

Page 1 of 3
REQUEST NUMBER: 10-1212

LOS ALAMOS

These Samples are on:

LANL Request Number: 10-1212

Per Agreement Number: 126310011

Project Cost Code: MR3A05529E00

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 1/12/2010

TURNAROUND/REPORT DUE: 2/11/2010

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Yes, Below Background

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:

January 23.

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6020	1	RE12-10-7236	R	1/7/2010	
		1	RE12-10-7237	R	1/7/2010	
		1	RE12-10-7238	R	1/7/2010	
		1	RE12-10-7239	R	1/7/2010	
		1	RE12-10-7240	R	1/7/2010	
		1	RE12-10-7241	R	1/7/2010	
		1	RE12-10-7242	R	1/7/2010	
		1	RE12-10-7243	R	1/7/2010	
		1	RE12-10-7252	R	1/7/2010	

Monday, January 11, 2010

REQUEST NUMBER: 10-1212

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
SW-846:6020		1	RE12-10-7253	R	1/7/2010	
		1	RE12-10-7254	R	1/7/2010	
		1	RE12-10-7255	R	1/7/2010	
		1	RE12-10-7276	R	1/7/2010	
		1	RE12-10-7284	W	1/7/2010	
		1	RE12-10-7236	R	1/7/2010	
		1	RE12-10-7237	R	1/7/2010	
		1	RE12-10-7238	R	1/7/2010	
		1	RE12-10-7239	R	1/7/2010	
		1	RE12-10-7240	R	1/7/2010	
SW-846:6850		1	RE12-10-7241	R	1/7/2010	
		1	RE12-10-7242	R	1/7/2010	
		1	RE12-10-7243	R	1/7/2010	
		1	RE12-10-7252	R	1/7/2010	
		1	RE12-10-7253	R	1/7/2010	
		1	RE12-10-7254	R	1/7/2010	
		1	RE12-10-7255	R	1/7/2010	
		1	RE12-10-7276	R	1/7/2010	
		1	RE12-10-7284	W	1/7/2010	
		1	RE12-10-7284	W	1/7/2010	
SW-846:7470A		1	RE12-10-7236	R	1/7/2010	
		1	RE12-10-7237	R	1/7/2010	
		1	RE12-10-7238	R	1/7/2010	
		1	RE12-10-7239	R	1/7/2010	
		1	RE12-10-7240	R	1/7/2010	
		1	RE12-10-7241	R	1/7/2010	
		1	RE12-10-7242	R	1/7/2010	
		1	RE12-10-7243	R	1/7/2010	
		1	RE12-10-7243	R	1/7/2010	
		1	RE12-10-7243	R	1/7/2010	

Monday, January 11, 2010

REQUEST NUMBER: 10-1212

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
SW-846:9012A		1	RE12-10-7252	R	1/7/2010	
		1	RE12-10-7253	R	1/7/2010	
		1	RE12-10-7254	R	1/7/2010	
		1	RE12-10-7255	R	1/7/2010	
		1	RE12-10-7276	R	1/7/2010	
		1	RE12-10-7236	R	1/7/2010	
		1	RE12-10-7237	R	1/7/2010	
		1	RE12-10-7238	R	1/7/2010	
		1	RE12-10-7239	R	1/7/2010	
		1	RE12-10-7240	R	1/7/2010	
		1	RE12-10-7241	R	1/7/2010	
		1	RE12-10-7242	R	1/7/2010	
		1	RE12-10-7243	R	1/7/2010	
		1	RE12-10-7252	R	1/7/2010	
		1	RE12-10-7253	R	1/7/2010	
		1	RE12-10-7254	R	1/7/2010	
		1	RE12-10-7255	R	1/7/2010	
		1	RE12-10-7276	R	1/7/2010	
		1	RE12-10-7284	W	1/7/2010	

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Monday, January 11, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1212C

LOS ALAMOS

REQUEST NUMBER: 10-1212

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 2/11/2010

General Engineering Laboratories, Inc.,
Charleston, SC.

TURNAROUND REQ'D: 30

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE12-10-7243	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7240	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7241	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7237	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7239	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7238	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7242	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7236	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7252	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7253	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7254	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7255	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7276	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7284	1	POLY	METALS+U-GEL	Nitric Acid	W
RE12-10-7284	1	POLY	SW-846:6850	Ice	W
RE12-10-7284	1	POLY	TCN	Sodium Hydroxide	W

Relinquished By:

Date

Time

Received By:

Date

Time

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Received for DISPOSAL By:

Date

Time

Remarks:

Printed Name

Signature

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2480

EVENT NAME: 4th Qtr. FY09 - AOC 12-004(a) - Threemile Canyon

SAMPLE ID: RE12-10-7239

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/07/2010		MEDIA:	QBT3		OK
TIME COLLECTED(HH:MM)		11:55		SUB-MEDIA:	TUFF 1		
PRS ID:	12-004(a)	OK		SAMPLE TECH CODE:	HA		
LOCATION ID:	12-610528			FIELD QC TYPE:	NA		
LOCATION TYPE:	GENERIC			FIELD PREP:	NA		
TOP DEPTH:	0	1.0 ft		SAMPLE USAGE:	INV		
BOTTOM DEPTH:	0	2.6 ft		SCREEN/PORT DESC:	N/A		
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+8270+NME D-EXP	500 ML AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None		
1		Met+U+CLO4+C N	1 GAL POLY	Ice		
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None		

SAMPLE DESC:

Light brown sandy silty frozen soil from 1/7/10 to brownish gray decomposed tuff

SAMPLE COMMENTS:

Sample duplicated by RE12-10-7276

LOCATION DESC:

4a-1

FIELD SCREENING/MEASUREMENT RESULTS:

$\alpha \leq 22 \text{ dpm}$

$\beta/8 \leq 2250 \text{ dpm}$

$\text{PID} = \frac{0}{0} \text{ ppm}$

COLLECTED BY (PRINT)

L. Lopez

REVIEWED BY (PRINT)

J. Marin

RELINQUISHED BY (Printed Name) <u>L. Lopez</u> (Signature) <u>[Signature]</u>	Date/Time <u>1/7/10</u> <u>16:00</u>	RECEIVED BY (Printed Name) <u>L. Lopez</u> (Signature) <u>[Signature]</u>	Date/Time <u>1/7/10</u> <u>4:00</u>
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2480

EVENT NAME: 4th Qtr. FY09 - AOC 12-004(a) - Threemile Canyon

SAMPLE ID: RE12-10-7236

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/07/2010		MEDIA:	OBT3		OK
TIME COLLECTED (HH:MM)		10:40		SUB-MEDIA:	TUFF1		
PRS ID:	12-004(a)	OK		SAMPLE TECH CODE:	HA		
LOCATION ID:	12-610527			FIELD QC TYPE:	NA		
LOCATION TYPE:	GENERIC			FIELD PREP:	NA		
TOP DEPTH:	0			SAMPLE USAGE:	INV		
BOTTOM DEPTH:	0	0.5 ft		SCREEN/PORT DESC:	NA		
FIELD MATRIX:	R			EXCAVATED: YES <input checked="" type="radio"/> NO <input type="radio"/> NA			
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
				WATER FLOWING: YES <input checked="" type="radio"/> NO <input type="radio"/> NA			
BOREHOLE: YES <input checked="" type="radio"/> NO <input type="radio"/> NA		BOREHOLE DECLINATION:	NA	BOREHOLE DIRECTION:	NA		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8082+8270+NME D-EXP	1RM 1/2 L 500 ML AMBER GLASS 250 ML	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None	1	
1		Met+U+CLO4+C N	1 GAL POLY 1 L 1/2 L 1/2 L	Ice	1	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	1	

SAMPLE DESC:

1RM 1/2 L
Light grayish brown, moderately indurated frozen tuff

SAMPLE COMMENTS:

LOCATION DESC:

4a2

FIELD SCREENING/MEASUREMENT RESULTS:

HE spot test negative

Alpha ≤ 16 dpmB18 ≤ 2020 PID = $\frac{0}{0}$ ppm

COLLECTED BY (PRINT)

REVIEWED BY (PRINT) J. Marin

L. Lopez

RELINQUISHED BY (Printed Name) LARRY LOPEZ (Signature) Larry Lopez	Date/Time 1/7/00 16:00	RECEIVED BY (Printed Name) K. Greene (Signature) K. Greene	Date/Time 1/7/00 4:00
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2480

EVENT NAME: 4th Qtr. FY09 - AOC 12-004(a) - Threemile Canyon

SAMPLE ID: RE12-10-7252

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/07		MEDIA:	QBT3	ALLH	
TIME COLLECTED (HH:MM)		13:46		SUB-MEDIA:	TUFF 1	NA	
PRS ID:	12-004(a)	OK		SAMPLE TECH CODE:	HA	OK	
LOCATION ID:	12-610539			FIELD QC TYPE:	NA		
LOCATION TYPE:	GENERIC			FIELD PREP:	NA		
TOP DEPTH:	0			SAMPLE USAGE:	INV		
BOTTOM DEPTH:	0	0.7 ft		SCREEN/PORT DESC:	NA		
FIELD MATRIX:	R	S		EXCAVATED: YES (NO) NA			
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
BOREHOLE: YES (NO) NA				BOREHOLE DECLINATION:	NA		
				BOREHOLE DIRECTION:	NA		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8270C+NMED Exp	500 ML AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None		
1		Met+U+CLO4+C N	1 GAL POLY 1 L 2RM 1/7/10	Ice		
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None		

SAMPLE DESC:

Light grayish brown, silty sandy dry soil

SAMPLE COMMENTS:

55 dpm site background
2010 dpm

LOCATION DESC:

4a5

FIELD SCREENING/MEASUREMENT RESULTS:

alpha 22 dpm
B/X 2050 dpm
PID: 0 ppm
HE test negative

COLLECTED BY (PRINT)

REVIEWED BY (PRINT)

J Marin

RELINQUISHED BY (Printed Name) Larey Lopez (Signature) [Signature]	Date/Time 11/7/10 16:00	RECEIVED BY (Printed Name) K. Greene (Signature) [Signature]	Date/Time 11/7/10 4:06
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2480

EVENT NAME: 4th Qtr. FY09 - AOC 12-004(a) - Threemile Canyon

SAMPLE ID: RE12-10-7241

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/07/2010		MEDIA: OBT3		OK	
TIME COLLECTED (HH:MM)		12:50		SUB-MEDIA: TUFF 1			
PRS ID: 12-004(a)		OK		SAMPLE TECH CODE: HA			
LOCATION ID: 12-610529				FIELD QC TYPE: NA			
LOCATION TYPE: GENERIC				FIELD PREP: NA			
TOP DEPTH: 0		1.0 ft		SAMPLE USAGE: INV			
BOTTOM DEPTH: 0		2.0 ft		SCREEN/PORT DESC: NA			
FIELD MATRIX: R		OK		EXCAVATED: YES <input checked="" type="radio"/> NO <input type="radio"/> NA			
COMPOSITE TYPE: NA		COMPOSITE TIME INTERVAL: NA		WATER FLOWING: YES <input checked="" type="radio"/> NO <input type="radio"/> NA			
BOREHOLE: YES <input checked="" type="radio"/> NO <input type="radio"/> NA		BOREHOLE DECLINATION: NA		BOREHOLE DIRECTION: NA			

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8082+8270+NME D-EXP	500 ML AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None		
1		Met+U+CLO4+C N	1 GAL POLY 1 L 1/2/10	Ice		
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None		

SAMPLE DESC:

Light pinkish gray dry ash flow tuff

SAMPLE COMMENTS:

LOCATION DESC:

4a3

FIELD SCREENING/MEASUREMENT RESULTS:

alpha = 55 dpm

B/x = 2450 dpm

PID = 0 ppm

COLLECTED BY (PRINT)

L. Lopez

REVIEWED BY (PRINT)

F. MARIN

RELINQUISHED BY (Printed Name) L. Lopez (Signature) [Signature]	Date/Time 1/7/10 16:00	RECEIVED BY (Printed Name) K. G. [Signature] (Signature) [Signature]	Date/Time 1/7/10 4:00
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2480

EVENT NAME: 4th Qtr. FY09 - AOC 12-004(a) - Threemile Canyon

SAMPLE ID: RE12-10-7254

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/07/2010		MEDIA:	QBT3	ALLH	
TIME COLLECTED (HH:MM)		14:20		SUB-MEDIA:	TUFF 1	NA	
PRS ID:	12-004(a)	OK		SAMPLE TECH CODE:	HA		OK
LOCATION ID:	12-610540			FIELD QC TYPE:	NA		
LOCATION TYPE:	GENERIC			FIELD PREP:	NA		
TOP DEPTH:	0			SAMPLE USAGE:	INV		
BOTTOM DEPTH:	0	0.6 ft		SCREEN/PORT DESC:	NA		
FIELD MATRIX:	R	S		EXCAVATED: YES/NO/NA	NO		
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
BOREHOLE: YES/NO/NA	NO			BOREHOLE DECLINATION:	NA		
				BOREHOLE DIRECTION:	NA		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8270C+NMED Exp	500 ML AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None		
1		Met+U+CLO4+C N	1 GAL POLY 1 L 2RM 1/2/10	Ice		
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None		

SAMPLE DESC:

Medium brown, organic, silty, sandy, dry soil

SAMPLE COMMENTS:

LOCATION DESC:

4a4

FIELD SCREENING/MEASUREMENT RESULTS:

$\frac{\text{Alpha}}{\text{Beta/Gamma}} = \frac{27}{2440} \text{ dpm}$
 $\frac{\text{Alpha}}{\text{Beta/Gamma}} = \frac{27}{2440} \text{ dpm}$

$\text{Alpha} = 27 \text{ dpm}$
 $\text{Beta/Gamma} = 2440 \text{ dpm}$

$\text{PID} \frac{\text{Ambient}}{\text{Reading}} = \frac{0}{0} \text{ ppm}$

HE Spot test Negative

COLLECTED BY (PRINT)

REVIEWED BY (PRINT) J. Marin

RELINQUISHED BY (Printed Name) Larry Lopez (Signature) Larry Lopez	Date/Time 1/7/10 16:00	RECEIVED BY (Printed Name) K. Green (Signature) K. Green	Date/Time 1/7/10 4:00
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2480

EVENT NAME: 4th Qtr. FY09 - AOC 12-004(a) - Threemile Canyon

SAMPLE ID: RE12-10-7253

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/07/2010		MEDIA:	OBT3		OK
TIME COLLECTED (HH:MM)		13:55		SUB-MEDIA:	TUFF 1		
PRS ID:	12-004(a)	OK		SAMPLE TECH CODE:	HA		
LOCATION ID:	12-610539			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:	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	8270C+NMED Exp	500 ML AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None		
1		Met+U+CLO4+C N	1 L POLY 1 L 1/2 1/10	Ice		
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None		

SAMPLE DESC:

Light gray, moderately indurated, dry, ash flow tuff

SAMPLE COMMENTS:

LOCATION DESC:

4a5

FIELD SCREENING/MEASUREMENT RESULTS:

alpha = 27 dpm
B/g = 2570 dpm
pid = 0 ppm

COLLECTED BY (PRINT)

L Lopez

REVIEWED BY (PRINT)

J Marin

RELINQUISHED BY (Printed Name) LARRY LOPEZ (Signature) <i>Larry Lopez</i>	Date/Time 11/7/10 16:00	RECEIVED BY (Printed Name) K. Green (Signature) <i>K. Green</i>	Date/Time 11/7/10 4:06
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2480

EVENT NAME: 4th Qtr. FY09 - AOC 12-004(a) - Threemile Canyon

SAMPLE ID: RE12-10-7284

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/07/2010		MEDIA:	NA		OK
TIME COLLECTED(HH:MM)		1521		SUB-MEDIA:	OTHER		
PRS ID:	12-004(a)	OK		SAMPLE TECH CODE:	DC		
LOCATION ID:	LNK			FIELD QC TYPE:	ER		
LOCATION TYPE:	GENERIC			FIELD PREP:	UF		
TOP DEPTH:	0			SAMPLE USAGE:	QC		
BOTTOM DEPTH:	0			SCREEN/PORT DESC:			
FIELD MATRIX:	W			EXCAVATED: YES/NO/NA			
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
BOREHOLE: YES/NO/NA	NO			WATER FLOWING: 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	1	SW-846:6850	250 ML POLY	Ice	1	
1	1	TCN	500 ML POLY	Sodium Hydroxide	1	

SAMPLE DESC: QC Sample of RE12-10-7255

SAMPLE COMMENTS:

WATER

LOCATION DESC:

4a 4

FIELD SCREENING/MEASUREMENT RESULTS:

NA

COLLECTED BY (PRINT)

L. Lopez

REVIEWED BY (PRINT)

J. Marin

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Larry Lopez	1/7/10	(Printed Name) V. G. - e - e	1/7/10
(Signature) Larry Lopez	16:00	(Signature) [Signature]	4:00
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2480

EVENT NAME: 4th Qtr. FY09 - AOC 12-004(a) - Threemile Canyon

SAMPLE ID: RE12-10-7238

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/07/2010		MEDIA:	QBT3	ALL 4	
TIME COLLECTED (HH:MM)		11:40		SUB-MEDIA:	TUFF 1	N/A	
PRS ID:	12-004(a)	OK		SAMPLE TECH CODE:	HA		
LOCATION ID:	12-610528			FIELD QC TYPE:	NA		
LOCATION TYPE:	GENERIC			FIELD PREP:	NA		
TOP DEPTH:	0	OK		SAMPLE USAGE:	INV		
BOTTOM DEPTH:	0	0.55 ft		SCREEN/PORT DESC:	N/A		
FIELD MATRIX:	R	S		EXCAVATED: YES (NO) NA			
COMPOSITE TYPE:	N/A			COMPOSITE TIME INTERVAL:	N/A		
BOREHOLE: YES (NO) NA				WATER FLOWING: YES (NO) NA			
BOREHOLE DECLINATION:	N/A			BOREHOLE DIRECTION:	N/A		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8082+8270+NME D-EXP	500 ML AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None		
1		Met+U+CLO4+C N	1 L POLY 1/7/10	Ice		
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None		

SAMPLE DESC:

Light brown silty sandy soil, frozen

SAMPLE COMMENTS:

LOCATION DESC:

4a-1

FIELD SCREENING/MEASUREMENT RESULTS:

HE spot test negative

 $\alpha \leq 11$ dpm $R/V \leq 1962$ dpm

PID = 0 ppm

COLLECTED BY (PRINT)

L. Lopez

REVIEWED BY (PRINT)

J. MARIN

RELINQUISHED BY (Printed Name) Larry Lopez (Signature) Larry Lopez	Date/Time 11/7/10 16:00	RECEIVED BY (Printed Name) K. Gucera (Signature) [Signature]	Date/Time 11/7/10 4:10
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2480

EVENT NAME: 4th Qtr. FY09 - AOC 12-004(a) - Threemile Canyon

SAMPLE ID: RE12-10-7237

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/07/2010		MEDIA:	OBT3		OK
TIME COLLECTED (HH:MM)		11:05		SUB-MEDIA:	TUFF 1		
PRS ID:	12-004(a)	OK		SAMPLE TECH CODE:	HA		
LOCATION ID:	12-610527			FIELD QC TYPE:	NA		
LOCATION TYPE:	GENERIC			FIELD PREP:	NA		
TOP DEPTH:	0	1.0 ft		SAMPLE USAGE:	INV		
BOTTOM DEPTH:	0	2.0 ft		SCREEN/PORT DESC:	NA		
FIELD MATRIX:	R	R		EXCAVATED: YES/NO/NA	NA		
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
BOREHOLE: YES/NO/NA	NO/NA			BOREHOLE DECLINATION:	NA		
				BOREHOLE DIRECTION:	NA		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8082+8270+NME D-EXP	500 ML AMBER GLASS 250 ML	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1		Met+U+CLO4+C N	1 GAL POLY 1L 1/7/10	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC:

Light grayish brown, moderately indurated frozen stuff

SAMPLE COMMENTS:

LOCATION DESC:

4a2

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha \leq 16 dpm
 B/g \leq 2580 dpm
 PID = 0 ppm

COLLECTED BY (PRINT)

L. Lopez

REVIEWED BY (PRINT) J. MARIN

RELINQUISHED BY (Printed Name) LARRY LOPEZ (Signature) Larry A. Lopez	Date/Time 1/7/10 16:00	RECEIVED BY (Printed Name) L. Greene (Signature) [Signature]	Date/Time 1/7/10 4:00
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2480

EVENT NAME: 4th Qtr. FY09 - AOC 12-004(a) - Threemile Canyon

SAMPLE ID: RE12-10-7255

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/07/2010		MEDIA:		QBT3	
TIME COLLECTED (HH:MM)		14:45		SUB-MEDIA:		TUFF 1	
PRS ID: 12-004(a)		OK		SAMPLE TECH CODE:		HA	
LOCATION ID: 12-610540				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: N/A			

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8270C+NMED Exp	500ML AMBER GLASS 1RM 1/2/10	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None		
1		Met+U+CLO4+C N	1 GAL POLY 1L 2RM 1/2/10	Ice		
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None		

SAMPLE DESC:

Light brownish gray, moderately indurated, dry, ark flow tuff

SAMPLE COMMENTS:

LOCATION DESC:

4a4

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 27 dpm

Beta/Gamma = 2320 dpm

COLLECTED BY (PRINT)

L. Lopez

$$PID \frac{\text{Ambient Reading}}{\text{Background}} = \text{ppm}$$

REVIEWED BY (PRINT) J. Marin

RELINQUISHED BY (Printed Name) Larry A. Lopez (Signature) Larry A. Lopez	Date/Time 1/7/10 16:00	RECEIVED BY (Printed Name) V. Bruce (Signature) [Signature]	Date/Time 1/7/10 4:00
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2480

EVENT NAME: 4th Qtr. FY09 - AOC 12-004(a) - Threemile Canyon

SAMPLE ID: RE12-10-7242

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/07/2010		MEDIA:		QBT3	
TIME COLLECTED (HH:MM)		13:20		SUB-MEDIA:		TUFF 1	
PRS ID: 12-004(a)		OK		SAMPLE TECH CODE: HA		OK	
LOCATION ID: 12-610530				FIELD QC TYPE: NA			
LOCATION TYPE: GENERIC				FIELD PREP: NA			
TOP DEPTH: 0				SAMPLE USAGE: INV			
BOTTOM DEPTH: 0		1.0 ft		SCREEN/PORT DESC: NA			
FIELD MATRIX: R		S		EXCAVATED: YES <input checked="" type="radio"/> NO <input type="radio"/> NA			
COMPOSITE TYPE: NA				COMPOSITE TIME INTERVAL: NA		WATER FLOWING: YES <input checked="" type="radio"/> NO <input type="radio"/> NA	
BOREHOLE: YES <input checked="" type="radio"/> NO <input type="radio"/> NA		BOREHOLE DECLINATION: NA		BOREHOLE DIRECTION: NA			

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8082+8270+NME D-EXP	500 ML AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None		
1		Met+U+CLO4+C N	1 GAL POLY 1 L PRM 1/7/10	Ice		
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None		

SAMPLE DESC:

Dark brown loamy sandy soil

SAMPLE COMMENTS:

LOCATION DESC:

4a6

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha ≤ 5 dpm P10 = $\frac{0}{0}$ ppmB18 ≤ 1997 dpm HE Spot test Negative

COLLECTED BY (PRINT)

L. Lopez

REVIEWED BY (PRINT) J. Marin

RELINQUISHED BY (Printed Name) LARRY LOPEZ (Signature) <i>[Signature]</i>	Date/Time 11/07/10 16:00	RECEIVED BY (Printed Name) L. Guzman (Signature) <i>[Signature]</i>	Date/Time 11/7/10 4:10
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2480

EVENT NAME: 4th Qtr. FY09 - AOC 12-004(a) - Threemile Canyon

SAMPLE ID: RE12-10-7276

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/07/2010		MEDIA:		OBT3	
TIME COLLECTED (HH:MM)		11:55		SUB-MEDIA:		TUFF 1	
PRS ID:	12-004(a)	OK		SAMPLE TECH CODE:		HA	
LOCATION ID:	UNK	12-610528		FIELD QC TYPE:		NA	
LOCATION TYPE:	GENERIC			FIELD PREP:		NA	
TOP DEPTH:	0	1.0		SAMPLE USAGE:		INV	
BOTTOM DEPTH:	0	2.6		SCREEN/PORT DESC:		NA	
FIELD MATRIX:	R	OK		EXCAVATED: YES/NO/NA		NA	
COMPOSITE TYPE: NA		COMPOSITE TIME INTERVAL: NA		WATER FLOWING: YES/NO/NA		NO/NA	
BOREHOLE: YES/NO/NA		BOREHOLE DECLINATION: NA		BOREHOLE DIRECTION: NA		NA	

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8082+8270+NME D-EXP	500 ML AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None		
1		Met+U+CLO4+C N	1 GAL POLY 12 2RM 1/10	Ice		
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None		

SAMPLE DESC:

Light brown to brownish gray decomposed tail.

SAMPLE COMMENTS:

Duplicate sample of RE12-10-7239

LOCATION DESC:

4a-1

FIELD SCREENING/MEASUREMENT RESULTS:

alpha ≤ 22 dpm
 B1 $\gamma \leq 2250$ dpm

PID = $\frac{0}{0}$ ppm

COLLECTED BY (PRINT)

L. Lopez

REVIEWED BY (PRINT)

Jan Marin

RELINQUISHED BY (Printed Name) <i>L. Lopez</i> (Signature) <i>L. Lopez</i>	Date/Time 1/07/10 16:00	RECEIVED BY (Printed Name) <i>V. Greene</i> (Signature) <i>V. Greene</i>	Date/Time 1/7/10 4:10
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2480

EVENT NAME: 4th Qtr. FY09 - AOC 12-004(a) - Threemile Canyon

SAMPLE ID: RE12-10-7243

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/07/2010		MEDIA:	QBT3		OK
TIME COLLECTED (HH:MM)		13:34		SUB-MEDIA:	TUFF 1		
PRS ID:	12-004(a)	OK		SAMPLE TECH CODE:	HA		
LOCATION ID:	12-610530			FIELD QC TYPE:	NA		
LOCATION TYPE:	GENERIC			FIELD PREP:	NA		
TOP DEPTH:	0	1.0 ft		SAMPLE USAGE:	INV		
BOTTOM DEPTH:	0	2.0 ft		SCREEN/PORT DESC:	NA		
FIELD MATRIX:	R	OK		EXCAVATED: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> NA			
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
BOREHOLE: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> NA				BOREHOLE DECLINATION:	NA		
				BOREHOLE DIRECTION:	NA		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8082+8270+NME D-EXP	500 ML AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None		
1		Met+U+CLO4+C N	1 GAL POLY 1 L 9AM 1/7/10	Ice		
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None		

SAMPLE DESC:

Light grayish brown, moderately indurated, dry, ash flow tuff

SAMPLE COMMENTS:

LOCATION DESC:

4a6

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha \leq 49 dpm PID: 0 ppm
 B/x \leq 2260 dpm

COLLECTED BY (PRINT)

L. Lopez

REVIEWED BY (PRINT)

J. Marin

RELINQUISHED BY (Printed Name) Larry Lopez (Signature) <i>Larry Lopez</i>	Date/Time 1/7/10 16:00	RECEIVED BY (Printed Name) K. Greene (Signature) <i>K. Greene</i>	Date/Time 1/7/10 4:10
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2480

EVENT NAME: 4th Qtr. FY09 - AOC 12-004(a) - Threemile Canyon

SAMPLE ID: RE12-10-7240

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/07/2010		MEDIA:	QBT3		0.2 gm 1/7/10 ALLH
TIME COLLECTED (HH:MM)		12:25		SUB-MEDIA:	TUFF 1		NA
PRS ID:	12-004(a)	OK		SAMPLE TECH CODE:	HA		OK
LOCATION ID:	12-610529			FIELD QC TYPE:	NA		
LOCATION TYPE:	GENERIC			FIELD PREP:	NA		
TOP DEPTH:	0			SAMPLE USAGE:	INV		
BOTTOM DEPTH:	0	0.6 Ft		SCREEN/PORT DESC:			NA
FIELD MATRIX:	B	OK 1/7/10 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+8270+NME D-EXP	500 ML AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None		
1		Met+U+CLO4+C N	1 GAL POLY 1/7/10	Ice		
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None		

SAMPLE DESC:

Medium brown silty sandy frozen soil

SAMPLE COMMENTS:

LOCATION DESC:

4a3

FIELD SCREENING/MEASUREMENT RESULTS:

 $\alpha \leq 27$ dpm $B/\gamma \leq 2100$ dpm

PID = 0 ppm HE Spot test negative

COLLECTED BY (PRINT)

L. Lopez

REVIEWED BY (PRINT)

J. Marin

RELINQUISHED BY (Printed Name) <u>Larry Lopez</u> (Signature) <u>[Signature]</u>	Date/Time <u>1/7/10</u> <u>16:00</u>	RECEIVED BY (Printed Name) <u>K. Greer</u> (Signature) <u>[Signature]</u>	Date/Time <u>1/7/10</u> <u>4:10</u>
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time



133 State Road 4, White Rock, NM 87544
505-672-2770 FAX 505-672-9834

ARS Sample Delivery Group: ARS2-10-00012
Client Sample ID: RE12-10-7236
Sample Collection Date: 01/07/10 10:40
Sample Matrix: Soil/Solid

Request or PO Number:
ARS Sample ID: ARS2-10-00012-001
Date Received: 01/08/10 00:00
Report Date: 01/09/10 06:49

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	YEN	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	42.57	32.48	39.18	32.98		pCi/g	EPA 900.0M	1/9/2010	ME	N/A
GROSS BETA	36.65	18.88	19.19	16.33		pCi/g	EPA 900.0M	1/9/2010	ME	N/A
NA-22	0.00	0.00	0.08	0.09		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
K-40	17.39	6.07	1.21	6.10		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
CO-60	0.00	7.93	0.02	7.93		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
CS-134	0.18	0.12	0.05	0.12		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
CS-137	0.21	0.16	0.05	0.16		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
TU-152	0.47	0.34	0.09	0.34		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
PB-212	1.53	0.41	0.07	0.42		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
PA-228	1.58	0.62	0.31	0.62		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
U-235	0.20	0.46	0.22	0.46		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
U-238	3.33	2.25	0.90	2.39		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
AM-241	0.07	0.21	0.10	0.21		pCi/g	EPA 901.1M	1/8/2010	ME	N/A

NOTES: % Moisture: 2.44

Matthew J. Edger
Quality Assurance Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in less than full requires the written consent of the client.

LELAP Certificate # 30658

NELAP Certificate # B97558



133 State Road 4, White Rock, NH 07844

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00012

Client Sample ID: RE12-10-7227

Sample Collection Date: 01/07/10 11:08

Sample Matrix: Soil/Solid

Request or PO Number:

ARS Sample ID: ARS2-10-00012-002

Date Received: 01/08/10 00:00

Report Date: 01/08/10 06:40

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	TPU	Qum	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	13.55	16.29	28.64	18.37		pCi/g	EPA 900.0M	1/9/2010	ME	N/A
GROSS BETA	53.48	16.46	17.99	17.72		pCi/g	EPA 900.0M	1/9/2010	ME	N/A
NA-22	0.08	0.16	0.13	0.16		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
K-40	41.00	11.99	2.04	12.06		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
CO-60	0.00	0.16	0.14	0.16		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
CS-134	0.00	0.00	0.10	0.00		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
CS-137	-0.01	17.45	0.98	17.48		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
EU-152	0.00	13.67	0.16	13.67		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
PB-212	1.82	0.64	0.19	0.65		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
RA-228	0.77	0.57	0.39	0.58		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
U-235	2.45	1.04	0.25	1.05		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
U-238	0.14	2.44	1.49	2.44		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
AM-241	0.00	0.65	0.09	0.05		pCi/g	EPA 901.1M	1/8/2010	ME	N/A

NOTES: % Moisture: 0.94

Matthew J. Edin
Quality Assurance Review

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133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00012

Request or PO Number:

Client Sample ID: RE12-10-7238

ARS Sample ID: ARS2-10-00012-003

Sample Collection Date: 01/07/10 11:40

Date Received: 01/08/10 00:00

Sample Matrix: Soil/Solid

Report Date: 01/09/10 06:49

Analysis Description	Analysis Results	Analysis Error +/- 2 s	HOC	TRU	Quel	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	21.43	12.92	32.23	33.53		pCi/g	EPA 900.0M	1/9/2010	ME	N/A
GROSS BETA	24.00	15.10	19.86	19.38		pCi/g	EPA 900.0M	1/9/2010	ME	N/A
NA-22	0.00	0.00	0.15	0.00		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
K-40	11.60	12.10	4.62	12.10		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
CO-60	0.00	15.88	0.16	15.98		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
CS-134	0.15	0.14	0.11	0.14		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
CS-137	0.35	0.19	0.10	0.29		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
SU-152	0.77	0.79	0.20	0.79		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
PB-212	1.34	0.57	0.18	0.57		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
RA-226	3.43	1.33	0.42	1.34		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
U-235	1.99	1.15	0.26	1.15		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
U-238	1.62	3.02	1.61	3.04		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
AM-241	0.54	0.40	0.16	0.40		pCi/g	EPA 901.1M	1/8/2010	ME	N/A

NOTES: % Moisture: 1.61

Matthew J. Folger
Quality Assurance Review

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NELAP Certificate # 587558



133 State Road 4, White Rock, NM 87544

505-872-2770 FAX 505-872-9934

ARS Sample Delivery Group: ARS2-10-00012

Client Sample ID: RE12-10-7239

Sample Collection Date: 01/07/10 11:55

Sample Matrix: SoH/Solid

Request or PO Number:

ARS Sample ID: ARS2-10-00012-004

Date Received: 01/08/10 00:00

Report Date: 01/09/10 06:49

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDA	TWU	Qua	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Trace/Chem Recovery
GROSS ALPHA	26.26	28.91	35.16	29.05		pCi/g	EPA 900.0M	1/9/2010	ME	N/A
GROSS BETA	40.88	15.81	18.65	16.89		pCi/g	EPA 900.0M	1/9/2010	ME	N/A
RA-22	0.00	0.00	0.10	0.00		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
K-40	12.40	7.32	2.41	7.33		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
CO-60	0.00	10.74	0.11	10.74		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
CS-134	0.10	0.14	0.08	0.14		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
CS-137	-0.01	14.06	0.07	14.06		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
EU-152	0.00	11.17	0.13	11.17		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
PB-212	1.89	0.51	0.12	0.51		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
RA 228	1.00	0.65	0.20	0.65		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
U-235	0.98	0.71	0.38	0.71		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
U-238	2.41	2.67	1.32	2.73		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
AM-241	0.06	0.14	0.07	0.14		pCi/g	EPA 901.1M	1/8/2010	ME	N/A

NOTES: % Moisture: 1.06

Matthew J. Edm
Quality Assurance Review

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LELAP Certificate # 30658

NELAP Certificate # E87558



133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00012

Request or PO Number:

Client Sample ID: RE12-10-7240

ARS Sample ID: ARS2-10-00012-005

Sample Collection Date: 01/07/10 12:25

Date Received: 01/08/10 00:00

Sample Matrix: Soil/Solid

Report Date: 01/09/10 06:49

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MOE	TPU	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	37.87	38.93	39.11	31.27		pCi/g	EPA 900.0M	1/8/2010	ME	N/A
GROSS BETA	29.01	14.57	19.00	14.99		pCi/g	EPA 900.0M	1/8/2010	ME	N/A
NA-22	9.00	0.00	0.12	0.00		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
K-40	-0.00	-19.98	3.50	-19.98		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
CO-60	0.00	11.83	0.12	11.83		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
CS-134	0.00	0.00	0.09	0.00		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
CS-137	0.13	0.16	0.07	0.16		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
EU-152	0.00	12.31	0.14	12.31		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
PB-212	1.35	0.48	0.11	0.48		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
RA 226	0.27	0.56	0.37	0.46		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
U-235	1.36	0.80	0.18	0.81		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
U-238	6.45	4.62	1.69	4.85		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
AM-241	0.14	0.21	0.10	0.21		pCi/g	EPA 901.1M	1/8/2010	ME	N/A

NOTES: % Moisture: 1.42

Matthew J. Eder
Quality Assurance Review

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LELAP Certificate # 30658

NELAP Certificate # E87558



133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00012
 Client Sample ID: RE12-10-7241
 Sample Collection Date: 01/07/10 12:50
 Sample Matrix: Soil/Solid

Request of PU Number:
 ARS Sample ID: ARS2-10-00012-006
 Date Received: 01/08/10 00:00
 Report Date: 01/08/10 06:49

Analysis Description	Analysis Results	Analysis Error +/- %	MNR	YHL	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Review
GROSS ALPHA	41.28	28.73	28.64	29.17		pCi/g	EPA 900.0M	1/8/2010	ME	N/A
GROSS BETA	43.48	18.90	17.99	18.77		pCi/g	EPA 900.0M	1/8/2010	ME	N/A
NA-22	0.00	0.00	0.12	0.00		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
K-40	27.60	9.64	1.92	9.68		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
CO-60	0.07	0.18	0.13	0.18		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
CS-134	0.00	0.00	0.09	0.00		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
CS-137	0.33	0.26	0.08	0.26		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
EU-152	0.00	66.54	0.18	66.54		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
PB-212	1.43	0.51	0.11	0.51		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
RA-226	1.08	1.21	0.34	1.21		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
U-235	1.79	0.85	0.20	0.85		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
U-238	0.76	2.93	1.99	2.94		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
AM-241	0.68	0.88	0.18	0.88		pCi/g	EPA 901.1M	1/8/2010	ME	N/A

NOTES: % Moisture: 1.05

Matthew A. Edley
 Quality Assurance Review

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NELAP Certificate # EB7558



133 State Road 4, White Rock, NM 87544
505-872-2770 FAX 505-872-9534

ARS Sample Delivery Group: ARS2-10-00012
Client Sample ID: RE12-10-7242
Sample Collection Date: 01/07/10 13:20
Sample Matrix: Soil/Sand

Request or PO Number:
ARS Sample ID: ARS2-10-00012-007
Date Received: 01/08/10 00:00
Report Date: 01/09/10 08:40

Analysis Description	Analysis Results	Analysis Error $\pm 2 \sigma$	MNR	TDI	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	51.43	32.93	32.23	33.53		pCi/g	EPA 900.0M	1/8/2010	ME	N/A
GROSS BETA	41.67	17.06	19.86	17.81		pCi/g	EPA 900.0M	1/8/2010	ME	N/A
NA-22	0.00	0.00	0.13	0.00		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
K-40	16.77	8.84	2.74	8.86		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
CO-60	0.00	12.62	5.12	12.62		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
CS-134	0.32	0.26	0.09	0.26		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
CS-137	0.00	0.31	0.08	0.31		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
RU-152	0.51	0.88	0.14	0.58		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
PB-212	1.64	0.83	0.10	0.53		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
RA-228	0.57	0.40	0.66	0.40		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
U-235	1.58	1.06	0.35	1.06		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
U-238	3.18	2.04	0.87	2.17		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
AM-241	0.78	0.39	0.10	0.39		pCi/g	EPA 901.1M	1/8/2010	ME	N/A

NOTES: % Moisture: 1.53

Matthew J. Feller
Quality Assurance Review

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LELAP Certificate # 30658

NELAP Certificate # E87558



123 State Road 4, White Rock, NM 87544
505-672-2770 FAX 505-672-9834

ARS Sample Delivery Group: ARS2-10-00012
Client Sample ID: RE12-10-7243
Sample Collection Date: 01/07/10 13:34
Sample Matrix: Soil/Solid

Request or PO Number:

ARS Sample ID: ARS2-10-00012-008
Date Received: 01/08/10 00:00
Report Date: 01/09/10 06:49

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	T9U	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	49.87	33.87	34.04	33.13		pCi/g	EPA 900.0M	1/9/2010	ME	N/A
GROSS BETA	58.90	17.69	18.46	19.11		pCi/g	EPA 900.0M	1/9/2010	ME	N/A
NA-22	0.00	0.00	0.13	0.09		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
K-40	25.97	9.70	2.08	9.73		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
CO-60	0.00	13.61	0.14	13.61		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
CS-134	0.00	0.00	0.10	0.00		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
CS-137	0.28	0.23	0.09	0.23		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
SU-152	0.00	14.16	0.16	14.16		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
PB-212	1.36	0.55	0.17	0.56		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
RA-226	2.08	0.99	0.35	0.99		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
U-235	0.68	0.79	0.40	0.79		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
U-238	9.15	4.23	1.45	4.72		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
AM-241	0.20	0.33	0.15	0.33		pCi/g	EPA 901.1M	1/8/2010	ME	N/A

NOTES: % Moisture: 0.48

Matthew L. Edley
Quality Assurance Review

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LELAP Certificate # 30658

NELAP Certificate # E87558



133 State Road 4, White Rock, NM 87544
505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00012
Client Sample ID: RE13-10-7252
Sample Collection Date: 01/07/10 13:46
Sample Matrix: Soil/Solid

Request or PO Number:
ARS Sample ID: ARS2-10-00012-009
Date Received: 01/08/10 00:00
Report Date: 01/09/10 06:40

Analysis Description	Analysis Results	Analysis Error +/- %	HSC	YD	Q101	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	72.39	40.19	39.11	41.16		pCi/g	EPA 900.0M	1/9/2010	ME	N/A
GROSS BETA	61.99	18.35	19.00	19.86		pCi/g	EPA 900.0M	1/9/2010	ME	N/A
NA-22	0.00	0.00	0.11	0.00		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
K-40	26.66	8.92	1.71	6.95		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
CO-60	0.13	0.10	0.11	0.10		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
CS-134	0.37	0.33	0.08	0.33		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
CS-137	0.59	0.32	0.07	0.32		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
EU-152	0.09	0.10	0.13	0.10		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
PB-211	1.50	0.54	0.16	0.54		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
RA-228	1.32	1.03	0.20	1.03		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
U-235	-0.07	99.84	0.22	99.84		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
U-238	3.11	4.99	1.14	4.99		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
AM-241	0.02	0.09	0.08	0.09		pCi/g	EPA 901.1M	1/8/2010	ME	N/A

NOTES: % Moisture: 1.52

Matthew J. Elder
Quality Assurance Review

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LELAP Certificate # 30658

NELAP Certificate # EB755B



133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-8534

ARS Sample Delivery Group: ARS2-10-00012

Client Sample ID: RS12-10-7253

Sample Collection Date: 01/07/10 13:55

Sample Matrix: Soil/Solid

Request or PO Number:

ARS Sample ID: ARS2-10-00012-010

Date Received: 01/08/10 00:00

Report Date: 01/09/10 08:49

Analysis Description	Analysis Results	Analysis Error +/- 2 s	SEC	TPH	Unit	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	98.62	42.51	28.64	44.13		pCi/g	EPA 900.0M	1/9/2010	ME	N/A
GROSS BETA	54.42	17.86	17.99	19.86		pCi/g	EPA 900.0M	1/9/2010	ME	N/A
NA-22	0.08	0.15	0.12	0.15		pCi/g	EPA 901.1M	1/9/2010	ME	N/A
K-40	-2.41	-50.73	5.11	-50.73		pCi/g	EPA 901.1M	1/9/2010	ME	N/A
CO-60	0.00	12.74	0.13	12.74		pCi/g	EPA 901.1M	1/9/2010	ME	N/A
CS-134	0.04	0.08	0.09	0.08		pCi/g	EPA 901.1M	1/9/2010	ME	N/A
CS-137	-0.01	16.67	0.08	16.67		pCi/g	EPA 901.1M	1/9/2010	ME	N/A
EU-152	0.02	0.53	0.23	0.53		pCi/g	EPA 901.1M	1/9/2010	ME	N/A
PB-212	1.09	0.60	0.25	0.60		pCi/g	EPA 901.1M	1/9/2010	ME	N/A
RA-228	1.37	0.79	0.34	0.79		pCi/g	EPA 901.1M	1/9/2010	ME	N/A
U-235	0.13	0.27	0.20	0.27		pCi/g	EPA 901.1M	1/9/2010	ME	N/A
U-238	5.58	3.98	1.38	4.09		pCi/g	EPA 901.1M	1/9/2010	ME	N/A
AM-241	0.45	0.48	0.19	0.48		pCi/g	EPA 901.1M	1/9/2010	ME	N/A

NOTES: % Moisture: 0.34

Matthew J. Edger
Quality Assurance Review

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LELAP Certificate # 30658

NELAP Certificate # E87558



133 State Road 4, White Rock, NM 87544
505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00012
Client Sample ID: RE12-10-7254
Sample Collection Date: 01/07/10 14:20
Sample Matrix: RnH/RnHd

Request or PO Number:
ARS Sample ID: ARS2-10-00012-011
Date Received: 01/08/10 00:00
Report Date: 01/09/10 06:49

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	YMU	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Trace/Check Recovery
GROSS ALPHA	70.75	37.98	32.23	38.96		pCi/g	EPA 900.0M	1/8/2010	ME	N/A
GROSS BETA	52.83	18.56	19.86	19.65		pCi/g	EPA 900.0M	1/8/2010	ME	N/A
NA-22	0.00	0.00	0.11	0.00		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
K-40	-1.56	938.02	2.10	938.02		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
CO-60	0.00	11.98	0.13	11.98		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
CS-134	0.09	0.11	0.08	0.11		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
CS-137	0.25	0.21	0.07	0.21		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
EU-152	0.56	0.48	0.13	0.48		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
PB-212	1.17	0.83	0.20	0.53		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
RA-228	2.67	1.02	0.30	1.02		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
U-235	1.67	0.73	0.18	0.74		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
U-238	8.10	3.46	1.09	3.92		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
AM-241	0.13	0.17	0.07	0.17		pCi/g	EPA 901.1M	1/8/2010	ME	N/A

NOTES: % Moisture: 1.55

Matthew A. Eder
Quality Assurance Review

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LELAP Certificate # 30658

NELAP Certificate # E87558



133 State Road 4, White Rock, NM 87544
505-672-2770 FAX 505-672-9334

ARS Sample Delivery Group: AR52-10-00012

Request or PO Number:

Client Sample ID: RE12-10-7255

ARS Sample ID: AR52-10-00012-012

Sample Collection Date: 01/07/10 14:45

Date Received: 01/08/10 00:00

Sample Matrix: Soil/Solid

Report Date: 01/08/10 06:40

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	TRU	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	63.80	36.21	35.16	37.04		pCi/g	EPA 900.0M	1/8/2010	ME	N/A
GROSS BETA	72.55	19.28	18.55	21.23		pCi/g	EPA 900.0M	1/8/2010	ME	N/A
NA-22	0.00	0.00	0.12	0.00		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
K-40	26.53	9.94	1.96	9.59		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
CS-60	0.07	0.11	0.11	0.11		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
CS-134	0.00	0.00	0.09	0.00		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
CS-137	0.34	0.22	0.08	0.22		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
EU-152	0.70	0.62	0.15	0.63		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
PB-212	1.70	0.60	0.17	0.60		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
RA-228	2.98	1.50	0.34	1.50		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
U-235	-0.08	144.89	0.32	144.89		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
U-238	0.48	4.04	1.99	4.04		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
AM-241	0.36	0.36	0.15	0.36		pCi/g	EPA 901.1M	1/8/2010	ME	N/A

NOTES: % MOISTURE: 0.17

[Signature]
Quality Assurance Review

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NELAP Certificate # EB7558



133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00012

Client Sample ID: RE12-10-7276

Sample Collection Date: 01/07/10 11:56

Sample Matrix: Soil/Amid

Request or PO Number:

ARS Sample ID: ARS2-10-00012-013

Date Received: 01/08/10 00:00

Report Date: 01/09/10 06:49

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MSR	TBR	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	87.40	43.63	39.18	44.93		pCi/g	EPA 900.0M	1/9/2010	ME	N/A
GROSS BETA	56.37	18.16	19.19	19.44		pCi/g	EPA 900.0M	1/9/2010	ME	N/A
HA-22	0.00	0.00	0.12	0.00		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
K-40	16.28	7.55	1.91	7.56		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
CO-60	0.06	0.10	0.13	0.10		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
CS-134	0.14	0.13	0.09	0.14		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
CS-137	-0.01	16.35	0.08	16.35		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
EU-152	0.00	12.99	0.18	12.99		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
PB-212	1.15	0.52	0.18	0.53		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
RA-228	0.47	0.47	0.33	0.47		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
U-235	1.22	0.84	0.32	0.84		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
U-238	2.58	3.10	1.42	3.16		pCi/g	EPA 901.1M	1/8/2010	ME	N/A
AM-241	0.25	0.24	0.09	0.24		pCi/g	EPA 901.1M	1/8/2010	ME	N/A

NOTES: % Moisture: 0.84

Matthew J. Eden
Quality Assurance Review

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LELAP Certificate # 30658

NELAP Certificate # E87558

DATA VALIDATION COVER SHEET

5116-1

Data Validation Cover Sheet

Records Use only



Section I.

REQUEST NUMBER: 10-1212 VALIDATION DATE: 02/18/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Ellen McEntee ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- | | | | |
|--|--|---|---|
| <input type="checkbox"/> TPH-GRO | <input type="checkbox"/> HIGH EXPLOSIVES | <input type="checkbox"/> DIOXIN FURANS | <input checked="" type="checkbox"/> LCMSMS PERCHLORATES |
| <input type="checkbox"/> TPH-DRO | <input type="checkbox"/> METALS | <input type="checkbox"/> PCB CONGENERS | <input type="checkbox"/> ORGANOCHLORINE |
| <input type="checkbox"/> GENERAL CHEMISTRY | <input type="checkbox"/> RADIOCHEMISTRY | <input type="checkbox"/> LCMSMS HIGH EXPLOSIVES | PESTICIDES/POLYCHLORINATED BIPHENYLS |

☐ OTHER (DESCRIBE):

Section II. Completeness Check

- | YES | NO | N/A | (CHECK ONE) | YES | NO | N/A | (CHECK ONE) |
|-------------------------------------|--------------------------|-------------------------------------|-----------------------------|-------------------------------------|--------------------------|-------------------------------------|--------------------------|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 1. CHAIN-OF-CUSTODY FORM(S) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 6. RAW/BSS DATA |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 2. CASE NARRATIVE | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 7. QUALITY CONTROL FORMS |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 3. SAMPLE RESULT FORMS | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 8. QUANTITATION REPORTS |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 4. SAMPLE CHROMATOGRAMS | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 9. TICS FORMS |
| <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 5. STANDARD CHROMATOGRAMS | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 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 MS/MSD associated with the water sample was performed on a LANL sample from another RN. No sample data was qualified as a result.

Reviewed by: Mary Donovan


Level: II

Date: 02/19/10


VALIDATOR'S SIGNATURE:

Ellen McEntee

DATE: 02/18/10

LC/MS/MS PERCHLORATE ANALYTICAL DATA VALIDATION CHECKLIST	
5121-2 LC/MS/MS Perchlorate Analytical Data Validation Checklist	Records Use only 

Yes No N/A				Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1. The Internal Standard (IS) relative retention time has shifted by more than 0.98 to 1.02 seconds.	R, PERC0	J, PERC0
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	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
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3. The IS are count is <25% of the expected value.	UJ, PERC1a	J, PERC1a
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	4. The IS area count is <70% but >25% of the average of that obtained from the calibration standards.	UJ, PERC1b	J, PERC1b
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	5. The IS area count is >130% of the average of that obtained from the calibration standards.	UJ, PERC1c	J, PERC1c
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	6. Required IS Information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, PERC1d	R, PERC1d
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7. The sample result is $\leq 5X$ the concentration of the related analyte in the method blank.	U, PERC4	N/A
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	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
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9. The sample result is $\leq 5X$ the concentration of the related analyte in the trip blank, rinsate blank, and/or equipment blank.	U, PERC4d	N/A
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	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
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	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
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	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	Records Use only
LC/MS/MS Perchlorate Analytical Data Validation Checklist	

Yes No N/A				Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	13. The ICV and/or CCV were recovered outside the method limits.	UJ, R, PERC7c	J, PERC7c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	14. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, R, PERC7d	J, PERC7d
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	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
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	16. The affected analyte is considered not detected because ion abundance ratios did not meet specifications.	N/A	R, PERC8
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	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
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	18. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ PERC9	J-, PERC9
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	19. The holding time was > 2 times the applicable holding time requirement.	R, PERC9a	J-, PERC9a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	20. The LCS percent recovery was <10%. Follow the external laboratory limits.	R, PERC12	J-, PERC12
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	21. The LCS percent recovery was < the Lower Acceptance Limit but >10%. Follow the external laboratory limits.	UJ, PERC12a	J-, PERC12a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	22. The LCS percent recovery was > the Upper Acceptance Limit. Follow the external laboratory limits.	N/A	J+, PERC12b
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	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
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	24. The MS/MSD percent recovery was <10%	R, PERC12d	R, PERC12d
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	25. The MS/MSD percent recovery was >10% but <75%	UJ, PERC12e	J, PERC12e
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	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



Yes No N/A (Check One)				Assign Qualifier Listed Below If Criterion = Yes	
				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	27. The MS/MSD relative percent difference was >20%.	UJ, PERC12g	J, PERC12g
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	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
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	29. The sample was diluted because target analytes were > the initial verification calibration.	UJ, PERC15a	J, PERC15a
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	30. The Contract Required Detection Limit check standard (CRI) sample did not pass method-acceptance limits.	UJ, R, PERC16	J, PERC16
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	31. The Interference Check Sample was not within $\pm 20\%$ of the known value.	UJ, PERC16a	J, PERC16a
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	32. The required CRI sample information is missing. Contact the SMO or external laboratory for information.	R, PERC16c	R, PERC16c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	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
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	34. Duplicate, dilution, or reanalysis.	UJ, PERC88	J, PERC88

Perchlorate Analysis Data Sheet

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

Lab Name: GEL Laboratories LLCLab Code: GELInstrument: LCMSMSMethod: SW846 6850 ModifiedMatrix: SOILExtraction Batch ID: 942314Extraction Type: Solid Prep

Client Sample No.

RE12-10-7243Date Received: 13-JAN-10GEL Job No (SDG): 10-1212GEL Sample ID: 244601001Date Filtered: 22-JAN-10Injection Volume (uL): 20%Solids: 94.2Sample Volume/Weight: 2.00 gConcentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.531	2.12	0.531	ug/kg	U	1	22-JAN-10 20:50	per0122041a
	Perchlorate Isotope Ratio						1	22-JAN-10 20:50	per0122041a
14797-73-0	Perchlorate-101	.531	2.12	0.531	ug/kg	U	1	22-JAN-10 20:50	per0122041a
	Perchlorate-O(18)			5.28	ug/kg		1	22-JAN-10 20:50	per0122041a

[^] 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 =

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

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: 942314
 Extraction Type: Solid Prep
 Client Sample No. RE12-10-7240
 Date Received: 13-JAN-10
 GEL Job No (SDG): 10-1212
 GEL Sample ID: 244601002
 Date Filtered: 22-JAN-10
 Injection Volume (uL): 20
 Sample Volume/Weight: 2.00 g
 % Solids: 86
 Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.578	2.31	0.578	ug/kg	U	1	22-JAN-10 21:11	per0122044a
	Perchlorate Isotope Ratio						1	22-JAN-10 21:11	per0122044a
14797-73-0	Perchlorate-101	.578	2.31	0.578	ug/kg	U	1	22-JAN-10 21:11	per0122044a
	Perchlorate-Q(18)			5.68	ug/kg		1	22-JAN-10 21:11	per0122044a

[^] 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 =
 Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Aliquot}}$ X $\frac{1}{\% \text{Solids}}$

EJM
02/18/10

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLCLab Code: GELInstrument: LCMSMSMethod: SW846 6850 ModifiedMatrix: SOILExtraction Batch ID: 942314Extraction Type: Solid PrepSample Volume/Weight: 2.00 gConcentrated Extract Volume: 20.0

Client Sample No.

RE12-10-7241Date Received: 13-JAN-10GEL Job No (SDG): 10-1212GEL Sample ID: 244601003Date Filtered: 22-JAN-10Injection Volume (uL): 20% Solids: 90.6

CAS No.	Analyte ^a	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.552	2.21	0.553	ug/kg	J	1	22-JAN-10 21:18	per0122045a
	Perchlorate Isotope Ratio			2.96			1	22-JAN-10 21:18	per0122045a
14797-73-0	Perchlorate-101	.552	2.21	0.552	ug/kg	U	1	22-JAN-10 21:18	per0122045a
	Perchlorate-O(18)			5.31	ug/kg		1	22-JAN-10 21:18	per0122045a

^a 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 =

Instrument Value X Concentrated Extract Volume X 1
Aliquot %Solids

Perchlorate Analysis Data Sheet

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Lab Name: GEL Laboratories LLCLab Code: GELInstrument: LCMSMSMethod: SW846 6850 ModifiedMatrix: SOILExtraction Batch ID: 942314Extraction Type: Solid PrepSample Volume/Weight: 2.00 gConcentrated Extract Volume: 20.0

Client Sample No.

RE12-10-7237Date Received: 13-JAN-10GEL Job No (SDG): 10-1212GEL Sample ID: 244601004Date Filtered: 22-JAN-10Injection Volume (uL): 20%Solids: 90

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.556	2.23	0.556	ug/kg	U	1	22-JAN-10 21:46	per0122049a
	Perchlorate Isotope Ratio						1	22-JAN-10 21:46	per0122049a
14797-73-0	Perchlorate-101	.556	2.23	0.556	ug/kg	U	1	22-JAN-10 21:46	per0122049a
	Perchlorate-O(18)			5.49	ug/kg		1	22-JAN-10 21:46	per0122049a

[^] 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 =

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

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 242314

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE12-10-7239

Date Received: 13-JAN-10

GEL Job No (SDG): 10-1212

GEL Sample ID: 244601005

Date Filtered: 22-JAN-10

Injection Volume (uL): 20

%Solids: 90.7

CAS No.	Analyte ^a	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.551	2.21	0.551	ug/kg	U	1	22-JAN-10 21:54	per0122050a
	Perchlorate Isotope Ratio						1	22-JAN-10 21:54	per0122050a
14797-73-0	Perchlorate-101	.551	2.21	0.551	ug/kg	U	1	22-JAN-10 21:54	per0122050a
	Perchlorate-O(18)			5.36	ug/kg		1	22-JAN-10 21:54	per0122050a

^a 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 =

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

Form 1

P perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 242314

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE12-10-7238

Date Received: 13-JAN-10

GEL Job No (SDG): 10-1212

GEL Sample ID: 244601006

Date Filtered: 22-JAN-10

Injection Volume (uL): 20

%Solids: 83

CAS No.	Analyte ^A	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.6	2.4	0.600	ug/kg	U	1	22-JAN-10 22:01	per0122051a
	Perchlorate Isotope Ratio						1	22-JAN-10 22:01	per0122051a
14797-73-0	Perchlorate-101	.6	2.4	0.600	ug/kg	U	1	22-JAN-10 22:01	per0122051a
	Perchlorate-O(18)			5.77	ug/kg		1	22-JAN-10 22:01	per0122051a

^A 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 =

Instrument Value X Concentrated Extract Volume X 1 %Solids
Aliquot

Perchlorate Analysis Data Sheet

Client Sample No.

RE12-10-7242

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 942314

Extraction Type: Solid Prep

Date Received: 13-JAN-10

GEL Job No (SDG): 10-1212

GEL Sample ID: 244601007

Date Filtered: 22-JAN-10

Injection Volume (uL): 20

%Solids: 84

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.598	2.39	0.598	ug/kg	U	1	22-JAN-10 22:08	per0122052a
	Perchlorate Isotope Ratio						1	22-JAN-10 22:08	per0122052a
14797-73-0	Perchlorate-101	.598	2.39	0.598	ug/kg	U	1	22-JAN-10 22:08	per0122052a
	Perchlorate-O(18)			5.90	ug/kg		1	22-JAN-10 22:08	per0122052a

[^] 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 =

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

Form 1

P perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 942314

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE12-10-7236

Date Received: 13-JAN-10

GEL Job No (SDG): 10-1212

GEL Sample ID: 244601008

Date Filtered: 22-JAN-10

Injection Volume (uL): 20

%Solids: 78

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.638	2.55	0.638	ug/kg	U	1	22-JAN-10 22:15	per0122053a
	Perchlorate Isotope Ratio						1	22-JAN-10 22:15	per0122053a
14797-73-0	Perchlorate-101	.638	2.55	0.638	ug/kg	U	1	22-JAN-10 22:15	per0122053a
	Perchlorate-O(18)			6.26	ug/kg		1	22-JAN-10 22:15	per0122053a

[^] 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 =

Instrument Value X Concentrated Extract Volume X ¹
Aliquot %Solids

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
Lab Code: GEL
Instrument: LCMSMS
Method: SW846 6850 Modified
Matrix: SOIL
Extraction Batch ID: 942314
Extraction Type: Solid Prep
Sample Volume/Weight: 2.00 g
Concentrated Extract Volume: 20.0
Client Sample No.
RE12-10-7252
Date Received: 13-JAN-10
GEL Job No (SDG): 10-1212
GEL Sample ID: 244601002
Date Filtered: 22-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	.595	2.38	0.595	ug/kg	U	1	22-JAN-10 22:22	per0122054a
	Perchlorate Isotope Ratio						1	22-JAN-10 22:22	per0122054a
14797-73-0	Perchlorate-101	.595	2.38	0.595	ug/kg	U	1	22-JAN-10 22:22	per0122054a
	Perchlorate-O(18)			5.94	ug/kg		1	22-JAN-10 22:22	per0122054a

[^] 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 =

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

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
Lab Code: GEL
Instrument: LCMSMS
Method: SW846 6850 Modified
Matrix: SOIL
Extraction Batch ID: 942314
Extraction Type: Solid Prep
Sample Volume/Weight: 2.00 g
Concentrated Extract Volume: 20.0
Client Sample No. RE12-10-7253
Date Received: 13-JAN-10
GEL Job No (SDG): 10-1212
GEL Sample ID: 244601010
Date Filtered: 22-JAN-10
Injection Volume (uL): 20
%Solids: 96.7

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	22-JAN-10 22:29	per0122055a
	Perchlorate Isotope Ratio						1	22-JAN-10 22:29	per0122055a
14797-73-0	Perchlorate-101	.517	2.07	0.517	ug/kg	U	1	22-JAN-10 22:29	per0122055a
	Perchlorate-O(18)			5.16	ug/kg		1	22-JAN-10 22:29	per0122055a

[^] 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 =

Instrument Value X Concentrated Extract Volume X 1
 Aliquot %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: 242314

Extraction Type: Solid Prep

Client Sample No.

RE12-10-7254

Date Received: 13-JAN-10

GEL Job No (SDG): 10-1212

GEL Sample ID: 244601011

Date Filtered: 22-JAN-10

Injection Volume (uL): 20

%Solids: 85

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc.*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.59	2.36	0.590	ug/kg	U	1	22-JAN-10 22:57	per0122059a
	Perchlorate Isotope Ratio						1	22-JAN-10 22:57	per0122059a
14797-73-0	Perchlorate-101	.59	2.36	0.590	ug/kg	U	1	22-JAN-10 22:57	per0122059a
	Perchlorate-O(18)			6.06	ug/kg		1	22-JAN-10 22:57	per0122059a

[^] 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 =

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

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLCLab Code: GELInstrument: LCMSMSMethod: SW846 6850 ModifiedMatrix: SOILExtraction Batch ID: 942314Extraction Type: Solid PrepSample Volume/Weight: 2.00 gConcentrated Extract Volume: 20.0

Client Sample No.

RE12-10-7255Date Received: 13-JAN-10GEL Job No (SDG): 10-1212GEL Sample ID: 244601012Date Filtered: 22-JAN-10Injection Volume (mL): 20%Solids: 93.4

CAS No.	Analyte ^a	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	22-JAN-10 23:04	per0122060a
	Perchlorate Isotope Ratio						1	22-JAN-10 23:04	per0122060a
14797-73-0	Perchlorate-101	.535	2.14	0.535	ug/kg	U	1	22-JAN-10 23:04	per0122060a
	Perchlorate-O(18)			5.31	ug/kg		1	22-JAN-10 23:04	per0122060a

^a 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 =

Instrument Value X Concentrated Extract Volume X 1
Aliquot %Solids

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 942314

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE12-10-7276

Date Received: 13-JAN-10

GEL Job No (SDG): 10-1212

GEL Sample ID: 244601013

Date Filtered: 22-JAN-10

Injection Volume (mL): 20

%Solids: 21.6

CAS No.	Analyte ^a	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.546	2.18	0.546	ug/kg	U	1	22-JAN-10 23:11	per0122061a
	Perchlorate Isotope Ratio						1	22-JAN-10 23:11	per0122061a
14797-73-0	Perchlorate-101	.546	2.18	0.546	ug/kg	U	1	22-JAN-10 23:11	per0122061a
	Perchlorate-O(18)			5.74	ug/kg		1	22-JAN-10 23:11	per0122061a

^a 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 =

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

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: WATER

Extraction Batch ID: 943783

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.

RE12-10-7284

Date Received: 13-JAN-10

GEL Job No (SDG): 10-1212-1

GEL Sample ID: 244602001

Date Filtered: 21-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	21-JAN-10 15:29	per0121016a
	Perchlorate Isotope Ratio						1	21-JAN-10 15:29	per0121016a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	21-JAN-10 15:29	per0121016a
	Perchlorate-O(18)			0.473	ug/L		1	21-JAN-10 15:29	per0121016a

[^] 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 =

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

DATA VALIDATION COVER SHEET

5118-1

Data Validation Cover Sheet

Records Use only

**Section I.**

REQUEST NUMBER: 10-1212 VALIDATION DATE: 02/18/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Ellen McEntee ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- | | | | |
|--|--|---|--|
| <input type="checkbox"/> TPH-GRO | <input type="checkbox"/> HIGH EXPLOSIVES | <input type="checkbox"/> DIOXIN FURANS | <input type="checkbox"/> LCMSMS PERCHLORATES |
| <input type="checkbox"/> TPH-DRO | <input checked="" type="checkbox"/> METALS | <input type="checkbox"/> PCB CONGENERS | <input type="checkbox"/> ORGANOCHLORINE |
| <input type="checkbox"/> GENERAL CHEMISTRY | <input type="checkbox"/> RADIOCHEMISTRY | <input type="checkbox"/> LCMSMS HIGH EXPLOSIVES | PESTICIDES/POLYCHLORINATED BIPHENYLS |

☐ OTHER (DESCRIBE):**Section II. Completeness Check**

- | YES | NO | N/A | (CHECK ONE) | YES | NO | N/A | (CHECK ONE) |
|-------------------------------------|--------------------------|-------------------------------------|-----------------------------|-------------------------------------|--------------------------|-------------------------------------|--------------------------|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 1. CHAIN-OF-CUSTODY FORM(S) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 6. RAW/BSS DATA |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 2. CASE NARRATIVE | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 7. QUALITY CONTROL FORMS |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 3. SAMPLE RESULT FORMS | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 8. QUANTITATION REPORTS |
| <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 4. SAMPLE CHROMATOGRAMS | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 9. TICS FORMS |
| <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 5. STANDARD CHROMATOGRAMS | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 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 MB associated with the water sample, U was detected. The associated result for U in sample RE12-10-7284 was a detect $\leq 5X$ the MB concentrations and, thus, was qualified U,I4.
2. In the ICB/CCB associated with the soil samples, U and TI were detected. The TI results in all samples except -7253 were detects $\leq 5X$ the blank concentration and, thus, were qualified U,I4b. All other associated sample results were either NDs or detects $> 5X$ the blank concentrations and, thus, were not qualified.
3. In the FR blank, sample -7284 associated with all soil samples, Fe, Mn, K, and Na were detected. The associated results for Na in samples -7242, -7236, -7252, and -7254 were $\leq 5X$ the FR blank concentration and, thus, were qualified U,I4d. All other associated results were $> 5X$ the FR blank concentrations and, thus, were not qualified.
4. The MS %R associated with the soil samples was $<$ the laboratory LAL but $\geq 10\%$ for Ba. All associated results were detects and, thus, were qualified J-,I6a. The MS %Rs associated with the soil samples were $>$ the laboratory UAL for Mg and K. The associated sample results were detects and, thus, were qualified J+,I6b. The MS %Rs associated with the soil samples were $>$ the laboratory UAL for Al, $<$ the laboratory UAL but $\geq 10\%$ for Fe, and $< 10\%$ for Mn, however, the sample concentrations were $> 4X$ the spike concentrations. Data were not qualified, based on professional judgment.
5. The duplicate RPDs associated with the soil samples were $> 35\%$ for Ba and Cr and the duplicate and parent sample concentrations were \geq the PQLs. The associated sample results were detects and, thus, were qualified J,I10a.
6. It should be noted that the matrix QC analyses for ICP, ICP-MS, and CVAA associated with the water sample, were performed on LANL samples from other RNs. No sample data was qualified as a result.

Reviewed by: Mary Donovan

Level: II

Date: 02/19/10

VALIDATOR'S SIGNATURE: _____


John McHale

DATE: 02/18 /10


Form 5118-1, Revision 0.0

LOS ALAMOS


Environmental Restoration Project

METALS ANALYTICAL DATA VALIDATION CHECKLIST	
5118-2 Metals Analytical Data Validation Checklist	Records Use only 


Yes No N/A				Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, I9	J-, I9
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2. The holding time was >2 times the applicable holding time requirement.	R, I9a	J-, I9a
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3. The instrument performance sample did not pass method acceptance criteria.	R, I16	R, I16
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	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
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	5. Samples were analyzed outside specific method tune time criteria.	N/A	J, I16b
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	6. The required instrument performance sample information is missing. Contact the SMO or external laboratory for information.	R, I16c	R, I16c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	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
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	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
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9. The initial Calibration Verification (ICV) and/or Continuing Calibration Verification (CCV) were recovered outside the method-specific limits.	UJ, I7c	J, I7c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, I7d	J, I7d
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	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
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	12. Metals interference check sample percent recover value is <50%.	R, I2	J-, I2

METALS ANALYTICAL DATA VALIDATION CHECKLIST	
5118-2 Metals Analytical Data Validation Checklist	Records Use only 

Yes No N/A				Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	13. Metals interference check sample percent recovery value is $\geq 50\%$ and $< 80\%$	UJ, I2a	J-, I2a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	14. Metals interference check sample percent recovery value is $> 120\%$.	N/A	J+, I2b
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	15. Metals interference check sample was not analyzed with the samples.	R, I2c	R, I2c
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	16. The sample result is $\leq 5X$ the concentration of the related analyte in the method blank.	U, I4	N/A
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	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
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	18. The sample result is $\leq 5X$ the concentration of the related analyte in the instrument blank and continuing calibration blank.	U, I4b	N/A
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	19. Continuing calibration blanks were not analyzed at the appropriate method frequency.	UJ, I4c	J, I4c
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	20. The sample result is $\leq 5X$ the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	U, I4d	N/A
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	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
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	22. The associated matrix spike recovery was $< 10\%$. Follow the external laboratory limits located within the associated data package.	R, I6	R, I6
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	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
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	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	
5118-2 Metals Analytical Data Validation Checklist	Records Use only 

Yes No N/A (Check One)				Assign Qualifier Listed Below If Criterion = Yes	
				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	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
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	26. The sample and the duplicate sample results were $\geq 5X$ the RL and the duplicate RPD was $>20\%$ for water samples and $>35\%$ for soil samples.	UJ, I10a	J, I10a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	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
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	28. The LCS percent recovery was $<10\%$. Follow the external laboratory limits located within the associated data package.	R, I12	R, I12
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	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
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	30. The LCS percent recovery was $>$ the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, I12b
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	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
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	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 

Yes No N/A (Check One)				Assign Qualifier Listed Below If Criterion = Yes	
				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	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
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	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
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	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
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	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
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	37. Serial dilution sample was not analyzed with the samples.	UJ, I18a	J, I18
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	38. The sample result was reported as detected between the IDL and the EDL.	N/A	J, I1
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	39. Duplicate, dilution, or reanalysis.	UJ, I88	J, I88
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	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
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	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: 10-1212

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244601001

BASIS: Dry Weight

DATE COLLECTED 07-JAN-10

CLIENT ID: RE12-10-7243

LEVEL: Low

DATE RECEIVED 13-JAN-10

MATRIX: SOIL

%SOLIDS: 94.2

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	2970000	ug/Kg		7160	21100	21100	1	P	HSC	01/28/10 20:44	012810-1	941727
7440-36-0	Antimony	1050	ug/Kg	U	348	1050	1050	1	P	HSC	01/28/10 20:44	012810-1	941727
7440-38-2	Arsenic	1.31	mg/kg		0.205	1.03	1.03	2	MS	BAJ	02/08/10 15:02	100208-2	941732
7440-39-3	Barium J-,16a	70200	ug/Kg	*N	105	527	527	1	P	HSC	01/28/10 20:44	012810-1	941727
7440-41-7	Beryllium	0.425	mg/kg		0.0205	0.103	0.103	2	MS	RMJ	01/30/10 08:30	100129-4	941732
7440-43-9	Cadmium	527	ug/Kg	U	105	527	527	1	P	HSC	01/28/10 20:44	012810-1	941727
7440-70-2	Calcium	782000	ug/Kg		8430	26300	26300	1	P	HSC	01/28/10 20:44	012810-1	941727
7440-47-3	Chromium J,110a	10300	ug/Kg	*	158	527	527	1	P	HSC	01/28/10 20:44	012810-1	941727
7440-48-4	Cobalt	5800	ug/Kg		158	527	527	1	P	HSC	01/28/10 20:44	012810-1	941727
7440-50-8	Copper	4010	ug/Kg		316	1050	1050	1	P	HSC	01/28/10 20:44	012810-1	941727
7439-89-6	Iron	8120000	ug/Kg		8430	26300	26300	1	P	HSC	01/28/10 20:44	012810-1	941727
7439-92-1	Lead	7810	ug/Kg	*	263	1050	1050	1	P	HSC	01/28/10 20:44	012810-1	941727
7439-95-4	Magnesium J+,16b	635000	ug/Kg	N	8960	31600	31600	1	P	HSC	01/28/10 20:44	012810-1	941727
7439-96-5	Manganese	391000	ug/Kg	*	211	1050	1050	1	P	HSC	01/28/10 20:44	012810-1	941727
7439-97-6	Mercury	11.4	ug/kg	U	3.88	11.4	11.4	1	AV	JXL1	01/28/10 12:19	01281051-9	943305
7440-02-0	Nickel	4.04	mg/kg		0.103	0.411	0.411	2	MS	BAJ	02/08/10 15:02	100208-2	941732
7440-09-7	Potassium J+,16b	565000	ug/Kg	N	6740	26300	26300	1	P	HSC	01/28/10 20:44	012810-1	941727
7782-49-2	Selenium	1.03	mg/kg	U	0.514	1.03	1.03	2	MS	BAJ	02/08/10 15:02	100208-2	941732
7440-22-4	Silver	403	ug/Kg	J	105	527	527	1	P	HSC	01/28/10 20:44	012810-1	941727
7440-23-5	Sodium	85200	ug/Kg		7370	26300	26300	1	P	HSC	01/28/10 20:44	012810-1	941727
7440-28-0	Thallium U,14b	0.0684	mg/kg	J	0.0616	0.205	0.205	2	MS	RMJ	02/03/10 18:25	100202-7	941732
7440-61-1	Uranium	1.04	mg/kg	*	0.0136	0.0411	0.0411	2	MS	RMJ	01/30/10 14:15	100129-6	941732
7440-62-2	Vanadium	8510	ug/Kg		105	527	527	1	P	HSC	01/28/10 20:44	012810-1	941727
7440-66-6	Zinc	24000	ug/Kg		348	1050	1050	1	P	HSC	01/28/10 20:44	012810-1	941727

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
941727	941725	SW846 3050B	0.504	g	50	mL	01/20/10	AXG2
941732	941730	SW846 3050B	0.517	g	50	mL	01/20/10	AXG2
943305	943303	SW846 7471A Prep	0.559	g	30	mL	01/27/10	TXB3

EJM
02/18/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1212

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244601002

BASIS: Dry Weight

DATE COLLECTED 07-JAN-10

CLIENT ID: RE12-10-7240

LEVEL: Low

DATE RECEIVED 13-JAN-10

MATRIX: SOIL

%SOLIDS: 86

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	8120000	ug/Kg		7800	22900	22900	1	P	HSC	01/28/10 21:34	012810-1	941727
7440-36-0	Antimony	1150	ug/Kg	U	379	1150	1150	1	P	HSC	01/28/10 21:34	012810-1	941727
7440-38-2	Arsenic	2.7	mg/kg		0.231	1.16	1.16	2	MS	BAJ	02/08/10 15:19	100208-2	941732
7440-39-3	Barium J-,16a	166000	ug/Kg	*N	115	574	574	1	P	HSC	01/28/10 21:34	012810-1	941727
7440-41-7	Beryllium	0.863	mg/kg		0.0231	0.116	0.116	2	MS	RMJ	01/30/10 08:46	100129-4	941732
7440-43-9	Cadmium	574	ug/Kg	U	115	574	574	1	P	HSC	01/28/10 21:34	012810-1	941727
7440-70-2	Calcium	4260000	ug/Kg		9180	28700	28700	1	P	HSC	01/28/10 21:34	012810-1	941727
7440-47-3	Chromium J,110a	9320	ug/Kg	*	172	574	574	1	P	HSC	01/28/10 21:34	012810-1	941727
7440-48-4	Cobalt	8120	ug/Kg		172	574	574	1	P	HSC	01/28/10 21:34	012810-1	941727
7440-50-8	Copper	7400	ug/Kg		344	1150	1150	1	P	HSC	01/28/10 21:34	012810-1	941727
7439-89-6	Iron	13500000	ug/Kg		9180	28700	28700	1	P	HSC	01/28/10 21:34	012810-1	941727
7439-92-1	Lead	10200	ug/Kg	*	287	1150	1150	1	P	HSC	01/28/10 21:34	012810-1	941727
7439-95-4	Magnesium J+,16b	2110000	ug/Kg	N	9750	34400	34400	1	P	HSC	01/28/10 21:34	012810-1	941727
7439-96-5	Manganese	322000	ug/Kg	*	229	1150	1150	1	P	HSC	01/28/10 21:34	012810-1	941727
7439-97-6	Mercury	14.7	ug/kg		4.19	12.3	12.3	1	AV	JXL1	01/28/10 12:28	012810S1-9	943305
7440-02-0	Nickel	9.69	mg/kg		0.116	0.463	0.463	2	MS	BAJ	02/08/10 15:19	100208-2	941732
7440-09-7	Potassium J+,16b	1710000	ug/Kg	N	7340	28700	28700	1	P	HSC	01/28/10 21:34	012810-1	941727
7782-49-2	Selenium	1.16	mg/kg	U	0.578	1.16	1.16	2	MS	BAJ	02/08/10 15:19	100208-2	941732
7440-22-4	Silver	698	ug/Kg		115	574	574	1	P	HSC	01/28/10 21:34	012810-1	941727
7440-23-5	Sodium	343000	ug/Kg		8030	28700	28700	1	P	HSC	01/28/10 21:34	012810-1	941727
7440-28-0	Thallium U,14b	0.251	mg/kg		0.0694	0.231	0.231	2	MS	RMJ	02/03/10 18:55	100202-7	941732
7440-61-1	Uranium	0.709	mg/kg	*	0.0153	0.0463	0.0463	2	MS	RMJ	01/30/10 14:44	100129-6	941732
7440-62-2	Vanadium	25000	ug/Kg		115	574	574	1	P	HSC	01/28/10 21:34	012810-1	941727
7440-66-6	Zinc	25500	ug/Kg		379	1150	1150	1	P	HSC	01/28/10 21:34	012810-1	941727

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
941727	941725	SW846 3050B	0.504	g	50	mL	01/20/10	AXG2
941732	941730	SW846 3050B	0.5	g	50	mL	01/20/10	AXG2
943305	943303	SW846 7471A Prep	0.563	g	30	mL	01/27/10	TXB3

EJM
02/18/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1212

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244601003

BASIS: Dry Weight

DATE COLLECTED 07-JAN-10

CLIENT ID: RE12-10-7241

LEVEL: Low

DATE RECEIVED 13-JAN-10

MATRIX: SOIL

%SOLIDS: 90.6

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	8620000	ug/Kg		7440	21900	21900	1	P	HSC	01/28/10 21:41	012810-1	941727
7440-36-0	Antimony	1090	ug/Kg	U	361	1090	1090	1	P	HSC	01/28/10 21:41	012810-1	941727
7440-38-2	Arsenic	3.14	mg/kg		0.22	1.1	1.1	2	MS	BAJ	02/08/10 15:22	100208-2	941732
7440-39-3	Barium J-,16a	169000	ug/Kg	*N	109	547	547	1	P	HSC	01/28/10 21:41	012810-1	941727
7440-41-7	Beryllium	1.02	mg/kg		0.022	0.11	0.11	2	MS	RMJ	01/30/10 08:55	100129-4	941732
7440-43-9	Cadmium	547	ug/Kg	U	109	547	547	1	P	HSC	01/28/10 21:41	012810-1	941727
7440-70-2	Calcium	4600000	ug/Kg		8760	27400	27400	1	P	HSC	01/28/10 21:41	012810-1	941727
7440-47-3	Chromium J,110a	8170	ug/Kg	*	164	547	547	1	P	HSC	01/28/10 21:41	012810-1	941727
7440-48-4	Cobalt	5890	ug/Kg		164	547	547	1	P	HSC	01/28/10 21:41	012810-1	941727
7440-50-8	Copper	6220	ug/Kg		328	1090	1090	1	P	HSC	01/28/10 21:41	012810-1	941727
7439-89-6	Iron	11700000	ug/Kg		8760	27400	27400	1	P	HSC	01/28/10 21:41	012810-1	941727
7439-92-1	Lead	10000	ug/Kg	*	274	1090	1090	1	P	HSC	01/28/10 21:41	012810-1	941727
7439-95-4	Magnesium J+,16b	2170000	ug/Kg	N	9300	32800	32800	1	P	HSC	01/28/10 21:41	012810-1	941727
7439-96-5	Manganese	273000	ug/Kg	*	219	1090	1090	1	P	HSC	01/28/10 21:41	012810-1	941727
7439-97-6	Mercury	13.2	ug/kg		4.13	12.1	12.1	1	AV	JXL	01/28/10 12:30	012810S1-9	943305
7440-02-0	Nickel	10.1	mg/kg		0.11	0.44	0.44	2	MS	BAJ	02/08/10 15:22	100208-2	941732
7440-09-7	Potassium J+,16b	1660000	ug/Kg	N	7010	27400	27400	1	P	HSC	01/28/10 21:41	012810-1	941727
7782-49-2	Selenium	1.1	mg/kg	U	0.549	1.1	1.1	2	MS	BAJ	02/08/10 15:22	100208-2	941732
7440-22-4	Silver	565	ug/Kg		109	547	547	1	P	HSC	01/28/10 21:41	012810-1	941727
7440-23-5	Sodium	679000	ug/Kg		7660	27400	27400	1	P	HSC	01/28/10 21:41	012810-1	941727
7440-28-0	Thallium U,14b	0.189	mg/kg	J	0.0659	0.22	0.22	2	MS	RMJ	02/03/10 19:01	100202-7	941732
7440-61-1	Uranium	0.836	mg/kg	*	0.0145	0.044	0.044	2	MS	RMJ	01/30/10 14:50	100129-6	941732
7440-62-2	Vanadium	21600	ug/Kg		109	547	547	1	P	HSC	01/28/10 21:41	012810-1	941727
7440-66-6	Zinc	24700	ug/Kg		361	1090	1090	1	P	HSC	01/28/10 21:41	012810-1	941727

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
941727	941725	SW846 3050B	0.504	g	50	mL	01/20/10	AXG2
941732	941730	SW846 3050B	0.502	g	50	mL	01/20/10	AXG2
943305	943303	SW846 7471A Prep	0.545	g	30	mL	01/27/10	TXB3

EJM
02/18/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1212

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244601004

BASIS: Dry Weight

DATE COLLECTED 07-JAN-10

CLIENT ID: RE12-10-7237

LEVEL: Low

DATE RECEIVED 13-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	7700000	ug/Kg		7420	21800	21800	1	P	HSC	01/28/10 21:48	012810-1	941727
7440-36-0	Antimony	1090	ug/Kg	U	360	1090	1090	1	P	HSC	01/28/10 21:48	012810-1	941727
7440-38-2	Arsenic	1.63	mg/kg		0.217	1.09	1.09	2	MS	BAJ	02/08/10 15:24	100208-2	941732
7440-39-3	Barium J-,16a	73900	ug/Kg	*N	109	545	545	1	P	HSC	01/28/10 21:48	012810-1	941727
7440-41-7	Beryllium	0.642	mg/kg		0.0217	0.109	0.109	2	MS	RMJ	01/30/10 08:58	100129-4	941732
7440-43-9	Cadmium	545	ug/Kg	U	109	545	545	1	P	HSC	01/28/10 21:48	012810-1	941727
7440-70-2	Calcium	1880000	ug/Kg		8730	27300	27300	1	P	HSC	01/28/10 21:48	012810-1	941727
7440-47-3	Chromium J,110a	13800	ug/Kg	*	164	545	545	1	P	HSC	01/28/10 21:48	012810-1	941727
7440-48-4	Cobalt	6960	ug/Kg		164	545	545	1	P	HSC	01/28/10 21:48	012810-1	941727
7440-50-8	Copper	5530	ug/Kg		327	1090	1090	1	P	HSC	01/28/10 21:48	012810-1	941727
7439-89-6	Iron	12300000	ug/Kg		8730	27300	27300	1	P	HSC	01/28/10 21:48	012810-1	941727
7439-92-1	Lead	22600	ug/Kg	*	273	1090	1090	1	P	HSC	01/28/10 21:48	012810-1	941727
7439-95-4	Magnesium J+,16b	1560000	ug/Kg	N	9270	32700	32700	1	P	HSC	01/28/10 21:48	012810-1	941727
7439-96-5	Manganese	285000	ug/Kg	*	218	1090	1090	1	P	HSC	01/28/10 21:48	012810-1	941727
7439-97-6	Mercury	24.2	ug/kg		4.13	12.2	12.2	1	AV	JXL1	01/28/10 12:35	012810S1-9	943305
7440-02-0	Nickel	6.4	mg/kg		0.109	0.435	0.435	2	MS	BAJ	02/08/10 15:24	100208-2	941732
7440-09-7	Potassium J+,16b	1290000	ug/Kg	N	6980	27300	27300	1	P	HSC	01/28/10 21:48	012810-1	941727
7782-49-2	Selenium	1.09	mg/kg	U	0.543	1.09	1.09	2	MS	BAJ	02/08/10 15:24	100208-2	941732
7440-22-4	Silver	593	ug/Kg		109	545	545	1	P	HSC	01/28/10 21:48	012810-1	941727
7440-23-5	Sodium	111000	ug/Kg		7640	27300	27300	1	P	HSC	01/28/10 21:48	012810-1	941727
7440-28-0	Thallium U,14b	0.139	mg/kg	J	0.0652	0.217	0.217	2	MS	RMJ	02/03/10 19:07	100202-7	941732
7440-61-1	Uranium	0.463	mg/kg	*	0.0143	0.0435	0.0435	2	MS	RMJ	01/30/10 14:56	100129-6	941732
7440-62-2	Vanadium	11300	ug/Kg		109	545	545	1	P	HSC	01/28/10 21:48	012810-1	941727
7440-66-6	Zinc	30600	ug/Kg		360	1090	1090	1	P	HSC	01/28/10 21:48	012810-1	941727

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
941727	941725	SW846 3050B	0.51	g	50	mL	01/20/10	AXG2
941732	941730	SW846 3050B	0.512	g	50	mL	01/20/10	AXG2
943305	943303	SW846 7471A Prep	0.549	g	30	mL	01/27/10	TXB3

EJM
02/18/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1212

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244601005

BASIS: Dry Weight

DATE COLLECTED 07-JAN-10

CLIENT ID: RE12-10-7239

LEVEL: Low

DATE RECEIVED 13-JAN-10

MATRIX: SOIL

%SOLIDS: 90.7

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	10600000	ug/Kg		7350	21600	21600	1	P	HSC	01/28/10 21:55	012810-1	941727
7440-36-0	Antimony	1080	ug/Kg	U	357	1080	1080	1	P	HSC	01/28/10 21:55	012810-1	941727
7440-38-2	Arsenic	2.68	mg/kg		0.219	1.1	1.1	2	MS	BAJ	02/08/10 15:27	100208-2	941732
7440-39-3	Barium J-,16a	214000	ug/Kg	*N	108	541	541	1	P	HSC	01/28/10 21:55	012810-1	941727
7440-41-7	Beryllium	1.11	mg/kg		0.0219	0.11	0.11	2	MS	RMJ	01/30/10 09:01	100129-4	941732
7440-43-9	Cadmium	541	ug/Kg	U	108	541	541	1	P	HSC	01/28/10 21:55	012810-1	941727
7440-70-2	Calcium	4580000	ug/Kg		8650	27000	27000	1	P	HSC	01/28/10 21:55	012810-1	941727
7440-47-3	Chromium J,110a	9300	ug/Kg	*	162	541	541	1	P	HSC	01/28/10 21:55	012810-1	941727
7440-48-4	Cobalt	4030	ug/Kg		162	541	541	1	P	HSC	01/28/10 21:55	012810-1	941727
7440-50-8	Copper	5810	ug/Kg		324	1080	1080	1	P	HSC	01/28/10 21:55	012810-1	941727
7439-89-6	Iron	10800000	ug/Kg		8650	27000	27000	1	P	HSC	01/28/10 21:55	012810-1	941727
7439-92-1	Lead	9190	ug/Kg	*	270	1080	1080	1	P	HSC	01/28/10 21:55	012810-1	941727
7439-95-4	Magnesium J+,16b	1960000	ug/Kg	N	9190	32400	32400	1	P	HSC	01/28/10 21:55	012810-1	941727
7439-96-5	Manganese	216000	ug/Kg	*	216	1080	1080	1	P	HSC	01/28/10 21:55	012810-1	941727
7439-97-6	Mercury	22.6	ug/kg		4.42	13	13	1	AV	JXL1	01/28/10 12:36	012810S1-9	943305
7440-02-0	Nickel	8.94	mg/kg		0.11	0.439	0.439	2	MS	BAJ	02/08/10 15:27	100208-2	941732
7440-09-7	Potassium J+,16b	1330000	ug/Kg	N	6920	27000	27000	1	P	HSC	01/28/10 21:55	012810-1	941727
7782-49-2	Selenium	1.1	mg/kg	U	0.548	1.1	1.1	2	MS	BAJ	02/08/10 15:27	100208-2	941732
7440-22-4	Silver	553	ug/Kg		108	541	541	1	P	HSC	01/28/10 21:55	012810-1	941727
7440-23-5	Sodium	432000	ug/Kg		7570	27000	27000	1	P	HSC	01/28/10 21:55	012810-1	941727
7440-28-0	Thallium U,14b	0.194	mg/kg	J	0.0658	0.219	0.219	2	MS	RMJ	02/03/10 19:24	100202-7	941732
7440-61-1	Uranium	0.647	mg/kg	*	0.0145	0.0439	0.0439	2	MS	RMJ	01/30/10 15:14	100129-6	941732
7440-62-2	Vanadium	17900	ug/Kg		108	541	541	1	P	HSC	01/28/10 21:55	012810-1	941727
7440-66-6	Zinc	20900	ug/Kg		357	1080	1080	1	P	HSC	01/28/10 21:55	012810-1	941727

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
941727	941725	SW846 3050B	0.51	g	50	mL	01/20/10	AXG2
941732	941730	SW846 3050B	0.503	g	50	mL	01/20/10	AXG2
943305	943303	SW846 7471A Prep	0.509	g	30	mL	01/27/10	TXB3

EJM
02/18/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1212

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244601006

BASIS: Dry Weight

DATE COLLECTED 07-JAN-10

CLIENT ID: RE12-10-7238

LEVEL: Low

DATE RECEIVED 13-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	18300000	ug/Kg		7880	23200	23200	1	P	HSC	01/28/10 22:02	012810-1	941727
7440-36-0	Antimony	1160	ug/Kg	U	382	1160	1160	1	P	HSC	01/28/10 22:02	012810-1	941727
7440-38-2	Arsenic	2.44	mg/kg		0.24	1.2	1.2	2	MS	BAJ	02/08/10 15:29	100208-2	941732
7440-39-3	Barium J-,16a	211000	ug/Kg	*N	116	579	579	1	P	HSC	01/28/10 22:02	012810-1	941727
7440-41-7	Beryllium	1.35	mg/kg		0.024	0.12	0.12	2	MS	RMJ	01/30/10 09:05	100129-4	941732
7440-43-9	Cadmium	579	ug/Kg	U	116	579	579	1	P	HSC	01/28/10 22:02	012810-1	941727
7440-70-2	Calcium	2630000	ug/Kg		9270	29000	29000	1	P	HSC	01/28/10 22:02	012810-1	941727
7440-47-3	Chromium J,110a	26400	ug/Kg	*	174	579	579	1	P	HSC	01/28/10 22:02	012810-1	941727
7440-48-4	Cobalt	6210	ug/Kg		174	579	579	1	P	HSC	01/28/10 22:02	012810-1	941727
7440-50-8	Copper	8830	ug/Kg		348	1160	1160	1	P	HSC	01/28/10 22:02	012810-1	941727
7439-89-6	Iron	16400000	ug/Kg		9270	29000	29000	1	P	HSC	01/28/10 22:02	012810-1	941727
7439-92-1	Lead	17000	ug/Kg	*	290	1160	1160	1	P	HSC	01/28/10 22:02	012810-1	941727
7439-95-4	Magnesium J+,16b	2570000	ug/Kg	N	9850	34800	34800	1	P	HSC	01/28/10 22:02	012810-1	941727
7439-96-5	Manganese	383000	ug/Kg	*	232	1160	1160	1	P	HSC	01/28/10 22:02	012810-1	941727
7439-97-6	Mercury	18	ug/kg		4.87	14.3	14.3	1	AV	JXL1	01/28/10 12:38	012810S1-9	943305
7440-02-0	Nickel	12	mg/kg		0.12	0.48	0.48	2	MS	BAJ	02/08/10 15:29	100208-2	941732
7440-09-7	Potassium J+,16b	1950000	ug/Kg	N	7410	29000	29000	1	P	HSC	01/28/10 22:02	012810-1	941727
7782-49-2	Selenium	1.2	mg/kg	U	0.6	1.2	1.2	2	MS	BAJ	02/08/10 15:29	100208-2	941732
7440-22-4	Silver	603	ug/Kg		116	579	579	1	P	HSC	01/28/10 22:02	012810-1	941727
7440-23-5	Sodium	190000	ug/Kg		8110	29000	29000	1	P	HSC	01/28/10 22:02	012810-1	941727
7440-28-0	Thallium U,14b	0.233	mg/kg	J	0.072	0.24	0.24	2	MS	RMJ	02/03/10 19:30	100202-7	941732
7440-61-1	Uranium	1.47	mg/kg	*	0.0158	0.048	0.048	2	MS	RMJ	01/30/10 15:20	100129-6	941732
7440-62-2	Vanadium	30300	ug/Kg		116	579	579	1	P	HSC	01/28/10 22:02	012810-1	941727
7440-66-6	Zinc	27700	ug/Kg		382	1160	1160	1	P	HSC	01/28/10 22:02	012810-1	941727

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
941727	941725	SW846 3050B	0.518	g	50	mL	01/20/10	AXG2
941732	941730	SW846 3050B	0.5	g	50	mL	01/20/10	AXG2
943305	943303	SW846 7471A Prep	0.503	g	30	mL	01/27/10	TXB3

EJM
02/18/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1212

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244601007

BASIS: Dry Weight

DATE COLLECTED 07-JAN-10

CLIENT ID: RE12-10-7242

LEVEL: Low

DATE RECEIVED 13-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	8460000	ug/Kg		8080	23800	23800	1	P	HSC	01/28/10 22:09	012810-1	941727
7440-36-0	Antimony	1190	ug/Kg	U	392	1190	1190	1	P	HSC	01/28/10 22:09	012810-1	941727
7440-38-2	Arsenic	2.06	mg/kg		0.231	1.16	1.16	2	MS	BAJ	02/08/10 15:32	100208-2	941732
7440-39-3	Barium J-,16a	115000	ug/Kg	*N	119	594	594	1	P	HSC	01/28/10 22:09	012810-1	941727
7440-41-7	Beryllium	0.981	mg/kg		0.0231	0.116	0.116	2	MS	RMJ	01/30/10 09:08	100129-4	941732
7440-43-9	Cadmium	594	ug/Kg	U	119	594	594	1	P	HSC	01/28/10 22:09	012810-1	941727
7440-70-2	Calcium	2080000	ug/Kg		9510	29700	29700	1	P	HSC	01/28/10 22:09	012810-1	941727
7440-47-3	Chromium J,110a	10400	ug/Kg	*	178	594	594	1	P	HSC	01/28/10 22:09	012810-1	941727
7440-48-4	Cobalt	4220	ug/Kg		178	594	594	1	P	HSC	01/28/10 22:09	012810-1	941727
7440-50-8	Copper	7160	ug/Kg		356	1190	1190	1	P	HSC	01/28/10 22:09	012810-1	941727
7439-89-6	Iron	11400000	ug/Kg		9510	29700	29700	1	P	HSC	01/28/10 22:09	012810-1	941727
7439-92-1	Lead	11700	ug/Kg	*	297	1190	1190	1	P	HSC	01/28/10 22:09	012810-1	941727
7439-95-4	Magnesium J+,16b	1840000	ug/Kg	N	10100	35600	35600	1	P	HSC	01/28/10 22:09	012810-1	941727
7439-96-5	Manganese	270000	ug/Kg	*	238	1190	1190	1	P	HSC	01/28/10 22:09	012810-1	941727
7439-97-6	Mercury	15.3	ug/kg		4.34	12.8	12.8	1	AV	JXLI	01/28/10 12:40	012810S1-9	943305
7440-02-0	Nickel	8.44	mg/kg		0.116	0.462	0.462	2	MS	BAJ	02/08/10 15:32	100208-2	941732
7440-09-7	Potassium J+,16b	1580000	ug/Kg	N	7600	29700	29700	1	P	HSC	01/28/10 22:09	012810-1	941727
7782-49-2	Selenium	1.16	mg/kg	U	0.578	1.16	1.16	2	MS	BAJ	02/08/10 15:32	100208-2	941732
7440-22-4	Silver	657	ug/Kg		119	594	594	1	P	HSC	01/28/10 22:09	012810-1	941727
7440-23-5	Sodium U,14d	60000	ug/Kg		8320	29700	29700	1	P	HSC	01/28/10 22:09	012810-1	941727
7440-28-0	Thallium U,14b	0.171	mg/kg	J	0.0694	0.231	0.231	2	MS	RMJ	02/03/10 19:36	100202-7	941732
7440-61-1	Uranium	3.08	mg/kg	*	0.0153	0.0462	0.0462	2	MS	RMJ	01/30/10 15:26	100129-6	941732
7440-62-2	Vanadium	18600	ug/Kg		119	594	594	1	P	HSC	01/28/10 22:09	012810-1	941727
7440-66-6	Zinc	24800	ug/Kg		392	1190	1190	1	P	HSC	01/28/10 22:09	012810-1	941727

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
941727	941725	SW846 3050B	0.503	g	50	mL	01/20/10	AXG2
941732	941730	SW846 3050B	0.517	g	50	mL	01/20/10	AXG2
943305	943303	SW846 7471A Prep	0.562	g	30	mL	01/27/10	TXB3

EJM
02/18/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1212

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244601008

BASIS: Dry Weight

DATE COLLECTED 07-JAN-10

CLIENT ID: RE12-10-7236

LEVEL: Low

DATE RECEIVED 13-JAN-10

MATRIX: SOIL

%SOLIDS: 78

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	6690000	ug/Kg		8560	25200	25200	1	P	HSC	01/28/10 22:30	012810-1	941727
7440-36-0	Antimony	1260	ug/Kg	U	415	1260	1260	1	P	HSC	01/28/10 22:30	012810-1	941727
7440-38-2	Arsenic	1.86	mg/kg		0.252	1.26	1.26	2	MS	BAJ	02/08/10 15:39	100208-2	941732
7440-39-3	Barium J-,16a	80800	ug/Kg	*N	126	629	629	1	P	HSC	01/28/10 22:30	012810-1	941727
7440-41-7	Beryllium	0.629	mg/kg		0.0252	0.126	0.126	2	MS	RMJ	01/30/10 09:11	100129-4	941732
7440-43-9	Cadmium	629	ug/Kg	U	126	629	629	1	P	HSC	01/28/10 22:30	012810-1	941727
7440-70-2	Calcium	1440000	ug/Kg		10100	31500	31500	1	P	HSC	01/28/10 22:30	012810-1	941727
7440-47-3	Chromium J-,110a	14400	ug/Kg	*	189	629	629	1	P	HSC	01/28/10 22:30	012810-1	941727
7440-48-4	Cobalt	6300	ug/Kg		189	629	629	1	P	HSC	01/28/10 22:30	012810-1	941727
7440-50-8	Copper	6760	ug/Kg		378	1260	1260	1	P	HSC	01/28/10 22:30	012810-1	941727
7439-89-6	Iron	12400000	ug/Kg		10100	31500	31500	1	P	HSC	01/28/10 22:30	012810-1	941727
7439-92-1	Lead	12400	ug/Kg	*	315	1260	1260	1	P	HSC	01/28/10 22:30	012810-1	941727
7439-95-4	Magnesium J+,16b	1290000	ug/Kg	N	10700	37800	37800	1	P	HSC	01/28/10 22:30	012810-1	941727
7439-96-5	Manganese	293000	ug/Kg	*	252	1260	1260	1	P	HSC	01/28/10 22:30	012810-1	941727
7439-97-6	Mercury	19	ug/kg		5.14	15.1	15.1	1	AV	JXL1	01/28/10 12:42	012810S1-9	943305
7440-02-0	Nickel	6.36	mg/kg		0.126	0.505	0.505	2	MS	BAJ	02/08/10 15:39	100208-2	941732
7440-09-7	Potassium J+,16b	1250000	ug/Kg	N	8060	31500	31500	1	P	HSC	01/28/10 22:30	012810-1	941727
7782-49-2	Selenium	1.26	mg/kg	U	0.631	1.26	1.26	2	MS	BAJ	02/08/10 15:39	100208-2	941732
7440-22-4	Silver	695	ug/Kg		126	629	629	1	P	HSC	01/28/10 22:30	012810-1	941727
7440-23-5	Sodium U-,14d	71900	ug/Kg		8810	31500	31500	1	P	HSC	01/28/10 22:30	012810-1	941727
7440-28-0	Thallium U-,14b	0.102	mg/kg	J	0.0757	0.252	0.252	2	MS	RMJ	02/03/10 19:42	100202-7	941732
7440-61-1	Uranium	2.51	mg/kg	*	0.0167	0.0505	0.0505	2	MS	RMJ	01/30/10 15:31	100129-6	941732
7440-62-2	Vanadium	17100	ug/Kg		126	629	629	1	P	HSC	01/28/10 22:30	012810-1	941727
7440-66-6	Zinc	28700	ug/Kg		415	1260	1260	1	P	HSC	01/28/10 22:30	012810-1	941727

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
941727	941725	SW846 3050B	0.507	g	50	mL	01/20/10	AXG2
941732	941730	SW846 3050B	0.506	g	50	mL	01/20/10	AXG2
943305	943303	SW846 7471A Prep	0.507	g	30	mL	01/27/10	TXB3

EJM
02/18/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1212

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244601009

BASIS: Dry Weight

DATE COLLECTED 07-JAN-10

CLIENT ID: RE12-10-7252

LEVEL: Low

DATE RECEIVED 13-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	6080000	ug/Kg		8090	23800	23800	1	P	HSC	01/28/10 22:37	012810-1	941727
7440-36-0	Antimony	1190	ug/Kg	U	392	1190	1190	1	P	HSC	01/28/10 22:37	012810-1	941727
7440-38-2	Arsenic	1.71	mg/kg		0.236	1.18	1.18	2	MS	BAJ	02/08/10 15:42	100208-2	941732
7440-39-3	Barium J-,16a	68400	ug/Kg	*N	119	595	595	1	P	HSC	01/28/10 22:37	012810-1	941727
7440-41-7	Beryllium	0.609	mg/kg		0.0236	0.118	0.118	2	MS	RMJ	01/30/10 09:15	100129-4	941732
7440-43-9	Cadmium	595	ug/Kg	U	119	595	595	1	P	HSC	01/28/10 22:37	012810-1	941727
7440-70-2	Calcium	1300000	ug/Kg		9520	29700	29700	1	P	HSC	01/28/10 22:37	012810-1	941727
7440-47-3	Chromium J,110a	10400	ug/Kg	*	178	595	595	1	P	HSC	01/28/10 22:37	012810-1	941727
7440-48-4	Cobalt	4470	ug/Kg		178	595	595	1	P	HSC	01/28/10 22:37	012810-1	941727
7440-50-8	Copper	5430	ug/Kg		357	1190	1190	1	P	HSC	01/28/10 22:37	012810-1	941727
7439-89-6	Iron	11400000	ug/Kg		9520	29700	29700	1	P	HSC	01/28/10 22:37	012810-1	941727
7439-92-1	Lead	18300	ug/Kg	*	297	1190	1190	1	P	HSC	01/28/10 22:37	012810-1	941727
7439-95-4	Magnesium J+,16b	1080000	ug/Kg	N	10100	35700	35700	1	P	HSC	01/28/10 22:37	012810-1	941727
7439-96-5	Manganese	302000	ug/Kg	*	238	1190	1190	1	P	HSC	01/28/10 22:37	012810-1	941727
7439-97-6	Mercury	11.8	ug/kg	J	4.3	12.7	12.7	1	AV	JXLI	01/28/10 12:43	012810S1-9	943305
7440-02-0	Nickel	6.09	mg/kg		0.118	0.471	0.471	2	MS	BAJ	02/08/10 15:42	100208-2	941732
7440-09-7	Potassium J+,16b	1070000	ug/Kg	N	7610	29700	29700	1	P	HSC	01/28/10 22:37	012810-1	941727
7782-49-2	Selenium	1.18	mg/kg	U	0.589	1.18	1.18	2	MS	BAJ	02/08/10 15:42	100208-2	941732
7440-22-4	Silver	624	ug/Kg		119	595	595	1	P	HSC	01/28/10 22:37	012810-1	941727
7440-23-5	Sodium U,14d	65600	ug/Kg		8330	29700	29700	1	P	HSC	01/28/10 22:37	012810-1	941727
7440-28-0	Thallium U,14b	0.0862	mg/kg	J	0.0707	0.236	0.236	2	MS	RMJ	02/03/10 19:48	100202-7	941732
7440-61-1	Uranium	2.91	mg/kg	*	0.0155	0.0471	0.0471	2	MS	RMJ	01/30/10 15:37	100129-6	941732
7440-62-2	Vanadium	15100	ug/Kg		119	595	595	1	P	HSC	01/28/10 22:37	012810-1	941727
7440-66-6	Zinc	27300	ug/Kg		392	1190	1190	1	P	HSC	01/28/10 22:37	012810-1	941727

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
941727	941725	SW846 3050B	0.5	g	50	mL	01/20/10	AXG2
941732	941730	SW846 3050B	0.505	g	50	mL	01/20/10	AXG2
943305	943303	SW846 7471A Prep	0.564	g	30	mL	01/27/10	TXB3

EJM
02/18/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1212

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244601010

BASIS: Dry Weight

DATE COLLECTED 07-JAN-10

CLIENT ID: RE12-10-7253

LEVEL: Low

DATE RECEIVED 13-JAN-10

MATRIX: SOIL

%SOLIDS: 96.7

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	1800000	ug/Kg		6880	20200	20200	1	P	HSC	01/28/10 22:44	012810-1	941727
7440-36-0	Antimony	1010	ug/Kg	U	334	1010	1010	1	P	HSC	01/28/10 22:44	012810-1	941727
7440-38-2	Arsenic	0.919	mg/kg	J	0.199	0.996	0.996	2	MS	BAJ	02/08/10 15:44	100208-2	941732
7440-39-3	Barium J-,16a	17100	ug/Kg	*N	101	506	506	1	P	HSC	01/28/10 22:44	012810-1	941727
7440-41-7	Beryllium	0.20	mg/kg		0.0199	0.0996	0.0996	2	MS	RMJ	01/30/10 09:18	100129-4	941732
7440-43-9	Cadmium	506	ug/Kg	U	101	506	506	1	P	HSC	01/28/10 22:44	012810-1	941727
7440-70-2	Calcium	410000	ug/Kg		8090	25300	25300	1	P	HSC	01/28/10 22:44	012810-1	941727
7440-47-3	Chromium J,110a	16400	ug/Kg	*	152	506	506	1	P	HSC	01/28/10 22:44	012810-1	941727
7440-48-4	Cobalt	1840	ug/Kg		152	506	506	1	P	HSC	01/28/10 22:44	012810-1	941727
7440-50-8	Copper	1760	ug/Kg		303	1010	1010	1	P	HSC	01/28/10 22:44	012810-1	941727
7439-89-6	Iron	7310000	ug/Kg		8090	25300	25300	1	P	HSC	01/28/10 22:44	012810-1	941727
7439-92-1	Lead	4720	ug/Kg	*	253	1010	1010	1	P	HSC	01/28/10 22:44	012810-1	941727
7439-95-4	Magnesium J+,16b	305000	ug/Kg	N	8600	30300	30300	1	P	HSC	01/28/10 22:44	012810-1	941727
7439-96-5	Manganese	228000	ug/Kg	*	202	1010	1010	1	P	HSC	01/28/10 22:44	012810-1	941727
7439-97-6	Mercury	11.9	ug/kg	U	4.06	11.9	11.9	1	AV	JXL1	01/28/10 12:45	012810S1-9	943305
7440-02-0	Nickel	3.28	mg/kg		0.0996	0.398	0.398	2	MS	BAJ	02/08/10 15:44	100208-2	941732
7440-09-7	Potassium J+,16b	356000	ug/Kg	N	6470	25300	25300	1	P	HSC	01/28/10 22:44	012810-1	941727
7782-49-2	Selenium	0.996	mg/kg	U	0.498	0.996	0.996	2	MS	BAJ	02/08/10 15:44	100208-2	941732
7440-22-4	Silver	458	ug/Kg	J	101	506	506	1	P	HSC	01/28/10 22:44	012810-1	941727
7440-23-5	Sodium	91700	ug/Kg		7080	25300	25300	1	P	HSC	01/28/10 22:44	012810-1	941727
7440-28-0	Thallium	0.199	mg/kg	U	0.0598	0.199	0.199	2	MS	RMJ	02/03/10 19:54	100202-7	941732
7440-61-1	Uranium	0.385	mg/kg	*	0.0131	0.0398	0.0398	2	MS	RMJ	01/28/10 12:11	100127-3	941732
7440-62-2	Vanadium	3320	ug/Kg		101	506	506	1	P	HSC	01/28/10 22:44	012810-1	941727
7440-66-6	Zinc	20800	ug/Kg		334	1010	1010	1	P	HSC	01/28/10 22:44	012810-1	941727

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
941727	941725	SW846 3050B	0.511	g	50	mL	01/20/10	AXG2
941732	941730	SW846 3050B	0.519	g	50	mL	01/20/10	AXG2
943305	943303	SW846 7471A Prep	0.52	g	30	mL	01/27/10	TXB3

EJM
02/18/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1212

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244601011

BASIS: Dry Weight

DATE COLLECTED 07-JAN-10

CLIENT ID: RE12-10-7254

LEVEL: Low

DATE RECEIVED 13-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	5040000	ug/Kg		7780	22900	22900	1	P	HSC	01/28/10 22:52	012810-1	941727
7440-36-0	Antimony	1140	ug/Kg	U	378	1140	1140	1	P	HSC	01/28/10 22:52	012810-1	941727
7440-38-2	Arsenic	2.2	mg/kg		0.236	1.18	1.18	2	MS	BAJ	02/08/10 15:47	100208-2	941732
7440-39-3	Barium J-,16a	73300	ug/Kg	*N	114	572	572	1	P	HSC	01/28/10 22:52	012810-1	941727
7440-41-7	Beryllium	0.575	mg/kg		0.0236	0.118	0.118	2	MS	RMJ	01/30/10 09:27	100129-4	941732
7440-43-9	Cadmium	572	ug/Kg	U	114	572	572	1	P	HSC	01/28/10 22:52	012810-1	941727
7440-70-2	Calcium	1410000	ug/Kg		9150	28600	28600	1	P	HSC	01/28/10 22:52	012810-1	941727
7440-47-3	Chromium J-,10a	17500	ug/Kg	*	172	572	572	1	P	HSC	01/28/10 22:52	012810-1	941727
7440-48-4	Cobalt	3960	ug/Kg		172	572	572	1	P	HSC	01/28/10 22:52	012810-1	941727
7440-50-8	Copper	5810	ug/Kg		343	1140	1140	1	P	HSC	01/28/10 22:52	012810-1	941727
7439-89-6	Iron	10400000	ug/Kg		9150	28600	28600	1	P	HSC	01/28/10 22:52	012810-1	941727
7439-92-1	Lead	11700	ug/Kg	*	286	1140	1140	1	P	HSC	01/28/10 22:52	012810-1	941727
7439-95-4	Magnesium J+,16b	1060000	ug/Kg	N	9730	34300	34300	1	P	HSC	01/28/10 22:52	012810-1	941727
7439-96-5	Manganese	292000	ug/Kg	*	229	1140	1140	1	P	HSC	01/28/10 22:52	012810-1	941727
7439-97-6	Mercury	11.6	ug/kg	J	4.29	12.6	12.6	1	AV	JXL1	01/28/10 12:47	012810S1-9	943305
7440-02-0	Nickel	6.11	mg/kg		0.118	0.472	0.472	2	MS	BAJ	02/08/10 15:47	100208-2	941732
7440-09-7	Potassium J+,16b	919000	ug/Kg	N	7320	28600	28600	1	P	HSC	01/28/10 22:52	012810-1	941727
7782-49-2	Selenium	1.18	mg/kg	U	0.59	1.18	1.18	2	MS	BAJ	02/08/10 15:47	100208-2	941732
7440-22-4	Silver	566	ug/Kg	J	114	572	572	1	P	HSC	01/28/10 22:52	012810-1	941727
7440-23-5	Sodium U,14d	62500	ug/Kg		8010	28600	28600	1	P	HSC	01/28/10 22:52	012810-1	941727
7440-28-0	Thallium U,14b	0.0857	mg/kg	J	0.0709	0.236	0.236	2	MS	RMJ	02/03/10 20:00	100202-7	941732
7440-61-1	Uranium	2.15	mg/kg	*	0.0156	0.0472	0.0472	2	MS	RMJ	01/30/10 15:49	100129-6	941732
7440-62-2	Vanadium	16000	ug/Kg		114	572	572	1	P	HSC	01/28/10 22:52	012810-1	941727
7440-66-6	Zinc	25000	ug/Kg		378	1140	1140	1	P	HSC	01/28/10 22:52	012810-1	941727

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
941727	941725	SW846 3050B	0.516	g	50	mL	01/20/10	AXG2
941732	941730	SW846 3050B	0.5	g	50	mL	01/20/10	AXG2
943305	943303	SW846 7471A Prep	0.561	g	30	mL	01/27/10	TXB3

EJM
02/18/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1212

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244601012

BASIS: Dry Weight

DATE COLLECTED 07-JAN-10

CLIENT ID: RE12-10-7255

LEVEL: Low

DATE RECEIVED 13-JAN-10

MATRIX: SOIL

%SOLIDS: 93.4

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	4250000	ug/Kg		7180	21100	21100	1	P	HSC	01/28/10 22:59	012810-1	941727
7440-36-0	Antimony	373	ug/Kg	J	348	1060	1060	1	P	HSC	01/28/10 22:59	012810-1	941727
7440-38-2	Arsenic	1.83	mg/kg		0.213	1.07	1.07	2	MS	BAJ	02/08/10 15:49	100208-2	941732
7440-39-3	Barium J-,16a	56600	ug/Kg	*N	106	528	528	1	P	HSC	01/28/10 22:59	012810-1	941727
7440-41-7	Beryllium	0.570	mg/kg		0.0213	0.107	0.107	2	MS	RMJ	01/30/10 09:30	100129-4	941732
7440-43-9	Cadmium	528	ug/Kg	U	106	528	528	1	P	HSC	01/28/10 22:59	012810-1	941727
7440-70-2	Calcium	985000	ug/Kg		8450	26400	26400	1	P	HSC	01/28/10 22:59	012810-1	941727
7440-47-3	Chromium J,110a	21300	ug/Kg	*	158	528	528	1	P	HSC	01/28/10 22:59	012810-1	941727
7440-48-4	Cobalt	3690	ug/Kg		158	528	528	1	P	HSC	01/28/10 22:59	012810-1	941727
7440-50-8	Copper	4110	ug/Kg		317	1060	1060	1	P	HSC	01/28/10 22:59	012810-1	941727
7439-89-6	Iron	8460000	ug/Kg		8450	26400	26400	1	P	HSC	01/28/10 22:59	012810-1	941727
7439-92-1	Lead	8180	ug/Kg	*	264	1060	1060	1	P	HSC	01/28/10 22:59	012810-1	941727
7439-95-4	Magnesium J+,16b	766000	ug/Kg	N	8980	31700	31700	1	P	HSC	01/28/10 22:59	012810-1	941727
7439-96-5	Manganese	275000	ug/Kg	*	211	1060	1060	1	P	HSC	01/28/10 22:59	012810-1	941727
7439-97-6	Mercury	15.4	ug/kg		4.01	11.8	11.8	1	AV	JXL1	01/28/10 12:48	012810S1-9	943305
7440-02-0	Nickel	4.96	mg/kg		0.107	0.427	0.427	2	MS	BAJ	02/08/10 15:49	100208-2	941732
7440-09-7	Potassium J+,16b	683000	ug/Kg	N	6760	26400	26400	1	P	HSC	01/28/10 22:59	012810-1	941727
7782-49-2	Selenium	1.07	mg/kg	U	0.533	1.07	1.07	2	MS	BAJ	02/08/10 15:49	100208-2	941732
7440-22-4	Silver	459	ug/Kg	J	106	528	528	1	P	HSC	01/28/10 22:59	012810-1	941727
7440-23-5	Sodium	64500	ug/Kg		7390	26400	26400	1	P	HSC	01/28/10 22:59	012810-1	941727
7440-28-0	Thallium U,14b	0.0828	mg/kg	J	0.064	0.213	0.213	2	MS	RMJ	02/03/10 20:06	100202-7	941732
7440-61-1	Uranium	4.58	mg/kg	*	0.0141	0.0427	0.0427	2	MS	RMJ	01/30/10 15:55	100129-6	941732
7440-62-2	Vanadium	11400	ug/Kg		106	528	528	1	P	HSC	01/28/10 22:59	012810-1	941727
7440-66-6	Zinc	22200	ug/Kg		348	1060	1060	1	P	HSC	01/28/10 22:59	012810-1	941727

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
941727	941725	SW846 3050B	0.507	g	50	mL	01/20/10	AXG2
941732	941730	SW846 3050B	0.502	g	50	mL	01/20/10	AXG2
943305	943303	SW846 7471A Prep	0.545	g	30	mL	01/27/10	TXB3

EJM
02/18/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1212

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244601013

BASIS: Dry Weight

DATE COLLECTED 07-JAN-10

CLIENT ID: RE12-10-7276

LEVEL: Low

DATE RECEIVED 13-JAN-10

MATRIX: SOIL

%SOLIDS: 91.6

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	11800000	ug/Kg		7380	21700	21700	1	P	HSC	01/28/10 23:06	012810-1	941727
7440-36-0	Antimony	1080	ug/Kg	U	358	1080	1080	1	P	HSC	01/28/10 23:06	012810-1	941727
7440-38-2	Arsenic	2.49	mg/kg		0.216	1.08	1.08	2	MS	BAJ	02/08/10 15:52	100208-2	941732
7440-39-3	Barium J-,16a	203000	ug/Kg	*N	108	542	542	1	P	HSC	01/28/10 23:06	012810-1	941727
7440-41-7	Beryllium	1.01	mg/kg		0.0216	0.108	0.108	2	MS	RMJ	01/30/10 09:33	100129-4	941732
7440-43-9	Cadmium	542	ug/Kg	U	108	542	542	1	P	HSC	01/28/10 23:06	012810-1	941727
7440-70-2	Calcium	4060000	ug/Kg		8680	27100	27100	1	P	HSC	01/28/10 23:06	012810-1	941727
7440-47-3	Chromium J-,110a	15500	ug/Kg	*	163	542	542	1	P	HSC	01/28/10 23:06	012810-1	941727
7440-48-4	Cobalt	15700	ug/Kg		163	542	542	1	P	HSC	01/28/10 23:06	012810-1	941727
7440-50-8	Copper	7500	ug/Kg		325	1080	1080	1	P	HSC	01/28/10 23:06	012810-1	941727
7439-89-6	Iron	14400000	ug/Kg		8680	27100	27100	1	P	HSC	01/28/10 23:06	012810-1	941727
7439-92-1	Lead	17100	ug/Kg	*	271	1080	1080	1	P	HSC	01/28/10 23:06	012810-1	941727
7439-95-4	Magnesium J+,16b	2770000	ug/Kg	N	9220	32500	32500	1	P	HSC	01/28/10 23:06	012810-1	941727
7439-96-5	Manganese	459000	ug/Kg	*	217	1080	1080	1	P	HSC	01/28/10 23:06	012810-1	941727
7439-97-6	Mercury	19.1	ug/kg		3.82	11.2	11.2	1	AV	JXL1	01/28/10 12:50	012810S1-9	943305
7440-02-0	Nickel	8.6	mg/kg		0.108	0.432	0.432	2	MS	BAJ	02/08/10 15:52	100208-2	941732
7440-09-7	Potassium J+,16b	1880000	ug/Kg	N	6940	27100	27100	1	P	HSC	01/28/10 23:06	012810-1	941727
7782-49-2	Selenium	1.08	mg/kg	U	0.54	1.08	1.08	2	MS	BAJ	02/08/10 15:52	100208-2	941732
7440-22-4	Silver	750	ug/Kg		108	542	542	1	P	HSC	01/28/10 23:06	012810-1	941727
7440-23-5	Sodium	626000	ug/Kg		7590	27100	27100	1	P	HSC	01/28/10 23:06	012810-1	941727
7440-28-0	Thallium U-,14b	0.182	mg/kg	J	0.0648	0.216	0.216	2	MS	RMJ	02/03/10 20:12	100202-7	941732
7440-61-1	Uranium	0.672	mg/kg	*	0.0143	0.0432	0.0432	2	MS	RMJ	01/30/10 16:01	100129-6	941732
7440-62-2	Vanadium	25100	ug/Kg		108	542	542	1	P	HSC	01/28/10 23:06	012810-1	941727
7440-66-6	Zinc	29200	ug/Kg		358	1080	1080	1	P	HSC	01/28/10 23:06	012810-1	941727

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
941727	941725	SW846 3050B	0.503	g	50	mL	01/20/10	AXG2
941732	941730	SW846 3050B	0.505	g	50	mL	01/20/10	AXG2
943305	943303	SW846 7471A Prep	0.582	g	30	mL	01/27/10	TXB3

EJM
02/18/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1212-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244602001

BASIS: As Received

DATE COLLECTED 07-JAN-10

CLIENT ID: RE12-10-7284

LEVEL: Low

DATE RECEIVED 13-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	01/19/10 17:48	011910-1	941810
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	BAJ	01/28/10 18:03	100128-5	946103
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	01/19/10 17:48	011910-1	941810
7440-39-3	Barium	5	ug/L	U	1	5	5	1	P	HSC	01/19/10 17:48	011910-1	941810
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	BAJ	01/25/10 23:36	100125-2	941814
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	BAJ	01/25/10 23:36	100125-2	941814
7440-70-2	Calcium	200	ug/L	U	50	200	200	1	P	HSC	01/19/10 17:48	011910-1	941810
7440-47-3	Chromium	5	ug/L	U	1	5	5	1	P	HSC	01/19/10 17:48	011910-1	941810
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	01/19/10 17:48	011910-1	941810
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	01/19/10 17:48	011910-1	941810
7439-89-6	Iron	46.7	ug/L	J	30	100	100	1	P	HSC	01/19/10 17:48	011910-1	941810
7439-92-1	Lead	2	ug/L	U	0.5	2	2	1	MS	BAJ	01/25/10 23:36	100125-2	941814
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	01/19/10 17:48	011910-1	941810
7439-96-5	Manganese	1.96	ug/L	J	1	5	5	1	MS	BAJ	01/25/10 23:36	100125-2	941814
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JXL1	01/20/10 12:11	012010W1-6	943080
7440-02-0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	01/19/10 17:48	011910-1	941810
7440-09-7	Potassium	190	ug/L		50	150	150	1	P	HSC	01/19/10 17:48	011910-1	941810
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	01/19/10 17:48	011910-1	941810
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	01/19/10 17:48	011910-1	941810
7440-23-5	Sodium	122	ug/L	J	100	300	300	1	P	HSC	01/19/10 17:48	011910-1	941810
7440-28-0	Thallium	1	ug/L	U	0.3	1	1	1	MS	BAJ	01/26/10 16:55	100126-3	941814
7440-61-1	Uranium U,14	0.147	ug/L	J	0.05	0.2	0.2	1	MS	BAJ	01/27/10 15:00	100127-4	941814
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	01/19/10 17:48	011910-1	941810
7440-66-6	Zinc	10	ug/L	U	3.3	10	10	1	P	HSC	01/19/10 17:48	011910-1	941810

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
941810	941808	SW846 3005A	50	mL	50	mL	01/18/10	BXA1
941814	941812	SW846 3005A	50	mL	50	mL	01/18/10	BXA1
943080	943079	SW846 7470A Prep	20	mL	20	mL	01/19/10	TXB3
946103	946101	SW846 3005A	50	mL	50	mL	01/28/10	AXG2

EJM
02/18/10

DATA VALIDATION COVER SHEET

5120-1

Data Validation Cover Sheet

Records Use only



Section I.

REQUEST NUMBER: 10-1212 VALIDATION DATE: 02/18/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Ellen McEntee ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- | | | | |
|---|--|---|--|
| <input type="checkbox"/> TPH-GRO | <input type="checkbox"/> HIGH EXPLOSIVES | <input type="checkbox"/> DIOXIN FURANS | <input type="checkbox"/> LCMSMS PERCHLORATES |
| <input type="checkbox"/> TPH-DRO | <input type="checkbox"/> METALS | <input type="checkbox"/> PCB CONGENERS | <input type="checkbox"/> ORGANOCHLORINE |
| <input checked="" type="checkbox"/> GENERAL CHEMISTRY | <input type="checkbox"/> RADIOCHEMISTRY | <input type="checkbox"/> LCMSMS HIGH EXPLOSIVES | PESTICIDES/POLYCHLORINATED BIPHENYLS |

☐ OTHER (DESCRIBE): total cyanide only

Section II. Completeness Check


- | YES | NO | N/A | (CHECK ONE) | YES | NO | N/A | (CHECK ONE) |
|-------------------------------------|--------------------------|-------------------------------------|-----------------------------|-------------------------------------|--------------------------|-------------------------------------|--------------------------|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 1. CHAIN-OF-CUSTODY FORM(S) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 6. RAW/BSS DATA |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 2. CASE NARRATIVE | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 7. QUALITY CONTROL FORMS |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 3. SAMPLE RESULT FORMS | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 8. QUANTITATION REPORTS |
| <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 4. SAMPLE CHROMATOGRAMS | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 9. TICS FORMS |
| <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 5. STANDARD CHROMATOGRAMS | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 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):


None.

Reviewed by: Mary Donovan Level: II Date: 02/19/10


VALIDATOR'S SIGNATURE: Ellen McEntee DATE: 02/18/10

GENERAL CHEMISTRY ANALYTICAL DATA VALIDATION CHECKLIST	
5120-2 General Chemistry Analytical Data Validation Checklist	Records Use only 

Yes No N/A				Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, I9	J-, I9
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2. The holding time was >2 times the applicable holding time requirement.	R, I9a	J-, I9a
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3. The affected analytes are regarded as rejected because the analytical holding time was exceeded.	R, I9b	R, I9b
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	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
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	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
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	6. The ICV and/or CCV were recovered outside the method specific limits.	UJ, I7c	J, I7c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, I7d	J, I7d
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	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
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	9. The interference check sample percent recovery value is <50%.	R, I2	J-, I2
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	10. The interference check sample percent recovery value is ≥50% and <80%.	UJ, I2a	J-, I2a
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	11. The interference check sample percent recovery value is >120%.	N/A	J+, I2b
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	12. The interference check sample was not analyzed with the samples.	R, I2c	R, I2c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	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 

Yes No N/A				Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	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
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	15. The sample result is ≤5X the concentration of the related analyte in the instrument blank and continuing calibration blank.	U, I4b	N/A
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	16. Continuing calibration blanks were not analyzed at the appropriate method frequency.	UJ, I4c	J, I4c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	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
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	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
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	19. The associate matrix spike recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, I6	R, I6
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	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
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	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
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	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
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	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	Records Use only
General Chemistry Analytical Data Validation Checklist	

Yes No N/A				Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	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
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	25. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, I12	R, I12
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	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
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	27. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, I12b
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	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
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	29. Duplicate, dilution, or reanalysis	UJ, I88	J, I88
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	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
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	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)

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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 1, 2010

Client SDG: 10-1212

Client Sample ID: RE12-10-7243
Sample ID: 244601001
Matrix: R
Collect Date: 07-JAN-10 12:00
Receive Date: 13-JAN-10
Collector: Client
Moisture: 5.84%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	69.4	255	ug/kg	1	AXC2	01/19/10	1158	941485	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/18/10	1537	941484

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 1, 2010

Client SDG: 10-1212

Client Sample ID: RE12-10-7240
Sample ID: 244601002
Matrix: R
Collect Date: 07-JAN-10 12:00
Receive Date: 13-JAN-10
Collector: Client
Moisture: 13.5%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
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Flow Injection Analysis

SW9012A Cyanide, Total "Dry Weight Corrected"

Cyanide, Total	U	ND	67.8	249	ug/kg	1	AXC2	01/19/10	1159	941485	1
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The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/18/10	1537	941484

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 1, 2010

Client SDG: 10-1212

Client Sample ID: RE12-10-7241
Sample ID: 244601003
Matrix: R
Collect Date: 07-JAN-10 12:00
Receive Date: 13-JAN-10
Collector: Client
Moisture: 9.37%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	75.0	276	ug/kg	1	AXC2	01/19/10	1200	941485	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/18/10	1537	941484

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 1, 2010

Client SDG: 10-1212

Client Sample ID: RE12-10-7237
Sample ID: 244601004
Matrix: R
Collect Date: 07-JAN-10 12:00
Receive Date: 13-JAN-10
Collector: Client
Moisture: 10.1%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	74.2	273	ug/kg	1	AXC2	01/19/10	1201	941485	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/18/10	1537	941484

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 1, 2010

Client SDG: 10-1212

Client Sample ID: RE12-10-7239
Sample ID: 244601005
Matrix: R
Collect Date: 07-JAN-10 12:00
Receive Date: 13-JAN-10
Collector: Client
Moisture: 9.32%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	75.0	276	ug/kg	1	AXC2	01/21/10	1135	941967	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/20/10	1551	941966

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 1, 2010

Client SDG: 10-1212

Client Sample ID: RE12-10-7238
Sample ID: 244601006
Matrix: R
Collect Date: 07-JAN-10 12:00
Receive Date: 13-JAN-10
Collector: Client
Moisture: 16.7%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
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Flow Injection Analysis

SW9012A Cyanide, Total "Dry Weight Corrected"

Cyanide, Total	J	186	81.6	300	ug/kg	1	AXC2	01/21/10	1138	941967	1
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The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/20/10	1551	941966

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 1, 2010

Client SDG: 10-1212

Client Sample ID: RE12-10-7242
Sample ID: 244601007
Matrix: R
Collect Date: 07-JAN-10 12:00
Receive Date: 13-JAN-10
Collector: Client
Moisture: 16.3%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	81.3	299	ug/kg	1	AXC2	01/21/10	1142	941967	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/20/10	1551	941966

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 1, 2010

Client SDG: 10-1212

Client Sample ID: RE12-10-7236
Sample ID: 244601008
Matrix: R
Collect Date: 07-JAN-10 12:00
Receive Date: 13-JAN-10
Collector: Client
Moisture: 21.7%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	86.8	319	ug/kg	1	AXC2	01/21/10	1143	941967	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/20/10	1551	941966

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 1, 2010

Client SDG: 10-1212

Client Sample ID: RE12-10-7252
Sample ID: 244601009
Matrix: R
Collect Date: 07-JAN-10 12:00
Receive Date: 13-JAN-10
Collector: Client
Moisture: 15.9%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	80.9	297	ug/kg	1	AXC2	01/21/10	1209	941967	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/20/10	1531	941966

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 1, 2010

Client SDG: 10-1212

Client Sample ID: RE12-10-7253
Sample ID: 244601010
Matrix: R
Collect Date: 07-JAN-10 12:00
Receive Date: 13-JAN-10
Collector: Client
Moisture: 3.26%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	70.3	258	ug/kg	1	AXC2	01/21/10	1210	941967	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/20/10	1551	941966

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 1, 2010

Client SDG: 10-1212

Client Sample ID: RE12-10-7254
Sample ID: 244601011
Matrix: R
Collect Date: 07-JAN-10 12:00
Receive Date: 13-JAN-10
Collector: Client
Moisture: 15.3%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	80.3	295	ug/kg	1	AXC2	01/21/10	1211	941967	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/20/10	1551	941966

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 1, 2010

Client SDG: 10-1212

Client Sample ID: RE12-10-7255
Sample ID: 244601012
Matrix: R
Collect Date: 07-JAN-10 12:00
Receive Date: 13-JAN-10
Collector: Client
Moisture: 6.61%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	72.8	268	ug/kg	1	AXC2	01/21/10	1212	941967	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/20/10	1551	941966

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 1, 2010

Client SDG: 10-1212

Client Sample ID: RE12-10-7276
Sample ID: 244601013
Matrix: R
Collect Date: 07-JAN-10 12:00
Receive Date: 13-JAN-10
Collector: Client
Moisture: 8.35%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
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Flow Injection Analysis

SW9012A Cyanide, Total "Dry Weight Corrected"

Cyanide, Total	U	ND	74.2	273	ug/kg	1	AXC2	01/21/10	1213	941967	1
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The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/20/10	1551	941966

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 4, 2010

Client SDG: 10-1212-1

Client Sample ID: RE12-10-7284
Sample ID: 244602001
Matrix: W
Collect Date: 07-JAN-10 12:00
Receive Date: 13-JAN-10
Collector: Client

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "As Received"</i>											
Cyanide, Total	U	ND	1.66	5.00	ug/L	1	AXC2	01/21/10	1240	941490	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/19/10	1511	941488

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

Monday, January 11, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1212C

LOS ALAMOS

REQUEST NUMBER: 10-1212

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 2/11/2010

General Engineering Laboratories, Inc.,
Charleston, SC.

TURNAROUND REQ'D: 30

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS:

244601%, 244602%

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE12-10-7243	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7240	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7241	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7237	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7239	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7238	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7242	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7236	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7252	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7253	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7254	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7255	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7276	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7284	1	POLY	METALS+U-GEL	Nitric Acid	W
RE12-10-7284	1	POLY	SW-846:6850	Ice	W
RE12-10-7284	1	POLY	TCN	Sodium Hydroxide	W

Relinquished By:

Date

Time

Received By:

Date

Time

Printed Name

Signature

1/11/10

1400

Printed Name

Signature

Greg Tyler

1-13-10

0855

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Received for DISPOSAL By:

Date

Time

Remarks:

Printed Name

Signature

Monday, January 11, 2010

**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: 10-1212

Per Agreement Number: 126310011

Project Cost Code: MR3A05529E00

Please analyse the enclosed samples
according to the schedule indicated:

SHIP DATE: 1/12/2010

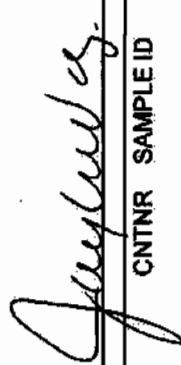
TURNAROUND/REPORT DUE: 2/11/2010

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	RE12-10-7236	R	1/7/2010	
		1	RE12-10-7237	R	1/7/2010	
		1	RE12-10-7238	R	1/7/2010	
		1	RE12-10-7239	R	1/7/2010	
		1	RE12-10-7240	R	1/7/2010	
		1	RE12-10-7241	R	1/7/2010	
		1	RE12-10-7242	R	1/7/2010	
		1	RE12-10-7243	R	1/7/2010	
		1	RE12-10-7252	R	1/7/2010	

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846.8020	1	RE12-10-7253	R	1/7/2010	
		1	RE12-10-7254	R	1/7/2010	
		1	RE12-10-7255	R	1/7/2010	
		1	RE12-10-7276	R	1/7/2010	
		1	RE12-10-7284	W	1/7/2010	
	SW-846.8850	1	RE12-10-7236	R	1/7/2010	
		1	RE12-10-7237	R	1/7/2010	
		1	RE12-10-7238	R	1/7/2010	
		1	RE12-10-7239	R	1/7/2010	
		1	RE12-10-7240	R	1/7/2010	
		1	RE12-10-7241	R	1/7/2010	
		1	RE12-10-7242	R	1/7/2010	
		1	RE12-10-7243	R	1/7/2010	
		1	RE12-10-7252	R	1/7/2010	
		1	RE12-10-7253	R	1/7/2010	
		1	RE12-10-7254	R	1/7/2010	
		1	RE12-10-7255	R	1/7/2010	
		1	RE12-10-7276	R	1/7/2010	
		1	RE12-10-7284	W	1/7/2010	
	SW-846.7470A	1	RE12-10-7284	W	1/7/2010	
	SW-846.7471A	1	RE12-10-7236	R	1/7/2010	
		1	RE12-10-7237	R	1/7/2010	
		1	RE12-10-7238	R	1/7/2010	
		1	RE12-10-7239	R	1/7/2010	
		1	RE12-10-7240	R	1/7/2010	
		1	RE12-10-7241	R	1/7/2010	
		1	RE12-10-7242	R	1/7/2010	
		1	RE12-10-7243	R	1/7/2010	

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:7471A	1	RE12-10-7252	R	1/7/2010	
		1	RE12-10-7253	R	1/7/2010	
		1	RE12-10-7254	R	1/7/2010	
		1	RE12-10-7255	R	1/7/2010	
		1	RE12-10-7276	R	1/7/2010	
	SW-846:9012A	1	RE12-10-7236	R	1/7/2010	
		1	RE12-10-7237	R	1/7/2010	
		1	RE12-10-7238	R	1/7/2010	
		1	RE12-10-7239	R	1/7/2010	
		1	RE12-10-7240	R	1/7/2010	
		1	RE12-10-7241	R	1/7/2010	
		1	RE12-10-7242	R	1/7/2010	
		1	RE12-10-7243	R	1/7/2010	
		1	RE12-10-7252	R	1/7/2010	
		1	RE12-10-7253	R	1/7/2010	
		1	RE12-10-7254	R	1/7/2010	
		1	RE12-10-7255	R	1/7/2010	
		1	RE12-10-7276	R	1/7/2010	
		1	RE12-10-7284	W	1/7/2010	

Final Page of REQUEST NUMBER 10-1212



January 18, 2010

www.gel.com

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: 244601 244602
SDG: 10-1212

Dear Ms. Valdez:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the following analytical results for the sample(s) we received on January 13, 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,

Valerie Davis
Project Manager

Purchase Order: 72733-001-09
Chain of Custody: 10-1212
Enclosures

Los Alamos National Laboratory (72733-001-09)

LANL ER Project

Work Order #: 244601 and 244602

SDG: 10-1212

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Case Narrative

**Case Narrative for
Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Workorder #: 244601 and 244602
SDG # : 10-1212**

January 18, 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 13, 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:

<u>Laboratory ID</u>	<u>Client ID</u>
244601001	RE12-10-7243
244601002	RE12-10-7240
244601003	RE12-10-7241
244601004	RE12-10-7237
244601005	RE12-10-7239
244601006	RE12-10-7238
244601007	RE12-10-7242
244601008	RE12-10-7236
244601009	RE12-10-7252
244601010	RE12-10-7253
244601011	RE12-10-7254
244601012	RE12-10-7255
244601013	RE12-10-7276
244602001	RE12-10-7284

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.


Valerie Davis

Project Manager

List of current GEL Certifications as of 18 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

Monday, January 11, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1212C

LOS ALAMOS

REQUEST NUMBER: 10-1212

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 2/11/2010

General Engineering Laboratories, Inc.,
Charleston, SC.

TURNAROUND REQ'D: 30

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS:

2446017, 2446027

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE12-10-7243	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7240	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7241	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7237	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7239	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7238	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7242	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7236	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7252	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7253	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7254	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7255	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7276	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7284	1	POLY	METALS+U-GEL	Nitric Acid	W
RE12-10-7284	1	POLY	SW-846:6850	Ice	W
RE12-10-7284	1	POLY	TCN	Sodium Hydroxide	W

Relinquished By:

Date

Time

Received By:

Date

Time

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Received for DISPOSAL By:

Date

Time

Remarks:

Printed Name

Signature

Monday, January 11, 2010

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

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

Please analyse the enclosed samples
according to the schedule indicated:

SHIP DATE: 1/12/2010

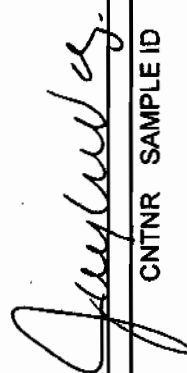
TURNAROUND/REPORT DUE: 2/11/2010

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Yes, Below Background
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:



REQUEST NUMBER: 10-1212

These Samples are on:

LANL Request Number: 10-1212
Per Agreement Number: 126310011
Project Cost Code: MR3A05529E00

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6020	1	RE12-10-7236	R	1/7/2010	
		1	RE12-10-7237	R	1/7/2010	
		1	RE12-10-7238	R	1/7/2010	
		1	RE12-10-7239	R	1/7/2010	
		1	RE12-10-7240	R	1/7/2010	
		1	RE12-10-7241	R	1/7/2010	
		1	RE12-10-7242	R	1/7/2010	
		1	RE12-10-7243	R	1/7/2010	
		1	RE12-10-7252	R	1/7/2010	

Monday, January 11, 2010

REQUEST NUMBER: 10-1212

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6020	1	RE12-10-7253	R	1/7/2010	
		1	RE12-10-7254	R	1/7/2010	
		1	RE12-10-7255	R	1/7/2010	
		1	RE12-10-7276	R	1/7/2010	
		1	RE12-10-7284	W	1/7/2010	
	SW-846:6850	1	RE12-10-7236	R	1/7/2010	
		1	RE12-10-7237	R	1/7/2010	
		1	RE12-10-7238	R	1/7/2010	
		1	RE12-10-7239	R	1/7/2010	
		1	RE12-10-7240	R	1/7/2010	
		1	RE12-10-7241	R	1/7/2010	
		1	RE12-10-7242	R	1/7/2010	
		1	RE12-10-7243	R	1/7/2010	
		1	RE12-10-7252	R	1/7/2010	
		1	RE12-10-7253	R	1/7/2010	
		1	RE12-10-7254	R	1/7/2010	
		1	RE12-10-7255	R	1/7/2010	
		1	RE12-10-7276	R	1/7/2010	
		1	RE12-10-7284	W	1/7/2010	
	SW-846:7470A	1	RE12-10-7284	W	1/7/2010	
	SW-846:7471A	1	RE12-10-7236	R	1/7/2010	
		1	RE12-10-7237	R	1/7/2010	
		1	RE12-10-7238	R	1/7/2010	
		1	RE12-10-7239	R	1/7/2010	
		1	RE12-10-7240	R	1/7/2010	
		1	RE12-10-7241	R	1/7/2010	
		1	RE12-10-7242	R	1/7/2010	
		1	RE12-10-7243	R	1/7/2010	

Monday, January 11, 2010

Page 3 of 3

REQUEST NUMBER: 10-1212

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:7471A	1	RE12-10-7252	R	1/7/2010	
		1	RE12-10-7253	R	1/7/2010	
		1	RE12-10-7254	R	1/7/2010	
		1	RE12-10-7255	R	1/7/2010	
		1	RE12-10-7276	R	1/7/2010	
	SW-846:9012A	1	RE12-10-7236	R	1/7/2010	
		1	RE12-10-7237	R	1/7/2010	
		1	RE12-10-7238	R	1/7/2010	
		1	RE12-10-7239	R	1/7/2010	
		1	RE12-10-7240	R	1/7/2010	
		1	RE12-10-7241	R	1/7/2010	
		1	RE12-10-7242	R	1/7/2010	
		1	RE12-10-7243	R	1/7/2010	
		1	RE12-10-7252	R	1/7/2010	
		1	RE12-10-7253	R	1/7/2010	
		1	RE12-10-7254	R	1/7/2010	
		1	RE12-10-7255	R	1/7/2010	
		1	RE12-10-7276	R	1/7/2010	
		1	RE12-10-7284	W	1/7/2010	

Final Page of REQUEST NUMBER 10-1212



Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: LANL		SDG/ARCOC/Work Order: 10-1212	
Received By: Greg Tyler		Date Received: 1/13/10	
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 dry ice none other 1-6C 10, 12, 13C
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 4887 1C 7209 7849 4854 10C
 7209 7849 4924 1C 7209 7849 4800 12C
 7209 7849 4810 2C 7209 7849 4843 13C
 7209 7849 4898 3C
 7209 7849 4946 4C
 7209 7849 4865 5C
 7209 7849 4876 6C
 7209 7849 4935 6C

PM (or PMA) review: Initials

Date

GIN ID: SAFA (505) 555-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TAGS BLDG 1237 DPU 03
LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 12JAN10
ACTMGT: 54.0 LB MAN
CAD: 0014176/CAFE2449
BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(43) 555-8171
REF: 6B010AMR3A0352VA00



2 of 2 WED - 13JAN A1
7209 7849 4887 PRIORITY OVERNIGHT
TRM 7209 7849 4876 0201

XX CHSA

29407
SC-US
CHS



ORIGIN ID: SAFA (505) 555-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TAGS BLDG 1237 DPU 03
LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 12JAN10
ACTMGT: 56.0 LB MAN
CAD: 0014176/CAFE2449
BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(43) 555-8171
REF: 6B010AMR2A0515BYD0



3 of 3 WED - 13JAN A1
7209 7849 4810 PRIORITY OVERNIGHT
7209 7849 4795 0201

XX CHSA

29407
SC-US
CHS

ORIGIN ID: SAFA (505) 555-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TAGS BLDG 1237 DPU 03
LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 12JAN10
ACTMGT: 47.0 LB MAN
CAD: 0014176/CAFE2449
BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(43) 555-8171
REF: 6B010AMR3A05529E00



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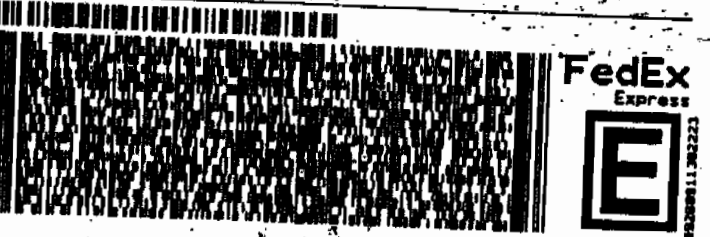


ORIGIN ID: SAFA (505) 555-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TAGS BLDG 1237 DPU 03
LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 12JAN10
ACTMGT: 57.0 LB MAN
CAD: 0014176/CAFE2449
BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(43) 555-8171
REF: 6B010AMR3A0352VA00



TRM 7209 7849 4898 WED - 13JAN A1
0201 PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

ORIGIN ID: SAFA (505) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
7800 BLDG 1237 DPU 03

SHIP DATE: 12JAN10
ACTWGT: 55.0 LB MAN
CAD: 0014176/CAFE2449

LOS ALAMOS, NM 87545
UNITED STATES US

BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

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CHARLESTON SC 29407

(843) 556-8171

REF: 6B010AMR3A05529E00

DATE: 12/10/2009 11:30:00 AM



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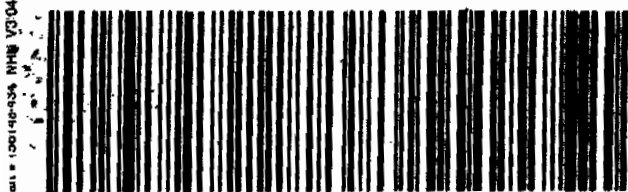


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PRIORITY OVERNIGHT

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29407
SC-US
CHS



RIGIN ID: SAFA (505) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
7800 BLDG 1237 DPU 03
LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 12JAN10
ACTWGT: 55.0 LB MAN
CAD: 0014176/CAFE2449

BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

6°

CHARLESTON SC 29407

(843) 556-8171

REF: 6B010AMR3A0352VA00

DATE: 12/10/2009 11:30:00 AM



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1 of 2
TRKH 7209 7849 4876
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NN MASTER NN

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PRIORITY OVERNIGHT

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SC-US
CHS

XX CHSA

Page 12 of 1343

ORIGIN ID: SAFA (505) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
7800 BLDG 1237 DPU 03

SHIP DATE: 12JAN10
ACTWGT: 48.0 LB MAN
CAD: 0014176/CAFE2449

LOS ALAMOS, NM 87545
UNITED STATES US

BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

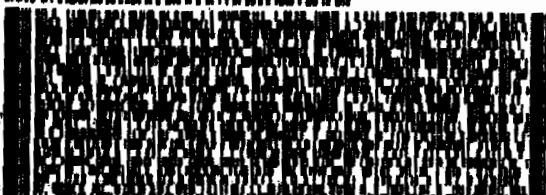
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CHARLESTON SC 29407

(843) 556-8171

REF: 6B010AMR3A0352VA00

DATE: 12/10/2009 11:30:00 AM



FedEx
Express



3 of 3
NPSH 7209 7849 4865
0203

MatrN 7209 7849 4843 0201

WED - 13JAN A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

XX CHSA



ORIGIN ID: SAFA (505) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
7800 BLDG 1237 DPU 03

SHIP DATE: 12JAN10
ACTWGT: 61.0 LB MAN
CAD: 0014176/CAFE2449

LOS ALAMOS, NM 87545
UNITED STATES US

BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

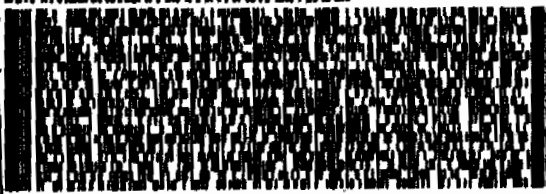
6°

CHARLESTON SC 29407

(843) 556-8171

REF: 6B010AMR3A05529E00

DATE: 12/10/2009 11:30:00 AM



FedEx
Express



TRKH 7209 7849 4935
0201

WED - 13JAN A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

XX CHSA

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.

LC/MS/MS PERCHLORATE ANALYSIS

Perchlorate by LC/MSMS
Los Alamos National Laboratory (LANL)
SDG 10-1212

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: 942315

Prep Batch Number: 942314

Sample Analysis

Sample ID	Client ID
244601001	RE12-10-7243
244601002	RE12-10-7240
244601003	RE12-10-7241
244601004	RE12-10-7237
244601005	RE12-10-7239
244601006	RE12-10-7238
244601007	RE12-10-7242
244601008	RE12-10-7236
244601009	RE12-10-7252
244601010	RE12-10-7253
244601011	RE12-10-7254
244601012	RE12-10-7255
244601013	RE12-10-7276
1202017256	Interference Check Sample (ICS)

10-1212-PERLCMS

Page 1 of 4

1202017252	Method Blank (MB)
1202017253	Laboratory Control Sample (LCS)
1202017254	244601001(RE12-10-7243) Matrix Spike (MS)
1202017255	244601001(RE12-10-7243) 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. The Perchlorate Isotope Ratio (PIR) for the CCV analyzed on 01/22/10 at 21:25:38 has 2.99 as the PIR on the raw data and 2.98 as the PIR on the LIMS form. The value is 2.985. The difference is due to the rounding rules and/or the number of significant figures used in the calculation.

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 244601001 (RE12-10-7243) was chosen for matrix spike and matrix spike duplicate analysis.

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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

Re-extractions or re-analyses were not required in this SDG except for dilutions.

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.

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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: 01/27/10

SAMPLE DATA SUMMARY

Perchlorate Analysis Data Sheet

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Lab Name: GEL Laboratories LLCLab Code: GELInstrument: LCMSMSMethod: SW846 6850 ModifiedMatrix: SOILExtraction Batch ID: 942314Extraction Type: Solid PrepSample Volume/Weight: 2.00 gConcentrated Extract Volume: 20.0

Client Sample No.

RE12-10-7243Date Received: 13-JAN-10GEL Job No (SDG): 10-1212GEL Sample ID: 244601001Date Filtered: 22-JAN-10Injection Volume (uL): 20%Solids: 94.2

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.531	2.12	0.531	ug/kg	U	1	22-JAN-10 20:50	per0122041a
	Perchlorate Isotope Ratio						1	22-JAN-10 20:50	per0122041a
14797-73-0	Perchlorate-101	.531	2.12	0.531	ug/kg	U	1	22-JAN-10 20:50	per0122041a
	Perchlorate-O(18)			5.28	ug/kg		1	22-JAN-10 20:50	per0122041a

[^] 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 =

Instrument Value X Concentrated Extract Volume X 1 %Solids
Aliquot

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 942314
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE12-10-7240
 Date Received: 13-JAN-10
 GEL Job No (SDG): 10-1212
 GEL Sample ID: 244601002
 Date Filtered: 22-JAN-10
 Injection Volume (uL): 20
 % Solids: 86

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.578	2.31	0.578	ug/kg	U	1	22-JAN-10 21:11	per0122044a
	Perchlorate Isotope Ratio						1	22-JAN-10 21:11	per0122044a
14797-73-0	Perchlorate-101	.578	2.31	0.578	ug/kg	U	1	22-JAN-10 21:11	per0122044a
	Perchlorate-O(18)			5.68	ug/kg		1	22-JAN-10 21:11	per0122044a

[^] 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 =
 Instrument Value X Concentrated Extract Volume X Aliquot
 1
 %Solids

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 942314
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE12-10-7241
 Date Received: 13-JAN-10
 GEL Job No (SDG): 10-1212
 GEL Sample ID: 244601003
 Date Filtered: 22-JAN-10
 Injection Volume (uL): 20
 %Solids: 90.6

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.552	2.21	0.553	ug/kg	J	1	22-JAN-10 21:18	per0122045a
	Perchlorate Isotope Ratio			2.96			1	22-JAN-10 21:18	per0122045a
14797-73-0	Perchlorate-101	.552	2.21	0.552	ug/kg	U	1	22-JAN-10 21:18	per0122045a
	Perchlorate-O(18)			5.31	ug/kg		1	22-JAN-10 21:18	per0122045a

[^] 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 =
 Instrument Value X Concentrated Extract Volume X 1
 Aliquot %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: 242314

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE12-10-7237

Date Received: 13-JAN-10

GEL Job No (SDG): 10-1212

GEL Sample ID: 244601004

Date Filtered: 22-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	.556	2.23	0.556	ug/kg	U	1	22-JAN-10 21:46	per0122049a
	Perchlorate Isotope Ratio						1	22-JAN-10 21:46	per0122049a
14797-73-0	Perchlorate-101	.556	2.23	0.556	ug/kg	U	1	22-JAN-10 21:46	per0122049a
	Perchlorate-O(18)			5.49	ug/kg		1	22-JAN-10 21:46	per0122049a

[^] 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 =

Instrument Value X Concentrated Extract Volume X 1
Aliquot %Solids

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 242314

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE12-10-7239

Date Received: 13-JAN-10

GEL Job No (SDG): 10-1212

GEL Sample ID: 244601005

Date Filtered: 22-JAN-10

Injection Volume (uL): 20

%Solids: 90.7

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.551	2.21	0.551	ug/kg	U	1	22-JAN-10 21:54	per0122050a
	Perchlorate Isotope Ratio						1	22-JAN-10 21:54	per0122050a
14797-73-0	Perchlorate-101	.551	2.21	0.551	ug/kg	U	1	22-JAN-10 21:54	per0122050a
	Perchlorate-O(18)			5.36	ug/kg		1	22-JAN-10 21:54	per0122050a

[^] 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 =

Instrument Value X Concentrated Extract Volume X 1
Aliquot %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: 942314

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE12-10-7238

Date Received: 13-JAN-10

GEL Job No (SDG): 10-1212

GEL Sample ID: 244601006

Date Filtered: 22-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	0.600	ug/kg	U	1	22-JAN-10 22:01	per0122051a
	Perchlorate Isotope Ratio						1	22-JAN-10 22:01	per0122051a
14797-73-0	Perchlorate-101	.6	2.4	0.600	ug/kg	U	1	22-JAN-10 22:01	per0122051a
	Perchlorate-O(18)			5.77	ug/kg		1	22-JAN-10 22:01	per0122051a

[^] 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 =

Instrument Value X Concentrated Extract Volume X %Solids
Aliquot

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: 942314

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE12-10-7242

Date Received: 13-JAN-10

GEL Job No (SDG): 10-1212

GEL Sample ID: 244601007

Date Filtered: 22-JAN-10

Injection Volume (uL): 20

%Solids: 84

CAS No.	Analyte ^a	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.598	2.39	0.598	ug/kg	U	1	22-JAN-10 22:08	per0122052a
	Perchlorate Isotope Ratio						1	22-JAN-10 22:08	per0122052a
14797-73-0	Perchlorate-101	.598	2.39	0.598	ug/kg	U	1	22-JAN-10 22:08	per0122052a
	Perchlorate-O(18)			5.90	ug/kg		1	22-JAN-10 22:08	per0122052a

^a 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 =

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

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846.6850 Modified

Matrix: SOIL

Extraction Batch ID: 242314

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE12-10-7236

Date Received: 13-JAN-10

GEL Job No (SDG): 10-1212

GEL Sample ID: 244601008

Date Filtered: 22-JAN-10

Injection Volume (uL): 20

%Solids: 78

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.638	2.55	0.638	ug/kg	U	1	22-JAN-10 22:15	per0122053a
	Perchlorate Isotope Ratio						1	22-JAN-10 22:15	per0122053a
14797-73-0	Perchlorate-101	.638	2.55	0.638	ug/kg	U	1	22-JAN-10 22:15	per0122053a
	Perchlorate-O(18)			6.26	ug/kg		1	22-JAN-10 22:15	per0122053a

[^] 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 =

Instrument Value X Concentrated Extract Volume X 1
Aliquot %Solids

Perchlorate Analysis Data Sheet

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Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 242314

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE12-10-7252

Date Received: 13-JAN-10

GEL Job No (SDG): 10-1212

GEL Sample ID: 244601009

Date Filtered: 22-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	.595	2.38	0.595	ug/kg	U	1	22-JAN-10 22:22	per0122054a
	Perchlorate Isotope Ratio						1	22-JAN-10 22:22	per0122054a
14797-73-0	Perchlorate-101	.595	2.38	0.595	ug/kg	U	1	22-JAN-10 22:22	per0122054a
	Perchlorate-O(18)			5.94	ug/kg		1	22-JAN-10 22:22	per0122054a

[^] 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 =

Instrument Value X Concentrated Extract Volume X 1
Aliquot %Solids

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 242314

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE12-10-7253

Date Received: 13-JAN-10

GEL Job No (SDG): 10-1212

GEL Sample ID: 244601010

Date Filtered: 22-JAN-10

Injection Volume (uL): 20

%Solids: 96.7

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	22-JAN-10 22:29	per0122055a
	Perchlorate Isotope Ratio						1	22-JAN-10 22:29	per0122055a
14797-73-0	Perchlorate-101	.517	2.07	0.517	ug/kg	U	1	22-JAN-10 22:29	per0122055a
	Perchlorate-O(18)			5.16	ug/kg		1	22-JAN-10 22:29	per0122055a

[^] 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 =

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

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 942314

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE12-10-7254

Date Received: 13-JAN-10

GEL Job No (SDG): 10-1212

GEL Sample ID: 244601011

Date Filtered: 22-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	.59	2.36	0.590	ug/kg	U	1	22-JAN-10 22:57	per0122059a
	Perchlorate Isotope Ratio						1	22-JAN-10 22:57	per0122059a
14797-73-0	Perchlorate-101	.59	2.36	0.590	ug/kg	U	1	22-JAN-10 22:57	per0122059a
	Perchlorate-O(18)			6.06	ug/kg		1	22-JAN-10 22:57	per0122059a

[^] 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 =

Instrument Value X Concentrated Extract Volume X 1 %Solids
Aliquot

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 942314
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE12-10-7255
 Date Received: 13-JAN-10
 GEL Job No (SDG): 10-1212
 GEL Sample ID: 244601012
 Date Filtered: 22-JAN-10
 Injection Volume (uL): 20
 %Solids: 93.4

CAS No.	Analyte ^a	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	22-JAN-10 23:04	per0122060a
	Perchlorate Isotope Ratio						1	22-JAN-10 23:04	per0122060a
14797-73-0	Perchlorate-101	.535	2.14	0.535	ug/kg	U	1	22-JAN-10 23:04	per0122060a
	Perchlorate-O(18)			5.31	ug/kg		1	22-JAN-10 23:04	per0122060a

^a 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 =

Instrument Value X Concentrated Extract Volume X ¹ %Solids
 Aliquot

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: 942314

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE12-10-7276

Date Received: 13-JAN-10

GEL Job No (SDG): 10-1212

GEL Sample ID: 244601013

Date Filtered: 22-JAN-10

Injection Volume (uL): 20

%Solids: 91.6

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.546	2.18	0.546	ug/kg	U	1	22-JAN-10 23:11	per0122061a
	Perchlorate Isotope Ratio						1	22-JAN-10 23:11	per0122061a
14797-73-0	Perchlorate-101	.546	2.18	0.546	ug/kg	U	1	22-JAN-10 23:11	per0122061a
	Perchlorate-O(18)			5.74	ug/kg		1	22-JAN-10 23:11	per0122061a

[^] 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 =

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

QUALITY CONTROL SUMMARY

Perchlorate Laboratory Control Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No. (SDG): 10-1212

Extract Batch Code: 942314

Date Filtered: 22-JAN-10

Matrix: SOIL

Sample ID: 1202017253

Analyte [^]	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	2.00	2.09	ug/kg	105		70 - 130
Perchlorate Isotope Ratio		2.9				-
Perchlorate-101	2.00	2.09	ug/kg	105		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.

Perchlorate Interference Check Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No. (SDG): 10-1212

Extract Batch Code: 942314

Date Filtered: 22-JAN-10

Matrix: SOIL

Sample ID: 1202017256

Analyte [^]	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	2.00	2.02	ug/kg	101		70 - 130
Perchlorate Isotope Ratio		3.08				
Perchlorate-101	2.00	1.91	ug/kg	95.5		70 - 130
Perchlorate-O(18)		4.76	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.

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

Dataset: C:\MassLynx\Perchlorate.PRO\per012210a.qld

Last Altered: Saturday, January 23, 2010 9:20:32 AM Eastern Standard Time
Printed: Saturday, January 23, 2010 9:27:21 AM Eastern Standard Time

Name: per0122040a

Date: 22-Jan-2010

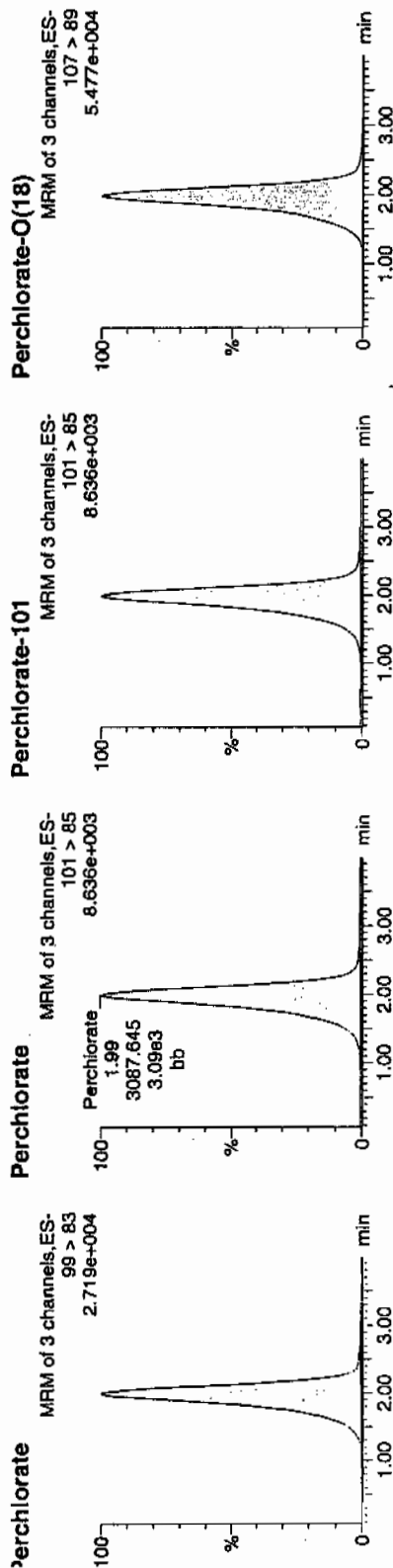
Time: 20:43:28

D: 1202017256

/ial: 2:1,C

01-23-10

162215 | 5020 | 1.1



D	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202017256	Perchlorate	99 > 83	1.99	9498.153	9498.153	bb			0.2021	101.07	1.07	1921.3...	3.08
1202017256	Perchlorate-101	101 > 85	1.99	3087.645	3087.645	bb			0.1910	95.48	-4.52	582.582	
1202017256	Perchlorate-O(18)	107 > 89	1.98	19369.814	19369.814	bb			0.4758	95.17	-4.83	3521.9...	

Perchlorate Spike/Spike Duplicate Summary

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No (SDG): 10-1212

Extract Batch Code: 942314

Date Extracted: 22-JAN-10

GEL MS/PS ID: 1202017254

Client ID: RE12-10-7243

GEL MSD/PSD ID: 1202017255

QC Type: MS

Compound [^]	Spike Added	Sample Conc	Units	MS Conc	MS Rec	#	MSD Conc	MSD Rec	#	RPD	#	RPD Limit	Recovery Limit
Perchlorate	2.12	0.0835	ug/kg	2.23	101		2.22	100		.731		30	75 - 125
Perchlorate Isotope Ratio	0	0.00		2.84			2.95			0			-
Perchlorate-101	2.12	0.0697	ug/kg	2.29	104		2.18	99.5		4.7		30	75 - 125
Perchlorate-O(18)	0	5.28	ug/kg	5.23			5.21			.346			-

[^] 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:

Perchlorate Initial Calibration Blank

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Lab Name: General Engineering LaboratoriesGEL Job No.(SDG): 10-1212Lab Code: GELReporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	22-JAN-10	per0122001a	IPB001
Perchlorate-101	0.00	0	NA	22-JAN-10	per0122001a	IPB001
Perchlorate	0.00	0	NA	22-JAN-10	per0122002a	IPB001
Perchlorate-101	0.00	0	NA	22-JAN-10	per0122002a	IPB001

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

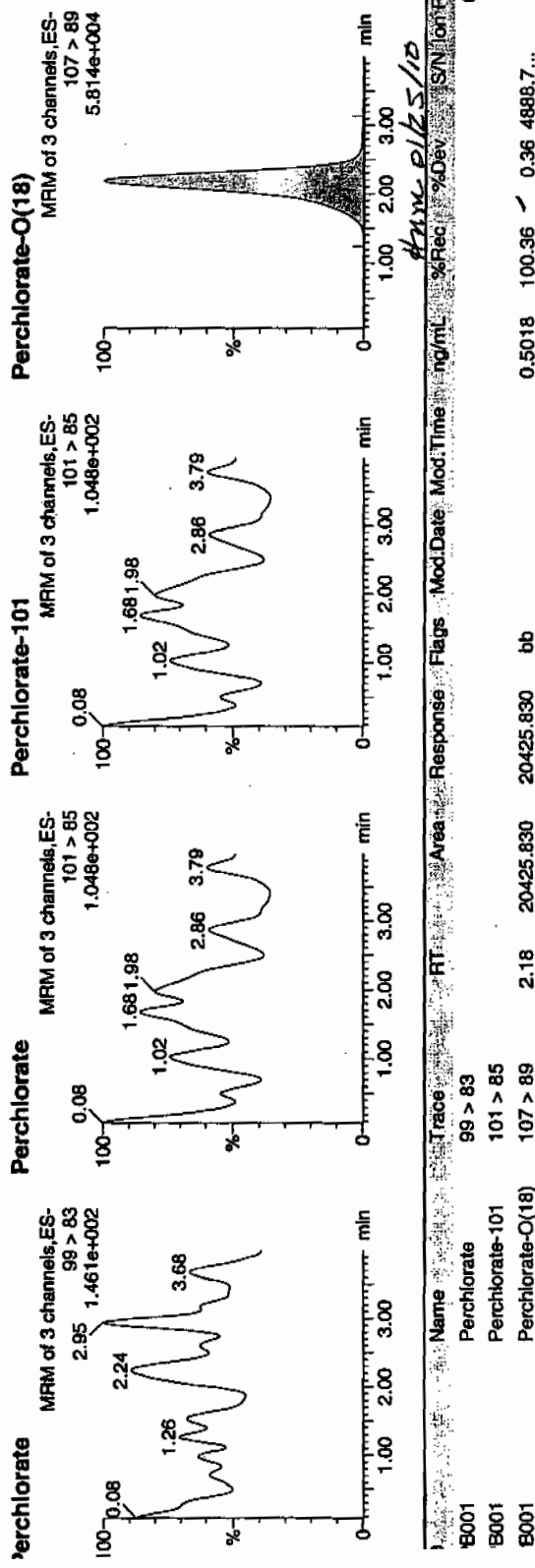
Dataset: C:\MassLynx\Perchlorate.PRO\per012210a.qld

Last Altered: Saturday, January 23, 2010 9:20:32 AM Eastern Standard Time
Printed: Saturday, January 23, 2010 9:27:21 AM Eastern Standard Time

Method: C:\MassLynx\Perchlorate.PRO\MethDB\per012210a.mdb 23 Jan 2010 08:53:00
Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per012210a.cdb 23 Jan 2010 09:20:31

Name: per0122001a
Date: 22-Jan-2010
Time: 16:08:41
D: IPB001
/lat: 1:1,A

01-23-10



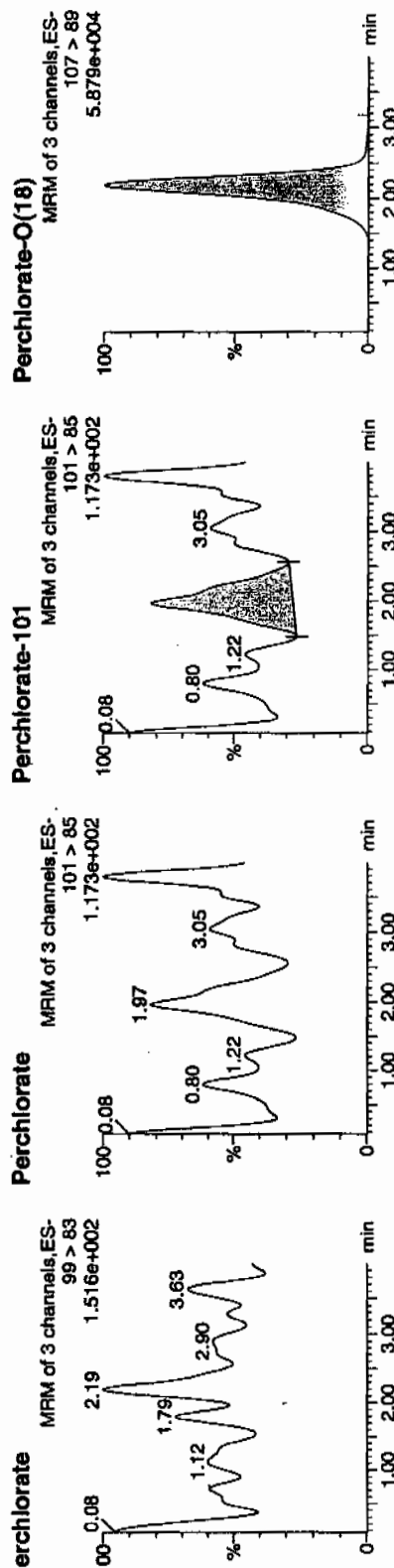
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per012210a.qld

Last Altered: Saturday, January 23, 2010 9:20:32 AM Eastern Standard Time
Printed: Saturday, January 23, 2010 9:27:21 AM Eastern Standard Time

Sample Name: per0122002a
Date: 22-Jan-2010
Time: 16:15:54
Operator: IPB001
Ratio: 1:1,A

QW
01-23-10



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	1.97	28.933	bb			0.0018			5.588	
B001	Perchlorate-O(18)	107 > 89	2.18	20822.545	bb			0.5115	102.30	2.30	3049.5...	

Form 4

Perchlorate Continuing Calibration Blank

GEL Job No.(SDG): 10-1212

Lab Name: General Engineering Laboratories

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	22-JAN-10	per0122008a	IPB002
Perchlorate-101	0.00	0	NA	22-JAN-10	per0122008a	IPB002
Perchlorate	0.00	0	NA	22-JAN-10	per0122010a	IPB003
Perchlorate-101	0.00	0	NA	22-JAN-10	per0122010a	IPB003
Perchlorate	0.00	0	NA	22-JAN-10	per0122023a	IPB004
Perchlorate-101	0.00	0	NA	22-JAN-10	per0122023a	IPB004
Perchlorate	0.00	0	NA	22-JAN-10	per0122036a	IPB005
Perchlorate-101	0.00	0	NA	22-JAN-10	per0122036a	IPB005
Perchlorate	0.00	0	NA	22-JAN-10	per0122047a	IPB006
Perchlorate-101	0.00	0	NA	22-JAN-10	per0122047a	IPB006
Perchlorate	0.00	0	NA	22-JAN-10	per0122057a	IPB007
Perchlorate-101	0.00	0	NA	22-JAN-10	per0122057a	IPB007
Perchlorate	0.00	0	NA	22-JAN-10	per0122067a	IPB008

Form 4

Perchlorate Continuing Calibration Blank

GEL Job No.(SDG): 10-1212

Lab Name: General Engineering Laboratories

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	22-JAN-10	per0122067a	IPB008

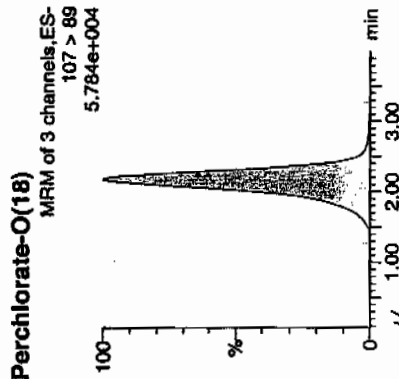
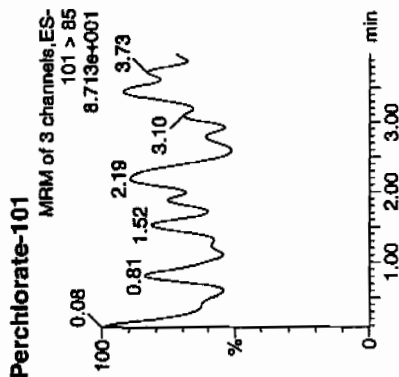
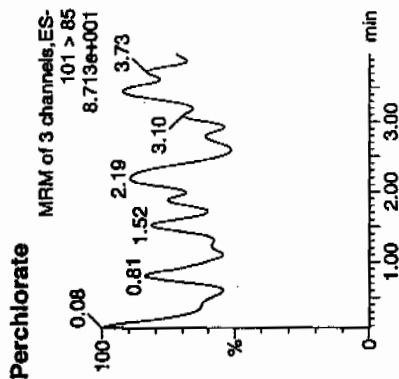
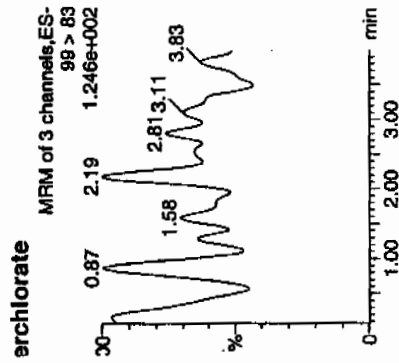
Quantify Sample Report MassLynx 4.0 SP4
 he GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per012210a.qld

Last Altered: Saturday, January 23, 2010 9:20:32 AM Eastern Standard Time
 Printed: Saturday, January 23, 2010 9:27:21 AM Eastern Standard Time

Sample Name: per0122008a
 Date: 22-Jan-2010
 Time: 16:58:00
 ID: IPB002
 Label: 1:1,A

0.23-10



Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	SN	Ion Ratio
B002	Perchlorate	99 > 83										0.00
B002	Perchlorate-101	101 > 85										
B002	Perchlorate-O(18)	107 > 89	2.18	20238.355		20238.355	bb	0.4972	99.43	-0.57	4458.4...	

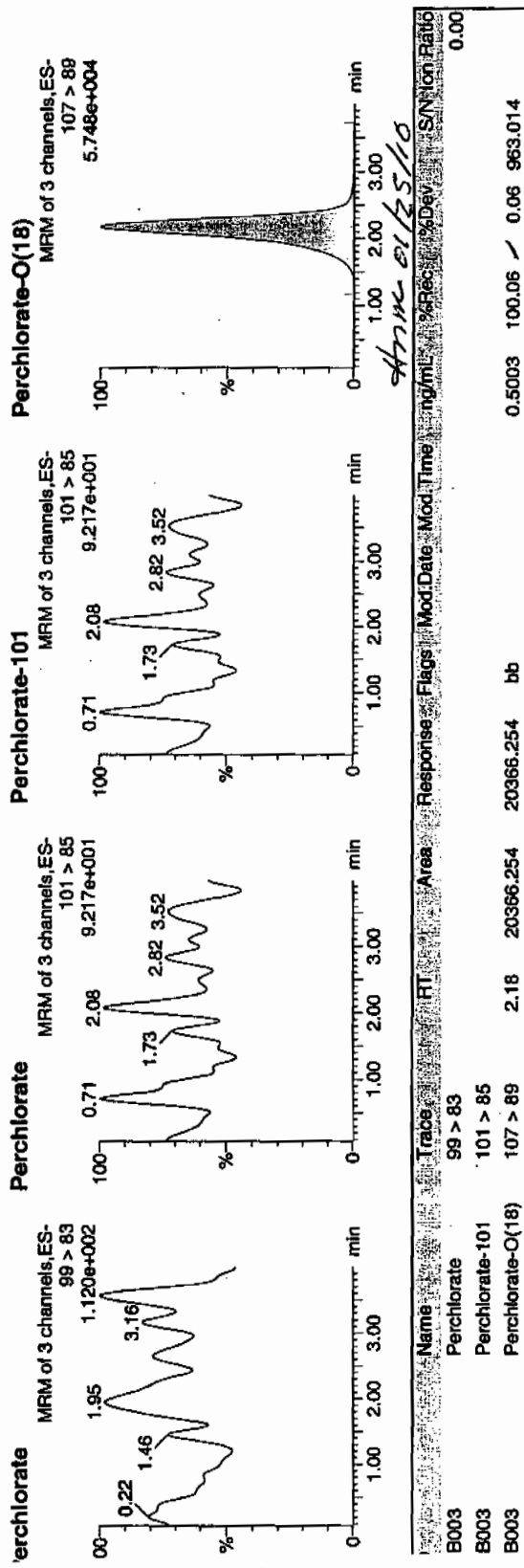
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per012210a.qld

Last Altered: Saturday, January 23, 2010 9:20:32 AM Eastern Standard Time
Printed: Saturday, January 23, 2010 9:27:21 AM Eastern Standard Time

Sample Name: per0122010a
Date: 22-Jan-2010
Time: 17:12:04
ID: IPB003
Lot: 1:1,A

01-23-10



Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	SN	Ion Ratio
B003	Perchlorate	99 > 83										0.00
B003	Perchlorate-101	101 > 85										
B003	Perchlorate-O(18)	107 > 89	2.18	20366.254	20366.254	bb		0.5003	100.06	0.06	963.014	

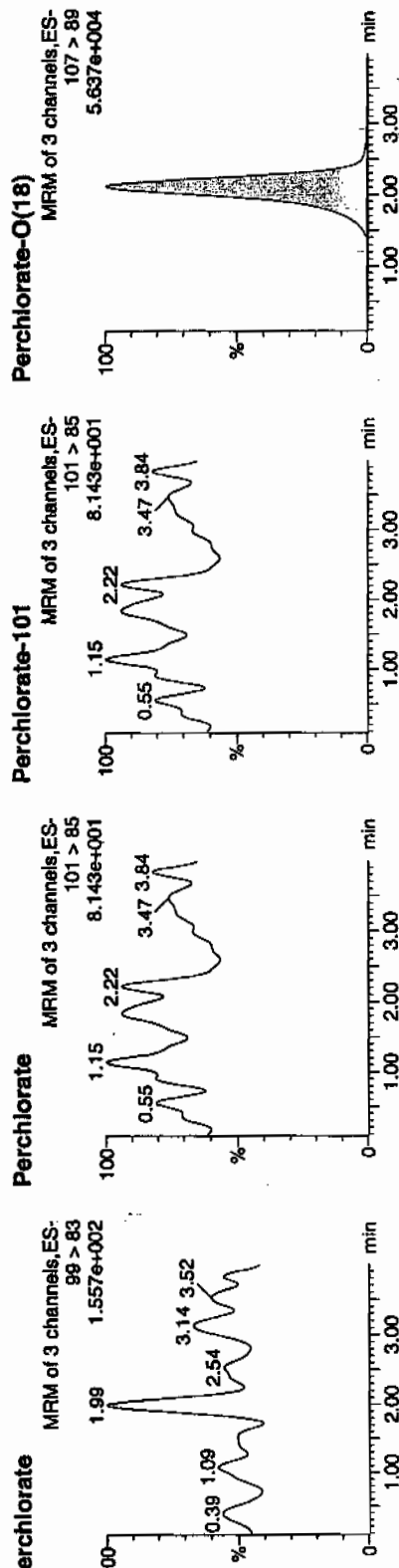
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per012210a.qld

Last Altered: Saturday, January 23, 2010 9:20:32 AM Eastern Standard Time
Printed: Saturday, January 23, 2010 9:27:21 AM Eastern Standard Time

Sample Name: per0122023a
Date: 22-Jan-2010
Time: 18:43:35
ID: IPB004
Tail: 1:1,A

01-23-10



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	2.12	19424.762	bb	19424.762		0.4772	95.44	-	4.56	2516.8...

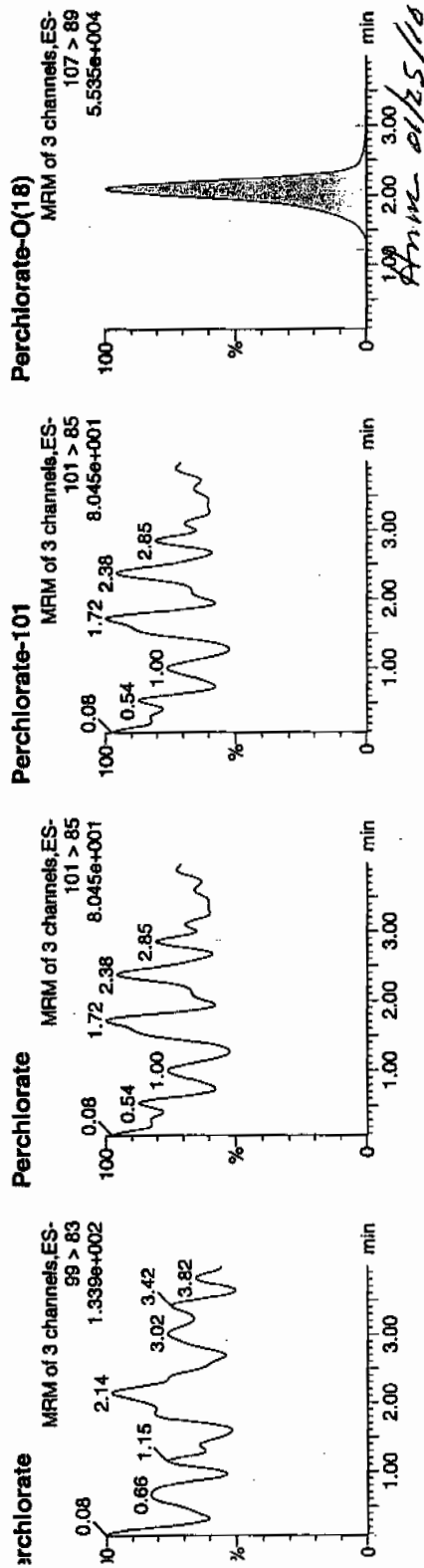
Quantify Sample Report MassLynx 4.0 SP4
 The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per012210a.qld

First Altered: Saturday, January 23, 2010 9:20:32 AM Eastern Standard Time
 First Altered: Saturday, January 23, 2010 9:27:21 AM Eastern Standard Time

Sample Name: per0122036a
 Date: 22-Jan-2010
 Time: 20:15:07
 File: IPB005
 Ali: 1:1,A

01-23-10



Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
3005 Perchlorate	99 > 83											0.00
3005 Perchlorate-101	101 > 85											
3005 Perchlorate-O(18)	107 > 89	2.09	19214.559	19214.559	bb			0.4720	94.40	✓	-5.60	2217.9...

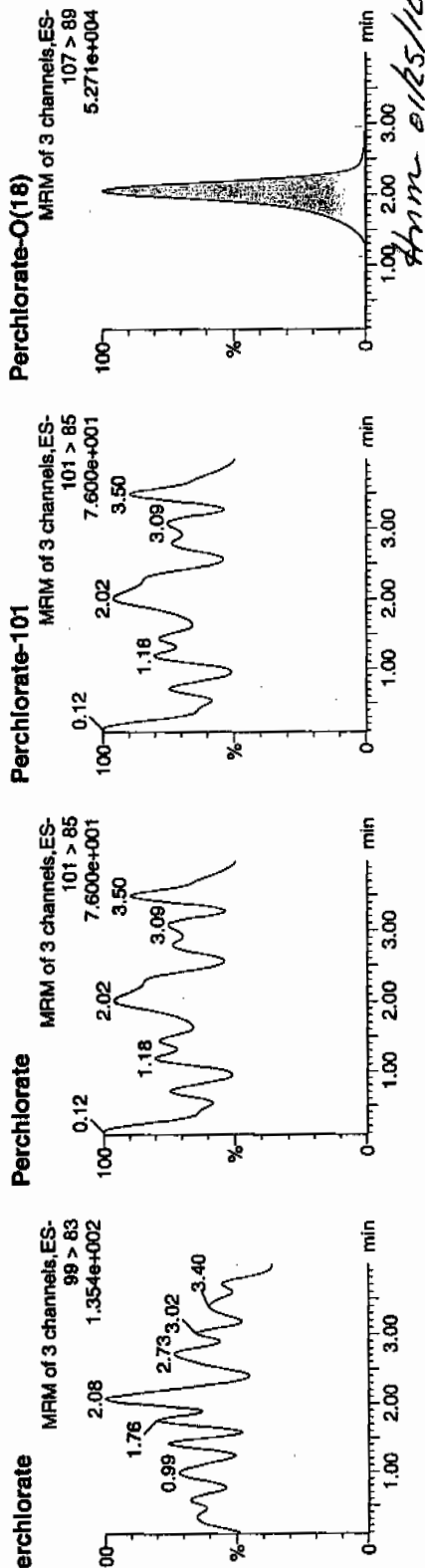
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per012210a.qld

Last Altered: Saturday, January 23, 2010 9:20:32 AM Eastern Standard Time
Printed: Saturday, January 23, 2010 9:27:21 AM Eastern Standard Time

Sample Name: per0122047a
Date: 22-Jan-2010
Time: 21:32:54
Operator: IPB006
Injection Volume: 1:1, A

01-23-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/ml	%Rec	%Dev	SN Ratio
B006	Perchlorate	99 > 83									0.00
B006	Perchlorate-101	101 > 85									
B006	Perchlorate-O(18)	107 > 89	2.05	18730.654	bb	18730.654		0.4601	92.03	-7.97	2938.9...

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

Dataset: C:\MassLynx\Perchlorate.PRO\per012210a.qld

Last Altered: Saturday, January 23, 2010 9:20:32 AM Eastern Standard Time
Printed: Saturday, January 23, 2010 9:27:21 AM Eastern Standard Time

Sample Name: per0122057a

Sample Date: 22-Jan-2010

Sample Time: 22:43:37

Sample ID: IPB007

Sample Label: 1:1,A

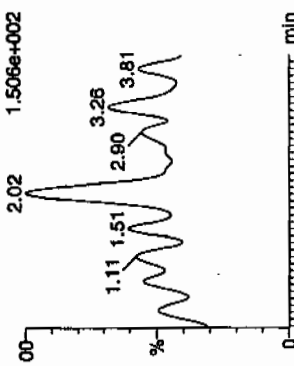
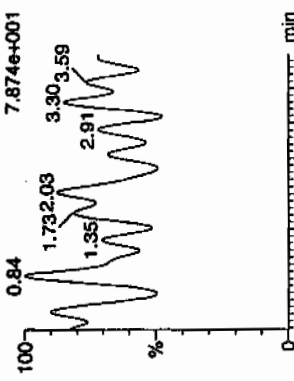
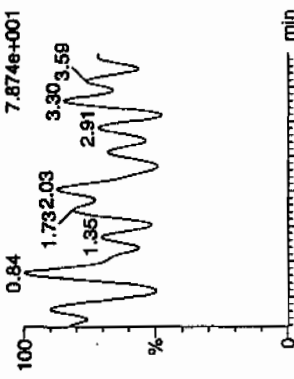
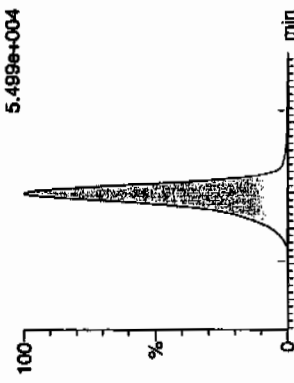
01-23-10

Perchlorate
MRM of 3 channels, ES-
107 > 89
5.489e+004

Perchlorate-101
MRM of 3 channels, ES-
101 > 85
7.874e+001

Perchlorate
MRM of 3 channels, ES-
101 > 85
7.874e+001

Perchlorate
MRM of 3 channels, ES-
99 > 83
1.506e+002



Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	SN	Ion Ratio
B007	Perchlorate	99 > 83										
B007	Perchlorate-101	101 > 85										
B007	Perchlorate-O(18)	107 > 89	2.00	19586.719	bb			0.4812	96.24	-3.76	2254.3...	

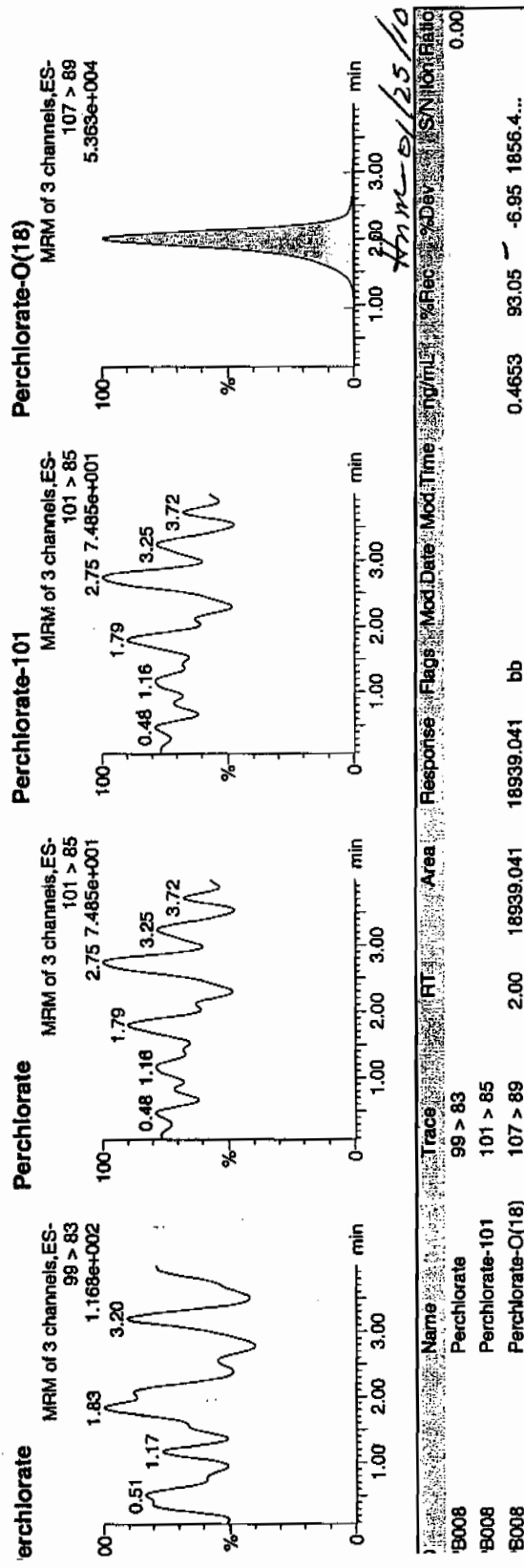
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per012210a.qld

Last Altered: Saturday, January 23, 2010 9:20:32 AM Eastern Standard Time
Printed: Saturday, January 23, 2010 9:27:21 AM Eastern Standard Time

Sample Name: per0122067a
Date: 22-Jan-2010
Time: 23:54:23
ID: IPB008
Label: 1:1,A

01-23-10



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

QUANTO ULTIMA: nairb_01_08_08.cal

Calibration Report - MS1 Static

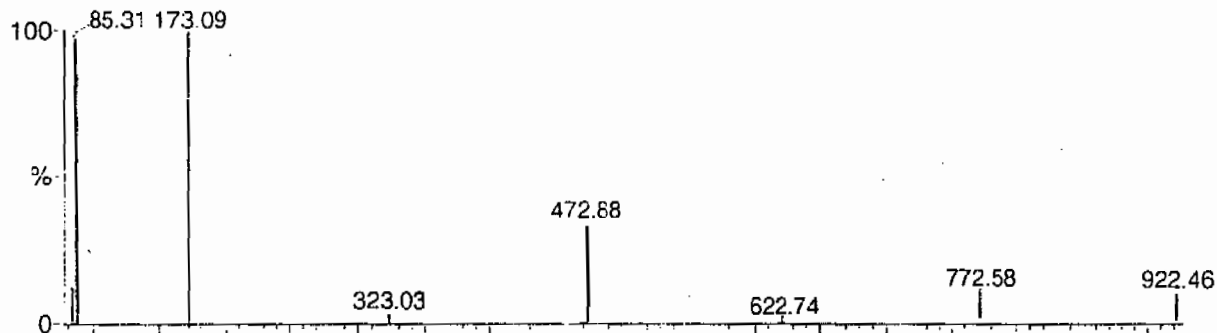
Page 1 of 1

Printed: Tue Jan 08 12:19:12 2008

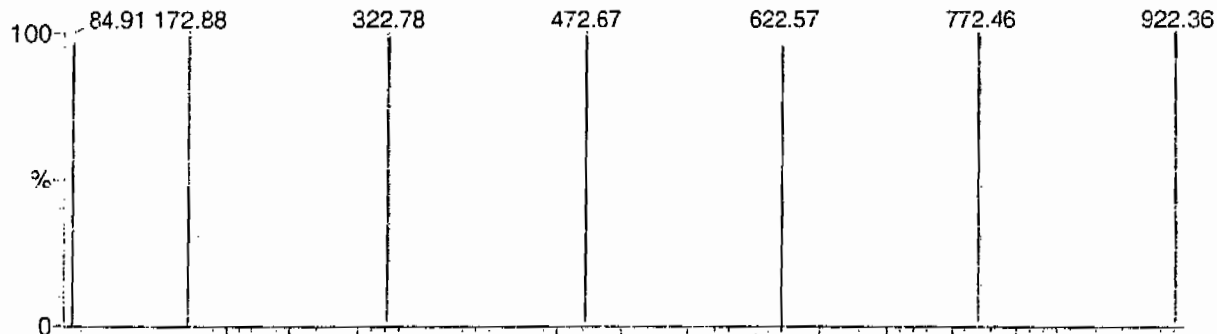
POINTS HIGHLIGHTED BY CURVED 01-08-08

Data file: STATMS1 - Uncalibrated

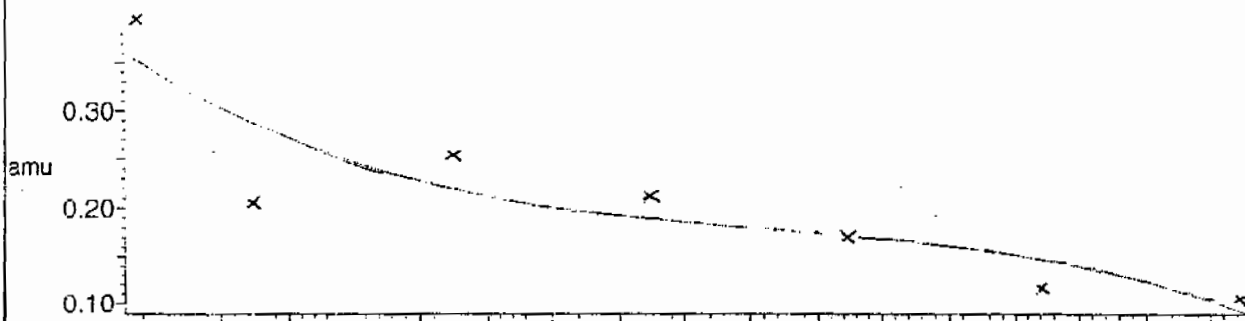
7 matches of 7 tested references



Reference file: Nairb

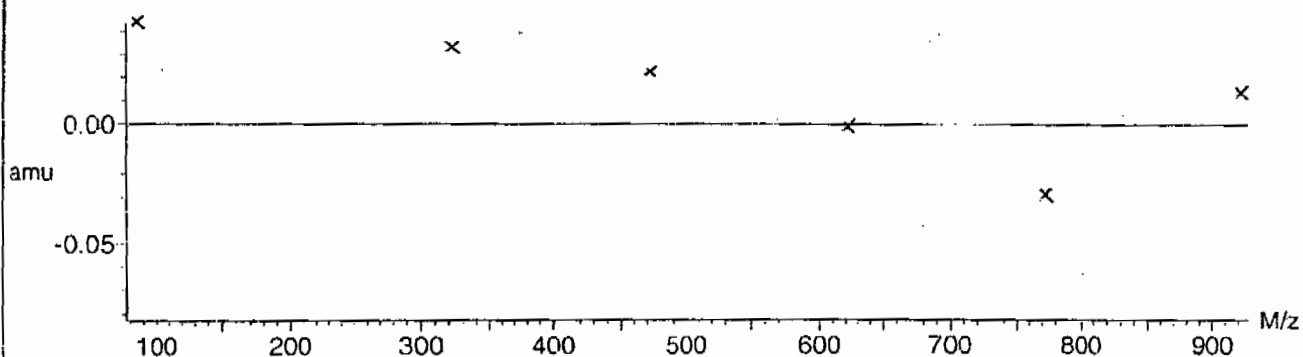


Mass difference (Raw - Ref mass)



Residuals

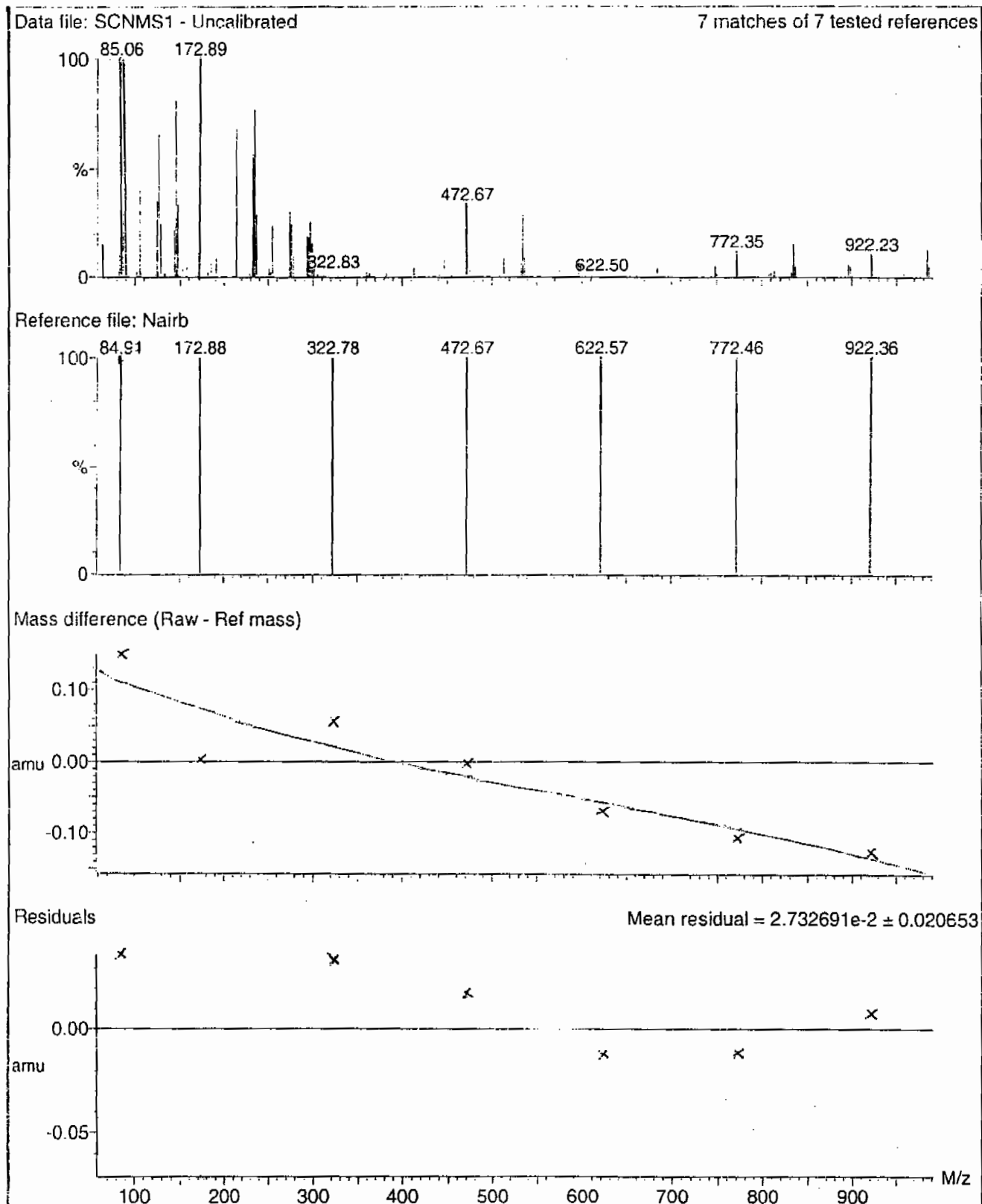
Mean residual = $3.212012 \times 10^{-2} \pm 0.024108$



Calibration Report - MS1 Scanning

Page 1 of 1

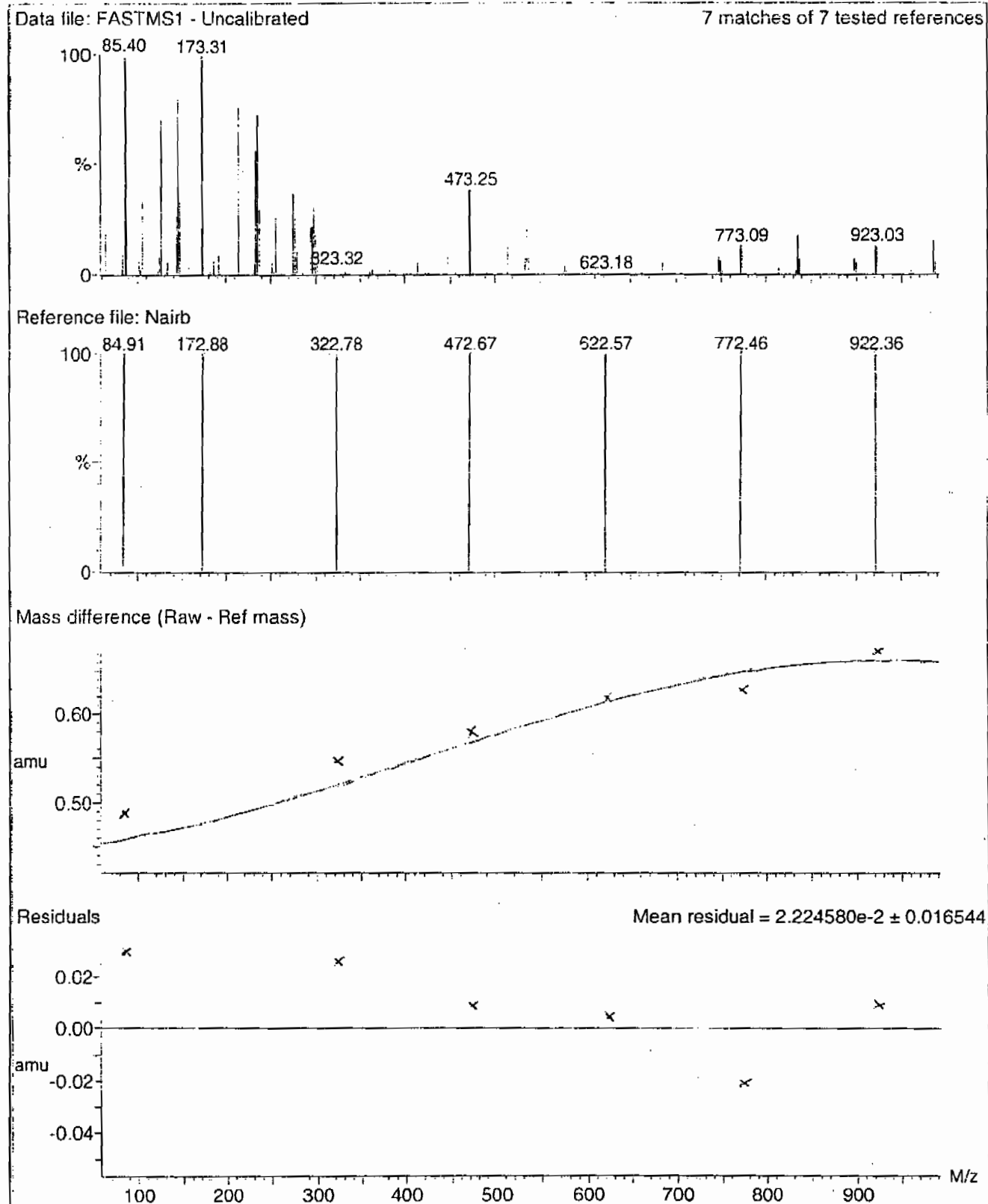
Printed: Tue Jan 08 12:20:09 2008



Calibration Report - MS1 Scan Speed Compensation

Page 1 of 1

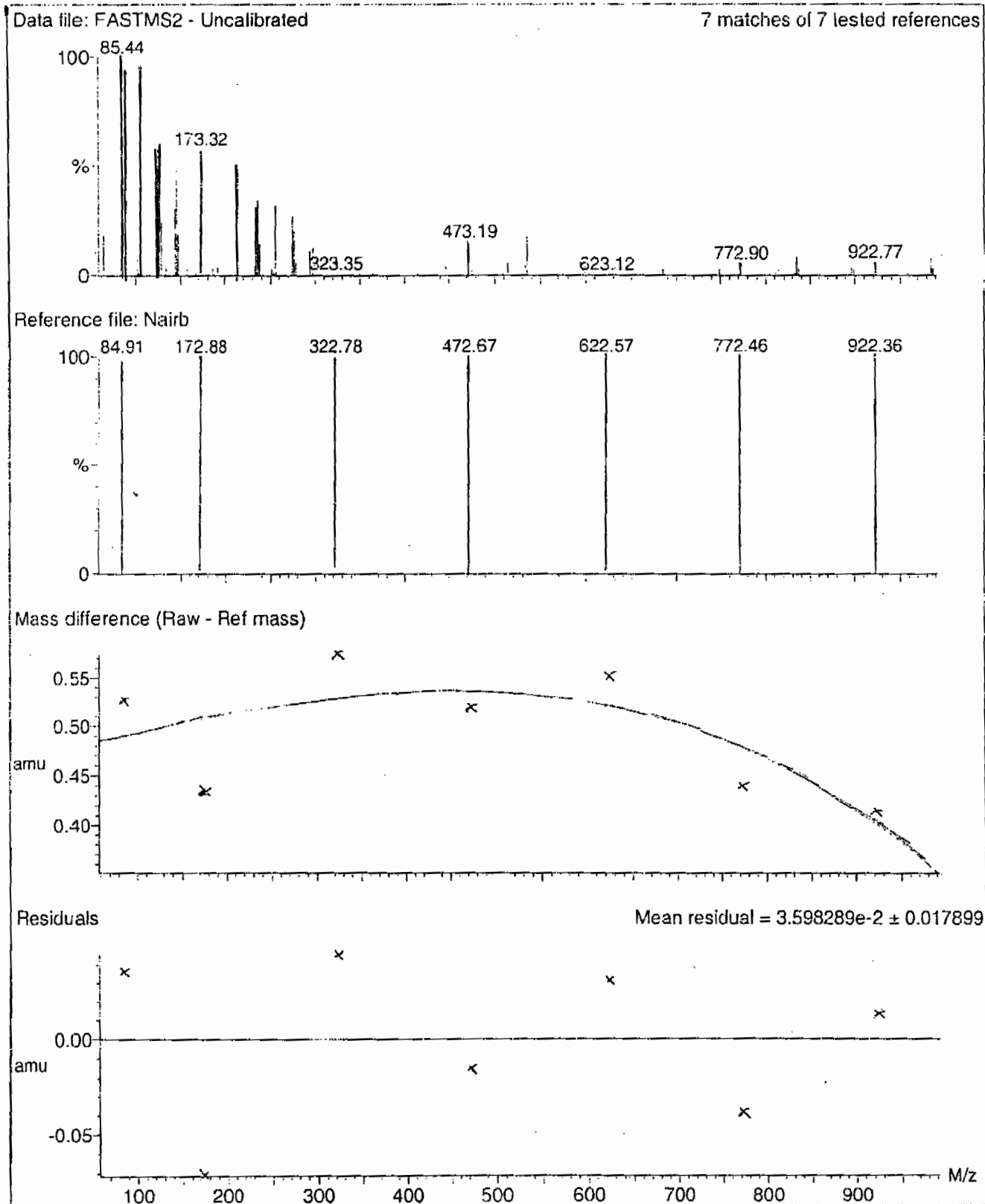
Printed: Tue Jan 08 12:21:04 2008



Calibration Report - MS2 Scan Speed Compensation

Page 1 of 1

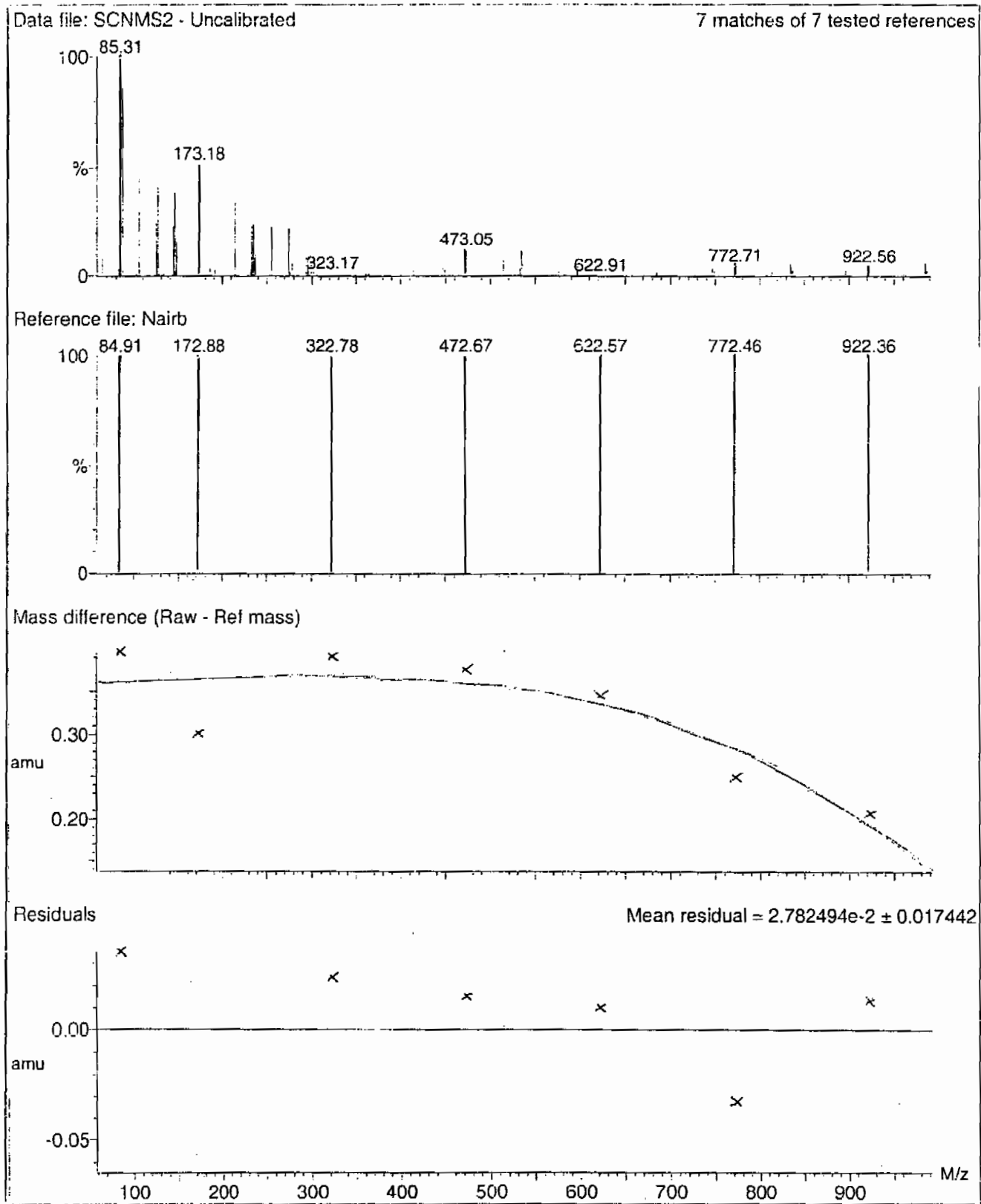
Printed: Tue Jan 08 12:23:51 2008



Calibration Report - MS2 Scanning

Page 1 of 1

Printed: Tue Jan 08 12:22:56 2008



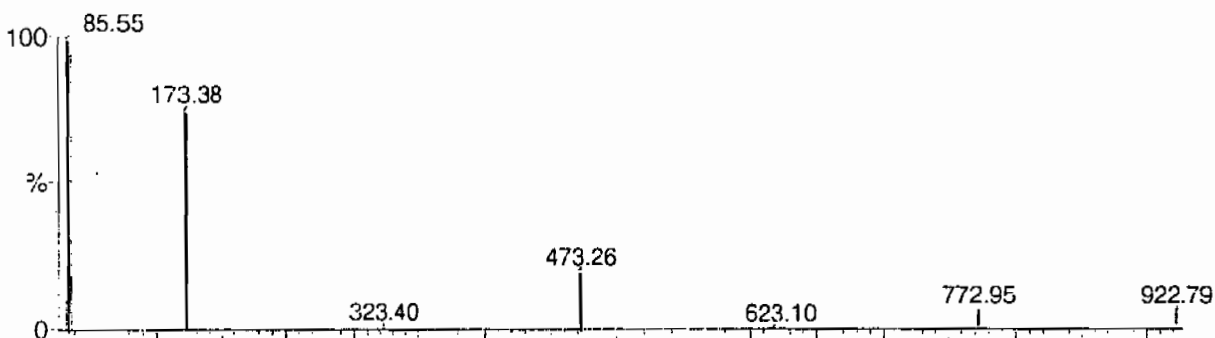
Calibration Report - MS2 Static

Page 1 of 1

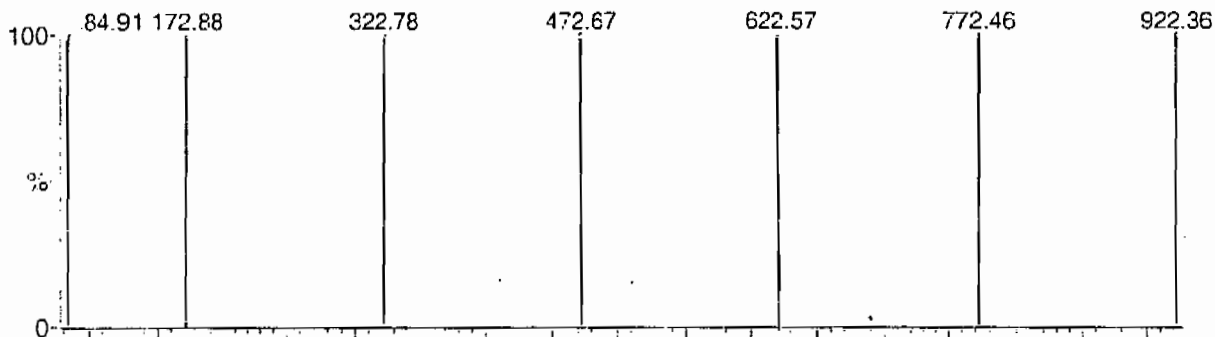
Printed: Tue Jan 08 12:21:59 2008

Data file: STATMS2 - Uncalibrated

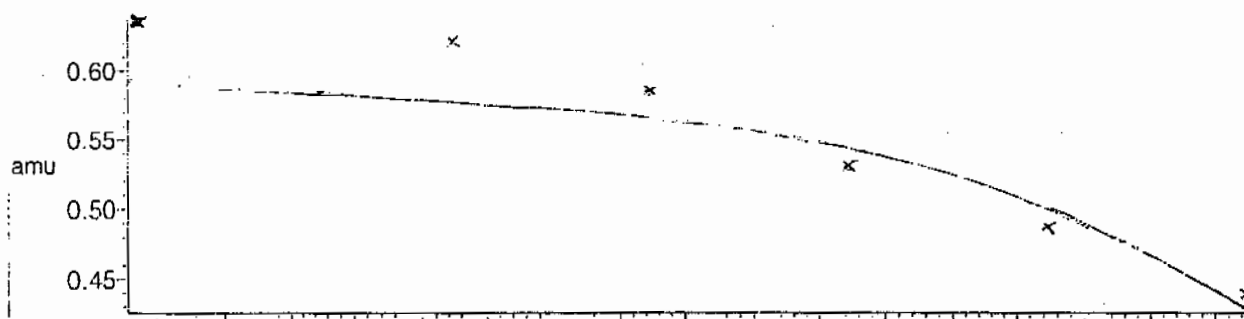
7 matches of 7 tested references



Reference file: Nairb

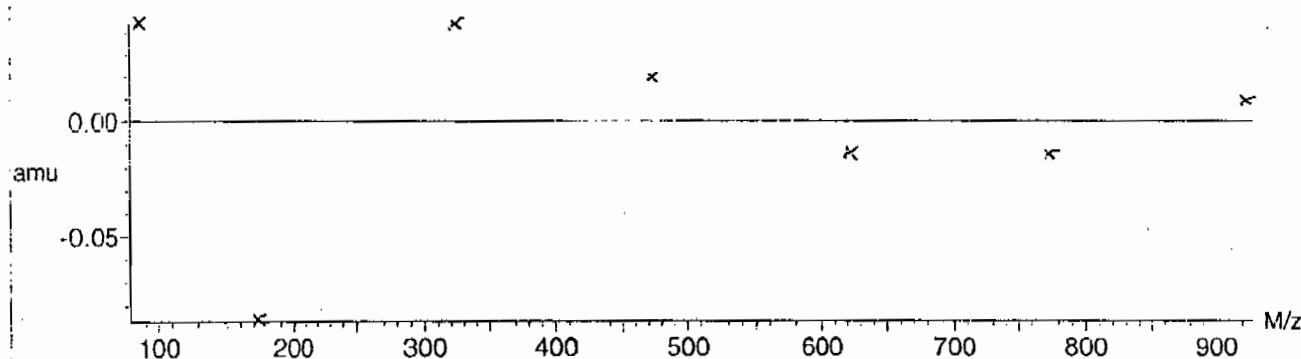


Mass difference (Raw - Ref mass)



Residuals

Mean residual = $3.295980 \times 10^{-2} \pm 0.025603$



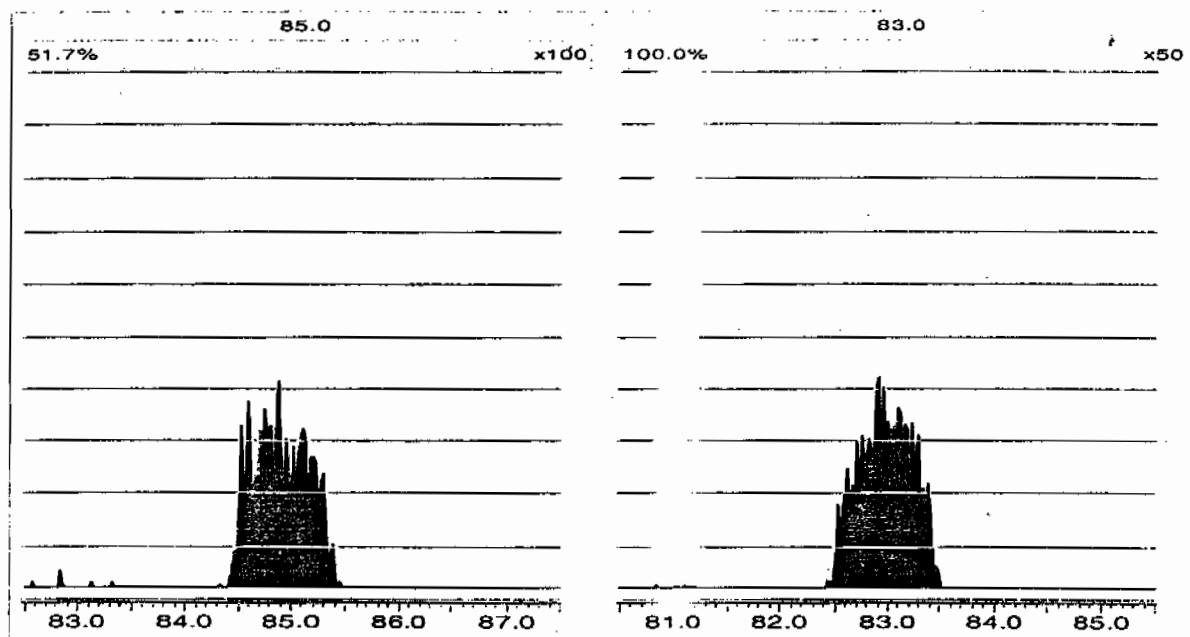
Tune Parameters

MassLynx 4.0 SP4

Page 1 of 1

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

Printed: Friday, January 22, 2010 14:19:41 Eastern Standard Time



Perchlorate RT And Area Summary

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

GEL Job No.(SDG): 10-1212

Lab Name: General Engineering Laboratories

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	per0122006a	22-JAN-10	20096.8				
Lower Area Limit			10048.4				
Upper Area Limit			40193.6				
1202017252	per0122038a	22-JAN-10 20:29	19875.1	2.09	2.10388	1.007	
1202017253	per0122039a	22-JAN-10 20:36	20536.5	2.08	2.09155	1.006	
1202017256	per0122040a	22-JAN-10 20:43	19369.8	1.98	1.99208	1.006	
244601001	per0122041a	22-JAN-10 20:50	20240.3	2.08	2.1039	1.011	
1202017254	per0122042a	22-JAN-10 20:57	20041.7	2.08	2.09155	1.006	
1202017255	per0122043a	22-JAN-10 21:04	19972.5	2.05	2.06662	1.008	
244601002	per0122044a	22-JAN-10 21:11	20009.9	2.05	2.06662	1.008	
244601003	per0122045a	22-JAN-10 21:18	19604.5	2.04	2.05428	1.007	

Perchlorate RT And Area Summary

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

Lab Name: General Engineering Laboratories GEL Job No.(SDG): 10-1212

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	per0122006a	22-JAN-10	20096.8				
Lower Area Limit			10048.4				
Upper Area Limit			40193.6				
244601004	per0122049a	22-JAN-10 21:46	20093.1	2.05	2.06662	1.008	
244601005	per0122050a	22-JAN-10 21:54	19777.5	2.04	2.05427	1.007	
244601006	per0122051a	22-JAN-10 22:01	19582.7	2.04	2.05428	1.007	
244601007	per0122052a	22-JAN-10 22:08	20086.7	2.03	2.04182	1.006	
244601008	per0122053a	22-JAN-10 22:15	19965.8	2.02	2.02935	1.005	
244601009	per0122054a	22-JAN-10 22:22	20313.5	2	2.017	1.009	
244601010	per0122055a	22-JAN-10 22:29	20330.1	1.99	2.00453	1.007	
244601011	per0122059a	22-JAN-10 22:57	20890	2.02	2.01702	.999	

Perchlorate RT And Area Summary

Lab Name: General Engineering Laboratories
GEL Job No.(SDG): 10-1212

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	per0122006a	22-JAN-10	20096.8				
Lower Area Limit			10048.4				
Upper Area Limit			40193.6				
244601012	per0122060a	22-JAN-10 23:04	20175.5	2	2.01702	1.009	
244601013	per0122061a	22-JAN-10 23:11	21425.8	2	2.01702	1.009	

SAMPLE DATA

Perchlorate Analysis Data Sheet

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

Lab Name: GEL Laboratories LLCLab Code: GELInstrument: LCMSMSMethod: SW846 6850 ModifiedMatrix: SOILExtraction Batch ID: 942314Extraction Type: Solid PrepSample Volume/Weight: 2.00 gConcentrated Extract Volume: 20.0

Client Sample No.

RE12-10-7243Date Received: 13-JAN-10GEL Job No (SDG): 10-1212GEL Sample ID: 244601001Date Filtered: 22-JAN-10Injection Volume (uL): 20%Solids: 94.2

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.531	2.12	0.531	ug/kg	U	1	22-JAN-10 20:50	per0122041a
	Perchlorate Isotope Ratio						1	22-JAN-10 20:50	per0122041a
14797-73-0	Perchlorate-101	.531	2.12	0.531	ug/kg	U	1	22-JAN-10 20:50	per0122041a
	Perchlorate-O(18)			5.28	ug/kg		1	22-JAN-10 20:50	per0122041a

[^] 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 =

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

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

Dataset: C:\MassLynx\Perchlorate.PRO\per012210a.qld

Last Altered: Saturday, January 23, 2010 9:20:32 AM Eastern Standard Time
Printed: Saturday, January 23, 2010 9:27:21 AM Eastern Standard Time

Name: per0122041a

Date: 22-Jan-2010

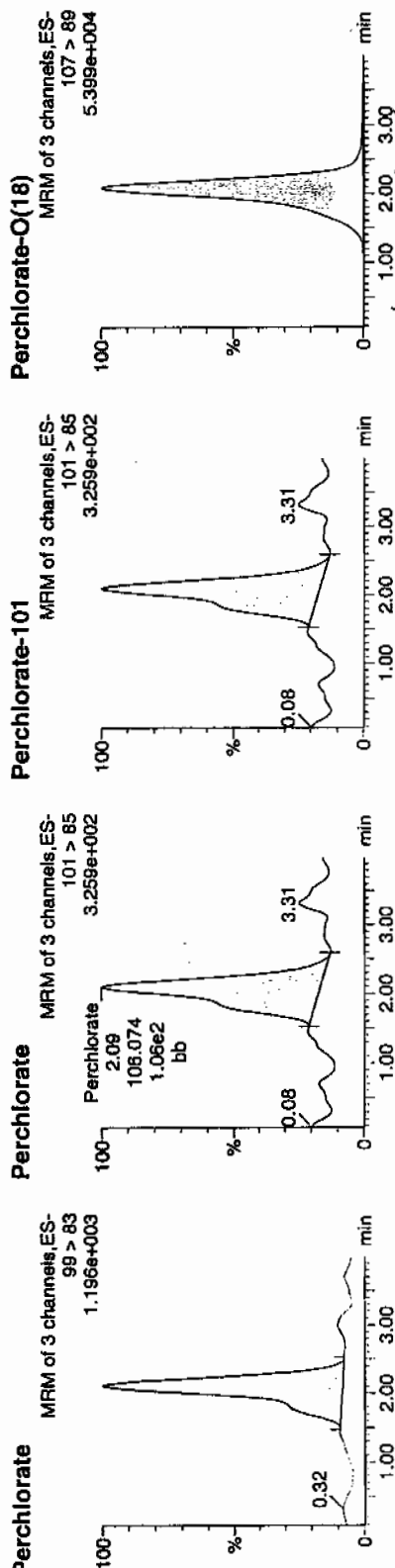
Time: 20:50:30

D: 244601001

File: 2:1,D

Q1-23-10

1.196e+003 | 942315 | 50720 | 11



D	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
44601001	Perchlorate	99 > 83	2.10	369.376	369.376	bb			0.0079			158.504	3.48
44601001	Perchlorate-101	101 > 85	2.09	106.074	106.074	bb			0.0066			61.878	
44601001	Perchlorate-O(18)	107 > 89	2.08	20240.307	20240.307	bb			0.4972	99.44	-0.56	1350.4...	

Perchlorate Analysis Data Sheet

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

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 242314

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE12-10-7240

Date Received: 13-JAN-10

GEL Job No (SDG): 10-1212

GEL Sample ID: 244601002

Date Filtered: 22-JAN-10

Injection Volume (uL): 20

%Solids: 86

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.578	2.31	0.578	ug/kg	U	1	22-JAN-10 21:11	per0122044a
	Perchlorate Isotope Ratio						1	22-JAN-10 21:11	per0122044a
14797-73-0	Perchlorate-101	.578	2.31	0.578	ug/kg	U	1	22-JAN-10 21:11	per0122044a
	Perchlorate-O(18)			5.68	ug/kg		1	22-JAN-10 21:11	per0122044a

[^] 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 =

Instrument Value X Concentrated Extract Volume X 1
Aliquot %Solids

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

Dataset: C:\MassLynx\Perchlorate.PRO\per012210a.qld

Last Altered: Saturday, January 23, 2010 9:20:32 AM Eastern Standard Time
Printed: Saturday, January 23, 2010 9:27:21 AM Eastern Standard Time

Name: per0122044a

Date: 22-Jan-2010

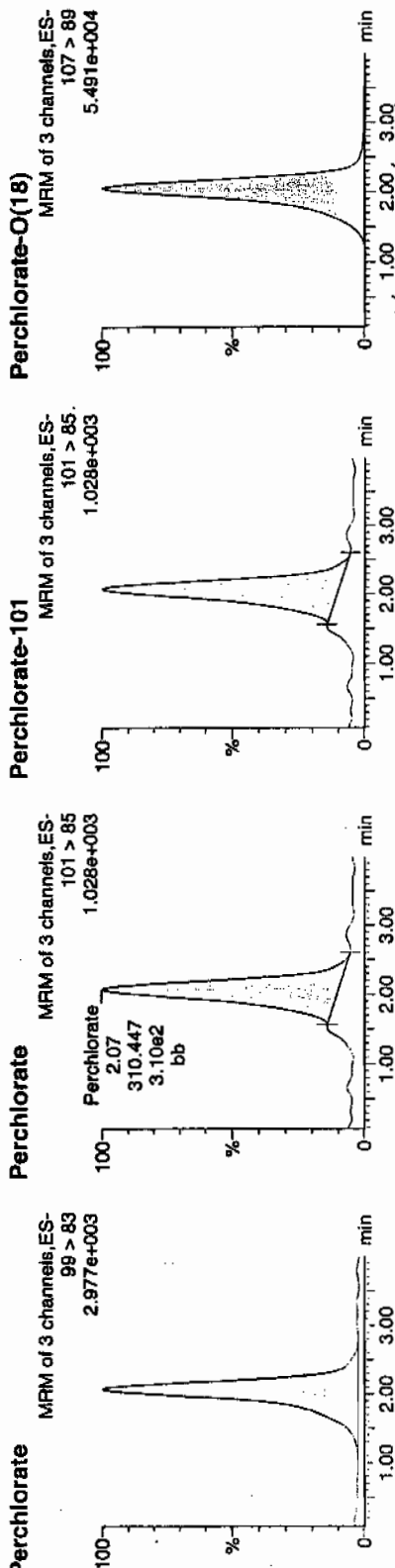
Time: 21:11:33

ID: 244601002

File: 2-2,A

01-23-10

Law 942315 / 5022011



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
244601002	Perchlorate	99 > 83	2.07	1028.381	1028.381	bb			0.0219			150.768	3.31
244601002	Perchlorate-101	101 > 85	2.07	310.447	310.447	bb			0.0192			140.244	
244601002	Perchlorate-O(18)	107 > 89	2.05	20099.947	20099.947	bb			0.4916	98.31	-1.69	3641.6...	

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 942314

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE12-10-7241

Date Received: 13-JAN-10

GEL Job No (SDG): 10-1212

GEL Sample ID: 244601003

Date Filtered: 22-JAN-10

Injection Volume (uL): 20

%Solids: 90.6

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.552	2.21	0.553	ug/kg	J	1	22-JAN-10 21:18	per0122045a
	Perchlorate Isotope Ratio			2.96			1	22-JAN-10 21:18	per0122045a
14797-73-0	Perchlorate-101	.552	2.21	0.552	ug/kg	U	1	22-JAN-10 21:18	per0122045a
	Perchlorate-O(18)			5.31	ug/kg		1	22-JAN-10 21:18	per0122045a

[^] 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 =

Instrument Value X Concentrated Extract Volume X 1
Aliquot %Solids

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

Dataset: C:\MassLynx\Perchlorate.PRO\per012210a.qld

Last Altered: Saturday, January 23, 2010 9:20:32 AM Eastern Standard Time
Printed: Saturday, January 23, 2010 9:27:21 AM Eastern Standard Time

Name: per0122045a

Date: 22-Jan-2010

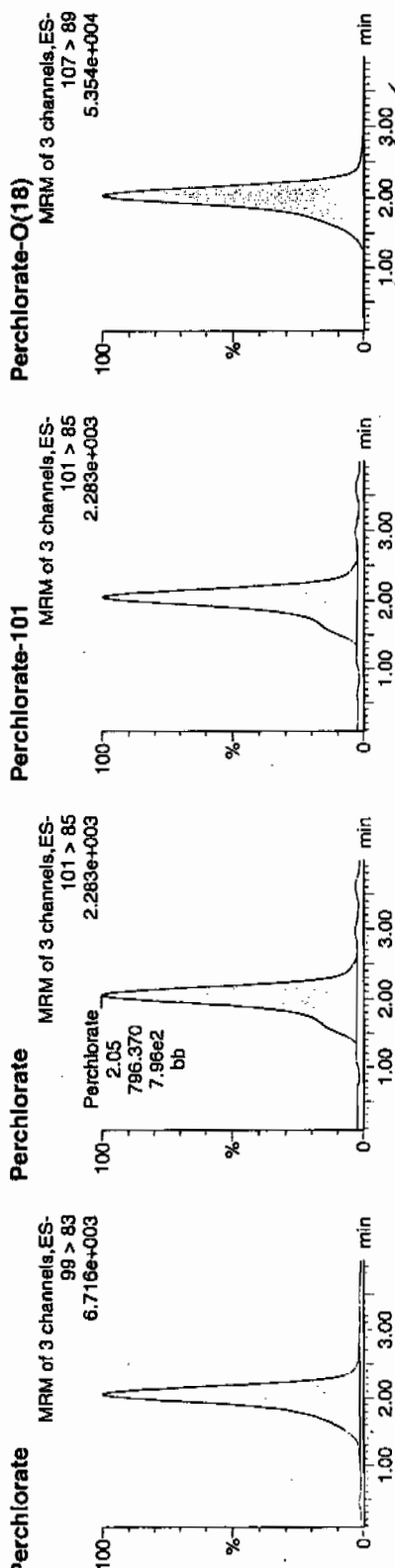
Time: 21:18:35

D: 244601003

/file: 2:2,B

01-23-10

144215 | 3000 | 11



D	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
244601003	Perchlorate	99 > 83	2.05	2353.513	2353.513	bb			0.0501			327.343	2.96
244601003	Perchlorate-101	101 > 85	2.05	796.370	796.370	bb			0.0493			43.855	
244601003	Perchlorate-O(18)	107 > 89	2.04	19604.469	19604.469	bb			0.4816	96.32	-3.68	2084.4...	

Perchlorate Analysis Data Sheet

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

Lab Name: GEL Laboratories LLCLab Code: GELInstrument: LCMSMSMethod: SW846 6850 ModifiedMatrix: SOILExtraction Batch ID: 942314Extraction Type: Solid PrepSample Volume/Weight: 2.00 gConcentrated Extract Volume: 20.0

Client Sample No.

RE12-10-7237Date Received: 13-JAN-10GEL Job No (SDG): 10-1212GEL Sample ID: 244601004Date Filtered: 22-JAN-10Injection Volume (uL): 20%Solids: 90

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.556	2.23	0.556	ug/kg	U	1	22-JAN-10 21:46	per0122049a
	Perchlorate Isotope Ratio						1	22-JAN-10 21:46	per0122049a
14797-73-0	Perchlorate-101	.556	2.23	0.556	ug/kg	U	1	22-JAN-10 21:46	per0122049a
	Perchlorate-O(18)			5.49	ug/kg		1	22-JAN-10 21:46	per0122049a

[^] 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 =

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

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

Dataset: C:\MassLynx\Perchlorate.PRO\per012210a.qld

Last Altered: Saturday, January 23, 2010 9:20:32 AM Eastern Standard Time
Printed: Saturday, January 23, 2010 9:27:21 AM Eastern Standard Time

Name: per0122049a

Date: 22-Jan-2010

Time: 21:46:57

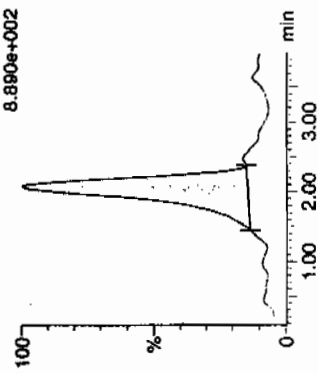
D: 244601004

/Iai: 2:2,C

122233 | 942315 | 8070 | 11
G-123-10

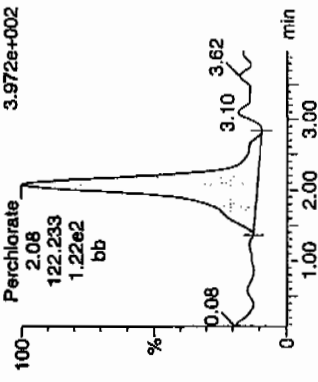
Perchlorate

MRM of 3 channels, ES-
99 > 83
8.890e+002



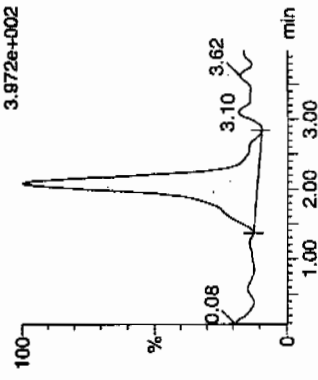
Perchlorate

MRM of 3 channels, ES-
101 > 85
3.972e+002



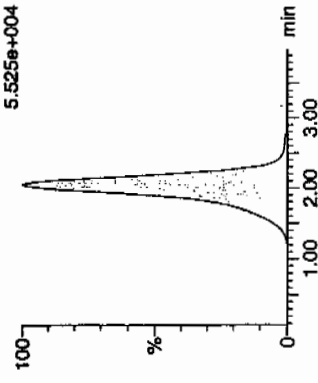
Perchlorate-101

MRM of 3 channels, ES-
101 > 85
3.972e+002



Perchlorate-O(18)

MRM of 3 channels, ES-
107 > 89
5.525e+004



D	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
244601004	Perchlorate	99 > 83	2.07	263.071	263.071	bb			0.0056			10.506	2.15
244601004	Perchlorate-101	101 > 85	2.08	122.233	122.233	bb			0.0076			121.946	
244601004	Perchlorate-O(18)	107 > 89	2.05	20093.068	20093.068	bb			0.4936	98.72	-1.28	6838.4...	

230500

Perchlorate Analysis Data Sheet

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

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 242314

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE12-10-7239

Date Received: 13-JAN-10

GEL Job No (SDG): 10-1212

GEL Sample ID: 244601005

Date Filtered: 22-JAN-10

Injection Volume (uL): 20

%Solids: 20.7

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.551	2.21	0.551	ug/kg	U	1	22-JAN-10 21:54	per0122050a
	Perchlorate Isotope Ratio						1	22-JAN-10 21:54	per0122050a
14797-73-0	Perchlorate-101	.551	2.21	0.551	ug/kg	U	1	22-JAN-10 21:54	per0122050a
	Perchlorate-O(18)			5.36	ug/kg		1	22-JAN-10 21:54	per0122050a

[^] 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 =

Instrument Value X Concentrated Extract Volume X 1
Aliquot %Solids

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

Dataset: C:\MassLynx\Perchlorate.PRO\per012210a.qld

Last Altered: Saturday, January 23, 2010 9:20:32 AM Eastern Standard Time
Printed: Saturday, January 23, 2010 9:27:21 AM Eastern Standard Time

Name: per0122050a

Date: 22-Jan-2010

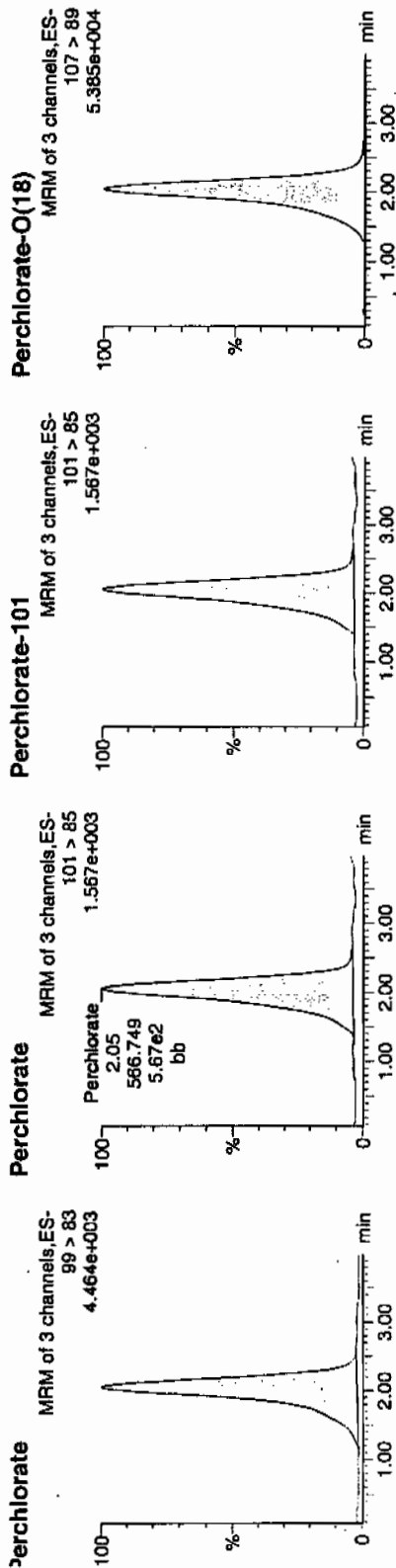
Time: 21:54:10

D: 244601005

File: 2,2,D

01-23-10

1672-1942315 | 2000 | 11



D	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
244601005	Perchlorate	99 > 83	2.05	1582.895	1582.895	bb			0.0337			267.676	2.79
244601005	Perchlorate-101	101 > 85	2.05	566.749	566.749	bb			0.0351			159.737	
244601005	Perchlorate-O(18)	107 > 89	2.04	1977.484	1977.484	bb			0.4858	97.17	-2.83	1100.0...	

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 942314
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE12-10-7238
 Date Received: 13-JAN-10
 GEL Job No (SDG): 10-1212
 GEL Sample ID: 244601006
 Date Filtered: 22-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	0.600	ug/kg	U	1	22-JAN-10 22:01	per0122051a
	Perchlorate Isotope Ratio						1	22-JAN-10 22:01	per0122051a
14797-73-0	Perchlorate-101	.6	2.4	0.600	ug/kg	U	1	22-JAN-10 22:01	per0122051a
	Perchlorate-O(18)			5.77	ug/kg		1	22-JAN-10 22:01	per0122051a

[^] 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 =
 Instrument Value X Concentrated Extract Volume X 1
 Aliquot %Solids

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

Dataset: C:\MassLynx\Perchlorate.PRO\per012210a.qld

Last Altered: Saturday, January 23, 2010 9:20:32 AM Eastern Standard Time
Printed: Saturday, January 23, 2010 9:27:21 AM Eastern Standard Time

Name: per0122051a

Date: 22-Jan-2010

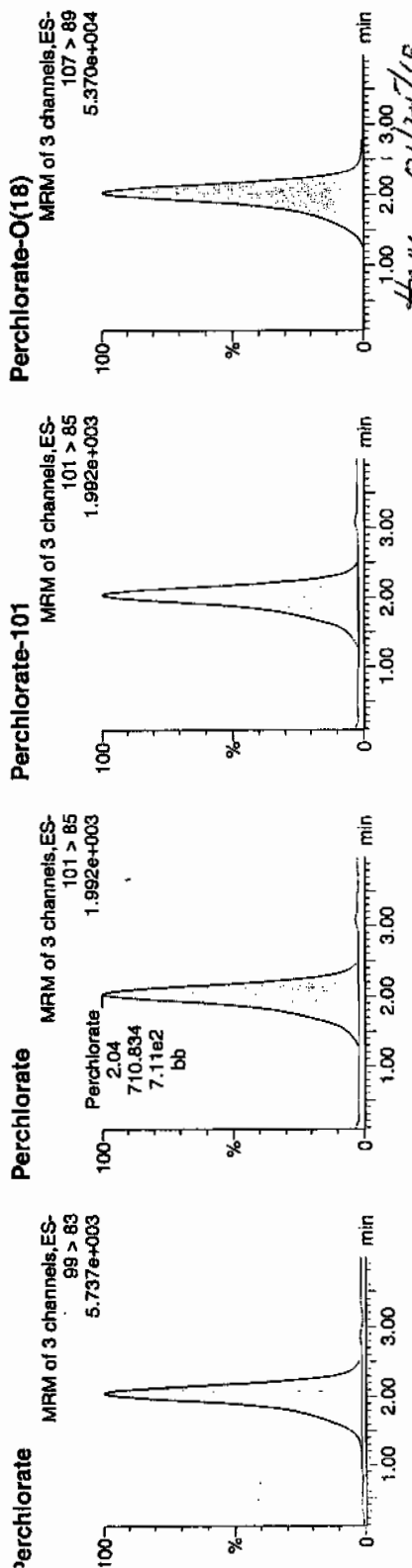
Time: 22:01:10

D: 244601006

File: 2:2,E

01-23-10

142001942315 | 30020111



D	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
244601006	Perchlorate	99 > 83	2.05	2018.754	2018.754	bb			0.0430			527.705	2.84
244601006	Perchlorate-101	101 > 85	2.04	710.834	710.834	bb			0.0440			104.282	
244601006	Perchlorate-Q(18)	107 > 89	2.04	19582.684	19582.684	bb			0.4811	96.21	-3.79	1698.6...	

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: 942314

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE12-10-7242

Date Received: 13-JAN-10

GEL Job No (SDG): 10-1212

GEL Sample ID: 244601007

Date Filtered: 22-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	.598	2.39	0.598	ug/kg	U	1	22-JAN-10 22:08	per0122052a
	Perchlorate Isotope Ratio						1	22-JAN-10 22:08	per0122052a
14797-73-0	Perchlorate-101	.598	2.39	0.598	ug/kg	U	1	22-JAN-10 22:08	per0122052a
	Perchlorate-O(18)			5.90	ug/kg		1	22-JAN-10 22:08	per0122052a

[^] 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 =

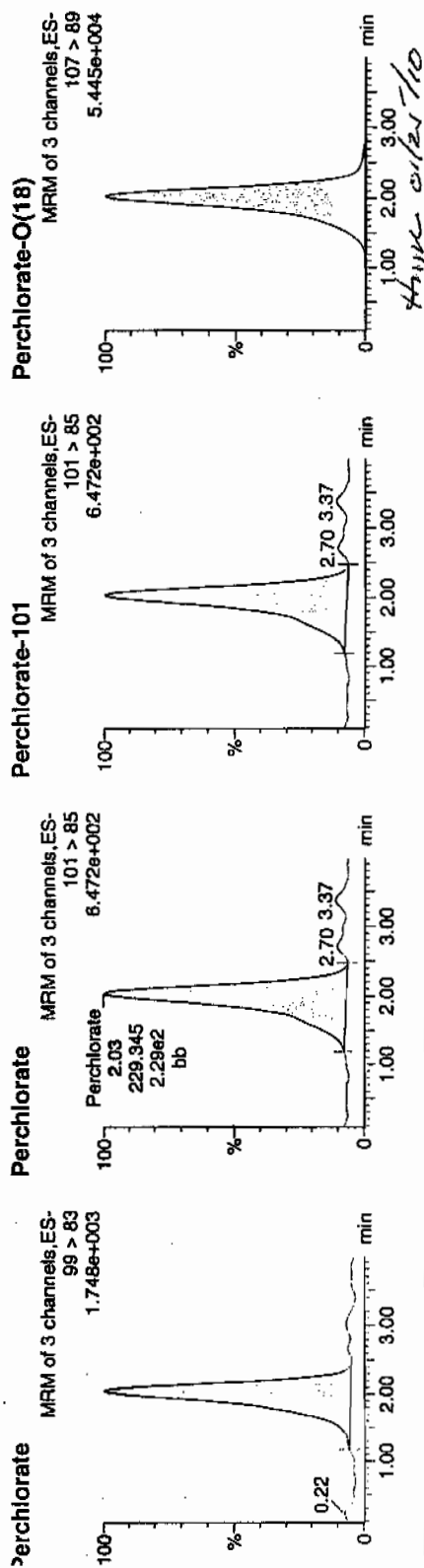
Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Aliquot}}$ X $\frac{1}{\% \text{Solids}}$

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

Dataset: C:\MassLynx\Perchlorate.PRO\per012210a.qld

Last Altered: Saturday, January 23, 2010 9:20:32 AM Eastern Standard Time
Printed: Saturday, January 23, 2010 9:27:21 AM Eastern Standard Time

Name: per0122052a
Date: 22-Jan-2010
Time: 22:08:11
D: 244601007
Jial: 2:2,F



D	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
244601007	Perchlorate	99 > 83	2.04	596.046	596.046	bb			0.0127			66.639	2.60
244601007	Perchlorate-101	101 > 85	2.03	229.345	229.345	bb			0.0142			166.565	
244601007	Perchlorate-O(18)	107 > 89	2.03	20086.682	20086.682	bb			0.4934	98.69	-1.31	2857.8...	

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 942314

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE12-10-7236

Date Received: 13-JAN-10

GEL Job No (SDG): 10-1212

GEL Sample ID: 244601008

Date Filtered: 22-JAN-10

Injection Volume (uL): 20

%Solids: 78

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.638	2.55	0.638	ug/kg	U	1	22-JAN-10 22:15	per0122053a
	Perchlorate Isotope Ratio						1	22-JAN-10 22:15	per0122053a
14797-73-0	Perchlorate-101	.638	2.55	0.638	ug/kg	U	1	22-JAN-10 22:15	per0122053a
	Perchlorate-O(18)			6.26	ug/kg		1	22-JAN-10 22:15	per0122053a

[^] 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 =

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

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

Dataset: C:\MassLynx\Perchlorate.PRO\per012210a.qld

Last Altered: Saturday, January 23, 2010 9:20:32 AM Eastern Standard Time
Printed: Saturday, January 23, 2010 9:27:21 AM Eastern Standard Time

Name: per0122053a

Date: 22-Jan-2010

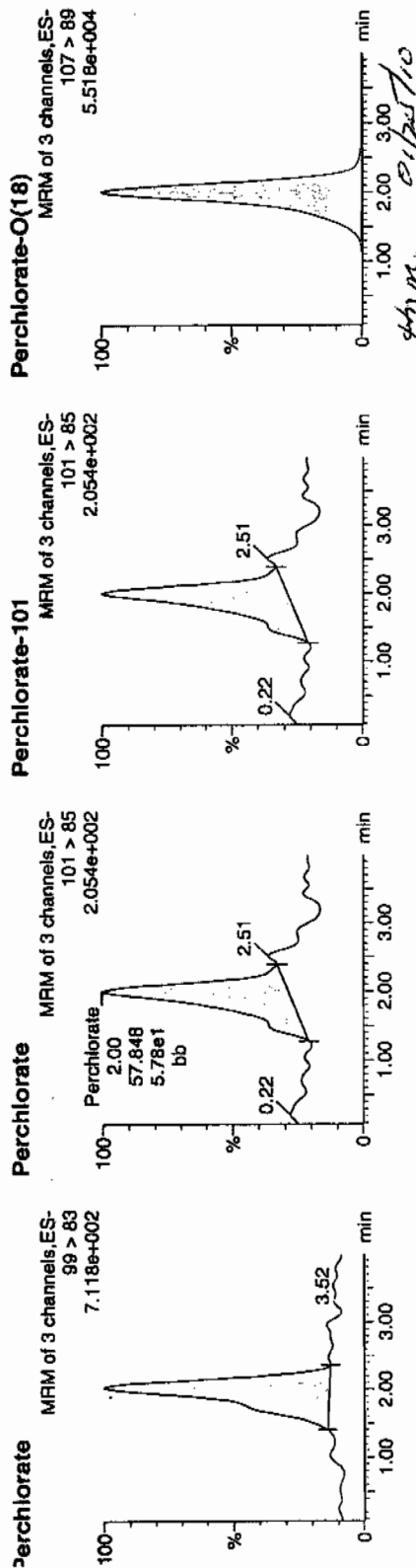
Time: 22:15:12

D: 244601008

Label: 2:3,A

6622
01-23-10

15020 | 942315 | 50220 | 11



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
244601008	Perchlorate	99 > 83	2.03	232.412	232.412	bb			0.0049			84.991	4.02
244601008	Perchlorate-101	101 > 85	2.00	57.848	57.848	bb			0.0036			87.642	
244601008	Perchlorate-Q(18)	107 > 89	2.02	19965.756	19965.756	bb			0.4905	98.09	-1.91	4193.0...	

0624
20.0500

Perchlorate Analysis Data Sheet

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

Lab Name: GEL Laboratories LLCLab Code: GELInstrument: LCMSMSMethod: SW846 6850 ModifiedMatrix: SOILExtraction Batch ID: 242314Extraction Type: Solid Prep

Client Sample No.

RE12-10-7252Date Received: 13-JAN-10GEL Job No (SDG): 10-1212GEL Sample ID: 244601009Date Filtered: 22-JAN-10Injection Volume (uL): 20%Solids: 84Sample Volume/Weight: 2.00 gConcentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.595	2.38	0.595	ug/kg	U	1	22-JAN-10 22:22	per0122054a
	Perchlorate Isotope Ratio						1	22-JAN-10 22:22	per0122054a
14797-73-0	Perchlorate-101	.595	2.38	0.595	ug/kg	U	1	22-JAN-10 22:22	per0122054a
	Perchlorate-O(18)			5.94	ug/kg		1	22-JAN-10 22:22	per0122054a

[^] 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 =

Instrument Value X Concentrated Extract Volume X 1
Aliquot %Solids

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

Dataset: C:\MassLynx\Perchlorate.PRO\per012210a.qld

Last Altered: Saturday, January 23, 2010 9:20:32 AM Eastern Standard Time
Printed: Saturday, January 23, 2010 9:27:21 AM Eastern Standard Time

Name: per0122054a

Date: 22-Jan-2010

Time: 22:22:15

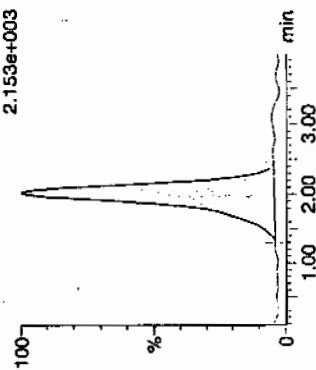
D: 244601009

Vial: 2:3,B

LOW 1942315 | 5000 | 11
01-23-10

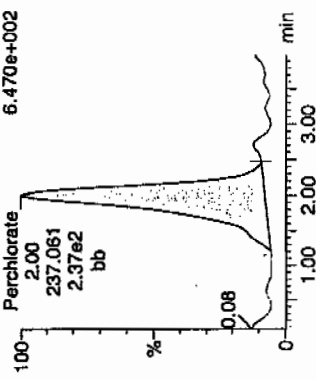
Perchlorate

MRM of 3 channels, ES-
99 > 83
2.153e+003



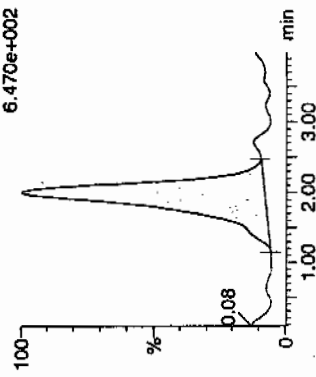
Perchlorate

MRM of 3 channels, ES-
101 > 85
6.470e+002



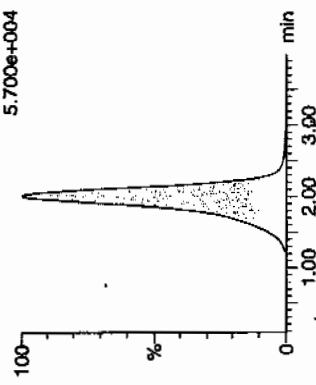
Perchlorate-101

MRM of 3 channels, ES-
101 > 85
6.470e+002



Perchlorate-O(18)

MRM of 3 channels, ES-
107 > 89
5.700e+004



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
244601009	Perchlorate	99 > 83	2.02	705.365	705.365	bb			0.0150			23.460	2.98
244601009	Perchlorate-101	101 > 85	2.00	237.061	237.061	bb			0.0147			42.382	
244601009	Perchlorate-O(18)	107 > 89	2.00	20313.531	20313.531	bb			0.4990	99.80	-0.20	3390.7...	

Form I

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 942314
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE12-10-7253
 Date Received: 13-JAN-10
 GEL Job No (SDG): 10-1212
 GEL Sample ID: 244601010
 Date Filtered: 22-JAN-10
 Injection Volume (uL): 20
 %Solids: 96.7

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	22-JAN-10 22:29	per0122055a
	Perchlorate Isotope Ratio						1	22-JAN-10 22:29	per0122055a
14797-73-0	Perchlorate-101	.517	2.07	0.517	ug/kg	U	1	22-JAN-10 22:29	per0122055a
	Perchlorate-O(18)			5.16	ug/kg		1	22-JAN-10 22:29	per0122055a

[^] 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 =
 Instrument Value X Concentrated Extract Volume X 1
 Aliquot %Solids

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

Dataset: C:\MassLynx\Perchlorate.PRO\per012210a.qld

Last Altered: Saturday, January 23, 2010 9:20:32 AM Eastern Standard Time
Printed: Saturday, January 23, 2010 9:27:21 AM Eastern Standard Time

Name: per0122055a

Date: 22-Jan-2010

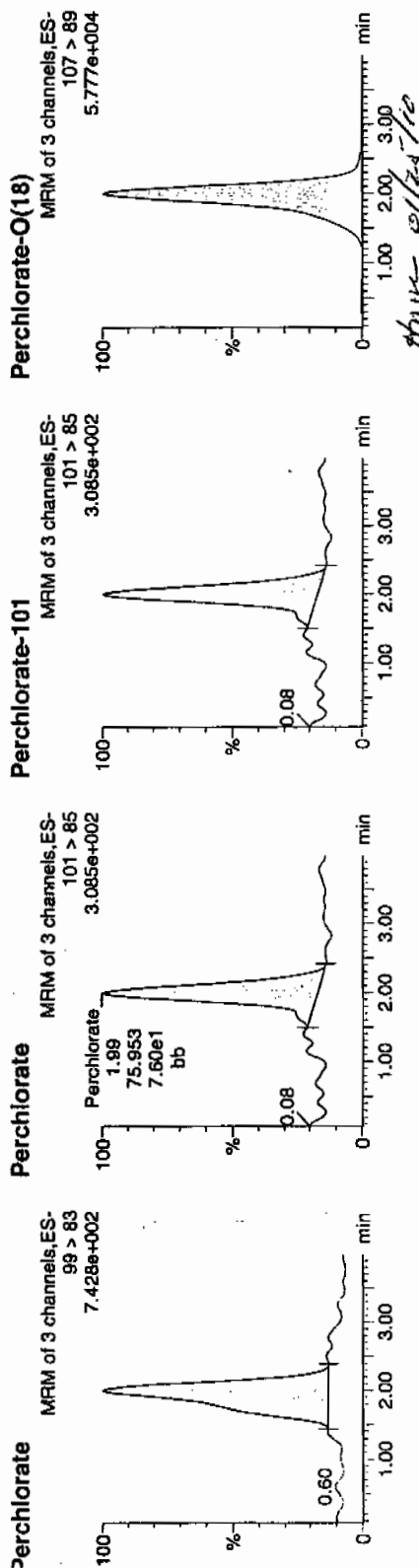
Time: 22:29:18

D: 244601010

Val: 2:3,C

01-23-10

15414 | 942315 | 5020 | 11



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
244601010	Perchlorate	99 > 83	2.00	249.263	249.263	bb			0.0053	62.882	3.28		
244601010	Perchlorate-101	101 > 85	1.99	75.953	75.953	bb			0.0047	65.754			
244601010	Perchlorate-O(18)	107 > 89	1.99	20330.135	20330.135	bb			0.4994	99.89	-0.11	1445.7...	

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: 942314

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE12-10-7254

Date Received: 13-JAN-10

GEL Job No (SDG): 10-1212

GEL Sample ID: 244601011

Date Filtered: 22-JAN-10

Injection Volume (uL): 20

%Solids: 85

CAS No.	Analyte ^a	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.59	2.36	0.590	ug/kg	U	1	22-JAN-10 22:57	per0122059a
	Perchlorate Isotope Ratio						1	22-JAN-10 22:57	per0122059a
14797-73-0	Perchlorate-101	.59	2.36	0.590	ug/kg	U	1	22-JAN-10 22:57	per0122059a
	Perchlorate-O(18)			6.06	ug/kg		1	22-JAN-10 22:57	per0122059a

^a 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 =

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

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

Dataset: C:\MassLynx\Perchlorate.PRO\per012210a.qld

Last Altered: Saturday, January 23, 2010 9:20:32 AM Eastern Standard Time
Printed: Saturday, January 23, 2010 9:27:21 AM Eastern Standard Time

Name: per0122059a

Date: 22-Jan-2010

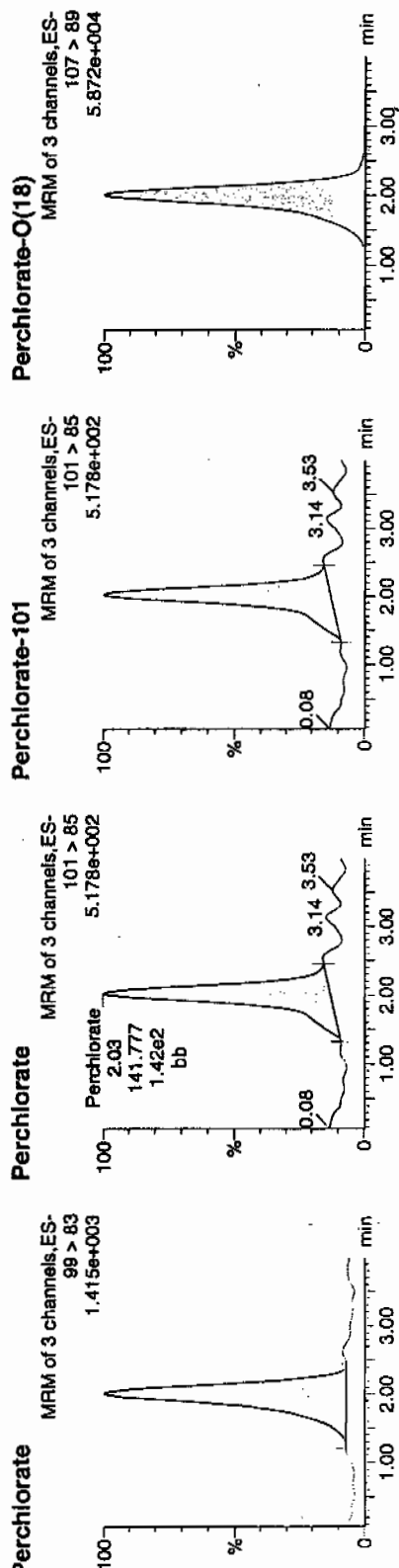
Time: 22:57:40

D: 244601011

/lat: 2:3.D

01-23-10

LANU | 942315 | 5070 | 11



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
244601011	Perchlorate	99 > 83	2.02	471.837	471.837	bb			0.0100	102.64	2.64	47.784	3.33
244601011	Perchlorate-101	101 > 85	2.03	141.777	141.777	bb			0.0088			41.100	
244601011	Perchlorate-O(18)	107 > 89	2.02	20890.008	20890.008	bb			0.5132			1729.8...	

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 942314

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE12-10-7255

Date Received: 13-JAN-10

GEL Job No (SDG): 10-1212

GEL Sample ID: 244601012

Date Filtered: 22-JAN-10

Injection Volume (uL): 20

%Solids: 93.4

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	22-JAN-10 23:04	per0122060a
	Perchlorate Isotope Ratio						1	22-JAN-10 23:04	per0122060a
14797-73-0	Perchlorate-101	.535	2.14	0.535	ug/kg	U	1	22-JAN-10 23:04	per0122060a
	Perchlorate-O(18)			5.31	ug/kg		1	22-JAN-10 23:04	per0122060a

[^] 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 =

Instrument Value X Concentrated Extract Volume X 1 %Solids
Aliquot

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

Dataset: C:\MassLynx\Perchlorate.PRO\per012210a.qld

Last Altered: Saturday, January 23, 2010 9:20:32 AM Eastern Standard Time
Printed: Saturday, January 23, 2010 9:27:21 AM Eastern Standard Time

Name: per0122060a

Date: 22-Jan-2010

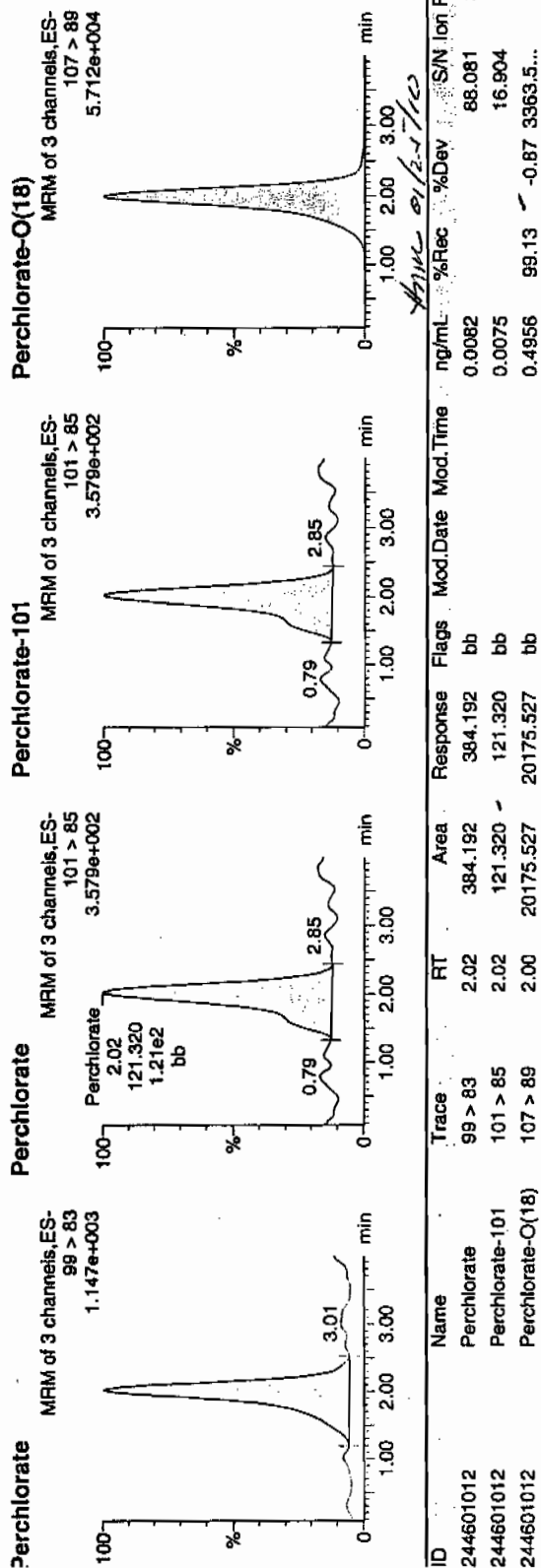
Time: 23:04:53

D: 244601012

Vial: 2:3,E

01-23-10

1.147e+003 | 3.01



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: 942314

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE12-10-7276

Date Received: 13-JAN-10

GEL Job No (SDG): 10-1212

GEL Sample ID: 244601013

Date Filtered: 22-JAN-10

Injection Volume (uL): 20

%Solids: 21.6

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.546	2.18	0.546	ug/kg	U	1	22-JAN-10 23:11	per0122061a
	Perchlorate Isotope Ratio						1	22-JAN-10 23:11	per0122061a
14797-73-0	Perchlorate-101	.546	2.18	0.546	ug/kg	U	1	22-JAN-10 23:11	per0122061a
	Perchlorate-O(18)			5.74	ug/kg		1	22-JAN-10 23:11	per0122061a

[^] 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 =
Instrument Value X Concentrated Extract Volume X 1 %Solids
Aliquot

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

Dataset: C:\MassLynx\Perchlorate.PRO\per012210a.qld

Last Altered: Saturday, January 23, 2010 9:20:32 AM Eastern Standard Time
Printed: Saturday, January 23, 2010 9:27:21 AM Eastern Standard Time

Name: per0122061a

Date: 22-Jan-2010

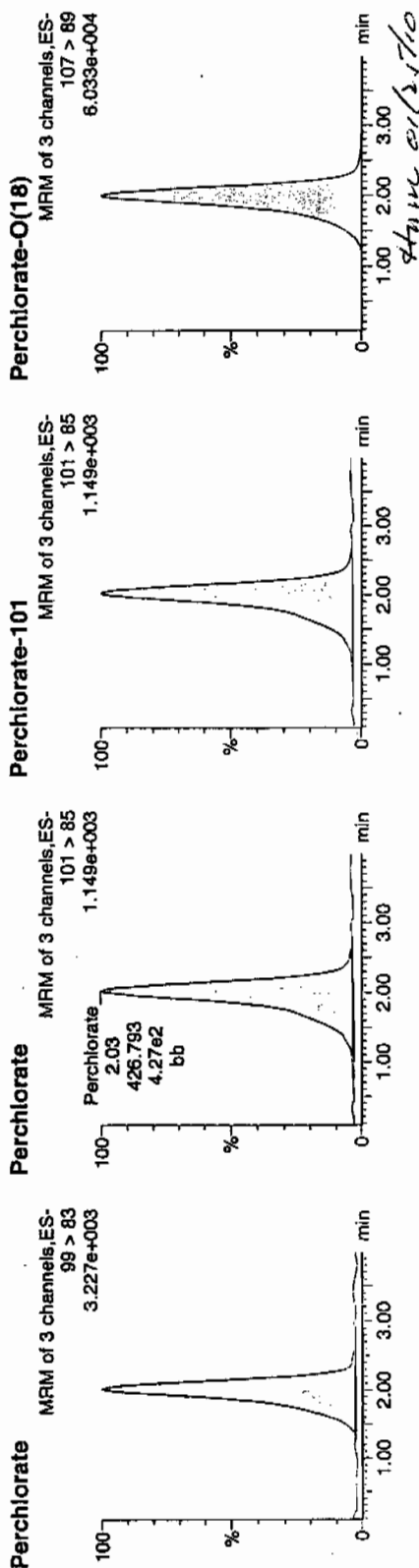
Time: 23:11:54

ID: 244601013

Vial: 2:3,F

01-23-10

1222061a | 942315 | 150720 | 11



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
244601013	Perchlorate	99 > 83	2.02	1083.923	1083.923	bb			0.0231			73.526	2.54
244601013	Perchlorate-101	101 > 85	2.03	426.793	426.793	bb			0.0264			99.547	
244601013	Perchlorate-O(18)	107 > 89	2.00	21425.785	21425.785	bb			0.5263	105.27	5.27	908.776	

STANDARDS DATA

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories
GEL Job No.(SDG): 10-1212

Lab Code: GEL

Instrument ID: LCMSMS Date Analyzed: 22-JAN-10

HPLC Column: Phenomenex Ion Pac AG-162 X 50 mm

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

Paramname Perchlorate

Coefficient of Determination:

Calibration Curve: 46988.72

Response Type: External Standard

Curve Type: RF

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories

Lab Code: GEL

Instrument ID: LCM SMS

Date Analyzed: 22-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: 16168.38

Response Type: External Standard

Curve Type: RF

Quantify Calibration Report MassLynx 4.0 SP4
 ie GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per012210a.qld

Acquisition Date: Saturday, January 23, 2010 9:20:32 AM Eastern Standard Time
 Acquisition Time: Saturday, January 23, 2010 9:27:21 AM Eastern Standard Time

Method: C:\MassLynx\Perchlorate.PRO\MethDB\per012210a.mdb 23 Jan 2010 08:53:00
 Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per012210a.cdb 23 Jan 2010 09:20:31

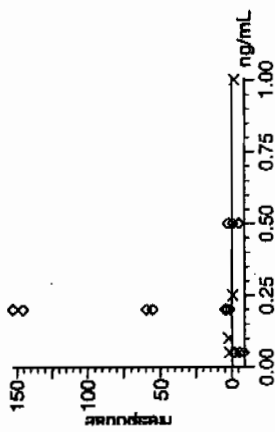
Compound name: Perchlorate

Response Factor: 46988.7

R² SD: 965.161, % Relative SD: 2.05403

Response type: External Std, Area

Response type: RIF



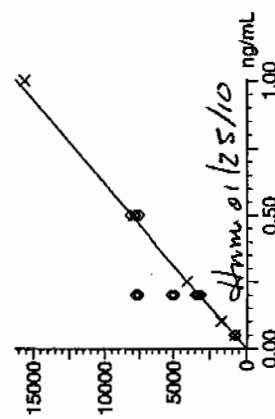
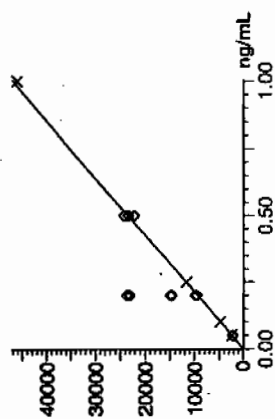
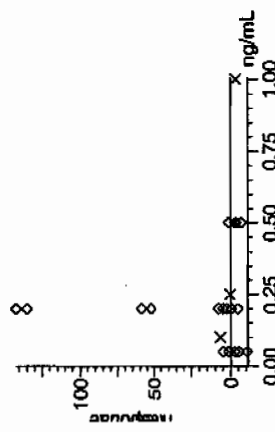
Compound name: Perchlorate-101

Response Factor: 16168.4

R² SD: 634.993, % Relative SD: 3.92737

Response type: External Std, Area

Response type: RIF



01-23-10

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

Dataset: C:\MassLynx\Perchlorate.PRO\per012210a.qld

Last Altered: Saturday, January 23, 2010 9:20:32 AM Eastern Standard Time
Printed: Saturday, January 23, 2010 9:27:21 AM Eastern Standard Time

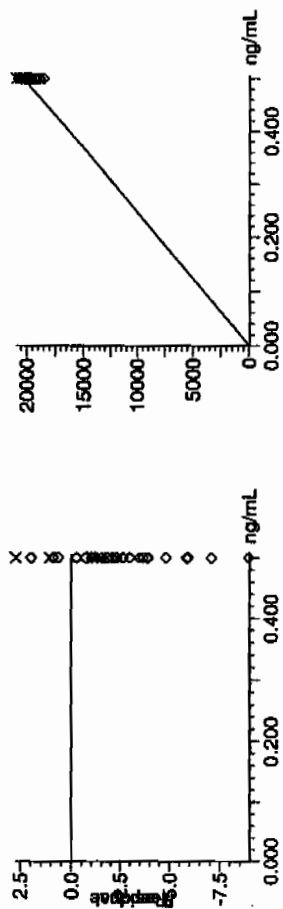
Compound name: Perchlorate-O(18)

Response Factor: 40707

RF SD: 744.722, % Relative SD: 1.82947

Response type: External Std, Area

Curve type: RF



Perchlorate Initial Calibration Verification

GEL Job No.(SDG): 10-1212

Lab Name: General Engineering Laboratories

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.52	103.22	22-JAN-10 17:05	per0122009a
Perchlorate Isotope Ratio		2.97		22-JAN-10 17:05	per0122009a
Perchlorate-101	.5	.51	101.04	22-JAN-10 17:05	per0122009a

Identify Sample Report MassLynx 4.0 SP4
 ie GEL Group, LLC Analyst: Charliers W. Wilson

itaset: C:\MassLynx\Perchlorate.PRO\per012210a.qld

st Altered: Saturday, January 23, 2010 9:20:32 AM Eastern Standard Time
 infed: Saturday, January 23, 2010 9:27:21 AM Eastern Standard Time

ime: per0122009a

ite: 22-Jan-2010

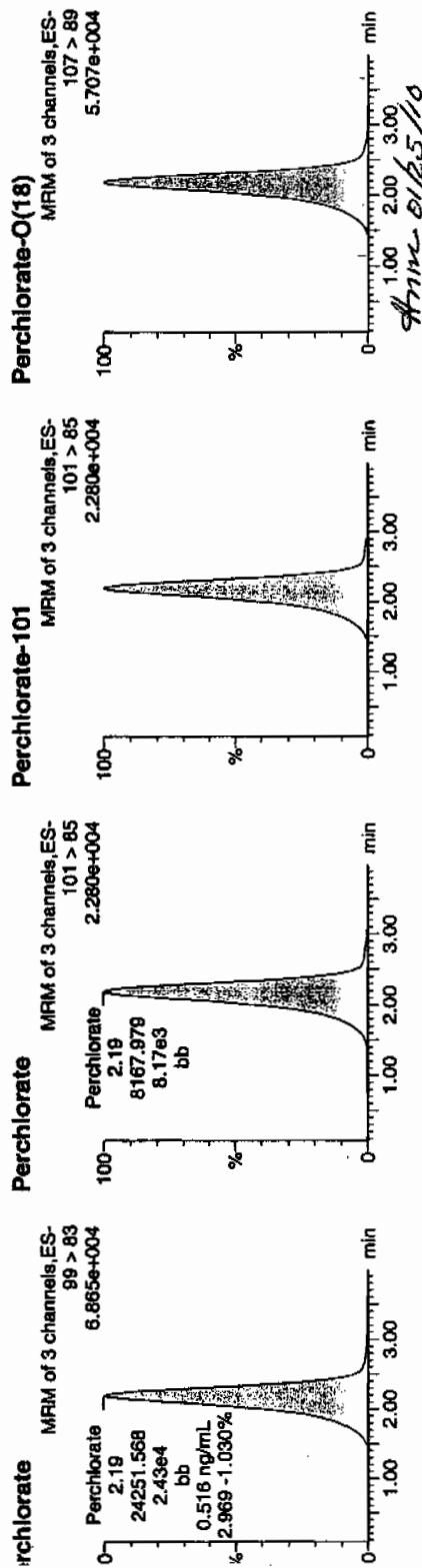
me: 17:05:01

: WCL100118-06ICV

al: 1:2,A

Per

01-23-10



Name	Trace	RT	Area	Response	Flags	ModTime	ModDate	ng/ml	%Rec	%Dev	SN	Ion Ratio
L100118-06ICV	Perchlorate	2.19	24251.568	24251.568	bb			0.5161	103.22	3.22	8416.6...	2.97
L100118-06ICV	Perchlorate-101	2.19	8167.979	8167.979	bb			0.5052	101.04	1.04	2947.7...	
L100118-06ICV	Perchlorate-O(18)	2.18	20208.422	20208.422	bb			0.4964	99.29	-0.71	18211...	

Form 3

Perchlorate Continuing Calibration Verification

GEL Job No.(SDG): 10-1212

Lab Name: General Engineering Laboratories

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.47	94.52	22-JAN-10 18:36	per0122022a
Perchlorate Isotope Ratio		2.94		22-JAN-10 18:36	per0122022a
Perchlorate-101	.5	.47	93.57	22-JAN-10 18:36	per0122022a
Perchlorate	.5	.48	95.03	22-JAN-10 20:08	per0122035a
Perchlorate Isotope Ratio		2.84		22-JAN-10 20:08	per0122035a
Perchlorate-101	.5	.49	97.22	22-JAN-10 20:08	per0122035a
Perchlorate	.5	.48	95.15	22-JAN-10 21:25	per0122046a
Perchlorate Isotope Ratio		2.98		22-JAN-10 21:25	per0122046a
Perchlorate-101	.5	.46	92.64	22-JAN-10 21:25	per0122046a
Perchlorate	.5	.5	99.41	22-JAN-10 22:36	per0122056a
Perchlorate Isotope Ratio		3		22-JAN-10 22:36	per0122056a
Perchlorate-101	.5	.48	96.35	22-JAN-10 22:36	per0122056a
Perchlorate	.5	.5	99.14	22-JAN-10 23:47	per0122066a

Perchlorate Continuing Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1212

Lab Code: GEL

Reporting Units: ug/kg

Perchlorate Isotope Ratio		2.98		22-JAN-10 23:47	per0122066a
Perchlorate-101	.5	.48	96.63	22-JAN-10 23:47	per0122066a

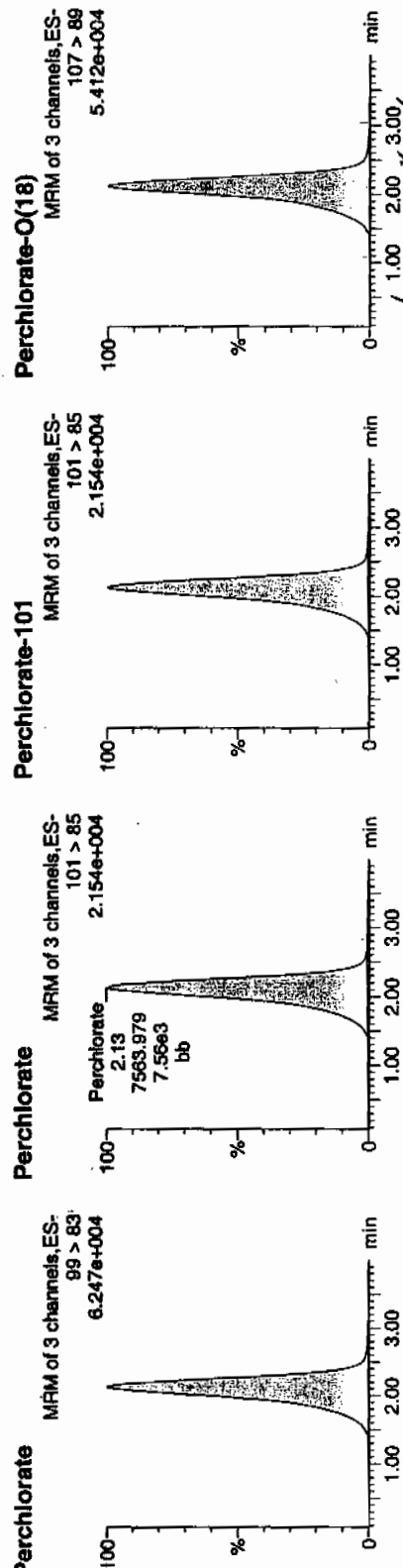
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per012210a.qid

Last Altered: Saturday, January 23, 2010 9:20:32 AM Eastern Standard Time
Printed: Saturday, January 23, 2010 9:27:21 AM Eastern Standard Time

Name: per0122022a
Date: 22-Jan-2010
Time: 18:36:33
D: WCL100118-06CCV
/ial: 1:2,A

Pure and
01-23-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/ml	%Rec	%Dev	S/N	Ion Ratio
CL100118-06CCV	Perchlorate	2.13	22207.250	22207.250	bb			0.4726	94.52	-5.48	1162.3...	2.94
CL100118-06CCV	Perchlorate-101	2.13	7563.979	7563.979	bb			0.4678	93.57	-6.43	3226.0...	
CL100118-06CCV	Perchlorate-O(18)	2.12	18912.758	18912.758	bb			0.4646	92.92	-7.08	1824.3...	

Quantity Sample Report MassLynx 4.0 SP4

he GEL Group, LLC Analyst: Charles W. Wilson

atset: C:\MassLynx\Perchlorate.PRO\per012210a.qld

1st Altered: Saturday, January 23, 2010 9:20:32 AM Eastern Standard Time
 rinted: Saturday, January 23, 2010 9:27:21 AM Eastern Standard Time

ame: per0122035a

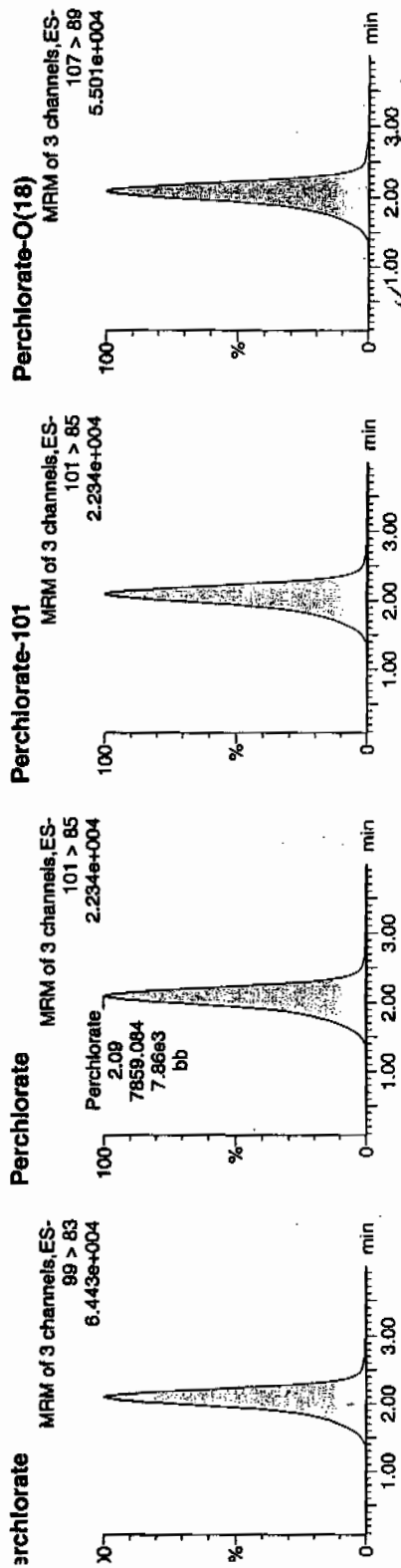
ate: 22-Jan-2010

me: 20:08:04

l: WCL100118-06CCV

al: 1:2,A

*Per
and
01-23-10*



Name	Trace	RT	Area	Response	Flags	ModTime	ModDate	Conc	%Rec	%Dev	S/N	Ion Ratio
CL100118-06CCV	Perchlorate	99 > 83	2.10	22326.107	bb			0.4751	95.03	-4.97	4174.8...	2.84
CL100118-06CCV	Perchlorate-101	101 > 85	2.09	7859.084	bb			0.4861	97.22	-2.78	682.216	
CL100118-06CCV	Perchlorate-O(18)	107 > 89	2.08	19144.617	bb			0.4703	94.06	-5.94	4864.8...	

antify Sample Report MassLynx 4.0 SP4
a GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per012210a.qld

Acquired: Saturday, January 23, 2010 9:20:32 AM Eastern Standard Time
 Date: Saturday, January 23, 2010 9:27:21 AM Eastern Standard Time

File: per0122046a

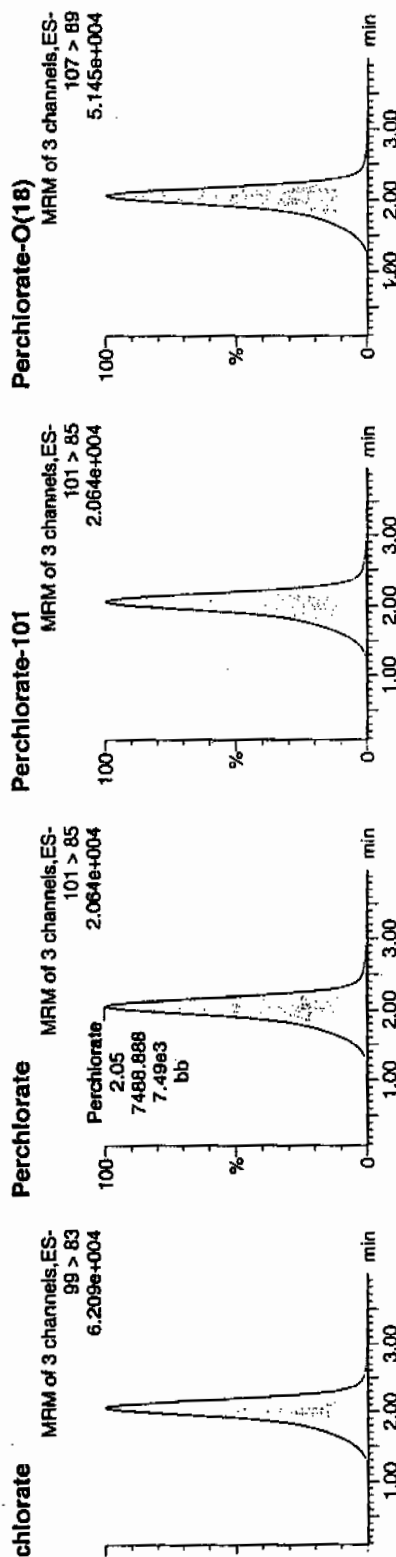
Date: 22-Jan-2010

Time: 21:25:38

WCL100118-06CCV

I: 1:2,A

Pass
 01-23-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
.100118-06CCV Perchlorate	99 > 83	2.05	22354.334	22354.334	bb			0.4757	95.15	-4.85	2696.7...	2.99
.100118-06CCV Perchlorate-101	101 > 85	2.05	7488.888	7488.888	bb			0.4632	92.64	-7.36	245.138	
.100118-06CCV Perchlorate-O(18)	107 > 89	2.05	18535.990	18535.990	bb			0.4554	91.07	-8.93	1942.3...	

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

atset: C:\MassLynx\Perchlorate.PRO\per012210a.qld

ast Altered: Saturday, January 23, 2010 9:20:32 AM Eastern Standard Time
 rinted: Saturday, January 23, 2010 9:27:21 AM Eastern Standard Time

ame: per0122056a

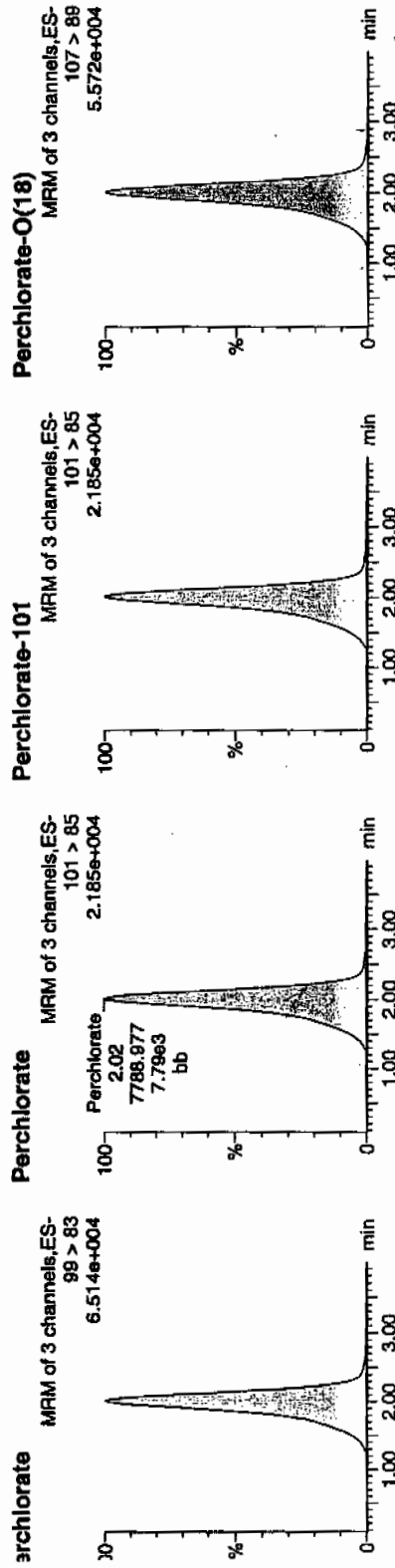
ate: 22-Jan-2010

ime: 22:36:21

i: WCL100118-06CCV

ial: 1:2,A

Pass
 and
 01-23-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	SN	Ratio
CL100118-06CCV	Perchlorate	99 > 83	2.02	23355.424	23355.424	bb		0.4970	99.41	-0.59	4132.8...	3.00
CL100118-06CCV	Perchlorate-101	101 > 85	2.02	7788.977	7788.977	bb		0.4817	96.35	-3.65	1988.2...	
CL100118-06CCV	Perchlorate-O(18)	107 > 89	2.00	19817.961	19817.961	bb		0.4868	97.37	-2.63	4286.0...	

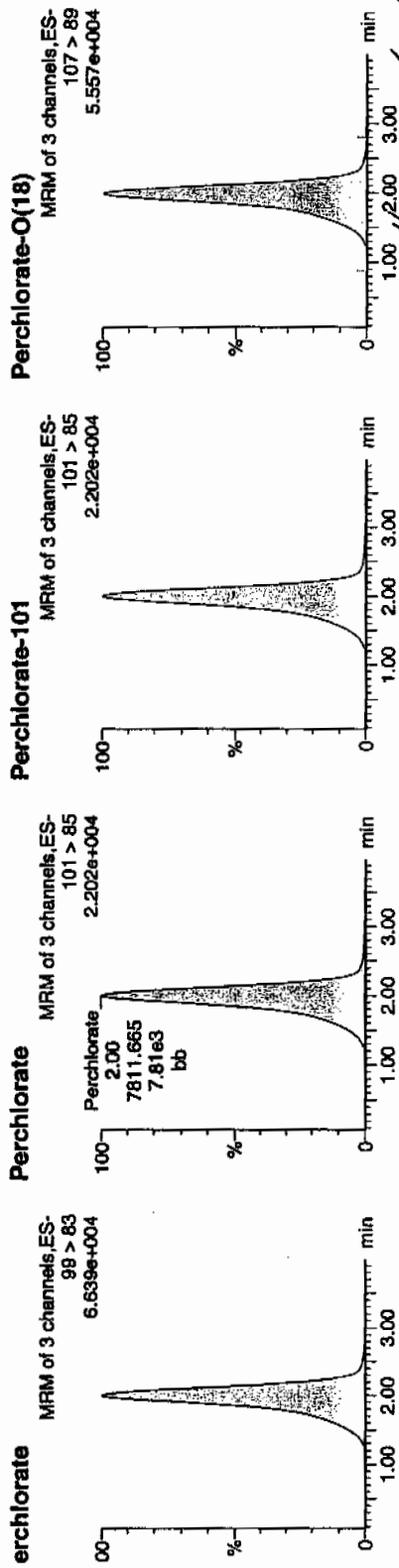
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per012210a.qld

Last Altered: Saturday, January 23, 2010 9:20:32 AM Eastern Standard Time
Printed: Saturday, January 23, 2010 9:27:21 AM Eastern Standard Time

Sample Name: per0122066a
Date: 22-Jan-2010
Time: 23:47:06
File: WCL100118-06CCV
Label: 1:2,A

Pass
and
01-23-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
CL100118-06CCV	Perchlorate	2.00	23291.490	23291.490	bb			0.4957	99.14	-0.86	504.875	2.98
CL100118-06CCV	Perchlorate-101	2.00	7811.665	7811.665	bb			0.4831	96.63	-3.37	1735.0...	
CL100118-06CCV	Perchlorate-O(18)	1.99	19549.516	19549.516	bb			0.4802	96.05	-3.95	4871.9...	

Perchlorate MDL Verification

GEL Job No.(SDG): 10-1212

Lab Name: General Engineering Laboratories

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.05	.05	99.27	22-JAN-10 17:19	per0122011a
Perchlorate Isotope Ratio		2.75		22-JAN-10 17:19	per0122011a
Perchlorate-101	.05	.05	104.82	22-JAN-10 17:19	per0122011a
Perchlorate	.05	.05	91.06	22-JAN-10 18:50	per0122024a
Perchlorate Isotope Ratio		2.8		22-JAN-10 18:50	per0122024a
Perchlorate-101	.05	.05	94.51	22-JAN-10 18:50	per0122024a
Perchlorate	.05	.05	97.57	22-JAN-10 20:22	per0122037a
Perchlorate Isotope Ratio		2.98		22-JAN-10 20:22	per0122037a
Perchlorate-101	.05	.05	95.12	22-JAN-10 20:22	per0122037a
Perchlorate	.05	.05	98.69	22-JAN-10 21:39	per0122048a
Perchlorate Isotope Ratio		3.21		22-JAN-10 21:39	per0122048a

Perchlorate MDL Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1212

Lab Code: GEL

Reporting Units: $\mu\text{g/kg}$

Perchlorate-101	.05	.04	89.3	22-JAN-10 21:39	per0122048a
Perchlorate	.05	.05	94.56	22-JAN-10 22:50	per0122058a
Perchlorate Isotope Ratio		2.82		22-JAN-10 22:50	per0122058a
Perchlorate-101	.05	.05	97.38	22-JAN-10 22:50	per0122058a
Perchlorate	.05	.05	97.93	23-JAN-10 00:01	per0122068a
Perchlorate Isotope Ratio		2.82		23-JAN-10 00:01	per0122068a
Perchlorate-101	.05	.05	101.07	23-JAN-10 00:01	per0122068a

Quantify Sample Report MassLynx 4.0 SP4

he GEL Group, LLC Analyst: Charlers W. Wilson

atasset: C:\MassLynx\Perchlorate.PRO\per012210a.qld

ast Altered: Saturday, January 23, 2010 9:20:32 AM Eastern Standard Time
rinted: Saturday, January 23, 2010 9:27:21 AM Eastern Standard Time

ame: per0122011a

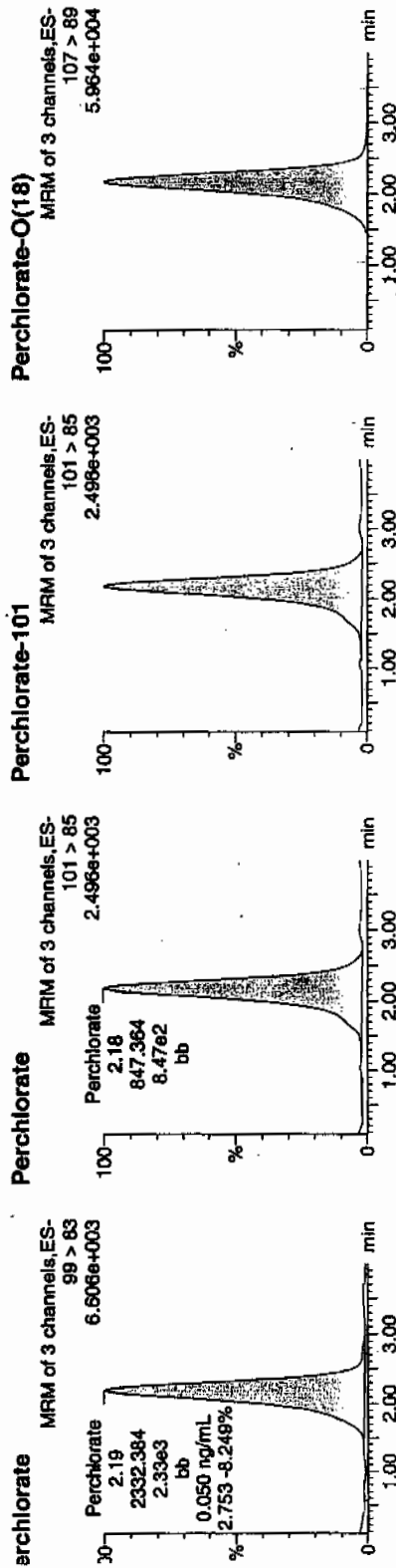
ate: 22-Jan-2010

ime: 17:19:06

I: WCL100118-07CRI

ial: 1:2,B

Per02
01-23-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	SN	Ion Ratio
CL100118-07CRI	Perchlorate	2.19	2332.384	2332.384	bb			0.0496	99.27	-0.73	494.593	2.75
CL100118-07CRI	Perchlorate-101	2.18	847.364	847.364	bb			0.0524	104.82	4.82	123.159	
CL100118-07CRI	Perchlorate-O(18)	2.17	20753.727	20753.727	bb			0.5098	101.97	1.97	2734.4...	

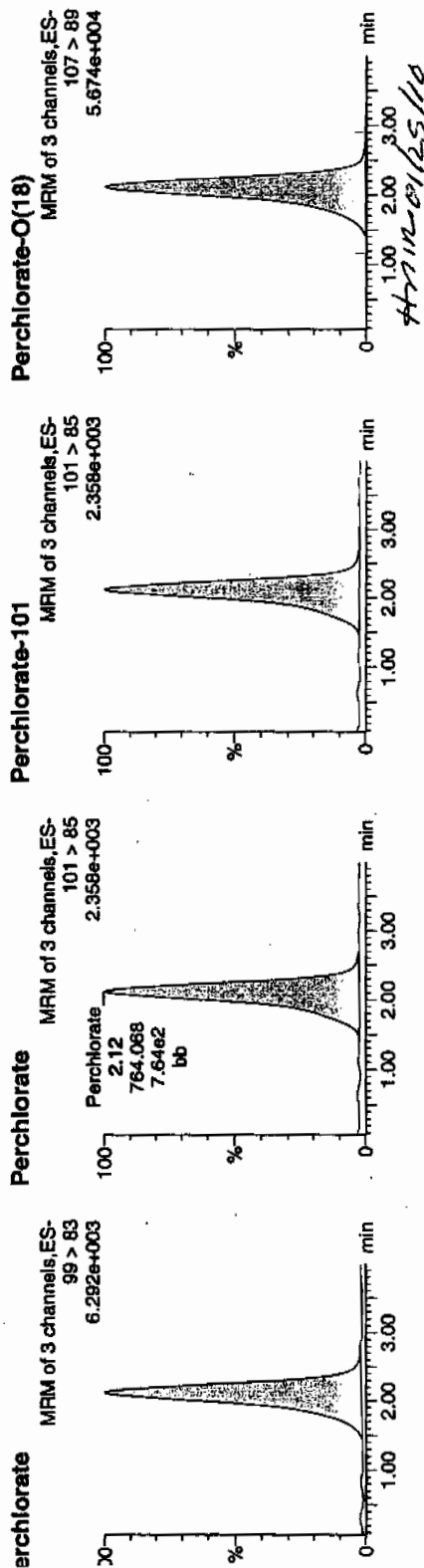
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per012210a.qld

Last Altered: Saturday, January 23, 2010 9:20:32 AM Eastern Standard Time
Printed: Saturday, January 23, 2010 9:27:21 AM Eastern Standard Time

Sample Name: per0122024a
Date: 22-Jan-2010
Time: 18:50:37
File: WCL100118-07CRI
Label: 1:2,B

01-23-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	SN	Ion Ratio
CL100118-07CRI	Perchlorate	99 > 83	2.13	2139.427	bb			0.0455	91.06	-8.94	395.228	2.80
CL100118-07CRI	Perchlorate-101	101 > 85	2.12	764.068	bb			0.0473	94.51	-5.49	421.978	
CL100118-07CRI	Perchlorate-O(18)	107 > 89	2.12	19644.518	bb			0.4826	96.52	-3.48	5557.7...	

Quantify Sample Report MassLynx 4.0 SP4
 he GEL Group, LLC Analyst: Charles W. Wilson

atset: C:\MassLynx\Perchlorate.PRO\per012210a.qld

ast Altered: Saturday, January 23, 2010 9:20:32 AM Eastern Standard Time
 rinted: Saturday, January 23, 2010 9:27:21 AM Eastern Standard Time

ame: per0122037a

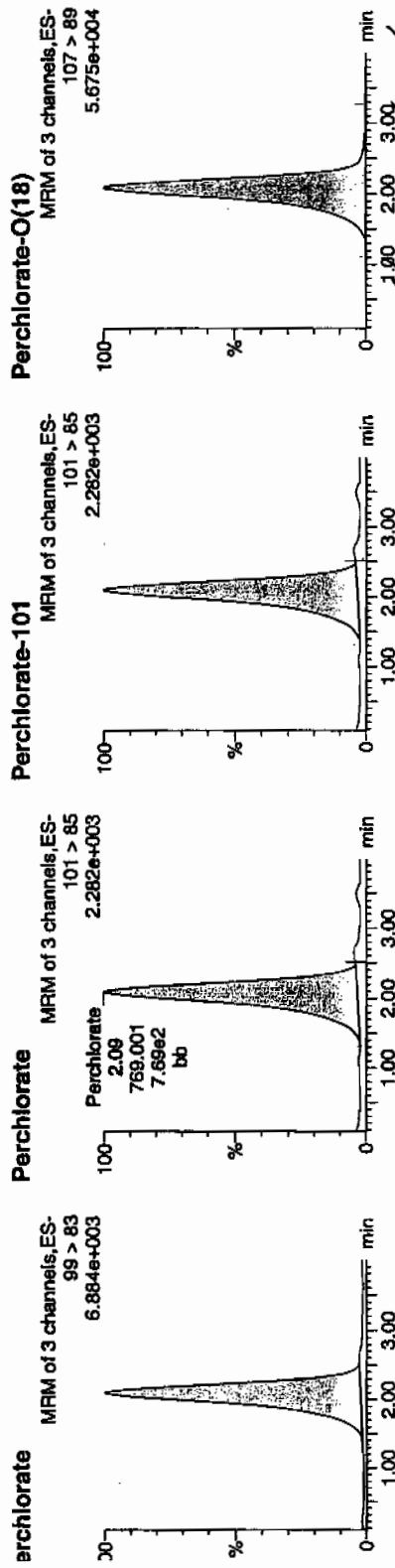
ate: 22-Jan-2010

ime: 20:22:10

o: WCL100118-07CRI

lat: 1:2,B

Perchlorate
01-23-10



Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	IS/N	Ratio
CL100118-07CRI	Perchlorate	99 > 83	2.10	2292.452	bb			0.0488	97.57	-2.43	480.540	2.98
CL100118-07CRI	Perchlorate-101	101 > 85	2.09	769.001	bb			0.0476	95.12	-4.88	152.312	
CL100118-07CRI	Perchlorate-Q(18)	107 > 89	2.08	19888.643	bb			0.4886	97.72	-2.28	5026.5...	

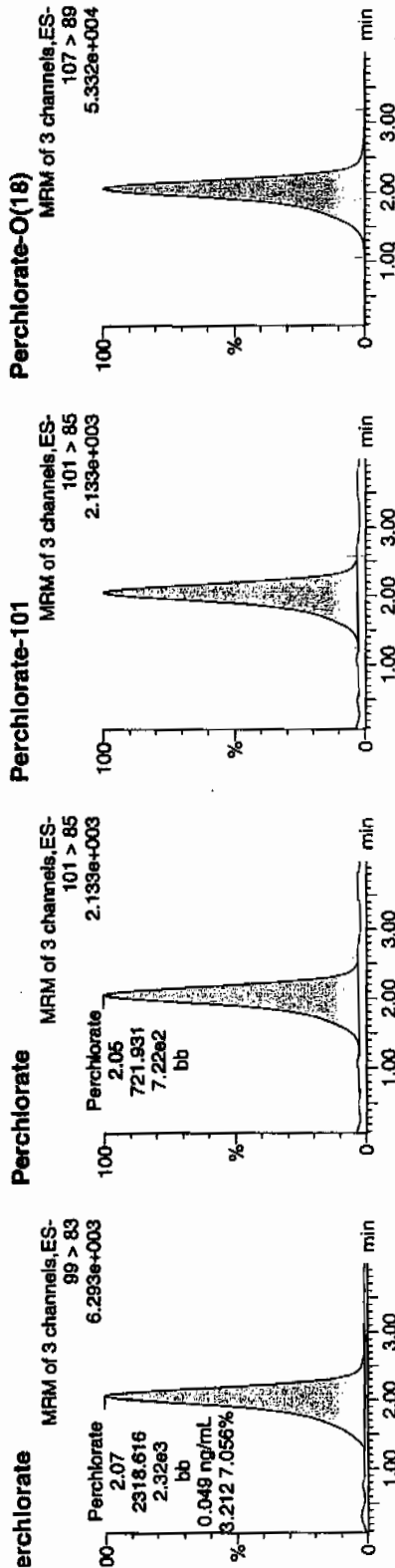
Quantify Sample Report MassLynx 4.0 SP4
 he GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per012210a.qld

Acquired: Saturday, January 23, 2010 9:20:32 AM Eastern Standard Time
 Printed: Saturday, January 23, 2010 9:27:21 AM Eastern Standard Time

Sample Name: per0122048a
 Date: 22-Jan-2010
 Time: 21:39:55
 File: WCL100118-07CRI
 Label: 1:2,B

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 and
 01-23-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
CL100118-07CRI	Perchlorate	2.07	2318.616	2318.616	bb			0.0493	98.69	-1.31	860.624	3.21
CL100118-07CRI	Perchlorate-101	2.05	721.931	721.931	bb			0.0447	89.30	-10.70	93.102	
CL100118-07CRI	Perchlorate-O(18)	2.05	19165.344	19165.344	bb			0.4708	94.16	-5.84	19316....	

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

Dataset: C:\MassLynx\Perchlorate.PRO\per012210a.qld

Last Altered: Saturday, January 23, 2010 9:20:32 AM Eastern Standard Time
Printed: Saturday, January 23, 2010 9:27:21 AM Eastern Standard Time

Name: per0122058a

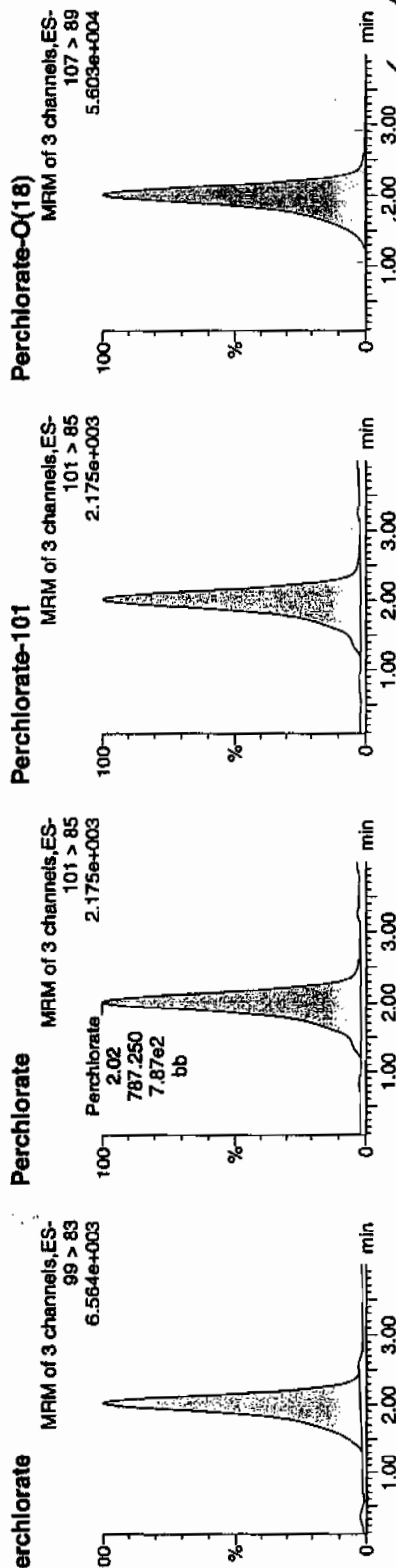
Date: 22-Jan-2010

Time: 22:50:38

Job: WCL100118-07CRI

Label: 1:2,B

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and
91-23-10*



Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/ml	% Rec	% Dev	SN	Ion Ratio
CL100118-07CRI	Perchlorate	99 > 83	2.02	2221.527	2221.527	bb		0.0473	94.56	-5.44	351.231	2.82
CL100118-07CRI	Perchlorate-101	101 > 85	2.02	787.250	787.250	bb		0.0487	97.38	-2.62	97.394	
CL100118-07CRI	Perchlorate-O(18)	107 > 89	2.00	19983.105	19983.105	bb		0.4909	98.18	-1.82	3199.6...	

Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charfers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per012210a.qld

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 Printed: Saturday, January 23, 2010 9:27:21 AM Eastern Standard Time

Sample Name: per0122068a

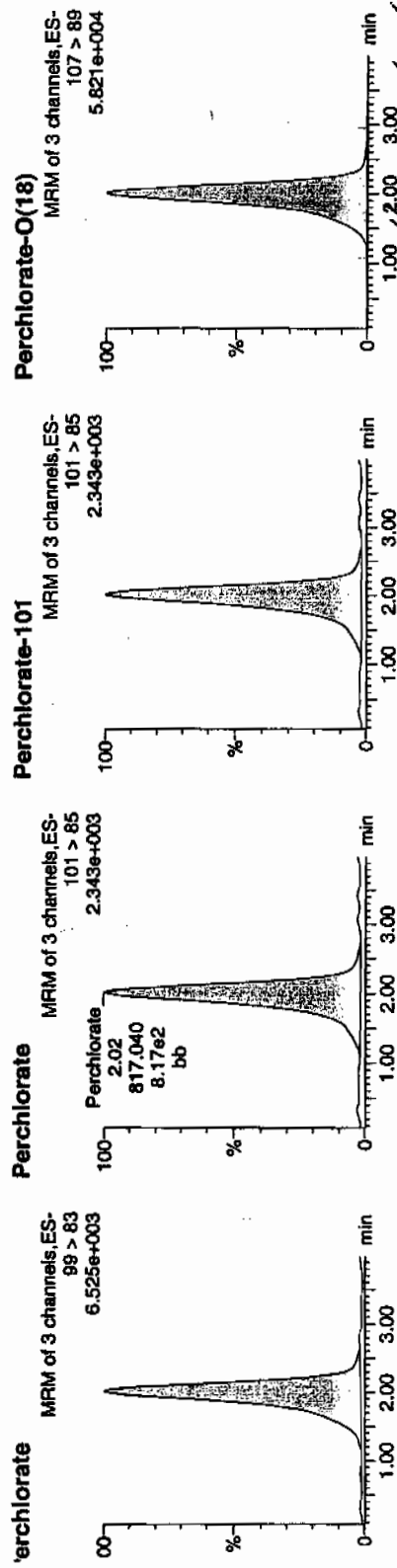
Date: 23-Jan-2010

Time: 00:01:24

Job: WCL100118-07CRI

Label: 1:2,B

*Perchlorate
and
O1-L3-10*



Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	SN	Ion Ratio
CL100118-07CRI	Perchlorate	99 > 83	2.02	2300.814	bb			0.0490	97.93	-2.07	379.395	2.82
CL100118-07CRI	Perchlorate-101	101 > 85	2.02	817.040	bb			0.0505	101.07	1.07	178.792	
CL100118-07CRI	Perchlorate-O(18)	107 > 89	2.00	20483.701	bb			0.5032	100.64	0.64	6420.6...	

QUALITY CONTROL

Perchlorate Analysis Data Sheet

Client Sample No.

MB

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Date Received: 22-JAN-10

Method: EPA 6850 Modified

GEL Job No (SDG): 10-1212

Matrix: SOIL

GEL Sample ID: 1202017252

Extraction Batch ID: 942314

Date Filtered: 22-JAN-10

Extraction Type: Solid Prep

Injection Volume (uL): 20

Sample Volume/Weight: 2.00 g

%Solids: 100

Concentrated Extract Volume: 20.0

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	22-JAN-10 20:29	per0122038a
	Perchlorate Isotope Ratio						1	22-JAN-10 20:29	per0122038a
14797-73-0	Perchlorate-101	.5	2	0.500	ug/kg	U	1	22-JAN-10 20:29	per0122038a
	Perchlorate-O(18)			4.88	ug/kg		1	22-JAN-10 20:29	per0122038a

[^] 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 =

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

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

Dataset: C:\MassLynx\Perchlorate.PRO\per012210a.qld

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Printed: Saturday, January 23, 2010 9:27:21 AM Eastern Standard Time

Sample Name: per0122038a

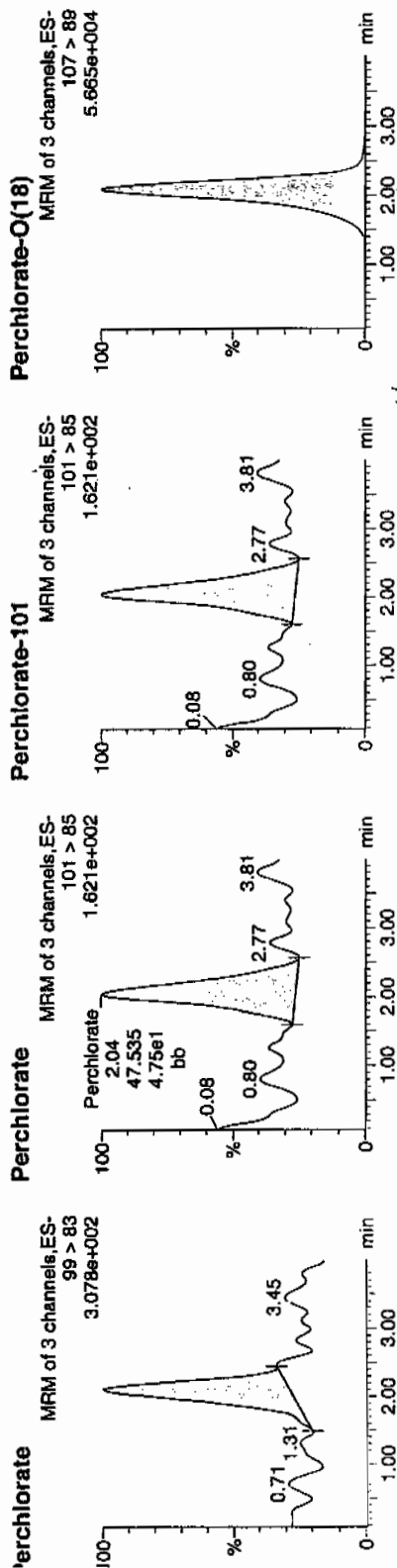
Date: 22-Jan-2010

Time: 20:29:13

ID: 1202017252

Label: 2:1,A

LAJL | 942315 | 5020 | MS | 1 |



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
202017252	Perchlorate	99 > 83	2.10	75.341	bb			0.0016	10.042	1.58	10.042	1.58
202017252	Perchlorate-101	101 > 85	2.04	47.535	bb			0.0029	31.422		31.422	
202017252	Perchlorate-O(18)	107 > 89	2.09	19875.137	bb			0.4882	97.65	-2.35	565.994	

Have 012511

20.0720

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: 942314

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

LCS

Date Received: 22-JAN-10

GEL Job No (SDG): 10-1212

GEL Sample ID: 1202017253

Date Filtered: 22-JAN-10

Injection Volume (uL): 20

%Solids: 100

CAS No.	Analyte ^a	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.5	2	2.09	ug/kg		1	22-JAN-10 20:36	per0122039a
	Perchlorate Isotope Ratio			2.9			1	22-JAN-10 20:36	per0122039a
14797-73-0	Perchlorate-101	.5	2	2.09	ug/kg		1	22-JAN-10 20:36	per0122039a
	Perchlorate-O(18)			5.04	ug/kg		1	22-JAN-10 20:36	per0122039a

^a 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 =

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

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

Dataset: C:\MassLynx\Perchlorate.PRO\per012210a.qld

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Printed: Saturday, January 23, 2010 9:27:21 AM Eastern Standard Time

Sample: per0122039a

Date: 22-Jan-2010

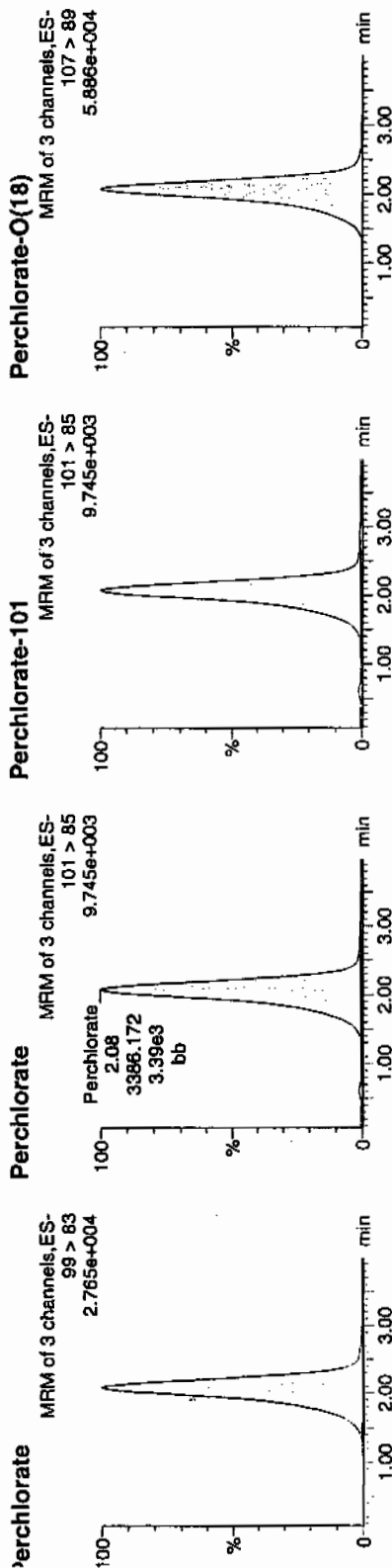
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D: 1202017253

File: 2:1,B

WJ
01-23-10

1222039a | 3070 | 1.1



D	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
202017253	Perchlorate	99 > 83	2.09	9828.313	9828.313	bb			0.2092	104.58	4.58	1190.6...	2.90
202017253	Perchlorate-101	101 > 85	2.08	3386.172	3386.172	bb			0.2094	104.72	4.72	557.536	
202017253	Perchlorate-O(18)	107 > 89	2.08	20536.463	20536.463	bb			0.5045	100.90	0.90	2424.2...	

9928.313
46928.7 = 0.2092
time 01/25/10

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 942314
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE12-10-7243MS
 Date Received: 13-JAN-10
 GEL Job No (SDG): 10-1212
 GEL Sample ID: 1202017254
 Date Filtered: 22-JAN-10
 Injection Volume (uL): 20
 %Solids: 94.2

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.531	2.12	2.23	ug/kg		1	22-JAN-10 20:57	per0122042a
	Perchlorate Isotope Ratio			2.84			1	22-JAN-10 20:57	per0122042a
14797-73-0	Perchlorate-101	.531	2.12	2.29	ug/kg		1	22-JAN-10 20:57	per0122042a
	Perchlorate-O(18)			5.23	ug/kg		1	22-JAN-10 20:57	per0122042a

[^] 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 =
 Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Aliquot}}$ X $\frac{1}{\% \text{Solids}}$

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

Dataset: C:\MassLynx\Perchlorate.PRO\per012210a.qld

Last Altered: Saturday, January 23, 2010 9:20:32 AM Eastern Standard Time
Printed: Saturday, January 23, 2010 9:27:21 AM Eastern Standard Time

Name: per0122042a

Date: 22-Jan-2010

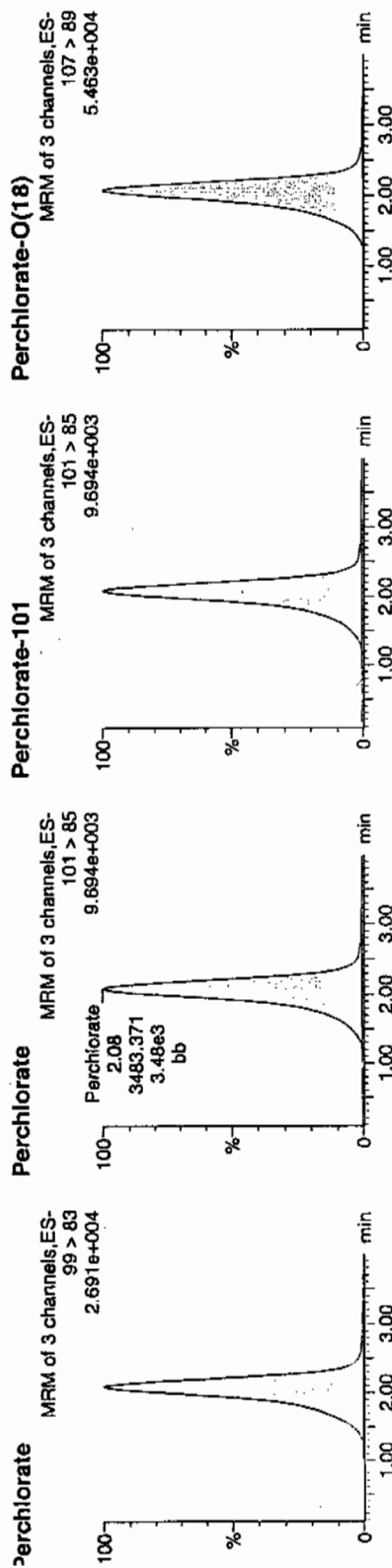
Time: 20:57:31

D: 1202017254

Fial: 2:1,E

663
01-23-10

122017254 | 50720 | MS | 1 | 1



D	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202017254	Perchlorate	99 > 83	2.09	9882.326	9882.326	bb			0.2103	105.16	5.16	2325.2...	2.84
1202017254	Perchlorate-101	101 > 85	2.08	3483.371	3483.371	bb			0.2154	107.72	7.72	146.597	
1202017254	Perchlorate-O(18)	107 > 89	2.08	20041.691	20041.691	bb			0.4923	98.47	-1.53	1353.2...	

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: 242314

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE12-10-7243MSD

Date Received: 13-JAN-10

GEL Job No (SDG): 10-1212

GEL Sample ID: 1202017255

Date Filtered: 22-JAN-10

Injection Volume (uL): 20

%Solids: 94.2

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.531	2.12	2.22	ug/kg		1	22-JAN-10 21:04	per0122043a
	Perchlorate Isotope Ratio			2.95			1	22-JAN-10 21:04	per0122043a
14797-73-0	Perchlorate-101	.531	2.12	2.18	ug/kg		1	22-JAN-10 21:04	per0122043a
	Perchlorate-O(18)			5.21	ug/kg		1	22-JAN-10 21:04	per0122043a

[^] 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 =

Instrument Value X Concentrated Extract Volume X 1
Aliquot %Solids

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

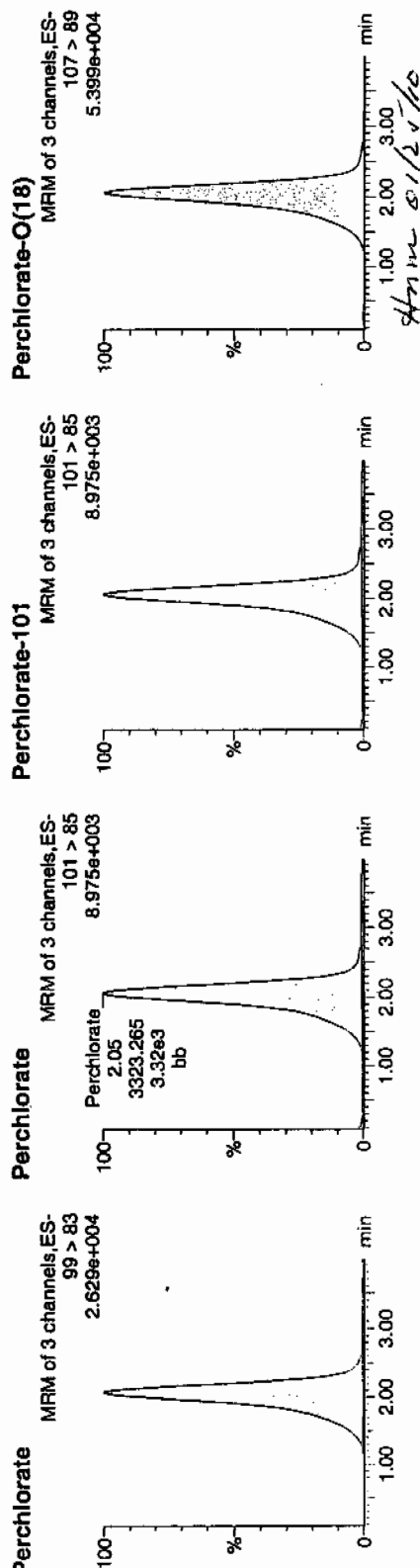
Dataset: C:\MassLynx\Perchlorate.PRO\per012210a.qld

Last Altered: Saturday, January 23, 2010 9:20:32 AM Eastern Standard Time
Printed: Saturday, January 23, 2010 9:27:21 AM Eastern Standard Time

Name: per0122043a
Date: 22-Jan-2010
Time: 21:04:32
ID: 1202017255
Label: 2:1,F

01-23-10

1672315 | 30220 | MSP | 11



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202017255	Perchlorate	99 > 83	2.07	9810.388	9810.388	bb			0.2088	104.39	4.39	1300.2...	2.95
1202017255	Perchlorate-101	101 > 85	2.05	3323.265	3323.265	bb			0.2055	102.77	2.77	216.314	
1202017255	Perchlorate-O(18)	107 > 89	2.05	19972.512	19972.512	bb			0.4906	98.13	-1.87	2601.6...	

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: 942314 Verified by: Lab SOP: GL-OA-E-067 REV# 6
 Analyst: Jareth Shirley Instrument: MicroMass Quattro Ultima
 Method: SW846 6850 Modified

Sample ID	Run Date	Aliquot (g)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1202017255 MB	22-JAN-2010 16:06:39	2	20	10
1202017255 LCS	22-JAN-2010 16:06:39	2	20	10
244601001	22-JAN-2010 16:06:39	2	20	10
1202017254 MS (244601001)	22-JAN-2010 16:06:39	2	20	10
1202017255 MSD (244601001)	22-JAN-2010 16:06:39	2	20	10
244601002	22-JAN-2010 16:06:39	2	20	10
244601003	22-JAN-2010 16:06:39	2	20	10
244601004	22-JAN-2010 16:06:39	2	20	10
244601005	22-JAN-2010 16:06:39	2	20	10
244601006	22-JAN-2010 16:06:39	2	20	10
244601007	22-JAN-2010 16:06:39	2	20	10
244601008	22-JAN-2010 16:06:39	2	20	10
244601009	22-JAN-2010 16:06:39	2	20	10
244601010	22-JAN-2010 16:06:39	2	20	10
244601011	22-JAN-2010 16:06:39	2	20	10
244601012	22-JAN-2010 16:06:39	2	20	10
244601013	22-JAN-2010 16:06:39	2	20	10
244601001	22-JAN-2010 16:06:39	2	20	10
244601002	22-JAN-2010 16:06:39	2	20	10
244613001	22-JAN-2010 16:06:39	2	20	10
1202017256 LCS	22-JAN-2010 16:06:39	2	20	10

Comments:

Type	Sample Id	Description	Serial Number	Spike Amt	Units	Comments
ICS	1202017256	10 ug/L ICV/CCV Second Source	UCL091230-01.1	.4	mL	Desalting cartridges used: B101/0211609 & B1000311609
LCS	1202017255	10 ug/L ICV/CCV Second Source	UCL091230-01.1	.4	mL	
MS	1202017254	10 ug/L ICV/CCV Second Source	UCL091230-01.1	.4	mL	
MSD	1202017255	10 ug/L ICV/CCV Second Source	UCL091230-01.1	.4	mL	

GEL ORGANIC RUN LOG

INSTRUMENT ID: LCM SMS#2

Date: 01/22/10
 Extr. Injection Volume: 20uL
 Sequence Number: per012210a
 Initial Calibration Date: 01/22/10

Method: EPA 6850-Modified
 Int. Std.: UCL091019-03.2
 Mobile Phase Lot#: 1254342, 1246195
 Standard-Samp Reagent Lot#: 1233976

Reviewed BY: *hmc*
 Date: *01/25/10*
 SOP: GL-OA-E-067 Rev.6
 Alt Check Std. ID: WCL100118-06

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC_Flag
per0122001a	IPB001	CWW	1/22/2010 16:08			1		USE	B
per0122002a	IPB001	CWW	1/22/2010 16:15			1		USE	B
per0122003a	WCLICAL-01	CWW	1/22/2010 16:22			1		USE	I
per0122004a	WCLICAL-02	CWW	1/22/2010 16:29			1		USE	I
per0122005a	WCLICAL-03	CWW	1/22/2010 16:36			1		USE	I
per0122006a	WCLICAL-04	CWW	1/22/2010 16:43			1		USE	I
per0122007a	WCLICAL-05	CWW	1/22/2010 16:51			1		USE	I
per0122008a	IPB002	CWW	1/22/2010 16:58			1		USE	B
per0122009a	WCLICV	CWW	1/22/2010 17:05			1		USE	C
per0122010a	IPB003	CWW	1/22/2010 17:12			1		USE	B
per0122011a	WCLCRI	CWW	1/22/2010 17:19			1		USE	C
per0122012a	1202021811	CWW	1/22/2010 17:26	944216	VARIOUS	1	LANL	USE	S
per0122013a	1202021812	CWW	1/22/2010 17:33	944216	VARIOUS	1	LANL	USE	S
per0122014a	1202021817	CWW	1/22/2010 17:40	944216	VARIOUS	1	LANL	USE	S
per0122015a	244510002	CWW	1/22/2010 17:47	944216	10-1189	10	LANL	USE	S
per0122016a	244510004	CWW	1/22/2010 17:54	944216	10-1189	1	LANL	USE	S
per0122017a	1202021813	CWW	1/22/2010 18:01	944216	10-1189	1	LANL	USE	S
per0122018a	1202021814	CWW	1/22/2010 18:08	944216	10-1189	1	LANL	USE	S
per0122019a	244510006	CWW	1/22/2010 18:15	944216	10-1189	1	LANL	USE	S
per0122020a	244521002	CWW	1/22/2010 18:22	944216	10-1193	1	LANL	USE	S
per0122021a	244521004	CWW	1/22/2010 18:29	944216	10-1193	5	LANL	USE	S
per0122022a	WCLCCV	CWW	1/22/2010 18:36			1		USE	C
per0122023a	IPB004	CWW	1/22/2010 18:43			1		USE	B
per0122024a	WCLCRI	CWW	1/22/2010 18:50			1		USE	C
per0122025a	244525002	CWW	1/22/2010 18:57	944216	10-1185	5	LANL	USE	S
per0122026a	244525004	CWW	1/22/2010 19:04	944216	10-1185	10	LANL	USE	S
per0122027a	244844002	CWW	1/22/2010 19:11	944216	10-1252	1	LANL	USE	S
per0122028a	244844004	CWW	1/22/2010 19:18	944216	10-1252	1	LANL	USE	S
per0122029a	244855002	CWW	1/22/2010 19:25	944216	10-1250	1	LANL	USE	S

per0122030a	244855004	CWW	1/22/2010 19:32	944216	10-1250	1	LANL	USE	S
per0122031a	1202021815	CWW	1/22/2010 19:39	944216	10-1250	1	LANL	USE	S
per0122032a	1202021816	CWW	1/22/2010 19:46	944216	10-1250	1	LANL	USE	S
per0122033a	244896002	CWW	1/22/2010 19:53	944216	10-1276	1	LANL	USE	S
per0122034a	244896003	CWW	1/22/2010 20:01	944216	10-1276	1	LANL	USE	S
per0122035a	WCLCCV	CWW	1/22/2010 20:08			1		USE	C
per0122036a	IPB005	CWW	1/22/2010 20:15			1		USE	B
per0122037a	WCLCRI	CWW	1/22/2010 20:22			1		USE	C
per0122038a	1202017252	CWW	1/22/2010 20:29	942315	VARIOUS	1	LANL	USE	S
per0122039a	1202017253	CWW	1/22/2010 20:36	942315	VARIOUS	1	LANL	USE	S
per0122040a	1202017256	CWW	1/22/2010 20:43	942315	VARIOUS	1	LANL	USE	S
per0122041a	244601001	CWW	1/22/2010 20:50	942315	10-1212	1	LANL	USE	S
per0122042a	1202017254	CWW	1/22/2010 20:57	942315	10-1212	1	LANL	USE	S
per0122043a	1202017255	CWW	1/22/2010 21:04	942315	10-1212	1	LANL	USE	S
per0122044a	244601002	CWW	1/22/2010 21:11	942315	10-1212	1	LANL	USE	S
per0122045a	244601003	CWW	1/22/2010 21:18	942315	10-1212	1	LANL	USE	S
per0122046a	WCLCCV	CWW	1/22/2010 21:25			1		USE	C
per0122047a	IPB006	CWW	1/22/2010 21:32			1		USE	B
per0122048a	WCLCRI	CWW	1/22/2010 21:39			1		USE	C
per0122049a	244601004	CWW	1/22/2010 21:46	942315	10-1212	1	LANL	USE	S
per0122050a	244601005	CWW	1/22/2010 21:54	942315	10-1212	1	LANL	USE	S
per0122051a	244601006	CWW	1/22/2010 22:01	942315	10-1212	1	LANL	USE	S
per0122052a	244601007	CWW	1/22/2010 22:08	942315	10-1212	1	LANL	USE	S
per0122053a	244601008	CWW	1/22/2010 22:15	942315	10-1212	1	LANL	USE	S
per0122054a	244601009	CWW	1/22/2010 22:22	942315	10-1212	1	LANL	USE	S
per0122055a	244601010	CWW	1/22/2010 22:29	942315	10-1212	1	LANL	USE	S
per0122056a	WCLCCV	CWW	1/22/2010 22:36			1		USE	C
per0122057a	IPB007	CWW	1/22/2010 22:43			1		USE	B
per0122058a	WCLCRI	CWW	1/22/2010 22:50			1		USE	C
per0122059a	244601011	CWW	1/22/2010 22:57	942315	10-1212	1	LANL	USE	S
per0122060a	244601012	CWW	1/22/2010 23:04	942315	10-1212	1	LANL	USE	S
per0122061a	244601013	CWW	1/22/2010 23:11	942315	10-1212	1	LANL	USE	S
per0122062a	244604001	CWW	1/22/2010 23:18	942315	10-1213	1	LANL	USE	S
per0122063a	244604002	CWW	1/22/2010 23:25	942315	10-1213	1	LANL	USE	S
per0122064a	244612001	CWW	1/22/2010 23:33	942315	10-1216	1	LANL	USE	S
per0122065a	244613001	CWW	1/22/2010 23:40	942315	10-1218	1	LANL	USE	S
per0122066a	WCLCCV	CWW	1/22/2010 23:47			1		USE	C

B C

USE
USE

1 1

1/22/2010 23:54
1/23/2010 0:01

CWW
CWW

IPB008
WCLCRI

per0122067a
per0122068a

Isotope Ratio Criteria

Isotope Ratio $^{35}\text{Cl}/^{37}\text{Cl}$

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.

LC/MS/MS PERCHLORATE ANALYSIS

**Perchlorate by LC/MSMS
Los Alamos National Laboratory (LANL)
SDG 10-1212-1**

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: 943784

Prep Batch Number: 943783

Sample Analysis

Sample ID	Client ID
244602001	RE12-10-7284
1202020836	Interference Check Sample (ICS)
1202020832	Method Blank (MB)
1202020833	Laboratory Control Sample (LCS)
1202020834	244922001(RE15-10-7229) Matrix Spike (MS)
1202020835	244922001(RE15-10-7229) 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.

10-1212-1-PERLCMS

Page 1 of 4

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

Client sample 244922001 (RE15-10-7229) from SDG 10-1288-1 was chosen for matrix spike and matrix spike duplicate analysis. Please see the raw data in the Miscellaneous Section.

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

The SDG was re-extracted within holding due to an LCS failing acceptance criteria. The re-extraction and 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 sample in this SDG was 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: Wendy M. Murr Date: 2/27/10

SAMPLE DATA SUMMARY

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: WATER

Extraction Batch ID: 243783

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.

RE12-10-7284

Date Received: 13-JAN-10

GEL Job No (SDG): 10-1212-1

GEL Sample ID: 244602001

Date Filtered: 21-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	21-JAN-10 15:29	per0121016a
	Perchlorate Isotope Ratio						1	21-JAN-10 15:29	per0121016a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	21-JAN-10 15:29	per0121016a
	Perchlorate-O(18)			0.473	ug/L		1	21-JAN-10 15:29	per0121016a

[^] 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 =

Instrument Value X Concentrated Extract Volume X 1
Aliquot %Solids

QUALITY CONTROL SUMMARY

Perchlorate Laboratory Control Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No. (SDG): 10-1212-1

Extract Batch Code: 943783

Date Filtered: 21-JAN-10

Matrix: WATER

Sample ID: 1202020833

Analyte [^]	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	0.200	.203	ug/L	102		85 - 115
Perchlorate Isotope Ratio		2.85				-
Perchlorate-101	0.200	.208	ug/L	104		85 - 115
Perchlorate-O(18)		.498	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.

Perchlorate Interference Check Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No. (SDG): 10-1212-1

Extract Batch Code: 243783

Date Filtered: 21-JAN-10

Matrix: WATER

Sample ID: 1202020836

Analyte^	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	0.200	.21	ug/L	105		70 - 130
Perchlorate Isotope Ratio		2.98				
Perchlorate-101	0.200	.205	ug/L	103		70 - 130
Perchlorate-O(18)		.483	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.

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

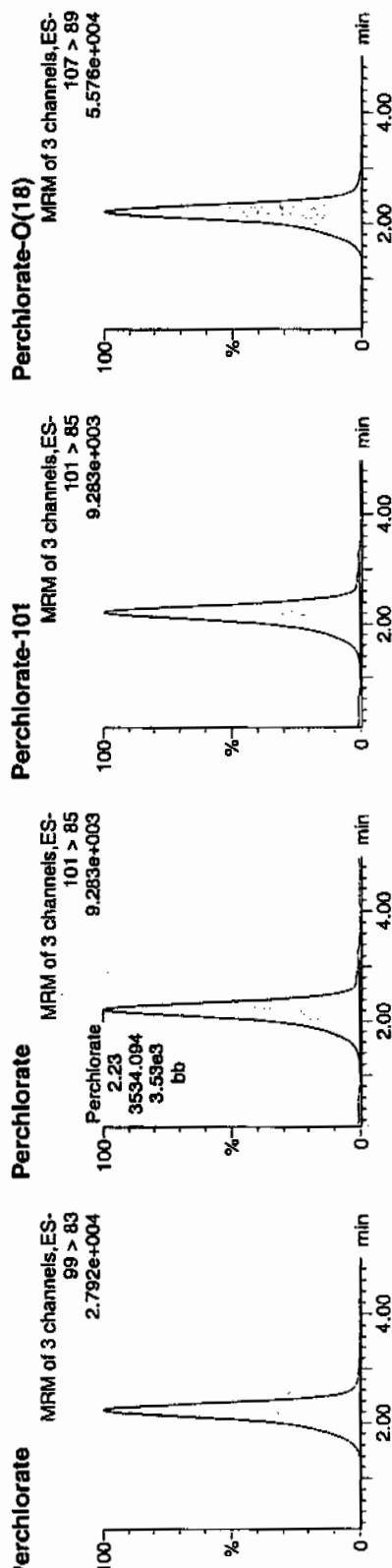
Dataset: C:\MassLynx\Perchlorate.PRO\per012110a.qld

Last Altered: Friday, January 22, 2010 1:03:56 PM Eastern Standard Time
Printed: Friday, January 22, 2010 1:16:11 PM Eastern Standard Time

Sample Name: per0121014a
Date: 21-Jan-2010
Time: 15:12:58
D: 1202020836
File: 1:3,C

662
01-22-10

1202020836 | 1202020836 | 1202020836



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
202020836	Perchlorate	99 > 83	2.24	10525.255	bb			0.2095	104.75	4.75	2562.6...	2.98
202020836	Perchlorate-101	101 > 85	2.23	3534.084	bb			0.2051	102.54	2.54	298.706	
202020836	Perchlorate-O(18)	107 > 89	2.22	21014.701	bb			0.4828	98.56	-3.44	851.611	

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

Perchlorate Spike/Spike Duplicate Summary

Lab Name: General Engineering Laboratories

Lab Code: GEL

Extract Batch Code: 943783

GEL Job No (SDG): 10-1212-1

Date Extracted: 21-JAN-10

GEL MS/PS ID: 1202020834

Client ID: RE15-10-7229

GEL MSD/PSD ID: 1202020835

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	0.0027	ug/L	0.203	100	.209	103	2.96	30	75 - 125
Perchlorate Isotope Ratio	0	0.00		3.11		3.01		0		-
Perchlorate-101	0.200	0.00268	ug/L	0.191	93.9	.203	100	6.22	30	75 - 125
Perchlorate-O(18)	0	0.482	ug/L	0.458		.486		5.84		-

[^] 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:

Form 4

Perchlorate Initial Calibration Blank

GEL Job No.(SDG): 10-1212-1

Lab Name: General Engineering Laboratories

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	21-JAN-10	per0121001a	IPB001
Perchlorate-101	0.00	0	NA	21-JAN-10	per0121001a	IPB001
Perchlorate	0.00	0	NA	21-JAN-10	per0121002a	IPB001
Perchlorate-101	0.00	0	NA	21-JAN-10	per0121002a	IPB001

Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per012110a.qld

Last Altered: Friday, January 22, 2010 1:03:56 PM Eastern Standard Time

Printed: Friday, January 22, 2010 1:16:11 PM Eastern Standard Time

Method: C:\MassLynx\Perchlorate.PRO\MethDB\per012110a.mdb 22 Jan 2010 13:03:42

Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per012110a.cdb 22 Jan 2010 13:03:55

Name: per0121001a

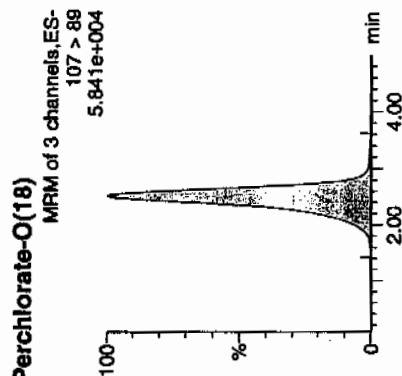
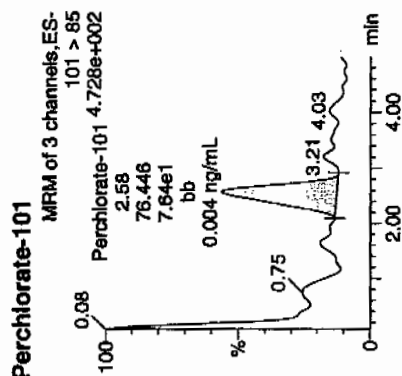
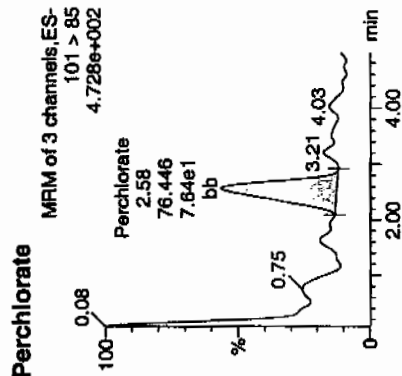
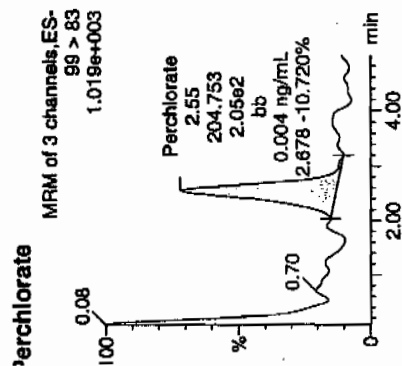
Date: 21-Jan-2010

Time: 13:28:21

D: IPB001

/lal: 1:1,A

Q1-21-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
Perchlorate	99 > 83	2.55	204.753	204.753	bb			0.0041			36.786	2.68
Perchlorate-101	101 > 85	2.58	76.446	76.446	bb			0.0044			19.217	
Perchlorate-O(18)	107 > 89	2.51	21984.707	21984.707	bb			0.5051	101.02	1.02	3540.1...	

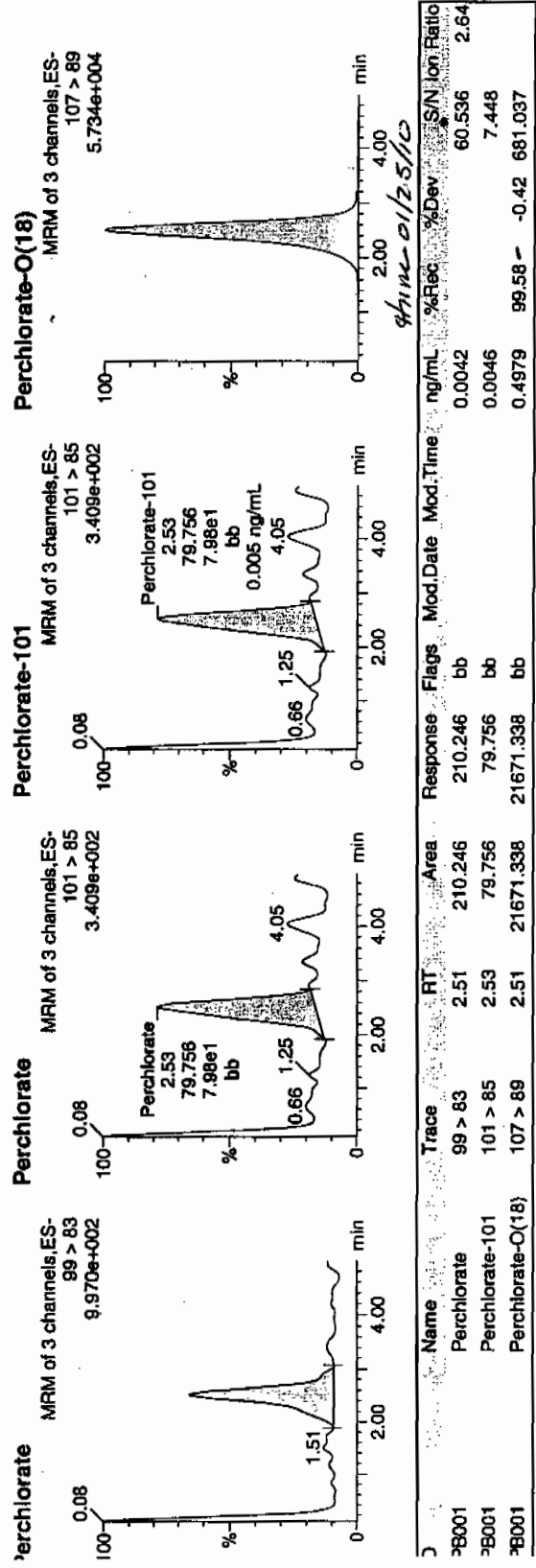
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per012110a.qld

Last Altered: Friday, January 22, 2010 1:03:56 PM Eastern Standard Time
Printed: Friday, January 22, 2010 1:16:11 PM Eastern Standard Time

Sample Name: per0121002a
Date: 21-Jan-2010
Time: 13:36:33
ID: IPB001
Label: 1:1,A

www
01-22-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
Perchlorate	99 > 83	2.51	210.246	210.246	bb			0.0042			60.536	2.64
Perchlorate-101	101 > 85	2.53	79.756	79.756	bb			0.0046			7.448	
Perchlorate-O(18)	107 > 89	2.51	21671.338	21671.338	bb			0.4979	99.58	-0.42	681.037	

Form 4

Perchlorate Continuing Calibration Blank

GEL Job No.(SDG): 10-1212-1

Lab Name: General Engineering Laboratories

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	21-JAN-10	per0121008a	IPB002
Perchlorate-101	0.00	0	NA	21-JAN-10	per0121008a	IPB002
Perchlorate	0.00	0	NA	21-JAN-10	per0121010a	IPB003
Perchlorate-101	0.00	0	NA	21-JAN-10	per0121010a	IPB003
Perchlorate	0.00	0	NA	21-JAN-10	per0121021a	IPB004
Perchlorate-101	0.00	0	NA	21-JAN-10	per0121021a	IPB004

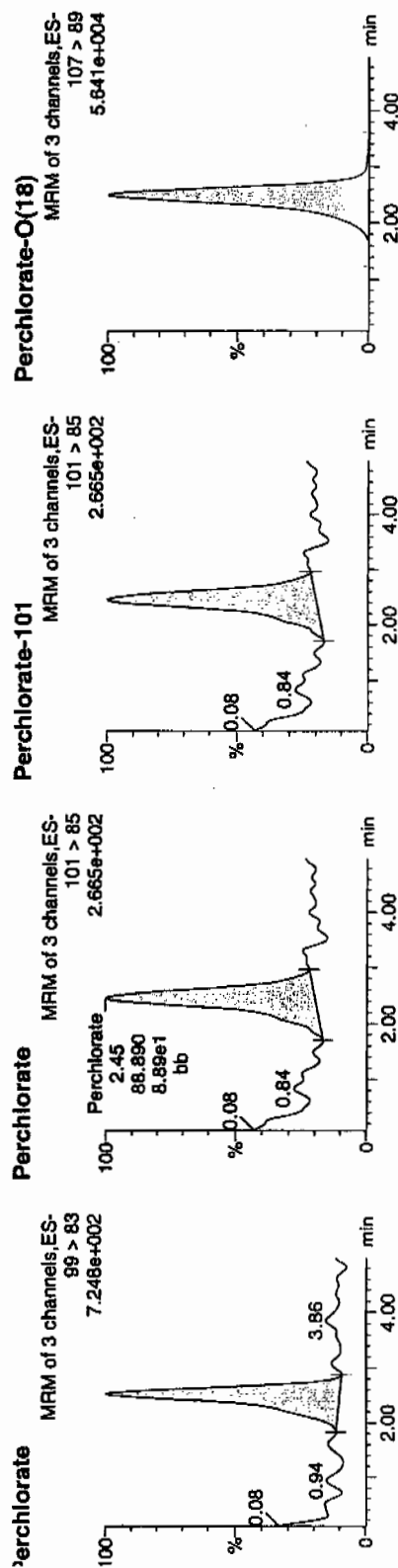
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per012110a.qld

Last Altered: Friday, January 22, 2010 1:03:56 PM Eastern Standard Time
Printed: Friday, January 22, 2010 1:16:11 PM Eastern Standard Time

Sample: per0121008a
Date: 21-Jan-2010
Time: 14:24:42
D: IPB002
Ial: 1:1,A

(ms)
01-22-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
Perchlorate	99 > 83	2.51	222.464	222.464	bb			0.0044			42.609	2.50
Perchlorate-101	101 > 85	2.45	88.890	88.890	bb			0.0052			32.880	
Perchlorate-O(18)	107 > 89	2.49	21012.908	21012.908	bb			0.4828	96.56	-3.44	1392.1...	

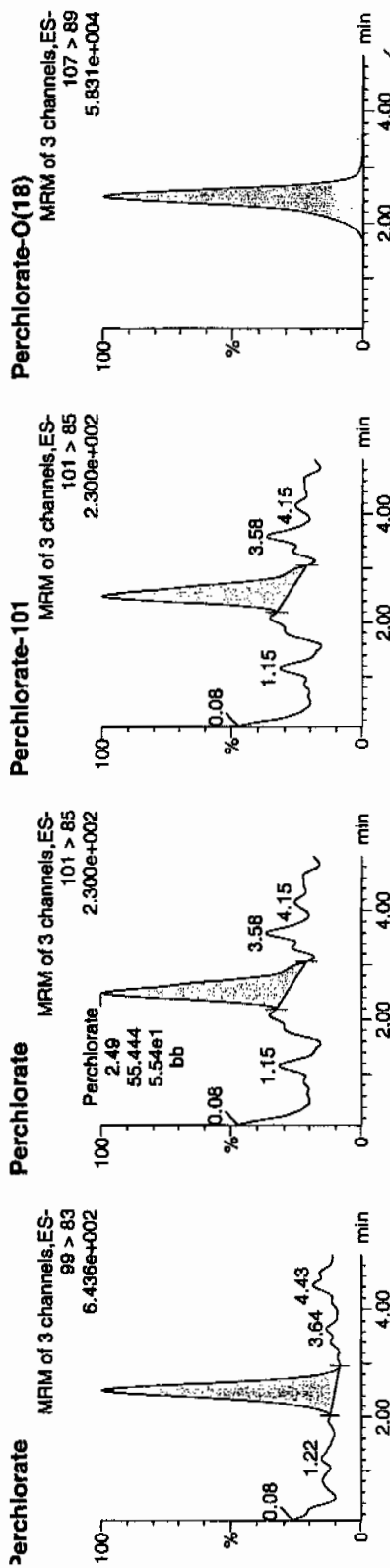
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per012110a.qld

Last Altered: Friday, January 22, 2010 1:03:56 PM Eastern Standard Time
Printed: Friday, January 22, 2010 1:16:11 PM Eastern Standard Time

Name: per0121010a
Date: 21-Jan-2010
Time: 14:40:46
D: IPB003
/lat: 1:1,A

01-21-10



D	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
PB003	Perchlorate	99 > 83	2.50	193.590	193.590	bb			0.0039	104.378		3.49	
PB003	Perchlorate-101	101 > 85	2.49	55.444	55.444	bb			0.0032	26.855			
PB003	Perchlorate-O(18)	107 > 89	2.49	21401.723	21401.723	bb			0.4917	98.34	-1.66	6111.1...	

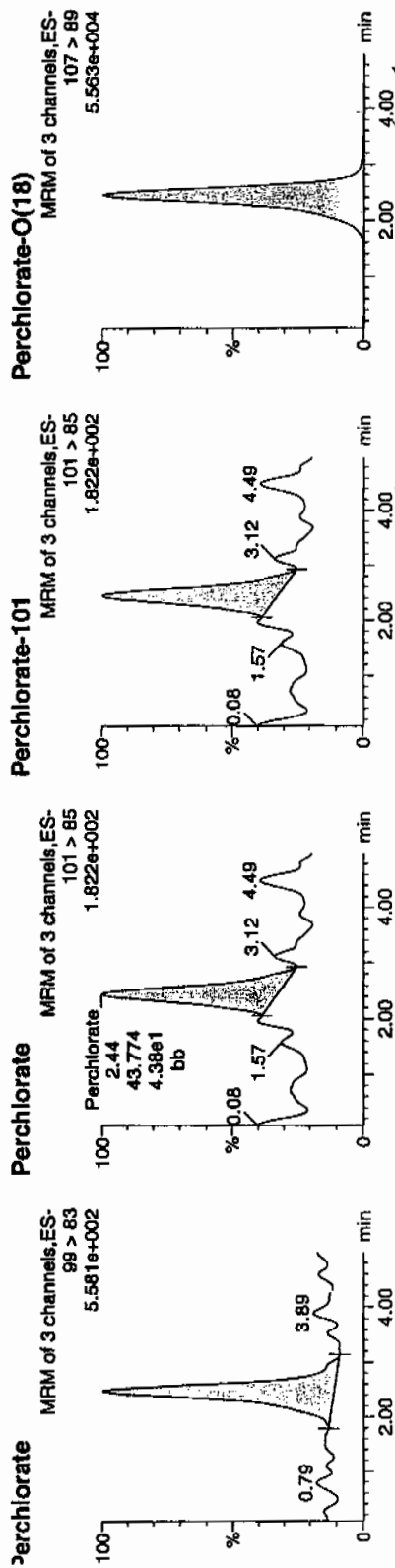
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per012110a.qid

Last Altered: Friday, January 22, 2010 1:03:56 PM Eastern Standard Time
Printed: Friday, January 22, 2010 1:16:11 PM Eastern Standard Time

Name: per0121021a
Date: 21-Jan-2010
Time: 16:09:13
D: IPB004
/lal: 1:1,A

Q-21-10



D	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
PB004	Perchlorate	99 > 83	2.46	180.474	180.474	bb			0.0036			41.034	4.12
PB004	Perchlorate-101	101 > 85	2.44	43.774	43.774	bb			0.0025			40.786	
PB004	Perchlorate-O(18)	107 > 89	2.45	20657.713	20657.713	bb			0.4746	94.92	-5.08	4317.2	

Q-21-10
620500

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

QUATRO ULTIMA: nairb_01_08_08.cal

Calibration Report - MS1 Static

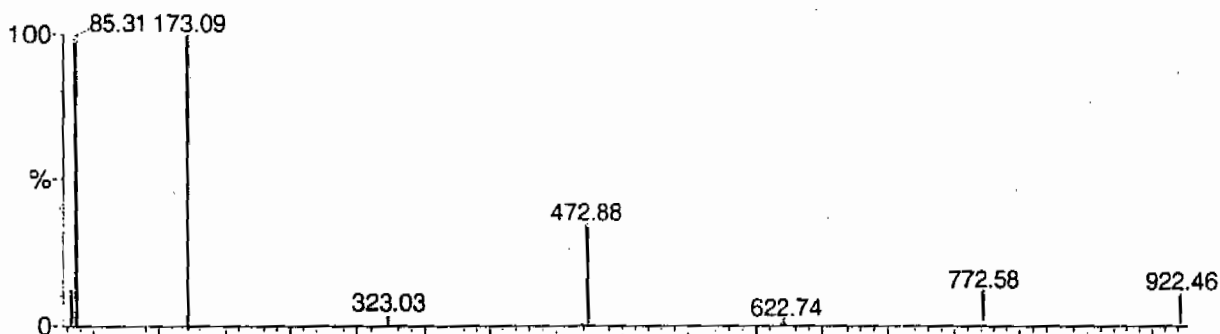
Page 1 of 1

Printed: Tue Jan 08 12:19:12 2008

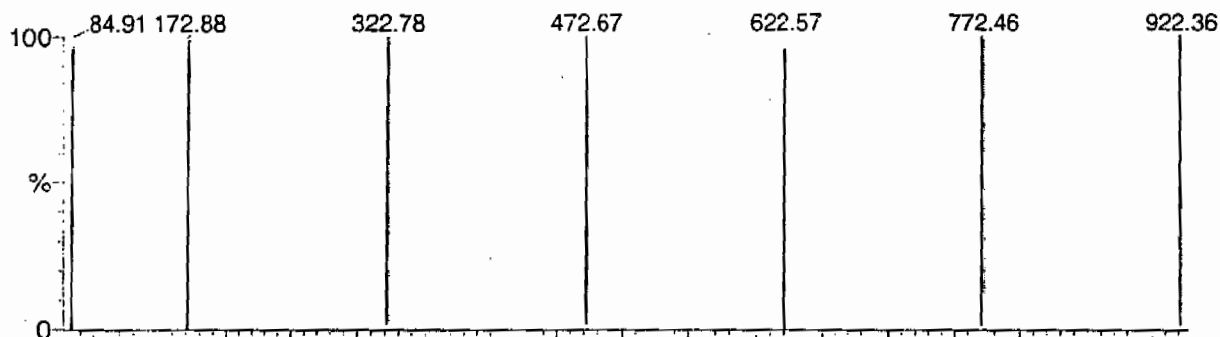
POINTS HIGHLIGHTED BY CURSOR 01-09-03

Data file: STATMS1 - Uncalibrated

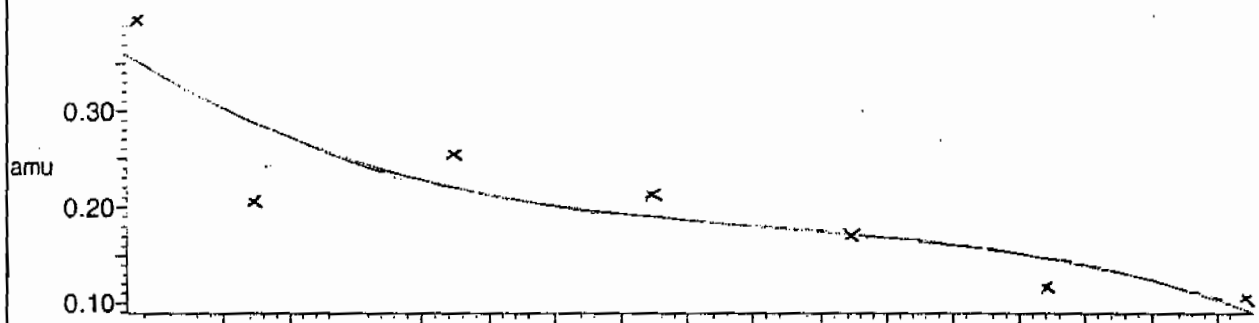
7 matches of 7 tested references



Reference file: Nairb

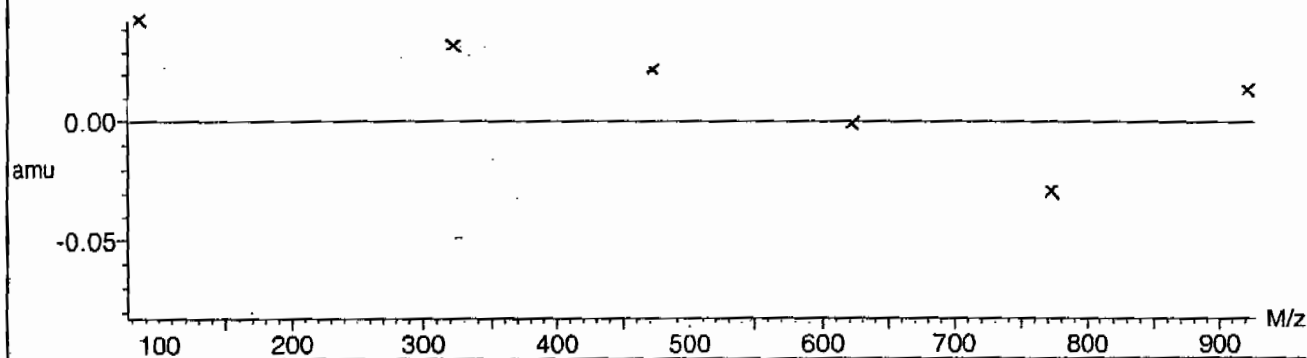


Mass difference (Raw - Ref mass)



Residuals

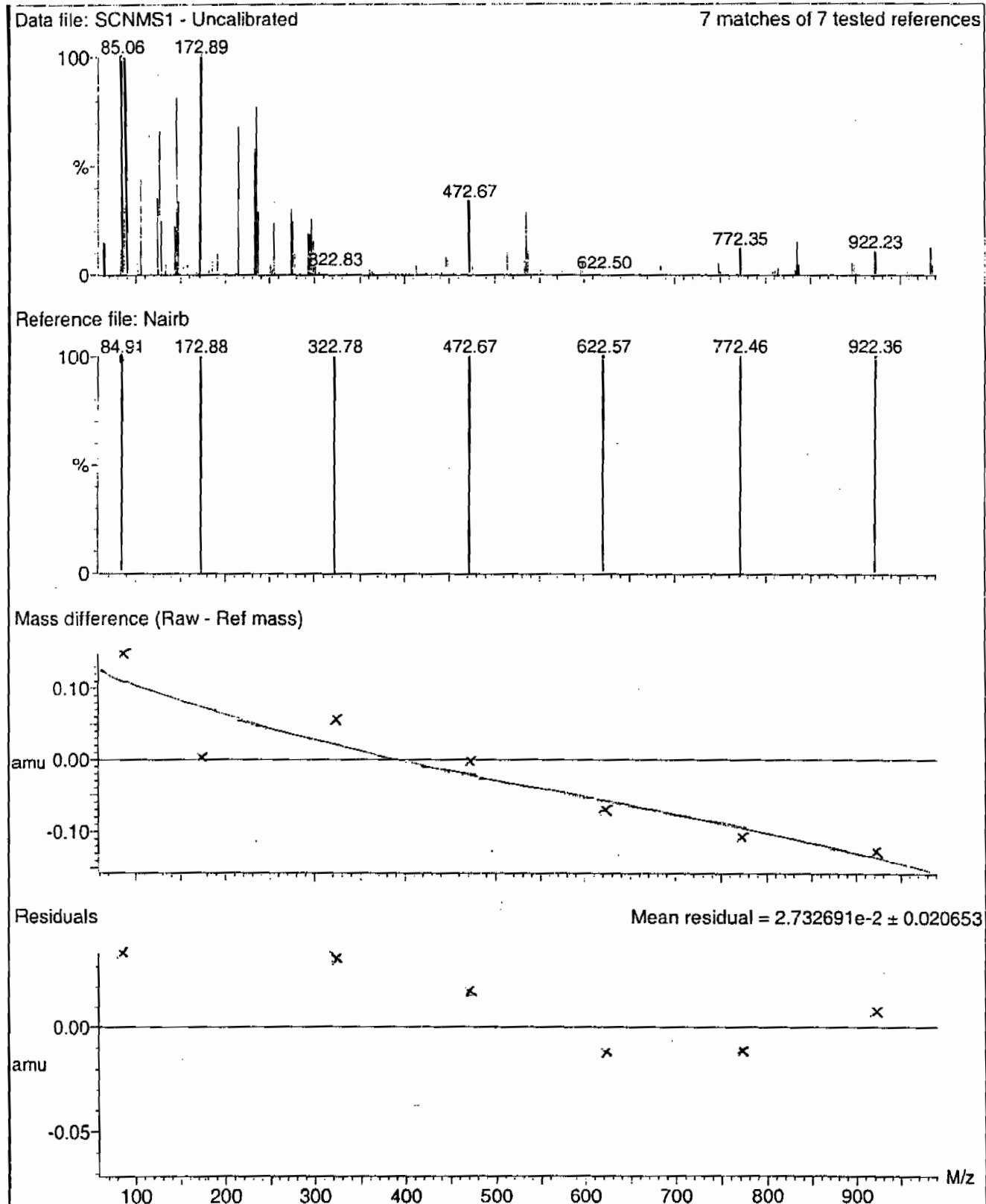
Mean residual = $3.212012 \times 10^{-2} \pm 0.024108$



Calibration Report - MS1 Scanning

Page 1 of 1

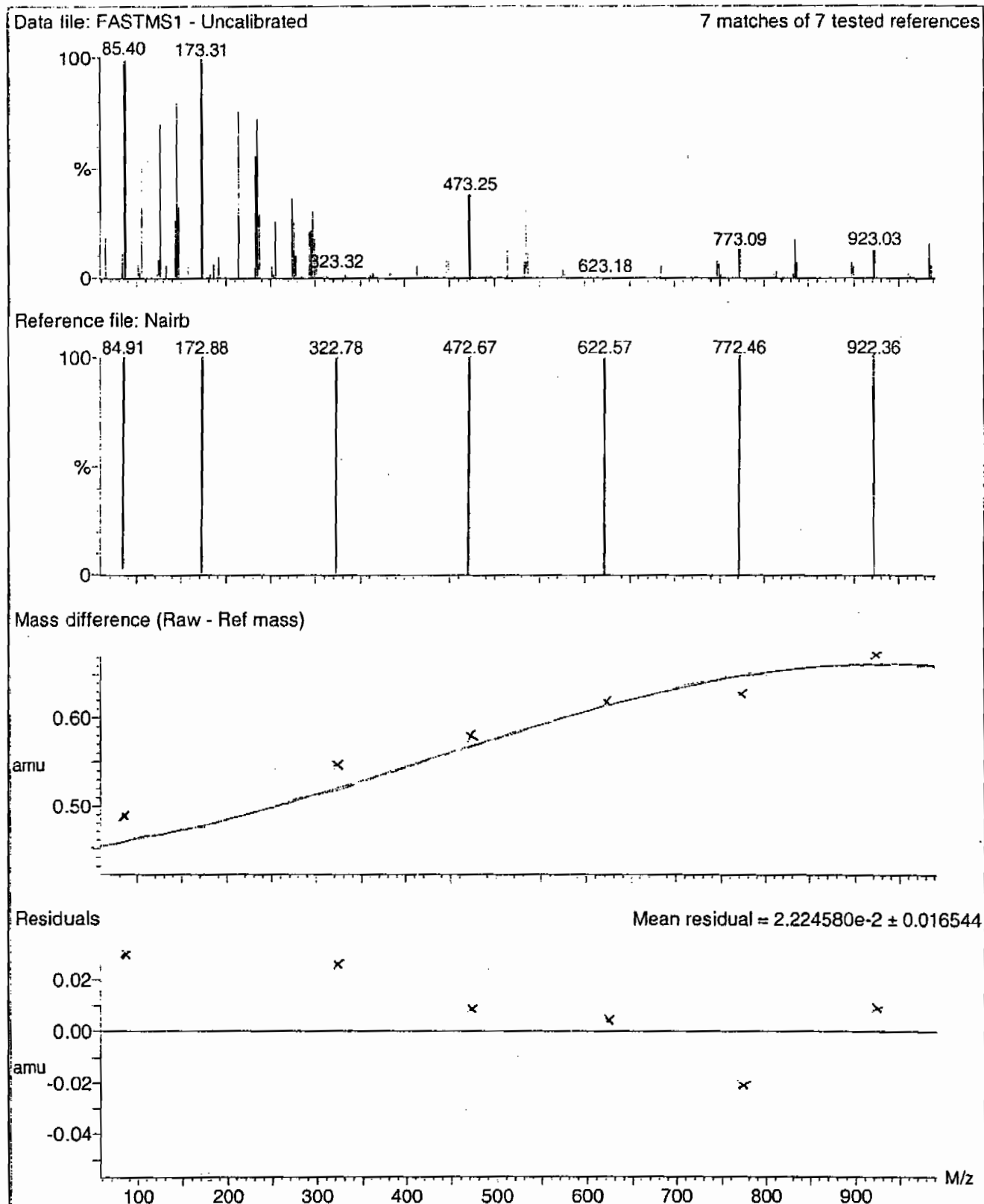
Printed: Tue Jan 08 12:20:09 2008



Calibration Report - MS1 Scan Speed Compensation

Page 1 of 1

Printed: Tue Jan 08 12:21:04 2008



Calibration Report - MS2 Scan Speed Compensation

Page 1 of 1

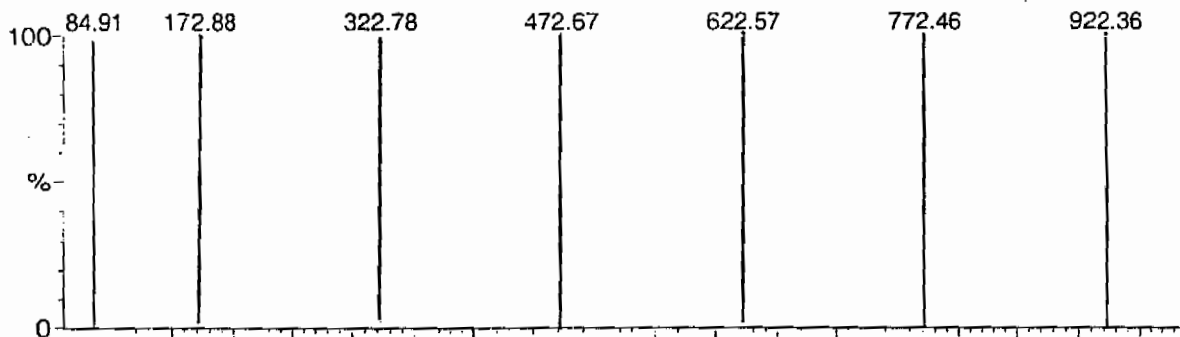
Printed: Tue Jan 08 12:23:51 2008

Data file: FASTMS2 - Uncalibrated

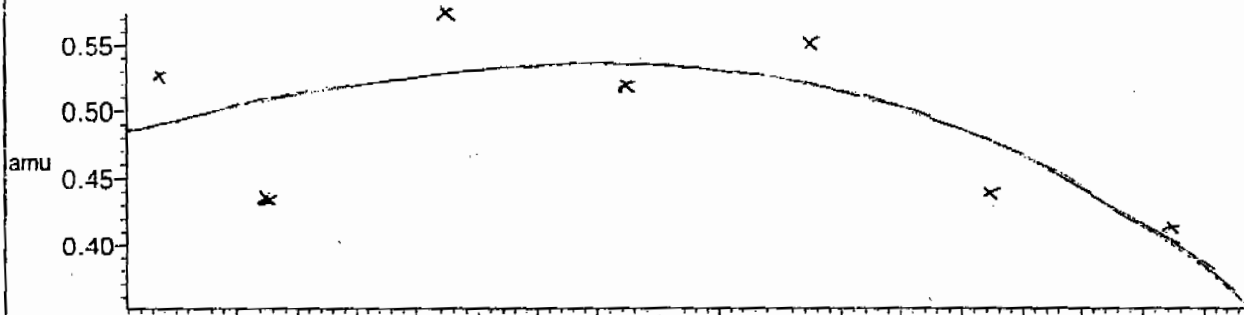
7 matches of 7 tested references



Reference file: Nairb

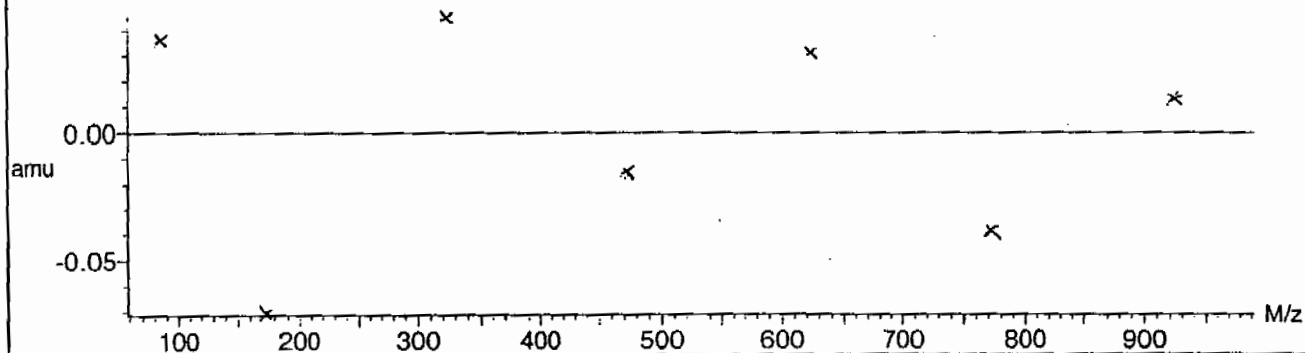


Mass difference (Raw - Ref mass)



Residuals

Mean residual = $3.598289 \times 10^{-2} \pm 0.017899$



Calibration Report - MS2 Scanning

Page 1 of 1

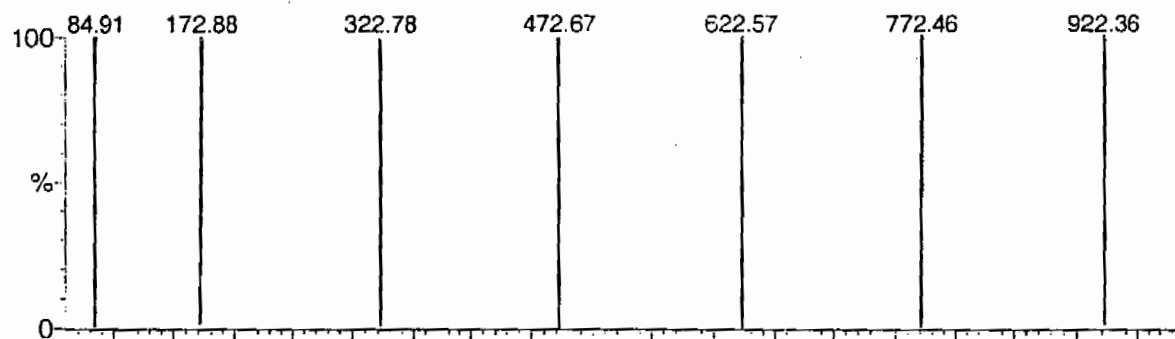
Printed: Tue Jan 08 12:22:56 2008

Data file: SCNMS2 - Uncalibrated

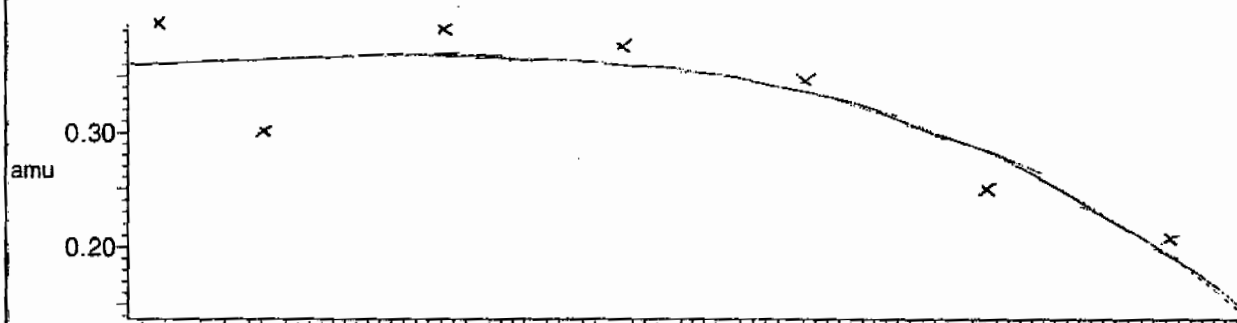
7 matches of 7 tested references



Reference file: Nairb

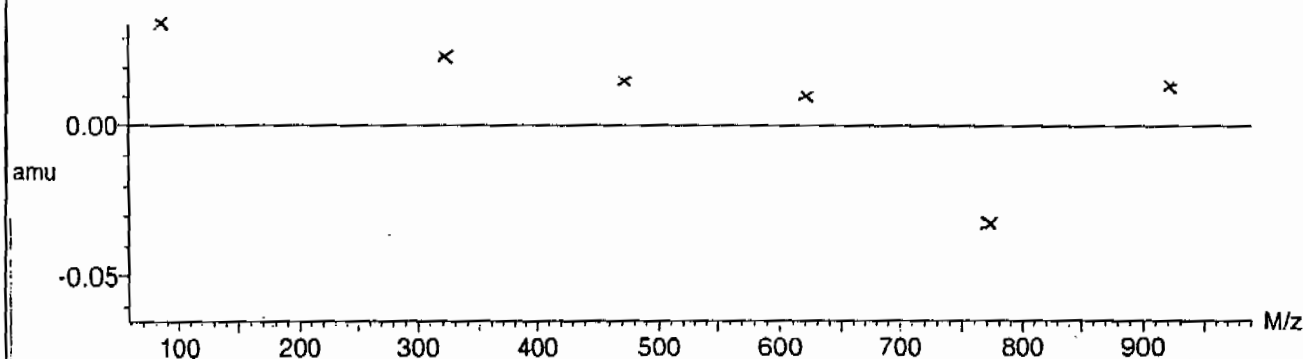


Mass difference (Raw - Ref mass)



Residuals

Mean residual = $2.782494 \times 10^{-2} \pm 0.017442$



Calibration Report - MS2 Static

Page 1 of 1

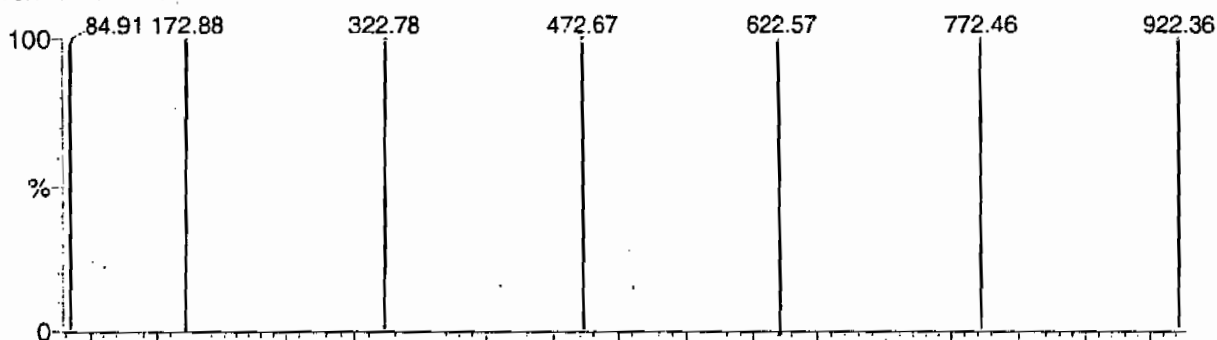
Printed: Tue Jan 08 12:21:59 2008

Data file: STATMS2 - Uncalibrated

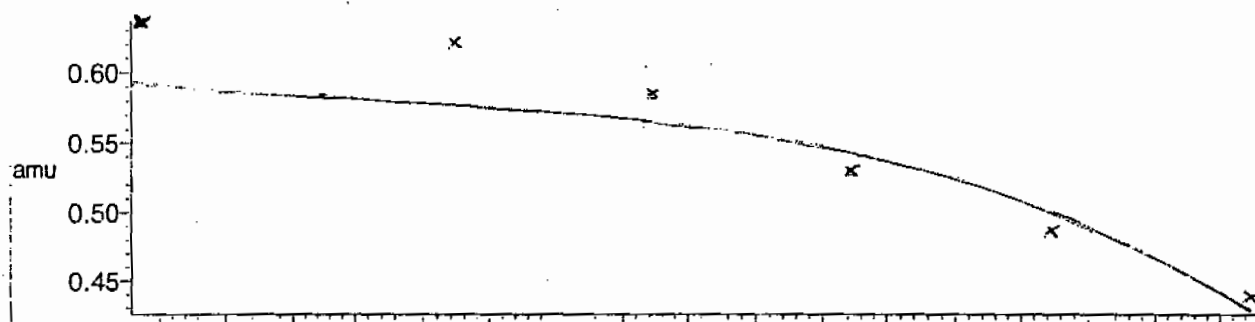
7 matches of 7 tested references



Reference file: Nairb

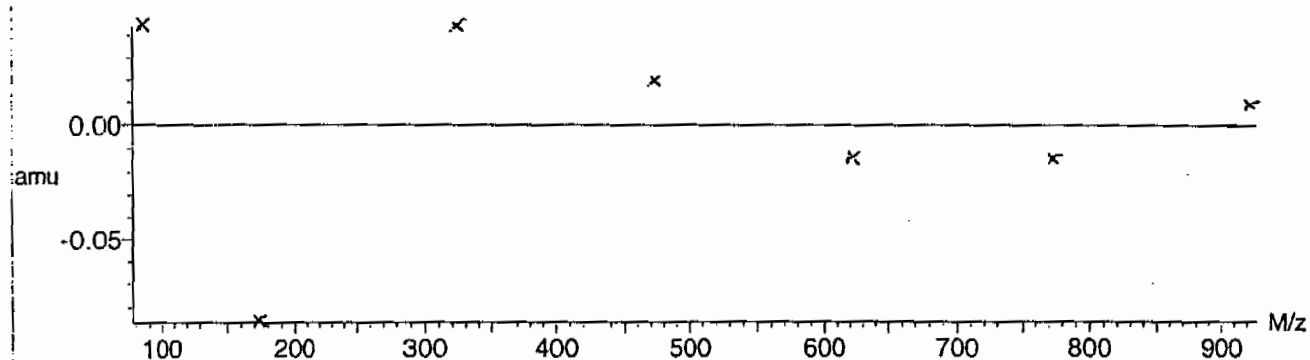


Mass difference (Raw - Ref mass)



Residuals

Mean residual = $3.295980 \times 10^{-2} \pm 0.025603$



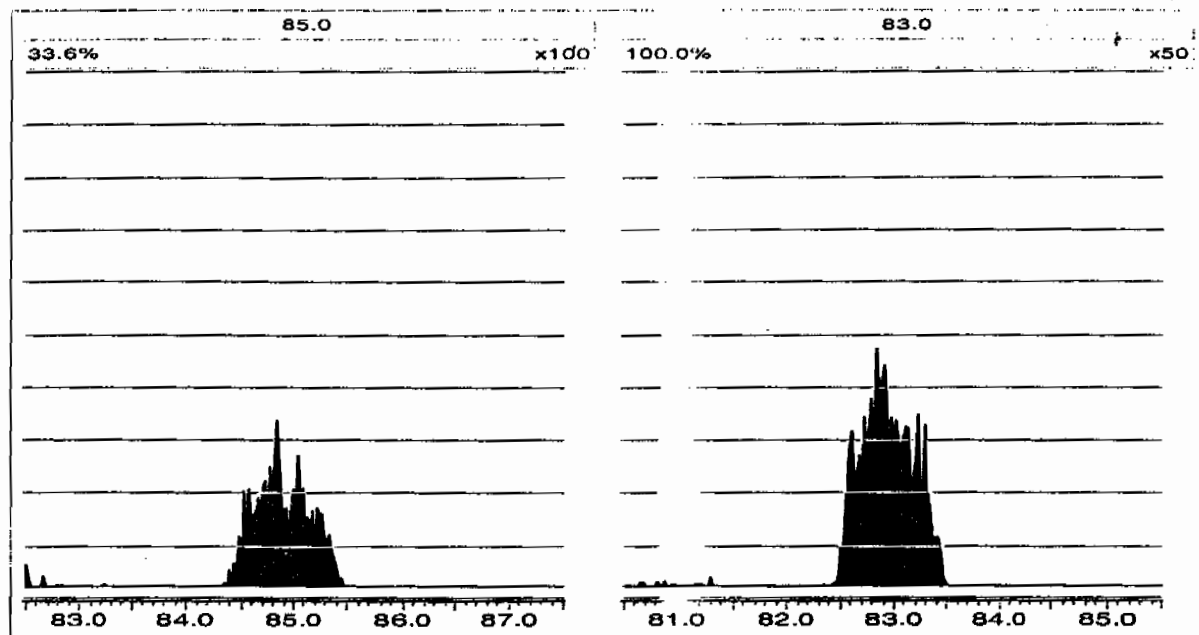
Tune Parameters

MassLynx 4.0 SP4

Page 1 of 1

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

Printed: Thursday, January 21, 2010 13:23:09 Eastern Standard Time



Perchlorate RT And Area Summary

Lab Name: General Engineering Laboratories GEL Job No.(SDG): 10-1212-1

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	per0121006a	21-JAN-10	21436.2				
Lower Area Limit			10718.1				
Upper Area Limit			42872.4				
1202020832	per0121012a	21-JAN-10 14:56	21028	2.48	2.47653	.999	
1202020833	per0121013a	21-JAN-10 15:04	21689.9	2.48	2.48902	1.004	
1202020836	per0121014a	21-JAN-10 15:12	21014.7	2.22	2.2406	1.009	
244602001	per0121016a	21-JAN-10 15:29	20592	2.45	2.47655	1.011	

SAMPLE DATA

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: WATER

Extraction Batch ID: 943783

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.

RE12-10-7284

Date Received: 13-JAN-10

GEL Job No (SDG): 10-1212-1

GEL Sample ID: 244602001

Date Filtered: 21-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	21-JAN-10 15:29	per0121016a
	Perchlorate Isotope Ratio						1	21-JAN-10 15:29	per0121016a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	21-JAN-10 15:29	per0121016a
	Perchlorate-O(18)			0.473	ug/L		1	21-JAN-10 15:29	per0121016a

[^] 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 =

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

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

Dataset: C:\MassLynx\Perchlorate.PRO\per012110a.qid

Last Altered: Friday, January 22, 2010 1:03:56 PM Eastern Standard Time
Printed: Friday, January 22, 2010 1:16:11 PM Eastern Standard Time

Name: per0121016a

Date: 21-Jan-2010

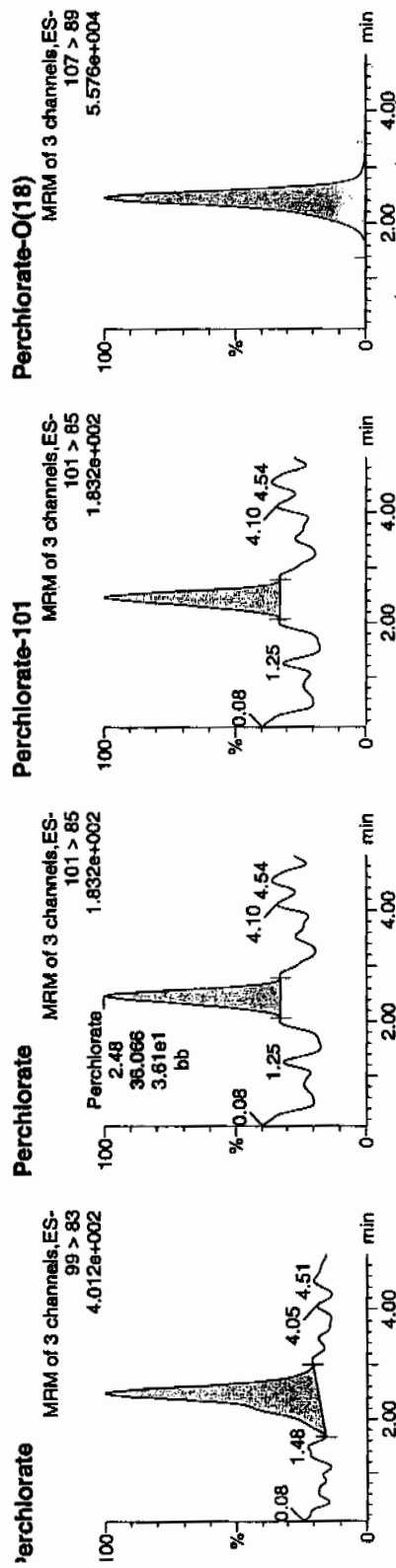
Time: 15:29:02

D: 244602001

File: 1:3.E

01-22-10

Law | 943724 | 122 | 11



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	SN	Ion Ratio
44602001	Perchlorate	99 > 83	2.48	132.156	bb			0.0026			43.278	3.66
44602001	Perchlorate-101	101 > 85	2.48	36.066	bb			0.0021			32.109	
44602001	Perchlorate-O(18)	107 > 89	2.45	20592.021	bb			0.4731	94.62	-5.38	2725.2...	

from 01/25/10

STANDARDS DATA

Form 2

Perchlorate Initial Calibration

GEL Job No.(SDG): 10-1212-1

Lab Name: General Engineering Laboratories

Lab Code: GEL

Instrument ID: LCMSMS Date Analyzed: 21-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

Paramname Perchlorate

Coefficient of Determination:

Calibration Curve: 50239.06

Response Type: External Standard

Curve Type: RF

Perchlorate Initial Calibration

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

Lab Name: General Engineering Laboratories GEL Job No.(SDG): 10-1212-1

Lab Code: GEL

Instrument ID: LCMSMS Date Analyzed: 21-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

Parname Perchlorate-101

Coefficient of Determination:

Calibration Curve: 17232.4

Response Type: External Standard

Curve Type: RF

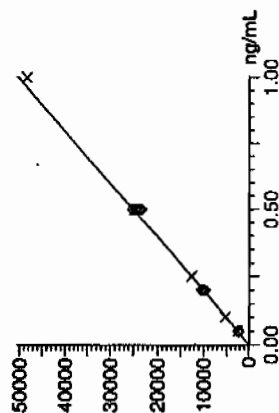
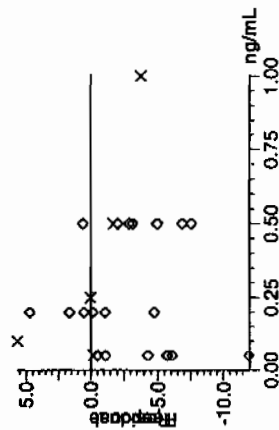
Quantify Calibration Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per012110a.qld

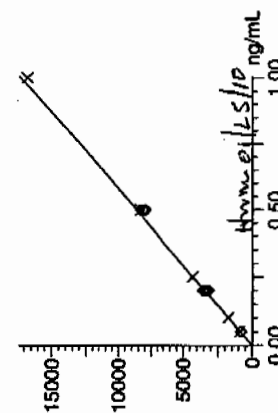
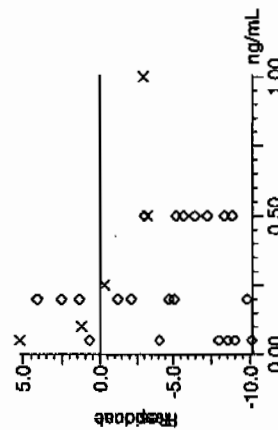
Last Altered: Friday, January 22, 2010 1:03:56 PM Eastern Standard Time
Printed: Friday, January 22, 2010 1:16:11 PM Eastern Standard Time

Method: C:\MassLynx\Perchlorate.PRO\MethDB\per012110a.mdb 22 Jan 2010 13:03:42
Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per012110a.cdb 22 Jan 2010 13:03:55

Compound name: Perchlorate
Response Factor: 50239
RF SD: 1769.18, % Relative SD: 3.52151
Response type: External Std, Area
Curve type: RF



Compound name: Perchlorate-101
Response Factor: 17232.4
RF SD: 596.582, % Relative SD: 3.46198
Response type: External Std, Area
Curve type: RF



Curved
01-22-10

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

Dataset: C:\MassLynx\Perchlorate.PRO\per012110a.qld

Last Altered: Friday, January 22, 2010 1:03:56 PM Eastern Standard Time
Printed: Friday, January 22, 2010 1:16:11 PM Eastern Standard Time

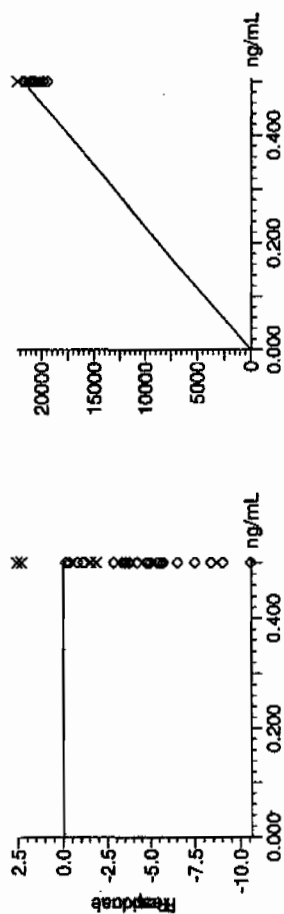
Compound name: Perchlorate-O(18)

Response Factor: 43525.2

RF SD: 974.018, % Relative SD: 2.23783

Response type: External Std, Area

Curve type: RF



01-22-10

Perchlorate Initial Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1212-1

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.5	100.6	21-JAN-10 14:32	per0121009a
Perchlorate Isotope Ratio		3.02		21-JAN-10 14:32	per0121009a
Perchlorate-101	.5	.48	96.98	21-JAN-10 14:32	per0121009a

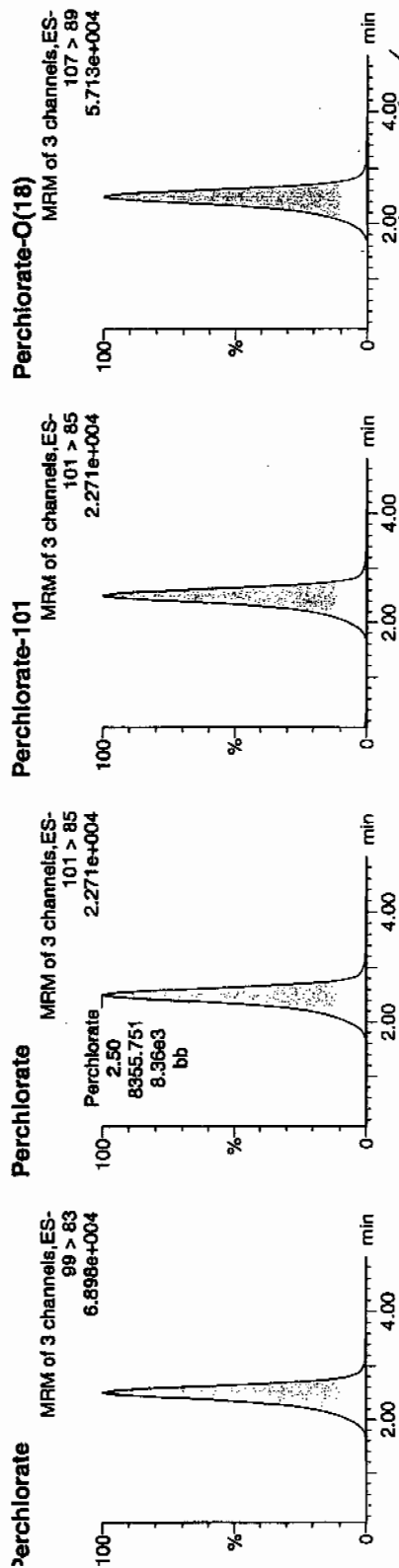
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per012110a.qld

Last Altered: Friday, January 22, 2010 1:03:56 PM Eastern Standard Time
Printed: Friday, January 22, 2010 1:16:11 PM Eastern Standard Time

Name: per0121009a
Date: 21-Jan-2010
Time: 14:32:44
D: WCL100118-06ICV
/lat: 1:2,A

Pure
01-22-10



D	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
	Perchlorate	99 > 83	2.50	25269.490	25269.490	bb			0.5030	100.60	0.60	4248.9...	3.02
	Perchlorate-101	101 > 85	2.50	8355.751	8355.751	bb			0.4849	96.98	-3.02	240.922	
	Perchlorate-O(18)	107 > 89	2.49	20988.775	20988.775	bb			0.4822	96.44	-3.56	177.662	

Form 3

Perchlorate Continuing Calibration Verification

GEL Job No.(SDG): 10-1212-1

Lab Name: General Engineering Laboratories

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.48	95.02	21-JAN-10 16:01	per0121020a
Perchlorate Isotope Ratio		3.02		21-JAN-10 16:01	per0121020a
Perchlorate-101	.5	.46	91.69	21-JAN-10 16:01	per0121020a

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

Dataset: C:\MassLynx\Perchlorate.PRO\per012110a.qld

Last Altered: Friday, January 22, 2010 1:03:56 PM Eastern Standard Time
Printed: Friday, January 22, 2010 1:16:11 PM Eastern Standard Time

Name: per0121020a

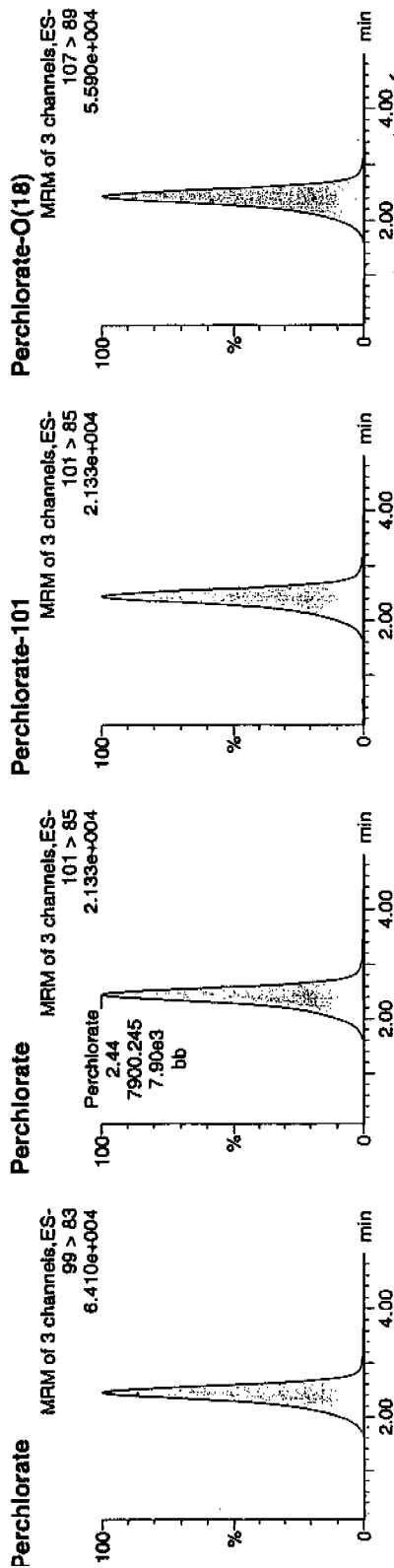
Date: 21-Jan-2010

Time: 16:01:10

ID: WCL100118-06CCV

Vial: 1:2,A

Pass
and
01-22-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	IS/N	Ratio
WCL100118-06CCV	Perchlorate	99 > 83	2.45	23869.734	23869.734	bb			0.4751	95.02	-4.98	3481.7...	3.02
WCL100118-06CCV	Perchlorate-101	101 > 85	2.44	7900.245	7900.245	bb			0.4585	91.69	-8.31	1784.4...	
WCL100118-06CCV	Perchlorate-Q(18)	107 > 89	2.44	20707.582	20707.582	bb			0.4758	95.15	-4.85	3834.6...	

there are 5 ho

Form 3

Perchlorate MDL Verification

GEL Job No.(SDG): 10-1212-1

Lab Name: General Engineering Laboratories

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.05	.05	99.52	21-JAN-10 14:48	per0121011a
Perchlorate Isotope Ratio		3.23		21-JAN-10 14:48	per0121011a
Perchlorate-101	.05	.04	89.89	21-JAN-10 14:48	per0121011a
Perchlorate	.05	.05	95.71	21-JAN-10 16:17	per0121022a
Perchlorate Isotope Ratio		2.91		21-JAN-10 16:17	per0121022a
Perchlorate-101	.05	.05	95.94	21-JAN-10 16:17	per0121022a

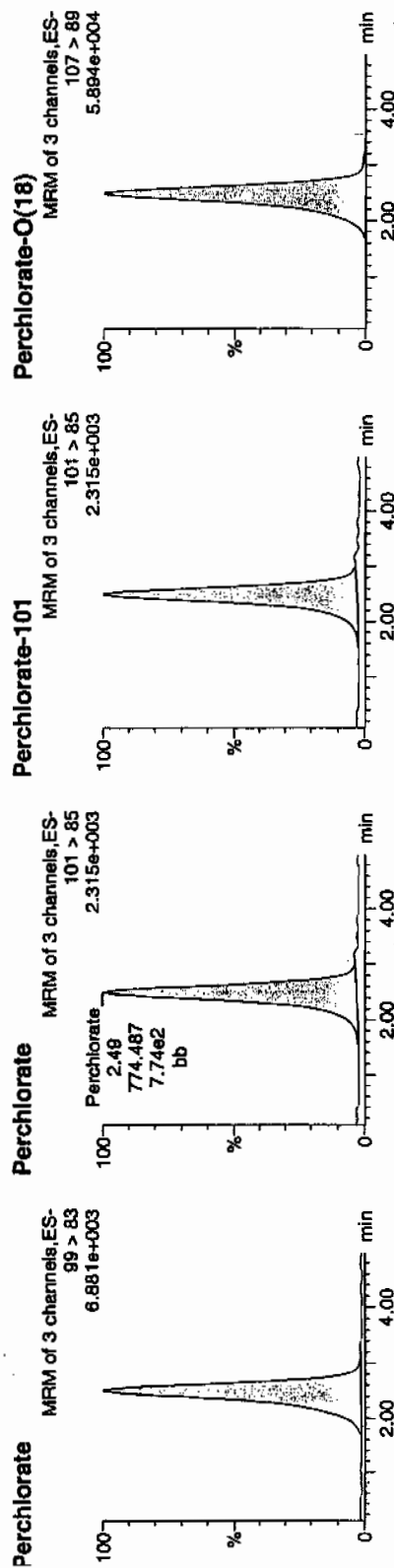
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per012110a.qld

Last Altered: Friday, January 22, 2010 1:03:56 PM Eastern Standard Time
Printed: Friday, January 22, 2010 1:16:11 PM Eastern Standard Time

Name: per0121011a
Date: 21-Jan-2010
Time: 14:48:48
ID: WCL100118-07CRI
Vial: 1:2,B

*Pass
and
01-22-10*



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100118-07CRI	Perchlorate	99 > 83	2.50	2499.918	2499.918	bb			0.0498	99.52	-0.48	607.914	3.23
WCL100118-07CRI	Perchlorate-101	101 > 85	2.49	774.487	774.487	bb			0.0449	89.89	-10.11	129.026	
WCL100118-07CRI	Perchlorate-O(18)	107 > 89	2.49	21733.771	21733.771	bb			0.4983	99.87	-0.13	6289.1...	

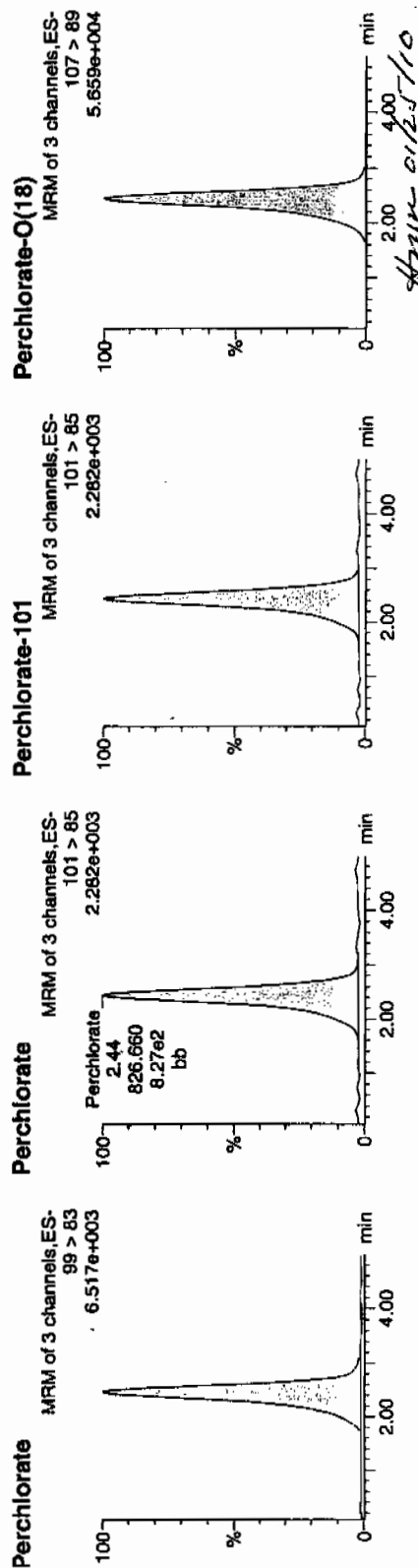
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charters W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per012110a.qld

Last Altered: Friday, January 22, 2010 1:03:56 PM Eastern Standard Time
Printed: Friday, January 22, 2010 1:16:11 PM Eastern Standard Time

Name: per0121022a
Date: 21-Jan-2010
Time: 16:17:15
ID: WCL100118-07CRI
Vial: 1:2,B

*Page 22
01-22-10*



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	SN	Ion Ratio
WCL100118-07CRI	Perchlorate	99 > 83	2.46	2404.126	2404.126	bb			0.0479	95.71	-4.29	1416.1...	2.91
WCL100118-07CRI	Perchlorate-101	101 > 85	2.44	826.660	826.660	bb			0.0480	95.94	-4.06	220.967	
WCL100118-07CRI	Perchlorate-O(18)	107 > 89	2.45	20843.346	20843.346	bb			0.4789	95.78	-4.22	6422.2...	

QUALITY CONTROL

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: EPA 6850 Modified

Matrix: WATER

Extraction Batch ID: 943783

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.

MB

Date Received: 21-JAN-10

GEL Job No (SDG): 10-1212-1

GEL Sample ID: 1202020832

Date Filtered: 21-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	21-JAN-10 14:56	per0121012a
	Perchlorate Isotope Ratio						1	21-JAN-10 14:56	per0121012a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	21-JAN-10 14:56	per0121012a
	Perchlorate-O(18)			0.483	ug/L		1	21-JAN-10 14:56	per0121012a

[^] 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 =

Instrument Value X Concentrated Extract Volume X 1
Aliquot %Solids

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

Dataset: C:\MassLynx\Perchlorate.PRO\per012110a.qld

Last Altered: Friday, January 22, 2010 1:03:56 PM Eastern Standard Time
Printed: Friday, January 22, 2010 1:16:11 PM Eastern Standard Time

Sample Name: per0121012a

Date: 21-Jan-2010

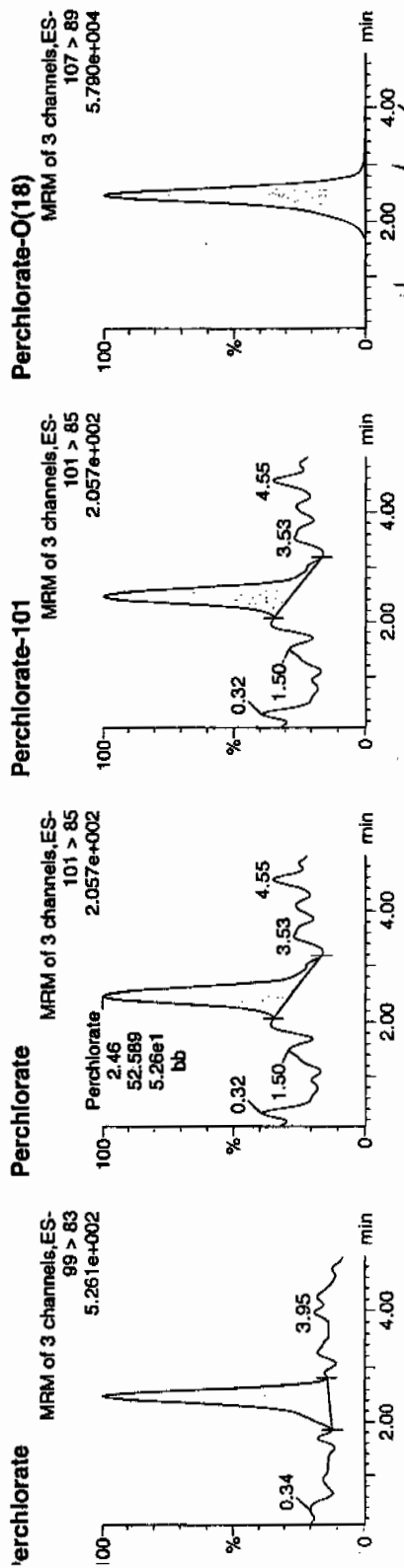
Time: 14:56:53

ID: 1202020832

File: 1:3,A

01-22-10

1202020832 / 1202020832 / 1202020832



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
202020832	Perchlorate	99 > 83	2.48	153.537	bb			0.0031	40.015	2.92		
202020832	Perchlorate-101	101 > 85	2.46	52.589	bb			0.0031	24.000			
202020832	Perchlorate-O(18)	107 > 89	2.48	21027.984	bb			0.4831	96.62	-3.38	4021.1...	

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: EPA 6850 Modified

Matrix: WATER

Extraction Batch ID: 243783

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.

LCS

Date Received: 21-JAN-10

GEL Job No (SDG): 10-1212-1

GEL Sample ID: 1202020833

Date Filtered: 21-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	0.203	ug/L		1	21-JAN-10 15:04	per0121013a
	Perchlorate Isotope Ratio			2.85			1	21-JAN-10 15:04	per0121013a
14797-73-0	Perchlorate-101	.05	.2	0.208	ug/L		1	21-JAN-10 15:04	per0121013a
	Perchlorate-O(18)			0.498	ug/L		1	21-JAN-10 15:04	per0121013a

[^] 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 =
Instrument Value X Concentrated Extract Volume X 1
Aliquot %Solids

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

Dataset: C:\MassLynx\Perchlorate.PRO\per012110a.qld

Last Altered: Friday, January 22, 2010 1:03:56 PM Eastern Standard Time
Printed: Friday, January 22, 2010 1:16:11 PM Eastern Standard Time

Name: per0121013a

Date: 21-Jan-2010

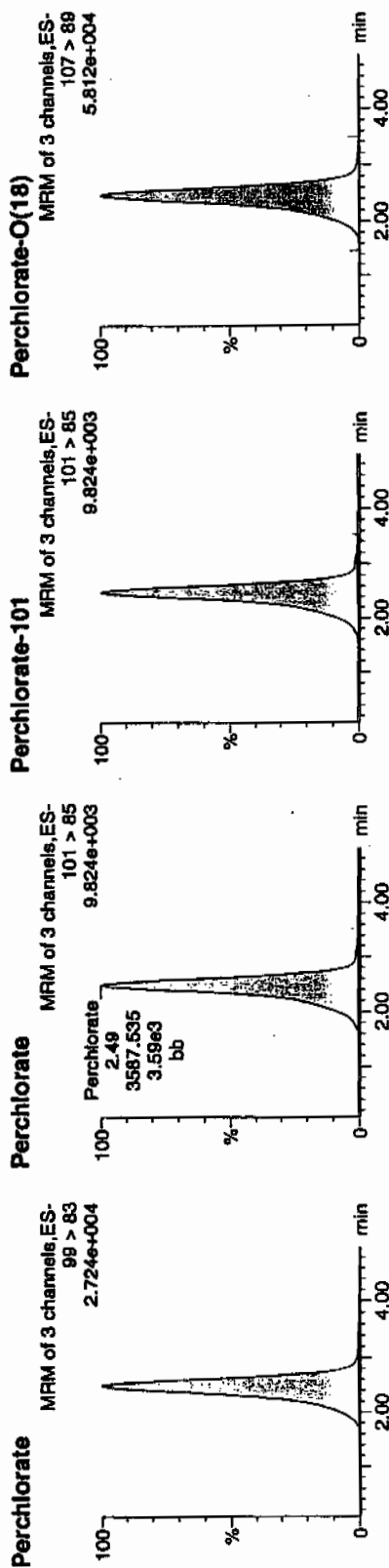
Time: 15:04:55

ID: 1202020833

Vial: 1:3,B

LAN-43784 | 22 | 11

0122-10



ID	Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N	Int Ratio
1202020833	Perchlorate	99 > 83	2.49	10216.783	10216.783	bb			0.2034	101.68	1.68	562.419	2.85
1202020833	Perchlorate-101	101 > 85	2.49	3587.535	3587.535	bb			0.2082	104.09	4.09	1450.1...	
1202020833	Perchlorate-O(18)	107 > 89	2.48	21689.895	21689.895	bb			0.4983	99.67	-0.33	2614.2...	

10216.783
56239 = 0.2034
HMM
01/25/10

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: 943783 Verified by: _____
 Analyst: Charles Wilson Lab SOP: GL-OA-E-067 REV# 6
 Method: SW846 6850 Modified Instrument: MicroMass Quattro Ultima

Sample ID	Run Date	Initial Volume (mL)	Final Volume (mL)	Prepped Factor (mL/mL)
1202020832 MB	21-JAN-2010 11:26:13	10	10	1
1202020833 LCS	21-JAN-2010 11:26:13	10	10	1
244418001 - 2	21-JAN-2010 11:26:13	10	10	1
244602001 - 2	21-JAN-2010 11:26:13	10	10	1
244610001 - 2	21-JAN-2010 11:26:13	10	10	1
244614001 - 2	21-JAN-2010 11:26:13	10	10	1
244618001 - 2	21-JAN-2010 11:26:13	10	10	1
244719001 - 2	21-JAN-2010 11:26:13	10	10	1
244719002 - 2	21-JAN-2010 11:26:13	10	10	1
244719003 - 2	21-JAN-2010 11:26:13	10	10	1
244722001 - 2	21-JAN-2010 11:26:13	10	10	1
244722002 - 2	21-JAN-2010 11:26:13	10	10	1
244722003 - 2	21-JAN-2010 11:26:13	10	10	1
244722004 - 2	21-JAN-2010 11:26:13	10	10	1
244849001	21-JAN-2010 11:26:13	10	10	1
244880001 - 2	21-JAN-2010 11:26:13	10	10	1
244893001 - 2	21-JAN-2010 11:26:13	10	10	1
244912001 - 2	21-JAN-2010 11:26:13	10	10	1
244919001 - 2	21-JAN-2010 11:26:13	10	10	1
244922001 - 2	21-JAN-2010 11:26:13	10	10	1
1202020834 - 2 MS (244922001)	21-JAN-2010 11:26:13	10	10	1
1202020835 - 2 MSD (244922001)	21-JAN-2010 11:26:13	10	10	1
244925001 - 2	21-JAN-2010 11:26:13	10	10	1
1202020836 LCS	21-JAN-2010 11:26:13	10	10	1

Comments:

Desalting cartridges used: BJO1/0221609 & BJO00311609

Type	Sample Id	Description	Serial Number	Spike Amt	Units
LCS	1202020836	10 ug/L ICV/CCV Second Source	UCL091230-01.1	.2	mL
LCS	1202020833	10 ug/L ICV/CCV Second Source	UCL091230-01.1	.2	mL
MS	1202020834	10 ug/L ICV/CCV Second Source	UCL091230-01.1	.2	mL
MSD	1202020835	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	OZSI HPLC Grade Water	1246195	10	mL

GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS#2

Date: 01/21/10
 Extr. Injection Volume: 20uL
 Sequence Number: per012110a
 Initial Calibration Date: 01/21/10

Method: EPA 6850-Modified
 Int. Std.: UCL091019-03.2
 Mobile Phase Lot#: 1254342, 1246195
 Standard-Samp Reagent Lot#: 1233976

Reviewed BY: *hmc*
 Date: *2/25/10*
 SOP: GL-OA-E-067 Rev.6
 Alt Check Std. ID: WCL100118-06

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC_Flag
per0121001a	IPB001	CWW	1/21/2010 13:28			1		USE	B
per0121002a	IPB001	CWW	1/21/2010 13:36			1		USE	B
per0121003a	WCLICAL-01	CWW	1/21/2010 13:44			1		USE	I
per0121004a	WCLICAL-02	CWW	1/21/2010 13:52			1		USE	I
per0121005a	WCLICAL-03	CWW	1/21/2010 14:00			1		USE	I
per0121006a	WCLICAL-04	CWW	1/21/2010 14:08			1		USE	I
per0121007a	WCLICAL-05	CWW	1/21/2010 14:16			1		USE	I
per0121008a	IPB002	CWW	1/21/2010 14:24			1		USE	B
per0121009a	WCLICV	CWW	1/21/2010 14:32			1		USE	C
per0121010a	IPB003	CWW	1/21/2010 14:40			1		USE	B
per0121011a	WCLCRI	CWW	1/21/2010 14:48			1		USE	C
per0121012a	1202020832	CWW	1/21/2010 14:56	943784	VARIOUS	1	LANL	USE	S
per0121013a	1202020833	CWW	1/21/2010 15:04	943784	VARIOUS	1	LANL	USE	S
per0121014a	1202020836	CWW	1/21/2010 15:12	943784	VARIOUS	1	LANL	USE	S
per0121015a	244418001	CWW	1/21/2010 15:21	943784	10-1195-1	1	LANL	USE	S
per0121016a	244602001	CWW	1/21/2010 15:29	943784	10-1212-1	1	LANL	USE	S
per0121017a	244610001	CWW	1/21/2010 15:37	943784	10-1215	1	LANL	USE	S
per0121018a	244614001	CWW	1/21/2010 15:45	943784	10-1218-1	1	LANL	USE	S
per0121019a	244618001	CWW	1/21/2010 15:53	943784	10-1220	1	LANL	USE	S
per0121020a	WCLCCV	CWW	1/21/2010 16:01			1		USE	C
per0121021a	IPB004	CWW	1/21/2010 16:09			1		USE	B
per0121022a	WCLCRI	CWW	1/21/2010 16:17			1		USE	C
per0121023a	244719001	CWW	1/21/2010 16:25	943784	10-1239	1	LANL	USE	S
per0121024a	244719002	CWW	1/21/2010 16:33	943784	10-1239	1	LANL	USE	S
per0121025a	244719003	CWW	1/21/2010 16:41	943784	10-1239	1	LANL	USE	S
per0121026a	244722001	CWW	1/21/2010 16:49	943784	10-1234-1	1	LANL	USE	S
per0121027a	244722002	CWW	1/21/2010 16:57	943784	10-1234-1	1	LANL	USE	S
per0121028a	244722003	CWW	1/21/2010 17:05	943784	10-1234-1	1	LANL	USE	S
per0121029a	244722004	CWW	1/21/2010 17:13	943784	10-1234-1	1	LANL	USE	S

per0121030a	244849001	CWW	1/21/2010 17:21	943784	10-1262-1	1	LANL	USE	S
per0121031a	WCLCCV	CWW	1/21/2010 17:29			1		USE	C
per0121032a	IPB005	CWW	1/21/2010 17:37			1		USE	B
per0121033a	WCLCRI	CWW	1/21/2010 17:45			1		USE	C
per0121034a	244880001	CWW	1/21/2010 17:53	943784	10-1264	1	LANL	USE	S
per0121035a	244893001	CWW	1/21/2010 18:01	943784	10-1278-1	1	LANL	USE	S
per0121036a	244912001	CWW	1/21/2010 18:09	943784	10-1282	1	LANL	USE	S
per0121037a	244919001	CWW	1/21/2010 18:17	943784	10-1286	1	LANL	USE	S
per0121038a	244922001	CWW	1/21/2010 18:25	943784	10-1288-1	1	LANL	USE	S
per0121039a	1202020834	CWW	1/21/2010 18:34	943784	10-1288-1	1	LANL	USE	S
per0121040a	1202020835	CWW	1/21/2010 18:42	943784	10-1288-1	1	LANL	USE	S
per0121041a	244925001	CWW	1/21/2010 18:50	943784	10-1270	1	LANL	USE	S
per0121042a	WCLCCV	CWW	1/21/2010 18:58			1		USE	C
per0121043a	IPB006	CWW	1/21/2010 19:06			1		USE	B
per0121044a	WCLCRI	CWW	1/21/2010 19:14			1		USE	C
per0121045a	1202011842	CWW	1/21/2010 19:22	940151	10-1156	1	LANL	USE	S
per0121046a	1202011843	CWW	1/21/2010 19:30	940151	10-1156	1	LANL	USE	S
per0121047a	1202011846	CWW	1/21/2010 19:38	940151	10-1156	1	LANL	USE	S
per0121048a	244224001	CWW	1/21/2010 19:46	940151	10-1156	1	LANL	USE	S
per0121049a	1202011844	CWW	1/21/2010 19:54	940151	10-1156	1	LANL	USE	S
per0121050a	1202011845	CWW	1/21/2010 20:02	940151	10-1156	1	LANL	USE	S
per0121051a	244224002	CWW	1/21/2010 20:10	940151	10-1156	1	LANL	USE	S
per0121052a	244224003	CWW	1/21/2010 20:18	940151	10-1156	1	LANL	USE	S
per0121053a	244224004	CWW	1/21/2010 20:26	940151	10-1156	1	LANL	USE	S
per0121054a	WCLCCV	CWW	1/21/2010 20:34			1		USE	C
per0121055a	IPB007	CWW	1/21/2010 20:42			1		USE	B
per0121056a	WCLCRI	CWW	1/21/2010 20:50			1		USE	C
per0121057a	244224005	CWW	1/21/2010 20:59	940151	10-1156	1	LANL	USE	S
per0121058a	244224006	CWW	1/21/2010 21:07	940151	10-1156	1	LANL	USE	S
per0121059a	244224007	CWW	1/21/2010 21:15	940151	10-1156	1	LANL	USE	S
per0121060a	244224008	CWW	1/21/2010 21:23	940151	10-1156	1	LANL	USE	S
per0121061a	244224009	CWW	1/21/2010 21:31	940151	10-1156	1	LANL	USE	S
per0121062a	244224010	CWW	1/21/2010 21:39	940151	10-1156	1	LANL	USE	S
per0121063a	244224011	CWW	1/21/2010 21:47	940151	10-1156	1	LANL	USE	S
per0121064a	244224012	CWW	1/21/2010 21:55	940151	10-1156	1	LANL	USE	S
per0121065a	WCLCCV	CWW	1/21/2010 22:03			1		USE	C
per0121066a	IPB008	CWW	1/21/2010 22:11			1		USE	B

per0121067a	WCLCRI	CWW	1/21/2010 22:19	940151	10-1156	1	LANL	USE	C
per0121068a	244224013	CWW	1/21/2010 22:27	940151	10-1156	1	LANL	USE	S
per0121069a	244224014	CWW	1/21/2010 22:36	940151	10-1156	1	LANL	USE	S
per0121070a	244224015	CWW	1/21/2010 22:44	940151	10-1156	1	LANL	USE	S
per0121071a	244224016	CWW	1/21/2010 22:52	940151	10-1156	1	LANL	USE	S
per0121072a	244224017	CWW	1/21/2010 23:00	940151	10-1156	1	LANL	USE	S
per0121073a	244224018	CWW	1/21/2010 23:08	940151	10-1156	1	LANL	USE	S
per0121074a	244224019	CWW	1/21/2010 23:16	940151	10-1156	1	LANL	USE	S
per0121075a	244224020	CWW	1/21/2010 23:24	940151	10-1156	1	LANL	USE	S
per0121076a	WCLCCV	CWW	1/21/2010 23:32			1		USE	C
per0121077a	IPB009	CWW	1/21/2010 23:40			1		USE	B
per0121078a	WCLCRI	CWW	1/21/2010 23:48			1		USE	C

Dataset: C:\MassLynx\Perchlorate.PRO\per012110a.qld

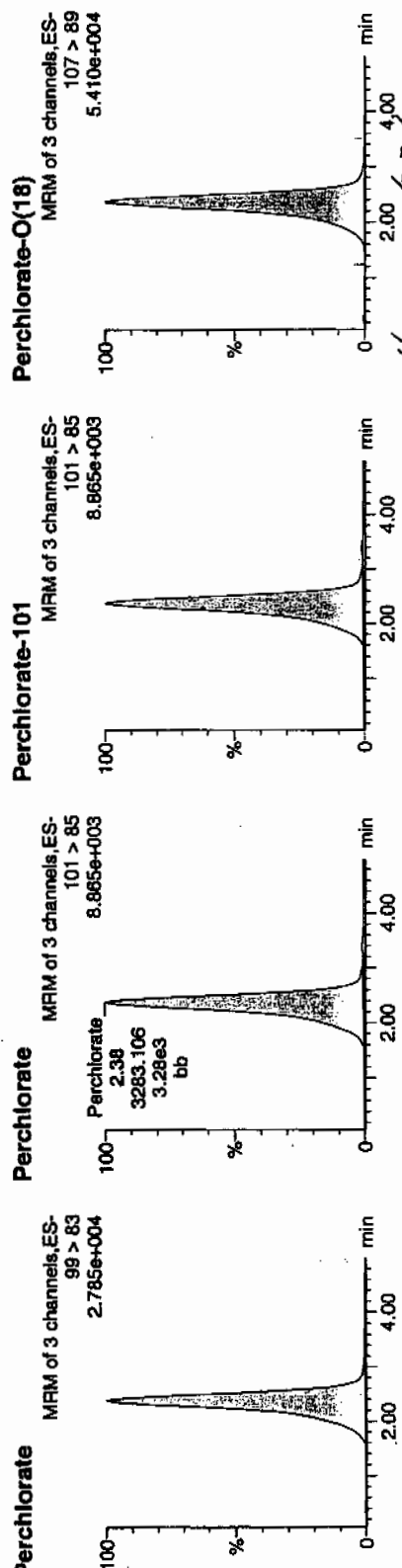
Last Altered: Friday, January 22, 2010 1:03:56 PM Eastern Standard Time
 Printed: Friday, January 22, 2010 1:16:11 PM Eastern Standard Time

Name: per0121039a

Date: 21-Jan-2010

Time: 18:34:00

D: 1202020834

 $\lambda/\lambda_0: 1:6, D$ 

ID	Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/ml	%Rec	%Dev	S/N	Ion Ratio
202020834	Perchlorate	99 > 83	2.39	10214.022	10214.022	bb		--	0.2033	101.65	1.65	2934.4...	3.11
202020834	Perchlorate-101	101 > 85	2.38	3283.106	3283.106	bb			0.1905	95.26	-4.74	2696.7...	
202020834	Perchlorate-O(18)	107 > 89	2.36	19942.906	19942.906	bb			0.4582	91.64	-8.36	3312.7...	

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

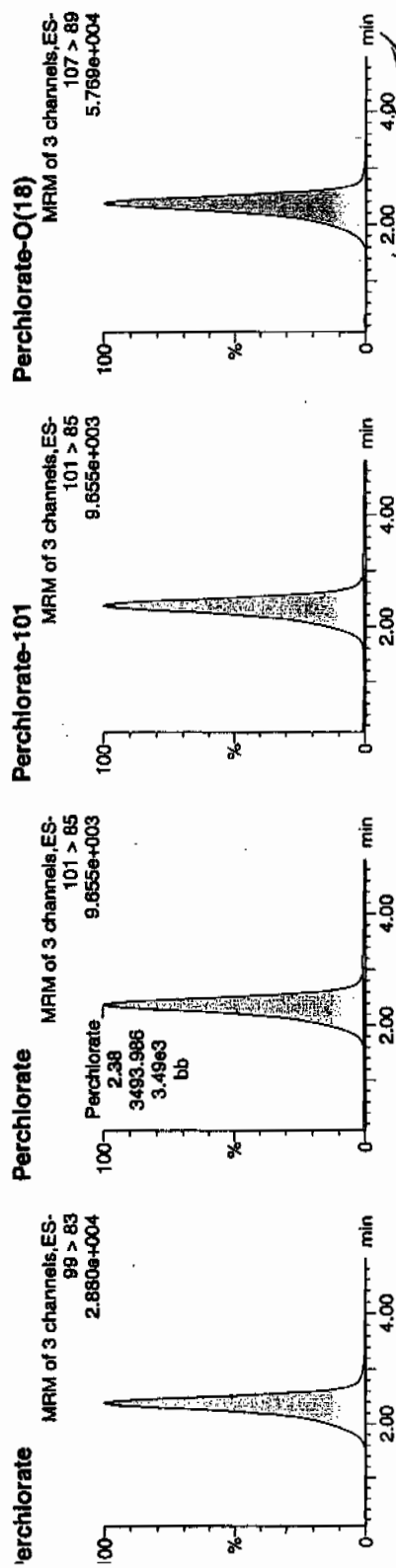
Dataset: C:\MassLynx\Perchlorate.PRO\per012110a.qld

Last Altered: Friday, January 22, 2010 1:03:56 PM Eastern Standard Time
Printed: Friday, January 22, 2010 1:16:11 PM Eastern Standard Time

Name: per0121040a
Date: 21-Jan-2010
Time: 18:42:02
D: 1202020835
Ial: 1:6,E

Q-22-10

LAN-1943784 / LIO / MSP / 11



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
202020835	Perchlorate	99 > 83	2.38	10520.571	bb			0.2094	104.71	4.71	1267.9...	3.01
202020835	Perchlorate-101	101 > 85	2.38	3493.986	bb			0.2028	101.38	1.38	447.198	
202020835	Perchlorate-O(18)	107 > 89	2.36	21143.459	bb			0.4858	97.16	-2.84	2783.1...	

$$\frac{10520.571}{50239} = 0.2094$$

Isotope Ratio Criteria

Isotope Ratio $^{35}\text{Cl}/^{37}\text{Cl}$

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 10-1212**

Sample Analysis

Sample ID	Client ID
244601001	RE12-10-7243
244601002	RE12-10-7240
244601003	RE12-10-7241
244601004	RE12-10-7237
244601005	RE12-10-7239
244601006	RE12-10-7238
244601007	RE12-10-7242
244601008	RE12-10-7236
244601009	RE12-10-7252
244601010	RE12-10-7253
244601011	RE12-10-7254
244601012	RE12-10-7255
244601013	RE12-10-7276
1202015660	Method Blank (MB) ICP
1202015665	Laboratory Control Sample (LCS)
1202015662	244601001(RE12-10-7243L) Serial Dilution (SD)
1202015661	244601001(RE12-10-7243D) Sample Duplicate (DUP)
1202015663	244601001(RE12-10-7243S) Matrix Spike (MS)
1202015664	244601001(RE12-10-7243SD) Matrix Spike Duplicate (MSD)
1202015679	Method Blank (MB) ICP-MS
1202015684	Laboratory Control Sample (LCS)

1202015681	244601001(RE12-10-7243L) Serial Dilution (SD)
1202015680	244601001(RE12-10-7243D) Sample Duplicate (DUP)
1202015682	244601001(RE12-10-7243S) Matrix Spike (MS)
1202015683	244601001(RE12-10-7243SD) Matrix Spike Duplicate (MSD)
1202019751	Method Blank (MB) CVAA
1202019752	Laboratory Control Sample (LCS)
1202019755	244601001(RE12-10-7243L) Serial Dilution (SD)
1202019753	244601001(RE12-10-7243D) Sample Duplicate (DUP)
1202019754	244601001(RE12-10-7243S) Matrix Spike (MS)
1202019756	244601001(RE12-10-7243SD) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on a "dry weight" basis.

Method/Analysis Information

Analytical Batch:	941727, 941732 and 943305
Prep Batch :	941725, 941730 and 943303
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 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.

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 sample was selected as the quality control (QC) sample for this SDG: 244601001.

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 barium, 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 met the recommended quality control acceptance criteria for percent recoveries for all applicable analytes with the exception of barium, 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 \pm RL is used to evaluate the DUP results. All applicable analytes met these requirements with the exception of barium, chromium, lead, manganese 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 DERs were generated for this SDG: 787293 and 788562. A copy of each DER 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: Krusten Parson Date: 2/9/10

Sample Data Summary

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1212

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244601001

BASIS: Dry Weight

DATE COLLECTED 07-JAN-10

CLIENT ID: RE12-10-7243

LEVEL: Low

DATE RECEIVED 13-JAN-10

MATRIX: SOIL

%SOLIDS: 94.2

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	2970000	ug/Kg		7160	21100	21100	1	P	HSC	01/28/10 20:44	012810-1	941727
7440-36-0	Antimony	1050	ug/Kg	U	348	1050	1050	1	P	HSC	01/28/10 20:44	012810-1	941727
7440-38-2	Arsenic	1.31	mg/kg		0.205	1.03	1.03	2	MS	BAJ	02/08/10 15:02	100208-2	941732
7440-39-3	Barium	70200	ug/Kg	*N	105	527	527	1	P	HSC	01/28/10 20:44	012810-1	941727
7440-41-7	Beryllium	0.425	mg/kg		0.0205	0.103	0.103	2	MS	RMJ	01/30/10 08:30	100129-4	941732
7440-43-9	Cadmium	527	ug/Kg	U	105	527	527	1	P	HSC	01/28/10 20:44	012810-1	941727
7440-70-2	Calcium	782000	ug/Kg		8430	26300	26300	1	P	HSC	01/28/10 20:44	012810-1	941727
7440-47-3	Chromium	10300	ug/Kg	*	158	527	527	1	P	HSC	01/28/10 20:44	012810-1	941727
7440-48-4	Cobalt	5800	ug/Kg		158	527	527	1	P	HSC	01/28/10 20:44	012810-1	941727
7440-50-8	Copper	4010	ug/Kg		316	1050	1050	1	P	HSC	01/28/10 20:44	012810-1	941727
7439-89-6	Iron	8120000	ug/Kg		8430	26300	26300	1	P	HSC	01/28/10 20:44	012810-1	941727
7439-92-1	Lead	7810	ug/Kg	*	263	1050	1050	1	P	HSC	01/28/10 20:44	012810-1	941727
7439-95-4	Magnesium	635000	ug/Kg	N	8960	31600	31600	1	P	HSC	01/28/10 20:44	012810-1	941727
7439-96-5	Manganese	391000	ug/Kg	*	211	1050	1050	1	P	HSC	01/28/10 20:44	012810-1	941727
7439-97-6	Mercury	11.4	ug/kg	U	3.88	11.4	11.4	1	AV	JXL1	01/28/10 12:19	012810S1-9	943305
7440-02-0	Nickel	4.04	mg/kg		0.103	0.411	0.411	2	MS	BAJ	02/08/10 15:02	100208-2	941732
7440-09-7	Potassium	565000	ug/Kg	N	6740	26300	26300	1	P	HSC	01/28/10 20:44	012810-1	941727
7782-49-2	Selenium	1.03	mg/kg	U	0.514	1.03	1.03	2	MS	BAJ	02/08/10 15:02	100208-2	941732
7440-22-4	Silver	403	ug/Kg	J	105	527	527	1	P	HSC	01/28/10 20:44	012810-1	941727
7440-23-5	Sodium	85200	ug/Kg		7370	26300	26300	1	P	HSC	01/28/10 20:44	012810-1	941727
7440-28-0	Thallium	0.0684	mg/kg	J	0.0616	0.205	0.205	2	MS	RMJ	02/03/10 18:25	100202-7	941732
7440-61-1	Uranium	1.04	mg/kg	*	0.0136	0.0411	0.0411	2	MS	RMJ	01/30/10 14:15	100129-6	941732
7440-62-2	Vanadium	8510	ug/Kg		105	527	527	1	P	HSC	01/28/10 20:44	012810-1	941727
7440-66-6	Zinc	24000	ug/Kg		348	1050	1050	1	P	HSC	01/28/10 20:44	012810-1	941727

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
941727	941725	SW846 3050B	0.504	g	50	mL	01/20/10	AXG2
941732	941730	SW846 3050B	0.517	g	50	mL	01/20/10	AXG2
943305	943303	SW846 7471A Prep	0.559	g	30	mL	01/27/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1212

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244601002

BASIS: Dry Weight

DATE COLLECTED 07-JAN-10

CLIENT ID: RE12-10-7240

LEVEL: Low

DATE RECEIVED 13-JAN-10

MATRIX: SOIL

%SOLIDS: 86

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	8120000	ug/Kg		7800	22900	22900	1	P	HSC	01/28/10 21:34	012810-1	941727
7440-36-0	Antimony	1150	ug/Kg	U	379	1150	1150	1	P	HSC	01/28/10 21:34	012810-1	941727
7440-38-2	Arsenic	2.7	mg/kg		0.231	1.16	1.16	2	MS	BAJ	02/08/10 15:19	100208-2	941732
7440-39-3	Barium	1660000	ug/Kg	*N	115	574	574	1	P	HSC	01/28/10 21:34	012810-1	941727
7440-41-7	Beryllium	0.863	mg/kg		0.0231	0.116	0.116	2	MS	RMJ	01/30/10 08:46	100129-4	941732
7440-43-9	Cadmium	574	ug/Kg	U	115	574	574	1	P	HSC	01/28/10 21:34	012810-1	941727
7440-70-2	Calcium	4260000	ug/Kg		9180	28700	28700	1	P	HSC	01/28/10 21:34	012810-1	941727
7440-47-3	Chromium	9320	ug/Kg	*	172	574	574	1	P	HSC	01/28/10 21:34	012810-1	941727
7440-48-4	Cobalt	8120	ug/Kg		172	574	574	1	P	HSC	01/28/10 21:34	012810-1	941727
7440-50-8	Copper	7400	ug/Kg		344	1150	1150	1	P	HSC	01/28/10 21:34	012810-1	941727
7439-89-6	Iron	13500000	ug/Kg		9180	28700	28700	1	P	HSC	01/28/10 21:34	012810-1	941727
7439-92-1	Lead	10200	ug/Kg	*	287	1150	1150	1	P	HSC	01/28/10 21:34	012810-1	941727
7439-95-4	Magnesium	2110000	ug/Kg	N	9750	34400	34400	1	P	HSC	01/28/10 21:34	012810-1	941727
7439-96-5	Manganese	322000	ug/Kg	*	229	1150	1150	1	P	HSC	01/28/10 21:34	012810-1	941727
7439-97-6	Mercury	14.7	ug/kg		4.19	12.3	12.3	1	AV	JXL1	01/28/10 12:28	012810S1-9	943305
7440-02-0	Nickel	9.69	mg/kg		0.116	0.463	0.463	2	MS	BAJ	02/08/10 15:19	100208-2	941732
7440-09-7	Potassium	1710000	ug/Kg	N	7340	28700	28700	1	P	HSC	01/28/10 21:34	012810-1	941727
7782-49-2	Selenium	1.16	mg/kg	U	0.578	1.16	1.16	2	MS	BAJ	02/08/10 15:19	100208-2	941732
7440-22-4	Silver	698	ug/Kg		115	574	574	1	P	HSC	01/28/10 21:34	012810-1	941727
7440-23-5	Sodium	343000	ug/Kg		8030	28700	28700	1	P	HSC	01/28/10 21:34	012810-1	941727
7440-28-0	Thallium	0.251	mg/kg		0.0694	0.231	0.231	2	MS	RMJ	02/03/10 18:55	100202-7	941732
7440-61-1	Uranium	0.709	mg/kg	*	0.0153	0.0463	0.0463	2	MS	RMJ	01/30/10 14:44	100129-6	941732
7440-62-2	Vanadium	25000	ug/Kg		115	574	574	1	P	HSC	01/28/10 21:34	012810-1	941727
7440-66-6	Zinc	25500	ug/Kg		379	1150	1150	1	P	HSC	01/28/10 21:34	012810-1	941727

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
941727	941725	SW846 3050B	0.504	g	50	mL	01/20/10	AXG2
941732	941730	SW846 3050B	0.5	g	50	mL	01/20/10	AXG2
943305	943303	SW846 7471A Prep	0.563	g	30	mL	01/27/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1212

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244601003

BASIS: Dry Weight

DATE COLLECTED 07-JAN-10

CLIENT ID: RE12-10-7241

LEVEL: Low

DATE RECEIVED 13-JAN-10

MATRIX: SOIL

%SOLIDS: 90.6

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	8620000	ug/Kg		7440	21900	21900	1	P	HSC	01/28/10 21:41	012810-1	941727
7440-36-0	Antimony	1090	ug/Kg	U	361	1090	1090	1	P	HSC	01/28/10 21:41	012810-1	941727
7440-38-2	Arsenic	3.14	mg/kg		0.22	1.1	1.1	2	MS	BAJ	02/08/10 15:22	100208-2	941732
7440-39-3	Barium	169000	ug/Kg	*N	109	547	547	1	P	HSC	01/28/10 21:41	012810-1	941727
7440-41-7	Beryllium	1.02	mg/kg		0.022	0.11	0.11	2	MS	RMJ	01/30/10 08:55	100129-4	941732
7440-43-9	Cadmium	547	ug/Kg	U	109	547	547	1	P	HSC	01/28/10 21:41	012810-1	941727
7440-70-2	Calcium	4600000	ug/Kg		8760	27400	27400	1	P	HSC	01/28/10 21:41	012810-1	941727
7440-47-3	Chromium	8170	ug/Kg	*	164	547	547	1	P	HSC	01/28/10 21:41	012810-1	941727
7440-48-4	Cobalt	5890	ug/Kg		164	547	547	1	P	HSC	01/28/10 21:41	012810-1	941727
7440-50-8	Copper	6220	ug/Kg		328	1090	1090	1	P	HSC	01/28/10 21:41	012810-1	941727
7439-89-6	Iron	11700000	ug/Kg		8760	27400	27400	1	P	HSC	01/28/10 21:41	012810-1	941727
7439-92-1	Lead	10000	ug/Kg	*	274	1090	1090	1	P	HSC	01/28/10 21:41	012810-1	941727
7439-95-4	Magnesium	2170000	ug/Kg	N	9300	32800	32800	1	P	HSC	01/28/10 21:41	012810-1	941727
7439-96-5	Manganese	273000	ug/Kg	*	219	1090	1090	1	P	HSC	01/28/10 21:41	012810-1	941727
7439-97-6	Mercury	13.2	ug/kg		4.13	12.1	12.1	1	AV	JXL1	01/28/10 12:30	012810S1-9	943305
7440-02-0	Nickel	10.1	mg/kg		0.11	0.44	0.44	2	MS	BAJ	02/08/10 15:22	100208-2	941732
7440-09-7	Potassium	1660000	ug/Kg	N	7010	27400	27400	1	P	HSC	01/28/10 21:41	012810-1	941727
7782-49-2	Selenium	1.1	mg/kg	U	0.549	1.1	1.1	2	MS	BAJ	02/08/10 15:22	100208-2	941732
7440-22-4	Silver	565	ug/Kg		109	547	547	1	P	HSC	01/28/10 21:41	012810-1	941727
7440-23-5	Sodium	679000	ug/Kg		7660	27400	27400	1	P	HSC	01/28/10 21:41	012810-1	941727
7440-28-0	Thallium	0.189	mg/kg	J	0.0659	0.22	0.22	2	MS	RMJ	02/03/10 19:01	100202-7	941732
7440-61-1	Uranium	0.836	mg/kg	*	0.0145	0.044	0.044	2	MS	RMJ	01/30/10 14:50	100129-6	941732
7440-62-2	Vanadium	21600	ug/Kg		109	547	547	1	P	HSC	01/28/10 21:41	012810-1	941727
7440-66-6	Zinc	24700	ug/Kg		361	1090	1090	1	P	HSC	01/28/10 21:41	012810-1	941727

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
941727	941725	SW846 3050B	0.504	g	50	mL	01/20/10	AXG2
941732	941730	SW846 3050B	0.502	g	50	mL	01/20/10	AXG2
943305	943303	SW846 7471A Prep	0.545	g	30	mL	01/27/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1212

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244601004

BASIS: Dry Weight

DATE COLLECTED 07-JAN-10

CLIENT ID: RE12-10-7237

LEVEL: Low

DATE RECEIVED 13-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	7700000	ug/Kg		7420	21800	21800	1	P	HSC	01/28/10 21:48	012810-1	941727
7440-36-0	Antimony	1090	ug/Kg	U	360	1090	1090	1	P	HSC	01/28/10 21:48	012810-1	941727
7440-38-2	Arsenic	1.63	mg/kg		0.217	1.09	1.09	2	MS	BAJ	02/08/10 15:24	100208-2	941732
7440-39-3	Barium	73900	ug/Kg	*N	109	545	545	1	P	HSC	01/28/10 21:48	012810-1	941727
7440-41-7	Beryllium	0.642	mg/kg		0.0217	0.109	0.109	2	MS	RMJ	01/30/10 08:58	100129-4	941732
7440-43-9	Cadmium	545	ug/Kg	U	109	545	545	1	P	HSC	01/28/10 21:48	012810-1	941727
7440-70-2	Calcium	1880000	ug/Kg		8730	27300	27300	1	P	HSC	01/28/10 21:48	012810-1	941727
7440-47-3	Chromium	13800	ug/Kg	*	164	545	545	1	P	HSC	01/28/10 21:48	012810-1	941727
7440-48-4	Cobalt	6960	ug/Kg		164	545	545	1	P	HSC	01/28/10 21:48	012810-1	941727
7440-50-8	Copper	5530	ug/Kg		327	1090	1090	1	P	HSC	01/28/10 21:48	012810-1	941727
7439-89-6	Iron	12300000	ug/Kg		8730	27300	27300	1	P	HSC	01/28/10 21:48	012810-1	941727
7439-92-1	Lead	22600	ug/Kg	*	273	1090	1090	1	P	HSC	01/28/10 21:48	012810-1	941727
7439-95-4	Magnesium	1560000	ug/Kg	N	9270	32700	32700	1	P	HSC	01/28/10 21:48	012810-1	941727
7439-96-5	Manganese	285000	ug/Kg	*	218	1090	1090	1	P	HSC	01/28/10 21:48	012810-1	941727
7439-97-6	Mercury	24.2	ug/kg		4.13	12.2	12.2	1	AV	JXLJ	01/28/10 12:35	012810S1-9	943305
7440-02-0	Nickel	6.4	mg/kg		0.109	0.435	0.435	2	MS	BAJ	02/08/10 15:24	100208-2	941732
7440-09-7	Potassium	1290000	ug/Kg	N	6980	27300	27300	1	P	HSC	01/28/10 21:48	012810-1	941727
7782-49-2	Selenium	1.09	mg/kg	U	0.543	1.09	1.09	2	MS	BAJ	02/08/10 15:24	100208-2	941732
7440-22-4	Silver	593	ug/Kg		109	545	545	1	P	HSC	01/28/10 21:48	012810-1	941727
7440-23-5	Sodium	111000	ug/Kg		7640	27300	27300	1	P	HSC	01/28/10 21:48	012810-1	941727
7440-28-0	Thallium	0.139	mg/kg	J	0.0652	0.217	0.217	2	MS	RMJ	02/03/10 19:07	100202-7	941732
7440-61-1	Uranium	0.463	mg/kg	*	0.0143	0.0435	0.0435	2	MS	RMJ	01/30/10 14:56	100129-6	941732
7440-62-2	Vanadium	11300	ug/Kg		109	545	545	1	P	HSC	01/28/10 21:48	012810-1	941727
7440-66-6	Zinc	30600	ug/Kg		360	1090	1090	1	P	HSC	01/28/10 21:48	012810-1	941727

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
941727	941725	SW846 3050B	0.51	g	50	mL	01/20/10	AXG2
941732	941730	SW846 3050B	0.512	g	50	mL	01/20/10	AXG2
943305	943303	SW846 7471A Prep	0.549	g	30	mL	01/27/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1212

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244601005

BASIS: Dry Weight

DATE COLLECTED 07-JAN-10

CLIENT ID: RE12-10-7239

LEVEL: Low

DATE RECEIVED 13-JAN-10

MATRIX: SOIL

%SOLIDS: 90.7

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	10600000	ug/Kg		7350	21600	21600	1	P	HSC	01/28/10 21:55	012810-1	941727
7440-36-0	Antimony	1080	ug/Kg	U	357	1080	1080	1	P	HSC	01/28/10 21:55	012810-1	941727
7440-38-2	Arsenic	2.68	mg/kg		0.219	1.1	1.1	2	MS	BAJ	02/08/10 15:27	100208-2	941732
7440-39-3	Barium	214000	ug/Kg	*N	108	541	541	1	P	HSC	01/28/10 21:55	012810-1	941727
7440-41-7	Beryllium	1.11	mg/kg		0.0219	0.11	0.11	2	MS	RMJ	01/30/10 09:01	100129-4	941732
7440-43-9	Cadmium	541	ug/Kg	U	108	541	541	1	P	HSC	01/28/10 21:55	012810-1	941727
7440-70-2	Calcium	4580000	ug/Kg		8650	27000	27000	1	P	HSC	01/28/10 21:55	012810-1	941727
7440-47-3	Chromium	9300	ug/Kg	*	162	541	541	1	P	HSC	01/28/10 21:55	012810-1	941727
7440-48-4	Cobalt	4030	ug/Kg		162	541	541	1	P	HSC	01/28/10 21:55	012810-1	941727
7440-50-8	Copper	5810	ug/Kg		324	1080	1080	1	P	HSC	01/28/10 21:55	012810-1	941727
7439-89-6	Iron	10800000	ug/Kg		8650	27000	27000	1	P	HSC	01/28/10 21:55	012810-1	941727
7439-92-1	Lead	9190	ug/Kg	*	270	1080	1080	1	P	HSC	01/28/10 21:55	012810-1	941727
7439-95-4	Magnesium	1960000	ug/Kg	N	9190	32400	32400	1	P	HSC	01/28/10 21:55	012810-1	941727
7439-96-5	Manganese	216000	ug/Kg	*	216	1080	1080	1	P	HSC	01/28/10 21:55	012810-1	941727
7439-97-6	Mercury	22.6	ug/kg		4.42	13	13	1	AV	JXL1	01/28/10 12:36	012810S1-9	943305
7440-02-0	Nickel	8.94	mg/kg		0.11	0.439	0.439	2	MS	BAJ	02/08/10 15:27	100208-2	941732
7440-09-7	Potassium	1330000	ug/Kg	N	6920	27000	27000	1	P	HSC	01/28/10 21:55	012810-1	941727
7782-49-2	Selenium	1.1	mg/kg	U	0.548	1.1	1.1	2	MS	BAJ	02/08/10 15:27	100208-2	941732
7440-22-4	Silver	553	ug/Kg		108	541	541	1	P	HSC	01/28/10 21:55	012810-1	941727
7440-23-5	Sodium	432000	ug/Kg		7570	27000	27000	1	P	HSC	01/28/10 21:55	012810-1	941727
7440-28-0	Thallium	0.194	mg/kg	J	0.0658	0.219	0.219	2	MS	RMJ	02/03/10 19:24	100202-7	941732
7440-61-1	Uranium	0.647	mg/kg	*	0.0145	0.0439	0.0439	2	MS	RMJ	01/30/10 15:14	100129-6	941732
7440-62-2	Vanadium	17900	ug/Kg		108	541	541	1	P	HSC	01/28/10 21:55	012810-1	941727
7440-66-6	Zinc	20900	ug/Kg		357	1080	1080	1	P	HSC	01/28/10 21:55	012810-1	941727

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
941727	941725	SW846 3050B	0.51	g	50	mL	01/20/10	AXG2
941732	941730	SW846 3050B	0.503	g	50	mL	01/20/10	AXG2
943305	943303	SW846 7471A Prep	0.509	g	30	mL	01/27/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1212

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244601006

BASIS: Dry Weight

DATE COLLECTED 07-JAN-10

CLIENT ID: RE12-10-7238

LEVEL: Low

DATE RECEIVED 13-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	18300000	ug/Kg		7880	23200	23200	1	P	HSC	01/28/10 22:02	012810-1	941727
7440-36-0	Antimony	1160	ug/Kg	U	382	1160	1160	1	P	HSC	01/28/10 22:02	012810-1	941727
7440-38-2	Arsenic	2.44	mg/kg		0.24	1.2	1.2	2	MS	BAJ	02/08/10 15:29	100208-2	941732
7440-39-3	Barium	211000	ug/Kg	*N	116	579	579	1	P	HSC	01/28/10 22:02	012810-1	941727
7440-41-7	Beryllium	1.35	mg/kg		0.024	0.12	0.12	2	MS	RMJ	01/30/10 09:05	100129-4	941732
7440-43-9	Cadmium	579	ug/Kg	U	116	579	579	1	P	HSC	01/28/10 22:02	012810-1	941727
7440-70-2	Calcium	2630000	ug/Kg		9270	29000	29000	1	P	HSC	01/28/10 22:02	012810-1	941727
7440-47-3	Chromium	26400	ug/Kg	*	174	579	579	1	P	HSC	01/28/10 22:02	012810-1	941727
7440-48-4	Cobalt	6210	ug/Kg		174	579	579	1	P	HSC	01/28/10 22:02	012810-1	941727
7440-50-8	Copper	8830	ug/Kg		348	1160	1160	1	P	HSC	01/28/10 22:02	012810-1	941727
7439-89-6	Iron	16400000	ug/Kg		9270	29000	29000	1	P	HSC	01/28/10 22:02	012810-1	941727
7439-92-1	Lead	17000	ug/Kg	*	290	1160	1160	1	P	HSC	01/28/10 22:02	012810-1	941727
7439-95-4	Magnesium	2570000	ug/Kg	N	9850	34800	34800	1	P	HSC	01/28/10 22:02	012810-1	941727
7439-96-5	Manganese	383000	ug/Kg	*	232	1160	1160	1	P	HSC	01/28/10 22:02	012810-1	941727
7439-97-6	Mercury	18	ug/kg		4.87	14.3	14.3	1	AV	JXL1	01/28/10 12:38	012810S1-9	943305
7440-02-0	Nickel	12	mg/kg		0.12	0.48	0.48	2	MS	BAJ	02/08/10 15:29	100208-2	941732
7440-09-7	Potassium	1950000	ug/Kg	N	7410	29000	29000	1	P	HSC	01/28/10 22:02	012810-1	941727
7782-49-2	Selenium	1.2	mg/kg	U	0.6	1.2	1.2	2	MS	BAJ	02/08/10 15:29	100208-2	941732
7440-22-4	Silver	603	ug/Kg		116	579	579	1	P	HSC	01/28/10 22:02	012810-1	941727
7440-23-5	Sodium	190000	ug/Kg		8110	29000	29000	1	P	HSC	01/28/10 22:02	012810-1	941727
7440-28-0	Thallium	0.233	mg/kg	J	0.072	0.24	0.24	2	MS	RMJ	02/03/10 19:30	100202-7	941732
7440-61-1	Uranium	1.47	mg/kg	*	0.0158	0.048	0.048	2	MS	RMJ	01/30/10 15:20	100129-6	941732
7440-62-2	Vanadium	30300	ug/Kg		116	579	579	1	P	HSC	01/28/10 22:02	012810-1	941727
7440-66-6	Zinc	27700	ug/Kg		382	1160	1160	1	P	HSC	01/28/10 22:02	012810-1	941727

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
941727	941725	SW846 3050B	0.518	g	50	mL	01/20/10	AXG2
941732	941730	SW846 3050B	0.5	g	50	mL	01/20/10	AXG2
943305	943303	SW846 7471A Prep	0.503	g	30	mL	01/27/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1212

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244601007

BASIS: Dry Weight

DATE COLLECTED 07-JAN-10

CLIENT ID: RE12-10-7242

LEVEL: Low

DATE RECEIVED 13-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	8460000	ug/Kg		8080	23800	23800	1	P	HSC	01/28/10 22:09	012810-1	941727
7440-36-0	Antimony	1190	ug/Kg	U	392	1190	1190	1	P	HSC	01/28/10 22:09	012810-1	941727
7440-38-2	Arsenic	2.06	mg/kg		0.231	1.16	1.16	2	MS	BAJ	02/08/10 15:32	100208-2	941732
7440-39-3	Barium	115000	ug/Kg	*N	119	594	594	1	P	HSC	01/28/10 22:09	012810-1	941727
7440-41-7	Beryllium	0.981	mg/kg		0.0231	0.116	0.116	2	MS	RMJ	01/30/10 09:08	100129-4	941732
7440-43-9	Cadmium	594	ug/Kg	U	119	594	594	1	P	HSC	01/28/10 22:09	012810-1	941727
7440-70-2	Calcium	2080000	ug/Kg		9510	29700	29700	1	P	HSC	01/28/10 22:09	012810-1	941727
7440-47-3	Chromium	10400	ug/Kg	*	178	594	594	1	P	HSC	01/28/10 22:09	012810-1	941727
7440-48-4	Cobalt	4220	ug/Kg		178	594	594	1	P	HSC	01/28/10 22:09	012810-1	941727
7440-50-8	Copper	7160	ug/Kg		356	1190	1190	1	P	HSC	01/28/10 22:09	012810-1	941727
7439-89-6	Iron	11400000	ug/Kg		9510	29700	29700	1	P	HSC	01/28/10 22:09	012810-1	941727
7439-92-1	Lead	11700	ug/Kg	*	297	1190	1190	1	P	HSC	01/28/10 22:09	012810-1	941727
7439-95-4	Magnesium	1840000	ug/Kg	N	10100	35600	35600	1	P	HSC	01/28/10 22:09	012810-1	941727
7439-96-5	Manganese	270000	ug/Kg	*	238	1190	1190	1	P	HSC	01/28/10 22:09	012810-1	941727
7439-97-6	Mercury	15.3	ug/kg		4.34	12.8	12.8	1	AV	JXL1	01/28/10 12:40	012810S1-9	943305
7440-02-0	Nickel	8.44	mg/kg		0.116	0.462	0.462	2	MS	BAJ	02/08/10 15:32	100208-2	941732
7440-09-7	Potassium	1580000	ug/Kg	N	7600	29700	29700	1	P	HSC	01/28/10 22:09	012810-1	941727
7782-49-2	Selenium	1.16	mg/kg	U	0.578	1.16	1.16	2	MS	BAJ	02/08/10 15:32	100208-2	941732
7440-22-4	Silver	657	ug/Kg		119	594	594	1	P	HSC	01/28/10 22:09	012810-1	941727
7440-23-5	Sodium	60000	ug/Kg		8320	29700	29700	1	P	HSC	01/28/10 22:09	012810-1	941727
7440-28-0	Thallium	0.171	mg/kg	J	0.0694	0.231	0.231	2	MS	RMJ	02/03/10 19:36	100202-7	941732
7440-61-1	Uranium	3.08	mg/kg	*	0.0153	0.0462	0.0462	2	MS	RMJ	01/30/10 15:26	100129-6	941732
7440-62-2	Vanadium	18600	ug/Kg		119	594	594	1	P	HSC	01/28/10 22:09	012810-1	941727
7440-66-6	Zinc	24800	ug/Kg		392	1190	1190	1	P	HSC	01/28/10 22:09	012810-1	941727

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
941727	941725	SW846 3050B	0.503	g	50	mL	01/20/10	AXG2
941732	941730	SW846 3050B	0.517	g	50	mL	01/20/10	AXG2
943305	943303	SW846 7471A Prep	0.562	g	30	mL	01/27/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1212

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244601008

BASIS: Dry Weight

DATE COLLECTED 07-JAN-10

CLIENT ID: RE12-10-7236

LEVEL: Low

DATE RECEIVED 13-JAN-10

MATRIX: SOIL

%SOLIDS: 78

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	6690000	ug/Kg		8560	25200	25200	1	P	HSC	01/28/10 22:30	012810-1	941727
7440-36-0	Antimony	1260	ug/Kg	U	415	1260	1260	1	P	HSC	01/28/10 22:30	012810-1	941727
7440-38-2	Arsenic	1.86	mg/kg		0.252	1.26	1.26	2	MS	BAJ	02/08/10 15:39	100208-2	941732
7440-39-3	Barium	80800	ug/Kg	*N	126	629	629	1	P	HSC	01/28/10 22:30	012810-1	941727
7440-41-7	Beryllium	0.629	mg/kg		0.0252	0.126	0.126	2	MS	RMJ	01/30/10 09:11	100129-4	941732
7440-43-9	Cadmium	629	ug/Kg	U	126	629	629	1	P	HSC	01/28/10 22:30	012810-1	941727
7440-70-2	Calcium	1440000	ug/Kg		10100	31500	31500	1	P	HSC	01/28/10 22:30	012810-1	941727
7440-47-3	Chromium	14400	ug/Kg	*	189	629	629	1	P	HSC	01/28/10 22:30	012810-1	941727
7440-48-4	Cobalt	6300	ug/Kg		189	629	629	1	P	HSC	01/28/10 22:30	012810-1	941727
7440-50-8	Copper	6760	ug/Kg		378	1260	1260	1	P	HSC	01/28/10 22:30	012810-1	941727
7439-89-6	Iron	12400000	ug/Kg		10100	31500	31500	1	P	HSC	01/28/10 22:30	012810-1	941727
7439-92-1	Lead	12400	ug/Kg	*	315	1260	1260	1	P	HSC	01/28/10 22:30	012810-1	941727
7439-95-4	Magnesium	1290000	ug/Kg	N	10700	37800	37800	1	P	HSC	01/28/10 22:30	012810-1	941727
7439-96-5	Manganese	293000	ug/Kg	*	252	1260	1260	1	P	HSC	01/28/10 22:30	012810-1	941727
7439-97-6	Mercury	19	ug/kg		5.14	15.1	15.1	1	AV	JXL1	01/28/10 12:42	012810S1-9	943305
7440-02-0	Nickel	6.36	mg/kg		0.126	0.505	0.505	2	MS	BAJ	02/08/10 15:39	100208-2	941732
7440-09-7	Potassium	1250000	ug/Kg	N	8060	31500	31500	1	P	HSC	01/28/10 22:30	012810-1	941727
7782-49-2	Selenium	1.26	mg/kg	U	0.631	1.26	1.26	2	MS	BAJ	02/08/10 15:39	100208-2	941732
7440-22-4	Silver	695	ug/Kg		126	629	629	1	P	HSC	01/28/10 22:30	012810-1	941727
7440-23-5	Sodium	71900	ug/Kg		8810	31500	31500	1	P	HSC	01/28/10 22:30	012810-1	941727
7440-28-0	Thallium	0.102	mg/kg	J	0.0757	0.252	0.252	2	MS	RMJ	02/03/10 19:42	100202-7	941732
7440-61-1	Uranium	2.51	mg/kg	*	0.0167	0.0505	0.0505	2	MS	RMJ	01/30/10 15:31	100129-6	941732
7440-62-2	Vanadium	17100	ug/Kg		126	629	629	1	P	HSC	01/28/10 22:30	012810-1	941727
7440-66-6	Zinc	28700	ug/Kg		415	1260	1260	1	P	HSC	01/28/10 22:30	012810-1	941727

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
941727	941725	SW846 3050B	0.507	g	50	mL	01/20/10	AXG2
941732	941730	SW846 3050B	0.506	g	50	mL	01/20/10	AXG2
943305	943303	SW846 7471A Prep	0.507	g	30	mL	01/27/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1212

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244601009

BASIS: Dry Weight

DATE COLLECTED 07-JAN-10

CLIENT ID: RE12-10-7252

LEVEL: Low

DATE RECEIVED 13-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	6080000	ug/Kg		8090	23800	23800	1	P	HSC	01/28/10 22:37	012810-1	941727
7440-36-0	Antimony	1190	ug/Kg	U	392	1190	1190	1	P	HSC	01/28/10 22:37	012810-1	941727
7440-38-2	Arsenic	1.71	mg/kg		0.236	1.18	1.18	2	MS	BAJ	02/08/10 15:42	100208-2	941732
7440-39-3	Barium	68400	ug/Kg	*N	119	595	595	1	P	HSC	01/28/10 22:37	012810-1	941727
7440-41-7	Beryllium	0.609	mg/kg		0.0236	0.118	0.118	2	MS	RMJ	01/30/10 09:15	100129-4	941732
7440-43-9	Cadmium	595	ug/Kg	U	119	595	595	1	P	HSC	01/28/10 22:37	012810-1	941727
7440-70-2	Calcium	1300000	ug/Kg		9520	29700	29700	1	P	HSC	01/28/10 22:37	012810-1	941727
7440-47-3	Chromium	10400	ug/Kg	*	178	595	595	1	P	HSC	01/28/10 22:37	012810-1	941727
7440-48-4	Cobalt	4470	ug/Kg		178	595	595	1	P	HSC	01/28/10 22:37	012810-1	941727
7440-50-8	Copper	5430	ug/Kg		357	1190	1190	1	P	HSC	01/28/10 22:37	012810-1	941727
7439-89-6	Iron	11400000	ug/Kg		9520	29700	29700	1	P	HSC	01/28/10 22:37	012810-1	941727
7439-92-1	Lead	18300	ug/Kg	*	297	1190	1190	1	P	HSC	01/28/10 22:37	012810-1	941727
7439-95-4	Magnesium	1080000	ug/Kg	N	10100	35700	35700	1	P	HSC	01/28/10 22:37	012810-1	941727
7439-96-5	Manganese	302000	ug/Kg	*	238	1190	1190	1	P	HSC	01/28/10 22:37	012810-1	941727
7439-97-6	Mercury	11.8	ug/kg	J	4.3	12.7	12.7	1	AV	JXLI	01/28/10 12:43	012810S1-9	943305
7440-02-0	Nickel	6.09	mg/kg		0.118	0.471	0.471	2	MS	BAJ	02/08/10 15:42	100208-2	941732
7440-09-7	Potassium	1070000	ug/Kg	N	7610	29700	29700	1	P	HSC	01/28/10 22:37	012810-1	941727
7782-49-2	Selenium	1.18	mg/kg	U	0.589	1.18	1.18	2	MS	BAJ	02/08/10 15:42	100208-2	941732
7440-22-4	Silver	624	ug/Kg		119	595	595	1	P	HSC	01/28/10 22:37	012810-1	941727
7440-23-5	Sodium	65600	ug/Kg		8330	29700	29700	1	P	HSC	01/28/10 22:37	012810-1	941727
7440-28-0	Thallium	0.0862	mg/kg	J	0.0707	0.236	0.236	2	MS	RMJ	02/03/10 19:48	100202-7	941732
7440-61-1	Uranium	2.91	mg/kg	*	0.0155	0.0471	0.0471	2	MS	RMJ	01/30/10 15:37	100129-6	941732
7440-62-2	Vanadium	15100	ug/Kg		119	595	595	1	P	HSC	01/28/10 22:37	012810-1	941727
7440-66-6	Zinc	27300	ug/Kg		392	1190	1190	1	P	HSC	01/28/10 22:37	012810-1	941727

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
941727	941725	SW846 3050B	0.5	g	50	mL	01/20/10	AXG2
941732	941730	SW846 3050B	0.505	g	50	mL	01/20/10	AXG2
943305	943303	SW846 7471A Prep	0.564	g	30	mL	01/27/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1212

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244601010

BASIS: Dry Weight

DATE COLLECTED 07-JAN-10

CLIENT ID: RE12-10-7253

LEVEL: Low

DATE RECEIVED 13-JAN-10

MATRIX: SOIL

%SOLIDS: 96.7

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	1800000	ug/Kg		6880	20200	20200	1	P	HSC	01/28/10 22:44	012810-1	941727
7440-36-0	Antimony	1010	ug/Kg	U	334	1010	1010	1	P	HSC	01/28/10 22:44	012810-1	941727
7440-38-2	Arsenic	0.919	mg/kg	J	0.199	0.996	0.996	2	MS	BAJ	02/08/10 15:44	100208-2	941732
7440-39-3	Barium	17100	ug/Kg	*N	101	506	506	1	P	HSC	01/28/10 22:44	012810-1	941727
7440-41-7	Beryllium	0.20	mg/kg		0.0199	0.0996	0.0996	2	MS	RMJ	01/30/10 09:18	100129-4	941732
7440-43-9	Cadmium	506	ug/Kg	U	101	506	506	1	P	HSC	01/28/10 22:44	012810-1	941727
7440-70-2	Calcium	410000	ug/Kg		8090	25300	25300	1	P	HSC	01/28/10 22:44	012810-1	941727
7440-47-3	Chromium	16400	ug/Kg	*	152	506	506	1	P	HSC	01/28/10 22:44	012810-1	941727
7440-48-4	Cobalt	1840	ug/Kg		152	506	506	1	P	HSC	01/28/10 22:44	012810-1	941727
7440-50-8	Copper	1760	ug/Kg		303	1010	1010	1	P	HSC	01/28/10 22:44	012810-1	941727
7439-89-6	Iron	7310000	ug/Kg		8090	25300	25300	1	P	HSC	01/28/10 22:44	012810-1	941727
7439-92-1	Lead	4720	ug/Kg	*	253	1010	1010	1	P	HSC	01/28/10 22:44	012810-1	941727
7439-95-4	Magnesium	305000	ug/Kg	N	8600	30300	30300	1	P	HSC	01/28/10 22:44	012810-1	941727
7439-96-5	Manganese	228000	ug/Kg	*	202	1010	1010	1	P	HSC	01/28/10 22:44	012810-1	941727
7439-97-6	Mercury	11.9	ug/kg	U	4.06	11.9	11.9	1	AV	JXL1	01/28/10 12:45	012810S1-9	943305
7440-02-0	Nickel	3.28	mg/kg		0.0996	0.398	0.398	2	MS	BAJ	02/08/10 15:44	100208-2	941732
7440-09-7	Potassium	356000	ug/Kg	N	6470	25300	25300	1	P	HSC	01/28/10 22:44	012810-1	941727
7782-49-2	Selenium	0.996	mg/kg	U	0.498	0.996	0.996	2	MS	BAJ	02/08/10 15:44	100208-2	941732
7440-22-4	Silver	458	ug/Kg	J	101	506	506	1	P	HSC	01/28/10 22:44	012810-1	941727
7440-23-5	Sodium	91700	ug/Kg		7080	25300	25300	1	P	HSC	01/28/10 22:44	012810-1	941727
7440-28-0	Thallium	0.199	mg/kg	U	0.0598	0.199	0.199	2	MS	RMJ	02/03/10 19:54	100202-7	941732
7440-61-1	Uranium	0.385	mg/kg	*	0.0131	0.0398	0.0398	2	MS	RMJ	01/28/10 12:11	100127-3	941732
7440-62-2	Vanadium	3320	ug/Kg		101	506	506	1	P	HSC	01/28/10 22:44	012810-1	941727
7440-66-6	Zinc	20800	ug/Kg		334	1010	1010	1	P	HSC	01/28/10 22:44	012810-1	941727

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
941727	941725	SW846 3050B	0.511	g	50	mL	01/20/10	AXG2
941732	941730	SW846 3050B	0.519	g	50	mL	01/20/10	AXG2
943305	943303	SW846 7471A Prep	0.52	g	30	mL	01/27/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1212

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244601011

BASIS: Dry Weight

DATE COLLECTED 07-JAN-10

CLIENT ID: RE12-10-7254

LEVEL: Low

DATE RECEIVED 13-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	5040000	ug/Kg		7780	22900	22900	1	P	HSC	01/28/10 22:52	012810-1	941727
7440-36-0	Antimony	1140	ug/Kg	U	378	1140	1140	1	P	HSC	01/28/10 22:52	012810-1	941727
7440-38-2	Arsenic	2.2	mg/kg		0.236	1.18	1.18	2	MS	BAJ	02/08/10 15:47	100208-2	941732
7440-39-3	Barium	73300	ug/Kg	*N	114	572	572	1	P	HSC	01/28/10 22:52	012810-1	941727
7440-41-7	Beryllium	0.575	mg/kg		0.0236	0.118	0.118	2	MS	RMJ	01/30/10 09:27	100129-4	941732
7440-43-9	Cadmium	572	ug/Kg	U	114	572	572	1	P	HSC	01/28/10 22:52	012810-1	941727
7440-70-2	Calcium	1410000	ug/Kg		9150	28600	28600	1	P	HSC	01/28/10 22:52	012810-1	941727
7440-47-3	Chromium	17500	ug/Kg	*	172	572	572	1	P	HSC	01/28/10 22:52	012810-1	941727
7440-48-4	Cobalt	3960	ug/Kg		172	572	572	1	P	HSC	01/28/10 22:52	012810-1	941727
7440-50-8	Copper	5810	ug/Kg		343	1140	1140	1	P	HSC	01/28/10 22:52	012810-1	941727
7439-89-6	Iron	10400000	ug/Kg		9150	28600	28600	1	P	HSC	01/28/10 22:52	012810-1	941727
7439-92-1	Lead	11700	ug/Kg	*	286	1140	1140	1	P	HSC	01/28/10 22:52	012810-1	941727
7439-95-4	Magnesium	1060000	ug/Kg	N	9730	34300	34300	1	P	HSC	01/28/10 22:52	012810-1	941727
7439-96-5	Manganese	292000	ug/Kg	*	229	1140	1140	1	P	HSC	01/28/10 22:52	012810-1	941727
7439-97-6	Mercury	11.6	ug/kg	J	4.29	12.6	12.6	1	AV	JXL1	01/28/10 12:47	012810S1-9	943305
7440-02-0	Nickel	6.11	mg/kg		0.118	0.472	0.472	2	MS	BAJ	02/08/10 15:47	100208-2	941732
7440-09-7	Potassium	919000	ug/Kg	N	7320	28600	28600	1	P	HSC	01/28/10 22:52	012810-1	941727
7782-49-2	Selenium	1.18	mg/kg	U	0.59	1.18	1.18	2	MS	BAJ	02/08/10 15:47	100208-2	941732
7440-22-4	Silver	566	ug/Kg	J	114	572	572	1	P	HSC	01/28/10 22:52	012810-1	941727
7440-23-5	Sodium	62500	ug/Kg		8010	28600	28600	1	P	HSC	01/28/10 22:52	012810-1	941727
7440-28-0	Thallium	0.0857	mg/kg	J	0.0709	0.236	0.236	2	MS	RMJ	02/03/10 20:00	100202-7	941732
7440-61-1	Uranium	2.15	mg/kg	*	0.0156	0.0472	0.0472	2	MS	RMJ	01/30/10 15:49	100129-6	941732
7440-62-2	Vanadium	16000	ug/Kg		114	572	572	1	P	HSC	01/28/10 22:52	012810-1	941727
7440-66-6	Zinc	25000	ug/Kg		378	1140	1140	1	P	HSC	01/28/10 22:52	012810-1	941727

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
941727	941725	SW846 3050B	0.516	g	50	mL	01/20/10	AXG2
941732	941730	SW846 3050B	0.5	g	50	mL	01/20/10	AXG2
943305	943303	SW846 7471A Prep	0.561	g	30	mL	01/27/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1212

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244601012

BASIS: Dry Weight

DATE COLLECTED 07-JAN-10

CLIENT ID: RE12-10-7255

LEVEL: Low

DATE RECEIVED 13-JAN-10

MATRIX: SOIL

%SOLIDS: 93.4

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	4250000	ug/Kg		7180	21100	21100	1	P	HSC	01/28/10 22:59	012810-1	941727
7440-36-0	Antimony	373	ug/Kg	J	348	1060	1060	1	P	HSC	01/28/10 22:59	012810-1	941727
7440-38-2	Arsenic	1.83	mg/kg		0.213	1.07	1.07	2	MS	BAJ	02/08/10 15:49	100208-2	941732
7440-39-3	Barium	56600	ug/Kg	*N	106	528	528	1	P	HSC	01/28/10 22:59	012810-1	941727
7440-41-7	Beryllium	0.570	mg/kg		0.0213	0.107	0.107	2	MS	RMJ	01/30/10 09:30	100129-4	941732
7440-43-9	Cadmium	528	ug/Kg	U	106	528	528	1	P	HSC	01/28/10 22:59	012810-1	941727
7440-70-2	Calcium	985000	ug/Kg		8450	26400	26400	1	P	HSC	01/28/10 22:59	012810-1	941727
7440-47-3	Chromium	21300	ug/Kg	*	158	528	528	1	P	HSC	01/28/10 22:59	012810-1	941727
7440-48-4	Cobalt	3690	ug/Kg		158	528	528	1	P	HSC	01/28/10 22:59	012810-1	941727
7440-50-8	Copper	4110	ug/Kg		317	1060	1060	1	P	HSC	01/28/10 22:59	012810-1	941727
7439-89-6	Iron	8460000	ug/Kg		8450	26400	26400	1	P	HSC	01/28/10 22:59	012810-1	941727
7439-92-1	Lead	8180	ug/Kg	*	264	1060	1060	1	P	HSC	01/28/10 22:59	012810-1	941727
7439-95-4	Magnesium	766000	ug/Kg	N	8980	31700	31700	1	P	HSC	01/28/10 22:59	012810-1	941727
7439-96-5	Manganese	275000	ug/Kg	*	211	1060	1060	1	P	HSC	01/28/10 22:59	012810-1	941727
7439-97-6	Mercury	15.4	ug/kg		4.01	11.8	11.8	1	AV	JXL1	01/28/10 12:48	012810S1-9	943305
7440-02-0	Nickel	4.96	mg/kg		0.107	0.427	0.427	2	MS	BAJ	02/08/10 15:49	100208-2	941732
7440-09-7	Potassium	683000	ug/Kg	N	6760	26400	26400	1	P	HSC	01/28/10 22:59	012810-1	941727
7782-49-2	Selenium	1.07	mg/kg	U	0.533	1.07	1.07	2	MS	BAJ	02/08/10 15:49	100208-2	941732
7440-22-4	Silver	459	ug/Kg	J	106	528	528	1	P	HSC	01/28/10 22:59	012810-1	941727
7440-23-5	Sodium	64500	ug/Kg		7390	26400	26400	1	P	HSC	01/28/10 22:59	012810-1	941727
7440-28-0	Thallium	0.0828	mg/kg	J	0.064	0.213	0.213	2	MS	RMJ	02/03/10 20:06	100202-7	941732
7440-61-1	Uranium	4.58	mg/kg	*	0.0141	0.0427	0.0427	2	MS	RMJ	01/30/10 15:55	100129-6	941732
7440-62-2	Vanadium	11400	ug/Kg		106	528	528	1	P	HSC	01/28/10 22:59	012810-1	941727
7440-66-6	Zinc	22200	ug/Kg		348	1060	1060	1	P	HSC	01/28/10 22:59	012810-1	941727

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt/vol.	Units	Final wt/vol.	Units	Date	Analyst
941727	941725	SW846 3050B	0.507	g	50	mL	01/20/10	AXG2
941732	941730	SW846 3050B	0.502	g	50	mL	01/20/10	AXG2
943305	943303	SW846 7471A Prep	0.545	g	30	mL	01/27/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1212

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244601013

BASIS: Dry Weight

DATE COLLECTED 07-JAN-10

CLIENT ID: RE12-10-7276

LEVEL: Low

DATE RECEIVED 13-JAN-10

MATRIX: SOIL

%SOLIDS: 91.6

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	11800000	ug/Kg		7380	21700	21700	1	P	HSC	01/28/10 23:06	012810-1	941727
7440-36-0	Antimony	1080	ug/Kg	U	358	1080	1080	1	P	HSC	01/28/10 23:06	012810-1	941727
7440-38-2	Arsenic	2.49	mg/kg		0.216	1.08	1.08	2	MS	BAJ	02/08/10 15:52	100208-2	941732
7440-39-3	Barium	203000	ug/Kg	*N	108	542	542	1	P	HSC	01/28/10 23:06	012810-1	941727
7440-41-7	Beryllium	1.01	mg/kg		0.0216	0.108	0.108	2	MS	RMJ	01/30/10 09:33	100129-4	941732
7440-43-9	Cadmium	542	ug/Kg	U	108	542	542	1	P	HSC	01/28/10 23:06	012810-1	941727
7440-70-2	Calcium	4060000	ug/Kg		8680	27100	27100	1	P	HSC	01/28/10 23:06	012810-1	941727
7440-47-3	Chromium	15500	ug/Kg	*	163	542	542	1	P	HSC	01/28/10 23:06	012810-1	941727
7440-48-4	Cobalt	15700	ug/Kg		163	542	542	1	P	HSC	01/28/10 23:06	012810-1	941727
7440-50-8	Copper	7500	ug/Kg		325	1080	1080	1	P	HSC	01/28/10 23:06	012810-1	941727
7439-89-6	Iron	14400000	ug/Kg		8680	27100	27100	1	P	HSC	01/28/10 23:06	012810-1	941727
7439-92-1	Lead	17100	ug/Kg	*	271	1080	1080	1	P	HSC	01/28/10 23:06	012810-1	941727
7439-95-4	Magnesium	2770000	ug/Kg	N	9220	32500	32500	1	P	HSC	01/28/10 23:06	012810-1	941727
7439-96-5	Manganese	459000	ug/Kg	*	217	1080	1080	1	P	HSC	01/28/10 23:06	012810-1	941727
7439-97-6	Mercury	19.1	ug/kg		3.82	11.2	11.2	1	AV	JXL1	01/28/10 12:50	012810S1-9	943305
7440-02-0	Nickel	8.6	mg/kg		0.108	0.432	0.432	2	MS	BAJ	02/08/10 15:52	100208-2	941732
7440-09-7	Potassium	1880000	ug/Kg	N	6940	27100	27100	1	P	HSC	01/28/10 23:06	012810-1	941727
7782-49-2	Selenium	1.08	mg/kg	U	0.54	1.08	1.08	2	MS	BAJ	02/08/10 15:52	100208-2	941732
7440-22-4	Silver	750	ug/Kg		108	542	542	1	P	HSC	01/28/10 23:06	012810-1	941727
7440-23-5	Sodium	626000	ug/Kg		7590	27100	27100	1	P	HSC	01/28/10 23:06	012810-1	941727
7440-28-0	Thallium	0.182	mg/kg	J	0.0648	0.216	0.216	2	MS	RMJ	02/03/10 20:12	100202-7	941732
7440-61-1	Uranium	0.672	mg/kg	*	0.0143	0.0432	0.0432	2	MS	RMJ	01/30/10 16:01	100129-6	941732
7440-62-2	Vanadium	25100	ug/Kg		108	542	542	1	P	HSC	01/28/10 23:06	012810-1	941727
7440-66-6	Zinc	29200	ug/Kg		358	1080	1080	1	P	HSC	01/28/10 23:06	012810-1	941727

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
941727	941725	SW846 3050B	0.503	g	50	mL	01/20/10	AXG2
941732	941730	SW846 3050B	0.505	g	50	mL	01/20/10	AXG2
943305	943303	SW846 7471A Prep	0.582	g	30	mL	01/27/10	TXB3

Quality Control Summary

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1212

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,ICPMS6,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICV01										
	Mercury	5.1	ug/L	5	ug/L	101.9	90.0 – 110.0	AV	28-JAN-10 09:05	012810S1-9
	Uranium	53.6	ug/L	50	ug/L	107.1	90.0 – 110.0	MS	28-JAN-10 09:37	100127-3
	Aluminum	4900	ug/L	5000	ug/L	98	90.0 – 110.0	P	28-JAN-10 10:35	012810-1
	Antimony	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	28-JAN-10 10:35	012810-1
	Barium	480	ug/L	500	ug/L	96	90.0 – 110.0	P	28-JAN-10 10:35	012810-1
	Cadmium	459	ug/L	500	ug/L	91.8	90.0 – 110.0	P	28-JAN-10 10:35	012810-1
	Calcium	4940	ug/L	5000	ug/L	98.9	90.0 – 110.0	P	28-JAN-10 10:35	012810-1
	Chromium	459	ug/L	500	ug/L	91.9	90.0 – 110.0	P	28-JAN-10 10:35	012810-1
	Cobalt	473	ug/L	500	ug/L	94.6	90.0 – 110.0	P	28-JAN-10 10:35	012810-1
	Copper	477	ug/L	500	ug/L	95.5	90.0 – 110.0	P	28-JAN-10 10:35	012810-1
	Iron	5120	ug/L	5000	ug/L	102.4	90.0 – 110.0	P	28-JAN-10 10:35	012810-1
	Lead	475	ug/L	500	ug/L	95	90.0 – 110.0	P	28-JAN-10 10:35	012810-1
	Magnesium	5340	ug/L	5000	ug/L	106.9	90.0 – 110.0	P	28-JAN-10 10:35	012810-1
	Manganese	483	ug/L	500	ug/L	96.6	90.0 – 110.0	P	28-JAN-10 10:35	012810-1
	Potassium	2430	ug/L	2500	ug/L	97.2	90.0 – 110.0	P	28-JAN-10 10:35	012810-1
	Silver	250	ug/L	250	ug/L	99.8	90.0 – 110.0	P	28-JAN-10 10:35	012810-1
	Sodium	2380	ug/L	2500	ug/L	95.4	90.0 – 110.0	P	28-JAN-10 10:35	012810-1
	Vanadium	485	ug/L	500	ug/L	97.1	90.0 – 110.0	P	28-JAN-10 10:35	012810-1
	Zinc	475	ug/L	500	ug/L	95	90.0 – 110.0	P	28-JAN-10 10:35	012810-1
	Beryllium	52.3	ug/L	50	ug/L	104.6	90.0 – 110.0	MS	30-JAN-10 07:28	100129-4
	Uranium	53.6	ug/L	50	ug/L	107.2	90.0 – 110.0	MS	30-JAN-10 13:10	100129-6
	Thallium	51.2	ug/L	50	ug/L	102.4	90.0 – 110.0	MS	03-FEB-10 17:20	100202-7
	Arsenic	49.3	ug/L	50	ug/L	98.6	90.0 – 110.0	MS	08-FEB-10 14:40	100208-2
	Nickel	52.2	ug/L	50	ug/L	104.3	90.0 – 110.0	MS	08-FEB-10 14:40	100208-2
	Selenium	49.9	ug/L	50	ug/L	99.8	90.0 – 110.0	MS	08-FEB-10 14:40	100208-2
CCV01										
	Mercury	5.06	ug/L	5	ug/L	101.2	80.0 – 120.0	AV	28-JAN-10 09:10	012810S1-9
	Uranium	53.6	ug/L	50	ug/L	107.2	90.0 – 110.0	MS	28-JAN-10 10:07	100127-3
	Aluminum	4880	ug/L	5000	ug/L	97.6	90.0 – 110.0	P	28-JAN-10 11:21	012810-1
	Antimony	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	28-JAN-10 11:21	012810-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1212

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,ICPMS6,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Barium	467	ug/L	500	ug/L	93.4	90.0 – 110.0	P	28-JAN-10 11:21	012810-1
	Cadmium	469	ug/L	500	ug/L	93.9	90.0 – 110.0	P	28-JAN-10 11:21	012810-1
	Calcium	5020	ug/L	5000	ug/L	100.4	90.0 – 110.0	P	28-JAN-10 11:21	012810-1
	Chromium	466	ug/L	500	ug/L	93.3	90.0 – 110.0	P	28-JAN-10 11:21	012810-1
	Cobalt	466	ug/L	500	ug/L	93.2	90.0 – 110.0	P	28-JAN-10 11:21	012810-1
	Copper	460	ug/L	500	ug/L	92.1	90.0 – 110.0	P	28-JAN-10 11:21	012810-1
	Iron	5120	ug/L	5000	ug/L	102.5	90.0 – 110.0	P	28-JAN-10 11:21	012810-1
	Lead	472	ug/L	500	ug/L	94.3	90.0 – 110.0	P	28-JAN-10 11:21	012810-1
	Magnesium	5310	ug/L	5000	ug/L	106.2	90.0 – 110.0	P	28-JAN-10 11:21	012810-1
	Manganese	467	ug/L	500	ug/L	93.5	90.0 – 110.0	P	28-JAN-10 11:21	012810-1
	Potassium	5090	ug/L	5000	ug/L	101.8	90.0 – 110.0	P	28-JAN-10 11:21	012810-1
	Silver	479	ug/L	500	ug/L	95.8	90.0 – 110.0	P	28-JAN-10 11:21	012810-1
	Sodium	9570	ug/L	10000	ug/L	95.7	90.0 – 110.0	P	28-JAN-10 11:21	012810-1
	Vanadium	470	ug/L	500	ug/L	94	90.0 – 110.0	P	28-JAN-10 11:21	012810-1
	Zinc	466	ug/L	500	ug/L	93.3	90.0 – 110.0	P	28-JAN-10 11:21	012810-1
	Beryllium	53.2	ug/L	50	ug/L	106.4	90.0 – 110.0	MS	30-JAN-10 07:43	100129-4
	Uranium	52.9	ug/L	50	ug/L	105.8	90.0 – 110.0	MS	30-JAN-10 13:39	100129-6
	Thallium	50.8	ug/L	50	ug/L	101.6	90.0 – 110.0	MS	03-FEB-10 17:50	100202-7
	Arsenic	48.8	ug/L	50	ug/L	97.7	90.0 – 110.0	MS	08-FEB-10 14:52	100208-2
	Nickel	53.4	ug/L	50	ug/L	106.8	90.0 – 110.0	MS	08-FEB-10 14:52	100208-2
	Selenium	51	ug/L	50	ug/L	102	90.0 – 110.0	MS	08-FEB-10 14:52	100208-2
CCV02										
	Mercury	5.01	ug/L	5	ug/L	100.2	80.0 – 120.0	AV	28-JAN-10 09:30	012810S1-9
	Uranium	53.6	ug/L	50	ug/L	107.1	90.0 – 110.0	MS	28-JAN-10 10:30	100127-3
	Aluminum	4790	ug/L	5000	ug/L	95.8	90.0 – 110.0	P	28-JAN-10 11:58	012810-1
	Antimony	490	ug/L	500	ug/L	98	90.0 – 110.0	P	28-JAN-10 11:58	012810-1
	Barium	471	ug/L	500	ug/L	94.2	90.0 – 110.0	P	28-JAN-10 11:58	012810-1
	Cadmium	474	ug/L	500	ug/L	94.8	90.0 – 110.0	P	28-JAN-10 11:58	012810-1
	Calcium	4940	ug/L	5000	ug/L	98.7	90.0 – 110.0	P	28-JAN-10 11:58	012810-1
	Chromium	471	ug/L	500	ug/L	94.2	90.0 – 110.0	P	28-JAN-10 11:58	012810-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1212

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,ICPMS6,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Cobalt	471	ug/L	500	ug/L	94.2	90.0 - 110.0	P	28-JAN-10 11:58	012810-1
	Copper	465	ug/L	500	ug/L	93	90.0 - 110.0	P	28-JAN-10 11:58	012810-1
	Iron	5200	ug/L	5000	ug/L	104	90.0 - 110.0	P	28-JAN-10 11:58	012810-1
	Lead	471	ug/L	500	ug/L	94.2	90.0 - 110.0	P	28-JAN-10 11:58	012810-1
	Magnesium	5180	ug/L	5000	ug/L	103.7	90.0 - 110.0	P	28-JAN-10 11:58	012810-1
	Manganese	471	ug/L	500	ug/L	94.1	90.0 - 110.0	P	28-JAN-10 11:58	012810-1
	Potassium	4930	ug/L	5000	ug/L	98.6	90.0 - 110.0	P	28-JAN-10 11:58	012810-1
	Silver	485	ug/L	500	ug/L	97	90.0 - 110.0	P	28-JAN-10 11:58	012810-1
	Sodium	10500	ug/L	10000	ug/L	104.9	90.0 - 110.0	P	28-JAN-10 11:58	012810-1
	Vanadium	475	ug/L	500	ug/L	95	90.0 - 110.0	P	28-JAN-10 11:58	012810-1
	Zinc	470	ug/L	500	ug/L	94	90.0 - 110.0	P	28-JAN-10 11:58	012810-1
	Beryllium	53.4	ug/L	50	ug/L	106.7	90.0 - 110.0	MS	30-JAN-10 08:18	100129-4
	Uranium	51.4	ug/L	50	ug/L	102.8	90.0 - 110.0	MS	30-JAN-10 14:03	100129-6
	Thallium	51.1	ug/L	50	ug/L	102.1	90.0 - 110.0	MS	03-FEB-10 18:13	100202-7
	Arsenic	48.6	ug/L	50	ug/L	97.2	90.0 - 110.0	MS	08-FEB-10 15:14	100208-2
	Nickel	52.5	ug/L	50	ug/L	105.1	90.0 - 110.0	MS	08-FEB-10 15:14	100208-2
	Selenium	50.8	ug/L	50	ug/L	101.7	90.0 - 110.0	MS	08-FEB-10 15:14	100208-2
CCV03										
	Mercury	5.11	ug/L	5	ug/L	102.2	80.0 - 120.0	AV	28-JAN-10 09:50	012810S1-9
	Uranium	52.3	ug/L	50	ug/L	104.5	90.0 - 110.0	MS	28-JAN-10 11:29	100127-3
	Aluminum	4850	ug/L	5000	ug/L	96.9	90.0 - 110.0	P	28-JAN-10 13:09	012810-1
	Antimony	493	ug/L	500	ug/L	98.7	90.0 - 110.0	P	28-JAN-10 13:09	012810-1
	Barium	474	ug/L	500	ug/L	94.7	90.0 - 110.0	P	28-JAN-10 13:09	012810-1
	Cadmium	475	ug/L	500	ug/L	95	90.0 - 110.0	P	28-JAN-10 13:09	012810-1
	Calcium	5000	ug/L	5000	ug/L	100.1	90.0 - 110.0	P	28-JAN-10 13:09	012810-1
	Chromium	471	ug/L	500	ug/L	94.1	90.0 - 110.0	P	28-JAN-10 13:09	012810-1
	Cobalt	474	ug/L	500	ug/L	94.9	90.0 - 110.0	P	28-JAN-10 13:09	012810-1
	Copper	469	ug/L	500	ug/L	93.9	90.0 - 110.0	P	28-JAN-10 13:09	012810-1
	Iron	5190	ug/L	5000	ug/L	103.8	90.0 - 110.0	P	28-JAN-10 13:09	012810-1
	Lead	472	ug/L	500	ug/L	94.4	90.0 - 110.0	P	28-JAN-10 13:09	012810-1

METALS

-2a-

Initial and Continuing Calibration Verification

SDG No: 10-1212

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,ICPMS6,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Magnesium	5270	ug/L	5000	ug/L	105.3	90.0 – 110.0	P	28-JAN-10 13:09	012810-1
	Manganese	472	ug/L	500	ug/L	94.5	90.0 – 110.0	P	28-JAN-10 13:09	012810-1
	Potassium	5000	ug/L	5000	ug/L	100	90.0 – 110.0	P	28-JAN-10 13:09	012810-1
	Silver	486	ug/L	500	ug/L	97.3	90.0 – 110.0	P	28-JAN-10 13:09	012810-1
	Sodium	9910	ug/L	10000	ug/L	99.1	90.0 – 110.0	P	28-JAN-10 13:09	012810-1
	Vanadium	475	ug/L	500	ug/L	95	90.0 – 110.0	P	28-JAN-10 13:09	012810-1
	Zinc	470	ug/L	500	ug/L	93.9	90.0 – 110.0	P	28-JAN-10 13:09	012810-1
	Beryllium	51.9	ug/L	50	ug/L	103.8	90.0 – 110.0	MS	30-JAN-10 08:49	100129-4
	Uranium	49.1	ug/L	50	ug/L	98.2	90.0 – 110.0	MS	30-JAN-10 15:02	100129-6
	Thallium	50.9	ug/L	50	ug/L	101.7	90.0 – 110.0	MS	03-FEB-10 19:12	100202-7
	Arsenic	48.9	ug/L	50	ug/L	97.8	90.0 – 110.0	MS	08-FEB-10 15:34	100208-2
	Nickel	53	ug/L	50	ug/L	106.1	90.0 – 110.0	MS	08-FEB-10 15:34	100208-2
	Selenium	50.8	ug/L	50	ug/L	101.5	90.0 – 110.0	MS	08-FEB-10 15:34	100208-2
CCV04										
	Mercury	5.17	ug/L	5	ug/L	103.5	80.0 – 120.0	AV	28-JAN-10 10:10	012810S1-9
	Uranium	51.8	ug/L	50	ug/L	103.6	90.0 – 110.0	MS	28-JAN-10 12:35	100127-3
	Aluminum	5010	ug/L	5000	ug/L	100.2	90.0 – 110.0	P	28-JAN-10 14:16	012810-1
	Antimony	508	ug/L	500	ug/L	101.7	90.0 – 110.0	P	28-JAN-10 14:16	012810-1
	Barium	482	ug/L	500	ug/L	96.4	90.0 – 110.0	P	28-JAN-10 14:16	012810-1
	Cadmium	484	ug/L	500	ug/L	96.8	90.0 – 110.0	P	28-JAN-10 14:16	012810-1
	Calcium	5070	ug/L	5000	ug/L	101.3	90.0 – 110.0	P	28-JAN-10 14:16	012810-1
	Chromium	479	ug/L	500	ug/L	95.9	90.0 – 110.0	P	28-JAN-10 14:16	012810-1
	Cobalt	485	ug/L	500	ug/L	97.1	90.0 – 110.0	P	28-JAN-10 14:16	012810-1
	Copper	479	ug/L	500	ug/L	95.8	90.0 – 110.0	P	28-JAN-10 14:16	012810-1
	Iron	5170	ug/L	5000	ug/L	103.4	90.0 – 110.0	P	28-JAN-10 14:16	012810-1
	Lead	483	ug/L	500	ug/L	96.6	90.0 – 110.0	P	28-JAN-10 14:16	012810-1
	Magnesium	5280	ug/L	5000	ug/L	105.7	90.0 – 110.0	P	28-JAN-10 14:16	012810-1
	Manganese	484	ug/L	500	ug/L	96.8	90.0 – 110.0	P	28-JAN-10 14:16	012810-1
	Potassium	5130	ug/L	5000	ug/L	102.6	90.0 – 110.0	P	28-JAN-10 14:16	012810-1
	Silver	496	ug/L	500	ug/L	99.1	90.0 – 110.0	P	28-JAN-10 14:16	012810-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1212

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,ICPMS6,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Sodium	9770	ug/L	10000	ug/L	97.7	90.0 – 110.0	P	28-JAN-10 14:16	012810-1
	Vanadium	484	ug/L	500	ug/L	96.8	90.0 – 110.0	P	28-JAN-10 14:16	012810-1
	Zinc	478	ug/L	500	ug/L	95.6	90.0 – 110.0	P	28-JAN-10 14:16	012810-1
	Beryllium	53.9	ug/L	50	ug/L	107.9	90.0 – 110.0	MS	30-JAN-10 09:21	100129-4
	Uranium	48	ug/L	50	ug/L	95.9	90.0 – 110.0	MS	30-JAN-10 16:07	100129-6
	Thallium	50.8	ug/L	50	ug/L	101.6	90.0 – 110.0	MS	03-FEB-10 20:17	100202-7
	Arsenic	47.4	ug/L	50	ug/L	94.9	90.0 – 110.0	MS	08-FEB-10 15:54	100208-2
	Nickel	52.2	ug/L	50	ug/L	104.4	90.0 – 110.0	MS	08-FEB-10 15:54	100208-2
	Selenium	50.4	ug/L	50	ug/L	100.7	90.0 – 110.0	MS	08-FEB-10 15:54	100208-2
CCV05										
	Mercury	5.17	ug/L	5	ug/L	103.5	80.0 – 120.0	AV	28-JAN-10 10:30	012810S1-9
	Aluminum	4900	ug/L	5000	ug/L	98	90.0 – 110.0	P	28-JAN-10 15:06	012810-1
	Antimony	504	ug/L	500	ug/L	100.8	90.0 – 110.0	P	28-JAN-10 15:06	012810-1
	Barium	481	ug/L	500	ug/L	96.2	90.0 – 110.0	P	28-JAN-10 15:06	012810-1
	Cadmium	483	ug/L	500	ug/L	96.7	90.0 – 110.0	P	28-JAN-10 15:06	012810-1
	Calcium	5050	ug/L	5000	ug/L	101.1	90.0 – 110.0	P	28-JAN-10 15:06	012810-1
	Chromium	479	ug/L	500	ug/L	95.8	90.0 – 110.0	P	28-JAN-10 15:06	012810-1
	Cobalt	483	ug/L	500	ug/L	96.6	90.0 – 110.0	P	28-JAN-10 15:06	012810-1
	Copper	478	ug/L	500	ug/L	95.6	90.0 – 110.0	P	28-JAN-10 15:06	012810-1
	Iron	5150	ug/L	5000	ug/L	103	90.0 – 110.0	P	28-JAN-10 15:06	012810-1
	Lead	479	ug/L	500	ug/L	95.8	90.0 – 110.0	P	28-JAN-10 15:06	012810-1
	Magnesium	5230	ug/L	5000	ug/L	104.6	90.0 – 110.0	P	28-JAN-10 15:06	012810-1
	Manganese	477	ug/L	500	ug/L	95.4	90.0 – 110.0	P	28-JAN-10 15:06	012810-1
	Potassium	5050	ug/L	5000	ug/L	100.9	90.0 – 110.0	P	28-JAN-10 15:06	012810-1
	Silver	495	ug/L	500	ug/L	99	90.0 – 110.0	P	28-JAN-10 15:06	012810-1
	Sodium	9850	ug/L	10000	ug/L	98.5	90.0 – 110.0	P	28-JAN-10 15:06	012810-1
	Vanadium	484	ug/L	500	ug/L	96.8	90.0 – 110.0	P	28-JAN-10 15:06	012810-1
	Zinc	478	ug/L	500	ug/L	95.6	90.0 – 110.0	P	28-JAN-10 15:06	012810-1
	Beryllium	52.4	ug/L	50	ug/L	104.7	90.0 – 110.0	MS	30-JAN-10 09:36	100129-4

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1212

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,ICPMS6,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
CCV06										
	Mercury	5.08	ug/L	5	ug/L	101.6	80.0 – 120.0	AV	28-JAN-10 10:50	012810S1-9
	Aluminum	4780	ug/L	5000	ug/L	95.7	90.0 – 110.0	P	28-JAN-10 16:29	012810-1
	Antimony	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	28-JAN-10 16:29	012810-1
	Barium	483	ug/L	500	ug/L	96.6	90.0 – 110.0	P	28-JAN-10 16:29	012810-1
	Cadmium	485	ug/L	500	ug/L	97.1	90.0 – 110.0	P	28-JAN-10 16:29	012810-1
	Calcium	4930	ug/L	5000	ug/L	98.6	90.0 – 110.0	P	28-JAN-10 16:29	012810-1
	Chromium	482	ug/L	500	ug/L	96.4	90.0 – 110.0	P	28-JAN-10 16:29	012810-1
	Cobalt	484	ug/L	500	ug/L	96.9	90.0 – 110.0	P	28-JAN-10 16:29	012810-1
	Copper	479	ug/L	500	ug/L	95.8	90.0 – 110.0	P	28-JAN-10 16:29	012810-1
	Iron	5010	ug/L	5000	ug/L	100.3	90.0 – 110.0	P	28-JAN-10 16:29	012810-1
	Lead	482	ug/L	500	ug/L	96.4	90.0 – 110.0	P	28-JAN-10 16:29	012810-1
	Magnesium	5110	ug/L	5000	ug/L	102.2	90.0 – 110.0	P	28-JAN-10 16:29	012810-1
	Manganese	482	ug/L	500	ug/L	96.3	90.0 – 110.0	P	28-JAN-10 16:29	012810-1
	Potassium	4950	ug/L	5000	ug/L	99.1	90.0 – 110.0	P	28-JAN-10 16:29	012810-1
	Silver	497	ug/L	500	ug/L	99.5	90.0 – 110.0	P	28-JAN-10 16:29	012810-1
	Sodium	9550	ug/L	10000	ug/L	95.5	90.0 – 110.0	P	28-JAN-10 16:29	012810-1
	Vanadium	487	ug/L	500	ug/L	97.4	90.0 – 110.0	P	28-JAN-10 16:29	012810-1
	Zinc	480	ug/L	500	ug/L	96.1	90.0 – 110.0	P	28-JAN-10 16:29	012810-1
CCV07										
	Mercury	5.05	ug/L	5	ug/L	100.9	80.0 – 120.0	AV	28-JAN-10 11:10	012810S1-9
	Aluminum	4820	ug/L	5000	ug/L	96.4	90.0 – 110.0	P	28-JAN-10 17:55	012810-1
	Antimony	514	ug/L	500	ug/L	102.7	90.0 – 110.0	P	28-JAN-10 17:55	012810-1
	Barium	487	ug/L	500	ug/L	97.4	90.0 – 110.0	P	28-JAN-10 17:55	012810-1
	Cadmium	488	ug/L	500	ug/L	97.7	90.0 – 110.0	P	28-JAN-10 17:55	012810-1
	Calcium	4980	ug/L	5000	ug/L	99.7	90.0 – 110.0	P	28-JAN-10 17:55	012810-1
	Chromium	485	ug/L	500	ug/L	97.1	90.0 – 110.0	P	28-JAN-10 17:55	012810-1
	Cobalt	489	ug/L	500	ug/L	97.7	90.0 – 110.0	P	28-JAN-10 17:55	012810-1
	Copper	485	ug/L	500	ug/L	96.9	90.0 – 110.0	P	28-JAN-10 17:55	012810-1
	Iron	5180	ug/L	5000	ug/L	103.6	90.0 – 110.0	P	28-JAN-10 17:55	012810-1
	Lead	484	ug/L	500	ug/L	96.8	90.0 – 110.0	P	28-JAN-10 17:55	012810-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1212

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,ICPMS6,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Magnesium	5230	ug/L	5000	ug/L	104.7	90.0 – 110.0	P	28-JAN-10 17:55	012810-1
	Manganese	489	ug/L	500	ug/L	97.9	90.0 – 110.0	P	28-JAN-10 17:55	012810-1
	Potassium	5000	ug/L	5000	ug/L	100	90.0 – 110.0	P	28-JAN-10 17:55	012810-1
	Silver	504	ug/L	500	ug/L	100.7	90.0 – 110.0	P	28-JAN-10 17:55	012810-1
	Sodium	10200	ug/L	10000	ug/L	102.5	90.0 – 110.0	P	28-JAN-10 17:55	012810-1
	Vanadium	491	ug/L	500	ug/L	98.2	90.0 – 110.0	P	28-JAN-10 17:55	012810-1
	Zinc	485	ug/L	500	ug/L	97	90.0 – 110.0	P	28-JAN-10 17:55	012810-1
CCV08										
	Mercury	4.99	ug/L	5	ug/L	99.9	80.0 – 120.0	AV	28-JAN-10 11:30	012810S1-9
	Aluminum	4880	ug/L	5000	ug/L	97.6	90.0 – 110.0	P	28-JAN-10 19:13	012810-1
	Antimony	500	ug/L	500	ug/L	100	90.0 – 110.0	P	28-JAN-10 19:13	012810-1
	Barium	474	ug/L	500	ug/L	94.8	90.0 – 110.0	P	28-JAN-10 19:13	012810-1
	Cadmium	475	ug/L	500	ug/L	95	90.0 – 110.0	P	28-JAN-10 19:13	012810-1
	Calcium	5030	ug/L	5000	ug/L	100.6	90.0 – 110.0	P	28-JAN-10 19:13	012810-1
	Chromium	471	ug/L	500	ug/L	94.1	90.0 – 110.0	P	28-JAN-10 19:13	012810-1
	Cobalt	476	ug/L	500	ug/L	95.1	90.0 – 110.0	P	28-JAN-10 19:13	012810-1
	Copper	471	ug/L	500	ug/L	94.2	90.0 – 110.0	P	28-JAN-10 19:13	012810-1
	Iron	5170	ug/L	5000	ug/L	103.5	90.0 – 110.0	P	28-JAN-10 19:13	012810-1
	Lead	472	ug/L	500	ug/L	94.5	90.0 – 110.0	P	28-JAN-10 19:13	012810-1
	Magnesium	5260	ug/L	5000	ug/L	105.2	90.0 – 110.0	P	28-JAN-10 19:13	012810-1
	Manganese	477	ug/L	500	ug/L	95.4	90.0 – 110.0	P	28-JAN-10 19:13	012810-1
	Potassium	5040	ug/L	5000	ug/L	100.9	90.0 – 110.0	P	28-JAN-10 19:13	012810-1
	Silver	488	ug/L	500	ug/L	97.7	90.0 – 110.0	P	28-JAN-10 19:13	012810-1
	Sodium	9900	ug/L	10000	ug/L	99	90.0 – 110.0	P	28-JAN-10 19:13	012810-1
	Vanadium	476	ug/L	500	ug/L	95.2	90.0 – 110.0	P	28-JAN-10 19:13	012810-1
	Zinc	470	ug/L	500	ug/L	94	90.0 – 110.0	P	28-JAN-10 19:13	012810-1
CCV09										
	Mercury	5.02	ug/L	5	ug/L	100.4	80.0 – 120.0	AV	28-JAN-10 11:51	012810S1-9
	Aluminum	4920	ug/L	5000	ug/L	98.3	90.0 – 110.0	P	28-JAN-10 20:16	012810-1
	Antimony	506	ug/L	500	ug/L	101.3	90.0 – 110.0	P	28-JAN-10 20:16	012810-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1212

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,ICPMS6,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Barium	483	ug/L	500	ug/L	96.7	90.0 – 110.0	P	28-JAN-10 20:16	012810-1
	Cadmium	485	ug/L	500	ug/L	97.1	90.0 – 110.0	P	28-JAN-10 20:16	012810-1
	Calcium	5150	ug/L	5000	ug/L	103.1	90.0 – 110.0	P	28-JAN-10 20:16	012810-1
	Chromium	481	ug/L	500	ug/L	96.3	90.0 – 110.0	P	28-JAN-10 20:16	012810-1
	Cobalt	485	ug/L	500	ug/L	97.1	90.0 – 110.0	P	28-JAN-10 20:16	012810-1
	Copper	479	ug/L	500	ug/L	95.9	90.0 – 110.0	P	28-JAN-10 20:16	012810-1
	Iron	5320	ug/L	5000	ug/L	106.5	90.0 – 110.0	P	28-JAN-10 20:16	012810-1
	Lead	480	ug/L	500	ug/L	96	90.0 – 110.0	P	28-JAN-10 20:16	012810-1
	Magnesium	5400	ug/L	5000	ug/L	108	90.0 – 110.0	P	28-JAN-10 20:16	012810-1
	Manganese	483	ug/L	500	ug/L	96.6	90.0 – 110.0	P	28-JAN-10 20:16	012810-1
	Potassium	5070	ug/L	5000	ug/L	101.4	90.0 – 110.0	P	28-JAN-10 20:16	012810-1
	Silver	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	28-JAN-10 20:16	012810-1
	Sodium	10100	ug/L	10000	ug/L	101.3	90.0 – 110.0	P	28-JAN-10 20:16	012810-1
	Vanadium	487	ug/L	500	ug/L	97.4	90.0 – 110.0	P	28-JAN-10 20:16	012810-1
	Zinc	480	ug/L	500	ug/L	96.1	90.0 – 110.0	P	28-JAN-10 20:16	012810-1
CCV10										
	Mercury	5	ug/L	5	ug/L	100	80.0 – 120.0	AV	28-JAN-10 12:11	012810S1-9
	Aluminum	4780	ug/L	5000	ug/L	95.6	90.0 – 110.0	P	28-JAN-10 21:20	012810-1
	Antimony	501	ug/L	500	ug/L	100.3	90.0 – 110.0	P	28-JAN-10 21:20	012810-1
	Barium	479	ug/L	500	ug/L	95.8	90.0 – 110.0	P	28-JAN-10 21:20	012810-1
	Cadmium	481	ug/L	500	ug/L	96.3	90.0 – 110.0	P	28-JAN-10 21:20	012810-1
	Calcium	5000	ug/L	5000	ug/L	100	90.0 – 110.0	P	28-JAN-10 21:20	012810-1
	Chromium	477	ug/L	500	ug/L	95.5	90.0 – 110.0	P	28-JAN-10 21:20	012810-1
	Cobalt	480	ug/L	500	ug/L	96	90.0 – 110.0	P	28-JAN-10 21:20	012810-1
	Copper	474	ug/L	500	ug/L	94.7	90.0 – 110.0	P	28-JAN-10 21:20	012810-1
	Iron	5190	ug/L	5000	ug/L	103.8	90.0 – 110.0	P	28-JAN-10 21:20	012810-1
	Lead	477	ug/L	500	ug/L	95.4	90.0 – 110.0	P	28-JAN-10 21:20	012810-1
	Magnesium	5200	ug/L	5000	ug/L	103.9	90.0 – 110.0	P	28-JAN-10 21:20	012810-1
	Manganese	481	ug/L	500	ug/L	96.1	90.0 – 110.0	P	28-JAN-10 21:20	012810-1
	Potassium	4990	ug/L	5000	ug/L	99.7	90.0 – 110.0	P	28-JAN-10 21:20	012810-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1212

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,ICPMS6,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Silver	492	ug/L	500	ug/L	98.4	90.0 – 110.0	P	28-JAN-10 21:20	012810-1
	Sodium	10000	ug/L	10000	ug/L	100.2	90.0 – 110.0	P	28-JAN-10 21:20	012810-1
	Vanadium	482	ug/L	500	ug/L	96.4	90.0 – 110.0	P	28-JAN-10 21:20	012810-1
	Zinc	475	ug/L	500	ug/L	94.9	90.0 – 110.0	P	28-JAN-10 21:20	012810-1
CCV11										
	Mercury	4.99	ug/L	5	ug/L	99.8	80.0 – 120.0	AV	28-JAN-10 12:31	012810S1-9
	Aluminum	4950	ug/L	5000	ug/L	99.1	90.0 – 110.0	P	28-JAN-10 22:16	012810-1
	Antimony	507	ug/L	500	ug/L	101.3	90.0 – 110.0	P	28-JAN-10 22:16	012810-1
	Barium	483	ug/L	500	ug/L	96.6	90.0 – 110.0	P	28-JAN-10 22:16	012810-1
	Cadmium	485	ug/L	500	ug/L	96.9	90.0 – 110.0	P	28-JAN-10 22:16	012810-1
	Calcium	5130	ug/L	5000	ug/L	102.6	90.0 – 110.0	P	28-JAN-10 22:16	012810-1
	Chromium	482	ug/L	500	ug/L	96.3	90.0 – 110.0	P	28-JAN-10 22:16	012810-1
	Cobalt	484	ug/L	500	ug/L	96.7	90.0 – 110.0	P	28-JAN-10 22:16	012810-1
	Copper	479	ug/L	500	ug/L	95.9	90.0 – 110.0	P	28-JAN-10 22:16	012810-1
	Iron	5300	ug/L	5000	ug/L	106.1	90.0 – 110.0	P	28-JAN-10 22:16	012810-1
	Lead	484	ug/L	500	ug/L	96.8	90.0 – 110.0	P	28-JAN-10 22:16	012810-1
	Magnesium	5350	ug/L	5000	ug/L	107.1	90.0 – 110.0	P	28-JAN-10 22:16	012810-1
	Manganese	486	ug/L	500	ug/L	97.2	90.0 – 110.0	P	28-JAN-10 22:16	012810-1
	Potassium	5140	ug/L	5000	ug/L	102.9	90.0 – 110.0	P	28-JAN-10 22:16	012810-1
	Silver	498	ug/L	500	ug/L	99.7	90.0 – 110.0	P	28-JAN-10 22:16	012810-1
	Sodium	10100	ug/L	10000	ug/L	100.5	90.0 – 110.0	P	28-JAN-10 22:16	012810-1
	Vanadium	487	ug/L	500	ug/L	97.4	90.0 – 110.0	P	28-JAN-10 22:16	012810-1
	Zinc	480	ug/L	500	ug/L	96	90.0 – 110.0	P	28-JAN-10 22:16	012810-1
CCV12										
	Mercury	5	ug/L	5	ug/L	100	80.0 – 120.0	AV	28-JAN-10 12:52	012810S1-9
	Aluminum	4920	ug/L	5000	ug/L	98.4	90.0 – 110.0	P	28-JAN-10 23:13	012810-1
	Antimony	507	ug/L	500	ug/L	101.5	90.0 – 110.0	P	28-JAN-10 23:13	012810-1
	Barium	487	ug/L	500	ug/L	97.5	90.0 – 110.0	P	28-JAN-10 23:13	012810-1
	Cadmium	489	ug/L	500	ug/L	97.8	90.0 – 110.0	P	28-JAN-10 23:13	012810-1
	Calcium	5150	ug/L	5000	ug/L	103	90.0 – 110.0	P	28-JAN-10 23:13	012810-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1212

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,ICPMS6,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Chromium	485	ug/L	500	ug/L	97.1	90.0 - 110.0	P	28-JAN-10 23:13	012810-1
	Cobalt	488	ug/L	500	ug/L	97.7	90.0 - 110.0	P	28-JAN-10 23:13	012810-1
	Copper	484	ug/L	500	ug/L	96.9	90.0 - 110.0	P	28-JAN-10 23:13	012810-1
	Iron	5310	ug/L	5000	ug/L	106.2	90.0 - 110.0	P	28-JAN-10 23:13	012810-1
	Lead	484	ug/L	500	ug/L	96.8	90.0 - 110.0	P	28-JAN-10 23:13	012810-1
	Magnesium	5390	ug/L	5000	ug/L	107.8	90.0 - 110.0	P	28-JAN-10 23:13	012810-1
	Manganese	485	ug/L	500	ug/L	96.9	90.0 - 110.0	P	28-JAN-10 23:13	012810-1
	Potassium	5130	ug/L	5000	ug/L	102.6	90.0 - 110.0	P	28-JAN-10 23:13	012810-1
	Silver	503	ug/L	500	ug/L	100.5	90.0 - 110.0	P	28-JAN-10 23:13	012810-1
	Sodium	10000	ug/L	10000	ug/L	100.1	90.0 - 110.0	P	28-JAN-10 23:13	012810-1
	Vanadium	491	ug/L	500	ug/L	98.1	90.0 - 110.0	P	28-JAN-10 23:13	012810-1
	Zinc	484	ug/L	500	ug/L	96.8	90.0 - 110.0	P	28-JAN-10 23:13	012810-1

METALS
-2b-
CRDL Standard for AA & ICP

SDG No: 10-1212

Contract: LANL01004

Lab Code: GEL

AA CRDL Standard Source: SPEX

ICP CRDL Standard Source Solutions Plus

Instrument ID: HG3,ICPMS5,ICPMS6,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Advisory Limits (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
CRDL01										
	Mercury	.159	ug/L	.2	ug/L	79.5	70.0 - 130.0	AV	28-JAN-10 09:08	012810S1-9
	Uranium	.224	ug/L	.2	ug/L	112	70.0 - 130.0	MS	28-JAN-10 09:49	100127-3
	Beryllium	.57	ug/L	.5	ug/L	114	70.0 - 130.0	MS	30-JAN-10 07:34	100129-4
	Uranium	.252	ug/L	.2	ug/L	126	70.0 - 130.0	MS	30-JAN-10 13:21	100129-6
	Thallium	1.09	ug/L	1	ug/L	108.5	70.0 - 130.0	MS	03-FEB-10 17:32	100202-7
	Nickel	2.25	ug/L	2	ug/L	112.6	70.0 - 130.0	MS	08-FEB-10 14:45	100208-2
	Arsenic	5.77	ug/L	5	ug/L	115.3	70.0 - 130.0	MS	08-FEB-10 14:45	100208-2
	Selenium	5.76	ug/L	5	ug/L	115.1	70.0 - 130.0	MS	08-FEB-10 14:45	100208-2
PQL01										
	Aluminum	191	ug/L	200	ug/L	95.7	70.0 - 130.0	P	28-JAN-10 10:49	012810-1
	Copper	8.93	ug/L	10	ug/L	89.3	70.0 - 130.0	P	28-JAN-10 10:49	012810-1
	Cobalt	4.74	ug/L	5	ug/L	94.8	70.0 - 130.0	P	28-JAN-10 10:49	012810-1
	Chromium	4.82	ug/L	5	ug/L	96.5	70.0 - 130.0	P	28-JAN-10 10:49	012810-1
	Cadmium	4.69	ug/L	5	ug/L	93.8	70.0 - 130.0	P	28-JAN-10 10:49	012810-1
	Barium	4.84	ug/L	5	ug/L	96.8	70.0 - 130.0	P	28-JAN-10 10:49	012810-1
	Antimony	8.43	ug/L	10	ug/L	84.3	70.0 - 130.0	P	28-JAN-10 10:49	012810-1
	Sodium	269	ug/L	300	ug/L	89.8	70.0 - 130.0	P	28-JAN-10 10:49	012810-1
	Silver	5.1	ug/L	5	ug/L	102.1	70.0 - 130.0	P	28-JAN-10 10:49	012810-1
	Potassium	166	ug/L	150	ug/L	110.7	70.0 - 130.0	P	28-JAN-10 10:49	012810-1
	Calcium	190	ug/L	200	ug/L	95.2	70.0 - 130.0	P	28-JAN-10 10:49	012810-1
	Zinc	9.34	ug/L	10	ug/L	93.4	70.0 - 130.0	P	28-JAN-10 10:49	012810-1
	Vanadium	5.01	ug/L	5	ug/L	100.1	70.0 - 130.0	P	28-JAN-10 10:49	012810-1
	Iron	100	ug/L	100	ug/L	100.2	70.0 - 130.0	P	28-JAN-10 10:49	012810-1
	Magnesium	236	ug/L	300	ug/L	78.8	70.0 - 130.0	P	28-JAN-10 10:49	012810-1
	Lead	9.52	ug/L	10	ug/L	95.2	70.0 - 130.0	P	28-JAN-10 10:49	012810-1
	Manganese	9.82	ug/L	10	ug/L	98.2	70.0 - 130.0	P	28-JAN-10 10:49	012810-1
PQL02										
	Aluminum	210	ug/L	200	ug/L	104.9	70.0 - 130.0	P	28-JAN-10 14:23	012810-1
	Copper	9.87	ug/L	10	ug/L	98.7	70.0 - 130.0	P	28-JAN-10 14:23	012810-1
	Cobalt	4.7	ug/L	5	ug/L	94.1	70.0 - 130.0	P	28-JAN-10 14:23	012810-1

METALS
-2b-
CRDL Standard for AA & ICP

SDG No: 10-1212

Contract: LANL01004

Lab Code: GEL

AA CRDL Standard Source:

ICP CRDL Standard Source

Instrument ID: HG3,ICPMS5,ICPMS6,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Advisory Limits (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Chromium	4.89	ug/L	5	ug/L	97.9	70.0 - 130.0	P	28-JAN-10 14:23	012810-1
	Cadmium	4.72	ug/L	5	ug/L	94.3	70.0 - 130.0	P	28-JAN-10 14:23	012810-1
	Barium	4.82	ug/L	5	ug/L	96.4	70.0 - 130.0	P	28-JAN-10 14:23	012810-1
	Antimony	10.5	ug/L	10	ug/L	104.6	70.0 - 130.0	P	28-JAN-10 14:23	012810-1
	Sodium	309	ug/L	300	ug/L	102.9	70.0 - 130.0	P	28-JAN-10 14:23	012810-1
	Silver	5.06	ug/L	5	ug/L	101.2	70.0 - 130.0	P	28-JAN-10 14:23	012810-1
	Potassium	189	ug/L	150	ug/L	126.2	70.0 - 130.0	P	28-JAN-10 14:23	012810-1
	Calcium	194	ug/L	200	ug/L	96.8	70.0 - 130.0	P	28-JAN-10 14:23	012810-1
	Zinc	9.52	ug/L	10	ug/L	95.2	70.0 - 130.0	P	28-JAN-10 14:23	012810-1
	Vanadium	4.86	ug/L	5	ug/L	97.3	70.0 - 130.0	P	28-JAN-10 14:23	012810-1
	Lead	10.8	ug/L	10	ug/L	108.2	70.0 - 130.0	P	28-JAN-10 14:23	012810-1
	Magnesium	276	ug/L	300	ug/L	91.9	70.0 - 130.0	P	28-JAN-10 14:23	012810-1
	Iron	113	ug/L	100	ug/L	112.9	70.0 - 130.0	P	28-JAN-10 14:23	012810-1
	Manganese	10	ug/L	10	ug/L	100.2	70.0 - 130.0	P	28-JAN-10 14:23	012810-1
PQL03	Barium	5.08	ug/L	5	ug/L	101.6	70.0 - 130.0	P	28-JAN-10 16:36	012810-1
	Cadmium	5	ug/L	5	ug/L	100	70.0 - 130.0	P	28-JAN-10 16:36	012810-1
	Chromium	4.86	ug/L	5	ug/L	97.3	70.0 - 130.0	P	28-JAN-10 16:36	012810-1
	Cobalt	4.97	ug/L	5	ug/L	99.4	70.0 - 130.0	P	28-JAN-10 16:36	012810-1
	Antimony	10.4	ug/L	10	ug/L	103.8	70.0 - 130.0	P	28-JAN-10 16:36	012810-1
	Sodium	319	ug/L	300	ug/L	106.4	70.0 - 130.0	P	28-JAN-10 16:36	012810-1
	Silver	5.12	ug/L	5	ug/L	102.3	70.0 - 130.0	P	28-JAN-10 16:36	012810-1
	Potassium	180	ug/L	150	ug/L	119.7	70.0 - 130.0	P	28-JAN-10 16:36	012810-1
	Manganese	10.3	ug/L	10	ug/L	102.5	70.0 - 130.0	P	28-JAN-10 16:36	012810-1
	Magnesium	339	ug/L	300	ug/L	112.9	70.0 - 130.0	P	28-JAN-10 16:36	012810-1
	Lead	11.7	ug/L	10	ug/L	117.1	70.0 - 130.0	P	28-JAN-10 16:36	012810-1
	Iron	112	ug/L	100	ug/L	112.3	70.0 - 130.0	P	28-JAN-10 16:36	012810-1
	Aluminum	205	ug/L	200	ug/L	102.5	70.0 - 130.0	P	28-JAN-10 16:36	012810-1
	Copper	10.2	ug/L	10	ug/L	102.2	70.0 - 130.0	P	28-JAN-10 16:36	012810-1
	Vanadium	4.99	ug/L	5	ug/L	99.7	70.0 - 130.0	P	28-JAN-10 16:36	012810-1

METALS
-2b-
CRDL Standard for AA & ICP

SDG No: 10-1212

Contract: LANL01004

Lab Code: GEL

AA CRDL Standard Source:

ICP CRDL Standard Source

Instrument ID: HG3,ICPMS5,ICPMS6,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Advisory Limits (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
PQL04	Zinc	10.3	ug/L	10	ug/L	102.5	70.0 – 130.0	P	28-JAN-10 16:36	012810-1
	Calcium	206	ug/L	200	ug/L	102.9	70.0 – 130.0	P	28-JAN-10 16:36	012810-1
	Aluminum	210	ug/L	200	ug/L	104.9	70.0 – 130.0	P	28-JAN-10 18:02	012810-1
	Iron	120	ug/L	100	ug/L	120.5	70.0 – 130.0	P	28-JAN-10 18:02	012810-1
	Lead	10.4	ug/L	10	ug/L	103.7	70.0 – 130.0	P	28-JAN-10 18:02	012810-1
	Magnesium	296	ug/L	300	ug/L	98.7	70.0 – 130.0	P	28-JAN-10 18:02	012810-1
	Manganese	10.1	ug/L	10	ug/L	100.9	70.0 – 130.0	P	28-JAN-10 18:02	012810-1
	Potassium	162	ug/L	150	ug/L	108.1	70.0 – 130.0	P	28-JAN-10 18:02	012810-1
	Silver	4.96	ug/L	5	ug/L	99.3	70.0 – 130.0	P	28-JAN-10 18:02	012810-1
	Sodium	333	ug/L	300	ug/L	111	70.0 – 130.0	P	28-JAN-10 18:02	012810-1
	Antimony	11.5	ug/L	10	ug/L	115.3	70.0 – 130.0	P	28-JAN-10 18:02	012810-1
	Barium	4.98	ug/L	5	ug/L	99.5	70.0 – 130.0	P	28-JAN-10 18:02	012810-1
	Cadmium	4.94	ug/L	5	ug/L	98.7	70.0 – 130.0	P	28-JAN-10 18:02	012810-1
	Chromium	4.73	ug/L	5	ug/L	94.6	70.0 – 130.0	P	28-JAN-10 18:02	012810-1
	Cobalt	4.8	ug/L	5	ug/L	95.9	70.0 – 130.0	P	28-JAN-10 18:02	012810-1
	Copper	9.77	ug/L	10	ug/L	97.7	70.0 – 130.0	P	28-JAN-10 18:02	012810-1
	Vanadium	5.14	ug/L	5	ug/L	102.8	70.0 – 130.0	P	28-JAN-10 18:02	012810-1
	Zinc	9.94	ug/L	10	ug/L	99.4	70.0 – 130.0	P	28-JAN-10 18:02	012810-1
	Calcium	209	ug/L	200	ug/L	104.5	70.0 – 130.0	P	28-JAN-10 18:02	012810-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1212

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> ug/L	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
ICB01										
	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	28-JAN-10 09:06	012810S1-9
	Uranium	0.077	+/-2	J	0.066	0.2	SOL	MS	28-JAN-10 09:43	100127-3
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	28-JAN-10 10:42	012810-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	28-JAN-10 10:42	012810-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	28-JAN-10 10:42	012810-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	28-JAN-10 10:42	012810-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	28-JAN-10 10:42	012810-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	28-JAN-10 10:42	012810-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	28-JAN-10 10:42	012810-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	28-JAN-10 10:42	012810-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	28-JAN-10 10:42	012810-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	28-JAN-10 10:42	012810-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	28-JAN-10 10:42	012810-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	28-JAN-10 10:42	012810-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	28-JAN-10 10:42	012810-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	28-JAN-10 10:42	012810-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	28-JAN-10 10:42	012810-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	28-JAN-10 10:42	012810-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	28-JAN-10 10:42	012810-1
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	30-JAN-10 07:31	100129-4
	Uranium	0.071	+/-2	J	0.066	0.2	SOL	MS	30-JAN-10 13:16	100129-6
	Thallium	0.315	+/-1	J	0.3	1.0	SOL	MS	03-FEB-10 17:26	100202-7
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	08-FEB-10 14:42	100208-2
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	08-FEB-10 14:42	100208-2
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	08-FEB-10 14:42	100208-2
CCB01										
	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	28-JAN-10 09:11	012810S1-9
	Uranium	0.066	+/-2	U	0.066	0.2	SOL	MS	28-JAN-10 10:12	100127-3
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	28-JAN-10 11:28	012810-1
	Antimony	8.75	+/-10	J	3.3	10.0	SOL	P	28-JAN-10 11:28	012810-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	28-JAN-10 11:28	012810-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1212

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	28-JAN-10 11:28	012810-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	28-JAN-10 11:28	012810-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	28-JAN-10 11:28	012810-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	28-JAN-10 11:28	012810-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	28-JAN-10 11:28	012810-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	28-JAN-10 11:28	012810-1
	Lead	3.82	+/-10	J	2.5	10.0	SOL	P	28-JAN-10 11:28	012810-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	28-JAN-10 11:28	012810-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	28-JAN-10 11:28	012810-1
	Potassium	90.8	+/-250	J	64.0	250	SOL	P	28-JAN-10 11:28	012810-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	28-JAN-10 11:28	012810-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	28-JAN-10 11:28	012810-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	28-JAN-10 11:28	012810-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	28-JAN-10 11:28	012810-1
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	30-JAN-10 07:46	100129-4
	Uranium	0.066	+/-2	U	0.066	0.2	SOL	MS	30-JAN-10 13:45	100129-6
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	03-FEB-10 17:56	100202-7
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	08-FEB-10 14:55	100208-2
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	08-FEB-10 14:55	100208-2
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	08-FEB-10 14:55	100208-2
CCB02	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	28-JAN-10 09:31	012810S1-9
	Uranium	0.066	+/-2	U	0.066	0.2	SOL	MS	28-JAN-10 10:36	100127-3
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	28-JAN-10 12:05	012810-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	28-JAN-10 12:05	012810-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	28-JAN-10 12:05	012810-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	28-JAN-10 12:05	012810-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	28-JAN-10 12:05	012810-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	28-JAN-10 12:05	012810-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	28-JAN-10 12:05	012810-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	28-JAN-10 12:05	012810-1

SW846

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1212

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Iron	80.0	+/-250	U	80.0	250	SOL	P	28-JAN-10 12:05	012810-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	28-JAN-10 12:05	012810-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	28-JAN-10 12:05	012810-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	28-JAN-10 12:05	012810-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	28-JAN-10 12:05	012810-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	28-JAN-10 12:05	012810-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	28-JAN-10 12:05	012810-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	28-JAN-10 12:05	012810-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	28-JAN-10 12:05	012810-1
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	30-JAN-10 08:21	100129-4
	Uranium	0.066	+/-2	U	0.066	0.2	SOL	MS	30-JAN-10 14:09	100129-6
	Thallium	0.329	+/-1	J	0.3	1.0	SOL	MS	03-FEB-10 18:19	100202-7
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	08-FEB-10 15:17	100208-2
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	08-FEB-10 15:17	100208-2
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	08-FEB-10 15:17	100208-2
CCB03	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	28-JAN-10 09:52	012810S1-9
	Uranium	0.066	+/-2	U	0.066	0.2	SOL	MS	28-JAN-10 11:35	100127-3
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	28-JAN-10 13:16	012810-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	28-JAN-10 13:16	012810-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	28-JAN-10 13:16	012810-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	28-JAN-10 13:16	012810-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	28-JAN-10 13:16	012810-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	28-JAN-10 13:16	012810-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	28-JAN-10 13:16	012810-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	28-JAN-10 13:16	012810-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	28-JAN-10 13:16	012810-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	28-JAN-10 13:16	012810-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	28-JAN-10 13:16	012810-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	28-JAN-10 13:16	012810-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	28-JAN-10 13:16	012810-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1212

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result ug/L</u>	<u>Acceptance</u>	<u>Conc Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run</u>
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	28-JAN-10 13:16	012810-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	28-JAN-10 13:16	012810-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	28-JAN-10 13:16	012810-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	28-JAN-10 13:16	012810-1
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	30-JAN-10 08:52	100129-4
	Uranium	0.066	+/-2	U	0.066	0.2	SOL	MS	30-JAN-10 15:08	100129-6
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	03-FEB-10 19:18	100202-7
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	08-FEB-10 15:37	100208-2
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	08-FEB-10 15:37	100208-2
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	08-FEB-10 15:37	100208-2
CCB04	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	28-JAN-10 10:12	012810S1-9
	Uranium	0.066	+/-2	U	0.066	0.2	SOL	MS	28-JAN-10 12:40	100127-3
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	28-JAN-10 14:30	012810-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	28-JAN-10 14:30	012810-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	28-JAN-10 14:30	012810-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	28-JAN-10 14:30	012810-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	28-JAN-10 14:30	012810-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	28-JAN-10 14:30	012810-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	28-JAN-10 14:30	012810-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	28-JAN-10 14:30	012810-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	28-JAN-10 14:30	012810-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	28-JAN-10 14:30	012810-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	28-JAN-10 14:30	012810-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	28-JAN-10 14:30	012810-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	28-JAN-10 14:30	012810-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	28-JAN-10 14:30	012810-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	28-JAN-10 14:30	012810-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	28-JAN-10 14:30	012810-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	28-JAN-10 14:30	012810-1
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	30-JAN-10 09:24	100129-4

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1212

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> ug/L	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
CCB05	Uranium	0.066	+/-2	U	0.066	0.2	SOL	MS	30-JAN-10 16:13	100129-6
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	03-FEB-10 20:23	100202-7
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	08-FEB-10 15:57	100208-2
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	08-FEB-10 15:57	100208-2
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	08-FEB-10 15:57	100208-2
	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	28-JAN-10 10:32	012810S1-9
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	28-JAN-10 15:13	012810-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	28-JAN-10 15:13	012810-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	28-JAN-10 15:13	012810-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	28-JAN-10 15:13	012810-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	28-JAN-10 15:13	012810-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	28-JAN-10 15:13	012810-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	28-JAN-10 15:13	012810-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	28-JAN-10 15:13	012810-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	28-JAN-10 15:13	012810-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	28-JAN-10 15:13	012810-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	28-JAN-10 15:13	012810-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	28-JAN-10 15:13	012810-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	28-JAN-10 15:13	012810-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	28-JAN-10 15:13	012810-1
CCB06	Sodium	70.0	+/-250	U	70.0	250	SOL	P	28-JAN-10 15:13	012810-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	28-JAN-10 15:13	012810-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	28-JAN-10 15:13	012810-1
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	30-JAN-10 09:39	100129-4
	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	28-JAN-10 10:52	012810S1-9
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	28-JAN-10 16:43	012810-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	28-JAN-10 16:43	012810-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	28-JAN-10 16:43	012810-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	28-JAN-10 16:43	012810-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1212

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ng/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	28-JAN-10 16:43	012810-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	28-JAN-10 16:43	012810-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	28-JAN-10 16:43	012810-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	28-JAN-10 16:43	012810-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	28-JAN-10 16:43	012810-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	28-JAN-10 16:43	012810-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	28-JAN-10 16:43	012810-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	28-JAN-10 16:43	012810-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	28-JAN-10 16:43	012810-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	28-JAN-10 16:43	012810-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	28-JAN-10 16:43	012810-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	28-JAN-10 16:43	012810-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	28-JAN-10 16:43	012810-1
CCB07	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	28-JAN-10 11:12	012810S1-9
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	28-JAN-10 18:09	012810-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	28-JAN-10 18:09	012810-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	28-JAN-10 18:09	012810-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	28-JAN-10 18:09	012810-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	28-JAN-10 18:09	012810-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	28-JAN-10 18:09	012810-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	28-JAN-10 18:09	012810-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	28-JAN-10 18:09	012810-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	28-JAN-10 18:09	012810-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	28-JAN-10 18:09	012810-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	28-JAN-10 18:09	012810-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	28-JAN-10 18:09	012810-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	28-JAN-10 18:09	012810-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	28-JAN-10 18:09	012810-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	28-JAN-10 18:09	012810-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	28-JAN-10 18:09	012810-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1212

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
CCB08	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	28-JAN-10 18:09	012810-1
	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	28-JAN-10 11:32	012810S1-9
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	28-JAN-10 19:20	012810-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	28-JAN-10 19:20	012810-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	28-JAN-10 19:20	012810-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	28-JAN-10 19:20	012810-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	28-JAN-10 19:20	012810-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	28-JAN-10 19:20	012810-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	28-JAN-10 19:20	012810-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	28-JAN-10 19:20	012810-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	28-JAN-10 19:20	012810-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	28-JAN-10 19:20	012810-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	28-JAN-10 19:20	012810-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	28-JAN-10 19:20	012810-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	28-JAN-10 19:20	012810-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	28-JAN-10 19:20	012810-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	28-JAN-10 19:20	012810-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	28-JAN-10 19:20	012810-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	28-JAN-10 19:20	012810-1
CCB09	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	28-JAN-10 11:52	012810S1-9
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	28-JAN-10 20:23	012810-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	28-JAN-10 20:23	012810-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	28-JAN-10 20:23	012810-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	28-JAN-10 20:23	012810-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	28-JAN-10 20:23	012810-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	28-JAN-10 20:23	012810-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	28-JAN-10 20:23	012810-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	28-JAN-10 20:23	012810-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	28-JAN-10 20:23	012810-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1212

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result ug/L</u>	<u>Acceptance</u>	<u>Conc Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run</u>
CCB10	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	28-JAN-10 20:23	012810-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	28-JAN-10 20:23	012810-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	28-JAN-10 20:23	012810-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	28-JAN-10 20:23	012810-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	28-JAN-10 20:23	012810-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	28-JAN-10 20:23	012810-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	28-JAN-10 20:23	012810-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	28-JAN-10 20:23	012810-1
CCB10	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	28-JAN-10 12:13	012810S1-9
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	28-JAN-10 21:27	012810-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	28-JAN-10 21:27	012810-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	28-JAN-10 21:27	012810-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	28-JAN-10 21:27	012810-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	28-JAN-10 21:27	012810-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	28-JAN-10 21:27	012810-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	28-JAN-10 21:27	012810-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	28-JAN-10 21:27	012810-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	28-JAN-10 21:27	012810-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	28-JAN-10 21:27	012810-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	28-JAN-10 21:27	012810-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	28-JAN-10 21:27	012810-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	28-JAN-10 21:27	012810-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	28-JAN-10 21:27	012810-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	28-JAN-10 21:27	012810-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	28-JAN-10 21:27	012810-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	28-JAN-10 21:27	012810-1
CCB11	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	28-JAN-10 12:33	012810S1-9
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	28-JAN-10 22:23	012810-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	28-JAN-10 22:23	012810-1

SW846

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1212

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ng/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	28-JAN-10 22:23	012810-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	28-JAN-10 22:23	012810-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	28-JAN-10 22:23	012810-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	28-JAN-10 22:23	012810-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	28-JAN-10 22:23	012810-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	28-JAN-10 22:23	012810-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	28-JAN-10 22:23	012810-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	28-JAN-10 22:23	012810-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	28-JAN-10 22:23	012810-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	28-JAN-10 22:23	012810-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	28-JAN-10 22:23	012810-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	28-JAN-10 22:23	012810-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	28-JAN-10 22:23	012810-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	28-JAN-10 22:23	012810-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	28-JAN-10 22:23	012810-1
CCB12	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	28-JAN-10 12:53	012810S1-9
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	28-JAN-10 23:20	012810-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	28-JAN-10 23:20	012810-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	28-JAN-10 23:20	012810-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	28-JAN-10 23:20	012810-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	28-JAN-10 23:20	012810-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	28-JAN-10 23:20	012810-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	28-JAN-10 23:20	012810-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	28-JAN-10 23:20	012810-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	28-JAN-10 23:20	012810-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	28-JAN-10 23:20	012810-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	28-JAN-10 23:20	012810-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	28-JAN-10 23:20	012810-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	28-JAN-10 23:20	012810-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	28-JAN-10 23:20	012810-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1212

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	28-JAN-10 23:20	012810-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	28-JAN-10 23:20	012810-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	28-JAN-10 23:20	012810-1

METALS
-3b-
PREPARATION BLANK SUMMARY

SDG NO. 10-1212
Contract: LANL01004
Matrix: SOIL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Acceptance Window</u>	<u>Conc Qual</u>	<u>M</u>	<u>MDL</u>	<u>RDL</u>
1202015660								
	Sodium	6930	ug/Kg	+/-24800	U	P	6930	24800
	Vanadium	99	ug/Kg	+/-495	U	P	99	495
	Zinc	327	ug/Kg	+/-990	U	P	327	990
	Antimony	327	ug/Kg	+/-990	U	P	327	990
	Calcium	7920	ug/Kg	+/-24800	U	P	7920	24800
	Cadmium	99	ug/Kg	+/-495	U	P	99	495
	Barium	99	ug/Kg	+/-495	U	P	99	495
	Aluminum	6730	ug/Kg	+/-19800	U	P	6730	19800
	Chromium	149	ug/Kg	+/-495	U	P	149	495
	Silver	99	ug/Kg	+/-495	U	P	99	495
	Potassium	6340	ug/Kg	+/-24800	U	P	6340	24800
	Manganese	198	ug/Kg	+/-990	U	P	198	990
	Magnesium	8420	ug/Kg	+/-29700	U	P	8420	29700
	Lead	248	ug/Kg	+/-990	U	P	248	990
	Iron	7920	ug/Kg	+/-24800	U	P	7920	24800
	Copper	297	ug/Kg	+/-990	U	P	297	990
	Cobalt	149	ug/Kg	+/-495	U	P	149	495
1202015679								
	Arsenic	0.199	mg/kg	+/-0.994	U	MS	0.199	0.994
	Beryllium	0.0199	mg/kg	+/-0.0994	U	MS	0.0199	0.0994
	Nickel	0.0994	mg/kg	+/-0.398	U	MS	0.0994	0.398
	Selenium	0.497	mg/kg	+/-0.994	U	MS	0.497	0.994
	Thallium	0.0596	mg/kg	+/-0.199	U	MS	0.0596	0.199
	Uranium	0.0131	mg/kg	+/-0.0398	U	MS	0.0131	0.0398
1202019751								
	Mercury	4.06	ug/kg	+/-12	U	AV	4.06	12

METALS

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Interference Check Sample

SDG No: 10-1212

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICSA01									
	Aluminum	527000	ug/L	500000	ug/L	105	80.0 - 120.0	28-JAN-10 10:56	012810-1
	Antimony	-1.45	ug/L					28-JAN-10 10:56	012810-1
	Barium	1.26	ug/L					28-JAN-10 10:56	012810-1
	Cadmium	-0.219	ug/L					28-JAN-10 10:56	012810-1
	Calcium	485000	ug/L	500000	ug/L	97.1	80.0 - 120.0	28-JAN-10 10:56	012810-1
	Chromium	1.74	ug/L					28-JAN-10 10:56	012810-1
	Cobalt	-1.82	ug/L					28-JAN-10 10:56	012810-1
	Copper	4.74	ug/L					28-JAN-10 10:56	012810-1
	Iron	188000	ug/L	200000	ug/L	94.2	80.0 - 120.0	28-JAN-10 10:56	012810-1
	Lead	10.0	ug/L					28-JAN-10 10:56	012810-1
	Magnesium	499000	ug/L	500000	ug/L	99.9	80.0 - 120.0	28-JAN-10 10:56	012810-1
	Manganese	-3.41	ug/L					28-JAN-10 10:56	012810-1
	Potassium	-137.0	ug/L					28-JAN-10 10:56	012810-1
	Silver	4.62	ug/L					28-JAN-10 10:56	012810-1
	Sodium	-5.06	ug/L					28-JAN-10 10:56	012810-1
	Vanadium	-1.43	ug/L					28-JAN-10 10:56	012810-1
	Zinc	8.02	ug/L					28-JAN-10 10:56	012810-1
ICSAB01									
	Aluminum	528000	ug/L	500000	ug/L	106	80.0 - 120.0	28-JAN-10 11:02	012810-1
	Antimony	542	ug/L	500	ug/L	108	80.0 - 120.0	28-JAN-10 11:02	012810-1
	Barium	476	ug/L	500	ug/L	95.2	80.0 - 120.0	28-JAN-10 11:02	012810-1
	Cadmium	433	ug/L	500	ug/L	86.5	80.0 - 120.0	28-JAN-10 11:02	012810-1
	Calcium	484000	ug/L	500000	ug/L	96.7	80.0 - 120.0	28-JAN-10 11:02	012810-1
	Chromium	458	ug/L	500	ug/L	91.7	80.0 - 120.0	28-JAN-10 11:02	012810-1
	Cobalt	427	ug/L	500	ug/L	85.4	80.0 - 120.0	28-JAN-10 11:02	012810-1
	Copper	543	ug/L	500	ug/L	109	80.0 - 120.0	28-JAN-10 11:02	012810-1
	Iron	188000	ug/L	200000	ug/L	93.8	80.0 - 120.0	28-JAN-10 11:02	012810-1
	Lead	455	ug/L	500	ug/L	91.1	80.0 - 120.0	28-JAN-10 11:02	012810-1
	Magnesium	501000	ug/L	500000	ug/L	100	80.0 - 120.0	28-JAN-10 11:02	012810-1

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METALS

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Interference Check Sample

SDG No: 10-1212

Contract: LANL01004

Lab Code: GEL

ICS:

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Manganese	462	ug/L	500	ug/L	92.4	80.0 – 120.0	28-JAN-10 11:02	012810-1
	Potassium	5350	ug/L	5000	ug/L	107	80.0 – 120.0	28-JAN-10 11:02	012810-1
	Silver	268	ug/L	250	ug/L	107	80.0 – 120.0	28-JAN-10 11:02	012810-1
	Sodium	5430	ug/L	5000	ug/L	109	80.0 – 120.0	28-JAN-10 11:02	012810-1
	Vanadium	478	ug/L	500	ug/L	95.6	80.0 – 120.0	28-JAN-10 11:02	012810-1
	Zinc	482	ug/L	500	ug/L	96.5	80.0 – 120.0	28-JAN-10 11:02	012810-1

METALS

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Interference Check Sample

SDG No: 10-1212

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: ICPMS5

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICSA01	Arsenic	0.045	ug/L					08-FEB-10 14:47	100208-2
	Nickel	3.63	ug/L					08-FEB-10 14:47	100208-2
	Selenium	-1.31	ug/L					08-FEB-10 14:47	100208-2
ICSAB01	Arsenic	19.9	ug/L	20	ug/L	99.3	80.0 - 120.0	08-FEB-10 14:50	100208-2
	Nickel	23.3	ug/L	23.31	ug/L	100	80.0 - 120.0	08-FEB-10 14:50	100208-2
	Selenium	17.6	ug/L	20	ug/L	88.2	80.0 - 120.0	08-FEB-10 14:50	100208-2

METALS

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Interference Check Sample

SDG No: 10-1212

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: ICPMS6

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICSA01	Uranium	0.005	ug/L					28-JAN-10 09:55	100127-3
ICSAB01	Uranium	22.0	ug/L	20	ug/L	110	80.0 - 120.0	28-JAN-10 10:01	100127-3

METALS

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Interference Check Sample

SDG No: 10-1212

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: ICPMS6

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICSA01	Beryllium	0.065	ug/L					30-JAN-10 07:37	100129-4
ICSAB01	Beryllium	19.7	ug/L	20	ug/L	98.3	80.0 - 120.0	30-JAN-10 07:40	100129-4

METALS

-4-

Interference Check Sample

SDG No: 10-1212

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: ICPMS6

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICSA01	Uranium	0.0	ug/L					30-JAN-10 13:27	100129-6
ICSAB01	Uranium	20.1	ug/L	20	ug/L	101	80.0 - 120.0	30-JAN-10 13:33	100129-6

METALS

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Interference Check Sample

SDG No: 10-1212

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: ICPMS6

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICSA01	Thallium	-0.082	ug/L					03-FEB-10 17:38	100202-7
ICSAB01	Thallium	18.5	ug/L	20	ug/L	92.3	80.0 - 120.0	03-FEB-10 17:44	100202-7

METALS

-5a-

Matrix Spike Summary

SDG NO. 10-1212 Client ID RE12-10-7243S

Contract: LANL01004 Level: Low

Matrix: SOIL % Solids: 94.2

Sample ID: 244601001 Spike ID: 1202015663

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/Kg		5880000		2970000		527000	552	N/A	P
Antimony	ug/Kg	75-125	48200		348	U	52700	91.5		P
Barium	ug/Kg	75-125	88700		70200		52700	35.1	N	P
Cadmium	ug/Kg	75-125	49800		105	U	52700	94.5		P
Calcium	ug/Kg	75-125	1340000		782000		527000	107		P
Chromium	ug/Kg	75-125	55100		10300		52700	85.1		P
Cobalt	ug/Kg	75-125	52900		5800		52700	89.5		P
Copper	ug/Kg	75-125	58200		4010		52700	103		P
Iron	ug/Kg		8370000		8120000		527000	46.8	N/A	P
Lead	ug/Kg	75-125	54900		7810		52700	89.3		P
Magnesium	ug/Kg	75-125	1330000		635000		527000	133	N	P
Manganese	ug/Kg		288000		391000		52700	-195	N/A	P
Potassium	ug/Kg	75-125	1240000		565000		527000	128	N	P
Silver	ug/Kg	75-125	52700		403	J	52700	99.3		P
Sodium	ug/Kg	75-125	639000		85200		527000	105		P
Vanadium	ug/Kg	75-125	55300		8510		52700	88.9		P
Zinc	ug/Kg	75-125	74900		24000		52700	96.6		P

METALS

-5a-

Matrix Spike Duplicate Summary

SDG NO. 10-1212 Client ID RE12-10-7243SD

Contract: LANL01004 Level: Low

Matrix: SOIL % Solids: 94.2

Sample ID: 244601001 Spike ID: 1202015664

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Potassium	ug/Kg	75-125	1350000		565000		506000	155	N	P
Silver	ug/Kg	75-125	50600		403	J	50600	99.3		P
Sodium	ug/Kg	75-125	616000		85200		506000	105		P
Vanadium	ug/Kg	75-125	54300		8510		50600	90.5		P
Zinc	ug/Kg	75-125	74500		24000		50600	99.7		P
Aluminum	ug/Kg		6920000		2970000		506000	780	N/A	P
Antimony	ug/Kg	75-125	45800		348	U	50600	90.6		P
Barium	ug/Kg	75-125	92200		70200		50600	43.4	N	P
Cadmium	ug/Kg	75-125	47700		105	U	50600	94.2		P
Calcium	ug/Kg	75-125	1400000		782000		506000	122		P
Chromium	ug/Kg	75-125	54400		10300		50600	87.3		P
Cobalt	ug/Kg	75-125	50900		5800		50600	89.2		P
Copper	ug/Kg	75-125	55500		4010		50600	102		P
Iron	ug/Kg		9280000		8120000		506000	229	N/A	P
Lead	ug/Kg	75-125	53100		7810		50600	89.5		P
Magnesium	ug/Kg	75-125	1450000		635000		506000	162	N	P
Manganese	ug/Kg		290000		391000		50600	-200	N/A	P

METALS

-5a-

Matrix Spike Summary

SDG NO. 10-1212

Client ID: RE12-10-7243S

Contract: LANL01004

Level: Low

Matrix: SOIL

% Solids: 94.2

Sample ID: 244601001

Spike ID: 1202015682

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	mg/kg	75-125	9.21		1.31		8.46	93.3		MS
Beryllium	mg/kg	75-125	5.31		0.425		5.29	92.3		MS
Nickel	mg/kg	75-125	9.32		4.04		5.29	99.8		MS
Selenium	mg/kg	75-125	1.86		0.514	U	2.12	88.1		MS
Thallium	mg/kg	75-125	10.3		0.0684	J	10.6	96.7		MS
Uranium	mg/kg	75-125	5.38		1.04		5.29	82.1		MS

METALS

-5a-

Matrix Spike Duplicate Summary

SDG NO. 10-1212 Client ID RE12-10-7243SD

Contract: LANL01004 Level: Low

Matrix: SOIL % Solids: 94.2

Sample ID: 244601001 Spike ID: 1202015683

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	mg/kg	75-125	9.11		1.31		8.26	94.4		MS
Beryllium	mg/kg	75-125	5.17		0.425		5.17	91.9		MS
Nickel	mg/kg	75-125	9.59		4.04		5.17	108		MS
Selenium	mg/kg	75-125	1.72		0.514	U	2.07	83.2		MS
Thallium	mg/kg	75-125	10.1		0.0684	J	10.3	97.1		MS
Uranium	mg/kg	75-125	5.79		1.04		5.17	92		MS

METALS

-5a-

Matrix Spike Summary

SDG NO. 10-1212 **Client ID** RE12-10-7243S**Contract:** LANL01004 **Level:** Low**Matrix:** SOIL **% Solids:** 94.2**Sample ID:** 244601001 **Spike ID:** 1202019754

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/kg	75-125	123		3.88	U	112	107		AV

METALS

-5a-

Matrix Spike Duplicate Summary

SDG NO. 10-1212 Client ID RE12-10-7243SD

Contract: LANL01004 Level: Low

Matrix: SOIL % Solids: 94.2

Sample ID: 244601001 Spike ID: 1202019756

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/kg	75-125	130		3.88	U	123	102		AV

Metals

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Duplicate Sample Summary

SDG No.: 10-1212

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE12-10-7243D

Sample ID: 244601001

Duplicate ID: 1202015661

Percent Solids for Dup: 94.2

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/Kg	+/-20%	2970000		3380000		12.7		P
Antimony	ug/Kg		348 U		344 U				P
Barium	ug/Kg	+/-20%	70200		46200		41.2	*	P
Cadmium	ug/Kg		105 U		104 U				P
Calcium	ug/Kg	+/-20%	782000		818000		4.48		P
Chromium	ug/Kg	+/-20%	10300		6530		44.6	*	P
Cobalt	ug/Kg	+/-20%	5800		5890		1.5		P
Copper	ug/Kg	+/-1040	4010		3970		.931		P
Iron	ug/Kg	+/-20%	8120000		8740000		7.29		P
Lead	ug/Kg	+/-20%	7810		5890		28	*	P
Magnesium	ug/Kg	+/-20%	635000		701000		9.99		P
Manganese	ug/Kg	+/-20%	391000		300000		26.4	*	P
Potassium	ug/Kg	+/-20%	565000		638000		12.2		P
Silver	ug/Kg	+/-521	403 J		329 J		20.3		P
Sodium	ug/Kg	+/-26000	85200		92900		8.63		P
Vanadium	ug/Kg	+/-20%	8510		7960		6.73		P
Zinc	ug/Kg	+/-20%	24000		29200		19.4		P

Metals

-6-

Duplicate Sample Summary

SDG No.: 10-1212

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE12-10-7243SD

Sample ID: 1202015663

Duplicate ID: 1202015664

Percent Solids for Dup: 94.2

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/Kg	+/-20	5880000		6920000		16.2		P
Antimony	ug/Kg	+/-20	48200		45800		5.05		P
Barium	ug/Kg	+/-20	88700		92200		3.83		P
Cadmium	ug/Kg	+/-20	49800		47700		4.37		P
Calcium	ug/Kg	+/-20	1340000		1400000		4.09		P
Chromium	ug/Kg	+/-20	55100		54400		1.24		P
Cobalt	ug/Kg	+/-20	52900		50900		3.89		P
Copper	ug/Kg	+/-20	58200		55500		4.86		P
Iron	ug/Kg	+/-20	8370000		9280000		10.3		P
Lead	ug/Kg	+/-20	54900		53100		3.33		P
Magnesium	ug/Kg	+/-20	1330000		1450000		8.76		P
Manganese	ug/Kg	+/-20	288000		290000		.562		P
Potassium	ug/Kg	+/-20	1240000		1350000		8.25		P
Silver	ug/Kg	+/-20	52700		50600		4.02		P
Sodium	ug/Kg	+/-20	639000		616000		3.59		P
Vanadium	ug/Kg	+/-20	55300		54300		1.89		P
Zinc	ug/Kg	+/-20	74900		74500		.598		P

Metals

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Duplicate Sample Summary

SDG No.: 10-1212

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE12-10-7243D

Sample ID: 244601001

Duplicate ID: 1202015680

Percent Solids for Dup: 94.2

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	mg/kg	+/-1.01	1.31		1.22		7.14		MS
Beryllium	mg/kg	+/-1.01	0.425		0.368		14.2		MS
Nickel	mg/kg	+/-20%	4.04		3.66		9.88		MS
Selenium	mg/kg		0.514 U		0.506 U				MS
Thallium	mg/kg		0.0684 J		0.0607 U		200		MS
Uranium	mg/kg	+/-20%	1.04		1.29		21.9	*	MS

Metals

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Duplicate Sample Summary

SDG No.: 10-1212

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE12-10-7243SD

Sample ID: 1202015682

Duplicate ID: 1202015683

Percent Solids for Dup: 94.2

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	mg/kg	+/-20	9.21		9.11		1.08		MS
Beryllium	mg/kg	+/-20	5.31		5.17		2.55		MS
Nickel	mg/kg	+/-20	9.32		9.59		2.92		MS
Selenium	mg/kg	+/-20	1.86		1.72		8.08		MS
Thallium	mg/kg	+/-20	10.3		10.1		1.91		MS
Uranium	mg/kg	+/-20	5.38		5.79		7.32		MS

Metals

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Duplicate Sample Summary

SDG No.: 10-1212

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE12-10-7243D

Sample ID: 244601001

Duplicate ID: 1202019753

Percent Solids for Dup: 94.2

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/kg		3.88 U		4.01 U				AV

Metals

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Duplicate Sample Summary

SDG No.: 10-1212

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE12-10-7243SD

Sample ID: 1202019754

Duplicate ID: 1202019756

Percent Solids for Dup: 94.2

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/kg	+/-20	123		130		5.9		AV

METALS

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Laboratory Control Sample Summary

SDG NO. 10-1212

Contract: LANL01004

Aqueous LCS Source:

Solid LCS Source: ERA

<u>Sample ID</u>	<u>Analyte</u>	<u>Units</u>	<u>True Value</u>	<u>Result</u>	<u>C</u>	<u>% Recovery</u>	<u>Acceptance Limit</u>	<u>M</u>
1202015665								
	Antimony	ug/Kg	173000	151000		87.3	71-130	P
	Barium	ug/Kg	198000	194000		97.9	80-120	P
	Cadmium	ug/Kg	60700	57200		94.2	81-120	P
	Calcium	ug/Kg	9870000	10100000		103	83-117	P
	Chromium	ug/Kg	236000	231000		98.1	80-120	P
	Cobalt	ug/Kg	91200	89600		98.2	81-120	P
	Copper	ug/Kg	174000	189000		109	81-118	P
	Iron	ug/Kg	18000000	19000000		105	51-149	P
	Lead	ug/Kg	86000	83600		97.2	79-121	P
	Magnesium	ug/Kg	4000000	3920000		98	79-122	P
	Manganese	ug/Kg	558000	520000		93.1	81-119	P
	Potassium	ug/Kg	4300000	4290000		99.8	74-127	P
	Silver	ug/Kg	30100	31900		106	66-134	P
	Sodium	ug/Kg	1020000	1020000		100	74-127	P
	Vanadium	ug/Kg	115000	119000		104	79-121	P
	Zinc	ug/Kg	594000	573000		96.4	80-121	P
	Aluminum	ug/Kg	10500000	8900000		84.8	56-144	P

METALS

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Laboratory Control Sample Summary

SDG NO. 10-1212

Contract: LANL01004

Aqueous LCS Source:

Solid LCS Source: ERA

<u>Sample ID</u>	<u>Analyte</u>	<u>Units</u>	<u>True Value</u>	<u>Result</u>	<u>C</u>	<u>% Recovery</u>	<u>Acceptance Limit</u>	<u>M</u>
1202015684								
	Thallium	mg/kg	121	145		120	78-123.2	MS
	Uranium	mg/kg	2.13	1.88		88.4	61.9-130.7	MS
	Arsenic	mg/kg	104	111		107	83-120	MS
	Beryllium	mg/kg	77.6	84.9		109	81.2-126.8	MS
	Nickel	mg/kg	134	155		116	83.3-121.4	MS
	Selenium	mg/kg	286	305		107	80.2-125.9	MS

METALS

-7-

Laboratory Control Sample Summary

SDG NO. 10-1212

Contract: LANL01004

Aqueous LCS Source:

Solid LCS Source: ERA

<u>Sample ID</u>	<u>Analyte</u>	<u>Units</u>	<u>True Value</u>	<u>Result</u>	<u>C</u>	<u>% Recovery</u>	<u>Acceptance Limit</u>	<u>M</u>
1202019752	Mercury	ug/kg	5150	5370		104	71.6-128.3	AV

METALS

-9-

Serial Dilution Sample Summary

SDG NO. 10-1212

Client ID RE12-10-7243L

Contract: LANL01004

Matrix: SOLID

Level: Low

Sample ID: 244601001

Serial Dilution ID: 1202015662

Analyte	Initial Value ng/L	C	Serial Value ng/L	C	% Difference	Qual	Acceptance Limit	M
Aluminum	28200		26900		4.79		10	P
Antimony	3.3	U	16.5	U				P
Barium	666		685		2.85		10	P
Cadmium	1	U	5	U				P
Calcium	7420		7400		.27		10	P
Chromium	97.6		97		.615		10	P
Cobalt	55		56		1.82			P
Copper	38		39.7	J	4.34			P
Iron	77100		79500		3.11		10	P
Lead	74.1		77.5		4.59			P
Magnesium	6020		5900		1.99		10	P
Manganese	3710		3880		4.58		10	P
Potassium	5360		5250		2.05		10	P
Silver	3.82	J	5	U	100			P
Sodium	809		800	J	1.11			P
Vanadium	80.8		83		2.72		10	P
Zinc	228		231		1.32		10	P

METALS

-9-

Serial Dilution Sample Summary

SDG NO. 10-1212

Client ID RE12-10-7243L

Contract: LANL01004

Matrix: SOLID

Level: Low

Sample ID: 244601001

Serial Dilution ID: 1202015681

Analyte	<u>Initial Value ug/L</u>	<u>C</u>	<u>Serial Value ug/L</u>	<u>C</u>	<u>% Difference</u>	<u>Qual</u>	<u>Acceptance Limit</u>	<u>M</u>
Arsenic	6.38		6.2	J	2.82			MS
Beryllium	2.07		2.46	J	18.8			MS
Nickel	19.7		20.3		3.05			MS
Selenium	2.5	U	12.5	U				MS
Thallium	.333	J	1.79	J	436			MS
Uranium	5.06		5.85		15.6			MS

METALS

-9-

Serial Dilution Sample Summary

SDG NO. 10-1212 Client ID RE12-10-7243L

Contract: LANL01004

Matrix: SOLID Level: Low

Sample ID: 244601001 Serial Dilution ID: 1202019755

Analyte	Initial Value ng/L	C	Serial Value ng/L	C	% Difference	Qual	Acceptance Limit	M
Mercury	.068	U	.34	U				AV

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-1212

Method Type: P

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Client ID</u>	<u>Sample Type</u>	<u>Matrix</u>	<u>Prep Date</u>	<u>Initial Sample Size</u>	<u>Final Sample Volume</u>	<u>Percent Solids</u>
Batch Number	941725						
1202015660	MB for batch 941725	MB	S	20-JAN-10	.505g	50mL	
1202015665	LCS for batch 941725	LCS	S	20-JAN-10	.517g	50mL	
1202015663	RE12-10-7243S	MS	S	20-JAN-10	.504g	50mL	
1202015664	RE12-10-7243SD	MSD	S	20-JAN-10	.525g	50mL	
1202015661	RE12-10-7243D	DUP	S	20-JAN-10	.51g	50mL	
244601001	RE12-10-7243	SAMPLE	S	20-JAN-10	.504g	50mL	
244601002	RE12-10-7240	SAMPLE	S	20-JAN-10	.504g	50mL	
244601003	RE12-10-7241	SAMPLE	S	20-JAN-10	.504g	50mL	
244601004	RE12-10-7237	SAMPLE	S	20-JAN-10	.51g	50mL	
244601005	RE12-10-7239	SAMPLE	S	20-JAN-10	.51g	50mL	
244601006	RE12-10-7238	SAMPLE	S	20-JAN-10	.518g	50mL	
244601007	RE12-10-7242	SAMPLE	S	20-JAN-10	.503g	50mL	
244601008	RE12-10-7236	SAMPLE	S	20-JAN-10	.507g	50mL	
244601009	RE12-10-7252	SAMPLE	S	20-JAN-10	.5g	50mL	
244601010	RE12-10-7253	SAMPLE	S	20-JAN-10	.511g	50mL	
244601011	RE12-10-7254	SAMPLE	S	20-JAN-10	.516g	50mL	
244601012	RE12-10-7255	SAMPLE	S	20-JAN-10	.507g	50mL	
244601013	RE12-10-7276	SAMPLE	S	20-JAN-10	.503g	50mL	

SW846

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-1212

Method Type: MS

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Client ID</u>	<u>Sample Type</u>	<u>Matrix</u>	<u>Prep Date</u>	<u>Initial Sample Size</u>	<u>Final Sample Volume</u>	<u>Percent Solids</u>
Batch Number 941730							
1202015679	MB for batch 941730	MB	S	20-JAN-10	.503g	50mL	
1202015684	LCS for batch 941730	LCS	S	20-JAN-10	.517g	50mL	
1202015682	RE12-10-7243S	MS	S	20-JAN-10	.502g	50mL	
1202015683	RE12-10-7243SD	MSD	S	20-JAN-10	.514g	50mL	
1202015680	RE12-10-7243D	DUP	S	20-JAN-10	.525g	50mL	
244601001	RE12-10-7243	SAMPLE	S	20-JAN-10	.517g	50mL	
244601002	RE12-10-7240	SAMPLE	S	20-JAN-10	.5g	50mL	
244601003	RE12-10-7241	SAMPLE	S	20-JAN-10	.502g	50mL	
244601004	RE12-10-7237	SAMPLE	S	20-JAN-10	.512g	50mL	
244601005	RE12-10-7239	SAMPLE	S	20-JAN-10	.503g	50mL	
244601006	RE12-10-7238	SAMPLE	S	20-JAN-10	.5g	50mL	
244601007	RE12-10-7242	SAMPLE	S	20-JAN-10	.517g	50mL	
244601008	RE12-10-7236	SAMPLE	S	20-JAN-10	.506g	50mL	
244601009	RE12-10-7252	SAMPLE	S	20-JAN-10	.505g	50mL	
244601010	RE12-10-7253	SAMPLE	S	20-JAN-10	.519g	50mL	
244601011	RE12-10-7254	SAMPLE	S	20-JAN-10	.5g	50mL	
244601012	RE12-10-7255	SAMPLE	S	20-JAN-10	.502g	50mL	
244601013	RE12-10-7276	SAMPLE	S	20-JAN-10	.505g	50mL	

SW846

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-1212

Method Type: AV

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Client ID</u>	<u>Sample Type</u>	<u>Matrix</u>	<u>Prep Date</u>	<u>Initial Sample Size</u>	<u>Final Sample Volume</u>	<u>Percent Solids</u>
Batch Number	943303						
1202019751	MB for batch 943303	MB	S	27-JAN-10	.502g	30mL	
1202019752	LCS for batch 943303	LCS	S	27-JAN-10	.202g	30mL	
1202019754	RE12-10-7243S	MS	S	27-JAN-10	.57g	30mL	
1202019756	RE12-10-7243SD	MSD	S	27-JAN-10	.516g	30mL	
1202019753	RE12-10-7243D	DUP	S	27-JAN-10	.54g	30mL	
244601001	RE12-10-7243	SAMPLE	S	27-JAN-10	.559g	30mL	
244601002	RE12-10-7240	SAMPLE	S	27-JAN-10	.563g	30mL	
244601003	RE12-10-7241	SAMPLE	S	27-JAN-10	.545g	30mL	
244601004	RE12-10-7237	SAMPLE	S	27-JAN-10	.549g	30mL	
244601005	RE12-10-7239	SAMPLE	S	27-JAN-10	.509g	30mL	
244601006	RE12-10-7238	SAMPLE	S	27-JAN-10	.503g	30mL	
244601007	RE12-10-7242	SAMPLE	S	27-JAN-10	.562g	30mL	
244601008	RE12-10-7236	SAMPLE	S	27-JAN-10	.507g	30mL	
244601009	RE12-10-7252	SAMPLE	S	27-JAN-10	.564g	30mL	
244601010	RE12-10-7253	SAMPLE	S	27-JAN-10	.52g	30mL	
244601011	RE12-10-7254	SAMPLE	S	27-JAN-10	.561g	30mL	
244601012	RE12-10-7255	SAMPLE	S	27-JAN-10	.545g	30mL	
244601013	RE12-10-7276	SAMPLE	S	27-JAN-10	.582g	30mL	

SW846

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: ICPMS5

Start Date: 08-FEB-10

End Date: 08-FEB-10

Client Sdg: 10-1212

Method MS

Data File: 100208-2

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	14:32			X														X	X							
S10	1	14:35			X														X	X							
S100	1	14:37			X														X	X							
ICV01	1	14:40			X														X	X							
ICB01	1	14:42			X														X	X							
CRDL01	1	14:45			X														X	X							
ICSA01	1	14:47			X														X	X							
ICSAB01	1	14:50			X														X	X							
CCV01	1	14:52			X														X	X							
CCB01	1	14:55			X														X	X							
1202015679	2	14:57			X														X	X							
1202015684	40	14:59			X														X	X							
244601001	2	15:02			X														X	X							
1202015680	2	15:04			X														X	X							
1202015682	2	15:07			X														X	X							
1202015683	2	15:09			X														X	X							
1202015681	10	15:12			X														X	X							
CCV02	1	15:14			X														X	X							
CCB02	1	15:17			X														X	X							
244601002	2	15:19			X														X	X							
244601003	2	15:22			X														X	X							
244601004	2	15:24			X														X	X							
244601005	2	15:27			X														X	X							
244601006	2	15:29			X														X	X							
244601007	2	15:32			X														X	X							
CCV03	1	15:34			X														X	X							
CCB03	1	15:37			X														X	X							
244601008	2	15:39			X														X	X							
244601009	2	15:42			X														X	X							
244601010	2	15:44			X														X	X							
244601011	2	15:47			X														X	X							
244601012	2	15:49			X														X	X							
244601013	2	15:52			X														X	X							
CCV04	1	15:54			X														X	X							
CCB04	1	15:57			X														X	X							

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: ICPMS6

Start Date: 28-JAN-10

End Date: 28-JAN-10

Client Sdg: 10-1212

Method: MS

Data File: 100127-3

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	09:19																							X		
S10	1	09:25																							X		
S100	1	09:31																							X		
ICV01	1	09:37																							X		
ICB01	1	09:43																							X		
CRDL01	1	09:49																							X		
ICSA01	1	09:55																							X		
ICSAB01	1	10:01																							X		
CCV01	1	10:07																							X		
CCB01	1	10:12																							X		
ZZZZZZ	2	10:18																									
ZZZZZZ	40	10:24																									
CCV02	1	10:30																							X		
CCB02	1	10:36																							X		
ZZZZZZ	2	10:42																									
ZZZZZZ	2	10:48																									
ZZZZZZ	2	10:54																									
ZZZZZZ	2	11:00																									
ZZZZZZ	10	11:06																									
ZZZZZZ	2	11:12																									
ZZZZZZ	2	11:18																									
ZZZZZZ	2	11:23																									
CCV03	1	11:29																							X		
CCB03	1	11:35																							X		
ZZZZZZ	2	11:41																									
ZZZZZZ	2	11:47																									
ZZZZZZ	2	11:53																									
ZZZZZZ	2	11:59																									
ZZZZZZ	2	12:05																									
244601010	2	12:11																							X		
ZZZZZZ	2	12:17																									
ZZZZZZ	2	12:23																									
ZZZZZZ	2	12:29																									
CCV04	1	12:35																							X		
CCB04	1	12:40																							X		

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: ICPMS6

Start Date: 30-JAN-10

End Date: 30-JAN-10

Client Sdg: 10-1212

Method: MS

Data File: 100129-4

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	07:19					X																				
S10	1	07:22					X																				
S100	1	07:25					X																				
ICV01	1	07:28					X																				
ICB01	1	07:31					X																				
CRDL01	1	07:34					X																				
ICSA01	1	07:37					X																				
ICSAB01	1	07:40					X																				
CCV01	1	07:43					X																				
CCB01	1	07:46					X																				
ZZZZZZ	1	07:49																									
ZZZZZZ	1	07:52																									
ZZZZZZ	1	07:55																									
ZZZZZZ	1	07:59																									
ZZZZZZ	1	08:02																									
ZZZZZZ	5	08:05																									
ZZZZZZ	1	08:08																									
ZZZZZZ	1	08:12																									
ZZZZZZ	1	08:15																									
CCV02	1	08:18					X																				
CCB02	1	08:21					X																				
1202015679	2	08:24					X																				
1202015684	40	08:27					X																				
244601001	2	08:30					X																				
1202015680	2	08:33					X																				
1202015682	2	08:36					X																				
1202015683	2	08:39					X																				
1202015681	10	08:43					X																				
244601002	2	08:46					X																				
CCV03	1	08:49					X																				
CCB03	1	08:52					X																				
244601003	2	08:55					X																				
244601004	2	08:58					X																				
244601005	2	09:01					X																				
244601006	2	09:05					X																				
244601007	2	09:08					X																				
244601008	2	09:11					X																				
244601009	2	09:15					X																				
244601010	2	09:18					X																				
CCV04	1	09:21					X																				

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: ICPMS6

Start Date: 30-JAN-10

End Date: 30-JAN-10

Client Sdg: 10-1212

Method MS

Data File: 100129-6

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	12:52																							X		
S10	1	12:58																							X		
S100	1	13:04																							X		
ICV01	1	13:10																							X		
ICB01	1	13:16																							X		
CRDL01	1	13:21																							X		
ICSA01	1	13:27																							X		
ICSAB01	1	13:33																							X		
CCV01	1	13:39																							X		
CCB01	1	13:45																							X		
1202015679	2	13:51																							X		
1202015684	40	13:57																							X		
CCV02	1	14:03																							X		
CCB02	1	14:09																							X		
244601001	2	14:15																							X		
1202015680	2	14:20																							X		
1202015682	2	14:26																							X		
1202015683	2	14:32																							X		
1202015681	10	14:38																							X		
244601002	2	14:44																							X		
244601003	2	14:50																							X		
244601004	2	14:56																							X		
CCV03	1	15:02																							X		
CCB03	1	15:08																							X		
244601005	2	15:14																							X		
244601006	2	15:20																							X		
244601007	2	15:26																							X		
244601008	2	15:31																							X		
244601009	2	15:37																							X		
ZZZZZZ	2	15:43																									
244601011	2	15:49																							X		
244601012	2	15:55																							X		
244601013	2	16:01																							X		
CCV04	1	16:07																							X		
CCB04	1	16:13																							X		

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: ICPMS6

Start Date: 03-FEB-10

End Date: 03-FEB-10

Client Sdg: 10-1212

Method MS

Data File: 100202-7

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	17:03																					X			
S10	1	17:09																					X			
S100	1	17:15																					X			
ICV01	1	17:20																					X			
ICB01	1	17:26																					X			
CRDL01	1	17:32																					X			
ICSA01	1	17:38																					X			
ICSAB01	1	17:44																					X			
CCV01	1	17:50																					X			
CCB01	1	17:56																					X			
1202015679	2	18:02																					X			
1202015684	40	18:08																					X			
CCV02	1	18:13																					X			
CCB02	1	18:19																					X			
244601001	2	18:25																					X			
1202015680	2	18:31																					X			
1202015682	2	18:37																					X			
1202015683	2	18:43																					X			
1202015681	10	18:49																					X			
244601002	2	18:55																					X			
244601003	2	19:01																					X			
244601004	2	19:07																					X			
CCV03	1	19:12																					X			
CCB03	1	19:18																					X			
244601005	2	19:24																					X			
244601006	2	19:30																					X			
244601007	2	19:36																					X			
244601008	2	19:42																					X			
244601009	2	19:48																					X			
244601010	2	19:54																					X			
244601011	2	20:00																					X			
244601012	2	20:06																					X			
244601013	2	20:12																					X			
CCV04	1	20:17																					X			
CCB04	1	20:23																					X			

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: OPTIMA3

Start Date: 28-JAN-10

End Date: 28-JAN-10

Client Sdg: 10-1212

Method P

Data File: 012810-1

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	10:02	X	X		X		X	X	X	X	X		X	X	X	X			X		X	X			X	X
S0.1	1	10:09		X		X		X		X	X	X			X		X			X		X				X	X
S0.5	1	10:16	X	X		X		X	X	X	X	X			X	X	X			X		X				X	X
SCAL	1	10:23	X	X		X		X	X	X	X	X		X	X	X	X			X		X	X			X	X
S10	1	10:30	X					X						X		X							X				
ICV01	1	10:35	X	X		X		X	X	X	X	X		X	X	X	X			X		X	X			X	X
ICB01	1	10:42	X	X		X		X	X	X	X	X		X	X	X	X			X		X	X			X	X
PQL01	1	10:49	X	X		X		X	X	X	X	X		X	X	X	X			X		X	X			X	X
ICSA01	1	10:56	X	X		X		X	X	X	X	X		X	X	X	X			X		X	X			X	X
ICSAB01	1	11:02	X	X		X		X	X	X	X	X		X	X	X	X			X		X	X			X	X
LR01	1	11:08	X	X		X		X	X	X	X	X		X	X	X	X			X		X	X			X	X
LR02	1	11:14	X	X		X		X	X	X	X	X		X	X	X	X			X		X	X			X	X
CCV01	1	11:21	X	X		X		X	X	X	X	X		X	X	X	X			X		X	X			X	X
CCB01	1	11:28	X	X		X		X	X	X	X	X		X	X	X	X			X		X	X			X	X
LR03	1	11:44	X	X		X		X	X	X	X	X		X	X	X	X			X		X	X			X	X
LR04	1	11:51	X	X		X		X	X	X	X	X		X	X	X	X			X		X	X			X	X
CCV02	1	11:58	X	X		X		X	X	X	X	X		X	X	X	X			X		X	X			X	X
CCB02	1	12:05	X	X		X		X	X	X	X	X		X	X	X	X			X		X	X			X	X
ZZZZZZ	1	12:21																									
ZZZZZZ	1	12:28																									
ZZZZZZ	1	12:34																									
ZZZZZZ	1	12:41																									
ZZZZZZ	1	12:48																									
ZZZZZZ	1	12:55																									
ZZZZZZ	5	13:02																									
CCV03	1	13:09	X	X		X		X	X	X	X	X		X	X	X	X			X		X	X			X	X
CCB03	1	13:16	X	X		X		X	X	X	X	X		X	X	X	X			X		X	X			X	X
ZZZZZZ	1	13:27																									
ZZZZZZ	1	13:34																									
ZZZZZZ	1	13:41																									
ZZZZZZ	1	13:48																									
ZZZZZZ	1	13:55																									
ZZZZZZ	1	14:02																									
ZZZZZZ	5	14:09																									
CCV04	1	14:16	X	X		X		X	X	X	X	X		X	X	X	X			X		X	X			X	X
PQL02	1	14:23	X	X		X		X	X	X	X	X		X	X	X	X			X		X	X			X	X
CCB04	1	14:30	X	X		X		X	X	X	X	X		X	X	X	X			X		X	X			X	X
CCV05	1	15:06	X	X		X		X	X	X	X	X		X	X	X	X			X		X	X			X	X
CCB05	1	15:13	X	X		X		X	X	X	X	X		X	X	X	X			X		X	X			X	X
ZZZZZZ	1	15:20																									

Metals
-14-
Analysis Run Log

Samp No.	D/F	Run Time																								
ZZZZZZ	1	15:27																								
ZZZZZZ	1	15:34																								
ZZZZZZ	1	15:41																								
ZZZZZZ	1	15:48																								
ZZZZZZ	5	15:55																								
ZZZZZZ	5	16:02																								
ZZZZZZ	5	16:09																								
ZZZZZZ	5	16:16																								
ZZZZZZ	5	16:22																								
CCV06	1	16:29	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
PQL03	1	16:36	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB06	1	16:43	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ	1	16:50																								
ZZZZZZ	1	16:57																								
ZZZZZZ	1	17:04																								
ZZZZZZ	1	17:11																								
ZZZZZZ	1	17:18																								
ZZZZZZ	1	17:25																								
ZZZZZZ	1	17:32																								
ZZZZZZ	1	17:41																								
ZZZZZZ	5	17:48																								
CCV07	1	17:55	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
PQL04	1	18:02	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB07	1	18:09	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ	1	18:16																								
ZZZZZZ	1	18:23																								
ZZZZZZ	1	18:30																								
ZZZZZZ	1	18:37																								
ZZZZZZ	1	18:44																								
ZZZZZZ	1	18:51																								
ZZZZZZ	1	18:58																								
ZZZZZZ	1	19:06																								
CCV08	1	19:13	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB08	1	19:20	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ	1	19:27																								
ZZZZZZ	1	19:34																								
ZZZZZZ	1	19:41																								
ZZZZZZ	1	19:48																								
ZZZZZZ	5	19:55																								
ZZZZZZ	1	20:02																								

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	20:09																										
CCV09	1	20:16	X	X		X		X	X	X	X	X			X	X	X	X			X		X	X			X	X
CCB09	1	20:23	X	X		X		X	X	X	X	X			X	X	X	X			X		X	X			X	X
1202015660	1	20:31	X	X		X		X	X	X	X	X			X	X	X	X			X		X	X			X	X
1202015665	1	20:38	X	X		X		X	X	X	X	X			X	X	X	X			X		X	X			X	X
244601001	1	20:44	X	X		X		X	X	X	X	X			X	X	X	X			X		X	X			X	X
1202015661	1	20:52	X	X		X		X	X	X	X	X			X	X	X	X			X		X	X			X	X
1202015663	1	20:59	X	X		X		X	X	X	X	X			X	X	X	X			X		X	X			X	X
1202015664	1	21:06	X	X		X		X	X	X	X	X			X	X	X	X			X		X	X			X	X
1202015662	5	21:13	X	X		X		X	X	X	X	X			X	X	X	X			X		X	X			X	X
CCV10	1	21:20	X	X		X		X	X	X	X	X			X	X	X	X			X		X	X			X	X
CCB10	1	21:27	X	X		X		X	X	X	X	X			X	X	X	X			X		X	X			X	X
244601002	1	21:34	X	X		X		X	X	X	X	X			X	X	X	X			X		X	X			X	X
244601003	1	21:41	X	X		X		X	X	X	X	X			X	X	X	X			X		X	X			X	X
244601004	1	21:48	X	X		X		X	X	X	X	X			X	X	X	X			X		X	X			X	X
244601005	1	21:55	X	X		X		X	X	X	X	X			X	X	X	X			X		X	X			X	X
244601006	1	22:02	X	X		X		X	X	X	X	X			X	X	X	X			X		X	X			X	X
244601007	1	22:09	X	X		X		X	X	X	X	X			X	X	X	X			X		X	X			X	X
CCV11	1	22:16	X	X		X		X	X	X	X	X			X	X	X	X			X		X	X			X	X
CCB11	1	22:23	X	X		X		X	X	X	X	X			X	X	X	X			X		X	X			X	X
244601008	1	22:30	X	X		X		X	X	X	X	X			X	X	X	X			X		X	X			X	X
244601009	1	22:37	X	X		X		X	X	X	X	X			X	X	X	X			X		X	X			X	X
244601010	1	22:44	X	X		X		X	X	X	X	X			X	X	X	X			X		X	X			X	X
244601011	1	22:52	X	X		X		X	X	X	X	X			X	X	X	X			X		X	X			X	X
244601012	1	22:59	X	X		X		X	X	X	X	X			X	X	X	X			X		X	X			X	X
244601013	1	23:06	X	X		X		X	X	X	X	X			X	X	X	X			X		X	X			X	X
CCV12	1	23:13	X	X		X		X	X	X	X	X			X	X	X	X			X		X	X			X	X
CCB12	1	23:20	X	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: 28-JAN-10

End Date: 28-JAN-10

Client Sdg: 10-1212

Method AV

Data File: 012810S1-9

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																									
ZZZZZZ	1	09:55																									
ZZZZZZ	10	09:57																									
ZZZZZZ	1	09:58																									
ZZZZZZ	1	10:00																									

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Analysis Run Log

SW846

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
-14-
Analysis Run Log

[illegible]

Standards

METALS
-10-
Instrument Detection Limits

SDG NO. 10-1212

Contract: LANL01004

Lab Code: GEL

MDL Effective Date: 01-JUL-09

ICP/MS	<u>Analyte</u>	<u>Wavelength</u> <u>(nm)</u>	<u>MDL</u>	<u>RDL</u>
			<u>ug/L</u>	<u>ug/L</u>
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. 10-1212

Contract: LANL01004

Lab Code: GEL

MDL Effective Date: 15-JUN-09

	<u>Analyte</u>	<u>Wavelength</u> <u>(nm)</u>	<u>MDL</u> <u>ug/L</u>	<u>RDL</u> <u>ug/L</u>
MERCURY				
SOLID	Mercury		0.068	.2

METALS
-10-
Instrument Detection Limits

SDG NO. 10-1212

Contract: LANL01004

Lab Code: GEL

MDL Effective Date: 01-JUL-09

ICP	<u>Analyte</u>	<u>Wavelength</u> <u>(nm)</u>	<u>MDL</u>	<u>RDL</u>
			<u>ug/L</u>	<u>ug/L</u>
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: 10-1212

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

GEL Job No: 10-1212

Contract: LANL01004

Instrument: OPTIMA3

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	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

GEL Job No:

10-1212

Contract: LANL01004

Instrument: OPTIMA3

Effective Dates:

01-NOV-09

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

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: GELGEL Job No: **10-1212**Contract: LANL01004Instrument: OPTIMA3Effective Dates: **01-NOV-09**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Nickel	Phosphorous	Potassium	Selenium	Silicon
Aluminium	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: GELGEL Job No: **10-1212**

Contract: LANL01004

Instrument: OPTIMA3

Effective Dates: **01-NOV-09**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

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

GEL Job No: 10-1212

Contract: LANL01004

Instrument: OPTIMA3

Effective Dates: 01-NOV-09

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

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. 10-1212

Contract: LANL01004

Lab Code: GEL

Instrument ID ICPMS5

<u>Analyte</u>	<u>Integration Time (msec)</u>	<u>LDR</u>	<u>Units</u>	<u>Effective Date</u>
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. 10-1212

Contract: LANL01004

Lab Code: GEL

Instrument ID ICPMS6

<u>Analyte</u>	<u>Integration Time (msec)</u>	<u>LDR</u>	<u>Units</u>	<u>Effective Date</u>
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. 10-1212

Contract: LANL01004

Lab Code: GEL

Instrument ID OPTIMA3

<u>Analyte</u>	<u>Integration Time (sec)</u>	<u>LDR</u>	<u>Units</u>	<u>Effective Date</u>
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
Aluminum	20	500000	ug/L	01-NOV-09
Antimony	20	10000	ug/L	01-NOV-09

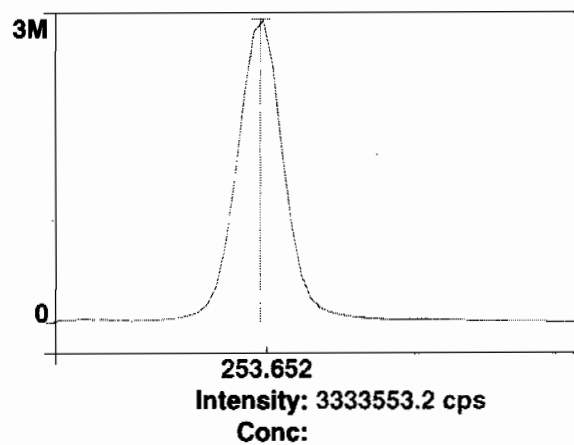
Raw Data

Method: Hg_ReAlign
Result: 020910

Sample ID: Hg_ReAlign

Hg 253.652

Rep: 1



1

1/28/2010 10:00:55 Hg ReAlign... Actual peak offset (nm): -0.009
Drift (nm): 0.000 Slit adjustment: 2

Analysis Begun

Start Time: 1/28/2010 10:02:02 Plasma On Time: 00:00:00
Logged In Analyst: Optima3 Technique: ICP Continuous
Spectrometer Model: Optima 5300 DV, S/N 077C7090601 Autosampler Model: S10

Sample Information File: C:\pe\Optima3\Sample Information\012810.sif

Batch ID:

Results Data Set: 012810

Results Library: C:\pe\Optima3\Results\Results.mdb

Method Loaded

Method Name: General Eng.2AX

IEC File: 011110.iec

Method Description:

Method Last Saved: 1/27/2010 11:56:23

MSF File:

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

Sample ID: S0

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 1/28/2010 10:02:04

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: S0

Net

Corrected

Calib.

Analysis

Repl#	Analyte	Intensity	Intensity	Conc. Units	Time
1	Sc Radial	5611.1	5611.1	0.000 %	10:03:57
1	Y RADIAL	6130.1	6130.1	0.000 %	10:03:57
1	Al 396.153Radial†	13.1	13.1	[0.00] ug/L	10:04:17
1	Ca 317.933Radial†	28.5	28.3	[0.00] ug/L	10:04:17
1	Fe 238.204 Radial†	8.2	8.1	[0.00] ug/L	10:04:17
1	K 766.490 Radial†	2450.4	2439.0	[0.00] ug/L	10:03:57
1	Mg 279.077 IEC†	3.5	3.5	[0.00] ug/L	10:04:17
1	Na 589.592 Radial†	-1029.9	-1025.1	[0.00] ug/L	10:03:57
1	Sr 421.552†	4.8	4.8	[0.00] ug/L	10:03:57
1	Sc 361.383	983317.9	983317.9	0.0000 %	10:05:14
1	Y 371.029	870601.0	870601.0	0.0000 %	10:05:14
1	Ag 328.068†	365.8	366.0	[0.00] ug/L	10:05:19
1	As 188.979†	-35.1	-35.1	[0.00] ug/L	10:05:39
1	B 249.677†	-273.6	-273.8	[0.00] ug/L	10:05:39
1	Ba 233.527†	-5.7	-5.7	[0.00] ug/L	10:05:39
1	Be 313.107†	-5094.3	-5098.0	[0.00] ug/L	10:05:19
1	Cd 226.502†	-194.0	-194.1	[0.00] ug/L	10:05:39
1	Co 228.616†	-74.9	-74.9	[0.00] ug/L	10:05:39
1	Cr 267.716†	70.1	70.1	[0.00] ug/L	10:05:39
1	Cu 324.752†	9088.5	9095.0	[0.00] ug/L	10:05:19
1	Mn 257.610†	531.1	531.5	[0.00] ug/L	10:05:39
1	Mo 202.031†	27.5	27.5	[0.00] ug/L	10:05:39
1	Ni 231.604†	111.2	111.3	[0.00] ug/L	10:05:39
1	P 214.914†	234.3	234.5	[0.00] ug/L	10:05:39
1	Pb 220.353†	-58.1	-58.1	[0.00] ug/L	10:05:39
1	S 181.975 Axial†	69.6	69.6	[0.00] ug/L	10:05:39
1	Sb 206.836†	33.3	33.3	[0.00] ug/L	10:05:39
1	Se 196.026†	-25.5	-25.5	[0.00] ug/L	10:05:39
1	Si 251.611†	458.8	459.1	[0.00] ug/L	10:05:39
1	Sn 189.927†	-5.2	-5.2	[0.00] ug/L	10:05:39
1	Ti 334.940†	-935.0	-935.7	[0.00] ug/L	10:05:19
1	Tl 190.801†	-41.7	-41.7	[0.00] ug/L	10:05:39
1	U 409.014†	-1445.0	-1446.0	[0.00] ug/L	10:05:14
1	V 292.402†	-1417.5	-1418.5	[0.00] ug/L	10:05:19
1	Zn 213.857†	741.6	742.1	[0.00] ug/L	10:05:39
1	SiO2†	486.1	486.4	[0.00] ug/L	10:07:00
2	Sc Radial	5626.9	5626.9	0.000 %	10:04:22
2	Y RADIAL	6146.6	6146.6	0.000 %	10:04:22
2	Al 396.153Radial†	4.5	4.5	[0.00] ug/L	10:04:42
2	Ca 317.933Radial†	25.1	24.9	[0.00] ug/L	10:04:42
2	Fe 238.204 Radial†	8.4	8.3	[0.00] ug/L	10:04:42
2	K 766.490 Radial†	2325.2	2307.9	[0.00] ug/L	10:04:22
2	Mg 279.077 IEC†	1.6	1.6	[0.00] ug/L	10:04:42
2	Na 589.592 Radial†	-1049.6	-1041.8	[0.00] ug/L	10:04:22
2	Sr 421.552†	13.4	13.3	[0.00] ug/L	10:04:22
2	Sc 361.383	979736.0	979736.0	0.0000 %	10:05:44
2	Y 371.029	869243.8	869243.8	0.0000 %	10:05:44
2	Ag 328.068†	288.4	289.7	[0.00] ug/L	10:05:49
2	As 188.979†	-33.7	-33.8	[0.00] ug/L	10:06:09
2	B 249.677†	-276.4	-277.6	[0.00] ug/L	10:06:09
2	Ba 233.527†	-2.8	-2.8	[0.00] ug/L	10:06:09
2	Be 313.107†	-5010.0	-5032.0	[0.00] ug/L	10:05:49
2	Cd 226.502†	-211.8	-212.8	[0.00] ug/L	10:06:09
2	Co 228.616†	-65.5	-65.8	[0.00] ug/L	10:06:09
2	Cr 267.716†	86.1	86.5	[0.00] ug/L	10:06:09
2	Cu 324.752†	9112.9	9152.9	[0.00] ug/L	10:05:49
2	Mn 257.610†	528.3	530.6	[0.00] ug/L	10:06:09
2	Mo 202.031†	17.9	18.0	[0.00] ug/L	10:06:09
2	Ni 231.604†	120.4	120.9	[0.00] ug/L	10:06:09
2	P 214.914†	244.0	245.1	[0.00] ug/L	10:06:09
2	Pb 220.353†	-50.0	-50.2	[0.00] ug/L	10:06:09
2	S 181.975 Axial†	60.1	60.4	[0.00] ug/L	10:06:09
2	Sb 206.836†	31.8	32.0	[0.00] ug/L	10:06:09
2	Se 196.026†	-20.7	-20.8	[0.00] ug/L	10:06:09
2	Si 251.611†	458.5	460.5	[0.00] ug/L	10:06:09
2	Sn 189.927†	-1.8	-1.8	[0.00] ug/L	10:06:09
2	Ti 334.940†	-919.1	-923.1	[0.00] ug/L	10:05:49
2	Tl 190.801†	-37.0	-37.2	[0.00] ug/L	10:06:09
2	U 409.014†	-1449.7	-1456.1	[0.00] ug/L	10:05:44
2	V 292.402†	-1483.7	-1490.2	[0.00] ug/L	10:05:49

2	Zn 213.857†	734.0	737.2	[0.00]	ug/L	10:06:09
2	SiO2†	474.8	476.9	[0.00]	ug/L	10:07:20
3	Sc Radial	5517.0	5517.0	0.000	%	10:04:47
3	Y RADIAL	5974.2	5974.2	0.000	%	10:04:47
3	Al 396.153Radial†	-6.2	-6.3	[0.00]	ug/L	10:05:07
3	Ca 317.933Radial†	26.8	27.1	[0.00]	ug/L	10:05:07
3	Fe 238.204 Radial†	8.7	8.8	[0.00]	ug/L	10:05:07
3	K 766.490 Radial†	2409.1	2438.8	[0.00]	ug/L	10:04:47
3	Mg 279.077 IEC†	2.0	2.0	[0.00]	ug/L	10:05:07
3	Na 589.592 Radial†	-1004.8	-1017.2	[0.00]	ug/L	10:04:47
3	Sr 421.552†	15.2	15.4	[0.00]	ug/L	10:04:47
3	Sc 361.383	989033.8	989033.8	0.0000	%	10:06:14
3	Y 371.029	876797.5	876797.5	0.0000	%	10:06:14
3	Ag 328.068†	308.8	307.2	[0.00]	ug/L	10:06:20
3	As 188.979†	-32.7	-32.5	[0.00]	ug/L	10:06:40
3	B 249.677†	-309.0	-307.4	[0.00]	ug/L	10:06:40
3	Ba 233.527†	-5.3	-5.2	[0.00]	ug/L	10:06:40
3	Be 313.107†	-5100.0	-5074.2	[0.00]	ug/L	10:06:20
3	Cd 226.502†	-192.1	-191.2	[0.00]	ug/L	10:06:40
3	Co 228.616†	-75.1	-74.7	[0.00]	ug/L	10:06:40
3	Cr 267.716†	100.5	100.0	[0.00]	ug/L	10:06:40
3	Cu 324.752†	9208.3	9161.7	[0.00]	ug/L	10:06:20
3	Mn 257.610†	539.4	536.7	[0.00]	ug/L	10:06:40
3	Mo 202.031†	23.5	23.4	[0.00]	ug/L	10:06:40
3	Ni 231.604†	98.2	97.7	[0.00]	ug/L	10:06:40
3	P 214.914†	240.2	239.0	[0.00]	ug/L	10:06:40
3	Pb 220.353†	-67.0	-66.7	[0.00]	ug/L	10:06:40
3	S 181.975 Axial†	73.8	73.4	[0.00]	ug/L	10:06:40
3	Sb 206.836†	40.4	40.1	[0.00]	ug/L	10:06:40
3	Se 196.026†	-17.2	-17.1	[0.00]	ug/L	10:06:40
3	Si 251.611†	463.6	461.2	[0.00]	ug/L	10:06:40
3	Sn 189.927†	-6.8	-6.8	[0.00]	ug/L	10:06:40
3	Ti 334.940†	-874.8	-870.4	[0.00]	ug/L	10:06:20
3	Tl 190.801†	-40.5	-40.3	[0.00]	ug/L	10:06:40
3	U 409.014†	-1258.5	-1252.1	[0.00]	ug/L	10:06:14
3	V 292.402†	-1419.7	-1412.5	[0.00]	ug/L	10:06:20
3	Zn 213.857†	752.6	748.8	[0.00]	ug/L	10:06:40
3	SiO2†	467.4	465.0	[0.00]	ug/L	10:07:40

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	984029.2	4689.51	0.48%	0.0000	%
Sc Radial	5585.0	59.44	1.06%	0.000	%
Y 371.029	872214.1	4026.90	0.46%	0.0000	%
Y RADIAL	6083.6	95.15	1.56%	0.000	%
Ag 328.068†	321.0	39.98	12.46%	[0.00]	ug/L
Al 396.153Radial†	3.7	9.72	259.67%	[0.00]	ug/L
As 188.979†	-33.8	1.30	3.83%	[0.00]	ug/L
B 249.677†	-286.3	18.43	6.44%	[0.00]	ug/L
Ba 233.527†	-4.6	1.55	33.96%	[0.00]	ug/L
Be 313.107†	-5068.1	33.42	0.66%	[0.00]	ug/L
Ca 317.933Radial†	26.8	1.73	6.48%	[0.00]	ug/L
Cd 226.502†	-199.4	11.70	5.87%	[0.00]	ug/L
Co 228.616†	-71.8	5.23	7.29%	[0.00]	ug/L
Cr 267.716†	85.5	14.95	17.48%	[0.00]	ug/L
Cu 324.752†	9136.5	36.21	0.40%	[0.00]	ug/L
Fe 238.204 Radial†	8.4	0.32	3.82%	[0.00]	ug/L
K 766.490 Radial†	2395.2	75.63	3.16%	[0.00]	ug/L
Mg 279.077 IEC†	2.4	1.00	41.90%	[0.00]	ug/L
Mn 257.610†	533.0	3.27	0.61%	[0.00]	ug/L
Mo 202.031†	23.0	4.78	20.83%	[0.00]	ug/L
Na 589.592 Radial†	-1028.0	12.54	1.22%	[0.00]	ug/L
Ni 231.604†	110.0	11.67	10.61%	[0.00]	ug/L
P 214.914†	239.5	5.31	2.22%	[0.00]	ug/L
Pb 220.353†	-58.4	8.24	14.12%	[0.00]	ug/L
S 181.975 Axial†	67.8	6.70	9.89%	[0.00]	ug/L
Sb 206.836†	35.1	4.38	12.47%	[0.00]	ug/L
Se 196.026†	-21.1	4.22	19.96%	[0.00]	ug/L
Si 251.611†	460.3	1.08	0.24%	[0.00]	ug/L

Sn 189.927†	-4.6	2.55	55.53%	[0.00] ug/L
Sr 421.552†	11.2	5.64	50.43%	[0.00] ug/L
Ti 334.940†	-909.7	34.64	3.81%	[0.00] ug/L
Tl 190.801†	-39.8	2.32	5.83%	[0.00] ug/L
U 409.014†	-1384.7	114.96	8.30%	[0.00] ug/L
V 292.402†	-1440.4	43.26	3.00%	[0.00] ug/L
Zn 213.857†	742.7	5.84	0.79%	[0.00] ug/L
SiO2†	476.1	10.74	2.26%	[0.00] ug/L

Sequence No.: 2

Sample ID: S0.1

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 2

Date Collected: 1/28/2010 10:09:52

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Units	Analysis Time
1	Sc Radial	5539.5	5539.5	99.2	%	10:11:50
1	Y RADIAL	6000.3	6000.3	98.63	%	10:11:50
1	K 766.490 Radial†	8277.8	5950.6	[1000]	ug/L	10:11:45
1	Sr 421.552†	16331.1	16454.0	[100]	ug/L	10:11:50
1	Sc 361.383	979976.8	979976.8	99.588	%	10:12:16
1	Y 371.029	866571.7	866571.7	99.353	%	10:12:16
1	Ag 328.068†	24184.2	23963.2	[100]	ug/L	10:12:21
1	As 188.979†	214.5	249.2	[100]	ug/L	10:12:41
1	B 249.677†	4088.2	4391.4	[100]	ug/L	10:12:21
1	Ba 233.527†	12940.8	12998.9	[100]	ug/L	10:12:21
1	Be 313.107†	284283.2	290526.8	[100]	ug/L	10:12:16
1	Cd 226.502†	9092.8	9329.8	[100]	ug/L	10:12:21
1	Co 228.616†	4641.6	4732.6	[100]	ug/L	10:12:41
1	Cr 267.716†	9591.3	9545.4	[100]	ug/L	10:12:21
1	Cu 324.752†	44167.1	35213.2	[100]	ug/L	10:12:21
1	Mn 257.610†	90979.7	90822.9	[100]	ug/L	10:12:21
1	Mo 202.031†	1502.4	1485.6	[100]	ug/L	10:12:41
1	Ni 231.604†	4148.8	4056.0	[100]	ug/L	10:12:41
1	P 214.914†	1158.3	923.6	[500]	ug/L	10:12:41
1	Pb 220.353†	762.0	823.5	[100]	ug/L	10:12:41
1	S 181.975 Axial†	211.0	144.1	[200]	ug/L	10:12:41
1	Sb 206.836†	329.6	295.8	[100]	ug/L	10:12:41
1	Se 196.026†	150.9	172.6	[100]	ug/L	10:12:41
1	Si 251.611†	16988.7	16598.7	[500]	ug/L	10:12:21
1	Sn 189.927†	552.8	559.7	[100]	ug/L	10:12:41
1	Ti 334.940†	64227.9	65403.2	[100]	ug/L	10:12:21
1	Tl 190.801†	282.5	323.4	[100]	ug/L	10:12:41
1	U 409.014†	2650.9	4046.6	[100]	ug/L	10:12:16
1	V 292.402†	14816.5	16318.2	[100]	ug/L	10:12:21
1	Zn 213.857†	11694.1	10999.7	[100]	ug/L	10:12:21
1	SiO2†	17339.4	16935.0	[1069.5]	ug/L	10:13:48
2	Sc Radial	5566.1	5566.1	99.7	%	10:12:00
2	Y RADIAL	6026.9	6026.9	99.07	%	10:12:00
2	K 766.490 Radial†	8327.5	5960.7	[1000]	ug/L	10:11:55
2	Sr 421.552†	16330.1	16374.5	[100]	ug/L	10:12:00
2	Sc 361.383	977205.9	977205.9	99.307	%	10:12:47
2	Y 371.029	865537.9	865537.9	99.235	%	10:12:47
2	Ag 328.068†	24501.2	24351.3	[100]	ug/L	10:12:52
2	As 188.979†	213.5	248.8	[100]	ug/L	10:13:12
2	B 249.677†	4222.7	4538.4	[100]	ug/L	10:12:52
2	Ba 233.527†	13051.8	13147.5	[100]	ug/L	10:12:52
2	Be 313.107†	283149.1	290194.2	[100]	ug/L	10:12:47
2	Cd 226.502†	9115.9	9378.9	[100]	ug/L	10:12:52
2	Co 228.616†	4625.7	4729.8	[100]	ug/L	10:13:12
2	Cr 267.716†	9692.8	9674.9	[100]	ug/L	10:12:52
2	Cu 324.752†	45001.7	36179.4	[100]	ug/L	10:12:52
2	Mn 257.610†	92069.2	92179.1	[100]	ug/L	10:12:52
2	Mo 202.031†	1510.6	1498.2	[100]	ug/L	10:13:12
2	Ni 231.604†	4174.6	4093.8	[100]	ug/L	10:13:12
2	P 214.914†	1144.4	912.9	[500]	ug/L	10:13:12
2	Pb 220.353†	755.0	818.7	[100]	ug/L	10:13:12
2	S 181.975 Axial†	219.8	153.5	[200]	ug/L	10:13:12
2	Sb 206.836†	326.5	293.6	[100]	ug/L	10:13:12
2	Se 196.026†	147.0	169.1	[100]	ug/L	10:13:12
2	Si 251.611†	17232.2	16892.3	[500]	ug/L	10:12:52
2	Sn 189.927†	551.2	559.6	[100]	ug/L	10:13:12
2	Ti 334.940†	65183.6	66548.5	[100]	ug/L	10:12:52
2	Tl 190.801†	283.0	324.8	[100]	ug/L	10:13:12
2	U 409.014†	2540.8	3943.2	[100]	ug/L	10:12:47

2	V 292.402†	15114.6	16660.6	[100] ug/L	10:12:52
2	Zn 213.857†	11769.8	11109.3	[100] ug/L	10:12:52
2	SiO2†	17150.1	16793.7	[1069.5] ug/L	10:13:53
3	Sc Radial	5628.9	5628.9	101 %	10:12:10
3	Y RADIAL	6119.6	6119.6	100.6 %	10:12:10
3	K 766.490 Radial†	8163.7	5704.8	[1000] ug/L	10:12:05
3	Sr 421.552†	16582.6	16442.0	[100] ug/L	10:12:10
3	Sc 361.383	982747.2	982747.2	99.870 %	10:13:17
3	Y 371.029	869713.2	869713.2	99.713 %	10:13:17
3	Ag 328.068†	24507.8	24218.8	[100] ug/L	10:13:22
3	As 188.979†	218.5	252.6	[100] ug/L	10:13:42
3	B 249.677†	4200.8	4492.6	[100] ug/L	10:13:22
3	Ba 233.527†	13130.1	13151.8	[100] ug/L	10:13:22
3	Be 313.107†	285001.6	290441.4	[100] ug/L	10:13:17
3	Cd 226.502†	9191.1	9402.5	[100] ug/L	10:13:22
3	Co 228.616†	4646.2	4724.1	[100] ug/L	10:13:42
3	Cr 267.716†	9669.3	9596.4	[100] ug/L	10:13:22
3	Cu 324.752†	44962.3	35884.4	[100] ug/L	10:13:22
3	Mn 257.610†	92310.3	91897.8	[100] ug/L	10:13:22
3	Mo 202.031†	1496.7	1475.7	[100] ug/L	10:13:42
3	Ni 231.604†	4133.9	4029.4	[100] ug/L	10:13:42
3	P 214.914†	1134.1	896.1	[500] ug/L	10:13:42
3	Pb 220.353†	764.2	823.6	[100] ug/L	10:13:42
3	S 181.975 Axial†	207.2	139.7	[200] ug/L	10:13:42
3	Sb 206.836†	326.7	292.0	[100] ug/L	10:13:42
3	Se 196.026†	155.3	176.6	[100] ug/L	10:13:42
3	Si 251.611†	17191.9	16754.1	[500] ug/L	10:13:22
3	Sn 189.927†	548.8	554.1	[100] ug/L	10:13:42
3	Ti 334.940†	65214.4	66209.2	[100] ug/L	10:13:22
3	Tl 190.801†	279.9	320.0	[100] ug/L	10:13:42
3	U 409.014†	2795.3	4183.6	[100] ug/L	10:13:17
3	V 292.402†	15083.1	16543.2	[100] ug/L	10:13:22
3	Zn 213.857†	11821.6	11094.3	[100] ug/L	10:13:22
3	SiO2†	17357.3	16903.8	[1069.5] ug/L	10:13:58

Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	979976.6	2770.62	0.28%	99.588 %
Sc Radial	5578.2	45.90	0.82%	99.9 %
Y 371.029	867274.2	2174.51	0.25%	99.434 %
Y RADIAL	6049.0	62.62	1.04%	99.43 %
Ag 328.068†	24177.8	197.28	0.82%	[100] ug/L
As 188.979†	250.2	2.07	0.83%	[100] ug/L
B 249.677†	4474.1	75.21	1.68%	[100] ug/L
Ba 233.527†	13099.4	87.05	0.66%	[100] ug/L
Be 313.107†	290387.5	172.73	0.06%	[100] ug/L
Cd 226.502†	9370.4	37.09	0.40%	[100] ug/L
Co 228.616†	4728.8	4.35	0.09%	[100] ug/L
Cr 267.716†	9605.6	65.24	0.68%	[100] ug/L
Cu 324.752†	35759.0	495.16	1.38%	[100] ug/L
K 766.490 Radial†	5872.0	144.90	2.47%	[1000] ug/L
Mn 257.610†	91633.3	715.74	0.78%	[100] ug/L
Mo 202.031†	1486.5	11.29	0.76%	[100] ug/L
Ni 231.604†	4059.7	32.37	0.80%	[100] ug/L
P 214.914†	910.9	13.86	1.52%	[500] ug/L
Pb 220.353†	821.9	2.84	0.34%	[100] ug/L
S 181.975 Axial†	145.8	7.08	4.86%	[200] ug/L
Sb 206.836†	293.8	1.92	0.65%	[100] ug/L
Se 196.026†	172.8	3.73	2.16%	[100] ug/L
Si 251.611†	16748.4	146.87	0.88%	[500] ug/L
Sn 189.927†	557.8	3.20	0.57%	[100] ug/L
Sr 421.552†	16423.5	42.88	0.26%	[100] ug/L
Ti 334.940†	66053.6	588.29	0.89%	[100] ug/L
Tl 190.801†	322.7	2.45	0.76%	[100] ug/L
U 409.014†	4057.8	120.60	2.97%	[100] ug/L
V 292.402†	16507.3	173.98	1.05%	[100] ug/L
Zn 213.857†	11067.8	59.40	0.54%	[100] ug/L
SiO2†	16877.5	74.21	0.44%	[1069.5] ug/L

Sequence No.: 3
 Sample ID: S0.5
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 3
 Date Collected: 1/28/2010 10:16:08
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: S0.5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Units	Analysis Time
1	Sc Radial	5470.0	5470.0	97.9	%	10:18:00
1	Y RADIAL	5904.8	5904.8	97.06	%	10:18:00
1	Al 396.153Radial†	7022.7	7166.7	[5000]	ug/L	10:18:00
1	Ca 317.933Radial†	3333.4	3376.8	[5000]	ug/L	10:18:20
1	K 766.490 Radial†	31950.4	30227.1	[5000]	ug/L	10:18:00
1	Mg 279.077 IEC†	164.3	165.4	[5000]	ug/L	10:18:20
1	Sr 421.552†	83381.5	85123.8	[500]	ug/L	10:18:00
1	Sc 361.383	973680.9	973680.9	98.948	%	10:19:18
1	Y 371.029	854154.1	854154.1	97.929	%	10:19:18
1	Ag 328.068†	125593.5	126607.3	[500]	ug/L	10:19:23
1	As 188.979†	1264.6	1311.8	[500]	ug/L	10:19:43
1	B 249.677†	23104.7	23636.5	[500]	ug/L	10:19:23
1	Ba 233.527†	66301.0	67010.2	[500]	ug/L	10:19:23
1	Be 313.107†	1483393.5	1504227.1	[500]	ug/L	10:19:18
1	Cd 226.502†	47137.0	47837.3	[500]	ug/L	10:19:23
1	Co 228.616†	24312.7	24642.9	[500]	ug/L	10:19:23
1	Cr 267.716†	48309.1	48737.0	[500]	ug/L	10:19:23
1	Cu 324.752†	192244.2	185150.8	[500]	ug/L	10:19:23
1	Mn 257.610†	467133.7	471565.5	[500]	ug/L	10:19:18
1	Mo 202.031†	7733.8	7793.0	[500]	ug/L	10:19:43
1	Ni 231.604†	21028.6	21142.1	[500]	ug/L	10:19:23
1	P 214.914†	4898.4	4711.0	[2500]	ug/L	10:19:43
1	Pb 220.353†	4136.9	4239.2	[500]	ug/L	10:19:43
1	S 181.975 Axial†	842.3	783.4	[1000]	ug/L	10:19:43
1	Sb 206.836†	1616.0	1598.0	[500]	ug/L	10:19:43
1	Se 196.026†	892.5	923.1	[500]	ug/L	10:19:43
1	Si 251.611†	89631.4	90123.7	[2500]	ug/L	10:19:23
1	Sn 189.927†	2899.2	2934.6	[500]	ug/L	10:19:43
1	Ti 334.940†	350239.0	354871.1	[500]	ug/L	10:19:18
1	Tl 190.801†	1598.9	1655.7	[500]	ug/L	10:19:43
1	U 409.014†	19431.8	21023.0	[500]	ug/L	10:19:23
1	V 292.402†	82233.4	84547.8	[500]	ug/L	10:19:23
1	Zn 213.857†	56983.5	56846.4	[500]	ug/L	10:19:23
1	SiO2†	89125.8	89597.0	[5347.5]	ug/L	10:20:51
2	Sc Radial	5485.3	5485.3	98.2	%	10:18:25
2	Y RADIAL	5927.2	5927.2	97.43	%	10:18:25
2	Al 396.153Radial†	7091.0	7216.2	[5000]	ug/L	10:18:25
2	Ca 317.933Radial†	3309.8	3343.2	[5000]	ug/L	10:18:45
2	K 766.490 Radial†	32043.0	30230.6	[5000]	ug/L	10:18:25
2	Mg 279.077 IEC†	162.7	163.3	[5000]	ug/L	10:18:45
2	Sr 421.552†	83914.9	85430.0	[500]	ug/L	10:18:25
2	Sc 361.383	971216.1	971216.1	98.698	%	10:19:49
2	Y 371.029	852413.1	852413.1	97.730	%	10:19:49
2	Ag 328.068†	127153.6	128510.2	[500]	ug/L	10:19:54
2	As 188.979†	1246.9	1297.2	[500]	ug/L	10:20:14
2	B 249.677†	23531.4	24128.1	[500]	ug/L	10:19:54
2	Ba 233.527†	67157.6	68048.2	[500]	ug/L	10:19:54
2	Be 313.107†	1479757.9	1504348.4	[500]	ug/L	10:19:49
2	Cd 226.502†	47724.3	48553.2	[500]	ug/L	10:19:54
2	Co 228.616†	24547.2	24942.8	[500]	ug/L	10:19:54
2	Cr 267.716†	48943.8	49504.0	[500]	ug/L	10:19:54
2	Cu 324.752†	195067.0	188503.9	[500]	ug/L	10:19:54
2	Mn 257.610†	465127.8	470731.2	[500]	ug/L	10:19:49
2	Mo 202.031†	7685.8	7764.2	[500]	ug/L	10:20:14
2	Ni 231.604†	21301.1	21472.1	[500]	ug/L	10:19:54
2	P 214.914†	4911.1	4736.4	[2500]	ug/L	10:20:14
2	Pb 220.353†	4118.5	4231.2	[500]	ug/L	10:20:14
2	S 181.975 Axial†	841.3	784.6	[1000]	ug/L	10:20:14
2	Sb 206.836†	1616.2	1602.4	[500]	ug/L	10:20:14

2	Se 196.026†	881.3	914.0	[500]	ug/L	10:20:14
2	Si 251.611†	90974.6	91714.5	[2500]	ug/L	10:19:54
2	Sn 189.927†	2892.6	2935.4	[500]	ug/L	10:20:14
2	Ti 334.940†	348096.7	353598.8	[500]	ug/L	10:19:49
2	Tl 190.801†	1595.5	1656.3	[500]	ug/L	10:20:14
2	U 409.014†	19459.1	21100.6	[500]	ug/L	10:19:54
2	V 292.402†	83108.8	85645.6	[500]	ug/L	10:19:54
2	Zn 213.857†	57712.4	57731.1	[500]	ug/L	10:19:54
2	SiO2†	89807.7	90516.4	[5347.5]	ug/L	10:20:56
3	Sc Radial	5415.3	5415.3	97.0	%	10:18:50
3	Y RADIAL	5870.4	5870.4	96.50	%	10:18:50
3	Al 396.153Radial†	6955.4	7169.7	[5000]	ug/L	10:18:50
3	Ca 317.933Radial†	3283.8	3359.9	[5000]	ug/L	10:19:10
3	K 766.490 Radial†	31587.2	30182.3	[5000]	ug/L	10:18:50
3	Mg 279.077 IEC†	161.4	164.1	[5000]	ug/L	10:19:10
3	Sr 421.552†	82304.8	84873.9	[500]	ug/L	10:18:50
3	Sc 361.383	976872.6	976872.6	99.273	%	10:20:20
3	Y 371.029	856369.4	856369.4	98.183	%	10:20:20
3	Ag 328.068†	125717.5	126317.5	[500]	ug/L	10:20:25
3	As 188.979†	1252.6	1295.6	[500]	ug/L	10:20:46
3	B 249.677†	23267.5	23724.2	[500]	ug/L	10:20:25
3	Ba 233.527†	66414.8	66906.0	[500]	ug/L	10:20:25
3	Be 313.107†	1478371.3	1494270.1	[500]	ug/L	10:20:20
3	Cd 226.502†	47423.3	47970.1	[500]	ug/L	10:20:25
3	Co 228.616†	24432.3	24683.1	[500]	ug/L	10:20:25
3	Cr 267.716†	48591.0	48861.4	[500]	ug/L	10:20:25
3	Cu 324.752†	192315.0	184587.4	[500]	ug/L	10:20:25
3	Mn 257.610†	466857.5	469744.8	[500]	ug/L	10:20:20
3	Mo 202.031†	7661.7	7694.9	[500]	ug/L	10:20:46
3	Ni 231.604†	21183.2	21228.4	[500]	ug/L	10:20:25
3	P 214.914†	4872.1	4668.3	[2500]	ug/L	10:20:46
3	Pb 220.353†	4111.7	4200.2	[500]	ug/L	10:20:46
3	S 181.975 Axial†	839.8	778.1	[1000]	ug/L	10:20:46
3	Sb 206.836†	1608.2	1584.8	[500]	ug/L	10:20:46
3	Se 196.026†	887.8	915.4	[500]	ug/L	10:20:46
3	Si 251.611†	89874.3	90072.4	[2500]	ug/L	10:20:25
3	Sn 189.927†	2862.0	2887.6	[500]	ug/L	10:20:46
3	Ti 334.940†	349778.4	353250.6	[500]	ug/L	10:20:20
3	Tl 190.801†	1580.5	1631.8	[500]	ug/L	10:20:46
3	U 409.014†	19498.6	21026.2	[500]	ug/L	10:20:25
3	V 292.402†	82476.2	84520.8	[500]	ug/L	10:20:25
3	Zn 213.857†	57145.2	56821.2	[500]	ug/L	10:20:25
3	SiO2†	89561.7	89741.7	[5347.5]	ug/L	10:21:01

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	973923.2	2836.03	0.29%	98.973 %
Sc Radial	5456.8	36.81	0.67%	97.7 %
Y 371.029	854312.2	1982.90	0.23%	97.948 %
Y RADIAL	5900.8	28.61	0.48%	97.00 %
Ag 328.068†	127145.0	1191.13	0.94%	[500] ug/L
Al 396.153Radial†	7184.2	27.76	0.39%	[5000] ug/L
As 188.979†	1301.5	8.95	0.69%	[500] ug/L
B 249.677†	23829.6	262.21	1.10%	[500] ug/L
Ba 233.527†	67321.5	631.54	0.94%	[500] ug/L
Be 313.107†	1500948.5	5784.02	0.39%	[500] ug/L
Ca 317.933Radial†	3360.0	16.79	0.50%	[5000] ug/L
Cd 226.502†	48120.2	380.85	0.79%	[500] ug/L
Co 228.616†	24756.3	162.82	0.66%	[500] ug/L
Cr 267.716†	49034.1	411.62	0.84%	[500] ug/L
Cu 324.752†	186080.7	2117.37	1.14%	[500] ug/L
K 766.490 Radial†	30213.3	26.97	0.09%	[5000] ug/L
Mg 279.077 IEC†	164.3	1.06	0.64%	[5000] ug/L
Mn 257.610†	470680.5	911.41	0.19%	[500] ug/L
Mo 202.031†	7750.7	50.45	0.65%	[500] ug/L
Ni 231.604†	21280.9	171.15	0.80%	[500] ug/L
P 214.914†	4705.2	34.40	0.73%	[2500] ug/L
Pb 220.353†	4223.5	20.59	0.49%	[500] ug/L
S 181.975 Axial†	782.1	3.46	0.44%	[1000] ug/L

Sb 206.836†	1595.1	9.14	0.57%	[500]	ug/L
Se 196.026†	917.5	4.90	0.53%	[500]	ug/L
Si 251.611†	90636.9	933.62	1.03%	[2500]	ug/L
Sn 189.927†	2919.2	27.37	0.94%	[500]	ug/L
Sr 421.552†	85142.6	278.50	0.33%	[500]	ug/L
Ti 334.940†	353906.8	853.01	0.24%	[500]	ug/L
Tl 190.801†	1647.9	13.97	0.85%	[500]	ug/L
U 409.014†	21049.9	43.89	0.21%	[500]	ug/L
V 292.402†	84904.7	641.75	0.76%	[500]	ug/L
Zn 213.857†	57132.9	518.19	0.91%	[500]	ug/L
SiO2†	89951.7	494.37	0.55%	[5347.5]	ug/L

Sequence No.: 4

Sample ID: SCAL

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 4

Date Collected: 1/28/2010 10:23:12

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: SCAL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib.	Analysis Time
1	Sc Radial	5428.6	5428.6	97.2 %		10:25:25
1	Y RADIAL	5831.4	5831.4	95.85 %		10:25:25
1	Al 396.153Radial†	13899.0	14295.9	[10000] ug/L		10:25:05
1	Ca 317.933Radial†	6519.2	6680.4	[10000] ug/L		10:25:25
1	Fe 238.204 Radial†	1193.3	1219.3	[10000] ug/L		10:25:25
1	K 766.490 Radial†	60669.5	60022.9	[10000] ug/L		10:25:05
1	Mg 279.077 IEC†	319.4	326.2	[10000] ug/L		10:25:25
1	Na 589.592 Radial†	35357.5	37404.7	[10000] ug/L		10:25:05
1	Sr 421.552†	166454.8	171241.3	[1000] ug/L		10:25:05
1	Sc 361.383	890354.9	890354.9	90.481 %		10:26:28
1	Y 371.029	807932.7	807932.7	92.630 %		10:26:28
1	Ag 328.068†	240164.5	265111.2	[1000] ug/L		10:26:28
1	As 188.979†	2507.5	2805.1	[1000] ug/L		10:26:48
1	B 249.677†	46072.1	51205.6	[1000] ug/L		10:26:28
1	Ba 233.527†	130347.4	144065.9	[1000] ug/L		10:26:28
1	Be 313.107†	2918205.6	3230298.4	[1000] ug/L		10:26:23
1	Cd 226.502†	92203.8	102103.9	[1000] ug/L		10:26:28
1	Co 228.616†	47786.6	52886.0	[1000] ug/L		10:26:28
1	Cr 267.716†	95035.3	104948.5	[1000] ug/L		10:26:28
1	Cu 324.752†	372989.7	403095.5	[1000] ug/L		10:26:28
1	Mn 257.610†	912916.0	1008431.1	[1000] ug/L		10:26:23
1	Mo 202.031†	14907.8	16453.3	[1000] ug/L		10:26:48
1	Ni 231.604†	40979.0	45180.4	[1000] ug/L		10:26:28
1	P 214.914†	9457.5	10213.0	[5000] ug/L		10:26:48
1	Pb 220.353†	8186.8	9106.5	[1000] ug/L		10:26:48
1	S 181.975 Axial†	1573.9	1671.7	[2000] ug/L		10:26:48
1	Sb 206.836†	3079.2	3368.0	[1000] ug/L		10:26:48
1	Se 196.026†	1742.3	1946.7	[1000] ug/L		10:26:48
1	Si 251.611†	170273.5	187727.7	[5000] ug/L		10:26:28
1	Sn 189.927†	5578.9	6170.4	[1000] ug/L		10:26:48
1	Ti 334.940†	659841.8	730173.6	[1000] ug/L		10:26:28
1	Tl 190.801†	3156.5	3528.4	[1000] ug/L		10:26:48
1	U 409.014†	39498.8	45039.2	[1000] ug/L		10:26:28
1	V 292.402†	163876.4	182558.3	[1000] ug/L		10:26:28
1	Zn 213.857†	110609.9	121504.4	[1000] ug/L		10:26:28
1	SiO2†	172548.5	190226.3	[10695] ug/L		10:27:57
2	Sc Radial	5406.0	5406.0	96.8 %		10:25:50
2	Y RADIAL	5819.7	5819.7	95.66 %		10:25:50
2	Al 396.153Radial†	13974.4	14433.4	[10000] ug/L		10:25:30
2	Ca 317.933Radial†	6500.4	6688.8	[10000] ug/L		10:25:50
2	Fe 238.204 Radial†	1194.4	1225.5	[10000] ug/L		10:25:50
2	K 766.490 Radial†	61192.4	60823.6	[10000] ug/L		10:25:30
2	Mg 279.077 IEC†	317.2	325.3	[10000] ug/L		10:25:50
2	Na 589.592 Radial†	35631.9	37839.9	[10000] ug/L		10:25:30
2	Sr 421.552†	167666.3	173207.5	[1000] ug/L		10:25:30
2	Sc 361.383	889821.6	889821.6	90.426 %		10:27:00
2	Y 371.029	807745.9	807745.9	92.609 %		10:27:00
2	Ag 328.068†	239767.5	264831.3	[1000] ug/L		10:27:00
2	As 188.979†	2502.3	2801.0	[1000] ug/L		10:27:20
2	B 249.677†	46106.5	51274.2	[1000] ug/L		10:27:00
2	Ba 233.527†	130445.7	144260.8	[1000] ug/L		10:27:00
2	Be 313.107†	2917365.7	3231302.6	[1000] ug/L		10:26:54
2	Cd 226.502†	92243.0	102208.3	[1000] ug/L		10:27:00
2	Co 228.616†	47843.1	52980.1	[1000] ug/L		10:27:00
2	Cr 267.716†	95194.0	105186.9	[1000] ug/L		10:27:00
2	Cu 324.752†	371843.4	402074.8	[1000] ug/L		10:27:00
2	Mn 257.610†	914680.0	1010986.5	[1000] ug/L		10:26:54
2	Mo 202.031†	14825.9	16372.6	[1000] ug/L		10:27:20
2	Ni 231.604†	41023.4	45256.7	[1000] ug/L		10:27:00

2	P 214.914†	9426.1	10184.6	[5000]	ug/L	10:27:20
2	Pb 220.353†	8208.7	9136.1	[1000]	ug/L	10:27:20
2	S 181.975 Axial†	1560.5	1657.9	[2000]	ug/L	10:27:20
2	Sb 206.836†	3071.8	3361.9	[1000]	ug/L	10:27:20
2	Se 196.026†	1739.3	1944.6	[1000]	ug/L	10:27:20
2	Si 251.611†	170060.2	187604.6	[5000]	ug/L	10:27:00
2	Sn 189.927†	5588.6	6184.9	[1000]	ug/L	10:27:20
2	Ti 334.940†	659101.8	729792.3	[1000]	ug/L	10:27:00
2	Tl 190.801†	3181.1	3557.7	[1000]	ug/L	10:27:20
2	U 409.014†	39375.3	44928.8	[1000]	ug/L	10:27:00
2	V 292.402†	163708.4	182481.1	[1000]	ug/L	10:27:00
2	Zn 213.857†	110669.4	121643.6	[1000]	ug/L	10:27:00
2	SiO2†	169744.7	187239.9	[10695]	ug/L	10:28:02
3	Sc Radial	5451.1	5451.1	97.6	%	10:26:15
3	Y RADIAL	5869.3	5869.3	96.48	%	10:26:15
3	Al 396.153Radial†	14032.6	14373.5	[10000]	ug/L	10:25:55
3	Ca 317.933Radial†	6546.0	6680.0	[10000]	ug/L	10:26:15
3	Fe 238.204 Radial†	1193.3	1214.2	[10000]	ug/L	10:26:15
3	K 766.490 Radial†	61260.4	60369.7	[10000]	ug/L	10:25:55
3	Mg 279.077 IEC†	317.0	322.4	[10000]	ug/L	10:26:15
3	Na 589.592 Radial†	35503.6	37403.6	[10000]	ug/L	10:25:55
3	Sr 421.552†	168169.7	172288.8	[1000]	ug/L	10:25:55
3	Sc 361.383	890814.1	890814.1	90.527	%	10:27:31
3	Y 371.029	809156.2	809156.2	92.770	%	10:27:31
3	Ag 328.068†	240672.4	265535.5	[1000]	ug/L	10:27:31
3	As 188.979†	2493.5	2788.3	[1000]	ug/L	10:27:51
3	B 249.677†	46217.3	51339.8	[1000]	ug/L	10:27:31
3	Ba 233.527†	131044.2	144761.3	[1000]	ug/L	10:27:31
3	Be 313.107†	2914422.2	3224456.6	[1000]	ug/L	10:27:26
3	Cd 226.502†	92903.8	102824.7	[1000]	ug/L	10:27:31
3	Co 228.616†	48002.5	53097.3	[1000]	ug/L	10:27:31
3	Cr 267.716†	95787.3	105725.0	[1000]	ug/L	10:27:31
3	Cu 324.752†	371909.8	401690.0	[1000]	ug/L	10:27:31
3	Mn 257.610†	913291.0	1008325.2	[1000]	ug/L	10:27:26
3	Mo 202.031†	14841.0	16371.0	[1000]	ug/L	10:27:51
3	Ni 231.604†	41332.6	45547.7	[1000]	ug/L	10:27:31
3	P 214.914†	9405.6	10150.3	[5000]	ug/L	10:27:51
3	Pb 220.353†	8154.0	9065.6	[1000]	ug/L	10:27:51
3	S 181.975 Axial†	1558.0	1653.2	[2000]	ug/L	10:27:51
3	Sb 206.836†	3068.2	3354.2	[1000]	ug/L	10:27:51
3	Se 196.026†	1750.2	1954.5	[1000]	ug/L	10:27:51
3	Si 251.611†	170726.3	188130.9	[5000]	ug/L	10:27:31
3	Sn 189.927†	5556.1	6142.1	[1000]	ug/L	10:27:51
3	Ti 334.940†	661615.7	731757.2	[1000]	ug/L	10:27:31
3	Tl 190.801†	3161.7	3532.3	[1000]	ug/L	10:27:51
3	U 409.014†	39436.0	44947.3	[1000]	ug/L	10:27:31
3	V 292.402†	164841.7	183531.2	[1000]	ug/L	10:27:31
3	Zn 213.857†	111168.5	122058.5	[1000]	ug/L	10:27:31
3	SiO2†	169296.5	186535.6	[10695]	ug/L	10:28:07

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	890330.2	496.70	0.06%	90.478	%
Sc Radial	5428.6	22.57	0.42%	97.2	%
Y 371.029	808278.3	766.03	0.09%	92.670	%
Y RADIAL	5840.1	25.97	0.44%	96.00	%
Ag 328.068†	265159.3	354.54	0.13%	[1000]	ug/L
Al 396.153Radial†	14367.6	68.96	0.48%	[10000]	ug/L
As 188.979†	2798.1	8.77	0.31%	[1000]	ug/L
B 249.677†	51273.2	67.10	0.13%	[1000]	ug/L
Ba 233.527†	144362.7	358.70	0.25%	[1000]	ug/L
Be 313.107†	3228685.9	3696.89	0.11%	[1000]	ug/L
Ca 317.933Radial†	6683.1	5.01	0.07%	[10000]	ug/L
Cd 226.502†	102379.0	389.50	0.38%	[1000]	ug/L
Co 228.616†	52987.8	105.87	0.20%	[1000]	ug/L
Cr 267.716†	105286.8	397.80	0.38%	[1000]	ug/L
Cu 324.752†	402286.8	726.31	0.18%	[1000]	ug/L
Fe 238.204 Radial†	1219.7	5.67	0.47%	[10000]	ug/L
K 766.490 Radial†	60405.4	401.52	0.66%	[10000]	ug/L

Mg 279.077 IEC†	324.6	1.99	0.61%	[10000]	ug/L
Mn 257.610†	1009247.6	1506.87	0.15%	[1000]	ug/L
Mo 202.031†	16399.0	47.07	0.29%	[1000]	ug/L
Na 589.592 Radial†	37549.4	251.59	0.67%	[10000]	ug/L
Ni 231.604†	45328.3	193.82	0.43%	[1000]	ug/L
P 214.914†	10182.6	31.37	0.31%	[5000]	ug/L
Pb 220.353†	9102.7	35.42	0.39%	[1000]	ug/L
S 181.975 Axial†	1660.9	9.62	0.58%	[2000]	ug/L
Sb 206.836†	3361.4	6.92	0.21%	[1000]	ug/L
Se 196.026†	1948.6	5.25	0.27%	[1000]	ug/L
Si 251.611†	187821.1	275.29	0.15%	[5000]	ug/L
Sn 189.927†	6165.8	21.76	0.35%	[1000]	ug/L
Sr 421.552†	172245.9	983.78	0.57%	[1000]	ug/L
Ti 334.940†	730574.4	1041.99	0.14%	[1000]	ug/L
Tl 190.801†	3539.4	15.91	0.45%	[1000]	ug/L
U 409.014†	44971.8	59.10	0.13%	[1000]	ug/L
V 292.402†	182856.9	585.29	0.32%	[1000]	ug/L
Zn 213.857†	121735.5	288.24	0.24%	[1000]	ug/L
SiO2†	188000.6	1959.40	1.04%	[10695]	ug/L

Sequence No.: 5
 Sample ID: S10
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 5
 Date Collected: 1/28/2010 10:30:19
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: S10

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Analysis Time
1	Sc Radial	5413.8	5413.8	96.9 %	10:32:32
1	Y RADIAL	5831.1	5831.1	95.85 %	10:32:32
1	Al 396.153Radial†	69951.8	72160.0	[50000] ug/L	10:32:12
1	Ca 317.933Radial†	31922.8	32905.4	[50000] ug/L	10:32:12
1	Fe 238.204 Radial†	2285.9	2349.8	[20000] ug/L	10:32:32
1	Mg 279.077 IEC†	1477.5	1521.9	[50000] ug/L	10:32:32
1	Na 589.592 Radial†	71916.4	75218.5	[20000] ug/L	10:32:12
1	Sc 361.383	954592.9	954592.9	97.009 %	10:33:29
1	Y 371.029	831254.9	831254.9	95.304 %	10:33:29
2	Sc Radial	5390.5	5390.5	96.5 %	10:32:57
2	Y RADIAL	5815.5	5815.5	95.59 %	10:32:57
2	Al 396.153Radial†	70126.9	72653.3	[50000] ug/L	10:32:37
2	Ca 317.933Radial†	31919.6	33044.5	[50000] ug/L	10:32:37
2	Fe 238.204 Radial†	2269.9	2343.3	[20000] ug/L	10:32:57
2	Mg 279.077 IEC†	1475.8	1526.7	[50000] ug/L	10:32:57
2	Na 589.592 Radial†	71719.4	75335.1	[20000] ug/L	10:32:37
2	Sc 361.383	943638.9	943638.9	95.895 %	10:33:35
2	Y 371.029	822406.1	822406.1	94.289 %	10:33:35
3	Sc Radial	5414.0	5414.0	96.9 %	10:33:22
3	Y RADIAL	5858.3	5858.3	96.30 %	10:33:22
3	Al 396.153Radial†	69461.0	71651.1	[50000] ug/L	10:33:02
3	Ca 317.933Radial†	31643.4	32616.1	[50000] ug/L	10:33:02
3	Fe 238.204 Radial†	2295.0	2359.1	[20000] ug/L	10:33:22
3	Mg 279.077 IEC†	1488.6	1533.2	[50000] ug/L	10:33:22
3	Na 589.592 Radial†	70686.0	73946.6	[20000] ug/L	10:33:02
3	Sc 361.383	948215.2	948215.2	96.360 %	10:33:41
3	Y 371.029	825816.7	825816.7	94.681 %	10:33:41

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	948815.7	5501.62	0.58%	96.421 %
Sc Radial	5406.1	13.51	0.25%	96.8 %
Y 371.029	826492.5	4462.97	0.54%	94.758 %
Y RADIAL	5835.0	21.67	0.37%	95.91 %
Al 396.153Radial†	72154.8	501.11	0.69%	[50000] ug/L
Ca 317.933Radial†	32855.4	218.54	0.67%	[50000] ug/L
Fe 238.204 Radial†	2350.7	7.94	0.34%	[20000] ug/L
Mg 279.077 IEC†	1527.2	5.68	0.37%	[50000] ug/L
Na 589.592 Radial†	74833.4	770.17	1.03%	[20000] ug/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	262.8	0.00000	0.999839	
Al 396.153Radial	3	Lin Thru 0	0.0	1.443	0.00000	1.000000	
As 188.979	3	Lin Thru 0	0.0	2.757	0.00000	0.999569	
B 249.677	3	Lin Thru 0	0.0	50.50	0.00000	0.999542	
Ba 233.527	3	Lin Thru 0	0.0	142.3	0.00000	0.999605	
Be 313.107	3	Lin Thru 0	0.0	3181	0.00000	0.999567	
Ca 317.933Radial	3	Lin Thru 0	0.0	0.6577	0.00000	0.999992	
Cd 226.502	3	Lin Thru 0	0.0	101.1	0.00000	0.999686	
Co 228.616	3	Lin Thru 0	0.0	52.25	0.00000	0.999613	
Cr 267.716	3	Lin Thru 0	0.0	103.8	0.00000	0.999594	
Cu 324.752	3	Lin Thru 0	0.0	396.0	0.00000	0.999503	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.1184	0.00000	0.999888	
K 766.490 Radial	3	Lin Thru 0	0.0	6.040	0.00000	0.999997	

Mg 279.077 IEC	3	Lin Thru 0	0.0	0.0306	0.00000	0.999903
Mn 257.610	3	Lin Thru 0	0.0	995.0	0.00000	0.999606
Mo 202.031	3	Lin Thru 0	0.0	16.21	0.00000	0.999729
Na 589.592 Radia	2	Lin Thru 0	0.0	3.744	0.00000	0.999999
Ni 231.604	3	Lin Thru 0	0.0	44.74	0.00000	0.999662
P 214.914	3	Lin Thru 0	0.0	2.004	0.00000	0.999496
Pb 220.353	3	Lin Thru 0	0.0	8.966	0.00000	0.999548
S 181.975 Axial	3	Lin Thru 0	0.0	0.8201	0.00000	0.999674
Sb 206.836	3	Lin Thru 0	0.0	3.324	0.00000	0.999736
Se 196.026	3	Lin Thru 0	0.0	1.924	0.00000	0.999682
Si 251.611	3	Lin Thru 0	0.0	37.27	0.00000	0.999861
Sn 189.927	3	Lin Thru 0	0.0	6.096	0.00000	0.999742
Sr 421.552	3	Lin Thru 0	0.0	171.8	0.00000	0.999982
Ti 334.940	3	Lin Thru 0	0.0	725.5	0.00000	0.999890
Tl 190.801	3	Lin Thru 0	0.0	3.489	0.00000	0.999591
U 409.014	3	Lin Thru 0	0.0	44.37	0.00000	0.999638
V 292.402	3	Lin Thru 0	0.0	180.1	0.00000	0.999556
Zn 213.857	3	Lin Thru 0	0.0	120.2	0.00000	0.999669
SiO2	3	Lin Thru 0	0.0	17.41	0.00000	0.999815

Sequence No.: 6

Sample ID: ICV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 9

Date Collected: 1/28/2010 10:35:52

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: ICV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5666.4	5666.4	101 %		10:37:45
1	Y RADIAL	6154.1	6154.1	101.2 %		10:37:45
1	Al 396.153Radial†	7116.3	7010.4	4833.9 ug/L	4833.9 ppb	10:37:45
1	Ca 317.933Radial†	3285.8	3211.8	4883.6 ug/L	4883.6 ppb	10:38:05
1	Fe 238.204 Radial†	614.0	596.8	5053.4 ug/L	5053.4 ppb	10:38:05
1	K 766.490 Radial†	17115.2	14474.2	2393.2 ug/L	2393.2 ppb	10:37:45
1	Mg 279.077 IEC†	165.4	160.7	5244.4 ug/L	5244.4 ppb	10:38:05
1	Na 589.592 Radial†	7963.3	8877.0	2370.8 ug/L	2370.8 ppb	10:37:45
1	Sr 421.552†	88308.5	87029.2	506.56 ug/L	506.56 ppb	10:37:45
1	Sc 361.383	973322.5	973322.5	98.912 %		10:39:02
1	Y 371.029	856390.1	856390.1	98.186 %		10:39:02
1	Ag 328.068†	64523.8	64912.6	250.12 ug/L	250.12 ppb	10:39:02
1	As 188.979†	1193.1	1240.0	453.87 ug/L	453.87 ppb	10:39:23
1	B 249.677†	24043.9	24594.6	484.81 ug/L	484.81 ppb	10:39:02
1	Ba 233.527†	67605.0	68353.2	481.46 ug/L	481.46 ppb	10:39:02
1	Be 313.107†	765394.7	778882.3	245.94 ug/L	245.94 ppb	10:39:02
1	Cd 226.502†	45927.4	46631.9	461.15 ug/L	461.15 ppb	10:39:23
1	Co 228.616†	24440.2	24780.8	474.39 ug/L	474.39 ppb	10:39:23
1	Cr 267.716†	47286.7	47721.3	460.42 ug/L	460.42 ppb	10:39:02
1	Cu 324.752†	196287.9	189310.6	478.13 ug/L	478.13 ppb	10:39:02
1	Mn 257.610†	477158.5	481874.4	484.56 ug/L	484.56 ppb	10:39:02
1	Mo 202.031†	8276.5	8344.6	515.27 ug/L	515.27 ppb	10:39:23
1	Ni 231.604†	21035.4	21156.8	472.58 ug/L	472.58 ppb	10:39:23
1	P 214.914†	4930.9	4745.7	2274.9 ug/L	2274.9 ppb	10:39:23
1	Pb 220.353†	4148.8	4252.8	476.00 ug/L	476.00 ppb	10:39:23
1	S 181.975 Axial†	1987.3	1941.3	2366.4 ug/L	2366.4 ppb	10:39:23
1	Sb 206.836†	1608.8	1591.4	497.41 ug/L	497.41 ppb	10:39:23
1	Se 196.026†	4553.9	4625.1	2422.1 ug/L	2422.1 ppb	10:39:23
1	Si 251.611†	171074.2	172495.8	4621.7 ug/L	4621.7 ppb	10:39:02
1	Sn 189.927†	3090.4	3129.0	514.09 ug/L	514.09 ppb	10:39:23
1	Ti 334.940†	344437.9	349136.5	481.09 ug/L	481.09 ppb	10:39:02
1	Tl 190.801†	1675.9	1734.1	500.41 ug/L	500.41 ppb	10:39:23
1	U 409.014†	18610.9	20200.3	453.70 ug/L	453.70 ppb	10:39:02
1	V 292.402†	83926.0	86289.6	485.88 ug/L	485.88 ppb	10:39:02
1	Zn 213.857†	57758.2	57650.9	475.61 ug/L	475.61 ppb	10:39:02
1	SiO2†	169535.0	170923.8	9801.4 ug/L	9801.4 ppb	10:40:20
2	Sc Radial	5575.1	5575.1	99.8 %		10:38:10
2	Y RADIAL	6011.7	6011.7	98.82 %		10:38:10
2	Al 396.153Radial†	7157.4	7166.4	4942.3 ug/L	4942.3 ppb	10:38:10
2	Ca 317.933Radial†	3263.0	3242.0	4929.5 ug/L	4929.5 ppb	10:38:30
2	Fe 238.204 Radial†	612.1	604.7	5120.7 ug/L	5120.7 ppb	10:38:30
2	K 766.490 Radial†	17232.0	14867.4	2458.3 ug/L	2458.3 ppb	10:38:10
2	Mg 279.077 IEC†	166.7	164.6	5372.7 ug/L	5372.7 ppb	10:38:30
2	Na 589.592 Radial†	7883.6	8925.6	2383.8 ug/L	2383.8 ppb	10:38:10
2	Sr 421.552†	88037.8	88182.7	513.27 ug/L	513.27 ppb	10:38:10
2	Sc 361.383	983646.7	983646.7	99.961 %		10:39:28
2	Y 371.029	866950.3	866950.3	99.396 %		10:39:28
2	Ag 328.068†	64938.8	64643.0	249.11 ug/L	249.11 ppb	10:39:28
2	As 188.979†	1184.6	1218.9	446.20 ug/L	446.20 ppb	10:39:49
2	B 249.677†	24212.1	24507.8	483.09 ug/L	483.09 ppb	10:39:28
2	Ba 233.527†	67945.3	67976.3	478.81 ug/L	478.81 ppb	10:39:28
2	Be 313.107†	770952.5	776320.4	245.13 ug/L	245.13 ppb	10:39:28
2	Cd 226.502†	45748.1	45965.2	454.54 ug/L	454.54 ppb	10:39:49
2	Co 228.616†	24430.6	24511.9	469.24 ug/L	469.24 ppb	10:39:49
2	Cr 267.716†	47489.9	47422.8	457.54 ug/L	457.54 ppb	10:39:28
2	Cu 324.752†	198387.8	189328.4	478.17 ug/L	478.17 ppb	10:39:28
2	Mn 257.610†	479430.3	479083.8	481.76 ug/L	481.76 ppb	10:39:28
2	Mo 202.031†	8291.5	8271.7	510.78 ug/L	510.78 ppb	10:39:49
2	Ni 231.604†	20972.1	20870.3	466.18 ug/L	466.18 ppb	10:39:49

2	P 214.914†	4909.4	4671.8	2237.9 ug/L	2237.9 ppb	10:39:49
2	Pb 220.353†	4141.5	4201.4	470.28 ug/L	470.28 ppb	10:39:49
2	S 181.975 Axial†	1970.0	1903.0	2319.6 ug/L	2319.6 ppb	10:39:49
2	Sb 206.836†	1588.9	1554.4	486.04 ug/L	486.04 ppb	10:39:49
2	Se 196.026†	4535.0	4557.9	2387.3 ug/L	2387.3 ppb	10:39:49
2	Si 251.611†	172226.7	171833.4	4604.0 ug/L	4604.0 ppb	10:39:28
2	Sn 189.927†	3070.5	3076.3	505.46 ug/L	505.46 ppb	10:39:49
2	Ti 334.940†	346760.7	347805.3	479.26 ug/L	479.26 ppb	10:39:28
2	Tl 190.801†	1680.7	1721.1	496.66 ug/L	496.66 ppb	10:39:49
2	U 409.014†	18930.9	20323.0	456.46 ug/L	456.46 ppb	10:39:28
2	V 292.402†	84583.2	86056.5	484.53 ug/L	484.53 ppb	10:39:28
2	Zn 213.857†	58108.3	57388.2	473.46 ug/L	473.46 ppb	10:39:28
2	SiO2†	171880.8	171471.5	9832.9 ug/L	9832.9 ppb	10:40:25
3	Sc Radial	5485.7	5485.7	98.2 %		10:38:35
3	Y RADIAL	5950.1	5950.1	97.81 %		10:38:35
3	Al 396.153Radial†	7020.8	7144.3	4926.6 ug/L	4926.6 ppb	10:38:35
3	Ca 317.933Radial†	3269.9	3302.4	5021.3 ug/L	5021.3 ppb	10:38:55
3	Fe 238.204 Radial†	610.2	612.8	5188.8 ug/L	5188.8 ppb	10:38:55
3	K 766.490 Radial†	16830.3	14739.9	2437.1 ug/L	2437.1 ppb	10:38:35
3	Mg 279.077 IEC†	165.3	165.9	5414.3 ug/L	5414.3 ppb	10:38:55
3	Na 589.592 Radial†	7812.0	8981.5	2398.7 ug/L	2398.7 ppb	10:38:35
3	Sr 421.552†	86681.9	88240.7	513.61 ug/L	513.61 ppb	10:38:35
3	Sc 361.383	973918.5	973918.5	98.973 %		10:39:54
3	Y 371.029	859357.5	859357.5	98.526 %		10:39:54
3	Ag 328.068†	64380.7	64728.1	249.46 ug/L	249.46 ppb	10:39:54
3	As 188.979†	1188.1	1234.2	451.78 ug/L	451.78 ppb	10:40:15
3	B 249.677†	24007.1	24542.6	483.75 ug/L	483.75 ppb	10:39:54
3	Ba 233.527†	67430.8	68135.4	479.93 ug/L	479.93 ppb	10:39:54
3	Be 313.107†	767334.0	780368.2	246.40 ug/L	246.40 ppb	10:39:54
3	Cd 226.502†	45997.5	46674.4	461.56 ug/L	461.56 ppb	10:40:15
3	Co 228.616†	24501.4	24827.6	475.29 ug/L	475.29 ppb	10:40:15
3	Cr 267.716†	47279.2	47684.5	460.07 ug/L	460.07 ppb	10:39:54
3	Cu 324.752†	195635.8	188530.2	476.16 ug/L	476.16 ppb	10:39:54
3	Mn 257.610†	476213.4	480624.3	483.31 ug/L	483.31 ppb	10:39:54
3	Mo 202.031†	8301.3	8364.5	516.51 ug/L	516.51 ppb	10:40:15
3	Ni 231.604†	21043.4	21151.9	472.47 ug/L	472.47 ppb	10:40:15
3	P 214.914†	4916.8	4728.3	2266.6 ug/L	2266.6 ppb	10:40:15
3	Pb 220.353†	4172.9	4274.6	478.44 ug/L	478.44 ppb	10:40:15
3	S 181.975 Axial†	1983.3	1936.1	2360.0 ug/L	2360.0 ppb	10:40:15
3	Sb 206.836†	1611.9	1593.5	498.09 ug/L	498.09 ppb	10:40:15
3	Se 196.026†	4557.4	4625.8	2422.9 ug/L	2422.9 ppb	10:40:15
3	Si 251.611†	170488.0	171797.6	4602.9 ug/L	4602.9 ppb	10:39:54
3	Sn 189.927†	3094.4	3131.2	514.48 ug/L	514.48 ppb	10:40:15
3	Ti 334.940†	343587.7	348064.4	479.62 ug/L	479.62 ppb	10:39:54
3	Tl 190.801†	1671.9	1729.0	498.91 ug/L	498.91 ppb	10:40:15
3	U 409.014†	18505.0	20081.8	451.01 ug/L	451.01 ppb	10:39:54
3	V 292.402†	83964.4	86276.5	485.81 ug/L	485.81 ppb	10:39:54
3	Zn 213.857†	57781.5	57638.7	475.50 ug/L	475.50 ppb	10:39:54
3	SiO2†	171326.0	172628.5	9899.2 ug/L	9899.2 ppb	10:40:31

Mean Data: ICV

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	976962.5	99.282 %		0.5890			0.59%
Sc Radial	5575.7	99.8 %		1.62			1.62%
Y 371.029	860899.3	98.703 %		0.6244			0.63%
Y RADIAL	6038.6	99.26 %		1.720			1.73%
Ag 328.068†	64761.2	249.56 ug/L		0.514	249.56 ppb	0.514	0.21%
QC value within limits for Ag 328.068 Recovery = 99.82%							
Al 396.153Radial†	7107.0	4900.9 ug/L		58.57	4900.9 ppb	58.57	1.20%
QC value within limits for Al 396.153Radial Recovery = 98.02%							
As 188.979†	1231.1	450.62 ug/L		3.963	450.62 ppb	3.963	0.88%
QC value within limits for As 188.979 Recovery = 90.12%							
B 249.677†	24548.4	483.89 ug/L		0.865	483.89 ppb	0.865	0.18%
QC value within limits for B 249.677 Recovery = 96.78%							
Ba 233.527†	68155.0	480.07 ug/L		1.329	480.07 ppb	1.329	0.28%
QC value within limits for Ba 233.527 Recovery = 96.01%							
Be 313.107†	778523.6	245.82 ug/L		0.644	245.82 ppb	0.644	0.26%
QC value within limits for Be 313.107 Recovery = 98.33%							
Ca 317.933Radial†	3252.1	4944.8 ug/L		70.13	4944.8 ppb	70.13	1.42%

QC value within limits for Ca 317.933 Radial Recovery = 98.90%							
Cd 226.502†	46423.8	459.08 ug/L	3.936	459.08 ppb	3.936	0.86%	
QC value within limits for Cd 226.502 Recovery = 91.82%							
Co 228.616†	24706.8	472.97 ug/L	3.267	472.97 ppb	3.267	0.69%	
QC value within limits for Co 228.616 Recovery = 94.59%							
Cr 267.716†	47609.6	459.34 ug/L	1.570	459.34 ppb	1.570	0.34%	
QC value within limits for Cr 267.716 Recovery = 91.87%							
Cu 324.752†	189056.4	477.49 ug/L	1.147	477.49 ppb	1.147	0.24%	
QC value within limits for Cu 324.752 Recovery = 95.50%							
Fe 238.204 Radial†	604.8	5121.0 ug/L	67.71	5121.0 ppb	67.71	1.32%	
QC value within limits for Fe 238.204 Radial Recovery = 102.42%							
K 766.490 Radial†	14693.8	2429.5 ug/L	33.20	2429.5 ppb	33.20	1.37%	
QC value within limits for K 766.490 Radial Recovery = 97.18%							
Mg 279.077 IEC†	163.7	5343.8 ug/L	88.56	5343.8 ppb	88.56	1.66%	
QC value within limits for Mg 279.077 IEC Recovery = 106.88%							
Mn 257.610†	480527.5	483.21 ug/L	1.404	483.21 ppb	1.404	0.29%	
QC value within limits for Mn 257.610 Recovery = 96.64%							
Mo 202.031†	8327.0	514.19 ug/L	3.015	514.19 ppb	3.015	0.59%	
QC value within limits for Mo 202.031 Recovery = 102.84%							
Na 589.592 Radial†	8928.1	2384.4 ug/L	13.97	2384.4 ppb	13.97	0.59%	
QC value within limits for Na 589.592 Radial Recovery = 95.38%							
Ni 231.604†	21059.7	470.41 ug/L	3.664	470.41 ppb	3.664	0.78%	
QC value within limits for Ni 231.604 Recovery = 94.08%							
P 214.914†	4715.3	2259.8 ug/L	19.39	2259.8 ppb	19.39	0.86%	
QC value within limits for P 214.914 Recovery = 90.39%							
Pb 220.353†	4242.9	474.90 ug/L	4.191	474.90 ppb	4.191	0.88%	
QC value within limits for Pb 220.353 Recovery = 94.98%							
S 181.975 Axial†	1926.8	2348.7 ug/L	25.36	2348.7 ppb	25.36	1.08%	
QC value within limits for S 181.975 Axial Recovery = 93.95%							
Sb 206.836†	1579.8	493.85 ug/L	6.769	493.85 ppb	6.769	1.37%	
QC value within limits for Sb 206.836 Recovery = 98.77%							
Se 196.026†	4602.9	2410.8 ug/L	20.29	2410.8 ppb	20.29	0.84%	
QC value within limits for Se 196.026 Recovery = 96.43%							
Si 251.611†	172042.3	4609.5 ug/L	10.54	4609.5 ppb	10.54	0.23%	
QC value within limits for Si 251.611 Recovery = 92.19%							
Sn 189.927†	3112.1	511.34 ug/L	5.101	511.34 ppb	5.101	1.00%	
QC value within limits for Sn 189.927 Recovery = 102.27%							
Sr 421.552†	87817.5	511.14 ug/L	3.977	511.14 ppb	3.977	0.78%	
QC value within limits for Sr 421.552 Recovery = 102.23%							
Ti 334.940†	348335.4	479.99 ug/L	0.973	479.99 ppb	0.973	0.20%	
QC value within limits for Ti 334.940 Recovery = 96.00%							
Tl 190.801†	1728.1	498.66 ug/L	1.886	498.66 ppb	1.886	0.38%	
QC value within limits for Tl 190.801 Recovery = 99.73%							
U 409.014†	20201.7	453.72 ug/L	2.725	453.72 ppb	2.725	0.60%	
QC value within limits for U 409.014 Recovery = 90.74%							
V 292.402†	86207.5	485.41 ug/L	0.762	485.41 ppb	0.762	0.16%	
QC value within limits for V 292.402 Recovery = 97.08%							
Zn 213.857†	57559.2	474.86 ug/L	1.211	474.86 ppb	1.211	0.26%	
QC value within limits for Zn 213.857 Recovery = 94.97%							
SiO2†	171674.6	9844.5 ug/L	49.94	9844.5 ppb	49.94	0.51%	
QC value within limits for SiO2 Recovery = 92.05%							
All analyte(s) passed QC.							

Sequence No.: 7

Sample ID: ICB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 10

Date Collected: 1/28/2010 10:42:41

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: ICB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5686.2	5686.2	102 %		10:44:34
1	Y RADIAL	6184.8	6184.8	101.7 %		10:44:34
1	Al 396.153Radial†	4.1	0.3	0.1714 ug/L	0.1714 ppb	10:44:54
1	Ca 317.933Radial†	24.4	-2.8	-4.2245 ug/L	-4.2245 ppb	10:44:54
1	Fe 238.204 Radial†	10.3	1.7	14.647 ug/L	14.647 ppb	10:44:54
1	K 766.490 Radial†	2471.6	32.4	5.3812 ug/L	5.3812 ppb	10:44:34
1	Mg 279.077 IEC†	3.4	1.0	32.650 ug/L	32.650 ppb	10:44:54
1	Na 589.592 Radial†	-1156.0	-107.4	-28.686 ug/L	-28.686 ppb	10:44:34
1	Sr 421.552†	2.5	-8.8	-0.0510 ug/L	-0.0510 ppb	10:44:34
1	Sc 361.383	983291.4	983291.4	99.925 %		10:45:51
1	Y 371.029	872805.7	872805.7	100.07 %		10:45:51
1	Ag 328.068†	329.5	8.8	0.0416 ug/L	0.0416 ppb	10:45:56
1	As 188.979†	-30.8	3.1	1.1096 ug/L	1.1096 ppb	10:46:16
1	B 249.677†	-86.9	199.3	3.9435 ug/L	3.9435 ppb	10:46:16
1	Ba 233.527†	-15.6	-11.0	-0.0772 ug/L	-0.0772 ppb	10:46:16
1	Be 313.107†	-4982.7	81.6	0.0255 ug/L	0.0255 ppb	10:45:56
1	Cd 226.502†	-215.8	-16.6	-0.1673 ug/L	-0.1673 ppb	10:46:16
1	Co 228.616†	-69.0	2.8	0.0534 ug/L	0.0534 ppb	10:46:16
1	Cr 267.716†	71.2	-14.3	-0.1357 ug/L	-0.1357 ppb	10:46:16
1	Cu 324.752†	8892.9	-237.0	-0.5948 ug/L	-0.5948 ppb	10:45:56
1	Mn 257.610†	508.0	-24.6	-0.0246 ug/L	-0.0246 ppb	10:46:16
1	Mo 202.031†	27.8	4.9	0.3039 ug/L	0.3039 ppb	10:46:16
1	Ni 231.604†	94.6	-15.3	-0.3415 ug/L	-0.3415 ppb	10:46:16
1	P 214.914†	238.9	-0.5	-0.1036 ug/L	-0.1036 ppb	10:46:16
1	Pb 220.353†	-60.2	-1.9	-0.2132 ug/L	-0.2132 ppb	10:46:16
1	S 181.975 Axial†	63.9	-3.9	-4.7457 ug/L	-4.7457 ppb	10:46:16
1	Sb 206.836†	35.5	0.4	0.1509 ug/L	0.1509 ppb	10:46:16
1	Se 196.026†	-13.3	7.9	4.1301 ug/L	4.1301 ppb	10:46:16
1	Si 251.611†	492.0	32.1	0.8576 ug/L	0.8576 ppb	10:46:16
1	Sn 189.927†	5.6	10.2	1.6684 ug/L	1.6684 ppb	10:46:16
1	Ti 334.940†	-950.1	-41.1	-0.0575 ug/L	-0.0575 ppb	10:45:56
1	Tl 190.801†	-30.0	9.8	2.8022 ug/L	2.8022 ppb	10:46:16
1	U 409.014†	-1612.1	-228.6	-5.1544 ug/L	-5.1544 ppb	10:45:56
1	V 292.402†	-1478.0	-38.7	-0.2217 ug/L	-0.2217 ppb	10:45:56
1	Zn 213.857†	670.9	-71.3	-0.5917 ug/L	-0.5917 ppb	10:46:16
1	SiO2†	452.9	-22.8	-1.3197 ug/L	-1.3197 ppb	10:47:22
2	Sc Radial	5691.9	5691.9	102 %		10:44:59
2	Y RADIAL	6172.4	6172.4	101.5 %		10:44:59
2	Al 396.153Radial†	6.9	3.0	2.0936 ug/L	2.0936 ppb	10:45:19
2	Ca 317.933Radial†	18.4	-8.7	-13.225 ug/L	-13.225 ppb	10:45:19
2	Fe 238.204 Radial†	9.1	0.5	4.2772 ug/L	4.2772 ppb	10:45:19
2	K 766.490 Radial†	2534.3	91.5	15.165 ug/L	15.165 ppb	10:44:59
2	Mg 279.077 IEC†	4.7	2.2	73.217 ug/L	73.217 ppb	10:45:19
2	Na 589.592 Radial†	-1121.5	-72.4	-19.347 ug/L	-19.347 ppb	10:44:59
2	Sr 421.552†	42.7	30.8	0.1791 ug/L	0.1791 ppb	10:44:59
2	Sc 361.383	994278.3	994278.3	101.04 %		10:46:21
2	Y 371.029	883411.0	883411.0	101.28 %		10:46:21
2	Ag 328.068†	500.8	174.7	0.6704 ug/L	0.6704 ppb	10:46:26
2	As 188.979†	-27.2	6.9	2.5192 ug/L	2.5192 ppb	10:46:46
2	B 249.677†	-87.0	200.2	3.9627 ug/L	3.9627 ppb	10:46:46
2	Ba 233.527†	-0.9	3.7	0.0266 ug/L	0.0266 ppb	10:46:46
2	Be 313.107†	-4948.0	171.1	0.0538 ug/L	0.0538 ppb	10:46:26
2	Cd 226.502†	-193.8	7.5	0.0730 ug/L	0.0730 ppb	10:46:46
2	Co 228.616†	-58.1	14.3	0.2743 ug/L	0.2743 ppb	10:46:46
2	Cr 267.716†	74.6	-11.7	-0.1104 ug/L	-0.1104 ppb	10:46:46
2	Cu 324.752†	9114.7	-115.8	-0.2900 ug/L	-0.2900 ppb	10:46:26
2	Mn 257.610†	508.6	-29.6	-0.0323 ug/L	-0.0323 ppb	10:46:46
2	Mo 202.031†	28.6	5.3	0.3290 ug/L	0.3290 ppb	10:46:46
2	Ni 231.604†	108.7	-2.4	-0.0533 ug/L	-0.0533 ppb	10:46:46

2	P 214.914†	228.4	-13.5	-6.6569 ug/L	-6.6569 ppb	10:46:46
2	Pb 220.353†	-64.0	-5.0	-0.5515 ug/L	-0.5515 ppb	10:46:46
2	S 181.975 Axial†	68.8	0.3	0.3585 ug/L	0.3585 ppb	10:46:46
2	Sb 206.836†	40.2	4.6	1.4313 ug/L	1.4313 ppb	10:46:46
2	Se 196.026†	-25.4	-4.0	-2.0644 ug/L	-2.0644 ppb	10:46:46
2	Si 251.611†	495.5	30.1	0.8046 ug/L	0.8046 ppb	10:46:46
2	Sn 189.927†	8.8	13.3	2.1757 ug/L	2.1757 ppb	10:46:46
2	Ti 334.940†	-922.7	-3.5	-0.0107 ug/L	-0.0107 ppb	10:46:26
2	Tl 190.801†	-38.8	1.3	0.3852 ug/L	0.3852 ppb	10:46:46
2	U 409.014†	-1581.8	-180.8	-4.0755 ug/L	-4.0755 ppb	10:46:26
2	V 292.402†	-1417.3	37.7	0.2069 ug/L	0.2069 ppb	10:46:26
2	Zn 213.857†	680.9	-68.8	-0.5722 ug/L	-0.5722 ppb	10:46:46
2	SiO2†	544.4	62.7	3.5929 ug/L	3.5929 ppb	10:47:27
3	Sc Radial	5669.0	5669.0	102 %		10:45:24
3	Y RADIAL	6192.4	6192.4	101.8 %		10:45:24
3	Al 396.153Radial†	20.5	16.5	11.424 ug/L	11.424 ppb	10:45:44
3	Ca 317.933Radial†	20.6	-6.5	-9.8351 ug/L	-9.8351 ppb	10:45:44
3	Fe 238.204 Radial†	10.2	1.7	14.005 ug/L	14.005 ppb	10:45:44
3	K 766.490 Radial†	2419.6	-11.5	-1.8795 ug/L	-1.8795 ppb	10:45:24
3	Mg 279.077 IEC†	4.3	1.8	59.476 ug/L	59.476 ppb	10:45:44
3	Na 589.592 Radial†	-1188.8	-143.2	-38.235 ug/L	-38.235 ppb	10:45:24
3	Sr 421.552†	-0.8	-12.0	-0.0697 ug/L	-0.0697 ppb	10:45:24
3	Sc 361.383	995295.6	995295.6	101.14 %		10:46:52
3	Y 371.029	883624.2	883624.2	101.31 %		10:46:52
3	Ag 328.068†	408.9	83.3	0.3253 ug/L	0.3253 ppb	10:46:57
3	As 188.979†	-27.7	6.4	2.3300 ug/L	2.3300 ppb	10:47:17
3	B 249.677†	-121.7	166.0	3.2834 ug/L	3.2834 ppb	10:47:17
3	Ba 233.527†	-9.4	-4.7	-0.0328 ug/L	-0.0328 ppb	10:47:17
3	Be 313.107†	-4833.1	289.7	0.0908 ug/L	0.0908 ppb	10:46:57
3	Cd 226.502†	-203.6	-2.0	-0.0222 ug/L	-0.0222 ppb	10:47:17
3	Co 228.616†	-60.7	11.8	0.2264 ug/L	0.2264 ppb	10:47:17
3	Cr 267.716†	85.3	-1.2	-0.0100 ug/L	-0.0100 ppb	10:47:17
3	Cu 324.752†	9047.5	-191.4	-0.4803 ug/L	-0.4803 ppb	10:46:57
3	Mn 257.610†	506.8	-31.9	-0.0331 ug/L	-0.0331 ppb	10:47:17
3	Mo 202.031†	22.9	-0.3	-0.0165 ug/L	-0.0165 ppb	10:47:17
3	Ni 231.604†	91.3	-19.7	-0.4412 ug/L	-0.4412 ppb	10:47:17
3	P 214.914†	237.4	-4.8	-2.2889 ug/L	-2.2889 ppb	10:47:17
3	Pb 220.353†	-49.5	9.4	1.0543 ug/L	1.0543 ppb	10:47:17
3	S 181.975 Axial†	62.3	-6.2	-7.5941 ug/L	-7.5941 ppb	10:47:17
3	Sb 206.836†	39.6	4.0	1.2214 ug/L	1.2214 ppb	10:47:17
3	Se 196.026†	-23.7	-2.3	-1.1231 ug/L	-1.1231 ppb	10:47:17
3	Si 251.611†	478.8	13.1	0.3514 ug/L	0.3514 ppb	10:47:17
3	Sn 189.927†	2.1	6.6	1.0867 ug/L	1.0867 ppb	10:47:17
3	Ti 334.940†	-1004.9	-83.7	-0.1196 ug/L	-0.1196 ppb	10:46:57
3	Tl 190.801†	-33.6	6.6	1.8780 ug/L	1.8780 ppb	10:47:17
3	U 409.014†	-1602.6	-199.7	-4.5034 ug/L	-4.5034 ppb	10:46:57
3	V 292.402†	-1452.7	4.2	0.0135 ug/L	0.0135 ppb	10:46:57
3	Zn 213.857†	667.2	-83.1	-0.6890 ug/L	-0.6890 ppb	10:47:17
3	SiO2†	533.3	51.1	2.9352 ug/L	2.9352 ppb	10:47:32

Mean Data: ICB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	990955.1	100.70 %		0.676			0.67%
Sc Radial	5682.3	102 %		0.2			0.21%
Y 371.029	879946.9	100.89 %		0.709			0.70%
Y RADIAL	6183.2	101.6 %		0.17			0.16%
Ag 328.068†	88.9	0.3457 ug/L		0.31493	0.3457 ppb	0.31493	91.09%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	6.6	4.5630 ug/L		6.01900	4.5630 ppb	6.01900	131.91%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	5.5	1.9863 ug/L		0.76507	1.9863 ppb	0.76507	38.52%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	188.5	3.7299 ug/L		0.38675	3.7299 ppb	0.38675	10.37%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	-4.0	-0.0278 ug/L		0.05209	-0.0278 ppb	0.05209	187.24%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	180.8	0.0567 ug/L		0.03273	0.0567 ppb	0.03273	57.73%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	-6.0	-9.0948 ug/L		4.54563	-9.0948 ppb	4.54563	49.98%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated						
Cd 226.502†	-3.7	-0.0388 ug/L	0.12103	-0.0388 ppb	0.12103	311.71%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	9.6	0.1847 ug/L	0.11621	0.1847 ppb	0.11621	62.92%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-9.1	-0.0854 ug/L	0.06651	-0.0854 ppb	0.06651	77.92%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-181.4	-0.4550 ug/L	0.15396	-0.4550 ppb	0.15396	33.84%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	1.3	10.976 ug/L	5.8105	10.976 ppb	5.8105	52.94%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	37.5	6.2222 ug/L	8.55325	6.2222 ppb	8.55325	137.46%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	1.7	55.114 ug/L	20.6321	55.114 ppb	20.6321	37.44%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	-28.7	-0.0300 ug/L	0.00470	-0.0300 ppb	0.00470	15.67%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	3.3	0.2055 ug/L	0.19260	0.2055 ppb	0.19260	93.74%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	-107.7	-28.756 ug/L	9.4442	-28.756 ppb	9.4442	32.84%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	-12.5	-0.2787 ug/L	0.20143	-0.2787 ppb	0.20143	72.28%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	-6.2	-3.0164 ug/L	3.33667	-3.0164 ppb	3.33667	110.62%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	0.9	0.0965 ug/L	0.84653	0.0965 ppb	0.84653	877.02%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	-3.3	-3.9937 ug/L	4.02927	-3.9937 ppb	4.02927	100.89%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	3.0	0.9345 ug/L	0.68672	0.9345 ppb	0.68672	73.48%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	0.5	0.3142 ug/L	3.33800	0.3142 ppb	3.33800	>999.9%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	25.1	0.6712 ug/L	0.27825	0.6712 ppb	0.27825	41.46%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	10.0	1.6436 ug/L	0.54494	1.6436 ppb	0.54494	33.15%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	3.3	0.0195 ug/L	0.13857	0.0195 ppb	0.13857	711.66%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	-42.8	-0.0626 ug/L	0.05462	-0.0626 ppb	0.05462	87.22%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	5.9	1.6885 ug/L	1.21961	1.6885 ppb	1.21961	72.23%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	-203.1	-4.5778 ug/L	0.54328	-4.5778 ppb	0.54328	11.87%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	1.1	-0.0004 ug/L	0.21460	-0.0004 ppb	0.21460	>999.9%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	-74.4	-0.6177 ug/L	0.06257	-0.6177 ppb	0.06257	10.13%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	30.3	1.7361 ug/L	2.66677	1.7361 ppb	2.66677	153.60%
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: 1/28/2010 10:49:43

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5602.9	5602.9	100 %		10:51:36
1	Y RADIAL	6128.2	6128.2	100.7 %		10:51:36
1	Al 396.153Radial†	296.0	291.4	201.46 ug/L	201.46 ppb	10:51:36
1	Ca 317.933Radial†	150.5	123.2	187.35 ug/L	187.35 ppb	10:51:56
1	Fe 238.204 Radial†	20.9	12.4	104.99 ug/L	104.99 ppb	10:51:56
1	K 766.490 Radial†	3397.2	991.2	163.93 ug/L	163.93 ppb	10:51:36
1	Mg 279.077 IEC†	8.2	5.8	189.13 ug/L	189.13 ppb	10:51:56
1	Na 589.592 Radial†	11.9	1039.9	277.72 ug/L	277.72 ppb	10:51:36
1	Sr 421.552†	879.0	865.1	5.0341 ug/L	5.0341 ppb	10:51:36
1	Sc 361.383	988055.0	988055.0	100.41 %		10:52:53
1	Y 371.029	877501.6	877501.6	100.61 %		10:52:53
1	Ag 328.068†	1725.5	1397.4	5.3307 ug/L	5.3307 ppb	10:52:58
1	As 188.979†	42.4	76.1	27.639 ug/L	27.639 ppb	10:53:18
1	B 249.677†	2164.8	2442.3	48.327 ug/L	48.327 ppb	10:52:58
1	Ba 233.527†	684.1	685.9	4.8317 ug/L	4.8317 ppb	10:53:18
1	Be 313.107†	10256.9	15283.1	4.8152 ug/L	4.8152 ppb	10:52:58
1	Cd 226.502†	270.4	468.7	4.6370 ug/L	4.6370 ppb	10:53:18
1	Co 228.616†	177.5	248.6	4.7694 ug/L	4.7694 ppb	10:53:18
1	Cr 267.716†	605.3	517.3	4.9755 ug/L	4.9755 ppb	10:53:18
1	Cu 324.752†	12731.0	3542.6	8.9286 ug/L	8.9286 ppb	10:52:58
1	Mn 257.610†	10353.9	9778.8	9.8301 ug/L	9.8301 ppb	10:52:58
1	Mo 202.031†	183.3	159.6	9.8555 ug/L	9.8555 ppb	10:53:18
1	Ni 231.604†	331.8	220.5	4.9243 ug/L	4.9243 ppb	10:53:18
1	P 214.914†	512.2	270.6	133.29 ug/L	133.29 ppb	10:53:18
1	Pb 220.353†	21.3	79.5	8.9271 ug/L	8.9271 ppb	10:53:18
1	S 181.975 Axial†	148.5	80.1	97.590 ug/L	97.590 ppb	10:53:18
1	Sb 206.836†	60.1	24.7	7.8056 ug/L	7.8056 ppb	10:53:18
1	Se 196.026†	34.6	55.6	29.275 ug/L	29.275 ppb	10:53:18
1	Si 251.611†	3930.8	3454.5	92.562 ug/L	92.562 ppb	10:53:18
1	Sn 189.927†	62.6	67.0	11.014 ug/L	11.014 ppb	10:53:18
1	Ti 334.940†	2579.1	3478.4	4.7834 ug/L	4.7834 ppb	10:52:58
1	Tl 190.801†	37.1	76.7	22.049 ug/L	22.049 ppb	10:53:18
1	U 409.014†	525.6	1908.2	42.986 ug/L	42.986 ppb	10:52:58
1	V 292.402†	-677.7	765.4	4.4523 ug/L	4.4523 ppb	10:52:58
1	Zn 213.857†	1896.7	1146.3	9.4856 ug/L	9.4856 ppb	10:53:18
1	SiO2†	4084.2	3591.4	205.97 ug/L	205.97 ppb	10:54:24
2	Sc Radial	5919.5	5919.5	106 %		10:52:02
2	Y RADIAL	6454.9	6454.9	106.1 %		10:52:02
2	Al 396.153Radial†	294.3	273.9	189.36 ug/L	189.36 ppb	10:52:02
2	Ca 317.933Radial†	157.2	121.5	184.79 ug/L	184.79 ppb	10:52:22
2	Fe 238.204 Radial†	19.8	10.3	86.975 ug/L	86.975 ppb	10:52:22
2	K 766.490 Radial†	3548.2	952.5	157.53 ug/L	157.53 ppb	10:52:02
2	Mg 279.077 IEC†	9.7	6.8	221.72 ug/L	221.72 ppb	10:52:22
2	Na 589.592 Radial†	-77.5	954.9	255.03 ug/L	255.03 ppb	10:52:02
2	Sr 421.552†	874.4	813.8	4.7358 ug/L	4.7358 ppb	10:52:02
2	Sc 361.383	994048.2	994048.2	101.02 %		10:53:23
2	Y 371.029	883464.1	883464.1	101.29 %		10:53:23
2	Ag 328.068†	1714.1	1375.8	5.2473 ug/L	5.2473 ppb	10:53:29
2	As 188.979†	46.2	79.6	28.897 ug/L	28.897 ppb	10:53:49
2	B 249.677†	2133.2	2398.0	47.453 ug/L	47.453 ppb	10:53:29
2	Ba 233.527†	684.2	681.9	4.8048 ug/L	4.8048 ppb	10:53:49
2	Be 313.107†	10217.5	15182.6	4.7834 ug/L	4.7834 ppb	10:53:29
2	Cd 226.502†	279.7	476.3	4.7137 ug/L	4.7137 ppb	10:53:49
2	Co 228.616†	177.6	247.6	4.7497 ug/L	4.7497 ppb	10:53:49
2	Cr 267.716†	576.2	484.9	4.6644 ug/L	4.6644 ppb	10:53:49
2	Cu 324.752†	12716.1	3451.4	8.6979 ug/L	8.6979 ppb	10:53:29
2	Mn 257.610†	10344.6	9707.4	9.7553 ug/L	9.7553 ppb	10:53:29
2	Mo 202.031†	182.9	158.1	9.7612 ug/L	9.7612 ppb	10:53:49
2	Ni 231.604†	335.8	222.4	4.9678 ug/L	4.9678 ppb	10:53:49

2	P 214.914†	518.4	273.7	134.88 ug/L	134.88 ppb	10:53:49
2	Pb 220.353†	34.4	92.4	10.358 ug/L	10.358 ppb	10:53:49
2	S 181.975 Axial†	135.7	66.5	81.046 ug/L	81.046 ppb	10:53:49
2	Sb 206.836†	62.0	26.3	8.2580 ug/L	8.2580 ppb	10:53:49
2	Se 196.026†	39.9	60.6	31.823 ug/L	31.823 ppb	10:53:49
2	Si 251.611†	3921.5	3421.7	91.683 ug/L	91.683 ppb	10:53:49
2	Sn 189.927†	56.9	60.9	10.024 ug/L	10.024 ppb	10:53:49
2	Ti 334.940†	2538.8	3422.9	4.7046 ug/L	4.7046 ppb	10:53:29
2	Tl 190.801†	34.3	73.7	21.194 ug/L	21.194 ppb	10:53:49
2	U 409.014†	484.0	1863.9	41.990 ug/L	41.990 ppb	10:53:29
2	V 292.402†	-511.4	934.2	5.3892 ug/L	5.3892 ppb	10:53:29
2	Zn 213.857†	1879.2	1117.6	9.2484 ug/L	9.2484 ppb	10:53:49
2	SiO2†	4059.6	3542.6	203.17 ug/L	203.17 ppb	10:54:29
3	Sc Radial	5653.0	5653.0	101 %		10:52:27
3	Y RADIAL	6175.2	6175.2	101.5 %		10:52:27
3	Al 396.153Radial†	272.0	265.0	183.21 ug/L	183.21 ppb	10:52:27
3	Ca 317.933Radial†	159.7	131.0	199.16 ug/L	199.16 ppb	10:52:47
3	Fe 238.204 Radial†	21.5	12.8	108.49 ug/L	108.49 ppb	10:52:47
3	K 766.490 Radial†	3504.8	1067.5	176.56 ug/L	176.56 ppb	10:52:27
3	Mg 279.077 IEC†	11.7	9.1	297.96 ug/L	297.96 ppb	10:52:47
3	Na 589.592 Radial†	2.5	1030.5	275.23 ug/L	275.23 ppb	10:52:27
3	Sr 421.552†	862.7	841.1	4.8948 ug/L	4.8948 ppb	10:52:27
3	Sc 361.383	991879.2	991879.2	100.80 %		10:53:54
3	Y 371.029	878943.5	878943.5	100.77 %		10:53:54
3	Ag 328.068†	1573.3	1239.9	4.7362 ug/L	4.7362 ppb	10:53:59
3	As 188.979†	42.6	76.1	27.641 ug/L	27.641 ppb	10:54:19
3	B 249.677†	2109.8	2379.4	47.081 ug/L	47.081 ppb	10:53:59
3	Ba 233.527†	693.8	692.9	4.8826 ug/L	4.8826 ppb	10:54:19
3	Be 313.107†	10120.0	15107.9	4.7603 ug/L	4.7603 ppb	10:53:59
3	Cd 226.502†	280.0	477.1	4.7195 ug/L	4.7195 ppb	10:54:19
3	Co 228.616†	174.4	244.9	4.6970 ug/L	4.6970 ppb	10:54:19
3	Cr 267.716†	592.1	501.9	4.8286 ug/L	4.8286 ppb	10:54:19
3	Cu 324.752†	12870.2	3631.8	9.1548 ug/L	9.1548 ppb	10:53:59
3	Mn 257.610†	10442.5	9826.9	9.8744 ug/L	9.8744 ppb	10:53:59
3	Mo 202.031†	179.5	155.1	9.5825 ug/L	9.5825 ppb	10:54:19
3	Ni 231.604†	336.9	224.2	5.0092 ug/L	5.0092 ppb	10:54:19
3	P 214.914†	519.5	275.8	135.87 ug/L	135.87 ppb	10:54:19
3	Pb 220.353†	24.6	82.7	9.2793 ug/L	9.2793 ppb	10:54:19
3	S 181.975 Axial†	137.9	69.0	84.102 ug/L	84.102 ppb	10:54:19
3	Sb 206.836†	65.1	29.4	9.2159 ug/L	9.2159 ppb	10:54:19
3	Se 196.026†	23.5	44.5	23.505 ug/L	23.505 ppb	10:54:19
3	Si 251.611†	3921.8	3430.5	91.920 ug/L	91.920 ppb	10:54:19
3	Sn 189.927†	60.2	64.3	10.579 ug/L	10.579 ppb	10:54:19
3	Ti 334.940†	2626.0	3514.9	4.8271 ug/L	4.8271 ppb	10:53:59
3	Tl 190.801†	24.9	64.5	18.542 ug/L	18.542 ppb	10:54:19
3	U 409.014†	470.4	1851.4	41.705 ug/L	41.705 ppb	10:53:59
3	V 292.402†	-547.9	896.9	5.1774 ug/L	5.1774 ppb	10:53:59
3	Zn 213.857†	1878.8	1121.2	9.2758 ug/L	9.2758 ppb	10:54:19
3	SiO2†	4058.7	3550.4	203.62 ug/L	203.62 ppb	10:54:34

Mean Data: PQL

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	991327.5	100.74 %		0.308			0.31%
Sc Radial	5725.1	103 %		3.0			2.97%
Y 371.029	879969.8	100.89 %		0.357			0.35%
Y RADIAL	6252.8	102.8 %		2.90			2.82%
Ag 328.068†	1337.7	5.1047 ug/L		0.32187	5.1047 ppb	0.32187	6.31%
QC value within limits for Ag 328.068 Recovery = 102.09%							
Al 396.153Radial†	276.7	191.34 ug/L		9.287	191.34 ppb	9.287	4.85%
QC value within limits for Al 396.153Radial Recovery = 95.67%							
As 188.979†	77.2	28.059 ug/L		0.7255	28.059 ppb	0.7255	2.59%
QC value within limits for As 188.979 Recovery = 93.53%							
B 249.677†	2406.5	47.620 ug/L		0.6396	47.620 ppb	0.6396	1.34%
QC value within limits for B 249.677 Recovery = 95.24%							
Ba 233.527†	686.9	4.8397 ug/L		0.03952	4.8397 ppb	0.03952	0.82%
QC value within limits for Ba 233.527 Recovery = 96.79%							
Be 313.107†	15191.2	4.7863 ug/L		0.02759	4.7863 ppb	0.02759	0.58%
QC value within limits for Be 313.107 Recovery = 95.73%							
Ca 317.933Radial†	125.2	190.43 ug/L		7.666	190.43 ppb	7.666	4.03%

QC value within limits for Ca 317.933 Radial Recovery = 95.22%

Cd 226.502†	474.0	4.6900 ug/L	0.04604	4.6900 ppb	0.04604	0.98%
QC value within limits for Cd 226.502 Recovery = 93.80%						
Co 228.616†	247.0	4.7387 ug/L	0.03743	4.7387 ppb	0.03743	0.79%
QC value within limits for Co 228.616 Recovery = 94.77%						
Cr 267.716†	501.3	4.8228 ug/L	0.15564	4.8228 ppb	0.15564	3.23%
QC value within limits for Cr 267.716 Recovery = 96.46%						
Cu 324.752†	3541.9	8.9271 ug/L	0.22844	8.9271 ppb	0.22844	2.56%
QC value within limits for Cu 324.752 Recovery = 89.27%						
Fe 238.204 Radial†	11.8	100.15 ug/L	11.546	100.15 ppb	11.546	11.53%
QC value within limits for Fe 238.204 Radial Recovery = 100.15%						
K 766.490 Radial†	1003.7	166.01 ug/L	9.682	166.01 ppb	9.682	5.83%
QC value within limits for K 766.490 Radial Recovery = 110.67%						
Mg 279.077 IEC†	7.2	236.27 ug/L	55.853	236.27 ppb	55.853	23.64%
QC value within limits for Mg 279.077 IEC Recovery = 78.76%						
Mn 257.610†	9771.0	9.8199 ug/L	0.06024	9.8199 ppb	0.06024	0.61%
QC value within limits for Mn 257.610 Recovery = 98.20%						
Mo 202.031†	157.6	9.7331 ug/L	0.13865	9.7331 ppb	0.13865	1.42%
QC value within limits for Mo 202.031 Recovery = 97.33%						
Na 589.592 Radial†	1008.4	269.33 ug/L	12.445	269.33 ppb	12.445	4.62%
QC value within limits for Na 589.592 Radial Recovery = 89.78%						
Ni 231.604†	222.4	4.9671 ug/L	0.04245	4.9671 ppb	0.04245	0.85%
QC value within limits for Ni 231.604 Recovery = 99.34%						
P 214.914†	273.4	134.68 ug/L	1.301	134.68 ppb	1.301	0.97%
QC value within limits for P 214.914 Recovery = 89.79%						
Pb 220.353†	84.9	9.5213 ug/L	0.74536	9.5213 ppb	0.74536	7.83%
QC value within limits for Pb 220.353 Recovery = 95.21%						
S 181.975 Axial†	71.8	87.579 ug/L	8.8032	87.579 ppb	8.8032	10.05%
QC value within limits for S 181.975 Axial Recovery = 87.58%						
Sb 206.836†	26.8	8.4265 ug/L	0.72010	8.4265 ppb	0.72010	8.55%
QC value within limits for Sb 206.836 Recovery = 84.26%						
Se 196.026†	53.5	28.201 ug/L	4.2621	28.201 ppb	4.2621	15.11%
QC value within limits for Se 196.026 Recovery = 94.00%						
Si 251.611†	3435.5	92.055 ug/L	0.4546	92.055 ppb	0.4546	0.49%
QC value within limits for Si 251.611 Recovery = 92.06%						
Sn 189.927†	64.1	10.539 ug/L	0.4963	10.539 ppb	0.4963	4.71%
QC value within limits for Sn 189.927 Recovery = 105.39%						
Sr 421.552†	840.0	4.8882 ug/L	0.14925	4.8882 ppb	0.14925	3.05%
QC value within limits for Sr 421.552 Recovery = 97.76%						
Ti 334.940†	3472.1	4.7717 ug/L	0.06212	4.7717 ppb	0.06212	1.30%
QC value within limits for Ti 334.940 Recovery = 95.43%						
Tl 190.801†	71.7	20.595 ug/L	1.8287	20.595 ppb	1.8287	8.88%
QC value within limits for Tl 190.801 Recovery = 102.98%						
U 409.014†	1874.5	42.227 ug/L	0.6728	42.227 ppb	0.6728	1.59%
QC value within limits for U 409.014 Recovery = 84.45%						
V 292.402†	865.5	5.0063 ug/L	0.49134	5.0063 ppb	0.49134	9.81%
QC value within limits for V 292.402 Recovery = 100.13%						
Zn 213.857†	1128.4	9.3366 ug/L	0.12974	9.3366 ppb	0.12974	1.39%
QC value within limits for Zn 213.857 Recovery = 93.37%						
SiO2†	3561.5	204.26 ug/L	1.502	204.26 ppb	1.502	0.74%
QC value within limits for SiO2 Recovery = 95.89%						

All analyte(s) passed QC.

Sequence No.: 9
 Sample ID: IC5A
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 13
 Date Collected: 1/28/2010 10:56:46
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: IC5A

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5058.1	5058.1	90.6 %		10:58:44
1	Y RADIAL	5462.8	5462.8	89.80 %		10:58:44
1	Al 396.153Radial†	675980.6	746391.1	517320 ug/L	517320 ppb	10:58:39
1	Ca 317.933Radial†	283669.5	313191.4	476210 ug/L	476210 ppb	10:58:39
1	Fe 238.204 Radial†	19947.5	22017.0	185920 ug/L	185920 ppb	10:58:44
1	K 766.490 Radial†	2166.9	-2.5	-159.71 ug/L	-159.71 ppb	10:58:44
1	Mg 279.077 IEC†	13699.8	15124.4	493420 ug/L	493420 ppb	10:58:44
1	Na 589.592 Radial†	-887.9	47.7	12.735 ug/L	12.735 ppb	10:58:44
1	Sr 421.552†	564.7	612.3	0.0084 ug/L	0.0084 ppb	10:58:44
1	Sc 361.383	810985.7	810985.7	82.415 %		10:59:11
1	Y 371.029	702259.5	702259.5	80.515 %		10:59:11
1	Ag 328.068†	-10676.9	-13276.1	3.2650 ug/L	3.2650 ppb	10:59:11
1	As 188.979†	-93.7	-79.9	14.369 ug/L	14.369 ppb	10:59:32
1	B 249.677†	647.6	1072.1	-8.9667 ug/L	-8.9667 ppb	10:59:11
1	Ba 233.527†	-518.5	-624.5	1.3059 ug/L	1.3059 ppb	10:59:32
1	Be 313.107†	-5132.0	-1159.0	-0.4247 ug/L	-0.4247 ppb	10:59:11
1	Cd 226.502†	1474.3	1988.2	0.4713 ug/L	0.4713 ppb	10:59:32
1	Co 228.616†	-20.9	46.4	-1.7785 ug/L	-1.7785 ppb	10:59:32
1	Cr 267.716†	-111.8	-221.2	1.4940 ug/L	1.4940 ppb	10:59:32
1	Cu 324.752†	5879.5	-2002.5	4.7669 ug/L	4.7669 ppb	10:59:11
1	Mn 257.610†	-816.3	-1523.5	-3.3512 ug/L	-3.3512 ppb	10:59:11
1	Mo 202.031†	-190.5	-254.1	4.4222 ug/L	4.4222 ppb	10:59:32
1	Ni 231.604†	202.4	135.6	3.0306 ug/L	3.0306 ppb	10:59:32
1	P 214.914†	197.6	0.2	-20.299 ug/L	-20.299 ppb	10:59:32
1	Pb 220.353†	-740.4	-840.0	8.0121 ug/L	8.0121 ppb	10:59:32
1	S 181.975 Axial†	111.8	67.9	-14.187 ug/L	-14.187 ppb	10:59:32
1	Sb 206.836†	67.3	46.5	3.4169 ug/L	3.4169 ppb	10:59:32
1	Se 196.026†	-1013.8	-1209.0	19.318 ug/L	19.318 ppb	10:59:32
1	Si 251.611†	499.7	146.1	4.1126 ug/L	4.1126 ppb	10:59:32
1	Sn 189.927†	-361.7	-434.3	4.2539 ug/L	4.2539 ppb	10:59:32
1	Ti 334.940†	-16643.6	-19285.2	-3.0396 ug/L	-3.0396 ppb	10:59:11
1	Tl 190.801†	-81.8	-59.5	-17.314 ug/L	-17.314 ppb	10:59:32
1	U 409.014†	-60.3	1311.6	8.3719 ug/L	8.3719 ppb	10:59:11
1	V 292.402†	1327.1	3050.7	-0.7443 ug/L	-0.7443 ppb	10:59:32
1	Zn 213.857†	3260.1	3213.0	8.6909 ug/L	8.6909 ppb	10:59:32
1	SiO2†	465.3	88.5	5.5103 ug/L	5.5103 ppb	11:00:28
2	Sc Radial	4935.4	4935.4	88.4 %		10:58:55
2	Y RADIAL	5353.5	5353.5	88.00 %		10:58:55
2	Al 396.153Radial†	667492.7	755345.8	523530 ug/L	523530 ppb	10:58:50
2	Ca 317.933Radial†	280061.9	316897.4	481840 ug/L	481840 ppb	10:58:50
2	Fe 238.204 Radial†	19671.4	22252.2	187900 ug/L	187900 ppb	10:58:55
2	K 766.490 Radial†	2333.7	245.6	-120.49 ug/L	-120.49 ppb	10:58:55
2	Mg 279.077 IEC†	13502.3	15277.1	498400 ug/L	498400 ppb	10:58:55
2	Na 589.592 Radial†	-928.3	-22.5	-6.0050 ug/L	-6.0050 ppb	10:58:55
2	Sr 421.552†	574.4	638.8	0.1206 ug/L	0.1206 ppb	10:58:55
2	Sc 361.383	815137.5	815137.5	82.837 %		10:59:37
2	Y 371.029	706389.1	706389.1	80.988 %		10:59:37
2	Ag 328.068†	-10854.8	-13424.8	3.2631 ug/L	3.2631 ppb	10:59:37
2	As 188.979†	-83.9	-67.5	19.339 ug/L	19.339 ppb	10:59:57
2	B 249.677†	888.9	1359.3	-3.6025 ug/L	-3.6025 ppb	10:59:37
2	Ba 233.527†	-555.2	-665.7	1.0763 ug/L	1.0763 ppb	10:59:57
2	Be 313.107†	-5218.4	-1231.6	-0.4487 ug/L	-0.4487 ppb	10:59:37
2	Cd 226.502†	1448.4	1947.8	-0.1333 ug/L	-0.1333 ppb	10:59:57
2	Co 228.616†	-16.3	52.2	-1.7002 ug/L	-1.7002 ppb	10:59:57
2	Cr 267.716†	-109.0	-217.1	1.5713 ug/L	1.5713 ppb	10:59:57
2	Cu 324.752†	5942.2	-1963.2	4.9709 ug/L	4.9709 ppb	10:59:37
2	Mn 257.610†	-868.6	-1581.5	-3.4172 ug/L	-3.4172 ppb	10:59:37
2	Mo 202.031†	-212.8	-279.8	3.0565 ug/L	3.0565 ppb	10:59:57
2	Ni 231.604†	202.2	134.1	2.9967 ug/L	2.9967 ppb	10:59:57

2	P 214.914†	194.3	-5.0	-22.962 ug/L	-22.962 ppb	10:59:57
2	Pb 220.353†	-771.3	-872.7	5.6039 ug/L	5.6039 ppb	10:59:57
2	S 181.975 Axial†	101.8	55.1	-30.900 ug/L	-30.900 ppb	10:59:57
2	Sb 206.836†	41.5	14.9	-6.1708 ug/L	-6.1708 ppb	10:59:57
2	Se 196.026†	-1040.0	-1234.4	13.102 ug/L	13.102 ppb	10:59:57
2	Si 251.611†	427.8	56.1	1.7183 ug/L	1.7183 ppb	10:59:57
2	Sn 189.927†	-346.1	-413.2	8.5989 ug/L	8.5989 ppb	10:59:57
2	Ti 334.940†	-17043.0	-19664.4	-3.2141 ug/L	-3.2141 ppb	10:59:37
2	Tl 190.801†	-88.8	-67.4	-19.594 ug/L	-19.594 ppb	10:59:57
2	U 409.014†	-28.7	1350.0	9.0124 ug/L	9.0124 ppb	10:59:37
2	V 292.402†	1270.7	2974.4	-1.3807 ug/L	-1.3807 ppb	10:59:57
2	Zn 213.857†	3294.1	3233.9	8.6718 ug/L	8.6718 ppb	10:59:57
2	SiO2†	451.8	69.3	4.4517 ug/L	4.4517 ppb	11:00:33
3	Sc Radial	4791.6	4791.6	85.8 %		10:59:05
3	Y RADIAL	5194.7	5194.7	85.39 %		10:59:05
3	Al 396.153Radial†	669051.9	779827.7	540500 ug/L	540500 ppb	10:59:00
3	Ca 317.933Radial†	280919.1	327406.0	497820 ug/L	497820 ppb	10:59:00
3	Fe 238.204 Radial†	19440.3	22650.7	191270 ug/L	191270 ppb	10:59:05
3	K 766.490 Radial†	2247.3	224.2	-129.37 ug/L	-129.37 ppb	10:59:05
3	Mg 279.077 IEC†	13316.4	15518.9	506290 ug/L	506290 ppb	10:59:05
3	Na 589.592 Radial†	-952.4	-82.0	-21.908 ug/L	-21.908 ppb	10:59:05
3	Sr 421.552†	600.7	689.0	0.2936 ug/L	0.2936 ppb	10:59:05
3	Sc 361.383	851975.7	851975.7	86.580 %		11:00:02
3	Y 371.029	749569.9	749569.9	85.939 %		11:00:02
3	Ag 328.068†	-10616.9	-12583.5	7.3362 ug/L	7.3362 ppb	11:00:02
3	As 188.979†	-103.6	-85.8	13.509 ug/L	13.509 ppb	11:00:23
3	B 249.677†	715.8	1113.0	-9.0262 ug/L	-9.0262 ppb	11:00:02
3	Ba 233.527†	-552.9	-634.1	1.3998 ug/L	1.3998 ppb	11:00:23
3	Be 313.107†	-5202.3	-940.5	-0.3538 ug/L	-0.3538 ppb	11:00:02
3	Cd 226.502†	1468.9	1896.0	-0.9941 ug/L	-0.9941 ppb	11:00:23
3	Co 228.616†	-27.3	40.2	-1.9766 ug/L	-1.9766 ppb	11:00:23
3	Cr 267.716†	-66.9	-162.8	2.1594 ug/L	2.1594 ppb	11:00:23
3	Cu 324.752†	5976.8	-2233.3	4.4674 ug/L	4.4674 ppb	11:00:02
3	Mn 257.610†	-952.7	-1633.4	-3.4595 ug/L	-3.4595 ppb	11:00:02
3	Mo 202.031†	-196.4	-249.8	5.3577 ug/L	5.3577 ppb	11:00:23
3	Ni 231.604†	222.6	147.1	3.2872 ug/L	3.2872 ppb	11:00:23
3	P 214.914†	178.7	-33.1	-35.296 ug/L	-35.296 ppb	11:00:23
3	Pb 220.353†	-750.5	-808.4	16.385 ug/L	16.385 ppb	11:00:23
3	S 181.975 Axial†	101.6	49.5	-40.921 ug/L	-40.921 ppb	11:00:23
3	Sb 206.836†	57.5	31.3	-1.5822 ug/L	-1.5822 ppb	11:00:23
3	Se 196.026†	-1030.5	-1169.1	59.228 ug/L	59.228 ppb	11:00:23
3	Si 251.611†	414.8	18.8	0.6941 ug/L	0.6941 ppb	11:00:23
3	Sn 189.927†	-357.2	-408.0	11.941 ug/L	11.941 ppb	11:00:23
3	Ti 334.940†	-16871.9	-18577.3	-0.2165 ug/L	-0.2165 ppb	11:00:02
3	Tl 190.801†	-89.5	-63.6	-18.488 ug/L	-18.488 ppb	11:00:23
3	U 409.014†	-77.6	1295.1	7.3894 ug/L	7.3894 ppb	11:00:02
3	V 292.402†	1253.2	2887.8	-2.1772 ug/L	-2.1772 ppb	11:00:23
3	Zn 213.857†	3272.5	3037.1	6.7065 ug/L	6.7065 ppb	11:00:23
3	SiO2†	458.9	53.9	3.5176 ug/L	3.5176 ppb	11:00:38

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	826033.0	83.944 %		2.2929			2.73%
Sc Radial	4928.4	88.2 %		2.39			2.71%
Y 371.029	719406.2	82.480 %		3.0043			3.64%
Y RADIAL	5337.0	87.73 %		2.216			2.53%
Ag 328.068†	-13094.8	4.6214 ug/L		2.35104	4.6214 ppb	2.35104	50.87%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	760521.5	527120 ug/L		11996.7	527120 ppb	11996.7	2.28%
QC value within limits for Al 396.153Radial Recovery = 105.42%							
As 188.979†	-77.7	15.739 ug/L		3.1474	15.739 ppb	3.1474	20.00%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	1181.5	-7.1985 ug/L		3.11431	-7.1985 ppb	3.11431	43.26%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	-641.4	1.2607 ug/L		0.16640	1.2607 ppb	0.16640	13.20%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	-1110.4	-0.4091 ug/L		0.04934	-0.4091 ppb	0.04934	12.06%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	319165.0	485290 ug/L		11211.6	485290 ppb	11211.6	2.31%

QC value within limits for Ca 317.933 Radial Recovery = 97.06%

Cd 226.502† 1944.0 -0.2187 ug/L 0.73641 -0.2187 ppb 0.73641 336.74%

QC value within limits for Cd 226.502 Recovery = Not calculated

Co 228.616† 46.3 -1.8184 ug/L 0.14243 -1.8184 ppb 0.14243 7.83%

QC value within limits for Co 228.616 Recovery = Not calculated

Cr 267.716† -200.4 1.7415 ug/L 0.36389 1.7415 ppb 0.36389 20.89%

QC value within limits for Cr 267.716 Recovery = Not calculated

Cu 324.752† -2066.3 4.7351 ug/L 0.25325 4.7351 ppb 0.25325 5.35%

QC value within limits for Cu 324.752 Recovery = Not calculated

Fe 238.204 Radial† 22306.6 188360 ug/L 2705.3 188360 ppb 2705.3 1.44%

QC value within limits for Fe 238.204 Radial Recovery = 94.18%

K 766.490 Radial† 155.8 -136.52 ug/L 20.561 -136.52 ppb 20.561 15.06%

QC value within limits for K 766.490 Radial Recovery = Not calculated

Mg 279.077 IEC† 15306.8 499370 ug/L 6488.7 499370 ppb 6488.7 1.30%

QC value within limits for Mg 279.077 IEC Recovery = 99.87%

Mn 257.610† -1579.5 -3.4093 ug/L 0.05457 -3.4093 ppb 0.05457 1.60%

QC value within limits for Mn 257.610 Recovery = Not calculated

Mo 202.031† -261.2 4.2788 ug/L 1.15728 4.2788 ppb 1.15728 27.05%

QC value within limits for Mo 202.031 Recovery = Not calculated

Na 589.592 Radial† -18.9 -5.0593 ug/L 17.34077 -5.0593 ppb 17.34077 342.75%

QC value within limits for Na 589.592 Radial Recovery = Not calculated

Ni 231.604† 138.9 3.1048 ug/L 0.15886 3.1048 ppb 0.15886 5.12%

QC value within limits for Ni 231.604 Recovery = Not calculated

P 214.914† -12.6 -26.186 ug/L 8.0015 -26.186 ppb 8.0015 30.56%

QC value within limits for P 214.914 Recovery = Not calculated

Pb 220.353† -840.4 10.000 ug/L 5.6587 10.000 ppb 5.6587 56.59%

QC value within limits for Pb 220.353 Recovery = Not calculated

S 181.975 Axial† 57.5 -28.669 ug/L 13.5059 -28.669 ppb 13.5059 47.11%

QC value within limits for S 181.975 Axial Recovery = Not calculated

Sb 206.836† 30.9 -1.4454 ug/L 4.79530 -1.4454 ppb 4.79530 331.77%

QC value within limits for Sb 206.836 Recovery = Not calculated

Se 196.026† -1204.2 30.549 ug/L 25.0300 30.549 ppb 25.0300 81.93%

QC value within limits for Se 196.026 Recovery = Not calculated

Si 251.611† 73.7 2.1750 ug/L 1.75439 2.1750 ppb 1.75439 80.66%

QC value within limits for Si 251.611 Recovery = Not calculated

Sn 189.927† -418.5 8.2648 ug/L 3.85465 8.2648 ppb 3.85465 46.64%

QC value within limits for Sn 189.927 Recovery = Not calculated

Sr 421.552† 646.7 0.1409 ug/L 0.14368 0.1409 ppb 0.14368 102.01%

QC value within limits for Sr 421.552 Recovery = Not calculated

Ti 334.940† -19175.6 -2.1567 ug/L 1.68253 -2.1567 ppb 1.68253 78.01%

QC value within limits for Ti 334.940 Recovery = Not calculated

Tl 190.801† -63.5 -18.465 ug/L 1.1402 -18.465 ppb 1.1402 6.18%

QC value within limits for Tl 190.801 Recovery = Not calculated

U 409.014† 1318.9 8.2579 ug/L 0.81750 8.2579 ppb 0.81750 9.90%

QC value within limits for U 409.014 Recovery = Not calculated

V 292.402† 2971.0 -1.4340 ug/L 0.71794 -1.4340 ppb 0.71794 50.06%

QC value within limits for V 292.402 Recovery = Not calculated

Zn 213.857† 3161.3 8.0231 ug/L 1.14021 8.0231 ppb 1.14021 14.21%

QC value within limits for Zn 213.857 Recovery = Not calculated

SiO2† 70.6 4.4932 ug/L 0.99699 4.4932 ppb 0.99699 22.19%

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: 1/28/2010 11:02:50
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: ICSAB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4905.7	4905.7	87.8 %		11:04:47
1	Y RADIAL	5325.9	5325.9	87.55 %		11:04:47
1	Al 396.153Radial†	664955.3	757037.2	524680 ug/L	524680 ppb	11:04:42
1	Ca 317.933Radial†	277964.4	316431.3	481140 ug/L	481140 ppb	11:04:42
1	Fe 238.204 Radial†	19539.0	22236.4	187780 ug/L	187780 ppb	11:04:47
1	K 766.490 Radial†	31142.5	33060.0	5310.1 ug/L	5310.1 ppb	11:04:42
1	Mg 279.077 IEC†	13459.7	15321.3	499850 ug/L	499850 ppb	11:04:47
1	Na 589.592 Radial†	16930.0	20302.5	5422.2 ug/L	5422.2 ppb	11:04:47
1	Sr 421.552†	75544.2	85994.7	496.98 ug/L	496.98 ppb	11:04:42
1	Sc 361.383	836968.8	836968.8	85.055 %		11:05:15
1	Y 371.029	724264.0	724264.0	83.037 %		11:05:15
1	Ag 328.068†	47713.6	55776.2	268.07 ug/L	268.07 ppb	11:05:15
1	As 188.979†	1056.3	1275.7	509.69 ug/L	509.69 ppb	11:05:35
1	B 249.677†	21995.6	26146.6	486.00 ug/L	486.00 ppb	11:05:15
1	Ba 233.527†	56644.5	66601.8	474.73 ug/L	474.73 ppb	11:05:15
1	Be 313.107†	620409.1	734486.7	231.96 ug/L	231.96 ppb	11:05:15
1	Cd 226.502†	38476.0	45435.8	430.42 ug/L	430.42 ppb	11:05:35
1	Co 228.616†	18946.4	22347.2	425.04 ug/L	425.04 ppb	11:05:35
1	Cr 267.716†	40019.0	46965.1	456.69 ug/L	456.69 ppb	11:05:15
1	Cu 324.752†	187767.0	211622.3	544.13 ug/L	544.13 ppb	11:05:15
1	Mn 257.610†	392218.9	460601.1	461.00 ug/L	461.00 ppb	11:05:15
1	Mo 202.031†	6205.8	7273.3	469.03 ug/L	469.03 ppb	11:05:35
1	Ni 231.604†	16080.2	18795.6	419.83 ug/L	419.83 ppb	11:05:35
1	P 214.914†	4296.9	4812.4	2278.4 ug/L	2278.4 ppb	11:05:35
1	Pb 220.353†	2612.1	3129.4	453.09 ug/L	453.09 ppb	11:05:35
1	S 181.975 Axial†	1885.4	2148.8	2522.0 ug/L	2522.0 ppb	11:05:35
1	Sb 206.836†	1543.8	1779.9	541.60 ug/L	541.60 ppb	11:05:35
1	Se 196.026†	3033.9	3588.1	2520.3 ug/L	2520.3 ppb	11:05:35
1	Si 251.611†	163369.2	191613.8	5135.4 ug/L	5135.4 ppb	11:05:15
1	Sn 189.927†	2068.1	2436.1	475.88 ug/L	475.88 ppb	11:05:35
1	Ti 334.940†	290822.0	342830.9	495.86 ug/L	495.86 ppb	11:05:15
1	Tl 190.801†	1280.4	1545.2	446.26 ug/L	446.26 ppb	11:05:35
1	U 409.014†	17156.6	21555.8	463.43 ug/L	463.43 ppb	11:05:15
1	V 292.402†	73626.2	88003.2	477.47 ug/L	477.47 ppb	11:05:15
1	Zn 213.857†	51960.4	60347.4	480.59 ug/L	480.59 ppb	11:05:15
1	SiO2†	161597.3	189514.8	10871 ug/L	10871 ppb	11:06:33
2	Sc Radial	4862.8	4862.8	87.1 %		11:04:58
2	Y RADIAL	5288.1	5288.1	86.92 %		11:04:58
2	Al 396.153Radial†	673105.5	773074.3	535800 ug/L	535800 ppb	11:04:53
2	Ca 317.933Radial†	280882.1	322573.1	490470 ug/L	490470 ppb	11:04:53
2	Fe 238.204 Radial†	19420.4	22296.4	188290 ug/L	188290 ppb	11:04:58
2	K 766.490 Radial†	31521.0	33807.4	5430.7 ug/L	5430.7 ppb	11:04:53
2	Mg 279.077 IEC†	13447.2	15442.0	503790 ug/L	503790 ppb	11:04:58
2	Na 589.592 Radial†	16776.9	20296.7	5420.7 ug/L	5420.7 ppb	11:04:58
2	Sr 421.552†	76480.4	87828.4	507.58 ug/L	507.58 ppb	11:04:53
2	Sc 361.383	831520.1	831520.1	84.502 %		11:05:41
2	Y 371.029	719267.4	719267.4	82.465 %		11:05:41
2	Ag 328.068†	47469.5	55854.8	268.41 ug/L	268.41 ppb	11:05:41
2	As 188.979†	1026.2	1248.3	499.85 ug/L	499.85 ppb	11:06:01
2	B 249.677†	21929.8	26238.2	487.72 ug/L	487.72 ppb	11:05:41
2	Ba 233.527†	56385.0	66731.2	475.66 ug/L	475.66 ppb	11:05:41
2	Be 313.107†	617825.5	736209.0	232.51 ug/L	232.51 ppb	11:05:41
2	Cd 226.502†	38474.5	45730.5	433.28 ug/L	433.28 ppb	11:06:01
2	Co 228.616†	18939.7	22485.2	427.68 ug/L	427.68 ppb	11:06:01
2	Cr 267.716†	39925.4	47162.6	458.60 ug/L	458.60 ppb	11:05:41
2	Cu 324.752†	186295.5	211327.4	543.41 ug/L	543.41 ppb	11:05:41
2	Mn 257.610†	390799.0	461942.5	462.23 ug/L	462.23 ppb	11:05:41
2	Mo 202.031†	6215.6	7332.6	472.84 ug/L	472.84 ppb	11:06:01
2	Ni 231.604†	16099.9	18942.8	423.12 ug/L	423.12 ppb	11:06:01

2	P 214.914†	4344.3	4901.5	2325.4 ug/L	2325.4 ppb	11:06:01
2	Pb 220.353†	2615.3	3153.3	458.27 ug/L	458.27 ppb	11:06:01
2	S 181.975 Axial†	1877.2	2153.7	2525.8 ug/L	2525.8 ppb	11:06:01
2	Sb 206.836†	1538.3	1785.3	543.12 ug/L	543.12 ppb	11:06:01
2	Se 196.026†	3012.1	3585.7	2521.4 ug/L	2521.4 ppb	11:06:01
2	Si 251.611†	162548.1	191900.8	5143.1 ug/L	5143.1 ppb	11:05:41
2	Sn 189.927†	2092.2	2480.5	484.60 ug/L	484.60 ppb	11:06:01
2	Ti 334.940†	289171.2	343117.8	497.18 ug/L	497.18 ppb	11:05:41
2	Tl 190.801†	1254.1	1523.8	440.13 ug/L	440.13 ppb	11:06:01
2	U 409.014†	16941.5	21433.5	460.61 ug/L	460.61 ppb	11:05:41
2	V 292.402†	73238.6	88111.7	478.12 ug/L	478.12 ppb	11:05:41
2	Zn 213.857†	51820.2	60581.8	482.47 ug/L	482.47 ppb	11:05:41
2	SiO2†	162651.0	192006.7	11014 ug/L	11014 ppb	11:06:38
3	Sc Radial	4908.3	4908.3	87.9 %		11:05:08
3	Y RADIAL	5366.9	5366.9	88.22 %		11:05:08
3	Al 396.153Radial†	664626.8	756262.5	524140 ug/L	524140 ppb	11:05:03
3	Ca 317.933Radial†	277170.0	315359.7	479510 ug/L	479510 ppb	11:05:03
3	Fe 238.204 Radial†	19421.9	22091.4	186560 ug/L	186560 ppb	11:05:08
3	K 766.490 Radial†	31182.8	33087.1	5315.1 ug/L	5315.1 ppb	11:05:03
3	Mg 279.077 IEC†	13436.2	15286.4	498710 ug/L	498710 ppb	11:05:08
3	Na 589.592 Radial†	16999.1	20370.9	5440.5 ug/L	5440.5 ppb	11:05:08
3	Sr 421.552†	75443.9	85834.9	496.06 ug/L	496.06 ppb	11:05:03
3	Sc 361.383	828897.6	828897.6	84.235 %		11:06:07
3	Y 371.029	715787.2	715787.2	82.066 %		11:06:07
3	Ag 328.068†	47140.9	55642.5	267.19 ug/L	267.19 ppb	11:06:07
3	As 188.979†	1041.1	1269.8	507.26 ug/L	507.26 ppb	11:06:27
3	B 249.677†	21827.3	26198.7	487.22 ug/L	487.22 ppb	11:06:07
3	Ba 233.527†	56387.7	66945.5	477.11 ug/L	477.11 ppb	11:06:07
3	Be 313.107†	615580.9	735857.5	232.40 ug/L	232.40 ppb	11:06:07
3	Cd 226.502†	38401.6	45787.9	434.03 ug/L	434.03 ppb	11:06:27
3	Co 228.616†	18928.9	22543.3	428.82 ug/L	428.82 ppb	11:06:27
3	Cr 267.716†	39880.1	47258.2	459.49 ug/L	459.49 ppb	11:06:07
3	Cu 324.752†	185484.0	211061.5	542.65 ug/L	542.65 ppb	11:06:07
3	Mn 257.610†	390472.4	463018.0	463.35 ug/L	463.35 ppb	11:06:07
3	Mo 202.031†	6227.0	7369.5	474.85 ug/L	474.85 ppb	11:06:27
3	Ni 231.604†	16057.4	18952.6	423.34 ug/L	423.34 ppb	11:06:27
3	P 214.914†	4325.1	4895.1	2320.8 ug/L	2320.8 ppb	11:06:27
3	Pb 220.353†	2598.5	3143.2	454.61 ug/L	454.61 ppb	11:06:27
3	S 181.975 Axial†	1902.7	2191.0	2573.5 ug/L	2573.5 ppb	11:06:27
3	Sb 206.836†	1525.6	1776.0	540.64 ug/L	540.64 ppb	11:06:27
3	Se 196.026†	3025.5	3612.9	2529.0 ug/L	2529.0 ppb	11:06:27
3	Si 251.611†	162193.7	192088.6	5148.1 ug/L	5148.1 ppb	11:06:07
3	Sn 189.927†	2082.9	2477.4	482.39 ug/L	482.39 ppb	11:06:27
3	Ti 334.940†	289402.0	344474.6	498.00 ug/L	498.00 ppb	11:06:07
3	Tl 190.801†	1273.0	1551.0	447.94 ug/L	447.94 ppb	11:06:27
3	U 409.014†	16966.3	21526.4	462.90 ug/L	462.90 ppb	11:06:07
3	V 292.402†	73069.7	88185.5	478.72 ug/L	478.72 ppb	11:06:07
3	Zn 213.857†	51764.8	60710.0	483.70 ug/L	483.70 ppb	11:06:07
3	SiO2†	162641.4	192604.3	11048 ug/L	11048 ppb	11:06:44

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	832462.2	84.597 %	0.4184			0.49%
Sc Radial	4892.2	87.6 %	0.46			0.52%
Y 371.029	719772.8	82.522 %	0.4885			0.59%
Y RADIAL	5327.0	87.56 %	0.648			0.74%
Ag 328.068†	55757.8	267.89 ug/L	0.629	267.89 ppb	0.629	0.23%
QC value within limits for Ag 328.068 Recovery = 107.16%						
Al 396.153Radial†	762124.6	528210 ug/L	6577.9	528210 ppb	6577.9	1.25%
QC value within limits for Al 396.153Radial Recovery = 105.64%						
As 188.979†	1264.6	505.60 ug/L	5.125	505.60 ppb	5.125	1.01%
QC value within limits for As 188.979 Recovery = 101.12%						
B 249.677†	26194.5	486.98 ug/L	0.886	486.98 ppb	0.886	0.18%
QC value within limits for B 249.677 Recovery = 97.40%						
Ba 233.527†	66759.5	475.84 ug/L	1.200	475.84 ppb	1.200	0.25%
QC value within limits for Ba 233.527 Recovery = 95.17%						
Be 313.107†	735517.8	232.29 ug/L	0.287	232.29 ppb	0.287	0.12%
QC value within limits for Be 313.107 Recovery = 92.92%						
Ca 317.933Radial†	318121.4	483710 ug/L	5918.3	483710 ppb	5918.3	1.22%

QC value within limits for Ca 317.933 Radial Recovery = 96.74%							
Cd	226.502†	45651.4	432.57 ug/L	1.906	432.57 ppb	1.906	0.44%
QC value within limits for Cd 226.502 Recovery = 86.51%							
Co	228.616†	22458.6	427.18 ug/L	1.939	427.18 ppb	1.939	0.45%
QC value within limits for Co 228.616 Recovery = 85.44%							
Cr	267.716†	47128.6	458.26 ug/L	1.432	458.26 ppb	1.432	0.31%
QC value within limits for Cr 267.716 Recovery = 91.65%							
Cu	324.752†	211337.1	543.40 ug/L	0.740	543.40 ppb	0.740	0.14%
QC value within limits for Cu 324.752 Recovery = 108.68%							
Fe	238.204 Radial†	22208.1	187540 ug/L	890.3	187540 ppb	890.3	0.47%
QC value within limits for Fe 238.204 Radial Recovery = 93.77%							
K	766.490 Radial†	33318.2	5352.0 ug/L	68.24	5352.0 ppb	68.24	1.28%
QC value within limits for K 766.490 Radial Recovery = 107.04%							
Mg	279.077 IEC†	15349.9	500780 ug/L	2663.5	500780 ppb	2663.5	0.53%
QC value within limits for Mg 279.077 IEC Recovery = 100.16%							
Mn	257.610†	461853.9	462.19 ug/L	1.178	462.19 ppb	1.178	0.25%
QC value within limits for Mn 257.610 Recovery = 92.44%							
Mo	202.031†	7325.1	472.24 ug/L	2.957	472.24 ppb	2.957	0.63%
QC value within limits for Mo 202.031 Recovery = 94.45%							
Na	589.592 Radial†	20323.4	5427.8 ug/L	11.02	5427.8 ppb	11.02	0.20%
QC value within limits for Na 589.592 Radial Recovery = 108.56%							
Ni	231.604†	18897.0	422.10 ug/L	1.965	422.10 ppb	1.965	0.47%
QC value within limits for Ni 231.604 Recovery = 84.42%							
P	214.914†	4869.7	2308.2 ug/L	25.95	2308.2 ppb	25.95	1.12%
QC value within limits for P 214.914 Recovery = 92.33%							
Pb	220.353†	3142.0	455.32 ug/L	2.659	455.32 ppb	2.659	0.58%
QC value within limits for Pb 220.353 Recovery = 91.06%							
S	181.975 Axial†	2164.5	2540.4 ug/L	28.70	2540.4 ppb	28.70	1.13%
QC value within limits for S 181.975 Axial Recovery = 101.62%							
Sb	206.836†	1780.4	541.79 ug/L	1.250	541.79 ppb	1.250	0.23%
QC value within limits for Sb 206.836 Recovery = 108.36%							
Se	196.026†	3595.6	2523.6 ug/L	4.77	2523.6 ppb	4.77	0.19%
QC value within limits for Se 196.026 Recovery = 100.94%							
Si	251.611†	191867.8	5142.2 ug/L	6.38	5142.2 ppb	6.38	0.12%
QC value within limits for Si 251.611 Recovery = 102.84%							
Sn	189.927†	2464.7	480.96 ug/L	4.533	480.96 ppb	4.533	0.94%
QC value within limits for Sn 189.927 Recovery = 96.19%							
Sr	421.552†	86552.7	500.21 ug/L	6.404	500.21 ppb	6.404	1.28%
QC value within limits for Sr 421.552 Recovery = 100.04%							
Ti	334.940†	343474.4	497.01 ug/L	1.080	497.01 ppb	1.080	0.22%
QC value within limits for Ti 334.940 Recovery = 99.40%							
Tl	190.801†	1540.0	444.77 ug/L	4.110	444.77 ppb	4.110	0.92%
QC value within limits for Tl 190.801 Recovery = 88.95%							
U	409.014†	21505.2	462.32 ug/L	1.498	462.32 ppb	1.498	0.32%
QC value within limits for U 409.014 Recovery = 92.46%							
V	292.402†	88100.1	478.11 ug/L	0.624	478.11 ppb	0.624	0.13%
QC value within limits for V 292.402 Recovery = 95.62%							
Zn	213.857†	60546.4	482.25 ug/L	1.569	482.25 ppb	1.569	0.33%
QC value within limits for Zn 213.857 Recovery = 96.45%							
SiO2†		191375.2	10978 ug/L	94.0	10978 ppb	94.0	0.86%
QC value within limits for SiO2 Recovery = 102.64%							

All analyte(s) passed QC.

Sequence No.: 11

Sample ID: LR1

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 15

Date Collected: 1/28/2010 11:08:54

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4801.0	4801.0	86.0 %		11:10:51
1	Y RADIAL	5243.1	5243.1	86.18 %		11:10:51
1	Al 396.153Radial†	650822.2	757093.8	524740 ug/L	524740 ppb	11:10:46
1	Ca 317.933Radial†	272307.8	316747.3	481620 ug/L	481620 ppb	11:10:46
1	Fe 238.204 Radial†	45151.3	52515.8	443460 ug/L	443460 ppb	11:10:51
1	K 766.490 Radial†	2622.7	655.8	-255.91 ug/L	-255.91 ppb	11:10:51
1	Mg 279.077 IEC†	13214.2	15369.7	501160 ug/L	501160 ppb	11:10:51
1	Na 589.592 Radial†	1677860.1	1952872.6	521560 ug/L	521560 ppb	11:10:46
1	Sr 421.552†	826.1	949.8	1.9326 ug/L	1.9326 ppb	11:10:51
1	Sc 361.383	709571.4	709571.4	72.109 %		11:11:20
1	Y 371.029	615310.1	615310.1	70.546 %		11:11:20
1	Ag 328.068†	-26423.7	-36965.2	-15.933 ug/L	-15.933 ppb	11:11:20
1	As 188.979†	-192.7	-233.4	19.117 ug/L	19.117 ppb	11:11:40
1	B 249.677†	2003.0	3064.1	-11.365 ug/L	-11.365 ppb	11:11:20
1	Ba 233.527†	-1565.4	-2166.3	-1.6516 ug/L	-1.6516 ppb	11:11:40
1	Be 313.107†	-12423.9	-12161.3	-3.8721 ug/L	-3.8721 ppb	11:11:20
1	Cd 226.502†	3739.0	5384.5	10.441 ug/L	10.441 ppb	11:11:40
1	Co 228.616†	190.9	336.5	-0.0194 ug/L	-0.0194 ppb	11:11:40
1	Cr 267.716†	64.3	3.7	2.6375 ug/L	2.6375 ppb	11:11:40
1	Cu 324.752†	2540.7	-5613.1	0.8263 ug/L	0.8263 ppb	11:11:20
1	Mn 257.610†	-27349.7	-38461.4	-15.364 ug/L	-15.364 ppb	11:11:20
1	Mo 202.031†	-451.3	-648.8	0.1307 ug/L	0.1307 ppb	11:11:40
1	Ni 231.604†	287.7	289.1	6.4568 ug/L	6.4568 ppb	11:11:40
1	P 214.914†	579.9	564.7	57.435 ug/L	57.435 ppb	11:11:40
1	Pb 220.353†	-520.1	-663.0	4.7875 ug/L	4.7875 ppb	11:11:40
1	S 181.975 Axial†	132.8	116.3	43.521 ug/L	43.521 ppb	11:11:40
1	Sb 206.836†	61.8	50.6	10.222 ug/L	10.222 ppb	11:11:40
1	Se 196.026†	-2427.9	-3345.9	-239.09 ug/L	-239.09 ppb	11:11:40
1	Si 251.611†	-477.4	-1122.3	-29.619 ug/L	-29.619 ppb	11:11:40
1	Sn 189.927†	-389.3	-535.2	-7.1495 ug/L	-7.1495 ppb	11:11:40
1	Ti 334.940†	-11985.6	-15711.9	-4.7495 ug/L	-4.7495 ppb	11:11:20
1	Tl 190.801†	-108.6	-110.9	-32.239 ug/L	-32.239 ppb	11:11:40
1	U 409.014†	488477.5	678802.3	15249 ug/L	15249 ppb	11:11:20
1	V 292.402†	3481.5	6268.5	8.6398 ug/L	8.6398 ppb	11:11:20
1	Zn 213.857†	6213.2	7873.7	22.484 ug/L	22.484 ppb	11:11:40
1	SiO2†	-544.1	-1230.7	-69.583 ug/L	-69.583 ppb	11:12:37
2	Sc Radial	4759.7	4759.7	85.2 %		11:11:02
2	Y RADIAL	5176.6	5176.6	85.09 %		11:11:02
2	Al 396.153Radial†	650715.1	763541.8	529210 ug/L	529210 ppb	11:10:57
2	Ca 317.933Radial†	272544.2	319775.1	486220 ug/L	486220 ppb	11:10:57
2	Fe 238.204 Radial†	44678.9	52417.6	442630 ug/L	442630 ppb	11:11:02
2	K 766.490 Radial†	2582.2	634.8	-262.37 ug/L	-262.37 ppb	11:11:02
2	Mg 279.077 IEC†	13086.6	15353.3	500620 ug/L	500620 ppb	11:11:02
2	Na 589.592 Radial†	1675154.4	1966645.0	525230 ug/L	525230 ppb	11:10:57
2	Sr 421.552†	816.3	946.6	1.8796 ug/L	1.8796 ppb	11:11:02
2	Sc 361.383	781859.3	781859.3	79.455 %		11:11:45
2	Y 371.029	678097.0	678097.0	77.744 %		11:11:45
2	Ag 328.068†	-25619.3	-32564.8	1.9014 ug/L	1.9014 ppb	11:11:45
2	As 188.979†	-185.4	-199.6	31.241 ug/L	31.241 ppb	11:12:05
2	B 249.677†	1891.8	2667.2	-19.087 ug/L	-19.087 ppb	11:11:45
2	Ba 233.527†	-1529.4	-1920.3	0.0399 ug/L	0.0399 ppb	11:12:05
2	Be 313.107†	-12296.2	-10407.6	-3.3120 ug/L	-3.3120 ppb	11:11:45
2	Cd 226.502†	3779.9	4956.6	5.9483 ug/L	5.9483 ppb	11:12:05
2	Co 228.616†	211.1	337.5	0.0059 ug/L	0.0059 ppb	11:12:05
2	Cr 267.716†	73.1	6.5	3.3425 ug/L	3.3425 ppb	11:12:05
2	Cu 324.752†	2762.0	-5660.4	1.6416 ug/L	1.6416 ppb	11:11:45
2	Mn 257.610†	-26920.7	-34414.7	-11.357 ug/L	-11.357 ppb	11:11:45
2	Mo 202.031†	-480.7	-628.0	1.4033 ug/L	1.4033 ppb	11:12:05
2	Ni 231.604†	264.2	222.6	4.9706 ug/L	4.9706 ppb	11:12:05

2	P 214.914†	598.1	513.2	33.596 ug/L	33.596 ppb	11:12:05
2	Pb 220.353†	-542.1	-624.0	10.259 ug/L	10.259 ppb	11:12:05
2	S 181.975 Axial†	130.7	96.7	18.718 ug/L	18.718 ppb	11:12:05
2	Sb 206.836†	56.0	35.4	5.6138 ug/L	5.6138 ppb	11:12:05
2	Se 196.026†	-2439.9	-3049.6	-87.594 ug/L	-87.594 ppb	11:12:05
2	Si 251.611†	-502.9	-1093.2	-28.855 ug/L	-28.855 ppb	11:12:05
2	Sn 189.927†	-391.3	-487.8	1.3122 ug/L	1.3122 ppb	11:12:05
2	Ti 334.940†	-10960.2	-12884.6	0.5849 ug/L	0.5849 ppb	11:11:45
2	Tl 190.801†	-111.3	-100.3	-29.144 ug/L	-29.144 ppb	11:12:05
2	U 409.014†	475926.3	600374.1	13482 ug/L	13482 ppb	11:11:45
2	V 292.402†	3100.1	5342.1	0.2384 ug/L	0.2384 ppb	11:11:45
2	Zn 213.857†	6241.2	7112.3	16.238 ug/L	16.238 ppb	11:12:05
2	SiO2†	-412.2	-994.9	-56.080 ug/L	-56.080 ppb	11:12:42
3	Sc Radial	4894.5	4894.5	87.6 %		11:11:12
3	Y RADIAL	5351.3	5351.3	87.96 %		11:11:12
3	Al 396.153Radial†	653172.4	745322.4	516580 ug/L	516580 ppb	11:11:07
3	Ca 317.933Radial†	272820.2	311284.7	473310 ug/L	473310 ppb	11:11:07
3	Fe 238.204 Radial†	44724.4	51026.0	430880 ug/L	430880 ppb	11:11:12
3	K 766.490 Radial†	2544.7	508.5	-274.71 ug/L	-274.71 ppb	11:11:12
3	Mg 279.077 IEC†	13064.7	14905.6	486020 ug/L	486020 ppb	11:11:12
3	Na 589.592 Radial†	1686844.1	1925863.0	514340 ug/L	514340 ppb	11:11:07
3	Sr 421.552†	823.0	928.0	1.8674 ug/L	1.8674 ppb	11:11:12
3	Sc 361.383	804982.1	804982.1	81.805 %		11:12:11
3	Y 371.029	697795.7	697795.7	80.003 %		11:12:11
3	Ag 328.068†	-25445.0	-31425.5	2.9267 ug/L	2.9267 ppb	11:12:11
3	As 188.979†	-186.7	-194.4	30.335 ug/L	30.335 ppb	11:12:31
3	B 249.677†	1828.0	2520.8	-20.079 ug/L	-20.079 ppb	11:12:11
3	Ba 233.527†	-1594.4	-1944.4	-0.4922 ug/L	-0.4922 ppb	11:12:31
3	Be 313.107†	-12213.1	-9861.5	-3.1433 ug/L	-3.1433 ppb	11:12:11
3	Cd 226.502†	3715.6	4741.4	4.9547 ug/L	4.9547 ppb	11:12:31
3	Co 228.616†	228.1	350.6	0.4337 ug/L	0.4337 ppb	11:12:31
3	Cr 267.716†	51.7	-22.3	2.9934 ug/L	2.9934 ppb	11:12:31
3	Cu 324.752†	2696.1	-5840.7	0.7880 ug/L	0.7880 ppb	11:12:11
3	Mn 257.610†	-27106.1	-33668.1	-11.170 ug/L	-11.170 ppb	11:12:11
3	Mo 202.031†	-468.8	-596.0	2.3093 ug/L	2.3093 ppb	11:12:31
3	Ni 231.604†	283.8	237.0	5.2926 ug/L	5.2926 ppb	11:12:31
3	P 214.914†	645.4	549.4	58.125 ug/L	58.125 ppb	11:12:31
3	Pb 220.353†	-512.9	-568.6	14.625 ug/L	14.625 ppb	11:12:31
3	S 181.975 Axial†	131.7	93.2	16.803 ug/L	16.803 ppb	11:12:31
3	Sb 206.836†	75.6	57.3	12.350 ug/L	12.350 ppb	11:12:31
3	Se 196.026†	-2434.9	-2955.3	-78.247 ug/L	-78.247 ppb	11:12:31
3	Si 251.611†	-514.8	-1089.6	-28.780 ug/L	-28.780 ppb	11:12:31
3	Sn 189.927†	-381.9	-462.3	3.3413 ug/L	3.3413 ppb	11:12:31
3	Ti 334.940†	-12044.9	-13814.2	-1.0570 ug/L	-1.0570 ppb	11:12:11
3	Tl 190.801†	-121.7	-109.0	-31.654 ug/L	-31.654 ppb	11:12:31
3	U 409.014†	475329.4	582438.7	13079 ug/L	13079 ppb	11:12:11
3	V 292.402†	2840.1	4912.2	-1.4634 ug/L	-1.4634 ppb	11:12:11
3	Zn 213.857†	6251.2	6898.9	15.601 ug/L	15.601 ppb	11:12:31
3	SiO2†	-469.4	-1049.9	-59.290 ug/L	-59.290 ppb	11:12:47

Mean Data: LRI

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	765471.0	77.789 %	5.0580			6.50%
Sc Radial	4818.4	86.3 %	1.24			1.43%
Y 371.029	663734.3	76.098 %	4.9389			6.49%
Y RADIAL	5257.0	86.41 %	1.450			1.68%
Ag 328.068†	-33651.8	-3.7017 ug/L	10.60506	-3.7017 ppb	10.60506	286.50%
Al 396.153Radial†	755319.3	523510 ug/L	6403.2	523510 ppb	6403.2	1.22%
QC value within limits for Al 396.153Radial Recovery = 104.70%						
As 188.979†	-209.1	26.898 ug/L	6.7535	26.898 ppb	6.7535	25.11%
B 249.677†	2750.7	-16.843 ug/L	4.7707	-16.843 ppb	4.7707	28.32%
Ba 233.527†	-2010.4	-0.7013 ug/L	0.86492	-0.7013 ppb	0.86492	123.33%
Be 313.107†	-10810.1	-3.4425 ug/L	0.38155	-3.4425 ppb	0.38155	11.08%
Ca 317.933Radial†	315935.7	480380 ug/L	6542.8	480380 ppb	6542.8	1.36%
QC value within limits for Ca 317.933Radial Recovery = 96.08%						
Cd 226.502†	5027.5	7.1147 ug/L	2.92325	7.1147 ppb	2.92325	41.09%
Co 228.616†	341.5	0.1401 ug/L	0.25464	0.1401 ppb	0.25464	181.78%
Cr 267.716†	-4.0	2.9911 ug/L	0.35249	2.9911 ppb	0.35249	11.78%
Cu 324.752†	-5704.7	1.0853 ug/L	0.48214	1.0853 ppb	0.48214	44.42%

Fe 238.204 Radial†	51986.5	438990 ug/L	7035.9	438990 ppb	7035.9	1.60%
QC value less than the lower limit for Fe 238.204 Radial Recovery = 87.80%						
K 766.490 Radial†	599.7	-264.33 ug/L	9.551	-264.33 ppb	9.551	3.61%
Mg 279.077 IEC†	15209.5	495940 ug/L	8586.9	495940 ppb	8586.9	1.73%
QC value within limits for Mg 279.077 IEC Recovery = 99.19%						
Mn 257.610†	-35514.7	-12.631 ug/L	2.3692	-12.631 ppb	2.3692	18.76%
Mo 202.031†	-624.2	1.2811 ug/L	1.09445	1.2811 ppb	1.09445	85.43%
Na 589.592 Radial†	1948460.2	520380 ug/L	5540.6	520380 ppb	5540.6	1.06%
QC value within limits for Na 589.592 Radial Recovery = 104.08%						
Ni 231.604†	249.5	5.5733 ug/L	0.78190	5.5733 ppb	0.78190	14.03%
P 214.914†	542.5	49.719 ug/L	13.9671	49.719 ppb	13.9671	28.09%
Pb 220.353†	-618.5	9.8907 ug/L	4.92928	9.8907 ppb	4.92928	49.84%
S 181.975 Axial†	102.1	26.348 ug/L	14.9039	26.348 ppb	14.9039	56.57%
Sb 206.836†	47.8	9.3953 ug/L	3.44353	9.3953 ppb	3.44353	36.65%
Se 196.026†	-3116.9	-134.98 ug/L	90.284	-134.98 ppb	90.284	66.89%
Si 251.611†	-1101.7	-29.085 ug/L	0.4645	-29.085 ppb	0.4645	1.60%
Sn 189.927†	-495.1	-0.8320 ug/L	5.56438	-0.8320 ppb	5.56438	668.82%
Sr 421.552†	941.5	1.8932 ug/L	0.03466	1.8932 ppb	0.03466	1.83%
Ti 334.940†	-14136.9	-1.7405 ug/L	2.73207	-1.7405 ppb	2.73207	156.97%
Tl 190.801†	-106.7	-31.012 ug/L	1.6442	-31.012 ppb	1.6442	5.30%
U 409.014†	620538.4	13936 ug/L	1154.6	13936 ppb	1154.6	8.28%
QC value within limits for U 409.014 Recovery = 92.91%						
V 292.402†	5507.6	2.4716 ug/L	5.40919	2.4716 ppb	5.40919	218.85%
Zn 213.857†	7295.0	18.108 ug/L	3.8036	18.108 ppb	3.8036	21.01%
SiO2†	-1091.9	-61.651 ug/L	7.0545	-61.651 ppb	7.0545	11.44%

QC Failed. Continue with analysis.

Sequence No.: 12
 Sample ID: LR2
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 16
 Date Collected: 1/28/2010 11:14:56
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5319.8	5319.8	95.3 %		11:16:54
1	Y RADIAL	5731.8	5731.8	94.22 %		11:16:54
1	Al 396.153Radial†	634.2	662.1	15.121 ug/L	15.121 ppb	11:16:54
1	Ca 317.933Radial†	35.0	10.0	15.190 ug/L	15.190 ppb	11:17:14
1	Fe 238.204 Radial†	-21.6	-31.1	1.6416 ug/L	1.6416 ppb	11:17:14
1	K 766.490 Radial†	1712678.6	1795669.7	297300 ug/L	297300 ppb	11:16:49
1	Mg 279.077 IEC†	-6.3	-9.0	-198.69 ug/L	-198.69 ppb	11:17:14
1	Na 589.592 Radial†	-605.9	391.9	104.67 ug/L	104.67 ppb	11:16:54
1	Sr 421.552†	1576772.7	1655372.1	9635.8 ug/L	9635.8 ppb	11:16:49
1	Sc 361.383	929238.3	929238.3	94.432 %		11:18:31
1	Y 371.029	803702.2	803702.2	92.145 %		11:18:31
1	Ag 328.068†	-8330.8	-9143.0	2.9682 ug/L	2.9682 ppb	11:18:36
1	As 188.979†	23248.3	24652.9	9002.4 ug/L	9002.4 ppb	11:18:36
1	B 249.677†	223988.4	237481.8	4677.0 ug/L	4677.0 ppb	11:18:31
1	Ba 233.527†	1798123.0	1904150.8	13399 ug/L	13399 ppb	11:18:31
1	Be 313.107†	8003957.7	8480965.3	2687.8 ug/L	2687.8 ppb	11:18:25
1	Cd 226.502†	861651.4	912656.5	9033.8 ug/L	9033.8 ppb	11:18:31
1	Co 228.616†	435708.3	461470.9	8829.3 ug/L	8829.3 ppb	11:18:36
1	Cr 267.716†	2182347.8	2310940.6	22281 ug/L	22281 ppb	11:18:31
1	Cu 324.752†	7231891.7	7649171.1	19318 ug/L	19318 ppb	11:18:25
1	Mn 257.610†	8407526.1	8902728.4	8947.1 ug/L	8947.1 ppb	11:18:25
1	Mo 202.031†	140088.6	148325.7	9151.0 ug/L	9151.0 ppb	11:18:36
1	Ni 231.604†	384673.9	407245.6	9096.8 ug/L	9096.8 ppb	11:18:31
1	P 214.914†	31920.5	33563.1	13002 ug/L	13002 ppb	11:18:36
1	Pb 220.353†	194669.4	206206.1	23011 ug/L	23011 ppb	11:18:36
1	S 181.975 Axial†	39024.5	41257.7	50311 ug/L	50311 ppb	11:18:36
1	Sb 206.836†	32049.1	33903.7	10542 ug/L	10542 ppb	11:18:36
1	Se 196.026†	17563.0	18619.8	9703.4 ug/L	9703.4 ppb	11:18:36
1	Si 251.611†	1596277.2	1689938.6	45228 ug/L	45228 ppb	11:18:31
1	Sn 189.927†	56678.9	60025.5	9846.4 ug/L	9846.4 ppb	11:18:36
1	Ti 334.940†	6560959.2	6948724.6	9569.8 ug/L	9569.8 ppb	11:18:25
1	Tl 190.801†	30342.6	32171.4	9287.7 ug/L	9287.7 ppb	11:18:36
1	U 409.014†	192.5	1588.5	-13.997 ug/L	-13.997 ppb	11:18:36
1	V 292.402†	1591568.4	1686852.9	9475.9 ug/L	9475.9 ppb	11:18:31
1	Zn 213.857†	1477399.9	1563769.6	12929 ug/L	12929 ppb	11:18:31
1	SiO2†	1622701.5	1717905.2	98402 ug/L	98402 ppb	11:19:24
2	Sc Radial	5325.0	5325.0	95.3 %		11:17:24
2	Y RADIAL	5724.3	5724.3	94.09 %		11:17:24
2	Al 396.153Radial†	628.2	655.1	7.8555 ug/L	7.8555 ppb	11:17:24
2	Ca 317.933Radial†	38.0	13.1	19.853 ug/L	19.853 ppb	11:17:44
2	Fe 238.204 Radial†	-19.0	-28.3	26.520 ug/L	26.520 ppb	11:17:44
2	K 766.490 Radial†	1746846.2	1829742.3	302940 ug/L	302940 ppb	11:17:19
2	Mg 279.077 IEC†	-5.0	-7.6	-151.60 ug/L	-151.60 ppb	11:17:44
2	Na 589.592 Radial†	-715.0	278.1	74.281 ug/L	74.281 ppb	11:17:24
2	Sr 421.552†	1609708.6	1688292.9	9827.5 ug/L	9827.5 ppb	11:17:19
2	Sc 361.383	922281.9	922281.9	93.725 %		11:18:51
2	Y 371.029	799286.1	799286.1	91.639 %		11:18:51
2	Ag 328.068†	-8286.9	-9162.7	2.9304 ug/L	2.9304 ppb	11:18:56
2	As 188.979†	23230.4	24819.5	9063.0 ug/L	9063.0 ppb	11:18:56
2	B 249.677†	222269.9	237437.3	4676.0 ug/L	4676.0 ppb	11:18:51
2	Ba 233.527†	1782740.2	1902100.3	13385 ug/L	13385 ppb	11:18:51
2	Be 313.107†	7995104.5	8535449.4	2705.0 ug/L	2705.0 ppb	11:18:45
2	Cd 226.502†	854726.5	912150.3	9028.8 ug/L	9028.8 ppb	11:18:51
2	Co 228.616†	434465.6	463625.1	8870.5 ug/L	8870.5 ppb	11:18:56
2	Cr 267.716†	2167844.3	2312897.1	22299 ug/L	22299 ppb	11:18:51
2	Cu 324.752†	7190192.5	7662443.5	19352 ug/L	19352 ppb	11:18:45
2	Mn 257.610†	8373679.1	8933768.8	8978.3 ug/L	8978.3 ppb	11:18:45
2	Mo 202.031†	139800.4	149137.2	9201.0 ug/L	9201.0 ppb	11:18:56
2	Ni 231.604†	381422.2	406848.6	9087.9 ug/L	9087.9 ppb	11:18:51

2	P 214.914†	31775.7	33663.6	13046 ug/L	13046 ppb	11:18:56
2	Pb 220.353†	194125.9	207181.1	23120 ug/L	23120 ppb	11:18:56
2	S 181.975 Axial†	38920.3	41458.3	50555 ug/L	50555 ppb	11:18:56
2	Sb 206.836†	31980.3	34086.3	10599 ug/L	10599 ppb	11:18:56
2	Se 196.026†	17499.3	18692.0	9741.1 ug/L	9741.1 ppb	11:18:56
2	Si 251.611†	1581646.0	1687077.9	45151 ug/L	45151 ppb	11:18:51
2	Sn 189.927†	56572.3	60364.5	9902.0 ug/L	9902.0 ppb	11:18:56
2	Ti 334.940†	6531345.1	6969532.2	9598.4 ug/L	9598.4 ppb	11:18:45
2	Tl 190.801†	30347.8	32419.3	9358.9 ug/L	9358.9 ppb	11:18:56
2	U 409.014†	165.3	1561.1	-14.659 ug/L	-14.659 ppb	11:18:56
2	V 292.402†	1580862.2	1688142.3	9483.7 ug/L	9483.7 ppb	11:18:51
2	Zn 213.857†	1466673.9	1564125.9	12932 ug/L	12932 ppb	11:18:51
2	SiO2†	1613067.3	1720587.0	98555 ug/L	98555 ppb	11:19:31
3	Sc Radial	5269.8	5269.8	94.4 %		11:17:55
3	Y RADIAL	5661.8	5661.8	93.07 %		11:17:55
3	Al 396.153Radial†	625.6	659.2	4.5890 ug/L	4.5890 ppb	11:17:55
3	Ca 317.933Radial†	33.8	9.0	13.733 ug/L	13.733 ppb	11:18:15
3	Fe 238.204 Radial†	-20.2	-29.8	17.393 ug/L	17.393 ppb	11:18:15
3	K 766.490 Radial†	1716505.1	1816802.3	300800 ug/L	300800 ppb	11:17:50
3	Mg 279.077 IEC†	-3.9	-6.5	-113.66 ug/L	-113.66 ppb	11:18:15
3	Na 589.592 Radial†	-696.8	289.5	77.317 ug/L	77.317 ppb	11:17:55
3	Sr 421.552†	1575274.0	1669505.9	9718.1 ug/L	9718.1 ppb	11:17:50
3	Sc 361.383	919806.3	919806.3	93.473 %		11:19:11
3	Y 371.029	796979.7	796979.7	91.374 %		11:19:11
3	Ag 328.068†	-8365.2	-9270.3	2.5417 ug/L	2.5417 ppb	11:19:16
3	As 188.979†	23554.4	25232.8	9212.9 ug/L	9212.9 ppb	11:19:16
3	B 249.677†	221433.0	237180.3	4670.6 ug/L	4670.6 ppb	11:19:11
3	Ba 233.527†	1782591.4	1907060.6	13420 ug/L	13420 ppb	11:19:11
3	Be 313.107†	8003252.1	8567125.6	2715.0 ug/L	2715.0 ppb	11:19:04
3	Cd 226.502†	856673.0	916687.3	9073.7 ug/L	9073.7 ppb	11:19:11
3	Co 228.616†	439343.2	470090.9	8994.5 ug/L	8994.5 ppb	11:19:16
3	Cr 267.716†	2167783.5	2319057.7	22359 ug/L	22359 ppb	11:19:11
3	Cu 324.752†	7210573.2	7704895.4	19459 ug/L	19459 ppb	11:19:04
3	Mn 257.610†	8372627.3	8956690.5	9001.3 ug/L	9001.3 ppb	11:19:04
3	Mo 202.031†	141341.4	151187.3	9327.5 ug/L	9327.5 ppb	11:19:16
3	Ni 231.604†	382075.9	408643.3	9127.9 ug/L	9127.9 ppb	11:19:11
3	P 214.914†	32211.8	34221.4	13304 ug/L	13304 ppb	11:19:16
3	Pb 220.353†	196230.9	209990.5	23434 ug/L	23434 ppb	11:19:16
3	S 181.975 Axial†	39421.2	42105.9	51345 ug/L	51345 ppb	11:19:16
3	Sb 206.836†	32428.9	34658.0	10775 ug/L	10775 ppb	11:19:16
3	Se 196.026†	17705.0	18962.3	9882.0 ug/L	9882.0 ppb	11:19:16
3	Si 251.611†	1576954.5	1686600.9	45136 ug/L	45136 ppb	11:19:11
3	Sn 189.927†	57056.1	61044.5	10014 ug/L	10014 ppb	11:19:16
3	Ti 334.940†	6535524.9	6992760.1	9630.4 ug/L	9630.4 ppb	11:19:04
3	Tl 190.801†	30692.3	32875.1	9489.4 ug/L	9489.4 ppb	11:19:16
3	U 409.014†	204.9	1603.9	-13.827 ug/L	-13.827 ppb	11:19:16
3	V 292.402†	1577675.3	1689272.6	9491.7 ug/L	9491.7 ppb	11:19:11
3	Zn 213.857†	1468275.6	1570051.2	12981 ug/L	12981 ppb	11:19:11
3	SiO2†	1608405.2	1720231.7	98531 ug/L	98531 ppb	11:19:38

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	923775.5	93.877 %	0.4970			0.53%
Sc Radial	5304.9	95.0 %	0.55			0.58%
Y 371.029	799989.4	91.719 %	0.3916			0.43%
Y RADIAL	5705.9	93.79 %	0.632			0.67%
Ag 328.068†	-9192.0	2.8134 ug/L	0.23611	2.8134 ppb	0.23611	8.39%
Al 396.153Radial†	658.8	9.1885 ug/L	5.39105	9.1885 ppb	5.39105	58.67%
As 188.979†	24901.8	9092.8 ug/L	108.33	9092.8 ppb	108.33	1.19%
QC value within limits for As 188.979 Recovery = 90.93%						
B 249.677†	237366.4	4674.5 ug/L	3.47	4674.5 ppb	3.47	0.07%
QC value within limits for B 249.677 Recovery = 93.49%						
Ba 233.527†	1904437.2	13401 ug/L	17.5	13401 ppb	17.5	0.13%
QC value less than the lower limit for Ba 233.527 Recovery = 89.34%						
Be 313.107†	8527846.8	2702.6 ug/L	13.77	2702.6 ppb	13.77	0.51%
QC value within limits for Be 313.107 Recovery = 90.09%						
Ca 317.933Radial†	10.7	16.259 ug/L	3.1966	16.259 ppb	3.1966	19.66%
Cd 226.502†	913831.4	9045.4 ug/L	24.61	9045.4 ppb	24.61	0.27%
QC value within limits for Cd 226.502 Recovery = 90.45%						

Co 228.616†	465062.3	8898.1 ug/L	85.99	8898.1 ppb	85.99	0.97%
QC value less than the lower limit for Co 228.616 Recovery = 88.98%						
Cr 267.716†	2314298.5	22313 ug/L	40.8	22313 ppb	40.8	0.18%
QC value less than the lower limit for Cr 267.716 Recovery = 89.25%						
Cu 324.752†	7672170.0	19376 ug/L	73.5	19376 ppb	73.5	0.38%
QC value within limits for Cu 324.752 Recovery = 96.88%						
Fe 238.204 Radial†	-29.7	15.185 ug/L	12.5853	15.185 ppb	12.5853	82.88%
K 766.490 Radial†	1814071.4	300350 ug/L	2847.8	300350 ppb	2847.8	0.95%
QC value within limits for K 766.490 Radial Recovery = 100.12%						
Mg 279.077 IEC†	-7.7	-154.65 ug/L	42.598	-154.65 ppb	42.598	27.55%
Mn 257.610†	8931062.6	8975.6 ug/L	27.22	8975.6 ppb	27.22	0.30%
QC value less than the lower limit for Mn 257.610 Recovery = 89.76%						
Mo 202.031†	149550.1	9226.5 ug/L	90.99	9226.5 ppb	90.99	0.99%
QC value within limits for Mo 202.031 Recovery = 92.27%						
Na 589.592 Radial†	319.8	85.422 ug/L	16.7359	85.422 ppb	16.7359	19.59%
Ni 231.604†	407579.2	9104.2 ug/L	21.02	9104.2 ppb	21.02	0.23%
QC value within limits for Ni 231.604 Recovery = 91.04%						
P 214.914†	33816.0	13117 ug/L	163.2	13117 ppb	163.2	1.24%
QC value less than the lower limit for P 214.914 Recovery = 87.45%						
Pb 220.353†	207792.6	23189 ug/L	219.3	23189 ppb	219.3	0.95%
QC value within limits for Pb 220.353 Recovery = 92.75%						
S 181.975 Axial†	41607.3	50737 ug/L	540.6	50737 ppb	540.6	1.07%
QC value within limits for S 181.975 Axial Recovery = 101.47%						
Sb 206.836†	34216.0	10639 ug/L	121.5	10639 ppb	121.5	1.14%
QC value within limits for Sb 206.836 Recovery = 106.39%						
Se 196.026†	18758.0	9775.5 ug/L	94.12	9775.5 ppb	94.12	0.96%
QC value within limits for Se 196.026 Recovery = 97.75%						
Si 251.611†	1687872.4	45172 ug/L	49.3	45172 ppb	49.3	0.11%
QC value within limits for Si 251.611 Recovery = 90.34%						
Sn 189.927†	60478.2	9920.7 ug/L	85.12	9920.7 ppb	85.12	0.86%
QC value within limits for Sn 189.927 Recovery = 99.21%						
Sr 421.552†	1671057.0	9727.1 ug/L	96.13	9727.1 ppb	96.13	0.99%
QC value within limits for Sr 421.552 Recovery = 97.27%						
Ti 334.940†	6970339.0	9599.5 ug/L	30.35	9599.5 ppb	30.35	0.32%
QC value within limits for Ti 334.940 Recovery = 96.00%						
Tl 190.801†	32488.6	9378.7 ug/L	102.30	9378.7 ppb	102.30	1.09%
QC value within limits for Tl 190.801 Recovery = 93.79%						
U 409.014†	1584.5	-14.161 ug/L	0.4397	-14.161 ppb	0.4397	3.10%
V 292.402†	1688089.3	9483.7 ug/L	7.92	9483.7 ppb	7.92	0.08%
QC value within limits for V 292.402 Recovery = 94.84%						
Zn 213.857†	1565982.2	12948 ug/L	29.1	12948 ppb	29.1	0.23%
QC value less than the lower limit for Zn 213.857 Recovery = 86.32%						
SiO2†	1719574.6	98496 ug/L	82.1	98496 ppb	82.1	0.08%
QC value within limits for SiO2 Recovery = 92.05%						
QC Failed. Continue with analysis.						

Sequence No.: 13
 Sample ID: CCV
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 7
 Date Collected: 1/28/2010 11:21:49
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5467.5	5467.5	97.9 %		11:23:41
1	Y RADIAL	5942.2	5942.2	97.68 %		11:23:41
1	Al 396.153Radial†	6924.8	7069.9	4877.1 ug/L	4877.1 ppb	11:23:41
1	Ca 317.933Radial†	3259.4	3302.7	5021.8 ug/L	5021.8 ppb	11:24:01
1	Fe 238.204 Radial†	600.7	605.2	5124.7 ug/L	5124.7 ppb	11:24:01
1	K 766.490 Radial†	32395.4	30696.6	5076.4 ug/L	5076.4 ppb	11:23:41
1	Mg 279.077 IEC†	162.8	163.9	5349.7 ug/L	5349.7 ppb	11:24:01
1	Na 589.592 Radial†	34018.1	35777.5	9555.1 ug/L	9555.1 ppb	11:23:41
1	Sr 421.552†	81368.6	83106.7	483.72 ug/L	483.72 ppb	11:23:41
1	Sc 361.383	970532.0	970532.0	98.628 %		11:24:59
1	Y 371.029	850970.2	850970.2	97.564 %		11:24:59
1	Ag 328.068†	125856.3	127285.6	487.42 ug/L	487.42 ppb	11:25:04
1	As 188.979†	1336.6	1389.1	508.04 ug/L	508.04 ppb	11:25:24
1	B 249.677†	24630.4	25259.2	497.96 ug/L	497.96 ppb	11:25:04
1	Ba 233.527†	66460.7	67389.5	474.67 ug/L	474.67 ppb	11:25:04
1	Be 313.107†	1456837.8	1482166.1	467.02 ug/L	467.02 ppb	11:24:59
1	Cd 226.502†	47375.1	48233.3	476.99 ug/L	476.99 ppb	11:25:04
1	Co 228.616†	24343.6	24753.9	473.77 ug/L	473.77 ppb	11:25:04
1	Cr 267.716†	48511.6	49100.7	473.70 ug/L	473.70 ppb	11:25:04
1	Cu 324.752†	192246.9	185784.0	469.21 ug/L	469.21 ppb	11:25:04
1	Mn 257.610†	460081.4	465946.8	468.56 ug/L	468.56 ppb	11:24:59
1	Mo 202.031†	7622.1	7705.2	475.83 ug/L	475.83 ppb	11:25:24
1	Ni 231.604†	21135.3	21319.3	476.21 ug/L	476.21 ppb	11:25:04
1	P 214.914†	4859.7	4687.7	2247.4 ug/L	2247.4 ppb	11:25:24
1	Pb 220.353†	4161.3	4277.6	478.67 ug/L	478.67 ppb	11:25:24
1	S 181.975 Axial†	835.8	779.6	949.76 ug/L	949.76 ppb	11:25:24
1	Sb 206.836†	1645.8	1633.5	508.75 ug/L	508.75 ppb	11:25:24
1	Se 196.026†	884.1	917.5	495.47 ug/L	495.47 ppb	11:25:24
1	Si 251.611†	90226.3	91020.8	2436.2 ug/L	2436.2 ppb	11:25:04
1	Sn 189.927†	2883.3	2928.0	481.14 ug/L	481.14 ppb	11:25:24
1	Ti 334.940†	344142.5	349838.3	482.06 ug/L	482.06 ppb	11:24:59
1	Tl 190.801†	1582.4	1644.1	474.56 ug/L	474.56 ppb	11:25:24
1	U 409.014†	19264.3	20916.9	469.81 ug/L	469.81 ppb	11:25:04
1	V 292.402†	82274.3	84858.9	477.40 ug/L	477.40 ppb	11:25:04
1	Zn 213.857†	57392.8	57448.3	473.91 ug/L	473.91 ppb	11:25:04
1	SiO2†	89230.1	89994.9	5155.1 ug/L	5155.1 ppb	11:26:32
2	Sc Radial	5439.0	5439.0	97.4 %		11:24:06
2	Y RADIAL	5901.7	5901.7	97.01 %		11:24:06
2	Al 396.153Radial†	6907.8	7089.5	4890.9 ug/L	4890.9 ppb	11:24:06
2	Ca 317.933Radial†	3257.4	3318.1	5045.2 ug/L	5045.2 ppb	11:24:26
2	Fe 238.204 Radial†	599.7	607.4	5143.1 ug/L	5143.1 ppb	11:24:26
2	K 766.490 Radial†	32353.0	30826.2	5097.8 ug/L	5097.8 ppb	11:24:06
2	Mg 279.077 IEC†	161.7	163.7	5341.5 ug/L	5341.5 ppb	11:24:26
2	Na 589.592 Radial†	33843.8	35780.3	9555.9 ug/L	9555.9 ppb	11:24:06
2	Sr 421.552†	80930.6	83091.7	483.64 ug/L	483.64 ppb	11:24:06
2	Sc 361.383	987924.7	987924.7	100.40 %		11:25:30
2	Y 371.029	867120.1	867120.1	99.416 %		11:25:30
2	Ag 328.068†	125083.1	124268.9	475.91 ug/L	475.91 ppb	11:25:35
2	As 188.979†	1322.9	1351.5	494.42 ug/L	494.42 ppb	11:25:55
2	B 249.677†	24368.4	24558.6	484.11 ug/L	484.11 ppb	11:25:35
2	Ba 233.527†	66064.4	65808.4	463.54 ug/L	463.54 ppb	11:25:35
2	Be 313.107†	1479870.2	1479103.1	466.06 ug/L	466.06 ppb	11:25:30
2	Cd 226.502†	47057.1	47070.9	465.48 ug/L	465.48 ppb	11:25:35
2	Co 228.616†	24198.9	24175.3	462.69 ug/L	462.69 ppb	11:25:35
2	Cr 267.716†	48280.3	48004.4	463.12 ug/L	463.12 ppb	11:25:35
2	Cu 324.752†	191165.9	181275.6	457.83 ug/L	457.83 ppb	11:25:35
2	Mn 257.610†	466426.7	464054.6	466.66 ug/L	466.66 ppb	11:25:30
2	Mo 202.031†	7677.5	7624.3	470.84 ug/L	470.84 ppb	11:25:55
2	Ni 231.604†	21021.8	20828.9	465.26 ug/L	465.26 ppb	11:25:35

2	P 214.914†	4855.9	4597.2	2204.4 ug/L	2204.4 ppb	11:25:55
2	Pb 220.353†	4136.2	4178.2	467.59 ug/L	467.59 ppb	11:25:55
2	S 181.975 Axial†	827.8	756.8	921.89 ug/L	921.89 ppb	11:25:55
2	Sb 206.836†	1657.0	1615.3	502.95 ug/L	502.95 ppb	11:25:55
2	Se 196.026†	889.6	907.2	490.17 ug/L	490.17 ppb	11:25:55
2	Si 251.611†	89749.4	88935.2	2380.3 ug/L	2380.3 ppb	11:25:35
2	Sn 189.927†	2865.4	2858.7	469.79 ug/L	469.79 ppb	11:25:55
2	Ti 334.940†	349318.2	348850.5	480.71 ug/L	480.71 ppb	11:25:30
2	Tl 190.801†	1569.5	1603.1	462.85 ug/L	462.85 ppb	11:25:55
2	U 409.014†	19171.3	20480.4	459.99 ug/L	459.99 ppb	11:25:35
2	V 292.402†	81937.2	83054.5	467.29 ug/L	467.29 ppb	11:25:35
2	Zn 213.857†	57116.9	56148.9	463.18 ug/L	463.18 ppb	11:25:35
2	SiO2†	89138.9	88311.3	5058.5 ug/L	5058.5 ppb	11:26:37
3	Sc Radial	5443.1	5443.1	97.5 %		11:24:31
3	Y RADIAL	5902.9	5902.9	97.03 %		11:24:31
3	Al 396.153Radial†	6881.7	7057.4	4868.7 ug/L	4868.7 ppb	11:24:31
3	Ca 317.933Radial†	3225.3	3282.7	4991.3 ug/L	4991.3 ppb	11:24:51
3	Fe 238.204 Radial†	596.0	603.1	5106.5 ug/L	5106.5 ppb	11:24:51
3	K 766.490 Radial†	32318.5	30766.1	5087.9 ug/L	5087.9 ppb	11:24:31
3	Mg 279.077 IEC†	158.9	160.6	5241.8 ug/L	5241.8 ppb	11:24:51
3	Na 589.592 Radial†	34015.2	35930.2	9595.9 ug/L	9595.9 ppb	11:24:31
3	Sr 421.552†	81060.1	83162.7	484.05 ug/L	484.05 ppb	11:24:31
3	Sc 361.383	986126.4	986126.4	100.21 %		11:26:01
3	Y 371.029	865834.5	865834.5	99.269 %		11:26:01
3	Ag 328.068†	124382.1	123796.5	474.10 ug/L	474.10 ppb	11:26:06
3	As 188.979†	1318.8	1349.8	493.81 ug/L	493.81 ppb	11:26:26
3	B 249.677†	24211.7	24446.5	481.90 ug/L	481.90 ppb	11:26:06
3	Ba 233.527†	65745.0	65609.8	462.14 ug/L	462.14 ppb	11:26:06
3	Be 313.107†	1479950.8	1481871.5	466.93 ug/L	466.93 ppb	11:26:01
3	Cd 226.502†	46945.6	47045.1	465.23 ug/L	465.23 ppb	11:26:06
3	Co 228.616†	24097.8	24118.4	461.60 ug/L	461.60 ppb	11:26:06
3	Cr 267.716†	48079.4	47891.6	462.03 ug/L	462.03 ppb	11:26:06
3	Cu 324.752†	189463.0	179923.5	454.42 ug/L	454.42 ppb	11:26:06
3	Mn 257.610†	465928.9	464405.1	467.01 ug/L	467.01 ppb	11:26:01
3	Mo 202.031†	7641.9	7602.7	469.51 ug/L	469.51 ppb	11:26:26
3	Ni 231.604†	20901.4	20746.9	463.42 ug/L	463.42 ppb	11:26:06
3	P 214.914†	4833.8	4584.0	2198.5 ug/L	2198.5 ppb	11:26:26
3	Pb 220.353†	4134.7	4184.2	468.26 ug/L	468.26 ppb	11:26:26
3	S 181.975 Axial†	825.3	755.8	920.72 ug/L	920.72 ppb	11:26:26
3	Sb 206.836†	1626.7	1588.1	494.75 ug/L	494.75 ppb	11:26:26
3	Se 196.026†	879.2	898.5	485.51 ug/L	485.51 ppb	11:26:26
3	Si 251.611†	89152.6	88502.7	2368.7 ug/L	2368.7 ppb	11:26:06
3	Sn 189.927†	2868.2	2866.7	471.09 ug/L	471.09 ppb	11:26:26
3	Ti 334.940†	348830.3	348998.2	480.92 ug/L	480.92 ppb	11:26:01
3	Tl 190.801†	1572.9	1609.3	464.63 ug/L	464.63 ppb	11:26:26
3	U 409.014†	19076.3	20420.5	458.65 ug/L	458.65 ppb	11:26:06
3	V 292.402†	81316.9	82584.4	464.67 ug/L	464.67 ppb	11:26:06
3	Zn 213.857†	56829.4	55965.8	461.68 ug/L	461.68 ppb	11:26:06
3	SiO2†	88553.0	87888.6	5034.3 ug/L	5034.3 ppb	11:26:42

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	981527.7	99.746 %	0.9720			0.97%
Sc Radial	5449.9	97.6 %	0.28			0.28%
Y 371.029	861308.2	98.750 %	1.0291			1.04%
Y RADIAL	5915.6	97.24 %	0.379			0.39%
Ag 328.068†	125117.0	479.14 ug/L	7.225	479.14 ppb	7.225	1.51%
QC value within limits for Ag 328.068 Recovery = 95.83%						
Al 396.153Radial†	7072.3	4878.9 ug/L	11.18	4878.9 ppb	11.18	0.23%
QC value within limits for Al 396.153Radial Recovery = 97.58%						
As 188.979†	1363.5	498.76 ug/L	8.042	498.76 ppb	8.042	1.61%
QC value within limits for As 188.979 Recovery = 99.75%						
B 249.677†	24754.8	487.99 ug/L	8.702	487.99 ppb	8.702	1.78%
QC value within limits for B 249.677 Recovery = 97.60%						
Ba 233.527†	66269.3	466.79 ug/L	6.867	466.79 ppb	6.867	1.47%
QC value within limits for Ba 233.527 Recovery = 93.36%						
Be 313.107†	1481046.9	466.67 ug/L	0.532	466.67 ppb	0.532	0.11%
QC value within limits for Be 313.107 Recovery = 93.33%						
Ca 317.933Radial†	3301.2	5019.4 ug/L	27.02	5019.4 ppb	27.02	0.54%

QC value within limits for Ca 317.933 Radial Recovery = 100.39%
Cd 226.502† 47449.8 469.23 ug/L 6.719 469.23 ppb 6.719 1.43%
QC value within limits for Cd 226.502 Recovery = 93.85%
Co 228.616† 24349.2 466.02 ug/L 6.737 466.02 ppb 6.737 1.45%
QC value within limits for Co 228.616 Recovery = 93.20%
Cr 267.716† 48332.3 466.28 ug/L 6.443 466.28 ppb 6.443 1.38%
QC value within limits for Cr 267.716 Recovery = 93.26%
Cu 324.752† 182327.7 460.49 ug/L 7.747 460.49 ppb 7.747 1.68%
QC value within limits for Cu 324.752 Recovery = 92.10%
Fe 238.204 Radial† 605.2 5124.8 ug/L 18.29 5124.8 ppb 18.29 0.36%
QC value within limits for Fe 238.204 Radial Recovery = 102.50%
K 766.490 Radial† 30763.0 5087.4 ug/L 10.74 5087.4 ppb 10.74 0.21%
QC value within limits for K 766.490 Radial Recovery = 101.75%
Mg 279.077 IEC† 162.7 5311.0 ug/L 60.10 5311.0 ppb 60.10 1.13%
QC value within limits for Mg 279.077 IEC Recovery = 106.22%
Mn 257.610† 464802.2 467.41 ug/L 1.010 467.41 ppb 1.010 0.22%
QC value within limits for Mn 257.610 Recovery = 93.48%
Mo 202.031† 7644.1 472.06 ug/L 3.333 472.06 ppb 3.333 0.71%
QC value within limits for Mo 202.031 Recovery = 94.41%
Na 589.592 Radial† 35829.3 9569.0 ug/L 23.34 9569.0 ppb 23.34 0.24%
QC value within limits for Na 589.592 Radial Recovery = 95.69%
Ni 231.604† 20965.0 468.30 ug/L 6.913 468.30 ppb 6.913 1.48%
QC value within limits for Ni 231.604 Recovery = 93.66%
P 214.914† 4623.0 2216.8 ug/L 26.70 2216.8 ppb 26.70 1.20%
QC value less than the lower limit for P 214.914 Recovery = 88.67%
Pb 220.353† 4213.3 471.51 ug/L 6.216 471.51 ppb 6.216 1.32%
QC value within limits for Pb 220.353 Recovery = 94.30%
S 181.975 Axial† 764.1 930.79 ug/L 16.441 930.79 ppb 16.441 1.77%
QC value within limits for S 181.975 Axial Recovery = 93.08%
Sb 206.836† 1612.3 502.15 ug/L 7.033 502.15 ppb 7.033 1.40%
QC value within limits for Sb 206.836 Recovery = 100.43%
Se 196.026† 907.7 490.38 ug/L 4.985 490.38 ppb 4.985 1.02%
QC value within limits for Se 196.026 Recovery = 98.08%
Si 251.611† 89486.3 2395.1 ug/L 36.08 2395.1 ppb 36.08 1.51%
QC value within limits for Si 251.611 Recovery = 95.80%
Sn 189.927† 2884.5 474.01 ug/L 6.213 474.01 ppb 6.213 1.31%
QC value within limits for Sn 189.927 Recovery = 94.80%
Sr 421.552† 83120.4 483.80 ug/L 0.218 483.80 ppb 0.218 0.05%
QC value within limits for Sr 421.552 Recovery = 96.76%
Ti 334.940† 349229.0 481.23 ug/L 0.727 481.23 ppb 0.727 0.15%
QC value within limits for Ti 334.940 Recovery = 96.25%
Tl 190.801† 1618.8 467.34 ug/L 6.313 467.34 ppb 6.313 1.35%
QC value within limits for Tl 190.801 Recovery = 93.47%
U 409.014† 20605.9 462.82 ug/L 6.093 462.82 ppb 6.093 1.32%
QC value within limits for U 409.014 Recovery = 92.56%
V 292.402† 83499.3 469.79 ug/L 6.722 469.79 ppb 6.722 1.43%
QC value within limits for V 292.402 Recovery = 93.96%
Zn 213.857† 56521.0 466.26 ug/L 6.671 466.26 ppb 6.671 1.43%
QC value within limits for Zn 213.857 Recovery = 93.25%
SiO2† 88731.6 5082.6 ug/L 63.90 5082.6 ppb 63.90 1.26%
QC value within limits for SiO2 Recovery = 95.05%
QC Failed. Continue with analysis.

Sequence No.: 14
 Sample ID: CCB
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 8
 Date Collected: 1/28/2010 11:28:52
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5535.3	5535.3	99.1 %		11:30:45
1	Y RADIAL	6033.1	6033.1	99.17 %		11:30:45
1	Al 396.153Radial†	18.0	14.4	9.9392 ug/L	9.9392 ppb	11:31:05
1	Ca 317.933Radial†	30.1	3.6	5.4288 ug/L	5.4288 ppb	11:31:05
1	Fe 238.204 Radial†	7.8	-0.6	-4.6629 ug/L	-4.6629 ppb	11:31:05
1	K 766.490 Radial†	2918.5	549.5	90.975 ug/L	90.975 ppb	11:30:45
1	Mg 279.077 IEC†	0.4	-2.0	-65.249 ug/L	-65.249 ppb	11:31:05
1	Na 589.592 Radial†	-1037.4	-18.7	-4.9888 ug/L	-4.9888 ppb	11:30:45
1	Sr 421.552†	57.3	46.6	0.2714 ug/L	0.2714 ppb	11:30:45
1	Sc 361.383	969797.9	969797.9	98.554 %		11:32:02
1	Y 371.029	859727.6	859727.6	98.568 %		11:32:02
1	Ag 328.068†	452.1	137.7	0.5253 ug/L	0.5253 ppb	11:32:07
1	As 188.979†	8.2	42.1	15.270 ug/L	15.270 ppb	11:32:27
1	B 249.677†	559.3	853.8	16.906 ug/L	16.906 ppb	11:32:27
1	Ba 233.527†	27.1	32.1	0.2248 ug/L	0.2248 ppb	11:32:27
1	Be 313.107†	-4925.8	70.0	0.0221 ug/L	0.0221 ppb	11:32:07
1	Cd 226.502†	-144.0	53.2	0.5265 ug/L	0.5265 ppb	11:32:27
1	Co 228.616†	-63.3	7.6	0.1478 ug/L	0.1478 ppb	11:32:27
1	Cr 267.716†	87.0	2.8	0.0281 ug/L	0.0281 ppb	11:32:27
1	Cu 324.752†	9399.5	400.9	1.0144 ug/L	1.0144 ppb	11:32:07
1	Mn 257.610†	581.7	57.3	0.0597 ug/L	0.0597 ppb	11:32:27
1	Mo 202.031†	34.4	11.9	0.7359 ug/L	0.7359 ppb	11:32:27
1	Ni 231.604†	119.1	10.8	0.2422 ug/L	0.2422 ppb	11:32:27
1	P 214.914†	230.4	-5.7	-3.0066 ug/L	-3.0066 ppb	11:32:27
1	Pb 220.353†	-20.3	37.8	4.2172 ug/L	4.2172 ppb	11:32:27
1	S 181.975 Axial†	46.1	-21.0	-25.668 ug/L	-25.668 ppb	11:32:27
1	Sb 206.836†	61.2	26.9	8.1678 ug/L	8.1678 ppb	11:32:27
1	Se 196.026†	-17.0	3.9	2.0152 ug/L	2.0152 ppb	11:32:27
1	Si 251.611†	628.0	177.0	4.7393 ug/L	4.7393 ppb	11:32:27
1	Sn 189.927†	13.8	18.6	3.0523 ug/L	3.0523 ppb	11:32:27
1	Ti 334.940†	-878.8	18.0	0.0327 ug/L	0.0327 ppb	11:32:07
1	Tl 190.801†	-40.6	-1.4	-0.4036 ug/L	-0.4036 ppb	11:32:27
1	U 409.014†	-1540.8	-178.6	-4.0260 ug/L	-4.0260 ppb	11:32:07
1	V 292.402†	-1439.8	-20.5	-0.1118 ug/L	-0.1118 ppb	11:32:07
1	Zn 213.857†	887.2	157.5	1.3082 ug/L	1.3082 ppb	11:32:27
1	SiO2†	637.4	170.6	9.7788 ug/L	9.7788 ppb	11:33:33
2	Sc Radial	5492.4	5492.4	98.3 %		11:31:10
2	Y RADIAL	5986.8	5986.8	98.41 %		11:31:10
2	Al 396.153Radial†	4.7	1.0	0.6963 ug/L	0.6963 ppb	11:31:30
2	Ca 317.933Radial†	26.2	-0.2	-0.2318 ug/L	-0.2318 ppb	11:31:30
2	Fe 238.204 Radial†	8.5	0.2	1.5678 ug/L	1.5678 ppb	11:31:30
2	K 766.490 Radial†	2960.7	615.4	101.89 ug/L	101.89 ppb	11:31:10
2	Mg 279.077 IEC†	1.5	-0.8	-26.773 ug/L	-26.773 ppb	11:31:30
2	Na 589.592 Radial†	-1012.3	-1.3	-0.3524 ug/L	-0.3524 ppb	11:31:10
2	Sr 421.552†	52.5	42.2	0.2455 ug/L	0.2455 ppb	11:31:10
2	Sc 361.383	964187.2	964187.2	97.984 %		11:32:32
2	Y 371.029	856634.3	856634.3	98.214 %		11:32:32
2	Ag 328.068†	342.1	28.1	0.1083 ug/L	0.1083 ppb	11:32:37
2	As 188.979†	15.4	49.6	17.978 ug/L	17.978 ppb	11:32:57
2	B 249.677†	520.8	817.8	16.192 ug/L	16.192 ppb	11:32:57
2	Ba 233.527†	11.6	16.4	0.1151 ug/L	0.1151 ppb	11:32:57
2	Be 313.107†	-4928.6	38.0	0.0117 ug/L	0.0117 ppb	11:32:37
2	Cd 226.502†	-166.2	29.7	0.2935 ug/L	0.2935 ppb	11:32:57
2	Co 228.616†	-77.0	-6.8	-0.1289 ug/L	-0.1289 ppb	11:32:57
2	Cr 267.716†	108.7	25.4	0.2455 ug/L	0.2455 ppb	11:32:57
2	Cu 324.752†	9211.4	264.4	0.6685 ug/L	0.6685 ppb	11:32:37
2	Mn 257.610†	573.6	52.5	0.0540 ug/L	0.0540 ppb	11:32:57
2	Mo 202.031†	29.0	6.6	0.4077 ug/L	0.4077 ppb	11:32:57
2	Ni 231.604†	108.2	0.5	0.0102 ug/L	0.0102 ppb	11:32:57

2	P 214.914†	225.9	-9.0	-4.6191 ug/L	-4.6191 ppb	11:32:57
2	Pb 220.353†	-33.1	24.5	2.7384 ug/L	2.7384 ppb	11:32:57
2	S 181.975 Axial†	60.1	-6.5	-7.8801 ug/L	-7.8801 ppb	11:32:57
2	Sb 206.836†	63.8	29.9	9.0425 ug/L	9.0425 ppb	11:32:57
2	Se 196.026†	-18.1	2.7	1.3954 ug/L	1.3954 ppb	11:32:57
2	Si 251.611†	602.2	154.3	4.1358 ug/L	4.1358 ppb	11:32:57
2	Sn 189.927†	5.3	10.0	1.6378 ug/L	1.6378 ppb	11:32:57
2	Ti 334.940†	-961.8	-71.9	-0.0965 ug/L	-0.0965 ppb	11:32:37
2	Tl 190.801†	-30.2	8.9	2.5562 ug/L	2.5562 ppb	11:32:57
2	U 409.014†	-1404.9	-49.1	-1.1076 ug/L	-1.1076 ppb	11:32:37
2	V 292.402†	-1414.7	-3.4	-0.0157 ug/L	-0.0157 ppb	11:32:37
2	Zn 213.857†	869.5	144.7	1.2032 ug/L	1.2032 ppb	11:32:57
2	SiO2†	623.7	160.4	9.2024 ug/L	9.2024 ppb	11:33:38
3	Sc Radial	5558.9	5558.9	99.5 %		11:31:35
3	Y RADIAL	6027.8	6027.8	99.08 %		11:31:35
3	Al 396.153Radial†	3.9	0.2	0.1211 ug/L	0.1211 ppb	11:31:55
3	Ca 317.933Radial†	23.6	-3.1	-4.7093 ug/L	-4.7093 ppb	11:31:55
3	Fe 238.204 Radial†	7.7	-0.6	-5.3106 ug/L	-5.3106 ppb	11:31:55
3	K 766.490 Radial†	2862.2	480.4	79.536 ug/L	79.536 ppb	11:31:35
3	Mg 279.077 IEC†	5.5	3.1	102.63 ug/L	102.63 ppb	11:31:55
3	Na 589.592 Radial†	-973.1	50.4	13.460 ug/L	13.460 ppb	11:31:35
3	Sr 421.552†	22.2	11.2	0.0650 ug/L	0.0650 ppb	11:31:35
3	Sc 361.383	960320.4	960320.4	97.591 %		11:33:02
3	Y 371.029	852729.1	852729.1	97.766 %		11:33:02
3	Ag 328.068†	307.3	-6.1	-0.0213 ug/L	-0.0213 ppb	11:33:07
3	As 188.979†	13.5	47.7	17.286 ug/L	17.286 ppb	11:33:28
3	B 249.677†	472.0	769.9	15.245 ug/L	15.245 ppb	11:33:28
3	Ba 233.527†	22.5	27.6	0.1937 ug/L	0.1937 ppb	11:33:28
3	Be 313.107†	-4859.5	88.6	0.0277 ug/L	0.0277 ppb	11:33:07
3	Cd 226.502†	-163.6	31.7	0.3125 ug/L	0.3125 ppb	11:33:28
3	Co 228.616†	-59.4	11.0	0.2117 ug/L	0.2117 ppb	11:33:28
3	Cr 267.716†	108.4	25.6	0.2482 ug/L	0.2482 ppb	11:33:28
3	Cu 324.752†	9123.5	212.2	0.5385 ug/L	0.5385 ppb	11:33:07
3	Mn 257.610†	599.4	81.2	0.0769 ug/L	0.0769 ppb	11:33:28
3	Mo 202.031†	31.4	9.2	0.5653 ug/L	0.5653 ppb	11:33:28
3	Ni 231.604†	89.5	-18.3	-0.4082 ug/L	-0.4082 ppb	11:33:28
3	P 214.914†	256.2	23.0	11.408 ug/L	11.408 ppb	11:33:28
3	Pb 220.353†	-17.6	40.3	4.4940 ug/L	4.4940 ppb	11:33:28
3	S 181.975 Axial†	48.8	-17.8	-21.701 ug/L	-21.701 ppb	11:33:28
3	Sb 206.836†	63.3	29.7	9.0305 ug/L	9.0305 ppb	11:33:28
3	Se 196.026†	-23.7	-3.1	-1.6284 ug/L	-1.6284 ppb	11:33:28
3	Si 251.611†	614.9	169.8	4.5498 ug/L	4.5498 ppb	11:33:28
3	Sn 189.927†	22.4	27.6	4.5201 ug/L	4.5201 ppb	11:33:28
3	Ti 334.940†	-933.9	-47.3	-0.0720 ug/L	-0.0720 ppb	11:33:07
3	Tl 190.801†	-39.4	-0.7	-0.1898 ug/L	-0.1898 ppb	11:33:28
3	U 409.014†	-1570.5	-224.5	-5.0604 ug/L	-5.0604 ppb	11:33:07
3	V 292.402†	-1423.0	-17.7	-0.0974 ug/L	-0.0974 ppb	11:33:07
3	Zn 213.857†	871.1	149.9	1.2498 ug/L	1.2498 ppb	11:33:28
3	SiO2†	622.0	161.2	9.2428 ug/L	9.2428 ppb	11:33:43

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	964768.5	98.043 %	0.4843			0.49%
Sc Radial	5528.9	99.0 %	0.60			0.61%
Y 371.029	856363.7	98.183 %	0.4021			0.41%
Y RADIAL	6015.9	98.89 %	0.416			0.42%
Ag 328.068†	53.2	0.2041 ug/L	0.28564	0.2041 ppb	0.28564	139.94%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	5.2	3.5855 ug/L	5.50995	3.5855 ppb	5.50995	153.67%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	46.4	16.845 ug/L	1.4070	16.845 ppb	1.4070	8.35%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	813.8	16.114 ug/L	0.8334	16.114 ppb	0.8334	5.17%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	25.4	0.1779 ug/L	0.05653	0.1779 ppb	0.05653	31.78%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	65.5	0.0205 ug/L	0.00811	0.0205 ppb	0.00811	39.56%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	0.1	0.1626 ug/L	5.08050	0.1626 ppb	5.08050	>999.9%

QC value within limits for Ca 317.933 Radial	Recovery = Not calculated		
Cd 226.502†	38.2 0.3775 ug/L	0.12935 0.3775 ppb	0.12935 34.26%
QC value within limits for Cd 226.502	Recovery = Not calculated		
Co 228.616†	3.9 0.0769 ug/L	0.18101 0.0769 ppb	0.18101 235.47%
QC value within limits for Co 228.616	Recovery = Not calculated		
Cr 267.716†	17.9 0.1739 ug/L	0.12626 0.1739 ppb	0.12626 72.60%
QC value within limits for Cr 267.716	Recovery = Not calculated		
Cu 324.752†	292.5 0.7405 ug/L	0.24600 0.7405 ppb	0.24600 33.22%
QC value within limits for Cu 324.752	Recovery = Not calculated		
Fe 238.204 Radial†	-0.3 -2.8019 ug/L	3.79808 -2.8019 ppb	3.79808 135.55%
QC value within limits for Fe 238.204 Radial	Recovery = Not calculated		
K 766.490 Radial†	548.4 90.801 ug/L	11.1782 90.801 ppb	11.1782 12.31%
QC value within limits for K 766.490 Radial	Recovery = Not calculated		
Mg 279.077 IEC†	0.1 3.5369 ug/L	87.94906 3.5369 ppb	87.94906 >999.9%
QC value within limits for Mg 279.077 IEC	Recovery = Not calculated		
Mn 257.610†	63.7 0.0635 ug/L	0.01191 0.0635 ppb	0.01191 18.74%
QC value within limits for Mn 257.610	Recovery = Not calculated		
Mo 202.031†	9.2 0.5696 ug/L	0.16416 0.5696 ppb	0.16416 28.82%
QC value within limits for Mo 202.031	Recovery = Not calculated		
Na 589.592 Radial†	10.1 2.7064 ug/L	9.59742 2.7064 ppb	9.59742 354.62%
QC value within limits for Na 589.592 Radial	Recovery = Not calculated		
Ni 231.604†	-2.3 -0.0519 ug/L	0.32963 -0.0519 ppb	0.32963 634.53%
QC value within limits for Ni 231.604	Recovery = Not calculated		
P 214.914†	2.8 1.2609 ug/L	8.82490 1.2609 ppb	8.82490 699.89%
QC value within limits for P 214.914	Recovery = Not calculated		
Pb 220.353†	34.2 3.8165 ug/L	0.94391 3.8165 ppb	0.94391 24.73%
QC value within limits for Pb 220.353	Recovery = Not calculated		
S 181.975 Axial†	-15.1 -18.416 ug/L	9.3379 -18.416 ppb	9.3379 50.70%
QC value within limits for S 181.975 Axial	Recovery = Not calculated		
Sb 206.836†	28.9 8.7469 ug/L	0.50162 8.7469 ppb	0.50162 5.73%
QC value within limits for Sb 206.836	Recovery = Not calculated		
Se 196.026†	1.2 0.5941 ug/L	1.94947 0.5941 ppb	1.94947 328.17%
QC value within limits for Se 196.026	Recovery = Not calculated		
Si 251.611†	167.1 4.4749 ug/L	0.30863 4.4749 ppb	0.30863 6.90%
QC value within limits for Si 251.611	Recovery = Not calculated		
Sn 189.927†	18.7 3.0701 ug/L	1.44126 3.0701 ppb	1.44126 46.95%
QC value within limits for Sn 189.927	Recovery = Not calculated		
Sr 421.552†	33.3 0.1940 ug/L	0.11243 0.1940 ppb	0.11243 57.96%
QC value within limits for Sr 421.552	Recovery = Not calculated		
Ti 334.940†	-33.7 -0.0453 ug/L	0.06863 -0.0453 ppb	0.06863 151.57%
QC value within limits for Ti 334.940	Recovery = Not calculated		
Tl 190.801†	2.3 0.6542 ug/L	1.65058 0.6542 ppb	1.65058 252.29%
QC value within limits for Tl 190.801	Recovery = Not calculated		
U 409.014†	-150.8 -3.3980 ug/L	2.04987 -3.3980 ppb	2.04987 60.33%
QC value within limits for U 409.014	Recovery = Not calculated		
V 292.402†	-13.9 -0.0749 ug/L	0.05182 -0.0749 ppb	0.05182 69.14%
QC value within limits for V 292.402	Recovery = Not calculated		
Zn 213.857†	150.7 1.2537 ug/L	0.05262 1.2537 ppb	0.05262 4.20%
QC value within limits for Zn 213.857	Recovery = Not calculated		
SiO2†	164.1 9.4080 ug/L	0.32175 9.4080 ppb	0.32175 3.42%
QC value within limits for SiO2	Recovery = Not calculated		

All analyte(s) passed QC.

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Analysis Begun

Start Time: 1/28/2010 11:44:15

Plasma On Time: 00:00:00

Logged In Analyst: Optima3

Technique: ICP Continuous

Spectrometer Model: Optima 5300 DV, S/N 077C7090601 Autosampler Model: S10

Sample Information File: C:\pe\Optima3\Sample Information\012810.sif

Batch ID:

Results Data Set: 012810

Results Library: C:\pe\Optima3\Results\Results.mdb
=====

Method Loaded

Method Name: General Eng.2AX

Method Last Saved: 1/28/2010 10:07:42

IEC File: 011110.iec

MSF File:

Method Description:
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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: 36

Sample ID: LR1

Date Collected: 1/28/2010 11:44:16

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	5328.5	5328.5	95.4 %		11:46:10
1	Y RADIAL	5806.5	5806.5	95.45 %		11:46:10
1	Al 396.153Radial†	-7.2	-11.3	-6.7254 ug/L	-6.7254 ppb	11:46:30

1	Ca 317.933Radial†	13.8	-12.3	-18.696 ug/L	-18.696 ppb	11:46:30
1	Fe 238.204 Radial†	43808.6	45909.6	387670 ug/L	387670 ppb	11:46:10
1	K 766.490 Radial†	2306.8	22.7	3.8153 ug/L	3.8153 ppb	11:46:10
1	Mg 279.077 IEC†	14.0	12.3	-5.4983 ug/L	-5.4983 ppb	11:46:30
1	Na 589.592 Radial†	-1025.6	-46.9	-12.534 ug/L	-12.534 ppb	11:46:10
1	Sr 421.552†	89.3	82.4	0.4799 ug/L	0.4799 ppb	11:46:10
1	Sc 361.383	926901.1	926901.1	94.194 %		11:47:27
1	Y 371.029	817719.4	817719.4	93.752 %		11:47:27
1	Ag 328.068†	-28600.5	-30684.3	8.9680 ug/L	8.9680 ppb	11:47:27
1	As 188.979†	-190.7	-168.6	29.711 ug/L	29.711 ppb	11:47:47
1	B 249.677†	2792.7	3251.1	1.4008 ug/L	1.4008 ppb	11:47:27
1	Ba 233.527†	-1895.7	-2007.9	-2.1949 ug/L	-2.1949 ppb	11:47:27
1	Be 313.107†	-4827.4	-56.8	-0.0183 ug/L	-0.0183 ppb	11:47:27
1	Cd 226.502†	3492.1	3906.7	-1.3870 ug/L	-1.3870 ppb	11:47:27
1	Co 228.616†	192.8	276.5	-0.3649 ug/L	-0.3649 ppb	11:47:47
1	Cr 267.716†	-421.9	-533.4	2.4482 ug/L	2.4482 ppb	11:47:27
1	Cu 324.752†	1760.9	-7267.1	2.1357 ug/L	2.1357 ppb	11:47:27
1	Mn 257.610†	-37909.2	-40778.6	-2.7091 ug/L	-2.7091 ppb	11:47:27
1	Mo 202.031†	-329.9	-373.2	7.0694 ug/L	7.0694 ppb	11:47:27
1	Ni 231.604†	163.5	63.6	1.4194 ug/L	1.4194 ppb	11:47:47
1	P 214.914†	737.1	543.1	-37.665 ug/L	-37.665 ppb	11:47:47
1	Pb 220.353†	259.5	333.8	0.1425 ug/L	0.1425 ppb	11:47:47
1	S 181.975 Axial†	61.2	-2.9	-3.4827 ug/L	-3.4827 ppb	11:47:47
1	Sb 206.836†	21.1	-12.7	5.5567 ug/L	5.5567 ppb	11:47:47
1	Se 196.026†	-1991.5	-2093.1	194.20 ug/L	194.20 ppb	11:47:47
1	Si 251.611†	-579.6	-1075.6	-28.574 ug/L	-28.574 ppb	11:47:27
1	Sn 189.927†	-21.9	-18.7	3.4548 ug/L	3.4548 ppb	11:47:47
1	Ti 334.940†	-995.8	-147.4	-0.2608 ug/L	-0.2608 ppb	11:47:27
1	Tl 190.801†	-47.3	-10.5	-3.3196 ug/L	-3.3196 ppb	11:47:47
1	U 409.014†	1003.4	2450.0	11.038 ug/L	11.038 ppb	11:47:27
1	V 292.402†	7714.7	9630.6	-3.2061 ug/L	-3.2061 ppb	11:47:27
1	Zn 213.857†	4807.7	4361.3	-1.2968 ug/L	-1.2968 ppb	11:47:47
1	SiO2†	-658.7	-1175.5	-66.874 ug/L	-66.874 ppb	11:48:45
2	Sc Radial	5332.8	5332.8	95.5 %		11:46:35
2	Y RADIAL	5800.7	5800.7	95.35 %		11:46:35
2	Al 396.153Radial†	-20.0	-24.7	-15.789 ug/L	-15.789 ppb	11:46:55
2	Ca 317.933Radial†	10.3	-16.0	-24.316 ug/L	-24.316 ppb	11:46:55
2	Fe 238.204 Radial†	43829.2	45893.7	387540 ug/L	387540 ppb	11:46:35
2	K 766.490 Radial†	2267.5	-20.4	-3.3201 ug/L	-3.3201 ppb	11:46:35
2	Mg 279.077 IEC†	13.3	11.5	-30.610 ug/L	-30.610 ppb	11:46:55
2	Na 589.592 Radial†	-1026.0	-46.5	-12.412 ug/L	-12.412 ppb	11:46:35
2	Sr 421.552†	129.5	124.4	0.7243 ug/L	0.7243 ppb	11:46:35
2	Sc 361.383	925261.0	925261.0	94.028 %		11:47:53
2	Y 371.029	818597.2	818597.2	93.853 %		11:47:53
2	Ag 328.068†	-28561.1	-30696.1	8.8801 ug/L	8.8801 ppb	11:47:53
2	As 188.979†	-204.3	-183.5	24.302 ug/L	24.302 ppb	11:48:13
2	B 249.677†	2609.9	3061.9	-2.3229 ug/L	-2.3229 ppb	11:47:53
2	Ba 233.527†	-1920.1	-2037.5	-2.4076 ug/L	-2.4076 ppb	11:47:53
2	Be 313.107†	-4865.0	-105.9	-0.0340 ug/L	-0.0340 ppb	11:47:53
2	Cd 226.502†	3550.3	3975.1	-0.6967 ug/L	-0.6967 ppb	11:47:53
2	Co 228.616†	194.3	278.5	-0.3343 ug/L	-0.3343 ppb	11:48:13
2	Cr 267.716†	-402.7	-513.8	2.6349 ug/L	2.6349 ppb	11:47:53
2	Cu 324.752†	1795.5	-7227.0	2.2310 ug/L	2.2310 ppb	11:47:53
2	Mn 257.610†	-37834.0	-40770.0	-2.7127 ug/L	-2.7127 ppb	11:47:53
2	Mo 202.031†	-386.9	-434.4	3.2847 ug/L	3.2847 ppb	11:47:53
2	Ni 231.604†	168.0	68.7	1.5331 ug/L	1.5331 ppb	11:48:13
2	P 214.914†	752.1	560.4	-28.913 ug/L	-28.913 ppb	11:48:13
2	Pb 220.353†	256.2	330.8	-0.1862 ug/L	-0.1862 ppb	11:48:13
2	S 181.975 Axial†	66.9	3.4	4.1403 ug/L	4.1403 ppb	11:48:13
2	Sb 206.836†	23.7	-9.9	6.3502 ug/L	6.3502 ppb	11:48:13
2	Se 196.026†	-2016.5	-2123.4	178.01 ug/L	178.01 ppb	11:48:13
2	Si 251.611†	-543.1	-1037.8	-27.515 ug/L	-27.515 ppb	11:47:53
2	Sn 189.927†	-13.3	-9.5	4.9555 ug/L	4.9555 ppb	11:48:13
2	Ti 334.940†	-1080.3	-239.1	-0.3851 ug/L	-0.3851 ppb	11:47:53
2	Tl 190.801†	-44.8	-7.8	-2.5701 ug/L	-2.5701 ppb	11:48:13
2	U 409.014†	922.6	2365.9	9.1576 ug/L	9.1576 ppb	11:47:53
2	V 292.402†	7662.8	9589.9	-3.4700 ug/L	-3.4700 ppb	11:47:53
2	Zn 213.857†	4826.5	4390.3	-1.0427 ug/L	-1.0427 ppb	11:48:13
2	SiO2†	-505.8	-1014.1	-57.503 ug/L	-57.503 ppb	11:48:50
3	Sc Radial	5375.6	5375.6	96.3 %		11:47:00
3	Y RADIAL	5820.0	5820.0	95.67 %		11:47:00

3	Al 396.153Radial†	-27.7	-32.5	-21.311 ug/L	-21.311 ppb	11:47:20
3	Ca 317.933Radial†	9.2	-17.2	-26.202 ug/L	-26.202 ppb	11:47:20
3	Fe 238.204 Radial†	44040.5	45747.9	386310 ug/L	386310 ppb	11:47:00
3	K 766.490 Radial†	2315.0	10.0	1.7106 ug/L	1.7106 ppb	11:47:00
3	Mg 279.077 IEC†	15.4	13.6	39.209 ug/L	39.209 ppb	11:47:20
3	Na 589.592 Radial†	-997.7	-8.6	-2.2918 ug/L	-2.2918 ppb	11:47:00
3	Sr 421.552†	66.7	58.1	0.3385 ug/L	0.3385 ppb	11:47:00
3	Sc 361.383	926640.8	926640.8	94.168 %		11:48:19
3	Y 371.029	819281.3	819281.3	93.931 %		11:48:19
3	Ag 328.068†	-28538.7	-30627.2	8.7458 ug/L	8.7458 ppb	11:48:19
3	As 188.979†	-214.2	-193.6	20.322 ug/L	20.322 ppb	11:48:39
3	B 249.677†	2565.8	3011.0	-3.1313 ug/L	-3.1313 ppb	11:48:19
3	Ba 233.527†	-1838.9	-1948.2	-1.8165 ug/L	-1.8165 ppb	11:48:19
3	Be 313.107†	-4881.7	-116.0	-0.0371 ug/L	-0.0371 ppb	11:48:19
3	Cd 226.502†	3539.4	3958.0	-0.7394 ug/L	-0.7394 ppb	11:48:19
3	Co 228.616†	200.2	284.4	-0.1987 ug/L	-0.1987 ppb	11:48:39
3	Cr 267.716†	-442.5	-555.4	2.2112 ug/L	2.2112 ppb	11:48:19
3	Cu 324.752†	1782.0	-7244.2	2.1227 ug/L	2.1227 ppb	11:48:19
3	Mn 257.610†	-38079.4	-40970.7	-3.0387 ug/L	-3.0387 ppb	11:48:19
3	Mo 202.031†	-358.7	-403.8	5.0740 ug/L	5.0740 ppb	11:48:19
3	Ni 231.604†	165.7	66.0	1.4720 ug/L	1.4720 ppb	11:48:39
3	P 214.914†	742.9	549.4	-33.444 ug/L	-33.444 ppb	11:48:39
3	Pb 220.353†	250.2	324.0	-0.8246 ug/L	-0.8246 ppb	11:48:39
3	S 181.975 Axial†	78.8	15.9	19.382 ug/L	19.382 ppb	11:48:39
3	Sb 206.836†	11.3	-23.1	2.3390 ug/L	2.3390 ppb	11:48:39
3	Se 196.026†	-1988.7	-2090.7	190.92 ug/L	190.92 ppb	11:48:39
3	Si 251.611†	-632.0	-1131.5	-30.051 ug/L	-30.051 ppb	11:48:19
3	Sn 189.927†	-25.5	-22.5	2.8107 ug/L	2.8107 ppb	11:48:39
3	Ti 334.940†	-1055.9	-211.5	-0.3525 ug/L	-0.3525 ppb	11:48:19
3	Tl 190.801†	-45.4	-8.5	-2.7539 ug/L	-2.7539 ppb	11:48:39
3	U 409.014†	896.6	2336.8	8.6421 ug/L	8.6421 ppb	11:48:19
3	V 292.402†	7728.1	9647.1	-2.9463 ug/L	-2.9463 ppb	11:48:19
3	Zn 213.857†	4809.9	4365.0	-1.1333 ug/L	-1.1333 ppb	11:48:39
3	SiO2†	-638.0	-1153.6	-65.566 ug/L	-65.566 ppb	11:48:55

Mean Data: LRI

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	926267.7	94.130 %		0.0896			0.10%
Sc Radial	5345.6	95.7 %		0.47			0.49%
Y 371.029	818532.6	93.845 %		0.0898			0.10%
Y RADIAL	5809.1	95.49 %		0.163			0.17%
Ag 328.068†	-30669.2	8.8646 ug/L		0.11190	8.8646 ppb	0.11190	1.26%
Al 396.153Radial†	-22.8	-14.608 ug/L		7.3639	-14.608 ppb	7.3639	50.41%
As 188.979†	-181.9	24.778 ug/L		4.7128	24.778 ppb	4.7128	19.02%
B 249.677†	3108.0	-1.3512 ug/L		2.41727	-1.3512 ppb	2.41727	178.90%
Ba 233.527†	-1997.9	-2.1397 ug/L		0.29939	-2.1397 ppb	0.29939	13.99%
Be 313.107†	-92.9	-0.0298 ug/L		0.01009	-0.0298 ppb	0.01009	33.81%
Ca 317.933Radial†	-15.2	-23.071 ug/L		3.9049	-23.071 ppb	3.9049	16.93%
Cd 226.502†	3946.6	-0.9410 ug/L		0.38679	-0.9410 ppb	0.38679	41.10%
Co 228.616†	279.8	-0.2993 ug/L		0.08843	-0.2993 ppb	0.08843	29.54%
Cr 267.716†	-534.2	2.4314 ug/L		0.21238	2.4314 ppb	0.21238	8.73%
Cu 324.752†	-7246.1	2.1631 ug/L		0.05913	2.1631 ppb	0.05913	2.73%
Fe 238.204 Radial†	45850.4	387170 ug/L		752.3	387170 ppb	752.3	0.19%
K 766.490 Radial†	4.1	0.7353 ug/L		3.66629	0.7353 ppb	3.66629	498.63%
Mg 279.077 IEC†	12.4	1.0335 ug/L		35.36444	1.0335 ppb	35.36444	>999.9%
Mn 257.610†	-40839.8	-2.8202 ug/L		0.18926	-2.8202 ppb	0.18926	6.71%
Mo 202.031†	-403.8	5.1427 ug/L		1.89330	5.1427 ppb	1.89330	36.82%
Na 589.592 Radial†	-34.0	-9.0794 ug/L		5.87856	-9.0794 ppb	5.87856	64.75%
Ni 231.604†	66.1	1.4748 ug/L		0.05688	1.4748 ppb	0.05688	3.86%
P 214.914†	550.9	-33.340 ug/L		4.3769	-33.340 ppb	4.3769	13.13%
Pb 220.353†	329.6	-0.2895 ug/L		0.49174	-0.2895 ppb	0.49174	169.88%
S 181.975 Axial†	5.5	6.6798 ug/L		11.64195	6.6798 ppb	11.64195	174.28%
Sb 206.836†	-15.2	4.7486 ug/L		2.12420	4.7486 ppb	2.12420	44.73%
Se 196.026†	-2102.4	187.71 ug/L		8.562	187.71 ppb	8.562	4.56%
Si 251.611†	-1081.6	-28.713 ug/L		1.2734	-28.713 ppb	1.2734	4.44%
Sn 189.927†	-16.9	3.7403 ug/L		1.10057	3.7403 ppb	1.10057	29.42%
Sr 421.552†	88.3	0.5142 ug/L		0.19518	0.5142 ppb	0.19518	37.96%
Ti 334.940†	-199.4	-0.3328 ug/L		0.06445	-0.3328 ppb	0.06445	19.37%
Tl 190.801†	-8.9	-2.8812 ug/L		0.39066	-2.8812 ppb	0.39066	13.56%

U 409.014†	2384.3	9.6124 ug/L	1.26081	9.6124 ppb	1.26081	13.12%
V 292.402†	9622.5	-3.2075 ug/L	0.26187	-3.2075 ppb	0.26187	8.16%
Zn 213.857†	4372.2	-1.1576 ug/L	0.12877	-1.1576 ppb	0.12877	11.12%
SiO2†	-1114.4	-63.314 ug/L	5.0753	-63.314 ppb	5.0753	8.02%

Sequence No.: 2

Sample ID: LR2

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 37

Date Collected: 1/28/2010 11:51:07

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5537.0	5537.0	99.1 %		11:53:01
1	Y RADIAL	6010.5	6010.5	98.80 %		11:53:01
1	Al 396.153Radial†	-10.1	-14.0	-9.5548 ug/L	-9.5548 ppb	11:53:21
1	Ca 317.933Radial†	35.1	8.7	13.176 ug/L	13.176 ppb	11:53:21
1	Fe 238.204 Radial†	-6.0	-14.5	21.289 ug/L	21.289 ppb	11:53:21
1	K 766.490 Radial†	2673.0	301.0	49.846 ug/L	49.846 ppb	11:53:01
1	Mg 279.077 IEC†	-0.2	-2.6	-85.717 ug/L	-85.717 ppb	11:53:21
1	Na 589.592 Radial†	-1094.1	-75.6	-20.180 ug/L	-20.180 ppb	11:53:01
1	Sr 421.552†	31.2	20.3	0.1180 ug/L	0.1180 ppb	11:53:01
1	Sc 361.383	981244.3	981244.3	99.717 %		11:54:19
1	Y 371.029	865050.6	865050.6	99.179 %		11:54:19
1	Ag 328.068†	407.2	87.4	0.2891 ug/L	0.2891 ppb	11:54:24
1	As 188.979†	-56.5	-22.8	-8.2466 ug/L	-8.2466 ppb	11:54:44
1	B 249.677†	924.1	1213.0	10.350 ug/L	10.350 ppb	11:54:44
1	Ba 233.527†	1333521.5	1337310.8	9396.0 ug/L	9396.0 ppb	11:54:19
1	Be 313.107†	-6368.2	-1318.2	-0.3996 ug/L	-0.3996 ppb	11:54:19
1	Cd 226.502†	-185.2	13.6	0.1577 ug/L	0.1577 ppb	11:54:44
1	Co 228.616†	249674.2	250454.6	4789.1 ug/L	4789.1 ppb	11:54:19
1	Cr 267.716†	1974695.3	1980214.3	19081 ug/L	19081 ppb	11:54:19
1	Cu 324.752†	8511.6	-600.8	-1.5462 ug/L	-1.5462 ppb	11:54:24
1	Mn 257.610†	-133.1	-666.4	-0.6783 ug/L	-0.6783 ppb	11:54:24
1	Mo 202.031†	-20.2	-43.2	-2.6775 ug/L	-2.6775 ppb	11:54:44
1	Ni 231.604†	277.5	168.3	0.8674 ug/L	0.8674 ppb	11:54:44
1	P 214.914†	18774.0	18587.7	9274.9 ug/L	9274.9 ppb	11:54:24
1	Pb 220.353†	40.1	98.6	10.996 ug/L	10.996 ppb	11:54:44
1	S 181.975 Axial†	61.3	-6.3	-7.7001 ug/L	-7.7001 ppb	11:54:44
1	Sb 206.836†	1478.3	1447.3	435.38 ug/L	435.38 ppb	11:54:44
1	Se 196.026†	-24.5	-3.4	-2.1957 ug/L	-2.1957 ppb	11:54:44
1	Si 251.611†	526.2	67.5	1.8425 ug/L	1.8425 ppb	11:54:44
1	Sn 189.927†	4.7	9.4	1.5348 ug/L	1.5348 ppb	11:54:44
1	Ti 334.940†	3822.7	4743.3	-0.3680 ug/L	-0.3680 ppb	11:54:24
1	Tl 190.801†	65.1	105.0	9.1522 ug/L	9.1522 ppb	11:54:44
1	U 409.014†	404.7	1790.6	-2.3265 ug/L	-2.3265 ppb	11:54:24
1	V 292.402†	-136.7	1303.4	0.2593 ug/L	0.2593 ppb	11:54:24
1	Zn 213.857†	1098576.7	1100952.0	9161.9 ug/L	9161.9 ppb	11:54:19
1	SiO2†	519.0	44.3	2.6177 ug/L	2.6177 ppb	11:55:52
2	Sc Radial	5593.0	5593.0	100 %		11:53:26
2	Y RADIAL	6087.5	6087.5	100.1 %		11:53:26
2	Al 396.153Radial†	5.6	1.9	1.3968 ug/L	1.3968 ppb	11:53:46
2	Ca 317.933Radial†	33.4	6.6	10.018 ug/L	10.018 ppb	11:53:46
2	Fe 238.204 Radial†	-7.1	-15.5	12.478 ug/L	12.478 ppb	11:53:46
2	K 766.490 Radial†	2554.9	156.1	25.848 ug/L	25.848 ppb	11:53:26
2	Mg 279.077 IEC†	3.9	1.5	50.551 ug/L	50.551 ppb	11:53:46
2	Na 589.592 Radial†	-1123.4	-93.8	-25.047 ug/L	-25.047 ppb	11:53:26
2	Sr 421.552†	46.1	34.8	0.2026 ug/L	0.2026 ppb	11:53:26
2	Sc 361.383	989078.5	989078.5	100.51 %		11:54:50
2	Y 371.029	873972.5	873972.5	100.20 %		11:54:50
2	Ag 328.068†	483.0	159.6	0.5617 ug/L	0.5617 ppb	11:54:55
2	As 188.979†	-63.6	-29.5	-10.661 ug/L	-10.661 ppb	11:55:15
2	B 249.677†	938.0	1219.4	10.498 ug/L	10.498 ppb	11:55:15
2	Ba 233.527†	1341301.2	1334458.3	9375.9 ug/L	9375.9 ppb	11:54:50
2	Be 313.107†	-6275.1	-1175.0	-0.3544 ug/L	-0.3544 ppb	11:54:50
2	Cd 226.502†	-183.9	16.4	0.1858 ug/L	0.1858 ppb	11:55:15
2	Co 228.616†	251304.0	250092.9	4782.2 ug/L	4782.2 ppb	11:54:50
2	Cr 267.716†	1989973.6	1979729.2	19076 ug/L	19076 ppb	11:54:50
2	Cu 324.752†	8443.6	-736.0	-1.8875 ug/L	-1.8875 ppb	11:54:55
2	Mn 257.610†	-56.1	-588.7	-0.6067 ug/L	-0.6067 ppb	11:54:55
2	Mo 202.031†	-9.4	-32.3	-2.0032 ug/L	-2.0032 ppb	11:55:15
2	Ni 231.604†	269.6	158.2	0.6471 ug/L	0.6471 ppb	11:55:15

2	P 214.914†	18774.3	18438.9	9200.7 ug/L	9200.7 ppb	11:54:55
2	Pb 220.353†	45.7	103.8	11.585 ug/L	11.585 ppb	11:55:15
2	S 181.975 Axial†	55.4	-12.7	-15.445 ug/L	-15.445 ppb	11:55:15
2	Sb 206.836†	1465.4	1422.8	428.01 ug/L	428.01 ppb	11:55:15
2	Se 196.026†	-9.1	12.1	5.8319 ug/L	5.8319 ppb	11:55:15
2	Si 251.611†	505.9	43.0	1.1787 ug/L	1.1787 ppb	11:55:15
2	Sn 189.927†	6.2	10.8	1.7708 ug/L	1.7708 ppb	11:55:15
2	Ti 334.940†	3908.4	4798.2	-0.3019 ug/L	-0.3019 ppb	11:54:55
2	Tl 190.801†	71.8	111.1	10.935 ug/L	10.935 ppb	11:55:15
2	U 409.014†	362.2	1745.0	-3.3426 ug/L	-3.3426 ppb	11:54:55
2	V 292.402†	-142.1	1299.0	0.2483 ug/L	0.2483 ppb	11:54:55
2	Zn 213.857†	1105098.0	1098713.7	9143.3 ug/L	9143.3 ppb	11:54:50
2	SiO2†	508.6	29.9	1.7711 ug/L	1.7711 ppb	11:55:57
3	Sc Radial	5656.6	5656.6	101 %		11:53:51
3	Y RADIAL	6129.9	6129.9	100.8 %		11:53:51
3	Al 396.153Radial†	2.7	-1.1	-0.6623 ug/L	-0.6623 ppb	11:54:11
3	Ca 317.933Radial†	35.7	8.4	12.817 ug/L	12.817 ppb	11:54:11
3	Fe 238.204 Radial†	-7.1	-15.4	13.577 ug/L	13.577 ppb	11:54:11
3	K 766.490 Radial†	2463.1	36.7	6.0923 ug/L	6.0923 ppb	11:53:51
3	Mg 279.077 IEC†	0.9	-1.5	-47.929 ug/L	-47.929 ppb	11:54:11
3	Na 589.592 Radial†	-1151.7	-109.1	-29.134 ug/L	-29.134 ppb	11:53:51
3	Sr 421.552†	58.1	46.2	0.2690 ug/L	0.2690 ppb	11:53:51
3	Sc 361.383	989803.0	989803.0	100.59 %		11:55:21
3	Y 371.029	873238.3	873238.3	100.12 %		11:55:21
3	Ag 328.068†	457.4	133.8	0.4615 ug/L	0.4615 ppb	11:55:26
3	As 188.979†	-55.5	-21.4	-7.7210 ug/L	-7.7210 ppb	11:55:46
3	B 249.677†	897.4	1178.4	9.6553 ug/L	9.6553 ppb	11:55:46
3	Ba 233.527†	1345816.4	1337970.5	9400.6 ug/L	9400.6 ppb	11:55:21
3	Be 313.107†	-6221.3	-1116.9	-0.3364 ug/L	-0.3364 ppb	11:55:21
3	Cd 226.502†	-184.4	16.1	0.1828 ug/L	0.1828 ppb	11:55:46
3	Co 228.616†	252039.7	250641.3	4792.7 ug/L	4792.7 ppb	11:55:21
3	Cr 267.716†	1991476.4	1979774.1	19076 ug/L	19076 ppb	11:55:21
3	Cu 324.752†	8467.4	-718.5	-1.8449 ug/L	-1.8449 ppb	11:55:26
3	Mn 257.610†	-141.2	-673.3	-0.6876 ug/L	-0.6876 ppb	11:55:26
3	Mo 202.031†	-11.7	-34.6	-2.1437 ug/L	-2.1437 ppb	11:55:46
3	Ni 231.604†	271.4	159.8	0.6762 ug/L	0.6762 ppb	11:55:46
3	P 214.914†	18602.6	18254.6	9108.7 ug/L	9108.7 ppb	11:55:26
3	Pb 220.353†	46.1	104.1	11.624 ug/L	11.624 ppb	11:55:46
3	S 181.975 Axial†	59.1	-9.0	-10.990 ug/L	-10.990 ppb	11:55:46
3	Sb 206.836†	1475.0	1431.3	430.55 ug/L	430.55 ppb	11:55:46
3	Se 196.026†	-15.4	5.8	2.5973 ug/L	2.5973 ppb	11:55:46
3	Si 251.611†	492.9	29.8	0.8247 ug/L	0.8247 ppb	11:55:46
3	Sn 189.927†	-2.6	2.0	0.3271 ug/L	0.3271 ppb	11:55:46
3	Ti 334.940†	3804.8	4692.4	-0.4406 ug/L	-0.4406 ppb	11:55:26
3	Tl 190.801†	57.3	96.7	6.7509 ug/L	6.7509 ppb	11:55:46
3	U 409.014†	488.6	1870.4	-0.5173 ug/L	-0.5173 ppb	11:55:26
3	V 292.402†	-139.4	1301.8	0.2653 ug/L	0.2653 ppb	11:55:26
3	Zn 213.857†	1107652.7	1100448.7	9157.8 ug/L	9157.8 ppb	11:55:21
3	SiO2†	563.5	84.1	4.8870 ug/L	4.8870 ppb	11:56:02

Mean Data: LR2

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	986708.6	100.27 %		0.482				0.48%
Sc Radial	5595.5	100 %		1.1				1.07%
Y 371.029	870753.8	99.833 %		0.5678				0.57%
Y RADIAL	6075.9	99.87 %		0.995				1.00%
Ag 328.068†	126.9	0.4375 ug/L		0.13791	0.4375 ppb		0.13791	31.53%
Al 396.153Radial†	-4.4	-2.9401 ug/L		5.82030	-2.9401 ppb		5.82030	197.96%
As 188.979†	-24.6	-8.8764 ug/L		1.56814	-8.8764 ppb		1.56814	17.67%
B 249.677†	1203.6	10.168 ug/L		0.4500	10.168 ppb		0.4500	4.43%
Ba 233.527†	1336579.9	9390.9 ug/L		13.12	9390.9 ppb		13.12	0.14%
Be 313.107†	-1203.4	-0.3634 ug/L		0.03253	-0.3634 ppb		0.03253	8.95%
Ca 317.933Radial†	7.9	12.004 ug/L		1.7292	12.004 ppb		1.7292	14.41%
Cd 226.502†	15.4	0.1755 ug/L		0.01542	0.1755 ppb		0.01542	8.79%
Co 228.616†	250396.2	4788.0 ug/L		5.34	4788.0 ppb		5.34	0.11%
Cr 267.716†	1979905.9	19078 ug/L		2.6	19078 ppb		2.6	0.01%
Cu 324.752†	-685.1	-1.7595 ug/L		0.18600	-1.7595 ppb		0.18600	10.57%
Fe 238.204 Radial†	-15.1	15.782 ug/L		4.8013	15.782 ppb		4.8013	30.42%
K 766.490 Radial†	164.6	27.262 ug/L		21.9111	27.262 ppb		21.9111	80.37%

Mg 279.077 IEC†	-0.9	-27.698 ug/L	70.3509	-27.698 ppb	70.3509	253.99%
Mn 257.610†	-642.8	-0.6575 ug/L	0.04428	-0.6575 ppb	0.04428	6.73%
Mo 202.031†	-36.7	-2.2748 ug/L	0.35578	-2.2748 ppb	0.35578	15.64%
Na 589.592 Radial†	-92.8	-24.787 ug/L	4.4824	-24.787 ppb	4.4824	18.08%
Ni 231.604†	162.1	0.7302 ug/L	0.11967	0.7302 ppb	0.11967	16.39%
P 214.914†	18427.1	9194.8 ug/L	83.25	9194.8 ppb	83.25	0.91%
Pb 220.353†	102.2	11.402 ug/L	0.3516	11.402 ppb	0.3516	3.08%
S 181.975 Axial†	-9.3	-11.379 ug/L	3.8871	-11.379 ppb	3.8871	34.16%
Sb 206.836†	1433.8	431.31 ug/L	3.740	431.31 ppb	3.740	0.87%
Se 196.026†	4.8	2.0778 ug/L	4.03897	2.0778 ppb	4.03897	194.38%
Si 251.611†	46.7	1.2820 ug/L	0.51672	1.2820 ppb	0.51672	40.31%
Sn 189.927†	7.4	1.2109 ug/L	0.77441	1.2109 ppb	0.77441	63.95%
Sr 421.552†	33.8	0.1965 ug/L	0.07567	0.1965 ppb	0.07567	38.50%
Ti 334.940†	4744.6	-0.3702 ug/L	0.06940	-0.3702 ppb	0.06940	18.75%
Tl 190.801†	104.3	8.9461 ug/L	2.09965	8.9461 ppb	2.09965	23.47%
U 409.014†	1802.0	-2.0622 ug/L	1.43110	-2.0622 ppb	1.43110	69.40%
V 292.402†	1301.4	0.2576 ug/L	0.00860	0.2576 ppb	0.00860	3.34%
Zn 213.857†	1100038.1	9154.3 ug/L	9.77	9154.3 ppb	9.77	0.11%
SiO2†	52.8	3.0919 ug/L	1.61117	3.0919 ppb	1.61117	52.11%

Sequence No.: 3

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 1/28/2010 11:58:13

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5584.7	5584.7	100.0 %		12:00:05
1	Y RADIAL	6046.8	6046.8	99.40 %		12:00:05
1	Al 396.153Radial†	6942.8	6939.5	4786.6 ug/L	4786.6 ppb	12:00:05
1	Ca 317.933Radial†	3256.4	3229.8	4911.0 ug/L	4911.0 ppb	12:00:25
1	Fe 238.204 Radial†	618.2	609.8	5163.9 ug/L	5163.9 ppb	12:00:25
1	K 766.490 Radial†	32047.0	29653.6	4903.4 ug/L	4903.4 ppb	12:00:05
1	Mg 279.077 IEC†	161.8	159.4	5201.5 ug/L	5201.5 ppb	12:00:25
1	Na 589.592 Radial†	38158.5	39188.7	10466 ug/L	10466 ppb	12:00:05
1	Sr 421.552†	86144.0	86137.8	501.37 ug/L	501.37 ppb	12:00:05
1	Sc 361.383	965418.1	965418.1	98.109 %		12:01:23
1	Y 371.029	846916.8	846916.8	97.100 %		12:01:23
1	Ag 328.068†	125838.7	127943.6	489.94 ug/L	489.94 ppb	12:01:28
1	As 188.979†	1249.3	1307.2	478.39 ug/L	478.39 ppb	12:01:48
1	B 249.677†	23426.8	24164.7	476.27 ug/L	476.27 ppb	12:01:28
1	Ba 233.527†	66364.7	67648.7	476.50 ug/L	476.50 ppb	12:01:28
1	Be 313.107†	1452832.8	1485908.3	468.20 ug/L	468.20 ppb	12:01:23
1	Cd 226.502†	47321.3	48432.9	478.96 ug/L	478.96 ppb	12:01:28
1	Co 228.616†	24326.0	24866.7	475.93 ug/L	475.93 ppb	12:01:28
1	Cr 267.716†	48478.9	49327.9	475.89 ug/L	475.89 ppb	12:01:28
1	Cu 324.752†	191904.6	186467.5	470.94 ug/L	470.94 ppb	12:01:28
1	Mn 257.610†	459264.9	467585.6	470.21 ug/L	470.21 ppb	12:01:23
1	Mo 202.031†	7594.2	7717.6	476.60 ug/L	476.60 ppb	12:01:48
1	Ni 231.604†	21044.0	21339.7	476.67 ug/L	476.67 ppb	12:01:28
1	P 214.914†	4828.9	4682.5	2244.3 ug/L	2244.3 ppb	12:01:48
1	Pb 220.353†	4069.0	4205.8	470.65 ug/L	470.65 ppb	12:01:48
1	S 181.975 Axial†	826.1	774.3	943.27 ug/L	943.27 ppb	12:01:48
1	Sb 206.836†	1574.2	1569.4	489.41 ug/L	489.41 ppb	12:01:48
1	Se 196.026†	874.0	911.9	492.71 ug/L	492.71 ppb	12:01:48
1	Si 251.611†	89923.6	91196.8	2440.9 ug/L	2440.9 ppb	12:01:28
1	Sn 189.927†	2841.5	2900.8	476.68 ug/L	476.68 ppb	12:01:48
1	Ti 334.940†	343779.6	351316.6	484.09 ug/L	484.09 ppb	12:01:23
1	Tl 190.801†	1557.4	1627.2	469.71 ug/L	469.71 ppb	12:01:48
1	U 409.014†	19376.2	21134.5	474.70 ug/L	474.70 ppb	12:01:28
1	V 292.402†	82300.3	85327.2	480.01 ug/L	480.01 ppb	12:01:28
1	Zn 213.857†	57267.1	57628.4	475.40 ug/L	475.40 ppb	12:01:28
1	SiO2†	89038.7	90279.0	5171.3 ug/L	5171.3 ppb	12:02:56
2	Sc Radial	5554.7	5554.7	99.5 %		12:00:30
2	Y RADIAL	5983.3	5983.3	98.35 %		12:00:30
2	Al 396.153Radial†	6931.5	6965.6	4804.9 ug/L	4804.9 ppb	12:00:30
2	Ca 317.933Radial†	3226.7	3217.5	4892.2 ug/L	4892.2 ppb	12:00:50
2	Fe 238.204 Radial†	613.0	607.9	5147.3 ug/L	5147.3 ppb	12:00:50
2	K 766.490 Radial†	32130.2	29910.2	4945.9 ug/L	4945.9 ppb	12:00:30
2	Mg 279.077 IEC†	157.2	155.7	5080.5 ug/L	5080.5 ppb	12:00:50
2	Na 589.592 Radial†	38008.5	39243.8	10481 ug/L	10481 ppb	12:00:30
2	Sr 421.552†	85805.3	86262.0	502.09 ug/L	502.09 ppb	12:00:30
2	Sc 361.383	976396.2	976396.2	99.224 %		12:01:54
2	Y 371.029	857941.5	857941.5	98.364 %		12:01:54
2	Ag 328.068†	123946.1	124594.0	477.15 ug/L	477.15 ppb	12:01:59
2	As 188.979†	1243.3	1286.8	470.99 ug/L	470.99 ppb	12:02:19
2	B 249.677†	22922.5	23387.9	460.93 ug/L	460.93 ppb	12:01:59
2	Ba 233.527†	65136.9	65650.7	462.44 ug/L	462.44 ppb	12:01:59
2	Be 313.107†	1473507.4	1490094.7	469.52 ug/L	469.52 ppb	12:01:54
2	Cd 226.502†	46577.3	47140.8	466.17 ug/L	466.17 ppb	12:01:59
2	Co 228.616†	23888.1	24146.7	462.14 ug/L	462.14 ppb	12:01:59
2	Cr 267.716†	47771.3	48059.2	463.65 ug/L	463.65 ppb	12:01:59
2	Cu 324.752†	188401.9	180738.2	456.48 ug/L	456.48 ppb	12:01:59
2	Mn 257.610†	464454.4	467552.4	470.18 ug/L	470.18 ppb	12:01:54
2	Mo 202.031†	7623.5	7660.2	473.05 ug/L	473.05 ppb	12:02:19
2	Ni 231.604†	20710.9	20762.8	463.78 ug/L	463.78 ppb	12:01:59

2	P 214.914†	4839.9	4638.3	2225.1 ug/L	2225.1 ppb	12:02:19
2	Pb 220.353†	4071.1	4161.3	465.68 ug/L	465.68 ppb	12:02:19
2	S 181.975 Axial†	835.8	774.6	943.61 ug/L	943.61 ppb	12:02:19
2	Sb 206.836†	1579.0	1556.2	485.24 ug/L	485.24 ppb	12:02:19
2	Se 196.026†	874.8	902.7	487.85 ug/L	487.85 ppb	12:02:19
2	Si 251.611†	88181.6	88410.6	2366.2 ug/L	2366.2 ppb	12:01:59
2	Sn 189.927†	2841.4	2868.2	471.32 ug/L	471.32 ppb	12:02:19
2	Ti 334.940†	348075.0	351705.8	484.65 ug/L	484.65 ppb	12:01:54
2	Tl 190.801†	1576.6	1628.7	470.22 ug/L	470.22 ppb	12:02:19
2	U 409.014†	19105.6	20639.7	463.58 ug/L	463.58 ppb	12:01:59
2	V 292.402†	81042.2	83116.2	467.67 ug/L	467.67 ppb	12:01:59
2	Zn 213.857†	56398.2	56096.4	462.75 ug/L	462.75 ppb	12:01:59
2	SiO2†	88823.6	89041.8	5100.4 ug/L	5100.4 ppb	12:03:01
3	Sc Radial	5470.9	5470.9	98.0 %		12:00:55
3	Y RADIAL	5864.6	5864.6	96.40 %		12:00:55
3	Al 396.153Radial†	6785.7	6923.5	4775.4 ug/L	4775.4 ppb	12:00:55
3	Ca 317.933Radial†	3251.1	3292.2	5005.8 ug/L	5005.8 ppb	12:01:15
3	Fe 238.204 Radial†	620.0	624.6	5288.3 ug/L	5288.3 ppb	12:01:15
3	K 766.490 Radial†	31592.7	29856.7	4936.9 ug/L	4936.9 ppb	12:00:55
3	Mg 279.077 IEC†	160.5	161.4	5268.7 ug/L	5268.7 ppb	12:01:15
3	Na 589.592 Radial†	37556.7	39368.4	10514 ug/L	10514 ppb	12:00:55
3	Sr 421.552†	84209.3	85955.2	500.30 ug/L	500.30 ppb	12:00:55
3	Sc 361.383	962762.3	962762.3	97.839 %		12:02:25
3	Y 371.029	844321.5	844321.5	96.802 %		12:02:25
3	Ag 328.068†	124828.9	127265.3	487.39 ug/L	487.39 ppb	12:02:30
3	As 188.979†	1247.6	1309.0	479.07 ug/L	479.07 ppb	12:02:50
3	B 249.677†	23237.3	24036.9	473.72 ug/L	473.72 ppb	12:02:30
3	Ba 233.527†	65878.3	67338.1	474.32 ug/L	474.32 ppb	12:02:30
3	Be 313.107†	1451996.7	1489138.7	469.22 ug/L	469.22 ppb	12:02:25
3	Cd 226.502†	47018.3	48256.3	477.20 ug/L	477.20 ppb	12:02:30
3	Co 228.616†	24198.1	24804.4	474.74 ug/L	474.74 ppb	12:02:30
3	Cr 267.716†	48150.6	49128.7	473.97 ug/L	473.97 ppb	12:02:30
3	Cu 324.752†	190098.1	185160.7	467.65 ug/L	467.65 ppb	12:02:30
3	Mn 257.610†	459086.8	468694.8	471.34 ug/L	471.34 ppb	12:02:25
3	Mo 202.031†	7635.2	7780.9	480.51 ug/L	480.51 ppb	12:02:50
3	Ni 231.604†	20908.9	21260.8	474.90 ug/L	474.90 ppb	12:02:30
3	P 214.914†	4853.8	4721.5	2264.4 ug/L	2264.4 ppb	12:02:50
3	Pb 220.353†	4115.6	4264.9	477.23 ug/L	477.23 ppb	12:02:50
3	S 181.975 Axial†	826.5	776.9	946.49 ug/L	946.49 ppb	12:02:50
3	Sb 206.836†	1588.9	1588.9	495.43 ug/L	495.43 ppb	12:02:50
3	Se 196.026†	879.2	919.7	497.18 ug/L	497.18 ppb	12:02:50
3	Si 251.611†	89205.4	90715.7	2428.0 ug/L	2428.0 ppb	12:02:30
3	Sn 189.927†	2868.2	2936.2	482.49 ug/L	482.49 ppb	12:02:50
3	Ti 334.940†	343556.5	352055.2	485.12 ug/L	485.12 ppb	12:02:25
3	Tl 190.801†	1566.3	1640.7	473.60 ug/L	473.60 ppb	12:02:50
3	U 409.014†	19116.9	20923.9	469.95 ug/L	469.95 ppb	12:02:30
3	V 292.402†	81490.9	84731.4	476.73 ug/L	476.73 ppb	12:02:30
3	Zn 213.857†	56746.6	57257.4	472.32 ug/L	472.32 ppb	12:02:30
3	SiO2†	89188.1	90682.1	5194.4 ug/L	5194.4 ppb	12:03:06

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	968192.2	98.391 %	0.7345			0.75%
Sc Radial	5536.8	99.1 %	1.06			1.07%
Y 371.029	849726.6	97.422 %	0.8291			0.85%
Y RADIAL	5964.9	98.05 %	1.520			1.55%
Ag 328.068†	126601.0	484.83 ug/L	6.769	484.83 ppb	6.769	1.40%
QC value within limits for Ag 328.068 Recovery = 96.97%						
Al 396.153Radial†	6942.8	4789.0 ug/L	14.88	4789.0 ppb	14.88	0.31%
QC value within limits for Al 396.153Radial Recovery = 95.78%						
As 188.979†	1301.0	476.15 ug/L	4.481	476.15 ppb	4.481	0.94%
QC value within limits for As 188.979 Recovery = 95.23%						
B 249.677†	23863.2	470.31 ug/L	8.219	470.31 ppb	8.219	1.75%
QC value within limits for B 249.677 Recovery = 94.06%						
Ba 233.527†	66879.1	471.08 ug/L	7.569	471.08 ppb	7.569	1.61%
QC value within limits for Ba 233.527 Recovery = 94.22%						
Be 313.107†	1488380.6	468.98 ug/L	0.690	468.98 ppb	0.690	0.15%
QC value within limits for Be 313.107 Recovery = 93.80%						
Ca 317.933Radial†	3246.5	4936.3 ug/L	60.85	4936.3 ppb	60.85	1.23%

QC value within limits for Ca 317.933 Radial Recovery = 98.73%							
Cd 226.502†	47943.3	474.11 ug/L	6.932	474.11 ppb	6.932	1.46%	
QC value within limits for Cd 226.502 Recovery = 94.82%							
Co 228.616†	24605.9	470.94 ug/L	7.642	470.94 ppb	7.642	1.62%	
QC value within limits for Co 228.616 Recovery = 94.19%							
Cr 267.716†	48838.6	471.17 ug/L	6.582	471.17 ppb	6.582	1.40%	
QC value within limits for Cr 267.716 Recovery = 94.23%							
Cu 324.752†	184122.1	465.02 ug/L	7.582	465.02 ppb	7.582	1.63%	
QC value within limits for Cu 324.752 Recovery = 93.00%							
Fe 238.204 Radial†	614.1	5199.8 ug/L	77.04	5199.8 ppb	77.04	1.48%	
QC value within limits for Fe 238.204 Radial Recovery = 104.00%							
K 766.490 Radial†	29806.8	4928.7 ug/L	22.41	4928.7 ppb	22.41	0.45%	
QC value within limits for K 766.490 Radial Recovery = 98.57%							
Mg 279.077 IEC†	158.8	5183.5 ug/L	95.34	5183.5 ppb	95.34	1.84%	
QC value within limits for Mg 279.077 IEC Recovery = 103.67%							
Mn 257.610†	467944.3	470.58 ug/L	0.658	470.58 ppb	0.658	0.14%	
QC value within limits for Mn 257.610 Recovery = 94.12%							
Mo 202.031†	7719.6	476.72 ug/L	3.733	476.72 ppb	3.733	0.78%	
QC value within limits for Mo 202.031 Recovery = 95.34%							
Na 589.592 Radial†	39267.0	10487 ug/L	24.6	10487 ppb	24.6	0.23%	
QC value within limits for Na 589.592 Radial Recovery = 104.87%							
Ni 231.604†	21121.1	471.78 ug/L	6.987	471.78 ppb	6.987	1.48%	
QC value within limits for Ni 231.604 Recovery = 94.36%							
P 214.914†	4680.8	2244.6 ug/L	19.66	2244.6 ppb	19.66	0.88%	
QC value less than the lower limit for P 214.914 Recovery = 89.79%							
Pb 220.353†	4210.6	471.19 ug/L	5.793	471.19 ppb	5.793	1.23%	
QC value within limits for Pb 220.353 Recovery = 94.24%							
S 181.975 Axial†	775.3	944.46 ug/L	1.768	944.46 ppb	1.768	0.19%	
QC value within limits for S 181.975 Axial Recovery = 94.45%							
Sb 206.836†	1571.5	490.03 ug/L	5.121	490.03 ppb	5.121	1.04%	
QC value within limits for Sb 206.836 Recovery = 98.01%							
Se 196.026†	911.5	492.58 ug/L	4.664	492.58 ppb	4.664	0.95%	
QC value within limits for Se 196.026 Recovery = 98.52%							
Si 251.611†	90107.7	2411.7 ug/L	39.92	2411.7 ppb	39.92	1.66%	
QC value within limits for Si 251.611 Recovery = 96.47%							
Sn 189.927†	2901.7	476.83 ug/L	5.584	476.83 ppb	5.584	1.17%	
QC value within limits for Sn 189.927 Recovery = 95.37%							
Sr 421.552†	86118.3	501.25 ug/L	0.899	501.25 ppb	0.899	0.18%	
QC value within limits for Sr 421.552 Recovery = 100.25%							
Ti 334.940†	351692.6	484.62 ug/L	0.515	484.62 ppb	0.515	0.11%	
QC value within limits for Ti 334.940 Recovery = 96.92%							
Tl 190.801†	1632.2	471.18 ug/L	2.115	471.18 ppb	2.115	0.45%	
QC value within limits for Tl 190.801 Recovery = 94.24%							
U 409.014†	20899.4	469.41 ug/L	5.581	469.41 ppb	5.581	1.19%	
QC value within limits for U 409.014 Recovery = 93.88%							
V 292.402†	84391.6	474.80 ug/L	6.393	474.80 ppb	6.393	1.35%	
QC value within limits for V 292.402 Recovery = 94.96%							
Zn 213.857†	56994.1	470.16 ug/L	6.594	470.16 ppb	6.594	1.40%	
QC value within limits for Zn 213.857 Recovery = 94.03%							
SiO2†	90001.0	5155.4 ug/L	48.99	5155.4 ppb	48.99	0.95%	
QC value within limits for SiO2 Recovery = 96.41%							
QC Failed. Continue with analysis.							

Sequence No.: 4
 Sample ID: CCB
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 8
 Date Collected: 1/28/2010 12:05:17
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5538.6	5538.6	99.2 %		12:07:10
1	Y RADIAL	6002.7	6002.7	98.67 %		12:07:10
1	Al 396.153Radial†	3.3	-0.5	-0.3184 ug/L	-0.3184 ppb	12:07:30
1	Ca 317.933Radial†	24.0	-2.6	-3.8810 ug/L	-3.8810 ppb	12:07:30
1	Fe 238.204 Radial†	7.6	-0.7	-6.0143 ug/L	-6.0143 ppb	12:07:30
1	K 766.490 Radial†	2544.0	170.0	28.166 ug/L	28.166 ppb	12:07:10
1	Mg 279.077 IEC†	-0.3	-2.7	-88.189 ug/L	-88.189 ppb	12:07:30
1	Na 589.592 Radial†	-1106.5	-87.8	-23.439 ug/L	-23.439 ppb	12:07:10
1	Sr 421.552†	1.9	-9.3	-0.0539 ug/L	-0.0539 ppb	12:07:10
1	Sc 361.383	982813.9	982813.9	99.876 %		12:08:26
1	Y 371.029	872054.1	872054.1	99.982 %		12:08:26
1	Ag 328.068†	475.6	155.2	0.5905 ug/L	0.5905 ppb	12:08:31
1	As 188.979†	-28.9	4.8	1.7567 ug/L	1.7567 ppb	12:08:51
1	B 249.677†	20.3	306.6	6.0710 ug/L	6.0710 ppb	12:08:51
1	Ba 233.527†	22.9	27.5	0.1937 ug/L	0.1937 ppb	12:08:51
1	Be 313.107†	-4839.2	222.9	0.0700 ug/L	0.0700 ppb	12:08:31
1	Cd 226.502†	-187.7	11.4	0.1135 ug/L	0.1135 ppb	12:08:51
1	Co 228.616†	-67.2	4.5	0.0872 ug/L	0.0872 ppb	12:08:51
1	Cr 267.716†	127.4	42.0	0.4050 ug/L	0.4050 ppb	12:08:51
1	Cu 324.752†	9049.0	-76.3	-0.1928 ug/L	-0.1928 ppb	12:08:31
1	Mn 257.610†	552.7	20.4	0.0236 ug/L	0.0236 ppb	12:08:51
1	Mo 202.031†	23.3	0.3	0.0199 ug/L	0.0199 ppb	12:08:51
1	Ni 231.604†	103.1	-6.7	-0.1502 ug/L	-0.1502 ppb	12:08:51
1	P 214.914†	238.1	-1.2	-0.5263 ug/L	-0.5263 ppb	12:08:51
1	Pb 220.353†	-38.1	20.2	2.2539 ug/L	2.2539 ppb	12:08:51
1	S 181.975 Axial†	48.1	-19.6	-23.896 ug/L	-23.896 ppb	12:08:51
1	Sb 206.836†	40.3	5.2	1.5924 ug/L	1.5924 ppb	12:08:51
1	Se 196.026†	-16.5	4.6	2.3904 ug/L	2.3904 ppb	12:08:51
1	Si 251.611†	521.5	61.9	1.6605 ug/L	1.6605 ppb	12:08:51
1	Sn 189.927†	2.9	7.5	1.2221 ug/L	1.2221 ppb	12:08:51
1	Ti 334.940†	-940.9	-32.3	-0.0378 ug/L	-0.0378 ppb	12:08:31
1	Tl 190.801†	-36.4	3.3	0.9493 ug/L	0.9493 ppb	12:08:51
1	U 409.014†	-1403.2	-20.2	-0.4558 ug/L	-0.4558 ppb	12:08:26
1	V 292.402†	-1375.5	63.2	0.3496 ug/L	0.3496 ppb	12:08:31
1	Zn 213.857†	874.5	132.9	1.1077 ug/L	1.1077 ppb	12:08:51
1	SiO2†	516.5	41.0	2.3566 ug/L	2.3566 ppb	12:09:57
2	Sc Radial	5604.9	5604.9	100 %		12:07:35
2	Y RADIAL	6046.1	6046.1	99.38 %		12:07:35
2	Al 396.153Radial†	12.7	8.9	6.1571 ug/L	6.1571 ppb	12:07:55
2	Ca 317.933Radial†	29.5	2.6	3.9973 ug/L	3.9973 ppb	12:07:55
2	Fe 238.204 Radial†	9.6	1.2	9.8552 ug/L	9.8552 ppb	12:07:55
2	K 766.490 Radial†	2539.2	135.0	22.348 ug/L	22.348 ppb	12:07:35
2	Mg 279.077 IEC†	1.4	-0.9	-30.795 ug/L	-30.795 ppb	12:07:55
2	Na 589.592 Radial†	-1040.9	-9.1	-2.4393 ug/L	-2.4393 ppb	12:07:35
2	Sr 421.552†	45.8	34.4	0.2003 ug/L	0.2003 ppb	12:07:35
2	Sc 361.383	984701.9	984701.9	100.07 %		12:08:57
2	Y 371.029	874664.8	874664.8	100.28 %		12:08:57
2	Ag 328.068†	382.9	61.6	0.2376 ug/L	0.2376 ppb	12:09:02
2	As 188.979†	-32.3	1.5	0.5516 ug/L	0.5516 ppb	12:09:22
2	B 249.677†	10.6	296.9	5.8765 ug/L	5.8765 ppb	12:09:22
2	Ba 233.527†	38.0	42.5	0.2990 ug/L	0.2990 ppb	12:09:22
2	Be 313.107†	-4866.6	204.8	0.0644 ug/L	0.0644 ppb	12:09:02
2	Cd 226.502†	-204.4	-5.0	-0.0502 ug/L	-0.0502 ppb	12:09:22
2	Co 228.616†	-72.7	-0.9	-0.0169 ug/L	-0.0169 ppb	12:09:22
2	Cr 267.716†	131.7	46.1	0.4442 ug/L	0.4442 ppb	12:09:22
2	Cu 324.752†	9177.4	34.5	0.0877 ug/L	0.0877 ppb	12:09:02
2	Mn 257.610†	558.4	25.0	0.0274 ug/L	0.0274 ppb	12:09:22
2	Mo 202.031†	24.8	1.8	0.1133 ug/L	0.1133 ppb	12:09:22
2	Ni 231.604†	98.4	-11.6	-0.2601 ug/L	-0.2601 ppb	12:09:22

2	P 214.914†	237.1	-2.6	-1.2882 ug/L	-1.2882 ppb	12:09:22
2	Pb 220.353†	-41.1	17.3	1.9319 ug/L	1.9319 ppb	12:09:22
2	S 181.975 Axial†	50.1	-17.7	-21.579 ug/L	-21.579 ppb	12:09:22
2	Sb 206.836†	37.3	2.1	0.6693 ug/L	0.6693 ppb	12:09:22
2	Se 196.026†	-19.9	1.3	0.6991 ug/L	0.6991 ppb	12:09:22
2	Si 251.611†	525.7	65.0	1.7437 ug/L	1.7437 ppb	12:09:22
2	Sn 189.927†	3.4	8.0	1.3137 ug/L	1.3137 ppb	12:09:22
2	Ti 334.940†	-917.0	-6.6	-0.0062 ug/L	-0.0062 ppb	12:09:02
2	Tl 190.801†	-29.7	10.1	2.8988 ug/L	2.8988 ppb	12:09:22
2	U 409.014†	-1382.6	3.1	0.0669 ug/L	0.0669 ppb	12:08:57
2	V 292.402†	-1442.3	-1.0	-0.0057 ug/L	-0.0057 ppb	12:09:02
2	Zn 213.857†	870.2	126.9	1.0566 ug/L	1.0566 ppb	12:09:22
2	SiO2†	528.1	51.7	2.9634 ug/L	2.9634 ppb	12:10:02
3	Sc Radial	5542.8	5542.8	99.2 %		12:08:00
3	Y RADIAL	6014.6	6014.6	98.87 %		12:08:00
3	Al 396.153Radial†	4.8	1.1	0.7757 ug/L	0.7757 ppb	12:08:20
3	Ca 317.933Radial†	30.8	4.3	6.5533 ug/L	6.5533 ppb	12:08:20
3	Fe 238.204 Radial†	9.3	1.0	8.3697 ug/L	8.3697 ppb	12:08:20
3	K 766.490 Radial†	2425.3	48.5	8.0387 ug/L	8.0387 ppb	12:08:00
3	Mg 279.077 IEC†	2.1	-0.3	-9.4124 ug/L	-9.4124 ppb	12:08:20
3	Na 589.592 Radial†	-1059.9	-40.0	-10.679 ug/L	-10.679 ppb	12:08:00
3	Sr 421.552†	11.0	-0.1	-0.0007 ug/L	-0.0007 ppb	12:08:00
3	Sc 361.383	988956.0	988956.0	100.50 %		12:09:27
3	Y 371.029	876779.2	876779.2	100.52 %		12:09:27
3	Ag 328.068†	384.5	61.6	0.2371 ug/L	0.2371 ppb	12:09:32
3	As 188.979†	-27.2	6.8	2.4574 ug/L	2.4574 ppb	12:09:52
3	B 249.677†	19.4	305.6	6.0498 ug/L	6.0498 ppb	12:09:52
3	Ba 233.527†	27.3	31.8	0.2227 ug/L	0.2227 ppb	12:09:52
3	Be 313.107†	-4900.3	192.2	0.0601 ug/L	0.0601 ppb	12:09:32
3	Cd 226.502†	-195.2	5.1	0.0493 ug/L	0.0493 ppb	12:09:52
3	Co 228.616†	-73.5	-1.3	-0.0252 ug/L	-0.0252 ppb	12:09:52
3	Cr 267.716†	122.7	36.5	0.3522 ug/L	0.3522 ppb	12:09:52
3	Cu 324.752†	8978.2	-203.1	-0.5116 ug/L	-0.5116 ppb	12:09:32
3	Mn 257.610†	563.3	27.6	0.0289 ug/L	0.0289 ppb	12:09:52
3	Mo 202.031†	20.0	-3.0	-0.1865 ug/L	-0.1865 ppb	12:09:52
3	Ni 231.604†	107.6	-3.0	-0.0662 ug/L	-0.0662 ppb	12:09:52
3	P 214.914†	243.9	3.2	1.6933 ug/L	1.6933 ppb	12:09:52
3	Pb 220.353†	-43.6	15.0	1.6735 ug/L	1.6735 ppb	12:09:52
3	S 181.975 Axial†	57.5	-10.6	-12.912 ug/L	-12.912 ppb	12:09:52
3	Sb 206.836†	41.1	5.8	1.7476 ug/L	1.7476 ppb	12:09:52
3	Se 196.026†	-20.3	0.9	0.5133 ug/L	0.5133 ppb	12:09:52
3	Si 251.611†	520.7	57.8	1.5539 ug/L	1.5539 ppb	12:09:52
3	Sn 189.927†	1.9	6.5	1.0642 ug/L	1.0642 ppb	12:09:52
3	Ti 334.940†	-1018.0	-103.2	-0.1400 ug/L	-0.1400 ppb	12:09:32
3	Tl 190.801†	-48.7	-8.7	-2.5045 ug/L	-2.5045 ppb	12:09:52
3	U 409.014†	-1459.7	-67.7	-1.5283 ug/L	-1.5283 ppb	12:09:27
3	V 292.402†	-1501.1	-53.2	-0.3023 ug/L	-0.3023 ppb	12:09:32
3	Zn 213.857†	875.0	128.0	1.0651 ug/L	1.0651 ppb	12:09:52
3	SiO2†	519.6	40.9	2.3538 ug/L	2.3538 ppb	12:10:07

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	985490.6	100.15 %		0.320			0.32%
Sc Radial	5562.1	99.6 %		0.66			0.67%
Y 371.029	874499.4	100.26 %		0.271			0.27%
Y RADIAL	6021.1	98.97 %		0.369			0.37%
Ag 328.068†	92.8	0.3551 ug/L		0.20387	0.3551 ppb	0.20387	57.42%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	3.2	2.2048 ug/L		3.46621	2.2048 ppb	3.46621	157.21%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	4.4	1.5886 ug/L		0.96395	1.5886 ppb	0.96395	60.68%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	303.0	5.9991 ug/L		0.10668	5.9991 ppb	0.10668	1.78%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	33.9	0.2385 ug/L		0.05441	0.2385 ppb	0.05441	22.82%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	206.6	0.0648 ug/L		0.00495	0.0648 ppb	0.00495	7.64%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	1.5	2.2232 ug/L		5.43872	2.2232 ppb	5.43872	244.64%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated						
Cd 226.502†	3.9	0.0375 ug/L	0.08247	0.0375 ppb		0.08247 219.77%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	0.8	0.0150 ug/L	0.06263	0.0150 ppb		0.06263 416.51%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	41.5	0.4005 ug/L	0.04617	0.4005 ppb		0.04617 11.53%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-81.6	-0.2056 ug/L	0.29986	-0.2056 ppb		0.29986 145.87%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	0.5	4.0702 ug/L	8.76493	4.0702 ppb		8.76493 215.34%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	117.9	19.518 ug/L	10.3578	19.518 ppb		10.3578 53.07%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	-1.3	-42.799 ug/L	40.7369	-42.799 ppb		40.7369 95.18%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	24.4	0.0266 ug/L	0.00276	0.0266 ppb		0.00276 10.37%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	-0.3	-0.0178 ug/L	0.15339	-0.0178 ppb		0.15339 864.07%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	-45.6	-12.186 ug/L	10.5805	-12.186 ppb		10.5805 86.83%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	-7.1	-0.1588 ug/L	0.09723	-0.1588 ppb		0.09723 61.23%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	-0.2	-0.0404 ug/L	1.54903	-0.0404 ppb		1.54903 >999.9%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	17.5	1.9531 ug/L	0.29077	1.9531 ppb		0.29077 14.89%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	-16.0	-19.462 ug/L	5.7895	-19.462 ppb		5.7895 29.75%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	4.4	1.3364 ug/L	0.58297	1.3364 ppb		0.58297 43.62%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	2.3	1.2009 ug/L	1.03429	1.2009 ppb		1.03429 86.12%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	61.6	1.6527 ug/L	0.09514	1.6527 ppb		0.09514 5.76%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	7.3	1.2000 ug/L	0.12622	1.2000 ppb		0.12622 10.52%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	8.3	0.0486 ug/L	0.13406	0.0486 ppb		0.13406 276.04%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	-47.4	-0.0614 ug/L	0.06991	-0.0614 ppb		0.06991 113.94%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	1.6	0.4479 ug/L	2.73635	0.4479 ppb		2.73635 610.96%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	-28.3	-0.6391 ug/L	0.81319	-0.6391 ppb		0.81319 127.25%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	3.0	0.0139 ug/L	0.32639	0.0139 ppb		0.32639 >999.9%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	129.2	1.0765 ug/L	0.02739	1.0765 ppb		0.02739 2.54%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	44.5	2.5580 ug/L	0.35114	2.5580 ppb		0.35114 13.73%
QC value within limits for SiO2 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 8

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 1/28/2010 13:09:31

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5445.1	5445.1	97.5 %		13:11:23
1	Y RADIAL	5906.0	5906.0	97.08 %		13:11:23
1	Al 396.153Radial†	6887.2	7060.4	4870.5 ug/L	4870.5 ppb	13:11:23
1	Ca 317.933Radial†	3258.0	3315.0	5040.4 ug/L	5040.4 ppb	13:11:43
1	Fe 238.204 Radial†	610.1	617.4	5227.6 ug/L	5227.6 ppb	13:11:43
1	K 766.490 Radial†	31831.1	30254.0	5003.0 ug/L	5003.0 ppb	13:11:23
1	Mg 279.077 IEC†	161.9	163.7	5342.8 ug/L	5342.8 ppb	13:11:43
1	Na 589.592 Radial†	35155.9	37087.4	9905.0 ug/L	9905.0 ppb	13:11:23
1	Sr 421.552†	82366.2	84471.9	491.67 ug/L	491.67 ppb	13:11:23
1	Sc 361.383	965820.8	965820.8	98.150 %		13:12:41
1	Y 371.029	846125.9	846125.9	97.009 %		13:12:41
1	Ag 328.068†	126351.5	128412.6	491.74 ug/L	491.74 ppb	13:12:46
1	As 188.979†	1250.0	1307.4	478.48 ug/L	478.48 ppb	13:13:06
1	B 249.677†	23602.0	24333.2	479.59 ug/L	479.59 ppb	13:12:46
1	Ba 233.527†	66580.2	67840.0	477.85 ug/L	477.85 ppb	13:12:46
1	Be 313.107†	1454287.1	1486772.5	468.48 ug/L	468.48 ppb	13:12:41
1	Cd 226.502†	47310.6	48401.9	478.65 ug/L	478.65 ppb	13:12:46
1	Co 228.616†	24493.3	25026.9	478.99 ug/L	478.99 ppb	13:12:46
1	Cr 267.716†	48407.2	49234.3	474.98 ug/L	474.98 ppb	13:12:46
1	Cu 324.752†	194012.3	188533.4	476.16 ug/L	476.16 ppb	13:12:46
1	Mn 257.610†	462303.3	470486.0	473.13 ug/L	473.13 ppb	13:12:41
1	Mo 202.031†	7597.6	7717.9	476.62 ug/L	476.62 ppb	13:13:06
1	Ni 231.604†	21099.0	21386.8	477.72 ug/L	477.72 ppb	13:12:46
1	P 214.914†	4874.4	4726.8	2265.4 ug/L	2265.4 ppb	13:13:06
1	Pb 220.353†	4098.3	4233.9	473.79 ug/L	473.79 ppb	13:13:06
1	S 181.975 Axial†	831.0	778.9	948.83 ug/L	948.83 ppb	13:13:06
1	Sb 206.836†	1595.1	1590.0	495.61 ug/L	495.61 ppb	13:13:06
1	Se 196.026†	880.6	918.3	496.24 ug/L	496.24 ppb	13:13:06
1	Si 251.611†	90516.1	91762.3	2456.1 ug/L	2456.1 ppb	13:12:46
1	Sn 189.927†	2849.3	2907.6	477.81 ug/L	477.81 ppb	13:13:06
1	Ti 334.940†	345905.6	353336.6	486.88 ug/L	486.88 ppb	13:12:41
1	Tl 190.801†	1565.9	1635.1	472.01 ug/L	472.01 ppb	13:13:06
1	U 409.014†	19622.4	21377.1	480.17 ug/L	480.17 ppb	13:12:46
1	V 292.402†	82246.0	85237.0	479.51 ug/L	479.51 ppb	13:12:46
1	Zn 213.857†	57146.4	57481.1	474.15 ug/L	474.15 ppb	13:12:46
1	SiO2†	89428.5	90638.3	5192.0 ug/L	5192.0 ppb	13:14:14
2	Sc Radial	5438.7	5438.7	97.4 %		13:11:48
2	Y RADIAL	5878.9	5878.9	96.64 %		13:11:48
2	Al 396.153Radial†	6836.3	7016.5	4840.0 ug/L	4840.0 ppb	13:11:48
2	Ca 317.933Radial†	3231.3	3291.5	5004.8 ug/L	5004.8 ppb	13:12:08
2	Fe 238.204 Radial†	605.9	613.8	5197.5 ug/L	5197.5 ppb	13:12:08
2	K 766.490 Radial†	31828.3	30289.6	5008.8 ug/L	5008.8 ppb	13:11:48
2	Mg 279.077 IEC†	160.4	162.4	5298.8 ug/L	5298.8 ppb	13:12:08
2	Na 589.592 Radial†	35123.3	37096.5	9907.4 ug/L	9907.4 ppb	13:11:48
2	Sr 421.552†	82180.3	84380.5	491.14 ug/L	491.14 ppb	13:11:48
2	Sc 361.383	976697.7	976697.7	99.255 %		13:13:12
2	Y 371.029	856835.5	856835.5	98.237 %		13:13:12
2	Ag 328.068†	125218.5	125837.4	481.91 ug/L	481.91 ppb	13:13:17
2	As 188.979†	1260.7	1304.0	477.24 ug/L	477.24 ppb	13:13:37
2	B 249.677†	23417.1	23879.2	470.63 ug/L	470.63 ppb	13:13:17
2	Ba 233.527†	66202.8	66704.3	469.85 ug/L	469.85 ppb	13:13:17
2	Be 313.107†	1471266.3	1487378.4	468.67 ug/L	468.67 ppb	13:13:12
2	Cd 226.502†	47066.5	47619.2	470.90 ug/L	470.90 ppb	13:13:17
2	Co 228.616†	24287.7	24541.8	469.71 ug/L	469.71 ppb	13:13:17
2	Cr 267.716†	48145.5	48421.4	467.14 ug/L	467.14 ppb	13:13:17
2	Cu 324.752†	191399.2	183699.4	463.96 ug/L	463.96 ppb	13:13:17
2	Mn 257.610†	465724.5	468687.5	471.32 ug/L	471.32 ppb	13:13:12
2	Mo 202.031†	7692.1	7726.9	477.18 ug/L	477.18 ppb	13:13:37
2	Ni 231.604†	21025.7	21073.6	470.72 ug/L	470.72 ppb	13:13:17

2	P 214.914†	4909.3	4706.6	2257.8 ug/L	2257.8 ppb	13:13:37
2	Pb 220.353†	4145.2	4234.6	473.88 ug/L	473.88 ppb	13:13:37
2	S 181.975 Axial†	839.5	778.0	947.80 ug/L	947.80 ppb	13:13:37
2	Sb 206.836†	1602.7	1579.5	492.47 ug/L	492.47 ppb	13:13:37
2	Se 196.026†	891.6	919.4	496.72 ug/L	496.72 ppb	13:13:37
2	Si 251.611†	89613.9	89826.3	2404.1 ug/L	2404.1 ppb	13:13:17
2	Sn 189.927†	2888.8	2915.1	479.03 ug/L	479.03 ppb	13:13:37
2	Ti 334.940†	348996.0	352525.5	485.77 ug/L	485.77 ppb	13:13:12
2	Tl 190.801†	1583.6	1635.2	472.07 ug/L	472.07 ppb	13:13:37
2	U 409.014†	19201.9	20730.8	465.62 ug/L	465.62 ppb	13:13:17
2	V 292.402†	81622.0	83675.1	470.82 ug/L	470.82 ppb	13:13:17
2	Zn 213.857†	56776.3	56459.8	465.72 ug/L	465.72 ppb	13:13:17
2	SiO2†	89889.4	90088.0	5160.4 ug/L	5160.4 ppb	13:14:19
3	Sc Radial	5496.7	5496.7	98.4 %		13:12:13
3	Y RADIAL	5924.5	5924.5	97.38 %		13:12:13
3	Al 396.153Radial†	6894.3	7001.4	4829.7 ug/L	4829.7 ppb	13:12:13
3	Ca 317.933Radial†	3238.9	3264.2	4963.2 ug/L	4963.2 ppb	13:12:33
3	Fe 238.204 Radial†	607.0	608.3	5150.8 ug/L	5150.8 ppb	13:12:33
3	K 766.490 Radial†	32050.4	30170.2	4989.1 ug/L	4989.1 ppb	13:12:13
3	Mg 279.077 IEC†	157.8	158.0	5155.4 ug/L	5155.4 ppb	13:12:33
3	Na 589.592 Radial†	35565.4	37164.9	9925.7 ug/L	9925.7 ppb	13:12:13
3	Sr 421.552†	82993.9	84316.3	490.76 ug/L	490.76 ppb	13:12:13
3	Sc 361.383	974436.1	974436.1	99.025 %		13:13:43
3	Y 371.029	852516.4	852516.4	97.742 %		13:13:43
3	Ag 328.068†	125803.1	126720.6	485.26 ug/L	485.26 ppb	13:13:48
3	As 188.979†	1246.4	1292.5	473.07 ug/L	473.07 ppb	13:14:08
3	B 249.677†	23527.6	24045.5	473.92 ug/L	473.92 ppb	13:13:48
3	Ba 233.527†	66513.9	67173.3	473.15 ug/L	473.15 ppb	13:13:48
3	Be 313.107†	1465775.4	1485273.7	468.01 ug/L	468.01 ppb	13:13:43
3	Cd 226.502†	47398.0	48064.0	475.31 ug/L	475.31 ppb	13:13:48
3	Co 228.616†	24473.6	24786.3	474.38 ug/L	474.38 ppb	13:13:48
3	Cr 267.716†	48312.1	48702.1	469.85 ug/L	469.85 ppb	13:13:48
3	Cu 324.752†	192643.4	185403.3	468.25 ug/L	468.25 ppb	13:13:48
3	Mn 257.610†	466174.1	470230.6	472.87 ug/L	472.87 ppb	13:13:43
3	Mo 202.031†	7617.2	7669.2	473.61 ug/L	473.61 ppb	13:14:08
3	Ni 231.604†	21061.8	21159.2	472.63 ug/L	472.63 ppb	13:13:48
3	P 214.914†	4886.1	4694.7	2251.0 ug/L	2251.0 ppb	13:14:08
3	Pb 220.353†	4092.2	4190.9	468.99 ug/L	468.99 ppb	13:14:08
3	S 181.975 Axial†	836.4	776.8	946.36 ug/L	946.36 ppb	13:14:08
3	Sb 206.836†	1597.3	1577.9	491.85 ug/L	491.85 ppb	13:14:08
3	Se 196.026†	877.1	906.9	490.03 ug/L	490.03 ppb	13:14:08
3	Si 251.611†	90251.7	90679.9	2427.1 ug/L	2427.1 ppb	13:13:48
3	Sn 189.927†	2854.6	2887.3	474.47 ug/L	474.47 ppb	13:14:08
3	Ti 334.940†	348501.1	352841.8	486.21 ug/L	486.21 ppb	13:13:43
3	Tl 190.801†	1565.0	1620.1	467.73 ug/L	467.73 ppb	13:14:08
3	U 409.014†	19479.6	21056.1	472.95 ug/L	472.95 ppb	13:13:48
3	V 292.402†	82068.3	84316.6	474.35 ug/L	474.35 ppb	13:13:48
3	Zn 213.857†	57065.6	56884.7	469.24 ug/L	469.24 ppb	13:13:48
3	SiO2†	89913.3	90322.4	5173.9 ug/L	5173.9 ppb	13:14:24

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	972318.2	98.810 %	0.5833			0.59%
Sc Radial	5460.2	97.8 %	0.57			0.58%
Y 371.029	851825.9	97.662 %	0.6177			0.63%
Y RADIAL	5903.1	97.03 %	0.376			0.39%
Ag 328.068†	126990.2	486.30 ug/L	4.997	486.30 ppb	4.997	1.03%
QC value within limits for Ag 328.068 Recovery = 97.26%						
Al 396.153Radial†	7026.1	4846.7 ug/L	21.21	4846.7 ppb	21.21	0.44%
QC value within limits for Al 396.153Radial Recovery = 96.93%						
As 188.979†	1301.3	476.26 ug/L	2.837	476.26 ppb	2.837	0.60%
QC value within limits for As 188.979 Recovery = 95.25%						
B 249.677†	24086.0	474.71 ug/L	4.532	474.71 ppb	4.532	0.95%
QC value within limits for B 249.677 Recovery = 94.94%						
Ba 233.527†	67239.2	473.61 ug/L	4.020	473.61 ppb	4.020	0.85%
QC value within limits for Ba 233.527 Recovery = 94.72%						
Be 313.107†	1486474.9	468.39 ug/L	0.340	468.39 ppb	0.340	0.07%
QC value within limits for Be 313.107 Recovery = 93.68%						
Ca 317.933Radial†	3290.2	5002.8 ug/L	38.64	5002.8 ppb	38.64	0.77%

QC value within limits for Ca 317.933 Radial Recovery = 100.06%

Cd 226.502†	48028.4	474.95 ug/L	3.886	474.95 ppb	3.886	0.82%
QC value within limits for Cd 226.502 Recovery = 94.99%						
Co 228.616†	24785.0	474.36 ug/L	4.640	474.36 ppb	4.640	0.98%
QC value within limits for Co 228.616 Recovery = 94.87%						
Cr 267.716†	48786.0	470.66 ug/L	3.982	470.66 ppb	3.982	0.85%
QC value within limits for Cr 267.716 Recovery = 94.13%						
Cu 324.752†	185878.7	469.46 ug/L	6.189	469.46 ppb	6.189	1.32%
QC value within limits for Cu 324.752 Recovery = 93.89%						
Fe 238.204 Radial†	613.2	5192.0 ug/L	38.69	5192.0 ppb	38.69	0.75%
QC value within limits for Fe 238.204 Radial Recovery = 103.84%						
K 766.490 Radial†	30237.9	5000.3 ug/L	10.14	5000.3 ppb	10.14	0.20%
QC value within limits for K 766.490 Radial Recovery = 100.01%						
Mg 279.077 IEC†	161.4	5265.7 ug/L	97.99	5265.7 ppb	97.99	1.86%
QC value within limits for Mg 279.077 IEC Recovery = 105.31%						
Mn 257.610†	469801.4	472.44 ug/L	0.979	472.44 ppb	0.979	0.21%
QC value within limits for Mn 257.610 Recovery = 94.49%						
Mo 202.031†	7704.7	475.80 ug/L	1.918	475.80 ppb	1.918	0.40%
QC value within limits for Mo 202.031 Recovery = 95.16%						
Na 589.592 Radial†	37116.3	9912.7 ug/L	11.31	9912.7 ppb	11.31	0.11%
QC value within limits for Na 589.592 Radial Recovery = 99.13%						
Ni 231.604†	21206.5	473.69 ug/L	3.616	473.69 ppb	3.616	0.76%
QC value within limits for Ni 231.604 Recovery = 94.74%						
P 214.914†	4709.4	2258.0 ug/L	7.22	2258.0 ppb	7.22	0.32%
QC value within limits for P 214.914 Recovery = 90.32%						
Pb 220.353†	4219.8	472.22 ug/L	2.799	472.22 ppb	2.799	0.59%
QC value within limits for Pb 220.353 Recovery = 94.44%						
S 181.975 Axial†	777.9	947.66 ug/L	1.242	947.66 ppb	1.242	0.13%
QC value within limits for S 181.975 Axial Recovery = 94.77%						
Sb 206.836†	1582.5	493.31 ug/L	2.017	493.31 ppb	2.017	0.41%
QC value within limits for Sb 206.836 Recovery = 98.66%						
Se 196.026†	914.9	494.33 ug/L	3.730	494.33 ppb	3.730	0.75%
QC value within limits for Se 196.026 Recovery = 98.87%						
Si 251.611†	90756.2	2429.1 ug/L	26.03	2429.1 ppb	26.03	1.07%
QC value within limits for Si 251.611 Recovery = 97.16%						
Sn 189.927†	2903.3	477.10 ug/L	2.365	477.10 ppb	2.365	0.50%
QC value within limits for Sn 189.927 Recovery = 95.42%						
Sr 421.552†	84389.6	491.19 ug/L	0.455	491.19 ppb	0.455	0.09%
QC value within limits for Sr 421.552 Recovery = 98.24%						
Ti 334.940†	352901.3	486.29 ug/L	0.559	486.29 ppb	0.559	0.11%
QC value within limits for Ti 334.940 Recovery = 97.26%						
Tl 190.801†	1630.1	470.61 ug/L	2.488	470.61 ppb	2.488	0.53%
QC value within limits for Tl 190.801 Recovery = 94.12%						
U 409.014†	21054.7	472.91 ug/L	7.273	472.91 ppb	7.273	1.54%
QC value within limits for U 409.014 Recovery = 94.58%						
V 292.402†	84409.6	474.90 ug/L	4.367	474.90 ppb	4.367	0.92%
QC value within limits for V 292.402 Recovery = 94.98%						
Zn 213.857†	56941.8	469.70 ug/L	4.237	469.70 ppb	4.237	0.90%
QC value within limits for Zn 213.857 Recovery = 93.94%						
SiO2†	90349.6	5175.4 ug/L	15.86	5175.4 ppb	15.86	0.31%
QC value within limits for SiO2 Recovery = 96.78%						

All analyte(s) passed QC.

Sequence No.: 9
 Sample ID: CCB
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 8
 Date Collected: 1/28/2010 13:16:35
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5640.1	5640.1	101 %		13:18:28
1	Y RADIAL	6127.9	6127.9	100.7 %		13:18:28
1	Al 396.153Radial†	14.7	10.8	7.4665 ug/L	7.4665 ppb	13:18:28
1	Ca 317.933Radial†	27.1	0.0	0.0620 ug/L	0.0620 ppb	13:18:48
1	Fe 238.204 Radial†	6.4	-2.0	-17.148 ug/L	-17.148 ppb	13:18:48
1	K 766.490 Radial†	2585.1	164.7	27.266 ug/L	27.266 ppb	13:18:28
1	Mg 279.077 IEC†	1.4	-1.0	-31.608 ug/L	-31.608 ppb	13:18:48
1	Na 589.592 Radial†	-1062.8	-24.4	-6.5080 ug/L	-6.5080 ppb	13:18:28
1	Sr 421.552†	20.5	9.2	0.0533 ug/L	0.0533 ppb	13:18:28
1	Sc 361.383	987502.1	987502.1	100.35 %		13:19:45
1	Y 371.029	875351.1	875351.1	100.36 %		13:19:45
1	Ag 328.068†	426.2	103.7	0.3918 ug/L	0.3918 ppb	13:19:50
1	As 188.979†	-23.7	10.2	3.7071 ug/L	3.7071 ppb	13:20:10
1	B 249.677†	87.8	373.8	7.4045 ug/L	7.4045 ppb	13:20:10
1	Ba 233.527†	9.5	14.0	0.0981 ug/L	0.0981 ppb	13:20:10
1	Be 313.107†	-5083.9	2.0	0.0005 ug/L	0.0005 ppb	13:19:50
1	Cd 226.502†	-196.9	3.1	0.0319 ug/L	0.0319 ppb	13:20:10
1	Co 228.616†	-78.7	-6.6	-0.1252 ug/L	-0.1252 ppb	13:20:10
1	Cr 267.716†	96.5	10.7	0.1037 ug/L	0.1037 ppb	13:20:10
1	Cu 324.752†	9210.9	42.0	0.1071 ug/L	0.1071 ppb	13:19:50
1	Mn 257.610†	603.1	68.0	0.0679 ug/L	0.0679 ppb	13:20:10
1	Mo 202.031†	34.5	11.4	0.7013 ug/L	0.7013 ppb	13:20:10
1	Ni 231.604†	95.9	-14.4	-0.3211 ug/L	-0.3211 ppb	13:20:10
1	P 214.914†	242.7	2.3	1.1786 ug/L	1.1786 ppb	13:20:10
1	Pb 220.353†	-41.3	17.2	1.9185 ug/L	1.9185 ppb	13:20:10
1	S 181.975 Axial†	52.3	-15.7	-19.165 ug/L	-19.165 ppb	13:20:10
1	Sb 206.836†	30.2	-5.0	-1.4526 ug/L	-1.4526 ppb	13:20:10
1	Se 196.026†	-23.4	-2.2	-1.1766 ug/L	-1.1766 ppb	13:20:10
1	Si 251.611†	547.2	85.0	2.2715 ug/L	2.2715 ppb	13:20:10
1	Sn 189.927†	13.9	18.4	3.0227 ug/L	3.0227 ppb	13:20:10
1	Ti 334.940†	-966.2	-53.1	-0.0691 ug/L	-0.0691 ppb	13:19:50
1	Tl 190.801†	-34.6	5.2	1.4998 ug/L	1.4998 ppb	13:20:10
1	U 409.014†	-1546.9	-156.7	-3.5307 ug/L	-3.5307 ppb	13:19:50
1	V 292.402†	-1449.8	-4.3	-0.0188 ug/L	-0.0188 ppb	13:19:50
1	Zn 213.857†	805.8	60.3	0.5054 ug/L	0.5054 ppb	13:20:10
1	SiO2†	548.8	70.8	4.0448 ug/L	4.0448 ppb	13:21:31
2	Sc Radial	5597.2	5597.2	100 %		13:18:53
2	Y RADIAL	6059.9	6059.9	99.61 %		13:18:53
2	Al 396.153Radial†	-21.3	-25.0	-17.347 ug/L	-17.347 ppb	13:18:53
2	Ca 317.933Radial†	28.6	1.8	2.6989 ug/L	2.6989 ppb	13:19:13
2	Fe 238.204 Radial†	9.1	0.7	5.9323 ug/L	5.9323 ppb	13:19:13
2	K 766.490 Radial†	2594.3	193.4	32.019 ug/L	32.019 ppb	13:18:53
2	Mg 279.077 IEC†	2.8	0.4	12.399 ug/L	12.399 ppb	13:19:13
2	Na 589.592 Radial†	-972.0	58.1	15.525 ug/L	15.525 ppb	13:18:53
2	Sr 421.552†	4.7	-6.5	-0.0379 ug/L	-0.0379 ppb	13:18:53
2	Sc 361.383	991706.0	991706.0	100.78 %		13:20:15
2	Y 371.029	878445.9	878445.9	100.71 %		13:20:15
2	Ag 328.068†	338.3	14.7	0.0612 ug/L	0.0612 ppb	13:20:20
2	As 188.979†	-27.9	6.1	2.2150 ug/L	2.2150 ppb	13:20:40
2	B 249.677†	64.9	350.6	6.9414 ug/L	6.9414 ppb	13:20:40
2	Ba 233.527†	-6.2	-1.6	-0.0107 ug/L	-0.0107 ppb	13:20:40
2	Be 313.107†	-4987.8	118.8	0.0372 ug/L	0.0372 ppb	13:20:20
2	Cd 226.502†	-192.6	8.2	0.0802 ug/L	0.0802 ppb	13:20:40
2	Co 228.616†	-72.2	0.1	0.0030 ug/L	0.0030 ppb	13:20:40
2	Cr 267.716†	100.1	13.8	0.1349 ug/L	0.1349 ppb	13:20:40
2	Cu 324.752†	9058.6	-148.1	-0.3717 ug/L	-0.3717 ppb	13:20:20
2	Mn 257.610†	624.9	87.1	0.0876 ug/L	0.0876 ppb	13:20:40
2	Mo 202.031†	28.5	5.3	0.3263 ug/L	0.3263 ppb	13:20:40
2	Ni 231.604†	103.2	-7.6	-0.1704 ug/L	-0.1704 ppb	13:20:40

2	P 214.914†	253.4	11.9	6.0071 ug/L	6.0071 ppb	13:20:40
2	Pb 220.353†	-48.5	10.3	1.1411 ug/L	1.1411 ppb	13:20:40
2	S 181.975 Axial†	49.7	-18.4	-22.489 ug/L	-22.489 ppb	13:20:40
2	Sb 206.836†	42.0	6.5	1.9904 ug/L	1.9904 ppb	13:20:40
2	Se 196.026†	-6.8	14.3	7.4756 ug/L	7.4756 ppb	13:20:40
2	Si 251.611†	536.3	71.9	1.9252 ug/L	1.9252 ppb	13:20:40
2	Sn 189.927†	3.7	8.3	1.3569 ug/L	1.3569 ppb	13:20:40
2	Ti 334.940†	-967.9	-50.6	-0.0689 ug/L	-0.0689 ppb	13:20:20
2	Tl 190.801†	-34.8	5.3	1.5095 ug/L	1.5095 ppb	13:20:40
2	U 409.014†	-1554.3	-157.6	-3.5522 ug/L	-3.5522 ppb	13:20:20
2	V 292.402†	-1425.8	25.7	0.1399 ug/L	0.1399 ppb	13:20:20
2	Zn 213.857†	792.8	43.9	0.3666 ug/L	0.3666 ppb	13:20:40
2	SiO2†	563.7	83.2	4.7716 ug/L	4.7716 ppb	13:21:51
3	Sc Radial	5611.4	5611.4	100 %		13:19:18
3	Y RADIAL	6098.9	6098.9	100.3 %		13:19:18
3	Al 396.153Radial†	4.6	0.9	0.6000 ug/L	0.6000 ppb	13:19:18
3	Ca 317.933Radial†	23.7	-3.1	-4.7765 ug/L	-4.7765 ppb	13:19:38
3	Fe 238.204 Radial†	9.2	0.8	6.6613 ug/L	6.6613 ppb	13:19:38
3	K 766.490 Radial†	2552.7	145.5	24.098 ug/L	24.098 ppb	13:19:18
3	Mg 279.077 IEC†	2.4	0.0	0.6165 ug/L	0.6165 ppb	13:19:38
3	Na 589.592 Radial†	-1064.2	-31.1	-8.3081 ug/L	-8.3081 ppb	13:19:18
3	Sr 421.552†	21.9	10.6	0.0618 ug/L	0.0618 ppb	13:19:18
3	Sc 361.383	978356.1	978356.1	99.423 %		13:20:45
3	Y 371.029	866398.8	866398.8	99.333 %		13:20:45
3	Ag 328.068†	332.1	13.0	0.0546 ug/L	0.0546 ppb	13:20:50
3	As 188.979†	-29.2	4.5	1.6269 ug/L	1.6269 ppb	13:21:10
3	B 249.677†	92.2	379.0	7.5034 ug/L	7.5034 ppb	13:21:10
3	Ba 233.527†	7.7	12.3	0.0864 ug/L	0.0864 ppb	13:21:10
3	Be 313.107†	-5015.7	23.3	0.0071 ug/L	0.0071 ppb	13:20:50
3	Cd 226.502†	-191.4	6.9	0.0663 ug/L	0.0663 ppb	13:21:10
3	Co 228.616†	-65.8	5.6	0.1067 ug/L	0.1067 ppb	13:21:10
3	Cr 267.716†	113.9	29.0	0.2813 ug/L	0.2813 ppb	13:21:10
3	Cu 324.752†	9184.5	101.2	0.2581 ug/L	0.2581 ppb	13:20:50
3	Mn 257.610†	606.8	77.4	0.0784 ug/L	0.0784 ppb	13:21:10
3	Mo 202.031†	21.1	-1.7	-0.1075 ug/L	-0.1075 ppb	13:21:10
3	Ni 231.604†	101.5	-7.9	-0.1764 ug/L	-0.1764 ppb	13:21:10
3	P 214.914†	250.8	12.7	6.2815 ug/L	6.2815 ppb	13:21:10
3	Pb 220.353†	-48.4	9.7	1.0774 ug/L	1.0774 ppb	13:21:10
3	S 181.975 Axial†	57.8	-9.6	-11.722 ug/L	-11.722 ppb	13:21:10
3	Sb 206.836†	38.4	3.5	1.0533 ug/L	1.0533 ppb	13:21:10
3	Se 196.026†	-12.8	8.2	4.3037 ug/L	4.3037 ppb	13:21:10
3	Si 251.611†	530.5	73.3	1.9674 ug/L	1.9674 ppb	13:21:10
3	Sn 189.927†	-2.6	1.9	0.3172 ug/L	0.3172 ppb	13:21:10
3	Ti 334.940†	-984.6	-80.6	-0.1102 ug/L	-0.1102 ppb	13:20:50
3	Tl 190.801†	-37.1	2.5	0.7034 ug/L	0.7034 ppb	13:21:10
3	U 409.014†	-1543.5	-167.7	-3.7814 ug/L	-3.7814 ppb	13:20:50
3	V 292.402†	-1444.2	-12.1	-0.0771 ug/L	-0.0771 ppb	13:20:50
3	Zn 213.857†	810.5	72.5	0.6036 ug/L	0.6036 ppb	13:21:10
3	SiO2†	563.1	90.2	5.1839 ug/L	5.1839 ppb	13:22:11

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	985854.7	100.19 %		0.694			0.69%
Sc Radial	5616.3	101 %		0.4			0.39%
Y 371.029	873398.6	100.14 %		0.717			0.72%
Y RADIAL	6095.6	100.2 %		0.56			0.56%
Ag 328.068†	43.8	0.1692 ug/L		0.19282	0.1692 ppb	0.19282	113.95%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	-4.4	-3.0936 ug/L		12.81265	-3.0936 ppb	12.81265	414.16%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	6.9	2.5163 ug/L		1.07235	2.5163 ppb	1.07235	42.62%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	367.8	7.2831 ug/L		0.30002	7.2831 ppb	0.30002	4.12%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	8.2	0.0579 ug/L		0.05973	0.0579 ppb	0.05973	103.10%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	48.1	0.0149 ug/L		0.01958	0.0149 ppb	0.01958	131.30%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	-0.4	-0.6719 ug/L		3.79138	-0.6719 ppb	3.79138	564.30%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated									
Cd 226.502†	6.1	0.0594 ug/L	0.02486	0.0594 ppb	0.02486	41.83%			
QC value within limits for Cd 226.502 Recovery = Not calculated									
Co 228.616†	-0.3	-0.0052 ug/L	0.11614	-0.0052 ppb	0.11614	>999.9%			
QC value within limits for Co 228.616 Recovery = Not calculated									
Cr 267.716†	17.8	0.1733 ug/L	0.09479	0.1733 ppb	0.09479	54.70%			
QC value within limits for Cr 267.716 Recovery = Not calculated									
Cu 324.752†	-1.6	-0.0022 ug/L	0.32885	-0.0022 ppb	0.32885	>999.9%			
QC value within limits for Cu 324.752 Recovery = Not calculated									
Fe 238.204 Radial†	-0.2	-1.5183 ug/L	13.54103	-1.5183 ppb	13.54103	891.88%			
QC value within limits for Fe 238.204 Radial Recovery = Not calculated									
K 766.490 Radial†	167.9	27.794 ug/L	3.9871	27.794 ppb	3.9871	14.34%			
QC value within limits for K 766.490 Radial Recovery = Not calculated									
Mg 279.077 IEC†	-0.2	-6.1973 ug/L	22.78112	-6.1973 ppb	22.78112	367.60%			
QC value within limits for Mg 279.077 IEC Recovery = Not calculated									
Mn 257.610†	77.5	0.0780 ug/L	0.00986	0.0780 ppb	0.00986	12.64%			
QC value within limits for Mn 257.610 Recovery = Not calculated									
Mo 202.031†	5.0	0.3067 ug/L	0.40477	0.3067 ppb	0.40477	131.96%			
QC value within limits for Mo 202.031 Recovery = Not calculated									
Na 589.592 Radial†	0.9	0.2362 ug/L	13.27078	0.2362 ppb	13.27078	>999.9%			
QC value within limits for Na 589.592 Radial Recovery = Not calculated									
Ni 231.604†	-10.0	-0.2226 ug/L	0.08533	-0.2226 ppb	0.08533	38.33%			
QC value within limits for Ni 231.604 Recovery = Not calculated									
P 214.914†	9.0	4.4891 ug/L	2.87024	4.4891 ppb	2.87024	63.94%			
QC value within limits for P 214.914 Recovery = Not calculated									
Pb 220.353†	12.4	1.3790 ug/L	0.46829	1.3790 ppb	0.46829	33.96%			
QC value within limits for Pb 220.353 Recovery = Not calculated									
S 181.975 Axial†	-14.6	-17.792 ug/L	5.5135	-17.792 ppb	5.5135	30.99%			
QC value within limits for S 181.975 Axial Recovery = Not calculated									
Sb 206.836†	1.7	0.5304 ug/L	1.78005	0.5304 ppb	1.78005	335.61%			
QC value within limits for Sb 206.836 Recovery = Not calculated									
Se 196.026†	6.8	3.5342 ug/L	4.37710	3.5342 ppb	4.37710	123.85%			
QC value within limits for Se 196.026 Recovery = Not calculated									
Si 251.611†	76.7	2.0547 ug/L	0.18891	2.0547 ppb	0.18891	9.19%			
QC value within limits for Si 251.611 Recovery = Not calculated									
Sn 189.927†	9.5	1.5656 ug/L	1.36477	1.5656 ppb	1.36477	87.17%			
QC value within limits for Sn 189.927 Recovery = Not calculated									
Sr 421.552†	4.4	0.0257 ug/L	0.05525	0.0257 ppb	0.05525	214.55%			
QC value within limits for Sr 421.552 Recovery = Not calculated									
Ti 334.940†	-61.4	-0.0827 ug/L	0.02380	-0.0827 ppb	0.02380	28.76%			
QC value within limits for Ti 334.940 Recovery = Not calculated									
Tl 190.801†	4.3	1.2375 ug/L	0.46259	1.2375 ppb	0.46259	37.38%			
QC value within limits for Tl 190.801 Recovery = Not calculated									
U 409.014†	-160.7	-3.6214 ug/L	0.13898	-3.6214 ppb	0.13898	3.84%			
QC value within limits for U 409.014 Recovery = Not calculated									
V 292.402†	3.1	0.0147 ug/L	0.11227	0.0147 ppb	0.11227	765.97%			
QC value within limits for V 292.402 Recovery = Not calculated									
Zn 213.857†	58.9	0.4918 ug/L	0.11909	0.4918 ppb	0.11909	24.21%			
QC value within limits for Zn 213.857 Recovery = Not calculated									
SiO2†	81.4	4.6668 ug/L	0.57671	4.6668 ppb	0.57671	12.36%			
QC value within limits for SiO2 Recovery = Not calculated									
All analyte(s) passed QC.									

Sequence No.: 8

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 1/28/2010 14:16:20

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5325.9	5325.9	95.4 %		14:18:12
1	Y RADIAL	5780.5	5780.5	95.02 %		14:18:12
1	Al 396.153Radial†	7006.7	7343.8	5066.1 ug/L	5066.1 ppb	14:18:12
1	Ca 317.933Radial†	3242.5	3373.4	5129.3 ug/L	5129.3 ppb	14:18:32
1	Fe 238.204 Radial†	597.8	618.4	5237.0 ug/L	5237.0 ppb	14:18:32
1	K 766.490 Radial†	32086.0	31251.7	5168.1 ug/L	5168.1 ppb	14:18:12
1	Mg 279.077 IEC†	159.7	165.1	5386.5 ug/L	5386.5 ppb	14:18:32
1	Na 589.592 Radial†	34070.6	36756.1	9816.5 ug/L	9816.5 ppb	14:18:12
1	Sr 421.552†	81905.0	85878.2	499.85 ug/L	499.85 ppb	14:18:12
1	Sc 361.383	943078.4	943078.4	95.838 %		14:19:30
1	Y 371.029	824502.2	824502.2	94.530 %		14:19:30
1	Ag 328.068†	125412.5	130537.3	499.85 ug/L	499.85 ppb	14:19:35
1	As 188.979†	1244.8	1332.7	487.73 ug/L	487.73 ppb	14:19:55
1	B 249.677†	23295.9	24593.8	484.72 ug/L	484.72 ppb	14:19:35
1	Ba 233.527†	66044.3	68916.7	485.43 ug/L	485.43 ppb	14:19:35
1	Be 313.107†	1444714.2	1512515.4	476.60 ug/L	476.60 ppb	14:19:30
1	Cd 226.502†	46979.7	49219.0	486.74 ug/L	486.74 ppb	14:19:35
1	Co 228.616†	24390.2	25521.1	488.46 ug/L	488.46 ppb	14:19:35
1	Cr 267.716†	47968.9	49966.3	482.04 ug/L	482.04 ppb	14:19:35
1	Cu 324.752†	192266.8	191478.9	483.59 ug/L	483.59 ppb	14:19:35
1	Mn 257.610†	461789.3	481308.4	484.00 ug/L	484.00 ppb	14:19:30
1	Mo 202.031†	7663.8	7973.7	492.40 ug/L	492.40 ppb	14:19:55
1	Ni 231.604†	20904.3	21702.0	484.76 ug/L	484.76 ppb	14:19:35
1	P 214.914†	4915.4	4889.4	2345.2 ug/L	2345.2 ppb	14:19:55
1	Pb 220.353†	4124.7	4362.1	488.17 ug/L	488.17 ppb	14:19:55
1	S 181.975 Axial†	833.1	801.4	976.35 ug/L	976.35 ppb	14:19:55
1	Sb 206.836†	1612.8	1647.7	513.54 ug/L	513.54 ppb	14:19:55
1	Se 196.026†	884.2	943.7	509.54 ug/L	509.54 ppb	14:19:55
1	Si 251.611†	89881.7	93324.3	2497.8 ug/L	2497.8 ppb	14:19:35
1	Sn 189.927†	2884.8	3014.7	495.38 ug/L	495.38 ppb	14:19:55
1	Ti 334.940†	346356.1	362305.5	499.24 ug/L	499.24 ppb	14:19:30
1	Tl 190.801†	1576.1	1684.3	486.22 ug/L	486.22 ppb	14:19:55
1	U 409.014†	19720.2	21961.3	493.32 ug/L	493.32 ppb	14:19:35
1	V 292.402†	81629.1	86614.0	487.39 ug/L	487.39 ppb	14:19:35
1	Zn 213.857†	56633.2	58349.6	481.33 ug/L	481.33 ppb	14:19:35
1	SiO2†	89507.8	92918.3	5322.5 ug/L	5322.5 ppb	14:21:03
2	Sc Radial	5357.5	5357.5	95.9 %		14:18:37
2	Y RADIAL	5777.3	5777.3	94.96 %		14:18:37
2	Al 396.153Radial†	6961.5	7253.4	5003.7 ug/L	5003.7 ppb	14:18:37
2	Ca 317.933Radial†	3200.2	3309.3	5031.8 ug/L	5031.8 ppb	14:18:57
2	Fe 238.204 Radial†	593.0	609.8	5163.9 ug/L	5163.9 ppb	14:18:57
2	K 766.490 Radial†	32091.1	31058.5	5136.2 ug/L	5136.2 ppb	14:18:37
2	Mg 279.077 IEC†	156.4	160.7	5243.5 ug/L	5243.5 ppb	14:18:57
2	Na 589.592 Radial†	34118.7	36595.4	9773.6 ug/L	9773.6 ppb	14:18:37
2	Sr 421.552†	81721.2	85179.8	495.79 ug/L	495.79 ppb	14:18:37
2	Sc 361.383	957350.6	957350.6	97.289 %		14:20:01
2	Y 371.029	836526.6	836526.6	95.908 %		14:20:01
2	Ag 328.068†	125692.4	128874.1	493.48 ug/L	493.48 ppb	14:20:06
2	As 188.979†	1239.2	1307.6	478.63 ug/L	478.63 ppb	14:20:26
2	B 249.677†	23427.1	24366.2	480.24 ug/L	480.24 ppb	14:20:06
2	Ba 233.527†	66431.5	68287.3	480.99 ug/L	480.99 ppb	14:20:06
2	Be 313.107†	1465568.6	1511477.9	476.28 ug/L	476.28 ppb	14:20:01
2	Cd 226.502†	47318.4	48836.4	482.96 ug/L	482.96 ppb	14:20:06
2	Co 228.616†	24556.3	25312.4	484.45 ug/L	484.45 ppb	14:20:06
2	Cr 267.716†	48338.3	49599.8	478.51 ug/L	478.51 ppb	14:20:06
2	Cu 324.752†	192316.7	188539.5	476.17 ug/L	476.17 ppb	14:20:06
2	Mn 257.610†	468915.7	481450.1	484.14 ug/L	484.14 ppb	14:20:01
2	Mo 202.031†	7690.0	7881.3	486.70 ug/L	486.70 ppb	14:20:26
2	Ni 231.604†	21105.5	21583.7	482.11 ug/L	482.11 ppb	14:20:06

2	P 214.914†	4913.7	4811.2	2307.7 ug/L	2307.7 ppb	14:20:26
2	Pb 220.353†	4128.5	4301.9	481.44 ug/L	481.44 ppb	14:20:26
2	S 181.975 Axial†	826.5	781.8	952.38 ug/L	952.38 ppb	14:20:26
2	Sb 206.836†	1613.1	1622.9	505.85 ug/L	505.85 ppb	14:20:26
2	Se 196.026†	884.3	930.1	502.16 ug/L	502.16 ppb	14:20:26
2	Si 251.611†	90215.4	92269.2	2469.6 ug/L	2469.6 ppb	14:20:06
2	Sn 189.927†	2887.5	2972.5	488.45 ug/L	488.45 ppb	14:20:26
2	Ti 334.940†	351686.8	362397.0	499.37 ug/L	499.37 ppb	14:20:01
2	Tl 190.801†	1570.7	1654.2	477.60 ug/L	477.60 ppb	14:20:26
2	U 409.014†	19621.7	21553.2	484.14 ug/L	484.14 ppb	14:20:06
2	V 292.402†	81938.8	85662.6	482.01 ug/L	482.01 ppb	14:20:06
2	Zn 213.857†	56982.0	57827.2	477.01 ug/L	477.01 ppb	14:20:06
2	SiO2†	89701.5	91725.2	5254.1 ug/L	5254.1 ppb	14:21:08
3	Sc Radial	5406.5	5406.5	96.8 %		14:19:02
3	Y RADIAL	5814.5	5814.5	95.58 %		14:19:02
3	Al 396.153Radial†	6963.3	7189.5	4959.6 ug/L	4959.6 ppb	14:19:02
3	Ca 317.933Radial†	3230.9	3310.9	5034.2 ug/L	5034.2 ppb	14:19:22
3	Fe 238.204 Radial†	592.1	603.3	5108.5 ug/L	5108.5 ppb	14:19:22
3	K 766.490 Radial†	32113.6	30778.8	5089.9 ug/L	5089.9 ppb	14:19:02
3	Mg 279.077 IEC†	157.2	160.0	5222.8 ug/L	5222.8 ppb	14:19:22
3	Na 589.592 Radial†	34234.0	36392.6	9719.4 ug/L	9719.4 ppb	14:19:02
3	Sr 421.552†	82262.0	84967.3	494.55 ug/L	494.55 ppb	14:19:02
3	Sc 361.383	956428.9	956428.9	97.195 %		14:20:32
3	Y 371.029	836802.5	836802.5	95.940 %		14:20:32
3	Ag 328.068†	125652.3	128957.4	493.78 ug/L	493.78 ppb	14:20:37
3	As 188.979†	1244.0	1313.7	480.83 ug/L	480.83 ppb	14:20:57
3	B 249.677†	23358.4	24318.8	479.31 ug/L	479.31 ppb	14:20:37
3	Ba 233.527†	66239.3	68155.4	480.06 ug/L	480.06 ppb	14:20:37
3	Be 313.107†	1464026.2	1511342.7	476.23 ug/L	476.23 ppb	14:20:32
3	Cd 226.502†	47220.4	48782.5	482.43 ug/L	482.43 ppb	14:20:37
3	Co 228.616†	24455.7	25233.3	482.93 ug/L	482.93 ppb	14:20:37
3	Cr 267.716†	48159.7	49463.9	477.20 ug/L	477.20 ppb	14:20:37
3	Cu 324.752†	192301.4	188714.2	476.61 ug/L	476.61 ppb	14:20:37
3	Mn 257.610†	468658.6	481650.1	484.34 ug/L	484.34 ppb	14:20:32
3	Mo 202.031†	7635.9	7833.3	483.73 ug/L	483.73 ppb	14:20:57
3	Ni 231.604†	21053.0	21550.6	481.37 ug/L	481.37 ppb	14:20:37
3	P 214.914†	4885.1	4786.6	2295.3 ug/L	2295.3 ppb	14:20:57
3	Pb 220.353†	4109.5	4286.4	479.70 ug/L	479.70 ppb	14:20:57
3	S 181.975 Axial†	830.2	786.4	957.98 ug/L	957.98 ppb	14:20:57
3	Sb 206.836†	1611.3	1622.7	505.68 ug/L	505.68 ppb	14:20:57
3	Se 196.026†	877.4	923.9	498.74 ug/L	498.74 ppb	14:20:57
3	Si 251.611†	90010.0	92147.2	2466.3 ug/L	2466.3 ppb	14:20:37
3	Sn 189.927†	2870.0	2957.4	485.98 ug/L	485.98 ppb	14:20:57
3	Ti 334.940†	351531.0	362585.1	499.63 ug/L	499.63 ppb	14:20:32
3	Tl 190.801†	1566.4	1651.4	476.81 ug/L	476.81 ppb	14:20:57
3	U 409.014†	19550.5	21499.4	482.93 ug/L	482.93 ppb	14:20:37
3	V 292.402†	81867.1	85670.0	482.02 ug/L	482.02 ppb	14:20:37
3	Zn 213.857†	56836.7	57734.2	476.25 ug/L	476.25 ppb	14:20:37
3	SiO2†	91106.6	93259.6	5342.3 ug/L	5342.3 ppb	14:21:13

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	952286.0	96.774 %	0.8117			0.84%
Sc Radial	5363.3	96.0 %	0.73			0.76%
Y 371.029	832610.4	95.459 %	0.8052			0.84%
Y RADIAL	5790.8	95.19 %	0.339			0.36%
Ag 328.068†	129456.2	495.70 ug/L	3.591	495.70 ppb	3.591	0.72%
QC value within limits for Ag 328.068 Recovery = 99.14%						
Al 396.153Radial†	7262.2	5009.8 ug/L	53.54	5009.8 ppb	53.54	1.07%
QC value within limits for Al 396.153Radial Recovery = 100.20%						
As 188.979†	1318.0	482.40 ug/L	4.750	482.40 ppb	4.750	0.98%
QC value within limits for As 188.979 Recovery = 96.48%						
B 249.677†	24426.2	481.42 ug/L	2.893	481.42 ppb	2.893	0.60%
QC value within limits for B 249.677 Recovery = 96.28%						
Ba 233.527†	68453.1	482.16 ug/L	2.867	482.16 ppb	2.867	0.59%
QC value within limits for Ba 233.527 Recovery = 96.43%						
Be 313.107†	1511778.7	476.37 ug/L	0.201	476.37 ppb	0.201	0.04%
QC value within limits for Be 313.107 Recovery = 95.27%						
Ca 317.933Radial†	3331.2	5065.1 ug/L	55.60	5065.1 ppb	55.60	1.10%

QC value within limits for Ca 317.933 Radial Recovery = 101.30%

Cd 226.502†	48946.0	484.04 ug/L	2.350	484.04 ppb	2.350	0.49%
QC value within limits for Cd 226.502 Recovery = 96.81%						
Co 228.616†	25355.6	485.28 ug/L	2.856	485.28 ppb	2.856	0.59%
QC value within limits for Co 228.616 Recovery = 97.06%						
Cr 267.716†	49676.6	479.25 ug/L	2.507	479.25 ppb	2.507	0.52%
QC value within limits for Cr 267.716 Recovery = 95.85%						
Cu 324.752†	189577.5	478.79 ug/L	4.164	478.79 ppb	4.164	0.87%
QC value within limits for Cu 324.752 Recovery = 95.76%						
Fe 238.204 Radial†	610.5	5169.8 ug/L	64.43	5169.8 ppb	64.43	1.25%
QC value within limits for Fe 238.204 Radial Recovery = 103.40%						
K 766.490 Radial†	31029.7	5131.4 ug/L	39.32	5131.4 ppb	39.32	0.77%
QC value within limits for K 766.490 Radial Recovery = 102.63%						
Mg 279.077 IEC†	161.9	5284.2 ug/L	89.11	5284.2 ppb	89.11	1.69%
QC value within limits for Mg 279.077 IEC Recovery = 105.68%						
Mn 257.610†	481469.5	484.16 ug/L	0.169	484.16 ppb	0.169	0.03%
QC value within limits for Mn 257.610 Recovery = 96.83%						
Mo 202.031†	7896.1	487.61 ug/L	4.408	487.61 ppb	4.408	0.90%
QC value within limits for Mo 202.031 Recovery = 97.52%						
Na 589.592 Radial†	36581.4	9769.8 ug/L	48.65	9769.8 ppb	48.65	0.50%
QC value within limits for Na 589.592 Radial Recovery = 97.70%						
Ni 231.604†	21612.1	482.75 ug/L	1.778	482.75 ppb	1.778	0.37%
QC value within limits for Ni 231.604 Recovery = 96.55%						
P 214.914†	4829.0	2316.1 ug/L	26.00	2316.1 ppb	26.00	1.12%
QC value within limits for P 214.914 Recovery = 92.64%						
Pb 220.353†	4316.8	483.10 ug/L	4.476	483.10 ppb	4.476	0.93%
QC value within limits for Pb 220.353 Recovery = 96.62%						
S 181.975 Axial†	789.9	962.23 ug/L	12.541	962.23 ppb	12.541	1.30%
QC value within limits for S 181.975 Axial Recovery = 96.22%						
Sb 206.836†	1631.1	508.35 ug/L	4.493	508.35 ppb	4.493	0.88%
QC value within limits for Sb 206.836 Recovery = 101.67%						
Se 196.026†	932.6	503.48 ug/L	5.517	503.48 ppb	5.517	1.10%
QC value within limits for Se 196.026 Recovery = 100.70%						
Si 251.611†	92580.2	2477.9 ug/L	17.31	2477.9 ppb	17.31	0.70%
QC value within limits for Si 251.611 Recovery = 99.12%						
Sn 189.927†	2981.5	489.94 ug/L	4.876	489.94 ppb	4.876	1.00%
QC value within limits for Sn 189.927 Recovery = 97.99%						
Sr 421.552†	85341.8	496.73 ug/L	2.773	496.73 ppb	2.773	0.56%
QC value within limits for Sr 421.552 Recovery = 99.35%						
Ti 334.940†	362429.2	499.42 ug/L	0.200	499.42 ppb	0.200	0.04%
QC value within limits for Ti 334.940 Recovery = 99.88%						
Tl 190.801†	1663.3	480.21 ug/L	5.218	480.21 ppb	5.218	1.09%
QC value within limits for Tl 190.801 Recovery = 96.04%						
U 409.014†	21671.3	486.80 ug/L	5.681	486.80 ppb	5.681	1.17%
QC value within limits for U 409.014 Recovery = 97.36%						
V 292.402†	85982.2	483.81 ug/L	3.100	483.81 ppb	3.100	0.64%
QC value within limits for V 292.402 Recovery = 96.76%						
Zn 213.857†	57970.3	478.20 ug/L	2.738	478.20 ppb	2.738	0.57%
QC value within limits for Zn 213.857 Recovery = 95.64%						
SiO2†	92634.4	5306.3 ug/L	46.27	5306.3 ppb	46.27	0.87%
QC value within limits for SiO2 Recovery = 99.23%						

All analyte(s) passed QC.

Sequence No.: 9

Sample ID: PQL

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 11

Date Collected: 1/28/2010 14:23:24

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5414.2	5414.2	96.9 %		14:25:17
1	Y RADIAL	5876.1	5876.1	96.59 %		14:25:17
1	Al 396.153Radial†	293.8	299.3	206.93 ug/L	206.93 ppb	14:25:37
1	Ca 317.933Radial†	149.9	127.8	194.35 ug/L	194.35 ppb	14:25:37
1	Fe 238.204 Radial†	21.3	13.6	114.78 ug/L	114.78 ppb	14:25:37
1	K 766.490 Radial†	3537.0	1253.4	207.33 ug/L	207.33 ppb	14:25:17
1	Mg 279.077 IEC†	11.7	9.7	316.74 ug/L	316.74 ppb	14:25:37
1	Na 589.592 Radial†	106.3	1137.7	303.84 ug/L	303.84 ppb	14:25:17
1	Sr 421.552†	817.0	831.7	4.8396 ug/L	4.8396 ppb	14:25:17
1	Sc 361.383	983875.2	983875.2	99.984 %		14:26:33
1	Y 371.029	870995.2	870995.2	99.860 %		14:26:33
1	Ag 328.068†	1660.5	1339.7	5.1091 ug/L	5.1091 ppb	14:26:38
1	As 188.979†	47.2	81.1	29.446 ug/L	29.446 ppb	14:26:59
1	B 249.677†	2378.2	2664.8	52.732 ug/L	52.732 ppb	14:26:38
1	Ba 233.527†	667.7	672.4	4.7368 ug/L	4.7368 ppb	14:26:59
1	Be 313.107†	9804.6	14874.2	4.6865 ug/L	4.6865 ppb	14:26:38
1	Cd 226.502†	267.7	467.0	4.6208 ug/L	4.6208 ppb	14:26:59
1	Co 228.616†	180.6	252.4	4.8433 ug/L	4.8433 ppb	14:26:59
1	Cr 267.716†	592.1	506.6	4.8702 ug/L	4.8702 ppb	14:26:59
1	Cu 324.752†	12912.6	3778.1	9.5208 ug/L	9.5208 ppb	14:26:38
1	Mn 257.610†	10354.5	9823.2	9.8705 ug/L	9.8705 ppb	14:26:38
1	Mo 202.031†	191.4	168.5	10.406 ug/L	10.406 ppb	14:26:59
1	Ni 231.604†	324.4	214.4	4.7900 ug/L	4.7900 ppb	14:26:59
1	P 214.914†	527.1	287.6	141.69 ug/L	141.69 ppb	14:26:59
1	Pb 220.353†	47.4	105.8	11.859 ug/L	11.859 ppb	14:26:59
1	S 181.975 Axial†	138.6	70.8	86.310 ug/L	86.310 ppb	14:26:59
1	Sb 206.836†	69.0	33.8	10.566 ug/L	10.566 ppb	14:26:59
1	Se 196.026†	40.1	61.3	32.255 ug/L	32.255 ppb	14:26:59
1	Si 251.611†	3988.2	3528.5	94.542 ug/L	94.542 ppb	14:26:59
1	Sn 189.927†	64.3	68.9	11.341 ug/L	11.341 ppb	14:26:59
1	Ti 334.940†	2504.9	3415.0	4.6840 ug/L	4.6840 ppb	14:26:38
1	Tl 190.801†	18.9	58.6	16.859 ug/L	16.859 ppb	14:26:59
1	U 409.014†	787.5	2172.4	48.940 ug/L	48.940 ppb	14:26:38
1	V 292.402†	-686.6	753.7	4.4076 ug/L	4.4076 ppb	14:26:38
1	Zn 213.857†	1876.4	1134.0	9.3822 ug/L	9.3822 ppb	14:26:59
1	SiO2†	4111.9	3636.4	208.54 ug/L	208.54 ppb	14:28:04
2	Sc Radial	5500.5	5500.5	98.5 %		14:25:42
2	Y RADIAL	5977.7	5977.7	98.26 %		14:25:42
2	Al 396.153Radial†	303.7	304.7	210.66 ug/L	210.66 ppb	14:26:02
2	Ca 317.933Radial†	151.4	127.0	193.11 ug/L	193.11 ppb	14:26:02
2	Fe 238.204 Radial†	22.0	13.9	117.42 ug/L	117.42 ppb	14:26:02
2	K 766.490 Radial†	3366.2	1022.8	169.14 ug/L	169.14 ppb	14:25:42
2	Mg 279.077 IEC†	11.5	9.3	303.37 ug/L	303.37 ppb	14:26:02
2	Na 589.592 Radial†	105.4	1135.1	303.15 ug/L	303.15 ppb	14:25:42
2	Sr 421.552†	831.7	833.3	4.8492 ug/L	4.8492 ppb	14:25:42
2	Sc 361.383	973545.3	973545.3	98.935 %		14:27:04
2	Y 371.029	861711.8	861711.8	98.796 %		14:27:04
2	Ag 328.068†	1557.9	1253.7	4.7873 ug/L	4.7873 ppb	14:27:09
2	As 188.979†	27.2	61.4	22.301 ug/L	22.301 ppb	14:27:29
2	B 249.677†	2350.9	2662.5	52.686 ug/L	52.686 ppb	14:27:09
2	Ba 233.527†	673.2	685.0	4.8270 ug/L	4.8270 ppb	14:27:29
2	Be 313.107†	9696.2	14868.7	4.6852 ug/L	4.6852 ppb	14:27:09
2	Cd 226.502†	277.9	480.2	4.7505 ug/L	4.7505 ppb	14:27:29
2	Co 228.616†	167.0	240.7	4.6173 ug/L	4.6173 ppb	14:27:29
2	Cr 267.716†	574.5	495.2	4.7619 ug/L	4.7619 ppb	14:27:29
2	Cu 324.752†	12887.8	3890.1	9.8052 ug/L	9.8052 ppb	14:27:09
2	Mn 257.610†	10365.4	9944.1	9.9928 ug/L	9.9928 ppb	14:27:09
2	Mo 202.031†	184.7	163.7	10.111 ug/L	10.111 ppb	14:27:29
2	Ni 231.604†	325.4	218.9	4.8895 ug/L	4.8895 ppb	14:27:29

2	P 214.914†	528.5	294.7	145.12 ug/L	145.12 ppb	14:27:29
2	Pb 220.353†	40.2	99.0	11.101 ug/L	11.101 ppb	14:27:29
2	S 181.975 Axial†	128.5	62.1	75.640 ug/L	75.640 ppb	14:27:29
2	Sb 206.836†	67.5	33.1	10.321 ug/L	10.321 ppb	14:27:29
2	Se 196.026†	27.4	48.8	25.793 ug/L	25.793 ppb	14:27:29
2	Si 251.611†	3965.5	3548.0	95.067 ug/L	95.067 ppb	14:27:29
2	Sn 189.927†	56.2	61.4	10.111 ug/L	10.111 ppb	14:27:29
2	Ti 334.940†	2611.6	3549.4	4.8715 ug/L	4.8715 ppb	14:27:09
2	Tl 190.801†	23.4	63.4	18.239 ug/L	18.239 ppb	14:27:29
2	U 409.014†	651.2	2042.9	46.022 ug/L	46.022 ppb	14:27:09
2	V 292.402†	-580.0	854.2	4.9549 ug/L	4.9549 ppb	14:27:09
2	Zn 213.857†	1859.6	1136.9	9.4052 ug/L	9.4052 ppb	14:27:29
2	SiO2†	4108.3	3676.5	210.85 ug/L	210.85 ppb	14:28:09
3	Sc Radial	5508.2	5508.2	98.6 %		14:26:07
3	Y RADIAL	5984.5	5984.5	98.37 %		14:26:07
3	Al 396.153Radial†	305.4	306.0	211.57 ug/L	211.57 ppb	14:26:27
3	Ca 317.933Radial†	151.9	127.3	193.50 ug/L	193.50 ppb	14:26:27
3	Fe 238.204 Radial†	20.7	12.6	106.61 ug/L	106.61 ppb	14:26:27
3	K 766.490 Radial†	3502.2	1155.9	191.18 ug/L	191.18 ppb	14:26:07
3	Mg 279.077 IEC†	8.6	6.3	206.54 ug/L	206.54 ppb	14:26:27
3	Na 589.592 Radial†	164.6	1194.9	319.13 ug/L	319.13 ppb	14:26:07
3	Sr 421.552†	836.0	836.5	4.8678 ug/L	4.8678 ppb	14:26:07
3	Sc 361.383	956701.7	956701.7	97.223 %		14:27:34
3	Y 371.029	844815.9	844815.9	96.859 %		14:27:34
3	Ag 328.068†	1659.6	1386.1	5.2859 ug/L	5.2859 ppb	14:27:39
3	As 188.979†	41.8	76.8	27.900 ug/L	27.900 ppb	14:27:59
3	B 249.677†	2353.3	2706.7	53.564 ug/L	53.564 ppb	14:27:39
3	Ba 233.527†	671.1	694.9	4.8966 ug/L	4.8966 ppb	14:27:59
3	Be 313.107†	9719.6	15065.3	4.7472 ug/L	4.7472 ppb	14:27:39
3	Cd 226.502†	275.7	482.9	4.7787 ug/L	4.7787 ppb	14:27:59
3	Co 228.616†	165.9	242.5	4.6524 ug/L	4.6524 ppb	14:27:59
3	Cr 267.716†	593.7	525.1	5.0496 ug/L	5.0496 ppb	14:27:59
3	Cu 324.752†	12846.6	4077.0	10.275 ug/L	10.275 ppb	14:27:39
3	Mn 257.610†	10377.3	10140.7	10.193 ug/L	10.193 ppb	14:27:39
3	Mo 202.031†	184.5	166.8	10.300 ug/L	10.300 ppb	14:27:59
3	Ni 231.604†	335.2	234.8	5.2444 ug/L	5.2444 ppb	14:27:59
3	P 214.914†	529.4	305.0	150.21 ug/L	150.21 ppb	14:27:59
3	Pb 220.353†	25.4	84.5	9.4853 ug/L	9.4853 ppb	14:27:59
3	S 181.975 Axial†	121.5	57.2	69.683 ug/L	69.683 ppb	14:27:59
3	Sb 206.836†	66.8	33.6	10.490 ug/L	10.490 ppb	14:27:59
3	Se 196.026†	36.7	58.9	30.987 ug/L	30.987 ppb	14:27:59
3	Si 251.611†	3982.2	3635.7	97.417 ug/L	97.417 ppb	14:27:59
3	Sn 189.927†	63.1	69.5	11.428 ug/L	11.428 ppb	14:27:59
3	Ti 334.940†	2623.3	3607.9	4.9587 ug/L	4.9587 ppb	14:27:39
3	Tl 190.801†	25.6	66.0	18.991 ug/L	18.991 ppb	14:27:59
3	U 409.014†	768.7	2175.4	49.009 ug/L	49.009 ppb	14:27:39
3	V 292.402†	-523.2	902.3	5.2296 ug/L	5.2296 ppb	14:27:39
3	Zn 213.857†	1871.9	1182.7	9.7843 ug/L	9.7843 ppb	14:27:59
3	SiO2†	4077.2	3717.6	213.20 ug/L	213.20 ppb	14:28:14

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	971374.1	98.714 %	1.3939			1.41%
Sc Radial	5474.3	98.0 %	0.93			0.95%
Y 371.029	859174.3	98.505 %	1.5217			1.54%
Y RADIAL	5946.1	97.74 %	0.998			1.02%
Ag 328.068†	1326.5	5.0607 ug/L	0.25280	5.0607 ppb	0.25280	5.00%
QC value within limits for Ag 328.068 Recovery = 101.21%						
Al 396.153Radial†	303.3	209.72 ug/L	2.460	209.72 ppb	2.460	1.17%
QC value within limits for Al 396.153Radial Recovery = 104.86%						
As 188.979†	73.1	26.549 ug/L	3.7588	26.549 ppb	3.7588	14.16%
QC value within limits for As 188.979 Recovery = 88.50%						
B 249.677†	2678.0	52.994 ug/L	0.4941	52.994 ppb	0.4941	0.93%
QC value within limits for B 249.677 Recovery = 105.99%						
Ba 233.527†	684.1	4.8201 ug/L	0.08011	4.8201 ppb	0.08011	1.66%
QC value within limits for Ba 233.527 Recovery = 96.40%						
Be 313.107†	14936.1	4.7063 ug/L	0.03542	4.7063 ppb	0.03542	0.75%
QC value within limits for Be 313.107 Recovery = 94.13%						
Ca 317.933Radial†	127.4	193.66 ug/L	0.636	193.66 ppb	0.636	0.33%

QC value within limits for Ca 317.933 Radial Recovery = 96.83%

Cd 226.502†	476.7	4.7166 ug/L	0.08422	4.7166 ppb	0.08422	1.79%
QC value within limits for Cd 226.502 Recovery = 94.33%						
Co 228.616†	245.2	4.7043 ug/L	0.12159	4.7043 ppb	0.12159	2.58%
QC value within limits for Co 228.616 Recovery = 94.09%						
Cr 267.716†	509.0	4.8939 ug/L	0.14529	4.8939 ppb	0.14529	2.97%
QC value within limits for Cr 267.716 Recovery = 97.88%						
Cu 324.752†	3915.1	9.8670 ug/L	0.38099	9.8670 ppb	0.38099	3.86%
QC value within limits for Cu 324.752 Recovery = 98.67%						
Fe 238.204 Radial†	13.4	112.94 ug/L	5.638	112.94 ppb	5.638	4.99%
QC value within limits for Fe 238.204 Radial Recovery = 112.94%						
K 766.490 Radial†	1144.0	189.22 ug/L	19.169	189.22 ppb	19.169	10.13%
QC value within limits for K 766.490 Radial Recovery = 126.14%						
Mg 279.077 IEC†	8.4	275.55 ug/L	60.132	275.55 ppb	60.132	21.82%
QC value within limits for Mg 279.077 IEC Recovery = 91.85%						
Mn 257.610†	9969.3	10.019 ug/L	0.1630	10.019 ppb	0.1630	1.63%
QC value within limits for Mn 257.610 Recovery = 100.19%						
Mo 202.031†	166.3	10.273 ug/L	0.1491	10.273 ppb	0.1491	1.45%
QC value within limits for Mo 202.031 Recovery = 102.73%						
Na 589.592 Radial†	1155.9	308.71 ug/L	9.035	308.71 ppb	9.035	2.93%
QC value within limits for Na 589.592 Radial Recovery = 102.90%						
Ni 231.604†	222.7	4.9746 ug/L	0.23889	4.9746 ppb	0.23889	4.80%
QC value within limits for Ni 231.604 Recovery = 99.49%						
P 214.914†	295.8	145.68 ug/L	4.285	145.68 ppb	4.285	2.94%
QC value within limits for P 214.914 Recovery = 97.12%						
Pb 220.353†	96.4	10.815 ug/L	1.2123	10.815 ppb	1.2123	11.21%
QC value within limits for Pb 220.353 Recovery = 108.15%						
S 181.975 Axial†	63.3	77.211 ug/L	8.4240	77.211 ppb	8.4240	10.91%
QC value within limits for S 181.975 Axial Recovery = 77.21%						
Sb 206.836†	33.5	10.459 ug/L	0.1255	10.459 ppb	0.1255	1.20%
QC value within limits for Sb 206.836 Recovery = 104.59%						
Se 196.026†	56.3	29.678 ug/L	3.4239	29.678 ppb	3.4239	11.54%
QC value within limits for Se 196.026 Recovery = 98.93%						
Si 251.611†	3570.7	95.675 ug/L	1.5312	95.675 ppb	1.5312	1.60%
QC value within limits for Si 251.611 Recovery = 95.68%						
Sn 189.927†	66.6	10.960 ug/L	0.7364	10.960 ppb	0.7364	6.72%
QC value within limits for Sn 189.927 Recovery = 109.60%						
Sr 421.552†	833.8	4.8522 ug/L	0.01436	4.8522 ppb	0.01436	0.30%
QC value within limits for Sr 421.552 Recovery = 97.04%						
Ti 334.940†	3524.1	4.8381 ug/L	0.14038	4.8381 ppb	0.14038	2.90%
QC value within limits for Ti 334.940 Recovery = 96.76%						
Tl 190.801†	62.7	18.029 ug/L	1.0816	18.029 ppb	1.0816	6.00%
QC value within limits for Tl 190.801 Recovery = 90.15%						
U 409.014†	2130.2	47.990 ug/L	1.7051	47.990 ppb	1.7051	3.55%
QC value within limits for U 409.014 Recovery = 95.98%						
V 292.402†	836.7	4.8640 ug/L	0.41846	4.8640 ppb	0.41846	8.60%
QC value within limits for V 292.402 Recovery = 97.28%						
Zn 213.857†	1151.2	9.5239 ug/L	0.22584	9.5239 ppb	0.22584	2.37%
QC value within limits for Zn 213.857 Recovery = 95.24%						
SiO2†	3676.8	210.86 ug/L	2.333	210.86 ppb	2.333	1.11%
QC value within limits for SiO2 Recovery = 99.00%						

All analyte(s) passed QC.

Sequence No.: 10

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 1/28/2010 14:30:26

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5569.1	5569.1	99.7 %		14:32:18
1	Y RADIAL	6051.6	6051.6	99.47 %		14:32:18
1	Al 396.153Radial†	13.4	9.7	6.6883 ug/L	6.6883 ppb	14:32:38
1	Ca 317.933Radial†	25.4	-1.3	-1.9470 ug/L	-1.9470 ppb	14:32:38
1	Fe 238.204 Radial†	8.6	0.2	1.7184 ug/L	1.7184 ppb	14:32:38
1	K 766.490 Radial†	2466.3	78.1	12.924 ug/L	12.924 ppb	14:32:18
1	Mg 279.077 IEC†	3.6	1.2	40.477 ug/L	40.477 ppb	14:32:38
1	Na 589.592 Radial†	-956.9	68.4	18.256 ug/L	18.256 ppb	14:32:18
1	Sr 421.552†	21.8	10.7	0.0621 ug/L	0.0621 ppb	14:32:18
1	Sc 361.383	973524.0	973524.0	98.932 %		14:33:35
1	Y 371.029	860522.3	860522.3	98.660 %		14:33:35
1	Ag 328.068†	375.5	58.5	0.2292 ug/L	0.2292 ppb	14:33:40
1	As 188.979†	-29.7	3.8	1.3802 ug/L	1.3802 ppb	14:34:00
1	B 249.677†	-71.0	214.5	4.2464 ug/L	4.2464 ppb	14:34:00
1	Ba 233.527†	-8.3	-3.9	-0.0262 ug/L	-0.0262 ppb	14:34:00
1	Be 313.107†	-5075.2	-61.9	-0.0197 ug/L	-0.0197 ppb	14:33:40
1	Cd 226.502†	-188.8	8.5	0.0830 ug/L	0.0830 ppb	14:34:00
1	Co 228.616†	-71.4	-0.4	-0.0072 ug/L	-0.0072 ppb	14:34:00
1	Cr 267.716†	86.3	1.7	0.0189 ug/L	0.0189 ppb	14:34:00
1	Cu 324.752†	9179.4	141.9	0.3615 ug/L	0.3615 ppb	14:33:40
1	Mn 257.610†	559.2	32.3	0.0310 ug/L	0.0310 ppb	14:34:00
1	Mo 202.031†	26.5	3.8	0.2374 ug/L	0.2374 ppb	14:34:00
1	Ni 231.604†	113.7	4.9	0.1099 ug/L	0.1099 ppb	14:34:00
1	P 214.914†	252.8	16.0	7.9226 ug/L	7.9226 ppb	14:34:00
1	Pb 220.353†	-49.5	8.3	0.9280 ug/L	0.9280 ppb	14:34:00
1	S 181.975 Axial†	44.4	-22.9	-27.963 ug/L	-27.963 ppb	14:34:00
1	Sb 206.836†	32.0	-2.8	-0.8163 ug/L	-0.8163 ppb	14:34:00
1	Se 196.026†	-20.4	0.5	0.2721 ug/L	0.2721 ppb	14:34:00
1	Si 251.611†	521.9	67.2	1.8010 ug/L	1.8010 ppb	14:34:00
1	Sn 189.927†	1.0	5.6	0.9126 ug/L	0.9126 ppb	14:34:00
1	Ti 334.940†	-976.2	-77.0	-0.1073 ug/L	-0.1073 ppb	14:33:40
1	Tl 190.801†	-50.9	-11.7	-3.3465 ug/L	-3.3465 ppb	14:34:00
1	U 409.014†	-1606.3	-238.9	-5.3855 ug/L	-5.3855 ppb	14:33:35
1	V 292.402†	-1359.8	65.9	0.3597 ug/L	0.3597 ppb	14:33:40
1	Zn 213.857†	773.5	39.1	0.3242 ug/L	0.3242 ppb	14:34:00
1	SiO2†	549.9	79.7	4.5712 ug/L	4.5712 ppb	14:35:21
2	Sc Radial	5445.6	5445.6	97.5 %		14:32:43
2	Y RADIAL	5932.5	5932.5	97.52 %		14:32:43
2	Al 396.153Radial†	-5.3	-9.1	-6.3538 ug/L	-6.3538 ppb	14:33:03
2	Ca 317.933Radial†	23.4	-2.8	-4.2868 ug/L	-4.2868 ppb	14:33:03
2	Fe 238.204 Radial†	9.0	0.9	7.2187 ug/L	7.2187 ppb	14:33:03
2	K 766.490 Radial†	2508.2	177.2	29.339 ug/L	29.339 ppb	14:32:43
2	Mg 279.077 IEC†	2.3	-0.0	-0.1100 ug/L	-0.1100 ppb	14:33:03
2	Na 589.592 Radial†	-963.5	39.9	10.662 ug/L	10.662 ppb	14:32:43
2	Sr 421.552†	16.0	5.2	0.0305 ug/L	0.0305 ppb	14:32:43
2	Sc 361.383	967530.7	967530.7	98.323 %		14:34:05
2	Y 371.029	856913.2	856913.2	98.246 %		14:34:05
2	Ag 328.068†	331.8	16.5	0.0626 ug/L	0.0626 ppb	14:34:10
2	As 188.979†	-25.8	7.6	2.7436 ug/L	2.7436 ppb	14:34:30
2	B 249.677†	-81.2	203.7	4.0316 ug/L	4.0316 ppb	14:34:30
2	Ba 233.527†	0.2	4.8	0.0339 ug/L	0.0339 ppb	14:34:30
2	Be 313.107†	-4993.4	-10.5	-0.0035 ug/L	-0.0035 ppb	14:34:10
2	Cd 226.502†	-199.4	-3.5	-0.0350 ug/L	-0.0350 ppb	14:34:30
2	Co 228.616†	-76.8	-6.3	-0.1198 ug/L	-0.1198 ppb	14:34:30
2	Cr 267.716†	103.8	20.0	0.1920 ug/L	0.1920 ppb	14:34:30
2	Cu 324.752†	9013.9	31.0	0.0771 ug/L	0.0771 ppb	14:34:10
2	Mn 257.610†	587.3	64.4	0.0654 ug/L	0.0654 ppb	14:34:30
2	Mo 202.031†	28.7	6.3	0.3876 ug/L	0.3876 ppb	14:34:30
2	Ni 231.604†	90.9	-17.5	-0.3914 ug/L	-0.3914 ppb	14:34:30

2	P 214.914†	249.3	14.1	7.0054 ug/L	7.0054 ppb	14:34:30
2	Pb 220.353†	-51.0	6.5	0.7246 ug/L	0.7246 ppb	14:34:30
2	S 181.975 Axial†	46.9	-20.1	-24.509 ug/L	-24.509 ppb	14:34:30
2	Sb 206.836†	39.3	4.8	1.4902 ug/L	1.4902 ppb	14:34:30
2	Se 196.026†	-14.6	6.3	3.3097 ug/L	3.3097 ppb	14:34:30
2	Si 251.611†	580.4	130.0	3.4836 ug/L	3.4836 ppb	14:34:30
2	Sn 189.927†	6.4	11.1	1.8264 ug/L	1.8264 ppb	14:34:30
2	Ti 334.940†	-960.7	-67.4	-0.0948 ug/L	-0.0948 ppb	14:34:10
2	Tl 190.801†	-35.5	3.7	1.0576 ug/L	1.0576 ppb	14:34:30
2	U 409.014†	-1228.9	134.9	3.0396 ug/L	3.0396 ppb	14:34:05
2	V 292.402†	-1421.6	-5.4	-0.0200 ug/L	-0.0200 ppb	14:34:10
2	Zn 213.857†	772.3	42.8	0.3575 ug/L	0.3575 ppb	14:34:30
2	SiO2†	546.8	80.0	4.5850 ug/L	4.5850 ppb	14:35:41
3	Sc Radial	5436.8	5436.8	97.3 %		14:33:08
3	Y RADIAL	5916.8	5916.8	97.26 %		14:33:08
3	Al 396.153Radial†	7.3	3.8	2.6180 ug/L	2.6180 ppb	14:33:28
3	Ca 317.933Radial†	22.2	-3.9	-5.9971 ug/L	-5.9971 ppb	14:33:28
3	Fe 238.204 Radial†	10.3	2.2	18.314 ug/L	18.314 ppb	14:33:28
3	K 766.490 Radial†	2565.8	240.5	39.819 ug/L	39.819 ppb	14:33:08
3	Mg 279.077 IEC†	1.3	-1.1	-35.496 ug/L	-35.496 ppb	14:33:28
3	Na 589.592 Radial†	-931.4	71.2	19.014 ug/L	19.014 ppb	14:33:08
3	Sr 421.552†	26.1	15.7	0.0913 ug/L	0.0913 ppb	14:33:08
3	Sc 361.383	963859.1	963859.1	97.950 %		14:34:35
3	Y 371.029	853225.1	853225.1	97.823 %		14:34:35
3	Ag 328.068†	350.7	37.0	0.1490 ug/L	0.1490 ppb	14:34:40
3	As 188.979†	-22.9	10.4	3.7744 ug/L	3.7744 ppb	14:35:00
3	B 249.677†	-67.9	216.9	4.2913 ug/L	4.2913 ppb	14:35:00
3	Ba 233.527†	10.0	14.7	0.1050 ug/L	0.1050 ppb	14:35:00
3	Be 313.107†	-4941.9	22.7	0.0069 ug/L	0.0069 ppb	14:34:40
3	Cd 226.502†	-205.3	-10.3	-0.1040 ug/L	-0.1040 ppb	14:35:00
3	Co 228.616†	-62.1	8.4	0.1622 ug/L	0.1622 ppb	14:35:00
3	Cr 267.716†	108.5	25.2	0.2444 ug/L	0.2444 ppb	14:35:00
3	Cu 324.752†	8964.9	15.9	0.0416 ug/L	0.0416 ppb	14:34:40
3	Mn 257.610†	577.1	56.3	0.0598 ug/L	0.0598 ppb	14:35:00
3	Mo 202.031†	26.9	4.5	0.2815 ug/L	0.2815 ppb	14:35:00
3	Ni 231.604†	90.6	-17.5	-0.3919 ug/L	-0.3919 ppb	14:35:00
3	P 214.914†	254.1	19.9	9.9181 ug/L	9.9181 ppb	14:35:00
3	Pb 220.353†	-49.6	7.7	0.8567 ug/L	0.8567 ppb	14:35:00
3	S 181.975 Axial†	51.9	-14.8	-18.094 ug/L	-18.094 ppb	14:35:00
3	Sb 206.836†	37.8	3.5	1.0718 ug/L	1.0718 ppb	14:35:00
3	Se 196.026†	-21.8	-1.1	-0.5064 ug/L	-0.5064 ppb	14:35:00
3	Si 251.611†	515.1	65.6	1.7556 ug/L	1.7556 ppb	14:35:00
3	Sn 189.927†	1.9	6.5	1.0660 ug/L	1.0660 ppb	14:35:00
3	Ti 334.940†	-968.4	-78.9	-0.1065 ug/L	-0.1065 ppb	14:34:40
3	Tl 190.801†	-39.3	-0.3	-0.1023 ug/L	-0.1023 ppb	14:35:00
3	U 409.014†	-1389.7	-34.1	-0.7704 ug/L	-0.7704 ppb	14:34:35
3	V 292.402†	-1343.7	68.6	0.3802 ug/L	0.3802 ppb	14:34:40
3	Zn 213.857†	775.9	49.5	0.4123 ug/L	0.4123 ppb	14:35:00
3	SiO2†	523.3	58.1	3.3309 ug/L	3.3309 ppb	14:36:01

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	968304.6	98.402 %		0.4958			0.50%
Sc Radial	5483.9	98.2 %		1.32			1.35%
Y 371.029	856886.9	98.243 %		0.4183			0.43%
Y RADIAL	5967.0	98.08 %		1.211			1.23%
Ag 328.068†	37.4	0.1469 ug/L		0.08332	0.1469 ppb	0.08332	56.70%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	1.4	0.9842 ug/L		6.67277	0.9842 ppb	6.67277	678.00%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	7.3	2.6327 ug/L		1.20090	2.6327 ppb	1.20090	45.61%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	211.7	4.1898 ug/L		0.13881	4.1898 ppb	0.13881	3.31%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	5.2	0.0376 ug/L		0.06566	0.0376 ppb	0.06566	174.84%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	-16.6	-0.0054 ug/L		0.01340	-0.0054 ppb	0.01340	246.47%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	-2.7	-4.0770 ug/L		2.03320	-4.0770 ppb	2.03320	49.87%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated						
Cd 226.502†	-1.8	-0.0187 ug/L	0.09456	-0.0187 ppb	0.09456	506.41%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	0.6	0.0117 ug/L	0.14192	0.0117 ppb	0.14192	>999.9%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	15.7	0.1518 ug/L	0.11803	0.1518 ppb	0.11803	77.76%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	63.0	0.1601 ug/L	0.17533	0.1601 ppb	0.17533	109.54%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	1.1	9.0836 ug/L	8.45337	9.0836 ppb	8.45337	93.06%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	165.3	27.361 ug/L	13.5562	27.361 ppb	13.5562	49.55%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	0.0	1.6238 ug/L	38.01602	1.6238 ppb	38.01602	>999.9%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	51.0	0.0521 ug/L	0.01848	0.0521 ppb	0.01848	35.51%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	4.9	0.3022 ug/L	0.07721	0.3022 ppb	0.07721	25.55%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	59.8	15.978 ug/L	4.6187	15.978 ppb	4.6187	28.91%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	-10.0	-0.2245 ug/L	0.28955	-0.2245 ppb	0.28955	128.98%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	16.7	8.2820 ug/L	1.48925	8.2820 ppb	1.48925	17.98%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	7.5	0.8364 ug/L	0.10323	0.8364 ppb	0.10323	12.34%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	-19.3	-23.522 ug/L	5.0078	-23.522 ppb	5.0078	21.29%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	1.8	0.5819 ug/L	1.22884	0.5819 ppb	1.22884	211.18%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	1.9	1.0251 ug/L	2.01645	1.0251 ppb	2.01645	196.70%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	87.6	2.3468 ug/L	0.98481	2.3468 ppb	0.98481	41.96%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	7.7	1.2683 ug/L	0.48932	1.2683 ppb	0.48932	38.58%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	10.5	0.0613 ug/L	0.03041	0.0613 ppb	0.03041	49.63%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	-74.4	-0.1029 ug/L	0.00696	-0.1029 ppb	0.00696	6.77%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	-2.8	-0.7971 ug/L	2.28279	-0.7971 ppb	2.28279	286.40%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	-46.0	-1.0387 ug/L	4.21896	-1.0387 ppb	4.21896	406.16%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	43.0	0.2400 ug/L	0.22537	0.2400 ppb	0.22537	93.91%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	43.8	0.3646 ug/L	0.04450	0.3646 ppb	0.04450	12.20%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	72.6	4.1624 ug/L	0.72010	4.1624 ppb	0.72010	17.30%
QC value within limits for SiO2 Recovery = Not calculated						
All analyte(s) passed QC.						

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Analysis Begun

Start Time: 1/28/2010 15:06:46

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\012810B.sif

Batch ID:

Results Data Set: 012810

Results Library: C:\pe\Optima3\Results\Results.mdb

Sequence No.: 1

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 1/28/2010 15:06:46

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5311.3	5311.3	95.1 %		15:08:38
1	Y RADIAL	5706.9	5706.9	93.81 %		15:08:38
1	Al 396.153Radial†	6788.8	7134.9	4921.8 ug/L	4921.8 ppb	15:08:38
1	Ca 317.933Radial†	3227.3	3366.8	5119.2 ug/L	5119.2 ppb	15:08:58
1	Fe 238.204 Radial†	594.5	616.8	5222.6 ug/L	5222.6 ppb	15:08:58
1	K 766.490 Radial†	31456.5	30682.2	5073.8 ug/L	5073.8 ppb	15:08:38
1	Mg 279.077 IEC†	156.8	162.5	5303.5 ug/L	5303.5 ppb	15:08:58
1	Na 589.592 Radial†	34313.1	37109.2	9910.8 ug/L	9910.8 ppb	15:08:38
1	Sr 421.552†	81218.5	85392.3	497.03 ug/L	497.03 ppb	15:08:38
1	Sc 361.383	957891.7	957891.7	97.344 %		15:09:56
1	Y 371.029	839502.8	839502.8	96.250 %		15:09:56
1	Ag 328.068†	125827.4	128939.8	493.75 ug/L	493.75 ppb	15:10:01
1	As 188.979†	1244.0	1311.8	480.11 ug/L	480.11 ppb	15:10:21
1	B 249.677†	23155.8	24073.9	474.45 ug/L	474.45 ppb	15:10:01
1	Ba 233.527†	66331.2	68145.8	480.00 ug/L	480.00 ppb	15:10:01
1	Be 313.107†	1455638.2	1500425.6	472.79 ug/L	472.79 ppb	15:09:56
1	Cd 226.502†	47179.4	48666.2	481.27 ug/L	481.27 ppb	15:10:01
1	Co 228.616†	24407.9	25145.7	481.27 ug/L	481.27 ppb	15:10:01
1	Cr 267.716†	48298.4	49530.8	477.84 ug/L	477.84 ppb	15:10:01
1	Cu 324.752†	192561.4	188679.2	476.52 ug/L	476.52 ppb	15:10:01
1	Mn 257.610†	462791.4	474886.5	477.55 ug/L	477.55 ppb	15:09:56
1	Mo 202.031†	7641.2	7826.8	483.34 ug/L	483.34 ppb	15:10:21
1	Ni 231.604†	21022.1	21485.7	479.92 ug/L	479.92 ppb	15:10:01
1	P 214.914†	4881.7	4775.4	2289.7 ug/L	2289.7 ppb	15:10:21
1	Pb 220.353†	4093.5	4263.6	477.13 ug/L	477.13 ppb	15:10:21
1	S 181.975 Axial†	830.6	785.4	956.87 ug/L	956.87 ppb	15:10:21
1	Sb 206.836†	1604.8	1613.4	502.89 ug/L	502.89 ppb	15:10:21
1	Se 196.026†	879.6	924.7	499.56 ug/L	499.56 ppb	15:10:21
1	Si 251.611†	89984.6	91979.7	2461.8 ug/L	2461.8 ppb	15:10:01
1	Sn 189.927†	2868.0	2950.8	484.91 ug/L	484.91 ppb	15:10:21
1	Ti 334.940†	347149.4	357531.6	492.67 ug/L	492.67 ppb	15:09:56
1	Tl 190.801†	1571.3	1653.9	477.44 ug/L	477.44 ppb	15:10:21
1	U 409.014†	19572.4	21491.2	482.73 ug/L	482.73 ppb	15:10:01
1	V 292.402†	82067.0	85746.7	482.43 ug/L	482.43 ppb	15:10:01
1	Zn 213.857†	56900.1	57710.0	476.04 ug/L	476.04 ppb	15:10:01
1	SiO2†	88786.1	90732.6	5197.2 ug/L	5197.2 ppb	15:11:29
2	Sc Radial	5430.4	5430.4	97.2 %		15:09:03
2	Y RADIAL	5892.8	5892.8	96.86 %		15:09:03
2	Al 396.153Radial†	6904.9	7097.7	4895.9 ug/L	4895.9 ppb	15:09:03
2	Ca 317.933Radial†	3191.9	3256.0	4950.7 ug/L	4950.7 ppb	15:09:23
2	Fe 238.204 Radial†	588.3	596.7	5053.0 ug/L	5053.0 ppb	15:09:23
2	K 766.490 Radial†	31888.2	30400.9	5027.3 ug/L	5027.3 ppb	15:09:03
2	Mg 279.077 IEC†	154.2	156.2	5097.3 ug/L	5097.3 ppb	15:09:23
2	Na 589.592 Radial†	34684.2	36699.7	9801.4 ug/L	9801.4 ppb	15:09:03
2	Sr 421.552†	82123.6	84450.6	491.55 ug/L	491.55 ppb	15:09:03
2	Sc 361.383	953028.6	953028.6	96.850 %		15:10:27
2	Y 371.029	836918.9	836918.9	95.953 %		15:10:27

2	Ag 328.068†	126630.4	130428.5	499.39 ug/L	499.39 ppb	15:10:32
2	As 188.979†	1231.6	1305.5	477.78 ug/L	477.78 ppb	15:10:52
2	B 249.677†	23514.9	24566.1	484.21 ug/L	484.21 ppb	15:10:32
2	Ba 233.527†	66773.0	68949.6	485.66 ug/L	485.66 ppb	15:10:32
2	Be 313.107†	1449054.0	1501257.8	473.04 ug/L	473.04 ppb	15:10:27
2	Cd 226.502†	47505.3	49249.9	487.06 ug/L	487.06 ppb	15:10:32
2	Co 228.616†	24607.0	25479.2	487.66 ug/L	487.66 ppb	15:10:32
2	Cr 267.716†	48598.7	50094.0	483.27 ug/L	483.27 ppb	15:10:32
2	Cu 324.752†	194188.9	191369.1	483.31 ug/L	483.31 ppb	15:10:32
2	Mn 257.610†	458422.5	472801.4	475.45 ug/L	475.45 ppb	15:10:27
2	Mo 202.031†	7628.1	7853.2	484.96 ug/L	484.96 ppb	15:10:52
2	Ni 231.604†	21171.5	21750.2	485.83 ug/L	485.83 ppb	15:10:32
2	P 214.914†	4847.5	4765.6	2283.6 ug/L	2283.6 ppb	15:10:52
2	Pb 220.353†	4095.6	4287.1	479.77 ug/L	479.77 ppb	15:10:52
2	S 181.975 Axial†	822.0	781.0	951.40 ug/L	951.40 ppb	15:10:52
2	Sb 206.836†	1603.2	1620.2	505.02 ug/L	505.02 ppb	15:10:52
2	Se 196.026†	865.8	915.1	494.03 ug/L	494.03 ppb	15:10:52
2	Si 251.611†	90606.3	93093.3	2491.7 ug/L	2491.7 ppb	15:10:32
2	Sn 189.927†	2863.7	2961.4	486.62 ug/L	486.62 ppb	15:10:52
2	Ti 334.940†	344229.4	356336.4	491.02 ug/L	491.02 ppb	15:10:27
2	Tl 190.801†	1560.2	1650.7	476.47 ug/L	476.47 ppb	15:10:52
2	U 409.014†	19766.2	21793.9	489.56 ug/L	489.56 ppb	15:10:32
2	V 292.402†	82765.9	86898.5	488.88 ug/L	488.88 ppb	15:10:32
2	Zn 213.857†	57304.4	58425.7	481.97 ug/L	481.97 ppb	15:10:32
2	SiO2†	89337.0	91766.9	5256.6 ug/L	5256.6 ppb	15:11:34
3	Sc Radial	5372.6	5372.6	96.2 %		15:09:28
3	Y RADIAL	5812.4	5812.4	95.54 %		15:09:28
3	Al 396.153Radial†	6818.5	7084.4	4886.8 ug/L	4886.8 ppb	15:09:28
3	Ca 317.933Radial†	3248.6	3350.3	5094.2 ug/L	5094.2 ppb	15:09:48
3	Fe 238.204 Radial†	596.6	611.8	5180.6 ug/L	5180.6 ppb	15:09:48
3	K 766.490 Radial†	31590.7	30444.7	5034.5 ug/L	5034.5 ppb	15:09:28
3	Mg 279.077 IEC†	158.2	162.1	5289.8 ug/L	5289.8 ppb	15:09:48
3	Na 589.592 Radial†	34416.5	36805.5	9829.7 ug/L	9829.7 ppb	15:09:28
3	Sr 421.552†	81382.5	84589.4	492.35 ug/L	492.35 ppb	15:09:28
3	Sc 361.383	954330.8	954330.8	96.982 %		15:10:58
3	Y 371.029	836126.3	836126.3	95.863 %		15:10:58
3	Ag 328.068†	124935.6	128502.5	492.07 ug/L	492.07 ppb	15:11:03
3	As 188.979†	1238.6	1310.9	479.79 ug/L	479.79 ppb	15:11:23
3	B 249.677†	23019.8	24022.4	473.44 ug/L	473.44 ppb	15:11:03
3	Ba 233.527†	65798.1	67850.3	477.92 ug/L	477.92 ppb	15:11:03
3	Be 313.107†	1451396.3	1501631.4	473.16 ug/L	473.16 ppb	15:10:58
3	Cd 226.502†	47015.8	48678.3	481.39 ug/L	481.39 ppb	15:11:03
3	Co 228.616†	24220.1	25045.6	479.35 ug/L	479.35 ppb	15:11:03
3	Cr 267.716†	47967.9	49375.1	476.34 ug/L	476.34 ppb	15:11:03
3	Cu 324.752†	190727.4	187526.3	473.61 ug/L	473.61 ppb	15:11:03
3	Mn 257.610†	460726.8	474531.6	477.19 ug/L	477.19 ppb	15:10:58
3	Mo 202.031†	7616.9	7831.0	483.60 ug/L	483.60 ppb	15:11:23
3	Ni 231.604†	20871.4	21410.9	478.25 ug/L	478.25 ppb	15:11:03
3	P 214.914†	4868.8	4780.8	2293.0 ug/L	2293.0 ppb	15:11:23
3	Pb 220.353†	4097.5	4283.4	479.34 ug/L	479.34 ppb	15:11:23
3	S 181.975 Axial†	832.4	790.5	962.99 ug/L	962.99 ppb	15:11:23
3	Sb 206.836†	1604.5	1619.3	504.69 ug/L	504.69 ppb	15:11:23
3	Se 196.026†	883.6	932.3	503.34 ug/L	503.34 ppb	15:11:23
3	Si 251.611†	89172.4	91487.1	2448.6 ug/L	2448.6 ppb	15:11:03
3	Sn 189.927†	2861.4	2955.1	485.60 ug/L	485.60 ppb	15:11:23
3	Ti 334.940†	345240.6	356894.2	491.80 ug/L	491.80 ppb	15:10:58
3	Tl 190.801†	1573.8	1662.6	479.93 ug/L	479.93 ppb	15:11:23
3	U 409.014†	19324.8	21310.9	478.68 ug/L	478.68 ppb	15:11:03
3	V 292.402†	81504.3	85481.1	480.96 ug/L	480.96 ppb	15:11:03
3	Zn 213.857†	56628.9	57648.4	475.55 ug/L	475.55 ppb	15:11:03
3	SiO2†	88650.7	90933.4	5208.7 ug/L	5208.7 ppb	15:11:39

Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	955083.7	97.058 %		0.2558			0.26%
Sc Radial	5371.4	96.2 %		1.07			1.11%
Y 371.029	837516.0	96.022 %		0.2024			0.21%
Y RADIAL	5804.0	95.40 %		1.532			1.61%
Ag 328.068†	129290.3	495.07 ug/L		3.830	495.07 ppb	3.830	0.77%

QC value within limits for Ag 328.068 Recovery = 99.01%							
Al 396.153Radial†	7105.7	4901.5 ug/L	18.14	4901.5 ppb	18.14	0.37%	
QC value within limits for Al 396.153Radial Recovery = 98.03%							
As 188.979†	1309.4	479.22 ug/L	1.265	479.22 ppb	1.265	0.26%	
QC value within limits for As 188.979 Recovery = 95.84%							
B 249.677†	24220.8	477.37 ug/L	5.944	477.37 ppb	5.944	1.25%	
QC value within limits for B 249.677 Recovery = 95.47%							
Ba 233.527†	68315.2	481.19 ug/L	4.004	481.19 ppb	4.004	0.83%	
QC value within limits for Ba 233.527 Recovery = 96.24%							
Be 313.107†	1501104.9	473.00 ug/L	0.193	473.00 ppb	0.193	0.04%	
QC value within limits for Be 313.107 Recovery = 94.60%							
Ca 317.933Radial†	3324.4	5054.7 ug/L	90.92	5054.7 ppb	90.92	1.80%	
QC value within limits for Ca 317.933Radial Recovery = 101.09%							
Cd 226.502†	48864.8	483.24 ug/L	3.312	483.24 ppb	3.312	0.69%	
QC value within limits for Cd 226.502 Recovery = 96.65%							
Co 228.616†	25223.5	482.76 ug/L	4.349	482.76 ppb	4.349	0.90%	
QC value within limits for Co 228.616 Recovery = 96.55%							
Cr 267.716†	49666.6	479.15 ug/L	3.647	479.15 ppb	3.647	0.76%	
QC value within limits for Cr 267.716 Recovery = 95.83%							
Cu 324.752†	189191.5	477.81 ug/L	4.973	477.81 ppb	4.973	1.04%	
QC value within limits for Cu 324.752 Recovery = 95.56%							
Fe 238.204 Radial†	608.4	5152.0 ug/L	88.36	5152.0 ppb	88.36	1.72%	
QC value within limits for Fe 238.204 Radial Recovery = 103.04%							
K 766.490 Radial†	30509.3	5045.2 ug/L	25.01	5045.2 ppb	25.01	0.50%	
QC value within limits for K 766.490 Radial Recovery = 100.90%							
Mg 279.077 IEC†	160.3	5230.2 ug/L	115.27	5230.2 ppb	115.27	2.20%	
QC value within limits for Mg 279.077 IEC Recovery = 104.60%							
Mn 257.610†	474073.1	476.73 ug/L	1.125	476.73 ppb	1.125	0.24%	
QC value within limits for Mn 257.610 Recovery = 95.35%							
Mo 202.031†	7837.0	483.96 ug/L	0.869	483.96 ppb	0.869	0.18%	
QC value within limits for Mo 202.031 Recovery = 96.79%							
Na 589.592 Radial†	36871.5	9847.3 ug/L	56.78	9847.3 ppb	56.78	0.58%	
QC value within limits for Na 589.592 Radial Recovery = 98.47%							
Ni 231.604†	21548.9	481.34 ug/L	3.982	481.34 ppb	3.982	0.83%	
QC value within limits for Ni 231.604 Recovery = 96.27%							
P 214.914†	4774.0	2288.7 ug/L	4.75	2288.7 ppb	4.75	0.21%	
QC value within limits for P 214.914 Recovery = 91.55%							
Pb 220.353†	4278.0	478.74 ug/L	1.414	478.74 ppb	1.414	0.30%	
QC value within limits for Pb 220.353 Recovery = 95.75%							
S 181.975 Axial†	785.6	957.08 ug/L	5.799	957.08 ppb	5.799	0.61%	
QC value within limits for S 181.975 Axial Recovery = 95.71%							
Sb 206.836†	1617.6	504.20 ug/L	1.148	504.20 ppb	1.148	0.23%	
QC value within limits for Sb 206.836 Recovery = 100.84%							
Se 196.026†	924.0	498.98 ug/L	4.685	498.98 ppb	4.685	0.94%	
QC value within limits for Se 196.026 Recovery = 99.80%							
Si 251.611†	92186.7	2467.4 ug/L	22.07	2467.4 ppb	22.07	0.89%	
QC value within limits for Si 251.611 Recovery = 98.70%							
Sn 189.927†	2955.8	485.71 ug/L	0.857	485.71 ppb	0.857	0.18%	
QC value within limits for Sn 189.927 Recovery = 97.14%							
Sr 421.552†	84810.8	493.64 ug/L	2.959	493.64 ppb	2.959	0.60%	
QC value within limits for Sr 421.552 Recovery = 98.73%							
Ti 334.940†	356920.7	491.83 ug/L	0.830	491.83 ppb	0.830	0.17%	
QC value within limits for Ti 334.940 Recovery = 98.37%							
Tl 190.801†	1655.7	477.95 ug/L	1.788	477.95 ppb	1.788	0.37%	
QC value within limits for Tl 190.801 Recovery = 95.59%							
U 409.014†	21532.0	483.66 ug/L	5.501	483.66 ppb	5.501	1.14%	
QC value within limits for U 409.014 Recovery = 96.73%							
V 292.402†	86042.1	484.09 ug/L	4.214	484.09 ppb	4.214	0.87%	
QC value within limits for V 292.402 Recovery = 96.82%							
Zn 213.857†	57928.0	477.86 ug/L	3.572	477.86 ppb	3.572	0.75%	
QC value within limits for Zn 213.857 Recovery = 95.57%							
SiO2†	91144.3	5220.8 ug/L	31.47	5220.8 ppb	31.47	0.60%	
QC value within limits for SiO2 Recovery = 97.63%							
All analyte(s) passed QC.							

Sequence No.: 2

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 1/28/2010 15:13:50

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5582.9	5582.9	100.0 %		15:15:42
1	Y RADIAL	6084.0	6084.0	100.0 %		15:15:42
1	Al 396.153Radial†	4.3	0.5	0.3707 ug/L	0.3707 ppb	15:16:02
1	Ca 317.933Radial†	28.0	1.2	1.8980 ug/L	1.8980 ppb	15:16:02
1	Fe 238.204 Radial†	9.0	0.6	4.8884 ug/L	4.8884 ppb	15:16:02
1	K 766.490 Radial†	2492.5	98.2	16.260 ug/L	16.260 ppb	15:15:42
1	Mg 279.077 IEC†	1.4	-1.0	-33.575 ug/L	-33.575 ppb	15:16:02
1	Na 589.592 Radial†	-966.8	60.9	16.263 ug/L	16.263 ppb	15:15:42
1	Sr 421.552†	15.6	4.4	0.0256 ug/L	0.0256 ppb	15:15:42
1	Sc 361.383	960037.5	960037.5	97.562 %		15:16:59
1	Y 371.029	850843.8	850843.8	97.550 %		15:16:59
1	Ag 328.068†	306.1	-7.3	-0.0201 ug/L	-0.0201 ppb	15:17:04
1	As 188.979†	-25.3	7.9	2.8794 ug/L	2.8794 ppb	15:17:24
1	B 249.677†	-99.5	184.3	3.6474 ug/L	3.6474 ppb	15:17:24
1	Ba 233.527†	6.8	11.5	0.0814 ug/L	0.0814 ppb	15:17:24
1	Be 313.107†	-4951.1	-6.8	-0.0024 ug/L	-0.0024 ppb	15:17:04
1	Cd 226.502†	-198.1	-3.7	-0.0384 ug/L	-0.0384 ppb	15:17:24
1	Co 228.616†	-60.1	10.2	0.1947 ug/L	0.1947 ppb	15:17:24
1	Cr 267.716†	108.2	25.4	0.2473 ug/L	0.2473 ppb	15:17:24
1	Cu 324.752†	9155.9	248.2	0.6306 ug/L	0.6306 ppb	15:17:04
1	Mn 257.610†	565.1	46.3	0.0483 ug/L	0.0483 ppb	15:17:24
1	Mo 202.031†	19.8	-2.7	-0.1645 ug/L	-0.1645 ppb	15:17:24
1	Ni 231.604†	103.9	-3.4	-0.0771 ug/L	-0.0771 ppb	15:17:24
1	P 214.914†	256.1	23.0	11.345 ug/L	11.345 ppb	15:17:24
1	Pb 220.353†	-49.9	7.2	0.8027 ug/L	0.8027 ppb	15:17:24
1	S 181.975 Axial†	48.0	-18.6	-22.639 ug/L	-22.639 ppb	15:17:24
1	Sb 206.836†	45.3	11.3	3.4021 ug/L	3.4021 ppb	15:17:24
1	Se 196.026†	-13.7	7.0	3.6787 ug/L	3.6787 ppb	15:17:24
1	Si 251.611†	513.3	65.8	1.7673 ug/L	1.7673 ppb	15:17:24
1	Sn 189.927†	-4.6	-0.2	-0.0248 ug/L	-0.0248 ppb	15:17:24
1	Ti 334.940†	-973.4	-88.0	-0.1156 ug/L	-0.1156 ppb	15:17:04
1	Tl 190.801†	-44.7	-6.0	-1.7326 ug/L	-1.7326 ppb	15:17:24
1	U 409.014†	-1626.7	-282.7	-6.3720 ug/L	-6.3720 ppb	15:17:04
1	V 292.402†	-1366.7	39.6	0.2039 ug/L	0.2039 ppb	15:17:04
1	Zn 213.857†	774.6	51.2	0.4252 ug/L	0.4252 ppb	15:17:24
1	SiO2†	477.6	13.5	0.7782 ug/L	0.7782 ppb	15:18:30
2	Sc Radial	5397.5	5397.5	96.6 %		15:16:07
2	Y RADIAL	5845.8	5845.8	96.09 %		15:16:07
2	Al 396.153Radial†	17.4	14.3	9.9165 ug/L	9.9165 ppb	15:16:27
2	Ca 317.933Radial†	29.2	3.5	5.3166 ug/L	5.3166 ppb	15:16:27
2	Fe 238.204 Radial†	8.2	0.1	0.8568 ug/L	0.8568 ppb	15:16:27
2	K 766.490 Radial†	2586.8	281.5	46.601 ug/L	46.601 ppb	15:16:07
2	Mg 279.077 IEC†	1.4	-0.9	-30.514 ug/L	-30.514 ppb	15:16:27
2	Na 589.592 Radial†	-956.0	38.8	10.364 ug/L	10.364 ppb	15:16:07
2	Sr 421.552†	21.5	11.0	0.0643 ug/L	0.0643 ppb	15:16:07
2	Sc 361.383	962559.4	962559.4	97.818 %		15:17:29
2	Y 371.029	853882.6	853882.6	97.898 %		15:17:29
2	Ag 328.068†	485.0	174.8	0.6663 ug/L	0.6663 ppb	15:17:34
2	As 188.979†	-35.6	-2.6	-0.9496 ug/L	-0.9496 ppb	15:17:54
2	B 249.677†	-93.5	190.7	3.7753 ug/L	3.7753 ppb	15:17:54
2	Ba 233.527†	3.6	8.3	0.0584 ug/L	0.0584 ppb	15:17:54
2	Be 313.107†	-4891.2	67.7	0.0211 ug/L	0.0211 ppb	15:17:34
2	Cd 226.502†	-209.3	-14.6	-0.1446 ug/L	-0.1446 ppb	15:17:54
2	Co 228.616†	-74.8	-4.6	-0.0890 ug/L	-0.0890 ppb	15:17:54
2	Cr 267.716†	115.4	32.5	0.3135 ug/L	0.3135 ppb	15:17:54
2	Cu 324.752†	9073.4	139.2	0.3523 ug/L	0.3523 ppb	15:17:34
2	Mn 257.610†	578.3	58.3	0.0599 ug/L	0.0599 ppb	15:17:54
2	Mo 202.031†	20.9	-1.6	-0.0987 ug/L	-0.0987 ppb	15:17:54
2	Ni 231.604†	100.6	-7.2	-0.1599 ug/L	-0.1599 ppb	15:17:54

2	P 214.914†	245.4	11.4	5.6305 ug/L	5.6305 ppb	15:17:54
2	Pb 220.353†	-55.4	1.8	0.1976 ug/L	0.1976 ppb	15:17:54
2	S 181.975 Axial†	41.9	-25.0	-30.501 ug/L	-30.501 ppb	15:17:54
2	Sb 206.836†	28.8	-5.7	-1.6979 ug/L	-1.6979 ppb	15:17:54
2	Se 196.026†	-22.2	-1.6	-0.8111 ug/L	-0.8111 ppb	15:17:54
2	Si 251.611†	506.1	57.1	1.5323 ug/L	1.5323 ppb	15:17:54
2	Sn 189.927†	3.8	8.5	1.3922 ug/L	1.3922 ppb	15:17:54
2	Ti 334.940†	-945.3	-56.6	-0.0745 ug/L	-0.0745 ppb	15:17:34
2	Tl 190.801†	-32.3	6.7	1.9218 ug/L	1.9218 ppb	15:17:54
2	U 409.014†	-1404.0	-50.6	-1.1403 ug/L	-1.1403 ppb	15:17:34
2	V 292.402†	-1402.4	6.7	0.0328 ug/L	0.0328 ppb	15:17:34
2	Zn 213.857†	787.9	62.7	0.5225 ug/L	0.5225 ppb	15:17:54
2	SiO2†	494.3	29.2	1.6786 ug/L	1.6786 ppb	15:18:35
3	Sc Radial	5440.3	5440.3	97.4 %		15:16:32
3	Y RADIAL	5894.4	5894.4	96.89 %		15:16:32
3	Al 396.153Radial†	11.1	7.7	5.3015 ug/L	5.3015 ppb	15:16:52
3	Ca 317.933Radial†	24.8	-1.3	-1.9365 ug/L	-1.9365 ppb	15:16:52
3	Fe 238.204 Radial†	8.3	0.1	0.5493 ug/L	0.5493 ppb	15:16:52
3	K 766.490 Radial†	2465.4	135.8	22.479 ug/L	22.479 ppb	15:16:32
3	Mg 279.077 IEC†	3.3	1.0	32.869 ug/L	32.869 ppb	15:16:52
3	Na 589.592 Radial†	-924.2	79.2	21.160 ug/L	21.160 ppb	15:16:32
3	Sr 421.552†	29.3	18.9	0.1098 ug/L	0.1098 ppb	15:16:32
3	Sc 361.383	970538.1	970538.1	98.629 %		15:17:59
3	Y 371.029	860258.8	860258.8	98.629 %		15:17:59
3	Ag 328.068†	332.7	16.3	0.0690 ug/L	0.0690 ppb	15:18:05
3	As 188.979†	-34.8	-1.5	-0.5279 ug/L	-0.5279 ppb	15:18:25
3	B 249.677†	-120.9	163.7	3.2419 ug/L	3.2419 ppb	15:18:25
3	Ba 233.527†	-5.6	-1.1	-0.0074 ug/L	-0.0074 ppb	15:18:25
3	Be 313.107†	-5101.1	-104.0	-0.0330 ug/L	-0.0330 ppb	15:18:05
3	Cd 226.502†	-196.7	-0.1	-0.0023 ug/L	-0.0023 ppb	15:18:25
3	Co 228.616†	-70.6	0.3	0.0061 ug/L	0.0061 ppb	15:18:25
3	Cr 267.716†	94.1	9.9	0.0984 ug/L	0.0984 ppb	15:18:25
3	Cu 324.752†	9055.2	44.6	0.1165 ug/L	0.1165 ppb	15:18:05
3	Mn 257.610†	587.6	62.8	0.0619 ug/L	0.0619 ppb	15:18:25
3	Mo 202.031†	27.2	4.7	0.2878 ug/L	0.2878 ppb	15:18:25
3	Ni 231.604†	93.8	-14.9	-0.3325 ug/L	-0.3325 ppb	15:18:25
3	P 214.914†	250.7	14.7	7.3229 ug/L	7.3229 ppb	15:18:25
3	Pb 220.353†	-60.7	-3.1	-0.3484 ug/L	-0.3484 ppb	15:18:25
3	S 181.975 Axial†	47.1	-20.1	-24.475 ug/L	-24.475 ppb	15:18:25
3	Sb 206.836†	33.8	-0.9	-0.2396 ug/L	-0.2396 ppb	15:18:25
3	Se 196.026†	-18.4	2.5	1.3088 ug/L	1.3088 ppb	15:18:25
3	Si 251.611†	497.2	43.8	1.1722 ug/L	1.1722 ppb	15:18:25
3	Sn 189.927†	0.2	4.8	0.7886 ug/L	0.7886 ppb	15:18:25
3	Ti 334.940†	-987.4	-91.4	-0.1259 ug/L	-0.1259 ppb	15:18:05
3	Tl 190.801†	-39.9	-0.7	-0.1896 ug/L	-0.1896 ppb	15:18:25
3	U 409.014†	-1670.6	-309.1	-6.9663 ug/L	-6.9663 ppb	15:18:05
3	V 292.402†	-1378.5	42.7	0.2286 ug/L	0.2286 ppb	15:18:05
3	Zn 213.857†	771.8	39.8	0.3331 ug/L	0.3331 ppb	15:18:25
3	SiO2†	527.7	58.9	3.3766 ug/L	3.3766 ppb	15:18:40

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	964378.3	98.003 %		0.5570				0.57%
Sc Radial	5473.6	98.0 %		1.74				1.77%
Y 371.029	854995.1	98.026 %		0.5509				0.56%
Y RADIAL	5941.4	97.66 %		2.069				2.12%
Ag 328.068†	61.3	0.2384 ug/L		0.37324	0.2384 ppb		0.37324	156.54%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	7.5	5.1962 ug/L		4.77375	5.1962 ppb		4.77375	91.87%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.3	0.4673 ug/L		2.09955	0.4673 ppb		2.09955	449.32%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	179.6	3.5549 ug/L		0.27849	3.5549 ppb		0.27849	7.83%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	6.2	0.0442 ug/L		0.04609	0.0442 ppb		0.04609	104.31%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-14.3	-0.0048 ug/L		0.02712	-0.0048 ppb		0.02712	570.34%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	1.2	1.7594 ug/L		3.62854	1.7594 ppb		3.62854	206.24%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated					
Cd 226.502†	-6.1	-0.0617 ug/L	0.07397	-0.0617 ppb	0.07397 119.82%
QC value within limits for Cd 226.502 Recovery = Not calculated					
Co 228.616†	1.9	0.0373 ug/L	0.14441	0.0373 ppb	0.14441 387.46%
QC value within limits for Co 228.616 Recovery = Not calculated					
Cr 267.716†	22.6	0.2197 ug/L	0.11013	0.2197 ppb	0.11013 50.12%
QC value within limits for Cr 267.716 Recovery = Not calculated					
Cu 324.752†	144.0	0.3665 ug/L	0.25735	0.3665 ppb	0.25735 70.23%
QC value within limits for Cu 324.752 Recovery = Not calculated					
Fe 238.204 Radial†	0.2	2.0981 ug/L	2.42131	2.0981 ppb	2.42131 115.40%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated					
K 766.490 Radial†	171.8	28.446 ug/L	16.0265	28.446 ppb	16.0265 56.34%
QC value within limits for K 766.490 Radial Recovery = Not calculated					
Mg 279.077 IEC†	-0.3	-10.407 ug/L	37.5089	-10.407 ppb	37.5089 360.43%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated					
Mn 257.610†	55.8	0.0567 ug/L	0.00731	0.0567 ppb	0.00731 12.88%
QC value within limits for Mn 257.610 Recovery = Not calculated					
Mo 202.031†	0.1	0.0082 ug/L	0.24437	0.0082 ppb	0.24437 >999.9%
QC value within limits for Mo 202.031 Recovery = Not calculated					
Na 589.592 Radial†	59.6	15.929 ug/L	5.4056	15.929 ppb	5.4056 33.94%
QC value within limits for Na 589.592 Radial Recovery = Not calculated					
Ni 231.604†	-8.5	-0.1898 ug/L	0.13028	-0.1898 ppb	0.13028 68.62%
QC value within limits for Ni 231.604 Recovery = Not calculated					
P 214.914†	16.4	8.0995 ug/L	2.93542	8.0995 ppb	2.93542 36.24%
QC value within limits for P 214.914 Recovery = Not calculated					
Pb 220.353†	1.9	0.2173 ug/L	0.57583	0.2173 ppb	0.57583 264.98%
QC value within limits for Pb 220.353 Recovery = Not calculated					
S 181.975 Axial†	-21.2	-25.872 ug/L	4.1128	-25.872 ppb	4.1128 15.90%
QC value within limits for S 181.975 Axial Recovery = Not calculated					
Sb 206.836†	1.6	0.4882 ug/L	2.62672	0.4882 ppb	2.62672 538.07%
QC value within limits for Sb 206.836 Recovery = Not calculated					
Se 196.026†	2.7	1.3921 ug/L	2.24602	1.3921 ppb	2.24602 161.34%
QC value within limits for Se 196.026 Recovery = Not calculated					
Si 251.611†	55.6	1.4906 ug/L	0.29975	1.4906 ppb	0.29975 20.11%
QC value within limits for Si 251.611 Recovery = Not calculated					
Sn 189.927†	4.4	0.7186 ug/L	0.71107	0.7186 ppb	0.71107 98.95%
QC value within limits for Sn 189.927 Recovery = Not calculated					
Sr 421.552†	11.4	0.0665 ug/L	0.04214	0.0665 ppb	0.04214 63.33%
QC value within limits for Sr 421.552 Recovery = Not calculated					
Ti 334.940†	-78.7	-0.1053 ug/L	0.02719	-0.1053 ppb	0.02719 25.82%
QC value within limits for Ti 334.940 Recovery = Not calculated					
Tl 190.801†	0.0	-0.0001 ug/L	1.83453	-0.0001 ppb	1.83453 >999.9%
QC value within limits for Tl 190.801 Recovery = Not calculated					
U 409.014†	-214.1	-4.8262 ug/L	3.20592	-4.8262 ppb	3.20592 66.43%
QC value within limits for U 409.014 Recovery = Not calculated					
V 292.402†	29.7	0.1551 ug/L	0.10663	0.1551 ppb	0.10663 68.74%
QC value within limits for V 292.402 Recovery = Not calculated					
Zn 213.857†	51.2	0.4269 ug/L	0.09470	0.4269 ppb	0.09470 22.18%
QC value within limits for Zn 213.857 Recovery = Not calculated					
SiO2†	33.9	1.9445 ug/L	1.31945	1.9445 ppb	1.31945 67.86%
QC value within limits for SiO2 Recovery = Not calculated					

All analyte(s) passed QC.

Sequence No.: 13

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 1/28/2010 16:29:43

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5300.7	5300.7	94.9 %			16:31:35
1	Y RADIAL	5750.1	5750.1	94.52 %			16:31:35
1	Al 396.153Radial†	6857.9	7222.1	4982.0 ug/L		4982.0 ppb	16:31:35
1	Ca 317.933Radial†	3204.7	3349.8	5093.4 ug/L		5093.4 ppb	16:31:55
1	Fe 238.204 Radial†	585.8	608.8	5155.2 ug/L		5155.2 ppb	16:31:55
1	K 766.490 Radial†	31825.4	31137.4	5149.2 ug/L		5149.2 ppb	16:31:35
1	Mg 279.077 IEC†	159.8	166.0	5417.0 ug/L		5417.0 ppb	16:31:55
1	Na 589.592 Radial†	34318.3	37187.4	9931.7 ug/L		9931.7 ppb	16:31:35
1	Sr 421.552†	81238.1	85584.9	498.15 ug/L		498.15 ppb	16:31:35
1	Sc 361.383	954628.1	954628.1	97.012 %			16:32:52
1	Y 371.029	837121.8	837121.8	95.977 %			16:32:52
1	Ag 328.068†	125348.0	128887.5	493.54 ug/L		493.54 ppb	16:32:57
1	As 188.979†	1246.5	1318.7	482.63 ug/L		482.63 ppb	16:33:17
1	B 249.677†	22940.9	23933.8	471.68 ug/L		471.68 ppb	16:32:57
1	Ba 233.527†	66195.3	68238.6	480.66 ug/L		480.66 ppb	16:32:57
1	Be 313.107†	1467910.1	1518187.6	478.38 ug/L		478.38 ppb	16:32:52
1	Cd 226.502†	47351.6	49009.3	484.67 ug/L		484.67 ppb	16:32:57
1	Co 228.616†	24387.3	25210.2	482.50 ug/L		482.50 ppb	16:32:57
1	Cr 267.716†	48305.9	49708.1	479.55 ug/L		479.55 ppb	16:32:57
1	Cu 324.752†	190629.8	187364.3	473.20 ug/L		473.20 ppb	16:32:57
1	Mn 257.610†	464709.9	478489.3	481.16 ug/L		481.16 ppb	16:32:52
1	Mo 202.031†	7661.9	7874.9	486.31 ug/L		486.31 ppb	16:33:17
1	Ni 231.604†	21100.5	21640.3	483.38 ug/L		483.38 ppb	16:32:57
1	P 214.914†	4897.3	4808.6	2307.0 ug/L		2307.0 ppb	16:33:17
1	Pb 220.353†	4123.8	4309.1	482.24 ug/L		482.24 ppb	16:33:17
1	S 181.975 Axial†	823.6	781.2	951.62 ug/L		951.62 ppb	16:33:17
1	Sb 206.836†	1615.3	1629.9	507.95 ug/L		507.95 ppb	16:33:17
1	Se 196.026†	872.8	920.8	497.33 ug/L		497.33 ppb	16:33:17
1	Si 251.611†	89580.8	91879.5	2459.1 ug/L		2459.1 ppb	16:32:57
1	Sn 189.927†	2878.3	2971.6	488.31 ug/L		488.31 ppb	16:33:17
1	Ti 334.940†	348573.9	360219.2	496.36 ug/L		496.36 ppb	16:32:52
1	Tl 190.801†	1578.3	1666.7	481.16 ug/L		481.16 ppb	16:33:17
1	U 409.014†	19513.1	21498.8	482.91 ug/L		482.91 ppb	16:32:57
1	V 292.402†	82135.1	86105.1	484.47 ug/L		484.47 ppb	16:32:57
1	Zn 213.857†	56993.2	58005.8	478.50 ug/L		478.50 ppb	16:32:57
1	SiO2†	88831.6	91091.4	5217.7 ug/L		5217.7 ppb	16:34:25
2	Sc Radial	5860.5	5860.5	105 %			16:32:00
2	Y RADIAL	6332.9	6332.9	104.1 %			16:32:00
2	Al 396.153Radial†	6783.5	6460.9	4454.4 ug/L		4454.4 ppb	16:32:00
2	Ca 317.933Radial†	3222.7	3044.5	4629.1 ug/L		4629.1 ppb	16:32:20
2	Fe 238.204 Radial†	589.9	553.7	4690.2 ug/L		4690.2 ppb	16:32:20
2	K 766.490 Radial†	31825.2	27934.0	4619.3 ug/L		4619.3 ppb	16:32:00
2	Mg 279.077 IEC†	153.0	143.4	4681.0 ug/L		4681.0 ppb	16:32:20
2	Na 589.592 Radial†	34071.0	33497.5	8946.2 ug/L		8946.2 ppb	16:32:00
2	Sr 421.552†	80814.3	77004.4	448.20 ug/L		448.20 ppb	16:32:00
2	Sc 361.383	951917.9	951917.9	96.737 %			16:33:23
2	Y 371.029	834053.7	834053.7	95.625 %			16:33:23
2	Ag 328.068†	126208.5	130145.0	498.19 ug/L		498.19 ppb	16:33:29
2	As 188.979†	1251.8	1327.8	485.83 ug/L		485.83 ppb	16:33:49
2	B 249.677†	23136.8	24203.6	477.10 ug/L		477.10 ppb	16:33:29
2	Ba 233.527†	66291.1	68531.9	482.71 ug/L		482.71 ppb	16:33:29
2	Be 313.107†	1465652.6	1520162.0	479.00 ug/L		479.00 ppb	16:33:23
2	Cd 226.502†	47222.5	49014.8	484.77 ug/L		484.77 ppb	16:33:29
2	Co 228.616†	24375.3	25269.3	483.64 ug/L		483.64 ppb	16:33:29
2	Cr 267.716†	48394.9	49941.8	481.80 ug/L		481.80 ppb	16:33:29
2	Cu 324.752†	193040.0	190415.4	480.88 ug/L		480.88 ppb	16:33:29
2	Mn 257.610†	464410.8	479544.0	482.20 ug/L		482.20 ppb	16:33:23
2	Mo 202.031†	7682.5	7918.7	488.96 ug/L		488.96 ppb	16:33:49
2	Ni 231.604†	21012.0	21610.8	482.72 ug/L		482.72 ppb	16:33:29

2	P 214.914†	4891.7	4817.2	2310.0 ug/L	2310.0 ppb	16:33:49
2	Pb 220.353†	4115.6	4312.8	482.58 ug/L	482.58 ppb	16:33:49
2	S 181.975 Axial†	835.7	796.1	969.96 ug/L	969.96 ppb	16:33:49
2	Sb 206.836†	1599.2	1618.0	504.48 ug/L	504.48 ppb	16:33:49
2	Se 196.026†	889.0	940.1	505.79 ug/L	505.79 ppb	16:33:49
2	Si 251.611†	90171.5	92753.0	2482.5 ug/L	2482.5 ppb	16:33:29
2	Sn 189.927†	2885.5	2987.4	490.83 ug/L	490.83 ppb	16:33:49
2	Ti 334.940†	348382.4	361044.3	497.50 ug/L	497.50 ppb	16:33:23
2	Tl 190.801†	1579.4	1672.4	482.80 ug/L	482.80 ppb	16:33:49
2	U 409.014†	19605.2	21651.3	486.39 ug/L	486.39 ppb	16:33:29
2	V 292.402†	82307.2	86524.1	486.89 ug/L	486.89 ppb	16:33:29
2	Zn 213.857†	57042.6	58224.1	480.35 ug/L	480.35 ppb	16:33:29
2	SiO2†	88873.5	91395.4	5235.1 ug/L	5235.1 ppb	16:34:30
3	Sc Radial	5363.8	5363.8	96.0 %		16:32:25
3	Y RADIAL	5822.9	5822.9	95.71 %		16:32:25
3	Al 396.153Radial†	6847.5	7126.1	4915.5 ug/L	4915.5 ppb	16:32:25
3	Ca 317.933Radial†	3228.1	3334.5	5070.1 ug/L	5070.1 ppb	16:32:45
3	Fe 238.204 Radial†	596.9	613.1	5191.7 ug/L	5191.7 ppb	16:32:45
3	K 766.490 Radial†	31883.0	30802.8	5093.8 ug/L	5093.8 ppb	16:32:25
3	Mg 279.077 IEC†	156.1	160.1	5225.6 ug/L	5225.6 ppb	16:32:45
3	Na 589.592 Radial†	34139.7	36575.9	9768.3 ug/L	9768.3 ppb	16:32:25
3	Sr 421.552†	81087.9	84421.2	491.37 ug/L	491.37 ppb	16:32:25
3	Sc 361.383	950852.4	950852.4	96.628 %		16:33:55
3	Y 371.029	835143.1	835143.1	95.750 %		16:33:55
3	Ag 328.068†	126653.9	130752.1	500.67 ug/L	500.67 ppb	16:34:00
3	As 188.979†	1251.6	1329.1	486.39 ug/L	486.39 ppb	16:34:20
3	B 249.677†	23272.0	24370.3	480.31 ug/L	480.31 ppb	16:34:00
3	Ba 233.527†	66533.5	68859.5	485.03 ug/L	485.03 ppb	16:34:00
3	Be 313.107†	1465853.4	1522067.5	479.60 ug/L	479.60 ppb	16:33:55
3	Cd 226.502†	47349.6	49201.1	486.56 ug/L	486.56 ppb	16:34:00
3	Co 228.616†	24494.6	25421.0	486.54 ug/L	486.54 ppb	16:34:00
3	Cr 267.716†	48559.3	50168.1	483.99 ug/L	483.99 ppb	16:34:00
3	Cu 324.752†	193539.2	191155.6	482.77 ug/L	482.77 ppb	16:34:00
3	Mn 257.610†	463006.3	478628.4	481.31 ug/L	481.31 ppb	16:33:55
3	Mo 202.031†	7654.4	7898.5	487.76 ug/L	487.76 ppb	16:34:20
3	Ni 231.604†	21116.4	21743.2	485.68 ug/L	485.68 ppb	16:34:00
3	P 214.914†	4878.5	4809.2	2305.3 ug/L	2305.3 ppb	16:34:20
3	Pb 220.353†	4103.6	4305.2	481.78 ug/L	481.78 ppb	16:34:20
3	S 181.975 Axial†	829.1	790.2	962.67 ug/L	962.67 ppb	16:34:20
3	Sb 206.836†	1609.1	1630.1	508.08 ug/L	508.08 ppb	16:34:20
3	Se 196.026†	882.8	934.7	504.67 ug/L	504.67 ppb	16:34:20
3	Si 251.611†	90424.2	93118.9	2492.4 ug/L	2492.4 ppb	16:34:00
3	Sn 189.927†	2874.3	2979.2	489.55 ug/L	489.55 ppb	16:34:20
3	Ti 334.940†	347679.3	360720.1	497.06 ug/L	497.06 ppb	16:33:55
3	Tl 190.801†	1578.1	1672.9	482.92 ug/L	482.92 ppb	16:34:20
3	U 409.014†	19634.7	21704.5	487.53 ug/L	487.53 ppb	16:34:00
3	V 292.402†	82735.5	87062.7	489.80 ug/L	489.80 ppb	16:34:00
3	Zn 213.857†	57197.6	58450.6	482.17 ug/L	482.17 ppb	16:34:00
3	SiO2†	90146.1	92815.3	5316.7 ug/L	5316.7 ppb	16:34:35

Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	952466.2	96.792 %		0.1978			0.20%
Sc Radial	5508.3	98.6 %		5.49			5.57%
Y 371.029	835439.6	95.784 %		0.1783			0.19%
Y RADIAL	5968.6	98.11 %		5.220			5.32%
Ag 328.068†	129928.2	497.46 ug/L		3.617	497.46 ppb	3.617	0.73%
QC value within limits for Ag 328.068 Recovery = 99.49%							
Al 396.153Radial†	6936.4	4784.0 ug/L		287.38	4784.0 ppb	287.38	6.01%
QC value within limits for Al 396.153Radial Recovery = 95.68%							
As 188.979†	1325.2	484.95 ug/L		2.028	484.95 ppb	2.028	0.42%
QC value within limits for As 188.979 Recovery = 96.99%							
B 249.677†	24169.2	476.36 ug/L		4.360	476.36 ppb	4.360	0.92%
QC value within limits for B 249.677 Recovery = 95.27%							
Ba 233.527†	68543.3	482.80 ug/L		2.189	482.80 ppb	2.189	0.45%
QC value within limits for Ba 233.527 Recovery = 96.56%							
Be 313.107†	1520139.0	478.99 ug/L		0.611	478.99 ppb	0.611	0.13%
QC value within limits for Be 313.107 Recovery = 95.80%							
Ca 317.933Radial†	3242.9	4930.9 ug/L		261.59	4930.9 ppb	261.59	5.31%

QC value within limits for Ca 317.933 Radial Recovery = 98.62%

Cd 226.502†	49075.1	485.34 ug/L	1.066	485.34 ppb	1.066	0.22%
QC value within limits for Cd 226.502 Recovery = 97.07%						
Co 228.616†	25300.2	484.23 ug/L	2.080	484.23 ppb	2.080	0.43%
QC value within limits for Co 228.616 Recovery = 96.85%						
Cr 267.716†	49939.3	481.78 ug/L	2.219	481.78 ppb	2.219	0.46%
QC value within limits for Cr 267.716 Recovery = 96.36%						
Cu 324.752†	189645.1	478.95 ug/L	5.070	478.95 ppb	5.070	1.06%
QC value within limits for Cu 324.752 Recovery = 95.79%						
Fe 238.204 Radial†	591.9	5012.4 ug/L	279.58	5012.4 ppb	279.58	5.58%
QC value within limits for Fe 238.204 Radial Recovery = 100.25%						
K 766.490 Radial†	29958.1	4954.1 ug/L	291.26	4954.1 ppb	291.26	5.88%
QC value within limits for K 766.490 Radial Recovery = 99.08%						
Mg 279.077 IEC†	156.5	5107.9 ug/L	381.87	5107.9 ppb	381.87	7.48%
QC value within limits for Mg 279.077 IEC Recovery = 102.16%						
Mn 257.610†	478887.3	481.56 ug/L	0.564	481.56 ppb	0.564	0.12%
QC value within limits for Mn 257.610 Recovery = 96.31%						
Mo 202.031†	7897.4	487.68 ug/L	1.331	487.68 ppb	1.331	0.27%
QC value within limits for Mo 202.031 Recovery = 97.54%						
Na 589.592 Radial†	35753.6	9548.7 ug/L	528.15	9548.7 ppb	528.15	5.53%
QC value within limits for Na 589.592 Radial Recovery = 95.49%						
Ni 231.604†	21664.8	483.93 ug/L	1.551	483.93 ppb	1.551	0.32%
QC value within limits for Ni 231.604 Recovery = 96.79%						
P 214.914†	4811.6	2307.4 ug/L	2.36	2307.4 ppb	2.36	0.10%
QC value within limits for P 214.914 Recovery = 92.30%						
Pb 220.353†	4309.0	482.20 ug/L	0.402	482.20 ppb	0.402	0.08%
QC value within limits for Pb 220.353 Recovery = 96.44%						
S 181.975 Axial†	789.2	961.42 ug/L	9.235	961.42 ppb	9.235	0.96%
QC value within limits for S 181.975 Axial Recovery = 96.14%						
Sb 206.836†	1626.0	506.84 ug/L	2.043	506.84 ppb	2.043	0.40%
QC value within limits for Sb 206.836 Recovery = 101.37%						
Se 196.026†	931.9	502.60 ug/L	4.597	502.60 ppb	4.597	0.91%
QC value within limits for Se 196.026 Recovery = 100.52%						
Si 251.611†	92583.8	2478.0 ug/L	17.07	2478.0 ppb	17.07	0.69%
QC value within limits for Si 251.611 Recovery = 99.12%						
Sn 189.927†	2979.4	489.56 ug/L	1.257	489.56 ppb	1.257	0.26%
QC value within limits for Sn 189.927 Recovery = 97.91%						
Sr 421.552†	82336.8	479.24 ug/L	27.092	479.24 ppb	27.092	5.65%
QC value within limits for Sr 421.552 Recovery = 95.85%						
Ti 334.940†	360661.2	496.98 ug/L	0.572	496.98 ppb	0.572	0.12%
QC value within limits for Ti 334.940 Recovery = 99.40%						
Tl 190.801†	1670.7	482.29 ug/L	0.984	482.29 ppb	0.984	0.20%
QC value within limits for Tl 190.801 Recovery = 96.46%						
U 409.014†	21618.2	485.61 ug/L	2.409	485.61 ppb	2.409	0.50%
QC value within limits for U 409.014 Recovery = 97.12%						
V 292.402†	86564.0	487.06 ug/L	2.671	487.06 ppb	2.671	0.55%
QC value within limits for V 292.402 Recovery = 97.41%						
Zn 213.857†	58226.8	480.34 ug/L	1.835	480.34 ppb	1.835	0.38%
QC value within limits for Zn 213.857 Recovery = 96.07%						
SiO2†	91767.3	5256.5 ug/L	52.84	5256.5 ppb	52.84	1.01%
QC value within limits for SiO2 Recovery = 98.30%						

All analyte(s) passed QC.

Sequence No.: 14
 Sample ID: PQL
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 11
 Date Collected: 1/28/2010 16:36:45
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5687.1	5687.1	102 %		16:38:39
1	Y RADIAL	6171.8	6171.8	101.4 %		16:38:39
1	Al 396.153Radial†	290.1	281.2	194.39 ug/L	194.39 ppb	16:38:59
1	Ca 317.933Radial†	156.5	126.9	192.95 ug/L	192.95 ppb	16:38:59
1	Fe 238.204 Radial†	21.3	12.5	105.60 ug/L	105.60 ppb	16:38:59
1	K 766.490 Radial†	3505.3	1047.2	173.17 ug/L	173.17 ppb	16:38:39
1	Mg 279.077 IEC†	13.3	10.7	347.71 ug/L	347.71 ppb	16:38:59
1	Na 589.592 Radial†	217.5	1241.6	331.59 ug/L	331.59 ppb	16:38:39
1	Sr 421.552†	893.6	866.4	5.0419 ug/L	5.0419 ppb	16:38:39
1	Sc 361.383	968729.9	968729.9	98.445 %		16:39:55
1	Y 371.029	858031.4	858031.4	98.374 %		16:39:55
1	Ag 328.068†	1608.8	1313.2	5.0087 ug/L	5.0087 ppb	16:40:00
1	As 188.979†	45.3	79.9	29.015 ug/L	29.015 ppb	16:40:20
1	B 249.677†	2169.6	2490.2	49.275 ug/L	49.275 ppb	16:40:00
1	Ba 233.527†	704.9	720.6	5.0770 ug/L	5.0770 ppb	16:40:20
1	Be 313.107†	10206.7	15435.9	4.8636 ug/L	4.8636 ppb	16:40:00
1	Cd 226.502†	307.4	511.6	5.0620 ug/L	5.0620 ppb	16:40:20
1	Co 228.616†	180.1	254.7	4.8864 ug/L	4.8864 ppb	16:40:20
1	Cr 267.716†	566.0	489.4	4.7058 ug/L	4.7058 ppb	16:40:20
1	Cu 324.752†	12939.3	4007.1	10.099 ug/L	10.099 ppb	16:40:00
1	Mn 257.610†	10547.2	10180.9	10.228 ug/L	10.228 ppb	16:40:00
1	Mo 202.031†	182.6	162.5	10.037 ug/L	10.037 ppb	16:40:20
1	Ni 231.604†	300.6	195.3	4.3628 ug/L	4.3628 ppb	16:40:20
1	P 214.914†	516.8	285.5	140.49 ug/L	140.49 ppb	16:40:20
1	Pb 220.353†	42.2	101.3	11.348 ug/L	11.348 ppb	16:40:20
1	S 181.975 Axial†	124.6	58.8	71.631 ug/L	71.631 ppb	16:40:20
1	Sb 206.836†	72.9	38.9	12.080 ug/L	12.080 ppb	16:40:20
1	Se 196.026†	38.7	60.4	31.798 ug/L	31.798 ppb	16:40:20
1	Si 251.611†	3995.1	3597.9	96.408 ug/L	96.408 ppb	16:40:20
1	Sn 189.927†	57.8	63.3	10.421 ug/L	10.421 ppb	16:40:20
1	Ti 334.940†	2624.7	3575.9	4.9032 ug/L	4.9032 ppb	16:40:00
1	Tl 190.801†	19.8	59.8	17.208 ug/L	17.208 ppb	16:40:20
1	U 409.014†	770.9	2167.8	48.837 ug/L	48.837 ppb	16:39:55
1	V 292.402†	-527.1	905.0	5.2436 ug/L	5.2436 ppb	16:40:00
1	Zn 213.857†	1931.2	1219.0	10.093 ug/L	10.093 ppb	16:40:20
1	SiO2†	4166.9	3756.6	215.45 ug/L	215.45 ppb	16:41:26
2	Sc Radial	5488.1	5488.1	98.3 %		16:39:04
2	Y RADIAL	5969.5	5969.5	98.12 %		16:39:04
2	Al 396.153Radial†	305.7	307.4	212.52 ug/L	212.52 ppb	16:39:24
2	Ca 317.933Radial†	164.5	140.7	213.91 ug/L	213.91 ppb	16:39:24
2	Fe 238.204 Radial†	22.5	14.5	122.21 ug/L	122.21 ppb	16:39:24
2	K 766.490 Radial†	3450.0	1115.8	184.53 ug/L	184.53 ppb	16:39:04
2	Mg 279.077 IEC†	11.3	9.1	298.48 ug/L	298.48 ppb	16:39:24
2	Na 589.592 Radial†	121.2	1151.4	307.50 ug/L	307.50 ppb	16:39:04
2	Sr 421.552†	870.0	874.2	5.0871 ug/L	5.0871 ppb	16:39:04
2	Sc 361.383	957933.8	957933.8	97.348 %		16:40:26
2	Y 371.029	848771.0	848771.0	97.312 %		16:40:26
2	Ag 328.068†	1654.0	1378.1	5.2594 ug/L	5.2594 ppb	16:40:31
2	As 188.979†	32.2	66.9	24.321 ug/L	24.321 ppb	16:40:51
2	B 249.677†	2081.3	2424.2	47.966 ug/L	47.966 ppb	16:40:31
2	Ba 233.527†	705.8	729.6	5.1396 ug/L	5.1396 ppb	16:40:51
2	Be 313.107†	10301.5	15650.2	4.9311 ug/L	4.9311 ppb	16:40:31
2	Cd 226.502†	298.9	506.4	5.0093 ug/L	5.0093 ppb	16:40:51
2	Co 228.616†	183.0	259.8	4.9855 ug/L	4.9855 ppb	16:40:51
2	Cr 267.716†	590.4	520.9	5.0096 ug/L	5.0096 ppb	16:40:51
2	Cu 324.752†	12859.8	4073.5	10.268 ug/L	10.268 ppb	16:40:31
2	Mn 257.610†	10482.1	10234.7	10.286 ug/L	10.286 ppb	16:40:31
2	Mo 202.031†	191.6	173.9	10.740 ug/L	10.740 ppb	16:40:51
2	Ni 231.604†	330.7	229.8	5.1325 ug/L	5.1325 ppb	16:40:51

2	P 214.914†	525.9	300.7	148.07 ug/L	148.07 ppb	16:40:51
2	Pb 220.353†	49.5	109.2	12.240 ug/L	12.240 ppb	16:40:51
2	S 181.975 Axial†	125.2	60.9	74.163 ug/L	74.163 ppb	16:40:51
2	Sb 206.836†	65.6	32.3	10.102 ug/L	10.102 ppb	16:40:51
2	Se 196.026†	35.6	57.7	30.456 ug/L	30.456 ppb	16:40:51
2	Si 251.611†	4001.9	3650.6	97.812 ug/L	97.812 ppb	16:40:51
2	Sn 189.927†	62.5	68.8	11.322 ug/L	11.322 ppb	16:40:51
2	Ti 334.940†	2650.8	3632.7	4.9891 ug/L	4.9891 ppb	16:40:31
2	Tl 190.801†	32.4	73.0	20.989 ug/L	20.989 ppb	16:40:51
2	U 409.014†	672.0	2075.1	46.745 ug/L	46.745 ppb	16:40:26
2	V 292.402†	-649.3	773.4	4.5155 ug/L	4.5155 ppb	16:40:31
2	Zn 213.857†	1946.3	1256.6	10.398 ug/L	10.398 ppb	16:40:51
2	SiO2†	4233.1	3872.3	222.08 ug/L	222.08 ppb	16:41:31
3	Sc Radial	5435.2	5435.2	97.3 %		16:39:29
3	Y RADIAL	5913.5	5913.5	97.20 %		16:39:29
3	Al 396.153Radial†	296.5	300.9	208.08 ug/L	208.08 ppb	16:39:49
3	Ca 317.933Radial†	160.8	138.5	210.52 ug/L	210.52 ppb	16:39:49
3	Fe 238.204 Radial†	20.7	12.9	109.17 ug/L	109.17 ppb	16:39:49
3	K 766.490 Radial†	3396.1	1094.5	181.01 ug/L	181.01 ppb	16:39:29
3	Mg 279.077 IEC†	13.3	11.3	369.46 ug/L	369.46 ppb	16:39:49
3	Na 589.592 Radial†	158.8	1191.2	318.14 ug/L	318.14 ppb	16:39:29
3	Sr 421.552†	922.8	937.0	5.4529 ug/L	5.4529 ppb	16:39:29
3	Sc 361.383	962803.2	962803.2	97.843 %		16:40:56
3	Y 371.029	854026.8	854026.8	97.915 %		16:40:56
3	Ag 328.068†	1616.6	1331.3	5.0783 ug/L	5.0783 ppb	16:41:01
3	As 188.979†	47.7	82.6	29.999 ug/L	29.999 ppb	16:41:21
3	B 249.677†	2110.7	2443.5	48.350 ug/L	48.350 ppb	16:41:01
3	Ba 233.527†	692.6	712.5	5.0200 ug/L	5.0200 ppb	16:41:21
3	Be 313.107†	10322.7	15618.3	4.9210 ug/L	4.9210 ppb	16:41:01
3	Cd 226.502†	292.3	498.1	4.9290 ug/L	4.9290 ppb	16:41:21
3	Co 228.616†	187.0	263.0	5.0440 ug/L	5.0440 ppb	16:41:21
3	Cr 267.716†	579.6	506.8	4.8733 ug/L	4.8733 ppb	16:41:21
3	Cu 324.752†	12939.2	4087.9	10.303 ug/L	10.303 ppb	16:41:01
3	Mn 257.610†	10499.0	10197.5	10.244 ug/L	10.244 ppb	16:41:01
3	Mo 202.031†	180.8	161.9	9.9978 ug/L	9.9978 ppb	16:41:21
3	Ni 231.604†	321.8	218.9	4.8890 ug/L	4.8890 ppb	16:41:21
3	P 214.914†	536.2	308.5	151.97 ug/L	151.97 ppb	16:41:21
3	Pb 220.353†	43.6	102.9	11.531 ug/L	11.531 ppb	16:41:21
3	S 181.975 Axial†	123.5	58.4	71.163 ug/L	71.163 ppb	16:41:21
3	Sb 206.836†	62.3	28.6	8.9647 ug/L	8.9647 ppb	16:41:21
3	Se 196.026†	47.3	69.4	36.489 ug/L	36.489 ppb	16:41:21
3	Si 251.611†	4006.1	3634.1	97.380 ug/L	97.380 ppb	16:41:21
3	Sn 189.927†	60.0	65.9	10.850 ug/L	10.850 ppb	16:41:21
3	Ti 334.940†	2655.9	3624.2	4.9703 ug/L	4.9703 ppb	16:41:01
3	Tl 190.801†	22.6	62.8	18.070 ug/L	18.070 ppb	16:41:21
3	U 409.014†	754.8	2156.1	48.574 ug/L	48.574 ppb	16:40:56
3	V 292.402†	-531.5	897.2	5.1995 ug/L	5.1995 ppb	16:41:01
3	Zn 213.857†	1938.1	1238.1	10.248 ug/L	10.248 ppb	16:41:21
3	SiO2†	4168.4	3784.2	217.03 ug/L	217.03 ppb	16:41:37

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	963155.6	97.879 %	0.5494			0.56%
Sc Radial	5536.8	99.1 %	2.38			2.40%
Y 371.029	853609.7	97.867 %	0.5325			0.54%
Y RADIAL	6018.2	98.93 %	2.234			2.26%
Ag 328.068†	1340.9	5.1154 ug/L	0.12944	5.1154 ppb	0.12944	2.53%
QC value within limits for Ag 328.068 Recovery = 102.31%						
Al 396.153Radial†	296.5	204.99 ug/L	9.450	204.99 ppb	9.450	4.61%
QC value within limits for Al 396.153Radial Recovery = 102.50%						
As 188.979†	76.5	27.778 ug/L	3.0347	27.778 ppb	3.0347	10.92%
QC value within limits for As 188.979 Recovery = 92.59%						
B 249.677†	2452.6	48.530 ug/L	0.6729	48.530 ppb	0.6729	1.39%
QC value within limits for B 249.677 Recovery = 97.06%						
Ba 233.527†	720.9	5.0789 ug/L	0.05978	5.0789 ppb	0.05978	1.18%
QC value within limits for Ba 233.527 Recovery = 101.58%						
Be 313.107†	15568.2	4.9052 ug/L	0.03644	4.9052 ppb	0.03644	0.74%
QC value within limits for Be 313.107 Recovery = 98.10%						
Ca 317.933Radial†	135.3	205.79 ug/L	11.251	205.79 ppb	11.251	5.47%

QC value within limits for Ca 317.933 Radial Recovery = 102.90%							
Cd 226.502†	505.4	5.0001 ug/L	0.06696	5.0001 ppb	0.06696	1.34%	
QC value within limits for Cd 226.502 Recovery = 100.00%							
Co 228.616†	259.2	4.9720 ug/L	0.07965	4.9720 ppb	0.07965	1.60%	
QC value within limits for Co 228.616 Recovery = 99.44%							
Cr 267.716†	505.7	4.8629 ug/L	0.15216	4.8629 ppb	0.15216	3.13%	
QC value within limits for Cr 267.716 Recovery = 97.26%							
Cu 324.752†	4056.2	10.223 ug/L	0.1094	10.223 ppb	0.1094	1.07%	
QC value within limits for Cu 324.752 Recovery = 102.23%							
Fe 238.204 Radial†	13.3	112.33 ug/L	8.744	112.33 ppb	8.744	7.78%	
QC value within limits for Fe 238.204 Radial Recovery = 112.33%							
K 766.490 Radial†	1085.8	179.57 ug/L	5.814	179.57 ppb	5.814	3.24%	
QC value within limits for K 766.490 Radial Recovery = 119.72%							
Mg 279.077 IEC†	10.4	338.55 ug/L	36.364	338.55 ppb	36.364	10.74%	
QC value within limits for Mg 279.077 IEC Recovery = 112.85%							
Mn 257.610†	10204.4	10.252 ug/L	0.0298	10.252 ppb	0.0298	0.29%	
QC value within limits for Mn 257.610 Recovery = 102.52%							
Mo 202.031†	166.1	10.258 ug/L	0.4174	10.258 ppb	0.4174	4.07%	
QC value within limits for Mo 202.031 Recovery = 102.58%							
Na 589.592 Radial†	1194.7	319.08 ug/L	12.075	319.08 ppb	12.075	3.78%	
QC value within limits for Na 589.592 Radial Recovery = 106.36%							
Ni 231.604†	214.7	4.7948 ug/L	0.39339	4.7948 ppb	0.39339	8.20%	
QC value within limits for Ni 231.604 Recovery = 95.90%							
P 214.914†	298.3	146.84 ug/L	5.839	146.84 ppb	5.839	3.98%	
QC value within limits for P 214.914 Recovery = 97.89%							
Pb 220.353†	104.4	11.706 ug/L	0.4711	11.706 ppb	0.4711	4.02%	
QC value within limits for Pb 220.353 Recovery = 117.06%							
S 181.975 Axial†	59.3	72.319 ug/L	1.6137	72.319 ppb	1.6137	2.23%	
QC value within limits for S 181.975 Axial Recovery = 72.32%							
Sb 206.836†	33.3	10.382 ug/L	1.5763	10.382 ppb	1.5763	15.18%	
QC value within limits for Sb 206.836 Recovery = 103.82%							
Se 196.026†	62.5	32.915 ug/L	3.1678	32.915 ppb	3.1678	9.62%	
QC value within limits for Se 196.026 Recovery = 109.72%							
Si 251.611†	3627.6	97.200 ug/L	0.7193	97.200 ppb	0.7193	0.74%	
QC value within limits for Si 251.611 Recovery = 97.20%							
Sn 189.927†	66.0	10.864 ug/L	0.4505	10.864 ppb	0.4505	4.15%	
QC value within limits for Sn 189.927 Recovery = 108.64%							
Sr 421.552†	892.5	5.1940 ug/L	0.22539	5.1940 ppb	0.22539	4.34%	
QC value within limits for Sr 421.552 Recovery = 103.88%							
Ti 334.940†	3610.9	4.9542 ug/L	0.04518	4.9542 ppb	0.04518	0.91%	
QC value within limits for Ti 334.940 Recovery = 99.08%							
Tl 190.801†	65.2	18.756 ug/L	1.9813	18.756 ppb	1.9813	10.56%	
QC value within limits for Tl 190.801 Recovery = 93.78%							
U 409.014†	2133.0	48.052 ug/L	1.1394	48.052 ppb	1.1394	2.37%	
QC value within limits for U 409.014 Recovery = 96.10%							
V 292.402†	858.5	4.9862 ug/L	0.40825	4.9862 ppb	0.40825	8.19%	
QC value within limits for V 292.402 Recovery = 99.72%							
Zn 213.857†	1237.9	10.246 ug/L	0.1530	10.246 ppb	0.1530	1.49%	
QC value within limits for Zn 213.857 Recovery = 102.46%							
SiO2†	3804.4	218.19 ug/L	3.458	218.19 ppb	3.458	1.58%	
QC value within limits for SiO2 Recovery = 102.44%							
All analyte(s) passed QC.							

Sequence No.: 15
 Sample ID: CCB
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 8
 Date Collected: 1/28/2010 16:43:48
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5501.0	5501.0	98.5 %		16:45:40
1	Y RADIAL	5962.3	5962.3	98.01 %		16:45:40
1	Al 396.153Radial†	2.9	-0.8	-0.5750 ug/L	-0.5750 ppb	16:46:00
1	Ca 317.933Radial†	25.5	-0.9	-1.3826 ug/L	-1.3826 ppb	16:46:00
1	Fe 238.204 Radial†	7.0	-1.4	-11.416 ug/L	-11.416 ppb	16:46:00
1	K 766.490 Radial†	2520.2	163.4	27.055 ug/L	27.055 ppb	16:45:40
1	Mg 279.077 IEC†	0.3	-2.0	-66.696 ug/L	-66.696 ppb	16:46:00
1	Na 589.592 Radial†	-948.7	64.8	17.319 ug/L	17.319 ppb	16:45:40
1	Sr 421.552†	35.7	25.0	0.1457 ug/L	0.1457 ppb	16:45:40
1	Sc 361.383	963970.0	963970.0	97.962 %		16:46:57
1	Y 371.029	853924.4	853924.4	97.903 %		16:46:57
1	Ag 328.068†	389.8	77.0	0.2945 ug/L	0.2945 ppb	16:47:02
1	As 188.979†	-33.3	-0.2	-0.0684 ug/L	-0.0684 ppb	16:47:22
1	B 249.677†	-302.3	-22.4	-0.4405 ug/L	-0.4405 ppb	16:47:22
1	Ba 233.527†	1.3	6.0	0.0414 ug/L	0.0414 ppb	16:47:22
1	Be 313.107†	-4903.3	62.8	0.0194 ug/L	0.0194 ppb	16:47:02
1	Cd 226.502†	-211.3	-16.3	-0.1613 ug/L	-0.1613 ppb	16:47:22
1	Co 228.616†	-80.1	-9.9	-0.1887 ug/L	-0.1887 ppb	16:47:22
1	Cr 267.716†	102.4	19.0	0.1858 ug/L	0.1858 ppb	16:47:22
1	Cu 324.752†	8936.0	-14.6	-0.0339 ug/L	-0.0339 ppb	16:47:02
1	Mn 257.610†	574.7	53.8	0.0556 ug/L	0.0556 ppb	16:47:22
1	Mo 202.031†	29.3	7.0	0.4294 ug/L	0.4294 ppb	16:47:22
1	Ni 231.604†	109.3	1.6	0.0349 ug/L	0.0349 ppb	16:47:22
1	P 214.914†	238.6	4.1	2.0539 ug/L	2.0539 ppb	16:47:22
1	Pb 220.353†	-48.9	8.5	0.9477 ug/L	0.9477 ppb	16:47:22
1	S 181.975 Axial†	42.1	-24.8	-30.270 ug/L	-30.270 ppb	16:47:22
1	Sb 206.836†	38.7	4.4	1.3358 ug/L	1.3358 ppb	16:47:22
1	Se 196.026†	-23.8	-3.1	-1.6599 ug/L	-1.6599 ppb	16:47:22
1	Si 251.611†	508.9	59.2	1.5825 ug/L	1.5825 ppb	16:47:22
1	Sn 189.927†	2.3	6.9	1.1359 ug/L	1.1359 ppb	16:47:22
1	Ti 334.940†	-1005.2	-116.4	-0.1524 ug/L	-0.1524 ppb	16:47:02
1	Tl 190.801†	-44.2	-5.3	-1.5320 ug/L	-1.5320 ppb	16:47:22
1	U 409.014†	-1645.6	-295.1	-6.6498 ug/L	-6.6498 ppb	16:47:02
1	V 292.402†	-1413.8	-2.8	-0.0217 ug/L	-0.0217 ppb	16:47:02
1	Zn 213.857†	795.5	69.3	0.5780 ug/L	0.5780 ppb	16:47:22
1	SiO2†	523.8	58.6	3.3521 ug/L	3.3521 ppb	16:48:28
2	Sc Radial	5471.0	5471.0	98.0 %		16:46:05
2	Y RADIAL	5917.6	5917.6	97.27 %		16:46:05
2	Al 396.153Radial†	11.2	7.7	5.3047 ug/L	5.3047 ppb	16:46:25
2	Ca 317.933Radial†	29.8	3.7	5.5690 ug/L	5.5690 ppb	16:46:25
2	Fe 238.204 Radial†	10.6	2.4	20.669 ug/L	20.669 ppb	16:46:25
2	K 766.490 Radial†	2431.4	86.8	14.372 ug/L	14.372 ppb	16:46:05
2	Mg 279.077 IEC†	2.6	0.3	9.4731 ug/L	9.4731 ppb	16:46:25
2	Na 589.592 Radial†	-980.0	27.6	7.3824 ug/L	7.3824 ppb	16:46:05
2	Sr 421.552†	41.8	31.5	0.1835 ug/L	0.1835 ppb	16:46:05
2	Sc 361.383	959223.1	959223.1	97.479 %		16:47:27
2	Y 371.029	851167.9	851167.9	97.587 %		16:47:27
2	Ag 328.068†	385.9	74.9	0.2972 ug/L	0.2972 ppb	16:47:32
2	As 188.979†	-39.7	-6.9	-2.4860 ug/L	-2.4860 ppb	16:47:52
2	B 249.677†	-310.7	-32.4	-0.6458 ug/L	-0.6458 ppb	16:47:52
2	Ba 233.527†	-8.1	-3.7	-0.0248 ug/L	-0.0248 ppb	16:47:52
2	Be 313.107†	-4878.8	63.1	0.0196 ug/L	0.0196 ppb	16:47:32
2	Cd 226.502†	-198.0	-3.8	-0.0403 ug/L	-0.0403 ppb	16:47:52
2	Co 228.616†	-65.7	4.4	0.0838 ug/L	0.0838 ppb	16:47:52
2	Cr 267.716†	99.9	17.0	0.1665 ug/L	0.1665 ppb	16:47:52
2	Cu 324.752†	8929.0	23.4	0.0628 ug/L	0.0628 ppb	16:47:32
2	Mn 257.610†	585.3	67.5	0.0695 ug/L	0.0695 ppb	16:47:52
2	Mo 202.031†	21.7	-0.7	-0.0425 ug/L	-0.0425 ppb	16:47:52
2	Ni 231.604†	111.8	4.7	0.1058 ug/L	0.1058 ppb	16:47:52

2	P 214.914†	233.6	0.1	0.0611 ug/L	0.0611 ppb	16:47:52
2	Pb 220.353†	-51.3	5.7	0.6354 ug/L	0.6354 ppb	16:47:52
2	S 181.975 Axial†	47.2	-19.4	-23.649 ug/L	-23.649 ppb	16:47:52
2	Sb 206.836†	33.0	-1.3	-0.3712 ug/L	-0.3712 ppb	16:47:52
2	Se 196.026†	-19.7	0.9	0.5429 ug/L	0.5429 ppb	16:47:52
2	Si 251.611†	524.0	77.2	2.0730 ug/L	2.0730 ppb	16:47:52
2	Sn 189.927†	4.3	9.0	1.4837 ug/L	1.4837 ppb	16:47:52
2	Ti 334.940†	-954.3	-69.3	-0.0934 ug/L	-0.0934 ppb	16:47:32
2	Tl 190.801†	-40.6	-1.9	-0.5532 ug/L	-0.5532 ppb	16:47:52
2	U 409.014†	-1564.2	-219.9	-4.9596 ug/L	-4.9596 ppb	16:47:32
2	V 292.402†	-1336.0	69.8	0.3747 ug/L	0.3747 ppb	16:47:32
2	Zn 213.857†	805.2	83.3	0.6908 ug/L	0.6908 ppb	16:47:52
2	SiO2†	493.7	30.3	1.7417 ug/L	1.7417 ppb	16:48:33
3	Sc Radial	5414.9	5414.9	97.0 %		16:46:30
3	Y RADIAL	5882.2	5882.2	96.69 %		16:46:30
3	Al 396.153Radial†	3.8	0.2	0.1022 ug/L	0.1022 ppb	16:46:50
3	Ca 317.933Radial†	26.9	1.0	1.4725 ug/L	1.4725 ppb	16:46:50
3	Fe 238.204 Radial†	9.1	1.0	8.3725 ug/L	8.3725 ppb	16:46:50
3	K 766.490 Radial†	2400.7	80.9	13.383 ug/L	13.383 ppb	16:46:30
3	Mg 279.077 IEC†	3.4	1.1	36.615 ug/L	36.615 ppb	16:46:50
3	Na 589.592 Radial†	-924.9	74.0	19.775 ug/L	19.775 ppb	16:46:30
3	Sr 421.552†	39.0	29.0	0.1689 ug/L	0.1689 ppb	16:46:30
3	Sc 361.383	961344.6	961344.6	97.695 %		16:47:57
3	Y 371.029	852794.6	852794.6	97.774 %		16:47:57
3	Ag 328.068†	355.6	43.0	0.1686 ug/L	0.1686 ppb	16:48:02
3	As 188.979†	-38.4	-5.4	-1.9760 ug/L	-1.9760 ppb	16:48:23
3	B 249.677†	-339.5	-61.3	-1.2155 ug/L	-1.2155 ppb	16:48:23
3	Ba 233.527†	0.5	5.1	0.0359 ug/L	0.0359 ppb	16:48:23
3	Be 313.107†	-4961.8	-10.9	-0.0037 ug/L	-0.0037 ppb	16:48:02
3	Cd 226.502†	-186.6	8.3	0.0813 ug/L	0.0813 ppb	16:48:23
3	Co 228.616†	-59.2	11.2	0.2146 ug/L	0.2146 ppb	16:48:23
3	Cr 267.716†	74.8	-9.0	-0.0856 ug/L	-0.0856 ppb	16:48:23
3	Cu 324.752†	8956.8	31.6	0.0818 ug/L	0.0818 ppb	16:48:02
3	Mn 257.610†	575.9	56.5	0.0562 ug/L	0.0562 ppb	16:48:23
3	Mo 202.031†	25.3	3.0	0.1846 ug/L	0.1846 ppb	16:48:23
3	Ni 231.604†	126.9	20.0	0.4458 ug/L	0.4458 ppb	16:48:23
3	P 214.914†	250.9	17.3	8.6317 ug/L	8.6317 ppb	16:48:23
3	Pb 220.353†	-61.0	-4.0	-0.4513 ug/L	-0.4513 ppb	16:48:23
3	S 181.975 Axial†	46.6	-20.1	-24.465 ug/L	-24.465 ppb	16:48:23
3	Sb 206.836†	27.1	-7.4	-2.2097 ug/L	-2.2097 ppb	16:48:23
3	Se 196.026†	-14.0	6.8	3.5537 ug/L	3.5537 ppb	16:48:23
3	Si 251.611†	506.7	58.4	1.5634 ug/L	1.5634 ppb	16:48:23
3	Sn 189.927†	5.2	9.9	1.6323 ug/L	1.6323 ppb	16:48:23
3	Ti 334.940†	-965.2	-78.2	-0.1094 ug/L	-0.1094 ppb	16:48:02
3	Tl 190.801†	-41.0	-2.2	-0.6380 ug/L	-0.6380 ppb	16:48:23
3	U 409.014†	-1470.5	-120.5	-2.7165 ug/L	-2.7165 ppb	16:48:02
3	V 292.402†	-1400.2	7.2	0.0371 ug/L	0.0371 ppb	16:48:02
3	Zn 213.857†	809.4	85.8	0.7103 ug/L	0.7103 ppb	16:48:23
3	SiO2†	530.7	67.1	3.8479 ug/L	3.8479 ppb	16:48:38

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	961512.6	97.712 %	0.2417			0.25%
Sc Radial	5462.3	97.8 %	0.78			0.80%
Y 371.029	852629.0	97.755 %	0.1589			0.16%
Y RADIAL	5920.7	97.32 %	0.660			0.68%
Ag 328.068†	65.0	0.2535 ug/L	0.07351	0.2535 ppb	0.07351	29.00%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	2.3	1.6106 ug/L	3.21702	1.6106 ppb	3.21702	199.74%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-4.2	-1.5101 ug/L	1.27433	-1.5101 ppb	1.27433	84.39%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-38.7	-0.7673 ug/L	0.40152	-0.7673 ppb	0.40152	52.33%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	2.4	0.0175 ug/L	0.03676	0.0175 ppb	0.03676	210.17%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	38.3	0.0118 ug/L	0.01337	0.0118 ppb	0.01337	113.51%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	1.2	1.8863 ug/L	3.49427	1.8863 ppb	3.49427	185.25%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd 226.502†	-3.9	-0.0401 ug/L	0.12131	-0.0401 ppb	0.12131	302.29%	
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	1.9	0.0365 ug/L	0.20575	0.0365 ppb	0.20575	563.26%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	9.0	0.0889 ug/L	0.15142	0.0889 ppb	0.15142	170.33%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	13.4	0.0369 ug/L	0.06202	0.0369 ppb	0.06202	168.08%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	0.7	5.8752 ug/L	16.18762	5.8752 ppb	16.18762	275.53%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	110.4	18.270 ug/L	7.6242	18.270 ppb	7.6242	41.73%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	-0.2	-6.8691 ug/L	53.55943	-6.8691 ppb	53.55943	779.71%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	59.3	0.0604 ug/L	0.00784	0.0604 ppb	0.00784	12.98%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	3.1	0.1905 ug/L	0.23601	0.1905 ppb	0.23601	123.91%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	55.5	14.825 ug/L	6.5619	14.825 ppb	6.5619	44.26%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	8.7	0.1955 ug/L	0.21964	0.1955 ppb	0.21964	112.36%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	7.2	3.5822 ug/L	4.48504	3.5822 ppb	4.48504	125.20%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	3.4	0.3773 ug/L	0.73437	0.3773 ppb	0.73437	194.66%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	-21.4	-26.128 ug/L	3.6102	-26.128 ppb	3.6102	13.82%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	-1.5	-0.4150 ug/L	1.77315	-0.4150 ppb	1.77315	427.22%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	1.5	0.8122 ug/L	2.61722	0.8122 ppb	2.61722	322.23%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	64.9	1.7396 ug/L	0.28885	1.7396 ppb	0.28885	16.60%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	8.6	1.4173 ug/L	0.25480	1.4173 ppb	0.25480	17.98%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	28.5	0.1661 ug/L	0.01905	0.1661 ppb	0.01905	11.47%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	-88.0	-0.1184 ug/L	0.03050	-0.1184 ppb	0.03050	25.76%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	-3.2	-0.9078 ug/L	0.54228	-0.9078 ppb	0.54228	59.74%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	-211.8	-4.7753 ug/L	1.97314	-4.7753 ppb	1.97314	41.32%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	24.7	0.1300 ug/L	0.21390	0.1300 ppb	0.21390	164.48%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	79.5	0.6597 ug/L	0.07144	0.6597 ppb	0.07144	10.83%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†	52.0	2.9806 ug/L	1.10115	2.9806 ppb	1.10115	36.94%	
QC value within limits for SiO2 Recovery = Not calculated							
All analyte(s) passed QC.							

Sequence No.: 3

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 1/28/2010 17:55:03

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5510.5	5510.5	98.7 %		17:56:55
1	Y RADIAL	5948.5	5948.5	97.78 %		17:56:55
1	Al 396.153Radial†	6791.8	6879.9	4745.0 ug/L	4745.0 ppb	17:56:55
1	Ca 317.933Radial†	3215.8	3232.5	4915.0 ug/L	4915.0 ppb	17:57:15
1	Fe 238.204 Radial†	602.3	602.0	5098.0 ug/L	5098.0 ppb	17:57:15
1	K 766.490 Radial†	31530.3	29561.3	4888.2 ug/L	4888.2 ppb	17:56:55
1	Mg 279.077 IEC†	160.0	159.8	5213.5 ug/L	5213.5 ppb	17:57:15
1	Na 589.592 Radial†	36274.8	37793.1	10093 ug/L	10093 ppb	17:56:55
1	Sr 421.552†	82594.8	83700.0	487.18 ug/L	487.18 ppb	17:56:55
1	Sc 361.383	949575.0	949575.0	96.499 %		17:58:13
1	Y 371.029	832716.9	832716.9	95.472 %		17:58:13
1	Ag 328.068†	126683.3	130958.9	501.42 ug/L	501.42 ppb	17:58:18
1	As 188.979†	1231.7	1310.2	479.56 ug/L	479.56 ppb	17:58:38
1	B 249.677†	23260.5	24390.7	480.73 ug/L	480.73 ppb	17:58:18
1	Ba 233.527†	66506.9	68924.6	485.49 ug/L	485.49 ppb	17:58:18
1	Be 313.107†	1464230.2	1522426.1	479.71 ug/L	479.71 ppb	17:58:13
1	Cd 226.502†	47336.8	49253.8	487.10 ug/L	487.10 ppb	17:58:18
1	Co 228.616†	24494.6	25455.2	487.18 ug/L	487.18 ppb	17:58:18
1	Cr 267.716†	48568.8	50245.5	484.73 ug/L	484.73 ppb	17:58:18
1	Cu 324.752†	193485.5	191369.4	483.31 ug/L	483.31 ppb	17:58:18
1	Mn 257.610†	463649.3	479939.3	482.62 ug/L	482.62 ppb	17:58:13
1	Mo 202.031†	7568.7	7820.4	482.93 ug/L	482.93 ppb	17:58:38
1	Ni 231.604†	21114.3	21770.4	486.29 ug/L	486.29 ppb	17:58:18
1	P 214.914†	4845.9	4782.2	2291.8 ug/L	2291.8 ppb	17:58:38
1	Pb 220.353†	4048.2	4253.4	475.96 ug/L	475.96 ppb	17:58:38
1	S 181.975 Axial†	820.1	782.1	952.78 ug/L	952.78 ppb	17:58:38
1	Sb 206.836†	1603.2	1626.2	506.75 ug/L	506.75 ppb	17:58:38
1	Se 196.026†	869.5	922.2	497.83 ug/L	497.83 ppb	17:58:38
1	Si 251.611†	90452.1	93273.8	2496.6 ug/L	2496.6 ppb	17:58:18
1	Sn 189.927†	2843.3	2951.1	484.92 ug/L	484.92 ppb	17:58:38
1	Ti 334.940†	347600.3	361122.3	497.60 ug/L	497.60 ppb	17:58:13
1	Tl 190.801†	1559.2	1655.6	477.95 ug/L	477.95 ppb	17:58:38
1	U 409.014†	19924.7	22032.3	494.93 ug/L	494.93 ppb	17:58:18
1	V 292.402†	82781.6	87225.6	490.67 ug/L	490.67 ppb	17:58:18
1	Zn 213.857†	57320.1	58657.2	483.89 ug/L	483.89 ppb	17:58:18
1	SiO2†	89341.7	92107.2	5276.2 ug/L	5276.2 ppb	17:59:46
2	Sc Radial	5497.7	5497.7	98.4 %		17:57:20
2	Y RADIAL	5946.9	5946.9	97.75 %		17:57:20
2	Al 396.153Radial†	6832.7	6937.5	4783.7 ug/L	4783.7 ppb	17:57:20
2	Ca 317.933Radial†	3240.9	3265.6	4965.4 ug/L	4965.4 ppb	17:57:40
2	Fe 238.204 Radial†	608.2	609.5	5161.6 ug/L	5161.6 ppb	17:57:40
2	K 766.490 Radial†	32081.8	30196.2	4993.2 ug/L	4993.2 ppb	17:57:20
2	Mg 279.077 IEC†	159.1	159.3	5198.5 ug/L	5198.5 ppb	17:57:40
2	Na 589.592 Radial†	36701.8	38312.7	10232 ug/L	10232 ppb	17:57:20
2	Sr 421.552†	83880.3	85201.3	495.92 ug/L	495.92 ppb	17:57:20
2	Sc 361.383	909748.2	909748.2	92.451 %		17:58:44
2	Y 371.029	796911.3	796911.3	91.366 %		17:58:44
2	Ag 328.068†	124631.5	134486.7	514.90 ug/L	514.90 ppb	17:58:49
2	As 188.979†	1232.5	1366.9	500.31 ug/L	500.31 ppb	17:59:09
2	B 249.677†	22943.0	25102.6	494.78 ug/L	494.78 ppb	17:58:49
2	Ba 233.527†	65276.9	70611.3	497.36 ug/L	497.36 ppb	17:58:49
2	Be 313.107†	1479060.5	1604894.0	505.70 ug/L	505.70 ppb	17:58:44
2	Cd 226.502†	46441.9	50433.2	498.77 ug/L	498.77 ppb	17:58:49
2	Co 228.616†	24053.2	26089.0	499.31 ug/L	499.31 ppb	17:58:49
2	Cr 267.716†	47508.3	51301.8	494.93 ug/L	494.93 ppb	17:58:49
2	Cu 324.752†	189778.9	196137.8	495.35 ug/L	495.35 ppb	17:58:49
2	Mn 257.610†	468363.6	506072.6	508.89 ug/L	508.89 ppb	17:58:44
2	Mo 202.031†	7645.7	8247.1	509.26 ug/L	509.26 ppb	17:59:09
2	Ni 231.604†	20721.2	22303.1	498.18 ug/L	498.18 ppb	17:58:49

2	P 214.914†	4860.2	5017.6	2407.0 ug/L	2407.0 ppb	17:59:09
2	Pb 220.353†	4095.5	4488.2	502.21 ug/L	502.21 ppb	17:59:09
2	S 181.975 Axial†	813.7	812.3	989.65 ug/L	989.65 ppb	17:59:09
2	Sb 206.836†	1613.7	1710.3	532.94 ug/L	532.94 ppb	17:59:09
2	Se 196.026†	883.6	976.8	526.52 ug/L	526.52 ppb	17:59:09
2	Si 251.611†	88728.7	95513.1	2556.3 ug/L	2556.3 ppb	17:58:49
2	Sn 189.927†	2873.5	3112.8	511.45 ug/L	511.45 ppb	17:59:09
2	Ti 334.940†	351498.8	381108.4	525.15 ug/L	525.15 ppb	17:58:44
2	Tl 190.801†	1575.4	1743.7	503.50 ug/L	503.50 ppb	17:59:09
2	U 409.014†	19301.6	22262.3	500.08 ug/L	500.08 ppb	17:58:49
2	V 292.402†	80983.7	89036.4	501.06 ug/L	501.06 ppb	17:58:49
2	Zn 213.857†	56165.1	60008.3	495.04 ug/L	495.04 ppb	17:58:49
2	SiO2†	89305.0	96120.6	5505.9 ug/L	5505.9 ppb	17:59:51
3	Sc Radial	5309.2	5309.2	95.1 %		17:57:45
3	Y RADIAL	5691.3	5691.3	93.55 %		17:57:45
3	Al 396.153Radial†	6792.5	7141.6	4926.6 ug/L	4926.6 ppb	17:57:45
3	Ca 317.933Radial†	3196.7	3336.0	5072.4 ug/L	5072.4 ppb	17:58:05
3	Fe 238.204 Radial†	600.4	623.1	5276.2 ug/L	5276.2 ppb	17:58:05
3	K 766.490 Radial†	31720.9	30973.3	5121.8 ug/L	5121.8 ppb	17:57:45
3	Mg 279.077 IEC†	156.3	162.1	5288.8 ug/L	5288.8 ppb	17:58:05
3	Na 589.592 Radial†	36090.0	38992.7	10414 ug/L	10414 ppb	17:57:45
3	Sr 421.552†	82671.3	86954.2	506.12 ug/L	506.12 ppb	17:57:45
3	Sc 361.383	959063.0	959063.0	97.463 %		17:59:15
3	Y 371.029	840648.8	840648.8	96.381 %		17:59:15
3	Ag 328.068†	126161.5	129124.8	494.47 ug/L	494.47 ppb	17:59:20
3	As 188.979†	1243.9	1310.1	479.52 ug/L	479.52 ppb	17:59:40
3	B 249.677†	23179.8	24069.5	474.36 ug/L	474.36 ppb	17:59:20
3	Ba 233.527†	66142.0	67868.4	478.05 ug/L	478.05 ppb	17:59:20
3	Be 313.107†	1458445.6	1501479.9	473.11 ug/L	473.11 ppb	17:59:15
3	Cd 226.502†	47037.6	48461.4	479.23 ug/L	479.23 ppb	17:59:20
3	Co 228.616†	24323.8	25028.8	479.02 ug/L	479.02 ppb	17:59:20
3	Cr 267.716†	48215.9	49385.5	476.44 ug/L	476.44 ppb	17:59:20
3	Cu 324.752†	192349.6	188220.3	475.37 ug/L	475.37 ppb	17:59:20
3	Mn 257.610†	462182.8	473681.3	476.35 ug/L	476.35 ppb	17:59:15
3	Mo 202.031†	7597.3	7772.1	479.97 ug/L	479.97 ppb	17:59:40
3	Ni 231.604†	20930.0	21364.9	477.23 ug/L	477.23 ppb	17:59:20
3	P 214.914†	4855.9	4742.8	2273.5 ug/L	2273.5 ppb	17:59:40
3	Pb 220.353†	4074.5	4238.9	474.37 ug/L	474.37 ppb	17:59:40
3	S 181.975 Axial†	818.8	772.4	940.92 ug/L	940.92 ppb	17:59:40
3	Sb 206.836†	1601.6	1608.1	501.17 ug/L	501.17 ppb	17:59:40
3	Se 196.026†	886.7	931.0	502.98 ug/L	502.98 ppb	17:59:40
3	Si 251.611†	89948.9	91830.2	2457.9 ug/L	2457.9 ppb	17:59:20
3	Sn 189.927†	2844.2	2922.9	480.32 ug/L	480.32 ppb	17:59:40
3	Ti 334.940†	346685.6	356620.2	491.41 ug/L	491.41 ppb	17:59:15
3	Tl 190.801†	1564.8	1645.3	474.98 ug/L	474.98 ppb	17:59:40
3	U 409.014†	19671.3	21568.1	484.46 ug/L	484.46 ppb	17:59:20
3	V 292.402†	82045.0	85621.2	481.68 ug/L	481.68 ppb	17:59:20
3	Zn 213.857†	56895.2	57633.6	475.42 ug/L	475.42 ppb	17:59:20
3	SiO2†	89145.6	90990.1	5212.1 ug/L	5212.1 ppb	17:59:56

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	939462.1	95.471 %	2.6591			2.79%
Sc Radial	5439.2	97.4 %	2.02			2.07%
Y 371.029	823425.7	94.406 %	2.6716			2.83%
Y RADIAL	5862.2	96.36 %	2.434			2.53%
Ag 328.068†	131523.4	503.60 ug/L	10.387	503.60 ppb	10.387	2.06%
QC value within limits for Ag 328.068 Recovery = 100.72%						
Al 396.153Radial†	6986.3	4818.4 ug/L	95.62	4818.4 ppb	95.62	1.98%
QC value within limits for Al 396.153Radial Recovery = 96.37%						
As 188.979†	1329.1	486.47 ug/L	11.993	486.47 ppb	11.993	2.47%
QC value within limits for As 188.979 Recovery = 97.29%						
B 249.677†	24520.9	483.29 ug/L	10.446	483.29 ppb	10.446	2.16%
QC value within limits for B 249.677 Recovery = 96.66%						
Ba 233.527†	69134.8	486.97 ug/L	9.740	486.97 ppb	9.740	2.00%
QC value within limits for Ba 233.527 Recovery = 97.39%						
Be 313.107†	1542933.3	486.18 ug/L	17.227	486.18 ppb	17.227	3.54%
QC value within limits for Be 313.107 Recovery = 97.24%						
Ca 317.933Radial†	3278.0	4984.3 ug/L	80.37	4984.3 ppb	80.37	1.61%

QC value within limits for Ca 317.933 Radial Recovery = 99.69%

Cd 226.502†	49382.8	488.37 ug/L	9.828	488.37 ppb	9.828	2.01%
QC value within limits for Cd 226.502 Recovery = 97.67%						
Co 228.616†	25524.3	488.50 ug/L	10.210	488.50 ppb	10.210	2.09%
QC value within limits for Co 228.616 Recovery = 97.70%						
Cr 267.716†	50310.9	485.37 ug/L	9.258	485.37 ppb	9.258	1.91%
QC value within limits for Cr 267.716 Recovery = 97.07%						
Cu 324.752†	191909.2	484.67 ug/L	10.061	484.67 ppb	10.061	2.08%
QC value within limits for Cu 324.752 Recovery = 96.93%						
Fe 238.204 Radial†	611.5	5178.6 ug/L	90.30	5178.6 ppb	90.30	1.74%
QC value within limits for Fe 238.204 Radial Recovery = 103.57%						
K 766.490 Radial†	30243.6	5001.1 ug/L	117.01	5001.1 ppb	117.01	2.34%
QC value within limits for K 766.490 Radial Recovery = 100.02%						
Mg 279.077 IEC†	160.4	5233.6 ug/L	48.39	5233.6 ppb	48.39	0.92%
QC value within limits for Mg 279.077 IEC Recovery = 104.67%						
Mn 257.610†	486564.4	489.29 ug/L	17.266	489.29 ppb	17.266	3.53%
QC value within limits for Mn 257.610 Recovery = 97.86%						
Mo 202.031†	7946.5	490.72 ug/L	16.125	490.72 ppb	16.125	3.29%
QC value within limits for Mo 202.031 Recovery = 98.14%						
Na 589.592 Radial†	38366.2	10246 ug/L	160.7	10246 ppb	160.7	1.57%
QC value within limits for Na 589.592 Radial Recovery = 102.46%						
Ni 231.604†	21812.8	487.23 ug/L	10.511	487.23 ppb	10.511	2.16%
QC value within limits for Ni 231.604 Recovery = 97.45%						
P 214.914†	4847.5	2324.1 ug/L	72.38	2324.1 ppb	72.38	3.11%
QC value within limits for P 214.914 Recovery = 92.96%						
Pb 220.353†	4326.9	484.18 ug/L	15.637	484.18 ppb	15.637	3.23%
QC value within limits for Pb 220.353 Recovery = 96.84%						
S 181.975 Axial†	788.9	961.11 ug/L	25.414	961.11 ppb	25.414	2.64%
QC value within limits for S 181.975 Axial Recovery = 96.11%						
Sb 206.836†	1648.2	513.62 ug/L	16.964	513.62 ppb	16.964	3.30%
QC value within limits for Sb 206.836 Recovery = 102.72%						
Se 196.026†	943.3	509.11 ug/L	15.295	509.11 ppb	15.295	3.00%
QC value within limits for Se 196.026 Recovery = 101.82%						
Si 251.611†	93539.0	2503.6 ug/L	49.60	2503.6 ppb	49.60	1.98%
QC value within limits for Si 251.611 Recovery = 100.14%						
Sn 189.927†	2995.6	492.23 ug/L	16.801	492.23 ppb	16.801	3.41%
QC value within limits for Sn 189.927 Recovery = 98.45%						
Sr 421.552†	85285.2	496.40 ug/L	9.480	496.40 ppb	9.480	1.91%
QC value within limits for Sr 421.552 Recovery = 99.28%						
Ti 334.940†	366283.6	504.72 ug/L	17.959	504.72 ppb	17.959	3.56%
QC value within limits for Ti 334.940 Recovery = 100.94%						
Tl 190.801†	1681.5	485.48 ug/L	15.681	485.48 ppb	15.681	3.23%
QC value within limits for Tl 190.801 Recovery = 97.10%						
U 409.014†	21954.3	493.16 ug/L	7.959	493.16 ppb	7.959	1.61%
QC value within limits for U 409.014 Recovery = 98.63%						
V 292.402†	87294.4	491.14 ug/L	9.697	491.14 ppb	9.697	1.97%
QC value within limits for V 292.402 Recovery = 98.23%						
Zn 213.857†	58766.4	484.78 ug/L	9.837	484.78 ppb	9.837	2.03%
QC value within limits for Zn 213.857 Recovery = 96.96%						
SiO2†	93072.6	5331.4 ug/L	154.50	5331.4 ppb	154.50	2.90%
QC value within limits for SiO2 Recovery = 99.70%						

All analyte(s) passed QC.

Sequence No.: 4

Sample ID: PQL

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 11

Date Collected: 1/28/2010 18:02:07

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5457.5	5457.5	97.7 %		18:04:00
1	Y RADIAL	5919.4	5919.4	97.30 %		18:04:00
1	Al 396.153Radial†	298.0	301.2	208.26 ug/L	208.26 ppb	18:04:20
1	Ca 317.933Radial†	157.3	134.2	204.00 ug/L	204.00 ppb	18:04:20
1	Fe 238.204 Radial†	22.1	14.2	120.38 ug/L	120.38 ppb	18:04:20
1	K 766.490 Radial†	3338.7	1021.5	168.92 ug/L	168.92 ppb	18:04:00
1	Mg 279.077 IEC†	9.3	7.2	233.49 ug/L	233.49 ppb	18:04:20
1	Na 589.592 Radial†	168.2	1200.2	320.54 ug/L	320.54 ppb	18:04:00
1	Sr 421.552†	890.8	900.4	5.2398 ug/L	5.2398 ppb	18:04:00
1	Sc 361.383	959586.5	959586.5	97.516 %		18:05:16
1	Y 371.029	850718.6	850718.6	97.536 %		18:05:16
1	Ag 328.068†	1565.2	1284.0	4.8994 ug/L	4.8994 ppb	18:05:21
1	As 188.979†	45.9	80.9	29.399 ug/L	29.399 ppb	18:05:41
1	B 249.677†	2147.0	2488.0	49.230 ug/L	49.230 ppb	18:05:21
1	Ba 233.527†	701.1	723.5	5.0978 ug/L	5.0978 ppb	18:05:41
1	Be 313.107†	10288.5	15618.6	4.9207 ug/L	4.9207 ppb	18:05:21
1	Cd 226.502†	298.4	505.4	4.9997 ug/L	4.9997 ppb	18:05:41
1	Co 228.616†	169.3	245.4	4.7094 ug/L	4.7094 ppb	18:05:41
1	Cr 267.716†	570.6	499.6	4.8025 ug/L	4.8025 ppb	18:05:41
1	Cu 324.752†	12894.9	4086.9	10.299 ug/L	10.299 ppb	18:05:21
1	Mn 257.610†	10478.4	10212.3	10.266 ug/L	10.266 ppb	18:05:21
1	Mo 202.031†	183.8	165.5	10.223 ug/L	10.223 ppb	18:05:41
1	Ni 231.604†	294.7	192.3	4.2945 ug/L	4.2945 ppb	18:05:41
1	P 214.914†	528.8	302.8	149.08 ug/L	149.08 ppb	18:05:41
1	Pb 220.353†	35.9	95.2	10.671 ug/L	10.671 ppb	18:05:41
1	S 181.975 Axial†	122.3	57.6	70.216 ug/L	70.216 ppb	18:05:41
1	Sb 206.836†	69.7	36.4	11.317 ug/L	11.317 ppb	18:05:41
1	Se 196.026†	29.8	51.7	27.299 ug/L	27.299 ppb	18:05:41
1	Si 251.611†	4207.1	3854.0	103.28 ug/L	103.28 ppb	18:05:21
1	Sn 189.927†	60.9	67.1	11.037 ug/L	11.037 ppb	18:05:41
1	Ti 334.940†	2521.9	3495.9	4.8025 ug/L	4.8025 ppb	18:05:21
1	Tl 190.801†	37.3	78.0	22.410 ug/L	22.410 ppb	18:05:41
1	U 409.014†	876.2	2283.3	51.439 ug/L	51.439 ppb	18:05:16
1	V 292.402†	-552.1	874.2	5.0762 ug/L	5.0762 ppb	18:05:21
1	Zn 213.857†	1915.8	1221.9	10.115 ug/L	10.115 ppb	18:05:41
1	SiO2†	4170.2	3800.3	217.96 ug/L	217.96 ppb	18:06:47
2	Sc Radial	5442.6	5442.6	97.4 %		18:04:25
2	Y RADIAL	5914.5	5914.5	97.22 %		18:04:25
2	Al 396.153Radial†	306.7	311.0	215.04 ug/L	215.04 ppb	18:04:45
2	Ca 317.933Radial†	165.1	142.6	216.84 ug/L	216.84 ppb	18:04:45
2	Fe 238.204 Radial†	22.5	14.7	124.48 ug/L	124.48 ppb	18:04:45
2	K 766.490 Radial†	3263.9	954.2	157.76 ug/L	157.76 ppb	18:04:25
2	Mg 279.077 IEC†	11.9	9.8	321.34 ug/L	321.34 ppb	18:04:45
2	Na 589.592 Radial†	259.8	1294.6	345.75 ug/L	345.75 ppb	18:04:25
2	Sr 421.552†	877.8	889.6	5.1768 ug/L	5.1768 ppb	18:04:25
2	Sc 361.383	974477.6	974477.6	99.029 %		18:05:47
2	Y 371.029	863873.3	863873.3	99.044 %		18:05:47
2	Ag 328.068†	1598.4	1293.1	4.9345 ug/L	4.9345 ppb	18:05:52
2	As 188.979†	46.4	80.7	29.320 ug/L	29.320 ppb	18:06:12
2	B 249.677†	2120.3	2427.4	48.030 ug/L	48.030 ppb	18:05:52
2	Ba 233.527†	698.1	709.5	4.9996 ug/L	4.9996 ppb	18:06:12
2	Be 313.107†	10172.1	15339.8	4.8329 ug/L	4.8329 ppb	18:05:52
2	Cd 226.502†	296.1	498.4	4.9304 ug/L	4.9304 ppb	18:06:12
2	Co 228.616†	171.2	244.7	4.6954 ug/L	4.6954 ppb	18:06:12
2	Cr 267.716†	570.6	490.6	4.7159 ug/L	4.7159 ppb	18:06:12
2	Cu 324.752†	12761.9	3750.4	9.4492 ug/L	9.4492 ppb	18:05:52
2	Mn 257.610†	10373.2	9941.9	9.9906 ug/L	9.9906 ppb	18:05:52
2	Mo 202.031†	185.6	164.4	10.158 ug/L	10.158 ppb	18:06:12
2	Ni 231.604†	306.9	199.9	4.4647 ug/L	4.4647 ppb	18:06:12

2	P 214.914†	526.3	291.9	143.85 ug/L	143.85 ppb	18:06:12
2	Pb 220.353†	36.9	95.6	10.724 ug/L	10.724 ppb	18:06:12
2	S 181.975 Axial†	127.7	61.2	74.544 ug/L	74.544 ppb	18:06:12
2	Sb 206.836†	74.6	40.2	12.486 ug/L	12.486 ppb	18:06:12
2	Se 196.026†	33.6	55.0	29.059 ug/L	29.059 ppb	18:06:12
2	Si 251.611†	4149.8	3730.2	99.956 ug/L	99.956 ppb	18:05:52
2	Sn 189.927†	66.2	71.4	11.749 ug/L	11.749 ppb	18:06:12
2	Ti 334.940†	2504.7	3439.0	4.7182 ug/L	4.7182 ppb	18:05:52
2	Tl 190.801†	33.3	73.4	21.103 ug/L	21.103 ppb	18:06:12
2	U 409.014†	947.8	2341.8	52.758 ug/L	52.758 ppb	18:05:47
2	V 292.402†	-537.9	897.2	5.2067 ug/L	5.2067 ppb	18:05:52
2	Zn 213.857†	1915.9	1192.0	9.8659 ug/L	9.8659 ppb	18:06:12
2	SiO2†	4156.2	3720.8	213.39 ug/L	213.39 ppb	18:06:53
3	Sc Radial	5518.3	5518.3	98.8 %		18:04:50
3	Y RADIAL	5980.4	5980.4	98.30 %		18:04:50
3	Al 396.153Radial†	298.0	297.9	206.02 ug/L	206.02 ppb	18:05:10
3	Ca 317.933Radial†	160.4	135.5	206.09 ug/L	206.09 ppb	18:05:10
3	Fe 238.204 Radial†	21.9	13.8	116.58 ug/L	116.58 ppb	18:05:10
3	K 766.490 Radial†	3321.0	966.0	159.72 ug/L	159.72 ppb	18:04:50
3	Mg 279.077 IEC†	12.5	10.2	333.43 ug/L	333.43 ppb	18:05:10
3	Na 589.592 Radial†	216.1	1246.7	332.97 ug/L	332.97 ppb	18:04:50
3	Sr 421.552†	908.1	907.9	5.2831 ug/L	5.2831 ppb	18:04:50
3	Sc 361.383	976172.0	976172.0	99.202 %		18:06:17
3	Y 371.029	866658.3	866658.3	99.363 %		18:06:17
3	Ag 328.068†	1633.4	1325.6	5.0594 ug/L	5.0594 ppb	18:06:22
3	As 188.979†	39.3	73.5	26.693 ug/L	26.693 ppb	18:06:42
3	B 249.677†	2150.6	2454.2	48.561 ug/L	48.561 ppb	18:06:22
3	Ba 233.527†	675.5	685.5	4.8310 ug/L	4.8310 ppb	18:06:42
3	Be 313.107†	10195.0	15345.1	4.8351 ug/L	4.8351 ppb	18:06:22
3	Cd 226.502†	291.5	493.2	4.8793 ug/L	4.8793 ppb	18:06:42
3	Co 228.616†	186.6	260.0	4.9847 ug/L	4.9847 ppb	18:06:42
3	Cr 267.716†	566.7	485.7	4.6703 ug/L	4.6703 ppb	18:06:42
3	Cu 324.752†	12832.1	3798.8	9.5736 ug/L	9.5736 ppb	18:06:22
3	Mn 257.610†	10400.9	9951.7	9.9991 ug/L	9.9991 ppb	18:06:22
3	Mo 202.031†	172.1	150.5	9.2959 ug/L	9.2959 ppb	18:06:42
3	Ni 231.604†	303.4	195.8	4.3738 ug/L	4.3738 ppb	18:06:42
3	P 214.914†	520.6	285.3	140.52 ug/L	140.52 ppb	18:06:42
3	Pb 220.353†	28.0	86.6	9.7139 ug/L	9.7139 ppb	18:06:42
3	S 181.975 Axial†	122.6	55.8	68.021 ug/L	68.021 ppb	18:06:42
3	Sb 206.836†	69.2	34.6	10.782 ug/L	10.782 ppb	18:06:42
3	Se 196.026†	31.6	52.9	27.940 ug/L	27.940 ppb	18:06:42
3	Si 251.611†	4210.0	3783.6	101.40 ug/L	101.40 ppb	18:06:22
3	Sn 189.927†	66.0	71.1	11.695 ug/L	11.695 ppb	18:06:42
3	Ti 334.940†	2672.8	3604.0	4.9452 ug/L	4.9452 ppb	18:06:22
3	Tl 190.801†	31.1	71.1	20.437 ug/L	20.437 ppb	18:06:42
3	U 409.014†	742.0	2132.7	48.046 ug/L	48.046 ppb	18:06:17
3	V 292.402†	-548.2	887.8	5.1346 ug/L	5.1346 ppb	18:06:22
3	Zn 213.857†	1915.3	1188.0	9.8339 ug/L	9.8339 ppb	18:06:42
3	SiO2†	4201.2	3758.9	215.60 ug/L	215.60 ppb	18:06:58

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	970078.7	98.582 %	0.9274			0.94%
Sc Radial	5472.8	98.0 %	0.72			0.73%
Y 371.029	860416.8	98.647 %	0.9761			0.99%
Y RADIAL	5938.1	97.61 %	0.603			0.62%
Ag 328.068†	1300.9	4.9645 ug/L	0.08410	4.9645 ppb	0.08410	1.69%
QC value within limits for Ag 328.068 Recovery = 99.29%						
Al 396.153Radial†	303.4	209.77 ug/L	4.698	209.77 ppb	4.698	2.24%
QC value within limits for Al 396.153Radial Recovery = 104.89%						
As 188.979†	78.4	28.470 ug/L	1.5400	28.470 ppb	1.5400	5.41%
QC value within limits for As 188.979 Recovery = 94.90%						
B 249.677†	2456.5	48.607 ug/L	0.6015	48.607 ppb	0.6015	1.24%
QC value within limits for B 249.677 Recovery = 97.21%						
Ba 233.527†	706.2	4.9762 ug/L	0.13496	4.9762 ppb	0.13496	2.71%
QC value within limits for Ba 233.527 Recovery = 99.52%						
Be 313.107†	15434.5	4.8629 ug/L	0.05009	4.8629 ppb	0.05009	1.03%
QC value within limits for Be 313.107 Recovery = 97.26%						
Ca 317.933Radial†	137.4	208.98 ug/L	6.891	208.98 ppb	6.891	3.30%

QC value within limits for Ca 317.933 Radial Recovery = 104.49%

Cd 226.502†	499.0	4.9365 ug/L	0.06046	4.9365 ppb	0.06046	1.22%
QC value within limits for Cd 226.502 Recovery = 98.73%						
Co 228.616†	250.0	4.7965 ug/L	0.16315	4.7965 ppb	0.16315	3.40%
QC value within limits for Co 228.616 Recovery = 95.93%						
Cr 267.716†	492.0	4.7296 ug/L	0.06715	4.7296 ppb	0.06715	1.42%
QC value within limits for Cr 267.716 Recovery = 94.59%						
Cu 324.752†	3878.7	9.7741 ug/L	0.45917	9.7741 ppb	0.45917	4.70%
QC value within limits for Cu 324.752 Recovery = 97.74%						
Fe 238.204 Radial†	14.3	120.48 ug/L	3.954	120.48 ppb	3.954	3.28%
QC value within limits for Fe 238.204 Radial Recovery = 120.48%						
K 766.490 Radial†	980.5	162.14 ug/L	5.958	162.14 ppb	5.958	3.67%
QC value within limits for K 766.490 Radial Recovery = 108.09%						
Mg 279.077 IEC†	9.1	296.09 ug/L	54.546	296.09 ppb	54.546	18.42%
QC value within limits for Mg 279.077 IEC Recovery = 98.70%						
Mn 257.610†	10035.3	10.085 ug/L	0.1563	10.085 ppb	0.1563	1.55%
QC value within limits for Mn 257.610 Recovery = 100.85%						
Mo 202.031†	160.2	9.8924 ug/L	0.51758	9.8924 ppb	0.51758	5.23%
QC value within limits for Mo 202.031 Recovery = 98.92%						
Na 589.592 Radial†	1247.2	333.09 ug/L	12.603	333.09 ppb	12.603	3.78%
QC value within limits for Na 589.592 Radial Recovery = 111.03%						
Ni 231.604†	196.0	4.3777 ug/L	0.08518	4.3777 ppb	0.08518	1.95%
QC value within limits for Ni 231.604 Recovery = 87.55%						
P 214.914†	293.3	144.48 ug/L	4.319	144.48 ppb	4.319	2.99%
QC value within limits for P 214.914 Recovery = 96.32%						
Pb 220.353†	92.5	10.369 ug/L	0.5683	10.369 ppb	0.5683	5.48%
QC value within limits for Pb 220.353 Recovery = 103.69%						
S 181.975 Axial†	58.2	70.927 ug/L	3.3194	70.927 ppb	3.3194	4.68%
QC value within limits for S 181.975 Axial Recovery = 70.93%						
Sb 206.836†	37.1	11.528 ug/L	0.8712	11.528 ppb	0.8712	7.56%
QC value within limits for Sb 206.836 Recovery = 115.28%						
Se 196.026†	53.2	28.099 ug/L	0.8906	28.099 ppb	0.8906	3.17%
QC value within limits for Se 196.026 Recovery = 93.66%						
Si 251.611†	3789.3	101.54 ug/L	1.664	101.54 ppb	1.664	1.64%
QC value within limits for Si 251.611 Recovery = 101.54%						
Sn 189.927†	69.9	11.494 ug/L	0.3962	11.494 ppb	0.3962	3.45%
QC value within limits for Sn 189.927 Recovery = 114.94%						
Sr 421.552†	899.3	5.2332 ug/L	0.05342	5.2332 ppb	0.05342	1.02%
QC value within limits for Sr 421.552 Recovery = 104.66%						
Ti 334.940†	3513.0	4.8220 ug/L	0.11478	4.8220 ppb	0.11478	2.38%
QC value within limits for Ti 334.940 Recovery = 96.44%						
Tl 190.801†	74.2	21.316 ug/L	1.0040	21.316 ppb	1.0040	4.71%
QC value within limits for Tl 190.801 Recovery = 106.58%						
U 409.014†	2252.6	50.748 ug/L	2.4309	50.748 ppb	2.4309	4.79%
QC value within limits for U 409.014 Recovery = 101.50%						
V 292.402†	886.4	5.1392 ug/L	0.06538	5.1392 ppb	0.06538	1.27%
QC value within limits for V 292.402 Recovery = 102.78%						
Zn 213.857†	1200.6	9.9384 ug/L	0.15406	9.9384 ppb	0.15406	1.55%
QC value within limits for Zn 213.857 Recovery = 99.38%						
SiO2†	3760.0	215.65 ug/L	2.283	215.65 ppb	2.283	1.06%
QC value within limits for SiO2 Recovery = 101.24%						

All analyte(s) passed QC.

Sequence No.: 5

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 1/28/2010 18:09:09

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5120.6	5120.6	91.7 %		18:11:00
1	Y RADIAL	5535.5	5535.5	90.99 %		18:11:00
1	Al 396.153Radial†	2.0	-1.5	-1.0532 ug/L	-1.0532 ppb	18:11:20
1	Ca 317.933Radial†	18.3	-6.8	-10.300 ug/L	-10.300 ppb	18:11:20
1	Fe 238.204 Radial†	8.3	0.7	5.7582 ug/L	5.7582 ppb	18:11:20
1	K 766.490 Radial†	2383.0	203.9	33.765 ug/L	33.765 ppb	18:11:00
1	Mg 279.077 IEC†	3.9	1.9	61.012 ug/L	61.012 ppb	18:11:20
1	Na 589.592 Radial†	-981.6	-42.6	-11.386 ug/L	-11.386 ppb	18:11:00
1	Sr 421.552†	21.0	11.7	0.0683 ug/L	0.0683 ppb	18:11:00
1	Sc 361.383	964230.7	964230.7	97.988 %		18:12:17
1	Y 371.029	854765.4	854765.4	97.999 %		18:12:17
1	Ag 328.068†	444.0	132.1	0.5097 ug/L	0.5097 ppb	18:12:22
1	As 188.979†	-31.8	1.4	0.5003 ug/L	0.5003 ppb	18:12:42
1	B 249.677†	-308.5	-28.5	-0.5659 ug/L	-0.5659 ppb	18:12:42
1	Ba 233.527†	-13.6	-9.3	-0.0653 ug/L	-0.0653 ppb	18:12:42
1	Be 313.107†	-4995.4	-29.9	-0.0099 ug/L	-0.0099 ppb	18:12:22
1	Cd 226.502†	-211.2	-16.2	-0.1616 ug/L	-0.1616 ppb	18:12:42
1	Co 228.616†	-72.7	-2.4	-0.0459 ug/L	-0.0459 ppb	18:12:42
1	Cr 267.716†	69.3	-14.9	-0.1407 ug/L	-0.1407 ppb	18:12:42
1	Cu 324.752†	8997.4	45.6	0.1186 ug/L	0.1186 ppb	18:12:22
1	Mn 257.610†	526.2	4.0	0.0021 ug/L	0.0021 ppb	18:12:42
1	Mo 202.031†	21.3	-1.2	-0.0757 ug/L	-0.0757 ppb	18:12:42
1	Ni 231.604†	100.5	-7.4	-0.1646 ug/L	-0.1646 ppb	18:12:42
1	P 214.914†	241.4	6.8	3.3815 ug/L	3.3815 ppb	18:12:42
1	Pb 220.353†	-64.5	-7.5	-0.8352 ug/L	-0.8352 ppb	18:12:42
1	S 181.975 Axial†	51.3	-15.5	-18.878 ug/L	-18.878 ppb	18:12:42
1	Sb 206.836†	37.0	2.6	0.7960 ug/L	0.7960 ppb	18:12:42
1	Se 196.026†	-19.6	1.1	0.5876 ug/L	0.5876 ppb	18:12:42
1	Si 251.611†	480.1	29.7	0.7973 ug/L	0.7973 ppb	18:12:42
1	Sn 189.927†	-0.9	3.7	0.5986 ug/L	0.5986 ppb	18:12:42
1	Ti 334.940†	-1047.7	-159.5	-0.2237 ug/L	-0.2237 ppb	18:12:22
1	Tl 190.801†	-38.1	0.9	0.2556 ug/L	0.2556 ppb	18:12:42
1	U 409.014†	-1598.3	-246.4	-5.5547 ug/L	-5.5547 ppb	18:12:22
1	V 292.402†	-1390.9	20.9	0.1051 ug/L	0.1051 ppb	18:12:22
1	Zn 213.857†	688.7	-39.8	-0.3312 ug/L	-0.3312 ppb	18:12:42
1	SiO2†	510.2	44.6	2.5616 ug/L	2.5616 ppb	18:13:48
2	Sc Radial	5194.2	5194.2	93.0 %		18:11:25
2	Y RADIAL	5636.1	5636.1	92.64 %		18:11:25
2	Al 396.153Radial†	1.8	-1.8	-1.2551 ug/L	-1.2551 ppb	18:11:45
2	Ca 317.933Radial†	14.9	-10.7	-16.285 ug/L	-16.285 ppb	18:11:45
2	Fe 238.204 Radial†	9.7	2.0	17.299 ug/L	17.299 ppb	18:11:45
2	K 766.490 Radial†	2435.6	223.7	37.052 ug/L	37.052 ppb	18:11:25
2	Mg 279.077 IEC†	3.4	1.2	39.952 ug/L	39.952 ppb	18:11:45
2	Na 589.592 Radial†	-1044.8	-95.4	-25.471 ug/L	-25.471 ppb	18:11:25
2	Sr 421.552†	24.6	15.3	0.0893 ug/L	0.0893 ppb	18:11:25
2	Sc 361.383	966719.4	966719.4	98.241 %		18:12:47
2	Y 371.029	856793.3	856793.3	98.232 %		18:12:47
2	Ag 328.068†	355.5	40.9	0.1661 ug/L	0.1661 ppb	18:12:52
2	As 188.979†	-24.3	9.1	3.3036 ug/L	3.3036 ppb	18:13:12
2	B 249.677†	-306.9	-26.1	-0.5202 ug/L	-0.5202 ppb	18:13:12
2	Ba 233.527†	-10.4	-6.0	-0.0411 ug/L	-0.0411 ppb	18:13:12
2	Be 313.107†	-5046.6	-68.9	-0.0220 ug/L	-0.0220 ppb	18:12:52
2	Cd 226.502†	-215.3	-19.8	-0.1986 ug/L	-0.1986 ppb	18:13:12
2	Co 228.616†	-70.0	0.6	0.0116 ug/L	0.0116 ppb	18:13:12
2	Cr 267.716†	89.1	5.2	0.0521 ug/L	0.0521 ppb	18:13:12
2	Cu 324.752†	8998.6	23.2	0.0617 ug/L	0.0617 ppb	18:12:52
2	Mn 257.610†	537.4	14.1	0.0143 ug/L	0.0143 ppb	18:13:12
2	Mo 202.031†	24.1	1.6	0.1010 ug/L	0.1010 ppb	18:13:12
2	Ni 231.604†	97.7	-10.5	-0.2357 ug/L	-0.2357 ppb	18:13:12

2	P 214.914†	244.0	8.8	4.3771 ug/L	4.3771 ppb	18:13:12
2	Pb 220.353†	-54.2	3.2	0.3580 ug/L	0.3580 ppb	18:13:12
2	S 181.975 Axial†	49.2	-17.7	-21.625 ug/L	-21.625 ppb	18:13:12
2	Sb 206.836†	33.0	-1.6	-0.4492 ug/L	-0.4492 ppb	18:13:12
2	Se 196.026†	-13.5	7.4	3.8839 ug/L	3.8839 ppb	18:13:12
2	Si 251.611†	467.7	15.8	0.4216 ug/L	0.4216 ppb	18:13:12
2	Sn 189.927†	3.0	7.6	1.2513 ug/L	1.2513 ppb	18:13:12
2	Ti 334.940†	-998.4	-106.5	-0.1505 ug/L	-0.1505 ppb	18:12:52
2	Tl 190.801†	-35.9	3.2	0.9190 ug/L	0.9190 ppb	18:13:12
2	U 409.014†	-1537.3	-180.1	-4.0612 ug/L	-4.0612 ppb	18:12:52
2	V 292.402†	-1358.0	58.0	0.3143 ug/L	0.3143 ppb	18:12:52
2	Zn 213.857†	708.7	-21.3	-0.1775 ug/L	-0.1775 ppb	18:13:12
2	SiO2†	479.7	12.2	0.6956 ug/L	0.6956 ppb	18:13:53
3	Sc Radial	5226.5	5226.5	93.6 %		18:11:50
3	Y RADIAL	5681.1	5681.1	93.38 %		18:11:50
3	Al 396.153Radial†	13.6	10.8	7.4600 ug/L	7.4600 ppb	18:12:10
3	Ca 317.933Radial†	18.1	-7.4	-11.310 ug/L	-11.310 ppb	18:12:10
3	Fe 238.204 Radial†	8.9	1.1	9.0413 ug/L	9.0413 ppb	18:12:10
3	K 766.490 Radial†	2414.1	184.4	30.547 ug/L	30.547 ppb	18:11:50
3	Mg 279.077 IEC†	0.4	-2.0	-64.386 ug/L	-64.386 ppb	18:12:10
3	Na 589.592 Radial†	-1005.5	-46.5	-12.407 ug/L	-12.407 ppb	18:11:50
3	Sr 421.552†	41.3	33.0	0.1922 ug/L	0.1922 ppb	18:11:50
3	Sc 361.383	956683.3	956683.3	97.221 %		18:13:17
3	Y 371.029	849619.5	849619.5	97.410 %		18:13:17
3	Ag 328.068†	331.1	19.6	0.0806 ug/L	0.0806 ppb	18:13:22
3	As 188.979†	-24.9	8.2	2.9667 ug/L	2.9667 ppb	18:13:43
3	B 249.677†	-342.5	-66.0	-1.3089 ug/L	-1.3089 ppb	18:13:43
3	Ba 233.527†	-10.4	-6.2	-0.0431 ug/L	-0.0431 ppb	18:13:43
3	Be 313.107†	-4902.6	25.3	0.0077 ug/L	0.0077 ppb	18:13:22
3	Cd 226.502†	-209.7	-16.3	-0.1634 ug/L	-0.1634 ppb	18:13:43
3	Co 228.616†	-59.0	11.1	0.2135 ug/L	0.2135 ppb	18:13:43
3	Cr 267.716†	80.3	-3.0	-0.0269 ug/L	-0.0269 ppb	18:13:43
3	Cu 324.752†	8887.7	5.2	0.0160 ug/L	0.0160 ppb	18:13:22
3	Mn 257.610†	504.0	-14.5	-0.0111 ug/L	-0.0111 ppb	18:13:43
3	Mo 202.031†	26.3	4.1	0.2535 ug/L	0.2535 ppb	18:13:43
3	Ni 231.604†	82.6	-25.0	-0.5588 ug/L	-0.5588 ppb	18:13:43
3	P 214.914†	255.5	23.3	11.639 ug/L	11.639 ppb	18:13:43
3	Pb 220.353†	-54.6	2.2	0.2420 ug/L	0.2420 ppb	18:13:43
3	S 181.975 Axial†	49.1	-17.3	-21.049 ug/L	-21.049 ppb	18:13:43
3	Sb 206.836†	38.7	4.6	1.4233 ug/L	1.4233 ppb	18:13:43
3	Se 196.026†	-17.3	3.3	1.7411 ug/L	1.7411 ppb	18:13:43
3	Si 251.611†	484.6	38.1	1.0201 ug/L	1.0201 ppb	18:13:43
3	Sn 189.927†	7.0	11.8	1.9366 ug/L	1.9366 ppb	18:13:43
3	Ti 334.940†	-964.0	-81.8	-0.1072 ug/L	-0.1072 ppb	18:13:22
3	Tl 190.801†	-36.8	1.9	0.5468 ug/L	0.5468 ppb	18:13:43
3	U 409.014†	-1526.2	-185.1	-4.1720 ug/L	-4.1720 ppb	18:13:22
3	V 292.402†	-1412.1	-12.0	-0.0735 ug/L	-0.0735 ppb	18:13:22
3	Zn 213.857†	691.5	-31.5	-0.2591 ug/L	-0.2591 ppb	18:13:43
3	SiO2†	501.1	39.3	2.2478 ug/L	2.2478 ppb	18:13:58

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	962544.5	97.817 %	0.5311			0.54%
Sc Radial	5180.5	92.8 %	0.97			1.05%
Y 371.029	853726.1	97.880 %	0.4240			0.43%
Y RADIAL	5617.6	92.34 %	1.226			1.33%
Ag 328.068†	64.2	0.2522 ug/L	0.22712	0.2522 ppb	0.22712	90.07%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	2.5	1.7173 ug/L	4.97440	1.7173 ppb	4.97440	289.67%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	6.2	2.2569 ug/L	1.53053	2.2569 ppb	1.53053	67.82%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-40.2	-0.7983 ug/L	0.44273	-0.7983 ppb	0.44273	55.46%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	-7.2	-0.0498 ug/L	0.01342	-0.0498 ppb	0.01342	26.95%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	-24.5	-0.0081 ug/L	0.01493	-0.0081 ppb	0.01493	185.16%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-8.3	-12.632 ug/L	3.2040	-12.632 ppb	3.2040	25.36%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated									
Cd	226.502†	-17.4	-0.1745 ug/L	0.02084	-0.1745 ppb	0.02084	11.94%		
QC value within limits for Cd 226.502 Recovery = Not calculated									
Co	228.616†	3.1	0.0597 ug/L	0.13625	0.0597 ppb	0.13625	228.07%		
QC value within limits for Co 228.616 Recovery = Not calculated									
Cr	267.716†	-4.2	-0.0385 ug/L	0.09690	-0.0385 ppb	0.09690	251.70%		
QC value within limits for Cr 267.716 Recovery = Not calculated									
Cu	324.752†	24.7	0.0654 ug/L	0.05140	0.0654 ppb	0.05140	78.57%		
QC value within limits for Cu 324.752 Recovery = Not calculated									
Fe	238.204 Radial†	1.3	10.699 ug/L	5.9463	10.699 ppb	5.9463	55.58%		
QC value within limits for Fe 238.204 Radial Recovery = Not calculated									
K	766.490 Radial†	204.0	33.788 ug/L	3.2523	33.788 ppb	3.2523	9.63%		
QC value within limits for K 766.490 Radial Recovery = Not calculated									
Mg	279.077 IEC†	0.4	12.192 ug/L	67.1499	12.192 ppb	67.1499	550.76%		
QC value within limits for Mg 279.077 IEC Recovery = Not calculated									
Mn	257.610†	1.2	0.0018 ug/L	0.01266	0.0018 ppb	0.01266	714.66%		
QC value within limits for Mn 257.610 Recovery = Not calculated									
Mo	202.031†	1.5	0.0929 ug/L	0.16474	0.0929 ppb	0.16474	177.26%		
QC value within limits for Mo 202.031 Recovery = Not calculated									
Na	589.592 Radial†	-61.5	-16.421 ug/L	7.8537	-16.421 ppb	7.8537	47.83%		
QC value within limits for Na 589.592 Radial Recovery = Not calculated									
Ni	231.604†	-14.3	-0.3197 ug/L	0.21010	-0.3197 ppb	0.21010	65.72%		
QC value within limits for Ni 231.604 Recovery = Not calculated									
P	214.914†	13.0	6.4659 ug/L	4.50761	6.4659 ppb	4.50761	69.71%		
QC value within limits for P 214.914 Recovery = Not calculated									
Pb	220.353†	-0.7	-0.0784 ug/L	0.65798	-0.0784 ppb	0.65798	839.25%		
QC value within limits for Pb 220.353 Recovery = Not calculated									
S	181.975 Axial†	-16.8	-20.518 ug/L	1.4485	-20.518 ppb	1.4485	7.06%		
QC value within limits for S 181.975 Axial Recovery = Not calculated									
Sb	206.836†	1.9	0.5901 ug/L	0.95307	0.5901 ppb	0.95307	161.52%		
QC value within limits for Sb 206.836 Recovery = Not calculated									
Se	196.026†	3.9	2.0709 ug/L	1.67269	2.0709 ppb	1.67269	80.77%		
QC value within limits for Se 196.026 Recovery = Not calculated									
Si	251.611†	27.9	0.7463 ug/L	0.30250	0.7463 ppb	0.30250	40.53%		
QC value within limits for Si 251.611 Recovery = Not calculated									
Sn	189.927†	7.7	1.2622 ug/L	0.66905	1.2622 ppb	0.66905	53.01%		
QC value within limits for Sn 189.927 Recovery = Not calculated									
Sr	421.552†	20.0	0.1166 ug/L	0.06629	0.1166 ppb	0.06629	56.86%		
QC value within limits for Sr 421.552 Recovery = Not calculated									
Ti	334.940†	-116.0	-0.1605 ug/L	0.05888	-0.1605 ppb	0.05888	36.69%		
QC value within limits for Ti 334.940 Recovery = Not calculated									
Tl	190.801†	2.0	0.5738 ug/L	0.33255	0.5738 ppb	0.33255	57.96%		
QC value within limits for Tl 190.801 Recovery = Not calculated									
U	409.014†	-203.9	-4.5960 ug/L	0.83211	-4.5960 ppb	0.83211	18.11%		
QC value within limits for U 409.014 Recovery = Not calculated									
V	292.402†	22.3	0.1153 ug/L	0.19410	0.1153 ppb	0.19410	168.33%		
QC value within limits for V 292.402 Recovery = Not calculated									
Zn	213.857†	-30.9	-0.2559 ug/L	0.07691	-0.2559 ppb	0.07691	30.05%		
QC value within limits for Zn 213.857 Recovery = Not calculated									
SiO2†		32.0	1.8350 ug/L	0.99918	1.8350 ppb	0.99918	54.45%		
QC value within limits for SiO2 Recovery = Not calculated									

All analyte(s) passed QC.

Sequence No.: 14
 Sample ID: CCV
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 1
 Date Collected: 1/28/2010 19:13:09
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5458.2	5458.2	97.7 %		19:15:01
1	Y RADIAL	5900.4	5900.4	96.99 %		19:15:01
1	Al 396.153Radial†	6938.4	7095.8	4895.2 ug/L	4895.2 ppb	19:15:01
1	Ca 317.933Radial†	3254.6	3303.4	5022.8 ug/L	5022.8 ppb	19:15:21
1	Fe 238.204 Radial†	603.8	609.5	5160.5 ug/L	5160.5 ppb	19:15:21
1	K 766.490 Radial†	32180.3	30532.5	5049.1 ug/L	5049.1 ppb	19:15:01
1	Mg 279.077 IEC†	156.8	158.0	5157.8 ug/L	5157.8 ppb	19:15:21
1	Na 589.592 Radial†	35306.8	37154.9	9923.0 ug/L	9923.0 ppb	19:15:01
1	Sr 421.552†	82819.5	84731.9	493.18 ug/L	493.18 ppb	19:15:01
1	Sc 361.383	980532.9	980532.9	99.645 %		19:16:19
1	Y 371.029	858522.7	858522.7	98.430 %		19:16:19
1	Ag 328.068†	125660.8	125787.9	481.70 ug/L	481.70 ppb	19:16:24
1	As 188.979†	1244.3	1282.6	469.53 ug/L	469.53 ppb	19:16:44
1	B 249.677†	23040.7	23409.2	461.33 ug/L	461.33 ppb	19:16:24
1	Ba 233.527†	66107.7	66348.0	467.34 ug/L	467.34 ppb	19:16:24
1	Be 313.107†	1489289.4	1499667.9	472.55 ug/L	472.55 ppb	19:16:19
1	Cd 226.502†	47153.8	47521.3	469.94 ug/L	469.94 ppb	19:16:24
1	Co 228.616†	24368.1	24526.8	469.40 ug/L	469.40 ppb	19:16:24
1	Cr 267.716†	48003.8	48089.4	463.94 ug/L	463.94 ppb	19:16:24
1	Cu 324.752†	191975.4	183523.4	463.51 ug/L	463.51 ppb	19:16:24
1	Mn 257.610†	473747.5	474903.8	477.57 ug/L	477.57 ppb	19:16:19
1	Mo 202.031†	7642.3	7646.6	472.22 ug/L	472.22 ppb	19:16:44
1	Ni 231.604†	20980.7	20945.6	467.86 ug/L	467.86 ppb	19:16:24
1	P 214.914†	4901.9	4679.8	2244.5 ug/L	2244.5 ppb	19:16:44
1	Pb 220.353†	4108.9	4181.9	468.00 ug/L	468.00 ppb	19:16:44
1	S 181.975 Axial†	829.4	764.5	931.38 ug/L	931.38 ppb	19:16:44
1	Sb 206.836†	1623.6	1594.2	496.67 ug/L	496.67 ppb	19:16:44
1	Se 196.026†	880.5	904.7	488.94 ug/L	488.94 ppb	19:16:44
1	Si 251.611†	89881.0	89741.2	2401.9 ug/L	2401.9 ppb	19:16:24
1	Sn 189.927†	2863.2	2878.0	472.95 ug/L	472.95 ppb	19:16:44
1	Ti 334.940†	355796.5	357974.9	493.29 ug/L	493.29 ppb	19:16:19
1	Tl 190.801†	1578.7	1624.1	468.99 ug/L	468.99 ppb	19:16:44
1	U 409.014†	19527.0	20981.4	471.28 ug/L	471.28 ppb	19:16:24
1	V 292.402†	81828.2	83560.4	470.12 ug/L	470.12 ppb	19:16:24
1	Zn 213.857†	56831.6	56291.6	464.34 ug/L	464.34 ppb	19:16:24
1	SiO2†	89838.1	89682.3	5137.2 ug/L	5137.2 ppb	19:17:52
2	Sc Radial	5440.6	5440.6	97.4 %		19:15:26
2	Y RADIAL	5876.0	5876.0	96.59 %		19:15:26
2	Al 396.153Radial†	6886.4	7065.4	4873.8 ug/L	4873.8 ppb	19:15:26
2	Ca 317.933Radial†	3270.6	3330.6	5064.2 ug/L	5064.2 ppb	19:15:46
2	Fe 238.204 Radial†	606.8	614.5	5203.7 ug/L	5203.7 ppb	19:15:46
2	K 766.490 Radial†	31951.3	30404.2	5027.8 ug/L	5027.8 ppb	19:15:26
2	Mg 279.077 IEC†	160.6	162.5	5302.4 ug/L	5302.4 ppb	19:15:46
2	Na 589.592 Radial†	35081.0	37040.3	9892.4 ug/L	9892.4 ppb	19:15:26
2	Sr 421.552†	82404.1	84580.3	492.30 ug/L	492.30 ppb	19:15:26
2	Sc 361.383	965034.9	965034.9	98.070 %		19:16:50
2	Y 371.029	844733.0	844733.0	96.849 %		19:16:50
2	Ag 328.068†	125961.4	128119.7	490.61 ug/L	490.61 ppb	19:16:55
2	As 188.979†	1239.3	1297.5	474.95 ug/L	474.95 ppb	19:17:15
2	B 249.677†	23200.4	23943.3	471.88 ug/L	471.88 ppb	19:16:55
2	Ba 233.527†	66315.3	67625.2	476.33 ug/L	476.33 ppb	19:16:55
2	Be 313.107†	1463589.8	1497465.1	471.86 ug/L	471.86 ppb	19:16:50
2	Cd 226.502†	47069.8	48195.6	476.61 ug/L	476.61 ppb	19:16:55
2	Co 228.616†	24412.2	24964.5	477.79 ug/L	477.79 ppb	19:16:55
2	Cr 267.716†	48184.1	49046.9	473.17 ug/L	473.17 ppb	19:16:55
2	Cu 324.752†	192442.8	187094.0	472.52 ug/L	472.52 ppb	19:16:55
2	Mn 257.610†	466018.9	474658.3	477.32 ug/L	477.32 ppb	19:16:50
2	Mo 202.031†	7627.8	7755.0	478.91 ug/L	478.91 ppb	19:17:15
2	Ni 231.604†	20972.1	21274.9	475.22 ug/L	475.22 ppb	19:16:55

2	P 214.914†	4883.4	4740.0	2272.7 ug/L	2272.7 ppb	19:17:15
2	Pb 220.353†	4105.0	4244.2	474.95 ug/L	474.95 ppb	19:17:15
2	S 181.975 Axial†	816.5	764.8	931.64 ug/L	931.64 ppb	19:17:15
2	Sb 206.836†	1619.7	1616.4	503.61 ug/L	503.61 ppb	19:17:15
2	Se 196.026†	876.2	914.6	494.22 ug/L	494.22 ppb	19:17:15
2	Si 251.611†	89984.2	91295.0	2443.5 ug/L	2443.5 ppb	19:16:55
2	Sn 189.927†	2857.1	2917.9	479.50 ug/L	479.50 ppb	19:17:15
2	Ti 334.940†	350011.9	357810.7	493.05 ug/L	493.05 ppb	19:16:50
2	Tl 190.801†	1570.8	1641.5	473.92 ug/L	473.92 ppb	19:17:15
2	U 409.014†	19655.7	21427.3	481.31 ug/L	481.31 ppb	19:16:55
2	V 292.402†	81823.7	84874.6	477.53 ug/L	477.53 ppb	19:16:55
2	Zn 213.857†	56817.4	57193.0	471.78 ug/L	471.78 ppb	19:16:55
2	SiO2†	90328.7	91630.4	5248.9 ug/L	5248.9 ppb	19:17:57
3	Sc Radial	5486.0	5486.0	98.2 %		19:15:52
3	Y RADIAL	5930.2	5930.2	97.48 %		19:15:52
3	Al 396.153Radial†	6940.2	7061.8	4871.2 ug/L	4871.2 ppb	19:15:52
3	Ca 317.933Radial†	3259.1	3291.2	5004.3 ug/L	5004.3 ppb	19:16:12
3	Fe 238.204 Radial†	606.7	609.3	5159.3 ug/L	5159.3 ppb	19:16:12
3	K 766.490 Radial†	32366.8	30556.0	5053.0 ug/L	5053.0 ppb	19:15:52
3	Mg 279.077 IEC†	162.7	163.2	5326.4 ug/L	5326.4 ppb	19:16:12
3	Na 589.592 Radial†	35317.6	36983.3	9877.2 ug/L	9877.2 ppb	19:15:52
3	Sr 421.552†	83117.7	84607.3	492.46 ug/L	492.46 ppb	19:15:52
3	Sc 361.383	966734.0	966734.0	98.242 %		19:17:21
3	Y 371.029	846570.4	846570.4	97.060 %		19:17:21
3	Ag 328.068†	126738.1	128684.5	492.76 ug/L	492.76 ppb	19:17:27
3	As 188.979†	1250.5	1306.7	478.25 ug/L	478.25 ppb	19:17:47
3	B 249.677†	23256.3	23958.6	472.18 ug/L	472.18 ppb	19:17:27
3	Ba 233.527†	66706.1	67904.1	478.30 ug/L	478.30 ppb	19:17:27
3	Be 313.107†	1468339.6	1499676.9	472.55 ug/L	472.55 ppb	19:17:21
3	Cd 226.502†	47298.6	48344.1	478.08 ug/L	478.08 ppb	19:17:27
3	Co 228.616†	24533.2	25043.9	479.31 ug/L	479.31 ppb	19:17:27
3	Cr 267.716†	48456.3	49237.7	475.02 ug/L	475.02 ppb	19:17:27
3	Cu 324.752†	194341.5	188681.8	476.53 ug/L	476.53 ppb	19:17:27
3	Mn 257.610†	466089.2	473894.8	476.55 ug/L	476.55 ppb	19:17:21
3	Mo 202.031†	7676.2	7790.6	481.10 ug/L	481.10 ppb	19:17:47
3	Ni 231.604†	21076.8	21343.9	476.76 ug/L	476.76 ppb	19:17:27
3	P 214.914†	4881.3	4729.1	2266.6 ug/L	2266.6 ppb	19:17:47
3	Pb 220.353†	4105.1	4236.9	474.14 ug/L	474.14 ppb	19:17:47
3	S 181.975 Axial†	824.2	771.2	939.45 ug/L	939.45 ppb	19:17:47
3	Sb 206.836†	1610.9	1604.6	500.14 ug/L	500.14 ppb	19:17:47
3	Se 196.026†	878.2	915.0	494.32 ug/L	494.32 ppb	19:17:47
3	Si 251.611†	90588.5	91748.9	2455.7 ug/L	2455.7 ppb	19:17:27
3	Sn 189.927†	2872.4	2928.4	481.21 ug/L	481.21 ppb	19:17:47
3	Ti 334.940†	349929.9	357100.0	492.06 ug/L	492.06 ppb	19:17:21
3	Tl 190.801†	1576.4	1644.4	474.72 ug/L	474.72 ppb	19:17:47
3	U 409.014†	19560.2	21294.9	478.32 ug/L	478.32 ppb	19:17:27
3	V 292.402†	82526.6	85443.4	480.72 ug/L	480.72 ppb	19:17:27
3	Zn 213.857†	57103.0	57381.9	473.34 ug/L	473.34 ppb	19:17:27
3	SiO2†	89809.9	90940.6	5209.2 ug/L	5209.2 ppb	19:18:02

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	970767.3	98.652 %	0.8638			0.88%
Sc Radial	5461.6	97.8 %	0.41			0.42%
Y 371.029	849942.0	97.446 %	0.8585			0.88%
Y RADIAL	5902.2	97.02 %	0.447			0.46%
Ag 328.068†	127530.7	488.36 ug/L	5.863	488.36 ppb	5.863	1.20%
QC value within limits for Ag 328.068 Recovery = 97.67%						
Al 396.153Radial†	7074.3	4880.1 ug/L	13.17	4880.1 ppb	13.17	0.27%
QC value within limits for Al 396.153Radial Recovery = 97.60%						
As 188.979†	1295.6	474.24 ug/L	4.402	474.24 ppb	4.402	0.93%
QC value within limits for As 188.979 Recovery = 94.85%						
B 249.677†	23770.4	468.46 ug/L	6.179	468.46 ppb	6.179	1.32%
QC value within limits for B 249.677 Recovery = 93.69%						
Ba 233.527†	67292.4	473.99 ug/L	5.841	473.99 ppb	5.841	1.23%
QC value within limits for Ba 233.527 Recovery = 94.80%						
Be 313.107†	1498936.6	472.32 ug/L	0.400	472.32 ppb	0.400	0.08%
QC value within limits for Be 313.107 Recovery = 94.46%						
Ca 317.933Radial†	3308.4	5030.5 ug/L	30.71	5030.5 ppb	30.71	0.61%

QC value within limits for Ca 317.933 Radial Recovery = 100.61%

Cd	226.502†	48020.3	474.88 ug/L	4.341	474.88 ppb	4.341	0.91%
QC value within limits for Cd 226.502 Recovery = 94.98%							
Co	228.616†	24845.1	475.50 ug/L	5.341	475.50 ppb	5.341	1.12%
QC value within limits for Co 228.616 Recovery = 95.10%							
Cr	267.716†	48791.3	470.71 ug/L	5.935	470.71 ppb	5.935	1.26%
QC value within limits for Cr 267.716 Recovery = 94.14%							
Cu	324.752†	186433.1	470.85 ug/L	6.670	470.85 ppb	6.670	1.42%
QC value within limits for Cu 324.752 Recovery = 94.17%							
Fe	238.204 Radial†	611.1	5174.5 ug/L	25.31	5174.5 ppb	25.31	0.49%
QC value within limits for Fe 238.204 Radial Recovery = 103.49%							
K	766.490 Radial†	30497.5	5043.3 ug/L	13.54	5043.3 ppb	13.54	0.27%
QC value within limits for K 766.490 Radial Recovery = 100.87%							
Mg	279.077 IEC†	161.2	5262.2 ug/L	91.19	5262.2 ppb	91.19	1.73%
QC value within limits for Mg 279.077 IEC Recovery = 105.24%							
Mn	257.610†	474485.6	477.15 ug/L	0.533	477.15 ppb	0.533	0.11%
QC value within limits for Mn 257.610 Recovery = 95.43%							
Mo	202.031†	7730.7	477.41 ug/L	4.627	477.41 ppb	4.627	0.97%
QC value within limits for Mo 202.031 Recovery = 95.48%							
Na	589.592 Radial†	37059.5	9897.5 ug/L	23.33	9897.5 ppb	23.33	0.24%
QC value within limits for Na 589.592 Radial Recovery = 98.98%							
Ni	231.604†	21188.1	473.28 ug/L	4.755	473.28 ppb	4.755	1.00%
QC value within limits for Ni 231.604 Recovery = 94.66%							
P	214.914†	4716.3	2261.3 ug/L	14.86	2261.3 ppb	14.86	0.66%
QC value within limits for P 214.914 Recovery = 90.45%							
Pb	220.353†	4221.0	472.36 ug/L	3.800	472.36 ppb	3.800	0.80%
QC value within limits for Pb 220.353 Recovery = 94.47%							
S	181.975 Axial†	766.8	934.16 ug/L	4.588	934.16 ppb	4.588	0.49%
QC value within limits for S 181.975 Axial Recovery = 93.42%							
Sb	206.836†	1605.1	500.14 ug/L	3.469	500.14 ppb	3.469	0.69%
QC value within limits for Sb 206.836 Recovery = 100.03%							
Se	196.026†	911.5	492.49 ug/L	3.078	492.49 ppb	3.078	0.62%
QC value within limits for Se 196.026 Recovery = 98.50%							
Si	251.611†	90928.4	2433.7 ug/L	28.19	2433.7 ppb	28.19	1.16%
QC value within limits for Si 251.611 Recovery = 97.35%							
Sn	189.927†	2908.1	477.89 ug/L	4.359	477.89 ppb	4.359	0.91%
QC value within limits for Sn 189.927 Recovery = 95.58%							
Sr	421.552†	84639.8	492.65 ug/L	0.471	492.65 ppb	0.471	0.10%
QC value within limits for Sr 421.552 Recovery = 98.53%							
Ti	334.940†	357628.5	492.80 ug/L	0.652	492.80 ppb	0.652	0.13%
QC value within limits for Ti 334.940 Recovery = 98.56%							
Tl	190.801†	1636.7	472.54 ug/L	3.108	472.54 ppb	3.108	0.66%
QC value within limits for Tl 190.801 Recovery = 94.51%							
U	409.014†	21234.5	476.97 ug/L	5.148	476.97 ppb	5.148	1.08%
QC value within limits for U 409.014 Recovery = 95.39%							
V	292.402†	84626.1	476.12 ug/L	5.435	476.12 ppb	5.435	1.14%
QC value within limits for V 292.402 Recovery = 95.22%							
Zn	213.857†	56955.5	469.82 ug/L	4.809	469.82 ppb	4.809	1.02%
QC value within limits for Zn 213.857 Recovery = 93.96%							
SiO2†		90751.1	5198.4 ug/L	56.62	5198.4 ppb	56.62	1.09%
QC value within limits for SiO2 Recovery = 97.21%							

All analyte(s) passed QC.

Sequence No.: 15

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 1/28/2010 19:20:12

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5568.5	5568.5	99.7 %		19:22:04
1	Y RADIAL	6024.6	6024.6	99.03 %		19:22:04
1	Al 396.153Radial†	9.1	5.3	3.6742 ug/L	3.6742 ppb	19:22:24
1	Ca 317.933Radial†	17.8	-9.0	-13.614 ug/L	-13.614 ppb	19:22:24
1	Fe 238.204 Radial†	9.5	1.1	9.4196 ug/L	9.4196 ppb	19:22:24
1	K 766.490 Radial†	2459.5	71.6	11.860 ug/L	11.860 ppb	19:22:04
1	Mg 279.077 IEC†	-0.9	-3.3	-108.98 ug/L	-108.98 ppb	19:22:24
1	Na 589.592 Radial†	-1030.5	-5.5	-1.4765 ug/L	-1.4765 ppb	19:22:04
1	Sr 421.552†	30.8	19.7	0.1150 ug/L	0.1150 ppb	19:22:04
1	Sc 361.383	965711.3	965711.3	98.138 %		19:23:21
1	Y 371.029	854695.4	854695.4	97.991 %		19:23:21
1	Ag 328.068†	333.7	19.0	0.0752 ug/L	0.0752 ppb	19:23:26
1	As 188.979†	-29.5	3.8	1.3768 ug/L	1.3768 ppb	19:23:46
1	B 249.677†	-237.8	44.0	0.8691 ug/L	0.8691 ppb	19:23:46
1	Ba 233.527†	0.3	4.9	0.0342 ug/L	0.0342 ppb	19:23:46
1	Be 313.107†	-5064.8	-92.8	-0.0292 ug/L	-0.0292 ppb	19:23:26
1	Cd 226.502†	-190.3	5.5	0.0529 ug/L	0.0529 ppb	19:23:46
1	Co 228.616†	-76.7	-6.4	-0.1212 ug/L	-0.1212 ppb	19:23:46
1	Cr 267.716†	103.0	19.4	0.1871 ug/L	0.1871 ppb	19:23:46
1	Cu 324.752†	9087.9	123.8	0.3131 ug/L	0.3131 ppb	19:23:26
1	Mn 257.610†	543.8	21.1	0.0266 ug/L	0.0266 ppb	19:23:46
1	Mo 202.031†	30.0	7.7	0.4732 ug/L	0.4732 ppb	19:23:46
1	Ni 231.604†	77.2	-31.4	-0.7009 ug/L	-0.7009 ppb	19:23:46
1	P 214.914†	243.0	8.1	3.9937 ug/L	3.9937 ppb	19:23:46
1	Pb 220.353†	-49.4	8.0	0.8965 ug/L	0.8965 ppb	19:23:46
1	S 181.975 Axial†	41.9	-25.2	-30.673 ug/L	-30.673 ppb	19:23:46
1	Sb 206.836†	28.2	-6.4	-1.9156 ug/L	-1.9156 ppb	19:23:46
1	Se 196.026†	-20.3	0.4	0.2403 ug/L	0.2403 ppb	19:23:46
1	Si 251.611†	490.1	39.1	1.0424 ug/L	1.0424 ppb	19:23:46
1	Sn 189.927†	-2.1	2.5	0.4023 ug/L	0.4023 ppb	19:23:46
1	Ti 334.940†	-914.6	-22.2	-0.0236 ug/L	-0.0236 ppb	19:23:26
1	Tl 190.801†	-38.2	0.8	0.2276 ug/L	0.2276 ppb	19:23:46
1	U 409.014†	-1365.2	-6.4	-0.1457 ug/L	-0.1457 ppb	19:23:21
1	V 292.402†	-1436.8	-23.6	-0.1284 ug/L	-0.1284 ppb	19:23:26
1	Zn 213.857†	712.6	-16.6	-0.1353 ug/L	-0.1353 ppb	19:23:46
1	SiO2†	481.0	14.1	0.7948 ug/L	0.7948 ppb	19:24:52
2	Sc Radial	5461.5	5461.5	97.8 %		19:22:29
2	Y RADIAL	5908.1	5908.1	97.11 %		19:22:29
2	Al 396.153Radial†	21.0	17.8	12.289 ug/L	12.289 ppb	19:22:49
2	Ca 317.933Radial†	18.1	-8.3	-12.618 ug/L	-12.618 ppb	19:22:49
2	Fe 238.204 Radial†	7.6	-0.6	-5.1288 ug/L	-5.1288 ppb	19:22:49
2	K 766.490 Radial†	2334.5	-7.9	-1.3044 ug/L	-1.3044 ppb	19:22:29
2	Mg 279.077 IEC†	5.0	2.7	87.437 ug/L	87.437 ppb	19:22:49
2	Na 589.592 Radial†	-970.5	35.6	9.5178 ug/L	9.5178 ppb	19:22:29
2	Sr 421.552†	33.3	22.9	0.1333 ug/L	0.1333 ppb	19:22:29
2	Sc 361.383	951321.7	951321.7	96.676 %		19:23:51
2	Y 371.029	841635.2	841635.2	96.494 %		19:23:51
2	Ag 328.068†	325.0	15.2	0.0599 ug/L	0.0599 ppb	19:23:56
2	As 188.979†	-32.0	0.8	0.2714 ug/L	0.2714 ppb	19:24:16
2	B 249.677†	-293.1	-16.9	-0.3334 ug/L	-0.3334 ppb	19:24:16
2	Ba 233.527†	-5.7	-1.3	-0.0095 ug/L	-0.0095 ppb	19:24:16
2	Be 313.107†	-4949.0	-51.1	-0.0162 ug/L	-0.0162 ppb	19:23:56
2	Cd 226.502†	-182.8	10.2	0.1006 ug/L	0.1006 ppb	19:24:16
2	Co 228.616†	-70.5	-1.2	-0.0212 ug/L	-0.0212 ppb	19:24:16
2	Cr 267.716†	66.5	-16.7	-0.1595 ug/L	-0.1595 ppb	19:24:16
2	Cu 324.752†	9025.0	198.7	0.5042 ug/L	0.5042 ppb	19:23:56
2	Mn 257.610†	553.8	39.9	0.0361 ug/L	0.0361 ppb	19:24:16
2	Mo 202.031†	27.2	5.2	0.3218 ug/L	0.3218 ppb	19:24:16
2	Ni 231.604†	91.8	-15.0	-0.3346 ug/L	-0.3346 ppb	19:24:16

2	P 214.914†	248.0	17.0	8.4226 ug/L	8.4226 ppb	19:24:16
2	Pb 220.353†	-52.7	3.8	0.4282 ug/L	0.4282 ppb	19:24:16
2	S 181.975 Axial†	53.8	-12.2	-14.874 ug/L	-14.874 ppb	19:24:16
2	Sb 206.836†	47.2	13.7	4.1493 ug/L	4.1493 ppb	19:24:16
2	Se 196.026†	-21.5	-1.1	-0.6107 ug/L	-0.6107 ppb	19:24:16
2	Si 251.611†	498.1	54.9	1.4692 ug/L	1.4692 ppb	19:24:16
2	Sn 189.927†	5.7	10.5	1.7182 ug/L	1.7182 ppb	19:24:16
2	Ti 334.940†	-926.3	-48.4	-0.0734 ug/L	-0.0734 ppb	19:23:56
2	Tl 190.801†	-31.8	6.8	1.9558 ug/L	1.9558 ppb	19:24:16
2	U 409.014†	-1540.4	-208.7	-4.7025 ug/L	-4.7025 ppb	19:23:51
2	V 292.402†	-1400.7	-8.4	-0.0485 ug/L	-0.0485 ppb	19:23:56
2	Zn 213.857†	689.9	-29.0	-0.2397 ug/L	-0.2397 ppb	19:24:16
2	SiO2†	502.1	43.3	2.4755 ug/L	2.4755 ppb	19:24:57
3	Sc Radial	5475.3	5475.3	98.0 %		19:22:54
3	Y RADIAL	5895.5	5895.5	96.91 %		19:22:54
3	Al 396.153Radial†	3.5	-0.1	-0.0796 ug/L	-0.0796 ppb	19:23:14
3	Ca 317.933Radial†	16.0	-10.5	-15.915 ug/L	-15.915 ppb	19:23:14
3	Fe 238.204 Radial†	10.0	1.8	14.930 ug/L	14.930 ppb	19:23:14
3	K 766.490 Radial†	2492.5	147.3	24.392 ug/L	24.392 ppb	19:22:54
3	Mg 279.077 IEC†	4.4	2.1	70.071 ug/L	70.071 ppb	19:23:14
3	Na 589.592 Radial†	-1042.0	-34.8	-9.3029 ug/L	-9.3029 ppb	19:22:54
3	Sr 421.552†	55.5	45.4	0.2644 ug/L	0.2644 ppb	19:22:54
3	Sc 361.383	970665.4	970665.4	98.642 %		19:24:21
3	Y 371.029	859453.3	859453.3	98.537 %		19:24:21
3	Ag 328.068†	309.9	-6.8	-0.0197 ug/L	-0.0197 ppb	19:24:26
3	As 188.979†	-29.7	3.7	1.3366 ug/L	1.3366 ppb	19:24:46
3	B 249.677†	-262.6	20.0	0.3945 ug/L	0.3945 ppb	19:24:46
3	Ba 233.527†	2.9	7.5	0.0532 ug/L	0.0532 ppb	19:24:46
3	Be 313.107†	-5084.9	-86.8	-0.0274 ug/L	-0.0274 ppb	19:24:26
3	Cd 226.502†	-184.1	12.7	0.1236 ug/L	0.1236 ppb	19:24:46
3	Co 228.616†	-73.0	-2.2	-0.0422 ug/L	-0.0422 ppb	19:24:46
3	Cr 267.716†	100.4	16.2	0.1572 ug/L	0.1572 ppb	19:24:46
3	Cu 324.752†	9024.3	12.0	0.0321 ug/L	0.0321 ppb	19:24:26
3	Mn 257.610†	544.7	19.2	0.0179 ug/L	0.0179 ppb	19:24:46
3	Mo 202.031†	19.7	-3.0	-0.1843 ug/L	-0.1843 ppb	19:24:46
3	Ni 231.604†	94.8	-13.9	-0.3102 ug/L	-0.3102 ppb	19:24:46
3	P 214.914†	248.3	12.2	6.0812 ug/L	6.0812 ppb	19:24:46
3	Pb 220.353†	-54.6	3.0	0.3325 ug/L	0.3325 ppb	19:24:46
3	S 181.975 Axial†	50.1	-17.0	-20.698 ug/L	-20.698 ppb	19:24:46
3	Sb 206.836†	39.2	4.6	1.3921 ug/L	1.3921 ppb	19:24:46
3	Se 196.026†	-18.7	2.2	1.2008 ug/L	1.2008 ppb	19:24:46
3	Si 251.611†	498.3	44.8	1.2053 ug/L	1.2053 ppb	19:24:46
3	Sn 189.927†	3.2	7.9	1.2910 ug/L	1.2910 ppb	19:24:46
3	Ti 334.940†	-935.4	-38.5	-0.0603 ug/L	-0.0603 ppb	19:24:26
3	Tl 190.801†	-39.6	-0.4	-0.1122 ug/L	-0.1122 ppb	19:24:46
3	U 409.014†	-1433.2	-68.2	-1.5391 ug/L	-1.5391 ppb	19:24:21
3	V 292.402†	-1420.3	0.5	-0.0034 ug/L	-0.0034 ppb	19:24:26
3	Zn 213.857†	692.2	-41.0	-0.3406 ug/L	-0.3406 ppb	19:24:46
3	SiO2†	538.0	69.3	3.9837 ug/L	3.9837 ppb	19:25:02

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	962566.1	97.819 %	1.0211			1.04%
Sc Radial	5501.8	98.5 %	1.04			1.06%
Y 371.029	851927.9	97.674 %	1.0577			1.08%
Y RADIAL	5942.7	97.68 %	1.170			1.20%
Ag 328.068†	9.1	0.0384 ug/L	0.05096	0.0384 ppb	0.05096	132.55%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	7.7	5.2945 ug/L	6.34148	5.2945 ppb	6.34148	119.77%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	2.7	0.9949 ug/L	0.62692	0.9949 ppb	0.62692	63.01%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	15.7	0.3101 ug/L	0.60568	0.3101 ppb	0.60568	195.31%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	3.7	0.0260 ug/L	0.03213	0.0260 ppb	0.03213	123.72%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	-76.9	-0.0243 ug/L	0.00705	-0.0243 ppb	0.00705	29.03%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-9.2	-14.049 ug/L	1.6909	-14.049 ppb	1.6909	12.04%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated						
Cd 226.502†	9.5	0.0924 ug/L	0.03605	0.0924 ppb	0.03605	39.02%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-3.2	-0.0615 ug/L	0.05273	-0.0615 ppb	0.05273	85.72%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	6.3	0.0616 ug/L	0.19205	0.0616 ppb	0.19205	311.67%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	111.5	0.2831 ug/L	0.23749	0.2831 ppb	0.23749	83.88%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	0.8	6.4068 ug/L	10.36312	6.4068 ppb	10.36312	161.75%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	70.3	11.649 ug/L	12.8495	11.649 ppb	12.8495	110.30%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	0.5	16.176 ug/L	108.7354	16.176 ppb	108.7354	672.20%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	26.8	0.0269 ug/L	0.00906	0.0269 ppb	0.00906	33.73%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	3.3	0.2036 ug/L	0.34435	0.2036 ppb	0.34435	169.16%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	-1.6	-0.4205 ug/L	9.45469	-0.4205 ppb	9.45469	>999.9%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	-20.1	-0.4485 ug/L	0.21885	-0.4485 ppb	0.21885	48.79%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	12.5	6.1658 ug/L	2.21568	6.1658 ppb	2.21568	35.93%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	4.9	0.5524 ug/L	0.30181	0.5524 ppb	0.30181	54.64%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	-18.1	-22.082 ug/L	7.9899	-22.082 ppb	7.9899	36.18%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	3.9	1.2086 ug/L	3.03663	1.2086 ppb	3.03663	251.25%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	0.5	0.2768 ug/L	0.90628	0.2768 ppb	0.90628	327.44%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	46.3	1.2390 ug/L	0.21541	1.2390 ppb	0.21541	17.39%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	6.9	1.1372 ug/L	0.67129	1.1372 ppb	0.67129	59.03%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	29.3	0.1709 ug/L	0.08149	0.1709 ppb	0.08149	47.67%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	-36.4	-0.0524 ug/L	0.02584	-0.0524 ppb	0.02584	49.30%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	2.4	0.6904 ug/L	1.10896	0.6904 ppb	1.10896	160.63%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	-94.4	-2.1291 ug/L	2.33501	-2.1291 ppb	2.33501	109.67%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	-10.5	-0.0601 ug/L	0.06329	-0.0601 ppb	0.06329	105.32%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	-28.9	-0.2385 ug/L	0.10265	-0.2385 ppb	0.10265	43.04%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	42.2	2.4180 ug/L	1.59524	2.4180 ppb	1.59524	65.97%
QC value within limits for SiO2 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 23

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 1/28/2010 20:16:41

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5404.8	5404.8	96.8 %		20:18:34
1	Y RADIAL	5854.2	5854.2	96.23 %		20:18:34
1	Al 396.153Radial†	6856.7	7081.7	4884.8 ug/L	4884.8 ppb	20:18:34
1	Ca 317.933Radial†	3286.6	3369.4	5123.2 ug/L	5123.2 ppb	20:18:54
1	Fe 238.204 Radial†	614.3	626.4	5303.8 ug/L	5303.8 ppb	20:18:54
1	K 766.490 Radial†	31889.0	30557.2	5053.0 ug/L	5053.0 ppb	20:18:34
1	Mg 279.077 IEC†	162.2	165.2	5392.8 ug/L	5392.8 ppb	20:18:54
1	Na 589.592 Radial†	35580.9	37795.4	10094 ug/L	10094 ppb	20:18:34
1	Sr 421.552†	82610.1	85353.7	496.80 ug/L	496.80 ppb	20:18:34
1	Sc 361.383	959377.5	959377.5	97.495 %		20:19:52
1	Y 371.029	840624.1	840624.1	96.378 %		20:19:52
1	Ag 328.068†	126035.6	128953.2	493.83 ug/L	493.83 ppb	20:19:57
1	As 188.979†	1236.2	1301.8	476.57 ug/L	476.57 ppb	20:20:17
1	B 249.677†	23193.9	24076.2	474.48 ug/L	474.48 ppb	20:19:57
1	Ba 233.527†	66327.6	68036.5	479.23 ug/L	479.23 ppb	20:19:57
1	Be 313.107†	1475209.0	1518183.4	478.38 ug/L	478.38 ppb	20:19:52
1	Cd 226.502†	47204.2	48616.5	480.76 ug/L	480.76 ppb	20:19:57
1	Co 228.616†	24404.6	25103.5	480.45 ug/L	480.45 ppb	20:19:57
1	Cr 267.716†	48339.3	49495.9	477.51 ug/L	477.51 ppb	20:19:57
1	Cu 324.752†	192552.7	188363.9	475.73 ug/L	475.73 ppb	20:19:57
1	Mn 257.610†	468535.7	480042.0	482.74 ug/L	482.74 ppb	20:19:52
1	Mo 202.031†	7661.0	7834.9	483.85 ug/L	483.85 ppb	20:20:17
1	Ni 231.604†	21024.4	21454.7	479.23 ug/L	479.23 ppb	20:19:57
1	P 214.914†	4874.3	4760.0	2282.0 ug/L	2282.0 ppb	20:20:17
1	Pb 220.353†	4097.6	4261.3	476.86 ug/L	476.86 ppb	20:20:17
1	S 181.975 Axial†	823.8	777.1	946.73 ug/L	946.73 ppb	20:20:17
1	Sb 206.836†	1602.2	1608.2	501.28 ug/L	501.28 ppb	20:20:17
1	Se 196.026†	888.6	932.6	503.91 ug/L	503.91 ppb	20:20:17
1	Si 251.611†	90093.8	91948.5	2461.0 ug/L	2461.0 ppb	20:19:57
1	Sn 189.927†	2855.1	2933.1	482.00 ug/L	482.00 ppb	20:20:17
1	Ti 334.940†	352201.7	362161.4	499.05 ug/L	499.05 ppb	20:19:52
1	Tl 190.801†	1575.4	1655.6	478.02 ug/L	478.02 ppb	20:20:17
1	U 409.014†	19499.3	21385.1	480.33 ug/L	480.33 ppb	20:19:57
1	V 292.402†	82149.9	85701.2	482.16 ug/L	482.16 ppb	20:19:57
1	Zn 213.857†	57067.2	57790.8	476.72 ug/L	476.72 ppb	20:19:57
1	SiO2†	90169.6	92010.4	5270.6 ug/L	5270.6 ppb	20:21:25
2	Sc Radial	5387.7	5387.7	96.5 %		20:18:59
2	Y RADIAL	5828.6	5828.6	95.81 %		20:18:59
2	Al 396.153Radial†	6902.7	7151.8	4933.2 ug/L	4933.2 ppb	20:18:59
2	Ca 317.933Radial†	3277.0	3370.3	5124.6 ug/L	5124.6 ppb	20:19:19
2	Fe 238.204 Radial†	612.6	626.7	5306.4 ug/L	5306.4 ppb	20:19:19
2	K 766.490 Radial†	31835.2	30606.2	5061.1 ug/L	5061.1 ppb	20:18:59
2	Mg 279.077 IEC†	158.5	162.0	5285.5 ug/L	5285.5 ppb	20:19:19
2	Na 589.592 Radial†	35611.3	37943.9	10134 ug/L	10134 ppb	20:18:59
2	Sr 421.552†	82709.3	85728.1	498.98 ug/L	498.98 ppb	20:18:59
2	Sc 361.383	945534.3	945534.3	96.088 %		20:20:23
2	Y 371.029	828819.9	828819.9	95.025 %		20:20:23
2	Ag 328.068†	125644.0	130438.3	499.50 ug/L	499.50 ppb	20:20:28
2	As 188.979†	1232.6	1316.6	481.92 ug/L	481.92 ppb	20:20:48
2	B 249.677†	23070.9	24296.4	478.83 ug/L	478.83 ppb	20:20:28
2	Ba 233.527†	66070.2	68764.6	484.36 ug/L	484.36 ppb	20:20:28
2	Be 313.107†	1453414.8	1517654.8	478.22 ug/L	478.22 ppb	20:20:23
2	Cd 226.502†	47073.3	49189.1	486.43 ug/L	486.43 ppb	20:20:28
2	Co 228.616†	24349.0	25412.1	486.36 ug/L	486.36 ppb	20:20:28
2	Cr 267.716†	48151.0	50025.8	482.62 ug/L	482.62 ppb	20:20:28
2	Cu 324.752†	191554.6	190216.7	480.41 ug/L	480.41 ppb	20:20:28
2	Mn 257.610†	461405.4	479657.4	482.35 ug/L	482.35 ppb	20:20:23
2	Mo 202.031†	7634.5	7922.4	489.25 ug/L	489.25 ppb	20:20:48
2	Ni 231.604†	20914.2	21655.6	483.72 ug/L	483.72 ppb	20:20:28

2	P 214.914†	4862.2	4820.6	2311.4 ug/L	2311.4 ppb	20:20:48
2	Pb 220.353†	4079.6	4304.1	481.66 ug/L	481.66 ppb	20:20:48
2	S 181.975 Axial†	815.5	780.9	951.36 ug/L	951.36 ppb	20:20:48
2	Sb 206.836†	1610.4	1640.9	511.38 ug/L	511.38 ppb	20:20:48
2	Se 196.026†	870.5	927.0	501.07 ug/L	501.07 ppb	20:20:48
2	Si 251.611†	89525.4	92709.9	2481.4 ug/L	2481.4 ppb	20:20:28
2	Sn 189.927†	2868.0	2989.4	491.24 ug/L	491.24 ppb	20:20:48
2	Ti 334.940†	346651.5	361674.3	498.38 ug/L	498.38 ppb	20:20:23
2	Tl 190.801†	1561.0	1664.3	480.46 ug/L	480.46 ppb	20:20:48
2	U 409.014†	19411.1	21586.1	484.85 ug/L	484.85 ppb	20:20:28
2	V 292.402†	82030.5	86810.6	488.40 ug/L	488.40 ppb	20:20:28
2	Zn 213.857†	56692.0	58257.3	480.56 ug/L	480.56 ppb	20:20:28
2	SiO2†	89424.1	92588.6	5303.6 ug/L	5303.6 ppb	20:21:30
3	Sc Radial	5317.8	5317.8	95.2 %		20:19:24
3	Y RADIAL	5735.0	5735.0	94.27 %		20:19:24
3	Al 396.153Radial†	6804.5	7142.7	4927.0 ug/L	4927.0 ppb	20:19:24
3	Ca 317.933Radial†	3289.4	3427.9	5212.2 ug/L	5212.2 ppb	20:19:44
3	Fe 238.204 Radial†	610.9	633.1	5361.1 ug/L	5361.1 ppb	20:19:44
3	K 766.490 Radial†	31611.3	30804.5	5093.9 ug/L	5093.9 ppb	20:19:24
3	Mg 279.077 IEC†	163.2	169.0	5514.9 ug/L	5514.9 ppb	20:19:44
3	Na 589.592 Radial†	35252.1	38051.5	10162 ug/L	10162 ppb	20:19:24
3	Sr 421.552†	81833.9	85934.7	500.18 ug/L	500.18 ppb	20:19:24
3	Sc 361.383	948559.8	948559.8	96.395 %		20:20:54
3	Y 371.029	832354.2	832354.2	95.430 %		20:20:54
3	Ag 328.068†	126216.8	130615.5	500.20 ug/L	500.20 ppb	20:20:59
3	As 188.979†	1233.6	1313.5	480.82 ug/L	480.82 ppb	20:21:19
3	B 249.677†	23257.5	24413.4	481.13 ug/L	481.13 ppb	20:20:59
3	Ba 233.527†	66557.1	69050.4	486.38 ug/L	486.38 ppb	20:20:59
3	Be 313.107†	1464867.8	1524711.6	480.43 ug/L	480.43 ppb	20:20:54
3	Cd 226.502†	47476.7	49451.4	489.02 ug/L	489.02 ppb	20:20:59
3	Co 228.616†	24567.1	25557.6	489.14 ug/L	489.14 ppb	20:20:59
3	Cr 267.716†	48462.1	50188.7	484.19 ug/L	484.19 ppb	20:20:59
3	Cu 324.752†	192753.9	190825.0	481.95 ug/L	481.95 ppb	20:20:59
3	Mn 257.610†	464132.3	480954.6	483.65 ug/L	483.65 ppb	20:20:54
3	Mo 202.031†	7606.8	7868.2	485.91 ug/L	485.91 ppb	20:21:19
3	Ni 231.604†	21152.6	21833.6	487.70 ug/L	487.70 ppb	20:20:59
3	P 214.914†	4886.5	4829.7	2315.5 ug/L	2315.5 ppb	20:21:19
3	Pb 220.353†	4090.6	4301.9	481.39 ug/L	481.39 ppb	20:21:19
3	S 181.975 Axial†	819.0	781.8	952.46 ug/L	952.46 ppb	20:21:19
3	Sb 206.836†	1600.7	1625.4	506.57 ug/L	506.57 ppb	20:21:19
3	Se 196.026†	883.6	937.7	506.80 ug/L	506.80 ppb	20:21:19
3	Si 251.611†	90272.5	93187.8	2494.2 ug/L	2494.2 ppb	20:20:59
3	Sn 189.927†	2837.9	2948.7	484.57 ug/L	484.57 ppb	20:21:19
3	Ti 334.940†	347777.9	361692.1	498.40 ug/L	498.40 ppb	20:20:54
3	Tl 190.801†	1566.0	1664.3	480.47 ug/L	480.47 ppb	20:21:19
3	U 409.014†	19622.5	21741.0	488.33 ug/L	488.33 ppb	20:20:59
3	V 292.402†	82523.5	87049.7	489.69 ug/L	489.69 ppb	20:20:59
3	Zn 213.857†	57265.1	58663.7	483.91 ug/L	483.91 ppb	20:20:59
3	SiO2†	90020.9	92911.0	5322.2 ug/L	5322.2 ppb	20:21:35

Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	951157.2	96.659 %	0.7396			0.77%
Sc Radial	5370.1	96.2 %	0.82			0.86%
Y 371.029	833932.8	95.611 %	0.6946			0.73%
Y RADIAL	5805.9	95.44 %	1.032			1.08%
Ag 328.068†	130002.3	497.84 ug/L	3.493	497.84 ppb	3.493	0.70%
QC value within limits for Ag 328.068 Recovery = 99.57%						
Al 396.153Radial†	7125.4	4915.0 ug/L	26.32	4915.0 ppb	26.32	0.54%
QC value within limits for Al 396.153Radial Recovery = 98.30%						
As 188.979†	1310.7	479.77 ug/L	2.827	479.77 ppb	2.827	0.59%
QC value within limits for As 188.979 Recovery = 95.95%						
B 249.677†	24262.0	478.15 ug/L	3.374	478.15 ppb	3.374	0.71%
QC value within limits for B 249.677 Recovery = 95.63%						
Ba 233.527†	68617.2	483.33 ug/L	3.683	483.33 ppb	3.683	0.76%
QC value within limits for Ba 233.527 Recovery = 96.67%						
Be 313.107†	1520183.3	479.01 ug/L	1.235	479.01 ppb	1.235	0.26%
QC value within limits for Be 313.107 Recovery = 95.80%						
Ca 317.933Radial†	3389.2	5153.3 ug/L	50.97	5153.3 ppb	50.97	0.99%

QC value within limits for Ca 317.933 Radial Recovery = 103.07%							
Cd 226.502†	49085.7	485.41 ug/L	4.224	485.41 ppb	4.224	0.87%	
QC value within limits for Cd 226.502 Recovery = 97.08%							
Co 228.616†	25357.7	485.32 ug/L	4.441	485.32 ppb	4.441	0.92%	
QC value within limits for Co 228.616 Recovery = 97.06%							
Cr 267.716†	49903.5	481.44 ug/L	3.495	481.44 ppb	3.495	0.73%	
QC value within limits for Cr 267.716 Recovery = 96.29%							
Cu 324.752†	189801.9	479.36 ug/L	3.236	479.36 ppb	3.236	0.68%	
QC value within limits for Cu 324.752 Recovery = 95.87%							
Fe 238.204 Radial†	628.7	5323.8 ug/L	32.37	5323.8 ppb	32.37	0.61%	
QC value within limits for Fe 238.204 Radial Recovery = 106.48%							
K 766.490 Radial†	30656.0	5069.4 ug/L	21.65	5069.4 ppb	21.65	0.43%	
QC value within limits for K 766.490 Radial Recovery = 101.39%							
Mg 279.077 IEC†	165.4	5397.7 ug/L	114.77	5397.7 ppb	114.77	2.13%	
QC value within limits for Mg 279.077 IEC Recovery = 107.95%							
Mn 257.610†	480218.0	482.92 ug/L	0.668	482.92 ppb	0.668	0.14%	
QC value within limits for Mn 257.610 Recovery = 96.58%							
Mo 202.031†	7875.2	486.33 ug/L	2.725	486.33 ppb	2.725	0.56%	
QC value within limits for Mo 202.031 Recovery = 97.27%							
Na 589.592 Radial†	37930.3	10130 ug/L	34.3	10130 ppb	34.3	0.34%	
QC value within limits for Na 589.592 Radial Recovery = 101.30%							
Ni 231.604†	21648.0	483.55 ug/L	4.234	483.55 ppb	4.234	0.88%	
QC value within limits for Ni 231.604 Recovery = 96.71%							
P 214.914†	4803.4	2303.0 ug/L	18.28	2303.0 ppb	18.28	0.79%	
QC value within limits for P 214.914 Recovery = 92.12%							
Pb 220.353†	4289.1	479.97 ug/L	2.695	479.97 ppb	2.695	0.56%	
QC value within limits for Pb 220.353 Recovery = 95.99%							
S 181.975 Axial†	780.0	950.18 ug/L	3.038	950.18 ppb	3.038	0.32%	
QC value within limits for S 181.975 Axial Recovery = 95.02%							
Sb 206.836†	1624.8	506.41 ug/L	5.051	506.41 ppb	5.051	1.00%	
QC value within limits for Sb 206.836 Recovery = 101.28%							
Se 196.026†	932.4	503.92 ug/L	2.866	503.92 ppb	2.866	0.57%	
QC value within limits for Se 196.026 Recovery = 100.78%							
Si 251.611†	92615.4	2478.9 ug/L	16.75	2478.9 ppb	16.75	0.68%	
QC value within limits for Si 251.611 Recovery = 99.15%							
Sn 189.927†	2957.0	485.94 ug/L	4.768	485.94 ppb	4.768	0.98%	
QC value within limits for Sn 189.927 Recovery = 97.19%							
Sr 421.552†	85672.2	498.66 ug/L	1.714	498.66 ppb	1.714	0.34%	
QC value within limits for Sr 421.552 Recovery = 99.73%							
Ti 334.940†	361842.6	498.61 ug/L	0.380	498.61 ppb	0.380	0.08%	
QC value within limits for Ti 334.940 Recovery = 99.72%							
Tl 190.801†	1661.4	479.65 ug/L	1.410	479.65 ppb	1.410	0.29%	
QC value within limits for Tl 190.801 Recovery = 95.93%							
U 409.014†	21570.7	484.51 ug/L	4.011	484.51 ppb	4.011	0.83%	
QC value within limits for U 409.014 Recovery = 96.90%							
V 292.402†	86520.5	486.75 ug/L	4.025	486.75 ppb	4.025	0.83%	
QC value within limits for V 292.402 Recovery = 97.35%							
Zn 213.857†	58237.3	480.40 ug/L	3.601	480.40 ppb	3.601	0.75%	
QC value within limits for Zn 213.857 Recovery = 96.08%							
SiO2†	92503.3	5298.8 ug/L	26.16	5298.8 ppb	26.16	0.49%	
QC value within limits for SiO2 Recovery = 99.09%							
All analyte(s) passed QC.							

Sequence No.: 24

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 1/28/2010 20:23:45

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5557.2	5557.2	99.5 %		20:25:36
1	Y RADIAL	6032.8	6032.8	99.16 %		20:25:36
1	Al 396.153Radial†	20.6	16.9	11.702 ug/L	11.702 ppb	20:25:56
1	Ca 317.933Radial†	23.9	-2.7	-4.1608 ug/L	-4.1608 ppb	20:25:56
1	Fe 238.204 Radial†	9.9	1.6	13.434 ug/L	13.434 ppb	20:25:56
1	K 766.490 Radial†	2376.3	-7.0	-1.1578 ug/L	-1.1578 ppb	20:25:36
1	Mg 279.077 IEC†	0.6	-1.7	-56.822 ug/L	-56.822 ppb	20:25:56
1	Na 589.592 Radial†	-1009.9	13.0	3.4839 ug/L	3.4839 ppb	20:25:36
1	Sr 421.552†	50.6	39.7	0.2310 ug/L	0.2310 ppb	20:25:36
1	Sc 361.383	967674.5	967674.5	98.338 %		20:26:53
1	Y 371.029	858189.4	858189.4	98.392 %		20:26:53
1	Ag 328.068†	361.4	46.5	0.1820 ug/L	0.1820 ppb	20:26:58
1	As 188.979†	-28.2	5.2	1.8872 ug/L	1.8872 ppb	20:27:18
1	B 249.677†	-226.7	55.7	1.1004 ug/L	1.1004 ppb	20:27:18
1	Ba 233.527†	-9.0	-4.6	-0.0319 ug/L	-0.0319 ppb	20:27:18
1	Be 313.107†	-5029.0	-45.9	-0.0146 ug/L	-0.0146 ppb	20:26:58
1	Cd 226.502†	-182.2	14.0	0.1372 ug/L	0.1372 ppb	20:27:18
1	Co 228.616†	-57.9	12.9	0.2490 ug/L	0.2490 ppb	20:27:18
1	Cr 267.716†	69.7	-14.6	-0.1405 ug/L	-0.1405 ppb	20:27:18
1	Cu 324.752†	9042.2	58.5	0.1490 ug/L	0.1490 ppb	20:26:58
1	Mn 257.610†	588.0	65.0	0.0690 ug/L	0.0690 ppb	20:27:18
1	Mo 202.031†	34.8	12.4	0.7676 ug/L	0.7676 ppb	20:27:18
1	Ni 231.604†	98.3	-10.0	-0.2232 ug/L	-0.2232 ppb	20:27:18
1	P 214.914†	255.8	20.7	10.271 ug/L	10.271 ppb	20:27:18
1	Pb 220.353†	-50.2	7.3	0.8191 ug/L	0.8191 ppb	20:27:18
1	S 181.975 Axial†	47.8	-19.2	-23.455 ug/L	-23.455 ppb	20:27:18
1	Sb 206.836†	28.2	-6.4	-1.9179 ug/L	-1.9179 ppb	20:27:18
1	Se 196.026†	-17.8	3.1	1.6410 ug/L	1.6410 ppb	20:27:18
1	Si 251.611†	512.3	60.6	1.6173 ug/L	1.6173 ppb	20:27:18
1	Sn 189.927†	-2.4	2.1	0.3496 ug/L	0.3496 ppb	20:27:18
1	Ti 334.940†	-936.0	-42.0	-0.0534 ug/L	-0.0534 ppb	20:26:58
1	Tl 190.801†	-38.4	0.7	0.1987 ug/L	0.1987 ppb	20:27:18
1	U 409.014†	-1405.2	-44.2	-0.9972 ug/L	-0.9972 ppb	20:26:58
1	V 292.402†	-1420.3	-3.9	-0.0155 ug/L	-0.0155 ppb	20:26:58
1	Zn 213.857†	705.9	-24.9	-0.2075 ug/L	-0.2075 ppb	20:27:18
1	SiO2†	516.2	48.8	2.7812 ug/L	2.7812 ppb	20:28:39
2	Sc Radial	5476.8	5476.8	98.1 %		20:26:01
2	Y RADIAL	5948.5	5948.5	97.78 %		20:26:01
2	Al 396.153Radial†	17.6	14.2	9.8004 ug/L	9.8004 ppb	20:26:21
2	Ca 317.933Radial†	18.9	-7.5	-11.461 ug/L	-11.461 ppb	20:26:21
2	Fe 238.204 Radial†	7.9	-0.4	-3.1804 ug/L	-3.1804 ppb	20:26:21
2	K 766.490 Radial†	2380.1	31.9	5.2888 ug/L	5.2888 ppb	20:26:01
2	Mg 279.077 IEC†	1.5	-0.9	-29.276 ug/L	-29.276 ppb	20:26:21
2	Na 589.592 Radial†	-1028.3	-20.6	-5.4980 ug/L	-5.4980 ppb	20:26:01
2	Sr 421.552†	15.8	4.9	0.0287 ug/L	0.0287 ppb	20:26:01
2	Sc 361.383	962158.0	962158.0	97.777 %		20:27:23
2	Y 371.029	853498.7	853498.7	97.854 %		20:27:23
2	Ag 328.068†	348.8	35.8	0.1400 ug/L	0.1400 ppb	20:27:28
2	As 188.979†	-35.4	-2.3	-0.8508 ug/L	-0.8508 ppb	20:27:48
2	B 249.677†	-227.3	53.8	1.0673 ug/L	1.0673 ppb	20:27:48
2	Ba 233.527†	4.8	9.5	0.0671 ug/L	0.0671 ppb	20:27:48
2	Be 313.107†	-4994.9	-40.4	-0.0127 ug/L	-0.0127 ppb	20:27:28
2	Cd 226.502†	-193.0	2.0	0.0187 ug/L	0.0187 ppb	20:27:48
2	Co 228.616†	-82.6	-12.6	-0.2406 ug/L	-0.2406 ppb	20:27:48
2	Cr 267.716†	79.9	-3.9	-0.0350 ug/L	-0.0350 ppb	20:27:48
2	Cu 324.752†	8972.1	39.5	0.1026 ug/L	0.1026 ppb	20:27:28
2	Mn 257.610†	596.5	77.1	0.0784 ug/L	0.0784 ppb	20:27:48
2	Mo 202.031†	30.5	8.2	0.5065 ug/L	0.5065 ppb	20:27:48
2	Ni 231.604†	99.1	-8.7	-0.1934 ug/L	-0.1934 ppb	20:27:48

2	P 214.914†	246.3	12.4	6.1961 ug/L	6.1961 ppb	20:27:48
2	Pb 220.353†	-38.2	19.3	2.1574 ug/L	2.1574 ppb	20:27:48
2	S 181.975 Axial†	45.2	-21.5	-26.245 ug/L	-26.245 ppb	20:27:48
2	Sb 206.836†	34.9	0.5	0.1908 ug/L	0.1908 ppb	20:27:48
2	Se 196.026†	-22.1	-1.5	-0.7848 ug/L	-0.7848 ppb	20:27:48
2	Si 251.611†	512.0	63.4	1.6941 ug/L	1.6941 ppb	20:27:48
2	Sn 189.927†	5.2	9.9	1.6196 ug/L	1.6196 ppb	20:27:48
2	Ti 334.940†	-906.9	-17.8	-0.0213 ug/L	-0.0213 ppb	20:27:28
2	Tl 190.801†	-50.6	-12.0	-3.4441 ug/L	-3.4441 ppb	20:27:48
2	U 409.014†	-1587.3	-238.6	-5.3781 ug/L	-5.3781 ppb	20:27:28
2	V 292.402†	-1390.0	18.8	0.1012 ug/L	0.1012 ppb	20:27:28
2	Zn 213.857†	691.2	-35.8	-0.2968 ug/L	-0.2968 ppb	20:27:48
2	SiO2†	531.5	67.5	3.8630 ug/L	3.8630 ppb	20:28:59
3	Sc Radial	5544.9	5544.9	99.3 %		20:26:26
3	Y RADIAL	6005.7	6005.7	98.72 %		20:26:26
3	Al 396.153Radial†	12.4	8.8	6.0611 ug/L	6.0611 ppb	20:26:46
3	Ca 317.933Radial†	18.8	-7.8	-11.857 ug/L	-11.857 ppb	20:26:46
3	Fe 238.204 Radial†	9.5	1.1	9.5898 ug/L	9.5898 ppb	20:26:46
3	K 766.490 Radial†	2392.1	14.2	2.3611 ug/L	2.3611 ppb	20:26:26
3	Mg 279.077 IEC†	2.5	0.1	4.4315 ug/L	4.4315 ppb	20:26:46
3	Na 589.592 Radial†	-1059.6	-39.3	-10.484 ug/L	-10.484 ppb	20:26:26
3	Sr 421.552†	24.3	13.3	0.0774 ug/L	0.0774 ppb	20:26:26
3	Sc 361.383	969277.5	969277.5	98.501 %		20:27:53
3	Y 371.029	859459.3	859459.3	98.538 %		20:27:53
3	Ag 328.068†	282.6	-34.1	-0.1215 ug/L	-0.1215 ppb	20:27:58
3	As 188.979†	-24.5	9.0	3.2625 ug/L	3.2625 ppb	20:28:19
3	B 249.677†	-260.8	21.5	0.4252 ug/L	0.4252 ppb	20:28:19
3	Ba 233.527†	-8.9	-4.5	-0.0309 ug/L	-0.0309 ppb	20:28:19
3	Be 313.107†	-5021.8	-30.2	-0.0097 ug/L	-0.0097 ppb	20:27:58
3	Cd 226.502†	-202.4	-6.2	-0.0631 ug/L	-0.0631 ppb	20:28:19
3	Co 228.616†	-79.6	-9.0	-0.1717 ug/L	-0.1717 ppb	20:28:19
3	Cr 267.716†	71.5	-13.0	-0.1227 ug/L	-0.1227 ppb	20:28:19
3	Cu 324.752†	9046.0	47.2	0.1225 ug/L	0.1225 ppb	20:27:58
3	Mn 257.610†	585.7	61.7	0.0628 ug/L	0.0628 ppb	20:28:19
3	Mo 202.031†	28.9	6.4	0.3962 ug/L	0.3962 ppb	20:28:19
3	Ni 231.604†	93.2	-15.4	-0.3437 ug/L	-0.3437 ppb	20:28:19
3	P 214.914†	252.1	16.4	8.1394 ug/L	8.1394 ppb	20:28:19
3	Pb 220.353†	-49.6	8.0	0.8960 ug/L	0.8960 ppb	20:28:19
3	S 181.975 Axial†	41.0	-26.2	-31.913 ug/L	-31.913 ppb	20:28:19
3	Sb 206.836†	39.2	4.7	1.4087 ug/L	1.4087 ppb	20:28:19
3	Se 196.026†	-20.2	0.6	0.3543 ug/L	0.3543 ppb	20:28:19
3	Si 251.611†	514.4	61.9	1.6565 ug/L	1.6565 ppb	20:28:19
3	Sn 189.927†	-7.4	-2.9	-0.4819 ug/L	-0.4819 ppb	20:28:19
3	Ti 334.940†	-957.2	-62.1	-0.0852 ug/L	-0.0852 ppb	20:27:58
3	Tl 190.801†	-41.2	-2.1	-0.5901 ug/L	-0.5901 ppb	20:28:19
3	U 409.014†	-1585.4	-224.8	-5.0677 ug/L	-5.0677 ppb	20:27:58
3	V 292.402†	-1387.6	31.7	0.1709 ug/L	0.1709 ppb	20:27:58
3	Zn 213.857†	699.5	-32.6	-0.2703 ug/L	-0.2703 ppb	20:28:19
3	SiO2†	522.6	54.4	3.1129 ug/L	3.1129 ppb	20:29:19

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	966370.0	98.205 %	0.3795			0.39%
Sc Radial	5526.3	98.9 %	0.78			0.78%
Y 371.029	857049.2	98.261 %	0.3600			0.37%
Y RADIAL	5995.7	98.55 %	0.707			0.72%
Ag 328.068†	16.1	0.0669 ug/L	0.16445	0.0669 ppb	0.16445	245.97%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	13.3	9.1880 ug/L	2.87011	9.1880 ppb	2.87011	31.24%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	4.0	1.4330 ug/L	2.09393	1.4330 ppb	2.09393	146.13%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	43.7	0.8643 ug/L	0.38064	0.8643 ppb	0.38064	44.04%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	0.1	0.0014 ug/L	0.05686	0.0014 ppb	0.05686	>999.9%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	-38.8	-0.0123 ug/L	0.00247	-0.0123 ppb	0.00247	20.07%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-6.0	-9.1597 ug/L	4.33375	-9.1597 ppb	4.33375	47.31%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated						
Cd 226.502†	3.3	0.0310 ug/L	0.10070	0.0310 ppb	0.10070	325.29%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-2.9	-0.0544 ug/L	0.26499	-0.0544 ppb	0.26499	486.84%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-10.5	-0.0994 ug/L	0.05644	-0.0994 ppb	0.05644	56.79%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	48.4	0.1247 ug/L	0.02331	0.1247 ppb	0.02331	18.69%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	0.8	6.6144 ug/L	8.69747	6.6144 ppb	8.69747	131.49%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	13.0	2.1640 ug/L	3.22784	2.1640 ppb	3.22784	149.16%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	-0.8	-27.222 ug/L	30.6784	-27.222 ppb	30.6784	112.70%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	67.9	0.0700 ug/L	0.00786	0.0700 ppb	0.00786	11.22%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	9.0	0.5568 ug/L	0.19077	0.5568 ppb	0.19077	34.26%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	-15.6	-4.1659 ug/L	7.07842	-4.1659 ppb	7.07842	169.91%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	-11.3	-0.2535 ug/L	0.07958	-0.2535 ppb	0.07958	31.40%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	16.5	8.2021 ug/L	2.03812	8.2021 ppb	2.03812	24.85%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	11.6	1.2908 ug/L	0.75143	1.2908 ppb	0.75143	58.21%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	-22.3	-27.204 ug/L	4.3096	-27.204 ppb	4.3096	15.84%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	-0.4	-0.1061 ug/L	1.68306	-0.1061 ppb	1.68306	>999.9%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	0.7	0.4035 ug/L	1.21364	0.4035 ppb	1.21364	300.79%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	62.0	1.6560 ug/L	0.03841	1.6560 ppb	0.03841	2.32%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	3.0	0.4958 ug/L	1.05835	0.4958 ppb	1.05835	213.46%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	19.3	0.1124 ug/L	0.10557	0.1124 ppb	0.10557	93.93%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	-40.6	-0.0533 ug/L	0.03196	-0.0533 ppb	0.03196	59.96%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	-4.5	-1.2785 ug/L	1.91648	-1.2785 ppb	1.91648	149.90%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	-169.2	-3.8143 ug/L	2.44465	-3.8143 ppb	2.44465	64.09%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	15.6	0.0856 ug/L	0.09420	0.0856 ppb	0.09420	110.10%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	-31.1	-0.2582 ug/L	0.04585	-0.2582 ppb	0.04585	17.76%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	56.9	3.2524 ug/L	0.55421	3.2524 ppb	0.55421	17.04%
QC value within limits for SiO2 Recovery = Not calculated						
All analyte(s) passed QC.						

Sequence No.: 25

Sample ID: 1202015660|941727|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 71

Date Collected: 1/28/2010 20:31:29

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202015660|941727|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5471.4	5471.4	98.0 %		20:33:23
1	Y RADIAL	5946.0	5946.0	97.74 %		20:33:23
1	Al 396.153Radial†	13.6	10.1	6.9978 ug/L	6.9978 ppb	20:33:43
1	Ca 317.933Radial†	33.4	7.3	11.085 ug/L	11.085 ppb	20:33:43
1	Fe 238.204 Radial†	17.6	9.5	80.460 ug/L	80.460 ppb	20:33:43
1	K 766.490 Radial†	2406.0	60.8	10.051 ug/L	10.051 ppb	20:33:23
1	Mg 279.077 IEC†	-0.5	-2.9	-93.514 ug/L	-93.514 ppb	20:33:43
1	Na 589.592 Radial†	-929.1	79.7	21.273 ug/L	21.273 ppb	20:33:23
1	Sr 421.552†	26.8	16.2	0.0944 ug/L	0.0944 ppb	20:33:23
1	Sc 361.383	953479.6	953479.6	96.895 %		20:34:39
1	Y 371.029	844205.4	844205.4	96.789 %		20:34:39
1	Ag 328.068†	330.9	20.6	0.1031 ug/L	0.1031 ppb	20:34:44
1	As 188.979†	-29.8	3.1	1.1339 ug/L	1.1339 ppb	20:35:05
1	B 249.677†	-292.9	-16.1	-0.3307 ug/L	-0.3307 ppb	20:35:05
1	Ba 233.527†	-4.2	0.2	0.0048 ug/L	0.0048 ppb	20:35:05
1	Be 313.107†	-5040.7	-134.1	-0.0419 ug/L	-0.0419 ppb	20:34:44
1	Cd 226.502†	-196.0	-2.9	-0.0363 ug/L	-0.0363 ppb	20:35:05
1	Co 228.616†	-74.3	-4.9	-0.0942 ug/L	-0.0942 ppb	20:35:05
1	Cr 267.716†	104.9	22.8	0.2202 ug/L	0.2202 ppb	20:35:05
1	Cu 324.752†	9091.0	245.7	0.6230 ug/L	0.6230 ppb	20:34:44
1	Mn 257.610†	1307.5	816.4	0.8322 ug/L	0.8322 ppb	20:35:05
1	Mo 202.031†	23.8	1.6	0.1064 ug/L	0.1064 ppb	20:35:05
1	Ni 231.604†	94.1	-12.9	-0.2885 ug/L	-0.2885 ppb	20:35:05
1	P 214.914†	260.0	28.8	14.218 ug/L	14.218 ppb	20:35:05
1	Pb 220.353†	-43.2	13.7	1.5266 ug/L	1.5266 ppb	20:35:05
1	S 181.975 Axial†	46.9	-19.4	-23.686 ug/L	-23.686 ppb	20:35:05
1	Sb 206.836†	49.6	16.1	4.8650 ug/L	4.8650 ppb	20:35:05
1	Se 196.026†	-26.4	-6.1	-2.8881 ug/L	-2.8881 ppb	20:35:05
1	Si 251.611†	801.1	366.5	9.8327 ug/L	9.8327 ppb	20:35:05
1	Sn 189.927†	7.3	12.1	1.9928 ug/L	1.9928 ppb	20:35:05
1	Ti 334.940†	-786.4	98.2	0.1429 ug/L	0.1429 ppb	20:34:44
1	Tl 190.801†	-44.4	-6.0	-1.7213 ug/L	-1.7213 ppb	20:35:05
1	U 409.014†	-1202.7	143.5	3.2252 ug/L	3.2252 ppb	20:34:39
1	V 292.402†	-1324.7	73.3	0.4007 ug/L	0.4007 ppb	20:34:44
1	Zn 213.857†	814.2	97.5	0.8049 ug/L	0.8049 ppb	20:35:05
1	SiO2†	802.3	351.9	20.204 ug/L	20.204 ppb	20:36:11
2	Sc Radial	5492.6	5492.6	98.3 %		20:33:48
2	Y RADIAL	5951.0	5951.0	97.82 %		20:33:48
2	Al 396.153Radial†	11.3	7.8	5.3941 ug/L	5.3941 ppb	20:34:08
2	Ca 317.933Radial†	30.2	4.0	6.0485 ug/L	6.0485 ppb	20:34:08
2	Fe 238.204 Radial†	14.7	6.6	55.635 ug/L	55.635 ppb	20:34:08
2	K 766.490 Radial†	2314.3	-42.0	-6.9610 ug/L	-6.9610 ppb	20:33:48
2	Mg 279.077 IEC†	0.5	-1.9	-61.994 ug/L	-61.994 ppb	20:34:08
2	Na 589.592 Radial†	-922.0	90.5	24.174 ug/L	24.174 ppb	20:33:48
2	Sr 421.552†	43.8	33.3	0.1940 ug/L	0.1940 ppb	20:33:48
2	Sc 361.383	951098.5	951098.5	96.653 %		20:35:10
2	Y 371.029	841783.6	841783.6	96.511 %		20:35:10
2	Ag 328.068†	442.4	136.7	0.5424 ug/L	0.5424 ppb	20:35:15
2	As 188.979†	-37.5	-5.0	-1.7933 ug/L	-1.7933 ppb	20:35:35
2	B 249.677†	-279.2	-2.7	-0.0619 ug/L	-0.0619 ppb	20:35:35
2	Ba 233.527†	0.9	5.5	0.0414 ug/L	0.0414 ppb	20:35:35
2	Be 313.107†	-5063.7	-171.0	-0.0532 ug/L	-0.0532 ppb	20:35:15
2	Cd 226.502†	-197.6	-5.1	-0.0571 ug/L	-0.0571 ppb	20:35:35
2	Co 228.616†	-63.2	6.4	0.1211 ug/L	0.1211 ppb	20:35:35
2	Cr 267.716†	86.4	3.9	0.0403 ug/L	0.0403 ppb	20:35:35
2	Cu 324.752†	9104.8	283.5	0.7203 ug/L	0.7203 ppb	20:35:15
2	Mn 257.610†	1297.6	809.5	0.8216 ug/L	0.8216 ppb	20:35:35
2	Mo 202.031†	25.0	2.9	0.1825 ug/L	0.1825 ppb	20:35:35
2	Ni 231.604†	93.0	-13.7	-0.3072 ug/L	-0.3072 ppb	20:35:35

2	P 214.914†	234.4	3.0	1.3357 ug/L	1.3357 ppb	20:35:35
2	Pb 220.353†	-54.5	2.0	0.2210 ug/L	0.2210 ppb	20:35:35
2	S 181.975 Axial†	45.9	-20.3	-24.747 ug/L	-24.747 ppb	20:35:35
2	Sb 206.836†	35.9	2.0	0.6502 ug/L	0.6502 ppb	20:35:35
2	Se 196.026†	-16.8	3.7	2.1149 ug/L	2.1149 ppb	20:35:35
2	Si 251.611†	781.9	348.7	9.3523 ug/L	9.3523 ppb	20:35:35
2	Sn 189.927†	8.5	13.4	2.2030 ug/L	2.2030 ppb	20:35:35
2	Ti 334.940†	-719.5	165.3	0.2348 ug/L	0.2348 ppb	20:35:15
2	Tl 190.801†	-40.4	-2.0	-0.5676 ug/L	-0.5676 ppb	20:35:35
2	U 409.014†	-1444.0	-109.3	-2.4702 ug/L	-2.4702 ppb	20:35:10
2	V 292.402†	-1297.4	98.1	0.5329 ug/L	0.5329 ppb	20:35:15
2	Zn 213.857†	784.2	68.6	0.5665 ug/L	0.5665 ppb	20:35:35
2	SiO2†	837.8	390.7	22.431 ug/L	22.431 ppb	20:36:16
3	Sc Radial	5435.9	5435.9	97.3 %		20:34:13
3	Y RADIAL	5919.3	5919.3	97.30 %		20:34:13
3	Al 396.153Radial†	3.6	-0.1	-0.0686 ug/L	-0.0686 ppb	20:34:33
3	Ca 317.933Radial†	32.0	6.2	9.3624 ug/L	9.3624 ppb	20:34:33
3	Fe 238.204 Radial†	14.8	6.8	57.626 ug/L	57.626 ppb	20:34:33
3	K 766.490 Radial†	2384.1	54.3	8.9842 ug/L	8.9842 ppb	20:34:13
3	Mg 279.077 IEC†	6.0	3.7	121.99 ug/L	121.99 ppb	20:34:33
3	Na 589.592 Radial†	-935.9	66.4	17.745 ug/L	17.745 ppb	20:34:13
3	Sr 421.552†	41.3	31.3	0.1821 ug/L	0.1821 ppb	20:34:13
3	Sc 361.383	968054.4	968054.4	98.377 %		20:35:40
3	Y 371.029	857659.1	857659.1	98.331 %		20:35:40
3	Ag 328.068†	399.2	84.8	0.3428 ug/L	0.3428 ppb	20:35:45
3	As 188.979†	-27.9	5.5	2.0129 ug/L	2.0129 ppb	20:36:05
3	B 249.677†	-266.7	15.2	0.2915 ug/L	0.2915 ppb	20:36:05
3	Ba 233.527†	9.3	14.1	0.1012 ug/L	0.1012 ppb	20:36:05
3	Be 313.107†	-5061.9	-77.3	-0.0239 ug/L	-0.0239 ppb	20:35:45
3	Cd 226.502†	-183.9	12.5	0.1172 ug/L	0.1172 ppb	20:36:05
3	Co 228.616†	-73.7	-3.1	-0.0606 ug/L	-0.0606 ppb	20:36:05
3	Cr 267.716†	120.5	37.0	0.3583 ug/L	0.3583 ppb	20:36:05
3	Cu 324.752†	9146.9	161.3	0.4110 ug/L	0.4110 ppb	20:35:45
3	Mn 257.610†	1308.0	796.6	0.8013 ug/L	0.8013 ppb	20:36:05
3	Mo 202.031†	29.6	7.2	0.4472 ug/L	0.4472 ppb	20:36:05
3	Ni 231.604†	106.5	-1.7	-0.0374 ug/L	-0.0374 ppb	20:36:05
3	P 214.914†	248.4	13.0	6.3689 ug/L	6.3689 ppb	20:36:05
3	Pb 220.353†	-43.8	13.9	1.5413 ug/L	1.5413 ppb	20:36:05
3	S 181.975 Axial†	49.9	-17.1	-20.792 ug/L	-20.792 ppb	20:36:05
3	Sb 206.836†	31.1	-3.5	-1.0187 ug/L	-1.0187 ppb	20:36:05
3	Se 196.026†	-16.7	4.1	2.3337 ug/L	2.3337 ppb	20:36:05
3	Si 251.611†	778.8	331.3	8.8839 ug/L	8.8839 ppb	20:36:05
3	Sn 189.927†	7.4	12.1	1.9896 ug/L	1.9896 ppb	20:36:05
3	Ti 334.940†	-765.4	131.7	0.1731 ug/L	0.1731 ppb	20:35:45
3	Tl 190.801†	-46.6	-7.6	-2.1814 ug/L	-2.1814 ppb	20:36:05
3	U 409.014†	-1397.4	-35.7	-0.8124 ug/L	-0.8124 ppb	20:35:40
3	V 292.402†	-1367.4	50.4	0.2782 ug/L	0.2782 ppb	20:35:45
3	Zn 213.857†	801.1	71.7	0.5904 ug/L	0.5904 ppb	20:36:05
3	SiO2†	776.1	312.8	17.950 ug/L	17.950 ppb	20:36:21

Mean Data: 1202015660|941727|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	957544.2	97.309 %		0.9329			0.96%
Sc Radial	5466.6	97.9 %		0.51			0.52%
Y 371.029	847882.7	97.210 %		0.9806			1.01%
Y RADIAL	5938.8	97.62 %		0.280			0.29%
Ag 328.068†	80.7	0.3294 ug/L		0.21992	0.3294 ppb	0.21992	66.75%
Al 396.153Radial†	5.9	4.1078 ug/L		3.70465	4.1078 ppb	3.70465	90.19%
As 188.979†	1.2	0.4512 ug/L		1.99283	0.4512 ppb	1.99283	441.67%
B 249.677†	-1.2	-0.0337 ug/L		0.31207	-0.0337 ppb	0.31207	925.94%
Ba 233.527†	6.6	0.0492 ug/L		0.04866	0.0492 ppb	0.04866	98.97%
Be 313.107†	-127.5	-0.0397 ug/L		0.01479	-0.0397 ppb	0.01479	37.30%
Ca 317.933Radial†	5.8	8.8319 ug/L		2.55968	8.8319 ppb	2.55968	28.98%
Cd 226.502†	1.5	0.0079 ug/L		0.09520	0.0079 ppb	0.09520	>999.9%
Co 228.616†	-0.5	-0.0112 ug/L		0.11584	-0.0112 ppb	0.11584	>999.9%
Cr 267.716†	21.2	0.2063 ug/L		0.15944	0.2063 ppb	0.15944	77.30%
Cu 324.752†	230.2	0.5847 ug/L		0.15815	0.5847 ppb	0.15815	27.05%
Fe 238.204 Radial†	7.6	64.574 ug/L		13.7944	64.574 ppb	13.7944	21.36%
K 766.490 Radial†	24.4	4.0248 ug/L		9.52894	4.0248 ppb	9.52894	236.76%

Mg 279.077 IEC†	-0.3	-11.172 ug/L	116.3945	-11.172 ppb	116.3945 >999.9%
Mn 257.610†	807.5	0.8184 ug/L	0.01571	0.8184 ppb	0.01571 1.92%
Mo 202.031†	3.9	0.2454 ug/L	0.17890	0.2454 ppb	0.17890 72.90%
Na 589.592 Radial†	78.9	21.064 ug/L	3.2194	21.064 ppb	3.2194 15.28%
Ni 231.604†	-9.4	-0.2110 ug/L	0.15068	-0.2110 ppb	0.15068 71.41%
P 214.914†	14.9	7.3075 ug/L	6.49221	7.3075 ppb	6.49221 88.84%
Pb 220.353†	9.9	1.0963 ug/L	0.75806	1.0963 ppb	0.75806 69.15%
S 181.975 Axial†	-18.9	-23.075 ug/L	2.0468	-23.075 ppb	2.0468 8.87%
Sb 206.836†	4.9	1.4988 ug/L	3.03227	1.4988 ppb	3.03227 202.31%
Se 196.026†	0.6	0.5202 ug/L	2.95367	0.5202 ppb	2.95367 567.82%
Si 251.611†	348.8	9.3563 ug/L	0.47442	9.3563 ppb	0.47442 5.07%
Sn 189.927†	12.6	2.0618 ug/L	0.12227	2.0618 ppb	0.12227 5.93%
Sr 421.552†	27.0	0.1568 ug/L	0.05443	0.1568 ppb	0.05443 34.71%
Ti 334.940†	131.7	0.1836 ug/L	0.04684	0.1836 ppb	0.04684 25.51%
Tl 190.801†	-5.2	-1.4901 ug/L	0.83136	-1.4901 ppb	0.83136 55.79%
U 409.014†	-0.5	-0.0191 ug/L	2.92944	-0.0191 ppb	2.92944 >999.9%
V 292.402†	73.9	0.4039 ug/L	0.12739	0.4039 ppb	0.12739 31.54%
Zn 213.857†	79.3	0.6539 ug/L	0.13126	0.6539 ppb	0.13126 20.07%
SiO2†	351.8	20.195 ug/L	2.2405	20.195 ppb	2.2405 11.09%

Sequence No.: 26

Sample ID: 1202015665|941727|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 72

Date Collected: 1/28/2010 20:38:32

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202015665|941727|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Units	Sample Conc.	Analysis Time
1	Sc Radial	5547.9	5547.9	99.3 %			20:40:46
1	Y RADIAL	6623.5	6623.5	108.9 %			20:40:46
1	Al 396.153Radial†	132421.7	133304.7	92369 ug/L		92369 ppb	20:40:25
1	Ca 317.933Radial†	68940.1	69375.0	105490 ug/L		105490 ppb	20:40:25
1	Fe 238.204 Radial†	23214.6	23361.6	197300 ug/L		197300 ppb	20:40:25
1	K 766.490 Radial†	269955.2	269367.7	44558 ug/L		44558 ppb	20:40:25
1	Mg 279.077 IEC†	1243.7	1249.7	40584 ug/L		40584 ppb	20:40:46
1	Na 589.592 Radial†	38527.2	39813.2	10633 ug/L		10633 ppb	20:40:25
1	Sr 421.552†	413332.3	416088.8	2421.2 ug/L		2421.2 ppb	20:40:25
1	Sc 361.383	967525.5	967525.5	98.323 %			20:41:47
1	Y 371.029	927517.2	927517.2	106.34 %			20:41:47
1	Ag 328.068†	68299.8	69143.9	330.76 ug/L		330.76 ppb	20:41:47
1	As 188.979†	2801.3	2882.9	1142.0 ug/L		1142.0 ppb	20:41:52
1	B 249.677†	77407.8	79014.5	1529.8 ug/L		1529.8 ppb	20:41:47
1	Ba 233.527†	279429.0	284200.0	2005.6 ug/L		2005.6 ppb	20:41:47
1	Be 313.107†	2494608.9	2542229.2	812.62 ug/L		812.62 ppb	20:41:47
1	Cd 226.502†	60694.6	61929.2	593.04 ug/L		593.04 ppb	20:41:52
1	Co 228.616†	48327.9	49224.0	927.85 ug/L		927.85 ppb	20:41:52
1	Cr 267.716†	244281.0	248362.4	2398.8 ug/L		2398.8 ppb	20:41:47
1	Cu 324.752†	763971.2	767866.3	1949.8 ug/L		1949.8 ppb	20:41:47
1	Mn 257.610†	5248005.1	5336991.1	5381.4 ug/L		5381.4 ppb	20:41:47
1	Mo 202.031†	8141.3	8257.2	526.00 ug/L		526.00 ppb	20:41:52
1	Ni 231.604†	58470.2	59357.5	1326.1 ug/L		1326.1 ppb	20:41:52
1	P 214.914†	16776.5	16823.2	7883.0 ug/L		7883.0 ppb	20:41:52
1	Pb 220.353†	7537.0	7723.9	864.54 ug/L		864.54 ppb	20:41:52
1	S 181.975 Axial†	3304.8	3293.4	3998.7 ug/L		3998.7 ppb	20:41:52
1	Sb 206.836†	5103.4	5155.3	1565.5 ug/L		1565.5 ppb	20:41:52
1	Se 196.026†	5040.5	5147.7	3334.9 ug/L		3334.9 ppb	20:41:52
1	Si 251.611†	986114.7	1002475.2	26890 ug/L		26890 ppb	20:41:47
1	Sn 189.927†	6409.4	6523.3	1089.4 ug/L		1089.4 ppb	20:41:52
1	Ti 334.940†	4227431.8	4300451.8	5937.6 ug/L		5937.6 ppb	20:41:47
1	Tl 190.801†	4014.2	4122.5	1250.0 ug/L		1250.0 ppb	20:41:52
1	U 409.014†	-7944.1	-6694.9	-178.74 ug/L		-178.74 ppb	20:41:47
1	V 292.402†	221879.2	227104.3	1232.6 ug/L		1232.6 ppb	20:41:47
1	Zn 213.857†	705851.6	717149.1	5937.8 ug/L		5937.8 ppb	20:41:47
1	SiO2†	987822.1	1004195.9	57653 ug/L		57653 ppb	20:42:27
2	Sc Radial	5629.5	5629.5	101 %			20:41:11
2	Y RADIAL	6722.4	6722.4	110.5 %			20:41:11
2	Al 396.153Radial†	133030.7	131976.8	91448 ug/L		91448 ppb	20:40:51
2	Ca 317.933Radial†	68809.4	68239.4	103760 ug/L		103760 ppb	20:40:51
2	Fe 238.204 Radial†	23199.6	23008.0	194310 ug/L		194310 ppb	20:40:51
2	K 766.490 Radial†	270434.9	265905.0	43985 ug/L		43985 ppb	20:40:51
2	Mg 279.077 IEC†	1257.3	1245.0	40435 ug/L		40435 ppb	20:41:11
2	Na 589.592 Radial†	38588.7	39312.1	10499 ug/L		10499 ppb	20:40:51
2	Sr 421.552†	415087.0	411799.3	2396.3 ug/L		2396.3 ppb	20:40:51
2	Sc 361.383	973948.4	973948.4	98.976 %			20:42:01
2	Y 371.029	932631.8	932631.8	106.93 %			20:42:01
2	Ag 328.068†	68766.2	69156.9	329.85 ug/L		329.85 ppb	20:42:01
2	As 188.979†	2787.3	2850.0	1129.3 ug/L		1129.3 ppb	20:42:07
2	B 249.677†	77935.7	79028.6	1530.6 ug/L		1530.6 ppb	20:42:01
2	Ba 233.527†	281225.4	284140.8	2005.1 ug/L		2005.1 ppb	20:42:01
2	Be 313.107†	2506694.3	2537707.8	811.20 ug/L		811.20 ppb	20:42:01
2	Cd 226.502†	60955.8	61786.1	591.93 ug/L		591.93 ppb	20:42:07
2	Co 228.616†	48625.4	49200.5	927.44 ug/L		927.44 ppb	20:42:07
2	Cr 267.716†	245480.5	247935.8	2394.6 ug/L		2394.6 ppb	20:42:01
2	Cu 324.752†	770142.5	768977.3	1952.4 ug/L		1952.4 ppb	20:42:01
2	Mn 257.610†	5275824.4	5329898.8	5374.0 ug/L		5374.0 ppb	20:42:01
2	Mo 202.031†	8159.3	8220.8	523.50 ug/L		523.50 ppb	20:42:07
2	Ni 231.604†	58796.3	59294.9	1324.7 ug/L		1324.7 ppb	20:42:07

2	P 214.914†	16877.6	16812.8	7879.5 ug/L	7879.5 ppb	20:42:07
2	Pb 220.353†	7635.5	7772.9	870.05 ug/L	870.05 ppb	20:42:07
2	S 181.975 Axial†	3305.1	3271.5	3972.2 ug/L	3972.2 ppb	20:42:07
2	Sb 206.836†	5151.7	5169.9	1569.8 ug/L	1569.8 ppb	20:42:07
2	Se 196.026†	5083.3	5157.1	3329.8 ug/L	3329.8 ppb	20:42:07
2	Si 251.611†	992733.5	1002548.4	26892 ug/L	26892 ppb	20:42:01
2	Sn 189.927†	6457.2	6528.6	1090.0 ug/L	1090.0 ppb	20:42:07
2	Ti 334.940†	4254376.7	4299321.3	5935.8 ug/L	5935.8 ppb	20:42:01
2	Tl 190.801†	4012.0	4093.3	1241.6 ug/L	1241.6 ppb	20:42:07
2	U 409.014†	-7866.9	-6563.6	-175.43 ug/L	-175.43 ppb	20:42:01
2	V 292.402†	222858.8	226605.9	1230.2 ug/L	1230.2 ppb	20:42:01
2	Zn 213.857†	708931.6	715526.7	5924.6 ug/L	5924.6 ppb	20:42:01
2	SiO2†	989813.5	999582.5	57388 ug/L	57388 ppb	20:42:33
3	Sc Radial	5588.6	5588.6	100 %		20:41:36
3	Y RADIAL	6666.9	6666.9	109.6 %		20:41:36
3	Al 396.153Radial†	133359.7	133269.6	92345 ug/L	92345 ppb	20:41:16
3	Ca 317.933Radial†	69104.0	69032.5	104960 ug/L	104960 ppb	20:41:16
3	Fe 238.204 Radial†	23294.8	23271.3	196540 ug/L	196540 ppb	20:41:16
3	K 766.490 Radial†	272009.3	269437.9	44570 ug/L	44570 ppb	20:41:16
3	Mg 279.077 IEC†	1252.3	1249.1	40566 ug/L	40566 ppb	20:41:36
3	Na 589.592 Radial†	38519.8	39522.9	10555 ug/L	10555 ppb	20:41:16
3	Sr 421.552†	416316.7	416035.9	2420.9 ug/L	2420.9 ppb	20:41:16
3	Sc 361.383	975867.3	975867.3	99.171 %		20:42:16
3	Y 371.029	934977.0	934977.0	107.20 %		20:42:16
3	Ag 328.068†	68823.3	69077.9	330.26 ug/L	330.26 ppb	20:42:16
3	As 188.979†	2793.8	2851.0	1130.2 ug/L	1130.2 ppb	20:42:21
3	B 249.677†	78205.5	79145.9	1532.5 ug/L	1532.5 ppb	20:42:16
3	Ba 233.527†	281124.9	283480.8	2000.5 ug/L	2000.5 ppb	20:42:16
3	Be 313.107†	2507673.3	2533715.1	809.94 ug/L	809.94 ppb	20:42:16
3	Cd 226.502†	60870.5	61578.9	589.65 ug/L	589.65 ppb	20:42:21
3	Co 228.616†	48512.1	48989.7	923.37 ug/L	923.37 ppb	20:42:21
3	Cr 267.716†	245233.8	247199.4	2387.6 ug/L	2387.6 ppb	20:42:16
3	Cu 324.752†	773067.3	770396.5	1956.2 ug/L	1956.2 ppb	20:42:16
3	Mn 257.610†	5277511.4	5321118.5	5365.4 ug/L	5365.4 ppb	20:42:16
3	Mo 202.031†	8129.8	8174.9	520.85 ug/L	520.85 ppb	20:42:21
3	Ni 231.604†	58441.1	58820.0	1314.1 ug/L	1314.1 ppb	20:42:21
3	P 214.914†	16791.0	16691.9	7816.8 ug/L	7816.8 ppb	20:42:21
3	Pb 220.353†	7559.1	7680.7	859.75 ug/L	859.75 ppb	20:42:21
3	S 181.975 Axial†	3324.5	3284.5	3987.9 ug/L	3987.9 ppb	20:42:21
3	Sb 206.836†	5099.9	5107.4	1550.8 ug/L	1550.8 ppb	20:42:21
3	Se 196.026†	5061.4	5124.8	3320.5 ug/L	3320.5 ppb	20:42:21
3	Si 251.611†	993990.9	1001844.2	26873 ug/L	26873 ppb	20:42:16
3	Sn 189.927†	6416.3	6474.6	1081.3 ug/L	1081.3 ppb	20:42:21
3	Ti 334.940†	4262589.2	4299150.4	5935.7 ug/L	5935.7 ppb	20:42:16
3	Tl 190.801†	4012.2	4085.5	1239.3 ug/L	1239.3 ppb	20:42:21
3	U 409.014†	-7898.1	-6579.4	-176.03 ug/L	-176.03 ppb	20:42:16
3	V 292.402†	223243.2	226550.8	1229.6 ug/L	1229.6 ppb	20:42:16
3	Zn 213.857†	708419.7	713602.0	5908.4 ug/L	5908.4 ppb	20:42:16
3	SiO2†	973350.0	981014.8	56321 ug/L	56321 ppb	20:42:39

Mean Data: 1202015665|941727|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	972447.1	98.823 %		0.4440				0.45%
Sc Radial	5588.7	100 %		0.7				0.73%
Y 371.029	931708.7	106.82 %		0.437				0.41%
Y RADIAL	6670.9	109.7 %		0.82				0.74%
Ag 328.068†	69126.2	330.29 ug/L		0.455	330.29 ppb		0.455	0.14%
Al 396.153Radial†	132850.4	92054 ug/L		524.5	92054 ppb		524.5	0.57%
As 188.979†	2861.3	1133.8 ug/L		7.06	1133.8 ppb		7.06	0.62%
B 249.677†	79063.0	1531.0 ug/L		1.41	1531.0 ppb		1.41	0.09%
Ba 233.527†	283940.5	2003.7 ug/L		2.80	2003.7 ppb		2.80	0.14%
Be 313.107†	2537884.0	811.25 ug/L		1.341	811.25 ppb		1.341	0.17%
Ca 317.933Radial†	68882.3	104740 ug/L		885.7	104740 ppb		885.7	0.85%
Cd 226.502†	61764.8	591.54 ug/L		1.730	591.54 ppb		1.730	0.29%
Co 228.616†	49138.1	926.22 ug/L		2.477	926.22 ppb		2.477	0.27%
Cr 267.716†	247832.5	2393.7 ug/L		5.67	2393.7 ppb		5.67	0.24%
Cu 324.752†	769080.0	1952.8 ug/L		3.19	1952.8 ppb		3.19	0.16%
Fe 238.204 Radial†	23213.7	196050 ug/L		1551.4	196050 ppb		1551.4	0.79%
K 766.490 Radial†	268236.8	44371 ug/L		334.1	44371 ppb		334.1	0.75%

Mg 279.077 IEC†	1247.9	40528 ug/L	81.6	40528 ppb	81.6	0.20%
Mn 257.610†	5329336.1	5373.6 ug/L	8.02	5373.6 ppb	8.02	0.15%
Mo 202.031†	8217.6	523.45 ug/L	2.573	523.45 ppb	2.573	0.49%
Na 589.592 Radial†	39549.4	10562 ug/L	67.2	10562 ppb	67.2	0.64%
Ni 231.604†	59157.5	1321.6 ug/L	6.57	1321.6 ppb	6.57	0.50%
P 214.914†	16775.9	7859.8 ug/L	37.26	7859.8 ppb	37.26	0.47%
Pb 220.353†	7725.8	864.78 ug/L	5.154	864.78 ppb	5.154	0.60%
S 181.975 Axial†	3283.1	3986.3 ug/L	13.33	3986.3 ppb	13.33	0.33%
Sb 206.836†	5144.2	1562.0 ug/L	9.95	1562.0 ppb	9.95	0.64%
Se 196.026†	5143.2	3328.4 ug/L	7.30	3328.4 ppb	7.30	0.22%
Si 251.611†	1002289.3	26885 ug/L	10.4	26885 ppb	10.4	0.04%
Sn 189.927†	6508.9	1086.9 ug/L	4.84	1086.9 ppb	4.84	0.45%
Sr 421.552†	414641.3	2412.8 ug/L	14.32	2412.8 ppb	14.32	0.59%
Ti 334.940†	4299641.2	5936.4 ug/L	1.05	5936.4 ppb	1.05	0.02%
Tl 190.801†	4100.4	1243.6 ug/L	5.62	1243.6 ppb	5.62	0.45%
U 409.014†	-6612.6	-176.73 ug/L	1.765	-176.73 ppb	1.765	1.00%
V 292.402†	226753.7	1230.8 ug/L	1.59	1230.8 ppb	1.59	0.13%
Zn 213.857†	715425.9	5923.6 ug/L	14.71	5923.6 ppb	14.71	0.25%
SiO2†	994931.1	57121 ug/L	704.6	57121 ppb	704.6	1.23%

Sequence No.: 27
 Sample ID: 244601001|941727|1
 Analyst: HSC
 Initial Sample Wt:
 Dilution:

Autosampler Location: 73
 Date Collected: 1/28/2010 20:44:50
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: 244601001|941727|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5473.0	5473.0	98.0 %		20:46:43
1	Y RADIAL	7251.0	7251.0	119.2 %		20:46:43
1	Al 396.153Radial†	40066.7	40882.7	28336 ug/L	28336 ppb	20:46:43
1	Ca 317.933Radial†	4831.0	4903.0	7455.1 ug/L	7455.1 ppb	20:46:43
1	Fe 238.204 Radial†	9008.8	9184.7	77560 ug/L	77560 ppb	20:46:43
1	K 766.490 Radial†	34363.7	32671.5	5405.3 ug/L	5405.3 ppb	20:46:43
1	Mg 279.077 IEC†	186.0	187.5	6037.2 ug/L	6037.2 ppb	20:47:03
1	Na 589.592 Radial†	2006.7	3075.8	821.45 ug/L	821.45 ppb	20:46:43
1	Sr 421.552†	11330.2	11550.8	67.181 ug/L	67.181 ppb	20:46:43
1	Sc 361.383	978335.8	978335.8	99.421 %		20:48:02
1	Y 371.029	1051417.0	1051417.0	120.55 %		20:48:02
1	Ag 328.068†	-5309.5	-5661.4	4.0245 ug/L	4.0245 ppb	20:48:07
1	As 188.979†	-43.3	-9.8	30.905 ug/L	30.905 ppb	20:48:27
1	B 249.677†	1086.6	1379.2	14.543 ug/L	14.543 ppb	20:48:07
1	Ba 233.527†	93633.0	94182.4	664.29 ug/L	664.29 ppb	20:48:07
1	Be 313.107†	-9084.6	-4069.4	2.9875 ug/L	2.9875 ppb	20:48:07
1	Cd 226.502†	591.2	794.0	-0.1591 ug/L	-0.1591 ppb	20:48:27
1	Co 228.616†	3014.4	3103.8	54.620 ug/L	54.620 ppb	20:48:27
1	Cr 267.716†	9971.6	9944.1	97.540 ug/L	97.540 ppb	20:48:07
1	Cu 324.752†	22177.9	13170.4	37.483 ug/L	37.483 ppb	20:48:07
1	Mn 257.610†	3649859.9	3670567.4	3696.3 ug/L	3696.3 ppb	20:48:02
1	Mo 202.031†	43.5	20.8	7.3927 ug/L	7.3927 ppb	20:48:27
1	Ni 231.604†	2792.5	2698.7	60.282 ug/L	60.282 ppb	20:48:27
1	P 214.914†	1315.8	1083.9	478.77 ug/L	478.77 ppb	20:48:27
1	Pb 220.353†	607.5	669.4	73.429 ug/L	73.429 ppb	20:48:27
1	S 181.975 Axial†	174.5	107.7	125.99 ug/L	125.99 ppb	20:48:27
1	Sb 206.836†	45.5	10.7	-1.5602 ug/L	-1.5602 ppb	20:48:27
1	Se 196.026†	-385.2	-366.4	67.898 ug/L	67.898 ppb	20:48:27
1	Si 251.611†	737871.1	741704.9	19900 ug/L	19900 ppb	20:48:02
1	Sn 189.927†	-37.9	-33.5	-3.0529 ug/L	-3.0529 ppb	20:48:27
1	Ti 334.940†	1354729.6	1363523.2	1880.0 ug/L	1880.0 ppb	20:48:02
1	Tl 190.801†	-162.0	-123.2	-2.5290 ug/L	-2.5290 ppb	20:48:27
1	U 409.014†	-10543.4	-9220.1	-216.87 ug/L	-216.87 ppb	20:48:02
1	V 292.402†	15399.8	16929.8	80.405 ug/L	80.405 ppb	20:48:07
1	Zn 213.857†	28814.8	28239.8	227.05 ug/L	227.05 ppb	20:48:07
1	SiO2†	746327.2	750194.4	43080 ug/L	43080 ppb	20:49:37
2	Sc Radial	5607.6	5607.6	100 %		20:47:08
2	Y RADIAL	7465.9	7465.9	122.7 %		20:47:08
2	Al 396.153Radial†	40918.3	40750.0	28244 ug/L	28244 ppb	20:47:08
2	Ca 317.933Radial†	4909.4	4862.8	7394.0 ug/L	7394.0 ppb	20:47:08
2	Fe 238.204 Radial†	9139.7	9094.6	76799 ug/L	76799 ppb	20:47:08
2	K 766.490 Radial†	34798.4	32263.3	5337.7 ug/L	5337.7 ppb	20:47:08
2	Mg 279.077 IEC†	189.7	186.6	6008.8 ug/L	6008.8 ppb	20:47:28
2	Na 589.592 Radial†	2008.6	3028.6	808.85 ug/L	808.85 ppb	20:47:08
2	Sr 421.552†	11592.7	11534.9	67.089 ug/L	67.089 ppb	20:47:08
2	Sc 361.383	964381.1	964381.1	98.003 %		20:48:34
2	Y 371.029	1035198.0	1035198.0	118.69 %		20:48:34
2	Ag 328.068†	-5256.0	-5684.1	3.6975 ug/L	3.6975 ppb	20:48:39
2	As 188.979†	-45.2	-12.3	29.911 ug/L	29.911 ppb	20:48:59
2	B 249.677†	1014.4	1321.3	13.519 ug/L	13.519 ppb	20:48:39
2	Ba 233.527†	92988.9	94888.0	669.23 ug/L	669.23 ppb	20:48:39
2	Be 313.107†	-8895.7	-4008.8	3.0319 ug/L	3.0319 ppb	20:48:39
2	Cd 226.502†	598.7	810.3	0.0803 ug/L	0.0803 ppb	20:48:59
2	Co 228.616†	3028.1	3161.6	55.719 ug/L	55.719 ppb	20:48:59
2	Cr 267.716†	9856.7	9971.9	97.796 ug/L	97.796 ppb	20:48:39
2	Cu 324.752†	22254.6	13571.4	38.456 ug/L	38.456 ppb	20:48:39
2	Mn 257.610†	3629041.2	3702445.7	3728.2 ug/L	3728.2 ppb	20:48:34
2	Mo 202.031†	55.5	33.6	8.1250 ug/L	8.1250 ppb	20:48:59
2	Ni 231.604†	2781.9	2728.6	60.949 ug/L	60.949 ppb	20:48:59

2	P 214.914†	1289.4	1076.2	475.29 ug/L	475.29 ppb	20:48:59
2	Pb 220.353†	614.0	684.9	75.207 ug/L	75.207 ppb	20:48:59
2	S 181.975 Axial†	168.4	104.0	121.52 ug/L	121.52 ppb	20:48:59
2	Sb 206.836†	47.3	13.1	-0.8620 ug/L	-0.8620 ppb	20:48:59
2	Se 196.026†	-386.0	-372.7	62.077 ug/L	62.077 ppb	20:48:59
2	Si 251.611†	732190.1	746647.3	20032 ug/L	20032 ppb	20:48:34
2	Sn 189.927†	-40.4	-36.6	-3.5860 ug/L	-3.5860 ppb	20:48:59
2	Ti 334.940†	1343343.7	1371622.5	1891.1 ug/L	1891.1 ppb	20:48:34
2	Tl 190.801†	-162.0	-125.6	-2.9738 ug/L	-2.9738 ppb	20:48:59
2	U 409.014†	-10490.5	-9319.5	-219.02 ug/L	-219.02 ppb	20:48:34
2	V 292.402†	15315.9	17068.4	81.279 ug/L	81.279 ppb	20:48:39
2	Zn 213.857†	28579.9	28419.5	228.62 ug/L	228.62 ppb	20:48:39
2	SiO2†	739467.4	754057.1	43302 ug/L	43302 ppb	20:49:43
3	Sc Radial	5443.5	5443.5	97.5 %		20:47:33
3	Y RADIAL	7238.7	7238.7	119.0 %		20:47:33
3	Al 396.153Radial†	39549.9	40574.6	28122 ug/L	28122 ppb	20:47:33
3	Ca 317.933Radial†	4776.2	4873.6	7410.4 ug/L	7410.4 ppb	20:47:33
3	Fe 238.204 Radial†	8885.5	9108.1	76914 ug/L	76914 ppb	20:47:33
3	K 766.490 Radial†	33749.8	32232.2	5332.5 ug/L	5332.5 ppb	20:47:33
3	Mg 279.077 IEC†	184.7	187.1	6025.9 ug/L	6025.9 ppb	20:47:53
3	Na 589.592 Radial†	1902.0	2979.5	795.73 ug/L	795.73 ppb	20:47:33
3	Sr 421.552†	11152.5	11431.4	66.486 ug/L	66.486 ppb	20:47:33
3	Sc 361.383	969856.6	969856.6	98.560 %		20:49:06
3	Y 371.029	1041537.8	1041537.8	119.41 %		20:49:06
3	Ag 328.068†	-5282.1	-5680.3	3.7456 ug/L	3.7456 ppb	20:49:11
3	As 188.979†	-50.5	-17.4	28.034 ug/L	28.034 ppb	20:49:31
3	B 249.677†	978.0	1278.5	12.655 ug/L	12.655 ppb	20:49:11
3	Ba 233.527†	93055.9	94420.3	665.95 ug/L	665.95 ppb	20:49:11
3	Be 313.107†	-9080.2	-4144.8	2.9814 ug/L	2.9814 ppb	20:49:11
3	Cd 226.502†	584.9	792.8	-0.1046 ug/L	-0.1046 ppb	20:49:31
3	Co 228.616†	2994.8	3110.4	54.744 ug/L	54.744 ppb	20:49:31
3	Cr 267.716†	9873.3	9932.1	97.412 ug/L	97.412 ppb	20:49:11
3	Cu 324.752†	22253.8	13442.5	38.136 ug/L	38.136 ppb	20:49:11
3	Mn 257.610†	3634582.1	3687161.7	3712.9 ug/L	3712.9 ppb	20:49:06
3	Mo 202.031†	62.6	40.6	8.5622 ug/L	8.5622 ppb	20:49:31
3	Ni 231.604†	2785.5	2716.2	60.673 ug/L	60.673 ppb	20:49:31
3	P 214.914†	1296.4	1075.8	475.05 ug/L	475.05 ppb	20:49:31
3	Pb 220.353†	605.1	672.3	73.766 ug/L	73.766 ppb	20:49:31
3	S 181.975 Axial†	155.3	89.8	104.21 ug/L	104.21 ppb	20:49:31
3	Sb 206.836†	48.9	14.5	-0.4412 ug/L	-0.4412 ppb	20:49:31
3	Se 196.026†	-378.2	-362.6	67.725 ug/L	67.725 ppb	20:49:31
3	Si 251.611†	734578.9	744853.1	19984 ug/L	19984 ppb	20:49:06
3	Sn 189.927†	-49.7	-45.8	-5.0900 ug/L	-5.0900 ppb	20:49:31
3	Ti 334.940†	1348522.5	1369138.4	1887.7 ug/L	1887.7 ppb	20:49:06
3	Tl 190.801†	-170.9	-133.6	-5.3678 ug/L	-5.3678 ppb	20:49:31
3	U 409.014†	-10493.2	-9261.8	-217.74 ug/L	-217.74 ppb	20:49:06
3	V 292.402†	15314.2	16978.4	80.776 ug/L	80.776 ppb	20:49:11
3	Zn 213.857†	28711.8	28388.7	228.35 ug/L	228.35 ppb	20:49:11
3	SiO2†	732973.1	743208.0	42679 ug/L	42679 ppb	20:49:49

Mean Data: 244601001|941727|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	970857.8	98.661 %	0.7145			0.72%
Sc Radial	5508.0	98.6 %	1.57			1.59%
Y 371.029	1042717.6	119.55 %	0.937			0.78%
Y RADIAL	7318.6	120.3 %	2.10			1.75%
Ag 328.068†	-5675.2	3.8225 ug/L	0.17656	3.8225 ppb	0.17656	4.62%
Al 396.153Radial†	40735.8	28234 ug/L	107.1	28234 ppb	107.1	0.38%
As 188.979†	-13.2	29.617 ug/L	1.4576	29.617 ppb	1.4576	4.92%
B 249.677†	1326.3	13.572 ug/L	0.9454	13.572 ppb	0.9454	6.97%
Ba 233.527†	94496.9	666.49 ug/L	2.512	666.49 ppb	2.512	0.38%
Be 313.107†	-4074.3	3.0003 ug/L	0.02757	3.0003 ppb	0.02757	0.92%
Ca 317.933Radial†	4879.8	7419.8 ug/L	31.64	7419.8 ppb	31.64	0.43%
Cd 226.502†	799.0	-0.0611 ug/L	0.12549	-0.0611 ppb	0.12549	205.27%
Co 228.616†	3125.2	55.028 ug/L	0.6016	55.028 ppb	0.6016	1.09%
Cr 267.716†	9949.4	97.583 ug/L	0.1952	97.583 ppb	0.1952	0.20%
Cu 324.752†	13394.8	38.025 ug/L	0.4962	38.025 ppb	0.4962	1.30%
Fe 238.204 Radial†	9129.1	77091 ug/L	410.4	77091 ppb	410.4	0.53%
K 766.490 Radial†	32389.0	5358.5 ug/L	40.58	5358.5 ppb	40.58	0.76%

Mg 279.077 IEC†	187.0	6023.9 ug/L	14.29	6023.9 ppb	14.29	0.24%
Mn 257.610†	3686724.9	3712.5 ug/L	15.99	3712.5 ppb	15.99	0.43%
Mo 202.031†	31.7	8.0266 ug/L	0.59091	8.0266 ppb	0.59091	7.36%
Na 589.592 Radial†	3027.9	808.68 ug/L	12.859	808.68 ppb	12.859	1.59%
Ni 231.604†	2714.5	60.635 ug/L	0.3352	60.635 ppb	0.3352	0.55%
P 214.914†	1078.6	476.37 ug/L	2.081	476.37 ppb	2.081	0.44%
Pb 220.353†	675.5	74.134 ug/L	0.9444	74.134 ppb	0.9444	1.27%
S 181.975 Axial†	100.5	117.24 ug/L	11.505	117.24 ppb	11.505	9.81%
Sb 206.836†	12.8	-0.9545 ug/L	0.56521	-0.9545 ppb	0.56521	59.22%
Se 196.026†	-367.2	65.900 ug/L	3.3121	65.900 ppb	3.3121	5.03%
Si 251.611†	744401.8	19972 ug/L	67.1	19972 ppb	67.1	0.34%
Sn 189.927†	-38.6	-3.9096 ug/L	1.05639	-3.9096 ppb	1.05639	27.02%
Sr 421.552†	11505.7	66.919 ug/L	0.3775	66.919 ppb	0.3775	0.56%
Ti 334.940†	1368094.7	1886.3 ug/L	5.72	1886.3 ppb	5.72	0.30%
Tl 190.801†	-127.5	-3.6235 ug/L	1.52688	-3.6235 ppb	1.52688	42.14%
U 409.014†	-9267.1	-217.88 ug/L	1.084	-217.88 ppb	1.084	0.50%
V 292.402†	16992.2	80.820 ug/L	0.4389	80.820 ppb	0.4389	0.54%
Zn 213.857†	28349.3	228.01 ug/L	0.837	228.01 ppb	0.837	0.37%
SiO2†	749153.2	43020 ug/L	315.8	43020 ppb	315.8	0.73%

Sequence No.: 28

Sample ID: 1202015661|941727|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 74

Date Collected: 1/28/2010 20:52:01

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202015661|941727|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5840.9	5840.9	105 %		20:53:54
1	Y RADIAL	7961.4	7961.4	130.9 %		20:53:54
1	Al 396.153Radial†	47090.4	45023.5	31206 ug/L	31206 ppb	20:53:54
1	Ca 317.933Radial†	5212.2	4957.0	7537.2 ug/L	7537.2 ppb	20:53:54
1	Fe 238.204 Radial†	10014.7	9567.5	80792 ug/L	80792 ppb	20:53:54
1	K 766.490 Radial†	39699.7	35565.1	5884.6 ug/L	5884.6 ppb	20:53:54
1	Mg 279.077 IEC†	211.3	199.7	6432.5 ug/L	6432.5 ppb	20:54:14
1	Na 589.592 Radial†	2384.9	3308.4	883.58 ug/L	883.58 ppb	20:53:54
1	Sr 421.552†	11913.6	11380.5	66.189 ug/L	66.189 ppb	20:53:54
1	Sc 361.383	964206.9	964206.9	97.986 %		20:55:12
1	Y 371.029	1070440.8	1070440.8	122.73 %		20:55:12
1	Ag 328.068†	-5981.3	-6425.3	2.1722 ug/L	2.1722 ppb	20:55:17
1	As 188.979†	-51.7	-18.9	31.023 ug/L	31.023 ppb	20:55:37
1	B 249.677†	969.9	1276.1	11.968 ug/L	11.968 ppb	20:55:17
1	Ba 233.527†	61711.2	62984.5	445.19 ug/L	445.19 ppb	20:55:17
1	Be 313.107†	-10945.2	-6102.2	3.0506 ug/L	3.0506 ppb	20:55:17
1	Cd 226.502†	701.4	915.2	0.6940 ug/L	0.6940 ppb	20:55:37
1	Co 228.616†	3133.1	3269.3	57.006 ug/L	57.006 ppb	20:55:37
1	Cr 267.716†	6301.0	6345.0	62.929 ug/L	62.929 ppb	20:55:37
1	Cu 324.752†	22092.5	13410.1	38.272 ug/L	38.272 ppb	20:55:17
1	Mn 257.610†	2808500.7	2865705.3	2887.7 ug/L	2887.7 ppb	20:55:12
1	Mo 202.031†	53.2	31.3	8.2943 ug/L	8.2943 ppb	20:55:37
1	Ni 231.604†	2246.5	2182.7	48.748 ug/L	48.748 ppb	20:55:37
1	P 214.914†	1256.7	1043.0	456.32 ug/L	456.32 ppb	20:55:37
1	Pb 220.353†	448.4	516.0	56.628 ug/L	56.628 ppb	20:55:37
1	S 181.975 Axial†	183.1	119.1	139.37 ug/L	139.37 ppb	20:55:37
1	Sb 206.836†	50.7	16.6	-0.8191 ug/L	-0.8191 ppb	20:55:37
1	Se 196.026†	-423.2	-410.7	55.713 ug/L	55.713 ppb	20:55:37
1	Si 251.611†	755850.2	770928.8	20684 ug/L	20684 ppb	20:55:12
1	Sn 189.927†	-45.6	-42.0	-4.3776 ug/L	-4.3776 ppb	20:55:37
1	Ti 334.940†	1554999.9	1587877.5	2189.2 ug/L	2189.2 ppb	20:55:12
1	Tl 190.801†	-169.0	-132.8	-6.5742 ug/L	-6.5742 ppb	20:55:37
1	U 409.014†	-11366.3	-10215.2	-239.59 ug/L	-239.59 ppb	20:55:12
1	V 292.402†	14758.7	16502.5	77.221 ug/L	77.221 ppb	20:55:17
1	Zn 213.857†	34838.5	34812.0	281.51 ug/L	281.51 ppb	20:55:17
1	SiO2†	757635.6	772735.1	44375 ug/L	44375 ppb	20:56:45
2	Sc Radial	5574.5	5574.5	99.8 %		20:54:19
2	Y RADIAL	7641.2	7641.2	125.6 %		20:54:19
2	Al 396.153Radial†	47349.8	47435.8	32878 ug/L	32878 ppb	20:54:19
2	Ca 317.933Radial†	5254.7	5237.9	7964.2 ug/L	7964.2 ppb	20:54:19
2	Fe 238.204 Radial†	10064.7	10075.4	85081 ug/L	85081 ppb	20:54:19
2	K 766.490 Radial†	39960.8	37641.3	6228.2 ug/L	6228.2 ppb	20:54:19
2	Mg 279.077 IEC†	214.9	212.9	6861.0 ug/L	6861.0 ppb	20:54:39
2	Na 589.592 Radial†	2311.5	3343.9	893.06 ug/L	893.06 ppb	20:54:19
2	Sr 421.552†	11984.5	11996.1	69.769 ug/L	69.769 ppb	20:54:19
2	Sc 361.383	960141.3	960141.3	97.572 %		20:55:43
2	Y 371.029	1069056.5	1069056.5	122.57 %		20:55:43
2	Ag 328.068†	-6028.9	-6499.9	3.2718 ug/L	3.2718 ppb	20:55:48
2	As 188.979†	-45.3	-12.6	34.290 ug/L	34.290 ppb	20:56:08
2	B 249.677†	1041.9	1354.1	12.816 ug/L	12.816 ppb	20:55:48
2	Ba 233.527†	61817.4	63360.0	447.96 ug/L	447.96 ppb	20:55:48
2	Be 313.107†	-10945.0	-6149.2	3.0240 ug/L	3.0240 ppb	20:55:48
2	Cd 226.502†	694.6	911.2	0.2119 ug/L	0.2119 ppb	20:56:08
2	Co 228.616†	3113.7	3262.9	56.832 ug/L	56.832 ppb	20:56:08
2	Cr 267.716†	6287.5	6358.4	63.142 ug/L	63.142 ppb	20:56:08
2	Cu 324.752†	22053.3	13465.5	38.638 ug/L	38.638 ppb	20:55:48
2	Mn 257.610†	2787711.3	2856535.5	2878.9 ug/L	2878.9 ppb	20:55:43
2	Mo 202.031†	45.6	23.8	8.1664 ug/L	8.1664 ppb	20:56:08
2	Ni 231.604†	2236.2	2181.8	48.728 ug/L	48.728 ppb	20:56:08

2	P 214.914†	1259.3	1051.1	457.31 ug/L	457.31 ppb	20:56:08
2	Pb 220.353†	450.5	520.0	57.029 ug/L	57.029 ppb	20:56:08
2	S 181.975 Axial†	184.5	121.3	141.79 ug/L	141.79 ppb	20:56:08
2	Sb 206.836†	47.8	13.8	-1.5691 ug/L	-1.5691 ppb	20:56:08
2	Se 196.026†	-439.6	-429.4	60.284 ug/L	60.284 ppb	20:56:08
2	Si 251.611†	751124.3	769351.7	20641 ug/L	20641 ppb	20:55:43
2	Sn 189.927†	-40.2	-36.6	-3.3584 ug/L	-3.3584 ppb	20:56:08
2	Ti 334.940†	1544772.6	1584115.7	2184.1 ug/L	2184.1 ppb	20:55:43
2	Tl 190.801†	-146.1	-110.0	-0.1322 ug/L	-0.1322 ppb	20:56:08
2	U 409.014†	-11314.3	-10211.1	-239.99 ug/L	-239.99 ppb	20:55:43
2	V 292.402†	14705.3	16511.6	76.654 ug/L	76.654 ppb	20:55:48
2	Zn 213.857†	34870.5	34995.4	282.62 ug/L	282.62 ppb	20:55:48
2	SiO2†	763768.9	782295.1	44924 ug/L	44924 ppb	20:56:51
3	Sc Radial	5569.0	5569.0	99.7 %		20:54:44
3	Y RADIAL	7673.6	7673.6	126.1 %		20:54:44
3	Al 396.153Radial†	47857.1	47991.3	33263 ug/L	33263 ppb	20:54:44
3	Ca 317.933Radial†	5308.6	5297.1	8054.3 ug/L	8054.3 ppb	20:54:44
3	Fe 238.204 Radial†	10146.2	10167.0	85855 ug/L	85855 ppb	20:54:44
3	K 766.490 Radial†	40185.9	37906.4	6272.1 ug/L	6272.1 ppb	20:54:44
3	Mg 279.077 IEC†	216.4	214.7	6916.7 ug/L	6916.7 ppb	20:55:04
3	Na 589.592 Radial†	2334.0	3368.8	899.71 ug/L	899.71 ppb	20:54:44
3	Sr 421.552†	12074.1	12097.8	70.360 ug/L	70.360 ppb	20:54:44
3	Sc 361.383	977869.6	977869.6	99.374 %		20:56:14
3	Y 371.029	1088532.3	1088532.3	124.80 %		20:56:14
3	Ag 328.068†	-6006.8	-6365.6	4.0240 ug/L	4.0240 ppb	20:56:19
3	As 188.979†	-40.5	-6.9	36.495 ug/L	36.495 ppb	20:56:39
3	B 249.677†	1026.1	1318.8	11.995 ug/L	11.995 ppb	20:56:19
3	Ba 233.527†	61624.4	62017.2	438.55 ug/L	438.55 ppb	20:56:19
3	Be 313.107†	-11027.0	-6028.4	3.0563 ug/L	3.0563 ppb	20:56:19
3	Cd 226.502†	695.0	898.7	0.0084 ug/L	0.0084 ppb	20:56:39
3	Co 228.616†	3115.1	3206.6	55.743 ug/L	55.743 ppb	20:56:39
3	Cr 267.716†	6304.2	6258.4	62.189 ug/L	62.189 ppb	20:56:39
3	Cu 324.752†	21979.1	12981.0	37.453 ug/L	37.453 ppb	20:56:19
3	Mn 257.610†	2833670.7	2850987.2	2873.4 ug/L	2873.4 ppb	20:56:14
3	Mo 202.031†	46.5	23.8	8.2317 ug/L	8.2317 ppb	20:56:39
3	Ni 231.604†	2240.9	2145.0	47.906 ug/L	47.906 ppb	20:56:39
3	P 214.914†	1249.1	1017.5	440.24 ug/L	440.24 ppb	20:56:39
3	Pb 220.353†	449.8	511.0	56.036 ug/L	56.036 ppb	20:56:39
3	S 181.975 Axial†	169.7	103.0	119.36 ug/L	119.36 ppb	20:56:39
3	Sb 206.836†	37.4	2.5	-4.9702 ug/L	-4.9702 ppb	20:56:39
3	Se 196.026†	-434.8	-416.4	69.642 ug/L	69.642 ppb	20:56:39
3	Si 251.611†	763412.0	767760.4	20599 ug/L	20599 ppb	20:56:14
3	Sn 189.927†	-39.3	-35.0	-3.0690 ug/L	-3.0690 ppb	20:56:39
3	Ti 334.940†	1571485.3	1582293.9	2181.5 ug/L	2181.5 ppb	20:56:14
3	Tl 190.801†	-157.7	-119.0	-2.7470 ug/L	-2.7470 ppb	20:56:39
3	U 409.014†	-11326.8	-10013.4	-235.62 ug/L	-235.62 ppb	20:56:14
3	V 292.402†	14785.9	16319.4	75.487 ug/L	75.487 ppb	20:56:19
3	Zn 213.857†	34829.0	34305.6	276.81 ug/L	276.81 ppb	20:56:19
3	SiO2†	761694.8	766016.7	43989 ug/L	43989 ppb	20:56:57

Mean Data: 1202015661|941727|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	967406.0	98.311 %	0.9438			0.96%
Sc Radial	5661.5	101 %	2.8			2.75%
Y 371.029	1076009.8	123.37 %	1.246			1.01%
Y RADIAL	7758.7	127.5 %	2.90			2.27%
Ag 328.068†	-6430.3	3.1560 ug/L	0.93132	3.1560 ppb	0.93132	29.51%
Al 396.153Radial†	46816.9	32449 ug/L	1093.6	32449 ppb	1093.6	3.37%
As 188.979†	-12.8	33.936 ug/L	2.7527	33.936 ppb	2.7527	8.11%
B 249.677†	1316.3	12.260 ug/L	0.4822	12.260 ppb	0.4822	3.93%
Ba 233.527†	62787.2	443.90 ug/L	4.838	443.90 ppb	4.838	1.09%
Be 313.107†	-6093.2	3.0436 ug/L	0.01722	3.0436 ppb	0.01722	0.57%
Ca 317.933Radial†	5164.0	7851.9 ug/L	276.25	7851.9 ppb	276.25	3.52%
Cd 226.502†	908.4	0.3048 ug/L	0.35216	0.3048 ppb	0.35216	115.55%
Co 228.616†	3246.3	56.527 ug/L	0.6842	56.527 ppb	0.6842	1.21%
Cr 267.716†	6320.6	62.753 ug/L	0.4999	62.753 ppb	0.4999	0.80%
Cu 324.752†	13285.5	38.121 ug/L	0.6067	38.121 ppb	0.6067	1.59%
Fe 238.204 Radial†	9936.6	83910 ug/L	2727.1	83910 ppb	2727.1	3.25%
K 766.490 Radial†	37037.6	6128.3 ug/L	212.19	6128.3 ppb	212.19	3.46%

Mg 279.077 IEC†	209.1	6736.7 ug/L	264.98	6736.7 ppb	264.98	3.93%
Mn 257.610†	2857742.6	2880.0 ug/L	7.22	2880.0 ppb	7.22	0.25%
Mo 202.031†	26.3	8.2308 ug/L	0.06394	8.2308 ppb	0.06394	0.78%
Na 589.592 Radial†	3340.4	892.12 ug/L	8.103	892.12 ppb	8.103	0.91%
Ni 231.604†	2169.9	48.460 ug/L	0.4804	48.460 ppb	0.4804	0.99%
P 214.914†	1037.2	451.29 ug/L	9.581	451.29 ppb	9.581	2.12%
Pb 220.353†	515.7	56.564 ug/L	0.4995	56.564 ppb	0.4995	0.88%
S 181.975 Axial†	114.5	133.51 ug/L	12.309	133.51 ppb	12.309	9.22%
Sb 206.836†	11.0	-2.4528 ug/L	2.21216	-2.4528 ppb	2.21216	90.19%
Se 196.026†	-418.8	61.879 ug/L	7.1006	61.879 ppb	7.1006	11.47%
Si 251.611†	769347.0	20641 ug/L	42.5	20641 ppb	42.5	0.21%
Sn 189.927†	-37.8	-3.6017 ug/L	0.68741	-3.6017 ppb	0.68741	19.09%
Sr 421.552†	11824.8	68.773 ug/L	2.2572	68.773 ppb	2.2572	3.28%
Ti 334.940†	1584762.4	2184.9 ug/L	3.91	2184.9 ppb	3.91	0.18%
Tl 190.801†	-120.6	-3.1511 ug/L	3.23992	-3.1511 ppb	3.23992	102.82%
U 409.014†	-10146.6	-238.40 ug/L	2.417	-238.40 ppb	2.417	1.01%
V 292.402†	16444.5	76.454 ug/L	0.8840	76.454 ppb	0.8840	1.16%
Zn 213.857†	34704.3	280.31 ug/L	3.083	280.31 ppb	3.083	1.10%
SiO2†	773682.3	44429 ug/L	469.8	44429 ppb	469.8	1.06%

Sequence No.: 29

Sample ID: 1202015663|941727|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 75

Date Collected: 1/28/2010 20:59:08

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202015663|941727|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Units	Sample Conc.	Analysis Time
1	Sc Radial	5480.6	5480.6	98.1 %			21:01:21
1	Y RADIAL	7479.1	7479.1	122.9 %			21:01:21
1	Al 396.153Radial†	79699.7	81215.1	56268 ug/L		56268 ppb	21:01:01
1	Ca 317.933Radial†	8331.0	8463.1	12868 ug/L		12868 ppb	21:01:01
1	Fe 238.204 Radial†	9312.0	9481.1	80076 ug/L		80076 ppb	21:01:01
1	K 766.490 Radial†	72549.0	71536.6	11836 ug/L		11836 ppb	21:01:01
1	Mg 279.077 IEC†	385.4	390.4	12661 ug/L		12661 ppb	21:01:21
1	Na 589.592 Radial†	21411.4	22847.6	6101.9 ug/L		6101.9 ppb	21:01:01
1	Sr 421.552†	97335.5	99179.6	577.22 ug/L		577.22 ppb	21:01:01
1	Sc 361.383	985791.9	985791.9	100.18 %			21:02:21
1	Y 371.029	1092292.7	1092292.7	125.23 %			21:02:21
1	Ag 328.068†	123735.8	123193.6	496.43 ug/L		496.43 ppb	21:02:21
1	As 188.979†	1233.4	1265.1	501.00 ug/L		501.00 ppb	21:02:41
1	B 249.677†	24708.0	24950.1	479.58 ug/L		479.58 ppb	21:02:21
1	Ba 233.527†	118525.4	118318.0	834.90 ug/L		834.90 ppb	21:02:21
1	Be 313.107†	1524927.6	1527268.9	486.52 ug/L		486.52 ppb	21:02:21
1	Cd 226.502†	48060.8	48174.2	468.63 ug/L		468.63 ppb	21:02:21
1	Co 228.616†	26224.0	26248.9	496.48 ug/L		496.48 ppb	21:02:41
1	Cr 267.716†	53745.2	53563.6	518.32 ug/L		518.32 ppb	21:02:21
1	Cu 324.752†	224834.9	215296.3	547.84 ug/L		547.84 ppb	21:02:21
1	Mn 257.610†	2699558.4	2694198.4	2715.0 ug/L		2715.0 ppb	21:02:21
1	Mo 202.031†	7299.5	7263.5	454.49 ug/L		454.49 ppb	21:02:41
1	Ni 231.604†	22403.5	22253.4	497.07 ug/L		497.07 ppb	21:02:41
1	P 214.914†	2225.7	1982.2	834.91 ug/L		834.91 ppb	21:02:41
1	Pb 220.353†	4519.1	4569.4	515.07 ug/L		515.07 ppb	21:02:41
1	S 181.975 Axial†	4110.9	4035.8	4910.8 ug/L		4910.8 ppb	21:02:41
1	Sb 206.836†	1516.4	1478.6	454.19 ug/L		454.19 ppb	21:02:41
1	Se 196.026†	538.0	558.2	559.79 ug/L		559.79 ppb	21:02:41
1	Si 251.611†	962735.4	960553.6	25766 ug/L		25766 ppb	21:02:21
1	Sn 189.927†	2806.5	2806.1	463.60 ug/L		463.60 ppb	21:02:41
1	Ti 334.940†	2053890.6	2051127.7	2827.6 ug/L		2827.6 ppb	21:02:21
1	Tl 190.801†	1467.5	1504.7	464.51 ug/L		464.51 ppb	21:02:41
1	U 409.014†	9843.4	11210.5	242.39 ug/L		242.39 ppb	21:02:21
1	V 292.402†	93869.9	95142.5	520.41 ug/L		520.41 ppb	21:02:21
1	Zn 213.857†	87068.0	86169.6	705.42 ug/L		705.42 ppb	21:02:21
1	SiO2†	955014.3	952830.6	54705 ug/L		54705 ppb	21:03:42
2	Sc Radial	5489.8	5489.8	98.3 %			21:01:47
2	Y RADIAL	7465.1	7465.1	122.7 %			21:01:47
2	Al 396.153Radial†	79893.2	81275.3	56310 ug/L		56310 ppb	21:01:27
2	Ca 317.933Radial†	8352.9	8471.0	12880 ug/L		12880 ppb	21:01:27
2	Fe 238.204 Radial†	9318.5	9471.7	79998 ug/L		79998 ppb	21:01:27
2	K 766.490 Radial†	73002.4	71873.5	11892 ug/L		11892 ppb	21:01:27
2	Mg 279.077 IEC†	391.6	396.0	12846 ug/L		12846 ppb	21:01:47
2	Na 589.592 Radial†	21559.9	22961.9	6132.5 ug/L		6132.5 ppb	21:01:27
2	Sr 421.552†	97670.2	99353.3	578.23 ug/L		578.23 ppb	21:01:27
2	Sc 361.383	974229.8	974229.8	99.004 %			21:02:48
2	Y 371.029	1084490.1	1084490.1	124.34 %			21:02:48
2	Ag 328.068†	123752.9	124676.7	502.07 ug/L		502.07 ppb	21:02:48
2	As 188.979†	1249.3	1295.7	512.36 ug/L		512.36 ppb	21:03:08
2	B 249.677†	24665.8	25200.2	484.52 ug/L		484.52 ppb	21:02:48
2	Ba 233.527†	118478.8	119675.1	844.45 ug/L		844.45 ppb	21:02:48
2	Be 313.107†	1529062.5	1549510.8	493.59 ug/L		493.59 ppb	21:02:48
2	Cd 226.502†	47987.8	48669.9	473.55 ug/L		473.55 ppb	21:02:48
2	Co 228.616†	26404.4	26741.8	505.87 ug/L		505.87 ppb	21:03:08
2	Cr 267.716†	53844.7	54300.7	525.43 ug/L		525.43 ppb	21:02:48
2	Cu 324.752†	225076.1	218203.5	555.17 ug/L		555.17 ppb	21:02:48
2	Mn 257.610†	2698781.2	2725394.3	2746.3 ug/L		2746.3 ppb	21:02:48
2	Mo 202.031†	7364.4	7415.5	463.86 ug/L		463.86 ppb	21:03:08
2	Ni 231.604†	22531.2	22647.8	505.88 ug/L		505.88 ppb	21:03:08

2	P 214.914†	2241.4	2024.4	854.67 ug/L	854.67 ppb	21:03:08
2	Pb 220.353†	4544.6	4648.6	523.95 ug/L	523.95 ppb	21:03:08
2	S 181.975 Axial†	4132.7	4106.5	4997.0 ug/L	4997.0 ppb	21:03:08
2	Sb 206.836†	1512.5	1492.6	458.66 ug/L	458.66 ppb	21:03:08
2	Se 196.026†	535.6	562.1	561.59 ug/L	561.59 ppb	21:03:08
2	Si 251.611†	962390.0	971610.1	26062 ug/L	26062 ppb	21:02:48
2	Sn 189.927†	2828.7	2861.7	472.74 ug/L	472.74 ppb	21:03:08
2	Ti 334.940†	2053751.6	2075319.2	2860.9 ug/L	2860.9 ppb	21:02:48
2	Tl 190.801†	1478.7	1533.3	473.10 ug/L	473.10 ppb	21:03:08
2	U 409.014†	9922.4	11407.0	246.82 ug/L	246.82 ppb	21:02:48
2	V 292.402†	93985.2	96371.0	527.35 ug/L	527.35 ppb	21:02:48
2	Zn 213.857†	87001.0	87133.4	713.38 ug/L	713.38 ppb	21:02:48
2	SiO2†	969882.5	979162.0	56216 ug/L	56216 ppb	21:03:48
3	Sc Radial	5556.6	5556.6	99.5 %		21:02:12
3	Y RADIAL	7525.7	7525.7	123.7 %		21:02:12
3	Al 396.153Radial†	78832.3	79232.1	54894 ug/L	54894 ppb	21:01:52
3	Ca 317.933Radial†	8197.7	8212.9	12488 ug/L	12488 ppb	21:01:52
3	Fe 238.204 Radial†	9223.1	9261.9	78225 ug/L	78225 ppb	21:01:52
3	K 766.490 Radial†	71873.9	69846.6	11557 ug/L	11557 ppb	21:01:52
3	Mg 279.077 IEC†	384.0	383.5	12441 ug/L	12441 ppb	21:02:12
3	Na 589.592 Radial†	21138.5	22274.7	5948.9 ug/L	5948.9 ppb	21:01:52
3	Sr 421.552†	96057.9	96538.5	561.85 ug/L	561.85 ppb	21:01:52
3	Sc 361.383	977888.9	977888.9	99.376 %		21:03:16
3	Y 371.029	1087043.6	1087043.6	124.63 %		21:03:16
3	Ag 328.068†	124309.1	124768.7	501.85 ug/L	501.85 ppb	21:03:16
3	As 188.979†	1246.1	1287.8	509.09 ug/L	509.09 ppb	21:03:36
3	B 249.677†	24876.5	25318.9	487.16 ug/L	487.16 ppb	21:03:16
3	Ba 233.527†	119253.6	120007.0	846.73 ug/L	846.73 ppb	21:03:16
3	Be 313.107†	1535245.6	1549953.7	493.73 ug/L	493.73 ppb	21:03:16
3	Cd 226.502†	48354.3	48857.2	475.59 ug/L	475.59 ppb	21:03:16
3	Co 228.616†	26439.6	26677.4	504.65 ug/L	504.65 ppb	21:03:36
3	Cr 267.716†	54094.8	54348.9	525.86 ug/L	525.86 ppb	21:03:16
3	Cu 324.752†	225755.5	218036.5	554.66 ug/L	554.66 ppb	21:03:16
3	Mn 257.610†	2711621.0	2728114.8	2748.9 ug/L	2748.9 ppb	21:03:16
3	Mo 202.031†	7356.6	7379.9	461.52 ug/L	461.52 ppb	21:03:36
3	Ni 231.604†	22583.7	22615.5	505.16 ug/L	505.16 ppb	21:03:36
3	P 214.914†	2250.4	2025.0	856.13 ug/L	856.13 ppb	21:03:36
3	Pb 220.353†	4556.8	4643.7	523.26 ug/L	523.26 ppb	21:03:36
3	S 181.975 Axial†	4132.7	4090.8	4978.2 ug/L	4978.2 ppb	21:03:36
3	Sb 206.836†	1519.7	1494.1	459.05 ug/L	459.05 ppb	21:03:36
3	Se 196.026†	549.6	574.2	561.92 ug/L	561.92 ppb	21:03:36
3	Si 251.611†	967173.0	972785.7	26094 ug/L	26094 ppb	21:03:16
3	Sn 189.927†	2838.8	2861.2	472.56 ug/L	472.56 ppb	21:03:36
3	Ti 334.940†	2062577.3	2076438.3	2862.4 ug/L	2862.4 ppb	21:03:16
3	Tl 190.801†	1478.7	1527.8	471.53 ug/L	471.53 ppb	21:03:36
3	U 409.014†	10080.3	11528.3	249.75 ug/L	249.75 ppb	21:03:16
3	V 292.402†	94418.4	96451.6	528.02 ug/L	528.02 ppb	21:03:16
3	Zn 213.857†	87422.3	87228.5	714.35 ug/L	714.35 ppb	21:03:16
3	SiO2†	954075.2	959589.9	55092 ug/L	55092 ppb	21:03:54

Mean Data: 1202015663|941727|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	979303.6	99.520 %		0.6005			0.60%
Sc Radial	5509.0	98.6 %		0.74			0.75%
Y 371.029	1087942.2	124.73 %		0.456			0.37%
Y RADIAL	7490.0	123.1 %		0.52			0.42%
Ag 328.068†	124213.0	500.11 ug/L		3.196	500.11 ppb	3.196	0.64%
Al 396.153Radial†	80574.2	55824 ug/L		805.9	55824 ppb	805.9	1.44%
As 188.979†	1282.8	507.48 ug/L		5.850	507.48 ppb	5.850	1.15%
B 249.677†	25156.4	483.76 ug/L		3.847	483.76 ppb	3.847	0.80%
Ba 233.527†	119333.4	842.03 ug/L		6.275	842.03 ppb	6.275	0.75%
Be 313.107†	1542244.5	491.28 ug/L		4.122	491.28 ppb	4.122	0.84%
Ca 317.933Radial†	8382.3	12745 ug/L		223.1	12745 ppb	223.1	1.75%
Cd 226.502†	48567.1	472.59 ug/L		3.575	472.59 ppb	3.575	0.76%
Co 228.616†	26556.1	502.33 ug/L		5.105	502.33 ppb	5.105	1.02%
Cr 267.716†	54071.1	523.20 ug/L		4.234	523.20 ppb	4.234	0.81%
Cu 324.752†	217178.8	552.56 ug/L		4.094	552.56 ppb	4.094	0.74%
Fe 238.204 Radial†	9404.9	79433 ug/L		1046.7	79433 ppb	1046.7	1.32%
K 766.490 Radial†	71085.6	11762 ug/L		179.7	11762 ppb	179.7	1.53%

Mg 279.077 IEC†	390.0	12649 ug/L	202.7	12649 ppb	202.7	1.60%
Mn 257.610†	2715902.5	2736.8 ug/L	18.88	2736.8 ppb	18.88	0.69%
Mo 202.031†	7353.0	459.96 ug/L	4.878	459.96 ppb	4.878	1.06%
Na 589.592 Radial†	22694.7	6061.1 ug/L	98.34	6061.1 ppb	98.34	1.62%
Ni 231.604†	22505.6	502.70 ug/L	4.891	502.70 ppb	4.891	0.97%
P 214.914†	2010.6	848.57 ug/L	11.849	848.57 ppb	11.849	1.40%
Pb 220.353†	4620.6	520.76 ug/L	4.937	520.76 ppb	4.937	0.95%
S 181.975 Axial†	4077.7	4962.0 ug/L	45.31	4962.0 ppb	45.31	0.91%
Sb 206.836†	1488.4	457.30 ug/L	2.700	457.30 ppb	2.700	0.59%
Se 196.026†	564.9	561.10 ug/L	1.145	561.10 ppb	1.145	0.20%
Si 251.611†	968316.5	25974 ug/L	181.0	25974 ppb	181.0	0.70%
Sn 189.927†	2843.0	469.63 ug/L	5.223	469.63 ppb	5.223	1.11%
Sr 421.552†	98357.1	572.44 ug/L	9.180	572.44 ppb	9.180	1.60%
Ti 334.940†	2067628.4	2850.3 ug/L	19.70	2850.3 ppb	19.70	0.69%
Tl 190.801†	1521.9	469.72 ug/L	4.575	469.72 ppb	4.575	0.97%
U 409.014†	11381.9	246.32 ug/L	3.703	246.32 ppb	3.703	1.50%
V 292.402†	95988.4	525.26 ug/L	4.213	525.26 ppb	4.213	0.80%
Zn 213.857†	86843.9	711.05 ug/L	4.901	711.05 ppb	4.901	0.69%
SiO2†	963860.8	55338 ug/L	785.2	55338 ppb	785.2	1.42%

Sequence No.: 30
 Sample ID: 1202015664|941727|1
 Analyst: HSC
 Initial Sample Wt:
 Dilution:

Autosampler Location: 76
 Date Collected: 1/28/2010 21:06:04
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: 1202015664|941727|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib.	Conc. Units	Sample	Analysis Time
1	Sc Radial	5517.0	5517.0	98.8 %				21:08:18
1	Y RADIAL	7630.9	7630.9	125.4 %				21:08:18
1	Al 396.153Radial†	96620.6	97807.6	67768 ug/L		67768 ppb		21:07:58
1	Ca 317.933Radial†	8983.2	9067.1	13787 ug/L		13787 ppb		21:07:58
1	Fe 238.204 Radial†	10660.6	10783.6	91075 ug/L		91075 ppb		21:07:58
1	K 766.490 Radial†	81103.9	79708.2	13189 ug/L		13189 ppb		21:07:58
1	Mg 279.077 IEC†	441.9	445.0	14432 ug/L		14432 ppb		21:08:18
1	Na 589.592 Radial†	21259.5	22549.6	6022.3 ug/L		6022.3 ppb		21:07:58
1	Sr 421.552†	98482.5	99685.0	580.16 ug/L		580.16 ppb		21:07:58
1	Sc 361.383	980846.6	980846.6	99.677 %				21:09:17
1	Y 371.029	1103677.5	1103677.5	126.54 %				21:09:17
1	Ag 328.068†	123476.3	123555.9	501.44 ug/L		501.44 ppb		21:09:17
1	As 188.979†	1250.5	1288.4	515.01 ug/L		515.01 ppb		21:09:37
1	B 249.677†	24980.6	25347.9	485.64 ug/L		485.64 ppb		21:09:17
1	Ba 233.527†	128961.6	129384.7	913.04 ug/L		913.04 ppb		21:09:17
1	Be 313.107†	1534162.1	1544208.2	492.64 ug/L		492.64 ppb		21:09:17
1	Cd 226.502†	48271.6	48627.6	471.99 ug/L		471.99 ppb		21:09:17
1	Co 228.616†	26700.8	26859.3	507.32 ug/L		507.32 ppb		21:09:37
1	Cr 267.716†	55668.1	55763.2	539.76 ug/L		539.76 ppb		21:09:17
1	Cu 324.752†	223817.7	215407.4	548.71 ug/L		548.71 ppb		21:09:17
1	Mn 257.610†	2842725.4	2851416.4	2874.0 ug/L		2874.0 ppb		21:09:17
1	Mo 202.031†	7415.5	7416.6	464.80 ug/L		464.80 ppb		21:09:37
1	Ni 231.604†	23040.1	23004.9	513.86 ug/L		513.86 ppb		21:09:37
1	P 214.914†	2483.8	2252.3	963.69 ug/L		963.69 ppb		21:09:37
1	Pb 220.353†	4603.5	4676.8	528.50 ug/L		528.50 ppb		21:09:37
1	S 181.975 Axial†	4242.3	4188.3	5094.6 ug/L		5094.6 ppb		21:09:37
1	Sb 206.836†	1529.5	1499.3	459.62 ug/L		459.62 ppb		21:09:37
1	Se 196.026†	495.7	518.5	576.28 ug/L		576.28 ppb		21:09:37
1	Si 251.611†	1018278.3	1021122.0	27391 ug/L		27391 ppb		21:09:17
1	Sn 189.927†	2837.3	2851.1	471.31 ug/L		471.31 ppb		21:09:37
1	Ti 334.940†	2294024.7	2302377.9	3173.9 ug/L		3173.9 ppb		21:09:17
1	Tl 190.801†	1482.9	1527.4	474.57 ug/L		474.57 ppb		21:09:37
1	U 409.014†	9385.3	10800.4	231.85 ug/L		231.85 ppb		21:09:17
1	V 292.402†	96853.2	98607.9	537.82 ug/L		537.82 ppb		21:09:17
1	Zn 213.857†	90656.6	90208.0	737.85 ug/L		737.85 ppb		21:09:17
1	SiO2†	1025470.6	1028321.8	59039 ug/L		59039 ppb		21:10:38
2	Sc Radial	5468.6	5468.6	97.9 %				21:08:43
2	Y RADIAL	7563.1	7563.1	124.3 %				21:08:43
2	Al 396.153Radial†	98652.7	100749.7	69808 ug/L		69808 ppb		21:08:23
2	Ca 317.933Radial†	9046.7	9212.5	14008 ug/L		14008 ppb		21:08:23
2	Fe 238.204 Radial†	10835.3	11057.6	93389 ug/L		93389 ppb		21:08:23
2	K 766.490 Radial†	82602.9	81966.6	13563 ug/L		13563 ppb		21:08:23
2	Mg 279.077 IEC†	437.1	444.0	14399 ug/L		14399 ppb		21:08:43
2	Na 589.592 Radial†	21778.7	23270.5	6214.9 ug/L		6214.9 ppb		21:08:23
2	Sr 421.552†	100956.4	103095.0	600.01 ug/L		600.01 ppb		21:08:23
2	Sc 361.383	989924.7	989924.7	100.60 %				21:09:44
2	Y 371.029	1114182.3	1114182.3	127.74 %				21:09:44
2	Ag 328.068†	123926.1	122867.0	499.56 ug/L		499.56 ppb		21:09:44
2	As 188.979†	1250.0	1276.4	511.10 ug/L		511.10 ppb		21:10:04
2	B 249.677†	25150.6	25287.0	484.07 ug/L		484.07 ppb		21:09:44
2	Ba 233.527†	129757.4	128989.2	910.33 ug/L		910.33 ppb		21:09:44
2	Be 313.107†	1545806.3	1541668.3	491.81 ug/L		491.81 ppb		21:09:44
2	Cd 226.502†	48563.0	48473.1	470.22 ug/L		470.22 ppb		21:09:44
2	Co 228.616†	26671.2	26584.2	502.04 ug/L		502.04 ppb		21:10:04
2	Cr 267.716†	55947.8	55529.1	537.55 ug/L		537.55 ppb		21:09:44
2	Cu 324.752†	225233.3	214755.4	547.18 ug/L		547.18 ppb		21:09:44
2	Mn 257.610†	2855490.1	2837951.3	2860.7 ug/L		2860.7 ppb		21:09:44
2	Mo 202.031†	7399.7	7332.7	459.81 ug/L		459.81 ppb		21:10:04
2	Ni 231.604†	23003.1	22756.1	508.30 ug/L		508.30 ppb		21:10:04

2	P 214.914†	2463.0	2208.8	940.93 ug/L	940.93 ppb	21:10:04
2	Pb 220.353†	4595.3	4626.3	523.08 ug/L	523.08 ppb	21:10:04
2	S 181.975 Axial†	4243.0	4149.9	5047.4 ug/L	5047.4 ppb	21:10:04
2	Sb 206.836†	1516.1	1471.9	451.27 ug/L	451.27 ppb	21:10:04
2	Se 196.026†	508.6	526.7	588.29 ug/L	588.29 ppb	21:10:04
2	Si 251.611†	1022921.8	1016369.5	27263 ug/L	27263 ppb	21:09:44
2	Sn 189.927†	2847.4	2835.0	468.75 ug/L	468.75 ppb	21:10:04
2	Ti 334.940†	2306444.9	2293618.6	3161.8 ug/L	3161.8 ppb	21:09:44
2	Tl 190.801†	1486.2	1517.1	471.47 ug/L	471.47 ppb	21:10:04
2	U 409.014†	9371.1	10700.0	229.33 ug/L	229.33 ppb	21:09:44
2	V 292.402†	97566.0	98425.4	536.41 ug/L	536.41 ppb	21:09:44
2	Zn 213.857†	91142.8	89857.3	734.75 ug/L	734.75 ppb	21:09:44
2	SiO2†	1022986.5	1016418.0	58356 ug/L	58356 ppb	21:10:44
3	Sc Radial	5565.2	5565.2	99.6 %		21:09:08
3	Y RADIAL	7671.6	7671.6	126.1 %		21:09:08
3	Al 396.153Radial†	97256.8	97599.4	67624 ug/L	67624 ppb	21:08:48
3	Ca 317.933Radial†	9004.2	9009.5	13699 ug/L	13699 ppb	21:08:48
3	Fe 238.204 Radial†	10722.9	10752.7	90814 ug/L	90814 ppb	21:08:48
3	K 766.490 Radial†	81697.0	79592.7	13170 ug/L	13170 ppb	21:08:48
3	Mg 279.077 IEC†	442.2	441.4	14316 ug/L	14316 ppb	21:09:08
3	Na 589.592 Radial†	21496.7	22601.2	6036.1 ug/L	6036.1 ppb	21:08:48
3	Sr 421.552†	99367.4	99710.1	580.31 ug/L	580.31 ppb	21:08:48
3	Sc 361.383	992325.2	992325.2	100.84 %		21:10:12
3	Y 371.029	1116011.6	1116011.6	127.95 %		21:10:12
3	Ag 328.068†	124640.7	123277.7	500.29 ug/L	500.29 ppb	21:10:12
3	As 188.979†	1240.8	1264.3	506.18 ug/L	506.18 ppb	21:10:32
3	B 249.677†	25396.7	25470.6	488.13 ug/L	488.13 ppb	21:10:12
3	Ba 233.527†	130134.9	129051.5	910.68 ug/L	910.68 ppb	21:10:12
3	Be 313.107†	1548281.3	1540405.5	491.43 ug/L	491.43 ppb	21:10:12
3	Cd 226.502†	48777.9	48569.5	471.44 ug/L	471.44 ppb	21:10:12
3	Co 228.616†	26652.5	26501.5	500.47 ug/L	500.47 ppb	21:10:32
3	Cr 267.716†	56088.8	55534.3	537.55 ug/L	537.55 ppb	21:10:12
3	Cu 324.752†	226562.9	215532.3	549.01 ug/L	549.01 ppb	21:10:12
3	Mn 257.610†	2868022.4	2843512.5	2866.1 ug/L	2866.1 ppb	21:10:12
3	Mo 202.031†	7370.1	7285.5	456.69 ug/L	456.69 ppb	21:10:32
3	Ni 231.604†	23021.5	22719.1	507.48 ug/L	507.48 ppb	21:10:32
3	P 214.914†	2488.8	2228.5	951.89 ug/L	951.89 ppb	21:10:32
3	Pb 220.353†	4603.9	4623.8	522.56 ug/L	522.56 ppb	21:10:32
3	S 181.975 Axial†	4222.6	4119.5	5010.7 ug/L	5010.7 ppb	21:10:32
3	Sb 206.836†	1508.6	1460.9	447.85 ug/L	447.85 ppb	21:10:32
3	Se 196.026†	502.2	519.2	575.73 ug/L	575.73 ppb	21:10:32
3	Si 251.611†	1028098.1	1019042.8	27335 ug/L	27335 ppb	21:10:12
3	Sn 189.927†	2847.7	2828.5	467.58 ug/L	467.58 ppb	21:10:32
3	Ti 334.940†	2316830.2	2298371.0	3168.3 ug/L	3168.3 ppb	21:10:12
3	Tl 190.801†	1471.5	1498.9	466.36 ug/L	466.36 ppb	21:10:32
3	U 409.014†	9544.3	10849.2	232.98 ug/L	232.98 ppb	21:10:12
3	V 292.402†	97747.4	98370.7	536.44 ug/L	536.44 ppb	21:10:12
3	Zn 213.857†	91506.1	89998.4	736.17 ug/L	736.17 ppb	21:10:12
3	SiO2†	1013535.5	1004586.1	57677 ug/L	57677 ppb	21:10:50

Mean Data: 1202015664|941727|1

Analyte	Mean Corrected	Calib.	Std.Dev.	Sample	Std.Dev.	RSD
	Intensity	Conc. Units		Conc. Units		
Sc 361.383	987698.9	100.37 %	0.615			0.61%
Sc Radial	5516.9	98.8 %	0.87			0.88%
Y 371.029	1111290.4	127.41 %	0.763			0.60%
Y RADIAL	7621.9	125.3 %	0.90			0.72%
Ag 328.068†	123233.5	500.43 ug/L	0.946	500.43 ppb	0.946	0.19%
Al 396.153Radial†	98718.9	68400 ug/L	1221.1	68400 ppb	1221.1	1.79%
As 188.979†	1276.3	510.77 ug/L	4.424	510.77 ppb	4.424	0.87%
B 249.677†	25368.5	485.95 ug/L	2.046	485.95 ppb	2.046	0.42%
Ba 233.527†	129141.8	911.35 ug/L	1.472	911.35 ppb	1.472	0.16%
Be 313.107†	1542094.0	491.96 ug/L	0.617	491.96 ppb	0.617	0.13%
Ca 317.933Radial†	9096.4	13831 ug/L	159.1	13831 ppb	159.1	1.15%
Cd 226.502†	48556.7	471.22 ug/L	0.906	471.22 ppb	0.906	0.19%
Co 228.616†	26648.3	503.28 ug/L	3.589	503.28 ppb	3.589	0.71%
Cr 267.716†	55608.9	538.29 ug/L	1.277	538.29 ppb	1.277	0.24%
Cu 324.752†	215231.7	548.30 ug/L	0.978	548.30 ppb	0.978	0.18%
Fe 238.204 Radial†	10864.6	91759 ug/L	1417.3	91759 ppb	1417.3	1.54%
K 766.490 Radial†	80422.5	13307 ug/L	221.5	13307 ppb	221.5	1.66%

Mg 279.077 IEC†	443.5	14383 ug/L	60.1	14383 ppb	60.1	0.42%
Mn 257.610†	2844293.4	2866.9 ug/L	6.69	2866.9 ppb	6.69	0.23%
Mo 202.031†	7344.9	460.43 ug/L	4.091	460.43 ppb	4.091	0.89%
Na 589.592 Radial†	22807.1	6091.1 ug/L	107.40	6091.1 ppb	107.40	1.76%
Ni 231.604†	22826.7	509.88 ug/L	3.471	509.88 ppb	3.471	0.68%
P 214.914†	2229.9	952.17 ug/L	11.383	952.17 ppb	11.383	1.20%
Pb 220.353†	4642.3	524.71 ug/L	3.289	524.71 ppb	3.289	0.63%
S 181.975 Axial†	4152.5	5050.9 ug/L	42.06	5050.9 ppb	42.06	0.83%
Sb 206.836†	1477.4	452.91 ug/L	6.058	452.91 ppb	6.058	1.34%
Se 196.026†	521.4	580.10 ug/L	7.098	580.10 ppb	7.098	1.22%
Si 251.611†	1018844.8	27330 ug/L	63.9	27330 ppb	63.9	0.23%
Sn 189.927†	2838.2	469.21 ug/L	1.908	469.21 ppb	1.908	0.41%
Sr 421.552†	100830.0	586.82 ug/L	11.417	586.82 ppb	11.417	1.95%
Ti 334.940†	2298122.5	3168.0 ug/L	6.03	3168.0 ppb	6.03	0.19%
Tl 190.801†	1514.5	470.80 ug/L	4.148	470.80 ppb	4.148	0.88%
U 409.014†	10783.2	231.39 ug/L	1.872	231.39 ppb	1.872	0.81%
V 292.402†	98468.0	536.89 ug/L	0.809	536.89 ppb	0.809	0.15%
Zn 213.857†	90021.2	736.26 ug/L	1.554	736.26 ppb	1.554	0.21%
SiO2†	1016442.0	58357 ug/L	681.4	58357 ppb	681.4	1.17%

Sequence No.: 31
 Sample ID: 1202017994|941727|5
 Analyst: HSC
 Initial Sample Wt: 562
 Dilution: 0.1/10
 562

Autosampler Location: 77
 Date Collected: 1/28/2010 21:13:01
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: 1202017994|941727|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5129.0	5129.0	91.8 %		21:14:55
1	Y RADIAL	5843.7	5843.7	96.06 %		21:14:55
1	Al 396.153Radial†	7963.4	8667.7	6007.5 ug/L	6007.5 ppb	21:14:55
1	Ca 317.933Radial†	1005.3	1067.9	1623.8 ug/L	1623.8 ppb	21:15:15
1	Fe 238.204 Radial†	1901.4	2062.0	17413 ug/L	17413 ppb	21:15:15
1	K 766.490 Radial†	8899.7	7295.7	1207.1 ug/L	1207.1 ppb	21:14:55
1	Mg 279.077 IEC†	39.8	40.9	1317.1 ug/L	1317.1 ppb	21:15:15
1	Na 589.592 Radial†	-419.1	571.7	152.68 ug/L	152.68 ppb	21:14:55
1	Sr 421.552†	2347.0	2544.5	14.799 ug/L	14.799 ppb	21:14:55
1	Sc 361.383	958741.7	958741.7	97.430 %		21:16:12
1	Y 371.029	884091.7	884091.7	101.36 %		21:16:12
1	Ag 328.068†	-826.5	-1169.3	1.2777 ug/L	1.2777 ppb	21:16:17
1	As 188.979†	-27.0	6.1	9.6356 ug/L	9.6356 ppb	21:16:37
1	B 249.677†	69.8	357.9	4.2231 ug/L	4.2231 ppb	21:16:17
1	Ba 233.527†	18866.0	19368.1	136.65 ug/L	136.65 ppb	21:16:17
1	Be 313.107†	-5949.5	-1038.4	0.5470 ug/L	0.5470 ppb	21:16:17
1	Cd 226.502†	-51.6	146.4	-0.3498 ug/L	-0.3498 ppb	21:16:37
1	Co 228.616†	554.9	641.3	11.274 ug/L	11.274 ppb	21:16:37
1	Cr 267.716†	2017.8	1985.5	19.512 ug/L	19.512 ppb	21:16:37
1	Cu 324.752†	11617.0	2786.9	7.9814 ug/L	7.9814 ppb	21:16:17
1	Mn 257.610†	751244.1	770525.8	776.03 ug/L	776.03 ppb	21:16:12
1	Mo 202.031†	31.0	8.9	1.9198 ug/L	1.9198 ppb	21:16:37
1	Ni 231.604†	649.3	556.5	12.430 ug/L	12.430 ppb	21:16:37
1	P 214.914†	457.2	229.7	100.69 ug/L	100.69 ppb	21:16:37
1	Pb 220.353†	78.5	138.9	15.145 ug/L	15.145 ppb	21:16:37
1	S 181.975 Axial†	64.5	-1.6	-3.1168 ug/L	-3.1168 ppb	21:16:37
1	Sb 206.836†	35.0	0.8	-0.6865 ug/L	-0.6865 ppb	21:16:37
1	Se 196.026†	-106.3	-87.9	12.259 ug/L	12.259 ppb	21:16:37
1	Si 251.611†	147223.8	150646.6	4041.8 ug/L	4041.8 ppb	21:16:12
1	Sn 189.927†	-10.4	-6.1	-0.4570 ug/L	-0.4570 ppb	21:16:37
1	Ti 334.940†	271049.5	279108.3	384.83 ug/L	384.83 ppb	21:16:12
1	Tl 190.801†	-63.9	-25.8	-0.5938 ug/L	-0.5938 ppb	21:16:37
1	U 409.014†	-3024.3	-1719.4	-40.781 ug/L	-40.781 ppb	21:16:12
1	V 292.402†	1993.8	3486.8	16.366 ug/L	16.366 ppb	21:16:17
1	Zn 213.857†	6339.4	5763.9	46.189 ug/L	46.189 ppb	21:16:17
1	SiO2†	147831.0	151254.1	8685.8 ug/L	8685.8 ppb	21:17:43
2	Sc Radial	6085.7	6085.7	109 %		21:15:20
2	Y RADIAL	6847.3	6847.3	112.6 %		21:15:20
2	Al 396.153Radial†	7629.0	6997.6	4850.0 ug/L	4850.0 ppb	21:15:20
2	Ca 317.933Radial†	996.7	887.9	1350.1 ug/L	1350.1 ppb	21:15:40
2	Fe 238.204 Radial†	1898.8	1734.2	14644 ug/L	14644 ppb	21:15:40
2	K 766.490 Radial†	8695.9	5585.3	923.96 ug/L	923.96 ppb	21:15:20
2	Mg 279.077 IEC†	39.7	34.0	1095.9 ug/L	1095.9 ppb	21:15:40
2	Na 589.592 Radial†	-436.7	627.3	167.52 ug/L	167.52 ppb	21:15:20
2	Sr 421.552†	2275.0	2076.6	12.078 ug/L	12.078 ppb	21:15:20
2	Sc 361.383	969291.5	969291.5	98.502 %		21:16:42
2	Y 371.029	894264.5	894264.5	102.53 %		21:16:42
2	Ag 328.068†	-794.3	-1127.4	0.5464 ug/L	0.5464 ppb	21:16:47
2	As 188.979†	-28.4	5.0	8.5701 ug/L	8.5701 ppb	21:17:07
2	B 249.677†	47.7	334.7	4.2147 ug/L	4.2147 ppb	21:16:47
2	Ba 233.527†	19000.6	19294.1	136.05 ug/L	136.05 ppb	21:16:47
2	Be 313.107†	-5975.7	-998.4	0.5598 ug/L	0.5598 ppb	21:16:47
2	Cd 226.502†	-27.9	171.0	0.1784 ug/L	0.1784 ppb	21:17:07
2	Co 228.616†	549.3	629.5	11.087 ug/L	11.087 ppb	21:17:07
2	Cr 267.716†	2022.0	1967.2	19.284 ug/L	19.284 ppb	21:17:07
2	Cu 324.752†	11722.1	2763.8	7.7787 ug/L	7.7787 ppb	21:16:47
2	Mn 257.610†	759838.5	770858.5	776.10 ug/L	776.10 ppb	21:16:42
2	Mo 202.031†	30.6	8.2	1.6560 ug/L	1.6560 ppb	21:17:07
2	Ni 231.604†	636.9	536.6	11.986 ug/L	11.986 ppb	21:17:07

2	P 214.914†	460.7	228.2	101.90 ug/L	101.90 ppb	21:17:07
2	Pb 220.353†	80.1	139.7	15.239 ug/L	15.239 ppb	21:17:07
2	S 181.975 Axial†	66.7	-0.1	-0.9858 ug/L	-0.9858 ppb	21:17:07
2	Sb 206.836†	39.4	4.9	0.4956 ug/L	0.4956 ppb	21:17:07
2	Se 196.026†	-100.5	-80.9	6.6833 ug/L	6.6833 ppb	21:17:07
2	Si 251.611†	148570.8	150369.5	4034.4 ug/L	4034.4 ppb	21:16:42
2	Sn 189.927†	-8.0	-3.5	-0.1194 ug/L	-0.1194 ppb	21:17:07
2	Ti 334.940†	274104.5	279181.9	384.91 ug/L	384.91 ppb	21:16:42
2	Tl 190.801†	-60.8	-21.9	0.5220 ug/L	0.5220 ppb	21:17:07
2	U 409.014†	-3220.8	-1885.0	-44.199 ug/L	-44.199 ppb	21:16:42
2	V 292.402†	1975.9	3446.3	16.532 ug/L	16.532 ppb	21:16:47
2	Zn 213.857†	6361.9	5715.9	46.060 ug/L	46.060 ppb	21:16:47
2	SiO2†	146227.0	147974.2	8497.5 ug/L	8497.5 ppb	21:17:49
3	Sc Radial	5750.6	5750.6	103 %		21:15:45
3	Y RADIAL	6455.4	6455.4	106.1 %		21:15:45
3	Al 396.153Radial†	7815.1	7586.4	5258.1 ug/L	5258.1 ppb	21:15:45
3	Ca 317.933Radial†	1015.9	959.9	1459.5 ug/L	1459.5 ppb	21:16:05
3	Fe 238.204 Radial†	1918.3	1854.7	15662 ug/L	15662 ppb	21:16:05
3	K 766.490 Radial†	8769.1	6121.4	1012.7 ug/L	1012.7 ppb	21:15:45
3	Mg 279.077 IEC†	38.3	34.8	1119.4 ug/L	1119.4 ppb	21:16:05
3	Na 589.592 Radial†	-437.8	602.9	161.00 ug/L	161.00 ppb	21:15:45
3	Sr 421.552†	2315.2	2237.4	13.013 ug/L	13.013 ppb	21:15:45
3	Sc 361.383	959298.3	959298.3	97.487 %		21:17:13
3	Y 371.029	883786.6	883786.6	101.33 %		21:17:13
3	Ag 328.068†	-795.3	-1136.8	0.8403 ug/L	0.8403 ppb	21:17:18
3	As 188.979†	-37.1	-4.3	5.4602 ug/L	5.4602 ppb	21:17:38
3	B 249.677†	48.2	335.7	4.0696 ug/L	4.0696 ppb	21:17:18
3	Ba 233.527†	19037.3	19532.7	137.76 ug/L	137.76 ppb	21:17:18
3	Be 313.107†	-6015.8	-1102.9	0.5272 ug/L	0.5272 ppb	21:17:18
3	Cd 226.502†	-30.7	167.9	0.0428 ug/L	0.0428 ppb	21:17:38
3	Co 228.616†	551.4	637.4	11.224 ug/L	11.224 ppb	21:17:38
3	Cr 267.716†	2006.8	1973.0	19.360 ug/L	19.360 ppb	21:17:38
3	Cu 324.752†	11672.9	2837.3	8.0175 ug/L	8.0175 ppb	21:17:18
3	Mn 257.610†	753108.6	771991.0	777.34 ug/L	777.34 ppb	21:17:13
3	Mo 202.031†	28.9	6.7	1.6474 ug/L	1.6474 ppb	21:17:38
3	Ni 231.604†	629.3	535.5	11.962 ug/L	11.962 ppb	21:17:38
3	P 214.914†	454.4	226.6	100.34 ug/L	100.34 ppb	21:17:38
3	Pb 220.353†	86.3	146.9	16.031 ug/L	16.031 ppb	21:17:38
3	S 181.975 Axial†	62.3	-3.9	-5.7377 ug/L	-5.7377 ppb	21:17:38
3	Sb 206.836†	32.7	-1.7	-1.4500 ug/L	-1.4500 ppb	21:17:38
3	Se 196.026†	-95.8	-77.1	12.053 ug/L	12.053 ppb	21:17:38
3	Si 251.611†	147458.9	150800.1	4045.9 ug/L	4045.9 ppb	21:17:13
3	Sn 189.927†	-7.5	-3.1	-0.0179 ug/L	-0.0179 ppb	21:17:38
3	Ti 334.940†	271356.4	279261.7	385.04 ug/L	385.04 ppb	21:17:13
3	Tl 190.801†	-66.0	-27.9	-1.1985 ug/L	-1.1985 ppb	21:17:38
3	U 409.014†	-3129.3	-1825.3	-42.969 ug/L	-42.969 ppb	21:17:13
3	V 292.402†	2064.4	3558.1	17.006 ug/L	17.006 ppb	21:17:18
3	Zn 213.857†	6341.4	5762.2	46.347 ug/L	46.347 ppb	21:17:18
3	SiO2†	150383.0		8635.8 ug/L	8635.8 ppb	21:17:54

Mean Data: 120201999|941727|5

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	962443.9	97.806 %		0.6033			0.62%
Sc Radial	5655.1	101 %		8.7			8.58%
Y 371.029	887380.9	101.74 %		0.684			0.67%
Y RADIAL	6382.1	104.9 %		8.31			7.93%
Ag 328.068†	-1144.5	0.8882 ug/L		0.36798	0.8882 ppb	0.36798	41.43%
Al 396.153Radial†	7750.5	5371.9 ug/L		587.09	5371.9 ppb	587.09	10.93%
As 188.979†	2.3	7.8886 ug/L		2.16954	7.8886 ppb	2.16954	27.50%
B 249.677†	342.8	4.1692 ug/L		0.08631	4.1692 ppb	0.08631	2.07%
Ba 233.527†	19398.3	136.82 ug/L		0.866	136.82 ppb	0.866	0.63%
Be 313.107†	-1046.6	0.5446 ug/L		0.01641	0.5446 ppb	0.01641	3.01%
Ca 317.933Radial†	971.9	1477.8 ug/L		137.77	1477.8 ppb	137.77	9.32%
Cd 226.502†	161.8	-0.0429 ug/L		0.27433	-0.0429 ppb	0.27433	640.20%
Co 228.616†	636.1	11.195 ug/L		0.0967	11.195 ppb	0.0967	0.86%
Cr 267.716†	1975.2	19.385 ug/L		0.1163	19.385 ppb	0.1163	0.60%
Cu 324.752†	2796.0	7.9259 ug/L		0.12875	7.9259 ppb	0.12875	1.62%
Fe 238.204 Radial†	1883.6	15906 ug/L		1400.2	15906 ppb	1400.2	8.80%
K 766.490 Radial†	6334.2	1047.9 ug/L		144.80	1047.9 ppb	144.80	13.82%

Mg 279.077 IEC†	36.6	1177.5 ug/L	121.47	1177.5 ppb	121.47	10.32%
Mn 257.610†	771125.1	776.49 ug/L	0.736	776.49 ppb	0.736	0.09%
Mo 202.031†	7.9	1.7411 ug/L	0.15486	1.7411 ppb	0.15486	8.89%
Na 589.592 Radial†	600.6	160.40 ug/L	7.439	160.40 ppb	7.439	4.64%
Ni 231.604†	542.9	12.126 ug/L	0.2635	12.126 ppb	0.2635	2.17%
P 214.914†	228.2	100.98 ug/L	0.814	100.98 ppb	0.814	0.81%
Pb 220.353†	141.8	15.471 ug/L	0.4869	15.471 ppb	0.4869	3.15%
S 181.975 Axial†	-1.9	-3.2801 ug/L	2.38019	-3.2801 ppb	2.38019	72.56%
Sb 206.836†	1.3	-0.5470 ug/L	0.98030	-0.5470 ppb	0.98030	179.23%
Se 196.026†	-82.0	10.332 ug/L	3.1612	10.332 ppb	3.1612	30.60%
Si 251.611†	150605.4	4040.7 ug/L	5.86	4040.7 ppb	5.86	0.14%
Sn 189.927†	-4.2	-0.1981 ug/L	0.22993	-0.1981 ppb	0.22993	116.08%
Sr 421.552†	2286.2	13.297 ug/L	1.3827	13.297 ppb	1.3827	10.40%
Ti 334.940†	279184.0	384.93 ug/L	0.104	384.93 ppb	0.104	0.03%
Tl 190.801†	-25.2	-0.4234 ug/L	0.87280	-0.4234 ppb	0.87280	206.13%
U 409.014†	-1809.9	-42.650 ug/L	1.7314	-42.650 ppb	1.7314	4.06%
V 292.402†	3497.0	16.635 ug/L	0.3322	16.635 ppb	0.3322	2.00%
Zn 213.857†	5747.3	46.199 ug/L	0.1435	46.199 ppb	0.1435	0.31%
SiO2†	149870.4	8606.4 ug/L	97.56	8606.4 ppb	97.56	1.13%

Sequence No.: 32

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 1/28/2010 21:20:05

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5868.0	5868.0	105 %		21:21:57
1	Y RADIAL	6333.5	6333.5	104.1 %		21:21:57
1	Al 396.153Radial†	6810.3	6478.2	4466.7 ug/L	4466.7 ppb	21:21:57
1	Ca 317.933Radial†	3280.9	3096.0	4707.5 ug/L	4707.5 ppb	21:22:17
1	Fe 238.204 Radial†	614.1	576.1	4879.3 ug/L	4879.3 ppb	21:22:17
1	K 766.490 Radial†	32008.2	28069.7	4641.6 ug/L	4641.6 ppb	21:21:57
1	Mg 279.077 IEC†	161.3	151.1	4932.4 ug/L	4932.4 ppb	21:22:17
1	Na 589.592 Radial†	36063.7	35352.9	9441.7 ug/L	9441.7 ppb	21:21:57
1	Sr 421.552†	82836.9	78831.7	458.84 ug/L	458.84 ppb	21:21:57
1	Sc 361.383	962572.8	962572.8	97.820 %		21:23:15
1	Y 371.029	844200.5	844200.5	96.788 %		21:23:15
1	Ag 328.068†	127413.7	129932.9	497.44 ug/L	497.44 ppb	21:23:20
1	As 188.979†	1239.6	1301.1	476.21 ug/L	476.21 ppb	21:23:40
1	B 249.677†	23654.6	24468.2	482.31 ug/L	482.31 ppb	21:23:20
1	Ba 233.527†	67097.6	68597.9	483.18 ug/L	483.18 ppb	21:23:20
1	Be 313.107†	1487349.0	1525571.2	480.71 ug/L	480.71 ppb	21:23:15
1	Cd 226.502†	47798.2	49063.0	485.23 ug/L	485.23 ppb	21:23:20
1	Co 228.616†	24655.0	25276.4	483.75 ug/L	483.75 ppb	21:23:20
1	Cr 267.716†	48881.6	49885.7	481.26 ug/L	481.26 ppb	21:23:20
1	Cu 324.752†	194951.4	190160.5	480.25 ug/L	480.25 ppb	21:23:20
1	Mn 257.610†	470762.4	480723.1	483.40 ug/L	483.40 ppb	21:23:15
1	Mo 202.031†	7663.3	7811.1	482.34 ug/L	482.34 ppb	21:23:40
1	Ni 231.604†	21301.8	21666.6	483.97 ug/L	483.97 ppb	21:23:20
1	P 214.914†	4906.5	4776.3	2289.5 ug/L	2289.5 ppb	21:23:40
1	Pb 220.353†	4110.4	4260.4	476.69 ug/L	476.69 ppb	21:23:40
1	S 181.975 Axial†	827.3	778.0	947.83 ug/L	947.83 ppb	21:23:40
1	Sb 206.836†	1599.5	1600.0	498.72 ug/L	498.72 ppb	21:23:40
1	Se 196.026†	880.2	920.9	496.43 ug/L	496.43 ppb	21:23:40
1	Si 251.611†	91120.7	92691.6	2481.0 ug/L	2481.0 ppb	21:23:20
1	Sn 189.927†	2844.9	2912.9	478.62 ug/L	478.62 ppb	21:23:40
1	Ti 334.940†	354202.2	363007.4	500.19 ug/L	500.19 ppb	21:23:15
1	Tl 190.801†	1580.9	1655.9	478.10 ug/L	478.10 ppb	21:23:40
1	U 409.014†	19793.8	21619.8	485.66 ug/L	485.66 ppb	21:23:20
1	V 292.402†	83206.7	86501.9	486.65 ug/L	486.65 ppb	21:23:20
1	Zn 213.857†	57601.6	58142.9	479.65 ug/L	479.65 ppb	21:23:20
1	SiO2†	89038.0	90546.6	5186.6 ug/L	5186.6 ppb	21:24:48
2	Sc Radial	5427.0	5427.0	97.2 %		21:22:22
2	Y RADIAL	5875.0	5875.0	96.57 %		21:22:22
2	Al 396.153Radial†	6833.9	7029.1	4848.5 ug/L	4848.5 ppb	21:22:22
2	Ca 317.933Radial†	3294.4	3363.5	5114.2 ug/L	5114.2 ppb	21:22:42
2	Fe 238.204 Radial†	615.7	625.2	5293.6 ug/L	5293.6 ppb	21:22:42
2	K 766.490 Radial†	32088.3	30627.2	5064.6 ug/L	5064.6 ppb	21:22:22
2	Mg 279.077 IEC†	160.9	163.2	5324.9 ug/L	5324.9 ppb	21:22:42
2	Na 589.592 Radial†	35869.1	37941.3	10133 ug/L	10133 ppb	21:22:22
2	Sr 421.552†	82827.4	85227.3	496.07 ug/L	496.07 ppb	21:22:22
2	Sc 361.383	962258.5	962258.5	97.788 %		21:23:46
2	Y 371.029	843059.6	843059.6	96.657 %		21:23:46
2	Ag 328.068†	125409.0	127925.3	489.91 ug/L	489.91 ppb	21:23:51
2	As 188.979†	1243.8	1305.7	477.95 ug/L	477.95 ppb	21:24:11
2	B 249.677†	23129.4	23939.0	471.78 ug/L	471.78 ppb	21:23:51
2	Ba 233.527†	66212.7	67715.3	476.97 ug/L	476.97 ppb	21:23:51
2	Be 313.107†	1473993.0	1512409.6	476.56 ug/L	476.56 ppb	21:23:46
2	Cd 226.502†	47175.1	48441.7	479.03 ug/L	479.03 ppb	21:23:51
2	Co 228.616†	24336.9	24959.3	477.69 ug/L	477.69 ppb	21:23:51
2	Cr 267.716†	48178.5	49183.0	474.49 ug/L	474.49 ppb	21:23:51
2	Cu 324.752†	191523.7	186720.3	471.58 ug/L	471.58 ppb	21:23:51
2	Mn 257.610†	467057.9	477092.0	479.77 ug/L	479.77 ppb	21:23:46
2	Mo 202.031†	7660.0	7810.3	482.33 ug/L	482.33 ppb	21:24:11
2	Ni 231.604†	20894.1	21256.8	474.81 ug/L	474.81 ppb	21:23:51

2	P 214.914†	4900.6	4771.9	2288.8 ug/L	2288.8 ppb	21:24:11
2	Pb 220.353†	4108.1	4259.4	476.64 ug/L	476.64 ppb	21:24:11
2	S 181.975 Axial†	815.1	765.8	932.90 ug/L	932.90 ppb	21:24:11
2	Sb 206.836†	1608.8	1610.1	501.82 ug/L	501.82 ppb	21:24:11
2	Se 196.026†	882.9	924.0	499.42 ug/L	499.42 ppb	21:24:11
2	Si 251.611†	89814.9	91386.6	2445.9 ug/L	2445.9 ppb	21:23:51
2	Sn 189.927†	2865.7	2935.1	482.33 ug/L	482.33 ppb	21:24:11
2	Ti 334.940†	350184.5	359017.0	494.72 ug/L	494.72 ppb	21:23:46
2	Tl 190.801†	1573.3	1648.7	476.00 ug/L	476.00 ppb	21:24:11
2	U 409.014†	19427.9	21252.1	477.34 ug/L	477.34 ppb	21:23:51
2	V 292.402†	81973.8	85268.9	479.74 ug/L	479.74 ppb	21:23:51
2	Zn 213.857†	56761.7	57303.2	472.69 ug/L	472.69 ppb	21:23:51
2	SiO2†	89510.9	91059.9	5216.0 ug/L	5216.0 ppb	21:24:53
3	Sc Radial	5327.1	5327.1	95.4 %		21:22:47
3	Y RADIAL	5726.8	5726.8	94.13 %		21:22:47
3	Al 396.153Radial†	6955.9	7289.0	5028.6 ug/L	5028.6 ppb	21:22:47
3	Ca 317.933Radial†	3271.3	3403.0	5174.3 ug/L	5174.3 ppb	21:23:07
3	Fe 238.204 Radial†	615.3	636.7	5390.9 ug/L	5390.9 ppb	21:23:07
3	K 766.490 Radial†	32578.9	31761.3	5252.2 ug/L	5252.2 ppb	21:22:47
3	Mg 279.077 IEC†	158.1	163.3	5330.2 ug/L	5330.2 ppb	21:23:07
3	Na 589.592 Radial†	36514.0	39310.2	10499 ug/L	10499 ppb	21:22:47
3	Sr 421.552†	84649.8	88737.7	516.50 ug/L	516.50 ppb	21:22:47
3	Sc 361.383	959075.9	959075.9	97.464 %		21:24:17
3	Y 371.029	840560.1	840560.1	96.371 %		21:24:17
3	Ag 328.068†	124705.2	127628.8	488.81 ug/L	488.81 ppb	21:24:22
3	As 188.979†	1247.6	1313.8	480.91 ug/L	480.91 ppb	21:24:42
3	B 249.677†	23027.9	23913.3	471.25 ug/L	471.25 ppb	21:24:22
3	Ba 233.527†	65970.1	67691.1	476.81 ug/L	476.81 ppb	21:24:22
3	Be 313.107†	1464122.8	1507284.6	474.95 ug/L	474.95 ppb	21:24:17
3	Cd 226.502†	47094.3	48519.0	479.79 ug/L	479.79 ppb	21:24:22
3	Co 228.616†	24281.1	24984.6	478.17 ug/L	478.17 ppb	21:24:22
3	Cr 267.716†	48198.0	49366.5	476.26 ug/L	476.26 ppb	21:24:22
3	Cu 324.752†	189861.6	185664.9	468.92 ug/L	468.92 ppb	21:24:22
3	Mn 257.610†	464651.8	476208.1	478.89 ug/L	478.89 ppb	21:24:17
3	Mo 202.031†	7638.3	7814.0	482.57 ug/L	482.57 ppb	21:24:42
3	Ni 231.604†	20951.4	21386.6	477.71 ug/L	477.71 ppb	21:24:22
3	P 214.914†	4901.0	4789.0	2297.8 ug/L	2297.8 ppb	21:24:42
3	Pb 220.353†	4097.4	4262.3	477.00 ug/L	477.00 ppb	21:24:42
3	S 181.975 Axial†	836.0	790.0	962.40 ug/L	962.40 ppb	21:24:42
3	Sb 206.836†	1608.2	1614.9	503.27 ug/L	503.27 ppb	21:24:42
3	Se 196.026†	888.2	932.4	504.14 ug/L	504.14 ppb	21:24:42
3	Si 251.611†	89301.7	91164.9	2440.0 ug/L	2440.0 ppb	21:24:22
3	Sn 189.927†	2860.8	2939.8	483.11 ug/L	483.11 ppb	21:24:42
3	Ti 334.940†	348560.5	358539.1	494.07 ug/L	494.07 ppb	21:24:17
3	Tl 190.801†	1580.7	1661.6	479.68 ug/L	479.68 ppb	21:24:42
3	U 409.014†	19346.1	21234.2	476.93 ug/L	476.93 ppb	21:24:22
3	V 292.402†	81784.0	85352.2	480.19 ug/L	480.19 ppb	21:24:22
3	Zn 213.857†	56417.7	57142.9	471.33 ug/L	471.33 ppb	21:24:22
3	SiO2†	89990.3	91855.5	5261.7 ug/L	5261.7 ppb	21:24:58

Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	961302.4	97.690 %		0.1966			0.20%
Sc Radial	5540.7	99.2 %		5.15			5.19%
Y 371.029	842606.7	96.605 %		0.2135			0.22%
Y RADIAL	5978.4	98.27 %		5.199			5.29%
Ag 328.068†	128495.6	492.06 ug/L		4.696	492.06 ppb	4.696	0.95%
QC value within limits for Ag 328.068 Recovery = 98.41%							
Al 396.153Radial†	6932.1	4781.3 ug/L		286.93	4781.3 ppb	286.93	6.00%
QC value within limits for Al 396.153Radial Recovery = 95.63%							
As 188.979†	1306.9	478.36 ug/L		2.377	478.36 ppb	2.377	0.50%
QC value within limits for As 188.979 Recovery = 95.67%							
B 249.677†	24106.8	475.11 ug/L		6.236	475.11 ppb	6.236	1.31%
QC value within limits for B 249.677 Recovery = 95.02%							
Ba 233.527†	68001.4	478.99 ug/L		3.630	478.99 ppb	3.630	0.76%
QC value within limits for Ba 233.527 Recovery = 95.80%							
Be 313.107†	1515088.4	477.40 ug/L		2.973	477.40 ppb	2.973	0.62%
QC value within limits for Be 313.107 Recovery = 95.48%							
Ca 317.933Radial†	3287.5	4998.6 ug/L		253.95	4998.6 ppb	253.95	5.08%

QC value within limits for Ca 317.933 Radial Recovery = 99.97%

Cd 226.502†	48674.6	481.35 ug/L	3.380	481.35 ppb	3.380	0.70%
QC value within limits for Cd 226.502 Recovery = 96.27%						
Co 228.616†	25073.4	479.87 ug/L	3.370	479.87 ppb	3.370	0.70%
QC value within limits for Co 228.616 Recovery = 95.97%						
Cr 267.716†	49478.4	477.34 ug/L	3.510	477.34 ppb	3.510	0.74%
QC value within limits for Cr 267.716 Recovery = 95.47%						
Cu 324.752†	187515.2	473.58 ug/L	5.920	473.58 ppb	5.920	1.25%
QC value within limits for Cu 324.752 Recovery = 94.72%						
Fe 238.204 Radial†	612.7	5187.9 ug/L	271.67	5187.9 ppb	271.67	5.24%
QC value within limits for Fe 238.204 Radial Recovery = 103.76%						
K 766.490 Radial†	30152.7	4986.1 ug/L	312.81	4986.1 ppb	312.81	6.27%
QC value within limits for K 766.490 Radial Recovery = 99.72%						
Mg 279.077 IEC†	159.2	5195.8 ug/L	228.15	5195.8 ppb	228.15	4.39%
QC value within limits for Mg 279.077 IEC Recovery = 103.92%						
Mn 257.610†	478007.7	480.69 ug/L	2.387	480.69 ppb	2.387	0.50%
QC value within limits for Mn 257.610 Recovery = 96.14%						
Mo 202.031†	7811.8	482.41 ug/L	0.134	482.41 ppb	0.134	0.03%
QC value within limits for Mo 202.031 Recovery = 96.48%						
Na 589.592 Radial†	37534.8	10024 ug/L	536.7	10024 ppb	536.7	5.35%
QC value within limits for Na 589.592 Radial Recovery = 100.24%						
Ni 231.604†	21436.7	478.83 ug/L	4.679	478.83 ppb	4.679	0.98%
QC value within limits for Ni 231.604 Recovery = 95.77%						
P 214.914†	4779.1	2292.0 ug/L	5.04	2292.0 ppb	5.04	0.22%
QC value within limits for P 214.914 Recovery = 91.68%						
Pb 220.353†	4260.7	476.78 ug/L	0.194	476.78 ppb	0.194	0.04%
QC value within limits for Pb 220.353 Recovery = 95.36%						
S 181.975 Axial†	777.9	947.71 ug/L	14.752	947.71 ppb	14.752	1.56%
QC value within limits for S 181.975 Axial Recovery = 94.77%						
Sb 206.836†	1608.3	501.27 ug/L	2.323	501.27 ppb	2.323	0.46%
QC value within limits for Sb 206.836 Recovery = 100.25%						
Se 196.026†	925.8	499.99 ug/L	3.888	499.99 ppb	3.888	0.78%
QC value within limits for Se 196.026 Recovery = 100.00%						
Si 251.611†	91747.7	2455.6 ug/L	22.13	2455.6 ppb	22.13	0.90%
QC value within limits for Si 251.611 Recovery = 98.23%						
Sn 189.927†	2929.3	481.35 ug/L	2.402	481.35 ppb	2.402	0.50%
QC value within limits for Sn 189.927 Recovery = 96.27%						
Sr 421.552†	84265.6	490.47 ug/L	29.234	490.47 ppb	29.234	5.96%
QC value within limits for Sr 421.552 Recovery = 98.09%						
Ti 334.940†	360187.8	496.33 ug/L	3.363	496.33 ppb	3.363	0.68%
QC value within limits for Ti 334.940 Recovery = 99.27%						
Tl 190.801†	1655.4	477.93 ug/L	1.847	477.93 ppb	1.847	0.39%
QC value within limits for Tl 190.801 Recovery = 95.59%						
U 409.014†	21368.7	479.98 ug/L	4.928	479.98 ppb	4.928	1.03%
QC value within limits for U 409.014 Recovery = 96.00%						
V 292.402†	85707.7	482.19 ug/L	3.864	482.19 ppb	3.864	0.80%
QC value within limits for V 292.402 Recovery = 96.44%						
Zn 213.857†	57529.7	474.56 ug/L	4.461	474.56 ppb	4.461	0.94%
QC value within limits for Zn 213.857 Recovery = 94.91%						
SiO2†	91154.0	5221.4 ug/L	37.87	5221.4 ppb	37.87	0.73%
QC value within limits for SiO2 Recovery = 97.64%						

All analyte(s) passed QC.

Sequence No.: 33

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 1/28/2010 21:27:08

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5449.6	5449.6	97.6 %			21:29:00
1	Y RADIAL	5909.6	5909.6	97.14 %			21:29:00
1	Al 396.153Radial†	7.1	3.5	2.4347 ug/L		2.4347 ppb	21:29:20
1	Ca 317.933Radial†	17.4	-8.9	-13.597 ug/L		-13.597 ppb	21:29:20
1	Fe 238.204 Radial†	8.0	-0.2	-1.5007 ug/L		-1.5007 ppb	21:29:20
1	K 766.490 Radial†	2493.0	159.7	26.449 ug/L		26.449 ppb	21:29:00
1	Mg 279.077 IEC†	-0.2	-2.6	-83.393 ug/L		-83.393 ppb	21:29:20
1	Na 589.592 Radial†	-994.6	8.7	2.3326 ug/L		2.3326 ppb	21:29:00
1	Sr 421.552†	13.8	2.9	0.0172 ug/L		0.0172 ppb	21:29:00
1	Sc 361.383	953243.0	953243.0	96.871 %			21:30:17
1	Y 371.029	846185.3	846185.3	97.016 %			21:30:17
1	Ag 328.068†	314.4	3.5	0.0161 ug/L		0.0161 ppb	21:30:22
1	As 188.979†	-26.3	6.7	2.4252 ug/L		2.4252 ppb	21:30:42
1	B 249.677†	-127.1	155.1	3.0695 ug/L		3.0695 ppb	21:30:42
1	Ba 233.527†	-11.8	-7.6	-0.0540 ug/L		-0.0540 ppb	21:30:42
1	Be 313.107†	-4946.0	-37.7	-0.0122 ug/L		-0.0122 ppb	21:30:22
1	Cd 226.502†	-187.3	6.0	0.0589 ug/L		0.0589 ppb	21:30:42
1	Co 228.616†	-46.7	23.6	0.4515 ug/L		0.4515 ppb	21:30:42
1	Cr 267.716†	71.5	-11.8	-0.1118 ug/L		-0.1118 ppb	21:30:42
1	Cu 324.752†	9029.9	185.0	0.4694 ug/L		0.4694 ppb	21:30:22
1	Mn 257.610†	605.7	92.3	0.0960 ug/L		0.0960 ppb	21:30:42
1	Mo 202.031†	23.0	0.8	0.0480 ug/L		0.0480 ppb	21:30:42
1	Ni 231.604†	90.5	-16.5	-0.3695 ug/L		-0.3695 ppb	21:30:42
1	P 214.914†	257.5	26.3	13.038 ug/L		13.038 ppb	21:30:42
1	Pb 220.353†	-50.3	6.5	0.7201 ug/L		0.7201 ppb	21:30:42
1	S 181.975 Axial†	38.6	-27.9	-34.035 ug/L		-34.035 ppb	21:30:42
1	Sb 206.836†	37.1	3.2	0.9736 ug/L		0.9736 ppb	21:30:42
1	Se 196.026†	-15.8	4.8	2.5128 ug/L		2.5128 ppb	21:30:42
1	Si 251.611†	532.6	89.5	2.4002 ug/L		2.4002 ppb	21:30:42
1	Sn 189.927†	4.2	8.9	1.4651 ug/L		1.4651 ppb	21:30:42
1	Ti 334.940†	-991.4	-113.6	-0.1498 ug/L		-0.1498 ppb	21:30:22
1	Tl 190.801†	-42.5	-4.2	-1.1929 ug/L		-1.1929 ppb	21:30:42
1	U 409.014†	-1523.0	-187.5	-4.2247 ug/L		-4.2247 ppb	21:30:17
1	V 292.402†	-1417.7	-23.1	-0.1369 ug/L		-0.1369 ppb	21:30:22
1	Zn 213.857†	719.7	0.2	0.0036 ug/L		0.0036 ppb	21:30:42
1	SiO2†	528.5	69.4	3.9863 ug/L		3.9863 ppb	21:31:48
2	Sc Radial	5369.4	5369.4	96.1 %			21:29:25
2	Y RADIAL	5790.7	5790.7	95.18 %			21:29:25
2	Al 396.153Radial†	9.4	6.0	4.1381 ug/L		4.1381 ppb	21:29:45
2	Ca 317.933Radial†	16.7	-9.4	-14.307 ug/L		-14.307 ppb	21:29:45
2	Fe 238.204 Radial†	8.8	0.8	6.5741 ug/L		6.5741 ppb	21:29:45
2	K 766.490 Radial†	2293.4	-9.7	-1.5988 ug/L		-1.5988 ppb	21:29:25
2	Mg 279.077 IEC†	3.7	1.5	48.436 ug/L		48.436 ppb	21:29:45
2	Na 589.592 Radial†	-1035.9	-49.4	-13.203 ug/L		-13.203 ppb	21:29:25
2	Sr 421.552†	-8.2	-19.7	-0.1146 ug/L		-0.1146 ppb	21:29:25
2	Sc 361.383	949117.8	949117.8	96.452 %			21:30:47
2	Y 371.029	841356.7	841356.7	96.462 %			21:30:47
2	Ag 328.068†	252.8	-58.9	-0.2195 ug/L		-0.2195 ppb	21:30:52
2	As 188.979†	-34.0	-1.4	-0.5267 ug/L		-0.5267 ppb	21:31:12
2	B 249.677†	-133.1	148.3	2.9352 ug/L		2.9352 ppb	21:31:12
2	Ba 233.527†	4.6	9.3	0.0657 ug/L		0.0657 ppb	21:31:12
2	Be 313.107†	-5041.9	-159.3	-0.0504 ug/L		-0.0504 ppb	21:30:52
2	Cd 226.502†	-186.6	5.9	0.0574 ug/L		0.0574 ppb	21:31:12
2	Co 228.616†	-65.5	3.9	0.0754 ug/L		0.0754 ppb	21:31:12
2	Cr 267.716†	86.6	4.3	0.0422 ug/L		0.0422 ppb	21:31:12
2	Cu 324.752†	9005.4	200.1	0.5072 ug/L		0.5072 ppb	21:30:52
2	Mn 257.610†	587.7	76.3	0.0754 ug/L		0.0754 ppb	21:31:12
2	Mo 202.031†	28.0	6.1	0.3780 ug/L		0.3780 ppb	21:31:12
2	Ni 231.604†	97.7	-8.7	-0.1941 ug/L		-0.1941 ppb	21:31:12

2	P 214.914†	236.3	5.5	2.6269 ug/L	2.6269 ppb	21:31:12
2	Pb 220.353†	-41.7	15.1	1.6832 ug/L	1.6832 ppb	21:31:12
2	S 181.975 Axial†	39.6	-26.8	-32.661 ug/L	-32.661 ppb	21:31:12
2	Sb 206.836†	43.7	10.2	3.0805 ug/L	3.0805 ppb	21:31:12
2	Se 196.026†	-25.4	-5.2	-2.6614 ug/L	-2.6614 ppb	21:31:12
2	Si 251.611†	514.7	73.3	1.9620 ug/L	1.9620 ppb	21:31:12
2	Sn 189.927†	1.0	5.6	0.9217 ug/L	0.9217 ppb	21:31:12
2	Ti 334.940†	-988.6	-115.2	-0.1635 ug/L	-0.1635 ppb	21:30:52
2	Tl 190.801†	-42.8	-4.6	-1.3236 ug/L	-1.3236 ppb	21:31:12
2	U 409.014†	-1454.0	-122.7	-2.7673 ug/L	-2.7673 ppb	21:30:47
2	V 292.402†	-1387.6	1.8	0.0102 ug/L	0.0102 ppb	21:30:52
2	Zn 213.857†	710.7	-5.9	-0.0490 ug/L	-0.0490 ppb	21:31:12
2	SiO2†	514.0	56.8	3.2491 ug/L	3.2491 ppb	21:31:53
3	Sc Radial	5411.8	5411.8	96.9 %		21:29:50
3	Y RADIAL	5874.8	5874.8	96.57 %		21:29:50
3	Al 396.153Radial†	-4.6	-8.5	-5.9221 ug/L	-5.9221 ppb	21:30:10
3	Ca 317.933Radial†	14.7	-11.6	-17.584 ug/L	-17.584 ppb	21:30:10
3	Fe 238.204 Radial†	9.3	1.1	9.6133 ug/L	9.6133 ppb	21:30:10
3	K 766.490 Radial†	2424.1	106.5	17.644 ug/L	17.644 ppb	21:29:50
3	Mg 279.077 IEC†	0.3	-2.0	-66.233 ug/L	-66.233 ppb	21:30:10
3	Na 589.592 Radial†	-1079.1	-85.7	-22.876 ug/L	-22.876 ppb	21:29:50
3	Sr 421.552†	14.3	3.6	0.0208 ug/L	0.0208 ppb	21:29:50
3	Sc 361.383	953516.6	953516.6	96.899 %		21:31:17
3	Y 371.029	844197.6	844197.6	96.788 %		21:31:17
3	Ag 328.068†	318.4	7.6	0.0316 ug/L	0.0316 ppb	21:31:22
3	As 188.979†	-26.8	6.1	2.2293 ug/L	2.2293 ppb	21:31:42
3	B 249.677†	-124.5	157.7	3.1217 ug/L	3.1217 ppb	21:31:42
3	Ba 233.527†	-7.6	-3.3	-0.0228 ug/L	-0.0228 ppb	21:31:42
3	Be 313.107†	-5055.4	-149.1	-0.0470 ug/L	-0.0470 ppb	21:31:22
3	Cd 226.502†	-179.9	13.7	0.1343 ug/L	0.1343 ppb	21:31:42
3	Co 228.616†	-66.5	3.2	0.0615 ug/L	0.0615 ppb	21:31:42
3	Cr 267.716†	92.9	10.3	0.0994 ug/L	0.0994 ppb	21:31:42
3	Cu 324.752†	9061.1	214.6	0.5423 ug/L	0.5423 ppb	21:31:22
3	Mn 257.610†	603.4	89.8	0.0939 ug/L	0.0939 ppb	21:31:42
3	Mo 202.031†	31.1	9.1	0.5615 ug/L	0.5615 ppb	21:31:42
3	Ni 231.604†	100.7	-6.1	-0.1354 ug/L	-0.1354 ppb	21:31:42
3	P 214.914†	238.2	6.3	3.0409 ug/L	3.0409 ppb	21:31:42
3	Pb 220.353†	-49.9	6.8	0.7604 ug/L	0.7604 ppb	21:31:42
3	S 181.975 Axial†	46.0	-20.3	-24.736 ug/L	-24.736 ppb	21:31:42
3	Sb 206.836†	36.6	2.7	0.8235 ug/L	0.8235 ppb	21:31:42
3	Se 196.026†	-16.9	3.7	1.9496 ug/L	1.9496 ppb	21:31:42
3	Si 251.611†	504.3	60.1	1.6057 ug/L	1.6057 ppb	21:31:42
3	Sn 189.927†	-0.6	4.0	0.6535 ug/L	0.6535 ppb	21:31:42
3	Ti 334.940†	-919.4	-39.1	-0.0509 ug/L	-0.0509 ppb	21:31:22
3	Tl 190.801†	-39.7	-1.3	-0.3627 ug/L	-0.3627 ppb	21:31:42
3	U 409.014†	-1330.7	11.4	0.2563 ug/L	0.2563 ppb	21:31:17
3	V 292.402†	-1409.0	-13.7	-0.0704 ug/L	-0.0704 ppb	21:31:22
3	Zn 213.857†	693.3	-27.3	-0.2277 ug/L	-0.2277 ppb	21:31:42
3	SiO2†	534.3	75.3	4.3061 ug/L	4.3061 ppb	21:31:58

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	951959.1	96.741 %		0.2504			0.26%
Sc Radial	5410.3	96.9 %		0.72			0.74%
Y 371.029	843913.2	96.755 %		0.2782			0.29%
Y RADIAL	5858.3	96.30 %		1.005			1.04%
Ag 328.068†	-15.9	-0.0573 ug/L		0.14069	-0.0573 ppb	0.14069	245.73%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	0.3	0.2169 ug/L		5.38427	0.2169 ppb	5.38427	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	3.8	1.3759 ug/L		1.65061	1.3759 ppb	1.65061	119.96%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	153.7	3.0421 ug/L		0.09623	3.0421 ppb	0.09623	3.16%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	-0.5	-0.0037 ug/L		0.06207	-0.0037 ppb	0.06207	>999.9%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	-115.4	-0.0365 ug/L		0.02114	-0.0365 ppb	0.02114	57.86%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	-10.0	-15.163 ug/L		2.1270	-15.163 ppb	2.1270	14.03%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated
Cd 226.502† 8.6 0.0835 ug/L 0.04397 0.0835 ppb 0.04397 52.64%
QC value within limits for Cd 226.502 Recovery = Not calculated
Co 228.616† 10.2 0.1962 ug/L 0.22128 0.1962 ppb 0.22128 112.81%
QC value within limits for Co 228.616 Recovery = Not calculated
Cr 267.716† 0.9 0.0100 ug/L 0.10923 0.0100 ppb 0.10923 >999.9%
QC value within limits for Cr 267.716 Recovery = Not calculated
Cu 324.752† 199.9 0.5063 ug/L 0.03642 0.5063 ppb 0.03642 7.19%
QC value within limits for Cu 324.752 Recovery = Not calculated
Fe 238.204 Radial† 0.6 4.8956 ug/L 5.74401 4.8956 ppb 5.74401 117.33%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated
K 766.490 Radial† 85.5 14.165 ug/L 14.3439 14.165 ppb 14.3439 101.27%
QC value within limits for K 766.490 Radial Recovery = Not calculated
Mg 279.077 IEC† -1.0 -33.730 ug/L 71.6734 -33.730 ppb 71.6734 212.49%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated
Mn 257.610† 86.1 0.0884 ug/L 0.01134 0.0884 ppb 0.01134 12.82%
QC value within limits for Mn 257.610 Recovery = Not calculated
Mo 202.031† 5.3 0.3291 ug/L 0.26022 0.3291 ppb 0.26022 79.06%
QC value within limits for Mo 202.031 Recovery = Not calculated
Na 589.592 Radial† -42.1 -11.249 ug/L 12.7172 -11.249 ppb 12.7172 113.06%
QC value within limits for Na 589.592 Radial Recovery = Not calculated
Ni 231.604† -10.4 -0.2330 ug/L 0.12184 -0.2330 ppb 0.12184 52.30%
QC value within limits for Ni 231.604 Recovery = Not calculated
P 214.914† 12.7 6.2352 ug/L 5.89473 6.2352 ppb 5.89473 94.54%
QC value within limits for P 214.914 Recovery = Not calculated
Pb 220.353† 9.5 1.0545 ug/L 0.54478 1.0545 ppb 0.54478 51.66%
QC value within limits for Pb 220.353 Recovery = Not calculated
S 181.975 Axial† -25.0 -30.477 ug/L 5.0193 -30.477 ppb 5.0193 16.47%
QC value within limits for S 181.975 Axial Recovery = Not calculated
Sb 206.836† 5.3 1.6259 ug/L 1.26199 1.6259 ppb 1.26199 77.62%
QC value within limits for Sb 206.836 Recovery = Not calculated
Se 196.026† 1.1 0.6003 ug/L 2.83874 0.6003 ppb 2.83874 472.86%
QC value within limits for Se 196.026 Recovery = Not calculated
Si 251.611† 74.3 1.9893 ug/L 0.39796 1.9893 ppb 0.39796 20.01%
QC value within limits for Si 251.611 Recovery = Not calculated
Sn 189.927† 6.2 1.0134 ug/L 0.41350 1.0134 ppb 0.41350 40.80%
QC value within limits for Sn 189.927 Recovery = Not calculated
Sr 421.552† -4.4 -0.0255 ug/L 0.07716 -0.0255 ppb 0.07716 302.30%
QC value within limits for Sr 421.552 Recovery = Not calculated
Ti 334.940† -89.3 -0.1214 ug/L 0.06140 -0.1214 ppb 0.06140 50.58%
QC value within limits for Ti 334.940 Recovery = Not calculated
Tl 190.801† -3.3 -0.9597 ug/L 0.52116 -0.9597 ppb 0.52116 54.30%
QC value within limits for Tl 190.801 Recovery = Not calculated
U 409.014† -99.6 -2.2453 ug/L 2.28566 -2.2453 ppb 2.28566 101.80%
QC value within limits for U 409.014 Recovery = Not calculated
V 292.402† -11.7 -0.0657 ug/L 0.07368 -0.0657 ppb 0.07368 112.17%
QC value within limits for V 292.402 Recovery = Not calculated
Zn 213.857† -11.0 -0.0910 ug/L 0.12125 -0.0910 ppb 0.12125 133.18%
QC value within limits for Zn 213.857 Recovery = Not calculated
SiO2† 67.1 3.8471 ug/L 0.54208 3.8471 ppb 0.54208 14.09%
QC value within limits for SiO2 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 34

Sample ID: 244601002|941727|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 78

Date Collected: 1/28/2010 21:34:09

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 244601002|941727|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5461.2	5461.2	97.8 %		21:36:22
1	Y RADIAL	6267.9	6267.9	103.0 %		21:36:22
1	Al 396.153Radial†	99706.1	101963.6	70671 ug/L	70671 ppb	21:36:02
1	Ca 317.933Radial†	23930.8	24446.7	37171 ug/L	37171 ppb	21:36:02
1	Fe 238.204 Radial†	13681.2	13983.1	118080 ug/L	118080 ppb	21:36:02
1	K 766.490 Radial†	90725.4	90387.7	14951 ug/L	14951 ppb	21:36:02
1	Mg 279.077 IEC†	557.8	568.0	18416 ug/L	18416 ppb	21:36:22
1	Na 589.592 Radial†	9956.1	11210.0	2993.9 ug/L	2993.9 ppb	21:36:02
1	Sr 421.552†	46483.3	47526.3	276.37 ug/L	276.37 ppb	21:36:02
1	Sc 361.383	967792.4	967792.4	98.350 %		21:37:19
1	Y 371.029	902575.3	902575.3	103.48 %		21:37:19
1	Ag 328.068†	-8107.3	-8564.3	6.2288 ug/L	6.2288 ppb	21:37:25
1	As 188.979†	-33.4	-0.2	50.144 ug/L	50.144 ppb	21:37:45
1	B 249.677†	1585.1	1898.0	18.186 ug/L	18.186 ppb	21:37:25
1	Ba 233.527†	202181.7	205578.3	1448.5 ug/L	1448.5 ppb	21:37:25
1	Be 313.107†	-2326.9	2702.1	6.7547 ug/L	6.7547 ppb	21:37:25
1	Cd 226.502†	984.3	1200.2	-0.3100 ug/L	-0.3100 ppb	21:37:45
1	Co 228.616†	3883.1	4020.0	70.427 ug/L	70.427 ppb	21:37:45
1	Cr 267.716†	8103.3	8153.7	81.254 ug/L	81.254 ppb	21:37:25
1	Cu 324.752†	31785.6	23182.4	64.878 ug/L	64.878 ppb	21:37:25
1	Mn 257.610†	2740325.8	2785768.0	2810.6 ug/L	2810.6 ppb	21:37:19
1	Mo 202.031†	-63.7	-87.7	4.1956 ug/L	4.1956 ppb	21:37:45
1	Ni 231.604†	3034.8	2975.7	66.462 ug/L	66.462 ppb	21:37:45
1	P 214.914†	1228.0	1009.1	414.11 ug/L	414.11 ppb	21:37:45
1	Pb 220.353†	695.1	765.1	89.802 ug/L	89.802 ppb	21:37:45
1	S 181.975 Axial†	460.6	400.6	475.21 ug/L	475.21 ppb	21:37:45
1	Sb 206.836†	58.3	24.1	-0.1230 ug/L	-0.1230 ppb	21:37:45
1	Se 196.026†	-577.8	-566.3	100.63 ug/L	100.63 ppb	21:37:45
1	Si 251.611†	862649.7	876662.3	23521 ug/L	23521 ppb	21:37:19
1	Sn 189.927†	-186.0	-184.5	-22.636 ug/L	-22.636 ppb	21:37:45
1	Ti 334.940†	1855097.0	1887130.2	2604.6 ug/L	2604.6 ppb	21:37:19
1	Tl 190.801†	-168.2	-131.2	-3.4389 ug/L	-3.4389 ppb	21:37:45
1	U 409.014†	-7646.7	-6390.3	-157.67 ug/L	-157.67 ppb	21:37:25
1	V 292.402†	40813.0	42938.1	218.40 ug/L	218.40 ppb	21:37:25
1	Zn 213.857†	28509.0	28244.6	223.09 ug/L	223.09 ppb	21:37:25
1	SiO2†	858885.0	872818.6	50122 ug/L	50122 ppb	21:38:53
2	Sc Radial	5479.7	5479.7	98.1 %		21:36:47
2	Y RADIAL	6293.9	6293.9	103.5 %		21:36:47
2	Al 396.153Radial†	99838.9	101753.7	70526 ug/L	70526 ppb	21:36:27
2	Ca 317.933Radial†	23763.1	24193.0	36786 ug/L	36786 ppb	21:36:27
2	Fe 238.204 Radial†	13574.5	13827.0	116760 ug/L	116760 ppb	21:36:27
2	K 766.490 Radial†	90340.4	89681.3	14834 ug/L	14834 ppb	21:36:27
2	Mg 279.077 IEC†	555.3	563.6	18271 ug/L	18271 ppb	21:36:47
2	Na 589.592 Radial†	9900.9	11119.2	2969.6 ug/L	2969.6 ppb	21:36:27
2	Sr 421.552†	46501.0	47383.4	275.54 ug/L	275.54 ppb	21:36:27
2	Sc 361.383	959325.5	959325.5	97.490 %		21:37:51
2	Y 371.029	893934.3	893934.3	102.49 %		21:37:51
2	Ag 328.068†	-8127.1	-8657.3	5.4524 ug/L	5.4524 ppb	21:37:56
2	As 188.979†	-24.4	8.8	53.063 ug/L	53.063 ppb	21:38:16
2	B 249.677†	1538.6	1864.5	17.735 ug/L	17.735 ppb	21:37:56
2	Ba 233.527†	199923.8	205076.6	1444.9 ug/L	1444.9 ppb	21:37:56
2	Be 313.107†	-2366.8	2640.3	6.7301 ug/L	6.7301 ppb	21:37:56
2	Cd 226.502†	976.1	1200.6	-0.1699 ug/L	-0.1699 ppb	21:38:16
2	Co 228.616†	3867.1	4038.5	70.806 ug/L	70.806 ppb	21:38:16
2	Cr 267.716†	8016.0	8136.9	81.067 ug/L	81.067 ppb	21:37:56
2	Cu 324.752†	31437.4	23110.4	64.626 ug/L	64.626 ppb	21:37:56
2	Mn 257.610†	2714407.8	2783773.9	2808.4 ug/L	2808.4 ppb	21:37:51
2	Mo 202.031†	-38.8	-62.8	5.6268 ug/L	5.6268 ppb	21:38:16
2	Ni 231.604†	3004.1	2971.5	66.368 ug/L	66.368 ppb	21:38:16

2	P 214.914†	1227.7	1019.8	420.52 ug/L	420.52 ppb	21:38:16
2	Pb 220.353†	672.7	748.4	88.037 ug/L	88.037 ppb	21:38:16
2	S 181.975 Axial†	448.8	392.6	465.54 ug/L	465.54 ppb	21:38:16
2	Sb 206.836†	56.7	23.1	-0.4261 ug/L	-0.4261 ppb	21:38:16
2	Se 196.026†	-580.2	-574.0	92.288 ug/L	92.288 ppb	21:38:16
2	Si 251.611†	854147.0	875682.0	23494 ug/L	23494 ppb	21:37:51
2	Sn 189.927†	-179.1	-179.2	-21.835 ug/L	-21.835 ppb	21:38:16
2	Ti 334.940†	1837247.8	1885468.7	2602.3 ug/L	2602.3 ppb	21:37:51
2	Tl 190.801†	-166.0	-130.6	-3.2756 ug/L	-3.2756 ppb	21:38:16
2	U 409.014†	-7594.5	-6405.4	-157.86 ug/L	-157.86 ppb	21:37:56
2	V 292.402†	40399.3	42880.0	218.29 ug/L	218.29 ppb	21:37:56
2	Zn 213.857†	28208.1	28191.8	222.78 ug/L	222.78 ppb	21:37:56
2	SiO2†	858583.7	880217.0	50547 ug/L	50547 ppb	21:38:59
3	Sc Radial	5423.4	5423.4	97.1 %		21:37:12
3	Y RADIAL	6240.4	6240.4	102.6 %		21:37:12
3	Al 396.153Radial†	99842.1	102813.2	71260 ug/L	71260 ppb	21:36:52
3	Ca 317.933Radial†	23934.7	24621.1	37437 ug/L	37437 ppb	21:36:52
3	Fe 238.204 Radial†	13607.3	14004.3	118260 ug/L	118260 ppb	21:36:52
3	K 766.490 Radial†	90540.9	90843.4	15026 ug/L	15026 ppb	21:36:52
3	Mg 279.077 IEC†	557.0	571.2	18518 ug/L	18518 ppb	21:37:12
3	Na 589.592 Radial†	9893.2	11216.0	2995.5 ug/L	2995.5 ppb	21:36:52
3	Sr 421.552†	46448.6	47821.4	278.09 ug/L	278.09 ppb	21:36:52
3	Sc 361.383	965735.4	965735.4	98.141 %		21:38:22
3	Y 371.029	901562.0	901562.0	103.36 %		21:38:22
3	Ag 328.068†	-8014.2	-8487.0	6.5760 ug/L	6.5760 ppb	21:38:27
3	As 188.979†	-26.7	6.6	52.597 ug/L	52.597 ppb	21:38:47
3	B 249.677†	1488.9	1803.3	16.281 ug/L	16.281 ppb	21:38:27
3	Ba 233.527†	200959.6	204771.0	1442.8 ug/L	1442.8 ppb	21:38:27
3	Be 313.107†	-2418.2	2604.1	6.7096 ug/L	6.7096 ppb	21:38:27
3	Cd 226.502†	993.9	1212.1	-0.2105 ug/L	-0.2105 ppb	21:38:47
3	Co 228.616†	3910.5	4056.4	71.134 ug/L	71.134 ppb	21:38:47
3	Cr 267.716†	8097.3	8165.1	81.368 ug/L	81.368 ppb	21:38:27
3	Cu 324.752†	31344.7	22801.9	63.926 ug/L	63.926 ppb	21:38:27
3	Mn 257.610†	2725068.5	2776156.2	2800.9 ug/L	2800.9 ppb	21:38:22
3	Mo 202.031†	-45.2	-69.0	5.3678 ug/L	5.3678 ppb	21:38:47
3	Ni 231.604†	3059.7	3007.7	67.177 ug/L	67.177 ppb	21:38:47
3	P 214.914†	1237.4	1021.3	420.41 ug/L	420.41 ppb	21:38:47
3	Pb 220.353†	677.2	748.4	88.057 ug/L	88.057 ppb	21:38:47
3	S 181.975 Axial†	456.4	397.3	471.06 ug/L	471.06 ppb	21:38:47
3	Sb 206.836†	54.8	20.7	-1.1101 ug/L	-1.1101 ppb	21:38:47
3	Se 196.026†	-584.4	-574.3	97.124 ug/L	97.124 ppb	21:38:47
3	Si 251.611†	858072.1	873866.2	23446 ug/L	23446 ppb	21:38:22
3	Sn 189.927†	-182.9	-181.8	-22.137 ug/L	-22.137 ppb	21:38:47
3	Ti 334.940†	1846687.6	1882579.0	2598.4 ug/L	2598.4 ppb	21:38:22
3	Tl 190.801†	-182.7	-146.4	-7.8999 ug/L	-7.8999 ppb	21:38:47
3	U 409.014†	-7638.8	-6398.8	-157.88 ug/L	-157.88 ppb	21:38:27
3	V 292.402†	40663.7	42874.4	218.05 ug/L	218.05 ppb	21:38:27
3	Zn 213.857†	28356.8	28151.3	222.29 ug/L	222.29 ppb	21:38:27
3	SiO2†	861031.2	876865.5	50355 ug/L	50355 ppb	21:39:05

Mean Data: 244601002|941727|1

Analyte	Mean Corrected	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	964284.4	97.993 %		0.4488			0.46%
Sc Radial	5454.8	97.7 %		0.51			0.53%
Y 371.029	899357.2	103.11 %		0.542			0.53%
Y RADIAL	6267.4	103.0 %		0.44			0.43%
Ag 328.068†	-8569.6	6.0857 ug/L		0.57534	6.0857 ppb	0.57534	9.45%
Al 396.153Radial†	102176.9	70819 ug/L		388.8	70819 ppb	388.8	0.55%
As 188.979†	5.1	51.935 ug/L		1.5681	51.935 ppb	1.5681	3.02%
B 249.677†	1855.3	17.400 ug/L		0.9955	17.400 ppb	0.9955	5.72%
Ba 233.527†	205142.0	1445.4 ug/L		2.87	1445.4 ppb	2.87	0.20%
Be 313.107†	2648.8	6.7315 ug/L		0.02256	6.7315 ppb	0.02256	0.34%
Ca 317.933Radial†	24420.3	37131 ug/L		327.3	37131 ppb	327.3	0.88%
Cd 226.502†	1204.3	-0.2301 ug/L		0.07206	-0.2301 ppb	0.07206	31.31%
Co 228.616†	4038.3	70.789 ug/L		0.3537	70.789 ppb	0.3537	0.50%
Cr 267.716†	8151.9	81.230 ug/L		0.1521	81.230 ppb	0.1521	0.19%
Cu 324.752†	23031.6	64.477 ug/L		0.4930	64.477 ppb	0.4930	0.76%
Fe 238.204 Radial†	13938.1	117700 ug/L		817.6	117700 ppb	817.6	0.69%
K 766.490 Radial†	90304.1	14937 ug/L		96.8	14937 ppb	96.8	0.65%

Mg 279.077 IEC†	567.6	18402 ug/L	124.1	18402 ppb	124.1	0.67%
Mn 257.610†	2781899.4	2806.6 ug/L	5.07	2806.6 ppb	5.07	0.18%
Mo 202.031†	-73.2	5.0634 ug/L	0.76259	5.0634 ppb	0.76259	15.06%
Na 589.592 Radial†	11181.7	2986.3 ug/L	14.48	2986.3 ppb	14.48	0.48%
Ni 231.604†	2985.0	66.669 ug/L	0.4423	66.669 ppb	0.4423	0.66%
P 214.914†	1016.8	418.35 ug/L	3.668	418.35 ppb	3.668	0.88%
Pb 220.353†	754.0	88.632 ug/L	1.0135	88.632 ppb	1.0135	1.14%
S 181.975 Axial†	396.8	470.61 ug/L	4.851	470.61 ppb	4.851	1.03%
Sb 206.836†	22.6	-0.5531 ug/L	0.50566	-0.5531 ppb	0.50566	91.43%
Se 196.026†	-571.5	96.680 ug/L	4.1874	96.680 ppb	4.1874	4.33%
Si 251.611†	875403.5	23487 ug/L	38.1	23487 ppb	38.1	0.16%
Sn 189.927†	-181.8	-22.203 ug/L	0.4045	-22.203 ppb	0.4045	1.82%
Sr 421.552†	47577.0	276.67 ug/L	1.298	276.67 ppb	1.298	0.47%
Ti 334.940†	1885059.3	2601.8 ug/L	3.16	2601.8 ppb	3.16	0.12%
Tl 190.801†	-136.1	-4.8715 ug/L	2.62395	-4.8715 ppb	2.62395	53.86%
U 409.014†	-6398.2	-157.80 ug/L	0.116	-157.80 ppb	0.116	0.07%
V 292.402†	42897.5	218.25 ug/L	0.182	218.25 ppb	0.182	0.08%
Zn 213.857†	28195.9	222.72 ug/L	0.402	222.72 ppb	0.402	0.18%
SiO2†	876633.7	50341 ug/L	212.7	50341 ppb	212.7	0.42%

Sequence No.: 35
 Sample ID: 244601003|941727|1
 Analyst: HSC
 Initial Sample Wt:
 Dilution:

Autosampler Location: 79
 Date Collected: 1/28/2010 21:41:17
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: 244601003|941727|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5514.8	5514.8	98.7 %		21:43:30
1	Y RADIAL	6866.0	6866.0	112.9 %		21:43:30
1	Al 396.153Radial†	111849.4	113270.5	78508 ug/L	78508 ppb	21:43:10
1	Ca 317.933Radial†	27288.4	27609.3	41980 ug/L	41980 ppb	21:43:10
1	Fe 238.204 Radial†	12476.8	12627.3	106630 ug/L	106630 ppb	21:43:10
1	K 766.490 Radial†	92556.0	91339.8	15106 ug/L	15106 ppb	21:43:10
1	Mg 279.077 IEC†	603.8	609.1	19768 ug/L	19768 ppb	21:43:30
1	Na 589.592 Radial†	21903.7	23210.7	6198.9 ug/L	6198.9 ppb	21:43:10
1	Sr 421.552†	56502.4	57211.0	332.71 ug/L	332.71 ppb	21:43:10
1	Sc 361.383	976983.5	976983.5	99.284 %		21:44:27
1	Y 371.029	984349.9	984349.9	112.86 %		21:44:27
1	Ag 328.068†	-7683.5	-8059.9	4.5617 ug/L	4.5617 ppb	21:44:32
1	As 188.979†	24.5	58.5	57.540 ug/L	57.540 ppb	21:44:52
1	B 249.677†	1353.4	1649.4	15.180 ug/L	15.180 ppb	21:44:32
1	Ba 233.527†	218884.2	220467.3	1552.7 ug/L	1552.7 ppb	21:44:32
1	Be 313.107†	12042.7	17197.6	8.3778 ug/L	8.3778 ppb	21:44:32
1	Cd 226.502†	842.7	1048.1	-0.6904 ug/L	-0.6904 ppb	21:44:52
1	Co 228.616†	2889.2	2981.9	53.493 ug/L	53.493 ppb	21:44:52
1	Cr 267.716†	7578.3	7547.4	75.293 ug/L	75.293 ppb	21:44:32
1	Cu 324.752†	29251.0	20325.4	57.244 ug/L	57.244 ppb	21:44:32
1	Mn 257.610†	2459673.7	2476879.1	2498.9 ug/L	2498.9 ppb	21:44:27
1	Mo 202.031†	-6.8	-29.8	6.9371 ug/L	6.9371 ppb	21:44:52
1	Ni 231.604†	3578.2	3494.1	78.060 ug/L	78.060 ppb	21:44:52
1	P 214.914†	1342.9	1113.0	478.58 ug/L	478.58 ppb	21:44:52
1	Pb 220.353†	691.2	754.5	91.496 ug/L	91.496 ppb	21:44:52
1	S 181.975 Axial†	601.5	538.1	641.41 ug/L	641.41 ppb	21:44:52
1	Sb 206.836†	29.4	-5.5	-5.2586 ug/L	-5.2586 ppb	21:44:52
1	Se 196.026†	-518.0	-500.6	97.427 ug/L	97.427 ppb	21:44:52
1	Si 251.611†	877846.7	883717.2	23710 ug/L	23710 ppb	21:44:27
1	Sn 189.927†	-187.0	-183.8	-21.975 ug/L	-21.975 ppb	21:44:52
1	Ti 334.940†	941948.2	949651.0	1313.1 ug/L	1313.1 ppb	21:44:27
1	Tl 190.801†	-155.7	-117.0	-11.445 ug/L	-11.445 ppb	21:44:52
1	U 409.014†	-22628.7	-21407.2	-494.82 ug/L	-494.82 ppb	21:44:27
1	V 292.402†	37220.5	38929.3	198.61 ug/L	198.61 ppb	21:44:32
1	Zn 213.857†	29184.3	28652.0	227.53 ug/L	227.53 ppb	21:44:32
1	SiO2†	884210.4	890110.9	51115 ug/L	51115 ppb	21:46:01
2	Sc Radial	5527.2	5527.2	99.0 %		21:43:55
2	Y RADIAL	6892.7	6892.7	113.3 %		21:43:55
2	Al 396.153Radial†	111934.0	113101.3	78391 ug/L	78391 ppb	21:43:35
2	Ca 317.933Radial†	27225.5	27483.6	41789 ug/L	41789 ppb	21:43:35
2	Fe 238.204 Radial†	12444.9	12566.7	106120 ug/L	106120 ppb	21:43:35
2	K 766.490 Radial†	92681.9	91256.3	15092 ug/L	15092 ppb	21:43:35
2	Mg 279.077 IEC†	608.5	612.4	19877 ug/L	19877 ppb	21:43:55
2	Na 589.592 Radial†	21911.5	23168.8	6187.7 ug/L	6187.7 ppb	21:43:35
2	Sr 421.552†	56445.1	57024.4	331.62 ug/L	331.62 ppb	21:43:35
2	Sc 361.383	983253.2	983253.2	99.921 %		21:44:58
2	Y 371.029	990563.8	990563.8	113.57 %		21:44:58
2	Ag 328.068†	-7443.1	-7769.9	5.4846 ug/L	5.4846 ppb	21:45:04
2	As 188.979†	28.8	62.6	58.905 ug/L	58.905 ppb	21:45:24
2	B 249.677†	1306.9	1594.1	14.168 ug/L	14.168 ppb	21:45:04
2	Ba 233.527†	217354.8	217530.9	1532.1 ug/L	1532.1 ppb	21:45:04
2	Be 313.107†	11806.5	16883.9	8.2743 ug/L	8.2743 ppb	21:45:04
2	Cd 226.502†	833.5	1033.5	-0.7806 ug/L	-0.7806 ppb	21:45:24
2	Co 228.616†	2926.8	3000.9	53.860 ug/L	53.860 ppb	21:45:24
2	Cr 267.716†	7463.8	7384.2	73.704 ug/L	73.704 ppb	21:45:04
2	Cu 324.752†	29137.4	20023.9	56.451 ug/L	56.451 ppb	21:45:04
2	Mn 257.610†	2465308.6	2466721.5	2488.7 ug/L	2488.7 ppb	21:44:58
2	Mo 202.031†	-4.7	-27.7	7.0291 ug/L	7.0291 ppb	21:45:24
2	Ni 231.604†	3600.7	3493.6	78.049 ug/L	78.049 ppb	21:45:24

2	P 214.914†	1342.8	1104.3	474.75 ug/L	474.75 ppb	21:45:24
2	Pb 220.353†	693.2	752.1	91.244 ug/L	91.244 ppb	21:45:24
2	S 181.975 Axial†	595.6	528.3	629.49 ug/L	629.49 ppb	21:45:24
2	Sb 206.836†	48.5	13.4	0.4210 ug/L	0.4210 ppb	21:45:24
2	Se 196.026†	-562.0	-541.3	74.606 ug/L	74.606 ppb	21:45:24
2	Si 251.611†	880929.3	881164.3	23641 ug/L	23641 ppb	21:44:58
2	Sn 189.927†	-187.5	-183.0	-21.883 ug/L	-21.883 ppb	21:45:24
2	Ti 334.940†	946424.0	948080.8	1310.9 ug/L	1310.9 ppb	21:44:58
2	Tl 190.801†	-166.0	-126.4	-14.199 ug/L	-14.199 ppb	21:45:24
2	U 409.014†	-22463.8	-21096.8	-487.76 ug/L	-487.76 ppb	21:44:58
2	V 292.402†	36958.8	38428.3	195.93 ug/L	195.93 ppb	21:45:04
2	Zn 213.857†	28945.8	28225.9	224.03 ug/L	224.03 ppb	21:45:04
2	SiO2†	886587.3	886810.9	50926 ug/L	50926 ppb	21:46:07
3	Sc Radial	5497.6	5497.6	98.4 %		21:44:20
3	Y RADIAL	6845.8	6845.8	112.5 %		21:44:20
3	Al 396.153Radial†	112626.3	114414.1	79300 ug/L	79300 ppb	21:44:00
3	Ca 317.933Radial†	27432.2	27841.8	42334 ug/L	42334 ppb	21:44:00
3	Fe 238.204 Radial†	12569.8	12761.4	107760 ug/L	107760 ppb	21:44:00
3	K 766.490 Radial†	93309.4	92398.5	15281 ug/L	15281 ppb	21:44:00
3	Mg 279.077 IEC†	604.2	611.4	19843 ug/L	19843 ppb	21:44:20
3	Na 589.592 Radial†	21975.2	23352.8	6236.8 ug/L	6236.8 ppb	21:44:00
3	Sr 421.552†	56716.9	57607.9	335.02 ug/L	335.02 ppb	21:44:00
3	Sc 361.383	978077.5	978077.5	99.395 %		21:45:29
3	Y 371.029	986110.0	986110.0	113.06 %		21:45:29
3	Ag 328.068†	-7558.3	-7925.3	5.4319 ug/L	5.4319 ppb	21:45:35
3	As 188.979†	38.0	72.1	62.730 ug/L	62.730 ppb	21:45:55
3	B 249.677†	1305.9	1600.1	14.018 ug/L	14.018 ppb	21:45:35
3	Ba 233.527†	218946.4	220283.3	1551.5 ug/L	1551.5 ppb	21:45:35
3	Be 313.107†	11997.2	17138.3	8.3611 ug/L	8.3611 ppb	21:45:35
3	Cd 226.502†	826.7	1031.1	-0.9743 ug/L	-0.9743 ppb	21:45:55
3	Co 228.616†	2918.5	3008.1	53.975 ug/L	53.975 ppb	21:45:55
3	Cr 267.716†	7552.2	7512.6	74.978 ug/L	74.978 ppb	21:45:35
3	Cu 324.752†	29131.4	20172.2	56.915 ug/L	56.915 ppb	21:45:35
3	Mn 257.610†	2460683.4	2475124.1	2497.3 ug/L	2497.3 ppb	21:45:29
3	Mo 202.031†	-17.8	-40.8	6.3491 ug/L	6.3491 ppb	21:45:55
3	Ni 231.604†	3620.7	3532.8	78.925 ug/L	78.925 ppb	21:45:55
3	P 214.914†	1363.6	1132.3	487.55 ug/L	487.55 ppb	21:45:55
3	Pb 220.353†	700.3	762.9	92.504 ug/L	92.504 ppb	21:45:55
3	S 181.975 Axial†	603.3	539.2	642.66 ug/L	642.66 ppb	21:45:55
3	Sb 206.836†	53.5	18.7	1.9983 ug/L	1.9983 ppb	21:45:55
3	Se 196.026†	-555.2	-537.5	82.073 ug/L	82.073 ppb	21:45:55
3	Si 251.611†	879442.9	884334.2	23726 ug/L	23726 ppb	21:45:29
3	Sn 189.927†	-193.7	-190.3	-22.969 ug/L	-22.969 ppb	21:45:55
3	Ti 334.940†	943608.0	950259.8	1314.0 ug/L	1314.0 ppb	21:45:29
3	Tl 190.801†	-164.6	-125.9	-13.980 ug/L	-13.980 ppb	21:45:55
3	U 409.014†	-22517.1	-21269.3	-491.84 ug/L	-491.84 ppb	21:45:29
3	V 292.402†	37215.7	38882.6	198.19 ug/L	198.19 ppb	21:45:35
3	Zn 213.857†	29142.0	28576.6	226.79 ug/L	226.79 ppb	21:45:35
3	SiO2†	878842.8	883714.6	50748 ug/L	50748 ppb	21:46:13

Mean Data: 244601003|941727|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Sc 361.383	979438.1	99.533 %		0.3403			0.34%
Sc Radial	5513.2	98.7 %		0.27			0.27%
Y 371.029	987007.9	113.16 %		0.367			0.32%
Y RADIAL	6868.2	112.9 %		0.39			0.34%
Ag 328.068†	-7918.4	5.1594 ug/L		0.51829	5.1594 ppb	0.51829	10.05%
Al 396.153Radial†	113595.3	78733 ug/L		495.0	78733 ppb	495.0	0.63%
As 188.979†	64.4	59.725 ug/L		2.6901	59.725 ppb	2.6901	4.50%
B 249.677†	1614.6	14.455 ug/L		0.6319	14.455 ppb	0.6319	4.37%
Ba 233.527†	219427.2	1545.4 ug/L		11.58	1545.4 ppb	11.58	0.75%
Be 313.107†	17073.3	8.3377 ug/L		0.05557	8.3377 ppb	0.05557	0.67%
Ca 317.933Radial†	27644.9	42034 ug/L		276.3	42034 ppb	276.3	0.66%
Cd 226.502†	1037.6	-0.8151 ug/L		0.14505	-0.8151 ppb	0.14505	17.80%
Co 228.616†	2997.0	53.776 ug/L		0.2518	53.776 ppb	0.2518	0.47%
Cr 267.716†	7481.4	74.658 ug/L		0.8414	74.658 ppb	0.8414	1.13%
Cu 324.752†	20173.8	56.870 ug/L		0.3982	56.870 ppb	0.3982	0.70%
Fe 238.204 Radial†	12651.8	106840 ug/L		841.4	106840 ppb	841.4	0.79%
K 766.490 Radial†	91664.9	15160 ug/L		105.3	15160 ppb	105.3	0.69%

Mg 279.077 IEC†	611.0	19829 ug/L	55.9	19829 ppb	55.9	0.28%
Mn 257.610†	2472908.3	2495.0 ug/L	5.51	2495.0 ppb	5.51	0.22%
Mo 202.031†	-32.8	6.7718 ug/L	0.36892	6.7718 ppb	0.36892	5.45%
Na 589.592 Radial†	23244.1	6207.8 ug/L	25.75	6207.8 ppb	25.75	0.41%
Ni 231.604†	3506.8	78.345 ug/L	0.5028	78.345 ppb	0.5028	0.64%
P 214.914†	1116.6	480.30 ug/L	6.571	480.30 ppb	6.571	1.37%
Pb 220.353†	756.5	91.748 ug/L	0.6667	91.748 ppb	0.6667	0.73%
S 181.975 Axial†	535.2	637.85 ug/L	7.268	637.85 ppb	7.268	1.14%
Sb 206.836†	8.8	-0.9465 ug/L	3.81677	-0.9465 ppb	3.81677	403.27%
Se 196.026†	-526.5	84.702 ug/L	11.6356	84.702 ppb	11.6356	13.74%
Si 251.611†	883071.9	23693 ug/L	45.1	23693 ppb	45.1	0.19%
Sn 189.927†	-185.7	-22.276 ug/L	0.6022	-22.276 ppb	0.6022	2.70%
Sr 421.552†	57281.1	333.12 ug/L	1.733	333.12 ppb	1.733	0.52%
Ti 334.940†	949330.5	1312.7 ug/L	1.59	1312.7 ppb	1.59	0.12%
Tl 190.801†	-123.1	-13.208 ug/L	1.5308	-13.208 ppb	1.5308	11.59%
U 409.014†	-21257.8	-491.47 ug/L	3.543	-491.47 ppb	3.543	0.72%
V 292.402†	38746.7	197.57 ug/L	1.443	197.57 ppb	1.443	0.73%
Zn 213.857†	28484.9	226.11 ug/L	1.842	226.11 ppb	1.842	0.81%
SiO2†	886878.8	50929 ug/L	183.7	50929 ppb	183.7	0.36%

Sequence No.: 36

Sample ID: 244601004|941727|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 80

Date Collected: 1/28/2010 21:48:23

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 244601004|941727|1.

Rep#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Units	Sample Conc.	Analysis Time
1	Sc Radial	5581.5	5581.5	99.9 %			21:50:37
1	Y RADIAL	7105.6	7105.6	116.8 %			21:50:37
1	Al 396.153Radial†	100375.4	100434.6	69611 ug/L		69611 ppb	21:50:17
1	Ca 317.933Radial†	11225.4	11205.7	17038 ug/L		17038 ppb	21:50:17
1	Fe 238.204 Radial†	13147.8	13147.6	111020 ug/L		111020 ppb	21:50:17
1	K 766.490 Radial†	72673.4	70323.7	11637 ug/L		11637 ppb	21:50:17
1	Mg 279.077 IEC†	446.0	443.9	14371 ug/L		14371 ppb	21:50:37
1	Na 589.592 Radial†	2706.8	3736.5	997.92 ug/L		997.92 ppb	21:50:17
1	Sr 421.552†	28305.0	28311.6	164.67 ug/L		164.67 ppb	21:50:17
1	Sc 361.383	972689.9	972689.9	98.848 %			21:51:34
1	Y 371.029	1008537.9	1008537.9	115.63 %			21:51:34
1	Ag 328.068†	-7956.5	-8370.3	4.6001 ug/L		4.6001 ppb	21:51:39
1	As 188.979†	-11.7	22.0	44.164 ug/L		44.164 ppb	21:51:59
1	B 249.677†	1322.2	1623.9	13.931 ug/L		13.931 ppb	21:51:39
1	Ba 233.527†	96649.1	97780.4	690.66 ug/L		690.66 ppb	21:51:39
1	Be 313.107†	9477.7	14656.3	7.2814 ug/L		7.2814 ppb	21:51:39
1	Cd 226.502†	919.0	1129.1	-0.2972 ug/L		-0.2972 ppb	21:51:59
1	Co 228.616†	3407.3	3518.8	63.561 ug/L		63.561 ppb	21:51:59
1	Cr 267.716†	13063.8	13130.6	128.96 ug/L		128.96 ppb	21:51:39
1	Cu 324.752†	27060.4	18239.4	52.094 ug/L		52.094 ppb	21:51:39
1	Mn 257.610†	2520459.2	2549308.9	2572.4 ug/L		2572.4 ppb	21:51:34
1	Mo 202.031†	132.6	111.1	15.678 ug/L		15.678 ppb	21:51:59
1	Ni 231.604†	4000.8	3937.5	87.964 ug/L		87.964 ppb	21:51:59
1	P 214.914†	1314.6	1090.4	462.77 ug/L		462.77 ppb	21:51:59
1	Pb 220.353†	1703.5	1781.7	203.30 ug/L		203.30 ppb	21:51:59
1	S 181.975 Axial†	335.4	271.5	318.09 ug/L		318.09 ppb	21:51:59
1	Sb 206.836†	47.4	12.8	1.2840 ug/L		1.2840 ppb	21:51:59
1	Se 196.026†	-575.7	-561.3	79.901 ug/L		79.901 ppb	21:51:59
1	Si 251.611†	1121332.7	1133944.5	30423 ug/L		30423 ppb	21:51:34
1	Sn 189.927†	-65.5	-61.7	-5.6590 ug/L		-5.6590 ppb	21:51:59
1	Ti 334.940†	843797.6	854544.0	1179.0 ug/L		1179.0 ppb	21:51:34
1	Tl 190.801†	-136.0	-97.9	-6.5595 ug/L		-6.5595 ppb	21:51:59
1	U 409.014†	-13506.6	-12279.3	-289.71 ug/L		-289.71 ppb	21:51:34
1	V 292.402†	20564.4	22244.6	105.88 ug/L		105.88 ppb	21:51:39
1	Zn 213.857†	36187.5	35866.7	287.08 ug/L		287.08 ppb	21:51:39
1	SiO2†	1125072.6	1137712.2	65333 ug/L		65333 ppb	21:53:08
2	Sc Radial	5583.3	5583.3	100.0 %			21:51:02
2	Y RADIAL	7114.5	7114.5	116.9 %			21:51:02
2	Al 396.153Radial†	101340.7	101367.6	70257 ug/L		70257 ppb	21:50:42
2	Ca 317.933Radial†	11323.4	11300.0	17182 ug/L		17182 ppb	21:50:42
2	Fe 238.204 Radial†	13231.8	13227.4	111700 ug/L		111700 ppb	21:50:42
2	K 766.490 Radial†	73375.5	71002.4	11749 ug/L		11749 ppb	21:50:42
2	Mg 279.077 IEC†	441.5	439.3	14220 ug/L		14220 ppb	21:51:02
2	Na 589.592 Radial†	2745.4	3774.2	1008.0 ug/L		1008.0 ppb	21:50:42
2	Sr 421.552†	28471.8	28469.2	165.59 ug/L		165.59 ppb	21:50:42
2	Sc 361.383	939354.9	939354.9	95.460 %			21:52:05
2	Y 371.029	982921.8	982921.8	112.69 %			21:52:05
2	Ag 328.068†	-7504.8	-8182.7	5.5211 ug/L		5.5211 ppb	21:52:10
2	As 188.979†	-3.4	30.3	47.913 ug/L		47.913 ppb	21:52:31
2	B 249.677†	1253.7	1599.6	13.334 ug/L		13.334 ppb	21:52:10
2	Ba 233.527†	90762.3	95083.4	671.72 ug/L		671.72 ppb	21:52:10
2	Be 313.107†	8684.3	14165.4	7.2766 ug/L		7.2766 ppb	21:52:10
2	Cd 226.502†	928.9	1172.4	0.0632 ug/L		0.0632 ppb	21:52:31
2	Co 228.616†	3408.1	3642.0	65.767 ug/L		65.767 ppb	21:52:31
2	Cr 267.716†	12352.6	12854.5	126.31 ug/L		126.31 ppb	21:52:10
2	Cu 324.752†	25174.4	17235.1	49.597 ug/L		49.597 ppb	21:52:10
2	Mn 257.610†	2559716.9	2680920.4	2704.7 ug/L		2704.7 ppb	21:52:05
2	Mo 202.031†	153.4	137.8	17.375 ug/L		17.375 ppb	21:52:31
2	Ni 231.604†	4038.2	4120.2	92.047 ug/L		92.047 ppb	21:52:31

2	P 214.914†	1326.6	1150.1	492.69 ug/L	492.69 ppb	21:52:31
2	Pb 220.353†	1761.7	1903.9	217.01 ug/L	217.01 ppb	21:52:31
2	S 181.975 Axial†	317.6	264.9	309.84 ug/L	309.84 ppb	21:52:31
2	Sb 206.836†	41.8	8.6	-0.1737 ug/L	-0.1737 ppb	21:52:31
2	Se 196.026†	-576.2	-582.5	71.171 ug/L	71.171 ppb	21:52:31
2	Si 251.611†	1140655.4	1194443.0	32046 ug/L	32046 ppb	21:52:05
2	Sn 189.927†	-63.8	-62.3	-5.7255 ug/L	-5.7255 ppb	21:52:31
2	Ti 334.940†	860520.0	902354.8	1245.0 ug/L	1245.0 ppb	21:52:05
2	Tl 190.801†	-135.8	-102.5	-6.7047 ug/L	-6.7047 ppb	21:52:31
2	U 409.014†	-13324.8	-12573.8	-296.41 ug/L	-296.41 ppb	21:52:05
2	V 292.402†	19257.7	21613.9	102.22 ug/L	102.22 ppb	21:52:10
2	Zn 213.857†	33655.4	34513.3	275.73 ug/L	275.73 ppb	21:52:10
2	SiO2†	1128635.3	1181835.4	67867 ug/L	67867 ppb	21:53:14
3	Sc Radial	5511.0	5511.0	98.7 %		21:51:27
3	Y RADIAL	7005.1	7005.1	115.1 %		21:51:27
3	Al 396.153Radial†	102453.2	103826.3	71962 ug/L	71962 ppb	21:51:07
3	Ca 317.933Radial†	11442.7	11569.7	17592 ug/L	17592 ppb	21:51:07
3	Fe 238.204 Radial†	13368.7	13539.9	114340 ug/L	114340 ppb	21:51:07
3	K 766.490 Radial†	73998.3	72597.5	12013 ug/L	12013 ppb	21:51:07
3	Mg 279.077 IEC†	438.6	442.1	14311 ug/L	14311 ppb	21:51:27
3	Na 589.592 Radial†	2879.1	3945.8	1053.8 ug/L	1053.8 ppb	21:51:07
3	Sr 421.552†	28814.1	29190.1	169.78 ug/L	169.78 ppb	21:51:07
3	Sc 361.383	986221.9	986221.9	100.22 %		21:52:36
3	Y 371.029	1022670.3	1022670.3	117.25 %		21:52:36
3	Ag 328.068†	-7926.2	-8229.6	6.1803 ug/L	6.1803 ppb	21:52:42
3	As 188.979†	-7.5	26.3	46.435 ug/L	46.435 ppb	21:53:02
3	B 249.677†	1292.9	1576.3	12.456 ug/L	12.456 ppb	21:52:42
3	Ba 233.527†	95162.4	94955.4	670.90 ug/L	670.90 ppb	21:52:42
3	Be 313.107†	9216.8	14264.4	7.1373 ug/L	7.1373 ppb	21:52:42
3	Cd 226.502†	894.8	1092.2	-1.0033 ug/L	-1.0033 ppb	21:53:02
3	Co 228.616†	3384.3	3448.6	62.182 ug/L	62.182 ppb	21:53:02
3	Cr 267.716†	12855.9	12741.7	125.27 ug/L	125.27 ppb	21:52:42
3	Cu 324.752†	26649.4	17453.6	50.281 ug/L	50.281 ppb	21:52:42
3	Mn 257.610†	2535156.6	2528987.3	2552.3 ug/L	2552.3 ppb	21:52:36
3	Mo 202.031†	145.6	122.3	16.631 ug/L	16.631 ppb	21:53:02
3	Ni 231.604†	4004.1	3885.2	86.797 ug/L	86.797 ppb	21:53:02
3	P 214.914†	1304.7	1062.3	447.05 ug/L	447.05 ppb	21:53:02
3	Pb 220.353†	1704.2	1758.7	200.93 ug/L	200.93 ppb	21:53:02
3	S 181.975 Axial†	339.2	270.6	316.49 ug/L	316.49 ppb	21:53:02
3	Sb 206.836†	45.3	10.1	0.4996 ug/L	0.4996 ppb	21:53:02
3	Se 196.026†	-553.2	-530.8	106.83 ug/L	106.83 ppb	21:53:02
3	Si 251.611†	1126797.1	1123831.6	30152 ug/L	30152 ppb	21:52:36
3	Sn 189.927†	-71.3	-66.5	-6.3168 ug/L	-6.3168 ppb	21:53:02
3	Ti 334.940†	848870.5	847893.0	1170.0 ug/L	1170.0 ppb	21:52:36
3	Tl 190.801†	-144.5	-104.4	-8.6049 ug/L	-8.6049 ppb	21:53:02
3	U 409.014†	-13412.9	-11998.4	-283.74 ug/L	-283.74 ppb	21:52:36
3	V 292.402†	20181.1	21576.6	101.72 ug/L	101.72 ppb	21:52:42
3	Zn 213.857†	35691.3	34869.2	278.47 ug/L	278.47 ppb	21:52:42
3	SiO2†	1141005.5	1137992.6	65350 ug/L	65350 ppb	21:53:20

Mean Data: 244601004|941727|1

Analyte	Mean Corrected	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	966088.9	98.177 %		2.4512				2.50%
Sc Radial	5558.6	99.5 %		0.74				0.74%
Y 371.029	1004710.0	115.19 %		2.310				2.01%
Y RADIAL	7075.1	116.3 %		1.00				0.86%
Ag 328.068†	-8260.9	5.4338 ug/L		0.79371	5.4338 ppb	0.79371	14.61%	
Al 396.153Radial†	101876.1	70610 ug/L		1214.4	70610 ppb	1214.4	1.72%	
As 188.979†	26.2	46.171 ug/L		1.8885	46.171 ppb	1.8885	4.09%	
B 249.677†	1599.9	13.240 ug/L		0.7423	13.240 ppb	0.7423	5.61%	
Ba 233.527†	95939.7	677.76 ug/L		11.177	677.76 ppb	11.177	1.65%	
Be 313.107†	14362.0	7.2318 ug/L		0.08182	7.2318 ppb	0.08182	1.13%	
Ca 317.933Radial†	11358.5	17271 ug/L		287.3	17271 ppb	287.3	1.66%	
Cd 226.502†	1131.2	-0.4124 ug/L		0.54250	-0.4124 ppb	0.54250	131.53%	
Co 228.616†	3536.5	63.837 ug/L		1.8082	63.837 ppb	1.8082	2.83%	
Cr 267.716†	12908.9	126.85 ug/L		1.902	126.85 ppb	1.902	1.50%	
Cu 324.752†	17642.7	50.657 ug/L		1.2903	50.657 ppb	1.2903	2.55%	
Fe 238.204 Radial†	13305.0	112350 ug/L		1750.6	112350 ppb	1750.6	1.56%	
K 766.490 Radial†	71307.9	11799 ug/L		193.2	11799 ppb	193.2	1.64%	

Mg 279.077 IEC†	441.8	14301 ug/L	76.4	14301 ppb	76.4	0.53%
Mn 257.610†	2586405.5	2609.8 ug/L	82.82	2609.8 ppb	82.82	3.17%
Mo 202.031†	123.7	16.562 ug/L	0.8506	16.562 ppb	0.8506	5.14%
Na 589.592 Radial†	3818.9	1019.9 ug/L	29.79	1019.9 ppb	29.79	2.92%
Ni 231.604†	3981.0	88.936 ug/L	2.7564	88.936 ppb	2.7564	3.10%
P 214.914†	1101.0	467.50 ug/L	23.183	467.50 ppb	23.183	4.96%
Pb 220.353†	1814.8	207.08 ug/L	8.678	207.08 ppb	8.678	4.19%
S 181.975 Axial†	269.0	314.80 ug/L	4.375	314.80 ppb	4.375	1.39%
Sb 206.836†	10.5	0.5366 ug/L	0.72954	0.5366 ppb	0.72954	135.95%
Se 196.026†	-558.2	85.966 ug/L	18.5852	85.966 ppb	18.5852	21.62%
Si 251.611†	1150739.7	30874 ug/L	1024.5	30874 ppb	1024.5	3.32%
Sn 189.927†	-63.5	-5.9004 ug/L	0.36209	-5.9004 ppb	0.36209	6.14%
Sr 421.552†	28657.0	166.68 ug/L	2.724	166.68 ppb	2.724	1.63%
Ti 334.940†	868263.9	1198.0 ug/L	40.95	1198.0 ppb	40.95	3.42%
Tl 190.801†	-101.6	-7.2897 ug/L	1.14132	-7.2897 ppb	1.14132	15.66%
U 409.014†	-12283.8	-289.95 ug/L	6.339	-289.95 ppb	6.339	2.19%
V 292.402†	21811.7	103.27 ug/L	2.271	103.27 ppb	2.271	2.20%
Zn 213.857†	35083.1	280.43 ug/L	5.923	280.43 ppb	5.923	2.11%
SiO2†	1152513.4	66183 ug/L	1458.2	66183 ppb	1458.2	2.20%

Sequence No.: 37
 Sample ID: 244601005|941727|1
 Analyst: HSC
 Initial Sample Wt:
 Dilution:

Autosampler Location: 81
 Date Collected: 1/28/2010 21:55:31
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: 244601005|941727|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5456.7	5456.7	97.7 %		21:57:44
1	Y RADIAL	6450.7	6450.7	106.0 %		21:57:44
1	Al 396.153Radial†	137987.7	141228.4	97885 ug/L	97885 ppb	21:57:24
1	Ca 317.933Radial†	27254.7	27868.8	42375 ug/L	42375 ppb	21:57:24
1	Fe 238.204 Radial†	11604.0	11868.4	100220 ug/L	100220 ppb	21:57:24
1	K 766.490 Radial†	75183.9	74556.5	12328 ug/L	12328 ppb	21:57:24
1	Mg 279.077 IEC†	547.5	558.0	18107 ug/L	18107 ppb	21:57:44
1	Na 589.592 Radial†	13600.6	14948.4	3992.3 ug/L	3992.3 ppb	21:57:24
1	Sr 421.552†	53573.4	54821.9	318.80 ug/L	318.80 ppb	21:57:24
1	Sc 361.383	969158.3	969158.3	98.489 %		21:58:41
1	Y 371.029	932965.9	932965.9	106.97 %		21:58:41
1	Ag 328.068†	-6809.5	-7235.0	5.2033 ug/L	5.2033 ppb	21:58:46
1	As 188.979†	-26.6	6.8	48.933 ug/L	48.933 ppb	21:59:06
1	B 249.677†	1136.7	1440.4	12.121 ug/L	12.121 ppb	21:58:46
1	Ba 233.527†	276066.4	280307.0	1972.9 ug/L	1972.9 ppb	21:58:46
1	Be 313.107†	1046.9	6131.0	7.9486 ug/L	7.9486 ppb	21:58:46
1	Cd 226.502†	809.2	1021.0	-0.2392 ug/L	-0.2392 ppb	21:59:06
1	Co 228.616†	2146.2	2250.9	36.978 ug/L	36.978 ppb	21:59:06
1	Cr 267.716†	8636.7	8683.7	85.934 ug/L	85.934 ppb	21:58:46
1	Cu 324.752†	27718.4	19007.2	53.386 ug/L	53.386 ppb	21:58:46
1	Mn 257.610†	1953459.7	1982901.0	2001.9 ug/L	2001.9 ppb	21:58:41
1	Mo 202.031†	-24.6	-48.0	5.3257 ug/L	5.3257 ppb	21:59:06
1	Ni 231.604†	2931.8	2866.8	64.049 ug/L	64.049 ppb	21:59:06
1	P 214.914†	1426.6	1209.0	537.13 ug/L	537.13 ppb	21:59:06
1	Pb 220.353†	570.4	637.5	83.199 ug/L	83.199 ppb	21:59:06
1	S 181.975 Axial†	587.4	528.6	626.24 ug/L	626.24 ppb	21:59:06
1	Sb 206.836†	58.2	24.0	-1.5961 ug/L	-1.5961 ppb	21:59:06
1	Se 196.026†	-516.0	-502.7	76.368 ug/L	76.368 ppb	21:59:06
1	Si 251.611†	826430.5	838651.1	22501 ug/L	22501 ppb	21:58:41
1	Sn 189.927†	-173.3	-171.4	-19.985 ug/L	-19.985 ppb	21:59:06
1	Ti 334.940†	1894243.6	1924219.1	2656.5 ug/L	2656.5 ppb	21:58:41
1	Tl 190.801†	-153.4	-116.0	-2.2413 ug/L	-2.2413 ppb	21:59:06
1	U 409.014†	-7519.0	-6249.6	-152.47 ug/L	-152.47 ppb	21:58:41
1	V 292.402†	30899.4	32813.9	164.77 ug/L	164.77 ppb	21:58:46
1	Zn 213.857†	24766.0	24403.3	192.89 ug/L	192.89 ppb	21:58:46
1	SiO2†	831050.6	843326.3	48428 ug/L	48428 ppb	22:00:15
2	Sc Radial	5500.1	5500.1	98.5 %		21:58:09
2	Y RADIAL	6502.7	6502.7	106.9 %		21:58:09
2	Al 396.153Radial†	140328.1	142491.8	98761 ug/L	98761 ppb	21:57:49
2	Ca 317.933Radial†	27582.4	27981.7	42546 ug/L	42546 ppb	21:57:49
2	Fe 238.204 Radial†	11754.0	11927.1	100720 ug/L	100720 ppb	21:57:49
2	K 766.490 Radial†	76311.3	75094.7	12417 ug/L	12417 ppb	21:57:49
2	Mg 279.077 IEC†	552.9	559.0	18140 ug/L	18140 ppb	21:58:09
2	Na 589.592 Radial†	13849.6	15091.6	4030.5 ug/L	4030.5 ppb	21:57:49
2	Sr 421.552†	54463.9	55293.9	321.55 ug/L	321.55 ppb	21:57:49
2	Sc 361.383	964970.7	964970.7	98.063 %		21:59:12
2	Y 371.029	927622.8	927622.8	106.35 %		21:59:12
2	Ag 328.068†	-6900.2	-7357.5	4.9081 ug/L	4.9081 ppb	21:59:18
2	As 188.979†	-24.2	9.1	49.903 ug/L	49.903 ppb	21:59:38
2	B 249.677†	1248.7	1559.6	14.399 ug/L	14.399 ppb	21:59:18
2	Ba 233.527†	279495.3	285020.0	2006.0 ug/L	2006.0 ppb	21:59:18
2	Be 313.107†	1126.1	6216.4	7.9796 ug/L	7.9796 ppb	21:59:18
2	Cd 226.502†	805.1	1020.3	-0.2970 ug/L	-0.2970 ppb	21:59:38
2	Co 228.616†	2181.8	2296.7	37.856 ug/L	37.856 ppb	21:59:38
2	Cr 267.716†	8688.7	8774.7	86.826 ug/L	86.826 ppb	21:59:18
2	Cu 324.752†	28083.6	19501.8	54.663 ug/L	54.663 ppb	21:59:18
2	Mn 257.610†	1946092.7	1983995.8	2003.1 ug/L	2003.1 ppb	21:59:12
2	Mo 202.031†	-42.1	-65.9	4.2583 ug/L	4.2583 ppb	21:59:38
2	Ni 231.604†	2958.5	2907.0	64.946 ug/L	64.946 ppb	21:59:38

2	P 214.914†	1415.2	1203.7	534.04 ug/L	534.04 ppb	21:59:38
2	Pb 220.353†	598.2	668.4	86.787 ug/L	86.787 ppb	21:59:38
2	S 181.975 Axial†	596.1	540.0	640.04 ug/L	640.04 ppb	21:59:38
2	Sb 206.836†	66.1	32.3	0.8676 ug/L	0.8676 ppb	21:59:38
2	Se 196.026†	-507.8	-496.7	81.220 ug/L	81.220 ppb	21:59:38
2	Si 251.611†	823359.4	839160.8	22514 ug/L	22514 ppb	21:59:12
2	Sn 189.927†	-174.5	-173.4	-20.281 ug/L	-20.281 ppb	21:59:38
2	Ti 334.940†	1887348.6	1925534.2	2658.3 ug/L	2658.3 ppb	21:59:12
2	Tl 190.801†	-171.3	-134.9	-7.6649 ug/L	-7.6649 ppb	21:59:38
2	U 409.014†	-7599.7	-6365.1	-155.13 ug/L	-155.13 ppb	21:59:12
2	V 292.402†	31233.2	33290.5	167.33 ug/L	167.33 ppb	21:59:18
2	Zn 213.857†	25038.3	24790.1	196.05 ug/L	196.05 ppb	21:59:18
2	SiO2†	831030.3	846967.3	48638 ug/L	48638 ppb	22:00:21
3	Sc Radial	5536.8	5536.8	99.1 %		21:58:34
3	Y RADIAL	6552.7	6552.7	107.7 %		21:58:34
3	Al 396.153Radial†	139759.2	140972.6	97708 ug/L	97708 ppb	21:58:14
3	Ca 317.933Radial†	27473.9	27686.4	42097 ug/L	42097 ppb	21:58:14
3	Fe 238.204 Radial†	11705.5	11799.0	99636 ug/L	99636 ppb	21:58:14
3	K 766.490 Radial†	75899.1	74164.9	12263 ug/L	12263 ppb	21:58:14
3	Mg 279.077 IEC†	553.9	556.3	18052 ug/L	18052 ppb	21:58:34
3	Na 589.592 Radial†	13738.1	14885.7	3975.5 ug/L	3975.5 ppb	21:58:14
3	Sr 421.552†	54182.6	54643.3	317.76 ug/L	317.76 ppb	21:58:14
3	Sc 361.383	977063.7	977063.7	99.292 %		21:59:43
3	Y 371.029	938679.5	938679.5	107.62 %		21:59:43
3	Ag 328.068†	-6811.8	-7181.4	5.2199 ug/L	5.2199 ppb	21:59:49
3	As 188.979†	-25.3	8.3	49.341 ug/L	49.341 ppb	22:00:09
3	B 249.677†	1172.6	1467.2	12.748 ug/L	12.748 ppb	21:59:49
3	Ba 233.527†	277497.1	279480.0	1967.1 ug/L	1967.1 ppb	21:59:49
3	Be 313.107†	1355.6	6433.4	8.0455 ug/L	8.0455 ppb	21:59:49
3	Cd 226.502†	827.3	1032.6	-0.0638 ug/L	-0.0638 ppb	22:00:09
3	Co 228.616†	2166.2	2253.5	37.030 ug/L	37.030 ppb	22:00:09
3	Cr 267.716†	8639.3	8615.3	85.263 ug/L	85.263 ppb	21:59:49
3	Cu 324.752†	27841.6	18903.6	53.093 ug/L	53.093 ppb	21:59:49
3	Mn 257.610†	1969057.1	1982561.8	2001.5 ug/L	2001.5 ppb	21:59:43
3	Mo 202.031†	-33.7	-56.9	4.7253 ug/L	4.7253 ppb	22:00:09
3	Ni 231.604†	2958.5	2869.6	64.112 ug/L	64.112 ppb	22:00:09
3	P 214.914†	1426.6	1197.2	531.72 ug/L	531.72 ppb	22:00:09
3	Pb 220.353†	589.8	652.4	84.875 ug/L	84.875 ppb	22:00:09
3	S 181.975 Axial†	596.7	533.1	631.81 ug/L	631.81 ppb	22:00:09
3	Sb 206.836†	56.7	22.0	-2.2493 ug/L	-2.2493 ppb	22:00:09
3	Se 196.026†	-505.4	-487.8	82.159 ug/L	82.159 ppb	22:00:09
3	Si 251.611†	834689.5	840179.7	22542 ug/L	22542 ppb	21:59:43
3	Sn 189.927†	-184.9	-181.6	-21.718 ug/L	-21.718 ppb	22:00:09
3	Ti 334.940†	1910253.7	1924781.8	2657.2 ug/L	2657.2 ppb	21:59:43
3	Tl 190.801†	-162.7	-124.1	-4.5768 ug/L	-4.5768 ppb	22:00:09
3	U 409.014†	-7551.4	-6220.5	-151.75 ug/L	-151.75 ppb	21:59:43
3	V 292.402†	31114.2	32776.4	164.64 ug/L	164.64 ppb	21:59:49
3	Zn 213.857†	24854.1	24288.6	191.99 ug/L	191.99 ppb	21:59:49
3	SiO2†	827768.1	833193.2	47847 ug/L	47847 ppb	22:00:27

Mean Data: 244601005|941727|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	970397.5	98.615 %	0.6241			0.63%
Sc Radial	5497.9	98.4 %	0.72			0.73%
Y 371.029	933089.4	106.98 %	0.634			0.59%
Y RADIAL	6502.0	106.9 %	0.84			0.78%
Ag 328.068†	-7258.0	5.1105 ug/L	0.17541	5.1105 ppb	0.17541	3.43%
Al 396.153Radial†	141564.3	98118 ug/L	563.8	98118 ppb	563.8	0.57%
As 188.979†	8.1	49.392 ug/L	0.4872	49.392 ppb	0.4872	0.99%
B 249.677†	1489.0	13.089 ug/L	1.1765	13.089 ppb	1.1765	8.99%
Ba 233.527†	281602.3	1982.0 ug/L	21.02	1982.0 ppb	21.02	1.06%
Be 313.107†	6260.3	7.9912 ug/L	0.04944	7.9912 ppb	0.04944	0.62%
Ca 317.933Radial†	27845.6	42339 ug/L	226.5	42339 ppb	226.5	0.54%
Cd 226.502†	1024.6	-0.2000 ug/L	0.12147	-0.2000 ppb	0.12147	60.74%
Co 228.616†	2267.1	37.288 ug/L	0.4930	37.288 ppb	0.4930	1.32%
Cr 267.716†	8691.2	86.008 ug/L	0.7837	86.008 ppb	0.7837	0.91%
Cu 324.752†	19137.5	53.714 ug/L	0.8347	53.714 ppb	0.8347	1.55%
Fe 238.204 Radial†	11864.8	100190 ug/L	541.3	100190 ppb	541.3	0.54%
K 766.490 Radial†	74605.4	12336 ug/L	77.2	12336 ppb	77.2	0.63%

Mg 279.077 IEC†	557.8	18100 ug/L	44.5	18100 ppb	44.5	0.25%
Mn 257.610†	1983152.9	2002.2 ug/L	0.80	2002.2 ppb	0.80	0.04%
Mo 202.031†	-56.9	4.7698 ug/L	0.53508	4.7698 ppb	0.53508	11.22%
Na 589.592 Radial†	14975.2	3999.4 ug/L	28.18	3999.4 ppb	28.18	0.70%
Ni 231.604†	2881.1	64.369 ug/L	0.5008	64.369 ppb	0.5008	0.78%
P 214.914†	1203.3	534.30 ug/L	2.713	534.30 ppb	2.713	0.51%
Pb 220.353†	652.7	84.954 ug/L	1.7954	84.954 ppb	1.7954	2.11%
S 181.975 Axial†	533.9	632.70 ug/L	6.943	632.70 ppb	6.943	1.10%
Sb 206.836†	26.1	-0.9926 ug/L	1.64371	-0.9926 ppb	1.64371	165.60%
Se 196.026†	-495.7	79.915 ug/L	3.1080	79.915 ppb	3.1080	3.89%
Si 251.611†	839330.6	22519 ug/L	20.9	22519 ppb	20.9	0.09%
Sn 189.927†	-175.5	-20.661 ug/L	0.9272	-20.661 ppb	0.9272	4.49%
Sr 421.552†	54919.7	319.37 ug/L	1.955	319.37 ppb	1.955	0.61%
Ti 334.940†	1924845.0	2657.3 ug/L	0.92	2657.3 ppb	0.92	0.03%
Tl 190.801†	-125.0	-4.8276 ug/L	2.72052	-4.8276 ppb	2.72052	56.35%
U 409.014†	-6278.4	-153.12 ug/L	1.782	-153.12 ppb	1.782	1.16%
V 292.402†	32960.3	165.58 ug/L	1.512	165.58 ppb	1.512	0.91%
Zn 213.857†	24494.0	193.64 ug/L	2.134	193.64 ppb	2.134	1.10%
SiO2†	841162.3	48304 ug/L	409.9	48304 ppb	409.9	0.85%

Sequence No.: 38
 Sample ID: 244601006|941727|1
 Analyst: HSC
 Initial Sample Wt:
 Dilution:

Autosampler Location: 82
 Date Collected: 1/28/2010 22:02:38
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: 244601006|941727|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5537.5	5537.5	99.1 %		22:04:51
1	Y RADIAL	6905.4	6905.4	113.5 %		22:04:51
1	Al 396.153Radial†	226258.0	228195.1	158160 ug/L	158160 ppb	22:04:31
1	Ca 317.933Radial†	14928.3	15029.6	22853 ug/L	22853 ppb	22:04:31
1	Fe 238.204 Radial†	16739.4	16874.6	142500 ug/L	142500 ppb	22:04:31
1	K 766.490 Radial†	103833.9	102329.4	16933 ug/L	16933 ppb	22:04:31
1	Mg 279.077 IEC†	686.2	689.7	22361 ug/L	22361 ppb	22:04:51
1	Na 589.592 Radial†	5091.6	6163.3	1646.0 ug/L	1646.0 ppb	22:04:31
1	Sr 421.552†	45994.3	46377.7	269.79 ug/L	269.79 ppb	22:04:31
1	Sc 361.383	938973.9	938973.9	95.421 %		22:05:55
1	Y 371.029	989555.6	989555.6	113.45 %		22:05:49
1	Ag 328.068†	-10107.3	-10913.2	5.6294 ug/L	5.6294 ppb	22:05:55
1	As 188.979†	-63.6	-32.8	70.519 ug/L	70.519 ppb	22:06:15
1	B 249.677†	1750.4	2120.7	18.660 ug/L	18.660 ppb	22:05:55
1	Ba 233.527†	247264.0	259133.2	1825.6 ug/L	1825.6 ppb	22:05:55
1	Be 313.107†	-7227.3	-2506.1	12.067 ug/L	12.067 ppb	22:05:55
1	Cd 226.502†	1274.4	1534.9	0.5232 ug/L	0.5232 ppb	22:06:15
1	Co 228.616†	3251.7	3479.6	53.446 ug/L	53.446 ppb	22:06:15
1	Cr 267.716†	22354.9	23342.0	228.17 ug/L	228.17 ppb	22:06:15
1	Cu 324.752†	34487.5	27005.8	75.850 ug/L	75.850 ppb	22:05:55
1	Mn 257.610†	3122699.4	3272004.8	3301.5 ug/L	3301.5 ppb	22:05:49
1	Mo 202.031†	21.1	-0.9	11.279 ug/L	11.279 ppb	22:06:15
1	Ni 231.604†	6520.5	6723.4	150.23 ug/L	150.23 ppb	22:06:15
1	P 214.914†	1825.5	1673.5	745.93 ug/L	745.93 ppb	22:06:15
1	Pb 220.353†	1038.4	1146.5	148.44 ug/L	148.44 ppb	22:06:15
1	S 181.975 Axial†	566.7	526.1	611.91 ug/L	611.91 ppb	22:06:15
1	Sb 206.836†	91.9	61.2	-0.4087 ug/L	-0.4087 ppb	22:06:15
1	Se 196.026†	-735.0	-749.2	91.934 ug/L	91.934 ppb	22:06:15
1	Si 251.611†	1281402.7	1342428.7	36017 ug/L	36017 ppb	22:05:49
1	Sn 189.927†	-136.2	-138.2	-16.795 ug/L	-16.795 ppb	22:06:15
1	Ti 334.940†	3919076.6	4108037.6	5663.6 ug/L	5663.6 ppb	22:05:49
1	Tl 190.801†	-259.6	-232.3	-4.7082 ug/L	-4.7082 ppb	22:06:15
1	U 409.014†	-9243.8	-8302.6	-203.88 ug/L	-203.88 ppb	22:05:55
1	V 292.402†	48127.3	51877.1	261.24 ug/L	261.24 ppb	22:05:55
1	Zn 213.857†	29898.3	30590.2	239.70 ug/L	239.70 ppb	22:06:15
1	SiO2†	1278104.8	1338956.7	76890 ug/L	76890 ppb	22:07:25
2	Sc Radial	5542.4	5542.4	99.2 %		22:05:16
2	Y RADIAL	6931.2	6931.2	113.9 %		22:05:16
2	Al 396.153Radial†	225061.0	226789.9	157190 ug/L	157190 ppb	22:04:56
2	Ca 317.933Radial†	14803.5	14890.7	22641 ug/L	22641 ppb	22:04:56
2	Fe 238.204 Radial†	16552.7	16671.7	140780 ug/L	140780 ppb	22:04:56
2	K 766.490 Radial†	103091.3	101489.8	16794 ug/L	16794 ppb	22:04:56
2	Mg 279.077 IEC†	676.1	678.9	22009 ug/L	22009 ppb	22:05:16
2	Na 589.592 Radial†	5075.2	6142.4	1640.4 ug/L	1640.4 ppb	22:04:56
2	Sr 421.552†	45710.3	46051.0	267.89 ug/L	267.89 ppb	22:04:56
2	Sc 361.383	942665.0	942665.0	95.796 %		22:06:26
2	Y 371.029	987204.7	987204.7	113.18 %		22:06:21
2	Ag 328.068†	-10232.5	-11002.5	4.7428 ug/L	4.7428 ppb	22:06:26
2	As 188.979†	-71.2	-40.5	67.200 ug/L	67.200 ppb	22:06:47
2	B 249.677†	1799.4	2164.6	19.809 ug/L	19.809 ppb	22:06:26
2	Ba 233.527†	248222.8	259119.5	1825.5 ug/L	1825.5 ppb	22:06:26
2	Be 313.107†	-7097.8	-2341.2	12.086 ug/L	12.086 ppb	22:06:26
2	Cd 226.502†	1287.3	1543.1	0.7810 ug/L	0.7810 ppb	22:06:47
2	Co 228.616†	3260.9	3475.8	53.430 ug/L	53.430 ppb	22:06:47
2	Cr 267.716†	22246.4	23137.0	226.16 ug/L	226.16 ppb	22:06:47
2	Cu 324.752†	35069.2	27471.5	76.936 ug/L	76.936 ppb	22:06:26
2	Mn 257.610†	3123713.9	3260249.8	3289.5 ug/L	3289.5 ppb	22:06:21
2	Mo 202.031†	19.3	-2.8	11.026 ug/L	11.026 ppb	22:06:47
2	Ni 231.604†	6497.7	6672.9	149.10 ug/L	149.10 ppb	22:06:47

2	P 214.914†	1810.5	1650.4	735.28 ug/L	735.28 ppb	22:06:47
2	Pb 220.353†	1027.9	1131.3	146.69 ug/L	146.69 ppb	22:06:47
2	S 181.975 Axial†	557.0	513.6	596.89 ug/L	596.89 ppb	22:06:47
2	Sb 206.836†	92.1	61.0	-0.4401 ug/L	-0.4401 ppb	22:06:47
2	Se 196.026†	-722.6	-733.2	94.508 ug/L	94.508 ppb	22:06:47
2	Si 251.611†	1283979.4	1339860.2	35948 ug/L	35948 ppb	22:06:21
2	Sn 189.927†	-141.5	-143.1	-17.660 ug/L	-17.660 ppb	22:06:47
2	Ti 334.940†	3924401.8	4097514.6	5649.1 ug/L	5649.1 ppb	22:06:21
2	Tl 190.801†	-253.5	-224.9	-2.7685 ug/L	-2.7685 ppb	22:06:47
2	U 409.014†	-9296.7	-8319.9	-204.07 ug/L	-204.07 ppb	22:06:26
2	V 292.402†	48518.2	52087.5	262.67 ug/L	262.67 ppb	22:06:26
2	Zn 213.857†	29819.4	30385.2	238.16 ug/L	238.16 ppb	22:06:47
2	SiO2†	1285307.5	1341230.8	77021 ug/L	77021 ppb	22:07:31
3	Sc Radial	5563.9	5563.9	99.6 %		22:05:41
3	Y RADIAL	6955.9	6955.9	114.3 %		22:05:41
3	Al 396.153Radial†	226519.6	227376.3	157590 ug/L	157590 ppb	22:05:21
3	Ca 317.933Radial†	14926.1	14956.0	22741 ug/L	22741 ppb	22:05:21
3	Fe 238.204 Radial†	16657.2	16712.1	141120 ug/L	141120 ppb	22:05:21
3	K 766.490 Radial†	103780.0	101779.0	16842 ug/L	16842 ppb	22:05:21
3	Mg 279.077 IEC†	681.5	681.7	22100 ug/L	22100 ppb	22:05:41
3	Na 589.592 Radial†	5084.1	6131.4	1637.5 ug/L	1637.5 ppb	22:05:21
3	Sr 421.552†	45958.0	46121.4	268.30 ug/L	268.30 ppb	22:05:21
3	Sc 361.383	934228.1	934228.1	94.939 %		22:06:58
3	Y 371.029	994333.9	994333.9	114.00 %		22:06:53
3	Ag 328.068†	-10041.3	-10897.5	5.2426 ug/L	5.2426 ppb	22:06:58
3	As 188.979†	-94.6	-65.8	58.813 ug/L	58.813 ppb	22:07:18
3	B 249.677†	1715.1	2092.8	18.329 ug/L	18.329 ppb	22:06:58
3	Ba 233.527†	244931.6	257992.8	1817.6 ug/L	1817.6 ppb	22:06:58
3	Be 313.107†	-7109.8	-2420.8	12.244 ug/L	12.244 ppb	22:06:58
3	Cd 226.502†	1296.1	1564.5	0.9594 ug/L	0.9594 ppb	22:07:18
3	Co 228.616†	3262.8	3508.6	53.878 ug/L	53.878 ppb	22:07:18
3	Cr 267.716†	22388.7	23496.6	229.63 ug/L	229.63 ppb	22:07:18
3	Cu 324.752†	34395.3	27092.2	75.994 ug/L	75.994 ppb	22:06:58
3	Mn 257.610†	3138235.0	3304992.8	3334.5 ug/L	3334.5 ppb	22:06:53
3	Mo 202.031†	14.3	-7.9	10.739 ug/L	10.739 ppb	22:07:18
3	Ni 231.604†	6516.7	6754.1	150.92 ug/L	150.92 ppb	22:07:18
3	P 214.914†	1811.8	1668.9	744.55 ug/L	744.55 ppb	22:07:18
3	Pb 220.353†	1010.7	1122.9	145.81 ug/L	145.81 ppb	22:07:18
3	S 181.975 Axial†	568.7	531.2	618.19 ug/L	618.19 ppb	22:07:18
3	Sb 206.836†	94.4	64.3	0.3113 ug/L	0.3113 ppb	22:07:18
3	Se 196.026†	-738.9	-757.2	83.185 ug/L	83.185 ppb	22:07:18
3	Si 251.611†	1289422.1	1357697.3	36427 ug/L	36427 ppb	22:06:53
3	Sn 189.927†	-130.5	-132.9	-15.970 ug/L	-15.970 ppb	22:07:18
3	Ti 334.940†	3944811.1	4156007.9	5729.7 ug/L	5729.7 ppb	22:06:53
3	Tl 190.801†	-261.3	-235.5	-4.9232 ug/L	-4.9232 ppb	22:07:18
3	U 409.014†	-9099.4	-8199.7	-201.41 ug/L	-201.41 ppb	22:06:58
3	V 292.402†	47806.3	51795.2	260.91 ug/L	260.91 ppb	22:06:58
3	Zn 213.857†	29846.8	30695.2	240.70 ug/L	240.70 ppb	22:07:18
3	SiO2†	1288997.8	1357234.7	77940 ug/L	77940 ppb	22:07:36

Mean Data: 244601006|941727|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	938622.3	95.386 %	0.4298			0.45%
Sc Radial	5547.9	99.3 %	0.25			0.25%
Y 371.029	990364.8	113.55 %	0.417			0.37%
Y RADIAL	6930.8	113.9 %	0.42			0.36%
Ag 328.068†	-10937.8	5.2049 ug/L	0.44446	5.2049 ppb	0.44446	8.54%
Al 396.153Radial†	227453.8	157650 ug/L	489.2	157650 ppb	489.2	0.31%
As 188.979†	-46.4	65.511 ug/L	6.0331	65.511 ppb	6.0331	9.21%
B 249.677†	2126.0	18.932 ug/L	0.7767	18.932 ppb	0.7767	4.10%
Ba 233.527†	258748.5	1822.9 ug/L	4.61	1822.9 ppb	4.61	0.25%
Be 313.107†	-2422.7	12.132 ug/L	0.0971	12.132 ppb	0.0971	0.80%
Ca 317.933Radial†	14958.8	22745 ug/L	105.7	22745 ppb	105.7	0.46%
Cd 226.502†	1547.5	0.7545 ug/L	0.21932	0.7545 ppb	0.21932	29.07%
Co 228.616†	3488.0	53.585 ug/L	0.2540	53.585 ppb	0.2540	0.47%
Cr 267.716†	23325.2	227.98 ug/L	1.741	227.98 ppb	1.741	0.76%
Cu 324.752†	27189.8	76.260 ug/L	0.5897	76.260 ppb	0.5897	0.77%
Fe 238.204 Radial†	16752.8	141470 ug/L	906.9	141470 ppb	906.9	0.64%
K 766.490 Radial†	101866.0	16857 ug/L	70.6	16857 ppb	70.6	0.42%

Mg 279.077 IEC†	683.4	22157 ug/L	182.9	22157 ppb	182.9	0.83%
Mn 257.610†	3279082.4	3308.5 ug/L	23.30	3308.5 ppb	23.30	0.70%
Mo 202.031†	-3.9	11.015 ug/L	0.2705	11.015 ppb	0.2705	2.46%
Na 589.592 Radial†	6145.7	1641.3 ug/L	4.33	1641.3 ppb	4.33	0.26%
Ni 231.604†	6716.8	150.08 ug/L	0.917	150.08 ppb	0.917	0.61%
P 214.914†	1664.3	741.92 ug/L	5.793	741.92 ppb	5.793	0.78%
Pb 220.353†	1133.6	146.98 ug/L	1.337	146.98 ppb	1.337	0.91%
S 181.975 Axial†	523.6	609.00 ug/L	10.945	609.00 ppb	10.945	1.80%
Sb 206.836†	62.2	-0.1792 ug/L	0.42508	-0.1792 ppb	0.42508	237.26%
Se 196.026†	-746.5	89.876 ug/L	5.9354	89.876 ppb	5.9354	6.60%
Si 251.611†	1346662.1	36131 ug/L	258.7	36131 ppb	258.7	0.72%
Sn 189.927†	-138.0	-16.808 ug/L	0.8455	-16.808 ppb	0.8455	5.03%
Sr 421.552†	46183.4	268.66 ug/L	1.000	268.66 ppb	1.000	0.37%
Ti 334.940†	4120520.0	5680.8 ug/L	42.98	5680.8 ppb	42.98	0.76%
Tl 190.801†	-230.9	-4.1333 ug/L	1.18687	-4.1333 ppb	1.18687	28.71%
U 409.014†	-8274.1	-203.12 ug/L	1.485	-203.12 ppb	1.485	0.73%
V 292.402†	51919.9	261.61 ug/L	0.933	261.61 ppb	0.933	0.36%
Zn 213.857†	30556.9	239.52 ug/L	1.277	239.52 ppb	1.277	0.53%
SiO2†	1345807.4	77284 ug/L	572.0	77284 ppb	572.0	0.74%

Sequence No.: 39
 Sample ID: 244601007|941727|1
 Analyst: HSC
 Initial Sample Wt:
 Dilution:

Autosampler Location: 83
 Date Collected: 1/28/2010 22:09:48
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: 244601007|941727|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5512.0	5512.0	98.7 %		22:12:02
1	Y RADIAL	6595.5	6595.5	108.4 %		22:12:02
1	Al 396.153Radial†	100092.1	101414.3	70290 ug/L	70290 ppb	22:11:42
1	Ca 317.933Radial†	11312.1	11435.2	17387 ug/L	17387 ppb	22:11:42
1	Fe 238.204 Radial†	11064.2	11202.4	94597 ug/L	94597 ppb	22:11:42
1	K 766.490 Radial†	80796.5	79471.6	13151 ug/L	13151 ppb	22:11:42
1	Mg 279.077 IEC†	465.9	469.7	15229 ug/L	15229 ppb	22:12:02
1	Na 589.592 Radial†	847.6	1886.8	503.92 ug/L	503.92 ppb	22:11:42
1	Sr 421.552†	31355.4	31759.7	184.74 ug/L	184.74 ppb	22:11:42
1	Sc 361.383	977794.4	977794.4	99.366 %		22:12:59
1	Y 371.029	952694.4	952694.4	109.23 %		22:12:59
1	Ag 328.068†	-6472.0	-6834.3	5.2145 ug/L	5.2145 ppb	22:13:04
1	As 188.979†	-34.2	-0.6	44.472 ug/L	44.472 ppb	22:13:24
1	B 249.677†	1136.8	1430.3	12.840 ug/L	12.840 ppb	22:13:04
1	Ba 233.527†	136845.1	137722.3	970.90 ug/L	970.90 ppb	22:13:04
1	Be 313.107†	-2670.9	2380.1	6.6472 ug/L	6.6472 ppb	22:13:04
1	Cd 226.502†	771.8	976.0	-0.1031 ug/L	-0.1031 ppb	22:13:24
1	Co 228.616†	2094.5	2179.7	35.329 ug/L	35.329 ppb	22:13:24
1	Cr 267.716†	8839.1	8809.9	87.030 ug/L	87.030 ppb	22:13:04
1	Cu 324.752†	30660.8	21719.7	59.940 ug/L	59.940 ppb	22:13:04
1	Mn 257.610†	2243272.2	2257043.3	2277.0 ug/L	2277.0 ppb	22:12:59
1	Mo 202.031†	3.1	-19.8	6.3259 ug/L	6.3259 ppb	22:13:24
1	Ni 231.604†	2987.6	2896.7	64.717 ug/L	64.717 ppb	22:13:24
1	P 214.914†	1636.2	1407.1	632.35 ug/L	632.35 ppb	22:13:24
1	Pb 220.353†	748.8	811.9	96.831 ug/L	96.831 ppb	22:13:24
1	S 181.975 Axial†	593.9	529.9	632.98 ug/L	632.98 ppb	22:13:24
1	Sb 206.836†	46.3	11.5	-4.4378 ug/L	-4.4378 ppb	22:13:24
1	Se 196.026†	-482.6	-464.5	75.887 ug/L	75.887 ppb	22:13:24
1	Si 251.611†	1198100.1	1205279.4	32337 ug/L	32337 ppb	22:12:59
1	Sn 189.927†	-125.4	-121.6	-15.709 ug/L	-15.709 ppb	22:13:24
1	Ti 334.940†	1872276.3	1885124.5	2599.5 ug/L	2599.5 ppb	22:12:59
1	Tl 190.801†	-161.5	-122.8	-3.2951 ug/L	-3.2951 ppb	22:13:24
1	U 409.014†	-7701.9	-6366.2	-154.46 ug/L	-154.46 ppb	22:12:59
1	V 292.402†	29679.5	31309.1	157.26 ug/L	157.26 ppb	22:13:04
1	Zn 213.857†	26811.0	26239.2	208.70 ug/L	208.70 ppb	22:13:04
1	SiO2†	1186684.5	1193775.2	68553 ug/L	68553 ppb	22:14:33
2	Sc Radial	5452.8	5452.8	97.6 %		22:12:27
2	Y RADIAL	6543.1	6543.1	107.6 %		22:12:27
2	Al 396.153Radial†	101207.6	103658.7	71846 ug/L	71846 ppb	22:12:07
2	Ca 317.933Radial†	11356.6	11605.3	17646 ug/L	17646 ppb	22:12:07
2	Fe 238.204 Radial†	11206.5	11469.9	96856 ug/L	96856 ppb	22:12:07
2	K 766.490 Radial†	81666.7	81252.3	13446 ug/L	13446 ppb	22:12:07
2	Mg 279.077 IEC†	474.0	483.1	15665 ug/L	15665 ppb	22:12:27
2	Na 589.592 Radial†	888.0	1937.5	517.46 ug/L	517.46 ppb	22:12:07
2	Sr 421.552†	31883.1	32645.2	189.89 ug/L	189.89 ppb	22:12:07
2	Sc 361.383	970251.7	970251.7	98.600 %		22:13:30
2	Y 371.029	946211.5	946211.5	108.48 %		22:13:30
2	Ag 328.068†	-6382.5	-6794.1	6.0971 ug/L	6.0971 ppb	22:13:36
2	As 188.979†	-42.2	-8.9	41.973 ug/L	41.973 ppb	22:13:56
2	B 249.677†	1195.1	1498.3	13.817 ug/L	13.817 ppb	22:13:36
2	Ba 233.527†	136534.1	138477.5	976.28 ug/L	976.28 ppb	22:13:36
2	Be 313.107†	-2827.0	2200.9	6.5931 ug/L	6.5931 ppb	22:13:36
2	Cd 226.502†	796.0	1006.6	-0.0330 ug/L	-0.0330 ppb	22:13:56
2	Co 228.616†	2101.2	2202.9	35.740 ug/L	35.740 ppb	22:13:56
2	Cr 267.716†	8885.6	8926.3	88.196 ug/L	88.196 ppb	22:13:36
2	Cu 324.752†	30765.7	22066.0	60.934 ug/L	60.934 ppb	22:13:36
2	Mn 257.610†	2228199.5	2259306.9	2279.5 ug/L	2279.5 ppb	22:13:30
2	Mo 202.031†	2.4	-20.5	6.4635 ug/L	6.4635 ppb	22:13:56
2	Ni 231.604†	3001.6	2934.2	65.555 ug/L	65.555 ppb	22:13:56

2	P 214.914†	1647.0	1430.9	642.61 ug/L	642.61 ppb	22:13:56
2	Pb 220.353†	765.7	834.9	99.512 ug/L	99.512 ppb	22:13:56
2	S 181.975 Axial†	597.3	538.0	642.54 ug/L	642.54 ppb	22:13:56
2	Sb 206.836†	61.1	26.9	0.2081 ug/L	0.2081 ppb	22:13:56
2	Se 196.026†	-465.0	-450.4	90.767 ug/L	90.767 ppb	22:13:56
2	Si 251.611†	1189648.3	1206081.0	32359 ug/L	32359 ppb	22:13:30
2	Sn 189.927†	-121.5	-118.6	-15.149 ug/L	-15.149 ppb	22:13:56
2	Ti 334.940†	1858524.5	1885825.1	2600.4 ug/L	2600.4 ppb	22:13:30
2	Tl 190.801†	-154.3	-116.8	-1.5617 ug/L	-1.5617 ppb	22:13:56
2	U 409.014†	-7608.5	-6331.8	-153.95 ug/L	-153.95 ppb	22:13:30
2	V 292.402†	29546.4	31406.3	157.48 ug/L	157.48 ppb	22:13:36
2	Zn 213.857†	26810.6	26448.6	210.21 ug/L	210.21 ppb	22:13:36
2	SiO2†	1200581.6	1217153.7	69896 ug/L	69896 ppb	22:14:39
3	Sc Radial	5505.4	5505.4	98.6 %		22:12:52
3	Y RADIAL	6591.9	6591.9	108.4 %		22:12:52
3	Al 396.153Radial†	101608.5	103074.1	71441 ug/L	71441 ppb	22:12:32
3	Ca 317.933Radial†	11376.9	11514.6	17508 ug/L	17508 ppb	22:12:32
3	Fe 238.204 Radial†	11171.2	11324.3	95627 ug/L	95627 ppb	22:12:32
3	K 766.490 Radial†	81829.4	80617.5	13341 ug/L	13341 ppb	22:12:32
3	Mg 279.077 IEC†	477.7	482.3	15639 ug/L	15639 ppb	22:12:52
3	Na 589.592 Radial†	807.9	1847.6	493.43 ug/L	493.43 ppb	22:12:32
3	Sr 421.552†	31868.5	32318.2	187.99 ug/L	187.99 ppb	22:12:32
3	Sc 361.383	974465.1	974465.1	99.028 %		22:14:01
3	Y 371.029	951263.9	951263.9	109.06 %		22:14:01
3	Ag 328.068†	-6514.7	-6899.6	5.2854 ug/L	5.2854 ppb	22:14:07
3	As 188.979†	-36.6	-3.1	43.720 ug/L	43.720 ppb	22:14:27
3	B 249.677†	1265.2	1563.9	15.317 ug/L	15.317 ppb	22:14:07
3	Ba 233.527†	135656.9	136992.9	965.80 ug/L	965.80 ppb	22:14:07
3	Be 313.107†	-3005.5	2033.1	6.5232 ug/L	6.5232 ppb	22:14:07
3	Cd 226.502†	800.0	1007.2	0.0997 ug/L	0.0997 ppb	22:14:27
3	Co 228.616†	2100.1	2192.5	35.572 ug/L	35.572 ppb	22:14:27
3	Cr 267.716†	8830.9	8832.1	87.259 ug/L	87.259 ppb	22:14:07
3	Cu 324.752†	30477.4	21640.0	59.791 ug/L	59.791 ppb	22:14:07
3	Mn 257.610†	2229500.3	2250849.3	2270.9 ug/L	2270.9 ppb	22:14:01
3	Mo 202.031†	6.3	-16.6	6.6055 ug/L	6.6055 ppb	22:14:27
3	Ni 231.604†	2976.4	2895.6	64.693 ug/L	64.693 ppb	22:14:27
3	P 214.914†	1649.2	1425.9	641.24 ug/L	641.24 ppb	22:14:27
3	Pb 220.353†	755.4	821.2	98.010 ug/L	98.010 ppb	22:14:27
3	S 181.975 Axial†	601.2	539.3	644.26 ug/L	644.26 ppb	22:14:27
3	Sb 206.836†	51.4	16.8	-2.7956 ug/L	-2.7956 ppb	22:14:27
3	Se 196.026†	-470.0	-453.5	85.085 ug/L	85.085 ppb	22:14:27
3	Si 251.611†	1190031.7	1201251.3	32229 ug/L	32229 ppb	22:14:01
3	Sn 189.927†	-113.2	-109.8	-13.736 ug/L	-13.736 ppb	22:14:27
3	Ti 334.940†	1861189.8	1880366.7	2592.9 ug/L	2592.9 ppb	22:14:01
3	Tl 190.801†	-159.3	-121.1	-2.9050 ug/L	-2.9050 ppb	22:14:27
3	U 409.014†	-7438.0	-6126.3	-149.17 ug/L	-149.17 ppb	22:14:01
3	V 292.402†	29226.6	30953.9	155.17 ug/L	155.17 ppb	22:14:07
3	Zn 213.857†	26487.7	26005.0	206.65 ug/L	206.65 ppb	22:14:07
3	SiO2†	1195729.3	1206989.0	69312 ug/L	69312 ppb	22:14:45

Mean Data: 244601007|941727|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	974170.4	98.998 %	0.3841			0.39%
Sc Radial	5490.1	98.3 %	0.58			0.59%
Y 371.029	950056.6	108.92 %	0.390			0.36%
Y RADIAL	6576.9	108.1 %	0.48			0.44%
Ag 328.068†	-6842.7	5.5323 ug/L	0.49036	5.5323 ppb	0.49036	8.86%
Al 396.153Radial†	102715.7	71192 ug/L	807.0	71192 ppb	807.0	1.13%
As 188.979†	-4.2	43.388 ug/L	1.2817	43.388 ppb	1.2817	2.95%
B 249.677†	1497.5	13.991 ug/L	1.2479	13.991 ppb	1.2479	8.92%
Ba 233.527†	137730.9	970.99 ug/L	5.237	970.99 ppb	5.237	0.54%
Be 313.107†	2204.7	6.5878 ug/L	0.06215	6.5878 ppb	0.06215	0.94%
Ca 317.933Radial†	11518.4	17514 ug/L	129.4	17514 ppb	129.4	0.74%
Cd 226.502†	996.6	-0.0121 ug/L	0.10299	-0.0121 ppb	0.10299	851.33%
Co 228.616†	2191.7	35.547 ug/L	0.2068	35.547 ppb	0.2068	0.58%
Cr 267.716†	8856.1	87.495 ug/L	0.6175	87.495 ppb	0.6175	0.71%
Cu 324.752†	21808.6	60.222 ug/L	0.6215	60.222 ppb	0.6215	1.03%
Fe 238.204 Radial†	11332.2	95693 ug/L	1130.9	95693 ppb	1130.9	1.18%
K 766.490 Radial†	80447.2	13313 ug/L	149.4	13313 ppb	149.4	1.12%

Mg 279.077 IEC†	478.3	15511 ug/L	244.4	15511 ppb	244.4	1.58%
Mn 257.610†	2255733.1	2275.8 ug/L	4.44	2275.8 ppb	4.44	0.19%
Mo 202.031†	-19.0	6.4650 ug/L	0.13981	6.4650 ppb	0.13981	2.16%
Na 589.592 Radial†	1890.6	504.94 ug/L	12.044	504.94 ppb	12.044	2.39%
Ni 231.604†	2908.8	64.988 ug/L	0.4913	64.988 ppb	0.4913	0.76%
P 214.914†	1421.3	638.73 ug/L	5.566	638.73 ppb	5.566	0.87%
Pb 220.353†	822.7	98.117 ug/L	1.3436	98.117 ppb	1.3436	1.37%
S 181.975 Axial†	535.7	639.93 ug/L	6.077	639.93 ppb	6.077	0.95%
Sb 206.836†	18.4	-2.3418 ug/L	2.35597	-2.3418 ppb	2.35597	100.61%
Se 196.026†	-456.2	83.913 ug/L	7.5088	83.913 ppb	7.5088	8.95%
Si 251.611†	1204203.9	32308 ug/L	69.4	32308 ppb	69.4	0.21%
Sn 189.927†	-116.7	-14.865 ug/L	1.0171	-14.865 ppb	1.0171	6.84%
Sr 421.552†	32241.0	187.54 ug/L	2.606	187.54 ppb	2.606	1.39%
Ti 334.940†	1883772.1	2597.6 ug/L	4.10	2597.6 ppb	4.10	0.16%
Tl 190.801†	-120.2	-2.5873 ug/L	0.90937	-2.5873 ppb	0.90937	35.15%
U 409.014†	-6274.8	-152.53 ug/L	2.917	-152.53 ppb	2.917	1.91%
V 292.402†	31223.1	156.63 ug/L	1.277	156.63 ppb	1.277	0.82%
Zn 213.857†	26230.9	208.52 ug/L	1.790	208.52 ppb	1.790	0.86%
SiO2†	1205972.7	69254 ug/L	673.2	69254 ppb	673.2	0.97%

Sequence No.: 40

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 1/28/2010 22:16:56

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5337.6	5337.6	95.6 %		22:18:47
1	Y RADIAL	5776.3	5776.3	94.95 %		22:18:47
1	Al 396.153Radial†	6849.9	7163.7	4941.5 ug/L	4941.5 ppb	22:18:47
1	Ca 317.933Radial†	3231.6	3354.7	5100.8 ug/L	5100.8 ppb	22:19:07
1	Fe 238.204 Radial†	603.3	622.9	5274.3 ug/L	5274.3 ppb	22:19:07
1	K 766.490 Radial†	31930.8	31015.9	5129.0 ug/L	5129.0 ppb	22:18:47
1	Mg 279.077 IEC†	159.0	164.0	5352.1 ug/L	5352.1 ppb	22:19:07
1	Na 589.592 Radial†	34906.8	37553.1	10029 ug/L	10029 ppb	22:18:47
1	Sr 421.552†	82008.6	85799.3	499.40 ug/L	499.40 ppb	22:18:47
1	Sc 361.383	950900.4	950900.4	96.633 %		22:20:05
1	Y 371.029	832895.6	832895.6	95.492 %		22:20:05
1	Ag 328.068†	125785.4	129846.7	497.23 ug/L	497.23 ppb	22:20:10
1	As 188.979†	1251.4	1328.9	486.39 ug/L	486.39 ppb	22:20:30
1	B 249.677†	22997.2	24084.7	474.65 ug/L	474.65 ppb	22:20:10
1	Ba 233.527†	65978.4	68281.7	480.96 ug/L	480.96 ppb	22:20:10
1	Be 313.107†	1474523.6	1530963.2	482.41 ug/L	482.41 ppb	22:20:05
1	Cd 226.502†	46939.4	48774.1	482.33 ug/L	482.33 ppb	22:20:10
1	Co 228.616†	24300.9	25219.3	482.67 ug/L	482.67 ppb	22:20:10
1	Cr 267.716†	48112.7	49703.4	479.51 ug/L	479.51 ppb	22:20:10
1	Cu 324.752†	191494.1	189029.1	477.41 ug/L	477.41 ppb	22:20:10
1	Mn 257.610†	467824.7	483590.5	486.30 ug/L	486.30 ppb	22:20:05
1	Mo 202.031†	7672.4	7916.7	488.89 ug/L	488.89 ppb	22:20:30
1	Ni 231.604†	20958.3	21578.5	482.00 ug/L	482.00 ppb	22:20:10
1	P 214.914†	4885.1	4815.8	2309.6 ug/L	2309.6 ppb	22:20:30
1	Pb 220.353†	4120.8	4322.7	483.74 ug/L	483.74 ppb	22:20:30
1	S 181.975 Axial†	809.7	770.1	938.13 ug/L	938.13 ppb	22:20:30
1	Sb 206.836†	1599.6	1620.2	505.05 ug/L	505.05 ppb	22:20:30
1	Se 196.026†	884.6	936.6	505.93 ug/L	505.93 ppb	22:20:30
1	Si 251.611†	89498.2	92156.0	2466.5 ug/L	2466.5 ppb	22:20:10
1	Sn 189.927†	2852.3	2956.2	485.80 ug/L	485.80 ppb	22:20:30
1	Ti 334.940†	351406.5	364559.1	502.35 ug/L	502.35 ppb	22:20:05
1	Tl 190.801†	1576.0	1670.7	482.37 ug/L	482.37 ppb	22:20:30
1	U 409.014†	19400.5	21461.2	482.05 ug/L	482.05 ppb	22:20:10
1	V 292.402†	81844.8	86136.7	484.66 ug/L	484.66 ppb	22:20:10
1	Zn 213.857†	56848.7	58086.6	479.16 ug/L	479.16 ppb	22:20:10
1	SiO2†	89698.6	92347.5	5289.8 ug/L	5289.8 ppb	22:21:38
2	Sc Radial	5301.4	5301.4	94.9 %		22:19:12
2	Y RADIAL	5756.5	5756.5	94.62 %		22:19:12
2	Al 396.153Radial†	6825.6	7187.1	4957.7 ug/L	4957.7 ppb	22:19:12
2	Ca 317.933Radial†	3232.7	3378.9	5137.6 ug/L	5137.6 ppb	22:19:33
2	Fe 238.204 Radial†	603.1	627.0	5308.8 ug/L	5308.8 ppb	22:19:33
2	K 766.490 Radial†	31737.1	31040.0	5133.0 ug/L	5133.0 ppb	22:19:12
2	Mg 279.077 IEC†	159.7	165.9	5413.1 ug/L	5413.1 ppb	22:19:33
2	Na 589.592 Radial†	34707.2	37592.3	10040 ug/L	10040 ppb	22:19:12
2	Sr 421.552†	81444.5	85791.2	499.35 ug/L	499.35 ppb	22:19:12
2	Sc 361.383	952468.3	952468.3	96.793 %		22:20:36
2	Y 371.029	835776.3	835776.3	95.822 %		22:20:36
2	Ag 328.068†	125733.0	129578.3	496.22 ug/L	496.22 ppb	22:20:41
2	As 188.979†	1243.4	1318.5	482.62 ug/L	482.62 ppb	22:21:02
2	B 249.677†	23026.8	24076.1	474.48 ug/L	474.48 ppb	22:20:41
2	Ba 233.527†	65968.1	68158.6	480.10 ug/L	480.10 ppb	22:20:41
2	Be 313.107†	1477229.6	1531247.0	482.50 ug/L	482.50 ppb	22:20:36
2	Cd 226.502†	46984.9	48741.1	482.00 ug/L	482.00 ppb	22:20:41
2	Co 228.616†	24261.6	25137.3	481.09 ug/L	481.09 ppb	22:20:41
2	Cr 267.716†	48176.9	49687.7	479.36 ug/L	479.36 ppb	22:20:41
2	Cu 324.752†	191943.1	189166.8	477.76 ug/L	477.76 ppb	22:20:41
2	Mn 257.610†	467242.7	482192.3	484.90 ug/L	484.90 ppb	22:20:36
2	Mo 202.031†	7671.4	7902.7	488.03 ug/L	488.03 ppb	22:21:02
2	Ni 231.604†	20919.8	21503.0	480.31 ug/L	480.31 ppb	22:20:41

2	P 214.914†	4908.0	4831.1	2317.1 ug/L	2317.1 ppb	22:21:02
2	Pb 220.353†	4099.7	4293.9	480.52 ug/L	480.52 ppb	22:21:02
2	S 181.975 Axial†	808.7	767.7	935.26 ug/L	935.26 ppb	22:21:02
2	Sb 206.836†	1603.2	1621.2	505.30 ug/L	505.30 ppb	22:21:02
2	Se 196.026†	885.3	935.8	505.63 ug/L	505.63 ppb	22:21:02
2	Si 251.611†	89727.6	92240.6	2468.8 ug/L	2468.8 ppb	22:20:41
2	Sn 189.927†	2849.2	2948.2	484.48 ug/L	484.48 ppb	22:21:02
2	Ti 334.940†	351479.6	364036.0	501.63 ug/L	501.63 ppb	22:20:36
2	Tl 190.801†	1572.5	1664.3	480.54 ug/L	480.54 ppb	22:21:02
2	U 409.014†	19597.5	21631.6	485.89 ug/L	485.89 ppb	22:20:41
2	V 292.402†	81993.6	86151.0	484.73 ug/L	484.73 ppb	22:20:41
2	Zn 213.857†	56769.1	57907.5	477.68 ug/L	477.68 ppb	22:20:41
2	SiO2†	89854.1	92355.4	5290.3 ug/L	5290.3 ppb	22:21:43
3	Sc Radial	5307.8	5307.8	95.0 %		22:19:38
3	Y RADIAL	5736.8	5736.8	94.30 %		22:19:38
3	Al 396.153Radial†	6839.3	7192.7	4961.3 ug/L	4961.3 ppb	22:19:38
3	Ca 317.933Radial†	3245.0	3387.7	5150.9 ug/L	5150.9 ppb	22:19:58
3	Fe 238.204 Radial†	605.9	629.1	5327.1 ug/L	5327.1 ppb	22:19:58
3	K 766.490 Radial†	32003.7	31279.7	5172.6 ug/L	5172.6 ppb	22:19:38
3	Mg 279.077 IEC†	156.5	162.2	5294.6 ug/L	5294.6 ppb	22:19:58
3	Na 589.592 Radial†	34919.8	37771.3	10088 ug/L	10088 ppb	22:19:38
3	Sr 421.552†	81682.7	85937.0	500.20 ug/L	500.20 ppb	22:19:38
3	Sc 361.383	943239.7	943239.7	95.855 %		22:21:07
3	Y 371.029	826726.1	826726.1	94.785 %		22:21:07
3	Ag 328.068†	125835.0	130955.6	501.49 ug/L	501.49 ppb	22:21:13
3	As 188.979†	1244.3	1331.9	487.49 ug/L	487.49 ppb	22:21:33
3	B 249.677†	23139.0	24425.9	481.39 ug/L	481.39 ppb	22:21:13
3	Ba 233.527†	66289.0	69160.2	487.15 ug/L	487.15 ppb	22:21:13
3	Be 313.107†	1466141.5	1534611.5	483.55 ug/L	483.55 ppb	22:21:07
3	Cd 226.502†	47235.8	49477.8	489.29 ug/L	489.29 ppb	22:21:13
3	Co 228.616†	24315.5	25438.8	486.88 ug/L	486.88 ppb	22:21:13
3	Cr 267.716†	48389.8	50396.8	486.20 ug/L	486.20 ppb	22:21:13
3	Cu 324.752†	191943.9	191107.8	482.66 ug/L	482.66 ppb	22:21:13
3	Mn 257.610†	464372.9	483921.3	486.64 ug/L	486.64 ppb	22:21:07
3	Mo 202.031†	7701.8	8011.9	494.77 ug/L	494.77 ppb	22:21:33
3	Ni 231.604†	21080.6	21882.3	488.78 ug/L	488.78 ppb	22:21:13
3	P 214.914†	4910.0	4882.8	2342.0 ug/L	2342.0 ppb	22:21:33
3	Pb 220.353†	4121.3	4357.9	487.68 ug/L	487.68 ppb	22:21:33
3	S 181.975 Axial†	816.0	783.5	954.49 ug/L	954.49 ppb	22:21:33
3	Sb 206.836†	1599.5	1633.5	509.26 ug/L	509.26 ppb	22:21:33
3	Se 196.026†	887.2	946.7	511.38 ug/L	511.38 ppb	22:21:33
3	Si 251.611†	89793.1	93215.9	2494.9 ug/L	2494.9 ppb	22:21:13
3	Sn 189.927†	2860.2	2988.5	491.10 ug/L	491.10 ppb	22:21:33
3	Ti 334.940†	348509.6	364490.3	502.27 ug/L	502.27 ppb	22:21:07
3	Tl 190.801†	1573.4	1681.2	485.35 ug/L	485.35 ppb	22:21:33
3	U 409.014†	19414.7	21639.0	486.04 ug/L	486.04 ppb	22:21:13
3	V 292.402†	82236.0	87232.6	490.82 ug/L	490.82 ppb	22:21:13
3	Zn 213.857†	56903.5	58621.6	483.56 ug/L	483.56 ppb	22:21:13
3	SiO2†	89931.5	93344.4	5346.9 ug/L	5346.9 ppb	22:21:48

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	948869.5	96.427 %	0.5018			0.52%
Sc Radial	5315.6	95.2 %	0.35			0.36%
Y 371.029	831799.4	95.366 %	0.5301			0.56%
Y RADIAL	5756.5	94.62 %	0.324			0.34%
Ag 328.068†	130126.9	498.31 ug/L	2.797	498.31 ppb	2.797	0.56%
QC value within limits for Ag 328.068 Recovery = 99.66%						
Al 396.153Radial†	7181.2	4953.5 ug/L	10.56	4953.5 ppb	10.56	0.21%
QC value within limits for Al 396.153Radial Recovery = 99.07%						
As 188.979†	1326.4	485.50 ug/L	2.553	485.50 ppb	2.553	0.53%
QC value within limits for As 188.979 Recovery = 97.10%						
B 249.677†	24195.6	476.84 ug/L	3.939	476.84 ppb	3.939	0.83%
QC value within limits for B 249.677 Recovery = 95.37%						
Ba 233.527†	68533.5	482.74 ug/L	3.846	482.74 ppb	3.846	0.80%
QC value within limits for Ba 233.527 Recovery = 96.55%						
Be 313.107†	1532273.9	482.82 ug/L	0.638	482.82 ppb	0.638	0.13%
QC value within limits for Be 313.107 Recovery = 96.56%						
Ca 317.933Radial†	3373.7	5129.8 ug/L	25.99	5129.8 ppb	25.99	0.51%

QC value within limits for Ca 317.933 Radial Recovery = 102.60%

Cd 226.502†	48997.7	484.54 ug/L	4.118	484.54 ppb	4.118	0.85%
QC value within limits for Cd 226.502 Recovery = 96.91%						
Co 228.616†	25265.1	483.55 ug/L	2.991	483.55 ppb	2.991	0.62%
QC value within limits for Co 228.616 Recovery = 96.71%						
Cr 267.716†	49929.3	481.69 ug/L	3.907	481.69 ppb	3.907	0.81%
QC value within limits for Cr 267.716 Recovery = 96.34%						
Cu 324.752†	189767.9	479.28 ug/L	2.936	479.28 ppb	2.936	0.61%
QC value within limits for Cu 324.752 Recovery = 95.86%						
Fe 238.204 Radial†	626.3	5303.4 ug/L	26.79	5303.4 ppb	26.79	0.51%
QC value within limits for Fe 238.204 Radial Recovery = 106.07%						
K 766.490 Radial†	31111.9	5144.9 ug/L	24.12	5144.9 ppb	24.12	0.47%
QC value within limits for K 766.490 Radial Recovery = 102.90%						
Mg 279.077 IEC†	164.0	5353.2 ug/L	59.24	5353.2 ppb	59.24	1.11%
QC value within limits for Mg 279.077 IEC Recovery = 107.06%						
Mn 257.610†	483234.7	485.95 ug/L	0.925	485.95 ppb	0.925	0.19%
QC value within limits for Mn 257.610 Recovery = 97.19%						
Mo 202.031†	7943.8	490.56 ug/L	3.666	490.56 ppb	3.666	0.75%
QC value within limits for Mo 202.031 Recovery = 98.11%						
Na 589.592 Radial†	37638.9	10052 ug/L	31.1	10052 ppb	31.1	0.31%
QC value within limits for Na 589.592 Radial Recovery = 100.52%						
Ni 231.604†	21654.6	483.70 ug/L	4.485	483.70 ppb	4.485	0.93%
QC value within limits for Ni 231.604 Recovery = 96.74%						
P 214.914†	4843.2	2322.9 ug/L	16.97	2322.9 ppb	16.97	0.73%
QC value within limits for P 214.914 Recovery = 92.92%						
Pb 220.353†	4324.8	483.98 ug/L	3.584	483.98 ppb	3.584	0.74%
QC value within limits for Pb 220.353 Recovery = 96.80%						
S 181.975 Axial†	773.8	942.63 ug/L	10.374	942.63 ppb	10.374	1.10%
QC value within limits for S 181.975 Axial Recovery = 94.26%						
Sb 206.836†	1625.0	506.53 ug/L	2.365	506.53 ppb	2.365	0.47%
QC value within limits for Sb 206.836 Recovery = 101.31%						
Se 196.026†	939.7	507.65 ug/L	3.236	507.65 ppb	3.236	0.64%
QC value within limits for Se 196.026 Recovery = 101.53%						
Si 251.611†	92537.5	2476.7 ug/L	15.76	2476.7 ppb	15.76	0.64%
QC value within limits for Si 251.611 Recovery = 99.07%						
Sn 189.927†	2964.3	487.12 ug/L	3.503	487.12 ppb	3.503	0.72%
QC value within limits for Sn 189.927 Recovery = 97.42%						
Sr 421.552†	85842.5	499.65 ug/L	0.477	499.65 ppb	0.477	0.10%
QC value within limits for Sr 421.552 Recovery = 99.93%						
Ti 334.940†	364361.8	502.08 ug/L	0.394	502.08 ppb	0.394	0.08%
QC value within limits for Ti 334.940 Recovery = 100.42%						
Tl 190.801†	1672.1	482.75 ug/L	2.427	482.75 ppb	2.427	0.50%
QC value within limits for Tl 190.801 Recovery = 96.55%						
U 409.014†	21577.3	484.66 ug/L	2.261	484.66 ppb	2.261	0.47%
QC value within limits for U 409.014 Recovery = 96.93%						
V 292.402†	86506.7	486.73 ug/L	3.538	486.73 ppb	3.538	0.73%
QC value within limits for V 292.402 Recovery = 97.35%						
Zn 213.857†	58205.2	480.13 ug/L	3.058	480.13 ppb	3.058	0.64%
QC value within limits for Zn 213.857 Recovery = 96.03%						
SiO2†	92682.5	5309.0 ug/L	32.82	5309.0 ppb	32.82	0.62%
QC value within limits for SiO2 Recovery = 99.28%						

All analyte(s) passed QC.

Sequence No.: 41
 Sample ID: CCB
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 6
 Date Collected: 1/28/2010 22:23:59
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5483.5	5483.5	98.2 %		22:25:50
1	Y RADIAL	5913.9	5913.9	97.21 %		22:25:50
1	Al 396.153Radial†	4.5	0.8	0.5506 ug/L	0.5506 ppb	22:26:10
1	Ca 317.933Radial†	22.2	-4.2	-6.3464 ug/L	-6.3464 ppb	22:26:10
1	Fe 238.204 Radial†	8.8	0.5	4.3957 ug/L	4.3957 ppb	22:26:10
1	K 766.490 Radial†	2440.2	90.2	14.934 ug/L	14.934 ppb	22:25:50
1	Mg 279.077 IEC†	1.6	-0.8	-24.974 ug/L	-24.974 ppb	22:26:10
1	Na 589.592 Radial†	-1051.7	-43.2	-11.532 ug/L	-11.532 ppb	22:25:50
1	Sr 421.552†	17.3	6.5	0.0378 ug/L	0.0378 ppb	22:25:50
1	Sc 361.383	897378.0	897378.0	91.194 %		22:27:07
1	Y 371.029	826318.2	826318.2	94.738 %		22:27:07
1	Ag 328.068†	362.9	76.9	0.2928 ug/L	0.2928 ppb	22:27:07
1	As 188.979†	-24.5	6.9	2.5073 ug/L	2.5073 ppb	22:27:27
1	B 249.677†	-233.9	29.8	0.5893 ug/L	0.5893 ppb	22:27:27
1	Ba 233.527†	9.7	15.2	0.1064 ug/L	0.1064 ppb	22:27:27
1	Be 313.107†	-4903.2	-308.6	-0.0973 ug/L	-0.0973 ppb	22:27:07
1	Cd 226.502†	-197.9	-17.6	-0.1749 ug/L	-0.1749 ppb	22:27:27
1	Co 228.616†	-67.4	-2.1	-0.0393 ug/L	-0.0393 ppb	22:27:27
1	Cr 267.716†	87.2	10.1	0.0971 ug/L	0.0971 ppb	22:27:27
1	Cu 324.752†	8847.3	565.0	1.4267 ug/L	1.4267 ppb	22:27:07
1	Mn 257.610†	603.1	128.4	0.1305 ug/L	0.1305 ppb	22:27:27
1	Mo 202.031†	21.1	0.2	0.0114 ug/L	0.0114 ppb	22:27:27
1	Ni 231.604†	78.3	-24.2	-0.5398 ug/L	-0.5398 ppb	22:27:27
1	P 214.914†	249.9	34.6	16.987 ug/L	16.987 ppb	22:27:27
1	Pb 220.353†	-54.9	-1.9	-0.2112 ug/L	-0.2112 ppb	22:27:27
1	S 181.975 Axial†	36.0	-28.3	-34.488 ug/L	-34.488 ppb	22:27:27
1	Sb 206.836†	35.5	3.8	1.1910 ug/L	1.1910 ppb	22:27:27
1	Se 196.026†	-15.7	3.9	2.0477 ug/L	2.0477 ppb	22:27:27
1	Si 251.611†	496.0	83.6	2.2416 ug/L	2.2416 ppb	22:27:27
1	Sn 189.927†	12.0	17.7	2.9091 ug/L	2.9091 ppb	22:27:27
1	Ti 334.940†	-925.4	-105.0	-0.1440 ug/L	-0.1440 ppb	22:27:07
1	Tl 190.801†	-39.7	-3.8	-1.0903 ug/L	-1.0903 ppb	22:27:27
1	U 409.014†	-1226.2	40.2	0.9044 ug/L	0.9044 ppb	22:27:07
1	V 292.402†	-1340.5	-29.6	-0.1632 ug/L	-0.1632 ppb	22:27:07
1	Zn 213.857†	695.3	19.8	0.1656 ug/L	0.1656 ppb	22:27:27
1	SiO2†	544.2	120.7	6.9286 ug/L	6.9286 ppb	22:28:23
2	Sc Radial	5290.1	5290.1	94.7 %		22:26:16
2	Y RADIAL	5764.3	5764.3	94.75 %		22:26:16
2	Al 396.153Radial†	9.2	6.0	4.1095 ug/L	4.1095 ppb	22:26:36
2	Ca 317.933Radial†	19.6	-6.0	-9.1674 ug/L	-9.1674 ppb	22:26:36
2	Fe 238.204 Radial†	8.9	1.0	8.1442 ug/L	8.1442 ppb	22:26:36
2	K 766.490 Radial†	2422.7	162.5	26.930 ug/L	26.930 ppb	22:26:16
2	Mg 279.077 IEC†	1.8	-0.5	-16.899 ug/L	-16.899 ppb	22:26:36
2	Na 589.592 Radial†	-1122.5	-157.1	-41.953 ug/L	-41.953 ppb	22:26:16
2	Sr 421.552†	37.2	28.1	0.1634 ug/L	0.1634 ppb	22:26:16
2	Sc 361.383	900968.3	900968.3	91.559 %		22:27:33
2	Y 371.029	830651.3	830651.3	95.235 %		22:27:33
2	Ag 328.068†	328.5	37.7	0.1429 ug/L	0.1429 ppb	22:27:33
2	As 188.979†	-27.5	3.8	1.3658 ug/L	1.3658 ppb	22:27:53
2	B 249.677†	-265.7	-3.9	-0.0782 ug/L	-0.0782 ppb	22:27:53
2	Ba 233.527†	-1.7	2.7	0.0176 ug/L	0.0176 ppb	22:27:53
2	Be 313.107†	-4932.6	-319.3	-0.1004 ug/L	-0.1004 ppb	22:27:33
2	Cd 226.502†	-206.2	-25.9	-0.2568 ug/L	-0.2568 ppb	22:27:53
2	Co 228.616†	-64.6	1.3	0.0263 ug/L	0.0263 ppb	22:27:53
2	Cr 267.716†	96.3	19.7	0.1884 ug/L	0.1884 ppb	22:27:53
2	Cu 324.752†	8935.1	622.3	1.5715 ug/L	1.5715 ppb	22:27:33
2	Mn 257.610†	646.5	173.2	0.1756 ug/L	0.1756 ppb	22:27:53
2	Mo 202.031†	31.9	11.9	0.7370 ug/L	0.7370 ppb	22:27:53
2	Ni 231.604†	103.5	3.1	0.0683 ug/L	0.0683 ppb	22:27:53

2	P 214.914†	239.2	21.7	10.511 ug/L	10.511 ppb	22:27:53
2	Pb 220.353†	-37.1	17.8	1.9889 ug/L	1.9889 ppb	22:27:53
2	S 181.975 Axial†	46.1	-17.4	-21.230 ug/L	-21.230 ppb	22:27:53
2	Sb 206.836†	37.0	5.3	1.5871 ug/L	1.5871 ppb	22:27:53
2	Se 196.026†	-18.8	0.6	0.3506 ug/L	0.3506 ppb	22:27:53
2	Si 251.611†	502.0	88.0	2.3509 ug/L	2.3509 ppb	22:27:53
2	Sn 189.927†	-8.5	-4.7	-0.7770 ug/L	-0.7770 ppb	22:27:53
2	Ti 334.940†	-835.7	-3.0	-0.0046 ug/L	-0.0046 ppb	22:27:33
2	Tl 190.801†	-45.5	-10.0	-2.8560 ug/L	-2.8560 ppb	22:27:53
2	U 409.014†	-1223.1	48.9	1.1013 ug/L	1.1013 ppb	22:27:33
2	V 292.402†	-1424.0	-114.8	-0.6265 ug/L	-0.6265 ppb	22:27:33
2	Zn 213.857†	708.4	31.0	0.2545 ug/L	0.2545 ppb	22:27:53
2	SiO2†	527.2	99.6	5.7022 ug/L	5.7022 ppb	22:28:28
3	Sc Radial	5439.5	5439.5	97.4 %		22:26:41
3	Y RADIAL	5922.6	5922.6	97.35 %		22:26:41
3	Al 396.153Radial†	7.0	3.5	2.3939 ug/L	2.3939 ppb	22:27:01
3	Ca 317.933Radial†	25.3	-0.8	-1.2502 ug/L	-1.2502 ppb	22:27:01
3	Fe 238.204 Radial†	11.0	2.9	24.524 ug/L	24.524 ppb	22:27:01
3	K 766.490 Radial†	2432.7	102.6	16.989 ug/L	16.989 ppb	22:26:41
3	Mg 279.077 IEC†	3.7	1.4	45.070 ug/L	45.070 ppb	22:27:01
3	Na 589.592 Radial†	-1003.8	-2.7	-0.7137 ug/L	-0.7137 ppb	22:26:41
3	Sr 421.552†	58.8	49.2	0.2865 ug/L	0.2865 ppb	22:26:41
3	Sc 361.383	900987.4	900987.4	91.561 %		22:27:58
3	Y 371.029	832461.3	832461.3	95.442 %		22:27:58
3	Ag 328.068†	302.7	9.6	0.0405 ug/L	0.0405 ppb	22:27:58
3	As 188.979†	-30.5	0.5	0.1869 ug/L	0.1869 ppb	22:28:18
3	B 249.677†	-208.3	58.7	1.1589 ug/L	1.1589 ppb	22:28:18
3	Ba 233.527†	2.3	7.1	0.0499 ug/L	0.0499 ppb	22:28:18
3	Be 313.107†	-5019.9	-414.5	-0.1306 ug/L	-0.1306 ppb	22:27:58
3	Cd 226.502†	-190.1	-8.2	-0.0833 ug/L	-0.0833 ppb	22:28:18
3	Co 228.616†	-63.5	2.5	0.0485 ug/L	0.0485 ppb	22:28:18
3	Cr 267.716†	90.1	12.9	0.1230 ug/L	0.1230 ppb	22:28:18
3	Cu 324.752†	9032.8	728.8	1.8402 ug/L	1.8402 ppb	22:27:58
3	Mn 257.610†	608.4	131.5	0.1327 ug/L	0.1327 ppb	22:28:18
3	Mo 202.031†	26.6	6.1	0.3755 ug/L	0.3755 ppb	22:28:18
3	Ni 231.604†	102.9	2.5	0.0548 ug/L	0.0548 ppb	22:28:18
3	P 214.914†	238.5	21.0	10.094 ug/L	10.094 ppb	22:28:18
3	Pb 220.353†	-52.7	0.8	0.0926 ug/L	0.0926 ppb	22:28:18
3	S 181.975 Axial†	42.3	-21.6	-26.362 ug/L	-26.362 ppb	22:28:18
3	Sb 206.836†	30.9	-1.4	-0.3919 ug/L	-0.3919 ppb	22:28:18
3	Se 196.026†	-26.3	-7.6	-3.8748 ug/L	-3.8748 ppb	22:28:18
3	Si 251.611†	518.3	105.7	2.8322 ug/L	2.8322 ppb	22:28:18
3	Sn 189.927†	7.3	12.6	2.0671 ug/L	2.0671 ppb	22:28:18
3	Ti 334.940†	-906.6	-80.5	-0.1161 ug/L	-0.1161 ppb	22:27:58
3	Tl 190.801†	-44.0	-8.3	-2.3792 ug/L	-2.3792 ppb	22:28:18
3	U 409.014†	-1143.6	135.7	3.0553 ug/L	3.0553 ppb	22:27:58
3	V 292.402†	-1386.7	-74.1	-0.4029 ug/L	-0.4029 ppb	22:27:58
3	Zn 213.857†	702.7	24.8	0.2012 ug/L	0.2012 ppb	22:28:18
3	SiO2†	506.6	77.2	4.4228 ug/L	4.4228 ppb	22:28:33

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	899777.9	91.438 %	0.2112			0.23%
Sc Radial	5404.4	96.8 %	1.82			1.88%
Y 371.029	829810.3	95.138 %	0.3619			0.38%
Y RADIAL	5866.9	96.44 %	1.463			1.52%
Ag 328.068†	41.4	0.1587 ug/L	0.12690	0.1587 ppb	0.12690	79.95%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	3.4	2.3513 ug/L	1.77981	2.3513 ppb	1.77981	75.69%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	3.7	1.3534 ug/L	1.16024	1.3534 ppb	1.16024	85.73%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	28.2	0.5566 ug/L	0.61920	0.5566 ppb	0.61920	111.24%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	8.3	0.0580 ug/L	0.04495	0.0580 ppb	0.04495	77.52%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	-347.5	-0.1094 ug/L	0.01836	-0.1094 ppb	0.01836	16.78%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-3.7	-5.5880 ug/L	4.01271	-5.5880 ppb	4.01271	71.81%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated									
Cd	226.502†	-17.3	-0.1717 ug/L	0.08678	-0.1717 ppb	0.08678	50.55%		
QC value within limits for Cd 226.502 Recovery = Not calculated									
Co	228.616†	0.6	0.0118 ug/L	0.04568	0.0118 ppb	0.04568	386.53%		
QC value within limits for Co 228.616 Recovery = Not calculated									
Cr	267.716†	14.2	0.1362 ug/L	0.04708	0.1362 ppb	0.04708	34.58%		
QC value within limits for Cr 267.716 Recovery = Not calculated									
Cu	324.752†	638.7	1.6128 ug/L	0.20981	1.6128 ppb	0.20981	13.01%		
QC value within limits for Cu 324.752 Recovery = Not calculated									
Fe	238.204 Radial†	1.5	12.355 ug/L	10.7045	12.355 ppb	10.7045	86.64%		
QC value within limits for Fe 238.204 Radial Recovery = Not calculated									
K	766.490 Radial†	118.4	19.618 ug/L	6.4154	19.618 ppb	6.4154	32.70%		
QC value within limits for K 766.490 Radial Recovery = Not calculated									
Mg	279.077 IEC†	0.0	1.0654 ug/L	38.32211	1.0654 ppb	38.32211	>999.9%		
QC value within limits for Mg 279.077 IEC Recovery = Not calculated									
Mn	257.610†	144.4	0.1463 ug/L	0.02538	0.1463 ppb	0.02538	17.35%		
QC value within limits for Mn 257.610 Recovery = Not calculated									
Mo	202.031†	6.1	0.3746 ug/L	0.36276	0.3746 ppb	0.36276	96.83%		
QC value within limits for Mo 202.031 Recovery = Not calculated									
Na	589.592 Radial†	-67.6	-18.066 ug/L	21.3821	-18.066 ppb	21.3821	118.35%		
QC value within limits for Na 589.592 Radial Recovery = Not calculated									
Ni	231.604†	-6.2	-0.1389 ug/L	0.34721	-0.1389 ppb	0.34721	249.95%		
QC value within limits for Ni 231.604 Recovery = Not calculated									
P	214.914†	25.7	12.531 ug/L	3.8648	12.531 ppb	3.8648	30.84%		
QC value within limits for P 214.914 Recovery = Not calculated									
Pb	220.353†	5.6	0.6234 ug/L	1.19228	0.6234 ppb	1.19228	191.25%		
QC value within limits for Pb 220.353 Recovery = Not calculated									
S	181.975 Axial†	-22.4	-27.360 ug/L	6.6852	-27.360 ppb	6.6852	24.43%		
QC value within limits for S 181.975 Axial Recovery = Not calculated									
Sb	206.836†	2.5	0.7954 ug/L	1.04716	0.7954 ppb	1.04716	131.65%		
QC value within limits for Sb 206.836 Recovery = Not calculated									
Se	196.026†	-1.0	-0.4922 ug/L	3.04986	-0.4922 ppb	3.04986	619.67%		
QC value within limits for Se 196.026 Recovery = Not calculated									
Si	251.611†	92.4	2.4749 ug/L	0.31418	2.4749 ppb	0.31418	12.69%		
QC value within limits for Si 251.611 Recovery = Not calculated									
Sn	189.927†	8.5	1.3998 ug/L	1.93155	1.3998 ppb	1.93155	137.99%		
QC value within limits for Sn 189.927 Recovery = Not calculated									
Sr	421.552†	27.9	0.1626 ug/L	0.12438	0.1626 ppb	0.12438	76.52%		
QC value within limits for Sr 421.552 Recovery = Not calculated									
Ti	334.940†	-62.8	-0.0882 ug/L	0.07378	-0.0882 ppb	0.07378	83.62%		
QC value within limits for Ti 334.940 Recovery = Not calculated									
Tl	190.801†	-7.4	-2.1085 ug/L	0.91346	-2.1085 ppb	0.91346	43.32%		
QC value within limits for Tl 190.801 Recovery = Not calculated									
U	409.014†	74.9	1.6870 ug/L	1.18905	1.6870 ppb	1.18905	70.48%		
QC value within limits for U 409.014 Recovery = Not calculated									
V	292.402†	-72.8	-0.3975 ug/L	0.23169	-0.3975 ppb	0.23169	58.28%		
QC value within limits for V 292.402 Recovery = Not calculated									
Zn	213.857†	25.2	0.2071 ug/L	0.04472	0.2071 ppb	0.04472	21.59%		
QC value within limits for Zn 213.857 Recovery = Not calculated									
SiO2†		99.2	5.6845 ug/L	1.25299	5.6845 ppb	1.25299	22.04%		
QC value within limits for SiO2 Recovery = Not calculated									

All analyte(s) passed QC.

Sequence No.: 42
 Sample ID: 244601008|941727|1
 Analyst: HSC
 Initial Sample Wt:
 Dilution:

Autosampler Location: 84
 Date Collected: 1/28/2010 22:30:43
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: 244601008|941727|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5337.6	5337.6	95.6 %		22:32:57
1	Y RADIAL	6451.9	6451.9	106.1 %		22:32:57
1	Al 396.153Radial†	73825.7	77244.6	53538 ug/L	53538 ppb	22:32:37
1	Ca 317.933Radial†	7368.3	7683.1	11682 ug/L	11682 ppb	22:32:57
1	Fe 238.204 Radial†	11237.9	11750.5	99227 ug/L	99227 ppb	22:32:37
1	K 766.490 Radial†	60219.8	60616.5	10031 ug/L	10031 ppb	22:32:37
1	Mg 279.077 IEC†	314.4	326.6	10555 ug/L	10555 ppb	22:32:57
1	Na 589.592 Radial†	1034.0	2109.9	563.51 ug/L	563.51 ppb	22:32:37
1	Sr 421.552†	19003.0	19872.8	115.59 ug/L	115.59 ppb	22:32:37
1	Sc 361.383	967064.7	967064.7	98.276 %		22:33:54
1	Y 371.029	950539.6	950539.6	108.98 %		22:33:54
1	Ag 328.068†	-6561.1	-6997.1	6.1002 ug/L	6.1002 ppb	22:33:59
1	As 188.979†	-42.6	-9.5	41.796 ug/L	41.796 ppb	22:34:19
1	B 249.677†	1111.3	1417.1	11.783 ug/L	11.783 ppb	22:33:59
1	Ba 233.527†	89350.0	90921.9	642.18 ug/L	642.18 ppb	22:33:59
1	Be 313.107†	-8841.2	-3928.2	4.5369 ug/L	4.5369 ppb	22:33:59
1	Cd 226.502†	819.0	1032.7	-0.0191 ug/L	-0.0191 ppb	22:34:19
1	Co 228.616†	2846.9	2968.7	50.328 ug/L	50.328 ppb	22:34:19
1	Cr 267.716†	11493.1	11609.2	114.07 ug/L	114.07 ppb	22:33:59
1	Cu 324.752†	27754.7	19105.1	53.590 ug/L	53.590 ppb	22:33:59
1	Mn 257.610†	2268436.1	2307696.9	2328.6 ug/L	2328.6 ppb	22:33:54
1	Mo 202.031†	133.1	112.5	14.780 ug/L	14.780 ppb	22:34:19
1	Ni 231.604†	3238.6	3185.4	71.161 ug/L	71.161 ppb	22:34:19
1	P 214.914†	1575.0	1363.2	603.90 ug/L	603.90 ppb	22:34:19
1	Pb 220.353†	780.6	852.6	97.266 ug/L	97.266 ppb	22:34:19
1	S 181.975 Axial†	512.1	453.3	542.70 ug/L	542.70 ppb	22:34:19
1	Sb 206.836†	59.7	25.6	0.8277 ug/L	0.8277 ppb	22:34:19
1	Se 196.026†	-496.9	-484.5	79.760 ug/L	79.760 ppb	22:34:19
1	Si 251.611†	1006120.1	1023309.5	27455 ug/L	27455 ppb	22:33:54
1	Sn 189.927†	-69.5	-66.1	-7.3978 ug/L	-7.3978 ppb	22:34:19
1	Ti 334.940†	1811783.6	1844476.3	2543.1 ug/L	2543.1 ppb	22:33:54
1	Tl 190.801†	-163.2	-126.4	-4.5770 ug/L	-4.5770 ppb	22:34:19
1	U 409.014†	-8213.1	-6972.4	-168.72 ug/L	-168.72 ppb	22:33:54
1	V 292.402†	25740.3	27632.3	136.22 ug/L	136.22 ppb	22:33:59
1	Zn 213.857†	28865.0	28628.6	228.10 ug/L	228.10 ppb	22:33:59
1	SiO2†	1020466.3	1037891.6	59601 ug/L	59601 ppb	22:35:28
2	Sc Radial	5508.9	5508.9	98.6 %		22:33:22
2	Y RADIAL	6639.7	6639.7	109.1 %		22:33:22
2	Al 396.153Radial†	76013.8	77060.9	53410 ug/L	53410 ppb	22:33:02
2	Ca 317.933Radial†	7326.0	7400.5	11253 ug/L	11253 ppb	22:33:22
2	Fe 238.204 Radial†	11522.5	11673.4	98575 ug/L	98575 ppb	22:33:02
2	K 766.490 Radial†	61686.0	60143.6	9953.2 ug/L	9953.2 ppb	22:33:02
2	Mg 279.077 IEC†	309.0	310.9	10044 ug/L	10044 ppb	22:33:22
2	Na 589.592 Radial†	1120.6	2164.2	577.99 ug/L	577.99 ppb	22:33:02
2	Sr 421.552†	19564.4	19823.6	115.31 ug/L	115.31 ppb	22:33:02
2	Sc 361.383	963883.6	963883.6	97.953 %		22:34:25
2	Y 371.029	949789.2	949789.2	108.89 %		22:34:25
2	Ag 328.068†	-6755.7	-7217.9	5.0640 ug/L	5.0640 ppb	22:34:30
2	As 188.979†	-42.8	-9.9	41.569 ug/L	41.569 ppb	22:34:51
2	B 249.677†	1258.4	1570.9	14.935 ug/L	14.935 ppb	22:34:30
2	Ba 233.527†	89958.3	91843.0	648.63 ug/L	648.63 ppb	22:34:30
2	Be 313.107†	-9146.1	-4269.2	4.4469 ug/L	4.4469 ppb	22:34:30
2	Cd 226.502†	804.1	1020.3	-0.0758 ug/L	-0.0758 ppb	22:34:51
2	Co 228.616†	2840.1	2971.2	50.374 ug/L	50.374 ppb	22:34:51
2	Cr 267.716†	11568.5	11724.8	115.17 ug/L	115.17 ppb	22:34:30
2	Cu 324.752†	28143.0	19594.7	54.795 ug/L	54.795 ppb	22:34:30
2	Mn 257.610†	2269693.2	2316598.1	2337.5 ug/L	2337.5 ppb	22:34:25
2	Mo 202.031†	137.5	117.4	15.029 ug/L	15.029 ppb	22:34:51
2	Ni 231.604†	3213.2	3170.4	70.826 ug/L	70.826 ppb	22:34:51

2	P 214.914†	1559.4	1352.4	598.81 ug/L	598.81 ppb	22:34:51
2	Pb 220.353†	796.9	872.0	99.447 ug/L	99.447 ppb	22:34:51
2	S 181.975 Axial†	508.5	451.3	540.35 ug/L	540.35 ppb	22:34:51
2	Sb 206.836†	51.6	17.6	-1.6034 ug/L	-1.6034 ppb	22:34:51
2	Se 196.026†	-468.1	-456.7	92.042 ug/L	92.042 ppb	22:34:51
2	Si 251.611†	1004753.7	1025293.4	27508 ug/L	27508 ppb	22:34:25
2	Sn 189.927†	-58.8	-55.4	-5.7264 ug/L	-5.7264 ppb	22:34:51
2	Ti 334.940†	1811194.9	1849959.6	2550.6 ug/L	2550.6 ppb	22:34:25
2	Tl 190.801†	-164.3	-128.0	-4.9333 ug/L	-4.9333 ppb	22:34:51
2	U 409.014†	-8426.1	-7217.5	-174.17 ug/L	-174.17 ppb	22:34:25
2	V 292.402†	25837.0	27817.4	137.32 ug/L	137.32 ppb	22:34:30
2	Zn 213.857†	29033.2	28897.3	230.40 ug/L	230.40 ppb	22:34:30
2	SiO2†	1011160.9	1031818.7	59252 ug/L	59252 ppb	22:35:34
3	Sc Radial	5518.9	5518.9	98.8 %		22:33:47
3	Y RADIAL	6660.9	6660.9	109.5 %		22:33:47
3	Al 396.153Radial†	74746.0	75637.6	52424 ug/L	52424 ppb	22:33:27
3	Ca 317.933Radial†	7386.1	7447.9	11325 ug/L	11325 ppb	22:33:47
3	Fe 238.204 Radial†	11383.0	11511.0	97204 ug/L	97204 ppb	22:33:27
3	K 766.490 Radial†	60769.0	59101.7	9780.7 ug/L	9780.7 ppb	22:33:27
3	Mg 279.077 IEC†	309.6	310.9	10047 ug/L	10047 ppb	22:33:47
3	Na 589.592 Radial†	1095.6	2136.8	570.67 ug/L	570.67 ppb	22:33:27
3	Sr 421.552†	19256.8	19476.3	113.29 ug/L	113.29 ppb	22:33:27
3	Sc 361.383	985433.0	985433.0	100.14 %		22:34:56
3	Y 371.029	968733.7	968733.7	111.07 %		22:34:56
3	Ag 328.068†	-6698.0	-7009.5	5.3940 ug/L	5.3940 ppb	22:35:02
3	As 188.979†	-38.1	-4.2	43.037 ug/L	43.037 ppb	22:35:22
3	B 249.677†	1203.8	1488.3	13.525 ug/L	13.525 ppb	22:35:02
3	Ba 233.527†	89935.8	89812.3	634.31 ug/L	634.31 ppb	22:35:02
3	Be 313.107†	-8944.0	-3863.2	4.5035 ug/L	4.5035 ppb	22:35:02
3	Cd 226.502†	798.2	996.4	-0.1697 ug/L	-0.1697 ppb	22:35:22
3	Co 228.616†	2849.9	2917.6	49.424 ug/L	49.424 ppb	22:35:22
3	Cr 267.716†	11581.1	11479.0	112.77 ug/L	112.77 ppb	22:35:02
3	Cu 324.752†	27947.1	18770.7	52.638 ug/L	52.638 ppb	22:35:02
3	Mn 257.610†	2288919.1	2285125.6	2305.7 ug/L	2305.7 ppb	22:34:56
3	Mo 202.031†	120.4	97.3	13.683 ug/L	13.683 ppb	22:35:22
3	Ni 231.604†	3236.0	3121.4	69.732 ug/L	69.732 ppb	22:35:22
3	P 214.914†	1556.2	1314.4	581.12 ug/L	581.12 ppb	22:35:22
3	Pb 220.353†	819.6	876.8	99.906 ug/L	99.906 ppb	22:35:22
3	S 181.975 Axial†	510.4	441.9	529.04 ug/L	529.04 ppb	22:35:22
3	Sb 206.836†	59.0	23.7	0.2902 ug/L	0.2902 ppb	22:35:22
3	Se 196.026†	-489.9	-468.1	81.534 ug/L	81.534 ppb	22:35:22
3	Si 251.611†	1015784.1	1013876.9	27202 ug/L	27202 ppb	22:34:56
3	Sn 189.927†	-68.9	-64.2	-7.1769 ug/L	-7.1769 ppb	22:35:22
3	Ti 334.940†	1828949.9	1827254.4	2519.3 ug/L	2519.3 ppb	22:34:56
3	Tl 190.801†	-148.6	-108.7	0.1963 ug/L	0.1963 ppb	22:35:22
3	U 409.014†	-8325.1	-6928.5	-167.49 ug/L	-167.49 ppb	22:34:56
3	V 292.402†	25864.6	27268.2	134.50 ug/L	134.50 ppb	22:35:02
3	Zn 213.857†	29100.7	28316.5	225.71 ug/L	225.71 ppb	22:35:02
3	SiO2†	1020335.6	1018406.0	58482 ug/L	58482 ppb	22:35:40

Mean Data: 244601008|941727|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	972127.1	98.790 %	1.1821			1.20%
Sc Radial	5455.1	97.7 %	1.82			1.87%
Y 371.029	956354.2	109.65 %	1.230			1.12%
Y RADIAL	6584.2	108.2 %	1.89			1.75%
Ag 328.068†	-7074.8	5.5194 ug/L	0.52937	5.5194 ppb	0.52937	9.59%
Al 396.153Radial†	76647.7	53124 ug/L	609.6	53124 ppb	609.6	1.15%
As 188.979†	-7.9	42.134 ug/L	0.7904	42.134 ppb	0.7904	1.88%
B 249.677†	1492.1	13.414 ug/L	1.5788	13.414 ppb	1.5788	11.77%
Ba 233.527†	90859.1	641.71 ug/L	7.170	641.71 ppb	7.170	1.12%
Be 313.107†	-4020.2	4.4958 ug/L	0.04552	4.4958 ppb	0.04552	1.01%
Ca 317.933Radial†	7510.5	11420 ug/L	230.1	11420 ppb	230.1	2.01%
Cd 226.502†	1016.5	-0.0882 ug/L	0.07608	-0.0882 ppb	0.07608	86.27%
Co 228.616†	2952.5	50.042 ug/L	0.5355	50.042 ppb	0.5355	1.07%
Cr 267.716†	11604.3	114.01 ug/L	1.202	114.01 ppb	1.202	1.05%
Cu 324.752†	19156.8	53.674 ug/L	1.0810	53.674 ppb	1.0810	2.01%
Fe 238.204 Radial†	11645.0	98335 ug/L	1032.6	98335 ppb	1032.6	1.05%
K 766.490 Radial†	59953.9	9921.8 ug/L	128.26	9921.8 ppb	128.26	1.29%

Mg 279.077 IEC†	316.1	10215 ug/L	294.3	10215 ppb	294.3	2.88%
Mn 257.610†	2303140.2	2323.9 ug/L	16.39	2323.9 ppb	16.39	0.71%
Mo 202.031†	109.1	14.497 ug/L	0.7161	14.497 ppb	0.7161	4.94%
Na 589.592 Radial†	2137.0	570.72 ug/L	7.241	570.72 ppb	7.241	1.27%
Ni 231.604†	3159.1	70.573 ug/L	0.7476	70.573 ppb	0.7476	1.06%
P 214.914†	1343.3	594.61 ug/L	11.959	594.61 ppb	11.959	2.01%
Pb 220.353†	867.1	98.873 ug/L	1.4102	98.873 ppb	1.4102	1.43%
S 181.975 Axial†	448.8	537.36 ug/L	7.301	537.36 ppb	7.301	1.36%
Sb 206.836†	22.3	-0.1618 ug/L	1.27702	-0.1618 ppb	1.27702	789.25%
Se 196.026†	-469.8	84.445 ug/L	6.6389	84.445 ppb	6.6389	7.86%
Si 251.611†	1020826.6	27388 ug/L	163.6	27388 ppb	163.6	0.60%
Sn 189.927†	-61.9	-6.7670 ug/L	0.90796	-6.7670 ppb	0.90796	13.42%
Sr 421.552†	19724.3	114.73 ug/L	1.257	114.73 ppb	1.257	1.10%
Ti 334.940†	1840563.4	2537.7 ug/L	16.33	2537.7 ppb	16.33	0.64%
Tl 190.801†	-121.0	-3.1047 ug/L	2.86425	-3.1047 ppb	2.86425	92.26%
U 409.014†	-7039.5	-170.12 ug/L	3.554	-170.12 ppb	3.554	2.09%
V 292.402†	27572.6	136.01 ug/L	1.422	136.01 ppb	1.422	1.05%
Zn 213.857†	28614.1	228.07 ug/L	2.345	228.07 ppb	2.345	1.03%
SiO2†	1029372.1	59112 ug/L	572.5	59112 ppb	572.5	0.97%

Sequence No.: 43
 Sample ID: 244601009|941727|1
 Analyst: HSC
 Initial Sample Wt:
 Dilution:

Autosampler Location: 85
 Date Collected: 1/28/2010 22:37:51
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: 244601009|941727|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5494.6	5494.6	98.4 %		22:39:44
1	Y RADIAL	6777.0	6777.0	111.4 %		22:39:44
1	Al 396.153Radial†	72624.5	73815.4	51161 ug/L	51161 ppb	22:39:44
1	Ca 317.933Radial†	7100.5	7190.5	10933 ug/L	10933 ppb	22:39:44
1	Fe 238.204 Radial†	11198.9	11374.7	96053 ug/L	96053 ppb	22:39:44
1	K 766.490 Radial†	56137.0	54665.2	9046.2 ug/L	9046.2 ppb	22:39:44
1	Mg 279.077 IEC†	282.0	284.3	9178.0 ug/L	9178.0 ppb	22:40:04
1	Na 589.592 Radial†	984.6	2028.8	541.84 ug/L	541.84 ppb	22:39:44
1	Sr 421.552†	17461.8	17737.9	103.17 ug/L	103.17 ppb	22:39:44
1	Sc 361.383	979852.9	979852.9	99.576 %		22:41:02
1	Y 371.029	982032.1	982032.1	112.59 %		22:41:02
1	Ag 328.068†	-6419.7	-6768.1	5.9394 ug/L	5.9394 ppb	22:41:07
1	As 188.979†	-31.8	1.9	43.651 ug/L	43.651 ppb	22:41:27
1	B 249.677†	1089.4	1380.3	11.608 ug/L	11.608 ppb	22:41:07
1	Ba 233.527†	79807.8	80152.5	566.39 ug/L	566.39 ppb	22:41:07
1	Be 313.107†	-8808.3	-3777.8	4.1807 ug/L	4.1807 ppb	22:41:07
1	Cd 226.502†	762.1	964.7	-0.3795 ug/L	-0.3795 ppb	22:41:27
1	Co 228.616†	2181.9	2263.0	37.235 ug/L	37.235 ppb	22:41:27
1	Cr 267.716†	8825.0	8777.1	86.718 ug/L	86.718 ppb	22:41:07
1	Cu 324.752†	24754.8	15723.8	44.903 ug/L	44.903 ppb	22:41:07
1	Mn 257.610†	2492884.9	2502977.1	2524.6 ug/L	2524.6 ppb	22:41:02
1	Mo 202.031†	251.2	229.3	21.732 ug/L	21.732 ppb	22:41:27
1	Ni 231.604†	2720.8	2622.4	58.586 ug/L	58.586 ppb	22:41:27
1	P 214.914†	1495.0	1261.9	557.06 ug/L	557.06 ppb	22:41:27
1	Pb 220.353†	1280.8	1344.6	151.94 ug/L	151.94 ppb	22:41:27
1	S 181.975 Axial†	480.8	415.1	496.58 ug/L	496.58 ppb	22:41:27
1	Sb 206.836†	52.6	17.7	-0.8181 ug/L	-0.8181 ppb	22:41:27
1	Se 196.026†	-485.2	-466.1	78.681 ug/L	78.681 ppb	22:41:27
1	Si 251.611†	966679.8	970339.7	26034 ug/L	26034 ppb	22:41:02
1	Sn 189.927†	-46.5	-42.1	-3.6281 ug/L	-3.6281 ppb	22:41:27
1	Ti 334.940†	1707354.0	1715540.8	2365.4 ug/L	2365.4 ppb	22:41:02
1	Tl 190.801†	-171.9	-132.9	-6.9032 ug/L	-6.9032 ppb	22:41:27
1	U 409.014†	-9998.7	-8656.5	-206.25 ug/L	-206.25 ppb	22:41:02
1	V 292.402†	24052.5	25595.4	125.58 ug/L	125.58 ppb	22:41:07
1	Zn 213.857†	28974.9	28355.6	226.23 ug/L	226.23 ppb	22:41:07
1	SiO2†	967742.4	971391.0	55782 ug/L	55782 ppb	22:42:35
2	Sc Radial	5578.9	5578.9	99.9 %		22:40:09
2	Y RADIAL	6879.3	6879.3	113.1 %		22:40:09
2	Al 396.153Radial†	73716.8	73793.6	51146 ug/L	51146 ppb	22:40:09
2	Ca 317.933Radial†	7204.4	7185.5	10926 ug/L	10926 ppb	22:40:09
2	Fe 238.204 Radial†	11332.0	11335.9	95725 ug/L	95725 ppb	22:40:09
2	K 766.490 Radial†	56911.2	54578.2	9031.8 ug/L	9031.8 ppb	22:40:09
2	Mg 279.077 IEC†	284.6	282.6	9122.3 ug/L	9122.3 ppb	22:40:29
2	Na 589.592 Radial†	1038.6	2067.8	552.24 ug/L	552.24 ppb	22:40:09
2	Sr 421.552†	17813.5	17821.8	103.66 ug/L	103.66 ppb	22:40:09
2	Sc 361.383	969926.0	969926.0	98.567 %		22:41:33
2	Y 371.029	970879.1	970879.1	111.31 %		22:41:33
2	Ag 328.068†	-6503.5	-6919.1	5.2672 ug/L	5.2672 ppb	22:41:38
2	As 188.979†	-30.7	2.7	43.875 ug/L	43.875 ppb	22:41:58
2	B 249.677†	1016.4	1317.4	10.416 ug/L	10.416 ppb	22:41:38
2	Ba 233.527†	80443.4	81617.7	576.68 ug/L	576.68 ppb	22:41:38
2	Be 313.107†	-8624.8	-3682.2	4.2210 ug/L	4.2210 ppb	22:41:38
2	Cd 226.502†	788.2	999.0	-0.0055 ug/L	-0.0055 ppb	22:41:58
2	Co 228.616†	2173.9	2277.3	37.507 ug/L	37.507 ppb	22:41:58
2	Cr 267.716†	8817.1	8859.7	87.511 ug/L	87.511 ppb	22:41:38
2	Cu 324.752†	24882.1	16107.4	45.854 ug/L	45.854 ppb	22:41:38
2	Mn 257.610†	2480550.1	2516085.5	2537.7 ug/L	2537.7 ppb	22:41:33
2	Mo 202.031†	253.0	233.8	21.983 ug/L	21.983 ppb	22:41:58
2	Ni 231.604†	2713.7	2643.2	59.050 ug/L	59.050 ppb	22:41:58

2	P 214.914†	1468.6	1250.5	551.41 ug/L	551.41 ppb	22:41:58
2	Pb 220.353†	1284.6	1361.6	153.87 ug/L	153.87 ppb	22:41:58
2	S 181.975 Axial†	478.1	417.3	499.22 ug/L	499.22 ppb	22:41:58
2	Sb 206.836†	59.4	25.1	1.3652 ug/L	1.3652 ppb	22:41:58
2	Se 196.026†	-471.3	-457.0	82.333 ug/L	82.333 ppb	22:41:58
2	Si 251.611†	958885.8	972368.2	26088 ug/L	26088 ppb	22:41:33
2	Sn 189.927†	-60.1	-56.4	-5.9731 ug/L	-5.9731 ppb	22:41:58
2	Ti 334.940†	1693282.0	1718812.8	2369.9 ug/L	2369.9 ppb	22:41:33
2	Tl 190.801†	-155.3	-117.8	-2.4981 ug/L	-2.4981 ppb	22:41:58
2	U 409.014†	-9863.5	-8622.2	-205.44 ug/L	-205.44 ppb	22:41:33
2	V 292.402†	24194.5	25986.7	127.80 ug/L	127.80 ppb	22:41:38
2	Zn 213.857†	29160.6	28841.9	230.30 ug/L	230.30 ppb	22:41:38
2	SiO2†	965625.3	979189.8	56230 ug/L	56230 ppb	22:42:41
3	Sc Radial	5591.2	5591.2	100 %		22:40:34
3	Y RADIAL	6931.9	6931.9	113.9 %		22:40:34
3	Al 396.153Radial†	73731.4	73646.4	51044 ug/L	51044 ppb	22:40:34
3	Ca 317.933Radial†	7173.7	7139.1	10855 ug/L	10855 ppb	22:40:34
3	Fe 238.204 Radial†	11297.7	11276.8	95226 ug/L	95226 ppb	22:40:34
3	K 766.490 Radial†	56896.2	54438.3	9008.6 ug/L	9008.6 ppb	22:40:34
3	Mg 279.077 IEC†	280.7	278.0	8972.4 ug/L	8972.4 ppb	22:40:54
3	Na 589.592 Radial†	1073.3	2100.1	560.88 ug/L	560.88 ppb	22:40:34
3	Sr 421.552†	17735.1	17704.4	102.98 ug/L	102.98 ppb	22:40:34
3	Sc 361.383	955041.8	955041.8	97.054 %		22:42:04
3	Y 371.029	955916.1	955916.1	109.60 %		22:42:04
3	Ag 328.068†	-6549.7	-7069.5	4.5409 ug/L	4.5409 ppb	22:42:09
3	As 188.979†	-43.6	-11.1	38.853 ug/L	38.853 ppb	22:42:29
3	B 249.677†	1175.3	1497.2	14.055 ug/L	14.055 ppb	22:42:09
3	Ba 233.527†	80072.3	82507.3	582.91 ug/L	582.91 ppb	22:42:09
3	Be 313.107†	-8672.5	-3867.7	4.1863 ug/L	4.1863 ppb	22:42:09
3	Cd 226.502†	770.6	993.3	-0.0112 ug/L	-0.0112 ppb	22:42:29
3	Co 228.616†	2160.6	2298.0	37.892 ug/L	37.892 ppb	22:42:29
3	Cr 267.716†	8786.1	8967.2	88.539 ug/L	88.539 ppb	22:42:09
3	Cu 324.752†	24691.5	16304.4	46.328 ug/L	46.328 ppb	22:42:09
3	Mn 257.610†	2458370.6	2532454.2	2554.1 ug/L	2554.1 ppb	22:42:04
3	Mo 202.031†	250.5	235.1	22.026 ug/L	22.026 ppb	22:42:29
3	Ni 231.604†	2690.7	2662.4	59.479 ug/L	59.479 ppb	22:42:29
3	P 214.914†	1495.3	1301.1	576.97 ug/L	576.97 ppb	22:42:29
3	Pb 220.353†	1279.9	1377.1	155.62 ug/L	155.62 ppb	22:42:29
3	S 181.975 Axial†	467.7	414.1	495.38 ug/L	495.38 ppb	22:42:29
3	Sb 206.836†	61.0	27.7	2.0957 ug/L	2.0957 ppb	22:42:29
3	Se 196.026†	-472.9	-466.2	75.932 ug/L	75.932 ppb	22:42:29
3	Si 251.611†	949233.3	977584.2	26228 ug/L	26228 ppb	22:42:04
3	Sn 189.927†	-58.4	-55.5	-5.8597 ug/L	-5.8597 ppb	22:42:29
3	Ti 334.940†	1674603.3	1726340.7	2380.3 ug/L	2380.3 ppb	22:42:04
3	Tl 190.801†	-150.2	-115.0	-1.5118 ug/L	-1.5118 ppb	22:42:29
3	U 409.014†	-9914.7	-8830.9	-210.09 ug/L	-210.09 ppb	22:42:04
3	V 292.402†	23952.7	26120.2	128.59 ug/L	128.59 ppb	22:42:09
3	Zn 213.857†	28899.0	29033.5	231.94 ug/L	231.94 ppb	22:42:09
3	SiO2†	965473.8	994301.8	57098 ug/L	57098 ppb	22:42:47

Mean Data: 244601009|941727|1

Analyte	Mean Corrected	Calib.	Std.Dev.	Sample	Std.Dev.	RSD
	Intensity	Conc. Units		Conc. Units		
Sc 361.383	968273.6	98.399 %	1.2691			1.29%
Sc Radial	5554.9	99.5 %	0.94			0.95%
Y 371.029	969609.1	111.17 %	1.502			1.35%
Y RADIAL	6862.7	112.8 %	1.29			1.15%
Ag 328.068†	-6918.9	5.2492 ug/L	0.69940	5.2492 ppb	0.69940	13.32%
Al 396.153Radial†	73751.8	51117 ug/L	63.7	51117 ppb	63.7	0.12%
As 188.979†	-2.2	42.126 ug/L	2.8373	42.126 ppb	2.8373	6.74%
B 249.677†	1398.3	12.026 ug/L	1.8553	12.026 ppb	1.8553	15.43%
Ba 233.527†	81425.8	575.33 ug/L	8.345	575.33 ppb	8.345	1.45%
Be 313.107†	-3775.9	4.1960 ug/L	0.02184	4.1960 ppb	0.02184	0.52%
Ca 317.933Radial†	7171.7	10905 ug/L	43.1	10905 ppb	43.1	0.40%
Cd 226.502†	985.7	-0.1320 ug/L	0.21429	-0.1320 ppb	0.21429	162.28%
Co 228.616†	2279.4	37.545 ug/L	0.3304	37.545 ppb	0.3304	0.88%
Cr 267.716†	8868.0	87.589 ug/L	0.9134	87.589 ppb	0.9134	1.04%
Cu 324.752†	16045.2	45.695 ug/L	0.7256	45.695 ppb	0.7256	1.59%
Fe 238.204 Radial†	11329.2	95668 ug/L	416.2	95668 ppb	416.2	0.44%
K 766.490 Radial†	54560.6	9028.9 ug/L	18.95	9028.9 ppb	18.95	0.21%

Mg 279.077 IEC†	281.6	9090.9 ug/L	106.32	9090.9 ppb	106.32	1.17%
Mn 257.610†	2517172.3	2538.8 ug/L	14.81	2538.8 ppb	14.81	0.58%
Mo 202.031†	232.7	21.913 ug/L	0.1587	21.913 ppb	0.1587	0.72%
Na 589.592 Radial†	2065.6	551.66 ug/L	9.534	551.66 ppb	9.534	1.73%
Ni 231.604†	2642.7	59.038 ug/L	0.4466	59.038 ppb	0.4466	0.76%
P 214.914†	1271.1	561.81 ug/L	13.430	561.81 ppb	13.430	2.39%
Pb 220.353†	1361.1	153.81 ug/L	1.842	153.81 ppb	1.842	1.20%
S 181.975 Axial†	415.5	497.06 ug/L	1.964	497.06 ppb	1.964	0.40%
Sb 206.836†	23.5	0.8809 ug/L	1.51607	0.8809 ppb	1.51607	172.10%
Se 196.026†	-463.1	78.982 ug/L	3.2110	78.982 ppb	3.2110	4.07%
Si 251.611†	973430.7	26117 ug/L	100.3	26117 ppb	100.3	0.38%
Sn 189.927†	-51.3	-5.1536 ug/L	1.32234	-5.1536 ppb	1.32234	25.66%
Sr 421.552†	17754.7	103.27 ug/L	0.352	103.27 ppb	0.352	0.34%
Ti 334.940†	1720231.4	2371.9 ug/L	7.64	2371.9 ppb	7.64	0.32%
Tl 190.801†	-121.9	-3.6377 ug/L	2.87067	-3.6377 ppb	2.87067	78.91%
U 409.014†	-8703.2	-207.26 ug/L	2.484	-207.26 ppb	2.484	1.20%
V 292.402†	25900.7	127.32 ug/L	1.561	127.32 ppb	1.561	1.23%
Zn 213.857†	28743.7	229.49 ug/L	2.942	229.49 ppb	2.942	1.28%
SiO2†	981627.5	56370 ug/L	668.9	56370 ppb	668.9	1.19%

Sequence No.: 44
 Sample ID: 244601010|941727|1
 Analyst: HSC
 Initial Sample Wt:
 Dilution:

Autosampler Location: 86
 Date Collected: 1/28/2010 22:44:59
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: 244601010|941727|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5364.7	5364.7	96.1 %		22:46:52
1	Y RADIAL	7653.6	7653.6	125.8 %		22:46:52
1	Al 396.153Radial†	25287.1	26321.8	18242 ug/L	18242 ppb	22:46:52
1	Ca 317.933Radial†	2653.3	2735.5	4159.3 ug/L	4159.3 ppb	22:47:12
1	Fe 238.204 Radial†	8438.9	8777.0	74116 ug/L	74116 ppb	22:46:52
1	K 766.490 Radial†	23341.4	21904.7	3624.2 ug/L	3624.2 ppb	22:46:52
1	Mg 279.077 IEC†	96.8	98.4	3134.1 ug/L	3134.1 ppb	22:47:12
1	Na 589.592 Radial†	2352.7	3477.3	928.70 ug/L	928.70 ppb	22:46:52
1	Sr 421.552†	5557.4	5774.5	33.582 ug/L	33.582 ppb	22:46:52
1	Sc 361.383	976796.5	976796.5	99.265 %		22:48:10
1	Y 371.029	1116496.7	1116496.7	128.01 %		22:48:10
1	Ag 328.068†	-4773.7	-5130.0	4.8431 ug/L	4.8431 ppb	22:48:15
1	As 188.979†	-39.3	-5.8	26.979 ug/L	26.979 ppb	22:48:35
1	B 249.677†	408.8	698.1	1.7226 ug/L	1.7226 ppb	22:48:15
1	Ba 233.527†	23932.4	24114.2	171.78 ug/L	171.78 ppb	22:48:15
1	Be 313.107†	-9667.1	-4670.6	1.6170 ug/L	1.6170 ppb	22:48:15
1	Cd 226.502†	489.0	692.0	-0.8077 ug/L	-0.8077 ppb	22:48:35
1	Co 228.616†	1080.9	1160.7	18.361 ug/L	18.361 ppb	22:48:35
1	Cr 267.716†	16849.0	16888.3	164.35 ug/L	164.35 ppb	22:48:15
1	Cu 324.752†	14583.7	5555.1	18.111 ug/L	18.111 ppb	22:48:15
1	Mn 257.610†	2225269.6	2241213.7	2259.6 ug/L	2259.6 ppb	22:48:10
1	Mo 202.031†	407.9	388.0	29.740 ug/L	29.740 ppb	22:48:35
1	Ni 231.604†	4199.8	4120.9	92.090 ug/L	92.090 ppb	22:48:35
1	P 214.914†	937.3	704.7	293.70 ug/L	293.70 ppb	22:48:35
1	Pb 220.353†	396.6	457.9	48.022 ug/L	48.022 ppb	22:48:35
1	S 181.975 Axial†	158.5	91.8	108.56 ug/L	108.56 ppb	22:48:35
1	Sb 206.836†	51.9	17.1	2.7746 ug/L	2.7746 ppb	22:48:35
1	Se 196.026†	-355.8	-337.3	71.016 ug/L	71.016 ppb	22:48:35
1	Si 251.611†	574184.5	577975.7	15507 ug/L	15507 ppb	22:48:10
1	Sn 189.927†	12.0	16.7	4.6227 ug/L	4.6227 ppb	22:48:35
1	Ti 334.940†	977787.5	985937.2	1359.3 ug/L	1359.3 ppb	22:48:10
1	Tl 190.801†	-138.3	-99.6	-6.6913 ug/L	-6.6913 ppb	22:48:35
1	U 409.014†	-13937.8	-12656.3	-294.08 ug/L	-294.08 ppb	22:48:10
1	V 292.402†	6703.1	8193.2	33.046 ug/L	33.046 ppb	22:48:15
1	Zn 213.857†	26495.0	25948.5	208.14 ug/L	208.14 ppb	22:48:15
1	SiO2†	571595.0	575351.2	33039 ug/L	33039 ppb	22:49:43
2	Sc Radial	5556.5	5556.5	99.5 %		22:47:17
2	Y RADIAL	7837.6	7837.6	128.8 %		22:47:17
2	Al 396.153Radial†	25150.5	25275.8	17517 ug/L	17517 ppb	22:47:17
2	Ca 317.933Radial†	2634.7	2621.5	3986.0 ug/L	3986.0 ppb	22:47:37
2	Fe 238.204 Radial†	8428.8	8463.6	71470 ug/L	71470 ppb	22:47:17
2	K 766.490 Radial†	23227.0	20950.9	3466.3 ug/L	3466.3 ppb	22:47:17
2	Mg 279.077 IEC†	94.1	92.2	2934.4 ug/L	2934.4 ppb	22:47:37
2	Na 589.592 Radial†	2313.0	3352.9	895.45 ug/L	895.45 ppb	22:47:17
2	Sr 421.552†	5547.3	5564.6	32.361 ug/L	32.361 ppb	22:47:17
2	Sc 361.383	982715.9	982715.9	99.867 %		22:48:41
2	Y 371.029	1121998.7	1121998.7	128.64 %		22:48:41
2	Ag 328.068†	-4741.4	-5068.8	4.2170 ug/L	4.2170 ppb	22:48:46
2	As 188.979†	-32.4	1.4	28.984 ug/L	28.984 ppb	22:49:06
2	B 249.677†	468.7	755.6	3.2917 ug/L	3.2917 ppb	22:48:46
2	Ba 233.527†	23632.9	23669.1	168.57 ug/L	168.57 ppb	22:48:46
2	Be 313.107†	-9496.9	-4441.5	1.6914 ug/L	1.6914 ppb	22:48:46
2	Cd 226.502†	463.4	663.4	-0.8167 ug/L	-0.8167 ppb	22:49:06
2	Co 228.616†	1071.2	1144.5	18.085 ug/L	18.085 ppb	22:49:06
2	Cr 267.716†	16709.2	16646.0	161.96 ug/L	161.96 ppb	22:48:46
2	Cu 324.752†	14392.6	5275.2	17.262 ug/L	17.262 ppb	22:48:46
2	Mn 257.610†	2235908.9	2238364.2	2256.5 ug/L	2256.5 ppb	22:48:41
2	Mo 202.031†	405.5	383.1	29.231 ug/L	29.231 ppb	22:49:06
2	Ni 231.604†	4216.5	4112.1	91.895 ug/L	91.895 ppb	22:49:06

2	P 214.914†	910.9	672.6	279.81 ug/L	279.81 ppb	22:49:06
2	Pb 220.353†	372.3	431.2	45.133 ug/L	45.133 ppb	22:49:06
2	S 181.975 Axial†	151.0	83.4	98.439 ug/L	98.439 ppb	22:49:06
2	Sb 206.836†	45.2	10.1	0.6209 ug/L	0.6209 ppb	22:49:06
2	Se 196.026†	-354.9	-334.2	63.830 ug/L	63.830 ppb	22:49:06
2	Si 251.611†	578397.5	578710.2	15526 ug/L	15526 ppb	22:48:41
2	Sn 189.927†	21.5	26.2	6.1002 ug/L	6.1002 ppb	22:49:06
2	Ti 334.940†	984474.3	986699.8	1360.4 ug/L	1360.4 ppb	22:48:41
2	Tl 190.801†	-136.2	-96.7	-5.8490 ug/L	-5.8490 ppb	22:49:06
2	U 409.014†	-13884.0	-12517.9	-290.65 ug/L	-290.65 ppb	22:48:41
2	V 292.402†	6651.9	8101.2	32.918 ug/L	32.918 ppb	22:48:46
2	Zn 213.857†	26278.9	25571.3	205.26 ug/L	205.26 ppb	22:48:46
2	SiO2†	569851.1	570136.6	32740 ug/L	32740 ppb	22:49:48
3	Sc Radial	5572.7	5572.7	99.8 %		22:47:42
3	Y RADIAL	7841.8	7841.8	128.9 %		22:47:42
3	Al 396.153Radial†	25213.4	25265.3	17510 ug/L	17510 ppb	22:47:42
3	Ca 317.933Radial†	2658.2	2637.3	4010.0 ug/L	4010.0 ppb	22:48:02
3	Fe 238.204 Radial†	8434.8	8445.0	71313 ug/L	71313 ppb	22:47:42
3	K 766.490 Radial†	23233.5	20889.5	3456.1 ug/L	3456.1 ppb	22:47:42
3	Mg 279.077 IEC†	95.7	93.5	2978.5 ug/L	2978.5 ppb	22:48:02
3	Na 589.592 Radial†	2316.6	3349.7	894.62 ug/L	894.62 ppb	22:47:42
3	Sr 421.552†	5574.2	5575.3	32.424 ug/L	32.424 ppb	22:47:42
3	Sc 361.383	986638.1	986638.1	100.27 %		22:49:12
3	Y 371.029	1127060.4	1127060.4	129.22 %		22:49:12
3	Ag 328.068†	-4662.9	-4971.6	4.5333 ug/L	4.5333 ppb	22:49:17
3	As 188.979†	-21.9	12.0	32.773 ug/L	32.773 ppb	22:49:37
3	B 249.677†	335.7	621.1	0.6536 ug/L	0.6536 ppb	22:49:17
3	Ba 233.527†	23505.7	23448.2	167.02 ug/L	167.02 ppb	22:49:17
3	Be 313.107†	-9602.5	-4509.0	1.6659 ug/L	1.6659 ppb	22:49:17
3	Cd 226.502†	480.7	678.8	-0.6473 ug/L	-0.6473 ppb	22:49:37
3	Co 228.616†	1079.2	1148.2	18.162 ug/L	18.162 ppb	22:49:37
3	Cr 267.716†	16609.6	16480.1	160.36 ug/L	160.36 ppb	22:49:17
3	Cu 324.752†	14313.7	5139.4	16.910 ug/L	16.910 ppb	22:49:17
3	Mn 257.610†	2240002.3	2233546.5	2251.6 ug/L	2251.6 ppb	22:49:12
3	Mo 202.031†	411.3	387.3	29.478 ug/L	29.478 ppb	22:49:37
3	Ni 231.604†	4242.4	4121.2	92.097 ug/L	92.097 ppb	22:49:37
3	P 214.914†	929.7	687.8	287.55 ug/L	287.55 ppb	22:49:37
3	Pb 220.353†	388.7	446.1	46.808 ug/L	46.808 ppb	22:49:37
3	S 181.975 Axial†	157.3	89.1	105.32 ug/L	105.32 ppb	22:49:37
3	Sb 206.836†	38.9	3.7	-1.3092 ug/L	-1.3092 ppb	22:49:37
3	Se 196.026†	-358.7	-336.6	62.086 ug/L	62.086 ppb	22:49:37
3	Si 251.611†	579066.0	577074.6	15482 ug/L	15482 ppb	22:49:12
3	Sn 189.927†	18.4	23.0	5.5773 ug/L	5.5773 ppb	22:49:37
3	Ti 334.940†	987029.6	985329.5	1358.5 ug/L	1358.5 ppb	22:49:12
3	Tl 190.801†	-131.1	-91.0	-4.2757 ug/L	-4.2757 ppb	22:49:37
3	U 409.014†	-13885.4	-12463.9	-289.41 ug/L	-289.41 ppb	22:49:12
3	V 292.402†	6617.9	8040.8	32.615 ug/L	32.615 ppb	22:49:17
3	Zn 213.857†	26150.5	25338.6	203.34 ug/L	203.34 ppb	22:49:17
3	SiO2†	575539.6	573541.7	32935 ug/L	32935 ppb	22:49:54

Mean Data: 244601010|941727|1

Analyte	Mean Corrected	Calib.	Std.Dev.	Sample	Std.Dev.	RSD
	Intensity	Conc. Units		Conc. Units		
Sc 361.383	982050.2	99.799 %	0.5035			0.50%
Sc Radial	5498.0	98.4 %	2.07			2.10%
Y 371.029	1121851.9	128.62 %	0.606			0.47%
Y RADIAL	7777.7	127.8 %	1.77			1.38%
Ag 328.068†	-5056.8	4.5311 ug/L	0.31308	4.5311 ppb	0.31308	6.91%
Al 396.153Radial†	25621.0	17757 ug/L	420.7	17757 ppb	420.7	2.37%
As 188.979†	2.6	29.579 ug/L	2.9422	29.579 ppb	2.9422	9.95%
B 249.677†	691.6	1.8893 ug/L	1.32691	1.8893 ppb	1.32691	70.23%
Ba 233.527†	23743.8	169.12 ug/L	2.431	169.12 ppb	2.431	1.44%
Be 313.107†	-4540.4	1.6581 ug/L	0.03781	1.6581 ppb	0.03781	2.28%
Ca 317.933Radial†	2664.7	4051.8 ug/L	93.93	4051.8 ppb	93.93	2.32%
Cd 226.502†	678.1	-0.7572 ug/L	0.09534	-0.7572 ppb	0.09534	12.59%
Co 228.616†	1151.1	18.203 ug/L	0.1425	18.203 ppb	0.1425	0.78%
Cr 267.716†	16671.4	162.22 ug/L	2.008	162.22 ppb	2.008	1.24%
Cu 324.752†	5323.2	17.427 ug/L	0.6173	17.427 ppb	0.6173	3.54%
Fe 238.204 Radial†	8561.9	72300 ug/L	1575.2	72300 ppb	1575.2	2.18%
K 766.490 Radial†	21248.3	3515.5 ug/L	94.21	3515.5 ppb	94.21	2.68%

Mg 279.077 IEC†	94.7	3015.7 ug/L	104.87	3015.7 ppb	104.87	3.48%
Mn 257.610†	2237708.1	2255.9 ug/L	4.02	2255.9 ppb	4.02	0.18%
Mo 202.031†	386.1	29.483 ug/L	0.2542	29.483 ppb	0.2542	0.86%
Na 589.592 Radial†	3393.3	906.26 ug/L	19.439	906.26 ppb	19.439	2.14%
Ni 231.604†	4118.1	92.027 ug/L	0.1147	92.027 ppb	0.1147	0.12%
P 214.914†	688.4	287.02 ug/L	6.960	287.02 ppb	6.960	2.42%
Pb 220.353†	445.1	46.654 ug/L	1.4505	46.654 ppb	1.4505	3.11%
S 181.975 Axial†	88.1	104.11 ug/L	5.167	104.11 ppb	5.167	4.96%
Sb 206.836†	10.3	0.6954 ug/L	2.04292	0.6954 ppb	2.04292	293.77%
Se 196.026†	-336.1	65.644 ug/L	4.7332	65.644 ppb	4.7332	7.21%
Si 251.611†	577920.2	15505 ug/L	22.0	15505 ppb	22.0	0.14%
Sn 189.927†	22.0	5.4334 ug/L	0.74918	5.4334 ppb	0.74918	13.79%
Sr 421.552†	5638.1	32.789 ug/L	0.6874	32.789 ppb	0.6874	2.10%
Ti 334.940†	985988.8	1359.4 ug/L	0.95	1359.4 ppb	0.95	0.07%
Tl 190.801†	-95.8	-5.6053 ug/L	1.22609	-5.6053 ppb	1.22609	21.87%
U 409.014†	-12546.0	-291.38 ug/L	2.416	-291.38 ppb	2.416	0.83%
V 292.402†	8111.7	32.860 ug/L	0.2211	32.860 ppb	0.2211	0.67%
Zn 213.857†	25619.5	205.58 ug/L	2.417	205.58 ppb	2.417	1.18%
SiO2†	573009.8	32905 ug/L	152.0	32905 ppb	152.0	0.46%

Sequence No.: 45

Sample ID: 244601011|941727|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 87

Date Collected: 1/28/2010 22:52:05

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 244601011|941727|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5476.2	5476.2	98.1 %			22:53:58
1	Y RADIAL	6518.0	6518.0	107.1 %			22:53:58
1	Al 396.153Radial†	62996.9	64245.4	44528 ug/L	44528 ppb		22:53:58
1	Ca 317.933Radial†	8052.4	8185.7	12446 ug/L	12446 ppb		22:53:58
1	Fe 238.204 Radial†	10699.8	10904.1	92078 ug/L	92078 ppb		22:53:58
1	K 766.490 Radial†	50358.3	48964.1	8101.7 ug/L	8101.7 ppb		22:53:58
1	Mg 279.077 IEC†	287.0	290.3	9379.2 ug/L	9379.2 ppb		22:54:18
1	Na 589.592 Radial†	1010.5	2058.6	549.80 ug/L	549.80 ppb		22:53:58
1	Sr 421.552†	19540.3	19917.5	115.85 ug/L	115.85 ppb		22:53:58
1	Sc 361.383	983752.0	983752.0	99.972 %			22:55:15
1	Y 371.029	949198.9	949198.9	108.83 %			22:55:15
1	Ag 328.068†	-6271.4	-6594.2	5.2710 ug/L	5.2710 ppb		22:55:20
1	As 188.979†	-43.0	-9.2	38.830 ug/L	38.830 ppb		22:55:41
1	B 249.677†	1206.7	1493.3	14.499 ug/L	14.499 ppb		22:55:20
1	Ba 233.527†	90557.8	90587.9	639.62 ug/L	639.62 ppb		22:55:20
1	Be 313.107†	-8729.5	-3663.9	4.2484 ug/L	4.2484 ppb		22:55:20
1	Cd 226.502†	788.3	987.9	0.3001 ug/L	0.3001 ppb		22:55:41
1	Co 228.616†	2055.2	2127.5	34.655 ug/L	34.655 ppb		22:55:41
1	Cr 267.716†	15708.1	15627.0	152.63 ug/L	152.63 ppb		22:55:20
1	Cu 324.752†	27280.3	18151.5	50.772 ug/L	50.772 ppb		22:55:20
1	Mn 257.610†	2530236.8	2530416.9	2551.7 ug/L	2551.7 ppb		22:55:15
1	Mo 202.031†	109.8	86.9	12.655 ug/L	12.655 ppb		22:55:41
1	Ni 231.604†	4202.8	4094.1	91.479 ug/L	91.479 ppb		22:55:41
1	P 214.914†	1881.4	1642.4	747.19 ug/L	747.19 ppb		22:55:41
1	Pb 220.353†	844.5	903.0	101.66 ug/L	101.66 ppb		22:55:41
1	S 181.975 Axial†	688.5	620.9	748.85 ug/L	748.85 ppb		22:55:41
1	Sb 206.836†	53.0	17.9	-0.9249 ug/L	-0.9249 ppb		22:55:41
1	Se 196.026†	-446.9	-425.9	86.001 ug/L	86.001 ppb		22:55:41
1	Si 251.611†	806225.2	805992.1	21624 ug/L	21624 ppb		22:55:15
1	Sn 189.927†	-79.1	-74.5	-8.7816 ug/L	-8.7816 ppb		22:55:41
1	Ti 334.940†	1724330.3	1725726.0	2379.5 ug/L	2379.5 ppb		22:55:15
1	Tl 190.801†	-159.5	-119.8	-2.9262 ug/L	-2.9262 ppb		22:55:41
1	U 409.014†	-5840.5	-4457.4	-111.30 ug/L	-111.30 ppb		22:55:20
1	V 292.402†	26588.7	28036.6	139.73 ug/L	139.73 ppb		22:55:20
1	Zn 213.857†	28147.0	27412.2	218.54 ug/L	218.54 ppb		22:55:20
1	SiO2†	807430.2	807181.7	46353 ug/L	46353 ppb		22:56:49
2	Sc Radial	5496.6	5496.6	98.4 %			22:54:23
2	Y RADIAL	6568.7	6568.7	108.0 %			22:54:23
2	Al 396.153Radial†	62031.2	63025.4	43683 ug/L	43683 ppb		22:54:23
2	Ca 317.933Radial†	7962.1	8063.5	12261 ug/L	12261 ppb		22:54:23
2	Fe 238.204 Radial†	10528.4	10689.4	90265 ug/L	90265 ppb		22:54:23
2	K 766.490 Radial†	49757.1	48162.3	7969.1 ug/L	7969.1 ppb		22:54:23
2	Mg 279.077 IEC†	283.4	285.6	9227.2 ug/L	9227.2 ppb		22:54:43
2	Na 589.592 Radial†	980.7	2024.5	540.69 ug/L	540.69 ppb		22:54:23
2	Sr 421.552†	19275.5	19574.4	113.85 ug/L	113.85 ppb		22:54:23
2	Sc 361.383	981408.6	981408.6	99.734 %			22:55:46
2	Y 371.029	948168.5	948168.5	108.71 %			22:55:46
2	Ag 328.068†	-6254.9	-6592.6	4.7022 ug/L	4.7022 ppb		22:55:52
2	As 188.979†	-34.1	-0.4	41.606 ug/L	41.606 ppb		22:56:12
2	B 249.677†	1008.0	1296.9	10.904 ug/L	10.904 ppb		22:55:52
2	Ba 233.527†	91222.1	91470.3	645.77 ug/L	645.77 ppb		22:55:52
2	Be 313.107†	-8916.4	-3872.1	4.1830 ug/L	4.1830 ppb		22:55:52
2	Cd 226.502†	787.5	988.9	0.4974 ug/L	0.4974 ppb		22:56:12
2	Co 228.616†	2066.1	2143.5	34.989 ug/L	34.989 ppb		22:56:12
2	Cr 267.716†	15779.8	15736.4	153.65 ug/L	153.65 ppb		22:55:52
2	Cu 324.752†	27546.7	18483.8	51.517 ug/L	51.517 ppb		22:55:52
2	Mn 257.610†	2525744.5	2531956.1	2553.1 ug/L	2553.1 ppb		22:55:46
2	Mo 202.031†	113.9	91.2	12.781 ug/L	12.781 ppb		22:56:12
2	Ni 231.604†	4225.6	4126.9	92.213 ug/L	92.213 ppb		22:56:12

2	P 214.914†	1900.4	1666.0	760.05 ug/L	760.05 ppb	22:56:12
2	Pb 220.353†	843.9	904.5	101.81 ug/L	101.81 ppb	22:56:12
2	S 181.975 Axial†	669.7	603.6	727.91 ug/L	727.91 ppb	22:56:12
2	Sb 206.836†	65.9	30.9	2.9854 ug/L	2.9854 ppb	22:56:12
2	Se 196.026†	-463.5	-443.6	70.774 ug/L	70.774 ppb	22:56:12
2	Si 251.611†	804158.8	805845.8	21621 ug/L	21621 ppb	22:55:46
2	Sn 189.927†	-78.1	-73.8	-8.7165 ug/L	-8.7165 ppb	22:56:12
2	Ti 334.940†	1720233.6	1725736.9	2379.6 ug/L	2379.6 ppb	22:55:46
2	Tl 190.801†	-155.4	-116.0	-1.8324 ug/L	-1.8324 ppb	22:56:12
2	U 409.014†	-5963.8	-4595.0	-114.20 ug/L	-114.20 ppb	22:55:52
2	V 292.402†	26846.2	28358.3	141.77 ug/L	141.77 ppb	22:55:52
2	Zn 213.857†	28300.2	27633.0	220.55 ug/L	220.55 ppb	22:55:52
2	SiO2†	801058.4	802721.4	46096 ug/L	46096 ppb	22:56:55
3	Sc Radial	5546.1	5546.1	99.3 %		22:54:48
3	Y RADIAL	6609.3	6609.3	108.6 %		22:54:48
3	Al 396.153Radial†	62941.0	63378.5	43927 ug/L	43927 ppb	22:54:48
3	Ca 317.933Radial†	8089.1	8119.0	12345 ug/L	12345 ppb	22:54:48
3	Fe 238.204 Radial†	10682.7	10749.2	90771 ug/L	90771 ppb	22:54:48
3	K 766.490 Radial†	50446.5	48405.0	8009.2 ug/L	8009.2 ppb	22:54:48
3	Mg 279.077 IEC†	280.8	280.4	9056.5 ug/L	9056.5 ppb	22:55:08
3	Na 589.592 Radial†	1016.8	2052.0	548.02 ug/L	548.02 ppb	22:54:48
3	Sr 421.552†	19493.0	19618.5	114.11 ug/L	114.11 ppb	22:54:48
3	Sc 361.383	989696.2	989696.2	100.58 %		22:56:18
3	Y 371.029	956190.9	956190.9	109.63 %		22:56:18
3	Ag 328.068†	-6305.7	-6590.6	4.8588 ug/L	4.8588 ppb	22:56:23
3	As 188.979†	-43.1	-9.1	38.518 ug/L	38.518 ppb	22:56:43
3	B 249.677†	1029.0	1309.4	11.071 ug/L	11.071 ppb	22:56:23
3	Ba 233.527†	90475.6	89962.1	635.18 ug/L	635.18 ppb	22:56:23
3	Be 313.107†	-9064.6	-3944.6	4.1473 ug/L	4.1473 ppb	22:56:23
3	Cd 226.502†	772.4	967.3	0.2302 ug/L	0.2302 ppb	22:56:43
3	Co 228.616†	2035.4	2095.6	34.072 ug/L	34.072 ppb	22:56:43
3	Cr 267.716†	15672.7	15497.4	151.35 ug/L	151.35 ppb	22:56:23
3	Cu 324.752†	27218.4	17926.0	50.134 ug/L	50.134 ppb	22:56:23
3	Mn 257.610†	2537924.4	2522859.5	2544.0 ug/L	2544.0 ppb	22:56:18
3	Mo 202.031†	108.1	84.5	12.408 ug/L	12.408 ppb	22:56:43
3	Ni 231.604†	4176.6	4042.7	90.332 ug/L	90.332 ppb	22:56:43
3	P 214.914†	1869.0	1618.7	736.42 ug/L	736.42 ppb	22:56:43
3	Pb 220.353†	853.7	907.1	102.11 ug/L	102.11 ppb	22:56:43
3	S 181.975 Axial†	680.2	608.5	733.79 ug/L	733.79 ppb	22:56:43
3	Sb 206.836†	55.8	20.3	-0.2043 ug/L	-0.2043 ppb	22:56:43
3	Se 196.026†	-455.6	-431.8	78.561 ug/L	78.561 ppb	22:56:43
3	Si 251.611†	807715.5	802630.3	21534 ug/L	21534 ppb	22:56:18
3	Sn 189.927†	-77.8	-72.7	-8.5272 ug/L	-8.5272 ppb	22:56:43
3	Ti 334.940†	1730593.8	1721594.3	2373.9 ug/L	2373.9 ppb	22:56:18
3	Tl 190.801†	-149.4	-108.8	0.1588 ug/L	0.1588 ppb	22:56:43
3	U 409.014†	-5917.2	-4498.6	-112.08 ug/L	-112.08 ppb	22:56:23
3	V 292.402†	26545.6	27834.1	138.79 ug/L	138.79 ppb	22:56:23
3	Zn 213.857†	28012.1	27108.9	216.15 ug/L	216.15 ppb	22:56:23
3	SiO2†	797754.8	792710.8	45522 ug/L	45522 ppb	22:57:01

Mean Data: 244601011|941727|1

Analyte	Mean Corrected	Conc.	Calib.	Std.Dev.	Sample	Std.Dev.	RSD
	Intensity	Units			Conc. Units		
Sc 361.383	984952.2	100.09 %		0.434			0.43%
Sc Radial	5506.3	98.6 %		0.64			0.65%
Y 371.029	951186.1	109.05 %		0.500			0.46%
Y RADIAL	6565.3	107.9 %		0.75			0.70%
Ag 328.068†	-6592.5	4.9440 ug/L		0.29383	4.9440 ppb	0.29383	5.94%
Al 396.153Radial†	63549.8	44046 ug/L		435.1	44046 ppb	435.1	0.99%
As 188.979†	-6.2	39.652 ug/L		1.7002	39.652 ppb	1.7002	4.29%
B 249.677†	1366.5	12.158 ug/L		2.0291	12.158 ppb	2.0291	16.69%
Ba 233.527†	90673.4	640.19 ug/L		5.317	640.19 ppb	5.317	0.83%
Be 313.107†	-3826.9	4.1929 ug/L		0.05131	4.1929 ppb	0.05131	1.22%
Ca 317.933Radial†	8122.7	12351 ug/L		93.0	12351 ppb	93.0	0.75%
Cd 226.502†	981.4	0.3426 ug/L		0.13860	0.3426 ppb	0.13860	40.46%
Co 228.616†	2122.2	34.572 ug/L		0.4640	34.572 ppb	0.4640	1.34%
Cr 267.716†	15620.3	152.54 ug/L		1.151	152.54 ppb	1.151	0.75%
Cu 324.752†	18187.1	50.807 ug/L		0.6922	50.807 ppb	0.6922	1.36%
Fe 238.204 Radial†	10780.9	91038 ug/L		935.6	91038 ppb	935.6	1.03%
K 766.490 Radial†	48510.5	8026.7 ug/L		68.04	8026.7 ppb	68.04	0.85%

Mg 279.077 IEC†	285.4	9221.0 ug/L	161.43	9221.0 ppb	161.43	1.75%
Mn 257.610†	2528410.8	2549.6 ug/L	4.90	2549.6 ppb	4.90	0.19%
Mo 202.031†	87.5	12.615 ug/L	0.1895	12.615 ppb	0.1895	1.50%
Na 589.592 Radial†	2045.0	546.17 ug/L	4.828	546.17 ppb	4.828	0.88%
Ni 231.604†	4087.9	91.342 ug/L	0.9482	91.342 ppb	0.9482	1.04%
P 214.914†	1642.4	747.89 ug/L	11.829	747.89 ppb	11.829	1.58%
Pb 220.353†	904.9	101.86 ug/L	0.228	101.86 ppb	0.228	0.22%
S 181.975 Axial†	611.0	736.85 ug/L	10.797	736.85 ppb	10.797	1.47%
Sb 206.836†	23.0	0.6187 ug/L	2.08099	0.6187 ppb	2.08099	336.34%
Se 196.026†	-433.8	78.445 ug/L	7.6142	78.445 ppb	7.6142	9.71%
Si 251.611†	804822.8	21593 ug/L	51.0	21593 ppb	51.0	0.24%
Sn 189.927†	-73.7	-8.6751 ug/L	0.13216	-8.6751 ppb	0.13216	1.52%
Sr 421.552†	19703.5	114.60 ug/L	1.086	114.60 ppb	1.086	0.95%
Ti 334.940†	1724352.4	2377.7 ug/L	3.28	2377.7 ppb	3.28	0.14%
Tl 190.801†	-114.9	-1.5333 ug/L	1.56408	-1.5333 ppb	1.56408	102.01%
U 409.014†	-4517.0	-112.52 ug/L	1.500	-112.52 ppb	1.500	1.33%
V 292.402†	28076.3	140.10 ug/L	1.525	140.10 ppb	1.525	1.09%
Zn 213.857†	27384.7	218.42 ug/L	2.201	218.42 ppb	2.201	1.01%
SiO2†	800871.3	45990 ug/L	425.6	45990 ppb	425.6	0.93%

Sequence No.: 46

Sample ID: 244601012|941727|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 88

Date Collected: 1/28/2010 22:59:12

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 244601012|941727|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5598.7	5598.7	100 %		23:01:05
1	Y RADIAL	6786.7	6786.7	111.6 %		23:01:05
1	Al 396.153Radial†	58173.5	58027.3	40218 ug/L	40218 ppb	23:01:05
1	Ca 317.933Radial†	6169.1	6127.3	9316.5 ug/L	9316.5 ppb	23:01:05
1	Fe 238.204 Radial†	9511.5	9479.8	80051 ug/L	80051 ppb	23:01:05
1	K 766.490 Radial†	41528.2	39031.2	6458.1 ug/L	6458.1 ppb	23:01:05
1	Mg 279.077 IEC†	229.6	226.7	7313.9 ug/L	7313.9 ppb	23:01:25
1	Na 589.592 Radial†	1286.1	2311.0	617.20 ug/L	617.20 ppb	23:01:05
1	Sr 421.552†	15059.9	15011.8	87.314 ug/L	87.314 ppb	23:01:05
1	Sc 361.383	984153.3	984153.3	100.01 %		23:02:22
1	Y 371.029	966624.8	966624.8	110.82 %		23:02:22
1	Ag 328.068†	-5465.8	-5786.1	4.3794 ug/L	4.3794 ppb	23:02:28
1	As 188.979†	-37.9	-4.0	34.503 ug/L	34.503 ppb	23:02:48
1	B 249.677†	915.8	1201.9	10.685 ug/L	10.685 ppb	23:02:28
1	Ba 233.527†	75779.0	75774.1	535.09 ug/L	535.09 ppb	23:02:28
1	Be 313.107†	-7660.1	-2591.1	3.6994 ug/L	3.6994 ppb	23:02:28
1	Cd 226.502†	643.4	842.7	0.1116 ug/L	0.1116 ppb	23:02:48
1	Co 228.616†	2018.6	2090.1	34.860 ug/L	34.860 ppb	23:02:48
1	Cr 267.716†	20784.9	20696.7	201.21 ug/L	201.21 ppb	23:02:28
1	Cu 324.752†	22702.2	13562.8	38.564 ug/L	38.564 ppb	23:02:28
1	Mn 257.610†	2582337.8	2581479.4	2601.9 ug/L	2601.9 ppb	23:02:22
1	Mo 202.031†	117.0	94.1	12.128 ug/L	12.128 ppb	23:02:48
1	Ni 231.604†	5058.3	4947.7	110.56 ug/L	110.56 ppb	23:02:48
1	P 214.914†	1500.6	1260.9	567.82 ug/L	567.82 ppb	23:02:48
1	Pb 220.353†	609.4	667.7	75.584 ug/L	75.584 ppb	23:02:48
1	S 181.975 Axial†	504.7	436.9	525.18 ug/L	525.18 ppb	23:02:48
1	Sb 206.836†	70.7	35.6	5.4826 ug/L	5.4826 ppb	23:02:48
1	Se 196.026†	-405.6	-384.5	67.494 ug/L	67.494 ppb	23:02:48
1	Si 251.611†	907208.1	906633.4	24325 ug/L	24325 ppb	23:02:22
1	Sn 189.927†	-56.2	-51.6	-5.7086 ug/L	-5.7086 ppb	23:02:48
1	Ti 334.940†	1441787.8	1442515.8	1988.9 ug/L	1988.9 ppb	23:02:22
1	Tl 190.801†	-155.3	-115.5	-4.6232 ug/L	-4.6232 ppb	23:02:48
1	U 409.014†	-7279.4	-5893.8	-142.41 ug/L	-142.41 ppb	23:02:28
1	V 292.402†	20355.4	21793.3	107.12 ug/L	107.12 ppb	23:02:28
1	Zn 213.857†	26958.7	26212.6	209.62 ug/L	209.62 ppb	23:02:28
1	SiO2†	898138.0	897548.7	51542 ug/L	51542 ppb	23:03:56
2	Sc Radial	5632.5	5632.5	101 %		23:01:30
2	Y RADIAL	6813.2	6813.2	112.0 %		23:01:30
2	Al 396.153Radial†	58433.1	57936.8	40156 ug/L	40156 ppb	23:01:30
2	Ca 317.933Radial†	6181.7	6102.8	9279.4 ug/L	9279.4 ppb	23:01:30
2	Fe 238.204 Radial†	9530.0	9441.2	79726 ug/L	79726 ppb	23:01:30
2	K 766.490 Radial†	41713.6	38966.8	6447.5 ug/L	6447.5 ppb	23:01:30
2	Mg 279.077 IEC†	228.2	223.9	7222.9 ug/L	7222.9 ppb	23:01:50
2	Na 589.592 Radial†	1317.8	2334.7	623.53 ug/L	623.53 ppb	23:01:30
2	Sr 421.552†	15078.7	14940.4	86.898 ug/L	86.898 ppb	23:01:30
2	Sc 361.383	972428.7	972428.7	98.821 %		23:02:53
2	Y 371.029	957426.7	957426.7	109.77 %		23:02:53
2	Ag 328.068†	-5379.0	-5764.2	4.3607 ug/L	4.3607 ppb	23:02:59
2	As 188.979†	-24.9	8.6	39.015 ug/L	39.015 ppb	23:03:19
2	B 249.677†	812.0	1108.0	8.8771 ug/L	8.8771 ppb	23:02:59
2	Ba 233.527†	74854.4	75751.9	534.93 ug/L	534.93 ppb	23:02:59
2	Be 313.107†	-7809.4	-2834.5	3.6202 ug/L	3.6202 ppb	23:02:59
2	Cd 226.502†	634.6	841.5	0.1335 ug/L	0.1335 ppb	23:03:19
2	Co 228.616†	2004.0	2099.8	35.049 ug/L	35.049 ppb	23:03:19
2	Cr 267.716†	20599.2	20759.4	201.80 ug/L	201.80 ppb	23:02:59
2	Cu 324.752†	22471.1	13602.6	38.649 ug/L	38.649 ppb	23:02:59
2	Mn 257.610†	2550234.4	2580124.3	2600.6 ug/L	2600.6 ppb	23:02:53
2	Mo 202.031†	101.0	79.2	11.188 ug/L	11.188 ppb	23:03:19
2	Ni 231.604†	5041.3	4991.5	111.54 ug/L	111.54 ppb	23:03:19

2	P 214.914†	1475.1	1253.2	564.20 ug/L	564.20 ppb	23:03:19
2	Pb 220.353†	632.5	698.4	79.020 ug/L	79.020 ppb	23:03:19
2	S 181.975 Axial†	517.4	455.8	548.25 ug/L	548.25 ppb	23:03:19
2	Sb 206.836†	57.5	23.0	1.7034 ug/L	1.7034 ppb	23:03:19
2	Se 196.026†	-407.5	-391.2	62.896 ug/L	62.896 ppb	23:03:19
2	Si 251.611†	894354.9	904563.8	24269 ug/L	24269 ppb	23:02:53
2	Sn 189.927†	-49.5	-45.5	-4.7059 ug/L	-4.7059 ppb	23:03:19
2	Ti 334.940†	1423750.9	1441645.2	1987.7 ug/L	1987.7 ppb	23:02:53
2	Tl 190.801†	-145.9	-107.9	-2.4520 ug/L	-2.4520 ppb	23:03:19
2	U 409.014†	-7329.9	-6032.6	-145.51 ug/L	-145.51 ppb	23:02:59
2	V 292.402†	20119.9	21800.3	107.19 ug/L	107.19 ppb	23:02:59
2	Zn 213.857†	26638.2	26213.2	209.65 ug/L	209.65 ppb	23:02:59
2	SiO2†	895003.3	905204.1	51982 ug/L	51982 ppb	23:04:02
3	Sc Radial	5485.6	5485.6	98.2 %		23:01:55
3	Y RADIAL	6672.2	6672.2	109.7 %		23:01:55
3	Al 396.153Radial†	57326.8	58362.4	40451 ug/L	40451 ppb	23:01:55
3	Ca 317.933Radial†	6090.9	6174.6	9388.5 ug/L	9388.5 ppb	23:01:55
3	Fe 238.204 Radial†	9386.3	9548.1	80628 ug/L	80628 ppb	23:01:55
3	K 766.490 Radial†	40866.9	39212.7	6488.2 ug/L	6488.2 ppb	23:01:55
3	Mg 279.077 IEC†	222.4	224.1	7228.4 ug/L	7228.4 ppb	23:02:15
3	Na 589.592 Radial†	1165.5	2214.7	591.48 ug/L	591.48 ppb	23:01:55
3	Sr 421.552†	14728.4	14984.3	87.153 ug/L	87.153 ppb	23:01:55
3	Sc 361.383	976527.2	976527.2	99.238 %		23:03:25
3	Y 371.029	961081.3	961081.3	110.19 %		23:03:25
3	Ag 328.068†	-5494.7	-5857.9	4.2987 ug/L	4.2987 ppb	23:03:30
3	As 188.979†	-36.1	-2.5	35.169 ug/L	35.169 ppb	23:03:50
3	B 249.677†	907.9	1201.1	10.574 ug/L	10.574 ppb	23:03:30
3	Ba 233.527†	75623.8	76209.4	538.17 ug/L	538.17 ppb	23:03:30
3	Be 313.107†	-7762.9	-2754.4	3.6462 ug/L	3.6462 ppb	23:03:30
3	Cd 226.502†	628.8	833.0	-0.0436 ug/L	-0.0436 ppb	23:03:50
3	Co 228.616†	2006.3	2093.5	34.916 ug/L	34.916 ppb	23:03:50
3	Cr 267.716†	20790.6	20864.8	202.84 ug/L	202.84 ppb	23:03:30
3	Cu 324.752†	22849.2	13888.1	39.417 ug/L	39.417 ppb	23:03:30
3	Mn 257.610†	2564960.8	2584132.8	2604.7 ug/L	2604.7 ppb	23:03:25
3	Mo 202.031†	106.7	84.6	11.590 ug/L	11.590 ppb	23:03:50
3	Ni 231.604†	5055.9	4984.8	111.39 ug/L	111.39 ppb	23:03:50
3	P 214.914†	1483.1	1254.9	564.25 ug/L	564.25 ppb	23:03:50
3	Pb 220.353†	623.3	686.5	77.672 ug/L	77.672 ppb	23:03:50
3	S 181.975 Axial†	508.8	444.9	534.99 ug/L	534.99 ppb	23:03:50
3	Sb 206.836†	63.3	28.7	3.4046 ug/L	3.4046 ppb	23:03:50
3	Se 196.026†	-395.9	-377.8	72.887 ug/L	72.887 ppb	23:03:50
3	Si 251.611†	898826.3	905271.1	24288 ug/L	24288 ppb	23:03:25
3	Sn 189.927†	-58.7	-54.5	-6.1623 ug/L	-6.1623 ppb	23:03:50
3	Ti 334.940†	1429999.6	1441895.1	1988.1 ug/L	1988.1 ppb	23:03:25
3	Tl 190.801†	-148.6	-110.0	-3.0424 ug/L	-3.0424 ppb	23:03:50
3	U 409.014†	-7314.9	-5986.3	-144.57 ug/L	-144.57 ppb	23:03:30
3	V 292.402†	20416.2	22013.4	108.25 ug/L	108.25 ppb	23:03:30
3	Zn 213.857†	26932.9	26397.1	211.09 ug/L	211.09 ppb	23:03:30
3	SiO2†	901758.3	908209.8	52154 ug/L	52154 ppb	23:04:08

Mean Data: 244601012|941727|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	977703.1	99.357 %		0.6047			0.61%
Sc Radial	5572.3	99.8 %		1.38			1.38%
Y 371.029	961710.9	110.26 %		0.531			0.48%
Y RADIAL	6757.4	111.1 %		1.23			1.11%
Ag 328.068†	-5802.8	4.3463 ug/L		0.04221	4.3463 ppb	0.04221	0.97%
Al 396.153Radial†	58108.8	40275 ug/L		155.4	40275 ppb	155.4	0.39%
As 188.979†	0.7	36.229 ug/L		2.4355	36.229 ppb	2.4355	6.72%
B 249.677†	1170.4	10.045 ug/L		1.0133	10.045 ppb	1.0133	10.09%
Ba 233.527†	75911.8	536.06 ug/L		1.827	536.06 ppb	1.827	0.34%
Be 313.107†	-2726.7	3.6553 ug/L		0.04040	3.6553 ppb	0.04040	1.11%
Ca 317.933Radial†	6134.9	9328.2 ug/L		55.48	9328.2 ppb	55.48	0.59%
Cd 226.502†	839.1	0.0672 ug/L		0.09653	0.0672 ppb	0.09653	143.68%
Co 228.616†	2094.5	34.942 ug/L		0.0969	34.942 ppb	0.0969	0.28%
Cr 267.716†	20773.6	201.95 ug/L		0.826	201.95 ppb	0.826	0.41%
Cu 324.752†	13684.5	38.877 ug/L		0.4701	38.877 ppb	0.4701	1.21%
Fe 238.204 Radial†	9489.7	80135 ug/L		457.2	80135 ppb	457.2	0.57%
K 766.490 Radial†	39070.2	6464.6 ug/L		21.10	6464.6 ppb	21.10	0.33%

Mg 279.077 IEC†	224.9	7255.1 ug/L	51.04	7255.1 ppb	51.04	0.70%
Mn 257.610†	2581912.2	2602.4 ug/L	2.09	2602.4 ppb	2.09	0.08%
Mo 202.031†	86.0	11.635 ug/L	0.4714	11.635 ppb	0.4714	4.05%
Na 589.592 Radial†	2286.8	610.74 ug/L	16.978	610.74 ppb	16.978	2.78%
Ni 231.604†	4974.6	111.16 ug/L	0.527	111.16 ppb	0.527	0.47%
P 214.914†	1256.4	565.42 ug/L	2.075	565.42 ppb	2.075	0.37%
Pb 220.353†	684.2	77.425 ug/L	1.7313	77.425 ppb	1.7313	2.24%
S 181.975 Axial†	445.9	536.14 ug/L	11.575	536.14 ppb	11.575	2.16%
Sb 206.836†	29.1	3.5302 ug/L	1.89275	3.5302 ppb	1.89275	53.62%
Se 196.026†	-384.5	67.759 ug/L	5.0010	67.759 ppb	5.0010	7.38%
Si 251.611†	905489.5	24294 ug/L	28.2	24294 ppb	28.2	0.12%
Sn 189.927†	-50.5	-5.5256 ug/L	0.74523	-5.5256 ppb	0.74523	13.49%
Sr 421.552†	14978.8	87.121 ug/L	0.2096	87.121 ppb	0.2096	0.24%
Ti 334.940†	1442018.7	1988.3 ug/L	0.61	1988.3 ppb	0.61	0.03%
Tl 190.801†	-111.2	-3.3725 ug/L	1.12265	-3.3725 ppb	1.12265	33.29%
U 409.014†	-5970.9	-144.16 ug/L	1.586	-144.16 ppb	1.586	1.10%
V 292.402†	21869.0	107.52 ug/L	0.631	107.52 ppb	0.631	0.59%
Zn 213.857†	26274.3	210.12 ug/L	0.842	210.12 ppb	0.842	0.40%
SiO2†	903654.2	51893 ug/L	315.7	51893 ppb	315.7	0.61%

Sequence No.: 47
 Sample ID: 244601013|941727|1
 Analyst: HSC
 Initial Sample Wt:
 Dilution:

Autosampler Location: 89
 Date Collected: 1/28/2010 23:06:19
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: 244601013|941727|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5497.3	5497.3	98.4 %		23:08:32
1	Y RADIAL	6555.7	6555.7	107.8 %		23:08:32
1	Al 396.153Radial†	152877.9	155314.2	107650 ug/L	107650 ppb	23:08:12
1	Ca 317.933Radial†	24022.4	24379.1	37069 ug/L	37069 ppb	23:08:12
1	Fe 238.204 Radial†	15318.9	15555.0	131360 ug/L	131360 ppb	23:08:12
1	K 766.490 Radial†	103927.3	103190.9	17069 ug/L	17069 ppb	23:08:12
1	Mg 279.077 IEC†	778.7	788.7	25605 ug/L	25605 ppb	23:08:32
1	Na 589.592 Radial†	20026.6	21374.3	5708.5 ug/L	5708.5 ppb	23:08:12
1	Sr 421.552†	63586.0	64589.7	375.70 ug/L	375.70 ppb	23:08:12
1	Sc 361.383	978981.0	978981.0	99.487 %		23:09:30
1	Y 371.029	945856.5	945856.5	108.44 %		23:09:30
1	Ag 328.068†	-9236.6	-9605.2	6.6381 ug/L	6.6381 ppb	23:09:36
1	As 188.979†	1.7	35.6	61.572 ug/L	61.572 ppb	23:09:56
1	B 249.677†	1454.7	1748.5	12.864 ug/L	12.864 ppb	23:09:36
1	Ba 233.527†	262389.4	263747.0	1857.6 ug/L	1857.6 ppb	23:09:36
1	Be 313.107†	10780.5	15904.2	9.6920 ug/L	9.6920 ppb	23:09:36
1	Cd 226.502†	1118.6	1323.7	-0.4348 ug/L	-0.4348 ppb	23:09:56
1	Co 228.616†	7667.6	7779.0	143.47 ug/L	143.47 ppb	23:09:56
1	Cr 267.716†	14464.5	14453.6	142.24 ug/L	142.24 ppb	23:09:56
1	Cu 324.752†	33256.3	24291.2	68.393 ug/L	68.393 ppb	23:09:36
1	Mn 257.610†	4169806.1	4190775.3	4223.6 ug/L	4223.6 ppb	23:09:30
1	Mo 202.031†	-6.0	-29.0	8.8475 ug/L	8.8475 ppb	23:09:56
1	Ni 231.604†	5102.5	5018.9	112.08 ug/L	112.08 ppb	23:09:56
1	P 214.914†	1590.7	1359.3	586.90 ug/L	586.90 ppb	23:09:56
1	Pb 220.353†	1237.5	1302.2	156.35 ug/L	156.35 ppb	23:09:56
1	S 181.975 Axial†	562.6	497.8	586.80 ug/L	586.80 ppb	23:09:56
1	Sb 206.836†	76.0	41.2	6.3763 ug/L	6.3763 ppb	23:09:56
1	Se 196.026†	-681.2	-663.6	96.352 ug/L	96.352 ppb	23:09:56
1	Si 251.611†	670674.6	673672.8	18074 ug/L	18074 ppb	23:09:30
1	Sn 189.927†	-145.6	-141.8	-15.413 ug/L	-15.413 ppb	23:09:56
1	Ti 334.940†	1490938.9	1499536.8	2069.8 ug/L	2069.8 ppb	23:09:30
1	Tl 190.801†	-184.6	-145.8	-5.6260 ug/L	-5.6260 ppb	23:09:56
1	U 409.014†	-8718.7	-7379.0	-181.60 ug/L	-181.60 ppb	23:09:36
1	V 292.402†	43564.3	45229.4	229.88 ug/L	229.88 ppb	23:09:36
1	Zn 213.857†	34240.8	33674.7	266.70 ug/L	266.70 ppb	23:09:36
1	SiO2†	672689.1	675681.8	38801 ug/L	38801 ppb	23:11:06
2	Sc Radial	5482.2	5482.2	98.2 %		23:08:57
2	Y RADIAL	6535.8	6535.8	107.4 %		23:08:57
2	Al 396.153Radial†	155996.8	158918.7	110150 ug/L	110150 ppb	23:08:37
2	Ca 317.933Radial†	24443.3	24875.0	37823 ug/L	37823 ppb	23:08:37
2	Fe 238.204 Radial†	15605.6	15889.8	134180 ug/L	134180 ppb	23:08:37
2	K 766.490 Radial†	105988.9	105581.4	17465 ug/L	17465 ppb	23:08:37
2	Mg 279.077 IEC†	778.8	791.0	25677 ug/L	25677 ppb	23:08:57
2	Na 589.592 Radial†	20404.6	21815.3	5826.2 ug/L	5826.2 ppb	23:08:37
2	Sr 421.552†	65019.9	66228.1	385.23 ug/L	385.23 ppb	23:08:37
2	Sc 361.383	976433.6	976433.6	99.228 %		23:10:03
2	Y 371.029	944461.5	944461.5	108.28 %		23:10:03
2	Ag 328.068†	-9223.5	-9616.2	7.5038 ug/L	7.5038 ppb	23:10:08
2	As 188.979†	10.3	44.2	65.392 ug/L	65.392 ppb	23:10:28
2	B 249.677†	1480.5	1778.3	12.995 ug/L	12.995 ppb	23:10:08
2	Ba 233.527†	263614.3	265669.5	1871.2 ug/L	1871.2 ppb	23:10:08
2	Be 313.107†	10807.4	15959.5	9.7101 ug/L	9.7101 ppb	23:10:08
2	Cd 226.502†	1092.6	1300.5	-0.9559 ug/L	-0.9559 ppb	23:10:28
2	Co 228.616†	7663.6	7795.1	143.74 ug/L	143.74 ppb	23:10:28
2	Cr 267.716†	14433.9	14460.7	142.37 ug/L	142.37 ppb	23:10:28
2	Cu 324.752†	33444.2	24567.8	69.240 ug/L	69.240 ppb	23:10:08
2	Mn 257.610†	4159692.9	4191517.9	4224.6 ug/L	4224.6 ppb	23:10:03
2	Mo 202.031†	-28.1	-51.3	7.7010 ug/L	7.7010 ppb	23:10:28
2	Ni 231.604†	5103.1	5032.8	112.39 ug/L	112.39 ppb	23:10:28

2	P 214.914†	1597.3	1370.2	590.52 ug/L	590.52 ppb	23:10:28
2	Pb 220.353†	1247.4	1315.5	158.10 ug/L	158.10 ppb	23:10:28
2	S 181.975 Axial†	566.0	502.6	592.23 ug/L	592.23 ppb	23:10:28
2	Sb 206.836†	46.8	12.0	-2.4301 ug/L	-2.4301 ppb	23:10:28
2	Se 196.026†	-685.0	-669.2	102.91 ug/L	102.91 ppb	23:10:28
2	Si 251.611†	668697.1	673438.5	18068 ug/L	18068 ppb	23:10:03
2	Sn 189.927†	-147.3	-143.9	-15.593 ug/L	-15.593 ppb	23:10:28
2	Ti 334.940†	1487301.8	1499781.1	2070.2 ug/L	2070.2 ppb	23:10:03
2	Tl 190.801†	-180.4	-142.1	-4.5701 ug/L	-4.5701 ppb	23:10:28
2	U 409.014†	-8618.1	-7300.4	-180.15 ug/L	-180.15 ppb	23:10:08
2	V 292.402†	43609.6	45389.2	230.34 ug/L	230.34 ppb	23:10:08
2	Zn 213.857†	34303.7	33827.8	267.69 ug/L	267.69 ppb	23:10:08
2	SiO2†	666715.6	671425.9	38557 ug/L	38557 ppb	23:11:11
3	Sc Radial	5493.8	5493.8	98.4 %		23:09:22
3	Y RADIAL	6533.1	6533.1	107.4 %		23:09:22
3	Al 396.153Radial†	155095.7	157668.6	109280 ug/L	109280 ppb	23:09:02
3	Ca 317.933Radial†	24261.7	24638.0	37462 ug/L	37462 ppb	23:09:02
3	Fe 238.204 Radial†	15536.3	15786.0	133310 ug/L	133310 ppb	23:09:02
3	K 766.490 Radial†	105440.7	104797.2	17335 ug/L	17335 ppb	23:09:02
3	Mg 279.077 IEC†	773.0	783.5	25431 ug/L	25431 ppb	23:09:22
3	Na 589.592 Radial†	20308.8	21674.3	5788.6 ug/L	5788.6 ppb	23:09:02
3	Sr 421.552†	64651.5	65714.4	382.24 ug/L	382.24 ppb	23:09:02
3	Sc 361.383	962572.7	962572.7	97.820 %		23:10:35
3	Y 371.029	931175.0	931175.0	106.76 %		23:10:35
3	Ag 328.068†	-9255.9	-9783.2	6.6048 ug/L	6.6048 ppb	23:10:40
3	As 188.979†	14.4	48.6	66.755 ug/L	66.755 ppb	23:11:00
3	B 249.677†	1498.1	1817.7	13.910 ug/L	13.910 ppb	23:10:40
3	Ba 233.527†	262634.8	268493.8	1891.1 ug/L	1891.1 ppb	23:10:40
3	Be 313.107†	10896.5	16207.5	9.7884 ug/L	9.7884 ppb	23:10:40
3	Cd 226.502†	1121.0	1345.3	-0.4217 ug/L	-0.4217 ppb	23:11:00
3	Co 228.616†	7687.2	7930.4	146.35 ug/L	146.35 ppb	23:11:00
3	Cr 267.716†	14398.8	14634.2	144.03 ug/L	144.03 ppb	23:11:00
3	Cu 324.752†	33216.5	24820.3	69.834 ug/L	69.834 ppb	23:10:40
3	Mn 257.610†	4113490.9	4204651.2	4237.7 ug/L	4237.7 ppb	23:10:35
3	Mo 202.031†	-18.6	-42.0	8.2053 ug/L	8.2053 ppb	23:11:00
3	Ni 231.604†	5095.3	5098.9	113.87 ug/L	113.87 ppb	23:11:00
3	P 214.914†	1602.9	1399.1	605.30 ug/L	605.30 ppb	23:11:00
3	Pb 220.353†	1237.3	1323.3	158.86 ug/L	158.86 ppb	23:11:00
3	S 181.975 Axial†	554.0	498.5	587.43 ug/L	587.43 ppb	23:11:00
3	Sb 206.836†	59.8	26.0	1.7551 ug/L	1.7551 ppb	23:11:00
3	Se 196.026†	-676.8	-670.8	99.165 ug/L	99.165 ppb	23:11:00
3	Si 251.611†	660147.9	674402.9	18094 ug/L	18094 ppb	23:10:35
3	Sn 189.927†	-153.6	-152.4	-17.072 ug/L	-17.072 ppb	23:11:00
3	Ti 334.940†	1466303.0	1499897.9	2070.4 ug/L	2070.4 ppb	23:10:35
3	Tl 190.801†	-174.2	-138.3	-3.4492 ug/L	-3.4492 ppb	23:11:00
3	U 409.014†	-8679.2	-7488.0	-184.29 ug/L	-184.29 ppb	23:10:40
3	V 292.402†	43516.8	45927.2	233.45 ug/L	233.45 ppb	23:10:40
3	Zn 213.857†	34305.1	34327.0	271.92 ug/L	271.92 ppb	23:10:40
3	SiO2†	670103.3	684564.3	39311 ug/L	39311 ppb	23:11:17

Mean Data: 244601013|941727|1

Analyte	Mean Corrected	Calib.	Std.Dev.	Sample	Std.Dev.	RSD
	Intensity	Conc. Units		Conc. Units		
Sc 361.383	972662.4	98.845 %	0.8974			0.91%
Sc Radial	5491.1	98.3 %	0.14			0.14%
Y 371.029	940497.7	107.83 %	0.929			0.86%
Y RADIAL	6541.5	107.5 %	0.20			0.19%
Ag 328.068†	-9668.2	6.9156 ug/L	0.50968	6.9156 ppb	0.50968	7.37%
Al 396.153Radial†	157300.5	109020 ug/L	1268.6	109020 ppb	1268.6	1.16%
As 188.979†	42.8	64.573 ug/L	2.6865	64.573 ppb	2.6865	4.16%
B 249.677†	1781.5	13.257 ug/L	0.5700	13.257 ppb	0.5700	4.30%
Ba 233.527†	265970.1	1873.3 ug/L	16.81	1873.3 ppb	16.81	0.90%
Be 313.107†	16023.7	9.7302 ug/L	0.05127	9.7302 ppb	0.05127	0.53%
Ca 317.933Radial†	24630.7	37451 ug/L	377.1	37451 ppb	377.1	1.01%
Cd 226.502†	1323.2	-0.6041 ug/L	0.30472	-0.6041 ppb	0.30472	50.44%
Co 228.616†	7834.8	144.52 ug/L	1.592	144.52 ppb	1.592	1.10%
Cr 267.716†	14516.1	142.88 ug/L	0.997	142.88 ppb	0.997	0.70%
Cu 324.752†	24559.8	69.156 ug/L	0.7242	69.156 ppb	0.7242	1.05%
Fe 238.204 Radial†	15743.6	132950 ug/L	1447.5	132950 ppb	1447.5	1.09%
K 766.490 Radial†	104523.2	17290 ug/L	201.6	17290 ppb	201.6	1.17%

Mg 279.077 IEC†	787.8	25571 ug/L	126.1	25571 ppb	126.1	0.49%
Mn 257.610†	4195648.1	4228.6 ug/L	7.89	4228.6 ppb	7.89	0.19%
Mo 202.031†	-40.8	8.2513 ug/L	0.57466	8.2513 ppb	0.57466	6.96%
Na 589.592 Radial†	21621.3	5774.4 ug/L	60.15	5774.4 ppb	60.15	1.04%
Ni 231.604†	5050.2	112.78 ug/L	0.954	112.78 ppb	0.954	0.85%
P 214.914†	1376.2	594.24 ug/L	9.751	594.24 ppb	9.751	1.64%
Pb 220.353†	1313.6	157.77 ug/L	1.289	157.77 ppb	1.289	0.82%
S 181.975 Axial†	499.6	588.82 ug/L	2.973	588.82 ppb	2.973	0.50%
Sb 206.836†	26.4	1.9004 ug/L	4.40502	1.9004 ppb	4.40502	231.79%
Se 196.026†	-667.9	99.476 ug/L	3.2913	99.476 ppb	3.2913	3.31%
Si 251.611†	673838.0	18079 ug/L	13.5	18079 ppb	13.5	0.07%
Sn 189.927†	-146.0	-16.026 ug/L	0.9102	-16.026 ppb	0.9102	5.68%
Sr 421.552†	65510.7	381.06 ug/L	4.875	381.06 ppb	4.875	1.28%
Ti 334.940†	1499738.6	2070.1 ug/L	0.30	2070.1 ppb	0.30	0.01%
Tl 190.801†	-142.1	-4.5484 ug/L	1.08857	-4.5484 ppb	1.08857	23.93%
U 409.014†	-7389.1	-182.01 ug/L	2.097	-182.01 ppb	2.097	1.15%
V 292.402†	45515.3	231.22 ug/L	1.942	231.22 ppb	1.942	0.84%
Zn 213.857†	33943.2	268.77 ug/L	2.775	268.77 ppb	2.775	1.03%
SiO2†	677224.0	38890 ug/L	385.0	38890 ppb	385.0	0.99%

Sequence No.: 48
 Sample ID: CCV
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 1
 Date Collected: 1/28/2010 23:13:29
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5311.1	5311.1	95.1 %		23:15:21
1	Y RADIAL	5723.8	5723.8	94.09 %		23:15:21
1	Al 396.153Radial†	6826.4	7174.7	4949.0 ug/L	4949.0 ppb	23:15:21
1	Ca 317.933Radial†	3269.5	3411.3	5187.0 ug/L	5187.0 ppb	23:15:41
1	Fe 238.204 Radial†	608.7	631.7	5348.6 ug/L	5348.6 ppb	23:15:41
1	K 766.490 Radial†	31983.2	31237.4	5165.6 ug/L	5165.6 ppb	23:15:21
1	Mg 279.077 IEC†	160.7	166.6	5438.4 ug/L	5438.4 ppb	23:15:41
1	Na 589.592 Radial†	34980.6	37812.6	10099 ug/L	10099 ppb	23:15:21
1	Sr 421.552†	81744.2	85948.7	500.26 ug/L	500.26 ppb	23:15:21
1	Sc 361.383	946109.0	946109.0	96.146 %		23:16:38
1	Y 371.029	830696.3	830696.3	95.240 %		23:16:38
1	Ag 328.068†	126929.5	131695.9	504.31 ug/L	504.31 ppb	23:16:44
1	As 188.979†	1251.7	1335.7	488.85 ug/L	488.85 ppb	23:17:04
1	B 249.677†	23180.0	24395.3	480.77 ug/L	480.77 ppb	23:16:44
1	Ba 233.527†	66718.0	69396.6	488.81 ug/L	488.81 ppb	23:16:44
1	Be 313.107†	1463024.7	1526731.1	481.07 ug/L	481.07 ppb	23:16:38
1	Cd 226.502†	47474.5	49576.7	490.27 ug/L	490.27 ppb	23:16:44
1	Co 228.616†	24524.7	25579.5	489.57 ug/L	489.57 ppb	23:16:44
1	Cr 267.716†	48597.8	50460.1	486.81 ug/L	486.81 ppb	23:16:44
1	Cu 324.752†	194038.7	192679.2	486.63 ug/L	486.63 ppb	23:16:44
1	Mn 257.610†	462414.6	480415.3	483.11 ug/L	483.11 ppb	23:16:38
1	Mo 202.031†	7645.5	7929.0	489.65 ug/L	489.65 ppb	23:17:04
1	Ni 231.604†	21166.9	21905.2	489.30 ug/L	489.30 ppb	23:16:44
1	P 214.914†	4888.2	4844.6	2322.1 ug/L	2322.1 ppb	23:17:04
1	Pb 220.353†	4112.3	4335.5	485.16 ug/L	485.16 ppb	23:17:04
1	S 181.975 Axial†	821.1	786.2	957.78 ug/L	957.78 ppb	23:17:04
1	Sb 206.836†	1596.8	1625.6	506.79 ug/L	506.79 ppb	23:17:04
1	Se 196.026†	882.0	938.5	507.16 ug/L	507.16 ppb	23:17:04
1	Si 251.611†	90529.1	93697.2	2507.8 ug/L	2507.8 ppb	23:16:44
1	Sn 189.927†	2861.2	2980.5	489.79 ug/L	489.79 ppb	23:17:04
1	Ti 334.940†	347233.3	362060.2	498.91 ug/L	498.91 ppb	23:16:38
1	Tl 190.801†	1556.8	1658.9	478.91 ug/L	478.91 ppb	23:17:04
1	U 409.014†	19794.7	21972.8	493.55 ug/L	493.55 ppb	23:16:44
1	V 292.402†	82751.5	87508.6	492.30 ug/L	492.30 ppb	23:16:44
1	Zn 213.857†	57321.5	58876.3	485.66 ug/L	485.66 ppb	23:16:44
1	SiO2†	88827.3	91911.4	5264.7 ug/L	5264.7 ppb	23:18:11
2	Sc Radial	5293.0	5293.0	94.8 %		23:15:46
2	Y RADIAL	5702.2	5702.2	93.73 %		23:15:46
2	Al 396.153Radial†	6804.8	7176.5	4950.1 ug/L	4950.1 ppb	23:15:46
2	Ca 317.933Radial†	3251.6	3404.3	5176.2 ug/L	5176.2 ppb	23:16:06
2	Fe 238.204 Radial†	609.2	634.4	5372.0 ug/L	5372.0 ppb	23:16:06
2	K 766.490 Radial†	31748.9	31105.4	5143.8 ug/L	5143.8 ppb	23:15:46
2	Mg 279.077 IEC†	158.6	165.0	5384.6 ug/L	5384.6 ppb	23:16:06
2	Na 589.592 Radial†	34608.4	37545.9	10027 ug/L	10027 ppb	23:15:46
2	Sr 421.552†	81109.7	85573.7	498.08 ug/L	498.08 ppb	23:15:46
2	Sc 361.383	944791.0	944791.0	96.012 %		23:17:10
2	Y 371.029	829042.9	829042.9	95.050 %		23:17:10
2	Ag 328.068†	128204.5	133208.0	510.09 ug/L	510.09 ppb	23:17:15
2	As 188.979†	1236.1	1321.2	483.61 ug/L	483.61 ppb	23:17:35
2	B 249.677†	23507.5	24770.1	488.17 ug/L	488.17 ppb	23:17:15
2	Ba 233.527†	67413.2	70217.5	494.59 ug/L	494.59 ppb	23:17:15
2	Be 313.107†	1466409.0	1532378.7	482.85 ug/L	482.85 ppb	23:17:10
2	Cd 226.502†	47982.9	50175.0	496.19 ug/L	496.19 ppb	23:17:15
2	Co 228.616†	24818.5	25921.0	496.11 ug/L	496.11 ppb	23:17:15
2	Cr 267.716†	49088.7	51041.9	492.42 ug/L	492.42 ppb	23:17:15
2	Cu 324.752†	195996.1	194999.5	492.49 ug/L	492.49 ppb	23:17:15
2	Mn 257.610†	463899.0	482632.3	485.35 ug/L	485.35 ppb	23:17:10
2	Mo 202.031†	7700.4	7997.2	493.87 ug/L	493.87 ppb	23:17:35
2	Ni 231.604†	21347.3	22123.9	494.18 ug/L	494.18 ppb	23:17:15

2	P 214.914†	4910.7	4875.1	2336.2 ug/L	2336.2 ppb	23:17:35
2	Pb 220.353†	4128.6	4358.4	487.72 ug/L	487.72 ppb	23:17:35
2	S 181.975 Axial†	822.4	788.8	960.89 ug/L	960.89 ppb	23:17:35
2	Sb 206.836†	1607.7	1639.3	511.04 ug/L	511.04 ppb	23:17:35
2	Se 196.026†	885.2	943.1	509.64 ug/L	509.64 ppb	23:17:35
2	Si 251.611†	91643.6	94989.4	2542.5 ug/L	2542.5 ppb	23:17:15
2	Sn 189.927†	2868.6	2992.4	491.74 ug/L	491.74 ppb	23:17:35
2	Ti 334.940†	347768.7	363121.7	500.37 ug/L	500.37 ppb	23:17:10
2	Tl 190.801†	1578.2	1683.5	485.95 ug/L	485.95 ppb	23:17:35
2	U 409.014†	19843.0	22051.8	495.32 ug/L	495.32 ppb	23:17:15
2	V 292.402†	83550.0	88460.4	497.64 ug/L	497.64 ppb	23:17:15
2	Zn 213.857†	57900.3	59562.3	491.33 ug/L	491.33 ppb	23:17:15
2	SiO2†	88801.7	92013.7	5270.5 ug/L	5270.5 ppb	23:18:17
3	Sc Radial	5417.3	5417.3	97.0 %		23:16:11
3	Y RADIAL	5864.1	5864.1	96.39 %		23:16:11
3	Al 396.153Radial†	6845.5	7053.6	4865.4 ug/L	4865.4 ppb	23:16:11
3	Ca 317.933Radial†	3266.7	3341.1	5080.2 ug/L	5080.2 ppb	23:16:31
3	Fe 238.204 Radial†	604.7	615.0	5207.6 ug/L	5207.6 ppb	23:16:31
3	K 766.490 Radial†	32137.2	30736.8	5082.9 ug/L	5082.9 ppb	23:16:11
3	Mg 279.077 IEC†	161.4	164.0	5353.7 ug/L	5353.7 ppb	23:16:31
3	Na 589.592 Radial†	34999.2	37110.6	9911.2 ug/L	9911.2 ppb	23:16:11
3	Sr 421.552†	81913.7	84438.2	491.47 ug/L	491.47 ppb	23:16:11
3	Sc 361.383	957482.6	957482.6	97.302 %		23:17:41
3	Y 371.029	839004.4	839004.4	96.192 %		23:17:41
3	Ag 328.068†	125711.6	128876.0	493.51 ug/L	493.51 ppb	23:17:46
3	As 188.979†	1254.7	1323.4	484.37 ug/L	484.37 ppb	23:18:06
3	B 249.677†	23019.0	23943.5	471.88 ug/L	471.88 ppb	23:17:46
3	Ba 233.527†	66064.1	67900.3	478.27 ug/L	478.27 ppb	23:17:46
3	Be 313.107†	1484896.8	1531134.3	482.46 ug/L	482.46 ppb	23:17:41
3	Cd 226.502†	47113.7	48619.3	480.80 ug/L	480.80 ppb	23:17:46
3	Co 228.616†	24293.9	25039.3	479.22 ug/L	479.22 ppb	23:17:46
3	Cr 267.716†	48185.7	49436.2	476.93 ug/L	476.93 ppb	23:17:46
3	Cu 324.752†	191364.9	187534.0	473.64 ug/L	473.64 ppb	23:17:46
3	Mn 257.610†	470358.0	482865.9	485.57 ug/L	485.57 ppb	23:17:41
3	Mo 202.031†	7668.0	7857.6	485.24 ug/L	485.24 ppb	23:18:06
3	Ni 231.604†	21029.4	21502.5	480.30 ug/L	480.30 ppb	23:17:46
3	P 214.914†	4881.5	4777.3	2291.2 ug/L	2291.2 ppb	23:18:06
3	Pb 220.353†	4109.8	4282.1	479.20 ug/L	479.20 ppb	23:18:06
3	S 181.975 Axial†	822.1	777.1	946.12 ug/L	946.12 ppb	23:18:06
3	Sb 206.836†	1608.0	1617.5	504.10 ug/L	504.10 ppb	23:18:06
3	Se 196.026†	884.8	930.5	502.51 ug/L	502.51 ppb	23:18:06
3	Si 251.611†	89549.7	91572.2	2450.9 ug/L	2450.9 ppb	23:17:46
3	Sn 189.927†	2855.4	2939.1	482.99 ug/L	482.99 ppb	23:18:06
3	Ti 334.940†	352701.8	363390.3	500.74 ug/L	500.74 ppb	23:17:41
3	Tl 190.801†	1577.4	1660.9	479.56 ug/L	479.56 ppb	23:18:06
3	U 409.014†	19282.7	21202.0	476.22 ug/L	476.22 ppb	23:17:46
3	V 292.402†	81935.2	85647.3	481.89 ug/L	481.89 ppb	23:17:46
3	Zn 213.857†	56771.0	57602.3	475.15 ug/L	475.15 ppb	23:17:46
3	SiO2†	90150.3	92173.7	5279.9 ug/L	5279.9 ppb	23:18:22

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	949460.9	96.487 %	0.7091			0.73%
Sc Radial	5340.5	95.6 %	1.20			1.26%
Y 371.029	832914.5	95.494 %	0.6120			0.64%
Y RADIAL	5763.4	94.74 %	1.445			1.53%
Ag 328.068†	131260.0	502.64 ug/L	8.417	502.64 ppb	8.417	1.67%
QC value within limits for Ag 328.068 Recovery = 100.53%						
Al 396.153Radial†	7134.9	4921.5 ug/L	48.62	4921.5 ppb	48.62	0.99%
QC value within limits for Al 396.153Radial Recovery = 98.43%						
As 188.979†	1326.8	485.61 ug/L	2.836	485.61 ppb	2.836	0.58%
QC value within limits for As 188.979 Recovery = 97.12%						
B 249.677†	24369.6	480.27 ug/L	8.157	480.27 ppb	8.157	1.70%
QC value within limits for B 249.677 Recovery = 96.05%						
Ba 233.527†	69171.5	487.23 ug/L	8.275	487.23 ppb	8.275	1.70%
QC value within limits for Ba 233.527 Recovery = 97.45%						
Be 313.107†	1530081.4	482.13 ug/L	0.935	482.13 ppb	0.935	0.19%
QC value within limits for Be 313.107 Recovery = 96.43%						
Ca 317.933Radial†	3385.6	5147.8 ug/L	58.81	5147.8 ppb	58.81	1.14%

QC value within limits for Ca 317.933 Radial Recovery = 102.96%							
Cd	226.502†	49457.0	489.09 ug/L	7.760	489.09 ppb	7.760	1.59%
QC value within limits for Cd 226.502 Recovery = 97.82%							
Co	228.616†	25513.3	488.30 ug/L	8.519	488.30 ppb	8.519	1.74%
QC value within limits for Co 228.616 Recovery = 97.66%							
Cr	267.716†	50312.7	485.39 ug/L	7.842	485.39 ppb	7.842	1.62%
QC value within limits for Cr 267.716 Recovery = 97.08%							
Cu	324.752†	191737.6	484.25 ug/L	9.648	484.25 ppb	9.648	1.99%
QC value within limits for Cu 324.752 Recovery = 96.85%							
Fe	238.204 Radial†	627.0	5309.4 ug/L	88.91	5309.4 ppb	88.91	1.67%
QC value within limits for Fe 238.204 Radial Recovery = 106.19%							
K	766.490 Radial†	31026.5	5130.8 ug/L	42.90	5130.8 ppb	42.90	0.84%
QC value within limits for K 766.490 Radial Recovery = 102.62%							
Mg	279.077 IEC†	165.2	5392.2 ug/L	42.82	5392.2 ppb	42.82	0.79%
QC value within limits for Mg 279.077 IEC Recovery = 107.84%							
Mn	257.610†	481971.2	484.68 ug/L	1.357	484.68 ppb	1.357	0.28%
QC value within limits for Mn 257.610 Recovery = 96.94%							
Mo	202.031†	7927.9	489.59 ug/L	4.314	489.59 ppb	4.314	0.88%
QC value within limits for Mo 202.031 Recovery = 97.92%							
Na	589.592 Radial†	37489.7	10012 ug/L	94.6	10012 ppb	94.6	0.95%
QC value within limits for Na 589.592 Radial Recovery = 100.12%							
Ni	231.604†	21843.9	487.93 ug/L	7.040	487.93 ppb	7.040	1.44%
QC value within limits for Ni 231.604 Recovery = 97.59%							
P	214.914†	4832.3	2316.5 ug/L	23.03	2316.5 ppb	23.03	0.99%
QC value within limits for P 214.914 Recovery = 92.66%							
Pb	220.353†	4325.3	484.02 ug/L	4.372	484.02 ppb	4.372	0.90%
QC value within limits for Pb 220.353 Recovery = 96.80%							
S	181.975 Axial†	784.0	955.13 ug/L	7.446	955.13 ppb	7.446	0.78%
QC value within limits for S 181.975 Axial Recovery = 95.51%							
Sb	206.836†	1627.5	507.31 ug/L	3.501	507.31 ppb	3.501	0.69%
QC value within limits for Sb 206.836 Recovery = 101.46%							
Se	196.026†	937.4	506.44 ug/L	3.618	506.44 ppb	3.618	0.71%
QC value within limits for Se 196.026 Recovery = 101.29%							
Si	251.611†	93419.6	2500.4 ug/L	46.24	2500.4 ppb	46.24	1.85%
QC value within limits for Si 251.611 Recovery = 100.02%							
Sn	189.927†	2970.7	488.17 ug/L	4.595	488.17 ppb	4.595	0.94%
QC value within limits for Sn 189.927 Recovery = 97.63%							
Sr	421.552†	85320.2	496.61 ug/L	4.578	496.61 ppb	4.578	0.92%
QC value within limits for Sr 421.552 Recovery = 99.32%							
Ti	334.940†	362857.4	500.01 ug/L	0.971	500.01 ppb	0.971	0.19%
QC value within limits for Ti 334.940 Recovery = 100.00%							
Tl	190.801†	1667.8	481.47 ug/L	3.890	481.47 ppb	3.890	0.81%
QC value within limits for Tl 190.801 Recovery = 96.29%							
U	409.014†	21742.2	488.36 ug/L	10.555	488.36 ppb	10.555	2.16%
QC value within limits for U 409.014 Recovery = 97.67%							
V	292.402†	87205.4	490.61 ug/L	8.008	490.61 ppb	8.008	1.63%
QC value within limits for V 292.402 Recovery = 98.12%							
Zn	213.857†	58680.3	484.05 ug/L	8.211	484.05 ppb	8.211	1.70%
QC value within limits for Zn 213.857 Recovery = 96.81%							
SiO2†		92032.9	5271.7 ug/L	7.66	5271.7 ppb	7.66	0.15%
QC value within limits for SiO2 Recovery = 98.58%							
All analyte(s) passed QC.							

Sequence No.: 49
 Sample ID: CCB
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 6
 Date Collected: 1/28/2010 23:20:31
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5353.0	5353.0	95.8 %		23:22:23
1	Y RADIAL	5807.2	5807.2	95.46 %		23:22:23
1	Al 396.153Radial†	10.8	7.5	5.1609 ug/L	5.1609 ppb	23:22:43
1	Ca 317.933Radial†	19.8	-6.1	-9.3284 ug/L	-9.3284 ppb	23:22:43
1	Fe 238.204 Radial†	10.0	2.0	16.819 ug/L	16.819 ppb	23:22:43
1	K 766.490 Radial†	2487.0	199.6	33.048 ug/L	33.048 ppb	23:22:23
1	Mg 279.077 IEC†	3.6	1.3	43.551 ug/L	43.551 ppb	23:22:43
1	Na 589.592 Radial†	-995.0	-10.1	-2.7062 ug/L	-2.7062 ppb	23:22:23
1	Sr 421.552†	-7.2	-18.7	-0.1086 ug/L	-0.1086 ppb	23:22:23
1	Sc 361.383	950322.8	950322.8	96.575 %		23:23:40
1	Y 371.029	843403.1	843403.1	96.697 %		23:23:40
1	Ag 328.068†	372.0	64.2	0.2489 ug/L	0.2489 ppb	23:23:45
1	As 188.979†	-30.4	2.4	0.8600 ug/L	0.8600 ppb	23:24:05
1	B 249.677†	-280.0	-3.7	-0.0762 ug/L	-0.0762 ppb	23:24:05
1	Ba 233.527†	-7.6	-3.3	-0.0227 ug/L	-0.0227 ppb	23:24:05
1	Be 313.107†	-4964.9	-73.0	-0.0230 ug/L	-0.0230 ppb	23:23:45
1	Cd 226.502†	-188.5	4.2	0.0395 ug/L	0.0395 ppb	23:24:05
1	Co 228.616†	-68.2	1.2	0.0239 ug/L	0.0239 ppb	23:24:05
1	Cr 267.716†	82.2	-0.4	-0.0037 ug/L	-0.0037 ppb	23:24:05
1	Cu 324.752†	8990.4	172.7	0.4367 ug/L	0.4367 ppb	23:23:45
1	Mn 257.610†	646.4	136.4	0.1369 ug/L	0.1369 ppb	23:24:05
1	Mo 202.031†	32.2	10.4	0.6415 ug/L	0.6415 ppb	23:24:05
1	Ni 231.604†	89.5	-17.3	-0.3875 ug/L	-0.3875 ppb	23:24:05
1	P 214.914†	239.0	7.9	3.8636 ug/L	3.8636 ppb	23:24:05
1	Pb 220.353†	-54.4	2.0	0.2252 ug/L	0.2252 ppb	23:24:05
1	S 181.975 Axial†	46.3	-19.9	-24.209 ug/L	-24.209 ppb	23:24:05
1	Sb 206.836†	30.1	-4.0	-1.1937 ug/L	-1.1937 ppb	23:24:05
1	Se 196.026†	-21.8	-1.5	-0.6966 ug/L	-0.6966 ppb	23:24:05
1	Si 251.611†	496.9	54.3	1.4483 ug/L	1.4483 ppb	23:24:05
1	Sn 189.927†	-4.0	0.5	0.0750 ug/L	0.0750 ppb	23:24:05
1	Ti 334.940†	-907.0	-29.4	-0.0456 ug/L	-0.0456 ppb	23:23:45
1	Tl 190.801†	-36.4	2.0	0.5774 ug/L	0.5774 ppb	23:24:05
1	U 409.014†	-1307.2	31.2	0.7016 ug/L	0.7016 ppb	23:23:40
1	V 292.402†	-1406.7	-16.2	-0.0811 ug/L	-0.0811 ppb	23:23:45
1	Zn 213.857†	706.5	-11.1	-0.0922 ug/L	-0.0922 ppb	23:24:05
1	SiO2†	518.0	60.3	3.4455 ug/L	3.4455 ppb	23:25:11
2	Sc Radial	5397.0	5397.0	96.6 %		23:22:48
2	Y RADIAL	5829.3	5829.3	95.82 %		23:22:48
2	Al 396.153Radial†	15.8	12.6	8.7083 ug/L	8.7083 ppb	23:23:08
2	Ca 317.933Radial†	17.9	-8.2	-12.470 ug/L	-12.470 ppb	23:23:08
2	Fe 238.204 Radial†	10.3	2.2	18.861 ug/L	18.861 ppb	23:23:08
2	K 766.490 Radial†	2368.6	56.0	9.2710 ug/L	9.2710 ppb	23:22:48
2	Mg 279.077 IEC†	1.8	-0.5	-15.749 ug/L	-15.749 ppb	23:23:08
2	Na 589.592 Radial†	-1022.9	-30.5	-8.1410 ug/L	-8.1410 ppb	23:22:48
2	Sr 421.552†	8.2	-2.7	-0.0158 ug/L	-0.0158 ppb	23:22:48
2	Sc 361.383	950495.6	950495.6	96.592 %		23:24:10
2	Y 371.029	842123.3	842123.3	96.550 %		23:24:10
2	Ag 328.068†	292.2	-18.5	-0.0606 ug/L	-0.0606 ppb	23:24:15
2	As 188.979†	-27.0	5.8	2.1193 ug/L	2.1193 ppb	23:24:35
2	B 249.677†	-270.1	6.6	0.1284 ug/L	0.1284 ppb	23:24:35
2	Ba 233.527†	-3.4	1.1	0.0086 ug/L	0.0086 ppb	23:24:35
2	Be 313.107†	-5049.8	-159.9	-0.0501 ug/L	-0.0501 ppb	23:24:15
2	Cd 226.502†	-199.5	-7.1	-0.0735 ug/L	-0.0735 ppb	23:24:35
2	Co 228.616†	-66.4	3.1	0.0605 ug/L	0.0605 ppb	23:24:35
2	Cr 267.716†	79.8	-2.9	-0.0257 ug/L	-0.0257 ppb	23:24:35
2	Cu 324.752†	8976.3	156.4	0.3979 ug/L	0.3979 ppb	23:24:15
2	Mn 257.610†	629.6	118.9	0.1220 ug/L	0.1220 ppb	23:24:35
2	Mo 202.031†	31.9	10.0	0.6213 ug/L	0.6213 ppb	23:24:35
2	Ni 231.604†	89.7	-17.1	-0.3815 ug/L	-0.3815 ppb	23:24:35

2	P 214.914†	241.6	10.6	5.1961 ug/L	5.1961 ppb	23:24:35
2	Pb 220.353†	-53.3	3.2	0.3582 ug/L	0.3582 ppb	23:24:35
2	S 181.975 Axial†	43.0	-23.3	-28.436 ug/L	-28.436 ppb	23:24:35
2	Sb 206.836†	32.7	-1.3	-0.3561 ug/L	-0.3561 ppb	23:24:35
2	Se 196.026†	-25.1	-4.9	-2.4788 ug/L	-2.4788 ppb	23:24:35
2	Si 251.611†	505.9	63.5	1.6950 ug/L	1.6950 ppb	23:24:35
2	Sn 189.927†	3.1	7.8	1.2730 ug/L	1.2730 ppb	23:24:35
2	Ti 334.940†	-839.7	40.4	0.0569 ug/L	0.0569 ppb	23:24:15
2	Tl 190.801†	-30.0	8.7	2.4852 ug/L	2.4852 ppb	23:24:35
2	U 409.014†	-1488.6	-156.4	-3.5267 ug/L	-3.5267 ppb	23:24:10
2	V 292.402†	-1357.4	35.1	0.1940 ug/L	0.1940 ppb	23:24:15
2	Zn 213.857†	709.4	-8.3	-0.0692 ug/L	-0.0692 ppb	23:24:35
2	SiO2†	500.9	42.5	2.4226 ug/L	2.4226 ppb	23:25:16
3	Sc Radial	5357.6	5357.6	95.9 %		23:23:13
3	Y RADIAL	5803.4	5803.4	95.39 %		23:23:13
3	Al 396.153Radial†	4.7	1.1	0.7429 ug/L	0.7429 ppb	23:23:33
3	Ca 317.933Radial†	20.9	-4.9	-7.5241 ug/L	-7.5241 ppb	23:23:33
3	Fe 238.204 Radial†	8.1	0.0	0.1200 ug/L	0.1200 ppb	23:23:33
3	K 766.490 Radial†	2405.7	112.6	18.659 ug/L	18.659 ppb	23:23:13
3	Mg 279.077 IEC†	3.5	1.3	41.904 ug/L	41.904 ppb	23:23:33
3	Na 589.592 Radial†	-1041.5	-57.6	-15.391 ug/L	-15.391 ppb	23:23:13
3	Sr 421.552†	39.0	29.5	0.1717 ug/L	0.1717 ppb	23:23:13
3	Sc 361.383	946445.6	946445.6	96.181 %		23:24:40
3	Y 371.029	839162.6	839162.6	96.211 %		23:24:40
3	Ag 328.068†	385.6	79.9	0.3044 ug/L	0.3044 ppb	23:24:46
3	As 188.979†	-38.5	-6.2	-2.2361 ug/L	-2.2361 ppb	23:25:06
3	B 249.677†	-262.8	13.1	0.2589 ug/L	0.2589 ppb	23:25:06
3	Ba 233.527†	-1.0	3.6	0.0256 ug/L	0.0256 ppb	23:25:06
3	Be 313.107†	-5020.2	-151.5	-0.0477 ug/L	-0.0477 ppb	23:24:46
3	Cd 226.502†	-192.2	-0.5	-0.0053 ug/L	-0.0053 ppb	23:25:06
3	Co 228.616†	-73.3	-4.4	-0.0827 ug/L	-0.0827 ppb	23:25:06
3	Cr 267.716†	75.7	-6.8	-0.0656 ug/L	-0.0656 ppb	23:25:06
3	Cu 324.752†	8987.2	207.6	0.5238 ug/L	0.5238 ppb	23:24:46
3	Mn 257.610†	651.7	144.7	0.1437 ug/L	0.1437 ppb	23:25:06
3	Mo 202.031†	29.2	7.4	0.4559 ug/L	0.4559 ppb	23:25:06
3	Ni 231.604†	92.3	-14.1	-0.3142 ug/L	-0.3142 ppb	23:25:06
3	P 214.914†	236.2	6.0	2.9176 ug/L	2.9176 ppb	23:25:06
3	Pb 220.353†	-61.0	-5.0	-0.5586 ug/L	-0.5586 ppb	23:25:06
3	S 181.975 Axial†	41.4	-24.7	-30.155 ug/L	-30.155 ppb	23:25:06
3	Sb 206.836†	36.1	2.4	0.7430 ug/L	0.7430 ppb	23:25:06
3	Se 196.026†	-17.0	3.4	1.7857 ug/L	1.7857 ppb	23:25:06
3	Si 251.611†	481.4	40.2	1.0740 ug/L	1.0740 ppb	23:25:06
3	Sn 189.927†	5.4	10.2	1.6661 ug/L	1.6661 ppb	23:25:06
3	Ti 334.940†	-909.5	-35.9	-0.0542 ug/L	-0.0542 ppb	23:24:46
3	Tl 190.801†	-35.7	2.7	0.7673 ug/L	0.7673 ppb	23:25:06
3	U 409.014†	-1301.2	31.9	0.7187 ug/L	0.7187 ppb	23:24:40
3	V 292.402†	-1355.2	31.4	0.1829 ug/L	0.1829 ppb	23:24:46
3	Zn 213.857†	707.5	-7.1	-0.0578 ug/L	-0.0578 ppb	23:25:06
3	SiO2†	512.8	57.1	3.2656 ug/L	3.2656 ppb	23:25:21

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	949088.0	96.449 %		0.2327			0.24%
Sc Radial	5369.2	96.1 %		0.43			0.45%
Y 371.029	841563.0	96.486 %		0.2494			0.26%
Y RADIAL	5813.3	95.56 %		0.230			0.24%
Ag 328.068†	41.9	0.1643 ug/L		0.19666	0.1643 ppb	0.19666	119.72%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	7.1	4.8707 ug/L		3.99063	4.8707 ppb	3.99063	81.93%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	0.7	0.2478 ug/L		2.24131	0.2478 ppb	2.24131	904.66%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	5.3	0.1037 ug/L		0.16893	0.1037 ppb	0.16893	162.93%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	0.5	0.0038 ug/L		0.02452	0.0038 ppb	0.02452	640.45%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	-128.1	-0.0403 ug/L		0.01501	-0.0403 ppb	0.01501	37.24%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	-6.4	-9.7742 ug/L		2.50298	-9.7742 ppb	2.50298	25.61%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated						
Cd 226.502†	-1.2	-0.0131 ug/L	0.05690	-0.0131 ppb	0.05690	435.39%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-0.0	0.0006 ug/L	0.07443	0.0006 ppb	0.07443	>999.9%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-3.4	-0.0317 ug/L	0.03137	-0.0317 ppb	0.03137	99.02%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	178.9	0.4528 ug/L	0.06448	0.4528 ppb	0.06448	14.24%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	1.4	11.933 ug/L	10.2815	11.933 ppb	10.2815	86.16%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	122.7	20.326 ug/L	11.9756	20.326 ppb	11.9756	58.92%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	0.7	23.235 ug/L	33.7718	23.235 ppb	33.7718	145.35%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	133.3	0.1342 ug/L	0.01111	0.1342 ppb	0.01111	8.28%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	9.3	0.5729 ug/L	0.10183	0.5729 ppb	0.10183	17.77%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	-32.7	-8.7461 ug/L	6.36412	-8.7461 ppb	6.36412	72.77%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	-16.2	-0.3611 ug/L	0.04069	-0.3611 ppb	0.04069	11.27%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	8.2	3.9924 ug/L	1.14470	3.9924 ppb	1.14470	28.67%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	0.1	0.0083 ug/L	0.49542	0.0083 ppb	0.49542	>999.9%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	-22.6	-27.600 ug/L	3.0600	-27.600 ppb	3.0600	11.09%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	-1.0	-0.2689 ug/L	0.97130	-0.2689 ppb	0.97130	361.19%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-1.0	-0.4632 ug/L	2.14177	-0.4632 ppb	2.14177	462.36%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	52.7	1.4058 ug/L	0.31266	1.4058 ppb	0.31266	22.24%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	6.1	1.0047 ug/L	0.82878	1.0047 ppb	0.82878	82.49%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	2.7	0.0157 ug/L	0.14281	0.0157 ppb	0.14281	907.62%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	-8.3	-0.0143 ug/L	0.06182	-0.0143 ppb	0.06182	431.78%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	4.5	1.2766 ug/L	1.05093	1.2766 ppb	1.05093	82.32%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	-31.1	-0.7021 ug/L	2.44618	-0.7021 ppb	2.44618	348.40%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	16.8	0.0986 ug/L	0.15569	0.0986 ppb	0.15569	157.90%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	-8.8	-0.0731 ug/L	0.01754	-0.0731 ppb	0.01754	24.01%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	53.3	3.0445 ug/L	0.54610	3.0445 ppb	0.54610	17.94%
QC value within limits for SiO2 Recovery = Not calculated						

All analyte(s) passed QC.

ICPMS #5 Daily Performance Report

Sample ID: Sample

Sample Date/Time: Monday, February 08, 2010 10:23:03

Sample Description:

Method File: c:\elandata\Method\Daily2.mth

Dataset File: c:\elandata\Dataset\default\Sample.423

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		2994.5		2994.514		63.094		2.1
Mg	24.0		45824.8		45824.781		235.661		0.5
Co	58.9		89096.2		89096.190		825.871		0.9
Rh	102.9		153538.3		153538.308		996.265		0.6
In	114.9		216070.8		216070.816		1344.730		0.6
Pb	208.0		241156.8		241156.842		2684.308		1.1
[> Ba	137.9		213207.2		213207.153		1998.755		0.9
[Ba++	69.0		4286.6		0.020		0.000		2.1
[> Ce	139.9		266114.7		266114.678		2381.850		0.9
[CeO	155.9		6762.6		0.025		0.000		0.9
Bkgd	220.0		16.2		16.200		3.785		23.4

Current Optimization File Data

Current Value	Description
0.90	Nebulizer Gas Flow
10.25	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	10.0	5016.9
Co	59	19	10.8	85907.5
In	115	19	12.8	220405.2

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	587	2060	0.640
Be	9.0	9.0	2041	2080	0.623
Mg	24.0	24.0	5685	2090	0.570
Mg	25.0	25.0	5949	2085	0.597
Mg	26.0	26.0	6161	2085	0.616
Co	58.9	58.9	14190	2115	0.609
Rh	102.9	102.9	24873	2175	0.585
In	114.9	114.9	27787	2190	0.609
Ce	139.9	139.9	33871	2210	0.611
Pb	206.0	206.0	49948	2300	0.596
Pb	207.0	207.0	50159	2245	0.612
Pb	208.0	208.0	50463	2280	0.677
U	238.1	238.1	57733	2300	0.667

ICPMS#5 - Summary Report

Sample ID: Blank

Sample Date/Time: Monday, February 08, 2010 14:32:53

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\as ni and se.mth

Dataset File: c:\elandata\Dataset\100207\Blank.435

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Sc	45		ug/L		916272	
[Ni	60		ug/L		97	
[> Ge	74		ug/L		365853	
| As	75		ug/L		-166	
| Se	77		ug/L		2912	
| Se	82		ug/L		3	
[Kr	83		ug/L		91	

Sample ID: Blank

Report Date/Time: Monday, February 08, 2010 14:33:23

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Sc	45Simple Linear	
Ni	60Simple Linear	
Ge	74Simple Linear	
As	75Simple Linear	
Se	77Simple Linear	
Se	82Simple Linear	
Kr	83Simple Linear	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate	Rel. % Difference
[>	Sc	45						
[	Ni	60						
[>	Ge	74						
|	As	75						
|	Se	77						
|	Se	82						
[Kr	83						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Monday, February 08, 2010 14:35:20

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\as ni and se.mth

Dataset File: c:\elandata\Dataset\100207\Standard 1.436

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		908809	908808.773
[	Ni	60	10.000	ug/L	0.990	14975	0.016
[>	Ge	74		ug/L		366986	366985.957
|	As	75	10.000	ug/L	1.825	10519	0.029
|	Se	77		ug/L		4693	0.005
|	Se	82	10.000	ug/L	1.694	1274	0.003
[	Kr	83		ug/L		76	-0.000

Sample ID: Standard 1

Report Date/Time: Monday, February 08, 2010 14:35:48

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[>	Sc	45					
[	Ni	60					
[>	Ge	74					
|	As	75					
|	Se	77					
|	Se	82					
[Kr	83					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Monday, February 08, 2010 14:37:46

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\as ni and se.mth

Dataset File: c:\elandata\Dataset\100207\Standard 2.437

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		924984	924984.372
[	Ni	60	99.948	ug/L	3.225	143950	0.156
[>	Ge	74		ug/L		369639	369639.471
|	As	75	100.014	ug/L	2.610	109000	0.295
|	Se	77		ug/L		13303	0.028
|	Se	82	99.945	ug/L	1.498	12137	0.033
[	Kr	83		ug/L		103	0.000

Sample ID: Standard 2

Report Date/Time: Monday, February 08, 2010 14:38:14

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[>	Sc	45					
[	Ni	60					
[>	Ge	74					
|	As	75					
|	Se	77					
|	Se	82					
[Kr	83					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Monday, February 08, 2010 14:40:12

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\as ni and se.mth

Dataset File: c:\elandata\Dataset\100207\QC Std 1.438

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		939098	939097.732
[	Ni	60	52.171	ug/L	1.471	76366	0.081
[>	Ge	74		ug/L		376838	376838.205
|	As	75	49.298	ug/L	1.874	54698	0.146
|	Se	77		ug/L		9039	0.016
|	Se	82	49.896	ug/L	1.885	6179	0.016
[	Kr	83		ug/L		91	-0.000

Sample ID: QC Std 1

Report Date/Time: Monday, February 08, 2010 14:40:40

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Sc	45		102.5				
[	Ni	60	104.341					
[>	Ge	74		103.0				
|	As	75	98.597					
|	Se	77						
|	Se	82	99.792					
[	Kr	83						

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: Monday, February 08, 2010 14:42:40

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\as ni and se.mth

Dataset File: c:\elandata\Dataset\100207\QC Std 2.439

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		950677	950677.338
[	Ni	60	0.011	ug/L	70.271	116	0.000
[>	Ge	74		ug/L		385777	385777.280
|	As	75	-0.037	ug/L	326.816	-219	-0.000
|	Se	77		ug/L		3983	0.002
|	Se	82	0.080	ug/L	48.063	13	0.000
[Kr	83		ug/L		95	-0.000

Sample ID: QC Std 2

Report Date/Time: Monday, February 08, 2010 14:43:11

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[>	Sc	45		103.8				
[	Ni	60						
[>	Ge	74		105.4				
[	As	75						
[	Se	77						
[	Se	82						
[	Kr	83						

QC Out Of Limits

Measurement Type Analyte MassOut 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: Monday, February 08, 2010 14:45:09

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\as ni and se.mth

Dataset File: c:\elandata\Dataset\100207\QC Std 3.440

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Sc	45		ug/L		955053	955052.772
[Ni	60	2.251	ug/L	1.673	3448	0.004
[> Ge	74		ug/L		386802	386801.710
[As	75	5.765	ug/L	2.152	6411	0.017
[Se	77		ug/L		5145	0.005
[Se	82	5.756	ug/L	2.119	734	0.002
[Kr	83		ug/L		96	-0.000

Sample ID: QC Std 3

Report Date/Time: Monday, February 08, 2010 14:45:38

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[>	Sc	45			104.2		
[	Ni	60	112.572				
[>	Ge	74			105.7		
|	As	75	115.300				
|	Se	77					
|	Se	82	115.118				
[	Kr	83					

QC Out Of Limits

Measurement Type Analyte MassOut 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: Monday, February 08, 2010 14:47:36

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\as ni and se.mth

Dataset File: c:\elandata\Dataset\100207\QC Std 4.441

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		805665	805664.602
[	Ni	60	3.625	ug/L	4.213	4631	0.006
[>	Ge	74		ug/L		329453	329453.116
|	As	75	0.045	ug/L	1443.417	-105	0.000
|	Se	77		ug/L		5697	0.009
|	Se	82	-1.305	ug/L	8.304	-139	-0.000
[	Kr	83		ug/L		291	0.001

Sample ID: QC Std 4

Report Date/Time: Monday, February 08, 2010 14:48:05

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[>	Sc	45			87.9		
[	Ni	60	109.520				
[>	Ge	74			90.1		
|	As	75					
|	Se	77					
|	Se	82					
[	Kr	83					

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: Monday, February 08, 2010 14:50:04

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\as ni and se.mth

Dataset File: c:\elandata\Dataset\100207\QC Std 5.442

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		807028	807027.948
|	Ni	60	23.323	ug/L	1.225	29386	0.036
[>	Ge	74		ug/L		320983	320983.360
|	As	75	19.854	ug/L	3.768	18676	0.059
|	Se	77		ug/L		6905	0.014
|	Se	82	17.634	ug/L	2.077	1861	0.006
|	Kr	83		ug/L		288	0.001

Sample ID: QC Std 5

Report Date/Time: Monday, February 08, 2010 14:50:33

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[>	Sc	45			88.1			
[	Ni	60	100.054					
[>	Ge	74			87.7			
|	As	75	99.271					
|	Se	77						
|	Se	82	88.169					
[	Kr	83						

QC Out Of Limits

Measurement Type Analyte MassOut 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: Monday, February 08, 2010 14:52:32

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\as nl and se.mth

Dataset File: c:\elandata\Dataset\100207\QC Std 6.443

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		869489	869488.849
[	Ni	60	53.422	ug/L	2.869	72386	0.083
[>	Ge	74		ug/L		355852	355851.748
|	As	75	48.823	ug/L	1.053	51146	0.144
|	Se	77		ug/L		9023	0.017
|	Se	82	50.991	ug/L	1.626	5963	0.017
[	Kr	83		ug/L		85	-0.000

Sample ID: QC Std 6

Report Date/Time: Monday, February 08, 2010 14:53:02

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[>	Sc	45			94.9		
[	Ni	60	106.845				
[>	Ge	74			97.3		
|	As	75	97.647				
|	Se	77					
|	Se	82	101.982				
[	Kr	83					

QC Out Of Limits

Measurement Type Analyte MassOut 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: Monday, February 08, 2010 14:55:02

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\as ni and se.mth

Dataset File: c:\elandata\Dataset\100207\QC Std 7.444

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		906044	906043.876
[	Ni	60	0.005	ug/L	96.866	102	0.000
[>	Ge	74		ug/L		372331	372331.339
|	As	75	-0.036	ug/L	543.392	-207	-0.000
|	Se	77		ug/L		4330	0.004
|	Se	82	0.064	ug/L	250.191	11	0.000
[	Kr	83		ug/L		94	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
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	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[>	Sc	45			98.9			
[	Ni	60						
[>	Ge	74			101.8			
|	As	75						
|	Se	77						
|	Se	82						
[	Kr	83						

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: Monday, February 08, 2010 14:55:32

Page 1

ICPMS#5 - Summary Report

Sample ID: 1202015679

Sample Date/Time: Monday, February 08, 2010 14:57:31

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 941732[2]ba]

Method File: c:\elandata\Method\as ni and se.mth

Dataset File: c:\elandata\Dataset\100207\1202015679.445

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Sc	45		ug/L		924718	924718.342
[Ni	60	0.076	ug/L	4.339	207	0.000
[> Ge	74		ug/L		375266	375266.462
| As	75	-0.095	ug/L	124.910	-275	-0.000
| Se	77		ug/L		3415	0.001
| Se	82	-0.044	ug/L	148.274	-3	-0.000
[Kr	83		ug/L		103	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
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	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[> Sc	45		100.9				
[Ni	60						
[> Ge	74		102.6				
| As	75						
| Se	77						
| Se	82						
[Kr	83						

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: 1202015679

Report Date/Time: Monday, February 08, 2010 14:57:59

Page 1

ICPMS#5 - Summary Report

Sample ID: 1202015684

Sample Date/Time: Monday, February 08, 2010 14:59:58

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 941732[40]ba]

Method File: c:\elandata\Method\as ni and se.mth

Dataset File: c:\elandata\Dataset\100207\1202015684.446

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Sc	45		ug/L		919038	919037.719
[Ni	60	40.084	ug/L	2.192	57439	0.062
[> Ge	74		ug/L		365821	365821.056
[As	75	28.678	ug/L	4.360	30816	0.085
[Se	77		ug/L		11473	0.023
[Se	82	78.971	ug/L	4.137	9492	0.026
[Kr	83		ug/L		100	0.000

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[> Sc	45		100.3				
[Ni	60						
[> Ge	74		100.0				
[As	75						
[Se	77						
[Se	82						
[Kr	83						

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202015684

Report Date/Time: Monday, February 08, 2010 15:00:27

Page 1

ICPMS#5 - Summary Report

Sample ID: 244601001

Sample Date/Time: Monday, February 08, 2010 15:02:26

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 941732|2|ba|

Method File: c:\elandata\Method\as ni and se.mth

Dataset File: c:\elandata\Dataset\100207\244601001.447

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
> Sc	45		ug/L		845240	845240.120
| Ni	60	19.653	ug/L	1.653	25944	0.031
> Ge	74		ug/L		307343	307343.041
| As	75	6.379	ug/L	3.035	5650	0.019
| Se	77		ug/L		2497	0.000
| Se	82	-0.071	ug/L	250.758	-5	-0.000
| Kr	83		ug/L		228	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
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	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
> Sc	45			92.2			
| Ni	60						
> Ge	74			84.0			
| As	75						
| Se	77						
| Se	82						
| Kr	83						

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: 244601001

Report Date/Time: Monday, February 08, 2010 15:02:55

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ICPMS#5 - Summary Report

Sample ID: 1202015680

Sample Date/Time: Monday, February 08, 2010 15:04:55

Sample Type:

Sample Description: LANL 6020 DUP

Number of Replicates: 3

Batch ID: 941732|2|baj

Method File: c:\elandata\Method\as ni and se.mth

Dataset File: c:\elandata\Dataset\100207\1202015680.448

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Sc	45		ug/L		826580	826579.836
[Ni	60	18.078	ug/L	1.756	23350	0.028
[> Ge	74		ug/L		298576	298576.230
| As	75	6.031	ug/L	2.706	5182	0.018
| Se	77		ug/L		2147	-0.001
| Se	82	0.101	ug/L	103.770	12	0.000
[Kr	83		ug/L		205	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
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	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[> Sc	45			90.2			
[Ni	60						
[> Ge	74			81.6			
| As	75						
| Se	77						
| Se	82						
[Kr	83						

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: 1202015680

Report Date/Time: Monday, February 08, 2010 15:05:24

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ICPMS#5 - Summary Report

Sample ID: 1202015682

Sample Date/Time: Monday, February 08, 2010 15:07:24

Sample Type:

Sample Description: LANL 6020 MS

Number of Replicates: 3

Batch ID: 941732|2|baj

Method File: c:\elandata\Method\as ni and se.mth

Dataset File: c:\elandata\Dataset\100207\1202015682.449

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		819335	819334.667
[	Ni	60	44.044	ug/L	1.789	56264	0.069
[>	Ge	74		ug/L		292816	292815.794
|	As	75	43.526	ug/L	2.432	37498	0.129
|	Se	77		ug/L		2611	0.001
|	Se	82	8.814	ug/L	2.341	850	0.003
[	Kr	83		ug/L		194	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
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	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[>	Sc	45			89.4			
[	Ni	60						
[>	Ge	74			80.0			
|	As	75						
|	Se	77						
|	Se	82						
[	Kr	83						

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: 1202015682

Report Date/Time: Monday, February 08, 2010 15:07:54

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ICPMS#5 - Summary Report

Sample ID: 1202015683

Sample Date/Time: Monday, February 08, 2010 15:09:54

Sample Type:

Sample Description: LANL 6020 MSD

Number of Replicates: 3

Batch ID: 941732|2|ba|

Method File: c:\elandata\Method\as ni and se.mth

Dataset File: c:\elandata\Dataset\100207\1202015683.450

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Sc	45		ug/L		812868	812867.961
[Ni	60	46.435	ug/L	1.598	58842	0.072
[> Ge	74		ug/L		292161	292160.732
| As	75	44.086	ug/L	0.187	37905	0.130
| Se	77		ug/L		2531	0.001
| Se	82	8.324	ug/L	2.852	801	0.003
[Kr	83		ug/L		241	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
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	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[> Sc	45			88.7			
[Ni	60						
[> Ge	74			79.9			
| As	75						
| Se	77						
| Se	82						
[Kr	83						

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: 1202015683

Report Date/Time: Monday, February 08, 2010 15:10:24

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ICPMS#5 - Summary Report

Sample ID: 1202015681

Sample Date/Time: Monday, February 08, 2010 15:12:24

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 941732|10|baj

Method File: c:\elandata\Method\as ni and se.mth

Dataset File: c:\elandata\Dataset\100207\1202015681.451

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Sc	45		ug/L		800070	800069.659
[Ni	60	4.062	ug/L	0.571	5144	0.006
[> Ge	74		ug/L		312266	312266.099
[As	75	1.244	ug/L	21.332	1007	0.004
[Se	77		ug/L		2294	-0.001
[Se	82	0.067	ug/L	290.413	9	0.000
[Kr	83		ug/L		99	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
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	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[> Sc	45		87.3			
[Ni	60					
[> Ge	74		85.4			
[As	75					
[Se	77					
[Se	82					
[Kr	83					

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: 1202015681

Report Date/Time: Monday, February 08, 2010 15:12:54

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ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Monday, February 08, 2010 15:14:54

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\as ni and se.mth

Dataset File: c:\elandata\Dataset\100207\QC Std 8.452

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Sc	45		ug/L		845915	845914.795
[Ni	60	52.536	ug/L	2.010	69277	0.082
[> Ge	74		ug/L		339741	339740.617
[As	75	48.614	ug/L	1.044	48618	0.144
[Se	77		ug/L		7571	0.014
[Se	82	50.842	ug/L	3.586	5677	0.017
[Kr	83		ug/L		86	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
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	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[> Sc	45		92.3			
[Ni	60	105.072				
[> Ge	74		92.9			
[As	75	97.227				
[Se	77					
[Se	82	101.684				
[Kr	83					

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 8

Report Date/Time: Monday, February 08, 2010 15:15:23

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ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Monday, February 08, 2010 15:17:23

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\as ni and se.mth

Dataset File: c:\elandata\Dataset\100207\QC Std 9.453

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Sc	45		ug/L		855396	855396.466
[Ni	60	0.020	ug/L	46.222	117	0.000
[> Ge	74		ug/L		346137	346136.899
| As	75	-0.036	ug/L	538.981	-195	-0.000
| Se	77		ug/L		3074	0.001
| Se	82	0.105	ug/L	90.624	15	0.000
[Kr	83		ug/L		86	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
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	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[> Sc	45			93.4			
[Ni	60						
[> Ge	74			94.6			
| As	75						
| Se	77						
| Se	82						
[Kr	83						

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 9

Report Date/Time: Monday, February 08, 2010 15:17:54

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ICPMS#5 - Summary Report

Sample ID: 244601002

Sample Date/Time: Monday, February 08, 2010 15:19:52

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 941732|2|baj

Method File: c:\elandata\Method\as ni and se.mth

Dataset File: c:\elandata\Dataset\100207\244601002.454

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Sc	45		ug/L		857149	857148.757
[Ni	60	41.913	ug/L	0.332	56019	0.065
[> Ge	74		ug/L		303072	303071.800
[As	75	11.676	ug/L	2.034	10312	0.034
[Se	77		ug/L		2275	-0.000
[Se	82	-0.963	ug/L	10.801	-94	-0.000
[Kr	83		ug/L		250	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
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	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dilution	Duplicate Rel. % Difference
[> Sc	45		93.5			
[Ni	60					
[> Ge	74		82.8			
[As	75					
[Se	77					
[Se	82					
[Kr	83					

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: 244601002

Report Date/Time: Monday, February 08, 2010 15:20:21

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ICPMS#5 - Summary Report

Sample ID: 244601003

Sample Date/Time: Monday, February 08, 2010 15:22:20

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 941732[2]ba]

Method File: c:\elandata\Method\as nl and se.mth

Dataset File: c:\elandata\Dataset\100207\244601003.455

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Sc	45		ug/L		891037	891037.044
[Ni	60	45.728	ug/L	3.750	63486	0.071
[> Ge	74		ug/L		304460	304459.836
[As	75	14.309	ug/L	0.404	12727	0.042
[Se	77		ug/L		2409	-0.000
[Se	82	-1.042	ug/L	9.161	-102	-0.000
[Kr	83		ug/L		357	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
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	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[> Sc	45		97.2			
[Ni	60					
[> Ge	74		83.2			
[As	75					
[Se	77					
[Se	82					
[Kr	83					

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: 244601003

Report Date/Time: Monday, February 08, 2010 15:22:50

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ICPMS#5 - Summary Report

Sample ID: 244601004

Sample Date/Time: Monday, February 08, 2010 15:24:49

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 941732|2|baj

Method File: c:\elandata\Method\as ni and se.mth

Dataset File: c:\elandata\Dataset\100207\244601004.456

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
> Sc	45		ug/L		848162	848161.881
| Ni	60	29.450	ug/L	3.380	38961	0.046
> Ge	74		ug/L		300574	300574.136
| As	75	7.497	ug/L	0.295	6518	0.022
| Se	77		ug/L		2055	-0.001
| Se	82	-0.186	ug/L	80.739	-16	-0.000
| Kr	83		ug/L		227	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
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	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
> Sc	45		92.6				
| Ni	60						
> Ge	74		82.2				
| As	75						
| Se	77						
| Se	82						
| Kr	83						

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: 244601004

Report Date/Time: Monday, February 08, 2010 15:25:18

Page 1

ICPMS#5 - Summary Report

Sample ID: 244601005

Sample Date/Time: Monday, February 08, 2010 15:27:18

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 941732|2|baj

Method File: c:\elandata\Method\as ni and se.mth

Dataset File: c:\elandata\Dataset\100207\244601005.457

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		881077	881076.549
[	Ni	60	40.796	ug/L	1.021	56044	0.064
[>	Ge	74		ug/L		307120	307120.394
[	As	75	12.226	ug/L	0.498	10949	0.036
[	Se	77		ug/L		2249	-0.001
[	Se	82	-1.741	ug/L	6.664	-173	-0.001
[	Kr	83		ug/L		367	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
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	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[>	Sc	45		96.2				
[	Ni	60						
[>	Ge	74		83.9				
[	As	75						
[	Se	77						
[	Se	82						
[	Kr	83						

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: 244601005

Report Date/Time: Monday, February 08, 2010 15:27:48

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ICPMS#5 - Summary Report

Sample ID: 244601006

Sample Date/Time: Monday, February 08, 2010 15:29:47

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 941732|2|ba|

Method File: c:\elandata\Method\as ni and se.mth

Dataset File: c:\elandata\Dataset\100207\244601006.458

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Sc	45		ug/L		863106	863106.260
[Ni	60	50.057	ug/L	2.053	67356	0.078
[> Ge	74		ug/L		305330	305330.205
[As	75	10.182	ug/L	2.840	9042	0.030
[Se	77		ug/L		2038	-0.001
[Se	82	-2.702	ug/L	5.319	-269	-0.001
[Kr	83		ug/L		455	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
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	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[> Sc	45			94.2			
[Ni	60						
[> Ge	74			83.5			
[As	75						
[Se	77						
[Se	82						
[Kr	83						

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: 244601006

Report Date/Time: Monday, February 08, 2010 15:30:18

Page 1

ICPMS#5 - Summary Report

Sample ID: 244601007

Sample Date/Time: Monday, February 08, 2010 15:32:18

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 941732[2]ba]

Method File: c:\elandata\Method\as ni and se.mth

Dataset File: c:\elandata\Dataset\100207\244601007.459

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Sc	45		ug/L		861301	861300.988
[Ni	60	36.503	ug/L	2.843	49018	0.057
[> Ge	74		ug/L		304341	304341.011
[As	75	8.895	ug/L	4.091	7857	0.026
[Se	77		ug/L		1878	-0.002
[Se	82	-1.136	ug/L	4.801	-111	-0.000
[Kr	83		ug/L		285	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
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	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[> Sc	45		94.0				
[Ni	60						
[> Ge	74		83.2				
[As	75						
[Se	77						
[Se	82						
[Kr	83						

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: 244601007

Report Date/Time: Monday, February 08, 2010 15:32:48

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Monday, February 08, 2010 15:34:47

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\as ni and se.mth

Dataset File: c:\elandata\Dataset\100207\QC Std 8.460

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Sc	45		ug/L		847400	847400.242
[Ni	60	53.024	ug/L	1.869	70023	0.083
[> Ge	74		ug/L		346202	346201.892
[As	75	48.880	ug/L	0.305	49816	0.144
[Se	77		ug/L		7568	0.014
[Se	82	50.770	ug/L	0.730	5776	0.017
[Kr	83		ug/L		86	-0.000

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[> Sc	45		92.5				
[Ni	60	106.047					
[> Ge	74		94.6				
[As	75	97.759					
[Se	77						
[Se	82	101.541					
[Kr	83						

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 8

Report Date/Time: Monday, February 08, 2010 15:35:17

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ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Monday, February 08, 2010 15:37:17

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\as ni and se.mth

Dataset File: c:\elandata\Dataset\100207\QC Std 9.461

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
> Sc	45		ug/L		883599	883599.118
[Ni	60	0.005	ug/L	83.180	101	0.000
> Ge	74		ug/L		355123	355122.939
[As	75	0.124	ug/L	197.797	-30	0.000
| Se	77		ug/L		3059	0.001
| Se	82	0.082	ug/L	74.881	12	0.000
[Kr	83		ug/L		83	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
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	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
> Sc	45		96.4				
[Ni	60						
> Ge	74		97.1				
| As	75						
| Se	77						
| Se	82						
[Kr	83						

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 9

Report Date/Time: Monday, February 08, 2010 15:37:47

Page 1

ICPMS#5 - Summary Report

Sample ID: 244601008

Sample Date/Time: Monday, February 08, 2010 15:39:48

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 941732[2]ba]

Method File: c:\elandata\Method\as ni and se.mth

Dataset File: c:\elandata\Dataset\100207\244601008.462

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Sc	45		ug/L		831182	831182.132
[Ni	60	25.223	ug/L	1.106	32724	0.039
[> Ge	74		ug/L		298900	298900.065
| As	75	7.360	ug/L	3.957	6361	0.022
| Se	77		ug/L		1937	-0.001
| Se	82	-0.154	ug/L	87.525	-13	-0.000
[Kr	83		ug/L		207	0.000

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[> Sc	45		90.7			
[Ni	60					
[> Ge	74		81.7			
| As	75					
| Se	77					
| Se	82					
[Kr	83					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 244601008

Report Date/Time: Monday, February 08, 2010 15:40:19

Page 1

ICPMS#5 - Summary Report

Sample ID: 244601009

Sample Date/Time: Monday, February 08, 2010 15:42:17

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 941732[2]ba]

Method File: c:\elandata\Method\as ni and se.mth

Dataset File: c:\elandata\Dataset\100207\244601009.463

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		820062	820062.178
[	Ni	60	25.871	ug/L	1.748	33115	0.040
[>	Ge	74		ug/L		291855	291855.374
|	As	75	7.279	ug/L	1.419	6141	0.021
|	Se	77		ug/L		1842	-0.002
|	Se	82	-0.387	ug/L	56.672	-35	-0.000
[	Kr	83		ug/L		209	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
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	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Sc	45			89.5			
[	Ni	60						
[>	Ge	74			79.8			
|	As	75						
|	Se	77						
|	Se	82						
[	Kr	83						

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: 244601009

Report Date/Time: Monday, February 08, 2010 15:42:47

Page 1

ICPMS#5 - Summary Report

Sample ID: 244601010

Sample Date/Time: Monday, February 08, 2010 15:44:46

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 941732|2|baj

Method File: c:\elandata\Method\as ni and se.mth

Dataset File: c:\elandata\Dataset\100207\244601010.464

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		785872	785872.147
[	Ni	60	16.448	ug/L	2.262	20198	0.026
[>	Ge	74		ug/L		292498	292497.751
[	As	75	4.615	ug/L	4.246	3853	0.014
[	Se	77		ug/L		1840	-0.002
[	Se	82	0.537	ug/L	44.974	54	0.000
[	Kr	83		ug/L		175	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
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	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[>	Sc	45			85.8			
[	Ni	60						
[>	Ge	74			79.9			
[	As	75						
[	Se	77						
[	Se	82						
[	Kr	83						

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: 244601010

Report Date/Time: Monday, February 08, 2010 15:45:16

Page 1

ICPMS#5 - Summary Report

Sample ID: 244601011

Sample Date/Time: Monday, February 08, 2010 15:47:15

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 941732[2]ba]

Method File: c:\elandata\Method\as ni and se.mth

Dataset File: c:\elandata\Dataset\100207\244601011.465

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Sc	45		ug/L		809529	809529.443
[Ni	60	25.889	ug/L	2.055	32702	0.040
[> Ge	74		ug/L		290444	290444.386
| As	75	9.310	ug/L	3.105	7853	0.027
| Se	77		ug/L		1767	-0.002
| Se	82	-0.107	ug/L	100.585	-8	-0.000
[Kr	83		ug/L		187	0.000

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[> Sc	45		88.4				
[Ni	60						
[> Ge	74		79.4				
| As	75						
| Se	77						
| Se	82						
[Kr	83						

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 244601011

Report Date/Time: Monday, February 08, 2010 15:47:45

Page 1

ICPMS#5 - Summary Report

Sample ID: 244601012

Sample Date/Time: Monday, February 08, 2010 15:49:45

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 941732|2|baj

Method File: c:\elandata\Method\as ni and se.mth

Dataset File: c:\elandata\Dataset\100207\244601012.466

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Sc	45		ug/L		802567	802566.915
[Ni	60	23.267	ug/L	1.404	29155	0.036
[> Ge	74		ug/L		287163	287162.545
| As	75	8.591	ug/L	3.600	7153	0.025
| Se	77		ug/L		1696	-0.002
| Se	82	-0.135	ug/L	211.661	-10	-0.000
[Kr	83		ug/L		181	0.000

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel.	% Difference
[> Sc	45			87.6			
[Ni	60						
[> Ge	74			78.5			
| As	75						
| Se	77						
| Se	82						
[Kr	83						

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 244601012

Report Date/Time: Monday, February 08, 2010 15:50:15

Page 1

ICPMS#5 - Summary Report

Sample ID: 244601013

Sample Date/Time: Monday, February 08, 2010 15:52:15

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 941732[2]ba]

Method File: c:\elandata\Method\as ni and se.mth

Dataset File: c:\elandata\Dataset\100207\244601013.467

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		861605	861605.415
[	Ni	60	39.781	ug/L	2.583	53450	0.062
[>	Ge	74		ug/L		295023	295023.320
|	As	75	11.506	ug/L	2.645	9890	0.034
|	Se	77		ug/L		2018	-0.001
|	Se	82	-1.104	ug/L	27.606	-105	-0.000
[	Kr	83		ug/L		299	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
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	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[>	Sc	45			94.0			
[	Ni	60						
[>	Ge	74			80.6			
|	As	75						
|	Se	77						
|	Se	82						
[	Kr	83						

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: 244601013

Report Date/Time: Monday, February 08, 2010 15:52:45

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Monday, February 08, 2010 15:54:44

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\as ni and se.mth

Dataset File: c:\elandata\Dataset\100207\QC Std 6.468

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		857484	857484.323
[	Ni	60	52.218	ug/L	2.564	69790	0.081
[>	Ge	74		ug/L		344170	344169.759
|	As	75	47.429	ug/L	3.125	48043	0.140
|	Se	77		ug/L		7487	0.014
|	Se	82	50.365	ug/L	1.401	5696	0.017
[	Kr	83		ug/L		88	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
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	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[>	Sc	45			93.6			
[	Ni	60	104.436					
[>	Ge	74			94.1			
|	As	75	94.858					
|	Se	77						
|	Se	82	100.730					
[	Kr	83						

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: Monday, February 08, 2010 15:55:14

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Monday, February 08, 2010 15:57:14

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\as ni and se.mth

Dataset File: c:\elandata\Dataset\100207\QC Std 7.469

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Sc	45		ug/L		861060	861059.721
[Ni	60	0.013	ug/L	47.830	108	0.000
[> Ge	74		ug/L		350887	350886.952
| As	75	0.022	ug/L	215.717	-136	0.000
| Se	77		ug/L		3005	0.001
| Se	82	0.154	ug/L	91.527	21	0.000
[Kr	83		ug/L		80	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
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	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[> Sc	45			94.0			
[Ni	60						
[> Ge	74			95.9			
| As	75						
| Se	77						
| Se	82						
[Kr	83						

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: Monday, February 08, 2010 15:57:45

Page 1

ICPMS #6 Daily Performance Report

Sample ID: Sample

Sample Date/Time: Thursday, January 28, 2010 00:03:38

Sample Description:

Method File: C:\elandata\Method\Daily2.mth

Dataset File: c:\elandata\Dataset\091212\Sample.263

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	1334.9	1334.862	36.179	2.7
Mg	24.0	12368.2	12368.154	285.349	2.3
Co	58.9	28651.3	28651.303	144.813	0.5
Rh	102.9	58150.7	58150.714	280.332	0.5
In	114.9	68929.5	68929.501	476.372	0.7
Pb	208.0	38818.5	38818.471	247.414	0.6
[> Ba	137.9	60881.3	60881.342	403.653	0.7
[Ba++	69.0	1477.0	0.024	0.001	2.8
[> Ce	139.9	81228.1	81228.130	1403.718	1.7
[CeO	155.9	1424.3	0.018	0.000	2.8
Bkgd	220.0	13.5	13.500	0.354	2.6

Current Optimization File Data

Current Value	Description
0.84	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	17	12.3	3053.7
Co	59	17	13.5	30039.2
In	115	17	15.0	69765.9

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	3.0	585	2080	0.660
Be	9.0	9.0	2033	2080	0.679
Mg	24.0	24.0	5692	2120	0.568
Mg	25.0	25.0	5935	2080	0.699
Mg	26.0	26.0	6159	2120	0.688
Co	58.9	58.9	14163	2170	0.637
Rh	102.9	102.9	24850	2230	0.694
In	114.9	115.0	27785	2260	0.681
Ce	139.9	139.9	33852	2280	0.745
Pb	206.0	206.0	49948	2430	0.741
Pb	207.0	207.0	50135	2385	0.679
Pb	208.0	208.0	50475	2430	0.714
U	238.1	238.1	57737	2470	0.718

ICPMS#6 - Summary Report

Sample ID: Blank

Sample Date/Time: Thursday, January 28, 2010 09:19:50

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 nohrs thtimozr.mth

Dataset File: C:\elandata\Dataset\100127\Blank.111

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7		ug/L			14
Be	9		ug/L			7
B	11		ug/L			796
Na	23		ug/L			8670
Mg	24		ug/L			3000
Al	27		ug/L			2000
P	31		ug/L			3428
K	39		ug/L			281776
Ca	43		ug/L			384
> Sc	45		ug/L			321124
V	51		ug/L			14605
Cr	52		ug/L			3207
Cr	53		ug/L			60015
Mn	55		ug/L			450
Fe	57		ug/L			4069
Co	59		ug/L			70
Ni	60		ug/L			144
Cu	63		ug/L			58
Cu	65		ug/L			136
Zn	66		ug/L			850
Zn	67		ug/L			6870
Zn	68		ug/L			986
> Ge	74		ug/L			79326
As	75		ug/L			434
Se	77		ug/L			3249
Se	82		ug/L			-14
Kr	83		ug/L			45
Sr	88		ug/L			96
Y	89		ug/L			20
Ag	107		ug/L			16
Cd	111		ug/L			7
Cd	114		ug/L			13
> In	115		ug/L			44769
Sn	120		ug/L			93
Sb	121		ug/L			176
Sb	123		ug/L			152
Ba	135		ug/L			14
Ba	137		ug/L			14
Ho	165		ug/L			6
> Lu	175		ug/L			59499
Tl	205		ug/L			173
Pb	208		ug/L			125
Bi	209		ug/L			12
U	238		ug/L			71

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	0.9999
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	
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	0.9988
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	
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	0.9999
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	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	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

ICPMS#6 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Thursday, January 28, 2010 09:25:44

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 nolrs thtimozr.mth

Dataset File: C:\elandata\Dataset\100127\Standard 1.112

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	10.000	ug/L	2.196	3309	0.011
Be	9	10.000	ug/L	2.171	1677	0.005
B	11	20.000	ug/L	4.336	3368	0.008
Na	23	1000.000	ug/L	2.885	1030208	3.308
Mg	24	1000.000	ug/L	3.281	704289	2.271
Al	27	1000.000	ug/L	3.096	1077876	3.483
P	31	1000.000	ug/L	1.494	86511	0.269
K	39	1000.000	ug/L	7.150	1663752	4.509
Ca	43	1000.000	ug/L	7.068	3236	0.009
> Sc	45		ug/L		308874	308874.140
V	51	10.000	ug/L	5.880	33625	0.063
Cr	52	10.000	ug/L	2.244	18706	0.051
Cr	53		ug/L		54284	-0.011
Mn	55	10.000	ug/L	1.356	22921	0.073
Fe	57	1000.000	ug/L	1.607	48786	0.145
Co	59	10.000	ug/L	0.577	16952	0.055
Ni	60	10.000	ug/L	2.586	3828	0.012
Cu	63		ug/L		7817	0.025
Cu	65	10.000	ug/L	1.329	3779	0.012
Zn	66	10.000	ug/L	0.436	4288	0.044
Zn	67		ug/L		6862	0.001
Zn	68		ug/L		3429	0.031
> Ge	74		ug/L		78135	78135.227
As	75	10.000	ug/L	9.817	2880	0.031
Se	77		ug/L		2874	-0.004
Se	82	10.000	ug/L	6.566	245	0.003
Kr	83		ug/L		38	-0.000
Sr	88	10.000	ug/L	1.161	29561	0.686
Y	89		ug/L		22	0.000
Ag	107	10.000	ug/L	1.329	12822	0.298
Cd	111	10.000	ug/L	1.675	3101	0.072
Cd	114		ug/L		7057	0.164
> In	115		ug/L		42934	42933.753
Sn	120	10.000	ug/L	1.868	12355	0.286
Sb	121	10.000	ug/L	11.687	9417	0.216
Sb	123		ug/L		7342	0.168
Ba	135		ug/L		2852	0.048
Ba	137	10.000	ug/L	3.462	4986	0.085
Ho	165		ug/L		9	0.000
> Lu	175		ug/L		58670	58670.151
Tl	205	10.000	ug/L	0.336	23225	0.393
Pb	208	10.000	ug/L	1.491	39006	0.663
Bi	209		ug/L		21	0.000
U	238	10.000	ug/L	0.306	42903	0.730

Sample ID: Standard 1

Report Date/Time: Thursday, January 28, 2010 09:28:14

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	
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	
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	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution %	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: Standard 2

Sample Date/Time: Thursday, January 28, 2010 09:31:37

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 nohrs thtimozr.mth

Dataset File: C:\elandata\Dataset\100127\Standard 2.113

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	100.039	ug/L	2.180	32028	0.111
Be	9	100.019	ug/L	0.455	15906	0.055
B	11	200.228	ug/L	1.801	28180	0.095
Na	23	10011.601	ug/L	2.671	10813509	37.467
Mg	24	10012.891	ug/L	7.060	7530982	26.101
Al	27	10010.624	ug/L	3.613	11254460	39.016
P	31	10003.178	ug/L	0.870	805769	2.783
K	39	10006.377	ug/L	3.770	14151739	48.190
Ca	43	10005.042	ug/L	0.127	28538	0.098
> Sc	45		ug/L		288382	288381.882
V	51	99.905	ug/L	1.005	179902	0.578
Cr	52	99.994	ug/L	0.788	147829	0.503
Cr	53		ug/L		57284	0.012
Mn	55	99.998	ug/L	1.173	209858	0.726
Fe	57	9998.471	ug/L	0.474	416227	1.431
Co	59	99.981	ug/L	0.592	154734	0.536
Ni	60	99.921	ug/L	0.927	32015	0.111
Cu	63		ug/L		69688	0.241
Cu	65	99.969	ug/L	0.895	33143	0.115
Zn	66	99.562	ug/L	1.216	22392	0.306
Zn	67		ug/L		9322	0.045
Zn	68		ug/L		16458	0.220
> Ge	74		ug/L		70744	70743.794
As	75	100.149	ug/L	2.237	26521	0.369
Se	77		ug/L		3609	0.010
Se	82	100.060	ug/L	2.652	2483	0.035
Kr	83		ug/L		36	-0.000
Sr	88	99.992	ug/L	1.231	272756	6.807
Y	89		ug/L		39	0.001
Ag	107	99.998	ug/L	0.825	119291	2.978
Cd	111	100.002	ug/L	0.949	28950	0.723
Cd	114		ug/L		66100	1.650
> In	115		ug/L		40058	40057.908
Sn	120	100.018	ug/L	0.024	116596	2.909
Sb	121	100.124	ug/L	8.357	98908	2.464
Sb	123		ug/L		75980	1.893
Ba	135		ug/L		26854	0.479
Ba	137	99.993	ug/L	0.157	47185	0.842
Ho	165		ug/L		10	0.000
> Lu	175		ug/L		56050	56050.302
Tl	205	100.012	ug/L	1.515	223199	3.979
Pb	208	100.015	ug/L	1.237	377444	6.732
Bi	209		ug/L		38	0.000
U	238	100.036	ug/L	1.350	424908	7.580

Sample ID: Standard 2

Report Date/Time: Thursday, January 28, 2010 09:34:06

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	0.9999
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	0.9999
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
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	0.9990
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	0.9999
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
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	0.9999
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	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	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: Thursday, January 28, 2010 09:37:29

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 nohrs thtmozr.mth

Dataset File: C:\elandata\Dataset\100127\QC Std 1.114

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	51.215	ug/L	2.791	16790	0.057
Be	9	51.392	ug/L	3.295	8369	0.028
B	11	102.434	ug/L	1.810	15115	0.049
Na	23	4729.129	ug/L	3.608	5233276	17.698
Mg	24	4901.426	ug/L	5.984	3773537	12.777
Al	27	5250.560	ug/L	1.510	6043062	20.464
P	31	5037.711	ug/L	0.822	416966	1.402
K	39	5403.047	ug/L	4.790	7939584	26.021
Ca	43	4967.786	ug/L	0.616	14683	0.049
> Sc	45		ug/L		295208	295208.038
V	51	49.923	ug/L	0.720	98741	0.289
Cr	52	51.179	ug/L	0.306	78891	0.257
Cr	53		ug/L		49386	-0.020
Mn	55	51.064	ug/L	0.969	109903	0.371
Fe	57	4927.257	ug/L	0.557	211864	0.705
Co	59	49.221	ug/L	0.562	78008	0.264
Ni	60	51.201	ug/L	1.347	16857	0.057
Cu	63		ug/L		36186	0.122
Cu	65	50.142	ug/L	1.623	17079	0.057
Zn	66	55.098	ug/L	0.538	12812	0.169
Zn	67		ug/L		7823	0.023
Zn	68		ug/L		9564	0.122
> Ge	74		ug/L		71190	71189.985
As	75	47.379	ug/L	0.895	12833	0.175
Se	77		ug/L		2561	-0.005
Se	82	50.803	ug/L	1.767	1262	0.018
Kr	83		ug/L		35	-0.000
Sr	88	51.650	ug/L	1.104	142458	3.516
Y	89		ug/L		27	0.000
Ag	107	50.111	ug/L	1.166	60434	1.492
Cd	111	50.260	ug/L	0.887	14710	0.363
Cd	114		ug/L		34416	0.850
> In	115		ug/L		40492	40491.639
Sn	120	49.284	ug/L	0.665	58117	1.433
Sb	121	49.260	ug/L	7.254	49260	1.212
Sb	123		ug/L		37964	0.934
Ba	135		ug/L		13804	0.245
Ba	137	50.956	ug/L	1.146	24167	0.429
Ho	165		ug/L		12	0.000
> Lu	175		ug/L		56323	56322.714
Tl	205	48.755	ug/L	0.271	109416	1.940
Pb	208	51.085	ug/L	1.298	193764	3.438
Bi	209		ug/L		42	0.001
U	238	53.555	ug/L	0.896	228597	4.058

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	0.9999
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	0.9999
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
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	0.9990
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	0.9999
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
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	0.9999
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	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Duplicate Rel. % Difference
|	Li	7	102.431				
|	Be	9	102.784				
|	B	11	102.434				
|	Na	23	94.583				
|	Mg	24	98.029				
|	Al	27	103.971				
|	P	31	100.754				
|	K	39	108.061				
|	Ca	43	99.356				
>	Sc	45		91.9			
|	V	51	99.846				
|	Cr	52	102.358				
|	Cr	53					
|	Mn	55	102.128				
|	Fe	57	98.545				
|	Co	59	98.442				
|	Ni	60	102.401				
|	Cu	63					
|	Cu	65	100.284				
|	Zn	66	110.197				
|	Zn	67					
|	Zn	68					
>	Ge	74		89.7			
|	As	75	94.758				
|	Se	77					
|	Se	82	101.607				
|	Kr	83					
|	Sr	88	103.301				
|	Y	89					
|	Ag	107	100.223				
|	Cd	111	100.520				
|	Cd	114					
>	In	115		90.4			
|	Sn	120	98.568				
|	Sb	121	98.520				
|	Sb	123					
|	Ba	135					
|	Ba	137	101.912				
|	Ho	165					
>	Lu	175		94.7			
|	Tl	205	97.509				
|	Pb	208	102.171				
|	Bi	209					
|	U	238	107.110				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 1	Zn	66	ICV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Thursday, January 28, 2010 09:43:24

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 nolsr thtimozr.mth

Dataset File: C:\elandata\Dataset\100127\QC Std 2.115

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.007	ug/L	123.900	16	0.000
Be	9	-0.001	ug/L	10.202	7	-0.000
B	11	1.019	ug/L	85.800	920	0.000
Na	23	2.830	ug/L	62.998	11672	0.011
Mg	24	-1.113	ug/L	0.290	2000	-0.003
Al	27	-0.496	ug/L	96.622	1333	-0.002
P	31	-1.260	ug/L	83.031	3205	-0.000
K	39	-8.715	ug/L	245.112	259356	-0.042
Ca	43	-11.837	ug/L	33.336	335	-0.000
> Sc	45		ug/L		310454	310454.177
V	51	-0.870	ug/L	68.869	12557	-0.005
Cr	52	-0.607	ug/L	12.250	2153	-0.003
Cr	53		ug/L		46611	-0.037
Mn	55	-0.016	ug/L	88.272	400	-0.000
Fe	57	-8.185	ug/L	14.059	3570	-0.001
Co	59	-0.005	ug/L	92.271	59	-0.000
Ni	60	-0.043	ug/L	83.639	125	-0.000
Cu	63		ug/L		51	-0.000
Cu	65	-0.132	ug/L	13.148	85	-0.000
Zn	66	-0.237	ug/L	43.355	763	-0.001
Zn	67		ug/L		6331	-0.004
Zn	68		ug/L		901	-0.001
> Ge	74		ug/L		76380	76380.420
As	75	-1.166	ug/L	25.013	89	-0.004
Se	77		ug/L		2110	-0.013
Se	82	0.242	ug/L	32.701	-7	0.000
Kr	83		ug/L		39	-0.000
Sr	88	-0.004	ug/L	141.545	79	-0.000
Y	89		ug/L		19	0.000
Ag	107	0.008	ug/L	27.196	26	0.000
Cd	111	0.005	ug/L	108.427	8	0.000
Cd	114		ug/L		15	0.000
> In	115		ug/L		42451	42451.071
Sn	120	0.271	ug/L	9.903	423	0.008
Sb	121	1.243	ug/L	19.034	1464	0.031
Sb	123		ug/L		1135	0.023
Ba	135		ug/L		10	-0.000
Ba	137	0.004	ug/L	84.409	15	0.000
Ho	165		ug/L		10	0.000
> Lu	175		ug/L		58662	58661.798
Tl	205	0.175	ug/L	28.009	577	0.007
Pb	208	0.003	ug/L	76.675	136	0.000
Bi	209		ug/L		12	0.000
U	238	0.077	ug/L	15.649	411	0.006

Sample ID: QC Std 2

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	0.9999
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	0.9999
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
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	0.9990
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	0.9999
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
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	0.9999
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	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	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		96.7			
|	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		96.3			
|	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		98.6			
|	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

ICPMS#6 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Thursday, January 28, 2010 09:49:19

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 nohrs thtimozr.mth

Dataset File: C:\elandata\Dataset\100127\QC Std 3.116

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	10.747	ug/L	2.443	3683	0.012
Be	9	0.513	ug/L	9.378	94	0.000
B	11	14.855	ug/L	7.000	2937	0.007
Na	23	233.219	ug/L	15.911	276693	0.873
Mg	24	6.807	ug/L	20.717	8336	0.018
Al	27	37.607	ug/L	23.629	47080	0.147
P	31	46.311	ug/L	5.906	7247	0.013
K	39	316.718	ug/L	14.897	739440	1.525
Ca	43	219.595	ug/L	1.279	1028	0.002
> Sc	45		ug/L		307644	307643.548
V	51	11.501	ug/L	9.826	34477	0.067
Cr	52	10.718	ug/L	2.127	19643	0.054
Cr	53		ug/L		52363	-0.017
Mn	55	5.673	ug/L	1.182	13108	0.041
Fe	57	106.342	ug/L	3.032	8579	0.015
Co	59	1.102	ug/L	2.173	1885	0.006
Ni	60	2.413	ug/L	0.274	960	0.003
Cu	63		ug/L		924	0.003
Cu	65	1.090	ug/L	1.290	515	0.001
Zn	66	15.930	ug/L	1.328	4568	0.049
Zn	67		ug/L		6981	0.005
Zn	68		ug/L		3674	0.036
> Ge	74		ug/L		76581	76581.154
As	75	4.597	ug/L	17.733	1719	0.017
Se	77		ug/L		2549	-0.008
Se	82	5.875	ug/L	4.322	145	0.002
Kr	83		ug/L		42	-0.000
Sr	88	11.026	ug/L	0.567	32974	0.751
Y	89		ug/L		19	-0.000
Ag	107	1.000	ug/L	3.229	1320	0.030
Cd	111	1.000	ug/L	5.609	323	0.007
Cd	114		ug/L		767	0.017
> In	115		ug/L		43804	43804.349
Sn	120	5.082	ug/L	1.019	6565	0.148
Sb	121	2.717	ug/L	8.478	3103	0.067
Sb	123		ug/L		2382	0.051
Ba	135		ug/L		629	0.010
Ba	137	2.169	ug/L	3.667	1085	0.018
Ho	165		ug/L		10	0.000
> Lu	175		ug/L		58712	58711.990
Tl	205	1.063	ug/L	3.680	2654	0.042
Pb	208	2.188	ug/L	1.286	8769	0.147
Bi	209		ug/L		9	-0.000
U	238	0.224	ug/L	1.816	1064	0.017

Sample ID: QC Std 3

Report Date/Time: Thursday, January 28, 2010 09:51:50

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	0.9999
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	0.9999
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
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	0.9990
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	0.9999
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
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	0.9999
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	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std	% Recovery	Int Std	% Recovery	Spike	% Recovery	Dilution	% Dil	Duplicate	Rel. % Difference
|	Li	7		107.470								
|	Be	9		102.528								
|	B	11		99.035								
|	Na	23		93.288								
|	Mg	24		45.382								
|	Al	27		125.356								
|	P	31		92.623								
|	K	39		105.573								
|	Ca	43		109.798								
>	Sc	45					95.8					
|	V	51		115.015								
|	Cr	52		107.178								
|	Cr	53										
|	Mn	55		113.469								
|	Fe	57		106.342								
|	Co	59		110.202								
|	Ni	60		120.651								
|	Cu	63										
|	Cu	65		108.996								
|	Zn	66		159.299								
|	Zn	67										
|	Zn	68										
>	Ge	74					96.5					
|	As	75		91.935								
|	Se	77										
|	Se	82		117.502								
|	Kr	83										
|	Sr	88		110.264								
|	Y	89										
|	Ag	107		99.993								
|	Cd	111		99.967								
|	Cd	114										
>	In	115					97.8					
|	Sn	120		101.645								
|	Sb	121		90.579								
|	Sb	123										
|	Ba	135										
|	Ba	137		108.442								
|	Ho	165										
>	Lu	175					98.7					
|	Tl	205		106.296								
|	Pb	208		109.381								
|	Bi	209										
|	U	238		111.761								

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	Zn	66	CRDL is out of limits

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Thursday, January 28, 2010 09:55:13

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 nohrs thtimozr.mth

Dataset File: C:\elandata\Dataset\100127\QC Std 4.117

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.212	ug/L	12.786	76	0.000
Be	9	0.123	ug/L	26.123	25	0.000
B	11	1.018	ug/L	11.929	805	0.000
Na	23	110854.100	ug/L	6.469	112708624	414.860
Mg	24	103445.537	ug/L	2.057	73292976	269.660
Al	27	115021.340	ug/L	2.813	121833307	448.294
P	31	99649.950	ug/L	0.684	7538268	27.727
K	39	102021.201	ug/L	7.903	133756317	491.329
Ca	43	96406.966	ug/L	0.634	256327	0.942
> Sc	45		ug/L		271760	271760.337
V	51	-1.999	ug/L	7.294	9215	-0.012
Cr	52	2.525	ug/L	2.263	6162	0.013
Cr	53		ug/L		32014	-0.069
Mn	55	5.489	ug/L	0.440	11217	0.040
Fe	57	89513.679	ug/L	1.071	3484088	12.808
Co	59	0.272	ug/L	5.321	455	0.001
Ni	60	3.686	ug/L	5.056	1230	0.004
Cu	63		ug/L		1790	0.006
Cu	65	5.120	ug/L	2.238	1709	0.006
Zn	66	10.076	ug/L	2.378	2664	0.031
Zn	67		ug/L		6173	0.010
Zn	68		ug/L		1494	0.011
> Ge	74		ug/L		63922	63921.665
As	75	-0.238	ug/L	89.363	294	-0.001
Se	77		ug/L		1800	-0.013
Se	82	-3.032	ug/L	11.188	-79	-0.001
Kr	83		ug/L		115	0.001
Sr	88	2.720	ug/L	1.233	7353	0.185
Y	89		ug/L		96	0.002
Ag	107	0.307	ug/L	38.724	373	0.009
Cd	111	1.283	ug/L	32.067	370	0.009
Cd	114		ug/L		2124	0.054
> In	115		ug/L		39253	39252.558
Sn	120	0.483	ug/L	8.453	633	0.014
Sb	121	0.447	ug/L	31.842	586	0.011
Sb	123		ug/L		446	0.008
Ba	135		ug/L		204	0.003
Ba	137	0.679	ug/L	4.261	355	0.006
Ho	165		ug/L		1529	0.026
> Lu	175		ug/L		59681	59680.673
Tl	205	0.022	ug/L	40.399	225	0.001
Pb	208	0.223	ug/L	2.398	1020	0.015
Bi	209		ug/L		562	0.009
U	238	0.005	ug/L	40.561	95	0.000

Sample ID: QC Std 4

Report Date/Time: Thursday, January 28, 2010 09:57:43

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	0.9999
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	0.9999
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
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	0.9990
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	0.9999
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
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	0.9999
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	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution %	Duplicate Rel. % Difference
[	Li	7					
|	Be	9					
|	B	11					
|	Na	23	110.854				
|	Mg	24	103.446				
|	Al	27	115.021				
|	P	31	99.650				
|	K	39	102.021				
|	Ca	43	96.407				
>	Sc	45		84.6			
|	V	51					
|	Cr	52	76.508				
|	Cr	53					
|	Mn	55	94.643				
|	Fe	57	89.514				
|	Co	59	115.733				
|	Ni	60	111.363				
|	Cu	63					
|	Cu	65	153.296				
|	Zn	66	267.988				
|	Zn	67					
|	Zn	68					
>	Ge	74		80.6			
|	As	75					
|	Se	77					
|	Se	82					
|	Kr	83					
|	Sr	88	91.907				
|	Y	89					
|	Ag	107					
|	Cd	111	289.041				
|	Cd	114					
>	In	115		87.7			
|	Sn	120					
|	Sb	121					
|	Sb	123					
|	Ba	135					
|	Ba	137	85.037				
|	Ho	165					
>	Lu	175		100.3			
|	Tl	205					
|	Pb	208	117.807				
|	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: Thursday, January 28, 2010 10:01:07

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 nolrs thtimozr.mth

Dataset File: C:\elandata\Dataset\100127\QC Std 5.118

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	25.243	ug/L	0.812	7148	0.028
Be	9	23.403	ug/L	4.837	3291	0.013
B	11	24.711	ug/L	1.917	3625	0.012
Na	23	114831.615	ug/L	5.413	109512409	429.746
Mg	24	109064.112	ug/L	4.960	72434744	284.307
Al	27	123771.175	ug/L	3.313	122870186	482.396
P	31	101535.706	ug/L	0.870	7199600	28.252
K	39	101672.143	ug/L	2.261	124968122	489.648
Ca	43	97899.428	ug/L	1.050	244000	0.957
> Sc	45		ug/L		254739	254739.447
V	51	18.238	ug/L	4.266	38484	0.106
Cr	52	22.727	ug/L	1.582	31643	0.114
Cr	53		ug/L		31996	-0.061
Mn	55	25.046	ug/L	0.573	46697	0.182
Fe	57	91008.384	ug/L	0.656	3320582	13.022
Co	59	19.356	ug/L	1.144	26504	0.104
Ni	60	22.119	ug/L	1.503	6349	0.024
Cu	63		ug/L		12817	0.050
Cu	65	23.529	ug/L	0.749	6973	0.027
Zn	66	27.188	ug/L	1.843	5707	0.084
Zn	67		ug/L		6504	0.021
Zn	68		ug/L		3815	0.051
> Ge	74		ug/L		60561	60561.371
As	75	21.234	ug/L	2.711	5076	0.078
Se	77		ug/L		1936	-0.009
Se	82	18.318	ug/L	14.826	381	0.006
Kr	83		ug/L		112	0.001
Sr	88	22.631	ug/L	0.323	57328	1.541
Y	89		ug/L		76	0.002
Ag	107	19.209	ug/L	0.298	21268	0.572
Cd	111	20.499	ug/L	2.163	5509	0.148
Cd	114		ug/L		14143	0.380
> In	115		ug/L		37159	37159.105
Sn	120	20.875	ug/L	1.157	22636	0.607
Sb	121	22.780	ug/L	1.448	20980	0.561
Sb	123		ug/L		16055	0.429
Ba	135		ug/L		5412	0.094
Ba	137	19.569	ug/L	2.960	9522	0.165
Ho	165		ug/L		1529	0.026
> Lu	175		ug/L		57751	57750.766
Tl	205	18.818	ug/L	3.437	43387	0.749
Pb	208	20.301	ug/L	2.543	79008	1.366
Bi	209		ug/L		629	0.011
U	238	21.964	ug/L	2.340	96146	1.664

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	0.9999
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	0.9999
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
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	0.9990
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	0.9999
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
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	0.9999
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	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution %	Duplicate Rel. % Difference
Li	7	126.213				
Be	9	117.017				
B	11	123.556				
Na	23	114.832				
Mg	24	109.064				
Al	27	123.771				
P	31	101.536				
K	39	101.672				
Ca	43	97.899				
> Sc	45		79.3			
V	51	91.191				
Cr	52	97.540				
Cr	53					
Mn	55	97.076				
Fe	57	91.008				
Co	59	95.587				
Ni	60	94.892				
Cu	63					
Cu	65	102.747				
Zn	66	114.429				
Zn	67					
Zn	68					
> Ge	74		76.3			
As	75	106.171				
Se	77					
Se	82	91.592				
Kr	83					
Sr	88	98.567				
Y	89					
Ag	107	96.045				
Cd	111	100.269				
Cd	114					
> In	115		83.0			
Sn	120	104.376				
Sb	121	113.899				
Sb	123					
Ba	135					
Ba	137	94.672				
Ho	165					
> Lu	175		97.1			
Tl	205	94.090				
Pb	208	100.499				
Bi	209					
U	238	109.818				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 5	Li	7	71CSAB is out of limits
QC Std 5	B	11	111CSAB is out of limits
QC Std 5	Al	27	271CSAB is out of limits
Sc 45 Int Std for QC Sc		45	
Ge 74 Int Std for QC Ge		74	

QC Action

QC Action Line: Continue

Sample ID: QC Std 5

ICPMS#6 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, January 28, 2010 10:07:01

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 nolrs thtimozr.mth

Dataset File: C:\elandata\Dataset\100127\QC Std 6.119

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	55.546	ug/L	3.195	16950	0.062
Be	9	55.573	ug/L	2.474	8424	0.031
B	11	112.396	ug/L	2.345	15371	0.053
Na	23	5315.663	ug/L	8.151	5477723	19.893
Mg	24	5498.172	ug/L	13.483	3937137	14.333
Al	27	5446.261	ug/L	3.665	5835146	21.227
P	31	5278.629	ug/L	0.943	406567	1.469
K	39	5155.342	ug/L	5.918	7063511	24.828
Ca	43	5008.977	ug/L	0.932	13781	0.049
> Sc	45		ug/L		274831	274831.115
V	51	49.330	ug/L	1.642	90984	0.286
Cr	52	51.452	ug/L	1.286	73815	0.259
Cr	53		ug/L		39581	-0.043
Mn	55	50.564	ug/L	0.512	101326	0.367
Fe	57	4853.359	ug/L	0.075	194339	0.694
Co	59	48.930	ug/L	0.235	72195	0.262
Ni	60	50.364	ug/L	0.605	15440	0.056
Cu	63		ug/L		33204	0.121
Cu	65	49.845	ug/L	0.732	15807	0.057
Zn	66	55.514	ug/L	0.966	12008	0.171
Zn	67		ug/L		7389	0.025
Zn	68		ug/L		8905	0.122
> Ge	74		ug/L		66252	66252.268
As	75	46.877	ug/L	1.574	11821	0.173
Se	77		ug/L		2015	-0.011
Se	82	49.768	ug/L	3.337	1151	0.018
Kr	83		ug/L		31	-0.000
Sr	88	49.881	ug/L	0.685	131950	3.396
Y	89		ug/L		22	0.000
Ag	107	49.841	ug/L	1.016	57648	1.484
Cd	111	50.564	ug/L	2.194	14192	0.365
Cd	114		ug/L		32938	0.848
> In	115		ug/L		38834	38833.797
Sn	120	49.170	ug/L	1.656	55607	1.430
Sb	121	48.221	ug/L	8.961	46255	1.187
Sb	123		ug/L		35605	0.913
Ba	135		ug/L		13418	0.237
Ba	137	50.406	ug/L	1.493	23971	0.424
Ho	165		ug/L		13	0.000
> Lu	175		ug/L		56479	56478.677
Tl	205	48.798	ug/L	0.858	109813	1.942
Pb	208	51.373	ug/L	1.673	195383	3.458
Bi	209		ug/L		56	0.001
U	238	53.597	ug/L	1.783	229378	4.061

Sample ID: QC Std 6

Report Date/Time: Thursday, January 28, 2010 10:09:31

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	0.9999
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	0.9999
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
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	0.9990
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	0.9999
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
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	0.9999
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	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Li	7	111.093				
Be	9	111.147				
B	11	112.396				
Na	23	106.313				
Mg	24	109.963				
Al	27	107.847				
P	31	105.573				
K	39	103.107				
Ca	43	100.180				
> Sc	45		85.6			
V	51	98.660				
Cr	52	102.905				
Cr	53					
Mn	55	101.128				
Fe	57	97.067				
Co	59	97.859				
Ni	60	100.727				
Cu	63					
Cu	65	99.689				
Zn	66	111.028				
Zn	67					
Zn	68					
> Ge	74		83.5			
As	75	93.754				
Se	77					
Se	82	99.536				
Kr	83					
Sr	88	99.762				
Y	89					
Ag	107	99.683				
Cd	111	101.129				
Cd	114					
> In	115		86.7			
Sn	120	98.339				
Sb	121	96.442				
Sb	123					
Ba	135					
Ba	137	100.812				
Ho	165					
> Lu	175		94.9			
Tl	205	97.596				
Pb	208	102.747				
Bi	209					
U	238	107.195				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Li	7	7CCV is out of limits (+/- 10%)
QC Std 6	Be	9	9CCV is out of limits (+/- 10%)
QC Std 6	B	11	11CCV is out of limits (+/- 10%)
QC Std 6	Zn	66	66CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, January 28, 2010 10:12:56

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 nolsr thtimozr.mth

Dataset File: C:\elandata\Dataset\100127\QC Std 7.120

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.060	ug/L	10.721	32	0.000
Be	9	0.004	ug/L	321.100	7	0.000
B	11	0.230	ug/L	210.929	756	0.000
Na	23	5.292	ug/L	13.344	13673	0.020
Mg	24	-0.920	ug/L	386.453	2000	-0.002
Al	27	0.745	ug/L	69.731	2667	0.003
P	31	-3.464	ug/L	44.154	2839	-0.001
K	39	-12.829	ug/L	110.111	238656	-0.062
Ca	43	-2.404	ug/L	182.649	343	-0.000
> Sc	45		ug/L		292317	292317.319
V	51	-2.741	ug/L	29.508	8645	-0.016
Cr	52	-0.873	ug/L	4.021	1636	-0.004
Cr	53		ug/L		34945	-0.067
Mn	55	-0.040	ug/L	29.620	325	-0.000
Fe	57	-24.171	ug/L	14.057	2692	-0.003
Co	59	-0.010	ug/L	24.735	48	-0.000
Ni	60	-0.068	ug/L	11.768	109	-0.000
Cu	63		ug/L		54	0.000
Cu	65	-0.130	ug/L	40.179	81	-0.000
Zn	66	-0.037	ug/L	193.060	739	-0.000
Zn	67		ug/L		5941	-0.001
Zn	68		ug/L		817	-0.001
> Ge	74		ug/L		69706	69706.034
As	75	-1.262	ug/L	55.526	59	-0.005
Se	77		ug/L		1368	-0.021
Se	82	0.234	ug/L	126.780	-6	0.000
Kr	83		ug/L		34	-0.000
Sr	88	-0.010	ug/L	5.878	60	-0.001
Y	89		ug/L		17	-0.000
Ag	107	0.006	ug/L	25.812	22	0.000
Cd	111	-0.018	ug/L	104.262	1	-0.000
Cd	114		ug/L		18	0.000
> In	115		ug/L		40664	40663.558
Sn	120	0.221	ug/L	24.886	346	0.006
Sb	121	0.912	ug/L	20.766	1072	0.022
Sb	123		ug/L		820	0.017
Ba	135		ug/L		12	-0.000
Ba	137	0.015	ug/L	92.640	20	0.000
Ho	165		ug/L		8	0.000
> Lu	175		ug/L		57529	57528.853
Tl	205	0.160	ug/L	31.558	533	0.006
Pb	208	0.003	ug/L	40.693	134	0.000
Bi	209		ug/L		10	-0.000
U	238	0.060	ug/L	24.378	330	0.005

Sample ID: QC Std 7

Report Date/Time: Thursday, January 28, 2010 10:15:28

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	0.9999
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	0.9999
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
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	0.9990
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	0.9999
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
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	0.9999
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	
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		91.0			
|	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		87.9			
|	As	75					
|	Se	77					
|	Se	82					
|	Kr	83					
|	Sr	88					
|	Y	89					
|	Ag	107					
|	Cd	111					
|	Cd	114					
>	In	115		90.8			
|	Sn	120					
|	Sb	121					
|	Sb	123					
|	Ba	135					
|	Ba	137					
|	Ho	165					
>	Lu	175		96.7			
|	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: QC Std 6

Sample Date/Time: Thursday, January 28, 2010 10:30:40

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 nohrs thtimozr.mth

Dataset File: C:\elandata\Dataset\100127\QC Std 6.123

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Li	7	53.221 ug/L	5.452	17031	0.059
|	Be	9	52.416 ug/L	1.433	8335	0.029
|	B	11	101.116 ug/L	0.849	14580	0.048
|	Na	23	4856.626 ug/L	9.254	5246418	18.175
|	Mg	24	4906.525 ug/L	6.202	3687714	12.790
|	Al	27	5224.265 ug/L	6.623	5867548	20.361
|	P	31	5061.967 ug/L	1.811	409075	1.408
|	K	39	5029.276 ug/L	8.980	7233782	24.221
|	Ca	43	4909.167 ug/L	2.190	14171	0.048
>	Sc	45	ug/L		288282	288282.340
|	V	51	48.906 ug/L	0.308	94726	0.283
|	Cr	52	50.800 ug/L	1.817	76476	0.255
|	Cr	53	ug/L		41351	-0.043
|	Mn	55	50.722 ug/L	1.518	106596	0.368
|	Fe	57	4873.482 ug/L	0.796	204664	0.697
|	Co	59	49.295 ug/L	0.904	76287	0.264
|	Ni	60	50.139 ug/L	2.649	16120	0.055
|	Cu	63	ug/L		34971	0.121
[	Cu	65	49.626 ug/L	2.793	16505	0.057
|	Zn	66	54.887 ug/L	2.608	12497	0.169
|	Zn	67	ug/L		7327	0.019
|	Zn	68	ug/L		9267	0.121
>	Ge	74	ug/L		69699	69698.648
|	As	75	46.355 ug/L	2.202	12300	0.171
|	Se	77	ug/L		2223	-0.009
|	Se	82	48.491 ug/L	7.323	1179	0.017
[	Kr	83	ug/L		32	-0.000
|	Sr	88	50.735 ug/L	0.688	139906	3.454
|	Y	89	ug/L		21	0.000
|	Ag	107	49.207 ug/L	1.491	59333	1.465
|	Cd	111	50.257 ug/L	0.550	14706	0.363
|	Cd	114	ug/L		33735	0.833
>	In	115	ug/L		40482	40482.463
|	Sn	120	49.053 ug/L	1.593	57832	1.427
|	Sb	121	46.759 ug/L	9.765	46766	1.151
[	Sb	123	ug/L		36076	0.887
|	Ba	135	ug/L		13822	0.240
|	Ba	137	50.142 ug/L	0.886	24340	0.422
|	Ho	165	ug/L		10	0.000
>	Lu	175	ug/L		57644	57643.975
|	Tl	205	49.202 ug/L	1.544	113005	1.958
|	Pb	208	51.212 ug/L	1.343	198811	3.447
|	Bi	209	ug/L		56	0.001
[	U	238	53.571 ug/L	1.713	234032	4.059

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	0.9999
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	0.9999
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
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	0.9990
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	0.9999
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
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	0.9999
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	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Li	7	106.443				
Be	9	104.832				
B	11	101.116				
Na	23	97.133				
Mg	24	98.131				
Al	27	103.451				
P	31	101.239				
K	39	100.586				
Ca	43	98.183				
> Sc	45		89.8			
V	51	97.811				
Cr	52	101.599				
Cr	53					
Mn	55	101.444				
Fe	57	97.470				
Co	59	98.589				
Ni	60	100.278				
Cu	63					
Cu	65	99.252				
Zn	66	109.774				
Zn	67					
Zn	68					
> Ge	74		87.9			
As	75	92.710				
Se	77					
Se	82	96.983				
Kr	83					
Sr	88	101.471				
Y	89					
Ag	107	98.414				
Cd	111	100.514				
Cd	114					
> In	115		90.4			
Sn	120	98.105				
Sb	121	93.518				
Sb	123					
Ba	135					
Ba	137	100.284				
Ho	165					
> Lu	175		96.9			
Tl	205	98.403				
Pb	208	102.424				
Bi	209					
U	238	107.142				

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: Thursday, January 28, 2010 10:36:35

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 noirs thtimozr.mth

Dataset File: C:\elandata\Dataset\100127\QC Std 7.124

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.032	ug/L	27.332	24	0.000
Be	9	0.012	ug/L	82.874	9	0.000
B	11	-0.317	ug/L	150.453	687	-0.000
Na	23	-0.284	ug/L	785.501	7669	-0.001
Mg	24	-1.858	ug/L	80.434	1333	-0.005
Al	27	-1.020	ug/L	49.120	667	-0.004
P	31	-3.521	ug/L	35.990	2863	-0.001
K	39	-16.759	ug/L	45.557	235257	-0.081
Ca	43	0.539	ug/L	2598.234	355	0.000
> Sc	45		ug/L		295338	295337.706
V	51	-2.256	ug/L	68.487	9575	-0.013
Cr	52	-0.784	ug/L	4.462	1785	-0.004
Cr	53		ug/L		35601	-0.066
Mn	55	-0.035	ug/L	20.262	338	-0.000
Fe	57	-23.070	ug/L	10.653	2767	-0.003
Co	59	-0.000	ug/L	1192.634	64	-0.000
Ni	60	-0.003	ug/L	1019.102	132	-0.000
Cu	63		ug/L		56	0.000
Cu	65	-0.176	ug/L	7.256	66	-0.000
Zn	66	-0.135	ug/L	78.790	732	-0.000
Zn	67		ug/L		5679	-0.007
Zn	68		ug/L		837	-0.001
> Ge	74		ug/L		71090	71090.160
As	75	-0.248	ug/L	245.646	324	-0.001
Se	77		ug/L		1467	-0.020
Se	82	0.079	ug/L	540.997	-10	0.000
Kr	83		ug/L		38	-0.000
Sr	88	-0.010	ug/L	24.513	61	-0.001
Y	89		ug/L		18	-0.000
Ag	107	0.008	ug/L	93.001	25	0.000
Cd	111	-0.002	ug/L	981.543	6	-0.000
Cd	114		ug/L		19	0.000
> In	115		ug/L		41414	41413.609
Sn	120	0.231	ug/L	14.760	363	0.007
Sb	121	0.969	ug/L	22.119	1149	0.024
Sb	123		ug/L		876	0.018
Ba	135		ug/L		10	-0.000
Ba	137	0.008	ug/L	117.622	17	0.000
Ho	165		ug/L		5	-0.000
> Lu	175		ug/L		58004	58003.770
Tl	205	0.176	ug/L	23.339	574	0.007
Pb	208	0.001	ug/L	161.506	128	0.000
Bi	209		ug/L		12	0.000
U	238	0.059	ug/L	29.602	326	0.004

Sample ID: QC Std 7

Report Date/Time: Thursday, January 28, 2010 10:39:07

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	0.9999
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	0.9999
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
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	0.9990
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	0.9999
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
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	0.9999
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	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution %	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		92.0			
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		89.6			
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		97.5			
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: Thursday, January 28, 2010 11:29:49

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 noirs thtimozr.mth

Dataset File: C:\elandata\Dataset\100127\QC Std 6.133

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	53.986	ug/L	3.025	18259	0.060
Be	9	51.642	ug/L	2.628	8676	0.028
B	11	104.416	ug/L	1.947	15889	0.050
Na	23	5072.854	ug/L	3.084	5790511	18.985
Mg	24	4940.036	ug/L	7.442	3929091	12.878
Al	27	5192.940	ug/L	3.876	6164571	20.239
P	31	5117.320	ug/L	0.887	436992	1.424
K	39	5015.955	ug/L	9.925	7634744	24.157
Ca	43	4921.672	ug/L	1.318	15013	0.048
> Sc	45		ug/L		304638	304638.477
V	51	48.724	ug/L	1.079	99785	0.282
Cr	52	50.781	ug/L	0.717	80804	0.255
Cr	53		ug/L		40900	-0.053
Mn	55	50.783	ug/L	1.353	112782	0.369
Fe	57	4857.342	ug/L	0.638	215581	0.695
Co	59	48.843	ug/L	0.156	79884	0.262
Ni	60	50.896	ug/L	1.007	17295	0.056
Cu	63		ug/L		36686	0.120
Cu	65	49.203	ug/L	0.621	17298	0.056
Zn	66	53.485	ug/L	0.413	12960	0.164
Zn	67		ug/L		7015	0.008
Zn	68		ug/L		9602	0.117
> Ge	74		ug/L		74051	74051.181
As	75	46.819	ug/L	2.874	13198	0.173
Se	77		ug/L		2409	-0.008
Se	82	50.393	ug/L	4.034	1303	0.018
Kr	83		ug/L		35	-0.000
Sr	88	49.277	ug/L	0.105	146316	3.355
Y	89		ug/L		47	0.001
Ag	107	48.849	ug/L	0.557	63415	1.455
Cd	111	49.429	ug/L	0.982	15575	0.357
Cd	114		ug/L		35951	0.825
> In	115		ug/L		43588	43588.055
Sn	120	48.529	ug/L	0.242	61604	1.411
Sb	121	45.868	ug/L	9.680	49436	1.129
Sb	123		ug/L		38333	0.875
Ba	135		ug/L		14827	0.240
Ba	137	49.998	ug/L	0.785	26015	0.421
Ho	165		ug/L		15	0.000
> Lu	175		ug/L		61789	61789.307
Tl	205	47.535	ug/L	0.414	117036	1.891
Pb	208	50.510	ug/L	0.436	210203	3.400
Bi	209		ug/L		55	0.001
U	238	52.265	ug/L	0.291	244755	3.960

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	0.9999
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	0.9999
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
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	0.9990
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	0.9999
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
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	0.9999
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	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Li	7	107.971				
Be	9	103.283				
B	11	104.416				
Na	23	101.457				
Mg	24	98.801				
Al	27	102.830				
P	31	102.346				
K	39	100.319				
Ca	43	98.433				
> Sc	45		94.9			
V	51	97.448				
Cr	52	101.563				
Cr	53					
Mn	55	101.566				
Fe	57	97.147				
Co	59	97.685				
Ni	60	101.791				
Cu	63					
Cu	65	98.406				
Zn	66	106.971				
Zn	67					
Zn	68					
> Ge	74		93.4			
As	75	93.639				
Se	77					
Se	82	100.786				
Kr	83					
Sr	88	98.553				
Y	89					
Ag	107	97.698				
Cd	111	98.857				
Cd	114					
> In	115		97.4			
Sn	120	97.057				
Sb	121	91.736				
Sb	123					
Ba	135					
Ba	137	99.997				
Ho	165					
> Lu	175		103.8			
Tl	205	95.071				
Pb	208	101.020				
Bi	209					
U	238	104.531				

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: Thursday, January 28, 2010 11:35:44

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 nolsr thtimozr.mth

Dataset File: C:\elandata\Dataset\100127\QC Std 7.134

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.051	ug/L	7.371	32	0.000
Be	9	0.000	ug/L	7099.996	7	0.000
B	11	-0.998	ug/L	53.709	641	-0.000
Na	23	-3.315	ug/L	52.714	4668	-0.012
Mg	24	-2.784	ug/L	49.789	667	-0.007
Al	27	0.802	ug/L	198.160	3000	0.003
P	31	-7.991	ug/L	9.793	2706	-0.002
K	39	-47.576	ug/L	27.392	207505	-0.229
Ca	43	-37.559	ug/L	10.777	265	-0.000
> Sc	45		ug/L		320132	320131.783
V	51	-2.090	ug/L	26.690	10691	-0.012
Cr	52	-0.591	ug/L	5.802	2246	-0.003
Cr	53		ug/L		34852	-0.078
Mn	55	-0.028	ug/L	18.624	384	-0.000
Fe	57	-32.074	ug/L	3.374	2587	-0.005
Co	59	-0.010	ug/L	42.565	52	-0.000
Ni	60	-0.050	ug/L	29.358	126	-0.000
Cu	63		ug/L		47	-0.000
Cu	65	-0.222	ug/L	6.014	54	-0.000
Zn	66	-0.212	ug/L	6.043	773	-0.001
Zn	67		ug/L		5401	-0.016
Zn	68		ug/L		824	-0.002
> Ge	74		ug/L		76834	76833.842
As	75	-0.904	ug/L	41.266	164	-0.003
Se	77		ug/L		1539	-0.021
Se	82	0.247	ug/L	169.180	-7	0.000
Kr	83		ug/L		35	-0.000
Sr	88	-0.008	ug/L	49.758	72	-0.001
Y	89		ug/L		27	0.000
Ag	107	0.005	ug/L	67.407	24	0.000
Cd	111	0.001	ug/L	704.470	8	0.000
Cd	114		ug/L		14	0.000
> In	115		ug/L		44775	44774.573
Sn	120	0.179	ug/L	23.134	326	0.005
Sb	121	0.907	ug/L	26.890	1176	0.022
Sb	123		ug/L		877	0.016
Ba	135		ug/L		17	0.000
Ba	137	0.004	ug/L	20.445	17	0.000
Ho	165		ug/L		12	0.000
> Lu	175		ug/L		63802	63802.138
Tl	205	0.110	ug/L	30.205	465	0.004
Pb	208	0.003	ug/L	99.395	149	0.000
Bi	209		ug/L		12	-0.000
U	238	0.052	ug/L	22.792	328	0.004

Calibration

Analyte	Mass Curve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	0.9999
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	0.9999
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
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	0.9990
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	0.9999
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
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	0.9999
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	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	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		99.7			
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		96.9			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Ag	107					
Cd	111					
Cd	114					
> In	115		100.0			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		107.2			
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: 244601010

Sample Date/Time: Thursday, January 28, 2010 12:11:17

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 941732|2|rmj

Method File: c:\elandata\Method\6020 nolrs thtimozr.mth

Dataset File: C:\elandata\Dataset\100127\244601010.140

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	24.884	ug/L	4.567	7143	0.028
Be	9	1.123	ug/L	8.732	166	0.001
B	11	0.688	ug/L	33.002	724	0.000
Na	23	604.494	ug/L	8.777	591033	2.262
Mg	24	1592.021	ug/L	7.599	1074054	4.150
Al	27	12183.419	ug/L	6.713	12261637	47.485
P	31	157.142	ug/L	1.752	14047	0.044
K	39	1823.261	ug/L	7.007	2493650	8.781
Ca	43	1798.038	ug/L	1.548	4845	0.018
> Sc	45		ug/L		258215	258215.301
V	51	12.695	ug/L	2.861	30721	0.073
Cr	52	12.552	ug/L	0.585	18870	0.063
Cr	53		ug/L		18864	-0.114
Mn	55	412.749	ug/L	0.162	774490	2.998
Fe	57	12301.834	ug/L	1.590	457776	1.760
Co	59	11.435	ug/L	0.994	15895	0.061
Ni	60	13.753	ug/L	1.116	4046	0.015
Cu	63		ug/L		3623	0.014
Cu	65	5.868	ug/L	0.391	1845	0.007
Zn	66	53.693	ug/L	1.892	10391	0.165
Zn	67		ug/L		4388	-0.012
Zn	68		ug/L		7584	0.116
> Ge	74		ug/L		59162	59161.515
As	75	2.851	ug/L	11.727	946	0.011
Se	77		ug/L		648	-0.030
Se	82	0.594	ug/L	61.712	2	0.000
Kr	83		ug/L		54	0.000
Sr	88	15.131	ug/L	1.437	37544	1.030
Y	89		ug/L		246458	6.775
Ag	107	0.206	ug/L	16.427	236	0.006
Cd	111	1.043	ug/L	10.389	280	0.008
Cd	114		ug/L		47	0.001
> In	115		ug/L		36372	36372.268
Sn	120	1.843	ug/L	1.462	2025	0.054
Sb	121	0.031	ug/L	62.503	171	0.001
Sb	123		ug/L		116	-0.000
Ba	135		ug/L		18858	0.328
Ba	137	69.228	ug/L	1.005	33448	0.583
Ho	165		ug/L		14243	0.248
> Lu	175		ug/L		57384	57384.264
Tl	205	0.158	ug/L	11.428	527	0.006
Pb	208	16.701	ug/L	1.612	64627	1.124
Bi	209		ug/L		1127	0.019
U	238	1.932	ug/L	1.776	8467	0.146

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	0.9999
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	0.9999
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
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	0.9990
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	0.9999
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
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	0.9999
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	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	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		80.4			
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		74.6			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Ag	107					
Cd	111					
Cd	114					
> In	115		81.2			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		96.4			
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: QC Std 6

Sample Date/Time: Thursday, January 28, 2010 12:35:00

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 nohrs thtimozr.mth

Dataset File: C:\elandata\Dataset\100127\QC Std 6.144

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	54.793	ug/L	3.242	17901	0.061
Be	9	52.448	ug/L	3.680	8510	0.029
B	11	103.288	ug/L	2.893	15183	0.049
Na	23	5199.449	ug/L	8.798	5727428	19.458
Mg	24	4840.324	ug/L	7.264	3711852	12.618
Al	27	5162.631	ug/L	4.840	5921552	20.121
P	31	5128.239	ug/L	0.988	423066	1.427
K	39	4901.512	ug/L	3.405	7209066	23.605
Ca	43	5024.945	ug/L	1.020	14804	0.049
> Sc	45		ug/L		294310	294310.184
V	51	48.921	ug/L	1.884	96714	0.283
Cr	52	51.909	ug/L	1.865	79708	0.261
Cr	53		ug/L		39662	-0.052
Mn	55	52.011	ug/L	0.918	111583	0.378
Fe	57	4963.880	ug/L	1.384	212722	0.710
Co	59	49.523	ug/L	1.051	78236	0.266
Ni	60	50.677	ug/L	0.796	16635	0.056
Cu	63		ug/L		35842	0.122
Cu	65	50.321	ug/L	2.286	17082	0.058
Zn	66	54.367	ug/L	1.195	12629	0.167
Zn	67		ug/L		6568	0.006
Zn	68		ug/L		9303	0.119
> Ge	74		ug/L		71071	71071.456
As	75	46.375	ug/L	1.805	12546	0.171
Se	77		ug/L		2337	-0.008
Se	82	50.448	ug/L	1.659	1251	0.018
Kr	83		ug/L		27	-0.000
Sr	88	50.899	ug/L	1.027	143998	3.465
Y	89		ug/L		41	0.001
Ag	107	49.657	ug/L	1.127	61425	1.479
Cd	111	50.687	ug/L	0.579	15217	0.366
Cd	114		ug/L		34847	0.839
> In	115		ug/L		41534	41533.612
Sn	120	49.519	ug/L	1.190	59898	1.440
Sb	121	46.173	ug/L	10.420	47381	1.136
Sb	123		ug/L		36465	0.874
Ba	135		ug/L		14227	0.242
Ba	137	50.517	ug/L	1.126	25034	0.425
Ho	165		ug/L		12	0.000
> Lu	175		ug/L		58850	58850.253
Tl	205	46.570	ug/L	0.553	109212	1.853
Pb	208	49.580	ug/L	1.535	196476	3.337
Bi	209		ug/L		53	0.001
U	238	51.797	ug/L	1.011	231001	3.925

Sample ID: QC Std 6

Report Date/Time: Thursday, January 28, 2010 12:37:30

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	0.9999
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	0.9999
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
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	0.9990
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	0.9999
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
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	0.9999
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	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[	Li	7	109.587				
|	Be	9	104.896				
|	B	11	103.288				
|	Na	23	103.989				
|	Mg	24	96.806				
|	Al	27	102.230				
|	P	31	102.565				
|	K	39	98.030				
|	Ca	43	100.499				
>	Sc	45		91.6			
|	V	51	97.842				
|	Cr	52	103.817				
|	Cr	53					
|	Mn	55	104.021				
|	Fe	57	99.278				
|	Co	59	99.045				
|	Ni	60	101.353				
|	Cu	63					
|	Cu	65	100.641				
|	Zn	66	108.733				
|	Zn	67					
|	Zn	68					
>	Ge	74		89.6			
|	As	75	92.750				
|	Se	77					
|	Se	82	100.896				
|	Kr	83					
|	Sr	88	101.798				
|	Y	89					
|	Ag	107	99.314				
|	Cd	111	101.374				
|	Cd	114					
>	In	115		92.8			
|	Sn	120	99.038				
|	Sb	121	92.346				
|	Sb	123					
|	Ba	135					
|	Ba	137	101.034				
|	Ho	165					
>	Lu	175		98.9			
|	Tl	205	93.140				
|	Pb	208	99.160				
|	Bi	209					
|	U	238	103.594				

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: Thursday, January 28, 2010 12:40:54

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 nols thtimozr.mth

Dataset File: C:\elandata\Dataset\100127\QC Std 7.145

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.077	ug/L	29.317	40	0.000
Be	9	0.006	ug/L	112.595	8	0.000
B	11	-1.194	ug/L	32.080	588	-0.001
Na	23	0.005	ug/L	83976.156	8336	0.000
Mg	24	-2.332	ug/L	53.507	1000	-0.006
Al	27	-0.204	ug/L	481.157	1667	-0.001
P	31	-7.817	ug/L	15.358	2619	-0.002
K	39	-52.133	ug/L	5.197	192961	-0.251
Ca	43	-38.084	ug/L	27.799	254	-0.000
> Sc	45		ug/L		308086	308086.026
V	51	-1.380	ug/L	23.402	11547	-0.008
Cr	52	-0.359	ug/L	15.472	2520	-0.002
Cr	53		ug/L		33119	-0.079
Mn	55	-0.030	ug/L	16.443	366	-0.000
Fe	57	-31.052	ug/L	3.121	2534	-0.004
Co	59	-0.005	ug/L	155.051	59	-0.000
Ni	60	-0.026	ug/L	143.323	130	-0.000
Cu	63		ug/L		59	0.000
Cu	65	-0.221	ug/L	4.841	53	-0.000
Zn	66	-0.289	ug/L	51.514	733	-0.001
Zn	67		ug/L		5163	-0.017
Zn	68		ug/L		805	-0.002
> Ge	74		ug/L		74637	74636.888
As	75	-0.608	ug/L	48.320	241	-0.002
Se	77		ug/L		1533	-0.020
Se	82	0.191	ug/L	314.129	-8	0.000
Kr	83		ug/L		35	-0.000
Sr	88	-0.008	ug/L	28.179	69	-0.001
Y	89		ug/L		19	-0.000
Ag	107	0.005	ug/L	102.235	22	0.000
Cd	111	0.001	ug/L	2050.126	7	0.000
Cd	114		ug/L		16	0.000
> In	115		ug/L		43327	43326.723
Sn	120	0.180	ug/L	21.212	317	0.005
Sb	121	0.857	ug/L	26.560	1083	0.021
Sb	123		ug/L		851	0.016
Ba	135		ug/L		20	0.000
Ba	137	0.015	ug/L	72.813	21	0.000
Ho	165		ug/L		8	0.000
> Lu	175		ug/L		59725	59724.517
Tl	205	0.112	ug/L	35.439	439	0.004
Pb	208	0.002	ug/L	242.328	132	0.000
Bi	209		ug/L		11	-0.000
U	238	0.050	ug/L	17.113	300	0.004

Sample ID: QC Std 7

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	0.9999
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	0.9999
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
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	0.9990
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	0.9999
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
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	0.9999
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	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		95.9			
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		94.1			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Ag	107					
Cd	111					
Cd	114					
> In	115		96.8			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		100.4			
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 Daily Performance Report

Sample ID: Sample

Sample Date/Time: Saturday, January 30, 2010 04:13:40

Sample Description:

Method File: C:\elandata\Method\Daily2.mth

Dataset File: c:\elandata\Dataset\100129\Sample.053

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	1792.5	1792.513	72.751	4.1
Mg	24.0	18863.7	18863.655	577.000	3.1
Co	58.9	47283.9	47283.932	578.230	1.2
Rh	102.9	106017.1	106017.140	497.163	0.5
In	114.9	128762.1	128762.112	971.977	0.8
Pb	208.0	74474.8	74474.849	967.189	1.3
[> Ba	137.9	108998.2	108998.215	303.237	0.3
[Ba++	69.0	2503.9	0.023	0.000	2.0
[> Ce	139.9	143175.9	143175.930	1040.052	0.7
[CeO	155.9	4079.0	0.028	0.001	2.4
Bkgd	220.0	11.1	11.100	1.851	16.7

Current Optimization File Data

Current Value	Description
0.82	Nebulizer Gas Flow
13.75	Lens Voltage
1450.00	ICP RF Power
-1781.25	Analog Stage Voltage
900.00	Pulse Stage Voltage
25.00	Discriminator Threshold
-6.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	21	11.3	4338.3
Co	59	21	13.0	37585.0
In	115	21	14.3	89863.4

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	3.0	582	2080	0.669
Be	9.0	9.0	2025	2080	0.669
Mg	24.0	24.0	5682	2120	0.628
Mg	25.0	25.1	5924	2080	0.682
Mg	26.0	25.9	6150	2120	0.687
Co	58.9	58.9	14166	2170	0.640
Rh	102.9	102.9	24851	2230	0.715
In	114.9	114.9	27776	2260	0.700
Ce	139.9	139.9	33841	2280	0.767
Pb	206.0	206.0	49948	2430	0.766
Pb	207.0	207.0	50135	2385	0.728
Pb	208.0	208.0	50451	2430	0.744
U	238.1	238.0	57719	2470	0.737

ICPMS#6 - Summary Report

Sample ID: Blank

Sample Date/Time: Saturday, January 30, 2010 07:19:03

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be.mth

Dataset File: c:\elandata\dataset\100129\Blank.100

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9		ug/L			19
Sc	45		ug/L			967638

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Simple Linear	
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								

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Saturday, January 30, 2010 07:22:07

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be.mth

Dataset File: c:\elandata\dataset\100129\Standard 1.101

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	10.000	ug/L	3.606	5213	0.006
Sc	45		ug/L		921987	921986.907

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 % Recovery	Dilution % Diff	Duplicate Rel. % Difference
Be	9					
Sc	45					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Saturday, January 30, 2010 07:25:09

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be.mth

Dataset File: c:\elandata\dataset\100129\Standard 2.102

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	99.989	ug/L	4.155	50518	0.056
Sc	45		ug/L		906095	906095.356

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	% Recovery	Dilution	% Dil	Duplicate	Rel. % Difference
Be	9										
Sc	45										

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Saturday, January 30, 2010 07:28:12

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be.mth

Dataset File: c:\elandata\dataset\100129\QC Std 1.103

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	52.277	4.240	26308	0.029
>	Sc	45	ug/L		902264	902263.653

Calibration

Analyte	Mass Curve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9	104.554				
	Sc	45		93.2			

QC Out Of Limits

Measurement Type	Analyte	Mass Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Saturday, January 30, 2010 07:31:17

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be.mth

Dataset File: c:\elandata\dataset\100129\QC Std 2.104

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.002	ug/L	319.266	19	0.000
Sc	45		ug/L		952791	952791.086

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 % Recovery	Dilution %	Duplicate Rel. % Difference
Be	9					
Sc	45		98.5			

QC Out Of Limits

Measurement Type	Analyte	Mass Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Saturday, January 30, 2010 07:34:22

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be.mth

Dataset File: c:\elandata\dataset\100129\QC Std 3.105

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.570	ug/L	5.836	308	0.000
Sc	45		ug/L		914893	914892.672

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	% Recovery	Dilution	% Dil	Duplicate	Rel. % Difference
Be	9		113.977								
Sc	45				94.5						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Saturday, January 30, 2010 07:37:25

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be.mth

Dataset File: c:\elandata\dataset\100129\QC Std 4.106

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.065	ug/L	11.309	51	0.000
Sc	45		ug/L		915249	915248.976

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 % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
Sc	45		94.6			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Saturday, January 30, 2010 07:40:29

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be.mth

Dataset File: c:\elandata\dataset\100129\QC Std 5.107

Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be 9	19.658	ug/L	1.620	9930	0.011
Sc 45		ug/L		904161	904161.298

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	

QC Calculated Values

Analyte Mass	QC Std	% Recovery	Int Std	% Recovery	Spike	% Recov	Dilution	% Dil	Duplicate	Rel. % Difference
Be 9		98.289								
Sc 45				93.4						

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: Saturday, January 30, 2010 07:43:33

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be.mth

Dataset File: c:\elandata\dataset\100129\QC Std 6.108

Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be 9	53.215	ug/L	2.296	26957	0.030
Sc 45		ug/L		907928	907928.390

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	% Di	Duplicate	Rel.	% Difference
[	Be	9		106.431									
>	Sc	45				93.8							

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Saturday, January 30, 2010 07:46:38

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be.mth

Dataset File: c:\elandata\dataset\100129\QC Std 7.109

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean	
[	Be	9	-0.010	ug/L	21.263	13	-0.000
>	Sc	45		ug/L		969681	969681.360

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	% Recovery	Dilution	% Dil	Duplicate	Rel. % Difference
[>	Be	9										
	Sc	45				100.2						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Saturday, January 30, 2010 08:18:22

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be.mth

Dataset File: c:\elandata\dataset\100129\QC Std 6.119

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	53.367	ug/L	3.151	27389	0.030
Sc	45		ug/L		920004	920004.031

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 % Recovery	Dilution % Diff	Duplicate Rel. % Difference
Be	9	106.733				
Sc	45		95.1			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Saturday, January 30, 2010 08:21:27

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be.mth

Dataset File: c:\elandata\dataset\100129\QC Std 7.120

Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be 9	-0.007	ug/L	119.789	15	-0.000
Sc 45		ug/L		980819	980819.256

Calibration

Analyte	Mass Curve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	

QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Duplicate Rel. % Difference
Be 9					
Sc 45		101.4			

QC Out Of Limits

Measurement Type	Analyte	Mass Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 1202015679

Sample Date/Time: Saturday, January 30, 2010 08:24:33

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 941732[2]rm]

Method File: c:\elandata\Method\be.mth

Dataset File: c:\elandata\dataset\100129\1202015679.121

Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	-0.007 ug/L	43.633	15	-0.000
Sc	45	ug/L		950079	950079.327

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	

QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Duplicate Rel. % Difference
Be	9				
Sc	45		98.2		

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 1202015684

Sample Date/Time: Saturday, January 30, 2010 08:27:38

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 941732|40|rmj

Method File: c:\elandata\Method\be.mth

Dataset File: c:\elandata\dataset\100129\1202015684.122

Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	21.945 ug/L	4.527	11432	0.012
Sc	45	ug/L		933029	933029.385

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	

QC Calculated Values

Analyte Mass	QC Std	% Recovery	Int Std	% Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
Be	9							
Sc	45			96.4				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 244601001

Sample Date/Time: Saturday, January 30, 2010 08:30:44

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 941732|2|rmj

Method File: c:\elandata\Method\be.mth

Dataset File: c:\elandata\dataset\100129\244601001.123

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	2.067 ug/L	4.371	1214	0.001
>	Sc	45	ug/L		1036350	1036349.961

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9					
>	Sc	45		107.1			

QC Out Of Limits

Measurement Type	Analyte	Mass Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 1202015680

Sample Date/Time: Saturday, January 30, 2010 08:33:49

Sample Type:

Sample Description: LANL 6020 DUP

Number of Replicates: 3

Batch ID: 941732[2]rm]

Method File: c:\elandata\Method\be.mth

Dataset File: c:\elandata\dataset\100129\1202015680.124

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	1.820	ug/L	2.257	1053	0.001
[> Sc	45		ug/L		1018220	1018220.236

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 % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[Be	9					
[> Sc	45		105.2			

QC Out Of Limits

Measurement Type	Analyte	Mass Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 1202015682

Sample Date/Time: Saturday, January 30, 2010 08:36:54

Sample Type:

Sample Description: LANL 6020 MS

Number of Replicates: 3

Batch ID: 941732|2|rmj

Method File: c:\elandata\Method\be.mth

Dataset File: c:\elandata\dataset\100129\1202015682.125

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	25.084	ug/L	2.848	14286	0.014
Sc	45		ug/L		1020168	1020167.921

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 % Di	Duplicate Rel. % Difference
Be	9					
Sc	45		105.4			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 1202015683

Sample Date/Time: Saturday, January 30, 2010 08:39:59

Sample Type:

Sample Description: LANL 6020 MSD

Number of Replicates: 3

Batch ID: 941732|2|rmj

Method File: c:\elandata\Method\be.mth

Dataset File: c:\elandata\dataset\100129\1202015683.126

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	25.036	ug/L	2.913	14305	0.014
Sc	45		ug/L		1023444	1023443.642

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 % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
Sc	45		105.8			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 1202015681

Sample Date/Time: Saturday, January 30, 2010 08:43:04

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 941732|10|rmj

Method File: c:\elandata\Method\be.mth

Dataset File: c:\elandata\dataset\100129\1202015681.127

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.492 ug/L	5.753	267	0.000
>	Sc	45	ug/L		908700	908700.149

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[	Be	9						
> td<	Sc	45		93.9				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 244601002

Sample Date/Time: Saturday, January 30, 2010 08:46:10

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 941732[2]rmj

Method File: c:\elandata\Method\be.mth

Dataset File: c:\elandata\dataset\100129\244601002.128

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	3.733 ug/L	1.579	2219	0.002
>	Sc	45	ug/L		1056119	1056119.353

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9				
>	Sc	45	109.1			

QC Out Of Limits

Measurement Type	Analyte	Mass Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Saturday, January 30, 2010 08:49:14

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be.mth

Dataset File: c:\elandata\dataset\100129\QC Std 6.129

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	51.890	ug/L	1.321	26911	0.029
Sc	45		ug/L		929393	929393.449

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 % Recovery	Dilution % Diff	Duplicate Rel. % Difference
Be	9	103.780				
Sc	45		96.0			

QC Out Of Limits

Measurement Type: Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Saturday, January 30, 2010 08:52:18

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be.mth

Dataset File: c:\elandata\dataset\100129\QC Std 7.130

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	-0.005 ug/L	155.607	16	-0.000
>	Sc	45	ua/L		984036	984035.963

Calibration

Analyte	Mass Curve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9					
>	Sc	45		101.7			

QC Out Of Limits

Measurement Type	Analyte	Mass Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 244601003

Sample Date/Time: Saturday, January 30, 2010 08:55:25

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 941732[2]rmj

Method File: c:\elandata\Method\be.mth

Dataset File: c:\elandata\dataset\100129\244601003.131

Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be 9	4.644	ug/L	4.506	2916	0.003
Sc 45		ug/L		1118473	1118473.286

Calibration

Analyte	Mass Curve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	

QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Be 9					
Sc 45		115.6			

QC Out Of Limits

Measurement Type	Analyte	Mass Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 244601004

Sample Date/Time: Saturday, January 30, 2010 08:58:30

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 941732[2]rmj

Method File: c:\elandata\Method\be.mth

Dataset File: c:\elandata\dataset\100129\244601004.132

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	2.954	ug/L	5.188	1791	0.002
45		ug/L		1076121	1076120.539	

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										
45					111.2						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 244601005

Sample Date/Time: Saturday, January 30, 2010 09:01:36

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 941732[2]rmj

Method File: c:\elandata\Method\be.mth

Dataset File: c:\elandata\dataset\100129\244601005.133

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	5.049	ug/L	0.404	3021	0.003
Sc	45		ug/L		1065619	1065619.124

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 % Recovery	Dilution % Diff	Duplicate Rel. % Difference
Be	9					
Sc	45		110.1			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 244601006

Sample Date/Time: Saturday, January 30, 2010 09:05:45

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 941732|2|rmj

Method File: c:\elandata\Method\be.mth

Dataset File: c:\elandata\dataset\100129\244601006.134

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	5.605	ug/L	0.358	3413	0.003
Sc	45		ug/L		1085128	1085127.720

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 % Recovery	Dilution % Diff	Duplicate Rel. % Difference
Be	9					
Sc	45		112.1			

QC Out Of Limits

Measurement Type	Analyte	Mass Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 244601007

Sample Date/Time: Saturday, January 30, 2010 09:08:51

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 941732|2|rmj

Method File: c:\elandata\Method\be.mth

Dataset File: c:\elandata\dataset\100129\244601007.135

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	4.245	ug/L	1.379	2551	0.002
Sc	45		ug/L		1068856	1068855.718

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 % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
Sc	45		110.5			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 244601008

Sample Date/Time: Saturday, January 30, 2010 09:11:57

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 941732|2|rmj

Method File: c:\elandata\Method\be.mth

Dataset File: c:\elandata\dataset\100129\244601008.136

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	2.493 ug/L	5.137	1475	0.001
>	Sc	45	ug/L		1046905	1046905.219

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[	Be	9					
>	Sc	45		108.2			

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 244601009

Sample Date/Time: Saturday, January 30, 2010 09:15:02

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 941732[2]rm]

Method File: c:\elandata\Method\be.mth

Dataset File: c:\elandata\dataset\100129\244601009.137

Concentration Results

Analyte	Mass	Conc.	Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	2.585	ug/L	3.278	1506	0.001	
45		ug/L		1031326	1031325.984		

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										
45				106.6							

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 244601010

Sample Date/Time: Saturday, January 30, 2010 09:18:08

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 941732[2]rm]

Method File: c:\elandata\Method\be.mth

Dataset File: c:\elandata\dataset\100129\244601010.138

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	1.003	ug/L	3.231	586	0.001
Sc	45		ug/L		1012984	1012984.051

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 % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
Sc	45		104.7			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Saturday, January 30, 2010 09:21:13

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be.mth

Dataset File: c:\elandata\dataset\100129\QC Std 6.139

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	53.941	ug/L	4.688	26815	0.030
Sc	45		ug/L		891739	891739.403

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	107.882				
Sc	45		92.2			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Saturday, January 30, 2010 09:24:18

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be.mth

Dataset File: c:\elandata\dataset\100129\QC Std 7.140

Concentration Results

Analyte	Mass	Conc.	Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	-0.010	ug/L	38.782	13	-0.000	
[> Sc	45		ug/L		961209	961209.325	

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	% Recovery	Dilution	% Diff	Duplicate	Rel. % Difference
[Be	9										
[> Sc	45				99.3						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 244601011

Sample Date/Time: Saturday, January 30, 2010 09:27:25

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 941732|2|rmj

Method File: c:\elandata\Method\be.mth

Dataset File: c:\elandata\dataset\100129\244601011.141

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean	
[	Be	9	2.433	ug/L	9.114	1431	0.001
>	Sc	45		ug/L		1041365	1041364.547

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	% Di	Duplicate	Rel.	% Difference
[	Be		9										
>	Sc		45			107.6							

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC-out of limits detected

ICPMS#6 - Summary Report

Sample ID: 244601012

Sample Date/Time: Saturday, January 30, 2010 09:30:31

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 941732|2|rm|

Method File: c:\elandata\Method\be.mth

Dataset File: c:\elandata\dataset\100129\244601012.142

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	2.674	ug/L	1.865	1587	0.001
Sc	45		ug/L		1050957	1050957.265

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	% Recovery	Dilution	% Diff	Duplicate	Rel. % Difference
Be	9										
Sc	45										

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: 244601013

Sample Date/Time: Saturday, January 30, 2010 09:33:38

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 941732|2|rmj

Method File: c:\elandata\Method\be.mth

Dataset File: c:\elandata\dataset\100129\244601013.143

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	4.677	ug/L	4.515	2844	0.003
45		ug/L		1082879	1082879.323	

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 % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[Be	9					
45		111.9				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Saturday, January 30, 2010 09:36:42

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be.mth

Dataset File: c:\elandata\dataset\100129\QC Std 6.144

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	52.356	ug/L	3.118	26360	0.029
Sc	45		ug/L		902602	902602.282

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 % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Be	9	104.711				
Sc	45		93.3			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Saturday, January 30, 2010 09:39:47

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be.mth

Dataset File: c:\elandata\dataset\100129\QC Std 7.145

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	0.000	ug/L	3334.520	19	0.000
[> Sc	45		ug/L		953970	953970.097

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 % Recovery	Dilution % Dil	Duplicate Rel.	% Difference
[Be	9						
[> Sc	45		98.6				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: Blank

Sample Date/Time: Saturday, January 30, 2010 12:52:28

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 nohrs thtimozr.mth

Dataset File: c:\elandata\dataset\100129\Blank.188

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7		ug/L		32	
Be	9		ug/L		12	
B	11		ug/L		552	
Na	23		ug/L		10004	
Mg	24		ug/L		3667	
Al	27		ug/L		2000	
P	31		ug/L		8100	
K	39		ug/L		415635	
Ca	43		ug/L		987	
> Sc	45		ug/L		543636	
V	51		ug/L		17937	
Cr	52		ug/L		4948	
Cr	53		ug/L		193766	
Mn	55		ug/L		1299	
Fe	57		ug/L		6177	
Co	59		ug/L		124	
Ni	60		ug/L		86	
Cu	63		ug/L		107	
Cu	65		ug/L		196	
Zn	66		ug/L		289	
Zn	67		ug/L		14254	
Zn	68		ug/L		1085	
> Ge	74		ug/L		166050	
As	75		ug/L		-63	
Se	77		ug/L		11029	
Se	82		ug/L		-17	
Kr	83		ug/L		76	
Sr	88		ug/L		173	
Y	89		ug/L		31	
Ag	107		ug/L		53	
Cd	111		ug/L		24	
Cd	114		ug/L		31	
> In	115		ug/L		102615	
Sn	120		ug/L		297	
Sb	121		ug/L		422	
Sb	123		ug/L		354	
Ba	135		ug/L		23	
Ba	137		ug/L		31	
Ho	165		ug/L		14	
> Lu	175		ug/L		147309	
Tl	205		ug/L		700	
Pb	208		ug/L		341	
Bi	209		ug/L		33	
U	238		ug/L		155	

Sample ID: Blank

Report Date/Time: Saturday, January 30, 2010 12:55:00

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Simple Linear	
Be	9Linear Thru Zero	1.0000
B	11Simple Linear	
Na	23Simple Linear	
Mg	24Simple Linear	
Al	27Simple Linear	
P	31Simple Linear	
K	39Simple Linear	
Ca	43Simple Linear	
Sc	45Linear Thru Zero	
V	51Simple Linear	
Cr	52Simple Linear	
Cr	53Simple Linear	
Mn	55Simple Linear	
Fe	57Simple Linear	
Co	59Simple Linear	
Ni	60Simple Linear	
Cu	63Simple Linear	
Cu	65Simple Linear	
Zn	66Simple Linear	
Zn	67Simple Linear	
Zn	68Simple Linear	
Ge	74Simple Linear	
As	75Simple Linear	
Se	77Simple Linear	
Se	82Simple Linear	
Kr	83Simple Linear	
Sr	88Simple Linear	
Y	89Simple Linear	
Ag	107Simple Linear	
Cd	111Simple Linear	
Cd	114Simple Linear	
In	115Simple Linear	
Sn	120Simple Linear	
Sb	121Simple Linear	
Sb	123Simple Linear	
Ba	135Simple Linear	
Ba	137Simple Linear	
Ho	165Simple Linear	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Simple Linear	
Bi	209Simple Linear	
U	238Simple Linear	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution %	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: Standard 1

Sample Date/Time: Saturday, January 30, 2010 12:58:23

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method6020 noirs thtimozr.mth

Dataset File: c:\elandata\dataset\100129\Standard 1.189

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Li	7	10.000 ug/L	0.793	4712	0.011
|	Be	9	10.000 ug/L	2.872	1873	0.004
|	B	11	20.000 ug/L	3.409	3626	0.007
|	Na	23	1000.000 ug/L	13.768	1397335	3.117
|	Mg	24	1000.000 ug/L	4.430	904808	2.025
|	Al	27	1000.000 ug/L	10.555	1574915	3.531
|	P	31	1000.000 ug/L	2.041	115725	0.245
|	K	39	1000.000 ug/L	5.348	1988358	3.701
|	Ca	43	1000.000 ug/L	1.530	5071	0.010
>	Sc	45	ug/L		445331	445331.115
|	V	51	10.000 ug/L	3.098	45549	0.069
|	Cr	52	10.000 ug/L	3.684	25664	0.049
|	Cr	53	ug/L		127950	-0.069
|	Mn	55	10.000 ug/L	0.884	34516	0.075
|	Fe	57	1000.000 ug/L	0.942	74484	0.156
|	Co	59	10.000 ug/L	1.233	27393	0.061
|	Ni	60	10.000 ug/L	1.790	6169	0.014
|	Cu	63	ug/L		13798	0.031
|	Cu	65	10.000 ug/L	1.094	6780	0.015
[	Zn	66	10.000 ug/L	2.341	5097	0.033
|	Zn	67	ug/L		10088	-0.016
|	Zn	68	ug/L		4347	0.023
>	Ge	74	ug/L		144880	144880.402
|	As	75	10.000 ug/L	3.235	5019	0.035
|	Se	77	ug/L		6511	-0.021
|	Se	82	10.000 ug/L	2.924	434	0.003
|	Kr	83	ug/L		67	0.000
[	Sr	88	10.000 ug/L	1.778	55311	0.600
|	Y	89	ug/L		41	0.000
|	Ag	107	10.000 ug/L	1.466	25477	0.277
|	Cd	111	10.000 ug/L	1.724	6089	0.066
|	Cd	114	ug/L		14078	0.153
>	In	115	ug/L		91888	91887.877
|	Sn	120	10.000 ug/L	2.339	25201	0.271
|	Sb	121	10.000 ug/L	6.010	20710	0.221
|	Sb	123	ug/L		15750	0.168
[	Ba	135	ug/L		6055	0.045
|	Ba	137	10.000 ug/L	0.960	10691	0.080
|	Ho	165	ug/L		18	0.000
>	Lu	175	ug/L		133317	133316.506
|	Tl	205	10.000 ug/L	1.883	52997	0.393
|	Pb	208	10.000 ug/L	1.299	91823	0.686
|	Bi	209	ug/L		42	0.000
|	U	238	10.000 ug/L	1.322	99643	0.746

Sample ID: Standard 1

Report Date/Time: Saturday, January 30, 2010 13:00:52

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	
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	
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	
U	238Linear 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

ICPMS#6 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Saturday, January 30, 2010 13:04:14

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 nohrs thtimozr.mth

Dataset File: c:\elandata\dataset\100129\Standard 2.190

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	99.967	ug/L	0.636	45699	0.102
Be	9	99.945	ug/L	0.281	17784	0.040
B	11	200.045	ug/L	2.630	33169	0.073
Na	23	9990.333	ug/L	6.884	12749637	28.392
Mg	24	9995.988	ug/L	2.880	8734474	19.462
Al	27	9979.059	ug/L	3.293	13074013	29.133
P	31	9996.683	ug/L	0.730	1069951	2.370
K	39	10005.108	ug/L	9.367	17845948	39.026
Ca	43	10002.771	ug/L	1.180	44988	0.098
> Sc	45		ug/L		448650	448650.039
V	51	99.840	ug/L	1.097	282474	0.597
Cr	52	100.069	ug/L	1.936	238007	0.521
Cr	53		ug/L		127680	-0.072
Mn	55	100.000	ug/L	1.055	338011	0.751
Fe	57	9997.720	ug/L	0.835	688746	1.524
Co	59	99.972	ug/L	1.899	267402	0.596
Ni	60	99.926	ug/L	1.377	57223	0.127
Cu	63		ug/L		131358	0.293
Cu	65	99.960	ug/L	0.517	64284	0.143
Zn	66	99.792	ug/L	0.884	40221	0.276
Zn	67		ug/L		15829	0.024
Zn	68		ug/L		30590	0.205
> Ge	74		ug/L		144665	144664.586
As	75	100.025	ug/L	0.506	51895	0.359
Se	77		ug/L		7891	-0.012
Se	82	100.047	ug/L	2.904	4694	0.033
Kr	83		ug/L		80	0.000
Sr	88	99.992	ug/L	0.654	542456	5.955
Y	89		ug/L		87	0.001
Ag	107	99.989	ug/L	1.665	249339	2.738
Cd	111	100.010	ug/L	2.130	60758	0.667
Cd	114		ug/L		141169	1.550
> In	115		ug/L		91077	91076.502
Sn	120	100.008	ug/L	0.840	249359	2.735
Sb	121	100.077	ug/L	3.620	218875	2.398
Sb	123		ug/L		170935	1.873
Ba	135		ug/L		61032	0.469
Ba	137	100.016	ug/L	1.153	105885	0.813
Ho	165		ug/L		21	0.000
> Lu	175		ug/L		130164	130164.318
Tl	205	99.997	ug/L	1.227	510515	3.918
Pb	208	99.982	ug/L	0.810	877774	6.742
Bi	209		ug/L		94	0.000
U	238	99.960	ug/L	1.036	934181	7.176

Sample ID: Standard 2

Report Date/Time: Saturday, January 30, 2010 13:06:44

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	0.9998
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
V	51Linear Thru Zero	0.9999
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	0.9998
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	
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	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	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: Saturday, January 30, 2010 13:10:07

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 nolrs thtimozr.mth

Dataset File: c:\elandata\dataset\100129\QC Std 1.191

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	49.532	ug/L	1.226	23713	0.050
Be	9	49.357	ug/L	3.160	9195	0.020
B	11	98.581	ug/L	1.479	17349	0.036
Na	23	5377.210	ug/L	5.407	7186293	15.282
Mg	24	5453.823	ug/L	4.771	4987215	10.618
Al	27	4983.292	ug/L	6.935	6830444	14.548
P	31	5033.598	ug/L	0.456	567311	1.193
K	39	4969.202	ug/L	10.808	9463798	19.383
Ca	43	5090.030	ug/L	1.769	24379	0.050
> Sc	45		ug/L		469543	469543.243
V	51	49.878	ug/L	1.355	155436	0.298
Cr	52	50.398	ug/L	0.879	127569	0.263
Cr	53		ug/L		114387	-0.113
Mn	55	51.555	ug/L	0.570	182921	0.387
Fe	57	5056.944	ug/L	1.970	367179	0.771
Co	59	49.730	ug/L	1.092	139255	0.296
Ni	60	51.329	ug/L	0.416	30799	0.065
Cu	63		ug/L		69419	0.148
Cu	65	50.513	ug/L	0.687	34079	0.072
Zn	66	52.775	ug/L	0.893	22043	0.146
Zn	67		ug/L		12502	-0.002
Zn	68		ug/L		17128	0.108
> Ge	74		ug/L		149087	149086.734
As	75	48.293	ug/L	2.672	25795	0.173
Se	77		ug/L		6081	-0.026
Se	82	51.358	ug/L	0.767	2475	0.017
Kr	83		ug/L		68	-0.000
Sr	88	52.348	ug/L	0.166	293724	3.117
Y	89		ug/L		61	0.000
Ag	107	50.384	ug/L	1.155	129950	1.379
Cd	111	50.223	ug/L	0.723	31563	0.335
Cd	114		ug/L		74056	0.786
> In	115		ug/L		94170	94169.971
Sn	120	50.023	ug/L	0.072	129110	1.368
Sb	121	50.417	ug/L	4.782	114170	1.208
Sb	123		ug/L		88247	0.934
Ba	135		ug/L		31651	0.238
Ba	137	50.594	ug/L	1.100	54752	0.411
Ho	165		ug/L		29	0.000
> Lu	175		ug/L		133014	133014.383
Tl	205	48.299	ug/L	0.627	252333	1.892
Pb	208	50.922	ug/L	0.838	457009	3.434
Bi	209		ug/L		128	0.001
U	238	53.581	ug/L	0.436	511798	3.847

Sample ID: QC Std 1

Report Date/Time: Saturday, January 30, 2010 13:12:37

Calibration

Analyte	Mass Curve 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	0.9998
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
V	51Linear Thru Zero	0.9999
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	0.9998
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	
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	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
|	Li	7	99.064				
|	Be	9	98.713				
|	B	11	98.581				
|	Na	23	107.544				
|	Mg	24	109.076				
|	Al	27	98.679				
|	P	31	100.672				
|	K	39	99.384				
|	Ca	43	101.801				
>	Sc	45		86.4			
|	V	51	99.757				
|	Cr	52	100.795				
|	Cr	53					
|	Mn	55	103.110				
|	Fe	57	101.139				
|	Co	59	99.459				
|	Ni	60	102.658				
|	Cu	63					
|	Cu	65	101.025				
|	Zn	66	105.549				
|	Zn	67					
|	Zn	68					
>	Ge	74		89.8			
|	As	75	96.586				
|	Se	77					
|	Se	82	102.716				
|	Kr	83					
|	Sr	88	104.695				
|	Y	89					
|	Ag	107	100.768				
|	Cd	111	100.445				
|	Cd	114					
>	In	115		91.8			
|	Sn	120	100.046				
|	Sb	121	100.834				
|	Sb	123					
|	Ba	135					
|	Ba	137	101.188				
|	Ho	165					
>	Lu	175		90.3			
|	Tl	205	96.598				
|	Pb	208	101.843				
|	Bi	209					
|	U	238	107.161				

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: Saturday, January 30, 2010 13:16:01

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 nohrs thtimozr.mth

Dataset File: c:\elandata\dataset\100129\QC Std 2.192

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.017	ug/L	116.034	41	0.000
Be	9	-0.003	ug/L	946.684	11	-0.000
B	11	2.162	ug/L	22.352	976	0.001
Na	23	0.245	ug/L	537.810	10337	0.001
Mg	24	1.275	ug/L	194.680	5001	0.002
Al	27	1.488	ug/L	26.794	4334	0.004
P	31	-2.987	ug/L	20.623	7675	-0.001
K	39	1.137	ug/L	1367.291	415645	0.004
Ca	43	-5.226	ug/L	138.962	954	-0.000
> Sc	45		ug/L		540794	540793.679
V	51	0.682	ug/L	40.852	20039	0.004
Cr	52	-0.554	ug/L	15.664	3359	-0.003
Cr	53		ug/L		155670	-0.068
Mn	55	-0.048	ug/L	41.548	1096	-0.000
Fe	57	-3.169	ug/L	36.251	5883	-0.000
Co	59	0.003	ug/L	89.378	134	0.000
Ni	60	-0.014	ug/L	52.717	76	-0.000
Cu	63		ug/L		117	0.000
Cu	65	-0.062	ug/L	12.234	147	-0.000
Zn	66	-0.047	ug/L	80.426	267	-0.000
Zn	67		ug/L		13781	-0.003
Zn	68		ug/L		1023	-0.000
> Ge	74		ug/L		165830	165830.049
As	75	0.032	ug/L	1410.376	-46	0.000
Se	77		ug/L		7637	-0.020
Se	82	0.002	ug/L	12199.435	-17	0.000
Kr	83		ug/L		71	-0.000
Sr	88	-0.001	ug/L	177.231	165	-0.000
Y	89		ug/L		31	0.000
Ag	107	0.004	ug/L	49.967	65	0.000
Cd	111	-0.005	ug/L	178.334	21	-0.000
Cd	114		ug/L		33	0.000
> In	115		ug/L		102065	102065.316
Sn	120	0.348	ug/L	26.657	1267	0.010
Sb	121	1.213	ug/L	29.059	3391	0.029
Sb	123		ug/L		2664	0.023
Ba	135		ug/L		27	0.000
Ba	137	0.006	ug/L	59.641	38	0.000
Ho	165		ug/L		17	0.000
> Lu	175		ug/L		145122	145122.189
Tl	205	0.348	ug/L	22.098	2664	0.014
Pb	208	0.006	ug/L	83.135	394	0.000
Bi	209		ug/L		24	-0.000
U	238	0.071	ug/L	31.239	896	0.005

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	0.9998
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
V	51Linear Thru Zero	0.9999
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	0.9998
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	
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	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution %	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		99.5			
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		99.9			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Ag	107					
Cd	111					
Cd	114					
> In	115		99.5			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		98.5			
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 3

Sample Date/Time: Saturday, January 30, 2010 13:21:56

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 noirs thtimozr.mth

Dataset File: c:\elandata\dataset\100129\QC Std 3.193

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	11.489	ug/L	2.068	5462	0.012
Be	9	0.589	ug/L	13.704	118	0.000
B	11	16.256	ug/L	0.608	3223	0.006
Na	23	293.912	ug/L	20.168	396216	0.835
Mg	24	15.344	ug/L	6.497	17010	0.030
Al	27	41.866	ug/L	13.668	58454	0.122
P	31	40.020	ug/L	4.643	11327	0.009
K	39	396.387	ug/L	6.530	1073242	1.546
Ca	43	204.762	ug/L	7.155	1779	0.002
> Sc	45		ug/L		464419	464419.311
V	51	10.506	ug/L	16.707	44493	0.063
Cr	52	9.913	ug/L	1.627	28216	0.052
Cr	53		ug/L		125526	-0.086
Mn	55	5.700	ug/L	1.050	20991	0.043
Fe	57	112.497	ug/L	2.038	13240	0.017
Co	59	1.110	ug/L	1.750	3178	0.007
Ni	60	2.430	ug/L	2.943	1512	0.003
Cu	63		ug/L		1721	0.004
Cu	65	1.111	ug/L	1.986	906	0.002
Zn	66	13.086	ug/L	0.690	5692	0.036
Zn	67		ug/L		10285	-0.017
Zn	68		ug/L		4755	0.025
> Ge	74		ug/L		149912	149911.629
As	75	5.432	ug/L	3.226	2867	0.020
Se	77		ug/L		5898	-0.027
Se	82	5.681	ug/L	2.264	261	0.002
Kr	83		ug/L		68	0.000
Sr	88	11.430	ug/L	1.480	64847	0.681
Y	89		ug/L		30	0.000
Ag	107	1.022	ug/L	2.921	2707	0.028
Cd	111	1.100	ug/L	3.182	720	0.007
Cd	114		ug/L		1641	0.017
> In	115		ug/L		95048	95048.202
Sn	120	5.327	ug/L	1.839	14121	0.146
Sb	121	3.079	ug/L	7.494	7400	0.074
Sb	123		ug/L		5802	0.058
Ba	135		ug/L		1394	0.010
Ba	137	2.114	ug/L	3.808	2377	0.017
Ho	165		ug/L		17	0.000
> Lu	175		ug/L		136600	136599.686
Tl	205	1.124	ug/L	1.510	6666	0.044
Pb	208	2.228	ug/L	0.377	20835	0.150
Bi	209		ug/L		40	0.000
U	238	0.252	ug/L	3.110	2614	0.018

Sample ID: QC Std 3

Report Date/Time: Saturday, January 30, 2010 13:24:26

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	0.9998
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
V	51Linear Thru Zero	0.9999
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	0.9998
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	
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	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Li	7	114.893				
Be	9	117.743				
B	11	108.374				
Na	23	117.565				
Mg	24	102.291				
Al	27	139.552				
P	31	80.039				
K	39	132.129				
Ca	43	102.381				
> Sc	45		85.4			
V	51	105.058				
Cr	52	99.134				
Cr	53					
Mn	55	113.999				
Fe	57	112.497				
Co	59	110.976				
Ni	60	121.493				
Cu	63					
Cu	65	111.137				
Zn	66	130.860				
Zn	67					
Zn	68					
> Ge	74		90.3			
As	75	108.631				
Se	77					
Se	82	113.617				
Kr	83					
Sr	88	114.297				
Y	89					
Ag	107	102.176				
Cd	111	109.973				
Cd	114					
> In	115		92.6			
Sn	120	106.544				
Sb	121	102.626				
Sb	123					
Ba	135					
Ba	137	105.693				
Ho	165					
> Lu	175		92.7			
Tl	205	112.433				
Pb	208	111.387				
Bi	209					
U	238	125.899				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 3	Al	27	CRDL is out of limits
QC Std 3	K	39	CRDL is out of limits
QC Std 3	Zn	66	CRDL is out of limits

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Saturday, January 30, 2010 13:27:48

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 nohrs thtimozr.mth

Dataset File: c:\elandata\dataset\100129\QC Std 4.194

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.278	ug/L	11.088	181	0.000
Be	9	0.076	ug/L	8.052	27	0.000
B	11	0.894	ug/L	17.367	710	0.000
Na	23	99949.819	ug/L	6.012	150365427	284.050
Mg	24	99536.584	ug/L	3.516	102622600	193.793
Al	27	100022.568	ug/L	1.756	154659016	292.011
P	31	76919.855	ug/L	1.262	9664186	18.235
K	39	94105.174	ug/L	3.862	194903480	367.071
Ca	43	92571.006	ug/L	1.414	483445	0.911
> Sc	45		ug/L		529659	529658.716
V	51	-0.659	ug/L	126.239	15344	-0.004
Cr	52	1.425	ug/L	5.383	8756	0.007
Cr	53		ug/L		81646	-0.202
Mn	55	5.179	ug/L	0.775	21864	0.039
Fe	57	68256.034	ug/L	0.505	5515941	10.403
Co	59	0.278	ug/L	1.765	998	0.002
Ni	60	3.599	ug/L	4.374	2514	0.005
Cu	63		ug/L		3805	0.007
Cu	65	4.930	ug/L	4.468	3922	0.007
Zn	66	8.387	ug/L	2.348	3869	0.023
Zn	67		ug/L		9979	-0.021
Zn	68		ug/L		1753	0.005
> Ge	74		ug/L		155039	155038.771
As	75	0.414	ug/L	83.431	173	0.001
Se	77		ug/L		4745	-0.036
Se	82	-2.333	ug/L	8.010	-134	-0.001
Kr	83		ug/L		210	0.001
Sr	88	2.836	ug/L	0.809	16764	0.169
Y	89		ug/L		194	0.002
Ag	107	0.354	ug/L	38.173	1000	0.010
Cd	111	1.431	ug/L	38.690	959	0.010
Cd	114		ug/L		5551	0.056
> In	115		ug/L		98292	98292.291
Sn	120	0.325	ug/L	7.256	1158	0.009
Sb	121	0.214	ug/L	31.132	908	0.005
Sb	123		ug/L		720	0.004
Ba	135		ug/L		477	0.003
Ba	137	0.694	ug/L	0.458	823	0.006
Ho	165		ug/L		3483	0.025
> Lu	175		ug/L		140573	140572.780
Tl	205	0.024	ug/L	52.198	801	0.001
Pb	208	0.223	ug/L	0.394	2434	0.015
Bi	209		ug/L		1428	0.010
U	238	-0.000	ug/L	1604.814	148	-0.000

Sample ID: QC Std 4

Report Date/Time: Saturday, January 30, 2010 13:30:19

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	0.9998
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
V	51Linear Thru Zero	0.9999
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	0.9998
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	
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	
U	238Linear 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	99.950				
Mg	24	99.537				
Al	27	100.023				
P	31	76.920				
K	39	94.105				
Ca	43	92.571				
> Sc	45		97.4			
V	51					
Cr	52	43.191				
Cr	53					
Mn	55	89.289				
Fe	57	68.256				
Co	59	118.232				
Ni	60	108.746				
Cu	63					
Cu	65	147.597				
Zn	66	223.050				
Zn	67					
Zn	68					
> Ge	74		93.4			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88	95.798				
Y	89					
Ag	107					
Cd	111	322.352				
Cd	114					
> In	115		95.8			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137	86.982				
Ho	165					
> Lu	175		95.4			
Tl	205					
Pb	208	117.732				
Bi	209					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 4	P	31	ICSA is out of limits
QC Std 4	Fe	57	ICSA is out of limits

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Saturday, January 30, 2010 13:33:42

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 noirs thtimozr.mth

Dataset File: c:\elandata\dataset\100129\QC Std 5.195

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	17.612	ug/L	1.257	9875	0.018
Be	9	17.598	ug/L	3.302	3840	0.007
B	11	18.271	ug/L	2.124	4212	0.007
Na	23	96110.749	ug/L	5.835	149892580	273.139
Mg	24	103502.609	ug/L	4.130	110590193	201.514
Al	27	102058.396	ug/L	3.965	163496674	297.954
P	31	79125.921	ug/L	0.145	10302057	18.758
K	39	93953.225	ug/L	2.044	201526413	366.479
Ca	43	91852.550	ug/L	0.852	497119	0.904
> Sc	45		ug/L		548768	548767.590
V	51	18.038	ug/L	1.696	77258	0.108
Cr	52	20.678	ug/L	0.177	64120	0.108
Cr	53		ug/L		84541	-0.202
Mn	55	24.075	ug/L	0.528	100535	0.181
Fe	57	68404.995	ug/L	1.352	5727385	10.426
Co	59	18.168	ug/L	0.913	59543	0.108
Ni	60	21.001	ug/L	1.108	14780	0.027
Cu	63		ug/L		31216	0.057
Cu	65	21.984	ug/L	0.457	17447	0.031
Zn	66	26.096	ug/L	0.877	11828	0.072
Zn	67		ug/L		11511	-0.014
Zn	68		ug/L		7829	0.042
> Ge	74		ug/L		159866	159865.786
As	75	20.649	ug/L	1.690	11791	0.074
Se	77		ug/L		5371	-0.033
Se	82	17.494	ug/L	6.028	893	0.006
Kr	83		ug/L		208	0.001
Sr	88	23.224	ug/L	1.615	137939	1.383
Y	89		ug/L		212	0.002
Ag	107	18.296	ug/L	0.962	49952	0.501
Cd	111	19.879	ug/L	1.430	13230	0.133
Cd	114		ug/L		34809	0.349
> In	115		ug/L		99620	99619.922
Sn	120	19.324	ug/L	1.559	52937	0.529
Sb	121	20.309	ug/L	0.973	48896	0.487
Sb	123		ug/L		37872	0.377
Ba	135		ug/L		12978	0.092
Ba	137	19.861	ug/L	0.737	22887	0.162
Ho	165		ug/L		3477	0.024
> Lu	175		ug/L		141525	141524.649
Tl	205	17.436	ug/L	1.016	97348	0.683
Pb	208	18.578	ug/L	0.914	177609	1.253
Bi	209		ug/L		1546	0.011
U	238	20.099	ug/L	0.523	204365	1.443

Sample ID: QC Std 5

Report Date/Time: Saturday, January 30, 2010 13:36:12

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	0.9998
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
V	51Linear Thru Zero	0.9999
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	0.9998
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	
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	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std	% Recovery	Int Std	% Recovery	Spike	% Recovery	Dilution	% Dil	Duplicate	Rel. % Difference
|	Li	7		88.059								
|	Be	9		87.992								
|	B	11		91.356								
|	Na	23		96.111								
|	Mg	24		103.503								
|	Al	27		102.058								
|	P	31		79.126								
|	K	39		93.953								
|	Ca	43		91.853								
>	Sc	45				100.9						
|	V	51		90.189								
|	Cr	52		88.746								
|	Cr	53										
|	Mn	55		93.315								
|	Fe	57		68.405								
|	Co	59		89.719								
|	Ni	60		90.096								
|	Cu	63										
|	Cu	65		95.999								
|	Zn	66		109.830								
|	Zn	67										
|	Zn	68										
>	Ge	74				96.3						
|	As	75		103.244								
|	Se	77										
|	Se	82		87.470								
|	Kr	83										
|	Sr	88		101.151								
|	Y	89										
|	Ag	107		91.480								
|	Cd	111		97.235								
|	Cd	114										
>	In	115				97.1						
|	Sn	120		96.621								
|	Sb	121		101.547								
|	Sb	123										
|	Ba	135										
|	Ba	137		96.084								
|	Ho	165										
>	Lu	175				96.1						
|	Tl	205		87.182								
|	Pb	208		91.969								
|	Bi	209										
|	U	238		100.495								

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 5	P	31	ICSAB is out of limits
QC Std 5	Fe	57	ICSAB is out of limits

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Saturday, January 30, 2010 13:39:35

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 nohrs thtimozr.mth

Dataset File: c:\elandata\dataset\100129\QC Std 6.196

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	46.191	ug/L	2.079	25141	0.047
Be	9	46.248	ug/L	1.059	9796	0.018
B	11	89.283	ug/L	1.834	17913	0.033
Na	23	4539.810	ug/L	6.409	6895689	12.902
Mg	24	5500.935	ug/L	10.287	5721728	10.710
Al	27	4731.921	ug/L	3.856	7372935	13.815
P	31	5071.589	ug/L	0.751	649623	1.202
K	39	4913.391	ug/L	1.308	10636609	19.165
Ca	43	5084.244	ug/L	1.857	27674	0.050
> Sc	45		ug/L		533707	533706.976
V	51	48.318	ug/L	3.858	171718	0.289
Cr	52	49.140	ug/L	0.319	141509	0.256
Cr	53		ug/L		103718	-0.162
Mn	55	50.668	ug/L	0.692	204362	0.381
Fe	57	4878.249	ug/L	1.462	402852	0.744
Co	59	47.828	ug/L	0.642	152242	0.285
Ni	60	49.130	ug/L	1.924	33510	0.063
Cu	63		ug/L		75541	0.141
Cu	65	48.403	ug/L	0.765	37127	0.069
Zn	66	52.515	ug/L	0.975	24057	0.145
Zn	67		ug/L		13347	-0.004
Zn	68		ug/L		18459	0.106
> Ge	74		ug/L		163504	163504.380
As	75	48.202	ug/L	0.411	28233	0.173
Se	77		ug/L		5487	-0.033
Se	82	51.531	ug/L	1.221	2724	0.017
Kr	83		ug/L		60	-0.000
Sr	88	52.819	ug/L	0.598	316951	3.145
Y	89		ug/L		62	0.000
Ag	107	50.433	ug/L	0.479	139110	1.381
Cd	111	49.779	ug/L	0.983	33457	0.332
Cd	114		ug/L		78170	0.776
> In	115		ug/L		100710	100709.633
Sn	120	50.127	ug/L	0.491	138362	1.371
Sb	121	48.645	ug/L	5.100	117803	1.166
Sb	123		ug/L		90894	0.899
Ba	135		ug/L		33071	0.241
Ba	137	51.836	ug/L	1.008	57812	0.422
Ho	165		ug/L		24	0.000
> Lu	175		ug/L		137073	137072.539
Tl	205	46.943	ug/L	0.832	252733	1.839
Pb	208	50.161	ug/L	1.195	463910	3.382
Bi	209		ug/L		128	0.001
U	238	52.885	ug/L	1.105	520540	3.797

Sample ID: QC Std 6

Report Date/Time: Saturday, January 30, 2010 13:42:05

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	0.9998
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
V	51Linear Thru Zero	0.9999
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	0.9998
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	
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	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std	% Recovery	Int Std	% Recovery	Spike	% Recovery	Dilution	% Diff	Duplicate	Rel. % Difference
|	Li	7		92.382								
|	Be	9		92.496								
|	B	11		89.283								
|	Na	23		90.796								
|	Mg	24		110.019								
|	Al	27		93.701								
|	P	31		101.432								
|	K	39		98.268								
|	Ca	43		101.685								
>	Sc	45					98.2					
|	V	51		96.636								
|	Cr	52		98.281								
|	Cr	53										
|	Mn	55		101.335								
|	Fe	57		97.565								
|	Co	59		95.656								
|	Ni	60		98.260								
|	Cu	63										
|	Cu	65		96.807								
|	Zn	66		105.031								
|	Zn	67										
|	Zn	68										
>	Ge	74					98.5					
|	As	75		96.405								
|	Se	77										
|	Se	82		103.062								
|	Kr	83										
|	Sr	88		105.638								
|	Y	89										
|	Ag	107		100.865								
|	Cd	111		99.557								
|	Cd	114										
>	In	115					98.1					
|	Sn	120		100.255								
|	Sb	121		97.290								
|	Sb	123										
|	Ba	135										
|	Ba	137		103.671								
|	Ho	165										
>	Lu	175					93.1					
|	Tl	205		93.887								
|	Pb	208		100.322								
|	Bi	209										
|	U	238		105.770								

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	B	11	11CCV is out of limits (+/- 10%)
QC Std 6	Mg	24	24CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Saturday, January 30, 2010 13:45:29

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 nohrs thtimozr.mth

Dataset File: c:\elandata\dataset\100129\QC Std 7.197

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.035	ug/L	55.252	57	0.000
Be	9	0.012	ug/L	83.942	16	0.000
B	11	0.759	ug/L	54.909	769	0.000
Na	23	3.388	ug/L	35.294	16676	0.010
Mg	24	0.851	ug/L	98.707	5001	0.002
Al	27	3.549	ug/L	42.295	8336	0.010
P	31	-14.838	ug/L	14.994	6768	-0.004
K	39	-13.768	ug/L	29.721	422836	-0.054
Ca	43	-19.374	ug/L	27.344	967	-0.000
> Sc	45		ug/L		594811	594810.748
V	51	-1.032	ug/L	338.005	15864	-0.006
Cr	52	-0.846	ug/L	5.396	2791	-0.004
Cr	53		ug/L		127267	-0.142
Mn	55	-0.104	ug/L	12.552	958	-0.001
Fe	57	-15.022	ug/L	12.741	5398	-0.002
Co	59	-0.000	ug/L	490.522	134	-0.000
Ni	60	-0.017	ug/L	57.976	81	-0.000
Cu	63		ug/L		130	0.000
Cu	65	-0.061	ug/L	17.091	163	-0.000
Zn	66	-0.016	ug/L	311.178	300	-0.000
Zn	67		ug/L		14120	-0.006
Zn	68		ug/L		973	-0.001
> Ge	74		ug/L		176808	176808.198
As	75	-0.030	ug/L	1897.419	-87	-0.000
Se	77		ug/L		5802	-0.034
Se	82	0.062	ug/L	244.282	-15	0.000
Kr	83		ug/L		69	-0.000
Sr	88	-0.002	ug/L	127.531	173	-0.000
Y	89		ug/L		31	-0.000
Ag	107	0.000	ug/L	566.320	57	0.000
Cd	111	-0.010	ug/L	198.275	19	-0.000
Cd	114		ug/L		35	0.000
> In	115		ug/L		109377	109376.737
Sn	120	0.261	ug/L	28.661	1098	0.007
Sb	121	0.825	ug/L	40.087	2611	0.020
Sb	123		ug/L		2030	0.015
Ba	135		ug/L		24	0.000
Ba	137	0.003	ug/L	141.770	35	0.000
Ho	165		ug/L		14	0.000
> Lu	175		ug/L		150531	150530.815
Tl	205	0.294	ug/L	24.298	2453	0.012
Pb	208	0.005	ug/L	64.402	397	0.000
Bi	209		ug/L		33	-0.000
U	238	0.057	ug/L	38.544	776	0.004

Sample ID: QC Std 7

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	0.9998
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
V	51Linear Thru Zero	0.9999
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	0.9998
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	
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	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	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			109.4		
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			106.5		
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Ag	107					
Cd	111					
Cd	114					
> In	115			106.6		
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175			102.2		
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: 1202015679

Sample Date/Time: Saturday, January 30, 2010 13:51:24

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 941732|2|rmj

Method File: c:\elandata\Method\6020 nolrs thtimozr.mth

Dataset File: c:\elandata\dataset\100129\1202015679.198

Concentration Results

Analyte	Mass	Conc.	Mean	Report Unit	Conc. RSD	Meas. Intens.	Mean	Net Intens.	Mean
Li	7	-0.011	ug/L		117.712		25		-0.000
Be	9	0.005	ug/L		273.868		12		0.000
B	11	-0.322	ug/L		42.578		469		-0.000
Na	23	37.403	ug/L		8.708		65149		0.106
Mg	24	21.126	ug/L		13.712		25022		0.041
Al	27	82.993	ug/L		25.251		128600		0.242
P	31	-19.502	ug/L		2.720		5370		-0.005
K	39	-2.003	ug/L		755.653		395419		-0.008
Ca	43	17.952	ug/L		19.108		1041		0.000
> Sc	45		ug/L				522545		522544.756
V	51	-4.031	ug/L		28.646		4659		-0.024
Cr	52	-0.741	ug/L		5.226		2737		-0.004
Cr	53		ug/L				71097		-0.220
Mn	55	0.077	ug/L		3.920		1551		0.001
Fe	57	5.675	ug/L		19.474		6389		0.001
Co	59	0.002	ug/L		412.247		126		0.000
Ni	60	0.275	ug/L		5.450		266		0.000
Cu	63		ug/L				1850		0.003
Cu	65	1.001	ug/L		2.589		937		0.001
Zn	66	11.396	ug/L		1.306		5488		0.032
Zn	67		ug/L				7603		-0.040
Zn	68		ug/L				4437		0.020
> Ge	74		ug/L				164857		164857.415
As	75	0.533	ug/L		75.159		254		0.002
Se	77		ug/L				2593		-0.051
Se	82	0.030	ug/L		378.644		-16		0.000
Kr	83		ug/L				67		-0.000
Sr	88	0.080	ug/L		6.033		664		0.005
Y	89		ug/L				60		0.000
Ag	107	0.112	ug/L		1.317		368		0.003
Cd	111	0.098	ug/L		33.640		92		0.001
Cd	114		ug/L				18		-0.000
> In	115		ug/L				102787		102786.733
Sn	120	15.502	ug/L		1.832		43872		0.424
Sb	121	0.192	ug/L		4.064		896		0.005
Sb	123		ug/L				683		0.003
Ba	135		ug/L				188		0.001
Ba	137	0.234	ug/L		8.845		305		0.002
Ho	165		ug/L				16		0.000
> Lu	175		ug/L				144036		144036.258
Tl	205	0.100	ug/L		19.990		1249		0.004
Pb	208	2.217	ug/L		0.770		21862		0.149
Bi	209		ug/L				39		0.000
U	238	-0.003	ug/L		13.453		126		-0.000

Sample ID: 1202015679

Report Date/Time: Saturday, January 30, 2010 13:53:55

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	0.9998
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
V	51Linear Thru Zero	0.9999
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	0.9998
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	
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	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	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		96.1			
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		99.3			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Ag	107					
Cd	111					
Cd	114					
> In	115		100.2			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		97.8			
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: 1202015684

Sample Date/Time: Saturday, January 30, 2010 13:57:18

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 941732|40|rmj

Method File: c:\elandata\Method\6020 noirs thtimozr.mth

Dataset File: c:\elandata\dataset\100129\1202015684.199

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	2.491	ug/L	3.087	1349	0.003
Be	9	19.855	ug/L	4.100	4100	0.008
B	11	35.711	ug/L	1.448	7290	0.013
Na	23	319.981	ug/L	12.132	482075	0.909
Mg	24	1255.558	ug/L	4.654	1273401	2.445
Al	27	3092.571	ug/L	1.195	4692540	9.029
P	31	203.255	ug/L	1.385	32774	0.048
K	39	1129.286	ug/L	5.090	2685639	4.405
Ca	43	2706.760	ug/L	0.954	14784	0.027
> Sc	45		ug/L		519515	519514.629
V	51	26.428	ug/L	7.766	99211	0.158
Cr	52	66.402	ug/L	0.598	184480	0.346
Cr	53		ug/L		105375	-0.154
Mn	55	148.357	ug/L	1.231	580095	1.114
Fe	57	4541.204	ug/L	0.452	365470	0.692
Co	59	25.606	ug/L	0.344	79399	0.153
Ni	60	38.307	ug/L	0.588	25454	0.049
Cu	63		ug/L		72246	0.139
Cu	65	47.241	ug/L	1.338	35276	0.068
Zn	66	182.925	ug/L	1.401	81685	0.506
Zn	67		ug/L		20422	0.041
Zn	68		ug/L		59640	0.364
> Ge	74		ug/L		160745	160745.245
As	75	28.938	ug/L	2.485	16640	0.104
Se	77		ug/L		6459	-0.026
Se	82	79.458	ug/L	1.748	4138	0.026
Kr	83		ug/L		64	-0.000
Sr	88	65.014	ug/L	0.319	388056	3.872
Y	89		ug/L		20127	0.201
Ag	107	6.733	ug/L	0.204	18521	0.184
Cd	111	17.003	ug/L	1.230	11385	0.113
Cd	114		ug/L		26665	0.266
> In	115		ug/L		100186	100186.451
Sn	120	10.951	ug/L	1.545	30296	0.300
Sb	121	8.011	ug/L	1.365	19646	0.192
Sb	123		ug/L		15308	0.149
Ba	135		ug/L		35189	0.255
Ba	137	55.032	ug/L	1.566	61865	0.448
Ho	165		ug/L		1199	0.009
> Lu	175		ug/L		138192	138191.936
Tl	205	31.280	ug/L	3.083	169969	1.225
Pb	208	26.508	ug/L	0.233	247325	1.787
Bi	209		ug/L		2095	0.015
U	238	0.487	ug/L	0.246	4982	0.035

Sample ID: 1202015684

Calibration

Analyte	Mass Curve 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	0.9998
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
V	51Linear Thru Zero	0.9999
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	0.9998
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	
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	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution %	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		95.6			
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		96.8			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Ag	107					
Cd	111					
Cd	114					
> In	115		97.6			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		93.8			
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: Saturday, January 30, 2010 14:03:11

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 noirs thtltmozr.mth

Dataset File: c:\elandata\dataset\100129\QC Std 6.200

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	46.826	ug/L	2.382	25576	0.048
Be	9	46.878	ug/L	1.788	9965	0.019
B	11	90.222	ug/L	2.564	18163	0.033
Na	23	4726.338	ug/L	4.857	7205995	13.432
Mg	24	4962.541	ug/L	2.166	5178936	9.662
Al	27	4905.812	ug/L	9.013	7671304	14.322
P	31	4874.524	ug/L	2.050	626993	1.156
K	39	4804.456	ug/L	8.166	10451817	18.741
Ca	43	5051.898	ug/L	2.065	27606	0.050
> Sc	45		ug/L		535671	535670.757
V	51	45.395	ug/L	4.090	162962	0.271
Cr	52	49.034	ug/L	0.747	141734	0.255
Cr	53		ug/L		107440	-0.156
Mn	55	49.950	ug/L	0.659	202229	0.375
Fe	57	4850.396	ug/L	0.490	402080	0.739
Co	59	47.417	ug/L	0.756	151493	0.283
Ni	60	48.570	ug/L	0.379	33254	0.062
Cu	63		ug/L		75538	0.141
Cu	65	47.990	ug/L	0.464	36948	0.069
Zn	66	53.284	ug/L	0.669	24415	0.148
Zn	67		ug/L		12926	-0.007
Zn	68		ug/L		18570	0.107
> Ge	74		ug/L		163579	163578.832
As	75	48.059	ug/L	1.199	28162	0.173
Se	77		ug/L		5639	-0.032
Se	82	50.153	ug/L	0.874	2652	0.016
Kr	83		ug/L		82	0.000
Sr	88	52.690	ug/L	0.854	314072	3.138
Y	89		ug/L		70	0.000
Ag	107	50.298	ug/L	1.236	137819	1.377
Cd	111	50.222	ug/L	1.301	33529	0.335
Cd	114		ug/L		78315	0.783
> In	115		ug/L		100046	100046.022
Sn	120	49.354	ug/L	1.885	135317	1.350
Sb	121	48.582	ug/L	6.486	116828	1.164
Sb	123		ug/L		91098	0.908
Ba	135		ug/L		32632	0.236
Ba	137	51.125	ug/L	1.059	57430	0.416
Ho	165		ug/L		28	0.000
> Lu	175		ug/L		138070	138069.719
Tl	205	47.142	ug/L	0.893	255655	1.847
Pb	208	50.153	ug/L	0.150	467239	3.382
Bi	209		ug/L		150	0.001
U	238	51.410	ug/L	0.661	509738	3.691

Sample ID: QC Std 6

Report Date/Time: Saturday, January 30, 2010 14:05:41

Calibration

Analyte	Mass Curve 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	0.9998
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
V	51Linear Thru Zero	0.9999
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	0.9998
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	
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	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Li	7	93.653				
Be	9	93.757				
B	11	90.222				
Na	23	94.527				
Mg	24	99.251				
Al	27	97.145				
P	31	97.490				
K	39	96.089				
Ca	43	101.038				
> Sc	45		98.5			
V	51	90.791				
Cr	52	98.069				
Cr	53					
Mn	55	99.901				
Fe	57	97.008				
Co	59	94.834				
Ni	60	97.140				
Cu	63					
Cu	65	95.980				
Zn	66	106.568				
Zn	67					
Zn	68					
> Ge	74		98.5			
As	75	96.118				
Se	77					
Se	82	100.307				
Kr	83					
Sr	88	105.381				
Y	89					
Ag	107	100.596				
Cd	111	100.443				
Cd	114					
> In	115		97.5			
Sn	120	98.708				
Sb	121	97.164				
Sb	123					
Ba	135					
Ba	137	102.249				
Ho	165					
> Lu	175		93.7			
Tl	205	94.285				
Pb	208	100.306				
Bi	209					
U	238	102.821				

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#6 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Saturday, January 30, 2010 14:09:06

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 noirs thtimozr.mth

Dataset File: c:\elandata\dataset\100129\QC Std 7.201

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.032	ug/L	27.048	54	0.000
Be	9	-0.002	ug/L	1103.616	12	-0.000
B	11	1.170	ug/L	26.992	845	0.000
Na	23	0.538	ug/L	137.653	11671	0.002
Mg	24	0.053	ug/L	5802.973	4001	0.000
Al	27	1.064	ug/L	160.873	4001	0.003
P	31	-10.262	ug/L	17.919	7309	-0.002
K	39	-15.062	ug/L	7.002	413569	-0.059
Ca	43	-20.008	ug/L	12.514	949	-0.000
> Sc	45		ug/L		585971	585970.536
V	51	-0.412	ug/L	622.873	17781	-0.002
Cr	52	-0.727	ug/L	8.044	3114	-0.004
Cr	53		ug/L		130415	-0.134
Mn	55	-0.089	ug/L	15.986	1006	-0.001
Fe	57	-16.787	ug/L	12.416	5160	-0.003
Co	59	0.002	ug/L	99.347	141	0.000
Ni	60	-0.010	ug/L	53.709	86	-0.000
Cu	63		ug/L		128	0.000
Cu	65	-0.101	ug/L	18.637	127	-0.000
Zn	66	-0.085	ug/L	49.402	262	-0.000
Zn	67		ug/L		13655	-0.007
Zn	68		ug/L		982	-0.001
> Ge	74		ug/L		173896	173896.441
As	75	-0.292	ug/L	198.749	-247	-0.001
Se	77		ug/L		5961	-0.032
Se	82	-0.051	ug/L	641.745	-21	-0.000
Kr	83		ug/L		72	-0.000
Sr	88	-0.002	ug/L	105.556	167	-0.000
Y	89		ug/L		35	0.000
Ag	107	0.000	ug/L	12079.423	56	0.000
Cd	111	-0.015	ug/L	27.382	15	-0.000
Cd	114		ug/L		39	0.000
> In	115		ug/L		108261	108260.637
Sn	120	0.309	ug/L	23.511	1230	0.008
Sb	121	0.860	ug/L	36.727	2683	0.021
Sb	123		ug/L		1992	0.015
Ba	135		ug/L		23	-0.000
Ba	137	0.000	ug/L	2759.559	32	0.000
Ho	165		ug/L		19	0.000
> Lu	175		ug/L		149826	149826.298
Tl	205	0.372	ug/L	22.683	2889	0.015
Pb	208	0.004	ug/L	54.422	388	0.000
Bi	209		ug/L		30	-0.000
U	238	0.052	ug/L	37.554	712	0.004

Sample ID: QC Std 7

Report Date/Time: Saturday, January 30, 2010 14:11:38

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	0.9998
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
V	51Linear Thru Zero	0.9999
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	0.9998
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	
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	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		107.8			
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		104.7			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Ag	107					
Cd	111					
Cd	114					
> In	115		105.5			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		101.7			
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: 244601001

Sample Date/Time: Saturday, January 30, 2010 14:15:02

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 941732|2|rmj

Method File: c:\elandata\Method\6020 nolrs thtimozr.mth

Dataset File: c:\elandata\dataset\100129\244601001.202

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	31.631	ug/L	2.833	20039	0.032
Be	9	1.747	ug/L	4.478	443	0.001
B	11	5.989	ug/L	4.480	1986	0.002
Na	23	593.557	ug/L	7.260	1058577	1.687
Mg	24	4454.264	ug/L	9.235	5390575	8.672
Al	27	28812.062	ug/L	1.760	52236872	84.115
P	31	230.077	ug/L	1.910	43125	0.055
K	39	3988.283	ug/L	4.843	10138903	15.557
Ca	43	3829.081	ug/L	1.717	24532	0.038
> Sc	45		ug/L		621047	621046.712
V	51	29.190	ug/L	5.556	128808	0.174
Cr	52	16.474	ug/L	0.951	58959	0.086
Cr	53		ug/L		69913	-0.244
Mn	55	478.672	ug/L	1.049	2234209	3.595
Fe	57	19111.570	ug/L	0.458	1816071	2.913
Co	59	18.164	ug/L	0.184	67371	0.108
Ni	60	15.824	ug/L	0.400	12627	0.020
Cu	63		ug/L		25391	0.041
Cu	65	14.325	ug/L	1.228	12944	0.020
Zn	66	71.903	ug/L	0.539	35374	0.199
Zn	67		ug/L		12860	-0.013
Zn	68		ug/L		28221	0.154
> Ge	74		ug/L		176161	176160.941
As	75	5.670	ug/L	3.136	3520	0.020
Se	77		ug/L		2472	-0.052
Se	82	0.034	ug/L	838.838	-16	0.000
Kr	83		ug/L		169	0.001
Sr	88	37.586	ug/L	2.175	252066	2.238
Y	89		ug/L		573856	5.099
Ag	107	0.229	ug/L	4.086	764	0.006
Cd	111	1.146	ug/L	6.423	887	0.008
Cd	114		ug/L		248	0.002
> In	115		ug/L		112544	112543.911
Sn	120	1.376	ug/L	1.326	4561	0.038
Sb	121	0.218	ug/L	8.607	1051	0.005
Sb	123		ug/L		807	0.004
Ba	135		ug/L		155775	0.938
Ba	137	201.248	ug/L	1.321	271828	1.637
Ho	165		ug/L		34465	0.207
> Lu	175		ug/L		166086	166086.235
Tl	205	0.399	ug/L	8.837	3383	0.016
Pb	208	20.704	ug/L	0.799	232236	1.396
Bi	209		ug/L		4772	0.029
U	238	5.060	ug/L	0.279	60511	0.363

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	0.9998
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
V	51Linear Thru Zero	0.9999
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	0.9998
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	
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	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Duplicate Rel. % Difference
|	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
>	Sc	45			114.2		
|	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			106.1		
|	As	75					
|	Se	77					
|	Se	82					
|	Kr	83					
|	Sr	88					
|	Y	89					
|	Ag	107					
|	Cd	111					
|	Cd	114					
>	In	115			109.7		
|	Sn	120					
|	Sb	121					
|	Sb	123					
|	Ba	135					
|	Ba	137					
|	Ho	165					
>	Lu	175			112.7		
|	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: 1202015680

Sample Date/Time: Saturday, January 30, 2010 14:20:57

Sample Type:

Sample Description: LANL 6020 DUP

Number of Replicates: 3

Batch ID: 941732|2|rmj

Method File: c:\elandata\Method\6020 nolrs thtimozr.mth

Dataset File: c:\elandata\dataset\100129\1202015680.203

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	27.850	ug/L	3.267	18131	0.028
Be	9	1.541	ug/L	3.531	403	0.001
B	11	4.250	ug/L	5.824	1636	0.002
Na	23	626.876	ug/L	16.554	1147674	1.782
Mg	24	3405.097	ug/L	6.683	4232784	6.630
Al	27	25674.276	ug/L	0.468	47818043	74.955
P	31	197.705	ug/L	1.005	39405	0.047
K	39	3193.431	ug/L	3.245	8433892	12.456
Ca	43	3279.784	ug/L	0.951	21753	0.032
> Sc	45		ug/L		637937	637937.427
V	51	22.087	ug/L	3.632	105257	0.132
Cr	52	13.630	ug/L	0.920	51110	0.071
Cr	53		ug/L		67239	-0.251
Mn	55	451.549	ug/L	0.571	2164925	3.391
Fe	57	16722.581	ug/L	0.421	1633187	2.549
Co	59	23.656	ug/L	0.515	90083	0.141
Ni	60	14.112	ug/L	0.726	11578	0.018
Cu	63		ug/L		21252	0.033
Cu	65	11.761	ug/L	1.290	10957	0.017
Zn	66	68.766	ug/L	1.050	34640	0.190
Zn	67		ug/L		12093	-0.019
Zn	68		ug/L		27180	0.144
> Ge	74		ug/L		180301	180301.128
As	75	5.062	ug/L	7.486	3209	0.018
Se	77		ug/L		2463	-0.053
Se	82	0.057	ug/L	548.207	-15	0.000
Kr	83		ug/L		166	0.000
Sr	88	29.873	ug/L	0.469	202643	1.779
Y	89		ug/L		605020	5.316
Ag	107	0.273	ug/L	1.777	910	0.007
Cd	111	1.215	ug/L	1.485	949	0.008
Cd	114		ug/L		224	0.002
> In	115		ug/L		113800	113799.978
Sn	120	1.526	ug/L	2.567	5079	0.042
Sb	121	0.072	ug/L	21.150	664	0.002
Sb	123		ug/L		539	0.001
Ba	135		ug/L		132054	0.791
Ba	137	170.384	ug/L	0.278	231423	1.386
Ho	165		ug/L		35675	0.214
> Lu	175		ug/L		166999	166998.769
Tl	205	0.260	ug/L	6.502	2493	0.010
Pb	208	18.919	ug/L	0.795	213424	1.276
Bi	209		ug/L		7583	0.045
U	238	6.400	ug/L	0.427	76912	0.460

Sample ID: 1202015680

Report Date/Time: Saturday, January 30, 2010 14:23:28

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	0.9998
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
V	51Linear Thru Zero	0.9999
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	0.9998
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	
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	
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		117.3			
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		108.6			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Ag	107					
Cd	111					
Cd	114					
> In	115		110.9			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		113.4			
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: 1202015682

Sample Date/Time: Saturday, January 30, 2010 14:26:52

Sample Type:

Sample Description: LANL 6020 MS

Number of Replicates: 3

Batch ID: 941732[2]rmj

Method File: c:\elandata\Method\6020 noirs thtimozr.mth

Dataset File: c:\elandata\dataset\100129\1202015682.204

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	44.359	ug/L	3.620	29674	0.045
Be	9	21.233	ug/L	4.335	5536	0.008
B	11	44.799	ug/L	1.169	11380	0.016
Na	23	1496.608	ug/L	5.307	2802605	4.253
Mg	24	4624.137	ug/L	2.801	5910958	9.003
Al	27	27850.103	ug/L	6.354	53341579	81.307
P	31	982.489	ug/L	1.232	162578	0.233
K	39	4171.543	ug/L	3.019	11176201	16.272
Ca	43	4241.134	ug/L	1.943	28579	0.042
> Sc	45		ug/L		656055	656054.633
V	51	44.713	ug/L	3.350	196937	0.267
Cr	52	37.161	ug/L	0.772	133001	0.194
Cr	53		ug/L		74111	-0.243
Mn	55	381.739	ug/L	0.940	1882477	2.867
Fe	57	17222.640	ug/L	0.644	1729531	2.625
Co	59	38.881	ug/L	0.601	152169	0.232
Ni	60	34.070	ug/L	1.055	28600	0.043
Cu	63		ug/L		65791	0.100
Cu	65	34.592	ug/L	1.211	32684	0.049
Zn	66	84.025	ug/L	1.350	43174	0.233
Zn	67		ug/L		13416	-0.013
Zn	68		ug/L		33716	0.176
> Ge	74		ug/L		184236	184236.364
As	75	38.307	ug/L	1.272	25266	0.138
Se	77		ug/L		2753	-0.051
Se	82	8.520	ug/L	2.232	492	0.003
Kr	83		ug/L		171	0.000
Sr	88	54.251	ug/L	0.866	375763	3.231
Y	89		ug/L		603232	5.189
Ag	107	21.805	ug/L	1.290	69460	0.597
Cd	111	6.100	ug/L	5.524	4756	0.041
Cd	114		ug/L		8127	0.070
> In	115		ug/L		116254	116253.681
Sn	120	17.476	ug/L	0.268	55903	0.478
Sb	121	48.350	ug/L	0.726	135170	1.159
Sb	123		ug/L		104261	0.893
Ba	135		ug/L		142788	0.846
Ba	137	182.695	ug/L	0.414	250801	1.486
Ho	165		ug/L		35783	0.212
> Lu	175		ug/L		168790	168789.978
Tl	205	39.129	ug/L	1.091	259556	1.533
Pb	208	96.377	ug/L	0.560	1097273	6.499
Bi	209		ug/L		3951	0.023
U	238	25.450	ug/L	0.960	308581	1.827

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	0.9998
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
V	51Linear Thru Zero	0.9999
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	0.9998
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	
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	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	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		120.7			
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		111.0			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Ag	107					
Cd	111					
Cd	114					
> In	115		113.3			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		114.6			
Tl	205					
Pb	208					
Bi	209					
U	238					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message
 Sc 45 Int Std for sarrSc 45

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: 1202015683

Sample Date/Time: Saturday, January 30, 2010 14:32:47

Sample Type:

Sample Description: LANL 6020 MSD

Number of Replicates: 3

Batch ID: 941732|2|rmj

Method File: c:\elandata\Method\6020 noirs thtimozr.mth

Dataset File: c:\elandata\dataset\100129\1202015683.205

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	55.395	ug/L	1.162	37778	0.056
Be	9	20.939	ug/L	2.067	5567	0.008
B	11	46.747	ug/L	3.259	12078	0.017
Na	23	1407.477	ug/L	12.581	2686856	4.000
Mg	24	5960.972	ug/L	1.101	7768403	11.606
Al	27	34013.569	ug/L	3.356	66440251	99.301
P	31	962.634	ug/L	0.741	162629	0.228
K	39	5180.058	ug/L	2.690	14026920	20.206
Ca	43	4417.454	ug/L	0.732	30301	0.043
> Sc	45		ug/L		668972	668972.257
V	51	51.178	ug/L	1.365	226659	0.306
Cr	52	37.916	ug/L	1.959	138244	0.198
Cr	53		ug/L		74137	-0.246
Mn	55	387.006	ug/L	1.080	1945924	2.907
Fe	57	18024.341	ug/L	1.615	1845225	2.747
Co	59	36.449	ug/L	1.169	145461	0.217
Ni	60	34.430	ug/L	1.214	29468	0.044
Cu	63		ug/L		63759	0.095
Cu	65	32.749	ug/L	0.931	31564	0.047
Zn	66	96.173	ug/L	0.596	49982	0.266
Zn	67		ug/L		14701	-0.007
Zn	68		ug/L		39483	0.205
> Ge	74		ug/L		186504	186504.405
As	75	38.407	ug/L	2.279	25647	0.138
Se	77		ug/L		2725	-0.052
Se	82	7.632	ug/L	6.121	444	0.002
Kr	83		ug/L		193	0.001
Sr	88	59.192	ug/L	1.975	415369	3.525
Y	89		ug/L		571366	4.851
Ag	107	21.375	ug/L	0.957	68996	0.585
Cd	111	5.736	ug/L	0.829	4534	0.038
Cd	114		ug/L		8071	0.068
> In	115		ug/L		117800	117799.989
Sn	120	15.858	ug/L	1.346	51427	0.434
Sb	121	41.847	ug/L	1.935	118598	1.003
Sb	123		ug/L		91254	0.771
Ba	135		ug/L		185900	1.095
Ba	137	234.047	ug/L	0.934	323028	1.903
Ho	165		ug/L		33930	0.200
> Lu	175		ug/L		169713	169712.526
Tl	205	38.619	ug/L	1.067	257594	1.513
Pb	208	97.294	ug/L	0.864	1113735	6.560
Bi	209		ug/L		4684	0.027
U	238	28.038	ug/L	1.090	341782	2.013

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	0.9998
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
V	51Linear Thru Zero	0.9999
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	0.9998
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	
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	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution %	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		123.1			
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		112.3			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Ag	107					
Cd	111					
Cd	114					
> In	115		114.8			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		115.2			
Tl	205					
Pb	208					
Bi	209					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for sam	Sc	45	

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: 1202015681

Sample Date/Time: Saturday, January 30, 2010 14:38:42

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 941732|10|rmj

Method File: c:\elandata\Method\6020 nolrs thtimozr.mth

Dataset File: c:\elandata\dataset\100129\1202015681.206

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	7.245	ug/L	5.322	4349	0.007
Be	9	0.404	ug/L	10.226	106	0.000
B	11	1.549	ug/L	31.059	922	0.001
Na	23	149.019	ug/L	7.870	258317	0.424
Mg	24	1148.288	ug/L	11.240	1308790	2.236
Al	27	7218.345	ug/L	11.388	12314527	21.074
P	31	32.825	ug/L	21.106	13258	0.008
K	39	905.463	ug/L	12.249	2508239	3.532
Ca	43	873.979	ug/L	7.510	6091	0.009
> Sc	45		ug/L		585867	585867.408
V	51	4.023	ug/L	25.874	33298	0.024
Cr	52	2.937	ug/L	11.340	14263	0.015
Cr	53		ug/L		75850	-0.227
Mn	55	148.993	ug/L	5.910	655633	1.119
Fe	57	4890.283	ug/L	5.211	442526	0.745
Co	59	4.318	ug/L	5.032	15184	0.026
Ni	60	3.905	ug/L	5.130	3004	0.005
Cu	63		ug/L		5908	0.010
Cu	65	3.423	ug/L	5.287	3074	0.005
Zn	66	17.349	ug/L	0.944	8910	0.048
Zn	67		ug/L		8454	-0.039
Zn	68		ug/L		7339	0.034
> Ge	74		ug/L		179014	179014.416
As	75	1.823	ug/L	19.284	1105	0.007
Se	77		ug/L		3020	-0.050
Se	82	0.096	ug/L	82.433	-13	0.000
Kr	83		ug/L		88	0.000
Sr	88	8.617	ug/L	1.784	56017	0.513
Y	89		ug/L		129029	1.186
Ag	107	0.039	ug/L	6.645	173	0.001
Cd	111	0.221	ug/L	16.826	186	0.001
Cd	114		ug/L		70	0.000
> In	115		ug/L		108823	108822.736
Sn	120	0.283	ug/L	2.364	1158	0.008
Sb	121	0.116	ug/L	18.525	750	0.003
Sb	123		ug/L		591	0.002
Ba	135		ug/L		33491	0.225
Ba	137	48.391	ug/L	1.422	58659	0.394
Ho	165		ug/L		7257	0.049
> Lu	175		ug/L		148978	148978.293
Tl	205	0.371	ug/L	18.472	2871	0.015
Pb	208	4.860	ug/L	0.983	49165	0.328
Bi	209		ug/L		978	0.006
U	238	1.170	ug/L	2.274	12674	0.084

Sample ID: 1202015681

Report Date/Time: Saturday, January 30, 2010 14:41:13

Calibration

Analyte	Mass Curve 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	0.9998
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
V	51Linear Thru Zero	0.9999
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	0.9998
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	
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	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	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		107.8			
|	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		107.8			
|	As	75					
|	Se	77					
|	Se	82					
|	Kr	83					
[	Sr	88					
|	Y	89					
|	Ag	107					
|	Cd	111					
|	Cd	114					
>	In	115		106.0			
|	Sn	120					
|	Sb	121					
|	Sb	123					
[	Ba	135					
|	Ba	137					
|	Ho	165					
>	Lu	175		101.1			
|	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: 244601002

Sample Date/Time: Saturday, January 30, 2010 14:44:37

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 941732|2|rmj

Method File: c:\elandata\Method\6020 nolrs thtimozr.mth

Dataset File: c:\elandata\dataset\100129\244601002.207

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	39.032	ug/L	3.311	27121	0.040
Be	9	3.010	ug/L	2.511	827	0.001
B	11	12.245	ug/L	4.020	3732	0.004
Na	23	1345.755	ug/L	1.877	2617899	3.825
Mg	24	10723.836	ug/L	6.235	14229623	20.879
Al	27	56487.770	ug/L	5.245	112364510	164.913
P	31	211.292	ug/L	2.720	44275	0.050
K	39	9240.793	ug/L	6.790	25072535	36.045
Ca	43	11298.160	ug/L	0.631	76988	0.111
> Sc	45		ug/L		681184	681184.003
V	51	82.177	ug/L	2.196	357012	0.491
Cr	52	35.479	ug/L	0.371	132126	0.185
Cr	53		ug/L		75648	-0.245
Mn	55	954.257	ug/L	1.193	4883283	7.167
Fe	57	31474.727	ug/L	0.538	3275382	4.797
Co	59	30.803	ug/L	1.202	125201	0.184
Ni	60	33.404	ug/L	0.492	29116	0.043
Cu	63		ug/L		50455	0.074
Cu	65	25.702	ug/L	1.257	25278	0.037
Zn	66	111.373	ug/L	1.012	58569	0.308
Zn	67		ug/L		18328	0.011
Zn	68		ug/L		51501	0.266
> Ge	74		ug/L		188902	188902.135
As	75	11.487	ug/L	2.903	7719	0.041
Se	77		ug/L		2481	-0.053
Se	82	-0.768	ug/L	25.820	-67	-0.000
Kr	83		ug/L		186	0.001
Sr	88	124.539	ug/L	1.227	874918	7.417
Y	89		ug/L		261741	2.219
Ag	107	0.288	ug/L	5.099	992	0.008
Cd	111	0.903	ug/L	13.128	737	0.006
Cd	114		ug/L		365	0.003
> In	115		ug/L		117954	117953.925
Sn	120	0.355	ug/L	2.539	1487	0.010
Sb	121	0.035	ug/L	4.092	583	0.001
Sb	123		ug/L		473	0.001
Ba	135		ug/L		516255	3.103
Ba	137	659.173	ug/L	1.551	891845	5.360
Ho	165		ug/L		15690	0.094
> Lu	175		ug/L		166382	166382.323
Tl	205	0.893	ug/L	2.558	6613	0.035
Pb	208	40.518	ug/L	0.901	454936	2.732
Bi	209		ug/L		8104	0.048
U	238	3.065	ug/L	0.979	36781	0.220

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	0.9998
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
V	51Linear Thru Zero	0.9999
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	0.9998
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	
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	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution %	Duplicate Rel. % Difference
|	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
>	Sc	45		125.3			
|	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		113.8			
|	As	75					
|	Se	77					
|	Se	82					
|	Kr	83					
|	Sr	88					
|	Y	89					
|	Ag	107					
|	Cd	111					
|	Cd	114					
>	In	115		114.9			
|	Sn	120					
|	Sb	121					
|	Sb	123					
|	Ba	135					
|	Ba	137					
|	Ho	165					
>	Lu	175		112.9			
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for sam	Al	45	27Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: 244601003

Sample Date/Time: Saturday, January 30, 2010 14:50:33

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 941732[2][rmj]

Method File: c:\elandata\Method\6020 noirs thtimozr.mth

Dataset File: c:\elandata\dataset\100129\244601003.208

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	48.908	ug/L	2.922	35159	0.050
Be	9	3.874	ug/L	4.717	1098	0.002
B	11	17.585	ug/L	2.237	5235	0.006
Na	23	3312.695	ug/L	2.149	6651877	9.414
Mg	24	13362.619	ug/L	12.311	18332934	26.016
Al	27	80883.312	ug/L	2.247	166495165	236.134
P	31	304.239	ug/L	2.042	61353	0.072
K	39	10129.036	ug/L	5.765	28384002	39.510
Ca	43	16878.095	ug/L	0.346	118416	0.166
> Sc	45		ug/L		705089	705089.017
V	51	102.901	ug/L	1.395	456798	0.615
Cr	52	45.109	ug/L	0.955	172129	0.235
Cr	53		ug/L		77387	-0.247
Mn	55	421.558	ug/L	1.384	2233780	3.166
Fe	57	35506.850	ug/L	1.121	3823368	5.412
Co	59	21.685	ug/L	1.046	91278	0.129
Ni	60	36.385	ug/L	1.705	32814	0.046
Cu	63		ug/L		53935	0.076
Cu	65	26.286	ug/L	1.708	26750	0.038
Zn	66	132.994	ug/L	0.852	69244	0.368
Zn	67		ug/L		19784	0.020
Zn	68		ug/L		59636	0.312
> Ge	74		ug/L		187181	187180.514
As	75	13.703	ug/L	2.443	9138	0.049
Se	77		ug/L		2499	-0.053
Se	82	-1.473	ug/L	16.925	-109	-0.000
Kr	83		ug/L		297	0.001
Sr	88	161.135	ug/L	0.321	1135634	9.596
Y	89		ug/L		626448	5.294
Ag	107	0.404	ug/L	2.822	1370	0.011
Cd	111	1.693	ug/L	7.293	1364	0.011
Cd	114		ug/L		275	0.002
> In	115		ug/L		118326	118326.110
Sn	120	0.386	ug/L	0.912	1591	0.011
Sb	121	0.059	ug/L	19.819	656	0.001
Sb	123		ug/L		540	0.001
Ba	135		ug/L		537968	3.091
Ba	137	648.032	ug/L	0.453	917087	5.270
Ho	165		ug/L		42064	0.242
> Lu	175		ug/L		174022	174021.911
Tl	205	0.733	ug/L	1.850	5822	0.029
Pb	208	37.962	ug/L	0.224	445846	2.560
Bi	209		ug/L		13025	0.075
U	238	3.803	ug/L	0.216	47692	0.273

Sample ID: 244601003

Report Date/Time: Saturday, January 30, 2010 14:53:04

Calibration

Analyte	Mass Curve 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	0.9998
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
V	51Linear Thru Zero	0.9999
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	0.9998
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	
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	
U	238Linear 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		129.7			
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		112.7			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Ag	107					
Cd	111					
Cd	114					
> In	115		115.3			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		118.1			
Tl	205					
Pb	208					
Bi	209					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Al	27	Sample is out of limits (over linear range)
Sc 45 Int Std for sam	Sc	45	
	V	51	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: 244601004

Sample Date/Time: Saturday, January 30, 2010 14:56:28

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 941732|2|rmj

Method File: c:\elandata\Method\6020 noirs thtimozr.mth

Dataset File: c:\elandata\dataset\100129\244601004.209

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	42.807	ug/L	1.925	31041	0.044
Be	9	2.436	ug/L	3.512	702	0.001
B	11	9.880	ug/L	6.619	3283	0.004
Na	23	648.532	ug/L	4.998	1323699	1.843
Mg	24	7247.848	ug/L	0.917	10039167	14.111
Al	27	47285.073	ug/L	10.829	98161131	138.046
P	31	209.141	ug/L	3.190	45852	0.050
K	39	6075.335	ug/L	5.238	17395057	23.698
Ca	43	4761.688	ug/L	1.299	34619	0.047
> Sc	45		ug/L		711095	711095.139
V	51	40.892	ug/L	2.304	197232	0.244
Cr	52	26.154	ug/L	1.113	103376	0.136
Cr	53		ug/L		68129	-0.261
Mn	55	559.518	ug/L	1.336	2989839	4.202
Fe	57	21395.740	ug/L	1.682	2326939	3.261
Co	59	23.135	ug/L	1.297	98205	0.138
Ni	60	24.011	ug/L	0.584	21880	0.031
Cu	63		ug/L		42598	0.060
Cu	65	20.662	ug/L	0.989	21264	0.030
Zn	66	112.087	ug/L	0.248	59705	0.310
Zn	67		ug/L		16135	-0.002
Zn	68		ug/L		46792	0.238
> Ge	74		ug/L		191326	191325.919
As	75	7.849	ug/L	1.611	5319	0.028
Se	77		ug/L		2123	-0.055
Se	82	-0.544	ug/L	93.192	-54	-0.000
Kr	83		ug/L		209	0.001
Sr	88	54.726	ug/L	0.836	400792	3.259
Y	89		ug/L		553162	4.500
Ag	107	0.533	ug/L	5.265	1857	0.015
Cd	111	1.877	ug/L	7.874	1568	0.013
Cd	114		ug/L		236	0.002
> In	115		ug/L		122919	122918.509
Sn	120	0.536	ug/L	4.880	2157	0.015
Sb	121	0.061	ug/L	10.980	685	0.001
Sb	123		ug/L		535	0.001
Ba	135		ug/L		210742	1.220
Ba	137	261.224	ug/L	0.803	367051	2.124
Ho	165		ug/L		31877	0.184
> Lu	175		ug/L		172774	172773.554
Tl	205	0.572	ug/L	1.294	4692	0.022
Pb	208	104.324	ug/L	0.630	1215743	7.034
Bi	209		ug/L		6421	0.037
U	238	2.130	ug/L	0.774	26598	0.153

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	0.9998
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
V	51Linear Thru Zero	0.9999
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	0.9998
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	
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	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
|	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
>	Sc	45		130.8			
|	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		115.2			
|	As	75					
|	Se	77					
|	Se	82					
|	Kr	83					
|	Sr	88					
|	Y	89					
|	Ag	107					
|	Cd	111					
|	Cd	114					
>	In	115		119.8			
|	Sn	120					
|	Sb	121					
|	Sb	123					
|	Ba	135					
|	Ba	137					
|	Ho	165					
>	Lu	175		117.3			
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for sam	Sc	45	

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Saturday, January 30, 2010 15:02:22

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 noirs thtimozr.mth

Dataset File: c:\elandata\dataset\100129\QC Std 6.210

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	43.825	ug/L	1.957	28063	0.045
Be	9	43.752	ug/L	4.216	10904	0.017
B	11	85.590	ug/L	1.940	20231	0.031
Na	23	5079.918	ug/L	1.469	9077682	14.437
Mg	24	5332.471	ug/L	3.454	6525957	10.382
Al	27	5518.386	ug/L	2.397	10119908	16.111
P	31	4938.272	ug/L	1.118	744566	1.171
K	39	4861.720	ug/L	0.632	12390898	18.964
Ca	43	5186.890	ug/L	0.540	33204	0.051
> Sc	45		ug/L		628049	628048.932
V	51	46.203	ug/L	2.781	194102	0.276
Cr	52	48.469	ug/L	0.976	164318	0.253
Cr	53		ug/L		111010	-0.180
Mn	55	49.561	ug/L	0.432	235271	0.372
Fe	57	4757.337	ug/L	0.554	462502	0.725
Co	59	46.318	ug/L	0.582	173503	0.276
Ni	60	47.375	ug/L	1.701	38028	0.060
Cu	63		ug/L		85594	0.136
Cu	65	46.810	ug/L	0.447	42260	0.067
Zn	66	54.412	ug/L	1.399	28104	0.151
Zn	67		ug/L		13127	-0.015
Zn	68		ug/L		21012	0.107
> Ge	74		ug/L		184439	184438.837
As	75	47.821	ug/L	0.860	31597	0.172
Se	77		ug/L		6295	-0.032
Se	82	49.876	ug/L	1.100	2973	0.016
Kr	83		ug/L		71	-0.000
Sr	88	52.881	ug/L	1.451	348249	3.149
Y	89		ug/L		131	0.001
Ag	107	49.823	ug/L	0.766	150830	1.364
Cd	111	50.554	ug/L	1.342	37290	0.337
Cd	114		ug/L		86290	0.780
> In	115		ug/L		110530	110529.593
Sn	120	48.923	ug/L	1.950	148209	1.338
Sb	121	47.796	ug/L	6.096	127047	1.145
Sb	123		ug/L		98181	0.885
Ba	135		ug/L		35296	0.238
Ba	137	51.198	ug/L	0.595	61788	0.416
Ho	165		ug/L		26	0.000
> Lu	175		ug/L		148334	148333.606
Tl	205	45.820	ug/L	0.877	266974	1.795
Pb	208	48.138	ug/L	1.245	481800	3.246
Bi	209		ug/L		131	0.001
U	238	49.090	ug/L	0.556	522917	3.524

Sample ID: QC Std 6

Report Date/Time: Saturday, January 30, 2010 15:04:52

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	0.9998
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
V	51Linear Thru Zero	0.9999
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	0.9998
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	
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	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Li	7	87.649				
Be	9	87.503				
B	11	85.590				
Na	23	101.598				
Mg	24	106.649				
Al	27	109.275				
P	31	98.765				
K	39	97.234				
Ca	43	103.738				
> Sc	45		115.5			
V	51	92.406				
Cr	52	96.937				
Cr	53					
Mn	55	99.122				
Fe	57	95.147				
Co	59	92.636				
Ni	60	94.750				
Cu	63					
Cu	65	93.620				
Zn	66	108.825				
Zn	67					
Zn	68					
> Ge	74		111.1			
As	75	95.641				
Se	77					
Se	82	99.752				
Kr	83					
Sr	88	105.762				
Y	89					
Ag	107	99.646				
Cd	111	101.108				
Cd	114					
> In	115		107.7			
Sn	120	97.846				
Sb	121	95.593				
Sb	123					
Ba	135					
Ba	137	102.396				
Ho	165					
> Lu	175		100.7			
Tl	205	91.639				
Pb	208	96.275				
Bi	209					
U	238	98.179				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Li	7	7CCV is out of limits (+/- 10%)
QC Std 6	Be	9	9CCV is out of limits (+/- 10%)
QC Std 6	B	11	11CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Saturday, January 30, 2010 15:08:16

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 nohrs thtimozr.mth

Dataset File: c:\elandata\dataset\100129\QC Std 7.211

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.063	ug/L	10.632	88	0.000
Be	9	-0.022	ug/L	32.526	9	-0.000
B	11	0.560	ug/L	68.879	869	0.000
Na	23	-0.377	ug/L	553.386	12339	-0.001
Mg	24	0.860	ug/L	144.831	6001	0.002
Al	27	2.424	ug/L	74.919	7669	0.007
P	31	-19.417	ug/L	2.995	7339	-0.005
K	39	-33.792	ug/L	23.194	451022	-0.132
Ca	43	-59.943	ug/L	5.719	874	-0.001
> Sc	45		ug/L		712713	712713.135
V	51	-1.866	ug/L	50.335	15580	-0.011
Cr	52	-0.141	ug/L	30.014	5962	-0.001
Cr	53		ug/L		132699	-0.170
Mn	55	-0.076	ug/L	8.849	1294	-0.001
Fe	57	-24.770	ug/L	3.303	5408	-0.004
Co	59	0.000	ug/L	520.670	164	0.000
Ni	60	-0.020	ug/L	21.156	95	-0.000
Cu	63		ug/L		132	-0.000
Cu	65	-0.143	ug/L	2.677	112	-0.000
Zn	66	-0.075	ug/L	47.600	305	-0.000
Zn	67		ug/L		13932	-0.016
Zn	68		ug/L		986	-0.002
> Ge	74		ug/L		199210	199210.331
As	75	0.324	ug/L	57.821	157	0.001
Se	77		ug/L		6371	-0.034
Se	82	0.234	ug/L	46.394	-6	0.000
Kr	83		ug/L		75	-0.000
Sr	88	-0.002	ug/L	75.349	191	-0.000
Y	89		ug/L		52	0.000
Ag	107	0.006	ug/L	37.166	82	0.000
Cd	111	0.017	ug/L	104.336	43	0.000
Cd	114		ug/L		45	0.000
> In	115		ug/L		121431	121430.585
Sn	120	0.225	ug/L	26.199	1100	0.006
Sb	121	0.748	ug/L	41.178	2678	0.018
Sb	123		ug/L		2063	0.014
Ba	135		ug/L		34	0.000
Ba	137	0.014	ug/L	35.667	52	0.000
Ho	165		ug/L		25	0.000
> Lu	175		ug/L		159811	159810.911
Tl	205	0.248	ug/L	27.707	2318	0.010
Pb	208	0.005	ug/L	25.768	425	0.000
Bi	209		ug/L		29	-0.000
U	238	0.042	ug/L	46.670	647	0.003

Sample ID: QC Std 7

Report Date/Time: Saturday, January 30, 2010 15:10:48

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	0.9998
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
V	51Linear Thru Zero	0.9999
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	0.9998
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	
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	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Duplicate Rel. % Difference
[	Li	7				
|	Be	9				
|	B	11				
|	Na	23				
|	Mg	24				
|	Al	27				
|	P	31				
|	K	39				
|	Ca	43				
>	Sc	45	131.1			
|	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	120.0			
|	As	75				
|	Se	77				
|	Se	82				
|	Kr	83				
|	Sr	88				
|	Y	89				
|	Ag	107				
|	Cd	111				
|	Cd	114				
>	In	115	118.3			
|	Sn	120				
|	Sb	121				
|	Sb	123				
|	Ba	135				
|	Ba	137				
|	Ho	165				
>	Lu	175	108.5			
|	Tl	205				
|	Pb	208				
|	Bi	209				
|	U	238				

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message
 Sc 45 Int Std for QC Sc 45

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: 244601005

Sample Date/Time: Saturday, January 30, 2010 15:14:12

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 941732|2|rmj

Method File: c:\elandata\Method\6020 noirs tht\mozr.mth

Dataset File: c:\elandata\dataset\100129\244601005.212

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Li	7	60.046 ug/L	1.676	42892	0.061
|	Be	9	4.182 ug/L	4.439	1177	0.002
|	B	11	13.764 ug/L	2.471	4227	0.005
|	Na	23	2286.529 ug/L	5.174	4563469	6.498
|	Mg	24	13689.291 ug/L	1.533	18679026	26.652
|	Al	27	92902.735 ug/L	2.981	190009648	271.225
|	P	31	328.258 ug/L	1.941	64970	0.078
|	K	39	8630.700 ug/L	4.691	24126402	33.665
|	Ca	43	20105.790 ug/L	0.513	139932	0.198
>	Sc	45	ug/L		700645	700645.266
|	V	51	80.917 ug/L	2.089	361859	0.484
|	Cr	52	41.165 ug/L	1.451	156639	0.214
|	Cr	53	ug/L		82119	-0.239
|	Mn	55	719.293 ug/L	0.965	3786299	5.402
|	Fe	57	35305.907 ug/L	2.094	3777372	5.381
|	Co	59	18.808 ug/L	0.642	78692	0.112
|	Ni	60	32.938 ug/L	1.396	29530	0.042
|	Cu	63	ug/L		52521	0.075
|	Cu	65	26.017 ug/L	1.744	26313	0.037
|	Zn	66	125.311 ug/L	1.623	65744	0.347
|	Zn	67	ug/L		22465	0.033
|	Zn	68	ug/L		64354	0.335
>	Ge	74	ug/L		188579	188579.496
|	As	75	12.005 ug/L	1.090	8057	0.043
|	Se	77	ug/L		2790	-0.052
|	Se	82	-1.738 ug/L	11.406	-126	-0.001
|	Kr	83	ug/L		274	0.001
|	Sr	88	175.547 ug/L	0.577	1237743	10.454
|	Y	89	ug/L		414120	3.498
|	Ag	107	0.417 ug/L	6.215	1414	0.011
|	Cd	111	1.301 ug/L	7.903	1055	0.009
|	Cd	114	ug/L		309	0.002
>	In	115	ug/L		118380	118380.068
|	Sn	120	0.553 ug/L	1.124	2132	0.015
|	Sb	121	0.080 ug/L	9.213	714	0.002
|	Sb	123	ug/L		549	0.001
|	Ba	135	ug/L		943114	5.723
|	Ba	137	1188.292 ug/L	2.456	1592322	9.663
|	Ho	165	ug/L		23034	0.140
>	Lu	175	ug/L		164826	164825.566
|	Tl	205	0.847 ug/L	1.540	6252	0.033
|	Pb	208	43.735 ug/L	2.459	486318	2.949
|	Bi	209	ug/L		17613	0.107
|	U	238	2.949 ug/L	2.912	35064	0.212

Sample ID: 244601005

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	0.9998
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
V	51Linear Thru Zero	0.9999
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	0.9998
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	
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	
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		128.9			
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		113.6			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Ag	107					
Cd	111					
Cd	114					
> In	115		115.4			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		111.9			
Tl	205					
Pb	208					
Bi	209					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Al		27	Sample is out of limits (over linear range)
Sc 45 Int Std for sam	Sc	45	

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: 244601006

Sample Date/Time: Saturday, January 30, 2010 15:20:07

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 941732|2|rmj

Method File: c:\elandata\Method\6020 noirs thtimozr.mth

Dataset File: c:\elandata\dataset\100129\244601006.213

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Li	7	77.980 ug/L	3.129	57675	0.079
|	Be	9	4.630 ug/L	0.455	1347	0.002
|	B	11	14.823 ug/L	2.946	4658	0.005
|	Na	23	947.084 ug/L	1.384	1966634	2.692
|	Mg	24	11505.150 ug/L	6.762	16258870	22.400
|	Al	27	109934.882 ug/L	5.405	232935416	320.949
|	P	31	355.757 ug/L	1.472	72018	0.084
|	K	39	9329.529 ug/L	3.404	26964802	36.391
|	Ca	43	8921.654 ug/L	0.872	65042	0.088
> |	Sc	45	ug/L		725696	725696.138
|	V	51	82.401 ug/L	0.733	381297	0.492
|	Cr	52	52.548 ug/L	0.290	205304	0.274
|	Cr	53	ug/L		81805	-0.244
|	Mn	55	856.712 ug/L	0.806	4670955	6.434
|	Fe	57	39039.574 ug/L	0.524	4326175	5.950
|	Co	59	19.454 ug/L	0.104	84304	0.116
|	Ni	60	39.829 ug/L	0.342	36964	0.051
|	Cu	63	ug/L		56967	0.078
|	Cu	65	27.968 ug/L	0.499	29280	0.040
[	Zn	66	124.697 ug/L	0.424	66343	0.345
|	Zn	67	ug/L		19683	0.017
|	Zn	68	ug/L		57202	0.293
> |	Ge	74	ug/L		191207	191206.661
|	As	75	10.011 ug/L	2.169	6800	0.036
|	Se	77	ug/L		2185	-0.055
|	Se	82	-3.779 ug/L	5.088	-255	-0.001
[	Kr	83	ug/L		381	0.002
[	Sr	88	124.668 ug/L	0.280	880690	7.424
|	Y	89	ug/L		426900	3.599
|	Ag	107	0.601 ug/L	2.488	2013	0.016
|	Cd	111	1.818 ug/L	3.224	1466	0.012
|	Cd	114	ug/L		536	0.004
> |	In	115	ug/L		118596	118596.393
|	Sn	120	0.617 ug/L	2.287	2346	0.017
|	Sb	121	0.086 ug/L	19.812	731	0.002
[	Sb	123	ug/L		602	0.002
|	Ba	135	ug/L		592969	3.558
|	Ba	137	753.499 ug/L	0.615	1021215	6.127
|	Ho	165	ug/L		23856	0.143
> |	Lu	175	ug/L		166659	166659.159
|	Tl	205	0.857 ug/L	4.203	6387	0.034
|	Pb	208	55.357 ug/L	0.176	622468	3.733
|	Bi	209	ug/L		8535	0.051
[	U	238	6.113 ug/L	0.758	73320	0.439

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	0.9998
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
V	51Linear Thru Zero	0.9999
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	0.9998
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	
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	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	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	133.5			
|	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	115.1			
|	As	75				
|	Se	77				
|	Se	82				
|	Kr	83				
|	Sr	88				
|	Y	89				
|	Ag	107				
|	Cd	111				
|	Cd	114				
> |	In	115	115.6			
|	Sn	120				
|	Sb	121				
|	Sb	123				
|	Ba	135				
|	Ba	137				
|	Ho	165				
> |	Lu	175	113.1			
|	Tl	205				
|	Pb	208				
|	Bi	209				
|	U	238				

QC Out Of Limits

Measurement Type	Analyte	Mass Out of Limits Message
Sc 45 Int Std for sam	Al	27 Sample is out of limits (over linear range)
		45

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: 244601007

Sample Date/Time: Saturday, January 30, 2010 15:26:03

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 941732|2|rmj

Method File: c:\elandata\Method\6020 nolrs thtimozr.mth

Dataset File: c:\elandata\dataset\100129\244601007.214

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	46.719	ug/L	2.663	34623	0.048
Be	9	3.644	ug/L	4.618	1066	0.001
B	11	13.078	ug/L	1.867	4202	0.005
Na	23	431.085	ug/L	9.316	903875	1.225
Mg	24	10168.609	ug/L	3.664	14391465	19.798
Al	27	73910.868	ug/L	7.354	156868430	215.779
P	31	274.389	ug/L	1.096	58100	0.065
K	39	8593.527	ug/L	3.123	24914846	33.520
Ca	43	7581.022	ug/L	1.221	55544	0.075
> Sc	45		ug/L		726737	726736.622
V	51	66.453	ug/L	1.043	312568	0.397
Cr	52	35.878	ug/L	0.181	142472	0.187
Cr	53		ug/L		72004	-0.257
Mn	55	680.599	ug/L	0.385	3716492	5.112
Fe	57	29906.765	ug/L	0.742	3320710	4.558
Co	59	16.873	ug/L	1.363	73240	0.101
Ni	60	29.732	ug/L	0.473	27662	0.038
Cu	63		ug/L		50063	0.069
Cu	65	23.771	ug/L	0.557	24961	0.034
Zn	66	113.685	ug/L	0.988	61293	0.315
Zn	67		ug/L		17423	0.004
Zn	68		ug/L		51113	0.257
> Ge	74		ug/L		193677	193676.699
As	75	9.227	ug/L	3.314	6343	0.033
Se	77		ug/L		2126	-0.055
Se	82	-1.804	ug/L	6.325	-134	-0.001
Kr	83		ug/L		256	0.001
Sr	88	92.244	ug/L	0.664	670497	5.493
Y	89		ug/L		378760	3.104
Ag	107	0.547	ug/L	4.620	1890	0.015
Cd	111	1.708	ug/L	3.124	1419	0.011
Cd	114		ug/L		536	0.004
> In	115		ug/L		122023	122023.132
Sn	120	0.371	ug/L	3.707	1592	0.010
Sb	121	0.085	ug/L	12.755	751	0.002
Sb	123		ug/L		592	0.001
Ba	135		ug/L		390212	2.306
Ba	137	489.252	ug/L	0.732	673139	3.979
Ho	165		ug/L		21746	0.128
> Lu	175		ug/L		169188	169187.683
Tl	205	0.667	ug/L	0.800	5224	0.026
Pb	208	48.689	ug/L	0.636	555828	3.283
Bi	209		ug/L		12067	0.071
U	238	13.306	ug/L	1.440	161788	0.955

Sample ID: 244601007

Report Date/Time: Saturday, January 30, 2010 15:28:34

Calibration

Analyte	Mass Curve 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	0.9998
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
V	51Linear Thru Zero	0.9999
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	0.9998
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	
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	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	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		133.7			
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		116.6			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Ag	107					
Cd	111					
Cd	114					
> In	115		118.9			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		114.9			
Tl	205					
Pb	208					
Bi	209					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for sam	Sc	45	27 Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: 244601008

Sample Date/Time: Saturday, January 30, 2010 15:31:59

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 941732[2]rmj

Method File: c:\elandata\Method\6020 noirs thtimozr.mth

Dataset File: c:\elandata\dataset\100129\244601008.215

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	37.697	ug/L	3.967	27627	0.038
Be	9	2.094	ug/L	4.296	612	0.001
B	11	9.069	ug/L	1.827	3105	0.003
Na	23	462.973	ug/L	5.627	958499	1.316
Mg	24	6080.665	ug/L	7.942	8512875	11.839
Al	27	45515.625	ug/L	2.575	95478270	132.880
P	31	296.199	ug/L	2.560	61157	0.070
K	39	5337.354	ug/L	7.244	15507718	20.819
Ca	43	4830.245	ug/L	0.310	35465	0.048
> Sc	45		ug/L		718516	718515.869
V	51	41.470	ug/L	3.359	201756	0.248
Cr	52	24.563	ug/L	0.588	98500	0.128
Cr	53		ug/L		66440	-0.264
Mn	55	515.511	ug/L	1.142	2783486	3.872
Fe	57	19887.441	ug/L	1.508	2185957	3.031
Co	59	15.080	ug/L	0.282	64737	0.090
Ni	60	20.252	ug/L	0.080	18665	0.026
Cu	63		ug/L		37246	0.052
Cu	65	17.881	ug/L	0.875	18628	0.026
Zn	66	101.431	ug/L	0.949	54516	0.281
Zn	67		ug/L		15310	-0.006
Zn	68		ug/L		43216	0.217
> Ge	74		ug/L		192938	192937.719
As	75	7.283	ug/L	1.398	4972	0.026
Se	77		ug/L		2067	-0.056
Se	82	-0.517	ug/L	89.749	-53	-0.000
Kr	83		ug/L		183	0.000
Sr	88	51.654	ug/L	0.334	369875	3.076
Y	89		ug/L		390464	3.249
Ag	107	0.419	ug/L	4.796	1441	0.011
Cd	111	1.540	ug/L	3.021	1263	0.010
Cd	114		ug/L		495	0.004
> In	115		ug/L		120178	120177.774
Sn	120	0.656	ug/L	2.411	2504	0.018
Sb	121	0.116	ug/L	6.674	828	0.003
Sb	123		ug/L		631	0.002
Ba	135		ug/L		209522	1.243
Ba	137	266.492	ug/L	0.444	365333	2.167
Ho	165		ug/L		22769	0.135
> Lu	175		ug/L		168566	168566.024
Tl	205	0.400	ug/L	4.172	3444	0.016
Pb	208	38.337	ug/L	0.458	436138	2.585
Bi	209		ug/L		10320	0.061
U	238	9.961	ug/L	0.988	120724	0.715

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	0.9998
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
V	51Linear Thru Zero	0.9999
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	0.9998
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	
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	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution %	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		132.2			
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		116.2			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Ag	107					
Cd	111					
Cd	114					
> In	115		117.1			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		114.4			
Tl	205					
Pb	208					
Bi	209					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass Out of Limits	Message
Sc 45 Int Std for sam	Sc	45	

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: 244601009

Sample Date/Time: Saturday, January 30, 2010 15:37:53

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 941732[2]rmj

Method File: c:\elandata\Method\6020 noirs thtimozr.mth

Dataset File: c:\elandata\dataset\100129\244601009.216

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	31.413	ug/L	3.000	23233	0.032
Be	9	2.209	ug/L	4.103	650	0.001
B	11	9.307	ug/L	0.138	3195	0.003
Na	23	456.318	ug/L	6.251	953543	1.297
Mg	24	5527.316	ug/L	9.573	7805751	10.761
Al	27	42653.754	ug/L	2.782	90270364	124.525
P	31	287.633	ug/L	2.662	60230	0.068
K	39	5192.002	ug/L	3.697	15234226	20.252
Ca	43	4734.143	ug/L	1.042	35096	0.047
> Sc	45		ug/L		724915	724914.989
V	51	40.217	ug/L	4.086	198143	0.240
Cr	52	25.099	ug/L	1.001	101400	0.131
Cr	53		ug/L		66119	-0.265
Mn	55	505.479	ug/L	0.496	2753714	3.796
Fe	57	18893.608	ug/L	0.490	2095697	2.880
Co	59	13.404	ug/L	0.840	58072	0.080
Ni	60	20.016	ug/L	0.427	18613	0.026
Cu	63		ug/L		35890	0.049
Cu	65	17.021	ug/L	1.422	17903	0.024
Zn	66	87.630	ug/L	0.208	48133	0.243
Zn	67		ug/L		14313	-0.013
Zn	68		ug/L		38358	0.188
> Ge	74		ug/L		196987	196987.141
As	75	6.439	ug/L	4.757	4480	0.023
Se	77		ug/L		2108	-0.056
Se	82	-0.411	ug/L	31.494	-47	-0.000
Kr	83		ug/L		182	0.000
Sr	88	50.805	ug/L	1.005	373518	3.026
Y	89		ug/L		409408	3.318
Ag	107	0.331	ug/L	2.264	1183	0.009
Cd	111	1.418	ug/L	11.229	1197	0.009
Cd	114		ug/L		503	0.004
> In	115		ug/L		123393	123392.836
Sn	120	0.566	ug/L	2.385	2268	0.015
Sb	121	0.059	ug/L	6.771	681	0.001
Sb	123		ug/L		534	0.001
Ba	135		ug/L		221645	1.282
Ba	137	275.059	ug/L	1.262	386634	2.237
Ho	165		ug/L		23592	0.136
> Lu	175		ug/L		172848	172847.815
Tl	205	0.375	ug/L	2.264	3362	0.015
Pb	208	33.370	ug/L	1.254	389298	2.250
Bi	209		ug/L		9127	0.053
U	238	12.341	ug/L	0.432	153327	0.886

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	0.9998
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
V	51Linear Thru Zero	0.9999
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	0.9998
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	
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	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	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		133.3			
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		118.6			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Ag	107					
Cd	111					
Cd	114					
> In	115		120.2			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		117.3			
Tl	205					
Pb	208					
Bi	209					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for sam	Sc	45	
	In	115	

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: 244601011

Sample Date/Time: Saturday, January 30, 2010 15:49:44

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 941732|2|rmj

Method File: c:\elandata\Method\6020 nolrs thtimozr.mth

Dataset File: c:\elandata\dataset\100129\244601011.218

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	27.385	ug/L	2.663	20244	0.028
Be	9	2.048	ug/L	5.444	603	0.001
B	11	7.014	ug/L	4.165	2587	0.003
Na	23	448.727	ug/L	6.879	937202	1.275
Mg	24	4501.880	ug/L	4.934	6351666	8.765
Al	27	34487.392	ug/L	10.981	72910679	100.684
P	31	313.655	ug/L	1.509	64646	0.074
K	39	4061.164	ug/L	1.493	12026242	15.841
Ca	43	4119.124	ug/L	1.786	30680	0.041
> Sc	45		ug/L		724248	724248.096
V	51	37.001	ug/L	0.874	184033	0.221
Cr	52	22.315	ug/L	0.792	90801	0.116
Cr	53		ug/L		68331	-0.262
Mn	55	798.999	ug/L	0.636	4347653	6.001
Fe	57	17674.032	ug/L	1.272	1959049	2.694
Co	59	13.219	ug/L	0.483	57222	0.079
Ni	60	20.047	ug/L	1.046	18624	0.026
Cu	63		ug/L		33426	0.046
Cu	65	15.768	ug/L	0.272	16589	0.023
Zn	66	91.804	ug/L	0.325	50525	0.254
Zn	67		ug/L		14648	-0.012
Zn	68		ug/L		39913	0.196
> Ge	74		ug/L		197440	197440.375
As	75	8.344	ug/L	1.184	5840	0.030
Se	77		ug/L		2228	-0.055
Se	82	0.103	ug/L	138.147	-14	0.000
Kr	83		ug/L		156	0.000
Sr	88	45.740	ug/L	1.545	334423	2.724
Y	89		ug/L		375106	3.057
Ag	107	0.410	ug/L	3.045	1439	0.011
Cd	111	1.611	ug/L	4.952	1347	0.011
Cd	114		ug/L		617	0.005
> In	115		ug/L		122711	122710.980
Sn	120	0.746	ug/L	3.940	2860	0.020
Sb	121	0.040	ug/L	27.815	623	0.001
Sb	123		ug/L		497	0.001
Ba	135		ug/L		210807	1.235
Ba	137	264.710	ug/L	0.190	367475	2.153
Ho	165		ug/L		21244	0.124
> Lu	175		ug/L		170694	170694.436
Tl	205	0.366	ug/L	5.357	3257	0.014
Pb	208	32.346	ug/L	0.278	372683	2.181
Bi	209		ug/L		8016	0.047
U	238	9.123	ug/L	0.582	111974	0.655

Sample ID: 244601011

Report Date/Time: Saturday, January 30, 2010 15:52:16

Calibration

Analyte	Mass Curve 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	0.9998
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
V	51Linear Thru Zero	0.9999
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	0.9998
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	
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	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		133.2			
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		118.9			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Ag	107					
Cd	111					
Cd	114					
> In	115		119.6			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		115.9			
Tl	205					
Pb	208					
Bi	209					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass Out of Limits Message
Sc 45 Int Std for sam	Sc	45

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: 244601012

Sample Date/Time: Saturday, January 30, 2010 15:55:41

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 941732[2]rmj

Method File: c:\elandata\Method\6020 noirs thtimozr.mth

Dataset File: c:\elandata\dataset\100129\244601012.219

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	29.464	ug/L	4.361	21710	0.030
Be	9	2.357	ug/L	11.995	690	0.001
B	11	8.875	ug/L	0.157	3069	0.003
Na	23	490.424	ug/L	7.627	1019578	1.394
Mg	24	5327.855	ug/L	8.566	7494517	10.373
Al	27	38705.786	ug/L	4.800	81590522	112.999
P	31	411.167	ug/L	0.385	81147	0.097
K	39	4693.715	ug/L	2.913	13773140	18.309
Ca	43	5152.380	ug/L	0.844	37932	0.051
> Sc	45		ug/L		722112	722111.582
V	51	43.584	ug/L	2.555	211894	0.260
Cr	52	25.561	ug/L	1.117	102743	0.133
Cr	53		ug/L		65413	-0.266
Mn	55	670.714	ug/L	1.076	3639206	5.037
Fe	57	19481.163	ug/L	0.967	2152265	2.969
Co	59	15.006	ug/L	1.102	64743	0.089
Ni	60	20.621	ug/L	0.992	19098	0.026
Cu	63		ug/L		44234	0.061
Cu	65	20.847	ug/L	1.342	21784	0.030
Zn	66	95.000	ug/L	0.338	51789	0.263
Zn	67		ug/L		14828	-0.010
Zn	68		ug/L		41790	0.207
> Ge	74		ug/L		195608	195608.395
As	75	8.854	ug/L	5.243	6146	0.032
Se	77		ug/L		2030	-0.056
Se	82	-0.469	ug/L	63.635	-50	-0.000
Kr	83		ug/L		181	0.000
Sr	88	57.258	ug/L	0.389	417351	3.410
Y	89		ug/L		336812	2.753
Ag	107	0.397	ug/L	1.146	1392	0.011
Cd	111	1.594	ug/L	6.959	1329	0.011
Cd	114		ug/L		837	0.007
> In	115		ug/L		122338	122337.954
Sn	120	0.868	ug/L	2.531	3260	0.024
Sb	121	0.104	ug/L	9.732	808	0.002
Sb	123		ug/L		645	0.002
Ba	135		ug/L		240041	1.408
Ba	137	303.937	ug/L	2.275	421410	2.472
Ho	165		ug/L		19117	0.112
> Lu	175		ug/L		170501	170501.156
Tl	205	0.366	ug/L	5.733	3256	0.014
Pb	208	41.259	ug/L	0.573	474722	2.782
Bi	209		ug/L		8885	0.052
U	238	21.477	ug/L	0.222	263078	1.542

Sample ID: 244601012

Report Date/Time: Saturday, January 30, 2010 15:58:12

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	0.9998
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
V	51Linear Thru Zero	0.9999
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	0.9998
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	
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	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	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	132.8			
|	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	117.8			
|	As	75				
|	Se	77				
|	Se	82				
|	Kr	83				
|	Sr	88				
|	Y	89				
|	Ag	107				
|	Cd	111				
|	Cd	114				
>	In	115	119.2			
|	Sn	120				
|	Sb	121				
|	Sb	123				
|	Ba	135				
|	Ba	137				
|	Ho	165				
>	Lu	175	115.7			
|	Tl	205				
|	Pb	208				
|	Bi	209				
|	U	238				

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message
 Sc 45 Int Std for samSc 45

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: 244601013

Sample Date/Time: Saturday, January 30, 2010 16:01:37

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 941732|2|rmj

Method File: c:\elandata\Method\6020 nolrs thtimozr.mth

Dataset File: c:\elandata\dataset\100129\244601013.220

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	52.302	ug/L	2.506	39839	0.053
Be	9	4.142	ug/L	2.633	1243	0.002
B	11	14.670	ug/L	0.814	4754	0.005
Na	23	2571.412	ug/L	10.032	5474685	7.308
Mg	24	13465.586	ug/L	8.043	19597789	26.217
Al	27	88503.188	ug/L	9.641	193008139	258.380
P	31	332.251	ug/L	1.807	69982	0.079
K	39	8244.142	ug/L	3.153	24599468	32.158
Ca	43	18264.435	ug/L	1.113	135675	0.180
> Sc	45		ug/L		747167	747167.326
V	51	78.290	ug/L	0.066	374220	0.468
Cr	52	40.708	ug/L	0.705	165279	0.212
Cr	53		ug/L		71601	-0.261
Mn	55	695.386	ug/L	0.414	3903927	5.223
Fe	57	33076.381	ug/L	0.627	3775203	5.041
Co	59	18.531	ug/L	1.043	82686	0.110
Ni	60	32.354	ug/L	0.621	30937	0.041
Cu	63		ug/L		54095	0.072
Cu	65	25.072	ug/L	1.065	27053	0.036
Zn	66	126.564	ug/L	1.494	67797	0.350
Zn	67		ug/L		20194	0.019
Zn	68		ug/L		61597	0.313
> Ge	74		ug/L		192546	192546.226
As	75	11.428	ug/L	2.736	7826	0.041
Se	77		ug/L		2342	-0.054
Se	82	-1.320	ug/L	32.286	-103	-0.000
Kr	83		ug/L		254	0.001
Sr	88	166.736	ug/L	2.089	1200399	9.929
Y	89		ug/L		461184	3.815
Ag	107	0.363	ug/L	9.044	1263	0.010
Cd	111	1.188	ug/L	5.347	986	0.008
Cd	114		ug/L		305	0.002
> In	115		ug/L		120895	120894.705
Sn	120	0.594	ug/L	0.513	2315	0.016
Sb	121	0.038	ug/L	21.682	609	0.001
Sb	123		ug/L		536	0.001
Ba	135		ug/L		762760	4.498
Ba	137	938.661	ug/L	1.462	1294435	7.633
Ho	165		ug/L		25794	0.152
> Lu	175		ug/L		169585	169585.341
Tl	205	0.727	ug/L	1.842	5635	0.028
Pb	208	40.493	ug/L	0.913	463422	2.730
Bi	209		ug/L		18791	0.111
U	238	3.108	ug/L	0.508	38024	0.223

Sample ID: 244601013

Report Date/Time: Saturday, January 30, 2010 16:04:08

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	0.9998
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
V	51Linear Thru Zero	0.9999
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	0.9998
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	
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	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		137.4			
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		116.0			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Ag	107					
Cd	111					
Cd	114					
> In	115		117.8			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		115.1			
Tl	205					
Pb	208					
Bi	209					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for sam	Sc	45	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Saturday, January 30, 2010 16:07:31

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 nohrs tht\mozr.mth

Dataset File: c:\elandata\dataset\100129\QC Std 6.221

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	42.648	ug/L	4.539	29350	0.043
Be	9	41.690	ug/L	1.885	11168	0.017
B	11	82.993	ug/L	1.923	21103	0.030
Na	23	5329.979	ug/L	2.295	10235173	15.147
Mg	24	5295.117	ug/L	8.896	6961685	10.309
Al	27	5280.795	ug/L	4.684	10408414	15.417
P	31	4853.917	ug/L	0.462	786682	1.151
K	39	4571.279	ug/L	4.090	12551051	17.831
Ca	43	4958.548	ug/L	0.500	34165	0.049
> Sc	45		ug/L		674912	674911.791
V	51	43.787	ug/L	5.228	198887	0.262
Cr	52	46.225	ug/L	1.422	168704	0.241
Cr	53		ug/L		109549	-0.194
Mn	55	46.657	ug/L	0.957	238105	0.350
Fe	57	4500.813	ug/L	1.945	470641	0.686
Co	59	43.638	ug/L	0.456	175678	0.260
Ni	60	45.198	ug/L	1.377	38997	0.058
Cu	63		ug/L		88589	0.131
Cu	65	44.276	ug/L	0.447	42969	0.063
Zn	66	52.631	ug/L	1.366	28629	0.146
Zn	67		ug/L		13030	-0.019
Zn	68		ug/L		21934	0.106
> Ge	74		ug/L		194173	194172.663
As	75	46.581	ug/L	0.555	32400	0.167
Se	77		ug/L		6570	-0.033
Se	82	47.538	ug/L	0.061	2983	0.015
Kr	83		ug/L		79	-0.000
Sr	88	51.453	ug/L	1.812	353132	3.064
Y	89		ug/L		117	0.001
Ag	107	49.758	ug/L	1.328	156983	1.362
Cd	111	49.398	ug/L	2.508	37971	0.329
Cd	114		ug/L		87962	0.763
> In	115		ug/L		115199	115198.693
Sn	120	48.121	ug/L	0.470	151944	1.316
Sb	121	48.155	ug/L	3.588	133400	1.154
Sb	123		ug/L		103530	0.895
Ba	135		ug/L		35764	0.233
Ba	137	50.078	ug/L	2.212	62532	0.407
Ho	165		ug/L		30	0.000
> Lu	175		ug/L		153494	153493.781
Tl	205	44.030	ug/L	3.389	265459	1.725
Pb	208	46.717	ug/L	1.237	483833	3.150
Bi	209		ug/L		148	0.001
U	238	47.950	ug/L	1.449	528507	3.442

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	0.9998
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
V	51Linear Thru Zero	0.9999
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	0.9998
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	
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	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Li	7	85.295				
Be	9	83.380				
B	11	82.993				
Na	23	106.600				
Mg	24	105.902				
Al	27	104.570				
P	31	97.078				
K	39	91.426				
Ca	43	99.171				
> Sc	45		124.1			
V	51	87.574				
Cr	52	92.450				
Cr	53					
Mn	55	93.314				
Fe	57	90.016				
Co	59	87.276				
Ni	60	90.396				
Cu	63					
Cu	65	88.553				
Zn	66	105.262				
Zn	67					
Zn	68					
> Ge	74		116.9			
As	75	93.162				
Se	77					
Se	82	95.076				
Kr	83					
Sr	88	102.905				
Y	89					
Ag	107	99.516				
Cd	111	98.795				
Cd	114					
> In	115		112.3			
Sn	120	96.242				
Sb	121	96.310				
Sb	123					
Ba	135					
Ba	137	100.155				
Ho	165					
> Lu	175		104.2			
Tl	205	88.059				
Pb	208	93.434				
Bi	209					
U	238	95.899				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Li	7	7CCV is out of limits (+/- 10%)
QC Std 6	Be	9	9CCV is out of limits (+/- 10%)
QC Std 6	B	11	11CCV is out of limits (+/- 10%)
Sc 45 Int Std for QC Sc		45	
QC Std 6	V	51	51CCV is out of limits (+/- 10%)
QC Std 6	Co	59	59CCV is out of limits (+/- 10%)
QC Std 6	Cu	65	65CCV is out of limits (+/- 10%)
QC Std 6	Tl	205	205CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Saturday, January 30, 2010 16:13:26

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 nolrs thtimozr.mth

Dataset File: c:\elandata\dataset\100129\QC Std 7.222

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.099	ug/L	8.649	117	0.000
Be	9	-0.015	ug/L	138.586	11	-0.000
B	11	0.384	ug/L	93.361	844	0.000
Na	23	0.108	ug/L	872.495	13673	0.000
Mg	24	-2.287	ug/L	64.667	1667	-0.004
Al	27	3.895	ug/L	30.915	11004	0.011
P	31	-16.968	ug/L	7.022	7943	-0.004
K	39	-17.020	ug/L	196.906	509445	-0.066
Ca	43	-77.150	ug/L	12.601	771	-0.001
> Sc	45		ug/L		730231	730230.866
V	51	-1.566	ug/L	99.597	17229	-0.009
Cr	52	0.300	ug/L	54.454	7783	0.002
Cr	53		ug/L		136112	-0.170
Mn	55	-0.051	ug/L	14.750	1463	-0.000
Fe	57	-24.309	ug/L	4.130	5592	-0.004
Co	59	-0.001	ug/L	42.984	164	-0.000
Ni	60	-0.042	ug/L	12.355	77	-0.000
Cu	63		ug/L		136	-0.000
Cu	65	-0.140	ug/L	3.816	118	-0.000
Zn	66	-0.066	ug/L	52.080	314	-0.000
Zn	67		ug/L		13676	-0.018
Zn	68		ug/L		986	-0.002
> Ge	74		ug/L		201854	201853.775
As	75	0.150	ug/L	233.254	32	0.001
Se	77		ug/L		6821	-0.033
Se	82	-0.055	ug/L	143.391	-25	-0.000
Kr	83		ug/L		80	-0.000
Sr	88	-0.001	ug/L	199.286	197	-0.000
Y	89		ug/L		50	0.000
Ag	107	0.010	ug/L	64.485	94	0.000
Cd	111	0.018	ug/L	52.424	43	0.000
Cd	114		ug/L		31	-0.000
> In	115		ug/L		120833	120832.694
Sn	120	0.209	ug/L	35.146	1041	0.006
Sb	121	0.580	ug/L	39.272	2177	0.014
Sb	123		ug/L		1664	0.010
Ba	135		ug/L		33	0.000
Ba	137	0.016	ug/L	28.149	54	0.000
Ho	165		ug/L		20	0.000
> Lu	175		ug/L		159219	159218.993
Tl	205	0.279	ug/L	30.220	2497	0.011
Pb	208	0.005	ug/L	69.512	423	0.000
Bi	209		ug/L		43	0.000
U	238	0.036	ug/L	42.695	583	0.003

Sample ID: QC Std 7

Report Date/Time: Saturday, January 30, 2010 16:15:58

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	0.9998
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
V	51Linear Thru Zero	0.9999
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	0.9998
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	
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	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	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		134.3			
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		121.6			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Ag	107					
Cd	111					
Cd	114					
> In	115		117.8			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		108.1			
Tl	205					
Pb	208					
Bi	209					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for QC Sc		45	
	Ge	74	

QC Action

QC Action Line: Continue

ICPMS #6 Daily Performance Report

Sample ID: Sample

Sample Date/Time: Tuesday, February 02, 2010 20:28:38

Sample Description:

Method File: C:\elandata\Method\Daily2.mth

Dataset File: c:\elandata\Dataset\100129\Sample.340

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	3372.4	3372.398	28.616	0.8
Mg	24.0	25746.6	25746.583	328.142	1.3
Co	58.9	44074.7	44074.697	635.506	1.4
Rh	102.9	92185.1	92185.106	1021.510	1.1
In	114.9	105091.4	105091.357	987.147	0.9
Pb	208.0	74434.4	74434.426	686.683	0.9
[> Ba	137.9	95298.1	95298.083	287.308	0.3
[Ba++	69.0	1973.1	0.021	0.000	2.3
[> Ce	139.9	125971.8	125971.811	1162.614	0.9
[CeO	155.9	3703.1	0.029	0.001	2.7
Bkgd	220.0	7.6	7.600	3.070	40.4

Current Optimization File Data

Current Value	Description
0.83	Nebulizer Gas Flow
14.00	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	17	13.8	3321.1
Co	59	17	15.0	34857.8
In	115	17	16.3	75147.1

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	3.0	585	2080	0.668
Be	9.0	9.0	2031	2080	0.666
Mg	24.0	24.0	5678	2120	0.608
Mg	25.0	24.9	5920	2080	0.718
Mg	26.0	26.0	6147	2120	0.685
Co	58.9	58.9	14162	2170	0.639
Rh	102.9	102.9	24849	2230	0.703
In	114.9	115.0	27787	2260	0.693
Ce	139.9	139.9	33839	2280	0.758
Pb	206.0	206.0	49948	2430	0.726
Pb	207.0	207.0	50135	2385	0.687
Pb	208.0	208.0	50451	2430	0.733
U	238.1	238.0	57718	2470	0.732

ICPMS#6 - Summary Report

Sample ID: Blank

Sample Date/Time: Wednesday, February 03, 2010 17:03:16

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 nolrs thtimozr.mth

Dataset File: C:\elandata\Dataset\100202\Blank.269

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7		ug/L		51	
Be	9		ug/L		7	
B	11		ug/L		491	
Na	23		ug/L		15676	
Mg	24		ug/L		1667	
Al	27		ug/L		1000	
P	31		ug/L		9062	
K	39		ug/L		358444	
Ca	43		ug/L		431	
> Sc	45		ug/L		703325	
V	51		ug/L		10831	
Cr	52		ug/L		2950	
Cr	53		ug/L		68564	
Mn	55		ug/L		814	
Fe	57		ug/L		3903	
Co	59		ug/L		123	
Ni	60		ug/L		77	
Cu	63		ug/L		89	
Cu	65		ug/L		81	
Zn	66		ug/L		157	
Zn	67		ug/L		13042	
Zn	68		ug/L		960	
> Ge	74		ug/L		162939	
As	75		ug/L		327	
Se	77		ug/L		2638	
Se	82		ug/L		3	
Kr	83		ug/L		57	
Sr	88		ug/L		116	
Y	89		ug/L		33	
Ag	107		ug/L		33	
Cd	111		ug/L		13	
Cd	114		ug/L		24	
> In	115		ug/L		100542	
Sn	120		ug/L		354	
Sb	121		ug/L		406	
Sb	123		ug/L		319	
Ba	135		ug/L		18	
Ba	137		ug/L		22	
Ho	165		ug/L		11	
> Lu	175		ug/L		152441	
Tl	205		ug/L		1222	
Pb	208		ug/L		538	
Bi	209		ug/L		19	
U	238		ug/L		155	

Sample ID: Blank

Report Date/Time: Wednesday, February 03, 2010 17:05:48

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	
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	
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	0.9999
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	
U	238Linear 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

ICPMS#6 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Wednesday, February 03, 2010 17:09:10

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 noirs thtimozr.mth

Dataset File: C:\elandata\Dataset\100202\Standard 1.270

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	10.000	ug/L	2.100	6992	0.010
Be	9	10.000	ug/L	4.563	2476	0.004
B	11	20.000	ug/L	1.086	5980	0.008
Na	23	1000.000	ug/L	2.058	2051935	2.902
Mg	24	1000.000	ug/L	4.407	1493357	2.125
Al	27	1000.000	ug/L	1.884	2261749	3.221
P	31	1000.000	ug/L	1.297	136822	0.182
K	39	1000.000	ug/L	4.337	2774170	3.444
Ca	43	1000.000	ug/L	0.879	5366	0.007
> Sc	45		ug/L		701693	701693.134
V	51	10.000	ug/L	14.461	37385	0.038
Cr	52	10.000	ug/L	1.542	25995	0.033
Cr	53		ug/L		68771	0.001
Mn	55	10.000	ug/L	0.668	33977	0.047
Fe	57	1000.000	ug/L	0.524	70207	0.095
Co	59	10.000	ug/L	1.487	24482	0.035
Ni	60	10.000	ug/L	0.351	5104	0.007
Cu	63		ug/L		11691	0.017
Cu	65	10.000	ug/L	1.555	5707	0.008
Zn	66	10.000	ug/L	2.597	3645	0.021
Zn	67		ug/L		12696	-0.004
Zn	68		ug/L		3598	0.016
> Ge	74		ug/L		166993	166992.786
As	75	10.000	ug/L	8.408	4446	0.025
Se	77		ug/L		2777	0.000
Se	82	10.000	ug/L	1.343	400	0.002
Kr	83		ug/L		67	0.000
Sr	88	10.000	ug/L	2.236	48926	0.475
Y	89		ug/L		30	-0.000
Ag	107	10.000	ug/L	2.433	21668	0.211
Cd	111	10.000	ug/L	1.374	5279	0.051
Cd	114		ug/L		11969	0.116
> In	115		ug/L		102727	102727.463
Sn	120	10.000	ug/L	1.375	21664	0.207
Sb	121	10.000	ug/L	4.419	18284	0.174
Sb	123		ug/L		14279	0.136
Ba	135		ug/L		4989	0.033
Ba	137	10.000	ug/L	3.761	8666	0.057
Ho	165		ug/L		11	0.000
> Lu	175		ug/L		151078	151077.832
Tl	205	10.000	ug/L	1.301	44817	0.289
Pb	208	10.000	ug/L	1.048	76547	0.503
Bi	209		ug/L		20	0.000
U	238	10.000	ug/L	0.859	85248	0.563

Sample ID: Standard 1

Report Date/Time: Wednesday, February 03, 2010 17:11:40

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	
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	
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	
U	238Linear 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

ICPMS#6 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Wednesday, February 03, 2010 17:15:01

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 nolrs thtimozr.mth

Dataset File: C:\elandata\Dataset\100202\Standard 2.271

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	100.072	ug/L	2.270	72773	0.107
Be	9	100.079	ug/L	0.494	26068	0.038
B	11	200.240	ug/L	2.544	61178	0.089
Na	23	10013.928	ug/L	15.948	23062835	33.760
Mg	24	10006.010	ug/L	4.821	15410493	22.619
Al	27	10008.304	ug/L	2.997	23954224	35.159
P	31	10002.262	ug/L	0.343	1278981	1.864
K	39	9993.673	ug/L	2.911	22410517	32.368
Ca	43	10002.368	ug/L	0.512	49540	0.072
> Sc	45		ug/L		681582	681581.918
V	51	100.063	ug/L	0.993	285786	0.404
Cr	52	100.034	ug/L	0.783	234859	0.340
Cr	53		ug/L		89102	0.033
Mn	55	100.031	ug/L	1.000	333255	0.488
Fe	57	10000.479	ug/L	1.301	651023	0.950
Co	59	100.022	ug/L	1.102	242202	0.355
Ni	60	100.031	ug/L	0.531	50471	0.074
Cu	63		ug/L		115551	0.169
Cu	65	100.027	ug/L	1.677	56240	0.082
Zn	66	100.049	ug/L	0.393	35674	0.219
Zn	67		ug/L		17936	0.031
Zn	68		ug/L		27213	0.162
> Ge	74		ug/L		161913	161912.733
As	75	100.108	ug/L	1.489	45086	0.276
Se	77		ug/L		5464	0.018
Se	82	100.082	ug/L	0.990	4201	0.026
Kr	83		ug/L		76	0.000
Sr	88	100.030	ug/L	1.060	485917	4.900
Y	89		ug/L		67	0.000
Ag	107	100.030	ug/L	0.941	215428	2.173
Cd	111	100.042	ug/L	1.285	53067	0.535
Cd	114		ug/L		119318	1.203
> In	115		ug/L		99143	99142.935
Sn	120	100.056	ug/L	0.754	218173	2.197
Sb	121	100.107	ug/L	3.697	193810	1.951
Sb	123		ug/L		150573	1.515
Ba	135		ug/L		49930	0.335
Ba	137	100.027	ug/L	0.189	87511	0.588
Ho	165		ug/L		15	0.000
> Lu	175		ug/L		148808	148807.846
Tl	205	100.019	ug/L	0.314	439048	2.942
Pb	208	100.001	ug/L	1.273	750097	5.037
Bi	209		ug/L		82	0.000
U	238	99.974	ug/L	1.173	816990	5.489

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	0.9999
Na	23Linear Thru Zero	0.9999
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	
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	0.9999
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
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	0.9999
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	
U	238Linear 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

ICPMS#6 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Wednesday, February 03, 2010 17:20:53

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 nolrs thtimozr.mth

Dataset File: C:\elandata\Dataset\100202\QC Std 1.272

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	53.841	ug/L	4.208	38977	0.057
Be	9	55.031	ug/L	2.169	14267	0.021
B	11	107.336	ug/L	0.628	32853	0.048
Na	23	5281.112	ug/L	4.201	12090232	17.804
Mg	24	5183.564	ug/L	2.701	7952081	11.718
Al	27	5107.220	ug/L	4.502	12177622	17.942
P	31	5346.588	ug/L	1.284	684497	0.996
K	39	5804.262	ug/L	4.505	13099946	18.799
Ca	43	5330.088	ug/L	1.847	26462	0.038
> Sc	45		ug/L		678457	678456.706
V	51	51.863	ug/L	3.114	152369	0.209
Cr	52	53.026	ug/L	1.587	125242	0.180
Cr	53		ug/L		75077	0.013
Mn	55	53.235	ug/L	0.901	176898	0.260
Fe	57	5369.278	ug/L	0.397	349678	0.510
Co	59	52.185	ug/L	1.409	125829	0.185
Ni	60	53.289	ug/L	1.094	26798	0.039
Cu	63		ug/L		60544	0.089
Cu	65	52.777	ug/L	2.018	29570	0.043
Zn	66	54.073	ug/L	1.359	19143	0.119
Zn	67		ug/L		15251	0.015
Zn	68		ug/L		15032	0.088
> Ge	74		ug/L		160155	160155.000
As	75	49.854	ug/L	0.648	22372	0.138
Se	77		ug/L		4000	0.009
Se	82	52.334	ug/L	2.919	2175	0.014
Kr	83		ug/L		66	0.000
Sr	88	53.293	ug/L	0.523	259446	2.611
Y	89		ug/L		45	0.000
Ag	107	50.789	ug/L	0.144	109614	1.103
Cd	111	51.822	ug/L	1.322	27552	0.277
Cd	114		ug/L		63321	0.637
> In	115		ug/L		99337	99336.538
Sn	120	51.561	ug/L	0.211	112825	1.132
Sb	121	50.393	ug/L	4.884	97961	0.982
Sb	123		ug/L		76690	0.769
Ba	135		ug/L		25968	0.176
Ba	137	52.409	ug/L	1.135	45479	0.308
Ho	165		ug/L		17	0.000
> Lu	175		ug/L		147578	147577.938
Tl	205	51.207	ug/L	1.397	223479	1.506
Pb	208	53.235	ug/L	1.482	396214	2.682
Bi	209		ug/L		87	0.000
U	238	56.742	ug/L	1.116	459904	3.116

Sample ID: QC Std 1

Report Date/Time: Wednesday, February 03, 2010 17:23:23

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	0.9999
Na	23Linear Thru Zero	0.9999
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	
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	0.9999
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
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	0.9999
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	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std	% Recovery	Int Std	% Recovery	Spike	% Recov	Dilution	% Dil	Duplicate	Rel. % Difference
Li	7		107.681								
Be	9		110.062								
B	11		107.336								
Na	23		105.622								
Mg	24		103.671								
Al	27		101.133								
P	31		106.932								
K	39		116.085								
Ca	43		106.602								
> Sc	45					96.5					
V	51		103.725								
Cr	52		106.052								
Cr	53										
Mn	55		106.469								
Fe	57		107.386								
Co	59		104.370								
Ni	60		106.577								
Cu	63										
Cu	65		105.555								
Zn	66		108.145								
Zn	67										
Zn	68										
> Ge	74					98.3					
As	75		99.708								
Se	77										
Se	82		104.668								
Kr	83										
Sr	88		106.585								
Y	89										
Ag	107		101.578								
Cd	111		103.645								
Cd	114										
> In	115					98.8					
Sn	120		103.123								
Sb	121		100.786								
Sb	123										
Ba	135										
Ba	137		104.818								
Ho	165										
> Lu	175					96.8					
Tl	205		102.414								
Pb	208		106.471								
Bi	209										
U	238		113.484								

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 1	Be	9	ICV is out of limits (+/- 10%)
QC Std 1	K	39	ICV is out of limits (+/- 10%)
QC Std 1	U	238	ICV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Wednesday, February 03, 2010 17:26:47

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 nolrs thtimozr.mth

Dataset File: C:\elandata\Dataset\100202\QC Std 2.273

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.010	ug/L	115.422	57	0.000
Be	9	0.007	ug/L	103.118	9	0.000
B	11	2.555	ug/L	29.533	1244	0.001
Na	23	-0.644	ug/L	279.084	13674	-0.002
Mg	24	1.790	ug/L	111.621	4334	0.004
Al	27	0.574	ug/L	110.958	2334	0.002
P	31	3.292	ug/L	29.592	9186	0.001
K	39	13.550	ug/L	157.655	375913	0.044
Ca	43	5.163	ug/L	148.033	443	0.000
> Sc	45		ug/L		680630	680630.336
V	51	1.404	ug/L	50.490	14328	0.006
Cr	52	0.067	ug/L	129.996	3006	0.000
Cr	53		ug/L		65757	-0.001
Mn	55	0.016	ug/L	31.859	840	0.000
Fe	57	0.867	ug/L	66.153	3833	0.000
Co	59	0.014	ug/L	98.063	152	0.000
Ni	60	-0.012	ug/L	148.191	68	-0.000
Cu	63		ug/L		104	0.000
Cu	65	-0.022	ug/L	94.756	67	-0.000
Zn	66	0.022	ug/L	127.601	161	0.000
Zn	67		ug/L		12933	0.001
Zn	68		ug/L		927	-0.000
> Ge	74		ug/L		158879	158879.101
As	75	-0.597	ug/L	101.933	60	-0.002
Se	77		ug/L		2553	-0.000
Se	82	-0.275	ug/L	66.536	-8	-0.000
Kr	83		ug/L		59	0.000
Sr	88	0.003	ug/L	132.083	129	0.000
Y	89		ug/L		33	0.000
Ag	107	0.005	ug/L	35.109	43	0.000
Cd	111	0.013	ug/L	102.174	20	0.000
Cd	114		ug/L		31	0.000
> In	115		ug/L		98437	98436.805
Sn	120	0.098	ug/L	19.297	558	0.002
Sb	121	0.990	ug/L	30.497	2289	0.019
Sb	123		ug/L		1785	0.015
Ba	135		ug/L		20	0.000
Ba	137	0.007	ug/L	44.294	28	0.000
Ho	165		ug/L		7	-0.000
> Lu	175		ug/L		148911	148910.712
Tl	205	0.315	ug/L	26.392	2569	0.009
Pb	208	0.009	ug/L	15.482	594	0.000
Bi	209		ug/L		20	0.000
U	238	0.056	ug/L	45.856	611	0.003

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	0.9999
Na	23Linear Thru Zero	0.9999
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	
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	0.9999
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
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	0.9999
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	
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		96.8			
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		97.5			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Ag	107					
Cd	111					
Cd	114					
> In	115		97.9			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		97.7			
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: QC Std 3

Sample Date/Time: Wednesday, February 03, 2010 17:32:41

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 nolrs thtimozr.mth

Dataset File: C:\elandata\Dataset\100202\QC Std 3.274

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	11.160	ug/L	2.823	8297	0.012
Be	9	0.526	ug/L	11.796	146	0.000
B	11	16.317	ug/L	1.782	5511	0.007
Na	23	250.334	ug/L	4.187	600733	0.844
Mg	24	16.623	ug/L	11.322	27694	0.038
Al	27	33.130	ug/L	10.853	81567	0.116
P	31	35.590	ug/L	8.787	13533	0.007
K	39	357.698	ug/L	6.571	1155610	1.159
Ca	43	224.050	ug/L	4.330	1543	0.002
> Sc	45		ug/L		693136	693136.321
V	51	10.823	ug/L	18.948	41021	0.044
Cr	52	10.979	ug/L	2.069	28800	0.037
Cr	53		ug/L		69341	0.003
Mn	55	5.757	ug/L	1.274	20260	0.028
Fe	57	110.662	ug/L	3.805	11134	0.011
Co	59	1.108	ug/L	1.811	2849	0.004
Ni	60	2.186	ug/L	2.074	1196	0.002
Cu	63		ug/L		1503	0.002
Cu	65	1.127	ug/L	3.170	724	0.001
Zn	66	11.542	ug/L	2.467	4304	0.025
Zn	67		ug/L		12992	-0.001
Zn	68		ug/L		3896	0.018
> Ge	74		ug/L		163818	163817.734
As	75	4.852	ug/L	20.886	2524	0.013
Se	77		ug/L		2631	-0.000
Se	82	4.682	ug/L	8.092	202	0.001
Kr	83		ug/L		70	0.000
Sr	88	11.340	ug/L	0.777	56880	0.556
Y	89		ug/L		31	-0.000
Ag	107	1.050	ug/L	2.736	2363	0.023
Cd	111	1.110	ug/L	4.149	620	0.006
Cd	114		ug/L		1390	0.013
> In	115		ug/L		102179	102178.588
Sn	120	5.429	ug/L	0.184	12541	0.119
Sb	121	2.957	ug/L	8.546	6302	0.058
Sb	123		ug/L		4974	0.045
Ba	135		ug/L		1121	0.007
Ba	137	2.176	ug/L	0.331	1944	0.013
Ho	165		ug/L		12	0.000
> Lu	175		ug/L		150340	150340.101
Tl	205	1.085	ug/L	2.216	6005	0.032
Pb	208	2.247	ug/L	1.014	17546	0.113
Bi	209		ug/L		23	0.000
U	238	0.251	ug/L	3.738	2223	0.014

Sample ID: QC Std 3

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	0.9999
Na	23Linear Thru Zero	0.9999
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	
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	0.9999
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
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	0.9999
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	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution %	Duplicate Rel. % Difference
Li	7	111.598				
Be	9	105.215				
B	11	108.783				
Na	23	100.134				
Mg	24	110.817				
Al	27	110.433				
P	31	71.180				
K	39	119.233				
Ca	43	112.025				
> Sc	45		98.6			
V	51	108.227				
Cr	52	109.786				
Cr	53					
Mn	55	115.131				
Fe	57	110.662				
Co	59	110.814				
Ni	60	109.301				
Cu	63					
Cu	65	112.709				
Zn	66	115.420				
Zn	67					
Zn	68					
> Ge	74		100.5			
As	75	97.036				
Se	77					
Se	82	93.631				
Kr	83					
Sr	88	113.403				
Y	89					
Ag	107	104.959				
Cd	111	110.972				
Cd	114					
> In	115		101.6			
Sn	120	108.581				
Sb	121	98.555				
Sb	123					
Ba	135					
Ba	137	108.778				
Ho	165					
> Lu	175		98.6			
Tl	205	108.539				
Pb	208	112.345				
Bi	209					
U	238	125.364				

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 4

Sample Date/Time: Wednesday, February 03, 2010 17:38:34

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 nohrs thtimozr.mth

Dataset File: C:\elandata\Dataset\100202\QC Std 4.275

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.212	ug/L	15.612	207	0.000
Be	9	0.101	ug/L	37.319	34	0.000
B	11	1.376	ug/L	4.836	905	0.001
Na	23	95426.420	ug/L	1.957	222272248	321.713
Mg	24	99430.956	ug/L	2.087	155241699	224.769
Al	27	92322.731	ug/L	5.196	224143096	324.327
P	31	91334.636	ug/L	1.720	11765949	17.018
K	39	99022.715	ug/L	5.704	222020471	320.722
Ca	43	92073.150	ug/L	0.394	458665	0.663
> Sc	45		ug/L		690738	690737.850
V	51	0.831	ug/L	37.086	12955	0.003
Cr	52	2.830	ug/L	1.604	9550	0.010
Cr	53		ug/L		59253	-0.012
Mn	55	5.545	ug/L	0.715	19478	0.027
Fe	57	92140.888	ug/L	0.133	6047833	8.750
Co	59	0.349	ug/L	5.976	976	0.001
Ni	60	3.642	ug/L	1.234	1935	0.003
Cu	63		ug/L		3233	0.005
Cu	65	5.356	ug/L	2.496	3128	0.004
Zn	66	6.299	ug/L	1.982	2400	0.014
Zn	67		ug/L		12711	-0.002
Zn	68		ug/L		1243	0.002
> Ge	74		ug/L		162426	162425.500
As	75	-0.866	ug/L	27.951	-63	-0.002
Se	77		ug/L		3486	0.005
Se	82	-2.824	ug/L	10.311	-116	-0.001
Kr	83		ug/L		185	0.001
Sr	88	2.922	ug/L	1.330	14134	0.143
Y	89		ug/L		192	0.002
Ag	107	0.402	ug/L	42.756	885	0.009
Cd	111	1.450	ug/L	31.290	771	0.008
Cd	114		ug/L		4061	0.041
> In	115		ug/L		97972	97971.985
Sn	120	0.247	ug/L	6.047	876	0.005
Sb	121	0.180	ug/L	46.361	739	0.004
Sb	123		ug/L		544	0.002
Ba	135		ug/L		366	0.002
Ba	137	0.684	ug/L	5.940	608	0.004
Ho	165		ug/L		2845	0.019
> Lu	175		ug/L		145928	145928.006
Tl	205	-0.082	ug/L	1.892	818	-0.002
Pb	208	0.233	ug/L	0.573	2228	0.012
Bi	209		ug/L		1116	0.008
U	238	-0.005	ug/L	31.024	106	-0.000

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	0.9999
Na	23Linear Thru Zero	0.9999
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	
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	0.9999
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
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	0.9999
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	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
|	Li	7					
|	Be	9					
|	B	11					
|	Na	23	95.426				
|	Mg	24	99.431				
|	Al	27	92.323				
|	P	31	91.335				
|	K	39	99.023				
|	Ca	43	92.073				
>	Sc	45		98.2			
|	V	51					
|	Cr	52	85.758				
|	Cr	53					
|	Mn	55	95.595				
|	Fe	57	92.141				
|	Co	59	148.385				
|	Ni	60	110.025				
|	Cu	63					
|	Cu	65	160.360				
|	Zn	66	167.529				
|	Zn	67					
|	Zn	68					
>	Ge	74		99.7			
|	As	75					
|	Se	77					
|	Se	82					
|	Kr	83					
|	Sr	88	98.702				
|	Y	89					
|	Ag	107					
|	Cd	111	326.618				
|	Cd	114					
>	In	115		97.4			
|	Sn	120					
|	Sb	121					
|	Sb	123					
|	Ba	135					
|	Ba	137	85.769				
|	Ho	165					
>	Lu	175		95.7			
|	Tl	205					
|	Pb	208	123.352				
|	Bi	209					
|	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 4	Cu	65	ICSA is out of limits

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Wednesday, February 03, 2010 17:44:28

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 nohrs thtimozr.mth

Dataset File: C:\elandata\Dataset\100202\QC Std 5.276

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	22.622	ug/L	4.145	16278	0.024
Be	9	22.414	ug/L	2.860	5769	0.009
B	11	21.483	ug/L	2.814	6900	0.010
Na	23	98869.719	ug/L	7.566	224444834	333.321
Mg	24	101671.245	ug/L	2.528	154729350	229.833
Al	27	93045.220	ug/L	1.822	220036657	326.865
P	31	92883.412	ug/L	0.383	11656174	17.307
K	39	101346.831	ug/L	5.155	221325571	328.250
Ca	43	92885.958	ug/L	0.127	450845	0.669
> Sc	45		ug/L		673043	673042.717
V	51	20.247	ug/L	4.458	65334	0.082
Cr	52	23.330	ug/L	2.194	56237	0.079
Cr	53		ug/L		63597	-0.003
Mn	55	26.045	ug/L	0.748	86266	0.127
Fe	57	94637.626	ug/L	0.434	6052369	8.987
Co	59	20.184	ug/L	0.945	48359	0.072
Ni	60	23.440	ug/L	0.837	11735	0.017
Cu	63		ug/L		25088	0.037
Cu	65	24.401	ug/L	1.997	13605	0.020
Zn	66	26.048	ug/L	1.462	9245	0.057
Zn	67		ug/L		13554	0.005
Zn	68		ug/L		6405	0.034
> Ge	74		ug/L		159193	159193.459
As	75	20.524	ug/L	0.931	9342	0.057
Se	77		ug/L		4027	0.009
Se	82	17.883	ug/L	5.492	740	0.005
Kr	83		ug/L		185	0.001
Sr	88	24.065	ug/L	0.134	115284	1.179
Y	89		ug/L		171	0.001
Ag	107	19.475	ug/L	1.008	41359	0.423
Cd	111	20.290	ug/L	2.496	10615	0.109
Cd	114		ug/L		27334	0.280
> In	115		ug/L		97699	97698.740
Sn	120	20.225	ug/L	1.120	43731	0.444
Sb	121	21.033	ug/L	0.617	40435	0.410
Sb	123		ug/L		31411	0.318
Ba	135		ug/L		10017	0.069
Ba	137	20.819	ug/L	0.266	17701	0.122
Ho	165		ug/L		2797	0.019
> Lu	175		ug/L		144482	144482.064
Tl	205	18.458	ug/L	1.290	79615	0.543
Pb	208	19.758	ug/L	1.143	144302	0.995
Bi	209		ug/L		1222	0.008
U	238	21.621	ug/L	0.194	171672	1.187

Sample ID: QC Std 5

Report Date/Time: Wednesday, February 03, 2010 17:46:59

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	0.9999
Na	23Linear Thru Zero	0.9999
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	
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	0.9999
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
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	0.9999
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	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[	Li	7	113.112				
|	Be	9	112.072				
|	B	11	107.415				
|	Na	23	98.870				
|	Mg	24	101.671				
|	Al	27	93.045				
|	P	31	92.883				
|	K	39	101.347				
|	Ca	43	92.886				
>	Sc	45		95.7			
|	V	51	101.235				
|	Cr	52	100.128				
|	Cr	53					
|	Mn	55	100.949				
|	Fe	57	94.638				
|	Co	59	99.676				
|	Ni	60	100.556				
|	Cu	63					
|	Cu	65	106.555				
|	Zn	66	109.631				
|	Zn	67					
|	Zn	68					
>	Ge	74		97.7			
|	As	75	102.621				
|	Se	77					
|	Se	82	89.414				
|	Kr	83					
|	Sr	88	104.813				
|	Y	89					
|	Ag	107	97.377				
|	Cd	111	99.245				
|	Cd	114					
>	In	115		97.2			
|	Sn	120	101.125				
|	Sb	121	105.167				
|	Sb	123					
|	Ba	135					
|	Ba	137	100.723				
|	Ho	165					
>	Lu	175		94.8			
|	Tl	205	92.288				
|	Pb	208	97.810				
|	Bi	209					
|	U	238	108.105				

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, February 03, 2010 17:50:21

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 nolsr thtimozr.mth

Dataset File: C:\elandata\Dataset\100202\QC Std 6.277

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	60.383	ug/L	2.377	43433	0.064
Be	9	60.118	ug/L	1.657	15485	0.023
B	11	110.232	ug/L	2.641	33508	0.049
Na	23	5658.470	ug/L	2.219	12865782	19.077
Mg	24	5682.798	ug/L	2.451	8661898	12.846
Al	27	5381.582	ug/L	1.026	12739049	18.905
P	31	5288.223	ug/L	1.012	672761	0.985
K	39	5600.574	ug/L	4.423	12576057	18.140
Ca	43	5325.778	ug/L	1.167	26278	0.038
> Sc	45		ug/L		673904	673904.221
V	51	52.387	ug/L	5.027	152742	0.211
Cr	52	53.180	ug/L	1.582	124754	0.181
Cr	53		ug/L		75383	0.014
Mn	55	53.030	ug/L	1.371	175029	0.259
Fe	57	5418.377	ug/L	0.854	350441	0.515
Co	59	52.329	ug/L	1.499	125332	0.186
Ni	60	54.674	ug/L	1.565	27303	0.040
Cu	63		ug/L		61012	0.090
Cu	65	53.787	ug/L	0.944	29938	0.044
Zn	66	55.227	ug/L	1.864	19553	0.121
Zn	67		ug/L		15140	0.014
Zn	68		ug/L		15026	0.088
> Ge	74		ug/L		160191	160191.419
As	75	48.655	ug/L	0.625	21848	0.134
Se	77		ug/L		3998	0.009
Se	82	49.976	ug/L	1.241	2077	0.013
Kr	83		ug/L		70	0.000
Sr	88	52.816	ug/L	0.510	253639	2.587
Y	89		ug/L		42	0.000
Ag	107	51.717	ug/L	1.868	110099	1.123
Cd	111	51.584	ug/L	0.185	27052	0.276
Cd	114		ug/L		62594	0.639
> In	115		ug/L		97994	97993.672
Sn	120	51.285	ug/L	1.138	110693	1.126
Sb	121	49.889	ug/L	5.058	95679	0.972
Sb	123		ug/L		74662	0.759
Ba	135		ug/L		25655	0.177
Ba	137	52.984	ug/L	1.558	45026	0.311
Ho	165		ug/L		18	0.000
> Lu	175		ug/L		144514	144513.781
Tl	205	50.807	ug/L	0.682	217166	1.495
Pb	208	52.992	ug/L	1.140	386241	2.669
Bi	209		ug/L		90	0.001
U	238	55.456	ug/L	0.909	440204	3.045

Sample ID: QC Std 6

Report Date/Time: Wednesday, February 03, 2010 17:52:51

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	0.9999
Na	23Linear Thru Zero	0.9999
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	
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	0.9999
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
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	0.9999
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	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Li	7	120.767				
Be	9	120.236				
B	11	110.232				
Na	23	113.169				
Mg	24	113.656				
Al	27	106.566				
P	31	105.764				
K	39	112.011				
Ca	43	106.516				
> Sc	45		95.8			
V	51	104.774				
Cr	52	106.361				
Cr	53					
Mn	55	106.061				
Fe	57	108.368				
Co	59	104.658				
Ni	60	109.347				
Cu	63					
Cu	65	107.574				
Zn	66	110.453				
Zn	67					
Zn	68					
> Ge	74		98.3			
As	75	97.310				
Se	77					
Se	82	99.953				
Kr	83					
Sr	88	105.632				
Y	89					
Ag	107	103.434				
Cd	111	103.167				
Cd	114					
> In	115		97.5			
Sn	120	102.570				
Sb	121	99.778				
Sb	123					
Ba	135					
Ba	137	105.968				
Ho	165					
> Lu	175		94.8			
Tl	205	101.615				
Pb	208	105.985				
Bi	209					
U	238	110.912				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Li	7	7CCV is out of limits (+/- 10%)
QC Std 6	Be	9	9CCV is out of limits (+/- 10%)
QC Std 6	B	11	11CCV is out of limits (+/- 10%)
QC Std 6	Na	23	23CCV is out of limits (+/- 10%)
QC Std 6	Mg	24	24CCV is out of limits (+/- 10%)
QC Std 6	K	39	39CCV is out of limits (+/- 10%)
QC Std 6	Zn	66	66CCV is out of limits (+/- 10%)
QC Std 6	U	238	238CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Wednesday, February 03, 2010 17:56:15

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 noirs thtimozr.mth

Dataset File: C:\elandata\Dataset\100202\QC Std 7.278

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.022	ug/L	101.429	64	0.000
Be	9	0.015	ug/L	52.109	11	0.000
B	11	2.048	ug/L	29.407	1085	0.001
Na	23	0.856	ug/L	76.079	17010	0.003
Mg	24	4.191	ug/L	28.231	8002	0.009
Al	27	2.444	ug/L	98.347	6669	0.009
P	31	-3.117	ug/L	37.701	8328	-0.001
K	39	6.384	ug/L	201.925	358450	0.021
Ca	43	2.192	ug/L	222.848	425	0.000
> Sc	45		ug/L		676803	676802.574
V	51	-1.173	ug/L	135.918	7140	-0.005
Cr	52	0.063	ug/L	64.853	2981	0.000
Cr	53		ug/L		65263	-0.001
Mn	55	0.005	ug/L	164.984	801	0.000
Fe	57	0.564	ug/L	208.051	3792	0.000
Co	59	0.003	ug/L	228.837	125	0.000
Ni	60	0.000	ug/L	20724.036	74	0.000
Cu	63		ug/L		93	0.000
Cu	65	0.021	ug/L	46.690	90	0.000
Zn	66	0.014	ug/L	240.559	157	0.000
Zn	67		ug/L		12663	0.001
Zn	68		ug/L		912	-0.000
> Ge	74		ug/L		157042	157041.920
As	75	-0.142	ug/L	193.794	253	-0.000
Se	77		ug/L		2528	-0.000
Se	82	0.102	ug/L	251.223	7	0.000
Kr	83		ug/L		54	-0.000
Sr	88	0.001	ug/L	290.671	121	0.000
Y	89		ug/L		31	-0.000
Ag	107	0.005	ug/L	127.864	42	0.000
Cd	111	0.010	ug/L	300.300	18	0.000
Cd	114		ug/L		30	0.000
> In	115		ug/L		98768	98768.077
Sn	120	0.064	ug/L	40.425	485	0.001
Sb	121	0.725	ug/L	39.823	1786	0.014
Sb	123		ug/L		1328	0.010
Ba	135		ug/L		15	-0.000
Ba	137	0.011	ug/L	79.043	31	0.000
Ho	165		ug/L		10	-0.000
> Lu	175		ug/L		148017	148017.238
Tl	205	0.236	ug/L	38.974	2207	0.007
Pb	208	0.011	ug/L	6.868	601	0.001
Bi	209		ug/L		24	0.000
U	238	0.047	ug/L	46.794	533	0.003

Sample ID: QC Std 7

Report Date/Time: Wednesday, February 03, 2010 17:58:47

Calibration

Analyte	Mass Curve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	0.9999
Na	23Linear Thru Zero	0.9999
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	
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	0.9999
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
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	0.9999
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	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	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		96.2			
|	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		96.4			
|	As	75					
|	Se	77					
|	Se	82					
|	Kr	83					
|	Sr	88					
|	Y	89					
|	Ag	107					
|	Cd	111					
|	Cd	114					
>	In	115		98.2			
|	Sn	120					
|	Sb	121					
|	Sb	123					
|	Ba	135					
|	Ba	137					
|	Ho	165					
>	Lu	175		97.1			
|	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: 1202015679

Sample Date/Time: Wednesday, February 03, 2010 18:02:10

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 941732|2|rmj

Method File: c:\elandata\Method\6020 nohrs thtimozr.mth

Dataset File: C:\elandata\Dataset\100202\1202015679.279

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	-0.022	ug/L	33.723	33	-0.000
Be	9	0.009	ug/L	103.560	9	0.000
B	11	0.484	ug/L	17.977	608	0.000
Na	23	35.367	ug/L	11.464	94313	0.119
Mg	24	33.105	ug/L	3.866	51426	0.075
Al	27	84.794	ug/L	7.597	199388	0.298
P	31	-15.067	ug/L	14.785	6713	-0.003
K	39	34.375	ug/L	25.495	413578	0.111
Ca	43	86.834	ug/L	7.060	825	0.001
> Sc	45		ug/L		665929	665929.254
V	51	-1.251	ug/L	65.610	6918	-0.005
Cr	52	0.565	ug/L	6.796	4073	0.002
Cr	53		ug/L		44396	-0.031
Mn	55	0.229	ug/L	7.602	1514	0.001
Fe	57	32.109	ug/L	9.580	5728	0.003
Co	59	0.004	ug/L	26.576	126	0.000
Ni	60	0.359	ug/L	7.931	250	0.000
Cu	63		ug/L		1701	0.002
Cu	65	1.484	ug/L	3.265	891	0.001
Zn	66	20.867	ug/L	0.777	7299	0.046
Zn	67		ug/L		8841	-0.023
Zn	68		ug/L		6024	0.033
> Ge	74		ug/L		156233	156233.043
As	75	-0.742	ug/L	54.115	-6	-0.002
Se	77		ug/L		1378	-0.007
Se	82	-0.554	ug/L	53.584	-19	-0.000
Kr	83		ug/L		69	0.000
Sr	88	0.114	ug/L	1.790	650	0.006
Y	89		ug/L		51	0.000
Ag	107	0.153	ug/L	3.007	352	0.003
Cd	111	0.077	ug/L	28.823	53	0.000
Cd	114		ug/L		-37	-0.001
> In	115		ug/L		96579	96578.619
Sn	120	21.334	ug/L	0.399	45586	0.468
Sb	121	0.321	ug/L	6.245	995	0.006
Sb	123		ug/L		763	0.005
Ba	135		ug/L		157	0.001
Ba	137	0.295	ug/L	6.286	268	0.002
Ho	165		ug/L		10	0.000
> Lu	175		ug/L		142341	142340.700
Tl	205	-0.023	ug/L	47.471	1045	-0.001
Pb	208	2.823	ug/L	1.646	20745	0.142
Bi	209		ug/L		41	0.000
U	238	-0.001	ug/L	280.968	135	-0.000

Sample ID: 1202015679

Report Date/Time: Wednesday, February 03, 2010 18:04:41

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	0.9999
Na	23Linear Thru Zero	0.9999
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	
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	0.9999
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
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	0.9999
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	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		94.7			
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		95.9			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Ag	107					
Cd	111					
Cd	114					
> In	115		96.1			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		93.4			
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: 1202015684

Sample Date/Time: Wednesday, February 03, 2010 18:08:04

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 941732|40|rmj

Method File: c:\elandata\Method\6020 nolrs thtimozr.mth

Dataset File: C:\elandata\Dataset\100202\1202015684.280

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	3.396	ug/L	2.737	2451	0.004
Be	9	27.309	ug/L	1.833	6931	0.010
B	11	48.414	ug/L	1.389	14749	0.022
Na	23	329.614	ug/L	11.005	753202	1.111
Mg	24	1391.813	ug/L	5.191	2090847	3.146
Al	27	3807.313	ug/L	5.940	8881242	13.375
P	31	252.283	ug/L	2.489	39756	0.047
K	39	1499.190	ug/L	1.834	3561361	4.856
Ca	43	3177.426	ug/L	0.859	15601	0.023
> Sc	45		ug/L		663641	663641.391
V	51	33.198	ug/L	6.129	99199	0.134
Cr	52	77.951	ug/L	1.141	178813	0.265
Cr	53		ug/L		72475	0.012
Mn	55	170.792	ug/L	0.950	553494	0.833
Fe	57	5316.621	ug/L	0.456	338731	0.505
Co	59	30.630	ug/L	0.419	72308	0.109
Ni	60	46.104	ug/L	0.791	22689	0.034
Cu	63		ug/L		64482	0.097
Cu	65	57.574	ug/L	1.471	31551	0.047
Zn	66	219.421	ug/L	1.088	74922	0.481
Zn	67		ug/L		21206	0.056
Zn	68		ug/L		55686	0.352
> Ge	74		ug/L		155402	155402.389
As	75	33.677	ug/L	0.721	14766	0.093
Se	77		ug/L		4636	0.014
Se	82	93.692	ug/L	1.357	3775	0.024
Kr	83		ug/L		61	0.000
Sr	88	74.063	ug/L	0.226	342919	3.628
Y	89		ug/L		17954	0.190
Ag	107	7.916	ug/L	1.496	16274	0.172
Cd	111	19.700	ug/L	1.336	9969	0.105
Cd	114		ug/L		23214	0.245
> In	115		ug/L		94488	94487.779
Sn	120	12.823	ug/L	1.567	26939	0.282
Sb	121	9.296	ug/L	0.924	17496	0.181
Sb	123		ug/L		13791	0.143
Ba	135		ug/L		30302	0.219
Ba	137	65.225	ug/L	0.376	53069	0.383
Ho	165		ug/L		1080	0.008
> Lu	175		ug/L		138374	138373.653
Tl	205	37.415	ug/L	5.523	153385	1.101
Pb	208	31.956	ug/L	0.485	223229	1.610
Bi	209		ug/L		1932	0.014
U	238	0.578	ug/L	2.592	4533	0.032

Calibration

Analyte	Mass Curve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	0.9999
Na	23Linear Thru Zero	0.9999
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	
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	0.9999
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
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	0.9999
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	
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		94.4			
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		95.4			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Ag	107					
Cd	111					
Cd	114					
> In	115		94.0			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		90.8			
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, February 03, 2010 18:13:57

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 nohrs thtimozr.mth

Dataset File: C:\elandata\Dataset\100202\QC Std 6.281

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	61.168	ug/L	1.554	43239	0.065
Be	9	61.176	ug/L	0.516	15484	0.023
B	11	110.872	ug/L	2.568	33104	0.049
Na	23	5679.942	ug/L	3.130	12696049	19.149
Mg	24	5553.189	ug/L	1.849	8312326	12.553
Al	27	5323.106	ug/L	8.334	12391499	18.700
P	31	5314.463	ug/L	1.579	664286	0.990
K	39	5525.322	ug/L	4.829	12182461	17.896
Ca	43	5314.346	ug/L	1.452	25761	0.038
> Sc	45		ug/L		662132	662131.868
V	51	50.660	ug/L	1.264	145565	0.204
Cr	52	52.353	ug/L	0.748	120741	0.178
Cr	53		ug/L		72190	0.012
Mn	55	52.113	ug/L	1.661	169053	0.254
Fe	57	5299.895	ug/L	0.705	336917	0.503
Co	59	52.044	ug/L	0.476	122509	0.185
Ni	60	54.144	ug/L	0.610	26573	0.040
Cu	63		ug/L		60027	0.091
Cu	65	52.897	ug/L	0.946	28932	0.044
Zn	66	55.139	ug/L	0.709	18797	0.121
Zn	67		ug/L		14403	0.013
Zn	68		ug/L		14555	0.088
> Ge	74		ug/L		154258	154257.705
As	75	49.893	ug/L	1.664	21563	0.138
Se	77		ug/L		3774	0.008
Se	82	52.053	ug/L	3.070	2083	0.013
Kr	83		ug/L		72	0.000
Sr	88	52.994	ug/L	0.403	248119	2.596
Y	89		ug/L		38	0.000
Ag	107	51.288	ug/L	0.209	106455	1.114
Cd	111	51.917	ug/L	0.944	26542	0.278
Cd	114		ug/L		60853	0.637
> In	115		ug/L		95534	95533.633
Sn	120	51.794	ug/L	0.949	108985	1.137
Sb	121	49.894	ug/L	4.299	93292	0.972
Sb	123		ug/L		72619	0.757
Ba	135		ug/L		24790	0.175
Ba	137	52.565	ug/L	1.238	43858	0.309
Ho	165		ug/L		17	0.000
> Lu	175		ug/L		141886	141886.213
Tl	205	51.063	ug/L	0.371	214281	1.502
Pb	208	53.284	ug/L	0.632	381335	2.684
Bi	209		ug/L		94	0.001
U	238	55.849	ug/L	0.307	435254	3.067

Sample ID: QC Std 6

Report Date/Time: Wednesday, February 03, 2010 18:16:27

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	0.9999
Na	23Linear Thru Zero	0.9999
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	
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	0.9999
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
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	0.9999
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	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
|	Li	7	122.336				
|	Be	9	122.352				
|	B	11	110.872				
|	Na	23	113.599				
|	Mg	24	111.064				
|	Al	27	105.408				
|	P	31	106.289				
|	K	39	110.506				
|	Ca	43	106.287				
>	Sc	45		94.1			
|	V	51	101.320				
|	Cr	52	104.705				
|	Cr	53					
|	Mn	55	104.226				
|	Fe	57	105.998				
|	Co	59	104.089				
|	Ni	60	108.289				
|	Cu	63					
|	Cu	65	105.793				
|	Zn	66	110.277				
|	Zn	67					
|	Zn	68					
>	Ge	74		94.7			
|	As	75	99.786				
|	Se	77					
|	Se	82	104.107				
|	Kr	83					
|	Sr	88	105.988				
|	Y	89					
|	Ag	107	102.576				
|	Cd	111	103.834				
|	Cd	114					
>	In	115		95.0			
|	Sn	120	103.589				
|	Sb	121	99.789				
|	Sb	123					
|	Ba	135					
|	Ba	137	105.130				
|	Ho	165					
>	Lu	175		93.1			
|	Tl	205	102.126				
|	Pb	208	106.569				
|	Bi	209					
|	U	238	111.698				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Li	7	7CCV is out of limits (+/- 10%)
QC Std 6	Be	9	9CCV is out of limits (+/- 10%)
QC Std 6	B	11	11CCV is out of limits (+/- 10%)
QC Std 6	Na	23	23CCV is out of limits (+/- 10%)
QC Std 6	Mg	24	24CCV is out of limits (+/- 10%)
QC Std 6	K	39	39CCV is out of limits (+/- 10%)
QC Std 6	Zn	66	66CCV is out of limits (+/- 10%)
QC Std 6	U	238	238CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Wednesday, February 03, 2010 18:19:51

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 nohrs thtimozr.mth

Dataset File: C:\elandata\Dataset\100202\QC Std 7.282

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	-0.002	ug/L	320.605	47	-0.000
Be	9	0.025	ug/L	35.470	13	0.000
B	11	1.888	ug/L	29.170	1026	0.001
Na	23	0.139	ug/L	1638.839	15342	0.000
Mg	24	1.618	ug/L	76.814	4001	0.004
Al	27	1.442	ug/L	35.397	4334	0.005
P	31	-0.607	ug/L	166.047	8555	-0.000
K	39	-0.023	ug/L	40372.081	341379	-0.000
Ca	43	2.114	ug/L	468.142	420	0.000
> Sc	45		ug/L		669713	669713.029
V	51	-0.953	ug/L	76.894	7776	-0.004
Cr	52	0.093	ug/L	96.909	3018	0.000
Cr	53		ug/L		64203	-0.002
Mn	55	0.006	ug/L	47.723	793	0.000
Fe	57	-1.710	ug/L	141.049	3605	-0.000
Co	59	0.000	ug/L	693.643	118	0.000
Ni	60	-0.014	ug/L	193.624	66	-0.000
Cu	63		ug/L		81	-0.000
Cu	65	0.008	ug/L	22.534	82	0.000
Zn	66	0.062	ug/L	65.042	169	0.000
Zn	67		ug/L		12430	0.001
Zn	68		ug/L		937	0.000
> Ge	74		ug/L		153694	153694.423
As	75	-1.029	ug/L	58.198	-126	-0.003
Se	77		ug/L		2427	-0.000
Se	82	-0.255	ug/L	14.646	-7	-0.000
Kr	83		ug/L		59	0.000
Sr	88	0.003	ug/L	142.052	125	0.000
Y	89		ug/L		29	-0.000
Ag	107	0.002	ug/L	298.881	35	0.000
Cd	111	0.014	ug/L	42.725	20	0.000
Cd	114		ug/L		21	-0.000
> In	115		ug/L		95037	95037.156
Sn	120	0.113	ug/L	28.086	569	0.002
Sb	121	0.730	ug/L	39.350	1725	0.014
Sb	123		ug/L		1330	0.011
Ba	135		ug/L		23	0.000
Ba	137	0.001	ug/L	349.645	22	0.000
Ho	165		ug/L		9	-0.000
> Lu	175		ug/L		144126	144126.081
Tl	205	0.329	ug/L	34.177	2543	0.010
Pb	208	0.007	ug/L	67.923	557	0.000
Bi	209		ug/L		24	0.000
U	238	0.041	ug/L	42.582	466	0.002

Sample ID: QC Std 7

Report Date/Time: Wednesday, February 03, 2010 18:22:23

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	0.9999
Na	23Linear Thru Zero	0.9999
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	
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	0.9999
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
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	0.9999
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	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution %	Duplicate Rel. % Difference
|	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
>|	Sc	45		95.2			
|	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		94.3			
|	As	75					
|	Se	77					
|	Se	82					
|	Kr	83					
|	Sr	88					
|	Y	89					
|	Ag	107					
|	Cd	111					
|	Cd	114					
>|	In	115		94.5			
|	Sn	120					
|	Sb	121					
|	Sb	123					
|	Ba	135					
|	Ba	137					
|	Ho	165					
>|	Lu	175		94.5			
|	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: 244601001

Sample Date/Time: Wednesday, February 03, 2010 18:25:46

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 941732[2]rmj

Method File: c:\elandata\Method\6020 nolrs thtimozr.mth

Dataset File: C:\elandata\Dataset\100202\244601001.283

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	44.655	ug/L	1.479	32266	0.048
Be	9	2.534	ug/L	2.487	662	0.001
B	11	7.940	ug/L	1.377	2860	0.004
Na	23	670.661	ug/L	5.836	1546809	2.261
Mg	24	4415.634	ug/L	2.874	6753932	9.982
Al	27	30513.445	ug/L	1.567	72547078	107.193
P	31	261.589	ug/L	1.011	41695	0.049
K	39	4515.289	ug/L	1.910	10241628	14.624
Ca	43	4237.438	ug/L	1.206	21069	0.031
> Sc	45		ug/L		676655	676655.163
V	51	31.450	ug/L	2.390	96337	0.127
Cr	52	18.612	ug/L	0.908	45688	0.063
Cr	53		ug/L		45210	-0.031
Mn	55	706.648	ug/L	0.531	2332498	3.446
Fe	57	21822.370	ug/L	2.164	1405387	2.072
Co	59	30.175	ug/L	1.640	72611	0.107
Ni	60	18.787	ug/L	2.660	9467	0.014
Cu	63		ug/L		17958	0.026
Cu	65	16.358	ug/L	2.246	9194	0.013
Zn	66	86.895	ug/L	0.689	29022	0.191
Zn	67		ug/L		12476	0.002
Zn	68		ug/L		22812	0.145
> Ge	74		ug/L		151571	151570.545
As	75	5.948	ug/L	11.311	2792	0.016
Se	77		ug/L		1393	-0.007
Se	82	-0.376	ug/L	143.470	-12	-0.000
Kr	83		ug/L		130	0.001
Sr	88	36.163	ug/L	0.745	168082	1.771
Y	89		ug/L		489322	5.160
Ag	107	0.273	ug/L	1.024	594	0.006
Cd	111	1.185	ug/L	11.717	614	0.006
Cd	114		ug/L		191	0.002
> In	115		ug/L		94816	94815.909
Sn	120	1.848	ug/L	3.236	4181	0.041
Sb	121	0.150	ug/L	8.528	660	0.003
Sb	123		ug/L		529	0.002
Ba	135		ug/L		107567	0.708
Ba	137	210.581	ug/L	0.855	188123	1.238
Ho	165		ug/L		30485	0.201
> Lu	175		ug/L		151972	151972.252
Tl	205	0.333	ug/L	3.359	2705	0.010
Pb	208	24.665	ug/L	0.898	189352	1.242
Bi	209		ug/L		6507	0.043
U	238	8.260	ug/L	0.785	69081	0.454

Sample ID: 244601001

Report Date/Time: Wednesday, February 03, 2010 18:28:17

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	0.9999
Na	23Linear Thru Zero	0.9999
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	
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	0.9999
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
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	0.9999
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	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45			96.2		
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			93.0		
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			99.7		
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: 1202015680

Sample Date/Time: Wednesday, February 03, 2010 18:31:40

Sample Type:

Sample Description: LANL 6020 DUP

Number of Replicates: 3

Batch ID: 941732|2|rmj

Method File: c:\elandata\Method\6020 nohrs thtimozr.mth

Dataset File: C:\elandata\Dataset\100202\1202015680.284

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	43.116	ug/L	3.966	31430	0.046
Be	9	2.476	ug/L	8.734	652	0.001
B	11	7.300	ug/L	0.776	2693	0.003
Na	23	645.251	ug/L	1.891	1500987	2.175
Mg	24	4291.626	ug/L	3.238	6625845	9.701
Al	27	29071.012	ug/L	7.138	69809453	102.126
P	31	253.367	ug/L	1.003	41050	0.047
K	39	4216.507	ug/L	7.841	9690594	13.657
Ca	43	4075.655	ug/L	2.453	20465	0.029
> Sc	45		ug/L		682981	682980.918
V	51	32.089	ug/L	1.944	99002	0.130
Cr	52	18.478	ug/L	1.135	45801	0.063
Cr	53		ug/L		43801	-0.033
Mn	55	698.988	ug/L	0.790	2328643	3.409
Fe	57	21640.913	ug/L	1.573	1406898	2.055
Co	59	30.623	ug/L	0.814	74387	0.109
Ni	60	18.880	ug/L	1.537	9604	0.014
Cu	63		ug/L		17896	0.026
Cu	65	15.912	ug/L	2.155	9029	0.013
Zn	66	88.005	ug/L	1.130	29406	0.193
Zn	67		ug/L		11966	-0.001
Zn	68		ug/L		22552	0.143
> Ge	74		ug/L		151607	151607.295
As	75	5.487	ug/L	6.161	2602	0.015
Se	77		ug/L		1409	-0.007
Se	82	-0.807	ug/L	28.372	-29	-0.000
Kr	83		ug/L		138	0.001
Sr	88	35.223	ug/L	1.007	167779	1.725
Y	89		ug/L		494569	5.090
Ag	107	0.318	ug/L	4.784	704	0.007
Cd	111	1.363	ug/L	2.081	721	0.007
Cd	114		ug/L		174	0.002
> In	115		ug/L		97188	97187.675
Sn	120	1.805	ug/L	3.433	4192	0.040
Sb	121	0.076	ug/L	19.962	536	0.001
Sb	123		ug/L		438	0.001
Ba	135		ug/L		105193	0.697
Ba	137	207.684	ug/L	0.317	184241	1.221
Ho	165		ug/L		29941	0.198
> Lu	175		ug/L		150910	150909.755
Tl	205	0.250	ug/L	9.360	2318	0.007
Pb	208	24.362	ug/L	0.539	185731	1.227
Bi	209		ug/L		6475	0.043
U	238	8.272	ug/L	0.558	68699	0.454

Sample ID: 1202015680

Report Date/Time: Wednesday, February 03, 2010 18:34:11

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	0.9999
Na	23Linear Thru Zero	0.9999
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	
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	0.9999
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
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	0.9999
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	
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		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		93.0			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Ag	107					
Cd	111					
Cd	114					
> In	115		96.7			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		99.0			
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: 1202015682

Sample Date/Time: Wednesday, February 03, 2010 18:37:34

Sample Type:

Sample Description: LANL 6020 MS

Number of Replicates: 3

Batch ID: 941732|2|rmj

Method File: c:\elandata\Method\6020 noirs thtimozr.mth

Dataset File: C:\elandata\Dataset\100202\1202015682.285

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	67.322	ug/L	2.189	49990	0.072
Be	9	32.126	ug/L	1.482	8548	0.012
B	11	64.500	ug/L	4.530	20450	0.029
Na	23	1836.370	ug/L	2.234	4324282	6.191
Mg	24	5826.262	ug/L	3.782	9168909	13.171
Al	27	31963.386	ug/L	6.192	78193431	112.287
P	31	1204.919	ug/L	1.950	165214	0.225
K	39	5838.396	ug/L	2.093	13512543	18.910
Ca	43	5209.788	ug/L	1.237	26545	0.038
> Sc	45		ug/L		695747	695747.471
V	51	58.049	ug/L	0.844	173730	0.234
Cr	52	47.552	ug/L	0.924	115510	0.162
Cr	53		ug/L		51550	-0.023
Mn	55	564.635	ug/L	0.776	1916811	2.754
Fe	57	21843.500	ug/L	0.245	1447112	2.074
Co	59	50.279	ug/L	0.975	124379	0.179
Ni	60	44.710	ug/L	0.836	23074	0.033
Cu	63		ug/L		53903	0.077
Cu	65	46.330	ug/L	0.811	26636	0.038
Zn	66	106.198	ug/L	2.170	36564	0.233
Zn	67		ug/L		13071	0.004
Zn	68		ug/L		27498	0.170
> Ge	74		ug/L		156444	156444.003
As	75	46.246	ug/L	3.226	20282	0.128
Se	77		ug/L		1707	-0.005
Se	82	9.135	ug/L	2.210	373	0.002
Kr	83		ug/L		127	0.000
Sr	88	63.194	ug/L	1.176	305326	3.096
Y	89		ug/L		492929	4.999
Ag	107	26.285	ug/L	0.781	56318	0.571
Cd	111	7.464	ug/L	3.892	3948	0.040
Cd	114		ug/L		6454	0.065
> In	115		ug/L		98587	98586.591
Sn	120	21.088	ug/L	0.821	45999	0.463
Sb	121	58.293	ug/L	0.262	112376	1.136
Sb	123		ug/L		86721	0.876
Ba	135		ug/L		112389	0.730
Ba	137	219.020	ug/L	1.166	198078	1.287
Ho	165		ug/L		29988	0.195
> Lu	175		ug/L		153855	153855.404
Tl	205	48.683	ug/L	1.076	221601	1.432
Pb	208	121.232	ug/L	1.074	940008	6.107
Bi	209		ug/L		3478	0.022
U	238	32.537	ug/L	1.104	275023	1.787

Sample ID: 1202015682

Calibration

Analyte	Mass Curve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	0.9999
Na	23Linear Thru Zero	0.9999
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	
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	0.9999
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
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	0.9999
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	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	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		98.9			
|	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		96.0			
|	As	75					
|	Se	77					
|	Se	82					
|	Kr	83					
|	Sr	88					
|	Y	89					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115		98.1			
|	Sn	120					
|	Sb	121					
|	Sb	123					
|	Ba	135					
|	Ba	137					
|	Ho	165					
|>	Lu	175		100.9			
|	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: 1202015683

Sample Date/Time: Wednesday, February 03, 2010 18:43:28

Sample Type:

Sample Description: LANL 6020 MSD

Number of Replicates: 3

Batch ID: 941732|2|rmj

Method File: c:\elandata\Method\6020 nolrs thtimozr.mth

Dataset File: C:\elandata\Dataset\100202\1202015683.286

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	87.266	ug/L	2.546	65965	0.093
Be	9	31.257	ug/L	2.199	8466	0.012
B	11	64.652	ug/L	3.654	20859	0.029
Na	23	1697.944	ug/L	4.360	4070987	5.724
Mg	24	7115.243	ug/L	1.146	11397093	16.084
Al	27	38503.600	ug/L	6.925	95816896	135.262
P	31	1171.435	ug/L	1.289	163765	0.218
K	39	6698.197	ug/L	0.303	15730250	21.695
Ca	43	5350.609	ug/L	2.096	27748	0.039
> Sc	45		ug/L		708456	708456.350
V	51	63.894	ug/L	0.917	193617	0.258
Cr	52	48.815	ug/L	1.359	120650	0.166
Cr	53		ug/L		51405	-0.025
Mn	55	593.346	ug/L	3.572	2051175	2.894
Fe	57	23406.327	ug/L	1.140	1578572	2.223
Co	59	47.699	ug/L	2.233	120136	0.169
Ni	60	45.608	ug/L	2.246	23958	0.034
Cu	63		ug/L		52201	0.074
Cu	65	44.384	ug/L	1.238	25985	0.037
Zn	66	121.179	ug/L	1.878	42229	0.266
Zn	67		ug/L		14050	0.009
Zn	68		ug/L		33012	0.203
> Ge	74		ug/L		158326	158325.931
As	75	45.996	ug/L	0.706	20430	0.127
Se	77		ug/L		1767	-0.005
Se	82	8.076	ug/L	9.112	335	0.002
Kr	83		ug/L		155	0.001
Sr	88	71.024	ug/L	3.619	340192	3.479
Y	89		ug/L		470666	4.815
Ag	107	26.518	ug/L	3.078	56330	0.576
Cd	111	7.198	ug/L	6.278	3775	0.039
Cd	114		ug/L		6544	0.067
> In	115		ug/L		97785	97784.669
Sn	120	19.779	ug/L	4.316	42792	0.434
Sb	121	52.549	ug/L	4.002	100468	1.024
Sb	123		ug/L		77677	0.792
Ba	135		ug/L		148407	0.971
Ba	137	287.989	ug/L	1.542	258681	1.693
Ho	165		ug/L		28629	0.187
> Lu	175		ug/L		152800	152800.044
Tl	205	48.904	ug/L	1.730	221076	1.439
Pb	208	124.267	ug/L	0.528	957010	6.260
Bi	209		ug/L		4013	0.026
U	238	35.736	ug/L	0.993	299989	1.962

Sample ID: 1202015683

Report Date/Time: Wednesday, February 03, 2010 18:45:58

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	0.9999
Na	23Linear Thru Zero	0.9999
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	
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	0.9999
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
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	0.9999
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	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		100.7			
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		97.2			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Ag	107					
Cd	111					
Cd	114					
> In	115		97.3			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		100.2			
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: 1202015681

Sample Date/Time: Wednesday, February 03, 2010 18:49:22

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 941732|10|rmj

Method File: c:\elandata\Method\6020 noirs tht\mozr.mth

Dataset File: C:\elandata\Dataset\100202\1202015681.287

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	9.784	ug/L	3.492	7257	0.010
Be	9	0.541	ug/L	7.120	150	0.000
B	11	3.045	ug/L	7.461	1416	0.001
Na	23	141.802	ug/L	6.007	345464	0.478
Mg	24	1086.564	ug/L	5.857	1697645	2.456
Al	27	7214.693	ug/L	7.570	17521873	25.345
P	31	41.070	ug/L	3.067	14190	0.008
K	39	1157.935	ug/L	9.882	2945181	3.750
Ca	43	990.194	ug/L	2.543	5355	0.007
> Sc	45		ug/L		690970	690970.495
V	51	7.940	ug/L	5.975	32765	0.032
Cr	52	4.574	ug/L	0.771	13654	0.016
Cr	53		ug/L		47606	-0.029
Mn	55	165.503	ug/L	0.485	558549	0.807
Fe	57	5588.190	ug/L	0.402	370498	0.531
Co	59	5.001	ug/L	0.717	12393	0.018
Ni	60	4.438	ug/L	2.411	2342	0.003
Cu	63		ug/L		4765	0.007
Cu	65	4.031	ug/L	0.751	2375	0.003
Zn	66	20.682	ug/L	0.170	7426	0.045
Zn	67		ug/L		9369	-0.022
Zn	68		ug/L		6228	0.033
> Ge	74		ug/L		160344	160343.792
As	75	0.822	ug/L	33.933	685	0.002
Se	77		ug/L		1724	-0.005
Se	82	-0.710	ug/L	38.240	-26	-0.000
Kr	83		ug/L		78	0.000
Sr	88	9.488	ug/L	0.221	46029	0.465
Y	89		ug/L		105621	1.069
Ag	107	0.043	ug/L	16.251	125	0.001
Cd	111	0.229	ug/L	13.699	134	0.001
Cd	114		ug/L		57	0.000
> In	115		ug/L		98789	98789.263
Sn	120	0.281	ug/L	2.702	957	0.006
Sb	121	0.041	ug/L	80.503	477	0.001
Sb	123		ug/L		382	0.001
Ba	135		ug/L		26744	0.186
Ba	137	55.507	ug/L	1.164	47006	0.326
Ho	165		ug/L		6036	0.042
> Lu	175		ug/L		144026	144025.547
Tl	205	0.357	ug/L	22.242	2666	0.011
Pb	208	5.715	ug/L	1.139	41966	0.288
Bi	209		ug/L		831	0.006
U	238	1.371	ug/L	1.578	10991	0.075

Sample ID: 1202015681

Report Date/Time: Wednesday, February 03, 2010 18:51:53

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	0.9999
Na	23Linear Thru Zero	0.9999
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	
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	0.9999
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
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	0.9999
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	
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		98.2			
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		98.4			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Ag	107					
Cd	111					
Cd	114					
> In	115		98.3			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		94.5			
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: 244601002

Sample Date/Time: Wednesday, February 03, 2010 18:55:16

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 941732|2|rmj

Method File: c:\elandata\Method\6020 nolrs thtimozr.mth

Dataset File: C:\elandata\Dataset\100202\244601002.288

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	57.527	ug/L	3.611	44914	0.061
Be	9	4.473	ug/L	1.252	1258	0.002
B	11	18.063	ug/L	1.940	6385	0.008
Na	23	1695.699	ug/L	1.163	4198940	5.717
Mg	24	12266.987	ug/L	6.361	20315165	27.730
Al	27	65213.513	ug/L	1.013	167679568	229.093
P	31	271.582	ug/L	1.075	46464	0.051
K	39	11574.258	ug/L	1.468	27795990	37.488
Ca	43	13884.808	ug/L	0.198	73656	0.100
> Sc	45		ug/L		731774	731773.949
V	51	105.465	ug/L	1.349	322830	0.426
Cr	52	45.819	ug/L	1.274	117150	0.156
Cr	53		ug/L		52308	-0.026
Mn	55	1525.266	ug/L	0.893	5445304	7.439
Fe	57	50992.199	ug/L	0.340	3547342	4.842
Co	59	39.956	ug/L	1.645	103932	0.142
Ni	60	43.986	ug/L	2.218	23862	0.033
Cu	63		ug/L		41233	0.056
Cu	65	34.647	ug/L	2.104	20964	0.029
Zn	66	143.077	ug/L	0.294	50522	0.314
Zn	67		ug/L		16693	0.024
Zn	68		ug/L		41993	0.256
> Ge	74		ug/L		160550	160549.530
As	75	13.238	ug/L	1.601	6192	0.037
Se	77		ug/L		1428	-0.007
Se	82	-2.114	ug/L	2.283	-85	-0.001
Kr	83		ug/L		171	0.001
Sr	88	147.492	ug/L	0.928	728342	7.225
Y	89		ug/L		218515	2.167
Ag	107	0.341	ug/L	3.317	780	0.007
Cd	111	0.951	ug/L	6.081	525	0.005
Cd	114		ug/L		320	0.003
> In	115		ug/L		100790	100789.682
Sn	120	0.415	ug/L	0.520	1272	0.009
Sb	121	0.007	ug/L	185.696	420	0.000
Sb	123		ug/L		334	0.000
Ba	135		ug/L		412878	2.738
Ba	137	808.096	ug/L	1.620	716131	4.750
Ho	165		ug/L		13294	0.088
> Lu	175		ug/L		150765	150764.916
Tl	205	1.085	ug/L	2.158	6021	0.032
Pb	208	51.287	ug/L	0.935	390020	2.584
Bi	209		ug/L		6850	0.045
U	238	4.026	ug/L	1.405	33483	0.221

Sample ID: 244601002

Report Date/Time: Wednesday, February 03, 2010 18:57:47

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	0.9999
Na	23Linear Thru Zero	0.9999
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	
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	0.9999
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
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	0.9999
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	
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		104.0			
|	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		98.5			
|	As	75					
|	Se	77					
|	Se	82					
|	Kr	83					
|	Sr	88					
|	Y	89					
|	Ag	107					
|	Cd	111					
|	Cd	114					
>	In	115		100.2			
|	Sn	120					
|	Sb	121					
|	Sb	123					
|	Ba	135					
|	Ba	137					
|	Ho	165					
>	Lu	175		98.9			
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Al	27	Sample is out of limits (over linear range)
	V	51	Sample is out of limits (over linear range)
	Mn	55	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#6 - Summary Report

Sample ID: 244601003

Sample Date/Time: Wednesday, February 03, 2010 19:01:10

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 941732[2]rmj

Method File: c:\elandata\Method\6020 nolrs thtimozr.mth

Dataset File: C:\elandata\Dataset\100202\244601003.289

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Li	7	72.192 ug/L	4.407	57734	0.077
|	Be	9	5.985 ug/L	2.478	1721	0.002
|	B	11	25.446 ug/L	3.200	9007	0.011
|	Na	23	3889.734 ug/L	3.993	9847141	13.114
|	Mg	24	16526.578 ug/L	0.845	28008403	37.359
|	Al	27	97311.475 ug/L	7.397	256310197	341.853
|	P	31	384.829 ug/L	2.468	63424	0.072
|	K	39	14732.808 ug/L	3.444	36134787	47.718
|	Ca	43	20440.007 ug/L	1.184	110870	0.147
>	Sc	45	ug/L		749592	749592.062
|	V	51	134.546 ug/L	0.519	418581	0.543
|	Cr	52	59.482 ug/L	0.313	154870	0.202
|	Cr	53	ug/L		55353	-0.024
|	Mn	55	694.573 ug/L	1.161	2540329	3.387
|	Fe	57	59812.952 ug/L	1.117	4262510	5.680
|	Co	59	28.885 ug/L	0.414	77027	0.103
|	Ni	60	48.959 ug/L	0.870	27211	0.036
|	Cu	63	ug/L		44534	0.059
|	Cu	65	36.260 ug/L	1.281	22479	0.030
[	Zn	66	168.976 ug/L	0.603	60023	0.371
|	Zn	67	ug/L		18499	0.034
|	Zn	68	ug/L		50265	0.305
>	Ge	74	ug/L		161582	161582.058
|	As	75	16.424 ug/L	3.048	7655	0.045
|	Se	77	ug/L		1518	-0.007
|	Se	82	-3.193 ug/L	20.444	-130	-0.001
[	Kr	83	ug/L		265	0.001
[	Sr	88	200.187 ug/L	1.115	983912	9.806
|	Y	89	ug/L		536278	5.345
|	Ag	107	0.503 ug/L	3.509	1129	0.011
|	Cd	111	1.931 ug/L	5.519	1050	0.010
|	Cd	114	ug/L		231	0.002
>	In	115	ug/L		100334	100333.816
|	Sn	120	0.474 ug/L	5.783	1397	0.010
|	Sb	121	0.066 ug/L	14.978	535	0.001
[	Sb	123	ug/L		435	0.001
[	Ba	135	ug/L		436301	2.784
|	Ba	137	819.043 ug/L	1.101	754449	4.814
|	Ho	165	ug/L		35578	0.227
>	Lu	175	ug/L		156707	156706.732
|	Tl	205	0.860 ug/L	0.105	5219	0.025
|	Pb	208	49.159 ug/L	0.485	388611	2.476
|	Bi	209	ug/L		11243	0.072
[	U	238	4.974 ug/L	1.200	42956	0.273

Sample ID: 244601003

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	0.9999
Na	23Linear Thru Zero	0.9999
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	
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	0.9999
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
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	0.9999
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	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	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		106.6			
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		99.2			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Ag	107					
Cd	111					
Cd	114					
> In	115		99.8			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		102.8			
Tl	205					
Pb	208					
Bi	209					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass Out of Limits Message
	Al	27 Sample is out of limits (over linear range)
	V	51 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#6 - Summary Report

Sample ID: 244601004

Sample Date/Time: Wednesday, February 03, 2010 19:07:04

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 941732|2|rmj

Method File: c:\elandata\Method\6020 nolrs thtimozr.mth

Dataset File: C:\elandata\Dataset\100202\244601004.290

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	64.764	ug/L	2.020	50661	0.069
Be	9	3.870	ug/L	3.883	1090	0.001
B	11	14.570	ug/L	0.664	5258	0.006
Na	23	677.438	ug/L	6.708	1688851	2.284
Mg	24	8195.602	ug/L	5.191	13590587	18.527
Al	27	54385.364	ug/L	7.821	139790007	191.054
P	31	265.564	ug/L	0.779	45689	0.049
K	39	8217.272	ug/L	5.055	19896934	26.615
Ca	43	5904.465	ug/L	0.709	31620	0.043
> Sc	45		ug/L		732664	732663.514
V	51	52.693	ug/L	2.360	167026	0.213
Cr	52	34.387	ug/L	0.699	88796	0.117
Cr	53		ug/L		47422	-0.033
Mn	55	895.477	ug/L	0.429	3200206	4.367
Fe	57	35251.973	ug/L	0.703	2456360	3.348
Co	59	30.749	ug/L	0.432	80131	0.109
Ni	60	32.111	ug/L	1.895	17464	0.024
Cu	63		ug/L		34271	0.047
Cu	65	27.839	ug/L	2.480	16879	0.023
Zn	66	138.901	ug/L	1.409	48866	0.305
Zn	67		ug/L		15021	0.014
Zn	68		ug/L		38070	0.232
> Ge	74		ug/L		159954	159953.921
As	75	8.459	ug/L	5.838	4054	0.023
Se	77		ug/L		1361	-0.008
Se	82	-1.808	ug/L	15.485	-72	-0.000
Kr	83		ug/L		182	0.001
Sr	88	65.826	ug/L	0.924	326952	3.225
Y	89		ug/L		447554	4.415
Ag	107	0.627	ug/L	4.588	1413	0.014
Cd	111	2.040	ug/L	8.086	1119	0.011
Cd	114		ug/L		183	0.002
> In	115		ug/L		101349	101348.814
Sn	120	0.638	ug/L	3.075	1776	0.014
Sb	121	0.068	ug/L	9.118	543	0.001
Sb	123		ug/L		435	0.001
Ba	135		ug/L		164734	1.067
Ba	137	316.102	ug/L	0.903	286831	1.858
Ho	165		ug/L		26700	0.173
> Lu	175		ug/L		154361	154360.696
Tl	205	0.641	ug/L	2.353	4149	0.019
Pb	208	133.239	ug/L	1.005	1036600	6.712
Bi	209		ug/L		5454	0.035
U	238	2.724	ug/L	0.935	23249	0.150

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	0.9999
Na	23Linear Thru Zero	0.9999
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	
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	0.9999
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
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	0.9999
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	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution %	Duplicate	Rel. % Difference
|	Li	7						
|	Be	9						
|	B	11						
|	Na	23						
|	Mg	24						
|	Al	27						
|	P	31						
|	K	39						
|	Ca	43						
>	Sc	45		104.2				
|	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		98.2				
|	As	75						
|	Se	77						
|	Se	82						
|	Kr	83						
|	Sr	88						
|	Y	89						
|	Ag	107						
|	Cd	111						
|	Cd	114						
>	In	115		100.8				
|	Sn	120						
|	Sb	121						
|	Sb	123						
|	Ba	135						
|	Ba	137						
|	Ho	165						
>	Lu	175		101.3				
|	Tl	205						
|	Pb	208						
|	Bi	209						
|	U	238						

QC Out Of Limits

Measurement Type Analyte
AI

Mass Out of Limits Message
27 Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Wednesday, February 03, 2010 19:12:58

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 nohrs thtmozt.mth

Dataset File: C:\elandata\Dataset\100202\QC Std 6.291

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	60.196	ug/L	3.086	43488	0.064
Be	9	59.981	ug/L	1.077	15518	0.023
B	11	108.829	ug/L	3.995	33242	0.048
Na	23	5825.433	ug/L	2.663	13307089	19.639
Mg	24	5517.780	ug/L	1.277	8443082	12.473
Al	27	5331.795	ug/L	7.624	12690926	18.730
P	31	5350.070	ug/L	0.815	683567	0.997
K	39	5658.160	ug/L	7.651	12763354	18.326
Ca	43	5364.094	ug/L	2.164	26582	0.039
> Sc	45		ug/L		676891	676891.129
V	51	51.697	ug/L	2.518	151655	0.209
Cr	52	53.470	ug/L	1.215	126010	0.182
Cr	53		ug/L		71826	0.009
Mn	55	53.479	ug/L	0.494	177340	0.261
Fe	57	5436.191	ug/L	0.822	353231	0.516
Co	59	52.551	ug/L	0.569	126445	0.187
Ni	60	54.286	ug/L	0.539	27236	0.040
Cu	63		ug/L		61874	0.091
Cu	65	53.824	ug/L	1.898	30088	0.044
Zn	66	56.076	ug/L	0.224	19851	0.123
Zn	67		ug/L		13824	0.006
Zn	68		ug/L		15276	0.089
> Ge	74		ug/L		160199	160198.730
As	75	50.317	ug/L	1.343	22583	0.139
Se	77		ug/L		3934	0.008
Se	82	50.670	ug/L	1.774	2106	0.013
Kr	83		ug/L		59	0.000
Sr	88	54.284	ug/L	0.803	258338	2.659
Y	89		ug/L		109	0.001
Ag	107	52.401	ug/L	0.248	110557	1.138
Cd	111	53.253	ug/L	1.415	27675	0.285
Cd	114		ug/L		62712	0.646
> In	115		ug/L		97110	97110.449
Sn	120	51.921	ug/L	0.957	111066	1.140
Sb	121	50.839	ug/L	3.656	96621	0.991
Sb	123		ug/L		75070	0.770
Ba	135		ug/L		25661	0.181
Ba	137	53.626	ug/L	0.365	44775	0.315
Ho	165		ug/L		18	0.000
> Lu	175		ug/L		141983	141983.196
Tl	205	50.852	ug/L	0.506	213551	1.496
Pb	208	53.357	ug/L	0.208	382117	2.688
Bi	209		ug/L		93	0.001
U	238	55.459	ug/L	0.232	432503	3.045

Sample ID: QC Std 6

Report Date/Time: Wednesday, February 03, 2010 19:15:28

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	0.9999
Na	23Linear Thru Zero	0.9999
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	
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	0.9999
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
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	0.9999
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	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution %	Duplicate Rel. % Difference
	Li	7	120.392				
	Be	9	119.963				
	B	11	108.829				
	Na	23	116.509				
	Mg	24	110.356				
	Al	27	105.580				
	P	31	107.001				
	K	39	113.163				
	Ca	43	107.282				
>	Sc	45		96.2			
	V	51	103.394				
	Cr	52	106.941				
	Cr	53					
	Mn	55	106.958				
	Fe	57	108.724				
	Co	59	105.103				
	Ni	60	108.573				
	Cu	63					
	Cu	65	107.648				
	Zn	66	112.153				
	Zn	67					
	Zn	68					
>	Ge	74		98.3			
	As	75	100.635				
	Se	77					
	Se	82	101.339				
	Kr	83					
	Sr	88	108.568				
	Y	89					
	Ag	107	104.802				
	Cd	111	106.506				
	Cd	114					
>	In	115		96.6			
	Sn	120	103.843				
	Sb	121	101.678				
	Sb	123					
	Ba	135					
	Ba	137	107.253				
	Ho	165					
>	Lu	175		93.1			
	Tl	205	101.703				
	Pb	208	106.713				
	Bi	209					
	U	238	110.918				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Li	7	7CCV is out of limits (+/- 10%)
QC Std 6	Be	9	9CCV is out of limits (+/- 10%)
QC Std 6	Na	23	23CCV is out of limits (+/- 10%)
QC Std 6	Mg	24	24CCV is out of limits (+/- 10%)
QC Std 6	K	39	39CCV is out of limits (+/- 10%)
QC Std 6	Zn	66	66CCV is out of limits (+/- 10%)
QC Std 6	U	238	238CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Wednesday, February 03, 2010 19:18:52

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 noirs thtlimozr.mth

Dataset File: C:\elandata\Dataset\100202\QC Std 7.292

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.029	ug/L	34.132	70	0.000
Be	9	0.003	ug/L	390.102	8	0.000
B	11	1.870	ug/L	31.045	1036	0.001
Na	23	-2.547	ug/L	36.425	9337	-0.009
Mg	24	0.265	ug/L	259.511	2000	0.001
Al	27	1.841	ug/L	38.328	5334	0.006
P	31	-3.703	ug/L	45.417	8292	-0.001
K	39	10.088	ug/L	17.877	368701	0.033
Ca	43	-3.759	ug/L	108.200	399	-0.000
> Sc	45		ug/L		679743	679743.256
V	51	0.155	ug/L	946.211	10961	0.001
Cr	52	0.243	ug/L	18.491	3413	0.001
Cr	53		ug/L		62951	-0.005
Mn	55	0.115	ug/L	3.676	1168	0.001
Fe	57	-1.588	ug/L	116.102	3668	-0.000
Co	59	0.004	ug/L	29.845	128	0.000
Ni	60	-0.003	ug/L	410.767	73	-0.000
Cu	63		ug/L		91	0.000
Cu	65	0.004	ug/L	665.720	81	0.000
Zn	66	0.052	ug/L	41.667	173	0.000
Zn	67		ug/L		12019	-0.005
Zn	68		ug/L		917	-0.000
> Ge	74		ug/L		159839	159838.572
As	75	-0.685	ug/L	113.049	16	-0.002
Se	77		ug/L		2545	-0.000
Se	82	0.139	ug/L	8.162	9	0.000
Kr	83		ug/L		51	-0.000
Sr	88	0.004	ug/L	46.932	133	0.000
Y	89		ug/L		44	0.000
Ag	107	0.006	ug/L	23.424	45	0.000
Cd	111	0.015	ug/L	77.714	21	0.000
Cd	114		ug/L		25	0.000
> In	115		ug/L		98684	98683.996
Sn	120	0.061	ug/L	35.723	479	0.001
Sb	121	0.653	ug/L	40.873	1647	0.013
Sb	123		ug/L		1253	0.010
Ba	135		ug/L		24	0.000
Ba	137	0.023	ug/L	43.690	41	0.000
Ho	165		ug/L		13	0.000
> Lu	175		ug/L		146282	146282.382
Tl	205	0.159	ug/L	53.946	1852	0.005
Pb	208	0.012	ug/L	47.884	607	0.001
Bi	209		ug/L		23	0.000
U	238	0.032	ug/L	45.368	407	0.002

Sample ID: QC Std 7

Report Date/Time: Wednesday, February 03, 2010 19:21:24

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	0.9999
Na	23Linear Thru Zero	0.9999
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	
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	0.9999
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
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	0.9999
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	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	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		96.6			
|	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		98.1			
|	As	75					
|	Se	77					
|	Se	82					
|	Kr	83					
[	Sr	88					
|	Y	89					
|	Ag	107					
|	Cd	111					
|	Cd	114					
>	In	115		98.2			
|	Sn	120					
|	Sb	121					
|	Sb	123					
[	Ba	135					
|	Ba	137					
|	Ho	165					
>	Lu	175		96.0			
|	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: 244601005

Sample Date/Time: Wednesday, February 03, 2010 19:24:47

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 941732[2]rmj

Method File: c:\elandata\Method\6020 noirs thtlimozr.mth

Dataset File: C:\elandata\Dataset\100202\244601005.293

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	86.300	ug/L	1.931	67955	0.092
Be	9	6.162	ug/L	5.109	1744	0.002
B	11	19.076	ug/L	0.257	6773	0.008
Na	23	2687.227	ug/L	3.220	6700547	9.060
Mg	24	14442.106	ug/L	4.774	24080396	32.647
Al	27	101366.147	ug/L	1.804	262812057	356.097
P	31	396.785	ug/L	1.786	64068	0.074
K	39	11549.677	ug/L	6.565	27969715	37.408
Ca	43	23552.195	ug/L	1.621	125702	0.170
> Sc	45		ug/L		737924	737923.857
V	51	99.887	ug/L	0.973	308851	0.403
Cr	52	51.263	ug/L	1.137	131803	0.174
Cr	53		ug/L		55827	-0.022
Mn	55	1122.222	ug/L	1.399	4040381	5.473
Fe	57	56325.692	ug/L	0.973	3951528	5.349
Co	59	24.083	ug/L	1.222	63239	0.086
Ni	60	42.113	ug/L	1.013	23051	0.031
Cu	63		ug/L		41007	0.055
Cu	65	34.183	ug/L	0.741	20868	0.028
Zn	66	152.423	ug/L	0.317	54054	0.334
Zn	67		ug/L		18994	0.038
Zn	68		ug/L		49609	0.302
> Ge	74		ug/L		161266	161265.656
As	75	13.249	ug/L	4.067	6221	0.037
Se	77		ug/L		1601	-0.006
Se	82	-3.139	ug/L	20.166	-128	-0.001
Kr	83		ug/L		225	0.001
Sr	88	204.399	ug/L	0.582	1007964	10.013
Y	89		ug/L		334158	3.319
Ag	107	0.440	ug/L	6.448	995	0.010
Cd	111	1.378	ug/L	10.954	756	0.007
Cd	114		ug/L		243	0.002
> In	115		ug/L		100653	100653.278
Sn	120	0.618	ug/L	1.277	1720	0.014
Sb	121	0.044	ug/L	60.752	493	0.001
Sb	123		ug/L		420	0.001
Ba	135		ug/L		738135	4.923
Ba	137	1422.154	ug/L	1.603	1253325	8.359
Ho	165		ug/L		18874	0.126
> Lu	175		ug/L		149927	149927.469
Tl	205	0.887	ug/L	4.968	5114	0.026
Pb	208	53.828	ug/L	0.608	407067	2.712
Bi	209		ug/L		14378	0.096
U	238	3.628	ug/L	1.329	30018	0.199

Sample ID: 244601005

Report Date/Time: Wednesday, February 03, 2010 19:27:18

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	0.9999
Na	23Linear Thru Zero	0.9999
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	
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	0.9999
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
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	0.9999
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	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution %	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			
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					
Ag	107					
Cd	111					
Cd	114					
> In	115		100.1			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		98.4			
Tl	205					
Pb	208					
Bi	209					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Al	27	Sample is out of limits (over linear range)
	Mn	55	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#6 - Summary Report

Sample ID: 244601006

Sample Date/Time: Wednesday, February 03, 2010 19:30:41

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 941732|2|rmj

Method File: c:\elandata\Method\6020 nolrs thtimozr.mth

Dataset File: C:\elandata\Dataset\100202\244601006.294

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	111.171	ug/L	2.634	87198	0.119
Be	9	6.989	ug/L	2.382	1971	0.003
B	11	21.580	ug/L	1.897	7569	0.010
Na	23	1090.629	ug/L	3.240	2720955	3.677
Mg	24	13765.866	ug/L	1.329	22884915	31.118
Al	27	129007.753	ug/L	4.509	333477018	453.201
P	31	444.700	ug/L	1.972	70398	0.083
K	39	12541.679	ug/L	2.755	30228139	40.621
Ca	43	10855.992	ug/L	0.706	57969	0.078
> Sc	45		ug/L		735289	735288.526
V	51	110.284	ug/L	1.374	338516	0.445
Cr	52	69.002	ug/L	1.071	175713	0.235
Cr	53		ug/L		58605	-0.018
Mn	55	1397.430	ug/L	1.000	5012677	6.815
Fe	57	65602.341	ug/L	0.665	4584610	6.230
Co	59	25.978	ug/L	0.232	67967	0.092
Ni	60	54.035	ug/L	0.753	29447	0.040
Cu	63		ug/L		45495	0.062
Cu	65	38.173	ug/L	2.019	23202	0.031
Zn	66	155.803	ug/L	0.708	54529	0.342
Zn	67		ug/L		17507	0.030
Zn	68		ug/L		45472	0.280
> Ge	74		ug/L		159170	159169.955
As	75	11.650	ug/L	3.516	5441	0.032
Se	77		ug/L		1330	-0.008
Se	82	-5.261	ug/L	2.750	-214	-0.001
Kr	83		ug/L		320	0.002
Sr	88	147.327	ug/L	0.492	720701	7.217
Y	89		ug/L		349539	3.501
Ag	107	0.690	ug/L	1.478	1528	0.015
Cd	111	2.137	ug/L	5.545	1155	0.011
Cd	114		ug/L		387	0.004
> In	115		ug/L		99844	99843.524
Sn	120	0.716	ug/L	3.351	1920	0.016
Sb	121	0.098	ug/L	18.923	595	0.002
Sb	123		ug/L		482	0.002
Ba	135		ug/L		466223	3.134
Ba	137	920.224	ug/L	0.343	804605	5.409
Ho	165		ug/L		19524	0.131
> Lu	175		ug/L		148757	148757.389
Tl	205	0.970	ug/L	0.349	5439	0.029
Pb	208	69.615	ug/L	0.848	522141	3.507
Bi	209		ug/L		7203	0.048
U	238	7.852	ug/L	1.988	64274	0.431

Sample ID: 244601006

Report Date/Time: Wednesday, February 03, 2010 19:33:12

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	0.9999
Na	23Linear Thru Zero	0.9999
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	
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	0.9999
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
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	0.9999
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	
U	238Linear 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		104.5			
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		97.7			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Ag	107					
Cd	111					
Cd	114					
> In	115		99.3			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		97.6			
Tl	205					
Pb	208					
Bi	209					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Al	27	Sample is out of limits (over linear range)
	V	51	Sample is out of limits (over linear range)
	Mn	55	Sample is out of limits (over linear range)
	Fe	57	Sample is out of limits (over linear range)
	Se	82	Sample is out of limits (<-PQL)

QC Action

QC Action Line: Continue

Sample ID: 244601006

ICPMS#6 - Summary Report

Sample ID: 244601007

Sample Date/Time: Wednesday, February 03, 2010 19:36:35

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 941732|2|rmj

Method File: c:\elandata\Method\6020 nolrs thtimozr.mth

Dataset File: C:\elandata\Dataset\100202\244601007.295

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	71.867	ug/L	2.271	54578	0.077
Be	9	5.409	ug/L	2.125	1478	0.002
B	11	18.695	ug/L	0.830	6413	0.008
Na	23	471.911	ug/L	5.625	1149302	1.591
Mg	24	11879.904	ug/L	2.146	19106342	26.855
Al	27	77694.390	ug/L	3.404	194371417	272.938
P	31	341.296	ug/L	0.309	54431	0.064
K	39	11379.600	ug/L	4.056	26579916	36.857
Ca	43	9256.878	ug/L	2.341	47925	0.067
> Sc	45		ug/L		711679	711679.139
V	51	87.128	ug/L	1.183	261213	0.352
Cr	52	47.038	ug/L	0.786	116903	0.160
Cr	53		ug/L		50047	-0.027
Mn	55	1109.910	ug/L	0.560	3853369	5.413
Fe	57	50156.773	ug/L	1.308	3393282	4.763
Co	59	22.386	ug/L	1.285	56692	0.080
Ni	60	39.646	ug/L	1.648	20929	0.029
Cu	63		ug/L		38575	0.054
Cu	65	32.850	ug/L	0.929	19341	0.027
Zn	66	141.480	ug/L	1.795	48523	0.310
Zn	67		ug/L		15633	0.020
Zn	68		ug/L		39274	0.246
> Ge	74		ug/L		155986	155986.321
As	75	10.535	ug/L	9.515	4845	0.029
Se	77		ug/L		1240	-0.008
Se	82	-3.377	ug/L	17.071	-134	-0.001
Kr	83		ug/L		228	0.001
Sr	88	111.817	ug/L	0.589	536159	5.477
Y	89		ug/L		297384	3.038
Ag	107	0.613	ug/L	4.625	1334	0.013
Cd	111	2.049	ug/L	2.834	1086	0.011
Cd	114		ug/L		385	0.004
> In	115		ug/L		97860	97859.721
Sn	120	0.422	ug/L	5.613	1251	0.009
Sb	121	0.096	ug/L	19.878	578	0.002
Sb	123		ug/L		472	0.002
Ba	135		ug/L		298858	2.034
Ba	137	600.700	ug/L	0.622	518795	3.531
Ho	165		ug/L		17500	0.119
> Lu	175		ug/L		146924	146924.170
Tl	205	0.741	ug/L	0.280	4381	0.022
Pb	208	61.974	ug/L	0.495	459204	3.122
Bi	209		ug/L		10020	0.068
U	238	17.245	ug/L	0.359	139276	0.947

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	0.9999
Na	23Linear Thru Zero	0.9999
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	
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	0.9999
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
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	0.9999
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	
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		101.2			
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		95.7			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Ag	107					
Cd	111					
Cd	114					
> In	115		97.3			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		96.4			
Tl	205					
Pb	208					
Bi	209					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Al	27	Sample is out of limits (over linear range)
	Mn	55	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#6 - Summary Report

Sample ID: 244601008

Sample Date/Time: Wednesday, February 03, 2010 19:42:30

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 941732[2]rmj

Method File: c:\elandata\Method\6020 noirs thtimozr.mth

Dataset File: C:\elandata\Dataset\100202\244601008.296

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	56.079	ug/L	3.419	41128	0.060
Be	9	3.228	ug/L	2.207	855	0.001
B	11	13.616	ug/L	2.975	4642	0.006
Na	23	448.834	ug/L	4.455	1056099	1.513
Mg	24	6495.066	ug/L	1.155	10092205	14.682
Al	27	50076.515	ug/L	5.383	120797730	175.917
P	31	365.710	ug/L	1.130	55697	0.068
K	39	6999.316	ug/L	1.457	15928405	22.670
Ca	43	5720.803	ug/L	1.183	28756	0.041
> Sc	45		ug/L		687272	687271.733
V	51	55.886	ug/L	2.853	165502	0.226
Cr	52	32.259	ug/L	0.549	78325	0.110
Cr	53		ug/L		45462	-0.031
Mn	55	825.318	ug/L	0.494	2767138	4.025
Fe	57	33216.918	ug/L	0.928	2171328	3.154
Co	59	20.287	ug/L	1.753	49623	0.072
Ni	60	27.126	ug/L	2.320	13850	0.020
Cu	63		ug/L		27929	0.041
Cu	65	24.556	ug/L	0.370	13983	0.020
Zn	66	125.823	ug/L	0.716	42129	0.276
Zn	67		ug/L		13597	0.009
Zn	68		ug/L		32577	0.208
> Ge	74		ug/L		152178	152178.359
As	75	7.994	ug/L	1.984	3666	0.022
Se	77		ug/L		1243	-0.008
Se	82	-1.664	ug/L	5.582	-63	-0.000
Kr	83		ug/L		149	0.001
Sr	88	59.819	ug/L	1.184	283002	2.930
Y	89		ug/L		297973	3.086
Ag	107	0.521	ug/L	7.820	1123	0.011
Cd	111	1.913	ug/L	5.048	1000	0.010
Cd	114		ug/L		347	0.003
> In	115		ug/L		96535	96534.615
Sn	120	0.756	ug/L	1.824	1942	0.017
Sb	121	0.127	ug/L	7.940	630	0.002
Sb	123		ug/L		489	0.002
Ba	135		ug/L		157692	1.079
Ba	137	321.191	ug/L	0.988	275894	1.888
Ho	165		ug/L		18186	0.124
> Lu	175		ug/L		146130	146129.813
Tl	205	0.404	ug/L	2.334	2908	0.012
Pb	208	48.466	ug/L	1.047	357241	2.441
Bi	209		ug/L		8335	0.057
U	238	12.776	ug/L	0.600	102657	0.702

Sample ID: 244601008

Report Date/Time: Wednesday, February 03, 2010 19:45:01

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	0.9999
Na	23Linear Thru Zero	0.9999
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	
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	0.9999
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
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	0.9999
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	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		97.7			
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		93.4			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Ag	107					
Cd	111					
Cd	114					
> In	115		96.0			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		95.9			
Tl	205					
Pb	208					
Bi	209					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Al	27	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: 244601009

Sample Date/Time: Wednesday, February 03, 2010 19:48:25

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 941732|2|rmj

Method File: c:\elandata\Method\6020 nolrs thtimozr.mth

Dataset File: C:\elandata\Dataset\100202\244601009.297

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	48.145	ug/L	2.972	35217	0.051
Be	9	3.326	ug/L	2.518	878	0.001
B	11	13.726	ug/L	3.426	4662	0.006
Na	23	443.775	ug/L	5.039	1040274	1.496
Mg	24	6222.274	ug/L	3.426	9643900	14.066
Al	27	48144.963	ug/L	3.802	116006885	169.132
P	31	364.399	ug/L	0.178	55363	0.068
K	39	6958.301	ug/L	7.189	15800826	22.537
Ca	43	5713.996	ug/L	0.981	28639	0.041
> Sc	45		ug/L		685351	685351.108
V	51	54.229	ug/L	1.706	160488	0.219
Cr	52	33.657	ug/L	0.748	81357	0.115
Cr	53		ug/L		44622	-0.032
Mn	55	824.117	ug/L	0.314	2755309	4.019
Fe	57	30959.160	ug/L	2.919	2019253	2.940
Co	59	18.155	ug/L	0.807	44303	0.064
Ni	60	27.061	ug/L	0.784	13784	0.020
Cu	63		ug/L		26786	0.039
Cu	65	23.768	ug/L	2.662	13492	0.020
Zn	66	110.032	ug/L	1.765	37080	0.241
Zn	67		ug/L		12895	0.004
Zn	68		ug/L		29464	0.187
> Ge	74		ug/L		153120	153120.031
As	75	7.705	ug/L	7.968	3569	0.021
Se	77		ug/L		1271	-0.008
Se	82	-1.434	ug/L	33.896	-54	-0.000
Kr	83		ug/L		162	0.001
Sr	88	60.898	ug/L	0.737	286884	2.983
Y	89		ug/L		315391	3.280
Ag	107	0.400	ug/L	2.607	866	0.009
Cd	111	1.743	ug/L	7.040	909	0.009
Cd	114		ug/L		372	0.004
> In	115		ug/L		96127	96126.576
Sn	120	0.708	ug/L	0.989	1832	0.016
Sb	121	0.067	ug/L	29.888	513	0.001
Sb	123		ug/L		383	0.001
Ba	135		ug/L		168268	1.146
Ba	137	337.205	ug/L	1.463	291114	1.982
Ho	165		ug/L		18864	0.128
> Lu	175		ug/L		146880	146879.824
Tl	205	0.366	ug/L	3.589	2760	0.011
Pb	208	43.292	ug/L	1.661	320783	2.181
Bi	209		ug/L		7380	0.050
U	238	16.077	ug/L	2.054	129778	0.883

Sample ID: 244601009

Report Date/Time: Wednesday, February 03, 2010 19:50:57

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	0.9999
Na	23Linear Thru Zero	0.9999
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	
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	0.9999
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
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	0.9999
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	
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		97.4			
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		94.0			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Ag	107					
Cd	111					
Cd	114					
In	115		95.6			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
Lu	175		96.4			
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: 244601010

Sample Date/Time: Wednesday, February 03, 2010 19:54:20

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 941732|2|rmj

Method File: c:\elandata\Method\6020 nolrs thtimozr.mth

Dataset File: C:\elandata\Dataset\100202\244601010.298

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	31.829	ug/L	5.012	22979	0.034
Be	9	1.322	ug/L	3.791	348	0.001
B	11	3.565	ug/L	3.251	1543	0.002
Na	23	634.943	ug/L	6.162	1461592	2.141
Mg	24	1912.339	ug/L	5.276	2927326	4.323
Al	27	13182.574	ug/L	6.556	31311593	46.310
P	31	163.321	ug/L	1.916	29287	0.030
K	39	2378.234	ug/L	6.684	5553769	7.703
Ca	43	2045.949	ug/L	1.821	10381	0.015
> Sc	45		ug/L		676260	676259.920
V	51	16.081	ug/L	2.181	54298	0.065
Cr	52	14.998	ug/L	1.224	37343	0.051
Cr	53		ug/L		40412	-0.038
Mn	55	446.570	ug/L	0.665	1473380	2.178
Fe	57	13614.773	ug/L	0.639	877961	1.293
Co	59	13.319	ug/L	1.598	32097	0.047
Ni	60	16.276	ug/L	1.916	8207	0.012
Cu	63		ug/L		8261	0.012
Cu	65	7.410	ug/L	3.650	4203	0.006
Zn	66	74.109	ug/L	0.195	24673	0.162
Zn	67		ug/L		10279	-0.012
Zn	68		ug/L		18775	0.118
> Ge	74		ug/L		150937	150936.730
As	75	4.076	ug/L	11.025	2002	0.011
Se	77		ug/L		1302	-0.008
Se	82	-0.240	ug/L	159.595	-7	-0.000
Kr	83		ug/L		113	0.000
Sr	88	17.724	ug/L	0.031	83228	0.868
Y	89		ug/L		530955	5.546
Ag	107	0.338	ug/L	6.748	733	0.007
Cd	111	1.623	ug/L	3.950	844	0.009
Cd	114		ug/L		80	0.001
> In	115		ug/L		95734	95733.743
Sn	120	2.060	ug/L	1.766	4667	0.045
Sb	121	-0.010	ug/L	42.012	368	-0.000
Sb	123		ug/L		274	-0.000
Ba	135		ug/L		42023	0.280
Ba	137	83.779	ug/L	0.299	73961	0.492
Ho	165		ug/L		33047	0.220
> Lu	175		ug/L		150153	150153.225
Tl	205	0.078	ug/L	20.762	1548	0.002
Pb	208	20.072	ug/L	0.449	152347	1.011
Bi	209		ug/L		2872	0.019
U	238	2.298	ug/L	1.385	19100	0.126

Sample ID: 244601010

Report Date/Time: Wednesday, February 03, 2010 19:56:52

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	0.9999
Na	23Linear Thru Zero	0.9999
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	
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	0.9999
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
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	0.9999
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	
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		96.2			
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		92.6			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Ag	107					
Cd	111					
Cd	114					
> In	115		95.2			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		98.5			
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: 244601011

Sample Date/Time: Wednesday, February 03, 2010 20:00:16

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 941732|2|rmj

Method File: c:\elandata\Method\6020 nolrs thtimozr.mth

Dataset File: C:\elandata\Dataset\100202\244601011.299

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	41.238	ug/L	3.992	30223	0.044
Be	9	3.269	ug/L	3.805	864	0.001
B	11	10.964	ug/L	3.050	3824	0.005
Na	23	496.016	ug/L	0.338	1163572	1.672
Mg	24	5585.698	ug/L	4.637	8672572	12.627
Al	27	38095.787	ug/L	7.430	92052661	133.829
P	31	399.457	ug/L	0.278	59956	0.074
K	39	5358.498	ug/L	2.921	12274753	17.356
Ca	43	5011.432	ug/L	0.698	25210	0.036
> Sc	45		ug/L		686633	686632.561
V	51	49.001	ug/L	1.727	146389	0.198
Cr	52	29.701	ug/L	1.548	72263	0.101
Cr	53		ug/L		44815	-0.032
Mn	55	1302.521	ug/L	1.460	4361266	6.352
Fe	57	28489.984	ug/L	2.483	1860847	2.705
Co	59	17.741	ug/L	2.024	43366	0.063
Ni	60	27.473	ug/L	2.411	14013	0.020
Cu	63		ug/L		25194	0.037
Cu	65	21.888	ug/L	2.150	12456	0.018
Zn	66	113.878	ug/L	2.316	38545	0.250
Zn	67		ug/L		13046	0.005
Zn	68		ug/L		30667	0.194
> Ge	74		ug/L		153808	153807.878
As	75	9.935	ug/L	5.170	4525	0.027
Se	77		ug/L		1283	-0.008
Se	82	-0.923	ug/L	52.247	-33	-0.000
Kr	83		ug/L		127	0.000
Sr	88	54.122	ug/L	0.779	255101	2.651
Y	89		ug/L		286635	2.980
Ag	107	0.469	ug/L	2.614	1011	0.010
Cd	111	1.815	ug/L	6.102	946	0.010
Cd	114		ug/L		454	0.004
> In	115		ug/L		96172	96172.098
Sn	120	0.897	ug/L	3.831	2231	0.020
Sb	121	0.052	ug/L	32.361	486	0.001
Sb	123		ug/L		357	0.001
Ba	135		ug/L		157439	1.086
Ba	137	324.780	ug/L	0.992	276826	1.909
Ho	165		ug/L		16980	0.117
> Lu	175		ug/L		145002	145002.047
Tl	205	0.363	ug/L	6.353	2709	0.011
Pb	208	41.799	ug/L	1.584	305789	2.106
Bi	209		ug/L		6520	0.045
U	238	11.811	ug/L	0.466	94179	0.649

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	0.9999
Na	23Linear Thru Zero	0.9999
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	
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	0.9999
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
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	0.9999
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	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution %	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		97.6			
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		94.4			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Ag	107					
Cd	111					
Cd	114					
> In	115		95.7			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		95.1			
Tl	205					
Pb	208					
Bi	209					
U	238					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message
Mn 55 Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: 244601012

Sample Date/Time: Wednesday, February 03, 2010 20:06:11

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 941732[2]rmj

Method File: c:\elandata\Method\6020 nolrs thtimozr.mth

Dataset File: C:\elandata\Dataset\100202\244601012.300

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	44.983	ug/L	1.846	32883	0.048
Be	9	3.532	ug/L	5.015	930	0.001
B	11	13.552	ug/L	1.076	4604	0.006
Na	23	529.200	ug/L	2.961	1236708	1.784
Mg	24	6370.086	ug/L	4.129	9868052	14.400
Al	27	42622.679	ug/L	4.158	102489858	149.732
P	31	507.537	ug/L	0.574	73566	0.095
K	39	6403.573	ug/L	2.332	14544035	20.740
Ca	43	6070.452	ug/L	0.771	30371	0.044
> Sc	45		ug/L		684687	684687.161
V	51	57.578	ug/L	1.300	169615	0.232
Cr	52	33.655	ug/L	0.088	81288	0.115
Cr	53		ug/L		44630	-0.032
Mn	55	1090.354	ug/L	0.611	3641371	5.318
Fe	57	31934.460	ug/L	2.304	2081167	3.033
Co	59	19.893	ug/L	0.338	48491	0.071
Ni	60	27.379	ug/L	1.036	13929	0.020
Cu	63		ug/L		33045	0.048
Cu	65	28.981	ug/L	2.118	16419	0.024
Zn	66	117.933	ug/L	0.866	39474	0.259
Zn	67		ug/L		13100	0.006
Zn	68		ug/L		31107	0.199
> Ge	74		ug/L		152072	152072.273
As	75	10.367	ug/L	6.194	4656	0.029
Se	77		ug/L		1197	-0.008
Se	82	-1.432	ug/L	22.749	-53	-0.000
Kr	83		ug/L		153	0.001
Sr	88	67.498	ug/L	1.989	317836	3.306
Y	89		ug/L		256931	2.674
Ag	107	0.469	ug/L	1.916	1009	0.010
Cd	111	2.071	ug/L	4.278	1077	0.011
Cd	114		ug/L		634	0.006
> In	115		ug/L		96074	96073.948
Sn	120	1.049	ug/L	2.620	2550	0.023
Sb	121	0.117	ug/L	6.299	607	0.002
Sb	123		ug/L		509	0.002
Ba	135		ug/L		178108	1.234
Ba	137	367.147	ug/L	0.206	311555	2.158
Ho	165		ug/L		14991	0.104
> Lu	175		ug/L		144363	144362.923
Tl	205	0.388	ug/L	3.266	2806	0.011
Pb	208	52.863	ug/L	0.310	384925	2.663
Bi	209		ug/L		7205	0.050
U	238	27.976	ug/L	0.831	221892	1.536

Sample ID: 244601012

Report Date/Time: Wednesday, February 03, 2010 20:08:43

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	0.9999
Na	23Linear Thru Zero	0.9999
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	
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	0.9999
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
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	0.9999
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	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		97.4			
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		93.3			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Ag	107					
Cd	111					
Cd	114					
> In	115		95.6			
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
	Mn	55	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: 244601013

Sample Date/Time: Wednesday, February 03, 2010 20:12:06

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 941732[2]rmj

Method File: c:\elandata\Method\6020 nolrs thtimozr.mth

Dataset File: C:\elandata\Dataset\100202\244601013.301

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	77.742	ug/L	3.169	59246	0.083
Be	9	5.956	ug/L	4.474	1632	0.002
B	11	20.211	ug/L	2.319	6921	0.009
Na	23	2832.962	ug/L	1.884	6841556	9.551
Mg	24	14603.459	ug/L	3.375	23568047	33.012
Al	27	94557.753	ug/L	3.845	237489021	332.179
P	31	421.111	ug/L	0.202	65264	0.078
K	39	11554.214	ug/L	1.244	27101090	37.423
Ca	43	22174.182	ug/L	0.442	114568	0.160
> Sc	45		ug/L		714408	714408.352
V	51	102.810	ug/L	1.356	307370	0.415
Cr	52	53.673	ug/L	0.651	133464	0.183
Cr	53		ug/L		50521	-0.027
Mn	55	1156.903	ug/L	0.307	4031923	5.642
Fe	57	56295.977	ug/L	0.543	3823006	5.346
Co	59	24.931	ug/L	0.544	63374	0.089
Ni	60	44.454	ug/L	1.995	23545	0.033
Cu	63		ug/L		41490	0.058
Cu	65	35.569	ug/L	1.685	21012	0.029
Zn	66	158.291	ug/L	0.891	53632	0.347
Zn	67		ug/L		16793	0.029
Zn	68		ug/L		46880	0.298
> Ge	74		ug/L		154092	154092.286
As	75	13.515	ug/L	1.370	6060	0.037
Se	77		ug/L		1408	-0.007
Se	82	-3.166	ug/L	22.051	-124	-0.001
Kr	83		ug/L		222	0.001
Sr	88	200.070	ug/L	0.386	945476	9.801
Y	89		ug/L		362359	3.756
Ag	107	0.503	ug/L	3.713	1086	0.011
Cd	111	1.602	ug/L	8.532	840	0.009
Cd	114		ug/L		242	0.002
> In	115		ug/L		96460	96460.149
Sn	120	0.713	ug/L	7.553	1849	0.016
Sb	121	0.046	ug/L	17.486	477	0.001
Sb	123		ug/L		395	0.001
Ba	135		ug/L		579968	4.009
Ba	137	1163.215	ug/L	0.513	989165	6.837
Ho	165		ug/L		20670	0.143
> Lu	175		ug/L		144677	144677.470
Tl	205	0.842	ug/L	2.311	4742	0.025
Pb	208	51.875	ug/L	0.365	378555	2.613
Bi	209		ug/L		15094	0.104
U	238	4.082	ug/L	1.580	32574	0.224

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	0.9999
Na	23Linear Thru Zero	0.9999
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	
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	0.9999
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
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	0.9999
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	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	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			101.6			
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			94.6			
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			94.9			
Tl	205						
Pb	208						
Bi	209						
U	238						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Al	27	Sample is out of limits (over linear range)
	V	51	Sample is out of limits (over linear range)
	Mn	55	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#6 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Wednesday, February 03, 2010 20:17:59

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 nohrs thtmozt.mth

Dataset File: C:\elandata\Dataset\100202\QC Std 6.302

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	59.920	ug/L	1.900	40379	0.064
Be	9	59.476	ug/L	2.106	14353	0.023
B	11	109.386	ug/L	0.824	31143	0.049
Na	23	5563.374	ug/L	3.693	11860439	18.756
Mg	24	5536.737	ug/L	1.258	7904048	12.516
Al	27	5195.627	ug/L	10.173	11538664	18.252
P	31	5324.455	ug/L	1.270	634479	0.992
K	39	5518.208	ug/L	3.790	11604283	17.873
Ca	43	5291.870	ug/L	1.857	24450	0.038
> Sc	45		ug/L		631270	631269.522
V	51	53.745	ug/L	1.155	146641	0.217
Cr	52	54.188	ug/L	0.425	119055	0.184
Cr	53		ug/L		67343	0.009
Mn	55	54.670	ug/L	0.663	169028	0.267
Fe	57	5441.393	ug/L	1.306	329641	0.517
Co	59	52.452	ug/L	1.081	117690	0.186
Ni	60	54.284	ug/L	1.436	25395	0.040
Cu	63		ug/L		57998	0.092
Cu	65	54.586	ug/L	0.725	28461	0.045
Zn	66	57.108	ug/L	2.624	18734	0.125
Zn	67		ug/L		12417	0.004
Zn	68		ug/L		14350	0.091
> Ge	74		ug/L		148519	148519.385
As	75	50.317	ug/L	0.762	20937	0.139
Se	77		ug/L		3655	0.008
Se	82	50.913	ug/L	2.510	1962	0.013
Kr	83		ug/L		75	0.000
Sr	88	54.825	ug/L	1.164	243014	2.686
Y	89		ug/L		91	0.001
Ag	107	53.307	ug/L	1.289	104754	1.158
Cd	111	54.363	ug/L	0.542	26315	0.291
Cd	114		ug/L		59567	0.658
> In	115		ug/L		90448	90447.998
Sn	120	52.480	ug/L	1.072	104553	1.152
Sb	121	52.524	ug/L	6.399	92934	1.023
Sb	123		ug/L		72268	0.796
Ba	135		ug/L		23798	0.180
Ba	137	54.634	ug/L	0.976	42404	0.321
Ho	165		ug/L		22	0.000
> Lu	175		ug/L		131991	131990.975
Tl	205	50.807	ug/L	0.527	198336	1.495
Pb	208	53.982	ug/L	0.891	359374	2.719
Bi	209		ug/L		93	0.001
U	238	56.077	ug/L	0.951	406524	3.079

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	0.9999
Na	23Linear Thru Zero	0.9999
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	
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	0.9999
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
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	0.9999
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	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Li	7	119.840				
Be	9	118.953				
B	11	109.386				
Na	23	111.267				
Mg	24	110.735				
Al	27	102.884				
P	31	106.489				
K	39	110.364				
Ca	43	105.837				
> Sc	45		89.8			
V	51	107.490				
Cr	52	108.377				
Cr	53					
Mn	55	109.341				
Fe	57	108.828				
Co	59	104.903				
Ni	60	108.568				
Cu	63					
Cu	65	109.172				
Zn	66	114.216				
Zn	67					
Zn	68					
> Ge	74		91.2			
As	75	100.633				
Se	77					
Se	82	101.826				
Kr	83					
Sr	88	109.649				
Y	89					
Ag	107	106.615				
Cd	111	108.727				
Cd	114					
> In	115		90.0			
Sn	120	104.960				
Sb	121	105.047				
Sb	123					
Ba	135					
Ba	137	109.269				
Ho	165					
> Lu	175		86.6			
Tl	205	101.613				
Pb	208	107.963				
Bi	209					
U	238	112.153				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Li	7	7CCV is out of limits (+/- 10%)
QC Std 6	Be	9	9CCV is out of limits (+/- 10%)
QC Std 6	Na	23	23CCV is out of limits (+/- 10%)
QC Std 6	Mg	24	24CCV is out of limits (+/- 10%)
QC Std 6	K	39	39CCV is out of limits (+/- 10%)
QC Std 6	Zn	66	66CCV is out of limits (+/- 10%)
QC Std 6	U	238	238CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#6 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Wednesday, February 03, 2010 20:23:53

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 nohrs thtimozr.mth

Dataset File: C:\elandata\Dataset\100202\QC Std 7.303

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.066	ug/L	37.154	92	0.000
Be	9	0.014	ug/L	13.293	10	0.000
B	11	1.779	ug/L	35.635	961	0.001
Na	23	-0.962	ug/L	117.962	12339	-0.003
Mg	24	0.762	ug/L	267.079	2667	0.002
Al	27	2.977	ug/L	21.045	7669	0.010
P	31	-0.693	ug/L	108.570	8266	-0.000
K	39	16.884	ug/L	84.831	365992	0.055
Ca	43	-8.599	ug/L	90.855	357	-0.000
> Sc	45		ug/L		648140	648140.157
V	51	-0.481	ug/L	110.403	8696	-0.002
Cr	52	0.150	ug/L	21.804	3049	0.001
Cr	53		ug/L		60128	-0.005
Mn	55	0.212	ug/L	13.592	1419	0.001
Fe	57	2.081	ug/L	119.112	3722	0.000
Co	59	0.004	ug/L	162.054	121	0.000
Ni	60	-0.010	ug/L	53.186	66	-0.000
Cu	63		ug/L		116	0.000
Cu	65	-0.002	ug/L	492.840	74	-0.000
Zn	66	0.047	ug/L	65.084	160	0.000
Zn	67		ug/L		11066	-0.006
Zn	68		ug/L		867	-0.000
> Ge	74		ug/L		150011	150010.833
As	75	-0.950	ug/L	95.478	-91	-0.003
Se	77		ug/L		2471	0.000
Se	82	-0.535	ug/L	56.582	-18	-0.000
Kr	83		ug/L		62	0.000
Sr	88	0.005	ug/L	115.173	131	0.000
Y	89		ug/L		58	0.000
Ag	107	0.009	ug/L	12.415	49	0.000
Cd	111	0.029	ug/L	48.837	27	0.000
Cd	114		ug/L		27	0.000
> In	115		ug/L		93063	93062.819
Sn	120	0.063	ug/L	54.860	455	0.001
Sb	121	0.568	ug/L	41.698	1403	0.011
Sb	123		ug/L		1100	0.009
Ba	135		ug/L		28	0.000
Ba	137	0.029	ug/L	17.792	44	0.000
Ho	165		ug/L		13	0.000
> Lu	175		ug/L		139080	139080.018
Tl	205	0.187	ug/L	51.868	1875	0.006
Pb	208	0.016	ug/L	18.080	600	0.001
Bi	209		ug/L		26	0.000
U	238	0.032	ug/L	43.682	382	0.002

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	0.9999
Na	23Linear Thru Zero	0.9999
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	
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	0.9999
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
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	0.9999
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	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Duplicate Rel. % Difference
|	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
>	Sc	45		92.2			
|	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		92.1			
|	As	75					
|	Se	77					
|	Se	82					
|	Kr	83					
|	Sr	88					
|	Y	89					
|	Ag	107					
|	Cd	111					
|	Cd	114					
>	In	115		92.6			
|	Sn	120					
|	Sb	121					
|	Sb	123					
|	Ba	135					
|	Ba	137					
|	Ho	165					
>	Lu	175		91.2			
|	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

=====
Analysis BegunLogged In Analyst: Administrator
Spectrometer Model: FIMS-100, S/N B050-9550Technique: AA FIMS-MHS
Autosampler Model: S10Sample 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
Sample ID: Calib Blank
Analyst:Autosampler Location: 1
Date Collected: 1/28/2010 08:53:52
Data Type: Original-----
Replicate Data: Calib Blank

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		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
Sample ID: S0.2
Analyst:Autosampler Location: 2
Date Collected: 1/28/2010 08:55:32
Data Type: Original-----
Replicate Data: S0.2

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		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
Sample ID: S0.5
Analyst:Autosampler Location: 3
Date Collected: 1/28/2010 08:57:12
Data Type: Original-----
Replicate Data: S0.5

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		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
Sample ID: S2.0
Analyst:Autosampler Location: 4
Date Collected: 1/28/2010 08:58:52
Data Type: Original

Replicate Data: S2.0

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr 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	StdConc ug/L	BlkCorr 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

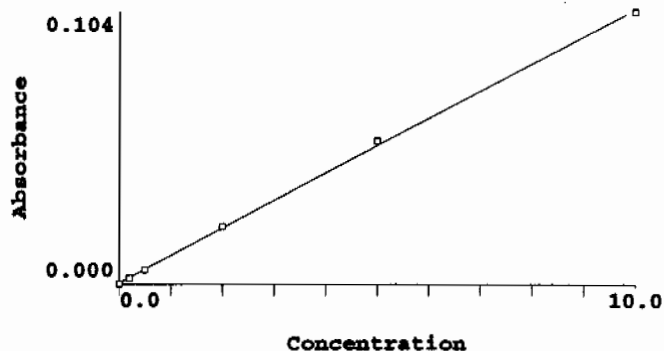
Analyst:

Data Type: Original

Replicate Data: S10.0

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr 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	StdConc ug/L	BlkCorr 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	StdConc ug/L	BlkCorr 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	StdConc ug/L	BlkCorr 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	StdConc ug/L	BlkCorr 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	StdConc 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	StdConc 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	StdConc 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	StdConc 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	StdConc	BlnkCorr	Peak	Peak	Time	Peak
------	------------	---------	----------	------	------	------	------

Replicate Data: 244227003|943287|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		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	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		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	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		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	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		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	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		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	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		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	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		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	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		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	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		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	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		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	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		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	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		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	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		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	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		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	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	3.800	3.800	0.0403	0.1714	0.0404	09:56:32	Yes

Replicate Data: 244228005|943278|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		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

Sample ID: 244228006|943278|1

Analyst: JXL

Autosampler Location: 40

Date Collected: 1/28/2010 10:05:46

Data Type: Original

Replicate Data: 244228006|943278|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		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

Sample ID: 244888001|943278|1

Analyst: JXL

Autosampler Location: 41

Date Collected: 1/28/2010 10:07:26

Data Type: Original

Replicate Data: 244888001|943278|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		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

Sample ID: CCV

Analyst:

Autosampler Location: 7

Date Collected: 1/28/2010 10:09:07

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		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

Sample ID: CCB

Analyst:

Autosampler Location: 8

Date Collected: 1/28/2010 10:10:46

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		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	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		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

Sample ID: CCV

Analyst:

Autosampler Location: 7

Date Collected: 1/28/2010 10:29:13

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		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

Sample ID: CCB

Analyst:

Autosampler Location: 8

Date Collected: 1/28/2010 10:30:52

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		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

Sample ID: 1202019686|943278|1

Analyst: JXL

Autosampler Location: 52

Date Collected: 1/28/2010 10:32:32

Data Type: Original

Replicate Data: 1202019686|943278|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		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

Sample ID: 1202019687|943278|1

Analyst: JXL

Autosampler Location: 53

Date Collected: 1/28/2010 10:34:12

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

Sample ID: 1202019727|943294|1

Analyst: JXL

Autosampler Location: 58

Date Collected: 1/28/2010 10:42:34

Data Type: Original

Replicate Data: 1202019727|943294|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		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				

Sequence No.: 67

Sample ID: 1202019728|943294|10

Analyst: JXL

Autosampler Location: 59

Date Collected: 1/28/2010 10:44:15

Data Type: Original

Replicate Data: 1202019728|943294|10

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		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				

Sequence No.: 68

Sample ID: 244242001|943294|1

Analyst: JXL

Autosampler Location: 60

Date Collected: 1/28/2010 10:45:56

Data Type: Original

Replicate Data: 244242001|943294|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		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

Sample ID: 1202019729|943294|1

Analyst: JXL

Autosampler Location: 61

Date Collected: 1/28/2010 10:47:37

Data Type: Original

Replicate Data: 1202019729|943294|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		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				

Sequence No.: 70

Sample ID: CCV

Analyst:

Autosampler Location: 7

Date Collected: 1/28/2010 10:49:19

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		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

Sample ID: CCB

Analyst:

Autosampler Location: 8

Date Collected: 1/28/2010 10:50:59

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		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

Sample ID: 1202019730|943294|1

Analyst: JXL

Autosampler Location: 62

Date Collected: 1/28/2010 10:52:39

Data Type: Original

Replicate Data: 1202019730|943294|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		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

Sample ID: 1202019732|943294|1

Analyst: JXL

Autosampler Location: 63

Date Collected: 1/28/2010 10:54:19

Data Type: Original

Replicate Data: 1202019732|943294|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		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

Sample ID: 1202019731|943294|5

Analyst: JXL

Autosampler Location: 64

Date Collected: 1/28/2010 10:56:00

Data Type: Original

Replicate Data: 1202019731|943294|5

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		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

Sample ID: 244242007|943294|1

Analyst: JXL

Autosampler Location: 70

Date Collected: 1/28/2010 11:06:05

Data Type: Original

Replicate Data: 244242007|943294|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		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

Sample ID: 244242008|943294|1

Analyst: JXL

Autosampler Location: 71

Date Collected: 1/28/2010 11:07:46

Data Type: Original

Replicate Data: 244242008|943294|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		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

Sample ID: CCV

Analyst:

Autosampler Location: 7

Date Collected: 1/28/2010 11:09:27

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		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

Sample ID: CCB

Analyst:

Autosampler Location: 8

Date Collected: 1/28/2010 11:11:06

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		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

Sample ID: CCV

Analyst:

Autosampler Location: 7

Date Collected: 1/28/2010 11:29:38

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		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

Sample ID: CCB

Analyst:

Autosampler Location: 8

Date Collected: 1/28/2010 11:31:18

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		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

Sample ID: 244515003|943299|1

Analyst: JXL

Autosampler Location: 82

Date Collected: 1/28/2010 11:32:57

Data Type: Original

Replicate Data: 244515003|943299|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		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

Sample ID: 244515004|943299|1

Analyst: JXL

Autosampler Location: 83

Date Collected: 1/28/2010 11:34:38

Data Type: Original

Replicate Data: 244515004|943299|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		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	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		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	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		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	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		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	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		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	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		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	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		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	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		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	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		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	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		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

Sample ID: 244622007|943299|1

Analyst: JXL

Autosampler Location: 101

Date Collected: 1/28/2010 12:08:29

Data Type: Original

Replicate Data: 244622007|943299|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		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

Sample ID: CCV

Analyst:

Autosampler Location: 7

Date Collected: 1/28/2010 12:10:12

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		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

Sample ID: CCB

Analyst:

Autosampler Location: 8

Date Collected: 1/28/2010 12:11:50

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		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

Sample ID: 244622008|943299|1

Analyst: JXL

Autosampler Location: 102

Date Collected: 1/28/2010 12:13:30

Data Type: Original

Replicate Data: 244622008|943299|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		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

Sample ID: 1202019751|943305|1

Autosampler Location: 103

Date Collected: 1/28/2010 12:15:12

Analyst: JXL

Data Type: Original

Replicate Data: 1202019751|943305|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.038	-0.038	0.0000	0.0006	0.0002	12:16:04	Yes
2	-0.042	-0.042	-0.0000	0.0001	0.0001	12:16:34	Yes
Mean:	-0.040	-0.040	0.0000				
SD:	0.003	0.003	0.0000				
%RSD:	8.038	8.038	204.46				

Sequence No.: 122

Autosampler Location: 104

Sample ID: 1202019752|943305|10

Date Collected: 1/28/2010 12:16:55

Analyst: JXL

Data Type: Original

Replicate Data: 1202019752|943305|10

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	3.630	3.630	0.0385	0.1644	0.0386	12:17:46	Yes
2	3.600	3.600	0.0382	0.1634	0.0383	12:18:16	Yes
Mean:	3.615	3.615	0.0383				
SD:	0.021	0.021	0.0002				
%RSD:	0.585	0.585	0.58				

Sequence No.: 123

Autosampler Location: 105

Sample ID: 244601001|943305|1

Date Collected: 1/28/2010 12:18:37

Analyst: JXL

Data Type: Original

Replicate Data: 244601001|943305|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.064	0.064	0.0011	0.0054	0.0013	12:19:28	Yes
2	0.055	0.055	0.0010	0.0050	0.0012	12:19:58	Yes
Mean:	0.060	0.060	0.0011				
SD:	0.006	0.006	0.0001				
%RSD:	10.88	10.88	6.42				

Sequence No.: 124

Autosampler Location: 106

Sample ID: 1202019753|943305|1

Date Collected: 1/28/2010 12:20:19

Analyst: JXL

Data Type: Original

Replicate Data: 1202019753|943305|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.059	0.059	0.0010	0.0053	0.0012	12:21:11	Yes
2	0.058	0.058	0.0010	0.0051	0.0012	12:21:41	Yes
Mean:	0.058	0.058	0.0010				
SD:	0.000	0.000	0.0000				
%RSD:	0.200	0.200	0.12				

Sequence No.: 125

Autosampler Location: 107

Sample ID: 1202019754|943305|1

Date Collected: 1/28/2010 12:22:01

Analyst: JXL

Data Type: Original

Replicate Data: 1202019754|943305|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	2.201	2.201	0.0235	0.1007	0.0237	12:22:53	Yes
2	2.183	2.183	0.0233	0.1000	0.0235	12:23:23	Yes
Mean:	2.192	2.192	0.0234				
SD:	0.013	0.013	0.0001				
%RSD:	0.572	0.572	0.56				

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	StdConc ug/L	BlkCorr 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	StdConc ug/L	BlkCorr 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	StdConc ug/L	BlkCorr 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	StdConc ug/L	BlkCorr 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	StdConc ug/L	BlkCorr 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

Sample ID: CCB

Analyst:

Autosampler Location: 8

Date Collected: 1/28/2010 12:32:12

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		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

Sample ID: 244601004|943305|1

Analyst: JXL

Autosampler Location: 112

Date Collected: 1/28/2010 12:33:52

Data Type: Original

Replicate Data: 244601004|943305|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		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

Sample ID: 244601005|943305|1

Analyst: JXL

Autosampler Location: 113

Date Collected: 1/28/2010 12:35:35

Data Type: Original

Replicate Data: 244601005|943305|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		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

Sample ID: 244601006|943305|1

Analyst: JXL

Autosampler Location: 114

Date Collected: 1/28/2010 12:37:17

Data Type: Original

Replicate Data: 244601006|943305|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		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

Sample ID: 244601007|943305|1
Analyst: JXL

Date Collected: 1/28/2010 12:38:59
Data Type: Original

Replicate Data: 244601007|943305|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.239	0.239	0.0029	0.0132	0.0031	12:39:52	Yes
2	0.242	0.242	0.0030	0.0137	0.0031	12:40:21	Yes
Mean:	0.240	0.240	0.0030				
SD:	0.002	0.002	0.0000				
%RSD:	0.639	0.639	0.55				

Sequence No.: 136

Autosampler Location: 116

Sample ID: 244601008|943305|1
Analyst: JXL

Date Collected: 1/28/2010 12:40:42
Data Type: Original

Replicate Data: 244601008|943305|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.253	0.253	0.0031	0.0142	0.0032	12:41:34	Yes
2	0.251	0.251	0.0031	0.0139	0.0032	12:42:04	Yes
Mean:	0.252	0.252	0.0031				
SD:	0.001	0.001	0.0000				
%RSD:	0.471	0.471	0.40				

Sequence No.: 137

Autosampler Location: 117

Sample ID: 244601009|943305|1
Analyst: JXL

Date Collected: 1/28/2010 12:42:25
Data Type: Original

Replicate Data: 244601009|943305|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.186	0.186	0.0024	0.0110	0.0025	12:43:17	Yes
2	0.186	0.186	0.0024	0.0106	0.0025	12:43:47	Yes
Mean:	0.186	0.186	0.0024				
SD:	0.000	0.000	0.0000				
%RSD:	0.020	0.020	0.02				

Sequence No.: 138

Autosampler Location: 118

Sample ID: 244601010|943305|1
Analyst: JXL

Date Collected: 1/28/2010 12:44:07
Data Type: Original

Replicate Data: 244601010|943305|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.019	0.019	0.0006	0.0032	0.0008	12:45:00	Yes
2	0.019	0.019	0.0006	0.0033	0.0008	12:45:30	Yes
Mean:	0.019	0.019	0.0006				
SD:	0.000	0.000	0.0000				
%RSD:	2.299	2.299	0.72				

Sequence No.: 139

Autosampler Location: 119

Sample ID: 244601011|943305|1
Analyst: JXL

Date Collected: 1/28/2010 12:45:50
Data Type: Original

Replicate Data: 244601011|943305|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.184	0.184	0.0024	0.0109	0.0025	12:46:43	Yes
2	0.184	0.184	0.0024	0.0108	0.0025	12:47:13	Yes
Mean:	0.184	0.184	0.0024				
SD:	0.000	0.000	0.0000				

%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	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		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	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		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	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		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	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		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

Miscellaneous

Prep LogBook

Analyst: AXG2
 Batch: 941725
 Lab SOP: GL-MA-E-009 REV# 19

Verified by: _____

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Type	Sample Id	Lot. Id	Spike Amount	Spike Units
MB	1202015660		SW846 3050B	20-JAN-2010 07:30	LCS	1202015665	U1062540-I	.517	g
LCS	1202015665		SW846 3050B	20-JAN-2010 07:30	MS	1202015663	U1091216-01	.25	mL
SAMPLE	244601001		SW846 3050B	20-JAN-2010 07:30	MS	1202015663	U1091216-06	.25	mL
DUP	1202015661	244601001	SW846 3050B	20-JAN-2010 07:30	MSD	1202015664	U1091216-01	.25	mL
SDILT	1202015662	244601001	SW846 3050B	20-JAN-2010 07:30	MSD	1202015664	U1091216-06	.25	mL
MS	1202015663	244601001	SW846 3050B	20-JAN-2010 07:30					
MSD	1202015664	244601001	SW846 3050B	20-JAN-2010 07:30					
SAMPLE	244601002		SW846 3050B	20-JAN-2010 07:30					
SAMPLE	244601003		SW846 3050B	20-JAN-2010 07:30					
SAMPLE	244601004		SW846 3050B	20-JAN-2010 07:30					
SAMPLE	244601005		SW846 3050B	20-JAN-2010 07:30					
SAMPLE	244601006		SW846 3050B	20-JAN-2010 07:30					
SAMPLE	244601007		SW846 3050B	20-JAN-2010 07:30					
SAMPLE	244601008		SW846 3050B	20-JAN-2010 07:30					
SAMPLE	244601009		SW846 3050B	20-JAN-2010 07:30					
SAMPLE	244601010		SW846 3050B	20-JAN-2010 07:30					
SAMPLE	244601011		SW846 3050B	20-JAN-2010 07:30					
SAMPLE	244601012		SW846 3050B	20-JAN-2010 07:30					
SAMPLE	244601013		SW846 3050B	20-JAN-2010 07:30					

Comments: Sample 244601001 consist of gray, powder-like soil.

Reagent/Solvent Lot ID	Amount	Description
1252838	10 mL	HYDROCHLORIC ACID
1252836	1.25 mL	Nitric Acid CONC.

Prep LogBook

Analyst: AXG2 Verified by: _____

Batch: 941730

Lab SOP: GL-MA-E-009 REV# 19

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Spike Amount	Spike Units
MB	1202015679		SW846 3050B	20-JAN-2010 07:30	0.503 g	50 mL	99.40358	.517	g
LCS	1202015684		SW846 3050B	20-JAN-2010 07:30	0.517 g	50 mL	96.7118	.5	mL
SAMPLE	244601001		SW846 3050B	20-JAN-2010 07:30	0.517 g	50 mL	96.7118	.5	mL
DUP	1202015680	244601001	SW846 3050B	20-JAN-2010 07:30	0.525 g	50 mL	95.2381	.5	mL
SDILT	1202015681	244601001	SW846 3050B	20-JAN-2010 07:30	0.517 g	50 mL	96.7118	.5	mL
MS	1202015682	244601001	SW846 3050B	20-JAN-2010 07:30	0.502 g	50 mL	99.60159	.5	mL
MSD	1202015683	244601001	SW846 3050B	20-JAN-2010 07:30	0.514 g	50 mL	97.27626	.5	mL
SAMPLE	244601002		SW846 3050B	20-JAN-2010 07:30	0.5 g	50 mL	100	.5	mL
SAMPLE	244601003		SW846 3050B	20-JAN-2010 07:30	0.502 g	50 mL	99.60159	.5	mL
SAMPLE	244601004		SW846 3050B	20-JAN-2010 07:30	0.512 g	50 mL	97.65625	.5	mL
SAMPLE	244601005		SW846 3050B	20-JAN-2010 07:30	0.503 g	50 mL	99.40358	.5	mL
SAMPLE	244601006		SW846 3050B	20-JAN-2010 07:30	0.5 g	50 mL	100	.5	mL
SAMPLE	244601007		SW846 3050B	20-JAN-2010 07:30	0.517 g	50 mL	96.7118	.5	mL
SAMPLE	244601008		SW846 3050B	20-JAN-2010 07:30	0.506 g	50 mL	98.81423	.5	mL
SAMPLE	244601009		SW846 3050B	20-JAN-2010 07:30	0.505 g	50 mL	99.0099	.5	mL
SAMPLE	244601010		SW846 3050B	20-JAN-2010 07:30	0.519 g	50 mL	96.33911	.5	mL
SAMPLE	244601011		SW846 3050B	20-JAN-2010 07:30	0.5 g	50 mL	100	.5	mL
SAMPLE	244601012		SW846 3050B	20-JAN-2010 07:30	0.502 g	50 mL	99.60159	.5	mL
SAMPLE	244601013		SW846 3050B	20-JAN-2010 07:30	0.505 g	50 mL	99.0099	.5	mL

Comments: Sample 244601001 consist of gray, powder-like soil.

Reagent/Solvent Lot ID	Amount	Description
1203655-02	1.5 mL	Hydrogen Peroxide 30%
1252836	5 mL	Nitric Acid CONC.

Prep LogBook

Analyst: TXB3
Batch: 943303
Lab SOP: GL-MA-E-010 REV# 23

Verified by:

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1202019752	U1031809A	.202	g
MS	1202019754	WHG100127-14	.3	mL
MSD	1202019756	WHG100127-14	.3	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1202019751		SW846 7471A Prep	27-JAN-2010 13:25	0.502 g	30 mL	59.76096	SOIL
LCS	1202019752		SW846 7471A Prep	27-JAN-2010 13:25	0.202 g	30 mL	148.51485	SOIL
SAMPLE	244601001		SW846 7471A Prep	27-JAN-2010 13:25	0.559 g	30 mL	53.66726	SOIL
DUP	1202019753	244601001	SW846 7471A Prep	27-JAN-2010 13:25	0.54 g	30 mL	55.55556	SOIL
MS	1202019754	244601001	SW846 7471A Prep	27-JAN-2010 13:25	0.57 g	30 mL	52.63158	SOIL
MSD	1202019756	244601001	SW846 7471A Prep	27-JAN-2010 13:25	0.516 g	30 mL	58.13953	SOIL
SDILT	1202019755	244601001	SW846 7471A Prep	27-JAN-2010 13:25	0.559 g	30 mL	53.66726	SOIL
SAMPLE	244601002		SW846 7471A Prep	27-JAN-2010 13:25	0.563 g	30 mL	53.28597	SOIL
SAMPLE	244601003		SW846 7471A Prep	27-JAN-2010 13:25	0.545 g	30 mL	55.04587	SOIL
SAMPLE	244601004		SW846 7471A Prep	27-JAN-2010 13:25	0.549 g	30 mL	54.64481	SOIL
SAMPLE	244601005		SW846 7471A Prep	27-JAN-2010 13:25	0.509 g	30 mL	58.9391	SOIL
SAMPLE	244601006		SW846 7471A Prep	27-JAN-2010 13:25	0.503 g	30 mL	59.64215	SOIL
SAMPLE	244601007		SW846 7471A Prep	27-JAN-2010 13:25	0.562 g	30 mL	53.38078	SOIL
SAMPLE	244601008		SW846 7471A Prep	27-JAN-2010 13:25	0.507 g	30 mL	59.1716	SOIL
SAMPLE	244601009		SW846 7471A Prep	27-JAN-2010 13:25	0.564 g	30 mL	53.19149	SOIL
SAMPLE	244601010		SW846 7471A Prep	27-JAN-2010 13:25	0.52 g	30 mL	57.69231	SOIL
SAMPLE	244601011		SW846 7471A Prep	27-JAN-2010 13:25	0.561 g	30 mL	53.47594	SOIL
SAMPLE	244601012		SW846 7471A Prep	27-JAN-2010 13:25	0.545 g	30 mL	55.04587	SOIL
SAMPLE	244601013		SW846 7471A Prep	27-JAN-2010 13:25	0.582 g	30 mL	51.54639	SOIL

Comments: Sample 244601001 is a rocky gray soil.
Digestion Start Date: 27-JAN-10 13:25
Digestion End Date: 27-JAN-10 13:55

Reagent/Solvent Lot ID	Amount	Description
1236355-A	1.125 mL	Hydrochloric Acid Conc.
1257474-I	.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 CAL S 5.0/ICV

DATA EXCEPTION REPORT

Mo.Day Yr. 04-FEB-10	Division: Industrial	Quality Criteria: Specifications	Type: Process
Instrument Type: ICP	Test / Method: SW846 3050B/6010B	Matrix Type: Solid	Client Code: LANL
Batch ID: 941727	Sample Numbers: See Below		
<p>Potentially affected work order(s)(SDG): 244601(10-1212)</p> <p>Application Issues:</p> <p>Failed Recovery for MS/PS</p> <p>Failed RPD for DUP</p> <p>Failed Recovery for MSD/PSD</p>			
Specification and Requirements		DER Disposition:	
<p>Exception Description:</p> <p>1. Failed Recovery for MS/PS:</p> <p>QC 1202015663MS</p> <p>2. Failed RPD for DUP:</p> <p>QC 1202015661DUP</p> <p>3. Failed Recovery for MSD/PSD:</p> <p>QC 1202015664MSD</p>		<p>1./3. The matrix spike and matrix spike duplicate recovery failed outside of the control limits for barium,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.</p> <p>2. The sample and sample duplicate % RPD failed outside the control limits for barium,chromium,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.</p>	

Originator's Name:

Helen Camello 05-FEB-10

Data Validator/Group Leader:

Louise Smith 05-FEB-10

DATA EXCEPTION REPORT

Mo. Day Yr. 09-FEB-10	Division: Industrial	Quality Criteria: Specifications	Type: Process
Instrument Type: ICP/MS	Test / Method: SW846 3050B/6020	Matrix Type: Solid	Client Code: LANL
Batch ID: 941732	Sample Numbers: See Below		
Potentially affected work order(s)(SDG): 244601(10-1212)			
Application Issues: Failed RPD for DUP			
Specification and Requirements Exception Description: 1. Failed RPD for DUP: QC 1202015680DUP		DER Disposition: 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

09-FEB-10

Data Validator/Group Leader:

Samantha Jacobs

09-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: UI062540-1 **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 **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: O2SI
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

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% H_2O (NH_4) $_2$ SiF $_6$
Supplier: o2si
Description: Silicon 1000mg/L +/- 0.3% in H_2O (NH_4) $_2$ SiF $_6$
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 :** H2O/tr HF
Supplier: ENVIRONMENTAL EXPRESS
Description: SILICON 1000mg/L H2O/tr HF
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 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
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

Standard Logbook

Analyte	Concentration	Analyte	Concentration
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		

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

Standard Logbook

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: UI100114-48 **Opened:** 22-JAN-10 **Amount :** 1000 mL
Name: Trace ICP ICESA **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: UI100126-11 **Opened:** 26-JAN-10 **Amount :** 1000 mL
Name: ICP-MS ICESA Master A **Received:** 26-JAN-10 **Catalog Number :** 160013-01-01L
Type: Source Material **Expires:** 26-JAN-11 **Lot Number :** 1018321
Employee: Elizabeth Janssen **Solvent :** 2% HNO3
Supplier: 02SI
Description: ICP-MS ICESA 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: 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

Standard Logbook

Analyte	Concentration	Analyte	Concentration
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: ICPMSCaSPIKEB **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: ICPMSCaSPIKEA **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

Standard Logbook

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 + TypeI 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: 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

Standard Logbook

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

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

Standard Logbook

Serial ID: WHG100127-11 **Opened:** 27-JAN-10 **Pipet Id :** Hg1289245
Name: MHGWORKCAL510.0 **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

Serial ID: WI100128-42 **Opened:** 28-JAN-10 **Balance Id :** 216
Name: TRACE ICP 0.1 PPM STD. **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 29-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.
WI100128-44	Aluminum	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100128-44	Antimony	1000 ug/L	10 mL	100 mL	100 ug/L
WI100128-44	Arsenic	1000 ug/L	10 mL	100 mL	100 ug/L
WI100128-44	Barium	1000 ug/L	10 mL	100 mL	100 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI100128-44	Beryllium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100128-44	Boron	1000 ug/L	10 mL	100 mL	100 ug/L
WI100128-44	Cadmium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100128-44	Calcium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100128-44	Chromium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100128-44	Cobalt	1000 ug/L	10 mL	100 mL	100 ug/L
WI100128-44	Copper	1000 ug/L	10 mL	100 mL	100 ug/L
WI100128-44	Iron	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100128-44	Lead	1000 ug/L	10 mL	100 mL	100 ug/L
WI100128-44	Magnesium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100128-44	Manganese	1000 ug/L	10 mL	100 mL	100 ug/L
WI100128-44	Molybdenum	1000 ug/L	10 mL	100 mL	100 ug/L
WI100128-44	Nickel	1000 ug/L	10 mL	100 mL	100 ug/L
WI100128-44	Phosphorous	5000 ug/L	10 mL	100 mL	500 ug/L
WI100128-44	Potassium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100128-44	Selenium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100128-44	Silica	10698 ug/L	10 mL	100 mL	1069 ug/L
WI100128-44	Silicon	5000 ug/L	10 mL	100 mL	500 ug/L
WI100128-44	Silver	1000 ug/L	10 mL	100 mL	100 ug/L
WI100128-44	Sodium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100128-44	Strontium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100128-44	Sulfur	2000 ug/L	10 mL	100 mL	200 ug/L
WI100128-44	Thallium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100128-44	Tin	1000 ug/L	10 mL	100 mL	100 ug/L
WI100128-44	Titanium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100128-44	Uranium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100128-44	Vanadium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100128-44	Zinc	1000 ug/L	10 mL	100 mL	100 ug/L

Serial ID: WI100128-43 Opened: 28-JAN-10 Balance Id : 216
 Name: TRACE ICP 0.5/CCV STD. Received: 02-NOV-09 Pipet Id : 1099667
 Type: Working Expires: 29-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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Allquot	Final Vol.	Final Conc.
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

Serial ID: WI100128-44 **Opened:** 28-JAN-10 **Balance Id :** 216
Name: TRACE ICP SCAL 1.0 **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 29-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.	Allquot	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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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

Serial ID: W100128-45 **Opened:** 28-JAN-10 **Balance Id :** 216
Name: TRACE ICP S-10 STD **Received:** 22-APR-09 **Pipet Id :** 1099667
Type: Working **Expires:** 29-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: W100128-46 **Opened:** 28-JAN-10 **Balance Id :** 216
Name: ICP TRACE ICV **Received:** 25-SEP-09 **Pipet Id :** 1099667
Type: Working **Expires:** 29-JAN-10 **Solvent :** 3%HCL AND 1%HNO3-1259494
Employee: Helen Camello
Supplier: GEL
Description: Initial Calibration Verification ICP Trace Metals

Standard Logbook

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
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: W100128-47 Opened: 28-JAN-10 Balance Id : 216
 Name: PQL Working Standard Received: 30-JUN-09 Pipet Id : 1099667
 Type: Working Expires: 29-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

Report run on: 09-FEB-10

GEL Laboratories LLC

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Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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
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: WMS100127-04AB **Opened:** 27-JAN-10 **Balance Id :** 40245216
Name: ICPMS Cal Standard 10 **Received:** 27-JAN-10 **Pipet Id :** 3541598
Type: Working **Expires:** 28-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1259290
Employee: Rose Jenkins
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100127-04B	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100127-04B	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS100127-04B	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS100127-04B	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100127-04B	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100127-04B	Boron	200 ug/l	5 mL	50 mL	20 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100127-04B	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100127-04B	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100127-04B	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100127-04B	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS100127-04B	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS100127-04B	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100127-04B	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS100127-04B	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100127-04B	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100127-04B	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS100127-04B	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS100127-04B	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS100127-04B	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100127-04B	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100127-04B	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100127-04B	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS100127-04B	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100127-04B	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100127-04B	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100127-04B	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100127-04B	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS100127-04B	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100127-04B	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS100127-04B	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100127-04B	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100127-04B	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS100127-04B	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS100127-04B **Opened:** 27-JAN-10 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 27-JAN-10 **Balance Id :** 40245216
Type: Working **Expres:** 28-JAN-10 **Pipet Id :** 1758088
Employee: Rose Jenkins **Solvent :** 2%HNO3/1%HCl- 1259290
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Allquot	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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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
UMS090303-03	Zirconium	10 mg/L	.5	50 mL	100 ug/l

Serial ID: WMS100127-05B Opened: 27-JAN-10 Balance Id : 40245216
 Name: ICPMS ICV Received: 27-JAN-10 Pipet Id : 1758088
 Type: Working Expires: 28-JAN-10 Solvent : 2%HNO3/1%HCl - 1259290
 Employee: Rose Jenkins
 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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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

Serial ID: WMS100127-06B **Opened:** 27-JAN-10 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 27-JAN-10 **Pipet Id :** 3820544
Type: Working **Expires:** 28-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1259290
Employee: Rose Jenkins
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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

Serial ID: WMS100127-07B **Opened:** 27-JAN-10 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 27-JAN-10 **Lot Number :** 1010773
Type: Working **Expires:** 28-JAN-10 **Pipet Id :** 3541598
Employee: Rose Jenkins **Solvent :** 2%HNO3/1%HCl - 1259290
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100126-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100126-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100126-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Standard Logbook

Serial ID: WMS100127-08B **Opened:** 27-JAN-10 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 27-JAN-10 **Pipet Id :** 3541598/1758088
Type: Working **Expires:** 28-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1259290
Employee: Rose Jenkins
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Allquot	Final Vol.	Final Conc.
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
UI100126-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100126-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100126-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Standard Logbook

Serial ID: WMS100130-04AB **Opened:** 30-JAN-10 **Balance Id :** 40245216
Name: ICPMS Cal Standard 10 **Received:** 30-JAN-10 **Pipet Id :** 3541598
Type: Working **Expires:** 31-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1259290
Employee: Rose Jenkins
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100130-04B	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100130-04B	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS100130-04B	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS100130-04B	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100130-04B	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100130-04B	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS100130-04B	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100130-04B	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100130-04B	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100130-04B	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS100130-04B	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS100130-04B	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100130-04B	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS100130-04B	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100130-04B	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100130-04B	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS100130-04B	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS100130-04B	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS100130-04B	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100130-04B	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100130-04B	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100130-04B	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS100130-04B	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100130-04B	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100130-04B	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100130-04B	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100130-04B	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS100130-04B	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100130-04B	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS100130-04B	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100130-04B	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100130-04B	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS100130-04B	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Standard Logbook

Serial ID: WMS100130-04B **Opened:** 30-JAN-10 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 30-JAN-10 **Balance Id :** 40245216
Type: Working **Expires:** 31-JAN-10 **Pipet Id :** 1758088
Employee: Rose Jenkins **Solvent :** 2%HNO3/1%HCl- 1259290
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
UMS090303-03	Zirconium	10 mg/L	.5	50 mL	100 ug/l

Standard Logbook

Serial ID: WMS100130-05B **Opened:** 30-JAN-10 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 30-JAN-10 **Pipet Id :** 1758088
Type: Working **Expires:** 31-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1259290
Employee: Rose Jenkins
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: WMS100130-06B **Opened:** 30-JAN-10 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 30-JAN-10 **Pipet Id :** 3820544
Type: Working **Expires:** 31-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1259290
Employee: Rose Jenkins
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: WMS100130-07B **Opened:** 30-JAN-10 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 30-JAN-10 **Lot Number :** 1010773
Type: Working **Expires:** 31-JAN-10 **Pipet Id :** 3541598
Employee: Rose Jenkins **Solvent :** 2%HNO3/1%HCl - 1259290
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100126-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100126-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100126-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS100130-08B **Opened:** 30-JAN-10 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 30-JAN-10 **Pipet Id :** 3541598/1758088
Type: Working **Expires:** 31-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1259290
Employee: Rose Jenkins
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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
UI100126-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100126-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100126-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS100202-04AB **Opened:** 02-FEB-10 **Balance Id :** 40245216
Name: ICPMS Cal Standard 10 **Received:** 02-FEB-10 **Pipet Id :** 3541598
Type: Working **Expires:** 03-FEB-10 **Solvent :** 2%HNO3/1%HCl - 1262930
Employee: Rose Jenkins
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100202-04B	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100202-04B	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS100202-04B	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS100202-04B	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100202-04B	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100202-04B	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS100202-04B	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100202-04B	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100202-04B	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100202-04B	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS100202-04B	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS100202-04B	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100202-04B	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS100202-04B	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100202-04B	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100202-04B	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS100202-04B	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100202-04B	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS100202-04B	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100202-04B	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100202-04B	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100202-04B	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS100202-04B	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100202-04B	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100202-04B	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100202-04B	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100202-04B	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS100202-04B	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100202-04B	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS100202-04B	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100202-04B	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100202-04B	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS100202-04B	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS100202-04B **Opened:** 02-FEB-10 **Amount:** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 02-FEB-10 **Balance Id:** 40245216
Type: Working **Expires:** 03-FEB-10 **Pipet Id:** 1758088
Employee: Rose Jenkins **Solvent:** 2%HNO3/1%HCl- 1262930
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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: WMS100202-05B **Opened:** 02-FEB-10 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 02-FEB-10 **Pipet Id :** 1758088
Type: Working **Expires:** 03-FEB-10 **Solvent :** 2%HNO3/1%HCl - 1262930
Employee: Rose Jenkins
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: WMS100202-06B **Opened:** 02-FEB-10 **Balance Id:** 40245216
Name: ICPMS CRDL **Received:** 02-FEB-10 **Pipet Id:** 3820544
Type: Working **Expires:** 03-FEB-10 **Solvent:** 2%HNO3/1%HCl - 1262930
Employee: Rose Jenkins
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: WMS100202-07B **Opened:** 02-FEB-10 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 02-FEB-10 **Lot Number :** 1010773
Type: Working **Expires:** 03-FEB-10 **Pipet Id :** 3541598
Employee: Rose Jenkins **Solvent :** 2%HNO3/1%HCl - 1262930
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100126-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100126-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100126-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS100202-08B **Opened:** 02-FEB-10 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 02-FEB-10 **Pipet Id :** 3541598/1758088
Type: Working **Expires:** 03-FEB-10 **Solvent :** 2%HNO3/1%HCl - 1262930
Employee: Rose Jenkins
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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
UI100126-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100126-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100126-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS100208-04 **Opened:** 08-FEB-10 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 08-FEB-10 **Balance Id :** 4025216
Type: Working **Expires:** 09-FEB-10 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl-1266278
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Allquot	Final Vol.	Final Conc.
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

Serial ID: WMS100208-04A **Opened:** 08-FEB-10 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 08-FEB-10 **Pipet Id :** 3541598
Type: Working **Expires:** 09-FEB-10 **Solvent :** 2%HNO3/1%HCl - 1266278
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Allquot	Final Vol.	Final Conc.
WMS100208-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100208-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS100208-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS100208-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100208-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100208-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100208-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100208-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100208-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100208-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS100208-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS100208-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100208-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS100208-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100208-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100208-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS100208-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS100208-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS100208-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100208-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100208-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100208-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS100208-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100208-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100208-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100208-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100208-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS100208-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100208-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS100208-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100208-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100208-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS100208-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS100208-05 Opened: 08-FEB-10 Balance Id : 40245216
 Name: ICPMS ICV Received: 08-FEB-10 Pipet Id : 3541598
 Type: Working Expires: 09-FEB-10 Solvent : 2%HNO3/1%HCl - 1266278
 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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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

Serial ID: WMS100208-06 **Opened:** 08-FEB-10 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 08-FEB-10 **Pipet Id :** 3820544
Type: Working **Expires:** 09-FEB-10 **Solvent :** 2%HNO3/1%HCl - 1266278
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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

Serial ID: WMS100208-07 **Opened:** 08-FEB-10 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 08-FEB-10 **Lot Number :** 1010773
Type: Working **Expires:** 09-FEB-10 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl - 1266278
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100126-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100126-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100126-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Standard Logbook

Serial ID: WMS100208-08 **Opened:** 08-FEB-10 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 08-FEB-10 **Pipet Id :** 1758088
Type: Working **Expires:** 09-FEB-10 **Solvent :** 2%HNO3/1%HCl - 1266278
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Allquot	Final Vol.	Final Conc.
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
UI100126-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100126-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100126-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Standard Logbook

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: Hydroxylamine 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: 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: 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.	Allquot	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.	Allquot	Final Vol.	Final Conc.
1156689-A	B-KMnO4(VWR)-MER	Crystals	50 g	1000 mL	3%

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: 1259290 **Opened:** 25-JAN-10 **Solvent :** Type I Water
Name: B-2%HNO3/1%HCl-ICPMS **Received:** 25-JAN-10
Type: Reagent/Solvent **Expires:** 01-FEB-10
Employee: Elizabeth Janssen
Supplier: GEL
Description: 2%HNO3/1%HCl Solution (Type I Water)

Standard Logbook

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1252836	I-HNO3	69.0-70.0	180 mL	9 l	N/A
1252838	I-HCL	36.5-38.0	90 mL	9 l	N/A

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

Serial ID: 1262930 Opened: 01-FEB-10 Solvent: Type I Water
 Name: B-2%HNO3/1%HCL-ICPMS Received: 01-FEB-10
 Type: Reagent/Solvent Expires: 08-FEB-10
 Employee: Elizabeth Janssen
 Supplier: GEL
 Description: 2%HNO3/1%HCL Solution (Type I Water)
 Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1252836	I-HNO3	69.0-70.0	180 mL	9 l	N/A
1252838	I-HCL	36.5-38.0	90 mL	9 l	N/A

Serial ID: 1266278 Opened: 08-FEB-10 Solvent: Type I Water
 Name: B-2%HNO3/1%HCL-ICPMS Received: 08-FEB-10
 Type: Reagent/Solvent Expires: 15-FEB-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.
1252836	I-HNO3	69.0-70.0	180 mL	9 l	N/A
1252838	I-HCL	36.5-38.0	90 mL	9 l	N/A

Metals Analysis

Case Narrative

**Metals Fractional Narrative
Los Alamos National Laboratory (LANL)
SDG 10-1212-1**

Sample Analysis

Sample ID	Client ID
244602001	RE12-10-7284
1202015894	Method Blank (MB) ICP
1202015895	Laboratory Control Sample (LCS)
1202015898	244625001(RE46-10-10061L) Serial Dilution (SD)
1202015896	244625001(RE46-10-10061D) Sample Duplicate (DUP)
1202015897	244625001(RE46-10-10061S) Matrix Spike (MS)
1202015911	Method Blank (MB) ICP-MS
1202026466	Method Blank (MB) ICP-MS
1202015912	Laboratory Control Sample (LCS)
1202026467	Laboratory Control Sample (LCS)
1202015915	244625001(RE46-10-10061L) Serial Dilution (SD)
1202026470	244625002(RE46-10-10065L) Serial Dilution (SD)
1202015913	244625001(RE46-10-10061D) Sample Duplicate (DUP)
1202026468	244625002(RE46-10-10065D) Sample Duplicate (DUP)
1202015914	244625001(RE46-10-10061S) Matrix Spike (MS)
1202026469	244625002(RE46-10-10065S) Matrix Spike (MS)
1202019168	Method Blank (MB) CVAA
1202019169	Laboratory Control Sample (LCS)
1202019172	244829001(RE46-10-10106L) Serial Dilution (SD)
1202019170	244829001(RE46-10-10106D) Sample Duplicate (DUP)
1202019171	244829001(RE46-10-10106S) Matrix Spike (MS)

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

Method/Analysis Information

Analytical Batch: 941810, 941814, 946103 and 943080
Prep Batch : 941808, 941812, 946101 and 943079
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 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: 244625001, 244625002 and 244829001.

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: Kristen Hanson Date: 2/4/10

Sample Data Summary

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1212-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244602001

BASIS: As Received

DATE COLLECTED 07-JAN-10

CLIENT ID: RE12-10-7284

LEVEL: Low

DATE RECEIVED 13-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	01/19/10 17:48	011910-1	941810
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	BAJ	01/28/10 18:03	100128-5	946103
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	01/19/10 17:48	011910-1	941810
7440-39-3	Barium	5	ug/L	U	1	5	5	1	P	HSC	01/19/10 17:48	011910-1	941810
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	BAJ	01/25/10 23:36	100125-2	941814
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	BAJ	01/25/10 23:36	100125-2	941814
7440-70-2	Calcium	200	ug/L	U	50	200	200	1	P	HSC	01/19/10 17:48	011910-1	941810
7440-47-3	Chromium	5	ug/L	U	1	5	5	1	P	HSC	01/19/10 17:48	011910-1	941810
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	01/19/10 17:48	011910-1	941810
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	01/19/10 17:48	011910-1	941810
7439-89-6	Iron	46.7	ug/L	J	30	100	100	1	P	HSC	01/19/10 17:48	011910-1	941810
7439-92-1	Lead	2	ug/L	U	0.5	2	2	1	MS	BAJ	01/25/10 23:36	100125-2	941814
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	01/19/10 17:48	011910-1	941810
7439-96-5	Manganese	1.96	ug/L	J	1	5	5	1	MS	BAJ	01/25/10 23:36	100125-2	941814
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JXL1	01/20/10 12:11	012010W1-6	943080
7440-02-0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	01/19/10 17:48	011910-1	941810
7440-09-7	Potassium	190	ug/L		50	150	150	1	P	HSC	01/19/10 17:48	011910-1	941810
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	01/19/10 17:48	011910-1	941810
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	01/19/10 17:48	011910-1	941810
7440-23-5	Sodium	122	ug/L	J	100	300	300	1	P	HSC	01/19/10 17:48	011910-1	941810
7440-28-0	Thallium	1	ug/L	U	0.3	1	1	1	MS	BAJ	01/26/10 16:55	100126-3	941814
7440-61-1	Uranium	0.147	ug/L	J	0.05	0.2	0.2	1	MS	BAJ	01/27/10 15:00	100127-4	941814
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	01/19/10 17:48	011910-1	941810
7440-66-6	Zinc	10	ug/L	U	3.3	10	10	1	P	HSC	01/19/10 17:48	011910-1	941810

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
941810	941808	SW846 3005A	50	mL	50	mL	01/18/10	BXA1
941814	941812	SW846 3005A	50	mL	50	mL	01/18/10	BXA1
943080	943079	SW846 7470A Prep	20	mL	20	mL	01/19/10	TXB3
946103	946101	SW846 3005A	50	mL	50	mL	01/28/10	AXG2

Quality Control Summary

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1212-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICV01										
	Aluminum	5060	ug/L	5000	ug/L	101.2	90.0 - 110.0	P	19-JAN-10 15:05	011910-1
	Arsenic	477	ug/L	500	ug/L	95.5	90.0 - 110.0	P	19-JAN-10 15:05	011910-1
	Barium	518	ug/L	500	ug/L	103.6	90.0 - 110.0	P	19-JAN-10 15:05	011910-1
	Calcium	5020	ug/L	5000	ug/L	100.5	90.0 - 110.0	P	19-JAN-10 15:05	011910-1
	Chromium	495	ug/L	500	ug/L	99.1	90.0 - 110.0	P	19-JAN-10 15:05	011910-1
	Cobalt	506	ug/L	500	ug/L	101.3	90.0 - 110.0	P	19-JAN-10 15:05	011910-1
	Copper	515	ug/L	500	ug/L	103.1	90.0 - 110.0	P	19-JAN-10 15:05	011910-1
	Iron	5000	ug/L	5000	ug/L	100	90.0 - 110.0	P	19-JAN-10 15:05	011910-1
	Magnesium	5240	ug/L	5000	ug/L	104.8	90.0 - 110.0	P	19-JAN-10 15:05	011910-1
	Nickel	497	ug/L	500	ug/L	99.3	90.0 - 110.0	P	19-JAN-10 15:05	011910-1
	Potassium	2440	ug/L	2500	ug/L	97.7	90.0 - 110.0	P	19-JAN-10 15:05	011910-1
	Selenium	2590	ug/L	2500	ug/L	103.4	90.0 - 110.0	P	19-JAN-10 15:05	011910-1
	Silver	258	ug/L	250	ug/L	103.4	90.0 - 110.0	P	19-JAN-10 15:05	011910-1
	Sodium	2350	ug/L	2500	ug/L	93.9	90.0 - 110.0	P	19-JAN-10 15:05	011910-1
	Vanadium	515	ug/L	500	ug/L	103	90.0 - 110.0	P	19-JAN-10 15:05	011910-1
	Zinc	507	ug/L	500	ug/L	101.5	90.0 - 110.0	P	19-JAN-10 15:05	011910-1
	Mercury	5.05	ug/L	5	ug/L	101	90.0 - 110.0	AV	20-JAN-10 09:25	012010W1-6
	Beryllium	52.1	ug/L	50	ug/L	104.2	90.0 - 110.0	MS	25-JAN-10 22:22	100125-2
	Cadmium	52.2	ug/L	50	ug/L	104.4	90.0 - 110.0	MS	25-JAN-10 22:22	100125-2
	Lead	53.4	ug/L	50	ug/L	106.7	90.0 - 110.0	MS	25-JAN-10 22:22	100125-2
	Manganese	53.2	ug/L	50	ug/L	106.3	90.0 - 110.0	MS	25-JAN-10 22:22	100125-2
	Thallium	53.8	ug/L	50	ug/L	107.6	90.0 - 110.0	MS	26-JAN-10 15:42	100126-3
	Uranium	52	ug/L	50	ug/L	104	90.0 - 110.0	MS	27-JAN-10 14:41	100127-4
	Antimony	52.1	ug/L	50	ug/L	104.3	90.0 - 110.0	MS	28-JAN-10 17:42	100128-5
CCV01										
	Aluminum	5090	ug/L	5000	ug/L	101.9	90.0 - 110.0	P	19-JAN-10 15:51	011910-1
	Arsenic	528	ug/L	500	ug/L	105.7	90.0 - 110.0	P	19-JAN-10 15:51	011910-1
	Barium	511	ug/L	500	ug/L	102.2	90.0 - 110.0	P	19-JAN-10 15:51	011910-1
	Calcium	5120	ug/L	5000	ug/L	102.3	90.0 - 110.0	P	19-JAN-10 15:51	011910-1
	Chromium	511	ug/L	500	ug/L	102.3	90.0 - 110.0	P	19-JAN-10 15:51	011910-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1212-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Cobalt	511	ug/L	500	ug/L	102.2	90.0 - 110.0	P	19-JAN-10 15:51	011910-1
	Copper	506	ug/L	500	ug/L	101.2	90.0 - 110.0	P	19-JAN-10 15:51	011910-1
	Iron	4980	ug/L	5000	ug/L	99.6	90.0 - 110.0	P	19-JAN-10 15:51	011910-1
	Magnesium	5140	ug/L	5000	ug/L	102.9	90.0 - 110.0	P	19-JAN-10 15:51	011910-1
	Nickel	511	ug/L	500	ug/L	102.1	90.0 - 110.0	P	19-JAN-10 15:51	011910-1
	Potassium	5340	ug/L	5000	ug/L	106.8	90.0 - 110.0	P	19-JAN-10 15:51	011910-1
	Selenium	521	ug/L	500	ug/L	104.2	90.0 - 110.0	P	19-JAN-10 15:51	011910-1
	Silver	511	ug/L	500	ug/L	102.2	90.0 - 110.0	P	19-JAN-10 15:51	011910-1
	Sodium	9640	ug/L	10000	ug/L	96.4	90.0 - 110.0	P	19-JAN-10 15:51	011910-1
	Vanadium	515	ug/L	500	ug/L	102.9	90.0 - 110.0	P	19-JAN-10 15:51	011910-1
	Zinc	507	ug/L	500	ug/L	101.4	90.0 - 110.0	P	19-JAN-10 15:51	011910-1
	Mercury	5.23	ug/L	5	ug/L	104.6	80.0 - 120.0	AV	20-JAN-10 09:31	012010W1-6
	Beryllium	51.4	ug/L	50	ug/L	102.9	90.0 - 110.0	MS	25-JAN-10 22:53	100125-2
	Cadmium	50.2	ug/L	50	ug/L	100.5	90.0 - 110.0	MS	25-JAN-10 22:53	100125-2
	Lead	53.2	ug/L	50	ug/L	106.3	90.0 - 110.0	MS	25-JAN-10 22:53	100125-2
	Manganese	52.9	ug/L	50	ug/L	105.7	90.0 - 110.0	MS	25-JAN-10 22:53	100125-2
	Thallium	53.3	ug/L	50	ug/L	106.7	90.0 - 110.0	MS	26-JAN-10 16:05	100126-3
	Uranium	52.6	ug/L	50	ug/L	105.1	90.0 - 110.0	MS	27-JAN-10 14:51	100127-4
	Antimony	50.7	ug/L	50	ug/L	101.4	90.0 - 110.0	MS	28-JAN-10 17:54	100128-5
CCV02	Aluminum	5100	ug/L	5000	ug/L	102	90.0 - 110.0	P	19-JAN-10 16:26	011910-1
	Arsenic	508	ug/L	500	ug/L	101.6	90.0 - 110.0	P	19-JAN-10 16:26	011910-1
	Barium	513	ug/L	500	ug/L	102.7	90.0 - 110.0	P	19-JAN-10 16:26	011910-1
	Calcium	5110	ug/L	5000	ug/L	102.2	90.0 - 110.0	P	19-JAN-10 16:26	011910-1
	Chromium	512	ug/L	500	ug/L	102.3	90.0 - 110.0	P	19-JAN-10 16:26	011910-1
	Cobalt	507	ug/L	500	ug/L	101.4	90.0 - 110.0	P	19-JAN-10 16:26	011910-1
	Copper	510	ug/L	500	ug/L	102	90.0 - 110.0	P	19-JAN-10 16:26	011910-1
	Iron	5020	ug/L	5000	ug/L	100.3	90.0 - 110.0	P	19-JAN-10 16:26	011910-1
	Magnesium	5180	ug/L	5000	ug/L	103.7	90.0 - 110.0	P	19-JAN-10 16:26	011910-1
	Nickel	508	ug/L	500	ug/L	101.7	90.0 - 110.0	P	19-JAN-10 16:26	011910-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1212-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Potassium	5010	ug/L	5000	ug/L	100.2	90.0 - 110.0	P	19-JAN-10 16:26	011910-1
	Selenium	526	ug/L	500	ug/L	105.2	90.0 - 110.0	P	19-JAN-10 16:26	011910-1
	Silver	511	ug/L	500	ug/L	102.2	90.0 - 110.0	P	19-JAN-10 16:26	011910-1
	Sodium	9680	ug/L	10000	ug/L	96.8	90.0 - 110.0	P	19-JAN-10 16:26	011910-1
	Vanadium	514	ug/L	500	ug/L	102.7	90.0 - 110.0	P	19-JAN-10 16:26	011910-1
	Zinc	507	ug/L	500	ug/L	101.4	90.0 - 110.0	P	19-JAN-10 16:26	011910-1
	Mercury	5.19	ug/L	5	ug/L	103.8	80.0 - 120.0	AV	20-JAN-10 09:54	012010W1-6
	Beryllium	50.9	ug/L	50	ug/L	101.8	90.0 - 110.0	MS	25-JAN-10 23:11	100125-2
	Cadmium	50.6	ug/L	50	ug/L	101.1	90.0 - 110.0	MS	25-JAN-10 23:11	100125-2
	Lead	53.4	ug/L	50	ug/L	106.7	90.0 - 110.0	MS	25-JAN-10 23:11	100125-2
	Manganese	52.9	ug/L	50	ug/L	105.8	90.0 - 110.0	MS	25-JAN-10 23:11	100125-2
	Thallium	53.1	ug/L	50	ug/L	106.2	90.0 - 110.0	MS	26-JAN-10 16:37	100126-3
	Uranium	51.8	ug/L	50	ug/L	103.7	90.0 - 110.0	MS	27-JAN-10 15:09	100127-4
	Antimony	51.7	ug/L	50	ug/L	103.5	90.0 - 110.0	MS	28-JAN-10 18:12	100128-5
CCV03	Aluminum	5080	ug/L	5000	ug/L	101.6	90.0 - 110.0	P	19-JAN-10 17:21	011910-1
	Arsenic	501	ug/L	500	ug/L	100.2	90.0 - 110.0	P	19-JAN-10 17:21	011910-1
	Barium	503	ug/L	500	ug/L	100.7	90.0 - 110.0	P	19-JAN-10 17:21	011910-1
	Calcium	5040	ug/L	5000	ug/L	100.7	90.0 - 110.0	P	19-JAN-10 17:21	011910-1
	Chromium	503	ug/L	500	ug/L	100.6	90.0 - 110.0	P	19-JAN-10 17:21	011910-1
	Cobalt	503	ug/L	500	ug/L	100.5	90.0 - 110.0	P	19-JAN-10 17:21	011910-1
	Copper	499	ug/L	500	ug/L	99.8	90.0 - 110.0	P	19-JAN-10 17:21	011910-1
	Iron	4960	ug/L	5000	ug/L	99.1	90.0 - 110.0	P	19-JAN-10 17:21	011910-1
	Magnesium	5060	ug/L	5000	ug/L	101.3	90.0 - 110.0	P	19-JAN-10 17:21	011910-1
	Nickel	503	ug/L	500	ug/L	100.7	90.0 - 110.0	P	19-JAN-10 17:21	011910-1
	Potassium	4970	ug/L	5000	ug/L	99.4	90.0 - 110.0	P	19-JAN-10 17:21	011910-1
	Selenium	515	ug/L	500	ug/L	102.9	90.0 - 110.0	P	19-JAN-10 17:21	011910-1
	Silver	504	ug/L	500	ug/L	100.8	90.0 - 110.0	P	19-JAN-10 17:21	011910-1
	Sodium	9690	ug/L	10000	ug/L	96.9	90.0 - 110.0	P	19-JAN-10 17:21	011910-1
	Vanadium	506	ug/L	500	ug/L	101.3	90.0 - 110.0	P	19-JAN-10 17:21	011910-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1212-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Zinc	499	ug/L	500	ug/L	99.8	90.0 - 110.0	P	19-JAN-10 17:21	011910-1
	Mercury	5.33	ug/L	5	ug/L	106.6	80.0 - 120.0	AV	20-JAN-10 10:17	012010W1-6
	Beryllium	50.5	ug/L	50	ug/L	100.9	90.0 - 110.0	MS	26-JAN-10 00:01	100125-2
	Cadmium	49.4	ug/L	50	ug/L	98.7	90.0 - 110.0	MS	26-JAN-10 00:01	100125-2
	Lead	52.5	ug/L	50	ug/L	105	90.0 - 110.0	MS	26-JAN-10 00:01	100125-2
	Manganese	51.9	ug/L	50	ug/L	103.8	90.0 - 110.0	MS	26-JAN-10 00:01	100125-2
	Thallium	52.7	ug/L	50	ug/L	105.3	90.0 - 110.0	MS	26-JAN-10 17:13	100126-3
	Uranium	52	ug/L	50	ug/L	104	90.0 - 110.0	MS	27-JAN-10 15:25	100127-4
	Antimony	51.2	ug/L	50	ug/L	102.3	90.0 - 110.0	MS	28-JAN-10 18:29	100128-5
CCV04	Aluminum	5070	ug/L	5000	ug/L	101.4	90.0 - 110.0	P	19-JAN-10 18:16	011910-1
	Arsenic	506	ug/L	500	ug/L	101.2	90.0 - 110.0	P	19-JAN-10 18:16	011910-1
	Barium	510	ug/L	500	ug/L	102	90.0 - 110.0	P	19-JAN-10 18:16	011910-1
	Calcium	5000	ug/L	5000	ug/L	100.1	90.0 - 110.0	P	19-JAN-10 18:16	011910-1
	Chromium	508	ug/L	500	ug/L	101.7	90.0 - 110.0	P	19-JAN-10 18:16	011910-1
	Cobalt	511	ug/L	500	ug/L	102.2	90.0 - 110.0	P	19-JAN-10 18:16	011910-1
	Copper	508	ug/L	500	ug/L	101.5	90.0 - 110.0	P	19-JAN-10 18:16	011910-1
	Iron	4860	ug/L	5000	ug/L	97.2	90.0 - 110.0	P	19-JAN-10 18:16	011910-1
	Magnesium	5040	ug/L	5000	ug/L	100.8	90.0 - 110.0	P	19-JAN-10 18:16	011910-1
	Nickel	510	ug/L	500	ug/L	101.9	90.0 - 110.0	P	19-JAN-10 18:16	011910-1
	Potassium	4880	ug/L	5000	ug/L	97.7	90.0 - 110.0	P	19-JAN-10 18:16	011910-1
	Selenium	529	ug/L	500	ug/L	105.7	90.0 - 110.0	P	19-JAN-10 18:16	011910-1
	Silver	510	ug/L	500	ug/L	102.1	90.0 - 110.0	P	19-JAN-10 18:16	011910-1
	Sodium	9060	ug/L	10000	ug/L	90.6	90.0 - 110.0	P	19-JAN-10 18:16	011910-1
	Vanadium	513	ug/L	500	ug/L	102.5	90.0 - 110.0	P	19-JAN-10 18:16	011910-1
	Zinc	506	ug/L	500	ug/L	101.2	90.0 - 110.0	P	19-JAN-10 18:16	011910-1
	Mercury	4.96	ug/L	5	ug/L	99.2	80.0 - 120.0	AV	20-JAN-10 10:40	012010W1-6
	Beryllium	49.8	ug/L	50	ug/L	99.5	90.0 - 110.0	MS	26-JAN-10 00:44	100125-2
	Cadmium	49.5	ug/L	50	ug/L	99	90.0 - 110.0	MS	26-JAN-10 00:44	100125-2
	Lead	52.6	ug/L	50	ug/L	105.1	90.0 - 110.0	MS	26-JAN-10 00:44	100125-2

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1212-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Manganese	51.9	ug/L	50	ug/L	103.8	90.0 – 110.0	MS	26-JAN-10 00:44	100125-2
	Thallium	49.5	ug/L	50	ug/L	98.9	90.0 – 110.0	MS	26-JAN-10 17:45	100126-3
CCV05	Aluminum	5120	ug/L	5000	ug/L	102.4	90.0 – 110.0	P	19-JAN-10 19:05	011910-1
	Arsenic	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	19-JAN-10 19:05	011910-1
	Barium	509	ug/L	500	ug/L	101.8	90.0 – 110.0	P	19-JAN-10 19:05	011910-1
	Calcium	5020	ug/L	5000	ug/L	100.4	90.0 – 110.0	P	19-JAN-10 19:05	011910-1
	Chromium	508	ug/L	500	ug/L	101.5	90.0 – 110.0	P	19-JAN-10 19:05	011910-1
	Cobalt	509	ug/L	500	ug/L	101.9	90.0 – 110.0	P	19-JAN-10 19:05	011910-1
	Copper	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	19-JAN-10 19:05	011910-1
	Iron	4910	ug/L	5000	ug/L	98.3	90.0 – 110.0	P	19-JAN-10 19:05	011910-1
	Magnesium	5010	ug/L	5000	ug/L	100.2	90.0 – 110.0	P	19-JAN-10 19:05	011910-1
	Nickel	509	ug/L	500	ug/L	101.9	90.0 – 110.0	P	19-JAN-10 19:05	011910-1
	Potassium	4910	ug/L	5000	ug/L	98.2	90.0 – 110.0	P	19-JAN-10 19:05	011910-1
	Selenium	527	ug/L	500	ug/L	105.4	90.0 – 110.0	P	19-JAN-10 19:05	011910-1
	Silver	510	ug/L	500	ug/L	102.1	90.0 – 110.0	P	19-JAN-10 19:05	011910-1
	Sodium	9400	ug/L	10000	ug/L	94	90.0 – 110.0	P	19-JAN-10 19:05	011910-1
	Vanadium	512	ug/L	500	ug/L	102.5	90.0 – 110.0	P	19-JAN-10 19:05	011910-1
	Zinc	505	ug/L	500	ug/L	101.1	90.0 – 110.0	P	19-JAN-10 19:05	011910-1
	Mercury	5.09	ug/L	5	ug/L	101.8	80.0 – 120.0	AV	20-JAN-10 11:03	012010W1-6
CCV06	Mercury	5.19	ug/L	5	ug/L	103.7	80.0 – 120.0	AV	20-JAN-10 11:27	012010W1-6
CCV07	Mercury	5.21	ug/L	5	ug/L	104.2	80.0 – 120.0	AV	20-JAN-10 11:50	012010W1-6
CCV08	Mercury	5.03	ug/L	5	ug/L	100.6	80.0 – 120.0	AV	20-JAN-10 12:13	012010W1-6
CCV09	Mercury	5.21	ug/L	5	ug/L	104.1	80.0 – 120.0	AV	20-JAN-10 12:36	012010W1-6

METALS
-2b-
CRDL Standard for AA & ICP

SDG No: 10-1212-1

Contract: LANL01004

Lab Code: GEL

AA CRDL Standard Source: SPEX

ICP CRDL Standard Source Solutions Plus

Instrument ID: HG3,ICPMS5,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Advisory Limits (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
CRDL01										
	Mercury	.201	ug/L	.2	ug/L	100.5	70.0 – 130.0	AV	20-JAN-10 09:29	012010W1-6
	Lead	2.39	ug/L	2	ug/L	119.5	70.0 – 130.0	MS	25-JAN-10 22:34	100125-2
	Manganese	5.84	ug/L	5	ug/L	116.8	70.0 – 130.0	MS	25-JAN-10 22:34	100125-2
	Beryllium	.539	ug/L	.5	ug/L	107.8	70.0 – 130.0	MS	25-JAN-10 22:34	100125-2
	Cadmium	1.09	ug/L	1	ug/L	109.4	70.0 – 130.0	MS	25-JAN-10 22:34	100125-2
	Thallium	1.23	ug/L	1	ug/L	123.4	70.0 – 130.0	MS	26-JAN-10 15:51	100126-3
	Uranium	.248	ug/L	.2	ug/L	124	70.0 – 130.0	MS	27-JAN-10 14:45	100127-4
	Antimony	3.39	ug/L	3	ug/L	113	70.0 – 130.0	MS	28-JAN-10 17:47	100128-5
PQL01										
	Aluminum	190	ug/L	200	ug/L	95	70.0 – 130.0	P	19-JAN-10 15:19	011910-1
	Iron	96.2	ug/L	100	ug/L	96.2	70.0 – 130.0	P	19-JAN-10 15:19	011910-1
	Magnesium	273	ug/L	300	ug/L	91.1	70.0 – 130.0	P	19-JAN-10 15:19	011910-1
	Nickel	5.75	ug/L	5	ug/L	115	70.0 – 130.0	P	19-JAN-10 15:19	011910-1
	Potassium	136	ug/L	150	ug/L	90.6	70.0 – 130.0	P	19-JAN-10 15:19	011910-1
	Silver	5.56	ug/L	5	ug/L	111.3	70.0 – 130.0	P	19-JAN-10 15:19	011910-1
	Sodium	288	ug/L	300	ug/L	95.9	70.0 – 130.0	P	19-JAN-10 15:19	011910-1
	Arsenic	30	ug/L	30	ug/L	100.1	70.0 – 130.0	P	19-JAN-10 15:19	011910-1
	Barium	5.69	ug/L	5	ug/L	113.8	70.0 – 130.0	P	19-JAN-10 15:19	011910-1
	Chromium	5.42	ug/L	5	ug/L	108.5	70.0 – 130.0	P	19-JAN-10 15:19	011910-1
	Cobalt	5.39	ug/L	5	ug/L	107.8	70.0 – 130.0	P	19-JAN-10 15:19	011910-1
	Copper	12.4	ug/L	10	ug/L	124	70.0 – 130.0	P	19-JAN-10 15:19	011910-1
	Vanadium	4.57	ug/L	5	ug/L	91.4	70.0 – 130.0	P	19-JAN-10 15:19	011910-1
	Zinc	11.2	ug/L	10	ug/L	111.7	70.0 – 130.0	P	19-JAN-10 15:19	011910-1
	Calcium	200	ug/L	200	ug/L	99.8	70.0 – 130.0	P	19-JAN-10 15:19	011910-1
	Selenium	30.6	ug/L	30	ug/L	102.1	70.0 – 130.0	P	19-JAN-10 15:19	011910-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1212-1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ng/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
ICB01	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	19-JAN-10 15:12	011910-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	19-JAN-10 15:12	011910-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	19-JAN-10 15:12	011910-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	19-JAN-10 15:12	011910-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	19-JAN-10 15:12	011910-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	19-JAN-10 15:12	011910-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	19-JAN-10 15:12	011910-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	19-JAN-10 15:12	011910-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	19-JAN-10 15:12	011910-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	19-JAN-10 15:12	011910-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	19-JAN-10 15:12	011910-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	19-JAN-10 15:12	011910-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	19-JAN-10 15:12	011910-1
	Sodium	100	+/-300	U	100	300	LIQ	P	19-JAN-10 15:12	011910-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	19-JAN-10 15:12	011910-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	19-JAN-10 15:12	011910-1
	Mercury	0.066	+/-2	U	0.066	0.2	LIQ	AV	20-JAN-10 09:27	012010W1-6
	Beryllium	0.1	+/-5	U	0.1	0.5	LIQ	MS	25-JAN-10 22:28	100125-2
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	25-JAN-10 22:28	100125-2
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	25-JAN-10 22:28	100125-2
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	25-JAN-10 22:28	100125-2
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	26-JAN-10 15:47	100126-3
	Uranium	0.05	+/-2	U	0.05	0.2	LIQ	MS	27-JAN-10 14:43	100127-4
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	28-JAN-10 17:44	100128-5
CCB01	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	19-JAN-10 15:58	011910-1
	Arsenic	9.74	+/-30	J	5.0	30.0	LIQ	P	19-JAN-10 15:58	011910-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	19-JAN-10 15:58	011910-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	19-JAN-10 15:58	011910-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	19-JAN-10 15:58	011910-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	19-JAN-10 15:58	011910-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1212-1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	19-JAN-10 15:58	011910-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	19-JAN-10 15:58	011910-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	19-JAN-10 15:58	011910-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	19-JAN-10 15:58	011910-1
	Potassium	141.61	+/-150	J	50.0	150	LIQ	P	19-JAN-10 15:58	011910-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	19-JAN-10 15:58	011910-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	19-JAN-10 15:58	011910-1
	Sodium	100	+/-300	U	100	300	LIQ	P	19-JAN-10 15:58	011910-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	19-JAN-10 15:58	011910-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	19-JAN-10 15:58	011910-1
	Mercury	0.066	+/-0.2	U	0.066	0.2	LIQ	AV	20-JAN-10 09:33	012010W1-6
	Beryllium	0.1	+/-0.5	U	0.1	0.5	LIQ	MS	25-JAN-10 22:59	100125-2
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	25-JAN-10 22:59	100125-2
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	25-JAN-10 22:59	100125-2
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	25-JAN-10 22:59	100125-2
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	26-JAN-10 16:09	100126-3
	Uranium	0.05	+/-0.2	U	0.05	0.2	LIQ	MS	27-JAN-10 14:54	100127-4
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	28-JAN-10 17:56	100128-5
CCB02	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	19-JAN-10 16:33	011910-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	19-JAN-10 16:33	011910-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	19-JAN-10 16:33	011910-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	19-JAN-10 16:33	011910-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	19-JAN-10 16:33	011910-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	19-JAN-10 16:33	011910-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	19-JAN-10 16:33	011910-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	19-JAN-10 16:33	011910-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	19-JAN-10 16:33	011910-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	19-JAN-10 16:33	011910-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	19-JAN-10 16:33	011910-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	19-JAN-10 16:33	011910-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1212-1

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ng/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	19-JAN-10 16:33	011910-1
	Sodium	100	+/-300	U	100	300	LIQ	P	19-JAN-10 16:33	011910-1
	Vanadium	-1.23	+/-5	J	1.0	5.0	LIQ	P	19-JAN-10 16:33	011910-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	19-JAN-10 16:33	011910-1
	Mercury	0.066	+/-2	U	0.066	0.2	LIQ	AV	20-JAN-10 09:56	012010W1-6
	Beryllium	0.1	+/-5	U	0.1	0.5	LIQ	MS	25-JAN-10 23:17	100125-2
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	25-JAN-10 23:17	100125-2
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	25-JAN-10 23:17	100125-2
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	25-JAN-10 23:17	100125-2
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	26-JAN-10 16:41	100126-3
	Uranium	0.05	+/-2	U	0.05	0.2	LIQ	MS	27-JAN-10 15:11	100127-4
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	28-JAN-10 18:15	100128-5
CCB03	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	19-JAN-10 17:28	011910-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	19-JAN-10 17:28	011910-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	19-JAN-10 17:28	011910-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	19-JAN-10 17:28	011910-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	19-JAN-10 17:28	011910-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	19-JAN-10 17:28	011910-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	19-JAN-10 17:28	011910-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	19-JAN-10 17:28	011910-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	19-JAN-10 17:28	011910-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	19-JAN-10 17:28	011910-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	19-JAN-10 17:28	011910-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	19-JAN-10 17:28	011910-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	19-JAN-10 17:28	011910-1
	Sodium	100	+/-300	U	100	300	LIQ	P	19-JAN-10 17:28	011910-1
	Vanadium	-1.06	+/-5	J	1.0	5.0	LIQ	P	19-JAN-10 17:28	011910-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	19-JAN-10 17:28	011910-1
	Mercury	0.066	+/-2	U	0.066	0.2	LIQ	AV	20-JAN-10 10:19	012010W1-6
	Beryllium	0.1	+/-5	U	0.1	0.5	LIQ	MS	26-JAN-10 00:07	100125-2

SW846

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1212-1

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	26-JAN-10 00:07	100125-2
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	26-JAN-10 00:07	100125-2
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	26-JAN-10 00:07	100125-2
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	26-JAN-10 17:17	100126-3
	Uranium	0.05	+/-2	U	0.05	0.2	LIQ	MS	27-JAN-10 15:27	100127-4
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	28-JAN-10 18:31	100128-5
CCB04	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	19-JAN-10 18:23	011910-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	19-JAN-10 18:23	011910-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	19-JAN-10 18:23	011910-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	19-JAN-10 18:23	011910-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	19-JAN-10 18:23	011910-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	19-JAN-10 18:23	011910-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	19-JAN-10 18:23	011910-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	19-JAN-10 18:23	011910-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	19-JAN-10 18:23	011910-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	19-JAN-10 18:23	011910-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	19-JAN-10 18:23	011910-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	19-JAN-10 18:23	011910-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	19-JAN-10 18:23	011910-1
	Sodium	100	+/-300	U	100	300	LIQ	P	19-JAN-10 18:23	011910-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	19-JAN-10 18:23	011910-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	19-JAN-10 18:23	011910-1
	Mercury	0.066	+/-2	U	0.066	0.2	LIQ	AV	20-JAN-10 10:42	012010W1-6
	Beryllium	0.1	+/-5	U	0.1	0.5	LIQ	MS	26-JAN-10 00:50	100125-2
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	26-JAN-10 00:50	100125-2
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	26-JAN-10 00:50	100125-2
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	26-JAN-10 00:50	100125-2
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	26-JAN-10 17:49	100126-3
CCB05	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	19-JAN-10 19:12	011910-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1212-1

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	19-JAN-10 19:12	011910-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	19-JAN-10 19:12	011910-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	19-JAN-10 19:12	011910-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	19-JAN-10 19:12	011910-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	19-JAN-10 19:12	011910-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	19-JAN-10 19:12	011910-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	19-JAN-10 19:12	011910-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	19-JAN-10 19:12	011910-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	19-JAN-10 19:12	011910-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	19-JAN-10 19:12	011910-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	19-JAN-10 19:12	011910-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	19-JAN-10 19:12	011910-1
	Sodium	100	+/-300	U	100	300	LIQ	P	19-JAN-10 19:12	011910-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	19-JAN-10 19:12	011910-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	19-JAN-10 19:12	011910-1
	Mercury	0.066	+/-2	U	0.066	0.2	LIQ	AV	20-JAN-10 11:05	012010W1-6
CCB06	Mercury	0.066	+/-2	U	0.066	0.2	LIQ	AV	20-JAN-10 11:28	012010W1-6
CCB07	Mercury	0.066	+/-2	U	0.066	0.2	LIQ	AV	20-JAN-10 11:52	012010W1-6
CCB08	Mercury	0.066	+/-2	U	0.066	0.2	LIQ	AV	20-JAN-10 12:15	012010W1-6
CCB09	Mercury	0.066	+/-2	U	0.066	0.2	LIQ	AV	20-JAN-10 12:38	012010W1-6

METALS
-3b-
PREPARATION BLANK SUMMARY

SDG NO. 10-1212-1

Contract: LANL01004

Matrix: WATER

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Acceptance Window</u>	<u>Conc Qual</u>	<u>M</u>	<u>MDL</u>	<u>RDL</u>
1202015894	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
	Arsenic	5	ug/L	+/-30	U	P	5	30
	Calcium	50	ug/L	+/-200	U	P	50	200
	Cobalt	1	ug/L	+/-5	U	P	1	5
	Iron	30	ug/L	+/-100	U	P	30	100
	Copper	3	ug/L	+/-10	U	P	3	10
	Chromium	1	ug/L	+/-5	U	P	1	5
	Barium	1	ug/L	+/-5	U	P	1	5
	Aluminum	68	ug/L	+/-200	U	P	68	200
	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
1202015911	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	0.122	ug/L	+/-0.2	J	MS	0.05	0.2
1202019168	Mercury	0.066	ug/L	+/-0.2	U	AV	0.066	0.2
1202026466	Antimony	1	ug/L	+/-3	U	MS	1	3

METALS

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Interference Check Sample

SDG No: 10-1212-1

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	533000	ug/L	500000	ug/L	107	80.0 - 120.0	19-JAN-10 15:26	011910-1
	Arsenic	9.71	ug/L					19-JAN-10 15:26	011910-1
	Barium	0.393	ug/L					19-JAN-10 15:26	011910-1
	Calcium	495000	ug/L	500000	ug/L	99.1	80.0 - 120.0	19-JAN-10 15:26	011910-1
	Chromium	1.5	ug/L					19-JAN-10 15:26	011910-1
	Cobalt	-1.34	ug/L					19-JAN-10 15:26	011910-1
	Copper	1.62	ug/L					19-JAN-10 15:26	011910-1
	Iron	187000	ug/L	200000	ug/L	93.4	80.0 - 120.0	19-JAN-10 15:26	011910-1
	Magnesium	494000	ug/L	500000	ug/L	98.7	80.0 - 120.0	19-JAN-10 15:26	011910-1
	Nickel	3.82	ug/L					19-JAN-10 15:26	011910-1
	Potassium	-193.0	ug/L					19-JAN-10 15:26	011910-1
	Selenium	18.0	ug/L					19-JAN-10 15:26	011910-1
	Silver	-1.36	ug/L					19-JAN-10 15:26	011910-1
	Sodium	22.1	ug/L					19-JAN-10 15:26	011910-1
	Vanadium	-1.67	ug/L					19-JAN-10 15:26	011910-1
	Zinc	9.17	ug/L					19-JAN-10 15:26	011910-1
ICSAB01									
	Aluminum	519000	ug/L	500000	ug/L	104	80.0 - 120.0	19-JAN-10 15:32	011910-1
	Arsenic	530	ug/L	500	ug/L	106	80.0 - 120.0	19-JAN-10 15:32	011910-1
	Barium	507	ug/L	500	ug/L	101	80.0 - 120.0	19-JAN-10 15:32	011910-1
	Calcium	483000	ug/L	500000	ug/L	96.6	80.0 - 120.0	19-JAN-10 15:32	011910-1
	Chromium	500	ug/L	500	ug/L	100	80.0 - 120.0	19-JAN-10 15:32	011910-1
	Cobalt	450	ug/L	500	ug/L	90	80.0 - 120.0	19-JAN-10 15:32	011910-1
	Copper	569	ug/L	500	ug/L	114	80.0 - 120.0	19-JAN-10 15:32	011910-1
	Iron	188000	ug/L	200000	ug/L	94.2	80.0 - 120.0	19-JAN-10 15:32	011910-1
	Magnesium	493000	ug/L	500000	ug/L	98.6	80.0 - 120.0	19-JAN-10 15:32	011910-1
	Nickel	458	ug/L	500	ug/L	91.6	80.0 - 120.0	19-JAN-10 15:32	011910-1
	Potassium	5140	ug/L	5000	ug/L	103	80.0 - 120.0	19-JAN-10 15:32	011910-1
	Selenium	2630	ug/L	2500	ug/L	105	80.0 - 120.0	19-JAN-10 15:32	011910-1

METALS
-4-
Interference Check Sample

SDG No: 10-1212-1

Contract: LANL01004

Lab Code: GEL

ICS:

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Silver	280	ug/L	250	ug/L	112	80.0 - 120.0	19-JAN-10 15:32	011910-1
	Sodium	5500	ug/L	5000	ug/L	110	80.0 - 120.0	19-JAN-10 15:32	011910-1
	Vanadium	524	ug/L	500	ug/L	105	80.0 - 120.0	19-JAN-10 15:32	011910-1
	Zinc	518	ug/L	500	ug/L	104	80.0 - 120.0	19-JAN-10 15:32	011910-1

METALS

-4-

Interference Check Sample

SDG No: 10-1212-1

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: ICPMS5

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICSA01									
	Beryllium	0.04	ug/L					25-JAN-10 22:41	100125-2
	Cadmium	0.501	ug/L					25-JAN-10 22:41	100125-2
	Lead	0.189	ug/L					25-JAN-10 22:41	100125-2
	Manganese	6.29	ug/L					25-JAN-10 22:41	100125-2
ICSAB01									
	Beryllium	18.7	ug/L	20	ug/L	93.4	80.0 - 120.0	25-JAN-10 22:47	100125-2
	Cadmium	20.4	ug/L	20.4	ug/L	100	80.0 - 120.0	25-JAN-10 22:47	100125-2
	Lead	21.2	ug/L	20.5	ug/L	103	80.0 - 120.0	25-JAN-10 22:47	100125-2
	Manganese	27.5	ug/L	25.8	ug/L	106	80.0 - 120.0	25-JAN-10 22:47	100125-2

METALS
-4-
Interference Check Sample

SDG No: 10-1212-1

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: ICPMS5

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICSA01	Thallium	-0.022	ug/L					26-JAN-10 15:56	100126-3
ICSAB01	Thallium	21.3	ug/L	20	ug/L	107	80.0 - 120.0	26-JAN-10 16:00	100126-3

METALS
-4-
Interference Check Sample

SDG No: 10-1212-1

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: ICPMS5

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICSA01	Uranium	-0.001	ug/L					27-JAN-10 14:47	100127-4
ICSAB01	Uranium	22.8	ug/L	20	ug/L	114	80.0 - 120.0	27-JAN-10 14:49	100127-4

METALS

-4-

Interference Check Sample

SDG No: 10-1212-1

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: ICPMS5

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICSA01	Antimony	0.27	ug/L					28-JAN-10 17:49	100128-5
ICSAB01	Antimony	21.7	ug/L	20	ug/L	109	80.0 - 120.0	28-JAN-10 17:51	100128-5

METALS

-5a-

Matrix Spike Summary

SDG NO. 10-1212-1

Client ID RE46-10-10061S

Contract: LANL01004

Level: Low

Matrix: WATER

% Solids:

Sample ID: 244625001

Spike ID: 1202015897

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Zinc	ug/L	75-125	510		3.3	U	500	102		P
Aluminum	ug/L	75-125	5440		68	U	5000	107		P
Arsenic	ug/L	75-125	518		5	U	500	104		P
Barium	ug/L	75-125	532		1.18	J	500	106		P
Calcium	ug/L	75-125	5300		105	J	5000	104		P
Chromium	ug/L	75-125	524		2.65	J	500	104		P
Cobalt	ug/L	75-125	508		1	U	500	102		P
Copper	ug/L	75-125	534		3	U	500	107		P
Iron	ug/L	75-125	5000		30	U	5000	99.5		P
Magnesium	ug/L	75-125	5170		85	U	5000	103		P
Nickel	ug/L	75-125	519		1.5	U	500	104		P
Potassium	ug/L	75-125	5150		50	U	5000	103		P
Selenium	ug/L	75-125	518		5	U	500	104		P
Silver	ug/L	75-125	516		1	U	500	103		P
Sodium	ug/L	75-125	4570		100	U	5000	90		P
Vanadium	ug/L	75-125	531		1	U	500	106		P

METALS

-5a-

Matrix Spike Summary

SDG NO. 10-1212-1 Client ID RE46-10-10061S

Contract: LANL01004 Level: Low

Matrix: WATER % Solids:

Sample ID: 244625001 Spike ID: 1202015914

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Beryllium	ug/L	75-125	51.4		0.1	U	50	103		MS
Cadmium	ug/L	75-125	11.1		0.11	U	10	110		MS
Lead	ug/L	75-125	44.5		0.5	U	40	111		MS
Manganese	ug/L	75-125	54.2		2.27	J	50	104		MS
Thallium	ug/L	75-125	94.1		0.3	U	100	94.1		MS
Uranium	ug/L	75-125	59.1		0.05	U	50	118		MS

METALS

-5a-

Matrix Spike Summary

SDG NO. 10-1212-1 Client ID RE46-10-10106S

Contract: LANL01004 Level: Low

Matrix: WATER % Solids:

Sample ID: 244829001 Spike ID: 1202019171

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/L	75-125	2.08		0.066	U	2	104		AV

METALS

-5a-

Matrix Spike Summary

SDG NO. 10-1212-1 Client ID RE46-10-10065S

Contract: LANL01004 Level: Low

Matrix: WATER % Solids:

Sample ID: 244625002 Spike ID: 1202026469

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Antimony	ug/L	75-125	204		1	U	200	102		MS

Metals

-6-

Duplicate Sample Summary

SDG No.: 10-1212-1

Contract: LANL01004

Lab Code: GEL

Matrix: LIQUID

Level: Low

Client ID: RE46-10-10061D

Sample ID: 244625001

Duplicate ID: 1202015896

Percent Solids for Dup: N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/L		68 U		73.6 J		200		P
Arsenic	ug/L		5 U		5 U				P
Barium	ug/L	+/-5	1.18 J		1.21 J		2.21		P
Calcium	ug/L	+/-200	105 J		106 J		.73		P
Chromium	ug/L	+/-5	2.65 J		3.08 J		15.1		P
Cobalt	ug/L		1 U		1 U				P
Copper	ug/L		3 U		3 U				P
Iron	ug/L		30 U		51.4 J		200		P
Magnesium	ug/L		85 U		85 U				P
Nickel	ug/L		1.5 U		1.5 U				P
Potassium	ug/L		50 U		50 U				P
Selenium	ug/L		5 U		5 U				P
Silver	ug/L		1 U		1 U				P
Sodium	ug/L		100 U		100 U				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.: 10-1212-1

Contract: LANL01004

Lab Code: GEL

Matrix: LIQUID

Level: Low

Client ID: RE46-10-10061D

Sample ID: 244625001

Duplicate ID: 1202015913

Percent Solids for Dup: N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Beryllium	ug/L		0.1 U		0.1 U				MS
Cadmium	ug/L		0.11 U		0.11 U				MS
Lead	ug/L		0.5 U		0.5 U				MS
Manganese	ug/L	+/-5	2.27 J		2.19 J		3.81		MS
Thallium	ug/L		0.3 U		0.3 U				MS
Uranium	ug/L		0.05 U		0.05 U				MS

Metals

-6-

Duplicate Sample Summary

SDG No.: 10-1212-1

Contract: LANL01004

Lab Code: GEL

Matrix: LIQUID

Level: Low

Client ID: RE46-10-10106D

Sample ID: 244829001

Duplicate ID: 1202019170

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

-6-

Duplicate Sample Summary

SDG No.: 10-1212-1

Contract: LANL01004

Lab Code: GEL

Matrix: LIQUID

Level: Low

Client ID: RE46-10-10065D

Sample ID: 244625002

Duplicate ID: 1202026468

Percent Solids for Dup: N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Antimony	ug/L		1 U		1 U				MS

METALS

-7-

Laboratory Control Sample Summary

SDG NO. 10-1212-1

Contract: LANL01004

Aqueous LCS Source:OS2I

Solid LCS Source:

<u>Sample ID</u>	<u>Analyte</u>	<u>Units</u>	<u>True Value</u>	<u>Result</u>	<u>C</u>	<u>% Recovery</u>	<u>Acceptance Limit</u>	<u>M</u>
1202015895	Aluminum	ug/L	5000	5270		105	80-120	P
	Arsenic	ug/L	500	515		103	80-120	P
	Barium	ug/L	500	528		106	80-120	P
	Calcium	ug/L	5000	5160		103	80-120	P
	Chromium	ug/L	500	518		104	80-120	P
	Cobalt	ug/L	500	504		101	80-120	P
	Copper	ug/L	500	529		106	80-120	P
	Iron	ug/L	5000	5090		102	80-120	P
	Magnesium	ug/L	5000	5190		104	80-120	P
	Nickel	ug/L	500	516		103	80-120	P
	Potassium	ug/L	5000	5100		102	80-120	P
	Selenium	ug/L	500	517		103	80-120	P
	Silver	ug/L	500	513		103	80-120	P
	Sodium	ug/L	5000	4900		97.9	80-120	P
	Vanadium	ug/L	500	528		106	80-120	P
	Zinc	ug/L	500	508		102	80-120	P

METALS

-7-

Laboratory Control Sample Summary

SDG NO. 10-1212-1

Contract: LANL01004

Aqueous LCS Source:O2si

Solid LCS Source:

<u>Sample ID</u>	<u>Analyte</u>	<u>Units</u>	<u>True Value</u>	<u>Result</u>	<u>C</u>	<u>% Recovery</u>	<u>Acceptance Limit</u>	<u>M</u>
1202015912	Beryllium	ug/L	50	51.9		104	80-120	MS
	Cadmium	ug/L	50	52.1		104	80-120	MS
	Lead	ug/L	50	53.9		108	80-120	MS
	Manganese	ug/L	50	52.4		105	80-120	MS
	Thallium	ug/L	50	51.1		102	80-120	MS
	Uranium	ug/L	50	57.5		115	80-120	MS

METALS
-7-
Laboratory Control Sample Summary

SDG NO. 10-1212-1

Contract: LANL01004

Aqueous LCS Source: GEL

Solid LCS Source:

<u>Sample ID</u>	<u>Analyte</u>	<u>Units</u>	<u>True Value</u>	<u>Result</u>	<u>C</u>	<u>% Recovery</u>	<u>Acceptance Limit</u>	<u>M</u>
1202019169	Mercury	ug/L	2	2.11		105	80-120	AV

METALS

-7-

Laboratory Control Sample Summary

SDG NO. 10-1212-1

Contract: LANL01004

Aqueous LCS Source:O2si

Solid LCS Source:

<u>Sample ID</u>	<u>Analyte</u>	<u>Units</u>	<u>True Value</u>	<u>Result</u>	<u>C</u>	<u>% Recovery</u>	<u>Acceptance Limit</u>	<u>M</u>
1202026467	Antimony	ug/L	50	53.5		107	80-120	MS

METALS

-9-

Serial Dilution Sample Summary

SDG NO. 10-1212-1 Client ID RE46-10-10061L

Contract: LANL01004

Matrix: LIQUID Level: Low

Sample ID: 244625001 Serial Dilution ID: 1202015898

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Aluminum	68	U	340	U				P
Arsenic	5	U	25	U				P
Barium	1.18	J	5	U	100			P
Calcium	105	J	250	U	100			P
Chromium	2.65	J	5	U	100			P
Cobalt	1	U	5	U				P
Copper	3	U	15	U				P
Iron	30	U	150	U				P
Magnesium	85	U	425	U				P
Nickel	1.5	U	7.5	U				P
Potassium	50	U	250	U				P
Selenium	5	U	25	U				P
Silver	1	U	5	U				P
Sodium	100	U	500	U				P
Vanadium	1	U	5	U				P
Zinc	3.3	U	16.5	U				P

METALS

-9-

Serial Dilution Sample Summary

SDG NO. 10-1212-1 Client ID RE46-10-10061L

Contract: LANL01004

Matrix: LIQUID Level: Low

Sample ID: 244625001 Serial Dilution ID: 1202015915

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Beryllium	.1	U	.5	U				MS
Cadmium	.11	U	.55	U				MS
Lead	.5	U	2.5	U				MS
Manganese	2.27	J	5	U	100			MS
Thallium	.3	U	2.52	J				MS
Uranium	.05	U	.25	U				MS

METALS

-9-

Serial Dilution Sample Summary

SDG NO. 10-1212-1 Client ID RE46-10-10106L

Contract: LANL01004

Matrix: LIQUID Level: Low

Sample ID: 244829001 Serial Dilution ID: 1202019172

Analyte	Initial Value ng/L	C	Serial Value ng/L	C	% Difference	Qual	Acceptance Limit	M
Mercury	.066	U	.33	U				AV

METALS

-9-

Serial Dilution Sample Summary

SDG NO. 10-1212-1 Client ID RE46-10-10065L

Contract: LANL01004

Matrix: LIQUID Level: Low

Sample ID: 244625002 Serial Dilution ID: 1202026470

<u>Analyte</u>	<u>Initial Value ng/L</u>	<u>C</u>	<u>Serial Value ng/L</u>	<u>C</u>	<u>% Difference</u>	<u>Qual</u>	<u>Acceptance Limit</u>	<u>M</u>
Antimony	1	U	5	U				MS

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-1212-1

Method Type: P

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Client ID</u>	<u>Sample Type</u>	<u>Matrix</u>	<u>Prep Date</u>	<u>Initial Sample Size</u>	<u>Final Sample Volume</u>	<u>Percent Solids</u>
Batch Number	941808						
1202015894	MB for batch 941808	MB	W	18-JAN-10	50mL	50mL	
1202015895	LCS for batch 941808	LCS	W	18-JAN-10	50mL	50mL	
1202015897	RE46-10-10061S	MS	W	18-JAN-10	50mL	50mL	
1202015896	RE46-10-10061D	DUP	W	18-JAN-10	50mL	50mL	
244602001	RE12-10-7284	SAMPLE	W	18-JAN-10	50mL	50mL	

SW846

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-1212-1

Method Type: MS

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Client ID</u>	<u>Sample Type</u>	<u>Matrix</u>	<u>Prep Date</u>	<u>Initial Sample Size</u>	<u>Final Sample Volume</u>	<u>Percent Solids</u>
Batch Number 941812							
1202015911	MB for batch 941812	MB	W	18-JAN-10	50mL	50mL	
1202015912	LCS for batch 941812	LCS	W	18-JAN-10	50mL	50mL	
1202015914	RE46-10-10061S	MS	W	18-JAN-10	50mL	50mL	
1202015913	RE46-10-10061D	DUP	W	18-JAN-10	50mL	50mL	
244602001	RE12-10-7284	SAMPLE	W	18-JAN-10	50mL	50mL	
Batch Number 946101							
1202026466	MB for batch 946101	MB	W	28-JAN-10	50mL	50mL	
1202026467	LCS for batch 946101	LCS	W	28-JAN-10	50mL	50mL	
1202026469	RE46-10-10065S	MS	W	28-JAN-10	50mL	50mL	
1202026468	RE46-10-10065D	DUP	W	28-JAN-10	50mL	50mL	
244602001	RE12-10-7284	SAMPLE	W	28-JAN-10	50mL	50mL	

SW846

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-1212-1

Method Type: AV

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Client ID</u>	<u>Sample Type</u>	<u>Matrix</u>	<u>Prep Date</u>	<u>Initial Sample Size</u>	<u>Final Sample Volume</u>	<u>Percent Solids</u>
Batch Number	943079						
1202019168	MB for batch 943079	MB	W	19-JAN-10	20mL	20mL	
1202019169	LCS for batch 943079	LCS	W	19-JAN-10	20mL	20mL	
1202019171	RE46-10-10106S	MS	W	19-JAN-10	20mL	20mL	
1202019170	RE46-10-10106D	DUP	W	19-JAN-10	20mL	20mL	
244602001	RE12-10-7284	SAMPLE	W	19-JAN-10	20mL	20mL	

SW846

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: ICPMS5

Start Date: 25-JAN-10

End Date: 26-JAN-10

Client Sdg: 10-1212-1

Method MS

Data File: 100125-2

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	22:04					X	X						X		X										
S10	1	22:10					X	X						X		X										
S100	1	22:16					X	X						X		X										
ICV01	1	22:22					X	X						X		X										
ICB01	1	22:28					X	X						X		X										
CRDL01	1	22:34					X	X						X		X										
ICSA01	1	22:41					X	X						X		X										
ICSAB01	1	22:47					X	X						X		X										
CCV01	1	22:53					X	X						X		X										
CCB01	1	22:59					X	X						X		X										
LR01	1	23:05					X	X						X		X										
CCV02	1	23:11					X	X						X		X										
CCB02	1	23:17					X	X						X		X										
1202015911	1	23:23					X	X						X		X										
1202015912	1	23:30					X	X						X		X										
244602001	1	23:36					X	X						X		X										
ZZZZZZ	1	23:42																								
ZZZZZZ	1	23:48																								
ZZZZZZ	1	23:54																								
CCV03	1	00:01					X	X						X		X										
CCB03	1	00:07					X	X						X		X										
ZZZZZZ	1	00:13																								
1202015913	1	00:19					X	X						X		X										
1202015914	1	00:25					X	X						X		X										
1202015915	5	00:31					X	X						X		X										
ZZZZZZ	1	00:38																								
CCV04	1	00:44					X	X						X		X										
CCB04	1	00:50					X	X						X		X										

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: ICPMS5

Start Date: 26-JAN-10

End Date: 26-JAN-10

Client Sdg: 10-1212-1

Method MS

Data File: 100126-3

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	Ti	U	V	Zn
S0.0	1	15:29																					X			
S10	1	15:33																					X			
S100	1	15:38																					X			
ICV01	1	15:42																					X			
ICB01	1	15:47																					X			
CRDL01	1	15:51																					X			
ICSA01	1	15:56																					X			
ICSAB01	1	16:00																					X			
CCV01	1	16:05																					X			
CCB01	1	16:09																					X			
ZZZZZZ	2	16:14																								
ZZZZZZ	40	16:18																								
ZZZZZZ	2	16:23																								
ZZZZZZ	2	16:27																								
ZZZZZZ	2	16:32																								
CCV02	1	16:37																					X			
CCB02	1	16:41																					X			
1202015911	1	16:46																					X			
1202015912	1	16:50																					X			
244602001	1	16:55																					X			
ZZZZZZ	1	16:59																								
ZZZZZZ	1	17:04																								
ZZZZZZ	1	17:08																								
CCV03	1	17:13																					X			
CCB03	1	17:17																					X			
ZZZZZZ	1	17:22																								
1202015913	1	17:27																					X			
1202015914	1	17:31																					X			
1202015915	5	17:36																					X			
ZZZZZZ	1	17:40																								
CCV04	1	17:45																					X			
CCB04	1	17:49																					X			

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: ICPMS5

Start Date: 27-JAN-10

End Date: 27-JAN-10

Client Sdg: 10-1212-1

Method MS

Data File: 100127-4

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	14:34																						X		
S10	1	14:36																						X		
S100	1	14:38																						X		
ICV01	1	14:41																						X		
ICB01	1	14:43																						X		
CRDL01	1	14:45																						X		
ICSA01	1	14:47																						X		
ICSAB01	1	14:49																						X		
CCV01	1	14:51																						X		
CCB01	1	14:54																						X		
1202015911	1	14:56																						X		
1202015912	1	14:58																						X		
244602001	1	15:00																						X		
ZZZZZZ	1	15:02																								
ZZZZZZ	1	15:05																								
ZZZZZZ	1	15:07																								
CCV02	1	15:09																						X		
CCB02	1	15:11																						X		
ZZZZZZ	1	15:13																								
1202015913	1	15:16																						X		
1202015914	1	15:18																						X		
1202015915	5	15:20																						X		
ZZZZZZ	1	15:22																								
CCV03	1	15:25																						X		
CCB03	1	15:27																						X		

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: ICPMS5

Start Date: 28-JAN-10

End Date: 28-JAN-10

Client Sdg: 10-1212-1

Method MS

Data File: 100128-5

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	17:35		X																						
S10	1	17:38		X																						
S100	1	17:40		X																						
ICV01	1	17:42		X																						
ICB01	1	17:44		X																						
CRDL01	1	17:47		X																						
ICSA01	1	17:49		X																						
ICSAB01	1	17:51		X																						
CCV01	1	17:54		X																						
CCB01	1	17:56		X																						
1202026466	1	17:58		X																						
1202026467	1	18:01		X																						
244602001	1	18:03		X																						
ZZZZZZ	1	18:05																								
ZZZZZZ	1	18:08																								
ZZZZZZ	1	18:10																								
CCV02	1	18:12		X																						
CCB02	1	18:15		X																						
ZZZZZZ	1	18:17																								
ZZZZZZ	1	18:19																								
1202026468	1	18:22		X																						
1202026469	1	18:24		X																						
1202026470	5	18:26		X																						
CCV03	1	18:29		X																						
CCB03	1	18:31		X																						

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: OPTIMA3

Start Date: 19-JAN-10

End Date: 19-JAN-10

Client Sdg: 10-1212-1

Method P

Data File: 011910-1

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	14:33	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
S0.1	1	14:40			X	X				X	X	X						X	X	X	X				X	X
S0.5	1	14:46	X		X	X			X	X	X	X			X			X	X	X	X				X	X
SCAL	1	14:53	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
S10	1	15:00	X						X				X		X							X				
ICV01	1	15:05	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ICB01	1	15:12	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
PQL01	1	15:19	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ICSA01	1	15:26	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ICSAB01	1	15:32	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
LR01	1	15:38	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
LR02	1	15:44	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCV01	1	15:51	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCB01	1	15:58	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
LR03	1	16:20	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCV02	1	16:26	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCB02	1	16:33	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ZZZZZZ	5	16:40																								
ZZZZZZ	5	16:47																								
ZZZZZZ	5	16:54																								
ZZZZZZ	5	17:00																								
ZZZZZZ	25	17:07																								
ZZZZZZ	5	17:14																								
CCV03	1	17:21	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCB03	1	17:28	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
1202015894	1	17:35	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
1202015895	1	17:42	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
244602001	1	17:48	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ZZZZZZ	1	17:55																								
ZZZZZZ	1	18:02																								
ZZZZZZ	1	18:09																								
CCV04	1	18:16	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCB04	1	18:23	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ZZZZZZ	1	18:30																								
1202015896	1	18:37	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
1202015897	1	18:44	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
1202015898	5	18:51	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ZZZZZZ	1	18:58																								
CCV05	1	19:05	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCB05	1	19:12	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: 20-JAN-10

End Date: 20-JAN-10

Client Sdg: 10-1212-1

Method AV

Data File: 012010W1-6

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	Ti	U	V	Zn
S0.0	1	09:14															X									
S0.2	1	09:16															X									
S0.5	1	09:18															X									
S2.0	1	09:19															X									
S5.0	1	09:21															X									
S10.0	1	09:23															X									
ICV01	1	09:25															X									
ICB01	1	09:27															X									
CRDL01	1	09:29															X									
CCV01	1	09:31															X									
CCB01	1	09:33															X									
ZZZZZZ	1	09:35																								
ZZZZZZ	1	09:37																								
ZZZZZZ	1	09:39																								
ZZZZZZ	1	09:41																								
ZZZZZZ	1	09:43																								
ZZZZZZ	1	09:44																								
ZZZZZZ	1	09:46																								
ZZZZZZ	1	09:48																								
ZZZZZZ	1	09:50																								
ZZZZZZ	1	09:52																								
CCV02	1	09:54															X									
CCB02	1	09:56															X									
ZZZZZZ	1	09:58																								
ZZZZZZ	1	10:00																								
ZZZZZZ	5	10:02																								
ZZZZZZ	1	10:04																								
ZZZZZZ	1	10:06																								
ZZZZZZ	1	10:08																								
ZZZZZZ	1	10:09																								
ZZZZZZ	1	10:11																								
ZZZZZZ	1	10:13																								
ZZZZZZ	1	10:15																								
CCV03	1	10:17															X									
CCB03	1	10:19															X									
ZZZZZZ	1	10:21																								
ZZZZZZ	1	10:23																								
ZZZZZZ	1	10:25																								
ZZZZZZ	1	10:27																								
ZZZZZZ	5	10:29																								

SW846

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	5	11:48																								
CCV07	1	11:50															X									
CCB07	1	11:52															X									
ZZZZZZ	1	11:54																								
ZZZZZZ	1	11:56																								
ZZZZZZ	1	11:57																								
ZZZZZZ	1	11:59																								
ZZZZZZ	1	12:01																								
1202019168	1	12:03															X									
1202019169	1	12:05															X									
ZZZZZZ	1	12:07																								
ZZZZZZ	1	12:09																								
244602001	1	12:11															X									
CCV08	1	12:13															X									
CCB08	1	12:15															X									
ZZZZZZ	1	12:17																								
ZZZZZZ	1	12:19																								
ZZZZZZ	1	12:21																								
ZZZZZZ	1	12:23																								
ZZZZZZ	1	12:25																								
ZZZZZZ	1	12:27																								
ZZZZZZ	1	12:28																								
1202019170	1	12:30															X									
1202019171	1	12:32															X									
1202019172	5	12:34															X									
CCV09	1	12:36															X									
CCB09	1	12:38															X									

Standards

METALS
-10-
Instrument Detection Limits

SDG NO. 10-1212-1

Contract: LANL01004

Lab Code: GEL

MDL Effective Date: 01-JUL-09

ICP/MS	<u>Analyte</u>	<u>Wavelength</u> <u>(nm)</u>	<u>MDL</u>	<u>RDL</u>
			<u>ug/L</u>	<u>ug/L</u>
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. 10-1212-1

Contract: LANL01004

Lab Code: GEL

MDL Effective Date: 01-JUL-09

		<u>Wavelength</u> (nm)	<u>MDL</u> ug/L	<u>RDL</u> ug/L
MERCURY	<u>Analyte</u>			
LIQUID	Mercury		0.066	.2

METALS
-10-
Instrument Detection Limits

SDG NO. 10-1212-1

Contract: LANL01004

Lab Code: GEL

MDL Effective Date: 01-JUL-09

ICP	<u>Analyte</u>	<u>Wavelength</u> <u>(nm)</u>	<u>MDL</u>	<u>RDL</u>
			<u>ug/L</u>	<u>ug/L</u>
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

GEL Job No: 10-1212-1

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

GEL Job No: 10-1212-1

Contract: LANL01004

Instrument: OPTIMA3

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	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

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Interelement Correction Factors

Lab Code: GEL

GEL Job No: 10-1212-1

Contract: LANL01004

Instrument: OPTIMA3

Effective Dates: 01-NOV-09

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

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

GEL Job No: 10-1212-1

Contract: LANL01004

Instrument: OPTIMA3

Effective Dates: 01-NOV-09

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

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

GEL Job No: 10-1212-1

Contract: LANL01004

Instrument: OPTIMA3

Effective Dates: 01-NOV-09

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

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

GEL Job No: 10-1212-1

Contract: LANL01004

Instrument: OPTIMA3

Effective Dates: 01-NOV-09

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

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. 10-1212-1

Contract: LANL01004

Lab Code: GEL

Instrument ID ICPMS5

<u>Analyte</u>	<u>Integration Time (msec)</u>	<u>LDR</u>	<u>Units</u>	<u>Effective Date</u>
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. 10-1212-1

Contract: LANL01004

Lab Code: GEL

Instrument ID OPTIMA3

<u>Analyte</u>	<u>Integration Time (sec)</u>	<u>LDR</u>	<u>Units</u>	<u>Effective Date</u>
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

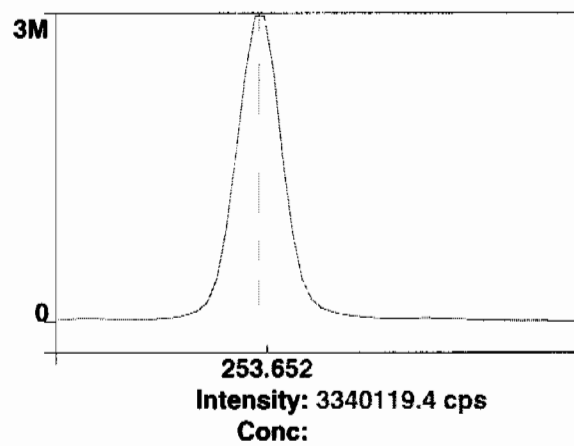
Raw Data

Method: Hg_ReAlign
Result: 020310

Sample ID: Hg_ReAlign

Hg 253.652

Rep: 1



1

=====
Analysis Begun

Start Time: 1/19/2010 14:33:04

Plasma On Time: 1/18/2010 05:48:39

Logged In Analyst: Optima3

Technique: ICP Continuous

Spectrometer Model: Optima 5300 DV, S/N 077C7090601 Autosampler Model: S10

Sample Information File: C:\pe\Optima3\Sample Information\011910.sif

Batch ID:

Results Data Set: 011910

Results Library: C:\pe\Optima3\Results\Results.mdb

=====
Method Loaded

Method Name: General Eng.2AX

Method Last Saved: 1/19/2010 13:21:41

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: 1/19/2010 14:33:06

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Replicate Data: S0

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Units	Analysis Time
1	Sc Radial	5710.9	5710.9	0.000 %		14:34:58
1	Y RADIAL	6012.3	6012.3	0.000 %		14:34:58
1	Al 396.153Radial†	-1.3	-1.3	[0.00] ug/L		14:34:58

1	Ca 317.933Radial†	26.8	26.4	[0.00]	ug/L	14:35:18
1	Fe 238.204 Radial†	13.0	12.8	[0.00]	ug/L	14:35:18
1	K 766.490 Radial†	2902.9	2862.3	[0.00]	ug/L	14:34:58
1	Mg 279.077 IEC†	2.2	2.2	[0.00]	ug/L	14:35:18
1	Na 589.592 Radial†	-1009.4	-995.3	[0.00]	ug/L	14:34:58
1	Sr 421.552†	27.2	26.8	[0.00]	ug/L	14:34:58
1	Sc 361.383	974278.1	974278.1	0.0000	%	14:36:15
1	Y 371.029	819551.5	819551.5	0.0000	%	14:36:15
1	Ag 328.068†	480.4	481.9	[0.00]	ug/L	14:36:20
1	As 188.979†	-20.3	-20.3	[0.00]	ug/L	14:36:40
1	B 249.677†	-541.4	-543.1	[0.00]	ug/L	14:36:40
1	Ba 233.527†	13.9	13.9	[0.00]	ug/L	14:36:40
1	Be 313.107†	-4446.6	-4460.6	[0.00]	ug/L	14:36:20
1	Cd 226.502†	-217.4	-218.1	[0.00]	ug/L	14:36:40
1	Co 228.616†	-79.8	-80.0	[0.00]	ug/L	14:36:40
1	Cr 267.716†	102.5	102.8	[0.00]	ug/L	14:36:40
1	Cu 324.752†	6191.7	6211.2	[0.00]	ug/L	14:36:20
1	Mn 257.610†	487.1	488.6	[0.00]	ug/L	14:36:40
1	Mo 202.031†	21.5	21.5	[0.00]	ug/L	14:36:40
1	Ni 231.604†	119.6	120.0	[0.00]	ug/L	14:36:40
1	P 214.914†	228.2	228.9	[0.00]	ug/L	14:36:40
1	Pb 220.353†	-27.1	-27.2	[0.00]	ug/L	14:36:40
1	S 181.975 Axial†	43.1	43.3	[0.00]	ug/L	14:36:40
1	Sb 206.836†	50.2	50.3	[0.00]	ug/L	14:36:40
1	Se 196.026†	-25.2	-25.3	[0.00]	ug/L	14:36:40
1	Si 251.611†	550.2	551.9	[0.00]	ug/L	14:36:40
1	Sn 189.927†	-0.1	-0.1	[0.00]	ug/L	14:36:40
1	Ti 334.940†	-1388.4	-1392.7	[0.00]	ug/L	14:36:20
1	Tl 190.801†	-38.7	-38.9	[0.00]	ug/L	14:36:40
1	U 409.014†	-1874.1	-1880.0	[0.00]	ug/L	14:36:15
1	V 292.402†	-1448.3	-1452.9	[0.00]	ug/L	14:36:20
1	Zn 213.857†	809.2	811.7	[0.00]	ug/L	14:36:40
1	SiO2†	540.7	542.4	[0.00]	ug/L	14:37:46
2	Sc Radial	5622.3	5622.3	0.000	%	14:35:23
2	Y RADIAL	5950.5	5950.5	0.000	%	14:35:23
2	Al 396.153Radial†	7.8	7.8	[0.00]	ug/L	14:35:23
2	Ca 317.933Radial†	23.3	23.3	[0.00]	ug/L	14:35:43
2	Fe 238.204 Radial†	13.9	14.0	[0.00]	ug/L	14:35:43
2	K 766.490 Radial†	2985.5	2990.1	[0.00]	ug/L	14:35:23
2	Mg 279.077 IEC†	3.9	3.9	[0.00]	ug/L	14:35:43
2	Na 589.592 Radial†	-1080.6	-1082.3	[0.00]	ug/L	14:35:23
2	Sr 421.552†	-21.8	-21.8	[0.00]	ug/L	14:35:23
2	Sc 361.383	976207.8	976207.8	0.0000	%	14:36:45
2	Y 371.029	820570.1	820570.1	0.0000	%	14:36:45
2	Ag 328.068†	465.1	465.6	[0.00]	ug/L	14:36:50
2	As 188.979†	-24.3	-24.3	[0.00]	ug/L	14:37:10
2	B 249.677†	-531.6	-532.2	[0.00]	ug/L	14:37:10
2	Ba 233.527†	5.9	5.9	[0.00]	ug/L	14:37:10
2	Be 313.107†	-4460.6	-4465.8	[0.00]	ug/L	14:36:50
2	Cd 226.502†	-217.9	-218.2	[0.00]	ug/L	14:37:10
2	Co 228.616†	-81.8	-81.9	[0.00]	ug/L	14:37:10
2	Cr 267.716†	83.8	83.9	[0.00]	ug/L	14:37:10
2	Cu 324.752†	6172.5	6179.7	[0.00]	ug/L	14:36:50
2	Mn 257.610†	493.9	494.5	[0.00]	ug/L	14:37:10
2	Mo 202.031†	19.0	19.0	[0.00]	ug/L	14:37:10
2	Ni 231.604†	111.2	111.3	[0.00]	ug/L	14:37:10
2	P 214.914†	227.8	228.1	[0.00]	ug/L	14:37:10
2	Pb 220.353†	-22.0	-22.0	[0.00]	ug/L	14:37:10
2	S 181.975 Axial†	47.9	48.0	[0.00]	ug/L	14:37:10
2	Sb 206.836†	42.8	42.8	[0.00]	ug/L	14:37:10
2	Se 196.026†	-32.5	-32.6	[0.00]	ug/L	14:37:10
2	Si 251.611†	513.0	513.6	[0.00]	ug/L	14:37:10
2	Sn 189.927†	6.8	6.8	[0.00]	ug/L	14:37:10
2	Ti 334.940†	-1443.1	-1444.7	[0.00]	ug/L	14:36:50
2	Tl 190.801†	-43.9	-44.0	[0.00]	ug/L	14:37:10
2	U 409.014†	-1825.5	-1827.6	[0.00]	ug/L	14:36:45
2	V 292.402†	-1409.3	-1410.9	[0.00]	ug/L	14:36:50
2	Zn 213.857†	821.7	822.6	[0.00]	ug/L	14:37:10
2	SiO2†	559.5	560.2	[0.00]	ug/L	14:37:51
3	Sc Radial	5559.8	5559.8	0.000	%	14:35:48
3	Y RADIAL	5884.7	5884.7	0.000	%	14:35:48

3	Al 396.153Radial†	-16.7	-16.9	[0.00]	ug/L	14:35:48
3	Ca 317.933Radial†	24.5	24.8	[0.00]	ug/L	14:36:08
3	Fe 238.204 Radial†	10.2	10.3	[0.00]	ug/L	14:36:08
3	K 766.490 Radial†	2849.3	2885.8	[0.00]	ug/L	14:35:48
3	Mg 279.077 IEC†	1.3	1.3	[0.00]	ug/L	14:36:08
3	Na 589.592 Radial†	-1065.6	-1079.3	[0.00]	ug/L	14:35:48
3	Sr 421.552†	30.2	30.6	[0.00]	ug/L	14:35:48
3	Sc 361.383	981559.2	981559.2	0.0000	%	14:37:15
3	Y 371.029	825711.7	825711.7	0.0000	%	14:37:15
3	Ag 328.068†	473.3	471.2	[0.00]	ug/L	14:37:21
3	As 188.979†	-16.4	-16.3	[0.00]	ug/L	14:37:41
3	B 249.677†	-549.3	-547.0	[0.00]	ug/L	14:37:41
3	Ba 233.527†	8.7	8.6	[0.00]	ug/L	14:37:41
3	Be 313.107†	-4416.7	-4397.8	[0.00]	ug/L	14:37:21
3	Cd 226.502†	-213.9	-213.0	[0.00]	ug/L	14:37:41
3	Co 228.616†	-61.1	-60.9	[0.00]	ug/L	14:37:41
3	Cr 267.716†	79.3	79.0	[0.00]	ug/L	14:37:41
3	Cu 324.752†	6263.8	6237.0	[0.00]	ug/L	14:37:21
3	Mn 257.610†	499.9	497.7	[0.00]	ug/L	14:37:41
3	Mo 202.031†	29.6	29.5	[0.00]	ug/L	14:37:41
3	Ni 231.604†	115.3	114.8	[0.00]	ug/L	14:37:41
3	P 214.914†	221.0	220.1	[0.00]	ug/L	14:37:41
3	Pb 220.353†	-21.2	-21.1	[0.00]	ug/L	14:37:41
3	S 181.975 Axial†	50.3	50.1	[0.00]	ug/L	14:37:41
3	Sb 206.836†	32.7	32.6	[0.00]	ug/L	14:37:41
3	Se 196.026†	-29.1	-28.9	[0.00]	ug/L	14:37:41
3	Si 251.611†	528.2	525.9	[0.00]	ug/L	14:37:41
3	Sn 189.927†	7.0	7.0	[0.00]	ug/L	14:37:41
3	Ti 334.940†	-1355.0	-1349.2	[0.00]	ug/L	14:37:21
3	Tl 190.801†	-29.1	-29.0	[0.00]	ug/L	14:37:41
3	U 409.014†	-1729.5	-1722.1	[0.00]	ug/L	14:37:15
3	V 292.402†	-1505.1	-1498.7	[0.00]	ug/L	14:37:21
3	Zn 213.857†	805.8	802.3	[0.00]	ug/L	14:37:41
3	SiO2†	537.6	535.3	[0.00]	ug/L	14:37:56

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	977348.4	3772.18	0.39%	0.0000 %
Sc Radial	5631.0	75.93	1.35%	0.000 %
Y 371.029	821944.4	3302.05	0.40%	0.0000 %
Y RADIAL	5949.2	63.81	1.07%	0.000 %
Ag 328.068†	472.9	8.28	1.75%	[0.00] ug/L
Al 396.153Radial†	-3.5	12.52	360.90%	[0.00] ug/L
As 188.979†	-20.3	4.02	19.79%	[0.00] ug/L
B 249.677†	-540.8	7.65	1.41%	[0.00] ug/L
Ba 233.527†	9.5	4.08	42.99%	[0.00] ug/L
Be 313.107†	-4441.4	37.84	0.85%	[0.00] ug/L
Ca 317.933Radial†	24.8	1.53	6.15%	[0.00] ug/L
Cd 226.502†	-216.4	2.96	1.37%	[0.00] ug/L
Co 228.616†	-74.3	11.62	15.65%	[0.00] ug/L
Cr 267.716†	88.6	12.59	14.22%	[0.00] ug/L
Cu 324.752†	6209.3	28.65	0.46%	[0.00] ug/L
Fe 238.204 Radial†	12.4	1.87	15.09%	[0.00] ug/L
K 766.490 Radial†	2912.8	68.03	2.34%	[0.00] ug/L
Mg 279.077 IEC†	2.5	1.34	53.97%	[0.00] ug/L
Mn 257.610†	493.6	4.62	0.94%	[0.00] ug/L
Mo 202.031†	23.3	5.48	23.48%	[0.00] ug/L
Na 589.592 Radial†	-1052.3	49.38	4.69%	[0.00] ug/L
Ni 231.604†	115.4	4.37	3.79%	[0.00] ug/L
P 214.914†	225.7	4.88	2.16%	[0.00] ug/L
Pb 220.353†	-23.4	3.28	13.99%	[0.00] ug/L
S 181.975 Axial†	47.1	3.50	7.42%	[0.00] ug/L
Sb 206.836†	41.9	8.92	21.28%	[0.00] ug/L
Se 196.026†	-28.9	3.63	12.55%	[0.00] ug/L
Si 251.611†	530.5	19.54	3.68%	[0.00] ug/L
Sn 189.927†	4.6	4.02	87.75%	[0.00] ug/L
Sr 421.552†	11.8	29.19	246.37%	[0.00] ug/L
Ti 334.940†	-1395.6	47.84	3.43%	[0.00] ug/L
Tl 190.801†	-37.3	7.63	20.47%	[0.00] ug/L

U 409.014†	-1809.9	80.43	4.44%	[0.00] ug/L
V 292.402†	-1454.2	43.89	3.02%	[0.00] ug/L
Zn 213.857†	812.2	10.16	1.25%	[0.00] ug/L
SiO2†	546.0	12.83	2.35%	[0.00] ug/L

Sequence No.: 2
 Sample ID: S0.1
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 2
 Date Collected: 1/19/2010 14:40:06
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib.	Analysis Time
1	Sc Radial	5724.9	5724.9	102 %		14:42:03
1	Y RADIAL	6030.9	6030.9	101.4 %		14:42:03
1	K 766.490 Radial†	8244.2	5196.2	[1000] ug/L		14:41:58
1	Sr 421.552†	17057.9	16766.3	[100] ug/L		14:42:03
1	Sc 361.383	972057.1	972057.1	99.459 %		14:42:30
1	Y 371.029	815600.8	815600.8	99.228 %		14:42:30
1	Ag 328.068†	24470.8	24131.0	[100] ug/L		14:42:30
1	As 188.979†	252.4	274.1	[100] ug/L		14:42:50
1	B 249.677†	4161.0	4724.4	[100] ug/L		14:42:30
1	Ba 233.527†	14667.5	14737.9	[100] ug/L		14:42:30
1	Be 313.107†	297370.7	303430.8	[100] ug/L		14:42:30
1	Cd 226.502†	9736.6	10006.0	[100] ug/L		14:42:50
1	Co 228.616†	5432.6	5536.4	[100] ug/L		14:42:50
1	Cr 267.716†	9789.5	9754.2	[100] ug/L		14:42:30
1	Cu 324.752†	42362.2	36383.5	[100] ug/L		14:42:30
1	Mn 257.610†	103176.9	103244.9	[100] ug/L		14:42:30
1	Mo 202.031†	1618.6	1604.1	[100] ug/L		14:42:50
1	Ni 231.604†	4564.3	4473.8	[100] ug/L		14:42:50
1	P 214.914†	1158.9	939.5	[500] ug/L		14:42:50
1	Pb 220.353†	885.4	913.6	[100] ug/L		14:42:50
1	S 181.975 Axial†	207.7	161.7	[200] ug/L		14:42:50
1	Sb 206.836†	356.6	316.7	[100] ug/L		14:42:50
1	Se 196.026†	133.7	163.4	[100] ug/L		14:42:50
1	Si 251.611†	17889.3	17456.2	[500] ug/L		14:42:30
1	Sn 189.927†	644.6	643.5	[100] ug/L		14:42:50
1	Ti 334.940†	68903.0	70673.7	[100] ug/L		14:42:30
1	Tl 190.801†	342.5	381.6	[100] ug/L		14:42:50
1	U 409.014†	2042.9	3864.0	[100] ug/L		14:42:30
1	V 292.402†	14415.9	15948.6	[100] ug/L		14:42:30
1	Zn 213.857†	12633.3	11889.9	[100] ug/L		14:42:30
1	SiO2†	17928.1	17479.7	[1069.5] ug/L		14:43:48
2	Sc Radial	5665.3	5665.3	101 %		14:42:13
2	Y RADIAL	5931.0	5931.0	99.69 %		14:42:13
2	K 766.490 Radial†	8215.5	5253.1	[1000] ug/L		14:42:08
2	Sr 421.552†	17032.1	16917.3	[100] ug/L		14:42:13
2	Sc 361.383	984694.4	984694.4	100.75 %		14:42:56
2	Y 371.029	824867.2	824867.2	100.36 %		14:42:56
2	Ag 328.068†	24612.9	23956.4	[100] ug/L		14:42:56
2	As 188.979†	243.0	261.5	[100] ug/L		14:43:16
2	B 249.677†	4265.4	4774.3	[100] ug/L		14:42:56
2	Ba 233.527†	14871.7	14751.3	[100] ug/L		14:42:56
2	Be 313.107†	300453.2	302653.2	[100] ug/L		14:42:56
2	Cd 226.502†	9716.6	9860.5	[100] ug/L		14:43:16
2	Co 228.616†	5427.8	5461.6	[100] ug/L		14:43:16
2	Cr 267.716†	9906.0	9743.5	[100] ug/L		14:42:56
2	Cu 324.752†	42828.0	36299.2	[100] ug/L		14:42:56
2	Mn 257.610†	104356.7	103084.6	[100] ug/L		14:42:56
2	Mo 202.031†	1615.1	1579.7	[100] ug/L		14:43:16
2	Ni 231.604†	4543.4	4394.2	[100] ug/L		14:43:16
2	P 214.914†	1159.6	925.2	[500] ug/L		14:43:16
2	Pb 220.353†	872.1	889.0	[100] ug/L		14:43:16
2	S 181.975 Axial†	211.9	163.2	[200] ug/L		14:43:16
2	Sb 206.836†	356.5	311.9	[100] ug/L		14:43:16
2	Se 196.026†	147.9	175.8	[100] ug/L		14:43:16
2	Si 251.611†	18031.3	17366.4	[500] ug/L		14:42:56
2	Sn 189.927†	643.9	634.5	[100] ug/L		14:43:16
2	Ti 334.940†	69777.7	70652.7	[100] ug/L		14:42:56
2	Tl 190.801†	342.9	377.7	[100] ug/L		14:43:16
2	U 409.014†	2050.1	3844.7	[100] ug/L		14:42:56

2	V 292.402†	14609.1	15954.3	[100] ug/L	14:42:56
2	Zn 213.857†	12784.6	11877.0	[100] ug/L	14:42:56
2	SiO2†	17884.6	17205.2	[1069.5] ug/L	14:43:53
3	Sc Radial	5570.0	5570.0	98.9 %	14:42:23
3	Y RADIAL	5873.3	5873.3	98.72 %	14:42:23
3	K 766.490 Radial†	8256.1	5433.8	[1000] ug/L	14:42:18
3	Sr 421.552†	16896.4	17069.6	[100] ug/L	14:42:23
3	Sc 361.383	970590.5	970590.5	99.309 %	14:43:22
3	Y 371.029	812835.8	812835.8	98.892 %	14:43:22
3	Ag 328.068†	24321.4	24017.8	[100] ug/L	14:43:22
3	As 188.979†	245.7	267.7	[100] ug/L	14:43:42
3	B 249.677†	4132.4	4701.9	[100] ug/L	14:43:22
3	Ba 233.527†	14709.6	14802.6	[100] ug/L	14:43:22
3	Be 313.107†	295348.1	301845.9	[100] ug/L	14:43:22
3	Cd 226.502†	9766.0	10050.4	[100] ug/L	14:43:42
3	Co 228.616†	5463.5	5575.8	[100] ug/L	14:43:42
3	Cr 267.716†	9691.7	9670.6	[100] ug/L	14:43:22
3	Cu 324.752†	42117.8	36201.7	[100] ug/L	14:43:22
3	Mn 257.610†	102845.5	103067.9	[100] ug/L	14:43:22
3	Mo 202.031†	1621.4	1609.3	[100] ug/L	14:43:42
3	Ni 231.604†	4569.5	4486.0	[100] ug/L	14:43:42
3	P 214.914†	1168.9	951.3	[500] ug/L	14:43:42
3	Pb 220.353†	906.6	936.3	[100] ug/L	14:43:42
3	S 181.975 Axial†	208.5	162.8	[200] ug/L	14:43:42
3	Sb 206.836†	356.0	316.6	[100] ug/L	14:43:42
3	Se 196.026†	153.3	183.3	[100] ug/L	14:43:42
3	Si 251.611†	17778.7	17372.0	[500] ug/L	14:43:22
3	Sn 189.927†	647.4	647.3	[100] ug/L	14:43:42
3	Ti 334.940†	68634.7	70508.1	[100] ug/L	14:43:22
3	Tl 190.801†	346.9	386.6	[100] ug/L	14:43:42
3	U 409.014†	1849.1	3671.9	[100] ug/L	14:43:22
3	V 292.402†	14359.8	15913.9	[100] ug/L	14:43:22
3	Zn 213.857†	12630.3	11906.0	[100] ug/L	14:43:22
3	SiO2†	17779.6	17357.4	[1069.5] ug/L	14:43:58

Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	975780.7	7754.25	0.79%	99.840 %
Sc Radial	5653.4	78.13	1.38%	100 %
Y 371.029	817767.9	6301.65	0.77%	99.492 %
Y RADIAL	5945.1	79.77	1.34%	99.93 %
Ag 328.068†	24035.1	88.59	0.37%	[100] ug/L
As 188.979†	267.8	6.30	2.35%	[100] ug/L
B 249.677†	4733.5	37.08	0.78%	[100] ug/L
Ba 233.527†	14763.9	34.15	0.23%	[100] ug/L
Be 313.107†	302643.3	792.50	0.26%	[100] ug/L
Cd 226.502†	9972.3	99.35	1.00%	[100] ug/L
Co 228.616†	5524.6	58.02	1.05%	[100] ug/L
Cr 267.716†	9722.8	45.49	0.47%	[100] ug/L
Cu 324.752†	36294.8	90.96	0.25%	[100] ug/L
K 766.490 Radial†	5294.4	124.05	2.34%	[1000] ug/L
Mn 257.610†	103132.5	97.75	0.09%	[100] ug/L
Mo 202.031†	1597.7	15.82	0.99%	[100] ug/L
Ni 231.604†	4451.3	49.88	1.12%	[100] ug/L
P 214.914†	938.7	13.06	1.39%	[500] ug/L
Pb 220.353†	913.0	23.68	2.59%	[100] ug/L
S 181.975 Axial†	162.6	0.79	0.49%	[200] ug/L
Sb 206.836†	315.1	2.73	0.87%	[100] ug/L
Se 196.026†	174.1	10.03	5.76%	[100] ug/L
Si 251.611†	17398.2	50.32	0.29%	[500] ug/L
Sn 189.927†	641.8	6.58	1.03%	[100] ug/L
Sr 421.552†	16917.7	151.64	0.90%	[100] ug/L
Ti 334.940†	70611.5	90.16	0.13%	[100] ug/L
Tl 190.801†	381.9	4.46	1.17%	[100] ug/L
U 409.014†	3793.5	105.77	2.79%	[100] ug/L
V 292.402†	15938.9	21.86	0.14%	[100] ug/L
Zn 213.857†	11891.0	14.53	0.12%	[100] ug/L
SiO2†	17347.5	137.54	0.79%	[1069.5] ug/L

Sequence No.: 3
 Sample ID: S0.5
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 3
 Date Collected: 1/19/2010 14:46:08
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: S0.5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib.	Analysis Time
1	Sc Radial	5591.3	5591.3	99.3 %		14:48:00
1	Y RADIAL	5860.4	5860.4	98.51 %		14:48:00
1	Al 396.153Radial†	6880.9	6933.2	[5000] ug/L		14:48:00
1	Ca 317.933Radial†	3366.3	3365.4	[5000] ug/L		14:48:20
1	K 766.490 Radial†	29596.5	26894.0	[5000] ug/L		14:48:00
1	Mg 279.077 IEC†	172.4	171.1	[5000] ug/L		14:48:20
1	Sr 421.552†	85853.4	86451.2	[500] ug/L		14:48:00
1	Sc 361.383	978719.3	978719.3	100.14 %		14:49:19
1	Y 371.029	811642.6	811642.6	98.747 %		14:49:19
1	Ag 328.068†	122185.9	121541.8	[500] ug/L		14:49:19
1	As 188.979†	1342.7	1361.2	[500] ug/L		14:49:40
1	B 249.677†	24304.3	24811.0	[500] ug/L		14:49:19
1	Ba 233.527†	74197.6	74084.2	[500] ug/L		14:49:19
1	Be 313.107†	1541818.9	1544100.6	[500] ug/L		14:49:19
1	Cd 226.502†	50915.9	51060.9	[500] ug/L		14:49:19
1	Co 228.616†	27426.2	27462.0	[500] ug/L		14:49:40
1	Cr 267.716†	49377.8	49220.1	[500] ug/L		14:49:19
1	Cu 324.752†	192563.3	186084.3	[500] ug/L		14:49:19
1	Mn 257.610†	516812.7	515595.2	[500] ug/L		14:49:19
1	Mo 202.031†	8104.4	8069.7	[500] ug/L		14:49:40
1	Ni 231.604†	22395.4	22248.7	[500] ug/L		14:49:40
1	P 214.914†	4982.2	4749.5	[2500] ug/L		14:49:40
1	Pb 220.353†	4617.8	4634.7	[500] ug/L		14:49:40
1	S 181.975 Axial†	861.5	813.2	[1000] ug/L		14:49:40
1	Sb 206.836†	1698.7	1654.5	[500] ug/L		14:49:40
1	Se 196.026†	863.1	890.8	[500] ug/L		14:49:40
1	Si 251.611†	90851.8	90194.1	[2500] ug/L		14:49:19
1	Sn 189.927†	3262.5	3253.3	[500] ug/L		14:49:40
1	Ti 334.940†	358049.2	358943.2	[500] ug/L		14:49:19
1	Tl 190.801†	1835.5	1870.2	[500] ug/L		14:49:40
1	U 409.014†	16430.0	18216.9	[500] ug/L		14:49:19
1	V 292.402†	80309.6	81651.2	[500] ug/L		14:49:19
1	Zn 213.857†	61141.4	60243.5	[500] ug/L		14:49:19
1	SiO2†	89969.2	89297.2	[5347.5] ug/L		14:50:40
2	Sc Radial	5497.6	5497.6	97.6 %		14:48:26
2	Y RADIAL	5751.0	5751.0	96.67 %		14:48:26
2	Al 396.153Radial†	6812.0	6980.7	[5000] ug/L		14:48:26
2	Ca 317.933Radial†	3360.1	3416.8	[5000] ug/L		14:48:46
2	K 766.490 Radial†	29159.8	26954.5	[5000] ug/L		14:48:26
2	Mg 279.077 IEC†	175.7	177.5	[5000] ug/L		14:48:46
2	Sr 421.552†	84608.6	86649.5	[500] ug/L		14:48:26
2	Sc 361.383	965897.7	965897.7	98.828 %		14:49:47
2	Y 371.029	802545.7	802545.7	97.640 %		14:49:47
2	Ag 328.068†	120561.6	121517.9	[500] ug/L		14:49:47
2	As 188.979†	1354.4	1390.8	[500] ug/L		14:50:07
2	B 249.677†	23924.2	24748.6	[500] ug/L		14:49:47
2	Ba 233.527†	73233.0	74091.7	[500] ug/L		14:49:47
2	Be 313.107†	1522583.9	1545075.5	[500] ug/L		14:49:47
2	Cd 226.502†	50200.9	51012.5	[500] ug/L		14:49:47
2	Co 228.616†	27536.7	27937.4	[500] ug/L		14:50:07
2	Cr 267.716†	48729.2	49218.3	[500] ug/L		14:49:47
2	Cu 324.752†	189211.0	185244.8	[500] ug/L		14:49:47
2	Mn 257.610†	509357.8	514902.7	[500] ug/L		14:49:47
2	Mo 202.031†	8150.9	8224.2	[500] ug/L		14:50:07
2	Ni 231.604†	22519.4	22671.0	[500] ug/L		14:50:07
2	P 214.914†	5010.0	4843.7	[2500] ug/L		14:50:07
2	Pb 220.353†	4663.3	4742.0	[500] ug/L		14:50:07
2	S 181.975 Axial†	875.6	838.9	[1000] ug/L		14:50:07
2	Sb 206.836†	1700.1	1678.3	[500] ug/L		14:50:07

2	Se 196.026†	873.5	912.8	[500]	ug/L	14:50:07
2	Si 251.611†	89332.4	89861.0	[2500]	ug/L	14:49:47
2	Sn 189.927†	3258.3	3292.3	[500]	ug/L	14:50:07
2	Ti 334.940†	352567.1	358142.3	[500]	ug/L	14:49:47
2	Tl 190.801†	1864.4	1923.8	[500]	ug/L	14:50:07
2	U 409.014†	16129.9	18131.0	[500]	ug/L	14:49:47
2	V 292.402†	79294.1	81688.3	[500]	ug/L	14:49:47
2	Zn 213.857†	60246.7	60148.7	[500]	ug/L	14:49:47
2	SiO2†	90174.4	90697.5	[5347.5]	ug/L	14:50:45
3	Sc Radial	5547.3	5547.3	98.5	%	14:48:51
3	Y RADIAL	5827.7	5827.7	97.96	%	14:48:51
3	Al 396.153Radial†	6854.9	6961.9	[5000]	ug/L	14:48:51
3	Ca 317.933Radial†	3388.3	3414.7	[5000]	ug/L	14:49:11
3	K 766.490 Radial†	29267.1	26796.2	[5000]	ug/L	14:48:51
3	Mg 279.077 IEC†	176.0	176.2	[5000]	ug/L	14:49:11
3	Sr 421.552†	85120.7	86394.1	[500]	ug/L	14:48:51
3	Sc 361.383	968007.2	968007.2	99.044	%	14:50:14
3	Y 371.029	803609.0	803609.0	97.769	%	14:50:14
3	Ag 328.068†	120861.1	121554.5	[500]	ug/L	14:50:14
3	As 188.979†	1331.3	1364.5	[500]	ug/L	14:50:34
3	B 249.677†	23997.0	24769.3	[500]	ug/L	14:50:14
3	Ba 233.527†	73566.5	74266.9	[500]	ug/L	14:50:14
3	Be 313.107†	1524422.8	1543574.7	[500]	ug/L	14:50:14
3	Cd 226.502†	50362.6	51065.0	[500]	ug/L	14:50:14
3	Co 228.616†	27512.5	27852.3	[500]	ug/L	14:50:34
3	Cr 267.716†	48961.8	49345.7	[500]	ug/L	14:50:14
3	Cu 324.752†	189817.2	185439.6	[500]	ug/L	14:50:14
3	Mn 257.610†	511483.2	515925.4	[500]	ug/L	14:50:14
3	Mo 202.031†	8101.6	8156.4	[500]	ug/L	14:50:34
3	Ni 231.604†	22463.6	22565.0	[500]	ug/L	14:50:34
3	P 214.914†	5017.4	4840.1	[2500]	ug/L	14:50:34
3	Pb 220.353†	4660.4	4728.8	[500]	ug/L	14:50:34
3	S 181.975 Axial†	862.2	823.4	[1000]	ug/L	14:50:34
3	Sb 206.836†	1696.0	1670.4	[500]	ug/L	14:50:34
3	Se 196.026†	863.6	900.9	[500]	ug/L	14:50:34
3	Si 251.611†	89618.2	89952.6	[2500]	ug/L	14:50:14
3	Sn 189.927†	3255.0	3281.8	[500]	ug/L	14:50:34
3	Ti 334.940†	354003.7	358815.3	[500]	ug/L	14:50:14
3	Tl 190.801†	1846.9	1902.0	[500]	ug/L	14:50:34
3	U 409.014†	16254.0	18220.8	[500]	ug/L	14:50:14
3	V 292.402†	79405.6	81626.1	[500]	ug/L	14:50:14
3	Zn 213.857†	60472.8	60244.1	[500]	ug/L	14:50:14
3	SiO2†	91204.5	91538.6	[5347.5]	ug/L	14:50:50

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	970874.7	6874.99	0.71%	99.338	%
Sc Radial	5545.4	46.87	0.85%	98.5	%
Y 371.029	805932.4	4973.63	0.62%	98.052	%
Y RADIAL	5813.0	56.13	0.97%	97.71	%
Ag 328.068†	121538.1	18.58	0.02%	[500]	ug/L
Al 396.153Radial†	6958.6	23.92	0.34%	[5000]	ug/L
As 188.979†	1372.1	16.21	1.18%	[500]	ug/L
B 249.677†	24776.3	31.79	0.13%	[500]	ug/L
Ba 233.527†	74147.6	103.39	0.14%	[500]	ug/L
Be 313.107†	1544250.3	761.53	0.05%	[500]	ug/L
Ca 317.933Radial†	3398.9	29.11	0.86%	[5000]	ug/L
Cd 226.502†	51046.1	29.22	0.06%	[500]	ug/L
Co 228.616†	27750.6	253.50	0.91%	[500]	ug/L
Cr 267.716†	49261.4	73.03	0.15%	[500]	ug/L
Cu 324.752†	185589.5	439.40	0.24%	[500]	ug/L
K 766.490 Radial†	26881.6	79.89	0.30%	[5000]	ug/L
Mg 279.077 IEC†	174.9	3.38	1.93%	[5000]	ug/L
Mn 257.610†	515474.4	521.95	0.10%	[500]	ug/L
Mo 202.031†	8150.1	77.42	0.95%	[500]	ug/L
Ni 231.604†	22494.9	219.70	0.98%	[500]	ug/L
P 214.914†	4811.1	53.39	1.11%	[2500]	ug/L
Pb 220.353†	4701.9	58.52	1.24%	[500]	ug/L
S 181.975 Axial†	825.2	12.94	1.57%	[1000]	ug/L

Sb 206.836†	1667.8	12.17	0.73%	[500]	ug/L
Se 196.026†	901.5	11.04	1.22%	[500]	ug/L
Si 251.611†	90002.5	172.09	0.19%	[2500]	ug/L
Sn 189.927†	3275.8	20.18	0.62%	[500]	ug/L
Sr 421.552†	86498.3	134.07	0.15%	[500]	ug/L
Ti 334.940†	358633.6	430.24	0.12%	[500]	ug/L
Tl 190.801†	1898.7	26.96	1.42%	[500]	ug/L
U 409.014†	18189.6	50.76	0.28%	[500]	ug/L
V 292.402†	81655.2	31.32	0.04%	[500]	ug/L
Zn 213.857†	60212.1	54.93	0.09%	[500]	ug/L
SiO2†	90511.1	1132.27	1.25%	[5347.5]	ug/L

Sequence No.: 4

Sample ID: SCAL

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 4

Date Collected: 1/19/2010 14:53:01

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: SCAL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib.	Analysis Time
1	Sc Radial	5417.2	5417.2	96.2 %		14:55:14
1	Y RADIAL	5617.4	5617.4	94.42 %		14:55:14
1	Al 396.153Radial†	13742.4	14288.4	[10000] ug/L		14:54:54
1	Ca 317.933Radial†	6570.7	6805.2	[10000] ug/L		14:55:14
1	Fe 238.204 Radial†	1210.9	1246.3	[10000] ug/L		14:55:14
1	K 766.490 Radial†	55918.3	55213.2	[10000] ug/L		14:54:54
1	Mg 279.077 IEC†	338.2	349.0	[10000] ug/L		14:55:14
1	Na 589.592 Radial†	39706.2	42326.1	[10000] ug/L		14:54:54
1	Sr 421.552†	171914.4	178689.9	[1000] ug/L		14:54:54
1	Sc 361.383	968216.6	968216.6	99.066 %		14:56:12
1	Y 371.029	776701.8	776701.8	94.496 %		14:56:18
1	Ag 328.068†	240729.0	242526.6	[1000] ug/L		14:56:18
1	As 188.979†	2647.3	2692.6	[1000] ug/L		14:56:38
1	B 249.677†	48638.4	49637.9	[1000] ug/L		14:56:18
1	Ba 233.527†	144912.5	146269.8	[1000] ug/L		14:56:18
1	Be 313.107†	3047639.1	3080824.5	[1000] ug/L		14:56:12
1	Cd 226.502†	99249.3	100401.8	[1000] ug/L		14:56:18
1	Co 228.616†	54263.9	54850.0	[1000] ug/L		14:56:18
1	Cr 267.716†	96701.8	97525.3	[1000] ug/L		14:56:18
1	Cu 324.752†	370693.6	367980.6	[1000] ug/L		14:56:18
1	Mn 257.610†	1016803.3	1025899.8	[1000] ug/L		14:56:12
1	Mo 202.031†	15926.5	16053.4	[1000] ug/L		14:56:38
1	Ni 231.604†	44065.1	44365.3	[1000] ug/L		14:56:18
1	P 214.914†	9654.4	9519.7	[5000] ug/L		14:56:38
1	Pb 220.353†	9039.8	9148.5	[1000] ug/L		14:56:38
1	S 181.975 Axial†	1677.3	1646.0	[2000] ug/L		14:56:38
1	Sb 206.836†	3314.4	3303.8	[1000] ug/L		14:56:38
1	Se 196.026†	1719.8	1764.9	[1000] ug/L		14:56:38
1	Si 251.611†	176111.1	177241.6	[5000] ug/L		14:56:18
1	Sn 189.927†	6410.1	6466.0	[1000] ug/L		14:56:38
1	Ti 334.940†	714158.4	722289.6	[1000] ug/L		14:56:12
1	Tl 190.801†	3654.9	3726.6	[1000] ug/L		14:56:38
1	U 409.014†	35803.7	37951.3	[1000] ug/L		14:56:18
1	V 292.402†	159907.3	162869.6	[1000] ug/L		14:56:18
1	Zn 213.857†	118529.3	118835.0	[1000] ug/L		14:56:18
1	SiO2†	177868.8	179000.5	[10695] ug/L		14:57:48
2	Sc Radial	5477.1	5477.1	97.3 %		14:55:39
2	Y RADIAL	5695.1	5695.1	95.73 %		14:55:39
2	Al 396.153Radial†	13593.2	13978.8	[10000] ug/L		14:55:19
2	Ca 317.933Radial†	6634.3	6796.0	[10000] ug/L		14:55:39
2	Fe 238.204 Radial†	1230.2	1252.4	[10000] ug/L		14:55:39
2	K 766.490 Radial†	55148.0	53785.5	[10000] ug/L		14:55:19
2	Mg 279.077 IEC†	339.4	346.5	[10000] ug/L		14:55:39
2	Na 589.592 Radial†	39161.3	41314.5	[10000] ug/L		14:55:19
2	Sr 421.552†	169291.2	174038.3	[1000] ug/L		14:55:19
2	Sc 361.383	965912.4	965912.4	98.830 %		14:56:44
2	Y 371.029	775762.4	775762.4	94.381 %		14:56:50
2	Ag 328.068†	239947.8	242315.8	[1000] ug/L		14:56:50
2	As 188.979†	2636.2	2687.8	[1000] ug/L		14:57:10
2	B 249.677†	48596.8	49712.9	[1000] ug/L		14:56:50
2	Ba 233.527†	144927.2	146633.6	[1000] ug/L		14:56:50
2	Be 313.107†	3044944.0	3085436.3	[1000] ug/L		14:56:44
2	Cd 226.502†	99434.3	100828.0	[1000] ug/L		14:56:50
2	Co 228.616†	54366.5	55084.4	[1000] ug/L		14:56:50
2	Cr 267.716†	96713.2	97769.7	[1000] ug/L		14:56:50
2	Cu 324.752†	368508.8	366662.5	[1000] ug/L		14:56:50
2	Mn 257.610†	1014442.9	1025959.9	[1000] ug/L		14:56:44
2	Mo 202.031†	15824.4	15988.5	[1000] ug/L		14:57:10
2	Ni 231.604†	43966.5	44371.7	[1000] ug/L		14:56:50

2	P 214.914†	9602.9	9490.9	[5000]	ug/L	14:57:10
2	Pb 220.353†	9008.4	9138.4	[1000]	ug/L	14:57:10
2	S 181.975 Axial†	1672.5	1645.2	[2000]	ug/L	14:57:10
2	Sb 206.836†	3306.0	3303.3	[1000]	ug/L	14:57:10
2	Se 196.026†	1719.1	1768.4	[1000]	ug/L	14:57:10
2	Si 251.611†	175506.9	177054.3	[5000]	ug/L	14:56:50
2	Sn 189.927†	6401.0	6472.2	[1000]	ug/L	14:57:10
2	Ti 334.940†	711837.8	721661.3	[1000]	ug/L	14:56:44
2	Tl 190.801†	3633.2	3713.5	[1000]	ug/L	14:57:10
2	U 409.014†	35589.1	37820.3	[1000]	ug/L	14:56:50
2	V 292.402†	159459.1	162801.1	[1000]	ug/L	14:56:50
2	Zn 213.857†	118463.9	119054.3	[1000]	ug/L	14:56:50
2	SiO2†	176906.1	178454.6	[10695]	ug/L	14:57:53
3	Sc Radial	5430.2	5430.2	96.4	%	14:56:04
3	Y RADIAL	5632.7	5632.7	94.68	%	14:56:04
3	Al 396.153Radial†	13548.9	14053.4	[10000]	ug/L	14:55:44
3	Ca 317.933Radial†	6566.1	6784.0	[10000]	ug/L	14:56:04
3	Fe 238.204 Radial†	1205.9	1238.1	[10000]	ug/L	14:56:04
3	K 766.490 Radial†	55187.9	54315.7	[10000]	ug/L	14:55:44
3	Mg 279.077 IEC†	339.4	349.5	[10000]	ug/L	14:56:04
3	Na 589.592 Radial†	39238.3	41741.5	[10000]	ug/L	14:55:44
3	Sr 421.552†	169705.6	175968.7	[1000]	ug/L	14:55:44
3	Sc 361.383	962598.0	962598.0	98.491	%	14:57:16
3	Y 371.029	776648.2	776648.2	94.489	%	14:57:22
3	Ag 328.068†	240960.7	244180.2	[1000]	ug/L	14:57:22
3	As 188.979†	2661.4	2722.5	[1000]	ug/L	14:57:42
3	B 249.677†	48868.7	50158.3	[1000]	ug/L	14:57:22
3	Ba 233.527†	145261.4	147477.8	[1000]	ug/L	14:57:22
3	Be 313.107†	3029751.4	3080619.4	[1000]	ug/L	14:57:16
3	Cd 226.502†	99521.6	101263.0	[1000]	ug/L	14:57:22
3	Co 228.616†	54392.6	55300.3	[1000]	ug/L	14:57:22
3	Cr 267.716†	96867.4	98263.2	[1000]	ug/L	14:57:22
3	Cu 324.752†	370638.4	370108.6	[1000]	ug/L	14:57:22
3	Mn 257.610†	1012811.7	1027838.0	[1000]	ug/L	14:57:16
3	Mo 202.031†	15956.4	16177.5	[1000]	ug/L	14:57:42
3	Ni 231.604†	44127.4	44688.3	[1000]	ug/L	14:57:22
3	P 214.914†	9681.4	9604.1	[5000]	ug/L	14:57:42
3	Pb 220.353†	9068.5	9230.9	[1000]	ug/L	14:57:42
3	S 181.975 Axial†	1677.8	1656.3	[2000]	ug/L	14:57:42
3	Sb 206.836†	3340.6	3349.9	[1000]	ug/L	14:57:42
3	Se 196.026†	1724.6	1780.0	[1000]	ug/L	14:57:42
3	Si 251.611†	176323.0	178494.4	[5000]	ug/L	14:57:22
3	Sn 189.927†	6449.0	6543.2	[1000]	ug/L	14:57:42
3	Ti 334.940†	710108.0	722385.0	[1000]	ug/L	14:57:16
3	Tl 190.801†	3675.9	3769.5	[1000]	ug/L	14:57:42
3	U 409.014†	35825.1	38183.9	[1000]	ug/L	14:57:22
3	V 292.402†	159971.8	163877.3	[1000]	ug/L	14:57:22
3	Zn 213.857†	118803.6	119811.9	[1000]	ug/L	14:57:22
3	SiO2†	177243.4	179413.5	[10695]	ug/L	14:57:58

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	965575.6	2824.41	0.29%	98.795	%
Sc Radial	5441.5	31.50	0.58%	96.6	%
Y 371.029	776370.8	527.59	0.07%	94.455	%
Y RADIAL	5648.4	41.19	0.73%	94.94	%
Ag 328.068†	243007.5	1021.03	0.42%	[1000]	ug/L
Al 396.153Radial†	14106.9	161.57	1.15%	[10000]	ug/L
As 188.979†	2701.0	18.81	0.70%	[1000]	ug/L
B 249.677†	49836.4	281.29	0.56%	[1000]	ug/L
Ba 233.527†	146793.7	619.74	0.42%	[1000]	ug/L
Be 313.107†	3082293.4	2723.79	0.09%	[1000]	ug/L
Ca 317.933Radial†	6795.1	10.63	0.16%	[10000]	ug/L
Cd 226.502†	100830.9	430.63	0.43%	[1000]	ug/L
Co 228.616†	55078.2	225.23	0.41%	[1000]	ug/L
Cr 267.716†	97852.7	375.91	0.38%	[1000]	ug/L
Cu 324.752†	368250.6	1738.86	0.47%	[1000]	ug/L
Fe 238.204 Radial†	1245.6	7.17	0.58%	[10000]	ug/L
K 766.490 Radial†	54438.2	721.70	1.33%	[10000]	ug/L

Mg 279.077 IEC†	348.3	1.65	0.47%	[10000]	ug/L
Mn 257.610†	1026565.9	1102.07	0.11%	[1000]	ug/L
Mo 202.031†	16073.1	96.07	0.60%	[1000]	ug/L
Na 589.592 Radial†	41794.0	507.87	1.22%	[10000]	ug/L
Ni 231.604†	44475.1	184.63	0.42%	[1000]	ug/L
P 214.914†	9538.2	58.81	0.62%	[5000]	ug/L
Pb 220.353†	9172.6	50.75	0.55%	[1000]	ug/L
S 181.975 Axial†	1649.2	6.22	0.38%	[2000]	ug/L
Sb 206.836†	3319.0	26.78	0.81%	[1000]	ug/L
Se 196.026†	1771.1	7.87	0.44%	[1000]	ug/L
Si 251.611†	177596.8	782.97	0.44%	[5000]	ug/L
Sn 189.927†	6493.8	42.93	0.66%	[1000]	ug/L
Sr 421.552†	176232.3	2336.95	1.33%	[1000]	ug/L
Ti 334.940†	722111.9	393.19	0.05%	[1000]	ug/L
Tl 190.801†	3736.5	29.30	0.78%	[1000]	ug/L
U 409.014†	37985.2	184.15	0.48%	[1000]	ug/L
V 292.402†	163182.7	602.54	0.37%	[1000]	ug/L
Zn 213.857†	119233.7	512.60	0.43%	[1000]	ug/L
SiO2†	178956.2	480.97	0.27%	[10695]	ug/L

Sequence No.: 5

Sample ID: S10

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 5

Date Collected: 1/19/2010 15:00:09

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: S10

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Units	Analysis Time
1	Sc Radial	5480.9	5480.9	97.3 %		15:02:23
1	Y RADIAL	5706.6	5706.6	95.92 %		15:02:23
1	Al 396.153Radial†	68354.4	70230.6	[50000] ug/L		15:02:03
1	Ca 317.933Radial†	32210.3	33067.9	[50000] ug/L		15:02:23
1	Fe 238.204 Radial†	2409.2	2462.8	[20000] ug/L		15:02:23
1	Mg 279.077 IEC†	1635.1	1677.4	[50000] ug/L		15:02:23
1	Na 589.592 Radial†	84994.7	88375.5	[20000] ug/L		15:02:03
1	Sc 361.383	940672.9	940672.9	96.247 %		15:03:20
1	Y 371.029	776506.4	776506.4	94.472 %		15:03:20
2	Sc Radial	5510.4	5510.4	97.9 %		15:02:48
2	Y RADIAL	5731.2	5731.2	96.34 %		15:02:48
2	Al 396.153Radial†	66119.6	67570.2	[50000] ug/L		15:02:28
2	Ca 317.933Radial†	32283.0	32964.7	[50000] ug/L		15:02:48
2	Fe 238.204 Radial†	2421.1	2461.7	[20000] ug/L		15:02:48
2	Mg 279.077 IEC†	1632.1	1665.3	[50000] ug/L		15:02:48
2	Na 589.592 Radial†	81908.9	84753.9	[20000] ug/L		15:02:28
2	Sc 361.383	940232.7	940232.7	96.202 %		15:03:25
2	Y 371.029	775766.4	775766.4	94.382 %		15:03:25
3	Sc Radial	5474.2	5474.2	97.2 %		15:03:13
3	Y RADIAL	5688.2	5688.2	95.61 %		15:03:13
3	Al 396.153Radial†	67179.6	69107.9	[50000] ug/L		15:02:53
3	Ca 317.933Radial†	32243.1	33142.1	[50000] ug/L		15:03:13
3	Fe 238.204 Radial†	2415.1	2472.0	[20000] ug/L		15:03:13
3	Mg 279.077 IEC†	1630.9	1675.1	[50000] ug/L		15:03:13
3	Na 589.592 Radial†	82912.3	86340.0	[20000] ug/L		15:02:53
3	Sc 361.383	928405.9	928405.9	94.992 %		15:03:31
3	Y 371.029	766148.3	766148.3	93.212 %		15:03:31

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc. Units	Calib Units
Sc 361.383	936437.2	6958.74	0.74%	95.814 %	
Sc Radial	5488.5	19.28	0.35%	97.5 %	
Y 371.029	772807.1	5778.51	0.75%	94.022 %	
Y RADIAL	5708.7	21.58	0.38%	95.96 %	
Al 396.153Radial†	68969.5	1335.56	1.94%	[50000] ug/L	
Ca 317.933Radial†	33058.2	89.07	0.27%	[50000] ug/L	
Fe 238.204 Radial†	2465.5	5.64	0.23%	[20000] ug/L	
Mg 279.077 IEC†	1672.6	6.41	0.38%	[50000] ug/L	
Na 589.592 Radial†	86489.8	1815.45	2.10%	[20000] ug/L	

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	243.0	0.00000	1.000000	
Al 396.153Radial	3	Lin Thru 0	0.0	1.381	0.00000	0.999990	
As 188.979	3	Lin Thru 0	0.0	2.709	0.00000	0.999979	
B 249.677	3	Lin Thru 0	0.0	49.76	0.00000	0.999988	
Ba 233.527	3	Lin Thru 0	0.0	147.1	0.00000	0.999992	
Be 313.107	3	Lin Thru 0	0.0	3083	0.00000	0.999998	
Ca 317.933Radial	3	Lin Thru 0	0.0	0.6620	0.00000	0.999982	
Cd 226.502	3	Lin Thru 0	0.0	101.1	0.00000	0.999987	
Co 228.616	3	Lin Thru 0	0.0	55.16	0.00000	0.999995	
Cr 267.716	3	Lin Thru 0	0.0	97.98	0.00000	0.999996	
Cu 324.752	3	Lin Thru 0	0.0	368.8	0.00000	0.999994	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.1235	0.00000	0.999991	
K 766.490 Radial	3	Lin Thru 0	0.0	5.429	0.00000	0.999985	

Mg 279.077 IEC	3	Lin Thru 0	0.0	0.0335	0.00000	0.999960
Mn 257.610	3	Lin Thru 0	0.0	1027	0.00000	0.999998
Mo 202.031	3	Lin Thru 0	0.0	16.12	0.00000	0.999984
Na 589.592 Radia	2	Lin Thru 0	0.0	4.295	0.00000	0.999909
Ni 231.604	3	Lin Thru 0	0.0	44.58	0.00000	0.999989
P 214.914	3	Lin Thru 0	0.0	1.911	0.00000	0.999993
Pb 220.353	3	Lin Thru 0	0.0	9.218	0.00000	0.999950
S 181.975 Axial	3	Lin Thru 0	0.0	0.8246	0.00000	0.999999
Sb 206.836	3	Lin Thru 0	0.0	3.321	0.00000	0.999988
Se 196.026	3	Lin Thru 0	0.0	1.777	0.00000	0.999973
Si 251.611	3	Lin Thru 0	0.0	35.61	0.00000	0.999983
Sn 189.927	3	Lin Thru 0	0.0	6.505	0.00000	0.999993
Sr 421.552	3	Lin Thru 0	0.0	175.5	0.00000	0.999968
Ti 334.940	3	Lin Thru 0	0.0	721.0	0.00000	0.999995
Tl 190.801	3	Lin Thru 0	0.0	3.749	0.00000	0.999978
U 409.014	3	Lin Thru 0	0.0	37.67	0.00000	0.999856
V 292.402	3	Lin Thru 0	0.0	163.2	0.00000	0.999998
Zn 213.857	3	Lin Thru 0	0.0	119.5	0.00000	0.999992
SiO2	3	Lin Thru 0	0.0	16.77	0.00000	0.999985

Sequence No.: 6

Sample ID: ICV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 9

Date Collected: 1/19/2010 15:05:42

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: ICV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5526.1	5526.1	98.1 %		15:07:34
1	Y RADIAL	5787.9	5787.9	97.29 %		15:07:34
1	Al 396.153Radial†	6898.6	7033.1	5068.0 ug/L	5068.0 ppb	15:07:34
1	Ca 317.933Radial†	3301.4	3339.3	5043.9 ug/L	5043.9 ppb	15:07:54
1	Fe 238.204 Radial†	614.5	613.8	4983.5 ug/L	4983.5 ppb	15:07:54
1	K 766.490 Radial†	15999.7	13390.6	2463.0 ug/L	2463.0 ppb	15:07:34
1	Mg 279.077 IEC†	173.7	174.5	5205.3 ug/L	5205.3 ppb	15:07:54
1	Na 589.592 Radial†	8954.3	10176.6	2369.1 ug/L	2369.1 ppb	15:07:34
1	Sr 421.552†	89080.9	90760.2	517.01 ug/L	517.01 ppb	15:07:34
1	Sc 361.383	966027.7	966027.7	98.842 %		15:08:52
1	Y 371.029	804058.3	804058.3	97.824 %		15:08:52
1	Ag 328.068†	61900.8	62153.3	258.96 ug/L	258.96 ppb	15:08:52
1	As 188.979†	1240.8	1275.7	474.98 ug/L	474.98 ppb	15:09:12
1	B 249.677†	25248.6	26085.3	521.97 ug/L	521.97 ppb	15:08:52
1	Ba 233.527†	75216.8	76088.7	518.54 ug/L	518.54 ppb	15:08:52
1	Be 313.107†	786814.3	800476.2	260.75 ug/L	260.75 ppb	15:08:52
1	Cd 226.502†	50362.6	51169.2	506.16 ug/L	506.16 ppb	15:08:52
1	Co 228.616†	27558.7	27955.9	506.95 ug/L	506.95 ppb	15:09:12
1	Cr 267.716†	48063.7	48538.4	496.00 ug/L	496.00 ppb	15:08:52
1	Cu 324.752†	194312.5	190380.3	516.22 ug/L	516.22 ppb	15:08:52
1	Mn 257.610†	521032.5	526644.8	512.84 ug/L	512.84 ppb	15:08:52
1	Mo 202.031†	8505.2	8581.5	532.88 ug/L	532.88 ppb	15:09:12
1	Ni 231.604†	22024.4	22167.2	496.97 ug/L	496.97 ppb	15:09:12
1	P 214.914†	4991.0	4823.7	2424.2 ug/L	2424.2 ppb	15:09:12
1	Pb 220.353†	4576.9	4654.0	506.61 ug/L	506.61 ppb	15:09:12
1	S 181.975 Axial†	2042.5	2019.3	2447.8 ug/L	2447.8 ppb	15:09:12
1	Sb 206.836†	1662.3	1639.8	513.09 ug/L	513.09 ppb	15:09:12
1	Se 196.026†	4495.0	4576.6	2595.0 ug/L	2595.0 ppb	15:09:12
1	Si 251.611†	173592.4	175096.2	4910.6 ug/L	4910.6 ppb	15:08:52
1	Sn 189.927†	3392.4	3427.6	527.79 ug/L	527.79 ppb	15:09:12
1	Ti 334.940†	349117.4	354604.2	491.66 ug/L	491.66 ppb	15:08:52
1	Tl 190.801†	1914.6	1974.3	529.95 ug/L	529.95 ppb	15:09:12
1	U 409.014†	16849.4	18856.8	498.95 ug/L	498.95 ppb	15:08:52
1	V 292.402†	80567.4	82965.7	515.59 ug/L	515.59 ppb	15:08:52
1	Zn 213.857†	61289.5	61195.5	507.89 ug/L	507.89 ppb	15:08:52
1	SiO2†	171438.5	172901.6	10298 ug/L	10298 ppb	15:10:10
2	Sc Radial	5535.7	5535.7	98.3 %		15:08:00
2	Y RADIAL	5805.9	5805.9	97.59 %		15:08:00
2	Al 396.153Radial†	6898.2	7020.5	5058.9 ug/L	5058.9 ppb	15:08:00
2	Ca 317.933Radial†	3303.3	3335.4	5038.0 ug/L	5038.0 ppb	15:08:20
2	Fe 238.204 Radial†	619.4	617.7	5015.1 ug/L	5015.1 ppb	15:08:20
2	K 766.490 Radial†	15942.6	13304.4	2447.1 ug/L	2447.1 ppb	15:08:00
2	Mg 279.077 IEC†	176.2	176.7	5272.9 ug/L	5272.9 ppb	15:08:20
2	Na 589.592 Radial†	8901.4	10106.9	2352.9 ug/L	2352.9 ppb	15:08:00
2	Sr 421.552†	88788.3	90305.1	514.42 ug/L	514.42 ppb	15:08:00
2	Sc 361.383	960979.3	960979.3	98.325 %		15:09:18
2	Y 371.029	800020.5	800020.5	97.333 %		15:09:18
2	Ag 328.068†	61437.7	62011.3	258.39 ug/L	258.39 ppb	15:09:18
2	As 188.979†	1253.7	1295.3	482.23 ug/L	482.23 ppb	15:09:38
2	B 249.677†	25059.0	26026.6	520.78 ug/L	520.78 ppb	15:09:18
2	Ba 233.527†	74853.6	76119.2	518.74 ug/L	518.74 ppb	15:09:18
2	Be 313.107†	782127.0	799891.0	260.56 ug/L	260.56 ppb	15:09:18
2	Cd 226.502†	49951.7	51019.0	504.67 ug/L	504.67 ppb	15:09:18
2	Co 228.616†	27520.3	28063.3	508.90 ug/L	508.90 ppb	15:09:38
2	Cr 267.716†	47793.7	48519.2	495.81 ug/L	495.81 ppb	15:09:18
2	Cu 324.752†	192990.5	190068.6	515.38 ug/L	515.38 ppb	15:09:18
2	Mn 257.610†	518080.4	526411.6	512.61 ug/L	512.61 ppb	15:09:18
2	Mo 202.031†	8470.7	8591.6	533.51 ug/L	533.51 ppb	15:09:38
2	Ni 231.604†	22009.3	22268.8	499.25 ug/L	499.25 ppb	15:09:38

2	P 214.914†	4980.2	4839.3	2432.6 ug/L	2432.6 ppb	15:09:38
2	Pb 220.353†	4558.0	4659.0	507.15 ug/L	507.15 ppb	15:09:38
2	S 181.975 Axial†	2037.1	2024.7	2454.4 ug/L	2454.4 ppb	15:09:38
2	Sb 206.836†	1661.1	1647.4	515.45 ug/L	515.45 ppb	15:09:38
2	Se 196.026†	4476.3	4581.5	2597.9 ug/L	2597.9 ppb	15:09:38
2	Si 251.611†	172424.5	174831.0	4903.2 ug/L	4903.2 ppb	15:09:18
2	Sn 189.927†	3399.6	3452.9	531.68 ug/L	531.68 ppb	15:09:38
2	Ti 334.940†	346711.2	354012.6	490.84 ug/L	490.84 ppb	15:09:18
2	Tl 190.801†	1909.5	1979.3	531.25 ug/L	531.25 ppb	15:09:38
2	U 409.014†	16530.2	18621.7	492.71 ug/L	492.71 ppb	15:09:18
2	V 292.402†	80139.3	82958.6	515.54 ug/L	515.54 ppb	15:09:18
2	Zn 213.857†	61014.6	61241.7	508.26 ug/L	508.26 ppb	15:09:18
2	SiO2†	171881.0	174262.8	10379 ug/L	10379 ppb	15:10:15
3	Sc Radial	5586.1	5586.1	99.2 %		15:08:25
3	Y RADIAL	5861.9	5861.9	98.53 %		15:08:25
3	Al 396.153Radial†	6945.3	7004.7	5047.6 ug/L	5047.6 ppb	15:08:25
3	Ca 317.933Radial†	3301.0	3302.7	4988.7 ug/L	4988.7 ppb	15:08:45
3	Fe 238.204 Radial†	622.5	615.1	4994.6 ug/L	4994.6 ppb	15:08:45
3	K 766.490 Radial†	15928.9	13144.4	2417.6 ug/L	2417.6 ppb	15:08:25
3	Mg 279.077 IEC†	176.6	175.5	5236.3 ug/L	5236.3 ppb	15:08:45
3	Na 589.592 Radial†	8852.8	9976.4	2322.5 ug/L	2322.5 ppb	15:08:25
3	Sr 421.552†	89290.9	89997.7	512.67 ug/L	512.67 ppb	15:08:25
3	Sc 361.383	965607.2	965607.2	98.799 %		15:09:44
3	Y 371.029	803394.3	803394.3	97.743 %		15:09:44
3	Ag 328.068†	61579.9	61855.7	257.74 ug/L	257.74 ppb	15:09:44
3	As 188.979†	1241.0	1276.4	475.25 ug/L	475.25 ppb	15:10:04
3	B 249.677†	25198.5	26045.7	521.18 ug/L	521.18 ppb	15:09:44
3	Ba 233.527†	74833.2	75733.6	516.12 ug/L	516.12 ppb	15:09:44
3	Be 313.107†	783410.1	797377.3	259.74 ug/L	259.74 ppb	15:09:44
3	Cd 226.502†	50057.1	50882.2	503.32 ug/L	503.32 ppb	15:09:44
3	Co 228.616†	27333.5	27740.1	503.03 ug/L	503.03 ppb	15:10:04
3	Cr 267.716†	47897.7	48391.6	494.51 ug/L	494.51 ppb	15:09:44
3	Cu 324.752†	193670.4	189816.1	514.69 ug/L	514.69 ppb	15:09:44
3	Mn 257.610†	518841.7	524656.9	510.91 ug/L	510.91 ppb	15:09:44
3	Mo 202.031†	8440.7	8520.0	529.07 ug/L	529.07 ppb	15:10:04
3	Ni 231.604†	21865.1	22015.6	493.57 ug/L	493.57 ppb	15:10:04
3	P 214.914†	4946.9	4781.4	2402.3 ug/L	2402.3 ppb	15:10:04
3	Pb 220.353†	4520.2	4598.5	500.58 ug/L	500.58 ppb	15:10:04
3	S 181.975 Axial†	2035.6	2013.3	2440.5 ug/L	2440.5 ppb	15:10:04
3	Sb 206.836†	1654.6	1632.9	510.87 ug/L	510.87 ppb	15:10:04
3	Se 196.026†	4436.0	4518.9	2562.6 ug/L	2562.6 ppb	15:10:04
3	Si 251.611†	172956.5	174529.1	4894.7 ug/L	4894.7 ppb	15:09:44
3	Sn 189.927†	3375.1	3411.6	525.32 ug/L	525.32 ppb	15:10:04
3	Ti 334.940†	347377.6	352997.0	489.43 ug/L	489.43 ppb	15:09:44
3	Tl 190.801†	1896.5	1956.8	525.26 ug/L	525.26 ppb	15:10:04
3	U 409.014†	16447.2	18457.1	488.35 ug/L	488.35 ppb	15:09:44
3	V 292.402†	80211.0	82640.5	513.53 ug/L	513.53 ppb	15:09:44
3	Zn 213.857†	61029.8	60959.6	505.94 ug/L	505.94 ppb	15:09:44
3	SiO2†	173595.0	175159.9	10432 ug/L	10432 ppb	15:10:20

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	964204.7	98.655 %	0.2866			0.29%
Sc Radial	5549.3	98.5 %	0.57			0.58%
Y 371.029	802491.1	97.633 %	0.2634			0.27%
Y RADIAL	5818.5	97.80 %	0.649			0.66%
Ag 328.068†	62006.8	258.37 ug/L	0.610	258.37 ppb	0.610	0.24%
QC value within limits for Ag 328.068 Recovery = 103.35%						
Al 396.153Radial†	7019.4	5058.2 ug/L	10.21	5058.2 ppb	10.21	0.20%
QC value within limits for Al 396.153Radial Recovery = 101.16%						
As 188.979†	1282.5	477.49 ug/L	4.111	477.49 ppb	4.111	0.86%
QC value within limits for As 188.979 Recovery = 95.50%						
B 249.677†	26052.5	521.31 ug/L	0.605	521.31 ppb	0.605	0.12%
QC value within limits for B 249.677 Recovery = 104.26%						
Ba 233.527†	75980.5	517.80 ug/L	1.460	517.80 ppb	1.460	0.28%
QC value within limits for Ba 233.527 Recovery = 103.56%						
Be 313.107†	799248.2	260.35 ug/L	0.537	260.35 ppb	0.537	0.21%
QC value within limits for Be 313.107 Recovery = 104.14%						
Ca 317.933Radial†	3325.8	5023.5 ug/L	30.29	5023.5 ppb	30.29	0.60%

QC value within limits for Ca 317.933 Radial Recovery = 100.47%

Cd 226.502†	51023.4	504.72 ug/L	1.423	504.72 ppb	1.423	0.28%
QC value within limits for Cd 226.502 Recovery = 100.94%						
Co 228.616†	27919.8	506.30 ug/L	2.988	506.30 ppb	2.988	0.59%
QC value within limits for Co 228.616 Recovery = 101.26%						
Cr 267.716†	48483.1	495.44 ug/L	0.814	495.44 ppb	0.814	0.16%
QC value within limits for Cr 267.716 Recovery = 99.09%						
Cu 324.752†	190088.3	515.43 ug/L	0.763	515.43 ppb	0.763	0.15%
QC value within limits for Cu 324.752 Recovery = 103.09%						
Fe 238.204 Radial†	615.5	4997.8 ug/L	16.04	4997.8 ppb	16.04	0.32%
QC value within limits for Fe 238.204 Radial Recovery = 99.96%						
K 766.490 Radial†	13279.8	2442.6 ug/L	22.99	2442.6 ppb	22.99	0.94%
QC value within limits for K 766.490 Radial Recovery = 97.70%						
Mg 279.077 IEC†	175.6	5238.2 ug/L	33.82	5238.2 ppb	33.82	0.65%
QC value within limits for Mg 279.077 IEC Recovery = 104.76%						
Mn 257.610†	525904.4	512.12 ug/L	1.058	512.12 ppb	1.058	0.21%
QC value within limits for Mn 257.610 Recovery = 102.42%						
Mo 202.031†	8564.4	531.82 ug/L	2.404	531.82 ppb	2.404	0.45%
QC value within limits for Mo 202.031 Recovery = 106.36%						
Na 589.592 Radial†	10086.6	2348.2 ug/L	23.66	2348.2 ppb	23.66	1.01%
QC value within limits for Na 589.592 Radial Recovery = 93.93%						
Ni 231.604†	22150.5	496.59 ug/L	2.856	496.59 ppb	2.856	0.58%
QC value within limits for Ni 231.604 Recovery = 99.32%						
P 214.914†	4814.8	2419.7 ug/L	15.62	2419.7 ppb	15.62	0.65%
QC value within limits for P 214.914 Recovery = 96.79%						
Pb 220.353†	4637.2	504.78 ug/L	3.648	504.78 ppb	3.648	0.72%
QC value within limits for Pb 220.353 Recovery = 100.96%						
S 181.975 Axial†	2019.1	2447.6 ug/L	6.91	2447.6 ppb	6.91	0.28%
QC value within limits for S 181.975 Axial Recovery = 97.90%						
Sb 206.836†	1640.1	513.13 ug/L	2.293	513.13 ppb	2.293	0.45%
QC value within limits for Sb 206.836 Recovery = 102.63%						
Se 196.026†	4559.0	2585.2 ug/L	19.62	2585.2 ppb	19.62	0.76%
QC value within limits for Se 196.026 Recovery = 103.41%						
Si 251.611†	174818.8	4902.8 ug/L	7.95	4902.8 ppb	7.95	0.16%
QC value within limits for Si 251.611 Recovery = 98.06%						
Sn 189.927†	3430.7	528.27 ug/L	3.206	528.27 ppb	3.206	0.61%
QC value within limits for Sn 189.927 Recovery = 105.65%						
Sr 421.552†	90354.3	514.70 ug/L	2.185	514.70 ppb	2.185	0.42%
QC value within limits for Sr 421.552 Recovery = 102.94%						
Ti 334.940†	353871.3	490.64 ug/L	1.130	490.64 ppb	1.130	0.23%
QC value within limits for Ti 334.940 Recovery = 98.13%						
Tl 190.801†	1970.1	528.82 ug/L	3.148	528.82 ppb	3.148	0.60%
QC value within limits for Tl 190.801 Recovery = 105.76%						
U 409.014†	18645.2	493.34 ug/L	5.333	493.34 ppb	5.333	1.08%
QC value within limits for U 409.014 Recovery = 98.67%						
V 292.402†	82854.9	514.89 ug/L	1.179	514.89 ppb	1.179	0.23%
QC value within limits for V 292.402 Recovery = 102.98%						
Zn 213.857†	61132.3	507.36 ug/L	1.247	507.36 ppb	1.247	0.25%
QC value within limits for Zn 213.857 Recovery = 101.47%						
SiO2†	174108.1	10370 ug/L	67.9	10370 ppb	67.9	0.65%
QC value within limits for SiO2 Recovery = 96.96%						

All analyte(s) passed QC.

Sequence No.: 7

Sample ID: ICB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 10

Date Collected: 1/19/2010 15:12:31

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: ICB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5642.7	5642.7	100 %		15:14:24
1	Y RADIAL	5945.2	5945.2	99.93 %		15:14:24
1	Al 396.153Radial†	16.6	20.0	14.471 ug/L	14.471 ppb	15:14:24
1	Ca 317.933Radial†	16.2	-8.6	-13.031 ug/L	-13.031 ppb	15:14:44
1	Fe 238.204 Radial†	14.6	2.2	17.652 ug/L	17.652 ppb	15:14:44
1	K 766.490 Radial†	2801.2	-117.3	-21.597 ug/L	-21.597 ppb	15:14:24
1	Mg 279.077 IEC†	-1.5	-3.9	-117.58 ug/L	-117.58 ppb	15:14:44
1	Na 589.592 Radial†	-1100.4	-45.9	-10.688 ug/L	-10.688 ppb	15:14:24
1	Sr 421.552†	18.6	6.7	0.0382 ug/L	0.0382 ppb	15:14:24
1	Sc 361.383	982454.7	982454.7	100.52 %		15:15:41
1	Y 371.029	826250.8	826250.8	100.52 %		15:15:41
1	Ag 328.068†	436.4	-38.8	-0.1577 ug/L	-0.1577 ppb	15:15:46
1	As 188.979†	-27.1	-6.6	-2.4473 ug/L	-2.4473 ppb	15:16:06
1	B 249.677†	-212.3	329.6	6.6212 ug/L	6.6212 ppb	15:15:46
1	Ba 233.527†	-5.8	-15.3	-0.1046 ug/L	-0.1046 ppb	15:16:06
1	Be 313.107†	-4489.4	-24.7	-0.0078 ug/L	-0.0078 ppb	15:15:46
1	Cd 226.502†	-203.6	13.8	0.1355 ug/L	0.1355 ppb	15:16:06
1	Co 228.616†	-81.0	-6.3	-0.1124 ug/L	-0.1124 ppb	15:16:06
1	Cr 267.716†	108.1	19.0	0.1923 ug/L	0.1923 ppb	15:16:06
1	Cu 324.752†	6154.9	-86.4	-0.2344 ug/L	-0.2344 ppb	15:15:46
1	Mn 257.610†	472.7	-23.3	-0.0162 ug/L	-0.0162 ppb	15:16:06
1	Mo 202.031†	38.1	14.6	0.9072 ug/L	0.9072 ppb	15:16:06
1	Ni 231.604†	117.5	1.5	0.0340 ug/L	0.0340 ppb	15:16:06
1	P 214.914†	224.5	-2.4	-1.1985 ug/L	-1.1985 ppb	15:16:06
1	Pb 220.353†	-33.6	-10.0	-1.0809 ug/L	-1.0809 ppb	15:16:06
1	S 181.975 Axial†	46.3	-1.1	-1.2963 ug/L	-1.2963 ppb	15:16:06
1	Sb 206.836†	35.2	-6.9	-2.0646 ug/L	-2.0646 ppb	15:16:06
1	Se 196.026†	-16.5	12.5	7.0891 ug/L	7.0891 ppb	15:16:06
1	Si 251.611†	516.6	-16.6	-0.4768 ug/L	-0.4768 ppb	15:16:06
1	Sn 189.927†	2.1	-2.5	-0.3870 ug/L	-0.3870 ppb	15:16:06
1	Ti 334.940†	-1339.9	62.6	0.0938 ug/L	0.0938 ppb	15:15:46
1	Tl 190.801†	-39.3	-1.9	-0.4945 ug/L	-0.4945 ppb	15:16:06
1	U 409.014†	-1744.9	74.1	1.9643 ug/L	1.9643 ppb	15:15:41
1	V 292.402†	-1549.5	-87.3	-0.5232 ug/L	-0.5232 ppb	15:15:46
1	Zn 213.857†	765.4	-50.8	-0.4270 ug/L	-0.4270 ppb	15:16:06
1	SiO2†	524.4	-24.3	-1.4733 ug/L	-1.4733 ppb	15:17:12
2	Sc Radial	5687.4	5687.4	101 %		15:14:49
2	Y RADIAL	6006.0	6006.0	101.0 %		15:14:49
2	Al 396.153Radial†	-8.0	-4.5	-3.2463 ug/L	-3.2463 ppb	15:14:49
2	Ca 317.933Radial†	14.2	-10.8	-16.333 ug/L	-16.333 ppb	15:15:09
2	Fe 238.204 Radial†	14.4	1.9	15.183 ug/L	15.183 ppb	15:15:09
2	K 766.490 Radial†	2799.2	-141.2	-26.011 ug/L	-26.011 ppb	15:14:49
2	Mg 279.077 IEC†	-0.9	-3.4	-100.94 ug/L	-100.94 ppb	15:15:09
2	Na 589.592 Radial†	-1050.2	12.5	2.9085 ug/L	2.9085 ppb	15:14:49
2	Sr 421.552†	38.0	25.8	0.1472 ug/L	0.1472 ppb	15:14:49
2	Sc 361.383	976418.1	976418.1	99.905 %		15:16:11
2	Y 371.029	820289.9	820289.9	99.799 %		15:16:11
2	Ag 328.068†	456.4	-16.1	-0.0625 ug/L	-0.0625 ppb	15:16:16
2	As 188.979†	-20.3	-0.0	-0.0114 ug/L	-0.0114 ppb	15:16:36
2	B 249.677†	-241.1	299.4	6.0140 ug/L	6.0140 ppb	15:16:16
2	Ba 233.527†	0.9	-8.6	-0.0597 ug/L	-0.0597 ppb	15:16:36
2	Be 313.107†	-4459.2	-22.0	-0.0072 ug/L	-0.0072 ppb	15:16:16
2	Cd 226.502†	-217.6	-1.4	-0.0164 ug/L	-0.0164 ppb	15:16:36
2	Co 228.616†	-73.3	0.9	0.0164 ug/L	0.0164 ppb	15:16:36
2	Cr 267.716†	97.6	9.1	0.0927 ug/L	0.0927 ppb	15:16:36
2	Cu 324.752†	6050.6	-152.9	-0.4129 ug/L	-0.4129 ppb	15:16:16
2	Mn 257.610†	461.5	-31.7	-0.0252 ug/L	-0.0252 ppb	15:16:36
2	Mo 202.031†	23.8	0.5	0.0341 ug/L	0.0341 ppb	15:16:36
2	Ni 231.604†	99.5	-15.8	-0.3539 ug/L	-0.3539 ppb	15:16:36

2	P 214.914†	219.0	-6.5	-3.3020 ug/L	-3.3020 ppb	15:16:36
2	Pb 220.353†	-33.5	-10.1	-1.1013 ug/L	-1.1013 ppb	15:16:36
2	S 181.975 Axial†	50.2	3.1	3.7741 ug/L	3.7741 ppb	15:16:36
2	Sb 206.836†	34.9	-6.9	-2.0803 ug/L	-2.0803 ppb	15:16:36
2	Se 196.026†	-36.2	-7.3	-4.0399 ug/L	-4.0399 ppb	15:16:36
2	Si 251.611†	525.2	-4.8	-0.1340 ug/L	-0.1340 ppb	15:16:36
2	Sn 189.927†	8.7	4.2	0.6361 ug/L	0.6361 ppb	15:16:36
2	Ti 334.940†	-1408.0	-13.8	-0.0124 ug/L	-0.0124 ppb	15:16:16
2	Tl 190.801†	-28.9	8.3	2.2184 ug/L	2.2184 ppb	15:16:36
2	U 409.014†	-1869.1	-60.9	-1.6198 ug/L	-1.6198 ppb	15:16:11
2	V 292.402†	-1556.9	-104.2	-0.6452 ug/L	-0.6452 ppb	15:16:16
2	Zn 213.857†	760.7	-50.8	-0.4236 ug/L	-0.4236 ppb	15:16:36
2	SiO2†	533.1	-12.4	-0.7394 ug/L	-0.7394 ppb	15:17:17
3	Sc Radial	5604.1	5604.1	99.5 %		15:15:14
3	Y RADIAL	5877.4	5877.4	98.79 %		15:15:14
3	Al 396.153Radial†	1.0	4.5	3.2169 ug/L	3.2169 ppb	15:15:14
3	Ca 317.933Radial†	19.1	-5.6	-8.4982 ug/L	-8.4982 ppb	15:15:34
3	Fe 238.204 Radial†	13.8	1.5	12.029 ug/L	12.029 ppb	15:15:34
3	K 766.490 Radial†	3007.3	109.1	20.103 ug/L	20.103 ppb	15:15:14
3	Mg 279.077 IEC†	5.0	2.5	75.896 ug/L	75.896 ppb	15:15:34
3	Na 589.592 Radial†	-1188.2	-141.7	-32.988 ug/L	-32.988 ppb	15:15:14
3	Sr 421.552†	27.7	16.0	0.0913 ug/L	0.0913 ppb	15:15:14
3	Sc 361.383	977319.7	977319.7	99.997 %		15:16:41
3	Y 371.029	820914.0	820914.0	99.875 %		15:16:41
3	Ag 328.068†	431.7	-41.2	-0.1680 ug/L	-0.1680 ppb	15:16:46
3	As 188.979†	-23.2	-2.9	-1.0780 ug/L	-1.0780 ppb	15:17:06
3	B 249.677†	-206.6	334.2	6.7129 ug/L	6.7129 ppb	15:16:46
3	Ba 233.527†	3.8	-5.7	-0.0391 ug/L	-0.0391 ppb	15:17:06
3	Be 313.107†	-4431.9	9.3	0.0032 ug/L	0.0032 ppb	15:16:46
3	Cd 226.502†	-218.1	-1.7	-0.0184 ug/L	-0.0184 ppb	15:17:06
3	Co 228.616†	-61.1	13.2	0.2388 ug/L	0.2388 ppb	15:17:06
3	Cr 267.716†	98.8	10.3	0.1041 ug/L	0.1041 ppb	15:17:06
3	Cu 324.752†	6138.5	-70.6	-0.1914 ug/L	-0.1914 ppb	15:16:46
3	Mn 257.610†	467.5	-26.1	-0.0273 ug/L	-0.0273 ppb	15:17:06
3	Mo 202.031†	28.0	4.6	0.2890 ug/L	0.2890 ppb	15:17:06
3	Ni 231.604†	104.5	-10.8	-0.2427 ug/L	-0.2427 ppb	15:17:06
3	P 214.914†	221.5	-4.2	-2.1826 ug/L	-2.1826 ppb	15:17:06
3	Pb 220.353†	-30.2	-6.8	-0.7362 ug/L	-0.7362 ppb	15:17:06
3	S 181.975 Axial†	48.7	1.6	1.9567 ug/L	1.9567 ppb	15:17:06
3	Sb 206.836†	38.4	-3.5	-1.0548 ug/L	-1.0548 ppb	15:17:06
3	Se 196.026†	-26.7	2.2	1.2910 ug/L	1.2910 ppb	15:17:06
3	Si 251.611†	524.3	-6.2	-0.1776 ug/L	-0.1776 ppb	15:17:06
3	Sn 189.927†	0.2	-4.4	-0.6725 ug/L	-0.6725 ppb	15:17:06
3	Ti 334.940†	-1350.4	45.1	0.0547 ug/L	0.0547 ppb	15:16:46
3	Tl 190.801†	-31.0	6.3	1.6707 ug/L	1.6707 ppb	15:17:06
3	U 409.014†	-1767.8	42.1	1.1148 ug/L	1.1148 ppb	15:16:41
3	V 292.402†	-1507.7	-53.6	-0.3224 ug/L	-0.3224 ppb	15:16:46
3	Zn 213.857†	760.8	-51.4	-0.4297 ug/L	-0.4297 ppb	15:17:06
3	SiO2†	536.3	-9.7	-0.5854 ug/L	-0.5854 ppb	15:17:22

Mean Data: ICB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	978730.8	100.14 %		0.333			0.33%
Sc Radial	5644.7	100 %		0.7			0.74%
Y 371.029	822484.9	100.07 %		0.399			0.40%
Y RADIAL	5942.9	99.89 %		1.082			1.08%
Ag 328.068†	-32.1	-0.1294 ug/L		0.05816	-0.1294 ppb	0.05816	44.95%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	6.7	4.8140 ug/L		8.96619	4.8140 ppb	8.96619	186.25%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	-3.2	-1.1789 ug/L		1.22108	-1.1789 ppb	1.22108	103.57%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	321.0	6.4494 ug/L		0.37982	6.4494 ppb	0.37982	5.89%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	-9.9	-0.0678 ug/L		0.03353	-0.0678 ppb	0.03353	49.46%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	-12.5	-0.0039 ug/L		0.00616	-0.0039 ppb	0.00616	156.23%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	-8.4	-12.621 ug/L		3.9334	-12.621 ppb	3.9334	31.17%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated					
Cd 226.502†	3.6	0.0336 ug/L	0.08827	0.0336 ppb	0.08827 263.03%
QC value within limits for Cd 226.502 Recovery = Not calculated					
Co 228.616†	2.6	0.0476 ug/L	0.17765	0.0476 ppb	0.17765 372.94%
QC value within limits for Co 228.616 Recovery = Not calculated					
Cr 267.716†	12.8	0.1297 ug/L	0.05447	0.1297 ppb	0.05447 42.00%
QC value within limits for Cr 267.716 Recovery = Not calculated					
Cu 324.752†	-103.3	-0.2796 ug/L	0.11744	-0.2796 ppb	0.11744 42.01%
QC value within limits for Cu 324.752 Recovery = Not calculated					
Fe 238.204 Radial†	1.8	14.955 ug/L	2.8185	14.955 ppb	2.8185 18.85%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated					
K 766.490 Radial†	-49.8	-9.1681 ug/L	25.44583	-9.1681 ppb	25.44583 277.55%
QC value within limits for K 766.490 Radial Recovery = Not calculated					
Mg 279.077 IEC†	-1.6	-47.544 ug/L	107.2251	-47.544 ppb	107.2251 225.53%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated					
Mn 257.610†	-27.0	-0.0229 ug/L	0.00591	-0.0229 ppb	0.00591 25.83%
QC value within limits for Mn 257.610 Recovery = Not calculated					
Mo 202.031†	6.6	0.4101 ug/L	0.44895	0.4101 ppb	0.44895 109.48%
QC value within limits for Mo 202.031 Recovery = Not calculated					
Na 589.592 Radial†	-58.4	-13.589 ug/L	18.1232	-13.589 ppb	18.1232 133.36%
QC value within limits for Na 589.592 Radial Recovery = Not calculated					
Ni 231.604†	-8.4	-0.1875 ug/L	0.19973	-0.1875 ppb	0.19973 106.50%
QC value within limits for Ni 231.604 Recovery = Not calculated					
P 214.914†	-4.3	-2.2277 ug/L	1.05246	-2.2277 ppb	1.05246 47.24%
QC value within limits for P 214.914 Recovery = Not calculated					
Pb 220.353†	-9.0	-0.9728 ug/L	0.20514	-0.9728 ppb	0.20514 21.09%
QC value within limits for Pb 220.353 Recovery = Not calculated					
S 181.975 Axial†	1.2	1.4782 ug/L	2.56888	1.4782 ppb	2.56888 173.79%
QC value within limits for S 181.975 Axial Recovery = Not calculated					
Sb 206.836†	-5.8	-1.7332 ug/L	0.58761	-1.7332 ppb	0.58761 33.90%
QC value within limits for Sb 206.836 Recovery = Not calculated					
Se 196.026†	2.5	1.4467 ug/L	5.56612	1.4467 ppb	5.56612 384.74%
QC value within limits for Se 196.026 Recovery = Not calculated					
Si 251.611†	-9.2	-0.2628 ug/L	0.18662	-0.2628 ppb	0.18662 71.02%
QC value within limits for Si 251.611 Recovery = Not calculated					
Sn 189.927†	-0.9	-0.1412 ug/L	0.68807	-0.1412 ppb	0.68807 487.44%
QC value within limits for Sn 189.927 Recovery = Not calculated					
Sr 421.552†	16.2	0.0922 ug/L	0.05449	0.0922 ppb	0.05449 59.08%
QC value within limits for Sr 421.552 Recovery = Not calculated					
Ti 334.940†	31.3	0.0453 ug/L	0.05371	0.0453 ppb	0.05371 118.46%
QC value within limits for Ti 334.940 Recovery = Not calculated					
Tl 190.801†	4.2	1.1315 ug/L	1.43455	1.1315 ppb	1.43455 126.78%
QC value within limits for Tl 190.801 Recovery = Not calculated					
U 409.014†	18.4	0.4864 ug/L	1.87288	0.4864 ppb	1.87288 385.04%
QC value within limits for U 409.014 Recovery = Not calculated					
V 292.402†	-81.7	-0.4969 ug/L	0.16303	-0.4969 ppb	0.16303 32.81%
QC value within limits for V 292.402 Recovery = Not calculated					
Zn 213.857†	-51.0	-0.4268 ug/L	0.00304	-0.4268 ppb	0.00304 0.71%
QC value within limits for Zn 213.857 Recovery = Not calculated					
SiO2†	-15.5	-0.9327 ug/L	0.47445	-0.9327 ppb	0.47445 50.87%
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: 1/19/2010 15:19:33
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5689.5	5689.5	101 %			15:21:26
1	Y RADIAL	5987.5	5987.5	100.6 %			15:21:26
1	Al 396.153Radial†	246.1	247.0	178.34 ug/L	178.34 ppb		15:21:26
1	Ca 317.933Radial†	158.8	132.3	199.85 ug/L	199.85 ppb		15:21:46
1	Fe 238.204 Radial†	23.1	10.5	84.875 ug/L	84.875 ppb		15:21:46
1	K 766.490 Radial†	3646.9	696.6	128.11 ug/L	128.11 ppb		15:21:26
1	Mg 279.077 IEC†	11.1	8.5	252.42 ug/L	252.42 ppb		15:21:46
1	Na 589.592 Radial†	199.0	1249.2	290.83 ug/L	290.83 ppb		15:21:26
1	Sr 421.552†	896.7	875.7	4.9870 ug/L	4.9870 ppb		15:21:26
1	Sc 361.383	898180.9	898180.9	91.900 %			15:22:43
1	Y 371.029	792857.6	792857.6	96.461 %			15:22:43
1	Ag 328.068†	1621.4	1291.3	5.3123 ug/L	5.3123 ppb		15:22:43
1	As 188.979†	57.8	83.3	30.768 ug/L	30.768 ppb		15:23:03
1	B 249.677†	2093.0	2818.2	56.606 ug/L	56.606 ppb		15:22:43
1	Ba 233.527†	783.3	842.8	5.7421 ug/L	5.7421 ppb		15:23:03
1	Be 313.107†	11185.2	16612.5	5.4005 ug/L	5.4005 ppb		15:22:43
1	Cd 226.502†	297.0	539.6	5.3443 ug/L	5.3443 ppb		15:23:03
1	Co 228.616†	211.2	304.0	5.5280 ug/L	5.5280 ppb		15:23:03
1	Cr 267.716†	559.0	519.7	5.2909 ug/L	5.2909 ppb		15:23:03
1	Cu 324.752†	9922.7	4588.0	12.415 ug/L	12.415 ppb		15:22:43
1	Mn 257.610†	11295.6	11797.6	11.480 ug/L	11.480 ppb		15:22:43
1	Mo 202.031†	201.5	195.9	12.164 ug/L	12.164 ppb		15:23:03
1	Ni 231.604†	328.8	242.4	5.4350 ug/L	5.4350 ppb		15:23:03
1	P 214.914†	511.7	331.1	170.90 ug/L	170.90 ppb		15:23:03
1	Pb 220.353†	51.1	79.0	8.6246 ug/L	8.6246 ppb		15:23:03
1	S 181.975 Axial†	133.1	97.8	118.51 ug/L	118.51 ppb		15:23:03
1	Sb 206.836†	71.5	35.9	11.244 ug/L	11.244 ppb		15:23:03
1	Se 196.026†	13.8	44.0	25.110 ug/L	25.110 ppb		15:23:03
1	Si 251.611†	4120.1	3952.7	110.85 ug/L	110.85 ppb		15:22:43
1	Sn 189.927†	78.1	80.4	12.386 ug/L	12.386 ppb		15:23:03
1	Ti 334.940†	2292.7	3890.3	5.3759 ug/L	5.3759 ppb		15:22:43
1	Tl 190.801†	48.0	89.5	23.937 ug/L	23.937 ppb		15:23:03
1	U 409.014†	218.7	2047.8	54.346 ug/L	54.346 ppb		15:22:43
1	V 292.402†	-674.3	720.4	4.6758 ug/L	4.6758 ppb		15:22:43
1	Zn 213.857†	1991.9	1355.2	11.284 ug/L	11.284 ppb		15:23:03
1	SiO2†	4147.4	3967.0	236.26 ug/L	236.26 ppb		15:23:59
2	Sc Radial	5762.7	5762.7	102 %			15:21:51
2	Y RADIAL	6073.9	6073.9	102.1 %			15:21:51
2	Al 396.153Radial†	279.3	276.4	199.63 ug/L	199.63 ppb		15:21:51
2	Ca 317.933Radial†	155.0	126.6	191.25 ug/L	191.25 ppb		15:22:11
2	Fe 238.204 Radial†	23.9	11.0	89.063 ug/L	89.063 ppb		15:22:11
2	K 766.490 Radial†	3754.7	756.1	139.08 ug/L	139.08 ppb		15:21:51
2	Mg 279.077 IEC†	13.2	10.5	311.95 ug/L	311.95 ppb		15:22:11
2	Na 589.592 Radial†	169.0	1217.4	283.41 ug/L	283.41 ppb		15:21:51
2	Sr 421.552†	895.8	863.5	4.9178 ug/L	4.9178 ppb		15:21:51
2	Sc 361.383	899795.5	899795.5	92.065 %			15:23:08
2	Y 371.029	792381.2	792381.2	96.403 %			15:23:08
2	Ag 328.068†	1645.9	1314.9	5.4132 ug/L	5.4132 ppb		15:23:08
2	As 188.979†	53.2	78.1	28.873 ug/L	28.873 ppb		15:23:28
2	B 249.677†	2152.8	2879.1	57.829 ug/L	57.829 ppb		15:23:08
2	Ba 233.527†	771.6	828.6	5.6450 ug/L	5.6450 ppb		15:23:28
2	Be 313.107†	11113.2	16512.4	5.3679 ug/L	5.3679 ppb		15:23:08
2	Cd 226.502†	295.1	536.9	5.3165 ug/L	5.3165 ppb		15:23:28
2	Co 228.616†	199.4	290.9	5.2860 ug/L	5.2860 ppb		15:23:28
2	Cr 267.716†	570.5	531.1	5.4084 ug/L	5.4084 ppb		15:23:28
2	Cu 324.752†	9971.6	4621.7	12.509 ug/L	12.509 ppb		15:23:08
2	Mn 257.610†	11316.3	11798.0	11.479 ug/L	11.479 ppb		15:23:08
2	Mo 202.031†	182.0	174.3	10.823 ug/L	10.823 ppb		15:23:28
2	Ni 231.604†	348.4	263.1	5.8986 ug/L	5.8986 ppb		15:23:28

2	P 214.914†	519.2	338.2	174.60 ug/L	174.60 ppb	15:23:28
2	Pb 220.353†	69.1	98.5	10.739 ug/L	10.739 ppb	15:23:28
2	S 181.975 Axial†	132.8	97.1	117.70 ug/L	117.70 ppb	15:23:28
2	Sb 206.836†	67.4	31.3	9.8117 ug/L	9.8117 ppb	15:23:28
2	Se 196.026†	22.8	53.7	30.616 ug/L	30.616 ppb	15:23:28
2	Si 251.611†	4165.3	3993.8	112.02 ug/L	112.02 ppb	15:23:08
2	Sn 189.927†	72.7	74.4	11.472 ug/L	11.472 ppb	15:23:28
2	Ti 334.940†	2235.7	3823.9	5.2797 ug/L	5.2797 ppb	15:23:08
2	Tl 190.801†	43.1	84.1	22.491 ug/L	22.491 ppb	15:23:28
2	U 409.014†	65.6	1881.2	49.922 ug/L	49.922 ppb	15:23:08
2	V 292.402†	-712.7	680.1	4.4015 ug/L	4.4015 ppb	15:23:08
2	Zn 213.857†	1974.1	1332.1	11.087 ug/L	11.087 ppb	15:23:28
2	SiO2†	4117.7	3926.7	233.90 ug/L	233.90 ppb	15:24:04
3	Sc Radial	5610.2	5610.2	99.6 %		15:22:16
3	Y RADIAL	5905.4	5905.4	99.26 %		15:22:16
3	Al 396.153Radial†	261.6	266.0	192.12 ug/L	192.12 ppb	15:22:16
3	Ca 317.933Radial†	161.8	137.6	207.83 ug/L	207.83 ppb	15:22:36
3	Fe 238.204 Radial†	26.4	14.2	114.73 ug/L	114.73 ppb	15:22:36
3	K 766.490 Radial†	3661.8	762.6	140.27 ug/L	140.27 ppb	15:22:16
3	Mg 279.077 IEC†	11.0	8.6	255.52 ug/L	255.52 ppb	15:22:36
3	Na 589.592 Radial†	187.6	1240.6	288.81 ug/L	288.81 ppb	15:22:16
3	Sr 421.552†	890.7	882.2	5.0243 ug/L	5.0243 ppb	15:22:16
3	Sc 361.383	902348.3	902348.3	92.326 %		15:23:34
3	Y 371.029	796516.3	796516.3	96.906 %		15:23:34
3	Ag 328.068†	1773.2	1447.7	5.9661 ug/L	5.9661 ppb	15:23:34
3	As 188.979†	57.4	82.4	30.475 ug/L	30.475 ppb	15:23:54
3	B 249.677†	2161.2	2881.6	57.876 ug/L	57.876 ppb	15:23:34
3	Ba 233.527†	779.3	834.6	5.6868 ug/L	5.6868 ppb	15:23:54
3	Be 313.107†	11102.4	16466.6	5.3526 ug/L	5.3526 ppb	15:23:34
3	Cd 226.502†	295.9	536.9	5.3140 ug/L	5.3140 ppb	15:23:54
3	Co 228.616†	203.6	294.7	5.3566 ug/L	5.3566 ppb	15:23:54
3	Cr 267.716†	586.7	546.9	5.5688 ug/L	5.5688 ppb	15:23:54
3	Cu 324.752†	9921.1	4536.4	12.277 ug/L	12.277 ppb	15:23:34
3	Mn 257.610†	11349.9	11799.6	11.485 ug/L	11.485 ppb	15:23:34
3	Mo 202.031†	186.5	178.7	11.098 ug/L	11.098 ppb	15:23:54
3	Ni 231.604†	349.8	263.6	5.9093 ug/L	5.9093 ppb	15:23:54
3	P 214.914†	510.3	327.0	168.75 ug/L	168.75 ppb	15:23:54
3	Pb 220.353†	62.7	91.3	9.9640 ug/L	9.9640 ppb	15:23:54
3	S 181.975 Axial†	131.9	95.7	116.02 ug/L	116.02 ppb	15:23:54
3	Sb 206.836†	63.7	27.1	8.5699 ug/L	8.5699 ppb	15:23:54
3	Se 196.026†	31.8	63.4	36.153 ug/L	36.153 ppb	15:23:54
3	Si 251.611†	4173.2	3989.5	111.90 ug/L	111.90 ppb	15:23:34
3	Sn 189.927†	77.0	78.9	12.159 ug/L	12.159 ppb	15:23:54
3	Ti 334.940†	2143.0	3716.6	5.1363 ug/L	5.1363 ppb	15:23:34
3	Tl 190.801†	45.3	86.3	23.084 ug/L	23.084 ppb	15:23:54
3	U 409.014†	178.5	2003.2	53.158 ug/L	53.158 ppb	15:23:34
3	V 292.402†	-680.2	717.4	4.6357 ug/L	4.6357 ppb	15:23:34
3	Zn 213.857†	1985.3	1338.1	11.135 ug/L	11.135 ppb	15:23:54
3	SiO2†	4147.4	3946.2	235.05 ug/L	235.05 ppb	15:24:09

Mean Data: FQL

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	900108.2	92.097 %		0.2150			0.23%
Sc Radial	5687.5	101 %		1.4			1.34%
Y 371.029	793918.4	96.590 %		0.2753			0.28%
Y RADIAL	5988.9	100.7 %		1.42			1.41%
Ag 328.068†	1351.3	5.5639 ug/L		0.35198	5.5639 ppb	0.35198	6.33%
QC value within limits for Ag 328.068 Recovery = 111.28%							
Al 396.153Radial†	263.1	190.03 ug/L		10.798	190.03 ppb	10.798	5.68%
QC value within limits for Al 396.153Radial Recovery = 95.01%							
As 188.979†	81.3	30.039 ug/L		1.0199	30.039 ppb	1.0199	3.40%
QC value within limits for As 188.979 Recovery = 100.13%							
B 249.677†	2859.6	57.437 ug/L		0.7200	57.437 ppb	0.7200	1.25%
QC value within limits for B 249.677 Recovery = 114.87%							
Ba 233.527†	835.3	5.6913 ug/L		0.04871	5.6913 ppb	0.04871	0.86%
QC value within limits for Ba 233.527 Recovery = 113.83%							
Be 313.107†	16530.5	5.3737 ug/L		0.02446	5.3737 ppb	0.02446	0.46%
QC value within limits for Be 313.107 Recovery = 107.47%							
Ca 317.933Radial†	132.2	199.64 ug/L		8.289	199.64 ppb	8.289	4.15%

QC value within limits for Ca 317.933 Radial Recovery = 99.82%							
Cd 226.502†	537.8	5.3249 ug/L	0.01679	5.3249 ppb	0.01679	0.32%	
QC value within limits for Cd 226.502 Recovery = 106.50%							
Co 228.616†	296.6	5.3902 ug/L	0.12445	5.3902 ppb	0.12445	2.31%	
QC value within limits for Co 228.616 Recovery = 107.80%							
Cr 267.716†	532.6	5.4227 ug/L	0.13953	5.4227 ppb	0.13953	2.57%	
QC value within limits for Cr 267.716 Recovery = 108.45%							
Cu 324.752†	4582.0	12.401 ug/L	0.1167	12.401 ppb	0.1167	0.94%	
QC value within limits for Cu 324.752 Recovery = 124.01%							
Fe 238.204 Radial†	11.9	96.222 ug/L	16.1621	96.222 ppb	16.1621	16.80%	
QC value within limits for Fe 238.204 Radial Recovery = 96.22%							
K 766.490 Radial†	738.5	135.82 ug/L	6.704	135.82 ppb	6.704	4.94%	
QC value within limits for K 766.490 Radial Recovery = 90.55%							
Mg 279.077 IEC†	9.2	273.30 ug/L	33.514	273.30 ppb	33.514	12.26%	
QC value within limits for Mg 279.077 IEC Recovery = 91.10%							
Mn 257.610†	11798.4	11.481 ug/L	0.0033	11.481 ppb	0.0033	0.03%	
QC value within limits for Mn 257.610 Recovery = 114.81%							
Mo 202.031†	183.0	11.362 ug/L	0.7082	11.362 ppb	0.7082	6.23%	
QC value within limits for Mo 202.031 Recovery = 113.62%							
Na 589.592 Radial†	1235.7	287.68 ug/L	3.837	287.68 ppb	3.837	1.33%	
QC value within limits for Na 589.592 Radial Recovery = 95.89%							
Ni 231.604†	256.4	5.7476 ug/L	0.27083	5.7476 ppb	0.27083	4.71%	
QC value within limits for Ni 231.604 Recovery = 114.95%							
P 214.914†	332.1	171.42 ug/L	2.959	171.42 ppb	2.959	1.73%	
QC value within limits for P 214.914 Recovery = 114.28%							
Pb 220.353†	89.6	9.7759 ug/L	1.06978	9.7759 ppb	1.06978	10.94%	
QC value within limits for Pb 220.353 Recovery = 97.76%							
S 181.975 Axial†	96.8	117.41 ug/L	1.274	117.41 ppb	1.274	1.08%	
QC value within limits for S 181.975 Axial Recovery = 117.41%							
Sb 206.836†	31.4	9.8751 ug/L	1.33801	9.8751 ppb	1.33801	13.55%	
QC value within limits for Sb 206.836 Recovery = 98.75%							
Se 196.026†	53.7	30.626 ug/L	5.5217	30.626 ppb	5.5217	18.03%	
QC value within limits for Se 196.026 Recovery = 102.09%							
Si 251.611†	3978.7	111.59 ug/L	0.643	111.59 ppb	0.643	0.58%	
QC value within limits for Si 251.611 Recovery = 111.59%							
Sn 189.927†	77.9	12.005 ug/L	0.4757	12.005 ppb	0.4757	3.96%	
QC value within limits for Sn 189.927 Recovery = 120.05%							
Sr 421.552†	873.8	4.9764 ug/L	0.05406	4.9764 ppb	0.05406	1.09%	
QC value within limits for Sr 421.552 Recovery = 99.53%							
Ti 334.940†	3810.3	5.2640 ug/L	0.12059	5.2640 ppb	0.12059	2.29%	
QC value within limits for Ti 334.940 Recovery = 105.28%							
Tl 190.801†	86.6	23.171 ug/L	0.7270	23.171 ppb	0.7270	3.14%	
QC value within limits for Tl 190.801 Recovery = 115.86%							
U 409.014†	1977.4	52.475 ug/L	2.2900	52.475 ppb	2.2900	4.36%	
QC value within limits for U 409.014 Recovery = 104.95%							
V 292.402†	706.0	4.5710 ug/L	0.14811	4.5710 ppb	0.14811	3.24%	
QC value within limits for V 292.402 Recovery = 91.42%							
Zn 213.857†	1341.8	11.169 ug/L	0.1030	11.169 ppb	0.1030	0.92%	
QC value within limits for Zn 213.857 Recovery = 111.69%							
SiO2†	3946.6	235.07 ug/L	1.184	235.07 ppb	1.184	0.50%	
QC value within limits for SiO2 Recovery = 110.36%							

All analyte(s) passed QC.

Sequence No.: 9
 Sample ID: ICSA
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 13
 Date Collected: 1/19/2010 15:26:19
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: ICSA

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4904.7	4904.7	87.1 %		15:28:19
1	Y RADIAL	5107.6	5107.6	85.85 %		15:28:19
1	Al 396.153Radial†	646888.6	742683.4	537900 ug/L	537900 ppb	15:28:14
1	Ca 317.933Radial†	288776.5	331513.7	500750 ug/L	500750 ppb	15:28:14
1	Fe 238.204 Radial†	20127.7	23095.9	186960 ug/L	186960 ppb	15:28:19
1	K 766.490 Radial†	2428.6	-124.5	-190.43 ug/L	-190.43 ppb	15:28:14
1	Mg 279.077 IEC†	14434.4	16569.3	494130 ug/L	494130 ppb	15:28:19
1	Na 589.592 Radial†	-823.2	107.2	24.950 ug/L	24.950 ppb	15:28:19
1	Sr 421.552†	564.4	636.1	-0.1152 ug/L	-0.1152 ppb	15:28:19
1	Sc 361.383	819339.4	819339.4	83.833 %		15:28:46
1	Y 371.029	673993.8	673993.8	82.000 %		15:28:46
1	Ag 328.068†	-11002.7	-13597.5	-2.1776 ug/L	-2.1776 ppb	15:28:46
1	As 188.979†	-85.1	-81.1	13.670 ug/L	13.670 ppb	15:29:06
1	B 249.677†	417.2	1038.4	-9.4976 ug/L	-9.4976 ppb	15:28:46
1	Ba 233.527†	-642.4	-775.8	0.4500 ug/L	0.4500 ppb	15:29:06
1	Be 313.107†	-4281.9	-666.3	-0.2742 ug/L	-0.2742 ppb	15:28:46
1	Cd 226.502†	1391.1	1875.7	-0.7452 ug/L	-0.7452 ppb	15:29:06
1	Co 228.616†	-10.8	61.3	-1.5772 ug/L	-1.5772 ppb	15:29:06
1	Cr 267.716†	-113.4	-223.9	1.3589 ug/L	1.3589 ppb	15:29:06
1	Cu 324.752†	2592.4	-3116.9	1.4265 ug/L	1.4265 ppb	15:28:46
1	Mn 257.610†	-564.2	-1166.6	-2.8812 ug/L	-2.8812 ppb	15:28:46
1	Mo 202.031†	-216.5	-281.6	3.0016 ug/L	3.0016 ppb	15:29:06
1	Ni 231.604†	221.7	149.2	3.3453 ug/L	3.3453 ppb	15:29:06
1	P 214.914†	176.9	-14.7	-23.132 ug/L	-23.132 ppb	15:29:06
1	Pb 220.353†	-884.4	-1031.6	-5.4427 ug/L	-5.4427 ppb	15:29:06
1	S 181.975 Axial†	74.9	42.2	-49.602 ug/L	-49.602 ppb	15:29:06
1	Sb 206.836†	60.7	30.5	-1.9169 ug/L	-1.9169 ppb	15:29:06
1	Se 196.026†	-1096.8	-1279.3	14.550 ug/L	14.550 ppb	15:29:06
1	Si 251.611†	467.5	27.1	0.9767 ug/L	0.9767 ppb	15:29:06
1	Sn 189.927†	-367.9	-443.4	11.068 ug/L	11.068 ppb	15:29:06
1	Ti 334.940†	-16642.1	-18455.9	1.1776 ug/L	1.1776 ppb	15:28:46
1	Tl 190.801†	-86.3	-65.6	-17.755 ug/L	-17.755 ppb	15:29:06
1	U 409.014†	-506.7	1205.5	10.696 ug/L	10.696 ppb	15:28:46
1	V 292.402†	989.8	2634.8	-1.6938 ug/L	-1.6938 ppb	15:29:06
1	Zn 213.857†	3396.2	3239.0	8.9656 ug/L	8.9656 ppb	15:29:06
1	SiO2†	432.7	-29.8	-1.3027 ug/L	-1.3027 ppb	15:30:02
2	Sc Radial	5004.5	5004.5	88.9 %		15:28:29
2	Y RADIAL	5216.0	5216.0	87.68 %		15:28:29
2	Al 396.153Radial†	653724.8	735569.3	532750 ug/L	532750 ppb	15:28:24
2	Ca 317.933Radial†	291101.4	327520.1	494710 ug/L	494710 ppb	15:28:24
2	Fe 238.204 Radial†	20457.3	23006.1	186240 ug/L	186240 ppb	15:28:29
2	K 766.490 Radial†	2418.8	-191.1	-200.67 ug/L	-200.67 ppb	15:28:24
2	Mg 279.077 IEC†	14685.7	16521.8	492710 ug/L	492710 ppb	15:28:29
2	Na 589.592 Radial†	-834.9	112.9	26.277 ug/L	26.277 ppb	15:28:29
2	Sr 421.552†	586.6	648.2	-0.0010 ug/L	-0.0010 ppb	15:28:29
2	Sc 361.383	816765.9	816765.9	83.570 %		15:29:11
2	Y 371.029	673481.5	673481.5	81.938 %		15:29:11
2	Ag 328.068†	-10677.7	-13250.0	-0.8938 ug/L	-0.8938 ppb	15:29:11
2	As 188.979†	-100.7	-100.1	6.4870 ug/L	6.4870 ppb	15:29:31
2	B 249.677†	371.7	985.6	-10.440 ug/L	-10.440 ppb	15:29:11
2	Ba 233.527†	-669.0	-810.0	0.1953 ug/L	0.1953 ppb	15:29:31
2	Be 313.107†	-4274.6	-673.6	-0.2767 ug/L	-0.2767 ppb	15:29:11
2	Cd 226.502†	1377.0	1864.1	-0.7866 ug/L	-0.7866 ppb	15:29:31
2	Co 228.616†	-16.6	54.4	-1.6941 ug/L	-1.6941 ppb	15:29:31
2	Cr 267.716†	-138.4	-254.2	1.0393 ug/L	1.0393 ppb	15:29:31
2	Cu 324.752†	2702.0	-2976.1	1.7750 ug/L	1.7750 ppb	15:29:11
2	Mn 257.610†	-641.3	-1260.9	-2.9868 ug/L	-2.9868 ppb	15:29:11
2	Mo 202.031†	-230.2	-298.8	1.8033 ug/L	1.8033 ppb	15:29:31
2	Ni 231.604†	243.8	176.4	3.9567 ug/L	3.9567 ppb	15:29:31

2	P 214.914†	187.7	-1.1	-16.822 ug/L	-16.822 ppb	15:29:31
2	Pb 220.353†	-843.2	-985.6	-1.6026 ug/L	-1.6026 ppb	15:29:31
2	S 181.975 Axial†	70.5	37.2	-54.710 ug/L	-54.710 ppb	15:29:31
2	Sb 206.836†	68.3	39.8	0.9435 ug/L	0.9435 ppb	15:29:31
2	Se 196.026†	-1068.5	-1249.6	27.994 ug/L	27.994 ppb	15:29:31
2	Si 251.611†	482.0	46.3	1.5289 ug/L	1.5289 ppb	15:29:31
2	Sn 189.927†	-385.3	-465.6	6.7355 ug/L	6.7355 ppb	15:29:31
2	Ti 334.940†	-16616.6	-18488.0	0.4442 ug/L	0.4442 ppb	15:29:11
2	Tl 190.801†	-80.6	-59.2	-16.044 ug/L	-16.044 ppb	15:29:31
2	U 409.014†	-798.4	854.6	1.4627 ug/L	1.4627 ppb	15:29:11
2	V 292.402†	978.6	2625.1	-1.7075 ug/L	-1.7075 ppb	15:29:31
2	Zn 213.857†	3403.9	3260.9	9.2150 ug/L	9.2150 ppb	15:29:31
2	SiO2†	524.0	81.0	5.3384 ug/L	5.3384 ppb	15:30:07
3	Sc Radial	4923.0	4923.0	87.4 %		15:28:39
3	Y RADIAL	5148.7	5148.7	86.54 %		15:28:39
3	Al 396.153Radial†	635968.2	727430.5	526860 ug/L	526860 ppb	15:28:34
3	Ca 317.933Radial†	283991.7	324807.8	490620 ug/L	490620 ppb	15:28:34
3	Fe 238.204 Radial†	20199.6	23092.2	186930 ug/L	186930 ppb	15:28:39
3	K 766.490 Radial†	2430.1	-133.2	-188.63 ug/L	-188.63 ppb	15:28:34
3	Mg 279.077 IEC†	14483.2	16563.5	493950 ug/L	493950 ppb	15:28:39
3	Na 589.592 Radial†	-863.3	64.8	15.079 ug/L	15.079 ppb	15:28:39
3	Sr 421.552†	587.9	660.5	0.0996 ug/L	0.0996 ppb	15:28:39
3	Sc 361.383	813200.2	813200.2	83.205 %		15:29:37
3	Y 371.029	670972.5	670972.5	81.632 %		15:29:37
3	Ag 328.068†	-10712.5	-13347.8	-1.0140 ug/L	-1.0140 ppb	15:29:37
3	As 188.979†	-95.0	-93.8	8.9796 ug/L	8.9796 ppb	15:29:57
3	B 249.677†	399.8	1021.3	-9.8378 ug/L	-9.8378 ppb	15:29:37
3	Ba 233.527†	-627.2	-763.2	0.5346 ug/L	0.5346 ppb	15:29:57
3	Be 313.107†	-4358.8	-797.2	-0.3165 ug/L	-0.3165 ppb	15:29:37
3	Cd 226.502†	1361.4	1852.6	-0.9723 ug/L	-0.9723 ppb	15:29:57
3	Co 228.616†	26.8	106.4	-0.7633 ug/L	-0.7633 ppb	15:29:57
3	Cr 267.716†	-52.4	-151.5	2.1007 ug/L	2.1007 ppb	15:29:57
3	Cu 324.752†	2646.7	-3028.4	1.6704 ug/L	1.6704 ppb	15:29:37
3	Mn 257.610†	-652.9	-1278.2	-2.9858 ug/L	-2.9858 ppb	15:29:37
3	Mo 202.031†	-235.3	-306.1	1.3544 ug/L	1.3544 ppb	15:29:57
3	Ni 231.604†	250.1	185.3	4.1554 ug/L	4.1554 ppb	15:29:57
3	P 214.914†	180.8	-8.4	-22.618 ug/L	-22.618 ppb	15:29:57
3	Pb 220.353†	-865.3	-1016.5	-6.3599 ug/L	-6.3599 ppb	15:29:57
3	S 181.975 Axial†	86.5	56.8	-29.879 ug/L	-29.879 ppb	15:29:57
3	Sb 206.836†	50.6	18.9	-5.1672 ug/L	-5.1672 ppb	15:29:57
3	Se 196.026†	-1090.6	-1281.8	11.505 ug/L	11.505 ppb	15:29:57
3	Si 251.611†	459.4	21.7	0.8433 ug/L	0.8433 ppb	15:29:57
3	Sn 189.927†	-374.1	-454.2	7.8706 ug/L	7.8706 ppb	15:29:57
3	Ti 334.940†	-16463.4	-18391.0	-0.0726 ug/L	-0.0726 ppb	15:29:37
3	Tl 190.801†	-91.5	-72.7	-19.655 ug/L	-19.655 ppb	15:29:57
3	U 409.014†	-813.2	832.5	0.7958 ug/L	0.7958 ppb	15:29:37
3	V 292.402†	997.6	2653.2	-1.6210 ug/L	-1.6210 ppb	15:29:57
3	Zn 213.857†	3406.1	3281.5	9.3187 ug/L	9.3187 ppb	15:29:57
3	SiO2†	469.9	18.7	1.6352 ug/L	1.6352 ppb	15:30:12

Mean Data: ICSEA

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	816435.2	83.536 %	0.3154			0.38%
Sc Radial	4944.1	87.8 %	0.94			1.07%
Y 371.029	672815.9	81.857 %	0.1967			0.24%
Y RADIAL	5157.4	86.69 %	0.920			1.06%
Ag 328.068†	-13398.4	-1.3618 ug/L	0.70907	-1.3618 ppb	0.70907	52.07%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	735227.7	532500 ug/L	5527.7	532500 ppb	5527.7	1.04%
QC value within limits for Al 396.153Radial Recovery = 106.50%						
As 188.979†	-91.7	9.7121 ug/L	3.64693	9.7121 ppb	3.64693	37.55%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	1015.1	-9.9252 ug/L	0.47730	-9.9252 ppb	0.47730	4.81%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	-783.0	0.3933 ug/L	0.17661	0.3933 ppb	0.17661	44.91%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	-712.4	-0.2891 ug/L	0.02372	-0.2891 ppb	0.02372	8.20%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	327947.2	495360 ug/L	5095.3	495360 ppb	5095.3	1.03%

QC value within limits for Ca 317.933 Radial Recovery = 99.07%

Cd 226.502† 1864.1 -0.8347 ug/L 0.12092 -0.8347 ppb 0.12092 14.49%

QC value within limits for Cd 226.502 Recovery = Not calculated

Co 228.616† 74.1 -1.3448 ug/L 0.50702 -1.3448 ppb 0.50702 37.70%

QC value within limits for Co 228.616 Recovery = Not calculated

Cr 267.716† -209.9 1.4996 ug/L 0.54449 1.4996 ppb 0.54449 36.31%

QC value within limits for Cr 267.716 Recovery = Not calculated

Cu 324.752† -3040.5 1.6240 ug/L 0.17885 1.6240 ppb 0.17885 11.01%

QC value within limits for Cu 324.752 Recovery = Not calculated

Fe 238.204 Radial† 23064.7 186710 ug/L 411.4 186710 ppb 411.4 0.22%

QC value within limits for Fe 238.204 Radial Recovery = 93.35%

K 766.490 Radial† -149.6 -193.25 ug/L 6.494 -193.25 ppb 6.494 3.36%

QC value within limits for K 766.490 Radial Recovery = Not calculated

Mg 279.077 IEC† 16551.5 493600 ug/L 773.7 493600 ppb 773.7 0.16%

QC value within limits for Mg 279.077 IEC Recovery = 98.72%

Mn 257.610† -1235.2 -2.9512 ug/L 0.06069 -2.9512 ppb 0.06069 2.06%

QC value within limits for Mn 257.610 Recovery = Not calculated

Mo 202.031† -295.5 2.0531 ug/L 0.85155 2.0531 ppb 0.85155 41.48%

QC value within limits for Mo 202.031 Recovery = Not calculated

Na 589.592 Radial† 94.9 22.102 ug/L 6.1181 22.102 ppb 6.1181 27.68%

QC value within limits for Na 589.592 Radial Recovery = Not calculated

Ni 231.604† 170.3 3.8191 ug/L 0.42223 3.8191 ppb 0.42223 11.06%

QC value within limits for Ni 231.604 Recovery = Not calculated

P 214.914† -8.1 -20.857 ug/L 3.5043 -20.857 ppb 3.5043 16.80%

QC value within limits for P 214.914 Recovery = Not calculated

Pb 220.353† -1011.2 -4.4684 ug/L 2.52385 -4.4684 ppb 2.52385 56.48%

QC value within limits for Pb 220.353 Recovery = Not calculated

S 181.975 Axial† 45.4 -44.730 ug/L 13.1128 -44.730 ppb 13.1128 29.32%

QC value within limits for S 181.975 Axial Recovery = Not calculated

Sb 206.836† 29.7 -2.0469 ug/L 3.05740 -2.0469 ppb 3.05740 149.37%

QC value within limits for Sb 206.836 Recovery = Not calculated

Se 196.026† -1270.2 18.016 ug/L 8.7738 18.016 ppb 8.7738 48.70%

QC value within limits for Se 196.026 Recovery = Not calculated

Si 251.611† 31.7 1.1163 ug/L 0.36350 1.1163 ppb 0.36350 32.56%

QC value within limits for Si 251.611 Recovery = Not calculated

Sn 189.927† -454.4 8.5579 ug/L 2.24630 8.5579 ppb 2.24630 26.25%

QC value within limits for Sn 189.927 Recovery = Not calculated

Sr 421.552† 648.3 -0.0056 ug/L 0.10748 -0.0056 ppb 0.10748 >999.9%

QC value within limits for Sr 421.552 Recovery = Not calculated

Ti 334.940† -18445.0 0.5164 ug/L 0.62825 0.5164 ppb 0.62825 121.66%

QC value within limits for Ti 334.940 Recovery = Not calculated

Tl 190.801† -65.9 -17.818 ug/L 1.8063 -17.818 ppb 1.8063 10.14%

QC value within limits for Tl 190.801 Recovery = Not calculated

U 409.014† 964.2 4.3182 ug/L 5.53336 4.3182 ppb 5.53336 128.14%

QC value within limits for U 409.014 Recovery = Not calculated

V 292.402† 2637.7 -1.6741 ug/L 0.04652 -1.6741 ppb 0.04652 2.78%

QC value within limits for V 292.402 Recovery = Not calculated

Zn 213.857† 3260.4 9.1664 ug/L 0.18150 9.1664 ppb 0.18150 1.98%

QC value within limits for Zn 213.857 Recovery = Not calculated

SiO2† 23.3 1.8903 ug/L 3.32791 1.8903 ppb 3.32791 176.05%

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: 1/19/2010 15:32:24
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: ICSAB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib.	Sample Conc. Units	Analysis Time
1	Sc Radial	5014.8	5014.8	89.1 %			15:34:21
1	Y RADIAL	5246.2	5246.2	88.18 %			15:34:21
1	Al 396.153Radial†	634525.8	712495.4	516020 ug/L		516020 ppb	15:34:16
1	Ca 317.933Radial†	283576.5	318395.6	480930 ug/L		480930 ppb	15:34:16
1	Fe 238.204 Radial†	20671.0	23198.5	187810 ug/L		187810 ppb	15:34:21
1	K 766.490 Radial†	28104.6	28645.1	5112.3 ug/L		5112.3 ppb	15:34:16
1	Mg 279.077 IEC†	14649.7	16447.2	490490 ug/L		490490 ppb	15:34:21
1	Na 589.592 Radial†	20003.4	23513.5	5474.0 ug/L		5474.0 ppb	15:34:21
1	Sr 421.552†	78910.8	88594.9	501.12 ug/L		501.12 ppb	15:34:16
1	Sc 361.383	836874.1	836874.1	85.627 %			15:34:49
1	Y 371.029	689312.4	689312.4	83.864 %			15:34:49
1	Ag 328.068†	46905.2	54305.6	279.48 ug/L		279.48 ppb	15:34:49
1	As 188.979†	1094.3	1298.3	526.25 ug/L		526.25 ppb	15:35:09
1	B 249.677†	23107.3	27526.8	521.41 ug/L		521.41 ppb	15:34:49
1	Ba 233.527†	62710.5	73227.3	504.70 ug/L		504.70 ppb	15:34:49
1	Be 313.107†	655555.2	770035.4	250.87 ug/L		250.87 ppb	15:34:49
1	Cd 226.502†	43264.3	50742.9	483.04 ug/L		483.04 ppb	15:34:49
1	Co 228.616†	21167.3	24794.6	446.86 ug/L		446.86 ppb	15:35:09
1	Cr 267.716†	41515.6	48395.7	498.12 ug/L		498.12 ppb	15:34:49
1	Cu 324.752†	181603.3	205877.2	567.90 ug/L		567.90 ppb	15:34:49
1	Mn 257.610†	429953.5	501630.2	486.70 ug/L		486.70 ppb	15:34:49
1	Mo 202.031†	6529.7	7602.4	491.99 ug/L		491.99 ppb	15:35:09
1	Ni 231.604†	17467.4	20284.1	454.76 ug/L		454.76 ppb	15:35:09
1	P 214.914†	4392.8	4904.5	2437.3 ug/L		2437.3 ppb	15:35:09
1	Pb 220.353†	2818.8	3315.4	461.89 ug/L		461.89 ppb	15:35:09
1	S 181.975 Axial†	1949.3	2229.4	2606.8 ug/L		2606.8 ppb	15:35:09
1	Sb 206.836†	1529.0	1743.7	532.43 ug/L		532.43 ppb	15:35:09
1	Se 196.026†	2819.1	3321.2	2604.5 ug/L		2604.5 ppb	15:35:09
1	Si 251.611†	163607.8	190539.8	5345.1 ug/L		5345.1 ppb	15:34:49
1	Sn 189.927†	2381.2	2776.4	503.07 ug/L		503.07 ppb	15:35:09
1	Ti 334.940†	299159.0	350770.1	510.50 ug/L		510.50 ppb	15:34:49
1	Tl 190.801†	1411.9	1686.1	453.12 ug/L		453.12 ppb	15:35:09
1	U 409.014†	15602.8	20031.7	509.31 ug/L		509.31 ppb	15:34:49
1	V 292.402†	73202.6	86944.2	521.93 ug/L		521.93 ppb	15:34:49
1	Zn 213.857†	55666.2	64197.9	515.50 ug/L		515.50 ppb	15:34:49
1	SiO2†	163655.6	190580.2	11354 ug/L		11354 ppb	15:36:07
2	Sc Radial	5021.6	5021.6	89.2 %			15:34:31
2	Y RADIAL	5282.1	5282.1	88.79 %			15:34:31
2	Al 396.153Radial†	633480.5	710365.7	514470 ug/L		514470 ppb	15:34:26
2	Ca 317.933Radial†	282519.2	316782.0	478490 ug/L		478490 ppb	15:34:26
2	Fe 238.204 Radial†	20809.4	23322.5	188810 ug/L		188810 ppb	15:34:31
2	K 766.490 Radial†	28012.8	28499.8	5086.4 ug/L		5086.4 ppb	15:34:26
2	Mg 279.077 IEC†	14809.2	16604.0	495160 ug/L		495160 ppb	15:34:31
2	Na 589.592 Radial†	20174.8	23675.6	5511.8 ug/L		5511.8 ppb	15:34:31
2	Sr 421.552†	78635.8	88167.5	498.71 ug/L		498.71 ppb	15:34:26
2	Sc 361.383	831001.6	831001.6	85.026 %			15:35:15
2	Y 371.029	682618.1	682618.1	83.049 %			15:35:15
2	Ag 328.068†	46392.5	54089.7	278.95 ug/L		278.95 ppb	15:35:15
2	As 188.979†	1082.7	1293.7	524.80 ug/L		524.80 ppb	15:35:35
2	B 249.677†	22973.2	27559.7	521.90 ug/L		521.90 ppb	15:35:15
2	Ba 233.527†	62491.5	73487.3	506.50 ug/L		506.50 ppb	15:35:15
2	Be 313.107†	650308.9	769275.4	250.62 ug/L		250.62 ppb	15:35:15
2	Cd 226.502†	42954.6	50735.7	482.87 ug/L		482.87 ppb	15:35:15
2	Co 228.616†	21174.6	24977.9	450.18 ug/L		450.18 ppb	15:35:35
2	Cr 267.716†	41287.1	48469.5	498.90 ug/L		498.90 ppb	15:35:15
2	Cu 324.752†	180522.6	206105.0	568.57 ug/L		568.57 ppb	15:35:15
2	Mn 257.610†	428382.6	503331.1	488.27 ug/L		488.27 ppb	15:35:15
2	Mo 202.031†	6547.0	7676.6	496.64 ug/L		496.64 ppb	15:35:35
2	Ni 231.604†	17451.4	20409.4	457.57 ug/L		457.57 ppb	15:35:35

2	P 214.914†	4391.7	4939.4	2454.3 ug/L	2454.3 ppb	15:35:35
2	Pb 220.353†	2812.5	3331.3	463.15 ug/L	463.15 ppb	15:35:35
2	S 181.975 Axial†	1954.7	2251.8	2634.4 ug/L	2634.4 ppb	15:35:35
2	Sb 206.836†	1570.4	1805.0	551.03 ug/L	551.03 ppb	15:35:35
2	Se 196.026†	2829.0	3356.1	2627.5 ug/L	2627.5 ppb	15:35:35
2	Si 251.611†	162836.3	190982.8	5357.4 ug/L	5357.4 ppb	15:35:15
2	Sn 189.927†	2357.2	2767.7	501.39 ug/L	501.39 ppb	15:35:35
2	Ti 334.940†	297688.4	351509.5	510.82 ug/L	510.82 ppb	15:35:15
2	Tl 190.801†	1396.7	1680.0	451.48 ug/L	451.48 ppb	15:35:35
2	U 409.014†	15488.8	20026.4	509.05 ug/L	509.05 ppb	15:35:15
2	V 292.402†	72832.2	87112.8	522.97 ug/L	522.97 ppb	15:35:15
2	Zn 213.857†	55403.0	64347.8	516.64 ug/L	516.64 ppb	15:35:15
2	SiO2†	162672.4	190774.5	11365 ug/L	11365 ppb	15:36:12
3	Sc Radial	4990.2	4990.2	88.6 %		15:34:42
3	Y RADIAL	5254.6	5254.6	88.33 %		15:34:42
3	Al 396.153Radial†	645760.6	728691.7	527750 ug/L	527750 ppb	15:34:37
3	Ca 317.933Radial†	287590.2	324497.2	490150 ug/L	490150 ppb	15:34:37
3	Fe 238.204 Radial†	20655.2	23295.3	188590 ug/L	188590 ppb	15:34:42
3	K 766.490 Radial†	28508.5	29256.8	5221.9 ug/L	5221.9 ppb	15:34:37
3	Mg 279.077 IEC†	14653.4	16532.6	493040 ug/L	493040 ppb	15:34:42
3	Na 589.592 Radial†	20013.7	23636.1	5502.6 ug/L	5502.6 ppb	15:34:42
3	Sr 421.552†	80276.1	90573.2	512.33 ug/L	512.33 ppb	15:34:37
3	Sc 361.383	824309.7	824309.7	84.341 %		15:35:41
3	Y 371.029	677556.2	677556.2	82.433 %		15:35:41
3	Ag 328.068†	46303.9	54427.6	280.13 ug/L	280.13 ppb	15:35:41
3	As 188.979†	1104.1	1329.4	537.91 ug/L	537.91 ppb	15:36:01
3	B 249.677†	22978.7	27785.6	526.46 ug/L	526.46 ppb	15:35:41
3	Ba 233.527†	62476.0	74065.6	510.43 ug/L	510.43 ppb	15:35:41
3	Be 313.107†	650914.9	776203.0	252.88 ug/L	252.88 ppb	15:35:41
3	Cd 226.502†	43147.8	51374.9	489.22 ug/L	489.22 ppb	15:35:41
3	Co 228.616†	21153.2	25154.7	453.39 ug/L	453.39 ppb	15:36:01
3	Cr 267.716†	41323.0	48906.3	503.35 ug/L	503.35 ppb	15:35:41
3	Cu 324.752†	179896.5	207086.2	571.22 ug/L	571.22 ppb	15:35:41
3	Mn 257.610†	428271.7	507289.6	492.18 ug/L	492.18 ppb	15:35:41
3	Mo 202.031†	6563.6	7758.8	501.86 ug/L	501.86 ppb	15:36:01
3	Ni 231.604†	17462.0	20588.6	461.58 ug/L	461.58 ppb	15:36:01
3	P 214.914†	4369.0	4954.4	2465.2 ug/L	2465.2 ppb	15:36:01
3	Pb 220.353†	2825.7	3373.7	470.85 ug/L	470.85 ppb	15:36:01
3	S 181.975 Axial†	1947.9	2262.4	2644.7 ug/L	2644.7 ppb	15:36:01
3	Sb 206.836†	1557.4	1804.6	550.79 ug/L	550.79 ppb	15:36:01
3	Se 196.026†	2830.4	3384.8	2644.8 ug/L	2644.8 ppb	15:36:01
3	Si 251.611†	162836.2	192537.4	5401.0 ug/L	5401.0 ppb	15:35:41
3	Sn 189.927†	2386.3	2824.7	511.92 ug/L	511.92 ppb	15:36:01
3	Ti 334.940†	297485.3	354111.1	516.16 ug/L	516.16 ppb	15:35:41
3	Tl 190.801†	1418.8	1719.5	462.04 ug/L	462.04 ppb	15:36:01
3	U 409.014†	15434.3	20109.7	511.28 ug/L	511.28 ppb	15:35:41
3	V 292.402†	72722.7	87678.3	526.50 ug/L	526.50 ppb	15:35:41
3	Zn 213.857†	55425.0	64902.9	521.27 ug/L	521.27 ppb	15:35:41
3	SiO2†	161920.1	191435.7	11404 ug/L	11404 ppb	15:36:17

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	830728.5	84.998 %	0.6432			0.76%
Sc Radial	5008.9	89.0 %	0.29			0.33%
Y 371.029	683162.3	83.115 %	0.7174			0.86%
Y RADIAL	5261.0	88.43 %	0.315			0.36%
Ag 328.068†	54274.3	279.52 ug/L	0.587	279.52 ppb	0.587	0.21%
QC value within limits for Ag 328.068 Recovery = 111.81%						
Al 396.153Radial†	717184.3	519410 ug/L	7258.8	519410 ppb	7258.8	1.40%
QC value within limits for Al 396.153Radial Recovery = 103.88%						
As 188.979†	1307.1	529.66 ug/L	7.187	529.66 ppb	7.187	1.36%
QC value within limits for As 188.979 Recovery = 105.93%						
B 249.677†	27624.0	523.26 ug/L	2.788	523.26 ppb	2.788	0.53%
QC value within limits for B 249.677 Recovery = 104.65%						
Ba 233.527†	73593.4	507.21 ug/L	2.932	507.21 ppb	2.932	0.58%
QC value within limits for Ba 233.527 Recovery = 101.44%						
Be 313.107†	771837.9	251.45 ug/L	1.238	251.45 ppb	1.238	0.49%
QC value within limits for Be 313.107 Recovery = 100.58%						
Ca 317.933Radial†	319891.6	483190 ug/L	6146.7	483190 ppb	6146.7	1.27%

QC value within limits for Ca 317.933 Radial Recovery = 96.64%							
Cd	226.502†	50951.2	485.04 ug/L	3.617	485.04 ppb	3.617	0.75%
QC value within limits for Cd 226.502 Recovery = 97.01%							
Co	228.616†	24975.8	450.15 ug/L	3.265	450.15 ppb	3.265	0.73%
QC value within limits for Co 228.616 Recovery = 90.03%							
Cr	267.716†	48590.5	500.12 ug/L	2.824	500.12 ppb	2.824	0.56%
QC value within limits for Cr 267.716 Recovery = 100.02%							
Cu	324.752†	206356.1	569.23 ug/L	1.755	569.23 ppb	1.755	0.31%
QC value within limits for Cu 324.752 Recovery = 113.85%							
Fe	238.204 Radial†	23272.1	188400 ug/L	527.8	188400 ppb	527.8	0.28%
QC value within limits for Fe 238.204 Radial Recovery = 94.20%							
K	766.490 Radial†	28800.6	5140.2 ug/L	71.93	5140.2 ppb	71.93	1.40%
QC value within limits for K 766.490 Radial Recovery = 102.80%							
Mg	279.077 IEC†	16528.0	492900 ug/L	2341.3	492900 ppb	2341.3	0.48%
QC value within limits for Mg 279.077 IEC Recovery = 98.58%							
Mn	257.610†	504083.6	489.05 ug/L	2.824	489.05 ppb	2.824	0.58%
QC value within limits for Mn 257.610 Recovery = 97.81%							
Mo	202.031†	7679.3	496.83 ug/L	4.938	496.83 ppb	4.938	0.99%
QC value within limits for Mo 202.031 Recovery = 99.37%							
Na	589.592 Radial†	23608.4	5496.1 ug/L	19.68	5496.1 ppb	19.68	0.36%
QC value within limits for Na 589.592 Radial Recovery = 109.92%							
Ni	231.604†	20427.4	457.97 ug/L	3.431	457.97 ppb	3.431	0.75%
QC value within limits for Ni 231.604 Recovery = 91.59%							
P	214.914†	4932.8	2452.3 ug/L	14.04	2452.3 ppb	14.04	0.57%
QC value within limits for P 214.914 Recovery = 98.09%							
Pb	220.353†	3340.1	465.30 ug/L	4.848	465.30 ppb	4.848	1.04%
QC value within limits for Pb 220.353 Recovery = 93.06%							
S	181.975 Axial†	2247.9	2628.6 ug/L	19.55	2628.6 ppb	19.55	0.74%
QC value within limits for S 181.975 Axial Recovery = 105.15%							
Sb	206.836†	1784.4	544.75 ug/L	10.671	544.75 ppb	10.671	1.96%
QC value within limits for Sb 206.836 Recovery = 108.95%							
Se	196.026†	3354.0	2625.6 ug/L	20.18	2625.6 ppb	20.18	0.77%
QC value within limits for Se 196.026 Recovery = 105.02%							
Si	251.611†	191353.3	5367.8 ug/L	29.40	5367.8 ppb	29.40	0.55%
QC value within limits for Si 251.611 Recovery = 107.36%							
Sn	189.927†	2789.6	505.46 ug/L	5.655	505.46 ppb	5.655	1.12%
QC value within limits for Sn 189.927 Recovery = 101.09%							
Sr	421.552†	89111.9	504.05 ug/L	7.266	504.05 ppb	7.266	1.44%
QC value within limits for Sr 421.552 Recovery = 100.81%							
Ti	334.940†	352130.2	512.50 ug/L	3.180	512.50 ppb	3.180	0.62%
QC value within limits for Ti 334.940 Recovery = 102.50%							
Tl	190.801†	1695.2	455.55 ug/L	5.682	455.55 ppb	5.682	1.25%
QC value within limits for Tl 190.801 Recovery = 91.11%							
U	409.014†	20055.9	509.88 ug/L	1.218	509.88 ppb	1.218	0.24%
QC value within limits for U 409.014 Recovery = 101.98%							
V	292.402†	87245.1	523.80 ug/L	2.394	523.80 ppb	2.394	0.46%
QC value within limits for V 292.402 Recovery = 104.76%							
Zn	213.857†	64482.9	517.80 ug/L	3.060	517.80 ppb	3.060	0.59%
QC value within limits for Zn 213.857 Recovery = 103.56%							
SiO2†		190930.2	11374 ug/L	26.6	11374 ppb	26.6	0.23%
QC value within limits for SiO2 Recovery = 106.35%							

All analyte(s) passed QC.

Sequence No.: 11

Sample ID: LRL

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 15

Date Collected: 1/19/2010 15:38:28

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: LRL

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4954.2	4954.2	88.0 %		15:40:27
1	Y RADIAL	5228.0	5228.0	87.88 %		15:40:27
1	Al 396.153Radial†	635420.3	722239.8	523100 ug/L	523100 ppb	15:40:21
1	Ca 317.933Radial†	283338.9	322026.0	486410 ug/L	486410 ppb	15:40:21
1	Fe 238.204 Radial†	47301.8	53752.1	435130 ug/L	435130 ppb	15:40:27
1	K 766.490 Radial†	2654.0	103.8	-340.09 ug/L	-340.09 ppb	15:40:21
1	Mg 279.077 IEC†	14256.7	16202.1	482910 ug/L	482910 ppb	15:40:27
1	Na 589.592 Radial†	1903361.0	2164465.3	503890 ug/L	503890 ppb	15:40:21
1	Sr 421.552†	832.0	933.8	1.6878 ug/L	1.6878 ppb	15:40:27
1	Sc 361.383	833087.8	833087.8	85.240 %		15:40:56
1	Y 371.029	687206.4	687206.4	83.607 %		15:40:56
1	Ag 328.068†	-25705.9	-30630.2	-3.5293 ug/L	-3.5293 ppb	15:40:56
1	As 188.979†	-221.8	-239.9	13.263 ug/L	13.263 ppb	15:41:16
1	B 249.677†	1479.4	2276.3	-24.934 ug/L	-24.934 ppb	15:40:56
1	Ba 233.527†	-1803.1	-2124.8	-1.1474 ug/L	-1.1474 ppb	15:41:16
1	Be 313.107†	-11528.7	-9083.6	-3.0042 ug/L	-3.0042 ppb	15:40:56
1	Cd 226.502†	3585.4	4422.7	1.6524 ug/L	1.6524 ppb	15:41:16
1	Co 228.616†	213.9	325.3	-0.4338 ug/L	-0.4338 ppb	15:41:16
1	Cr 267.716†	25.1	-59.1	2.1175 ug/L	2.1175 ppb	15:41:16
1	Cu 324.752†	-511.0	-6808.8	-3.4942 ug/L	-3.4942 ppb	15:40:56
1	Mn 257.610†	-27918.6	-33246.7	-9.1454 ug/L	-9.1454 ppb	15:40:56
1	Mo 202.031†	-523.0	-636.9	0.0487 ug/L	0.0487 ppb	15:41:16
1	Ni 231.604†	323.9	264.7	5.9336 ug/L	5.9336 ppb	15:41:16
1	P 214.914†	630.3	513.7	51.803 ug/L	51.803 ppb	15:41:16
1	Pb 220.353†	-630.3	-716.0	1.5974 ug/L	1.5974 ppb	15:41:16
1	S 181.975 Axial†	105.4	76.6	-5.1750 ug/L	-5.1750 ppb	15:41:16
1	Sb 206.836†	45.6	11.5	-1.4750 ug/L	-1.4750 ppb	15:41:16
1	Se 196.026†	-2577.5	-2994.9	-79.229 ug/L	-79.229 ppb	15:41:16
1	Si 251.611†	-641.9	-1283.5	-35.558 ug/L	-35.558 ppb	15:41:16
1	Sn 189.927†	-403.3	-477.8	7.7910 ug/L	7.7910 ppb	15:41:16
1	Ti 334.940†	-16859.7	-18383.6	-6.1318 ug/L	-6.1318 ppb	15:40:56
1	Tl 190.801†	-120.9	-104.5	-28.325 ug/L	-28.325 ppb	15:41:16
1	U 409.014†	466068.8	548584.9	14515 ug/L	14515 ppb	15:40:56
1	V 292.402†	2480.9	4364.7	0.0528 ug/L	0.0528 ppb	15:40:56
1	Zn 213.857†	6418.7	6718.0	14.011 ug/L	14.011 ppb	15:41:16
1	SiO2†	-652.7	-1311.7	-77.156 ug/L	-77.156 ppb	15:42:13
2	Sc Radial	4848.8	4848.8	86.1 %		15:40:38
2	Y RADIAL	5105.0	5105.0	85.81 %		15:40:38
2	Al 396.153Radial†	642112.1	745702.3	540090 ug/L	540090 ppb	15:40:33
2	Ca 317.933Radial†	286168.4	332308.8	501950 ug/L	501950 ppb	15:40:33
2	Fe 238.204 Radial†	47356.0	54983.2	445090 ug/L	445090 ppb	15:40:38
2	K 766.490 Radial†	2663.1	180.0	-337.31 ug/L	-337.31 ppb	15:40:33
2	Mg 279.077 IEC†	14289.1	16591.7	494520 ug/L	494520 ppb	15:40:38
2	Na 589.592 Radial†	1920287.4	2231124.0	519410 ug/L	519410 ppb	15:40:33
2	Sr 421.552†	878.5	1008.4	1.9967 ug/L	1.9967 ppb	15:40:38
2	Sc 361.383	808294.8	808294.8	82.703 %		15:41:22
2	Y 371.029	667366.3	667366.3	81.194 %		15:41:22
2	Ag 328.068†	-25607.4	-31436.1	-4.1632 ug/L	-4.1632 ppb	15:41:22
2	As 188.979†	-220.1	-245.9	13.384 ug/L	13.384 ppb	15:41:42
2	B 249.677†	1424.5	2263.2	-26.816 ug/L	-26.816 ppb	15:41:22
2	Ba 233.527†	-1819.1	-2209.1	-1.4163 ug/L	-1.4163 ppb	15:41:42
2	Be 313.107†	-11450.6	-9404.1	-3.1096 ug/L	-3.1096 ppb	15:41:22
2	Cd 226.502†	3583.0	4548.8	1.9507 ug/L	1.9507 ppb	15:41:42
2	Co 228.616†	208.0	325.7	-0.5677 ug/L	-0.5677 ppb	15:41:42
2	Cr 267.716†	93.9	25.0	3.0067 ug/L	3.0067 ppb	15:41:42
2	Cu 324.752†	-629.2	-6970.1	-3.6311 ug/L	-3.6311 ppb	15:41:22
2	Mn 257.610†	-28216.2	-34611.1	-9.9644 ug/L	-9.9644 ppb	15:41:22
2	Mo 202.031†	-504.1	-632.9	1.2566 ug/L	1.2566 ppb	15:41:42
2	Ni 231.604†	308.2	257.3	5.7690 ug/L	5.7690 ppb	15:41:42

2	P 214.914†	588.8	486.2	33.656 ug/L	33.656 ppb	15:41:42
2	Pb 220.353†	-610.6	-714.8	4.6952 ug/L	4.6952 ppb	15:41:42
2	S 181.975 Axial†	109.8	85.7	2.7052 ug/L	2.7052 ppb	15:41:42
2	Sb 206.836†	41.7	8.5	-2.6525 ug/L	-2.6525 ppb	15:41:42
2	Se 196.026†	-2559.4	-3065.8	-81.651 ug/L	-81.651 ppb	15:41:42
2	Si 251.611†	-622.8	-1283.5	-35.561 ug/L	-35.561 ppb	15:41:42
2	Sn 189.927†	-417.0	-508.7	5.5540 ug/L	5.5540 ppb	15:41:42
2	Ti 334.940†	-16740.6	-18846.3	-5.8202 ug/L	-5.8202 ppb	15:41:22
2	Tl 190.801†	-119.8	-107.6	-29.160 ug/L	-29.160 ppb	15:41:42
2	U 409.014†	464983.3	564043.8	14924 ug/L	14924 ppb	15:41:22
2	V 292.402†	2458.2	4426.4	-0.0062 ug/L	-0.0062 ppb	15:41:22
2	Zn 213.857†	6374.3	6895.2	14.529 ug/L	14.529 ppb	15:41:42
2	SiO2†	-610.3	-1283.8	-75.500 ug/L	-75.500 ppb	15:42:18
3	Sc Radial	5069.3	5069.3	90.0 %		15:40:49
3	Y RADIAL	5338.2	5338.2	89.73 %		15:40:49
3	Al 396.153Radial†	628793.6	698473.2	505890 ug/L	505890 ppb	15:40:44
3	Ca 317.933Radial†	281162.2	312292.8	471710 ug/L	471710 ppb	15:40:44
3	Fe 238.204 Radial†	46028.9	51117.0	413790 ug/L	413790 ppb	15:40:49
3	K 766.490 Radial†	2511.1	-123.4	-370.99 ug/L	-370.99 ppb	15:40:44
3	Mg 279.077 IEC†	13869.1	15403.4	459110 ug/L	459110 ppb	15:40:49
3	Na 589.592 Radial†	1887759.4	2097992.8	488420 ug/L	488420 ppb	15:40:44
3	Sr 421.552†	823.3	902.7	1.6202 ug/L	1.6202 ppb	15:40:49
3	Sc 361.383	810328.1	810328.1	82.911 %		15:41:47
3	Y 371.029	669862.6	669862.6	81.497 %		15:41:47
3	Ag 328.068†	-25666.1	-31429.2	-13.854 ug/L	-13.854 ppb	15:41:47
3	As 188.979†	-195.1	-215.0	17.451 ug/L	17.451 ppb	15:42:07
3	B 249.677†	1333.5	2149.1	-24.027 ug/L	-24.027 ppb	15:41:47
3	Ba 233.527†	-1815.5	-2199.1	-2.2998 ug/L	-2.2998 ppb	15:42:07
3	Be 313.107†	-11461.5	-9382.5	-3.1023 ug/L	-3.1023 ppb	15:41:47
3	Cd 226.502†	3580.3	4534.7	5.0428 ug/L	5.0428 ppb	15:42:07
3	Co 228.616†	210.6	328.2	-0.0728 ug/L	-0.0728 ppb	15:42:07
3	Cr 267.716†	33.0	-48.7	1.6485 ug/L	1.6485 ppb	15:42:07
3	Cu 324.752†	-596.7	-6929.0	-5.1741 ug/L	-5.1741 ppb	15:41:47
3	Mn 257.610†	-28074.1	-34354.2	-11.356 ug/L	-11.356 ppb	15:41:47
3	Mo 202.031†	-518.8	-649.0	-2.5343 ug/L	-2.5343 ppb	15:42:07
3	Ni 231.604†	321.4	272.3	6.1059 ug/L	6.1059 ppb	15:42:07
3	P 214.914†	609.8	509.8	62.678 ug/L	62.678 ppb	15:42:07
3	Pb 220.353†	-626.3	-732.0	-2.0543 ug/L	-2.0543 ppb	15:42:07
3	S 181.975 Axial†	116.1	92.9	17.871 ug/L	17.871 ppb	15:42:07
3	Sb 206.836†	66.6	38.5	6.5496 ug/L	6.5496 ppb	15:42:07
3	Se 196.026†	-2579.8	-3082.6	-206.13 ug/L	-206.13 ppb	15:42:07
3	Si 251.611†	-584.7	-1235.7	-34.206 ug/L	-34.206 ppb	15:42:07
3	Sn 189.927†	-392.1	-477.5	5.2361 ug/L	5.2361 ppb	15:42:07
3	Ti 334.940†	-16708.5	-18756.8	-6.8536 ug/L	-6.8536 ppb	15:41:47
3	Tl 190.801†	-112.9	-98.9	-26.821 ug/L	-26.821 ppb	15:42:07
3	U 409.014†	466026.3	563891.0	14924 ug/L	14924 ppb	15:41:47
3	V 292.402†	2521.4	4495.2	4.2671 ug/L	4.2671 ppb	15:41:47
3	Zn 213.857†	6425.4	6937.6	17.917 ug/L	17.917 ppb	15:42:07
3	SiO2†	-619.7	-1293.3	-76.039 ug/L	-76.039 ppb	15:42:23

Mean Data: LR1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	817236.9	83.618 %		1.4084			1.68%
Sc Radial	4957.4	88.0 %		1.96			2.22%
Y 371.029	674811.8	82.099 %		1.3147			1.60%
Y RADIAL	5223.7	87.81 %		1.961			2.23%
Ag 328.068†	-31165.1	-7.1823 ug/L		5.78686	-7.1823 ppb	5.78686	80.57%
Al 396.153Radial†	722138.4	523030 ug/L		17103.4	523030 ppb	17103.4	3.27%
QC value within limits for Al 396.153Radial Recovery = 104.61%							
As 188.979†	-233.6	14.700 ug/L		2.3838	14.700 ppb	2.3838	16.22%
B 249.677†	2229.5	-25.259 ug/L		1.4226	-25.259 ppb	1.4226	5.63%
Ba 233.527†	-2177.7	-1.6212 ug/L		0.60289	-1.6212 ppb	0.60289	37.19%
Be 313.107†	-9290.1	-3.0720 ug/L		0.05886	-3.0720 ppb	0.05886	1.92%
Ca 317.933Radial†	322209.2	486690 ug/L		15118.8	486690 ppb	15118.8	3.11%
QC value within limits for Ca 317.933Radial Recovery = 97.34%							
Cd 226.502†	4502.1	2.8820 ug/L		1.87729	2.8820 ppb	1.87729	65.14%
Co 228.616†	326.4	-0.3581 ug/L		0.25599	-0.3581 ppb	0.25599	71.49%
Cr 267.716†	-27.6	2.2576 ug/L		0.68982	2.2576 ppb	0.68982	30.56%
Cu 324.752†	-6902.6	-4.0998 ug/L		0.93286	-4.0998 ppb	0.93286	22.75%

Fe 238.204 Radial†	53284.1	431340 ug/L	15988.8	431340 ppb	15988.8	3.71%
QC value less than the lower limit for Fe 238.204 Radial Recovery = 86.27%						
K 766.490 Radial†	53.5	-349.46 ug/L	18.694	-349.46 ppb	18.694	5.35%
Mg 279.077 IEC†	16065.7	478850 ug/L	18055.7	478850 ppb	18055.7	3.77%
QC value within limits for Mg 279.077 IEC Recovery = 95.77%						
Mn 257.610†	-34070.7	-10.155 ug/L	1.1175	-10.155 ppb	1.1175	11.00%
Mo 202.031†	-639.6	-0.4097 ug/L	1.93654	-0.4097 ppb	1.93654	472.71%
Na 589.592 Radial†	2164527.4	503910 ug/L	15496.7	503910 ppb	15496.7	3.08%
QC value within limits for Na 589.592 Radial Recovery = 100.78%						
Ni 231.604†	264.8	5.9362 ug/L	0.16845	5.9362 ppb	0.16845	2.84%
P 214.914†	503.2	49.379 ug/L	14.6621	49.379 ppb	14.6621	29.69%
Pb 220.353†	-720.9	1.4128 ug/L	3.37855	1.4128 ppb	3.37855	239.15%
S 181.975 Axial†	85.1	5.1339 ug/L	11.71363	5.1339 ppb	11.71363	228.16%
Sb 206.836†	19.5	0.8074 ug/L	5.00767	0.8074 ppb	5.00767	620.25%
Se 196.026†	-3047.8	-122.34 ug/L	72.579	-122.34 ppb	72.579	59.33%
Si 251.611†	-1267.6	-35.109 ug/L	0.7812	-35.109 ppb	0.7812	2.23%
Sn 189.927†	-488.0	6.1937 ug/L	1.39242	6.1937 ppb	1.39242	22.48%
Sr 421.552†	948.3	1.7682 ug/L	0.20071	1.7682 ppb	0.20071	11.35%
Ti 334.940†	-18662.2	-6.2685 ug/L	0.53008	-6.2685 ppb	0.53008	8.46%
Tl 190.801†	-103.7	-28.102 ug/L	1.1850	-28.102 ppb	1.1850	4.22%
U 409.014†	558839.9	14787 ug/L	236.2	14787 ppb	236.2	1.60%
QC value within limits for U 409.014 Recovery = 98.58%						
V 292.402†	4428.8	1.4379 ug/L	2.45035	1.4379 ppb	2.45035	170.41%
Zn 213.857†	6850.3	15.486 ug/L	2.1217	15.486 ppb	2.1217	13.70%
SiO2†	-1296.3	-76.232 ug/L	0.8447	-76.232 ppb	0.8447	1.11%

QC Failed. Continue with analysis.

Sequence No.: 12
 Sample ID: LR2
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 16
 Date Collected: 1/19/2010 15:44:32
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: LR2

Rep#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5506.8	5506.8	97.8 %		15:46:30
1	Y RADIAL	5794.9	5794.9	97.41 %		15:46:30
1	Al 396.153Radial†	624.4	642.0	-9.6790 ug/L	-9.6790 ppb	15:46:30
1	Ca 317.933Radial†	34.0	9.9	14.950 ug/L	14.950 ppb	15:46:50
1	Fe 238.204 Radial†	-19.9	-32.8	19.367 ug/L	19.367 ppb	15:46:50
1	K 766.490 Radial†	1534691.8	1566386.5	288490 ug/L	288490 ppb	15:46:25
1	Mg 279.077 IEC†	-6.3	-8.9	-163.94 ug/L	-163.94 ppb	15:46:50
1	Na 589.592 Radial†	-270.9	775.3	180.49 ug/L	180.49 ppb	15:46:30
1	Sr 421.552†	1619188.1	1655689.1	9432.3 ug/L	9432.3 ppb	15:46:25
1	Sc 361.383	927949.5	927949.5	94.946 %		15:48:07
1	Y 371.029	762701.5	762701.5	92.792 %		15:48:07
1	Ag 328.068†	-7970.8	-8868.1	4.8381 ug/L	4.8381 ppb	15:48:12
1	As 188.979†	26132.3	27543.7	10226 ug/L	10226 ppb	15:48:12
1	B 249.677†	242006.1	255429.9	5106.1 ug/L	5106.1 ppb	15:48:07
1	Ba 233.527†	1984967.0	2090626.1	14235 ug/L	14235 ppb	15:48:07
1	Be 313.107†	8432353.5	8885686.4	2904.0 ug/L	2904.0 ppb	15:48:01
1	Cd 226.502†	951974.1	1002868.3	9928.7 ug/L	9928.7 ppb	15:48:07
1	Co 228.616†	498152.7	524745.9	9511.0 ug/L	9511.0 ppb	15:48:12
1	Cr 267.716†	2288092.7	2409809.5	24609 ug/L	24609 ppb	15:48:07
1	Cu 324.752†	7042058.7	7410729.3	20095 ug/L	20095 ppb	15:48:01
1	Mn 257.610†	9196726.6	9685815.4	9426.8 ug/L	9426.8 ppb	15:48:01
1	Mo 202.031†	149796.8	157747.8	9787.4 ug/L	9787.4 ppb	15:48:12
1	Ni 231.604†	425009.0	447518.7	10033 ug/L	10033 ppb	15:48:07
1	P 214.914†	33043.8	34577.2	14204 ug/L	14204 ppb	15:48:12
1	Pb 220.353†	215958.9	227478.7	24690 ug/L	24690 ppb	15:48:12
1	S 181.975 Axial†	40456.9	42563.5	51617 ug/L	51617 ppb	15:48:12
1	Sb 206.836†	32955.3	34667.8	10808 ug/L	10808 ppb	15:48:12
1	Se 196.026†	17201.9	18146.5	10240 ug/L	10240 ppb	15:48:12
1	Si 251.611†	1647057.8	1734207.5	48581 ug/L	48581 ppb	15:48:07
1	Sn 189.927†	64722.4	68163.3	10479 ug/L	10479 ppb	15:48:12
1	Ti 334.940†	6616341.1	6969953.8	9657.9 ug/L	9657.9 ppb	15:48:01
1	Tl 190.801†	34503.0	36377.0	9766.7 ug/L	9766.7 ppb	15:48:12
1	U 409.014†	-437.1	1349.5	-19.181 ug/L	-19.181 ppb	15:48:12
1	V 292.402†	1586524.1	1672435.9	10368 ug/L	10368 ppb	15:48:07
1	Zn 213.857†	1628033.1	1713888.3	14255 ug/L	14255 ppb	15:48:07
1	SiO2†	1661168.0	1749053.4	104050 ug/L	104050 ppb	15:49:00
2	Sc Radial	5311.6	5311.6	94.3 %		15:47:00
2	Y RADIAL	5544.0	5544.0	93.19 %		15:47:00
2	Al 396.153Radial†	637.9	679.7	17.752 ug/L	17.752 ppb	15:47:00
2	Ca 317.933Radial†	39.1	16.6	25.091 ug/L	25.091 ppb	15:47:20
2	Fe 238.204 Radial†	-19.3	-32.9	17.994 ug/L	17.994 ppb	15:47:20
2	K 766.490 Radial†	1519198.2	1607634.2	296090 ug/L	296090 ppb	15:46:55
2	Mg 279.077 IEC†	-7.1	-10.0	-195.16 ug/L	-195.16 ppb	15:47:20
2	Na 589.592 Radial†	-345.8	685.6	159.62 ug/L	159.62 ppb	15:47:00
2	Sr 421.552†	1599878.3	1696066.4	9662.3 ug/L	9662.3 ppb	15:46:55
2	Sc 361.383	928940.2	928940.2	95.047 %		15:48:27
2	Y 371.029	763584.2	763584.2	92.900 %		15:48:27
2	Ag 328.068†	-7930.9	-8817.1	5.0757 ug/L	5.0757 ppb	15:48:32
2	As 188.979†	26171.3	27555.4	10232 ug/L	10232 ppb	15:48:32
2	B 249.677†	243300.5	256519.9	5128.0 ug/L	5128.0 ppb	15:48:27
2	Ba 233.527†	1987882.0	2091463.5	14241 ug/L	14241 ppb	15:48:27
2	Be 313.107†	8567686.2	9018600.1	2947.4 ug/L	2947.4 ppb	15:48:20
2	Cd 226.502†	953153.3	1003039.7	9930.4 ug/L	9930.4 ppb	15:48:27
2	Co 228.616†	497935.3	523957.6	9496.5 ug/L	9496.5 ppb	15:48:32
2	Cr 267.716†	2290087.6	2409338.3	24604 ug/L	24604 ppb	15:48:27
2	Cu 324.752†	7152348.1	7518856.3	20388 ug/L	20388 ppb	15:48:20
2	Mn 257.610†	9322101.2	9807393.6	9545.1 ug/L	9545.1 ppb	15:48:20
2	Mo 202.031†	149934.2	157724.1	9785.9 ug/L	9785.9 ppb	15:48:32
2	Ni 231.604†	425183.5	447225.0	10027 ug/L	10027 ppb	15:48:27

2	P 214.914†	33196.6	34700.8	14210 ug/L	14210 ppb	15:48:32
2	Pb 220.353†	215763.8	227031.0	24642 ug/L	24642 ppb	15:48:32
2	S 181.975 Axial†	40610.0	42679.1	51757 ug/L	51757 ppb	15:48:32
2	Sb 206.836†	33074.0	34755.6	10833 ug/L	10833 ppb	15:48:32
2	Se 196.026†	17263.7	18192.2	10266 ug/L	10266 ppb	15:48:32
2	Si 251.611†	1652731.2	1738326.5	48696 ug/L	48696 ppb	15:48:27
2	Sn 189.927†	64691.0	68057.5	10463 ug/L	10463 ppb	15:48:32
2	Ti 334.940†	6714736.9	7066045.5	9791.1 ug/L	9791.1 ppb	15:48:20
2	Tl 190.801†	34603.5	36444.1	9786.3 ug/L	9786.3 ppb	15:48:32
2	U 409.014†	-250.7	1546.1	-13.951 ug/L	-13.951 ppb	15:48:32
2	V 292.402†	1589460.4	1673743.3	10376 ug/L	10376 ppb	15:48:27
2	Zn 213.857†	1630372.1	1714520.5	14260 ug/L	14260 ppb	15:48:27
2	SiO2†	1669252.2	1755693.0	104440 ug/L	104440 ppb	15:49:07
3	Sc Radial	5406.3	5406.3	96.0 %		15:47:31
3	Y RADIAL	5629.5	5629.5	94.63 %		15:47:31
3	Al 396.153Radial†	636.5	666.4	-2.7110 ug/L	-2.7110 ppb	15:47:31
3	Ca 317.933Radial†	30.9	7.3	11.011 ug/L	11.011 ppb	15:47:51
3	Fe 238.204 Radial†	-20.6	-33.8	17.353 ug/L	17.353 ppb	15:47:51
3	K 766.490 Radial†	1537032.8	1597998.2	294320 ug/L	294320 ppb	15:47:26
3	Mg 279.077 IEC†	-5.5	-8.2	-140.69 ug/L	-140.69 ppb	15:47:51
3	Na 589.592 Radial†	-286.6	753.7	175.46 ug/L	175.46 ppb	15:47:31
3	Sr 421.552†	1617752.6	1684973.5	9599.1 ug/L	9599.1 ppb	15:47:26
3	Sc 361.383	908610.2	908610.2	92.967 %		15:48:47
3	Y 371.029	746622.6	746622.6	90.836 %		15:48:47
3	Ag 328.068†	-8079.3	-9163.5	4.0320 ug/L	4.0320 ppb	15:48:52
3	As 188.979†	26185.1	28186.4	10464 ug/L	10464 ppb	15:48:52
3	B 249.677†	239191.2	257827.2	5153.7 ug/L	5153.7 ppb	15:48:47
3	Ba 233.527†	1966795.9	2115578.4	14405 ug/L	14405 ppb	15:48:47
3	Be 313.107†	8423250.0	9064926.7	2962.6 ug/L	2962.6 ppb	15:48:40
3	Cd 226.502†	942890.5	1014438.4	10043 ug/L	10043 ppb	15:48:47
3	Co 228.616†	498792.3	536601.2	9726.1 ug/L	9726.1 ppb	15:48:52
3	Cr 267.716†	2265795.0	2437118.2	24888 ug/L	24888 ppb	15:48:47
3	Cu 324.752†	7006616.7	7530471.6	20419 ug/L	20419 ppb	15:48:40
3	Mn 257.610†	9175009.4	9868623.1	9604.7 ug/L	9604.7 ppb	15:48:40
3	Mo 202.031†	149990.3	161314.0	10009 ug/L	10009 ppb	15:48:52
3	Ni 231.604†	420660.5	452368.9	10142 ug/L	10142 ppb	15:48:47
3	P 214.914†	33120.5	35400.5	14572 ug/L	14572 ppb	15:48:52
3	Pb 220.353†	216271.5	232656.2	25252 ug/L	25252 ppb	15:48:52
3	S 181.975 Axial†	40433.1	43444.8	52685 ug/L	52685 ppb	15:48:52
3	Sb 206.836†	32920.8	35369.4	11027 ug/L	11027 ppb	15:48:52
3	Se 196.026†	17201.1	18531.4	10457 ug/L	10457 ppb	15:48:52
3	Si 251.611†	1627549.2	1750146.0	49026 ug/L	49026 ppb	15:48:47
3	Sn 189.927†	64842.0	69742.9	10722 ug/L	10722 ppb	15:48:52
3	Ti 334.940†	6593855.1	7094088.6	9829.9 ug/L	9829.9 ppb	15:48:40
3	Tl 190.801†	34564.1	37216.2	9991.7 ug/L	9991.7 ppb	15:48:52
3	U 409.014†	-414.9	1363.6	-19.430 ug/L	-19.430 ppb	15:48:52
3	V 292.402†	1568930.6	1689077.4	10473 ug/L	10473 ppb	15:48:47
3	Zn 213.857†	1612713.1	1733905.8	14421 ug/L	14421 ppb	15:48:47
3	SiO2†	1651155.2	1775522.3	105620 ug/L	105620 ppb	15:49:14

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	921833.3	94.320 %	1.1728			1.24%
Sc Radial	5408.3	96.0 %	1.73			1.80%
Y 371.029	757636.1	92.176 %	1.1617			1.26%
Y RADIAL	5656.1	95.07 %	2.145			2.26%
Ag 328.068†	-8949.5	4.6486 ug/L	0.54705	4.6486 ppb	0.54705	11.77%
Al 396.153Radial†	662.7	1.7874 ug/L	14.25808	1.7874 ppb	14.25808	797.70%
As 188.979†	27761.8	10307 ug/L	135.9	10307 ppb	135.9	1.32%
QC value within limits for As 188.979 Recovery = 103.07%						
B 249.677†	256592.3	5129.3 ug/L	23.81	5129.3 ppb	23.81	0.46%
QC value within limits for B 249.677 Recovery = 102.59%						
Ba 233.527†	2099222.7	14294 ug/L	96.5	14294 ppb	96.5	0.67%
QC value within limits for Ba 233.527 Recovery = 95.29%						
Be 313.107†	8989737.7	2938.0 ug/L	30.38	2938.0 ppb	30.38	1.03%
QC value within limits for Be 313.107 Recovery = 97.93%						
Ca 317.933Radial†	11.3	17.017 ug/L	7.2642	17.017 ppb	7.2642	42.69%
Cd 226.502†	1006782.2	9967.4 ug/L	65.65	9967.4 ppb	65.65	0.66%
QC value within limits for Cd 226.502 Recovery = 99.67%						

Co 228.616†	528434.9	9577.8 ug/L	128.56	9577.8 ppb	128.56	1.34%
QC value within limits for Co 228.616 Recovery = 95.78%						
Cr 267.716†	2418755.3	24701 ug/L	162.4	24701 ppb	162.4	0.66%
QC value within limits for Cr 267.716 Recovery = 98.80%						
Cu 324.752†	7486685.7	20301 ug/L	179.1	20301 ppb	179.1	0.88%
QC value within limits for Cu 324.752 Recovery = 101.50%						
Fe 238.204 Radial†	-33.1	18.238 ug/L	1.0294	18.238 ppb	1.0294	5.64%
K 766.490 Radial†	1590673.0	292970 ug/L	3974.2	292970 ppb	3974.2	1.36%
QC value within limits for K 766.490 Radial Recovery = 97.66%						
Mg 279.077 IEC†	-9.1	-166.60 ug/L	27.336	-166.60 ppb	27.336	16.41%
Mn 257.610†	9787277.4	9525.6 ug/L	90.56	9525.6 ppb	90.56	0.95%
QC value within limits for Mn 257.610 Recovery = 95.26%						
Mo 202.031†	158928.6	9860.6 ug/L	128.17	9860.6 ppb	128.17	1.30%
QC value within limits for Mo 202.031 Recovery = 98.61%						
Na 589.592 Radial†	738.2	171.86 ug/L	10.891	171.86 ppb	10.891	6.34%
Ni 231.604†	449037.5	10067 ug/L	64.7	10067 ppb	64.7	0.64%
QC value within limits for Ni 231.604 Recovery = 100.67%						
P 214.914†	34892.8	14329 ug/L	211.0	14329 ppb	211.0	1.47%
QC value within limits for P 214.914 Recovery = 95.52%						
Pb 220.353†	229055.3	24861 ug/L	339.4	24861 ppb	339.4	1.37%
QC value within limits for Pb 220.353 Recovery = 99.45%						
S 181.975 Axial†	42895.8	52020 ug/L	580.8	52020 ppb	580.8	1.12%
QC value within limits for S 181.975 Axial Recovery = 104.04%						
Sb 206.836†	34930.9	10889 ug/L	119.9	10889 ppb	119.9	1.10%
QC value within limits for Sb 206.836 Recovery = 108.89%						
Se 196.026†	18290.0	10321 ug/L	118.7	10321 ppb	118.7	1.15%
QC value within limits for Se 196.026 Recovery = 103.21%						
Si 251.611†	1740893.3	48768 ug/L	230.8	48768 ppb	230.8	0.47%
QC value within limits for Si 251.611 Recovery = 97.54%						
Sn 189.927†	68654.6	10555 ug/L	145.1	10555 ppb	145.1	1.37%
QC value within limits for Sn 189.927 Recovery = 105.55%						
Sr 421.552†	1678909.7	9564.6 ug/L	118.84	9564.6 ppb	118.84	1.24%
QC value within limits for Sr 421.552 Recovery = 95.65%						
Ti 334.940†	7043362.6	9759.6 ug/L	90.25	9759.6 ppb	90.25	0.92%
QC value within limits for Ti 334.940 Recovery = 97.60%						
Tl 190.801†	36679.1	9848.2 ug/L	124.62	9848.2 ppb	124.62	1.27%
QC value within limits for Tl 190.801 Recovery = 98.48%						
U 409.014†	1419.7	-17.521 ug/L	3.0941	-17.521 ppb	3.0941	17.66%
V 292.402†	1678418.9	10406 ug/L	58.4	10406 ppb	58.4	0.56%
QC value within limits for V 292.402 Recovery = 104.06%						
Zn 213.857†	1720771.6	14312 ug/L	94.7	14312 ppb	94.7	0.66%
QC value within limits for Zn 213.857 Recovery = 95.41%						
SiO2†	1760089.6	104710 ug/L	818.0	104710 ppb	818.0	0.78%
QC value within limits for SiO2 Recovery = 97.86%						

All analyte(s) passed QC.

Sequence No.: 13
 Sample ID: CCV
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 7
 Date Collected: 1/19/2010 15:51:23
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5285.9	5285.9	93.9 %		15:53:16
1	Y RADIAL	5569.4	5569.4	93.62 %		15:53:16
1	Al 396.153Radial†	6564.6	6996.8	5043.3 ug/L	5043.3 ppb	15:53:16
1	Ca 317.933Radial†	3149.6	3330.4	5030.5 ug/L	5030.5 ppb	15:53:36
1	Fe 238.204 Radial†	576.5	601.7	4886.5 ug/L	4886.5 ppb	15:53:36
1	K 766.490 Radial†	29816.0	28850.3	5307.7 ug/L	5307.7 ppb	15:53:16
1	Mg 279.077 IEC†	160.9	168.9	5038.7 ug/L	5038.7 ppb	15:53:36
1	Na 589.592 Radial†	37696.1	41210.0	9593.8 ug/L	9593.8 ppb	15:53:16
1	Sr 421.552†	81237.1	86530.1	492.91 ug/L	492.91 ppb	15:53:16
1	Sc 361.383	928764.0	928764.0	95.029 %		15:54:33
1	Y 371.029	770918.6	770918.6	93.792 %		15:54:33
1	Ag 328.068†	118374.7	124094.0	513.84 ug/L	513.84 ppb	15:54:39
1	As 188.979†	1332.7	1422.7	529.39 ug/L	529.39 ppb	15:54:59
1	B 249.677†	24993.6	26841.8	537.16 ug/L	537.16 ppb	15:54:39
1	Ba 233.527†	71680.6	75420.8	514.00 ug/L	514.00 ppb	15:54:39
1	Be 313.107†	1471065.5	1552459.5	504.68 ug/L	504.68 ppb	15:54:33
1	Cd 226.502†	49172.1	51960.7	514.02 ug/L	514.02 ppb	15:54:39
1	Co 228.616†	26902.9	28384.5	514.62 ug/L	514.62 ppb	15:54:39
1	Cr 267.716†	47882.3	50298.5	513.97 ug/L	513.97 ppb	15:54:39
1	Cu 324.752†	184280.8	187711.4	508.97 ug/L	508.97 ppb	15:54:39
1	Mn 257.610†	494516.2	519891.2	506.27 ug/L	506.27 ppb	15:54:33
1	Mo 202.031†	7689.2	8068.1	501.02 ug/L	501.02 ppb	15:54:59
1	Ni 231.604†	21861.8	22890.1	513.18 ug/L	513.18 ppb	15:54:39
1	P 214.914†	4721.4	4742.7	2383.1 ug/L	2383.1 ppb	15:54:59
1	Pb 220.353†	4395.4	4648.7	505.97 ug/L	505.97 ppb	15:54:59
1	S 181.975 Axial†	839.9	836.8	1013.8 ug/L	1013.8 ppb	15:54:59
1	Sb 206.836†	1633.9	1677.5	523.33 ug/L	523.33 ppb	15:54:59
1	Se 196.026†	812.9	884.4	517.02 ug/L	517.02 ppb	15:54:59
1	Si 251.611†	87701.8	91759.1	2570.7 ug/L	2570.7 ppb	15:54:39
1	Sn 189.927†	3092.1	3249.3	500.37 ug/L	500.37 ppb	15:54:59
1	Ti 334.940†	342297.9	361599.3	501.36 ug/L	501.36 ppb	15:54:33
1	Tl 190.801†	1773.4	1903.4	511.04 ug/L	511.04 ppb	15:54:59
1	U 409.014†	16498.3	19171.3	507.28 ug/L	507.28 ppb	15:54:39
1	V 292.402†	77870.6	83398.2	517.80 ug/L	517.80 ppb	15:54:39
1	Zn 213.857†	59264.2	61552.2	510.79 ug/L	510.79 ppb	15:54:39
1	SiO2†	86812.3	90807.5	5402.2 ug/L	5402.2 ppb	15:56:06
2	Sc Radial	5086.7	5086.7	90.3 %		15:53:41
2	Y RADIAL	5340.4	5340.4	89.77 %		15:53:41
2	Al 396.153Radial†	6412.7	7102.4	5119.6 ug/L	5119.6 ppb	15:53:41
2	Ca 317.933Radial†	3177.9	3493.1	5276.3 ug/L	5276.3 ppb	15:54:01
2	Fe 238.204 Radial†	585.2	635.4	5159.2 ug/L	5159.2 ppb	15:54:01
2	K 766.490 Radial†	29050.5	29246.6	5380.5 ug/L	5380.5 ppb	15:53:41
2	Mg 279.077 IEC†	164.0	179.0	5341.1 ug/L	5341.1 ppb	15:54:01
2	Na 589.592 Radial†	36511.9	41471.5	9654.7 ug/L	9654.7 ppb	15:53:41
2	Sr 421.552†	79107.1	87561.0	498.79 ug/L	498.79 ppb	15:53:41
2	Sc 361.383	921311.1	921311.1	94.266 %		15:55:05
2	Y 371.029	765736.8	765736.8	93.162 %		15:55:05
2	Ag 328.068†	116855.3	123489.9	511.42 ug/L	511.42 ppb	15:55:10
2	As 188.979†	1310.1	1410.1	524.77 ug/L	524.77 ppb	15:55:30
2	B 249.677†	24633.9	26672.9	533.74 ug/L	533.74 ppb	15:55:10
2	Ba 233.527†	70782.8	75078.6	511.67 ug/L	511.67 ppb	15:55:10
2	Be 313.107†	1457443.2	1550531.3	504.05 ug/L	504.05 ppb	15:55:05
2	Cd 226.502†	48356.2	51513.8	509.57 ug/L	509.57 ppb	15:55:10
2	Co 228.616†	26474.7	28159.2	510.54 ug/L	510.54 ppb	15:55:10
2	Cr 267.716†	47235.3	50019.7	511.12 ug/L	511.12 ppb	15:55:10
2	Cu 324.752†	182088.3	186954.3	506.93 ug/L	506.93 ppb	15:55:10
2	Mn 257.610†	489879.3	519181.9	505.59 ug/L	505.59 ppb	15:55:05
2	Mo 202.031†	7669.3	8112.4	503.79 ug/L	503.79 ppb	15:55:30
2	Ni 231.604†	21632.7	22833.1	511.90 ug/L	511.90 ppb	15:55:10

2	P 214.914†	4705.2	4765.6	2395.3 ug/L	2395.3 ppb	15:55:30
2	Pb 220.353†	4379.2	4669.0	508.17 ug/L	508.17 ppb	15:55:30
2	S 181.975 Axial†	821.5	824.3	998.67 ug/L	998.67 ppb	15:55:30
2	Sb 206.836†	1633.9	1691.4	527.59 ug/L	527.59 ppb	15:55:30
2	Se 196.026†	815.7	894.3	523.57 ug/L	523.57 ppb	15:55:30
2	Si 251.611†	86565.6	91300.3	2557.8 ug/L	2557.8 ppb	15:55:10
2	Sn 189.927†	3079.9	3262.6	502.47 ug/L	502.47 ppb	15:55:30
2	Ti 334.940†	339258.9	361289.4	500.94 ug/L	500.94 ppb	15:55:05
2	Tl 190.801†	1757.6	1901.8	510.63 ug/L	510.63 ppb	15:55:30
2	U 409.014†	16336.1	19139.6	506.41 ug/L	506.41 ppb	15:55:10
2	V 292.402†	76831.5	82958.8	515.11 ug/L	515.11 ppb	15:55:10
2	Zn 213.857†	58339.0	61075.2	506.78 ug/L	506.78 ppb	15:55:10
2	SiO2†	86447.8	91159.9	5423.2 ug/L	5423.2 ppb	15:56:12
3	Sc Radial	5248.0	5248.0	93.2 %		15:54:06
3	Y RADIAL	5513.5	5513.5	92.68 %		15:54:06
3	Al 396.153Radial†	6616.8	7103.2	5120.2 ug/L	5120.2 ppb	15:54:06
3	Ca 317.933Radial†	3132.4	3336.2	5039.3 ug/L	5039.3 ppb	15:54:26
3	Fe 238.204 Radial†	573.0	602.5	4892.1 ug/L	4892.1 ppb	15:54:26
3	K 766.490 Radial†	29710.9	28966.8	5329.1 ug/L	5329.1 ppb	15:54:06
3	Mg 279.077 IEC†	160.0	169.2	5047.6 ug/L	5047.6 ppb	15:54:26
3	Na 589.592 Radial†	37760.2	41568.7	9677.3 ug/L	9677.3 ppb	15:54:06
3	Sr 421.552†	81539.5	87479.4	498.32 ug/L	498.32 ppb	15:54:06
3	Sc 361.383	925023.5	925023.5	94.646 %		15:55:36
3	Y 371.029	769190.4	769190.4	93.582 %		15:55:36
3	Ag 328.068†	116405.3	122517.0	507.32 ug/L	507.32 ppb	15:55:41
3	As 188.979†	1330.7	1426.3	530.69 ug/L	530.69 ppb	15:56:01
3	B 249.677†	24378.0	26297.8	526.25 ug/L	526.25 ppb	15:55:41
3	Ba 233.527†	70496.3	74474.5	507.55 ug/L	507.55 ppb	15:55:41
3	Be 313.107†	1466074.9	1553446.3	505.00 ug/L	505.00 ppb	15:55:36
3	Cd 226.502†	48255.0	51201.0	506.49 ug/L	506.49 ppb	15:55:41
3	Co 228.616†	26449.0	28019.4	508.00 ug/L	508.00 ppb	15:55:41
3	Cr 267.716†	47219.7	49802.1	508.89 ug/L	508.89 ppb	15:55:41
3	Cu 324.752†	180933.7	184959.1	501.51 ug/L	501.51 ppb	15:55:41
3	Mn 257.610†	491867.3	519196.7	505.59 ug/L	505.59 ppb	15:55:36
3	Mo 202.031†	7706.4	8118.9	504.18 ug/L	504.18 ppb	15:56:01
3	Ni 231.604†	21511.6	22613.0	506.97 ug/L	506.97 ppb	15:55:41
3	P 214.914†	4751.6	4794.7	2411.8 ug/L	2411.8 ppb	15:56:01
3	Pb 220.353†	4381.7	4653.0	506.46 ug/L	506.46 ppb	15:56:01
3	S 181.975 Axial†	829.7	829.5	1004.9 ug/L	1004.9 ppb	15:56:01
3	Sb 206.836†	1640.7	1691.6	527.65 ug/L	527.65 ppb	15:56:01
3	Se 196.026†	817.5	892.6	521.72 ug/L	521.72 ppb	15:56:01
3	Si 251.611†	86189.8	90534.8	2536.3 ug/L	2536.3 ppb	15:55:41
3	Sn 189.927†	3088.2	3258.3	501.76 ug/L	501.76 ppb	15:56:01
3	Ti 334.940†	340615.1	361278.0	500.92 ug/L	500.92 ppb	15:55:36
3	Tl 190.801†	1766.8	1904.0	511.23 ug/L	511.23 ppb	15:56:01
3	U 409.014†	16312.0	19044.6	503.92 ug/L	503.92 ppb	15:55:41
3	V 292.402†	76499.7	82281.1	511.00 ug/L	511.00 ppb	15:55:41
3	Zn 213.857†	58205.0	60685.2	503.58 ug/L	503.58 ppb	15:55:41
3	SiO2†	87774.5	92193.6	5484.8 ug/L	5484.8 ppb	15:56:17

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	925032.9	94.647 %	0.3813			0.40%
Sc Radial	5206.8	92.5 %	1.88			2.03%
Y 371.029	768615.3	93.512 %	0.3210			0.34%
Y RADIAL	5474.4	92.02 %	2.007			2.18%
Ag 328.068†	123367.0	510.86 ug/L	3.293	510.86 ppb	3.293	0.64%
QC value within limits for Ag 328.068 Recovery = 102.17%						
Al 396.153Radial†	7067.5	5094.4 ug/L	44.26	5094.4 ppb	44.26	0.87%
QC value within limits for Al 396.153Radial Recovery = 101.89%						
As 188.979†	1419.7	528.28 ug/L	3.114	528.28 ppb	3.114	0.59%
QC value within limits for As 188.979 Recovery = 105.66%						
B 249.677†	26604.2	532.38 ug/L	5.582	532.38 ppb	5.582	1.05%
QC value within limits for B 249.677 Recovery = 106.48%						
Ba 233.527†	74991.3	511.07 ug/L	3.265	511.07 ppb	3.265	0.64%
QC value within limits for Ba 233.527 Recovery = 102.21%						
Be 313.107†	1552145.7	504.58 ug/L	0.481	504.58 ppb	0.481	0.10%
QC value within limits for Be 313.107 Recovery = 100.92%						
Ca 317.933Radial†	3386.6	5115.4 ug/L	139.45	5115.4 ppb	139.45	2.73%

QC value within limits for Ca 317.933 Radial Recovery = 102.31%									
Cd	226.502†	51558.5	510.03 ug/L	3.782	510.03 ppb	3.782	0.74%		
QC value within limits for Cd 226.502 Recovery = 102.01%									
Co	228.616†	28187.7	511.05 ug/L	3.336	511.05 ppb	3.336	0.65%		
QC value within limits for Co 228.616 Recovery = 102.21%									
Cr	267.716†	50040.1	511.33 ug/L	2.543	511.33 ppb	2.543	0.50%		
QC value within limits for Cr 267.716 Recovery = 102.27%									
Cu	324.752†	186541.6	505.80 ug/L	3.856	505.80 ppb	3.856	0.76%		
QC value within limits for Cu 324.752 Recovery = 101.16%									
Fe	238.204 Radial†	613.2	4979.3 ug/L	155.89	4979.3 ppb	155.89	3.13%		
QC value within limits for Fe 238.204 Radial Recovery = 99.59%									
K	766.490 Radial†	29021.2	5339.1 ug/L	37.46	5339.1 ppb	37.46	0.70%		
QC value within limits for K 766.490 Radial Recovery = 106.78%									
Mg	279.077 IEC†	172.4	5142.5 ug/L	172.09	5142.5 ppb	172.09	3.35%		
QC value within limits for Mg 279.077 IEC Recovery = 102.85%									
Mn	257.610†	519423.2	505.81 ug/L	0.390	505.81 ppb	0.390	0.08%		
QC value within limits for Mn 257.610 Recovery = 101.16%									
Mo	202.031†	8099.8	503.00 ug/L	1.723	503.00 ppb	1.723	0.34%		
QC value within limits for Mo 202.031 Recovery = 100.60%									
Na	589.592 Radial†	41416.7	9642.0 ug/L	43.19	9642.0 ppb	43.19	0.45%		
QC value within limits for Na 589.592 Radial Recovery = 96.42%									
Ni	231.604†	22778.7	510.68 ug/L	3.280	510.68 ppb	3.280	0.64%		
QC value within limits for Ni 231.604 Recovery = 102.14%									
P	214.914†	4767.7	2396.7 ug/L	14.40	2396.7 ppb	14.40	0.60%		
QC value within limits for P 214.914 Recovery = 95.87%									
Pb	220.353†	4656.9	506.86 ug/L	1.155	506.86 ppb	1.155	0.23%		
QC value within limits for Pb 220.353 Recovery = 101.37%									
S	181.975 Axial†	830.2	1005.8 ug/L	7.60	1005.8 ppb	7.60	0.76%		
QC value within limits for S 181.975 Axial Recovery = 100.58%									
Sb	206.836†	1686.8	526.19 ug/L	2.480	526.19 ppb	2.480	0.47%		
QC value within limits for Sb 206.836 Recovery = 105.24%									
Se	196.026†	890.4	520.77 ug/L	3.378	520.77 ppb	3.378	0.65%		
QC value within limits for Se 196.026 Recovery = 104.15%									
Si	251.611†	91198.1	2554.9 ug/L	17.39	2554.9 ppb	17.39	0.68%		
QC value within limits for Si 251.611 Recovery = 102.20%									
Sn	189.927†	3256.7	501.54 ug/L	1.068	501.54 ppb	1.068	0.21%		
QC value within limits for Sn 189.927 Recovery = 100.31%									
Sr	421.552†	87190.2	496.67 ug/L	3.264	496.67 ppb	3.264	0.66%		
QC value within limits for Sr 421.552 Recovery = 99.33%									
Ti	334.940†	361388.9	501.07 ug/L	0.249	501.07 ppb	0.249	0.05%		
QC value within limits for Ti 334.940 Recovery = 100.21%									
Tl	190.801†	1903.1	510.97 ug/L	0.310	510.97 ppb	0.310	0.06%		
QC value within limits for Tl 190.801 Recovery = 102.19%									
U	409.014†	19118.5	505.87 ug/L	1.740	505.87 ppb	1.740	0.34%		
QC value within limits for U 409.014 Recovery = 101.17%									
V	292.402†	82879.4	514.64 ug/L	3.428	514.64 ppb	3.428	0.67%		
QC value within limits for V 292.402 Recovery = 102.93%									
Zn	213.857†	61104.2	507.05 ug/L	3.611	507.05 ppb	3.611	0.71%		
QC value within limits for Zn 213.857 Recovery = 101.41%									
SiO2†		91387.0	5436.7 ug/L	42.93	5436.7 ppb	42.93	0.79%		
QC value within limits for SiO2 Recovery = 101.67%									

All analyte(s) passed QC.

Sequence No.: 14

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 1/19/2010 15:58:27

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5312.2	5312.2	94.3 %		16:00:19
1	Y RADIAL	5632.2	5632.2	94.67 %		16:00:19
1	Al 396.153Radial†	2.2	5.9	4.2393 ug/L	4.2393 ppb	16:00:19
1	Ca 317.933Radial†	21.0	-2.5	-3.8401 ug/L	-3.8401 ppb	16:00:39
1	Fe 238.204 Radial†	13.2	1.6	13.079 ug/L	13.079 ppb	16:00:39
1	K 766.490 Radial†	3521.4	820.0	151.03 ug/L	151.03 ppb	16:00:19
1	Mg 279.077 IEC†	-0.6	-3.1	-91.711 ug/L	-91.711 ppb	16:00:39
1	Na 589.592 Radial†	-910.2	87.4	20.352 ug/L	20.352 ppb	16:00:19
1	Sr 421.552†	-9.6	-22.0	-0.1252 ug/L	-0.1252 ppb	16:00:19
1	Sc 361.383	948021.7	948021.7	96.999 %		16:01:36
1	Y 371.029	797986.7	797986.7	97.085 %		16:01:36
1	Ag 328.068†	410.9	-49.3	-0.2016 ug/L	-0.2016 ppb	16:01:41
1	As 188.979†	6.7	27.2	10.051 ug/L	10.051 ppb	16:02:01
1	B 249.677†	635.4	1195.8	24.029 ug/L	24.029 ppb	16:01:41
1	Ba 233.527†	16.0	7.0	0.0475 ug/L	0.0475 ppb	16:02:01
1	Be 313.107†	-4350.7	-43.9	-0.0142 ug/L	-0.0142 ppb	16:01:41
1	Cd 226.502†	-180.1	30.7	0.3035 ug/L	0.3035 ppb	16:02:01
1	Co 228.616†	-71.5	0.6	0.0104 ug/L	0.0104 ppb	16:02:01
1	Cr 267.716†	118.8	33.9	0.3449 ug/L	0.3449 ppb	16:02:01
1	Cu 324.752†	6152.9	133.9	0.3622 ug/L	0.3622 ppb	16:01:41
1	Mn 257.610†	503.8	25.8	0.0301 ug/L	0.0301 ppb	16:02:01
1	Mo 202.031†	22.5	-0.1	-0.0067 ug/L	-0.0067 ppb	16:02:01
1	Ni 231.604†	121.4	9.8	0.2202 ug/L	0.2202 ppb	16:02:01
1	P 214.914†	218.6	-0.4	-0.2610 ug/L	-0.2610 ppb	16:02:01
1	Pb 220.353†	-13.6	9.4	1.0148 ug/L	1.0148 ppb	16:02:01
1	S 181.975 Axial†	47.2	1.5	1.8133 ug/L	1.8133 ppb	16:02:01
1	Sb 206.836†	40.1	-0.6	-0.1553 ug/L	-0.1553 ppb	16:02:01
1	Se 196.026†	-24.7	3.5	2.0017 ug/L	2.0017 ppb	16:02:01
1	Si 251.611†	642.3	131.7	3.6987 ug/L	3.6987 ppb	16:02:01
1	Sn 189.927†	15.1	11.0	1.6844 ug/L	1.6844 ppb	16:02:01
1	Ti 334.940†	-1344.6	9.3	0.0185 ug/L	0.0185 ppb	16:01:41
1	Tl 190.801†	-31.0	5.4	1.4294 ug/L	1.4294 ppb	16:02:01
1	U 409.014†	-1647.0	112.0	2.9704 ug/L	2.9704 ppb	16:01:36
1	V 292.402†	-1434.3	-24.5	-0.1486 ug/L	-0.1486 ppb	16:01:41
1	Zn 213.857†	903.1	118.8	0.9911 ug/L	0.9911 ppb	16:02:01
1	SiO2†	653.6	127.9	7.6261 ug/L	7.6261 ppb	16:03:07
2	Sc Radial	5329.5	5329.5	94.6 %		16:00:44
2	Y RADIAL	5670.1	5670.1	95.31 %		16:00:44
2	Al 396.153Radial†	25.7	30.7	22.175 ug/L	22.175 ppb	16:00:44
2	Ca 317.933Radial†	15.5	-8.5	-12.833 ug/L	-12.833 ppb	16:01:04
2	Fe 238.204 Radial†	12.2	0.5	4.3245 ug/L	4.3245 ppb	16:01:04
2	K 766.490 Radial†	3550.3	838.4	154.44 ug/L	154.44 ppb	16:00:44
2	Mg 279.077 IEC†	4.0	1.7	51.570 ug/L	51.570 ppb	16:01:04
2	Na 589.592 Radial†	-1027.0	-32.8	-7.6352 ug/L	-7.6352 ppb	16:00:44
2	Sr 421.552†	16.9	6.0	0.0343 ug/L	0.0343 ppb	16:00:44
2	Sc 361.383	932947.0	932947.0	95.457 %		16:02:06
2	Y 371.029	786789.0	786789.0	95.723 %		16:02:06
2	Ag 328.068†	442.2	-9.7	-0.0391 ug/L	-0.0391 ppb	16:02:11
2	As 188.979†	2.2	22.6	8.3467 ug/L	8.3467 ppb	16:02:31
2	B 249.677†	561.6	1129.0	22.689 ug/L	22.689 ppb	16:02:11
2	Ba 233.527†	11.3	2.3	0.0146 ug/L	0.0146 ppb	16:02:31
2	Be 313.107†	-4365.6	-131.9	-0.0430 ug/L	-0.0430 ppb	16:02:11
2	Cd 226.502†	-180.3	27.5	0.2710 ug/L	0.2710 ppb	16:02:31
2	Co 228.616†	-79.1	-8.6	-0.1543 ug/L	-0.1543 ppb	16:02:31
2	Cr 267.716†	83.5	-1.1	-0.0111 ug/L	-0.0111 ppb	16:02:31
2	Cu 324.752†	6233.2	320.6	0.8708 ug/L	0.8708 ppb	16:02:11
2	Mn 257.610†	487.2	16.8	0.0147 ug/L	0.0147 ppb	16:02:31
2	Mo 202.031†	30.5	8.7	0.5369 ug/L	0.5369 ppb	16:02:31
2	Ni 231.604†	94.5	-16.4	-0.3672 ug/L	-0.3672 ppb	16:02:31

2	P 214.914†	225.6	10.6	5.4213 ug/L	5.4213 ppb	16:02:31
2	Pb 220.353†	-32.4	-10.5	-1.1358 ug/L	-1.1358 ppb	16:02:31
2	S 181.975 Axial†	51.4	6.7	8.0876 ug/L	8.0876 ppb	16:02:31
2	Sb 206.836†	42.9	3.1	0.9663 ug/L	0.9663 ppb	16:02:31
2	Se 196.026†	-25.6	2.1	1.1980 ug/L	1.1980 ppb	16:02:31
2	Si 251.611†	634.1	133.8	3.7510 ug/L	3.7510 ppb	16:02:31
2	Sn 189.927†	16.9	13.1	2.0138 ug/L	2.0138 ppb	16:02:31
2	Ti 334.940†	-1392.9	-63.7	-0.0932 ug/L	-0.0932 ppb	16:02:11
2	Tl 190.801†	-39.3	-3.9	-1.0358 ug/L	-1.0358 ppb	16:02:31
2	U 409.014†	-1810.1	-86.4	-2.2933 ug/L	-2.2933 ppb	16:02:06
2	V 292.402†	-1493.0	-109.8	-0.6695 ug/L	-0.6695 ppb	16:02:11
2	Zn 213.857†	908.8	139.9	1.1715 ug/L	1.1715 ppb	16:02:31
2	SiO2†	617.2	100.6	5.9868 ug/L	5.9868 ppb	16:03:12
3	Sc Radial	5275.8	5275.8	93.7 %		16:01:09
3	Y RADIAL	5595.7	5595.7	94.06 %		16:01:09
3	Al 396.153Radial†	-2.8	0.5	0.3519 ug/L	0.3519 ppb	16:01:09
3	Ca 317.933Radial†	22.5	-0.9	-1.3099 ug/L	-1.3099 ppb	16:01:29
3	Fe 238.204 Radial†	11.7	0.2	1.2656 ug/L	1.2656 ppb	16:01:29
3	K 766.490 Radial†	3336.1	648.0	119.35 ug/L	119.35 ppb	16:01:09
3	Mg 279.077 IEC†	1.0	-1.4	-40.838 ug/L	-40.838 ppb	16:01:29
3	Na 589.592 Radial†	-1000.4	-15.5	-3.6031 ug/L	-3.6031 ppb	16:01:09
3	Sr 421.552†	24.7	14.5	0.0824 ug/L	0.0824 ppb	16:01:09
3	Sc 361.383	937015.1	937015.1	95.873 %		16:02:37
3	Y 371.029	789652.5	789652.5	96.071 %		16:02:37
3	Ag 328.068†	354.9	-102.8	-0.4253 ug/L	-0.4253 ppb	16:02:42
3	As 188.979†	8.7	29.4	10.834 ug/L	10.834 ppb	16:03:02
3	B 249.677†	543.9	1108.0	22.267 ug/L	22.267 ppb	16:02:42
3	Ba 233.527†	4.5	-4.8	-0.0333 ug/L	-0.0333 ppb	16:03:02
3	Be 313.107†	-4411.4	-159.8	-0.0516 ug/L	-0.0516 ppb	16:02:42
3	Cd 226.502†	-197.3	10.6	0.1055 ug/L	0.1055 ppb	16:03:02
3	Co 228.616†	-59.9	11.8	0.2141 ug/L	0.2141 ppb	16:03:02
3	Cr 267.716†	102.6	18.4	0.1871 ug/L	0.1871 ppb	16:03:02
3	Cu 324.752†	6160.4	216.3	0.5855 ug/L	0.5855 ppb	16:02:42
3	Mn 257.610†	503.5	31.6	0.0325 ug/L	0.0325 ppb	16:03:02
3	Mo 202.031†	27.7	5.6	0.3454 ug/L	0.3454 ppb	16:03:02
3	Ni 231.604†	105.6	-5.2	-0.1160 ug/L	-0.1160 ppb	16:03:02
3	P 214.914†	224.3	8.2	4.1995 ug/L	4.1995 ppb	16:03:02
3	Pb 220.353†	-2.5	20.9	2.2629 ug/L	2.2629 ppb	16:03:02
3	S 181.975 Axial†	39.2	-6.3	-7.5989 ug/L	-7.5989 ppb	16:03:02
3	Sb 206.836†	45.3	5.4	1.6470 ug/L	1.6470 ppb	16:03:02
3	Se 196.026†	-26.5	1.3	0.7327 ug/L	0.7327 ppb	16:03:02
3	Si 251.611†	649.3	146.7	4.1164 ug/L	4.1164 ppb	16:03:02
3	Sn 189.927†	11.2	7.1	1.0917 ug/L	1.0917 ppb	16:03:02
3	Ti 334.940†	-1263.2	78.0	0.1105 ug/L	0.1105 ppb	16:02:42
3	Tl 190.801†	-36.3	-0.6	-0.1529 ug/L	-0.1529 ppb	16:03:02
3	U 409.014†	-1672.6	65.3	1.7324 ug/L	1.7324 ppb	16:02:37
3	V 292.402†	-1445.2	-53.2	-0.3193 ug/L	-0.3193 ppb	16:02:42
3	Zn 213.857†	909.1	136.0	1.1382 ug/L	1.1382 ppb	16:03:02
3	SiO2†	638.7	120.3	7.1630 ug/L	7.1630 ppb	16:03:17

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	939327.9	96.110 %		0.7980			0.83%
Sc Radial	5305.9	94.2 %		0.49			0.52%
Y 371.029	791476.1	96.293 %		0.7078			0.73%
Y RADIAL	5632.6	94.68 %		0.625			0.66%
Ag 328.068†	-53.9	-0.2220 ug/L		0.19393	-0.2220 ppb	0.19393	87.37%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	12.3	8.9220 ug/L		11.64061	8.9220 ppb	11.64061	130.47%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	26.4	9.7441 ug/L		1.27192	9.7441 ppb	1.27192	13.05%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	1144.3	22.995 ug/L		0.9197	22.995 ppb	0.9197	4.00%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	1.5	0.0096 ug/L		0.04062	0.0096 ppb	0.04062	422.58%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	-111.9	-0.0363 ug/L		0.01957	-0.0363 ppb	0.01957	53.97%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	-4.0	-5.9943 ug/L		6.05600	-5.9943 ppb	6.05600	101.03%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated									
Cd	226.502†	23.0	0.2267 ug/L	0.10623	0.2267 ppb	0.10623	46.87%		
QC value within limits for Cd 226.502 Recovery = Not calculated									
Co	228.616†	1.3	0.0234 ug/L	0.18454	0.0234 ppb	0.18454	787.44%		
QC value within limits for Co 228.616 Recovery = Not calculated									
Cr	267.716†	17.1	0.1737 ug/L	0.17837	0.1737 ppb	0.17837	102.71%		
QC value within limits for Cr 267.716 Recovery = Not calculated									
Cu	324.752†	223.6	0.6061 ug/L	0.25494	0.6061 ppb	0.25494	42.06%		
QC value within limits for Cu 324.752 Recovery = Not calculated									
Fe	238.204 Radial†	0.8	6.2231 ug/L	6.13135	6.2231 ppb	6.13135	98.53%		
QC value within limits for Fe 238.204 Radial Recovery = Not calculated									
K	766.490 Radial†	768.8	141.61 ug/L	19.348	141.61 ppb	19.348	13.66%		
QC value within limits for K 766.490 Radial Recovery = Not calculated									
Mg	279.077 IEC†	-0.9	-26.993 ug/L	72.6371	-26.993 ppb	72.6371	269.10%		
QC value within limits for Mg 279.077 IEC Recovery = Not calculated									
Mn	257.610†	24.7	0.0258 ug/L	0.00967	0.0258 ppb	0.00967	37.48%		
QC value within limits for Mn 257.610 Recovery = Not calculated									
Mo	202.031†	4.7	0.2918 ug/L	0.27574	0.2918 ppb	0.27574	94.48%		
QC value within limits for Mo 202.031 Recovery = Not calculated									
Na	589.592 Radial†	13.0	3.0378 ug/L	15.12919	3.0378 ppb	15.12919	498.04%		
QC value within limits for Na 589.592 Radial Recovery = Not calculated									
Ni	231.604†	-3.9	-0.0877 ug/L	0.29470	-0.0877 ppb	0.29470	336.13%		
QC value within limits for Ni 231.604 Recovery = Not calculated									
P	214.914†	6.2	3.1199 ug/L	2.99102	3.1199 ppb	2.99102	95.87%		
QC value within limits for P 214.914 Recovery = Not calculated									
Pb	220.353†	6.6	0.7140 ug/L	1.71919	0.7140 ppb	1.71919	240.78%		
QC value within limits for Pb 220.353 Recovery = Not calculated									
S	181.975 Axial†	0.6	0.7673 ug/L	7.89539	0.7673 ppb	7.89539	>999.9%		
QC value within limits for S 181.975 Axial Recovery = Not calculated									
Sb	206.836†	2.6	0.8193 ug/L	0.91009	0.8193 ppb	0.91009	111.08%		
QC value within limits for Sb 206.836 Recovery = Not calculated									
Se	196.026†	2.3	1.3108 ug/L	0.64198	1.3108 ppb	0.64198	48.98%		
QC value within limits for Se 196.026 Recovery = Not calculated									
Si	251.611†	137.4	3.8553 ug/L	0.22757	3.8553 ppb	0.22757	5.90%		
QC value within limits for Si 251.611 Recovery = Not calculated									
Sn	189.927†	10.4	1.5966 ug/L	0.46726	1.5966 ppb	0.46726	29.27%		
QC value within limits for Sn 189.927 Recovery = Not calculated									
Sr	421.552†	-0.5	-0.0028 ug/L	0.10868	-0.0028 ppb	0.10868	>999.9%		
QC value within limits for Sr 421.552 Recovery = Not calculated									
Ti	334.940†	7.9	0.0119 ug/L	0.10204	0.0119 ppb	0.10204	855.13%		
QC value within limits for Ti 334.940 Recovery = Not calculated									
Tl	190.801†	0.3	0.0802 ug/L	1.24902	0.0802 ppb	1.24902	>999.9%		
QC value within limits for Tl 190.801 Recovery = Not calculated									
U	409.014†	30.3	0.8032 ug/L	2.75213	0.8032 ppb	2.75213	342.66%		
QC value within limits for U 409.014 Recovery = Not calculated									
V	292.402†	-62.5	-0.3791 ug/L	0.26557	-0.3791 ppb	0.26557	70.05%		
QC value within limits for V 292.402 Recovery = Not calculated									
Zn	213.857†	131.5	1.1003 ug/L	0.09600	1.1003 ppb	0.09600	8.73%		
QC value within limits for Zn 213.857 Recovery = Not calculated									
SiO2†	116.2	6.9253 ug/L	0.84508	6.9253 ppb	0.84508	12.20%			
QC value within limits for SiO2 Recovery = Not calculated									
All analyte(s) passed QC.									

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Analysis Begun

Start Time: 1/19/2010 16:20:05

Plasma On Time: 1/18/2010 05:48:39

Logged In Analyst: Optima3

Technique: ICP Continuous

Spectrometer Model: Optima 5300 DV, S/N 077C7090601 Autosampler Model: S10

Sample Information File: C:\pe\Optima3\Sample Information\011910B.sif

Batch ID:

Results Data Set: 011910

Results Library: C:\pe\Optima3\Results\Results.mdb

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Method Loaded

Method Name: General Eng.2AX

Method Last Saved: 1/19/2010 14:37:57

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 361.383	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 361.383	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 361.383	Yes
K 766.490 Radial	Lin Thru 0	Peak Area	Radial	Sc 361.383	Yes
Mg 279.077 IEC	Lin Thru 0	Peak Area	Radial	Sc 361.383	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 361.383	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 361.383	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: 1/19/2010 16:20:06

Analyst: HSC

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

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Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5137.3	5137.3	91.2 %		16:22:00
1	Y RADIAL	5426.6	5426.6	91.22 %		16:22:00
1	Al 396.153Radial†	-31.5	-31.0	-21.116 ug/L	-21.116 ppb	16:22:00

1	Ca 317.933Radial†	8.6	-15.4	-23.329 ug/L	-23.329 ppb	16:22:20
1	Fe 238.204 Radial†	43314.9	47465.5	384240 ug/L	384240 ppb	16:22:00
1	K 766.490 Radial†	2720.4	69.1	12.794 ug/L	12.794 ppb	16:22:00
1	Mg 279.077 IEC†	11.1	9.7	-112.24 ug/L	-112.24 ppb	16:22:20
1	Na 589.592 Radial†	-1003.5	-47.6	-11.090 ug/L	-11.090 ppb	16:22:00
1	Sr 421.552†	96.5	93.9	0.5351 ug/L	0.5351 ppb	16:22:00
1	Sc 361.383	899988.3	899988.3	92.085 %		16:23:17
1	Y 371.029	753720.7	753720.7	91.700 %		16:23:17
1	Ag 328.068†	-27787.6	-30649.1	-1.5210 ug/L	-1.5210 ppb	16:23:17
1	As 188.979†	-220.8	-219.5	9.0684 ug/L	9.0684 ppb	16:23:37
1	B 249.677†	2120.5	2843.5	-5.2693 ug/L	-5.2693 ppb	16:23:17
1	Ba 233.527†	-1978.6	-2158.1	-2.8611 ug/L	-2.8611 ppb	16:23:37
1	Be 313.107†	-4261.6	-186.6	-0.0608 ug/L	-0.0608 ppb	16:23:17
1	Cd 226.502†	3350.6	3855.1	-1.5340 ug/L	-1.5340 ppb	16:23:37
1	Co 228.616†	205.8	297.8	-0.2193 ug/L	-0.2193 ppb	16:23:37
1	Cr 267.716†	-562.5	-699.5	0.3824 ug/L	0.3824 ppb	16:23:37
1	Cu 324.752†	-2353.0	-8764.6	-3.4606 ug/L	-3.4606 ppb	16:23:17
1	Mn 257.610†	-41180.8	-45214.1	-6.0675 ug/L	-6.0675 ppb	16:23:17
1	Mo 202.031†	-389.7	-446.6	2.1217 ug/L	2.1217 ppb	16:23:37
1	Ni 231.604†	225.4	129.4	2.9001 ug/L	2.9001 ppb	16:23:37
1	P 214.914†	782.4	623.9	21.721 ug/L	21.721 ppb	16:23:37
1	Pb 220.353†	225.9	268.7	-7.6184 ug/L	-7.6184 ppb	16:23:37
1	S 181.975 Axial†	57.0	14.8	17.946 ug/L	17.946 ppb	16:23:37
1	Sb 206.836†	9.9	-31.2	-0.2107 ug/L	-0.2107 ppb	16:23:37
1	Se 196.026†	-2185.3	-2344.2	33.631 ug/L	33.631 ppb	16:23:37
1	Si 251.611†	-790.4	-1388.8	-38.660 ug/L	-38.660 ppb	16:23:37
1	Sn 189.927†	-24.5	-31.1	1.6730 ug/L	1.6730 ppb	16:23:37
1	Ti 334.940†	-1371.9	-94.2	-0.1807 ug/L	-0.1807 ppb	16:23:37
1	Tl 190.801†	-46.3	-13.0	-3.8098 ug/L	-3.8098 ppb	16:23:37
1	U 409.014†	366.2	2207.6	14.822 ug/L	14.822 ppb	16:23:17
1	V 292.402†	6838.1	8880.0	-1.8126 ug/L	-1.8126 ppb	16:23:37
1	Zn 213.857†	4798.5	4398.7	-0.4394 ug/L	-0.4394 ppb	16:23:37
1	SiO2†	-756.0	-1367.0	-80.772 ug/L	-80.772 ppb	16:24:34
2	Sc Radial	5181.8	5181.8	92.0 %		16:22:25
2	Y RADIAL	5450.7	5450.7	91.62 %		16:22:25
2	Al 396.153Radial†	-24.4	-23.1	-15.362 ug/L	-15.362 ppb	16:22:25
2	Ca 317.933Radial†	13.5	-10.2	-15.344 ug/L	-15.344 ppb	16:22:45
2	Fe 238.204 Radial†	43614.1	47382.5	383560 ug/L	383560 ppb	16:22:25
2	K 766.490 Radial†	2687.0	7.2	1.3888 ug/L	1.3888 ppb	16:22:25
2	Mg 279.077 IEC†	11.5	10.0	-103.18 ug/L	-103.18 ppb	16:22:45
2	Na 589.592 Radial†	-1087.2	-129.2	-30.073 ug/L	-30.073 ppb	16:22:25
2	Sr 421.552†	101.2	98.1	0.5593 ug/L	0.5593 ppb	16:22:25
2	Sc 361.383	892242.4	892242.4	91.292 %		16:23:42
2	Y 371.029	746877.5	746877.5	90.867 %		16:23:42
2	Ag 328.068†	-27389.8	-30475.3	-1.0207 ug/L	-1.0207 ppb	16:23:42
2	As 188.979†	-226.7	-228.0	5.7611 ug/L	5.7611 ppb	16:24:03
2	B 249.677†	2285.8	3044.6	-1.1212 ug/L	-1.1212 ppb	16:23:42
2	Ba 233.527†	-1990.6	-2189.9	-3.0954 ug/L	-3.0954 ppb	16:24:03
2	Be 313.107†	-4283.3	-250.4	-0.0816 ug/L	-0.0816 ppb	16:23:42
2	Cd 226.502†	3339.8	3874.8	-1.2689 ug/L	-1.2689 ppb	16:24:03
2	Co 228.616†	240.9	338.1	0.5223 ug/L	0.5223 ppb	16:24:03
2	Cr 267.716†	-600.5	-746.3	-0.1082 ug/L	-0.1082 ppb	16:24:03
2	Cu 324.752†	-2135.0	-8548.0	-2.9099 ug/L	-2.9099 ppb	16:23:42
2	Mn 257.610†	-40471.3	-44825.2	-5.7557 ug/L	-5.7557 ppb	16:23:42
2	Mo 202.031†	-385.4	-445.5	2.1357 ug/L	2.1357 ppb	16:24:03
2	Ni 231.604†	226.3	132.5	2.9689 ug/L	2.9689 ppb	16:24:03
2	P 214.914†	767.7	615.3	17.627 ug/L	17.627 ppb	16:24:03
2	Pb 220.353†	251.8	299.3	-4.2403 ug/L	-4.2403 ppb	16:24:03
2	S 181.975 Axial†	67.7	27.1	32.849 ug/L	32.849 ppb	16:24:03
2	Sb 206.836†	24.6	-14.9	4.6711 ug/L	4.6711 ppb	16:24:03
2	Se 196.026†	-2184.0	-2363.4	20.463 ug/L	20.463 ppb	16:24:03
2	Si 251.611†	-808.4	-1416.0	-39.424 ug/L	-39.424 ppb	16:24:03
2	Sn 189.927†	-23.3	-30.1	1.8258 ug/L	1.8258 ppb	16:24:03
2	Ti 334.940†	-1391.6	-128.8	-0.2289 ug/L	-0.2289 ppb	16:24:03
2	Tl 190.801†	-44.3	-11.2	-3.3316 ug/L	-3.3316 ppb	16:24:03
2	U 409.014†	429.4	2280.2	16.828 ug/L	16.828 ppb	16:23:42
2	V 292.402†	6933.8	9049.3	-0.6722 ug/L	-0.6722 ppb	16:24:03
2	Zn 213.857†	4842.1	4491.8	0.4034 ug/L	0.4034 ppb	16:24:03
2	SiO2†	-862.9	-1491.1	-88.179 ug/L	-88.179 ppb	16:24:39
3	Sc Radial	5203.4	5203.4	92.4 %		16:22:50
3	Y RADIAL	5501.6	5501.6	92.48 %		16:22:50

3	Al 396.153Radial†	-8.6	-5.8	-2.8667 ug/L	-2.8667 ppb	16:22:50
3	Ca 317.933Radial†	11.9	-11.9	-18.034 ug/L	-18.034 ppb	16:23:10
3	Fe 238.204 Radial†	43633.7	47207.2	382140 ug/L	382140 ppb	16:22:50
3	K 766.490 Radial†	2583.7	-116.7	-21.438 ug/L	-21.438 ppb	16:22:50
3	Mg 279.077 IEC†	12.8	11.4	-59.895 ug/L	-59.895 ppb	16:23:10
3	Na 589.592 Radial†	-1030.6	-63.0	-14.676 ug/L	-14.676 ppb	16:22:50
3	Sr 421.552†	73.1	67.2	0.3830 ug/L	0.3830 ppb	16:22:50
3	Sc 361.383	908070.6	908070.6	92.912 %		16:24:08
3	Y 371.029	759574.4	759574.4	92.412 %		16:24:08
3	Ag 328.068†	-28001.8	-30611.0	-2.0467 ug/L	-2.0467 ppb	16:24:08
3	As 188.979†	-222.6	-219.2	8.6712 ug/L	8.6712 ppb	16:24:28
3	B 249.677†	2283.3	2998.3	-1.8193 ug/L	-1.8193 ppb	16:24:08
3	Ba 233.527†	-1976.9	-2137.2	-2.7841 ug/L	-2.7841 ppb	16:24:28
3	Be 313.107†	-4356.3	-247.3	-0.0804 ug/L	-0.0804 ppb	16:24:08
3	Cd 226.502†	3354.7	3827.1	-1.5942 ug/L	-1.5942 ppb	16:24:28
3	Co 228.616†	215.7	306.4	-0.0341 ug/L	-0.0341 ppb	16:24:28
3	Cr 267.716†	-610.0	-745.1	-0.1260 ug/L	-0.1260 ppb	16:24:28
3	Cu 324.752†	-2314.0	-8699.9	-3.3974 ug/L	-3.3974 ppb	16:24:08
3	Mn 257.610†	-41257.0	-44898.1	-5.9685 ug/L	-5.9685 ppb	16:24:08
3	Mo 202.031†	-400.6	-454.5	1.4641 ug/L	1.4641 ppb	16:24:28
3	Ni 231.604†	225.0	126.8	2.8404 ug/L	2.8404 ppb	16:24:28
3	P 214.914†	794.3	629.2	26.168 ug/L	26.168 ppb	16:24:28
3	Pb 220.353†	221.6	261.9	-8.1576 ug/L	-8.1576 ppb	16:24:28
3	S 181.975 Axial†	67.0	25.0	30.307 ug/L	30.307 ppb	16:24:28
3	Sb 206.836†	26.4	-13.5	5.0534 ug/L	5.0534 ppb	16:24:28
3	Se 196.026†	-2205.7	-2345.0	25.786 ug/L	25.786 ppb	16:24:28
3	Si 251.611†	-757.5	-1345.8	-37.447 ug/L	-37.447 ppb	16:24:28
3	Sn 189.927†	-22.5	-28.8	2.0012 ug/L	2.0012 ppb	16:24:28
3	Ti 334.940†	-1360.3	-68.5	-0.1495 ug/L	-0.1495 ppb	16:24:28
3	Tl 190.801†	-68.0	-36.0	-9.9244 ug/L	-9.9244 ppb	16:24:28
3	U 409.014†	472.1	2318.1	17.994 ug/L	17.994 ppb	16:24:08
3	V 292.402†	6795.8	8768.4	-2.1923 ug/L	-2.1923 ppb	16:24:28
3	Zn 213.857†	4845.4	4402.8	-0.2022 ug/L	-0.2022 ppb	16:24:28
3	SiO2†	-842.0	-1452.2	-85.845 ug/L	-85.845 ppb	16:24:44

Mean Data: LRI

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	900100.4	92.096 %		0.8098			0.88%
Sc Radial	5174.2	91.9 %		0.60			0.65%
Y 371.029	753390.8	91.660 %		0.7732			0.84%
Y RADIAL	5459.7	91.77 %		0.644			0.70%
Ag 328.068†	-30578.5	-1.5294 ug/L		0.51303	-1.5294 ppb	0.51303	33.54%
Al 396.153Radial†	-20.0	-13.115 ug/L		9.3297	-13.115 ppb	9.3297	71.14%
As 188.979†	-222.2	7.8335 ug/L		1.80578	7.8335 ppb	1.80578	23.05%
B 249.677†	2962.1	-2.7366 ug/L		2.22100	-2.7366 ppb	2.22100	81.16%
Ba 233.527†	-2161.8	-2.9136 ug/L		0.16216	-2.9136 ppb	0.16216	5.57%
Be 313.107†	-228.1	-0.0743 ug/L		0.01169	-0.0743 ppb	0.01169	15.73%
Ca 317.933Radial†	-12.5	-18.903 ug/L		4.0628	-18.903 ppb	4.0628	21.49%
Cd 226.502†	3852.3	-1.4657 ug/L		0.17307	-1.4657 ppb	0.17307	11.81%
Co 228.616†	314.1	0.0896 ug/L		0.38598	0.0896 ppb	0.38598	430.75%
Cr 267.716†	-730.3	0.0494 ug/L		0.28849	0.0494 ppb	0.28849	583.82%
Cu 324.752†	-8670.8	-3.2560 ug/L		0.30138	-3.2560 ppb	0.30138	9.26%
Fe 238.204 Radial†	47351.7	383310 ug/L		1067.6	383310 ppb	1067.6	0.28%
K 766.490 Radial†	-13.5	-2.4187 ug/L		17.43077	-2.4187 ppb	17.43077	720.67%
Mg 279.077 IEC†	10.4	-91.774 ug/L		27.9773	-91.774 ppb	27.9773	30.48%
Mn 257.610†	-44979.1	-5.9306 ug/L		0.15934	-5.9306 ppb	0.15934	2.69%
Mo 202.031†	-448.9	1.9072 ug/L		0.38376	1.9072 ppb	0.38376	20.12%
Na 589.592 Radial†	-80.0	-18.613 ug/L		10.0852	-18.613 ppb	10.0852	54.18%
Ni 231.604†	129.6	2.9032 ug/L		0.06428	2.9032 ppb	0.06428	2.21%
P 214.914†	622.8	21.839 ug/L		4.2719	21.839 ppb	4.2719	19.56%
Pb 220.353†	276.6	-6.6721 ug/L		2.12319	-6.6721 ppb	2.12319	31.82%
S 181.975 Axial†	22.3	27.034 ug/L		7.9722	27.034 ppb	7.9722	29.49%
Sb 206.836†	-19.9	3.1712 ug/L		2.93506	3.1712 ppb	2.93506	92.55%
Se 196.026†	-2350.8	26.627 ug/L		6.6245	26.627 ppb	6.6245	24.88%
Si 251.611†	-1383.5	-38.511 ug/L		0.9974	-38.511 ppb	0.9974	2.59%
Sn 189.927†	-30.0	1.8333 ug/L		0.16425	1.8333 ppb	0.16425	8.96%
Sr 421.552†	86.4	0.4925 ug/L		0.09554	0.4925 ppb	0.09554	19.40%
Ti 334.940†	-97.2	-0.1864 ug/L		0.04000	-0.1864 ppb	0.04000	21.46%
Tl 190.801†	-20.1	-5.6886 ug/L		3.67607	-5.6886 ppb	3.67607	64.62%

U 409.014†	2268.6	16.548 ug/L	1.6042	16.548 ppb	1.6042	9.69%
V 292.402†	8899.3	-1.5590 ug/L	0.79111	-1.5590 ppb	0.79111	50.74%
Zn 213.857†	4431.1	-0.0794 ug/L	0.43460	-0.0794 ppb	0.43460	547.13%
SiO2†	-1436.8	-84.932 ug/L	3.7868	-84.932 ppb	3.7868	4.46%

Sequence No.: 2

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 1/19/2010 16:26:55

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5355.2	5355.2	95.1	%		16:28:48
1	Y RADIAL	5635.9	5635.9	94.73	%		16:28:48
1	Al 396.153Radial†	6720.9	7070.6	5096.4	ug/L	5096.4 ppb	16:28:48
1	Ca 317.933Radial†	3177.1	3315.9	5008.6	ug/L	5008.6 ppb	16:29:08
1	Fe 238.204 Radial†	587.2	605.1	4913.3	ug/L	4913.3 ppb	16:29:08
1	K 766.490 Radial†	28711.7	27278.0	5018.0	ug/L	5018.0 ppb	16:28:48
1	Mg 279.077 IEC†	164.5	170.5	5085.6	ug/L	5085.6 ppb	16:29:08
1	Na 589.592 Radial†	38793.6	41844.3	9741.5	ug/L	9741.5 ppb	16:28:48
1	Sr 421.552†	83174.6	87447.4	498.14	ug/L	498.14 ppb	16:28:48
1	Sc 361.383	933188.1	933188.1	95.482	%		16:30:07
1	Y 371.029	774903.1	774903.1	94.277	%		16:30:07
1	Ag 328.068†	118272.0	123395.9	510.97	ug/L	510.97 ppb	16:30:07
1	As 188.979†	1280.1	1361.0	506.63	ug/L	506.63 ppb	16:30:27
1	B 249.677†	23882.0	25552.9	511.28	ug/L	511.28 ppb	16:30:07
1	Ba 233.527†	71970.3	75366.6	513.62	ug/L	513.62 ppb	16:30:07
1	Be 313.107†	1489740.9	1564679.7	508.65	ug/L	508.65 ppb	16:30:07
1	Cd 226.502†	49190.5	51734.7	511.77	ug/L	511.77 ppb	16:30:07
1	Co 228.616†	26551.2	27881.9	505.52	ug/L	505.52 ppb	16:30:27
1	Cr 267.716†	47853.0	50029.0	511.22	ug/L	511.22 ppb	16:30:07
1	Cu 324.752†	186156.7	188756.7	511.82	ug/L	511.82 ppb	16:30:07
1	Mn 257.610†	499934.4	523098.7	509.39	ug/L	509.39 ppb	16:30:07
1	Mo 202.031†	7836.8	8184.3	508.23	ug/L	508.23 ppb	16:30:27
1	Ni 231.604†	21710.9	22623.0	507.19	ug/L	507.19 ppb	16:30:27
1	P 214.914†	4816.1	4818.3	2422.1	ug/L	2422.1 ppb	16:30:27
1	Pb 220.353†	4465.5	4700.2	511.58	ug/L	511.58 ppb	16:30:27
1	S 181.975 Axial†	830.8	822.9	997.03	ug/L	997.03 ppb	16:30:27
1	Sb 206.836†	1620.3	1655.1	516.77	ug/L	516.77 ppb	16:30:27
1	Se 196.026†	822.3	890.1	520.40	ug/L	520.40 ppb	16:30:27
1	Si 251.611†	87767.5	91390.4	2560.2	ug/L	2560.2 ppb	16:30:07
1	Sn 189.927†	3134.8	3278.6	504.88	ug/L	504.88 ppb	16:30:27
1	Ti 334.940†	345947.3	363713.8	504.30	ug/L	504.30 ppb	16:30:07
1	Tl 190.801†	1779.4	1900.9	510.45	ug/L	510.45 ppb	16:30:27
1	U 409.014†	15784.9	18341.8	485.26	ug/L	485.26 ppb	16:30:07
1	V 292.402†	77616.9	82744.1	513.85	ug/L	513.85 ppb	16:30:07
1	Zn 213.857†	59159.5	61146.9	507.43	ug/L	507.43 ppb	16:30:07
1	SiO2†	87384.0	90973.2	5411.9	ug/L	5411.9 ppb	16:31:27
2	Sc Radial	5166.1	5166.1	91.7	%		16:29:13
2	Y RADIAL	5420.8	5420.8	91.12	%		16:29:13
2	Al 396.153Radial†	6513.6	7103.3	5120.1	ug/L	5120.1 ppb	16:29:13
2	Ca 317.933Radial†	3175.4	3436.4	5190.6	ug/L	5190.6 ppb	16:29:33
2	Fe 238.204 Radial†	587.4	627.9	5098.1	ug/L	5098.1 ppb	16:29:33
2	K 766.490 Radial†	27758.3	27343.6	5030.0	ug/L	5030.0 ppb	16:29:13
2	Mg 279.077 IEC†	163.5	175.8	5243.6	ug/L	5243.6 ppb	16:29:33
2	Na 589.592 Radial†	37318.2	41728.8	9714.6	ug/L	9714.6 ppb	16:29:13
2	Sr 421.552†	80406.8	87631.0	499.19	ug/L	499.19 ppb	16:29:13
2	Sc 361.383	929745.0	929745.0	95.129	%		16:30:34
2	Y 371.029	771734.8	771734.8	93.891	%		16:30:34
2	Ag 328.068†	117802.2	123360.8	510.88	ug/L	510.88 ppb	16:30:34
2	As 188.979†	1272.7	1358.2	505.62	ug/L	505.62 ppb	16:30:54
2	B 249.677†	23711.8	25466.6	509.52	ug/L	509.52 ppb	16:30:34
2	Ba 233.527†	71679.7	75340.2	513.45	ug/L	513.45 ppb	16:30:34
2	Be 313.107†	1483723.7	1564132.4	508.47	ug/L	508.47 ppb	16:30:34
2	Cd 226.502†	49221.3	51957.8	513.96	ug/L	513.96 ppb	16:30:34
2	Co 228.616†	26471.2	27900.8	505.86	ug/L	505.86 ppb	16:30:54
2	Cr 267.716†	47751.2	50107.6	512.02	ug/L	512.02 ppb	16:30:34
2	Cu 324.752†	184724.4	187973.1	509.70	ug/L	509.70 ppb	16:30:34
2	Mn 257.610†	498320.9	523341.6	509.64	ug/L	509.64 ppb	16:30:34
2	Mo 202.031†	7802.1	8178.3	507.87	ug/L	507.87 ppb	16:30:54
2	Ni 231.604†	21644.5	22637.4	507.52	ug/L	507.52 ppb	16:30:54

2	P 214.914†	4809.7	4830.3	2428.7 ug/L	2428.7 ppb	16:30:54
2	Pb 220.353†	4469.2	4721.5	513.87 ug/L	513.87 ppb	16:30:54
2	S 181.975 Axial†	814.7	809.3	980.45 ug/L	980.45 ppb	16:30:54
2	Sb 206.836†	1620.2	1661.3	518.65 ug/L	518.65 ppb	16:30:54
2	Se 196.026†	823.7	894.8	523.69 ug/L	523.69 ppb	16:30:54
2	Si 251.611†	87341.2	91282.6	2557.2 ug/L	2557.2 ppb	16:30:34
2	Sn 189.927†	3128.5	3284.1	505.76 ug/L	505.76 ppb	16:30:54
2	Ti 334.940†	344439.2	363470.2	503.97 ug/L	503.97 ppb	16:30:34
2	Tl 190.801†	1761.8	1889.3	507.35 ug/L	507.35 ppb	16:30:54
2	U 409.014†	15770.8	18388.2	486.47 ug/L	486.47 ppb	16:30:34
2	V 292.402†	77274.0	82684.7	513.46 ug/L	513.46 ppb	16:30:34
2	Zn 213.857†	58959.5	61166.0	507.57 ug/L	507.57 ppb	16:30:34
2	SiO2†	86205.3	90073.1	5358.2 ug/L	5358.2 ppb	16:31:32
3	Sc Radial	5312.3	5312.3	94.3 %		16:29:38
3	Y RADIAL	5576.3	5576.3	93.73 %		16:29:38
3	Al 396.153Radial†	6656.2	7059.0	5087.8 ug/L	5087.8 ppb	16:29:38
3	Ca 317.933Radial†	3229.4	3398.2	5133.0 ug/L	5133.0 ppb	16:29:58
3	Fe 238.204 Radial†	596.6	620.0	5034.4 ug/L	5034.4 ppb	16:29:58
3	K 766.490 Radial†	28277.3	27060.8	4978.0 ug/L	4978.0 ppb	16:29:38
3	Mg 279.077 IEC†	167.4	174.9	5219.1 ug/L	5219.1 ppb	16:29:58
3	Na 589.592 Radial†	37875.0	41199.3	9591.3 ug/L	9591.3 ppb	16:29:38
3	Sr 421.552†	82067.0	86978.2	495.47 ug/L	495.47 ppb	16:29:38
3	Sc 361.383	926499.4	926499.4	94.797 %		16:31:02
3	Y 371.029	769448.4	769448.4	93.613 %		16:31:02
3	Ag 328.068†	117271.7	123235.0	510.35 ug/L	510.35 ppb	16:31:02
3	As 188.979†	1283.6	1374.4	511.58 ug/L	511.58 ppb	16:31:22
3	B 249.677†	23570.7	25405.1	508.28 ug/L	508.28 ppb	16:31:02
3	Ba 233.527†	71361.2	75268.2	512.96 ug/L	512.96 ppb	16:31:02
3	Be 313.107†	1472416.2	1557668.1	506.37 ug/L	506.37 ppb	16:31:02
3	Cd 226.502†	48848.2	51745.6	511.87 ug/L	511.87 ppb	16:31:02
3	Co 228.616†	26547.3	28078.5	509.09 ug/L	509.09 ppb	16:31:22
3	Cr 267.716†	47542.5	50063.2	511.57 ug/L	511.57 ppb	16:31:02
3	Cu 324.752†	183478.0	187338.6	507.98 ug/L	507.98 ppb	16:31:02
3	Mn 257.610†	495346.9	522039.5	508.36 ug/L	508.36 ppb	16:31:02
3	Mo 202.031†	7852.1	8259.8	512.92 ug/L	512.92 ppb	16:31:22
3	Ni 231.604†	21705.7	22781.6	510.75 ug/L	510.75 ppb	16:31:22
3	P 214.914†	4812.9	4851.4	2440.1 ug/L	2440.1 ppb	16:31:22
3	Pb 220.353†	4466.3	4734.9	515.34 ug/L	515.34 ppb	16:31:22
3	S 181.975 Axial†	829.6	828.0	1003.2 ug/L	1003.2 ppb	16:31:22
3	Sb 206.836†	1628.3	1675.8	523.15 ug/L	523.15 ppb	16:31:22
3	Se 196.026†	837.6	912.5	533.40 ug/L	533.40 ppb	16:31:22
3	Si 251.611†	86764.2	90995.6	2549.1 ug/L	2549.1 ppb	16:31:02
3	Sn 189.927†	3125.6	3292.5	507.04 ug/L	507.04 ppb	16:31:22
3	Ti 334.940†	342404.5	362592.2	502.75 ug/L	502.75 ppb	16:31:02
3	Tl 190.801†	1789.1	1924.6	516.73 ug/L	516.73 ppb	16:31:22
3	U 409.014†	15666.0	18335.7	485.08 ug/L	485.08 ppb	16:31:02
3	V 292.402†	77013.7	82694.6	513.60 ug/L	513.60 ppb	16:31:02
3	Zn 213.857†	58609.9	61014.4	506.29 ug/L	506.29 ppb	16:31:02
3	SiO2†	87828.1	92102.4	5479.1 ug/L	5479.1 ppb	16:31:38

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	929810.8	95.136 %	0.3422			0.36%
Sc Radial	5277.9	93.7 %	1.76			1.88%
Y 371.029	772028.8	93.927 %	0.3333			0.35%
Y RADIAL	5544.3	93.19 %	1.867			2.00%
Ag 328.068†	123330.6	510.73 ug/L	0.338	510.73 ppb	0.338	0.07%
QC value within limits for Ag 328.068 Recovery = 102.15%						
Al 396.153Radial†	7077.6	5101.4 ug/L	16.73	5101.4 ppb	16.73	0.33%
QC value within limits for Al 396.153Radial Recovery = 102.03%						
As 188.979†	1364.5	507.94 ug/L	3.186	507.94 ppb	3.186	0.63%
QC value within limits for As 188.979 Recovery = 101.59%						
B 249.677†	25474.9	509.69 ug/L	1.507	509.69 ppb	1.507	0.30%
QC value within limits for B 249.677 Recovery = 101.94%						
Ba 233.527†	75325.0	513.34 ug/L	0.345	513.34 ppb	0.345	0.07%
QC value within limits for Ba 233.527 Recovery = 102.67%						
Be 313.107†	1562160.1	507.83 ug/L	1.267	507.83 ppb	1.267	0.25%
QC value within limits for Be 313.107 Recovery = 101.57%						
Ca 317.933Radial†	3383.5	5110.7 ug/L	93.00	5110.7 ppb	93.00	1.82%

QC value within limits for Ca 317.933 Radial Recovery = 102.21%

Cd 226.502†	51812.7	512.53 ug/L	1.237	512.53 ppb	1.237	0.24%
QC value within limits for Cd 226.502 Recovery = 102.51%						
Co 228.616†	27953.8	506.82 ug/L	1.974	506.82 ppb	1.974	0.39%
QC value within limits for Co 228.616 Recovery = 101.36%						
Cr 267.716†	50066.6	511.60 ug/L	0.403	511.60 ppb	0.403	0.08%
QC value within limits for Cr 267.716 Recovery = 102.32%						
Cu 324.752†	188022.8	509.83 ug/L	1.923	509.83 ppb	1.923	0.38%
QC value within limits for Cu 324.752 Recovery = 101.97%						
Fe 238.204 Radial†	617.7	5015.3 ug/L	93.91	5015.3 ppb	93.91	1.87%
QC value within limits for Fe 238.204 Radial Recovery = 100.31%						
K 766.490 Radial†	27227.5	5008.7 ug/L	27.23	5008.7 ppb	27.23	0.54%
QC value within limits for K 766.490 Radial Recovery = 100.17%						
Mg 279.077 IEC†	173.7	5182.8 ug/L	85.04	5182.8 ppb	85.04	1.64%
QC value within limits for Mg 279.077 IEC Recovery = 103.66%						
Mn 257.610†	522826.6	509.13 ug/L	0.675	509.13 ppb	0.675	0.13%
QC value within limits for Mn 257.610 Recovery = 101.83%						
Mo 202.031†	8207.5	509.68 ug/L	2.818	509.68 ppb	2.818	0.55%
QC value within limits for Mo 202.031 Recovery = 101.94%						
Na 589.592 Radial†	41590.8	9682.5 ug/L	80.06	9682.5 ppb	80.06	0.83%
QC value within limits for Na 589.592 Radial Recovery = 96.82%						
Ni 231.604†	22680.6	508.49 ug/L	1.966	508.49 ppb	1.966	0.39%
QC value within limits for Ni 231.604 Recovery = 101.70%						
P 214.914†	4833.3	2430.3 ug/L	9.10	2430.3 ppb	9.10	0.37%
QC value within limits for P 214.914 Recovery = 97.21%						
Pb 220.353†	4718.9	513.60 ug/L	1.898	513.60 ppb	1.898	0.37%
QC value within limits for Pb 220.353 Recovery = 102.72%						
S 181.975 Axial†	820.1	993.56 ug/L	11.755	993.56 ppb	11.755	1.18%
QC value within limits for S 181.975 Axial Recovery = 99.36%						
Sb 206.836†	1664.1	519.52 ug/L	3.278	519.52 ppb	3.278	0.63%
QC value within limits for Sb 206.836 Recovery = 103.90%						
Se 196.026†	899.1	525.83 ug/L	6.759	525.83 ppb	6.759	1.29%
QC value within limits for Se 196.026 Recovery = 105.17%						
Si 251.611†	91222.9	2555.5 ug/L	5.76	2555.5 ppb	5.76	0.23%
QC value within limits for Si 251.611 Recovery = 102.22%						
Sn 189.927†	3285.1	505.89 ug/L	1.089	505.89 ppb	1.089	0.22%
QC value within limits for Sn 189.927 Recovery = 101.18%						
Sr 421.552†	87352.2	497.60 ug/L	1.918	497.60 ppb	1.918	0.39%
QC value within limits for Sr 421.552 Recovery = 99.52%						
Ti 334.940†	363258.7	503.67 ug/L	0.817	503.67 ppb	0.817	0.16%
QC value within limits for Ti 334.940 Recovery = 100.73%						
Tl 190.801†	1904.9	511.51 ug/L	4.779	511.51 ppb	4.779	0.93%
QC value within limits for Tl 190.801 Recovery = 102.30%						
U 409.014†	18355.2	485.60 ug/L	0.755	485.60 ppb	0.755	0.16%
QC value within limits for U 409.014 Recovery = 97.12%						
V 292.402†	82707.8	513.63 ug/L	0.198	513.63 ppb	0.198	0.04%
QC value within limits for V 292.402 Recovery = 102.73%						
Zn 213.857†	61109.1	507.10 ug/L	0.702	507.10 ppb	0.702	0.14%
QC value within limits for Zn 213.857 Recovery = 101.42%						
SiO2†	91049.5	5416.4 ug/L	60.57	5416.4 ppb	60.57	1.12%
QC value within limits for SiO2 Recovery = 101.29%						

All analyte(s) passed QC.

Sequence No.: 3

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 1/19/2010 16:33:48

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5357.1	5357.1	95.1 %		16:35:40
1	Y RADIAL	5716.6	5716.6	96.09 %		16:35:40
1	Al 396.153Radial†	3.3	6.9	5.0441 ug/L	5.0441 ppb	16:35:40
1	Ca 317.933Radial†	27.6	4.2	6.2990 ug/L	6.2990 ppb	16:36:00
1	Fe 238.204 Radial†	11.5	-0.2	-1.8820 ug/L	-1.8820 ppb	16:36:00
1	K 766.490 Radial†	2901.9	137.6	25.341 ug/L	25.341 ppb	16:35:40
1	Mg 279.077 IEC†	3.1	0.8	24.412 ug/L	24.412 ppb	16:36:00
1	Na 589.592 Radial†	-1046.5	-47.7	-11.114 ug/L	-11.114 ppb	16:35:40
1	Sr 421.552†	17.1	6.1	0.0349 ug/L	0.0349 ppb	16:35:40
1	Sc 361.383	886978.7	886978.7	90.754 %		16:36:57
1	Y 371.029	775466.6	775466.6	94.345 %		16:36:57
1	Ag 328.068†	453.4	26.7	0.1063 ug/L	0.1063 ppb	16:36:57
1	As 188.979†	-16.7	1.9	0.6924 ug/L	0.6924 ppb	16:37:17
1	B 249.677†	6.4	547.9	11.011 ug/L	11.011 ppb	16:36:57
1	Ba 233.527†	10.2	1.7	0.0078 ug/L	0.0078 ppb	16:37:17
1	Be 313.107†	-4348.8	-350.5	-0.1144 ug/L	-0.1144 ppb	16:36:57
1	Cd 226.502†	-222.7	-28.9	-0.2871 ug/L	-0.2871 ppb	16:37:17
1	Co 228.616†	-73.2	-6.4	-0.1169 ug/L	-0.1169 ppb	16:37:17
1	Cr 267.716†	108.7	31.2	0.3183 ug/L	0.3183 ppb	16:37:17
1	Cu 324.752†	6123.1	537.6	1.4606 ug/L	1.4606 ppb	16:36:57
1	Mn 257.610†	455.4	8.2	0.0068 ug/L	0.0068 ppb	16:37:17
1	Mo 202.031†	15.1	-6.7	-0.4167 ug/L	-0.4167 ppb	16:37:17
1	Ni 231.604†	102.7	-2.2	-0.0492 ug/L	-0.0492 ppb	16:37:17
1	P 214.914†	221.4	18.2	9.2440 ug/L	9.2440 ppb	16:37:17
1	Pb 220.353†	-51.0	-32.7	-3.5524 ug/L	-3.5524 ppb	16:37:17
1	S 181.975 Axial†	54.0	12.4	15.044 ug/L	15.044 ppb	16:37:17
1	Sb 206.836†	37.3	-0.8	-0.2435 ug/L	-0.2435 ppb	16:37:17
1	Se 196.026†	-25.9	0.4	0.2124 ug/L	0.2124 ppb	16:37:17
1	Si 251.611†	540.0	64.5	1.8176 ug/L	1.8176 ppb	16:37:17
1	Sn 189.927†	3.0	-1.3	-0.1983 ug/L	-0.1983 ppb	16:37:17
1	Ti 334.940†	-1475.4	-230.1	-0.3182 ug/L	-0.3182 ppb	16:36:57
1	Tl 190.801†	-32.9	1.1	0.2837 ug/L	0.2837 ppb	16:37:17
1	U 409.014†	-1815.3	-190.4	-5.0550 ug/L	-5.0550 ppb	16:36:57
1	V 292.402†	-1576.8	-283.3	-1.7509 ug/L	-1.7509 ppb	16:36:57
1	Zn 213.857†	817.8	88.9	0.7426 ug/L	0.7426 ppb	16:37:17
1	SiO2†	552.5	62.9	3.7619 ug/L	3.7619 ppb	16:38:13
2	Sc Radial	5413.1	5413.1	96.1 %		16:36:05
2	Y RADIAL	5768.4	5768.4	96.96 %		16:36:05
2	Al 396.153Radial†	-16.9	-14.2	-10.283 ug/L	-10.283 ppb	16:36:05
2	Ca 317.933Radial†	23.9	0.0	0.0039 ug/L	0.0039 ppb	16:36:25
2	Fe 238.204 Radial†	13.0	1.1	8.9447 ug/L	8.9447 ppb	16:36:25
2	K 766.490 Radial†	2971.6	178.5	32.886 ug/L	32.886 ppb	16:36:05
2	Mg 279.077 IEC†	1.6	-0.9	-25.665 ug/L	-25.665 ppb	16:36:25
2	Na 589.592 Radial†	-1115.1	-107.7	-25.082 ug/L	-25.082 ppb	16:36:05
2	Sr 421.552†	26.4	15.6	0.0889 ug/L	0.0889 ppb	16:36:05
2	Sc 361.383	896352.2	896352.2	91.713 %		16:37:22
2	Y 371.029	787241.2	787241.2	95.778 %		16:37:22
2	Ag 328.068†	326.2	-117.3	-0.4788 ug/L	-0.4788 ppb	16:37:22
2	As 188.979†	-12.5	6.7	2.4655 ug/L	2.4655 ppb	16:37:42
2	B 249.677†	22.0	564.7	11.347 ug/L	11.347 ppb	16:37:22
2	Ba 233.527†	15.3	7.1	0.0463 ug/L	0.0463 ppb	16:37:42
2	Be 313.107†	-4367.4	-320.7	-0.1046 ug/L	-0.1046 ppb	16:37:22
2	Cd 226.502†	-216.6	-19.8	-0.1980 ug/L	-0.1980 ppb	16:37:42
2	Co 228.616†	-75.0	-7.5	-0.1348 ug/L	-0.1348 ppb	16:37:42
2	Cr 267.716†	81.6	0.4	0.0057 ug/L	0.0057 ppb	16:37:42
2	Cu 324.752†	6117.0	460.5	1.2530 ug/L	1.2530 ppb	16:37:22
2	Mn 257.610†	439.2	-14.6	-0.0123 ug/L	-0.0123 ppb	16:37:42
2	Mo 202.031†	31.3	10.8	0.6704 ug/L	0.6704 ppb	16:37:42
2	Ni 231.604†	119.0	14.4	0.3220 ug/L	0.3220 ppb	16:37:42

2	P 214.914†	236.3	32.0	16.489 ug/L	16.489 ppb	16:37:42
2	Pb 220.353†	-45.5	-26.2	-2.8490 ug/L	-2.8490 ppb	16:37:42
2	S 181.975 Axial†	50.3	7.7	9.3595 ug/L	9.3595 ppb	16:37:42
2	Sb 206.836†	36.1	-2.6	-0.7456 ug/L	-0.7456 ppb	16:37:42
2	Se 196.026†	-26.8	-0.2	-0.1044 ug/L	-0.1044 ppb	16:37:42
2	Si 251.611†	543.4	62.1	1.7344 ug/L	1.7344 ppb	16:37:42
2	Sn 189.927†	9.8	6.1	0.9427 ug/L	0.9427 ppb	16:37:42
2	Ti 334.940†	-1453.5	-189.3	-0.2573 ug/L	-0.2573 ppb	16:37:22
2	Tl 190.801†	-30.2	4.3	1.1504 ug/L	1.1504 ppb	16:37:42
2	U 409.014†	-1900.4	-262.2	-6.9633 ug/L	-6.9633 ppb	16:37:22
2	V 292.402†	-1504.1	-185.8	-1.1440 ug/L	-1.1440 ppb	16:37:22
2	Zn 213.857†	830.8	93.6	0.7790 ug/L	0.7790 ppb	16:37:42
2	SiO2†	553.2	57.2	3.3924 ug/L	3.3924 ppb	16:38:18
3	Sc Radial	5340.3	5340.3	94.8 %		16:36:30
3	Y RADIAL	5661.0	5661.0	95.16 %		16:36:30
3	Al 396.153Radial†	-9.8	-6.9	-4.9983 ug/L	-4.9983 ppb	16:36:30
3	Ca 317.933Radial†	29.5	6.3	9.5302 ug/L	9.5302 ppb	16:36:50
3	Fe 238.204 Radial†	11.9	0.2	1.6040 ug/L	1.6040 ppb	16:36:50
3	K 766.490 Radial†	2928.5	175.1	32.261 ug/L	32.261 ppb	16:36:30
3	Mg 279.077 IEC†	0.9	-1.5	-45.358 ug/L	-45.358 ppb	16:36:50
3	Na 589.592 Radial†	-1113.3	-121.6	-28.319 ug/L	-28.319 ppb	16:36:30
3	Sr 421.552†	38.1	28.3	0.1613 ug/L	0.1613 ppb	16:36:30
3	Sc 361.383	888901.3	888901.3	90.950 %		16:37:48
3	Y 371.029	777254.7	777254.7	94.563 %		16:37:48
3	Ag 328.068†	481.4	56.4	0.2349 ug/L	0.2349 ppb	16:37:48
3	As 188.979†	-27.9	-10.3	-3.8165 ug/L	-3.8165 ppb	16:38:08
3	B 249.677†	10.1	551.8	11.090 ug/L	11.090 ppb	16:37:48
3	Ba 233.527†	1.1	-8.3	-0.0582 ug/L	-0.0582 ppb	16:38:08
3	Be 313.107†	-4392.6	-388.2	-0.1262 ug/L	-0.1262 ppb	16:37:48
3	Cd 226.502†	-211.3	-15.9	-0.1585 ug/L	-0.1585 ppb	16:38:08
3	Co 228.616†	-68.1	-0.6	-0.0106 ug/L	-0.0106 ppb	16:38:08
3	Cr 267.716†	95.4	16.3	0.1677 ug/L	0.1677 ppb	16:38:08
3	Cu 324.752†	6110.9	509.7	1.3859 ug/L	1.3859 ppb	16:37:48
3	Mn 257.610†	485.6	40.3	0.0412 ug/L	0.0412 ppb	16:38:08
3	Mo 202.031†	27.5	6.9	0.4292 ug/L	0.4292 ppb	16:38:08
3	Ni 231.604†	118.9	15.4	0.3451 ug/L	0.3451 ppb	16:38:08
3	P 214.914†	227.6	24.5	12.570 ug/L	12.570 ppb	16:38:08
3	Pb 220.353†	-45.2	-26.3	-2.8537 ug/L	-2.8537 ppb	16:38:08
3	S 181.975 Axial†	42.1	-0.9	-1.0520 ug/L	-1.0520 ppb	16:38:08
3	Sb 206.836†	34.7	-3.7	-1.0972 ug/L	-1.0972 ppb	16:38:08
3	Se 196.026†	-30.6	-4.7	-2.6231 ug/L	-2.6231 ppb	16:38:08
3	Si 251.611†	537.8	60.8	1.7034 ug/L	1.7034 ppb	16:38:08
3	Sn 189.927†	12.9	9.6	1.4828 ug/L	1.4828 ppb	16:38:08
3	Ti 334.940†	-1349.0	-87.7	-0.1137 ug/L	-0.1137 ppb	16:37:48
3	Tl 190.801†	-32.2	1.9	0.5136 ug/L	0.5136 ppb	16:38:08
3	U 409.014†	-1885.3	-263.0	-6.9817 ug/L	-6.9817 ppb	16:37:48
3	V 292.402†	-1441.5	-130.8	-0.8099 ug/L	-0.8099 ppb	16:37:48
3	Zn 213.857†	830.8	101.2	0.8432 ug/L	0.8432 ppb	16:38:08
3	SiO2†	554.1	63.2	3.7595 ug/L	3.7595 ppb	16:38:23

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	890744.1	91.139 %	0.5066			0.56%
Sc Radial	5370.2	95.4 %	0.68			0.71%
Y 371.029	779987.5	94.895 %	0.7720			0.81%
Y RADIAL	5715.3	96.07 %	0.903			0.94%
Ag 328.068†	-11.4	-0.0458 ug/L	0.38041	-0.0458 ppb	0.38041	829.83%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-4.7	-3.4125 ug/L	7.78584	-3.4125 ppb	7.78584	228.16%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-0.6	-0.2195 ug/L	3.23877	-0.2195 ppb	3.23877	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	554.8	11.149 ug/L	0.1761	11.149 ppb	0.1761	1.58%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	0.2	-0.0014 ug/L	0.05286	-0.0014 ppb	0.05286	>999.9%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	-353.1	-0.1151 ug/L	0.01082	-0.1151 ppb	0.01082	9.40%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	3.5	5.2777 ug/L	4.84459	5.2777 ppb	4.84459	91.79%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated						
Cd 226.502†	-21.5	-0.2145 ug/L	0.06587	-0.2145 ppb	0.06587	30.70%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-4.9	-0.0874 ug/L	0.06716	-0.0874 ppb	0.06716	76.81%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	16.0	0.1639 ug/L	0.15637	0.1639 ppb	0.15637	95.39%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	502.6	1.3665 ug/L	0.10512	1.3665 ppb	0.10512	7.69%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	0.4	2.8889 ug/L	5.52653	2.8889 ppb	5.52653	191.30%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	163.7	30.163 ug/L	4.1874	30.163 ppb	4.1874	13.88%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	-0.5	-15.537 ug/L	35.9705	-15.537 ppb	35.9705	231.51%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	11.3	0.0119 ug/L	0.02715	0.0119 ppb	0.02715	228.22%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	3.7	0.2276 ug/L	0.57091	0.2276 ppb	0.57091	250.81%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	-92.4	-21.505 ug/L	9.1433	-21.505 ppb	9.1433	42.52%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	9.2	0.2060 ug/L	0.22133	0.2060 ppb	0.22133	107.45%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	24.9	12.768 ug/L	3.6265	12.768 ppb	3.6265	28.40%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	-28.4	-3.0850 ug/L	0.40477	-3.0850 ppb	0.40477	13.12%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	6.4	7.7839 ug/L	8.16293	7.7839 ppb	8.16293	104.87%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	-2.4	-0.6954 ug/L	0.42908	-0.6954 ppb	0.42908	61.70%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-1.5	-0.8384 ug/L	1.55371	-0.8384 ppb	1.55371	185.33%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	62.5	1.7518 ug/L	0.05909	1.7518 ppb	0.05909	3.37%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	4.8	0.7424 ug/L	0.85824	0.7424 ppb	0.85824	115.61%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	16.7	0.0951 ug/L	0.06342	0.0951 ppb	0.06342	66.71%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	-169.0	-0.2297 ug/L	0.10503	-0.2297 ppb	0.10503	45.72%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	2.4	0.6492 ug/L	0.44898	0.6492 ppb	0.44898	69.16%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	-238.5	-6.3333 ug/L	1.10712	-6.3333 ppb	1.10712	17.48%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	-200.0	-1.2349 ug/L	0.47706	-1.2349 ppb	0.47706	38.63%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	94.6	0.7882 ug/L	0.05094	0.7882 ppb	0.05094	6.46%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	61.1	3.6379 ug/L	0.21265	3.6379 ppb	0.21265	5.85%
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: 1

Date Collected: 1/19/2010 17:21:15

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5353.0	5353.0	95.1 %		17:23:07
1	Y RADIAL	5607.8	5607.8	94.26 %		17:23:07
1	Al 396.153Radial†	6620.8	6968.1	5022.6 ug/L	5022.6 ppb	17:23:07
1	Ca 317.933Radial†	3156.1	3295.2	4977.3 ug/L	4977.3 ppb	17:23:27
1	Fe 238.204 Radial†	585.9	604.0	4904.3 ug/L	4904.3 ppb	17:23:27
1	K 766.490 Radial†	28242.4	26796.2	4929.3 ug/L	4929.3 ppb	17:23:07
1	Mg 279.077 IEC†	163.5	169.6	5058.4 ug/L	5058.4 ppb	17:23:27
1	Na 589.592 Radial†	38233.8	41271.5	9608.1 ug/L	9608.1 ppb	17:23:07
1	Sr 421.552†	82790.2	87077.6	496.03 ug/L	496.03 ppb	17:23:07
1	Sc 361.383	940895.5	940895.5	96.270 %		17:24:24
1	Y 371.029	780991.2	780991.2	95.018 %		17:24:24
1	Ag 328.068†	116938.2	120995.7	501.04 ug/L	501.04 ppb	17:24:29
1	As 188.979†	1276.2	1346.0	501.04 ug/L	501.04 ppb	17:24:49
1	B 249.677†	23186.0	24625.0	492.66 ug/L	492.66 ppb	17:24:29
1	Ba 233.527†	70567.1	73291.6	499.49 ug/L	499.49 ppb	17:24:29
1	Be 313.107†	1476842.6	1538501.0	500.14 ug/L	500.14 ppb	17:24:24
1	Cd 226.502†	48191.9	50275.4	497.33 ug/L	497.33 ppb	17:24:29
1	Co 228.616†	26399.1	27496.2	498.52 ug/L	498.52 ppb	17:24:29
1	Cr 267.716†	47131.9	48869.4	499.36 ug/L	499.36 ppb	17:24:29
1	Cu 324.752†	182063.1	182907.5	495.95 ug/L	495.95 ppb	17:24:29
1	Mn 257.610†	495836.5	514553.0	501.07 ug/L	501.07 ppb	17:24:24
1	Mo 202.031†	7747.7	8024.5	498.32 ug/L	498.32 ppb	17:24:49
1	Ni 231.604†	21541.5	22260.7	499.07 ug/L	499.07 ppb	17:24:29
1	P 214.914†	4795.9	4756.0	2392.5 ug/L	2392.5 ppb	17:24:49
1	Pb 220.353†	4400.0	4593.9	500.01 ug/L	500.01 ppb	17:24:49
1	S 181.975 Axial†	826.9	811.9	983.59 ug/L	983.59 ppb	17:24:49
1	Sb 206.836†	1613.8	1634.4	510.22 ug/L	510.22 ppb	17:24:49
1	Se 196.026†	825.8	886.8	518.42 ug/L	518.42 ppb	17:24:49
1	Si 251.611†	86173.3	88981.4	2492.7 ug/L	2492.7 ppb	17:24:29
1	Sn 189.927†	3114.4	3230.5	497.48 ug/L	497.48 ppb	17:24:49
1	Ti 334.940†	343673.4	358383.8	496.90 ug/L	496.90 ppb	17:24:24
1	Tl 190.801†	1768.6	1874.4	503.33 ug/L	503.33 ppb	17:24:49
1	U 409.014†	16399.5	18844.8	498.64 ug/L	498.64 ppb	17:24:29
1	V 292.402†	76623.7	81046.4	503.34 ug/L	503.34 ppb	17:24:29
1	Zn 213.857†	58206.0	59648.9	494.96 ug/L	494.96 ppb	17:24:29
1	SiO2†	86824.8	89642.7	5332.8 ug/L	5332.8 ppb	17:25:57
2	Sc Radial	5292.4	5292.4	94.0 %		17:23:32
2	Y RADIAL	5536.2	5536.2	93.06 %		17:23:32
2	Al 396.153Radial†	6672.0	7102.3	5120.1 ug/L	5120.1 ppb	17:23:32
2	Ca 317.933Radial†	3172.1	3350.2	5060.4 ug/L	5060.4 ppb	17:23:52
2	Fe 238.204 Radial†	587.1	612.3	4971.7 ug/L	4971.7 ppb	17:23:52
2	K 766.490 Radial†	28289.6	27186.7	5001.2 ug/L	5001.2 ppb	17:23:32
2	Mg 279.077 IEC†	163.1	171.1	5103.2 ug/L	5103.2 ppb	17:23:52
2	Na 589.592 Radial†	38324.4	41828.5	9737.8 ug/L	9737.8 ppb	17:23:32
2	Sr 421.552†	82658.1	87934.4	500.91 ug/L	500.91 ppb	17:23:32
2	Sc 361.383	940773.1	940773.1	96.258 %		17:24:55
2	Y 371.029	780866.2	780866.2	95.002 %		17:24:55
2	Ag 328.068†	116987.2	121062.5	501.33 ug/L	501.33 ppb	17:25:00
2	As 188.979†	1274.8	1344.7	500.61 ug/L	500.61 ppb	17:25:21
2	B 249.677†	23227.8	24671.6	493.58 ug/L	493.58 ppb	17:25:00
2	Ba 233.527†	70681.3	73419.7	500.37 ug/L	500.37 ppb	17:25:00
2	Be 313.107†	1488373.7	1550680.0	504.10 ug/L	504.10 ppb	17:24:55
2	Cd 226.502†	48231.7	50323.3	497.80 ug/L	497.80 ppb	17:25:00
2	Co 228.616†	26412.6	27513.7	498.82 ug/L	498.82 ppb	17:25:00
2	Cr 267.716†	47158.6	48903.4	499.71 ug/L	499.71 ppb	17:25:00
2	Cu 324.752†	182374.1	183255.2	496.89 ug/L	496.89 ppb	17:25:00
2	Mn 257.610†	499333.0	518252.4	504.68 ug/L	504.68 ppb	17:24:55
2	Mo 202.031†	7686.0	7961.4	494.41 ug/L	494.41 ppb	17:25:21
2	Ni 231.604†	21591.5	22315.6	500.30 ug/L	500.30 ppb	17:25:00

2	P 214.914†	4744.6	4703.4	2364.8 ug/L	2364.8 ppb	17:25:21
2	Pb 220.353†	4369.0	4562.3	496.59 ug/L	496.59 ppb	17:25:21
2	S 181.975 Axial†	816.8	801.4	970.88 ug/L	970.88 ppb	17:25:21
2	Sb 206.836†	1612.2	1633.0	509.61 ug/L	509.61 ppb	17:25:21
2	Se 196.026†	808.8	869.2	508.80 ug/L	508.80 ppb	17:25:21
2	Si 251.611†	86315.5	89140.8	2497.2 ug/L	2497.2 ppb	17:25:00
2	Sn 189.927†	3080.1	3195.3	492.08 ug/L	492.08 ppb	17:25:21
2	Ti 334.940†	345814.8	360655.0	500.06 ug/L	500.06 ppb	17:24:55
2	Tl 190.801†	1754.6	1860.1	499.56 ug/L	499.56 ppb	17:25:21
2	U 409.014†	16528.7	18981.3	502.25 ug/L	502.25 ppb	17:25:00
2	V 292.402†	76671.7	81106.7	503.65 ug/L	503.65 ppb	17:25:00
2	Zn 213.857†	58303.6	59758.1	495.86 ug/L	495.86 ppb	17:25:00
2	SiO2†	86979.1	89814.7	5343.2 ug/L	5343.2 ppb	17:26:02
3	Sc Radial	5291.3	5291.3	94.0 %		17:23:57
3	Y RADIAL	5603.1	5603.1	94.18 %		17:23:57
3	Al 396.153Radial†	6642.4	7072.4	5098.2 ug/L	5098.2 ppb	17:23:57
3	Ca 317.933Radial†	3178.9	3358.2	5072.5 ug/L	5072.5 ppb	17:24:17
3	Fe 238.204 Radial†	589.0	614.4	4989.3 ug/L	4989.3 ppb	17:24:17
3	K 766.490 Radial†	28199.2	27097.1	4984.7 ug/L	4984.7 ppb	17:23:57
3	Mg 279.077 IEC†	160.6	168.4	5025.4 ug/L	5025.4 ppb	17:24:17
3	Na 589.592 Radial†	38259.1	41768.0	9723.7 ug/L	9723.7 ppb	17:23:57
3	Sr 421.552†	82614.9	87907.9	500.76 ug/L	500.76 ppb	17:23:57
3	Sc 361.383	931120.6	931120.6	95.270 %		17:25:26
3	Y 371.029	772431.1	772431.1	93.976 %		17:25:26
3	Ag 328.068†	117725.7	123097.6	509.74 ug/L	509.74 ppb	17:25:32
3	As 188.979†	1262.9	1345.9	501.05 ug/L	501.05 ppb	17:25:52
3	B 249.677†	23419.0	25122.5	502.61 ug/L	502.61 ppb	17:25:32
3	Ba 233.527†	71351.9	74884.9	510.35 ug/L	510.35 ppb	17:25:32
3	Be 313.107†	1466812.1	1544077.0	501.95 ug/L	501.95 ppb	17:25:26
3	Cd 226.502†	48791.8	51430.6	508.76 ug/L	508.76 ppb	17:25:32
3	Co 228.616†	26755.2	28157.8	510.51 ug/L	510.51 ppb	17:25:32
3	Cr 267.716†	47613.6	49888.9	509.78 ug/L	509.78 ppb	17:25:32
3	Cu 324.752†	183141.4	186024.6	504.40 ug/L	504.40 ppb	17:25:32
3	Mn 257.610†	493195.1	517187.4	503.64 ug/L	503.64 ppb	17:25:26
3	Mo 202.031†	7680.0	8038.0	499.16 ug/L	499.16 ppb	17:25:52
3	Ni 231.604†	21809.7	22777.1	510.65 ug/L	510.65 ppb	17:25:32
3	P 214.914†	4724.7	4733.6	2379.1 ug/L	2379.1 ppb	17:25:52
3	Pb 220.353†	4366.8	4607.0	501.44 ug/L	501.44 ppb	17:25:52
3	S 181.975 Axial†	818.0	811.5	983.12 ug/L	983.12 ppb	17:25:52
3	Sb 206.836†	1595.1	1632.4	509.66 ug/L	509.66 ppb	17:25:52
3	Se 196.026†	813.1	882.4	516.28 ug/L	516.28 ppb	17:25:52
3	Si 251.611†	87034.0	90824.5	2544.5 ug/L	2544.5 ppb	17:25:32
3	Sn 189.927†	3083.5	3232.0	497.73 ug/L	497.73 ppb	17:25:52
3	Ti 334.940†	341282.7	359622.1	498.63 ug/L	498.63 ppb	17:25:26
3	Tl 190.801†	1745.7	1869.7	502.04 ug/L	502.04 ppb	17:25:52
3	U 409.014†	16566.5	19198.9	508.01 ug/L	508.01 ppb	17:25:32
3	V 292.402†	77212.0	82499.6	512.26 ug/L	512.26 ppb	17:25:32
3	Zn 213.857†	58866.0	60976.3	505.98 ug/L	505.98 ppb	17:25:32
3	SiO2†	87813.5	91627.2	5451.2 ug/L	5451.2 ppb	17:26:07

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	937596.4	95.933 %	0.5738			0.60%
Sc Radial	5312.3	94.3 %	0.63			0.67%
Y 371.029	778096.2	94.665 %	0.5969			0.63%
Y RADIAL	5582.3	93.83 %	0.673			0.72%
Ag 328.068†	121718.6	504.04 ug/L	4.943	504.04 ppb	4.943	0.98%
QC value within limits for Ag 328.068 Recovery = 100.81%						
Al 396.153Radial†	7047.6	5080.3 ug/L	51.13	5080.3 ppb	51.13	1.01%
QC value within limits for Al 396.153Radial Recovery = 101.61%						
As 188.979†	1345.5	500.90 ug/L	0.252	500.90 ppb	0.252	0.05%
QC value within limits for As 188.979 Recovery = 100.18%						
B 249.677†	24806.4	496.28 ug/L	5.497	496.28 ppb	5.497	1.11%
QC value within limits for B 249.677 Recovery = 99.26%						
Ba 233.527†	73865.4	503.40 ug/L	6.030	503.40 ppb	6.030	1.20%
QC value within limits for Ba 233.527 Recovery = 100.68%						
Be 313.107†	1544419.3	502.07 ug/L	1.981	502.07 ppb	1.981	0.39%
QC value within limits for Be 313.107 Recovery = 100.41%						
Ca 317.933Radial†	3334.5	5036.7 ug/L	51.84	5036.7 ppb	51.84	1.03%

QC value within limits for Ca 317.933 Radial Recovery = 100.73%							
Cd 226.502†	50676.4	501.30 ug/L	6.468	501.30 ppb	6.468	1.29%	
QC value within limits for Cd 226.502 Recovery = 100.26%							
Co 228.616†	27722.6	502.61 ug/L	6.838	502.61 ppb	6.838	1.36%	
QC value within limits for Co 228.616 Recovery = 100.52%							
Cr 267.716†	49220.6	502.95 ug/L	5.916	502.95 ppb	5.916	1.18%	
QC value within limits for Cr 267.716 Recovery = 100.59%							
Cu 324.752†	184062.4	499.08 ug/L	4.631	499.08 ppb	4.631	0.93%	
QC value within limits for Cu 324.752 Recovery = 99.82%							
Fe 238.204 Radial†	610.3	4955.1 ug/L	44.83	4955.1 ppb	44.83	0.90%	
QC value within limits for Fe 238.204 Radial Recovery = 99.10%							
K 766.490 Radial†	27026.7	4971.7 ug/L	37.63	4971.7 ppb	37.63	0.76%	
QC value within limits for K 766.490 Radial Recovery = 99.43%							
Mg 279.077 IEC†	169.7	5062.3 ug/L	39.04	5062.3 ppb	39.04	0.77%	
QC value within limits for Mg 279.077 IEC Recovery = 101.25%							
Mn 257.610†	516664.3	503.13 ug/L	1.857	503.13 ppb	1.857	0.37%	
QC value within limits for Mn 257.610 Recovery = 100.63%							
Mo 202.031†	8008.0	497.30 ug/L	2.534	497.30 ppb	2.534	0.51%	
QC value within limits for Mo 202.031 Recovery = 99.46%							
Na 589.592 Radial†	41622.7	9689.9 ug/L	71.15	9689.9 ppb	71.15	0.73%	
QC value within limits for Na 589.592 Radial Recovery = 96.90%							
Ni 231.604†	22451.2	503.34 ug/L	6.358	503.34 ppb	6.358	1.26%	
QC value within limits for Ni 231.604 Recovery = 100.67%							
P 214.914†	4731.0	2378.8 ug/L	13.90	2378.8 ppb	13.90	0.58%	
QC value within limits for P 214.914 Recovery = 95.15%							
Pb 220.353†	4587.7	499.35 ug/L	2.495	499.35 ppb	2.495	0.50%	
QC value within limits for Pb 220.353 Recovery = 99.87%							
S 181.975 Axial†	808.2	979.20 ug/L	7.204	979.20 ppb	7.204	0.74%	
QC value within limits for S 181.975 Axial Recovery = 97.92%							
Sb 206.836†	1633.2	509.83 ug/L	0.339	509.83 ppb	0.339	0.07%	
QC value within limits for Sb 206.836 Recovery = 101.97%							
Se 196.026†	879.5	514.50 ug/L	5.055	514.50 ppb	5.055	0.98%	
QC value within limits for Se 196.026 Recovery = 102.90%							
Si 251.611†	89648.9	2511.5 ug/L	28.66	2511.5 ppb	28.66	1.14%	
QC value within limits for Si 251.611 Recovery = 100.46%							
Sn 189.927†	3219.3	495.76 ug/L	3.190	495.76 ppb	3.190	0.64%	
QC value within limits for Sn 189.927 Recovery = 99.15%							
Sr 421.552†	87639.9	499.24 ug/L	2.775	499.24 ppb	2.775	0.56%	
QC value within limits for Sr 421.552 Recovery = 99.85%							
Ti 334.940†	359553.6	498.53 ug/L	1.580	498.53 ppb	1.580	0.32%	
QC value within limits for Ti 334.940 Recovery = 99.71%							
Tl 190.801†	1868.0	501.64 ug/L	1.916	501.64 ppb	1.916	0.38%	
QC value within limits for Tl 190.801 Recovery = 100.33%							
U 409.014†	19008.3	502.97 ug/L	4.724	502.97 ppb	4.724	0.94%	
QC value within limits for U 409.014 Recovery = 100.59%							
V 292.402†	81550.9	506.42 ug/L	5.061	506.42 ppb	5.061	1.00%	
QC value within limits for V 292.402 Recovery = 101.28%							
Zn 213.857†	60127.8	498.94 ug/L	6.118	498.94 ppb	6.118	1.23%	
QC value within limits for Zn 213.857 Recovery = 99.79%							
SiO2†	90361.5	5375.7 ug/L	65.54	5375.7 ppb	65.54	1.22%	
QC value within limits for SiO2 Recovery = 100.53%							
All analyte(s) passed QC.							

Sequence No.: 11

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 1/19/2010 17:28:17

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5276.5	5276.5	93.7 %		17:30:09
1	Y RADIAL	5618.2	5618.2	94.44 %		17:30:09
1	Al 396.153Radial†	-4.9	-1.8	-1.3322 ug/L	-1.3322 ppb	17:30:09
1	Ca 317.933Radial†	15.6	-8.2	-12.406 ug/L	-12.406 ppb	17:30:29
1	Fe 238.204 Radial†	9.0	-2.8	-22.448 ug/L	-22.448 ppb	17:30:29
1	K 766.490 Radial†	2952.8	238.5	43.935 ug/L	43.935 ppb	17:30:09
1	Mg 279.077 IEC†	2.4	0.1	3.3158 ug/L	3.3158 ppb	17:30:29
1	Na 589.592 Radial†	-1101.9	-123.7	-28.791 ug/L	-28.791 ppb	17:30:09
1	Sr 421.552†	60.3	52.5	0.2991 ug/L	0.2991 ppb	17:30:09
1	Sc 361.383	908061.3	908061.3	92.911 %		17:31:26
1	Y 371.029	769827.9	769827.9	93.659 %		17:31:26
1	Ag 328.068†	427.8	-12.5	-0.0580 ug/L	-0.0580 ppb	17:31:26
1	As 188.979†	-23.9	-5.4	-2.0178 ug/L	-2.0178 ppb	17:31:46
1	B 249.677†	-206.3	318.8	6.4102 ug/L	6.4102 ppb	17:31:46
1	Ba 233.527†	7.4	-1.5	-0.0135 ug/L	-0.0135 ppb	17:31:46
1	Be 313.107†	-4426.0	-322.4	-0.1048 ug/L	-0.1048 ppb	17:31:26
1	Cd 226.502†	-213.0	-12.9	-0.1261 ug/L	-0.1261 ppb	17:31:46
1	Co 228.616†	-76.3	-7.9	-0.1395 ug/L	-0.1395 ppb	17:31:46
1	Cr 267.716†	113.5	33.6	0.3436 ug/L	0.3436 ppb	17:31:46
1	Cu 324.752†	6010.7	260.0	0.7076 ug/L	0.7076 ppb	17:31:26
1	Mn 257.610†	469.7	12.0	0.0093 ug/L	0.0093 ppb	17:31:46
1	Mo 202.031†	37.4	16.9	1.0463 ug/L	1.0463 ppb	17:31:46
1	Ni 231.604†	117.2	10.7	0.2412 ug/L	0.2412 ppb	17:31:46
1	P 214.914†	229.6	21.5	11.107 ug/L	11.107 ppb	17:31:46
1	Pb 220.353†	-44.9	-24.9	-2.6953 ug/L	-2.6953 ppb	17:31:46
1	S 181.975 Axial†	44.9	1.2	1.3949 ug/L	1.3949 ppb	17:31:46
1	Sb 206.836†	32.1	-7.4	-2.2043 ug/L	-2.2043 ppb	17:31:46
1	Se 196.026†	-30.2	-3.5	-2.0589 ug/L	-2.0589 ppb	17:31:46
1	Si 251.611†	484.7	-8.7	-0.2585 ug/L	-0.2585 ppb	17:31:46
1	Sn 189.927†	5.4	1.2	0.1880 ug/L	0.1880 ppb	17:31:46
1	Ti 334.940†	-1371.7	-80.8	-0.1112 ug/L	-0.1112 ppb	17:31:26
1	Tl 190.801†	-42.3	-8.2	-2.1945 ug/L	-2.1945 ppb	17:31:46
1	U 409.014†	-1919.0	-255.5	-6.7808 ug/L	-6.7808 ppb	17:31:26
1	V 292.402†	-1533.7	-196.6	-1.1996 ug/L	-1.1996 ppb	17:31:26
1	Zn 213.857†	779.5	26.7	0.2233 ug/L	0.2233 ppb	17:31:46
1	SiO2†	507.9	0.7	0.0126 ug/L	0.0126 ppb	17:32:42
2	Sc Radial	5317.2	5317.2	94.4 %		17:30:34
2	Y RADIAL	5641.2	5641.2	94.82 %		17:30:34
2	Al 396.153Radial†	-24.0	-21.9	-15.849 ug/L	-15.849 ppb	17:30:34
2	Ca 317.933Radial†	17.2	-6.6	-10.001 ug/L	-10.001 ppb	17:30:54
2	Fe 238.204 Radial†	12.0	0.4	3.1353 ug/L	3.1353 ppb	17:30:54
2	K 766.490 Radial†	2927.2	187.2	34.497 ug/L	34.497 ppb	17:30:34
2	Mg 279.077 IEC†	4.2	2.0	58.467 ug/L	58.467 ppb	17:30:54
2	Na 589.592 Radial†	-1202.0	-220.7	-51.386 ug/L	-51.386 ppb	17:30:34
2	Sr 421.552†	56.7	48.2	0.2746 ug/L	0.2746 ppb	17:30:34
2	Sc 361.383	905759.6	905759.6	92.675 %		17:31:51
2	Y 371.029	767575.7	767575.7	93.385 %		17:31:51
2	Ag 328.068†	436.4	-2.1	-0.0041 ug/L	-0.0041 ppb	17:31:51
2	As 188.979†	-20.4	-1.7	-0.6305 ug/L	-0.6305 ppb	17:32:11
2	B 249.677†	-254.0	266.7	5.3586 ug/L	5.3586 ppb	17:32:11
2	Ba 233.527†	4.5	-4.6	-0.0343 ug/L	-0.0343 ppb	17:32:11
2	Be 313.107†	-4333.8	-234.9	-0.0765 ug/L	-0.0765 ppb	17:31:51
2	Cd 226.502†	-196.9	4.0	0.0367 ug/L	0.0367 ppb	17:32:11
2	Co 228.616†	-75.0	-6.7	-0.1227 ug/L	-0.1227 ppb	17:32:11
2	Cr 267.716†	124.3	45.5	0.4671 ug/L	0.4671 ppb	17:32:11
2	Cu 324.752†	6060.4	330.1	0.9011 ug/L	0.9011 ppb	17:31:51
2	Mn 257.610†	460.6	3.5	0.0013 ug/L	0.0013 ppb	17:32:11
2	Mo 202.031†	15.5	-6.6	-0.4110 ug/L	-0.4110 ppb	17:32:11
2	Ni 231.604†	93.0	-15.0	-0.3356 ug/L	-0.3356 ppb	17:32:11

2	P 214.914†	212.1	3.1	1.4789 ug/L	1.4789 ppb	17:32:11
2	Pb 220.353†	-49.5	-30.0	-3.2641 ug/L	-3.2641 ppb	17:32:11
2	S 181.975 Axial†	38.1	-6.1	-7.3354 ug/L	-7.3354 ppb	17:32:11
2	Sb 206.836†	34.5	-4.6	-1.3781 ug/L	-1.3781 ppb	17:32:11
2	Se 196.026†	-21.9	5.3	2.9974 ug/L	2.9974 ppb	17:32:11
2	Si 251.611†	501.3	10.4	0.2972 ug/L	0.2972 ppb	17:32:11
2	Sn 189.927†	14.6	11.2	1.7135 ug/L	1.7135 ppb	17:32:11
2	Ti 334.940†	-1376.8	-90.0	-0.1264 ug/L	-0.1264 ppb	17:31:51
2	Tl 190.801†	-34.4	0.2	0.0529 ug/L	0.0529 ppb	17:32:11
2	U 409.014†	-2050.4	-402.5	-10.688 ug/L	-10.688 ppb	17:31:51
2	V 292.402†	-1550.3	-218.7	-1.3657 ug/L	-1.3657 ppb	17:31:51
2	Zn 213.857†	778.3	27.6	0.2313 ug/L	0.2313 ppb	17:32:11
2	SiO2†	504.0	-2.1	-0.1166 ug/L	-0.1166 ppb	17:32:47
3	Sc Radial	5322.3	5322.3	94.5 %		17:30:59
3	Y RADIAL	5671.2	5671.2	95.33 %		17:30:59
3	Al 396.153Radial†	-13.1	-10.4	-7.5866 ug/L	-7.5866 ppb	17:30:59
3	Ca 317.933Radial†	18.3	-5.5	-8.3161 ug/L	-8.3161 ppb	17:31:19
3	Fe 238.204 Radial†	12.9	1.2	10.033 ug/L	10.033 ppb	17:31:19
3	K 766.490 Radial†	2940.1	197.8	36.449 ug/L	36.449 ppb	17:30:59
3	Mg 279.077 IEC†	3.0	0.6	19.151 ug/L	19.151 ppb	17:31:19
3	Na 589.592 Radial†	-1062.7	-72.1	-16.788 ug/L	-16.788 ppb	17:30:59
3	Sr 421.552†	16.2	5.3	0.0303 ug/L	0.0303 ppb	17:30:59
3	Sc 361.383	923855.8	923855.8	94.527 %		17:32:16
3	Y 371.029	783220.6	783220.6	95.289 %		17:32:16
3	Ag 328.068†	404.9	-44.6	-0.1798 ug/L	-0.1798 ppb	17:32:16
3	As 188.979†	-24.5	-5.6	-2.0728 ug/L	-2.0728 ppb	17:32:36
3	B 249.677†	-245.6	281.0	5.6453 ug/L	5.6453 ppb	17:32:36
3	Ba 233.527†	13.4	4.7	0.0310 ug/L	0.0310 ppb	17:32:36
3	Be 313.107†	-4543.6	-365.3	-0.1188 ug/L	-0.1188 ppb	17:32:16
3	Cd 226.502†	-216.4	-12.5	-0.1258 ug/L	-0.1258 ppb	17:32:36
3	Co 228.616†	-75.5	-5.6	-0.0993 ug/L	-0.0993 ppb	17:32:36
3	Cr 267.716†	110.6	28.4	0.2905 ug/L	0.2905 ppb	17:32:36
3	Cu 324.752†	6171.3	319.3	0.8683 ug/L	0.8683 ppb	17:32:16
3	Mn 257.610†	469.2	2.8	0.0029 ug/L	0.0029 ppb	17:32:36
3	Mo 202.031†	32.5	11.0	0.6852 ug/L	0.6852 ppb	17:32:36
3	Ni 231.604†	110.3	1.3	0.0299 ug/L	0.0299 ppb	17:32:36
3	P 214.914†	235.4	23.4	12.050 ug/L	12.050 ppb	17:32:36
3	Pb 220.353†	-57.8	-37.7	-4.0901 ug/L	-4.0901 ppb	17:32:36
3	S 181.975 Axial†	50.9	6.7	8.1310 ug/L	8.1310 ppb	17:32:36
3	Sb 206.836†	33.2	-6.8	-2.0393 ug/L	-2.0393 ppb	17:32:36
3	Se 196.026†	-31.8	-4.7	-2.5932 ug/L	-2.5932 ppb	17:32:36
3	Si 251.611†	499.9	-1.6	-0.0542 ug/L	-0.0542 ppb	17:32:36
3	Sn 189.927†	5.3	1.0	0.1513 ug/L	0.1513 ppb	17:32:36
3	Ti 334.940†	-1400.7	-86.3	-0.1210 ug/L	-0.1210 ppb	17:32:16
3	Tl 190.801†	-33.3	2.1	0.5545 ug/L	0.5545 ppb	17:32:36
3	U 409.014†	-1832.9	-129.1	-3.4303 ug/L	-3.4303 ppb	17:32:16
3	V 292.402†	-1470.8	-101.8	-0.6215 ug/L	-0.6215 ppb	17:32:16
3	Zn 213.857†	788.1	21.5	0.1776 ug/L	0.1776 ppb	17:32:36
3	SiO2†	496.8	-20.4	-1.2330 ug/L	-1.2330 ppb	17:32:52

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	912558.9	93.371 %	1.0079			1.08%
Sc Radial	5305.3	94.2 %	0.45			0.47%
Y 371.029	773541.4	94.111 %	1.0290			1.09%
Y RADIAL	5643.5	94.86 %	0.448			0.47%
Ag 328.068†	-19.7	-0.0806 ug/L	0.09004	-0.0806 ppb	0.09004	111.67%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-11.4	-8.2560 ug/L	7.28164	-8.2560 ppb	7.28164	88.20%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-4.3	-1.5737 ug/L	0.81730	-1.5737 ppb	0.81730	51.93%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	288.8	5.8047 ug/L	0.54362	5.8047 ppb	0.54362	9.37%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	-0.5	-0.0056 ug/L	0.03336	-0.0056 ppb	0.03336	598.24%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	-307.5	-0.1000 ug/L	0.02154	-0.1000 ppb	0.02154	21.54%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-6.8	-10.241 ug/L	2.0553	-10.241 ppb	2.0553	20.07%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd 226.502†	-7.1	-0.0717 ug/L	0.09388	-0.0717 ppb	0.09388	130.87%	
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	-6.7	-0.1205 ug/L	0.02021	-0.1205 ppb	0.02021	16.77%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	35.8	0.3671 ug/L	0.09062	0.3671 ppb	0.09062	24.69%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	303.1	0.8257 ug/L	0.10353	0.8257 ppb	0.10353	12.54%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	-0.4	-3.0932 ug/L	17.11263	-3.0932 ppb	17.11263	553.23%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	207.8	38.294 ug/L	4.9823	38.294 ppb	4.9823	13.01%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	0.9	26.978 ug/L	28.3965	26.978 ppb	28.3965	105.26%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	6.1	0.0045 ug/L	0.00425	0.0045 ppb	0.00425	94.35%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	7.1	0.4402 ug/L	0.75891	0.4402 ppb	0.75891	172.41%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	-138.8	-32.322 ug/L	17.5672	-32.322 ppb	17.5672	54.35%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	-1.0	-0.0215 ug/L	0.29182	-0.0215 ppb	0.29182	>999.9%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	16.0	8.2121 ug/L	5.85017	8.2121 ppb	5.85017	71.24%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	-30.9	-3.3498 ug/L	0.70136	-3.3498 ppb	0.70136	20.94%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	0.6	0.7302 ug/L	7.75458	0.7302 ppb	7.75458	>999.9%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	-6.3	-1.8739 ug/L	0.43725	-1.8739 ppb	0.43725	23.33%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	-1.0	-0.5516 ug/L	3.08510	-0.5516 ppb	3.08510	559.35%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	0.0	-0.0052 ug/L	0.28109	-0.0052 ppb	0.28109	>999.9%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	4.5	0.6843 ug/L	0.89154	0.6843 ppb	0.89154	130.29%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	35.3	0.2013 ug/L	0.14865	0.2013 ppb	0.14865	73.84%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	-85.7	-0.1195 ug/L	0.00774	-0.1195 ppb	0.00774	6.47%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	-2.0	-0.5290 ug/L	1.46399	-0.5290 ppb	1.46399	276.72%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	-262.4	-6.9664 ug/L	3.63236	-6.9664 ppb	3.63236	52.14%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	-172.3	-1.0623 ug/L	0.39065	-1.0623 ppb	0.39065	36.77%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	25.3	0.2107 ug/L	0.02894	0.2107 ppb	0.02894	13.73%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†	-7.3	-0.4457 ug/L	0.68495	-0.4457 ppb	0.68495	153.69%	
QC value within limits for SiO2 Recovery = Not calculated							
All analyte(s) passed QC.							

Sequence No.: 12

Sample ID: 1202015894|941810|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 44

Date Collected: 1/19/2010 17:35:02

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202015894|941810|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5413.6	5413.6	96.1 %		17:36:54
1	Y RADIAL	5722.5	5722.5	96.19 %		17:36:54
1	Al 396.153Radial†	-2.9	0.4	0.3000 ug/L	0.3000 ppb	17:36:54
1	Ca 317.933Radial†	19.6	-4.4	-6.6749 ug/L	-6.6749 ppb	17:37:14
1	Fe 238.204 Radial†	12.8	0.9	7.6022 ug/L	7.6022 ppb	17:37:14
1	K 766.490 Radial†	2895.0	98.6	18.166 ug/L	18.166 ppb	17:36:54
1	Mg 279.077 IEC†	1.0	-1.5	-44.554 ug/L	-44.554 ppb	17:37:14
1	Na 589.592 Radial†	-1113.4	-105.9	-24.649 ug/L	-24.649 ppb	17:36:54
1	Sr 421.552†	13.3	2.0	0.0113 ug/L	0.0113 ppb	17:36:54
1	Sc 361.383	948355.2	948355.2	97.033 %		17:38:11
1	Y 371.029	798563.7	798563.7	97.155 %		17:38:11
1	Ag 328.068†	428.1	-31.7	-0.1293 ug/L	-0.1293 ppb	17:38:16
1	As 188.979†	-17.2	2.6	0.9588 ug/L	0.9588 ppb	17:38:36
1	B 249.677†	-280.4	251.8	5.0590 ug/L	5.0590 ppb	17:38:36
1	Ba 233.527†	10.6	1.4	0.0084 ug/L	0.0084 ppb	17:38:36
1	Be 313.107†	-4549.5	-247.2	-0.0797 ug/L	-0.0797 ppb	17:38:16
1	Cd 226.502†	-223.9	-14.4	-0.1435 ug/L	-0.1435 ppb	17:38:36
1	Co 228.616†	-68.8	3.3	0.0603 ug/L	0.0603 ppb	17:38:36
1	Cr 267.716†	119.2	34.2	0.3493 ug/L	0.3493 ppb	17:38:36
1	Cu 324.752†	6241.2	222.7	0.6055 ug/L	0.6055 ppb	17:38:16
1	Mn 257.610†	497.4	19.0	0.0211 ug/L	0.0211 ppb	17:38:36
1	Mo 202.031†	26.4	3.8	0.2380 ug/L	0.2380 ppb	17:38:36
1	Ni 231.604†	101.0	-11.3	-0.2529 ug/L	-0.2529 ppb	17:38:36
1	P 214.914†	236.2	17.7	9.1677 ug/L	9.1677 ppb	17:38:36
1	Pb 220.353†	-53.6	-31.8	-3.4482 ug/L	-3.4482 ppb	17:38:36
1	S 181.975 Axial†	48.5	2.9	3.5288 ug/L	3.5288 ppb	17:38:36
1	Sb 206.836†	42.4	1.8	0.5501 ug/L	0.5501 ppb	17:38:36
1	Se 196.026†	-24.0	4.2	2.3952 ug/L	2.3952 ppb	17:38:36
1	Si 251.611†	721.1	212.7	5.9705 ug/L	5.9705 ppb	17:38:36
1	Sn 189.927†	12.3	8.1	1.2389 ug/L	1.2389 ppb	17:38:36
1	Ti 334.940†	-1208.9	149.7	0.2112 ug/L	0.2112 ppb	17:38:16
1	Tl 190.801†	-28.6	7.8	2.0935 ug/L	2.0935 ppb	17:38:36
1	U 409.014†	-1831.5	-77.6	-2.0615 ug/L	-2.0615 ppb	17:38:11
1	V 292.402†	-1525.1	-117.6	-0.7236 ug/L	-0.7236 ppb	17:38:16
1	Zn 213.857†	838.1	51.5	0.4309 ug/L	0.4309 ppb	17:38:36
1	SiO2†	763.0	240.3	14.328 ug/L	14.328 ppb	17:39:42
2	Sc Radial	5292.1	5292.1	94.0 %		17:37:19
2	Y RADIAL	5635.5	5635.5	94.73 %		17:37:19
2	Al 396.153Radial†	-2.5	0.8	0.5631 ug/L	0.5631 ppb	17:37:19
2	Ca 317.933Radial†	23.0	-0.4	-0.5807 ug/L	-0.5807 ppb	17:37:39
2	Fe 238.204 Radial†	13.5	2.0	15.962 ug/L	15.962 ppb	17:37:39
2	K 766.490 Radial†	2813.0	80.4	14.815 ug/L	14.815 ppb	17:37:19
2	Mg 279.077 IEC†	1.3	-1.1	-32.318 ug/L	-32.318 ppb	17:37:39
2	Na 589.592 Radial†	-1064.7	-80.7	-18.779 ug/L	-18.779 ppb	17:37:19
2	Sr 421.552†	55.2	46.9	0.2669 ug/L	0.2669 ppb	17:37:19
2	Sc 361.383	941277.4	941277.4	96.309 %		17:38:41
2	Y 371.029	791422.8	791422.8	96.287 %		17:38:41
2	Ag 328.068†	437.4	-18.8	-0.0730 ug/L	-0.0730 ppb	17:38:46
2	As 188.979†	-27.8	-8.5	-3.1364 ug/L	-3.1364 ppb	17:39:06
2	B 249.677†	-322.4	206.0	4.1375 ug/L	4.1375 ppb	17:39:06
2	Ba 233.527†	15.4	6.5	0.0437 ug/L	0.0437 ppb	17:39:06
2	Be 313.107†	-4445.6	-174.6	-0.0563 ug/L	-0.0563 ppb	17:38:46
2	Cd 226.502†	-219.2	-11.2	-0.1129 ug/L	-0.1129 ppb	17:39:06
2	Co 228.616†	-68.3	3.3	0.0610 ug/L	0.0610 ppb	17:39:06
2	Cr 267.716†	98.2	13.4	0.1373 ug/L	0.1373 ppb	17:39:06
2	Cu 324.752†	6169.0	196.1	0.5335 ug/L	0.5335 ppb	17:38:46
2	Mn 257.610†	499.3	24.9	0.0271 ug/L	0.0271 ppb	17:39:06
2	Mo 202.031†	29.2	7.0	0.4362 ug/L	0.4362 ppb	17:39:06
2	Ni 231.604†	107.4	-3.8	-0.0864 ug/L	-0.0864 ppb	17:39:06

2	P 214.914†	243.0	26.6	13.808 ug/L	13.808 ppb	17:39:06
2	Pb 220.353†	-30.2	-7.9	-0.8624 ug/L	-0.8624 ppb	17:39:06
2	S 181.975 Axial†	43.7	-1.7	-2.1007 ug/L	-2.1007 ppb	17:39:06
2	Sb 206.836†	57.3	17.6	5.3129 ug/L	5.3129 ppb	17:39:06
2	Se 196.026†	-31.9	-4.2	-2.2919 ug/L	-2.2919 ppb	17:39:06
2	Si 251.611†	732.8	230.4	6.4636 ug/L	6.4636 ppb	17:39:06
2	Sn 189.927†	1.4	-3.2	-0.4872 ug/L	-0.4872 ppb	17:39:06
2	Ti 334.940†	-1244.2	103.7	0.1470 ug/L	0.1470 ppb	17:38:46
2	Tl 190.801†	-37.4	-1.6	-0.4174 ug/L	-0.4174 ppb	17:39:06
2	U 409.014†	-1798.2	-57.2	-1.5210 ug/L	-1.5210 ppb	17:38:41
2	V 292.402†	-1485.5	-88.3	-0.5408 ug/L	-0.5408 ppb	17:38:46
2	Zn 213.857†	837.2	57.1	0.4759 ug/L	0.4759 ppb	17:39:06
2	SiO2†	744.0	226.6	13.500 ug/L	13.500 ppb	17:39:47
3	Sc Radial	5463.4	5463.4	97.0 %		17:37:44
3	Y RADIAL	5759.0	5759.0	96.80 %		17:37:44
3	Al 396.153Radial†	7.6	11.3	8.2037 ug/L	8.2037 ppb	17:37:44
3	Ca 317.933Radial†	19.8	-4.5	-6.7661 ug/L	-6.7661 ppb	17:38:04
3	Fe 238.204 Radial†	10.1	-2.0	-15.991 ug/L	-15.991 ppb	17:38:04
3	K 766.490 Radial†	2752.4	-75.9	-13.982 ug/L	-13.982 ppb	17:37:44
3	Mg 279.077 IEC†	1.7	-0.7	-21.370 ug/L	-21.370 ppb	17:38:04
3	Na 589.592 Radial†	-1075.2	-55.9	-13.018 ug/L	-13.018 ppb	17:37:44
3	Sr 421.552†	-4.4	-16.4	-0.0934 ug/L	-0.0934 ppb	17:37:44
3	Sc 361.383	938107.1	938107.1	95.985 %		17:39:12
3	Y 371.029	788752.0	788752.0	95.962 %		17:39:12
3	Ag 328.068†	449.6	-4.5	-0.0255 ug/L	-0.0255 ppb	17:39:17
3	As 188.979†	-22.1	-2.7	-1.0145 ug/L	-1.0145 ppb	17:39:37
3	B 249.677†	-317.4	210.0	4.2240 ug/L	4.2240 ppb	17:39:37
3	Ba 233.527†	4.7	-4.6	-0.0321 ug/L	-0.0321 ppb	17:39:37
3	Be 313.107†	-4493.6	-240.2	-0.0778 ug/L	-0.0778 ppb	17:39:17
3	Cd 226.502†	-212.4	-4.8	-0.0458 ug/L	-0.0458 ppb	17:39:37
3	Co 228.616†	-78.8	-7.8	-0.1415 ug/L	-0.1415 ppb	17:39:37
3	Cr 267.716†	114.4	30.6	0.3109 ug/L	0.3109 ppb	17:39:37
3	Cu 324.752†	6283.8	337.3	0.9131 ug/L	0.9131 ppb	17:39:17
3	Mn 257.610†	500.4	27.8	0.0263 ug/L	0.0263 ppb	17:39:37
3	Mo 202.031†	23.5	1.1	0.0668 ug/L	0.0668 ppb	17:39:37
3	Ni 231.604†	111.3	0.6	0.0128 ug/L	0.0128 ppb	17:39:37
3	P 214.914†	243.3	27.7	14.360 ug/L	14.360 ppb	17:39:37
3	Pb 220.353†	-21.3	1.2	0.1319 ug/L	0.1319 ppb	17:39:37
3	S 181.975 Axial†	46.3	1.1	1.3825 ug/L	1.3825 ppb	17:39:37
3	Sb 206.836†	49.0	9.1	2.7614 ug/L	2.7614 ppb	17:39:37
3	Se 196.026†	-30.0	-2.3	-1.3650 ug/L	-1.3650 ppb	17:39:37
3	Si 251.611†	711.9	211.2	5.9292 ug/L	5.9292 ppb	17:39:37
3	Sn 189.927†	7.2	2.9	0.4438 ug/L	0.4438 ppb	17:39:37
3	Ti 334.940†	-1295.5	45.9	0.0638 ug/L	0.0638 ppb	17:39:17
3	Tl 190.801†	-47.8	-12.5	-3.3377 ug/L	-3.3377 ppb	17:39:37
3	U 409.014†	-1685.4	54.0	1.4336 ug/L	1.4336 ppb	17:39:12
3	V 292.402†	-1420.5	-25.7	-0.1523 ug/L	-0.1523 ppb	17:39:17
3	Zn 213.857†	839.3	62.2	0.5211 ug/L	0.5211 ppb	17:39:37
3	SiO2†	773.4	259.8	15.494 ug/L	15.494 ppb	17:39:52

Mean Data: 1202015894|941810|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	942579.9	96.443 %		0.5368				0.56%
Sc Radial	5389.7	95.7 %		1.56				1.63%
Y 371.029	792912.8	96.468 %		0.6172				0.64%
Y RADIAL	5705.6	95.91 %		1.066				1.11%
Ag 328.068†	-18.3	-0.0759 ug/L		0.05193	-0.0759 ppb		0.05193	68.37%
Al 396.153Radial†	4.2	3.0223 ug/L		4.48920	3.0223 ppb		4.48920	148.54%
As 188.979†	-2.9	-1.0640 ug/L		2.04805	-1.0640 ppb		2.04805	192.48%
B 249.677†	222.6	4.4735 ug/L		0.50891	4.4735 ppb		0.50891	11.38%
Ba 233.527†	1.1	0.0067 ug/L		0.03796	0.0067 ppb		0.03796	569.51%
Be 313.107†	-220.7	-0.0713 ug/L		0.01299	-0.0713 ppb		0.01299	18.23%
Ca 317.933Radial†	-3.1	-4.6739 ug/L		3.54508	-4.6739 ppb		3.54508	75.85%
Cd 226.502†	-10.1	-0.1007 ug/L		0.05000	-0.1007 ppb		0.05000	49.63%
Co 228.616†	-0.4	-0.0067 ug/L		0.11670	-0.0067 ppb		0.11670	>999.9%
Cr 267.716†	26.1	0.2658 ug/L		0.11292	0.2658 ppb		0.11292	42.48%
Cu 324.752†	252.1	0.6840 ug/L		0.20162	0.6840 ppb		0.20162	29.48%
Fe 238.204 Radial†	0.3	2.5244 ug/L		16.57040	2.5244 ppb		16.57040	656.40%
K 766.490 Radial†	34.3	6.3331 ug/L		17.67266	6.3331 ppb		17.67266	279.05%

Mg 279.077 IEC†	-1.1	-32.747 ug/L	11.5980	-32.747 ppb	11.5980	35.42%
Mn 257.610†	23.9	0.0248 ug/L	0.00327	0.0248 ppb	0.00327	13.18%
Mo 202.031†	4.0	0.2470 ug/L	0.18490	0.2470 ppb	0.18490	74.86%
Na 589.592 Radial†	-80.8	-18.815 ug/L	5.8151	-18.815 ppb	5.8151	30.91%
Ni 231.604†	-4.9	-0.1088 ug/L	0.13423	-0.1088 ppb	0.13423	123.35%
P 214.914†	24.0	12.446 ug/L	2.8521	12.446 ppb	2.8521	22.92%
Pb 220.353†	-12.8	-1.3929 ug/L	1.84809	-1.3929 ppb	1.84809	132.68%
S 181.975 Axial†	0.8	0.9369 ug/L	2.84108	0.9369 ppb	2.84108	303.25%
Sb 206.836†	9.5	2.8748 ug/L	2.38340	2.8748 ppb	2.38340	82.91%
Se 196.026†	-0.8	-0.4206 ug/L	2.48215	-0.4206 ppb	2.48215	590.18%
Si 251.611†	218.1	6.1211 ug/L	0.29734	6.1211 ppb	0.29734	4.86%
Sn 189.927†	2.6	0.3985 ug/L	0.86391	0.3985 ppb	0.86391	216.80%
Sr 421.552†	10.8	0.0616 ug/L	0.18537	0.0616 ppb	0.18537	301.00%
Ti 334.940†	99.8	0.1406 ug/L	0.07391	0.1406 ppb	0.07391	52.55%
Tl 190.801†	-2.1	-0.5539 ug/L	2.71819	-0.5539 ppb	2.71819	490.78%
U 409.014†	-26.9	-0.7163 ug/L	1.88137	-0.7163 ppb	1.88137	262.65%
V 292.402†	-77.2	-0.4722 ug/L	0.29176	-0.4722 ppb	0.29176	61.79%
Zn 213.857†	56.9	0.4760 ug/L	0.04515	0.4760 ppb	0.04515	9.49%
SiO2†	242.2	14.441 ug/L	1.0015	14.441 ppb	1.0015	6.94%

Sequence No.: 13

Sample ID: 1202015895|941810|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 45

Date Collected: 1/19/2010 17:42:02

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202015895|941810|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5347.7	5347.7	95.0 %			17:43:55
1	Y RADIAL	5611.1	5611.1	94.32 %			17:43:55
1	Al 396.153Radial†	6919.2	7289.2	5255.0 ug/L		5255.0 ppb	17:43:55
1	Ca 317.933Radial†	3281.5	3430.5	5181.7 ug/L		5181.7 ppb	17:44:15
1	Fe 238.204 Radial†	608.8	628.7	5104.1 ug/L		5104.1 ppb	17:44:15
1	K 766.490 Radial†	28941.5	27562.2	5072.2 ug/L		5072.2 ppb	17:43:55
1	Mg 279.077 IEC†	170.4	177.0	5279.8 ug/L		5279.8 ppb	17:44:15
1	Na 589.592 Radial†	18878.8	20931.3	4872.9 ug/L		4872.9 ppb	17:43:55
1	Sr 421.552†	84721.3	89198.2	508.11 ug/L		508.11 ppb	17:43:55
1	Sc 361.383	949444.7	949444.7	97.145 %			17:45:14
1	Y 371.029	788593.6	788593.6	95.942 %			17:45:14
1	Ag 328.068†	120678.4	123752.2	512.53 ug/L		512.53 ppb	17:45:14
1	As 188.979†	1303.6	1362.3	507.24 ug/L		507.24 ppb	17:45:34
1	B 249.677†	24205.6	25457.7	509.36 ug/L		509.36 ppb	17:45:14
1	Ba 233.527†	75276.6	77479.5	528.02 ug/L		528.02 ppb	17:45:14
1	Be 313.107†	1543541.0	1593346.3	517.97 ug/L		517.97 ppb	17:45:14
1	Cd 226.502†	50250.1	51943.4	513.82 ug/L		513.82 ppb	17:45:14
1	Co 228.616†	26634.9	27492.0	498.42 ug/L		498.42 ppb	17:45:34
1	Cr 267.716†	49333.8	50695.1	518.03 ug/L		518.03 ppb	17:45:14
1	Cu 324.752†	195328.5	194859.8	528.36 ug/L		528.36 ppb	17:45:14
1	Mn 257.610†	518792.8	533546.3	519.57 ug/L		519.57 ppb	17:45:14
1	Mo 202.031†	7895.4	8104.1	503.28 ug/L		503.28 ppb	17:45:34
1	Ni 231.604†	22257.7	22796.5	511.09 ug/L		511.09 ppb	17:45:34
1	P 214.914†	1305.1	1117.7	482.12 ug/L		482.12 ppb	17:45:34
1	Pb 220.353†	4547.1	4704.2	512.00 ug/L		512.00 ppb	17:45:34
1	S 181.975 Axial†	4060.8	4133.0	5011.1 ug/L		5011.1 ppb	17:45:34
1	Sb 206.836†	1689.1	1696.9	529.54 ug/L		529.54 ppb	17:45:34
1	Se 196.026†	822.3	875.4	512.76 ug/L		512.76 ppb	17:45:34
1	Si 251.611†	176138.7	180784.8	5070.7 ug/L		5070.7 ppb	17:45:14
1	Sn 189.927†	3298.1	3390.5	522.11 ug/L		522.11 ppb	17:45:34
1	Ti 334.940†	359247.1	371200.8	514.67 ug/L		514.67 ppb	17:45:14
1	Tl 190.801†	1813.7	1904.3	511.50 ug/L		511.50 ppb	17:45:34
1	U 409.014†	17360.6	19680.7	520.77 ug/L		520.77 ppb	17:45:14
1	V 292.402†	81341.7	85186.5	528.78 ug/L		528.78 ppb	17:45:14
1	Zn 213.857†	60301.3	61261.4	508.32 ug/L		508.32 ppb	17:45:14
1	SiO2†	175369.4	179977.5	10720 ug/L		10720 ppb	17:46:35
2	Sc Radial	5353.9	5353.9	95.1 %			17:44:20
2	Y RADIAL	5616.0	5616.0	94.40 %			17:44:20
2	Al 396.153Radial†	6967.0	7331.1	5285.0 ug/L		5285.0 ppb	17:44:20
2	Ca 317.933Radial†	3274.4	3419.1	5164.4 ug/L		5164.4 ppb	17:44:40
2	Fe 238.204 Radial†	610.0	629.2	5108.2 ug/L		5108.2 ppb	17:44:40
2	K 766.490 Radial†	29130.0	27725.3	5102.2 ug/L		5102.2 ppb	17:44:20
2	Mg 279.077 IEC†	168.3	174.5	5206.6 ug/L		5206.6 ppb	17:44:40
2	Na 589.592 Radial†	18990.0	21025.3	4894.8 ug/L		4894.8 ppb	17:44:20
2	Sr 421.552†	85649.9	90072.1	513.09 ug/L		513.09 ppb	17:44:20
2	Sc 361.383	937126.8	937126.8	95.885 %			17:45:41
2	Y 371.029	777360.0	777360.0	94.576 %			17:45:41
2	Ag 328.068†	119396.5	124048.1	513.74 ug/L		513.74 ppb	17:45:41
2	As 188.979†	1309.1	1385.6	515.84 ug/L		515.84 ppb	17:46:01
2	B 249.677†	23799.3	25361.6	507.40 ug/L		507.40 ppb	17:45:41
2	Ba 233.527†	74546.1	77736.2	529.77 ug/L		529.77 ppb	17:45:41
2	Be 313.107†	1516696.5	1586234.7	515.67 ug/L		515.67 ppb	17:45:41
2	Cd 226.502†	49505.2	51846.4	512.87 ug/L		512.87 ppb	17:45:41
2	Co 228.616†	26701.3	27921.5	506.22 ug/L		506.22 ppb	17:46:01
2	Cr 267.716†	48750.1	50753.9	518.62 ug/L		518.62 ppb	17:45:41
2	Cu 324.752†	193186.0	195268.3	529.46 ug/L		529.46 ppb	17:45:41
2	Mn 257.610†	512589.5	534096.3	520.11 ug/L		520.11 ppb	17:45:41
2	Mo 202.031†	7907.9	8223.9	510.71 ug/L		510.71 ppb	17:46:01
2	Ni 231.604†	22291.7	23133.1	518.63 ug/L		518.63 ppb	17:46:01

2	P 214.914†	1303.3	1133.5	490.26 ug/L	490.26 ppb	17:46:01
2	Pb 220.353†	4564.8	4784.1	520.70 ug/L	520.70 ppb	17:46:01
2	S 181.975 Axial†	4059.6	4186.8	5076.3 ug/L	5076.3 ppb	17:46:01
2	Sb 206.836†	1697.9	1728.9	539.45 ug/L	539.45 ppb	17:46:01
2	Se 196.026†	816.8	880.8	515.87 ug/L	515.87 ppb	17:46:01
2	Si 251.611†	174239.9	181187.8	5082.0 ug/L	5082.0 ppb	17:45:41
2	Sn 189.927†	3302.2	3439.3	529.62 ug/L	529.62 ppb	17:46:01
2	Ti 334.940†	354588.4	371202.9	514.68 ug/L	514.68 ppb	17:45:41
2	Tl 190.801†	1809.4	1924.4	516.83 ug/L	516.83 ppb	17:46:01
2	U 409.014†	17349.9	19904.4	526.70 ug/L	526.70 ppb	17:45:41
2	V 292.402†	80061.8	84952.2	527.45 ug/L	527.45 ppb	17:45:41
2	Zn 213.857†	59574.1	61318.8	508.75 ug/L	508.75 ppb	17:45:41
2	SiO2†	173100.3	179983.8	10721 ug/L	10721 ppb	17:46:40
3	Sc Radial	5391.3	5391.3	95.7 %		17:44:45
3	Y RADIAL	5660.6	5660.6	95.15 %		17:44:45
3	Al 396.153Radial†	6982.3	7296.2	5259.7 ug/L	5259.7 ppb	17:44:45
3	Ca 317.933Radial†	3283.8	3404.9	5143.1 ug/L	5143.1 ppb	17:45:05
3	Fe 238.204 Radial†	608.0	622.7	5055.8 ug/L	5055.8 ppb	17:45:05
3	K 766.490 Radial†	29388.4	27782.3	5112.7 ug/L	5112.7 ppb	17:44:45
3	Mg 279.077 IEC†	165.0	169.9	5069.0 ug/L	5069.0 ppb	17:45:05
3	Na 589.592 Radial†	19234.0	21141.4	4921.8 ug/L	4921.8 ppb	17:44:45
3	Sr 421.552†	86240.3	90062.8	513.04 ug/L	513.04 ppb	17:44:45
3	Sc 361.383	940669.6	940669.6	96.247 %		17:46:09
3	Y 371.029	781263.2	781263.2	95.051 %		17:46:09
3	Ag 328.068†	119500.8	123687.4	512.24 ug/L	512.24 ppb	17:46:09
3	As 188.979†	1327.7	1399.7	521.03 ug/L	521.03 ppb	17:46:29
3	B 249.677†	23944.9	25419.3	508.56 ug/L	508.56 ppb	17:46:09
3	Ba 233.527†	74451.9	77345.4	527.11 ug/L	527.11 ppb	17:46:09
3	Be 313.107†	1519424.5	1583111.6	514.65 ug/L	514.65 ppb	17:46:09
3	Cd 226.502†	49529.6	51677.3	511.20 ug/L	511.20 ppb	17:46:09
3	Co 228.616†	26931.4	28055.7	508.65 ug/L	508.65 ppb	17:46:29
3	Cr 267.716†	48849.1	50665.3	517.72 ug/L	517.72 ppb	17:46:09
3	Cu 324.752†	193385.7	194716.9	527.97 ug/L	527.97 ppb	17:46:09
3	Mn 257.610†	512998.6	532507.9	518.56 ug/L	518.56 ppb	17:46:09
3	Mo 202.031†	7933.0	8219.0	510.40 ug/L	510.40 ppb	17:46:29
3	Ni 231.604†	22403.6	23161.8	519.28 ug/L	519.28 ppb	17:46:29
3	P 214.914†	1316.6	1142.3	495.16 ug/L	495.16 ppb	17:46:29
3	Pb 220.353†	4582.6	4784.7	520.76 ug/L	520.76 ppb	17:46:29
3	S 181.975 Axial†	4093.7	4206.2	5099.9 ug/L	5099.9 ppb	17:46:29
3	Sb 206.836†	1697.0	1721.3	537.15 ug/L	537.15 ppb	17:46:29
3	Se 196.026†	833.5	895.0	523.65 ug/L	523.65 ppb	17:46:29
3	Si 251.611†	174326.2	180593.0	5065.3 ug/L	5065.3 ppb	17:46:09
3	Sn 189.927†	3312.6	3437.2	529.28 ug/L	529.28 ppb	17:46:29
3	Ti 334.940†	355330.5	370581.2	513.83 ug/L	513.83 ppb	17:46:09
3	Tl 190.801†	1832.5	1941.2	521.30 ug/L	521.30 ppb	17:46:29
3	U 409.014†	17170.8	19650.3	519.96 ug/L	519.96 ppb	17:46:09
3	V 292.402†	80276.3	84860.6	526.88 ug/L	526.88 ppb	17:46:09
3	Zn 213.857†	59674.1	61188.7	507.67 ug/L	507.67 ppb	17:46:09
3	SiO2†	173364.9	179578.8	10696 ug/L	10696 ppb	17:46:45

Mean Data: 1202015895|941810|1

Analyte	Mean Corrected	Calib.	Std.Dev.	Sample	Std.Dev.	RSD
	Intensity	Conc. Units		Conc. Units		
Sc 361.383	942413.7	96.426 %	0.6488			0.67%
Sc Radial	5364.3	95.3 %	0.42			0.44%
Y 371.029	782405.6	95.190 %	0.6939			0.73%
Y RADIAL	5629.2	94.62 %	0.459			0.49%
Ag 328.068†	123829.2	512.84 ug/L	0.795	512.84 ppb	0.795	0.15%
Al 396.153Radial†	7305.5	5266.6 ug/L	16.11	5266.6 ppb	16.11	0.31%
As 188.979†	1382.6	514.70 ug/L	6.966	514.70 ppb	6.966	1.35%
B 249.677†	25412.9	508.44 ug/L	0.984	508.44 ppb	0.984	0.19%
Ba 233.527†	77520.3	528.30 ug/L	1.351	528.30 ppb	1.351	0.26%
Be 313.107†	1587564.2	516.10 ug/L	1.702	516.10 ppb	1.702	0.33%
Ca 317.933Radial†	3418.2	5163.1 ug/L	19.36	5163.1 ppb	19.36	0.38%
Cd 226.502†	51822.3	512.63 ug/L	1.327	512.63 ppb	1.327	0.26%
Co 228.616†	27823.1	504.43 ug/L	5.349	504.43 ppb	5.349	1.06%
Cr 267.716†	50704.8	518.12 ug/L	0.459	518.12 ppb	0.459	0.09%
Cu 324.752†	194948.3	528.60 ug/L	0.775	528.60 ppb	0.775	0.15%
Fe 238.204 Radial†	626.8	5089.4 ug/L	29.12	5089.4 ppb	29.12	0.57%
K 766.490 Radial†	27689.9	5095.7 ug/L	21.04	5095.7 ppb	21.04	0.41%

Mg 279.077 IEC†	173.8	5185.1 ug/L	107.02	5185.1 ppb	107.02	2.06%
Mn 257.610†	533383.5	519.41 ug/L	0.784	519.41 ppb	0.784	0.15%
Mo 202.031†	8182.4	508.13 ug/L	4.204	508.13 ppb	4.204	0.83%
Na 589.592 Radial†	21032.7	4896.5 ug/L	24.50	4896.5 ppb	24.50	0.50%
Ni 231.604†	23030.5	516.33 ug/L	4.553	516.33 ppb	4.553	0.88%
P 214.914†	1131.2	489.18 ug/L	6.586	489.18 ppb	6.586	1.35%
Pb 220.353†	4757.6	517.82 ug/L	5.038	517.82 ppb	5.038	0.97%
S 181.975 Axial†	4175.3	5062.4 ug/L	46.01	5062.4 ppb	46.01	0.91%
Sb 206.836†	1715.7	535.38 ug/L	5.188	535.38 ppb	5.188	0.97%
Se 196.026†	883.7	517.43 ug/L	5.608	517.43 ppb	5.608	1.08%
Si 251.611†	180855.2	5072.6 ug/L	8.51	5072.6 ppb	8.51	0.17%
Sn 189.927†	3422.3	527.00 ug/L	4.241	527.00 ppb	4.241	0.80%
Sr 421.552†	89777.7	511.42 ug/L	2.859	511.42 ppb	2.859	0.56%
Ti 334.940†	370995.0	514.39 ug/L	0.490	514.39 ppb	0.490	0.10%
Tl 190.801†	1923.3	516.54 ug/L	4.906	516.54 ppb	4.906	0.95%
U 409.014†	19745.1	522.48 ug/L	3.682	522.48 ppb	3.682	0.70%
V 292.402†	84999.8	527.70 ug/L	0.971	527.70 ppb	0.971	0.18%
Zn 213.857†	61256.3	508.25 ug/L	0.547	508.25 ppb	0.547	0.11%
SiO2†	179846.7	10712 ug/L	13.9	10712 ppb	13.9	0.13%

Sequence No.: 14

Sample ID: 244602001|941810|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 46

Date Collected: 1/19/2010 17:48:55

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 244602001|941810|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5438.4	5438.4	96.6 %		17:50:48
1	Y RADIAL	5754.8	5754.8	96.73 %		17:50:48
1	Al 396.153Radial†	77.6	83.8	60.678 ug/L	60.678 ppb	17:50:48
1	Ca 317.933Radial†	53.6	30.7	46.375 ug/L	46.375 ppb	17:51:08
1	Fe 238.204 Radial†	17.0	5.2	42.214 ug/L	42.214 ppb	17:51:08
1	K 766.490 Radial†	3759.7	980.1	180.46 ug/L	180.46 ppb	17:50:48
1	Mg 279.077 IEC†	3.3	1.0	28.474 ug/L	28.474 ppb	17:51:08
1	Na 589.592 Radial†	-468.3	567.4	132.09 ug/L	132.09 ppb	17:50:48
1	Sr 421.552†	93.2	84.7	0.4820 ug/L	0.4820 ppb	17:50:48
1	Sc 361.383	892496.6	892496.6	91.318 %		17:52:05
1	Y 371.029	749399.3	749399.3	91.174 %		17:52:05
1	Ag 328.068†	470.3	42.1	0.1787 ug/L	0.1787 ppb	17:52:10
1	As 188.979†	-23.7	-5.6	-2.0442 ug/L	-2.0442 ppb	17:52:30
1	B 249.677†	800.6	1417.4	28.478 ug/L	28.478 ppb	17:52:10
1	Ba 233.527†	140.3	144.2	0.9776 ug/L	0.9776 ppb	17:52:30
1	Be 313.107†	-4533.3	-522.9	-0.1667 ug/L	-0.1667 ppb	17:52:10
1	Cd 226.502†	-207.4	-10.7	-0.1103 ug/L	-0.1103 ppb	17:52:30
1	Co 228.616†	-70.9	-3.3	-0.0630 ug/L	-0.0630 ppb	17:52:30
1	Cr 267.716†	160.7	87.4	0.8903 ug/L	0.8903 ppb	17:52:30
1	Cu 324.752†	6686.6	1113.0	3.0196 ug/L	3.0196 ppb	17:52:10
1	Mn 257.610†	2331.1	2059.2	2.0071 ug/L	2.0071 ppb	17:52:10
1	Mo 202.031†	24.1	3.1	0.1962 ug/L	0.1962 ppb	17:52:30
1	Ni 231.604†	112.3	7.6	0.1707 ug/L	0.1707 ppb	17:52:30
1	P 214.914†	237.9	34.8	17.610 ug/L	17.610 ppb	17:52:30
1	Pb 220.353†	-47.6	-28.7	-3.1020 ug/L	-3.1020 ppb	17:52:30
1	S 181.975 Axial†	84.4	45.3	54.972 ug/L	54.972 ppb	17:52:30
1	Sb 206.836†	37.0	-1.4	-0.4205 ug/L	-0.4205 ppb	17:52:30
1	Se 196.026†	-27.0	-0.6	-0.1706 ug/L	-0.1706 ppb	17:52:30
1	Si 251.611†	58300.4	63312.7	1778.0 ug/L	1778.0 ppb	17:52:10
1	Sn 189.927†	9.5	5.8	0.8959 ug/L	0.8959 ppb	17:52:30
1	Ti 334.940†	-442.8	910.7	1.2662 ug/L	1.2662 ppb	17:52:10
1	Tl 190.801†	-31.6	2.6	0.7293 ug/L	0.7293 ppb	17:52:30
1	U 409.014†	-1620.9	34.9	0.9195 ug/L	0.9195 ppb	17:52:05
1	V 292.402†	-1585.2	-281.7	-1.7291 ug/L	-1.7291 ppb	17:52:10
1	Zn 213.857†	958.0	236.8	1.9730 ug/L	1.9730 ppb	17:52:30
1	SiO2†	57845.0	62798.5	3745.4 ug/L	3745.4 ppb	17:53:36
2	Sc Radial	5466.0	5466.0	97.1 %		17:51:13
2	Y RADIAL	5759.8	5759.8	96.82 %		17:51:13
2	Al 396.153Radial†	54.8	60.0	43.389 ug/L	43.389 ppb	17:51:13
2	Ca 317.933Radial†	55.4	32.2	48.709 ug/L	48.709 ppb	17:51:33
2	Fe 238.204 Radial†	18.5	6.7	54.385 ug/L	54.385 ppb	17:51:33
2	K 766.490 Radial†	3910.3	1115.7	205.43 ug/L	205.43 ppb	17:51:13
2	Mg 279.077 IEC†	2.7	0.3	9.5914 ug/L	9.5914 ppb	17:51:33
2	Na 589.592 Radial†	-513.3	523.5	121.87 ug/L	121.87 ppb	17:51:13
2	Sr 421.552†	91.6	82.5	0.4699 ug/L	0.4699 ppb	17:51:13
2	Sc 361.383	967255.3	967255.3	98.967 %		17:52:35
2	Y 371.029	810088.0	810088.0	98.558 %		17:52:35
2	Ag 328.068†	374.8	-94.2	-0.3717 ug/L	-0.3717 ppb	17:52:40
2	As 188.979†	-24.4	-4.3	-1.5599 ug/L	-1.5599 ppb	17:53:00
2	B 249.677†	766.1	1314.8	26.414 ug/L	26.414 ppb	17:52:40
2	Ba 233.527†	140.4	132.4	0.9019 ug/L	0.9019 ppb	17:53:00
2	Be 313.107†	-4513.8	-119.5	-0.0357 ug/L	-0.0357 ppb	17:52:40
2	Cd 226.502†	-208.5	5.7	0.0509 ug/L	0.0509 ppb	17:53:00
2	Co 228.616†	-69.6	3.9	0.0689 ug/L	0.0689 ppb	17:53:00
2	Cr 267.716†	150.1	63.1	0.6447 ug/L	0.6447 ppb	17:53:00
2	Cu 324.752†	6656.5	516.7	1.4031 ug/L	1.4031 ppb	17:52:40
2	Mn 257.610†	2344.2	1875.1	1.8300 ug/L	1.8300 ppb	17:52:40
2	Mo 202.031†	33.5	10.5	0.6545 ug/L	0.6545 ppb	17:53:00
2	Ni 231.604†	107.1	-7.2	-0.1610 ug/L	-0.1610 ppb	17:53:00

2	P 214.914†	251.0	27.9	14.287 ug/L	14.287 ppb	17:53:00
2	Pb 220.353†	-53.1	-30.3	-3.2776 ug/L	-3.2776 ppb	17:53:00
2	S 181.975 Axial†	82.9	36.6	44.387 ug/L	44.387 ppb	17:53:00
2	Sb 206.836†	40.4	-1.1	-0.3053 ug/L	-0.3053 ppb	17:53:00
2	Se 196.026†	-31.0	-2.4	-1.1596 ug/L	-1.1596 ppb	17:53:00
2	Si 251.611†	57535.5	57605.4	1617.7 ug/L	1617.7 ppb	17:52:40
2	Sn 189.927†	10.3	5.9	0.9078 ug/L	0.9078 ppb	17:53:00
2	Ti 334.940†	-424.3	966.9	1.3459 ug/L	1.3459 ppb	17:52:40
2	Tl 190.801†	-41.4	-4.5	-1.1881 ug/L	-1.1881 ppb	17:53:00
2	U 409.014†	-1738.1	53.6	1.4166 ug/L	1.4166 ppb	17:52:35
2	V 292.402†	-1429.2	10.0	0.0640 ug/L	0.0640 ppb	17:52:40
2	Zn 213.857†	968.0	165.8	1.3821 ug/L	1.3821 ppb	17:53:00
2	SiO2†	56883.4	56931.0	3395.4 ug/L	3395.4 ppb	17:53:41
3	Sc Radial	5468.8	5468.8	97.1 %		17:51:38
3	Y RADIAL	5770.2	5770.2	96.99 %		17:51:38
3	Al 396.153Radial†	64.8	70.2	50.782 ug/L	50.782 ppb	17:51:38
3	Ca 317.933Radial†	53.7	30.5	46.011 ug/L	46.011 ppb	17:51:58
3	Fe 238.204 Radial†	17.2	5.4	43.564 ug/L	43.564 ppb	17:51:58
3	K 766.490 Radial†	3792.5	992.3	182.70 ug/L	182.70 ppb	17:51:38
3	Mg 279.077 IEC†	1.6	-0.8	-23.539 ug/L	-23.539 ppb	17:51:58
3	Na 589.592 Radial†	-550.7	485.2	112.96 ug/L	112.96 ppb	17:51:38
3	Sr 421.552†	64.1	54.1	0.3081 ug/L	0.3081 ppb	17:51:38
3	Sc 361.383	959499.4	959499.4	98.174 %		17:53:05
3	Y 371.029	803679.6	803679.6	97.778 %		17:53:05
3	Ag 328.068†	364.2	-102.0	-0.4105 ug/L	-0.4105 ppb	17:53:10
3	As 188.979†	-15.5	4.5	1.6824 ug/L	1.6824 ppb	17:53:30
3	B 249.677†	771.5	1326.6	26.654 ug/L	26.654 ppb	17:53:10
3	Ba 233.527†	145.6	138.8	0.9448 ug/L	0.9448 ppb	17:53:30
3	Be 313.107†	-4484.0	-126.0	-0.0377 ug/L	-0.0377 ppb	17:53:10
3	Cd 226.502†	-203.2	9.4	0.0894 ug/L	0.0894 ppb	17:53:30
3	Co 228.616†	-79.9	-7.1	-0.1308 ug/L	-0.1308 ppb	17:53:30
3	Cr 267.716†	157.2	71.6	0.7294 ug/L	0.7294 ppb	17:53:30
3	Cu 324.752†	6780.1	697.0	1.8897 ug/L	1.8897 ppb	17:53:10
3	Mn 257.610†	2348.3	1898.4	1.8529 ug/L	1.8529 ppb	17:53:10
3	Mo 202.031†	35.1	12.4	0.7734 ug/L	0.7734 ppb	17:53:30
3	Ni 231.604†	109.8	-3.5	-0.0786 ug/L	-0.0786 ppb	17:53:30
3	P 214.914†	247.9	26.8	13.634 ug/L	13.634 ppb	17:53:30
3	Pb 220.353†	-21.5	1.6	0.1777 ug/L	0.1777 ppb	17:53:30
3	S 181.975 Axial†	93.8	48.4	58.675 ug/L	58.675 ppb	17:53:30
3	Sb 206.836†	47.3	6.3	1.8969 ug/L	1.8969 ppb	17:53:30
3	Se 196.026†	-28.1	0.3	0.3428 ug/L	0.3428 ppb	17:53:30
3	Si 251.611†	57704.3	58247.3	1635.7 ug/L	1635.7 ppb	17:53:10
3	Sn 189.927†	5.6	1.1	0.1757 ug/L	0.1757 ppb	17:53:30
3	Ti 334.940†	-379.7	1008.8	1.4050 ug/L	1.4050 ppb	17:53:10
3	Tl 190.801†	-36.2	0.4	0.1241 ug/L	0.1241 ppb	17:53:30
3	U 409.014†	-1605.8	174.2	4.6177 ug/L	4.6177 ppb	17:53:05
3	V 292.402†	-1446.7	-19.5	-0.1081 ug/L	-0.1081 ppb	17:53:10
3	Zn 213.857†	956.2	161.8	1.3479 ug/L	1.3479 ppb	17:53:30
3	SiO2†	57242.4	57761.3	3444.9 ug/L	3444.9 ppb	17:53:46

Mean Data: 244602001|941810|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	939750.4	96.153 %		4.2059			4.37%
Sc Radial	5457.7	96.9 %		0.30			0.31%
Y 371.029	787722.3	95.836 %		4.0566			4.23%
Y RADIAL	5761.6	96.85 %		0.132			0.14%
Ag 328.068†	-51.4	-0.2012 ug/L		0.32953	-0.2012 ppb	0.32953	163.82%
Al 396.153Radial†	71.3	51.616 ug/L		8.6746	51.616 ppb	8.6746	16.81%
As 188.979†	-1.8	-0.6405 ug/L		2.02628	-0.6405 ppb	2.02628	316.34%
B 249.677†	1353.0	27.182 ug/L		1.1291	27.182 ppb	1.1291	4.15%
Ba 233.527†	138.5	0.9414 ug/L		0.03795	0.9414 ppb	0.03795	4.03%
Be 313.107†	-256.1	-0.0800 ug/L		0.07508	-0.0800 ppb	0.07508	93.80%
Ca 317.933Radial†	31.1	47.032 ug/L		1.4636	47.032 ppb	1.4636	3.11%
Cd 226.502†	1.5	0.0100 ug/L		0.10597	0.0100 ppb	0.10597	>999.9%
Co 228.616†	-2.2	-0.0416 ug/L		0.10158	-0.0416 ppb	0.10158	244.08%
Cr 267.716†	74.0	0.7548 ug/L		0.12475	0.7548 ppb	0.12475	16.53%
Cu 324.752†	775.5	2.1041 ug/L		0.82934	2.1041 ppb	0.82934	39.42%
Fe 238.204 Radial†	5.8	46.721 ug/L		6.6716	46.721 ppb	6.6716	14.28%
K 766.490 Radial†	1029.4	189.53 ug/L		13.815	189.53 ppb	13.815	7.29%

Mg 279.077 IEC†	0.2	4.8422 ug/L	26.32949	4.8422 ppb	26.32949	543.75%
Mn 257.610†	1944.2	1.8967 ug/L	0.09633	1.8967 ppb	0.09633	5.08%
Mo 202.031†	8.7	0.5414 ug/L	0.30478	0.5414 ppb	0.30478	56.30%
Na 589.592 Radial†	525.4	122.31 ug/L	9.571	122.31 ppb	9.571	7.83%
Ni 231.604†	-1.0	-0.0230 ug/L	0.17271	-0.0230 ppb	0.17271	751.73%
P 214.914†	29.8	15.177 ug/L	2.1323	15.177 ppb	2.1323	14.05%
Pb 220.353†	-19.1	-2.0673 ug/L	1.94622	-2.0673 ppb	1.94622	94.14%
S 181.975 Axial†	43.4	52.678 ug/L	7.4149	52.678 ppb	7.4149	14.08%
Sb 206.836†	1.2	0.3903 ug/L	1.30599	0.3903 ppb	1.30599	334.57%
Se 196.026†	-0.9	-0.3291 ug/L	0.76368	-0.3291 ppb	0.76368	232.04%
Si 251.611†	59721.8	1677.1 ug/L	87.80	1677.1 ppb	87.80	5.24%
Sn 189.927†	4.2	0.6598 ug/L	0.41927	0.6598 ppb	0.41927	63.55%
Sr 421.552†	73.8	0.4200 ug/L	0.09708	0.4200 ppb	0.09708	23.11%
Ti 334.940†	962.1	1.3390 ug/L	0.06965	1.3390 ppb	0.06965	5.20%
Tl 190.801†	-0.5	-0.1116 ug/L	0.98016	-0.1116 ppb	0.98016	878.48%
U 409.014†	87.6	2.3179 ug/L	2.00712	2.3179 ppb	2.00712	86.59%
V 292.402†	-97.0	-0.5911 ug/L	0.98930	-0.5911 ppb	0.98930	167.37%
Zn 213.857†	188.1	1.5676 ug/L	0.35147	1.5676 ppb	0.35147	22.42%
SiO2†	59163.6	3528.6 ug/L	189.38	3528.6 ppb	189.38	5.37%

Sequence No.: 18

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 1/19/2010 18:16:20

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5649.9	5649.9	100 %		18:18:12
1	Y RADIAL	5980.0	5980.0	100.5 %		18:18:12
1	Al 396.153Radial†	6650.0	6631.3	4778.4 ug/L	4778.4 ppb	18:18:12
1	Ca 317.933Radial†	3188.0	3152.5	4761.8 ug/L	4761.8 ppb	18:18:32
1	Fe 238.204 Radial†	584.6	570.2	4631.5 ug/L	4631.5 ppb	18:18:32
1	K 766.490 Radial†	28096.6	25090.2	4615.6 ug/L	4615.6 ppb	18:18:12
1	Mg 279.077 IEC†	162.4	159.4	4755.0 ug/L	4755.0 ppb	18:18:32
1	Na 589.592 Radial†	36101.5	37033.4	8621.5 ug/L	8621.5 ppb	18:18:12
1	Sr 421.552†	80506.2	80226.0	457.00 ug/L	457.00 ppb	18:18:12
1	Sc 361.383	932695.4	932695.4	95.431 %		18:19:29
1	Y 371.029	772959.0	772959.0	94.040 %		18:19:29
1	Ag 328.068†	118082.5	123262.7	510.32 ug/L	510.32 ppb	18:19:34
1	As 188.979†	1278.2	1359.7	506.07 ug/L	506.07 ppb	18:19:54
1	B 249.677†	23330.8	24988.5	499.97 ug/L	499.97 ppb	18:19:34
1	Ba 233.527†	71351.6	74758.1	509.47 ug/L	509.47 ppb	18:19:34
1	Be 313.107†	1485871.7	1561449.5	507.60 ug/L	507.60 ppb	18:19:29
1	Cd 226.502†	48838.8	51393.4	508.43 ug/L	508.43 ppb	18:19:34
1	Co 228.616†	26780.0	28136.4	510.13 ug/L	510.13 ppb	18:19:34
1	Cr 267.716†	47586.3	49776.0	508.62 ug/L	508.62 ppb	18:19:34
1	Cu 324.752†	184687.1	187319.8	507.90 ug/L	507.90 ppb	18:19:34
1	Mn 257.610†	498301.9	521664.6	507.98 ug/L	507.98 ppb	18:19:29
1	Mo 202.031†	7786.8	8136.3	505.23 ug/L	505.23 ppb	18:19:54
1	Ni 231.604†	21789.9	22717.7	509.32 ug/L	509.32 ppb	18:19:34
1	P 214.914†	4838.8	4844.7	2436.8 ug/L	2436.8 ppb	18:19:54
1	Pb 220.353†	4402.0	4636.1	504.58 ug/L	504.58 ppb	18:19:54
1	S 181.975 Axial†	833.6	826.4	1001.3 ug/L	1001.3 ppb	18:19:54
1	Sb 206.836†	1636.7	1673.2	522.15 ug/L	522.15 ppb	18:19:54
1	Se 196.026†	836.1	905.1	527.77 ug/L	527.77 ppb	18:19:54
1	Si 251.611†	87510.2	91169.3	2554.1 ug/L	2554.1 ppb	18:19:34
1	Sn 189.927†	3127.3	3272.5	503.90 ug/L	503.90 ppb	18:19:54
1	Ti 334.940†	345232.2	363155.8	503.51 ug/L	503.51 ppb	18:19:29
1	Tl 190.801†	1770.2	1892.2	508.12 ug/L	508.12 ppb	18:19:54
1	U 409.014†	16369.1	18962.7	501.78 ug/L	501.78 ppb	18:19:34
1	V 292.402†	77421.2	82581.9	512.88 ug/L	512.88 ppb	18:19:34
1	Zn 213.857†	58977.5	60988.8	506.13 ug/L	506.13 ppb	18:19:34
1	SiO2†	88353.6	92037.6	5475.5 ug/L	5475.5 ppb	18:21:02
2	Sc Radial	5241.1	5241.1	93.1 %		18:18:37
2	Y RADIAL	5487.7	5487.7	92.24 %		18:18:37
2	Al 396.153Radial†	6751.3	7257.1	5231.9 ug/L	5231.9 ppb	18:18:37
2	Ca 317.933Radial†	3214.3	3428.6	5178.9 ug/L	5178.9 ppb	18:18:57
2	Fe 238.204 Radial†	589.5	621.0	5041.8 ug/L	5041.8 ppb	18:18:57
2	K 766.490 Radial†	28304.3	27497.4	5058.5 ug/L	5058.5 ppb	18:18:37
2	Mg 279.077 IEC†	167.0	177.0	5279.2 ug/L	5279.2 ppb	18:18:57
2	Na 589.592 Radial†	36482.7	40249.3	9370.2 ug/L	9370.2 ppb	18:18:37
2	Sr 421.552†	81590.7	87649.2	499.29 ug/L	499.29 ppb	18:18:37
2	Sc 361.383	945490.6	945490.6	96.740 %		18:20:00
2	Y 371.029	783304.5	783304.5	95.299 %		18:20:00
2	Ag 328.068†	118483.5	122002.8	505.24 ug/L	505.24 ppb	18:20:06
2	As 188.979†	1280.4	1343.9	500.30 ug/L	500.30 ppb	18:20:26
2	B 249.677†	23469.0	24800.6	496.14 ug/L	496.14 ppb	18:20:06
2	Ba 233.527†	71626.1	74030.0	504.52 ug/L	504.52 ppb	18:20:06
2	Be 313.107†	1492904.4	1547648.4	503.12 ug/L	503.12 ppb	18:20:00
2	Cd 226.502†	48925.3	50790.2	502.41 ug/L	502.41 ppb	18:20:06
2	Co 228.616†	26854.6	27833.7	504.63 ug/L	504.63 ppb	18:20:06
2	Cr 267.716†	47658.5	49175.7	502.50 ug/L	502.50 ppb	18:20:06
2	Cu 324.752†	184925.7	184947.4	501.49 ug/L	501.49 ppb	18:20:06
2	Mn 257.610†	501422.3	517823.8	504.26 ug/L	504.26 ppb	18:20:00
2	Mo 202.031†	7799.5	8039.0	499.23 ug/L	499.23 ppb	18:20:26
2	Ni 231.604†	21857.3	22478.5	503.95 ug/L	503.95 ppb	18:20:06

2	P 214.914†	4864.2	4802.3	2415.7 ug/L	2415.7 ppb	18:20:26
2	Pb 220.353†	4427.8	4600.4	500.75 ug/L	500.75 ppb	18:20:26
2	S 181.975 Axial†	836.4	817.4	990.31 ug/L	990.31 ppb	18:20:26
2	Sb 206.836†	1631.5	1644.5	513.34 ug/L	513.34 ppb	18:20:26
2	Se 196.026†	846.4	903.9	528.56 ug/L	528.56 ppb	18:20:26
2	Si 251.611†	87726.6	90152.0	2525.6 ug/L	2525.6 ppb	18:20:06
2	Sn 189.927†	3149.2	3250.7	500.62 ug/L	500.62 ppb	18:20:26
2	Ti 334.940†	347258.4	360354.7	499.64 ug/L	499.64 ppb	18:20:00
2	Tl 190.801†	1775.7	1872.8	502.92 ug/L	502.92 ppb	18:20:26
2	U 409.014†	16473.2	18838.1	498.44 ug/L	498.44 ppb	18:20:06
2	V 292.402†	77505.3	81570.9	506.55 ug/L	506.55 ppb	18:20:06
2	Zn 213.857†	59114.5	60294.1	500.31 ug/L	500.31 ppb	18:20:06
2	SiO2†	88031.9	90452.1	5381.1 ug/L	5381.1 ppb	18:21:07
3	Sc Radial	5361.0	5361.0	95.2 %		18:19:02
3	Y RADIAL	5697.2	5697.2	95.76 %		18:19:02
3	Al 396.153Radial†	6856.0	7204.8	5193.7 ug/L	5193.7 ppb	18:19:02
3	Ca 317.933Radial†	3218.4	3355.6	5068.6 ug/L	5068.6 ppb	18:19:22
3	Fe 238.204 Radial†	586.7	603.9	4904.0 ug/L	4904.0 ppb	18:19:22
3	K 766.490 Radial†	28513.2	27036.6	4973.7 ug/L	4973.7 ppb	18:19:02
3	Mg 279.077 IEC†	164.8	170.7	5091.6 ug/L	5091.6 ppb	18:19:22
3	Na 589.592 Radial†	36585.8	39480.9	9191.3 ug/L	9191.3 ppb	18:19:02
3	Sr 421.552†	82269.2	86401.3	492.18 ug/L	492.18 ppb	18:19:02
3	Sc 361.383	933085.0	933085.0	95.471 %		18:20:32
3	Y 371.029	772287.0	772287.0	93.959 %		18:20:32
3	Ag 328.068†	119354.4	124543.4	515.69 ug/L	515.69 ppb	18:20:37
3	As 188.979†	1291.2	1372.8	510.96 ug/L	510.96 ppb	18:20:57
3	B 249.677†	23814.0	25484.5	509.87 ug/L	509.87 ppb	18:20:37
3	Ba 233.527†	72351.4	75774.1	516.40 ug/L	516.40 ppb	18:20:37
3	Be 313.107†	1479378.4	1553998.1	505.18 ug/L	505.18 ppb	18:20:32
3	Cd 226.502†	49422.5	51983.4	514.24 ug/L	514.24 ppb	18:20:37
3	Co 228.616†	27233.9	28600.1	518.53 ug/L	518.53 ppb	18:20:37
3	Cr 267.716†	48080.4	50272.6	513.70 ug/L	513.70 ppb	18:20:37
3	Cu 324.752†	186758.0	189408.1	513.57 ug/L	513.57 ppb	18:20:37
3	Mn 257.610†	498539.8	521695.8	508.02 ug/L	508.02 ppb	18:20:32
3	Mo 202.031†	7806.7	8153.7	506.33 ug/L	506.33 ppb	18:20:57
3	Ni 231.604†	22073.7	23005.5	515.76 ug/L	515.76 ppb	18:20:37
3	P 214.914†	4853.0	4857.5	2442.3 ug/L	2442.3 ppb	18:20:57
3	Pb 220.353†	4443.8	4678.0	509.18 ug/L	509.18 ppb	18:20:57
3	S 181.975 Axial†	831.2	823.5	997.67 ug/L	997.67 ppb	18:20:57
3	Sb 206.836†	1635.5	1671.2	521.66 ug/L	521.66 ppb	18:20:57
3	Se 196.026†	837.3	906.0	529.29 ug/L	529.29 ppb	18:20:57
3	Si 251.611†	88746.8	92426.3	2589.3 ug/L	2589.3 ppb	18:20:37
3	Sn 189.927†	3149.7	3294.5	507.33 ug/L	507.33 ppb	18:20:57
3	Ti 334.940†	345131.4	362899.2	503.16 ug/L	503.16 ppb	18:20:32
3	Tl 190.801†	1784.8	1906.8	511.94 ug/L	511.94 ppb	18:20:57
3	U 409.014†	16788.4	19394.7	513.21 ug/L	513.21 ppb	18:20:37
3	V 292.402†	78290.5	83458.5	518.25 ug/L	518.25 ppb	18:20:37
3	Zn 213.857†	59707.5	61727.7	512.23 ug/L	512.23 ppb	18:20:37
3	SiO2†	87923.5	91548.4	5446.3 ug/L	5446.3 ppb	18:21:12

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	937090.3	95.881 %	0.7446			0.78%
Sc Radial	5417.3	96.2 %	3.73			3.88%
Y 371.029	776183.5	94.433 %	0.7514			0.80%
Y RADIAL	5721.6	96.17 %	4.153			4.32%
Ag 328.068†	123269.6	510.42 ug/L	5.224	510.42 ppb	5.224	1.02%
QC value within limits for Ag 328.068 Recovery = 102.08%						
Al 396.153Radial†	7031.1	5068.0 ug/L	251.53	5068.0 ppb	251.53	4.96%
QC value within limits for Al 396.153Radial Recovery = 101.36%						
As 188.979†	1358.8	505.78 ug/L	5.333	505.78 ppb	5.333	1.05%
QC value within limits for As 188.979 Recovery = 101.16%						
B 249.677†	25091.2	502.00 ug/L	7.083	502.00 ppb	7.083	1.41%
QC value within limits for B 249.677 Recovery = 100.40%						
Ba 233.527†	74854.1	510.13 ug/L	5.966	510.13 ppb	5.966	1.17%
QC value within limits for Ba 233.527 Recovery = 102.03%						
Be 313.107†	1554365.3	505.30 ug/L	2.245	505.30 ppb	2.245	0.44%
QC value within limits for Be 313.107 Recovery = 101.06%						
Ca 317.933Radial†	3312.3	5003.1 ug/L	216.11	5003.1 ppb	216.11	4.32%

QC value within limits for Ca 317.933 Radial Recovery = 100.06%

Cd 226.502†	51389.0	508.36 ug/L	5.915	508.36 ppb	5.915	1.16%
QC value within limits for Cd 226.502 Recovery = 101.67%						
Co 228.616†	28190.1	511.10 ug/L	7.003	511.10 ppb	7.003	1.37%
QC value within limits for Co 228.616 Recovery = 102.22%						
Cr 267.716†	49741.4	508.27 ug/L	5.609	508.27 ppb	5.609	1.10%
QC value within limits for Cr 267.716 Recovery = 101.65%						
Cu 324.752†	187225.1	507.65 ug/L	6.044	507.65 ppb	6.044	1.19%
QC value within limits for Cu 324.752 Recovery = 101.53%						
Fe 238.204 Radial†	598.4	4859.1 ug/L	208.84	4859.1 ppb	208.84	4.30%
QC value within limits for Fe 238.204 Radial Recovery = 97.18%						
K 766.490 Radial†	26541.4	4882.6 ug/L	235.12	4882.6 ppb	235.12	4.82%
QC value within limits for K 766.490 Radial Recovery = 97.65%						
Mg 279.077 IEC†	169.0	5041.9 ug/L	265.61	5041.9 ppb	265.61	5.27%
QC value within limits for Mg 279.077 IEC Recovery = 100.84%						
Mn 257.610†	520394.7	506.75 ug/L	2.160	506.75 ppb	2.160	0.43%
QC value within limits for Mn 257.610 Recovery = 101.35%						
Mo 202.031†	8109.7	503.60 ug/L	3.823	503.60 ppb	3.823	0.76%
QC value within limits for Mo 202.031 Recovery = 100.72%						
Na 589.592 Radial†	38921.2	9061.0 ug/L	390.97	9061.0 ppb	390.97	4.31%
QC value within limits for Na 589.592 Radial Recovery = 90.61%						
Ni 231.604†	22733.9	509.68 ug/L	5.915	509.68 ppb	5.915	1.16%
QC value within limits for Ni 231.604 Recovery = 101.94%						
P 214.914†	4834.9	2431.6 ug/L	14.06	2431.6 ppb	14.06	0.58%
QC value within limits for P 214.914 Recovery = 97.26%						
Pb 220.353†	4638.2	504.84 ug/L	4.222	504.84 ppb	4.222	0.84%
QC value within limits for Pb 220.353 Recovery = 100.97%						
S 181.975 Axial†	822.4	996.42 ug/L	5.589	996.42 ppb	5.589	0.56%
QC value within limits for S 181.975 Axial Recovery = 99.64%						
Sb 206.836†	1663.0	519.05 ug/L	4.951	519.05 ppb	4.951	0.95%
QC value within limits for Sb 206.836 Recovery = 103.81%						
Se 196.026†	905.0	528.54 ug/L	0.761	528.54 ppb	0.761	0.14%
QC value within limits for Se 196.026 Recovery = 105.71%						
Si 251.611†	91249.2	2556.3 ug/L	31.95	2556.3 ppb	31.95	1.25%
QC value within limits for Si 251.611 Recovery = 102.25%						
Sn 189.927†	3272.5	503.95 ug/L	3.358	503.95 ppb	3.358	0.67%
QC value within limits for Sn 189.927 Recovery = 100.79%						
Sr 421.552†	84758.8	482.82 ug/L	22.642	482.82 ppb	22.642	4.69%
QC value within limits for Sr 421.552 Recovery = 96.56%						
Ti 334.940†	362136.6	502.11 ug/L	2.140	502.11 ppb	2.140	0.43%
QC value within limits for Ti 334.940 Recovery = 100.42%						
Tl 190.801†	1890.6	507.66 ug/L	4.528	507.66 ppb	4.528	0.89%
QC value within limits for Tl 190.801 Recovery = 101.53%						
U 409.014†	19065.2	504.47 ug/L	7.744	504.47 ppb	7.744	1.54%
QC value within limits for U 409.014 Recovery = 100.89%						
V 292.402†	82537.1	512.56 ug/L	5.859	512.56 ppb	5.859	1.14%
QC value within limits for V 292.402 Recovery = 102.51%						
Zn 213.857†	61003.5	506.22 ug/L	5.961	506.22 ppb	5.961	1.18%
QC value within limits for Zn 213.857 Recovery = 101.24%						
SiO2†	91346.1	5434.3 ug/L	48.33	5434.3 ppb	48.33	0.89%
QC value within limits for SiO2 Recovery = 101.62%						

All analyte(s) passed QC.

Sequence No.: 19

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 1/19/2010 18:23:22

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5349.9	5349.9	95.0 %		18:25:14
1	Y RADIAL	5699.7	5699.7	95.81 %		18:25:14
1	Al 396.153Radial†	-25.7	-23.5	-17.033 ug/L	-17.033 ppb	18:25:14
1	Ca 317.933Radial†	20.3	-3.4	-5.1985 ug/L	-5.1985 ppb	18:25:34
1	Fe 238.204 Radial†	9.8	-2.0	-16.221 ug/L	-16.221 ppb	18:25:34
1	K 766.490 Radial†	2872.8	111.0	20.466 ug/L	20.466 ppb	18:25:14
1	Mg 279.077 IEC†	3.6	1.4	40.311 ug/L	40.311 ppb	18:25:34
1	Na 589.592 Radial†	-1199.8	-210.6	-49.019 ug/L	-49.019 ppb	18:25:14
1	Sr 421.552†	26.8	16.4	0.0934 ug/L	0.0934 ppb	18:25:14
1	Sc 361.383	932192.6	932192.6	95.380 %		18:26:31
1	Y 371.029	783553.8	783553.8	95.329 %		18:26:31
1	Ag 328.068†	434.5	-17.4	-0.0787 ug/L	-0.0787 ppb	18:26:36
1	As 188.979†	-25.6	-6.6	-2.4254 ug/L	-2.4254 ppb	18:26:56
1	B 249.677†	-343.9	180.2	3.6238 ug/L	3.6238 ppb	18:26:56
1	Ba 233.527†	3.7	-5.6	-0.0402 ug/L	-0.0402 ppb	18:26:56
1	Be 313.107†	-4448.6	-222.7	-0.0724 ug/L	-0.0724 ppb	18:26:36
1	Cd 226.502†	-219.9	-14.2	-0.1387 ug/L	-0.1387 ppb	18:26:56
1	Co 228.616†	-82.6	-12.3	-0.2230 ug/L	-0.2230 ppb	18:26:56
1	Cr 267.716†	84.4	-0.1	-0.0018 ug/L	-0.0018 ppb	18:26:56
1	Cu 324.752†	6207.7	299.2	0.8107 ug/L	0.8107 ppb	18:26:36
1	Mn 257.610†	457.5	-13.9	-0.0168 ug/L	-0.0168 ppb	18:26:56
1	Mo 202.031†	19.1	-3.3	-0.2058 ug/L	-0.2058 ppb	18:26:56
1	Ni 231.604†	107.0	-3.2	-0.0721 ug/L	-0.0721 ppb	18:26:56
1	P 214.914†	223.6	8.7	4.4144 ug/L	4.4144 ppb	18:26:56
1	Pb 220.353†	-39.3	-17.7	-1.9275 ug/L	-1.9275 ppb	18:26:56
1	S 181.975 Axial†	43.2	-1.9	-2.2796 ug/L	-2.2796 ppb	18:26:56
1	Sb 206.836†	36.0	-4.2	-1.2614 ug/L	-1.2614 ppb	18:26:56
1	Se 196.026†	-28.7	-1.1	-0.6956 ug/L	-0.6956 ppb	18:26:56
1	Si 251.611†	492.2	-14.4	-0.4025 ug/L	-0.4025 ppb	18:26:56
1	Sn 189.927†	8.1	3.9	0.5999 ug/L	0.5999 ppb	18:26:56
1	Ti 334.940†	-1392.0	-63.8	-0.0922 ug/L	-0.0922 ppb	18:26:36
1	Tl 190.801†	-29.4	6.4	1.7117 ug/L	1.7117 ppb	18:26:56
1	U 409.014†	-1748.1	-22.9	-0.6069 ug/L	-0.6069 ppb	18:26:31
1	V 292.402†	-1484.9	-102.7	-0.6303 ug/L	-0.6303 ppb	18:26:36
1	Zn 213.857†	751.8	-24.0	-0.1996 ug/L	-0.1996 ppb	18:26:56
1	SiO2†	549.2	29.9	1.7887 ug/L	1.7887 ppb	18:28:02
2	Sc Radial	5225.0	5225.0	92.8 %		18:25:39
2	Y RADIAL	5516.7	5516.7	92.73 %		18:25:39
2	Al 396.153Radial†	-9.0	-6.2	-4.5221 ug/L	-4.5221 ppb	18:25:39
2	Ca 317.933Radial†	16.3	-7.3	-11.012 ug/L	-11.012 ppb	18:25:59
2	Fe 238.204 Radial†	11.2	-0.3	-2.7966 ug/L	-2.7966 ppb	18:25:59
2	K 766.490 Radial†	2833.7	141.1	26.018 ug/L	26.018 ppb	18:25:39
2	Mg 279.077 IEC†	0.6	-1.8	-54.588 ug/L	-54.588 ppb	18:25:59
2	Na 589.592 Radial†	-1146.2	-183.0	-42.603 ug/L	-42.603 ppb	18:25:39
2	Sr 421.552†	40.8	32.1	0.1832 ug/L	0.1832 ppb	18:25:39
2	Sc 361.383	933807.7	933807.7	95.545 %		18:27:01
2	Y 371.029	783935.2	783935.2	95.376 %		18:27:01
2	Ag 328.068†	353.0	-103.5	-0.4240 ug/L	-0.4240 ppb	18:27:06
2	As 188.979†	-28.1	-9.1	-3.3660 ug/L	-3.3660 ppb	18:27:26
2	B 249.677†	-362.7	161.1	3.2390 ug/L	3.2390 ppb	18:27:26
2	Ba 233.527†	20.0	11.4	0.0762 ug/L	0.0762 ppb	18:27:26
2	Be 313.107†	-4512.9	-281.9	-0.0914 ug/L	-0.0914 ppb	18:27:06
2	Cd 226.502†	-215.5	-9.1	-0.0912 ug/L	-0.0912 ppb	18:27:26
2	Co 228.616†	-76.8	-6.1	-0.1110 ug/L	-0.1110 ppb	18:27:26
2	Cr 267.716†	121.2	38.3	0.3922 ug/L	0.3922 ppb	18:27:26
2	Cu 324.752†	6201.3	281.2	0.7654 ug/L	0.7654 ppb	18:27:06
2	Mn 257.610†	457.5	-14.8	-0.0124 ug/L	-0.0124 ppb	18:27:26
2	Mo 202.031†	23.9	1.7	0.1042 ug/L	0.1042 ppb	18:27:26
2	Ni 231.604†	117.2	7.3	0.1633 ug/L	0.1633 ppb	18:27:26

2	P 214.914†	241.6	27.1	14.032 ug/L	14.032 ppb	18:27:26
2	Pb 220.353†	-32.2	-10.2	-1.1128 ug/L	-1.1128 ppb	18:27:26
2	S 181.975 Axial†	46.6	1.6	1.9428 ug/L	1.9428 ppb	18:27:26
2	Sb 206.836†	34.2	-6.1	-1.8361 ug/L	-1.8361 ppb	18:27:26
2	Se 196.026†	-32.5	-5.1	-2.8652 ug/L	-2.8652 ppb	18:27:26
2	Si 251.611†	489.3	-18.4	-0.5176 ug/L	-0.5176 ppb	18:27:26
2	Sn 189.927†	1.7	-2.8	-0.4326 ug/L	-0.4326 ppb	18:27:26
2	Ti 334.940†	-1337.1	-3.9	0.0000 ug/L	0.0000 ppb	18:27:06
2	Tl 190.801†	-30.4	5.4	1.4502 ug/L	1.4502 ppb	18:27:26
2	U 409.014†	-1933.8	-214.0	-5.6829 ug/L	-5.6829 ppb	18:27:01
2	V 292.402†	-1465.7	-79.9	-0.4997 ug/L	-0.4997 ppb	18:27:06
2	Zn 213.857†	756.4	-20.6	-0.1738 ug/L	-0.1738 ppb	18:27:26
2	SiO2†	514.2	-7.7	-0.4636 ug/L	-0.4636 ppb	18:28:07
3	Sc Radial	5376.0	5376.0	95.5 %		18:26:04
3	Y RADIAL	5693.8	5693.8	95.71 %		18:26:04
3	Al 396.153Radial†	-16.0	-13.3	-9.6219 ug/L	-9.6219 ppb	18:26:04
3	Ca 317.933Radial†	21.4	-2.4	-3.6393 ug/L	-3.6393 ppb	18:26:25
3	Fe 238.204 Radial†	13.0	1.3	10.389 ug/L	10.389 ppb	18:26:25
3	K 766.490 Radial†	2862.8	85.8	15.812 ug/L	15.812 ppb	18:26:04
3	Mg 279.077 IEC†	3.4	1.1	32.849 ug/L	32.849 ppb	18:26:25
3	Na 589.592 Radial†	-1108.1	-108.4	-25.227 ug/L	-25.227 ppb	18:26:04
3	Sr 421.552†	12.0	0.8	0.0043 ug/L	0.0043 ppb	18:26:04
3	Sc 361.383	942897.9	942897.9	96.475 %		18:27:32
3	Y 371.029	791816.6	791816.6	96.335 %		18:27:32
3	Ag 328.068†	382.5	-76.5	-0.3189 ug/L	-0.3189 ppb	18:27:37
3	As 188.979†	-30.1	-10.9	-4.0251 ug/L	-4.0251 ppb	18:27:57
3	B 249.677†	-338.8	189.6	3.8083 ug/L	3.8083 ppb	18:27:57
3	Ba 233.527†	3.5	-5.9	-0.0413 ug/L	-0.0413 ppb	18:27:57
3	Be 313.107†	-4456.8	-178.2	-0.0576 ug/L	-0.0576 ppb	18:27:37
3	Cd 226.502†	-209.9	-1.1	-0.0111 ug/L	-0.0111 ppb	18:27:57
3	Co 228.616†	-62.7	9.3	0.1684 ug/L	0.1684 ppb	18:27:57
3	Cr 267.716†	106.4	21.7	0.2188 ug/L	0.2188 ppb	18:27:57
3	Cu 324.752†	6173.4	189.6	0.5116 ug/L	0.5116 ppb	18:27:37
3	Mn 257.610†	466.9	-9.7	-0.0097 ug/L	-0.0097 ppb	18:27:57
3	Mo 202.031†	27.8	5.5	0.3395 ug/L	0.3395 ppb	18:27:57
3	Ni 231.604†	109.9	-1.4	-0.0318 ug/L	-0.0318 ppb	18:27:57
3	P 214.914†	222.8	5.3	2.6310 ug/L	2.6310 ppb	18:27:57
3	Pb 220.353†	-43.3	-21.5	-2.3365 ug/L	-2.3365 ppb	18:27:57
3	S 181.975 Axial†	49.5	4.2	5.0896 ug/L	5.0896 ppb	18:27:57
3	Sb 206.836†	46.1	5.9	1.7777 ug/L	1.7777 ppb	18:27:57
3	Se 196.026†	-18.7	9.5	5.4092 ug/L	5.4092 ppb	18:27:57
3	Si 251.611†	500.7	-11.5	-0.3279 ug/L	-0.3279 ppb	18:27:57
3	Sn 189.927†	1.0	-3.5	-0.5454 ug/L	-0.5454 ppb	18:27:57
3	Ti 334.940†	-1280.1	68.7	0.0895 ug/L	0.0895 ppb	18:27:37
3	Tl 190.801†	-33.2	2.9	0.7706 ug/L	0.7706 ppb	18:27:57
3	U 409.014†	-1538.3	215.4	5.7181 ug/L	5.7181 ppb	18:27:32
3	V 292.402†	-1512.4	-113.5	-0.6807 ug/L	-0.6807 ppb	18:27:37
3	Zn 213.857†	769.2	-14.9	-0.1265 ug/L	-0.1265 ppb	18:27:57
3	SiO2†	501.6	-26.0	-1.5603 ug/L	-1.5603 ppb	18:28:12

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	936299.4	95.800 %		0.5905			0.62%
Sc Radial	5317.0	94.4 %		1.43			1.52%
Y 371.029	786435.2	95.680 %		0.5675			0.59%
Y RADIAL	5636.8	94.75 %		1.748			1.84%
Ag 328.068†	-65.8	-0.2739 ug/L		0.17697	-0.2739 ppb	0.17697	64.62%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	-14.3	-10.392 ug/L		6.2910	-10.392 ppb	6.2910	60.53%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	-8.9	-3.2722 ug/L		0.80395	-3.2722 ppb	0.80395	24.57%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	177.0	3.5571 ug/L		0.29046	3.5571 ppb	0.29046	8.17%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	-0.0	-0.0018 ug/L		0.06755	-0.0018 ppb	0.06755	>999.9%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	-227.6	-0.0738 ug/L		0.01697	-0.0738 ppb	0.01697	22.99%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	-4.4	-6.6165 ug/L		3.88541	-6.6165 ppb	3.88541	58.72%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd 226.502†	-8.1	-0.0803 ug/L	0.06451	-0.0803 ppb	0.06451	80.31%	
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	-3.1	-0.0552 ug/L	0.20156	-0.0552 ppb	0.20156	365.01%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	20.0	0.2031 ug/L	0.19742	0.2031 ppb	0.19742	97.23%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	256.7	0.6959 ug/L	0.16120	0.6959 ppb	0.16120	23.16%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	-0.4	-2.8762 ug/L	13.30505	-2.8762 ppb	13.30505	462.60%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	112.6	20.765 ug/L	5.1095	20.765 ppb	5.1095	24.61%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	0.2	6.1907 ug/L	52.76808	6.1907 ppb	52.76808	852.38%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	-12.8	-0.0130 ug/L	0.00357	-0.0130 ppb	0.00357	27.46%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	1.3	0.0793 ug/L	0.27350	0.0793 ppb	0.27350	344.80%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	-167.3	-38.950 ug/L	12.3095	-38.950 ppb	12.3095	31.60%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	0.9	0.0198 ug/L	0.12589	0.0198 ppb	0.12589	635.33%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	13.7	7.0259 ug/L	6.13298	7.0259 ppb	6.13298	87.29%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	-16.5	-1.7923 ug/L	0.62292	-1.7923 ppb	0.62292	34.76%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	1.3	1.5843 ug/L	3.69769	1.5843 ppb	3.69769	233.40%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	-1.5	-0.4399 ug/L	1.94194	-0.4399 ppb	1.94194	441.41%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	1.1	0.6162 ug/L	4.29033	0.6162 ppb	4.29033	696.30%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	-14.8	-0.4160 ug/L	0.09554	-0.4160 ppb	0.09554	22.97%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	-0.8	-0.1260 ug/L	0.63122	-0.1260 ppb	0.63122	500.85%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	16.4	0.0936 ug/L	0.08941	0.0936 ppb	0.08941	95.49%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	0.3	-0.0009 ug/L	0.09088	-0.0009 ppb	0.09088	>999.9%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	4.9	1.3108 ug/L	0.48579	1.3108 ppb	0.48579	37.06%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	-7.2	-0.1906 ug/L	5.71189	-0.1906 ppb	5.71189	>999.9%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	-98.7	-0.6036 ug/L	0.09341	-0.6036 ppb	0.09341	15.48%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	-19.8	-0.1666 ug/L	0.03711	-0.1666 ppb	0.03711	22.27%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†	-1.3	-0.0784 ug/L	1.70740	-0.0784 ppb	1.70740	>999.9%	
QC value within limits for SiO2 Recovery = Not calculated							

All analyte(s) passed QC.

Sequence No.: 21
 Sample ID: 1202015896|941810|1
 Analyst: HSC
 Initial Sample Wt:
 Dilution:

Autosampler Location: 51
 Date Collected: 1/19/2010 18:37:23
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: 1202015896|941810|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5379.0	5379.0	95.5 %		18:39:16
1	Y RADIAL	5723.7	5723.7	96.21 %		18:39:16
1	Al 396.153Radial†	106.9	115.3	83.516 ug/L	83.516 ppb	18:39:16
1	Ca 317.933Radial†	92.4	71.9	108.53 ug/L	108.53 ppb	18:39:36
1	Fe 238.204 Radial†	19.2	7.8	62.921 ug/L	62.921 ppb	18:39:36
1	K 766.490 Radial†	3014.5	243.0	44.689 ug/L	44.689 ppb	18:39:16
1	Mg 279.077 IEC†	2.6	0.2	6.9863 ug/L	6.9863 ppb	18:39:36
1	Na 589.592 Radial†	-666.2	354.9	82.621 ug/L	82.621 ppb	18:39:16
1	Sr 421.552†	154.0	149.4	0.8502 ug/L	0.8502 ppb	18:39:16
1	Sc 361.383	947605.5	947605.5	96.957 %		18:40:33
1	Y 371.029	794216.6	794216.6	96.627 %		18:40:33
1	Ag 328.068†	359.8	-101.9	-0.3995 ug/L	-0.3995 ppb	18:40:38
1	As 188.979†	-30.9	-11.5	-4.2327 ug/L	-4.2327 ppb	18:40:58
1	B 249.677†	-415.7	112.0	2.2400 ug/L	2.2400 ppb	18:40:58
1	Ba 233.527†	171.2	167.1	1.1375 ug/L	1.1375 ppb	18:40:58
1	Be 313.107†	-4519.9	-220.4	-0.0674 ug/L	-0.0674 ppb	18:40:38
1	Cd 226.502†	-224.8	-15.4	-0.1587 ug/L	-0.1587 ppb	18:40:58
1	Co 228.616†	-66.8	5.4	0.0925 ug/L	0.0925 ppb	18:40:58
1	Cr 267.716†	383.2	306.7	3.1317 ug/L	3.1317 ppb	18:40:58
1	Cu 324.752†	6467.9	461.6	1.2559 ug/L	1.2559 ppb	18:40:38
1	Mn 257.610†	2683.5	2274.2	2.2193 ug/L	2.2193 ppb	18:40:38
1	Mo 202.031†	26.6	4.1	0.2599 ug/L	0.2599 ppb	18:40:58
1	Ni 231.604†	158.0	47.6	1.0686 ug/L	1.0686 ppb	18:40:58
1	P 214.914†	239.9	21.7	11.078 ug/L	11.078 ppb	18:40:58
1	Pb 220.353†	-38.8	-16.6	-1.7879 ug/L	-1.7879 ppb	18:40:58
1	S 181.975 Axial†	65.3	20.2	24.516 ug/L	24.516 ppb	18:40:58
1	Sb 206.836†	43.7	3.1	0.9399 ug/L	0.9399 ppb	18:40:58
1	Se 196.026†	-29.9	-1.9	-0.8319 ug/L	-0.8319 ppb	18:40:58
1	Si 251.611†	5622.4	5268.4	147.95 ug/L	147.95 ppb	18:40:38
1	Sn 189.927†	2.5	-2.0	-0.2919 ug/L	-0.2919 ppb	18:40:58
1	Ti 334.940†	-92.0	1300.6	1.8174 ug/L	1.8174 ppb	18:40:38
1	Tl 190.801†	-43.5	-7.6	-2.0009 ug/L	-2.0009 ppb	18:40:58
1	U 409.014†	-1811.5	-58.5	-1.5672 ug/L	-1.5672 ppb	18:40:33
1	V 292.402†	-1429.7	-20.4	-0.1363 ug/L	-0.1363 ppb	18:40:38
1	Zn 213.857†	952.8	170.4	1.4121 ug/L	1.4121 ppb	18:40:58
1	SiO2†	5674.5	5306.7	316.49 ug/L	316.49 ppb	18:42:04
2	Sc Radial	5531.8	5531.8	98.2 %		18:39:41
2	Y RADIAL	5853.2	5853.2	98.39 %		18:39:41
2	Al 396.153Radial†	105.8	111.2	80.492 ug/L	80.492 ppb	18:39:41
2	Ca 317.933Radial†	91.1	67.9	102.51 ug/L	102.51 ppb	18:40:01
2	Fe 238.204 Radial†	17.0	4.9	39.738 ug/L	39.738 ppb	18:40:01
2	K 766.490 Radial†	2913.0	52.5	9.6074 ug/L	9.6074 ppb	18:39:41
2	Mg 279.077 IEC†	4.7	2.3	69.258 ug/L	69.258 ppb	18:40:01
2	Na 589.592 Radial†	-665.3	375.1	87.316 ug/L	87.316 ppb	18:39:41
2	Sr 421.552†	179.8	171.2	0.9744 ug/L	0.9744 ppb	18:39:41
2	Sc 361.383	957280.1	957280.1	97.947 %		18:41:03
2	Y 371.029	800987.3	800987.3	97.450 %		18:41:03
2	Ag 328.068†	412.0	-52.3	-0.2055 ug/L	-0.2055 ppb	18:41:08
2	As 188.979†	-25.4	-5.6	-2.0508 ug/L	-2.0508 ppb	18:41:28
2	B 249.677†	-450.3	81.0	1.6207 ug/L	1.6207 ppb	18:41:28
2	Ba 233.527†	193.9	188.5	1.2821 ug/L	1.2821 ppb	18:41:28
2	Be 313.107†	-4573.1	-227.6	-0.0697 ug/L	-0.0697 ppb	18:41:08
2	Cd 226.502†	-231.4	-19.8	-0.1990 ug/L	-0.1990 ppb	18:41:28
2	Co 228.616†	-64.6	8.4	0.1472 ug/L	0.1472 ppb	18:41:28
2	Cr 267.716†	381.3	300.7	3.0691 ug/L	3.0691 ppb	18:41:28
2	Cu 324.752†	6390.9	315.6	0.8573 ug/L	0.8573 ppb	18:41:08
2	Mn 257.610†	2625.0	2186.5	2.1291 ug/L	2.1291 ppb	18:41:08
2	Mo 202.031†	28.1	5.4	0.3395 ug/L	0.3395 ppb	18:41:28
2	Ni 231.604†	181.7	70.1	1.5731 ug/L	1.5731 ppb	18:41:28

2	P 214.914†	235.6	14.9	7.6002 ug/L	7.6002 ppb	18:41:28
2	Pb 220.353†	-51.4	-29.1	-3.1364 ug/L	-3.1364 ppb	18:41:28
2	S 181.975 Axial†	51.1	5.0	6.0897 ug/L	6.0897 ppb	18:41:28
2	Sb 206.836†	45.9	5.0	1.5064 ug/L	1.5064 ppb	18:41:28
2	Se 196.026†	-21.8	6.7	3.9001 ug/L	3.9001 ppb	18:41:28
2	Si 251.611†	5731.3	5320.9	149.42 ug/L	149.42 ppb	18:41:08
2	Sn 189.927†	9.7	5.4	0.8388 ug/L	0.8388 ppb	18:41:28
2	Ti 334.940†	-83.6	1310.2	1.8236 ug/L	1.8236 ppb	18:41:08
2	Tl 190.801†	-32.3	4.3	1.1645 ug/L	1.1645 ppb	18:41:28
2	U 409.014†	-1731.9	41.7	1.0948 ug/L	1.0948 ppb	18:41:03
2	V 292.402†	-1458.6	-35.1	-0.2156 ug/L	-0.2156 ppb	18:41:08
2	Zn 213.857†	965.3	173.3	1.4358 ug/L	1.4358 ppb	18:41:28
2	SiO2†	5598.1	5169.5	308.31 ug/L	308.31 ppb	18:42:09
3	Sc Radial	5597.7	5597.7	99.4 %		18:40:06
3	Y RADIAL	5902.8	5902.8	99.22 %		18:40:06
3	Al 396.153Radial†	74.7	78.6	56.888 ug/L	56.888 ppb	18:40:06
3	Ca 317.933Radial†	94.9	70.6	106.69 ug/L	106.69 ppb	18:40:26
3	Fe 238.204 Radial†	18.6	6.4	51.460 ug/L	51.460 ppb	18:40:26
3	K 766.490 Radial†	2986.0	91.0	16.694 ug/L	16.694 ppb	18:40:06
3	Mg 279.077 IEC†	2.2	-0.3	-9.2418 ug/L	-9.2418 ppb	18:40:26
3	Na 589.592 Radial†	-672.8	375.4	87.400 ug/L	87.400 ppb	18:40:06
3	Sr 421.552†	217.1	206.5	1.1757 ug/L	1.1757 ppb	18:40:06
3	Sc 361.383	961592.7	961592.7	98.388 %		18:41:34
3	Y 371.029	805974.4	805974.4	98.057 %		18:41:34
3	Ag 328.068†	420.7	-45.3	-0.1747 ug/L	-0.1747 ppb	18:41:39
3	As 188.979†	-29.5	-9.7	-3.5377 ug/L	-3.5377 ppb	18:41:59
3	B 249.677†	-441.1	92.5	1.8503 ug/L	1.8503 ppb	18:41:59
3	Ba 233.527†	185.1	178.6	1.2146 ug/L	1.2146 ppb	18:41:59
3	Be 313.107†	-4537.4	-170.4	-0.0508 ug/L	-0.0508 ppb	18:41:39
3	Cd 226.502†	-219.2	-6.4	-0.0672 ug/L	-0.0672 ppb	18:41:59
3	Co 228.616†	-77.9	-4.9	-0.0940 ug/L	-0.0940 ppb	18:41:59
3	Cr 267.716†	381.0	298.7	3.0482 ug/L	3.0482 ppb	18:41:59
3	Cu 324.752†	6392.6	288.1	0.7830 ug/L	0.7830 ppb	18:41:39
3	Mn 257.610†	2639.9	2189.6	2.1365 ug/L	2.1365 ppb	18:41:39
3	Mo 202.031†	30.6	7.8	0.4897 ug/L	0.4897 ppb	18:41:59
3	Ni 231.604†	166.9	54.3	1.2174 ug/L	1.2174 ppb	18:41:59
3	P 214.914†	246.9	25.2	13.003 ug/L	13.003 ppb	18:41:59
3	Pb 220.353†	-70.5	-48.3	-5.2261 ug/L	-5.2261 ppb	18:41:59
3	S 181.975 Axial†	54.2	7.9	9.6213 ug/L	9.6213 ppb	18:41:59
3	Sb 206.836†	43.7	2.6	0.7464 ug/L	0.7464 ppb	18:41:59
3	Se 196.026†	-18.1	10.5	6.1055 ug/L	6.1055 ppb	18:41:59
3	Si 251.611†	5660.4	5222.7	146.66 ug/L	146.66 ppb	18:41:39
3	Sn 189.927†	-5.9	-10.6	-1.6156 ug/L	-1.6156 ppb	18:41:59
3	Ti 334.940†	22.3	1418.2	1.9803 ug/L	1.9803 ppb	18:41:39
3	Tl 190.801†	-35.3	1.4	0.4079 ug/L	0.4079 ppb	18:41:59
3	U 409.014†	-1722.8	58.9	1.5511 ug/L	1.5511 ppb	18:41:34
3	V 292.402†	-1516.9	-87.6	-0.5379 ug/L	-0.5379 ppb	18:41:39
3	Zn 213.857†	943.3	146.5	1.2129 ug/L	1.2129 ppb	18:41:59
3	SiO2†	5586.9	5132.5	306.09 ug/L	306.09 ppb	18:42:14

Mean Data: 1202015896|941810|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	955492.8	97.764 %		0.7329			0.75%
Sc Radial	5502.8	97.7 %		1.99			2.04%
Y 371.029	800392.8	97.378 %		0.7180			0.74%
Y RADIAL	5826.6	97.94 %		1.554			1.59%
Ag 328.068†	-66.5	-0.2599 ug/L		0.12187	-0.2599 ppb	0.12187	46.89%
Al 396.153Radial†	101.7	73.632 ug/L		14.5792	73.632 ppb	14.5792	19.80%
As 188.979†	-8.9	-3.2737 ug/L		1.11464	-3.2737 ppb	1.11464	34.05%
B 249.677†	95.2	1.9037 ug/L		0.31308	1.9037 ppb	0.31308	16.45%
Ba 233.527†	178.1	1.2114 ug/L		0.07233	1.2114 ppb	0.07233	5.97%
Be 313.107†	-206.1	-0.0626 ug/L		0.01031	-0.0626 ppb	0.01031	16.46%
Ca 317.933Radial†	70.1	105.91 ug/L		3.085	105.91 ppb	3.085	2.91%
Cd 226.502†	-13.9	-0.1417 ug/L		0.06754	-0.1417 ppb	0.06754	47.68%
Co 228.616†	2.9	0.0486 ug/L		0.12646	0.0486 ppb	0.12646	260.35%
Cr 267.716†	302.0	3.0830 ug/L		0.04349	3.0830 ppb	0.04349	1.41%
Cu 324.752†	355.1	0.9654 ug/L		0.25432	0.9654 ppb	0.25432	26.34%
Fe 238.204 Radial†	6.3	51.373 ug/L		11.5916	51.373 ppb	11.5916	22.56%
K 766.490 Radial†	128.9	23.664 ug/L		18.5502	23.664 ppb	18.5502	78.39%

Mg 279.077 IEC†	0.8	22.334 ug/L	41.4395	22.334 ppb	41.4395	185.54%
Mn 257.610†	2216.8	2.1616 ug/L	0.05007	2.1616 ppb	0.05007	2.32%
Mo 202.031†	5.8	0.3630 ug/L	0.11669	0.3630 ppb	0.11669	32.14%
Na 589.592 Radial†	368.5	85.779 ug/L	2.7353	85.779 ppb	2.7353	3.19%
Ni 231.604†	57.3	1.2864 ug/L	0.25919	1.2864 ppb	0.25919	20.15%
P 214.914†	20.6	10.560 ug/L	2.7384	10.560 ppb	2.7384	25.93%
Pb 220.353†	-31.3	-3.3835 ug/L	1.73240	-3.3835 ppb	1.73240	51.20%
S 181.975 Axial†	11.1	13.409 ug/L	9.7797	13.409 ppb	9.7797	72.93%
Sb 206.836†	3.6	1.0642 ug/L	0.39494	1.0642 ppb	0.39494	37.11%
Se 196.026†	5.1	3.0579 ug/L	3.54451	3.0579 ppb	3.54451	115.91%
Si 251.611†	5270.7	148.01 ug/L	1.381	148.01 ppb	1.381	0.93%
Sn 189.927†	-2.4	-0.3562 ug/L	1.22849	-0.3562 ppb	1.22849	344.86%
Sr 421.552†	175.7	1.0001 ug/L	0.16425	1.0001 ppb	0.16425	16.42%
Ti 334.940†	1343.0	1.8738 ug/L	0.09228	1.8738 ppb	0.09228	4.92%
Tl 190.801†	-0.6	-0.1428 ug/L	1.65300	-0.1428 ppb	1.65300	>999.9%
U 409.014†	14.0	0.3596 ug/L	1.68415	0.3596 ppb	1.68415	468.37%
V 292.402†	-47.7	-0.2966 ug/L	0.21272	-0.2966 ppb	0.21272	71.73%
Zn 213.857†	163.4	1.3536 ug/L	0.12246	1.3536 ppb	0.12246	9.05%
SiO2†	5202.9	310.30 ug/L	5.477	310.30 ppb	5.477	1.77%

Sequence No.: 22

Sample ID: 1202015897|941810|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 52

Date Collected: 1/19/2010 18:44:24

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202015897|941810|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5369.4	5369.4	95.4 %		18:46:17
1	Y RADIAL	5692.6	5692.6	95.69 %		18:46:17
1	Al 396.153Radial†	7201.8	7556.2	5448.0 ug/L	5448.0 ppb	18:46:17
1	Ca 317.933Radial†	3385.2	3525.4	5325.0 ug/L	5325.0 ppb	18:46:37
1	Fe 238.204 Radial†	604.1	621.2	5043.5 ug/L	5043.5 ppb	18:46:37
1	K 766.490 Radial†	29511.8	28037.2	5159.7 ug/L	5159.7 ppb	18:46:17
1	Mg 279.077 IEC†	169.4	175.2	5225.6 ug/L	5225.6 ppb	18:46:37
1	Na 589.592 Radial†	17845.8	19767.8	4602.0 ug/L	4602.0 ppb	18:46:17
1	Sr 421.552†	83145.1	87185.0	496.64 ug/L	496.64 ppb	18:46:17
1	Sc 361.383	948461.6	948461.6	97.044 %		18:47:36
1	Y 371.029	785260.6	785260.6	95.537 %		18:47:36
1	Ag 328.068†	121493.2	124720.6	516.50 ug/L	516.50 ppb	18:47:36
1	As 188.979†	1327.1	1387.9	516.72 ug/L	516.72 ppb	18:47:56
1	B 249.677†	24200.4	25478.2	509.75 ug/L	509.75 ppb	18:47:36
1	Ba 233.527†	76034.8	78341.0	533.88 ug/L	533.88 ppb	18:47:36
1	Be 313.107†	1549566.8	1601202.5	520.54 ug/L	520.54 ppb	18:47:36
1	Cd 226.502†	50475.4	52229.2	516.66 ug/L	516.66 ppb	18:47:36
1	Co 228.616†	27174.7	28076.6	509.02 ug/L	509.02 ppb	18:47:56
1	Cr 267.716†	49949.4	51382.1	525.04 ug/L	525.04 ppb	18:47:36
1	Cu 324.752†	197122.7	196917.1	533.93 ug/L	533.93 ppb	18:47:36
1	Mn 257.610†	525212.2	540714.8	526.54 ug/L	526.54 ppb	18:47:36
1	Mo 202.031†	8005.5	8226.0	510.83 ug/L	510.83 ppb	18:47:56
1	Ni 231.604†	22607.0	23180.2	519.69 ug/L	519.69 ppb	18:47:56
1	P 214.914†	1351.0	1166.5	506.68 ug/L	506.68 ppb	18:47:56
1	Pb 220.353†	4628.9	4793.3	521.74 ug/L	521.74 ppb	18:47:56
1	S 181.975 Axial†	4170.3	4250.1	5153.1 ug/L	5153.1 ppb	18:47:56
1	Sb 206.836†	1721.3	1731.8	540.29 ug/L	540.29 ppb	18:47:56
1	Se 196.026†	835.8	890.2	520.97 ug/L	520.97 ppb	18:47:56
1	Si 251.611†	183765.5	188831.8	5296.6 ug/L	5296.6 ppb	18:47:36
1	Sn 189.927†	3331.3	3428.2	527.93 ug/L	527.93 ppb	18:47:56
1	Ti 334.940†	363602.7	376072.4	521.45 ug/L	521.45 ppb	18:47:36
1	Tl 190.801†	1822.3	1915.1	514.41 ug/L	514.41 ppb	18:47:56
1	U 409.014†	17503.7	19846.7	525.16 ug/L	525.16 ppb	18:47:36
1	V 292.402†	81667.7	85609.2	531.48 ug/L	531.48 ppb	18:47:36
1	Zn 213.857†	60623.7	61657.9	511.58 ug/L	511.58 ppb	18:47:36
1	SiO2†	182840.6	187863.4	11190 ug/L	11190 ppb	18:48:56
2	Sc Radial	5432.0	5432.0	96.5 %		18:46:42
2	Y RADIAL	5737.9	5737.9	96.45 %		18:46:42
2	Al 396.153Radial†	7296.9	7567.8	5456.4 ug/L	5456.4 ppb	18:46:42
2	Ca 317.933Radial†	3389.2	3488.5	5269.4 ug/L	5269.4 ppb	18:47:02
2	Fe 238.204 Radial†	603.8	613.6	4982.0 ug/L	4982.0 ppb	18:47:02
2	K 766.490 Radial†	29864.8	28046.2	5161.4 ug/L	5161.4 ppb	18:46:42
2	Mg 279.077 IEC†	168.4	172.0	5132.7 ug/L	5132.7 ppb	18:47:02
2	Na 589.592 Radial†	17905.0	19613.3	4566.0 ug/L	4566.0 ppb	18:46:42
2	Sr 421.552†	84092.9	87162.1	496.51 ug/L	496.51 ppb	18:46:42
2	Sc 361.383	951468.8	951468.8	97.352 %		18:48:03
2	Y 371.029	787212.8	787212.8	95.774 %		18:48:03
2	Ag 328.068†	121417.1	124246.7	514.52 ug/L	514.52 ppb	18:48:03
2	As 188.979†	1341.1	1397.9	520.37 ug/L	520.37 ppb	18:48:23
2	B 249.677†	24305.5	25507.4	510.35 ug/L	510.35 ppb	18:48:03
2	Ba 233.527†	75782.5	77834.2	530.43 ug/L	530.43 ppb	18:48:03
2	Be 313.107†	1546738.5	1593250.5	517.95 ug/L	517.95 ppb	18:48:03
2	Cd 226.502†	50292.6	51877.0	513.18 ug/L	513.18 ppb	18:48:03
2	Co 228.616†	27091.6	27902.8	505.87 ug/L	505.87 ppb	18:48:23
2	Cr 267.716†	49826.4	51093.1	522.09 ug/L	522.09 ppb	18:48:03
2	Cu 324.752†	197532.7	196696.2	533.33 ug/L	533.33 ppb	18:48:03
2	Mn 257.610†	524388.1	538157.6	524.05 ug/L	524.05 ppb	18:48:03
2	Mo 202.031†	8019.8	8214.6	510.12 ug/L	510.12 ppb	18:48:23
2	Ni 231.604†	22584.1	23083.0	517.51 ug/L	517.51 ppb	18:48:23

2	P 214.914†	1320.4	1130.6	488.04 ug/L	488.04 ppb	18:48:23
2	Pb 220.353†	4583.4	4731.5	515.04 ug/L	515.04 ppb	18:48:23
2	S 181.975 Axial†	4132.4	4197.6	5089.4 ug/L	5089.4 ppb	18:48:23
2	Sb 206.836†	1713.2	1717.9	536.05 ug/L	536.05 ppb	18:48:23
2	Se 196.026†	828.3	879.7	514.84 ug/L	514.84 ppb	18:48:23
2	Si 251.611†	183656.6	188121.6	5276.7 ug/L	5276.7 ppb	18:48:03
2	Sn 189.927†	3327.0	3412.9	525.56 ug/L	525.56 ppb	18:48:23
2	Ti 334.940†	363518.9	374802.1	519.69 ug/L	519.69 ppb	18:48:03
2	Tl 190.801†	1813.0	1899.6	510.27 ug/L	510.27 ppb	18:48:23
2	U 409.014†	17573.7	19861.6	525.57 ug/L	525.57 ppb	18:48:03
2	V 292.402†	81610.6	85284.6	529.49 ug/L	529.49 ppb	18:48:03
2	Zn 213.857†	60407.6	61238.4	508.09 ug/L	508.09 ppb	18:48:03
2	SiO2†	182222.6	186633.0	11117 ug/L	11117 ppb	18:49:02
3	Sc Radial	5396.8	5396.8	95.8 %		18:47:07
3	Y RADIAL	5733.0	5733.0	96.37 %		18:47:07
3	Al 396.153Radial†	7206.7	7523.0	5423.9 ug/L	5423.9 ppb	18:47:07
3	Ca 317.933Radial†	3380.7	3502.6	5290.6 ug/L	5290.6 ppb	18:47:27
3	Fe 238.204 Radial†	600.0	613.7	4982.8 ug/L	4982.8 ppb	18:47:27
3	K 766.490 Radial†	29566.4	27937.1	5141.3 ug/L	5141.3 ppb	18:47:07
3	Mg 279.077 IEC†	168.1	172.9	5159.2 ug/L	5159.2 ppb	18:47:27
3	Na 589.592 Radial†	17737.1	19559.3	4553.5 ug/L	4553.5 ppb	18:47:07
3	Sr 421.552†	83262.1	86864.4	494.82 ug/L	494.82 ppb	18:47:07
3	Sc 361.383	950975.5	950975.5	97.302 %		18:48:31
3	Y 371.029	789122.4	789122.4	96.007 %		18:48:31
3	Ag 328.068†	121758.3	124662.0	516.24 ug/L	516.24 ppb	18:48:31
3	As 188.979†	1334.7	1392.0	518.22 ug/L	518.22 ppb	18:48:51
3	B 249.677†	24348.6	25564.6	511.50 ug/L	511.50 ppb	18:48:31
3	Ba 233.527†	76065.9	78165.9	532.69 ug/L	532.69 ppb	18:48:31
3	Be 313.107†	1554006.1	1601543.9	520.64 ug/L	520.64 ppb	18:48:31
3	Cd 226.502†	50303.4	51914.8	513.56 ug/L	513.56 ppb	18:48:31
3	Co 228.616†	27197.0	28025.5	508.10 ug/L	508.10 ppb	18:48:51
3	Cr 267.716†	49966.4	51263.5	523.83 ug/L	523.83 ppb	18:48:31
3	Cu 324.752†	197717.5	196991.4	534.13 ug/L	534.13 ppb	18:48:31
3	Mn 257.610†	524829.2	538890.5	524.76 ug/L	524.76 ppb	18:48:31
3	Mo 202.031†	8041.4	8241.0	511.76 ug/L	511.76 ppb	18:48:51
3	Ni 231.604†	22662.7	23175.8	519.59 ug/L	519.59 ppb	18:48:51
3	P 214.914†	1323.2	1134.2	489.79 ug/L	489.79 ppb	18:48:51
3	Pb 220.353†	4653.1	4805.6	523.08 ug/L	523.08 ppb	18:48:51
3	S 181.975 Axial†	4157.4	4225.6	5123.4 ug/L	5123.4 ppb	18:48:51
3	Sb 206.836†	1706.1	1711.5	534.22 ug/L	534.22 ppb	18:48:51
3	Se 196.026†	834.1	886.2	518.46 ug/L	518.46 ppb	18:48:51
3	Si 251.611†	183804.8	188371.6	5283.7 ug/L	5283.7 ppb	18:48:31
3	Sn 189.927†	3348.0	3436.3	529.16 ug/L	529.16 ppb	18:48:51
3	Ti 334.940†	363676.0	375157.2	520.18 ug/L	520.18 ppb	18:48:31
3	Tl 190.801†	1839.5	1927.7	517.78 ug/L	517.78 ppb	18:48:51
3	U 409.014†	17627.3	19926.0	527.28 ug/L	527.28 ppb	18:48:31
3	V 292.402†	81857.5	85581.8	531.34 ug/L	531.34 ppb	18:48:31
3	Zn 213.857†	60550.7	61417.7	509.58 ug/L	509.58 ppb	18:48:31
3	SiO2†	182483.7	186998.5	11139 ug/L	11139 ppb	18:49:07

Mean Data: 1202015897|941810|1

Analyte	Mean Corrected	Calib.	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	950302.0	97.233 %	0.1650				0.17%
Sc Radial	5399.4	95.9 %	0.56				0.58%
Y 371.029	787198.6	95.773 %	0.2349				0.25%
Y RADIAL	5721.2	96.17 %	0.418				0.43%
Ag 328.068†	124543.1	515.75 ug/L	1.074	515.75 ppb		1.074	0.21%
Al 396.153Radial†	7549.0	5442.7 ug/L	16.88	5442.7 ppb		16.88	0.31%
As 188.979†	1392.6	518.44 ug/L	1.834	518.44 ppb		1.834	0.35%
B 249.677†	25516.7	510.53 ug/L	0.888	510.53 ppb		0.888	0.17%
Ba 233.527†	78113.7	532.34 ug/L	1.753	532.34 ppb		1.753	0.33%
Be 313.107†	1598665.6	519.71 ug/L	1.524	519.71 ppb		1.524	0.29%
Ca 317.933Radial†	3505.5	5295.0 ug/L	28.06	5295.0 ppb		28.06	0.53%
Cd 226.502†	52007.0	514.47 ug/L	1.910	514.47 ppb		1.910	0.37%
Co 228.616†	28001.6	507.66 ug/L	1.618	507.66 ppb		1.618	0.32%
Cr 267.716†	51246.2	523.65 ug/L	1.485	523.65 ppb		1.485	0.28%
Cu 324.752†	196868.3	533.79 ug/L	0.417	533.79 ppb		0.417	0.08%
Fe 238.204 Radial†	616.1	5002.8 ug/L	35.26	5002.8 ppb		35.26	0.70%
K 766.490 Radial†	28006.8	5154.2 ug/L	11.15	5154.2 ppb		11.15	0.22%

Mg 279.077 IEC†	173.4	5172.5 ug/L	47.84	5172.5 ppb	47.84	0.92%
Mn 257.610†	539254.3	525.12 ug/L	1.283	525.12 ppb	1.283	0.24%
Mo 202.031†	8227.2	510.90 ug/L	0.823	510.90 ppb	0.823	0.16%
Na 589.592 Radial†	19646.8	4573.8 ug/L	25.19	4573.8 ppb	25.19	0.55%
Ni 231.604†	23146.3	518.93 ug/L	1.230	518.93 ppb	1.230	0.24%
P 214.914†	1143.7	494.84 ug/L	10.291	494.84 ppb	10.291	2.08%
Pb 220.353†	4776.8	519.95 ug/L	4.307	519.95 ppb	4.307	0.83%
S 181.975 Axial†	4224.5	5122.0 ug/L	31.86	5122.0 ppb	31.86	0.62%
Sb 206.836†	1720.4	536.85 ug/L	3.113	536.85 ppb	3.113	0.58%
Se 196.026†	885.4	518.09 ug/L	3.082	518.09 ppb	3.082	0.59%
Si 251.611†	188441.7	5285.7 ug/L	10.11	5285.7 ppb	10.11	0.19%
Sn 189.927†	3425.8	527.55 ug/L	1.829	527.55 ppb	1.829	0.35%
Sr 421.552†	87070.5	495.99 ug/L	1.019	495.99 ppb	1.019	0.21%
Ti 334.940†	375343.9	520.44 ug/L	0.909	520.44 ppb	0.909	0.17%
Tl 190.801†	1914.1	514.15 ug/L	3.759	514.15 ppb	3.759	0.73%
U 409.014†	19878.1	526.01 ug/L	1.122	526.01 ppb	1.122	0.21%
V 292.402†	85491.8	530.77 ug/L	1.109	530.77 ppb	1.109	0.21%
Zn 213.857†	61438.0	509.75 ug/L	1.752	509.75 ppb	1.752	0.34%
SiO2†	187164.9	11149 ug/L	37.7	11149 ppb	37.7	0.34%

Sequence No.: 23
 Sample ID: 1202015898|941810|5
 Analyst: HSC
 Initial Sample Wt:
 Dilution:

Autosampler Location: 53
 Date Collected: 1/19/2010 18:51:17
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: 1202015898|941810|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib.	Sample Conc. Units	Analysis Time
1	Sc Radial	5480.2	5480.2	97.3 %			18:53:10
1	Y RADIAL	5792.8	5792.8	97.37 %			18:53:10
1	Al 396.153Radial†	6.0	9.6	6.9788 ug/L		6.9788 ppb	18:53:10
1	Ca 317.933Radial†	38.1	14.3	21.569 ug/L		21.569 ppb	18:53:30
1	Fe 238.204 Radial†	10.2	-1.9	-15.346 ug/L		-15.346 ppb	18:53:30
1	K 766.490 Radial†	2880.6	47.1	8.6730 ug/L		8.6730 ppb	18:53:10
1	Mg 279.077 IEC†	-0.2	-2.7	-80.780 ug/L		-80.780 ppb	18:53:30
1	Na 589.592 Radial†	-1016.2	8.1	1.8808 ug/L		1.8808 ppb	18:53:10
1	Sr 421.552†	66.2	56.2	0.3198 ug/L		0.3198 ppb	18:53:10
1	Sc 361.383	946802.8	946802.8	96.875 %			18:54:26
1	Y 371.029	793284.7	793284.7	96.513 %			18:54:26
1	Ag 328.068†	444.4	-14.2	-0.0672 ug/L		-0.0672 ppb	18:54:31
1	As 188.979†	-24.5	-5.0	-1.8510 ug/L		-1.8510 ppb	18:54:52
1	B 249.677†	-373.3	155.4	3.1243 ug/L		3.1243 ppb	18:54:52
1	Ba 233.527†	52.3	44.5	0.2995 ug/L		0.2995 ppb	18:54:52
1	Be 313.107†	-4519.8	-224.2	-0.0722 ug/L		-0.0722 ppb	18:54:31
1	Cd 226.502†	-218.9	-9.5	-0.0923 ug/L		-0.0923 ppb	18:54:52
1	Co 228.616†	-59.6	12.8	0.2306 ug/L		0.2306 ppb	18:54:52
1	Cr 267.716†	135.8	51.6	0.5255 ug/L		0.5255 ppb	18:54:52
1	Cu 324.752†	6214.7	205.9	0.5578 ug/L		0.5578 ppb	18:54:31
1	Mn 257.610†	884.0	418.9	0.4095 ug/L		0.4095 ppb	18:54:52
1	Mo 202.031†	16.3	-6.5	-0.4034 ug/L		-0.4034 ppb	18:54:52
1	Ni 231.604†	130.2	19.1	0.4279 ug/L		0.4279 ppb	18:54:52
1	P 214.914†	232.8	14.6	7.5272 ug/L		7.5272 ppb	18:54:52
1	Pb 220.353†	-68.2	-47.0	-5.0920 ug/L		-5.0920 ppb	18:54:52
1	S 181.975 Axial†	46.3	0.7	0.8670 ug/L		0.8670 ppb	18:54:52
1	Sb 206.836†	28.2	-12.8	-3.8599 ug/L		-3.8599 ppb	18:54:52
1	Se 196.026†	-29.8	-1.8	-1.0883 ug/L		-1.0883 ppb	18:54:52
1	Si 251.611†	1450.8	967.2	27.165 ug/L		27.165 ppb	18:54:52
1	Sn 189.927†	5.8	1.4	0.2161 ug/L		0.2161 ppb	18:54:52
1	Ti 334.940†	-1196.7	160.2	0.2319 ug/L		0.2319 ppb	18:54:31
1	Tl 190.801†	-29.2	7.1	1.9032 ug/L		1.9032 ppb	18:54:52
1	U 409.014†	-1779.7	-27.2	-0.7206 ug/L		-0.7206 ppb	18:54:26
1	V 292.402†	-1573.3	-169.9	-1.0482 ug/L		-1.0482 ppb	18:54:31
1	Zn 213.857†	803.7	17.5	0.1441 ug/L		0.1441 ppb	18:54:52
1	SiO2†	1542.1	1045.9	62.392 ug/L		62.392 ppb	18:55:58
2	Sc Radial	5453.5	5453.5	96.8 %			18:53:35
2	Y RADIAL	5766.0	5766.0	96.92 %			18:53:35
2	Al 396.153Radial†	27.2	31.5	22.829 ug/L		22.829 ppb	18:53:35
2	Ca 317.933Radial†	37.2	13.6	20.525 ug/L		20.525 ppb	18:53:55
2	Fe 238.204 Radial†	14.9	3.0	24.527 ug/L		24.527 ppb	18:53:55
2	K 766.490 Radial†	2996.8	181.6	33.436 ug/L		33.436 ppb	18:53:35
2	Mg 279.077 IEC†	-0.1	-2.6	-77.890 ug/L		-77.890 ppb	18:53:55
2	Na 589.592 Radial†	-934.8	87.0	20.252 ug/L		20.252 ppb	18:53:35
2	Sr 421.552†	51.4	41.3	0.2349 ug/L		0.2349 ppb	18:53:35
2	Sc 361.383	953281.6	953281.6	97.538 %			18:54:57
2	Y 371.029	799130.9	799130.9	97.224 %			18:54:57
2	Ag 328.068†	411.1	-51.4	-0.2064 ug/L		-0.2064 ppb	18:55:02
2	As 188.979†	-28.7	-9.1	-3.3474 ug/L		-3.3474 ppb	18:55:22
2	B 249.677†	-405.4	125.1	2.5103 ug/L		2.5103 ppb	18:55:22
2	Ba 233.527†	47.2	38.8	0.2637 ug/L		0.2637 ppb	18:55:22
2	Be 313.107†	-4548.8	-222.2	-0.0711 ug/L		-0.0711 ppb	18:55:02
2	Cd 226.502†	-212.1	-1.1	-0.0130 ug/L		-0.0130 ppb	18:55:22
2	Co 228.616†	-60.8	11.9	0.2142 ug/L		0.2142 ppb	18:55:22
2	Cr 267.716†	138.9	53.8	0.5486 ug/L		0.5486 ppb	18:55:22
2	Cu 324.752†	6291.8	241.4	0.6556 ug/L		0.6556 ppb	18:55:02
2	Mn 257.610†	876.3	404.8	0.3996 ug/L		0.3996 ppb	18:55:22
2	Mo 202.031†	23.0	0.3	0.0185 ug/L		0.0185 ppb	18:55:22
2	Ni 231.604†	111.2	-1.3	-0.0301 ug/L		-0.0301 ppb	18:55:22

2	P 214.914†	237.7	18.0	9.2930 ug/L	9.2930 ppb	18:55:22
2	Pb 220.353†	-42.9	-20.6	-2.2287 ug/L	-2.2287 ppb	18:55:22
2	S 181.975 Axial†	43.4	-2.6	-3.2119 ug/L	-3.2119 ppb	18:55:22
2	Sb 206.836†	37.5	-3.5	-1.0372 ug/L	-1.0372 ppb	18:55:22
2	Se 196.026†	-22.2	6.2	3.5887 ug/L	3.5887 ppb	18:55:22
2	Si 251.611†	1468.7	975.3	27.389 ug/L	27.389 ppb	18:55:22
2	Sn 189.927†	6.8	2.4	0.3745 ug/L	0.3745 ppb	18:55:22
2	Ti 334.940†	-1063.8	304.9	0.4316 ug/L	0.4316 ppb	18:55:02
2	Tl 190.801†	-37.8	-1.5	-0.3848 ug/L	-0.3848 ppb	18:55:22
2	U 409.014†	-1754.8	10.8	0.2818 ug/L	0.2818 ppb	18:54:57
2	V 292.402†	-1504.5	-88.3	-0.5460 ug/L	-0.5460 ppb	18:55:02
2	Zn 213.857†	801.9	9.9	0.0796 ug/L	0.0796 ppb	18:55:22
2	SiO2†	1515.9	1008.2	60.131 ug/L	60.131 ppb	18:56:03
3	Sc Radial	5460.1	5460.1	97.0 %		18:54:00
3	Y RADIAL	5754.4	5754.4	96.72 %		18:54:00
3	Al 396.153Radial†	24.7	29.0	20.959 ug/L	20.959 ppb	18:54:00
3	Ca 317.933Radial†	37.5	13.9	20.921 ug/L	20.921 ppb	18:54:20
3	Fe 238.204 Radial†	12.9	1.0	7.8996 ug/L	7.8996 ppb	18:54:20
3	K 766.490 Radial†	2847.4	23.8	4.3762 ug/L	4.3762 ppb	18:54:00
3	Mg 279.077 IEC†	1.7	-0.7	-20.429 ug/L	-20.429 ppb	18:54:20
3	Na 589.592 Radial†	-1053.3	-34.0	-7.9214 ug/L	-7.9214 ppb	18:54:00
3	Sr 421.552†	37.4	26.7	0.1521 ug/L	0.1521 ppb	18:54:00
3	Sc 361.383	944881.1	944881.1	96.678 %		18:55:27
3	Y 371.029	792333.5	792333.5	96.397 %		18:55:27
3	Ag 328.068†	382.2	-77.6	-0.3168 ug/L	-0.3168 ppb	18:55:32
3	As 188.979†	-16.2	3.6	1.3166 ug/L	1.3166 ppb	18:55:52
3	B 249.677†	-414.9	111.6	2.2411 ug/L	2.2411 ppb	18:55:52
3	Ba 233.527†	65.8	58.6	0.3974 ug/L	0.3974 ppb	18:55:52
3	Be 313.107†	-4457.1	-168.9	-0.0539 ug/L	-0.0539 ppb	18:55:32
3	Cd 226.502†	-211.7	-2.6	-0.0266 ug/L	-0.0266 ppb	18:55:52
3	Co 228.616†	-77.8	-6.2	-0.1122 ug/L	-0.1122 ppb	18:55:52
3	Cr 267.716†	139.6	55.8	0.5698 ug/L	0.5698 ppb	18:55:52
3	Cu 324.752†	6223.5	228.0	0.6201 ug/L	0.6201 ppb	18:55:32
3	Mn 257.610†	846.2	381.7	0.3731 ug/L	0.3731 ppb	18:55:52
3	Mo 202.031†	26.3	3.8	0.2395 ug/L	0.2395 ppb	18:55:52
3	Ni 231.604†	104.7	-7.1	-0.1583 ug/L	-0.1583 ppb	18:55:52
3	P 214.914†	232.1	14.3	7.3716 ug/L	7.3716 ppb	18:55:52
3	Pb 220.353†	-42.9	-20.9	-2.2669 ug/L	-2.2669 ppb	18:55:52
3	S 181.975 Axial†	44.2	-1.4	-1.6484 ug/L	-1.6484 ppb	18:55:52
3	Sb 206.836†	29.7	-11.2	-3.3714 ug/L	-3.3714 ppb	18:55:52
3	Se 196.026†	-21.7	6.5	3.6712 ug/L	3.6712 ppb	18:55:52
3	Si 251.611†	1456.8	976.4	27.417 ug/L	27.417 ppb	18:55:52
3	Sn 189.927†	4.8	0.4	0.0668 ug/L	0.0668 ppb	18:55:52
3	Ti 334.940†	-1068.5	290.3	0.4080 ug/L	0.4080 ppb	18:55:32
3	Tl 190.801†	-24.3	12.1	3.2413 ug/L	3.2413 ppb	18:55:52
3	U 409.014†	-1835.0	-88.2	-2.3435 ug/L	-2.3435 ppb	18:55:27
3	V 292.402†	-1475.7	-72.2	-0.4459 ug/L	-0.4459 ppb	18:55:32
3	Zn 213.857†	813.2	29.0	0.2418 ug/L	0.2418 ppb	18:55:52
3	SiO2†	1526.3	1032.8	61.592 ug/L	61.592 ppb	18:56:08

Mean Data: 1202015898|941810|5

Analyte	Mean Corrected	Conc.	Calib.	Std.Dev.	Conc.	Sample	Std.Dev.	RSD
Sc 361.383	948321.8	97.030	%	0.4503				0.46%
Sc Radial	5464.6	97.0	%	0.25				0.25%
Y 371.029	794916.3	96.712	%	0.4478				0.46%
Y RADIAL	5771.0	97.01	%	0.332				0.34%
Ag 328.068†	-47.7	-0.1968	ug/L	0.12507	-0.1968	ppb	0.12507	63.56%
Al 396.153Radial†	23.4	16.922	ug/L	8.6620	16.922	ppb	8.6620	51.19%
As 188.979†	-3.5	-1.2939	ug/L	2.38139	-1.2939	ppb	2.38139	184.04%
B 249.677†	130.7	2.6252	ug/L	0.45268	2.6252	ppb	0.45268	17.24%
Ba 233.527†	47.3	0.3202	ug/L	0.06923	0.3202	ppb	0.06923	21.62%
Be 313.107†	-205.1	-0.0657	ug/L	0.01030	-0.0657	ppb	0.01030	15.66%
Ca 317.933Radial†	13.9	21.005	ug/L	0.5271	21.005	ppb	0.5271	2.51%
Cd 226.502†	-4.4	-0.0440	ug/L	0.04244	-0.0440	ppb	0.04244	96.50%
Co 228.616†	6.2	0.1109	ug/L	0.19332	0.1109	ppb	0.19332	174.36%
Cr 267.716†	53.7	0.5480	ug/L	0.02219	0.5480	ppb	0.02219	4.05%
Cu 324.752†	225.1	0.6112	ug/L	0.04953	0.6112	ppb	0.04953	8.10%
Fe 238.204 Radial†	0.7	5.6933	ug/L	20.02778	5.6933	ppb	20.02778	351.78%
K 766.490 Radial†	84.2	15.495	ug/L	15.6851	15.495	ppb	15.6851	101.23%

Mg 279.077 IEC†	-2.0	-59.700 ug/L	34.0400	-59.700 ppb	34.0400	57.02%
Mn 257.610†	401.8	0.3941 ug/L	0.01879	0.3941 ppb	0.01879	4.77%
Mo 202.031†	-0.8	-0.0484 ug/L	0.32661	-0.0484 ppb	0.32661	674.18%
Na 589.592 Radial†	20.3	4.7370 ug/L	14.30204	4.7370 ppb	14.30204	301.92%
Ni 231.604†	3.6	0.0798 ug/L	0.30820	0.0798 ppb	0.30820	386.12%
P 214.914†	15.6	8.0639 ug/L	1.06725	8.0639 ppb	1.06725	13.23%
Pb 220.353†	-29.5	-3.1959 ug/L	1.64218	-3.1959 ppb	1.64218	51.38%
S 181.975 Axial†	-1.1	-1.3311 ug/L	2.05784	-1.3311 ppb	2.05784	154.60%
Sb 206.836†	-9.1	-2.7562 ug/L	1.50858	-2.7562 ppb	1.50858	54.74%
Se 196.026†	3.6	2.0572 ug/L	2.72441	2.0572 ppb	2.72441	132.43%
Si 251.611†	973.0	27.324 ug/L	0.1378	27.324 ppb	0.1378	0.50%
Sn 189.927†	1.4	0.2191 ug/L	0.15391	0.2191 ppb	0.15391	70.23%
Sr 421.552†	41.4	0.2356 ug/L	0.08387	0.2356 ppb	0.08387	35.60%
Ti 334.940†	251.8	0.3571 ug/L	0.10914	0.3571 ppb	0.10914	30.56%
Tl 190.801†	5.9	1.5866 ug/L	1.83369	1.5866 ppb	1.83369	115.58%
U 409.014†	-34.9	-0.9275 ug/L	1.32481	-0.9275 ppb	1.32481	142.84%
V 292.402†	-110.1	-0.6800 ug/L	0.32278	-0.6800 ppb	0.32278	47.47%
Zn 213.857†	18.8	0.1552 ug/L	0.08166	0.1552 ppb	0.08166	52.62%
SiO2†	1029.0	61.371 ug/L	1.1469	61.371 ppb	1.1469	1.87%

Sequence No.: 25

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 1/19/2010 19:05:19

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5479.3	5479.3	97.3 %		19:07:11
1	Y RADIAL	5770.1	5770.1	96.99 %		19:07:11
1	Al 396.153Radial†	6917.0	7112.1	5126.7 ug/L	5126.7 ppb	19:07:11
1	Ca 317.933Radial†	3225.8	3290.3	4969.9 ug/L	4969.9 ppb	19:07:31
1	Fe 238.204 Radial†	597.6	601.8	4887.0 ug/L	4887.0 ppb	19:07:31
1	K 766.490 Radial†	28741.7	26624.9	4897.9 ug/L	4897.9 ppb	19:07:11
1	Mg 279.077 IEC†	165.2	167.3	4991.1 ug/L	4991.1 ppb	19:07:31
1	Na 589.592 Radial†	38242.5	40353.8	9394.5 ug/L	9394.5 ppb	19:07:11
1	Sr 421.552†	84456.6	86783.8	494.36 ug/L	494.36 ppb	19:07:11
1	Sc 361.383	941661.2	941661.2	96.349 %		19:08:28
1	Y 371.029	779591.9	779591.9	94.847 %		19:08:28
1	Ag 328.068†	119470.5	123525.3	511.47 ug/L	511.47 ppb	19:08:33
1	As 188.979†	1287.4	1356.5	504.95 ug/L	504.95 ppb	19:08:54
1	B 249.677†	23750.7	25191.6	504.01 ug/L	504.01 ppb	19:08:33
1	Ba 233.527†	72024.4	74744.5	509.39 ug/L	509.39 ppb	19:08:33
1	Be 313.107†	1494982.6	1556081.0	505.86 ug/L	505.86 ppb	19:08:28
1	Cd 226.502†	49202.2	51283.3	507.31 ug/L	507.31 ppb	19:08:33
1	Co 228.616†	27029.0	28127.6	509.96 ug/L	509.96 ppb	19:08:33
1	Cr 267.716†	48003.7	49734.4	508.20 ug/L	508.20 ppb	19:08:33
1	Cu 324.752†	187029.5	187908.3	509.50 ug/L	509.50 ppb	19:08:33
1	Mn 257.610†	502354.4	520899.1	507.25 ug/L	507.25 ppb	19:08:28
1	Mo 202.031†	7831.9	8105.4	503.33 ug/L	503.33 ppb	19:08:54
1	Ni 231.604†	22027.9	22747.4	509.98 ug/L	509.98 ppb	19:08:33
1	P 214.914†	4854.3	4812.5	2419.5 ug/L	2419.5 ppb	19:08:54
1	Pb 220.353†	4412.2	4602.9	501.02 ug/L	501.02 ppb	19:08:54
1	S 181.975 Axial†	837.4	822.0	995.85 ug/L	995.85 ppb	19:08:54
1	Sb 206.836†	1636.3	1656.4	517.01 ug/L	517.01 ppb	19:08:54
1	Se 196.026†	842.6	903.5	527.80 ug/L	527.80 ppb	19:08:54
1	Si 251.611†	88424.1	91244.7	2556.2 ug/L	2556.2 ppb	19:08:33
1	Sn 189.927†	3136.5	3250.8	500.59 ug/L	500.59 ppb	19:08:54
1	Ti 334.940†	348221.0	362813.5	503.04 ug/L	503.04 ppb	19:08:28
1	Tl 190.801†	1780.7	1885.5	506.31 ug/L	506.31 ppb	19:08:54
1	U 409.014†	16825.5	19273.0	509.99 ug/L	509.99 ppb	19:08:33
1	V 292.402†	78085.4	82498.9	512.33 ug/L	512.33 ppb	19:08:33
1	Zn 213.857†	59448.3	60889.1	505.26 ug/L	505.26 ppb	19:08:33
1	SiO2†	88997.4	91824.3	5462.8 ug/L	5462.8 ppb	19:10:01
2	Sc Radial	5450.1	5450.1	96.8 %		19:07:36
2	Y RADIAL	5715.0	5715.0	96.06 %		19:07:36
2	Al 396.153Radial†	6830.4	7060.6	5089.5 ug/L	5089.5 ppb	19:07:36
2	Ca 317.933Radial†	3234.2	3316.7	5009.8 ug/L	5009.8 ppb	19:07:56
2	Fe 238.204 Radial†	593.5	600.8	4878.6 ug/L	4878.6 ppb	19:07:56
2	K 766.490 Radial†	28530.7	26565.0	4886.8 ug/L	4886.8 ppb	19:07:36
2	Mg 279.077 IEC†	163.9	166.9	4979.0 ug/L	4979.0 ppb	19:07:56
2	Na 589.592 Radial†	38027.5	40342.0	9391.8 ug/L	9391.8 ppb	19:07:36
2	Sr 421.552†	83784.4	86553.7	493.05 ug/L	493.05 ppb	19:07:36
2	Sc 361.383	942933.0	942933.0	96.479 %		19:08:59
2	Y 371.029	781142.0	781142.0	95.036 %		19:08:59
2	Ag 328.068†	118756.7	122618.2	507.74 ug/L	507.74 ppb	19:09:05
2	As 188.979†	1299.9	1367.6	509.09 ug/L	509.09 ppb	19:09:25
2	B 249.677†	23588.5	24990.2	499.98 ug/L	499.98 ppb	19:09:05
2	Ba 233.527†	71855.4	74468.5	507.51 ug/L	507.51 ppb	19:09:05
2	Be 313.107†	1512435.3	1572077.8	511.06 ug/L	511.06 ppb	19:08:59
2	Cd 226.502†	49080.4	51088.2	505.38 ug/L	505.38 ppb	19:09:05
2	Co 228.616†	26906.0	27962.3	506.95 ug/L	506.95 ppb	19:09:05
2	Cr 267.716†	47843.0	49500.6	505.82 ug/L	505.82 ppb	19:09:05
2	Cu 324.752†	185544.3	186107.1	504.62 ug/L	504.62 ppb	19:09:05
2	Mn 257.610†	506729.0	524730.2	510.98 ug/L	510.98 ppb	19:08:59
2	Mo 202.031†	7832.6	8095.2	502.70 ug/L	502.70 ppb	19:09:25
2	Ni 231.604†	21968.2	22654.6	507.90 ug/L	507.90 ppb	19:09:05

2	P 214.914†	4872.4	4824.5	2426.8 ug/L	2426.8 ppb	19:09:25
2	Pb 220.353†	4442.6	4628.2	503.76 ug/L	503.76 ppb	19:09:25
2	S 181.975 Axial†	839.3	822.8	996.91 ug/L	996.91 ppb	19:09:25
2	Sb 206.836†	1661.7	1680.5	524.25 ug/L	524.25 ppb	19:09:25
2	Se 196.026†	845.6	905.4	528.82 ug/L	528.82 ppb	19:09:25
2	Si 251.611†	87969.3	90649.5	2539.5 ug/L	2539.5 ppb	19:09:05
2	Sn 189.927†	3151.4	3261.9	502.31 ug/L	502.31 ppb	19:09:25
2	Ti 334.940†	351724.0	365956.8	507.41 ug/L	507.41 ppb	19:08:59
2	Tl 190.801†	1809.8	1913.2	513.76 ug/L	513.76 ppb	19:09:25
2	U 409.014†	16544.9	18958.7	501.65 ug/L	501.65 ppb	19:09:05
2	V 292.402†	77962.9	82262.6	510.85 ug/L	510.85 ppb	19:09:05
2	Zn 213.857†	59311.9	60664.4	503.40 ug/L	503.40 ppb	19:09:05
2	SiO2†	88344.6	91023.1	5415.0 ug/L	5415.0 ppb	19:10:06
3	Sc Radial	5364.8	5364.8	95.3 %		19:08:01
3	Y RADIAL	5591.1	5591.1	93.98 %		19:08:01
3	Al 396.153Radial†	6798.3	7139.2	5146.4 ug/L	5146.4 ppb	19:08:01
3	Ca 317.933Radial†	3223.6	3358.7	5073.3 ug/L	5073.3 ppb	19:08:21
3	Fe 238.204 Radial†	595.5	612.7	4975.1 ug/L	4975.1 ppb	19:08:21
3	K 766.490 Radial†	28402.6	26899.2	4948.3 ug/L	4948.3 ppb	19:08:01
3	Mg 279.077 IEC†	163.8	169.4	5054.8 ug/L	5054.8 ppb	19:08:21
3	Na 589.592 Radial†	37569.3	40485.8	9425.2 ug/L	9425.2 ppb	19:08:01
3	Sr 421.552†	83129.6	87242.8	496.97 ug/L	496.97 ppb	19:08:01
3	Sc 361.383	941942.6	941942.6	96.377 %		19:09:31
3	Y 371.029	779122.0	779122.0	94.790 %		19:09:31
3	Ag 328.068†	119517.9	123537.4	511.56 ug/L	511.56 ppb	19:09:36
3	As 188.979†	1293.2	1362.2	507.10 ug/L	507.10 ppb	19:09:56
3	B 249.677†	23852.1	25289.4	505.96 ug/L	505.96 ppb	19:09:36
3	Ba 233.527†	72233.5	74939.1	510.72 ug/L	510.72 ppb	19:09:36
3	Be 313.107†	1506107.5	1567160.5	509.46 ug/L	509.46 ppb	19:09:31
3	Cd 226.502†	49329.0	51399.6	508.45 ug/L	508.45 ppb	19:09:36
3	Co 228.616†	27114.5	28207.9	511.41 ug/L	511.41 ppb	19:09:36
3	Cr 267.716†	48078.2	49796.8	508.84 ug/L	508.84 ppb	19:09:36
3	Cu 324.752†	186935.4	187752.7	509.09 ug/L	509.09 ppb	19:09:36
3	Mn 257.610†	506059.2	524587.4	510.84 ug/L	510.84 ppb	19:09:31
3	Mo 202.031†	7814.8	8085.2	502.09 ug/L	502.09 ppb	19:09:56
3	Ni 231.604†	22031.4	22744.2	509.91 ug/L	509.91 ppb	19:09:36
3	P 214.914†	4854.0	4810.8	2418.6 ug/L	2418.6 ppb	19:09:56
3	Pb 220.353†	4424.6	4614.3	502.25 ug/L	502.25 ppb	19:09:56
3	S 181.975 Axial†	840.7	825.2	999.74 ug/L	999.74 ppb	19:09:56
3	Sb 206.836†	1631.4	1650.8	515.32 ug/L	515.32 ppb	19:09:56
3	Se 196.026†	836.1	896.4	524.15 ug/L	524.15 ppb	19:09:56
3	Si 251.611†	88406.0	91198.5	2554.9 ug/L	2554.9 ppb	19:09:36
3	Sn 189.927†	3150.7	3264.5	502.73 ug/L	502.73 ppb	19:09:56
3	Ti 334.940†	350889.3	365474.1	506.74 ug/L	506.74 ppb	19:09:31
3	Tl 190.801†	1778.3	1882.4	505.54 ug/L	505.54 ppb	19:09:56
3	U 409.014†	16711.0	19149.0	506.69 ug/L	506.69 ppb	19:09:36
3	V 292.402†	78301.5	82698.9	513.51 ug/L	513.51 ppb	19:09:36
3	Zn 213.857†	59690.3	61121.8	507.20 ug/L	507.20 ppb	19:09:36
3	SiO2†	89147.1	91952.0	5470.5 ug/L	5470.5 ppb	19:10:11

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	942179.0	96.402 %	0.0684			0.07%
Sc Radial	5431.4	96.5 %	1.06			1.10%
Y 371.029	779952.0	94.891 %	0.1286			0.14%
Y RADIAL	5692.1	95.68 %	1.541			1.61%
Ag 328.068†	123226.9	510.25 ug/L	2.181	510.25 ppb	2.181	0.43%
QC value within limits for Ag 328.068 Recovery = 102.05%						
Al 396.153Radial†	7104.0	5120.8 ug/L	28.90	5120.8 ppb	28.90	0.56%
QC value within limits for Al 396.153Radial Recovery = 102.42%						
As 188.979†	1362.1	507.05 ug/L	2.074	507.05 ppb	2.074	0.41%
QC value within limits for As 188.979 Recovery = 101.41%						
B 249.677†	25157.1	503.32 ug/L	3.052	503.32 ppb	3.052	0.61%
QC value within limits for B 249.677 Recovery = 100.66%						
Ba 233.527†	74717.4	509.20 ug/L	1.612	509.20 ppb	1.612	0.32%
QC value within limits for Ba 233.527 Recovery = 101.84%						
Be 313.107†	1565106.4	508.79 ug/L	2.663	508.79 ppb	2.663	0.52%
QC value within limits for Be 313.107 Recovery = 101.76%						
Ca 317.933Radial†	3321.9	5017.7 ug/L	52.16	5017.7 ppb	52.16	1.04%

QC value within limits for Ca 317.933 Radial Recovery = 100.35%

Cd 226.502†	51257.0	507.05 ug/L	1.553	507.05 ppb	1.553	0.31%
QC value within limits for Cd 226.502 Recovery = 101.41%						
Co 228.616†	28099.3	509.44 ug/L	2.271	509.44 ppb	2.271	0.45%
QC value within limits for Co 228.616 Recovery = 101.89%						
Cr 267.716†	49677.3	507.62 ug/L	1.595	507.62 ppb	1.595	0.31%
QC value within limits for Cr 267.716 Recovery = 101.52%						
Cu 324.752†	187256.0	507.74 ug/L	2.705	507.74 ppb	2.705	0.53%
QC value within limits for Cu 324.752 Recovery = 101.55%						
Fe 238.204 Radial†	605.1	4913.6 ug/L	53.50	4913.6 ppb	53.50	1.09%
QC value within limits for Fe 238.204 Radial Recovery = 98.27%						
K 766.490 Radial†	26696.4	4911.0 ug/L	32.80	4911.0 ppb	32.80	0.67%
QC value within limits for K 766.490 Radial Recovery = 98.22%						
Mg 279.077 IEC†	167.9	5008.3 ug/L	40.74	5008.3 ppb	40.74	0.81%
QC value within limits for Mg 279.077 IEC Recovery = 100.17%						
Mn 257.610†	523405.5	509.69 ug/L	2.115	509.69 ppb	2.115	0.42%
QC value within limits for Mn 257.610 Recovery = 101.94%						
Mo 202.031†	8095.2	502.71 ug/L	0.622	502.71 ppb	0.622	0.12%
QC value within limits for Mo 202.031 Recovery = 100.54%						
Na 589.592 Radial†	40393.9	9403.8 ug/L	18.58	9403.8 ppb	18.58	0.20%
QC value within limits for Na 589.592 Radial Recovery = 94.04%						
Ni 231.604†	22715.4	509.26 ug/L	1.180	509.26 ppb	1.180	0.23%
QC value within limits for Ni 231.604 Recovery = 101.85%						
P 214.914†	4816.0	2421.6 ug/L	4.47	2421.6 ppb	4.47	0.18%
QC value within limits for P 214.914 Recovery = 96.87%						
Pb 220.353†	4615.1	502.34 ug/L	1.373	502.34 ppb	1.373	0.27%
QC value within limits for Pb 220.353 Recovery = 100.47%						
S 181.975 Axial†	823.3	997.50 ug/L	2.010	997.50 ppb	2.010	0.20%
QC value within limits for S 181.975 Axial Recovery = 99.75%						
Sb 206.836†	1662.6	518.86 ug/L	4.745	518.86 ppb	4.745	0.91%
QC value within limits for Sb 206.836 Recovery = 103.77%						
Se 196.026†	901.8	526.93 ug/L	2.454	526.93 ppb	2.454	0.47%
QC value within limits for Se 196.026 Recovery = 105.39%						
Si 251.611†	91030.9	2550.2 ug/L	9.30	2550.2 ppb	9.30	0.36%
QC value within limits for Si 251.611 Recovery = 102.01%						
Sn 189.927†	3259.0	501.88 ug/L	1.129	501.88 ppb	1.129	0.23%
QC value within limits for Sn 189.927 Recovery = 100.38%						
Sr 421.552†	86860.1	494.80 ug/L	1.998	494.80 ppb	1.998	0.40%
QC value within limits for Sr 421.552 Recovery = 98.96%						
Ti 334.940†	364748.1	505.73 ug/L	2.354	505.73 ppb	2.354	0.47%
QC value within limits for Ti 334.940 Recovery = 101.15%						
Tl 190.801†	1893.7	508.53 ug/L	4.540	508.53 ppb	4.540	0.89%
QC value within limits for Tl 190.801 Recovery = 101.71%						
U 409.014†	19126.9	506.11 ug/L	4.200	506.11 ppb	4.200	0.83%
QC value within limits for U 409.014 Recovery = 101.22%						
V 292.402†	82486.8	512.23 ug/L	1.333	512.23 ppb	1.333	0.26%
QC value within limits for V 292.402 Recovery = 102.45%						
Zn 213.857†	60891.8	505.29 ug/L	1.900	505.29 ppb	1.900	0.38%
QC value within limits for Zn 213.857 Recovery = 101.06%						
SiO2†	91599.8	5449.4 ug/L	30.03	5449.4 ppb	30.03	0.55%
QC value within limits for SiO2 Recovery = 101.91%						

All analyte(s) passed QC.

Sequence No.: 26

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 1/19/2010 19:12:21

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5481.8	5481.8	97.3 %		19:14:13
1	Y RADIAL	5837.5	5837.5	98.12 %		19:14:13
1	Al 396.153Radial†	-6.4	-3.1	-2.2339 ug/L	-2.2339 ppb	19:14:13
1	Ca 317.933Radial†	20.4	-3.9	-5.9052 ug/L	-5.9052 ppb	19:14:33
1	Fe 238.204 Radial†	10.6	-1.5	-11.839 ug/L	-11.839 ppb	19:14:33
1	K 766.490 Radial†	2919.1	85.8	15.826 ug/L	15.826 ppb	19:14:13
1	Mg 279.077 IEC†	5.4	3.0	90.812 ug/L	90.812 ppb	19:14:33
1	Na 589.592 Radial†	-1156.3	-135.5	-31.538 ug/L	-31.538 ppb	19:14:13
1	Sr 421.552†	4.8	-6.9	-0.0391 ug/L	-0.0391 ppb	19:14:13
1	Sc 361.383	948374.4	948374.4	97.035 %		19:15:30
1	Y 371.029	796565.7	796565.7	96.912 %		19:15:30
1	Ag 328.068†	391.3	-69.7	-0.2927 ug/L	-0.2927 ppb	19:15:35
1	As 188.979†	-23.5	-3.9	-1.4514 ug/L	-1.4514 ppb	19:15:55
1	B 249.677†	-339.1	191.3	3.8459 ug/L	3.8459 ppb	19:15:55
1	Ba 233.527†	-5.9	-15.6	-0.1075 ug/L	-0.1075 ppb	19:15:55
1	Be 313.107†	-4476.7	-172.1	-0.0557 ug/L	-0.0557 ppb	19:15:35
1	Cd 226.502†	-199.6	10.7	0.1069 ug/L	0.1069 ppb	19:15:55
1	Co 228.616†	-80.3	-8.5	-0.1526 ug/L	-0.1526 ppb	19:15:55
1	Cr 267.716†	77.0	-9.2	-0.0947 ug/L	-0.0947 ppb	19:15:55
1	Cu 324.752†	6175.3	154.6	0.4187 ug/L	0.4187 ppb	19:15:35
1	Mn 257.610†	484.4	5.6	0.0006 ug/L	0.0006 ppb	19:15:55
1	Mo 202.031†	29.5	7.1	0.4374 ug/L	0.4374 ppb	19:15:55
1	Ni 231.604†	113.3	1.4	0.0324 ug/L	0.0324 ppb	19:15:55
1	P 214.914†	216.2	-2.9	-1.6165 ug/L	-1.6165 ppb	19:15:55
1	Pb 220.353†	-64.4	-43.0	-4.6579 ug/L	-4.6579 ppb	19:15:55
1	S 181.975 Axial†	44.2	-1.6	-1.8909 ug/L	-1.8909 ppb	19:15:55
1	Sb 206.836†	27.8	-13.2	-3.9662 ug/L	-3.9662 ppb	19:15:55
1	Se 196.026†	-30.1	-2.1	-1.2433 ug/L	-1.2433 ppb	19:15:55
1	Si 251.611†	489.0	-26.5	-0.7504 ug/L	-0.7504 ppb	19:15:55
1	Sn 189.927†	5.4	1.0	0.1586 ug/L	0.1586 ppb	19:15:55
1	Ti 334.940†	-1319.1	36.2	0.0420 ug/L	0.0420 ppb	19:15:35
1	Tl 190.801†	-36.1	0.1	0.0224 ug/L	0.0224 ppb	19:15:55
1	U 409.014†	-1755.7	0.5	0.0155 ug/L	0.0155 ppb	19:15:30
1	V 292.402†	-1501.4	-93.1	-0.5608 ug/L	-0.5608 ppb	19:15:35
1	Zn 213.857†	768.4	-20.3	-0.1699 ug/L	-0.1699 ppb	19:15:55
1	SiO2†	488.5	-42.5	-2.5453 ug/L	-2.5453 ppb	19:17:01
2	Sc Radial	5159.3	5159.3	91.6 %		19:14:38
2	Y RADIAL	5460.9	5460.9	91.79 %		19:14:38
2	Al 396.153Radial†	-8.6	-5.9	-4.2844 ug/L	-4.2844 ppb	19:14:38
2	Ca 317.933Radial†	17.7	-5.6	-8.4069 ug/L	-8.4069 ppb	19:14:58
2	Fe 238.204 Radial†	12.2	0.9	7.4681 ug/L	7.4681 ppb	19:14:58
2	K 766.490 Radial†	2898.6	250.9	46.244 ug/L	46.244 ppb	19:14:38
2	Mg 279.077 IEC†	3.2	1.0	30.066 ug/L	30.066 ppb	19:14:58
2	Na 589.592 Radial†	-1205.5	-263.4	-61.329 ug/L	-61.329 ppb	19:14:38
2	Sr 421.552†	38.5	30.1	0.1717 ug/L	0.1717 ppb	19:14:38
2	Sc 361.383	936430.9	936430.9	95.813 %		19:16:00
2	Y 371.029	787002.0	787002.0	95.749 %		19:16:00
2	Ag 328.068†	484.0	32.2	0.1333 ug/L	0.1333 ppb	19:16:05
2	As 188.979†	-21.9	-2.5	-0.9372 ug/L	-0.9372 ppb	19:16:25
2	B 249.677†	-363.0	161.9	3.2525 ug/L	3.2525 ppb	19:16:25
2	Ba 233.527†	3.2	-6.1	-0.0424 ug/L	-0.0424 ppb	19:16:25
2	Be 313.107†	-4440.1	-192.7	-0.0627 ug/L	-0.0627 ppb	19:16:05
2	Cd 226.502†	-196.5	11.3	0.1114 ug/L	0.1114 ppb	19:16:25
2	Co 228.616†	-82.0	-11.3	-0.2038 ug/L	-0.2038 ppb	19:16:25
2	Cr 267.716†	90.3	5.7	0.0576 ug/L	0.0576 ppb	19:16:25
2	Cu 324.752†	6134.2	192.9	0.5232 ug/L	0.5232 ppb	19:16:05
2	Mn 257.610†	470.8	-2.3	-0.0027 ug/L	-0.0027 ppb	19:16:25
2	Mo 202.031†	29.9	7.8	0.4861 ug/L	0.4861 ppb	19:16:25
2	Ni 231.604†	116.8	6.5	0.1470 ug/L	0.1470 ppb	19:16:25

2	P 214.914†	230.2	14.5	7.5169 ug/L	7.5169 ppb	19:16:25
2	Pb 220.353†	-59.0	-38.1	-4.1371 ug/L	-4.1371 ppb	19:16:25
2	S 181.975 Axial†	45.1	-0.0	-0.0308 ug/L	-0.0308 ppb	19:16:25
2	Sb 206.836†	33.4	-7.0	-2.0628 ug/L	-2.0628 ppb	19:16:25
2	Se 196.026†	-28.8	-1.1	-0.6171 ug/L	-0.6171 ppb	19:16:25
2	Si 251.611†	495.0	-13.8	-0.3939 ug/L	-0.3939 ppb	19:16:25
2	Sn 189.927†	20.5	16.8	2.5820 ug/L	2.5820 ppb	19:16:25
2	Ti 334.940†	-1406.6	-72.5	-0.1043 ug/L	-0.1043 ppb	19:16:05
2	Tl 190.801†	-34.9	0.9	0.2356 ug/L	0.2356 ppb	19:16:25
2	U 409.014†	-1720.7	14.0	0.3712 ug/L	0.3712 ppb	19:16:00
2	V 292.402†	-1455.2	-64.6	-0.3888 ug/L	-0.3888 ppb	19:16:05
2	Zn 213.857†	754.3	-25.0	-0.2116 ug/L	-0.2116 ppb	19:16:25
2	SiO2†	484.0	-40.8	-2.4455 ug/L	-2.4455 ppb	19:17:06
3	Sc Radial	5554.5	5554.5	98.6 %		19:15:03
3	Y RADIAL	5828.5	5828.5	97.97 %		19:15:03
3	Al 396.153Radial†	-6.5	-3.1	-2.2416 ug/L	-2.2416 ppb	19:15:03
3	Ca 317.933Radial†	16.9	-7.7	-11.601 ug/L	-11.601 ppb	19:15:23
3	Fe 238.204 Radial†	9.4	-2.8	-22.636 ug/L	-22.636 ppb	19:15:23
3	K 766.490 Radial†	2865.8	-7.5	-1.3680 ug/L	-1.3680 ppb	19:15:03
3	Mg 279.077 IEC†	3.3	0.8	25.384 ug/L	25.384 ppb	19:15:23
3	Na 589.592 Radial†	-1138.4	-101.8	-23.704 ug/L	-23.704 ppb	19:15:03
3	Sr 421.552†	9.4	-2.3	-0.0131 ug/L	-0.0131 ppb	19:15:03
3	Sc 361.383	945889.1	945889.1	96.781 %		19:16:30
3	Y 371.029	793339.3	793339.3	96.520 %		19:16:30
3	Ag 328.068†	408.4	-51.0	-0.2183 ug/L	-0.2183 ppb	19:16:35
3	As 188.979†	-23.8	-4.3	-1.5858 ug/L	-1.5858 ppb	19:16:55
3	B 249.677†	-344.0	185.3	3.7282 ug/L	3.7282 ppb	19:16:55
3	Ba 233.527†	12.6	3.5	0.0217 ug/L	0.0217 ppb	19:16:55
3	Be 313.107†	-4460.2	-167.1	-0.0543 ug/L	-0.0543 ppb	19:16:35
3	Cd 226.502†	-228.6	-19.8	-0.1941 ug/L	-0.1941 ppb	19:16:55
3	Co 228.616†	-81.1	-9.5	-0.1721 ug/L	-0.1721 ppb	19:16:55
3	Cr 267.716†	102.9	17.8	0.1806 ug/L	0.1806 ppb	19:16:55
3	Cu 324.752†	6234.0	232.1	0.6287 ug/L	0.6287 ppb	19:16:35
3	Mn 257.610†	454.8	-23.7	-0.0263 ug/L	-0.0263 ppb	19:16:55
3	Mo 202.031†	26.3	3.8	0.2361 ug/L	0.2361 ppb	19:16:55
3	Ni 231.604†	114.9	3.4	0.0766 ug/L	0.0766 ppb	19:16:55
3	P 214.914†	238.3	20.5	10.650 ug/L	10.650 ppb	19:16:55
3	Pb 220.353†	-60.7	-39.3	-4.2651 ug/L	-4.2651 ppb	19:16:55
3	S 181.975 Axial†	48.2	2.7	3.2420 ug/L	3.2420 ppb	19:16:55
3	Sb 206.836†	28.7	-12.3	-3.6829 ug/L	-3.6829 ppb	19:16:55
3	Se 196.026†	-27.3	0.7	0.3338 ug/L	0.3338 ppb	19:16:55
3	Si 251.611†	486.1	-28.2	-0.7940 ug/L	-0.7940 ppb	19:16:55
3	Sn 189.927†	7.3	3.0	0.4601 ug/L	0.4601 ppb	19:16:55
3	Ti 334.940†	-1366.5	-16.4	-0.0259 ug/L	-0.0259 ppb	19:16:35
3	Tl 190.801†	-41.3	-5.4	-1.4356 ug/L	-1.4356 ppb	19:16:55
3	U 409.014†	-1797.7	-47.5	-1.2599 ug/L	-1.2599 ppb	19:16:30
3	V 292.402†	-1500.9	-96.7	-0.5879 ug/L	-0.5879 ppb	19:16:35
3	Zn 213.857†	751.6	-35.6	-0.2975 ug/L	-0.2975 ppb	19:16:55
3	SiO2†	465.3	-65.2	-3.8945 ug/L	-3.8945 ppb	19:17:11

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	943564.8	96.543 %		0.6448			0.67%
Sc Radial	5398.5	95.9 %		3.74			3.90%
Y 371.029	792302.3	96.394 %		0.5919			0.61%
Y RADIAL	5708.9	95.96 %		3.612			3.76%
Ag 328.068†	-29.5	-0.1259 ug/L		0.22755	-0.1259 ppb	0.22755	180.69%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	-4.0	-2.9199 ug/L		1.18164	-2.9199 ppb	1.18164	40.47%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	-3.6	-1.3248 ug/L		0.34237	-1.3248 ppb	0.34237	25.84%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	179.5	3.6089 ug/L		0.31421	3.6089 ppb	0.31421	8.71%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	-6.1	-0.0427 ug/L		0.06464	-0.0427 ppb	0.06464	151.23%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	-177.3	-0.0576 ug/L		0.00453	-0.0576 ppb	0.00453	7.88%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	-5.7	-8.6377 ug/L		2.85492	-8.6377 ppb	2.85492	33.05%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated						
Cd 226.502†	0.7	0.0081 ug/L	0.17512	0.0081 ppb	0.17512	>999.9%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-9.8	-0.1762 ug/L	0.02588	-0.1762 ppb	0.02588	14.69%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	4.8	0.0479 ug/L	0.13794	0.0479 ppb	0.13794	288.27%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	193.2	0.5236 ug/L	0.10503	0.5236 ppb	0.10503	20.06%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	-1.1	-9.0023 ug/L	15.25108	-9.0023 ppb	15.25108	169.41%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	109.8	20.234 ug/L	24.1099	20.234 ppb	24.1099	119.16%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	1.6	48.754 ug/L	36.4985	48.754 ppb	36.4985	74.86%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	-6.8	-0.0095 ug/L	0.01468	-0.0095 ppb	0.01468	155.10%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	6.2	0.3865 ug/L	0.13250	0.3865 ppb	0.13250	34.28%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	-166.9	-38.857 ug/L	19.8512	-38.857 ppb	19.8512	51.09%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	3.8	0.0853 ug/L	0.05782	0.0853 ppb	0.05782	67.76%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	10.7	5.5167 ug/L	6.37306	5.5167 ppb	6.37306	115.52%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	-40.1	-4.3534 ug/L	0.27139	-4.3534 ppb	0.27139	6.23%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	0.4	0.4401 ug/L	2.59862	0.4401 ppb	2.59862	590.45%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	-10.8	-3.2373 ug/L	1.02696	-3.2373 ppb	1.02696	31.72%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-0.8	-0.5089 ug/L	0.79409	-0.5089 ppb	0.79409	156.05%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	-22.8	-0.6461 ug/L	0.21949	-0.6461 ppb	0.21949	33.97%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	6.9	1.0669 ug/L	1.32076	1.0669 ppb	1.32076	123.79%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	7.0	0.0398 ug/L	0.11495	0.0398 ppb	0.11495	288.70%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	-17.6	-0.0294 ug/L	0.07324	-0.0294 ppb	0.07324	249.18%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	-1.5	-0.3925 ug/L	0.90956	-0.3925 ppb	0.90956	231.71%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	-11.0	-0.2911 ug/L	0.85772	-0.2911 ppb	0.85772	294.68%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	-84.8	-0.5125 ug/L	0.10795	-0.5125 ppb	0.10795	21.06%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	-27.0	-0.2263 ug/L	0.06505	-0.2263 ppb	0.06505	28.74%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	-49.5	-2.9618 ug/L	0.80930	-2.9618 ppb	0.80930	27.32%
QC value within limits for SiO2 Recovery = Not calculated						

All analyte(s) passed QC.

ICPMS #5 Daily Performance Report

Sample ID: Sample

Sample Date/Time: Monday, January 25, 2010 10:06:01

Sample Description:

Method File: c:\elandata\Method\Daily2.mth

Dataset File: c:\elandata\Dataset\default2\Sample.1750

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	3797.9	3797.905	55.830	1.5
Mg	24.0	41866.7	41866.664	413.504	1.0
Co	58.9	89574.0	89573.957	663.666	0.7
Rh	102.9	166042.0	166041.981	567.518	0.3
In	114.9	222043.5	222043.538	1016.649	0.5
Pb	208.0	242059.8	242059.850	2131.441	0.9
[> Ba	137.9	227089.5	227089.518	838.861	0.4
[Ba++	69.0	4144.4	0.018	0.000	1.2
[> Ce	139.9	278563.8	278563.808	2005.002	0.7
[CeO	155.9	6175.5	0.022	0.000	1.6
Bkgd	220.0	15.5	15.500	1.225	7.9

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	23	10.3	4722.4
Co	59	23	11.0	89272.7
In	115	23	12.3	230319.1

ICPMS #5 Instrument Tuning Report

File Name: 100125.tun
File Path: C:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	590	2050	0.661
Be	9.0	9.1	2059	2070	0.641
Mg	24.0	24.0	5689	2070	0.614
Mg	25.0	25.0	5941	2070	0.625
Mg	26.0	26.0	6164	2070	0.651
Co	58.9	58.9	14182	2105	0.614
Rh	102.9	102.9	24875	2165	0.614
In	114.9	114.9	27789	2185	0.615
Ce	139.9	139.9	33873	2200	0.633
Pb	206.0	206.0	49948	2270	0.673
Pb	207.0	207.0	50159	2235	0.664
Pb	208.0	208.0	50451	2260	0.722
U	238.1	238.1	57726	2275	0.736

ICPMS#5 - Summary Report

Sample ID: Blank

Sample Date/Time: Monday, January 25, 2010 22:04:28

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100125\Blank.194

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7		ug/L		90	
Be	9		ug/L		22	
B	11		ug/L		1754	
Na	23		ug/L		23019	
Mg	24		ug/L		6001	
Al	27		ug/L		6668	
P	31		ug/L		5051	
K	39		ug/L		503750	
Ca	43		ug/L		386	
> Sc	45		ug/L		677670	
Ti	47		ug/L		309	
V	51		ug/L		5775	
Cr	52		ug/L		151	
Cr	53		ug/L		100808	
Mn	55		ug/L		1192	
Fe	57		ug/L		5858	
Co	59		ug/L		164	
Ni	60		ug/L		148	
Cu	63		ug/L		1704	
Cu	65		ug/L		817	
Zn	66		ug/L		670	
Zn	67		ug/L		11561	
Zn	68		ug/L		1321	
> Ge	74		ug/L		380019	
As	75		ug/L		1	
Se	77		ug/L		5475	
Se	82		ug/L		-16	
Kr	83		ug/L		113	
Sr	88		ug/L		237	
Y	89		ug/L		62	
Mo	98		ug/L		129	
Ag	107		ug/L		78	
Cd	111		ug/L		25	
Cd	114		ug/L		65	
> In	115		ug/L		243683	
Sn	120		ug/L		476	
Sb	121		ug/L		695	
Sb	123		ug/L		577	
Ba	135		ug/L		44	
Ba	137		ug/L		70	
Ho	165		ug/L		22	
> Lu	175		ug/L		523034	
Tl	205		ug/L		1789	
Pb	208		ug/L		991	
Bi	209		ug/L		164	
Th	232		ug/L		1004	
U	238		ug/L		683	

Sample ID: Blank

Report Date/Time: Monday, January 25, 2010 22:07:12

Page 1

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	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	0.9997
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 % Di	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: Monday, January 25, 2010 22:10:35

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100125\Standard 1.195

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	10.000	ug/L	1.428	18520	0.026
Be	9	10.000	ug/L	1.795	3997	0.006
B	11	20.000	ug/L	5.753	8648	0.010
Na	23	1000.000	ug/L	9.225	3284255	4.668
Mg	24	1000.000	ug/L	4.364	2593444	3.703
Al	27	1000.000	ug/L	1.398	3302586	4.717
P	31	1000.000	ug/L	3.562	218203	0.305
K	39	1000.000	ug/L	8.590	4853013	6.202
Ca	43	1000.000	ug/L	2.428	11780	0.016
> Sc	45		ug/L		698733	698733.022
Ti	47	10.000	ug/L	1.980	5860	0.008
V	51	10.000	ug/L	4.518	72831	0.096
Cr	52	10.000	ug/L	3.724	53485	0.076
Cr	53		ug/L		110486	0.009
Mn	55	10.000	ug/L	2.654	87424	0.123
Fe	57	1000.000	ug/L	1.954	181920	0.252
Co	59	10.000	ug/L	2.994	68631	0.098
Ni	60	10.000	ug/L	1.598	14883	0.021
Cu	63		ug/L		37211	0.051
Cu	65	10.000	ug/L	1.114	18044	0.025
Zn	66	10.000	ug/L	0.883	12068	0.029
Zn	67		ug/L		13447	0.004
Zn	68		ug/L		9357	0.021
> Ge	74		ug/L		389225	389225.277
As	75	10.000	ug/L	4.204	11316	0.029
Se	77		ug/L		6659	0.003
Se	82	10.000	ug/L	4.397	1094	0.003
Kr	83		ug/L		101	-0.000
Sr	88	10.000	ug/L	1.190	137779	0.550
Y	89		ug/L		87	0.000
Mo	98	10.000	ug/L	1.739	34340	0.137
Ag	107	10.000	ug/L	1.013	60334	0.241
Cd	111	10.000	ug/L	1.366	14277	0.057
Cd	114		ug/L		34581	0.138
> In	115		ug/L		250111	250110.998
Sn	120	10.000	ug/L	1.689	62272	0.247
Sb	121	10.000	ug/L	8.394	48133	0.190
Sb	123		ug/L		38577	0.152
Ba	135		ug/L		16344	0.031
Ba	137	10.000	ug/L	1.789	29237	0.055
Ho	165		ug/L		22	-0.000
> Lu	175		ug/L		526201	526201.117
Tl	205	10.000	ug/L	0.920	260011	0.491
Pb	208	10.000	ug/L	1.731	397900	0.754
Bi	209		ug/L		201	0.000
Th	232	10.000	ug/L	0.798	498429	0.945
U	238	10.000	ug/L	1.178	521262	0.989

Sample ID: Standard 1

Report Date/Time: Monday, January 25, 2010 22:13:16

Page 1

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 % Di	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 MassOut 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: Monday, January 25, 2010 22:16:39

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100125\Standard 2.196

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	99.978	ug/L	1.465	184610	0.258
Be	9	100.006	ug/L	1.579	40936	0.057
B	11	199.983	ug/L	2.411	71269	0.097
Na	23	10005.419	ug/L	6.496	35369652	49.386
Mg	24	9988.155	ug/L	3.243	23662496	33.071
Al	27	10005.232	ug/L	6.564	35615356	49.801
P	31	9992.140	ug/L	3.517	2024895	2.824
K	39	10008.837	ug/L	4.942	49202830	68.097
Ca	43	10000.962	ug/L	1.108	118050	0.165
> Sc	45		ug/L		715231	715231.403
Ti	47	100.002	ug/L	1.176	57154	0.079
V	51	99.992	ug/L	1.790	685363	0.950
Cr	52	99.975	ug/L	1.256	532455	0.744
Cr	53		ug/L		169308	0.088
Mn	55	99.954	ug/L	0.650	843999	1.178
Fe	57	9989.410	ug/L	1.881	1632019	2.274
Co	59	99.950	ug/L	2.426	667124	0.933
Ni	60	99.984	ug/L	0.548	148534	0.207
Cu	63		ug/L		352365	0.490
Cu	65	99.974	ug/L	1.924	172428	0.240
Zn	66	99.967	ug/L	0.237	113683	0.283
Zn	67		ug/L		30208	0.045
Zn	68		ug/L		83791	0.206
> Ge	74		ug/L		399257	399256.729
As	75	100.023	ug/L	1.012	118787	0.298
Se	77		ug/L		14848	0.023
Se	82	100.000	ug/L	2.422	11372	0.029
Kr	83		ug/L		119	0.000
Sr	88	99.937	ug/L	1.009	1302097	5.168
Y	89		ug/L		186	0.000
Mo	98	99.999	ug/L	1.438	344279	1.366
Ag	107	99.936	ug/L	2.609	570009	2.263
Cd	111	100.015	ug/L	3.155	145715	0.578
Cd	114		ug/L		338857	1.345
> In	115		ug/L		251958	251957.995
Sn	120	99.983	ug/L	0.239	612337	2.428
Sb	121	100.041	ug/L	5.698	499233	1.978
Sb	123		ug/L		396975	1.572
Ba	135		ug/L		165844	0.318
Ba	137	100.010	ug/L	1.470	292313	0.560
Ho	165		ug/L		32	0.000
> Lu	175		ug/L		521860	521859.736
Tl	205	99.763	ug/L	0.425	2067169	3.958
Pb	208	99.872	ug/L	1.755	3486362	6.680
Bi	209		ug/L		469	0.001
Th	232	99.778	ug/L	0.904	4028042	7.717
U	238	99.784	ug/L	1.886	4236806	8.118

Sample ID: Standard 2

Report Date/Time: Monday, January 25, 2010 22:19:21

Page 1

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	0.9999
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	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	0.9997
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9998
U	238Linear Thru Zero	0.9998

Sample ID: Standard 2

Report Date/Time: Monday, January 25, 2010 22:19:21

Page 2

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	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

Sample ID: Standard 2

Report Date/Time: Monday, January 25, 2010 22:19:21

Page 3

ICPMS#5 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Monday, January 25, 2010 22:22:44

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100125\QC Std 1.197

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	51.142	ug/L	1.182	97611	0.132
Be	9	52.084	ug/L	2.851	22040	0.030
B	11	109.139	ug/L	2.279	41047	0.053
Na	23	4927.705	ug/L	11.224	18015930	24.323
Mg	24	5295.044	ug/L	2.156	12964540	17.532
Al	27	4942.446	ug/L	3.187	18193586	24.601
P	31	5275.704	ug/L	0.876	1107552	1.491
K	39	4715.941	ug/L	0.981	24262241	32.086
Ca	43	5028.666	ug/L	1.045	61555	0.083
> Sc	45		ug/L		739140	739139.907
Ti	47	50.923	ug/L	3.037	30226	0.040
V	51	51.003	ug/L	1.620	364365	0.485
Cr	52	51.446	ug/L	1.746	283190	0.383
Cr	53		ug/L		145321	0.048
Mn	55	53.148	ug/L	3.388	464210	0.627
Fe	57	5243.600	ug/L	3.399	888201	1.194
Co	59	50.459	ug/L	1.832	348148	0.471
Ni	60	51.298	ug/L	1.988	78817	0.106
Cu	63		ug/L		185439	0.248
Cu	65	50.668	ug/L	3.362	90723	0.122
Zn	66	53.110	ug/L	3.101	61784	0.150
Zn	67		ug/L		22178	0.024
Zn	68		ug/L		45537	0.109
> Ge	74		ug/L		406424	406424.183
As	75	47.279	ug/L	2.649	57131	0.141
Se	77		ug/L		11193	0.013
Se	82	50.777	ug/L	1.053	5870	0.014
Kr	83		ug/L		125	0.000
Sr	88	55.053	ug/L	5.171	708407	2.847
Y	89		ug/L		88	0.000
Mo	98	51.051	ug/L	3.912	173691	0.697
Ag	107	53.712	ug/L	4.219	302691	1.216
Cd	111	52.179	ug/L	3.665	75124	0.302
Cd	114		ug/L		176007	0.707
> In	115		ug/L		249180	249180.253
Sn	120	52.790	ug/L	3.938	319615	1.282
Sb	121	52.883	ug/L	2.775	261354	1.045
Sb	123		ug/L		205505	0.822
Ba	135		ug/L		86675	0.162
Ba	137	50.687	ug/L	0.757	151435	0.284
Ho	165		ug/L		46	0.000
> Lu	175		ug/L		533278	533278.123
Tl	205	54.987	ug/L	2.015	1164902	2.181
Pb	208	53.352	ug/L	0.922	1903853	3.568
Bi	209		ug/L		520	0.001
Th	232	51.651	ug/L	3.645	2130654	3.995
U	238	52.777	ug/L	0.381	2290606	4.294

Sample ID: QC Std 1

Report Date/Time: Monday, January 25, 2010 22:25:26

Page 1

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	0.9999
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	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	0.9997
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 % Di	Duplicate Rel. % Difference
Li	7	102.284				
Be	9	104.169				
B	11	109.139				
Na	23	98.554				
Mg	24	105.901				
Al	27	97.870				
P	31	105.514				
K	39	94.319				
Ca	43	100.573				
> Sc	45		109.1			
Ti	47	101.846				
V	51	102.005				
Cr	52	102.892				
Cr	53					
Mn	55	106.295				
Fe	57	104.872				
Co	59	100.917				
Ni	60	102.597				
Cu	63					
Cu	65	101.336				
Zn	66	106.221				
Zn	67					
Zn	68					
> Ge	74		106.9			
As	75	94.558				
Se	77					
Se	82	101.553				
Kr	83					
Sr	88	110.106				
Y	89					
Mo	98	102.103				
Ag	107	107.424				
Cd	111	104.358				
Cd	114					
> In	115		102.3			
Sn	120	105.579				
Sb	121	105.766				
Sb	123					
Ba	135					
Ba	137	101.374				
Ho	165					
> Lu	175		102.0			
Tl	205	109.973				
Pb	208	106.705				
Bi	209					
Th	232	103.303				
U	238	105.554				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 1	Sr	88	ICV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Monday, January 25, 2010 22:28:51

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100125\QC Std 2.198

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.028	ug/L	35.903	155	0.000
Be	9	-0.015	ug/L	68.063	19	-0.000
B	11	4.111	ug/L	20.111	3477	0.002
Na	23	-1.452	ug/L	34.362	20348	-0.007
Mg	24	-0.679	ug/L	63.074	5001	-0.002
Al	27	1.028	ug/L	118.247	11338	0.005
P	31	-0.192	ug/L	484.324	5613	-0.000
K	39	7.396	ug/L	32.253	602094	0.050
Ca	43	0.448	ug/L	702.850	437	0.000
> Sc	45		ug/L		758778	758777.900
Ti	47	0.023	ug/L	90.678	360	0.000
V	51	-0.370	ug/L	109.315	3805	-0.004
Cr	52	0.383	ug/L	7.230	2329	0.003
Cr	53		ug/L		118545	0.008
Mn	55	-0.006	ug/L	73.854	1280	-0.000
Fe	57	3.622	ug/L	28.525	7182	0.001
Co	59	0.003	ug/L	80.273	202	0.000
Ni	60	0.011	ug/L	106.289	182	0.000
Cu	63		ug/L		1930	0.000
Cu	65	0.013	ug/L	98.431	939	0.000
Zn	66	0.035	ug/L	46.441	778	0.000
Zn	67		ug/L		13097	0.001
Zn	68		ug/L		1479	0.000
> Ge	74		ug/L		418217	418217.333
As	75	0.078	ug/L	610.451	99	0.000
Se	77		ug/L		7062	0.002
Se	82	-0.137	ug/L	139.300	-34	-0.000
Kr	83		ug/L		130	0.000
Sr	88	0.002	ug/L	55.462	274	0.000
Y	89		ug/L		54	-0.000
Mo	98	0.044	ug/L	34.995	291	0.001
Ag	107	0.001	ug/L	150.621	90	0.000
Cd	111	0.013	ug/L	48.632	46	0.000
Cd	114		ug/L		61	-0.000
> In	115		ug/L		259096	259095.512
Sn	120	0.266	ug/L	19.518	2177	0.006
Sb	121	1.047	ug/L	25.086	6083	0.021
Sb	123		ug/L		4847	0.016
Ba	135		ug/L		49	0.000
Ba	137	-0.000	ug/L	533.797	72	-0.000
Ho	165		ug/L		28	0.000
> Lu	175		ug/L		546227	546227.368
Tl	205	0.235	ug/L	26.025	6959	0.009
Pb	208	0.002	ug/L	27.192	1092	0.000
Bi	209		ug/L		179	0.000
Th	232	0.054	ug/L	16.966	3318	0.004
U	238	0.005	ug/L	36.831	933	0.000

Sample ID: QC Std 2

Report Date/Time: Monday, January 25, 2010 22:31:35

Page 1

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	0.9999
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	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	0.9997
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 % Di	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		112.0			
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		110.1			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		106.3			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		104.4			
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#5 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Monday, January 25, 2010 22:34:58

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100125\QC Std 3.199

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	10.933	ug/L	1.305	21173	0.028
Be	9	0.539	ug/L	4.138	255	0.000
B	11	17.289	ug/L	2.450	8201	0.008
Na	23	279.578	ug/L	11.782	1057836	1.380
Mg	24	12.174	ug/L	4.535	36714	0.040
Al	27	31.779	ug/L	6.710	125551	0.158
P	31	60.450	ug/L	3.960	18329	0.017
K	39	335.929	ug/L	7.824	2261159	2.286
Ca	43	214.877	ug/L	5.034	3065	0.004
> Sc	45		ug/L		747194	747194.115
Ti	47	9.447	ug/L	3.079	5948	0.008
V	51	10.529	ug/L	5.281	81048	0.100
Cr	52	11.433	ug/L	2.678	63739	0.085
Cr	53		ug/L		127632	0.022
Mn	55	5.839	ug/L	1.877	52732	0.069
Fe	57	123.301	ug/L	2.687	27426	0.028
Co	59	1.127	ug/L	1.276	8036	0.011
Ni	60	2.214	ug/L	2.471	3594	0.005
Cu	63		ug/L		6080	0.006
Cu	65	1.155	ug/L	3.899	2973	0.003
Zn	66	11.162	ug/L	0.986	13822	0.032
Zn	67		ug/L		15306	0.007
Zn	68		ug/L		10962	0.023
> Ge	74		ug/L		414342	414342.136
As	75	5.987	ug/L	3.076	7379	0.018
Se	77		ug/L		7560	0.004
Se	82	5.544	ug/L	8.847	638	0.002
Kr	83		ug/L		113	-0.000
Sr	88	11.982	ug/L	1.195	161037	0.620
Y	89		ug/L		59	-0.000
Mo	98	0.538	ug/L	1.128	2044	0.007
Ag	107	1.083	ug/L	2.925	6447	0.025
Cd	111	1.094	ug/L	3.562	1669	0.006
Cd	114		ug/L		3941	0.015
> In	115		ug/L		259517	259517.027
Sn	120	5.577	ug/L	0.846	35658	0.135
Sb	121	3.322	ug/L	7.708	17781	0.066
Sb	123		ug/L		14030	0.052
Ba	135		ug/L		3665	0.007
Ba	137	2.129	ug/L	2.075	6539	0.012
Ho	165		ug/L		21	-0.000
> Lu	175		ug/L		542367	542367.161
Tl	205	1.346	ug/L	2.292	30814	0.053
Pb	208	2.390	ug/L	0.811	87711	0.160
Bi	209		ug/L		202	0.000
Th	232	1.340	ug/L	0.549	57257	0.104
U	238	0.270	ug/L	1.789	12627	0.022

Sample ID: QC Std 3

Report Date/Time: Monday, January 25, 2010 22:37:40

Page 1

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	0.9999
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	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	0.9997
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	109.333				
Be	9	107.836				
B	11	115.257				
Na	23	111.831				
Mg	24	81.158				
Al	27	105.931				
P	31	120.899				
K	39	111.976				
Ca	43	107.438				
> Sc	45		110.3			
Ti	47	94.468				
V	51	105.290				
Cr	52	114.331				
Cr	53					
Mn	55	116.773				
Fe	57	123.301				
Co	59	112.666				
Ni	60	110.700				
Cu	63					
Cu	65	115.547				
Zn	66	111.622				
Zn	67					
Zn	68					
> Ge	74		109.0			
As	75	119.731				
Se	77					
Se	82	110.877				
Kr	83					
Sr	88	119.816				
Y	89					
Mo	98	107.576				
Ag	107	108.323				
Cd	111	109.381				
Cd	114					
> In	115		106.5			
Sn	120	111.538				
Sb	121	110.721				
Sb	123					
Ba	135					
Ba	137	106.447				
Ho	165					
> Lu	175		103.7			
Tl	205	134.591				
Pb	208	119.483				
Bi	209					
Th	232	134.016				
U	238	135.056				

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

Sample ID: QC Std 3
 Report Date/Time: Monday, January 25, 2010 22:37:40
 Page 3

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Monday, January 25, 2010 22:41:04

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100125\QC Std 4.200

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.164	ug/L	12.277	391	0.000
Be	9	0.040	ug/L	80.501	39	0.000
B	11	1.240	ug/L	22.960	2242	0.001
Na	23	93191.882	ug/L	4.342	323157088	459.987
Mg	24	101284.740	ug/L	3.461	235596160	335.352
Al	27	98227.042	ug/L	5.056	343446577	488.926
P	31	97978.987	ug/L	1.036	19463674	27.693
K	39	102241.558	ug/L	4.258	489314908	695.623
Ca	43	94426.478	ug/L	1.268	1091878	1.553
Sc	45		ug/L		702680	702680.449
Ti	47	1451.622	ug/L	0.624	810641	1.153
V	51	-0.228	ug/L	200.088	4484	-0.002
Cr	52	2.450	ug/L	3.951	12973	0.018
Cr	53		ug/L		97131	-0.011
Mn	55	6.291	ug/L	2.215	53348	0.074
Fe	57	98257.110	ug/L	1.626	15719886	22.365
Co	59	0.308	ug/L	4.709	2191	0.003
Ni	60	2.993	ug/L	0.906	4518	0.006
Cu	63		ug/L		8470	0.010
Cu	65	2.454	ug/L	1.067	4985	0.006
Zn	66	3.372	ug/L	2.782	4510	0.010
Zn	67		ug/L		12445	0.001
Zn	68		ug/L		2293	0.002
Ge	74		ug/L		398814	398813.804
As	75	0.160	ug/L	327.989	191	0.000
Se	77		ug/L		8266	0.006
Se	82	-0.759	ug/L	25.457	-103	-0.000
Kr	83		ug/L		276	0.000
Sr	88	1.312	ug/L	0.442	16451	0.068
Y	89		ug/L		505	0.002
Mo	98	2015.947	ug/L	0.659	6583122	27.539
Ag	107	0.071	ug/L	10.501	460	0.002
Cd	111	0.501	ug/L	29.522	720	0.003
Cd	114		ug/L		8901	0.037
In	115		ug/L		239052	239052.046
Sn	120	0.179	ug/L	6.144	1504	0.004
Sb	121	0.229	ug/L	11.903	1764	0.005
Sb	123		ug/L		1403	0.003
Ba	135		ug/L		1253	0.002
Ba	137	0.735	ug/L	2.746	2108	0.004
Ho	165		ug/L		1241	0.002
Lu	175		ug/L		495871	495870.586
Tl	205	0.032	ug/L	9.772	2332	0.001
Pb	208	0.189	ug/L	0.691	7200	0.013
Bi	209		ug/L		1412	0.003
Th	232	0.042	ug/L	35.718	2547	0.003
U	238	-0.010	ug/L	1.900	230	-0.001

Sample ID: QC Std 4

Report Date/Time: Monday, January 25, 2010 22:43:47

Page 1

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	0.9999
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	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	0.9997
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	93.192				
Mg	24	101.285				
Al	27	98.227				
P	31	97.979				
K	39	102.242				
Ca	43	94.426				
> Sc	45		103.7			
Ti	47	72.581				
V	51					
Cr	52	66.227				
Cr	53					
Mn	55	108.460				
Fe	57	98.257				
Co	59	123.210				
Ni	60	110.856				
Cu	63					
Cu	65	84.610				
Zn	66	93.680				
Zn	67					
Zn	68					
> Ge	74		104.9			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88	109.332				
Y	89					
Mo	98	100.797				
Ag	107					
Cd	111	125.323				
Cd	114					
> In	115		98.1			
Sn	120					
Sb	121	228.802				
Sb	123					
Ba	135					
Ba	137	109.709				
Ho	165					
> Lu	175		94.8			
Tl	205					
Pb	208	94.372				
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: Monday, January 25, 2010 22:47:11

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100125\QC Std 5.201

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	19.261	ug/L	1.415	34080	0.050
Be	9	18.683	ug/L	2.278	7333	0.011
B	11	17.898	ug/L	2.596	7710	0.009
Na	23	94252.108	ug/L	5.586	318171057	465.220
Mg	24	99084.879	ug/L	4.973	224450781	328.069
Al	27	97267.949	ug/L	2.921	331097534	484.153
P	31	95536.039	ug/L	2.007	18472291	27.002
K	39	101918.592	ug/L	1.178	474843487	693.426
Ca	43	92867.779	ug/L	1.880	1045181	1.528
Sc	45		ug/L		684072	684071.977
Ti	47	1451.076	ug/L	1.750	788723	1.153
V	51	20.474	ug/L	4.563	138818	0.195
Cr	52	23.010	ug/L	2.452	117302	0.171
Cr	53		ug/L		104555	0.004
Mn	55	27.470	ug/L	1.395	222706	0.324
Fe	57	98671.014	ug/L	1.912	15367141	22.459
Co	59	20.038	ug/L	2.065	128054	0.187
Ni	60	21.940	ug/L	3.714	31278	0.046
Cu	63		ug/L		70583	0.101
Cu	65	20.839	ug/L	1.006	35031	0.050
Zn	66	21.762	ug/L	1.419	24635	0.062
Zn	67		ug/L		15211	0.009
Zn	68		ug/L		17238	0.041
Ge	74		ug/L		388787	388787.069
As	75	20.691	ug/L	2.695	23935	0.062
Se	77		ug/L		9303	0.010
Se	82	19.078	ug/L	3.510	2100	0.005
Kr	83		ug/L		286	0.000
Sr	88	24.271	ug/L	0.132	291420	1.255
Y	89		ug/L		502	0.002
Mo	98	2028.814	ug/L	2.803	6429670	27.715
Ag	107	20.451	ug/L	1.166	107505	0.463
Cd	111	20.424	ug/L	2.419	27424	0.118
Cd	114		ug/L		71494	0.308
In	115		ug/L		232031	232030.901
Sn	120	21.289	ug/L	1.818	120415	0.517
Sb	121	23.715	ug/L	1.095	109429	0.469
Sb	123		ug/L		86983	0.373
Ba	135		ug/L		31755	0.065
Ba	137	20.343	ug/L	1.869	56021	0.114
Ho	165		ug/L		1235	0.002
Lu	175		ug/L		491240	491239.692
Tl	205	21.492	ug/L	1.896	420538	0.853
Pb	208	21.150	ug/L	1.885	695761	1.415
Bi	209		ug/L		1940	0.004
Th	232	23.422	ug/L	0.398	890785	1.811
U	238	23.679	ug/L	1.106	946993	1.927

Sample ID: QC Std 5

Report Date/Time: Monday, January 25, 2010 22:49:53

Page 1

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	0.9999
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	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	0.9997
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	96.307				
Be	9	93.416				
B	11	89.488				
Na	23	94.252				
Mg	24	99.085				
Al	27	97.268				
P	31	95.536				
K	39	101.919				
Ca	43	92.868				
> Sc	45		100.9			
Ti	47	72.554				
V	51	102.368				
Cr	52	97.089				
Cr	53					
Mn	55	106.472				
Fe	57	98.671				
Co	59	98.952				
Ni	60	96.652				
Cu	63					
Cu	65	91.000				
Zn	66	92.210				
Zn	67					
Zn	68					
> Ge	74		102.3			
As	75	103.454				
Se	77					
Se	82	95.390				
Kr	83					
Sr	88	114.484				
Y	89					
Mo	98	101.441				
Ag	107	102.257				
Cd	111	100.119				
Cd	114					
> In	115		95.2			
Sn	120	106.445				
Sb	121	117.984				
Sb	123					
Ba	135					
Ba	137	98.417				
Ho	165					
> Lu	175		93.9			
Tl	205	107.459				
Pb	208	104.705				
Bi	209					
Th	232	117.108				
U	238	118.395				

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: Monday, January 25, 2010 22:53:18

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100125\QC Std 6.202

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	50.577	ug/L	0.889	90881	0.130
Be	9	51.425	ug/L	0.870	20493	0.029
B	11	102.172	ug/L	3.038	36296	0.050
Na	23	4769.954	ug/L	5.688	16406669	23.544
Mg	24	5013.454	ug/L	5.254	11555293	16.599
Al	27	4868.228	ug/L	4.975	16868077	24.232
P	31	5211.015	ug/L	2.339	1030017	1.473
K	39	5278.468	ug/L	2.071	25505879	35.913
Ca	43	4859.633	ug/L	3.066	56018	0.080
> Sc	45		ug/L		695797	695797.341
Ti	47	51.495	ug/L	1.761	28780	0.041
V	51	50.906	ug/L	2.299	342434	0.484
Cr	52	51.078	ug/L	1.674	264733	0.380
Cr	53		ug/L		140019	0.052
Mn	55	52.870	ug/L	0.270	434921	0.623
Fe	57	5251.470	ug/L	1.504	837731	1.195
Co	59	50.115	ug/L	1.151	325578	0.468
Ni	60	50.874	ug/L	1.152	73601	0.106
Cu	63		ug/L		174046	0.248
Cu	65	50.533	ug/L	0.233	85217	0.121
Zn	66	51.298	ug/L	1.969	58281	0.145
Zn	67		ug/L		21194	0.023
Zn	68		ug/L		43232	0.106
> Ge	74		ug/L		396580	396579.667
As	75	46.743	ug/L	1.919	55136	0.139
Se	77		ug/L		10964	0.013
Se	82	49.986	ug/L	2.384	5638	0.014
Kr	83		ug/L		105	-0.000
Sr	88	52.307	ug/L	0.859	676694	2.705
Y	89		ug/L		105	0.000
Mo	98	49.287	ug/L	2.277	168499	0.673
Ag	107	51.236	ug/L	1.443	290190	1.160
Cd	111	50.230	ug/L	1.840	72665	0.290
Cd	114		ug/L		172719	0.690
> In	115		ug/L		250120	250120.393
Sn	120	49.609	ug/L	2.360	301799	1.205
Sb	121	50.056	ug/L	8.134	248011	0.989
Sb	123		ug/L		196826	0.785
Ba	135		ug/L		82614	0.158
Ba	137	49.567	ug/L	0.797	144937	0.278
Ho	165		ug/L		49	0.000
> Lu	175		ug/L		521904	521904.341
Tl	205	54.782	ug/L	1.145	1135947	2.173
Pb	208	53.171	ug/L	1.174	1856949	3.556
Bi	209		ug/L		522	0.001
Th	232	51.694	ug/L	1.541	2087458	3.998
U	238	52.486	ug/L	2.147	2229113	4.270

Sample ID: QC Std 6

Report Date/Time: Monday, January 25, 2010 22:58:01

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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	0.9999
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	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	0.9997
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 % Dif	Duplicate Rel. % Difference
Li	7	101.154				
Be	9	102.850				
B	11	102.172				
Na	23	95.399				
Mg	24	100.269				
Al	27	96.401				
P	31	104.220				
K	39	105.569				
Ca	43	97.193				
> Sc	45		102.7			
Ti	47	102.989				
V	51	101.812				
Cr	52	102.156				
Cr	53					
Mn	55	105.741				
Fe	57	105.029				
Co	59	100.230				
Ni	60	101.748				
Cu	63					
Cu	65	101.066				
Zn	66	102.595				
Zn	67					
Zn	68					
> Ge	74		104.4			
As	75	93.485				
Se	77					
Se	82	99.973				
Kr	83					
Sr	88	104.613				
Y	89					
Mo	98	98.574				
Ag	107	102.472				
Cd	111	100.460				
Cd	114					
> In	115		102.6			
Sn	120	99.219				
Sb	121	100.111				
Sb	123					
Ba	135					
Ba	137	99.135				
Ho	165					
> Lu	175		99.8			
Tl	205	109.565				
Pb	208	106.342				
Bi	209					
Th	232	103.388				
U	238	104.971				

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: Monday, January 25, 2010 22:59:26

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100125\QC Std 7.203

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.026	ug/L	15.170	140	0.000
Be	9	-0.007	ug/L	86.686	20	-0.000
B	11	2.515	ug/L	23.392	2681	0.001
Na	23	0.901	ug/L	119.580	27026	0.004
Mg	24	-0.676	ug/L	93.880	4667	-0.002
Al	27	-0.453	ug/L	38.976	5334	-0.002
P	31	-0.109	ug/L	1196.201	5223	-0.000
K	39	20.208	ug/L	66.460	619558	0.137
Ca	43	-1.705	ug/L	168.587	381	-0.000
> Sc	45		ug/L		703848	703847.778
Ti	47	0.245	ug/L	25.933	458	0.000
V	51	0.371	ug/L	91.528	8467	0.004
Cr	52	-0.008	ug/L	474.294	118	-0.000
Cr	53		ug/L		115513	0.015
Mn	55	-0.005	ug/L	114.025	1196	-0.000
Fe	57	5.725	ug/L	13.750	7000	0.001
Co	59	0.004	ug/L	56.252	194	0.000
Ni	60	0.000	ug/L	3838.210	154	0.000
Cu	63		ug/L		1752	-0.000
Cu	65	0.022	ug/L	122.115	886	0.000
Zn	66	0.005	ug/L	870.212	705	0.000
Zn	67		ug/L		12473	0.001
Zn	68		ug/L		1445	0.000
> Ge	74		ug/L		397256	397255.903
As	75	0.072	ug/L	279.534	86	0.000
Se	77		ug/L		7234	0.004
Se	82	0.014	ug/L	1416.730	-15	0.000
Kr	83		ug/L		108	-0.000
Sr	88	-0.000	ug/L	1546.711	241	-0.000
Y	89		ug/L		49	-0.000
Mo	98	0.123	ug/L	16.289	551	0.002
Ag	107	-0.001	ug/L	138.794	76	-0.000
Cd	111	0.009	ug/L	28.846	40	0.000
Cd	114		ug/L		64	-0.000
> In	115		ug/L		249858	249858.062
Sn	120	0.210	ug/L	19.286	1764	0.005
Sb	121	0.706	ug/L	26.350	4200	0.014
Sb	123		ug/L		3275	0.011
Ba	135		ug/L		44	-0.000
Ba	137	-0.002	ug/L	66.345	67	-0.000
Ho	165		ug/L		29	0.000
> Lu	175		ug/L		530646	530645.607
Tl	205	0.281	ug/L	28.183	7725	0.011
Pb	208	0.002	ug/L	69.872	1069	0.000
Bi	209		ug/L		187	0.000
Th	232	0.049	ug/L	22.007	3045	0.004
U	238	0.004	ug/L	39.523	880	0.000

Sample ID: QC Std 7

Report Date/Time: Monday, January 25, 2010 23:02:10

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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	0.9999
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	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	0.9997
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9998
U	238Linear Thru Zero	0.9998

Sample ID: QC Std 7

Report Date/Time: Monday, January 25, 2010 23:02:10

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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		103.9			
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		104.5			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		102.5			
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: QC Std 10

Sample Date/Time: Monday, January 25, 2010 23:05:33

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100125\QC Std 10.204

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	939.908	ug/L	2.414	1566122	2.425
Be	9	993.392	ug/L	3.317	366993	0.568
B	11	1.392	ug/L	17.576	2108	0.001
Na	23	46684.127	ug/L	2.616	148957655	230.429
Mg	24	52681.490	ug/L	7.812	112654059	174.428
Al	27	50764.404	ug/L	7.547	163401107	252.681
P	31	24717.812	ug/L	2.116	4520071	6.986
K	39	51359.919	ug/L	3.673	226115946	349.439
Ca	43	48027.763	ug/L	0.316	510809	0.790
> Sc	45		ug/L		646095	646095.366
Ti	47	38.444	ug/L	3.339	20015	0.031
V	51	915.325	ug/L	0.300	5623778	8.696
Cr	52	916.725	ug/L	1.130	4408897	6.825
Cr	53		ug/L		643558	0.848
Mn	55	907.709	ug/L	1.688	6913195	10.701
Fe	57	48667.552	ug/L	2.397	7160389	11.078
Co	59	862.672	ug/L	2.167	5201163	8.051
Ni	60	860.013	ug/L	1.744	1152736	1.784
Cu	63		ug/L		2776227	4.294
Cu	65	839.843	ug/L	1.857	1302517	2.015
Zn	66	2298.236	ug/L	1.106	2427305	6.506
Zn	67		ug/L		384300	1.000
Zn	68		ug/L		1581521	4.237
> Ge	74		ug/L		373055	373055.224
As	75	832.846	ug/L	2.833	923740	2.477
Se	77		ug/L		42877	0.101
Se	82	463.976	ug/L	0.866	49351	0.132
Kr	83		ug/L		167	0.000
Sr	88	956.257	ug/L	0.953	11251172	49.447
Y	89		ug/L		471	0.002
Mo	98	1015.584	ug/L	1.271	3157020	13.874
Ag	107	233.556	ug/L	1.679	1203141	5.288
Cd	111	910.581	ug/L	0.428	1198153	5.266
Cd	114		ug/L		2944345	12.939
> In	115		ug/L		227542	227542.248
Sn	120	981.073	ug/L	1.932	5422900	23.829
Sb	121	244.058	ug/L	5.761	1098874	4.825
Sb	123		ug/L		885783	3.889
Ba	135		ug/L		1366755	2.739
Ba	137	928.333	ug/L	2.518	2593637	5.199
Ho	165		ug/L		396	0.001
> Lu	175		ug/L		498984	498984.155
Tl	205	472.551	ug/L	2.488	9353537	18.747
Pb	208	4764.887	ug/L	2.246	159002819	318.693
Bi	209		ug/L		4707	0.009
Th	232	2527.560	ug/L	1.858	97523572	195.483
U	238	5205.054	ug/L	0.997	211290443	423.485

Sample ID: QC Std 10

Report Date/Time: Monday, January 25, 2010 23:08:14

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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	0.9999
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	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	0.9997
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	93.991				
Be	9	99.339				
B	11					
Na	23	93.368				
Mg	24	105.363				
Al	27	101.529				
P	31	98.871				
K	39	102.720				
Ca	43	96.056				
> Sc	45		95.3			
Ti	47					
V	51	91.533				
Cr	52	91.673				
Cr	53					
Mn	55	90.771				
Fe	57	97.335				
Co	59	86.267				
Ni	60	86.001				
Cu	63					
Cu	65	83.984				
Zn	66	91.929				
Zn	67					
Zn	68					
> Ge	74		98.2			
As	75	83.285				
Se	77					
Se	82	92.795				
Kr	83					
Sr	88	95.626				
Y	89					
Mo	98	101.558				
Ag	107	93.422				
Cd	111	91.058				
Cd	114					
> In	115		93.4			
Sn	120	98.107				
Sb	121	97.623				
Sb	123					
Ba	135					
Ba	137	92.833				
Ho	165					
> Lu	175		95.4			
Tl	205	94.510				
Pb	208	95.298				
Bi	209					
Th	232	101.102				
U	238	104.101				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 10	Co	59LRS	is out of limits (+/- 10%)
QC Std 10	Ni	60LRS	is out of limits (+/- 10%)
QC Std 10	Cu	65LRS	is out of limits (+/- 10%)
QC Std 10	As	75LRS	is out of limits (+/- 10%)

Sample ID: QC Std 10

Report Date/Time: Monday, January 25, 2010 23:08:14

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QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 11

Sample Date/Time: Monday, January 25, 2010 23:11:38

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100125\QC Std 11.205

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	49.734	ug/L	0.325	92227	0.128
Be	9	50.896	ug/L	2.217	20928	0.029
B	11	103.095	ug/L	1.754	37779	0.050
Na	23	5163.468	ug/L	1.452	18322687	25.486
Mg	24	5645.732	ug/L	3.997	13430717	18.693
Al	27	4935.283	ug/L	6.159	17653874	24.565
P	31	5335.374	ug/L	1.402	1088166	1.508
K	39	5259.780	ug/L	9.404	26229450	35.786
Ca	43	4918.950	ug/L	0.927	58512	0.081
> Sc	45		ug/L		718040	718040.385
Ti	47	51.241	ug/L	1.951	29559	0.041
V	51	50.933	ug/L	1.159	353548	0.484
Cr	52	51.133	ug/L	0.673	273474	0.381
Cr	53		ug/L		139578	0.046
Mn	55	52.917	ug/L	1.046	449184	0.624
Fe	57	5287.162	ug/L	1.320	870314	1.203
Co	59	49.881	ug/L	1.146	334411	0.465
Ni	60	50.716	ug/L	0.983	75713	0.105
Cu	63		ug/L		179371	0.247
Cu	65	50.746	ug/L	0.909	88302	0.122
Zn	66	51.879	ug/L	0.491	59899	0.147
Zn	67		ug/L		22370	0.025
Zn	68		ug/L		44613	0.107
> Ge	74		ug/L		403062	403061.656
As	75	47.280	ug/L	2.914	56675	0.141
Se	77		ug/L		10304	0.011
Se	82	49.658	ug/L	1.164	5692	0.014
Kr	83		ug/L		119	-0.000
Sr	88	54.045	ug/L	1.105	708682	2.795
Y	89		ug/L		83	0.000
Mo	98	49.432	ug/L	0.798	171315	0.675
Ag	107	51.409	ug/L	0.624	295135	1.164
Cd	111	50.562	ug/L	0.403	74145	0.292
Cd	114		ug/L		176052	0.694
> In	115		ug/L		253503	253503.188
Sn	120	54.654	ug/L	0.753	337003	1.327
Sb	121	54.457	ug/L	4.222	273627	1.077
Sb	123		ug/L		215074	0.846
Ba	135		ug/L		85329	0.160
Ba	137	50.527	ug/L	1.998	150771	0.283
Ho	165		ug/L		59	0.000
> Lu	175		ug/L		532580	532580.255
Tl	205	54.592	ug/L	0.617	1155235	2.166
Pb	208	53.360	ug/L	1.043	1901699	3.569
Bi	209		ug/L		538	0.001
Th	232	52.504	ug/L	2.015	2163493	4.061
U	238	53.385	ug/L	0.863	2313864	4.343

Sample ID: QC Std 11

Report Date/Time: Monday, January 25, 2010 23:14:19

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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	0.9999
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	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	0.9997
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	99.467				
Be	9	101.793				
B	11	103.095				
Na	23	103.269				
Mg	24	112.915				
Al	27	97.728				
P	31	106.707				
K	39	105.196				
Ca	43	98.379				
> Sc	45		106.0			
Ti	47	102.482				
V	51	101.866				
Cr	52	102.265				
Cr	53					
Mn	55	105.834				
Fe	57	105.743				
Co	59	99.761				
Ni	60	101.432				
Cu	63					
Cu	65	101.491				
Zn	66	103.757				
Zn	67					
Zn	68					
> Ge	74		106.1			
As	75	94.560				
Se	77					
Se	82	99.317				
Kr	83					
Sr	88	108.091				
Y	89					
Mo	98	98.864				
Ag	107	102.817				
Cd	111	101.123				
Cd	114					
> In	115		104.0			
Sn	120	109.308				
Sb	121	108.914				
Sb	123					
Ba	135					
Ba	137	101.054				
Ho	165					
> Lu	175		101.8			
Tl	205	109.185				
Pb	208	106.720				
Bi	209					
Th	232	105.008				
U	238	106.771				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 11	Mg		24CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 12

Sample Date/Time: Monday, January 25, 2010 23:17:45

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100125\QC Std 12.206

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.077	ug/L	16.647	244	0.000
Be	9	0.001	ug/L	848.946	25	0.000
B	11	2.211	ug/L	33.634	2687	0.001
Na	23	0.392	ug/L	142.463	26358	0.002
Mg	24	-1.303	ug/L	49.089	3334	-0.004
Al	27	0.844	ug/L	62.765	10337	0.004
P	31	1.393	ug/L	236.698	5756	0.000
K	39	8.920	ug/L	105.571	590311	0.061
Ca	43	-3.868	ug/L	91.961	372	-0.000
> Sc	45		ug/L		734968	734968.258
Ti	47	0.013	ug/L	302.650	343	0.000
V	51	-0.059	ug/L	668.460	5813	-0.001
Cr	52	0.021	ug/L	266.042	281	0.000
Cr	53		ug/L		112694	0.005
Mn	55	-0.009	ug/L	73.755	1217	-0.000
Fe	57	0.109	ug/L	652.095	6370	0.000
Co	59	0.010	ug/L	17.102	245	0.000
Ni	60	0.004	ug/L	444.041	166	0.000
Cu	63		ug/L		1852	0.000
Cu	65	0.011	ug/L	247.882	906	0.000
Zn	66	0.036	ug/L	97.117	768	0.000
Zn	67		ug/L		13004	0.001
Zn	68		ug/L		1587	0.000
> Ge	74		ug/L		411594	411594.431
As	75	0.551	ug/L	79.090	678	0.002
Se	77		ug/L		6569	0.002
Se	82	0.085	ug/L	71.814	-7	0.000
Kr	83		ug/L		113	-0.000
Sr	88	0.004	ug/L	27.805	296	0.000
Y	89		ug/L		47	-0.000
Mo	98	0.123	ug/L	10.050	563	0.002
Ag	107	0.004	ug/L	39.318	104	0.000
Cd	111	0.012	ug/L	36.944	44	0.000
Cd	114		ug/L		58	-0.000
> In	115		ug/L		254825	254824.707
Sn	120	1.098	ug/L	10.646	7286	0.027
Sb	121	1.588	ug/L	20.421	8719	0.031
Sb	123		ug/L		6917	0.025
Ba	135		ug/L		61	0.000
Ba	137	0.004	ug/L	104.551	85	0.000
Ho	165		ug/L		24	0.000
> Lu	175		ug/L		536813	536812.984
Tl	205	0.359	ug/L	15.270	9475	0.014
Pb	208	0.013	ug/L	35.182	1467	0.001
Bi	209		ug/L		205	0.000
Th	232	0.106	ug/L	13.410	5451	0.008
U	238	0.046	ug/L	18.581	2722	0.004

Sample ID: QC Std 12

Report Date/Time: Monday, January 25, 2010 23:20:29

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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	0.9999
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	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
Hf	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9997
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9998
U	238Linear Thru Zero	0.9998

Sample ID: QC Std 12

Report Date/Time: Monday, January 25, 2010 23:20:29

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QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		108.5			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
L Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		108.3			
As	75					
Se	77					
Se	82					
L Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		104.6			
Sn	120					
Sb	121					
L Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		102.6			
Tl	205					
Pb	208					
Bi	209					
Th	232					
L 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 12

Report Date/Time: Monday, January 25, 2010 23:20:29

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ICPMS#5 - Summary Report

Sample ID: 1202015911

Sample Date/Time: Monday, January 25, 2010 23:23:55

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 941814|1|baj

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100125\1202015911.207

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.138	ug/L	12.249	366	0.000
Be	9	-0.023	ug/L	51.833	15	-0.000
B	11	0.859	ug/L	10.350	2250	0.000
Na	23	4.416	ug/L	36.326	41728	0.022
Mg	24	-0.790	ug/L	59.813	4667	-0.003
Al	27	0.799	ug/L	70.903	10337	0.004
P	31	2.256	ug/L	8.227	6055	0.001
K	39	22.407	ug/L	13.900	670372	0.152
Ca	43	12.494	ug/L	36.665	580	0.000
> Sc	45		ug/L		748379	748379.233
Ti	47	0.416	ug/L	10.201	589	0.000
V	51	-2.306	ug/L	54.837	-10001	-0.022
Cr	52	0.070	ug/L	68.990	558	0.001
Cr	53		ug/L		303979	0.257
Mn	55	0.169	ug/L	1.851	2809	0.002
Fe	57	6.545	ug/L	9.874	7584	0.001
Co	59	0.002	ug/L	95.002	199	0.000
Ni	60	0.122	ug/L	20.271	352	0.000
Cu	63		ug/L		2681	0.001
Cu	65	0.242	ug/L	10.413	1337	0.001
Zn	66	0.921	ug/L	2.836	1782	0.003
Zn	67		ug/L		51487	0.096
Zn	68		ug/L		3966	0.006
> Ge	74		ug/L		407877	407876.914
As	75	0.207	ug/L	210.214	252	0.001
Se	77		ug/L		20444	0.036
Se	82	0.082	ug/L	67.989	-8	0.000
Kr	83		ug/L		113	-0.000
Sr	88	0.031	ug/L	6.771	639	0.002
Y	89		ug/L		65	0.000
Mo	98	0.090	ug/L	8.252	433	0.001
Ag	107	-0.003	ug/L	33.125	60	-0.000
Cd	111	0.008	ug/L	66.944	38	0.000
Cd	114		ug/L		21	-0.000
> In	115		ug/L		245989	245989.221
Sn	120	2.426	ug/L	37.852	14941	0.059
Sb	121	0.858	ug/L	21.784	4870	0.017
Sb	123		ug/L		3994	0.014
Ba	135		ug/L		72	0.000
Ba	137	0.010	ug/L	17.916	98	0.000
Ho	165		ug/L		22	0.000
> Lu	175		ug/L		522359	522359.308
Tl	205	0.140	ug/L	7.220	4693	0.006
Pb	208	0.004	ug/L	48.075	1130	0.000
Bi	209		ug/L		221	0.000
Th	232	0.130	ug/L	15.335	6250	0.010
U	238	0.121	ug/L	0.882	5832	0.010

Sample ID: 1202015911

Report Date/Time: Monday, January 25, 2010 23:26:41

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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	0.9999
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	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	0.9997
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 % Di	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		110.4			
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		107.3			
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		99.9			
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: 1202015912

Sample Date/Time: Monday, January 25, 2010 23:30:07

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 941814|1|baj

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100125\1202015912.208

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	48.124	ug/L	1.535	91612	0.124
Be	9	51.909	ug/L	0.511	21915	0.030
B	11	108.101	ug/L	2.401	40566	0.052
Na	23	2072.355	ug/L	2.220	7564256	10.229
Mg	24	2259.528	ug/L	1.797	5521785	7.481
Al	27	2232.254	ug/L	4.364	8196342	11.111
P	31	2285.407	ug/L	3.330	481527	0.646
K	39	2216.336	ug/L	8.263	11656277	15.079
Ca	43	2080.922	ug/L	3.419	25645	0.034
> Sc	45		ug/L		737153	737153.184
Ti	47	48.135	ug/L	1.223	28521	0.038
V	51	45.328	ug/L	3.554	323638	0.431
Cr	52	50.666	ug/L	2.192	278153	0.377
Cr	53		ug/L		351754	0.328
Mn	55	52.367	ug/L	2.082	456330	0.617
Fe	57	2211.490	ug/L	3.605	377361	0.503
Co	59	50.311	ug/L	2.070	346219	0.470
Ni	60	50.782	ug/L	2.881	77816	0.105
Cu	63		ug/L		186928	0.251
Cu	65	51.040	ug/L	0.140	91178	0.122
Zn	66	52.359	ug/L	1.303	60398	0.148
Zn	67		ug/L		68148	0.139
Zn	68		ug/L		46793	0.113
> Ge	74		ug/L		402732	402732.099
As	75	50.409	ug/L	1.035	60382	0.150
Se	77		ug/L		25094	0.048
Se	82	52.310	ug/L	0.861	5992	0.015
Kr	83		ug/L		142	0.000
Sr	88	56.738	ug/L	1.240	701448	2.934
Y	89		ug/L		87	0.000
Mo	98	52.671	ug/L	1.895	172097	0.720
Ag	107	54.385	ug/L	0.392	294368	1.231
Cd	111	52.073	ug/L	1.695	71996	0.301
Cd	114		ug/L		172930	0.723
> In	115		ug/L		239009	239008.535
Sn	120	55.302	ug/L	1.147	321502	1.343
Sb	121	60.728	ug/L	1.686	287604	1.200
Sb	123		ug/L		229848	0.959
Ba	135		ug/L		93059	0.180
Ba	137	56.693	ug/L	3.863	163681	0.317
Ho	165		ug/L		50	0.000
> Lu	175		ug/L		515496	515496.222
Tl	205	53.320	ug/L	2.332	1092012	2.115
Pb	208	53.908	ug/L	1.876	1859374	3.606
Bi	209		ug/L		1478533	2.868
Th	232	51.650	ug/L	0.746	2060079	3.995
U	238	53.520	ug/L	1.945	2245286	4.354

Sample ID: 1202015912

Report Date/Time: Monday, January 25, 2010 23:32:53

Page 1

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	0.9999
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	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	0.9997
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 % Di	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		108.8			
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		106.0			
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		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

Sample ID: 1202015912

Report Date/Time: Monday, January 25, 2010 23:32:53

Page 3

ICPMS#5 - Summary Report

Sample ID: 244602001

Sample Date/Time: Monday, January 25, 2010 23:36:20

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 941814[1]ba]

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100125\244602001.209

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.218	ug/L	2.420	522	0.001
Be	9	-0.014	ug/L	127.288	19	-0.000
B	11	27.864	ug/L	4.174	12090	0.014
Na	23	149.863	ug/L	9.013	580611	0.740
Mg	24	11.539	ug/L	7.630	35377	0.038
Al	27	46.595	ug/L	13.253	181149	0.232
P	31	7.680	ug/L	16.270	7224	0.002
K	39	206.993	ug/L	4.169	1616337	1.408
Ca	43	70.160	ug/L	7.709	1293	0.001
> Sc	45		ug/L		750942	750941.599
Ti	47	1.491	ug/L	2.254	1232	0.001
V	51	-3.557	ug/L	13.250	-19001	-0.034
Cr	52	1.931	ug/L	26.754	11011	0.014
Cr	53		ug/L		350969	0.318
Mn	55	1.960	ug/L	0.737	18673	0.023
Fe	57	48.294	ug/L	5.698	14738	0.011
Co	59	0.021	ug/L	4.132	328	0.000
Ni	60	0.122	ug/L	19.840	353	0.000
Cu	63		ug/L		7313	0.007
Cu	65	1.466	ug/L	4.504	3545	0.004
Zn	66	1.785	ug/L	4.720	2769	0.005
Zn	67		ug/L		61744	0.121
Zn	68		ug/L		5108	0.009
> Ge	74		ug/L		406617	406616.724
As	75	0.388	ug/L	155.292	467	0.001
Se	77		ug/L		23790	0.044
Se	82	-0.144	ug/L	25.398	-34	-0.000
Kr	83		ug/L		131	0.000
Sr	88	0.519	ug/L	0.547	6798	0.027
Y	89		ug/L		825	0.003
Mo	98	0.043	ug/L	10.957	271	0.001
Ag	107	0.000	ug/L	950.367	79	0.000
Cd	111	0.010	ug/L	45.290	39	0.000
Cd	114		ug/L		77	0.000
> In	115		ug/L		244220	244220.415
Sn	120	0.299	ug/L	13.518	2246	0.007
Sb	121	0.312	ug/L	20.912	2202	0.006
Sb	123		ug/L		1809	0.005
Ba	135		ug/L		1597	0.003
Ba	137	0.914	ug/L	1.505	2744	0.005
Ho	165		ug/L		83	0.000
> Lu	175		ug/L		522545	522545.267
Tl	205	0.801	ug/L	17.577	18415	0.032
Pb	208	0.169	ug/L	1.634	6894	0.011
Bi	209		ug/L		224	0.000
Th	232	0.080	ug/L	25.411	4239	0.006
U	238	0.123	ug/L	3.395	5925	0.010

Sample ID: 244602001

Report Date/Time: Monday, January 25, 2010 23:39:06

Page 1

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	0.9999
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	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	0.9997
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 % Dif	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		110.8			
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		107.0			
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		99.9			
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: QC Std 8

Sample Date/Time: Tuesday, January 26, 2010 00:01:02

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100125\QC Std 8.213

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	49.952	ug/L	0.841	90097	0.129
Be	9	50.457	ug/L	1.754	20188	0.029
B	11	98.059	ug/L	1.602	35044	0.048
Na	23	4490.973	ug/L	4.018	15505872	22.167
Mg	24	5202.076	ug/L	5.200	12037545	17.224
Al	27	4986.205	ug/L	5.229	17343470	24.819
P	31	5125.072	ug/L	1.942	1016870	1.449
K	39	4652.677	ug/L	1.956	22634206	31.656
Ca	43	4856.998	ug/L	3.291	56190	0.080
Sc	45		ug/L		698468	698468.429
Ti	47	50.087	ug/L	2.455	28109	0.040
V	51	49.458	ug/L	0.217	334135	0.470
Cr	52	50.534	ug/L	1.026	262895	0.376
Cr	53		ug/L		163932	0.086
Mn	55	51.904	ug/L	0.269	428621	0.612
Fe	57	5194.220	ug/L	1.183	831735	1.182
Co	59	49.135	ug/L	2.932	320348	0.459
Ni	60	50.723	ug/L	2.120	73651	0.105
Cu	63		ug/L		172383	0.244
Cu	65	49.539	ug/L	1.122	83888	0.119
Zn	66	50.758	ug/L	0.385	57146	0.144
Zn	67		ug/L		24504	0.032
Zn	68		ug/L		42681	0.105
Ge	74		ug/L		392915	392915.203
As	75	46.655	ug/L	1.106	54530	0.139
Se	77		ug/L		11820	0.016
Se	82	49.592	ug/L	0.994	5541	0.014
Kr	83		ug/L		107	-0.000
Sr	88	51.962	ug/L	1.659	664211	2.687
Y	89		ug/L		108	0.000
Mo	98	49.292	ug/L	2.169	166529	0.673
Ag	107	50.858	ug/L	1.227	284636	1.151
Cd	111	49.351	ug/L	2.701	70541	0.285
Cd	114		ug/L		169743	0.687
In	115		ug/L		247162	247162.061
Sn	120	49.939	ug/L	2.715	300194	1.213
Sb	121	49.020	ug/L	4.571	240303	0.969
Sb	123		ug/L		193063	0.778
Ba	135		ug/L		81049	0.154
Ba	137	48.886	ug/L	2.065	143775	0.274
Ho	165		ug/L		56	0.000
Lu	175		ug/L		525074	525074.318
Tl	205	50.508	ug/L	2.896	1053648	2.004
Pb	208	52.474	ug/L	2.101	1843293	3.510
Bi	209		ug/L		485	0.001
Th	232	50.842	ug/L	2.331	2065061	3.932
U	238	51.854	ug/L	1.142	2215527	4.219

Sample ID: QC Std 8

Report Date/Time: Tuesday, January 26, 2010 00:03:45

Page 1

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	0.9999
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	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	0.9997
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9998
U	238Linear Thru Zero	0.9998

Sample ID: QC Std 8

Report Date/Time: Tuesday, January 26, 2010 00:03:45

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QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Li	7	99.904				
Be	9	100.915				
B	11	98.059				
Na	23	89.819				
Mg	24	104.042				
Al	27	98.737				
P	31	102.501				
K	39	93.054				
Ca	43	97.140				
> Sc	45		103.1			
Ti	47	100.173				
V	51	98.917				
Cr	52	101.069				
Cr	53					
Mn	55	103.808				
Fe	57	103.884				
Co	59	98.269				
Ni	60	101.447				
Cu	63					
Cu	65	99.079				
Zn	66	101.516				
Zn	67					
Zn	68					
> Ge	74		103.4			
As	75	93.311				
Se	77					
Se	82	99.183				
Kr	83					
Sr	88	103.923				
Y	89					
Mo	98	98.583				
Ag	107	101.715				
Cd	111	98.703				
Cd	114					
> In	115		101.4			
Sn	120	99.877				
Sb	121	98.040				
Sb	123					
Ba	135					
Ba	137	97.771				
Ho	165					
> Lu	175		100.4			
Tl	205	101.017				
Pb	208	104.949				
Bi	209					
Th	232	101.685				
U	238	103.707				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 8	Na	23	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Tuesday, January 26, 2010 00:07:10

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100125\QC Std 9.214

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.010	ug/L	72.157	113	0.000
Be	9	-0.008	ug/L	145.198	20	-0.000
B	11	1.953	ug/L	38.530	2492	0.001
Na	23	-1.221	ug/L	169.814	19681	-0.006
Mg	24	-0.251	ug/L	688.412	5668	-0.001
Al	27	0.395	ug/L	102.832	8336	0.002
P	31	1.248	ug/L	167.780	5502	0.000
K	39	7.367	ug/L	113.734	559444	0.050
Ca	43	-2.275	ug/L	72.083	375	-0.000
> Sc	45		ug/L		705153	705152.685
Ti	47	-0.013	ug/L	38.630	315	-0.000
V	51	-0.578	ug/L	22.609	2134	-0.005
Cr	52	0.043	ug/L	74.278	382	0.000
Cr	53		ug/L		123991	0.027
Mn	55	-0.001	ug/L	683.891	1231	-0.000
Fe	57	2.379	ug/L	60.186	6475	0.001
Co	59	0.003	ug/L	81.757	189	0.000
Ni	60	-0.003	ug/L	15.592	149	-0.000
Cu	63		ug/L		1735	-0.000
Cu	65	0.016	ug/L	85.020	877	0.000
Zn	66	0.045	ug/L	38.028	746	0.000
Zn	67		ug/L		13718	0.004
Zn	68		ug/L		1570	0.001
> Ge	74		ug/L		394522	394522.240
As	75	0.073	ug/L	305.934	87	0.000
Se	77		ug/L		7302	0.004
Se	82	-0.055	ug/L	91.735	-23	-0.000
Kr	83		ug/L		125	0.000
Sr	88	0.001	ug/L	109.727	253	0.000
Y	89		ug/L		42	-0.000
Mo	98	0.037	ug/L	27.066	261	0.001
Ag	107	0.004	ug/L	28.110	102	0.000
Cd	111	0.005	ug/L	139.249	34	0.000
Cd	114		ug/L		64	-0.000
> In	115		ug/L		253049	253048.974
Sn	120	0.170	ug/L	24.079	1542	0.004
Sb	121	0.667	ug/L	28.710	4059	0.013
Sb	123		ug/L		3188	0.010
Ba	135		ug/L		43	-0.000
Ba	137	-0.002	ug/L	159.025	65	-0.000
Ho	165		ug/L		21	-0.000
> Lu	175		ug/L		526730	526730.448
Tl	205	0.808	ug/L	17.663	18694	0.032
Pb	208	0.003	ug/L	33.733	1095	0.000
Bi	209		ug/L		120	-0.000
Th	232	0.054	ug/L	19.050	3194	0.004
U	238	0.007	ug/L	5.311	972	0.001

Sample ID: QC Std 9

Report Date/Time: Tuesday, January 26, 2010 00:09:54

Page 1

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	0.9999
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	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	0.9997
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		104.1				
|	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		103.8				
|	As	75						
|	Se	77						
|	Se	82						
|	Kr	83						
|	Sr	88						
|	Y	89						
|	Mo	98						
|	Ag	107						
|	Cd	111						
|	Cd	114						
>	In	115		103.8				
|	Sn	120						
|	Sb	121						
|	Sb	123						
|	Ba	135						
|	Ba	137						
|	Ho	165						
>	Lu	175		100.7				
|	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: 1202015913

Sample Date/Time: Tuesday, January 26, 2010 00:19:33

Sample Type:

Sample Description: LANL 6020 DUP

Number of Replicates: 3

Batch ID: 941814|1|ba|

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100125\1202015913.216

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.072	ug/L	12.224	226	0.000
Be	9	-0.022	ug/L	48.082	15	-0.000
B	11	-0.062	ug/L	221.364	1823	-0.000
Na	23	113.705	ug/L	11.939	424618	0.561
Mg	24	13.731	ug/L	4.561	38719	0.045
Al	27	74.584	ug/L	1.320	271558	0.371
P	31	4.689	ug/L	50.261	6250	0.001
K	39	46.786	ug/L	24.062	756222	0.318
Ca	43	121.883	ug/L	8.049	1835	0.002
> Sc	45		ug/L		712531	712531.399
Ti	47	1.701	ug/L	7.962	1288	0.001
V	51	-4.499	ug/L	38.624	-24510	-0.043
Cr	52	2.330	ug/L	9.173	12506	0.017
Cr	53		ug/L		331134	0.316
Mn	55	2.188	ug/L	2.217	19630	0.026
Fe	57	56.804	ug/L	2.720	15370	0.013
Co	59	0.052	ug/L	4.748	515	0.000
Ni	60	1.576	ug/L	2.007	2486	0.003
Cu	63		ug/L		3291	0.002
Cu	65	0.485	ug/L	4.285	1688	0.001
Zn	66	1.601	ug/L	0.842	2464	0.005
Zn	67		ug/L		57485	0.116
Zn	68		ug/L		4640	0.008
> Ge	74		ug/L		391448	391448.409
As	75	-0.190	ug/L	213.516	-226	-0.001
Se	77		ug/L		22213	0.042
Se	82	0.008	ug/L	759.764	-16	0.000
Kr	83		ug/L		110	-0.000
Sr	88	0.986	ug/L	2.038	12217	0.051
Y	89		ug/L		1201	0.005
Mo	98	0.074	ug/L	2.333	363	0.001
Ag	107	0.001	ug/L	186.443	78	0.000
Cd	111	0.013	ug/L	92.310	42	0.000
Cd	114		ug/L		56	-0.000
> In	115		ug/L		235161	235160.784
Sn	120	0.100	ug/L	7.035	1028	0.002
Sb	121	0.025	ug/L	41.034	786	0.000
Sb	123		ug/L		673	0.000
Ba	135		ug/L		1962	0.004
Ba	137	1.184	ug/L	3.305	3463	0.007
Ho	165		ug/L		113	0.000
> Lu	175		ug/L		512060	512060.271
Tl	205	0.213	ug/L	7.128	6068	0.008
Pb	208	0.064	ug/L	5.136	3149	0.004
Bi	209		ug/L		292	0.000
Th	232	0.026	ug/L	14.407	2028	0.002
U	238	0.003	ug/L	12.438	806	0.000

Sample ID: 1202015913

Report Date/Time: Tuesday, January 26, 2010 00:22:19

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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	0.9999
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	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	0.9997
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 % D	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		105.1			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
L Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		103.0			
As	75					
Se	77					
Se	82					
L Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		96.5			
Sn	120					
Sb	121					
L Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		97.9			
Tl	205					
Pb	208					
Bi	209					
Th	232					
L 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: 1202015913

Report Date/Time: Tuesday, January 26, 2010 00:22:19

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ICPMS#5 - Summary Report

Sample ID: 1202015914

Sample Date/Time: Tuesday, January 26, 2010 00:25:46

Sample Type:

Sample Description: LANL 6020 MS

Number of Replicates: 3

Batch ID: 941814|1|ba|

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100125\1202015914.217

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	47.985	ug/L	2.270	88533	0.124
Be	9	51.382	ug/L	1.409	21026	0.029
B	11	102.868	ug/L	1.704	37510	0.050
Na	23	2238.959	ug/L	1.705	7922140	11.051
Mg	24	2195.055	ug/L	3.200	5197605	7.268
Al	27	2214.313	ug/L	6.979	7885938	11.022
P	31	2186.514	ug/L	1.431	446882	0.618
K	39	2116.822	ug/L	3.702	10825301	14.402
Ca	43	2188.000	ug/L	2.048	26119	0.036
> Sc	45		ug/L		714627	714626.965
Ti	47	47.566	ug/L	0.188	27328	0.038
V	51	43.779	ug/L	4.854	303116	0.416
Cr	52	53.994	ug/L	1.555	287347	0.402
Cr	53		ug/L		364958	0.362
Mn	55	54.204	ug/L	1.288	457870	0.639
Fe	57	2245.314	ug/L	4.609	371169	0.511
Co	59	50.394	ug/L	2.585	336131	0.470
Ni	60	51.332	ug/L	1.527	76257	0.107
Cu	63		ug/L		179249	0.248
Cu	65	51.101	ug/L	1.366	88501	0.123
Zn	66	53.338	ug/L	1.429	58824	0.151
Zn	67		ug/L		66741	0.143
Zn	68		ug/L		45093	0.114
> Ge	74		ug/L		385166	385165.512
As	75	77.082	ug/L	1.622	88303	0.229
Se	77		ug/L		24268	0.049
Se	82	20.711	ug/L	3.383	2258	0.006
Kr	83		ug/L		129	0.000
Sr	88	57.397	ug/L	0.647	690833	2.968
Y	89		ug/L		1310	0.005
Mo	98	50.619	ug/L	1.532	161002	0.691
Ag	107	52.202	ug/L	1.501	275046	1.182
Cd	111	11.062	ug/L	0.674	14908	0.064
Cd	114		ug/L		33823	0.145
> In	115		ug/L		232686	232685.971
Sn	120	52.256	ug/L	2.988	295706	1.269
Sb	121	218.453	ug/L	1.981	1005332	4.318
Sb	123		ug/L		815958	3.505
Ba	135		ug/L		85404	0.167
Ba	137	52.210	ug/L	2.576	149200	0.292
Ho	165		ug/L		388	0.001
> Lu	175		ug/L		510168	510167.940
Tl	205	91.567	ug/L	4.467	1854529	3.633
Pb	208	44.480	ug/L	0.888	1518604	2.975
Bi	209		ug/L		708	0.001
Th	232	51.783	ug/L	2.566	2043765	4.005
U	238	53.614	ug/L	1.146	2225843	4.362

Sample ID: 1202015914

Report Date/Time: Tuesday, January 26, 2010 00:28:32

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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	0.9999
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	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	0.9997
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 % Di	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		105.5			
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		101.4			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		95.5			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		97.5			
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

Sample ID: 1202015914

Report Date/Time: Tuesday, January 26, 2010 00:28:32

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ICPMS#5 - Summary Report

Sample ID: 1202015915

Sample Date/Time: Tuesday, January 26, 2010 00:31:59

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 941814|5|baj

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100125\1202015915.218

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.001	ug/L	447.395	92	0.000
Be	9	-0.024	ug/L	45.718	13	-0.000
B	11	1.489	ug/L	26.382	2262	0.001
Na	23	22.291	ug/L	9.765	98339	0.110
Mg	24	0.423	ug/L	456.965	7002	0.001
Al	27	10.793	ug/L	41.054	43404	0.054
P	31	1.023	ug/L	224.702	5288	0.000
K	39	15.385	ug/L	44.426	579198	0.105
Ca	43	23.172	ug/L	4.859	649	0.000
> Sc	45		ug/L		682970	682969.882
Ti	47	0.397	ug/L	5.201	527	0.000
V	51	-0.736	ug/L	82.886	1042	-0.007
Cr	52	0.919	ug/L	6.121	4824	0.007
Cr	53		ug/L		187180	0.125
Mn	55	0.511	ug/L	2.258	5314	0.006
Fe	57	12.951	ug/L	11.614	7917	0.003
Co	59	0.006	ug/L	51.146	206	0.000
Ni	60	0.257	ug/L	2.324	513	0.001
Cu	63		ug/L		1943	0.000
Cu	65	0.087	ug/L	27.104	966	0.000
Zn	66	0.571	ug/L	1.123	1272	0.002
Zn	67		ug/L		21194	0.026
Zn	68		ug/L		2378	0.003
> Ge	74		ug/L		376492	376491.691
As	75	0.142	ug/L	465.328	158	0.000
Se	77		ug/L		12636	0.019
Se	82	-0.116	ug/L	41.603	-28	-0.000
Kr	83		ug/L		117	0.000
Sr	88	0.197	ug/L	2.936	2686	0.010
Y	89		ug/L		257	0.001
Mo	98	0.026	ug/L	19.867	212	0.000
Ag	107	-0.006	ug/L	17.818	46	-0.000
Cd	111	-0.005	ug/L	85.142	18	-0.000
Cd	114		ug/L		40	-0.000
> In	115		ug/L		240609	240609.420
Sn	120	0.005	ug/L	56.089	501	0.000
Sb	121	0.302	ug/L	21.514	2126	0.006
Sb	123		ug/L		1713	0.005
Ba	135		ug/L		1547	0.003
Ba	137	0.912	ug/L	2.449	2727	0.005
Ho	165		ug/L		37	0.000
> Lu	175		ug/L		520153	520152.612
Tl	205	2.700	ug/L	17.008	57557	0.107
Pb	208	0.011	ug/L	3.762	1373	0.001
Bi	209		ug/L		161	-0.000
Th	232	0.013	ug/L	44.264	1533	0.001
U	238	-0.009	ug/L	4.813	318	-0.001

Sample ID: 1202015915

Report Date/Time: Tuesday, January 26, 2010 00:34:45

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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	0.9999
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	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	0.9997
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 % Di	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		100.8			
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		99.1			
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		99.4			
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#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Tuesday, January 26, 2010 00:44:20

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100125\QC Std 8.220

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	50.390	ug/L	1.564	88540	0.130
Be	9	49.757	ug/L	2.276	19384	0.028
B	11	97.732	ug/L	1.989	34021	0.047
Na	23	4706.513	ug/L	8.386	15815065	23.231
Mg	24	5465.100	ug/L	2.869	12318859	18.095
Al	27	4874.832	ug/L	0.831	16515727	24.265
P	31	5091.071	ug/L	2.540	983878	1.439
K	39	4857.433	ug/L	1.711	22995992	33.049
Ca	43	4817.754	ug/L	2.780	54290	0.079
> Sc	45		ug/L		680387	680387.180
Ti	47	50.086	ug/L	3.273	27370	0.040
V	51	49.198	ug/L	4.712	323613	0.467
Cr	52	50.268	ug/L	2.958	254670	0.374
Cr	53		ug/L		158554	0.084
Mn	55	51.907	ug/L	2.866	417398	0.612
Fe	57	5187.867	ug/L	2.957	809024	1.181
Co	59	49.469	ug/L	3.026	314140	0.462
Ni	60	50.502	ug/L	2.700	71419	0.105
Cu	63		ug/L		168247	0.245
Cu	65	50.099	ug/L	1.418	82605	0.120
Zn	66	50.743	ug/L	1.481	56423	0.144
Zn	67		ug/L		23934	0.031
Zn	68		ug/L		41923	0.105
> Ge	74		ug/L		388133	388132.816
As	75	45.998	ug/L	1.677	53096	0.137
Se	77		ug/L		11485	0.015
Se	82	48.349	ug/L	2.460	5335	0.014
Kr	83		ug/L		129	0.000
Sr	88	51.988	ug/L	0.612	652420	2.688
Y	89		ug/L		108	0.000
Mo	98	49.022	ug/L	1.962	162565	0.670
Ag	107	51.036	ug/L	1.463	280369	1.155
Cd	111	49.509	ug/L	2.005	69469	0.286
Cd	114		ug/L		166188	0.685
> In	115		ug/L		242602	242602.034
Sn	120	49.869	ug/L	0.818	294301	1.211
Sb	121	49.752	ug/L	6.812	239160	0.983
Sb	123		ug/L		189035	0.777
Ba	135		ug/L		79716	0.154
Ba	137	48.302	ug/L	2.012	140094	0.270
Ho	165		ug/L		51	0.000
> Lu	175		ug/L		517704	517703.799
Tl	205	52.792	ug/L	1.416	1086077	2.094
Pb	208	52.555	ug/L	1.655	1820587	3.515
Bi	209		ug/L		458	0.001
Th	232	50.674	ug/L	0.408	2029951	3.919
U	238	52.151	ug/L	2.299	2197091	4.243

Sample ID: QC Std 8

Report Date/Time: Tuesday, January 26, 2010 00:47:03

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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	0.9999
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	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	0.9997
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 % Di	Duplicate Rel. % Difference
Li	7	100.780				
Be	9	99.514				
B	11	97.732				
Na	23	94.130				
Mg	24	109.302				
Al	27	96.531				
P	31	101.821				
K	39	97.149				
Ca	43	96.355				
> Sc	45		100.4			
Ti	47	100.173				
V	51	98.397				
Cr	52	100.536				
Cr	53					
Mn	55	103.815				
Fe	57	103.757				
Co	59	98.939				
Ni	60	101.003				
Cu	63					
Cu	65	100.198				
Zn	66	101.486				
Zn	67					
Zn	68					
> Ge	74		102.1			
As	75	91.995				
Se	77					
Se	82	96.698				
Kr	83					
Sr	88	103.976				
Y	89					
Mo	98	98.044				
Ag	107	102.072				
Cd	111	99.018				
Cd	114					
> In	115		99.6			
Sn	120	99.737				
Sb	121	99.505				
Sb	123					
Ba	135					
Ba	137	96.604				
Ho	165					
> Lu	175		99.0			
Tl	205	105.583				
Pb	208	105.110				
Bi	209					
Th	232	101.349				
U	238	104.302				

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: Tuesday, January 26, 2010 00:50:28

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100125\QC Std 9.221

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	-0.002	ug/L	252.067	87	-0.000
Be	9	-0.008	ug/L	119.449	19	-0.000
B	11	1.527	ug/L	43.599	2256	0.001
Na	23	-1.507	ug/L	68.183	18012	-0.007
Mg	24	-1.345	ug/L	55.544	3000	-0.004
Al	27	0.093	ug/L	519.710	7002	0.000
P	31	0.658	ug/L	23.960	5182	0.000
K	39	9.589	ug/L	83.606	547993	0.065
Ca	43	-2.426	ug/L	51.309	359	-0.000
> Sc	45		ug/L		678372	678371.710
Ti	47	-0.009	ug/L	400.496	304	-0.000
V	51	-0.601	ug/L	78.802	1861	-0.006
Cr	52	-0.066	ug/L	77.851	-178	-0.000
Cr	53		ug/L		118808	0.026
Mn	55	-0.000	ug/L	2509.917	1188	-0.000
Fe	57	2.103	ug/L	27.855	6187	0.000
Co	59	0.005	ug/L	38.168	195	0.000
Ni	60	0.007	ug/L	46.024	157	0.000
Cu	63		ug/L		1609	-0.000
Cu	65	0.030	ug/L	16.618	867	0.000
Zn	66	0.023	ug/L	169.405	698	0.000
Zn	67		ug/L		13131	0.004
Zn	68		ug/L		1502	0.000
> Ge	74		ug/L		382427	382426.629
As	75	-0.089	ug/L	278.990	-99	-0.000
Se	77		ug/L		7177	0.004
Se	82	0.116	ug/L	154.516	-4	0.000
Kr	83		ug/L		103	-0.000
Sr	88	0.001	ug/L	132.858	242	0.000
Y	89		ug/L		52	-0.000
Mo	98	0.034	ug/L	40.737	241	0.000
Ag	107	0.002	ug/L	166.513	89	0.000
Cd	111	0.009	ug/L	59.750	37	0.000
Cd	114		ug/L		69	0.000
> In	115		ug/L		241677	241677.322
Sn	120	0.171	ug/L	19.439	1476	0.004
Sb	121	0.730	ug/L	25.671	4176	0.014
Sb	123		ug/L		3267	0.011
Ba	135		ug/L		51	0.000
Ba	137	0.000	ug/L	711.348	72	0.000
Ho	165		ug/L		25	0.000
> Lu	175		ug/L		521854	521854.000
Tl	205	1.068	ug/L	9.980	23878	0.042
Pb	208	0.003	ug/L	48.852	1082	0.000
Bi	209		ug/L		131	-0.000
Th	232	0.058	ug/L	23.333	3331	0.004
U	238	0.007	ug/L	15.278	970	0.001

Sample ID: QC Std 9

Report Date/Time: Tuesday, January 26, 2010 00:53:12

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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	0.9999
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	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	0.9997
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		100.1			
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		100.6			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		99.2			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		99.8			
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 9	Ti	205	CCB is out of limits (+/- PQL)

QC Action

QC Action Line: Continue

ICPMS #5 Daily Performance Report

Sample ID: Sample

Sample Date/Time: Tuesday, January 26, 2010 11:50:48

Sample Description:

Method File: c:\elandata\Method\Daily2.mth

Dataset File: c:\elandata\Dataset\default2\Sample.1757

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		4436.7		4436.689		48.898		1.1
	Mg	24.0		44893.2		44893.233		387.688		0.9
	Co	58.9		89933.8		89933.799		377.550		0.4
	Rh	102.9		172250.3		172250.255		912.249		0.5
	In	114.9		232605.8		232605.824		954.616		0.4
	Pb	208.0		242441.0		242440.952		1289.402		0.5
[>	Ba	137.9		234274.3		234274.313		1966.783		0.8
[	Ba++	69.0		3927.7		0.017		0.000		1.3
[>	Ce	139.9		291124.7		291124.707		1386.774		0.5
[	CeO	155.9		5852.1		0.020		0.000		1.8
	Bkgd	220.0		22.7		22.700		3.701		16.3

Current Optimization File Data

Current Value	Description
0.85	Nebulizer Gas Flow
11.00	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	17	10.5	5214.0
Co	59	17	11.0	90041.2
In	115	17	12.5	223917.6

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	584	2050	0.664
Be	9.0	9.0	2031	2070	0.650
Mg	24.0	24.0	5697	2070	0.674
Mg	25.0	25.0	5937	2070	0.657
Mg	26.0	25.9	6149	2070	0.678
Co	58.9	58.9	14166	2105	0.643
Rh	102.9	102.9	24873	2165	0.635
In	114.9	114.9	27799	2185	0.631
Ce	139.9	139.9	33871	2200	0.651
Pb	206.0	206.0	49948	2270	0.712
Pb	207.0	207.0	50159	2235	0.682
Pb	208.0	208.0	50451	2260	0.723
U	238.1	238.1	57726	2275	0.728

ICPMS#5 - Summary Report

Sample ID: Blank

Sample Date/Time: Tuesday, January 26, 2010 15:29:24

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\I only.mth

Dataset File: C:\elandata\Dataset\100126\Blank.046

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		370135	
[TI	205		ug/L		1320	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
TI	205	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[> Lu	175					
[TI	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: Blank

Report Date/Time: Tuesday, January 26, 2010 15:29:36

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ICPMS#5 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Tuesday, January 26, 2010 15:33:53

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\Ti only.mth

Dataset File: C:\elandata\Dataset\100126\Standard 1.047

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		360406	360405.897
[	Ti	205	10.000 ug/L	0.546	264934	0.732

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
Ti	205Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[>	Lu	175					
[Ti	205					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Tuesday, January 26, 2010 15:38:20

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\Tl only.mth

Dataset File: C:\elandata\Dataset\100126\Standard 2.048

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		349618	349618.079
[	Tl	205	99.803	ug/L	0.487	2133004	6.097

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Lu	175						
[Tl	205						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Tuesday, January 26, 2010 15:42:47

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\I only.mth

Dataset File: C:\elandata\Dataset\100126\QC Std 1.049

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		353326	353326.316
[	TI	205	53.822	ug/L	0.342	1163065	3.288

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
TI	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[>	Lu	175			95.5			
[TI	205	107.644					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Tuesday, January 26, 2010 15:47:17

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\Tl only.mth

Dataset File: C:\elandata\Dataset\100126\QC Std 2.050

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		357405	357405.322
[	Tl	205	-0.003	ug/L	124.220	1216	-0.000

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[>	Lu	175			96.6			
[Tl	205						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 2

Report Date/Time: Tuesday, January 26, 2010 15:47:29

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Tuesday, January 26, 2010 15:51:47

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\W only.mth

Dataset File: C:\elandata\Dataset\100126\QC Std 3.051

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		358714	358714.110
[TI	205	1.234	ug/L	0.837	28333	0.075

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
TI	205Linear Thru Zero	0.9998

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[> Lu	175			96.9		
[TI	205	123.444				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Tuesday, January 26, 2010 15:56:16

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\dl only.mth

Dataset File: C:\elandata\Dataset\100126\QC Std 4.052

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		333635	333634.716
[	Tl	205	-0.022	ug/L	3.312	744	-0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Lu	175			90.1			
[Tl	205						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 4

Report Date/Time: Tuesday, January 26, 2010 15:56:26

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ICPMS#5 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Tuesday, January 26, 2010 16:00:45

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\1 only.mth

Dataset File: C:\elandata\Dataset\100126\QC Std 5.053

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		327001	327000.816
[TI	205	21.342	ug/L	0.757	427539	1.304

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
TI	205	Linear Thru Zero	0.9998

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[> Lu	175			88.3		
[TI	205	106.710				

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: Tuesday, January 26, 2010 16:00:56

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Tuesday, January 26, 2010 16:05:15

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\il only.mth

Dataset File: C:\elandata\Dataset\100126\QC Std 6.054

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		350759	350758.804
[	Tl	205	53.324	ug/L	1.353	1143892	3.258

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[>	Lu	175			94.8		
[	Tl	205	106.648				

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: Tuesday, January 26, 2010 16:09:46

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\MI only.mth

Dataset File: C:\elandata\Dataset\100126\QC Std 7.055

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		366983	366983.076
[	TI	205	0.000	ug/L	198.511	1318	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
TI	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % DI	Duplicate Rel.	% Difference
[>	Lu	175			99.1			
[	TI	205						

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: Tuesday, January 26, 2010 16:09:58

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ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Tuesday, January 26, 2010 16:37:00

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\I only.mth

Dataset File: C:\elandata\Dataset\100126\QC Std 6.061

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		349396	349396.112
[	Tl	205	53.098	ug/L	1.340	1134552	3.244

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Lu	175			94.4			
[	Tl	205	106.197					

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: Tuesday, January 26, 2010 16:37:11

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Tuesday, January 26, 2010 16:41:31

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\TI only.mth

Dataset File: C:\elandata\Dataset\100126\QC Std 7.062

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		351213	351213.342
[	TI	205	-0.006	ug/L	54.747	1131	-0.000

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
TI	205Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[>	Lu	175			94.9			
[TI	205						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202015911

Sample Date/Time: Tuesday, January 26, 2010 16:46:04

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 941814|1|ba|

Method File: c:\elandata\Method\il only.mth

Dataset File: C:\elandata\Dataset\100126\1202015911.063

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		322165	322165.287
[	Tl	205	-0.032	ug/L	4.643	524	-0.002

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[>	Lu	175			87.0			
[Tl	205						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202015911

Report Date/Time: Tuesday, January 26, 2010 16:46:17

Page 1

ICPMS#5 - Summary Report

Sample ID: 1202015912

Sample Date/Time: Tuesday, January 26, 2010 16:50:38

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 941814|1|baj

Method File: c:\elandata\Method\TI only.mth

Dataset File: C:\elandata\Dataset\100126\1202015912.064

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		332357	332357.420
[	TI	205	51.122 ug/L	2.114	1039145	3.123

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
TI	205Linear Thru Zero	0.9998

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[>	Lu	175		89.8			
[TI	205					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202015912

Report Date/Time: Tuesday, January 26, 2010 16:50:52

Page 1

ICPMS#5 - Summary Report

Sample ID: 244602001

Sample Date/Time: Tuesday, January 26, 2010 16:55:14

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 941814|1|bej

Method File: c:\elandata\Method\l only.mth

Dataset File: C:\elandata\Dataset\100126\244602001.065

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		325407	325407.452
[	Tl	205	0.140	ug/L	4.702	3950	0.009

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[>	Lu	175			87.9			
[Tl	205						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Tuesday, January 26, 2010 17:13:27

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\I only.mth

Dataset File: C:\elandata\Dataset\100126\QC Std 6.069

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		340485	340485.144
[TI	205	52.658	ug/L	0.808	1096588	3.217

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
TI	205	Linear Thru Zero	0.9998

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[> Lu	175			92.0			
[TI	205	105.316					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Tuesday, January 26, 2010 17:17:58

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\Tl only.mth

Dataset File: C:\elandata\Dataset\100126\QC Std 7.070

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		346773	346772.965
[TI	205	0.046	ug/L	12.279	2201	0.003

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel.	% Difference
[> Lu	175			93.7			
[TI	205						

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: Tuesday, January 26, 2010 17:18:10

Page 1

ICPMS#5 - Summary Report

Sample ID: 1202015913

Sample Date/Time: Tuesday, January 26, 2010 17:27:04

Sample Type:

Sample Description: LANL 6020 DUP

Number of Replicates: 3

Batch ID: 941814[1]ba]

Method File: c:\elandata\Method\l only.mth

Dataset File: C:\elandata\Dataset\100126\1202015913.072

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		326528	326528.227
[TI	205	-0.021	ug/L	4.741	740	-0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
TI	205	Linear Thru Zero	0.9998

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[> Lu	175			88.2		
[TI	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202015914

Sample Date/Time: Tuesday, January 26, 2010 17:31:38

Sample Type:

Sample Description: LANL 6020 MS

Number of Replicates: 3

Batch ID: 941814|1|be|

Method File: c:\elandata\Method\MI only.mth

Dataset File: C:\elandata\Dataset\100126\1202015914.073

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		320571	320571.004
[TI	205	94.076	ug/L	1.980	1843246	5.748

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
TI	205Linear Thru Zero	0.9998

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % DI	Duplicate Rel. % Difference
[> Lu	175			86.6		
[TI	205					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202015915

Sample Date/Time: Tuesday, January 26, 2010 17:36:13

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 941814|5|baj

Method File: c:\elandata\Method\Ti only.mth

Dataset File: C:\elandata\Dataset\100126\1202015915.074

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		344051	344051.296
[	Tl	205	0.504	ug/L	1.356	11816	0.031

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[>	Lu	175			93.0			
[Tl	205						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202015915

Report Date/Time: Tuesday, January 26, 2010 17:36:27

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Tuesday, January 26, 2010 17:45:21

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\Tl only.mth

Dataset File: C:\elandata\Dataset\100126\QC Std 6.076

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		359243	359243.445
[	Tl	205	49.466	ug/L	0.379	1086956	3.022

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Lu	175			97.1			
[Tl	205	98.932					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Tuesday, January 26, 2010 17:49:52

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\TI only.mth

Dataset File: C:\elandata\Dataset\100126\QC Std 7.077

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		347859	347859.249
[	TI	205	0.141	ug/L	2.529	4241	0.009

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	.175Linear Thru Zero	
TI	205Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[>	Lu	175			94.0			
[	TI	205						

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Tuesday, January 26, 2010 17:50:04

Page 1

ICPMS #5 Daily Performance Report

Sample ID: Sample

Sample Date/Time: Wednesday, January 27, 2010 10:01:35

Sample Description:

Method File: c:\elandata\Method\Daily2.mth

Dataset File: c:\elandata\Dataset\default2\Sample.1759

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		3087.9		3087.934		102.308		3.3
Mg	24.0		43506.8		43506.755		472.576		1.1
Co	58.9		90532.6		90532.583		922.047		1.0
Rh	102.9		164177.8		164177.826		711.277		0.4
In	114.9		219828.5		219828.487		1233.124		0.6
Pb	208.0		228297.1		228297.121		2676.890		1.2
[> Ba	137.9		216842.8		216842.850		2692.980		1.2
[Ba++	69.0		5124.6		0.024		0.000		1.1
[> Ce	139.9		265739.6		265739.576		3528.800		1.3
[CeO	155.9		6319.2		0.024		0.001		2.2
Bkgd	220.0		23.6		23.600		3.324		14.1

Current Optimization File Data

Current Value	Description
0.85	Nebulizer Gas Flow
11.00	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	17	10.0	5387.0
Co	59	17	11.0	83338.7
In	115	17	12.5	220648.3

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	586	2050	0.653
Be	9.0	9.0	2034	2070	0.659
Mg	24.0	23.9	5683	2070	0.662
Mg	25.0	25.0	5947	2070	0.718
Mg	26.0	26.0	6147	2070	0.671
Co	58.9	59.0	14188	2105	0.637
Rh	102.9	102.9	24878	2165	0.625
In	114.9	114.9	27792	2185	0.632
Ce	139.9	139.9	33864	2200	0.638
Pb	206.0	206.0	49948	2270	0.691
Pb	207.0	207.0	50159	2235	0.674
Pb	208.0	208.0	50451	2260	0.722
U	238.1	238.1	57732	2275	0.725

ICPMS#5 - Summary Report

Sample ID: Blank

Sample Date/Time: Wednesday, January 27, 2010 14:34:38

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only.mth

Dataset File: C:\elandata\Dataset\100127\Blank.069

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		500728	
[U	238		ug/L		215	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[> Lu	175					
[U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: Blank

Report Date/Time: Wednesday, January 27, 2010 14:34:50

Page 1

ICPMS#5 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Wednesday, January 27, 2010 14:36:47

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: C:\elandata\Dataset\100127\Standard 1.070

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		505513	505512.940
[U	238	10.000	ug/L	1.646	473826	0.937

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	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
[> Lu	175						
[U	238						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Wednesday, January 27, 2010 14:38:54

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only.mth

Dataset File: C:\elandata\Dataset\100127\Standard 2.071

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		497725	497724.877
[U	238	99.803	ug/L	1.934	3886020	7.809

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9998

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[> Lu	175						
[U	238						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: Standard 2

Report Date/Time: Wednesday, January 27, 2010 14:39:03

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Wednesday, January 27, 2010 14:41:01

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: C:\elandata\Dataset\100127\QC Std 1.072

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		499426	499426.057
[	U	238	51.992	ug/L	0.983	2031851	4.068

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
>	Lu	175			99.7			
[U	238	103.983					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 1

Report Date/Time: Wednesday, January 27, 2010 14:41:11

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Wednesday, January 27, 2010 14:43:11

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only.mth

Dataset File: C:\elandata\Dataset\100127\QC Std 2.073

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		493033	493032.553
[	U	238	0.009	ug/L	10.946	560	0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Lu	175			98.5			
[U	238						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 2

Report Date/Time: Wednesday, January 27, 2010 14:43:23

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Wednesday, January 27, 2010 14:45:23

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only.mth

Dataset File: C:\elandata\Dataset\100127\QC Std 3.074

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		505736	505735.679
[	U	238	0.248	ug/L	2.488	10036	0.019

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[>	Lu	175			101.0		
[	U	238	124.095				

QC Out Of Limits

Measurement Type Analyte MassOut 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: Wednesday, January 27, 2010 14:47:33

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only.mth

Dataset File: C:\elandata\Dataset\100127\QC Std 4.075

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		453447	453447.191
[	U	238	-0.001 ug/L	75.460	171	-0.000

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	0.9998

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[>	Lu	175		90.6			
[U	238					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Wednesday, January 27, 2010 14:49:42

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: C:\elandata\Dataset\100127\QC Std 5.076

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		504204	504203.575
[U	238	22.818	ug/L	2.161	900226	1.785

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	0.9998

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[> Lu	175		100.7			
[U	238	114.089				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 5

Report Date/Time: Wednesday, January 27, 2010 14:49:53

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Wednesday, January 27, 2010 14:51:52

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only.mth

Dataset File: C:\elandata\Dataset\100127\QC Std 6.077

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		496413	496413.317
[U	238	52.566	ug/L	1.999	2041680	4.113

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9998

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[> Lu	175			99.1			
[U	238	105.131					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 6

Report Date/Time: Wednesday, January 27, 2010 14:52:03

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Wednesday, January 27, 2010 14:54:03

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: C:\elandata\Dataset\100127\QC Std 7.078

Concentration Results

	Analyte	Mass	Conc.	Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175			ug/L		490837	490836.715
[	U	238	0.013		ug/L	1.617	722	0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[>	Lu	175			98.0			
[	U	238						

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Wednesday, January 27, 2010 14:54:15

Page 1

ICPMS#5 - Summary Report

Sample ID: 1202015911

Sample Date/Time: Wednesday, January 27, 2010 14:56:15

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 941814|1|ba|

Method File: c:\elandata\Method\lu only.mth

Dataset File: C:\elandata\Dataset\100127\1202015911.079

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		472222	472222.455
[	U	238	0.122	ug/L	2.721	4697	0.010

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[>	Lu	175			94.3			
[U	238						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202015912

Sample Date/Time: Wednesday, January 27, 2010 14:58:29

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 941814|1|ba|

Method File: c:\elandata\Method\only.mth

Dataset File: C:\elandata\Dataset\100127\1202015912.080

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		473836	473835.747
[U	238	57.524	ug/L	2.242	2132512	4.501

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9998

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[> Lu	175			94.6			
[U	238						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202015912

Report Date/Time: Wednesday, January 27, 2010 14:58:42

Page 1

ICPMS#5 - Summary Report

Sample ID: 244602001

Sample Date/Time: Wednesday, January 27, 2010 15:00:43

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 941814|1|baj

Method File: c:\elandata\Method\only.mth

Dataset File: C:\elandata\Dataset\100127\244602001.081

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		479263	479263.205
[U	238	0.147	ug/L	2.176	5714	0.011

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9998

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
[> Lu	175			95.7		
[U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: 244602001

Report Date/Time: Wednesday, January 27, 2010 15:00:56

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Wednesday, January 27, 2010 15:09:35

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only.mth

Dataset File: C:\elandata\Dataset\100127\QC Std 8.085

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		510221	510221.386
[U	238	51.837	ug/L	2.406	2069186	4.056

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9998

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[> Lu	175		101.9				
[U	238	103.673					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 8

Report Date/Time: Wednesday, January 27, 2010 15:09:46

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Wednesday, January 27, 2010 15:11:46

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: C:\elandata\Dataset\100127\QC Std 9.086

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
> Lu	175		ug/L		495404	495404.328
[U	238	0.007	ug/L	8.684	495	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9998

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution %	Duplicate Rel. % Difference
> Lu	175		98.9			
[U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 9

Report Date/Time: Wednesday, January 27, 2010 15:11:58

Page 1

ICPMS#5 - Summary Report

Sample ID: 1202015913

Sample Date/Time: Wednesday, January 27, 2010 15:16:12

Sample Type:

Sample Description: LANL 6020 DUP

Number of Replicates: 3

Batch ID: 941814|1|ba|

Method File: c:\elandata\Method\lu only.mth

Dataset File: C:\elandata\Dataset\100127\1202015913.088

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		471756	471756.291
[	U	238	0.015	ug/L	3.852	763	0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[>	Lu	175		94.2			
[	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#5 - Summary Report

Sample ID: 1202015914

Sample Date/Time: Wednesday, January 27, 2010 15:18:26

Sample Type:

Sample Description: LANL 6020 MS

Number of Replicates: 3

Batch ID: 941814|1|ba|

Method File: c:\elandata\Method\only.mth

Dataset File: C:\elandata\Dataset\100127\1202015914.089

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		471610	471609.576
[U	238	59.138	ug/L	1.056	2182696	4.627

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	0.9998

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[> Lu	175		94.2			
[U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202015914

Report Date/Time: Wednesday, January 27, 2010 15:18:40

Page 1

ICPMS#5 - Summary Report

Sample ID: 1202015915

Sample Date/Time: Wednesday, January 27, 2010 15:20:41

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 941814[5]ba]

Method File: c:\elandata\Method\lu only.mth

Dataset File: C:\elandata\Dataset\100127\1202015915.090

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		497912	497911.699
[	U	238	0.015	ug/L	3.363	805	0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[>	Lu	175			99.4		
[U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202015915

Report Date/Time: Wednesday, January 27, 2010 15:20:55

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Wednesday, January 27, 2010 15:25:10

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\w only.mth

Dataset File: C:\elandata\Dataset\100127\QC Std 6.092

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		507958	507958.414
[U	238	51.982	ug/L	1.273	2065952	4.067

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	0.9998

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[> Lu	175			101.4		
[U	238	103.964				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 6

Report Date/Time: Wednesday, January 27, 2010 15:25:21

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Wednesday, January 27, 2010 15:27:21

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: C:\elandata\Dataset\100127\QC Std 7.093

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		499121	499120.875
[	U	238	0.009	ug/L	5.132	569	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175			99.7		
[U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS #5 Daily Performance Report

Sample ID: Sample

Sample Date/Time: Thursday, January 28, 2010 13:07:04

Sample Description:

Method File: c:\elandata\Method\Daily2.mth

Dataset File: c:\elandata\Dataset\default2\Sample.1761

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		2641.2		2641.244		79.852		3.0
Mg	24.0		33901.0		33900.980		310.198		0.9
Co	58.9		66712.4		66712.412		450.483		0.7
Rh	102.9		118448.8		118448.836		582.547		0.5
In	114.9		160373.2		160373.237		1670.420		1.0
Pb	208.0		170059.7		170059.677		1418.990		0.8
[> Ba	137.9		158881.2		158881.172		1065.197		0.7
[Ba++	69.0		3613.1		0.023		0.000		1.8
[> Ce	139.9		199169.9		199169.853		1508.479		0.8
[CeO	155.9		3714.1		0.019		0.000		0.9
Bkgd	220.0		21.4		21.400		2.608		12.2

Current Optimization File Data

Current Value	Description
0.85	Nebulizer Gas Flow
11.00	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	23	11.0	3943.2
Co	59	23	12.0	63746.9
In	115	23	13.5	157884.3

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	588	2050	0.654
Be	9.0	9.0	2037	2070	0.648
Mg	24.0	24.0	5681	2070	0.621
Mg	25.0	25.0	5945	2070	0.661
Mg	26.0	26.0	6145	2070	0.649
Co	58.9	58.9	14186	2105	0.634
Rh	102.9	102.9	24871	2165	0.620
In	114.9	114.9	27797	2185	0.617
Ce	139.9	139.9	33869	2200	0.639
Pb	206.0	206.0	49948	2270	0.683
Pb	207.0	207.0	50159	2235	0.675
Pb	208.0	208.0	50451	2260	0.715
U	238.1	238.0	57725	2275	0.725

ICPMS#5 - Summary Report

Sample ID: Blank
Sample Date/Time: Thursday, January 28, 2010 17:35:43
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\sb only.mth
Dataset File: C:\elandata\Dataset\100128\Blank.081

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> In	115		ug/L		198147	
| Sb	121		ug/L		197	
| Sb	123		ug/L		161	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Simple Linear	
Sb	121	Simple Linear	
Sb	123	Simple Linear	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[> In	115					
| Sb	121					
Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Thursday, January 28, 2010 17:38:02

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\sb only.mth

Dataset File: C:\elandata\Dataset\100128\Standard 1.082

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	In	115		ug/L		197409	197408.552
|	Sb	121	10.000	ug/L	10.687	41185	0.208
[	Sb	123		ug/L		31981	0.162

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[>	In	115					
|	Sb	121					
[Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: Standard 1

Report Date/Time: Thursday, January 28, 2010 17:38:20

Page 1

ICPMS#5 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Thursday, January 28, 2010 17:40:18

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\sb only.mth

Dataset File: C:\elandata\Dataset\100128\Standard 2.083

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	In	115		ug/L		201383	201382.800
|	Sb	121	99.991	ug/L	8.934	415158	2.066
L	Sb	123		ug/L		324697	1.616

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[>	In	115					
|	Sb	121					
L	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: Standard 2

Report Date/Time: Thursday, January 28, 2010 17:40:37

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Thursday, January 28, 2010 17:42:35

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\sb only.mth

Dataset File: C:\elandata\Dataset\100128\QC Std 1.084

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	In	115		ug/L		203684	203683.897
|	Sb	121	52.134	ug/L	12.006	218482	1.077
|	Sb	123		ug/L		168415	0.830

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
>	In	115		102.8				
|	Sb	121	104.268					
	Sb	123						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 1

Report Date/Time: Thursday, January 28, 2010 17:42:54

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Thursday, January 28, 2010 17:44:54

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\sb only.mth

Dataset File: C:\elandata\Dataset\100128\QC Std 2.085

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	In	115		ug/L		211738	211737.817
|	Sb	121	0.401	ug/L	11.364	1957	0.008
|	Sb	123		ug/L		1563	0.007

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
>	In	115		106.9				
|	Sb	121						
	Sb	123						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 2

Report Date/Time: Thursday, January 28, 2010 17:45:15

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Thursday, January 28, 2010 17:47:13

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\sb only.mth

Dataset File: C:\elandata\Dataset\100128\QC Std 3.086

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	In	115		ug/L		206502	206501.707
|	Sb	121	3.390	ug/L	7.837	14631	0.070
|	Sb	123		ug/L		11457	0.055

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[>	In	115		104.2			
|	Sb	121	112.993				
	Sb	123					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 3

Report Date/Time: Thursday, January 28, 2010 17:47:33

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Thursday, January 28, 2010 17:49:31

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\sb only.mth

Dataset File: C:\elandata\Dataset\100128\QC Std 4.087

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> In	115		ug/L		190701	190701.325
| Sb	121	0.270	ug/L	8.364	1250	0.006
| Sb	123		ug/L		953	0.004

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[> In	115		96.2				
| Sb	121						
| Sb	123						

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 4

Report Date/Time: Thursday, January 28, 2010 17:49:51

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Thursday, January 28, 2010 17:51:50

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\sb only.mth

Dataset File: C:\elandata\Dataset\100128\QC Std 5.088

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> In	115		ug/L		187846	187846.151
| Sb	121	21.701	ug/L	10.169	84130	0.448
| Sb	123		ug/L		65390	0.348

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[> In	115		94.8			
| Sb	121	108.507				
| Sb	123					

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: Thursday, January 28, 2010 17:52:10

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, January 28, 2010 17:54:09

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\sb only.mth

Dataset File: C:\elandata\Dataset\100128\QC Std 6.089

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	In	115		ug/L		198533	198532.934
|	Sb	121	50.690	ug/L	12.202	207128	1.047
|	Sb	123		ug/L		163729	0.827

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Ret.	% Difference
>	In	115		100.2				
|	Sb	121	101.380					
	Sb	123						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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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 28, 2010 17:56:29

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\sb only.mth

Dataset File: C:\elandata\Dataset\100128\QC Std 7.090

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	In	115		ug/L		203022	203021.658
|	Sb	121	0.265	ug/L	14.452	1308	0.005
|	Sb	123		ug/L		1005	0.004

Calibration

Analyte	MassCurve Type	Correlation Coefficient
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[>	In	115		102.5				
|	Sb	121						
|	Sb	123						

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Thursday, January 28, 2010 17:56:50

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ICPMS#5 - Summary Report

Sample ID: 1202026466

Sample Date/Time: Thursday, January 28, 2010 17:58:50

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 946103|1|baj

Method File: c:\elandata\Method\sb only.mth

Dataset File: C:\elandata\Dataset\100128\1202026466.091

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	In	115		ug/L		192526	192525.886
|	Sb	121	0.209	ug/L	13.738	1020	0.004
L	Sb	123		ug/L		802	0.003

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel.	% Difference
[>	In	115			97.2			
|	Sb	121						
L	Sb	123						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202026466

Report Date/Time: Thursday, January 28, 2010 17:59:11

Page 1

ICPMS#5 - Summary Report

Sample ID: 1202026467

Sample Date/Time: Thursday, January 28, 2010 18:01:12

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 946103|1|ba|

Method File: c:\elandata\Method\sb only.mth

Dataset File: C:\elandata\Dataset\100128\1202026467.092

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
In	115		ug/L		188543	188542.680
Sb	121	53.547	ug/L	14.666	207833	1.106
Sb	123		ug/L		162611	0.865

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
In	115		95.2			
Sb	121					
Sb	123					

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: 244602001

Sample Date/Time: Thursday, January 28, 2010 18:03:32

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 9461031|ba|

Method File: c:\elandata\Method\sb only.mth

Dataset File: C:\elandata\Dataset\100128\244602001.093

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> In	115		ug/L		197905	197904.990
| Sb	121	0.065	ug/L	15.235	463	0.001
| Sb	123		ug/L		361	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[> In	115		99.9			
| Sb	121					
| Sb	123					

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 8

Sample Date/Time: Thursday, January 28, 2010 18:12:51

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\sb only.mth

Dataset File: C:\elandata\Dataset\100128\QC Std 8.097

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	In	115		ug/L		200922	200922.137
|	Sb	121	51.737	ug/L	8.575	214405	1.069
L	Sb	123		ug/L		166925	0.833

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[>	In	115		101.4			
|	Sb	121	103.473				
L	Sb	123					

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 8

Report Date/Time: Thursday, January 28, 2010 18:13:12

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Thursday, January 28, 2010 18:15:12

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\sb only.mth

Dataset File: C:\elandata\Dataset\100128\QC Std 9.098

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	In	115		ug/L		205352	205352.302
|	Sb	121	0.236	ug/L	10.950	1202	0.005
[	Sb	123		ug/L		949	0.004

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	In	115		103.6				
|	Sb	121						
[Sb	123						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202026468

Sample Date/Time: Thursday, January 28, 2010 18:22:17

Sample Type:

Sample Description: LANL 6020 DUP

Number of Replicates: 3

Batch ID: 946103|1|ba|

Method File: c:\elandata\Method\sb only.mth

Dataset File: C:\elandata\Dataset\100128\1202026468.101

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	In	115		ug/L		187671	187670.604
|	Sb	121	0.026	ug/L	39.022	285	0.001
[	Sb	123		ug/L		234	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[>	In	115		94.7				
|	Sb	121						
[	Sb	123						

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: 1202026468

Report Date/Time: Thursday, January 28, 2010 18:22:38

Page 1

ICPMS#5 - Summary Report

Sample ID: 1202026469

Sample Date/Time: Thursday, January 28, 2010 18:24:38

Sample Type:

Sample Description: LANL 6020 MS

Number of Replicates: 3

Batch ID: 946103|1|baj

Method File: c:\elandata\Method\sb only.mth

Dataset File: C:\elandata\Dataset\100128\1202026469.102

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> In	115		ug/L		185126	185125.976
| Sb	121	203.966	ug/L	11.835	776550	4.214
| Sb	123		ug/L		616927	3.343

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[> In	115		93.4				
| Sb	121						
| Sb	123						

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: 1202026469

Report Date/Time: Thursday, January 28, 2010 18:24:58

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ICPMS#5 - Summary Report

Sample ID: 1202026470

Sample Date/Time: Thursday, January 28, 2010 18:26:58

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 946103|5|ba|

Method File: c:\elandata\Method\sb only.mth

Dataset File: C:\elandata\Dataset\100128\1202026470.103

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> In	115		ug/L		195201	195201.173
| Sb	121	0.026	ug/L	37.598	297	0.001
| Sb	123		ug/L		231	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[> In	115			98.5			
| Sb	121						
Sb	123						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202026470

Report Date/Time: Thursday, January 28, 2010 18:27:18

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ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, January 28, 2010 18:29:17

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\sb only.mth

Dataset File: C:\elandata\Dataset\100128\QC Std 6.104

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	In	115		ug/L		199307	199307.063
|	Sb	121	51.171	ug/L	12.532	209825	1.057
|	Sb	123		ug/L		166983	0.841

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[>	In	115			100.6			
|	Sb	121	102.343					
	Sb	123						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 6

Report Date/Time: Thursday, January 28, 2010 18:29:38

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ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, January 28, 2010 18:31:38

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\sb only.mth

Dataset File: C:\elandata\Dataset\100128\QC Std 7.105

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> In	115		ug/L		206992	206992.427
| Sb	121	0.234	ug/L	12.394	1203	0.005
| Sb	123		ug/L		948	0.004

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[> In	115		104.5				
| Sb	121						
| Sb	123						

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: Thursday, January 28, 2010 18:31:59

Page 1

=====
Analysis BegunLogged In Analyst: Administrator
Spectrometer Model: FIMS-100, S/N B050-9550Technique: AA FIMS-MHS
Autosampler Model: S10Sample Information File: C:\data-AA\Administrator\Sample Information\012010W1.SIF
Batch ID:
Results Data Set: 012010W1
Results Library: C:\data-AA\Administrator\Results\Results.mdb=====
Method Loaded

Method Name: WATER

Method Last Saved: 12/28/2009 15:47:50

Method Description: 7470A, 245.2, ILM04 ANALYST JXL

=====
Sequence No.: 1

Autosampler Location: 1

Sample ID: Calib Blank

Date Collected: 1/20/2010 09:12:33

Analyst:

Data Type: Original

Replicate Data: Calib Blank

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1		[0.00]	0.0001	-0.0003	0.0001	09:13:36	Yes
2		[0.00]	0.0001	-0.0003	0.0001	09:14:11	Yes
Mean:		[0.00]	0.0001				
SD:		0.00	0.0000				
%RSD:		0.00	21.99				

Auto-zero performed.-----
Sequence No.: 2

Autosampler Location: 2

Sample ID: S0.2

Date Collected: 1/20/2010 09:14:30

Analyst:

Data Type: Original

Replicate Data: S0.2

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1		[0.2]	0.0019	0.0077	0.0020	09:15:30	Yes
2		[0.2]	0.0020	0.0094	0.0021	09:16:05	Yes
Mean:		[0.2]	0.0019				
SD:		0.0	0.0000				
%RSD:		0.0	2.53				

Standard number 1 applied. [0.2]
Correlation Coef.: 1.000000 Slope: 0.00973 Intercept: 0.00000-----
Sequence No.: 3

Autosampler Location: 3

Sample ID: S0.5

Date Collected: 1/20/2010 09:16:24

Analyst:

Data Type: Original

Replicate Data: S0.5

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1		[0.5]	0.0050	0.0207	0.0051	09:17:25	Yes
2		[0.5]	0.0050	0.0216	0.0052	09:18:01	Yes
Mean:		[0.5]	0.0050				
SD:		0.0	0.0000				
%RSD:		0.0	0.61				

Standard number 2 applied. [0.5]
Correlation Coef.: 0.999897 Slope: 0.01007 Intercept: -0.00003-----
Sequence No.: 4

Autosampler Location: 4

Sample ID: S2.0

Date Collected: 1/20/2010 09:18:20

Analyst:

Data Type: Original

Replicate Data: S2.0

Repl	SampleConc	StdConc	BlankCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1		[2.0]	0.0199	0.0875	0.0200	09:19:22	Yes
2		[2.0]	0.0197	0.0868	0.0198	09:19:56	Yes
Mean:		[2.0]	0.0198				
SD:		0.0	0.0001				
%RSD:		0.0	0.65				

Standard number 3 applied. [2.0]
Correlation Coef.: 0.999988 Slope: 0.00991 Intercept: 0.00001

Sequence No.: 5

Sample ID: S5.0

Analyst:

Autosampler Location: 5

Date Collected: 1/20/2010 09:20:16

Data Type: Original

Replicate Data: S5.0

Repl	SampleConc	StdConc	BlankCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1		[5.0]	0.0498	0.2202	0.0499	09:21:18	Yes
2		[5.0]	0.0498	0.2192	0.0499	09:21:53	Yes
Mean:		[5.0]	0.0498				
SD:		0.0	0.0000				
%RSD:		0.0	0.08				

Standard number 4 applied. [5.0]
Correlation Coef.: 0.999997 Slope: 0.00995 Intercept: -0.00002

Sequence No.: 6

Sample ID: S10.0

Analyst:

Autosampler Location: 6

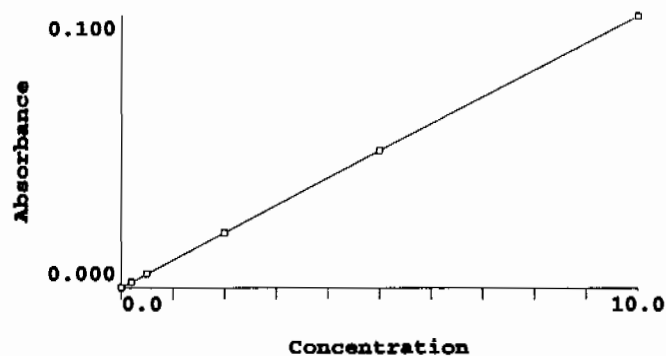
Date Collected: 1/20/2010 09:22:13

Data Type: Original

Replicate Data: S10.0

Repl	SampleConc	StdConc	BlankCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1		[10.0]	0.1002	0.4437	0.1003	09:23:14	Yes
2		[10.0]	0.0994	0.4398	0.0995	09:23:49	Yes
Mean:		[10.0]	0.0998				
SD:		0.0	0.0005				
%RSD:		0.0	0.53				

Standard number 5 applied. [10.0]
Correlation Coef.: 0.999998 Slope: 0.00998 Intercept: -0.00005

-----
Calibration data for Hg 253.7

Equation: Linear, Calculated Intercept

ID	Mean Signal	Entered	Calculated	Standard	%RSD
	(Abs)	Conc.	Conc.	Deviation	
		ug/L	ug/L		
Calib Blank	0.0000	0	0.005	0.00	22.0
S0.2	0.0019	0.2	0.200	0.00	2.5
S0.5	0.0050	0.5	0.508	0.00	0.6
S2.0	0.0198	2.0	1.990	0.00	0.7

S5.0 0.0498 5.0 4.992 0.00 0.1
S10.0 0.0998 10.0 10.005 0.00 0.5
Correlation Coef.: 0.999998 Slope: 0.00998 Intercept: -0.00005

Sequence No.: 7
Sample ID: ICV
Analyst:

Autosampler Location: 9
Date Collected: 1/20/2010 09:24:08
Data Type: Original

Replicate Data: ICV

Repl #	SampleConc ug/L	StdConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.074	5.074	0.0506	0.2226	0.0507	09:25:09	Yes
2	5.031	5.031	0.0502	0.2206	0.0503	09:25:44	Yes
Mean:	5.052	5.052	0.0504				
SD:	0.030	0.030	0.0003				
%RSD:	0.602	0.602	0.60				

QC value within limits for Hg 253.7 Recovery = 101.05%
All analyte(s) passed QC.

Sequence No.: 8
Sample ID: ICB
Analyst:

Autosampler Location: 10
Date Collected: 1/20/2010 09:26:03
Data Type: Original

Replicate Data: ICB

Repl #	SampleConc ug/L	StdConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.002	0.002	-0.0000	-0.0007	0.0001	09:27:05	Yes
2	0.000	0.000	-0.0000	-0.0009	0.0001	09:27:39	Yes
Mean:	0.001	0.001	-0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	105.7	105.7	43.42				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 9
Sample ID: CRDL
Analyst:

Autosampler Location: 11
Date Collected: 1/20/2010 09:27:59
Data Type: Original

Replicate Data: CRDL

Repl #	SampleConc ug/L	StdConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.204	0.204	0.0020	0.0087	0.0021	09:29:01	Yes
2	0.197	0.197	0.0019	0.0078	0.0020	09:29:36	Yes
Mean:	0.201	0.201	0.0020				
SD:	0.005	0.005	0.0000				
%RSD:	2.426	2.426	2.48				

QC value within limits for Hg 253.7 Recovery = 100.29%
All analyte(s) passed QC.

Sequence No.: 10
Sample ID: CCV
Analyst:

Autosampler Location: 7
Date Collected: 1/20/2010 09:29:56
Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StdConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.234	5.234	0.0522	0.2278	0.0523	09:30:56	Yes
2	5.226	5.226	0.0521	0.2272	0.0522	09:31:31	Yes
Mean:	5.230	5.230	0.0522				
SD:	0.006	0.006	0.0001				
%RSD:	0.112	0.112	0.11				

QC value within limits for Hg 253.7 Recovery = 104.60%
All analyte(s) passed QC.

Sequence No.: 11
Sample ID: CCB
Analyst:

Autosampler Location: 8
Date Collected: 1/20/2010 09:31:50
Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.008	0.008	0.0000	0.0000	0.0001	09:32:51	Yes
2	0.005	0.005	0.0000	-0.0004	0.0001	09:33:26	Yes
Mean:	0.006	0.006	0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	33.70	33.70	130.95				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 12
Sample ID: 1202019129|943072|1
Analyst: JXL

Autosampler Location: 12
Date Collected: 1/20/2010 09:33:45
Data Type: Original

Replicate Data: 1202019129|943072|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.011	0.011	0.0001	0.0002	0.0002	09:34:47	Yes
2	0.004	0.004	-0.0000	-0.0006	0.0001	09:35:22	Yes
Mean:	0.008	0.008	0.0000				
SD:	0.005	0.005	0.0001				
%RSD:	66.58	66.58	164.72				

Sequence No.: 13
Sample ID: 1202019130|943072|1
Analyst: JXL

Autosampler Location: 13
Date Collected: 1/20/2010 09:35:42
Data Type: Original

Replicate Data: 1202019130|943072|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	2.032	2.032	0.0202	0.0889	0.0203	09:36:44	Yes
2	2.035	2.035	0.0203	0.0893	0.0204	09:37:19	Yes
Mean:	2.034	2.034	0.0203				
SD:	0.002	0.002	0.0000				
%RSD:	0.095	0.095	0.09				

Sequence No.: 14
Sample ID: 244236001|943072|1
Analyst: JXL

Autosampler Location: 14
Date Collected: 1/20/2010 09:37:39
Data Type: Original

Replicate Data: 244236001|943072|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.007	0.007	0.0000	-0.0000	0.0001	09:38:40	Yes
2	0.003	0.003	-0.0000	-0.0008	0.0001	09:39:15	Yes
Mean:	0.005	0.005	0.0000				
SD:	0.003	0.003	0.0000				
%RSD:	66.28	66.28	>999.9%				

Sequence No.: 15
Sample ID: 244236002|943072|1
Analyst: JXL

Autosampler Location: 15
Date Collected: 1/20/2010 09:39:34
Data Type: Original

Replicate Data: 244236002|943072|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
------	------------	----------	---------	------	------	------	------

Replicate Data: 244240002|943072|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.021	0.021	0.0002	0.0008	0.0003	09:50:08	Yes
2	0.018	0.018	0.0001	0.0005	0.0002	09:50:43	Yes
Mean:	0.020	0.020	0.0002				
SD:	0.002	0.002	0.0000				
%RSD:	10.41	10.41	13.61				

=====

Sequence No.: 21
Sample ID: 244510003|943072|1
Analyst: JXLAutosampler Location: 21
Date Collected: 1/20/2010 09:51:02
Data Type: Original-----
Replicate Data: 244510003|943072|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.016	0.016	0.0001	0.0004	0.0002	09:52:03	Yes
2	0.024	0.024	0.0002	0.0010	0.0003	09:52:39	Yes
Mean:	0.020	0.020	0.0002				
SD:	0.006	0.006	0.0001				
%RSD:	30.50	30.50	39.82				

=====

Sequence No.: 22
Sample ID: CCV
Analyst:Autosampler Location: 7
Date Collected: 1/20/2010 09:52:58
Data Type: Original-----
Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.204	5.204	0.0519	0.2276	0.0520	09:53:59	Yes
2	5.180	5.180	0.0517	0.2263	0.0518	09:54:34	Yes
Mean:	5.192	5.192	0.0518				
SD:	0.017	0.017	0.0002				
%RSD:	0.331	0.331	0.33				

QC value within limits for Hg 253.7 Recovery = 103.84%
All analyte(s) passed QC.

=====

Sequence No.: 23
Sample ID: CCB
Analyst:Autosampler Location: 8
Date Collected: 1/20/2010 09:54:53
Data Type: Original-----
Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.019	0.019	0.0001	0.0008	0.0003	09:55:53	Yes
2	0.028	0.028	0.0002	0.0016	0.0003	09:56:28	Yes
Mean:	0.024	0.024	0.0002				
SD:	0.006	0.006	0.0001				
%RSD:	25.84	25.84	32.13				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

=====

Sequence No.: 24
Sample ID: 1202019131|943072|1
Analyst: JXLAutosampler Location: 22
Date Collected: 1/20/2010 09:56:47
Data Type: Original-----
Replicate Data: 1202019131|943072|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.018	0.018	0.0001	0.0010	0.0002	09:57:49	Yes
2	0.024	0.024	0.0002	0.0019	0.0003	09:58:23	Yes

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	2.082	2.082	0.0207	0.0926	0.0208	10:07:29	Yes
2	2.048	2.048	0.0204	0.0911	0.0205	10:08:04	Yes
Mean:	2.065	2.065	0.0206				
SD:	0.024	0.024	0.0002				
%RSD:	1.164	1.164	1.17				

Sequence No.: 30

Autosampler Location: 28

Sample ID: 244525001|943084|1

Date Collected: 1/20/2010 10:08:23

Analyst: JXL

Data Type: Original

Replicate Data: 244525001|943084|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.012	0.012	0.0001	-0.0004	0.0002	10:09:24	Yes
2	0.016	0.016	0.0001	0.0007	0.0002	10:09:59	Yes
Mean:	0.014	0.014	0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	17.46	17.46	26.05				

Sequence No.: 31

Autosampler Location: 29

Sample ID: 244525002|943084|1

Date Collected: 1/20/2010 10:10:18

Analyst: JXL

Data Type: Original

Replicate Data: 244525002|943084|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.022	0.022	0.0002	0.0009	0.0003	10:11:19	Yes
2	0.021	0.021	0.0002	0.0015	0.0003	10:11:54	Yes
Mean:	0.021	0.021	0.0002				
SD:	0.000	0.000	0.0000				
%RSD:	1.718	1.718	2.19				

Sequence No.: 32

Autosampler Location: 30

Sample ID: 244705001|943084|1

Date Collected: 1/20/2010 10:12:13

Analyst: JXL

Data Type: Original

Replicate Data: 244705001|943084|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.035	0.035	0.0003	0.0026	0.0004	10:13:14	Yes
2	0.044	0.044	0.0004	0.0040	0.0005	10:13:49	Yes
Mean:	0.039	0.039	0.0003				
SD:	0.006	0.006	0.0001				
%RSD:	15.97	15.97	18.11				

Sequence No.: 33

Autosampler Location: 31

Sample ID: 244716001|943084|1

Date Collected: 1/20/2010 10:14:08

Analyst: JXL

Data Type: Original

Replicate Data: 244716001|943084|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.027	0.027	0.0002	0.0019	0.0003	10:15:09	Yes
2	0.039	0.039	0.0003	0.0036	0.0005	10:15:44	Yes
Mean:	0.033	0.033	0.0003				
SD:	0.009	0.009	0.0001				
%RSD:	27.74	27.74	32.27				

Sequence No.: 34

Autosampler Location: 7

Sample ID: CCV

Date Collected: 1/20/2010 10:16:03

Analyst:

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.348	5.348	0.0533	0.2348	0.0534	10:17:04	Yes
2	5.314	5.314	0.0530	0.2321	0.0531	10:17:38	Yes
Mean:	5.331	5.331	0.0532				
SD:	0.024	0.024	0.0002				
%RSD:	0.449	0.449	0.45				

QC value within limits for Hg 253.7 Recovery = 106.61%
All analyte(s) passed QC.

Sequence No.: 35

Autosampler Location: 8

Sample ID: CCB

Date Collected: 1/20/2010 10:17:57

Analyst:

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.009	0.009	0.0000	-0.0014	0.0001	10:18:58	Yes
2	0.012	0.012	0.0001	0.0008	0.0002	10:19:34	Yes
Mean:	0.010	0.010	0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	17.28	17.28	31.46				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 36

Autosampler Location: 32

Sample ID: 244716002|943084|1

Date Collected: 1/20/2010 10:19:53

Analyst: JXL

Data Type: Original

Replicate Data: 244716002|943084|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.012	0.012	0.0001	0.0006	0.0002	10:20:54	Yes
2	0.012	0.012	0.0001	0.0006	0.0002	10:21:29	Yes
Mean:	0.012	0.012	0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	3.237	3.237	5.25				

Sequence No.: 37

Autosampler Location: 33

Sample ID: 244855001|943084|1

Date Collected: 1/20/2010 10:21:48

Analyst: JXL

Data Type: Original

Replicate Data: 244855001|943084|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.019	0.019	0.0001	0.0012	0.0003	10:22:49	Yes
2	0.017	0.017	0.0001	0.0008	0.0002	10:23:25	Yes
Mean:	0.018	0.018	0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	8.879	8.879	11.90				

Sequence No.: 38

Autosampler Location: 34

Sample ID: 1202019179|943084|1

Date Collected: 1/20/2010 10:23:44

Analyst: JXL

Data Type: Original

Replicate Data: 1202019179|943084|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.015	0.015	0.0001	0.0009	0.0002	10:24:45	Yes

Replicate Data: 244855004|943084|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.012	0.012	0.0001	0.0013	0.0002	10:34:27	Yes
2	0.012	0.012	0.0001	0.0006	0.0002	10:35:02	Yes
Mean:	0.012	0.012	0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	0.033	0.033	0.05				

Sequence No.: 44

Sample ID: 1202019197|943096|1

Analyst: JXL

Autosampler Location: 40

Date Collected: 1/20/2010 10:35:22

Data Type: Original

Replicate Data: 1202019197|943096|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.007	0.007	0.0000	0.0004	0.0001	10:36:23	Yes
2	0.011	0.011	0.0001	0.0010	0.0002	10:36:58	Yes
Mean:	0.009	0.009	0.0000				
SD:	0.003	0.003	0.0000				
%RSD:	33.24	33.24	71.13				

Sequence No.: 45

Sample ID: 1202019198|943096|1

Analyst: JXL

Autosampler Location: 41

Date Collected: 1/20/2010 10:37:17

Data Type: Original

Replicate Data: 1202019198|943096|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	2.088	2.088	0.0208	0.0936	0.0209	10:38:18	Yes
2	2.093	2.093	0.0208	0.0939	0.0209	10:38:53	Yes
Mean:	2.090	2.090	0.0208				
SD:	0.003	0.003	0.0000				
%RSD:	0.163	0.163	0.16				

Sequence No.: 46

Sample ID: CCV

Analyst:

Autosampler Location: 7

Date Collected: 1/20/2010 10:39:12

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	4.975	4.975	0.0496	0.2208	0.0497	10:40:12	Yes
2	4.949	4.949	0.0493	0.2196	0.0495	10:40:47	Yes
Mean:	4.962	4.962	0.0495				
SD:	0.018	0.018	0.0002				
%RSD:	0.370	0.370	0.37				

QC value within limits for Hg 253.7 Recovery = 99.24%

All analyte(s) passed QC.

Sequence No.: 47

Sample ID: CCB

Analyst:

Autosampler Location: 8

Date Collected: 1/20/2010 10:41:06

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.008	0.008	0.0000	0.0005	0.0001	10:42:07	Yes
2	0.012	0.012	0.0001	0.0008	0.0002	10:42:42	Yes
Mean:	0.010	0.010	0.0001				
SD:	0.003	0.003	0.0000				
%RSD:	26.59	26.59	49.36				

QC value within limits for Hg 253.7 Recovery = Not calculated

Replicate Data: 1202019187|943090|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.006	0.006	0.0000	0.0000	0.0001	11:01:25	Yes
2	0.009	0.009	0.0000	0.0006	0.0001	11:02:00	Yes
Mean:	0.007	0.007	0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	22.97	22.97	61.32				

Sequence No.: 58

Sample ID: CCV

Analyst:

Autosampler Location: 7

Date Collected: 1/20/2010 11:02:20

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.084	5.084	0.0507	0.2239	0.0508	11:03:21	Yes
2	5.100	5.100	0.0509	0.2238	0.0510	11:03:55	Yes
Mean:	5.092	5.092	0.0508				
SD:	0.011	0.011	0.0001				
%RSD:	0.218	0.218	0.22				

QC value within limits for Hg 253.7 Recovery = 101.85%

All analyte(s) passed QC.

Sequence No.: 59

Sample ID: CCB

Analyst:

Autosampler Location: 8

Date Collected: 1/20/2010 11:04:14

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.006	0.006	0.0000	0.0001	0.0001	11:05:15	Yes
2	0.008	0.008	0.0000	0.0003	0.0001	11:05:50	Yes
Mean:	0.007	0.007	0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	22.82	22.82	70.62				

QC value within limits for Hg 253.7 Recovery = Not calculated

All analyte(s) passed QC.

Sequence No.: 60

Sample ID: 1202019188|943090|1

Analyst: JXL

Autosampler Location: 52

Date Collected: 1/20/2010 11:06:09

Data Type: Original

Replicate Data: 1202019188|943090|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	2.222	2.222	0.0221	0.0964	0.0222	11:07:10	Yes
2	2.232	2.232	0.0222	0.0970	0.0223	11:07:45	Yes
Mean:	2.227	2.227	0.0222				
SD:	0.007	0.007	0.0001				
%RSD:	0.320	0.320	0.32				

Sequence No.: 61

Sample ID: 244631001|943090|1

Analyst: JXL

Autosampler Location: 53

Date Collected: 1/20/2010 11:08:05

Data Type: Original

Replicate Data: 244631001|943090|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.019	0.019	0.0001	0.0018	0.0003	11:09:06	Yes
2	0.008	0.008	0.0000	0.0002	0.0001	11:09:41	Yes
Mean:	0.014	0.014	0.0001				

#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.011	0.011	0.0001	-0.0002	0.0002	11:18:45	Yes
2	0.012	0.012	0.0001	-0.0000	0.0002	11:19:20	Yes
Mean:	0.012	0.012	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	7.336	7.336	12.17				

Sequence No.: 67

Autosampler Location: 59

Sample ID: 244631004|943090|1

Date Collected: 1/20/2010 11:19:40

Analyst: JXL

Data Type: Original

Replicate Data: 244631004|943090|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.011	0.011	0.0001	0.0002	0.0002	11:20:41	Yes
2	0.007	0.007	0.0000	-0.0004	0.0001	11:21:16	Yes
Mean:	0.009	0.009	0.0000				
SD:	0.003	0.003	0.0000				
%RSD:	34.49	34.49	69.91				

Sequence No.: 68

Autosampler Location: 60

Sample ID: 1202017947|942590|1

Date Collected: 1/20/2010 11:21:36

Analyst: JXL

Data Type: Original

Replicate Data: 1202017947|942590|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.013	0.013	0.0001	-0.0000	0.0002	11:22:37	Yes
2	0.014	0.014	0.0001	0.0001	0.0002	11:23:12	Yes
Mean:	0.013	0.013	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	4.309	4.309	6.64				

Sequence No.: 69

Autosampler Location: 61

Sample ID: 1202017948|942590|1

Date Collected: 1/20/2010 11:23:32

Analyst: JXL

Data Type: Original

Replicate Data: 1202017948|942590|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	2.156	2.156	0.0215	0.0940	0.0216	11:24:34	Yes
2	2.153	2.153	0.0214	0.0937	0.0215	11:25:09	Yes
Mean:	2.155	2.155	0.0215				
SD:	0.002	0.002	0.0000				
%RSD:	0.107	0.107	0.11				

Sequence No.: 70

Autosampler Location: 7

Sample ID: CCV

Date Collected: 1/20/2010 11:25:29

Analyst:

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.174	5.174	0.0516	0.2246	0.0517	11:26:30	Yes
2	5.200	5.200	0.0518	0.2250	0.0520	11:27:05	Yes
Mean:	5.187	5.187	0.0517				
SD:	0.018	0.018	0.0002				
%RSD:	0.355	0.355	0.36				

QC value within limits for Hg 253.7 Recovery = 103.73%
All analyte(s) passed QC.

Sequence No.: 71

Autosampler Location: 8

Sample ID: CCB
Analyst:

Date Collected: 1/20/2010 11:27:24
Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.018	0.018	0.0001	0.0001	0.0002	11:28:25	Yes
2	0.010	0.010	0.0001	-0.0002	0.0002	11:28:59	Yes
Mean:	0.014	0.014	0.0001				
SD:	0.006	0.006	0.0001				
%RSD:	40.25	40.25	59.87				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

=====

Sequence No.: 72
Sample ID: 244807013|942590|1
Analyst: JXL

Autosampler Location: 62
Date Collected: 1/20/2010 11:29:19
Data Type: Original

Replicate Data: 244807013|942590|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.019	0.019	0.0001	0.0004	0.0003	11:30:20	Yes
2	0.022	0.022	0.0002	0.0014	0.0003	11:30:55	Yes
Mean:	0.021	0.021	0.0002				
SD:	0.002	0.002	0.0000				
%RSD:	10.63	10.63	13.65				

=====

Sequence No.: 73
Sample ID: 1202017949|942590|1
Analyst: JXL

Autosampler Location: 63
Date Collected: 1/20/2010 11:31:15
Data Type: Original

Replicate Data: 1202017949|942590|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.012	0.012	0.0001	0.0003	0.0002	11:32:16	Yes
2	0.018	0.018	0.0001	0.0007	0.0002	11:32:51	Yes
Mean:	0.015	0.015	0.0001				
SD:	0.004	0.004	0.0000				
%RSD:	25.70	25.70	37.14				

=====

Sequence No.: 74
Sample ID: 1202017950|942590|1
Analyst: JXL

Autosampler Location: 64
Date Collected: 1/20/2010 11:33:10
Data Type: Original

Replicate Data: 1202017950|942590|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	1.957	1.957	0.0195	0.0892	0.0196	11:34:12	Yes
2	1.953	1.953	0.0194	0.0882	0.0195	11:34:47	Yes
Mean:	1.955	1.955	0.0195				
SD:	0.003	0.003	0.0000				
%RSD:	0.174	0.174	0.17				

=====

Sequence No.: 75
Sample ID: 1202017951|942590|5
Analyst: JXL

Autosampler Location: 65
Date Collected: 1/20/2010 11:35:06
Data Type: Original

Replicate Data: 1202017951|942590|5

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.011	0.011	0.0001	0.0002	0.0002	11:36:08	Yes
2	0.014	0.014	0.0001	0.0005	0.0002	11:36:42	Yes

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	2.169	2.169	0.0216	0.0954	0.0217	11:45:47	Yes
2	2.154	2.154	0.0215	0.0950	0.0216	11:46:22	Yes
Mean:	2.161	2.161	0.0215				
SD:	0.010	0.010	0.0001				
%RSD:	0.461	0.461	0.46				

Sequence No.: 81

Autosampler Location: 71

Sample ID: 1202019118|943063|5

Date Collected: 1/20/2010 11:46:42

Analyst: JXL

Data Type: Original

Replicate Data: 1202019118|943063|5

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.003	0.003	-0.0000	-0.0001	0.0001	11:47:43	Yes
2	0.009	0.009	0.0000	0.0006	0.0002	11:48:18	Yes
Mean:	0.006	0.006	0.0000				
SD:	0.004	0.004	0.0000				
%RSD:	67.87	67.87	259.28				

Sequence No.: 82

Autosampler Location: 7

Sample ID: CCV

Date Collected: 1/20/2010 11:48:38

Analyst:

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.204	5.204	0.0519	0.2256	0.0520	11:49:39	Yes
2	5.215	5.215	0.0520	0.2262	0.0521	11:50:13	Yes
Mean:	5.209	5.209	0.0519				
SD:	0.008	0.008	0.0001				
%RSD:	0.158	0.158	0.16				

QC value within limits for Hg 253.7 Recovery = 104.19%
All analyte(s) passed QC.

Sequence No.: 83

Autosampler Location: 8

Sample ID: CCB

Date Collected: 1/20/2010 11:50:32

Analyst:

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.008	0.008	0.0000	0.0004	0.0001	11:51:33	Yes
2	0.013	0.013	0.0001	0.0007	0.0002	11:52:08	Yes
Mean:	0.010	0.010	0.0001				
SD:	0.003	0.003	0.0000				
%RSD:	32.57	32.57	58.89				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 84

Autosampler Location: 72

Sample ID: 244953002|943063|1

Date Collected: 1/20/2010 11:52:27

Analyst: JXL

Data Type: Original

Replicate Data: 244953002|943063|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.005	0.005	0.0000	-0.0001	0.0001	11:53:29	Yes
2	0.015	0.015	0.0001	0.0011	0.0002	11:54:04	Yes
Mean:	0.010	0.010	0.0001				
SD:	0.007	0.007	0.0001				
%RSD:	66.55	66.55	123.42				

Sequence No.: 85

Sample ID: 244953003|943063|1

Analyst: JXL

Autosampler Location: 73

Date Collected: 1/20/2010 11:54:24

Data Type: Original

Replicate Data: 244953003|943063|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.005	0.005	0.0000	-0.0002	0.0001	11:55:26	Yes
2	0.010	0.010	0.0001	0.0009	0.0002	11:56:01	Yes
Mean:	0.007	0.007	0.0000				
SD:	0.004	0.004	0.0000				
%RSD:	50.86	50.86	139.23				

Sequence No.: 86

Sample ID: 244953004|943063|1

Analyst: JXL

Autosampler Location: 74

Date Collected: 1/20/2010 11:56:21

Data Type: Original

Replicate Data: 244953004|943063|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.008	0.008	0.0000	0.0004	0.0001	11:57:23	Yes
2	0.012	0.012	0.0001	0.0008	0.0002	11:57:57	Yes
Mean:	0.010	0.010	0.0001				
SD:	0.003	0.003	0.0000				
%RSD:	33.99	33.99	63.60				

Sequence No.: 87

Sample ID: 244953005|943063|1

Analyst: JXL

Autosampler Location: 75

Date Collected: 1/20/2010 11:58:17

Data Type: Original

Replicate Data: 244953005|943063|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.014	0.014	0.0001	0.0010	0.0002	11:59:19	Yes
2	0.011	0.011	0.0001	0.0007	0.0002	11:59:54	Yes
Mean:	0.013	0.013	0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	15.63	15.63	24.82				

Sequence No.: 88

Sample ID: 244953006|943063|1

Analyst: JXL

Autosampler Location: 76

Date Collected: 1/20/2010 12:00:14

Data Type: Original

Replicate Data: 244953006|943063|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.003	0.003	-0.0000	-0.0003	0.0001	12:01:16	Yes
2	0.009	0.009	0.0000	0.0007	0.0001	12:01:50	Yes
Mean:	0.006	0.006	0.0000				
SD:	0.004	0.004	0.0000				
%RSD:	65.80	65.80	268.71				

Sequence No.: 89

Sample ID: 1202019168|943080|1

Analyst: JXL

Autosampler Location: 77

Date Collected: 1/20/2010 12:02:10

Data Type: Original

Replicate Data: 1202019168|943080|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.007	0.007	0.0000	0.0006	0.0001	12:03:12	Yes

2	0.010	0.010	0.0001	0.0008	0.0002	12:03:47	Yes
Mean:	0.008	0.008	0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	26.97	26.97	62.78				

Sequence No.: 90

Sample ID: 1202019169|943080|1

Analyst: JXL

Autosampler Location: 78

Date Collected: 1/20/2010 12:04:07

Data Type: Original

Replicate Data: 1202019169|943080|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	2.120	2.120	0.0211	0.0935	0.0212	12:05:09	Yes
2	2.097	2.097	0.0209	0.0924	0.0210	12:05:43	Yes
Mean:	2.108	2.108	0.0210				
SD:	0.016	0.016	0.0002				
%RSD:	0.753	0.753	0.75				

Sequence No.: 91

Sample ID: 244516001|943080|1

Analyst: JXL

Autosampler Location: 79

Date Collected: 1/20/2010 12:06:03

Data Type: Original

Replicate Data: 244516001|943080|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.007	0.007	0.0000	0.0005	0.0001	12:07:05	Yes
2	0.008	0.008	0.0000	0.0004	0.0001	12:07:40	Yes
Mean:	0.008	0.008	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	10.00	10.00	25.96				

Sequence No.: 92

Sample ID: 244516002|943080|1

Analyst: JXL

Autosampler Location: 80

Date Collected: 1/20/2010 12:08:00

Data Type: Original

Replicate Data: 244516002|943080|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.011	0.011	0.0001	0.0009	0.0002	12:09:02	Yes
2	0.011	0.011	0.0001	0.0011	0.0002	12:09:37	Yes
Mean:	0.011	0.011	0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	0.265	0.265	0.45				

Sequence No.: 93

Sample ID: 244602001|943080|1

Analyst: JXL

Autosampler Location: 81

Date Collected: 1/20/2010 12:09:57

Data Type: Original

Replicate Data: 244602001|943080|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.014	0.014	0.0001	0.0015	0.0002	12:10:58	Yes
2	0.008	0.008	0.0000	0.0003	0.0001	12:11:33	Yes
Mean:	0.011	0.011	0.0001				
SD:	0.004	0.004	0.0000				
%RSD:	38.91	38.91	69.05				

Sequence No.: 94

Sample ID: CCV

Analyst:

Autosampler Location: 7

Date Collected: 1/20/2010 12:11:53

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.043	5.043	0.0503	0.2214	0.0504	12:12:53	Yes
2	5.018	5.018	0.0500	0.2196	0.0501	12:13:29	Yes
Mean:	5.031	5.031	0.0502				
SD:	0.018	0.018	0.0002				
%RSD:	0.354	0.354	0.35				

QC value within limits for Hg 253.7 Recovery = 100.62%
All analyte(s) passed QC.

Sequence No.: 95

Sample ID: CCB

Analyst:

Autosampler Location: 8

Date Collected: 1/20/2010 12:13:48

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.012	0.012	0.0001	0.0008	0.0002	12:14:49	Yes
2	0.010	0.010	0.0001	0.0009	0.0002	12:15:23	Yes
Mean:	0.011	0.011	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	9.409	9.409	16.05				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 96

Sample ID: 244625001|943080|1

Analyst: JXL

Autosampler Location: 82

Date Collected: 1/20/2010 12:15:43

Data Type: Original

Replicate Data: 244625001|943080|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.008	0.008	0.0000	0.0004	0.0001	12:16:44	Yes
2	0.010	0.010	0.0001	0.0009	0.0002	12:17:19	Yes
Mean:	0.009	0.009	0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	19.05	19.05	40.42				

Sequence No.: 97

Sample ID: 244625002|943080|1

Analyst: JXL

Autosampler Location: 83

Date Collected: 1/20/2010 12:17:39

Data Type: Original

Replicate Data: 244625002|943080|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.009	0.009	0.0000	0.0009	0.0002	12:18:40	Yes
2	0.008	0.008	0.0000	0.0008	0.0001	12:19:15	Yes
Mean:	0.008	0.008	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	11.81	11.81	25.95				

Sequence No.: 98

Sample ID: 244722001|943080|1

Analyst: JXL

Autosampler Location: 84

Date Collected: 1/20/2010 12:19:35

Data Type: Original

Replicate Data: 244722001|943080|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.004	0.004	-0.0000	0.0001	0.0001	12:20:37	Yes
2	0.005	0.005	0.0000	0.0004	0.0001	12:21:12	Yes
Mean:	0.005	0.005	0.0000				
SD:	0.001	0.001	0.0000				

%RSD: 15.97 15.97 >999.9%

Sequence No.: 99

Sample ID: 244722002|943080|1

Analyst: JXL

Autosampler Location: 85

Date Collected: 1/20/2010 12:21:32

Data Type: Original

Replicate Data: 244722002|943080|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.012	0.012	0.0001	0.0010	0.0002	12:22:34	Yes
2	0.016	0.016	0.0001	0.0008	0.0002	12:23:09	Yes
Mean:	0.014	0.014	0.0001				
SD:	0.003	0.003	0.0000				
%RSD:	18.77	18.77	28.20				

Sequence No.: 100

Sample ID: 244722003|943080|1

Analyst: JXL

Autosampler Location: 86

Date Collected: 1/20/2010 12:23:30

Data Type: Original

Replicate Data: 244722003|943080|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.008	0.008	0.0000	0.0006	0.0001	12:24:31	Yes
2	0.011	0.011	0.0001	0.0010	0.0002	12:25:06	Yes
Mean:	0.009	0.009	0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	25.47	25.47	51.11				

Sequence No.: 101

Sample ID: 244722004|943080|1

Analyst: JXL

Autosampler Location: 87

Date Collected: 1/20/2010 12:25:26

Data Type: Original

Replicate Data: 244722004|943080|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.012	0.012	0.0001	0.0009	0.0002	12:26:28	Yes
2	0.014	0.014	0.0001	0.0016	0.0002	12:27:03	Yes
Mean:	0.013	0.013	0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	12.77	12.77	20.01				

Sequence No.: 102

Sample ID: 244829001|943080|1

Analyst: JXL

Autosampler Location: 88

Date Collected: 1/20/2010 12:27:23

Data Type: Original

Replicate Data: 244829001|943080|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.006	0.006	0.0000	0.0003	0.0001	12:28:24	Yes
2	0.003	0.003	-0.0000	-0.0001	0.0001	12:28:59	Yes
Mean:	0.005	0.005	-0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	40.53	40.53	>999.9%				

Sequence No.: 103

Sample ID: 1202019170|943080|1

Analyst: JXL

Autosampler Location: 89

Date Collected: 1/20/2010 12:29:19

Data Type: Original

Replicate Data: 1202019170|943080|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored

1	0.006	0.006	0.0000	0.0005	0.0001	12:30:21	Yes
2	0.003	0.003	-0.0000	0.0004	0.0001	12:30:56	Yes
Mean:	0.005	0.005	-0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	54.18	54.18	>999.9%				

Sequence No.: 104

Autosampler Location: 90

Sample ID: 1202019171|943080|1

Date Collected: 1/20/2010 12:31:16

Analyst: JXL

Data Type: Original

Replicate Data: 1202019171|943080|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	2.091	2.091	0.0208	0.0929	0.0209	12:32:18	Yes
2	2.078	2.078	0.0207	0.0925	0.0208	12:32:53	Yes
Mean:	2.084	2.084	0.0208				
SD:	0.009	0.009	0.0001				
%RSD:	0.413	0.413	0.41				

Sequence No.: 105

Autosampler Location: 91

Sample ID: 1202019172|943080|5

Date Collected: 1/20/2010 12:33:13

Analyst: JXL

Data Type: Original

Replicate Data: 1202019172|943080|5

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.007	0.007	0.0000	0.0007	0.0001	12:34:15	Yes
2	0.007	0.007	0.0000	0.0007	0.0001	12:34:49	Yes
Mean:	0.007	0.007	0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	1.831	1.831	5.48				

Sequence No.: 106

Autosampler Location: 7

Sample ID: CCV

Date Collected: 1/20/2010 12:35:10

Analyst:

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.202	5.202	0.0519	0.2236	0.0520	12:36:10	Yes
2	5.213	5.213	0.0520	0.2254	0.0521	12:36:45	Yes
Mean:	5.207	5.207	0.0519				
SD:	0.008	0.008	0.0001				
%RSD:	0.148	0.148	0.15				

QC value within limits for Hg 253.7 Recovery = 104.14%
All analyte(s) passed QC.

Sequence No.: 107

Autosampler Location: 8

Sample ID: CCB

Date Collected: 1/20/2010 12:37:04

Analyst:

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.012	0.012	0.0001	0.0010	0.0002	12:38:05	Yes
2	0.014	0.014	0.0001	0.0011	0.0002	12:38:40	Yes
Mean:	0.013	0.013	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	8.551	8.551	13.31				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Miscellaneous

Prep LogBook

Analyst: BXA1 Verified by: _____

Batch: 941808

Lab SOP: GL-MA-E-006 REV# 9

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Spike Amount	Spike Units
MB	1202015894		SW846 3005A	18-JAN-2010 16:57	<2	50 mL	50 mL	1	.25	mL
LCS	1202015895		SW846 3005A	18-JAN-2010 16:57	<2	50 mL	50 mL	1	.25	mL
SAMPLE	244602001		SW846 3005A	18-JAN-2010 16:57	<2	50 mL	50 mL	1	.25	mL
SAMPLE	244610001		SW846 3005A	18-JAN-2010 16:57	<2	50 mL	50 mL	1	.25	mL
SAMPLE	244614001		SW846 3005A	18-JAN-2010 16:57	<2	50 mL	50 mL	1	.25	mL
SAMPLE	244618001		SW846 3005A	18-JAN-2010 16:57	<2	50 mL	50 mL	1	.25	mL
SAMPLE	244625001		SW846 3005A	18-JAN-2010 16:57	<2	50 mL	50 mL	1	.25	mL
DUP	1202015896	244625001	SW846 3005A	18-JAN-2010 16:57	<2	50 mL	50 mL	1	.25	mL
MS	1202015897	244625001	SW846 3005A	18-JAN-2010 16:57	<2	50 mL	50 mL	1	.25	mL
SDILT	1202015898	244625001	SW846 3005A	18-JAN-2010 16:57	<2	50 mL	50 mL	1	.25	mL
SAMPLE	244625002		SW846 3005A	18-JAN-2010 16:57	<2	50 mL	50 mL	1	.25	mL

Comments

Reagent/Solvent Lot ID	Amount	Description
1252838	2.5 mL	HYDROCHLORIC ACID
1252836	1 mL	Nitric Acid CONC.

Prep LogBook

Analyst: BXA1 Verified by: _____

Batch: 941812

Lab SOP: GL-MA-E-006 REV# 9

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Spike Amount	Spike Units
MB	1202015911		SW846 3005A	18-JAN-2010 16:59	<2	50 mL	50 mL	1	.5	mL
LCS	1202015912		SW846 3005A	18-JAN-2010 16:59	<2	50 mL	50 mL	1	.5	mL
SAMPLE	244602001		SW846 3005A	18-JAN-2010 16:59	<2	50 mL	50 mL	1	.5	mL
SAMPLE	244610001		SW846 3005A	18-JAN-2010 16:59	<2	50 mL	50 mL	1	.5	mL
SAMPLE	244614001		SW846 3005A	18-JAN-2010 16:59	<2	50 mL	50 mL	1	.5	mL
SAMPLE	244618001		SW846 3005A	18-JAN-2010 16:59	<2	50 mL	50 mL	1	.5	mL
SAMPLE	244625001		SW846 3005A	18-JAN-2010 16:59	<2	50 mL	50 mL	1	.5	mL
DUP	1202015913	244625001	SW846 3005A	18-JAN-2010 16:59	<2	50 mL	50 mL	1	.5	mL
MS	1202015914	244625001	SW846 3005A	18-JAN-2010 16:59	<2	50 mL	50 mL	1	.5	mL
SDLT	1202015915	244625001	SW846 3005A	18-JAN-2010 16:59	<2	50 mL	50 mL	1	.5	mL
SAMPLE	244625002		SW846 3005A	18-JAN-2010 16:59	<2	50 mL	50 mL	1	.5	mL

Comments

Reagent/Solvent Lot ID	Amount	Description
1252838	2.5 mL	HYDROCHLORIC ACID
1252836	1 mL	Nitric Acid CONC.

Prep LogBook

Analyst: TXB3 Verified by: _____

Batch: 943079

Lab SOP: GL-MA-E-010 REV# 23

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Spike Amount	Spike Units
MB	1202019168		SW846 7470A Prep	19-JAN-2010 12:45	<2	20 mL	20 mL	1		WATER
LCS	1202019169		SW846 7470A Prep	19-JAN-2010 12:45	<2	20 mL	20 mL	1	.2	WATER
SAMPLE	244516001		SW846 7470A Prep	19-JAN-2010 12:45	<2	20 mL	20 mL	1		WATER
SAMPLE	244516002		SW846 7470A Prep	19-JAN-2010 12:45	<2	20 mL	20 mL	1		WATER
SAMPLE	244602001		SW846 7470A Prep	19-JAN-2010 12:45	<2	20 mL	20 mL	1		WATER
SAMPLE	244625001		SW846 7470A Prep	19-JAN-2010 12:45	<2	20 mL	20 mL	1		WATER
SAMPLE	244625002		SW846 7470A Prep	19-JAN-2010 12:45	<2	20 mL	20 mL	1		WATER
SAMPLE	244722001		SW846 7470A Prep	19-JAN-2010 12:45	<2	20 mL	20 mL	1		WATER
SAMPLE	244722002		SW846 7470A Prep	19-JAN-2010 12:45	<2	20 mL	20 mL	1		WATER
SAMPLE	244722003		SW846 7470A Prep	19-JAN-2010 12:45	<2	20 mL	20 mL	1		WATER
SAMPLE	244722004		SW846 7470A Prep	19-JAN-2010 12:45	<2	20 mL	20 mL	1		WATER
SAMPLE	244829001		SW846 7470A Prep	19-JAN-2010 12:45	<2	20 mL	20 mL	1		WATER
DUP	1202019170	244829001	SW846 7470A Prep	19-JAN-2010 12:45	<2	20 mL	20 mL	1		WATER
MS	1202019171	244829001	SW846 7470A Prep	19-JAN-2010 12:45	<2	20 mL	20 mL	1		WATER
SDILT	1202019172	244829001	SW846 7470A Prep	19-JAN-2010 12:45	<2	20 mL	20 mL	1		WATER
SAMPLE	244829002		SW846 7470A Prep	19-JAN-2010 12:45	<2	20 mL	20 mL	1		WATER
SAMPLE	244829003		SW846 7470A Prep	19-JAN-2010 12:45	<2	20 mL	20 mL	1		WATER
SAMPLE	244829004		SW846 7470A Prep	19-JAN-2010 12:45	<2	20 mL	20 mL	1		WATER

Comments: Digestion Start Date: 19-JAN-10 12:45
Digestion End Date: 19-JAN-10 14:45

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
1255535-C	3 mL	5% KMnO4 solution
1255532-C	1 mL	Hg reducing agent
WHG100119-06	500 uL	Mercury Working 2nd Source 5.0/CCV
WHG100119-01a	20 uL	Mercury Working 1st Source CAL 0.2/CRA
WHG100119-02	50 uL	Mercury Working 1st Source CAL 0.5
WHG100119-05	1 mL	Mercury Working 1st Source CAL 10.0
WHG100119-03	200 uL	Mercury Working 1st Source CAL 2.0
WHG100119-04	500 uL	Mercury Working 1st Source CAL 5.0/CCV

Prep Data Logbook Version 1.1

GEL Laboratories LLC

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Prep LogBook

Analyst: AXG2 Verified by: _____

Batch: 946101

Lab SOP: GL-MA-E-006 REV# 9

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Spike Amount	Spike Units
MB	1202026466		SW846 3005A	28-JAN-2010 07:30	<2	50 mL	50 mL	1		
LCS	1202026467		SW846 3005A	28-JAN-2010 07:30	<2	50 mL	50 mL	1	.5	mL
SAMPLE	244602001		SW846 3005A	28-JAN-2010 07:30	<2	50 mL	50 mL	1	.5	mL
SAMPLE	244610001		SW846 3005A	28-JAN-2010 07:30	<2	50 mL	50 mL	1	.5	mL
SAMPLE	244614001		SW846 3005A	28-JAN-2010 07:30	<2	50 mL	50 mL	1	.5	mL
SAMPLE	244618001		SW846 3005A	28-JAN-2010 07:30	<2	50 mL	50 mL	1	.5	mL
SAMPLE	244625001		SW846 3005A	28-JAN-2010 07:30	<2	50 mL	50 mL	1	.5	mL
SAMPLE	244625002		SW846 3005A	28-JAN-2010 07:30	<2	50 mL	50 mL	1	.5	mL
DUP	1202026468	244625002	SW846 3005A	28-JAN-2010 07:30	<2	50 mL	50 mL	1	.5	mL
MS	1202026469	244625002	SW846 3005A	28-JAN-2010 07:30	<2	50 mL	50 mL	1	.5	mL
SDILT	1202026470	244625002	SW846 3005A	28-JAN-2010 07:30	<2	50 mL	50 mL	1	.5	mL

Comments

Reagent/Solvent Lot ID	Amount	Description
1252838	2.5 mL	HYDROCHLORIC ACID
1234886	1 mL	Nitric Acid CONC.

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 ICSEA 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 ICSEA 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 **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
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Standard Logbook

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

Standard Logbook

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

Standard Logbook

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: UI090930-A **Opened:** 30-SEP-09 **Catalog Number :** 160067-02

Name: ICP-MS DOE Liquid SPIKE **Received:** 28-SEP-09 **Lot Number :** 1017141

Type: Source Material **Expires:** 30-SEP-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
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: UI090930-B **Opened:** 30-SEP-09 **Catalog Number :** 160067-02

Name: ICP-MS DOE Liquid SPIKE **Received:** 28-SEP-09 **Lot Number :** 1017141

Type: Source Material **Expires:** 30-SEP-10

Employee: Francena Armstrong **Verified:** 21-NOV-08

Supplier: O2Si

Description: ICP-MS DOE Liquid Spike Solution B

Comments: None

Analyte	Concentration	Analyte	Concentration
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Standard Logbook

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: 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

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

Standard Logbook

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 :** H2O/tr HF
Supplier: ENVIRONMENTAL EXPRESS
Description: SILICON 1000mg/L H2O/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: O2SI
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 Standard **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

Standard Logbook

Analyte	Concentration	Analyte	Concentration
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 Standard **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 ICSEA **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

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
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Standard Logbook

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
Iron	2000 mg/L	Magnesium	2000 mg/L
Phosphorous	2000 mg/L	Potassium	2000 mg/L
Sodium	2000 mg/L		

Standard Logbook

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

Standard Logbook

Analyte	Concentration	Analyte	Concentration
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
Sulfur	50000 ug/L	Thallium	10000 ug/L
Tin	10000 ug/L	Titanium	10000 ug/L
Vanadium	10000 ug/L	Zinc	15000 ug/L

Standard Logbook

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: O2SI
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: UI100126-11 **Opened:** 26-JAN-10 **Amount :** 1000 mL
Name: ICP-MS ICSA Master A **Received:** 26-JAN-10 **Catalog Number :** 160013-01-01L
Type: Source Material **Expires:** 26-JAN-11 **Lot Number :** 1018321
Employee: Elizabeth Janssen **Solvent :** 2% HNO3
Supplier: O2SI
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: 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

Standard Logbook

Analyte	Concentration	Analyte	Concentration
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

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

Standard Logbook

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: IHG100119-01 **Opened:** 19-JAN-10 **Instrument Id :** Mercury
Name: MHGINTER1 **Received:** 19-JAN-10 **Pipet Id :** Minou1
Type: Intermediate **Expires:** 20-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: IHG100119-02 **Opened:** 19-JAN-10 **Pipet Id :** Minou1
Name: MHGINTER2 **Received:** 19-JAN-10 **Solvent :** 2% HNO3-1240182
Type: Intermediate **Expires:** 20-JAN-10
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Intermediate 2nd Source 200 ug/L
Comments: None

Standard Logbook

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: WHG100119-01a **Opened:** 19-JAN-10 **Pipet Id :** Hg1289245
Name: MHGWORKCAL0.2CRA **Received:** 19-JAN-10 **Solvent :** 2% HNO3-1240182
Type: Working **Expires:** 26-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.
IHG100119-01	Mercury	200 ug/L	20 uL	20 mL	.2 ug/L

Serial ID: WHG100119-02 **Opened:** 19-JAN-10 **Pipet Id :** Hg1289245
Name: MHGWORKCAL0.5 **Received:** 19-JAN-10 **Solvent :** 2% HNO3-1240182
Type: Working **Expires:** 26-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.
IHG100119-01	Mercury	200 ug/L	50 uL	20 mL	.5 ug/L

Serial ID: WHG100119-03 **Opened:** 19-JAN-10 **Pipet Id :** Hg1289245
Name: MHGWORKCAL2.0 **Received:** 19-JAN-10 **Solvent :** 2% HNO3-1240182
Type: Working **Expires:** 26-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.
IHG100119-01	Mercury	200 ug/L	200 uL	20 mL	2 ug/L

Serial ID: WHG100119-04 **Opened:** 19-JAN-10 **Pipet Id :** Hg1289245
Name: MHGWORKCAL5.0CCV **Received:** 19-JAN-10 **Solvent :** 2% HNO3-1240182
Type: Working **Expires:** 26-JAN-10
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL 5.0/CCV
Comments: None

Standard Logbook

Parent Material	Analyte	Parent Conc.	Allquot	Final Vol.	Final Conc.
IHG100119-01	Mercury	200 ug/L	500 uL	20 mL	5 ug/L

Serial ID: WHG100119-05 Opened: 19-JAN-10 Pipet Id : Hg1289245
 Name: MHGWORKCAL10.0 Received: 19-JAN-10 Solvent : 2% HNO3-1240182
 Type: Working Expires: 26-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.	Allquot	Final Vol.	Final Conc.
IHG100119-01	Mercury	200 ug/L	1 mL	20 mL	10 ug/L

Serial ID: WHG100119-06 Opened: 19-JAN-10 Pipet Id : Hg1289245
 Name: MHGWORK5.0ICV Received: 19-JAN-10 Solvent : 2% HNO3-1240182
 Type: Working Expires: 26-JAN-10
 Employee: Tara Griffin
 Supplier: GEL
 Description: Mercury Working 2nd Source 5.0/ICV
 Comments: None

Parent Material	Analyte	Parent Conc.	Allquot	Final Vol.	Final Conc.
IHG100119-02	Mercury	200 ug/L	500 uL	20 mL	5 ug/L

Serial ID: WHG100119-13 Opened: 19-JAN-10 Pipet Id : Hg1289245
 Name: MHG1QLCSMSSPIKE Received: 19-JAN-10 Solvent : 2% HNO3-1240182
 Type: Working Expires: 26-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.	Allquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: WI100119-42 Opened: 19-JAN-10 Balance Id : 216
 Name: TRACE ICP 0.1 PPM STD. Received: 02-NOV-09 Pipet Id : 1099667
 Type: Working Expires: 20-JAN-10 Solvent : 3%HCL and 1%HNO3 -1256122
 Employee: Helen Camello
 Supplier: GEL
 Description: TRACE ICP 0.1 PPM CALIBRATION STD.
 Comments: None

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI100119-44	Aluminum	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100119-44	Antimony	1000 ug/L	10 mL	100 mL	100 ug/L
WI100119-44	Arsenic	1000 ug/L	10 mL	100 mL	100 ug/L
WI100119-44	Barium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100119-44	Beryllium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100119-44	Boron	1000 ug/L	10 mL	100 mL	100 ug/L
WI100119-44	Cadmium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100119-44	Calcium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100119-44	Chromium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100119-44	Cobalt	1000 ug/L	10 mL	100 mL	100 ug/L
WI100119-44	Copper	1000 ug/L	10 mL	100 mL	100 ug/L
WI100119-44	Iron	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100119-44	Lead	1000 ug/L	10 mL	100 mL	100 ug/L
WI100119-44	Magnesium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100119-44	Manganese	1000 ug/L	10 mL	100 mL	100 ug/L
WI100119-44	Molybdenum	1000 ug/L	10 mL	100 mL	100 ug/L
WI100119-44	Nickel	1000 ug/L	10 mL	100 mL	100 ug/L
WI100119-44	Phosphorous	5000 ug/L	10 mL	100 mL	500 ug/L
WI100119-44	Potassium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100119-44	Selenium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100119-44	Silica	10698 ug/L	10 mL	100 mL	1069 ug/L
WI100119-44	Silicon	5000 ug/L	10 mL	100 mL	500 ug/L
WI100119-44	Silver	1000 ug/L	10 mL	100 mL	100 ug/L
WI100119-44	Sodium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100119-44	Strontium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100119-44	Sulfur	2000 ug/L	10 mL	100 mL	200 ug/L
WI100119-44	Thallium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100119-44	Tin	1000 ug/L	10 mL	100 mL	100 ug/L
WI100119-44	Titanium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100119-44	Uranium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100119-44	Vanadium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100119-44	Zinc	1000 ug/L	10 mL	100 mL	100 ug/L

Serial ID: WI100119-43 Opened: 19-JAN-10 Balance Id : 216
 Name: TRACE ICP 0.5/CCV STD. Received: 02-NOV-09 Pipet Id : 1099667
 Type: Working Expires: 20-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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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

Serial ID: WI100119-44 **Opened:** 19-JAN-10 **Balance Id :** 216
Name: TRACE ICP SCAL 1.0 **Received:** 02-NOV-09 **Pipet Id :** 1099667
Type: Working **Expires:** 20-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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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

Serial ID: WI100119-45 **Opened:** 19-JAN-10 **Balance Id :** 216
Name: TRACE ICP S-10 STD **Received:** 22-APR-09 **Pipet Id :** 1099667
Type: Working **Expires:** 20-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

Standard Logbook

Serial ID: WI100119-46 **Opened:** 19-JAN-10 **Balance Id :** 216
Name: ICP TRACE ICV **Received:** 25-SEP-09 **Pipet Id :** 1099667
Type: Working **Expires:** 20-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
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

Standard Logbook

Serial ID: W100119-47 **Opened:** 19-JAN-10 **Balance Id :** 216
Name: PQL Working Standard **Received:** 30-JUN-09 **Pipet Id :** 1099667
Type: Working **Expires:** 20-JAN-10 **Solvent :** 3%HCL & 1%HNO3-1256122
Employee: Helen Camello
Supplier: 02si
Description: PQL Working Standard
Comments: None

Parent Material	Analyte	Parent Conc.	Allquot	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
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: WMS100125-04 **Opened:** 25-JAN-10 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 25-JAN-10 **Balance Id :** 4025216
Type: Working **Expires:** 26-JAN-10 **Pipet Id :** 3541598
Employee: Elizabeth Janssen **Solvent :** 2%HNO3/1%HCL-1259290
Supplier: GEL

Standard Logbook

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

Serial ID: WMS100125-04A **Opened:** 25-JAN-10 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 25-JAN-10 **Pipet Id :** 3541598
Type: Working **Expires:** 26-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1259290
Employee: Elizabeth Janssen
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Standard Logbook

Parent Material	Analyte	Parent Conc.	Allquot	Final Vol.	Final Conc.
WMS100125-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100125-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS100125-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS100125-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100125-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100125-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS100125-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100125-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100125-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100125-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS100125-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS100125-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100125-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS100125-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100125-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100125-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS100125-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS100125-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS100125-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100125-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100125-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100125-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS100125-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100125-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100125-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100125-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100125-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS100125-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100125-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS100125-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100125-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100125-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS100125-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS100125-05 **Opened:** 25-JAN-10 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 25-JAN-10 **Pipet Id :** 3541598
Type: Working **Expires:** 26-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1259290
Employee: Elizabeth Janssen
Supplier: GEL
Description: ICPMS ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Allquot	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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Allquot	Final Vol.	Final Conc.
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

Serial ID: WMS100125-06 **Opened:** 25-JAN-10 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 25-JAN-10 **Pipet Id :** 3820544
Type: Working **Expires:** 26-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1259290
Employee: Elizabeth Janssen
Supplier: GEL
Description: ICPMS CRDL
Comments: None

Parent Material	Analyte	Parent Conc.	Allquot	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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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

Serial ID: WMS100125-07 **Opened:** 25-JAN-10 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 25-JAN-10 **Lot Number :** 1010773
Type: Working **Expires:** 26-JAN-10 **Pipet Id :** 3541598
Employee: Elizabeth Janssen **Solvent :** 2%HNO3/1%HCl - 1259290
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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: WMS100125-08 **Opened:** 25-JAN-10 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 25-JAN-10 **Pipet Id :** 1758088
Type: Working **Expires:** 26-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1259290
Employee: Elizabeth Janssen
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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: WMS100125-70 **Opened:** 25-JAN-10 **Balance Id :** 40245216
Name: ICPMS LINEAR RANGE ST **Received:** 25-JAN-10 **Pipet Id :** 1758088
Type: Working **Expires:** 26-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1259290
Employee: Elizabeth Janssen
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
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091212-61	Zirconium	50 mg/L	.5 mL	50 mL	500 ug/L

Serial ID: WMS100126-04 **Opened:** 26-JAN-10 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 26-JAN-10 **Balance Id :** 4025216
Type: Working **Expires:** 27-JAN-10 **Pipet Id :** 3541598
Employee: Elizabeth Janssen **Solvent :** 2%HNO3/1%HCl-1259290
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: WMS100126-04A **Opened:** 26-JAN-10 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 26-JAN-10 **Pipet Id :** 3541598
Type: Working **Expires:** 27-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1259290
Employee: Elizabeth Janssen
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100126-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100126-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS100126-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS100126-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100126-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100126-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS100126-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100126-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100126-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100126-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS100126-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS100126-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100126-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS100126-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100126-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100126-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS100126-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS100126-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS100126-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100126-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100126-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100126-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS100126-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100126-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100126-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100126-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100126-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS100126-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100126-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS100126-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100126-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100126-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS100126-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Standard Logbook

Serial ID: WMS100126-05 **Opened:** 26-JAN-10 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 26-JAN-10 **Pipet Id :** 3541598
Type: Working **Expires:** 27-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1259290
Employee: Elizabeth Janssen
Supplier: GEL
Description: ICPMS ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Allquot	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: WMS100126-06 **Opened:** 26-JAN-10 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 26-JAN-10 **Pipet Id :** 3820544
Type: Working **Expires:** 27-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1259290
Employee: Elizabeth Janssen
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: WMS100126-07 **Opened:** 26-JAN-10 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 26-JAN-10 **Lot Number :** 1010773
Type: Working **Expires:** 27-JAN-10 **Pipet Id :** 3541598
Employee: Elizabeth Janssen **Solvent :** 2%HNO3/1%HCl - 1259290
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100126-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100126-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100126-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS100126-08 **Opened:** 26-JAN-10 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 26-JAN-10 **Pipet Id :** 1758088
Type: Working **Expires:** 27-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1259290
Employee: Elizabeth Janssen
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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
UI100126-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100126-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100126-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS100127-04 **Opened:** 27-JAN-10 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 27-JAN-10 **Balance Id :** 4025216
Type: Working **Expires:** 28-JAN-10 **Pipet Id :** 3541598
Employee: Elizabeth Janssen **Solvent :** 2%HNO3/1%HCl-1259290
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: WMS100127-04A **Opened:** 27-JAN-10 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 27-JAN-10 **Pipet Id :** 3541598
Type: Working **Expires:** 28-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1259290
Employee: Elizabeth Janssen
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100127-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100127-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS100127-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS100127-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100127-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100127-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS100127-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100127-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100127-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100127-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS100127-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS100127-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100127-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS100127-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100127-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100127-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS100127-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS100127-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS100127-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100127-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100127-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100127-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS100127-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100127-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100127-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100127-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100127-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS100127-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100127-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS100127-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100127-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100127-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS100127-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS100127-05 **Opened:** 27-JAN-10 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 27-JAN-10 **Pipet Id :** 3541598
Type: Working **Expires:** 28-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1259290
Employee: Elizabeth Janssen
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: WMS100127-06 **Opened:** 27-JAN-10 **Balance Id:** 40245216
Name: ICPMS CRDL **Received:** 27-JAN-10 **Pipet Id:** 3820544
Type: Working **Expires:** 28-JAN-10 **Solvent:** 2%HNO3/1%HCl - 1259290
Employee: Elizabeth Janssen
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: WMS100127-07 **Opened:** 27-JAN-10 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 27-JAN-10 **Lot Number :** 1010773
Type: Working **Expires:** 28-JAN-10 **Pipet Id :** 3541598
Employee: Elizabeth Janssen **Solvent :** 2%HNO3/1%HCl - 1259290
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100126-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100126-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100126-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS100127-08 **Opened:** 27-JAN-10 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 27-JAN-10 **Pipet Id :** 1758088
Type: Working **Expires:** 28-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1259290
Employee: Elizabeth Janssen
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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
UI100126-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100126-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100126-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS100128-04 Opened: 28-JAN-10 Amount : 50 mL
 Name: ICPMS Cal Standard 100 Received: 28-JAN-10 Balance Id : 4025216
 Type: Working Expires: 29-JAN-10 Pipet Id : 3541598
 Employee: Elizabeth Janssen Solvent : 2%HNO3/1%HCl-1259290
 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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Allquot	Final Vol.	Final Conc.
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

Serial ID: WMS100128-04A **Opened:** 28-JAN-10 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 28-JAN-10 **Pipet Id :** 3541598
Type: Working **Expires:** 29-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1259290
Employee: Elizabeth Janssen
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Allquot	Final Vol.	Final Conc.
WMS100128-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100128-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS100128-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS100128-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100128-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100128-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100128-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100128-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100128-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100128-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS100128-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS100128-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100128-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS100128-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100128-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100128-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS100128-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS100128-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS100128-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100128-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100128-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100128-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS100128-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100128-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100128-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100128-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100128-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS100128-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100128-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS100128-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100128-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100128-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS100128-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS100128-05 **Opened:** 28-JAN-10 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 28-JAN-10 **Pipet Id :** 3541598
Type: Working **Expires:** 29-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1259290
Employee: Elizabeth Janssen
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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

Serial ID: WMS100128-06 Opened: 28-JAN-10 Balance Id : 40245216
 Name: ICPMS CRDL Received: 28-JAN-10 Pipet Id : 3820544
 Type: Working Expires: 29-JAN-10 Solvent : 2%HNO3/1%HCl - 1259290
 Employee: Elizabeth Janssen
 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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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

Serial ID: WMS100128-07 **Opened:** 28-JAN-10 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 28-JAN-10 **Lot Number :** 1010773
Type: Working **Expires:** 29-JAN-10 **Pipet Id :** 3541598
Employee: Elizabeth Janssen **Solvent :** 2%HNO3/1%HCl - 1259290
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100126-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100126-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100126-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Standard Logbook

Serial ID: WMS100128-08 **Opened:** 28-JAN-10 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 28-JAN-10 **Pipet Id :** 1758088
Type: Working **Expires:** 29-JAN-10 **Solvent :** 2%HNO3/1%HCl - 1259290
Employee: Elizabeth Janssen
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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
UI100126-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100126-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100126-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100126-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Standard Logbook

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: 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

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: 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: Hydroxylamine Hydrochloride
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.	Allquot	Final Vol.	Final Conc.
1215906	B-K2S2O8S-MER	N/A	50 g	1000 mL	N/A

Standard Logbook

Serial ID: 1234886 Opened: 27-NOV-09 Lot Number : H20053 L
 Name: I-HNO3 Received: 27-NOV-09
 Type: Reagent/Solvent Expires: 27-NOV-10
 Employee: Bryan Davis
 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: 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: 125532-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

Standard Logbook

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: 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

Serial ID: 1259290 Opened: 25-JAN-10 Solvent : Type I Water
 Name: B-2%HNO3/1%HCL-ICPMS Received: 25-JAN-10
 Type: Reagent/Solvent Expires: 01-FEB-10
 Employee: Elizabeth Janssen
 Supplier: GEL
 Description: 2%HNO3/1%HCL Solution (Type I Water)
 Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1252836	I-HNO3	69.0-70.0	180 mL	9 l	N/A
1252838	I-HCL	36.5-38.0	90 mL	9 l	N/A

General Chemistry Analysis

Case Narrative

**General Chemistry Narrative
Los Alamos National Laboratory (LANL)
SDG 10-1212**

Method/Analysis Information

Product: Cyanide, Total
Analytical Batch: 941485 and 941967 **Method:** SW846 9012A
Prep Batch : 941484 and 941966 **Method:** SW846 9010B Prep

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 9012A:

Sample ID	Client ID
244601001	RE12-10-7243
244601002	RE12-10-7240
244601003	RE12-10-7241
244601004	RE12-10-7237
244601005	RE12-10-7239
244601006	RE12-10-7238
244601007	RE12-10-7242
244601008	RE12-10-7236
244601009	RE12-10-7252
244601010	RE12-10-7253
244601011	RE12-10-7254
244601012	RE12-10-7255
244601013	RE12-10-7276
1202015099	Method Blank (MB)
1202015100	244222005(RE16-10-2786) Sample Duplicate (DUP)
1202015102	244222005(RE16-10-2786) Matrix Spike (MS)
1202015104	244222005(RE16-10-2786) Matrix Spike Duplicate (MSD)
1202015106	Laboratory Control Sample (LCS)
1202016404	Method Blank (MB)
1202016405	244601005(RE12-10-7239) Sample Duplicate (DUP)
1202016406	244601006(RE12-10-7238) Sample Duplicate (DUP)
1202016407	244601005(RE12-10-7239) Matrix Spike (MS)
1202016408	244601006(RE12-10-7238) Matrix Spike (MS)
1202016409	244601005(RE12-10-7239) Matrix Spike Duplicate (MSD)
1202016410	244601006(RE12-10-7238) Matrix Spike Duplicate (MSD)
1202016411	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: 244222005 (RE16-10-2786)- Batch 941485, 244601005 (RE12-10-7239) and 244601006 (RE12-10-7238)- Batch 941967.

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. 1202016405 (RE12-10-7239), 1202016406 (RE12-10-7238), 244601005 (RE12-10-7239) and 244601006 (RE12-10-7238)- Batch 941967.

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: 1202015106 (LCS)- Batch 941485 and 1202016411 (LCS)- Batch 941967.

Sample Re-analysis

The following samples were re-analyzed due to CCV failure: 1202016404 (MB), 1202016411 (LCS), 244601009 (RE12-10-7252), 244601010 (RE12-10-7253), 244601011 (RE12-10-7254), 244601012 (RE12-10-7255) and 244601013 (RE12-10-7276)- Batch 941967.

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:  Date: 04Feb10

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: 10-1212 GEL Work Order: 244601

The Qualifiers in this report are defined as follows:

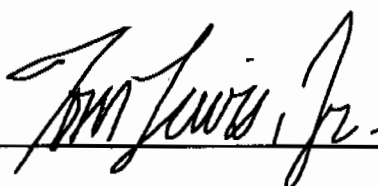
- * Indicates that a quality control analyte recovery is outside of specified acceptance criteria.
- ** Indicates the analyte is a surrogate compound.

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

A handwritten signature in black ink, appearing to read "Tom Lewis, Jr.", is written over a horizontal line.

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 1, 2010

Client SDG: 10-1212

Client Sample ID: RE12-10-7243
Sample ID: 244601001
Matrix: R
Collect Date: 07-JAN-10 12:00
Receive Date: 13-JAN-10
Collector: Client
Moisture: 5.84%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
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Flow Injection Analysis

SW9012A Cyanide, Total "Dry Weight Corrected"

Cyanide, Total	U	ND	69.4	255	ug/kg	1	AXC2	01/19/10	1158	941485	1
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The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/18/10	1537	941484

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: February 1, 2010

Client SDG: 10-1212

Client Sample ID: RE12-10-7240
Sample ID: 244601002
Matrix: R
Collect Date: 07-JAN-10 12:00
Receive Date: 13-JAN-10
Collector: Client
Moisture: 13.5%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
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Flow Injection Analysis

SW9012A Cyanide, Total "Dry Weight Corrected"

Cyanide, Total	U	ND	67.8	249	ug/kg	1	AXC2	01/19/10	1159	941485	1
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The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/18/10	1537	941484

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 1, 2010

Client SDG: 10-1212

Client Sample ID: RE12-10-7241
Sample ID: 244601003
Matrix: R
Collect Date: 07-JAN-10 12:00
Receive Date: 13-JAN-10
Collector: Client
Moisture: 9.37%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
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Flow Injection Analysis

SW9012A Cyanide, Total "Dry Weight Corrected"

Cyanide, Total	U	ND	75.0	276	ug/kg	1	AXC2	01/19/10	1200	941485	1
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The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/18/10	1537	941484

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 1, 2010

Client SDG: 10-1212

Client Sample ID: RE12-10-7237
Sample ID: 244601004
Matrix: R
Collect Date: 07-JAN-10 12:00
Receive Date: 13-JAN-10
Collector: Client
Moisture: 10.1%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	74.2	273	ug/kg	1	AXC2	01/19/10	1201	941485	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/18/10	1537	941484

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 1, 2010

Client SDG: 10-1212

Client Sample ID: RE12-10-7239
Sample ID: 244601005
Matrix: R
Collect Date: 07-JAN-10 12:00
Receive Date: 13-JAN-10
Collector: Client
Moisture: 9.32%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
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Flow Injection Analysis

SW9012A Cyanide, Total "Dry Weight Corrected"

Cyanide, Total	U	ND	75.0	276	ug/kg	1	AXC2	01/21/10	1135	941967	1
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The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/20/10	1551	941966

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 1, 2010

Client SDG: 10-1212

Client Sample ID: RE12-10-7238
Sample ID: 244601006
Matrix: R
Collect Date: 07-JAN-10 12:00
Receive Date: 13-JAN-10
Collector: Client
Moisture: 16.7%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
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Flow Injection Analysis

SW9012A Cyanide, Total "Dry Weight Corrected"

Cyanide, Total	J	186	81.6	300	ug/kg	1	AXC2	01/21/10	1138	941967	1
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The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/20/10	1551	941966

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 1, 2010

Client SDG: 10-1212

Client Sample ID: RE12-10-7242
Sample ID: 244601007
Matrix: R
Collect Date: 07-JAN-10 12:00
Receive Date: 13-JAN-10
Collector: Client
Moisture: 16.3%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
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Flow Injection Analysis

SW9012A Cyanide, Total "Dry Weight Corrected"

Cyanide, Total	U	ND	81.3	299	ug/kg	1	AXC2	01/21/10	1142	941967	1
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The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/20/10	1551	941966

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 1, 2010

Client SDG: 10-1212

Client Sample ID: RE12-10-7236
Sample ID: 244601008
Matrix: R
Collect Date: 07-JAN-10 12:00
Receive Date: 13-JAN-10
Collector: Client
Moisture: 21.7%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	86.8	319	ug/kg	1	AXC2	01/21/10	1143	941967	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/20/10	1551	941966

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 1, 2010

Client SDG: 10-1212

Client Sample ID: RE12-10-7252
Sample ID: 244601009
Matrix: R
Collect Date: 07-JAN-10 12:00
Receive Date: 13-JAN-10
Collector: Client
Moisture: 15.9%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
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Flow Injection Analysis

SW9012A Cyanide, Total "Dry Weight Corrected"

Cyanide, Total	U	ND	80.9	297	ug/kg	1	AXC2	01/21/10	1209	941967	1
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The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/20/10	1551	941966

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 1, 2010

Client SDG: 10-1212

Client Sample ID: RE12-10-7253
Sample ID: 244601010
Matrix: R
Collect Date: 07-JAN-10 12:00
Receive Date: 13-JAN-10
Collector: Client
Moisture: 3.26%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
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Flow Injection Analysis

SW9012A Cyanide, Total "Dry Weight Corrected"

Cyanide, Total	U	ND	70.3	258	ug/kg	1	AXC2	01/21/10	1210	941967	1
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The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXSS	01/20/10	1551	941966

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 1, 2010

Client SDG: 10-1212

Client Sample ID: RE12-10-7254
Sample ID: 244601011
Matrix: R
Collect Date: 07-JAN-10 12:00
Receive Date: 13-JAN-10
Collector: Client
Moisture: 15.3%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
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Flow Injection Analysis

SW9012A Cyanide, Total "Dry Weight Corrected"

Cyanide, Total	U	ND	80.3	295	ug/kg	1	AXC2	01/21/10	1211	941967	1
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The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/20/10	1551	941966

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 1, 2010

Client SDG: 10-1212

Client Sample ID: RE12-10-7255
Sample ID: 244601012
Matrix: R
Collect Date: 07-JAN-10 12:00
Receive Date: 13-JAN-10
Collector: Client
Moisture: 6.61%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	72.8	268	ug/kg	1	AXC2	01/21/10	1212	941967	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/20/10	1551	941966

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 1, 2010

Client SDG: 10-1212

Client Sample ID: RE12-10-7276
Sample ID: 244601013
Matrix: R
Collect Date: 07-JAN-10 12:00
Receive Date: 13-JAN-10
Collector: Client
Moisture: 8.35%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	74.2	273	ug/kg	1	AXC2	01/21/10	1213	941967	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/20/10	1551	941966

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

Quality Control Summary

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QC Summary

Report Date: February 1, 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: 244601

Paramname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Flow Injection Analysis											
Batch	941485										
QC1202015100	244222005	DUP									
Cyanide, Total		U	ND	U	ND	ug/kg	N/A		AXC2	01/19/10	11:32
QC1202015106	LCS										
Cyanide, Total	67900				82000	ug/kg	121	(46%-145%)		01/19/10	11:30
QC1202015099	MB										
Cyanide, Total				U	250	ug/kg				01/19/10	11:30
QC1202015102	244222005	MS									
Cyanide, Total	5540	U	ND		4920	ug/kg	88.8	(50%-130%)		01/19/10	11:33
QC1202015104	244222005	MSD									
Cyanide, Total	5330	U	ND		4230	ug/kg	15.1	79.4	(0%-30%)	01/19/10	11:34
Batch	941967										
QC1202016405	244601005	DUP									
Cyanide, Total		U	ND	U	ND	ug/kg	N/A		AXC2	01/21/10	11:36
QC1202016406	244601006	DUP									
Cyanide, Total		J	186	U	ND	ug/kg	200	^		01/21/10	11:39
QC1202016411	LCS										
Cyanide, Total	67900				78000	ug/kg	110	(46%-145%)		01/21/10	11:30
QC1202016404	MB										
Cyanide, Total				U	250	ug/kg				01/21/10	11:29
QC1202016407	244601005	MS									
Cyanide, Total	5510	U	ND		5730	ug/kg	104	(50%-130%)		01/21/10	11:36
QC1202016408	244601006	MS									
Cyanide, Total	6000	J	186		5700	ug/kg	91.9	(50%-130%)		01/21/10	11:40
QC1202016409	244601005	MSD									
Cyanide, Total	5510	U	ND		6010	ug/kg	4.69	109	(0%-30%)	01/21/10	11:37
QC1202016410	244601006	MSD									
Cyanide, Total	6000	J	186		5830	ug/kg	2.29	94.1	(0%-30%)	01/21/10	11:41

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

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QC Summary

Workorder: 244601

Page 2 of 2

Parname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
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: 01-FEB-2010 14:47

GEL Laboratories LLC

Contract: LANL01004

SDG #: 10-1212

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	19-JAN-2010 11:11:17	OM_1-19-2010_11-00-47	153	150	102	(90%-110%)	Yes
CCV	19-JAN-2010 11:25:35	OM_1-19-2010_11-00-47	107	100	107	(90%-110%)	Yes
CCV	19-JAN-2010 11:38:00	OM_1-19-2010_11-00-47	108	100	108	(90%-110%)	Yes
CCV	19-JAN-2010 11:50:23	OM_1-19-2010_11-00-47	108	100	108	(90%-110%)	Yes
CCV	19-JAN-2010 12:02:04	OM_1-19-2010_11-00-47	108	100	108	(90%-110%)	Yes
ICV	21-JAN-2010 10:34:52	OM_1-21-2010_10-24-21	158	150	105	(90%-110%)	Yes
CCV	21-JAN-2010 11:19:02	OM_1-21-2010_11-18-16	101	100	101	(90%-110%)	Yes
CCV	21-JAN-2010 11:31:25	OM_1-21-2010_11-18-16	96.4	100	96	(90%-110%)	Yes
CCV	21-JAN-2010 11:43:57	OM_1-21-2010_11-18-16	96.2	100	96	(90%-110%)	Yes
CCV	21-JAN-2010 12:06:14	OM_1-21-2010_12-04-42	99.6	100	100	(90%-110%)	Yes
CCV	21-JAN-2010 12:18:43	OM_1-21-2010_12-04-42	99.7	100	100	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	19-JAN-2010 11:13:07	OM_1-19-2010_11-00-47	-2.29	5	Yes
CCB	19-JAN-2010 11:27:25	OM_1-19-2010_11-00-47	-2.44	5	Yes
CCB	19-JAN-2010 11:39:51	OM_1-19-2010_11-00-47	-2.79	5	Yes
CCB	19-JAN-2010 11:52:14	OM_1-19-2010_11-00-47	-2.79	5	Yes
CCB	19-JAN-2010 12:03:54	OM_1-19-2010_11-00-47	-2.79	5	Yes
ICB	21-JAN-2010 10:36:42	OM_1-21-2010_10-24-21	-2.4	5	Yes
CCB	21-JAN-2010 11:20:52	OM_1-21-2010_11-18-16	0.746	5	Yes
CCB	21-JAN-2010 11:33:16	OM_1-21-2010_11-18-16	0.324	5	Yes
CCB	21-JAN-2010 11:45:47	OM_1-21-2010_11-18-16	0.353	5	Yes
CCB	21-JAN-2010 12:08:05	OM_1-21-2010_12-04-42	0.791	5	Yes
CCB	21-JAN-2010 12:20:34	OM_1-21-2010_12-04-42	0.209	5	Yes

Cyanide, Total

Prep LogBook

Analyst: AXS5
 Batch: 941484
 Lab SOP: GL-GC-E-067 REV# 13

Verified by:

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix	Type	Sample Id	Lot. Id	Spike Amount	Spike Units
MB	1202015099		SW846 9010B Prep	18-JAN-2010 15:37	>12	0.5 g	25 mL	50	SOIL	LCS	1202015106	URF1200957-01	.25	g
LCS	1202015106		SW846 9010B Prep	18-JAN-2010 15:37	>12	0.25 g	25 mL	100	SOIL	MS	1202015102	URF1184831-02	.025	mL
SAMPLE	244222005		SW846 9010B Prep	18-JAN-2010 15:37	>12	0.56 g	25 mL	44.64286	SOIL	MS	1202015103	URF1184831-02	.025	mL
DUP	1202015100	244222005	SW846 9010B Prep	18-JAN-2010 15:37	>12	0.55 g	25 mL	45.45455	SOIL	MSD	1202015104	URF1184831-02	.025	mL
MS	1202015102	244222005	SW846 9010B Prep	18-JAN-2010 15:37	>12	0.5 g	25 mL	50	SOIL	MSD	1202015105	URF1184831-02	.025	mL
MSD	1202015104	244222005	SW846 9010B Prep	18-JAN-2010 15:37	>12	0.52 g	25 mL	48.07692	SOIL					
SAMPLE	244515001		SW846 9010B Prep	18-JAN-2010 15:37	>12	0.56 g	25 mL	44.64286	SOIL					
SAMPLE	244515002		SW846 9010B Prep	18-JAN-2010 15:37	>12	0.55 g	25 mL	45.45455	SOIL					
SAMPLE	244515003		SW846 9010B Prep	18-JAN-2010 15:37	>12	0.56 g	25 mL	44.64286	SOIL					
SAMPLE	244515004		SW846 9010B Prep	18-JAN-2010 15:37	>12	0.51 g	25 mL	49.01961	SOIL					
SAMPLE	244515005		SW846 9010B Prep	18-JAN-2010 15:37	>12	0.52 g	25 mL	48.07692	SOIL					
SAMPLE	244515006		SW846 9010B Prep	18-JAN-2010 15:37	>12	0.51 g	25 mL	49.01961	SOIL					
SAMPLE	244515007		SW846 9010B Prep	18-JAN-2010 15:37	>12	0.57 g	25 mL	43.85965	SOIL					
SAMPLE	244515008		SW846 9010B Prep	18-JAN-2010 15:37	>12	0.5 g	25 mL	50	SOIL					
SAMPLE	244519001		SW846 9010B Prep	18-JAN-2010 15:37	>12	0.55 g	25 mL	45.45455	SOIL					
DUP	1202015101	244519001	SW846 9010B Prep	18-JAN-2010 15:37	>12	0.56 g	25 mL	44.64286	SOIL					
MS	1202015103	244519001	SW846 9010B Prep	18-JAN-2010 15:37	>12	0.53 g	25 mL	47.16981	SOIL					
MSD	1202015105	244519001	SW846 9010B Prep	18-JAN-2010 15:37	>12	0.5 g	25 mL	50	SOIL					
SAMPLE	244519002		SW846 9010B Prep	18-JAN-2010 15:37	>12	0.5 g	25 mL	50	SOIL					
SAMPLE	244519003		SW846 9010B Prep	18-JAN-2010 15:37	>12	0.54 g	25 mL	46.2963	SOIL					
SAMPLE	244519004		SW846 9010B Prep	18-JAN-2010 15:37	>12	0.56 g	25 mL	44.64286	SOIL					
SAMPLE	244519005		SW846 9010B Prep	18-JAN-2010 15:37	>12	0.52 g	25 mL	48.07692	SOIL					
SAMPLE	244519006		SW846 9010B Prep	18-JAN-2010 15:37	>12	0.58 g	25 mL	43.10345	SOIL					
SAMPLE	244597001		SW846 9010B Prep	18-JAN-2010 15:37	>12	0.55 g	25 mL	45.45455	SOIL					
SAMPLE	244601001		SW846 9010B Prep	18-JAN-2010 15:37	>12	0.52 g	25 mL	48.07692	SOIL					
SAMPLE	244601002		SW846 9010B Prep	18-JAN-2010 15:37	>12	0.58 g	25 mL	43.10345	SOIL					
SAMPLE	244601003		SW846 9010B Prep	18-JAN-2010 15:37	>12	0.5 g	25 mL	50	SOIL					
SAMPLE	244601004		SW846 9010B Prep	18-JAN-2010 15:37	>12	0.51 g	25 mL	49.01961	SOIL					

Prep LogBook

Reagent/Solvent Lot ID	Amount	Description	Comments:
091211-C	25 mL	0.25N Sodium Hydroxide Solution	
WCN100118-07	.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	

Prep LogBook

Analyst: AXS5 Verified by: _____

Batch: 941966

Lab SOP: GL-GC-E-067 REV# 13

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Spike Amount	Spike Units
MB	1202016404		SW846 9010B Prep	20-JAN-2010 15:51	>12	0.5 g	25 mL	50	.25	g
LCS	1202016411		SW846 9010B Prep	20-JAN-2010 15:51	>12	0.25 g	25 mL	100	.025	mL
SAMPLE	244601005		SW846 9010B Prep	20-JAN-2010 15:51	>12	0.5 g	25 mL	50	.025	mL
DUP	1202016405	244601005	SW846 9010B Prep	20-JAN-2010 15:51	>12	0.5 g	25 mL	50	.025	mL
MS	1202016407	244601005	SW846 9010B Prep	20-JAN-2010 15:51	>12	0.5 g	25 mL	50	.025	mL
MSD	1202016409	244601005	SW846 9010B Prep	20-JAN-2010 15:51	>12	0.5 g	25 mL	50	.025	mL
SAMPLE	244601006		SW846 9010B Prep	20-JAN-2010 15:51	>12	0.5 g	25 mL	50	.025	mL
DUP	1202016406	244601006	SW846 9010B Prep	20-JAN-2010 15:51	>12	0.5 g	25 mL	50	.025	mL
MS	1202016408	244601006	SW846 9010B Prep	20-JAN-2010 15:51	>12	0.5 g	25 mL	50	.025	mL
MSD	1202016410	244601006	SW846 9010B Prep	20-JAN-2010 15:51	>12	0.5 g	25 mL	50	.025	mL
SAMPLE	244601007		SW846 9010B Prep	20-JAN-2010 15:51	>12	0.5 g	25 mL	50	.025	mL
SAMPLE	244601008		SW846 9010B Prep	20-JAN-2010 15:51	>12	0.5 g	25 mL	50	.025	mL
SAMPLE	244601009		SW846 9010B Prep	20-JAN-2010 15:51	>12	0.5 g	25 mL	50	.025	mL
SAMPLE	244601010		SW846 9010B Prep	20-JAN-2010 15:51	>12	0.5 g	25 mL	50	.025	mL
SAMPLE	244601011		SW846 9010B Prep	20-JAN-2010 15:51	>12	0.5 g	25 mL	50	.025	mL
SAMPLE	244601012		SW846 9010B Prep	20-JAN-2010 15:51	>12	0.5 g	25 mL	50	.025	mL
SAMPLE	244601013		SW846 9010B Prep	20-JAN-2010 15:51	>12	0.5 g	25 mL	50	.025	mL
SAMPLE	244604001		SW846 9010B Prep	20-JAN-2010 15:51	>12	0.5 g	25 mL	50	.025	mL
SAMPLE	244604002		SW846 9010B Prep	20-JAN-2010 15:51	>12	0.5 g	25 mL	50	.025	mL
SAMPLE	244628001		SW846 9010B Prep	20-JAN-2010 15:51	>12	0.5 g	25 mL	50	.025	mL
SAMPLE	244628002		SW846 9010B Prep	20-JAN-2010 15:51	>12	0.5 g	25 mL	50	.025	mL
SAMPLE	244628003		SW846 9010B Prep	20-JAN-2010 15:51	>12	0.5 g	25 mL	50	.025	mL
SAMPLE	244628004		SW846 9010B Prep	20-JAN-2010 15:51	>12	0.5 g	25 mL	50	.025	mL
SAMPLE	244628005		SW846 9010B Prep	20-JAN-2010 15:51	>12	0.5 g	25 mL	50	.025	mL
SAMPLE	244628006		SW846 9010B Prep	20-JAN-2010 15:51	>12	0.5 g	25 mL	50	.025	mL
SAMPLE	244628007		SW846 9010B Prep	20-JAN-2010 15:51	>12	0.5 g	25 mL	50	.025	mL
SAMPLE	244628008		SW846 9010B Prep	20-JAN-2010 15:51	>12	0.5 g	25 mL	50	.025	mL
SAMPLE	244628009		SW846 9010B Prep	20-JAN-2010 15:51	>12	0.5 g	25 mL	50	.025	mL

Prep Data Logbook Version 1.1

GEL Laboratories LLC

Page#

Prep LogBook

Reagent/Solvent Lot ID	Amount	Description	Comments
091211-C	25 mL	0.25N Sodium Hydroxide Solution	
WCN1001119-07	.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	

This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
200 ppb		1	axc2	1/19/2010 11:04:07	OM_1-19-2010_11-00-47
150 ppb		1	axc2	1/19/2010 11:05:00	OM_1-19-2010_11-00-47
100 ppb		1	axc2	1/19/2010 11:05:52	OM_1-19-2010_11-00-47
50 ppb		1	axc2	1/19/2010 11:06:45	OM_1-19-2010_11-00-47
10 ppb		1	axc2	1/19/2010 11:07:38	OM_1-19-2010_11-00-47
CRDL 5.0 ppb		1	axc2	1/19/2010 11:08:32	OM_1-19-2010_11-00-47
ICAL-00		1	axc2	1/19/2010 11:09:26	OM_1-19-2010_11-00-47
ICV		1	axc2	1/19/2010 11:11:17	OM_1-19-2010_11-00-47
ICB		1	axc2	1/19/2010 11:13:07	OM_1-19-2010_11-00-47
CRDL		1	axc2	1/19/2010 11:14:58	OM_1-19-2010_11-00-47
1202012107	940253	1	axc2	1/19/2010 11:16:47	OM_1-19-2010_11-00-47
1202012109	940253	250	axc2	1/19/2010 11:17:41	OM_1-19-2010_11-00-47
243905001	940253	1	axc2	1/19/2010 11:18:34	OM_1-19-2010_11-00-47
244122001	940253	1	axc2	1/19/2010 11:19:27	OM_1-19-2010_11-00-47
244189001	940253	1	axc2	1/19/2010 11:20:20	OM_1-19-2010_11-00-47
1202012108	940253	1	axc2	1/19/2010 11:21:13	OM_1-19-2010_11-00-47
244189002	940253	1	axc2	1/19/2010 11:22:06	OM_1-19-2010_11-00-47
244189003	940253	1	axc2	1/19/2010 11:22:58	OM_1-19-2010_11-00-47
244189004	940253	1	axc2	1/19/2010 11:23:50	OM_1-19-2010_11-00-47
244189005	940253	1	axc2	1/19/2010 11:24:43	OM_1-19-2010_11-00-47
CCV		1	axc2	1/19/2010 11:25:35	OM_1-19-2010_11-00-47
CCB		1	axc2	1/19/2010 11:27:25	OM_1-19-2010_11-00-47
244189006	940253	1	axc2	1/19/2010 11:29:13	OM_1-19-2010_11-00-47
1202015099	941485	1	axc2	1/19/2010 11:30:05	OM_1-19-2010_11-00-47
1202015106	941485	25	axc2	1/19/2010 11:30:57	OM_1-19-2010_11-00-47
244222005	941485	1	axc2	1/19/2010 11:31:49	OM_1-19-2010_11-00-47
1202015100	941485	1	axc2	1/19/2010 11:32:40	OM_1-19-2010_11-00-47
1202015102	941485	1	axc2	1/19/2010 11:33:35	OM_1-19-2010_11-00-47
1202015104	941485	1	axc2	1/19/2010 11:34:28	OM_1-19-2010_11-00-47
244515001	941485	1	axc2	1/19/2010 11:35:21	OM_1-19-2010_11-00-47
244515002	941485	1	axc2	1/19/2010 11:36:14	OM_1-19-2010_11-00-47
244515003	941485	1	axc2	1/19/2010 11:37:08	OM_1-19-2010_11-00-47
CCV		1	axc2	1/19/2010 11:38:00	OM_1-19-2010_11-00-47
CCB		1	axc2	1/19/2010 11:39:51	OM_1-19-2010_11-00-47
244515004	941485	1	axc2	1/19/2010 11:41:40	OM_1-19-2010_11-00-47
244515005	941485	1	axc2	1/19/2010 11:42:33	OM_1-19-2010_11-00-47
244515006	941485	1	axc2	1/19/2010 11:43:27	OM_1-19-2010_11-00-47
244515007	941485	1	axc2	1/19/2010 11:44:19	OM_1-19-2010_11-00-47
244515008	941485	1	axc2	1/19/2010 11:45:11	OM_1-19-2010_11-00-47
244519001	941485	1	axc2	1/19/2010 11:46:03	OM_1-19-2010_11-00-47
1202015101	941485	1	axc2	1/19/2010 11:46:55	OM_1-19-2010_11-00-47
1202015103	941485	1	axc2	1/19/2010 11:47:48	OM_1-19-2010_11-00-47
1202015105	941485	1	axc2	1/19/2010 11:48:40	OM_1-19-2010_11-00-47
244519002	941485	1	axc2	1/19/2010 11:49:31	OM_1-19-2010_11-00-47
CCV		1	axc2	1/19/2010 11:50:23	OM_1-19-2010_11-00-47
CCB		1	axc2	1/19/2010 11:52:14	OM_1-19-2010_11-00-47
244519003	941485	1	axc2	1/19/2010 11:54:06	OM_1-19-2010_11-00-47
244519004	941485	1	axc2	1/19/2010 11:55:00	OM_1-19-2010_11-00-47
244519005	941485	1	axc2	1/19/2010 11:55:53	OM_1-19-2010_11-00-47
244519006	941485	1	axc2	1/19/2010 11:56:46	OM_1-19-2010_11-00-47
244597001	941485	1	axc2	1/19/2010 11:57:39	OM_1-19-2010_11-00-47
244601001	941485	1	axc2	1/19/2010 11:58:33	OM_1-19-2010_11-00-47
244601002	941485	1	axc2	1/19/2010 11:59:26	OM_1-19-2010_11-00-47
244601003	941485	1	axc2	1/19/2010 12:00:18	OM_1-19-2010_11-00-47
244601004	941485	1	axc2	1/19/2010 12:01:11	OM_1-19-2010_11-00-47
CCV		1	axc2	1/19/2010 12:02:04	OM_1-19-2010_11-00-47
CCB		1	axc2	1/19/2010 12:03:54	OM_1-19-2010_11-00-47

Original Run Filename: OM_1-19-2010_11-00-47.OMN created 1/19/2010 11:00:47
 Original Run Author's Signature: [axc2]
 Current Run Filename: OM_1-19-2010_11-00-47.OMN last modified 1/19/2010 12:04:59
 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		Detection Time	ADF	MDF	Description
			Conc. (ug/L)	Area (Vs)				
WCN100119-01	1	S1	200	6.82	1/19/2010@11:04:07			200 ppb
WCN100119-02	1	S2	150	5.28	1/19/2010@11:05:00			150 ppb
WCN100119-03	1	S3	100	3.55	1/19/2010@11:05:52			100 ppb
WCN100119-04	1	S4	50.0	1.84	1/19/2010@11:06:45			50 ppb
WCN100119-05	1	S5	10.0	0.444	1/19/2010@11:07:38			10 ppb
WCN100119-06	1	S6	5.00	0.276	1/19/2010@11:08:32			CRDL 5.0 ppb
WCN100119-08	1	S7	0.00	0.0125	1/19/2010@11:09:26			0.0 ppb
DQM Test: Minimum Correlation Coefficient								
Result:			0.99973 > 0.99500					
Message			Pass					
Action			Continue					
WCN100119-07	1	S8	153	5.30	1/19/2010@11:11:17			ICV
Known Conc:			150					
DQM Test: > + Percent Relative Difference								
Result:			1.8 < 10.0					
Message			ICV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			1.8 < 10.0					
Message			ICV Passed					
Action			Continue					
Calibration:			Table/Fig. 1					
WCN100119-08	1	S7	-2.29	0.0169	1/19/2010@11:13:07			ICB/CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-2.29 < 5.01					
Message			ICB/CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-2.29 > -5.01					
Message			ICB/CCB Passed					
Action			Continue					
WCN100119-06	1	S6	5.83	0.294	1/19/2010@11:14:58			CRDL
Known Conc:			5.00					
DQM Test: > + Concentration Limit								
Result:			5.83 < 7.50					
Message			CRDL Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			5.83 > 2.50					
Message			Pass					
Action			None					
1202012107|940253|MB	1	1	-2.43	0.0122	1/19/2010@11:16:47			
1202012109||LCS	1	2	80.9	2.85	1/19/2010@11:17:41		250.00	
243905001	1	3	-2.01	0.0265	1/19/2010@11:18:34			
244122001	1	4	-1.69	0.0374	1/19/2010@11:19:27			
244189001	1	5	-2.78	2.66e-4	1/19/2010@11:20:20			
1202012108||DUP	1	6	-2.83	-0.00162	1/19/2010@11:21:13			
244189002	1	7	-2.71	0.00247	1/19/2010@11:22:06			
244189003	1	8	-1.18	0.0548	1/19/2010@11:22:58			
244189004	1	9	-1.21	0.0538	1/19/2010@11:23:50			
244189005	1	10	-2.43	0.0122	1/19/2010@11:24:43			
WCN100119-03	1	S3	107	3.73	1/19/2010@11:25:35			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			6.7 < 10.0					
Message			CCV Passed					

		Action	Continue						
		DQM Test: < - Percent Relative Difference							
		Result:	6.7 < 10.0						
		Message	CCV Passed						
		Action	Continue						
WCN100119-08	1	S7	-2.44	0.0116	1/19/2010@11:27:25				CCB
		Known Conc:	0.00						
		DQM Test: > + Concentration Limit							
		Result:	-2.44 < 5.00						
		Message	CCB Passed						
		Action	Continue						
		DQM Test: < - Concentration Limit							
		Result:	-2.44 > -5.00						
		Message	CCB Passed						
		Action	Continue						
244189006	1	11	-2.81	-6.51e-4	1/19/2010@11:29:13				
1202015099|941485|MB	1	12	-2.41	0.0128	1/19/2010@11:30:05				
1202015106|LCS	1	13	32.8	1.21	1/19/2010@11:30:57			25.00	
244222005	1	14	-0.352	0.0829	1/19/2010@11:31:49				
1202015100|DUP	1	15	-0.382	0.0819	1/19/2010@11:32:40				
1202015102|MS	1	16	88.8	3.12	1/19/2010@11:33:35				
1202015104|MSD	1	17	79.4	2.80	1/19/2010@11:34:28				
244515001	1	18	-1.70	0.0369	1/19/2010@11:35:21				
244515002	1	19	-1.92	0.0296	1/19/2010@11:36:14				
244515003	1	20	-0.880	0.0649	1/19/2010@11:37:08				
WCN100119-03	1	S3	108	3.76	1/19/2010@11:38:00				CCV
		Known Conc:	100						
		DQM Test: > + Percent Relative Difference							
		Result:	7.7 < 10.0						
		Message	CCV Passed						
		Action	Continue						
		DQM Test: < - Percent Relative Difference							
		Result:	7.7 < 10.0						
		Message	CCV Passed						
		Action	Continue						
WCN100119-08	1	S7	-2.79	-2.14e-4	1/19/2010@11:39:51				CCB
		Known Conc:	0.00						
		DQM Test: > + Concentration Limit							
		Result:	-2.79 < 5.00						
		Message	CCB Passed						
		Action	Continue						
		DQM Test: < - Concentration Limit							
		Result:	-2.79 > -5.00						
		Message	CCB Passed						
		Action	Continue						
244515004	1	21	-1.74	0.0356	1/19/2010@11:41:40				
244515005	1	22	-1.79	0.0339	1/19/2010@11:42:33				
244515006	1	23	-3.35	-0.0193	1/19/2010@11:43:27				
244515007	1	24	-2.93	-0.00487	1/19/2010@11:44:19				
244515008	1	25	-2.79	-1.43e-4	1/19/2010@11:45:11				
244519001	1	26	0.990	0.129	1/19/2010@11:46:03				
1202015101|DUP	1	27	0.208	0.102	1/19/2010@11:46:55				
1202015103|MS	1	28	103	3.61	1/19/2010@11:47:48				
1202015105|MSD	1	29	56.0	2.00	1/19/2010@11:48:40				
244519002	1	30	-0.585	0.0750	1/19/2010@11:49:31				
WCN100119-03	1	S3	108	3.76	1/19/2010@11:50:23				CCV
		Known Conc:	100						
		DQM Test: > + Percent Relative Difference							
		Result:	7.6 < 10.0						
		Message	CCV Passed						
		Action	Continue						
		DQM Test: < - Percent Relative Difference							
		Result:	7.6 < 10.0						
		Message	CCV Passed						
		Action	Continue						
WCN100119-08	1	S7	-2.79	-1.27e-4	1/19/2010@11:52:14				CCB
		Known Conc:	0.00						
		DQM Test: > + Concentration Limit							

		Result:	-2.79 < 5.00				
		Message	CCB Passed				
		Action	Continue				
DQM Test: < - Concentration Limit							
		Result:	-2.79 > -5.00				
		Message	CCB Passed				
		Action	Continue				
244519003	1	31	3.76	0.223	1/19/2010@11:54:06		
244519004	1	32	4.72	0.256	1/19/2010@11:55:00		
244519005	1	33	-0.763	0.0689	1/19/2010@11:55:53		
244519006	1	34	0.906	0.126	1/19/2010@11:56:46		
244597001	1	35	0.597	0.115	1/19/2010@11:57:39		
244601001	1	36	-1.60	0.0403	1/19/2010@11:58:33		
244601002	1	37	-1.74	0.0356	1/19/2010@11:59:26		
244601003	1	38	-1.98	0.0275	1/19/2010@12:00:18		
244601004	1	39	-2.79	-2.15e-4	1/19/2010@12:01:11		
WCN100119-03	1	S3	108	3.78	1/19/2010@12:02:04		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				
WCN100119-08	1	S7	-2.79	-2.62e-4	1/19/2010@12:03:54		CCB
		Known Conc:	0.00				
DQM Test: > + Concentration Limit							
		Result:	-2.79 < 5.00				
		Message	CCB Passed				
		Action	Continue				
DQM Test: < - Concentration Limit							
		Result:	-2.79 > -5.00				
		Message	CCB Passed				
		Action	Continue				

Analyte Properties Table for OM_1-19-2010_11-00-47.OMN

Property	Channel 1
	TCYANIDE
Concentration Units	ug/L
Calibration 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

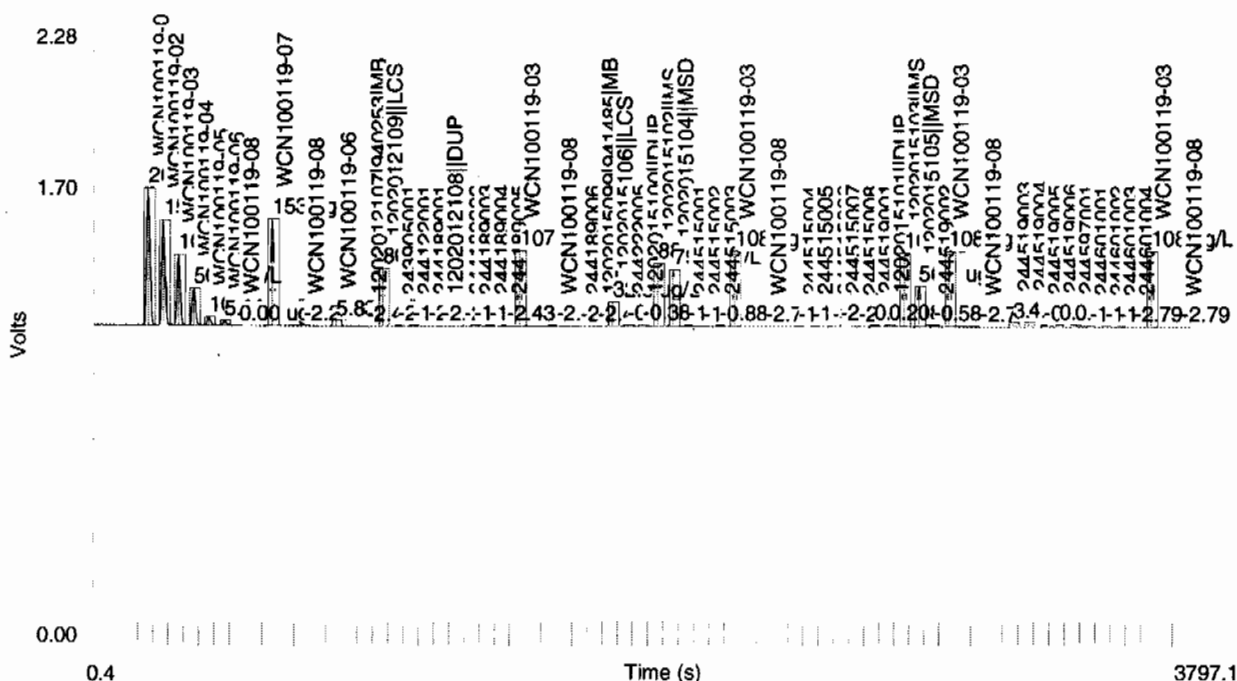
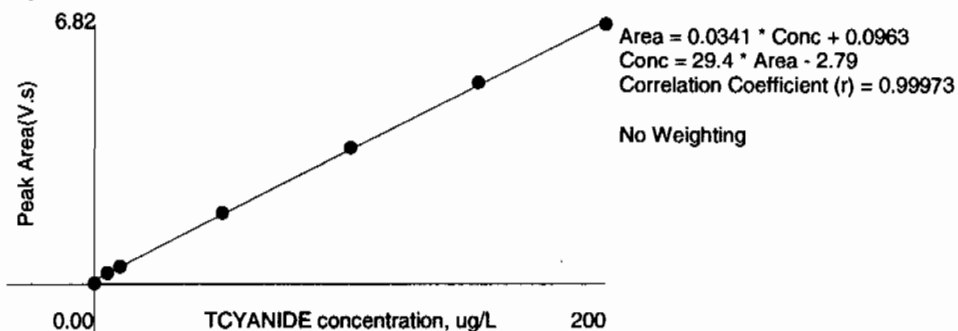


Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	6.82	0.518	1.2	1/19/2010	11:05:10
2	150	1	5.28	0.398	-1.4	1/19/2010	11:06:02
3	100	1	3.55	0.267	-1.3	1/19/2010	11:06:55
4	50.0	1	1.84	0.141	-2.0	1/19/2010	11:07:48
5	10.0	1	0.444	0.0325	-1.6	1/19/2010	11:08:41
6	5.00	1	0.276	0.0199	-3.7	1/19/2010	11:09:35
7	0.00	1	0.0125	8.42e-4		1/19/2010	11:10:29

Figure 1: TCYANIDE



This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
200 ppb		1	axc2	1/21/2010 10:27:43	OM_1-21-2010_10-24-21
150 ppb		1	axc2	1/21/2010 10:28:35	OM_1-21-2010_10-24-21
100 ppb		1	axc2	1/21/2010 10:29:27	OM_1-21-2010_10-24-21
50 ppb		1	axc2	1/21/2010 10:30:20	OM_1-21-2010_10-24-21
10 ppb		1	axc2	1/21/2010 10:31:13	OM_1-21-2010_10-24-21
CRDL 5.0 ppb		1	axc2	1/21/2010 10:32:07	OM_1-21-2010_10-24-21
ICAL-00		1	axc2	1/21/2010 10:33:01	OM_1-21-2010_10-24-21
ICV		1	axc2	1/21/2010 10:34:52	OM_1-21-2010_10-24-21
ICB		1	axc2	1/21/2010 10:36:42	OM_1-21-2010_10-24-21
CRDL		1	axc2	1/21/2010 10:38:32	OM_1-21-2010_10-24-21
1202016428	941971	1	axc2	1/21/2010 10:40:22	OM_1-21-2010_10-24-21
1202016432	941971	25	axc2	1/21/2010 10:41:15	OM_1-21-2010_10-24-21
244612001	941971	1	axc2	1/21/2010 10:42:08	OM_1-21-2010_10-24-21
1202017516	941971	1	axc2	1/21/2010 10:43:01	OM_1-21-2010_10-24-21
1202017517	941971	1	axc2	1/21/2010 10:43:54	OM_1-21-2010_10-24-21
1202017518	941971	1	axc2	1/21/2010 10:44:47	OM_1-21-2010_10-24-21
244619001	941971	1	axc2	1/21/2010 10:45:40	OM_1-21-2010_10-24-21
244619003	941971	1	axc2	1/21/2010 10:46:33	OM_1-21-2010_10-24-21
244622001	941971	1	axc2	1/21/2010 10:47:25	OM_1-21-2010_10-24-21
244622002	941971	1	axc2	1/21/2010 10:48:17	OM_1-21-2010_10-24-21
CCV		1	axc2	1/21/2010 10:49:09	OM_1-21-2010_10-24-21
CCB		1	axc2	1/21/2010 10:51:00	OM_1-21-2010_10-24-21
244628010	941971	1	axc2	1/21/2010 10:52:48	OM_1-21-2010_10-24-21
1202016429	941971	1	axc2	1/21/2010 10:53:40	OM_1-21-2010_10-24-21
1202016430	941971	1	axc2	1/21/2010 10:54:33	OM_1-21-2010_10-24-21
1202016431	941971	1	axc2	1/21/2010 10:55:24	OM_1-21-2010_10-24-21
244628011	941971	1	axc2	1/21/2010 10:56:15	OM_1-21-2010_10-24-21
244628012	941971	1	axc2	1/21/2010 10:57:09	OM_1-21-2010_10-24-21
244628013	941971	1	axc2	1/21/2010 10:58:03	OM_1-21-2010_10-24-21
244628014	941971	1	axc2	1/21/2010 10:58:56	OM_1-21-2010_10-24-21
244628015	941971	1	axc2	1/21/2010 10:59:49	OM_1-21-2010_10-24-21
244628016	941971	1	axc2	1/21/2010 11:00:43	OM_1-21-2010_10-24-21
CCV		1	axc2	1/21/2010 11:01:36	OM_1-21-2010_10-24-21
CCB		1	axc2	1/21/2010 11:03:26	OM_1-21-2010_10-24-21
244721001*	941971	1	axc2	1/21/2010 11:05:15	OM_1-21-2010_10-24-21
244721002*	941971	1	axc2	1/21/2010 11:06:08	OM_1-21-2010_10-24-21
244721003*	941971	1	axc2	1/21/2010 11:07:01	OM_1-21-2010_10-24-21
244721004*	941971	1	axc2	1/21/2010 11:07:53	OM_1-21-2010_10-24-21
244721005*	941971	1	axc2	1/21/2010 11:08:46	OM_1-21-2010_10-24-21
244721006*	941971	1	axc2	1/21/2010 11:09:38	OM_1-21-2010_10-24-21
244721007*	941971	1	axc2	1/21/2010 11:10:30	OM_1-21-2010_10-24-21
244721008*	941971	1	axc2	1/21/2010 11:11:22	OM_1-21-2010_10-24-21
1202016404*	941967	1	axc2	1/21/2010 11:12:15	OM_1-21-2010_10-24-21
1202016411*	941967	25	axc2	1/21/2010 11:13:07	OM_1-21-2010_10-24-21
CCV		1	axc2	1/21/2010 11:13:59	OM_1-21-2010_10-24-21

Author: axc2

Date : 1/22/2010

Original Run Filename: OM_1-21-2010_10-24-21.OMN created 1/21/2010 10:24:21
 Original Run Author's Signature: [axc2]
 Current Run Filename: OM_1-21-2010_10-24-21.OMN last modified 1/21/2010 11:15:04
 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		Detection Time	ADF	MDF	Description
			Conc. (ug/L)	Area (Vs)				
WCN10012101	1	S1	200	6.67	1/21/2010@10:27:43			200 ppb
WCN100121-02	1	S2	150	5.08	1/21/2010@10:28:35			150 ppb
WCN100121-03	1	S3	100	3.41	1/21/2010@10:29:27			100 ppb
WCN100121-04	1	S4	50.0	1.78	1/21/2010@10:30:20			50 ppb
WCN100121-05	1	S5	10.0	0.469	1/21/2010@10:31:13			10 ppb
WCN100121-06	1	S6	5.00	0.298	1/21/2010@10:32:07			CRDL 5.0 ppb
WCN100121-08	1	S7	0.00	-0.00455	1/21/2010@10:33:01			0.0 ppb
DQM Test: Minimum Correlation Coefficient								
Result:			0.99980 > 0.99500					
Message			Pass					
Action			Continue					
WCN100121-07	1	S8	158	5.30	1/21/2010@10:34:52			ICV
Known Conc:			150					
DQM Test: > + Percent Relative Difference								
Result:			5.0 < 10.0					
Message			ICV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			5.0 < 10.0					
Message			ICV Passed					
Action			Continue					
Calibration:			Table/Fig. 1					
WCN100121-08	1	S7	-2.40	0.0191	1/21/2010@10:36:42			ICB/CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-2.40 < 5.01					
Message			ICB/CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-2.40 > -5.01					
Message			ICB/CCB Passed					
Action			Continue					
WCN100121-06	1	S6	5.87	0.292	1/21/2010@10:38:32			CRDL
Known Conc:			5.00					
DQM Test: > + Concentration Limit								
Result:			5.87 < 7.50					
Message			CRDL Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			5.87 > 2.50					
Message			Pass					
Action			None					
1202016428|941971|MB	1	1	-2.00	0.0322	1/21/2010@10:40:22			
1202016432|LCS	1	2	31.6	1.14	1/21/2010@10:41:15		25.00	
244612001	1	3	-1.49	0.0492	1/21/2010@10:42:08			
1202017516|DUP	1	4	-1.96	0.0337	1/21/2010@10:43:01			
1202017517|MS	1	5	109	3.69	1/21/2010@10:43:54			
1202017518|MSD	1	6	107	3.63	1/21/2010@10:44:47			
244619001	1	7	0.140	0.103	1/21/2010@10:45:40			
244619003	1	8	0.0720	0.101	1/21/2010@10:46:33			
244622001	1	9	-1.77	0.0398	1/21/2010@10:47:25			
244622002	1	10	-1.91	0.0351	1/21/2010@10:48:17			
WCN100121-03	1	S3	104	3.53	1/21/2010@10:49:09			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			3.9 < 10.0					
Message			CCV Passed					

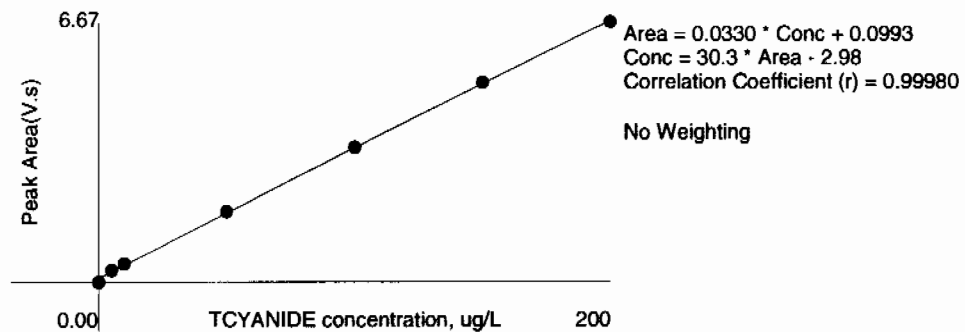
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			3.9 < 10.0					
Message			CCV Passed					
Action			Continue					
WCN100121-08	1	S7	-0.243	0.0903	1/21/2010@10:51:00			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-0.243 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-0.243 > -5.00					
Message			CCB Passed					
Action			Continue					
244628010	1	11	1.90	0.161	1/21/2010@10:52:48			
1202016429|DUP	1	12	3.43	0.212	1/21/2010@10:53:40			
1202016430|MS	1	13	91.4	3.12	1/21/2010@10:54:33			
1202016431|MSD	1	14	99.1	3.37	1/21/2010@10:55:24			
244628011	1	15	1.13	0.136	1/21/2010@10:56:15			
244628012	1	16	0.879	0.127	1/21/2010@10:57:09			
244628013	1	17	-0.820	0.0712	1/21/2010@10:58:03			
244628014	1	18	-3.16	-0.00624	1/21/2010@10:58:56			
244628015	1	19	2.03	0.165	1/21/2010@10:59:49			
244628016	1	20	-2.23	0.0247	1/21/2010@11:00:43			
WCN100121-03	1	S3	107	3.65	1/21/2010@11:01:36			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					
WCN100121-08	1	S7	1.15	0.137	1/21/2010@11:03:26			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			1.15 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			1.15 > -5.00					
Message			CCB Passed					
Action			Continue					
244721001	1	21	0.0472	0.0999	1/21/2010@11:05:15			
244721002	1	22	-1.32	0.0546	1/21/2010@11:06:08			
244721003	1	23	-0.588	0.0789	1/21/2010@11:07:01			
244721004	1	24	4.11	0.234	1/21/2010@11:07:53			
244721005	1	25	-1.73	0.0410	1/21/2010@11:08:46			
244721006	1	26	3.04	0.199	1/21/2010@11:09:38			
244721007	1	27	0.176	0.104	1/21/2010@11:10:30			
244721008	1	28	-0.868	0.0697	1/21/2010@11:11:22			
1202016404|941967|MB	1	29	-2.13	0.0279	1/21/2010@11:12:15			
1202016411|LCS	1	30	30.0	1.09	1/21/2010@11:13:07		25.00	
WCN100121-03	1	S3	111	3.78	1/21/2010@11:13:59			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			11.5 > 10.0					
Message			CCV Failed					
Action			Stop Run					
DQM Test: < - Percent Relative Difference								
Result:			11.5 > 10.0					
Message			CCV Passed					
Action			Continue					

Analyte Properties Table for OM_1-21-2010_10-24-21.OMN

Property	Channel 1
	TCYANIDE
Concentration Units	ug/L
Calibration 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

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	6.67	0.502	0.6	1/21/2010	10:28:46
2	150	1	5.08	0.383	-0.6	1/21/2010	10:29:38
3	100	1	3.41	0.258	-0.3	1/21/2010	10:30:30
4	50.0	1	1.78	0.135	-1.6	1/21/2010	10:31:23
5	10.0	1	0.469	0.0346	-9.1	1/21/2010	10:32:16
6	5.00	1	0.298	0.0213	-12.7	1/21/2010	10:33:10
7	0.00	1	-0.00455	-0.00192		1/21/2010	10:34:04

Figure 1: TCYANIDE



This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
CCV		1	axc2	1/21/2010 11:19:02	OM_1-21-2010_11-18-16
CCB		1	axc2	1/21/2010 11:20:52	OM_1-21-2010_11-18-16
244721001	941971	1	axc2	1/21/2010 11:22:42	OM_1-21-2010_11-18-16
244721002	941971	1	axc2	1/21/2010 11:23:35	OM_1-21-2010_11-18-16
244721003	941971	1	axc2	1/21/2010 11:24:27	OM_1-21-2010_11-18-16
244721004	941971	1	axc2	1/21/2010 11:25:20	OM_1-21-2010_11-18-16
244721005	941971	1	axc2	1/21/2010 11:26:13	OM_1-21-2010_11-18-16
244721006	941971	1	axc2	1/21/2010 11:27:05	OM_1-21-2010_11-18-16
244721007	941971	1	axc2	1/21/2010 11:27:57	OM_1-21-2010_11-18-16
244721008	941971	1	axc2	1/21/2010 11:28:49	OM_1-21-2010_11-18-16
1202016404	941967	1	axc2	1/21/2010 11:29:41	OM_1-21-2010_11-18-16
1202016411	941967	25	axc2	1/21/2010 11:30:33	OM_1-21-2010_11-18-16
CCV		1	axc2	1/21/2010 11:31:25	OM_1-21-2010_11-18-16
CCB		1	axc2	1/21/2010 11:33:16	OM_1-21-2010_11-18-16
244601005	941967	1	axc2	1/21/2010 11:35:06	OM_1-21-2010_11-18-16
1202016405	941967	1	axc2	1/21/2010 11:36:00	OM_1-21-2010_11-18-16
1202016407	941967	1	axc2	1/21/2010 11:36:53	OM_1-21-2010_11-18-16
1202016409	941967	1	axc2	1/21/2010 11:37:47	OM_1-21-2010_11-18-16
244601006	941967	1	axc2	1/21/2010 11:38:40	OM_1-21-2010_11-18-16
1202016406	941967	1	axc2	1/21/2010 11:39:33	OM_1-21-2010_11-18-16
1202016408	941967	1	axc2	1/21/2010 11:40:26	OM_1-21-2010_11-18-16
1202016410	941967	1	axc2	1/21/2010 11:41:19	OM_1-21-2010_11-18-16
244601007	941967	1	axc2	1/21/2010 11:42:12	OM_1-21-2010_11-18-16
244601008	941967	1	axc2	1/21/2010 11:43:05	OM_1-21-2010_11-18-16
CCV		1	axc2	1/21/2010 11:43:57	OM_1-21-2010_11-18-16
CCB		1	axc2	1/21/2010 11:45:47	OM_1-21-2010_11-18-16
244601009*	941967	1	axc2	1/21/2010 11:47:36	OM_1-21-2010_11-18-16
244601010*	941967	1	axc2	1/21/2010 11:48:28	OM_1-21-2010_11-18-16
244601011*	941967	1	axc2	1/21/2010 11:49:21	OM_1-21-2010_11-18-16
244601012*	941967	1	axc2	1/21/2010 11:50:12	OM_1-21-2010_11-18-16
244601013*	941967	1	axc2	1/21/2010 11:51:04	OM_1-21-2010_11-18-16
244604001*	941967	1	axc2	1/21/2010 11:51:58	OM_1-21-2010_11-18-16
244604002*	941967	1	axc2	1/21/2010 11:52:52	OM_1-21-2010_11-18-16
244628001*	941967	1	axc2	1/21/2010 11:53:46	OM_1-21-2010_11-18-16
244628002*	941967	1	axc2	1/21/2010 11:54:40	OM_1-21-2010_11-18-16
244628003*	941967	1	axc2	1/21/2010 11:55:34	OM_1-21-2010_11-18-16
CCV		1	axc2	1/21/2010 11:56:26	OM_1-21-2010_11-18-16
CCB		1	axc2	1/21/2010 11:58:16	OM_1-21-2010_11-18-16

Original Run Filename: OM_1-21-2010_11-18-16.OMN created 1/21/2010 11:18:16
 Original Run Author's Signature: [axc2]
 Current Run Filename: OM_1-21-2010_11-18-16.OMN last modified 1/21/2010 11:59:21
 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		Detection Time	ADF	MDF	Description
			TCYANIDE	Area (Vs)				
WCN100121-03	1	S3	101	3.44	1/21/2010@11:19:02			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			1.3 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			1.3 < 10.0					
Message			CCV Passed					
Action			Continue					
Calibration:			Table/Fig. 1					
WCN100121-08	1	S7	0.746	0.123	1/21/2010@11:20:52			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			0.746 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			0.746 > -5.00					
Message			CCB Passed					
Action			Continue					
244721001[941971]	1	21	-1.14	0.0605	1/21/2010@11:22:42			
244721002	1	22	-0.453	0.0834	1/21/2010@11:23:35			
244721003	1	23	-0.586	0.0790	1/21/2010@11:24:27			
244721004	1	24	0.967	0.130	1/21/2010@11:25:20			
244721005	1	25	-1.70	0.0421	1/21/2010@11:26:13			
244721006	1	26	-0.610	0.0782	1/21/2010@11:27:05			
244721007	1	27	0.360	0.110	1/21/2010@11:27:57			
244721008	1	28	-1.15	0.0604	1/21/2010@11:28:49			
1202016404[941967]MB	1	29	-1.95	0.0339	1/21/2010@11:29:41			
1202016411[ILCS]	1	30	31.2	1.13	1/21/2010@11:30:33		25.00	
WCN100121-03	1	S3	96.4	3.28	1/21/2010@11:31:25			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			-3.6 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			-3.6 < 10.0					
Message			CCV Passed					
Action			Continue					
WCN100121-08	1	S7	0.324	0.109	1/21/2010@11:33:16			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			0.324 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			0.324 > -5.00					
Message			CCB Passed					
Action			Continue					
244601005	1	31	-0.951	0.0669	1/21/2010@11:35:06			
1202016405[DUP]	1	32	-1.97	0.0333	1/21/2010@11:36:00			
1202016407[MS]	1	33	104	3.55	1/21/2010@11:36:53			
1202016409[MSD]	1	34	109	3.69	1/21/2010@11:37:47			
244601006	1	35	3.10	0.201	1/21/2010@11:38:40			
1202016406[DUP]	1	36	-0.467	0.0829	1/21/2010@11:39:33			

1202016408	MS	1	37	95.0	3.24	1/21/2010@11:40:26		
1202016410	MSD	1	38	97.2	3.31	1/21/2010@11:41:19		
244601007		1	39	1.24	0.139	1/21/2010@11:42:12		
244601008		1	40	0.510	0.115	1/21/2010@11:43:05		
WCN100121-03		1	S3	96.2	3.28	1/21/2010@11:43:57		CCV
Known Conc:				100				
DQM Test: > + Percent Relative Difference								
Result:				-3.8 < 10.0				
Message				CCV Passed				
Action				Continue				
DQM Test: < - Percent Relative Difference								
Result:				-3.8 < 10.0				
Message				CCV Passed				
Action				Continue				
WCN100121-08		1	S7	0.353	0.110	1/21/2010@11:45:47		CCB
Known Conc:				0.00				
DQM Test: > + Concentration Limit								
Result:				0.353 < 5.00				
Message				CCB Passed				
Action				Continue				
DQM Test: < - Concentration Limit								
Result:				0.353 > -5.00				
Message				CCB Passed				
Action				Continue				
244601009		1	41	0.390	0.111	1/21/2010@11:47:36		
244601010		1	42	-1.29	0.0557	1/21/2010@11:48:28		
244601011		1	43	-0.652	0.0768	1/21/2010@11:49:21		
244601012		1	44	-0.725	0.0744	1/21/2010@11:50:12		
244601013		1	45	-1.42	0.0515	1/21/2010@11:51:04		
244604001		1	46	4.05	0.232	1/21/2010@11:51:58		
244604002		1	47	0.277	0.107	1/21/2010@11:52:52		
244628001		1	48	-0.683	0.0758	1/21/2010@11:53:46		
244628002		1	49	-1.11	0.0618	1/21/2010@11:54:40		
244628003		1	50	-1.86	0.0367	1/21/2010@11:55:34		
WCN100121-03		1	S3	95.8	3.26	1/21/2010@11:56:26		CCV
Known Conc:				100				
DQM Test: > + Percent Relative Difference								
Result:				-4.2 < 10.0				
Message				CCV Passed				
Action				Continue				
DQM Test: < - Percent Relative Difference								
Result:				-4.2 < 10.0				
Message				CCV Passed				
Action				Continue				
WCN100121-08		1	S7	7.89	0.359	1/21/2010@11:58:16		CCB
Known Conc:				0.00				
DQM Test: > + Concentration Limit								
Result:				7.89 > 5.00				
Message				CCB Failed				
Action				Stop Run				
DQM Test: < - Concentration Limit								
Result:				7.89 > -5.00				
Message				CCB Passed				
Action				Continue				

Analyte Properties Table for OM_1-21-2010_11-18-16.OMN

Property	Channel 1
	TCYANIDE
Concentration Units	ug/L
Calibration 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

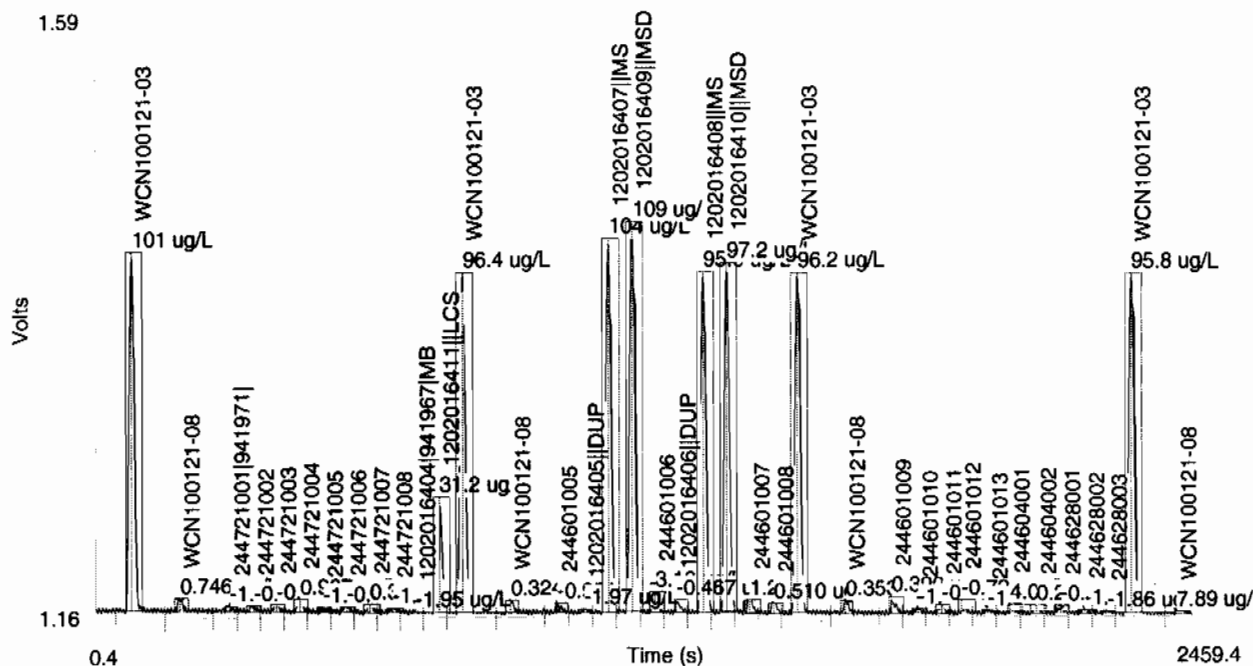
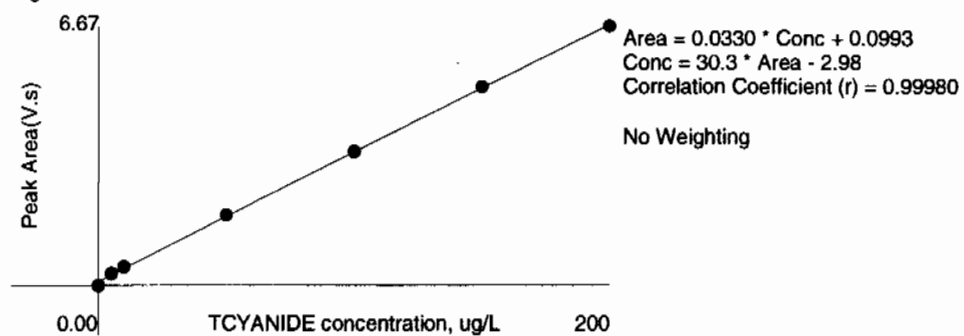


Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	6.67	0.502	0.6	1/21/2010	10:28:46
2	150	1	5.08	0.383	-0.6	1/21/2010	10:29:38
3	100	1	3.41	0.258	-0.3	1/21/2010	10:30:30
4	50.0	1	1.78	0.135	-1.6	1/21/2010	10:31:23
5	10.0	1	0.469	0.0346	-9.1	1/21/2010	10:32:16
6	5.00	1	0.298	0.0213	-12.7	1/21/2010	10:33:10
7	0.00	1	-0.00455	-0.00192		1/21/2010	10:34:04

Figure 1: TCYANIDE



This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
CCV		1	axc2	1/21/2010 12:06:14	OM_1-21-2010_12-04-42
CCB		1	axc2	1/21/2010 12:08:05	OM_1-21-2010_12-04-42
244601009	941967	1	axc2	1/21/2010 12:09:53	OM_1-21-2010_12-04-42
244601010	941967	1	axc2	1/21/2010 12:10:46	OM_1-21-2010_12-04-42
244601011	941967	1	axc2	1/21/2010 12:11:38	OM_1-21-2010_12-04-42
244601012	941967	1	axc2	1/21/2010 12:12:30	OM_1-21-2010_12-04-42
244601013	941967	1	axc2	1/21/2010 12:13:22	OM_1-21-2010_12-04-42
244604001	941967	1	axc2	1/21/2010 12:14:16	OM_1-21-2010_12-04-42
244604002	941967	1	axc2	1/21/2010 12:15:10	OM_1-21-2010_12-04-42
244628001	941967	1	axc2	1/21/2010 12:16:04	OM_1-21-2010_12-04-42
244628002	941967	1	axc2	1/21/2010 12:16:57	OM_1-21-2010_12-04-42
244628003	941967	1	axc2	1/21/2010 12:17:51	OM_1-21-2010_12-04-42
CCV		1	axc2	1/21/2010 12:18:43	OM_1-21-2010_12-04-42
CCB		1	axc2	1/21/2010 12:20:34	OM_1-21-2010_12-04-42
244628004	941967	1	axc2	1/21/2010 12:22:23	OM_1-21-2010_12-04-42
244628005	941967	1	axc2	1/21/2010 12:23:16	OM_1-21-2010_12-04-42
244628006	941967	1	axc2	1/21/2010 12:24:09	OM_1-21-2010_12-04-42
244628007	941967	1	axc2	1/21/2010 12:25:02	OM_1-21-2010_12-04-42
244628008	941967	1	axc2	1/21/2010 12:25:55	OM_1-21-2010_12-04-42
244628009	941967	1	axc2	1/21/2010 12:26:48	OM_1-21-2010_12-04-42
1202015109	941490	1	axc2	1/21/2010 12:27:40	OM_1-21-2010_12-04-42
1202015116	941490	1	axc2	1/21/2010 12:28:32	OM_1-21-2010_12-04-42
244510001	941490	1	axc2	1/21/2010 12:29:25	OM_1-21-2010_12-04-42
1202015110	941490	1	axc2	1/21/2010 12:30:17	OM_1-21-2010_12-04-42
CCV		1	axc2	1/21/2010 12:31:09	OM_1-21-2010_12-04-42
CCB		1	axc2	1/21/2010 12:32:59	OM_1-21-2010_12-04-42
1202015112	941490	1	axc2	1/21/2010 12:34:50	OM_1-21-2010_12-04-42
1202015114	941490	1	axc2	1/21/2010 12:35:44	OM_1-21-2010_12-04-42
244510003	941490	1	axc2	1/21/2010 12:36:38	OM_1-21-2010_12-04-42
244510005	941490	1	axc2	1/21/2010 12:37:32	OM_1-21-2010_12-04-42
244521001	941490	1	axc2	1/21/2010 12:38:26	OM_1-21-2010_12-04-42
244521003	941490	1	axc2	1/21/2010 12:39:19	OM_1-21-2010_12-04-42
244602001	941490	1	axc2	1/21/2010 12:40:12	OM_1-21-2010_12-04-42
1202016398	941490	1	axc2	1/21/2010 12:41:06	OM_1-21-2010_12-04-42
1202016400	941490	1	axc2	1/21/2010 12:41:58	OM_1-21-2010_12-04-42
1202016402	941490	1	axc2	1/21/2010 12:42:51	OM_1-21-2010_12-04-42
CCV		1	axc2	1/21/2010 12:43:43	OM_1-21-2010_12-04-42
CCB		1	axc2	1/21/2010 12:45:34	OM_1-21-2010_12-04-42
244614001	941490	1	axc2	1/21/2010 12:47:23	OM_1-21-2010_12-04-42
244618001	941490	1	axc2	1/21/2010 12:48:16	OM_1-21-2010_12-04-42
244625001	941490	1	axc2	1/21/2010 12:49:08	OM_1-21-2010_12-04-42
244625002	941490	1	axc2	1/21/2010 12:50:01	OM_1-21-2010_12-04-42
244640001	941490	1	axc2	1/21/2010 12:50:53	OM_1-21-2010_12-04-42
1202015111	941490	1	axc2	1/21/2010 12:51:47	OM_1-21-2010_12-04-42
1202015113	941490	1	axc2	1/21/2010 12:52:42	OM_1-21-2010_12-04-42
1202015115	941490	1	axc2	1/21/2010 12:53:36	OM_1-21-2010_12-04-42
244640002	941490	1	axc2	1/21/2010 12:54:30	OM_1-21-2010_12-04-42
244640003	941490	1	axc2	1/21/2010 12:55:24	OM_1-21-2010_12-04-42
CCV		1	axc2	1/21/2010 12:56:17	OM_1-21-2010_12-04-42
CCB		1	axc2	1/21/2010 12:58:07	OM_1-21-2010_12-04-42
244695002	941490	1	axc2	1/21/2010 12:59:56	OM_1-21-2010_12-04-42
1202016399	941490	1	axc2	1/21/2010 13:00:50	OM_1-21-2010_12-04-42
1202016401	941490	1	axc2	1/21/2010 13:01:43	OM_1-21-2010_12-04-42
1202016403	941490	1	axc2	1/21/2010 13:02:36	OM_1-21-2010_12-04-42
244695004	941490	1	axc2	1/21/2010 13:03:29	OM_1-21-2010_12-04-42
244726001	941490	1	axc2	1/21/2010 13:04:22	OM_1-21-2010_12-04-42
244758001	941490	1	axc2	1/21/2010 13:05:15	OM_1-21-2010_12-04-42
244758002	941490	1	axc2	1/21/2010 13:06:08	OM_1-21-2010_12-04-42

1202017566	942468	1	axc2	1/21/2010	13:07:01	OM_1-21-2010_12-04-42
1202017576	942468	1	axc2	1/21/2010	13:07:52	OM_1-21-2010_12-04-42
CCV		1	axc2	1/21/2010	13:08:45	OM_1-21-2010_12-04-42
CCB		1	axc2	1/21/2010	13:10:35	OM_1-21-2010_12-04-42
244855001*	942468	1	axc2	1/21/2010	13:12:26	OM_1-21-2010_12-04-42
1202017567*	942468	1	axc2	1/21/2010	13:13:20	OM_1-21-2010_12-04-42
1202017570*	942468	1	axc2	1/21/2010	13:14:14	OM_1-21-2010_12-04-42
1202017573*	942468	1	axc2	1/21/2010	13:15:09	OM_1-21-2010_12-04-42
244855003*	942468	1	axc2	1/21/2010	13:16:03	OM_1-21-2010_12-04-42
244874001*	942468	1	axc2	1/21/2010	13:16:57	OM_1-21-2010_12-04-42
244879003*	942468	1	axc2	1/21/2010	13:17:51	OM_1-21-2010_12-04-42
1202017568*	942468	1	axc2	1/21/2010	13:18:45	OM_1-21-2010_12-04-42
1202017571*	942468	1	axc2	1/21/2010	13:19:38	OM_1-21-2010_12-04-42
1202017574*	942468	1	axc2	1/21/2010	13:20:31	OM_1-21-2010_12-04-42
CCV		1	axc2	1/21/2010	13:21:24	OM_1-21-2010_12-04-42

Original Run Filename: OM_1-21-2010_12-04-42.OMN created 1/21/2010 12:04:42
 Original Run Author's Signature: [axc2]
 Current Run Filename: OM_1-21-2010_12-04-42.OMN last modified 1/21/2010 13:22:29
 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		Detection Time	ADF	MDF	Description
			TCYANIDE	Area (Vs)				
WCN100121-03	1	S3	99.6	3.39	1/21/2010@12:06:14			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			-0.4 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			-0.4 < 10.0					
Message			CCV Passed					
Action			Continue					
WCN100121-08	1	S7	0.791	0.124	1/21/2010@12:08:05			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			0.791 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			0.791 > -5.00					
Message			CCB Passed					
Action			Continue					
Calibration:			Table/Fig. 1					
244601009[941967]	1	41	-0.501	0.0818	1/21/2010@12:09:53			
244601010	1	42	-1.30	0.0554	1/21/2010@12:10:46			
244601011	1	43	-0.319	0.0878	1/21/2010@12:11:38			
244601012	1	44	-1.43	0.0511	1/21/2010@12:12:30			
244601013	1	45	-1.15	0.0602	1/21/2010@12:13:22			
244604001	1	46	-1.61	0.0450	1/21/2010@12:14:16			
244604002	1	47	-0.0842	0.0956	1/21/2010@12:15:10			
244628001	1	48	-0.762	0.0731	1/21/2010@12:16:04			
244628002	1	49	-1.20	0.0586	1/21/2010@12:16:57			
244628003	1	50	-1.34	0.0542	1/21/2010@12:17:51			
WCN100121-03	1	S3	99.7	3.39	1/21/2010@12:18:43			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			-0.3 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			-0.3 < 10.0					
Message			CCV Passed					
Action			Continue					
WCN100121-08	1	S7	0.209	0.105	1/21/2010@12:20:34			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			0.209 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			0.209 > -5.00					
Message			CCB Passed					
Action			Continue					
244628004	1	51	-0.821	0.0712	1/21/2010@12:22:23			
244628005	1	52	-1.38	0.0527	1/21/2010@12:23:16			
244628006	1	53	0.607	0.118	1/21/2010@12:24:09			
244628007	1	54	-1.69	0.0424	1/21/2010@12:25:02			
244628008	1	55	-2.98	0.00	1/21/2010@12:25:55			
244628009	1	56	0.0868	0.101	1/21/2010@12:26:48			

1202015109|941490|MB	1	57	-0.219	0.0911	1/21/2010@12:27:40		
1202015116|LCS	1	58	53.4	1.86	1/21/2010@12:28:32		
244510001	1	59	-0.767	0.0730	1/21/2010@12:29:25		
1202015110|DUP	1	60	-2.98	-2.84e-4	1/21/2010@12:30:17		
WCN100121-03	1	S3	96.1	3.27	1/21/2010@12:31:09		CCV
Known Conc:			100				
DQM Test: > + Percent Relative Difference							
Result:			-3.9 < 10.0				
Message			CCV Passed				
Action			Continue				
DQM Test: < - Percent Relative Difference							
Result:			-3.9 < 10.0				
Message			CCV Passed				
Action			Continue				
WCN100121-08	1	S7	1.10	0.135	1/21/2010@12:32:59		CCB
Known Conc:			0.00				
DQM Test: > + Concentration Limit							
Result:			1.10 < 5.00				
Message			CCB Passed				
Action			Continue				
DQM Test: < - Concentration Limit							
Result:			1.10 > -5.00				
Message			CCB Passed				
Action			Continue				
1202015112|MS	1	61	108	3.68	1/21/2010@12:34:50		
1202015114|MSD	1	62	111	3.77	1/21/2010@12:35:44		
244510003	1	63	0.439	0.113	1/21/2010@12:36:38		
244510005	1	64	3.23	0.205	1/21/2010@12:37:32		
244521001	1	65	-1.99	0.0325	1/21/2010@12:38:26		
244521003	1	66	1.19	0.138	1/21/2010@12:39:19		
244602001	1	67	-2.16	0.0268	1/21/2010@12:40:12		
1202016398|DUP	1	68	-2.98	-1.33e-4	1/21/2010@12:41:06		
1202016400|MS	1	69	111	3.78	1/21/2010@12:41:58		
1202016402|MSD	1	70	117	3.97	1/21/2010@12:42:51		
WCN100121-03	1	S3	101	3.45	1/21/2010@12:43:43		CCV
Known Conc:			100				
DQM Test: > + Percent Relative Difference							
Result:			1.5 < 10.0				
Message			CCV Passed				
Action			Continue				
DQM Test: < - Percent Relative Difference							
Result:			1.5 < 10.0				
Message			CCV Passed				
Action			Continue				
WCN100121-08	1	S7	1.18	0.137	1/21/2010@12:45:34		CCB
Known Conc:			0.00				
DQM Test: > + Concentration Limit							
Result:			1.18 < 5.00				
Message			CCB Passed				
Action			Continue				
DQM Test: < - Concentration Limit							
Result:			1.18 > -5.00				
Message			CCB Passed				
Action			Continue				
244614001	1	71	-2.30	0.0223	1/21/2010@12:47:23		
244618001	1	72	-2.25	0.0239	1/21/2010@12:48:16		
244625001	1	73	-3.13	-0.00504	1/21/2010@12:49:08		
244625002	1	74	-2.49	0.0159	1/21/2010@12:50:01		
244640001	1	75	-2.02	0.0316	1/21/2010@12:50:53		
1202015111|DUP	1	76	-2.17	0.0266	1/21/2010@12:51:47		
1202015113|MS	1	77	104	3.54	1/21/2010@12:52:42		
1202015115|MSD	1	78	114	3.85	1/21/2010@12:53:36		
244640002	1	79	0.712	0.122	1/21/2010@12:54:30		
244640003	1	80	-1.59	0.0457	1/21/2010@12:55:24		
WCN100121-03	1	S3	97.7	3.33	1/21/2010@12:56:17		CCV
Known Conc:			100				
DQM Test: > + Percent Relative Difference							
Result:			-2.3 < 10.0				

		Message	CCV Passed				
		Action	Continue				
DQM Test: < - Percent Relative Difference							
		Result:	-2.3 < 10.0				
		Message	CCV Passed				
		Action	Continue				
WCN100121-08	1	S7	0.823	0.126	1/21/2010@12:58:07		CCB
		Known Conc:	0.00				
DQM Test: > + Concentration Limit							
		Result:	0.823 < 5.00				
		Message	CCB Passed				
		Action	Continue				
DQM Test: < - Concentration Limit							
		Result:	0.823 > -5.00				
		Message	CCB Passed				
		Action	Continue				
244695002	1	81	-2.59	0.0126	1/21/2010@12:59:56		
1202016399	DUP	1	82	0.985	0.131	1/21/2010@13:00:50	
1202016401	MS	1	83	114	3.86	1/21/2010@13:01:43	
1202016403	MSD	1	84	119	4.02	1/21/2010@13:02:36	
244695004		1	85	-1.10	0.0618	1/21/2010@13:03:29	
244726001		1	86	26.8	0.985	1/21/2010@13:04:22	
244758001		1	87	-1.02	0.0645	1/21/2010@13:05:15	
244758002		1	88	-1.24	0.0575	1/21/2010@13:06:08	
1202017566	942468/MB	1	89	-1.04	0.0641	1/21/2010@13:07:01	
1202017576	LCS	1	90	49.7	1.74	1/21/2010@13:07:52	
WCN100121-03		1	S3	99.0	3.37	1/21/2010@13:08:45	CCV
		Known Conc:	100				
DQM Test: > + Percent Relative Difference							
		Result:	-1.0 < 10.0				
		Message	CCV Passed				
		Action	Continue				
DQM Test: < - Percent Relative Difference							
		Result:	-1.0 < 10.0				
		Message	CCV Passed				
		Action	Continue				
WCN100121-08	1	S7	1.01	0.132	1/21/2010@13:10:35		CCB
		Known Conc:	0.00				
DQM Test: > + Concentration Limit							
		Result:	1.01 < 5.00				
		Message	CCB Passed				
		Action	Continue				
DQM Test: < - Concentration Limit							
		Result:	1.01 > -5.00				
		Message	CCB Passed				
		Action	Continue				
244855001		1	91	-1.52	0.0483	1/21/2010@13:12:26	
1202017567	DUP	1	92	-1.16	0.0601	1/21/2010@13:13:20	
1202017570	MS	1	93	105	3.57	1/21/2010@13:14:14	
1202017573	MSD	1	94	113	3.82	1/21/2010@13:15:09	
244855003		1	95	2.70	0.188	1/21/2010@13:16:03	
244874001		1	96	6.26	0.305	1/21/2010@13:16:57	
244879003		1	97	0.509	0.115	1/21/2010@13:17:51	
1202017568	DUP	1	98	-0.0503	0.0967	1/21/2010@13:18:45	
1202017571	MS	1	99	113	3.83	1/21/2010@13:19:38	
1202017574	MSD	1	100	138	4.65	1/21/2010@13:20:31	
WCN100121-03		1	S3	-321	-10.5	1/21/2010@13:21:24	CCV
		Known Conc:	100				
DQM Test: > + Percent Relative Difference							
		Result:	-420.7 < 10.0				
		Message	CCV Passed				
		Action	Continue				
DQM Test: < - Percent Relative Difference							
		Result:	-420.7 < 10.0				
		Message	CCV Failed				
		Action	Stop Run				

Analyte Properties Table for OM_1-21-2010_12-04-42.OMN

Property	Channel 1
	TCYANIDE
Concentration Units	ug/L
Calibration 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

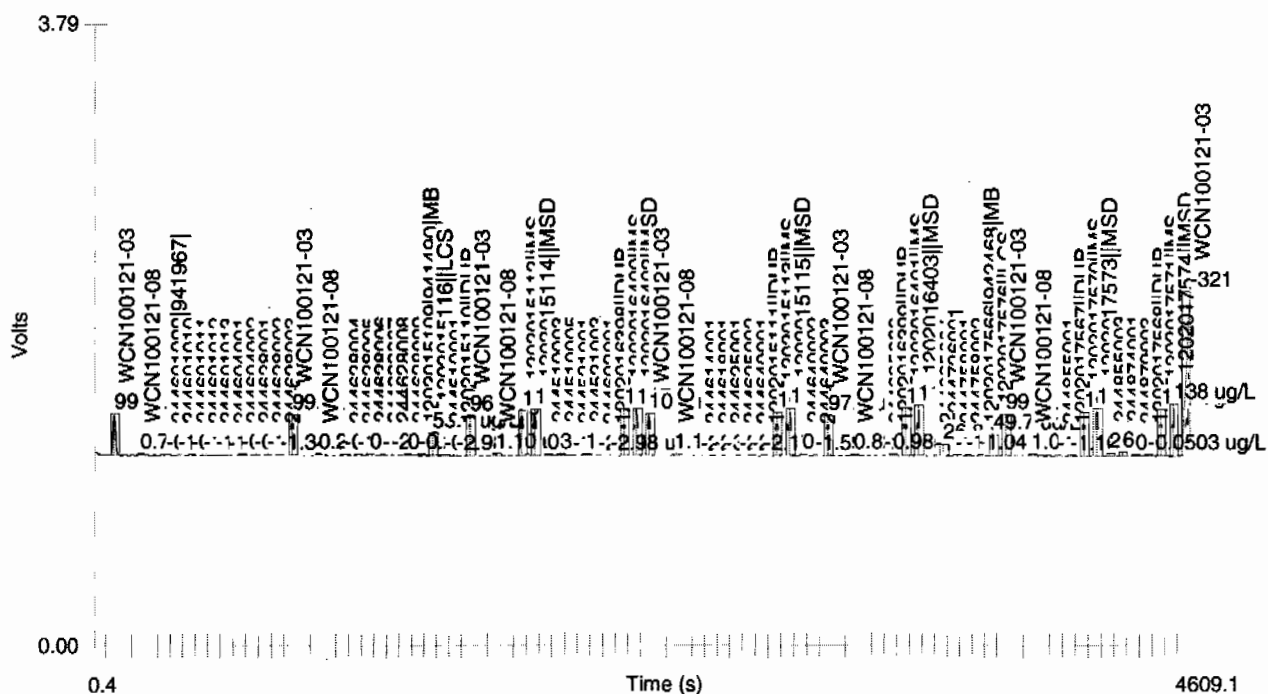
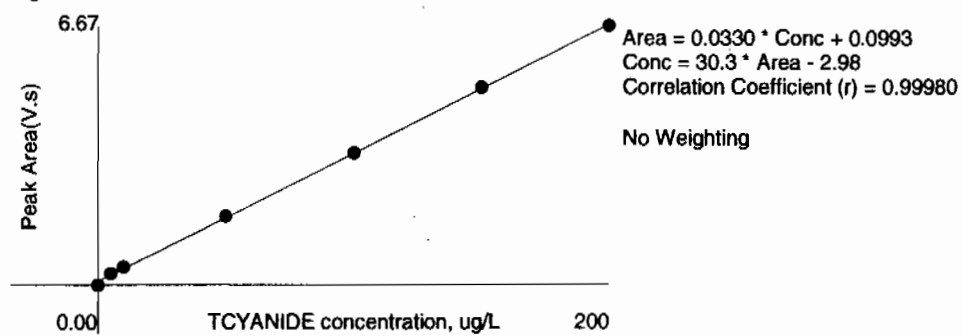


Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	6.67	0.502	0.6	1/21/2010	10:28:46
2	150	1	5.08	0.383	-0.6	1/21/2010	10:29:38
3	100	1	3.41	-0.258	-0.3	1/21/2010	10:30:30
4	50.0	1	1.78	0.135	-1.6	1/21/2010	10:31:23
5	10.0	1	0.469	0.0346	-9.1	1/21/2010	10:32:16
6	5.00	1	0.298	0.0213	-12.7	1/21/2010	10:33:10
7	0.00	1	-0.00455	-0.00192		1/21/2010	10:34:04

Figure 1: TCYANIDE



General Chemistry Analysis

Case Narrative

**General Chemistry Narrative
Los Alamos National Laboratory (LANL)
SDG 10-1212-1**

Method/Analysis Information

Product:	Cyanide, Total		
Analytical Batch:	941490	Method:	SW9012A Cyanide and Total
Prep Batch :	941488	Method:	SSW846 9010B Prep

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 9012A:

Sample ID	Client ID
244602001	RE12-10-7284
1202015109	Method Blank (MB)
1202015110	244510001(CALA-10-9177) Sample Duplicate (DUP)
1202015112	244510001(CALA-10-9177) Matrix Spike (MS)
1202015114	244510001(CALA-10-9177) Matrix Spike Duplicate (MSD)
1202015116	Laboratory Control Sample (LCS)
1202016398	244602001(RE12-10-7284) Sample Duplicate (DUP)
1202016400	244602001(RE12-10-7284) Matrix Spike (MS)
1202016402	244602001(RE12-10-7284) Matrix Spike Duplicate (MSD)

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: 244510001 (CALA-10-9177) and 244602001 (RE12-10-7284).

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. 1202015110 (CALA-10-9177), 1202016398 (RE12-10-7284) and 244602001 (RE12-10-7284).

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

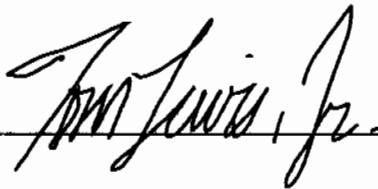
Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

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: _____



Date: _____

04Feb10

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: 10-1212-1 GEL Work Order: 244602

The Qualifiers in this report are defined as follows:

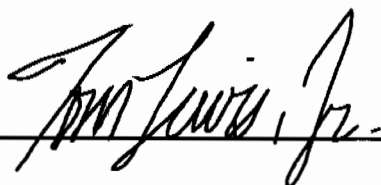
- * Indicates that a quality control analyte recovery is outside of specified acceptance criteria.
- ** Indicates the analyte is a surrogate compound.

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

A handwritten signature in black ink, appearing to read "Tom Lewis, Jr.", is written over a horizontal line.

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 4, 2010

Client SDG: 10-1212-1

Client Sample ID: RE12-10-7284
Sample ID: 244602001
Matrix: W
Collect Date: 07-JAN-10 12:00
Receive Date: 13-JAN-10
Collector: Client

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "As Received"</i>											
Cyanide, Total	U	ND	1.66	5.00	ug/L	1	AXC2	01/21/10	1240	941490	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/19/10	1511	941488

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: February 4, 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: 244602

Paramname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Flow Injection Analysis											
Batch	941490										
QC1202015110	244510001	DUP									
Cyanide, Total		U	ND	U	ND	ug/L	N/A		AXC2	01/21/10	12:30
QC1202016398	244602001	DUP									
Cyanide, Total		U	ND	U	ND	ug/L	N/A			01/21/10	12:41
QC1202015116	LCS										
Cyanide, Total	50.0				53.4	ug/L	107	(90%-110%)		01/21/10	12:28
QC1202015109	MB										
Cyanide, Total			U		5.00	ug/L				01/21/10	12:27
QC1202015112	244510001	MS									
Cyanide, Total	100	U	ND		108	ug/L	108	(60%-127%)		01/21/10	12:34
QC1202016400	244602001	MS									
Cyanide, Total	100	U	ND		111	ug/L	111	(60%-127%)		01/21/10	12:41
QC1202015114	244510001	MSD									
Cyanide, Total	100	U	ND		111	ug/L	2.74	111	(0%-20%)	01/21/10	12:35
QC1202016402	244602001	MSD									
Cyanide, Total	100	U	ND		117	ug/L	5.26	117	(0%-20%)	01/21/10	12:42

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.

GEL LABORATORIES LLC

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

QC Summary

Workorder: 244602

Page 2 of 2

Paramname	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: 04-FEB-2010 16:36

GEL Laboratories LLC

Contract: LANL01004

SDG #: 10-1212-1

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	21-JAN-2010 10:34:52	OM_1-21-2010_10-24-21	158	150	105	(90%-110%)	Yes
CCV	21-JAN-2010 12:18:43	OM_1-21-2010_12-04-42	99.7	100	100	(90%-110%)	Yes
CCV	21-JAN-2010 12:31:09	OM_1-21-2010_12-04-42	96.1	100	96	(90%-110%)	Yes
CCV	21-JAN-2010 12:43:43	OM_1-21-2010_12-04-42	101	100	101	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	21-JAN-2010 10:36:42	OM_1-21-2010_10-24-21	-2.4	5	Yes
CCB	21-JAN-2010 12:20:34	OM_1-21-2010_12-04-42	0.209	5	Yes
CCB	21-JAN-2010 12:32:59	OM_1-21-2010_12-04-42	1.1	5	Yes
CCB	21-JAN-2010 12:45:34	OM_1-21-2010_12-04-42	1.18	5	Yes

Cyanide, Total

Prep LogBook

Analyst: AXS5 Verified by: _____

Batch: 941488

Lab SOP: GL-GC-E-067 REV# 13

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix	Type	Sample Id	Lot. Id	Spike Amount	Spike Units
MB	1202015109		EPA 335.4	19-JAN-2010 15:11	>12	25 mL	25 mL	1	GROUND WATER	LCS	1202015116	URF1184831-02	.0125	mL
LCS	1202015116		EPA 335.4	19-JAN-2010 15:11	>12	25 mL	25 mL	1	GROUND WATER	MS	1202015112	URF1184831-02	.025	mL
SAMPLE	244510001		EPA 335.4	19-JAN-2010 15:11	>12	25 mL	25 mL	1	GROUND WATER	MS	1202015113	URF1184831-02	.025	mL
DUP	1202015110	244510001	EPA 335.4	19-JAN-2010 15:11	>12	25 mL	25 mL	1	GROUND WATER	MS	1202016400	URF1184831-02	.025	mL
MS	1202015112	244510001	EPA 335.4	19-JAN-2010 15:11	>12	25 mL	25 mL	1	GROUND WATER	MS	1202016401	URF1184831-02	.025	mL
MSD	1202015114	244510001	EPA 335.4	19-JAN-2010 15:11	>12	25 mL	25 mL	1	GROUND WATER	MSD	1202015114	URF1184831-02	.025	mL
SAMPLE	244510003		EPA 335.4	19-JAN-2010 15:11	>12	25 mL	25 mL	1	GROUND WATER	MSD	1202015115	URF1184831-02	.025	mL
SAMPLE	244510005		EPA 335.4	19-JAN-2010 15:11	>12	25 mL	25 mL	1	GROUND WATER	MSD	1202016402	URF1184831-02	.025	mL
SAMPLE	244521001		EPA 335.4	19-JAN-2010 15:11	>12	25 mL	25 mL	1	GROUND WATER	MSD	1202016403	URF1184831-02	.025	mL
SAMPLE	244521003		EPA 335.4	19-JAN-2010 15:11	>12	25 mL	25 mL	1	GROUND WATER					
SAMPLE	244602001		SW846 9010B Prep	19-JAN-2010 15:11	>12	25 mL	25 mL	1	WATER					
DUP	1202016398	244602001	SW846 9010B Prep	19-JAN-2010 15:11	>12	25 mL	25 mL	1	WATER					
MS	1202016400	244602001	SW846 9010B Prep	19-JAN-2010 15:11	>12	25 mL	25 mL	1	WATER					
MSD	1202016402	244602001	SW846 9010B Prep	19-JAN-2010 15:11	>12	25 mL	25 mL	1	WATER					
SAMPLE	244614001		SW846 9010B Prep	19-JAN-2010 15:11	>12	25 mL	25 mL	1	WATER					
SAMPLE	244618001		SW846 9010B Prep	19-JAN-2010 15:11	>12	25 mL	25 mL	1	WATER					
SAMPLE	244625001		SW846 9010B Prep	19-JAN-2010 15:11	>12	25 mL	25 mL	1	WATER					
SAMPLE	244625002		SW846 9010B Prep	19-JAN-2010 15:11	>12	25 mL	25 mL	1	WATER					
SAMPLE	244640001		SW846 9010B Prep	19-JAN-2010 15:11	>12	25 mL	25 mL	1	WATER					
DUP	1202015111	244640001	SW846 9010B Prep	19-JAN-2010 15:11	>12	25 mL	25 mL	1	GROUND WATER					
MS	1202015113	244640001	SW846 9010B Prep	19-JAN-2010 15:11	>12	25 mL	25 mL	1	GROUND WATER					
MSD	1202015115	244640001	SW846 9010B Prep	19-JAN-2010 15:11	>12	25 mL	25 mL	1	GROUND WATER					
SAMPLE	244640002		SW846 9010B Prep	19-JAN-2010 15:11	>12	25 mL	25 mL	1	GROUND WATER					
SAMPLE	244640003		SW846 9010B Prep	19-JAN-2010 15:11	>12	25 mL	25 mL	1	GROUND WATER					

Prep Data Logbook Version 1:1

GEL Laboratories LLC

Page#

Prep LogBook

Analyst: AXS5
Batch: 941488
Lab SOP: GL-GC-E-067 REV# 13

Verified by: _____

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix	Spike Amount	Spike Units
SAMPLE	244695002		EPA 335.3	19-JAN-2010 15:11	>12	25 mL	25 mL	1	WATER	.0125	mL
DUP	1202016399	244695002	EPA 335.3	19-JAN-2010 15:11	>12	25 mL	25 mL	1	WATER	.025	mL
MS	1202016401	244695002	EPA 335.3	19-JAN-2010 15:11	>12	25 mL	25 mL	1	WATER	.025	mL
MSD	1202016403	244695002	EPA 335.3	19-JAN-2010 15:11	>12	25 mL	25 mL	1	WATER	.025	mL
SAMPLE	244695004		EPA 335.3	19-JAN-2010 15:11	>12	25 mL	25 mL	1	WATER	.025	mL
SAMPLE	244726001		EPA 335.4	19-JAN-2010 15:11	>12	25 mL	25 mL	1	WASTE WATER	.025	mL
SAMPLE	244758001	9010B Prep	SW/846	19-JAN-2010 15:11	>12	25 mL	25 mL	1	GROUND WATER	.025	mL
SAMPLE	244758002	9010B Prep	SW/846	19-JAN-2010 15:11	>12	25 mL	25 mL	1	GROUND WATER	.025	mL

Comments

Reagent/Solvent Lot ID	Amount	Description
091211-C	25 mL	0.25N Sodium Hydroxide Solution
WCN100119-07	.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

This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
200 ppb		1	axc2	1/21/2010 10:27:43	OM_1-21-2010_10-24-21
150 ppb		1	axc2	1/21/2010 10:28:35	OM_1-21-2010_10-24-21
100 ppb		1	axc2	1/21/2010 10:29:27	OM_1-21-2010_10-24-21
50 ppb		1	axc2	1/21/2010 10:30:20	OM_1-21-2010_10-24-21
10 ppb		1	axc2	1/21/2010 10:31:13	OM_1-21-2010_10-24-21
CRDL 5.0 ppb		1	axc2	1/21/2010 10:32:07	OM_1-21-2010_10-24-21
ICAL-00		1	axc2	1/21/2010 10:33:01	OM_1-21-2010_10-24-21
ICV		1	axc2	1/21/2010 10:34:52	OM_1-21-2010_10-24-21
ICB		1	axc2	1/21/2010 10:36:42	OM_1-21-2010_10-24-21
CRDL		1	axc2	1/21/2010 10:38:32	OM_1-21-2010_10-24-21
1202016428	941971	1	axc2	1/21/2010 10:40:22	OM_1-21-2010_10-24-21
1202016432	941971	25	axc2	1/21/2010 10:41:15	OM_1-21-2010_10-24-21
244612001	941971	1	axc2	1/21/2010 10:42:08	OM_1-21-2010_10-24-21
1202017516	941971	1	axc2	1/21/2010 10:43:01	OM_1-21-2010_10-24-21
1202017517	941971	1	axc2	1/21/2010 10:43:54	OM_1-21-2010_10-24-21
1202017518	941971	1	axc2	1/21/2010 10:44:47	OM_1-21-2010_10-24-21
244619001	941971	1	axc2	1/21/2010 10:45:40	OM_1-21-2010_10-24-21
244619003	941971	1	axc2	1/21/2010 10:46:33	OM_1-21-2010_10-24-21
244622001	941971	1	axc2	1/21/2010 10:47:25	OM_1-21-2010_10-24-21
244622002	941971	1	axc2	1/21/2010 10:48:17	OM_1-21-2010_10-24-21
CCV		1	axc2	1/21/2010 10:49:09	OM_1-21-2010_10-24-21
CCB		1	axc2	1/21/2010 10:51:00	OM_1-21-2010_10-24-21
244628010	941971	1	axc2	1/21/2010 10:52:48	OM_1-21-2010_10-24-21
1202016429	941971	1	axc2	1/21/2010 10:53:40	OM_1-21-2010_10-24-21
1202016430	941971	1	axc2	1/21/2010 10:54:33	OM_1-21-2010_10-24-21
1202016431	941971	1	axc2	1/21/2010 10:55:24	OM_1-21-2010_10-24-21
244628011	941971	1	axc2	1/21/2010 10:56:15	OM_1-21-2010_10-24-21
244628012	941971	1	axc2	1/21/2010 10:57:09	OM_1-21-2010_10-24-21
244628013	941971	1	axc2	1/21/2010 10:58:03	OM_1-21-2010_10-24-21
244628014	941971	1	axc2	1/21/2010 10:58:56	OM_1-21-2010_10-24-21
244628015	941971	1	axc2	1/21/2010 10:59:49	OM_1-21-2010_10-24-21
244628016	941971	1	axc2	1/21/2010 11:00:43	OM_1-21-2010_10-24-21
CCV		1	axc2	1/21/2010 11:01:36	OM_1-21-2010_10-24-21
CCB		1	axc2	1/21/2010 11:03:26	OM_1-21-2010_10-24-21
244721001*	941971	1	axc2	1/21/2010 11:05:15	OM_1-21-2010_10-24-21
244721002*	941971	1	axc2	1/21/2010 11:06:08	OM_1-21-2010_10-24-21
244721003*	941971	1	axc2	1/21/2010 11:07:01	OM_1-21-2010_10-24-21
244721004*	941971	1	axc2	1/21/2010 11:07:53	OM_1-21-2010_10-24-21
244721005*	941971	1	axc2	1/21/2010 11:08:46	OM_1-21-2010_10-24-21
244721006*	941971	1	axc2	1/21/2010 11:09:38	OM_1-21-2010_10-24-21
244721007*	941971	1	axc2	1/21/2010 11:10:30	OM_1-21-2010_10-24-21
244721008*	941971	1	axc2	1/21/2010 11:11:22	OM_1-21-2010_10-24-21
1202016404*	941967	1	axc2	1/21/2010 11:12:15	OM_1-21-2010_10-24-21
1202016411*	941967	25	axc2	1/21/2010 11:13:07	OM_1-21-2010_10-24-21
CCV		1	axc2	1/21/2010 11:13:59	OM_1-21-2010_10-24-21

Author: axc2

Date : 1/22/2010

Original Run Filename: OM_1-21-2010_10-24-21.OMN created 1/21/2010 10:24:21
 Original Run Author's Signature: [axc2]
 Current Run Filename: OM_1-21-2010_10-24-21.OMN last modified 1/21/2010 11:15:04
 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		Detection Time	ADF	MDF	Description
			Conc. (ug/L)	Area (Vs)				
WCN100121-01	1	S1	200	6.67	1/21/2010@10:27:43			200 ppb
WCN100121-02	1	S2	150	5.08	1/21/2010@10:28:35			150 ppb
WCN100121-03	1	S3	100	3.41	1/21/2010@10:29:27			100 ppb
WCN100121-04	1	S4	50.0	1.78	1/21/2010@10:30:20			50 ppb
WCN100121-05	1	S5	10.0	0.469	1/21/2010@10:31:13			10 ppb
WCN100121-06	1	S6	5.00	0.298	1/21/2010@10:32:07			CRDL 5.0 ppb
WCN100121-08	1	S7	0.00	-0.00455	1/21/2010@10:33:01			0.0 ppb
DQM Test: Minimum Correlation Coefficient								
Result:			0.99980 > 0.99500					
Message			Pass					
Action			Continue					
WCN100121-07	1	S8	158	5.30	1/21/2010@10:34:52			ICV
Known Conc:			150					
DQM Test: > + Percent Relative Difference								
Result:			5.0 < 10.0					
Message			ICV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			5.0 < 10.0					
Message			ICV Passed					
Action			Continue					
Calibration:			Table/Fig. 1					
WCN100121-08	1	S7	-2.40	0.0191	1/21/2010@10:36:42			ICB/CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-2.40 < 5.01					
Message			ICB/CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-2.40 > -5.01					
Message			ICB/CCB Passed					
Action			Continue					
WCN100121-06	1	S6	5.87	0.292	1/21/2010@10:38:32			CRDL
Known Conc:			5.00					
DQM Test: > + Concentration Limit								
Result:			5.87 < 7.50					
Message			CRDL Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			5.87 > 2.50					
Message			Pass					
Action			None					
1202016428|941971|MB	1	1	-2.00	0.0322	1/21/2010@10:40:22			
1202016432|LCS	1	2	31.6	1.14	1/21/2010@10:41:15		25.00	
244612001	1	3	-1.49	0.0492	1/21/2010@10:42:08			
1202017516|DUP	1	4	-1.96	0.0337	1/21/2010@10:43:01			
1202017517|MS	1	5	109	3.69	1/21/2010@10:43:54			
1202017518|MSD	1	6	107	3.63	1/21/2010@10:44:47			
244619001	1	7	0.140	0.103	1/21/2010@10:45:40			
244619003	1	8	0.0720	0.101	1/21/2010@10:46:33			
244622001	1	9	-1.77	0.0398	1/21/2010@10:47:25			
244622002	1	10	-1.91	0.0351	1/21/2010@10:48:17			
WCN100121-03	1	S3	104	3.53	1/21/2010@10:49:09			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			3.9 < 10.0					
Message			CCV Passed					

		Action	Continue						
		DQM Test: < - Percent Relative Difference							
		Result:	3.9 < 10.0						
		Message	CCV Passed						
		Action	Continue						
WCN100121-08	1	S7	-0.243	0.0903	1/21/2010@10:51:00				CCB
		Known Conc:	0.00						
		DQM Test: > + Concentration Limit							
		Result:	-0.243 < 5.00						
		Message	CCB Passed						
		Action	Continue						
		DQM Test: < - Concentration Limit							
		Result:	-0.243 > -5.00						
		Message	CCB Passed						
		Action	Continue						
244628010	1	11	1.90	0.161	1/21/2010@10:52:48				
1202016429||DUP	1	12	3.43	0.212	1/21/2010@10:53:40				
1202016430||MS	1	13	91.4	3.12	1/21/2010@10:54:33				
1202016431||MSD	1	14	99.1	3.37	1/21/2010@10:55:24				
244628011	1	15	1.13	0.136	1/21/2010@10:56:15				
244628012	1	16	0.879	0.127	1/21/2010@10:57:09				
244628013	1	17	-0.820	0.0712	1/21/2010@10:58:03				
244628014	1	18	-3.16	-0.00624	1/21/2010@10:58:56				
244628015	1	19	2.03	0.165	1/21/2010@10:59:49				
244628016	1	20	-2.23	0.0247	1/21/2010@11:00:43				
WCN100121-03	1	S3	107	3.65	1/21/2010@11:01:36				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						
WCN100121-08	1	S7	1.15	0.137	1/21/2010@11:03:26				CCB
		Known Conc:	0.00						
		DQM Test: > + Concentration Limit							
		Result:	1.15 < 5.00						
		Message	CCB Passed						
		Action	Continue						
		DQM Test: < - Concentration Limit							
		Result:	1.15 > -5.00						
		Message	CCB Passed						
		Action	Continue						
244721001	1	21	0.0472	0.0999	1/21/2010@11:05:15				
244721002	1	22	-1.32	0.0546	1/21/2010@11:06:08				
244721003	1	23	-0.588	0.0789	1/21/2010@11:07:01				
244721004	1	24	4.11	0.234	1/21/2010@11:07:53				
244721005	1	25	-1.73	0.0410	1/21/2010@11:08:46				
244721006	1	26	3.04	0.199	1/21/2010@11:09:38				
244721007	1	27	0.176	0.104	1/21/2010@11:10:30				
244721008	1	28	-0.868	0.0697	1/21/2010@11:11:22				
1202016404|941967|MB	1	29	-2.13	0.0279	1/21/2010@11:12:15				
1202016411||LCS	1	30	30.0	1.09	1/21/2010@11:13:07			25.00	
WCN100121-03	1	S3	111	3.78	1/21/2010@11:13:59				CCV
		Known Conc:	100						
		DQM Test: > + Percent Relative Difference							
		Result:	11.5 > 10.0						
		Message	CCV Failed						
		Action	Stop Run						
		DQM Test: < - Percent Relative Difference							
		Result:	11.5 > 10.0						
		Message	CCV Passed						
		Action	Continue						

Analyte Properties Table for OM_1-21-2010_10-24-21.OMN

Property	Channel 1 TCYANIDE
Concentration Units	ug/L
Calibration 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

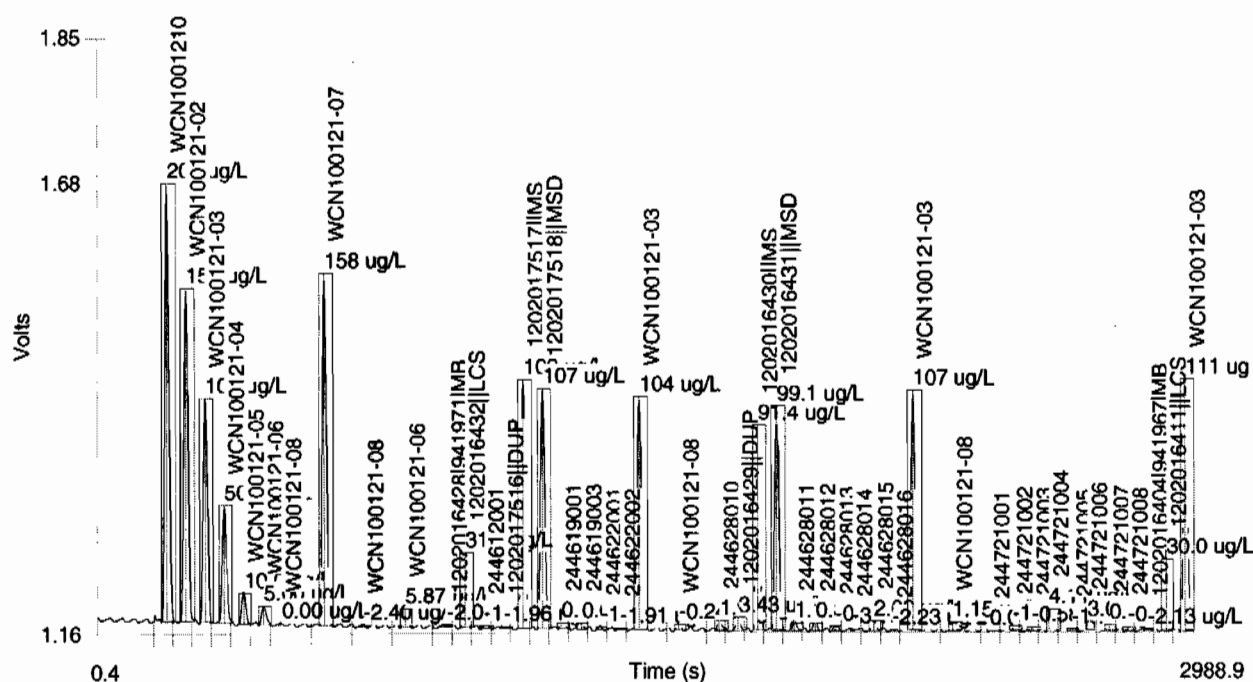
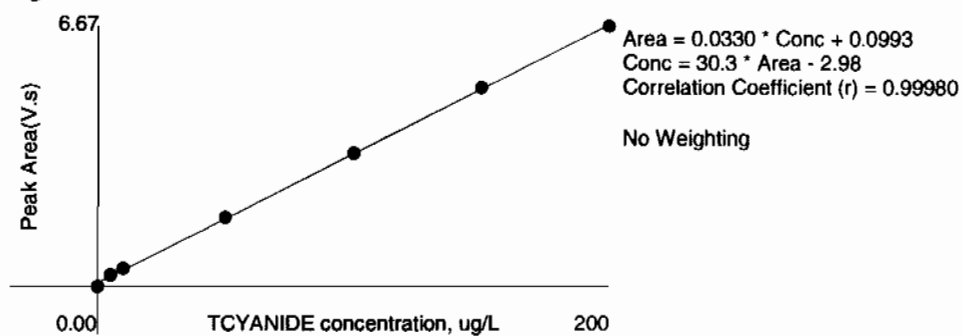


Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	6.67	0.502	0.6	1/21/2010	10:28:46
2	150	1	5.08	0.383	-0.6	1/21/2010	10:29:38
3	100	1	3.41	0.258	-0.3	1/21/2010	10:30:30
4	50.0	1	1.78	0.135	-1.6	1/21/2010	10:31:23
5	10.0	1	0.469	0.0346	-9.1	1/21/2010	10:32:16
6	5.00	1	0.298	0.0213	-12.7	1/21/2010	10:33:10
7	0.00	1	-0.00455	-0.00192		1/21/2010	10:34:04

Figure 1: TCYANIDE



This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
CCV		1	axc2	1/21/2010 12:06:14	OM_1-21-2010_12-04-42
CCB		1	axc2	1/21/2010 12:08:05	OM_1-21-2010_12-04-42
244601009	941967	1	axc2	1/21/2010 12:09:53	OM_1-21-2010_12-04-42
244601010	941967	1	axc2	1/21/2010 12:10:46	OM_1-21-2010_12-04-42
244601011	941967	1	axc2	1/21/2010 12:11:38	OM_1-21-2010_12-04-42
244601012	941967	1	axc2	1/21/2010 12:12:30	OM_1-21-2010_12-04-42
244601013	941967	1	axc2	1/21/2010 12:13:22	OM_1-21-2010_12-04-42
244604001	941967	1	axc2	1/21/2010 12:14:16	OM_1-21-2010_12-04-42
244604002	941967	1	axc2	1/21/2010 12:15:10	OM_1-21-2010_12-04-42
244628001	941967	1	axc2	1/21/2010 12:16:04	OM_1-21-2010_12-04-42
244628002	941967	1	axc2	1/21/2010 12:16:57	OM_1-21-2010_12-04-42
244628003	941967	1	axc2	1/21/2010 12:17:51	OM_1-21-2010_12-04-42
CCV		1	axc2	1/21/2010 12:18:43	OM_1-21-2010_12-04-42
CCB		1	axc2	1/21/2010 12:20:34	OM_1-21-2010_12-04-42
244628004	941967	1	axc2	1/21/2010 12:22:23	OM_1-21-2010_12-04-42
244628005	941967	1	axc2	1/21/2010 12:23:16	OM_1-21-2010_12-04-42
244628006	941967	1	axc2	1/21/2010 12:24:09	OM_1-21-2010_12-04-42
244628007	941967	1	axc2	1/21/2010 12:25:02	OM_1-21-2010_12-04-42
244628008	941967	1	axc2	1/21/2010 12:25:55	OM_1-21-2010_12-04-42
244628009	941967	1	axc2	1/21/2010 12:26:48	OM_1-21-2010_12-04-42
1202015109	941490	1	axc2	1/21/2010 12:27:40	OM_1-21-2010_12-04-42
1202015116	941490	1	axc2	1/21/2010 12:28:32	OM_1-21-2010_12-04-42
244510001	941490	1	axc2	1/21/2010 12:29:25	OM_1-21-2010_12-04-42
1202015110	941490	1	axc2	1/21/2010 12:30:17	OM_1-21-2010_12-04-42
CCV		1	axc2	1/21/2010 12:31:09	OM_1-21-2010_12-04-42
CCB		1	axc2	1/21/2010 12:32:59	OM_1-21-2010_12-04-42
1202015112	941490	1	axc2	1/21/2010 12:34:50	OM_1-21-2010_12-04-42
1202015114	941490	1	axc2	1/21/2010 12:35:44	OM_1-21-2010_12-04-42
244510003	941490	1	axc2	1/21/2010 12:36:38	OM_1-21-2010_12-04-42
244510005	941490	1	axc2	1/21/2010 12:37:32	OM_1-21-2010_12-04-42
244521001	941490	1	axc2	1/21/2010 12:38:26	OM_1-21-2010_12-04-42
244521003	941490	1	axc2	1/21/2010 12:39:19	OM_1-21-2010_12-04-42
244602001	941490	1	axc2	1/21/2010 12:40:12	OM_1-21-2010_12-04-42
1202016398	941490	1	axc2	1/21/2010 12:41:06	OM_1-21-2010_12-04-42
1202016400	941490	1	axc2	1/21/2010 12:41:58	OM_1-21-2010_12-04-42
1202016402	941490	1	axc2	1/21/2010 12:42:51	OM_1-21-2010_12-04-42
CCV		1	axc2	1/21/2010 12:43:43	OM_1-21-2010_12-04-42
CCB		1	axc2	1/21/2010 12:45:34	OM_1-21-2010_12-04-42
244614001	941490	1	axc2	1/21/2010 12:47:23	OM_1-21-2010_12-04-42
244618001	941490	1	axc2	1/21/2010 12:48:16	OM_1-21-2010_12-04-42
244625001	941490	1	axc2	1/21/2010 12:49:08	OM_1-21-2010_12-04-42
244625002	941490	1	axc2	1/21/2010 12:50:01	OM_1-21-2010_12-04-42
244640001	941490	1	axc2	1/21/2010 12:50:53	OM_1-21-2010_12-04-42
1202015111	941490	1	axc2	1/21/2010 12:51:47	OM_1-21-2010_12-04-42
1202015113	941490	1	axc2	1/21/2010 12:52:42	OM_1-21-2010_12-04-42
1202015115	941490	1	axc2	1/21/2010 12:53:36	OM_1-21-2010_12-04-42
244640002	941490	1	axc2	1/21/2010 12:54:30	OM_1-21-2010_12-04-42
244640003	941490	1	axc2	1/21/2010 12:55:24	OM_1-21-2010_12-04-42
CCV		1	axc2	1/21/2010 12:56:17	OM_1-21-2010_12-04-42
CCB		1	axc2	1/21/2010 12:58:07	OM_1-21-2010_12-04-42
244695002	941490	1	axc2	1/21/2010 12:59:56	OM_1-21-2010_12-04-42
1202016399	941490	1	axc2	1/21/2010 13:00:50	OM_1-21-2010_12-04-42
1202016401	941490	1	axc2	1/21/2010 13:01:43	OM_1-21-2010_12-04-42
1202016403	941490	1	axc2	1/21/2010 13:02:36	OM_1-21-2010_12-04-42
244695004	941490	1	axc2	1/21/2010 13:03:29	OM_1-21-2010_12-04-42
244726001	941490	1	axc2	1/21/2010 13:04:22	OM_1-21-2010_12-04-42
244758001	941490	1	axc2	1/21/2010 13:05:15	OM_1-21-2010_12-04-42
244758002	941490	1	axc2	1/21/2010 13:06:08	OM_1-21-2010_12-04-42

1202017566	942468	1	axc2	1/21/2010	13:07:01	OM_1-21-2010_12-04-42
1202017576	942468	1	axc2	1/21/2010	13:07:52	OM_1-21-2010_12-04-42
CCV		1	axc2	1/21/2010	13:08:45	OM_1-21-2010_12-04-42
CCB		1	axc2	1/21/2010	13:10:35	OM_1-21-2010_12-04-42
244855001*	942468	1	axc2	1/21/2010	13:12:26	OM_1-21-2010_12-04-42
1202017567*	942468	1	axc2	1/21/2010	13:13:20	OM_1-21-2010_12-04-42
1202017570*	942468	1	axc2	1/21/2010	13:14:14	OM_1-21-2010_12-04-42
1202017573*	942468	1	axc2	1/21/2010	13:15:09	OM_1-21-2010_12-04-42
244855003*	942468	1	axc2	1/21/2010	13:16:03	OM_1-21-2010_12-04-42
244874001*	942468	1	axc2	1/21/2010	13:16:57	OM_1-21-2010_12-04-42
244879003*	942468	1	axc2	1/21/2010	13:17:51	OM_1-21-2010_12-04-42
1202017568*	942468	1	axc2	1/21/2010	13:18:45	OM_1-21-2010_12-04-42
1202017571*	942468	1	axc2	1/21/2010	13:19:38	OM_1-21-2010_12-04-42
1202017574*	942468	1	axc2	1/21/2010	13:20:31	OM_1-21-2010_12-04-42
CCV		1	axc2	1/21/2010	13:21:24	OM_1-21-2010_12-04-42

Original Run Filename: OM_1-21-2010_12-04-42.OMN created 1/21/2010 12:04:42
 Original Run Author's Signature: [axc2]
 Current Run Filename: OM_1-21-2010_12-04-42.OMN last modified 1/21/2010 13:22:29
 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		Detection Time	ADF	MDF	Description
			TCYANIDE	Area (Vs)				
WCN100121-03	1	S3	99.6	3.39	1/21/2010@12:06:14			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			-0.4 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			-0.4 < 10.0					
Message			CCV Passed					
Action			Continue					
WCN100121-08	1	S7	0.791	0.124	1/21/2010@12:08:05			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			0.791 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			0.791 > -5.00					
Message			CCB Passed					
Action			Continue					
Calibration:			Table/Fig. 1					
244601009|941967|	1	41	-0.501	0.0818	1/21/2010@12:09:53			
244601010	1	42	-1.30	0.0554	1/21/2010@12:10:46			
244601011	1	43	-0.319	0.0878	1/21/2010@12:11:38			
244601012	1	44	-1.43	0.0511	1/21/2010@12:12:30			
244601013	1	45	-1.15	0.0602	1/21/2010@12:13:22			
244604001	1	46	-1.61	0.0450	1/21/2010@12:14:16			
244604002	1	47	-0.0842	0.0956	1/21/2010@12:15:10			
244628001	1	48	-0.762	0.0731	1/21/2010@12:16:04			
244628002	1	49	-1.20	0.0586	1/21/2010@12:16:57			
244628003	1	50	-1.34	0.0542	1/21/2010@12:17:51			
WCN100121-03	1	S3	99.7	3.39	1/21/2010@12:18:43			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			-0.3 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			-0.3 < 10.0					
Message			CCV Passed					
Action			Continue					
WCN100121-08	1	S7	0.209	0.105	1/21/2010@12:20:34			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			0.209 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			0.209 > -5.00					
Message			CCB Passed					
Action			Continue					
244628004	1	51	-0.821	0.0712	1/21/2010@12:22:23			
244628005	1	52	-1.38	0.0527	1/21/2010@12:23:16			
244628006	1	53	0.607	0.118	1/21/2010@12:24:09			
244628007	1	54	-1.69	0.0424	1/21/2010@12:25:02			
244628008	1	55	-2.98	0.00	1/21/2010@12:25:55			
244628009	1	56	0.0868	0.101	1/21/2010@12:26:48			

1202015109	941490	MB	1	57	-0.219	0.0911	1/21/2010@12:27:40		
1202015116		LCS	1	58	53.4	1.86	1/21/2010@12:28:32		
244510001			1	59	-0.767	0.0730	1/21/2010@12:29:25		
1202015110		DUP	1	60	-2.98	-2.84e-4	1/21/2010@12:30:17		
WCN100121-03			1	S3	96.1	3.27	1/21/2010@12:31:09		CCV
			Known Conc:		100				
DQM Test: > + Percent Relative Difference									
			Result:		-3.9 < 10.0				
			Message		CCV Passed				
			Action		Continue				
DQM Test: < - Percent Relative Difference									
			Result:		-3.9 < 10.0				
			Message		CCV Passed				
			Action		Continue				
WCN100121-08			1	S7	1.10	0.135	1/21/2010@12:32:59		CCB
			Known Conc:		0.00				
DQM Test: > + Concentration Limit									
			Result:		1.10 < 5.00				
			Message		CCB Passed				
			Action		Continue				
DQM Test: < - Concentration Limit									
			Result:		1.10 > -5.00				
			Message		CCB Passed				
			Action		Continue				
1202015112		MS	1	61	108	3.68	1/21/2010@12:34:50		
1202015114		MSD	1	62	111	3.77	1/21/2010@12:35:44		
244510003			1	63	0.439	0.113	1/21/2010@12:36:38		
244510005			1	64	3.23	0.205	1/21/2010@12:37:32		
244521001			1	65	-1.99	0.0325	1/21/2010@12:38:26		
244521003			1	66	1.19	0.138	1/21/2010@12:39:19		
244602001			1	67	-2.16	0.0268	1/21/2010@12:40:12		
1202016398		DUP	1	68	-2.98	-1.33e-4	1/21/2010@12:41:06		
1202016400		MS	1	69	111	3.78	1/21/2010@12:41:58		
1202016402		MSD	1	70	117	3.97	1/21/2010@12:42:51		
WCN100121-03			1	S3	101	3.45	1/21/2010@12:43:43		CCV
			Known Conc:		100				
DQM Test: > + Percent Relative Difference									
			Result:		1.5 < 10.0				
			Message		CCV Passed				
			Action		Continue				
DQM Test: < - Percent Relative Difference									
			Result:		1.5 < 10.0				
			Message		CCV Passed				
			Action		Continue				
WCN100121-08			1	S7	1.18	0.137	1/21/2010@12:45:34		CCB
			Known Conc:		0.00				
DQM Test: > + Concentration Limit									
			Result:		1.18 < 5.00				
			Message		CCB Passed				
			Action		Continue				
DQM Test: < - Concentration Limit									
			Result:		1.18 > -5.00				
			Message		CCB Passed				
			Action		Continue				
244614001			1	71	-2.30	0.0223	1/21/2010@12:47:23		
244618001			1	72	-2.25	0.0239	1/21/2010@12:48:16		
244625001			1	73	-3.13	-0.00504	1/21/2010@12:49:08		
244625002			1	74	-2.49	0.0159	1/21/2010@12:50:01		
244640001			1	75	-2.02	0.0316	1/21/2010@12:50:53		
1202015111		DUP	1	76	-2.17	0.0266	1/21/2010@12:51:47		
1202015113		MS	1	77	104	3.54	1/21/2010@12:52:42		
1202015115		MSD	1	78	114	3.85	1/21/2010@12:53:36		
244640002			1	79	0.712	0.122	1/21/2010@12:54:30		
244640003			1	80	-1.59	0.0457	1/21/2010@12:55:24		
WCN100121-03			1	S3	97.7	3.33	1/21/2010@12:56:17		CCV
			Known Conc:		100				
DQM Test: > + Percent Relative Difference									
			Result:		-2.3 < 10.0				

		Message	CCV Passed				
		Action	Continue				
DQM Test: < - Percent Relative Difference							
		Result:	-2.3 < 10.0				
		Message	CCV Passed				
		Action	Continue				
WCN100121-08	1	S7	0.823	0.126	1/21/2010@12:58:07		CCB
		Known Conc:	0.00				
DQM Test: > + Concentration Limit							
		Result:	0.823 < 5.00				
		Message	CCB Passed				
		Action	Continue				
DQM Test: < - Concentration Limit							
		Result:	0.823 > -5.00				
		Message	CCB Passed				
		Action	Continue				
244695002	1	81	-2.59	0.0126	1/21/2010@12:59:56		
1202016399||DUP	1	82	0.985	0.131	1/21/2010@13:00:50		
1202016401||MS	1	83	114	3.86	1/21/2010@13:01:43		
1202016403||MSD	1	84	119	4.02	1/21/2010@13:02:36		
244695004	1	85	-1.10	0.0618	1/21/2010@13:03:29		
244726001	1	86	26.8	0.985	1/21/2010@13:04:22		
244758001	1	87	-1.02	0.0645	1/21/2010@13:05:15		
244758002	1	88	-1.24	0.0575	1/21/2010@13:06:08		
1202017566|942468|MB	1	89	-1.04	0.0641	1/21/2010@13:07:01		
1202017576||LCS	1	90	49.7	1.74	1/21/2010@13:07:52		
WCN100121-03	1	S3	99.0	3.37	1/21/2010@13:08:45		CCV
		Known Conc:	100				
DQM Test: > + Percent Relative Difference							
		Result:	-1.0 < 10.0				
		Message	CCV Passed				
		Action	Continue				
DQM Test: < - Percent Relative Difference							
		Result:	-1.0 < 10.0				
		Message	CCV Passed				
		Action	Continue				
WCN100121-08	1	S7	1.01	0.132	1/21/2010@13:10:35		CCB
		Known Conc:	0.00				
DQM Test: > + Concentration Limit							
		Result:	1.01 < 5.00				
		Message	CCB Passed				
		Action	Continue				
DQM Test: < - Concentration Limit							
		Result:	1.01 > -5.00				
		Message	CCB Passed				
		Action	Continue				
244855001	1	91	-1.52	0.0483	1/21/2010@13:12:26		
1202017567||DUP	1	92	-1.16	0.0601	1/21/2010@13:13:20		
1202017570||MS	1	93	105	3.57	1/21/2010@13:14:14		
1202017573||MSD	1	94	113	3.82	1/21/2010@13:15:09		
244855003	1	95	2.70	0.188	1/21/2010@13:16:03		
244874001	1	96	6.26	0.305	1/21/2010@13:16:57		
244879003	1	97	0.509	0.115	1/21/2010@13:17:51		
1202017568||DUP	1	98	-0.0503	0.0967	1/21/2010@13:18:45		
1202017571||MS	1	99	113	3.83	1/21/2010@13:19:38		
1202017574||MSD	1	100	138	4.65	1/21/2010@13:20:31		
WCN100121-03	1	S3	-321	-10.5	1/21/2010@13:21:24		CCV
		Known Conc:	100				
DQM Test: > + Percent Relative Difference							
		Result:	-420.7 < 10.0				
		Message	CCV Passed				
		Action	Continue				
DQM Test: < - Percent Relative Difference							
		Result:	-420.7 < 10.0				
		Message	CCV Failed				
		Action	Stop Run				

Analyte Properties Table for OM_1-21-2010_12-04-42.OMN

Property	Channel 1
	TCYANIDE
Concentration Units	ug/L
Calibration 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

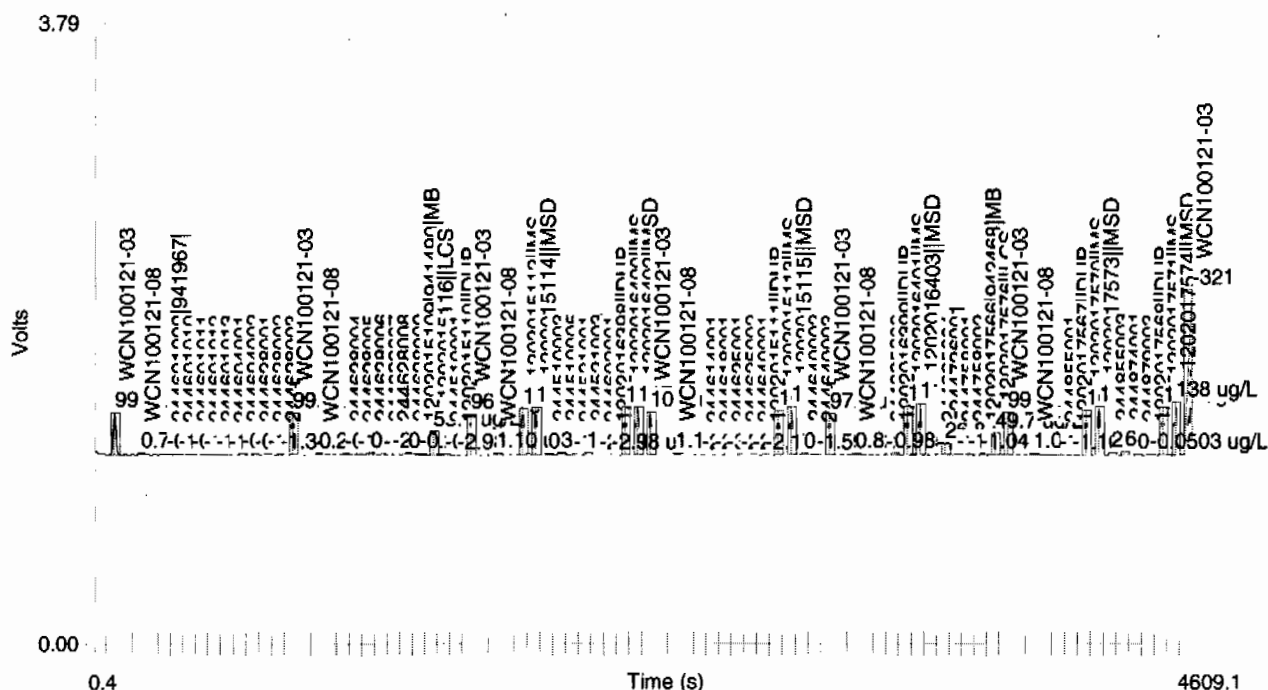


Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	6.67	0.502	0.6	1/21/2010	10:28:46
2	150	1	5.08	0.383	-0.6	1/21/2010	10:29:38
3	100	1	3.41	0.258	-0.3	1/21/2010	10:30:30
4	50.0	1	1.78	0.135	-1.6	1/21/2010	10:31:23
5	10.0	1	0.469	0.0346	-9.1	1/21/2010	10:32:16
6	5.00	1	0.298	0.0213	-12.7	1/21/2010	10:33:10
7	0.00	1	-0.00455	-0.00192		1/21/2010	10:34:04

Figure 1: TCYANIDE

