

Thursday, January 28, 2010

Page 1 of 3  
REQUEST NUMBER: 10-1474

**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: 10-1474

Per Agreement Number: 126310011

Project Cost Code: MR3A05529E00

Please analyse the enclosed samples  
according to the schedule indicated:

SHIP DATE: 1/28/2010

TURNAROUND/REPORT DUE: 2/27/2010

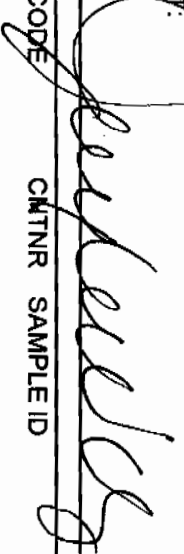
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:



PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
SW-846:6020		1	RE15-10-7952	R	1/26/2010	
		1	RE15-10-7953	R	1/26/2010	
		1	RE15-10-7954	R	1/26/2010	
		1	RE15-10-7955	R	1/26/2010	
		1	RE15-10-7956	R	1/26/2010	
		1	RE15-10-8058	R	1/26/2010	
		1	RE15-10-8059	R	1/26/2010	
		1	RE15-10-8060	R	1/26/2010	
		1	RE15-10-8081	W	1/26/2010	

Thursday, January 28, 2010

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REQUEST NUMBER: 10-1474

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
SW-846:6020	SW-846:6850	1	RE15-10-8082	W	1/26/2010	
		1	RE15-10-7952	R	1/26/2010	
		1	RE15-10-7953	R	1/26/2010	
		1	RE15-10-7954	R	1/26/2010	
		1	RE15-10-7955	R	1/26/2010	
		1	RE15-10-7956	R	1/26/2010	
		1	RE15-10-8058	R	1/26/2010	
		1	RE15-10-8059	R	1/26/2010	
		1	RE15-10-8060	R	1/26/2010	
		1	RE15-10-8081	W	1/26/2010	
SW-846:7470A	SW-846:7471A	1	RE15-10-8082	W	1/26/2010	
		1	RE15-10-8081	W	1/26/2010	
		1	RE15-10-8082	W	1/26/2010	
		1	RE15-10-8081	W	1/26/2010	
		1	RE15-10-8082	W	1/26/2010	
		1	RE15-10-8081	W	1/26/2010	
		1	RE15-10-7952	R	1/26/2010	
		1	RE15-10-7953	R	1/26/2010	
		1	RE15-10-7954	R	1/26/2010	
		1	RE15-10-7955	R	1/26/2010	
SW-846:9012A	SW-846:9012A	1	RE15-10-8060	R	1/26/2010	
		1	RE15-10-7952	R	1/26/2010	
		1	RE15-10-7953	R	1/26/2010	
		1	RE15-10-7954	R	1/26/2010	
		1	RE15-10-7955	R	1/26/2010	
		1	RE15-10-7956	R	1/26/2010	
		1	RE15-10-8058	R	1/26/2010	
		1	RE15-10-8059	R	1/26/2010	
		1	RE15-10-8060	R	1/26/2010	
		1	RE15-10-8081	R	1/26/2010	

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REQUEST NUMBER: 10-1474

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
SW-846:9012A		1	RE15-10-8060	R	1/26/2010	
		1	RE15-10-8081	W	1/26/2010	
		1	RE15-10-8082	W	1/26/2010	

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Thursday, January 28, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1474

LOS ALAMOS

REQUEST NUMBER: 10-1474

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 2/27/2010

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
RE15-10-7954	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7956	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7955	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7953	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7952	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-8060	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-8058	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-8059	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-8081	1	POLY	METALS+U-GEL	Nitric Acid	W
RE15-10-8081	1	POLY	SW-846:6850	Ice	W
RE15-10-8081	1	POLY	TCN	Sodium Hydroxide	W
RE15-10-8082	1	POLY	METALS+U-GEL	Nitric Acid	W
RE15-10-8082	1	POLY	SW-846:6850	Ice	W
RE15-10-8082	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: 2499

EVENT NAME: 4th Qtr. FY09 - SWMU 15-008(b) - Threemile Canyon

SAMPLE ID: RE15-10-7952

WORK ORDER:

AS PLANNED		AS COLLECTED	AS PLANNED		AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		01/26/2010	MEDIA:	OBT3	ok
TIME COLLECTED (HH:MM)		1400	SUB-MEDIA:	TUFF 1	↓
PRS ID:	15-008(b)	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	15-610745	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	2.5	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	3.5	SCREEN/PORT DESC:		NA
FIELD MATRIX:	R	R	EXCAVATED: YES/NO/NA		
COMPOSITE TYPE:	NA	COMPOSITE TIME INTERVAL:	NA	WATER FLOWING: YES/NO/NA	
BOREHOLE: YES/NO/NA		BOREHOLE DECLINATION:	NA	BOREHOLE DIRECTION:	NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Regular	AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1	↓	H3	500 ML POLY	Ice	Y	
1	↓	Met+U+CLO4+C N	1 GAL POLY 1L RS 01-11-10	Ice	Y	
1	↓	NMED Explosives list	250 ML AMBER GLASS	Ice	Y	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC:

Pinkish gray moist tuff

SAMPLE COMMENTS:

Hit tuff at 1.5 ft

LOCATION DESC:

8b-65 mesa top

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 16 dpm  
Beta/Gamma = 1997 dpm

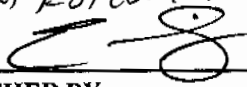
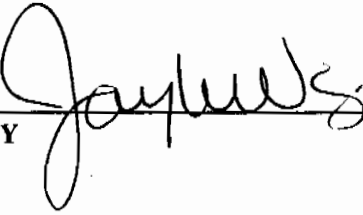
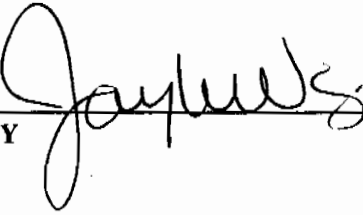
PID Ambient 0.0  
Reading 0.0 ppm

COLLECTED BY (PRINT)

TLMcFarland

REVIEWED BY (PRINT)

R Saunders

RELINQUISHED BY (Printed Name) Estevan Lujan (Signature) 	Date/Time 1/27/10 09:16 Am	RECEIVED BY (Printed Name)  (Signature) 	Date/Time 1/27/10 938
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2499

EVENT NAME: 4th Qtr. FY09 - SWMU 15-008(b) - Threemile Canyon

SAMPLE ID: RE15-10-7953

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/26/2010		MEDIA: QBT3		Allh	
TIME COLLECTED (HH:MM)		1457		SUB-MEDIA: TUFF 1		NA	
PRS ID:	15-008(b)	ok		SAMPLE TECH CODE: HA		ok	
LOCATION ID:	15-610746	↓		FIELD QC TYPE: NA		↓	
LOCATION TYPE:	GENERIC	↓		FIELD PREP: NA		↓	
TOP DEPTH:	0	0.0		SAMPLE USAGE: INV		↓	
BOTTOM DEPTH:	0	0.8		SCREEN/PORT DESC:		NA	
FIELD MATRIX:	R	S		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE: NA		COMPOSITE TIME INTERVAL: NA		WATER FLOWING: YES/NO/NA			
BOREHOLE: YES/NO/NA		BOREHOLE DECLINATION: NA		BOREHOLE DIRECTION: NA			

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Regular	AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1		H3	500 ML POLY	Ice	Y	
1		Met+U+CLO4+C N	1 L POLY IL RS 01-11-10	Ice	Y	
1		NMED Explosives list	250 ML AMBER GLASS	Ice	Y	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: Brown sand

FD RE15-10-8060

SAMPLE COMMENTS:

NA

LOCATION DESC: 8b-46 mesa top

FIELD SCREENING/MEASUREMENT RESULTS:

HE negative

Alpha  $\leq$  22 dpm  
Beta/Gamma  $\leq$  1470 dpm

PID  $\frac{\text{Ambient}}{\text{Reading}} = \frac{0.0}{0.0}$  ppm

COLLECTED BY (PRINT)

TLMcFarland

REVIEWED BY (PRINT)

R Saunders

RELINQUISHED BY (Printed Name) Estevan Lujan (Signature)	Date/Time 1/27/10 09:15 AM	RECEIVED BY (Printed Name) (Signature)	Date/Time 1/27/10 935
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2499

EVENT NAME: 4th Qtr. FY09 - SWMU 15-008(b) - Threemile Canyon

SAMPLE ID: RE15-10-7954

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/26/2010		MEDIA:		QBT3	
TIME COLLECTED (HH:MM)		1512		SUB-MEDIA:		TUFF 1	
PRS ID:	15-008(b)	ok		SAMPLE TECH CODE:		HA	
LOCATION ID:	15-610746	↓		FIELD QC TYPE:		NA	
LOCATION TYPE:	GENERIC	↓		FIELD PREP:		NA	
TOP DEPTH:	0	3.0		SAMPLE USAGE:		INV	
BOTTOM DEPTH:	0	3.4		SCREEN/PORT DESC:		NA	
FIELD MATRIX:	R	R		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE: NA		COMPOSITE TIME INTERVAL: NA		WATER FLOWING: YES/NO/NA			
BOREHOLE: YES/NO/NA		BOREHOLE DECLINATION: NA		BOREHOLE DIRECTION: NA			

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Regular	AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1		H3	500 ML POLY	Ice	Y	
1		Met+U+CLO4+C N	1 GAL POLY IL RS 01-11-10	Ice	Y	
1		NMED Explosives list	250 ML AMBER GLASS	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC:

Gray tuff

SAMPLE COMMENTS:

NA

LOCATION DESC:

86-46 mesa top

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha  $\leq$  33 dpm  
Beta/Gamma  $\leq$  3340 dpm

PID  $\frac{\text{Ambient}}{\text{Reading}} = \frac{0.0}{0.0}$  ppm

COLLECTED BY (PRINT)

JLMcFarland

REVIEWED BY (PRINT)

R Saunders

RELINQUISHED BY (Printed Name) Estevan Lujam (Signature)	Date/Time 1/27/10 09:16 AM	RECEIVED BY (Printed Name) Sherri Sherwood (Signature)	Date/Time 1/27/10 0916
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2499

EVENT NAME: 4th Qtr. FY09 - SWMU 15-008(b) - Threemile Canyon

SAMPLE ID: RE15-10-7955

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/26/2010		MEDIA: QBT3		ALLH	
TIME COLLECTED(HH:MM)		1515		SUB-MEDIA: TUFF 1		NA	
PRS ID:	15-008(b)	ok		SAMPLE TECH CODE: HA		ok	
LOCATION ID:	15-610747	↓		FIELD QC TYPE: NA		↓	
LOCATION TYPE:	GENERIC	↓		FIELD PREP: NA		↓	
TOP DEPTH:	0	0.0		SAMPLE USAGE: INV		↓	
BOTTOM DEPTH:	0	0.5		SCREEN/PORT DESC:		NA	
FIELD MATRIX:	R	S		EXCAVATED: YES / <input checked="" type="checkbox"/> / NA			
COMPOSITE TYPE: NA		COMPOSITE TIME INTERVAL: NA		WATER FLOWING: YES / <input checked="" type="checkbox"/> / NA			
BOREHOLE: YES / <input checked="" type="checkbox"/> / NA		BOREHOLE DECLINATION: NA		BOREHOLE DIRECTION: NA			

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Regular	AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1		H3	500 ML POLY	Ice	Y	
1		Met+U+CLO4+C N	1 GAL POLY IL RS 01-11-10	Ice	Y	
1		NMED Explosives list	250 ML AMBER GLASS	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: light brown silty sand with some tuff

SAMPLE COMMENTS:

NA

LOCATION DESC: 8b-35 mesa top

FIELD SCREENING/MEASUREMENT RESULTS:

HE NEG

Alpha = 5 dpm

Beta/Gamma = 4250 dpm

PID Ambient 0.0  
Reading 8.9 ppm

COLLECTED BY (PRINT)

R Saunders

REVIEWED BY (PRINT)

TLMcFarland

RELINQUISHED BY (Printed Name) <i>Estevan Lujan</i> (Signature) <i>[Signature]</i>	Date/Time 1/27/10 09:16 AM	RECEIVED BY (Printed Name) <i>Sherril Sherwood</i> (Signature) <i>[Signature]</i>	Date/Time 1/27/10 0916
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2499

EVENT NAME: 4th Qtr. FY09 - SWMU 15-008(b) - Threemile Canyon

SAMPLE ID: RE15-10-7956

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/26/2010		MEDIA:	QBT3		OK
TIME COLLECTED (HH:MM)		1530		SUB-MEDIA:	TUFF 1		↓
PRS ID:	15-008(b)	ok		SAMPLE TECH CODE:	HA		ok
LOCATION ID:	15-610747	↓		FIELD QC TYPE:	NA		↓
LOCATION TYPE:	GENERIC	↓		FIELD PREP:	NA		↓
TOP DEPTH:	0	3.0		SAMPLE USAGE:	INV		↓
BOTTOM DEPTH:	0	3.7		SCREEN/PORT DESC:			NA
FIELD MATRIX:	R	R		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
				WATER FLOWING: YES/NO/NA			
BOREHOLE: YES/NO/NA				BOREHOLE DECLINATION:	NA		
				BOREHOLE DIRECTION:	NA		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Regular	AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1		H3	500 ML POLY	Ice	Y	
1		Met+U+CLO4+C N	TGAL POLY 1L RS 01-11-10	Ice	Y	
1		NMED Explosives list	250 ML AMBER GLASS	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: pinkish grey tuff, tuff fragments  
FR RE 15-10-8082

SAMPLE COMMENTS:  
NA

LOCATION DESC: 8b-35 mesa top

## FIELD SCREENING/MEASUREMENT RESULTS:

Alpha  $\leq$  44 dpm  
Beta/Gamma  $\leq$  2910 dpm

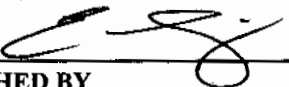
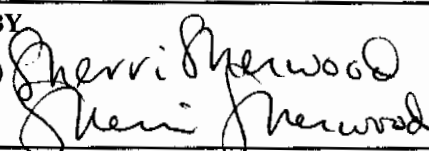
PID  $\frac{\text{Ambient}}{\text{Reading}} = \frac{0.0}{7.1}$  ppm

COLLECTED BY (PRINT)

R Saunders

REVIEWED BY (PRINT)

TLMcFarland

RELINQUISHED BY (Printed Name) Estevan Lujan (Signature) 	Date/Time 1/27/10 09:15 AM	RECEIVED BY (Printed Name) Sherri Sherwood (Signature) 	Date/Time 1/27/10 0915
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

**SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY**

EVENT ID: 2499

EVENT NAME: 4th Qtr. FY09 - SWMU 15-008(b) - Threemile Canyon

SAMPLE ID: RE15-10-8058

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/26/2010		MEDIA:		OBT3	
TIME COLLECTED (HH:MM)		1029		SUB-MEDIA:		TUFF 1	
PRS ID:	15-008(b)	OK		SAMPLE TECH CODE:		HA	
LOCATION ID:	UNK	↓		FIELD QC TYPE:		ED	
LOCATION TYPE:	GENERIC	✓		FIELD PREP:		NA	
TOP DEPTH:	0	0.0		SAMPLE USAGE:		QC	
BOTTOM DEPTH:	0	0.5		SCREEN/PORT DESC:		NA	
FIELD MATRIX:	R	S		EXCAVATED: YES/NO/NA		NA	
COMPOSITE TYPE: NA		COMPOSITE TIME INTERVAL: NA		WATER FLOWING: YES/NO/NA		NA	
BOREHOLE: YES/NO/NA		BOREHOLE DECLINATION: NA		BOREHOLE DIRECTION: NA		NA	

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	normal	72m 1/26/10 8082+NMED-HEXP	250 ML AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1		H3	500 ML POLY	Ice	Y	
1		Met+U+CLO4+C N	1 GAL POLY 1 liter 1.11.10 JC	Ice	Y	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: QC Sample of RE 15-10-7947  
brown sandy silt, rocks, some roots, pine needles

SAMPLE COMMENTS:

NA

LOCATION DESC:

86-43 mesa top

FIELD SCREENING/MEASUREMENT RESULTS:

HE NEG

Alpha  $\leq$  16 dpm  
Beta/Gamma  $\leq$  2300 dpm

PID  $\frac{\text{Ambient Reading}}{1.5}$  ppm

COLLECTED BY (PRINT)

R Saunders

REVIEWED BY (PRINT)

T L McFarland

RELINQUISHED BY (Printed Name) Estuan Lujan (Signature)	Date/Time 1/27/10 09:21 AM	RECEIVED BY (Printed Name) (Signature)	Date/Time 1/27/10 938
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

**SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY**

EVENT ID: 2499

EVENT NAME: 4th Qtr. FY09 - SWMU 15-008(b) - Threemile Canyon

SAMPLE ID: RE15-10-8059

WORK ORDER:

AS PLANNED		AS COLLECTED	AS PLANNED		AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		01/26/2010	MEDIA:		QBT3
TIME COLLECTED (HH:MM)		1047	SUB-MEDIA:		TUFF 1
PRS ID:	15-008(b)	OK	SAMPLE TECH CODE:		HA
LOCATION ID:	UNK	15-610742	FIELD QC TYPE:		ED
LOCATION TYPE:	GENERIC	OK	FIELD PREP:		NA
TOP DEPTH:	0	2.5	SAMPLE USAGE:		QC
BOTTOM DEPTH:	0	3.5	SCREEN/PORT DESC:		NA
FIELD MATRIX:	R	R	EXCAVATED: YES/NO/NA		
COMPOSITE TYPE: NA		COMPOSITE TIME INTERVAL: NA	WATER FLOWING: YES/NO/NA		
BOREHOLE: YES/NO/NA		BOREHOLE DECLINATION: NA	BOREHOLE DIRECTION: NA		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	72m 1/26/10 80827-NMED-HEXP	250 ML AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1		H3	500 ML POLY	Ice	Y	
1		Met+U+CLO4+C N	1 GAL POLY 1 liter 1.11.10 LC	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: QC Sample of RE15-10-7946

Gray tuff

SAMPLE COMMENTS:

Tuff at 2 ft

LOCATION DESC: 8b-41 mesa top edge

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha  $\leq$  16 dpm  
Beta/Gamma  $\leq$  2070 dpmPID  $\frac{\text{Ambient}}{\text{Reading}} \frac{0.1}{83}$  ppm

COLLECTED BY (PRINT)

TL McFarland

REVIEWED BY (PRINT)

R Saunders

RELINQUISHED BY (Printed Name) <i>Estevan Luján</i> (Signature) <i>[Signature]</i>	Date/Time 1/27/10 09:20 Am	RECEIVED BY (Printed Name) <i>Sherril Sherwood</i> (Signature) <i>[Signature]</i>	Date/Time 1/27/10 0920
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2499

EVENT NAME: 4th Qtr. FY09 - SWMU 15-008(b) - Threemile Canyon

SAMPLE ID: RE15-10-8060

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/26/2010		MEDIA:		QBT3	
TIME COLLECTED (HH:MM)		1457		SUB-MEDIA:		TUFF 1	
PRS ID:	15-008(b)	OK		SAMPLE TECH CODE:		HA	
LOCATION ID:	UNK	15-61074		FIELD QC TYPE:		FD	
LOCATION TYPE:	GENERIC	OK		FIELD PREP:		NA	
TOP DEPTH:	0	0.0		SAMPLE USAGE:		QC	
BOTTOM DEPTH:	0	0.8		SCREEN/PORT DESC:		NA	
FIELD MATRIX:	R	S		EXCAVATED: YES/NO/NA		NA	
COMPOSITE TYPE: NA		COMPOSITE TIME INTERVAL: NA		WATER FLOWING: YES/NO/NA		NA	
BOREHOLE: YES/NO/NA		BOREHOLE DECLINATION: NA		BOREHOLE DIRECTION: NA		NA	

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	7241126/10 8082+NMED-HEXP	250 ML AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1		H3	500 ML POLY	Ice	Y	
1		Met+U+CLO4+C N	1 GAL POLY 1 liter 1.11.10 7c	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: QC Sample of RE15-10-7953

Brown sand

SAMPLE COMMENTS:

NA

LOCATION DESC:

8b-46 mesa top

FIELD SCREENING/MEASUREMENT RESULTS:

HE negative

Alpha = 22 dpm  
Beta/Gamma = 7970 dpm

PID  $\frac{\text{Ambient Reading}}{0.0} = 0.0$  ppm

COLLECTED BY (PRINT)

TL McFarlane

REVIEWED BY (PRINT)

R Saunders

RELINQUISHED BY (Printed Name) <i>Estevan Lujan</i> (Signature) <i>[Signature]</i>	Date/Time 1/27/10 09:15 AM	RECEIVED BY (Printed Name) <i>[Signature]</i> (Signature) <i>[Signature]</i>	Date/Time 1/27/10 935
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time



## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2499

EVENT NAME: 4th Qtr. FY09 - SWMU 15-008(b) - Threemile Canyon

SAMPLE ID: RE15-10-8081

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/26/2010		MEDIA:		NA	
TIME COLLECTED (HH:MM)		1028		SUB-MEDIA:		OTHER	
PRS ID: 15-008(b)		OK		SAMPLE TECH CODE:		DC	
LOCATION ID: UNK		15-610742		FIELD QC TYPE:		ER	
LOCATION TYPE: GENERIC		OK		FIELD PREP:		UF	
TOP DEPTH: 0		↓		SAMPLE USAGE:		QC	
BOTTOM DEPTH: 0		↓		SCREEN/PORT DESC:		NA	
FIELD MATRIX: W		W		EXCAVATED: YES (NO) NA			
COMPOSITE TYPE: NA		COMPOSITE TIME INTERVAL: NA		WATER FLOWING: YES (NO) NA			
BOREHOLE: YES (NO) NA		BOREHOLE DECLINATION: NA		BOREHOLE DIRECTION: NA			

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

SAMPLE DESC: QC Sample of

RE15-10-7945

Rinsate

SAMPLE COMMENTS: NA

LOCATION DESC:  
NA

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha =  $\frac{RS_{01-26-10}}{dpm}$   
 Beta/Gamma =  $\frac{dpm}{dpm}$

PID  $\frac{RS_{01-26-10}}{Ambient Reading} = ppm$

COLLECTED BY (PRINT)

R Saunders

REVIEWED BY (PRINT) TLMcFarland

RELINQUISHED BY (Printed Name) Eskoan Lujan (Signature)	Date/Time 1/27/10 09:19 AM	RECEIVED BY (Printed Name) Sheri Sherwood (Signature)	Date/Time 1/27/10 0919
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2499

EVENT NAME: 4th Qtr. FY09 - SWMU 15-008(b) - Threemile Canyon

SAMPLE ID: RE15-10-8082

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/26/2010		MEDIA:	NA		ok
TIME COLLECTED (HH:MM)		1547		SUB-MEDIA:	OTHER		
PRS ID:	15-008(b)	ok		SAMPLE TECH CODE:	DC		
LOCATION ID:	UNK	15-610747		FIELD QC TYPE:	ER		
LOCATION TYPE:	GENERIC	ok		FIELD PREP:	UF		
TOP DEPTH:	0			SAMPLE USAGE:	QC		
BOTTOM DEPTH:	0			SCREEN/PORT DESC:			NA
FIELD MATRIX:	W			EXCAVATED: YES/NO/NA			
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
BOREHOLE: YES/NO/NA				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	↓	SW-846:6850	250 ML POLY	Ice	Y	
1	↓	TCN	500 ML POLY	Sodium Hydroxide	Y	

SAMPLE DESC: QC Sample of RE15-10-7956

SAMPLE COMMENTS:

Rinsate

LOCATION DESC:

NA

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha =        dpm <sup>72m 1/26/10</sup>  
 Beta/Gamma =        dpm

PID <sup>72m 1/26/10</sup>  $\frac{\text{Ambient Reading}}{\text{Reading}} = \text{ppm}$

COLLECTED BY (PRINT)

TL McFarland

REVIEWED BY (PRINT)

R Saunders

RELINQUISHED BY (Printed Name) <i>Estevan Lujan</i> (Signature) <i>E Lujan</i>	Date/Time 1/27/10 09:14A4	RECEIVED BY (Printed Name) <i>Shari Sherwood</i> (Signature) <i>Shari Sherwood</i>	Date/Time 1/27/10 0914
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

## Rad Screening Data Release Form

The Following samples were received at the Field Support Facility (FSF) without screening data (list sample number):

RE15-10-7890	RE15-10-7886	RE15-10-7948
" " 7889	" " 7885	" " 7947
" " 7956	" " 7882	" " 8058
" " 7953	" " 7881	" " 7950
" " 8060	" " 7941	
" " 7954	" " 7942	
" " 7955	" " 7943	
" " 7952	" " 7944	
" " 7951	" " 8059	
" " 7949	" " 7946	
	" " 7945	

These samples will not be shipped until radiological screening data documentation arrives at the FSF. I understand that it is my responsibility to ensure this information arrives at the FSF in a timely manner. If holding times are missed because screening data does not arrive, I will pick up the samples.

.....

The following samples do not require rad screening data for the reasons stated (list sample numbers):

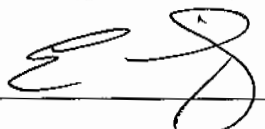
RE15-10-8082

RE15-10-8081

Reason: *Field Rinse*

.....

Print Last Name Lujan

Signature 

Date 11/27/10



133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00026

Request or PO Number:

Client Sample ID: RE15-10-7952

ARS Sample ID: ARS2-10-00026-007

Sample Collection Date: 01/26/10 14:00

Date Received: 01/27/10 00:00

Sample Matrix: Soil/Solid

Report Date: 01/28/10 12:07

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDR	YDL	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	62.18	35.32	30.56	36.33		pCi/g	EPA 900.0M	1/28/2010	ME	N/A
GROSS BETA	81.19	20.92	19.68	23.16		pCi/g	EPA 900.0M	1/28/2010	ME	N/A
NA-22	0.00	0.00	0.14	0.00		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
K-40	-0.16	-12.45	5.49	-12.45		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
CO-60	0.00	14.59	0.15	14.59		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
CS-134	0.00	0.00	0.11	0.00		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
CS-137	-0.01	19.09	0.09	19.09		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
EU-152	0.42	0.49	0.17	0.49		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
PB-212	1.86	0.64	0.15	0.64		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
RA-228	1.89	1.11	0.39	1.11		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
U-235	-0.09	82.03	0.23	82.03		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
U-238	5.90	4.57	1.79	4.79		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
AM-241	0.41	0.48	0.18	0.48		pCi/g	EPA 901.1M	1/27/2010	ME	N/A

NOTES: % Moisture: 0.69

*[Signature]*  
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: ARS2-10-00025

Request or PO Number:

Client Sample ID: RE15-10-7953

ARS Sample ID: ARS2-10-00026-008

Sample Collection Date: 01/26/10 14:57

Date Received: 01/27/10 00:00

Sample Matrix: Soil/Solid

Report Date: 01/28/10 12:07

Analysis Description	Analysis Results	Analysis Error +/- 2 s	Min	Typ	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	157.42	34.93	38.20	58.23		pCi/g	EPA 900.0M	1/28/2010	ME	N/A
GROSS BETA	199.89	29.87	18.71	38.00		pCi/g	EPA 900.0M	1/28/2010	ME	N/A
NA-22	0.00	0.00	0.07	0.00		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
K-40	-0.78	-24.74	3.32	-24.74		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
CO-60	0.00	7.42	0.08	7.42		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
CS-134	0.00	0.00	0.05	0.00		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
CS-137	0.42	0.22	0.05	0.22		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
EU-152	0.49	0.40	0.09	0.40		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
PB-212	1.00	0.39	0.14	0.39		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
RA-228	0.14	0.10	0.28	0.30		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
U-235	3.25	1.18	0.46	1.19		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
U-238	82.56	8.88	2.44	20.84		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
AM-241	1.34	1.06	0.39	1.06		pCi/g	EPA 901.1M	1/27/2010	ME	N/A

NOTES: % Moisture: 1.56

*[Signature]*  
Quality Assurance Review

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LELAP Certificate # 30658

NEAP Certificate # EB7558



133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00026

Request or PO Number:

Client Sample ID: RE15-10-7954

ARS Sample ID: ARS2-10-00026-009

Sample Collection Date: 01/26/10 15:12

Date Received: 01/27/10 00:00

Sample Matrix: Soil/Solid

Report Date: 01/28/10 12:07

Analysis Description	Analysis Result	Analysis Error +/- 2 s	MDC	TPU	Dual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	109.48	47.68	36.02	49.50		pCi/g	EPA 900.0M	1/28/2010	ME	N/A
GROSS BETA	103.84	21.78	17.51	25.22		pCi/g	EPA 900.0M	1/28/2010	ME	N/A
NA-22	0.00	0.00	0.14	0.00		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
K-40	27.12	10.11	2.13	10.14		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
CO-60	0.00	13.97	0.14	13.97		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
CS-134	0.00	0.00	0.10	0.00		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
CS-137	0.04	0.11	0.09	0.11		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
EU-152	1.10	0.83	0.16	0.83		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
PB-212	1.84	0.61	0.13	0.62		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
RA-228	2.52	1.45	0.37	1.46		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
U-235	0.09	157.74	0.35	157.74		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
U-238	20.50	0.40	2.03	7.93		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
AM-241	0.09	0.29	0.15	0.29		pCi/g	EPA 901.1M	1/27/2010	ME	N/A

NOTES: % Moisture: 0.64

*[Signature]*  
 Quality Assurance Review

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NELAP Certificate # E97558



133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: AR52-10-00026

Request or PO Number:

Client Sample ID: RE15-10-7955

ARS Sample ID: AR52-10-00026-010

Sample Collection Date: 01/26/10 15:15

Date Received: 01/27/10 00:00

Sample Matrix: Soil/Solid

Report Date: 01/28/10 12:07

Analysis Description	Analysis Result	Analysis Error +/- 2 s	MC	TPH	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	62.00	35.86	31.68	35.86		pCi/g	EPA 900.0M	1/28/2010	ME	N/A
GROSS BETA	94.28	20.75	18.10	23.74		pCi/g	EPA 900.0M	1/28/2010	ME	N/A
NA-22	0.00	0.00	0.09	0.00		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
K-40	21.17	7.18	1.39	7.21		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
CO-60	0.00	0.13	0.09	0.13		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
CS-134	0.16	0.16	0.07	0.16		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
CS-137	0.24	0.25	0.09	0.25		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
EU-152	0.61	0.46	0.11	0.46		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
PB-212	1.05	0.45	0.17	0.45		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
RA-228	1.72	0.72	0.24	0.72		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
U-235	3.40	1.46	0.48	1.47		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
U-238	67.00	7.54	2.12	13.30		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
AM-241	0.04	0.25	0.15	0.25		pCi/g	EPA 901.1M	1/27/2010	ME	N/A

NOTES: % Moisture: 1.72

*Matthew J. Elder*  
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 # E87558



133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00026  
 Client Sample ID: RE15-10-7956  
 Sample Collection Date: 01/26/10 15:30  
 Sample Matrix: Soil/Solid

Request or PO Number:  
 ARS Sample ID: ARS2-10-00026-011  
 Date Received: 01/27/10 00:00  
 Report Date: 01/28/10 12:07

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	TPU	Qua	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	91.15	42.42	30.86	43.87		pCi/g	EPA 900.0M	1/28/2010	ME	N/A
GROSS BETA	83.97	21.62	19.68	23.84		pCi/g	EPA 900.0M	1/28/2010	ME	N/A
NA-22	0.00	0.00	0.12	0.00		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
K-40	28.52	9.81	1.93	9.85		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
CS-137	0.00	12.64	0.13	12.64		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
CS-134	0.11	0.13	0.09	0.13		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
CS-137	-0.01	16.54	0.08	16.54		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
EU-152	0.00	13.15	0.15	13.15		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
PB-212	1.71	0.88	0.11	0.86		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
RA-228	1.20	0.57	0.34	0.57		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
U-235	1.49	1.03	0.38	1.03		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
U-238	19.18	7.15	2.41	6.39		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
AM-241	0.61	0.54	0.20	0.54		pCi/g	EPA 901.1M	1/27/2010	ME	N/A

NOTES: % Moisture: 0.57

*M. L. Edley*  
 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 # F87558





133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00026

Request or PO Number:

Client Sample ID: RE15-10-5060

ARS Sample ID: ARS2-10-00026-012

Sample Collection Date: 01/26/10 14:57

Date Received: 01/27/10 00:00

Sample Matrix: Soil/Solid

Report Date: 01/28/10 12:07

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MBC	TPI	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	182.51	54.21	38.20	57.34		pCi/g	EPA 900.0M	1/28/2010	ME	N/A
GROSS BETA	223.52	30.34	18.71	40.86		pCi/g	EPA 900.0M	1/28/2010	ME	N/A
NA-22	0.00	0.00	0.07	0.00		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
K-40	11.72	6.49	1.13	6.53		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
CN-50	0.00	7.37	0.07	7.37		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
CS-134	0.26	0.17	0.05	0.17		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
CS-137	0.13	0.15	0.05	0.15		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
BU-152	0.32	0.36	0.09	0.36		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
PB-212	0.62	0.36	0.16	0.36		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
RA-228	1.04	0.98	0.20	0.99		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
U-235	2.44	1.34	0.49	1.34		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
U-238	88.93	10.06	2.90	22.06		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
AM-241	0.69	0.70	0.31	0.70		pCi/g	EPA 901.1M	1/27/2010	ME	N/A

NOTES: % Moisture: 1.51

*[Signature]*  
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 # E87558



133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00025

Request or PO Number:

Client Sample ID: RE15-10-8058

ARS Sample ID: ARS2-10-00025-014

Sample Collection Date: 01/26/10 10:29

Date Received: 01/27/10 00:00

Sample Matrix: Soil/Solid

Report Date: 01/28/10 00:24

Analysis Description	Analysis Results	Analysis Error +/- 2 s	HDC	TPH	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	182.13	58.02	31.78	62.15		pCi/g	EPA 900.0M	1/28/2010	ME	N/A
GROSS BETA	154.91	26.46	18.25	32.55		pCi/g	EPA 900.0M	1/28/2010	ME	N/A
NA-22	0.00	0.00	0.13	0.00		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
K-40	-1.76	2369.70	4.25	2369.70		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
CO-60	0.08	0.16	0.13	0.14		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
CS-134	0.10	0.11	0.09	0.11		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
CS-137	0.08	0.42	0.08	0.42		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
EU-152	0.73	0.52	0.15	0.52		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
PB-212	1.07	0.45	0.11	0.45		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
RA-228	1.49	0.83	0.34	0.83		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
U-235	1.85	1.12	0.48	1.12		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
U-238	15.92	5.80	1.66	6.60		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
AM-241	0.44	0.33	0.11	0.33		pCi/g	EPA 901.1M	1/27/2010	ME	N/A

NOTES: % Moisture: 3.74

  
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 # E87558



133 State Road 4, White Rock, NM 87544

905-672-2770 FAX 905-672-9534

ARS Sample Delivery Group: ARS2-10-00025

Request or PO Number:

Client Sample ID: NE15-10-8059

ARS Sample ID: ARS2-10-00025-015

Sample Collection Date: 01/26/10 10:47

Date Received: 01/27/10 00:00

Sample Matrix: Soil/Solid

Report Date: 01/28/10 09:34

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MNR	TBI	Qua	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Trace/Chem Recovery
GROSS ALPHA	109.10	53.62	30.56	56.64		pCi/g	EPA 900.0M	1/28/2010	ME	N/A
GROSS BETA	114.64	24.84	19.60	28.54		pCi/g	EPA 900.0M	1/28/2010	ME	N/A
NA-23	0.00	0.00	0.13	0.00		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
K-40	0.71	9.53	5.30	9.53		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
CO-60	0.06	0.17	0.14	0.17		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
CS-134	0.36	0.30	0.10	0.30		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
CS-137	0.02	0.12	0.11	0.12		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
EU-152	1.05	0.64	0.16	0.64		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
PB-212	1.21	0.53	0.17	0.54		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
RA-228	1.00	0.66	0.43	0.66		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
U-235	2.42	1.28	0.36	1.29		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
U-238	2.14	2.50	1.36	2.04		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
AM-241	0.29	0.35	0.14	0.35		pCi/g	EPA 901.1M	1/27/2010	ME	N/A

NOTES: % Moisture: 0.83

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# 30638

NELAP Certificate # E87558



133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00026

Client Sample ID: RE13-10-7952

Sample Collection Date: 01/26/10 14:00

Sample Matrix: Soil/Soilid

Request or PO Number:

ARS Sample ID: ARS2-10-00026-007

Data Received: 01/27/10 00:00

Report Date: 01/28/10 12:07

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDR	YBI	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	62.18	35.32	30.56	36.33		pCi/g	EPA 900.0M	1/28/2010	ME	N/A
GROSS BETA	81.19	20.92	19.68	23.16		pCi/g	EPA 900.0M	1/28/2010	ME	N/A
NA-22	0.00	0.00	0.14	0.00		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
K-40	-0.16	-12.45	5.49	-12.45		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
CO-60	0.00	14.59	0.15	14.59		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
CS-134	0.00	0.00	0.11	0.00		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
CS-137	-0.01	19.09	0.09	19.09		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
EU-152	0.42	0.49	0.17	0.49		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
PB-212	1.86	0.64	0.15	0.64		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
RA-228	1.89	1.11	0.39	1.11		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
U-235	-0.09	82.03	0.23	82.03		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
U-238	5.90	4.57	1.79	4.76		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
AM-241	0.41	0.48	0.18	0.48		pCi/g	EPA 901.1M	1/27/2010	ME	N/A

NOTES: % Moisture: 0.69

*[Signature]*  
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 # E87558



133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00025

Request or PO Number:

Client Sample ID: RE15-10-7953

ARS Sample ID: ARS2-10-00026-008

Sample Collection Date: 01/26/10 14:57

Date Received: 01/27/10 00:00

Sample Matrix: Soil/Solid

Report Date: 01/28/10 12:07


Analysis Description	Analysis Results	Analysis Error +/- 2 s	Min	Typ	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	157.42	54.95	36.20	58.23		pCi/g	EPA 900.0M	1/28/2010	ME	N/A
GROSS BETA	199.89	29.97	18.71	38.00		pCi/g	EPA 900.0M	1/28/2010	ME	N/A
NA-22	0.00	0.00	0.07	0.00		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
K-40	-0.78	-24.74	3.32	-24.74		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
CO-60	0.00	7.42	0.88	7.42		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
CS-134	0.00	0.00	0.05	0.00		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
CS-137	0.42	0.22	0.05	0.22		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
SU-152	0.49	0.40	0.09	0.40		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
PB-212	1.00	0.39	0.34	0.39		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
RA-228	0.14	0.10	0.20	0.30		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
U-235	3.25	1.18	0.46	1.19		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
U-238	92.86	8.88	2.44	20.84		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
AM-241	1.34	1.06	0.59	1.06		pCi/g	EPA 901.1M	1/27/2010	ME	N/A
NOTES: % Moisture: 1.56										

  
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


NE LAP Certificate # E87558

DATA VALIDATION COVER SHEET	
<b>5122-1</b>  <div style="text-align: center;"><b>Data Validation Cover Sheet</b></div>	Records Use only  

Section I.			
REQUEST NUMBER: <u>10-1474</u>	VALIDATION DATE: <u>03/09/10</u>	LAB CODE: <u>GEL</u>	
CONTRACT LABORATORY NAME: <u>GEL Laboratories LLC</u>			
VALIDATOR: <u>Joanne Compton</u>		ORGANIZATION: <u>Analytical Quality Associates, Inc.</u>	
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 PESTICIDES/POLYCHLORINATED BIPHENYLS
<input type="checkbox"/> GENERAL CHEMISTRY	<input type="checkbox"/> RADIOCHEMISTRY	<input type="checkbox"/> LCMSMS HIGH EXPLOSIVES	
<input type="checkbox"/> 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. The MS/MSD %R calculations were performed incorrectly for the aqueous and the soil analyses. The parent sample results were < the MDL and, thus, a result of 0 ug/L or 0 ug/kg should have been used to calculate the %Rs. The laboratory subtracted the parent sample concentrations. The %Rs were within the acceptance limit when calculated correctly. The MS and MSD for the soil and aqueous analyses were performed on samples from other LANL RNs and the raw data for the parent samples were not included in the data package. No sample results were qualified.							
Reviewed by: <u>Mary Donovan</u> Level: <u>II</u> Date: <u>03/10/10</u>							

VALIDATOR'S SIGNATURE: <u>Jeanne Compton</u>		DATE: <u>03/09/10</u>
Form 5122-1, Revision 0.0	LOS ALAMOS Environmental Restoration Project	


LC/MS/MS PERCHLORATE ANALYTICAL DATA VALIDATION CHECKLIST	
<b>5121-2</b> <b>LC/MS/MS Perchlorate Analytical Data Validation Checklist</b>	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	
<b>5121-2</b> <b>LC/MS/MS Perchlorate Analytical Data Validation Checklist</b>	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. 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	
<b>5121-2</b>  <b>LC/MS/MS Perchlorate Analytical Data Validation Checklist</b>	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

Form 1

Perchlorate Analysis Data Sheet

Client Sample No.

RE15-10-7954

Date Received: 29-JAN-10

GEL Job No (SDG): 10-1474

GEL Sample ID: 245806001

Date Filtered: 10-FEB-10

Injection Volume (uL): 20

%Solids: 94.2

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 947239

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

CAS No.	Analyte <sup>^</sup>	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	12-FEB-10 17:05	per0212030a
	Perchlorate Isotope Ratio						1	12-FEB-10 17:05	per0212030a
14797-73-0	Perchlorate-101	.531	2.12	0.531	ug/kg	U	1	12-FEB-10 17:05	per0212030a
	Perchlorate-O(18)			5.63	ug/kg		1	12-FEB-10 17:05	per0212030a

<sup>^</sup> 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

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

Lab Name: GEL Laboratories LLCLab Code: GELInstrument: LCMSMSMethod: SW846.6850 ModifiedMatrix: SOILExtraction Batch ID: 947239Extraction Type: Solid Prep

Client Sample No.

RE15-10-7956Date Received: 29-JAN-10GEL Job No (SDG): 10-1474GEL Sample ID: 245806002Date Filtered: 10-FEB-10Injection Volume (uL): 20%Solids: 93.9Sample Volume/Weight: 2.00 gConcentrated Extract Volume: 20.0

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.533	2.13	0.923	ug/kg	J	1	12-FEB-10 17:37	per0212034a
	Perchlorate Isotope Ratio			2.92			1	12-FEB-10 17:37	per0212034a
14797-73-0	Perchlorate-101	.533	2.13	0.974	ug/kg	J	1	12-FEB-10 17:37	per0212034a
	Perchlorate-O(18)			5.69	ug/kg		1	12-FEB-10 17:37	per0212034a

<sup>^</sup> 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

JCC

03/09/10

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: 947239

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-7955

Date Received: 29-JAN-10

GEL Job No (SDG): 10-1474

GEL Sample ID: 245806003

Date Filtered: 10-FEB-10

Injection Volume (uL): 20

% Solids: 82

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.61	2.44	0.610	ug/kg	U	1	12-FEB-10 17:45	per0212035a
	Perchlorate Isotope Ratio						1	12-FEB-10 17:45	per0212035a
14797-73-0	Perchlorate-101	.61	2.44	0.610	ug/kg	U	1	12-FEB-10 17:45	per0212035a
	Perchlorate-O(18)			6.47	ug/kg		1	12-FEB-10 17:45	per0212035a

<sup>^</sup> 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

JCC  
03/09/10

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: 947239  
 Extraction Type: Solid Prep  
 Sample Volume/Weight: 2.00 g  
 Concentrated Extract Volume: 20.0  
 Client Sample No. RE15-10-7953  
 Date Received: 29-JAN-10  
 GEL Job No (SDG): 10-1474  
 GEL Sample ID: 245806004  
 Date Filtered: 10-FEB-10  
 Injection Volume (uL): 20  
 %Solids: 86

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.582	2.33	0.582	ug/kg	U	1	12-FEB-10 17:53	per0212036a
	Perchlorate Isotope Ratio						1	12-FEB-10 17:53	per0212036a
14797-73-0	Perchlorate-101	.582	2.33	0.582	ug/kg	U	1	12-FEB-10 17:53	per0212036a
	Perchlorate-O(18)			6.12	ug/kg		1	12-FEB-10 17:53	per0212036a

<sup>^</sup> 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

JCC  
03/09/10

Form 1

Perchlorate Analysis Data Sheet

Client Sample No.

RE15-10-7952

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 947239

Extraction Type: Solid Prep

Date Received: 29-JAN-10

GEL Job No (SDG): 10-1474

GEL Sample ID: 245806005

Date Filtered: 10-FEB-10

Injection Volume (uL): 20

%Solids: 93.3

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.536	2.14	0.536	ug/kg	U	1	12-FEB-10 18:01	per0212037a
	Perchlorate Isotope Ratio						1	12-FEB-10 18:01	per0212037a
14797-73-0	Perchlorate-101	.536	2.14	0.536	ug/kg	U	1	12-FEB-10 18:01	per0212037a
	Perchlorate-O(18)			5.80	ug/kg		1	12-FEB-10 18:01	per0212037a

<sup>^</sup> 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

JCC  
03/09/10

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: 947239  
 Extraction Type: Solid Prep  
 Sample Volume/Weight: 2.00 g  
 Concentrated Extract Volume: 20.0  
 Client Sample No. RE15-10-8060  
 Date Received: 29-JAN-10  
 GEL Job No (SDG): 10-1474  
 GEL Sample ID: 245806006  
 Date Filtered: 10-FEB-10  
 Injection Volume (uL): 20  
 %Solids: 85

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.585	2.34	0.585	ug/kg	U	1	12-FEB-10 18:09	per0212038a
	Perchlorate Isotope Ratio						1	12-FEB-10 18:09	per0212038a
14797-73-0	Perchlorate-101	.585	2.34	0.585	ug/kg	U	1	12-FEB-10 18:09	per0212038a
	Perchlorate-O(18)			6.04	ug/kg		1	12-FEB-10 18:09	per0212038a

<sup>^</sup> 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: 947239

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8058

Date Received: 29-JAN-10

GEL Job No (SDG): 10-1474

GEL Sample ID: 245806007

Date Filtered: 10-FEB-10

Injection Volume (uL): 20

%Solids: 64

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.78	3.12	0.780	ug/kg	U	1	12-FEB-10 18:17	per0212039a
	Perchlorate Isotope Ratio						1	12-FEB-10 18:17	per0212039a
14797-73-0	Perchlorate-101	.78	3.12	0.780	ug/kg	U	1	12-FEB-10 18:17	per0212039a
	Perchlorate-O(18)			8.72	ug/kg		1	12-FEB-10 18:17	per0212039a

<sup>^</sup> 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  $\frac{\% \text{Solids}}{1}$

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03/09/10

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: 947239

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8059

Date Received: 29-JAN-10

GEL Job No (SDG): 10-1474

GEL Sample ID: 245806008

Date Filtered: 10-FEB-10

Injection Volume (uL): 20

%Solids: 92.7

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.539	2.16	0.539	ug/kg	U	1	12-FEB-10 18:25	per0212040a
	Perchlorate Isotope Ratio								
14797-73-0	Perchlorate-101	.539	2.16	0.539	ug/kg	U	1	12-FEB-10 18:25	per0212040a
	Perchlorate-O(18)			6.02	ug/kg		1	12-FEB-10 18:25	per0212040a

<sup>^</sup> 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

JCC  
03/09/10

Form 1

P perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: WATER

Extraction Batch ID: 947198

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.

RE15-10-8081

Date Received: 29-JAN-10

GEL Job No (SDG): 10-1474-1

GEL Sample ID: 245807001

Date Filtered: 30-JAN-10

Injection Volume (uL): 20

%Solids:

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.050	ug/L	U	1	01-FEB-10 16:22	per0201014a
	Perchlorate Isotope Ratio						1	01-FEB-10 16:22	per0201014a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	01-FEB-10 16:22	per0201014a
	Perchlorate-O(18)			0.477	ug/L		1	01-FEB-10 16:22	per0201014a

<sup>^</sup> 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 <sup>1</sup> %Solids  
Aliquot

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03/09/10

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: 947198

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.

RE15-10-8082

Date Received: 29-JAN-10

GEL Job No (SDG): 10-1474-1

GEL Sample ID: 245807002

Date Filtered: 30-JAN-10

Injection Volume (uL): 20

% Solids:


CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.050	ug/L	U	1	31-JAN-10 21:34	per0131074a
	Perchlorate Isotope Ratio						1	31-JAN-10 21:34	per0131074a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	31-JAN-10 21:34	per0131074a
	Perchlorate-O(18)			0.499	ug/L		1	31-JAN-10 21:34	per0131074a

<sup>^</sup> 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.


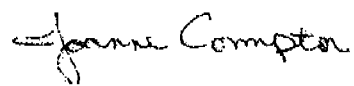
\*Concentration =


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

JCC  
03/09/10


DATA VALIDATION COVER SHEET	
<b>5118-1</b>  <div style="text-align: center; margin-top: 20px;">Data Validation Cover Sheet</div>	Records Use only  <div style="text-align: center;">   <b>Los Alamos</b>  <small>NATIONAL LABORATORY</small>  <small>EST 1943</small> </div>

Section I.							
REQUEST NUMBER: <u>10-1474</u>		VALIDATION DATE: <u>03/09/10</u>		LAB CODE: <u>GEL</u>			
CONTRACT LABORATORY NAME: <u>GEL Laboratories LLC</u>							
VALIDATOR: <u>Joanne Compton</u>		ORGANIZATION: <u>Analytical Quality Associates, Inc.</u>					
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 PESTICIDES/POLYCHLORINATED BIPHENYLS				
<input type="checkbox"/> GENERAL CHEMISTRY	<input type="checkbox"/> RADIOCHEMISTRY	<input type="checkbox"/> LCMSMS HIGH EXPLOSIVES					
<input type="checkbox"/> 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):							
<ol style="list-style-type: none"> <li>In the soil MB, U was detected. The associated results for samples RE15-10-7952 and -8059 were detects &gt;5X but ≤50X the MB concentration and, thus, were qualified J,I4a. The associated results for all samples <u>except</u> RE15-10-7952 and -8059 were detects &gt; 50X the MB concentration and, thus, were not qualified based on professional judgment.  In the aqueous MB, Mg was detected. The associated sample results were NDs and, thus, were not qualified.</li> <li>In the CCBs associated with the soil analysis, Na, Pb, Tl, and Hg were detected. The associated sample results for Hg, Tl results for samples -7954, -7956, -7955, -8058, Na results for samples -7953, -8060, -8058, and Pb results for samples -7952 and -8059 were detects ≤ 5X the greatest associated blank concentration and, thus, were qualified U,I4b. All other associated sample results were either NDs or detects &gt;5X the greatest blank concentration and, thus, were not qualified.</li> </ol>							

DATA VALIDATION COVER SHEET	
5118-1	Records Use only
<p align="center"><b>Data Validation Cover Sheet</b></p> <p align="right">    <b>Los Alamos</b>  <small>NATIONAL LABORATORY</small>  <small>EST. 1947</small> </p>	
<p>In the CCBs associated with the aqueous analysis, Mg and Ti were detected. The associated sample results were NDs and, thus, were not qualified.</p> <p>3. In the FR blanks, samples RE15-10-8081 and -8082 associated with all samples, Na, K, Pb, and U were detected. The Na sample results associated with samples -7956, -7955, -7953, -8060, and -8058 were detects <math>\leq 5X</math> the greatest FR blank concentration and, thus, were qualified U,I4d. All other associated sample results were either NDs or detects <math>&gt; 5X</math> the greatest FR blank concentration and, thus, were not qualified.</p> <p>4. In the aqueous analysis, the ICV %R was <math>&gt;</math> the method specified limits for Al. The associated sample results were NDs and, thus, qualified UJ,I7c.</p> <p>5. The soil MS %Rs for Cu, Mg, Mn and K were <math>&gt;</math> the laboratory UAL. The associated sample results were detects and, thus, qualified J+,I6b. The soil MS %Rs for Al, Fe, and U were also <math>&gt;</math> the laboratory UAL. The aqueous MS %R for Ca was <math>&lt;</math> the laboratory LAL but <math>\geq 10\%</math>. However, the associated parent sample results were detects <math>&gt;</math> than <math>4X</math> the spike amount and, thus, no sample results were qualified based on professional judgment.</p> <p>6. The soil duplicate RPD was <math>&gt; 35\%</math> and the parent and duplicate sample results were <math>\geq 5X</math> the PQLs for Cr, Cu, Pb, Be, and Ni. The Pb results for samples -7952 and -8059 were qualified ND and, thus, were qualified UJ,I10a. The remaining associated sample results were detects and, thus, were qualified J,I10a.</p> <p>7. It should be noted that the matrix QC for the aqueous ICP-AES and ICP-MS analysis were performed on samples from other LANL RNs and that the raw data for the parent samples were not included in the data package. It should also be noted that the matrix QC aqueous ICP-AES analysis was performed on the FR blank -8081. No sample data were qualified as a result.</p> <p>Reviewed by: <u>Mary Donovan</u> Level: <u>I</u> Date: <u>03/10/10</u></p>	
<p>VALIDATOR'S SIGNATURE: <u></u> DATE: <u>03/09/10</u></p>	
Form 5118-1, Revision 0.0	LOS ALAMOS Environmental Restoration Project


METALS ANALYTICAL DATA VALIDATION CHECKLIST	
<b>5118-2</b>  <b>Metals Analytical Data Validation Checklist</b>	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	Records Use only	
Metals 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. 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 checked="" type="checkbox"/>	<input 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 type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	23. The associated matrix spike recovery was $< \text{the LAL}$ 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 $> \text{the UAL}$ . Follow the external laboratory limits located within the associated data package.	UJ, I6b	J+, I6b



METALS ANALYTICAL DATA VALIDATION CHECKLIST	
<b>5118-2</b>  <b>Metals Analytical Data Validation Checklist</b>	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"/>	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	
<b>5118-2</b>  <b>Metals Analytical Data Validation Checklist</b>	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 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: 10-1474

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245806001

BASIS: Dry Weight

DATE COLLECTED 26-JAN-10

CLIENT ID: RE15-10-7954

LEVEL: Low

DATE RECEIVED 29-JAN-10

MATRIX: SOIL

%SOLIDS: 94.2

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyte	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	3360000	ug/Kg		6790	20000	20000	1	P	HSC	02/17/10 02:45	021610-1	948071
7440-36-0	Antimony	5040	ug/Kg	*	329	998	998	1	P	HSC	02/17/10 02:45	021610-1	948071
7440-38-2	Arsenic	1.48	mg/kg		0.209	1.05	1.05	2	MS	SKJ	02/19/10 00:12	100218-3	948073
7440-39-3	Barium	48800	ug/Kg		99.8	499	499	1	P	HSC	02/17/10 02:45	021610-1	948071
7440-41-7	Beryllium J,110a	1.37	mg/kg	*	0.0209	0.105	0.105	2	MS	SKJ	02/19/10 14:42	100219-4	948073
7440-43-9	Cadmium	499	ug/Kg	U	99.8	499	499	1	P	HSC	02/17/10 02:45	021610-1	948071
7440-70-2	Calcium	1100000	ug/Kg		7990	25000	25000	1	P	HSC	02/17/10 02:45	021610-1	948071
7440-47-3	Chromium J,110a	13400	ug/Kg	*	150	499	499	1	P	HSC	02/17/10 02:45	021610-1	948071
7440-48-4	Cobalt	3090	ug/Kg	*	150	499	499	1	P	HSC	02/17/10 02:45	021610-1	948071
7440-50-8	Copper J+,16b	115000	ug/Kg	*N	299	998	998	1	P	HSC	02/17/10 02:45	021610-1	948071
7439-89-6	Iron	9310000	ug/Kg		16000	49900	49900	2	P	HSC	02/23/10 14:32	022310A-2	948071
7439-92-1	Lead J,110a	578000	ug/Kg	*	499	2000	2000	2	P	HSC	02/23/10 14:32	022310A-2	948071
7439-95-4	Magnesium J+,16b	696000	ug/Kg	N	17000	59900	59900	2	P	HSC	02/23/10 14:32	022310A-2	948071
7439-96-5	Manganese J+,16b	192000	ug/Kg	N	200	998	998	1	P	HSC	02/17/10 02:45	021610-1	948071
7439-97-6	Mercury U, 14b	14.4	ug/kg		4.13	12.2	12.2	1	AV	JXL1	02/16/10 09:40	021610S2-5	947650
7440-02-0	Nickel J,110a	7.19	mg/kg	*N	0.105	0.419	0.419	2	MS	SKJ	02/19/10 00:12	100218-3	948073
7440-09-7	Potassium J+,16b	460000	ug/Kg	N	6390	25000	25000	1	P	HSC	02/17/10 02:45	021610-1	948071
7782-49-2	Selenium	1.05	mg/kg	U	0.324	1.05	1.05	2	MS	SKJ	02/19/10 00:12	100218-3	948073
7440-22-4	Silver	766	ug/Kg		99.8	499	499	1	P	HSC	02/17/10 02:45	021610-1	948071
7440-23-5	Sodium	85000	ug/Kg		6990	25000	25000	1	P	HSC	02/17/10 02:45	021610-1	948071
7440-28-0	Thallium U, 14b	0.0878	mg/kg	J	0.0628	0.209	0.209	2	MS	SKJ	02/19/10 00:12	100218-3	948073
7440-61-1	Uranium	84.4	mg/kg	*	0.0138	0.0419	0.0419	2	MS	SKJ	02/19/10 00:12	100218-3	948073
7440-62-2	Vanadium	8040	ug/Kg		99.8	499	499	1	P	HSC	02/17/10 02:45	021610-1	948071
7440-66-6	Zinc	36600	ug/Kg		329	998	998	1	P	HSC	02/17/10 02:45	021610-1	948071

**Prep Information:**

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
947650	947648	SW846 7471A Prep	0.524	g	30	mL	02/15/10	TXB3
948071	948070	SW846 3050B	0.532	g	50	mL	02/08/10	FGA
948073	948072	SW846 3050B	0.507	g	50	mL	02/08/10	FGA

JCC  
03/09/10

**METALS**  
-1-  
**INORGANICS ANALYSIS DATA PACKAGE**

SDG No: 10-1474

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245806002

BASIS: Dry Weight

DATE COLLECTED 26-JAN-10

CLIENT ID: RE15-10-7956

LEVEL: Low

DATE RECEIVED 29-JAN-10

MATRIX: SOIL

%SOLIDS: 93.9

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	4800000	ug/Kg		6930	20400	20400	1	P	HSC	02/17/10 03:33	021610-1	948071
7440-36-0	Antimony	528	ug/Kg	J*	336	1020	1020	1	P	HSC	02/17/10 03:33	021610-1	948071
7440-38-2	Arsenic	2.82	mg/kg		0.206	1.03	1.03	2	MS	SKJ	02/19/10 00:42	100218-3	948073
7440-39-3	Barium	54600	ug/Kg		102	509	509	1	P	HSC	02/17/10 03:33	021610-1	948071
7440-41-7	Beryllium J,110a	29.1	mg/kg	*	0.0206	0.103	0.103	2	MS	SKJ	02/19/10 14:58	100219-4	948073
7440-43-9	Cadmium	509	ug/Kg	U	102	509	509	1	P	HSC	02/17/10 03:33	021610-1	948071
7440-70-2	Calcium	2290000	ug/Kg		8150	25500	25500	1	P	HSC	02/17/10 03:33	021610-1	948071
7440-47-3	Chromium J,110a	11200	ug/Kg	*	153	509	509	1	P	HSC	02/17/10 03:33	021610-1	948071
7440-48-4	Cobalt	2060	ug/Kg	*	153	509	509	1	P	HSC	02/17/10 03:33	021610-1	948071
7440-50-8	Copper J+,16b	73900	ug/Kg	*N	306	1020	1020	1	P	HSC	02/17/10 03:33	021610-1	948071
7439-89-6	Iron	8990000	ug/Kg		16300	50900	50900	2	P	HSC	02/24/10 08:48	022310A-2	948071
7439-92-1	Lead J,110a	23900	ug/Kg	*	509	2040	2040	2	P	HSC	02/24/10 08:48	022310A-2	948071
7439-95-4	Magnesium J+,16b	1050000	ug/Kg	N	17300	61100	61100	2	P	HSC	02/24/10 08:48	022310A-2	948071
7439-96-5	Manganese J+,16b	185000	ug/Kg	N	204	1020	1020	1	P	HSC	02/17/10 03:33	021610-1	948071
7439-97-6	Mercury U, 14b	15.5	ug/kg		3.8	11.2	11.2	1	AV	JXL1	02/16/10 09:51	021610S2-5	947650
7440-02-0	Nickel J,110a	7.17	mg/kg	*N	0.103	0.412	0.412	2	MS	SKJ	02/19/10 00:42	100218-3	948073
7440-09-7	Potassium J+,16b	675000	ug/Kg	N	6520	25500	25500	1	P	HSC	02/17/10 03:33	021610-1	948071
7782-49-2	Selenium	0.640	mg/kg	J	0.515	1.03	1.03	2	MS	SKJ	02/19/10 00:42	100218-3	948073
7440-22-4	Silver	692	ug/Kg		102	509	509	1	P	HSC	02/17/10 03:33	021610-1	948071
7440-23-5	Sodium U, 14d	63900	ug/Kg		7130	25500	25500	1	P	HSC	02/17/10 03:33	021610-1	948071
7440-28-0	Thallium U, 14b	0.139	mg/kg	J	0.0618	0.206	0.206	2	MS	SKJ	02/19/10 00:42	100218-3	948073
7440-61-1	Uranium	69.8	mg/kg	*	0.0136	0.0412	0.0412	2	MS	SKJ	02/19/10 00:42	100218-3	948073
7440-62-2	Vanadium	11400	ug/Kg		102	509	509	1	P	HSC	02/17/10 03:33	021610-1	948071
7440-66-6	Zinc	32100	ug/Kg		336	1020	1020	1	P	HSC	02/17/10 03:33	021610-1	948071

**Prep Information:**

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
947650	947648	SW846 7471A Prep	0.572	g	30	mL	02/15/10	TXB3
948071	948070	SW846 3050B	0.523	g	50	mL	02/08/10	FGA
948073	948072	SW846 3050B	0.517	g	50	mL	02/08/10	FGA

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**METALS**  
-1-  
**INORGANICS ANALYSIS DATA PACKAGE**

SDG No: 10-1474

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245806003

BASIS: Dry Weight

DATE COLLECTED 26-JAN-10

CLIENT ID: RE15-10-7955

LEVEL: Low

DATE RECEIVED 29-JAN-10

MATRIX: SOIL

%SOLIDS: 82

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	3390000	ug/Kg		7960	23400	23400	1	P	HSC	02/17/10 03:41	021610-1	948071
7440-36-0	Antimony	5530	ug/Kg	*	386	1170	1170	1	P	HSC	02/17/10 03:41	021610-1	948071
7440-38-2	Arsenic	1.8	mg/kg		0.233	1.17	1.17	2	MS	SKJ	02/19/10 00:46	100218-3	948073
7440-39-3	Barium	73400	ug/Kg		117	585	585	1	P	HSC	02/17/10 03:41	021610-1	948071
7440-41-7	Beryllium J,110a	6.85	mg/kg	*	0.0233	0.117	0.117	2	MS	SKJ	02/19/10 15:00	100219-4	948073
7440-43-9	Cadmium	242	ug/Kg	J	117	585	585	1	P	HSC	02/17/10 03:41	021610-1	948071
7440-70-2	Calcium	1460000	ug/Kg		9370	29300	29300	1	P	HSC	02/17/10 03:41	021610-1	948071
7440-47-3	Chromium J,110a	6870	ug/Kg	*	176	585	585	1	P	HSC	02/17/10 03:41	021610-1	948071
7440-48-4	Cobalt	6080	ug/Kg	*	176	585	585	1	P	HSC	02/17/10 03:41	021610-1	948071
7440-50-8	Copper J+,16b	1200000	ug/Kg	*N	351	1170	1170	1	P	HSC	02/17/10 03:41	021610-1	948071
7439-89-6	Iron	8710000	ug/Kg		18700	58500	58500	2	P	HSC	02/23/10 15:27	022310A-2	948071
7439-92-1	Lead J,110a	203000	ug/Kg	*	585	2340	2340	2	P	HSC	02/23/10 15:27	022310A-2	948071
7439-95-4	Magnesium J+,16b	713000	ug/Kg	N	19900	70300	70300	2	P	HSC	02/23/10 15:27	022310A-2	948071
7439-96-5	Manganese J+,16b	234000	ug/Kg	N	234	1170	1170	1	P	HSC	02/17/10 03:41	021610-1	948071
7439-97-6	Mercury U, 14b	15.7	ug/kg		4.58	13.5	13.5	1	AV	JXL1	02/16/10 09:33	021610S2-5	947650
7440-02-0	Nickel J,110a	6.47	mg/kg	*N	0.117	0.467	0.467	2	MS	SKJ	02/19/10 00:46	100218-3	948073
7440-09-7	Potassium J+,16b	586000	ug/Kg	N	7490	29300	29300	1	P	HSC	02/17/10 03:41	021610-1	948071
7782-49-2	Selenium	1.17	mg/kg	U	0.583	1.17	1.17	2	MS	SKJ	02/19/10 00:46	100218-3	948073
7440-22-4	Silver	1060	ug/Kg		117	585	585	1	P	HSC	02/17/10 03:41	021610-1	948071
7440-23-5	Sodium U, 14d	68300	ug/Kg		8200	29300	29300	1	P	HSC	02/17/10 03:41	021610-1	948071
7440-28-0	Thallium U, 14b	0.0733	mg/kg	J	0.07	0.233	0.233	2	MS	SKJ	02/19/10 00:46	100218-3	948073
7440-61-1	Uranium	183	mg/kg	*	0.0154	0.0467	0.0467	2	MS	SKJ	02/19/10 00:46	100218-3	948073
7440-62-2	Vanadium	11300	ug/Kg		117	585	585	1	P	HSC	02/17/10 03:41	021610-1	948071
7440-66-6	Zinc	64700	ug/Kg		386	1170	1170	1	P	HSC	02/17/10 03:41	021610-1	948071

**Prep Information:**

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
947650	947648	SW846 7471A Prep	0.544	g	30	mL	02/15/10	TXB3
948071	948070	SW846 3050B	0.521	g	50	mL	02/08/10	FGA
948073	948072	SW846 3050B	0.523	g	50	mL	02/08/10	FGA

JCC  
03/09/10

**METALS**  
-1-  
**INORGANICS ANALYSIS DATA PACKAGE**

SDG No: 10-1474

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245806004

BASIS: Dry Weight

DATE COLLECTED 26-JAN-10

CLIENT ID: RE15-10-7953

LEVEL: Low

DATE RECEIVED 29-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	2950000	ug/Kg		7470	22000	22000	1	P	HSC	02/17/10 03:48	021610-1	948071
7440-36-0	Antimony	256000	ug/Kg	*	362	1100	1100	1	P	HSC	02/17/10 03:48	021610-1	948071
7440-38-2	Arsenic	2.29	mg/kg		0.223	1.12	1.12	2	MS	SKJ	02/19/10 00:50	100218-3	948073
7440-39-3	Barium	89000	ug/Kg		110	549	549	1	P	HSC	02/17/10 03:48	021610-1	948071
7440-41-7	Beryllium J,110a	12.2	mg/kg	*	0.0223	0.112	0.112	2	MS	SKJ	02/19/10 15:03	100219-4	948073
7440-43-9	Cadmium	448	ug/Kg	J	110	549	549	1	P	HSC	02/17/10 03:48	021610-1	948071
7440-70-2	Calcium	1220000	ug/Kg		8780	27500	27500	1	P	HSC	02/17/10 03:48	021610-1	948071
7440-47-3	Chromium J,110a	10500	ug/Kg	*	165	549	549	1	P	HSC	02/17/10 03:48	021610-1	948071
7440-48-4	Cobalt	2690	ug/Kg	*	165	549	549	1	P	HSC	02/17/10 03:48	021610-1	948071
7440-50-8	Copper J+,16b	686000	ug/Kg	*N	329	1100	1100	1	P	HSC	02/17/10 03:48	021610-1	948071
7439-89-6	Iron	6900000	ug/Kg		17600	54900	54900	2	P	HSC	02/23/10 15:34	022310A-2	948071
7439-92-1	Lead J,110a	138000000	ug/Kg	*	27500	110000	110000	100	P	HSC	02/23/10 17:46	022310A-2	948071
7439-95-4	Magnesium J+,16b	862000	ug/Kg	N	18700	65900	65900	2	P	HSC	02/23/10 15:34	022310A-2	948071
7439-96-5	Manganese J+,16b	140000	ug/Kg	N	220	1100	1100	1	P	HSC	02/17/10 03:48	021610-1	948071
7439-97-6	Mercury U, 14b	17.7	ug/kg		4.23	12.4	12.4	1	AV	JXL	02/16/10 09:59	021610S2-5	947650
7440-02-0	Nickel J,110a	8.47	mg/kg	*N	0.112	0.447	0.447	2	MS	SKJ	02/19/10 00:50	100218-3	948073
7440-09-7	Potassium J+,16b	340000	ug/Kg	N	7030	27500	27500	1	P	HSC	02/17/10 03:48	021610-1	948071
7782-49-2	Selenium	1.12	mg/kg	U	0.559	1.12	1.12	2	MS	SKJ	02/19/10 00:50	100218-3	948073
7440-22-4	Silver	2520	ug/Kg		110	549	549	1	P	HSC	02/17/10 03:48	021610-1	948071
7440-23-5	Sodium U, 14b	42700	ug/Kg		7690	27500	27500	1	P	HSC	02/17/10 03:48	021610-1	948071
7440-28-0	Thallium	0.223	mg/kg	U	0.067	0.223	0.223	2	MS	SKJ	02/19/10 00:50	100218-3	948073
7440-61-1	Uranium	362	mg/kg	*	0.0147	0.0447	0.0447	2	MS	SKJ	02/19/10 00:50	100218-3	948073
7440-62-2	Vanadium	9670	ug/Kg		110	549	549	1	P	HSC	02/17/10 03:48	021610-1	948071
7440-66-6	Zinc	125000	ug/Kg		362	1100	1100	1	P	HSC	02/17/10 03:48	021610-1	948071

**Prep Information:**

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
947650	947648	SW846 7471A Prep	0.562	g	30	mL	02/15/10	TXB3
948071	948070	SW846 3050B	0.53	g	50	mL	02/08/10	FGA
948073	948072	SW846 3050B	0.521	g	50	mL	02/08/10	FGA

JCC  
03/09/10

**METALS**  
-1-  
**INORGANICS ANALYSIS DATA PACKAGE**

SDG No: 10-1474

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245806005

BASIS: Dry Weight

DATE COLLECTED 26-JAN-10

CLIENT ID: RE15-10-7952

LEVEL: Low

DATE RECEIVED 29-JAN-10

MATRIX: SOIL

%SOLIDS: 93.3

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	1670000	ug/Kg		7100	20900	20900	1	P	HSC	02/17/10 03:55	021610-1	948071
7440-36-0	Antimony	1040	ug/Kg	U*	345	1040	1040	1	P	HSC	02/17/10 03:55	021610-1	948071
7440-38-2	Arsenic	0.839	mg/kg	J	0.201	1.01	1.01	2	MS	SKJ	02/19/10 00:54	100218-3	948073
7440-39-3	Barium	48800	ug/Kg		104	522	522	1	P	HSC	02/17/10 03:55	021610-1	948071
7440-41-7	Beryllium J,110a	0.310	mg/kg	*	0.0201	0.101	0.101	2	MS	SKJ	02/19/10 15:10	100219-4	948073
7440-43-9	Cadmium	522	ug/Kg	U	104	522	522	1	P	HSC	02/17/10 03:55	021610-1	948071
7440-70-2	Calcium	569000	ug/Kg		8360	26100	26100	1	P	HSC	02/17/10 03:55	021610-1	948071
7440-47-3	Chromium J,110a	24000	ug/Kg	*	157	522	522	1	P	HSC	02/17/10 03:55	021610-1	948071
7440-48-4	Cobalt	5010	ug/Kg	*	157	522	522	1	P	HSC	02/17/10 03:55	021610-1	948071
7440-50-8	Copper J+,16b	4310	ug/Kg	*N	313	1040	1040	1	P	HSC	02/17/10 03:55	021610-1	948071
7439-89-6	Iron	8550000	ug/Kg		16700	52200	52200	2	P	HSC	02/23/10 17:53	022310A-2	948071
7439-92-1	Lead U, 14b	7460	ug/Kg	*	522	2090	2090	2	P	HSC	02/23/10 17:53	022310A-2	948071
7439-95-4	Magnesium J+,16b	390000	ug/Kg	N	17800	62700	62700	2	P	HSC	02/23/10 17:53	022310A-2	948071
7439-96-5	Manganese J+,16b	354000	ug/Kg	N	209	1040	1040	1	P	HSC	02/17/10 03:55	021610-1	948071
7439-97-6	Mercury U, 14b	22.2	ug/kg		4.2	12.3	12.3	1	AV	JXL1	02/16/10 10:01	021610S2-5	947650
7440-02-0	Nickel J,110a	4.07	mg/kg	*N	0.101	0.403	0.403	2	MS	SKJ	02/19/10 00:54	100218-3	948073
7440-09-7	Potassium J+,16b	353000	ug/Kg	N	6690	26100	26100	1	P	HSC	02/17/10 03:55	021610-1	948071
7782-49-2	Selenium	1.01	mg/kg	U	0.504	1.01	1.01	2	MS	SKJ	02/19/10 00:54	100218-3	948073
7440-22-4	Silver	589	ug/Kg		104	522	522	1	P	HSC	02/17/10 03:55	021610-1	948071
7440-23-5	Sodium	128000	ug/Kg		7310	26100	26100	1	P	HSC	02/17/10 03:55	021610-1	948071
7440-28-0	Thallium	0.201	mg/kg	U	0.0604	0.201	0.201	2	MS	SKJ	02/19/10 00:54	100218-3	948073
7440-61-1	Uranium J,14a	0.519	mg/kg	*	0.0133	0.0403	0.0403	2	MS	SKJ	02/19/10 00:54	100218-3	948073
7440-62-2	Vanadium	3900	ug/Kg		104	522	522	1	P	HSC	02/17/10 03:55	021610-1	948071
7440-66-6	Zinc	37500	ug/Kg		345	1040	1040	1	P	HSC	02/17/10 03:55	021610-1	948071

**Prep Information:**

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
947650	947648	SW846 7471A Prep	0.521	g	30	mL	02/15/10	TXB3
948071	948070	SW846 3050B	0.513	g	50	mL	02/08/10	FGA
948073	948072	SW846 3050B	0.532	g	50	mL	02/08/10	FGA

JCC  
03/09/10

**METALS**  
-1-  
**INORGANICS ANALYSIS DATA PACKAGE**

SDG No: 10-1474

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245806006

BASIS: Dry Weight

DATE COLLECTED 26-JAN-10

CLIENT ID: RE15-10-8060

LEVEL: Low

DATE RECEIVED 29-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	2550000	ug/Kg		7630	22400	22400	1	P	HSC	02/17/10 04:02	021610-1	948071
7440-36-0	Antimony	8360	ug/Kg	*	370	1120	1120	1	P	HSC	02/17/10 04:02	021610-1	948071
7440-38-2	Arsenic	3.7	mg/kg		0.219	1.1	1.1	2	MS	SKJ	02/19/10 01:07	100218-3	948073
7440-39-3	Barium	85200	ug/Kg		112	561	561	1	P	HSC	02/17/10 04:02	021610-1	948071
7440-41-7	Beryllium J,110a	9.08	mg/kg	*	0.0219	0.11	0.11	2	MS	SKJ	02/19/10 15:12	100219-4	948073
7440-43-9	Cadmium	229	ug/Kg	J	112	561	561	1	P	HSC	02/17/10 04:02	021610-1	948071
7440-70-2	Calcium	1360000	ug/Kg		8970	28000	28000	1	P	HSC	02/17/10 04:02	021610-1	948071
7440-47-3	Chromium J,110a	9600	ug/Kg	*	168	561	561	1	P	HSC	02/17/10 04:02	021610-1	948071
7440-48-4	Cobalt	3890	ug/Kg	*	168	561	561	1	P	HSC	02/17/10 04:02	021610-1	948071
7440-50-8	Copper J+,16b	445000	ug/Kg	*N	336	1120	1120	1	P	HSC	02/17/10 04:02	021610-1	948071
7439-89-6	Iron	6730000	ug/Kg		17900	56100	56100	2	P	HSC	02/23/10 15:48	022310A-2	948071
7439-92-1	Lead J,110a	952000	ug/Kg	*	561	2240	2240	2	P	HSC	02/23/10 15:48	022310A-2	948071
7439-95-4	Magnesium J+,16b	653000	ug/Kg	N	19100	67300	67300	2	P	HSC	02/23/10 15:48	022310A-2	948071
7439-96-5	Manganese J+,16b	144000	ug/Kg	N	224	1120	1120	1	P	HSC	02/17/10 04:02	021610-1	948071
7439-97-6	Mercury U, 14b	17.5	ug/kg		4.78	14	14	1	AV	JXL	02/16/10 10:02	021610S2-5	947650
7440-02-0	Nickel J,110a	7.59	mg/kg	*N	0.11	0.439	0.439	2	MS	SKJ	02/19/10 01:07	100218-3	948073
7440-09-7	Potassium J+,16b	344000	ug/Kg	N	7180	28000	28000	1	P	HSC	02/17/10 04:02	021610-1	948071
7782-49-2	Selenium	1.1	mg/kg	U	0.548	1.1	1.1	2	MS	SKJ	02/19/10 01:07	100218-3	948073
7440-22-4	Silver	1240	ug/Kg		112	561	561	1	P	HSC	02/17/10 04:02	021610-1	948071
7440-23-5	Sodium U, 14b	59600	ug/Kg		7850	28000	28000	1	P	HSC	02/17/10 04:02	021610-1	948071
7440-28-0	Thallium	0.219	mg/kg	U	0.0658	0.219	0.219	2	MS	SKJ	02/19/10 01:07	100218-3	948073
7440-61-1	Uranium	352	mg/kg	*	0.0145	0.0439	0.0439	2	MS	SKJ	02/19/10 01:07	100218-3	948073
7440-62-2	Vanadium	7750	ug/Kg		112	561	561	1	P	HSC	02/17/10 04:02	021610-1	948071
7440-66-6	Zinc	52800	ug/Kg		370	1120	1120	1	P	HSC	02/17/10 04:02	021610-1	948071

**Prep Information:**

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
947650	947648	SW846 7471A Prep	0.5	g	30	mL	02/15/10	TXB3
948071	948070	SW846 3050B	0.522	g	50	mL	02/08/10	FGA
948073	948072	SW846 3050B	0.534	g	50	mL	02/08/10	FGA

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03/09/10



**METALS**  
-1-  
**INORGANICS ANALYSIS DATA PACKAGE**

SDG No: 10-1474

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245806007

BASIS: Dry Weight

DATE COLLECTED 26-JAN-10

CLIENT ID: RE15-10-8058

LEVEL: Low

DATE RECEIVED 29-JAN-10

MATRIX: SOIL

%SOLIDS: 64

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyte	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	7390000	ug/Kg		10300	30200	30200	1	P	HSC	02/17/10 04:09	021610-1	948071
7440-36-0	Antimony	1680	ug/Kg		498	1510	1510	1	P	HSC	02/17/10 04:09	021610-1	948071
7440-38-2	Arsenic	2.96	mg/kg		0.303	1.51	1.51	2	MS	SKJ	02/19/10 01:11	100218-3	948073
7440-39-3	Barium	114000	ug/Kg		151	754	754	1	P	HSC	02/17/10 04:09	021610-1	948071
7440-41-7	Beryllium J,110a	2.84	mg/kg	*	0.0303	0.151	0.151	2	MS	SKJ	02/19/10 15:14	100219-4	948073
7440-43-9	Cadmium	798	ug/Kg		151	754	754	1	P	HSC	02/17/10 04:09	021610-1	948071
7440-70-2	Calcium	3730000	ug/Kg		12100	37700	37700	1	P	HSC	02/17/10 04:09	021610-1	948071
7440-47-3	Chromium J,110a	10500	ug/Kg	*	226	754	754	1	P	HSC	02/17/10 04:09	021610-1	948071
7440-48-4	Cobalt	5630	ug/Kg	*	226	754	754	1	P	HSC	02/17/10 04:09	021610-1	948071
7440-50-8	Copper J+,16b	148000	ug/Kg	*N	453	1510	1510	1	P	HSC	02/17/10 04:09	021610-1	948071
7439-89-6	Iron	11200000	ug/Kg		24100	75400	75400	2	P	HSC	02/23/10 15:55	022310A-2	948071
7439-92-1	Lead J,110a	140000	ug/Kg	*	754	3020	3020	2	P	HSC	02/23/10 15:55	022310A-2	948071
7439-95-4	Magnesium J+,16b	1630000	ug/Kg	N	25600	90500	90500	2	P	HSC	02/23/10 15:55	022310A-2	948071
7439-96-5	Manganese J+,16b	378000	ug/Kg	N	302	1510	1510	1	P	HSC	02/17/10 04:09	021610-1	948071
7439-97-6	Mercury U, 14b	41.4	ug/kg		6.35	18.7	18.7	1	AV	JXL1	02/16/10 10:04	021610S2-5	947650
7440-02-0	Nickel J,110a	8.08	mg/kg	*N	0.151	0.606	0.606	2	MS	SKJ	02/19/10 01:11	100218-3	948073
7440-09-7	Potassium J+,16b	1490000	ug/Kg	N	9650	37700	37700	1	P	HSC	02/17/10 04:09	021610-1	948071
7782-49-2	Selenium	1.51	mg/kg	U	0.757	1.51	1.51	2	MS	SKJ	02/19/10 01:11	100218-3	948073
7440-22-4	Silver	1060	ug/Kg		151	754	754	1	P	HSC	02/17/10 04:09	021610-1	948071
7440-23-5	Sodium U, 14b	35700	ug/Kg	J	10600	37700	37700	1	P	HSC	02/17/10 04:09	021610-1	948071
7440-28-0	Thallium U, 14b	0.139	mg/kg	J	0.0909	0.303	0.303	2	MS	SKJ	02/19/10 01:11	100218-3	948073
7440-61-1	Uranium	53.8	mg/kg	*	0.02	0.0606	0.0606	2	MS	SKJ	02/19/10 01:11	100218-3	948073
7440-62-2	Vanadium	20000	ug/Kg		151	754	754	1	P	HSC	02/17/10 04:09	021610-1	948071
7440-66-6	Zinc	67200	ug/Kg		498	1510	1510	1	P	HSC	02/17/10 04:09	021610-1	948071

**Prep Information:**

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
947650	947648	SW846 7471A Prep	0.501	g	30	mL	02/15/10	TXB3
948071	948070	SW846 3050B	0.517	g	50	mL	02/08/10	FGA
948073	948072	SW846 3050B	0.515	g	50	mL	02/08/10	FGA

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**METALS**  
-1-  
**INORGANICS ANALYSIS DATA PACKAGE**

SDG No: 10-1474

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245806008

BASIS: Dry Weight

DATE COLLECTED 26-JAN-10

CLIENT ID: RE15-10-8059

LEVEL: Low

DATE RECEIVED 29-JAN-10

MATRIX: SOIL

%SOLIDS: 92.7

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	1910000	ug/Kg		7130	21000	21000	1	P	HSC	02/17/10 04:16	021610-1	948071
7440-36-0	Antimony	1050	ug/Kg	U*	346	1050	1050	1	P	HSC	02/17/10 04:16	021610-1	948071
7440-38-2	Arsenic	0.845	mg/kg	J	0.211	1.05	1.05	2	MS	SKJ	02/19/10 01:15	100218-3	948073
7440-39-3	Barium	30500	ug/Kg		105	525	525	1	P	HSC	02/17/10 04:16	021610-1	948071
7440-41-7	Beryllium J,110a	0.304	mg/kg	*	0.0211	0.105	0.105	2	MS	SKJ	02/19/10 15:16	100219-4	948073
7440-43-9	Cadmium	525	ug/Kg	U	105	525	525	1	P	HSC	02/17/10 04:16	021610-1	948071
7440-70-2	Calcium	779000	ug/Kg		8390	26200	26200	1	P	HSC	02/17/10 04:16	021610-1	948071
7440-47-3	Chromium J,110a	16300	ug/Kg	*	157	525	525	1	P	HSC	02/17/10 04:16	021610-1	948071
7440-48-4	Cobalt	14300	ug/Kg	*	157	525	525	1	P	HSC	02/17/10 04:16	021610-1	948071
7440-50-8	Copper J+,16b	5340	ug/Kg	*N	315	1050	1050	1	P	HSC	02/17/10 04:16	021610-1	948071
7439-89-6	Iron	8500000	ug/Kg		16800	52500	52500	2	P	HSC	02/23/10 17:59	022310A-2	948071
7439-92-1	Lead U, 14b	6900	ug/Kg	*	525	2100	2100	2	P	HSC	02/23/10 17:59	022310A-2	948071
7439-95-4	Magnesium J+,16b	386000	ug/Kg	N	17800	62900	62900	2	P	HSC	02/23/10 17:59	022310A-2	948071
7439-96-5	Manganese J+,16b	221000	ug/Kg	N	210	1050	1050	1	P	HSC	02/17/10 04:16	021610-1	948071
7439-97-6	Mercury U, 14b	26.5	ug/kg		4.33	12.7	12.7	1	AV	JXL1	02/16/10 10:06	021610S2-5	947650
7440-02-0	Nickel J,110a	4.26	mg/kg	*N	0.105	0.421	0.421	2	MS	SKJ	02/19/10 01:15	100218-3	948073
7440-09-7	Potassium J+,16b	396000	ug/Kg	N	6710	26200	26200	1	P	HSC	02/17/10 04:16	021610-1	948071
7782-49-2	Selenium	1.05	mg/kg	U	0.527	1.05	1.05	2	MS	SKJ	02/19/10 01:15	100218-3	948073
7440-22-4	Silver	564	ug/Kg		105	525	525	1	P	HSC	02/17/10 04:16	021610-1	948071
7440-23-5	Sodium	145000	ug/Kg		7340	26200	26200	1	P	HSC	02/17/10 04:16	021610-1	948071
7440-28-0	Thallium	0.211	mg/kg	U	0.0632	0.211	0.211	2	MS	SKJ	02/19/10 01:15	100218-3	948073
7440-61-1	Uranium J,14a	0.584	mg/kg	*	0.0139	0.0421	0.0421	2	MS	SKJ	02/19/10 01:15	100218-3	948073
7440-62-2	Vanadium	5440	ug/Kg		105	525	525	1	P	HSC	02/17/10 04:16	021610-1	948071
7440-66-6	Zinc	32800	ug/Kg		346	1050	1050	1	P	HSC	02/17/10 04:16	021610-1	948071

**Prep Information:**

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
947650	947648	SW846 7471A Prep	0.508	g	30	mL	02/15/10	TXB3
948071	948070	SW846 3050B	0.514	g	50	mL	02/08/10	FGA
948073	948072	SW846 3050B	0.512	g	50	mL	02/08/10	FGA

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**METALS**  
-1-  
**INORGANICS ANALYSIS DATA PACKAGE**

SDG No: 10-1474-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245807001

BASIS: As Received

DATE COLLECTED 26-JAN-10

CLIENT ID: RE15-10-8081

LEVEL: Low

DATE RECEIVED 29-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 UJ,I7c	200	ug/L	U	68	200	200	1	P	HSC	02/25/10 16:33	022510-1	948088
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	BAJ	02/20/10 22:38	100220-2	948090
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	02/25/10 16:33	022510-1	948088
7440-39-3	Barium	5	ug/L	U	1	5	5	1	P	HSC	02/25/10 16:33	022510-1	948088
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	BAJ	02/21/10 11:54	100220-7	948090
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	BAJ	02/20/10 22:38	100220-2	948090
7440-70-2	Calcium	200	ug/L	U	50	200	200	1	P	HSC	02/25/10 16:33	022510-1	948088
7440-47-3	Chromium	5	ug/L	U	1	5	5	1	P	HSC	02/25/10 16:33	022510-1	948088
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	02/25/10 16:33	022510-1	948088
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	02/25/10 16:33	022510-1	948088
7439-89-6	Iron	100	ug/L	U	30	100	100	1	P	HSC	02/25/10 16:33	022510-1	948088
7439-92-1	Lead	2	ug/L	U	0.5	2	2	1	MS	BAJ	02/21/10 11:54	100220-7	948090
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	02/25/10 16:33	022510-1	948088
7439-96-5	Manganese	5	ug/L	U	1	5	5	1	MS	BAJ	02/21/10 11:54	100220-7	948090
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JXL1	02/15/10 11:13	021510W1-9	947646
7440-02-0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	02/25/10 16:33	022510-1	948088
7440-09-7	Potassium	180	ug/L		50	150	150	1	P	HSC	02/25/10 16:33	022510-1	948088
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	02/25/10 16:33	022510-1	948088
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	02/25/10 16:33	022510-1	948088
7440-23-5	Sodium	160	ug/L	J	100	300	300	1	P	HSC	02/25/10 16:33	022510-1	948088
7440-28-0	Thallium	1	ug/L	U	0.3	1	1	1	MS	BAJ	02/20/10 22:38	100220-2	948090
7440-61-1	Uranium	0.20	ug/L	U	0.05	0.2	0.2	1	MS	BAJ	02/21/10 13:39	100221-8	948090
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	02/25/10 16:33	022510-1	948088
7440-66-6	Zinc	10	ug/L	U	3.3	10	10	1	P	HSC	02/25/10 16:33	022510-1	948088

**Prep Information:**

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
947646	947645	SW846 7470A Prep	20	mL	20	mL	02/12/10	TXB3
948088	948085	SW846 3005A	25	mL	25	mL	02/25/10	AXG2
948090	948089	SW846 3005A	50	mL	50	mL	02/03/10	LYH1

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03/09/10

**METALS**  
**-1-**  
**INORGANICS ANALYSIS DATA PACKAGE**

SDG No: 10-1474-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245807002

BASIS: As Received

DATE COLLECTED 26-JAN-10

CLIENT ID: RE15-10-8082

LEVEL: Low

DATE RECEIVED 29-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 UJ,17c	200	ug/L	U	68	200	200	1	P	HSC	02/25/10 16:39	022510-1	948088
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	BAJ	02/20/10 22:44	100220-2	948090
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	02/25/10 16:39	022510-1	948088
7440-39-3	Barium	5	ug/L	U	1	5	5	1	P	HSC	02/25/10 16:39	022510-1	948088
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	BAJ	02/21/10 11:56	100220-7	948090
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	BAJ	02/20/10 22:44	100220-2	948090
7440-70-2	Calcium	200	ug/L	U	50	200	200	1	P	HSC	02/25/10 16:39	022510-1	948088
7440-47-3	Chromium	5	ug/L	U	1	5	5	1	P	HSC	02/25/10 16:39	022510-1	948088
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	02/25/10 16:39	022510-1	948088
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	02/25/10 16:39	022510-1	948088
7439-89-6	Iron	100	ug/L	U	30	100	100	1	P	HSC	02/25/10 16:39	022510-1	948088
7439-92-1	Lead	0.604	ug/L	J	0.5	2	2	1	MS	BAJ	02/21/10 11:56	100220-7	948090
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	02/25/10 16:39	022510-1	948088
7439-96-5	Manganese	5	ug/L	U	1	5	5	1	MS	BAJ	02/21/10 11:56	100220-7	948090
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JXL1	02/15/10 11:25	021510W1-9	947646
7440-02-0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	02/25/10 16:39	022510-1	948088
7440-09-7	Potassium	82.7	ug/L	J	50	150	150	1	P	HSC	02/25/10 16:39	022510-1	948088
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	02/25/10 16:39	022510-1	948088
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	02/25/10 16:39	022510-1	948088
7440-23-5	Sodium	154	ug/L	J	100	300	300	1	P	HSC	02/25/10 16:39	022510-1	948088
7440-28-0	Thallium	1	ug/L	U	0.3	1	1	1	MS	BAJ	02/20/10 22:44	100220-2	948090
7440-61-1	Uranium	0.088	ug/L	J	0.05	0.2	0.2	1	MS	BAJ	02/21/10 13:41	100221-8	948090
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	02/25/10 16:39	022510-1	948088
7440-66-6	Zinc	10	ug/L	U	3.3	10	10	1	P	HSC	02/25/10 16:39	022510-1	948088

**Prep Information:**

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
947646	947645	SW846 7470A Prep	20	mL	20	mL	02/12/10	TXB3
948088	948085	SW846 3005A	25	mL	25	mL	02/25/10	AXG2
948090	948089	SW846 3005A	50	mL	50	mL	02/03/10	LYH1

JCC  
03/09/10

## DATA VALIDATION COVER SHEET

5120-1

## Data Validation Cover Sheet

Records Use only



## Section I.

REQUEST NUMBER: 10-1474 VALIDATION DATE: 03/10/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Joanne Compton 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<br>PESTICIDES/POLYCHLORINA<br>TED BIPHENYLS |
| <input checked="" type="checkbox"/> GENERAL CHEMISTRY    | <input type="checkbox"/> RADIOCHEMISTRY  | <input type="checkbox"/> LCMSMS HIGH<br>EXPLOSIVES |   |
| <input type="checkbox"/> OTHER (DESCRIBE): Total Cyanide |  |  |   |

## Section II. Completeness Check

- | YES                                 | N                        | N/A                                 | (CHECK ONE)                 | YES                                 | NO                       | N/A                                 | (CHECK ONE)              |
|-------------------------------------|--------------------------|-------------------------------------|-----------------------------|-------------------------------------|--------------------------|-------------------------------------|--------------------------|
|                                     | O                        |                                     |                             |                                     |                          |                                     |                          |
| <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 aqueous MB, total cyanide was detected. The associated sample results were detects  $\leq 5X$  the MB concentration and, thus, were qualified U,I4.
2. In the ICB and CCBs associated with the aqueous analysis, total cyanide was detected. The associated sample results were detects  $\leq 5X$  the greatest associated blank concentration and, thus, were qualified U,I4b.
3. It should be noted that the matrix QC for the soil and aqueous analysis for total cyanide were performed on samples from other LANL RNs except for one set of soil matrix QC. No sample data were qualified as a result.

Reviewed by: Mary Donovan


Level: I

Date: 03/10/10

DATA VALIDATION COVER SHEET	
5120-1	Records Use only
Data Validation Cover Sheet	
VALIDATOR'S SIGNATURE: <u><i>Jeanne Compton</i></u>	DATE: <u>03/10/10</u>
Form 5120-1, Revision 0.0	LOS ALAMOS Environmental Restoration Project


GENERAL CHEMISTRY ANALYTICAL DATA VALIDATION CHECKLIST	
5120-2  General Chemistry 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"/>	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 checked="" type="checkbox"/>	<input 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 (Check One)				Assign Qualifier Listed Below If Criterion = Yes	
				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 checked="" type="checkbox"/>	<input 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	
<b>5120-2</b>  <b>General Chemistry Analytical Data Validation Checklist</b>	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"/>	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)

# 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 17, 2010

Client SDG: 10-1474

Client Sample ID: RE15-10-7954  
Sample ID: 245806001  
Matrix: R  
Collect Date: 26-JAN-10 12:00  
Receive Date: 29-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	70.8	260	ug/kg	1	AXC2	02/08/10	1541	947318	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	02/05/10	1402	947317

### The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

**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 17, 2010

Client SDG: 10-1474

Client Sample ID: RE15-10-7956  
Sample ID: 245806002  
Matrix: R  
Collect Date: 26-JAN-10 12:00  
Receive Date: 29-JAN-10  
Collector: Client  
Moisture: 6.14%

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	63.5	234	ug/kg	1	AXC2	02/08/10	1545	947318	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	02/05/10	1402	947317

**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 17, 2010

Client SDG: 10-1474

Client Sample ID: RE15-10-7955  
Sample ID: 245806003  
Matrix: R  
Collect Date: 26-JAN-10 12:00  
Receive Date: 29-JAN-10  
Collector: Client  
Moisture: 18%

Project: LANL01004  
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Flow Injection Analysis</b>											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	71.5	263	ug/kg	1	AXC2	02/08/10	1546	947318	1

### The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/05/10	1402	947317

### 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 17, 2010

Client SDG: 10-1474

Client Sample ID: RE15-10-7953  
Sample ID: 245806004  
Matrix: R  
Collect Date: 26-JAN-10 12:00  
Receive Date: 29-JAN-10  
Collector: Client  
Moisture: 14.1%

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	76.1	280	ug/kg	1	AXC2	02/08/10	1547	947318	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	02/05/10	1402	947317

### 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 17, 2010

Client SDG: 10-1474

Client Sample ID: RE15-10-7952  
Sample ID: 245806005  
Matrix: R  
Collect Date: 26-JAN-10 12:00  
Receive Date: 29-JAN-10  
Collector: Client  
Moisture: 6.69%

Project: LANL01004  
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Flow Injection Analysis</b>											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	72.9	268	ug/kg	1	AXC2	02/08/10	1548	947318	1

### The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/05/10	1402	947317

### The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

JCC  
3/10/10

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Los Alamos, New Mexico 87545  
Contact: Ms. Joylene Valdez  
Project: LANL ER Project

Report Date: February 17, 2010

Client SDG: 10-1474

Client Sample ID: RE15-10-8060  
Sample ID: 245806006  
Matrix: R  
Collect Date: 26-JAN-10 12:00  
Receive Date: 29-JAN-10  
Collector: Client  
Moisture: 14.6%

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	75.1	276	ug/kg	1	AXC2	02/08/10	1549	947318	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	02/05/10	1402	947317

### The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

# GEL LABORATORIES LLC

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## Certificate of Analysis

Company : Los Alamos National Laboratory  
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Los Alamos, New Mexico 87545  
Contact: Ms. Joylene Valdez  
Project: LANL ER Project

Report Date: February 17, 2010

Client SDG: 10-1474

Client Sample ID: RE15-10-8058  
Sample ID: 245806007  
Matrix: R  
Collect Date: 26-JAN-10 12:00  
Receive Date: 29-JAN-10  
Collector: Client  
Moisture: 35.9%

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	104	382	ug/kg	1	AXC2	02/08/10	1550	947318	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	02/05/10	1402	947317

### The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	



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## Certificate of Analysis

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Los Alamos, New Mexico 87545  
Contact: Ms. Joylene Valdez  
Project: **LANL ER Project**

Report Date: February 17, 2010

Client SDG: 10-1474

Client Sample ID: RE15-10-8059  
Sample ID: 245806008  
Matrix: R  
Collect Date: 26-JAN-10 12:00  
Receive Date: 29-JAN-10  
Collector: Client  
Moisture: 7.28%

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	70.5	259	ug/kg	1	AXC2	02/09/10	1318	947321	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	02/08/10	1427	947319

### 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 9, 2010

Client SDG: 10-1474-1

Client Sample ID: RE15-10-8081  
Sample ID: 245807001  
Matrix: W  
Collect Date: 26-JAN-10 12:00  
Receive Date: 29-JAN-10  
Collector: Client

Project: LANL01004  
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Flow Injection Analysis</b>											
<i>SW9012A Cyanide, Total "As Received"</i>											
Cyanide, Total	J	2.82	U,14	1.66	5.00	ug/L	1	AXC2	02/05/10	1112	947324 1

### The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/03/10	1524	947322

### The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

# GEL LABORATORIES LLC

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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 9, 2010

Client SDG: 10-1474-1

Client Sample ID: RE15-10-8082  
Sample ID: 245807002  
Matrix: W  
Collect Date: 26-JAN-10 12:00  
Receive Date: 29-JAN-10  
Collector: Client

Project: LANL01004  
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Flow Injection Analysis</b>											
<i>SW9012A Cyanide, Total "As Received"</i>											
Cyanide, Total	J	2.67	U,14	1.66	5.00	ug/L	1	AXC2	02/05/10	1113	947324 1

### The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/03/10	1524	947322

### The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

Thursday, January 28, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1474

LOS ALAMOS

REQUEST NUMBER: 10-1474

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 2/27/2010

General Engineering Laboratories, Inc.,  
Charleston, SC.

TURNAROUND REQ'D: 30

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS:

245806, 245807%

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE15-10-7954	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7956	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7955	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7953	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7952	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-8060	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-8058	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-8059	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-8081	1	POLY	METALS+U-GEL	Nitric Acid	W
RE15-10-8081	1	POLY	SW-846:6850	Ice	W
RE15-10-8081	1	POLY	TCN	Sodium Hydroxide	W
RE15-10-8082	1	POLY	METALS+U-GEL	Nitric Acid	W
RE15-10-8082	1	POLY	SW-846:6850	Ice	W
RE15-10-8082	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

Thursday, January 28, 2010  
**LOS ALAMOS**  
NATIONAL LABORATORY

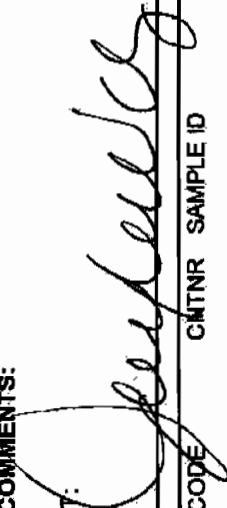
These Samples are on:  
LANL Request Number: 10-1474  
Per Agreement Number: 126310011  
Project Cost Code: MR3A05529E00

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: 1/28/2010  
TURNAROUND/REPORT DUE: 2/27/2010  
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required  
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:  
Signature: 

PRIORITY	METHOD CODE	CMTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6020					
		1	RE15-10-7952	R	1/26/2010	
		1	RE15-10-7953	R	1/26/2010	
		1	RE15-10-7954	R	1/26/2010	
		1	RE15-10-7955	R	1/26/2010	
		1	RE15-10-7956	R	1/26/2010	
		1	RE15-10-8058	R	1/26/2010	
		1	RE15-10-8059	R	1/26/2010	
		1	RE15-10-8060	R	1/26/2010	
		1	RE15-10-8081	W	1/26/2010	

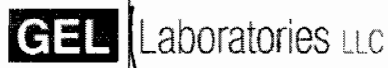
PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6020	1	RE15-10-8082	W	1/26/2010	
	SW-846:6850	1	RE15-10-7952	R	1/26/2010	
		1	RE15-10-7953	R	1/26/2010	
		1	RE15-10-7954	R	1/26/2010	
		1	RE15-10-7955	R	1/26/2010	
		1	RE15-10-7956	R	1/26/2010	
		1	RE15-10-8058	R	1/26/2010	
		1	RE15-10-8059	R	1/26/2010	
		1	RE15-10-8080	R	1/26/2010	
		1	RE15-10-8081	W	1/26/2010	
		1	RE15-10-8082	W	1/26/2010	
	SW-846:7470A	1	RE15-10-8081	W	1/26/2010	
		1	RE15-10-8082	W	1/26/2010	
	SW-846:7471A	1	RE15-10-7952	R	1/26/2010	
		1	RE15-10-7953	R	1/26/2010	
		1	RE15-10-7954	R	1/26/2010	
		1	RE15-10-7955	R	1/26/2010	
		1	RE15-10-7956	R	1/26/2010	
		1	RE15-10-8058	R	1/26/2010	
		1	RE15-10-8059	R	1/26/2010	
		1	RE15-10-8060	R	1/26/2010	
	SW-846:9012A	1	RE15-10-7952	R	1/26/2010	
		1	RE15-10-7953	R	1/26/2010	
		1	RE15-10-7954	R	1/26/2010	
		1	RE15-10-7955	R	1/26/2010	
		1	RE15-10-7956	R	1/26/2010	
		1	RE15-10-8058	R	1/26/2010	

REQUEST NUMBER: 10-1474

Thursday, January 28, 2010

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:9012A	1	RE15-10-8080	R	1/28/2010	
		1	RE15-10-8081	W	1/28/2010	
		1	RE15-10-8082	W	1/28/2010	

Final Page of REQUEST NUMBER 10-1474



a member of **The GEL Group** INC



PO Box 30712 Charleston, SC 29417  
2040 Savage Road Charleston, SC 29407  
P 843.556.8171 F 843.766.1178

February 04, 2010

[www.gel.com](http://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: 245806 245807  
SDG: 10-1474

Dear Ms. Valdez:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the following analytical results for the sample(s) we received on January 29, 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: 10-1474  
Enclosures



**Los Alamos National Laboratory (72733-001-09)**  
**LANL ER Project**  
**Work Order #: 245806 and 245807**  
**SDG: 10-1474**

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# Case Narrative

**Case Narrative for  
Los Alamos National Laboratory (72733-001-09)  
LANL ER Project  
Workorder #: 245806 and 245807  
SDG # : 10-1474**

**February 04, 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 29, 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>
245806001	RE15-10-7954
245806002	RE15-10-7956
245806003	RE15-10-7955
245806004	RE15-10-7953
245806005	RE15-10-7952
245806006	RE15-10-8060
245806007	RE15-10-8058
245806008	RE15-10-8059
245807001	RE15-10-8081
245807002	RE15-10-8082

**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 04 February 2010**

<b>State</b>	<b>Certification</b>
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**

Thursday, January 28, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1474

LOS ALAMOS

REQUEST NUMBER: 10-1474

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 2/27/2010

General Engineering Laboratories, Inc.,  
Charleston, SC.

TURNAROUND REQ'D: 30

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS:

245806, 245807%

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE15-10-7954	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7956	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7955	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7953	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7952	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-8060	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-8058	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-8059	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-8081	1	POLY	METALS+U-GEL	Nitric Acid	W
RE15-10-8081	1	POLY	SW-846:6850	Ice	W
RE15-10-8081	1	POLY	TCN	Sodium Hydroxide	W
RE15-10-8082	1	POLY	METALS+U-GEL	Nitric Acid	W
RE15-10-8082	1	POLY	SW-846:6850	Ice	W
RE15-10-8082	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



Thursday, January 28, 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: 1/28/2010**

**TURNAROUND REPORT DUE: 2/27/2010**

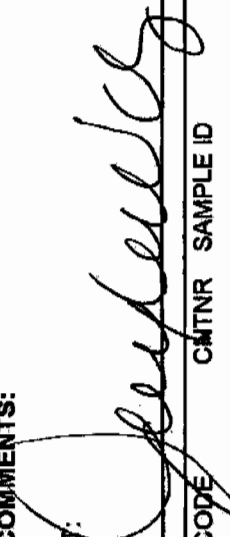
**TURNAROUND REQ'D: 30 Days**

**RAD SCREENING: Not Required**

**LAB REQUEST COMMENTS:**

LANL ER SMO CONTACT:

Signature:



These Samples are on:

LANL Request Number: 10-1474

Per Agreement Number: 126310011

Project Cost Code: MR3A05529E00

PRIORITY	METHOD CODE	CMTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6020	1	RE15-10-7952	R	1/28/2010	
		1	RE15-10-7953	R	1/26/2010	
		1	RE15-10-7954	R	1/26/2010	
		1	RE15-10-7955	R	1/26/2010	
		1	RE15-10-7956	R	1/26/2010	
		1	RE15-10-8058	R	1/26/2010	
		1	RE15-10-8059	R	1/26/2010	
		1	RE15-10-8060	R	1/26/2010	
		1	RE15-10-8081	W	1/28/2010	

Thursday, January 28, 2010

REQUEST NUMBER: 10-1474

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6020	1	RE15-10-8082	W	1/26/2010	
	SW-846:6850	1	RE15-10-7952	R	1/26/2010	
		1	RE15-10-7953	R	1/26/2010	
		1	RE15-10-7954	R	1/26/2010	
		1	RE15-10-7955	R	1/26/2010	
		1	RE15-10-7956	R	1/26/2010	
		1	RE15-10-8058	R	1/26/2010	
		1	RE15-10-8059	R	1/26/2010	
		1	RE15-10-8060	R	1/26/2010	
		1	RE15-10-8081	W	1/26/2010	
		1	RE15-10-8082	W	1/26/2010	
	SW-846:7470A	1	RE15-10-8081	W	1/26/2010	
		1	RE15-10-8082	W	1/26/2010	
	SW-846:7471A	1	RE15-10-7952	R	1/26/2010	
		1	RE15-10-7953	R	1/26/2010	
		1	RE15-10-7954	R	1/26/2010	
		1	RE15-10-7955	R	1/26/2010	
		1	RE15-10-7956	R	1/26/2010	
		1	RE15-10-8058	R	1/26/2010	
		1	RE15-10-8059	R	1/26/2010	
		1	RE15-10-8060	R	1/26/2010	
	SW-846:9012A	1	RE15-10-7952	R	1/26/2010	
		1	RE15-10-7953	R	1/26/2010	
		1	RE15-10-7954	R	1/26/2010	
		1	RE15-10-7955	R	1/26/2010	
		1	RE15-10-7956	R	1/26/2010	
		1	RE15-10-8058	R	1/26/2010	
		1	RE15-10-8059	R	1/26/2010	

Thursday, January 28, 2010

Page 3 of 3

REQUEST NUMBER: 10-1474

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:9012A	1	RE15-10-8080	R	1/26/2010	
		1	RE15-10-8081	W	1/26/2010	
		1	RE15-10-8082	W	1/26/2010	

Final Page of REQUEST NUMBER 10-1474

**SAMPLE RECEIPT & REVIEW FORM**

Client: LANL			SDG/ARCOC/Work Order: 10-1474		
Received By: Patricia Dover-Dent			Date Received: January 29, 2009		
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*: 60 CPM	
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 (describe) 1-6    10-12C
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: time written on containers, not on COC
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: FEDEX#S**

7209 7849 7419 11C	7209 7849 7522 6C
7209 7849 7500 5C	7209 7849 7533 1C
7209 7849 7452 2C	7209 7849 7544 1C
7209 7849 7474 1C	7209 7849 7420 10C
7209 7849 7441 4C	7209 7849 7496 2C
7209 7849 7463 3C	7209 7849 7485 3C
7209 7849 7430 10C	7209 7849 7408 12C
7209 7849 7511 6C	

PM (or PMA) review: Initials

*[Signature]*

Date

2/10/09 2/1/10

ORIGIN ID: SDEA (505) 665-9968  
JOYLENE VALDEZ  
LOS ALAMOS MAIL LAB  
1600 BLDG 1237 DPU 03

SHIP DATE: 29 JAN 19  
ACTMGT: 60.0 LB MAN  
CAD: 0014176/CAFE2449

LOS ALAMOS NM 87545  
UNITED STATES US

BILL SENDER

VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171  
REF: 680100R290515BYD0

FedEx  
Express



FRI - 29 JAN A1  
PRIORITY OVERNIGHT

3 of 3  
MPS# 7209 7849 7419  
Mat# 7209 7849 7393 0261

29407  
SC-US  
CHS

XX CHSA



ORIGIN ID: SDEA (505) 665-9338  
JOYLENE VALDEZ  
LOS ALAMOS MAIL LAB  
1600 BLDG 1237 DPU 03

SHIP DATE: 29 JAN 19  
ACTMGT: 60.0 LB MAN  
CAD: 0014176/CAFE2449

LOS ALAMOS NM 87545  
UNITED STATES US

BILL SENDER

VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171  
REF: 680100R180156GKKO

FedEx  
Express



FRI - 29 JAN A1  
PRIORITY OVERNIGHT

1 of 2  
TRK# 7209 7849 7500  
Mat# MASTER MH

29407  
SC-US  
CHS

XX CHSA



ORIGIN ID: SAFA (505) 665-9958

SHIP DATE: 20JAN10  
ACTWGT: 47.0 LB MAN  
CAD: 0014176/CAFE2449

**BILL SENDER**

VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

**CHARLESTON SC 29407**

(943) 556-8171  
REF: 68010AMR3A05329E00

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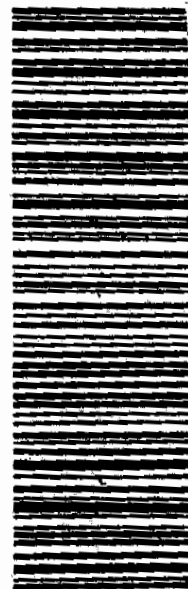
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**PRIORITY OVERNIGHT**

TRK# 7209 7849 7452  
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**CHS**  
**SC-US**



ORIGIN ID: SAFA (505) 665-9958  
JOYLENE VALDEZ  
LOS ANGELES

LOS ALAMOS NATL LAB  
T980 BLDG 1237 DPU 03

LOS ALAMOS NM 87545  
UNITED STATES OF AMERICA

°VALERIE DAVIS  
GENERAL ENGINE  
2040 SAVAGE RD

CHARLESTON SC 29407  
(843) 556-8171

REF: 6B010AMR1A015AGWKO

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Matr# 7209 7849 7463

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ORIGIN ID: SFA (505) 665-9968  
 JOYLENE VALDEZ  
 LOS ALAMOS NATL LAB  
 1680 BLDG 1237 DPU 93  
 LOS ALAMOS NM 87545  
 UNITED STATES US  
 BILL SENDER

SHIP DATE: 29 JAN 10  
 ACTWGT: 15.0 LB HMN  
 CAD: 0014176/CAFE2449

VALERIE DAVIS  
 GENERAL ENGINEERING LAB  
 2040 SAVAGE RD

CHARLESTON SC 29407  
 (843) 566-8171  
 REF: 680104MR1A015AGWKO

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Part 15618431 NMT V3 74-5

ORIGIN ID: SFA (505) 665-9968  
 JOYLENE VALDEZ  
 LOS ALAMOS NATL LAB  
 1680 BLDG 1237 DPU 93  
 LOS ALAMOS NM 87545  
 UNITED STATES US  
 BILL SENDER

SHIP DATE: 29 JAN 10  
 ACTWGT: 15.0 LB HMN  
 CAD: 0014176/CAFE2449

VALERIE DAVIS  
 GENERAL ENGINEERING LAB  
 2040 SAVAGE RD

CHARLESTON SC 29407  
 (843) 566-8171  
 REF: 680104MR3A0529E00

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 PRIORITY OVERNIGHT

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 SC-US  
 CHS

2 of 2  
 MPSh 7209 7849 7441  
 0263  
 Master 7209 7849 7430 0201

XX CHSA



ORIGIN ID: 54FA (108) 885-8868  
JOYLENE VALDEZ  
LOS ALAMOS NATL LAB  
1888 BLDG 1237 DPU 93  
UNITED STATES US

SHIP DATE: 28JAN10  
ACTVAT: 52.0 LB MAN  
CRO: 0014176/CPEZ249  
BILL SENDER

VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

CHARLESTON SC 29407  
(843) 566-8171  
REF: 680100WR308528ED0

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PRIORITY OVERNIGHT

1 of 2  
UNKN 7209 7840 7430  
8263

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29407  
SC-US  
CHS



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ORIGIN ID: 54FA (506) 685-8868  
JOYLENE VALDEZ  
LOS ALAMOS NATL LAB  
1888 BLDG 1237 DPU 93  
UNITED STATES US

SHIP DATE: 28JAN10  
ACTVAT: 52.0 LB MAN  
CRO: 0014176/CPEZ249  
BILL SENDER

VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

CHARLESTON SC 29407  
(843) 566-8171  
REF: 680100WR100159GAKO

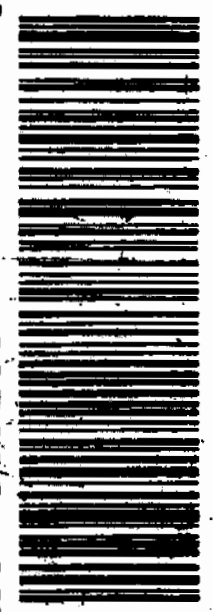
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PRIORITY OVERNIGHT

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UNKN 7209 7849 7511  
8263  
Matr# 7209 7849 7590 8201

XX CHSA  
29407  
SC-US  
CHS



Part # 156148-434 NRTV3 04-00





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ORIGIN ID: 88FA (805) 665-9968  
JOYLENE VALDEZ  
LOS ALAMOS NATL LAB  
TRAB BLDG 1237 DRU 93

SHIP DATE: 28JAN10  
ACTING: 80.0 LB MIN  
CNO: 8814176/CAFE2449

LOS ALAMOS, NM 87545  
UNITED STATES US

BILL SENDER

VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 664-8171  
REF: 8801000RDW1583500

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FRI - 29JAN A1  
PRIORITY OVERNIGHT

TRK# 7209 7849 7533

XX CHSA

29407 SC-US CHS



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ORIGIN ID: 88FA (805) 665-9968  
JOYLENE VALDEZ  
LOS ALAMOS NATL LAB  
TRAB BLDG 1237 DRU 93

LOS ALAMOS, NM 87545  
UNITED STATES US

VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 664-8171  
REF: 880100AX4900850000

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FRI - 29JAN A1  
PRIORITY OVERNIGHT

TRK# 7209 7849 7544

XX CHSA

29407 SC-US CHS



Part # 156148-434 NRIT V3 04-00

ORIGIN ID: SOFA (505) 665-9968  
JOYLENE VALDEZ  
LOS ALAMOS NATL LAB  
7800 BLDG 1237 DUJ 03  
LOS ALAMOS, NM 87545  
UNITED STATES US  
SHIP DATE: 28JAN18  
ACTWGT: 54.8 LB MAN  
CNO: 0014178/CPE2449

BILL SENDER

VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD  
CHARLESTON SC 29407  
(843) 856-8171  
REF: 688100W22065153Y00

CHARLESTON SC 29407  
(843) 856-8171  
REF: 688100W22065153Y00

REF: 688100W22065153Y00

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FRI - 29JAN A1  
PRIORITY OVERNIGHT

2 of 2  
NPSN 7209 7849 7496  
Matr# 7209 7849 7485 8201

XX CHSA

29407  
SC-US  
CHS



Part # 156148-434 NRT V3 04-08

ORIGIN ID: SOFA (505) 665-9968  
JOYLENE VALDEZ  
LOS ALAMOS NATL LAB  
7800 BLDG 1237 DUJ 03  
LOS ALAMOS, NM 87545  
UNITED STATES US  
SHIP DATE: 28JAN18  
ACTWGT: 51.8 LB MAN  
CNO: 0014178/CPE2449

BILL SENDER

VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD  
CHARLESTON SC 29407  
(843) 856-8171  
REF: 688100W22065153Y00

CHARLESTON SC 29407  
(843) 856-8171  
REF: 688100W22065153Y00

REF: 688100W22065153Y00

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Express



FRI - 29JAN A1  
PRIORITY OVERNIGHT

TRKH 7209 7849 7420  
8201

XX CHSA

29407  
SC-US  
CHS



Part # 156148-434 NRT V3 04-08

ORIGIN ID: 50FA 501 605-1966  
VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD  
CHARLESTON SC 29407  
REF: 680100010015000000

SHIP DATE: 29 JAN 19  
ACTING: 49 3 LB MAN  
CNO: 0014178/CFE2449  
BILL SENDER

VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD  
CHARLESTON SC 29407  
REF: 680100010015000000

CHARLESTON SC 29407  
(043) 556-8171  
REF: 680100010015000000



FRI - 29 JAN A1  
PRIORITY OVERNIGHT

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SC-US  
CHS

1 of 2  
TRK# 7289 7849 7485  
NN MASTER NN

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ORIGIN ID: 50FA 501 605-1966  
VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD  
CHARLESTON SC 29407  
REF: 680100010015000000

SHIP DATE: 29 JAN 19  
ACTING: 49 3 LB MAN  
CNO: 0014178/CFE2449  
BILL SENDER

VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD  
CHARLESTON SC 29407  
REF: 680100010015000000

CHARLESTON SC 29407  
(043) 556-8171  
REF: 680100010015000000



FRI - 29 JAN A1  
PRIORITY OVERNIGHT

29407  
SC-US  
CHS

2 of 3  
TRK# 7289 7849 7485  
NN MASTER NN

XX CHSA



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# **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 10-1474

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: 947240

Prep Batch Number: 947239

Sample Analysis

Sample ID	Client ID
245806001	RE15-10-7954
245806002	RE15-10-7956
245806003	RE15-10-7955
245806004	RE15-10-7953
245806005	RE15-10-7952
245806006	RE15-10-8060
245806007	RE15-10-8058
245806008	RE15-10-8059
1202029071	Interference Check Sample (ICS)
1202029067	Method Blank (MB)
1202029068	Laboratory Control Sample (LCS)
1202029069	245682002(RE46-10-11907) Matrix Spike (MS)
1202029070	245682002(RE46-10-11907) Matrix Spike Duplicate (MSD)

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

10-1474-PERLCMS

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### **Preparation/Analytical Method Verification**

#### **SOP Reference**

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

### **Calibration Information**

#### **Initial Calibration**

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

#### **CCV Requirements**

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

#### **CCB Requirements**

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

#### **CCV Requirements**

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

#### **Low Level Standard (CRI) Requirements**

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

### **Quality Control (QC) Information**

#### **Method Blank (MB) Statement**

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

#### **Interference Check Sample (ICS)**

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

#### **Laboratory Control Sample (LCS) Recovery**

The LCS spike recoveries met the acceptance limits.

#### **QC Sample Designation**

Client sample 245682002 (RE46-10-11907) from SDG 10-1450-1 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.

10-1474-PERLCMS

Page 2 of 4

### **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.

#### **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.

10-1474-PERLCMS

Page 3 of 4

#### **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 H. Mauer Date: 02/17/10

10-1474-PERLCMS

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# SAMPLE DATA SUMMARY

P perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 947239

Extraction Type: Solid Prep

Client Sample No.

RE15-10-7954

Date Received: 29-JAN-10

GEL Job No (SDG): 10-1474

GEL Sample ID: 245806001

Date Filtered: 10-FEB-10

Injection Volume (uL): 20

%Solids: 94.2

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

CAS No.	Analyte <sup>^</sup>	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	12-FEB-10 17:05	per0212030a
	Perchlorate Isotope Ratio						1	12-FEB-10 17:05	per0212030a
14797-73-0	Perchlorate-101	.531	2.12	0.531	ug/kg	U	1	12-FEB-10 17:05	per0212030a
	Perchlorate-O(18)			5.63	ug/kg		1	12-FEB-10 17:05	per0212030a

<sup>^</sup> 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: 247239

Extraction Type: Solid Prep

Client Sample No.

RE15-10-7956

Date Received: 29-JAN-10

GEL Job No (SDG): 10-1474

GEL Sample ID: 245806002

Date Filtered: 10-FEB-10

Injection Volume (uL): 20

%Solids: 93.9

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.533	2.13	0.923	ug/kg	J	1	12-FEB-10 17:37	per0212034a
	Perchlorate Isotope Ratio			2.92			1	12-FEB-10 17:37	per0212034a
14797-73-0	Perchlorate-101	.533	2.13	0.974	ug/kg	J	1	12-FEB-10 17:37	per0212034a
	Perchlorate-O(18)			5.69	ug/kg		1	12-FEB-10 17:37	per0212034a

<sup>^</sup> 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: SOIL

Extraction Batch ID: 947239

Extraction Type: Solid Prep

Client Sample No.

RE15-10-7955

Date Received: 29-JAN-10

GEL Job No (SDG): 10-1474

GEL Sample ID: 245806003

Date Filtered: 10-FEB-10

Injection Volume (uL): 20

%Solids: 82

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.61	2.44	0.610	ug/kg	U	1	12-FEB-10 17:45	per0212035a
	Perchlorate Isotope Ratio						1	12-FEB-10 17:45	per0212035a
14797-73-0	Perchlorate-101	.61	2.44	0.610	ug/kg	U	1	12-FEB-10 17:45	per0212035a
	Perchlorate-O(18)			6.47	ug/kg		1	12-FEB-10 17:45	per0212035a

<sup>^</sup> 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

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Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846.6850 Modified

Matrix: SOIL

Extraction Batch ID: 947239

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-7953

Date Received: 29-JAN-10

GEL Job No (SDG): 10-1474

GEL Sample ID: 245806004

Date Filtered: 10-FEB-10

Injection Volume (uL): 20

%Solids: 86

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.582	2.33	0.582	ug/kg	U	1	12-FEB-10 17:53	per0212036a
	Perchlorate Isotope Ratio						1	12-FEB-10 17:53	per0212036a
14797-73-0	Perchlorate-101	.582	2.33	0.582	ug/kg	U	1	12-FEB-10 17:53	per0212036a
	Perchlorate-O(18)			6.12	ug/kg		1	12-FEB-10 17:53	per0212036a

<sup>^</sup> 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: 947239  
 Extraction Type: Solid Prep  
 Client Sample No. RE15-10-7952  
 Date Received: 29-JAN-10  
 GEL Job No (SDG): 10-1474  
 GEL Sample ID: 245806005  
 Date Filtered: 10-FEB-10  
 Injection Volume (uL): 20  
 Sample Volume/Weight: 2.00 g  
 %Solids: 93.3  
 Concentrated Extract Volume: 20.0

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.536	2.14	0.536	ug/kg	U	1	12-FEB-10 18:01	per0212037a
	Perchlorate Isotope Ratio						1	12-FEB-10 18:01	per0212037a
14797-73-0	Perchlorate-101	.536	2.14	0.536	ug/kg	U	1	12-FEB-10 18:01	per0212037a
	Perchlorate-O(18)			5.80	ug/kg		1	12-FEB-10 18:01	per0212037a

<sup>^</sup> 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 LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 947239

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8060

Date Received: 29-JAN-10

GEL Job No (SDG): 10-1474

GEL Sample ID: 245806006

Date Filtered: 10-FEB-10

Injection Volume (uL): 20

%Solids: 85

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.585	2.34	0.585	ug/kg	U	1	12-FEB-10 18:09	per0212038a
	Perchlorate Isotope Ratio						1	12-FEB-10 18:09	per0212038a
14797-73-0	Perchlorate-101	.585	2.34	0.585	ug/kg	U	1	12-FEB-10 18:09	per0212038a
	Perchlorate-O(18)			6.04	ug/kg		1	12-FEB-10 18:09	per0212038a

<sup>^</sup> 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: 947239

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8058

Date Received: 29-JAN-10

GEL Job No (SDG): 10-1474

GEL Sample ID: 245806007

Date Filtered: 10-FEB-10

Injection Volume (uL): 20

%Solids: 64

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.78	3.12	0.780	ug/kg	U	1	12-FEB-10 18:17	per0212039a
	Perchlorate Isotope Ratio						1	12-FEB-10 18:17	per0212039a
14797-73-0	Perchlorate-101	.78	3.12	0.780	ug/kg	U	1	12-FEB-10 18:17	per0212039a
	Perchlorate-O(18)			8.72	ug/kg		1	12-FEB-10 18:17	per0212039a

<sup>^</sup> 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: 247239

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8059

Date Received: 29-JAN-10

GEL Job No (SDG): 10-1474

GEL Sample ID: 245806008

Date Filtered: 10-FEB-10

Injection Volume (uL): 20

%Solids: 92.7

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.539	2.16	0.539	ug/kg	U	1	12-FEB-10 18:25	per0212040a
	Perchlorate Isotope Ratio						1	12-FEB-10 18:25	per0212040a
14797-73-0	Perchlorate-101	.539	2.16	0.539	ug/kg	U	1	12-FEB-10 18:25	per0212040a
	Perchlorate-O(18)			6.02	ug/kg		1	12-FEB-10 18:25	per0212040a

<sup>^</sup> 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

# QUALITY CONTROL SUMMARY

Perchlorate Laboratory Control Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL GEL Job No. (SDG): 10-1474

Extract Batch Code: 947239 Date Filtered: 10-FEB-10

Matrix: SOIL Sample ID: 1202029068

Analyte^	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	2.00	2.13	ug/kg	106		70 - 130
Perchlorate Isotope Ratio		3.26				-
Perchlorate-101	2.00	2.01	ug/kg	101		70 - 130
Perchlorate-O(18)		5.01	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): 10-1474

Extract Batch Code: 947239

Date Filtered: 10-FEB-10

Matrix: SOIL

Sample ID: 1202029071

Analyte <sup>^</sup>	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	2.00	2.26	ug/kg	113		70 - 130
Perchlorate Isotope Ratio		3.06				
Perchlorate-101	2.00	2.28	ug/kg	114		70 - 130
Perchlorate-O(18)		5.34	ug/kg			

<sup>^</sup> 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\per021210a.qld

**Last Altered:** Saturday, February 13, 2010 10:56:08 AM Eastern Standard Time

Printed: Saturday, February 13, 2010 11:00:28 AM Eastern Standard Time

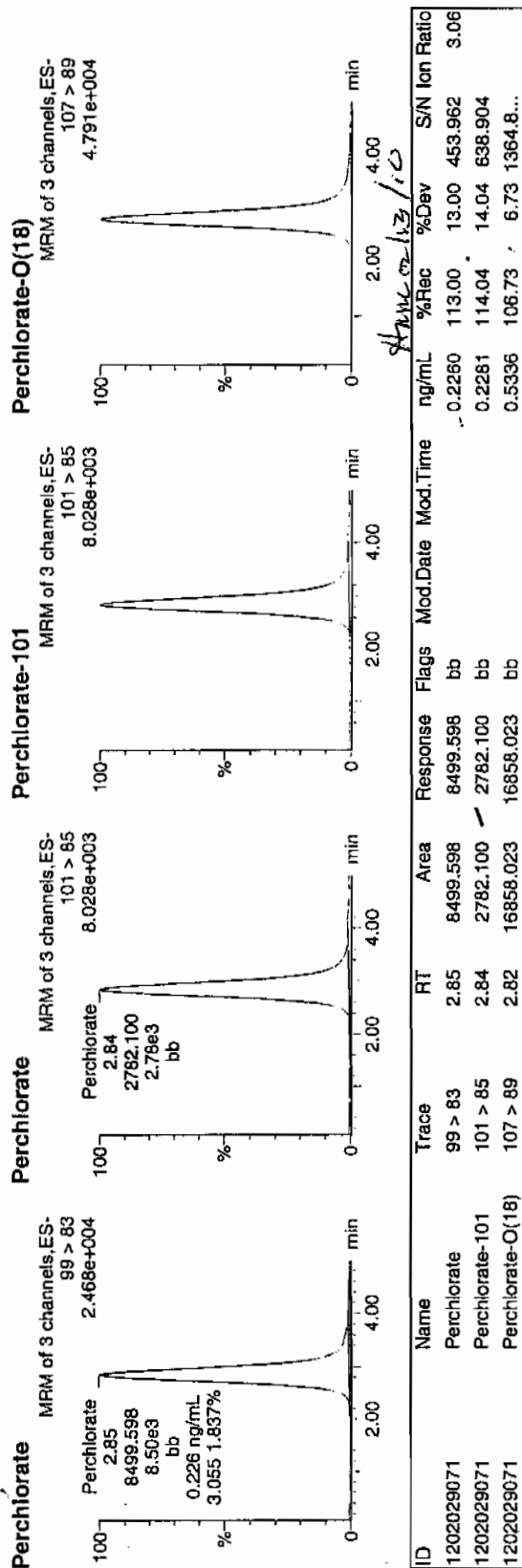
**Name: per0212014a**

Date: 12-Feb-2010

Time: 14:56:24

ID: 1202029071

Vial: 1:3,C



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



Perchlorate Spike/Spike Duplicate Summary

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No (SDG): 10-1474

Extract Batch Code: 247239

Date Extracted: 10-FEB-10

GEL MS/PS ID: 1202029069

Client ID: RE46-10-11907

GEL MSD/PSD ID: 1202029070

QC Type: MS

Compound <sup>^</sup>	Spike Added	Sample Conc	Units	MS Conc	MS Rec	#	MSD Conc	MSD Rec	#	RPD	#	RPD Limit	Recovery Limit
Perchlorate	2.39	0.106	ug/kg	2.72	110		2.29	91.6		17.2		30	75 - 125
Perchlorate Isotope Ratio	0	0.00		3.07			3.03			0			-
Perchlorate-101	2.39	0.106	ug/kg	2.74	110		2.33	93.3		16		30	75 - 125
Perchlorate-O(18)	0	6.16	ug/kg	6.43			6.39			.59			-

<sup>^</sup> 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

Lab Name: General Engineering Laboratories GEL Job No.(SDG): 10-1474

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	12-FEB-10	per0212001a	IPB001
Perchlorate-101	0.00	0	NA	12-FEB-10	per0212001a	IPB001
Perchlorate	0.00	0	NA	12-FEB-10	per0212002a	IPB001
Perchlorate-101	0.00	0	NA	12-FEB-10	per0212002a	IPB001

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

Dataset: C:\MassLynx\Perchlorate.PRO\per021210a.qld

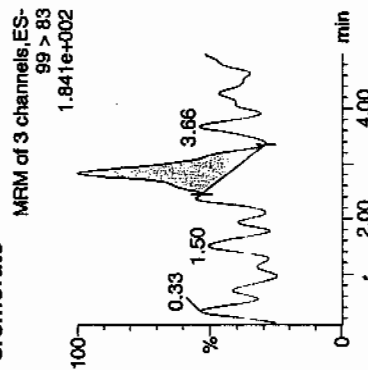
Last Altered: Saturday, February 13, 2010 10:56:08 AM Eastern Standard Time  
Printed: Saturday, February 13, 2010 11:00:28 AM Eastern Standard Time

Method: C:\MassLynx\Perchlorate.PRO\MethDB\per021210a.mdb 12 Feb 2010 14:01:47  
Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per021210a.cdb 13 Feb 2010 10:56:08

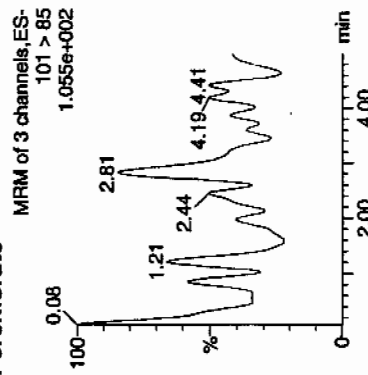
Name: per0212001a  
Date: 12-Feb-2010  
Time: 13:11:47  
ID: IPB001  
Vial: 1:1.A

02-13-10

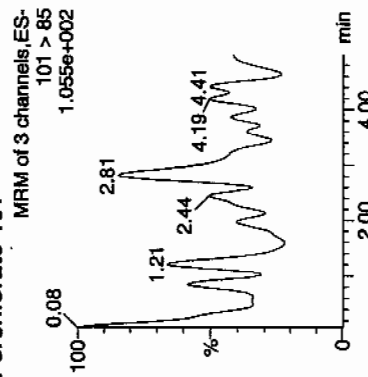
**Perchlorate**



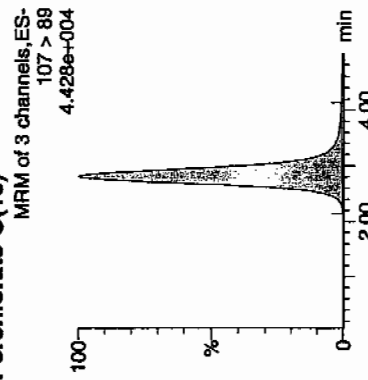
**Perchlorate**



**Perchlorate-101**



**Perchlorate-O(18)**



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB001	Perchlorate	99 > 83	2.82	38.717	38.717	bb			0.0010			10.949	0.00
IPB001	Perchlorate-101	101 > 85											
IPB001	Perchlorate-O(18)	107 > 89	2.81	15682.421	15682.421	bb			0.4964	99.28	-0.72	2148.0...	

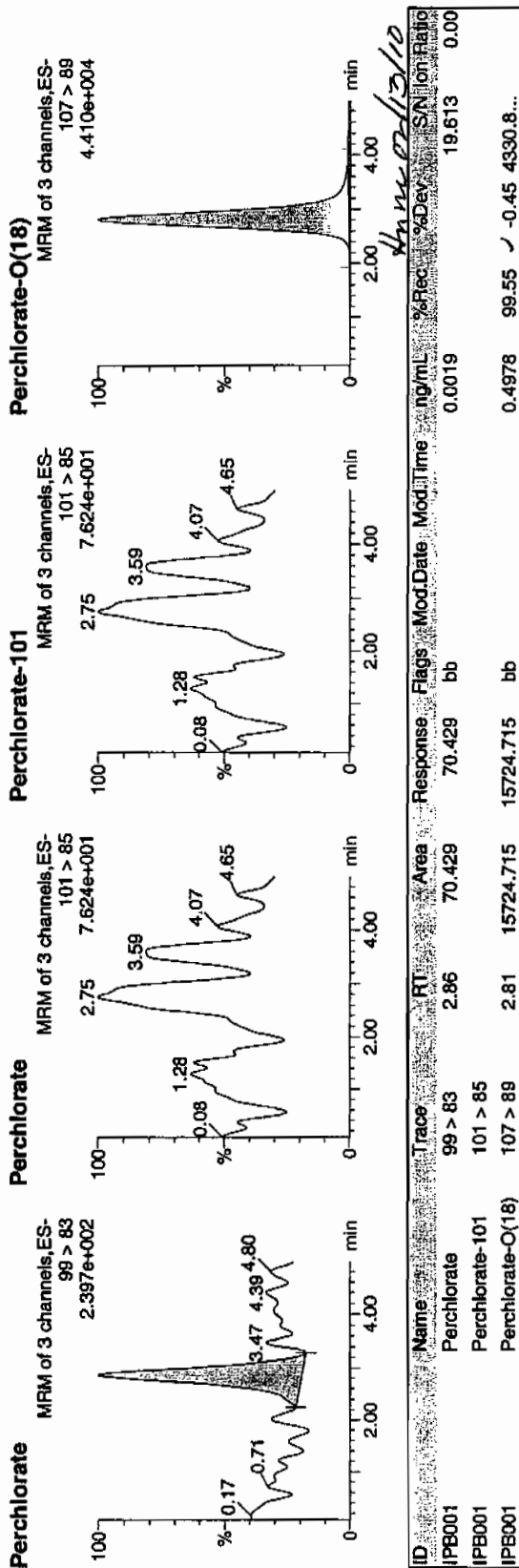
Quantify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charfers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per021210a.qld

Last Altered: Saturday, February 13, 2010 10:56:08 AM Eastern Standard Time  
Printed: Saturday, February 13, 2010 11:00:28 AM Eastern Standard Time

Name: per0212002a  
Date: 12-Feb-2010  
Time: 13:20:00  
ID: IPB001  
Vial: 1:1,A

02-13-10



Perchlorate Continuing Calibration Blank

Lab Name: General Engineering Laboratories GEL Job No.(SDG): 10-1474

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	12-FEB-10	per0212008a	IPB002
Perchlorate-101	0.00	0	NA	12-FEB-10	per0212008a	IPB002
Perchlorate	0.00	0	NA	12-FEB-10	per0212010a	IPB003
Perchlorate-101	0.00	0	NA	12-FEB-10	per0212010a	IPB003
Perchlorate	0.00	0	NA	12-FEB-10	per0212021a	IPB004
Perchlorate-101	0.00	0	NA	12-FEB-10	per0212021a	IPB004
Perchlorate	0.00	0	NA	12-FEB-10	per0212032a	IPB005
Perchlorate-101	0.00	0	NA	12-FEB-10	per0212032a	IPB005
Perchlorate	0.00	0	NA	12-FEB-10	per0212042a	IPB006
Perchlorate-101	0.00	0	NA	12-FEB-10	per0212042a	IPB006

Quantify Sample Report MassLynx 4.0 SP4

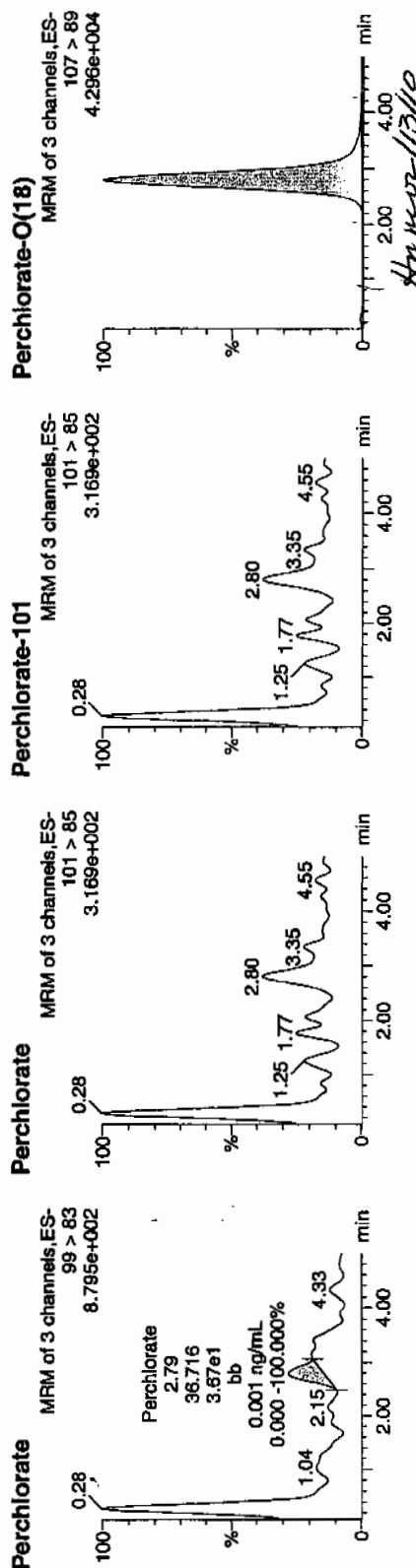
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per021210a.qld

Last Altered: Saturday, February 13, 2010 10:56:08 AM Eastern Standard Time  
Printed: Saturday, February 13, 2010 11:00:28 AM Eastern Standard Time

Name: per0212008a  
Date: 12-Feb-2010  
Time: 14:08:09  
ID: IPB002  
Vial: 1:1,A

02-13-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	IS/N	Ratio
IPB002	Perchlorate	99 > 83	2.79	36.716	36.716	bb			0.0010			20.998	0.00
IPB002	Perchlorate-101	101 > 85											
IPB002	Perchlorate-O(18)	107 > 89	2.79	15252.011	15252.011	bb			0.4828	96.56	-3.44	3237.0...	

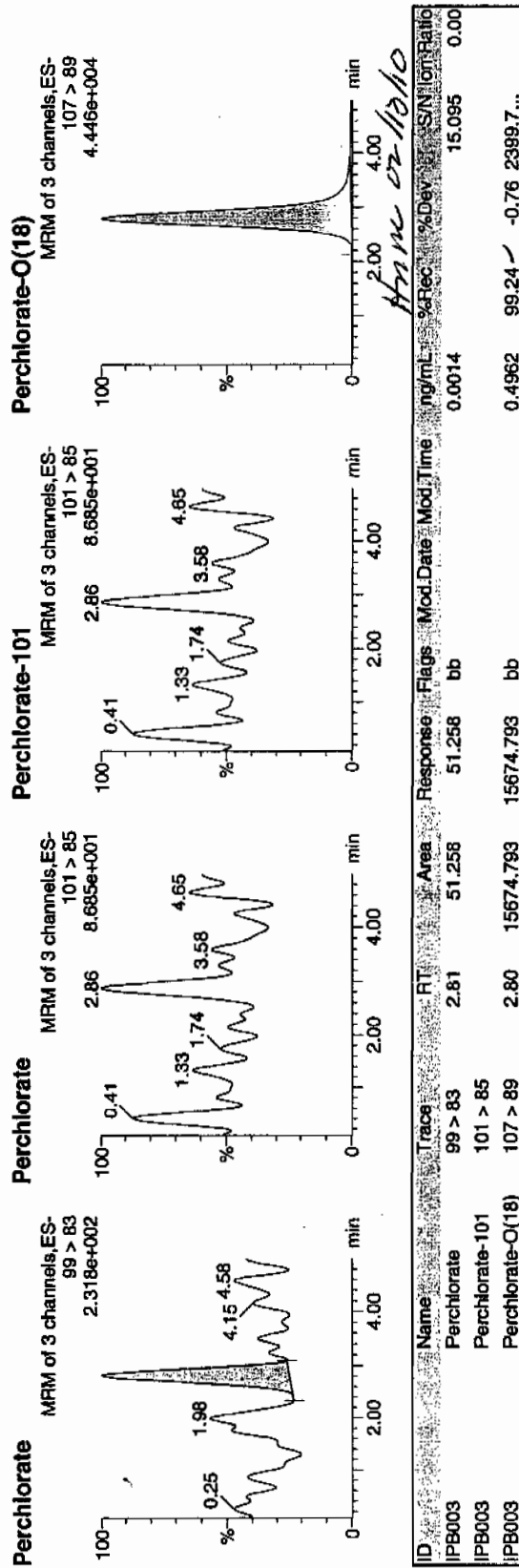
**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per021210a.qld

Last Altered: Saturday, February 13, 2010 10:56:08 AM Eastern Standard Time  
Printed: Saturday, February 13, 2010 11:00:28 AM Eastern Standard Time

Name: per0212010a  
Date: 12-Feb-2010  
Time: 14:24:13  
ID: IPB003  
Vial: 1:1,A

02-13-10



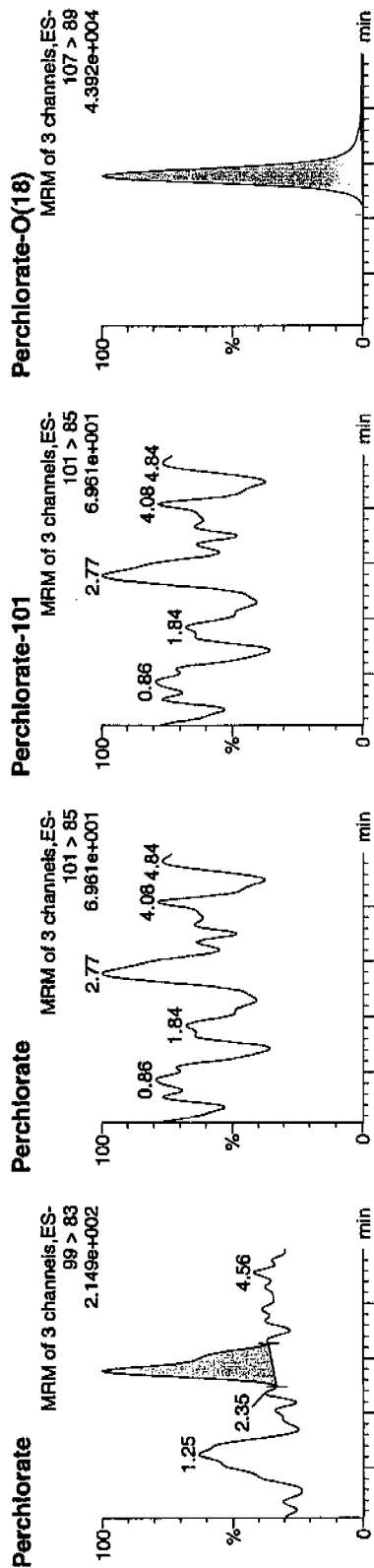
**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per021210a.qld

Last Altered: Saturday, February 13, 2010 10:56:08 AM Eastern Standard Time  
Printed: Saturday, February 13, 2010 11:00:28 AM Eastern Standard Time

Name: per0212021a  
Date: 12-Feb-2010  
Time: 15:52:38  
ID: IPB004  
Vial: 1:1,A

02-13-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	SN	Ion Ratio
IPB004	Perchlorate	99 > 83	2.76	48.784	48.784	bb			0.0013	98.35	-1.65	2671.0...	0.00
IPB004	Perchlorate-101	101 > 85											
IPB004	Perchlorate-O(18)	107 > 89	2.77	15534.931	15534.931	bb			0.4918	98.35	-1.65	2671.0...	0.00



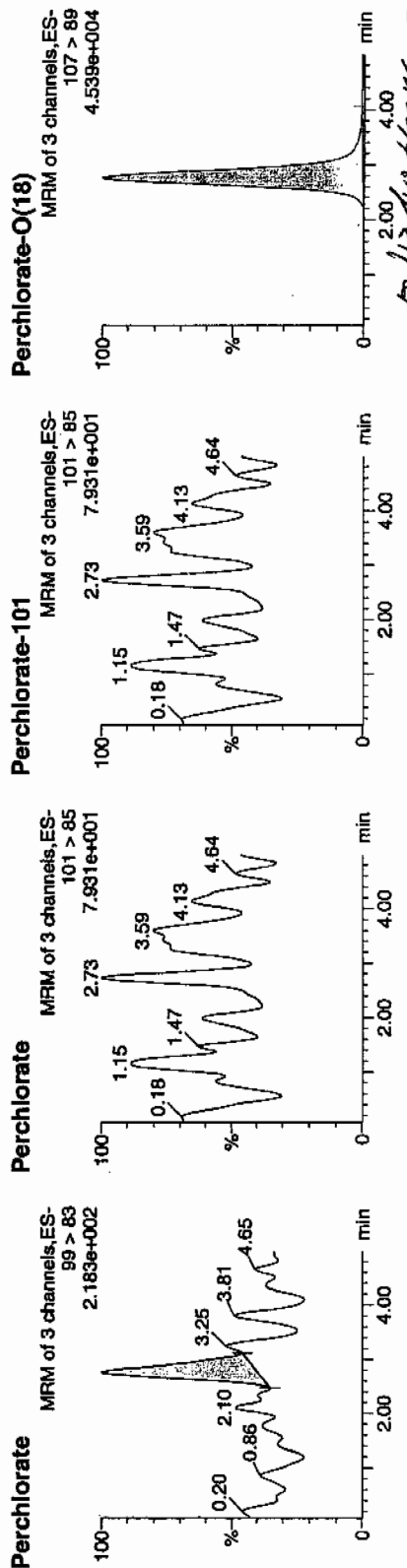
Quantify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charters W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per021210a.qld

Last Altered: Saturday, February 13, 2010 10:56:08 AM Eastern Standard Time  
Printed: Saturday, February 13, 2010 11:00:28 AM Eastern Standard Time

Name: per0212032a  
Date: 12-Feb-2010  
Time: 17:21:20  
ID: IPB005  
Vial: 1:1,A

000  
02-13-10



ID	Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/mL	% Rec	% Dev	SN	Ion Ratio
IPB005	Perchlorate	99 > 83	2.76	38.580	38.580	bb			0.0010			13.178	0.00
IPB005	Perchlorate-101	101 > 85											
IPB005	Perchlorate-O(18)	107 > 89	2.76	15785.521	15785.521	bb			0.4997	99.94	-0.06	4113.3...	

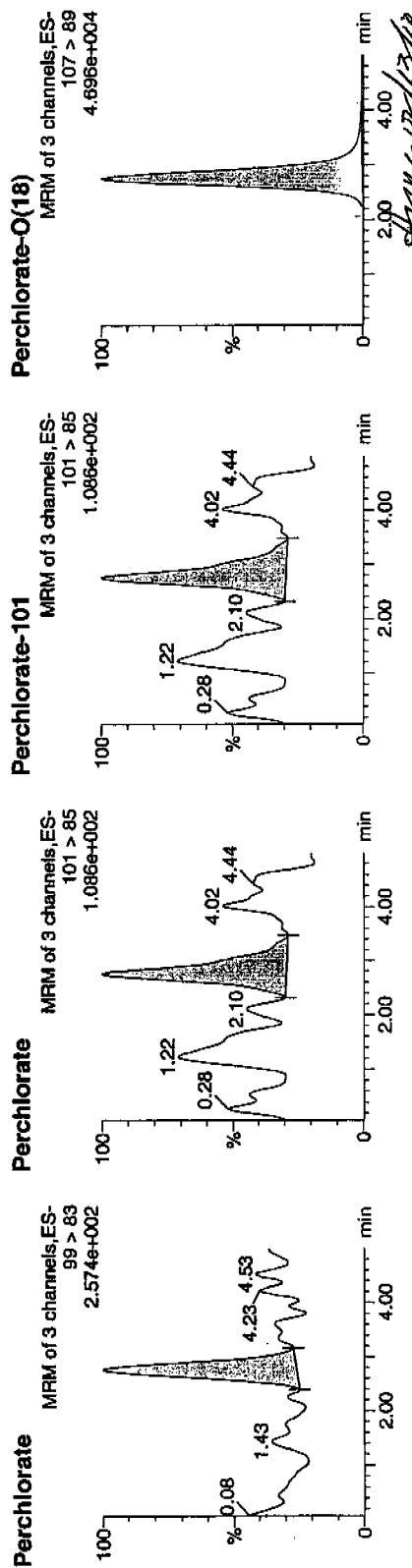
**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per021210a.qld

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Printed: Saturday, February 13, 2010 11:00:28 AM Eastern Standard Time

Name: per0212042a  
Date: 12-Feb-2010  
Time: 18:41:50  
ID: IPB006  
Vial: 1:1,A

*QWZ*  
*02-13-10*



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	SN	Ion Ratio
IPB006	Perchlorate	99 > 83	2.76	63.368	63.368	bb			0.0017			25.713	2.12
IPB006	Perchlorate-101	101 > 85	2.75	29.885	29.885	bb			0.0025			8.674	
IPB006	Perchlorate-O(18)	107 > 89	2.76	16748.635	16748.635	bb			0.5302	106.03	✓	6.03	1315.2...

*OKAY*  
*220500*

Nairb.ref

; Positive ion monoisotopic and average masses from solution  
 ; of NaI/Rbi (2.0/0.05ug/ul) in 50/20 2-propanol/H<sub>2</sub>O.  
 ; 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

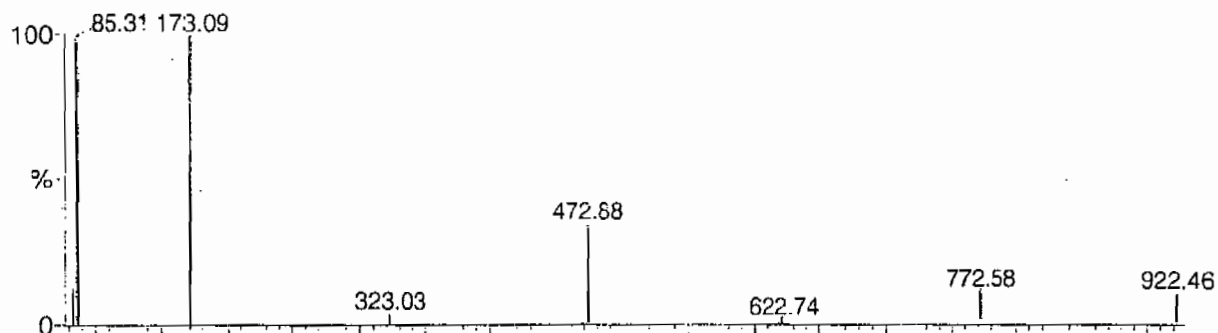
Page 1 of 1

Printed: Tue Jan 08 12:19:12 2008

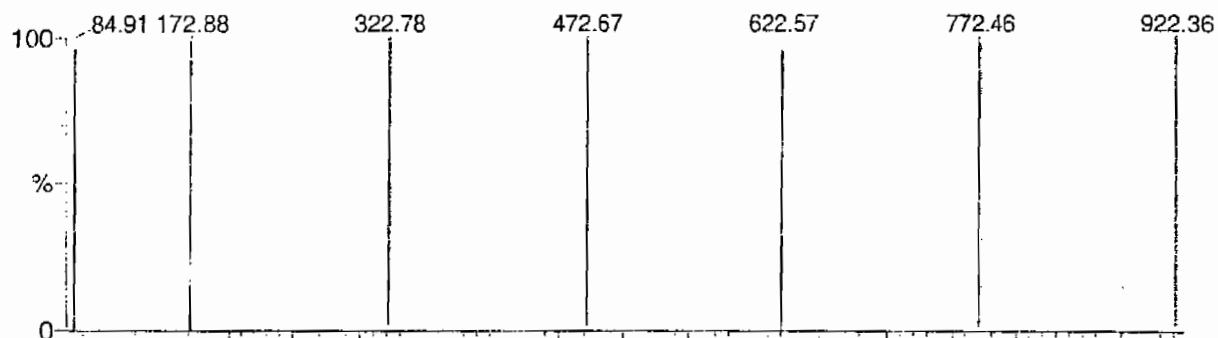
POINTS HIGHLIGHTED BY CURVE 01-01-08

Data file: STATMS1 - Uncalibrated

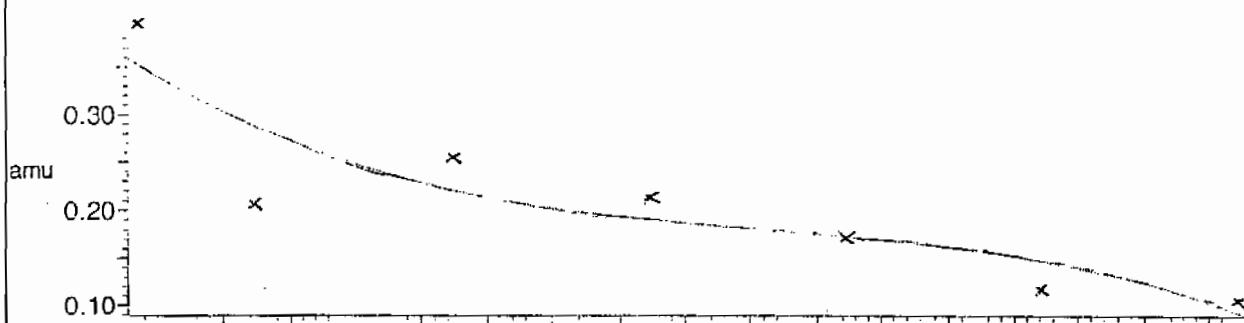
7 matches of 7 tested references



Reference file: Nairb

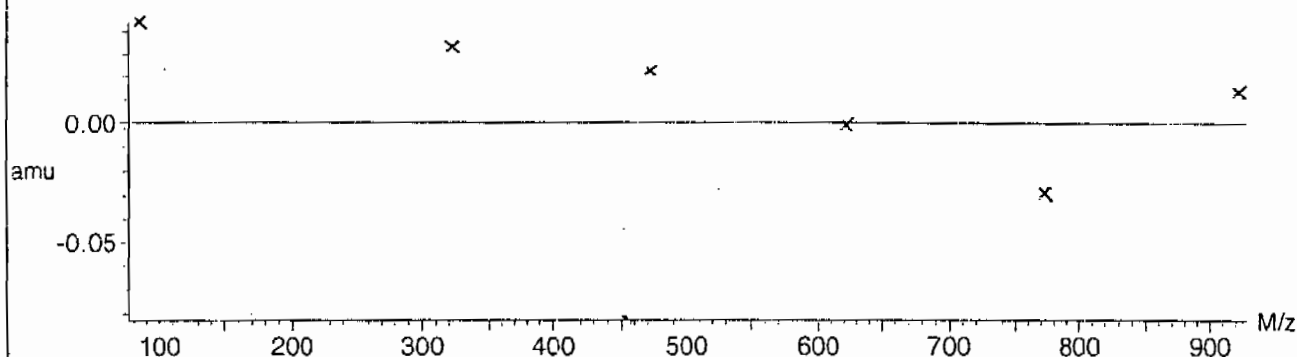


Mass difference (Raw - Ref mass)



Residuals

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

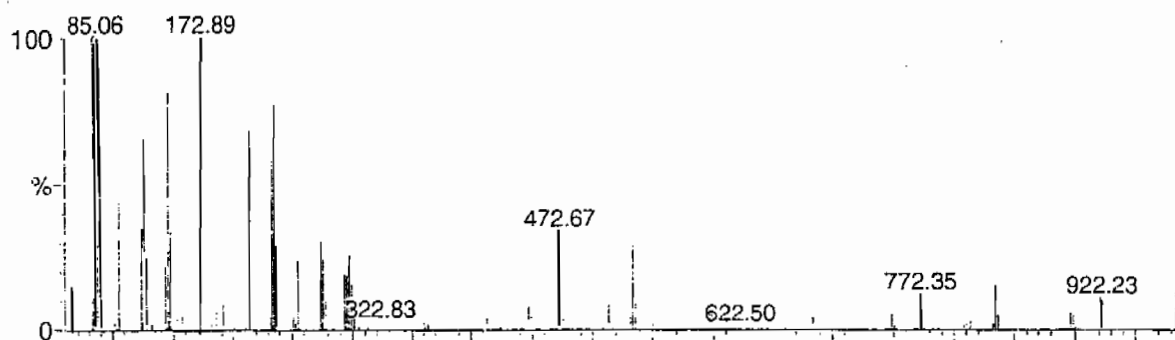


Calibration Report - MS1 Scanning

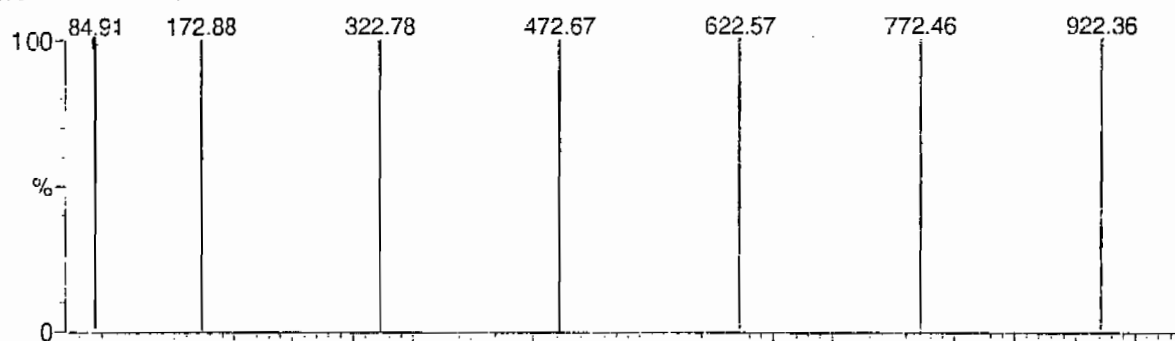
Page 1 of 1

Printed: Tue Jan 08 12:20:09 2008

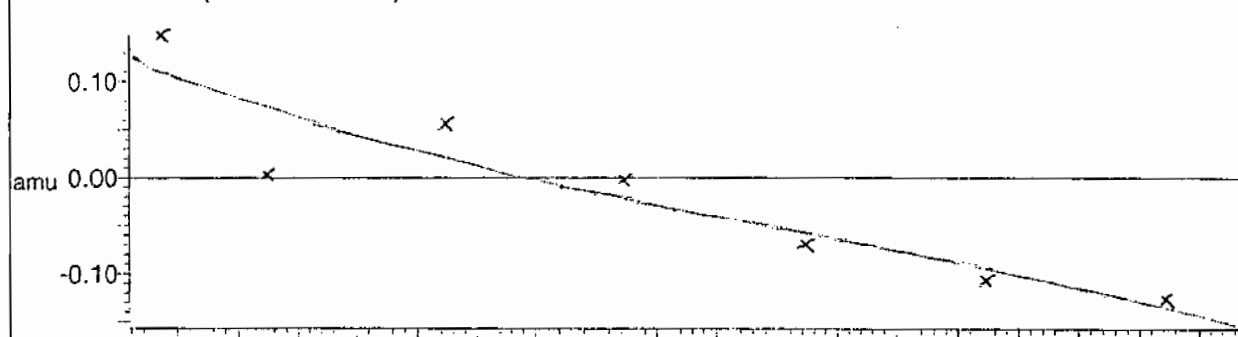
Data file: SCNMS1 - Uncalibrated 7 matches of 7 tested references



Reference file: Nairb

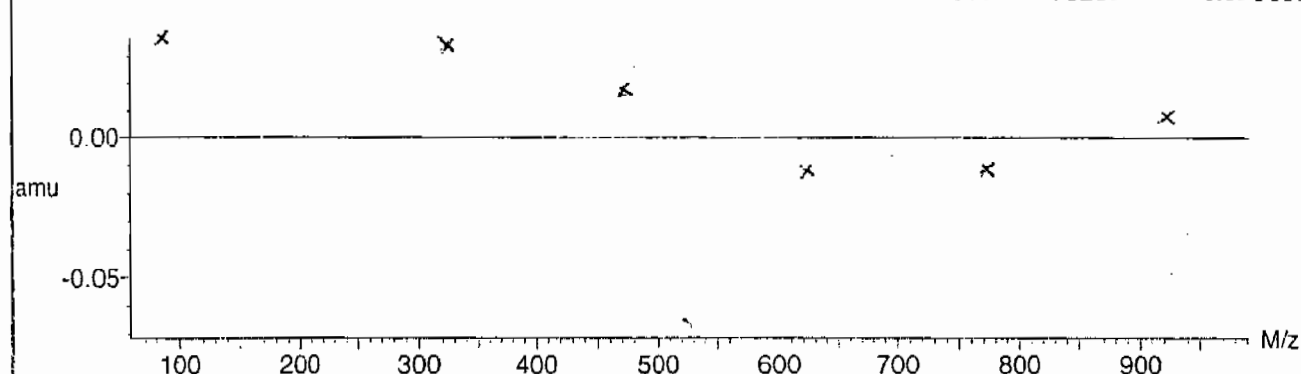


Mass difference (Raw - Ref mass)



Residuals

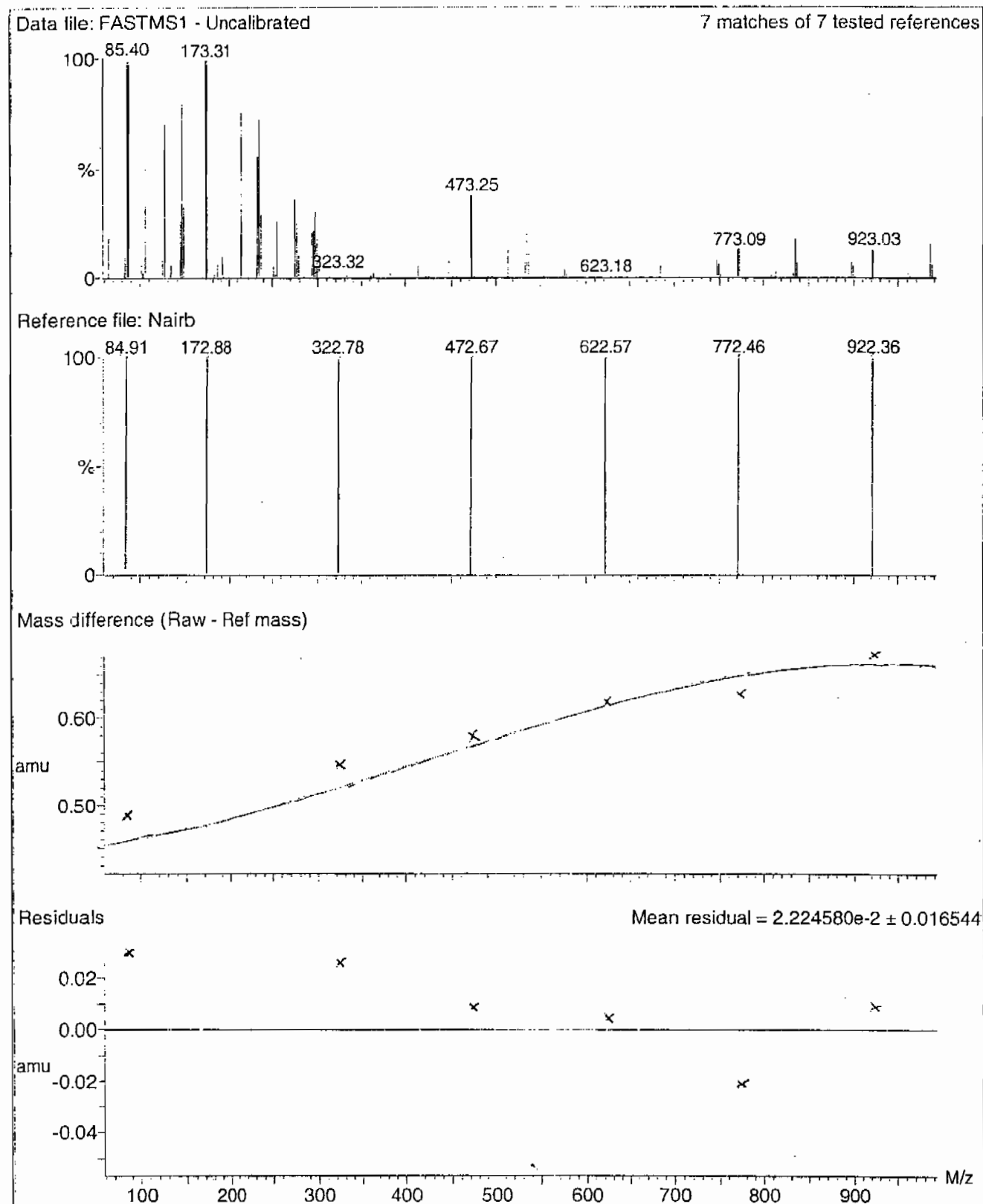
Mean residual =  $2.732691 \times 10^{-2} \pm 0.020653$



Calibration Report - MS1 Scan Speed Compensation

Page 1 of 1

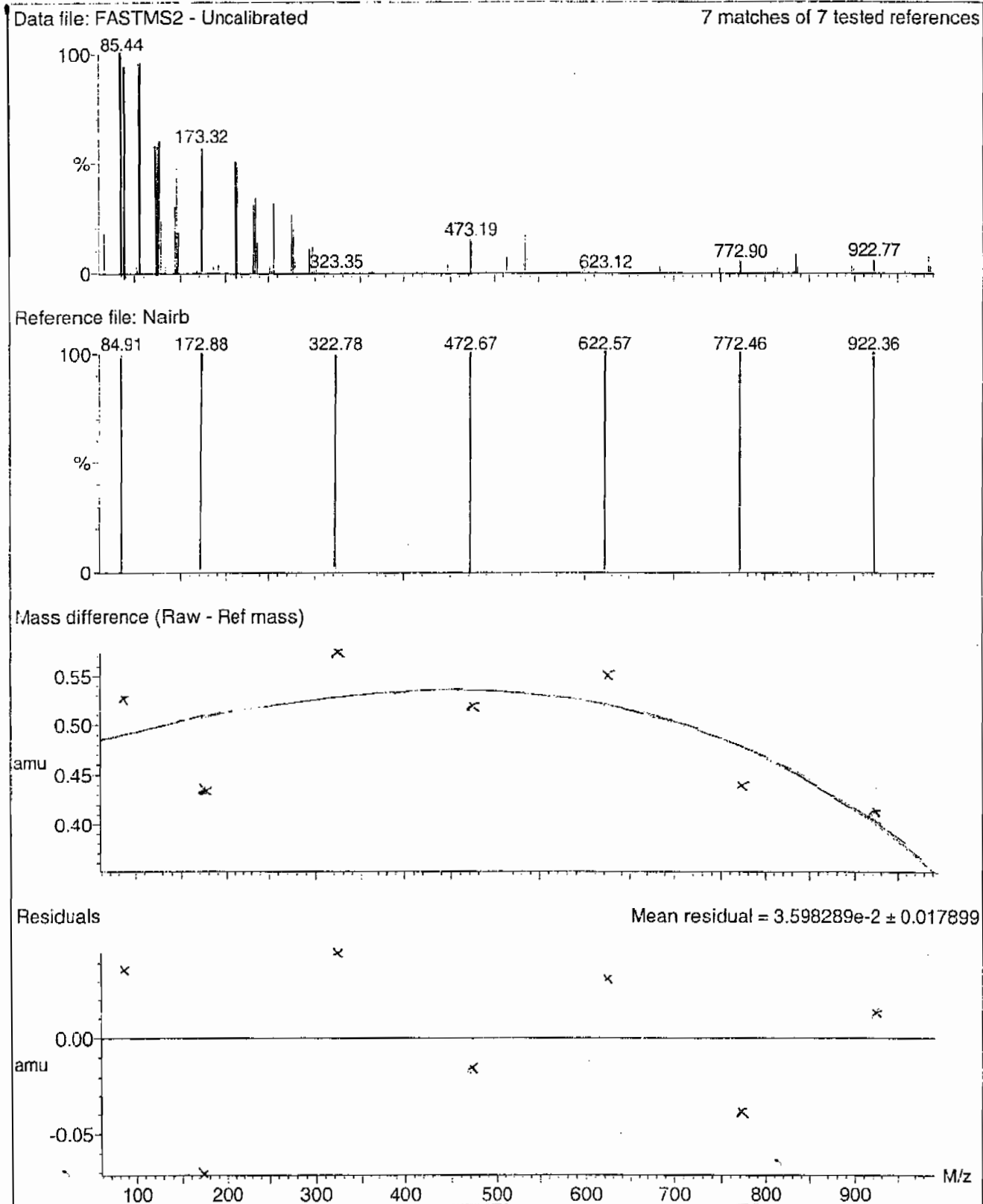
Printed: Tue Jan 08 12:21:04 2008



Calibration Report - MS2 Scan Speed Compensation

Page 1 of 1

Printed: Tue Jan 08 12:23:51 2008



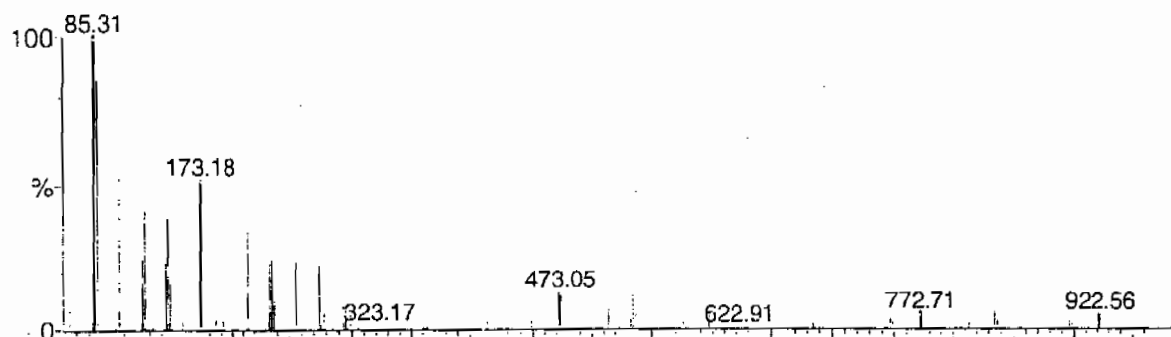
Calibration Report - MS2 Scanning

Page 1 of 1

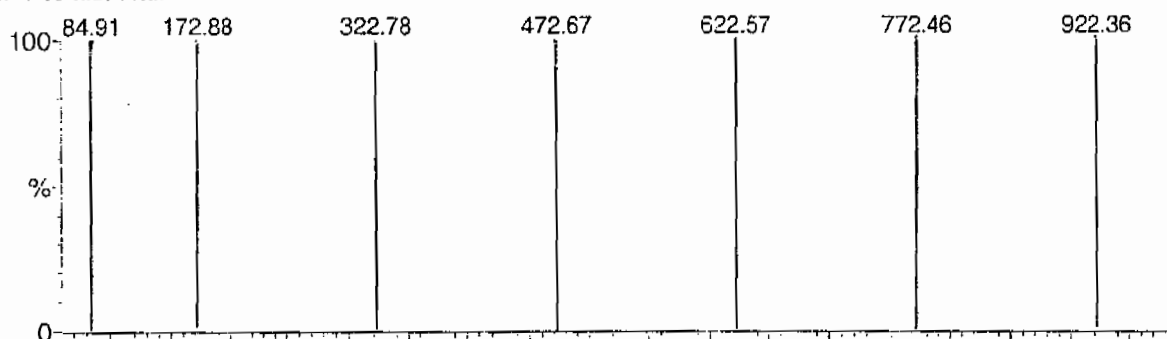
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Data file: SCNMS2 - Uncalibrated

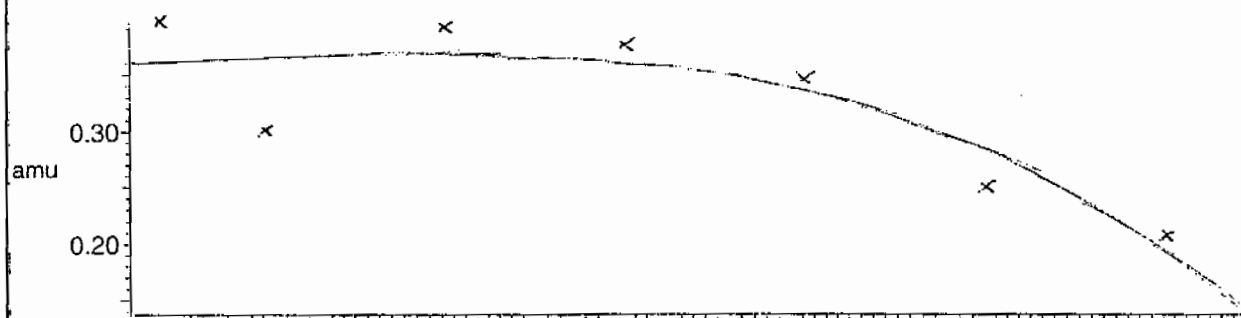
7 matches of 7 tested references



Reference file: Nairb

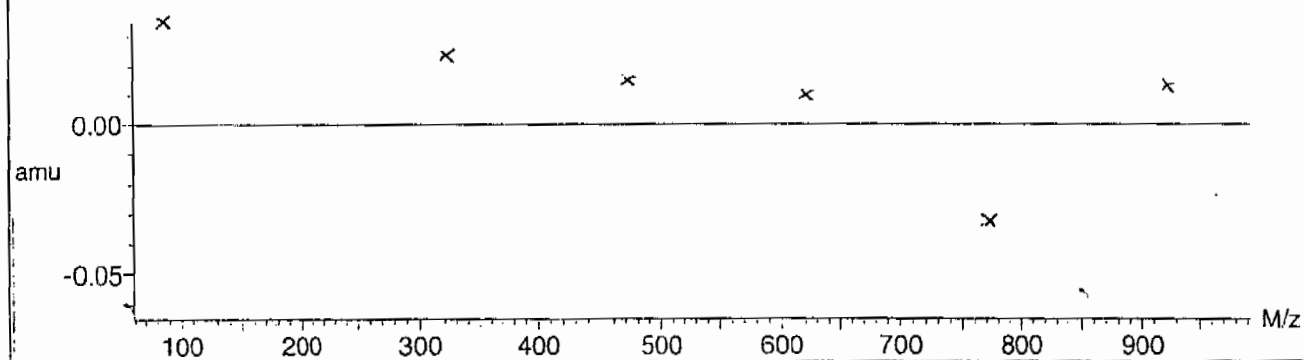


Mass difference (Raw - Ref mass)



Residuals

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





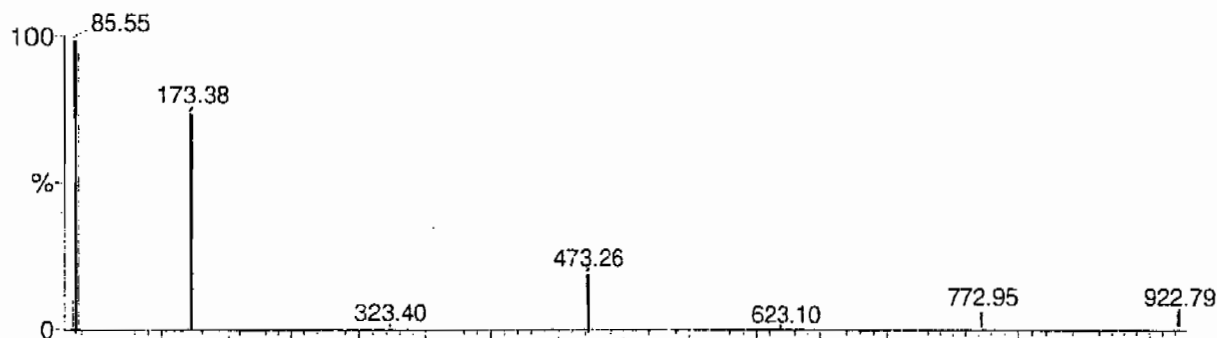
Calibration Report - MS2 Static

Page 1 of 1

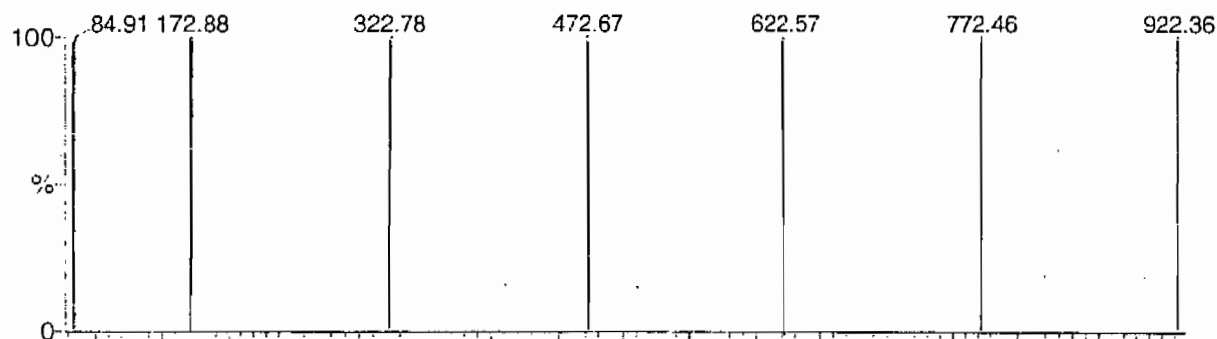
Printed: Tue Jan 08 12:21:59 2008

Data file: STATMS2 - Uncalibrated

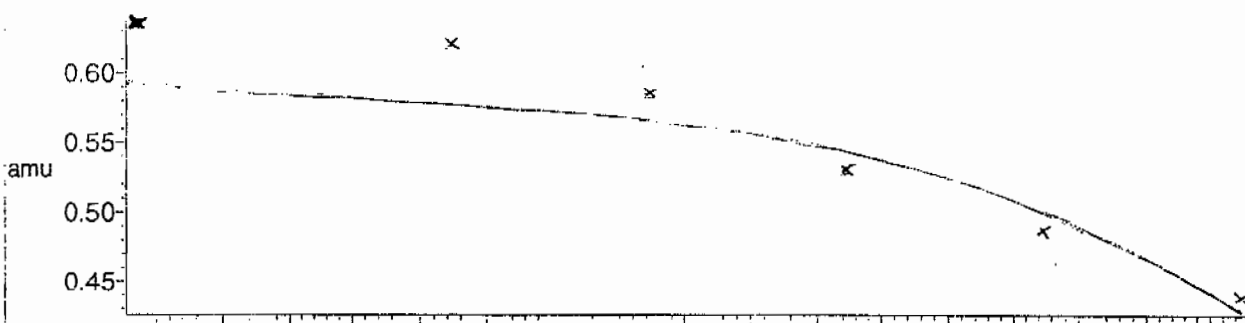
7 matches of 7 tested references



Reference file: Nairb

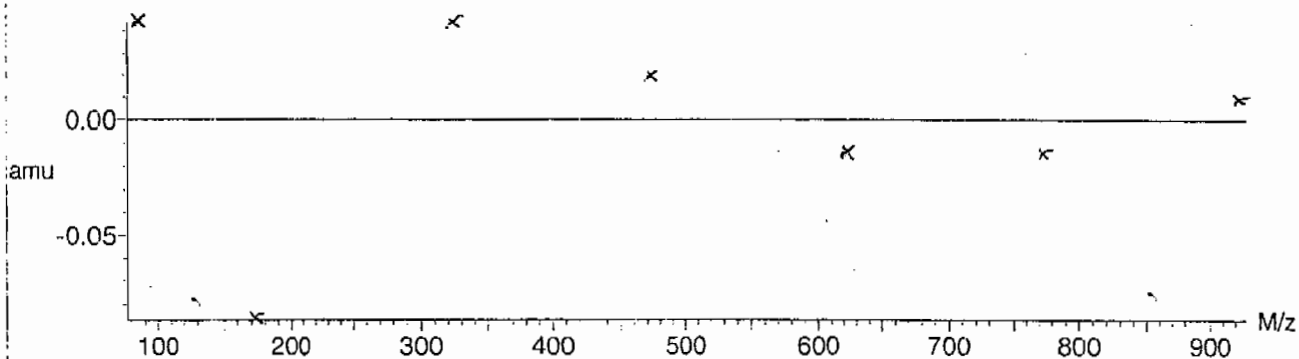


Mass difference (Raw - Ref mass)



Residuals

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



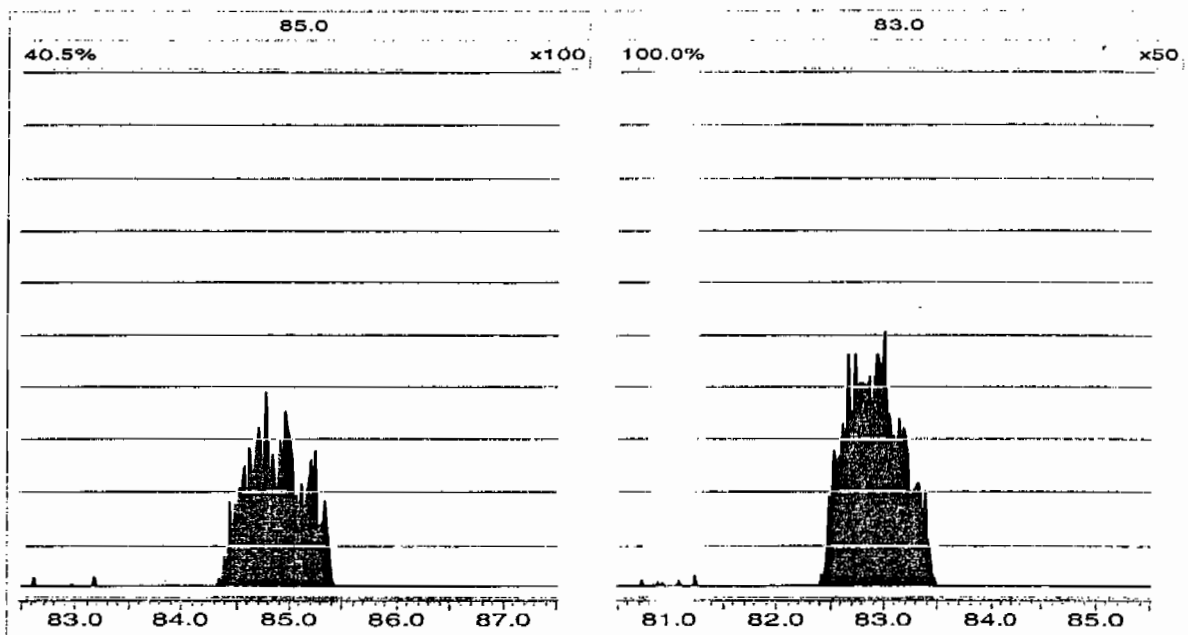
Tune Parameters

MassLynx 4.0 SP4

Page 1 of 1

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

Printed: Friday, February 12, 2010 11:29:55 Eastern Standard Time



Perchlorate RT And Area Summary

GEL Job No.(SDG): 10-1474

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	per0212006a	12-FEB-10	15715				
Lower Area Limit			7857.5				
Upper Area Limit			31430				
1202029067	per0212012a	12-FEB-10 14:40	15223.1	2.79	2.7747	.995	
1202029068	per0212013a	12-FEB-10 14:48	15842.5	2.79	2.7996	1.003	
1202029071	per0212014a	12-FEB-10 14:56	16858	2.82	2.84922	1.01	
245806001	per0212030a	12-FEB-10 17:05	16733.5	2.77	2.78722	1.006	
245806002	per0212034a	12-FEB-10 17:37	16858	2.76	2.78715	1.01	
245806003	per0212035a	12-FEB-10 17:45	16751.2	2.77	2.78715	1.006	
245806004	per0212036a	12-FEB-10 17:53	16603.5	2.77	2.78715	1.006	
245806005	per0212037a	12-FEB-10 18:01	17097.2	2.77	2.79965	1.011	

Perchlorate RT And Area Summary

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1474

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	per0212006a	12-FEB-10	15715				
Lower Area Limit			7857.5				
Upper Area Limit			31430				
245806006	per0212038a	12-FEB-10 18:09	16301.7	2.77	2.78718	1.006	
245806007	per0212039a	12-FEB-10 18:17	17668	2.76	2.78717	1.01	
245806008	per0212040a	12-FEB-10 18:25	17624.9	2.76	2.77467	1.005	

# SAMPLE DATA

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 947239

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-7954

Date Received: 29-JAN-10

GEL Job No (SDG): 10-1474

GEL Sample ID: 245806001

Date Filtered: 10-FEB-10

Injection Volume (uL): 20

%Solids: 94.2

CAS No.	Analyte <sup>^</sup>	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	12-FEB-10 17:05	per0212030a
	Perchlorate Isotope Ratio						1	12-FEB-10 17:05	per0212030a
14797-73-0	Perchlorate-101	.531	2.12	0.531	ug/kg	U	1	12-FEB-10 17:05	per0212030a
	Perchlorate-O(18)			5.63	ug/kg		1	12-FEB-10 17:05	per0212030a

<sup>^</sup> 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

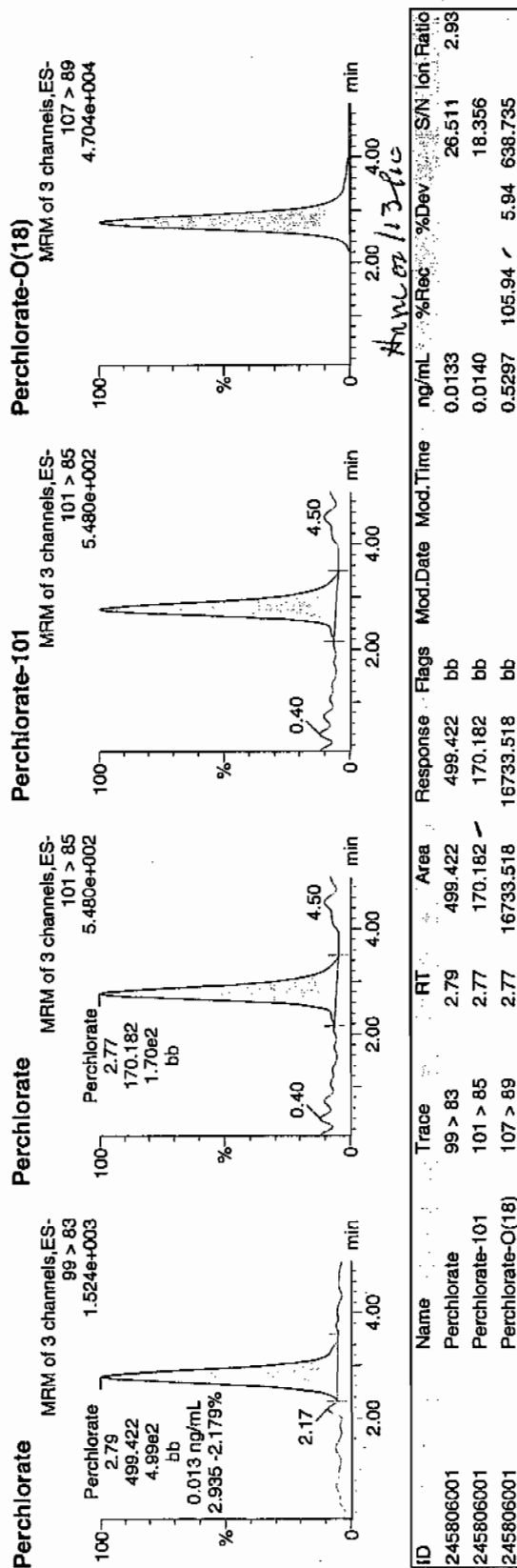
Dataset: C:\MassLynx\P perchlorate.PRO\per021210a.qld

Last Altered: Saturday, February 13, 2010 10:56:08 AM Eastern Standard Time  
Printed: Saturday, February 13, 2010 11:00:28 AM Eastern Standard Time

Name: per0212030a  
Date: 12-Feb-2010  
Time: 17:05:15  
ID: 245806001  
Vial: 1:5,D

02-13-10

114102 | 947340 | 5070 | 1 |



Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 947239

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-7956

Date Received: 29-JAN-10

GEL Job No (SDG): 10-1474

GEL Sample ID: 245806002

Date Filtered: 10-FEB-10

Injection Volume (uL): 20

%Solids: 93.9

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.533	2.13	0.923	ug/kg	J	1	12-FEB-10 17:37	per0212034a
	Perchlorate Isotope Ratio			2.92			1	12-FEB-10 17:37	per0212034a
14797-73-0	Perchlorate-101	.533	2.13	0.974	ug/kg	J	1	12-FEB-10 17:37	per0212034a
	Perchlorate-O(18)			5.69	ug/kg		1	12-FEB-10 17:37	per0212034a

<sup>^</sup> 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\per021210a.qld

Last Altered: Saturday, February 13, 2010 10:56:08 AM Eastern Standard Time  
Printed: Saturday, February 13, 2010 11:00:28 AM Eastern Standard Time

Name: per0212034a

Date: 12-Feb-2010

Time: 17:37:27

ID: 245806002

Vial: 1:5,E

1920-1947240 | 507011

02-13-10

**Perchlorate**

MRM of 3 channels, ES-

99 > 83

9.246e+003

Perchlorate

2.79

3258.567

3.26e3

bb

0.087 ng/mL

2.924 -2.548%

min

2.00

4.00

min

**Perchlorate**

MRM of 3 channels, ES-

101 > 85

3.297e+003

Perchlorate

2.77

1114.586

1.11e3

bb

min

2.00

4.00

min

**Perchlorate-101**

MRM of 3 channels, ES-

101 > 85

3.297e+003

min

2.00

4.00

min

**Perchlorate-O(18)**

MRM of 3 channels, ES-

107 > 89

4.751e+004

min

2.00

4.00

min

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
245806002	Perchlorate	99 > 83	2.79	3258.567	3258.567	bb			0.0866			408.689	2.92
245806002	Perchlorate-101	101 > 85	2.77	1114.586	1114.586	bb			0.0914			313.430	
245806002	Perchlorate-O(18)	107 > 89	2.76	16858.047	16858.047	bb			0.5336	106.73	6.73	7248.5...	

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 947239

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-7955

Date Received: 29-JAN-10

GEL Job No (SDG): 10-1474

GEL Sample ID: 245806003

Date Filtered: 10-FEB-10

Injection Volume (uL): 20

%Solids: 82

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.61	2.44	0.610	ug/kg	U	1	12-FEB-10 17:45	per0212035a
	Perchlorate Isotope Ratio						1	12-FEB-10 17:45	per0212035a
14797-73-0	Perchlorate-101	.61	2.44	0.610	ug/kg	U	1	12-FEB-10 17:45	per0212035a
	Perchlorate-O(18)			6.47	ug/kg		1	12-FEB-10 17:45	per0212035a

<sup>^</sup> 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\per021210a.qld

Last Altered: Saturday, February 13, 2010 10:56:08 AM Eastern Standard Time  
Printed: Saturday, February 13, 2010 11:00:28 AM Eastern Standard Time

Name: per0212035a

Date: 12-Feb-2010

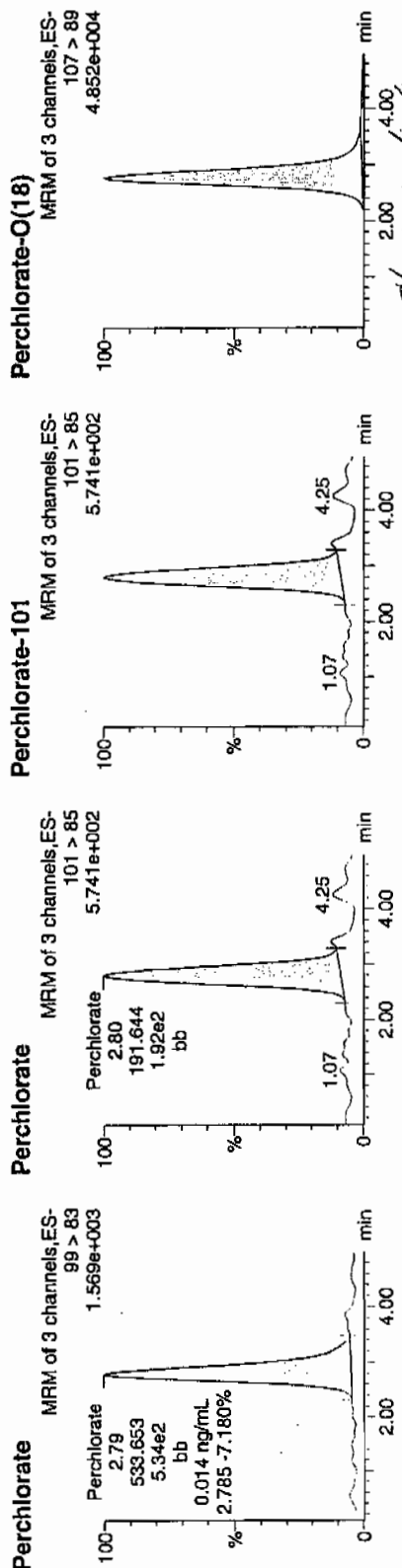
Time: 17:45:29

ID: 245806003

Vial: 1:5,F

02-13-10

LANC | 947240 | 5025 | 11



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
245806003	Perchlorate	99 > 83	2.79	533.653	533.653	bb			0.0142			89.385	2.78
245806003	Perchlorate-101	101 > 85	2.80	191.644	191.644	bb			0.0157			100.295	
245806003	Perchlorate-O(18)	107 > 89	2.77	16751.219	16751.219	bb			0.5303	106.05	6.05	1760.2...	

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 947239

Extraction Type: Solid Prep

Client Sample No.

RE15-10-7953

Date Received: 29-JAN-10

GEL Job No (SDG): 10-1474

GEL Sample ID: 245806004

Date Filtered: 10-FEB-10

Injection Volume (uL): 20

%Solids: 86

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.582	2.33	0.582	ug/kg	U	1	12-FEB-10 17:53	per0212036a
	Perchlorate Isotope Ratio						1	12-FEB-10 17:53	per0212036a
14797-73-0	Perchlorate-101	.582	2.33	0.582	ug/kg	U	1	12-FEB-10 17:53	per0212036a
	Perchlorate-O(18)			6.12	ug/kg		1	12-FEB-10 17:53	per0212036a

<sup>^</sup> 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: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per021210a.qld

Last Altered: Saturday, February 13, 2010 10:56:08 AM Eastern Standard Time  
Printed: Saturday, February 13, 2010 11:00:28 AM Eastern Standard Time

Name: per0212036a

Date: 12-Feb-2010

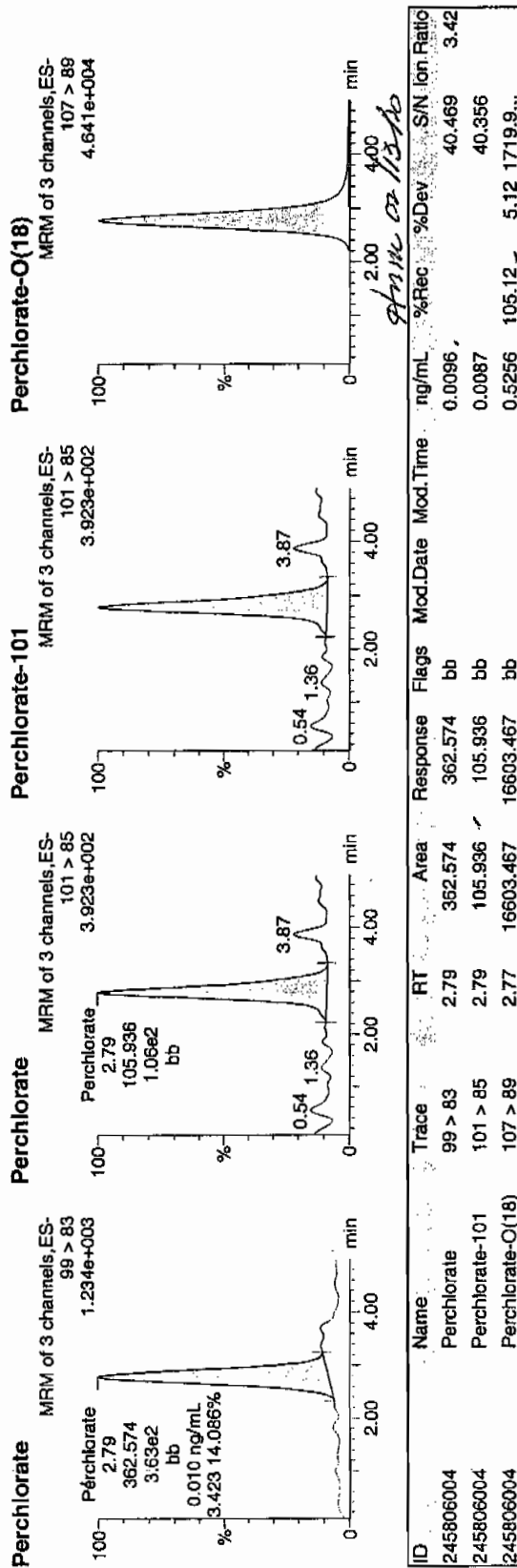
Time: 17:53:31

ID: 245806004

Vial: 1:6,A

1920 | 947240 | 5020 | 1 |

02-13-10



Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 947239

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-7952

Date Received: 29-JAN-10

GEL Job No (SDG): 10-1474

GEL Sample ID: 245806005

Date Filtered: 10-FEB-10

Injection Volume (uL): 20

%Solids: 93.3

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.536	2.14	0.536	ug/kg	U	1	12-FEB-10 18:01	per0212037a
	Perchlorate Isotope Ratio						1	12-FEB-10 18:01	per0212037a
14797-73-0	Perchlorate-101	.536	2.14	0.536	ug/kg	U	1	12-FEB-10 18:01	per0212037a
	Perchlorate-O(18)			5.80	ug/kg		1	12-FEB-10 18:01	per0212037a

<sup>^</sup> 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: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per021210a.qld

Last Altered: Saturday, February 13, 2010 10:56:08 AM Eastern Standard Time  
Printed: Saturday, February 13, 2010 11:00:28 AM Eastern Standard Time

Name: per0212037a

Date: 12-Feb-2010

Time: 18:01:34

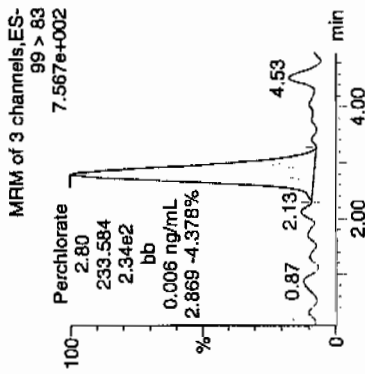
ID: 245806005

Vial: 1:6,B

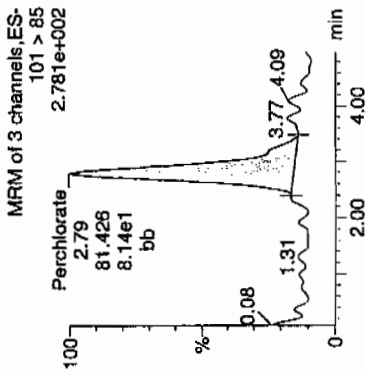
02-13-10

122001947240 | 5020 | 11

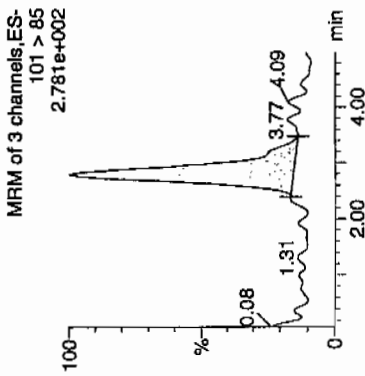
Perchlorate



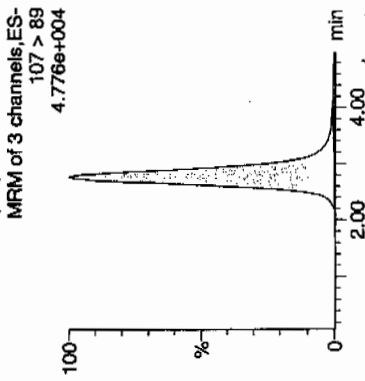
Perchlorate



Perchlorate-101



Perchlorate-O(18)



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
245806005	Perchlorate	99 > 83	2.80	233.584	233.584	bb			0.0062			13.282	2.87
245806005	Perchlorate-101	101 > 85	2.79	81.426	81.426	bb			0.0067			38.263	
245806005	Perchlorate-O(18)	107 > 89	2.77	17097.164	17097.164	bb			0.5412	108.24	8.24	3840.6...	

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC  
 Lab Code: GEL  
 Instrument: LCMSMS  
 Method: SW846 6850 Modified  
 Matrix: SOIL  
 Extraction Batch ID: 947239  
 Extraction Type: Solid Prep  
 Client Sample No. RE15-10-8060  
 Date Received: 29-JAN-10  
 GEL Job No (SDG): 10-1474  
 GEL Sample ID: 245806006  
 Date Filtered: 10-FEB-10  
 Injection Volume (uL): 20  
 Sample Volume/Weight: 2.00 g  
 %Solids: 85

Concentrated Extract Volume: 20.0

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.585	2.34	0.585	ug/kg	U	1	12-FEB-10 18:09	per0212038a
	Perchlorate Isotope Ratio						1	12-FEB-10 18:09	per0212038a
14797-73-0	Perchlorate-101	.585	2.34	0.585	ug/kg	U	1	12-FEB-10 18:09	per0212038a
	Perchlorate-O(18)			6.04	ug/kg		1	12-FEB-10 18:09	per0212038a

^ 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\per021210a.qld

Last Altered: Saturday, February 13, 2010 10:56:08 AM Eastern Standard Time

Printed: Saturday, February 13, 2010 11:00:28 AM Eastern Standard Time

Name: per0212038a

Date: 12-Feb-2010

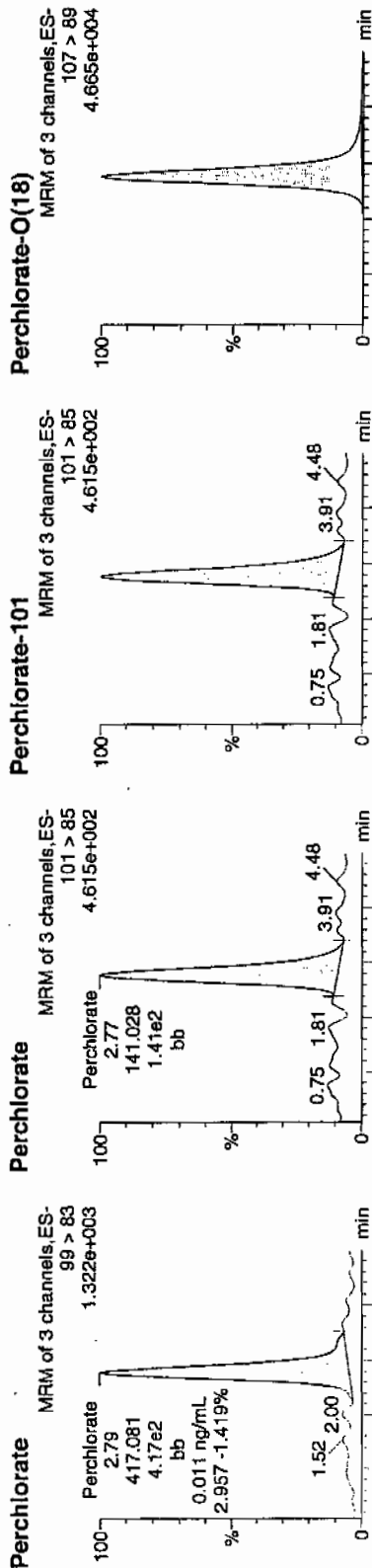
Time: 18:09:38

ID: 245806006

Vial: 1:6,C

02-13-10

1500-1947240 | 5070 | 11



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
245806006	Perchlorate	99 > 83	2.79	417.081	417.081	bb			0.0111			106.640	2.96
245806006	Perchlorate-101	101 > 85	2.77	141.028	141.028	bb			0.0116			14.700	
245806006	Perchlorate-O(18)	107 > 89	2.77	16301.740	16301.740	bb			0.5160	103.21	3.21	984.339	

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 947239

Extraction Type: Solid Prep

Client Sample No.

RE15-10-8058

Date Received: 29-JAN-10

GEL Job No (SDG): 10-1474

GEL Sample ID: 245806007

Date Filtered: 10-FEB-10

Injection Volume (uL): 20

%Solids: 64

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.78	3.12	0.780	ug/kg	U	1	12-FEB-10 18:17	per0212039a
	Perchlorate Isotope Ratio						1	12-FEB-10 18:17	per0212039a
14797-73-0	Perchlorate-101	.78	3.12	0.780	ug/kg	U	1	12-FEB-10 18:17	per0212039a
	Perchlorate-O(18)			8.72	ug/kg		1	12-FEB-10 18:17	per0212039a

<sup>^</sup> 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\per021210a.qld

Last Altered: Saturday, February 13, 2010 10:56:08 AM Eastern Standard Time  
Printed: Saturday, February 13, 2010 11:00:28 AM Eastern Standard Time

Name: per0212039a

Date: 12-Feb-2010

Time: 18:17:42

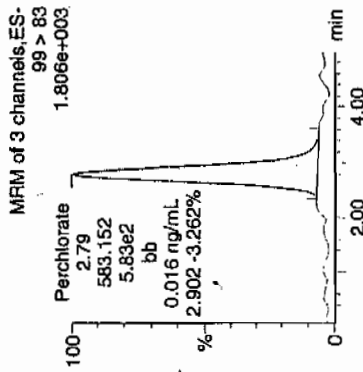
ID: 245806007

Vial: 1:6,D

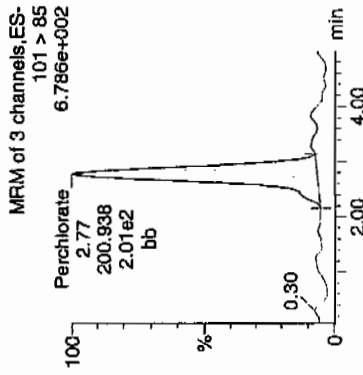
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16402 | 947240 | 5000 | 1 |

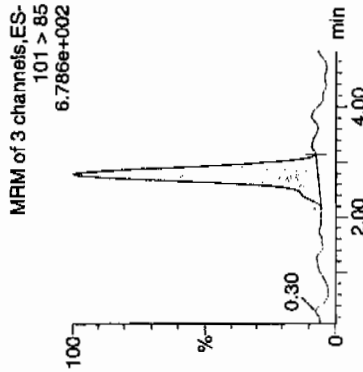
Perchlorate



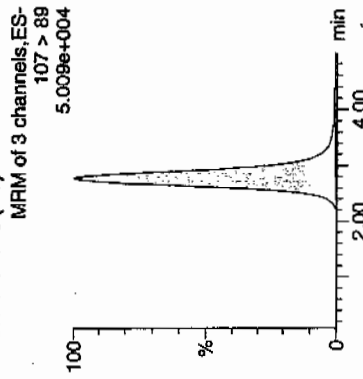
Perchlorate



Perchlorate-101



Perchlorate-O(18)



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
245806007	Perchlorate	99 > 83	2.79	583.152	583.152	bb			0.0155	222.935		2.90	
245806007	Perchlorate-101	101 > 85	2.77	200.938	200.938	bb			0.0165	173.795			
245806007	Perchlorate-O(18)	107 > 89	2.76	17667.965	17667.965	bb			0.5593	111.85	11.85	2273.6...	

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 947239

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8059

Date Received: 29-JAN-10

GEL Job No (SDG): 10-1474

GEL Sample ID: 245806008

Date Filtered: 10-FEB-10

Injection Volume (uL): 20

%Solids: 92.7

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.539	2.16	0.539	ug/kg	U	1	12-FEB-10 18:25	per0212040a
	Perchlorate Isotope Ratio						1	12-FEB-10 18:25	per0212040a
14797-73-0	Perchlorate-101	.539	2.16	0.539	ug/kg	U	1	12-FEB-10 18:25	per0212040a
	Perchlorate-O(18)			6.02	ug/kg		1	12-FEB-10 18:25	per0212040a

<sup>^</sup> 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\per021210a.qld

Last Altered: Saturday, February 13, 2010 10:56:08 AM Eastern Standard Time  
Printed: Saturday, February 13, 2010 11:00:28 AM Eastern Standard Time

Name: per0212040a

Date: 12-Feb-2010

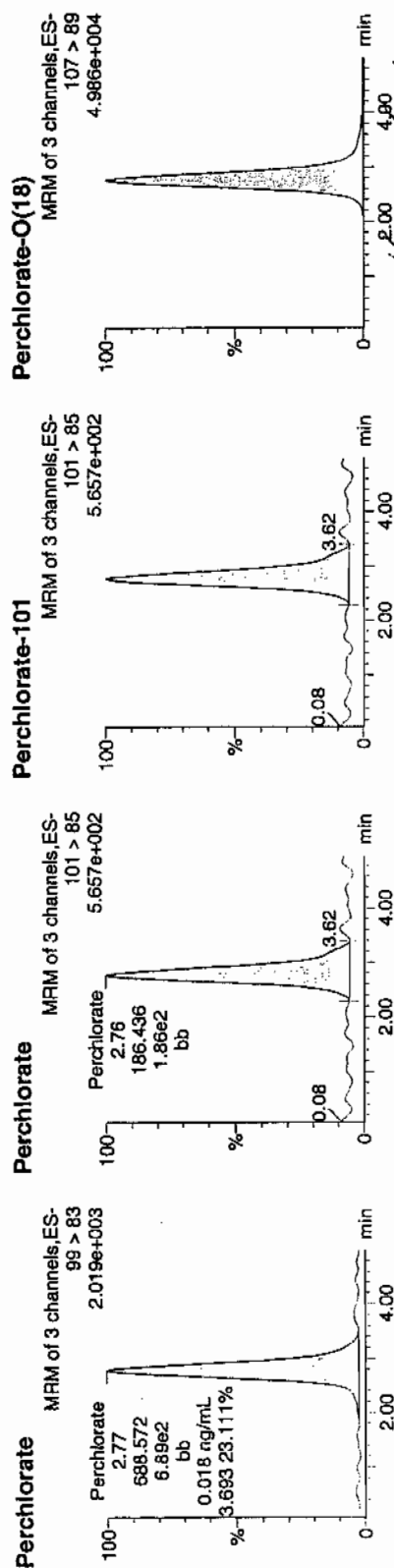
Time: 18:25:44

ID: 245806008

Vial: 1:6,E

02-13-10

11202 | 947240 | 5020 | 11



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
245806008	Perchlorate	99 > 83	2.77	688.572	688.572	bb			0.0183			124.206	3.69
245806008	Perchlorate-101	101 > 85	2.76	186.436	186.436	bb			0.0153			59.294	
245806008	Perchlorate-O(18)	107 > 89	2.76	17624.924	17624.924	bb			0.5579	111.58 ✓		712.358	

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

# STANDARDS DATA

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories GEL Job No.(SDG): 10-1474

Lab Code: GEL

Instrument ID: LCMSMS Date Analyzed: 12-FEB-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: 37608.16

Response Type: External Standard

Curve Type: RF

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories

Lab Code: GEL

Instrument ID: LCMSMS Date Analyzed: 12-FEB-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-101

Coefficient of Determination:

Calibration Curve: 12197.42

Response Type: External Standard

Curve Type: RF



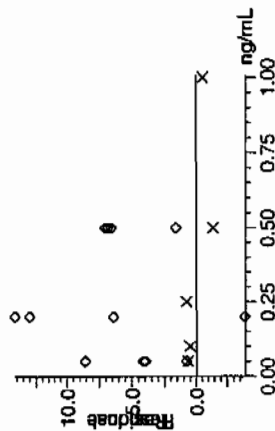
Quantify Calibration Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charliers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per021210a.qld

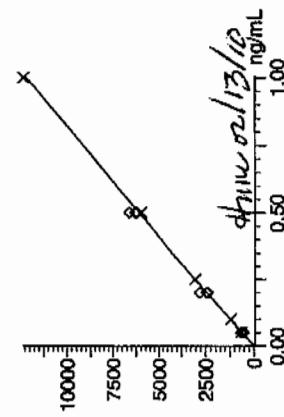
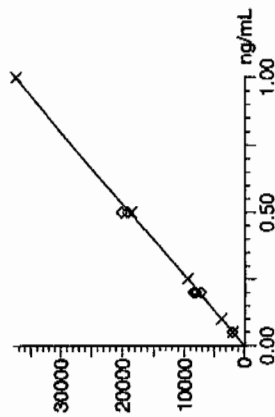
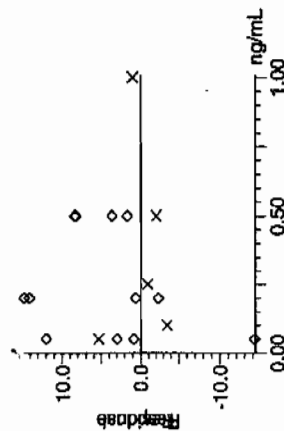
Last Altered: Saturday, February 13, 2010 10:56:08 AM Eastern Standard Time  
Printed: Saturday, February 13, 2010 11:00:28 AM Eastern Standard Time

Method: C:\MassLynx\Perchlorate.PRO\MethDB\per021210a.mdb 12 Feb 2010 14:01:47  
Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per021210a.cdb 13 Feb 2010 10:56:08

Compound name: Perchlorate  
Response Factor: 37608.1  
RRF SD: 358.139, % Relative SD: 0.952292  
Response type: External Std, Area  
Curve type: RF



Compound name: Perchlorate-101  
Response Factor: 12197.4  
RRF SD: 418.958, % Relative SD: 3.43481  
Response type: External Std, Area  
Curve type: RF



02-13-10

02-13-10

Quantify Calibration Report - MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per021210a.qld

Last Altered: Saturday, February 13, 2010 10:56:08 AM Eastern Standard Time

Printed: Saturday, February 13, 2010 11:00:28 AM Eastern Standard Time

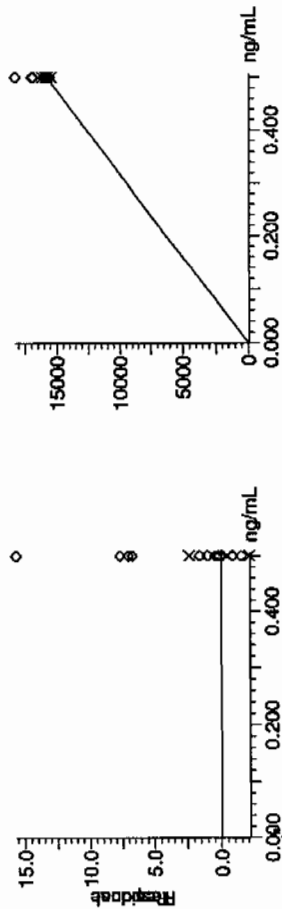
Compound name: Perchlorate-O(18)

Response Factor: 31590.9

RRF SD: 519.998, % Relative SD: 1.64603

Response type: External Std, Area

Curve type: RF



Perchlorate Initial Calibration Verification

GEL Job No.(SDG): 10-1474

Lab Name: General Engineering Laboratories

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.53	106.79	12-FEB-10 14:16	per0212009a
Perchlorate Isotope Ratio		3.04		12-FEB-10 14:16	per0212009a
Perchlorate-101	.5	.54	108.45	12-FEB-10 14:16	per0212009a

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

Dataset: C:\MassLynx\Perchlorate.PRO\per021210a.qld

Last Altered: Saturday, February 13, 2010 10:56:08 AM Eastern Standard Time  
Printed: Saturday, February 13, 2010 11:00:28 AM Eastern Standard Time

Name: per0212009a

Date: 12-Feb-2010

Time: 14:16:11

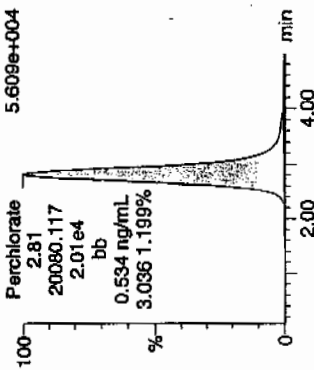
ID: WCL100128-061CV UCL100211-061CV

Vial: 1:2,A

Per  
02-13-10

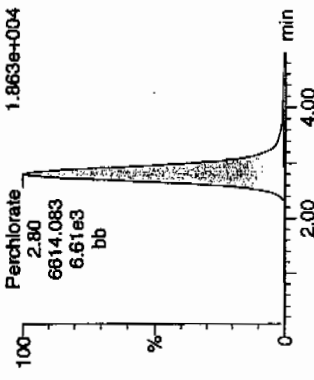
**Perchlorate**

MRM of 3 channels, ES-  
99 > 83  
5.609e+004



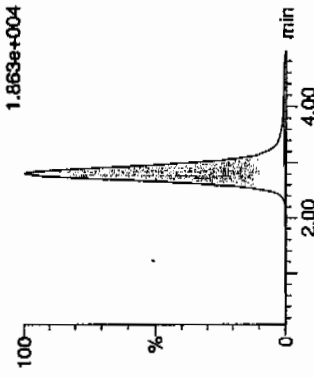
**Perchlorate**

MRM of 3 channels, ES-  
101 > 85  
1.863e+004



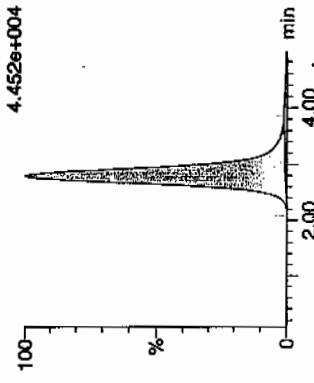
**Perchlorate-101**

MRM of 3 channels, ES-  
101 > 85  
1.863e+004



**Perchlorate-O(18)**

MRM of 3 channels, ES-  
107 > 89  
4.452e+004



ID	Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	SN	Ion Ratio
WCL100128-061CV	Perchlorate	99 > 83	2.81	20080.117	20080.117	bb			0.5339	106.79	6.79	1116.2...	3.04
WCL100128-061CV	Perchlorate-101	101 > 85	2.80	6614.083	6614.083	bb			0.5423	108.45	8.45	1715.6...	
WCL100128-061CV	Perchlorate-O(18)	107 > 89	2.79	15659.994	15659.994	bb			0.4957	99.14	-0.86	780.695	

Perchlorate Continuing Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1474

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.51	101.58	12-FEB-10 15:44	per0212020a
Perchlorate Isotope Ratio		3.08		12-FEB-10 15:44	per0212020a
Perchlorate-101	.5	.51	101.67	12-FEB-10 15:44	per0212020a
Perchlorate	.5	.53	106.57	12-FEB-10 17:13	per0212031a
Perchlorate Isotope Ratio		3.04		12-FEB-10 17:13	per0212031a
Perchlorate-101	.5	.54	108.26	12-FEB-10 17:13	per0212031a
Perchlorate	.5	.54	107.02	12-FEB-10 18:33	per0212041a
Perchlorate Isotope Ratio		3.18		12-FEB-10 18:33	per0212041a
Perchlorate-101	.5	.52	103.61	12-FEB-10 18:33	per0212041a

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

Dataset: C:\MassLynx\Perchlorate.PRO\per021210a.qld

Last Altered: Saturday, February 13, 2010 10:56:08 AM Eastern Standard Time  
Printed: Saturday, February 13, 2010 11:00:28 AM Eastern Standard Time

Name: per0212020a

Date: 12-Feb-2010

Time: 15:44:36

ID: WCL100128-06CCV

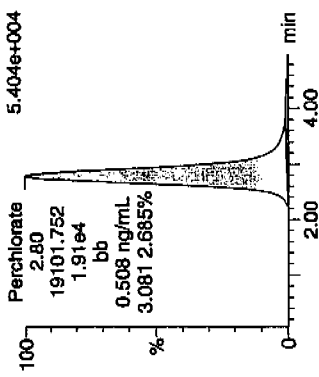
Vial: 1:2,A

WCL100128-06CCV

Perchlorate  
02-13-10

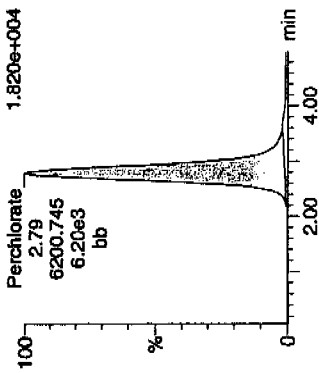
**Perchlorate**

MRM of 3 channels, ES-  
99 > 83  
5.404e+004



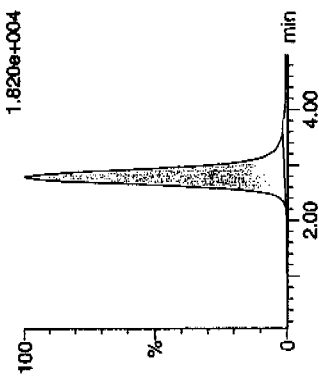
**Perchlorate**

MRM of 3 channels, ES-  
101 > 85  
1.820e+004



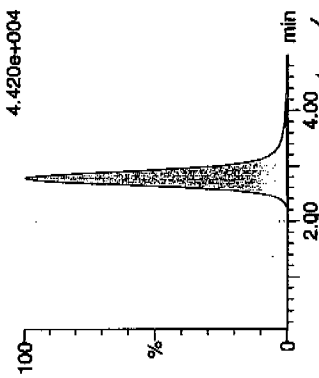
**Perchlorate-101**

MRM of 3 channels, ES-  
101 > 85  
1.820e+004



**Perchlorate-O(18)**

MRM of 3 channels, ES-  
107 > 89  
4.420e+004



ID	Name	Trace	RT	Area	Response	Flags	Mod	Date	Mod	Time	ng/mL	%Rec	%Dev	S/N	Ion	Ratio
WCL100128-06CCV	Perchlorate	99 > 83	2.80	19101.752	19101.752	bb					0.5079	101.58	1.58	2610.9...	3.08	
WCL100128-06CCV	Perchlorate-101	101 > 85	2.79	6200.745	6200.745	bb					0.5084	101.67	1.67	546.973		
WCL100128-06CCV	Perchlorate-O(18)	107 > 89	2.77	15563.824	15563.824	bb					0.4927	98.53	-1.47	1889.5...		

# Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per021210a.qld

Last Altered: Saturday, February 13, 2010 10:56:08 AM Eastern Standard Time

Printed: Saturday, February 13, 2010 11:00:28 AM Eastern Standard Time

Name: per0212031a

Date: 12-Feb-2010

Time: 17:13:18

ID: WCL100128-06CCV

Vial: 1:2,A

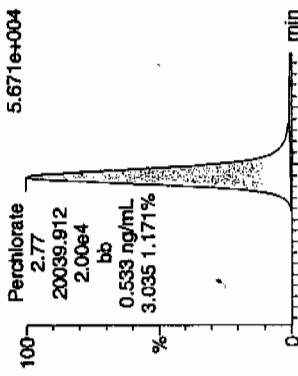
WCL100128-06CCV

02-13-10

Per  
02-13-10

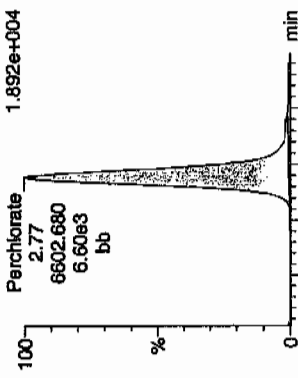
## Perchlorate

MRM of 3 channels, ES-  
99 > 83  
5.671e+004



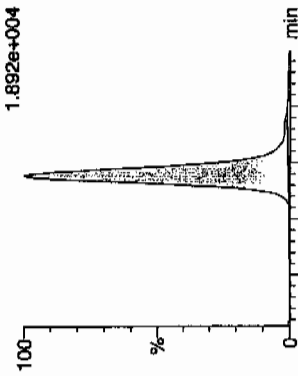
## Perchlorate

MRM of 3 channels, ES-  
101 > 85  
1.892e+004



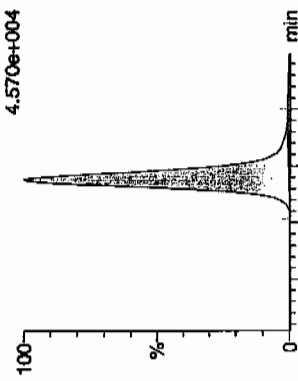
## Perchlorate-101

MRM of 3 channels, ES-  
101 > 85  
1.892e+004



## Perchlorate-O(18)

MRM of 3 channels, ES-  
107 > 89  
4.570e+004



ID	Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/ml	%Rec	%Dev	S/N	Ion Ratio
WCL100128-06CCV	Perchlorate	99 > 83	2.77	20039.912	20039.912	bb			0.5329	106.57	6.57	5797.7...	3.04
WCL100128-06CCV	Perchlorate-101	101 > 85	2.77	6602.680	6602.680	bb			0.5413	108.26	8.26	1694.1...	
WCL100128-06CCV	Perchlorate-O(18)	107 > 89	2.76	16048.817	16048.817	bb			0.5080	101.60	1.60	1410.6...	

# Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per021210a.qld

Last Altered: Saturday, February 13, 2010 10:56:08 AM Eastern Standard Time

Printed: Saturday, February 13, 2010 11:00:28 AM Eastern Standard Time

Name: per0212041a

Date: 12-Feb-2010

Time: 18:33:47

ID: WCL100128-06CCV

Vial: 1:2,A

WCL100128-06CCV

Pure  
and  
OL-13-10

## Perchlorate

MRM of 3 channels, ES-

99 > 83

5.666e+004

min

4.00

2.00

0

100

%

2.77

20124.188

2.01e4

bb

0.535 ng/mL

3.185 6.159%

## Perchlorate

MRM of 3 channels, ES-

101 > 85

1.796e+004

min

4.00

2.00

0

100

%

2.77

6318.867

6.32e3

bb

## Perchlorate-101

MRM of 3 channels, ES-

101 > 85

1.796e+004

min

4.00

2.00

0

100

%

1.796e+004

## Perchlorate-O(18)

MRM of 3 channels, ES-

107 > 89

4.487e+004

min

4.00

2.00

0

100

%

2.00

7.02

107.02

103.61

100.12

7.02

2450.8...

3.61

507.983

0.12

2260.6...

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100128-06CCV	Perchlorate	99 > 83	2.77	20124.188	20124.188	bb			0.5351	107.02	7.02	2450.8...	3.18
WCL100128-06CCV	Perchlorate-101	101 > 85	2.77	6318.867	6318.867	bb			0.5181	103.61	3.61	507.983	
WCL100128-06CCV	Perchlorate-O(18)	107 > 89	2.76	15814.844	15814.844	bb			0.5006	100.12	0.12	2260.6...	



Perchlorate MDL Verification

GEL Job No.(SDG): 10-1474

Lab Name: General Engineering Laboratories

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.05	.05	100.77	12-FEB-10 14:32	per0212011a
Perchlorate Isotope Ratio		2.78		12-FEB-10 14:32	per0212011a
Perchlorate-101	.05	.06	111.96	12-FEB-10 14:32	per0212011a
Perchlorate	.05	.05	103.94	12-FEB-10 16:00	per0212022a
Perchlorate Isotope Ratio		3.73		12-FEB-10 16:00	per0212022a
Perchlorate-101	.05	.04	85.82	12-FEB-10 16:00	per0212022a
Perchlorate	.05	.05	104.14	12-FEB-10 17:29	per0212033a
Perchlorate Isotope Ratio		3.12		12-FEB-10 17:29	per0212033a
Perchlorate-101	.05	.05	102.97	12-FEB-10 17:29	per0212033a
Perchlorate	.05	.05	108.6	12-FEB-10 18:49	per0212043a
Perchlorate Isotope Ratio		3.32		12-FEB-10 18:49	per0212043a

Perchlorate MDL Verification

GEL Job No.(SDG): 10-1474

Lab Name: General Engineering Laboratories

Lab Code: GEL

Reporting Units: ug/kg

Perchlorate-101	.05	.05	100.86	12-FEB-10 18:49	per0212043a
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**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per021210a.qld

Last Altered: Saturday, February 13, 2010 10:56:08 AM Eastern Standard Time  
Printed: Saturday, February 13, 2010 11:00:28 AM Eastern Standard Time

Name: per0212011a

Date: 12-Feb-2010

Time: 14:32:15

ID: WCL100128-07CRI

Vial: 1:2,B

WCL100128-07CRI

02-13-10

Pure  
02-13-10

**Perchlorate**

MRM of 3 channels, ES-

99 > 83

5.526e+003

Perchlorate

2.81

1894.902

1.89e3

bb

0.050 ng/mL

2.775 - 7.491%

min

2.00

4.00

**Perchlorate**

MRM of 3 channels, ES-

101 > 85

2.001e+003

Perchlorate

2.80

682.782

6.83e2

bb

min

2.00

4.00

**Perchlorate-101**

MRM of 3 channels, ES-

101 > 85

2.001e+003

min

2.00

4.00

**Perchlorate-O(18)**

MRM of 3 channels, ES-

107 > 89

4.460e+004

min

2.00

4.00

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ratio
WCL100128-07CRI	Perchlorate	99 > 83	2.81	1894.902	1894.902	bb			0.0504	100.77	0.77	116.592	2.78
WCL100128-07CRI	Perchlorate-101	101 > 85	2.80	682.782	682.782	bb			0.0560	111.96	11.96	330.079	
WCL100128-07CRI	Perchlorate-O(18)	107 > 89	2.79	15868.563	15868.563	bb			0.5023	100.46	0.46	2772.0...	

# Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per021210a.qld

Last Altered: Saturday, February 13, 2010 10:56:08 AM Eastern Standard Time

Printed: Saturday, February 13, 2010 11:00:28 AM Eastern Standard Time

Name: per0212022a

Date: 12-Feb-2010

Time: 16:00:40

ID: WCL100128-07CRI

Vial: 1:2,B

WCL100111-07CRI

02-13-10

Pur  
02-13-10

## Perchlorate

MRM of 3 channels, ES-

99 > 83

5.556e+003

2.80

1954.557

1.95e3

bb

0.052 ng/mL

3.734 24.478%

min

4.00

2.00

0

100

%

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

## Perchlorate

MRM of 3 channels, ES-

101 > 85

1.741e+003

2.80

523.403

5.23e2

bb

1.78

min

4.00

2.00

0

100

%

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

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

## Perchlorate-101

MRM of 3 channels, ES-

101 > 85

1.741e+003

1.78

min

4.00

2.00

0

100

%

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

## Perchlorate-O(18)

MRM of 3 channels, ES-

107 > 89

4.365e+004

min

4.00

2.00

0

100

%

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

ID	Name	Trace	RT	Area	Response	Flags	Mod	Date	Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100128-07CRI	Perchlorate	99 > 83	2.80	1954.557	1954.557	bb				0.0520	103.94	3.94	556.182	3.73
WCL100128-07CRI	Perchlorate-101	101 > 85	2.80	523.403	523.403	bb				0.0429	85.82	-14.18	119.738	
WCL100128-07CRI	Perchlorate-O(18)	107 > 89	2.79	15667.299	15667.299	bb				0.4959	99.19	-0.81	1626.3...	

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

Dataset: C:\MassLynx\Pchlorate.PRO\per021210a.qld

Last Altered: Saturday, February 13, 2010 10:56:08 AM Eastern Standard Time  
Printed: Saturday, February 13, 2010 11:00:28 AM Eastern Standard Time

Name: per0212033a

Date: 12-Feb-2010

Time: 17:29:23

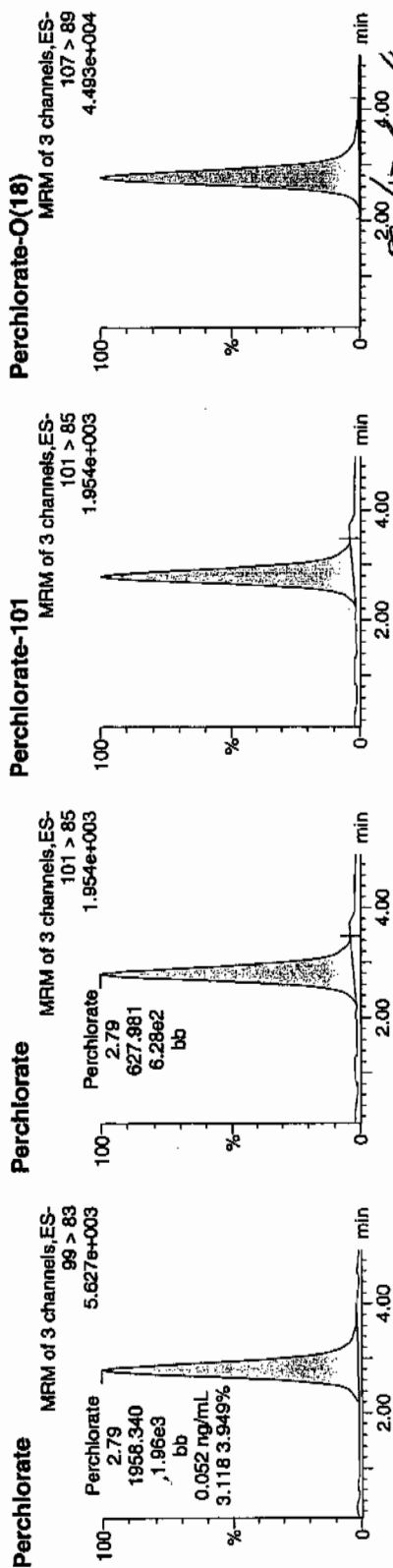
ID: WCL100128-07CR1

Vial: 1:2,B

WCL 100128-07CR1

03-13-10

Per  
03-13-10



ID	Name	Trace	RT	Area	Response	Flags	Mod:Time	ng/mL	%Rec	%Dev	SN	Ion:Ratio
WCL100128-07CR1	Perchlorate	99 > 83	2.79	1958.340	1958.340	bb		0.0521	104.14	4.14	315.766	3.12
WCL100128-07CR1	Perchlorate-101	101 > 85	2.79	627.981	627.981	bb		0.0515	102.97	2.97	173.472	
WCL100128-07CR1	Perchlorate-O(18)	107 > 89	2.77	15952.271	15952.271	bb		0.5050	100.99	0.99	571.084	

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

Dataset: C:\MassLynx\Perchlorate.PRO\per021210a.qld

Last Altered: Saturday, February 13, 2010 10:56:08 AM Eastern Standard Time  
Printed: Saturday, February 13, 2010 11:00:28 AM Eastern Standard Time

Name: per0212043a

Date: 12-Feb-2010

Time: 18:49:53

ID: WCL100128-07CRI

Vial: 1:2,B

WCL100128-07CRI

02-13-10

Perchlorate

MRM of 3 channels, ES-

99 > 83

6.048e+003

Perchlorate

2.77

2042.134

2.04e3

bb

0.054 ng/mL

3.320 10.660%

%

min

4.00

2.00

0

100

Perchlorate

MRM of 3 channels, ES-

101 > 85

1.983e+003

Perchlorate

2.77

615.138

6.15e2

bb

%

min

4.00

2.00

0

100

Perchlorate

MRM of 3 channels, ES-

101 > 85

1.983e+003

Perchlorate-101

1.983

%

min

4.00

2.00

0

100

Perchlorate-O(18)

MRM of 3 channels, ES-

107 > 89

5.214e+004

Perchlorate-O(18)

5.214

%

min

4.00

2.00

0

100

Perchlorate-O(18)

MRM of 3 channels, ES-

107 > 89

5.214e+004

Perchlorate-O(18)

5.214

%

min

4.00

2.00

0

100

Perchlorate-O(18)

MRM of 3 channels, ES-

107 > 89

5.214e+004

Perchlorate-O(18)

5.214

%

min

4.00

2.00

0

100

Perchlorate-O(18)

MRM of 3 channels, ES-

107 > 89

5.214e+004

Perchlorate-O(18)

5.214

%

min

4.00

2.00

0

100

Perchlorate-O(18)

MRM of 3 channels, ES-

107 > 89

5.214e+004

Perchlorate-O(18)

5.214

%

min

4.00

2.00

0

100

Perchlorate-O(18)

MRM of 3 channels, ES-

107 > 89

5.214e+004

Perchlorate-O(18)

5.214

%

min

4.00

2.00

0

100

Perchlorate-O(18)

MRM of 3 channels, ES-

107 > 89

5.214e+004

Perchlorate-O(18)

5.214

%

min

4.00

2.00

0

100

Perchlorate-O(18)

MRM of 3 channels, ES-

107 > 89

5.214e+004

Perchlorate-O(18)

5.214

%

min

4.00

2.00

0

100

Perchlorate-O(18)

MRM of 3 channels, ES-

107 > 89

5.214e+004

Perchlorate-O(18)

5.214

%

min

4.00

2.00

0

100

Perchlorate-O(18)

MRM of 3 channels, ES-

107 > 89

5.214e+004

Perchlorate-O(18)

5.214

%

min

4.00

2.00

0

100

Perchlorate-O(18)

MRM of 3 channels, ES-

107 > 89

5.214e+004

Perchlorate-O(18)

5.214

%

min

4.00

2.00

0

100

Perchlorate-O(18)

MRM of 3 channels, ES-

107 > 89

5.214e+004

Perchlorate-O(18)

5.214

%

min

4.00

2.00

0

100

Perchlorate-O(18)

MRM of 3 channels, ES-

107 > 89

5.214e+004

Perchlorate-O(18)

5.214

%

min

4.00

2.00

0

100

Perchlorate-O(18)

MRM of 3 channels, ES-

107 > 89

5.214e+004

Perchlorate-O(18)

5.214

%

min

4.00

2.00

0

100

Perchlorate-O(18)

MRM of 3 channels, ES-

107 > 89

5.214e+004

Perchlorate-O(18)

5.214

%

min

4.00

2.00

0

100

Perchlorate-O(18)

MRM of 3 channels, ES-

107 > 89

5.214e+004

Perchlorate-O(18)

5.214

%

min

4.00

2.00

0

100

Perchlorate-O(18)

MRM of 3 channels, ES-

107 > 89

5.214e+004

Perchlorate-O(18)

5.214

%

min

4.00

2.00

0

100

Perchlorate-O(18)

MRM of 3 channels, ES-

107 > 89

5.214e+004

Perchlorate-O(18)

5.214

%

min

4.00

2.00

0

100

Perchlorate-O(18)

MRM of 3 channels, ES-

107 > 89

5.214e+004

Perchlorate-O(18)

5.214

%

min

4.00

# QUALITY CONTROL

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: EPA 6850 Modified

Matrix: SOIL

Extraction Batch ID: 947239

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

MB

Date Received: 10-FEB-10

GEL Job No (SDG): 10-1474

GEL Sample ID: 1202029067

Date Filtered: 10-FEB-10

Injection Volume (uL): 20

%Solids: 100

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.5	2	0.500	ug/kg	U	1	12-FEB-10 14:40	per0212012a
	Perchlorate Isotope Ratio						1	12-FEB-10 14:40	per0212012a
14797-73-0	Perchlorate-101	.5	2	0.500	ug/kg	U	1	12-FEB-10 14:40	per0212012a
	Perchlorate-O(18)			4.82	ug/kg		1	12-FEB-10 14:40	per0212012a

<sup>^</sup> 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

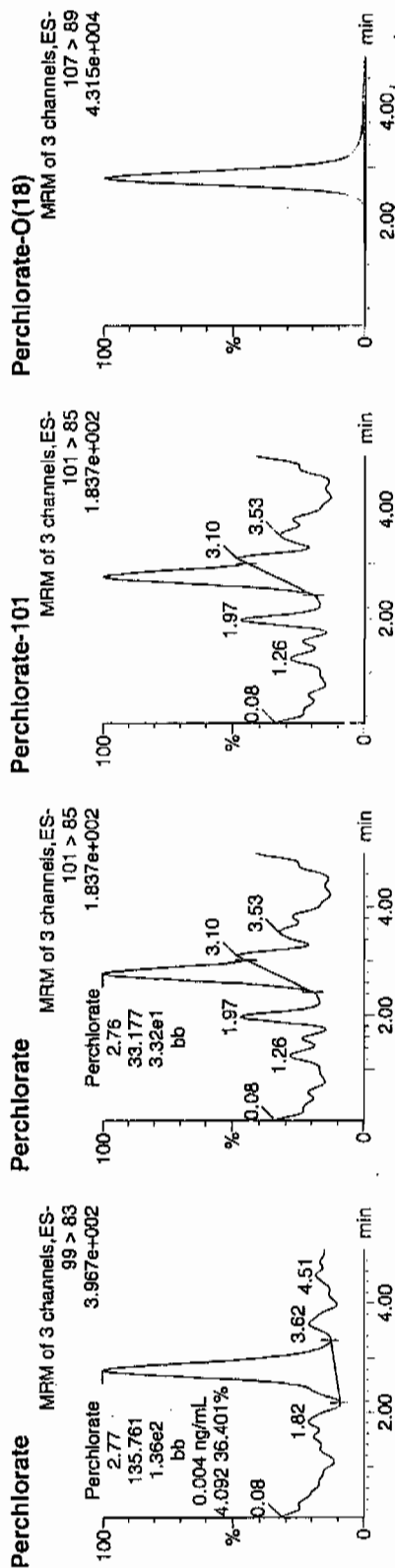
Dataset: C:\MassLynx\Perchlorate.PRO\per021210a.qld

Last Altered: Saturday, February 13, 2010 10:56:08 AM Eastern Standard Time  
Printed: Saturday, February 13, 2010 11:00:28 AM Eastern Standard Time

Name: per0212012a  
Date: 12-Feb-2010  
Time: 14:40:19  
ID: 1202029067  
Vial: 1:3,A

600  
02-13-10

12102 | 947240 | 5020 | MB | 1 |



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202029067	Perchlorate	99 > 83	2.77	135.761	135.761	bb			0.0036			13.882	4.09
1202029067	Perchlorate-101	101 > 85	2.76	33.177	33.177	bb			0.0027			15.585	
1202029067	Perchlorate-O(18)	107 > 89	2.79	15223.065	15223.065	bb			0.4819	96.38	-3.62	643.544	

02/13/10

20.0500

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC  
 Lab Code: GEL  
 Instrument: LCMSMS  
 Method: EPA 6850 Modified  
 Matrix: SOIL  
 Extraction Batch ID: 947239  
 Extraction Type: Solid Prep  
 Client Sample No.: LCS  
 Date Received: 10-FEB-10  
 GEL Job No (SDG): 10-1474  
 GEL Sample ID: 1202029068  
 Date Filtered: 10-FEB-10  
 Injection Volume (uL): 20  
 %Solids: 100

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.5	2	2.13	ug/kg		1	12-FEB-10 14:48	per0212013a
	Perchlorate Isotope Ratio			3.26			1	12-FEB-10 14:48	per0212013a
14797-73-0	Perchlorate-101	.5	2	2.01	ug/kg		1	12-FEB-10 14:48	per0212013a
	Perchlorate-O(18)			5.01	ug/kg		1	12-FEB-10 14:48	per0212013a

<sup>^</sup> 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 =  

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

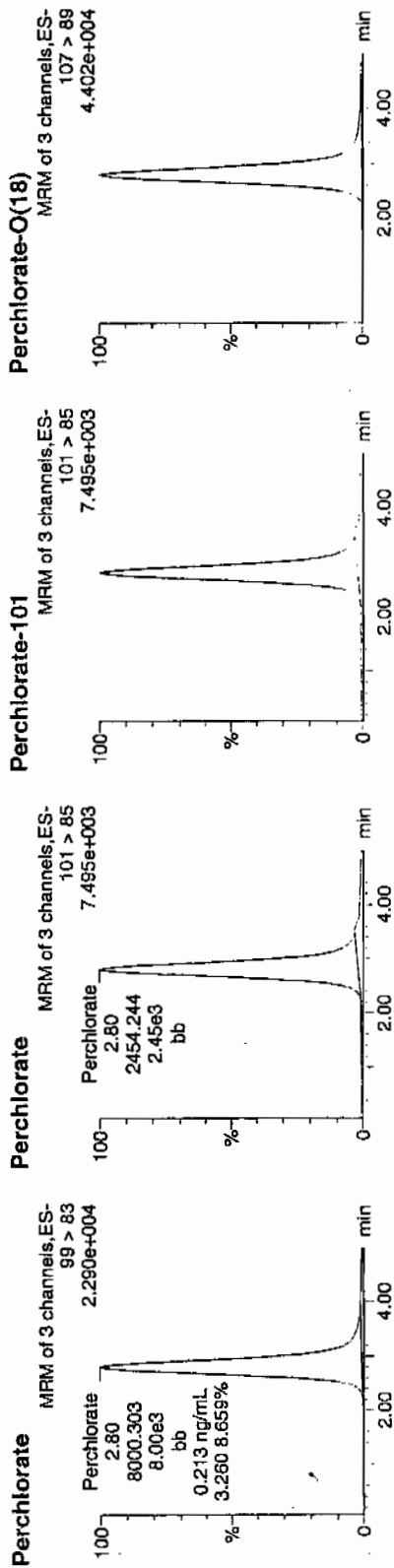
Quantify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charliers W. Wilson  
Dataset: C:\MassLynx\Perchlorate.PRO\per021210a.qld

Last Altered: Saturday, February 13, 2010 10:56:08 AM Eastern Standard Time  
Printed: Saturday, February 13, 2010 11:00:28 AM Eastern Standard Time

Name: per0212013a  
Date: 12-Feb-2010  
Time: 14:48:22  
ID: 1202029068  
Vial: 1:3,B

0.000  
0.013-10

1.920 | 947240 | 5000 | 1.1



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202029068	Perchlorate	99 > 83	2.80	8000.303	8000.303	bb			0.2127	106.36	6.36	1689.3...	3.26
1202029068	Perchlorate-101	101 > 85	2.80	2454.244	2454.244	bb			0.2012	100.61	0.61	474.361	
1202029068	Perchlorate-O(18)	107 > 89	2.79	15842.475	15842.475	bb			0.5015	100.30	0.30	1347.2...	

$$\frac{8000.303}{2454.244} = 0.2127$$

0.013-10

# 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: 947239

Verified by:

Analyst: Jareth Shirley

Method: SW846 6850 Modified

Lab SOP: GL-OA-E-067 REV# 6

Instrument: MicroMass Quattro Ultima

Sample ID	Run Date	Aliquot (g)	Prepped Aliquot (mL)	Prepped Factor (mL/g)	Type	Sample ID	Description	Spike Amt	Units	Comments
1202029067 MB	10-FEB-2010 15:29:00	2	20	10	ICS	1202029071	10 ug/L ICV/CCV Second Source	4	mL	Desalting cartridges used: 091118-1-Ba & 100105-1-H
1202029068 LCS	10-FEB-2010 15:29:00	2	20	10	ICS	1202029068	10 ug/L ICV/CCV Second Source	4	mL	
245682001	10-FEB-2010 15:29:00	2	20	10	MS	1202029069	10 ug/L ICV/CCV Second Source	4	mL	
245682002	10-FEB-2010 15:29:00	2	20	10	MSD	1202029070	10 ug/L ICV/CCV Second Source	4	mL	
1202029069 MS (245682002)	10-FEB-2010 15:29:00	2	20	10						
1202029070 MSD (245682002)	10-FEB-2010 15:29:00	2	20	10						
245682003	10-FEB-2010 15:29:00	2	20	10						
245682004	10-FEB-2010 15:29:00	2	20	10						
245682005	10-FEB-2010 15:29:00	2	20	10						
245682006	10-FEB-2010 15:29:00	2	20	10						
245682007	10-FEB-2010 15:29:00	2	20	10						
245682008	10-FEB-2010 15:29:00	2	20	10						
245682009	10-FEB-2010 15:29:00	2	20	10						
245682010	10-FEB-2010 15:29:00	2	20	10						
245806001	10-FEB-2010 15:29:00	2	20	10						
245806002	10-FEB-2010 15:29:00	2	20	10						
245806003	10-FEB-2010 15:29:00	2	20	10						
245806004	10-FEB-2010 15:29:00	2	20	10						
245806005	10-FEB-2010 15:29:00	2	20	10						
245806006	10-FEB-2010 15:29:00	2	20	10						
245806007	10-FEB-2010 15:29:00	2	20	10						
245806008	10-FEB-2010 15:29:00	2	20	10						
1202029071 ICS	10-FEB-2010 15:29:00	2	20	10						

GEL ORGANIC RUN LOG

INSTRUMENT ID: LOMSMS#2

Date: 02/12/10  
 Extr. Injection Volume: 20uL  
 Sequence Number: per021210a  
 Initial Calibration Date: 02/12/10

Method: EPA 6850-Modified  
 Int. Std.: UCL100122-01  
 Mobile Phase Lot#: 1254342, 1261217  
 Standard-Samp Reagent Lot#: 1233976

Reviewed BY: *Am ML*  
 Date: *02/13/10*  
 SOP: GL-OA-E-067 Rev.6  
 Alt Check Std. ID: WCL100128-06

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC_Flag
per0212001a	IPB001	CWW	2/12/2010 13:11			1		USE	B
per0212002a	IPB001	CWW	2/12/2010 13:20			1		USE	B
per0212003a	WCLICAL-01	CWW	2/12/2010 13:28			1		USE	I
per0212004a	WCLICAL-02	CWW	2/12/2010 13:36			1		USE	I
per0212005a	WCLICAL-03	CWW	2/12/2010 13:44			1		USE	I
per0212006a	WCLICAL-04	CWW	2/12/2010 13:52			1		USE	I
per0212007a	WCLICAL-05	CWW	2/12/2010 14:00			1		USE	I
per0212008a	IPB002	CWW	2/12/2010 14:08			1		USE	B
per0212009a	WCLICV	CWW	2/12/2010 14:16			1		USE	C
per0212010a	IPB003	CWW	2/12/2010 14:24			1		USE	B
per0212011a	WCLCRI	CWW	2/12/2010 14:32			1		USE	C
per0212012a	1202029067	CWW	2/12/2010 14:40	947240	VARIOUS	1	LANL	USE	S
per0212013a	1202029068	CWW	2/12/2010 14:48	947240	VARIOUS	1	LANL	USE	S
per0212014a	1202029071	CWW	2/12/2010 14:56	947240	VARIOUS	1	LANL	USE	S
per0212015a	245682001	CWW	2/12/2010 15:04	947240	10-1450-1	1	LANL	USE	S
per0212016a	245682002	CWW	2/12/2010 15:12	947240	10-1450-1	1	LANL	USE	S
per0212017a	1202029069	CWW	2/12/2010 15:20	947240	10-1450-1	1	LANL	USE	S
per0212018a	1202029070	CWW	2/12/2010 15:28	947240	10-1450-1	1	LANL	USE	S
per0212019a	245682003	CWW	2/12/2010 15:36	947240	10-1450-1	1	LANL	USE	S
per0212020a	WCLCCV	CWW	2/12/2010 15:44			1		USE	C
per0212021a	IPB004	CWW	2/12/2010 15:52			1		USE	B
per0212022a	WCLCRI	CWW	2/12/2010 16:00			1		USE	C
per0212023a	245682004	CWW	2/12/2010 16:08	947240	10-1450-1	1	LANL	USE	S
per0212024a	245682005	CWW	2/12/2010 16:16	947240	10-1450-1	1	LANL	USE	S
per0212025a	245682006	CWW	2/12/2010 16:24	947240	10-1450-1	1	LANL	USE	S
per0212026a	245682007	CWW	2/12/2010 16:32	947240	10-1450-1	1	LANL	USE	S
per0212027a	245682008	CWW	2/12/2010 16:40	947240	10-1450-1	1	LANL	USE	S
per0212028a	245682009	CWW	2/12/2010 16:49	947240	10-1450-1	1	LANL	USE	S
per0212029a	245682010	CWW	2/12/2010 16:57	947240	10-1450-1	1	LANL	USE	S

per0212030a	245806001	CWW	2/12/2010 17:05	947240	10-1474	1	LANL	USE	S
per0212031a	WCLCCV	CWW	2/12/2010 17:13			1		USE	C
per0212032a	IPB005	CWW	2/12/2010 17:21			1		USE	B
per0212033a	WCLCRI	CWW	2/12/2010 17:29			1		USE	C
per0212034a	245806002	CWW	2/12/2010 17:37	947240	10-1474	1	LANL	USE	S
per0212035a	245806003	CWW	2/12/2010 17:45	947240	10-1474	1	LANL	USE	S
per0212036a	245806004	CWW	2/12/2010 17:53	947240	10-1474	1	LANL	USE	S
per0212037a	245806005	CWW	2/12/2010 18:01	947240	10-1474	1	LANL	USE	S
per0212038a	245806006	CWW	2/12/2010 18:09	947240	10-1474	1	LANL	USE	S
per0212039a	245806007	CWW	2/12/2010 18:17	947240	10-1474	1	LANL	USE	S
per0212040a	245806008	CWW	2/12/2010 18:25	947240	10-1474	1	LANL	USE	S
per0212041a	WCLCCV	CWW	2/12/2010 18:33			1		USE	C
per0212042a	IPB006	CWW	2/12/2010 18:41			1		USE	B
per0212043a	WCLCRI	CWW	2/12/2010 18:49			1		USE	C

Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per021210a.qld

Last Altered: Saturday, February 13, 2010 10:56:08 AM Eastern Standard Time  
Printed: Saturday, February 13, 2010 11:00:28 AM Eastern Standard Time

Name: per0212017a

Date: 12-Feb-2010

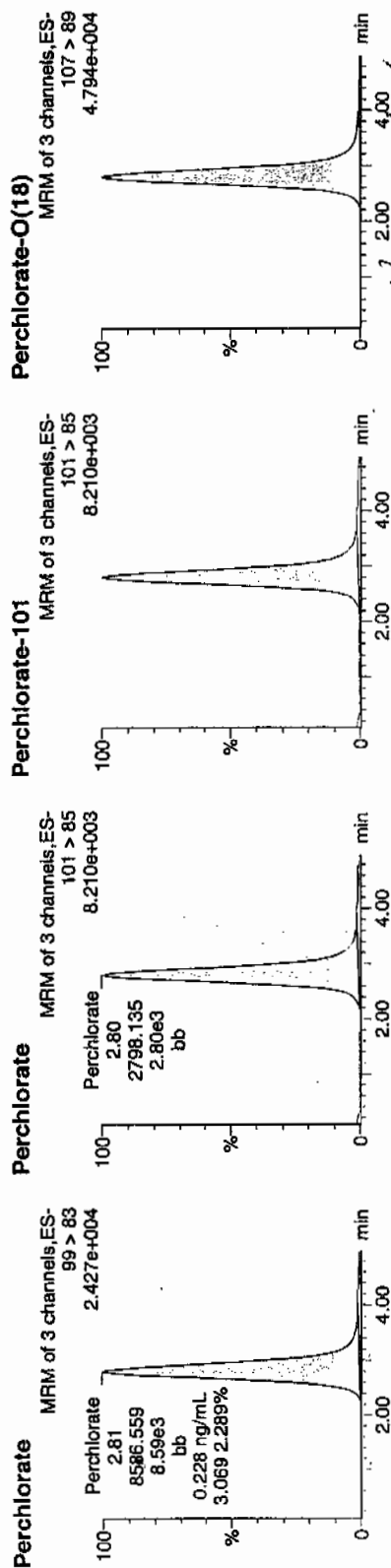
Time: 15:20:29

ID: 1202029069

Vial: 1:3,F

600  
02-13-10

LANC 194240 | 5020 | MS | 1 |



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202029069	Perchlorate	99 > 83	2.81	8586.559	8586.559	bb			0.2283	114.16	14.16	1712.0...	3.07
1202029069	Perchlorate-101	101 > 85	2.80	2798.135	2798.135	bb			0.2294	114.70	14.70	559.261	
1202029069	Perchlorate-O(18)	107 > 89	2.80	17012.309	17012.309	bb			0.5385	107.70	7.70	1805.2...	



Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per021210a.qld

Last Altered: Saturday, February 13, 2010 10:56:08 AM Eastern Standard Time  
Printed: Saturday, February 13, 2010 11:00:28 AM Eastern Standard Time

Name: per0212018a

Date: 12-Feb-2010

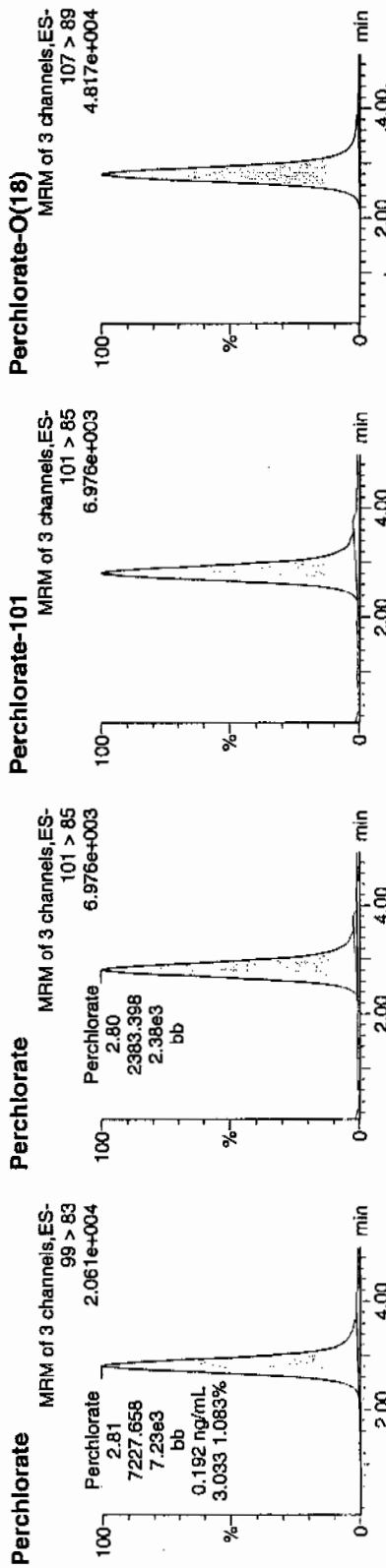
Time: 15:28:30

ID: 1202029070

Vial: 1:4,A

02-13-10

1202029070 | 1202029070 | MSO | 1



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202029070	Perchlorate	99 > 83	2.81	7227.658	7227.658	bb			0.1922	96.09	-3.91	577.933	3.03
1202029070	Perchlorate-101	101 > 85	2.80	2383.398	2383.398	bb			0.1954	97.70	-2.30	1002.9...	
1202029070	Perchlorate-O(18)	107 > 89	2.80	16912.295	16912.295	bb			0.5354	107.07	7.07	1264.1...	

$$\frac{7227.658}{37608.1} \times 100 = 2.29\%$$

## 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 10-1474-1**

**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:** 947199

**Prep Batch Number:** 947198

**Sample Analysis**

<b>Sample ID</b>	<b>Client ID</b>
245807001	RE15-10-8081
245807002	RE15-10-8082
1202028966	Interference Check Sample (ICS)
1202028960	Method Blank (MB)
1202028961	Laboratory Control Sample (LCS)
1202028962	245614001(RE46-10-11838) Matrix Spike (MS)
1202028963	245614001(RE46-10-11838) 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.

10-1474-1-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 245614001 (RE46-10-11838) from SDG 10-1417-1 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.

10-1474-1-PERLCMS

Page 2 of 4

### **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**

Sample 245807001 (RE15-10-8081) was re-analyzed to confirm the potential of carryover from the previous sample. The re-analysis is reported.

### **Miscellaneous Information**

#### **Data Exception (DER) Documentation**

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

#### **Manual Integrations**

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

#### **Method Comments**

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

#### **Additional Comments**

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

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

#### **Perchlorate Isotope Ratio**

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

### 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: Deborah Mauer Date: 02/06/10

# SAMPLE DATA SUMMARY



Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: WATER

Extraction Batch ID: 247198

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.

RE15-10-8081

Date Received: 29-JAN-10

GEL Job No (SDG): 10-1474-1

GEL Sample ID: 245807001

Date Filtered: 30-JAN-10

Injection Volume (uL): 20

%Solids:

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.050	ug/L	U	1	01-FEB-10 16:22	per0201014a
	Perchlorate Isotope Ratio						1	01-FEB-10 16:22	per0201014a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	01-FEB-10 16:22	per0201014a
	Perchlorate-O(18)			0.477	ug/L		1	01-FEB-10 16:22	per0201014a

<sup>^</sup> 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 <sup>1</sup>  
Aliquot %Solids

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: WATER

Extraction Batch ID: 947198

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.

RE15-10-8082

Date Received: 29-JAN-10

GEL Job No (SDG): 10-1474-1

GEL Sample ID: 245807002

Date Filtered: 30-JAN-10

Injection Volume (uL): 20

%Solids:

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.050	ug/L	U	1	31-JAN-10 21:34	per0131074a
	Perchlorate Isotope Ratio						1	31-JAN-10 21:34	per0131074a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	31-JAN-10 21:34	per0131074a
	Perchlorate-O(18)			0.499	ug/L		1	31-JAN-10 21:34	per0131074a

<sup>^</sup> 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): 10-1474-1

Extract Batch Code: 947198 Date Filtered: 30-JAN-10

Matrix: WATER Sample ID: 1202028961

Analyte^	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	0.200	.199	ug/L	99.4		85 - 115
Perchlorate Isotope Ratio		3.1				-
Perchlorate-101	0.200	.191	ug/L	95.3		85 - 115
Perchlorate-O(18)		.455	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.

Form 5a

Perchlorate Interference Check Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL GEL Job No. (SDG): 10-1474-1

Extract Batch Code: 247198 Date Filtered: 30-JAN-10

Matrix: SURFACE WATER Sample ID: 1202028966

Analyte^	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	0.200	.2	ug/L	100		70 - 130
Perchlorate Isotope Ratio		3.04				
Perchlorate-101	0.200	.196	ug/L	98		70 - 130
Perchlorate-O(18)		.475	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: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per013110a.qld

Last Altered: Monday, February 01, 2010 10:45:07 AM Eastern Standard Time  
Printed: Monday, February 01, 2010 10:58:37 AM Eastern Standard Time

Name: per0131048a

Date: 31-Jan-2010

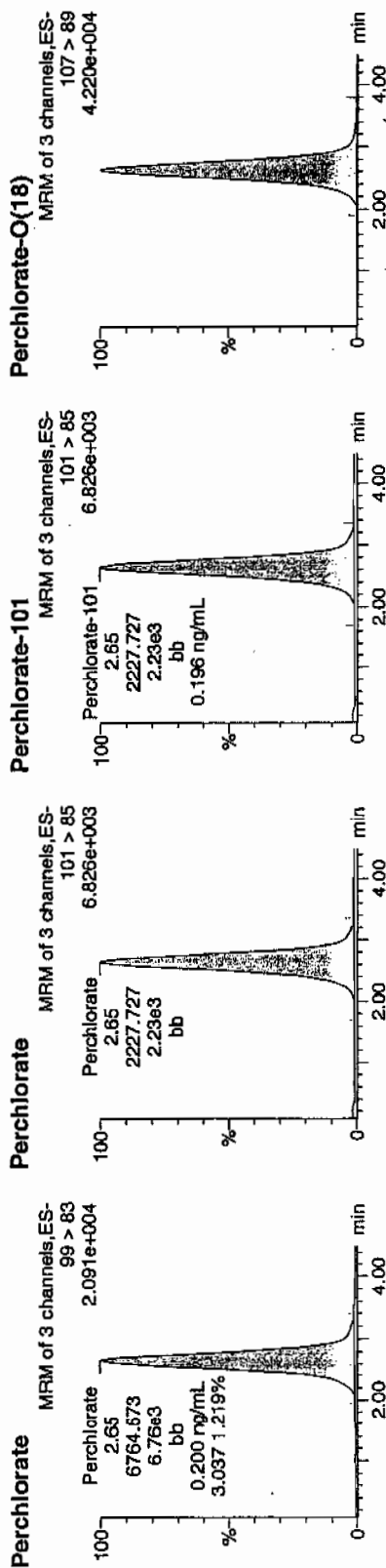
Time: 18:17:55

ID: 1202028966

Vial: 2:1,C

02-01-10

1202028966 | 1202028966 | 1202028966



ID	Name	Trace	RT	Area	Response	Flag	Mod Date	Mod Time	Int	Ref	Dev	SN	Ratio
1202028966	Perchlorate	99 > 83	2.65	6764.573	6764.573	bb			0.2000	100.01	0.01	722.076	3.04
1202028966	Perchlorate-101	101 > 85	2.65	2227.727	2227.727	bb			0.1960	97.99	-2.01	600.092	
1202028966	Perchlorate-O(18)	107 > 89	2.64	13812.098	13812.098	bb			0.4749	94.98	-5.02	4165.3...	

Perchlorate Spike/Spike Duplicate Summary

Lab Name: General Engineering Laboratories

Lab Code: GEL

Extract Batch Code: 947198

GEL MS/PS ID: 1202028962

GEL MSD/PSD ID: 1202028963

GEL Job No (SDG): 10-1474-1

Date Extracted: 30-JAN-10

Client ID: RE46-10-11838

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	0.00266	ug/L	0.204	101		.196	96.5		4.16		30	75 - 125
Perchlorate Isotope Ratio	0	0.00		3.07			2.95			0			-
Perchlorate-101	0.200	0.00	ug/L	0.198	98.9		.198	98.8		.103		30	75 - 125
Perchlorate-O(18)	0	0.438	ug/L	0.475			.484			1.83			-

^ 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

GEL Job No.(SDG): 10-1474-1

Lab Name: General Engineering Laboratories

Lab Code: GEL

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

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	31-JAN-10	per0131001a	IPB001
Perchlorate-101	0.00	0	NA	31-JAN-10	per0131001a	IPB001
Perchlorate	0.00	0	NA	31-JAN-10	per0131002a	IPB001
Perchlorate-101	0.00	0	NA	31-JAN-10	per0131002a	IPB001
Perchlorate	0.00	0	NA	01-FEB-10	per0201001a	IPB001
Perchlorate-101	0.00	0	NA	01-FEB-10	per0201001a	IPB001
Perchlorate	0.00	0	NA	01-FEB-10	per0201002a	IPB001
Perchlorate-101	0.00	0	NA	01-FEB-10	per0201002a	IPB001



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

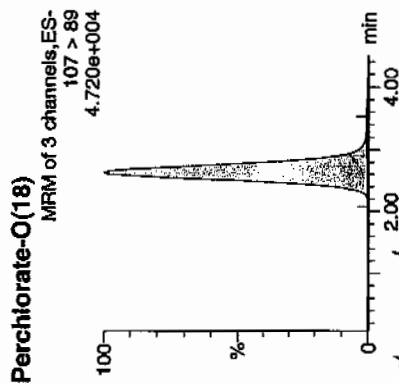
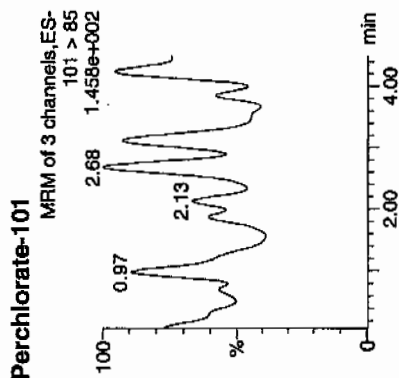
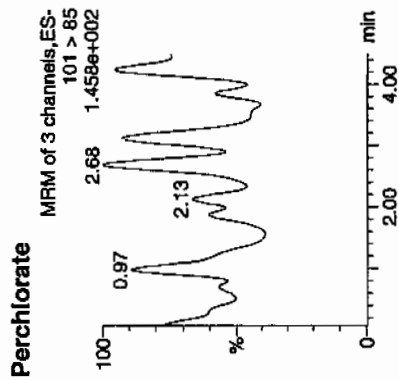
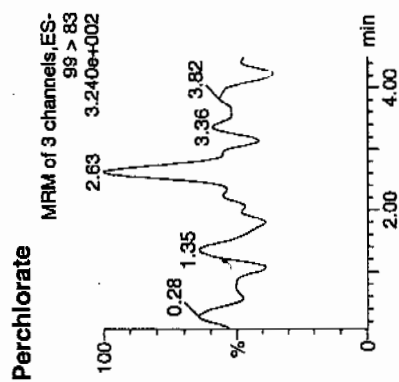
Dataset: C:\MassLynx\Perchlorate.PRO\per013110a.qld

Last Altered: Monday, February 01, 2010 10:45:07 AM Eastern Standard Time  
Printed: Monday, February 01, 2010 10:58:37 AM Eastern Standard Time

Method: C:\MassLynx\Perchlorate.PRO\MethDB\per013110a.mdb 01 Feb 2010 10:44:50  
Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per013110a.cdb 01 Feb 2010 10:45:05

Name: per0131001a  
Date: 31-Jan-2010  
Time: 12:23:18  
ID: IPB001  
Vial: 1:1,A

303-01-12



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB001	Perchlorate	99 > 83											0.00
IPB001	Perchlorate-101	101 > 85											
IPB001	Perchlorate-O(18)	107 > 89	2.64	14142.885	14142.885	bb			0.4863	97.26	-2.74	1262.8...	

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

Dataset: C:\MassLynx\Perchlorate.PRO\per013110a.qld

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Printed: Monday, February 01, 2010 10:58:37 AM Eastern Standard Time

Name: per0131002a

Date: 31-Jan-2010

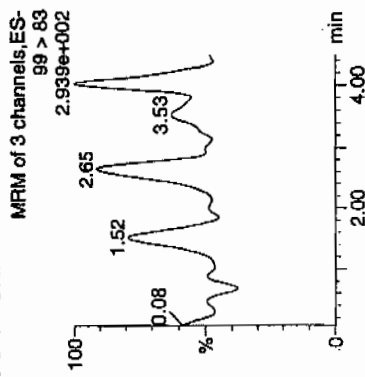
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ID: IPB001

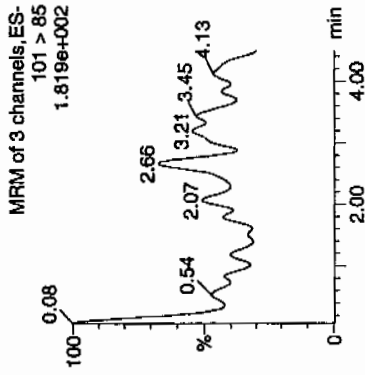
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02-01-10

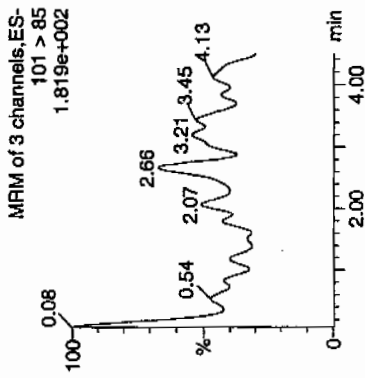
### Perchlorate



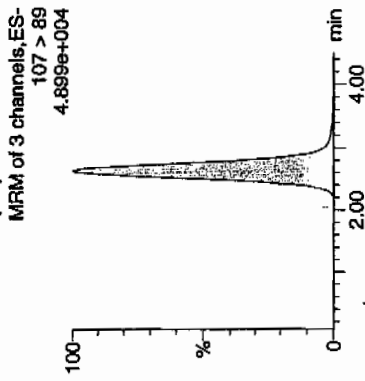
### Perchlorate



### Perchlorate-101



### Perchlorate-O(18)



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB001	Perchlorate	99 > 83											
IPB001	Perchlorate-101	101 > 85	2.64	14670.820	14670.820	bb			0.5044	100.89	0.89	7699.2...	0.00
IPB001	Perchlorate-O(18)	107 > 89											

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

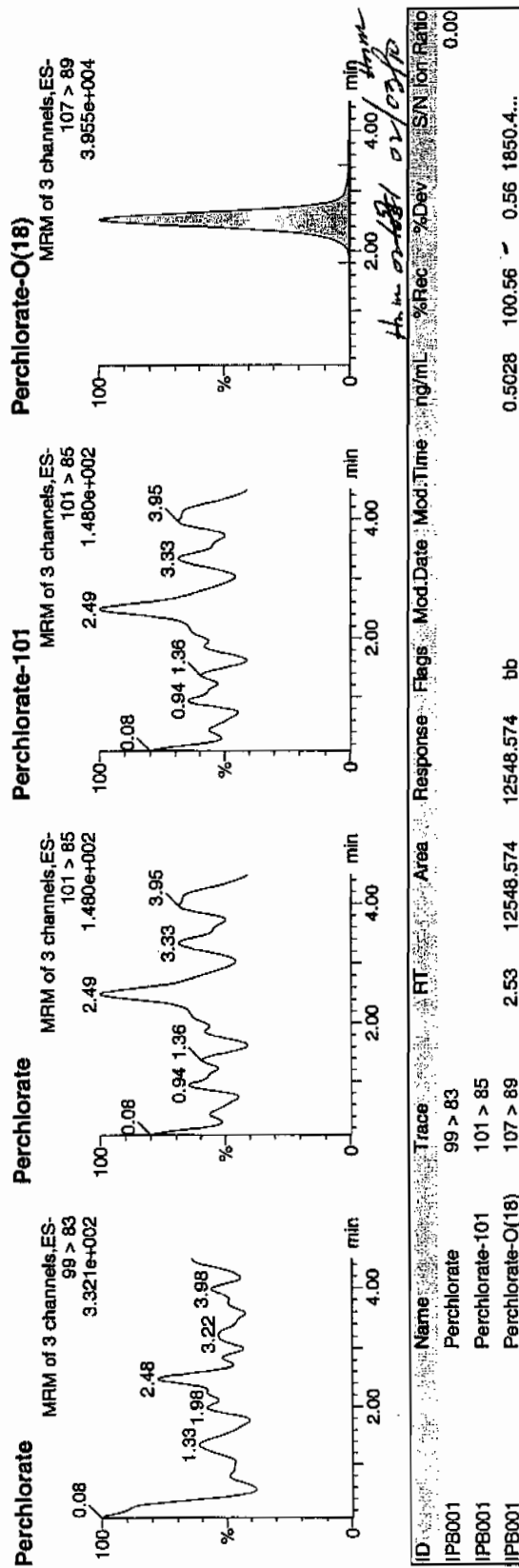
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Last Altered: Tuesday, February 02, 2010 2:28:24 PM Eastern Standard Time  
Printed: Tuesday, February 02, 2010 2:30:40 PM Eastern Standard Time

Method: C:\MassLynx\Perchlorate.PRO\MethDB\per020110a.mdb 02 Feb 2010 07:54:05  
Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per020110a.cdb 02 Feb 2010 14:28:23

Name: per0201001a  
Date: 01-Feb-2010  
Time: 14:44:45  
ID: IPB001  
Vial: 1:1,A

02-02-10



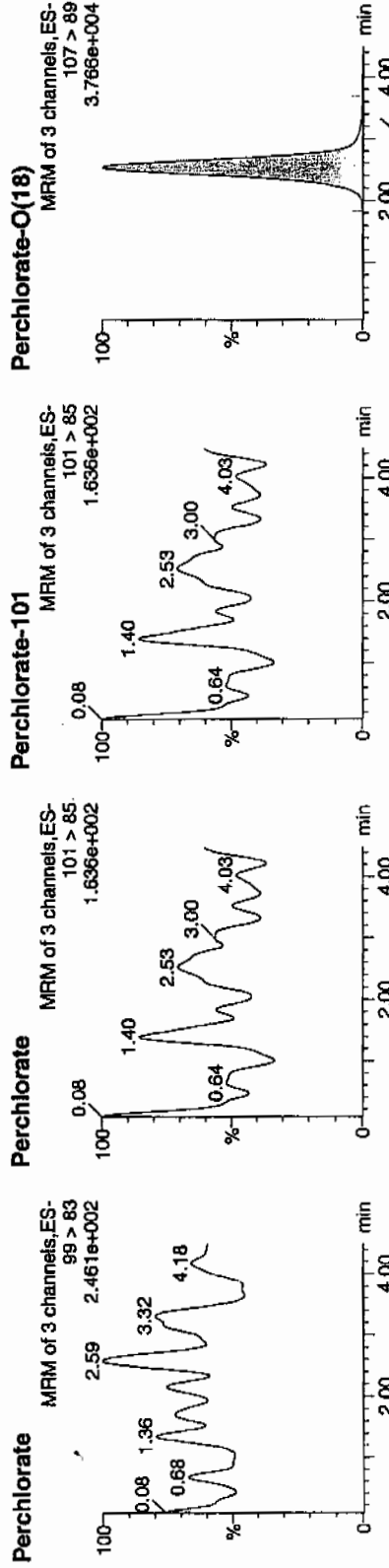
**Quantity Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020110a.qld

Last Altered: Tuesday, February 02, 2010 2:28:24 PM Eastern Standard Time  
Printed: Tuesday, February 02, 2010 2:30:40 PM Eastern Standard Time

Name: per0201002a  
Date: 01-Feb-2010  
Time: 14:52:28  
ID: IPB001  
Vial: 1:1,A

02-01-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB001	Perchlorate	99 > 83											0.00
IPB001	Perchlorate-101	101 > 85	2.54	12279.958	12279.958	bb			0.4920	98.41	-1.59	1440.2	
IPB001	Perchlorate-O(18)	107 > 89											

Perchlorate Continuing Calibration Blank

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1474-1

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	31-JAN-10	per0131008a	IPB002
Perchlorate-101	0.00	0	NA	31-JAN-10	per0131008a	IPB002
Perchlorate	0.00	0	NA	31-JAN-10	per0131010a	IPB003
Perchlorate-101	0.00	0	NA	31-JAN-10	per0131010a	IPB003
Perchlorate	0.00	0	NA	31-JAN-10	per0131022a	IPB004
Perchlorate-101	0.00	0	NA	31-JAN-10	per0131022a	IPB004
Perchlorate	0.00	0	NA	31-JAN-10	per0131033a	IPB005
Perchlorate-101	0.00	0	NA	31-JAN-10	per0131033a	IPB005
Perchlorate	0.00	0	NA	31-JAN-10	per0131044a	IPB006
Perchlorate-101	0.00	0	NA	31-JAN-10	per0131044a	IPB006
Perchlorate	0.00	0	NA	31-JAN-10	per0131055a	IPB007
Perchlorate-101	0.00	0	NA	31-JAN-10	per0131055a	IPB007
Perchlorate	0.00	0	NA	31-JAN-10	per0131066a	IPB008

Form 4

Perchlorate Continuing Calibration Blank

GEL Job No.(SDG): 10-1474-1

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-101	0.00	0	NA	31-JAN-10	per0131066a	IPB008
Perchlorate	0.00	0	NA	31-JAN-10	per0131075a	IPB009
Perchlorate-101	0.00	0	NA	31-JAN-10	per0131075a	IPB009
Perchlorate	0.00	0	NA	31-JAN-10	per0131078a	IPB010
Perchlorate-101	0.00	0	NA	31-JAN-10	per0131078a	IPB010
Perchlorate	0.00	0	NA	01-FEB-10	per0201008a	IPB002
Perchlorate-101	0.00	0	NA	01-FEB-10	per0201008a	IPB002
Perchlorate	0.00	0	NA	01-FEB-10	per0201010a	IPB003
Perchlorate-101	0.00	0	NA	01-FEB-10	per0201010a	IPB003
Perchlorate	0.00	0	NA	01-FEB-10	per0201015a	IPB004
Perchlorate-101	0.00	0	NA	01-FEB-10	per0201015a	IPB004
Perchlorate	0.00	0	NA	01-FEB-10	per0201021a	IPB005
Perchlorate-101	0.00	0	NA	01-FEB-10	per0201021a	IPB005

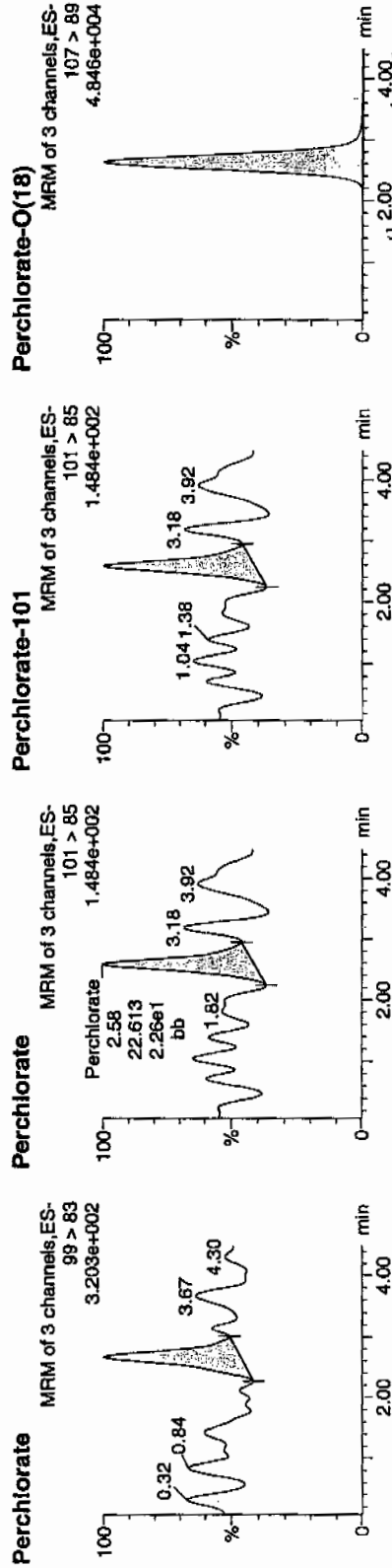
Quantify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per013110a.qld

Last Altered: Monday, February 01, 2010 10:45:07 AM Eastern Standard Time  
Printed: Monday, February 01, 2010 10:58:37 AM Eastern Standard Time

Name: per0131008a  
Date: 31-Jan-2010  
Time: 13:15:57  
ID: IPB002  
Vial: 1:1,A

02-01-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB002	Perchlorate	99 > 83	2.66	48.090	48.090	bb			0.0014			8.037	2.13
IPB002	Perchlorate-101	101 > 85	2.58	22.613	22.613	bb			0.0020			5.380	
IPB002	Perchlorate-O(18)	107 > 89	2.63	14490.285	14490.285	bb			0.4982	99.65	-0.35	1594.1...	

Handwritten notes: "Handwritten notes" and "Handwritten notes" are visible in the right margin.

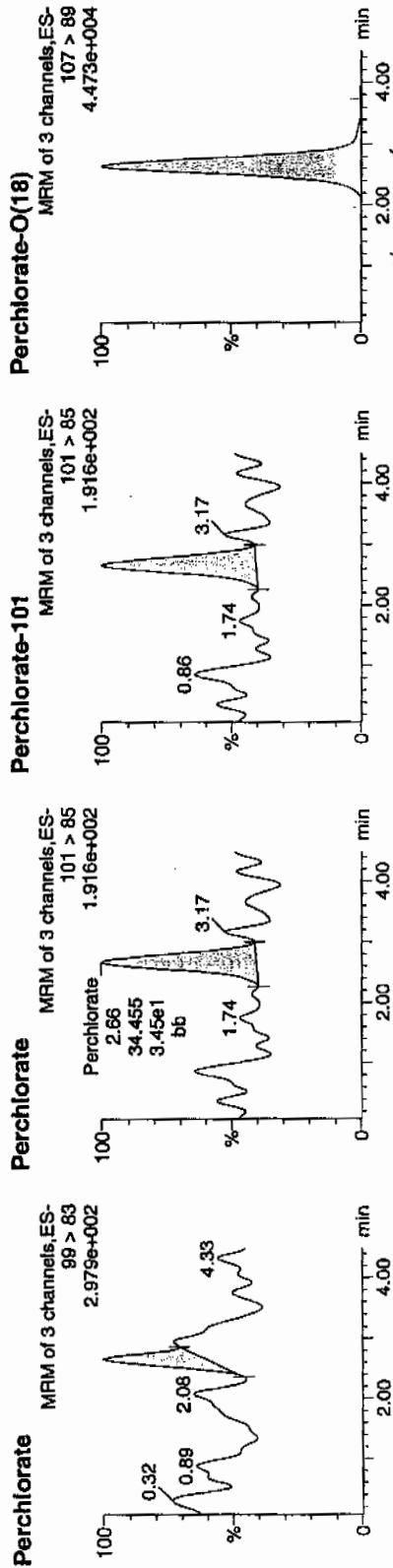
**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per013110a.qld

Last Altered: Monday, February 01, 2010 10:45:07 AM Eastern Standard Time  
Printed: Monday, February 01, 2010 10:58:37 AM Eastern Standard Time

Name: per0131010a  
Date: 31-Jan-2010  
Time: 13:31:01  
ID: IPB003  
Vial: 1:1,A

02-01-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	SN	Ion Ratio
IPB003	Perchlorate	99 > 83	2.66	27.957	27.957	bb			0.0008			6.487	0.81
IPB003	Perchlorate-101	101 > 85	2.66	34.455	34.455	bb			0.0030			10.133	
IPB003	Perchlorate-O(18)	107 > 89	2.65	14485.047	14485.047	bb			0.4981	99.61	-0.39	3915.2...	

0.004  
2.0.0003



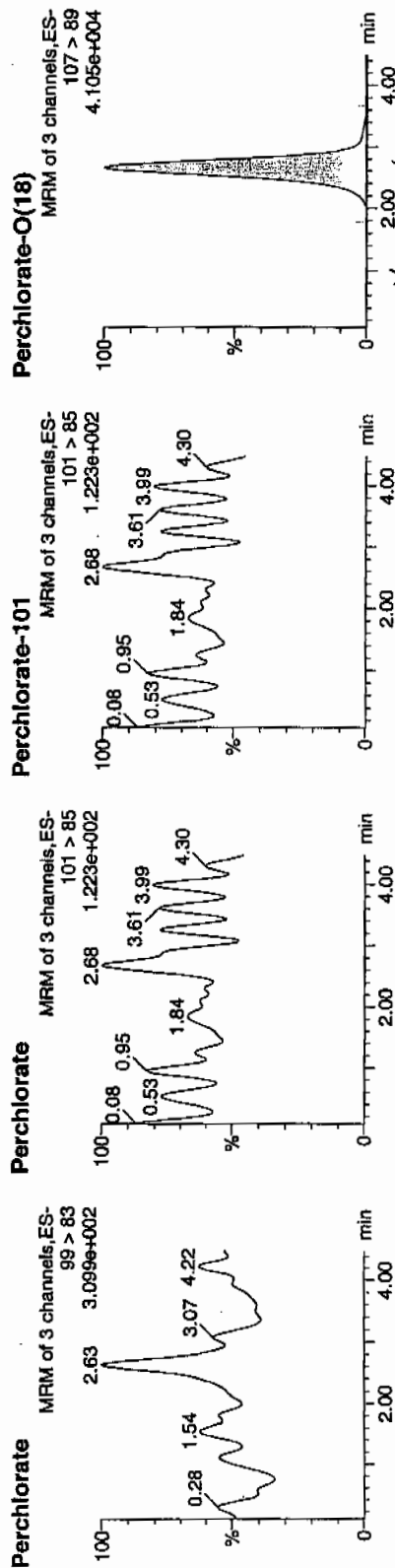
**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per013110a.qld

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Printed: Monday, February 01, 2010 10:58:37 AM Eastern Standard Time

Name: per0131022a  
Date: 31-Jan-2010  
Time: 15:01:35  
ID: IPB004  
Vial: 1:1,A

QWJ  
02-01-10



ID	Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	SN	Ion Ratio
IPB004	Perchlorate	99 > 83											0.00
IPB004	Perchlorate-101	101 > 85											
IPB004	Perchlorate-O(18)	107 > 89	2.65	13877.979	13877.979	bb			0.4772	95.44	-4.56	576.575	

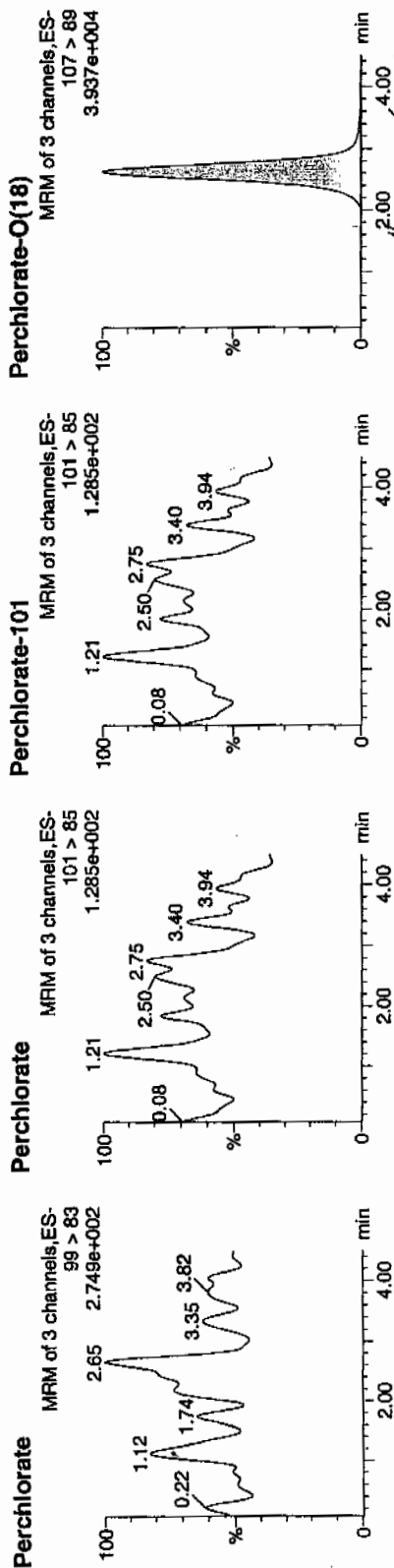
**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charliers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per013110a.qld

Last Altered: Monday, February 01, 2010 10:45:07 AM Eastern Standard Time  
Printed: Monday, February 01, 2010 10:58:37 AM Eastern Standard Time

Name: per0131033a  
Date: 31-Jan-2010  
Time: 16:24:34  
ID: IPB005  
Vial: 1:1,A

01-01-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB005	Perchlorate	99 > 83											
IPB005	Perchlorate-101	101 > 85	2.63	13136.926	13136.926	bb			0.4517	90.34	-9.66	4624.5...	
IPB005	Perchlorate-O(18)	107 > 89	2.63	13136.926	13136.926	bb			0.4517	90.34	-9.66	4624.5...	

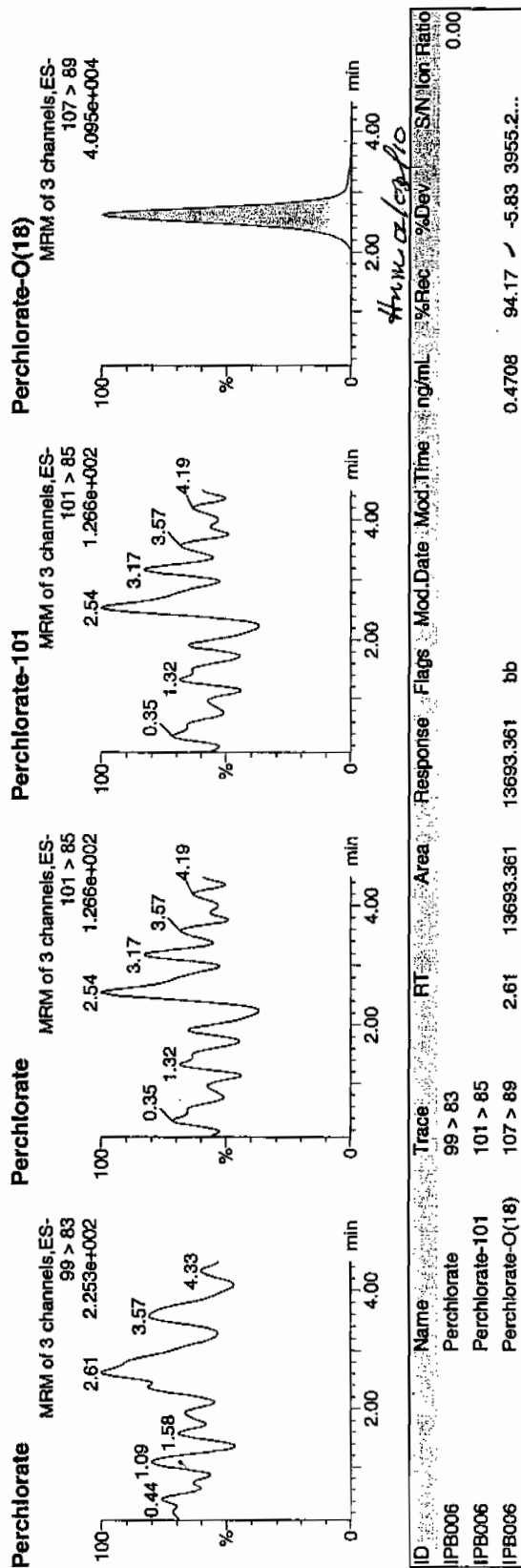
**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per013110a.qld

Last Altered: Monday, February 01, 2010 10:45:07 AM Eastern Standard Time  
Printed: Monday, February 01, 2010 10:58:37 AM Eastern Standard Time

Name: per0131044a  
Date: 31-Jan-2010  
Time: 17:47:37  
ID: IPB006  
Vial: 1:1,A

02-01-10



Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per013110a.qld

Last Altered: Monday, February 01, 2010 10:45:07 AM Eastern Standard Time  
Printed: Monday, February 01, 2010 10:58:37 AM Eastern Standard Time

Name: per0131055a

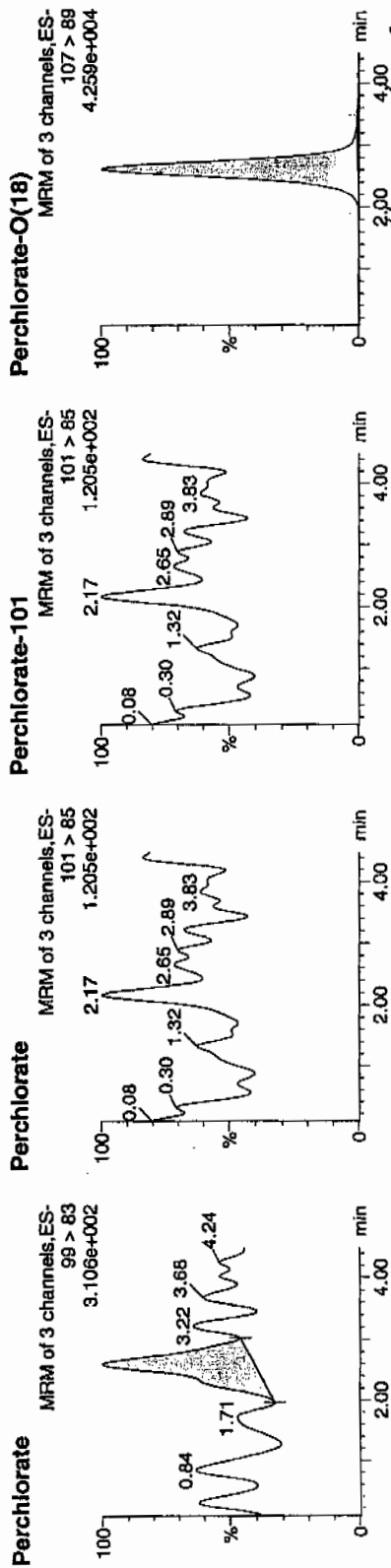
Date: 31-Jan-2010

Time: 19:10:53

ID: IPB007

Vial: 1:1,A

07-31-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB007	Perchlorate	99 > 83	2.59	81.753	81.753	bb			0.0024			4.141	0.00
IPB007	Perchlorate-101	101 > 85											
IPB007	Perchlorate-O(18)	107 > 89	2.61	13936.795	13936.795	bb			0.4782	95.84	-4.16	4415.2...	

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

Dataset: C:\MassLynx\Perchlorate.PRO\per013110a.qld

Last Altered: Monday, February 01, 2010 10:45:07 AM Eastern Standard Time  
Printed: Monday, February 01, 2010 10:58:37 AM Eastern Standard Time

Name: per01311066a

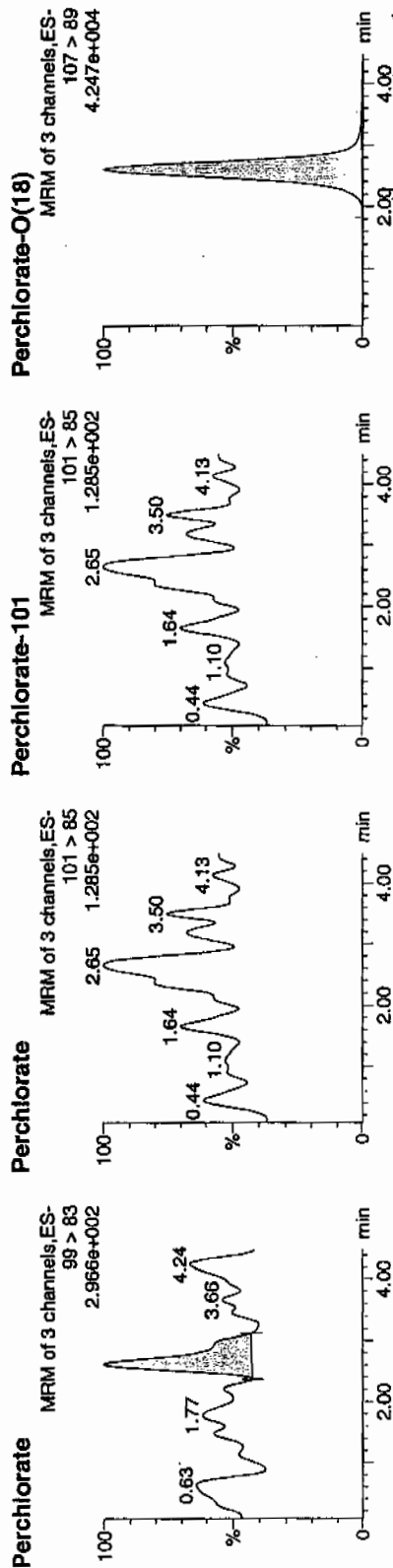
Date: 31-Jan-2010

Time: 20:34:13

ID: IPB008

Vial: 1:1,A

02-01-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB008	Perchlorate	99 > 83	2.61	52.781	52.781	bb			0.0016			11.563	0.00
IPB008	Perchlorate-101	101 > 85											
IPB008	Perchlorate-O(18)	107 > 89	2.60	14030.887	14030.887	bb			0.4824	96.49	-3.51	3435.7...	

Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per013110a.qld

Last Altered: Monday, February 01, 2010 10:45:07 AM Eastern Standard Time

Printed: Monday, February 01, 2010 10:58:37 AM Eastern Standard Time

Name: per0131075a

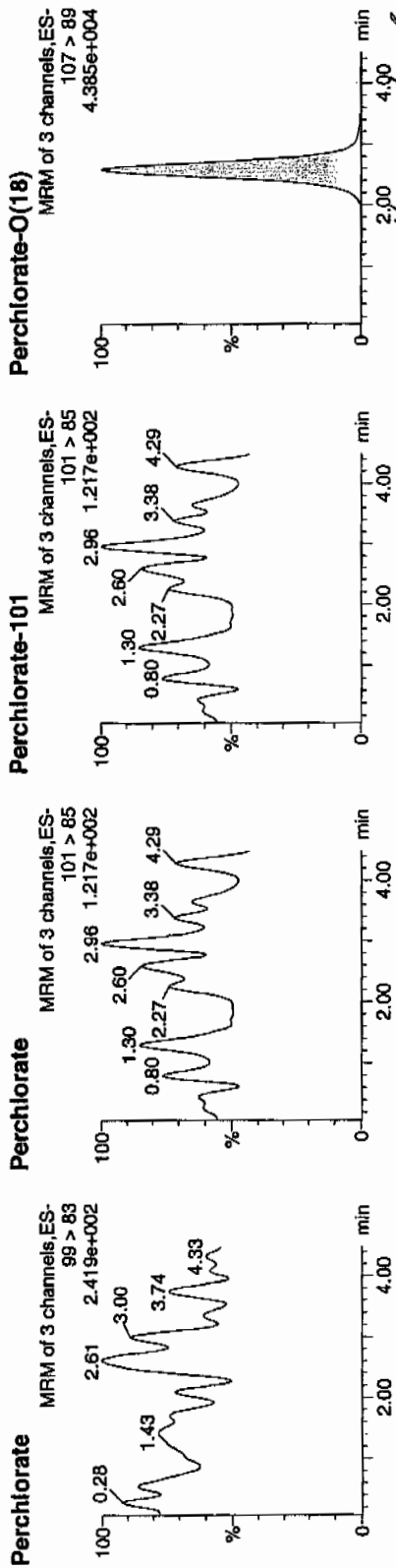
Date: 31-Jan-2010

Time: 21:42:14

ID: IPB009

Vial: 1:1,A

02-01-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	ISN	Ion Ratio
IPB009	Perchlorate	99 > 83											0.00
IPB009	Perchlorate-101	101 > 85											
IPB009	Perchlorate-O(18)	107 > 89	2.59	14440.522	14440.522	bb			0.4965	99.31	-0.69	3410.0...	

Quantify Sample Report MassLynx 4.0 SP4

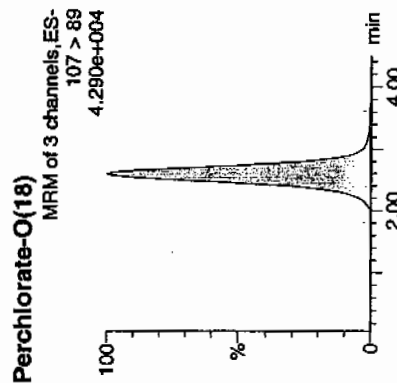
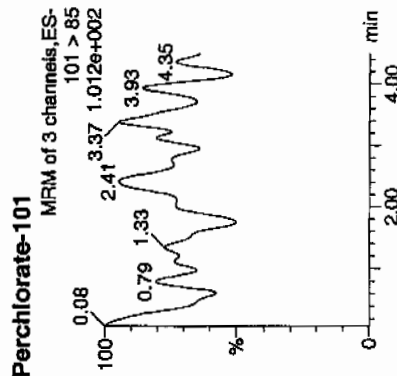
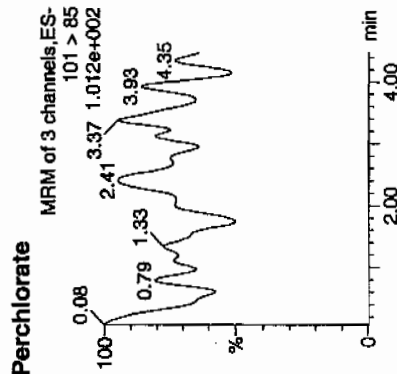
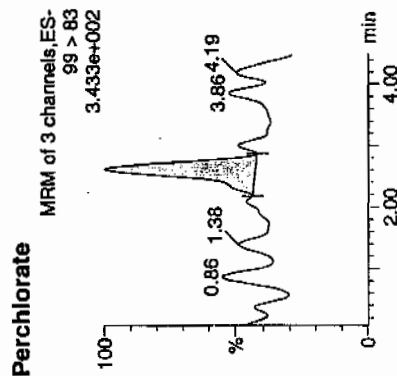
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per013110a.qld

Last Altered: Monday, February 01, 2010 10:45:07 AM Eastern Standard Time  
Printed: Monday, February 01, 2010 10:58:37 AM Eastern Standard Time

Name: per0131078a  
Date: 31-Jan-2010  
Time: 22:05:33  
ID: IPB010  
Vial: 1:1,A

02-01-10



ID	Name	Trace	RT	Area	Response	Flags	Mod. Date	Mod. Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB010	Perchlorate	99 > 83	2.61	54.315	54.315	bb			0.0016			12.130	0.00
IPB010	Perchlorate-101	101 > 85											
IPB010	Perchlorate-O(18)	107 > 89	2.60	14165.403	14165.403	bb			0.4871	97.41	-2.59	1328.2...	

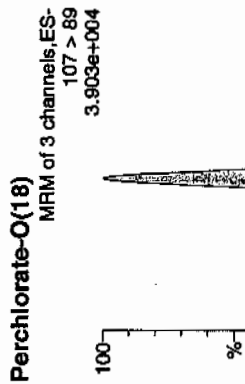
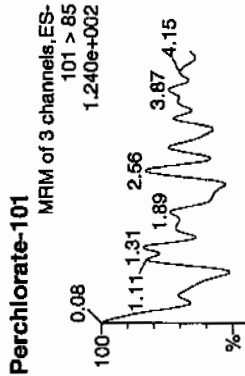
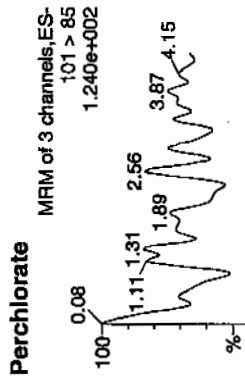
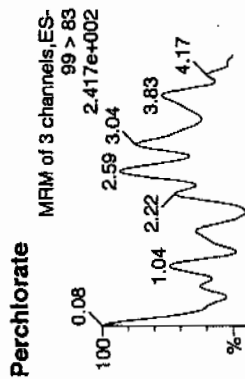
Quantify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020110a.qld

Last Altered: Tuesday, February 02, 2010 2:28:24 PM Eastern Standard Time  
Printed: Tuesday, February 02, 2010 2:30:40 PM Eastern Standard Time

Name: per0201008a  
Date: 01-Feb-2010  
Time: 15:37:36  
ID: IPB002  
Vial: 1:1,A

02-02-10



ID	Name	Trace	RT	Area	Response	Flags	Mod	Date	Time	ng/mL	%Rec	%Dev	S/N	Ion	Ratio
IPB002	Perchlorate	99 > 83													0.00
IPB002	Perchlorate-101	101 > 85													
IPB002	Perchlorate-O(18)	107 > 89	2.54	12466.273	12466.273	bb				0.4995	99.90	-0.10	3302.1...		



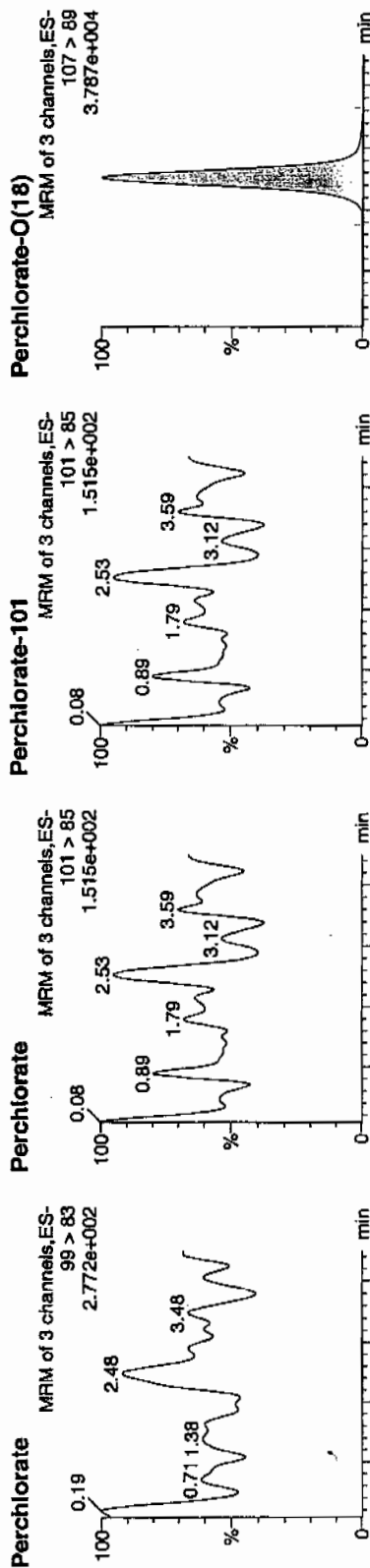
Quantify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020110a.qld

Last Altered: Tuesday, February 02, 2010 2:28:24 PM Eastern Standard Time  
Printed: Tuesday, February 02, 2010 2:30:40 PM Eastern Standard Time

Name: per0201010a  
Date: 01-Feb-2010  
Time: 15:52:41  
ID: IPB003  
Vial: 1:1,A

02-02-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	SN	Ion Ratio
IPB003	Perchlorate	99 > 83											0.00
IPB003	Perchlorate-101	101 > 85											
IPB003	Perchlorate-O(18)	107 > 89	2.51	12216.218	12216.218	bb			0.4895	97.90	-2.10	3557.9...	

Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charters W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020110a.qld

Last Altered: Tuesday, February 02, 2010 2:28:24 PM Eastern Standard Time

Printed: Tuesday, February 02, 2010 2:30:40 PM Eastern Standard Time

Name: per0201015a

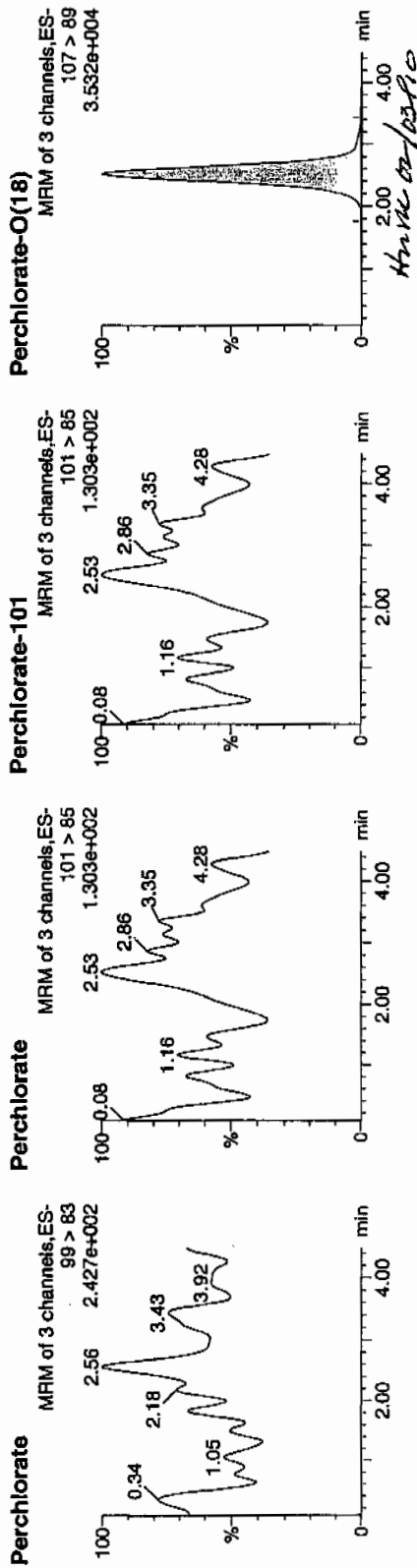
Date: 01-Feb-2010

Time: 16:30:26

ID: IPB004

Vial: 1:1,A

02-30-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/ml	%Rec	%Dev	SN	Ion Ratio
IPB004	Perchlorate	99 > 83											0.00
IPB004	Perchlorate-101	101 > 85											
IPB004	Perchlorate-O(18)	107 > 89	2.53	11317.529	11317.529	bb			0.4535	90.70	-9.30	873.039	

Quantity Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020110a.qld

Last Altered: Tuesday, February 02, 2010 2:28:24 PM Eastern Standard Time  
Printed: Tuesday, February 02, 2010 2:30:40 PM Eastern Standard Time

Name: per0201021a

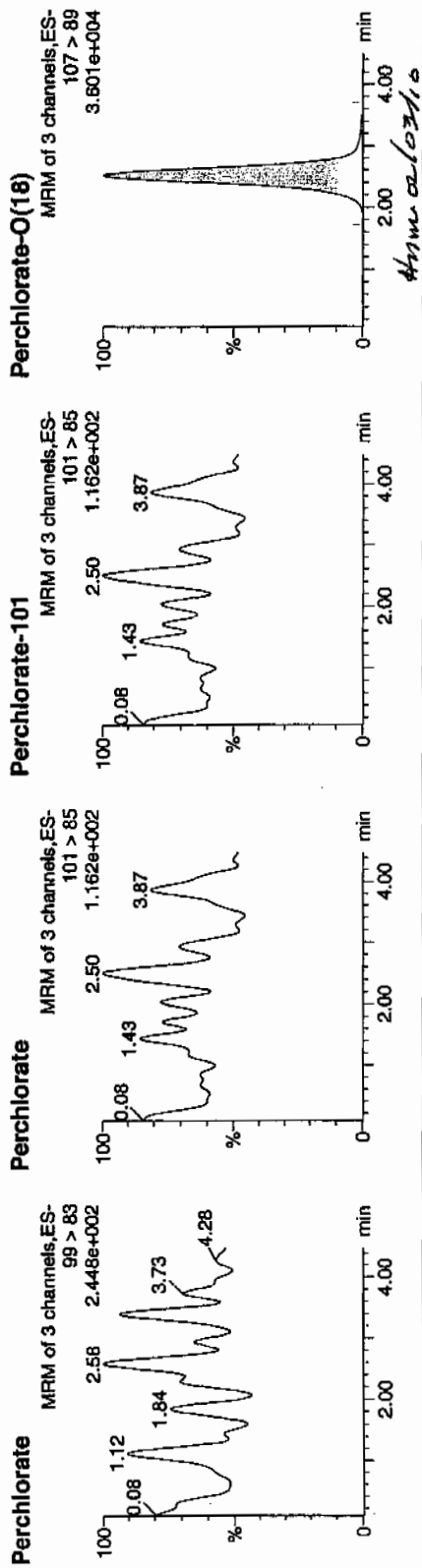
Date: 01-Feb-2010

Time: 17:15:41

ID: IPB005

Vial: 1:1,A

02-02-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	SN	Ion Ratio
IPB005	Perchlorate	99 > 83											0.00
IPB005	Perchlorate-101	101 > 85											
IPB005	Perchlorate-O(18)	107 > 89	2.51	11657.459	11657.459	bb			0.4671	93.42	-6.58	6561.5...	

Nairb.ref

;Positive ion monoisotopic and average masses from solution  
 ;of NaI/Rbi (2.0/0.05ug/ul) in 50/20 2-propanol/H<sub>2</sub>O.  
 ;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

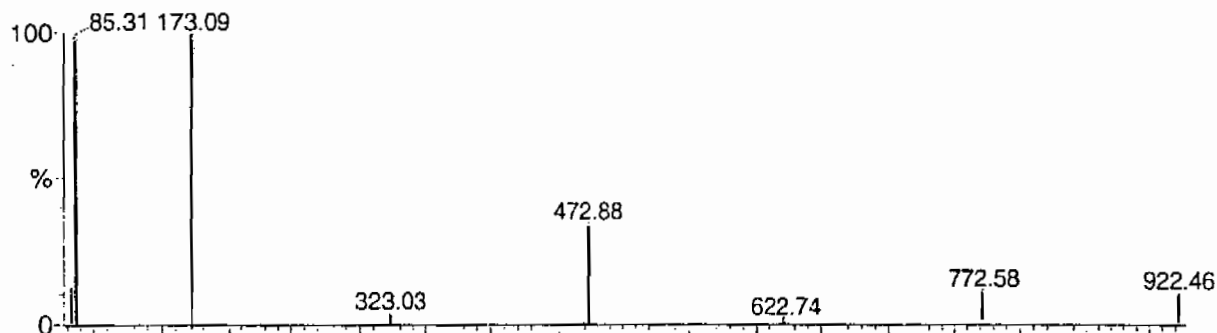
Page 1 of 1

Printed: Tue Jan 08 12:19:12 2008

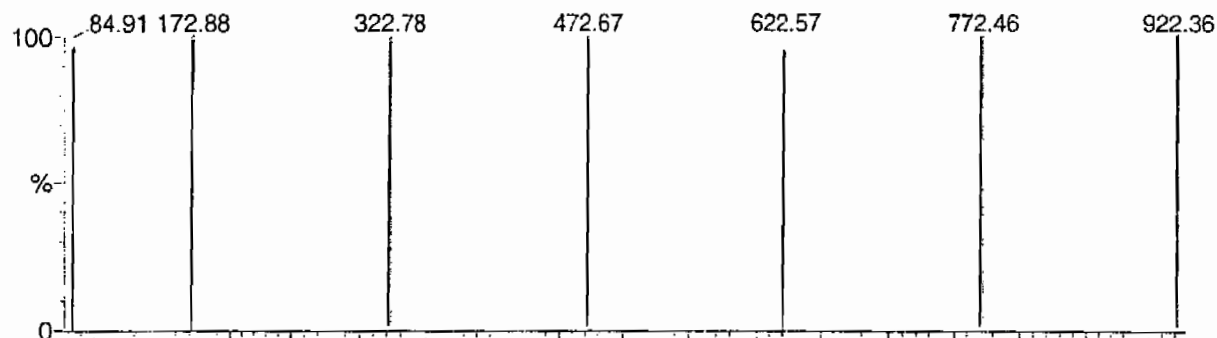
POINTS HIGHLIGHTED BY CURV 01-07-08

Data file: STATMS1 - Uncalibrated

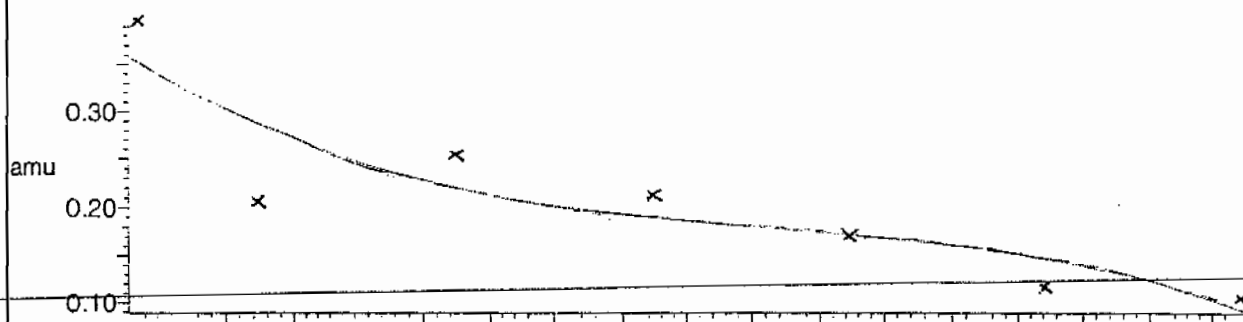
7 matches of 7 tested references



Reference file: Nairb

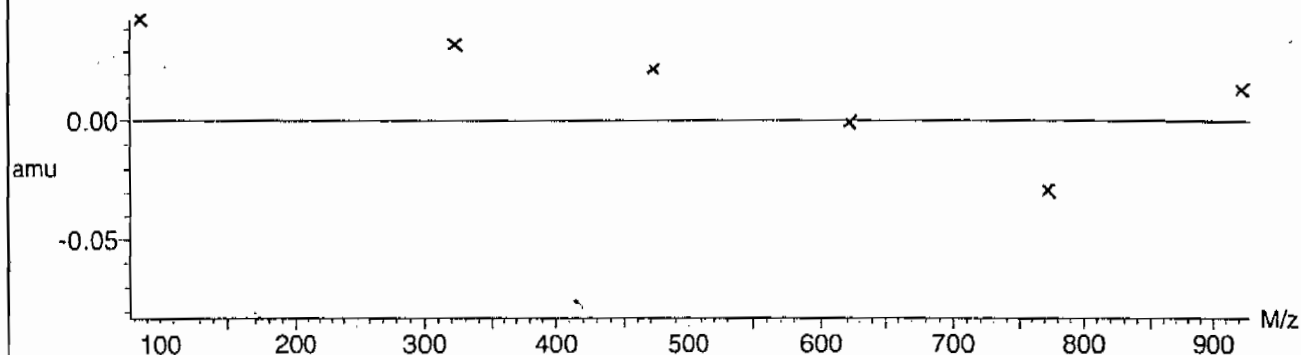


Mass difference (Raw - Ref mass)



Residuals

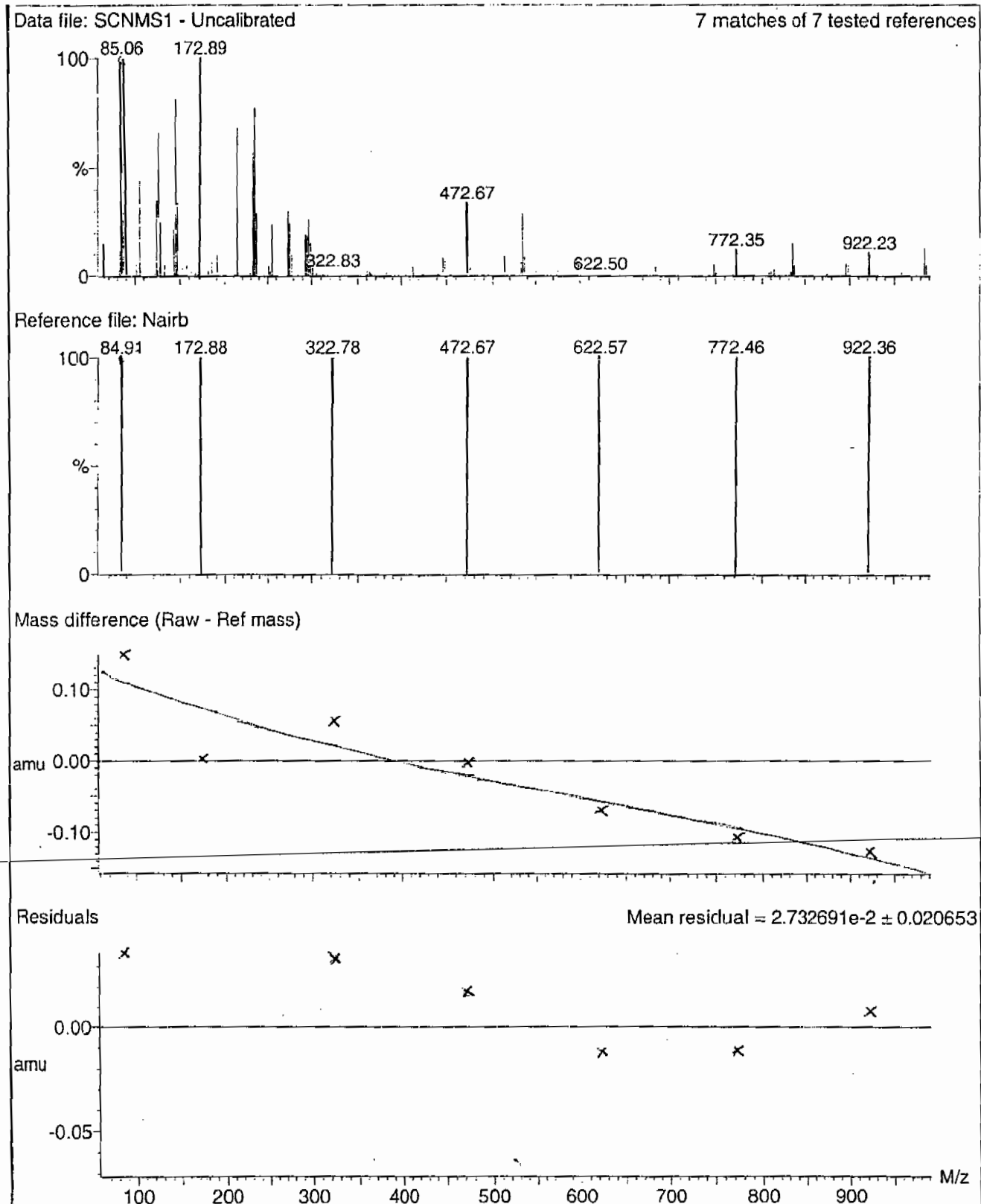
Mean residual =  $3.212012 \times 10^{-2} \pm 0.024108$



Calibration Report - MS1 Scanning

Page 1 of 1

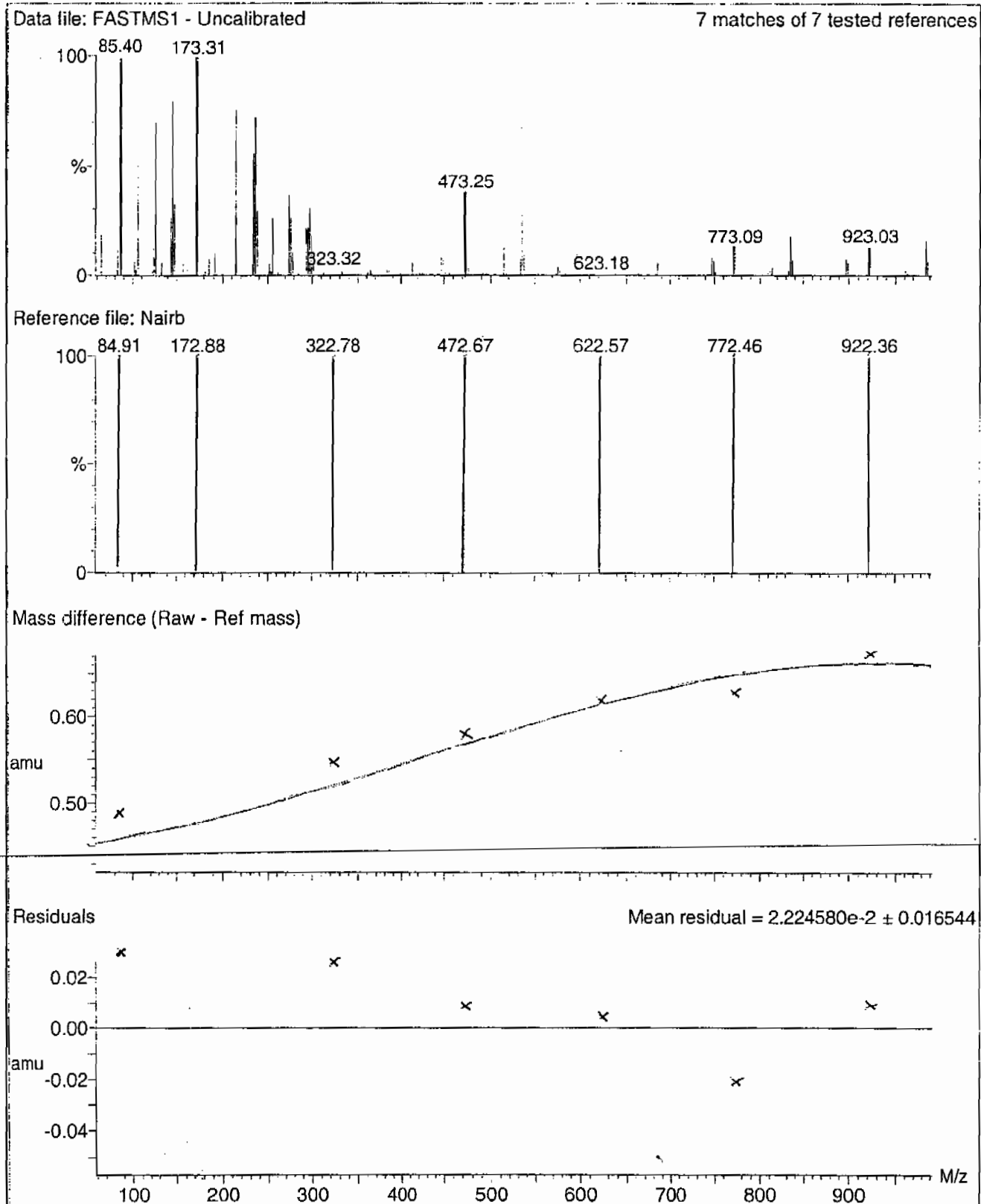
Printed: Tue Jan 08 12:20:09 2008



Calibration Report - MS1 Scan Speed Compensation

Page 1 of 1

Printed: Tue Jan 08 12:21:04 2008



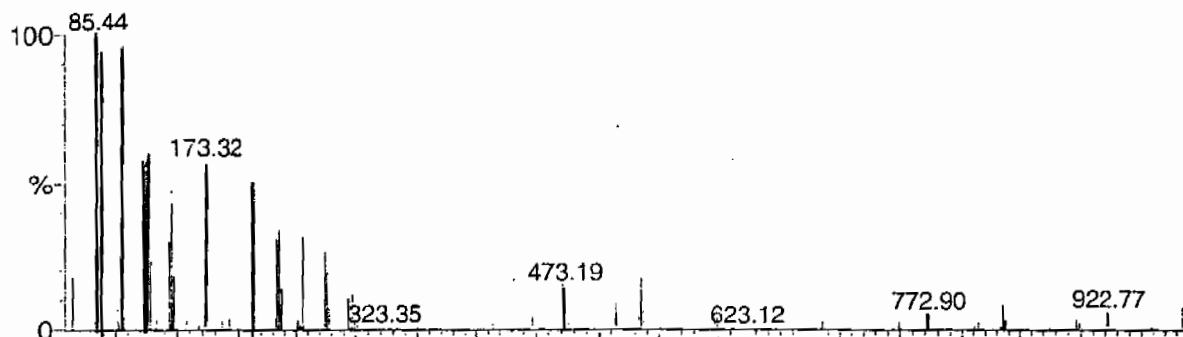
Calibration Report - MS2 Scan Speed Compensation

Page 1 of 1

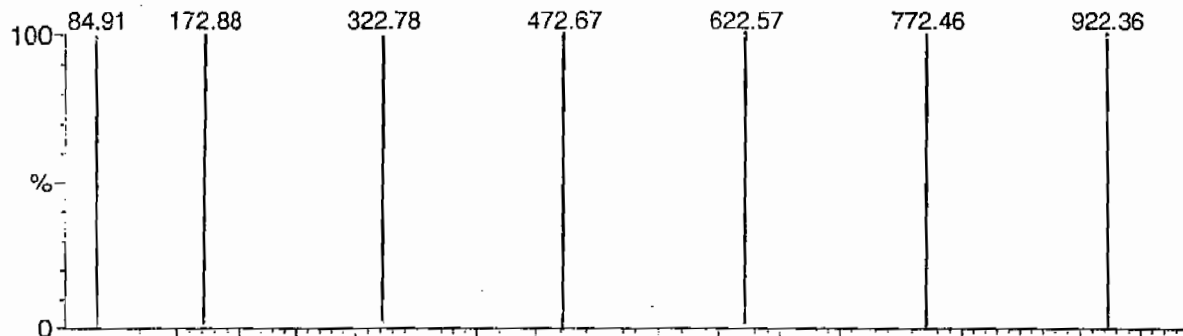
Printed: Tue Jan 08 12:23:51 2008

Data file: FASTMS2 - Uncalibrated

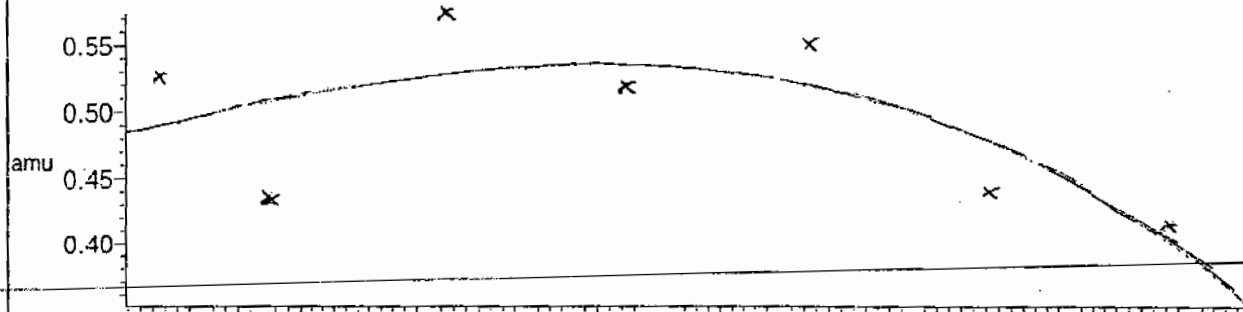
7 matches of 7 tested references



Reference file: Nairb

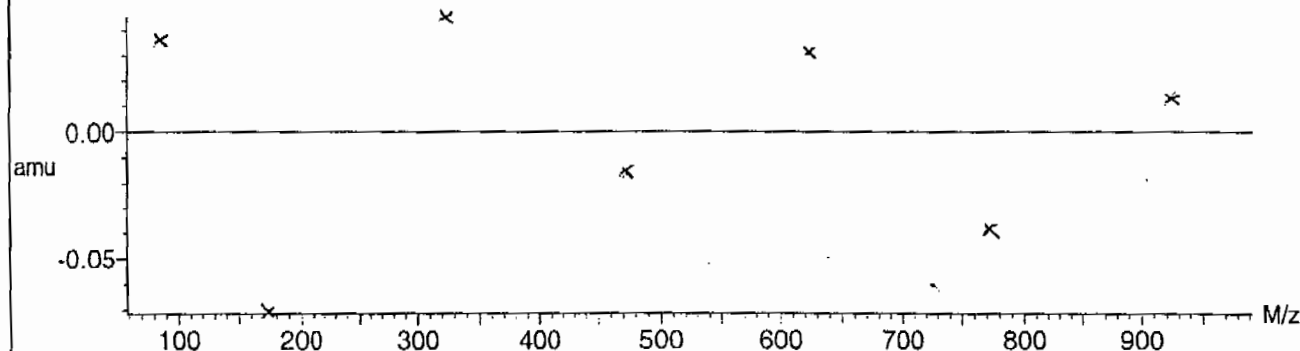


Mass difference (Raw - Ref mass)



Residuals

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





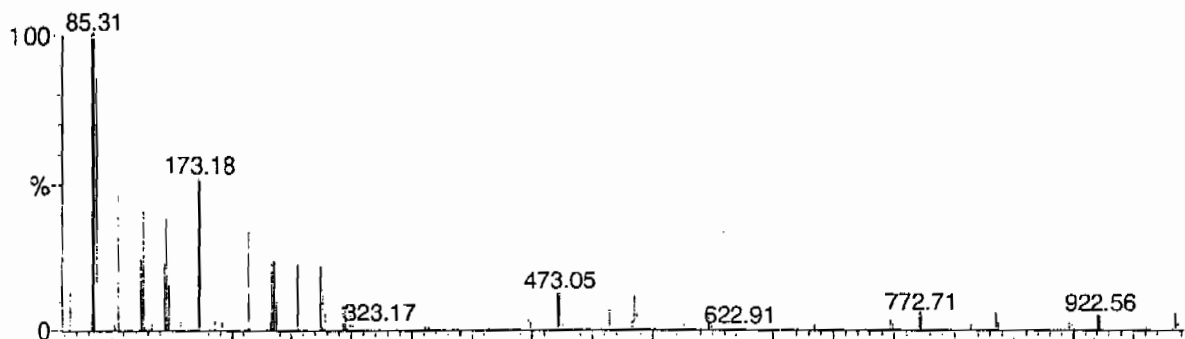
Calibration Report - MS2 Scanning

Page 1 of 1

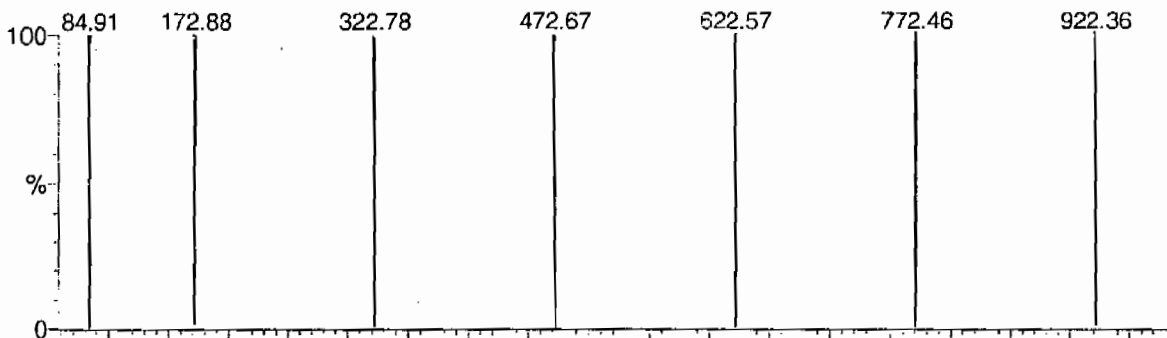
Printed: Tue Jan 08 12:22:56 2008

Data file: SCNMS2 - Uncalibrated

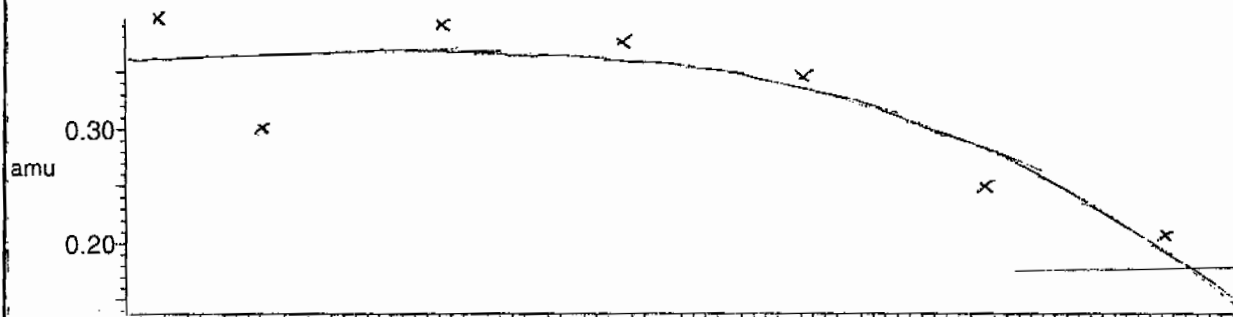
7 matches of 7 tested references



Reference file: Nairb

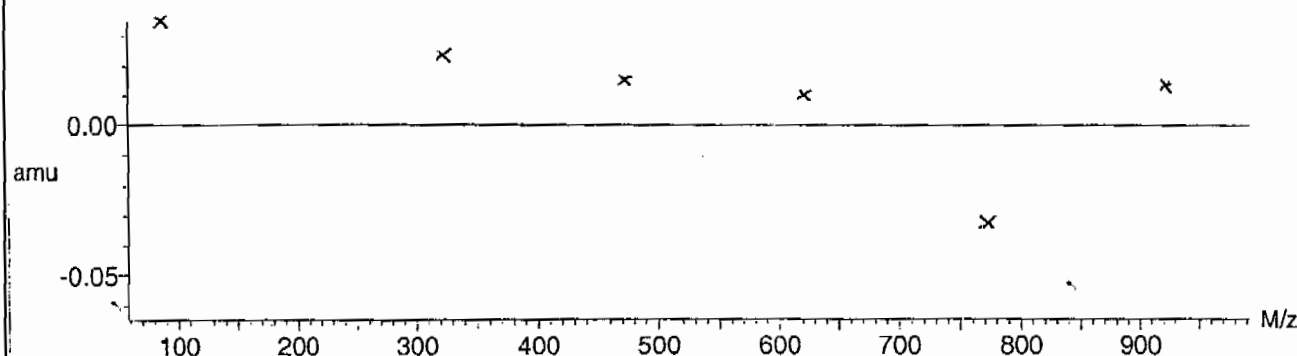


Mass difference (Raw - Ref mass)



Residuals

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



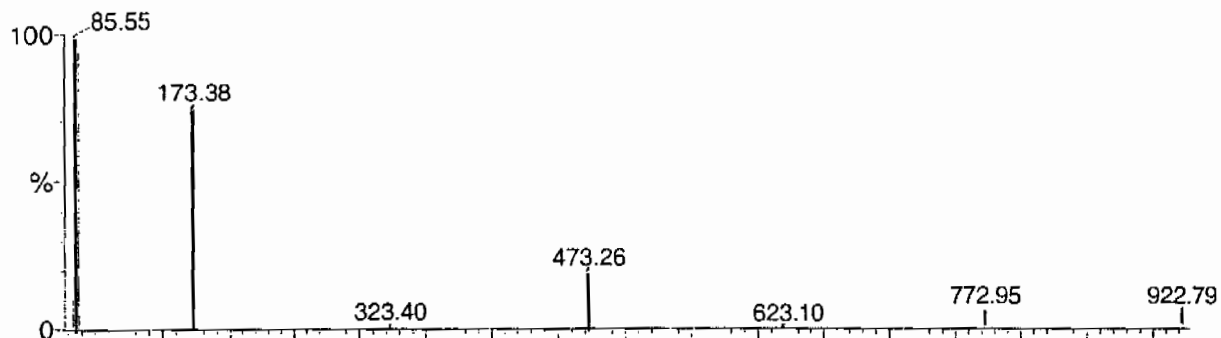
Calibration Report - MS2 Static

Page 1 of 1

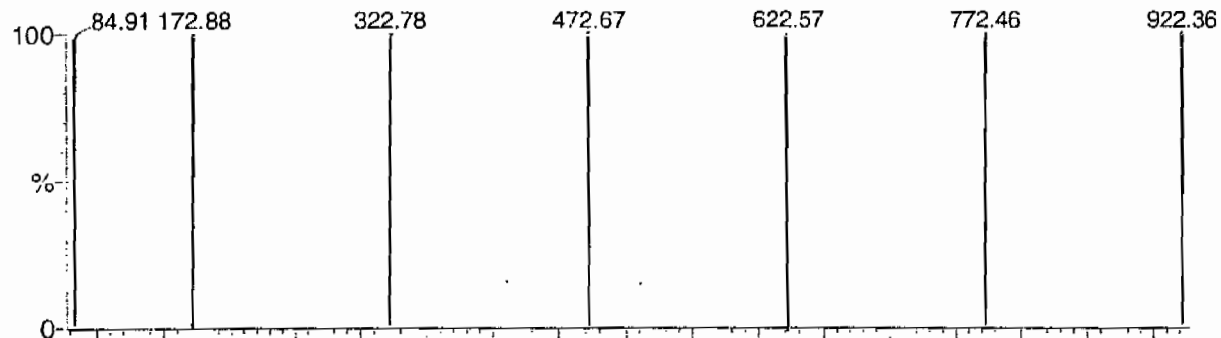
Printed: Tue Jan 08 12:21:59 2008

Data file: STATMS2 - Uncalibrated

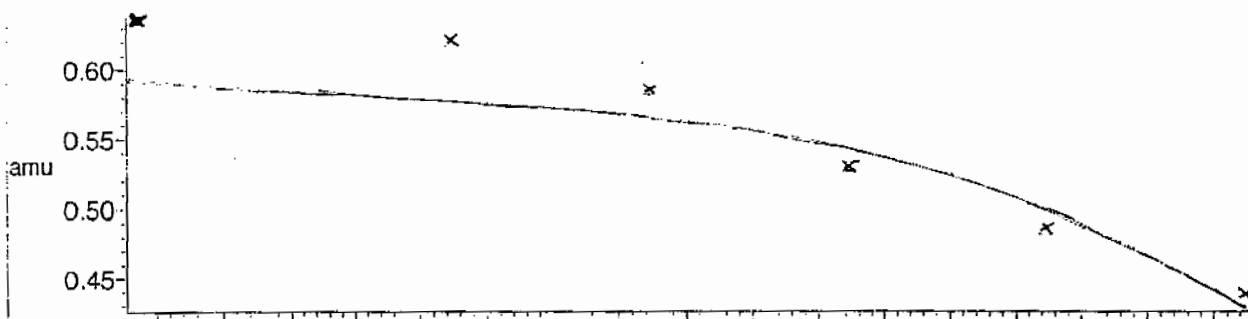
7 matches of 7 tested references



Reference file: Nairb

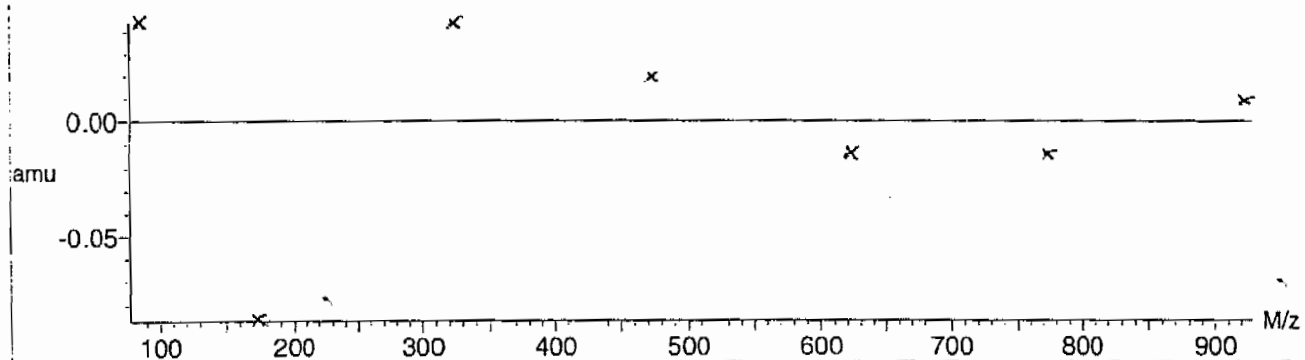


Mass difference (Raw - Ref mass)



Residuals

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



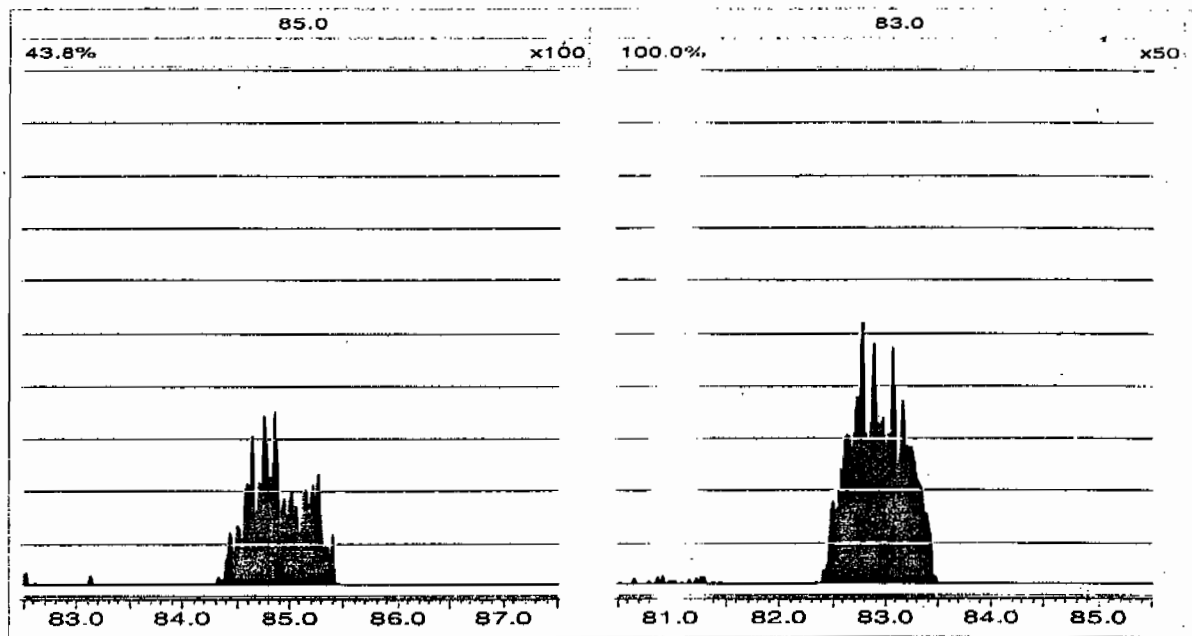
Tune Parameters

MassLynx 4.0 SP4

Page 1 of 1

File: C:\MassLynx\Perchlorate.PROVACQUDB\Perchlorate.IPR

Printed: Sunday, January 31, 2010 11:10:18 Eastern Standard Time



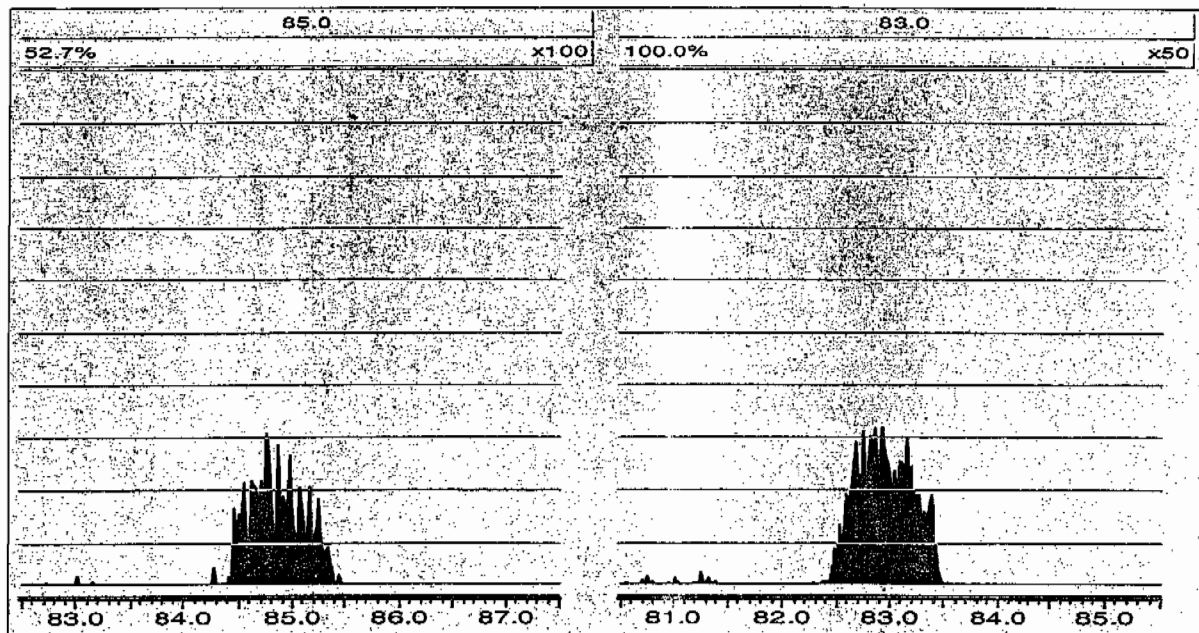
Tune Parameters

MassLynx 4.0 SP4

Page 1 of 1

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

Printed: Monday, February 01, 2010 12:58:34 Eastern Standard Time



Perchlorate RT And Area Summary

GEL Job No.(SDG): 10-1474-1

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	per0131006a	31-JAN-10	14758				
Lower Area Limit			7379				
Upper Area Limit			29516				
1202028960	per0131046a	31-JAN-10 18:02	13448.4	2.63	2.65055	1.008	
1202028961	per0131047a	31-JAN-10 18:10	13238.3	2.61	2.62565	1.006	
1202028966	per0131048a	31-JAN-10 18:17	13812.1	2.64	2.65053	1.004	
245807002	per0131074a	31-JAN-10 21:34	14508.8	2.59			

Perchlorate RT And Area Summary

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1474-1

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	per0201006a	01-FEB-10	12552.6				
Lower Area Limit			6276.3				
Upper Area Limit			25105.2				
245807001	per0201014a	01-FEB-10 16:22	11903	2.53	2.50148	.989	

# 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: 947198

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.

RE15-10-8081

Date Received: 29-JAN-10

GEL Job No (SDG): 10-1474-1

GEL Sample ID: 245807001

Date Filtered: 30-JAN-10

Injection Volume (uL): 20

%Solids:

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.050	ug/L	U	1	01-FEB-10 16:22	per0201014a
	Perchlorate Isotope Ratio						1	01-FEB-10 16:22	per0201014a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	01-FEB-10 16:22	per0201014a
	Perchlorate-O(18)			0.477	ug/L		1	01-FEB-10 16:22	per0201014a

<sup>^</sup> 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

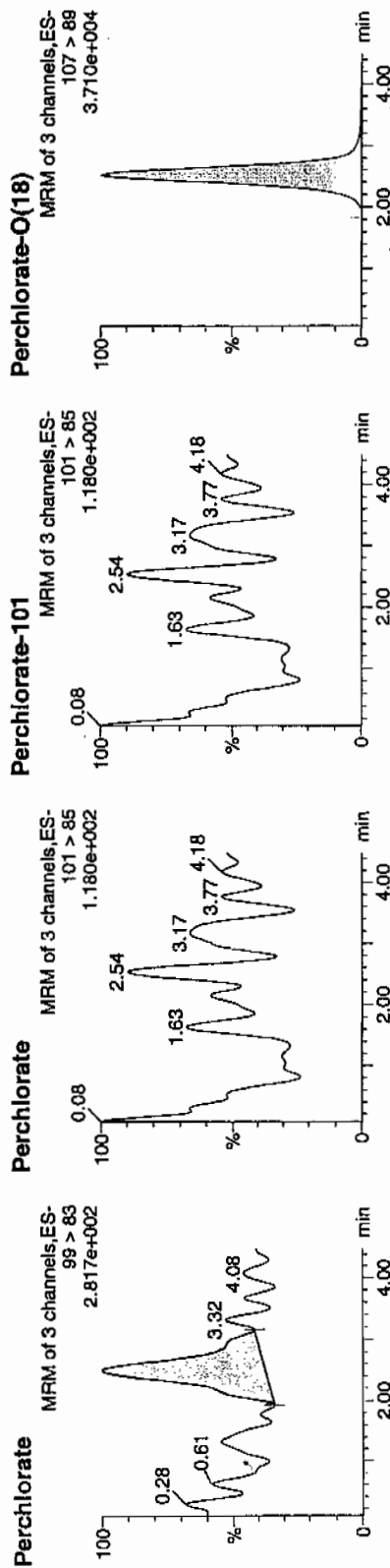
Dataset: C:\MassLynx\Perchlorate.PRO\per020110a.qld

Last Altered: Tuesday, February 02, 2010 2:28:24 PM Eastern Standard Time  
Printed: Tuesday, February 02, 2010 2:30:40 PM Eastern Standard Time

Name: per0201014a  
Date: 01-Feb-2010  
Time: 16:22:54  
ID: 245807001  
Vial: 1:3,C

02-02-10

12221109



ID	Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
245807001	Perchlorate	99 > 83	2.50	91.731	91.731	bb			0.0031			11.261	0.00
245807001	Perchlorate-101	101 > 85											
245807001	Perchlorate-O(18)	107 > 89	2.53	11902.968	11902.968	bb			0.4769	95.39	-4.61	3277.1...	

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: WATER

Extraction Batch ID: 947198

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.

RE15-10-8082

Date Received: 29-JAN-10

GEL Job No (SDG): 10-1474-1

GEL Sample ID: 245807002

Date Filtered: 30-JAN-10

Injection Volume (uL): 20

%Solids:

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.050	ug/L	U	1	31-JAN-10 21:34	per0131074a
	Perchlorate Isotope Ratio						1	31-JAN-10 21:34	per0131074a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	31-JAN-10 21:34	per0131074a
	Perchlorate-O(18)			0.499	ug/L		1	31-JAN-10 21:34	per0131074a

<sup>^</sup> 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

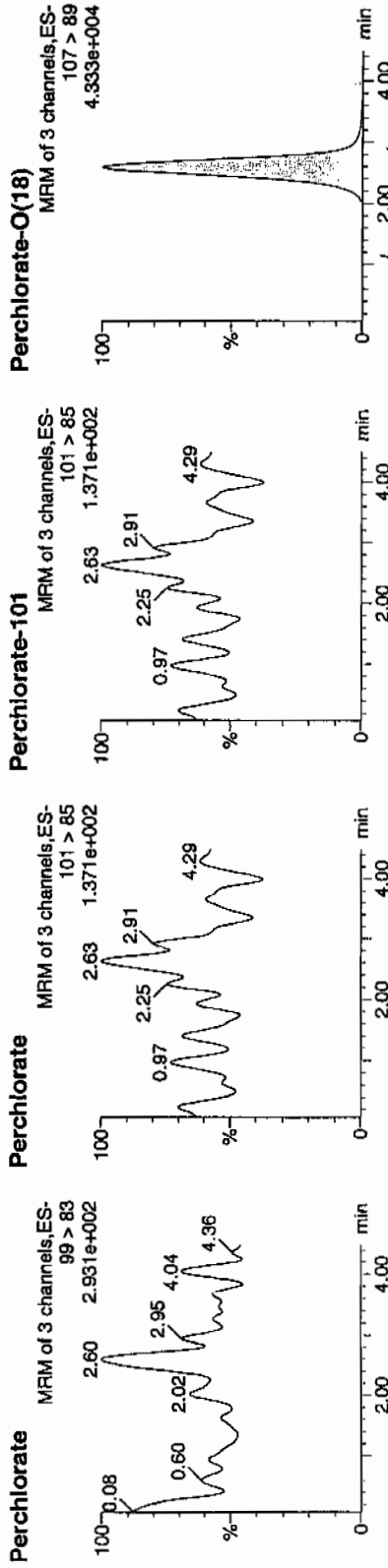
Dataset: C:\MassLynx\Perchlorate.PRO\per013110a.qld

Last Altered: Monday, February 01, 2010 10:45:07 AM Eastern Standard Time  
Printed: Monday, February 01, 2010 10:58:37 AM Eastern Standard Time

Name: per0131074a  
Date: 31-Jan-2010  
Time: 21:34:42  
ID: 245807002  
Vial: 2:4,E

1222 111

02-01-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	SN	Ion Ratio
245807002	Perchlorate	99 > 83											0.00
245807002	Perchlorate-101	101 > 85											
245807002	Perchlorate-O(18)	107 > 89	2.59	14508.780	14508.780	bb			0.4989	99.78	-0.22	1936.3...	

# STANDARDS DATA

Perchlorate Initial Calibration

GEL Job No.(SDG): 10-1474-1

Lab Name: General Engineering Laboratories

Lab Code: GEL

Instrument ID: LCMSMS Date Analyzed: 31-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: 33819.9  
 Response Type: External Standard  
 Curve Type: RF

Perchlorate Initial Calibration

GEL Job No.(SDG): 10-1474-1

Lab Name: General Engineering Laboratories

Lab Code: GEL

Instrument ID: LCMSMS Date Analyzed: 31-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-101

Coefficient of Determination:

Calibration Curve: 11367

Response Type: External Standard

Curve Type: RF

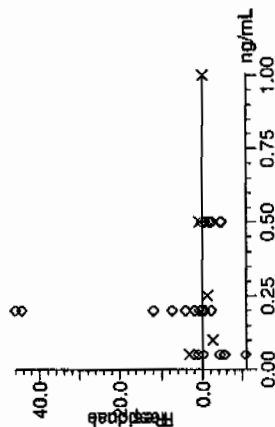
Quantify Calibration Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per013110a.qld

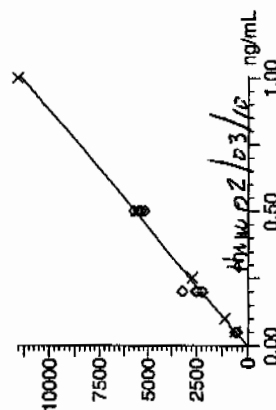
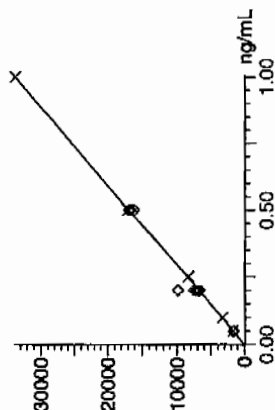
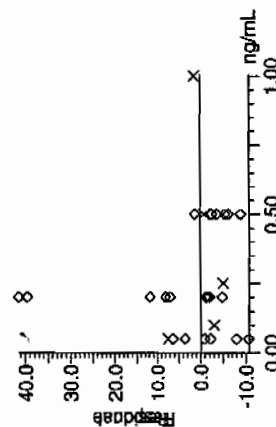
Last Altered: Monday, February 01, 2010 10:45:07 AM Eastern Standard Time  
Printed: Monday, February 01, 2010 10:58:37 AM Eastern Standard Time

Method: C:\MassLynx\Perchlorate.PRO\MethDB\per013110a.mdb 01 Feb 2010 10:44:50  
Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per013110a.cdb 01 Feb 2010 10:45:05

Compound name: Perchlorate  
Response Factor: 33819.9  
RRF SD: 737.507, % Relative SD: 2.18069  
Response type: External Std, Area  
Curve type: RF



Compound name: Perchlorate-101  
Response Factor: 11367  
RRF SD: 542.649, % Relative SD: 4.7739  
Response type: External Std, Area  
Curve type: RF

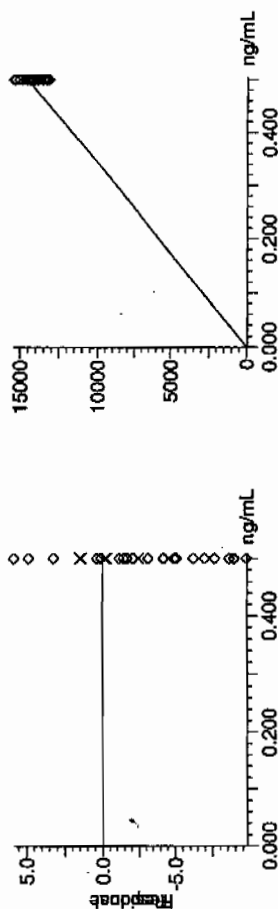


Pa 157  
Quantify Calibration Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per013110a.qld

Last Altered: Monday, February 01, 2010 10:45:07 AM Eastern Standard Time  
Printed: Monday, February 01, 2010 10:58:37 AM Eastern Standard Time

1321  
Compound name: Perchlorate-O(18)  
Response Factor: 29083  
RRF SD: 471.184, % Relative SD: 1.62014  
Response type: External Std, Area  
Curve type: RF





Perchlorate Initial Calibration

GEL Job No.(SDG): 10-1474-1

Lab Name: General Engineering Laboratories

Lab Code: GEL

Instrument ID: LCMSMS Date Analyzed: 01-FEB-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: 29509.02

Response Type: External Standard

Curve Type: RF

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories GEL Job No.(SDG): 10-1474-1

Lab Code: GEL

Instrument ID: LCMSMS Date Analyzed: 01-FEB-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: 9714.282

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\per020110a.qld

Last Altered: Tuesday, February 02, 2010 2:28:24 PM Eastern Standard Time

Printed: Tuesday, February 02, 2010 2:30:40 PM Eastern Standard Time

Method: C:\MassLynx\Perchlorate.PRO\MethDB\per020110a.mdb 02 Feb 2010 07:54:05

Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per020110a.cdb 02 Feb 2010 14:28:23

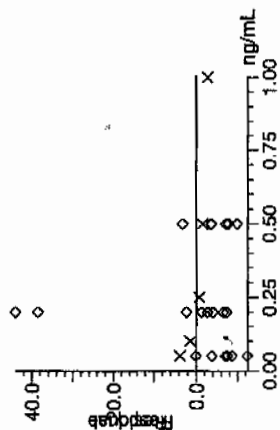
Compound name: Perchlorate

Response Factor: 29509

RRF SD: 760.836, % Relative SD: 2.57832

Response type: External Std, Area

Curve type: RF



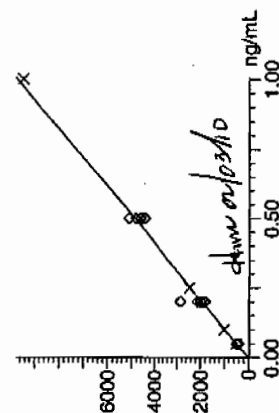
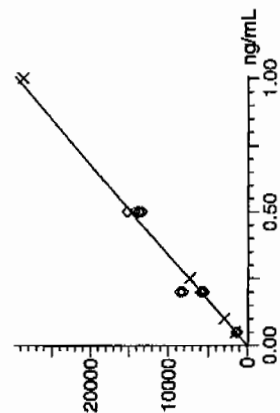
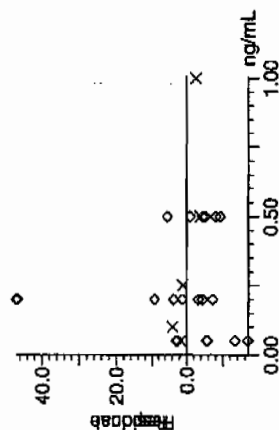
Compound name: Perchlorate-101

Response Factor: 9714.29

RRF SD: 312.663, % Relative SD: 3.21858

Response type: External Std, Area

Curve type: RF



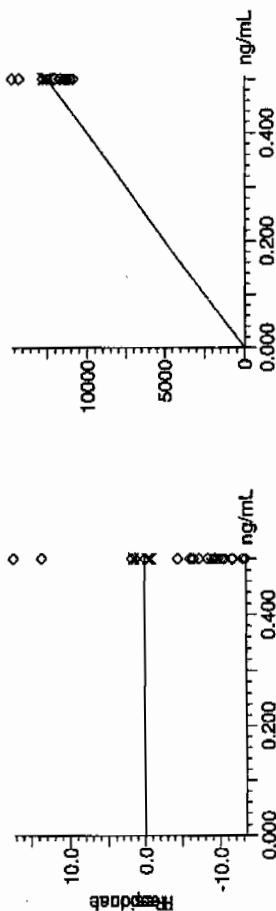
02-02-10

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

Dataset: C:\MassLynx\Perchlorate.PRO\per020110a.qld

Last Altered: Tuesday, February 02, 2010 2:28:24 PM Eastern Standard Time  
Printed: Tuesday, February 02, 2010 2:30:40 PM Eastern Standard Time

Compound name: Perchlorate-O(18)  
Response Factor: 24957  
RRF SD: 251.821, % Relative SD: 1.00902  
Response type: External Std, Area  
Curve type: RIF



Perchlorate Initial Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1474-1

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.49	98.34	31-JAN-10 13:23	per0131009a
Perchlorate Isotope Ratio		2.89		31-JAN-10 13:23	per0131009a
Perchlorate-101	.5	.51	101.28	31-JAN-10 13:23	per0131009a
Perchlorate	.5	.52	103.11	01-FEB-10 15:45	per0201009a
Perchlorate Isotope Ratio		2.98		01-FEB-10 15:45	per0201009a
Perchlorate-101	.5	.53	105.27	01-FEB-10 15:45	per0201009a

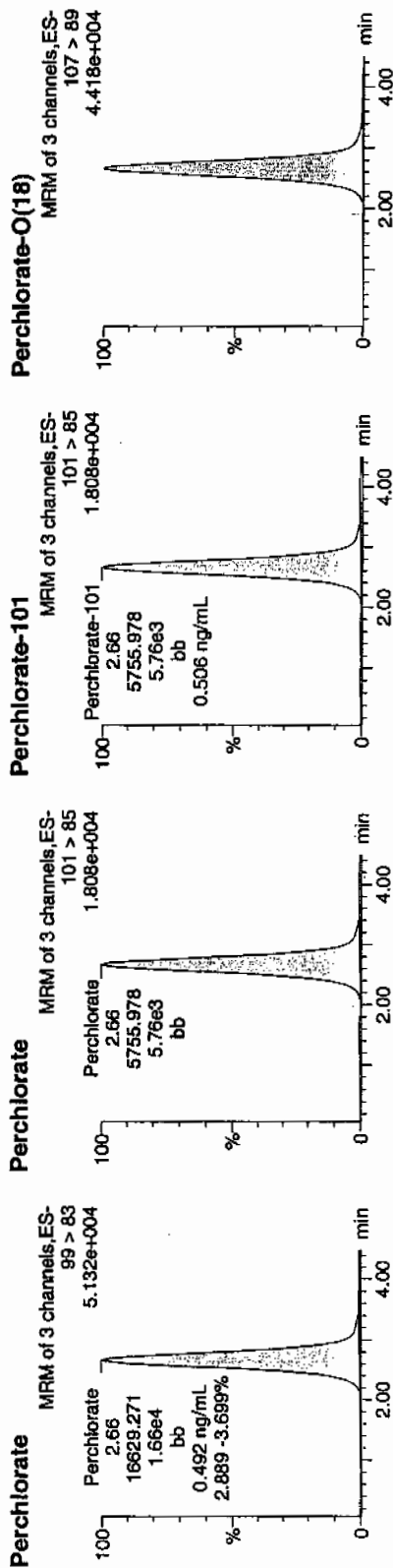
Quantify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per013110a.qld

Last Altered: Monday, February 01, 2010 10:45:07 AM Eastern Standard Time  
Printed: Monday, February 01, 2010 10:58:37 AM Eastern Standard Time

Name: per0131009a  
Date: 31-Jan-2010  
Time: 13:23:29  
ID: WCL100128-06ICV  
Vial: 1:2,A

Pass  
and  
02-01-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100128-06ICV	Perchlorate	99 > 83	2.66	16629.271	16629.271	bb			0.4917	98.34	-1.66	1435.3...	2.89
WCL100128-06ICV	Perchlorate-101	101 > 85	2.66	5755.978	5755.978	bb			0.5084	101.28	1.28	591.471	
WCL100128-06ICV	Perchlorate-O(18)	107 > 89	2.66	14373.936	14373.936	bb			0.4942	98.85	-1.15	3087.1...	

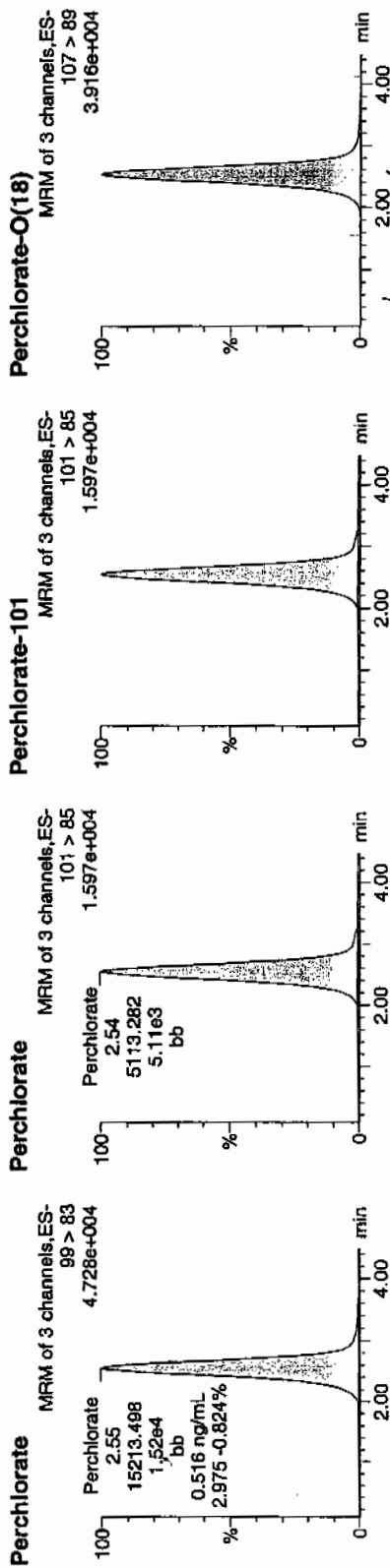
**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charters W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020110a.qtd

Last Altered: Tuesday, February 02, 2010 2:28:24 PM Eastern Standard Time  
Printed: Tuesday, February 02, 2010 2:30:40 PM Eastern Standard Time

Name: per0201009a  
Date: 01-Feb-2010  
Time: 15:45:09  
ID: WCL100128-06ICV  
Vial: 1:2,A

Per02  
02-02-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100128-06ICV	Perchlorate	99 > 83	2.55	15213.498	15213.498	bb			0.5156	103.11	3.11	1234.0...	2.98
WCL100128-06ICV	Perchlorate-101	101 > 85	2.54	5113.282	5113.282	bb			0.5264	105.27	5.27	2547.6...	
WCL100128-06ICV	Perchlorate-O(18)	107 > 89	2.53	12695.416	12695.416	bb			0.5087	101.74	1.74	962.638	

Perchlorate Continuing Calibration Verification

GEL Job No.(SDG): 10-1474-1

Lab Name: General Engineering Laboratories

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.48	95.54	31-JAN-10 14:54	per0131021a
Perchlorate Isotope Ratio		2.92		31-JAN-10 14:54	per0131021a
Perchlorate-101	.5	.49	97.46	31-JAN-10 14:54	per0131021a
Perchlorate	.5	.48	95.21	31-JAN-10 16:17	per0131032a
Perchlorate Isotope Ratio		3.02		31-JAN-10 16:17	per0131032a
Perchlorate-101	.5	.47	93.93	31-JAN-10 16:17	per0131032a
Perchlorate	.5	.48	95.2	31-JAN-10 17:40	per0131043a
Perchlorate Isotope Ratio		2.94		31-JAN-10 17:40	per0131043a
Perchlorate-101	.5	.48	96.44	31-JAN-10 17:40	per0131043a
Perchlorate	.5	.5	99.25	31-JAN-10 19:03	per0131054a
Perchlorate Isotope Ratio		3.14		31-JAN-10 19:03	per0131054a
Perchlorate-101	.5	.47	93.9	31-JAN-10 19:03	per0131054a
Perchlorate	.5	.5	100.12	31-JAN-10 20:26	per0131065a



Perchlorate Continuing Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1474-1

Lab Code: GEL

Reporting Units: ug/L

Perchlorate Isotope Ratio		3.15		31-JAN-10 20:26	per0131065a
Perchlorate-101	.5	.47	94.61	31-JAN-10 20:26	per0131065a
Perchlorate	.5	.49	97.71	31-JAN-10 21:57	per0131077a
Perchlorate Isotope Ratio		3.19		31-JAN-10 21:57	per0131077a
Perchlorate-101	.5	.46	91.15	31-JAN-10 21:57	per0131077a
Perchlorate	.5	.48	96.42	01-FEB-10 17:08	per0201020a
Perchlorate Isotope Ratio		2.96		01-FEB-10 17:08	per0201020a
Perchlorate-101	.5	.49	98.95	01-FEB-10 17:08	per0201020a

Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per013110a.qld

Last Altered: Monday, February 01, 2010 10:45:07 AM Eastern Standard Time  
Printed: Monday, February 01, 2010 10:58:37 AM Eastern Standard Time

Name: per0131021a

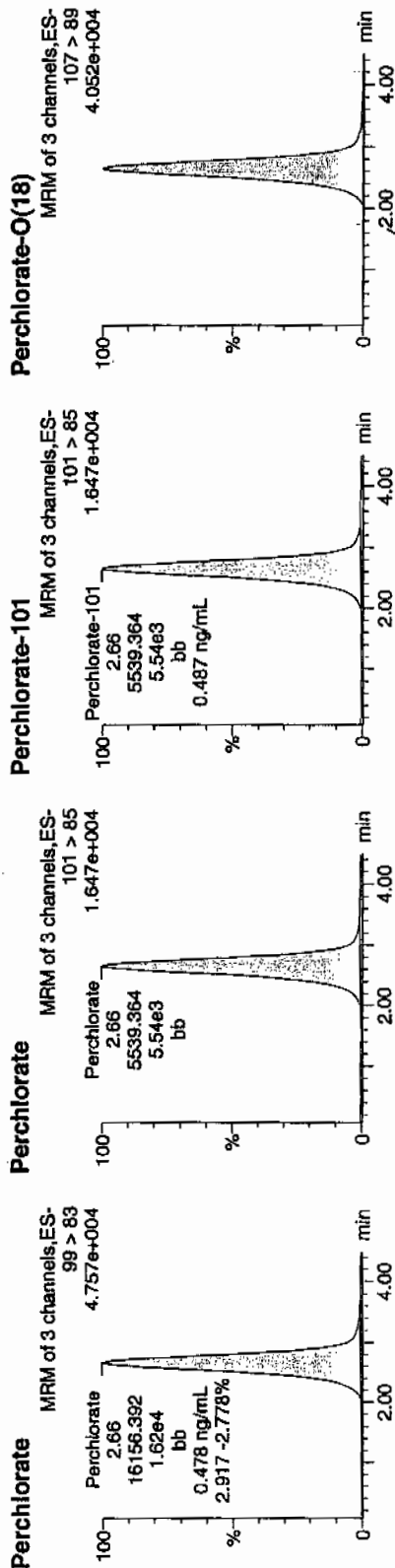
Date: 31-Jan-2010

Time: 14:54:02

ID: WCL100128-06CCV

Vial: 1:2,A

Pure  
and  
02-01-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	SN	Ion Ratio
WCL100128-06CCV	Perchlorate	99 > 83	2.66	16156.392	16156.392	bb			0.4777	95.54	-4.46	559.772	2.92
WCL100128-06CCV	Perchlorate-101	101 > 85	2.66	5539.364	5539.364	bb			0.4873	97.46	-2.54	691.093	
WCL100128-06CCV	Perchlorate-O(18)	107 > 89	2.65	13809.432	13809.432	bb			0.4748	94.97	-5.03	2631.7...	

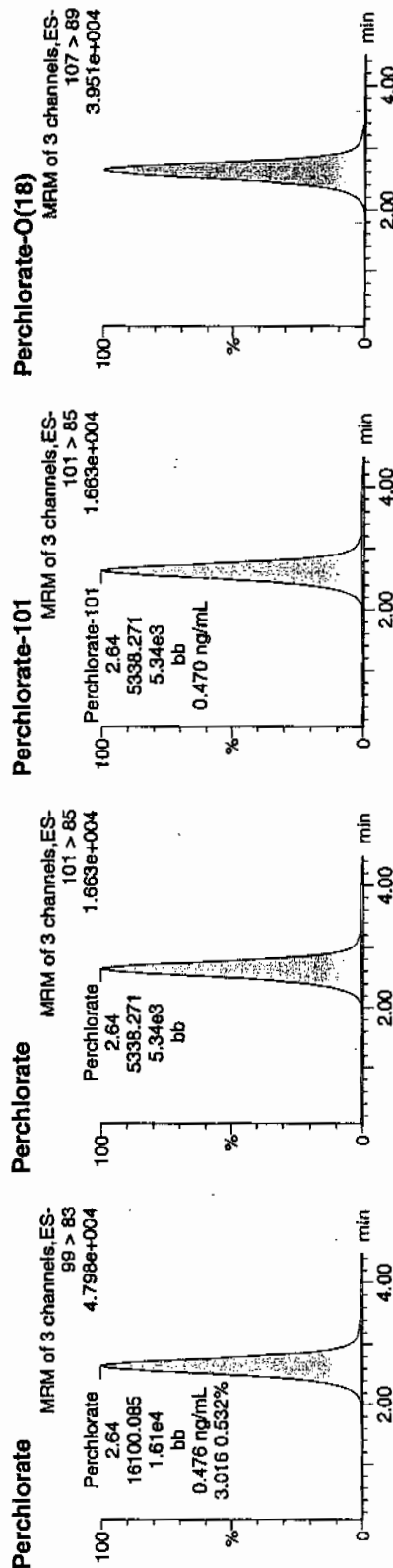
Quantify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per013110a.qld

Last Altered: Monday, February 01, 2010 10:45:07 AM Eastern Standard Time  
Printed: Monday, February 01, 2010 10:58:37 AM Eastern Standard Time

Name: per0131032a  
Date: 31-Jan-2010  
Time: 16:17:01  
ID: WCL100128-06CCV  
Vial: 1:2,A

Per0131032a  
01-01-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100128-06CCV	Perchlorate	99 > 83	2.64	16100.085	16100.085	bb			0.4761	95.21	-4.79	1980.2...	3.02
WCL100128-06CCV	Perchlorate-101	101 > 85	2.64	5338.271	5338.271	bb			0.4696	93.93	-6.07	931.388	
WCL100128-06CCV	Perchlorate-O(18)	107 > 89	2.63	13123.846	13123.846	bb			0.4513	90.25	-9.75	686.121	

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

Dataset: C:\MassLynx\Perchlorate.PRO\per013110a.qld

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Printed: Monday, February 01, 2010 10:58:37 AM Eastern Standard Time

Name: per0131043a

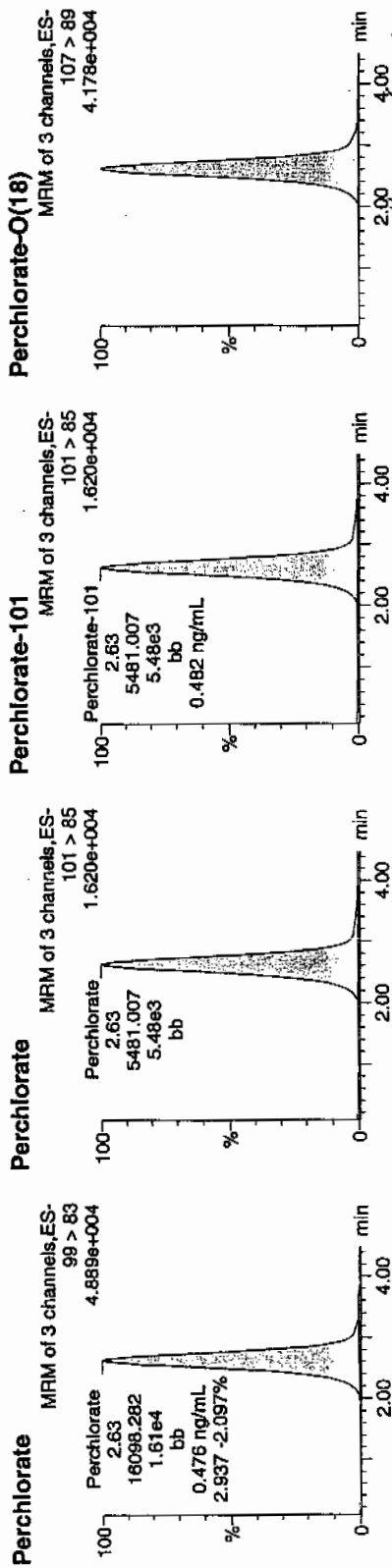
Date: 31-Jan-2010

Time: 17:40:03

ID: WCL100128-06CCV

Vial: 1:2,A

Pass  
and  
02-01-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	SN	Ion Ratio
WCL100128-06CCV	Perchlorate	99 > 83	2.63	16098.282	16098.282	bb			0.4760	95.20	-4.80	1056.1...	2.94
WCL100128-06CCV	Perchlorate-101	101 > 85	2.63	5481.007	5481.007	bb			0.4822	96.44	-3.56	523.363	
WCL100128-06CCV	Perchlorate-O(18)	107 > 89	2.61	13816.302	13816.302	bb			0.4751	95.01	-4.99	10733...	

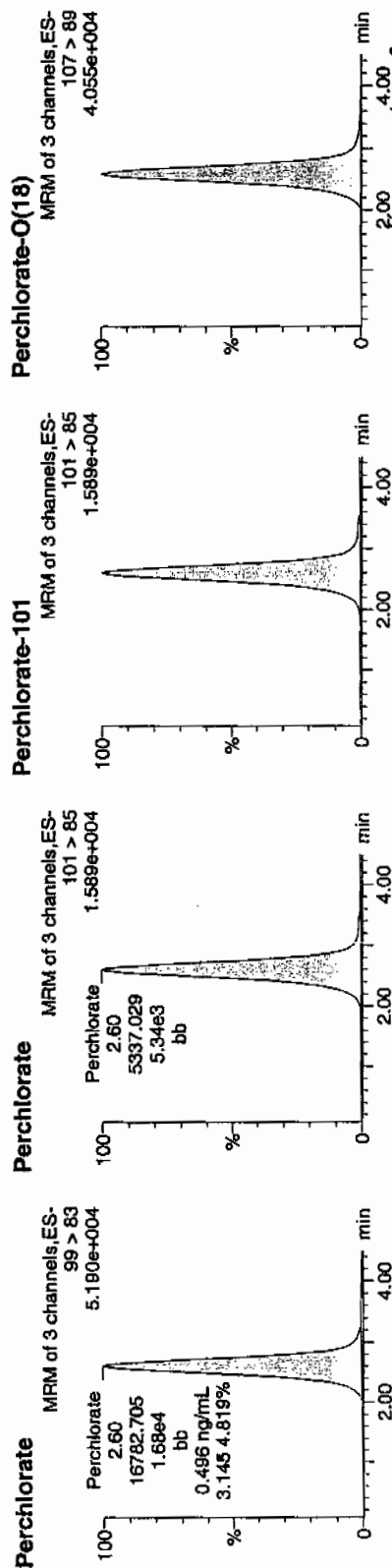
**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per013110a.qld

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Printed: Monday, February 01, 2010 10:58:37 AM Eastern Standard Time

Name: per0131054a  
Date: 31-Jan-2010  
Time: 19:03:06  
ID: WCL100128-06CCV  
Vial: 1:2,A

*Per  
and  
02-01-10*



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100128-06CCV	Perchlorate	99 > 83	2.60	16782.705	16782.705	bb			0.4962	99.25	-0.75	363.629	3.14
WCL100128-06CCV	Perchlorate-101	101 > 85	2.60	5337.029	5337.029	bb			0.4695	93.90	-6.10	1594.0...	
WCL100128-06CCV	Perchlorate-O(18)	107 > 89	2.60	13526.200	13526.200	bb			0.4651	93.02	-6.98	3181.7...	

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

Dataset: C:\MassLynx\Perchlorate.PRO\per013110a.qld

Last Altered: Monday, February 01, 2010 10:45:07 AM Eastern Standard Time  
Printed: Monday, February 01, 2010 10:58:37 AM Eastern Standard Time

Name: per0131065a

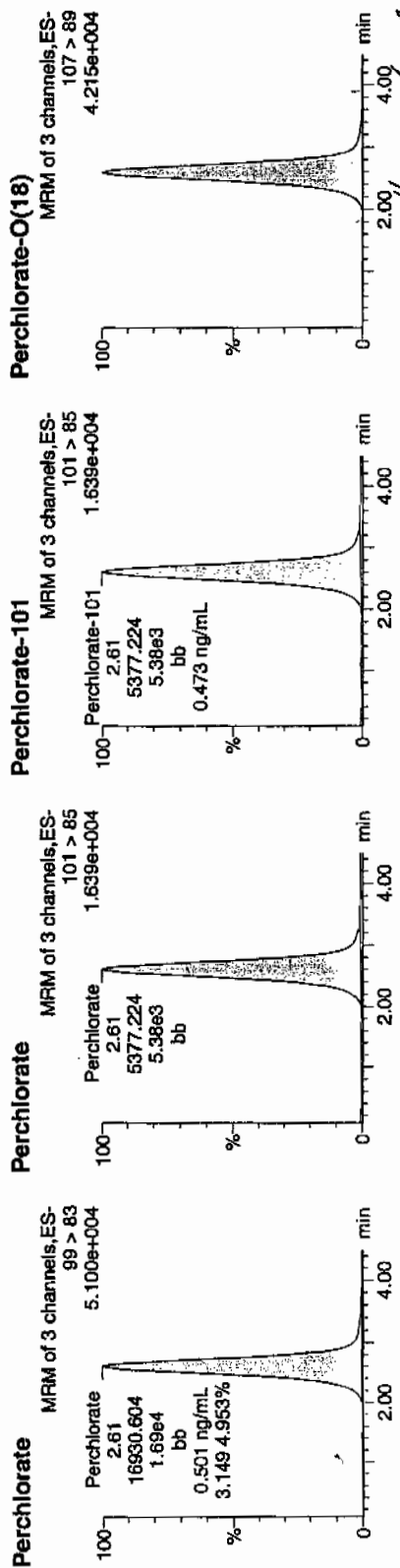
Date: 31-Jan-2010

Time: 20:26:26

ID: WCL100128-06CCV

Vial: 1:2,A

*Per  
02-01-10*



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100128-06CCV	Perchlorate	99 > 83	2.61	16930.604	16930.604	bb			0.5006	100.12	0.12	2310.5...	3.15
WCL100128-06CCV	Perchlorate-101	101 > 85	2.61	5377.224	5377.224	bb			0.4731	94.61	-5.39	916.330	
WCL100128-06CCV	Perchlorate-O(18)	107 > 89	2.60	13933.124	13933.124	bb			0.4791	95.82	-4.18	5137.3...	

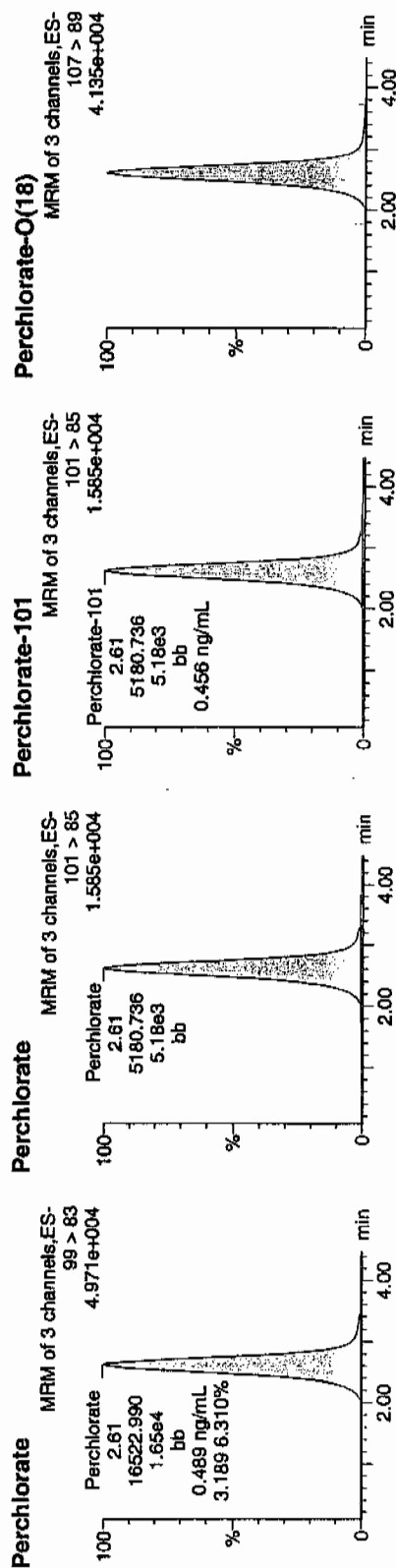
Quantify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per013110a.qld

Last Altered: Monday, February 01, 2010 10:45:07 AM Eastern Standard Time  
Printed: Monday, February 01, 2010 10:58:37 AM Eastern Standard Time

Name: per0131077a  
Date: 31-Jan-2010  
Time: 21:57:45  
ID: WCL100128-06CCV  
Vial: 1:2,A

*Per*  
*and*  
*01-31-10*



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	SN/Int	Ratio
WCL100128-06CCV	Perchlorate	99 > 83	2.61	16522.990	16522.990	bb			0.4886	97.71	-2.29	1711.4...	3.19
WCL100128-06CCV	Perchlorate-101	101 > 85	2.61	5180.736	5180.736	bb			0.4558	91.15	-8.85	1110.0...	
WCL100128-06CCV	Perchlorate-O(18)	107 > 89	2.60	13635.730	13635.730	bb			0.4589	93.77	-6.23	6209.2...	

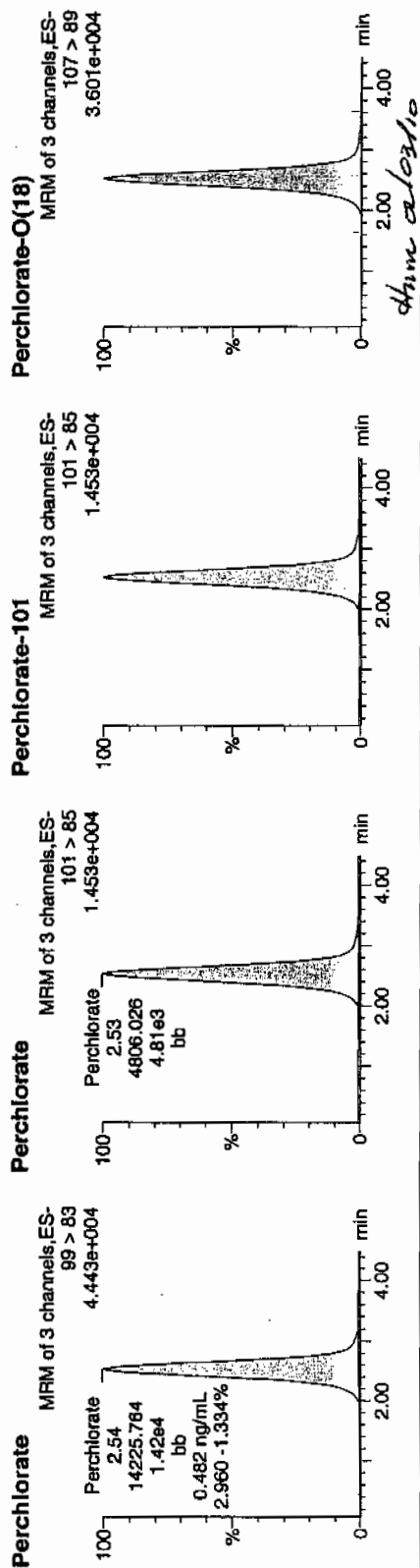
**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charliers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020110a.qld

Last Altered: Tuesday, February 02, 2010 2:28:24 PM Eastern Standard Time  
Printed: Tuesday, February 02, 2010 2:30:40 PM Eastern Standard Time

Name: per0201020a  
Date: 01-Feb-2010  
Time: 17:08:09  
ID: WCL100128-06CCV  
Vial: 1:2,A

*Pure  
and  
02-01-10*



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100128-06CCV	Perchlorate	99 > 83	2.54	14225.764	14225.764	bb			0.4821	96.42	-3.58	786.613	2.96
WCL100128-06CCV	Perchlorate-101	101 > 85	2.53	4806.026	4806.026	bb			0.4947	98.95	-1.05	491.086	
WCL100128-06CCV	Perchlorate-O(18)	107 > 89	2.51	11571.769	11571.769	bb			0.4637	92.73	-7.27	6320.0...	



Perchlorate MDL Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1474-1

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.05	.05	99.8	31-JAN-10 13:38	per0131011a
Perchlorate Isotope Ratio		2.79		31-JAN-10 13:38	per0131011a
Perchlorate-101	.05	.05	106.42	31-JAN-10 13:38	per0131011a
Perchlorate	.05	.05	101.06	31-JAN-10 15:09	per0131023a
Perchlorate Isotope Ratio		3.03		31-JAN-10 15:09	per0131023a
Perchlorate-101	.05	.05	99.13	31-JAN-10 15:09	per0131023a
Perchlorate	.05	.05	94.76	31-JAN-10 16:32	per0131034a
Perchlorate Isotope Ratio		3.06		31-JAN-10 16:32	per0131034a
Perchlorate-101	.05	.05	92.11	31-JAN-10 16:32	per0131034a
Perchlorate	.05	.04	89.19	31-JAN-10 17:55	per0131045a
Perchlorate Isotope Ratio		2.97		31-JAN-10 17:55	per0131045a

Perchlorate MDL Verification

GEL Job No.(SDG): 10-1474-1

Lab Name: General Engineering Laboratories

Lab Code: GEL

Reporting Units: ug/L

Perchlorate-101	.05	.04	89.43	31-JAN-10 17:55	per0131045a
Perchlorate	.05	.05	95.73	31-JAN-10 19:18	per0131056a
Perchlorate Isotope Ratio		2.68		31-JAN-10 19:18	per0131056a
Perchlorate-101	.05	.05	106.32	31-JAN-10 19:18	per0131056a
Perchlorate	.05	.05	102.23	31-JAN-10 20:41	per0131067a
Perchlorate Isotope Ratio		2.94		31-JAN-10 20:41	per0131067a
Perchlorate-101	.05	.05	103.57	31-JAN-10 20:41	per0131067a
Perchlorate	.05	.05	94.46	31-JAN-10 22:13	per0131079a
Perchlorate Isotope Ratio		2.87		31-JAN-10 22:13	per0131079a
Perchlorate-101	.05	.05	97.88	31-JAN-10 22:13	per0131079a
Perchlorate	.05	.05	100.09	01-FEB-10 16:00	per0201011a

Perchlorate MDL Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1474-1

Lab Code: GEL

Reporting Units: ug/L

Perchlorate Isotope Ratio		2.95		01-FEB-10 16:00	per0201011a
Perchlorate-101	.05	.05	102.95	01-FEB-10 16:00	per0201011a
Perchlorate	.05	.05	93.07	01-FEB-10 17:23	per0201022a
Perchlorate Isotope Ratio		3		01-FEB-10 17:23	per0201022a
Perchlorate-101	.05	.05	94.25	01-FEB-10 17:23	per0201022a

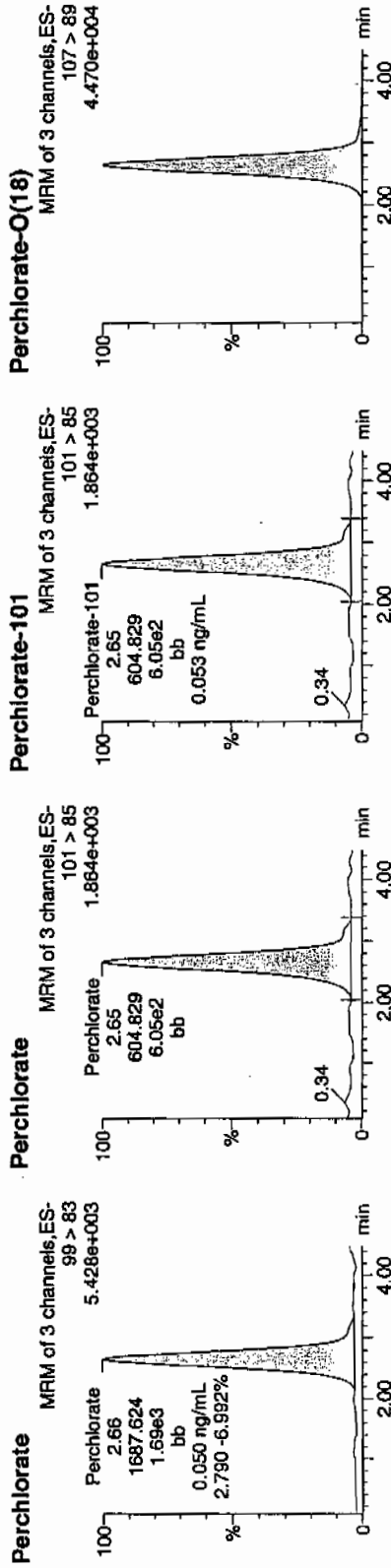
Quantify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per013110a.qld

Last Altered: Monday, February 01, 2010 10:45:07 AM Eastern Standard Time  
Printed: Monday, February 01, 2010 10:58:37 AM Eastern Standard Time

Name: per0131011a  
Date: 31-Jan-2010  
Time: 13:38:34  
ID: WCL100128-07CRI  
Vial: 1:2,B

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02.01.10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100128-07CRI	Perchlorate	99 > 83	2.66	1687.624	1687.624	bb			0.0499	99.80	-0.20	385.644	2.79
WCL100128-07CRI	Perchlorate-101	101 > 85	2.65	604.829	604.829	bb			0.0532	106.42	6.42	201.132	
WCL100128-07CRI	Perchlorate-O(18)	107 > 89	2.64	14329.497	14329.497	bb			0.4927	98.54	-1.46	4076.8...	

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

Dataset: C:\MassLynx\Perchlorate.PRO\per013110a.qld

Last Altered: Monday, February 01, 2010 10:45:07 AM Eastern Standard Time  
Printed: Monday, February 01, 2010 10:58:37 AM Eastern Standard Time

Name: per0131023a

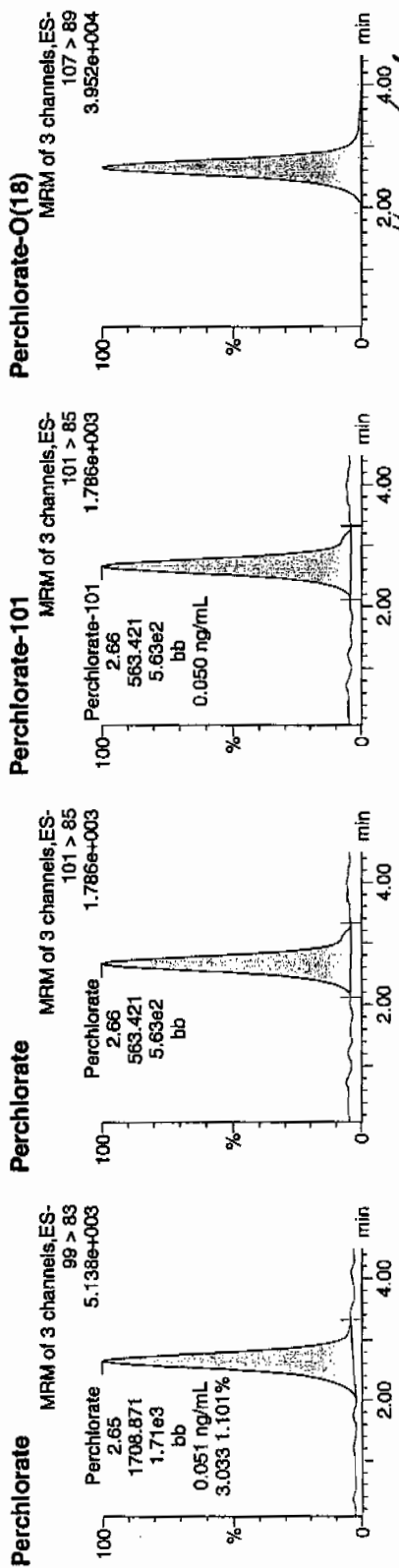
Date: 31-Jan-2010

Time: 15:09:07

ID: WCL100128-07CRI

Vial: 1:2,B

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02-01-10



ID	Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100128-07CRI	Perchlorate	99 > 83	2.65	1708.871	1708.871	bb			0.0505	101.08	1.06	90.206	3.03
WCL100128-07CRI	Perchlorate-101	101 > 85	2.66	563.421	563.421	bb			0.0496	99.13	-0.87	234.947	
WCL100128-07CRI	Perchlorate-Q(18)	107 > 89	2.65	13430.074	13430.074	bb			0.4618	92.36	-7.64	1794.5...	

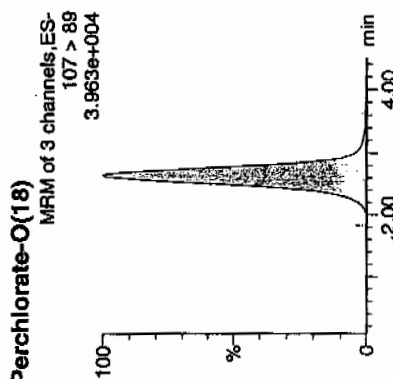
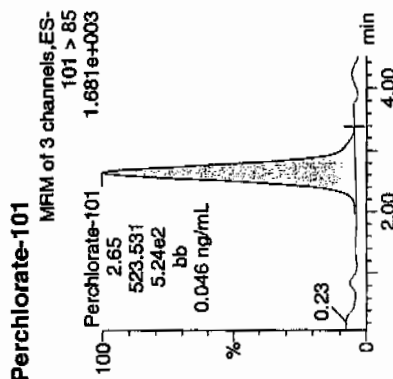
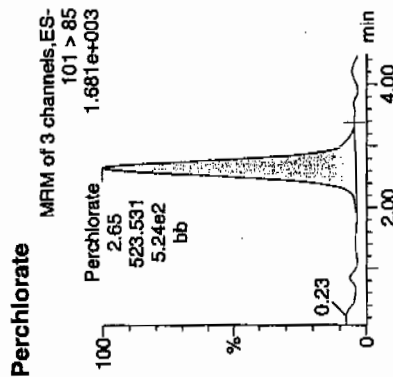
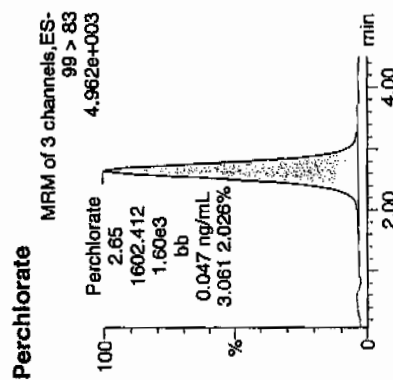
**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per013110a.qld

Last Altered: Monday, February 01, 2010 10:45:07 AM Eastern Standard Time  
Printed: Monday, February 01, 2010 10:58:37 AM Eastern Standard Time

Name: per0131034a  
Date: 31-Jan-2010  
Time: 16:32:06  
ID: WCL100128-07CRI  
Vial: 1:2,B

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*and*  
*01-01-10*



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100128-07CRI	Perchlorate	99 > 83	2.65	1602.412	1602.412	bb			0.0474	94.76	-5.24	128.941	3.06
WCL100128-07CRI	Perchlorate-101	101 > 85	2.65	523.531	523.531	bb			0.0461	92.11	-7.89	148.998	
WCL100128-07CRI	Perchlorate-O(18)	107 > 89	2.64	13291.097	13291.097	bb			0.4570	91.40	-8.60	3554.0...	

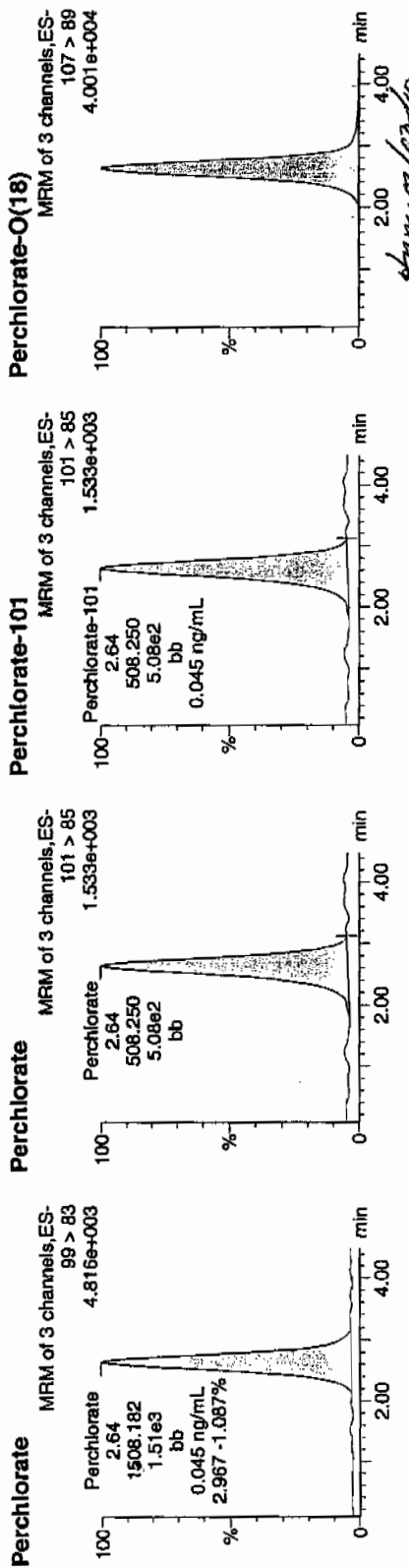
**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charters W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per013110a.qld

Last Altered: Monday, February 01, 2010 10:45:07 AM Eastern Standard Time  
Printed: Monday, February 01, 2010 10:58:37 AM Eastern Standard Time

Name: per0131045a  
Date: 31-Jan-2010  
Time: 17:55:09  
ID: WCL100128-07CRI  
Vial: 1:2,B

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and  
02-01-10*



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100128-07CRI	Perchlorate	99 > 83	2.64	1508.182	1508.182	bb			0.0446	89.19	-10.81	257.659	2.97
WCL100128-07CRI	Perchlorate-101	101 > 85	2.64	508.250	508.250	bb			0.0447	89.43	-10.57	61.987	
WCL100128-07CRI	Perchlorate-O(18)	107 > 89	2.63	13246.691	13246.691	bb			0.4555	91.10	-8.90	5001.8...	

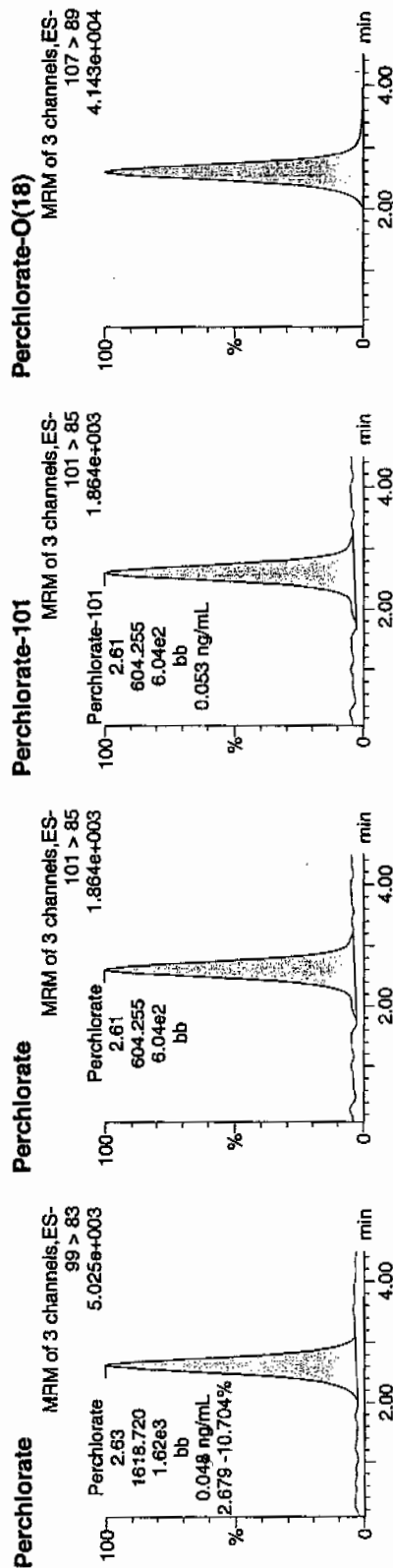
**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charfers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per013110a.qid

Last Altered: Monday, February 01, 2010 10:45:07 AM Eastern Standard Time  
Printed: Monday, February 01, 2010 10:58:37 AM Eastern Standard Time

Name: per0131056a  
Date: 31-Jan-2010  
Time: 19:18:25  
ID: WCL100128-07CRI  
Vial: 1:2,B

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ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100128-07CRI	Perchlorate	99 > 83	2.63	1618.720	1618.720	bb			0.0479	95.73	-4.27	296.151	2.68
WCL100128-07CRI	Perchlorate-101	101 > 85	2.61	604.255	604.255	bb			0.0532	106.32	6.32	17.440	
WCL100128-07CRI	Perchlorate-O(18)	107 > 89	2.61	13919.873	13919.873	bb			0.4786	95.73	-4.27	10057...	



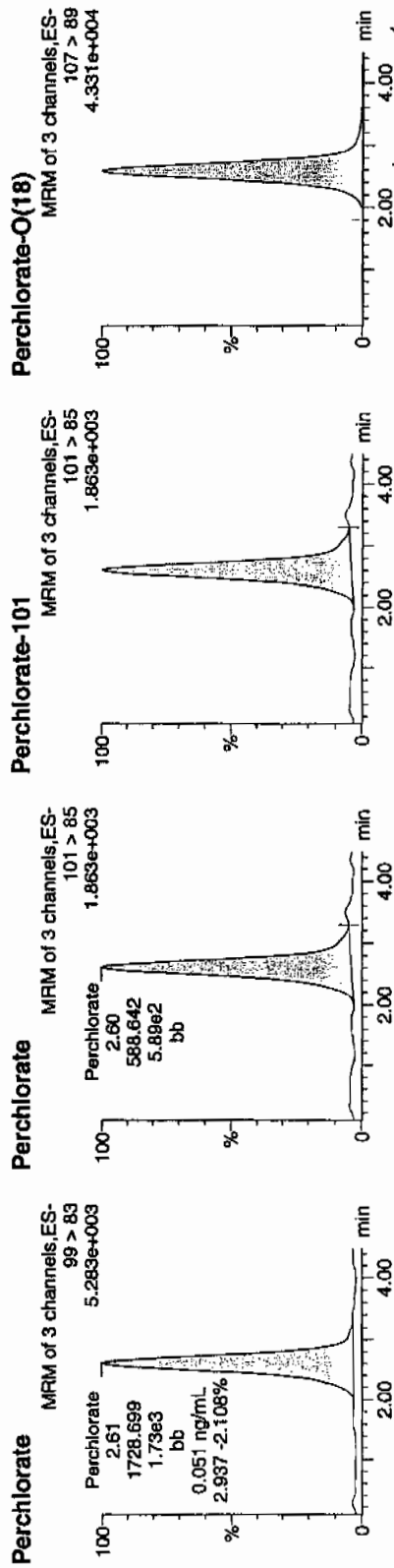
**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per013110a.qld

Last Altered: Monday, February 01, 2010 10:45:07 AM Eastern Standard Time  
Printed: Monday, February 01, 2010 10:58:37 AM Eastern Standard Time

Name: per0131067a  
Date: 31-Jan-2010  
Time: 20:41:45  
ID: WCL100128-07CRI  
Vial: 1:2,B

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Q-31 ID*



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	SN	Ion Ratio
WCL100128-07CRI	Perchlorate	99 > 83	2.61	1728.699	1728.699	bb			0.0511	102.23	2.23	392.527	2.94
WCL100128-07CRI	Perchlorate-101	101 > 85	2.60	588.642	588.642	bb			0.0518	103.57	3.57	130.060	
WCL100128-07CRI	Perchlorate-O(18)	107 > 89	2.59	14243.858	14243.858	bb			0.4898	97.95	-2.05	5194.8...	

Quantify Sample Report MassLynx 4.0 SP4

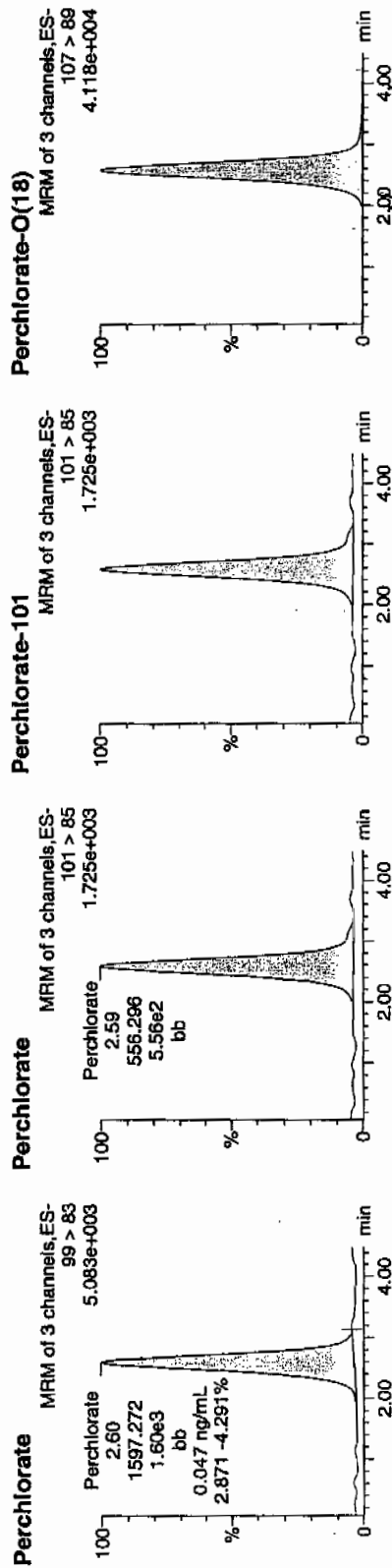
The GEL Group, LLC Analyst: Charfers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per013110a.qld

Last Altered: Monday, February 01, 2010 10:45:07 AM Eastern Standard Time  
Printed: Monday, February 01, 2010 10:58:37 AM Eastern Standard Time

Name: per0131079a  
Date: 31-Jan-2010  
Time: 22:13:05  
ID: WCL100128-07CRI  
Vial: 1:2,B

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and  
02-01-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100128-07CRI	Perchlorate	99 > 83	2.60	1597.272	1597.272	bb			0.0472	94.46	-5.54	190.554	2.87
WCL100128-07CRI	Perchlorate-101	101 > 85	2.59	556.296	556.296	bb			0.0489	97.88	-2.12	73.002	
WCL100128-07CRI	Perchlorate-O(18)	107 > 89	2.58	13796.101	13796.101	bb			0.4744	94.87	-5.13	8492.1...	

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

Dataset: C:\MassLynx\Perchlorate.PRO\per020110a.qld

Last Altered: Tuesday, February 02, 2010 2:28:24 PM Eastern Standard Time  
Printed: Tuesday, February 02, 2010 2:30:40 PM Eastern Standard Time

Name: per0201011a

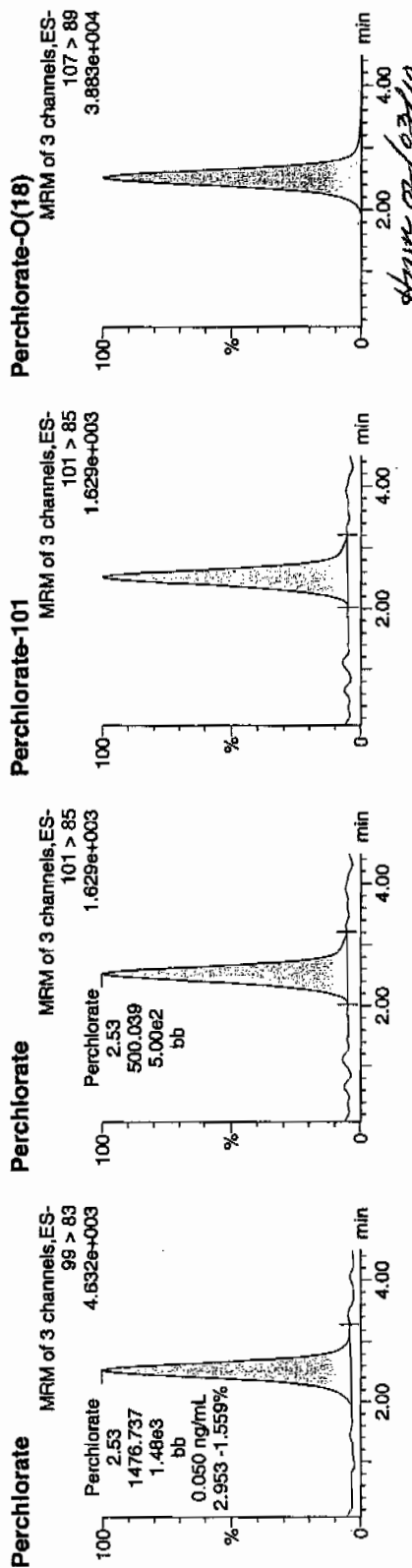
Date: 01-Feb-2010

Time: 16:00:14

ID: WCL100128-07CRI

Vial: 1:2,B

*Pass  
and  
02-02-10*



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100128-07CRI	Perchlorate	99 > 83	2.53	1476.737	1476.737	bb			0.0500	100.09	0.09	417.546	2.95
WCL100128-07CRI	Perchlorate-101	101 > 85	2.53	500.039	500.039	bb			0.0515	102.95	2.95	65.424	
WCL100128-07CRI	Perchlorate-O(18)	107 > 89	2.51	12467.722	12467.722	bb			0.4996	99.91	-0.09	1252.1...	

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

Dataset: C:\MassLynx\Perchlorate.PRO\per020110a.qld

Last Altered: Tuesday, February 02, 2010 2:28:24 PM Eastern Standard Time  
Printed: Tuesday, February 02, 2010 2:30:40 PM Eastern Standard Time

Name: per0201022a

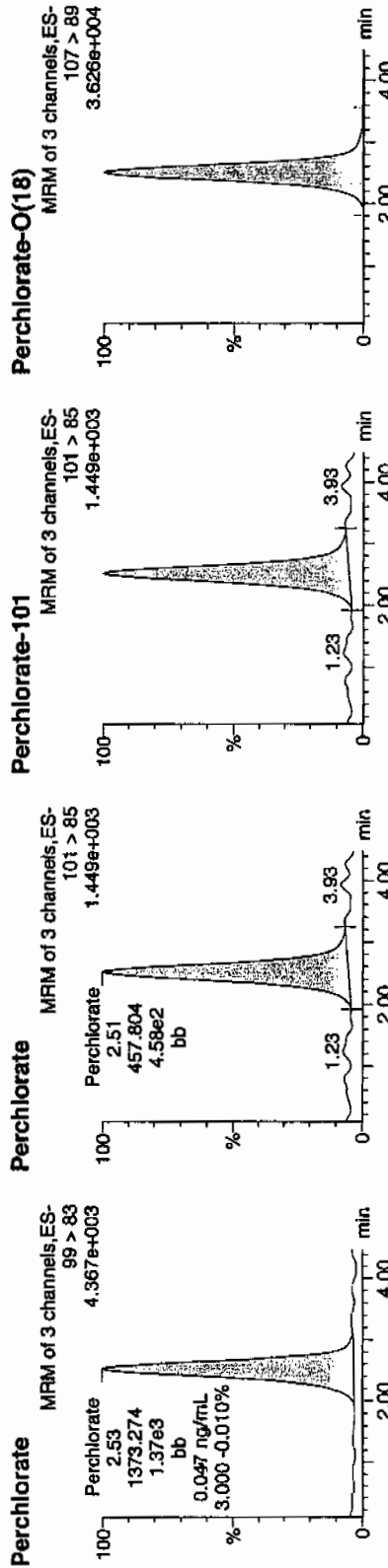
Date: 01-Feb-2010

Time: 17:23:13

ID: WCL100128-07CRI

Vial: 1:2,B

*Pass*  
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*02.02.10*



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	SN	Ion Ratio
WCL100128-07CRI	Perchlorate	99 > 83	2.53	1373.274	1373.274	bb			0.0465	93.07	-6.93	234.582	3.00
WCL100128-07CRI	Perchlorate-101	101 > 85	2.51	457.804	457.804	bb			0.0471	94.25	-5.75	66.529	
WCL100128-07CRI	Perchlorate-O(18)	107 > 89	2.50	11662.440	11662.440	bb			0.4673	93.46	-6.54	3818.4...	

# 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: 947198

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.

MB

Date Received: 30-JAN-10

GEL Job No (SDG): 10-1474-1

GEL Sample ID: 1202028960

Date Filtered: 30-JAN-10

Injection Volume (uL): 20

%Solids:

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.050	ug/L	U	1	31-JAN-10 18:02	per0131046a
	Perchlorate Isotope Ratio						1	31-JAN-10 18:02	per0131046a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	31-JAN-10 18:02	per0131046a
	Perchlorate-O(18)			0.462	ug/L		1	31-JAN-10 18:02	per0131046a

<sup>^</sup> 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\per013110a.qld

Last Altered: Monday, February 01, 2010 10:45:07 AM Eastern Standard Time  
Printed: Monday, February 01, 2010 10:58:37 AM Eastern Standard Time

Name: per0131046a

Date: 31-Jan-2010

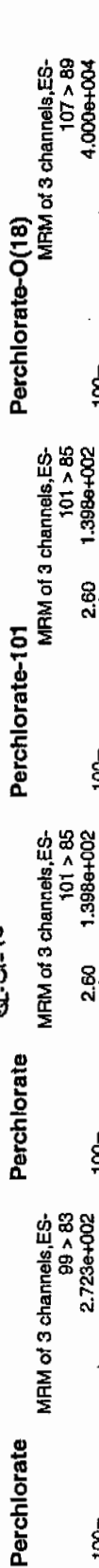
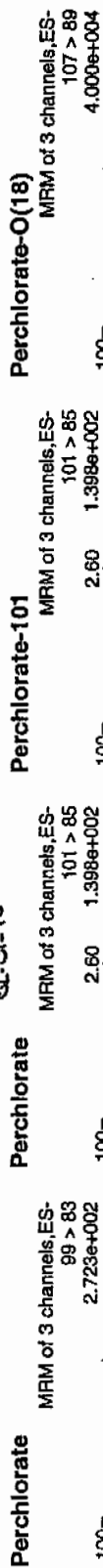
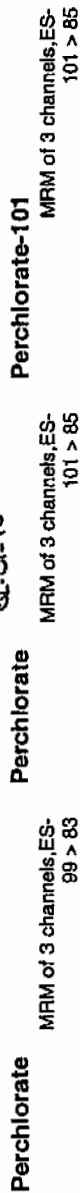
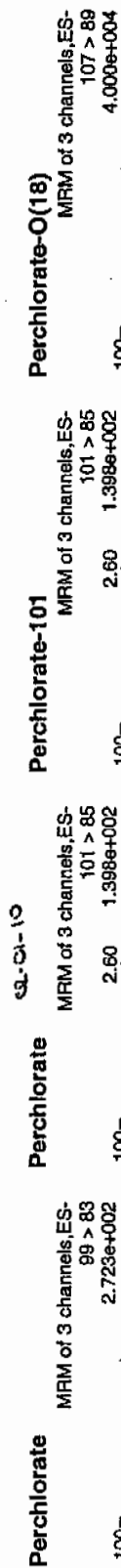
Time: 18:02:41

ID: 1202028960

Vial: 2:1,A

02-01-10

1202028960 | 947149 | 50339 | MB | 11



ID	Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202028960	Perchlorate	99 > 83	2.65	22.511	22.511	bb			0.0007	8.744		0.00	
1202028960	Perchlorate-101	101 > 85											
1202028960	Perchlorate-O(18)	107 > 89	2.63	13448.378	13448.378	bb			0.4624	92.48	-7.52	3729.0...	

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: EPA 6850 Modified

Matrix: WATER

Extraction Batch ID: 947198

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.

LCS

Date Received: 30-JAN-10

GEL Job No (SDG): 10-1474-1

GEL Sample ID: 1202028961

Date Filtered: 30-JAN-10

Injection Volume (uL): 20

%Solids:

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.199	ug/L	J	1	31-JAN-10 18:10	per0131047a
	Perchlorate Isotope Ratio			3.1			1	31-JAN-10 18:10	per0131047a
14797-73-0	Perchlorate-101	.05	.2	0.191	ug/L	J	1	31-JAN-10 18:10	per0131047a
	Perchlorate-O(18)			0.455	ug/L		1	31-JAN-10 18:10	per0131047a

<sup>^</sup> 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: Charfers W. Wilson

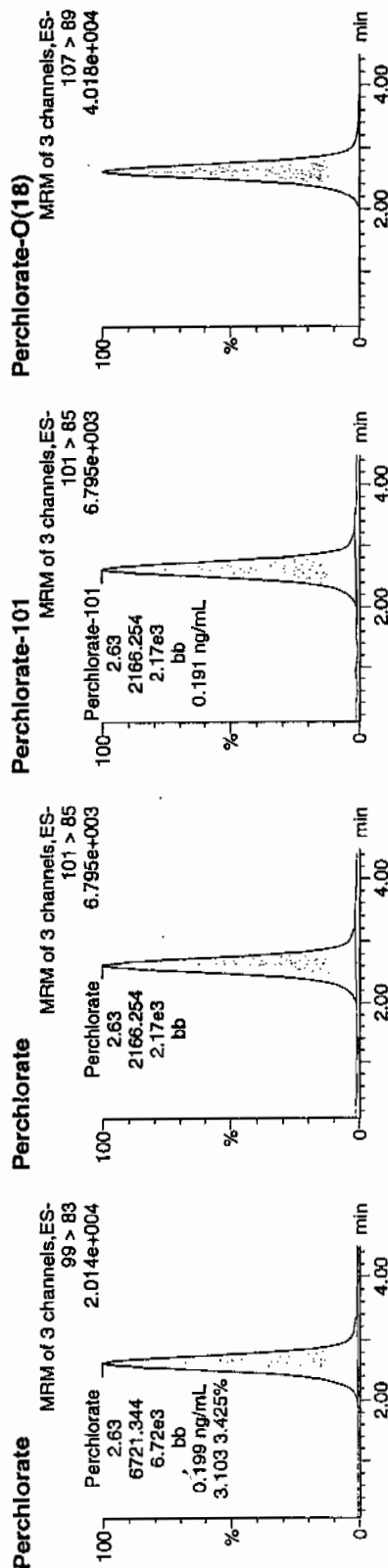
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Last Altered: Monday, February 01, 2010 10:45:07 AM Eastern Standard Time  
Printed: Monday, February 01, 2010 10:58:37 AM Eastern Standard Time

Name: per0131047a  
Date: 31-Jan-2010  
Time: 18:10:24  
ID: 1202028961  
Vial: 2:1,B

01-01-10

1202028961 | 1202028961 | 1202028961



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec.	%Dev.	S/N	Ion Ratio
1202028961	Perchlorate	99 > 83	2.63	6721.344	6721.344	bb			0.1987	99.37	-0.63	1459.2...	3.10
1202028961	Perchlorate-101	101 > 85	2.63	2166.254	2166.254	bb			0.1906	95.29	-4.71	575.994	
1202028961	Perchlorate-Q(18)	107 > 89	2.61	13238.314	13238.314	bb			0.4552	91.04	-8.96	2651.3...	

$$\frac{6721.344}{33819.9} = 0.1987$$

Amw 02/03/10

# 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: 947198 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	Initial Volume (mL)	Final Volume (mL)	Prepped Factor (mL/mL)
1203028960 MB	30-JAN-2010 12:08:58	10	10	1
1203028961 LCS	30-JAN-2010 12:08:58	10	10	1
245601001	30-JAN-2010 12:08:58	10	10	1
245614001	30-JAN-2010 12:08:58	10	10	1
1203028962 MS (245614001)	30-JAN-2010 12:08:58	10	10	1
1203028963 MSD (245614001)	30-JAN-2010 12:08:58	10	10	1
245614002	30-JAN-2010 12:08:58	10	10	1
245618007	30-JAN-2010 12:08:58	10	10	1
245619001	30-JAN-2010 12:08:58	10	10	1
245625001	30-JAN-2010 12:08:58	10	10	1
245676002	30-JAN-2010 12:08:58	10	10	1
1203028964 MS (245676002)	30-JAN-2010 12:08:58	10	10	1
1203028965 MSD (245676002)	30-JAN-2010 12:08:58	10	10	1
245676005	30-JAN-2010 12:08:58	10	10	1
245681001	30-JAN-2010 12:08:58	10	10	1
245681002	30-JAN-2010 12:08:58	10	10	1
245690001	30-JAN-2010 12:08:58	10	10	1
245690002	30-JAN-2010 12:08:58	10	10	1
245777001	30-JAN-2010 12:08:58	10	10	1
245777005	30-JAN-2010 12:08:58	10	10	1
245807001	30-JAN-2010 12:08:58	10	10	1
245807002	30-JAN-2010 12:08:58	10	10	1
1203028966 ICS	30-JAN-2010 12:08:58	10	10	1

Type	Sample Id	Description	Serial Number	Spike Amt	Units	Comments:
ICS	1203028966	10 ug/L ICV/CCV Second Source	UCL091230-01.2	.2	mL	Desalting cartridges used: 090406-1-Bu & 091130-1-H
LCS	1203028961	10 ug/L ICV/CCV Second Source	UCL091230-01.2	.2	mL	
MS	1203028962	10 ug/L ICV/CCV Second Source	UCL091230-01.2	.2	mL	
MS	1203028964	10 ug/L ICV/CCV Second Source	UCL091230-01.2	.2	mL	
MSD	1203028963	10 ug/L ICV/CCV Second Source	UCL091230-01.2	.2	mL	
MSD	1203028965	10 ug/L ICV/CCV Second Source	UCL091230-01.2	.2	mL	
RGNT	All	500 ppm Carbonate, Bicarbonate, Chloride, Sulfate	1236492	10	mL	
RGNT	All	Q251 HPLC Grade Water	1246195	10	mL	

GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS#2

Date: 01/31/10

Extr. Injection Volume: 20uL

Sequence Number: per013110a

Initial Calibration Date: 01/31/10

Method: EPA 6850-Modified

Int. Std.: UCL100122-01

Mobile Phase Lot#: 1254342, 1246195

Standard-Samp Reagent Lot#: 1233976

Reviewed BY: *Hmm*

Date: 02/03/10

SOP: GL-OA-E-067 Rev.6

Alt Check Std. ID: WCL100128-06

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC_Flag
per0131001a	IPB001	CWW	1/31/2010 12:23			1		USE	B
per0131002a	IPB001	CWW	1/31/2010 12:30			1		USE	B
per0131003a	WCLICAL-01	CWW	1/31/2010 12:38			1		USE	I
per0131004a	WCLICAL-02	CWW	1/31/2010 12:45			1		USE	I
per0131005a	WCLICAL-03	CWW	1/31/2010 12:53			1		USE	I
per0131006a	WCLICAL-04	CWW	1/31/2010 13:00			1		USE	I
per0131007a	WCLICAL-05	CWW	1/31/2010 13:08			1		USE	I
per0131008a	IPB002	CWW	1/31/2010 13:15			1		USE	B
per0131009a	WCLICV	CWW	1/31/2010 13:23			1		USE	C
per0131010a	IPB003	CWW	1/31/2010 13:31			1		USE	B
per0131011a	WCLCRI	CWW	1/31/2010 13:38			1		USE	C
per0131012a	1202023105	CWW	1/31/2010 13:46	944723	VARIOUS	1	LANL	USE	S
per0131013a	1202023106	CWW	1/31/2010 13:53	944723	VARIOUS	1	LANL	USE	S
per0131014a	1202023109	CWW	1/31/2010 14:01	944723	VARIOUS	1	LANL	USE	S
per0131015a	244921001	CWW	1/31/2010 14:08	944723	10-1288	1	LANL	USE	S
per0131016a	244921002	CWW	1/31/2010 14:16	944723	10-1288	1	LANL	USE	S
per0131017a	244921003	CWW	1/31/2010 14:23	944723	10-1288	1	LANL	USE	S
per0131018a	244921004	CWW	1/31/2010 14:31	944723	10-1288	1	LANL	USE	S
per0131019a	244921005	CWW	1/31/2010 14:38	944723	10-1288	1	LANL	USE	S
per0131020a	244921006	CWW	1/31/2010 14:46	944723	10-1288	1	LANL	USE	S
per0131021a	WCLCCV	CWW	1/31/2010 14:54			1	LANL	USE	C
per0131022a	IPB004	CWW	1/31/2010 15:01			1	LANL	USE	B
per0131023a	WCLCRI	CWW	1/31/2010 15:09			1	LANL	USE	C
per0131024a	244921007	CWW	1/31/2010 15:16	944723	10-1288	1	LANL	USE	S
per0131025a	244921008	CWW	1/31/2010 15:24	944723	10-1288	1	LANL	USE	S
per0131026a	244921009	CWW	1/31/2010 15:31	944723	10-1288	1	LANL	USE	S
per0131027a	244921010	CWW	1/31/2010 15:39	944723	10-1288	1	LANL	USE	S
per0131028a	245134001	CWW	1/31/2010 15:46	944723	10-1300	1	LANL	USE	S
per0131029a	1202023107	CWW	1/31/2010 15:54	944723	10-1300	1	LANL	USE	S

per0131030a	1202023108	CWW	1/31/2010 16:01	944723	10-1300	1	LANL	USE	S
per0131031a	245134002	CWW	1/31/2010 16:09	944723	10-1300	1	LANL	USE	S
per0131032a	WCLCCV	CWW	1/31/2010 16:17			1	LANL	USE	C
per0131033a	IPB005	CWW	1/31/2010 16:24			1	LANL	USE	B
per0131034a	WCLCRI	CWW	1/31/2010 16:32			1	LANL	USE	C
per0131035a	245134003	CWW	1/31/2010 16:39	944723	10-1300	1	LANL	USE	S
per0131036a	245134004	CWW	1/31/2010 16:47	944723	10-1300	1	LANL	USE	S
per0131037a	245134005	CWW	1/31/2010 16:54	944723	10-1300	1	LANL	USE	S
per0131038a	245134006	CWW	1/31/2010 17:02	944723	10-1300	1	LANL	USE	S
per0131039a	245134007	CWW	1/31/2010 17:09	944723	10-1300	1	LANL	USE	S
per0131040a	245134008	CWW	1/31/2010 17:17	944723	10-1300	1	LANL	USE	S
per0131041a	245134009	CWW	1/31/2010 17:24	944723	10-1300	1	LANL	USE	S
per0131042a	245134010	CWW	1/31/2010 17:32	944723	10-1300	1	LANL	USE	S
per0131043a	WCLCCV	CWW	1/31/2010 17:40			1	LANL	USE	C
per0131044a	IPB006	CWW	1/31/2010 17:47			1	LANL	USE	B
per0131045a	WCLCRI	CWW	1/31/2010 17:55			1	LANL	USE	C
per0131046a	1202028960	CWW	1/31/2010 18:02	947199	VARIOUS	1	LANL	USE	S
per0131047a	1202028961	CWW	1/31/2010 18:10	947199	VARIOUS	1	LANL	USE	S
per0131048a	1202028966	CWW	1/31/2010 18:17	947199	VARIOUS	1	LANL	USE	S
per0131049a	245601001	CWW	1/31/2010 18:25	947199	10-1409	1	LANL	USE	S
per0131050a	245614001	CWW	1/31/2010 18:32	947199	10-1417-1	1	LANL	USE	S
per0131051a	1202028962	CWW	1/31/2010 18:40	947199	10-1417-1	1	LANL	USE	S
per0131052a	1202028963	CWW	1/31/2010 18:48	947199	10-1417-1	1	LANL	USE	S
per0131053a	245614002	CWW	1/31/2010 18:55	947199	10-1417-1	1	LANL	USE	S
per0131054a	WCLCCV	CWW	1/31/2010 19:03			1	LANL	USE	C
per0131055a	IPB007	CWW	1/31/2010 19:10			1	LANL	USE	B
per0131056a	WCLCRI	CWW	1/31/2010 19:18			1	LANL	USE	C
per0131057a	245618007	CWW	1/31/2010 19:25	947199	10-1422	1	LANL	USE	S
per0131058a	245619001	CWW	1/31/2010 19:33	947199	10-1423	1	LANL	USE	S
per0131059a	245625001	CWW	1/31/2010 19:41	947199	10-1425	1	LANL	USE	S
per0131060a	245676002	CWW	1/31/2010 19:48	947199	10-1446	1	LANL	USE	S
per0131061a	1202028964	CWW	1/31/2010 19:56	947199	10-1446	1	LANL	USE	S
per0131062a	1202028965	CWW	1/31/2010 20:03	947199	10-1446	1	LANL	USE	S
per0131063a	245676005	CWW	1/31/2010 20:11	947199	10-1446	1	LANL	USE	S
per0131064a	245681001	CWW	1/31/2010 20:18	947199	10-1450	1	LANL	USE	S
per0131065a	WCLCCV	CWW	1/31/2010 20:26			1	LANL	USE	C
per0131066a	IPB008	CWW	1/31/2010 20:34			1	LANL	USE	B

per0131067a	WCLCRI	CWW	1/31/2010 20:41	947199	10-1450	1	LANL	USE	C
per0131068a	245681002	CWW	1/31/2010 20:49	947199	10-1433-1	1	LANL	USE	S
per0131069a	245690001	CWW	1/31/2010 20:57	947199	10-1433-1	1	LANL	USE	S
per0131070a	245690002	CWW	1/31/2010 21:04	947199	10-1433-1	1	LANL	USE	S
per0131071a	245777001	CWW	1/31/2010 21:12	947199	10-1458	1	LANL	DUSE-DL	S
per0131072a	245777005	CWW	1/31/2010 21:19	947199	10-1458	1	LANL	DUSE-DL	S
per0131073a	245807001	CWW	1/31/2010 21:27	947199	10-1474-1	1	LANL	DUSE-RA	S
per0131074a	245807002	CWW	1/31/2010 21:34	947199	10-1474-1	1	LANL	USE	S
per0131075a	IPB009	CWW	1/31/2010 21:42	Screen	Inhouse	1	GEL	DUSE	B
per0131076a	1262643 Suppr	CWW	1/31/2010 21:50			1		USE	S
per0131077a	WCLCCV	CWW	1/31/2010 21:57			1		USE	C
per0131078a	IPB010	CWW	1/31/2010 22:05			1		USE	B
per0131079a	WCLCRI	CWW	1/31/2010 22:13			1		USE	C

GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS#2

Date: 02/01/10  
 Extr. Injection Volume: 20ul  
 Sequence Number: per020110a  
 Initial Calibration Date: 02/01/10

Method: EPA 6850-Modified  
 Int. Std.: UCL100122-01  
 Mobile Phase Lot#: 1254342, 1246195  
 Standard-Samp Reagent Lot#: 1233976

Reviewed BY: *hmc*  
 Date: *2/23/10*  
 SOP: GL-OA-E-067 Rev.6  
 Alt Check Std. ID: WCL100128-06

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC_Flag
per0201001a	IPB001	CWW	2/1/2010 14:44			1		USE	B
per0201002a	IPB001	CWW	2/1/2010 14:52			1		USE	B
per0201003a	WCLICAL-01	CWW	2/1/2010 15:00			1		USE	I
per0201004a	WCLICAL-02	CWW	2/1/2010 15:07			1		USE	I
per0201005a	WCLICAL-03	CWW	2/1/2010 15:15			1		USE	I
per0201006a	WCLICAL-04	CWW	2/1/2010 15:22			1		USE	I
per0201007a	WCLICAL-05	CWW	2/1/2010 15:30			1		USE	I
per0201008a	IPB002	CWW	2/1/2010 15:37			1		USE	B
per0201009a	WCLICV	CWW	2/1/2010 15:45			1		USE	C
per0201010a	IPB003	CWW	2/1/2010 15:52			1		USE	B
per0201011a	WCLCRI	CWW	2/1/2010 16:00			1		USE	C
per0201012a	245777001	CWW	2/1/2010 16:07	947199	10-1458	10	LANL	USE	S
per0201013a	245777005	CWW	2/1/2010 16:15	947199	10-1458	10	LANL	USE	S
per0201014a	245807001	CWW	2/1/2010 16:22	947199	10-1474-1	1	LANL	USE	S
per0201015a	IPB004	CWW	2/1/2010 16:30			1		USE	B
per0201016a	1202024354	CWW	2/1/2010 16:37	945206	VARIOUS	1	LANL	USE	S
per0201017a	1202024355	CWW	2/1/2010 16:45	945206	VARIOUS	1	LANL	USE	S
per0201018a	1202024358	CWW	2/1/2010 16:53	945206	VARIOUS	1	LANL	USE	S
per0201019a	245113001	CWW	2/1/2010 17:00	945206	10-1325-1	1	LANL	USE	S
per0201020a	WCLCCV	CWW	2/1/2010 17:08			1		USE	C
per0201021a	IPB005	CWW	2/1/2010 17:15			1		USE	B
per0201022a	WCLCRI	CWW	2/1/2010 17:23			1		USE	C
per0201023a	245113002	CWW	2/1/2010 17:30	945206	10-1325-1	1	LANL	USE	S
per0201024a	1202024356	CWW	2/1/2010 17:38	945206	10-1325-1	1	LANL	USE	S
per0201025a	1202024357	CWW	2/1/2010 17:45	945206	10-1325-1	1	LANL	USE	S
per0201026a	245113003	CWW	2/1/2010 17:53	945206	10-1325-1	1	LANL	USE	S
per0201027a	245113004	CWW	2/1/2010 18:00	945206	10-1325-1	1	LANL	USE	S
per0201028a	245113005	CWW	2/1/2010 18:08	945206	10-1325-1	1	LANL	USE	S
per0201029a	245113006	CWW	2/1/2010 18:16	945206	10-1325-1	1	LANL	USE	S

per0201030a	245113007	CWW	2/1/2010 18:23	945206	10-1325-1	1	LANL	USE	S
per0201031a	245113008	CWW	2/1/2010 18:31	945206	10-1325-1	1	LANL	USE	S
per0201032a	245113009	CWW	2/1/2010 18:38	945206	10-1325-1	1	LANL	USE	S
per0201033a	WCLCCV	CWW	2/1/2010 18:46			1		USE	C
per0201034a	IPB006	CWW	2/1/2010 18:53			1		USE	B
per0201035a	WCLCRI	CWW	2/1/2010 19:01			1		USE	C
per0201036a	245113010	CWW	2/1/2010 19:08	945206	10-1325-1	1	LANL	USE	S
per0201037a	245113011	CWW	2/1/2010 19:16	945206	10-1325-1	1	LANL	USE	S
per0201038a	245113012	CWW	2/1/2010 19:24	945206	10-1325-1	1	LANL	USE	S
per0201039a	245113013	CWW	2/1/2010 19:31	945206	10-1325-1	1	LANL	USE	S
per0201040a	245113014	CWW	2/1/2010 19:39	945206	10-1325-1	1	LANL	USE	S
per0201041a	245371001	CWW	2/1/2010 19:46	945206	10-1374	1	LANL	USE	S
per0201042a	245371002	CWW	2/1/2010 19:54	945206	10-1374	1	LANL	USE	S
per0201043a	245372002	CWW	2/1/2010 20:01	945206	10-1375	1	LANL	USE	S
per0201044a	245372003	CWW	2/1/2010 20:09	945206	10-1375	1	LANL	USE	S
per0201045a	245372004	CWW	2/1/2010 20:16	945206	10-1375	1	LANL	USE	S
per0201046a	WCLCCV	CWW	2/1/2010 20:24			1		USE	C
per0201047a	IPB007	CWW	2/1/2010 20:32			1		USE	B
per0201048a	WCLCRI	CWW	2/1/2010 20:39			1		USE	C
per0201049a	1202024390	CWW	2/1/2010 20:47	945227	VARIOUS	1	LANL	USE	S
per0201050a	1202024391	CWW	2/1/2010 20:54	945227	VARIOUS	1	LANL	USE	S
per0201051a	1202024399	CWW	2/1/2010 21:02	945227	VARIOUS	1	LANL	USE	S
per0201052a	245250001	CWW	2/1/2010 21:09	945227	10-1351-1	1	LANL	USE	S
per0201053a	245250002	CWW	2/1/2010 21:17	945227	10-1351-1	1	LANL	USE	S
per0201054a	245373001	CWW	2/1/2010 21:24	945227	10-1375-1	1	LANL	USE	S
per0201055a	245375001	CWW	2/1/2010 21:32	945227	10-1373-1	1	LANL	USE	S
per0201056a	1202024392	CWW	2/1/2010 21:40	945227	10-1373-1	1	LANL	USE	S
per0201057a	1202024393	CWW	2/1/2010 21:47	945227	10-1373-1	1	LANL	USE	S
per0201058a	WCLCCV	CWW	2/1/2010 21:55			1		USE	C
per0201059a	IPB008	CWW	2/1/2010 22:02			1		USE	B
per0201060a	WCLCRI	CWW	2/1/2010 22:10			1		USE	C
per0201061a	245375002	CWW	2/1/2010 22:17	945227	10-1373-1	1	LANL	USE	S
per0201062a	245378001	CWW	2/1/2010 22:25	945227	10-1378-1	1	LANL	USE	S
per0201063a	245378002	CWW	2/1/2010 22:33	945227	10-1378-1	1	LANL	USE	S
per0201064a	245382001	CWW	2/1/2010 22:40	945227	10-1381	1	LANL	USE	S
per0201065a	245386001	CWW	2/1/2010 22:48	945227	10-1383-1	1	LANL	USE	S
per0201066a	245390001	CWW	2/1/2010 22:55	945227	10-1386-1	1	LANL	USE	S



S S C B C

USE  
USE  
USE  
USE  
USE

LANL  
LANL

1  
1  
1  
1  
1

10-1390-1  
10-1390-1

945227  
945227

2/1/2010 23:03  
2/1/2010 23:10  
2/1/2010 23:18  
2/1/2010 23:26  
2/1/2010 23:33

CWW  
CWW  
CWW  
CWW  
CWW

245392001  
245392002  
WCLCCV  
IPB009  
WCLCRI

per0201067a  
per0201068a  
per0201069a  
per0201070a  
per0201071a

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

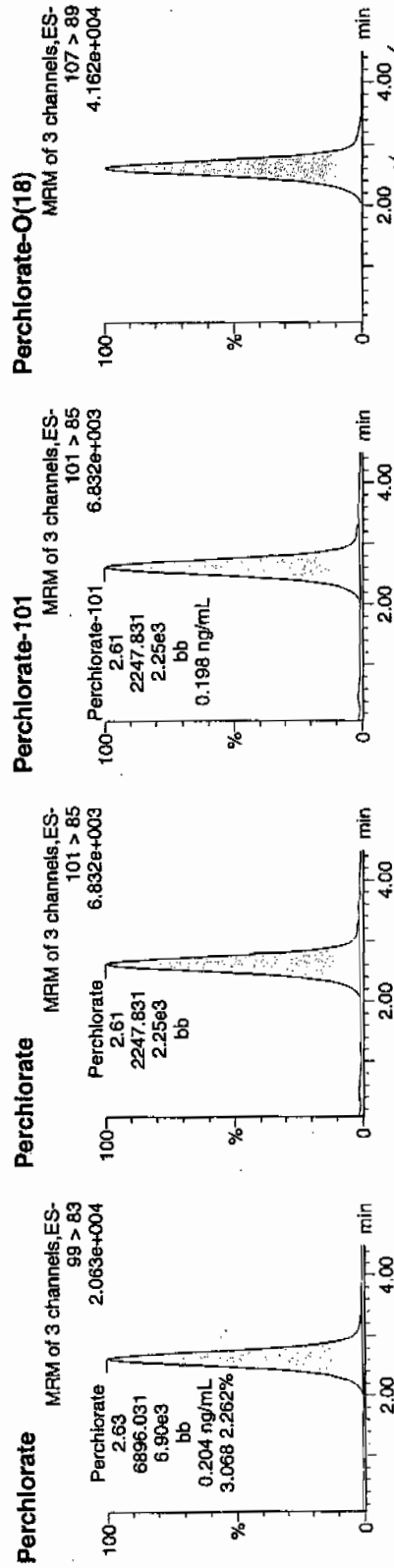
Dataset: C:\MassLynx\Perchlorate.PRO\per013110a.qld

Last Altered: Monday, February 01, 2010 10:45:07 AM Eastern Standard Time  
Printed: Monday, February 01, 2010 10:58:37 AM Eastern Standard Time

Name: per0131051a  
Date: 31-Jan-2010  
Time: 18:40:29  
ID: 1202028962  
Vial: 2:1,F

02-01-10

1202028962 | 947194 | 1202028962 | MS | 1 |



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202028962	Perchlorate	99 > 83	2.63	6896.031	6896.031	bb			0.2039	101.95	1.95	499.072	3.07
1202028962	Perchlorate-101	101 > 85	2.61	2247.831	2247.831	bb			0.1978	98.88	-1.12	1131.5...	
1202028962	Perchlorate-O(18)	107 > 89	2.61	13826.360	13826.360	bb			0.4754	95.08	-4.92	4176.2...	

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

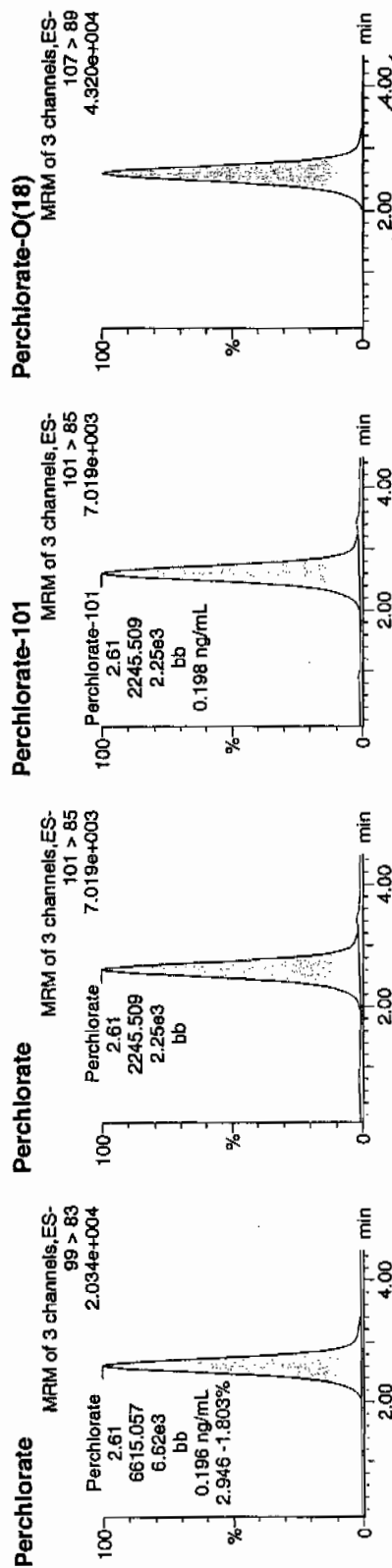
Dataset: C:\MassLynx\Perchlorate.PRO\per013110a.qld

Last Altered: Monday, February 01, 2010 10:45:07 AM Eastern Standard Time  
Printed: Monday, February 01, 2010 10:58:37 AM Eastern Standard Time

Name: per0131052a  
Date: 31-Jan-2010  
Time: 18:48:01  
ID: 1202028963  
Vial: 2:2,A

02-01-10

1202028963 | 1202028963 | 1202028963



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202028963	Perchlorate	99 > 83	2.61	6615.057	6615.057	bb			0.1956	97.80	-2.20	747.719	2.95
1202028963	Perchlorate-101	101 > 85	2.61	2245.509	2245.509	bb			0.1975	98.77	-1.23	234.767	
1202028963	Perchlorate-O(18)	107 > 89	2.60	14081.118	14081.118	bb			0.4842	96.83	-3.17	1719.1...	

## 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 10-1474**

**Sample Analysis**

<b>Sample ID</b>	<b>Client ID</b>
245806001	RE15-10-7954
245806002	RE15-10-7956
245806003	RE15-10-7955
245806004	RE15-10-7953
245806005	RE15-10-7952
245806006	RE15-10-8060
245806007	RE15-10-8058
245806008	RE15-10-8059
1202030969	Method Blank (MB) ICP
1202030974	Laboratory Control Sample (LCS)
1202030971	245806001(RE15-10-7954L) Serial Dilution (SD)
1202030970	245806001(RE15-10-7954D) Sample Duplicate (DUP)
1202030972	245806001(RE15-10-7954S) Matrix Spike (MS)
1202030973	245806001(RE15-10-7954SD) Matrix Spike Duplicate (MSD)
1202030975	Method Blank (MB) ICP-MS
1202030980	Laboratory Control Sample (LCS)
1202030977	245806001(RE15-10-7954L) Serial Dilution (SD)
1202030976	245806001(RE15-10-7954D) Sample Duplicate (DUP)
1202030978	245806001(RE15-10-7954S) Matrix Spike (MS)
1202030979	245806001(RE15-10-7954SD) Matrix Spike Duplicate (MSD)

1202029970	Method Blank (MB) CVAA
1202029971	Laboratory Control Sample (LCS)
1202029974	245806001(RE15-10-7954L) Serial Dilution (SD)
1202029972	245806001(RE15-10-7954D) Sample Duplicate (DUP)
1202029973	245806001(RE15-10-7954S) Matrix Spike (MS)
1202029975	245806001(RE15-10-7954SD) Matrix Spike Duplicate (MSD)

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

#### **Method/Analysis Information**

<b>Analytical Batch:</b>	948071, 948073 and 947650
<b>Prep Batch :</b>	948070, 948072 and 947648
<b>Standard Operating Procedures:</b>	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
<b>Analytical Method:</b>	SW846 3050B/6010B, SW846 3050B/6020 and SW846 7471A
<b>Prep Method :</b>	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 6100E inductively coupled plasma mass spectrometer (ICP-MS). The instrument is equipped with a cross-flow nebulizer, quadrupole mass spectrometer, and dual mode electron multiplier detector. Internal standards of scandium, germanium, indium, tantalum, and/or lutetium were utilized to cover the mass spectrum. Operating conditions are set at 1400W power and combined argon pressures of 360+/-7 kPa for the plasma and auxiliary gases, and 0.85 L/min carrier gas flow, and an initial



lens voltage of 5.2.

The Metals analysis-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 verification (CCV) bracketing this SDG met the established 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: 245806001.

#### **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 copper, magnesium, manganese 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 copper, magnesium, potassium and nickel, as indicated by the "N" qualifiers.

### **MS/MSD Relative Percent Difference (RPD) Statement**

The relative percent difference (RPD) obtained from the designated matrix spike duplicate (MSD) is evaluated based on acceptance criteria of 20%. The RPD between qualifying elements results in the MS and MSD were within the acceptance limits of 20% with the exception of copper, as indicated by the "\*" qualifier.

### **Duplicate Relative Percent Difference (RPD) Statement**

The relative percent difference (RPD) obtained from the designated sample duplicate (DUP) is evaluated based on acceptance criteria of 20% when the sample is 5X the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the contract required detection limit (RL), a control of +/-RL is used to evaluate the DUP results. All applicable analytes met these requirements with the exception of antimony, chromium, cobalt, copper, lead, beryllium, nickel and uranium, as indicated by the "\*" qualifiers.

### **Serial Dilution % Difference Statement**

The serial dilution is used to assess matrix suppression or enhancement. Raw element concentrations that are 25X the IDL/MDL for CVAA, 50X the IDL/MDL for ICP, and 100X the IDL/MDL for ICP-MS analyses are applicable for serial dilution assessment. All applicable analytes met the acceptance criteria of less than 10% difference (%D).

## **Technical Information**

### **Holding Time Specifications**

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

### **Sample Dilutions**

Dilutions are performed to minimize matrix interferences resulting from elevated mineral element concentrations present in solid samples and/or to bring over range target analyte concentrations into the linear calibration range of the instruments. The samples in this SDG were diluted the standard 2x for solids on the ICPMS. Samples in this SDG required dilutions after repeated attempts to analyze undiluted resulted in ICP instrument QC failures. The samples were diluted at 2x dilution because when analyzed straight twice the CCV failed for iron and magnesium.

### **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: 793483 and 795195. 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: Kuson Fanson Date: 2/25/10

# Sample Data Summary

**METALS**  
-1-  
**INORGANICS ANALYSIS DATA PACKAGE**

SDG No: 10-1474

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245806001

BASIS: Dry Weight

DATE COLLECTED 26-JAN-10

CLIENT ID: RE15-10-7954

LEVEL: Low

DATE RECEIVED 29-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	3360000	ug/Kg		6790	20000	20000	1	P	HSC	02/17/10 02:45	021610-1	948071
7440-36-0	Antimony	5040	ug/Kg	*	329	998	998	1	P	HSC	02/17/10 02:45	021610-1	948071
7440-38-2	Arsenic	1.48	mg/kg		0.209	1.05	1.05	2	MS	SKJ	02/19/10 00:12	100218-3	948073
7440-39-3	Barium	48800	ug/Kg		99.8	499	499	1	P	HSC	02/17/10 02:45	021610-1	948071
7440-41-7	Beryllium	1.37	mg/kg	*	0.0209	0.105	0.105	2	MS	SKJ	02/19/10 14:42	100219-4	948073
7440-43-9	Cadmium	499	ug/Kg	U	99.8	499	499	1	P	HSC	02/17/10 02:45	021610-1	948071
7440-70-2	Calcium	1100000	ug/Kg		7990	25000	25000	1	P	HSC	02/17/10 02:45	021610-1	948071
7440-47-3	Chromium	13400	ug/Kg	*	150	499	499	1	P	HSC	02/17/10 02:45	021610-1	948071
7440-48-4	Cobalt	3090	ug/Kg	*	150	499	499	1	P	HSC	02/17/10 02:45	021610-1	948071
7440-50-8	Copper	115000	ug/Kg	*N	299	998	998	1	P	HSC	02/17/10 02:45	021610-1	948071
7439-89-6	Iron	9310000	ug/Kg		16000	49900	49900	2	P	HSC	02/23/10 14:32	022310A-2	948071
7439-92-1	Lead	578000	ug/Kg	*	499	2000	2000	2	P	HSC	02/23/10 14:32	022310A-2	948071
7439-95-4	Magnesium	696000	ug/Kg	N	17000	59900	59900	2	P	HSC	02/23/10 14:32	022310A-2	948071
7439-96-5	Manganese	192000	ug/Kg	N	200	998	998	1	P	HSC	02/17/10 02:45	021610-1	948071
7439-97-6	Mercury	14.4	ug/kg		4.13	12.2	12.2	1	AV	JXL1	02/16/10 09:40	021610S2-5	947650
7440-02-0	Nickel	7.19	mg/kg	*N	0.105	0.419	0.419	2	MS	SKJ	02/19/10 00:12	100218-3	948073
7440-09-7	Potassium	460000	ug/Kg	N	6390	25000	25000	1	P	HSC	02/17/10 02:45	021610-1	948071
7782-49-2	Selenium	1.05	mg/kg	U	0.524	1.05	1.05	2	MS	SKJ	02/19/10 00:12	100218-3	948073
7440-22-4	Silver	766	ug/Kg		99.8	499	499	1	P	HSC	02/17/10 02:45	021610-1	948071
7440-23-5	Sodium	85000	ug/Kg		6990	25000	25000	1	P	HSC	02/17/10 02:45	021610-1	948071
7440-28-0	Thallium	0.0878	mg/kg	J	0.0628	0.209	0.209	2	MS	SKJ	02/19/10 00:12	100218-3	948073
7440-61-1	Uranium	84.4	mg/kg	*	0.0138	0.0419	0.0419	2	MS	SKJ	02/19/10 00:12	100218-3	948073
7440-62-2	Vanadium	8040	ug/Kg		99.8	499	499	1	P	HSC	02/17/10 02:45	021610-1	948071
7440-66-6	Zinc	36600	ug/Kg		329	998	998	1	P	HSC	02/17/10 02:45	021610-1	948071

**Prep Information:**

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
947650	947648	SW846 7471A Prep	0.524	g	30	mL	02/15/10	TXB3
948071	948070	SW846 3050B	0.532	g	50	mL	02/08/10	FGA
948073	948072	SW846 3050B	0.507	g	50	mL	02/08/10	FGA

**METALS**  
**-1-**  
**INORGANICS ANALYSIS DATA PACKAGE**

SDG No: 10-1474

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245806002

BASIS: Dry Weight

DATE COLLECTED 26-JAN-10

CLIENT ID: RE15-10-7956

LEVEL: Low

DATE RECEIVED 29-JAN-10

MATRIX: SOIL

%SOLIDS: 93.9

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	4800000	ug/Kg		6930	20400	20400	1	P	HSC	02/17/10 03:33	021610-1	948071
7440-36-0	Antimony	528	ug/Kg	J*	336	1020	1020	1	P	HSC	02/17/10 03:33	021610-1	948071
7440-38-2	Arsenic	2.82	mg/kg		0.206	1.03	1.03	2	MS	SKJ	02/19/10 00:42	100218-3	948073
7440-39-3	Barium	54600	ug/Kg		102	509	509	1	P	HSC	02/17/10 03:33	021610-1	948071
7440-41-7	Beryllium	29.1	mg/kg	*	0.0206	0.103	0.103	2	MS	SKJ	02/19/10 14:58	100219-4	948073
7440-43-9	Cadmium	509	ug/Kg	U	102	509	509	1	P	HSC	02/17/10 03:33	021610-1	948071
7440-70-2	Calcium	2290000	ug/Kg		8150	25500	25500	1	P	HSC	02/17/10 03:33	021610-1	948071
7440-47-3	Chromium	11200	ug/Kg	*	153	509	509	1	P	HSC	02/17/10 03:33	021610-1	948071
7440-48-4	Cobalt	2060	ug/Kg	*	153	509	509	1	P	HSC	02/17/10 03:33	021610-1	948071
7440-50-8	Copper	73900	ug/Kg	*N	306	1020	1020	1	P	HSC	02/17/10 03:33	021610-1	948071
7439-89-6	Iron	8990000	ug/Kg		16300	50900	50900	2	P	HSC	02/24/10 08:48	022310A-2	948071
7439-92-1	Lead	23900	ug/Kg	*	509	2040	2040	2	P	HSC	02/24/10 08:48	022310A-2	948071
7439-95-4	Magnesium	1050000	ug/Kg	N	17300	61100	61100	2	P	HSC	02/24/10 08:48	022310A-2	948071
7439-96-5	Manganese	185000	ug/Kg	N	204	1020	1020	1	P	HSC	02/17/10 03:33	021610-1	948071
7439-97-6	Mercury	15.5	ug/kg		3.8	11.2	11.2	1	AV	JXL1	02/16/10 09:51	021610S2-3	947650
7440-02-0	Nickel	7.17	mg/kg	*N	0.103	0.412	0.412	2	MS	SKJ	02/19/10 00:42	100218-3	948073
7440-09-7	Potassium	675000	ug/Kg	N	6520	25500	25500	1	P	HSC	02/17/10 03:33	021610-1	948071
7782-49-2	Selenium	0.640	mg/kg	J	0.515	1.03	1.03	2	MS	SKJ	02/19/10 00:42	100218-3	948073
7440-22-4	Silver	692	ug/Kg		102	509	509	1	P	HSC	02/17/10 03:33	021610-1	948071
7440-23-5	Sodium	63900	ug/Kg		7130	25500	25500	1	P	HSC	02/17/10 03:33	021610-1	948071
7440-28-0	Thallium	0.139	mg/kg	J	0.0618	0.206	0.206	2	MS	SKJ	02/19/10 00:42	100218-3	948073
7440-61-1	Uranium	69.8	mg/kg	*	0.0136	0.0412	0.0412	2	MS	SKJ	02/19/10 00:42	100218-3	948073
7440-62-2	Vanadium	11400	ug/Kg		102	509	509	1	P	HSC	02/17/10 03:33	021610-1	948071
7440-66-6	Zinc	32100	ug/Kg		336	1020	1020	1	P	HSC	02/17/10 03:33	021610-1	948071

**Prep Information:**

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
947650	947648	SW846 7471A Prep	0.572	g	30	mL	02/15/10	TXB3
948071	948070	SW846 3050B	0.523	g	50	mL	02/08/10	FGA
948073	948072	SW846 3050B	0.517	g	50	mL	02/08/10	FGA

**METALS**  
**-1-**  
**INORGANICS ANALYSIS DATA PACKAGE**

SDG No: 10-1474

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245806003

BASIS: Dry Weight

DATE COLLECTED 26-JAN-10

CLIENT ID: RE15-10-7955

LEVEL: Low

DATE RECEIVED 29-JAN-10

MATRIX: SOIL

%SOLIDS: 82

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	3390000	ug/Kg		7960	23400	23400	1	P	HSC	02/17/10 03:41	021610-1	948071
7440-36-0	Antimony	5530	ug/Kg	*	386	1170	1170	1	P	HSC	02/17/10 03:41	021610-1	948071
7440-38-2	Arsenic	1.8	mg/kg		0.233	1.17	1.17	2	MS	SKJ	02/19/10 00:46	100218-3	948073
7440-39-3	Barium	73400	ug/Kg		117	585	585	1	P	HSC	02/17/10 03:41	021610-1	948071
7440-41-7	Beryllium	6.85	mg/kg	*	0.0233	0.117	0.117	2	MS	SKJ	02/19/10 15:00	100219-4	948073
7440-43-9	Cadmium	242	ug/Kg	J	117	585	585	1	P	HSC	02/17/10 03:41	021610-1	948071
7440-70-2	Calcium	1460000	ug/Kg		9370	29300	29300	1	P	HSC	02/17/10 03:41	021610-1	948071
7440-47-3	Chromium	6870	ug/Kg	*	176	585	585	1	P	HSC	02/17/10 03:41	021610-1	948071
7440-48-4	Cobalt	6080	ug/Kg	*	176	585	585	1	P	HSC	02/17/10 03:41	021610-1	948071
7440-50-8	Copper	1200000	ug/Kg	*N	351	1170	1170	1	P	HSC	02/17/10 03:41	021610-1	948071
7439-89-6	Iron	8710000	ug/Kg		18700	58500	58500	2	P	HSC	02/23/10 15:27	022310A-2	948071
7439-92-1	Lead	203000	ug/Kg	*	585	2340	2340	2	P	HSC	02/23/10 15:27	022310A-2	948071
7439-95-4	Magnesium	713000	ug/Kg	N	19900	70300	70300	2	P	HSC	02/23/10 15:27	022310A-2	948071
7439-96-5	Manganese	234000	ug/Kg	N	234	1170	1170	1	P	HSC	02/17/10 03:41	021610-1	948071
7439-97-6	Mercury	15.7	ug/kg		4.58	13.5	13.5	1	AV	JXL1	02/16/10 09:53	021610S2-5	947650
7440-02-0	Nickel	6.47	mg/kg	*N	0.117	0.467	0.467	2	MS	SKJ	02/19/10 00:46	100218-3	948073
7440-09-7	Potassium	586000	ug/Kg	N	7490	29300	29300	1	P	HSC	02/17/10 03:41	021610-1	948071
7782-49-2	Selenium	1.17	mg/kg	U	0.583	1.17	1.17	2	MS	SKJ	02/19/10 00:46	100218-3	948073
7440-22-4	Silver	1060	ug/Kg		117	585	585	1	P	HSC	02/17/10 03:41	021610-1	948071
7440-23-5	Sodium	68300	ug/Kg		8200	29300	29300	1	P	HSC	02/17/10 03:41	021610-1	948071
7440-28-0	Thallium	0.0733	mg/kg	J	0.07	0.233	0.233	2	MS	SKJ	02/19/10 00:46	100218-3	948073
7440-61-1	Uranium	183	mg/kg	*	0.0154	0.0467	0.0467	2	MS	SKJ	02/19/10 00:46	100218-3	948073
7440-62-2	Vanadium	11300	ug/Kg		117	585	585	1	P	HSC	02/17/10 03:41	021610-1	948071
7440-66-6	Zinc	64700	ug/Kg		386	1170	1170	1	P	HSC	02/17/10 03:41	021610-1	948071

**Prep Information:**

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
947650	947648	SW846 7471A Prep	0.544	g	30	mL	02/15/10	TXB3
948071	948070	SW846 3050B	0.521	g	50	mL	02/08/10	FGA
948073	948072	SW846 3050B	0.523	g	50	mL	02/08/10	FGA

**METALS**  
-1-  
**INORGANICS ANALYSIS DATA PACKAGE**

SDG No: 10-1474

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245806004

BASIS: Dry Weight

DATE COLLECTED 26-JAN-10

CLIENT ID: RE15-10-7953

LEVEL: Low

DATE RECEIVED 29-JAN-10

MATRIX: SOIL

%SOLIDS: 86

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Rnn	Analytical Batch
7429-90-5	Aluminum	2950000	ug/Kg		7470	22000	22000	1	P	HSC	02/17/10 03:48	021610-1	948071
7440-36-0	Antimony	256000	ug/Kg	*	362	1100	1100	1	P	HSC	02/17/10 03:48	021610-1	948071
7440-38-2	Arsenic	2.29	mg/kg		0.223	1.12	1.12	2	MS	SKJ	02/19/10 00:50	100218-3	948073
7440-39-3	Barium	89000	ug/Kg		110	549	549	1	P	HSC	02/17/10 03:48	021610-1	948071
7440-41-7	Beryllium	12.2	mg/kg	*	0.0223	0.112	0.112	2	MS	SKJ	02/19/10 15:03	100219-4	948073
7440-43-9	Cadmium	448	ug/Kg	J	110	549	549	1	P	HSC	02/17/10 03:48	021610-1	948071
7440-70-2	Calcium	1220000	ug/Kg		8780	27500	27500	1	P	HSC	02/17/10 03:48	021610-1	948071
7440-47-3	Chromium	10500	ug/Kg	*	165	549	549	1	P	HSC	02/17/10 03:48	021610-1	948071
7440-48-4	Cobalt	2690	ug/Kg	*	165	549	549	1	P	HSC	02/17/10 03:48	021610-1	948071
7440-50-8	Copper	686000	ug/Kg	*N	329	1100	1100	1	P	HSC	02/17/10 03:48	021610-1	948071
7439-89-6	Iron	6900000	ug/Kg		17600	54900	54900	2	P	HSC	02/23/10 15:34	022310A-2	948071
7439-92-1	Lead	138000000	ug/Kg	*	27500	110000	110000	100	P	HSC	02/23/10 17:46	022310A-2	948071
7439-95-4	Magnesium	862000	ug/Kg	N	18700	65900	65900	2	P	HSC	02/23/10 15:34	022310A-2	948071
7439-96-5	Manganese	140000	ug/Kg	N	220	1100	1100	1	P	HSC	02/17/10 03:48	021610-1	948071
7439-97-6	Mercury	17.7	ug/kg		4.23	12.4	12.4	1	AV	JXL1	02/16/10 09:59	021610S2-5	947650
7440-02-0	Nickel	8.47	mg/kg	*N	0.112	0.447	0.447	2	MS	SKJ	02/19/10 00:50	100218-3	948073
7440-09-7	Potassium	340000	ug/Kg	N	7030	27500	27500	1	P	HSC	02/17/10 03:48	021610-1	948071
7782-49-2	Selenium	1.12	mg/kg	U	0.559	1.12	1.12	2	MS	SKJ	02/19/10 00:50	100218-3	948073
7440-22-4	Silver	2520	ug/Kg		110	549	549	1	P	HSC	02/17/10 03:48	021610-1	948071
7440-23-5	Sodium	42700	ug/Kg		7690	27500	27500	1	P	HSC	02/17/10 03:48	021610-1	948071
7440-28-0	Thallium	0.223	mg/kg	U	0.067	0.223	0.223	2	MS	SKJ	02/19/10 00:50	100218-3	948073
7440-61-1	Uranium	362	mg/kg	*	0.0147	0.0447	0.0447	2	MS	SKJ	02/19/10 00:50	100218-3	948073
7440-62-2	Vanadium	9670	ug/Kg		110	549	549	1	P	HSC	02/17/10 03:48	021610-1	948071
7440-66-6	Zinc	125000	ug/Kg		362	1100	1100	1	P	HSC	02/17/10 03:48	021610-1	948071

**Prep Information:**

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
947650	947648	SW846 7471A Prep	0.562	g	30	mL	02/15/10	TXB3
948071	948070	SW846 3050B	0.53	g	50	mL	02/08/10	FGA
948073	948072	SW846 3050B	0.521	g	50	mL	02/08/10	FGA



**METALS**  
**-1-**  
**INORGANICS ANALYSIS DATA PACKAGE**

SDG No: 10-1474

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245806005

BASIS: Dry Weight

DATE COLLECTED 26-JAN-10

CLIENT ID: RE15-10-7952

LEVEL: Low

DATE RECEIVED 29-JAN-10

MATRIX: SOIL

%SOLIDS: 93.3

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	1670000	ug/Kg		7100	20900	20900	1	P	HSC	02/17/10 03:55	021610-1	948071
7440-36-0	Antimony	1040	ug/Kg	U*	345	1040	1040	1	P	HSC	02/17/10 03:55	021610-1	948071
7440-38-2	Arsenic	0.839	mg/kg	J	0.201	1.01	1.01	2	MS	SKJ	02/19/10 00:54	100218-3	948073
7440-39-3	Barium	48800	ug/Kg		104	522	522	1	P	HSC	02/17/10 03:55	021610-1	948071
7440-41-7	Beryllium	0.310	mg/kg	*	0.0201	0.101	0.101	2	MS	SKJ	02/19/10 15:10	100219-4	948073
7440-43-9	Cadmium	522	ug/Kg	U	104	522	522	1	P	HSC	02/17/10 03:55	021610-1	948071
7440-70-2	Calcium	569000	ug/Kg		8360	26100	26100	1	P	HSC	02/17/10 03:55	021610-1	948071
7440-47-3	Chromium	24000	ug/Kg	*	157	522	522	1	P	HSC	02/17/10 03:55	021610-1	948071
7440-48-4	Cobalt	5010	ug/Kg	*	157	522	522	1	P	HSC	02/17/10 03:55	021610-1	948071
7440-50-8	Copper	4310	ug/Kg	*N	313	1040	1040	1	P	HSC	02/17/10 03:55	021610-1	948071
7439-89-6	Iron	8550000	ug/Kg		16700	52200	52200	2	P	HSC	02/23/10 17:53	022310A-2	948071
7439-92-1	Lead	7460	ug/Kg	*	522	2090	2090	2	P	HSC	02/23/10 17:53	022310A-2	948071
7439-95-4	Magnesium	390000	ug/Kg	N	17800	62700	62700	2	P	HSC	02/23/10 17:53	022310A-2	948071
7439-96-5	Manganese	354000	ug/Kg	N	209	1040	1040	1	P	HSC	02/17/10 03:55	021610-1	948071
7439-97-6	Mercury	22.2	ug/kg		4.2	12.3	12.3	1	AV	JXL1	02/16/10 10:01	021610S2-5	947650
7440-02-0	Nickel	4.07	mg/kg	*N	0.101	0.403	0.403	2	MS	SKJ	02/19/10 00:54	100218-3	948073
7440-09-7	Potassium	353000	ug/Kg	N	6690	26100	26100	1	P	HSC	02/17/10 03:55	021610-1	948071
7782-49-2	Selenium	1.01	mg/kg	U	0.504	1.01	1.01	2	MS	SKJ	02/19/10 00:54	100218-3	948073
7440-22-4	Silver	589	ug/Kg		104	522	522	1	P	HSC	02/17/10 03:55	021610-1	948071
7440-23-5	Sodium	128000	ug/Kg		7310	26100	26100	1	P	HSC	02/17/10 03:55	021610-1	948071
7440-28-0	Thallium	0.201	mg/kg	U	0.0604	0.201	0.201	2	MS	SKJ	02/19/10 00:54	100218-3	948073
7440-61-1	Uranium	0.519	mg/kg	*	0.0133	0.0403	0.0403	2	MS	SKJ	02/19/10 00:54	100218-3	948073
7440-62-2	Vanadium	3900	ug/Kg		104	522	522	1	P	HSC	02/17/10 03:55	021610-1	948071
7440-66-6	Zinc	37500	ug/Kg		345	1040	1040	1	P	HSC	02/17/10 03:55	021610-1	948071

**Prep Information:**

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
947650	947648	SW846 7471A Prep	0.521	g	30	mL	02/15/10	TXB3
948071	948070	SW846 3050B	0.513	g	50	mL	02/08/10	FGA
948073	948072	SW846 3050B	0.532	g	50	mL	02/08/10	FGA

**METALS**  
-1-  
**INORGANICS ANALYSIS DATA PACKAGE**

SDG No: 10-1474

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245806006

BASIS: Dry Weight

DATE COLLECTED 26-JAN-10

CLIENT ID: RE15-10-8060

LEVEL: Low

DATE RECEIVED 29-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	2550000	ug/Kg		7630	22400	22400	1	P	HSC	02/17/10 04:02	021610-1	948071
7440-36-0	Antimony	8360	ug/Kg	*	370	1120	1120	1	P	HSC	02/17/10 04:02	021610-1	948071
7440-38-2	Arsenic	3.7	mg/kg		0.219	1.1	1.1	2	MS	SKJ	02/19/10 01:07	100218-3	948073
7440-39-3	Barium	85200	ug/Kg		112	561	561	1	P	HSC	02/17/10 04:02	021610-1	948071
7440-41-7	Beryllium	9.08	mg/kg	*	0.0219	0.11	0.11	2	MS	SKJ	02/19/10 15:12	100219-4	948073
7440-43-9	Cadmium	229	ug/Kg	J	112	561	561	1	P	HSC	02/17/10 04:02	021610-1	948071
7440-70-2	Calcium	1360000	ug/Kg		8970	28000	28000	1	P	HSC	02/17/10 04:02	021610-1	948071
7440-47-3	Chromium	9600	ug/Kg	*	168	561	561	1	P	HSC	02/17/10 04:02	021610-1	948071
7440-48-4	Cobalt	3890	ug/Kg	*	168	561	561	1	P	HSC	02/17/10 04:02	021610-1	948071
7440-50-8	Copper	445000	ug/Kg	*N	336	1120	1120	1	P	HSC	02/17/10 04:02	021610-1	948071
7439-89-6	Iron	6730000	ug/Kg		17900	56100	56100	2	P	HSC	02/23/10 15:48	022310A-2	948071
7439-92-1	Lead	952000	ug/Kg	*	561	2240	2240	2	P	HSC	02/23/10 15:48	022310A-2	948071
7439-95-4	Magnesium	653000	ug/Kg	N	19100	67300	67300	2	P	HSC	02/23/10 15:48	022310A-2	948071
7439-96-5	Manganese	144000	ug/Kg	N	224	1120	1120	1	P	HSC	02/17/10 04:02	021610-1	948071
7439-97-6	Mercury	17.5	ug/kg		4.78	14	14	1	AV	JXL1	02/16/10 10:02	021610S2-5	947650
7440-02-0	Nickel	7.59	mg/kg	*N	0.11	0.439	0.439	2	MS	SKJ	02/19/10 01:07	100218-3	948073
7440-09-7	Potassium	344000	ug/Kg	N	7180	28000	28000	1	P	HSC	02/17/10 04:02	021610-1	948071
7782-49-2	Selenium	1.1	mg/kg	U	0.548	1.1	1.1	2	MS	SKJ	02/19/10 01:07	100218-3	948073
7440-22-4	Silver	1240	ug/Kg		112	561	561	1	P	HSC	02/17/10 04:02	021610-1	948071
7440-23-5	Sodium	59600	ug/Kg		7850	28000	28000	1	P	HSC	02/17/10 04:02	021610-1	948071
7440-28-0	Thallium	0.219	mg/kg	U	0.0658	0.219	0.219	2	MS	SKJ	02/19/10 01:07	100218-3	948073
7440-61-1	Uranium	352	mg/kg	*	0.0145	0.0439	0.0439	2	MS	SKJ	02/19/10 01:07	100218-3	948073
7440-62-2	Vanadium	7750	ug/Kg		112	561	561	1	P	HSC	02/17/10 04:02	021610-1	948071
7440-66-6	Zinc	52800	ug/Kg		370	1120	1120	1	P	HSC	02/17/10 04:02	021610-1	948071

**Prep Information:**

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
947650	947648	SW846 7471A Prep	0.5	g	30	mL	02/15/10	TXB3
948071	948070	SW846 3050B	0.522	g	50	mL	02/08/10	FGA
948073	948072	SW846 3050B	0.534	g	50	mL	02/08/10	FGA

**METALS**  
**-1-**  
**INORGANICS ANALYSIS DATA PACKAGE**

SDG No: 10-1474

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245806007

BASIS: Dry Weight

DATE COLLECTED 26-JAN-10

CLIENT ID: RE15-10-8058

LEVEL: Low

DATE RECEIVED 29-JAN-10

MATRIX: SOIL

%SOLIDS: 64

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	7390000	ug/Kg		10300	30200	30200	1	P	HSC	02/17/10 04:09	021610-1	948071
7440-36-0	Antimony	1680	ug/Kg	*	498	1510	1510	1	P	HSC	02/17/10 04:09	021610-1	948071
7440-38-2	Arsenic	2.96	mg/kg		0.303	1.51	1.51	2	MS	SKJ	02/19/10 01:11	100218-3	948073
7440-39-3	Barium	114000	ug/Kg		151	754	754	1	P	HSC	02/17/10 04:09	021610-1	948071
7440-41-7	Beryllium	2.84	mg/kg	*	0.0303	0.151	0.151	2	MS	SKJ	02/19/10 15:14	100219-4	948073
7440-43-9	Cadmium	798	ug/Kg		151	754	754	1	P	HSC	02/17/10 04:09	021610-1	948071
7440-70-2	Calcium	3730000	ug/Kg		12100	37700	37700	1	P	HSC	02/17/10 04:09	021610-1	948071
7440-47-3	Chromium	10500	ug/Kg	*	226	754	754	1	P	HSC	02/17/10 04:09	021610-1	948071
7440-48-4	Cobalt	5630	ug/Kg	*	226	754	754	1	P	HSC	02/17/10 04:09	021610-1	948071
7440-50-8	Copper	148000	ug/Kg	*N	453	1510	1510	1	P	HSC	02/17/10 04:09	021610-1	948071
7439-89-6	Iron	11200000	ug/Kg		24100	75400	75400	2	P	HSC	02/23/10 15:55	022310A-2	948071
7439-92-1	Lead	140000	ug/Kg	*	754	3020	3020	2	P	HSC	02/23/10 15:55	022310A-2	948071
7439-95-4	Magnesium	1630000	ug/Kg	N	25600	90500	90500	2	P	HSC	02/23/10 15:55	022310A-2	948071
7439-96-5	Manganese	378000	ug/Kg	N	302	1510	1510	1	P	HSC	02/17/10 04:09	021610-1	948071
7439-97-6	Mercury	41.4	ug/kg		6.35	18.7	18.7	1	AV	JXLI	02/16/10 10:04	021610S2-5	947650
7440-02-0	Nickel	8.08	mg/kg	*N	0.151	0.606	0.606	2	MS	SKJ	02/19/10 01:11	100218-3	948073
7440-09-7	Potassium	1490000	ug/Kg	N	9650	37700	37700	1	P	HSC	02/17/10 04:09	021610-1	948071
7782-49-2	Selenium	1.51	mg/kg	U	0.757	1.51	1.51	2	MS	SKJ	02/19/10 01:11	100218-3	948073
7440-22-4	Silver	1060	ug/Kg		151	754	754	1	P	HSC	02/17/10 04:09	021610-1	948071
7440-23-5	Sodium	35700	ug/Kg	J	10600	37700	37700	1	P	HSC	02/17/10 04:09	021610-1	948071
7440-28-0	Thallium	0.139	mg/kg	J	0.0909	0.303	0.303	2	MS	SKJ	02/19/10 01:11	100218-3	948073
7440-61-1	Uranium	53.8	mg/kg	*	0.02	0.0606	0.0606	2	MS	SKJ	02/19/10 01:11	100218-3	948073
7440-62-2	Vanadium	20000	ug/Kg		151	754	754	1	P	HSC	02/17/10 04:09	021610-1	948071
7440-66-6	Zinc	67200	ug/Kg		498	1510	1510	1	P	HSC	02/17/10 04:09	021610-1	948071

**Prep Information:**

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
947650	947648	SW846 7471A Prep	0.501	g	30	mL	02/15/10	TXB3
948071	948070	SW846 3050B	0.517	g	50	mL	02/08/10	FGA
948073	948072	SW846 3050B	0.515	g	50	mL	02/08/10	FGA

**METALS**  
-1-  
**INORGANICS ANALYSIS DATA PACKAGE**

SDG No: 10-1474

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245806008

BASIS: Dry Weight

DATE COLLECTED 26-JAN-10

CLIENT ID: RE15-10-8059

LEVEL: Low

DATE RECEIVED 29-JAN-10

MATRIX: SOIL

%SOLIDS: 92.7

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	1910000	ug/Kg		7130	21000	21000	1	P	HSC	02/17/10 04:16	021610-1	948071
7440-36-0	Antimony	1050	ug/Kg	U*	346	1050	1050	1	P	HSC	02/17/10 04:16	021610-1	948071
7440-38-2	Arsenic	0.845	mg/kg	J	0.211	1.05	1.05	2	MS	SKJ	02/19/10 01:15	100218-3	948073
7440-39-3	Barium	30500	ug/Kg		105	525	525	1	P	HSC	02/17/10 04:16	021610-1	948071
7440-41-7	Beryllium	0.304	mg/kg	*	0.0211	0.105	0.105	2	MS	SKJ	02/19/10 15:16	100219-4	948073
7440-43-9	Cadmium	525	ug/Kg	U	105	525	525	1	P	HSC	02/17/10 04:16	021610-1	948071
7440-70-2	Calcium	779000	ug/Kg		8390	26200	26200	1	P	HSC	02/17/10 04:16	021610-1	948071
7440-47-3	Chromium	16300	ug/Kg	*	157	525	525	1	P	HSC	02/17/10 04:16	021610-1	948071
7440-48-4	Cobalt	14300	ug/Kg	*	157	525	525	1	P	HSC	02/17/10 04:16	021610-1	948071
7440-50-8	Copper	5340	ug/Kg	*N	315	1050	1050	1	P	HSC	02/17/10 04:16	021610-1	948071
7439-89-6	Iron	8500000	ug/Kg		16800	52500	52500	2	P	HSC	02/23/10 17:59	022310A-2	948071
7439-92-1	Lead	6900	ug/Kg	*	525	2100	2100	2	P	HSC	02/23/10 17:59	022310A-2	948071
7439-95-4	Magnesium	386000	ug/Kg	N	17800	62900	62900	2	P	HSC	02/23/10 17:59	022310A-2	948071
7439-96-5	Manganese	221000	ug/Kg	N	210	1050	1050	1	P	HSC	02/17/10 04:16	021610-1	948071
7439-97-6	Mercury	26.5	ug/kg		4.33	12.7	12.7	1	AV	JXL1	02/16/10 10:06	021610S2-5	947650
7440-02-0	Nickel	4.26	mg/kg	*N	0.105	0.421	0.421	2	MS	SKJ	02/19/10 01:15	100218-3	948073
7440-09-7	Potassium	396000	ug/Kg	N	6710	26200	26200	1	P	HSC	02/17/10 04:16	021610-1	948071
7782-49-2	Selenium	1.05	mg/kg	U	0.527	1.05	1.05	2	MS	SKJ	02/19/10 01:15	100218-3	948073
7440-22-4	Silver	564	ug/Kg		105	525	525	1	P	HSC	02/17/10 04:16	021610-1	948071
7440-23-5	Sodium	145000	ug/Kg		7340	26200	26200	1	P	HSC	02/17/10 04:16	021610-1	948071
7440-28-0	Thallium	0.211	mg/kg	U	0.0632	0.211	0.211	2	MS	SKJ	02/19/10 01:15	100218-3	948073
7440-61-1	Uranium	0.584	mg/kg	*	0.0139	0.0421	0.0421	2	MS	SKJ	02/19/10 01:15	100218-3	948073
7440-62-2	Vanadium	5440	ug/Kg		105	525	525	1	P	HSC	02/17/10 04:16	021610-1	948071
7440-66-6	Zinc	32800	ug/Kg		346	1050	1050	1	P	HSC	02/17/10 04:16	021610-1	948071

**Prep Information:**

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
947650	947648	SW846 7471A Prep	0.508	g	30	mL	02/15/10	TXB3
948071	948070	SW846 3050B	0.514	g	50	mL	02/08/10	FGA
948073	948072	SW846 3050B	0.512	g	50	mL	02/08/10	FGA

# **Quality Control Summary**

## METALS

-2a-

## Initial and Continuing Calibration Verification

SDG No: 10-1474

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS4,MER536,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
ICV01										
	Mercury	5.04	ug/L	5	ug/L	100.9	90.0 – 110.0	AV	16-FEB-10 09:01	021610S2-5
	Aluminum	4930	ug/L	5000	ug/L	98.7	90.0 – 110.0	P	16-FEB-10 12:18	021610-1
	Antimony	514	ug/L	500	ug/L	102.7	90.0 – 110.0	P	16-FEB-10 12:18	021610-1
	Barium	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	16-FEB-10 12:18	021610-1
	Cadmium	478	ug/L	500	ug/L	95.5	90.0 – 110.0	P	16-FEB-10 12:18	021610-1
	Calcium	4950	ug/L	5000	ug/L	99	90.0 – 110.0	P	16-FEB-10 12:18	021610-1
	Chromium	475	ug/L	500	ug/L	94.9	90.0 – 110.0	P	16-FEB-10 12:18	021610-1
	Cobalt	491	ug/L	500	ug/L	98.2	90.0 – 110.0	P	16-FEB-10 12:18	021610-1
	Copper	490	ug/L	500	ug/L	98	90.0 – 110.0	P	16-FEB-10 12:18	021610-1
	Manganese	506	ug/L	500	ug/L	101.1	90.0 – 110.0	P	16-FEB-10 12:18	021610-1
	Potassium	2410	ug/L	2500	ug/L	96.4	90.0 – 110.0	P	16-FEB-10 12:18	021610-1
	Silver	254	ug/L	250	ug/L	101.5	90.0 – 110.0	P	16-FEB-10 12:18	021610-1
	Sodium	2490	ug/L	2500	ug/L	99.5	90.0 – 110.0	P	16-FEB-10 12:18	021610-1
	Vanadium	502	ug/L	500	ug/L	100.3	90.0 – 110.0	P	16-FEB-10 12:18	021610-1
	Zinc	498	ug/L	500	ug/L	99.7	90.0 – 110.0	P	16-FEB-10 12:18	021610-1
	Arsenic	49.4	ug/L	50	ug/L	98.7	90.0 – 110.0	MS	18-FEB-10 23:14	100218-3
	Nickel	52.2	ug/L	50	ug/L	104.3	90.0 – 110.0	MS	18-FEB-10 23:14	100218-3
	Selenium	50.2	ug/L	50	ug/L	100.3	90.0 – 110.0	MS	18-FEB-10 23:14	100218-3
	Thallium	48.4	ug/L	50	ug/L	96.8	90.0 – 110.0	MS	18-FEB-10 23:14	100218-3
	Uranium	52.8	ug/L	50	ug/L	105.6	90.0 – 110.0	MS	18-FEB-10 23:14	100218-3
	Beryllium	52.1	ug/L	50	ug/L	104.2	90.0 – 110.0	MS	19-FEB-10 14:18	100219-4
	Iron	5220	ug/L	5000	ug/L	104.5	90.0 – 110.0	P	23-FEB-10 11:10	022310A-2
	Lead	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	23-FEB-10 11:10	022310A-2
	Magnesium	5300	ug/L	5000	ug/L	106	90.0 – 110.0	P	23-FEB-10 11:10	022310A-2
CCV01										
	Mercury	5.12	ug/L	5	ug/L	102.4	80.0 – 120.0	AV	16-FEB-10 09:07	021610S2-5
	Aluminum	5130	ug/L	5000	ug/L	102.6	90.0 – 110.0	P	16-FEB-10 13:04	021610-1
	Antimony	520	ug/L	500	ug/L	104.1	90.0 – 110.0	P	16-FEB-10 13:04	021610-1
	Barium	497	ug/L	500	ug/L	99.5	90.0 – 110.0	P	16-FEB-10 13:04	021610-1
	Cadmium	486	ug/L	500	ug/L	97.2	90.0 – 110.0	P	16-FEB-10 13:04	021610-1

SW846

## METALS

-2a-

## Initial and Continuing Calibration Verification

SDG No: 10-1474

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS4,MER536,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>
	Calcium	5070	ug/L	5000	ug/L	101.3	90.0 - 110.0	P	16-FEB-10 13:04	021610-1
	Chromium	493	ug/L	500	ug/L	98.6	90.0 - 110.0	P	16-FEB-10 13:04	021610-1
	Cobalt	493	ug/L	500	ug/L	98.5	90.0 - 110.0	P	16-FEB-10 13:04	021610-1
	Copper	491	ug/L	500	ug/L	98.3	90.0 - 110.0	P	16-FEB-10 13:04	021610-1
	Manganese	500	ug/L	500	ug/L	100	90.0 - 110.0	P	16-FEB-10 13:04	021610-1
	Potassium	5290	ug/L	5000	ug/L	105.8	90.0 - 110.0	P	16-FEB-10 13:04	021610-1
	Silver	494	ug/L	500	ug/L	98.8	90.0 - 110.0	P	16-FEB-10 13:04	021610-1
	Sodium	10200	ug/L	10000	ug/L	102.1	90.0 - 110.0	P	16-FEB-10 13:04	021610-1
	Vanadium	497	ug/L	500	ug/L	99.5	90.0 - 110.0	P	16-FEB-10 13:04	021610-1
	Zinc	492	ug/L	500	ug/L	98.3	90.0 - 110.0	P	16-FEB-10 13:04	021610-1
	Arsenic	47.7	ug/L	50	ug/L	95.4	90.0 - 110.0	MS	18-FEB-10 23:35	100218-3
	Nickel	52	ug/L	50	ug/L	104.1	90.0 - 110.0	MS	18-FEB-10 23:35	100218-3
	Selenium	49.9	ug/L	50	ug/L	99.9	90.0 - 110.0	MS	18-FEB-10 23:35	100218-3
	Thallium	47.3	ug/L	50	ug/L	94.6	90.0 - 110.0	MS	18-FEB-10 23:35	100218-3
	Uranium	51.9	ug/L	50	ug/L	103.7	90.0 - 110.0	MS	18-FEB-10 23:35	100218-3
	Beryllium	50.1	ug/L	50	ug/L	100.3	90.0 - 110.0	MS	19-FEB-10 14:29	100219-4
	Iron	5110	ug/L	5000	ug/L	102.3	90.0 - 110.0	P	23-FEB-10 11:57	022310A-2
	Lead	517	ug/L	500	ug/L	103.4	90.0 - 110.0	P	23-FEB-10 11:57	022310A-2
	Magnesium	5410	ug/L	5000	ug/L	108.3	90.0 - 110.0	P	23-FEB-10 11:57	022310A-2
CCV02										
	Mercury	5.26	ug/L	5	ug/L	105.3	80.0 - 120.0	AV	16-FEB-10 09:30	021610S2-5
	Aluminum	5060	ug/L	5000	ug/L	101.2	90.0 - 110.0	P	16-FEB-10 13:26	021610-1
	Antimony	505	ug/L	500	ug/L	101	90.0 - 110.0	P	16-FEB-10 13:26	021610-1
	Barium	498	ug/L	500	ug/L	99.7	90.0 - 110.0	P	16-FEB-10 13:26	021610-1
	Cadmium	484	ug/L	500	ug/L	96.9	90.0 - 110.0	P	16-FEB-10 13:26	021610-1
	Calcium	5040	ug/L	5000	ug/L	100.8	90.0 - 110.0	P	16-FEB-10 13:26	021610-1
	Chromium	495	ug/L	500	ug/L	99.1	90.0 - 110.0	P	16-FEB-10 13:26	021610-1
	Cobalt	492	ug/L	500	ug/L	98.4	90.0 - 110.0	P	16-FEB-10 13:26	021610-1
	Copper	493	ug/L	500	ug/L	98.7	90.0 - 110.0	P	16-FEB-10 13:26	021610-1
	Manganese	501	ug/L	500	ug/L	100.2	90.0 - 110.0	P	16-FEB-10 13:26	021610-1

## METALS

-2a-

## Initial and Continuing Calibration Verification

SDG No: 10-1474

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS4,MER536,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Potassium	5040	ug/L	5000	ug/L	100.8	90.0 – 110.0	P	16-FEB-10 13:26	021610-1
	Silver	496	ug/L	500	ug/L	99.3	90.0 – 110.0	P	16-FEB-10 13:26	021610-1
	Sodium	10100	ug/L	10000	ug/L	101.4	90.0 – 110.0	P	16-FEB-10 13:26	021610-1
	Vanadium	499	ug/L	500	ug/L	99.7	90.0 – 110.0	P	16-FEB-10 13:26	021610-1
	Zinc	491	ug/L	500	ug/L	98.2	90.0 – 110.0	P	16-FEB-10 13:26	021610-1
	Arsenic	49.5	ug/L	50	ug/L	99	90.0 – 110.0	MS	18-FEB-10 23:47	100218-3
	Nickel	53	ug/L	50	ug/L	106	90.0 – 110.0	MS	18-FEB-10 23:47	100218-3
	Selenium	52.2	ug/L	50	ug/L	104.4	90.0 – 110.0	MS	18-FEB-10 23:47	100218-3
	Thallium	49.5	ug/L	50	ug/L	99	90.0 – 110.0	MS	18-FEB-10 23:47	100218-3
	Uranium	54.7	ug/L	50	ug/L	109.4	90.0 – 110.0	MS	18-FEB-10 23:47	100218-3
	Beryllium	50	ug/L	50	ug/L	100	90.0 – 110.0	MS	19-FEB-10 14:38	100219-4
	Iron	4990	ug/L	5000	ug/L	99.9	90.0 – 110.0	P	23-FEB-10 12:25	022310A-2
	Lead	506	ug/L	500	ug/L	101.2	90.0 – 110.0	P	23-FEB-10 12:25	022310A-2
	Magnesium	5230	ug/L	5000	ug/L	104.5	90.0 – 110.0	P	23-FEB-10 12:25	022310A-2
CCV03	Mercury	5.67	ug/L	5	ug/L	113.4	80.0 – 120.0	AV	16-FEB-10 09:55	021610S2-5
	Aluminum	5150	ug/L	5000	ug/L	103.1	90.0 – 110.0	P	16-FEB-10 15:01	021610-1
	Antimony	513	ug/L	500	ug/L	102.6	90.0 – 110.0	P	16-FEB-10 15:01	021610-1
	Barium	499	ug/L	500	ug/L	99.8	90.0 – 110.0	P	16-FEB-10 15:01	021610-1
	Cadmium	479	ug/L	500	ug/L	95.9	90.0 – 110.0	P	16-FEB-10 15:01	021610-1
	Calcium	5170	ug/L	5000	ug/L	103.3	90.0 – 110.0	P	16-FEB-10 15:01	021610-1
	Chromium	487	ug/L	500	ug/L	97.3	90.0 – 110.0	P	16-FEB-10 15:01	021610-1
	Cobalt	495	ug/L	500	ug/L	99	90.0 – 110.0	P	16-FEB-10 15:01	021610-1
	Copper	510	ug/L	500	ug/L	102	90.0 – 110.0	P	16-FEB-10 15:01	021610-1
	Manganese	504	ug/L	500	ug/L	100.8	90.0 – 110.0	P	16-FEB-10 15:01	021610-1
	Potassium	5370	ug/L	5000	ug/L	107.5	90.0 – 110.0	P	16-FEB-10 15:01	021610-1
	Silver	503	ug/L	500	ug/L	100.5	90.0 – 110.0	P	16-FEB-10 15:01	021610-1
	Sodium	12300	ug/L	10000	ug/L	122.7	90.0 – 110.0	P	16-FEB-10 15:01	021610-1
	Vanadium	496	ug/L	500	ug/L	99.3	90.0 – 110.0	P	16-FEB-10 15:01	021610-1
	Zinc	495	ug/L	500	ug/L	98.9	90.0 – 110.0	P	16-FEB-10 15:01	021610-1

SW846



## METALS

-2a-

## Initial and Continuing Calibration Verification

SDG No: 10-1474

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS4,MER536,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Arsenic	48.7	ug/L	50	ug/L	97.4	90.0 - 110.0	MS	19-FEB-10 00:04	100218-3
	Nickel	51.3	ug/L	50	ug/L	102.6	90.0 - 110.0	MS	19-FEB-10 00:04	100218-3
	Selenium	49.4	ug/L	50	ug/L	98.8	90.0 - 110.0	MS	19-FEB-10 00:04	100218-3
	Thallium	47.9	ug/L	50	ug/L	95.8	90.0 - 110.0	MS	19-FEB-10 00:04	100218-3
	Uranium	52.8	ug/L	50	ug/L	105.5	90.0 - 110.0	MS	19-FEB-10 00:04	100218-3
	Beryllium	50.4	ug/L	50	ug/L	100.8	90.0 - 110.0	MS	19-FEB-10 14:51	100219-4
	Iron	4970	ug/L	5000	ug/L	99.5	90.0 - 110.0	P	23-FEB-10 13:03	022310A-2
	Lead	506	ug/L	500	ug/L	101.3	90.0 - 110.0	P	23-FEB-10 13:03	022310A-2
	Magnesium	5190	ug/L	5000	ug/L	103.8	90.0 - 110.0	P	23-FEB-10 13:03	022310A-2
CCV04										
	Mercury	5.57	ug/L	5	ug/L	111.3	80.0 - 120.0	AV	16-FEB-10 10:14	021610S2-5
	Aluminum	5200	ug/L	5000	ug/L	104	90.0 - 110.0	P	16-FEB-10 15:21	021610-1
	Antimony	513	ug/L	500	ug/L	102.7	90.0 - 110.0	P	16-FEB-10 15:21	021610-1
	Barium	495	ug/L	500	ug/L	99.1	90.0 - 110.0	P	16-FEB-10 15:21	021610-1
	Cadmium	485	ug/L	500	ug/L	96.9	90.0 - 110.0	P	16-FEB-10 15:21	021610-1
	Calcium	5110	ug/L	5000	ug/L	102.1	90.0 - 110.0	P	16-FEB-10 15:21	021610-1
	Chromium	485	ug/L	500	ug/L	97.1	90.0 - 110.0	P	16-FEB-10 15:21	021610-1
	Cobalt	496	ug/L	500	ug/L	99.1	90.0 - 110.0	P	16-FEB-10 15:21	021610-1
	Copper	503	ug/L	500	ug/L	100.7	90.0 - 110.0	P	16-FEB-10 15:21	021610-1
	Manganese	502	ug/L	500	ug/L	100.4	90.0 - 110.0	P	16-FEB-10 15:21	021610-1
	Potassium	5320	ug/L	5000	ug/L	106.3	90.0 - 110.0	P	16-FEB-10 15:21	021610-1
	Silver	502	ug/L	500	ug/L	100.4	90.0 - 110.0	P	16-FEB-10 15:21	021610-1
	Sodium	11500	ug/L	10000	ug/L	114.7	90.0 - 110.0	P	16-FEB-10 15:21	021610-1
	Vanadium	495	ug/L	500	ug/L	99.1	90.0 - 110.0	P	16-FEB-10 15:21	021610-1
	Zinc	492	ug/L	500	ug/L	98.4	90.0 - 110.0	P	16-FEB-10 15:21	021610-1
	Arsenic	49.1	ug/L	50	ug/L	98.2	90.0 - 110.0	MS	19-FEB-10 00:33	100218-3
	Nickel	50.9	ug/L	50	ug/L	101.7	90.0 - 110.0	MS	19-FEB-10 00:33	100218-3
	Selenium	50.7	ug/L	50	ug/L	101.4	90.0 - 110.0	MS	19-FEB-10 00:33	100218-3
	Thallium	46.7	ug/L	50	ug/L	93.3	90.0 - 110.0	MS	19-FEB-10 00:33	100218-3
	Uranium	51	ug/L	50	ug/L	101.9	90.0 - 110.0	MS	19-FEB-10 00:33	100218-3

SW846

## METALS

-2a-

## Initial and Continuing Calibration Verification

SDG No: 10-1474

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS4,MER536,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Beryllium	50.2	ug/L	50	ug/L	100.5	90.0 - 110.0	MS	19-FEB-10 15:05	100219-4
	Iron	5340	ug/L	5000	ug/L	106.7	90.0 - 110.0	P	23-FEB-10 14:04	022310A-2
	Lead	505	ug/L	500	ug/L	101.1	90.0 - 110.0	P	23-FEB-10 14:04	022310A-2
	Magnesium	5510	ug/L	5000	ug/L	110.3	90.0 - 110.0	P	23-FEB-10 14:04	022310A-2
CCV05	Aluminum	4900	ug/L	5000	ug/L	98.1	90.0 - 110.0	P	16-FEB-10 15:39	021610-1
	Antimony	504	ug/L	500	ug/L	100.7	90.0 - 110.0	P	16-FEB-10 15:39	021610-1
	Barium	489	ug/L	500	ug/L	97.7	90.0 - 110.0	P	16-FEB-10 15:39	021610-1
	Cadmium	477	ug/L	500	ug/L	95.4	90.0 - 110.0	P	16-FEB-10 15:39	021610-1
	Calcium	4860	ug/L	5000	ug/L	97.1	90.0 - 110.0	P	16-FEB-10 15:39	021610-1
	Chromium	477	ug/L	500	ug/L	95.3	90.0 - 110.0	P	16-FEB-10 15:39	021610-1
	Cobalt	487	ug/L	500	ug/L	97.3	90.0 - 110.0	P	16-FEB-10 15:39	021610-1
	Copper	495	ug/L	500	ug/L	99.1	90.0 - 110.0	P	16-FEB-10 15:39	021610-1
	Manganese	493	ug/L	500	ug/L	98.6	90.0 - 110.0	P	16-FEB-10 15:39	021610-1
	Potassium	5020	ug/L	5000	ug/L	100.4	90.0 - 110.0	P	16-FEB-10 15:39	021610-1
	Silver	494	ug/L	500	ug/L	98.8	90.0 - 110.0	P	16-FEB-10 15:39	021610-1
	Sodium	11100	ug/L	10000	ug/L	110.8	90.0 - 110.0	P	16-FEB-10 15:39	021610-1
	Vanadium	486	ug/L	500	ug/L	97.3	90.0 - 110.0	P	16-FEB-10 15:39	021610-1
	Zinc	485	ug/L	500	ug/L	96.9	90.0 - 110.0	P	16-FEB-10 15:39	021610-1
	Arsenic	49.5	ug/L	50	ug/L	99	90.0 - 110.0	MS	19-FEB-10 00:58	100218-3
	Nickel	51.6	ug/L	50	ug/L	103.2	90.0 - 110.0	MS	19-FEB-10 00:58	100218-3
	Selenium	49.4	ug/L	50	ug/L	98.8	90.0 - 110.0	MS	19-FEB-10 00:58	100218-3
	Thallium	45.8	ug/L	50	ug/L	91.6	90.0 - 110.0	MS	19-FEB-10 00:58	100218-3
	Uranium	50.2	ug/L	50	ug/L	100.4	90.0 - 110.0	MS	19-FEB-10 00:58	100218-3
	Beryllium	52.5	ug/L	50	ug/L	105	90.0 - 110.0	MS	19-FEB-10 15:19	100219-4
	Iron	5230	ug/L	5000	ug/L	104.7	90.0 - 110.0	P	23-FEB-10 15:06	022310A-2
	Lead	507	ug/L	500	ug/L	101.5	90.0 - 110.0	P	23-FEB-10 15:06	022310A-2
	Magnesium	5320	ug/L	5000	ug/L	106.4	90.0 - 110.0	P	23-FEB-10 15:06	022310A-2
CCV06	Aluminum	4960	ug/L	5000	ug/L	99.1	90.0 - 110.0	P	16-FEB-10 16:07	021610-1

SW846

## METALS

-2a-

## Initial and Continuing Calibration Verification

SDG No: 10-1474

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS4,MER536,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>
	Antimony	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	16-FEB-10 16:07	021610-1
	Barium	490	ug/L	500	ug/L	98	90.0 – 110.0	P	16-FEB-10 16:07	021610-1
	Cadmium	478	ug/L	500	ug/L	95.5	90.0 – 110.0	P	16-FEB-10 16:07	021610-1
	Calcium	4960	ug/L	5000	ug/L	99.2	90.0 – 110.0	P	16-FEB-10 16:07	021610-1
	Chromium	479	ug/L	500	ug/L	95.7	90.0 – 110.0	P	16-FEB-10 16:07	021610-1
	Cobalt	489	ug/L	500	ug/L	97.8	90.0 – 110.0	P	16-FEB-10 16:07	021610-1
	Copper	495	ug/L	500	ug/L	99	90.0 – 110.0	P	16-FEB-10 16:07	021610-1
	Manganese	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	16-FEB-10 16:07	021610-1
	Potassium	5020	ug/L	5000	ug/L	100.4	90.0 – 110.0	P	16-FEB-10 16:07	021610-1
	Silver	494	ug/L	500	ug/L	98.7	90.0 – 110.0	P	16-FEB-10 16:07	021610-1
	Sodium	10800	ug/L	10000	ug/L	107.6	90.0 – 110.0	P	16-FEB-10 16:07	021610-1
	Vanadium	487	ug/L	500	ug/L	97.5	90.0 – 110.0	P	16-FEB-10 16:07	021610-1
	Zinc	485	ug/L	500	ug/L	97	90.0 – 110.0	P	16-FEB-10 16:07	021610-1
	Arsenic	48.9	ug/L	50	ug/L	97.8	90.0 – 110.0	MS	19-FEB-10 01:19	100218-3
	Nickel	50.8	ug/L	50	ug/L	101.6	90.0 – 110.0	MS	19-FEB-10 01:19	100218-3
	Selenium	49.7	ug/L	50	ug/L	99.3	90.0 – 110.0	MS	19-FEB-10 01:19	100218-3
	Thallium	46.1	ug/L	50	ug/L	92.1	90.0 – 110.0	MS	19-FEB-10 01:19	100218-3
	Uranium	50.6	ug/L	50	ug/L	101.2	90.0 – 110.0	MS	19-FEB-10 01:19	100218-3
	Iron	5070	ug/L	5000	ug/L	101.3	90.0 – 110.0	P	23-FEB-10 16:09	022310A-2
	Lead	524	ug/L	500	ug/L	104.9	90.0 – 110.0	P	23-FEB-10 16:09	022310A-2
	Magnesium	5200	ug/L	5000	ug/L	104.1	90.0 – 110.0	P	23-FEB-10 16:09	022310A-2
CCV07	Aluminum	4940	ug/L	5000	ug/L	98.8	90.0 – 110.0	P	16-FEB-10 16:40	021610-1
	Antimony	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	16-FEB-10 16:40	021610-1
	Barium	489	ug/L	500	ug/L	97.7	90.0 – 110.0	P	16-FEB-10 16:40	021610-1
	Cadmium	468	ug/L	500	ug/L	93.5	90.0 – 110.0	P	16-FEB-10 16:40	021610-1
	Calcium	4930	ug/L	5000	ug/L	98.6	90.0 – 110.0	P	16-FEB-10 16:40	021610-1
	Chromium	476	ug/L	500	ug/L	95.1	90.0 – 110.0	P	16-FEB-10 16:40	021610-1
	Cobalt	483	ug/L	500	ug/L	96.6	90.0 – 110.0	P	16-FEB-10 16:40	021610-1
	Copper	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	16-FEB-10 16:40	021610-1

SW846

## METALS

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## Initial and Continuing Calibration Verification

SDG No: 10-1474

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS4,MER536,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Manganese	494	ug/L	500	ug/L	98.8	90.0 - 110.0	P	16-FEB-10 16:40	021610-1
	Potassium	4970	ug/L	5000	ug/L	99.4	90.0 - 110.0	P	16-FEB-10 16:40	021610-1
	Silver	491	ug/L	500	ug/L	98.2	90.0 - 110.0	P	16-FEB-10 16:40	021610-1
	Sodium	10600	ug/L	10000	ug/L	106.3	90.0 - 110.0	P	16-FEB-10 16:40	021610-1
	Vanadium	485	ug/L	500	ug/L	97.1	90.0 - 110.0	P	16-FEB-10 16:40	021610-1
	Zinc	484	ug/L	500	ug/L	96.8	90.0 - 110.0	P	16-FEB-10 16:40	021610-1
	Iron	5030	ug/L	5000	ug/L	100.7	90.0 - 110.0	P	23-FEB-10 16:57	022310A-2
	Lead	517	ug/L	500	ug/L	103.5	90.0 - 110.0	P	23-FEB-10 16:57	022310A-2
	Magnesium	5200	ug/L	5000	ug/L	104.1	90.0 - 110.0	P	23-FEB-10 16:57	022310A-2
CCV08	Aluminum	4910	ug/L	5000	ug/L	98.2	90.0 - 110.0	P	16-FEB-10 17:42	021610-1
	Antimony	497	ug/L	500	ug/L	99.4	90.0 - 110.0	P	16-FEB-10 17:42	021610-1
	Barium	491	ug/L	500	ug/L	98.2	90.0 - 110.0	P	16-FEB-10 17:42	021610-1
	Cadmium	478	ug/L	500	ug/L	95.5	90.0 - 110.0	P	16-FEB-10 17:42	021610-1
	Calcium	4850	ug/L	5000	ug/L	97	90.0 - 110.0	P	16-FEB-10 17:42	021610-1
	Chromium	475	ug/L	500	ug/L	95.1	90.0 - 110.0	P	16-FEB-10 17:42	021610-1
	Cobalt	490	ug/L	500	ug/L	98.1	90.0 - 110.0	P	16-FEB-10 17:42	021610-1
	Copper	499	ug/L	500	ug/L	99.9	90.0 - 110.0	P	16-FEB-10 17:42	021610-1
	Manganese	496	ug/L	500	ug/L	99.2	90.0 - 110.0	P	16-FEB-10 17:42	021610-1
	Potassium	4920	ug/L	5000	ug/L	98.3	90.0 - 110.0	P	16-FEB-10 17:42	021610-1
	Silver	496	ug/L	500	ug/L	99.1	90.0 - 110.0	P	16-FEB-10 17:42	021610-1
	Sodium	10300	ug/L	10000	ug/L	103.5	90.0 - 110.0	P	16-FEB-10 17:42	021610-1
	Vanadium	487	ug/L	500	ug/L	97.4	90.0 - 110.0	P	16-FEB-10 17:42	021610-1
	Zinc	487	ug/L	500	ug/L	97.4	90.0 - 110.0	P	16-FEB-10 17:42	021610-1
	Iron	5120	ug/L	5000	ug/L	102.4	90.0 - 110.0	P	23-FEB-10 17:25	022310A-2
	Lead	516	ug/L	500	ug/L	103.1	90.0 - 110.0	P	23-FEB-10 17:25	022310A-2
	Magnesium	5320	ug/L	5000	ug/L	106.3	90.0 - 110.0	P	23-FEB-10 17:25	022310A-2
CCV09	Aluminum	4830	ug/L	5000	ug/L	96.7	90.0 - 110.0	P	16-FEB-10 18:44	021610-1
	Antimony	492	ug/L	500	ug/L	98.4	90.0 - 110.0	P	16-FEB-10 18:44	021610-1

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## METALS

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## Initial and Continuing Calibration Verification

SDG No: 10-1474

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS4,MER536,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	487	ug/L	500	ug/L	97.3	90.0 - 110.0	P	16-FEB-10 18:44	021610-1
	Cadmium	472	ug/L	500	ug/L	94.4	90.0 - 110.0	P	16-FEB-10 18:44	021610-1
	Calcium	4780	ug/L	5000	ug/L	95.7	90.0 - 110.0	P	16-FEB-10 18:44	021610-1
	Chromium	471	ug/L	500	ug/L	94.1	90.0 - 110.0	P	16-FEB-10 18:44	021610-1
	Cobalt	485	ug/L	500	ug/L	97	90.0 - 110.0	P	16-FEB-10 18:44	021610-1
	Copper	493	ug/L	500	ug/L	98.6	90.0 - 110.0	P	16-FEB-10 18:44	021610-1
	Manganese	493	ug/L	500	ug/L	98.6	90.0 - 110.0	P	16-FEB-10 18:44	021610-1
	Potassium	4810	ug/L	5000	ug/L	96.2	90.0 - 110.0	P	16-FEB-10 18:44	021610-1
	Silver	490	ug/L	500	ug/L	98.1	90.0 - 110.0	P	16-FEB-10 18:44	021610-1
	Sodium	10200	ug/L	10000	ug/L	101.9	90.0 - 110.0	P	16-FEB-10 18:44	021610-1
	Vanadium	482	ug/L	500	ug/L	96.4	90.0 - 110.0	P	16-FEB-10 18:44	021610-1
	Zinc	482	ug/L	500	ug/L	96.4	90.0 - 110.0	P	16-FEB-10 18:44	021610-1
	Iron	5210	ug/L	5000	ug/L	104.2	90.0 - 110.0	P	23-FEB-10 18:40	022310A-2
	Lead	509	ug/L	500	ug/L	101.8	90.0 - 110.0	P	23-FEB-10 18:40	022310A-2
	Magnesium	5400	ug/L	5000	ug/L	108	90.0 - 110.0	P	23-FEB-10 18:40	022310A-2
CCV10	Aluminum	4900	ug/L	5000	ug/L	97.9	90.0 - 110.0	P	16-FEB-10 19:41	021610-1
	Antimony	496	ug/L	500	ug/L	99.3	90.0 - 110.0	P	16-FEB-10 19:41	021610-1
	Barium	493	ug/L	500	ug/L	98.6	90.0 - 110.0	P	16-FEB-10 19:41	021610-1
	Cadmium	478	ug/L	500	ug/L	95.5	90.0 - 110.0	P	16-FEB-10 19:41	021610-1
	Calcium	4900	ug/L	5000	ug/L	98.1	90.0 - 110.0	P	16-FEB-10 19:41	021610-1
	Chromium	477	ug/L	500	ug/L	95.4	90.0 - 110.0	P	16-FEB-10 19:41	021610-1
	Cobalt	491	ug/L	500	ug/L	98.2	90.0 - 110.0	P	16-FEB-10 19:41	021610-1
	Copper	500	ug/L	500	ug/L	100	90.0 - 110.0	P	16-FEB-10 19:41	021610-1
	Manganese	497	ug/L	500	ug/L	99.4	90.0 - 110.0	P	16-FEB-10 19:41	021610-1
	Potassium	4880	ug/L	5000	ug/L	97.6	90.0 - 110.0	P	16-FEB-10 19:41	021610-1
	Silver	496	ug/L	500	ug/L	99.2	90.0 - 110.0	P	16-FEB-10 19:41	021610-1
	Sodium	10300	ug/L	10000	ug/L	103.5	90.0 - 110.0	P	16-FEB-10 19:41	021610-1
	Vanadium	488	ug/L	500	ug/L	97.6	90.0 - 110.0	P	16-FEB-10 19:41	021610-1
	Zinc	489	ug/L	500	ug/L	97.8	90.0 - 110.0	P	16-FEB-10 19:41	021610-1

## METALS

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## Initial and Continuing Calibration Verification

SDG No: 10-1474

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS4,MER536,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Iron	5190	ug/L	5000	ug/L	103.7	90.0 - 110.0	P	23-FEB-10 19:55	022310A-2
	Lead	517	ug/L	500	ug/L	103.5	90.0 - 110.0	P	23-FEB-10 19:55	022310A-2
	Magnesium	5320	ug/L	5000	ug/L	106.4	90.0 - 110.0	P	23-FEB-10 19:55	022310A-2
CCV11										
	Aluminum	5000	ug/L	5000	ug/L	100.1	90.0 - 110.0	P	16-FEB-10 20:57	021610-1
	Antimony	500	ug/L	500	ug/L	100.1	90.0 - 110.0	P	16-FEB-10 20:57	021610-1
	Barium	496	ug/L	500	ug/L	99.1	90.0 - 110.0	P	16-FEB-10 20:57	021610-1
	Cadmium	473	ug/L	500	ug/L	94.5	90.0 - 110.0	P	16-FEB-10 20:57	021610-1
	Calcium	5060	ug/L	5000	ug/L	101.3	90.0 - 110.0	P	16-FEB-10 20:57	021610-1
	Chromium	481	ug/L	500	ug/L	96.2	90.0 - 110.0	P	16-FEB-10 20:57	021610-1
	Cobalt	492	ug/L	500	ug/L	98.3	90.0 - 110.0	P	16-FEB-10 20:57	021610-1
	Copper	501	ug/L	500	ug/L	100.3	90.0 - 110.0	P	16-FEB-10 20:57	021610-1
	Manganese	502	ug/L	500	ug/L	100.5	90.0 - 110.0	P	16-FEB-10 20:57	021610-1
	Potassium	5020	ug/L	5000	ug/L	100.3	90.0 - 110.0	P	16-FEB-10 20:57	021610-1
	Silver	490	ug/L	500	ug/L	98	90.0 - 110.0	P	16-FEB-10 20:57	021610-1
	Sodium	10700	ug/L	10000	ug/L	107.1	90.0 - 110.0	P	16-FEB-10 20:57	021610-1
	Vanadium	487	ug/L	500	ug/L	97.5	90.0 - 110.0	P	16-FEB-10 20:57	021610-1
	Zinc	489	ug/L	500	ug/L	97.8	90.0 - 110.0	P	16-FEB-10 20:57	021610-1
	Iron	4980	ug/L	5000	ug/L	99.7	90.0 - 110.0	P	23-FEB-10 21:12	022310A-2
	Lead	522	ug/L	500	ug/L	104.4	90.0 - 110.0	P	23-FEB-10 21:12	022310A-2
	Magnesium	5330	ug/L	5000	ug/L	106.6	90.0 - 110.0	P	23-FEB-10 21:12	022310A-2
CCV12										
	Aluminum	5050	ug/L	5000	ug/L	101.1	90.0 - 110.0	P	16-FEB-10 22:07	021610-1
	Antimony	500	ug/L	500	ug/L	100	90.0 - 110.0	P	16-FEB-10 22:07	021610-1
	Barium	498	ug/L	500	ug/L	99.5	90.0 - 110.0	P	16-FEB-10 22:07	021610-1
	Cadmium	484	ug/L	500	ug/L	96.8	90.0 - 110.0	P	16-FEB-10 22:07	021610-1
	Calcium	5070	ug/L	5000	ug/L	101.4	90.0 - 110.0	P	16-FEB-10 22:07	021610-1
	Chromium	484	ug/L	500	ug/L	96.7	90.0 - 110.0	P	16-FEB-10 22:07	021610-1
	Cobalt	498	ug/L	500	ug/L	99.7	90.0 - 110.0	P	16-FEB-10 22:07	021610-1
	Copper	501	ug/L	500	ug/L	100.3	90.0 - 110.0	P	16-FEB-10 22:07	021610-1

SW846

## METALS

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## Initial and Continuing Calibration Verification

SDG No: 10-1474

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS4,MER536,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Manganese	504	ug/L	500	ug/L	100.8	90.0 - 110.0	P	16-FEB-10 22:07	021610-1
	Potassium	5060	ug/L	5000	ug/L	101.2	90.0 - 110.0	P	16-FEB-10 22:07	021610-1
	Silver	494	ug/L	500	ug/L	98.7	90.0 - 110.0	P	16-FEB-10 22:07	021610-1
	Sodium	10900	ug/L	10000	ug/L	109.3	90.0 - 110.0	P	16-FEB-10 22:07	021610-1
	Vanadium	490	ug/L	500	ug/L	98.1	90.0 - 110.0	P	16-FEB-10 22:07	021610-1
	Zinc	491	ug/L	500	ug/L	98.3	90.0 - 110.0	P	16-FEB-10 22:07	021610-1
	Iron	5170	ug/L	5000	ug/L	103.5	90.0 - 110.0	P	23-FEB-10 22:21	022310A-2
	Lead	516	ug/L	500	ug/L	103.3	90.0 - 110.0	P	23-FEB-10 22:21	022310A-2
	Magnesium	5510	ug/L	5000	ug/L	110.2	90.0 - 110.0	P	23-FEB-10 22:21	022310A-2
CCV13										
	Aluminum	5180	ug/L	5000	ug/L	103.6	90.0 - 110.0	P	16-FEB-10 23:16	021610-1
	Antimony	516	ug/L	500	ug/L	103.1	90.0 - 110.0	P	16-FEB-10 23:16	021610-1
	Barium	513	ug/L	500	ug/L	102.6	90.0 - 110.0	P	16-FEB-10 23:16	021610-1
	Cadmium	498	ug/L	500	ug/L	99.6	90.0 - 110.0	P	16-FEB-10 23:16	021610-1
	Calcium	5230	ug/L	5000	ug/L	104.6	90.0 - 110.0	P	16-FEB-10 23:16	021610-1
	Chromium	497	ug/L	500	ug/L	99.4	90.0 - 110.0	P	16-FEB-10 23:16	021610-1
	Cobalt	515	ug/L	500	ug/L	103.1	90.0 - 110.0	P	16-FEB-10 23:16	021610-1
	Copper	516	ug/L	500	ug/L	103.3	90.0 - 110.0	P	16-FEB-10 23:16	021610-1
	Manganese	519	ug/L	500	ug/L	103.7	90.0 - 110.0	P	16-FEB-10 23:16	021610-1
	Potassium	5180	ug/L	5000	ug/L	103.6	90.0 - 110.0	P	16-FEB-10 23:16	021610-1
	Silver	507	ug/L	500	ug/L	101.3	90.0 - 110.0	P	16-FEB-10 23:16	021610-1
	Sodium	10800	ug/L	10000	ug/L	108.5	90.0 - 110.0	P	16-FEB-10 23:16	021610-1
	Vanadium	503	ug/L	500	ug/L	100.7	90.0 - 110.0	P	16-FEB-10 23:16	021610-1
	Zinc	506	ug/L	500	ug/L	101.3	90.0 - 110.0	P	16-FEB-10 23:16	021610-1
	Iron	5310	ug/L	5000	ug/L	106.2	90.0 - 110.0	P	23-FEB-10 23:09	022310A-2
	Lead	522	ug/L	500	ug/L	104.4	90.0 - 110.0	P	23-FEB-10 23:09	022310A-2
	Magnesium	5570	ug/L	5000	ug/L	111.4	90.0 - 110.0	P	23-FEB-10 23:09	022310A-2
CCV14										
	Aluminum	5210	ug/L	5000	ug/L	104.2	90.0 - 110.0	P	17-FEB-10 00:18	021610-1
	Antimony	515	ug/L	500	ug/L	103	90.0 - 110.0	P	17-FEB-10 00:18	021610-1

SW846

## METALS

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## Initial and Continuing Calibration Verification

SDG No: 10-1474

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS4,MER536,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Barium	513	ug/L	500	ug/L	102.6	90.0 - 110.0	P	17-FEB-10 00:18	021610-1
	Cadmium	489	ug/L	500	ug/L	97.7	90.0 - 110.0	P	17-FEB-10 00:18	021610-1
	Calcium	5250	ug/L	5000	ug/L	105	90.0 - 110.0	P	17-FEB-10 00:18	021610-1
	Chromium	496	ug/L	500	ug/L	99.2	90.0 - 110.0	P	17-FEB-10 00:18	021610-1
	Cobalt	510	ug/L	500	ug/L	101.9	90.0 - 110.0	P	17-FEB-10 00:18	021610-1
	Copper	517	ug/L	500	ug/L	103.4	90.0 - 110.0	P	17-FEB-10 00:18	021610-1
	Manganese	520	ug/L	500	ug/L	104.1	90.0 - 110.0	P	17-FEB-10 00:18	021610-1
	Potassium	5190	ug/L	5000	ug/L	103.8	90.0 - 110.0	P	17-FEB-10 00:18	021610-1
	Silver	503	ug/L	500	ug/L	100.6	90.0 - 110.0	P	17-FEB-10 00:18	021610-1
	Sodium	10200	ug/L	10000	ug/L	102.3	90.0 - 110.0	P	17-FEB-10 00:18	021610-1
	Vanadium	501	ug/L	500	ug/L	100.2	90.0 - 110.0	P	17-FEB-10 00:18	021610-1
	Zinc	506	ug/L	500	ug/L	101.2	90.0 - 110.0	P	17-FEB-10 00:18	021610-1
	Iron	5210	ug/L	5000	ug/L	104.3	90.0 - 110.0	P	24-FEB-10 00:05	022310A-2
	Lead	517	ug/L	500	ug/L	103.4	90.0 - 110.0	P	24-FEB-10 00:05	022310A-2
	Magnesium	5520	ug/L	5000	ug/L	110.5	90.0 - 110.0	P	24-FEB-10 00:05	022310A-2
CCV15	Aluminum	5290	ug/L	5000	ug/L	105.8	90.0 - 110.0	P	17-FEB-10 01:21	021610-1
	Antimony	520	ug/L	500	ug/L	104	90.0 - 110.0	P	17-FEB-10 01:21	021610-1
	Barium	517	ug/L	500	ug/L	103.3	90.0 - 110.0	P	17-FEB-10 01:21	021610-1
	Cadmium	503	ug/L	500	ug/L	100.5	90.0 - 110.0	P	17-FEB-10 01:21	021610-1
	Calcium	5250	ug/L	5000	ug/L	105	90.0 - 110.0	P	17-FEB-10 01:21	021610-1
	Chromium	500	ug/L	500	ug/L	100.1	90.0 - 110.0	P	17-FEB-10 01:21	021610-1
	Cobalt	519	ug/L	500	ug/L	103.8	90.0 - 110.0	P	17-FEB-10 01:21	021610-1
	Copper	518	ug/L	500	ug/L	103.7	90.0 - 110.0	P	17-FEB-10 01:21	021610-1
	Manganese	519	ug/L	500	ug/L	103.9	90.0 - 110.0	P	17-FEB-10 01:21	021610-1
	Potassium	5250	ug/L	5000	ug/L	105.1	90.0 - 110.0	P	17-FEB-10 01:21	021610-1
	Silver	509	ug/L	500	ug/L	101.8	90.0 - 110.0	P	17-FEB-10 01:21	021610-1
	Sodium	10300	ug/L	10000	ug/L	103.5	90.0 - 110.0	P	17-FEB-10 01:21	021610-1
	Vanadium	507	ug/L	500	ug/L	101.3	90.0 - 110.0	P	17-FEB-10 01:21	021610-1
	Zinc	511	ug/L	500	ug/L	102.1	90.0 - 110.0	P	17-FEB-10 01:21	021610-1

SW846



## METALS

-2a-

## Initial and Continuing Calibration Verification

SDG No: 10-1474

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS4,MER536,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Iron	5440	ug/L	5000	ug/L	108.8	90.0 - 110.0	P	24-FEB-10 01:06	022310A-2
	Lead	520	ug/L	500	ug/L	104	90.0 - 110.0	P	24-FEB-10 01:06	022310A-2
	Magnesium	5590	ug/L	5000	ug/L	111.9	90.0 - 110.0	P	24-FEB-10 01:06	022310A-2
CCV16										
	Aluminum	5110	ug/L	5000	ug/L	102.2	90.0 - 110.0	P	17-FEB-10 02:18	021610-1
	Antimony	520	ug/L	500	ug/L	103.9	90.0 - 110.0	P	17-FEB-10 02:18	021610-1
	Barium	513	ug/L	500	ug/L	102.6	90.0 - 110.0	P	17-FEB-10 02:18	021610-1
	Cadmium	498	ug/L	500	ug/L	99.5	90.0 - 110.0	P	17-FEB-10 02:18	021610-1
	Calcium	5130	ug/L	5000	ug/L	102.6	90.0 - 110.0	P	17-FEB-10 02:18	021610-1
	Chromium	497	ug/L	500	ug/L	99.4	90.0 - 110.0	P	17-FEB-10 02:18	021610-1
	Cobalt	514	ug/L	500	ug/L	102.8	90.0 - 110.0	P	17-FEB-10 02:18	021610-1
	Copper	517	ug/L	500	ug/L	103.3	90.0 - 110.0	P	17-FEB-10 02:18	021610-1
	Manganese	523	ug/L	500	ug/L	104.5	90.0 - 110.0	P	17-FEB-10 02:18	021610-1
	Potassium	5040	ug/L	5000	ug/L	100.8	90.0 - 110.0	P	17-FEB-10 02:18	021610-1
	Silver	506	ug/L	500	ug/L	101.3	90.0 - 110.0	P	17-FEB-10 02:18	021610-1
	Sodium	9960	ug/L	10000	ug/L	99.6	90.0 - 110.0	P	17-FEB-10 02:18	021610-1
	Vanadium	503	ug/L	500	ug/L	100.7	90.0 - 110.0	P	17-FEB-10 02:18	021610-1
	Zinc	507	ug/L	500	ug/L	101.3	90.0 - 110.0	P	17-FEB-10 02:18	021610-1
	Iron	5480	ug/L	5000	ug/L	109.6	90.0 - 110.0	P	24-FEB-10 02:22	022310A-2
	Lead	521	ug/L	500	ug/L	104.2	90.0 - 110.0	P	24-FEB-10 02:22	022310A-2
	Magnesium	5680	ug/L	5000	ug/L	113.7	90.0 - 110.0	P	24-FEB-10 02:22	022310A-2
CCV17										
	Aluminum	5320	ug/L	5000	ug/L	106.4	90.0 - 110.0	P	17-FEB-10 03:20	021610-1
	Antimony	519	ug/L	500	ug/L	103.7	90.0 - 110.0	P	17-FEB-10 03:20	021610-1
	Barium	512	ug/L	500	ug/L	102.3	90.0 - 110.0	P	17-FEB-10 03:20	021610-1
	Cadmium	490	ug/L	500	ug/L	98.1	90.0 - 110.0	P	17-FEB-10 03:20	021610-1
	Calcium	5310	ug/L	5000	ug/L	106.1	90.0 - 110.0	P	17-FEB-10 03:20	021610-1
	Chromium	501	ug/L	500	ug/L	100.2	90.0 - 110.0	P	17-FEB-10 03:20	021610-1
	Cobalt	509	ug/L	500	ug/L	101.8	90.0 - 110.0	P	17-FEB-10 03:20	021610-1
	Copper	520	ug/L	500	ug/L	104	90.0 - 110.0	P	17-FEB-10 03:20	021610-1

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## METALS

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## Initial and Continuing Calibration Verification

SDG No: 10-1474

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS4,MER536,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Manganese	521	ug/L	500	ug/L	104.1	90.0 - 110.0	P	17-FEB-10 03:20	021610-1
	Potassium	5230	ug/L	5000	ug/L	104.5	90.0 - 110.0	P	17-FEB-10 03:20	021610-1
	Silver	506	ug/L	500	ug/L	101.2	90.0 - 110.0	P	17-FEB-10 03:20	021610-1
	Sodium	10000	ug/L	10000	ug/L	100.4	90.0 - 110.0	P	17-FEB-10 03:20	021610-1
	Vanadium	505	ug/L	500	ug/L	101.1	90.0 - 110.0	P	17-FEB-10 03:20	021610-1
	Zinc	507	ug/L	500	ug/L	101.3	90.0 - 110.0	P	17-FEB-10 03:20	021610-1
	Iron	5330	ug/L	5000	ug/L	106.6	90.0 - 110.0	P	24-FEB-10 03:23	022310A-2
	Lead	530	ug/L	500	ug/L	106	90.0 - 110.0	P	24-FEB-10 03:23	022310A-2
	Magnesium	5410	ug/L	5000	ug/L	108.2	90.0 - 110.0	P	24-FEB-10 03:23	022310A-2
CCV18										
	Aluminum	5260	ug/L	5000	ug/L	105.3	90.0 - 110.0	P	17-FEB-10 04:23	021610-1
	Antimony	521	ug/L	500	ug/L	104.2	90.0 - 110.0	P	17-FEB-10 04:23	021610-1
	Barium	512	ug/L	500	ug/L	102.5	90.0 - 110.0	P	17-FEB-10 04:23	021610-1
	Cadmium	501	ug/L	500	ug/L	100.1	90.0 - 110.0	P	17-FEB-10 04:23	021610-1
	Calcium	5330	ug/L	5000	ug/L	106.5	90.0 - 110.0	P	17-FEB-10 04:23	021610-1
	Chromium	502	ug/L	500	ug/L	100.4	90.0 - 110.0	P	17-FEB-10 04:23	021610-1
	Cobalt	515	ug/L	500	ug/L	102.9	90.0 - 110.0	P	17-FEB-10 04:23	021610-1
	Copper	519	ug/L	500	ug/L	103.8	90.0 - 110.0	P	17-FEB-10 04:23	021610-1
	Manganese	522	ug/L	500	ug/L	104.4	90.0 - 110.0	P	17-FEB-10 04:23	021610-1
	Potassium	5140	ug/L	5000	ug/L	102.8	90.0 - 110.0	P	17-FEB-10 04:23	021610-1
	Silver	509	ug/L	500	ug/L	101.8	90.0 - 110.0	P	17-FEB-10 04:23	021610-1
	Sodium	10400	ug/L	10000	ug/L	103.9	90.0 - 110.0	P	17-FEB-10 04:23	021610-1
	Vanadium	508	ug/L	500	ug/L	101.6	90.0 - 110.0	P	17-FEB-10 04:23	021610-1
	Zinc	508	ug/L	500	ug/L	101.6	90.0 - 110.0	P	17-FEB-10 04:23	021610-1
	Iron	5440	ug/L	5000	ug/L	108.9	90.0 - 110.0	P	24-FEB-10 04:33	022310A-2
	Lead	526	ug/L	500	ug/L	105.2	90.0 - 110.0	P	24-FEB-10 04:33	022310A-2
	Magnesium	5630	ug/L	5000	ug/L	112.5	90.0 - 110.0	P	24-FEB-10 04:33	022310A-2
CCV19										
	Iron	5110	ug/L	5000	ug/L	102.2	90.0 - 110.0	P	24-FEB-10 05:51	022310A-2
	Lead	510	ug/L	500	ug/L	101.9	90.0 - 110.0	P	24-FEB-10 05:51	022310A-2

SW846

## METALS

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## Initial and Continuing Calibration Verification

SDG No: 10-1474

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS4,MER536,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>
CCV20	Magnesium	5310	ug/L	5000	ug/L	106.3	90.0 – 110.0	P	24-FEB-10 05:51	022310A-2
	Iron	5010	ug/L	5000	ug/L	100.2	90.0 – 110.0	P	24-FEB-10 06:17	022310A-2
	Lead	506	ug/L	500	ug/L	101.3	90.0 – 110.0	P	24-FEB-10 06:17	022310A-2
CCV21	Magnesium	5280	ug/L	5000	ug/L	105.7	90.0 – 110.0	P	24-FEB-10 06:17	022310A-2
	Iron	5170	ug/L	5000	ug/L	103.4	90.0 – 110.0	P	24-FEB-10 07:41	022310A-2
	Lead	509	ug/L	500	ug/L	101.8	90.0 – 110.0	P	24-FEB-10 07:41	022310A-2
CCV22	Magnesium	5430	ug/L	5000	ug/L	108.6	90.0 – 110.0	P	24-FEB-10 07:41	022310A-2
	Iron	5260	ug/L	5000	ug/L	105.1	90.0 – 110.0	P	24-FEB-10 08:55	022310A-2
	Lead	507	ug/L	500	ug/L	101.5	90.0 – 110.0	P	24-FEB-10 08:55	022310A-2
	Magnesium	5380	ug/L	5000	ug/L	107.7	90.0 – 110.0	P	24-FEB-10 08:55	022310A-2

**METALS**  
**-2b-**  
**CRDL Standard for AA & ICP**

SDG No: 10-1474

Contract: LANL01004

Lab Code: GEL

AA CRDL Standard Source: SPEX

ICP CRDL Standard Source Solutions Plus

Instrument ID: ICPMS4,MER536,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	.255	ug/L	.2	ug/L	127.4	70.0 – 130.0	AV	16-FEB-10 09:05	021610S2-5
	Nickel	2.29	ug/L	2	ug/L	114.3	70.0 – 130.0	MS	18-FEB-10 23:23	100218-3
	Thallium	1.12	ug/L	1	ug/L	112.3	70.0 – 130.0	MS	18-FEB-10 23:23	100218-3
	Selenium	5.91	ug/L	5	ug/L	118.2	70.0 – 130.0	MS	18-FEB-10 23:23	100218-3
	Uranium	.229	ug/L	.2	ug/L	114.5	70.0 – 130.0	MS	18-FEB-10 23:23	100218-3
	Arsenic	5.99	ug/L	5	ug/L	119.8	70.0 – 130.0	MS	18-FEB-10 23:23	100218-3
	Beryllium	.496	ug/L	.5	ug/L	99.2	70.0 – 130.0	MS	19-FEB-10 14:22	100219-4
PQL01										
	Aluminum	216	ug/L	200	ug/L	107.9	70.0 – 130.0	P	16-FEB-10 12:32	021610-1
	Manganese	10.3	ug/L	10	ug/L	103	70.0 – 130.0	P	16-FEB-10 12:32	021610-1
	Potassium	141	ug/L	150	ug/L	94	70.0 – 130.0	P	16-FEB-10 12:32	021610-1
	Sodium	304	ug/L	300	ug/L	101.3	70.0 – 130.0	P	16-FEB-10 12:32	021610-1
	Barium	5.07	ug/L	5	ug/L	101.4	70.0 – 130.0	P	16-FEB-10 12:32	021610-1
	Chromium	3.95	ug/L	5	ug/L	79.1	70.0 – 130.0	P	16-FEB-10 12:32	021610-1
	Copper	10	ug/L	10	ug/L	100.3	70.0 – 130.0	P	16-FEB-10 12:32	021610-1
	Zinc	10.2	ug/L	10	ug/L	101.9	70.0 – 130.0	P	16-FEB-10 12:32	021610-1
	Calcium	206	ug/L	200	ug/L	103.1	70.0 – 130.0	P	16-FEB-10 12:32	021610-1
	Vanadium	4.75	ug/L	5	ug/L	94.9	70.0 – 130.0	P	16-FEB-10 12:32	021610-1
	Cobalt	4.75	ug/L	5	ug/L	95	70.0 – 130.0	P	16-FEB-10 12:32	021610-1
	Cadmium	4.77	ug/L	5	ug/L	95.4	70.0 – 130.0	P	16-FEB-10 12:32	021610-1
	Antimony	9.77	ug/L	10	ug/L	97.7	70.0 – 130.0	P	16-FEB-10 12:32	021610-1
	Silver	4.92	ug/L	5	ug/L	98.3	70.0 – 130.0	P	16-FEB-10 12:32	021610-1
	Magnesium	244	ug/L	300	ug/L	81.2	70.0 – 130.0	P	23-FEB-10 11:23	022310A-2
	Iron	114	ug/L	100	ug/L	114.3	70.0 – 130.0	P	23-FEB-10 11:23	022310A-2
	Lead	11.4	ug/L	10	ug/L	113.9	70.0 – 130.0	P	23-FEB-10 11:23	022310A-2

## Metals

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## Initial and Continuing Calibration Blank Summary

SDG No.: 10-1474

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>
<b>ICB01</b>										
	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	16-FEB-10 09:03	021610S2-5
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	16-FEB-10 12:25	021610-1
	Antimony	4.65	+/-10	J	3.3	10.0	SOL	P	16-FEB-10 12:25	021610-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 12:25	021610-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 12:25	021610-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	16-FEB-10 12:25	021610-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	16-FEB-10 12:25	021610-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	16-FEB-10 12:25	021610-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	16-FEB-10 12:25	021610-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	16-FEB-10 12:25	021610-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	16-FEB-10 12:25	021610-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 12:25	021610-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	16-FEB-10 12:25	021610-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 12:25	021610-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	16-FEB-10 12:25	021610-1
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	18-FEB-10 23:18	100218-3
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	18-FEB-10 23:18	100218-3
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	18-FEB-10 23:18	100218-3
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	18-FEB-10 23:18	100218-3
	Uranium	0.066	+/-2	U	0.066	0.2	SOL	MS	18-FEB-10 23:18	100218-3
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	19-FEB-10 14:20	100219-4
	Iron	80.0	+/-250	U	80.0	250	SOL	P	23-FEB-10 11:17	022310A-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	23-FEB-10 11:17	022310A-2
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	23-FEB-10 11:17	022310A-2
<b>CCB01</b>										
	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	16-FEB-10 09:09	021610S2-5
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	16-FEB-10 13:11	021610-1
	Antimony	4.45	+/-10	J	3.3	10.0	SOL	P	16-FEB-10 13:11	021610-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 13:11	021610-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 13:11	021610-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	16-FEB-10 13:11	021610-1

## Initial and Continuing Calibration Blank Summary

SDG No.: 10-1474

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	16-FEB-10 13:11	021610-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	16-FEB-10 13:11	021610-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	16-FEB-10 13:11	021610-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	16-FEB-10 13:11	021610-1
	Potassium	90.9	+/-250	J	64.0	250	SOL	P	16-FEB-10 13:11	021610-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 13:11	021610-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	16-FEB-10 13:11	021610-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 13:11	021610-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	16-FEB-10 13:11	021610-1
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	18-FEB-10 23:39	100218-3
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	18-FEB-10 23:39	100218-3
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	18-FEB-10 23:39	100218-3
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	18-FEB-10 23:39	100218-3
	Uranium	0.066	+/-2	U	0.066	0.2	SOL	MS	18-FEB-10 23:39	100218-3
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	19-FEB-10 14:31	100219-4
	Iron	80.0	+/-250	U	80.0	250	SOL	P	23-FEB-10 12:04	022310A-2
	Lead	6.01	+/-10	J	2.5	10.0	SOL	P	23-FEB-10 12:04	022310A-2
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	23-FEB-10 12:04	022310A-2
CCB02	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	16-FEB-10 09:33	021610S2-5
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	16-FEB-10 13:33	021610-1
	Antimony	5.52	+/-10	J	3.3	10.0	SOL	P	16-FEB-10 13:33	021610-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 13:33	021610-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 13:33	021610-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	16-FEB-10 13:33	021610-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	16-FEB-10 13:33	021610-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	16-FEB-10 13:33	021610-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	16-FEB-10 13:33	021610-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	16-FEB-10 13:33	021610-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	16-FEB-10 13:33	021610-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 13:33	021610-1

## Metals

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## Initial and Continuing Calibration Blank Summary

SDG No.: 10-1474

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Sodium	-74.7	+/-250	J	70.0	250	SOL	P	16-FEB-10 13:33	021610-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 13:33	021610-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	16-FEB-10 13:33	021610-1
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	18-FEB-10 23:51	100218-3
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	18-FEB-10 23:51	100218-3
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	18-FEB-10 23:51	100218-3
	Thallium	0.35	+/-1	J	0.3	1.0	SOL	MS	18-FEB-10 23:51	100218-3
	Uranium	0.19	+/-2	J	0.066	0.2	SOL	MS	18-FEB-10 23:51	100218-3
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	19-FEB-10 14:40	100219-4
	Iron	80.0	+/-250	U	80.0	250	SOL	P	23-FEB-10 12:32	022310A-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	23-FEB-10 12:32	022310A-2
	Magnesium	-99.39	+/-300	J	85.0	300	SOL	P	23-FEB-10 12:32	022310A-2
CCB03	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	16-FEB-10 09:57	021610S2-5
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	16-FEB-10 15:08	021610-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	16-FEB-10 15:08	021610-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 15:08	021610-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 15:08	021610-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	16-FEB-10 15:08	021610-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	16-FEB-10 15:08	021610-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	16-FEB-10 15:08	021610-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	16-FEB-10 15:08	021610-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	16-FEB-10 15:08	021610-1
	Potassium	280.55	+/-250		64.0	250	SOL	P	16-FEB-10 15:08	021610-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 15:08	021610-1
	Sodium	1039.7	+/-250		70.0	250	SOL	P	16-FEB-10 15:08	021610-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 15:08	021610-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	16-FEB-10 15:08	021610-1
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	19-FEB-10 00:08	100218-3
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	19-FEB-10 00:08	100218-3
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	19-FEB-10 00:08	100218-3

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## Metals

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## Initial and Continuing Calibration Blank Summary

SDG No.: 10-1474

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ng/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Thallium	0.304	+/-1	J	0.3	1.0	SOL	MS	19-FEB-10 00:08	100218-3
	Uranium	0.066	+/-2	U	0.066	0.2	SOL	MS	19-FEB-10 00:08	100218-3
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	19-FEB-10 14:54	100219-4
	Iron	80.0	+/-250	U	80.0	250	SOL	P	23-FEB-10 13:10	022310A-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	23-FEB-10 13:10	022310A-2
	Magnesium	-89.25	+/-300	J	85.0	300	SOL	P	23-FEB-10 13:10	022310A-2
CCB04	Mercury	0.094	+/-2	J	0.068	0.2	SOL	AV	16-FEB-10 10:16	021610S2-5
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	16-FEB-10 15:28	021610-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	16-FEB-10 15:28	021610-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 15:28	021610-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 15:28	021610-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	16-FEB-10 15:28	021610-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	16-FEB-10 15:28	021610-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	16-FEB-10 15:28	021610-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	16-FEB-10 15:28	021610-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	16-FEB-10 15:28	021610-1
	Potassium	179.55	+/-250	J	64.0	250	SOL	P	16-FEB-10 15:28	021610-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 15:28	021610-1
	Sodium	788.45	+/-250		70.0	250	SOL	P	16-FEB-10 15:28	021610-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 15:28	021610-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	16-FEB-10 15:28	021610-1
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	19-FEB-10 00:37	100218-3
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	19-FEB-10 00:37	100218-3
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	19-FEB-10 00:37	100218-3
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	19-FEB-10 00:37	100218-3
	Uranium	0.066	+/-2	U	0.066	0.2	SOL	MS	19-FEB-10 00:37	100218-3
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	19-FEB-10 15:07	100219-4
	Iron	80.0	+/-250	U	80.0	250	SOL	P	23-FEB-10 14:11	022310A-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	23-FEB-10 14:11	022310A-2
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	23-FEB-10 14:11	022310A-2

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## Metals

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## Initial and Continuing Calibration Blank Summary

SDG No.: 10-1474

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>
<b>CCB05</b>										
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	16-FEB-10 15:46	021610-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	16-FEB-10 15:46	021610-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 15:46	021610-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 15:46	021610-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	16-FEB-10 15:46	021610-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	16-FEB-10 15:46	021610-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	16-FEB-10 15:46	021610-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	16-FEB-10 15:46	021610-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	16-FEB-10 15:46	021610-1
	Potassium	145.12	+/-250	J	64.0	250	SOL	P	16-FEB-10 15:46	021610-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 15:46	021610-1
	Sodium	619.07	+/-250		70.0	250	SOL	P	16-FEB-10 15:46	021610-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 15:46	021610-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	16-FEB-10 15:46	021610-1
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	19-FEB-10 01:02	100218-3
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	19-FEB-10 01:02	100218-3
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	19-FEB-10 01:02	100218-3
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	19-FEB-10 01:02	100218-3
	Uranium	0.066	+/-2	U	0.066	0.2	SOL	MS	19-FEB-10 01:02	100218-3
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	19-FEB-10 15:21	100219-4
	Iron	80.0	+/-250	U	80.0	250	SOL	P	23-FEB-10 15:13	022310A-2
	Lead	2.65	+/-10	J	2.5	10.0	SOL	P	23-FEB-10 15:13	022310A-2
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	23-FEB-10 15:13	022310A-2
<b>CCB06</b>										
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	16-FEB-10 16:14	021610-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	16-FEB-10 16:14	021610-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 16:14	021610-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 16:14	021610-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	16-FEB-10 16:14	021610-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	16-FEB-10 16:14	021610-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	16-FEB-10 16:14	021610-1

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## Metals

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## Initial and Continuing Calibration Blank Summary

SDG No.: 10-1474

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ng/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	16-FEB-10 16:14	021610-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	16-FEB-10 16:14	021610-1
	Potassium	93.45	+/-250	J	64.0	250	SOL	P	16-FEB-10 16:14	021610-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 16:14	021610-1
	Sodium	617.67	+/-250		70.0	250	SOL	P	16-FEB-10 16:14	021610-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 16:14	021610-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	16-FEB-10 16:14	021610-1
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	19-FEB-10 01:23	100218-3
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	19-FEB-10 01:23	100218-3
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	19-FEB-10 01:23	100218-3
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	19-FEB-10 01:23	100218-3
	Uranium	0.066	+/-2	U	0.066	0.2	SOL	MS	19-FEB-10 01:23	100218-3
	Iron	80.0	+/-250	U	80.0	250	SOL	P	23-FEB-10 16:16	022310A-2
	Lead	21.3	+/-10		2.5	10.0	SOL	P	23-FEB-10 16:16	022310A-2
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	23-FEB-10 16:16	022310A-2
CCB07	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	16-FEB-10 16:47	021610-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	16-FEB-10 16:47	021610-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 16:47	021610-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 16:47	021610-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	16-FEB-10 16:47	021610-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	16-FEB-10 16:47	021610-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	16-FEB-10 16:47	021610-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	16-FEB-10 16:47	021610-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	16-FEB-10 16:47	021610-1
	Potassium	69.32	+/-250	J	64.0	250	SOL	P	16-FEB-10 16:47	021610-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 16:47	021610-1
	Sodium	431.15	+/-250		70.0	250	SOL	P	16-FEB-10 16:47	021610-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 16:47	021610-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	16-FEB-10 16:47	021610-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	23-FEB-10 17:04	022310A-2

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## Metals

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## Initial and Continuing Calibration Blank Summary

SDG No.: 10-1474

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result ng/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>
CCB08	Lead	11.76	+/-10		2.5	10.0	SOL	P	23-FEB-10 17:04	022310A-2
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	23-FEB-10 17:04	022310A-2
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	16-FEB-10 17:49	021610-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	16-FEB-10 17:49	021610-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 17:49	021610-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 17:49	021610-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	16-FEB-10 17:49	021610-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	16-FEB-10 17:49	021610-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	16-FEB-10 17:49	021610-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	16-FEB-10 17:49	021610-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	16-FEB-10 17:49	021610-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	16-FEB-10 17:49	021610-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 17:49	021610-1
	Sodium	370.72	+/-250		70.0	250	SOL	P	16-FEB-10 17:49	021610-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 17:49	021610-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	16-FEB-10 17:49	021610-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	23-FEB-10 17:32	022310A-2
	Lead	8.75	+/-10	J	2.5	10.0	SOL	P	23-FEB-10 17:32	022310A-2
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	23-FEB-10 17:32	022310A-2
CCB09	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	16-FEB-10 18:51	021610-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	16-FEB-10 18:51	021610-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 18:51	021610-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 18:51	021610-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	16-FEB-10 18:51	021610-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	16-FEB-10 18:51	021610-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	16-FEB-10 18:51	021610-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	16-FEB-10 18:51	021610-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	16-FEB-10 18:51	021610-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	16-FEB-10 18:51	021610-1

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## Metals

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## Initial and Continuing Calibration Blank Summary

SDG No.: 10-1474

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>
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 18:51	021610-1
	Sodium	325.41	+/-250		70.0	250	SOL	P	16-FEB-10 18:51	021610-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 18:51	021610-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	16-FEB-10 18:51	021610-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	23-FEB-10 18:47	022310A-2
	Lead	6.19	+/-10	J	2.5	10.0	SOL	P	23-FEB-10 18:47	022310A-2
	Magnesium	-124.45	+/-300	J	85.0	300	SOL	P	23-FEB-10 18:47	022310A-2
<b>CCB10</b>	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	16-FEB-10 19:48	021610-1
	Antimony	4.46	+/-10	J	3.3	10.0	SOL	P	16-FEB-10 19:48	021610-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 19:48	021610-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 19:48	021610-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	16-FEB-10 19:48	021610-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	16-FEB-10 19:48	021610-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	16-FEB-10 19:48	021610-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	16-FEB-10 19:48	021610-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	16-FEB-10 19:48	021610-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	16-FEB-10 19:48	021610-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 19:48	021610-1
	Sodium	241.85	+/-250	J	70.0	250	SOL	P	16-FEB-10 19:48	021610-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 19:48	021610-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	16-FEB-10 19:48	021610-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	23-FEB-10 20:02	022310A-2
	Lead	3.5	+/-10	J	2.5	10.0	SOL	P	23-FEB-10 20:02	022310A-2
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	23-FEB-10 20:02	022310A-2
<b>CCB11</b>	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	16-FEB-10 21:04	021610-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	16-FEB-10 21:04	021610-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 21:04	021610-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 21:04	021610-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	16-FEB-10 21:04	021610-1

SW846

## Initial and Continuing Calibration Blank Summary

SDG No.: 10-1474

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	16-FEB-10 21:04	021610-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	16-FEB-10 21:04	021610-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	16-FEB-10 21:04	021610-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	16-FEB-10 21:04	021610-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	16-FEB-10 21:04	021610-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 21:04	021610-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	16-FEB-10 21:04	021610-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 21:04	021610-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	16-FEB-10 21:04	021610-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	23-FEB-10 21:19	022310A-2
	Lead	3.34	+/-10	J	2.5	10.0	SOL	P	23-FEB-10 21:19	022310A-2
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	23-FEB-10 21:19	022310A-2
CCB12	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	16-FEB-10 22:14	021610-1
	Antimony	3.35	+/-10	J	3.3	10.0	SOL	P	16-FEB-10 22:14	021610-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 22:14	021610-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 22:14	021610-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	16-FEB-10 22:14	021610-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	16-FEB-10 22:14	021610-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	16-FEB-10 22:14	021610-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	16-FEB-10 22:14	021610-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	16-FEB-10 22:14	021610-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	16-FEB-10 22:14	021610-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 22:14	021610-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	16-FEB-10 22:14	021610-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 22:14	021610-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	16-FEB-10 22:14	021610-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	23-FEB-10 22:28	022310A-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	23-FEB-10 22:28	022310A-2
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	23-FEB-10 22:28	022310A-2

## Metals

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## Initial and Continuing Calibration Blank Summary

SDG No.: 10-1474

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result ng/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>
<b>CCB13</b>										
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	16-FEB-10 23:23	021610-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	16-FEB-10 23:23	021610-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 23:23	021610-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 23:23	021610-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	16-FEB-10 23:23	021610-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	16-FEB-10 23:23	021610-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	16-FEB-10 23:23	021610-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	16-FEB-10 23:23	021610-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	16-FEB-10 23:23	021610-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	16-FEB-10 23:23	021610-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 23:23	021610-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	16-FEB-10 23:23	021610-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	16-FEB-10 23:23	021610-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	16-FEB-10 23:23	021610-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	23-FEB-10 23:16	022310A-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	23-FEB-10 23:16	022310A-2
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	23-FEB-10 23:16	022310A-2
<b>CCB14</b>										
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	17-FEB-10 00:25	021610-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	17-FEB-10 00:25	021610-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	17-FEB-10 00:25	021610-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	17-FEB-10 00:25	021610-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	17-FEB-10 00:25	021610-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	17-FEB-10 00:25	021610-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	17-FEB-10 00:25	021610-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	17-FEB-10 00:25	021610-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	17-FEB-10 00:25	021610-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	17-FEB-10 00:25	021610-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	17-FEB-10 00:25	021610-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	17-FEB-10 00:25	021610-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	17-FEB-10 00:25	021610-1

SW846

## Metals

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## Initial and Continuing Calibration Blank Summary

SDG No.: 10-1474

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	17-FEB-10 00:25	021610-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	24-FEB-10 00:12	022310A-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	24-FEB-10 00:12	022310A-2
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	24-FEB-10 00:12	022310A-2
CCB15	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	17-FEB-10 01:28	021610-1
	Antimony	3.92	+/-10	J	3.3	10.0	SOL	P	17-FEB-10 01:28	021610-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	17-FEB-10 01:28	021610-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	17-FEB-10 01:28	021610-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	17-FEB-10 01:28	021610-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	17-FEB-10 01:28	021610-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	17-FEB-10 01:28	021610-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	17-FEB-10 01:28	021610-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	17-FEB-10 01:28	021610-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	17-FEB-10 01:28	021610-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	17-FEB-10 01:28	021610-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	17-FEB-10 01:28	021610-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	17-FEB-10 01:28	021610-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	17-FEB-10 01:28	021610-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	24-FEB-10 01:13	022310A-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	24-FEB-10 01:13	022310A-2
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	24-FEB-10 01:13	022310A-2
CCB16	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	17-FEB-10 02:25	021610-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	17-FEB-10 02:25	021610-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	17-FEB-10 02:25	021610-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	17-FEB-10 02:25	021610-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	17-FEB-10 02:25	021610-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	17-FEB-10 02:25	021610-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	17-FEB-10 02:25	021610-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	17-FEB-10 02:25	021610-1

SW846

## Metals

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## Initial and Continuing Calibration Blank Summary

SDG No.: 10-1474

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	17-FEB-10 02:25	021610-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	17-FEB-10 02:25	021610-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	17-FEB-10 02:25	021610-1
	Sodium	112.28	+/-250	J	70.0	250	SOL	P	17-FEB-10 02:25	021610-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	17-FEB-10 02:25	021610-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	17-FEB-10 02:25	021610-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	24-FEB-10 02:29	022310A-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	24-FEB-10 02:29	022310A-2
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	24-FEB-10 02:29	022310A-2
CCB17	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	17-FEB-10 03:27	021610-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	17-FEB-10 03:27	021610-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	17-FEB-10 03:27	021610-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	17-FEB-10 03:27	021610-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	17-FEB-10 03:27	021610-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	17-FEB-10 03:27	021610-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	17-FEB-10 03:27	021610-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	17-FEB-10 03:27	021610-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	17-FEB-10 03:27	021610-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	17-FEB-10 03:27	021610-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	17-FEB-10 03:27	021610-1
	Sodium	-106.66	+/-250	J	70.0	250	SOL	P	17-FEB-10 03:27	021610-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	17-FEB-10 03:27	021610-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	17-FEB-10 03:27	021610-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	24-FEB-10 03:31	022310A-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	24-FEB-10 03:31	022310A-2
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	24-FEB-10 03:31	022310A-2
CCB18	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	17-FEB-10 04:30	021610-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	17-FEB-10 04:30	021610-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	17-FEB-10 04:30	021610-1

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## Metals

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## Initial and Continuing Calibration Blank Summary

SDG No.: 10-1474

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	17-FEB-10 04:30	021610-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	17-FEB-10 04:30	021610-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	17-FEB-10 04:30	021610-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	17-FEB-10 04:30	021610-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	17-FEB-10 04:30	021610-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	17-FEB-10 04:30	021610-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	17-FEB-10 04:30	021610-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	17-FEB-10 04:30	021610-1
	Sodium	-75.36	+/-250	J	70.0	250	SOL	P	17-FEB-10 04:30	021610-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	17-FEB-10 04:30	021610-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	17-FEB-10 04:30	021610-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	24-FEB-10 04:40	022310A-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	24-FEB-10 04:40	022310A-2
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	24-FEB-10 04:40	022310A-2
<b>CCB19</b>	Iron	80.0	+/-250	U	80.0	250	SOL	P	24-FEB-10 05:58	022310A-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	24-FEB-10 05:58	022310A-2
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	24-FEB-10 05:58	022310A-2
<b>CCB20</b>	Iron	80.0	+/-250	U	80.0	250	SOL	P	24-FEB-10 06:24	022310A-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	24-FEB-10 06:24	022310A-2
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	24-FEB-10 06:24	022310A-2
<b>CCB21</b>	Iron	80.0	+/-250	U	80.0	250	SOL	P	24-FEB-10 07:48	022310A-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	24-FEB-10 07:48	022310A-2
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	24-FEB-10 07:48	022310A-2
<b>CCB22</b>	Iron	80.0	+/-250	U	80.0	250	SOL	P	24-FEB-10 09:02	022310A-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	24-FEB-10 09:02	022310A-2
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	24-FEB-10 09:02	022310A-2

**METALS**  
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**PREPARATION BLANK SUMMARY**

**SDG NO.** 10-1474  
**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>
1202029970	Mercury	3.81	ug/kg	+/-11.2	U	AV	3.81	11.2
1202030969	Aluminum	6500	ug/Kg	+/-19100	U	P	6500	19100
	Antimony	315	ug/Kg	+/-956	U	P	315	956
	Barium	95.6	ug/Kg	+/-478	U	P	95.6	478
	Cadmium	95.6	ug/Kg	+/-478	U	P	95.6	478
	Calcium	7650	ug/Kg	+/-23900	U	P	7650	23900
	Chromium	143	ug/Kg	+/-478	U	P	143	478
	Cobalt	143	ug/Kg	+/-478	U	P	143	478
	Copper	287	ug/Kg	+/-956	U	P	287	956
	Iron	7650	ug/Kg	+/-23900	U	P	7650	23900
	Lead	239	ug/Kg	+/-956	U	P	239	956
	Magnesium	8130	ug/Kg	+/-28700	U	P	8130	28700
	Manganese	191	ug/Kg	+/-956	U	P	191	956
	Potassium	6120	ug/Kg	+/-23900	U	P	6120	23900
	Silver	95.6	ug/Kg	+/-478	U	P	95.6	478
	Sodium	-13200	ug/Kg	+/-23900	J	P	6690	23900
	Vanadium	95.6	ug/Kg	+/-478	U	P	95.6	478
	Zinc	315	ug/Kg	+/-956	U	P	315	956
1202030975	Arsenic	0.198	mg/kg	+/-0.988	U	MS	0.198	0.988
	Beryllium	0.0198	mg/kg	+/-0.0988	U	MS	0.0198	0.0988
	Nickel	0.0988	mg/kg	+/-0.395	U	MS	0.0988	0.395
	Selenium	0.494	mg/kg	+/-0.988	U	MS	0.494	0.988
	Thallium	0.0593	mg/kg	+/-0.198	U	MS	0.0593	0.198
	Uranium	0.0296	mg/kg	+/-0.0395	J	MS	0.013	0.0395

## METALS

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## Interference Check Sample

SDG No: 10-1474

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	526000	ug/L	500000	ug/L	105	80.0 - 120.0	16-FEB-10 12:39	021610-1
	Antimony	0.835	ug/L					16-FEB-10 12:39	021610-1
	Barium	-0.258	ug/L					16-FEB-10 12:39	021610-1
	Cadmium	-1.61	ug/L					16-FEB-10 12:39	021610-1
	Calcium	489000	ug/L	500000	ug/L	97.8	80.0 - 120.0	16-FEB-10 12:39	021610-1
	Chromium	1.6	ug/L					16-FEB-10 12:39	021610-1
	Cobalt	-1.66	ug/L					16-FEB-10 12:39	021610-1
	Copper	3.48	ug/L					16-FEB-10 12:39	021610-1
	Manganese	-1.06	ug/L					16-FEB-10 12:39	021610-1
	Potassium	-146.0	ug/L					16-FEB-10 12:39	021610-1
	Silver	4.44	ug/L					16-FEB-10 12:39	021610-1
	Sodium	349	ug/L					16-FEB-10 12:39	021610-1
	Vanadium	-2.55	ug/L					16-FEB-10 12:39	021610-1
	Zinc	-0.46	ug/L					16-FEB-10 12:39	021610-1
ICSAB01									
	Aluminum	523000	ug/L	500000	ug/L	105	80.0 - 120.0	16-FEB-10 12:45	021610-1
	Antimony	549	ug/L	500	ug/L	110	80.0 - 120.0	16-FEB-10 12:45	021610-1
	Barium	493	ug/L	500	ug/L	98.6	80.0 - 120.0	16-FEB-10 12:45	021610-1
	Cadmium	457	ug/L	500	ug/L	91.4	80.0 - 120.0	16-FEB-10 12:45	021610-1
	Calcium	482000	ug/L	500000	ug/L	96.5	80.0 - 120.0	16-FEB-10 12:45	021610-1
	Chromium	480	ug/L	500	ug/L	96	80.0 - 120.0	16-FEB-10 12:45	021610-1
	Cobalt	445	ug/L	500	ug/L	89.1	80.0 - 120.0	16-FEB-10 12:45	021610-1
	Copper	566	ug/L	500	ug/L	113	80.0 - 120.0	16-FEB-10 12:45	021610-1
	Manganese	485	ug/L	500	ug/L	97.1	80.0 - 120.0	16-FEB-10 12:45	021610-1
	Potassium	5460	ug/L	5000	ug/L	109	80.0 - 120.0	16-FEB-10 12:45	021610-1
	Silver	275	ug/L	250	ug/L	110	80.0 - 120.0	16-FEB-10 12:45	021610-1
	Sodium	5800	ug/L	5000	ug/L	116	80.0 - 120.0	16-FEB-10 12:45	021610-1
	Vanadium	498	ug/L	500	ug/L	99.7	80.0 - 120.0	16-FEB-10 12:45	021610-1
	Zinc	495	ug/L	500	ug/L	99	80.0 - 120.0	16-FEB-10 12:45	021610-1

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## METALS

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## Interference Check Sample

SDG No: 10-1474

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>
<b>ICSA01</b>									
	Iron	192000	ug/L	200000	ug/L	96.2	80.0 - 120.0	23-FEB-10 11:30	022310A-2
	Lead	-8.35	ug/L					23-FEB-10 11:30	022310A-2
	Magnesium	505000	ug/L	500000	ug/L	101	80.0 - 120.0	23-FEB-10 11:30	022310A-2
<b>ICSAB01</b>									
	Iron	193000	ug/L	200000	ug/L	96.5	80.0 - 120.0	23-FEB-10 11:37	022310A-2
	Lead	462	ug/L	500	ug/L	92.4	80.0 - 120.0	23-FEB-10 11:37	022310A-2
	Magnesium	510000	ug/L	500000	ug/L	102	80.0 - 120.0	23-FEB-10 11:37	022310A-2

## METALS

-4-

## Interference Check Sample

SDG No: 10-1474

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: ICPMS4

<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>
<b>ICSA01</b>									
	Arsenic	-0.361	ug/L					18-FEB-10 23:27	100218-3
	Nickel	4.91	ug/L					18-FEB-10 23:27	100218-3
	Selenium	-0.571	ug/L					18-FEB-10 23:27	100218-3
	Thallium	0.021	ug/L					18-FEB-10 23:27	100218-3
	Uranium	-0.016	ug/L					18-FEB-10 23:27	100218-3
<b>ICSAB01</b>									
	Arsenic	19.8	ug/L	20	ug/L	99.2	80.0 - 120.0	18-FEB-10 23:31	100218-3
	Nickel	24.4	ug/L	23.31	ug/L	105	80.0 - 120.0	18-FEB-10 23:31	100218-3
	Selenium	21.1	ug/L	20	ug/L	105	80.0 - 120.0	18-FEB-10 23:31	100218-3
	Thallium	17.9	ug/L	20	ug/L	89.7	80.0 - 120.0	18-FEB-10 23:31	100218-3
	Uranium	21.5	ug/L	20	ug/L	108	80.0 - 120.0	18-FEB-10 23:31	100218-3

## METALS

-4-

## Interference Check Sample

SDG No: 10-1474

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: ICPMS4

<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	0.102	ug/L					19-FEB-10 14:24	100219-4
ICSAB01	Beryllium	17.9	ug/L	20	ug/L	89.6	80.0 - 120.0	19-FEB-10 14:27	100219-4

## METALS

-5a-

## Matrix Spike Summary

SDG NO. 10-1474

Client ID: RE15-10-7954S

Contract: LANL01004

Level: Low

Matrix: SOIL

% Solids: 94.2

Sample ID: 245806001

Spike ID: 1202029973

<u>Analyte</u>	<u>Units</u>	<u>Acceptance Limit</u>	<u>Spiked Result</u>	<u>C</u>	<u>Sample Result</u>	<u>C</u>	<u>Spike Added</u>	<u>% Recovery</u>	<u>Qual</u>	<u>M</u>
Mercury	ug/kg	75-125	138		14.4		107	115		AV

## METALS

-5a-

## Matrix Spike Duplicate Summary

SDG NO. 10-1474 Client ID: RE15-10-7954SD

Contract: LANL01004 Level: Low

Matrix: SOIL % Solids: 94.2

Sample ID: 245806001 Spike ID: 1202029975

<u>Analyte</u>	<u>Units</u>	<u>Acceptance Limit</u>	<u>Spiked Result</u>	<u>C</u>	<u>Sample Result</u>	<u>C</u>	<u>Spike Added</u>	<u>% Recovery</u>	<u>Qual</u>	<u>M</u>
Mercury	ug/kg	75-125	137		14.4		107	114		AV



## METALS

-5a-

## Matrix Spike Summary

SDG NO. 10-1474

Client ID RE15-10-7954S

Contract: LANL01004

Level: Low

Matrix: SOIL

% Solids: 94.2

Sample ID: 245806001

Spike ID: 1202030972

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/Kg		7650000		3360000		511000	839	N/A	P
Antimony	ug/Kg	75-125	46100		5040		51100	80.4		P
Barium	ug/Kg	75-125	111000		48800		51100	121		P
Cadmium	ug/Kg	75-125	46500		99.8	U	51100	91		P
Calcium	ug/Kg	75-125	1630000		1100000		511000	103		P
Chromium	ug/Kg	75-125	57700		13400		51100	86.6		P
Cobalt	ug/Kg	75-125	50200		3090		51100	92.2		P
Copper	ug/Kg	75-125	679000		115000		51100	1100	N	P
Iron	ug/Kg		11000000		9310000		511000	327	N/A	P
Lead	ug/Kg		86200		578000		51100	-963	N/A	P
Magnesium	ug/Kg	75-125	1590000		696000		511000	175	N	P
Manganese	ug/Kg	75-125	259000		192000		51100	131	N	P
Potassium	ug/Kg	75-125	1190000		460000		511000	142	N	P
Silver	ug/Kg	75-125	50100		766		51100	96.7		P
Sodium	ug/Kg	75-125	538000		85000		511000	88.7		P
Vanadium	ug/Kg	75-125	57100		8040		51100	96.1		P
Zinc	ug/Kg	75-125	87000		36600		51100	98.7		P

## METALS

-5a-

## Matrix Spike Duplicate Summary

SDG NO. 10-1474 Client ID RE15-10-7954SD

Contract: LANL01004 Level: Low

Matrix: SOIL % Solids: 94.2

Sample ID: 245806001 Spike ID: 1202030973

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Copper	ug/Kg	75-125	113000		115000		50500	-4.26	N	P
Iron	ug/Kg		10200000		9310000		505000	182	N/A	P
Lead	ug/Kg		92500		578000		50500	-962	N/A	P
Magnesium	ug/Kg	75-125	1500000		696000		505000	159	N	P
Manganese	ug/Kg	75-125	231000		192000		50500	77.4		P
Potassium	ug/Kg	75-125	1140000		460000		505000	134	N	P
Silver	ug/Kg	75-125	49900		766		50500	97.3		P
Sodium	ug/Kg	75-125	559000		85000		505000	93.8		P
Vanadium	ug/Kg	75-125	56000		8040		50500	94.9		P
Zinc	ug/Kg	75-125	81700		36600		50500	89.4		P
Aluminum	ug/Kg		7000000		3360000		505000	721	N/A	P
Antimony	ug/Kg	75-125	46300		5040		50500	81.7		P
Barium	ug/Kg	75-125	94600		48800		50500	90.6		P
Cadmium	ug/Kg	75-125	45900		99.8	U	50500	91		P
Calcium	ug/Kg	75-125	1540000		1100000		505000	88.7		P
Chromium	ug/Kg	75-125	61000		13400		50500	94.2		P
Cobalt	ug/Kg	75-125	49800		3090		50500	92.5		P

## METALS

-5a-

## Matrix Spike Summary

SDG NO. 10-1474

Client ID: RE15-10-7954S

Contract: LANL01004

Level: Low

Matrix: SOIL

% Solids: 94.2

Sample ID: 245806001

Spike ID: 1202030978

<u>Analyte</u>	<u>Units</u>	<u>Acceptance Limit</u>	<u>Spiked Result</u>	<u>C</u>	<u>Sample Result</u>	<u>C</u>	<u>Spike Added</u>	<u>% Recovery</u>	<u>Qual</u>	<u>M</u>
Arsenic	mg/kg	75-125	10.7		1.48		8.46	108		MS
Beryllium	mg/kg	75-125	6		1.37		5.29	87.6		MS
Nickel	mg/kg	75-125	12		7.19		5.29	90.7		MS
Selenium	mg/kg	75-125	2.37		0.524	U	2.12	89.1		MS
Thallium	mg/kg	75-125	8.85		0.0878	J	10.6	82.9		MS
Uranium	mg/kg		105		84.4		5.29	390	N/A	MS

## METALS

-5a-

## Matrix Spike Duplicate Summary

SDG NO. 10-1474 Client ID. RE15-10-7954SD

Contract: LANL01004 Level: Low

Matrix: SOIL % Solids: 94.2

Sample ID: 245806001 Spike ID: 1202030979

<u>Analyte</u>	<u>Units</u>	<u>Acceptance Limit</u>	<u>Spiked Result</u>	<u>C</u>	<u>Sample Result</u>	<u>C</u>	<u>Spike Added</u>	<u>% Recovery</u>	<u>Qual</u>	<u>M</u>
Arsenic	mg/kg	75-125	9.21		1.48		8.35	92.6		MS
Beryllium	mg/kg	75-125	6.05		1.37		5.22	89.7		MS
Nickel	mg/kg	75-125	10.7		7.19		5.22	67.2	N	MS
Selenium	mg/kg	75-125	2.16		0.524	U	2.09	80		MS
Thallium	mg/kg	75-125	8.71		0.0878	J	10.4	82.6		MS
Uranium	mg/kg		104		84.4		5.22	377	N/A	MS

## Metals

-6-

## Duplicate Sample Summary

SDG No.: 10-1474

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE15-10-7954D

Sample ID: 245806001

Duplicate ID: 1202029972

Percent Solids for Dup: 94.2

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/kg	+/-12.6	14.4		16.3		12.5		AV

## Metals

-6-

## Duplicate Sample Summary

SDG No.: 10-1474

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE15-10-7954SD

Sample ID: 1202029973

Duplicate ID: 1202029975

Percent Solids for Dup: 94.2

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/kg	+/-20	138		137		.457		AV

**Metals**  
**-6-**  
**Duplicate Sample Summary**

SDG No.: 10-1474

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE15-10-7954D

Sample ID: 245806001

Duplicate ID: 1202030970

Percent Solids for Dup: 94.2

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/Kg	+/-20%	3360000		3180000		5.59		P
Antimony	ug/Kg	+/-998	5040		992 J		134	*	P
Barium	ug/Kg	+/-20%	48800		45200		7.79		P
Cadmium	ug/Kg		99.8 U		99.8 U				P
Calcium	ug/Kg	+/-20%	1100000		1040000		5.6		P
Chromium	ug/Kg	+/-20%	13400		8790		41.8	*	P
Cobalt	ug/Kg	+/-499	3090		2490		21.2	*	P
Copper	ug/Kg	+/-20%	115000		33000		111	*	P
Iron	ug/Kg	+/-20%	9310000		9510000		2.11		P
Lead	ug/Kg	+/-20%	578000		31400		179	*	P
Magnesium	ug/Kg	+/-20%	696000		675000		3.13		P
Manganese	ug/Kg	+/-20%	192000		210000		8.81		P
Potassium	ug/Kg	+/-20%	460000		448000		2.7		P
Silver	ug/Kg	+/-499	766		680		11.9		P
Sodium	ug/Kg	+/-25000	85000		81600		4.08		P
Vanadium	ug/Kg	+/-20%	8040		7420		7.95		P
Zinc	ug/Kg	+/-20%	36600		34700		5.42		P

Metals  
-6-  
Duplicate Sample Summary

SDG No.: 10-1474

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE15-10-7954SD

Sample ID: 1202030972

Duplicate ID: 1202030973

Percent Solids for Dup: 94.2

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/Kg	+/-20	7650000		7000000		8.83		P
Antimony	ug/Kg	+/-20	46100		46300		.33		P
Barium	ug/Kg	+/-20	111000		94600		15.7		P
Cadmium	ug/Kg	+/-20	46500		45900		1.2		P
Calcium	ug/Kg	+/-20	1630000		1540000		5.09		P
Chromium	ug/Kg	+/-20	57700		61000		5.6		P
Cobalt	ug/Kg	+/-20	50200		49800		.79		P
Copper	ug/Kg	+/-20	679000		113000		143	*	P
Iron	ug/Kg	+/-20	11000000		10200000		7.09		P
Lead	ug/Kg	+/-20	86200		92500		7.07		P
Magnesium	ug/Kg	+/-20	1590000		1500000		5.78		P
Manganese	ug/Kg	+/-20	259000		231000		11.5		P
Potassium	ug/Kg	+/-20	1190000		1140000		4.27		P
Silver	ug/Kg	+/-20	50100		49900		.518		P
Sodium	ug/Kg	+/-20	538000		559000		3.76		P
Vanadium	ug/Kg	+/-20	57100		56000		2.02		P
Zinc	ug/Kg	+/-20	87000		81700		6.27		P



## Metals

-6-

## Duplicate Sample Summary

SDG No.: 10-1474

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE15-10-7954D

Sample ID: 245806001

Duplicate ID: 1202030976

Percent Solids for Dup: 94.2

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	mg/kg	+/-1.05	1.48		1.32		11.6		MS
Beryllium	mg/kg	+/-20%	1.37		0.922		39.1	*	MS
Nickel	mg/kg	+/-20%	7.19		4.76		40.8	*	MS
Selenium	mg/kg		0.524 U		0.527 U				MS
Thallium	mg/kg	+/-0.211	0.0878 J		0.07 J		22.6		MS
Uranium	mg/kg	+/-20%	84.4		68.9		20.2	*	MS

## Metals

-6-

## Duplicate Sample Summary

SDG No.: 10-1474

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE15-10-7954SD

Sample ID: 1202030978

Duplicate ID: 1202030979

Percent Solids for Dup: 94.2

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	mg/kg	+/-20	10.7		9.21		14.6		MS
Beryllium	mg/kg	+/-20	6		6.05		.77		MS
Nickel	mg/kg	+/-20	12		10.7		11.4		MS
Selenium	mg/kg	+/-20	2.37		2.16		9.52		MS
Thallium	mg/kg	+/-20	8.85		8.71		1.68		MS
Uranium	mg/kg	+/-20	105		104		.934		MS

## METALS

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## Laboratory Control Sample Summary

SDG NO. 10-1474

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>
1202029971	Mercury	ug/kg	5150	5800		113	71.6-128.3	AV

## METALS

-7-

## Laboratory Control Sample Summary

SDG NO. 10-1474

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>
1202030974								
	Aluminum	ug/Kg	10500000	8060000		76.8	56-144	P
	Antimony	ug/Kg	173000	130000		75.4	71-130	P
	Barium	ug/Kg	198000	178000		90	80-120	P
	Cadmium	ug/Kg	60700	53000		87.3	81-120	P
	Calcium	ug/Kg	9870000	9340000		94.7	83-117	P
	Chromium	ug/Kg	236000	213000		90.2	80-120	P
	Cobalt	ug/Kg	91200	84700		92.9	81-120	P
	Copper	ug/Kg	174000	176000		101	81-118	P
	Iron	ug/Kg	18000000	17500000		97	51-149	P
	Lead	ug/Kg	86000	78500		91.3	79-121	P
	Magnesium	ug/Kg	4000000	3710000		92.8	79-122	P
	Manganese	ug/Kg	558000	499000		89.4	81-119	P
	Potassium	ug/Kg	4300000	3800000		88.5	74-127	P
	Silver	ug/Kg	30100	30000		99.7	66-134	P
	Sodium	ug/Kg	1020000	919000		90.1	74-127	P
	Vanadium	ug/Kg	115000	111000		96.3	79-121	P
	Zinc	ug/Kg	594000	548000		92.3	80-121	P

## METALS

-7-

## Laboratory Control Sample Summary

SDG NO. 10-1474

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>
1202030980								
	Arsenic	mg/kg	104	118		113	78-123	MS
	Beryllium	mg/kg	77.6	82.6		106	84-116	MS
	Nickel	mg/kg	134	147		109	78-123	MS
	Selenium	mg/kg	286	317		111	77-123	MS
	Thallium	mg/kg	121	123		102	78-122	MS
	Uranium	mg/kg	2.13	2.11		99	73-127	MS

## METALS

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## Serial Dilution Sample Summary

SDG NO. 10-1474

Client ID RE15-10-7954L

Contract: LANL01004

Matrix: SOLID

Level: Low

Sample ID: 245806001

Serial Dilution ID: 1202029974

<u>Analyte</u>	<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>
Mercury	.237		.34	U	100			AV

## METALS

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## Serial Dilution Sample Summary

SDG NO. 10-1474

Client ID: RE15-10-7954L

Contract: LANL01004

Matrix: SOLID

Level: Low

Sample ID: 245806001

Serial Dilution ID: 1202030971

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Aluminum	33700		32400		3.86		10	P
Antimony	50.5		57.5		13.9			P
Barium	489		505		3.27		10	P
Cadmium	1	U	5	U				P
Calcium	11000		11000		.455		10	P
Chromium	135		135		0		10	P
Cobalt	30.9		32.7		5.83			P
Copper	1150		1180		2.17		10	P
Iron	46700		47100		.749		10	P
Lead	2900		2910		.345		10	P
Magnesium	3490		3400		2.72			P
Manganese	1920		2010		4.69		10	P
Potassium	4610		4300		6.83		10	P
Silver	7.68		7.5	J	2.34			P
Sodium	852		492	J	42.3			P
Vanadium	80.5		79		1.86		10	P
Zinc	366		380		3.83		10	P

## METALS

-9-

## Serial Dilution Sample Summary

SDG NO. 10-1474 Client ID RE15-10-7954L

Contract: LANL01004

Matrix: SOLID Level: Low

Sample ID: 245806001 Serial Dilution ID: 1202030977

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Arsenic	7.05		10.7	J	51.8			MS
Beryllium	6.54		7.3		11.6			MS
Nickel	34.3		38.8		13			MS
Selenium	2.5	U	12.5	U				MS
Thallium	.419	J	1.53	J	265			MS
Uranium	403		439		8.93		10	MS



## METALS

-13-

## SAMPLE PREPARATION SUMMARY

SDG No: 10-1474

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	948070						
1202030969	MB for batch 948070	MB	S	08-FEB-10	.523g	50mL	
1202030974	LCS for batch 948070	LCS	S	08-FEB-10	.514g	50mL	
1202030972	RE15-10-7954S	MS	S	08-FEB-10	.52g	50mL	
1202030973	RE15-10-7954SD	MSD	S	08-FEB-10	.526g	50mL	
1202030970	RE15-10-7954D	DUP	S	08-FEB-10	.532g	50mL	
245806001	RE15-10-7954	SAMPLE	S	08-FEB-10	.532g	50mL	
245806002	RE15-10-7956	SAMPLE	S	08-FEB-10	.523g	50mL	
245806003	RE15-10-7955	SAMPLE	S	08-FEB-10	.521g	50mL	
245806004	RE15-10-7953	SAMPLE	S	08-FEB-10	.53g	50mL	
245806005	RE15-10-7952	SAMPLE	S	08-FEB-10	.513g	50mL	
245806006	RE15-10-8060	SAMPLE	S	08-FEB-10	.522g	50mL	
245806007	RE15-10-8058	SAMPLE	S	08-FEB-10	.517g	50mL	
245806008	RE15-10-8059	SAMPLE	S	08-FEB-10	.514g	50mL	

SW846

METALS  
-13-  
SAMPLE PREPARATION SUMMARY

SDG No: 10-1474

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 948072							
1202030975	MB for batch 948072	MB	S	08-FEB-10	.506g	50mL	
1202030980	LCS for batch 948072	LCS	S	08-FEB-10	.515g	50mL	
1202030978	RE15-10-7954S	MS	S	08-FEB-10	.502g	50mL	
1202030979	RE15-10-7954SD	MSD	S	08-FEB-10	.509g	50mL	
1202030976	RE15-10-7954D	DUP	S	08-FEB-10	.504g	50mL	
245806001	RE15-10-7954	SAMPLE	S	08-FEB-10	.507g	50mL	
245806002	RE15-10-7956	SAMPLE	S	08-FEB-10	.517g	50mL	
245806003	RE15-10-7955	SAMPLE	S	08-FEB-10	.523g	50mL	
245806004	RE15-10-7953	SAMPLE	S	08-FEB-10	.521g	50mL	
245806005	RE15-10-7952	SAMPLE	S	08-FEB-10	.532g	50mL	
245806006	RE15-10-8060	SAMPLE	S	08-FEB-10	.534g	50mL	
245806007	RE15-10-8058	SAMPLE	S	08-FEB-10	.515g	50mL	
245806008	RE15-10-8059	SAMPLE	S	08-FEB-10	.512g	50mL	

SW846

METALS  
-13-  
SAMPLE PREPARATION SUMMARY

SDG No: 10-1474

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>
<b>Batch Number 947648</b>							
1202029970	MB for batch 947648	MB	S	15-FEB-10	.535g	30mL	
1202029971	LCS for batch 947648	LCS	S	15-FEB-10	.209g	30mL	
1202029973	RE15-10-7954S	MS	S	15-FEB-10	.595g	30mL	
1202029975	RE15-10-7954SD	MSD	S	15-FEB-10	.593g	30mL	
1202029972	RE15-10-7954D	DUP	S	15-FEB-10	.504g	30mL	
245806001	RE15-10-7954	SAMPLE	S	15-FEB-10	.524g	30mL	
245806002	RE15-10-7956	SAMPLE	S	15-FEB-10	.572g	30mL	
245806003	RE15-10-7955	SAMPLE	S	15-FEB-10	.544g	30mL	
245806004	RE15-10-7953	SAMPLE	S	15-FEB-10	.562g	30mL	
245806005	RE15-10-7952	SAMPLE	S	15-FEB-10	.521g	30mL	
245806006	RE15-10-8060	SAMPLE	S	15-FEB-10	.5g	30mL	
245806007	RE15-10-8058	SAMPLE	S	15-FEB-10	.501g	30mL	
245806008	RE15-10-8059	SAMPLE	S	15-FEB-10	.508g	30mL	

SW846

Metals  
-14-  
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: OPTIMA3

Start Date: 16-FEB-10

Client Sdg: 10-1474

Method P

Data File: 021610-1

End Date: 17-FEB-10

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	11:46	X	X		X		X	X	X	X	X				X			X		X	X			X	X
S0.1	1	11:52		X		X		X		X	X	X				X			X		X				X	X
S0.5	1	11:58	X	X		X		X	X	X	X	X				X			X		X				X	X
SCAL	1	12:05	X	X		X		X	X	X	X	X				X			X		X	X			X	X
S10	1	12:13	X						X													X				
ICV01	1	12:18	X	X		X		X	X	X	X	X				X			X		X	X			X	X
ICB01	1	12:25	X	X		X		X	X	X	X	X				X			X		X	X			X	X
PQL01	1	12:32	X	X		X		X	X	X	X	X				X			X		X	X			X	X
ICSA01	1	12:39	X	X		X		X	X	X	X	X				X			X		X	X			X	X
ICSAB01	1	12:45	X	X		X		X	X	X	X	X				X			X		X	X			X	X
LR01	1	12:51	X	X		X		X	X	X	X	X				X			X		X	X			X	X
LR02	1	12:57	X	X		X		X	X	X	X	X				X			X		X	X			X	X
CCV01	1	13:04	X	X		X		X	X	X	X	X				X			X		X	X			X	X
CCB01	1	13:11	X	X		X		X	X	X	X	X				X			X		X	X			X	X
LR03	1	13:19	X	X		X		X	X	X	X	X				X			X		X	X			X	X
CCV02	1	13:26	X	X		X		X	X	X	X	X				X			X		X	X			X	X
CCB02	1	13:33	X	X		X		X	X	X	X	X				X			X		X	X			X	X
//////	1	13:49																								
//////	1	13:55																								
//////	1	14:02																								
//////	1	14:10																								
//////	1	14:17																								
//////	5	14:25																								
//////	10	14:32																								
//////	10	14:39																								
//////	10	14:47																								
//////	50	14:54																								
CCV03	1	15:01	X	X		X		X	X	X	X	X				X			X		X	X			X	X
CCB03	1	15:08	X	X		X		X	X	X	X	X				X			X		X	X			X	X
//////	50	15:14																								
CCV04	1	15:21	X	X		X		X	X	X	X	X				X			X		X	X			X	X
CCB04	1	15:28	X	X		X		X	X	X	X	X				X			X		X	X			X	X
CCV05	1	15:39	X	X		X		X	X	X	X	X				X			X		X	X			X	X
CCB05	1	15:46	X	X		X		X	X	X	X	X				X			X		X	X			X	X
//////	50	15:53																								
//////	5	16:00																								
CCV06	1	16:07	X	X		X		X	X	X	X	X				X			X		X	X			X	X
CCB06	1	16:14	X	X		X		X	X	X	X	X				X			X		X	X			X	X
CCV07	1	16:40	X	X		X		X	X	X	X	X				X			X		X	X			X	X
CCB07	1	16:47	X	X		X		X	X	X	X	X				X			X		X	X			X	X

Metals  
-14-  
Analysis Run Log

Samp No.	D/F	Run Time																		
TTTTT	1	16:54																		
TTTTT	1	17:01																		
TTTTT	1	17:07																		
TTTTT	1	17:14																		
TTTTT	1	17:21																		
TTTTT	1	17:28																		
TTTTT	1	17:35																		
CCV08	1	17:42	X	X		X		X	X	X	X	X		X		X		X	X	
CCB08	1	17:49	X	X		X		X	X	X	X	X		X		X		X	X	
TTTTT	1	17:55																		
TTTTT	5	18:02																		
TTTTT	1	18:09																		
TTTTT	1	18:16																		
TTTTT	1	18:23																		
TTTTT	1	18:30																		
TTTTT	1	18:37																		
CCV09	1	18:44	X	X		X		X	X	X	X	X		X		X		X	X	
CCB09	1	18:51	X	X		X		X	X	X	X	X		X		X		X	X	
TTTTT	1	18:58																		
TTTTT	1	19:05																		
TTTTT	1	19:12																		
TTTTT	1	19:19																		
TTTTT	1	19:26																		
TTTTT	1	19:34																		
CCV10	1	19:41	X	X		X		X	X	X	X	X		X		X		X	X	
CCB10	1	19:48	X	X		X		X	X	X	X	X		X		X		X	X	
TTTTT	1	19:54																		
TTTTT	1	20:01																		
TTTTT	1	20:08																		
TTTTT	1	20:15																		
TTTTT	1	20:22																		
TTTTT	1	20:29																		
TTTTT	5	20:36																		
TTTTT	1	20:43																		
TTTTT	1	20:50																		
CCV11	1	20:57	X	X		X		X	X	X	X	X		X		X		X	X	
CCB11	1	21:04	X	X		X		X	X	X	X	X		X		X		X	X	
TTTTT	1	21:10																		
TTTTT	1	21:17																		
TTTTT	1	21:25																		

**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	21:32																								
ZZZZZZ	1	21:39																								
ZZZZZZ	1	21:46																								
ZZZZZZ	1	21:53																								
ZZZZZZ	1	22:00																								
CCV12	1	22:07	X	X		X		X	X	X	X	X				X			X		X	X			X	X
CCB12	1	22:14	X	X		X		X	X	X	X	X				X			X		X	X			X	X
ZZZZZZ	1	22:21																								
ZZZZZZ	1	22:28																								
ZZZZZZ	1	22:34																								
ZZZZZZ	1	22:41																								
ZZZZZZ	1	22:48																								
ZZZZZZ	1	22:55																								
ZZZZZZ	5	23:02																								
ZZZZZZ	1	23:09																								
CCV13	1	23:16	X	X		X		X	X	X	X	X				X			X		X	X			X	X
CCB13	1	23:23	X	X		X		X	X	X	X	X				X			X		X	X			X	X
ZZZZZZ	1	23:30																								
ZZZZZZ	1	23:36																								
ZZZZZZ	1	23:43																								
ZZZZZZ	1	23:50																								
ZZZZZZ	1	23:57																								
ZZZZZZ	1	00:04																								
ZZZZZZ	5	00:11																								
CCV14	1	00:18	X	X		X		X	X	X	X	X				X			X		X	X			X	X
CCB14	1	00:25	X	X		X		X	X	X	X	X				X			X		X	X			X	X
ZZZZZZ	1	00:31																								
ZZZZZZ	1	00:38																								
ZZZZZZ	1	00:46																								
ZZZZZZ	1	00:53																								
ZZZZZZ	1	01:00																								
ZZZZZZ	1	01:07																								
ZZZZZZ	1	01:14																								
CCV15	1	01:21	X	X		X		X	X	X	X	X				X			X		X	X			X	X
CCB15	1	01:28	X	X		X		X	X	X	X	X				X			X		X	X			X	X
ZZZZZZ	1	01:35																								
ZZZZZZ	1	01:42																								
ZZZZZZ	1	01:49																								
ZZZZZZ	1	01:56																								
ZZZZZZ	1	02:04																								

[illegible]

**Metals**  
**-14-**  
**Analysis Run Log**

Contract: LANL01004

Lab Code: GEL

Inst Name: OPTIMA3

Start Date: 23-FEB-10

End Date: 24-FEB-10

Client Sdg: 10-1474

Method P

Data File: 022310A-2

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
S0.0	1	10:37											X	X	X											
S0.1	1	10:44												X												
S0.5	1	10:50												X	X											
SCAL	1	10:57											X	X	X											
S10	1	11:04											X		X											
ICV01	1	11:10											X	X	X											
ICB01	1	11:17											X	X	X											
PQL01	1	11:23											X	X	X											
ICSA01	1	11:30											X	X	X											
ICSAB01	1	11:37											X	X	X											
LR01	1	11:43											X	X	X											
LR02	1	11:50											X	X	X											
CCV01	1	11:57											X	X	X											
CCB01	1	12:04											X	X	X											
LR03	1	12:18											X	X	X											
CCV02	1	12:25											X	X	X											
CCB02	1	12:32											X	X	X											
ZZZZZZ	50	12:49																								
ZZZZZZ	100	12:56																								
CCV03	1	13:03											X	X	X											
CCB03	1	13:10											X	X	X											
ZZZZZZ	10	13:17																								
ZZZZZZ	10	13:24																								
ZZZZZZ	10	13:31																								
ZZZZZZ	10	13:38																								
ZZZZZZ	50	13:45																								
ZZZZZZ	10	13:52																								
ZZZZZZ	10	13:59																								
CCV04	1	14:04											X	X	X											
CCB04	1	14:11											X	X	X											
1202030969	1	14:19											X	X	X											
1202030974	1	14:26											X	X	X											
245806001	2	14:32											X	X	X											
1202030970	2	14:39											X	X	X											
1202030972	2	14:46											X	X	X											
1202030973	2	14:52											X	X	X											
1202030971	10	14:59											X	X	X											
CCV05	1	15:06											X	X	X											
CCB05	1	15:13											X	X	X											
ZZZZZZ	2	15:20																								



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	100	20:51																								
ZZZZZZ	500	20:58																								
ZZZZZZ	100	21:05																								
CCV11	1	21:12											X	X	X											
CCB11	1	21:19											X	X	X											
ZZZZZZ	10	21:26																								
ZZZZZZ	10	21:33																								
ZZZZZZ	10	21:40																								
ZZZZZZ	10	21:47																								
ZZZZZZ	5	21:54																								
ZZZZZZ	5	22:01																								
ZZZZZZ	5	22:07																								
ZZZZZZ	25	22:14																								
CCV12	1	22:21											X	X	X											
CCB12	1	22:28											X	X	X											
ZZZZZZ	5	22:35																								
ZZZZZZ	5	22:42																								
ZZZZZZ	5	22:48																								
ZZZZZZ	5	22:55																								
ZZZZZZ	5	23:02																								
CCV13	1	23:09											X	X	X											
CCB13	1	23:16											X	X	X											
ZZZZZZ	1	23:23																								
ZZZZZZ	1	23:30																								
ZZZZZZ	1	23:36																								
ZZZZZZ	100	23:43																								
ZZZZZZ	500	23:50																								
ZZZZZZ	100	23:57																								
CCV14	1	00:05											X	X	X											
CCB14	1	00:12											X	X	X											
ZZZZZZ	1	00:18																								
ZZZZZZ	1	00:25																								
ZZZZZZ	1	00:32																								
ZZZZZZ	1	00:39																								
ZZZZZZ	1	00:46																								
ZZZZZZ	1	00:53																								
ZZZZZZ	5	01:00																								
CCV15	1	01:06											X	X	X											
CCB15	1	01:13											X	X	X											
ZZZZZZ	1	01:20																								

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
CCV20	1	06:17											X	X	X											
CCB20	1	06:24											X	X	X											
//////	1	06:39																								
//////	1	06:46																								
//////	1	06:53																								
//////	1	07:00																								
//////	1	07:07																								
//////	1	07:13																								
//////	1	07:20																								
//////	1	07:27																								
//////	5	07:34																								
CCV21	1	07:41											X	X	X											
CCB21	1	07:48											X	X	X											
//////	1	07:54																								
//////	1	08:01																								
//////	1	08:07																								
//////	1	08:15																								
//////	1	08:22																								
//////	1	08:29																								
//////	1	08:36																								
//////	5	08:42																								
245806001/2	2	08:48											X	X	X											
CCV22	1	08:55											X	X	X											
CCB22	1	09:02											X	X	X											

Metals  
-14-  
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: MER536

Start Date: 16-FEB-10

End Date: 16-FEB-10

Client Sdg: 10-1474

Method: AV

Data File: 021610S2-5

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
S0.0	1	08:49															X									
S0.2	1	08:51															X									
S0.5	1	08:53															X									
S2.0	1	08:55															X									
S5.0	1	08:57															X									
S10	1	08:59															X									
ICV01	1	09:01															X									
ICB01	1	09:03															X									
CRDL01	1	09:05															X									
CCV01	1	09:07															X									
CCB01	1	09:09															X									
1202029970	1	09:11															X									
1202029971	10	09:13															X									
111111	1	09:15																								
111111	1	09:17																								
111111	1	09:19																								
111111	1	09:21																								
111111	1	09:23																								
111111	1	09:25																								
111111	1	09:27																								
111111	1	09:28																								
CCV02	1	09:30															X									
CCB02	1	09:33															X									
111111	1	09:35																								
111111	1	09:36																								
111111	1	09:38																								
245806001	1	09:40															X									
1202029972	1	09:42															X									
1202029973	1	09:44															X									
1202029975	1	09:46															X									
1202029974	5	09:48															X									
245806002	1	09:51															X									
245806003	1	09:53															X									
CCV03	1	09:55															X									
CCB03	1	09:57															X									
245806004	1	09:59															X									
245806005	1	10:01															X									
245806006	1	10:02															X									
245806007	1	10:04															X									
245806008	1	10:06															X									

Samp No.	D/F	Run Time
777777	1	10:08
777777	10	10:10
CCV04	1	10:14
CCB04	1	10:16

Metals  
-14-  
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: ICPMS4

Start Date: 18-FEB-10

End Date: 19-FEB-10

Client Sdg: 10-1474

Method MS

Data File: 100218-3

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	23:02			X													X	X			X	X			
S10	1	23:06			X													X	X			X	X			
S100	1	23:10			X													X	X			X	X			
ICV01	1	23:14			X													X	X			X	X			
ICB01	1	23:18			X													X	X			X	X			
CRDL01	1	23:23			X													X	X			X	X			
ICSA01	1	23:27			X													X	X			X	X			
ICSAB01	1	23:31			X													X	X			X	X			
CCV01	1	23:35			X													X	X			X	X			
CCB01	1	23:39			X													X	X			X	X			
LR01	1	23:43			X													X	X			X	X			
CCV02	1	23:47			X													X	X			X	X			
CCB02	1	23:51			X													X	X			X	X			
1202030975	2	23:56			X													X	X			X	X			
1202030980	40	00:00			X													X	X			X	X			
CCV03	1	00:04			X													X	X			X	X			
CCB03	1	00:08			X													X	X			X	X			
245806001	2	00:12			X													X	X			X	X			
1202030976	2	00:16			X													X	X			X	X			
1202030978	2	00:21			X													X	X			X	X			
1202030979	2	00:25			X													X	X			X	X			
1202030977	10	00:29			X													X	X			X	X			
CCV04	1	00:33			X													X	X			X	X			
CCB04	1	00:37			X													X	X			X	X			
245806002	2	00:42			X													X	X			X	X			
245806003	2	00:46			X													X	X			X	X			
245806004	2	00:50			X													X	X			X	X			
245806005	2	00:54			X													X	X			X	X			
CCV05	1	00:58			X													X	X			X	X			
CCB05	1	01:02			X													X	X			X	X			
245806006	2	01:07			X													X	X			X	X			
245806007	2	01:11			X													X	X			X	X			
245806008	2	01:15			X													X	X			X	X			
CCV06	1	01:19			X													X	X			X	X			
CCB06	1	01:23			X													X	X			X	X			

**Metals**  
**-14-**  
**Analysis Run Log**

Contract: LANL01004

Lab Code: GEL

Inst Name: ICPMS4

Start Date: 19-FEB-10

Client Sdg: 10-1474

Method MS

Data File: 100219-4

End Date: 19-FEB-10

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	14:11					X																			
S10	1	14:14					X																			
S100	1	14:16					X																			
ICV01	1	14:18					X																			
ICB01	1	14:20					X																			
CRDL01	1	14:22					X																			
ICSA01	1	14:24					X																			
ICSAB01	1	14:27					X																			
CCV01	1	14:29					X																			
CCB01	1	14:31					X																			
1202030975	2	14:33					X																			
1202030980	40	14:36					X																			
CCV02	1	14:38					X																			
CCB02	1	14:40					X																			
245806001	2	14:42					X																			
1202030976	2	14:45					X																			
1202030978	2	14:47					X																			
1202030979	2	14:49					X																			
CCV03	1	14:51					X																			
CCB03	1	14:54					X																			
1202030977	10	14:56					X																			
245806002	2	14:58					X																			
245806003	2	15:00					X																			
245806004	2	15:03					X																			
CCV04	1	15:05					X																			
CCB04	1	15:07					X																			
245806005	2	15:10					X																			
245806006	2	15:12					X																			
245806007	2	15:14					X																			
245806008	2	15:16					X																			
CCV05	1	15:19					X																			
CCB05	1	15:21					X																			



# Standards

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**METALS**  
**-10-**  
**Instrument Detection Limits**

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SDG NO. 10-1474

Contract: LANL01004

Lab Code: GEL

MDL Effective Date: 01-JUL-09

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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

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**METALS**  
**-10-**  
**Instrument Detection Limits**

**SDG NO.** 10-1474

**Contract:** LANL01004

**Lab Code:** GEL

**MDL Effective Date:** 15-JUN-09

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	<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. 10-1474

Contract: LANL01004

Lab Code: GEL

MDL Effective Date: 01-JUL-09

ICP	Analyte	Wavelength	MDL	RDL
		(nm)	ug/L	ug/L
SOLID	Aluminum	396.153	68.0	200
	Antimony	206.836	3.3	10
	Arsenic	188.979	5.0	30
	Barium	233.527	1.0	5
	Beryllium	313.107	1.0	5
	Cadmium	226.502	1.0	5
	Calcium	317.933	80.0	250
	Chromium	267.716	1.5	5
	Cobalt	228.616	1.5	5
	Copper	324.752	3.0	10
	Iron	238.204	80.0	250
	Lead	220.353	2.5	10
	Magnesium	279.077	85.0	300
	Manganese	257.61	2.0	10
	Nickel	231.604	1.5	5
	Potassium	766.49	64.0	250
	Selenium	196.026	5.0	30
	Silver	328.068	1.0	5
	Sodium	589.592	70.0	250
	Thallium	190.801	5.0	20
	Uranium	409.014	10.0	50
	Vanadium	292.402	1.0	5
	Zinc	213.857	3.3	10

**METALS**  
**-11-**  
**Interelement Correction Factors**

Lab Code: GEL

GEL Job No:

10-1474

Contract: LANL01004

Instrument: OPTIMA3

Effective Dates: 01-FEB-10

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: 10-1474

Contract: LANL01004

Instrument: OPTIMA3

Effective Dates: 01-FEB-10

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:

**10-1474**

Contract: LANL01004

Instrument: OPTIMA3

Effective Dates: **01-FEB-10**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

		Iron	Lead	Magnesium	Manganese	Molybdenum
Parmname	Wavelength					
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-**  
**Interement Correction Factors**

Lab Code: GEL

GEL Job No: 10-1474

Contract: LANL01004

Instrument: OPTIMA3

Effective Dates: 01-FEB-10

Interement Correction Factors (apparent ppb analyte/ppm interferent)

		Nickel	Phosphorous	Potassium	Selenium	Silica
Parmname	Wavelength					
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-**  
**Interement Correction Factors**

Lab Code: GEL

GEL Job No:

10-1474

Contract: LANL01004

Instrument: OPTIMA3

Effective Dates:

01-FEB-10

Interement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Silicon	Silver	Strontium	Sulfur	Thallium
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	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	0.00000	0.00000	0.00000	0.00000	0.00000

**METALS**  
**-11-**  
**Interement Correction Factors**

Lab Code: GEL

GEL Job No: 10-1474

Contract: LANL01004

Instrument: OPTIMA3

Effective Dates: 01-FEB-10

Interement Correction Factors (apparent ppb analyte/ppm interferent)

		Tin	Titanium	Uranium	Vanadium	Zinc
Parmname	Wavelength					
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	-15.4932	3.30431	0.00000	-2.81282	0.00000
Arsenic	188.979	0.00000	-8.66313	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	-2.20293	0.00000
Beryllium	313.107	0.00000	-2.27027	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	-0.19473	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.39645	-1.41250	0.00000
Cobalt	228.616	0.00000	2.09497	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.55360	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	-9.37529	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	0.81635	-4.04400	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	-8.29801	0.00000	1.88584	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.43915	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	1.05947	-1.91382	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

**METALS**  
**-12-**  
**Linear Ranges**

SDG NO. 10-1474

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-FEB-10
Antimony	20	10000	ug/L	01-FEB-10
Arsenic	20	10000	ug/L	01-FEB-10
Barium	20	15000	ug/L	01-FEB-10
Beryllium	20	3000	ug/L	01-FEB-10
Cadmium	20	10000	ug/L	01-FEB-10
Calcium	20	500000	ug/L	01-FEB-10
Chromium	20	25000	ug/L	01-FEB-10
Cobalt	20	10000	ug/L	01-FEB-10
Copper	20	20000	ug/L	01-FEB-10
Iron	20	500000	ug/L	01-FEB-10
Lead	20	25000	ug/L	01-FEB-10
Magnesium	20	500000	ug/L	01-FEB-10
Manganese	20	10000	ug/L	01-FEB-10
Nickel	20	10000	ug/L	01-FEB-10
Potassium	20	300000	ug/L	01-FEB-10
Selenium	20	10000	ug/L	01-FEB-10
Silver	20	1000	ug/L	01-FEB-10
Sodium	20	500000	ug/L	01-FEB-10
Thallium	20	10000	ug/L	01-FEB-10
Uranium	20	15000	ug/L	01-FEB-10
Vanadium	20	10000	ug/L	01-FEB-10
Zinc	20	15000	ug/L	01-FEB-10

METALS  
-12-  
Linear Ranges

SDG NO. 10-1474

Contract: LANL01004

Lab Code: GEL

Instrument ID ICPMS4

<u>Analyte</u>	<u>Integration Time (msec)</u>	<u>LDR</u>	<u>Units</u>	<u>Effective Date</u>
Aluminum	1	50000	ug/L	01-FEB-10
Antimony	1000	250	ug/L	01-FEB-10
Arsenic	1000	1000	ug/L	01-FEB-10
Barium	1000	1000	ug/L	01-FEB-10
Beryllium	1000	1000	ug/L	01-FEB-10
Cadmium	1000	1000	ug/L	01-FEB-10
Calcium	500	50000	ug/L	01-FEB-10
Chromium	1000	1000	ug/L	01-FEB-10
Cobalt	1000	1000	ug/L	01-FEB-10
Copper	1000	1000	ug/L	01-FEB-10
Iron	500	50000	ug/L	01-FEB-10
Lead	1000	5000	ug/L	01-FEB-10
Magnesium	1	50000	ug/L	01-FEB-10
Manganese	1000	1000	ug/L	01-FEB-10
Nickel	1000	1000	ug/L	01-FEB-10
Potassium	1	50000	ug/L	01-FEB-10
Selenium	1000	500	ug/L	01-FEB-10
Silver	1000	250	ug/L	01-FEB-10
Sodium	1	50000	ug/L	01-FEB-10
Thallium	1000	500	ug/L	01-FEB-10
Uranium	1000	5000	ug/L	01-FEB-10
Vanadium	1000	100	ug/L	01-FEB-10
Zinc	1000	2500	ug/L	01-FEB-10

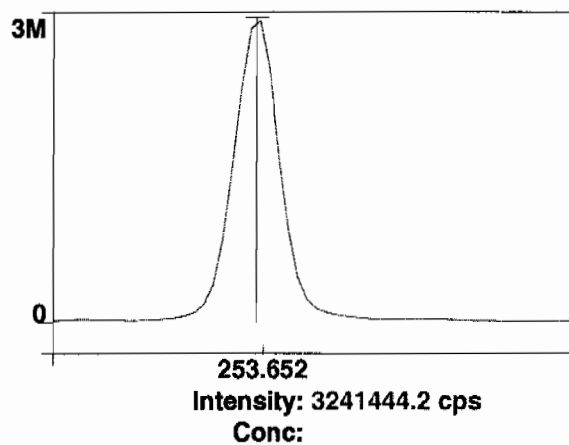
# Raw Data

Method: Hg\_ReAlign  
Result: 022410

Sample ID: Hg\_ReAlign

Hg 253.652

Rep: 1



1

=====  
Analysis Begun

Start Time: 2/16/2010 11:46:01

Plasma On Time: 2/15/2010 05:50:42

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\021610.sif

Batch ID:

Results Data Set: 021610

Results Library: C:\pe\Optima3\Results\Results.mdb  
=====

## Method Loaded

Method Name: General Eng.2AX

Method Last Saved: 2/16/2010 09:05:05

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: 2/16/2010 11:46:03

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

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Replicate Data: S0

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Analysis Time
1	Sc Radial	4341.7	4341.7	0.000 %	11:47:55
1	Y RADIAL	4471.4	4471.4	0.000 %	11:47:55
1	Al 396.153Radial†	-175.8	-172.2	[0.00] ug/L	11:47:55

1	Ca 317.933Radial†	14.1	13.8	[0.00]	ug/L	11:48:15
1	Fe 238.204 Radial†	10.4	10.1	[0.00]	ug/L	11:48:15
1	K 766.490 Radial†	3248.0	3180.1	[0.00]	ug/L	11:47:55
1	Mg 279.077 IEC†	2.3	2.3	[0.00]	ug/L	11:48:15
1	Na 589.592 Radial†	227.6	222.9	[0.00]	ug/L	11:47:55
1	Sr 421.552†	86.7	84.9	[0.00]	ug/L	11:47:55
1	Sc 361.383	848751.5	848751.5	0.0000	%	11:49:12
1	Y 371.029	702201.4	702201.4	0.0000	%	11:49:12
1	Ag 328.068†	164.7	165.0	[0.00]	ug/L	11:49:12
1	As 188.979†	-27.6	-27.7	[0.00]	ug/L	11:49:32
1	B 249.677†	-476.2	-476.9	[0.00]	ug/L	11:49:32
1	Ba 233.527†	15.5	15.6	[0.00]	ug/L	11:49:32
1	Be 313.107†	-4361.6	-4368.1	[0.00]	ug/L	11:49:12
1	Cd 226.502†	-190.4	-190.6	[0.00]	ug/L	11:49:32
1	Co 228.616†	-82.2	-82.3	[0.00]	ug/L	11:49:32
1	Cr 267.716†	153.6	153.9	[0.00]	ug/L	11:49:32
1	Cu 324.752†	8084.8	8096.8	[0.00]	ug/L	11:49:12
1	Mn 257.610†	580.8	581.6	[0.00]	ug/L	11:49:32
1	Mo 202.031†	4.3	4.3	[0.00]	ug/L	11:49:32
1	Ni 231.604†	117.0	117.1	[0.00]	ug/L	11:49:32
1	P 214.914†	232.7	233.1	[0.00]	ug/L	11:49:32
1	Pb 220.353†	-75.2	-75.3	[0.00]	ug/L	11:49:32
1	S 181.975 Axial†	40.3	40.4	[0.00]	ug/L	11:49:32
1	Sb 206.836†	37.8	37.9	[0.00]	ug/L	11:49:32
1	Se 196.026†	-21.6	-21.6	[0.00]	ug/L	11:49:32
1	Si 251.611†	615.7	616.6	[0.00]	ug/L	11:49:32
1	Sn 189.927†	8.5	8.6	[0.00]	ug/L	11:49:32
1	Ti 334.940†	-1519.3	-1521.6	[0.00]	ug/L	11:49:12
1	Tl 190.801†	-32.6	-32.6	[0.00]	ug/L	11:49:32
1	U 409.014†	-3456.7	-3461.8	[0.00]	ug/L	11:49:12
1	V 292.402†	-1680.9	-1683.4	[0.00]	ug/L	11:49:12
1	Zn 213.857†	686.4	687.4	[0.00]	ug/L	11:49:32
1	SiO2†	600.5	601.4	[0.00]	ug/L	11:50:28
2	Sc Radial	4353.2	4353.2	0.000	%	11:48:21
2	Y RADIAL	4521.0	4521.0	0.000	%	11:48:21
2	Al 396.153Radial†	-171.5	-167.5	[0.00]	ug/L	11:48:21
2	Ca 317.933Radial†	22.1	21.6	[0.00]	ug/L	11:48:41
2	Fe 238.204 Radial†	11.0	10.7	[0.00]	ug/L	11:48:41
2	K 766.490 Radial†	3106.4	3033.4	[0.00]	ug/L	11:48:21
2	Mg 279.077 IEC†	2.0	1.9	[0.00]	ug/L	11:48:41
2	Na 589.592 Radial†	203.0	198.2	[0.00]	ug/L	11:48:21
2	Sr 421.552†	95.1	92.9	[0.00]	ug/L	11:48:21
2	Sc 361.383	851402.3	851402.3	0.0000	%	11:49:38
2	Y 371.029	703154.2	703154.2	0.0000	%	11:49:38
2	Ag 328.068†	216.7	216.3	[0.00]	ug/L	11:49:38
2	As 188.979†	-27.2	-27.1	[0.00]	ug/L	11:49:58
2	B 249.677†	-471.0	-470.2	[0.00]	ug/L	11:49:58
2	Ba 233.527†	17.0	17.0	[0.00]	ug/L	11:49:58
2	Be 313.107†	-4386.4	-4379.3	[0.00]	ug/L	11:49:38
2	Cd 226.502†	-197.4	-197.1	[0.00]	ug/L	11:49:58
2	Co 228.616†	-80.6	-80.5	[0.00]	ug/L	11:49:58
2	Cr 267.716†	148.4	148.2	[0.00]	ug/L	11:49:58
2	Cu 324.752†	8157.3	8143.9	[0.00]	ug/L	11:49:38
2	Mn 257.610†	571.2	570.3	[0.00]	ug/L	11:49:58
2	Mo 202.031†	12.0	12.0	[0.00]	ug/L	11:49:58
2	Ni 231.604†	118.8	118.6	[0.00]	ug/L	11:49:58
2	P 214.914†	248.5	248.1	[0.00]	ug/L	11:49:58
2	Pb 220.353†	-71.0	-70.9	[0.00]	ug/L	11:49:58
2	S 181.975 Axial†	38.5	38.4	[0.00]	ug/L	11:49:58
2	Sb 206.836†	44.0	43.9	[0.00]	ug/L	11:49:58
2	Se 196.026†	-27.3	-27.3	[0.00]	ug/L	11:49:58
2	Si 251.611†	610.7	609.7	[0.00]	ug/L	11:49:58
2	Sn 189.927†	9.0	9.0	[0.00]	ug/L	11:49:58
2	Ti 334.940†	-1445.2	-1442.8	[0.00]	ug/L	11:49:38
2	Tl 190.801†	-38.7	-38.6	[0.00]	ug/L	11:49:58
2	U 409.014†	-3487.1	-3481.4	[0.00]	ug/L	11:49:38
2	V 292.402†	-1613.1	-1610.4	[0.00]	ug/L	11:49:38
2	Zn 213.857†	685.3	684.2	[0.00]	ug/L	11:49:58
2	SiO2†	596.6	595.6	[0.00]	ug/L	11:50:33
3	Sc Radial	4057.8	4057.8	0.000	%	11:48:46
3	Y RADIAL	4214.3	4214.3	0.000	%	11:48:46



3	Al 396.153Radial†	-131.2	-137.4	[0.00]	ug/L	11:48:46
3	Ca 317.933Radial†	18.7	19.6	[0.00]	ug/L	11:49:06
3	Fe 238.204 Radial†	8.9	9.3	[0.00]	ug/L	11:49:06
3	K 766.490 Radial†	3151.4	3301.3	[0.00]	ug/L	11:48:46
3	Mg 279.077 IEC†	3.7	3.9	[0.00]	ug/L	11:49:06
3	Na 589.592 Radial†	191.0	200.1	[0.00]	ug/L	11:48:46
3	Sr 421.552†	87.5	91.6	[0.00]	ug/L	11:48:46
3	Sc 361.383	849872.6	849872.6	0.0000	%	11:50:03
3	Y 371.029	702829.5	702829.5	0.0000	%	11:50:03
3	Ag 328.068†	301.7	301.8	[0.00]	ug/L	11:50:03
3	As 188.979†	-30.1	-30.1	[0.00]	ug/L	11:50:23
3	B 249.677†	-498.5	-498.6	[0.00]	ug/L	11:50:23
3	Ba 233.527†	24.0	24.0	[0.00]	ug/L	11:50:23
3	Be 313.107†	-4269.3	-4270.0	[0.00]	ug/L	11:50:03
3	Cd 226.502†	-198.7	-198.7	[0.00]	ug/L	11:50:23
3	Co 228.616†	-73.8	-73.8	[0.00]	ug/L	11:50:23
3	Cr 267.716†	147.0	147.0	[0.00]	ug/L	11:50:23
3	Cu 324.752†	8040.3	8041.6	[0.00]	ug/L	11:50:03
3	Mn 257.610†	557.3	557.4	[0.00]	ug/L	11:50:23
3	Mo 202.031†	15.0	15.0	[0.00]	ug/L	11:50:23
3	Ni 231.604†	104.8	104.8	[0.00]	ug/L	11:50:23
3	P 214.914†	244.7	244.8	[0.00]	ug/L	11:50:23
3	Pb 220.353†	-74.4	-74.5	[0.00]	ug/L	11:50:23
3	S 181.975 Axial†	49.9	49.9	[0.00]	ug/L	11:50:23
3	Sb 206.836†	25.2	25.2	[0.00]	ug/L	11:50:23
3	Se 196.026†	-21.1	-21.1	[0.00]	ug/L	11:50:23
3	Si 251.611†	610.6	610.7	[0.00]	ug/L	11:50:23
3	Sn 189.927†	20.3	20.3	[0.00]	ug/L	11:50:23
3	Ti 334.940†	-1514.1	-1514.3	[0.00]	ug/L	11:50:03
3	Tl 190.801†	-46.1	-46.1	[0.00]	ug/L	11:50:23
3	U 409.014†	-3601.8	-3602.3	[0.00]	ug/L	11:50:03
3	V 292.402†	-1737.8	-1738.1	[0.00]	ug/L	11:50:03
3	Zn 213.857†	691.5	691.7	[0.00]	ug/L	11:50:23
3	SiO2†	661.5	661.6	[0.00]	ug/L	11:50:38

## Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	850008.8	1330.66	0.16%	0.0000	%
Sc Radial	4250.9	167.29	3.94%	0.0000	%
Y 371.029	702728.4	484.42	0.07%	0.0000	%
Y RADIAL	4402.2	164.65	3.74%	0.0000	%
Ag 328.068†	227.7	69.10	30.35%	[0.00]	ug/L
Al 396.153Radial†	-159.0	18.85	11.85%	[0.00]	ug/L
As 188.979†	-28.3	1.59	5.63%	[0.00]	ug/L
B 249.677†	-481.9	14.85	3.08%	[0.00]	ug/L
Ba 233.527†	18.8	4.53	24.06%	[0.00]	ug/L
Be 313.107†	-4339.1	60.13	1.39%	[0.00]	ug/L
Ca 317.933Radial†	18.3	4.03	22.00%	[0.00]	ug/L
Cd 226.502†	-195.5	4.27	2.19%	[0.00]	ug/L
Co 228.616†	-78.9	4.49	5.70%	[0.00]	ug/L
Cr 267.716†	149.7	3.66	2.45%	[0.00]	ug/L
Cu 324.752†	8094.1	51.19	0.63%	[0.00]	ug/L
Fe 238.204 Radial†	10.1	0.70	7.00%	[0.00]	ug/L
K 766.490 Radial†	3171.6	134.15	4.23%	[0.00]	ug/L
Mg 279.077 IEC†	2.7	1.06	38.89%	[0.00]	ug/L
Mn 257.610†	569.7	12.13	2.13%	[0.00]	ug/L
Mo 202.031†	10.5	5.52	52.76%	[0.00]	ug/L
Na 589.592 Radial†	207.1	13.71	6.62%	[0.00]	ug/L
Ni 231.604†	113.5	7.61	6.71%	[0.00]	ug/L
P 214.914†	242.0	7.90	3.27%	[0.00]	ug/L
Pb 220.353†	-73.6	2.33	3.17%	[0.00]	ug/L
S 181.975 Axial†	42.9	6.12	14.26%	[0.00]	ug/L
Sb 206.836†	35.7	9.55	26.76%	[0.00]	ug/L
Se 196.026†	-23.3	3.45	14.79%	[0.00]	ug/L
Si 251.611†	612.3	3.77	0.62%	[0.00]	ug/L
Sn 189.927†	12.6	6.63	52.56%	[0.00]	ug/L
Sr 421.552†	89.8	4.28	4.76%	[0.00]	ug/L
Ti 334.940†	-1492.9	43.54	2.92%	[0.00]	ug/L
Tl 190.801†	-39.1	6.75	17.25%	[0.00]	ug/L

U 409.014†	-3515.2	76.12	2.17%	[0.00]	ug/L
V 292.402†	-1677.3	64.04	3.82%	[0.00]	ug/L
Zn 213.857†	687.8	3.75	0.54%	[0.00]	ug/L
SiO2†	619.5	36.53	5.90%	[0.00]	ug/L

Sequence No.: 2  
 Sample ID: S0.1  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 2  
 Date Collected: 2/16/2010 11:52:49  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

## Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Analysis Time
1	Sc Radial	4326.7	4326.7	102 %	11:54:47
1	Y RADIAL	4475.5	4475.5	101.7 %	11:54:47
1	K 766.490 Radial†	8282.3	4965.6	[1000] ug/L	11:54:42
1	Sr 421.552†	13230.3	12908.7	[100] ug/L	11:54:47
1	Sc 361.383	857644.3	857644.3	100.90 %	11:55:14
1	Y 371.029	706605.2	706605.2	100.55 %	11:55:14
1	Ag 328.068†	21213.1	20796.6	[100] ug/L	11:55:14
1	As 188.979†	204.3	230.8	[100] ug/L	11:55:34
1	B 249.677†	3602.8	4052.6	[100] ug/L	11:55:14
1	Ba 233.527†	12531.5	12401.1	[100] ug/L	11:55:14
1	Be 313.107†	269412.1	271352.7	[100] ug/L	11:55:14
1	Cd 226.502†	8455.7	8575.9	[100] ug/L	11:55:14
1	Co 228.616†	4621.3	4659.0	[100] ug/L	11:55:34
1	Cr 267.716†	8768.1	8540.4	[100] ug/L	11:55:14
1	Cu 324.752†	40432.8	31978.7	[100] ug/L	11:55:14
1	Mn 257.610†	89563.0	88195.9	[100] ug/L	11:55:14
1	Mo 202.031†	1344.8	1322.4	[100] ug/L	11:55:34
1	Ni 231.604†	4108.5	3958.4	[100] ug/L	11:55:14
1	P 214.914†	1121.5	869.6	[500] ug/L	11:55:34
1	Pb 220.353†	730.7	797.8	[100] ug/L	11:55:34
1	S 181.975 Axial†	200.6	155.9	[200] ug/L	11:55:34
1	Sb 206.836†	322.2	283.6	[100] ug/L	11:55:34
1	Se 196.026†	145.8	167.9	[100] ug/L	11:55:34
1	Si 251.611†	16657.9	15897.3	[500] ug/L	11:55:14
1	Sn 189.927†	556.8	539.2	[100] ug/L	11:55:34
1	Ti 334.940†	61039.2	61988.6	[100] ug/L	11:55:14
1	Tl 190.801†	283.9	320.5	[100] ug/L	11:55:34
1	U 409.014†	229.5	3742.7	[100] ug/L	11:55:14
1	V 292.402†	12039.9	13610.0	[100] ug/L	11:55:14
1	Zn 213.857†	11119.5	10332.7	[100] ug/L	11:55:14
1	SiO2†	16613.6	15846.2	[1069.5] ug/L	11:56:30
2	Sc Radial	4389.6	4389.6	103 %	11:54:57
2	Y RADIAL	4530.3	4530.3	102.9 %	11:54:57
2	K 766.490 Radial†	8310.2	4876.1	[1000] ug/L	11:54:52
2	Sr 421.552†	13344.8	12833.4	[100] ug/L	11:54:57
2	Sc 361.383	851136.1	851136.1	100.13 %	11:55:39
2	Y 371.029	701838.8	701838.8	99.873 %	11:55:39
2	Ag 328.068†	20948.1	20692.7	[100] ug/L	11:55:39
2	As 188.979†	200.6	228.6	[100] ug/L	11:55:59
2	B 249.677†	3537.7	4014.9	[100] ug/L	11:55:39
2	Ba 233.527†	12459.9	12424.5	[100] ug/L	11:55:39
2	Be 313.107†	267429.2	271414.1	[100] ug/L	11:55:39
2	Cd 226.502†	8399.7	8584.0	[100] ug/L	11:55:39
2	Co 228.616†	4630.3	4703.0	[100] ug/L	11:55:59
2	Cr 267.716†	8692.9	8531.7	[100] ug/L	11:55:39
2	Cu 324.752†	40067.1	31919.9	[100] ug/L	11:55:39
2	Mn 257.610†	88973.7	88286.1	[100] ug/L	11:55:39
2	Mo 202.031†	1353.9	1341.7	[100] ug/L	11:55:59
2	Ni 231.604†	4090.4	3971.5	[100] ug/L	11:55:39
2	P 214.914†	1132.4	888.9	[500] ug/L	11:55:59
2	Pb 220.353†	735.4	808.0	[100] ug/L	11:55:59
2	S 181.975 Axial†	202.9	159.7	[200] ug/L	11:55:59
2	Sb 206.836†	330.1	294.0	[100] ug/L	11:55:59
2	Se 196.026†	149.0	172.1	[100] ug/L	11:55:59
2	Si 251.611†	16475.5	15841.3	[500] ug/L	11:55:39
2	Sn 189.927†	561.8	548.4	[100] ug/L	11:55:59
2	Ti 334.940†	60616.0	62028.6	[100] ug/L	11:55:39
2	Tl 190.801†	282.6	321.3	[100] ug/L	11:55:59
2	U 409.014†	-139.6	3375.8	[100] ug/L	11:55:39

2	V 292.402†	11905.3	13566.9	[100]	ug/L	11:55:39
2	Zn 213.857†	10978.5	10276.2	[100]	ug/L	11:55:39
2	SiO2†	16528.8	15887.4	[1069.5]	ug/L	11:56:35
3	Sc Radial	4340.9	4340.9	102	%	11:55:07
3	Y RADIAL	4482.8	4482.8	101.8	%	11:55:07
3	K 766.490 Radial†	8248.8	4906.1	[1000]	ug/L	11:55:02
3	Sr 421.552†	13137.1	12774.7	[100]	ug/L	11:55:07
3	Sc 361.383	857800.6	857800.6	100.92	%	11:56:05
3	Y 371.029	706558.2	706558.2	100.54	%	11:56:05
3	Ag 328.068†	21197.6	20777.4	[100]	ug/L	11:56:05
3	As 188.979†	215.2	241.5	[100]	ug/L	11:56:25
3	B 249.677†	3596.7	4045.9	[100]	ug/L	11:56:05
3	Ba 233.527†	12531.9	12399.2	[100]	ug/L	11:56:05
3	Be 313.107†	269021.5	270917.0	[100]	ug/L	11:56:05
3	Cd 226.502†	8433.2	8552.1	[100]	ug/L	11:56:05
3	Co 228.616†	4661.4	4697.9	[100]	ug/L	11:56:25
3	Cr 267.716†	8712.0	8483.2	[100]	ug/L	11:56:05
3	Cu 324.752†	40490.2	32028.3	[100]	ug/L	11:56:05
3	Mn 257.610†	89778.5	88393.3	[100]	ug/L	11:56:05
3	Mo 202.031†	1371.9	1349.0	[100]	ug/L	11:56:25
3	Ni 231.604†	4020.2	3870.2	[100]	ug/L	11:56:05
3	P 214.914†	1102.9	850.9	[500]	ug/L	11:56:25
3	Pb 220.353†	739.7	806.5	[100]	ug/L	11:56:25
3	S 181.975 Axial†	197.0	152.3	[200]	ug/L	11:56:25
3	Sb 206.836†	334.0	295.3	[100]	ug/L	11:56:25
3	Se 196.026†	143.8	165.8	[100]	ug/L	11:56:25
3	Si 251.611†	16592.5	15829.4	[500]	ug/L	11:56:05
3	Sn 189.927†	573.4	555.6	[100]	ug/L	11:56:25
3	Ti 334.940†	61178.7	62115.9	[100]	ug/L	11:56:05
3	Tl 190.801†	275.5	312.1	[100]	ug/L	11:56:25
3	U 409.014†	-76.2	3439.6	[100]	ug/L	11:56:05
3	V 292.402†	11980.2	13548.7	[100]	ug/L	11:56:05
3	Zn 213.857†	11104.4	10315.8	[100]	ug/L	11:56:05
3	SiO2†	16392.7	15624.3	[1069.5]	ug/L	11:56:40

## Mean Data: S0.1

Analyte	Mean Corrected				Calib
	Intensity	Std.Dev.	RSD	Conc.	Units
Sc 361.383	855527.0	3803.40	0.44%	100.65	%
Sc Radial	4352.4	32.96	0.76%	102	%
Y 371.029	705000.7	2738.39	0.39%	100.32	%
Y RADIAL	4496.2	29.77	0.66%	102.1	%
Ag 328.068†	20755.6	55.29	0.27%	[100]	ug/L
As 188.979†	233.6	6.92	2.96%	[100]	ug/L
B 249.677†	4037.8	20.12	0.50%	[100]	ug/L
Ba 233.527†	12408.3	14.12	0.11%	[100]	ug/L
Be 313.107†	271227.9	271.05	0.10%	[100]	ug/L
Cd 226.502†	8570.7	16.60	0.19%	[100]	ug/L
Co 228.616†	4686.6	24.06	0.51%	[100]	ug/L
Cr 267.716†	8518.4	30.80	0.36%	[100]	ug/L
Cu 324.752†	31975.6	54.25	0.17%	[100]	ug/L
K 766.490 Radial†	4915.9	45.56	0.93%	[1000]	ug/L
Mn 257.610†	88291.7	98.84	0.11%	[100]	ug/L
Mo 202.031†	1337.7	13.74	1.03%	[100]	ug/L
Ni 231.604†	3933.3	55.08	1.40%	[100]	ug/L
P 214.914†	869.8	19.02	2.19%	[500]	ug/L
Pb 220.353†	804.1	5.53	0.69%	[100]	ug/L
S 181.975 Axial†	156.0	3.73	2.39%	[200]	ug/L
Sb 206.836†	291.0	6.37	2.19%	[100]	ug/L
Se 196.026†	168.6	3.20	1.90%	[100]	ug/L
Si 251.611†	15856.0	36.24	0.23%	[500]	ug/L
Sn 189.927†	547.7	8.19	1.50%	[100]	ug/L
Sr 421.552†	12838.9	67.16	0.52%	[100]	ug/L
Ti 334.940†	62044.4	65.06	0.10%	[100]	ug/L
Tl 190.801†	317.9	5.10	1.60%	[100]	ug/L
U 409.014†	3519.4	196.00	5.57%	[100]	ug/L
V 292.402†	13575.2	31.49	0.23%	[100]	ug/L
Zn 213.857†	10308.3	29.01	0.28%	[100]	ug/L
SiO2†	15786.0	141.51	0.90%	[1069.5]	ug/L

Sequence No.: 3  
 Sample ID: S0.5  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 3  
 Date Collected: 2/16/2010 11:58:51  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

## Replicate Data: S0.5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc Radial	4330.2	4330.2	102	%	12:00:44
1	Y RADIAL	4422.8	4422.8	100.5	%	12:00:44
1	Al 396.153Radial†	4894.9	4964.3	[5000]	ug/L	12:00:44
1	Ca 317.933Radial†	2794.1	2724.6	[5000]	ug/L	12:01:04
1	K 766.490 Radial†	28169.5	24482.0	[5000]	ug/L	12:00:44
1	Mg 279.077 IEC†	139.1	133.9	[5000]	ug/L	12:01:04
1	Sr 421.552†	66095.4	64795.1	[500]	ug/L	12:00:44
1	Sc 361.383	866347.8	866347.8	101.92	%	12:02:01
1	Y 371.029	705393.8	705393.8	100.38	%	12:02:01
1	Ag 328.068†	102655.0	100491.3	[500]	ug/L	12:02:06
1	As 188.979†	1145.3	1152.0	[500]	ug/L	12:02:26
1	B 249.677†	20124.2	20226.6	[500]	ug/L	12:02:06
1	Ba 233.527†	60693.3	59529.8	[500]	ug/L	12:02:06
1	Be 313.107†	1364703.3	1343304.7	[500]	ug/L	12:02:01
1	Cd 226.502†	41966.3	41370.3	[500]	ug/L	12:02:06
1	Co 228.616†	23476.8	23112.9	[500]	ug/L	12:02:06
1	Cr 267.716†	42389.5	41440.4	[500]	ug/L	12:02:06
1	Cu 324.752†	167280.7	156031.8	[500]	ug/L	12:02:06
1	Mn 257.610†	437426.4	428607.0	[500]	ug/L	12:02:01
1	Mo 202.031†	6700.2	6563.4	[500]	ug/L	12:02:26
1	Ni 231.604†	19416.7	18937.0	[500]	ug/L	12:02:06
1	P 214.914†	4699.9	4369.3	[2500]	ug/L	12:02:26
1	Pb 220.353†	3937.6	3936.9	[500]	ug/L	12:02:26
1	S 181.975 Axial†	799.5	741.5	[1000]	ug/L	12:02:26
1	Sb 206.836†	1500.5	1436.5	[500]	ug/L	12:02:26
1	Se 196.026†	836.3	843.8	[500]	ug/L	12:02:26
1	Si 251.611†	79738.1	77621.9	[2500]	ug/L	12:02:06
1	Sn 189.927†	2773.0	2708.1	[500]	ug/L	12:02:26
1	Ti 334.940†	300130.6	295963.2	[500]	ug/L	12:02:06
1	Tl 190.801†	1537.1	1547.3	[500]	ug/L	12:02:26
1	U 409.014†	13780.7	17036.0	[500]	ug/L	12:02:06
1	V 292.402†	66067.1	66498.4	[500]	ug/L	12:02:06
1	Zn 213.857†	51280.8	49625.9	[500]	ug/L	12:02:06
1	SiO2†	80660.6	78519.8	[5347.5]	ug/L	12:03:34
2	Sc Radial	4344.3	4344.3	102	%	12:01:09
2	Y RADIAL	4468.3	4468.3	101.5	%	12:01:09
2	Al 396.153Radial†	4910.7	4964.2	[5000]	ug/L	12:01:09
2	Ca 317.933Radial†	2793.7	2715.3	[5000]	ug/L	12:01:29
2	K 766.490 Radial†	28558.1	24772.5	[5000]	ug/L	12:01:09
2	Mg 279.077 IEC†	138.7	133.0	[5000]	ug/L	12:01:29
2	Sr 421.552†	66419.5	64901.7	[500]	ug/L	12:01:09
2	Sc 361.383	858388.4	858388.4	100.99	%	12:02:32
2	Y 371.029	699297.9	699297.9	99.512	%	12:02:32
2	Ag 328.068†	103582.4	102343.6	[500]	ug/L	12:02:37
2	As 188.979†	1144.2	1161.4	[500]	ug/L	12:02:57
2	B 249.677†	20485.5	20767.5	[500]	ug/L	12:02:37
2	Ba 233.527†	61659.8	61039.1	[500]	ug/L	12:02:37
2	Be 313.107†	1354883.7	1345996.4	[500]	ug/L	12:02:32
2	Cd 226.502†	42779.6	42557.5	[500]	ug/L	12:02:37
2	Co 228.616†	24005.1	23849.7	[500]	ug/L	12:02:37
2	Cr 267.716†	43144.2	42573.3	[500]	ug/L	12:02:37
2	Cu 324.752†	169031.7	159287.5	[500]	ug/L	12:02:37
2	Mn 257.610†	434446.7	429635.9	[500]	ug/L	12:02:32
2	Mo 202.031†	6686.9	6611.2	[500]	ug/L	12:02:57
2	Ni 231.604†	19622.6	19317.5	[500]	ug/L	12:02:37
2	P 214.914†	4705.0	4417.1	[2500]	ug/L	12:02:57
2	Pb 220.353†	3930.3	3965.5	[500]	ug/L	12:02:57
2	S 181.975 Axial†	798.8	748.1	[1000]	ug/L	12:02:57
2	Sb 206.836†	1490.1	1439.8	[500]	ug/L	12:02:57

2	Se 196.026†	835.2	850.4	[500]	ug/L	12:02:57
2	Si 251.611†	81067.4	79663.7	[2500]	ug/L	12:02:37
2	Sn 189.927†	2767.9	2728.3	[500]	ug/L	12:02:57
2	Ti 334.940†	303839.8	302366.6	[500]	ug/L	12:02:37
2	Tl 190.801†	1544.0	1568.0	[500]	ug/L	12:02:57
2	U 409.014†	13909.5	17288.9	[500]	ug/L	12:02:37
2	V 292.402†	66999.8	68023.0	[500]	ug/L	12:02:37
2	Zn 213.857†	52116.7	50920.2	[500]	ug/L	12:02:37
2	SiO2†	80314.9	78911.4	[5347.5]	ug/L	12:03:39
3	Sc Radial	4290.2	4290.2	101	%	12:01:34
3	Y RADIAL	4406.0	4406.0	100.1	%	12:01:34
3	Al 396.153Radial†	4861.9	4976.3	[5000]	ug/L	12:01:34
3	Ca 317.933Radial†	2745.8	2702.3	[5000]	ug/L	12:01:54
3	K 766.490 Radial†	28237.6	24807.1	[5000]	ug/L	12:01:34
3	Mg 279.077 IEC†	138.6	134.6	[5000]	ug/L	12:01:54
3	Sr 421.552†	65739.5	65046.9	[500]	ug/L	12:01:34
3	Sc 361.383	855708.1	855708.1	100.67	%	12:03:03
3	Y 371.029	697085.1	697085.1	99.197	%	12:03:03
3	Ag 328.068†	104159.6	103238.2	[500]	ug/L	12:03:08
3	As 188.979†	1163.1	1183.7	[500]	ug/L	12:03:28
3	B 249.677†	20548.9	20894.0	[500]	ug/L	12:03:08
3	Ba 233.527†	61705.2	61275.4	[500]	ug/L	12:03:08
3	Be 313.107†	1348590.3	1343947.4	[500]	ug/L	12:03:03
3	Cd 226.502†	42791.4	42701.9	[500]	ug/L	12:03:08
3	Co 228.616†	23992.5	23911.6	[500]	ug/L	12:03:08
3	Cr 267.716†	43136.0	42699.0	[500]	ug/L	12:03:08
3	Cu 324.752†	169705.8	160481.4	[500]	ug/L	12:03:08
3	Mn 257.610†	433059.5	429605.4	[500]	ug/L	12:03:03
3	Mo 202.031†	6673.9	6619.0	[500]	ug/L	12:03:28
3	Ni 231.604†	19755.0	19509.9	[500]	ug/L	12:03:08
3	P 214.914†	4719.4	4446.0	[2500]	ug/L	12:03:28
3	Pb 220.353†	3931.2	3978.6	[500]	ug/L	12:03:28
3	S 181.975 Axial†	808.5	760.2	[1000]	ug/L	12:03:28
3	Sb 206.836†	1510.6	1464.9	[500]	ug/L	12:03:28
3	Se 196.026†	838.7	856.4	[500]	ug/L	12:03:28
3	Si 251.611†	81093.2	79940.8	[2500]	ug/L	12:03:08
3	Sn 189.927†	2771.3	2740.2	[500]	ug/L	12:03:28
3	Ti 334.940†	304686.3	304149.8	[500]	ug/L	12:03:08
3	Tl 190.801†	1531.8	1560.7	[500]	ug/L	12:03:28
3	U 409.014†	13900.4	17323.0	[500]	ug/L	12:03:08
3	V 292.402†	67043.2	68274.0	[500]	ug/L	12:03:08
3	Zn 213.857†	52192.8	51157.4	[500]	ug/L	12:03:08
3	SiO2†	80944.3	79785.6	[5347.5]	ug/L	12:03:44

## Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	860148.1	5533.81	0.64%	101.19 %
Sc Radial	4321.6	28.05	0.65%	102 %
Y 371.029	700592.3	4302.94	0.61%	99.696 %
Y RADIAL	4432.4	32.23	0.73%	100.7 %
Ag 328.068†	102024.3	1400.99	1.37%	[500] ug/L
Al 396.153Radial†	4968.3	6.98	0.14%	[5000] ug/L
As 188.979†	1165.7	16.29	1.40%	[500] ug/L
B 249.677†	20629.3	354.49	1.72%	[500] ug/L
Ba 233.527†	60614.8	946.98	1.56%	[500] ug/L
Be 313.107†	1344416.1	1405.75	0.10%	[500] ug/L
Ca 317.933Radial†	2714.1	11.23	0.41%	[5000] ug/L
Cd 226.502†	42209.9	730.66	1.73%	[500] ug/L
Co 228.616†	23624.7	444.32	1.88%	[500] ug/L
Cr 267.716†	42237.6	693.23	1.64%	[500] ug/L
Cu 324.752†	158600.2	2303.05	1.45%	[500] ug/L
K 766.490 Radial†	24687.2	178.57	0.72%	[5000] ug/L
Mg 279.077 IEC†	133.8	0.80	0.60%	[5000] ug/L
Mn 257.610†	429282.8	585.44	0.14%	[500] ug/L
Mo 202.031†	6597.9	30.09	0.46%	[500] ug/L
Ni 231.604†	19254.8	291.54	1.51%	[500] ug/L
P 214.914†	4410.8	38.72	0.88%	[2500] ug/L
Pb 220.353†	3960.3	21.32	0.54%	[500] ug/L
S 181.975 Axial†	749.9	9.47	1.26%	[1000] ug/L

Sb 206.836†	1447.1	15.51	1.07%	[500]	ug/L
Se 196.026†	850.2	6.30	0.74%	[500]	ug/L
Si 251.611†	79075.5	1266.40	1.60%	[2500]	ug/L
Sn 189.927†	2725.5	16.25	0.60%	[500]	ug/L
Sr 421.552†	64914.6	126.38	0.19%	[500]	ug/L
Ti 334.940†	300826.5	4305.14	1.43%	[500]	ug/L
Tl 190.801†	1558.7	10.53	0.68%	[500]	ug/L
U 409.014†	17216.0	156.79	0.91%	[500]	ug/L
V 292.402†	67598.5	960.94	1.42%	[500]	ug/L
Zn 213.857†	50567.8	824.29	1.63%	[500]	ug/L
SiO2†	79072.3	648.05	0.82%	[5347.5]	ug/L

Sequence No.: 4

Sample ID: SCAL

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 4

Date Collected: 2/16/2010 12:05:55

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: SCAL

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Analysis Time
1	Sc Radial	4297.1	4297.1	101 %	12:07:48
1	Y RADIAL	4399.9	4399.9	99.95 %	12:07:48
1	Al 396.153Radial†	9882.9	9935.6	[10000] ug/L	12:07:48
1	Ca 317.933Radial†	5548.8	5470.8	[10000] ug/L	12:07:48
1	Fe 238.204 Radial†	998.4	977.6	[10000] ug/L	12:08:08
1	K 766.490 Radial†	53335.7	49590.4	[10000] ug/L	12:07:48
1	Mg 279.077 IEC†	272.0	266.4	[10000] ug/L	12:08:08
1	Na 589.592 Radial†	30738.5	30200.8	[10000] ug/L	12:07:48
1	Sr 421.552†	130742.1	129245.9	[1000] ug/L	12:07:48
1	Sc 361.383	850290.2	850290.2	100.03 %	12:09:11
1	Y 371.029	694357.4	694357.4	98.809 %	12:09:11
1	Ag 328.068†	209475.7	209178.7	[1000] ug/L	12:09:11
1	As 188.979†	2351.5	2379.0	[1000] ug/L	12:09:32
1	B 249.677†	42443.4	42911.3	[1000] ug/L	12:09:11
1	Ba 233.527†	123558.0	123498.3	[1000] ug/L	12:09:11
1	Be 313.107†	2720911.6	2724350.2	[1000] ug/L	12:09:06
1	Cd 226.502†	85522.6	85689.8	[1000] ug/L	12:09:11
1	Co 228.616†	47983.7	48046.7	[1000] ug/L	12:09:11
1	Cr 267.716†	86528.8	86350.5	[1000] ug/L	12:09:11
1	Cu 324.752†	337449.3	329243.5	[1000] ug/L	12:09:11
1	Mn 257.610†	866578.5	865721.9	[1000] ug/L	12:09:06
1	Mo 202.031†	13503.7	13488.7	[1000] ug/L	12:09:32
1	Ni 231.604†	39239.7	39113.2	[1000] ug/L	12:09:11
1	P 214.914†	9281.6	9036.6	[5000] ug/L	12:09:32
1	Pb 220.353†	8008.1	8079.0	[1000] ug/L	12:09:32
1	S 181.975 Axial†	1577.2	1533.8	[2000] ug/L	12:09:32
1	Sb 206.836†	2990.0	2953.4	[1000] ug/L	12:09:32
1	Se 196.026†	1692.7	1715.5	[1000] ug/L	12:09:32
1	Si 251.611†	161659.4	160993.6	[5000] ug/L	12:09:11
1	Sn 189.927†	5589.4	5575.0	[1000] ug/L	12:09:32
1	Ti 334.940†	617562.9	618851.4	[1000] ug/L	12:09:11
1	Tl 190.801†	3133.4	3171.5	[1000] ug/L	12:09:32
1	U 409.014†	31887.1	35391.7	[1000] ug/L	12:09:11
1	V 292.402†	137158.2	138790.1	[1000] ug/L	12:09:11
1	Zn 213.857†	103334.0	102612.0	[1000] ug/L	12:09:11
1	SiO2†	160870.9	160198.1	[10695] ug/L	12:10:40
2	Sc Radial	4352.3	4352.3	102 %	12:08:13
2	Y RADIAL	4460.9	4460.9	101.3 %	12:08:13
2	Al 396.153Radial†	10007.9	9933.7	[10000] ug/L	12:08:13
2	Ca 317.933Radial†	5646.2	5496.2	[10000] ug/L	12:08:13
2	Fe 238.204 Radial†	989.5	956.4	[10000] ug/L	12:08:33
2	K 766.490 Radial†	54007.2	49576.7	[10000] ug/L	12:08:13
2	Mg 279.077 IEC†	277.2	268.0	[10000] ug/L	12:08:33
2	Na 589.592 Radial†	31324.9	30387.7	[10000] ug/L	12:08:13
2	Sr 421.552†	132904.2	129716.6	[1000] ug/L	12:08:13
2	Sc 361.383	839445.4	839445.4	98.757 %	12:09:43
2	Y 371.029	685183.9	685183.9	97.503 %	12:09:43
2	Ag 328.068†	206897.9	209273.8	[1000] ug/L	12:09:43
2	As 188.979†	2347.8	2405.7	[1000] ug/L	12:10:03
2	B 249.677†	41812.0	42820.1	[1000] ug/L	12:09:43
2	Ba 233.527†	122310.8	123831.1	[1000] ug/L	12:09:43
2	Be 313.107†	2711028.7	2749482.7	[1000] ug/L	12:09:38
2	Cd 226.502†	84641.7	85902.3	[1000] ug/L	12:09:43
2	Co 228.616†	47590.9	48268.7	[1000] ug/L	12:09:43
2	Cr 267.716†	85401.1	86326.0	[1000] ug/L	12:09:43
2	Cu 324.752†	332443.3	328532.5	[1000] ug/L	12:09:43
2	Mn 257.610†	864434.1	874742.2	[1000] ug/L	12:09:38
2	Mo 202.031†	13411.3	13569.6	[1000] ug/L	12:10:03
2	Ni 231.604†	38969.4	39285.5	[1000] ug/L	12:09:43



2	P 214.914†	9237.6	9111.9	[5000]	ug/L	12:10:03
2	Pb 220.353†	7982.7	8156.7	[1000]	ug/L	12:10:03
2	S 181.975 Axial†	1563.7	1540.4	[2000]	ug/L	12:10:03
2	Sb 206.836†	2972.1	2973.8	[1000]	ug/L	12:10:03
2	Se 196.026†	1673.5	1717.9	[1000]	ug/L	12:10:03
2	Si 251.611†	159696.8	161094.1	[5000]	ug/L	12:09:43
2	Sn 189.927†	5579.8	5637.4	[1000]	ug/L	12:10:03
2	Ti 334.940†	608943.4	618099.1	[1000]	ug/L	12:09:43
2	Tl 190.801†	3119.6	3198.0	[1000]	ug/L	12:10:03
2	U 409.014†	31366.4	35276.3	[1000]	ug/L	12:09:43
2	V 292.402†	135527.3	138910.0	[1000]	ug/L	12:09:43
2	Zn 213.857†	102342.1	102942.2	[1000]	ug/L	12:09:43
2	SiO2†	160636.2	162038.1	[10695]	ug/L	12:10:45
3	Sc Radial	4297.5	4297.5	101	%	12:08:39
3	Y RADIAL	4423.8	4423.8	100.5	%	12:08:39
3	Al 396.153Radial†	9870.2	9922.2	[10000]	ug/L	12:08:39
3	Ca 317.933Radial†	5538.9	5460.5	[10000]	ug/L	12:08:39
3	Fe 238.204 Radial†	978.2	957.6	[10000]	ug/L	12:08:59
3	K 766.490 Radial†	53330.5	49580.4	[10000]	ug/L	12:08:39
3	Mg 279.077 IEC†	272.3	266.7	[10000]	ug/L	12:08:59
3	Na 589.592 Radial†	30764.4	30223.6	[10000]	ug/L	12:08:39
3	Sr 421.552†	130878.6	129369.2	[1000]	ug/L	12:08:39
3	Sc 361.383	841600.4	841600.4	99.011	%	12:10:15
3	Y 371.029	686704.9	686704.9	97.720	%	12:10:15
3	Ag 328.068†	207691.9	209539.3	[1000]	ug/L	12:10:15
3	As 188.979†	2328.7	2380.3	[1000]	ug/L	12:10:35
3	B 249.677†	41884.9	42785.3	[1000]	ug/L	12:10:15
3	Ba 233.527†	122357.9	123561.5	[1000]	ug/L	12:10:15
3	Be 313.107†	2688134.5	2719330.7	[1000]	ug/L	12:10:09
3	Cd 226.502†	84714.8	85756.7	[1000]	ug/L	12:10:15
3	Co 228.616†	47550.5	48104.5	[1000]	ug/L	12:10:15
3	Cr 267.716†	85613.9	86319.5	[1000]	ug/L	12:10:15
3	Cu 324.752†	334091.8	329335.6	[1000]	ug/L	12:10:15
3	Mn 257.610†	858428.4	866435.2	[1000]	ug/L	12:10:09
3	Mo 202.031†	13390.8	13514.2	[1000]	ug/L	12:10:35
3	Ni 231.604†	38839.2	39113.7	[1000]	ug/L	12:10:15
3	P 214.914†	9187.0	9036.8	[5000]	ug/L	12:10:35
3	Pb 220.353†	7943.8	8096.7	[1000]	ug/L	12:10:35
3	S 181.975 Axial†	1565.8	1538.6	[2000]	ug/L	12:10:35
3	Sb 206.836†	2989.0	2983.2	[1000]	ug/L	12:10:35
3	Se 196.026†	1680.3	1720.4	[1000]	ug/L	12:10:35
3	Si 251.611†	160054.4	161041.2	[5000]	ug/L	12:10:15
3	Sn 189.927†	5572.8	5615.9	[1000]	ug/L	12:10:35
3	Ti 334.940†	611283.7	618883.9	[1000]	ug/L	12:10:15
3	Tl 190.801†	3103.6	3173.7	[1000]	ug/L	12:10:35
3	U 409.014†	31685.8	35517.5	[1000]	ug/L	12:10:15
3	V 292.402†	135693.6	138726.6	[1000]	ug/L	12:10:15
3	Zn 213.857†	102467.5	102803.5	[1000]	ug/L	12:10:15
3	SiO2†	159790.3	160767.3	[10695]	ug/L	12:10:51

## Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	843778.7	5741.17	0.68%	99.267 %
Sc Radial	4315.7	31.77	0.74%	102 %
Y 371.029	688748.7	4916.41	0.71%	98.011 %
Y RADIAL	4428.2	30.70	0.69%	100.6 %
Ag 328.068†	209330.6	186.88	0.09%	[1000] ug/L
Al 396.153Radial†	9930.5	7.22	0.07%	[10000] ug/L
As 188.979†	2388.3	15.03	0.63%	[1000] ug/L
B 249.677†	42838.9	65.08	0.15%	[1000] ug/L
Ba 233.527†	123630.3	176.75	0.14%	[1000] ug/L
Be 313.107†	2731054.6	16155.39	0.59%	[1000] ug/L
Ca 317.933Radial†	5475.8	18.41	0.34%	[10000] ug/L
Cd 226.502†	85782.9	108.69	0.13%	[1000] ug/L
Co 228.616†	48139.9	115.15	0.24%	[1000] ug/L
Cr 267.716†	86332.0	16.33	0.02%	[1000] ug/L
Cu 324.752†	329037.2	439.48	0.13%	[1000] ug/L
Fe 238.204 Radial†	963.9	11.92	1.24%	[10000] ug/L
K 766.490 Radial†	49582.5	7.08	0.01%	[10000] ug/L

Mg 279.077 IEC†	267.0	0.89	0.33%	[10000]	ug/L
Mn 257.610†	868966.4	5014.62	0.58%	[1000]	ug/L
Mo 202.031†	13524.2	41.36	0.31%	[1000]	ug/L
Na 589.592 Radial†	30270.7	101.98	0.34%	[10000]	ug/L
Ni 231.604†	39170.8	99.35	0.25%	[1000]	ug/L
P 214.914†	9061.8	43.43	0.48%	[5000]	ug/L
Pb 220.353†	8110.8	40.74	0.50%	[1000]	ug/L
S 181.975 Axial†	1537.6	3.45	0.22%	[2000]	ug/L
Sb 206.836†	2970.1	15.24	0.51%	[1000]	ug/L
Se 196.026†	1717.9	2.46	0.14%	[1000]	ug/L
Si 251.611†	161043.0	50.23	0.03%	[5000]	ug/L
Sn 189.927†	5609.4	31.70	0.57%	[1000]	ug/L
Sr 421.552†	129443.9	244.03	0.19%	[1000]	ug/L
Ti 334.940†	618611.5	444.02	0.07%	[1000]	ug/L
Tl 190.801†	3181.0	14.69	0.46%	[1000]	ug/L
U 409.014†	35395.2	120.64	0.34%	[1000]	ug/L
V 292.402†	138808.9	93.16	0.07%	[1000]	ug/L
Zn 213.857†	102785.9	165.80	0.16%	[1000]	ug/L
SiO2†	161001.2	942.03	0.59%	[10695]	ug/L

Sequence No.: 5

Sample ID: S10

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 5

Date Collected: 2/16/2010 12:13:01

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	4283.2	4283.2	101 %	12:15:15
1	Y RADIAL	4369.2	4369.2	99.25 %	12:15:15
1	Al 396.153Radial†	49493.0	49278.7	[50000] ug/L	12:14:55
1	Ca 317.933Radial†	26610.3	26391.3	[50000] ug/L	12:14:55
1	Fe 238.204 Radial†	1891.8	1867.5	[20000] ug/L	12:15:15
1	Mg 279.077 IEC†	1308.9	1296.3	[50000] ug/L	12:15:15
1	Na 589.592 Radial†	59870.7	59212.1	[20000] ug/L	12:14:55
1	Sc 361.383	840869.2	840869.2	98.925 %	12:16:12
1	Y 371.029	681000.5	681000.5	96.908 %	12:16:12
2	Sc Radial	4263.4	4263.4	100 %	12:15:40
2	Y RADIAL	4348.3	4348.3	98.78 %	12:15:40
2	Al 396.153Radial†	50662.4	50672.3	[50000] ug/L	12:15:20
2	Ca 317.933Radial†	27188.2	27089.9	[50000] ug/L	12:15:20
2	Fe 238.204 Radial†	1890.5	1874.9	[20000] ug/L	12:15:40
2	Mg 279.077 IEC†	1301.2	1294.6	[50000] ug/L	12:15:40
2	Na 589.592 Radial†	61100.3	60713.4	[20000] ug/L	12:15:20
2	Sc 361.383	841226.2	841226.2	98.967 %	12:16:18
2	Y 371.029	682042.3	682042.3	97.056 %	12:16:18
3	Sc Radial	4282.5	4282.5	101 %	12:16:05
3	Y RADIAL	4375.8	4375.8	99.40 %	12:16:05
3	Al 396.153Radial†	50251.2	50038.9	[50000] ug/L	12:15:45
3	Ca 317.933Radial†	27070.7	26852.4	[50000] ug/L	12:15:45
3	Fe 238.204 Radial†	1893.0	1869.0	[20000] ug/L	12:16:05
3	Mg 279.077 IEC†	1298.9	1286.6	[50000] ug/L	12:16:05
3	Na 589.592 Radial†	60167.0	59515.4	[20000] ug/L	12:15:45
3	Sc 361.383	841005.8	841005.8	98.941 %	12:16:23
3	Y 371.029	680903.1	680903.1	96.894 %	12:16:23

## Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	841033.7	180.11	0.02%	98.944 %
Sc Radial	4276.4	11.22	0.26%	101 %
Y 371.029	681315.3	631.51	0.09%	96.953 %
Y RADIAL	4364.5	14.35	0.33%	99.14 %
Al 396.153Radial†	49996.6	697.75	1.40%	[50000] ug/L
Ca 317.933Radial†	26777.8	355.23	1.33%	[50000] ug/L
Fe 238.204 Radial†	1870.4	3.92	0.21%	[20000] ug/L
Mg 279.077 IEC†	1292.5	5.20	0.40%	[50000] ug/L
Na 589.592 Radial†	59813.6	793.85	1.33%	[20000] ug/L

## Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	208.3	0.00000	0.999949	
Al 396.153Radial	3	Lin Thru 0	0.0	0.9996	0.00000	0.999999	
As 188.979	3	Lin Thru 0	0.0	2.377	0.00000	0.999953	
B 249.677	3	Lin Thru 0	0.0	42.51	0.00000	0.999880	
Ba 233.527	3	Lin Thru 0	0.0	123.2	0.00000	0.999970	
Be 313.107	3	Lin Thru 0	0.0	2723	0.00000	0.999981	
Ca 317.933Radial	3	Lin Thru 0	0.0	0.5361	0.00000	0.999990	
Cd 226.502	3	Lin Thru 0	0.0	85.51	0.00000	0.999980	
Co 228.616	3	Lin Thru 0	0.0	47.95	0.00000	0.999971	
Cr 267.716	3	Lin Thru 0	0.0	85.95	0.00000	0.999963	
Cu 324.752	3	Lin Thru 0	0.0	326.6	0.00000	0.999894	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.0941	0.00000	0.999926	
K 766.490 Radial	3	Lin Thru 0	0.0	4.954	0.00000	0.999998	

Mg 279.077 IEC	3	Lin Thru 0	0.0	0.0259	0.00000	0.999975
Mn 257.610	3	Lin Thru 0	0.0	867.0	0.00000	0.999987
Mo 202.031	3	Lin Thru 0	0.0	13.46	0.00000	0.999953
Na 589.592 Radia	2	Lin Thru 0	0.0	2.998	0.00000	0.999988
Ni 231.604	3	Lin Thru 0	0.0	39.04	0.00000	0.999977
P 214.914	3	Lin Thru 0	0.0	1.802	0.00000	0.999939
Pb 220.353	3	Lin Thru 0	0.0	8.073	0.00000	0.999956
S 181.975 Axial	3	Lin Thru 0	0.0	0.7651	0.00000	0.999950
Sb 206.836	3	Lin Thru 0	0.0	2.955	0.00000	0.999947
Se 196.026	3	Lin Thru 0	0.0	1.714	0.00000	0.999991
Si 251.611	3	Lin Thru 0	0.0	32.09	0.00000	0.999974
Sn 189.927	3	Lin Thru 0	0.0	5.577	0.00000	0.999935
Sr 421.552	3	Lin Thru 0	0.0	129.5	0.00000	0.999999
Ti 334.940	3	Lin Thru 0	0.0	615.3	0.00000	0.999939
Tl 190.801	3	Lin Thru 0	0.0	3.168	0.00000	0.999968
U 409.014	3	Lin Thru 0	0.0	35.20	0.00000	0.999941
V 292.402	3	Lin Thru 0	0.0	138.1	0.00000	0.999945
Zn 213.857	3	Lin Thru 0	0.0	102.5	0.00000	0.999979
SiO2	3	Lin Thru 0	0.0	15.00	0.00000	0.999974

Sequence No.: 6

Sample ID: ICV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 9

Date Collected: 2/16/2010 12:18:35

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	4360.4	4360.4	103 %		12:20:27
1	Y RADIAL	4469.4	4469.4	101.5 %		12:20:27
1	Al 396.153Radial†	4929.7	4965.0	4941.6 ug/L	4941.6 ppb	12:20:27
1	Ca 317.933Radial†	2777.9	2689.8	5017.5 ug/L	5017.5 ppb	12:20:47
1	Fe 238.204 Radial†	508.3	485.4	5173.6 ug/L	5173.6 ppb	12:20:47
1	K 766.490 Radial†	15571.7	12009.2	2420.8 ug/L	2420.8 ppb	12:20:27
1	Mg 279.077 IEC†	143.2	136.9	5288.7 ug/L	5288.7 ppb	12:20:47
1	Na 589.592 Radial†	7893.9	7488.7	2497.9 ug/L	2497.9 ppb	12:20:27
1	Sr 421.552†	69074.7	67250.6	519.22 ug/L	519.22 ppb	12:20:27
1	Sc 361.383	868942.2	868942.2	102.23 %		12:21:45
1	Y 371.029	709496.3	709496.3	100.96 %		12:21:45
1	Ag 328.068†	53459.2	52066.7	253.28 ug/L	253.28 ppb	12:21:45
1	As 188.979†	1082.4	1087.1	461.66 ug/L	461.66 ppb	12:22:05
1	B 249.677†	21376.4	21392.6	501.06 ug/L	501.06 ppb	12:21:45
1	Ba 233.527†	62495.5	61115.0	497.48 ug/L	497.48 ppb	12:21:45
1	Be 313.107†	704444.7	693434.6	255.82 ug/L	255.82 ppb	12:21:45
1	Cd 226.502†	41203.6	40501.3	473.50 ug/L	473.50 ppb	12:22:05
1	Co 228.616†	23747.1	23308.5	486.20 ug/L	486.20 ppb	12:22:05
1	Cr 267.716†	41778.0	40718.0	474.32 ug/L	474.32 ppb	12:21:45
1	Cu 324.752†	172222.0	160375.4	491.03 ug/L	491.03 ppb	12:21:45
1	Mn 257.610†	449261.8	438903.1	506.52 ug/L	506.52 ppb	12:21:45
1	Mo 202.031†	7181.9	7015.0	521.72 ug/L	521.72 ppb	12:22:05
1	Ni 231.604†	19443.8	18906.6	483.98 ug/L	483.98 ppb	12:22:05
1	P 214.914†	4754.1	4408.5	2350.6 ug/L	2350.6 ppb	12:22:05
1	Pb 220.353†	3947.3	3934.9	489.12 ug/L	489.12 ppb	12:22:05
1	S 181.975 Axial†	1926.1	1841.2	2405.5 ug/L	2405.5 ppb	12:22:05
1	Sb 206.836†	1511.1	1442.5	506.98 ug/L	506.98 ppb	12:22:05
1	Se 196.026†	4383.0	4310.8	2533.2 ug/L	2533.2 ppb	12:22:05
1	Si 251.611†	157732.7	153683.6	4782.7 ug/L	4782.7 ppb	12:21:45
1	Sn 189.927†	2996.1	2918.2	524.11 ug/L	524.11 ppb	12:22:05
1	Ti 334.940†	309110.1	303867.8	493.74 ug/L	493.74 ppb	12:21:45
1	Tl 190.801†	1610.0	1614.0	512.87 ug/L	512.87 ppb	12:22:05
1	U 409.014†	13900.0	17112.3	484.46 ug/L	484.46 ppb	12:21:45
1	V 292.402†	68110.9	68304.1	501.66 ug/L	501.66 ppb	12:21:45
1	Zn 213.857†	53475.5	51622.6	499.31 ug/L	499.31 ppb	12:21:45
1	SiO2†	155745.2	151732.1	10102 ug/L	10102 ppb	12:23:03
2	Sc Radial	4411.6	4411.6	104 %		12:20:53
2	Y RADIAL	4512.2	4512.2	102.5 %		12:20:53
2	Al 396.153Radial†	4948.5	4927.3	4903.3 ug/L	4903.3 ppb	12:20:53
2	Ca 317.933Radial†	2749.9	2631.4	4908.5 ug/L	4908.5 ppb	12:21:13
2	Fe 238.204 Radial†	499.6	471.3	5023.6 ug/L	5023.6 ppb	12:21:13
2	K 766.490 Radial†	15645.9	11904.4	2399.6 ug/L	2399.6 ppb	12:20:53
2	Mg 279.077 IEC†	144.7	136.7	5279.5 ug/L	5279.5 ppb	12:21:13
2	Na 589.592 Radial†	8025.8	7526.4	2510.5 ug/L	2510.5 ppb	12:20:53
2	Sr 421.552†	69566.6	66942.6	516.85 ug/L	516.85 ppb	12:20:53
2	Sc 361.383	856794.2	856794.2	100.80 %		12:22:11
2	Y 371.029	699854.6	699854.6	99.591 %		12:22:11
2	Ag 328.068†	53010.6	52363.1	254.66 ug/L	254.66 ppb	12:22:11
2	As 188.979†	1087.6	1107.3	470.09 ug/L	470.09 ppb	12:22:31
2	B 249.677†	20918.9	21235.1	497.35 ug/L	497.35 ppb	12:22:11
2	Ba 233.527†	61691.2	61183.8	498.04 ug/L	498.04 ppb	12:22:11
2	Be 313.107†	694167.9	693009.6	255.67 ug/L	255.67 ppb	12:22:11
2	Cd 226.502†	41342.3	41210.4	481.81 ug/L	481.81 ppb	12:22:31
2	Co 228.616†	23881.3	23771.0	495.88 ug/L	495.88 ppb	12:22:31
2	Cr 267.716†	41313.9	40837.0	475.71 ug/L	475.71 ppb	12:22:11
2	Cu 324.752†	169360.3	159925.0	489.65 ug/L	489.65 ppb	12:22:11
2	Mn 257.610†	442690.7	438615.1	506.17 ug/L	506.17 ppb	12:22:11
2	Mo 202.031†	7247.3	7179.4	533.92 ug/L	533.92 ppb	12:22:31
2	Ni 231.604†	19570.2	19301.6	494.10 ug/L	494.10 ppb	12:22:31

2	P 214.914†	4762.4	4482.7	2392.2 ug/L	2392.2 ppb	12:22:31
2	Pb 220.353†	3959.9	4002.1	497.48 ug/L	497.48 ppb	12:22:31
2	S 181.975 Axial†	1953.1	1894.7	2475.3 ug/L	2475.3 ppb	12:22:31
2	Sb 206.836†	1526.7	1478.9	519.70 ug/L	519.70 ppb	12:22:31
2	Se 196.026†	4408.4	4396.9	2582.9 ug/L	2582.9 ppb	12:22:31
2	Si 251.611†	155299.4	153457.2	4775.5 ug/L	4775.5 ppb	12:22:11
2	Sn 189.927†	2993.1	2956.8	531.01 ug/L	531.01 ppb	12:22:31
2	Ti 334.940†	304709.0	303788.7	493.60 ug/L	493.60 ppb	12:22:11
2	Tl 190.801†	1632.9	1659.1	527.04 ug/L	527.04 ppb	12:22:31
2	U 409.014†	13328.9	16738.6	473.86 ug/L	473.86 ppb	12:22:11
2	V 292.402†	67295.7	68440.0	502.82 ug/L	502.82 ppb	12:22:11
2	Zn 213.857†	52681.3	51576.3	498.81 ug/L	498.81 ppb	12:22:11
2	SiO2†	157647.2	155779.2	10372 ug/L	10372 ppb	12:23:08
3	Sc Radial	4390.1	4390.1	103 %		12:21:18
3	Y RADIAL	4517.5	4517.5	102.6 %		12:21:18
3	Al 396.153Radial†	4976.6	4977.9	4954.2 ug/L	4954.2 ppb	12:21:18
3	Ca 317.933Radial†	2742.3	2637.1	4919.1 ug/L	4919.1 ppb	12:21:38
3	Fe 238.204 Radial†	498.6	472.7	5038.8 ug/L	5038.8 ppb	12:21:38
3	K 766.490 Radial†	15612.6	11946.0	2408.1 ug/L	2408.1 ppb	12:21:18
3	Mg 279.077 IEC†	146.7	139.4	5383.5 ug/L	5383.5 ppb	12:21:38
3	Na 589.592 Radial†	7813.8	7358.9	2454.6 ug/L	2454.6 ppb	12:21:18
3	Sr 421.552†	69255.7	66969.9	517.06 ug/L	517.06 ppb	12:21:18
3	Sc 361.383	858961.3	858961.3	101.05 %		12:22:37
3	Y 371.029	702178.7	702178.7	99.922 %		12:22:37
3	Ag 328.068†	52864.1	52085.4	253.32 ug/L	253.32 ppb	12:22:37
3	As 188.979†	1081.2	1098.2	466.26 ug/L	466.26 ppb	12:22:57
3	B 249.677†	20968.3	21231.6	497.28 ug/L	497.28 ppb	12:22:37
3	Ba 233.527†	61523.0	60863.0	495.43 ug/L	495.43 ppb	12:22:37
3	Be 313.107†	694240.8	691344.2	255.05 ug/L	255.05 ppb	12:22:37
3	Cd 226.502†	41092.7	40859.9	477.71 ug/L	477.71 ppb	12:22:57
3	Co 228.616†	23690.0	23522.0	490.68 ug/L	490.68 ppb	12:22:57
3	Cr 267.716†	41244.1	40664.6	473.70 ug/L	473.70 ppb	12:22:37
3	Cu 324.752†	169502.3	159641.5	488.78 ug/L	488.78 ppb	12:22:37
3	Mn 257.610†	441818.6	436644.0	503.89 ug/L	503.89 ppb	12:22:37
3	Mo 202.031†	7191.9	7106.5	528.50 ug/L	528.50 ppb	12:22:57
3	Ni 231.604†	19436.5	19120.4	489.46 ug/L	489.46 ppb	12:22:57
3	P 214.914†	4751.2	4459.8	2379.6 ug/L	2379.6 ppb	12:22:57
3	Pb 220.353†	3944.2	3976.6	494.32 ug/L	494.32 ppb	12:22:57
3	S 181.975 Axial†	1932.7	1869.6	2442.6 ug/L	2442.6 ppb	12:22:57
3	Sb 206.836†	1515.4	1463.9	514.48 ug/L	514.48 ppb	12:22:57
3	Se 196.026†	4365.2	4343.0	2551.5 ug/L	2551.5 ppb	12:22:57
3	Si 251.611†	155175.8	152946.2	4759.7 ug/L	4759.7 ppb	12:22:37
3	Sn 189.927†	2993.3	2949.5	529.70 ug/L	529.70 ppb	12:22:57
3	Ti 334.940†	304554.5	302873.1	492.11 ug/L	492.11 ppb	12:22:37
3	Tl 190.801†	1617.9	1640.2	521.08 ug/L	521.08 ppb	12:22:57
3	U 409.014†	13447.0	16822.1	476.23 ug/L	476.23 ppb	12:22:37
3	V 292.402†	67158.6	68135.9	500.55 ug/L	500.55 ppb	12:22:37
3	Zn 213.857†	52611.6	51375.5	496.88 ug/L	496.88 ppb	12:22:37
3	SiO2†	156707.7	154454.9	10284 ug/L	10284 ppb	12:23:13

## Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	861565.9	101.36 %	0.762			0.75%
Sc Radial	4387.4	103 %	0.6			0.59%
Y 371.029	703843.2	100.16 %	0.716			0.71%
Y RADIAL	4499.7	102.2 %	0.60			0.59%
Ag 328.068†	52171.7	253.75 ug/L	0.787	253.75 ppb	0.787	0.31%
QC value within limits for Ag 328.068 Recovery = 101.50%						
Al 396.153Radial†	4956.7	4933.0 ug/L	26.50	4933.0 ppb	26.50	0.54%
QC value within limits for Al 396.153Radial Recovery = 98.66%						
As 188.979†	1097.6	466.00 ug/L	4.219	466.00 ppb	4.219	0.91%
QC value within limits for As 188.979 Recovery = 93.20%						
B 249.677†	21286.4	498.57 ug/L	2.161	498.57 ppb	2.161	0.43%
QC value within limits for B 249.677 Recovery = 99.71%						
Ba 233.527†	61053.9	496.98 ug/L	1.374	496.98 ppb	1.374	0.28%
QC value within limits for Ba 233.527 Recovery = 99.40%						
Be 313.107†	692596.1	255.51 ug/L	0.408	255.51 ppb	0.408	0.16%
QC value within limits for Be 313.107 Recovery = 102.21%						
Ca 317.933Radial†	2652.7	4948.4 ug/L	60.08	4948.4 ppb	60.08	1.21%

QC value within limits for Ca 317.933 Radial Recovery = 98.97%							
Cd	226.502†	40857.2	477.68 ug/L	4.156	477.68 ppb	4.156	0.87%
QC value within limits for Cd 226.502 Recovery = 95.54%							
Co	228.616†	23533.9	490.92 ug/L	4.842	490.92 ppb	4.842	0.99%
QC value within limits for Co 228.616 Recovery = 98.18%							
Cr	267.716†	40739.9	474.58 ug/L	1.029	474.58 ppb	1.029	0.22%
QC value within limits for Cr 267.716 Recovery = 94.92%							
Cu	324.752†	159980.6	489.82 ug/L	1.134	489.82 ppb	1.134	0.23%
QC value within limits for Cu 324.752 Recovery = 97.96%							
Fe	238.204 Radial†	476.5	5078.7 ug/L	82.55	5078.7 ppb	82.55	1.63%
QC value within limits for Fe 238.204 Radial Recovery = 101.57%							
K	766.490 Radial†	11953.2	2409.5 ug/L	10.64	2409.5 ppb	10.64	0.44%
QC value within limits for K 766.490 Radial Recovery = 96.38%							
Mg	279.077 IEC†	137.7	5317.2 ug/L	57.60	5317.2 ppb	57.60	1.08%
QC value within limits for Mg 279.077 IEC Recovery = 106.34%							
Mn	257.610†	438054.1	505.53 ug/L	1.425	505.53 ppb	1.425	0.28%
QC value within limits for Mn 257.610 Recovery = 101.11%							
Mo	202.031†	7100.3	528.05 ug/L	6.116	528.05 ppb	6.116	1.16%
QC value within limits for Mo 202.031 Recovery = 105.61%							
Na	589.592 Radial†	7458.0	2487.7 ug/L	29.30	2487.7 ppb	29.30	1.18%
QC value within limits for Na 589.592 Radial Recovery = 99.51%							
Ni	231.604†	19109.6	489.18 ug/L	5.062	489.18 ppb	5.062	1.03%
QC value within limits for Ni 231.604 Recovery = 97.84%							
P	214.914†	4450.3	2374.1 ug/L	21.35	2374.1 ppb	21.35	0.90%
QC value within limits for P 214.914 Recovery = 94.97%							
Pb	220.353†	3971.2	493.64 ug/L	4.222	493.64 ppb	4.222	0.86%
QC value within limits for Pb 220.353 Recovery = 98.73%							
S	181.975 Axial†	1868.5	2441.1 ug/L	34.96	2441.1 ppb	34.96	1.43%
QC value within limits for S 181.975 Axial Recovery = 97.64%							
Sb	206.836†	1461.8	513.72 ug/L	6.393	513.72 ppb	6.393	1.24%
QC value within limits for Sb 206.836 Recovery = 102.74%							
Se	196.026†	4350.2	2555.9 ug/L	25.16	2555.9 ppb	25.16	0.98%
QC value within limits for Se 196.026 Recovery = 102.23%							
Si	251.611†	153362.3	4772.7 ug/L	11.80	4772.7 ppb	11.80	0.25%
QC value within limits for Si 251.611 Recovery = 95.45%							
Sn	189.927†	2941.5	528.27 ug/L	3.663	528.27 ppb	3.663	0.69%
QC value within limits for Sn 189.927 Recovery = 105.65%							
Sr	421.552†	67054.4	517.71 ug/L	1.316	517.71 ppb	1.316	0.25%
QC value within limits for Sr 421.552 Recovery = 103.54%							
Ti	334.940†	303509.9	493.15 ug/L	0.906	493.15 ppb	0.906	0.18%
QC value within limits for Ti 334.940 Recovery = 98.63%							
Tl	190.801†	1637.8	520.33 ug/L	7.117	520.33 ppb	7.117	1.37%
QC value within limits for Tl 190.801 Recovery = 104.07%							
U	409.014†	16891.0	478.19 ug/L	5.565	478.19 ppb	5.565	1.16%
QC value within limits for U 409.014 Recovery = 95.64%							
V	292.402†	68293.4	501.68 ug/L	1.136	501.68 ppb	1.136	0.23%
QC value within limits for V 292.402 Recovery = 100.34%							
Zn	213.857†	51524.8	498.33 ug/L	1.281	498.33 ppb	1.281	0.26%
QC value within limits for Zn 213.857 Recovery = 99.67%							
SiO2†		153988.7	10253 ug/L	137.4	10253 ppb	137.4	1.34%
QC value within limits for SiO2 Recovery = 95.86%							
All analyte(s) passed QC.							

Sequence No.: 7

Sample ID: ICB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 10

Date Collected: 2/16/2010 12:25:24

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	4455.3	4455.3	105 %		12:27:17
1	Y RADIAL	4561.8	4561.8	103.6 %		12:27:17
1	Al 396.153Radial†	-148.1	17.7	17.696 ug/L	17.696 ppb	12:27:17
1	Ca 317.933Radial†	20.8	1.5	2.8793 ug/L	2.8793 ppb	12:27:37
1	Fe 238.204 Radial†	11.5	0.9	9.5190 ug/L	9.5190 ppb	12:27:37
1	K 766.490 Radial†	3239.8	-80.5	-16.259 ug/L	-16.259 ppb	12:27:17
1	Mg 279.077 IEC†	3.4	0.5	20.058 ug/L	20.058 ppb	12:27:37
1	Na 589.592 Radial†	320.3	98.5	32.864 ug/L	32.864 ppb	12:27:17
1	Sr 421.552†	101.2	6.7	0.0520 ug/L	0.0520 ppb	12:27:17
1	Sc 361.383	850103.5	850103.5	100.01 %		12:28:34
1	Y 371.029	701164.2	701164.2	99.777 %		12:28:34
1	Ag 328.068†	351.9	124.2	0.6024 ug/L	0.6024 ppb	12:28:34
1	As 188.979†	-33.8	-5.5	-2.3138 ug/L	-2.3138 ppb	12:28:54
1	B 249.677†	-258.3	223.6	5.2598 ug/L	5.2598 ppb	12:28:54
1	Ba 233.527†	28.2	9.4	0.0763 ug/L	0.0763 ppb	12:28:54
1	Be 313.107†	-4315.7	23.9	0.0092 ug/L	0.0092 ppb	12:28:34
1	Cd 226.502†	-206.2	-10.7	-0.1266 ug/L	-0.1266 ppb	12:28:54
1	Co 228.616†	-79.3	-0.4	-0.0076 ug/L	-0.0076 ppb	12:28:54
1	Cr 267.716†	168.0	18.3	0.2141 ug/L	0.2141 ppb	12:28:54
1	Cu 324.752†	8192.7	97.7	0.3021 ug/L	0.3021 ppb	12:28:34
1	Mn 257.610†	656.9	87.1	0.1006 ug/L	0.1006 ppb	12:28:54
1	Mo 202.031†	21.2	10.8	0.8000 ug/L	0.8000 ppb	12:28:54
1	Ni 231.604†	106.4	-7.2	-0.1832 ug/L	-0.1832 ppb	12:28:54
1	P 214.914†	253.2	11.1	6.1445 ug/L	6.1445 ppb	12:28:54
1	Pb 220.353†	-77.9	-4.3	-0.5330 ug/L	-0.5330 ppb	12:28:54
1	S 181.975 Axial†	47.0	4.1	5.3073 ug/L	5.3073 ppb	12:28:54
1	Sb 206.836†	45.0	9.3	3.1996 ug/L	3.1996 ppb	12:28:54
1	Se 196.026†	-21.5	1.9	1.1248 ug/L	1.1248 ppb	12:28:54
1	Si 251.611†	630.4	18.1	0.5531 ug/L	0.5531 ppb	12:28:54
1	Sn 189.927†	26.6	13.9	2.5008 ug/L	2.5008 ppb	12:28:54
1	Ti 334.940†	-1382.2	110.9	0.1808 ug/L	0.1808 ppb	12:28:34
1	Tl 190.801†	-36.1	3.1	0.9666 ug/L	0.9666 ppb	12:28:54
1	U 409.014†	-3667.0	-151.4	-4.3038 ug/L	-4.3038 ppb	12:28:34
1	V 292.402†	-1691.7	-14.2	-0.1010 ug/L	-0.1010 ppb	12:28:34
1	Zn 213.857†	726.3	38.5	0.3747 ug/L	0.3747 ppb	12:28:54
1	SiO2†	620.9	1.3	0.0652 ug/L	0.0652 ppb	12:29:50
2	Sc Radial	4440.7	4440.7	104 %		12:27:42
2	Y RADIAL	4576.2	4576.2	104.0 %		12:27:42
2	Al 396.153Radial†	-148.2	17.2	17.157 ug/L	17.157 ppb	12:27:42
2	Ca 317.933Radial†	24.9	5.5	10.224 ug/L	10.224 ppb	12:28:02
2	Fe 238.204 Radial†	12.5	1.9	19.787 ug/L	19.787 ppb	12:28:02
2	K 766.490 Radial†	3182.1	-125.6	-25.354 ug/L	-25.354 ppb	12:27:42
2	Mg 279.077 IEC†	2.2	-0.6	-23.955 ug/L	-23.955 ppb	12:28:02
2	Na 589.592 Radial†	210.8	-5.3	-1.7514 ug/L	-1.7514 ppb	12:27:42
2	Sr 421.552†	78.4	-14.8	-0.1143 ug/L	-0.1143 ppb	12:27:42
2	Sc 361.383	850643.0	850643.0	100.07 %		12:29:00
2	Y 371.029	701080.0	701080.0	99.765 %		12:29:00
2	Ag 328.068†	215.2	-12.6	-0.0538 ug/L	-0.0538 ppb	12:29:00
2	As 188.979†	-32.2	-3.9	-1.6295 ug/L	-1.6295 ppb	12:29:20
2	B 249.677†	-253.7	228.4	5.3704 ug/L	5.3704 ppb	12:29:20
2	Ba 233.527†	1.4	-17.5	-0.1413 ug/L	-0.1413 ppb	12:29:20
2	Be 313.107†	-4312.8	29.6	0.0106 ug/L	0.0106 ppb	12:29:00
2	Cd 226.502†	-195.3	0.3	0.0017 ug/L	0.0017 ppb	12:29:20
2	Co 228.616†	-78.1	0.9	0.0198 ug/L	0.0198 ppb	12:29:20
2	Cr 267.716†	145.5	-4.3	-0.0489 ug/L	-0.0489 ppb	12:29:20
2	Cu 324.752†	8133.5	33.3	0.1034 ug/L	0.1034 ppb	12:29:00
2	Mn 257.610†	632.8	62.5	0.0751 ug/L	0.0751 ppb	12:29:20
2	Mo 202.031†	20.8	10.3	0.7687 ug/L	0.7687 ppb	12:29:20
2	Ni 231.604†	100.8	-12.8	-0.3269 ug/L	-0.3269 ppb	12:29:20



2	P 214.914†	228.4	-13.7	-7.6283 ug/L	-7.6283 ppb	12:29:20
2	Pb 220.353†	-60.9	12.7	1.5761 ug/L	1.5761 ppb	12:29:20
2	S 181.975 Axial†	46.3	3.3	4.3280 ug/L	4.3280 ppb	12:29:20
2	Sb 206.836†	52.7	17.0	5.7844 ug/L	5.7844 ppb	12:29:20
2	Se 196.026†	-17.8	5.6	3.3281 ug/L	3.3281 ppb	12:29:20
2	Si 251.611†	602.3	-10.5	-0.3364 ug/L	-0.3364 ppb	12:29:20
2	Sn 189.927†	18.9	6.2	1.1203 ug/L	1.1203 ppb	12:29:20
2	Ti 334.940†	-1553.1	-59.0	-0.0923 ug/L	-0.0923 ppb	12:29:00
2	Tl 190.801†	-33.4	5.7	1.8073 ug/L	1.8073 ppb	12:29:20
2	U 409.014†	-3539.5	-21.7	-0.6188 ug/L	-0.6188 ppb	12:29:00
2	V 292.402†	-1688.4	-9.8	-0.0648 ug/L	-0.0648 ppb	12:29:00
2	Zn 213.857†	725.2	36.9	0.3593 ug/L	0.3593 ppb	12:29:20
2	SiO2†	626.5	6.5	0.4151 ug/L	0.4151 ppb	12:29:55
3	Sc Radial	4363.6	4363.6	103 %		12:28:08
3	Y RADIAL	4483.5	4483.5	101.8 %		12:28:08
3	Al 396.153Radial†	-148.0	14.8	14.794 ug/L	14.794 ppb	12:28:08
3	Ca 317.933Radial†	22.9	3.9	7.3483 ug/L	7.3483 ppb	12:28:28
3	Fe 238.204 Radial†	10.6	0.2	2.5876 ug/L	2.5876 ppb	12:28:28
3	K 766.490 Radial†	3081.8	-169.4	-34.205 ug/L	-34.205 ppb	12:28:08
3	Mg 279.077 IEC†	0.3	-2.4	-92.996 ug/L	-92.996 ppb	12:28:28
3	Na 589.592 Radial†	217.7	5.0	1.6838 ug/L	1.6838 ppb	12:28:08
3	Sr 421.552†	105.7	13.1	0.1014 ug/L	0.1014 ppb	12:28:08
3	Sc 361.383	852757.2	852757.2	100.32 %		12:29:25
3	Y 371.029	704054.8	704054.8	100.19 %		12:29:25
3	Ag 328.068†	256.4	27.9	0.1341 ug/L	0.1341 ppb	12:29:25
3	As 188.979†	-31.2	-2.8	-1.1867 ug/L	-1.1867 ppb	12:29:45
3	B 249.677†	-279.9	202.9	4.7727 ug/L	4.7727 ppb	12:29:45
3	Ba 233.527†	18.0	-0.9	-0.0081 ug/L	-0.0081 ppb	12:29:45
3	Be 313.107†	-4269.7	83.2	0.0306 ug/L	0.0306 ppb	12:29:25
3	Cd 226.502†	-215.8	-19.6	-0.2295 ug/L	-0.2295 ppb	12:29:45
3	Co 228.616†	-68.1	11.0	0.2297 ug/L	0.2297 ppb	12:29:45
3	Cr 267.716†	144.7	-5.4	-0.0631 ug/L	-0.0631 ppb	12:29:45
3	Cu 324.752†	8096.3	-23.9	-0.0725 ug/L	-0.0725 ppb	12:29:25
3	Mn 257.610†	622.2	50.5	0.0623 ug/L	0.0623 ppb	12:29:45
3	Mo 202.031†	17.5	7.0	0.5216 ug/L	0.5216 ppb	12:29:45
3	Ni 231.604†	123.6	9.7	0.2485 ug/L	0.2485 ppb	12:29:45
3	P 214.914†	239.0	-3.7	-2.0195 ug/L	-2.0195 ppb	12:29:45
3	Pb 220.353†	-65.2	8.6	1.0665 ug/L	1.0665 ppb	12:29:45
3	S 181.975 Axial†	41.2	-1.8	-2.4200 ug/L	-2.4200 ppb	12:29:45
3	Sb 206.836†	50.4	14.6	4.9775 ug/L	4.9775 ppb	12:29:45
3	Se 196.026†	-25.0	-1.5	-0.8926 ug/L	-0.8926 ppb	12:29:45
3	Si 251.611†	616.0	1.7	0.0452 ug/L	0.0452 ppb	12:29:45
3	Sn 189.927†	24.5	11.8	2.1193 ug/L	2.1193 ppb	12:29:45
3	Ti 334.940†	-1476.3	21.4	0.0437 ug/L	0.0437 ppb	12:29:25
3	Tl 190.801†	-33.5	5.7	1.7946 ug/L	1.7946 ppb	12:29:45
3	U 409.014†	-3555.9	-29.3	-0.8315 ug/L	-0.8315 ppb	12:29:25
3	V 292.402†	-1727.4	-44.5	-0.3186 ug/L	-0.3186 ppb	12:29:25
3	Zn 213.857†	725.9	35.8	0.3475 ug/L	0.3475 ppb	12:29:45
3	SiO2†	632.0	10.5	0.6837 ug/L	0.6837 ppb	12:30:00

## Mean Data: ICB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	851167.9	100.14 %		0.165				0.16%
Sc Radial	4419.9	104 %		1.2				1.11%
Y 371.029	702099.6	99.911 %		0.2410				0.24%
Y RADIAL	4540.5	103.1 %		1.13				1.10%
Ag 328.068†	46.5	0.2275 ug/L		0.33795	0.2275 ppb		0.33795	148.52%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	16.6	16.549 ug/L		1.5440	16.549 ppb		1.5440	9.33%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-4.1	-1.7100 ug/L		0.56785	-1.7100 ppb		0.56785	33.21%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	218.3	5.1343 ug/L		0.31799	5.1343 ppb		0.31799	6.19%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-3.0	-0.0244 ug/L		0.10969	-0.0244 ppb		0.10969	449.88%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	45.5	0.0168 ug/L		0.01199	0.0168 ppb		0.01199	71.29%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	3.7	6.8174 ug/L		3.70128	6.8174 ppb		3.70128	54.29%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd 226.502†	-10.0	-0.1181 ug/L	0.11582	-0.1181 ppb	0.11582	98.05%	
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	3.8	0.0807 ug/L	0.12984	0.0807 ppb	0.12984	160.98%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	2.9	0.0340 ug/L	0.15613	0.0340 ppb	0.15613	458.91%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	35.7	0.1110 ug/L	0.18742	0.1110 ppb	0.18742	168.85%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	1.0	10.631 ug/L	8.6537	10.631 ppb	8.6537	81.40%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	-125.2	-25.273 ug/L	8.9732	-25.273 ppb	8.9732	35.51%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	-0.8	-32.298 ug/L	56.9867	-32.298 ppb	56.9867	176.44%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	66.7	0.0793 ug/L	0.01951	0.0793 ppb	0.01951	24.60%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	9.4	0.6967 ug/L	0.15251	0.6967 ppb	0.15251	21.89%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	32.8	10.932 ug/L	19.0710	10.932 ppb	19.0710	174.45%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	-3.4	-0.0872 ug/L	0.29951	-0.0872 ppb	0.29951	343.43%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	-2.1	-1.1678 ug/L	6.92582	-1.1678 ppb	6.92582	593.08%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	5.6	0.7032 ug/L	1.10045	0.7032 ppb	1.10045	156.49%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	1.8	2.4051 ug/L	4.20725	2.4051 ppb	4.20725	174.93%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	13.6	4.6538 ug/L	1.32244	4.6538 ppb	1.32244	28.42%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	2.0	1.1868 ug/L	2.11107	1.1868 ppb	2.11107	177.88%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	3.1	0.0873 ug/L	0.44621	0.0873 ppb	0.44621	511.12%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	10.7	1.9134 ug/L	0.71290	1.9134 ppb	0.71290	37.26%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	1.7	0.0130 ug/L	0.11303	0.0130 ppb	0.11303	868.15%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	24.4	0.0441 ug/L	0.13656	0.0441 ppb	0.13656	309.95%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	4.8	1.5228 ug/L	0.48177	1.5228 ppb	0.48177	31.64%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	-67.5	-1.9180 ug/L	2.06884	-1.9180 ppb	2.06884	107.86%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	-22.8	-0.1615 ug/L	0.13730	-0.1615 ppb	0.13730	85.04%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	37.1	0.3605 ug/L	0.01362	0.3605 ppb	0.01362	3.78%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†	6.1	0.3880 ug/L	0.31015	0.3880 ppb	0.31015	79.93%	
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: 2/16/2010 12:32:12  
 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	4365.0	4365.0	103 %		12:34:05
1	Y RADIAL	4513.2	4513.2	102.5 %		12:34:05
1	Al 396.153Radial†	71.4	228.6	228.13 ug/L	228.13 ppb	12:34:05
1	Ca 317.933Radial†	129.9	108.2	201.88 ug/L	201.88 ppb	12:34:25
1	Fe 238.204 Radial†	21.7	11.1	117.86 ug/L	117.86 ppb	12:34:25
1	K 766.490 Radial†	4017.9	741.3	149.43 ug/L	149.43 ppb	12:34:05
1	Mg 279.077 IEC†	12.9	9.9	380.54 ug/L	380.54 ppb	12:34:25
1	Na 589.592 Radial†	1204.1	965.6	322.08 ug/L	322.08 ppb	12:34:05
1	Sr 421.552†	754.3	644.8	4.9769 ug/L	4.9769 ppb	12:34:05
1	Sc 361.383	854077.8	854077.8	100.48 %		12:35:22
1	Y 371.029	703434.5	703434.5	100.10 %		12:35:22
1	Ag 328.068†	1253.1	1019.4	4.9056 ug/L	4.9056 ppb	12:35:22
1	As 188.979†	36.7	64.8	27.314 ug/L	27.314 ppb	12:35:42
1	B 249.677†	1666.4	2140.3	50.321 ug/L	50.321 ppb	12:35:22
1	Ba 233.527†	640.5	618.6	5.0367 ug/L	5.0367 ppb	12:35:42
1	Be 313.107†	9115.3	13411.0	4.9375 ug/L	4.9375 ppb	12:35:22
1	Cd 226.502†	225.8	420.2	4.9153 ug/L	4.9153 ppb	12:35:42
1	Co 228.616†	151.4	229.5	4.8013 ug/L	4.8013 ppb	12:35:42
1	Cr 267.716†	522.6	370.4	4.2961 ug/L	4.2961 ppb	12:35:42
1	Cu 324.752†	11466.5	3317.8	10.134 ug/L	10.134 ppb	12:35:22
1	Mn 257.610†	9572.7	8957.3	10.327 ug/L	10.327 ppb	12:35:22
1	Mo 202.031†	165.7	154.5	11.492 ug/L	11.492 ppb	12:35:42
1	Ni 231.604†	280.8	165.9	4.2477 ug/L	4.2477 ppb	12:35:42
1	P 214.914†	507.9	263.5	144.22 ug/L	144.22 ppb	12:35:42
1	Pb 220.353†	9.3	82.8	10.326 ug/L	10.326 ppb	12:35:42
1	S 181.975 Axial†	122.8	79.3	103.56 ug/L	103.56 ppb	12:35:42
1	Sb 206.836†	70.7	34.7	12.111 ug/L	12.111 ppb	12:35:42
1	Se 196.026†	30.6	53.7	31.774 ug/L	31.774 ppb	12:35:42
1	Si 251.611†	3825.5	3194.9	99.420 ug/L	99.420 ppb	12:35:22
1	Sn 189.927†	68.1	55.2	9.9301 ug/L	9.9301 ppb	12:35:42
1	Ti 334.940†	1649.5	3134.5	5.0651 ug/L	5.0651 ppb	12:35:22
1	Tl 190.801†	22.8	61.8	19.558 ug/L	19.558 ppb	12:35:42
1	U 409.014†	-1608.2	1914.6	54.365 ug/L	54.365 ppb	12:35:22
1	V 292.402†	-1059.7	622.6	4.7589 ug/L	4.7589 ppb	12:35:22
1	Zn 213.857†	1739.8	1043.7	10.128 ug/L	10.128 ppb	12:35:42
1	SiO2†	3848.1	3210.2	213.72 ug/L	213.72 ppb	12:36:38
2	Sc Radial	4445.0	4445.0	105 %		12:34:30
2	Y RADIAL	4541.6	4541.6	103.2 %		12:34:30
2	Al 396.153Radial†	49.4	206.3	205.86 ug/L	205.86 ppb	12:34:30
2	Ca 317.933Radial†	134.8	110.5	206.21 ug/L	206.21 ppb	12:34:50
2	Fe 238.204 Radial†	18.4	7.6	80.787 ug/L	80.787 ppb	12:34:50
2	K 766.490 Radial†	3952.6	608.5	122.63 ug/L	122.63 ppb	12:34:30
2	Mg 279.077 IEC†	9.8	6.6	256.54 ug/L	256.54 ppb	12:34:50
2	Na 589.592 Radial†	1135.2	878.5	293.04 ug/L	293.04 ppb	12:34:30
2	Sr 421.552†	732.4	610.6	4.7128 ug/L	4.7128 ppb	12:34:30
2	Sc 361.383	850654.7	850654.7	100.08 %		12:35:47
2	Y 371.029	699508.6	699508.6	99.542 %		12:35:47
2	Ag 328.068†	1229.8	1001.2	4.8132 ug/L	4.8132 ppb	12:35:47
2	As 188.979†	38.9	67.2	28.306 ug/L	28.306 ppb	12:36:07
2	B 249.677†	1726.7	2207.3	51.903 ug/L	51.903 ppb	12:35:47
2	Ba 233.527†	641.2	621.9	5.0638 ug/L	5.0638 ppb	12:36:07
2	Be 313.107†	8942.9	13275.3	4.8872 ug/L	4.8872 ppb	12:35:47
2	Cd 226.502†	193.0	388.3	4.5453 ug/L	4.5453 ppb	12:36:07
2	Co 228.616†	150.5	229.3	4.7939 ug/L	4.7939 ppb	12:36:07
2	Cr 267.716†	475.8	325.8	3.7796 ug/L	3.7796 ppb	12:36:07
2	Cu 324.752†	11448.2	3345.4	10.220 ug/L	10.220 ppb	12:35:47
2	Mn 257.610†	9603.7	9026.6	10.409 ug/L	10.409 ppb	12:35:47
2	Mo 202.031†	147.8	137.3	10.208 ug/L	10.208 ppb	12:36:07
2	Ni 231.604†	281.9	168.1	4.3034 ug/L	4.3034 ppb	12:36:07

2	P 214.914†	505.6	263.2	144.09 ug/L	144.09 ppb	12:36:07
2	Pb 220.353†	8.0	81.6	10.165 ug/L	10.165 ppb	12:36:07
2	S 181.975 Axial†	125.4	82.4	107.63 ug/L	107.63 ppb	12:36:07
2	Sb 206.836†	61.3	25.6	9.0337 ug/L	9.0337 ppb	12:36:07
2	Se 196.026†	28.3	51.6	30.385 ug/L	30.385 ppb	12:36:07
2	Si 251.611†	3830.4	3215.2	100.07 ug/L	100.07 ppb	12:35:47
2	Sn 189.927†	73.3	60.6	10.898 ug/L	10.898 ppb	12:36:07
2	Ti 334.940†	1526.1	3017.8	4.8886 ug/L	4.8886 ppb	12:35:47
2	Tl 190.801†	23.1	62.2	19.694 ug/L	19.694 ppb	12:36:07
2	U 409.014†	-1777.1	1739.4	49.393 ug/L	49.393 ppb	12:35:47
2	V 292.402†	-937.1	741.0	5.5919 ug/L	5.5919 ppb	12:35:47
2	Zn 213.857†	1712.1	1023.1	9.9316 ug/L	9.9316 ppb	12:36:07
2	SiO2†	3788.5	3166.1	210.82 ug/L	210.82 ppb	12:36:43
3	Sc Radial	4315.2	4315.2	102 %		12:34:55
3	Y RADIAL	4470.6	4470.6	101.6 %		12:34:55
3	Al 396.153Radial†	55.8	214.0	213.61 ug/L	213.61 ppb	12:34:55
3	Ca 317.933Radial†	133.2	112.9	210.58 ug/L	210.58 ppb	12:35:15
3	Fe 238.204 Radial†	19.5	9.2	97.608 ug/L	97.608 ppb	12:35:15
3	K 766.490 Radial†	3979.7	748.8	150.96 ug/L	150.96 ppb	12:34:55
3	Mg 279.077 IEC†	10.1	7.3	280.19 ug/L	280.19 ppb	12:35:15
3	Na 589.592 Radial†	1113.4	889.7	296.78 ug/L	296.78 ppb	12:34:55
3	Sr 421.552†	722.2	621.6	4.7982 ug/L	4.7982 ppb	12:34:55
3	Sc 361.383	840845.7	840845.7	98.922 %		12:36:13
3	Y 371.029	693189.2	693189.2	98.643 %		12:36:13
3	Ag 328.068†	1259.2	1045.3	5.0267 ug/L	5.0267 ppb	12:36:13
3	As 188.979†	45.0	73.8	31.112 ug/L	31.112 ppb	12:36:33
3	B 249.677†	1621.7	2121.2	49.876 ug/L	49.876 ppb	12:36:13
3	Ba 233.527†	640.5	628.7	5.1155 ug/L	5.1155 ppb	12:36:33
3	Be 313.107†	8768.4	13203.1	4.8610 ug/L	4.8610 ppb	12:36:13
3	Cd 226.502†	216.6	414.5	4.8481 ug/L	4.8481 ppb	12:36:33
3	Co 228.616†	142.5	222.9	4.6595 ug/L	4.6595 ppb	12:36:33
3	Cr 267.716†	470.8	326.3	3.7849 ug/L	3.7849 ppb	12:36:33
3	Cu 324.752†	11160.8	3188.3	9.7418 ug/L	9.7418 ppb	12:36:13
3	Mn 257.610†	9275.3	8806.6	10.156 ug/L	10.156 ppb	12:36:13
3	Mo 202.031†	140.7	131.8	9.8031 ug/L	9.8031 ppb	12:36:33
3	Ni 231.604†	272.0	161.5	4.1327 ug/L	4.1327 ppb	12:36:33
3	P 214.914†	495.3	258.8	141.73 ug/L	141.73 ppb	12:36:33
3	Pb 220.353†	15.3	89.0	11.083 ug/L	11.083 ppb	12:36:33
3	S 181.975 Axial†	119.9	78.3	102.33 ug/L	102.33 ppb	12:36:33
3	Sb 206.836†	58.0	23.0	8.1545 ug/L	8.1545 ppb	12:36:33
3	Se 196.026†	27.0	50.6	29.871 ug/L	29.871 ppb	12:36:33
3	Si 251.611†	3910.2	3340.5	103.98 ug/L	103.98 ppb	12:36:13
3	Sn 189.927†	79.7	67.9	12.212 ug/L	12.212 ppb	12:36:33
3	Ti 334.940†	1597.7	3108.0	5.0357 ug/L	5.0357 ppb	12:36:13
3	Tl 190.801†	28.9	68.3	21.631 ug/L	21.631 ppb	12:36:33
3	U 409.014†	-1899.5	1595.0	45.289 ug/L	45.289 ppb	12:36:13
3	V 292.402†	-1157.2	507.5	3.8854 ug/L	3.8854 ppb	12:36:13
3	Zn 213.857†	1750.8	1082.2	10.508 ug/L	10.508 ppb	12:36:33
3	SiO2†	3833.4	3255.7	216.80 ug/L	216.80 ppb	12:36:48

## Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	848526.1	99.826 %	0.8080			0.81%
Sc Radial	4375.0	103 %	1.5			1.50%
Y 371.029	698710.8	99.428 %	0.7356			0.74%
Y RADIAL	4508.5	102.4 %	0.81			0.79%
Ag 328.068†	1022.0	4.9152 ug/L	0.10710	4.9152 ppb	0.10710	2.18%
QC value within limits for Ag 328.068 Recovery = 98.30%						
Al 396.153Radial†	216.3	215.87 ug/L	11.308	215.87 ppb	11.308	5.24%
QC value within limits for Al 396.153Radial Recovery = 107.93%						
As 188.979†	68.6	28.911 ug/L	1.9701	28.911 ppb	1.9701	6.81%
QC value within limits for As 188.979 Recovery = 96.37%						
B 249.677†	2156.3	50.700 ug/L	1.0655	50.700 ppb	1.0655	2.10%
QC value within limits for B 249.677 Recovery = 101.40%						
Ba 233.527†	623.1	5.0720 ug/L	0.04003	5.0720 ppb	0.04003	0.79%
QC value within limits for Ba 233.527 Recovery = 101.44%						
Be 313.107†	13296.5	4.8953 ug/L	0.03885	4.8953 ppb	0.03885	0.79%
QC value within limits for Be 313.107 Recovery = 97.91%						
Ca 317.933Radial†	110.6	206.22 ug/L	4.353	206.22 ppb	4.353	2.11%

QC value within limits for Ca 317.933 Radial Recovery = 103.11%							
Cd 226.502†	407.7	4.7696 ug/L	0.19713	4.7696 ppb	0.19713	4.13%	
QC value within limits for Cd 226.502 Recovery = 95.39%							
Co 228.616†	227.2	4.7515 ug/L	0.07982	4.7515 ppb	0.07982	1.68%	
QC value within limits for Co 228.616 Recovery = 95.03%							
Cr 267.716†	340.8	3.9536 ug/L	0.29669	3.9536 ppb	0.29669	7.50%	
QC value within limits for Cr 267.716 Recovery = 79.07%							
Cu 324.752†	3283.8	10.032 ug/L	0.2548	10.032 ppb	0.2548	2.54%	
QC value within limits for Cu 324.752 Recovery = 100.32%							
Fe 238.204 Radial†	9.3	98.753 ug/L	18.5648	98.753 ppb	18.5648	18.80%	
QC value within limits for Fe 238.204 Radial Recovery = 98.75%							
K 766.490 Radial†	699.5	141.01 ug/L	15.934	141.01 ppb	15.934	11.30%	
QC value within limits for K 766.490 Radial Recovery = 94.00%							
Mg 279.077 IEC†	7.9	305.76 ug/L	65.838	305.76 ppb	65.838	21.53%	
QC value within limits for Mg 279.077 IEC Recovery = 101.92%							
Mn 257.610†	8930.2	10.297 ug/L	0.1292	10.297 ppb	0.1292	1.25%	
QC value within limits for Mn 257.610 Recovery = 102.97%							
Mo 202.031†	141.2	10.501 ug/L	0.8815	10.501 ppb	0.8815	8.39%	
QC value within limits for Mo 202.031 Recovery = 105.01%							
Na 589.592 Radial†	911.3	303.97 ug/L	15.797	303.97 ppb	15.797	5.20%	
QC value within limits for Na 589.592 Radial Recovery = 101.32%							
Ni 231.604†	165.2	4.2280 ug/L	0.08709	4.2280 ppb	0.08709	2.06%	
QC value within limits for Ni 231.604 Recovery = 84.56%							
P 214.914†	261.8	143.35 ug/L	1.405	143.35 ppb	1.405	0.98%	
QC value within limits for P 214.914 Recovery = 95.56%							
Pb 220.353†	84.5	10.525 ug/L	0.4900	10.525 ppb	0.4900	4.66%	
QC value within limits for Pb 220.353 Recovery = 105.25%							
S 181.975 Axial†	80.0	104.51 ug/L	2.776	104.51 ppb	2.776	2.66%	
QC value within limits for S 181.975 Axial Recovery = 104.51%							
Sb 206.836†	27.7	9.7666 ug/L	2.07773	9.7666 ppb	2.07773	21.27%	
QC value within limits for Sb 206.836 Recovery = 97.67%							
Se 196.026†	52.0	30.677 ug/L	0.9844	30.677 ppb	0.9844	3.21%	
QC value within limits for Se 196.026 Recovery = 102.26%							
Si 251.611†	3250.2	101.15 ug/L	2.465	101.15 ppb	2.465	2.44%	
QC value within limits for Si 251.611 Recovery = 101.15%							
Sn 189.927†	61.2	11.013 ug/L	1.1453	11.013 ppb	1.1453	10.40%	
QC value within limits for Sn 189.927 Recovery = 110.13%							
Sr 421.552†	625.7	4.8293 ug/L	0.13477	4.8293 ppb	0.13477	2.79%	
QC value within limits for Sr 421.552 Recovery = 96.59%							
Ti 334.940†	3086.8	4.9964 ug/L	0.09458	4.9964 ppb	0.09458	1.89%	
QC value within limits for Ti 334.940 Recovery = 99.93%							
Tl 190.801†	64.1	20.294 ug/L	1.1597	20.294 ppb	1.1597	5.71%	
QC value within limits for Tl 190.801 Recovery = 101.47%							
U 409.014†	1749.6	49.682 ug/L	4.5451	49.682 ppb	4.5451	9.15%	
QC value within limits for U 409.014 Recovery = 99.36%							
V 292.402†	623.7	4.7454 ug/L	0.85329	4.7454 ppb	0.85329	17.98%	
QC value within limits for V 292.402 Recovery = 94.91%							
Zn 213.857†	1049.7	10.189 ug/L	0.2928	10.189 ppb	0.2928	2.87%	
QC value within limits for Zn 213.857 Recovery = 101.89%							
SiO2†	3210.7	213.78 ug/L	2.991	213.78 ppb	2.991	1.40%	
QC value within limits for SiO2 Recovery = 100.37%							
All analyte(s) passed QC.							

Sequence No.: 9

Sample ID: IC5A

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 13

Date Collected: 2/16/2010 12:39:00

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	3937.1	3937.1	92.6 %		12:40:58
1	Y RADIAL	4029.9	4029.9	91.54 %		12:40:58
1	Al 396.153Radial†	478456.5	516755.4	516960 ug/L	516960 ppb	12:40:53
1	Ca 317.933Radial†	238994.6	258027.6	481320 ug/L	481320 ppb	12:40:53
1	Fe 238.204 Radial†	16335.7	17627.8	187340 ug/L	187340 ppb	12:40:58
1	K 766.490 Radial†	3019.5	88.7	-143.22 ug/L	-143.22 ppb	12:40:53
1	Mg 279.077 IEC†	11718.1	12649.5	488360 ug/L	488360 ppb	12:40:58
1	Na 589.592 Radial†	1169.1	1055.2	351.97 ug/L	351.97 ppb	12:40:58
1	Sr 421.552†	547.3	501.1	0.2753 ug/L	0.2753 ppb	12:40:58
1	Sc 361.383	740276.7	740276.7	87.090 %		12:41:25
1	Y 371.029	594718.2	594718.2	84.630 %		12:41:25
1	Ag 328.068†	-9235.1	-10831.7	4.7208 ug/L	4.7208 ppb	12:41:25
1	As 188.979†	-107.5	-95.1	3.7336 ug/L	3.7336 ppb	12:41:46
1	B 249.677†	362.1	897.7	-9.3057 ug/L	-9.3057 ppb	12:41:25
1	Ba 233.527†	-647.4	-762.3	-0.4564 ug/L	-0.4564 ppb	12:41:46
1	Be 313.107†	-4701.6	-1059.4	-0.4395 ug/L	-0.4395 ppb	12:41:25
1	Cd 226.502†	1164.0	1532.0	-1.4262 ug/L	-1.4262 ppb	12:41:46
1	Co 228.616†	-32.6	41.4	-1.8478 ug/L	-1.8478 ppb	12:41:46
1	Cr 267.716†	-48.8	-205.7	1.2542 ug/L	1.2542 ppb	12:41:46
1	Cu 324.752†	5131.6	-2201.9	3.1539 ug/L	3.1539 ppb	12:41:25
1	Mn 257.610†	741.7	281.9	-1.1476 ug/L	-1.1476 ppb	12:41:25
1	Mo 202.031†	-242.0	-288.3	-1.1526 ug/L	-1.1526 ppb	12:41:46
1	Ni 231.604†	205.2	122.1	3.1281 ug/L	3.1281 ppb	12:41:46
1	P 214.914†	216.2	6.3	-17.890 ug/L	-17.890 ppb	12:41:46
1	Pb 220.353†	-814.3	-861.4	-5.1356 ug/L	-5.1356 ppb	12:41:46
1	S 181.975 Axial†	68.2	35.4	-50.587 ug/L	-50.587 ppb	12:41:46
1	Sb 206.836†	81.0	57.4	1.8960 ug/L	1.8960 ppb	12:41:46
1	Se 196.026†	-916.1	-1028.5	20.689 ug/L	20.689 ppb	12:41:46
1	Si 251.611†	562.2	33.2	1.2996 ug/L	1.2996 ppb	12:41:46
1	Sn 189.927†	-356.8	-422.3	0.5649 ug/L	0.5649 ppb	12:41:46
1	Ti 334.940†	-13188.7	-13650.8	2.4504 ug/L	2.4504 ppb	12:41:25
1	Tl 190.801†	-79.8	-52.6	-16.804 ug/L	-16.804 ppb	12:41:46
1	U 409.014†	-1918.8	1311.9	15.915 ug/L	15.915 ppb	12:41:25
1	V 292.402†	344.5	2072.8	-3.0434 ug/L	-3.0434 ppb	12:41:46
1	Zn 213.857†	3071.7	2839.3	-0.3354 ug/L	-0.3354 ppb	12:41:46
1	SiO2†	480.6	-67.7	-3.9304 ug/L	-3.9304 ppb	12:42:42
2	Sc Radial	3938.9	3938.9	92.7 %		12:41:08
2	Y RADIAL	4049.1	4049.1	91.98 %		12:41:08
2	Al 396.153Radial†	483505.5	521957.5	522160 ug/L	522160 ppb	12:41:03
2	Ca 317.933Radial†	240862.2	259919.8	484850 ug/L	484850 ppb	12:41:03
2	Fe 238.204 Radial†	16338.0	17621.9	187280 ug/L	187280 ppb	12:41:08
2	K 766.490 Radial†	3062.5	133.4	-135.37 ug/L	-135.37 ppb	12:41:03
2	Mg 279.077 IEC†	11742.6	12669.9	489150 ug/L	489150 ppb	12:41:08
2	Na 589.592 Radial†	1175.6	1061.6	354.12 ug/L	354.12 ppb	12:41:08
2	Sr 421.552†	545.1	498.4	0.2281 ug/L	0.2281 ppb	12:41:08
2	Sc 361.383	743346.1	743346.1	87.452 %		12:41:51
2	Y 371.029	597417.9	597417.9	85.014 %		12:41:51
2	Ag 328.068†	-9292.0	-10853.0	4.5531 ug/L	4.5531 ppb	12:41:51
2	As 188.979†	-98.8	-84.6	8.1206 ug/L	8.1206 ppb	12:42:11
2	B 249.677†	371.1	906.3	-9.0933 ug/L	-9.0933 ppb	12:41:51
2	Ba 233.527†	-609.3	-715.6	-0.0773 ug/L	-0.0773 ppb	12:42:11
2	Be 313.107†	-4579.3	-897.2	-0.3791 ug/L	-0.3791 ppb	12:41:51
2	Cd 226.502†	1152.3	1513.1	-1.6404 ug/L	-1.6404 ppb	12:42:11
2	Co 228.616†	-32.8	41.4	-1.8460 ug/L	-1.8460 ppb	12:42:11
2	Cr 267.716†	10.4	-137.8	2.0442 ug/L	2.0442 ppb	12:42:11
2	Cu 324.752†	5324.7	-2005.4	3.7522 ug/L	3.7522 ppb	12:41:51
2	Mn 257.610†	881.3	438.1	-1.0059 ug/L	-1.0059 ppb	12:41:51
2	Mo 202.031†	-230.5	-274.0	-0.0520 ug/L	-0.0520 ppb	12:42:11
2	Ni 231.604†	220.9	139.0	3.5611 ug/L	3.5611 ppb	12:42:11

2	P 214.914†	220.5	10.1	-14.542 ug/L	-14.542 ppb	12:42:11
2	Pb 220.353†	-829.6	-875.0	-5.6358 ug/L	-5.6358 ppb	12:42:11
2	S 181.975 Axial†	65.8	32.4	-55.569 ug/L	-55.569 ppb	12:42:11
2	Sb 206.836†	73.0	47.8	-1.4860 ug/L	-1.4860 ppb	12:42:11
2	Se 196.026†	-907.9	-1014.8	28.677 ug/L	28.677 ppb	12:42:11
2	Si 251.611†	560.8	28.9	1.1522 ug/L	1.1522 ppb	12:42:11
2	Sn 189.927†	-364.3	-429.2	-0.1275 ug/L	-0.1275 ppb	12:42:11
2	Ti 334.940†	-13038.7	-13416.8	3.2397 ug/L	3.2397 ppb	12:41:51
2	Tl 190.801†	-75.8	-47.5	-15.210 ug/L	-15.210 ppb	12:42:11
2	U 409.014†	-1933.5	1304.2	15.703 ug/L	15.703 ppb	12:41:51
2	V 292.402†	449.9	2191.8	-2.1436 ug/L	-2.1436 ppb	12:42:11
2	Zn 213.857†	3087.5	2842.7	-0.2961 ug/L	-0.2961 ppb	12:42:11
2	SiO2†	533.1	-9.9	-0.1044 ug/L	-0.1044 ppb	12:42:47
3	Sc Radial	3825.6	3825.6	90.0 %		12:41:19
3	Y RADIAL	3920.0	3920.0	89.05 %		12:41:19
3	Al 396.153Radial†	485514.9	539653.4	539860 ug/L	539860 ppb	12:41:14
3	Ca 317.933Radial†	241480.6	268310.1	500500 ug/L	500500 ppb	12:41:14
3	Fe 238.204 Radial†	15921.7	17681.9	187920 ug/L	187920 ppb	12:41:19
3	K 766.490 Radial†	2887.3	36.7	-160.12 ug/L	-160.12 ppb	12:41:14
3	Mg 279.077 IEC†	11480.6	12754.3	492410 ug/L	492410 ppb	12:41:19
3	Na 589.592 Radial†	1102.4	1017.9	339.53 ug/L	339.53 ppb	12:41:19
3	Sr 421.552†	520.4	488.5	0.0344 ug/L	0.0344 ppb	12:41:19
3	Sc 361.383	746684.9	746684.9	87.844 %		12:42:16
3	Y 371.029	599554.4	599554.4	85.318 %		12:42:16
3	Ag 328.068†	-9423.9	-10955.6	4.0545 ug/L	4.0545 ppb	12:42:16
3	As 188.979†	-112.6	-99.8	1.8698 ug/L	1.8698 ppb	12:42:36
3	B 249.677†	340.9	870.0	-10.052 ug/L	-10.052 ppb	12:42:16
3	Ba 233.527†	-631.6	-737.9	-0.2399 ug/L	-0.2399 ppb	12:42:36
3	Be 313.107†	-4776.7	-1098.6	-0.4525 ug/L	-0.4525 ppb	12:42:16
3	Cd 226.502†	1153.7	1508.9	-1.7538 ug/L	-1.7538 ppb	12:42:36
3	Co 228.616†	-8.5	69.1	-1.2730 ug/L	-1.2730 ppb	12:42:36
3	Cr 267.716†	-30.4	-184.4	1.5112 ug/L	1.5112 ppb	12:42:36
3	Cu 324.752†	5275.1	-2089.0	3.5250 ug/L	3.5250 ppb	12:42:16
3	Mn 257.610†	913.3	469.9	-1.0395 ug/L	-1.0395 ppb	12:42:16
3	Mo 202.031†	-214.7	-254.8	1.6069 ug/L	1.6069 ppb	12:42:36
3	Ni 231.604†	222.7	140.0	3.5858 ug/L	3.5858 ppb	12:42:36
3	P 214.914†	229.4	19.2	-5.5250 ug/L	-5.5250 ppb	12:42:36
3	Pb 220.353†	-841.3	-884.1	-2.7413 ug/L	-2.7413 ppb	12:42:36
3	S 181.975 Axial†	76.0	43.6	-44.200 ug/L	-44.200 ppb	12:42:36
3	Sb 206.836†	83.7	59.6	2.0945 ug/L	2.0945 ppb	12:42:36
3	Se 196.026†	-890.1	-989.9	45.831 ug/L	45.831 ppb	12:42:36
3	Si 251.611†	569.1	35.6	1.3412 ug/L	1.3412 ppb	12:42:36
3	Sn 189.927†	-353.5	-415.0	4.8101 ug/L	4.8101 ppb	12:42:36
3	Ti 334.940†	-12983.8	-13287.5	5.2790 ug/L	5.2790 ppb	12:42:16
3	Tl 190.801†	-69.2	-39.7	-12.727 ug/L	-12.727 ppb	12:42:36
3	U 409.014†	-1666.8	1617.7	24.537 ug/L	24.537 ppb	12:42:16
3	V 292.402†	413.0	2147.4	-2.4574 ug/L	-2.4574 ppb	12:42:36
3	Zn 213.857†	3069.1	2806.1	-0.7493 ug/L	-0.7493 ppb	12:42:36
3	SiO2†	536.1	-9.2	-0.1006 ug/L	-0.1006 ppb	12:42:52

## Mean Data: ICSCA

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	743435.9	87.462 %	0.3771			0.43%
Sc Radial	3900.5	91.8 %	1.53			1.66%
Y 371.029	597230.2	84.987 %	0.3449			0.41%
Y RADIAL	3999.7	90.86 %	1.582			1.74%
Ag 328.068†	-10880.1	4.4428 ug/L	0.34656	4.4428 ppb	0.34656	7.80%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	526122.1	526330 ug/L	12008.3	526330 ppb	12008.3	2.28%
QC value within limits for Al 396.153Radial Recovery = 105.27%						
As 188.979†	-93.2	4.5747 ug/L	3.20913	4.5747 ppb	3.20913	70.15%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	891.4	-9.4838 ug/L	0.50378	-9.4838 ppb	0.50378	5.31%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	-738.6	-0.2579 ug/L	0.19016	-0.2579 ppb	0.19016	73.75%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	-1018.4	-0.4237 ug/L	0.03920	-0.4237 ppb	0.03920	9.25%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	262085.8	488890 ug/L	10208.8	488890 ppb	10208.8	2.09%

QC value within limits for Ca 317.933 Radial Recovery = 97.78%

Cd 226.502†	1518.0	-1.6068 ug/L	0.16637	-1.6068 ppb	0.16637	10.35%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	50.6	-1.6556 ug/L	0.33131	-1.6556 ppb	0.33131	20.01%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-176.0	1.6032 ug/L	0.40296	1.6032 ppb	0.40296	25.14%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-2098.8	3.4771 ug/L	0.30202	3.4771 ppb	0.30202	8.69%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	17643.9	187510 ug/L	351.2	187510 ppb	351.2	0.19%
QC value within limits for Fe 238.204 Radial Recovery = 93.76%						
K 766.490 Radial†	86.3	-146.24 ug/L	12.648	-146.24 ppb	12.648	8.65%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	12691.3	489970 ug/L	2145.0	489970 ppb	2145.0	0.44%
QC value within limits for Mg 279.077 IEC Recovery = 97.99%						
Mn 257.610†	396.6	-1.0643 ug/L	0.07402	-1.0643 ppb	0.07402	6.96%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	-272.4	0.1341 ug/L	1.38915	0.1341 ppb	1.38915	>999.9%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	1044.9	348.54 ug/L	7.878	348.54 ppb	7.878	2.26%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	133.7	3.4250 ug/L	0.25741	3.4250 ppb	0.25741	7.52%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	11.9	-12.652 ug/L	6.3956	-12.652 ppb	6.3956	50.55%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	-873.5	-4.5042 ug/L	1.54712	-4.5042 ppb	1.54712	34.35%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	37.1	-50.118 ug/L	5.6989	-50.118 ppb	5.6989	11.37%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	54.9	0.8348 ug/L	2.01232	0.8348 ppb	2.01232	241.04%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-1011.1	31.732 ug/L	12.8465	31.732 ppb	12.8465	40.48%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	32.6	1.2643 ug/L	0.09934	1.2643 ppb	0.09934	7.86%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	-422.2	1.7492 ug/L	2.67336	1.7492 ppb	2.67336	152.83%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	496.0	0.1793 ug/L	0.12765	0.1793 ppb	0.12765	71.20%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	-13451.7	3.6563 ug/L	1.45964	3.6563 ppb	1.45964	39.92%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	-46.6	-14.914 ug/L	2.0544	-14.914 ppb	2.0544	13.78%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	1411.3	18.719 ug/L	5.0401	18.719 ppb	5.0401	26.93%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	2137.3	-2.5481 ug/L	0.45675	-2.5481 ppb	0.45675	17.93%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	2829.4	-0.4602 ug/L	0.25107	-0.4602 ppb	0.25107	54.55%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	-28.9	-1.3784 ug/L	2.21004	-1.3784 ppb	2.21004	160.33%
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: 2/16/2010 12:45:04  
 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	3916.0	3916.0	92.1 %		12:47:17
1	Y RADIAL	4032.1	4032.1	91.59 %		12:47:17
1	Al 396.153Radial†	487289.5	529119.2	529300 ug/L	529300 ppb	12:46:57
1	Ca 317.933Radial†	241486.9	262119.3	488950 ug/L	488950 ppb	12:46:57
1	Fe 238.204 Radial†	16392.0	17783.7	189010 ug/L	189010 ppb	12:47:17
1	K 766.490 Radial†	28852.9	28148.7	5515.7 ug/L	5515.7 ppb	12:46:57
1	Mg 279.077 IEC†	11740.0	12741.3	491910 ug/L	491910 ppb	12:47:17
1	Na 589.592 Radial†	16400.7	17596.1	5869.4 ug/L	5869.4 ppb	12:46:57
1	Sr 421.552†	61995.6	67207.4	515.28 ug/L	515.28 ppb	12:46:57
1	Sc 361.383	746963.1	746963.1	87.877 %		12:48:15
1	Y 371.029	598362.8	598362.8	85.149 %		12:48:15
1	Ag 328.068†	39835.7	45103.5	275.36 ug/L	275.36 ppb	12:48:15
1	As 188.979†	984.6	1148.7	530.73 ug/L	530.73 ppb	12:48:35
1	B 249.677†	19569.3	22750.9	503.26 ug/L	503.26 ppb	12:48:15
1	Ba 233.527†	52653.8	59898.7	493.23 ug/L	493.23 ppb	12:48:15
1	Be 313.107†	578185.8	662287.2	244.38 ug/L	244.38 ppb	12:48:15
1	Cd 226.502†	35945.2	41099.4	461.49 ug/L	461.49 ppb	12:48:35
1	Co 228.616†	18988.0	21686.3	449.60 ug/L	449.60 ppb	12:48:35
1	Cr 267.716†	36075.4	40902.4	480.05 ug/L	480.05 ppb	12:48:15
1	Cu 324.752†	166171.6	181001.3	563.89 ug/L	563.89 ppb	12:48:15
1	Mn 257.610†	370784.4	421365.5	484.54 ug/L	484.54 ppb	12:48:15
1	Mo 202.031†	5540.7	6294.6	488.22 ug/L	488.22 ppb	12:48:35
1	Ni 231.604†	15586.8	17623.5	451.14 ug/L	451.14 ppb	12:48:35
1	P 214.914†	4284.6	4633.7	2444.7 ug/L	2444.7 ppb	12:48:35
1	Pb 220.353†	2488.1	2904.9	464.95 ug/L	464.95 ppb	12:48:35
1	S 181.975 Axial†	1844.8	2056.4	2588.4 ug/L	2588.4 ppb	12:48:35
1	Sb 206.836†	1466.0	1632.6	552.42 ug/L	552.42 ppb	12:48:35
1	Se 196.026†	2986.6	3421.9	2624.2 ug/L	2624.2 ppb	12:48:35
1	Si 251.611†	146822.1	166464.3	5181.7 ug/L	5181.7 ppb	12:48:15
1	Sn 189.927†	2054.8	2325.6	494.49 ug/L	494.49 ppb	12:48:35
1	Ti 334.940†	263882.7	301778.9	515.48 ug/L	515.48 ppb	12:48:15
1	Tl 190.801†	1237.1	1446.9	460.12 ug/L	460.12 ppb	12:48:35
1	U 409.014†	12742.4	18015.5	489.16 ug/L	489.16 ppb	12:48:15
1	V 292.402†	60315.5	70313.5	498.14 ug/L	498.14 ppb	12:48:15
1	Zn 213.857†	47858.4	53772.9	492.91 ug/L	492.91 ppb	12:48:15
1	SiO2†	149139.1	169093.7	11261 ug/L	11261 ppb	12:49:33
2	Sc Radial	3927.2	3927.2	92.4 %		12:47:43
2	Y RADIAL	4027.8	4027.8	91.50 %		12:47:43
2	Al 396.153Radial†	479696.5	519389.1	519570 ug/L	519570 ppb	12:47:23
2	Ca 317.933Radial†	238039.5	257639.0	480590 ug/L	480590 ppb	12:47:23
2	Fe 238.204 Radial†	16460.8	17807.4	189260 ug/L	189260 ppb	12:47:43
2	K 766.490 Radial†	28609.9	27796.2	5447.3 ug/L	5447.3 ppb	12:47:23
2	Mg 279.077 IEC†	11755.2	12721.3	491140 ug/L	491140 ppb	12:47:43
2	Na 589.592 Radial†	16203.2	17331.6	5781.1 ug/L	5781.1 ppb	12:47:23
2	Sr 421.552†	61052.5	65994.3	505.97 ug/L	505.97 ppb	12:47:23
2	Sc 361.383	755718.9	755718.9	88.907 %		12:48:41
2	Y 371.029	604468.6	604468.6	86.017 %		12:48:41
2	Ag 328.068†	40156.0	44938.5	274.76 ug/L	274.76 ppb	12:48:41
2	As 188.979†	987.7	1139.3	526.84 ug/L	526.84 ppb	12:49:01
2	B 249.677†	19998.0	22975.1	508.51 ug/L	508.51 ppb	12:48:41
2	Ba 233.527†	53172.0	59787.4	492.33 ug/L	492.33 ppb	12:48:41
2	Be 313.107†	586311.4	663803.6	244.93 ug/L	244.93 ppb	12:48:41
2	Cd 226.502†	35859.1	40528.7	454.79 ug/L	454.79 ppb	12:49:01
2	Co 228.616†	18962.7	21407.5	443.76 ug/L	443.76 ppb	12:49:01
2	Cr 267.716†	36529.0	40937.0	480.46 ug/L	480.46 ppb	12:48:41
2	Cu 324.752†	168697.1	181651.1	565.89 ug/L	565.89 ppb	12:48:41
2	Mn 257.610†	375656.6	421956.9	485.28 ug/L	485.28 ppb	12:48:41
2	Mo 202.031†	5519.3	6197.5	480.92 ug/L	480.92 ppb	12:49:01
2	Ni 231.604†	15533.1	17357.7	444.33 ug/L	444.33 ppb	12:49:01

2	P 214.914†	4284.3	4576.8	2410.0 ug/L	2410.0 ppb	12:49:01
2	Pb 220.353†	2463.1	2844.0	455.12 ug/L	455.12 ppb	12:49:01
2	S 181.975 Axial†	1842.0	2028.9	2554.3 ug/L	2554.3 ppb	12:49:01
2	Sb 206.836†	1471.8	1619.7	548.02 ug/L	548.02 ppb	12:49:01
2	Se 196.026†	2997.9	3395.3	2609.1 ug/L	2609.1 ppb	12:49:01
2	Si 251.611†	148855.0	166815.1	5192.7 ug/L	5192.7 ppb	12:48:41
2	Sn 189.927†	2029.1	2269.7	483.19 ug/L	483.19 ppb	12:49:01
2	Ti 334.940†	267403.7	302260.1	515.20 ug/L	515.20 ppb	12:48:41
2	Tl 190.801†	1224.3	1416.1	450.44 ug/L	450.44 ppb	12:49:01
2	U 409.014†	13041.9	18184.3	493.92 ug/L	493.92 ppb	12:48:41
2	V 292.402†	60984.4	70270.6	497.68 ug/L	497.68 ppb	12:48:41
2	Zn 213.857†	48682.7	54069.1	495.80 ug/L	495.80 ppb	12:48:41
2	SiO2†	148164.3	166031.0	11057 ug/L	11057 ppb	12:49:38
3	Sc Radial	3943.1	3943.1	92.8 %		12:48:08
3	Y RADIAL	4062.9	4062.9	92.29 %		12:48:08
3	Al 396.153Radial†	481436.5	519174.1	519350 ug/L	519350 ppb	12:47:48
3	Ca 317.933Radial†	237606.2	256134.2	477790 ug/L	477790 ppb	12:47:48
3	Fe 238.204 Radial†	16447.3	17721.1	188350 ug/L	188350 ppb	12:48:08
3	K 766.490 Radial†	28583.9	27643.5	5417.5 ug/L	5417.5 ppb	12:47:48
3	Mg 279.077 IEC†	11765.3	12680.9	489580 ug/L	489580 ppb	12:48:08
3	Na 589.592 Radial†	16177.5	17233.2	5748.3 ug/L	5748.3 ppb	12:47:48
3	Sr 421.552†	61128.7	65810.3	504.57 ug/L	504.57 ppb	12:47:48
3	Sc 361.383	760720.8	760720.8	89.496 %		12:49:07
3	Y 371.029	608232.4	608232.4	86.553 %		12:49:07
3	Ag 328.068†	40543.2	45074.2	275.15 ug/L	275.15 ppb	12:49:07
3	As 188.979†	978.5	1121.6	519.21 ug/L	519.21 ppb	12:49:27
3	B 249.677†	20217.0	23071.8	510.94 ug/L	510.94 ppb	12:49:07
3	Ba 233.527†	53601.0	59873.5	493.01 ug/L	493.01 ppb	12:49:07
3	Be 313.107†	590205.8	663819.0	244.94 ug/L	244.94 ppb	12:49:07
3	Cd 226.502†	36034.9	40460.0	454.08 ug/L	454.08 ppb	12:49:27
3	Co 228.616†	19044.6	21358.8	442.75 ug/L	442.75 ppb	12:49:27
3	Cr 267.716†	36732.7	40894.4	479.95 ug/L	479.95 ppb	12:49:07
3	Cu 324.752†	170101.9	181973.2	566.83 ug/L	566.83 ppb	12:49:07
3	Mn 257.610†	378742.5	422626.9	486.03 ug/L	486.03 ppb	12:49:07
3	Mo 202.031†	5541.1	6181.0	479.59 ug/L	479.59 ppb	12:49:27
3	Ni 231.604†	15656.8	17380.9	444.93 ug/L	444.93 ppb	12:49:27
3	P 214.914†	4278.9	4539.1	2389.6 ug/L	2389.6 ppb	12:49:27
3	Pb 220.353†	2492.4	2858.5	456.90 ug/L	456.90 ppb	12:49:27
3	S 181.975 Axial†	1850.9	2025.2	2549.5 ug/L	2549.5 ppb	12:49:27
3	Sb 206.836†	1473.8	1611.1	545.12 ug/L	545.12 ppb	12:49:27
3	Se 196.026†	3010.5	3387.2	2601.4 ug/L	2601.4 ppb	12:49:27
3	Si 251.611†	150260.4	167284.6	5207.3 ug/L	5207.3 ppb	12:49:07
3	Sn 189.927†	2051.9	2280.1	484.62 ug/L	484.62 ppb	12:49:27
3	Ti 334.940†	269479.6	302602.0	515.51 ug/L	515.51 ppb	12:49:07
3	Tl 190.801†	1236.3	1420.5	451.85 ug/L	451.85 ppb	12:49:27
3	U 409.014†	13001.1	18042.2	489.99 ug/L	489.99 ppb	12:49:07
3	V 292.402†	61601.8	70509.5	499.49 ug/L	499.49 ppb	12:49:07
3	Zn 213.857†	49001.2	54064.9	495.89 ug/L	495.89 ppb	12:49:07
3	SiO2†	147415.4	164098.4	10928 ug/L	10928 ppb	12:49:43

## Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	754467.6	88.760 %		0.8192			0.92%
Sc Radial	3928.8	92.4 %		0.32			0.35%
Y 371.029	603687.9	85.906 %		0.7088			0.83%
Y RADIAL	4041.0	91.79 %		0.435			0.47%
Ag 328.068†	45038.7	275.09 ug/L		0.304	275.09 ppb	0.304	0.11%
QC value within limits for Ag 328.068 Recovery = 110.04%							
Al 396.153Radial†	522560.8	522740 ug/L		5682.8	522740 ppb	5682.8	1.09%
QC value within limits for Al 396.153Radial Recovery = 104.55%							
As 188.979†	1136.5	525.60 ug/L		5.858	525.60 ppb	5.858	1.11%
QC value within limits for As 188.979 Recovery = 105.12%							
B 249.677†	22932.6	507.57 ug/L		3.924	507.57 ppb	3.924	0.77%
QC value within limits for B 249.677 Recovery = 101.51%							
Ba 233.527†	59853.2	492.86 ug/L		0.467	492.86 ppb	0.467	0.09%
QC value within limits for Ba 233.527 Recovery = 98.57%							
Be 313.107†	663303.3	244.75 ug/L		0.325	244.75 ppb	0.325	0.13%
QC value within limits for Be 313.107 Recovery = 97.90%							
Ca 317.933Radial†	258630.8	482440 ug/L		5807.7	482440 ppb	5807.7	1.20%

QC value within limits for Ca 317.933 Radial Recovery = 96.49%

Cd 226.502†	40696.0	456.79 ug/L	4.090	456.79 ppb	4.090	0.90%
QC value within limits for Cd 226.502 Recovery = 91.36%						
Co 228.616†	21484.2	445.37 ug/L	3.695	445.37 ppb	3.695	0.83%
QC value within limits for Co 228.616 Recovery = 89.07%						
Cr 267.716†	40911.3	480.15 ug/L	0.269	480.15 ppb	0.269	0.06%
QC value within limits for Cr 267.716 Recovery = 96.03%						
Cu 324.752†	181541.9	565.54 ug/L	1.501	565.54 ppb	1.501	0.27%
QC value within limits for Cu 324.752 Recovery = 113.11%						
Fe 238.204 Radial†	17770.7	188870 ug/L	473.8	188870 ppb	473.8	0.25%
QC value within limits for Fe 238.204 Radial Recovery = 94.44%						
K 766.490 Radial†	27862.8	5460.2 ug/L	50.34	5460.2 ppb	50.34	0.92%
QC value within limits for K 766.490 Radial Recovery = 109.20%						
Mg 279.077 IEC†	12714.5	490870 ug/L	1186.8	490870 ppb	1186.8	0.24%
QC value within limits for Mg 279.077 IEC Recovery = 98.17%						
Mn 257.610†	421983.1	485.28 ug/L	0.742	485.28 ppb	0.742	0.15%
QC value within limits for Mn 257.610 Recovery = 97.06%						
Mo 202.031†	6224.4	482.91 ug/L	4.642	482.91 ppb	4.642	0.96%
QC value within limits for Mo 202.031 Recovery = 96.58%						
Na 589.592 Radial†	17386.9	5799.6 ug/L	62.62	5799.6 ppb	62.62	1.08%
QC value within limits for Na 589.592 Radial Recovery = 115.99%						
Ni 231.604†	17454.0	446.80 ug/L	3.769	446.80 ppb	3.769	0.84%
QC value within limits for Ni 231.604 Recovery = 89.36%						
P 214.914†	4583.2	2414.8 ug/L	27.86	2414.8 ppb	27.86	1.15%
QC value within limits for P 214.914 Recovery = 96.59%						
Pb 220.353†	2869.1	458.99 ug/L	5.234	458.99 ppb	5.234	1.14%
QC value within limits for Pb 220.353 Recovery = 91.80%						
S 181.975 Axial†	2036.8	2564.1 ug/L	21.18	2564.1 ppb	21.18	0.83%
QC value within limits for S 181.975 Axial Recovery = 102.56%						
Sb 206.836†	1621.1	548.52 ug/L	3.679	548.52 ppb	3.679	0.67%
QC value within limits for Sb 206.836 Recovery = 109.70%						
Se 196.026†	3401.5	2611.6 ug/L	11.57	2611.6 ppb	11.57	0.44%
QC value within limits for Se 196.026 Recovery = 104.46%						
Si 251.611†	166854.7	5193.9 ug/L	12.87	5193.9 ppb	12.87	0.25%
QC value within limits for Si 251.611 Recovery = 103.88%						
Sn 189.927†	2291.8	487.43 ug/L	6.152	487.43 ppb	6.152	1.26%
QC value within limits for Sn 189.927 Recovery = 97.49%						
Sr 421.552†	66337.3	508.61 ug/L	5.818	508.61 ppb	5.818	1.14%
QC value within limits for Sr 421.552 Recovery = 101.72%						
Ti 334.940†	302213.7	515.40 ug/L	0.170	515.40 ppb	0.170	0.03%
QC value within limits for Ti 334.940 Recovery = 103.08%						
Tl 190.801†	1427.9	454.14 ug/L	5.231	454.14 ppb	5.231	1.15%
QC value within limits for Tl 190.801 Recovery = 90.83%						
U 409.014†	18080.7	491.02 ug/L	2.545	491.02 ppb	2.545	0.52%
QC value within limits for U 409.014 Recovery = 98.20%						
V 292.402†	70364.6	498.44 ug/L	0.941	498.44 ppb	0.941	0.19%
QC value within limits for V 292.402 Recovery = 99.69%						
Zn 213.857†	53968.9	494.86 ug/L	1.698	494.86 ppb	1.698	0.34%
QC value within limits for Zn 213.857 Recovery = 98.97%						
SiO2†	166407.7	11082 ug/L	167.8	11082 ppb	167.8	1.51%
QC value within limits for SiO2 Recovery = 103.62%						

All analyte(s) passed QC.

Sequence No.: 11  
 Sample ID: LR1  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 15  
 Date Collected: 2/16/2010 12:51:54  
 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	3836.6	3836.6	90.3 %		12:53:52
1	Y RADIAL	3980.0	3980.0	90.41 %		12:53:52
1	Al 396.153Radial†	469696.5	520578.6	520780 ug/L	520780 ppb	12:53:47
1	Ca 317.933Radial†	231182.0	256129.3	477780 ug/L	477780 ppb	12:53:47
1	Fe 238.204 Radial†	37815.0	41888.6	445180 ug/L	445180 ppb	12:53:52
1	K 766.490 Radial†	2794.4	-75.4	-378.53 ug/L	-378.53 ppb	12:53:47
1	Mg 279.077 IEC†	11166.5	12369.7	477280 ug/L	477280 ppb	12:53:52
1	Na 589.592 Radial†	1412072.0	1564356.4	521810 ug/L	521810 ppb	12:53:47
1	Sr 421.552†	714.3	701.6	1.8499 ug/L	1.8499 ppb	12:53:52
1	Sc 361.383	724699.9	724699.9	85.258 %		12:54:21
1	Y 371.029	581705.7	581705.7	82.778 %		12:54:21
1	Ag 328.068†	-21851.5	-25857.5	8.9483 ug/L	8.9483 ppb	12:54:21
1	As 188.979†	-193.6	-198.8	20.610 ug/L	20.610 ppb	12:54:41
1	B 249.677†	1394.1	2117.1	-22.512 ug/L	-22.512 ppb	12:54:21
1	Ba 233.527†	-1136.9	-1352.3	2.6304 ug/L	2.6304 ppb	12:54:41
1	Be 313.107†	-9927.8	-7305.3	-2.7176 ug/L	-2.7176 ppb	12:54:21
1	Cd 226.502†	3273.5	4035.0	3.7857 ug/L	3.7857 ppb	12:54:41
1	Co 228.616†	297.3	427.6	2.4153 ug/L	2.4153 ppb	12:54:41
1	Cr 267.716†	189.0	72.0	4.2850 ug/L	4.2850 ppb	12:54:41
1	Cu 324.752†	2279.8	-5420.1	-0.3589 ug/L	-0.3589 ppb	12:54:21
1	Mn 257.610†	-20496.1	-24609.9	-3.9503 ug/L	-3.9503 ppb	12:54:21
1	Mo 202.031†	-472.4	-564.5	-1.7055 ug/L	-1.7055 ppb	12:54:41
1	Ni 231.604†	345.5	291.7	7.4662 ug/L	7.4662 ppb	12:54:41
1	P 214.914†	622.1	487.7	44.432 ug/L	44.432 ppb	12:54:41
1	Pb 220.353†	-580.4	-607.2	2.4255 ug/L	2.4255 ppb	12:54:41
1	S 181.975 Axial†	115.8	92.9	23.862 ug/L	23.862 ppb	12:54:41
1	Sb 206.836†	100.6	82.3	6.8584 ug/L	6.8584 ppb	12:54:41
1	Se 196.026†	-2080.6	-2417.0	41.476 ug/L	41.476 ppb	12:54:41
1	Si 251.611†	-163.0	-803.5	-24.521 ug/L	-24.521 ppb	12:54:41
1	Sn 189.927†	-379.6	-457.9	-2.0082 ug/L	-2.0082 ppb	12:54:41
1	Ti 334.940†	-9212.4	-9312.4	4.1124 ug/L	4.1124 ppb	12:54:21
1	Tl 190.801†	-87.6	-63.6	-20.434 ug/L	-20.434 ppb	12:54:41
1	U 409.014†	394240.2	465923.9	13185 ug/L	13185 ppb	12:54:21
1	V 292.402†	2097.1	4137.0	-0.8928 ug/L	-0.8928 ppb	12:54:41
1	Zn 213.857†	5731.6	6034.9	-7.7457 ug/L	-7.7457 ppb	12:54:41
1	SiO2†	-374.1	-1058.3	-69.416 ug/L	-69.416 ppb	12:55:38
2	Sc Radial	3797.7	3797.7	89.3 %		12:54:03
2	Y RADIAL	3955.5	3955.5	89.85 %		12:54:03
2	Al 396.153Radial†	471940.9	528418.0	528630 ug/L	528630 ppb	12:53:58
2	Ca 317.933Radial†	232240.7	259936.3	484880 ug/L	484880 ppb	12:53:58
2	Fe 238.204 Radial†	37836.1	42341.2	449980 ug/L	449980 ppb	12:54:03
2	K 766.490 Radial†	2912.2	88.2	-350.87 ug/L	-350.87 ppb	12:53:58
2	Mg 279.077 IEC†	11113.7	12437.3	479890 ug/L	479890 ppb	12:54:03
2	Na 589.592 Radial†	1418206.5	1587238.3	529440 ug/L	529440 ppb	12:53:58
2	Sr 421.552†	685.9	678.0	1.6142 ug/L	1.6142 ppb	12:54:03
2	Sc 361.383	735668.9	735668.9	86.548 %		12:54:46
2	Y 371.029	590847.9	590847.9	84.079 %		12:54:46
2	Ag 328.068†	-21869.6	-25496.3	12.220 ug/L	12.220 ppb	12:54:46
2	As 188.979†	-213.8	-218.7	13.321 ug/L	13.321 ppb	12:55:06
2	B 249.677†	1485.7	2198.5	-21.372 ug/L	-21.372 ppb	12:54:46
2	Ba 233.527†	-1752.5	-2043.7	-2.8403 ug/L	-2.8403 ppb	12:55:06
2	Be 313.107†	-9849.9	-7041.6	-2.6235 ug/L	-2.6235 ppb	12:54:46
2	Cd 226.502†	3082.2	3756.8	0.0299 ug/L	0.0299 ppb	12:55:06
2	Co 228.616†	217.5	330.1	0.3170 ug/L	0.3170 ppb	12:55:06
2	Cr 267.716†	66.2	-73.2	2.6949 ug/L	2.6949 ppb	12:55:06
2	Cu 324.752†	2993.8	-4635.0	2.3095 ug/L	2.3095 ppb	12:54:46
2	Mn 257.610†	-21000.5	-24834.2	-3.8406 ug/L	-3.8406 ppb	12:54:46
2	Mo 202.031†	-464.0	-546.5	0.0900 ug/L	0.0900 ppb	12:55:06
2	Ni 231.604†	298.5	231.4	5.9235 ug/L	5.9235 ppb	12:55:06

2	P 214.914†	604.2	456.1	24.523 ug/L	24.523 ppb	12:55:06
2	Pb 220.353†	-581.4	-598.2	4.8898 ug/L	4.8898 ppb	12:55:06
2	S 181.975 Axial†	84.9	55.1	-27.020 ug/L	-27.020 ppb	12:55:06
2	Sb 206.836†	74.4	50.3	-4.2099 ug/L	-4.2099 ppb	12:55:06
2	Se 196.026†	-2105.5	-2409.4	61.721 ug/L	61.721 ppb	12:55:06
2	Si 251.611†	-431.3	-1110.7	-34.111 ug/L	-34.111 ppb	12:55:06
2	Sn 189.927†	-381.6	-453.5	-0.0677 ug/L	-0.0677 ppb	12:55:06
2	Ti 334.940†	-9991.4	-10051.4	3.6592 ug/L	3.6592 ppb	12:54:46
2	Tl 190.801†	-99.5	-75.9	-24.304 ug/L	-24.304 ppb	12:55:06
2	U 409.014†	399656.7	465287.8	13166 ug/L	13166 ppb	12:54:46
2	V 292.402†	1976.4	3960.9	-2.8323 ug/L	-2.8323 ppb	12:55:06
2	Zn 213.857†	5650.6	5841.1	-10.351 ug/L	-10.351 ppb	12:55:06
2	SiO2†	-419.8	-1104.6	-72.541 ug/L	-72.541 ppb	12:55:43
3	Sc Radial	3792.8	3792.8	89.2 %		12:54:13
3	Y RADIAL	3932.5	3932.5	89.33 %		12:54:13
3	Al 396.153Radial†	469630.3	526516.8	526720 ug/L	526720 ppb	12:54:08
3	Ca 317.933Radial†	230940.4	258817.7	482790 ug/L	482790 ppb	12:54:08
3	Fe 238.204 Radial†	37445.3	41958.4	445920 ug/L	445920 ppb	12:54:13
3	K 766.490 Radial†	2836.5	7.5	-366.44 ug/L	-366.44 ppb	12:54:08
3	Mg 279.077 IEC†	11077.1	12412.4	478930 ug/L	478930 ppb	12:54:13
3	Na 589.592 Radial†	1416277.7	1587145.2	529410 ug/L	529410 ppb	12:54:08
3	Sr 421.552†	673.9	665.4	1.5330 ug/L	1.5330 ppb	12:54:13
3	Sc 361.383	735730.7	735730.7	86.556 %		12:55:12
3	Y 371.029	591133.5	591133.5	84.120 %		12:55:12
3	Ag 328.068†	-22273.9	-25961.3	8.6600 ug/L	8.6600 ppb	12:55:12
3	As 188.979†	-211.4	-216.0	13.562 ug/L	13.562 ppb	12:55:32
3	B 249.677†	1446.1	2152.6	-21.792 ug/L	-21.792 ppb	12:55:12
3	Ba 233.527†	-1776.2	-2070.9	-3.1843 ug/L	-3.1843 ppb	12:55:32
3	Be 313.107†	-9980.3	-7191.4	-2.6721 ug/L	-2.6721 ppb	12:55:12
3	Cd 226.502†	3144.8	3828.8	1.2878 ug/L	1.2878 ppb	12:55:32
3	Co 228.616†	207.6	318.7	0.1279 ug/L	0.1279 ppb	12:55:32
3	Cr 267.716†	76.0	-61.9	2.7559 ug/L	2.7559 ppb	12:55:32
3	Cu 324.752†	2087.9	-5681.9	-1.0996 ug/L	-1.0996 ppb	12:55:12
3	Mn 257.610†	-21234.7	-25102.7	-4.5129 ug/L	-4.5129 ppb	12:55:12
3	Mo 202.031†	-479.6	-564.6	-1.5926 ug/L	-1.5926 ppb	12:55:32
3	Ni 231.604†	278.6	208.4	5.3341 ug/L	5.3341 ppb	12:55:32
3	P 214.914†	617.4	471.3	36.335 ug/L	36.335 ppb	12:55:32
3	Pb 220.353†	-615.0	-636.9	0.0387 ug/L	0.0387 ppb	12:55:32
3	S 181.975 Axial†	86.5	57.0	-24.246 ug/L	-24.246 ppb	12:55:32
3	Sb 206.836†	54.7	27.5	-11.901 ug/L	-11.901 ppb	12:55:32
3	Se 196.026†	-2103.9	-2407.4	49.688 ug/L	49.688 ppb	12:55:32
3	Si 251.611†	-405.0	-1080.3	-33.147 ug/L	-33.147 ppb	12:55:32
3	Sn 189.927†	-398.8	-473.4	-4.0165 ug/L	-4.0165 ppb	12:55:32
3	Ti 334.940†	-8491.7	-8317.7	6.2845 ug/L	6.2845 ppb	12:55:12
3	Tl 190.801†	-95.4	-71.1	-22.783 ug/L	-22.783 ppb	12:55:32
3	U 409.014†	399064.1	464564.3	13146 ug/L	13146 ppb	12:55:12
3	V 292.402†	2011.5	4001.3	-2.0272 ug/L	-2.0272 ppb	12:55:32
3	Zn 213.857†	5696.0	5893.0	-9.2270 ug/L	-9.2270 ppb	12:55:32
3	SiO2†	-471.7	-1164.5	-76.497 ug/L	-76.497 ppb	12:55:48

## Mean Data: LR1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	732033.2	86.121 %		0.7472			0.87%
Sc Radial	3809.0	89.6 %		0.56			0.63%
Y 371.029	587895.7	83.659 %		0.7631			0.91%
Y RADIAL	3956.0	89.86 %		0.539			0.60%
Ag 328.068†	-25771.7	9.9426 ug/L		1.97719	9.9426 ppb	1.97719	19.89%
Al 396.153Radial†	525171.1	525380 ug/L		4090.8	525380 ppb	4090.8	0.78%
QC value within limits for Al 396.153Radial Recovery = 105.08%							
As 188.979†	-211.2	15.831 ug/L		4.1408	15.831 ppb	4.1408	26.16%
B 249.677†	2156.1	-21.892 ug/L		0.5768	-21.892 ppb	0.5768	2.63%
Ba 233.527†	-1822.3	-1.1314 ug/L		3.26234	-1.1314 ppb	3.26234	288.35%
Be 313.107†	-7179.4	-2.6711 ug/L		0.04707	-2.6711 ppb	0.04707	1.76%
Ca 317.933Radial†	258294.4	481820 ug/L		3650.0	481820 ppb	3650.0	0.76%
QC value within limits for Ca 317.933Radial Recovery = 96.36%							
Cd 226.502†	3873.5	1.7012 ug/L		1.91170	1.7012 ppb	1.91170	112.38%
Co 228.616†	358.8	0.9534 ug/L		1.26959	0.9534 ppb	1.26959	133.16%
Cr 267.716†	-21.0	3.2453 ug/L		0.90098	3.2453 ppb	0.90098	27.76%
Cu 324.752†	-5245.7	0.2837 ug/L		1.79306	0.2837 ppb	1.79306	632.12%

Fe 238.204 Radial†	42062.7	447030 ug/L	2589.6	447030 ppb	2589.6	0.58%
QC value less than the lower limit for Fe 238.204 Radial Recovery = 89.41%						
K 766.490 Radial†	6.7	-365.28 ug/L	13.871	-365.28 ppb	13.871	3.80%
Mg 279.077 IEC†	12406.5	478700 ug/L	1317.5	478700 ppb	1317.5	0.28%
QC value within limits for Mg 279.077 IEC Recovery = 95.74%						
Mn 257.610†	-24848.9	-4.1013 ug/L	0.36070	-4.1013 ppb	0.36070	8.79%
Mo 202.031†	-558.6	-1.0694 ug/L	1.00566	-1.0694 ppb	1.00566	94.04%
Na 589.592 Radial†	1579579.9	526890 ug/L	4397.7	526890 ppb	4397.7	0.83%
QC value within limits for Na 589.592 Radial Recovery = 105.38%						
Ni 231.604†	243.8	6.2413 ug/L	1.10101	6.2413 ppb	1.10101	17.64%
P 214.914†	471.7	35.097 ug/L	10.0119	35.097 ppb	10.0119	28.53%
Pb 220.353†	-614.1	2.4513 ug/L	2.42568	2.4513 ppb	2.42568	98.95%
S 181.975 Axial†	68.3	-9.1349 ug/L	28.60948	-9.1349 ppb	28.60948	313.19%
Sb 206.836†	53.4	-3.0842 ug/L	9.43026	-3.0842 ppb	9.43026	305.76%
Se 196.026†	-2411.3	50.962 ug/L	10.1825	50.962 ppb	10.1825	19.98%
Si 251.611†	-998.1	-30.593 ug/L	5.2804	-30.593 ppb	5.2804	17.26%
Sn 189.927†	-461.6	-2.0308 ug/L	1.97448	-2.0308 ppb	1.97448	97.23%
Sr 421.552†	681.7	1.6657 ug/L	0.16461	1.6657 ppb	0.16461	9.88%
Ti 334.940†	-9227.2	4.6854 ug/L	1.40327	4.6854 ppb	1.40327	29.95%
Tl 190.801†	-70.2	-22.507 ug/L	1.9496	-22.507 ppb	1.9496	8.66%
U 409.014†	465258.7	13166 ug/L	19.4	13166 ppb	19.4	0.15%
QC value less than the lower limit for U 409.014 Recovery = 87.77%						
V 292.402†	4033.0	-1.9174 ug/L	0.97437	-1.9174 ppb	0.97437	50.82%
Zn 213.857†	5923.0	-9.1078 ug/L	1.30655	-9.1078 ppb	1.30655	14.35%
SiO2†	-1109.1	-72.818 ug/L	3.5488	-72.818 ppb	3.5488	4.87%

QC Failed. Continue with analysis.

Sequence No.: 12

Sample ID: LR2

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 16

Date Collected: 2/16/2010 12:57:57

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	4043.8	4043.8	95.1 %		13:00:15
1	Y RADIAL	4406.9	4406.9	100.1 %		12:59:55
1	Al 396.153Radial†	335.3	511.5	53.469 ug/L	53.469 ppb	12:59:55
1	Ca 317.933Radial†	32.5	15.8	29.491 ug/L	29.491 ppb	13:00:15
1	Fe 238.204 Radial†	-12.6	-23.3	26.099 ug/L	26.099 ppb	13:00:15
1	K 766.490 Radial†	1473623.2	1545923.4	312050 ug/L	312050 ppb	12:59:50
1	Mg 279.077 IEC†	-0.8	-3.6	-38.405 ug/L	-38.405 ppb	13:00:15
1	Na 589.592 Radial†	317.3	126.5	42.182 ug/L	42.182 ppb	12:59:55
1	Sr 421.552†	1230116.8	1293027.5	9983.8 ug/L	9983.8 ppb	12:59:50
1	Sc 361.383	813914.2	813914.2	95.754 %		13:01:33
1	Y 371.029	653226.7	653226.7	92.956 %		13:01:33
1	Ag 328.068†	-7054.5	-7595.0	3.1080 ug/L	3.1080 ppb	13:01:38
1	As 188.979†	21370.4	22346.4	9466.5 ug/L	9466.5 ppb	13:01:38
1	B 249.677†	197564.0	206807.3	4839.3 ug/L	4839.3 ppb	13:01:33
1	Ba 233.527†	1590638.8	1661159.8	13510 ug/L	13510 ppb	13:01:33
1	Be 313.107†	7362987.9	7693852.4	2848.7 ug/L	2848.7 ppb	13:01:26
1	Cd 226.502†	774676.2	809226.2	9469.3 ug/L	9469.3 ppb	13:01:33
1	Co 228.616†	419606.5	438293.6	9137.1 ug/L	9137.1 ppb	13:01:38
1	Cr 267.716†	1929296.4	2014705.0	23453 ug/L	23453 ppb	13:01:33
1	Cu 324.752†	6350103.3	6623616.4	20280 ug/L	20280 ppb	13:01:26
1	Mn 257.610†	7853884.8	8201610.2	9459.6 ug/L	9459.6 ppb	13:01:26
1	Mo 202.031†	121770.7	127160.4	9448.8 ug/L	9448.8 ppb	13:01:38
1	Ni 231.604†	347364.8	362655.8	9283.6 ug/L	9283.6 ppb	13:01:38
1	P 214.914†	30691.2	31810.3	13716 ug/L	13716 ppb	13:01:38
1	Pb 220.353†	184431.9	192684.4	23881 ug/L	23881 ppb	13:01:38
1	S 181.975 Axial†	37197.7	38804.4	50716 ug/L	50716 ppb	13:01:38
1	Sb 206.836†	29846.2	31134.1	10888 ug/L	10888 ppb	13:01:38
1	Se 196.026†	16395.1	17145.5	10030 ug/L	10030 ppb	13:01:38
1	Si 251.611†	1441062.2	1504356.5	46763 ug/L	46763 ppb	13:01:33
1	Sn 189.927†	53366.0	55720.0	9991.2 ug/L	9991.2 ppb	13:01:38
1	Ti 334.940†	5900732.9	6163904.8	10010 ug/L	10010 ppb	13:01:26
1	Tl 190.801†	28768.7	30083.6	9564.7 ug/L	9564.7 ppb	13:01:38
1	U 409.014†	-2245.3	1170.2	-19.182 ug/L	-19.182 ppb	13:01:38
1	V 292.402†	1295811.7	1354954.1	9928.0 ug/L	9928.0 ppb	13:01:33
1	Zn 213.857†	1355698.6	1415131.8	13725 ug/L	13725 ppb	13:01:33
1	SiO2†	1463609.2	1527896.1	101610 ug/L	101610 ppb	13:02:24
2	Sc Radial	4008.7	4008.7	94.3 %		13:00:46
2	Y RADIAL	4438.8	4438.8	100.8 %		13:00:26
2	Al 396.153Radial†	375.3	557.0	100.00 ug/L	100.00 ppb	13:00:26
2	Ca 317.933Radial†	39.6	23.6	44.085 ug/L	44.085 ppb	13:00:46
2	Fe 238.204 Radial†	-9.1	-19.7	63.476 ug/L	63.476 ppb	13:00:46
2	K 766.490 Radial†	1438906.2	1522677.5	307360 ug/L	307360 ppb	13:00:21
2	Mg 279.077 IEC†	-1.1	-3.9	-51.414 ug/L	-51.414 ppb	13:00:46
2	Na 589.592 Radial†	489.8	312.3	104.17 ug/L	104.17 ppb	13:00:26
2	Sr 421.552†	1194313.0	1266387.1	9778.1 ug/L	9778.1 ppb	13:00:21
2	Sc 361.383	817881.6	817881.6	96.220 %		13:01:52
2	Y 371.029	657254.2	657254.2	93.529 %		13:01:52
2	Ag 328.068†	-7090.9	-7597.2	3.0124 ug/L	3.0124 ppb	13:01:58
2	As 188.979†	21452.5	22323.4	9454.9 ug/L	9454.9 ppb	13:01:58
2	B 249.677†	198314.1	206585.9	4834.2 ug/L	4834.2 ppb	13:01:52
2	Ba 233.527†	1591672.2	1654175.7	13453 ug/L	13453 ppb	13:01:52
2	Be 313.107†	7214029.2	7501741.9	2777.7 ug/L	2777.7 ppb	13:01:46
2	Cd 226.502†	774004.0	804603.1	9415.2 ug/L	9415.2 ppb	13:01:52
2	Co 228.616†	420007.4	436584.6	9102.0 ug/L	9102.0 ppb	13:01:58
2	Cr 267.716†	1930309.1	2005983.7	23352 ug/L	23352 ppb	13:01:52
2	Cu 324.752†	6227198.6	6463714.6	19790 ug/L	19790 ppb	13:01:46
2	Mn 257.610†	7704138.5	8006194.3	9234.2 ug/L	9234.2 ppb	13:01:46
2	Mo 202.031†	122093.3	126878.8	9427.9 ug/L	9427.9 ppb	13:01:58
2	Ni 231.604†	348181.3	361744.7	9260.3 ug/L	9260.3 ppb	13:01:58

2	P 214.914†	30684.7	31648.0	13723 ug/L	13723 ppb	13:01:58
2	Pb 220.353†	184604.3	191929.3	23788 ug/L	23788 ppb	13:01:58
2	S 181.975 Axial†	37393.6	38819.6	50735 ug/L	50735 ppb	13:01:58
2	Sb 206.836†	29820.1	30955.8	10828 ug/L	10828 ppb	13:01:58
2	Se 196.026†	16343.4	17008.7	9950.6 ug/L	9950.6 ppb	13:01:58
2	Si 251.611†	1445712.8	1501889.4	46687 ug/L	46687 ppb	13:01:52
2	Sn 189.927†	53403.3	55488.4	9949.6 ug/L	9949.6 ppb	13:01:58
2	Ti 334.940†	5792570.6	6021600.9	9778.6 ug/L	9778.6 ppb	13:01:46
2	Tl 190.801†	28856.5	30029.1	9544.7 ug/L	9544.7 ppb	13:01:58
2	U 409.014†	-2402.6	1018.2	-23.279 ug/L	-23.279 ppb	13:01:58
2	V 292.402†	1298788.8	1351483.7	9902.9 ug/L	9902.9 ppb	13:01:52
2	Zn 213.857†	1355926.1	1408500.3	13661 ug/L	13661 ppb	13:01:52
2	SiO2†	1471208.8	1528379.6	101650 ug/L	101650 ppb	13:02:30
3	Sc Radial	4019.5	4019.5	94.6 %		13:01:16
3	Y RADIAL	4196.1	4196.1	95.32 %		13:00:56
3	Al 396.153Radial†	295.0	471.0	7.4518 ug/L	7.4518 ppb	13:00:56
3	Ca 317.933Radial†	36.4	20.2	37.657 ug/L	37.657 ppb	13:01:16
3	Fe 238.204 Radial†	-13.3	-24.2	19.639 ug/L	19.639 ppb	13:01:16
3	K 766.490 Radial†	1447545.7	1527693.5	308370 ug/L	308370 ppb	13:00:51
3	Mg 279.077 IEC†	-3.4	-6.3	-144.01 ug/L	-144.01 ppb	13:01:16
3	Na 589.592 Radial†	264.3	72.4	24.148 ug/L	24.148 ppb	13:00:56
3	Sr 421.552†	1202398.1	1271517.2	9817.8 ug/L	9817.8 ppb	13:00:51
3	Sc 361.383	802890.7	802890.7	94.457 %		13:02:12
3	Y 371.029	646897.6	646897.6	92.055 %		13:02:12
3	Ag 328.068†	-7142.1	-7788.9	2.0126 ug/L	2.0126 ppb	13:02:17
3	As 188.979†	21323.7	22603.4	9575.0 ug/L	9575.0 ppb	13:02:17
3	B 249.677†	193145.1	204961.8	4795.6 ug/L	4795.6 ppb	13:02:12
3	Ba 233.527†	1559424.2	1650921.0	13426 ug/L	13426 ppb	13:02:12
3	Be 313.107†	7312694.9	7746183.8	2868.1 ug/L	2868.1 ppb	13:02:06
3	Cd 226.502†	757654.1	802312.9	9388.5 ug/L	9388.5 ppb	13:02:12
3	Co 228.616†	418639.4	443286.3	9241.4 ug/L	9241.4 ppb	13:02:17
3	Cr 267.716†	1894834.5	2005884.3	23350 ug/L	23350 ppb	13:02:12
3	Cu 324.752†	6309777.0	6671975.8	20428 ug/L	20428 ppb	13:02:06
3	Mn 257.610†	7785976.9	8242331.7	9506.6 ug/L	9506.6 ppb	13:02:06
3	Mo 202.031†	121562.1	128685.6	9562.1 ug/L	9562.1 ppb	13:02:17
3	Ni 231.604†	347180.8	367441.8	9406.1 ug/L	9406.1 ppb	13:02:17
3	P 214.914†	30616.6	32171.4	13889 ug/L	13889 ppb	13:02:17
3	Pb 220.353†	184110.0	194988.1	24167 ug/L	24167 ppb	13:02:17
3	S 181.975 Axial†	37114.8	39250.0	51298 ug/L	51298 ppb	13:02:17
3	Sb 206.836†	29665.5	31370.7	10973 ug/L	10973 ppb	13:02:17
3	Se 196.026†	16299.9	17279.8	10109 ug/L	10109 ppb	13:02:17
3	Si 251.611†	1409269.2	1491360.7	46357 ug/L	46357 ppb	13:02:12
3	Sn 189.927†	53317.8	56434.1	10119 ug/L	10119 ppb	13:02:17
3	Ti 334.940†	5863417.3	6209008.3	10083 ug/L	10083 ppb	13:02:06
3	Tl 190.801†	28780.9	30509.0	9699.5 ug/L	9699.5 ppb	13:02:17
3	U 409.014†	-2270.1	1111.9	-20.609 ug/L	-20.609 ppb	13:02:17
3	V 292.402†	1273023.0	1349408.4	9889.4 ug/L	9889.4 ppb	13:02:12
3	Zn 213.857†	1327845.6	1405083.2	13626 ug/L	13626 ppb	13:02:12
3	SiO2†	1468763.4	1554339.1	103370 ug/L	103370 ppb	13:02:35

## Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	811562.2	95.477 %	0.9138			0.96%
Sc Radial	4024.0	94.7 %	0.42			0.45%
Y 371.029	652459.5	92.847 %	0.7429			0.80%
Y RADIAL	4347.3	98.75 %	2.996			3.03%
Ag 328.068†	-7660.4	2.7110 ug/L	0.60675	2.7110 ppb	0.60675	22.38%
Al 396.153Radial†	513.2	53.641 ug/L	46.2750	53.641 ppb	46.2750	86.27%
As 188.979†	22424.4	9498.8 ug/L	66.23	9498.8 ppb	66.23	0.70%
QC value within limits for As 188.979 Recovery = 94.99%						
B 249.677†	206118.3	4823.1 ug/L	23.90	4823.1 ppb	23.90	0.50%
QC value within limits for B 249.677 Recovery = 96.46%						
Ba 233.527†	1655418.9	13463 ug/L	42.5	13463 ppb	42.5	0.32%
QC value less than the lower limit for Ba 233.527 Recovery = 89.75%						
Be 313.107†	7647259.4	2831.5 ug/L	47.64	2831.5 ppb	47.64	1.68%
QC value within limits for Be 313.107 Recovery = 94.38%						
Ca 317.933Radial†	19.9	37.078 ug/L	7.3141	37.078 ppb	7.3141	19.73%
Cd 226.502†	805380.7	9424.3 ug/L	41.15	9424.3 ppb	41.15	0.44%
QC value within limits for Cd 226.502 Recovery = 94.24%						



Co 228.616†	439388.2	9160.2 ug/L	72.50	9160.2 ppb	72.50	0.79%
QC value within limits for Co 228.616 Recovery = 91.60%						
Cr 267.716†	2008857.6	23385 ug/L	58.9	23385 ppb	58.9	0.25%
QC value within limits for Cr 267.716 Recovery = 93.54%						
Cu 324.752†	6586435.6	20166 ug/L	333.7	20166 ppb	333.7	1.65%
QC value within limits for Cu 324.752 Recovery = 100.83%						
Fe 238.204 Radial†	-22.4	36.405 ug/L	23.6659	36.405 ppb	23.6659	65.01%
K 766.490 Radial†	1532098.1	309260 ug/L	2469.4	309260 ppb	2469.4	0.80%
QC value within limits for K 766.490 Radial Recovery = 103.09%						
Mg 279.077 IEC†	-4.6	-77.942 ug/L	57.5819	-77.942 ppb	57.5819	73.88%
Mn 257.610†	8150045.4	9400.1 ug/L	145.59	9400.1 ppb	145.59	1.55%
QC value within limits for Mn 257.610 Recovery = 94.00%						
Mo 202.031†	127574.9	9479.6 ug/L	72.23	9479.6 ppb	72.23	0.76%
QC value within limits for Mo 202.031 Recovery = 94.80%						
Na 589.592 Radial†	170.4	56.834 ug/L	41.9759	56.834 ppb	41.9759	73.86%
Ni 231.604†	363947.4	9316.7 ug/L	78.34	9316.7 ppb	78.34	0.84%
QC value within limits for Ni 231.604 Recovery = 93.17%						
P 214.914†	31876.6	13776 ug/L	97.5	13776 ppb	97.5	0.71%
QC value within limits for P 214.914 Recovery = 91.84%						
Pb 220.353†	193200.6	23945 ug/L	197.4	23945 ppb	197.4	0.82%
QC value within limits for Pb 220.353 Recovery = 95.78%						
S 181.975 Axial†	38958.0	50916 ug/L	330.6	50916 ppb	330.6	0.65%
QC value within limits for S 181.975 Axial Recovery = 101.83%						
Sb 206.836†	31153.6	10896 ug/L	72.8	10896 ppb	72.8	0.67%
QC value within limits for Sb 206.836 Recovery = 108.96%						
Se 196.026†	17144.7	10030 ug/L	79.2	10030 ppb	79.2	0.79%
QC value within limits for Se 196.026 Recovery = 100.30%						
Si 251.611†	1499202.2	46602 ug/L	215.9	46602 ppb	215.9	0.46%
QC value within limits for Si 251.611 Recovery = 93.20%						
Sn 189.927†	55880.9	10020 ug/L	88.4	10020 ppb	88.4	0.88%
QC value within limits for Sn 189.927 Recovery = 100.20%						
Sr 421.552†	1276977.3	9859.9 ug/L	109.14	9859.9 ppb	109.14	1.11%
QC value within limits for Sr 421.552 Recovery = 98.60%						
Ti 334.940†	6131504.7	9957.3 ug/L	158.98	9957.3 ppb	158.98	1.60%
QC value within limits for Ti 334.940 Recovery = 99.57%						
Tl 190.801†	30207.3	9603.0 ug/L	84.15	9603.0 ppb	84.15	0.88%
QC value within limits for Tl 190.801 Recovery = 96.03%						
U 409.014†	1100.1	-21.023 ug/L	2.0797	-21.023 ppb	2.0797	9.89%
V 292.402†	1351948.7	9906.8 ug/L	19.60	9906.8 ppb	19.60	0.20%
QC value within limits for V 292.402 Recovery = 99.07%						
Zn 213.857†	1409571.8	13671 ug/L	50.2	13671 ppb	50.2	0.37%
QC value within limits for Zn 213.857 Recovery = 91.14%						
SiO2†	1536871.6	102210 ug/L	1006.8	102210 ppb	1006.8	0.99%
QC value within limits for SiO2 Recovery = 95.52%						
QC Failed. Continue with analysis.						

Sequence No.: 13  
 Sample ID: CCV  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 7  
 Date Collected: 2/16/2010 13:04:46  
 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	4278.5	4278.5	101 %		13:06:38
1	Y RADIAL	4403.6	4403.6	100.0 %		13:06:38
1	Al 396.153Radial†	4944.4	5071.5	5049.1 ug/L	5049.1 ppb	13:06:38
1	Ca 317.933Radial†	2656.4	2620.9	4888.9 ug/L	4888.9 ppb	13:06:58
1	Fe 238.204 Radial†	479.4	466.3	4970.2 ug/L	4970.2 ppb	13:06:58
1	K 766.490 Radial†	29176.4	25816.3	5205.1 ug/L	5205.1 ppb	13:06:38
1	Mg 279.077 IEC†	134.8	131.2	5067.6 ug/L	5067.6 ppb	13:06:58
1	Na 589.592 Radial†	30434.4	30030.7	10017 ug/L	10017 ppb	13:06:38
1	Sr 421.552†	65572.1	65058.7	502.30 ug/L	502.30 ppb	13:06:38
1	Sc 361.383	847466.4	847466.4	99.701 %		13:07:57
1	Y 371.029	687946.7	687946.7	97.897 %		13:07:57
1	Ag 328.068†	102102.1	102180.7	493.82 ug/L	493.82 ppb	13:07:57
1	As 188.979†	1192.4	1224.3	519.47 ug/L	519.47 ppb	13:08:17
1	B 249.677†	21239.3	21784.9	510.29 ug/L	510.29 ppb	13:07:57
1	Ba 233.527†	60936.7	61100.7	497.35 ug/L	497.35 ppb	13:07:57
1	Be 313.107†	1333863.2	1342203.9	494.14 ug/L	494.14 ppb	13:07:57
1	Cd 226.502†	41617.2	41937.5	490.32 ug/L	490.32 ppb	13:08:17
1	Co 228.616†	23690.5	23840.4	497.22 ug/L	497.22 ppb	13:08:17
1	Cr 267.716†	42278.1	42255.3	492.20 ug/L	492.20 ppb	13:07:57
1	Cu 324.752†	167644.5	160053.4	490.04 ug/L	490.04 ppb	13:07:57
1	Mn 257.610†	432221.0	432947.9	499.64 ug/L	499.64 ppb	13:07:57
1	Mo 202.031†	6756.6	6766.4	503.23 ug/L	503.23 ppb	13:08:17
1	Ni 231.604†	19428.0	19372.8	495.92 ug/L	495.92 ppb	13:08:17
1	P 214.914†	4730.4	4502.6	2403.0 ug/L	2403.0 ppb	13:08:17
1	Pb 220.353†	3993.2	4078.7	506.93 ug/L	506.93 ppb	13:08:17
1	S 181.975 Axial†	815.2	774.7	1011.6 ug/L	1011.6 ppb	13:08:17
1	Sb 206.836†	1533.6	1502.5	526.63 ug/L	526.63 ppb	13:08:17
1	Se 196.026†	836.6	862.4	520.78 ug/L	520.78 ppb	13:08:17
1	Si 251.611†	79978.3	79606.0	2474.5 ug/L	2474.5 ppb	13:07:57
1	Sn 189.927†	2829.2	2825.1	507.39 ug/L	507.39 ppb	13:08:17
1	Ti 334.940†	308044.0	310461.0	504.46 ug/L	504.46 ppb	13:07:57
1	Tl 190.801†	1554.0	1597.8	507.75 ug/L	507.75 ppb	13:08:17
1	U 409.014†	13087.9	16642.3	471.09 ug/L	471.09 ppb	13:07:57
1	V 292.402†	65731.9	67606.4	496.33 ug/L	496.33 ppb	13:07:57
1	Zn 213.857†	51328.9	50795.1	491.19 ug/L	491.19 ppb	13:07:57
1	SiO2†	81049.1	80672.8	5365.0 ug/L	5365.0 ppb	13:09:17
2	Sc Radial	4172.0	4172.0	98.1 %		13:07:03
2	Y RADIAL	4288.0	4288.0	97.41 %		13:07:03
2	Al 396.153Radial†	4910.2	5162.0	5140.0 ug/L	5140.0 ppb	13:07:03
2	Ca 317.933Radial†	2675.9	2708.1	5051.7 ug/L	5051.7 ppb	13:07:23
2	Fe 238.204 Radial†	476.6	475.6	5069.0 ug/L	5069.0 ppb	13:07:23
2	K 766.490 Radial†	28880.8	26255.0	5293.5 ug/L	5293.5 ppb	13:07:03
2	Mg 279.077 IEC†	134.2	134.0	5176.9 ug/L	5176.9 ppb	13:07:23
2	Na 589.592 Radial†	30366.0	30732.8	10251 ug/L	10251 ppb	13:07:03
2	Sr 421.552†	65263.4	66407.0	512.71 ug/L	512.71 ppb	13:07:03
2	Sc 361.383	853528.2	853528.2	100.41 %		13:08:25
2	Y 371.029	692463.8	692463.8	98.539 %		13:08:25
2	Ag 328.068†	102814.1	102162.5	493.77 ug/L	493.77 ppb	13:08:25
2	As 188.979†	1175.8	1199.3	508.97 ug/L	508.97 ppb	13:08:45
2	B 249.677†	21434.1	21827.6	511.30 ug/L	511.30 ppb	13:08:25
2	Ba 233.527†	61494.7	61222.3	498.34 ug/L	498.34 ppb	13:08:25
2	Be 313.107†	1346484.8	1345271.9	495.27 ug/L	495.27 ppb	13:08:25
2	Cd 226.502†	41320.4	41345.5	483.39 ug/L	483.39 ppb	13:08:45
2	Co 228.616†	23521.9	23503.8	490.19 ug/L	490.19 ppb	13:08:45
2	Cr 267.716†	42715.2	42389.3	493.76 ug/L	493.76 ppb	13:08:25
2	Cu 324.752†	169170.7	160379.0	491.04 ug/L	491.04 ppb	13:08:25
2	Mn 257.610†	436015.6	433648.0	500.45 ug/L	500.45 ppb	13:08:25
2	Mo 202.031†	6716.9	6678.8	496.73 ug/L	496.73 ppb	13:08:45
2	Ni 231.604†	19324.8	19131.6	489.74 ug/L	489.74 ppb	13:08:45

2	P 214.914†	4700.9	4439.6	2367.7 ug/L	2367.7 ppb	13:08:45
2	Pb 220.353†	3942.6	3999.9	497.16 ug/L	497.16 ppb	13:08:45
2	S 181.975 Axial†	810.2	764.0	997.51 ug/L	997.51 ppb	13:08:45
2	Sb 206.836†	1520.3	1478.3	518.18 ug/L	518.18 ppb	13:08:45
2	Se 196.026†	826.7	846.6	511.87 ug/L	511.87 ppb	13:08:45
2	Si 251.611†	80610.7	79666.0	2476.5 ug/L	2476.5 ppb	13:08:25
2	Sn 189.927†	2802.9	2778.7	499.11 ug/L	499.11 ppb	13:08:45
2	Ti 334.940†	310548.1	310760.5	504.95 ug/L	504.95 ppb	13:08:25
2	Tl 190.801†	1545.2	1577.9	501.54 ug/L	501.54 ppb	13:08:45
2	U 409.014†	13289.0	16749.3	474.12 ug/L	474.12 ppb	13:08:25
2	V 292.402†	66387.6	67791.1	497.57 ug/L	497.57 ppb	13:08:25
2	Zn 213.857†	51825.6	50924.1	492.47 ug/L	492.47 ppb	13:08:25
2	SiO2†	80362.2	79411.3	5281.1 ug/L	5281.1 ppb	13:09:23
3	Sc Radial	4058.3	4058.3	95.5 %		13:07:28
3	Y RADIAL	4207.4	4207.4	95.57 %		13:07:28
3	Al 396.153Radial†	4832.4	5220.8	5198.9 ug/L	5198.9 ppb	13:07:28
3	Ca 317.933Radial†	2709.9	2820.2	5260.8 ug/L	5260.8 ppb	13:07:49
3	Fe 238.204 Radial†	484.8	497.7	5304.1 ug/L	5304.1 ppb	13:07:49
3	K 766.490 Radial†	28434.4	26612.4	5365.6 ug/L	5365.6 ppb	13:07:28
3	Mg 279.077 IEC†	136.4	140.1	5412.1 ug/L	5412.1 ppb	13:07:49
3	Na 589.592 Radial†	29846.8	31056.4	10359 ug/L	10359 ppb	13:07:28
3	Sr 421.552†	64381.3	67347.2	519.97 ug/L	519.97 ppb	13:07:28
3	Sc 361.383	849872.7	849872.7	99.984 %		13:08:52
3	Y 371.029	690925.9	690925.9	98.320 %		13:08:52
3	Ag 328.068†	102508.9	102297.6	494.50 ug/L	494.50 ppb	13:08:52
3	As 188.979†	1168.5	1197.0	508.09 ug/L	508.09 ppb	13:09:12
3	B 249.677†	21244.0	21729.3	508.95 ug/L	508.95 ppb	13:08:52
3	Ba 233.527†	60983.3	60974.2	496.33 ug/L	496.33 ppb	13:08:52
3	Be 313.107†	1341511.2	1346065.0	495.56 ug/L	495.56 ppb	13:08:52
3	Cd 226.502†	41179.8	41381.9	483.79 ug/L	483.79 ppb	13:09:12
3	Co 228.616†	23446.3	23528.9	490.70 ug/L	490.70 ppb	13:09:12
3	Cr 267.716†	42438.6	42295.7	492.68 ug/L	492.68 ppb	13:08:52
3	Cu 324.752†	169050.4	160983.4	492.90 ug/L	492.90 ppb	13:08:52
3	Mn 257.610†	433713.9	433213.6	499.96 ug/L	499.96 ppb	13:08:52
3	Mo 202.031†	6662.8	6653.4	494.86 ug/L	494.86 ppb	13:09:12
3	Ni 231.604†	19253.3	19142.9	490.03 ug/L	490.03 ppb	13:09:12
3	P 214.914†	4692.3	4451.1	2373.6 ug/L	2373.6 ppb	13:09:12
3	Pb 220.353†	3952.2	4026.4	500.43 ug/L	500.43 ppb	13:09:12
3	S 181.975 Axial†	802.1	759.4	991.48 ug/L	991.48 ppb	13:09:12
3	Sb 206.836†	1508.4	1473.0	516.34 ug/L	516.34 ppb	13:09:12
3	Se 196.026†	824.6	848.0	513.45 ug/L	513.45 ppb	13:09:12
3	Si 251.611†	80336.4	79737.0	2478.7 ug/L	2478.7 ppb	13:08:52
3	Sn 189.927†	2794.8	2782.6	499.84 ug/L	499.84 ppb	13:09:12
3	Ti 334.940†	309406.4	310948.9	505.27 ug/L	505.27 ppb	13:08:52
3	Tl 190.801†	1540.1	1579.5	502.01 ug/L	502.01 ppb	13:09:12
3	U 409.014†	13146.7	16663.9	471.67 ug/L	471.67 ppb	13:08:52
3	V 292.402†	66141.4	67829.2	497.78 ug/L	497.78 ppb	13:08:52
3	Zn 213.857†	51485.5	50806.0	491.28 ug/L	491.28 ppb	13:08:52
3	SiO2†	79732.5	79125.8	5262.1 ug/L	5262.1 ppb	13:09:28

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	850289.1	100.03 %	0.359			0.36%
Sc Radial	4169.6	98.1 %	2.59			2.64%
Y 371.029	690445.4	98.252 %	0.3268			0.33%
Y RADIAL	4299.7	97.67 %	2.241			2.29%
Ag 328.068†	102213.6	494.03 ug/L	0.406	494.03 ppb	0.406	0.08%
QC value within limits for Ag 328.068 Recovery = 98.81%						
Al 396.153Radial†	5151.5	5129.3 ug/L	75.44	5129.3 ppb	75.44	1.47%
QC value within limits for Al 396.153Radial Recovery = 102.59%						
As 188.979†	1206.9	512.18 ug/L	6.330	512.18 ppb	6.330	1.24%
QC value within limits for As 188.979 Recovery = 102.44%						
B 249.677†	21780.6	510.18 ug/L	1.180	510.18 ppb	1.180	0.23%
QC value within limits for B 249.677 Recovery = 102.04%						
Ba 233.527†	61099.1	497.34 ug/L	1.003	497.34 ppb	1.003	0.20%
QC value within limits for Ba 233.527 Recovery = 99.47%						
Be 313.107†	1344513.6	494.99 ug/L	0.750	494.99 ppb	0.750	0.15%
QC value within limits for Be 313.107 Recovery = 99.00%						
Ca 317.933Radial†	2716.4	5067.1 ug/L	186.43	5067.1 ppb	186.43	3.68%

QC value within limits for Ca 317.933Radial Recovery = 101.34%							
Cd 226.502†	41555.0	485.83 ug/L	3.894	485.83 ppb	3.894	0.80%	
QC value within limits for Cd 226.502 Recovery = 97.17%							
Co 228.616†	23624.4	492.70 ug/L	3.924	492.70 ppb	3.924	0.80%	
QC value within limits for Co 228.616 Recovery = 98.54%							
Cr 267.716†	42313.4	492.88 ug/L	0.800	492.88 ppb	0.800	0.16%	
QC value within limits for Cr 267.716 Recovery = 98.58%							
Cu 324.752†	160471.9	491.33 ug/L	1.454	491.33 ppb	1.454	0.30%	
QC value within limits for Cu 324.752 Recovery = 98.27%							
Fe 238.204 Radial†	479.9	5114.4 ug/L	171.51	5114.4 ppb	171.51	3.35%	
QC value within limits for Fe 238.204 Radial Recovery = 102.29%							
K 766.490 Radial†	26227.9	5288.1 ug/L	80.37	5288.1 ppb	80.37	1.52%	
QC value within limits for K 766.490 Radial Recovery = 105.76%							
Mg 279.077 IEC†	135.1	5218.9 ug/L	176.09	5218.9 ppb	176.09	3.37%	
QC value within limits for Mg 279.077 IEC Recovery = 104.38%							
Mn 257.610†	433269.8	500.02 ug/L	0.409	500.02 ppb	0.409	0.08%	
QC value within limits for Mn 257.610 Recovery = 100.00%							
Mo 202.031†	6699.5	498.27 ug/L	4.393	498.27 ppb	4.393	0.88%	
QC value within limits for Mo 202.031 Recovery = 99.65%							
Na 589.592 Radial†	30606.7	10209 ug/L	174.9	10209 ppb	174.9	1.71%	
QC value within limits for Na 589.592 Radial Recovery = 102.09%							
Ni 231.604†	19215.8	491.90 ug/L	3.484	491.90 ppb	3.484	0.71%	
QC value within limits for Ni 231.604 Recovery = 98.38%							
P 214.914†	4464.4	2381.4 ug/L	18.92	2381.4 ppb	18.92	0.79%	
QC value within limits for P 214.914 Recovery = 95.26%							
Pb 220.353†	4035.0	501.51 ug/L	4.976	501.51 ppb	4.976	0.99%	
QC value within limits for Pb 220.353 Recovery = 100.30%							
S 181.975 Axial†	766.0	1000.2 ug/L	10.31	1000.2 ppb	10.31	1.03%	
QC value within limits for S 181.975 Axial Recovery = 100.02%							
Sb 206.836†	1484.6	520.38 ug/L	5.485	520.38 ppb	5.485	1.05%	
QC value within limits for Sb 206.836 Recovery = 104.08%							
Se 196.026†	852.3	515.36 ug/L	4.753	515.36 ppb	4.753	0.92%	
QC value within limits for Se 196.026 Recovery = 103.07%							
Si 251.611†	79669.7	2476.6 ug/L	2.09	2476.6 ppb	2.09	0.08%	
QC value within limits for Si 251.611 Recovery = 99.06%							
Sn 189.927†	2795.5	502.11 ug/L	4.583	502.11 ppb	4.583	0.91%	
QC value within limits for Sn 189.927 Recovery = 100.42%							
Sr 421.552†	66271.0	511.66 ug/L	8.880	511.66 ppb	8.880	1.74%	
QC value within limits for Sr 421.552 Recovery = 102.33%							
Ti 334.940†	310723.4	504.89 ug/L	0.410	504.89 ppb	0.410	0.08%	
QC value within limits for Ti 334.940 Recovery = 100.98%							
Tl 190.801†	1585.1	503.77 ug/L	3.459	503.77 ppb	3.459	0.69%	
QC value within limits for Tl 190.801 Recovery = 100.75%							
U 409.014†	16685.2	472.29 ug/L	1.607	472.29 ppb	1.607	0.34%	
QC value within limits for U 409.014 Recovery = 94.46%							
V 292.402†	67742.3	497.23 ug/L	0.784	497.23 ppb	0.784	0.16%	
QC value within limits for V 292.402 Recovery = 99.45%							
Zn 213.857†	50841.8	491.64 ug/L	0.716	491.64 ppb	0.716	0.15%	
QC value within limits for Zn 213.857 Recovery = 98.33%							
SiO2†	79736.6	5302.7 ug/L	54.77	5302.7 ppb	54.77	1.03%	
QC value within limits for SiO2 Recovery = 99.16%							
All analyte(s) passed QC.							

Sequence No.: 14  
 Sample ID: CCB  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 8  
 Date Collected: 2/16/2010 13:11:37  
 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	4080.8	4080.8	96.0 %		13:13:50
1	Y RADIAL	4371.1	4371.1	99.29 %		13:13:30
1	Al 396.153Radial†	-122.3	31.7	31.598 ug/L	31.598 ppb	13:13:30
1	Ca 317.933Radial†	14.1	-3.7	-6.8414 ug/L	-6.8414 ppb	13:13:50
1	Fe 238.204 Radial†	10.3	0.7	7.4143 ug/L	7.4143 ppb	13:13:50
1	K 766.490 Radial†	3563.8	540.8	109.18 ug/L	109.18 ppb	13:13:30
1	Mg 279.077 IEC†	2.6	-0.0	-1.5512 ug/L	-1.5512 ppb	13:13:50
1	Na 589.592 Radial†	111.5	-90.9	-30.326 ug/L	-30.326 ppb	13:13:30
1	Sr 421.552†	61.6	-25.6	-0.1976 ug/L	-0.1976 ppb	13:13:30
1	Sc 361.383	834569.1	834569.1	98.184 %		13:14:47
1	Y 371.029	688647.9	688647.9	97.996 %		13:14:47
1	Ag 328.068†	256.0	33.0	0.1671 ug/L	0.1671 ppb	13:14:47
1	As 188.979†	-17.9	10.1	4.2506 ug/L	4.2506 ppb	13:15:07
1	B 249.677†	467.5	958.1	22.538 ug/L	22.538 ppb	13:14:47
1	Ba 233.527†	20.2	1.7	0.0143 ug/L	0.0143 ppb	13:15:07
1	Be 313.107†	-4283.1	-23.2	-0.0088 ug/L	-0.0088 ppb	13:14:47
1	Cd 226.502†	-182.2	9.9	0.1134 ug/L	0.1134 ppb	13:15:07
1	Co 228.616†	-66.0	11.6	0.2461 ug/L	0.2461 ppb	13:15:07
1	Cr 267.716†	149.3	2.4	0.0311 ug/L	0.0311 ppb	13:15:07
1	Cu 324.752†	7973.9	27.3	0.0881 ug/L	0.0881 ppb	13:14:47
1	Mn 257.610†	557.2	-2.2	-0.0018 ug/L	-0.0018 ppb	13:15:07
1	Mo 202.031†	28.9	19.0	1.4092 ug/L	1.4092 ppb	13:15:07
1	Ni 231.604†	106.2	-5.4	-0.1376 ug/L	-0.1376 ppb	13:15:07
1	P 214.914†	256.8	19.6	10.894 ug/L	10.894 ppb	13:15:07
1	Pb 220.353†	-46.8	25.9	3.2139 ug/L	3.2139 ppb	13:15:07
1	S 181.975 Axial†	43.7	1.6	2.0366 ug/L	2.0366 ppb	13:15:07
1	Sb 206.836†	40.5	5.6	1.9850 ug/L	1.9850 ppb	13:15:07
1	Se 196.026†	-17.3	5.7	3.3705 ug/L	3.3705 ppb	13:15:07
1	Si 251.611†	623.9	23.1	0.7028 ug/L	0.7028 ppb	13:15:07
1	Sn 189.927†	33.0	21.0	3.7587 ug/L	3.7587 ppb	13:15:07
1	Ti 334.940†	-1547.0	-82.7	-0.1320 ug/L	-0.1320 ppb	13:14:47
1	Tl 190.801†	-33.6	4.8	1.5285 ug/L	1.5285 ppb	13:15:07
1	U 409.014†	-3707.9	-261.3	-7.4240 ug/L	-7.4240 ppb	13:14:47
1	V 292.402†	-1652.7	-5.9	-0.0384 ug/L	-0.0384 ppb	13:14:47
1	Zn 213.857†	771.2	97.7	0.9530 ug/L	0.9530 ppb	13:15:07
1	SiO2†	667.1	59.9	3.9560 ug/L	3.9560 ppb	13:16:03
2	Sc Radial	4111.7	4111.7	96.7 %		13:14:15
2	Y RADIAL	4390.6	4390.6	99.74 %		13:13:55
2	Al 396.153Radial†	-131.4	23.2	23.175 ug/L	23.175 ppb	13:13:55
2	Ca 317.933Radial†	21.8	4.3	7.9428 ug/L	7.9428 ppb	13:14:15
2	Fe 238.204 Radial†	8.8	-0.9	-9.9532 ug/L	-9.9532 ppb	13:14:15
2	K 766.490 Radial†	3512.1	459.5	92.765 ug/L	92.765 ppb	13:13:55
2	Mg 279.077 IEC†	-1.2	-3.9	-152.00 ug/L	-152.00 ppb	13:14:15
2	Na 589.592 Radial†	96.9	-106.9	-35.655 ug/L	-35.655 ppb	13:13:55
2	Sr 421.552†	72.7	-14.7	-0.1135 ug/L	-0.1135 ppb	13:13:55
2	Sc 361.383	834436.3	834436.3	98.168 %		13:15:12
2	Y 371.029	688166.1	688166.1	97.928 %		13:15:12
2	Ag 328.068†	300.6	78.5	0.3757 ug/L	0.3757 ppb	13:15:12
2	As 188.979†	-10.9	17.3	7.2590 ug/L	7.2590 ppb	13:15:32
2	B 249.677†	398.8	888.2	20.897 ug/L	20.897 ppb	13:15:12
2	Ba 233.527†	2.9	-15.8	-0.1295 ug/L	-0.1295 ppb	13:15:32
2	Be 313.107†	-4328.8	-70.5	-0.0256 ug/L	-0.0256 ppb	13:15:12
2	Cd 226.502†	-196.7	-4.9	-0.0572 ug/L	-0.0572 ppb	13:15:32
2	Co 228.616†	-86.8	-9.6	-0.1982 ug/L	-0.1982 ppb	13:15:32
2	Cr 267.716†	156.9	10.1	0.1186 ug/L	0.1186 ppb	13:15:32
2	Cu 324.752†	8003.4	58.7	0.1814 ug/L	0.1814 ppb	13:15:12
2	Mn 257.610†	557.2	-2.1	0.0028 ug/L	0.0028 ppb	13:15:32
2	Mo 202.031†	18.1	8.0	0.5911 ug/L	0.5911 ppb	13:15:32
2	Ni 231.604†	109.6	-1.9	-0.0488 ug/L	-0.0488 ppb	13:15:32

2	P 214.914†	216.5	-21.5	-11.889 ug/L	-11.889 ppb	13:15:32
2	Pb 220.353†	-45.6	27.1	3.3643 ug/L	3.3643 ppb	13:15:32
2	S 181.975 Axial†	60.8	19.1	24.915 ug/L	24.915 ppb	13:15:32
2	Sb 206.836†	55.1	20.4	6.9965 ug/L	6.9965 ppb	13:15:32
2	Se 196.026†	-18.8	4.1	2.3827 ug/L	2.3827 ppb	13:15:32
2	Si 251.611†	646.2	46.0	1.4257 ug/L	1.4257 ppb	13:15:32
2	Sn 189.927†	40.3	28.4	5.1018 ug/L	5.1018 ppb	13:15:32
2	Ti 334.940†	-1387.0	80.1	0.1453 ug/L	0.1453 ppb	13:15:12
2	Tl 190.801†	-22.4	16.3	5.1363 ug/L	5.1363 ppb	13:15:32
2	U 409.014†	-3590.7	-142.6	-4.0492 ug/L	-4.0492 ppb	13:15:12
2	V 292.402†	-1680.2	-34.3	-0.2495 ug/L	-0.2495 ppb	13:15:12
2	Zn 213.857†	751.4	77.7	0.7595 ug/L	0.7595 ppb	13:15:32
2	SiO2†	638.1	30.5	2.0182 ug/L	2.0182 ppb	13:16:08
3	Sc Radial	4090.2	4090.2	96.2 %		13:14:40
3	Y RADIAL	4448.1	4448.1	101.0 %		13:14:20
3	Al 396.153Radial†	-130.8	23.0	23.037 ug/L	23.037 ppb	13:14:20
3	Ca 317.933Radial†	21.2	3.8	6.9966 ug/L	6.9966 ppb	13:14:40
3	Fe 238.204 Radial†	11.3	1.7	17.786 ug/L	17.786 ppb	13:14:40
3	K 766.490 Radial†	3388.9	350.5	70.764 ug/L	70.764 ppb	13:14:20
3	Mg 279.077 IEC†	0.1	-2.6	-101.31 ug/L	-101.31 ppb	13:14:40
3	Na 589.592 Radial†	87.9	-115.7	-38.591 ug/L	-38.591 ppb	13:14:20
3	Sr 421.552†	110.7	25.2	0.1947 ug/L	0.1947 ppb	13:14:20
3	Sc 361.383	843103.7	843103.7	99.188 %		13:15:37
3	Y 371.029	695321.1	695321.1	98.946 %		13:15:37
3	Ag 328.068†	198.2	-27.9	-0.1277 ug/L	-0.1277 ppb	13:15:37
3	As 188.979†	-17.9	10.3	4.3412 ug/L	4.3412 ppb	13:15:57
3	B 249.677†	341.4	826.1	19.433 ug/L	19.433 ppb	13:15:37
3	Ba 233.527†	5.9	-12.8	-0.1044 ug/L	-0.1044 ppb	13:15:57
3	Be 313.107†	-4374.5	-71.2	-0.0262 ug/L	-0.0262 ppb	13:15:37
3	Cd 226.502†	-180.4	13.6	0.1573 ug/L	0.1573 ppb	13:15:57
3	Co 228.616†	-78.9	-0.7	-0.0135 ug/L	-0.0135 ppb	13:15:57
3	Cr 267.716†	175.0	26.8	0.3120 ug/L	0.3120 ppb	13:15:57
3	Cu 324.752†	8094.8	66.9	0.2069 ug/L	0.2069 ppb	13:15:37
3	Mn 257.610†	585.0	20.1	0.0290 ug/L	0.0290 ppb	13:15:57
3	Mo 202.031†	16.4	6.0	0.4502 ug/L	0.4502 ppb	13:15:57
3	Ni 231.604†	110.5	-2.1	-0.0548 ug/L	-0.0548 ppb	13:15:57
3	P 214.914†	238.8	-1.2	-0.6621 ug/L	-0.6621 ppb	13:15:57
3	Pb 220.353†	-62.9	10.1	1.2617 ug/L	1.2617 ppb	13:15:57
3	S 181.975 Axial†	53.1	10.6	13.870 ug/L	13.870 ppb	13:15:57
3	Sb 206.836†	48.0	12.7	4.3833 ug/L	4.3833 ppb	13:15:57
3	Se 196.026†	-16.1	7.1	4.2001 ug/L	4.2001 ppb	13:15:57
3	Si 251.611†	619.3	12.1	0.3707 ug/L	0.3707 ppb	13:15:57
3	Sn 189.927†	36.5	24.2	4.3427 ug/L	4.3427 ppb	13:15:57
3	Ti 334.940†	-1508.4	-27.8	-0.0354 ug/L	-0.0354 ppb	13:15:37
3	Tl 190.801†	-28.9	9.9	3.1354 ug/L	3.1354 ppb	13:15:57
3	U 409.014†	-3545.6	-59.5	-1.6931 ug/L	-1.6931 ppb	13:15:37
3	V 292.402†	-1703.8	-40.4	-0.2944 ug/L	-0.2944 ppb	13:15:37
3	Zn 213.857†	765.4	83.9	0.8159 ug/L	0.8159 ppb	13:15:57
3	SiO2†	610.3	-4.3	-0.2962 ug/L	-0.2962 ppb	13:16:13

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	837369.7	98.513 %		0.5843				0.59%
Sc Radial	4094.2	96.3 %		0.37				0.39%
Y 371.029	690711.7	98.290 %		0.5691				0.58%
Y RADIAL	4403.3	100.0 %		0.91				0.91%
Ag 328.068†	27.9	0.1384 ug/L		0.25296	0.1384 ppb		0.25296	182.81%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	26.0	25.937 ug/L		4.9037	25.937 ppb		4.9037	18.91%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	12.6	5.2836 ug/L		1.71138	5.2836 ppb		1.71138	32.39%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	890.8	20.956 ug/L		1.5534	20.956 ppb		1.5534	7.41%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-9.0	-0.0732 ug/L		0.07679	-0.0732 ppb		0.07679	104.88%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-55.0	-0.0202 ug/L		0.00987	-0.0202 ppb		0.00987	48.79%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	1.4	2.6993 ug/L		8.27604	2.6993 ppb		8.27604	306.60%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated						
Cd 226.502†	6.2	0.0712 ug/L	0.11331	0.0712 ppb	0.11331	159.17%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	0.5	0.0115 ug/L	0.22320	0.0115 ppb	0.22320	>999.9%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	13.1	0.1539 ug/L	0.14369	0.1539 ppb	0.14369	93.36%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	51.0	0.1588 ug/L	0.06254	0.1588 ppb	0.06254	39.39%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	0.5	5.0825 ug/L	14.01597	5.0825 ppb	14.01597	275.77%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	450.3	90.903 ug/L	19.2756	90.903 ppb	19.2756	21.20%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	-2.2	-84.956 ug/L	76.5476	-84.956 ppb	76.5476	90.10%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	5.2	0.0100 ug/L	0.01662	0.0100 ppb	0.01662	165.85%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	11.0	0.8168 ug/L	0.51781	0.8168 ppb	0.51781	63.39%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	-104.5	-34.857 ug/L	4.1899	-34.857 ppb	4.1899	12.02%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	-3.1	-0.0804 ug/L	0.04960	-0.0804 ppb	0.04960	61.71%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	-1.0	-0.5524 ug/L	11.39186	-0.5524 ppb	11.39186	>999.9%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	21.0	2.6133 ug/L	1.17296	2.6133 ppb	1.17296	44.88%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	10.4	13.607 ug/L	11.4412	13.607 ppb	11.4412	84.08%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	12.9	4.4549 ug/L	2.50656	4.4549 ppb	2.50656	56.26%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	5.7	3.3177 ug/L	0.90985	3.3177 ppb	0.90985	27.42%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	27.1	0.8331 ug/L	0.53945	0.8331 ppb	0.53945	64.76%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	24.5	4.4011 ug/L	0.67343	4.4011 ppb	0.67343	15.30%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	-5.0	-0.0388 ug/L	0.20657	-0.0388 ppb	0.20657	532.13%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	-10.2	-0.0074 ug/L	0.14079	-0.0074 ppb	0.14079	>999.9%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	10.3	3.2667 ug/L	1.80748	3.2667 ppb	1.80748	55.33%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	-154.5	-4.3888 ug/L	2.88047	-4.3888 ppb	2.88047	65.63%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	-26.9	-0.1941 ug/L	0.13673	-0.1941 ppb	0.13673	70.44%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	86.4	0.8428 ug/L	0.09953	0.8428 ppb	0.09953	11.81%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	28.7	1.8926 ug/L	2.12891	1.8926 ppb	2.12891	112.48%
QC value within limits for SiO2 Recovery = Not calculated						
All analyte(s) passed QC.						

## =====

## Analysis Begun

Start Time: 2/16/2010 13:19:34

Plasma On Time: 2/15/2010 05:50:42

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\021610.sif

Batch ID:

Results Data Set: 021610

Results Library: C:\pe\Optima3\Results\Results.mdb

## =====

## Method Loaded

Method Name: General Eng.2AX

Method Last Saved: 2/16/2010 11:50:40

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: 37

Sample ID: LR1

Date Collected: 2/16/2010 13:19:36

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	3988.1	3988.1	93.8 %		13:21:50
1	Y RADIAL	4341.2	4341.2	98.61 %		13:21:30
1	Al 396.153Radial	-160.7	-12.3	-10.938 ug/L	-10.938 ppb	13:21:30



1	Ca 317.933Radial†	7.1	-10.8	-20.119 ug/L	-20.119 ppb	13:21:50
1	Fe 238.204 Radial†	35531.6	37862.5	402390 ug/L	402390 ppb	13:21:30
1	K 766.490 Radial†	3101.0	133.7	27.081 ug/L	27.081 ppb	13:21:30
1	Mg 279.077 IEC†	11.7	9.7	-45.732 ug/L	-45.732 ppb	13:21:50
1	Na 589.592 Radial†	-113.9	-328.4	-109.55 ug/L	-109.55 ppb	13:21:30
1	Sr 421.552†	158.4	79.1	0.6107 ug/L	0.6107 ppb	13:21:30
1	Sc 361.383	832881.2	832881.2	97.985 %		13:22:47
1	Y 371.029	683100.4	683100.4	97.207 %		13:22:47
1	Ag 328.068†	-21957.5	-22636.7	19.075 ug/L	19.075 ppb	13:22:47
1	As 188.979†	-215.0	-191.1	13.937 ug/L	13.937 ppb	13:23:07
1	B 249.677†	2049.3	2573.4	-4.8538 ug/L	-4.8538 ppb	13:22:47
1	Ba 233.527†	-1848.4	-1905.2	-3.1479 ug/L	-3.1479 ppb	13:22:47
1	Be 313.107†	-8961.3	-4806.5	-1.7555 ug/L	-1.7555 ppb	13:22:47
1	Cd 226.502†	2735.8	2987.6	-4.6639 ug/L	-4.6639 ppb	13:22:47
1	Co 228.616†	752.1	846.4	11.760 ug/L	11.760 ppb	13:23:07
1	Cr 267.716†	-241.0	-395.6	-0.7230 ug/L	-0.7230 ppb	13:22:47
1	Cu 324.752†	2372.5	-5672.8	-1.6438 ug/L	-1.6438 ppb	13:22:47
1	Mn 257.610†	-31245.9	-32458.2	2.2901 ug/L	2.2901 ppb	13:22:47
1	Mo 202.031†	-355.9	-373.7	3.4668 ug/L	3.4668 ppb	13:22:47
1	Ni 231.604†	214.3	105.2	2.6850 ug/L	2.6850 ppb	13:23:07
1	P 214.914†	739.8	513.0	-36.053 ug/L	-36.053 ppb	13:23:07
1	Pb 220.353†	211.9	289.8	-2.6063 ug/L	-2.6063 ppb	13:23:07
1	S 181.975 Axial†	70.1	28.6	37.375 ug/L	37.375 ppb	13:23:07
1	Sb 206.836†	22.5	-12.7	-9.3722 ug/L	-9.3722 ppb	13:23:07
1	Se 196.026†	-1724.0	-1736.1	283.60 ug/L	283.60 ppb	13:23:07
1	Si 251.611†	-610.4	-1235.2	-38.151 ug/L	-38.151 ppb	13:22:47
1	Sn 189.927†	-28.4	-41.6	-0.6874 ug/L	-0.6874 ppb	13:23:07
1	Ti 334.940†	1182.7	2700.0	-0.0648 ug/L	-0.0648 ppb	13:22:47
1	Tl 190.801†	-53.3	-15.3	-5.1274 ug/L	-5.1274 ppb	13:23:07
1	U 409.014†	343838.2	354424.2	10022 ug/L	10022 ppb	13:22:47
1	V 292.402†	3226.3	4969.9	-3.7281 ug/L	-3.7281 ppb	13:22:47
1	Zn 213.857†	4209.5	3608.3	-24.994 ug/L	-24.994 ppb	13:23:07
1	SiO2†	-706.3	-1340.3	-88.607 ug/L	-88.607 ppb	13:24:05
2	Sc Radial	4025.1	4025.1	94.7 %		13:22:15
2	Y RADIAL	4252.0	4252.0	96.59 %		13:21:55
2	Al 396.153Radial†	-150.0	0.6	1.7932 ug/L	1.7932 ppb	13:21:55
2	Ca 317.933Radial†	7.9	-10.0	-18.603 ug/L	-18.603 ppb	13:22:15
2	Fe 238.204 Radial†	34648.7	36582.8	388790 ug/L	388790 ppb	13:21:55
2	K 766.490 Radial†	3001.9	-1.2	-0.1479 ug/L	-0.1479 ppb	13:21:55
2	Mg 279.077 IEC†	8.8	6.6	-150.99 ug/L	-150.99 ppb	13:22:15
2	Na 589.592 Radial†	-157.7	-373.7	-124.64 ug/L	-124.64 ppb	13:21:55
2	Sr 421.552†	185.6	106.2	0.8203 ug/L	0.8203 ppb	13:21:55
2	Sc 361.383	834868.4	834868.4	98.219 %		13:23:13
2	Y 371.029	683686.5	683686.5	97.290 %		13:23:13
2	Ag 328.068†	-22168.1	-22797.8	13.704 ug/L	13.704 ppb	13:23:13
2	As 188.979†	-202.1	-177.5	16.494 ug/L	16.494 ppb	13:23:33
2	B 249.677†	1949.1	2466.4	-5.1617 ug/L	-5.1617 ppb	13:23:13
2	Ba 233.527†	-1889.3	-1942.4	-3.8638 ug/L	-3.8638 ppb	13:23:13
2	Be 313.107†	-8885.9	-4708.0	-1.7194 ug/L	-1.7194 ppb	13:23:13
2	Cd 226.502†	2692.2	2936.5	-3.8550 ug/L	-3.8550 ppb	13:23:13
2	Co 228.616†	729.3	821.3	11.441 ug/L	11.441 ppb	13:23:33
2	Cr 267.716†	-247.1	-401.3	-1.0556 ug/L	-1.0556 ppb	13:23:13
2	Cu 324.752†	2323.9	-5728.1	-2.5363 ug/L	-2.5363 ppb	13:23:13
2	Mn 257.610†	-30959.5	-32090.7	1.3757 ug/L	1.3757 ppb	13:23:13
2	Mo 202.031†	-312.9	-329.1	5.7286 ug/L	5.7286 ppb	13:23:13
2	Ni 231.604†	224.0	114.6	2.9243 ug/L	2.9243 ppb	13:23:33
2	P 214.914†	742.1	513.6	-24.758 ug/L	-24.758 ppb	13:23:33
2	Pb 220.353†	218.8	296.3	-0.4934 ug/L	-0.4934 ppb	13:23:33
2	S 181.975 Axial†	70.9	29.2	38.215 ug/L	38.215 ppb	13:23:33
2	Sb 206.836†	38.1	3.2	-3.7933 ug/L	-3.7933 ppb	13:23:33
2	Se 196.026†	-1708.9	-1716.6	251.19 ug/L	251.19 ppb	13:23:33
2	Si 251.611†	-625.2	-1248.9	-38.617 ug/L	-38.617 ppb	13:23:13
2	Sn 189.927†	-30.1	-43.2	-1.2162 ug/L	-1.2162 ppb	13:23:33
2	Ti 334.940†	1170.0	2684.1	-0.0833 ug/L	-0.0833 ppb	13:23:13
2	Tl 190.801†	-53.8	-15.7	-5.2328 ug/L	-5.2328 ppb	13:23:33
2	U 409.014†	344875.5	354645.0	10030 ug/L	10030 ppb	13:23:13
2	V 292.402†	3208.6	4944.1	-1.8776 ug/L	-1.8776 ppb	13:23:13
2	Zn 213.857†	4230.1	3619.0	-22.856 ug/L	-22.856 ppb	13:23:33
2	SiO2†	-621.9	-1252.7	-82.855 ug/L	-82.855 ppb	13:24:10
3	Sc Radial	4040.8	4040.8	95.1 %		13:22:40
3	Y RADIAL	4411.2	4411.2	100.2 %		13:22:20

3	Al 396.153Radial†	-160.5	-9.8	-8.5480 ug/L	-8.5480 ppb	13:22:20
3	Ca 317.933Radial†	12.2	-5.5	-10.325 ug/L	-10.325 ppb	13:22:40
3	Fe 238.204 Radial†	35465.9	37299.6	396410 ug/L	396410 ppb	13:22:20
3	K 766.490 Radial†	3038.4	24.8	5.1041 ug/L	5.1041 ppb	13:22:20
3	Mg 279.077 IEC†	14.1	12.2	54.746 ug/L	54.746 ppb	13:22:40
3	Na 589.592 Radial†	-153.1	-368.2	-122.80 ug/L	-122.80 ppb	13:22:20
3	Sr 421.552†	164.5	83.2	0.6427 ug/L	0.6427 ppb	13:22:20
3	Sc 361.383	828455.3	828455.3	97.464 %		13:23:39
3	Y 371.029	678768.7	678768.7	96.590 %		13:23:39
3	Ag 328.068†	-22033.1	-22834.0	16.078 ug/L	16.078 ppb	13:23:39
3	As 188.979†	-208.4	-185.5	14.884 ug/L	14.884 ppb	13:23:59
3	B 249.677†	2007.3	2541.4	-4.6335 ug/L	-4.6335 ppb	13:23:39
3	Ba 233.527†	-2011.0	-2082.2	-4.7678 ug/L	-4.7678 ppb	13:23:39
3	Be 313.107†	-8887.9	-4780.0	-1.7456 ug/L	-1.7456 ppb	13:23:39
3	Cd 226.502†	2608.0	2871.3	-5.3988 ug/L	-5.3988 ppb	13:23:39
3	Co 228.616†	740.0	838.1	11.677 ug/L	11.677 ppb	13:23:59
3	Cr 267.716†	-349.8	-508.6	-2.1679 ug/L	-2.1679 ppb	13:23:39
3	Cu 324.752†	2410.3	-5621.1	-1.8205 ug/L	-1.8205 ppb	13:23:39
3	Mn 257.610†	-30964.8	-32340.2	1.8315 ug/L	1.8315 ppb	13:23:39
3	Mo 202.031†	-331.3	-350.4	4.7351 ug/L	4.7351 ppb	13:23:39
3	Ni 231.604†	222.2	114.4	2.9201 ug/L	2.9201 ppb	13:23:59
3	P 214.914†	757.8	535.5	-18.794 ug/L	-18.794 ppb	13:23:59
3	Pb 220.353†	192.9	271.5	-4.3021 ug/L	-4.3021 ppb	13:23:59
3	S 181.975 Axial†	69.8	28.8	37.581 ug/L	37.581 ppb	13:23:59
3	Sb 206.836†	20.7	-14.5	-9.8602 ug/L	-9.8602 ppb	13:23:59
3	Se 196.026†	-1722.7	-1744.2	259.62 ug/L	259.62 ppb	13:23:59
3	Si 251.611†	-636.8	-1265.7	-39.122 ug/L	-39.122 ppb	13:23:39
3	Sn 189.927†	-25.4	-38.7	-0.2718 ug/L	-0.2718 ppb	13:23:59
3	Ti 334.940†	1207.7	2732.0	-0.0333 ug/L	-0.0333 ppb	13:23:39
3	Tl 190.801†	-69.3	-32.0	-10.381 ug/L	-10.381 ppb	13:23:59
3	U 409.014†	343156.5	355599.4	10056 ug/L	10056 ppb	13:23:39
3	V 292.402†	3133.0	4891.8	-3.3319 ug/L	-3.3319 ppb	13:23:39
3	Zn 213.857†	4220.6	3642.7	-23.766 ug/L	-23.766 ppb	13:23:59
3	SiO2†	-667.6	-1304.5	-86.266 ug/L	-86.266 ppb	13:24:15

## Mean Data: LR1

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	832068.3	97.889 %	%	0.3862			0.39%
Sc Radial	4018.0	94.5 %	%	0.64			0.67%
Y 371.029	681851.9	97.029 %	%	0.3822			0.39%
Y RADIAL	4334.8	98.47 %	%	1.814			1.84%
Ag 328.068†	-22756.2	16.286 ug/L	ug/L	2.6911	16.286 ppb	2.6911	16.52%
Al 396.153Radial†	-7.2	-5.8975 ug/L	ug/L	6.76670	-5.8975 ppb	6.76670	114.74%
As 188.979†	-184.7	15.105 ug/L	ug/L	1.2926	15.105 ppb	1.2926	8.56%
B 249.677†	2527.1	-4.8830 ug/L	ug/L	0.26531	-4.8830 ppb	0.26531	5.43%
Ba 233.527†	-1976.6	-3.9265 ug/L	ug/L	0.81177	-3.9265 ppb	0.81177	20.67%
Be 313.107†	-4764.8	-1.7402 ug/L	ug/L	0.01868	-1.7402 ppb	0.01868	1.07%
Ca 317.933Radial†	-8.8	-16.349 ug/L	ug/L	5.2719	-16.349 ppb	5.2719	32.25%
Cd 226.502†	2931.8	-4.6392 ug/L	ug/L	0.77221	-4.6392 ppb	0.77221	16.65%
Co 228.616†	835.3	11.626 ug/L	ug/L	0.1654	11.626 ppb	0.1654	1.42%
Cr 267.716†	-435.2	-1.3155 ug/L	ug/L	0.75672	-1.3155 ppb	0.75672	57.52%
Cu 324.752†	-5674.0	-2.0002 ug/L	ug/L	0.47263	-2.0002 ppb	0.47263	23.63%
Fe 238.204 Radial†	37248.3	395860 ug/L	ug/L	6816.1	395860 ppb	6816.1	1.72%
K 766.490 Radial†	52.4	10.679 ug/L	ug/L	14.4449	10.679 ppb	14.4449	135.27%
Mg 279.077 IEC†	9.5	-47.325 ug/L	ug/L	102.8770	-47.325 ppb	102.8770	217.38%
Mn 257.610†	-32296.3	1.8325 ug/L	ug/L	0.45721	1.8325 ppb	0.45721	24.95%
Mo 202.031†	-351.1	4.6435 ug/L	ug/L	1.13369	4.6435 ppb	1.13369	24.41%
Na 589.592 Radial†	-356.8	-119.00 ug/L	ug/L	8.229	-119.00 ppb	8.229	6.92%
Ni 231.604†	111.4	2.8432 ug/L	ug/L	0.13696	2.8432 ppb	0.13696	4.82%
P 214.914†	520.7	-26.535 ug/L	ug/L	8.7655	-26.535 ppb	8.7655	33.03%
Pb 220.353†	285.9	-2.4673 ug/L	ug/L	1.90818	-2.4673 ppb	1.90818	77.34%
S 181.975 Axial†	28.9	37.724 ug/L	ug/L	0.4379	37.724 ppb	0.4379	1.16%
Sb 206.836†	-8.0	-7.6752 ug/L	ug/L	3.37070	-7.6752 ppb	3.37070	43.92%
Se 196.026†	-1732.3	264.80 ug/L	ug/L	16.814	264.80 ppb	16.814	6.35%
Si 251.611†	-1249.9	-38.630 ug/L	ug/L	0.4854	-38.630 ppb	0.4854	1.26%
Sn 189.927†	-41.2	-0.7251 ug/L	ug/L	0.47330	-0.7251 ppb	0.47330	65.27%
Sr 421.552†	89.5	0.6913 ug/L	ug/L	0.11293	0.6913 ppb	0.11293	16.34%
Ti 334.940†	2705.4	-0.0604 ug/L	ug/L	0.02526	-0.0604 ppb	0.02526	41.79%
Tl 190.801†	-21.0	-6.9138 ug/L	ug/L	3.00335	-6.9138 ppb	3.00335	43.44%

U 409.014†	354889.5	10036 ug/L	17.8	10036 ppb	17.8	0.18%
V 292.402†	4935.3	-2.9792 ug/L	0.97435	-2.9792 ppb	0.97435	32.71%
Zn 213.857†	3623.3	-23.872 ug/L	1.0730	-23.872 ppb	1.0730	4.49%
SiO2†	-1299.2	-85.909 ug/L	2.8924	-85.909 ppb	2.8924	3.37%

Sequence No.: 2

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/16/2010 13:26:26

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	4310.8	4310.8	101 %		13:28:18
1	Y RADIAL	4413.8	4413.8	100.3 %		13:28:18
1	Al 396.153Radial†	4928.8	5019.3	4997.1 ug/L	4997.1 ppb	13:28:18
1	Ca 317.933Radial†	2671.2	2615.8	4879.4 ug/L	4879.4 ppb	13:28:38
1	Fe 238.204 Radial†	482.3	465.5	4962.2 ug/L	4962.2 ppb	13:28:38
1	K 766.490 Radial†	28154.6	24591.9	4957.9 ug/L	4957.9 ppb	13:28:18
1	Mg 279.077 IEC†	134.8	130.2	5028.2 ug/L	5028.2 ppb	13:28:38
1	Na 589.592 Radial†	30766.8	30132.3	10051 ug/L	10051 ppb	13:28:18
1	Sr 421.552†	66158.3	65149.4	503.00 ug/L	503.00 ppb	13:28:18
1	Sc 361.383	847459.5	847459.5	99.700 %		13:29:37
1	Y 371.029	689364.5	689364.5	98.098 %		13:29:37
1	Ag 328.068†	103189.4	103272.2	499.07 ug/L	499.07 ppb	13:29:37
1	As 188.979†	1154.9	1186.7	503.69 ug/L	503.69 ppb	13:29:57
1	B 249.677†	20631.1	21175.1	495.95 ug/L	495.95 ppb	13:29:37
1	Ba 233.527†	61217.8	61383.1	499.65 ug/L	499.65 ppb	13:29:37
1	Be 313.107†	1347799.5	1356193.1	499.30 ug/L	499.30 ppb	13:29:37
1	Cd 226.502†	41450.0	41770.2	488.37 ug/L	488.37 ppb	13:29:57
1	Co 228.616†	23625.4	23775.3	495.85 ug/L	495.85 ppb	13:29:57
1	Cr 267.716†	42718.9	42697.7	497.35 ug/L	497.35 ppb	13:29:37
1	Cu 324.752†	169926.5	162343.6	497.04 ug/L	497.04 ppb	13:29:37
1	Mn 257.610†	435568.9	436309.5	503.52 ug/L	503.52 ppb	13:29:37
1	Mo 202.031†	6713.6	6723.4	500.03 ug/L	500.03 ppb	13:29:57
1	Ni 231.604†	19404.9	19349.8	495.33 ug/L	495.33 ppb	13:29:57
1	P 214.914†	4733.6	4505.8	2403.3 ug/L	2403.3 ppb	13:29:57
1	Pb 220.353†	3967.7	4053.2	503.75 ug/L	503.75 ppb	13:29:57
1	S 181.975 Axial†	799.1	758.6	990.57 ug/L	990.57 ppb	13:29:57
1	Sb 206.836†	1484.4	1453.2	509.70 ug/L	509.70 ppb	13:29:57
1	Se 196.026†	833.0	858.9	518.67 ug/L	518.67 ppb	13:29:57
1	Si 251.611†	80486.9	80116.7	2490.5 ug/L	2490.5 ppb	13:29:37
1	Sn 189.927†	2764.3	2760.0	495.72 ug/L	495.72 ppb	13:29:57
1	Ti 334.940†	311363.1	313792.6	509.87 ug/L	509.87 ppb	13:29:37
1	Tl 190.801†	1548.4	1592.1	506.04 ug/L	506.04 ppb	13:29:57
1	U 409.014†	13377.0	16932.4	479.33 ug/L	479.33 ppb	13:29:37
1	V 292.402†	66396.6	68273.6	501.13 ug/L	501.13 ppb	13:29:37
1	Zn 213.857†	51565.6	51032.9	493.50 ug/L	493.50 ppb	13:29:37
1	SiO2†	80953.8	80577.8	5358.8 ug/L	5358.8 ppb	13:30:57
2	Sc Radial	4095.8	4095.8	96.4 %		13:28:43
2	Y RADIAL	4225.8	4225.8	95.99 %		13:28:43
2	Al 396.153Radial†	4763.7	5103.1	5081.2 ug/L	5081.2 ppb	13:28:43
2	Ca 317.933Radial†	2700.1	2784.0	5193.2 ug/L	5193.2 ppb	13:29:03
2	Fe 238.204 Radial†	484.1	492.3	5246.9 ug/L	5246.9 ppb	13:29:03
2	K 766.490 Radial†	27409.2	25275.5	5095.8 ug/L	5095.8 ppb	13:28:43
2	Mg 279.077 IEC†	135.8	138.2	5337.1 ug/L	5337.1 ppb	13:29:03
2	Na 589.592 Radial†	29666.7	30583.0	10201 ug/L	10201 ppb	13:28:43
2	Sr 421.552†	63950.8	66282.5	511.75 ug/L	511.75 ppb	13:28:43
2	Sc 361.383	847465.7	847465.7	99.701 %		13:30:04
2	Y 371.029	689049.5	689049.5	98.053 %		13:30:04
2	Ag 328.068†	102828.9	102909.8	497.42 ug/L	497.42 ppb	13:30:04
2	As 188.979†	1128.7	1160.4	492.71 ug/L	492.71 ppb	13:30:24
2	B 249.677†	20622.5	21166.3	495.72 ug/L	495.72 ppb	13:30:04
2	Ba 233.527†	61314.6	61479.8	500.44 ug/L	500.44 ppb	13:30:04
2	Be 313.107†	1341780.8	1350146.4	497.07 ug/L	497.07 ppb	13:30:04
2	Cd 226.502†	40896.5	41214.7	481.84 ug/L	481.84 ppb	13:30:24
2	Co 228.616†	23324.2	23473.1	489.53 ug/L	489.53 ppb	13:30:24
2	Cr 267.716†	42677.6	42656.0	496.87 ug/L	496.87 ppb	13:30:04
2	Cu 324.752†	168900.4	161313.1	493.90 ug/L	493.90 ppb	13:30:04
2	Mn 257.610†	434688.4	435423.1	502.51 ug/L	502.51 ppb	13:30:04
2	Mo 202.031†	6635.9	6645.3	494.26 ug/L	494.26 ppb	13:30:24
2	Ni 231.604†	19111.2	19055.0	487.78 ug/L	487.78 ppb	13:30:24

2	P 214.914†	4658.6	4430.6	2361.9 ug/L	2361.9 ppb	13:30:24
2	Pb 220.353†	3932.1	4017.5	499.30 ug/L	499.30 ppb	13:30:24
2	S 181.975 Axial†	793.9	753.4	983.69 ug/L	983.69 ppb	13:30:24
2	Sb 206.836†	1461.1	1429.8	501.54 ug/L	501.54 ppb	13:30:24
2	Se 196.026†	813.1	838.9	507.90 ug/L	507.90 ppb	13:30:24
2	Si 251.611†	80375.8	80004.7	2487.1 ug/L	2487.1 ppb	13:30:04
2	Sn 189.927†	2732.6	2728.2	490.07 ug/L	490.07 ppb	13:30:24
2	Ti 334.940†	310445.9	312870.4	508.39 ug/L	508.39 ppb	13:30:04
2	Tl 190.801†	1519.9	1563.5	497.03 ug/L	497.03 ppb	13:30:24
2	U 409.014†	13374.0	16929.3	479.20 ug/L	479.20 ppb	13:30:04
2	V 292.402†	66305.8	68182.0	500.35 ug/L	500.35 ppb	13:30:04
2	Zn 213.857†	51371.3	50837.7	491.61 ug/L	491.61 ppb	13:30:04
2	SiO2†	79242.0	78860.2	5244.4 ug/L	5244.4 ppb	13:31:02
3	Sc Radial	4222.0	4222.0	99.3 %		13:29:08
3	Y RADIAL	4362.8	4362.8	99.11 %		13:29:08
3	Al 396.153Radial†	4924.0	5116.8	5094.7 ug/L	5094.7 ppb	13:29:08
3	Ca 317.933Radial†	2706.1	2706.4	5048.4 ug/L	5048.4 ppb	13:29:28
3	Fe 238.204 Radial†	482.6	475.9	5072.2 ug/L	5072.2 ppb	13:29:28
3	K 766.490 Radial†	28113.7	25134.8	5067.4 ug/L	5067.4 ppb	13:29:08
3	Mg 279.077 IEC†	133.9	132.1	5101.0 ug/L	5101.0 ppb	13:29:28
3	Na 589.592 Radial†	30432.2	30433.8	10151 ug/L	10151 ppb	13:29:08
3	Sr 421.552†	65789.5	66150.7	510.73 ug/L	510.73 ppb	13:29:08
3	Sc 361.383	853808.9	853808.9	100.45 %		13:30:32
3	Y 371.029	694630.8	694630.8	98.848 %		13:30:32
3	Ag 328.068†	102619.6	101935.2	492.67 ug/L	492.67 ppb	13:30:32
3	As 188.979†	1140.5	1163.8	494.02 ug/L	494.02 ppb	13:30:52
3	B 249.677†	20608.0	20998.2	491.78 ug/L	491.78 ppb	13:30:32
3	Ba 233.527†	61053.5	60762.9	494.60 ug/L	494.60 ppb	13:30:32
3	Be 313.107†	1339080.4	1337459.6	492.40 ug/L	492.40 ppb	13:30:32
3	Cd 226.502†	41318.9	41330.5	483.21 ug/L	483.21 ppb	13:30:52
3	Co 228.616†	23573.6	23547.5	491.10 ug/L	491.10 ppb	13:30:52
3	Cr 267.716†	42533.3	42194.3	491.49 ug/L	491.49 ppb	13:30:32
3	Cu 324.752†	168480.6	159636.6	488.77 ug/L	488.77 ppb	13:30:32
3	Mn 257.610†	433048.0	430550.8	496.88 ug/L	496.88 ppb	13:30:32
3	Mo 202.031†	6712.8	6672.4	496.26 ug/L	496.26 ppb	13:30:52
3	Ni 231.604†	19328.5	19129.0	489.68 ug/L	489.68 ppb	13:30:52
3	P 214.914†	4700.7	4437.8	2367.1 ug/L	2367.1 ppb	13:30:52
3	Pb 220.353†	3972.9	4028.8	500.73 ug/L	500.73 ppb	13:30:52
3	S 181.975 Axial†	804.1	757.6	989.23 ug/L	989.23 ppb	13:30:52
3	Sb 206.836†	1478.6	1436.4	503.89 ug/L	503.89 ppb	13:30:52
3	Se 196.026†	838.3	857.9	518.45 ug/L	518.45 ppb	13:30:52
3	Si 251.611†	79990.4	79022.1	2456.4 ug/L	2456.4 ppb	13:30:32
3	Sn 189.927†	2774.5	2749.6	493.88 ug/L	493.88 ppb	13:30:52
3	Ti 334.940†	309446.3	309561.9	503.02 ug/L	503.02 ppb	13:30:32
3	Tl 190.801†	1538.0	1570.2	499.07 ug/L	499.07 ppb	13:30:52
3	U 409.014†	13104.0	16560.9	468.77 ug/L	468.77 ppb	13:30:32
3	V 292.402†	66008.8	67392.3	494.66 ug/L	494.66 ppb	13:30:32
3	Zn 213.857†	51287.8	50371.8	487.08 ug/L	487.08 ppb	13:30:32
3	SiO2†	79210.2	78238.1	5202.9 ug/L	5202.9 ppb	13:31:07

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	849578.0	99.949 %	0.4311			0.43%
Sc Radial	4209.5	99.0 %	2.54			2.57%
Y 371.029	691014.9	98.333 %	0.4462			0.45%
Y RADIAL	4334.1	98.45 %	2.269			2.24%
Ag 328.068†	102705.7	496.39 ug/L	3.324	496.39 ppb	3.324	0.67%
QC value within limits for Ag 328.068 Recovery = 99.28%						
Al 396.153Radial†	5079.7	5057.6 ug/L	52.91	5057.6 ppb	52.91	1.05%
QC value within limits for Al 396.153Radial Recovery = 101.15%						
As 188.979†	1170.3	496.81 ug/L	5.998	496.81 ppb	5.998	1.21%
QC value within limits for As 188.979 Recovery = 99.36%						
B 249.677†	21113.2	494.48 ug/L	2.341	494.48 ppb	2.341	0.47%
QC value within limits for B 249.677 Recovery = 98.90%						
Ba 233.527†	61208.6	498.23 ug/L	3.167	498.23 ppb	3.167	0.64%
QC value within limits for Ba 233.527 Recovery = 99.65%						
Be 313.107†	1347933.0	496.25 ug/L	3.520	496.25 ppb	3.520	0.71%
QC value within limits for Be 313.107 Recovery = 99.25%						
Ca 317.933Radial†	2702.0	5040.3 ug/L	157.03	5040.3 ppb	157.03	3.12%

QC value within limits for Ca 317.933 Radial Recovery = 100.81%						
Cd	226.502†	41438.5	484.47 ug/L	3.444	484.47 ppb	3.444 0.71%
QC value within limits for Cd 226.502 Recovery = 96.89%						
Co	228.616†	23598.6	492.16 ug/L	3.288	492.16 ppb	3.288 0.67%
QC value within limits for Co 228.616 Recovery = 98.43%						
Cr	267.716†	42516.0	495.24 ug/L	3.253	495.24 ppb	3.253 0.66%
QC value within limits for Cr 267.716 Recovery = 99.05%						
Cu	324.752†	161097.8	493.24 ug/L	4.178	493.24 ppb	4.178 0.85%
QC value within limits for Cu 324.752 Recovery = 98.65%						
Fe	238.204 Radial†	477.9	5093.8 ug/L	143.56	5093.8 ppb	143.56 2.82%
QC value within limits for Fe 238.204 Radial Recovery = 101.88%						
K	766.490 Radial†	25000.7	5040.4 ug/L	72.79	5040.4 ppb	72.79 1.44%
QC value within limits for K 766.490 Radial Recovery = 100.81%						
Mg	279.077 IEC†	133.5	5155.4 ug/L	161.48	5155.4 ppb	161.48 3.13%
QC value within limits for Mg 279.077 IEC Recovery = 103.11%						
Mn	257.610†	434094.5	500.97 ug/L	3.575	500.97 ppb	3.575 0.71%
QC value within limits for Mn 257.610 Recovery = 100.19%						
Mo	202.031†	6680.4	496.85 ug/L	2.932	496.85 ppb	2.932 0.59%
QC value within limits for Mo 202.031 Recovery = 99.37%						
Na	589.592 Radial†	30383.0	10135 ug/L	76.6	10135 ppb	76.6 0.76%
QC value within limits for Na 589.592 Radial Recovery = 101.35%						
Ni	231.604†	19177.9	490.93 ug/L	3.926	490.93 ppb	3.926 0.80%
QC value within limits for Ni 231.604 Recovery = 98.19%						
P	214.914†	4458.1	2377.5 ug/L	22.54	2377.5 ppb	22.54 0.95%
QC value within limits for P 214.914 Recovery = 95.10%						
Pb	220.353†	4033.2	501.26 ug/L	2.270	501.26 ppb	2.270 0.45%
QC value within limits for Pb 220.353 Recovery = 100.25%						
S	181.975 Axial†	756.6	987.83 ug/L	3.646	987.83 ppb	3.646 0.37%
QC value within limits for S 181.975 Axial Recovery = 98.78%						
Sb	206.836†	1439.8	505.04 ug/L	4.200	505.04 ppb	4.200 0.83%
QC value within limits for Sb 206.836 Recovery = 101.01%						
Se	196.026†	851.9	515.01 ug/L	6.156	515.01 ppb	6.156 1.20%
QC value within limits for Se 196.026 Recovery = 103.00%						
Si	251.611†	79714.5	2478.0 ug/L	18.76	2478.0 ppb	18.76 0.76%
QC value within limits for Si 251.611 Recovery = 99.12%						
Sn	189.927†	2745.9	493.22 ug/L	2.880	493.22 ppb	2.880 0.58%
QC value within limits for Sn 189.927 Recovery = 98.64%						
Sr	421.552†	65860.9	508.49 ug/L	4.783	508.49 ppb	4.783 0.94%
QC value within limits for Sr 421.552 Recovery = 101.70%						
Ti	334.940†	312075.0	507.09 ug/L	3.606	507.09 ppb	3.606 0.71%
QC value within limits for Ti 334.940 Recovery = 101.42%						
Tl	190.801†	1575.3	500.71 ug/L	4.724	500.71 ppb	4.724 0.94%
QC value within limits for Tl 190.801 Recovery = 100.14%						
U	409.014†	16807.5	475.77 ug/L	6.059	475.77 ppb	6.059 1.27%
QC value within limits for U 409.014 Recovery = 95.15%						
V	292.402†	67949.3	498.71 ug/L	3.528	498.71 ppb	3.528 0.71%
QC value within limits for V 292.402 Recovery = 99.74%						
Zn	213.857†	50747.5	490.73 ug/L	3.299	490.73 ppb	3.299 0.67%
QC value within limits for Zn 213.857 Recovery = 98.15%						
SiO2†		79225.4	5268.7 ug/L	80.73	5268.7 ppb	80.73 1.53%
QC value within limits for SiO2 Recovery = 98.53%						

All analyte(s) passed QC.

Sequence No.: 3

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/16/2010 13:33:18

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	3927.6	3927.6	92.4 %		13:35:10
1	Y RADIAL	4071.0	4071.0	92.48 %		13:35:10
1	Al 396.153Radial†	-161.8	-16.1	-16.108 ug/L	-16.108 ppb	13:35:10
1	Ca 317.933Radial†	22.4	6.0	11.104 ug/L	11.104 ppb	13:35:30
1	Fe 238.204 Radial†	10.3	1.1	11.442 ug/L	11.442 ppb	13:35:30
1	K 766.490 Radial†	3230.5	324.8	65.577 ug/L	65.577 ppb	13:35:10
1	Mg 279.077 IEC†	2.7	0.2	9.5656 ug/L	9.5656 ppb	13:35:30
1	Na 589.592 Radial†	40.8	-162.9	-54.329 ug/L	-54.329 ppb	13:35:10
1	Sr 421.552†	92.6	10.4	0.0800 ug/L	0.0800 ppb	13:35:10
1	Sc 361.383	840669.4	840669.4	98.901 %		13:36:27
1	Y 371.029	694936.4	694936.4	98.891 %		13:36:27
1	Ag 328.068†	239.0	14.0	0.0695 ug/L	0.0695 ppb	13:36:27
1	As 188.979†	-27.6	0.4	0.1877 ug/L	0.1877 ppb	13:36:47
1	B 249.677†	116.2	599.4	14.099 ug/L	14.099 ppb	13:36:27
1	Ba 233.527†	8.3	-10.5	-0.0851 ug/L	-0.0851 ppb	13:36:47
1	Be 313.107†	-4317.2	-26.1	-0.0093 ug/L	-0.0093 ppb	13:36:27
1	Cd 226.502†	-201.4	-8.1	-0.0957 ug/L	-0.0957 ppb	13:36:47
1	Co 228.616†	-79.4	-1.4	-0.0289 ug/L	-0.0289 ppb	13:36:47
1	Cr 267.716†	155.6	7.6	0.0883 ug/L	0.0883 ppb	13:36:47
1	Cu 324.752†	8026.2	21.3	0.0651 ug/L	0.0651 ppb	13:36:27
1	Mn 257.610†	535.8	-28.0	-0.0316 ug/L	-0.0316 ppb	13:36:47
1	Mo 202.031†	17.1	6.9	0.5110 ug/L	0.5110 ppb	13:36:47
1	Ni 231.604†	117.0	4.8	0.1238 ug/L	0.1238 ppb	13:36:47
1	P 214.914†	246.0	6.8	3.7688 ug/L	3.7688 ppb	13:36:47
1	Pb 220.353†	-63.5	9.4	1.1581 ug/L	1.1581 ppb	13:36:47
1	S 181.975 Axial†	44.8	2.4	3.1757 ug/L	3.1757 ppb	13:36:47
1	Sb 206.836†	53.2	18.1	6.1746 ug/L	6.1746 ppb	13:36:47
1	Se 196.026†	-22.9	0.2	0.1571 ug/L	0.1571 ppb	13:36:47
1	Si 251.611†	565.3	-40.7	-1.2758 ug/L	-1.2758 ppb	13:36:47
1	Sn 189.927†	23.7	11.4	2.0410 ug/L	2.0410 ppb	13:36:47
1	Ti 334.940†	-1412.8	64.3	0.1048 ug/L	0.1048 ppb	13:36:27
1	Tl 190.801†	-29.8	9.0	2.8501 ug/L	2.8501 ppb	13:36:47
1	U 409.014†	-3440.6	36.3	1.0302 ug/L	1.0302 ppb	13:36:27
1	V 292.402†	-1677.6	-18.9	-0.1296 ug/L	-0.1296 ppb	13:36:27
1	Zn 213.857†	711.1	31.2	0.3020 ug/L	0.3020 ppb	13:36:47
1	SiO2†	616.3	3.6	0.2280 ug/L	0.2280 ppb	13:37:43
2	Sc Radial	4251.7	4251.7	100 %		13:35:35
2	Y RADIAL	4391.9	4391.9	99.77 %		13:35:35
2	Al 396.153Radial†	-154.1	5.0	4.9825 ug/L	4.9825 ppb	13:35:35
2	Ca 317.933Radial†	17.5	-0.8	-1.5118 ug/L	-1.5118 ppb	13:35:55
2	Fe 238.204 Radial†	10.3	0.2	2.1422 ug/L	2.1422 ppb	13:35:55
2	K 766.490 Radial†	3224.7	52.5	10.626 ug/L	10.626 ppb	13:35:35
2	Mg 279.077 IEC†	3.6	0.9	33.067 ug/L	33.067 ppb	13:35:55
2	Na 589.592 Radial†	-30.7	-237.8	-79.307 ug/L	-79.307 ppb	13:35:35
2	Sr 421.552†	14.5	-75.3	-0.5812 ug/L	-0.5812 ppb	13:35:35
2	Sc 361.383	840859.8	840859.8	98.924 %		13:36:53
2	Y 371.029	694632.2	694632.2	98.848 %		13:36:53
2	Ag 328.068†	155.0	-70.9	-0.3394 ug/L	-0.3394 ppb	13:36:53
2	As 188.979†	-36.6	-8.7	-3.6616 ug/L	-3.6616 ppb	13:37:13
2	B 249.677†	89.2	572.1	13.458 ug/L	13.458 ppb	13:36:53
2	Ba 233.527†	2.5	-16.3	-0.1310 ug/L	-0.1310 ppb	13:37:13
2	Be 313.107†	-4402.7	-111.5	-0.0409 ug/L	-0.0409 ppb	13:36:53
2	Cd 226.502†	-197.5	-4.2	-0.0488 ug/L	-0.0488 ppb	13:37:13
2	Co 228.616†	-74.7	3.3	0.0699 ug/L	0.0699 ppb	13:37:13
2	Cr 267.716†	169.0	21.2	0.2462 ug/L	0.2462 ppb	13:37:13
2	Cu 324.752†	8061.2	54.8	0.1665 ug/L	0.1665 ppb	13:36:53
2	Mn 257.610†	536.3	-27.6	-0.0330 ug/L	-0.0330 ppb	13:37:13
2	Mo 202.031†	13.6	3.3	0.2473 ug/L	0.2473 ppb	13:37:13
2	Ni 231.604†	103.6	-8.7	-0.2240 ug/L	-0.2240 ppb	13:37:13

2	P 214.914†	235.1	-4.3	-2.3864 ug/L	-2.3864 ppb	13:37:13
2	Pb 220.353†	-69.2	3.6	0.4419 ug/L	0.4419 ppb	13:37:13
2	S 181.975 Axial†	48.4	6.0	7.8773 ug/L	7.8773 ppb	13:37:13
2	Sb 206.836†	41.8	6.6	2.2769 ug/L	2.2769 ppb	13:37:13
2	Se 196.026†	-23.1	-0.0	-0.0205 ug/L	-0.0205 ppb	13:37:13
2	Si 251.611†	578.7	-27.3	-0.8552 ug/L	-0.8552 ppb	13:37:13
2	Sn 189.927†	27.2	14.9	2.6688 ug/L	2.6688 ppb	13:37:13
2	Ti 334.940†	-1472.1	4.8	0.0036 ug/L	0.0036 ppb	13:36:53
2	Tl 190.801†	-41.0	-2.3	-0.7335 ug/L	-0.7335 ppb	13:37:13
2	U 409.014†	-3388.1	90.2	2.5609 ug/L	2.5609 ppb	13:36:53
2	V 292.402†	-1572.0	88.2	0.6474 ug/L	0.6474 ppb	13:36:53
2	Zn 213.857†	697.8	17.6	0.1731 ug/L	0.1731 ppb	13:37:13
2	SiO2†	621.9	9.2	0.6045 ug/L	0.6045 ppb	13:37:48
3	Sc Radial	4219.0	4219.0	99.3 %		13:36:00
3	Y RADIAL	4390.6	4390.6	99.74 %		13:36:00
3	Al 396.153Radial†	-158.1	-0.3	-0.2996 ug/L	-0.2996 ppb	13:36:00
3	Ca 317.933Radial†	13.5	-4.7	-8.8094 ug/L	-8.8094 ppb	13:36:20
3	Fe 238.204 Radial†	10.0	-0.0	-0.0167 ug/L	-0.0167 ppb	13:36:20
3	K 766.490 Radial†	3161.9	14.2	2.9089 ug/L	2.9089 ppb	13:36:00
3	Mg 279.077 IEC†	0.9	-1.8	-68.962 ug/L	-68.962 ppb	13:36:20
3	Na 589.592 Radial†	-63.7	-271.2	-90.467 ug/L	-90.467 ppb	13:36:00
3	Sr 421.552†	57.1	-32.2	-0.2489 ug/L	-0.2489 ppb	13:36:00
3	Sc 361.383	843627.2	843627.2	99.249 %		13:37:18
3	Y 371.029	696156.6	696156.6	99.065 %		13:37:18
3	Ag 328.068†	118.0	-108.7	-0.5217 ug/L	-0.5217 ppb	13:37:18
3	As 188.979†	-31.0	-2.9	-1.2246 ug/L	-1.2246 ppb	13:37:38
3	B 249.677†	124.0	606.8	14.276 ug/L	14.276 ppb	13:37:18
3	Ba 233.527†	18.1	-0.6	-0.0046 ug/L	-0.0046 ppb	13:37:38
3	Be 313.107†	-4387.0	-81.0	-0.0298 ug/L	-0.0298 ppb	13:37:18
3	Cd 226.502†	-192.2	1.8	0.0212 ug/L	0.0212 ppb	13:37:38
3	Co 228.616†	-75.5	2.8	0.0603 ug/L	0.0603 ppb	13:37:38
3	Cr 267.716†	168.6	20.1	0.2345 ug/L	0.2345 ppb	13:37:38
3	Cu 324.752†	8073.9	40.9	0.1252 ug/L	0.1252 ppb	13:37:18
3	Mn 257.610†	537.4	-28.2	-0.0297 ug/L	-0.0297 ppb	13:37:38
3	Mo 202.031†	21.5	11.1	0.8284 ug/L	0.8284 ppb	13:37:38
3	Ni 231.604†	96.4	-16.4	-0.4200 ug/L	-0.4200 ppb	13:37:38
3	P 214.914†	242.1	1.9	1.0623 ug/L	1.0623 ppb	13:37:38
3	Pb 220.353†	-81.5	-8.6	-1.0587 ug/L	-1.0587 ppb	13:37:38
3	S 181.975 Axial†	49.0	6.5	8.4506 ug/L	8.4506 ppb	13:37:38
3	Sb 206.836†	59.0	23.8	8.1091 ug/L	8.1091 ppb	13:37:38
3	Se 196.026†	-11.7	11.6	6.7588 ug/L	6.7588 ppb	13:37:38
3	Si 251.611†	574.8	-33.2	-1.0437 ug/L	-1.0437 ppb	13:37:38
3	Sn 189.927†	27.7	15.3	2.7408 ug/L	2.7408 ppb	13:37:38
3	Ti 334.940†	-1491.0	-9.3	-0.0108 ug/L	-0.0108 ppb	13:37:18
3	Tl 190.801†	-44.1	-5.3	-1.6787 ug/L	-1.6787 ppb	13:37:38
3	U 409.014†	-3493.0	-4.2	-0.1210 ug/L	-0.1210 ppb	13:37:18
3	V 292.402†	-1657.4	7.3	0.0633 ug/L	0.0633 ppb	13:37:18
3	Zn 213.857†	694.8	12.3	0.1228 ug/L	0.1228 ppb	13:37:38
3	SiO2†	612.3	-2.6	-0.1956 ug/L	-0.1956 ppb	13:37:53

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	841718.8	99.025 %		0.1948				0.20%
Sc Radial	4132.8	97.2 %		4.20				4.32%
Y 371.029	695241.7	98.935 %		0.1148				0.12%
Y RADIAL	4284.5	97.33 %		4.200				4.32%
Ag 328.068†	-55.2	-0.2638 ug/L		0.30276	-0.2638 ppb		0.30276	114.75%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-3.8	-3.8082 ug/L		10.97404	-3.8082 ppb		10.97404	288.17%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-3.7	-1.5661 ug/L		1.94724	-1.5661 ppb		1.94724	124.33%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	592.8	13.944 ug/L		0.4301	13.944 ppb		0.4301	3.08%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-9.1	-0.0736 ug/L		0.06395	-0.0736 ppb		0.06395	86.94%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-72.9	-0.0267 ug/L		0.01603	-0.0267 ppb		0.01603	60.04%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	0.1	0.2609 ug/L		10.07430	0.2609 ppb		10.07430	>999.9%



QC value within limits for Ca 317.933 Radial Recovery = Not calculated					
Cd 226.502†	-3.5	-0.0411 ug/L	0.05885	-0.0411 ppb	0.05885 143.12%
QC value within limits for Cd 226.502 Recovery = Not calculated					
Co 228.616†	1.6	0.0338 ug/L	0.05447	0.0338 ppb	0.05447 161.35%
QC value within limits for Co 228.616 Recovery = Not calculated					
Cr 267.716†	16.3	0.1896 ug/L	0.08797	0.1896 ppb	0.08797 46.39%
QC value within limits for Cr 267.716 Recovery = Not calculated					
Cu 324.752†	39.0	0.1189 ug/L	0.05097	0.1189 ppb	0.05097 42.86%
QC value within limits for Cu 324.752 Recovery = Not calculated					
Fe 238.204 Radial†	0.4	4.5223 ug/L	6.08866	4.5223 ppb	6.08866 134.64%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated					
K 766.490 Radial†	130.5	26.371 ug/L	34.1725	26.371 ppb	34.1725 129.58%
QC value within limits for K 766.490 Radial Recovery = Not calculated					
Mg 279.077 IEC†	-0.2	-8.7766 ug/L	53.43030	-8.7766 ppb	53.43030 608.78%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated					
Mn 257.610†	-27.9	-0.0314 ug/L	0.00162	-0.0314 ppb	0.00162 5.14%
QC value within limits for Mn 257.610 Recovery = Not calculated					
Mo 202.031†	7.1	0.5289 ug/L	0.29095	0.5289 ppb	0.29095 55.01%
QC value within limits for Mo 202.031 Recovery = Not calculated					
Na 589.592 Radial†	-224.0	-74.701 ug/L	18.5043	-74.701 ppb	18.5043 24.77%
QC value within limits for Na 589.592 Radial Recovery = Not calculated					
Ni 231.604†	-6.8	-0.1734 ug/L	0.27539	-0.1734 ppb	0.27539 158.83%
QC value within limits for Ni 231.604 Recovery = Not calculated					
P 214.914†	1.5	0.8149 ug/L	3.08504	0.8149 ppb	3.08504 378.58%
QC value within limits for P 214.914 Recovery = Not calculated					
Pb 220.353†	1.5	0.1804 ug/L	1.13129	0.1804 ppb	1.13129 627.03%
QC value within limits for Pb 220.353 Recovery = Not calculated					
S 181.975 Axial†	5.0	6.5012 ug/L	2.89423	6.5012 ppb	2.89423 44.52%
QC value within limits for S 181.975 Axial Recovery = Not calculated					
Sb 206.836†	16.2	5.5202 ug/L	2.97064	5.5202 ppb	2.97064 53.81%
QC value within limits for Sb 206.836 Recovery = Not calculated					
Se 196.026†	3.9	2.2985 ug/L	3.86374	2.2985 ppb	3.86374 168.10%
QC value within limits for Se 196.026 Recovery = Not calculated					
Si 251.611†	-33.7	-1.0582 ug/L	0.21070	-1.0582 ppb	0.21070 19.91%
QC value within limits for Si 251.611 Recovery = Not calculated					
Sn 189.927†	13.8	2.4835 ug/L	0.38495	2.4835 ppb	0.38495 15.50%
QC value within limits for Sn 189.927 Recovery = Not calculated					
Sr 421.552†	-32.4	-0.2500 ug/L	0.33062	-0.2500 ppb	0.33062 132.23%
QC value within limits for Sr 421.552 Recovery = Not calculated					
Ti 334.940†	19.9	0.0326 ug/L	0.06299	0.0326 ppb	0.06299 193.49%
QC value within limits for Ti 334.940 Recovery = Not calculated					
Tl 190.801†	0.5	0.1460 ug/L	2.38906	0.1460 ppb	2.38906 >999.9%
QC value within limits for Tl 190.801 Recovery = Not calculated					
U 409.014†	40.8	1.1567 ug/L	1.34540	1.1567 ppb	1.34540 116.31%
QC value within limits for U 409.014 Recovery = Not calculated					
V 292.402†	25.5	0.1937 ug/L	0.40461	0.1937 ppb	0.40461 208.88%
QC value within limits for V 292.402 Recovery = Not calculated					
Zn 213.857†	20.4	0.1993 ug/L	0.09244	0.1993 ppb	0.09244 46.38%
QC value within limits for Zn 213.857 Recovery = Not calculated					
SiO2†	3.4	0.2123 ug/L	0.40024	0.2123 ppb	0.40024 188.53%
QC value within limits for SiO2 Recovery = Not calculated					

All analyte(s) passed QC.

Sequence No.: 11

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/16/2010 15:01:36

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	4080.2	4080.2	96.0 %		15:03:48
1	Y RADIAL	4285.5	4285.5	97.35 %		15:03:28
1	Al 396.153Radial†	4783.5	5142.6	5120.5 ug/L	5120.5 ppb	15:03:28
1	Ca 317.933Radial†	2644.9	2737.2	5106.0 ug/L	5106.0 ppb	15:03:48
1	Fe 238.204 Radial†	496.7	507.4	5407.7 ug/L	5407.7 ppb	15:03:48
1	K 766.490 Radial†	28390.1	26406.3	5323.2 ug/L	5323.2 ppb	15:03:28
1	Mg 279.077 IEC†	132.7	135.6	5235.1 ug/L	5235.1 ppb	15:03:48
1	Na 589.592 Radial†	35528.9	36808.2	12278 ug/L	12278 ppb	15:03:28
1	Sr 421.552†	66773.4	69477.1	536.42 ug/L	536.42 ppb	15:03:28
1	Sc 361.383	819156.6	819156.6	96.370 %		15:04:47
1	Y 371.029	661929.3	661929.3	94.194 %		15:04:47
1	Ag 328.068†	100495.8	104053.1	502.95 ug/L	502.95 ppb	15:04:47
1	As 188.979†	1103.3	1173.1	498.13 ug/L	498.13 ppb	15:05:07
1	B 249.677†	21328.1	22613.3	529.71 ug/L	529.71 ppb	15:04:47
1	Ba 233.527†	59092.6	61299.4	498.97 ug/L	498.97 ppb	15:04:47
1	Be 313.107†	1308525.1	1362147.6	501.49 ug/L	501.49 ppb	15:04:47
1	Cd 226.502†	39476.7	41159.1	481.17 ug/L	481.17 ppb	15:05:07
1	Co 228.616†	22888.1	23829.0	496.95 ug/L	496.95 ppb	15:05:07
1	Cr 267.716†	40435.4	41808.7	487.01 ug/L	487.01 ppb	15:04:47
1	Cu 324.752†	168397.9	166646.2	510.24 ug/L	510.24 ppb	15:04:47
1	Mn 257.610†	421122.8	436413.9	503.67 ug/L	503.67 ppb	15:04:47
1	Mo 202.031†	6473.2	6706.6	498.82 ug/L	498.82 ppb	15:05:07
1	Ni 231.604†	18503.6	19087.0	488.60 ug/L	488.60 ppb	15:05:07
1	P 214.914†	4488.7	4415.7	2350.3 ug/L	2350.3 ppb	15:05:07
1	Pb 220.353†	3783.4	3999.4	497.06 ug/L	497.06 ppb	15:05:07
1	S 181.975 Axial†	860.5	850.0	1109.9 ug/L	1109.9 ppb	15:05:07
1	Sb 206.836†	1449.8	1468.7	514.73 ug/L	514.73 ppb	15:05:07
1	Se 196.026†	789.1	842.1	510.34 ug/L	510.34 ppb	15:05:07
1	Si 251.611†	77647.3	79959.4	2485.6 ug/L	2485.6 ppb	15:04:47
1	Sn 189.927†	2625.5	2711.8	487.12 ug/L	487.12 ppb	15:05:07
1	Ti 334.940†	303184.0	316095.8	513.63 ug/L	513.63 ppb	15:04:47
1	Tl 190.801†	1506.1	1601.9	509.16 ug/L	509.16 ppb	15:05:07
1	U 409.014†	13079.8	17087.6	483.70 ug/L	483.70 ppb	15:04:47
1	V 292.402†	63536.0	67606.3	496.22 ug/L	496.22 ppb	15:04:47
1	Zn 213.857†	49869.6	51060.1	493.73 ug/L	493.73 ppb	15:04:47
1	SiO2†	77669.3	79975.0	5318.6 ug/L	5318.6 ppb	15:06:08
2	Sc Radial	4084.2	4084.2	96.1 %		15:04:14
2	Y RADIAL	4305.4	4305.4	97.80 %		15:03:54
2	Al 396.153Radial†	4809.5	5164.9	5142.6 ug/L	5142.6 ppb	15:03:54
2	Ca 317.933Radial†	2636.3	2725.6	5084.2 ug/L	5084.2 ppb	15:04:14
2	Fe 238.204 Radial†	491.9	502.0	5349.6 ug/L	5349.6 ppb	15:04:14
2	K 766.490 Radial†	28459.4	26449.4	5332.0 ug/L	5332.0 ppb	15:03:54
2	Mg 279.077 IEC†	130.3	133.0	5134.7 ug/L	5134.7 ppb	15:04:14
2	Na 589.592 Radial†	35522.4	36765.2	12263 ug/L	12263 ppb	15:03:54
2	Sr 421.552†	66527.8	69153.4	533.92 ug/L	533.92 ppb	15:03:54
2	Sc 361.383	819198.5	819198.5	96.375 %		15:05:15
2	Y 371.029	661013.3	661013.3	94.064 %		15:05:15
2	Ag 328.068†	100523.5	104076.6	503.04 ug/L	503.04 ppb	15:05:15
2	As 188.979†	1106.4	1176.3	499.47 ug/L	499.47 ppb	15:05:35
2	B 249.677†	21213.1	22492.8	526.88 ug/L	526.88 ppb	15:05:15
2	Ba 233.527†	59207.3	61415.3	499.92 ug/L	499.92 ppb	15:05:15
2	Be 313.107†	1309711.7	1363309.5	501.92 ug/L	501.92 ppb	15:05:15
2	Cd 226.502†	39584.1	41268.4	482.46 ug/L	482.46 ppb	15:05:35
2	Co 228.616†	22938.8	23880.5	498.03 ug/L	498.03 ppb	15:05:35
2	Cr 267.716†	40488.5	41861.6	487.62 ug/L	487.62 ppb	15:05:15
2	Cu 324.752†	168288.1	166523.4	509.86 ug/L	509.86 ppb	15:05:15
2	Mn 257.610†	422577.7	437901.2	505.39 ug/L	505.39 ppb	15:05:15
2	Mo 202.031†	6501.1	6735.2	500.94 ug/L	500.94 ppb	15:05:35
2	Ni 231.604†	18578.0	19163.2	490.55 ug/L	490.55 ppb	15:05:35

2	P 214.914†	4503.4	4430.8	2358.8 ug/L	2358.8 ppb	15:05:35
2	Pb 220.353†	3796.4	4012.8	498.73 ug/L	498.73 ppb	15:05:35
2	S 181.975 Axial†	860.5	849.9	1109.8 ug/L	1109.8 ppb	15:05:35
2	Sb 206.836†	1451.8	1470.7	515.47 ug/L	515.47 ppb	15:05:35
2	Se 196.026†	788.4	841.4	509.73 ug/L	509.73 ppb	15:05:35
2	Si 251.611†	77846.7	80162.2	2491.9 ug/L	2491.9 ppb	15:05:15
2	Sn 189.927†	2629.9	2716.2	487.91 ug/L	487.91 ppb	15:05:35
2	Ti 334.940†	303723.5	316639.6	514.52 ug/L	514.52 ppb	15:05:15
2	Tl 190.801†	1501.8	1597.4	507.75 ug/L	507.75 ppb	15:05:35
2	U 409.014†	13124.5	17133.2	485.01 ug/L	485.01 ppb	15:05:15
2	V 292.402†	63678.1	67750.3	497.30 ug/L	497.30 ppb	15:05:15
2	Zn 213.857†	50048.3	51242.9	495.51 ug/L	495.51 ppb	15:05:15
2	SiO2†	78162.3	80482.5	5352.4 ug/L	5352.4 ppb	15:06:13
3	Sc Radial	3909.5	3909.5	92.0 %		15:04:39
3	Y RADIAL	4212.4	4212.4	95.69 %		15:04:19
3	Al 396.153Radial†	4655.8	5221.4	5199.5 ug/L	5199.5 ppb	15:04:19
3	Ca 317.933Radial†	2635.0	2846.7	5310.2 ug/L	5310.2 ppb	15:04:39
3	Fe 238.204 Radial†	490.9	523.7	5580.3 ug/L	5580.3 ppb	15:04:39
3	K 766.490 Radial†	27867.2	27128.8	5469.0 ug/L	5469.0 ppb	15:04:19
3	Mg 279.077 IEC†	130.4	139.1	5370.7 ug/L	5370.7 ppb	15:04:39
3	Na 589.592 Radial†	34028.2	36792.3	12272 ug/L	12272 ppb	15:04:19
3	Sr 421.552†	64668.6	70225.4	542.19 ug/L	542.19 ppb	15:04:19
3	Sc 361.383	822426.5	822426.5	96.755 %		15:05:42
3	Y 371.029	663379.1	663379.1	94.400 %		15:05:42
3	Ag 328.068†	100677.5	103826.3	501.91 ug/L	501.91 ppb	15:05:42
3	As 188.979†	1081.6	1146.2	486.84 ug/L	486.84 ppb	15:06:02
3	B 249.677†	21369.9	22568.5	528.65 ug/L	528.65 ppb	15:05:42
3	Ba 233.527†	59199.0	61165.5	497.89 ug/L	497.89 ppb	15:05:42
3	Be 313.107†	1309185.8	1357432.0	499.76 ug/L	499.76 ppb	15:05:42
3	Cd 226.502†	39104.8	40611.8	474.75 ug/L	474.75 ppb	15:06:02
3	Co 228.616†	22684.3	23523.9	490.58 ug/L	490.58 ppb	15:06:02
3	Cr 267.716†	40464.0	41671.4	485.41 ug/L	485.41 ppb	15:05:42
3	Cu 324.752†	168755.9	166321.5	509.25 ug/L	509.25 ppb	15:05:42
3	Mn 257.610†	422577.2	436179.7	503.41 ug/L	503.41 ppb	15:05:42
3	Mo 202.031†	6435.8	6641.2	493.98 ug/L	493.98 ppb	15:06:02
3	Ni 231.604†	18352.1	18854.0	482.63 ug/L	482.63 ppb	15:06:02
3	P 214.914†	4440.6	4347.5	2312.5 ug/L	2312.5 ppb	15:06:02
3	Pb 220.353†	3752.5	3951.9	491.17 ug/L	491.17 ppb	15:06:02
3	S 181.975 Axial†	847.0	832.5	1087.1 ug/L	1087.1 ppb	15:06:02
3	Sb 206.836†	1439.7	1452.3	508.99 ug/L	508.99 ppb	15:06:02
3	Se 196.026†	789.3	839.1	509.12 ug/L	509.12 ppb	15:06:02
3	Si 251.611†	77939.9	79941.6	2485.1 ug/L	2485.1 ppb	15:05:42
3	Sn 189.927†	2611.7	2686.7	482.65 ug/L	482.65 ppb	15:06:02
3	Ti 334.940†	304304.4	316003.0	513.49 ug/L	513.49 ppb	15:05:42
3	Tl 190.801†	1476.3	1564.9	497.50 ug/L	497.50 ppb	15:06:02
3	U 409.014†	13078.8	17032.6	482.13 ug/L	482.13 ppb	15:05:42
3	V 292.402†	63704.2	67518.0	495.49 ug/L	495.49 ppb	15:05:42
3	Zn 213.857†	50142.4	51136.3	494.48 ug/L	494.48 ppb	15:05:42
3	SiO2†	77371.0	79346.3	5276.8 ug/L	5276.8 ppb	15:06:18

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	820260.5	96.500 %		0.2207			0.23%
Sc Radial	4024.6	94.7 %		2.35			2.48%
Y 371.029	662107.2	94.220 %		0.1698			0.18%
Y RADIAL	4267.7	96.95 %		1.113			1.15%
Ag 328.068†	103985.3	502.63 ug/L		0.627	502.63 ppb	0.627	0.12%
QC value within limits for Ag 328.068 Recovery = 100.53%							
Al 396.153Radial†	5176.3	5154.2 ug/L		40.75	5154.2 ppb	40.75	0.79%
QC value within limits for Al 396.153Radial Recovery = 103.08%							
As 188.979†	1165.2	494.81 ug/L		6.939	494.81 ppb	6.939	1.40%
QC value within limits for As 188.979 Recovery = 98.96%							
B 249.677†	22558.2	528.41 ug/L		1.428	528.41 ppb	1.428	0.27%
QC value within limits for B 249.677 Recovery = 105.68%							
Ba 233.527†	61293.4	498.93 ug/L		1.013	498.93 ppb	1.013	0.20%
QC value within limits for Ba 233.527 Recovery = 99.79%							
Be 313.107†	1360963.0	501.06 ug/L		1.144	501.06 ppb	1.144	0.23%
QC value within limits for Be 313.107 Recovery = 100.21%							
Ca 317.933Radial†	2769.8	5166.8 ug/L		124.65	5166.8 ppb	124.65	2.41%

QC value within limits for Ca 317.933 Radial Recovery = 103.34%					
Cd 226.502†	41013.1	479.46 ug/L	4.130	479.46 ppb	4.130 0.86%
QC value within limits for Cd 226.502 Recovery = 95.89%					
Co 228.616†	23744.5	495.19 ug/L	4.028	495.19 ppb	4.028 0.81%
QC value within limits for Co 228.616 Recovery = 99.04%					
Cr 267.716†	41780.5	486.68 ug/L	1.140	486.68 ppb	1.140 0.23%
QC value within limits for Cr 267.716 Recovery = 97.34%					
Cu 324.752†	166497.0	509.78 ug/L	0.496	509.78 ppb	0.496 0.10%
QC value within limits for Cu 324.752 Recovery = 101.96%					
Fe 238.204 Radial†	511.0	5445.8 ug/L	120.01	5445.8 ppb	120.01 2.20%
QC value within limits for Fe 238.204 Radial Recovery = 108.92%					
K 766.490 Radial†	26661.5	5374.7 ug/L	81.77	5374.7 ppb	81.77 1.52%
QC value within limits for K 766.490 Radial Recovery = 107.49%					
Mg 279.077 IEC†	135.9	5246.9 ug/L	118.45	5246.9 ppb	118.45 2.26%
QC value within limits for Mg 279.077 IEC Recovery = 104.94%					
Mn 257.610†	436831.6	504.16 ug/L	1.072	504.16 ppb	1.072 0.21%
QC value within limits for Mn 257.610 Recovery = 100.83%					
Mo 202.031†	6694.3	497.91 ug/L	3.569	497.91 ppb	3.569 0.72%
QC value within limits for Mo 202.031 Recovery = 99.58%					
Na 589.592 Radial†	36788.6	12271 ug/L	7.2	12271 ppb	7.2 0.06%
QC value greater than the upper limit for Na 589.592 Radial Recovery = 122.71%					
Ni 231.604†	19034.8	487.26 ug/L	4.124	487.26 ppb	4.124 0.85%
QC value within limits for Ni 231.604 Recovery = 97.45%					
P 214.914†	4398.0	2340.5 ug/L	24.66	2340.5 ppb	24.66 1.05%
QC value within limits for P 214.914 Recovery = 93.62%					
Pb 220.353†	3988.0	495.65 ug/L	3.971	495.65 ppb	3.971 0.80%
QC value within limits for Pb 220.353 Recovery = 99.13%					
S 181.975 Axial†	844.1	1102.3 ug/L	13.16	1102.3 ppb	13.16 1.19%
QC value greater than the upper limit for S 181.975 Axial Recovery = 110.23%					
Sb 206.836†	1463.9	513.07 ug/L	3.546	513.07 ppb	3.546 0.69%
QC value within limits for Sb 206.836 Recovery = 102.61%					
Se 196.026†	840.9	509.73 ug/L	0.605	509.73 ppb	0.605 0.12%
QC value within limits for Se 196.026 Recovery = 101.95%					
Si 251.611†	80021.1	2487.5 ug/L	3.79	2487.5 ppb	3.79 0.15%
QC value within limits for Si 251.611 Recovery = 99.50%					
Sn 189.927†	2704.9	485.89 ug/L	2.833	485.89 ppb	2.833 0.58%
QC value within limits for Sn 189.927 Recovery = 97.18%					
Sr 421.552†	69618.7	537.51 ug/L	4.245	537.51 ppb	4.245 0.79%
QC value within limits for Sr 421.552 Recovery = 107.50%					
Ti 334.940†	316246.1	513.88 ug/L	0.555	513.88 ppb	0.555 0.11%
QC value within limits for Ti 334.940 Recovery = 102.78%					
Tl 190.801†	1588.1	504.80 ug/L	6.362	504.80 ppb	6.362 1.26%
QC value within limits for Tl 190.801 Recovery = 100.96%					
U 409.014†	17084.5	483.61 ug/L	1.443	483.61 ppb	1.443 0.30%
QC value within limits for U 409.014 Recovery = 96.72%					
V 292.402†	67624.9	496.34 ug/L	0.912	496.34 ppb	0.912 0.18%
QC value within limits for V 292.402 Recovery = 99.27%					
Zn 213.857†	51146.4	494.57 ug/L	0.894	494.57 ppb	0.894 0.18%
QC value within limits for Zn 213.857 Recovery = 98.91%					
SiO2†	79934.6	5315.9 ug/L	37.85	5315.9 ppb	37.85 0.71%
QC value within limits for SiO2 Recovery = 99.41%					
QC Failed. Continue with analysis.					

Sequence No.: 12

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/16/2010 15:08:27

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	3994.6	3994.6	94.0 %		15:10:40
1	Y RADIAL	4277.5	4277.5	97.17 %		15:10:20
1	Al 396.153Radial†	-133.0	17.5	17.468 ug/L	17.468 ppb	15:10:20
1	Ca 317.933Radial†	17.8	0.7	1.2428 ug/L	1.2428 ppb	15:10:40
1	Fe 238.204 Radial†	7.8	-1.7	-18.094 ug/L	-18.094 ppb	15:10:40
1	K 766.490 Radial†	4316.4	1421.7	286.58 ug/L	286.58 ppb	15:10:20
1	Mg 279.077 IEC†	2.5	-0.1	-4.1074 ug/L	-4.1074 ppb	15:10:40
1	Na 589.592 Radial†	3182.1	3179.2	1060.5 ug/L	1060.5 ppb	15:10:20
1	Sr 421.552†	121.3	39.3	0.3035 ug/L	0.3035 ppb	15:10:20
1	Sc 361.383	812570.2	812570.2	95.596 %		15:11:37
1	Y 371.029	665154.7	665154.7	94.653 %		15:11:37
1	Ag 328.068†	107.8	-114.9	-0.5695 ug/L	-0.5695 ppb	15:11:37
1	As 188.979†	-34.4	-7.7	-3.2463 ug/L	-3.2463 ppb	15:11:57
1	B 249.677†	765.3	1282.5	30.174 ug/L	30.174 ppb	15:11:37
1	Ba 233.527†	11.4	-6.9	-0.0578 ug/L	-0.0578 ppb	15:11:57
1	Be 313.107†	-4311.6	-171.1	-0.0627 ug/L	-0.0627 ppb	15:11:37
1	Cd 226.502†	-198.7	-12.3	-0.1399 ug/L	-0.1399 ppb	15:11:57
1	Co 228.616†	-71.2	4.4	0.0922 ug/L	0.0922 ppb	15:11:57
1	Cr 267.716†	150.0	7.2	0.0776 ug/L	0.0776 ppb	15:11:57
1	Cu 324.752†	7871.3	139.9	0.4206 ug/L	0.4206 ppb	15:11:37
1	Mn 257.610†	536.6	-8.4	-0.0113 ug/L	-0.0113 ppb	15:11:57
1	Mo 202.031†	14.2	4.4	0.3273 ug/L	0.3273 ppb	15:11:57
1	Ni 231.604†	102.6	-6.2	-0.1583 ug/L	-0.1583 ppb	15:11:57
1	P 214.914†	242.6	11.8	6.4874 ug/L	6.4874 ppb	15:11:57
1	Pb 220.353†	-65.8	4.7	0.5903 ug/L	0.5903 ppb	15:11:57
1	S 181.975 Axial†	128.7	91.7	119.84 ug/L	119.84 ppb	15:11:57
1	Sb 206.836†	31.6	-2.6	-0.8658 ug/L	-0.8658 ppb	15:11:57
1	Se 196.026†	-15.1	7.5	4.3331 ug/L	4.3331 ppb	15:11:57
1	Si 251.611†	537.3	-50.3	-1.5702 ug/L	-1.5702 ppb	15:11:57
1	Sn 189.927†	16.3	4.4	0.7940 ug/L	0.7940 ppb	15:11:57
1	Ti 334.940†	-1381.2	48.0	0.0732 ug/L	0.0732 ppb	15:11:37
1	Tl 190.801†	-30.3	7.4	2.3483 ug/L	2.3483 ppb	15:11:57
1	U 409.014†	-2947.7	431.6	12.263 ug/L	12.263 ppb	15:11:37
1	V 292.402†	-1661.0	-60.2	-0.4055 ug/L	-0.4055 ppb	15:11:37
1	Zn 213.857†	675.1	18.5	0.1836 ug/L	0.1836 ppb	15:11:57
1	SiO2†	573.8	-19.3	-1.2964 ug/L	-1.2964 ppb	15:12:53
2	Sc Radial	4018.9	4018.9	94.5 %		15:11:05
2	Y RADIAL	4277.1	4277.1	97.16 %		15:10:45
2	Al 396.153Radial†	-138.5	12.5	12.410 ug/L	12.410 ppb	15:10:45
2	Ca 317.933Radial†	19.8	2.6	4.8968 ug/L	4.8968 ppb	15:11:05
2	Fe 238.204 Radial†	10.6	1.2	12.816 ug/L	12.816 ppb	15:11:05
2	K 766.490 Radial†	4354.7	1434.6	289.20 ug/L	289.20 ppb	15:10:45
2	Mg 279.077 IEC†	1.9	-0.7	-27.977 ug/L	-27.977 ppb	15:11:05
2	Na 589.592 Radial†	3056.1	3025.5	1009.2 ug/L	1009.2 ppb	15:10:45
2	Sr 421.552†	84.3	-0.7	-0.0052 ug/L	-0.0052 ppb	15:10:45
2	Sc 361.383	798526.3	798526.3	93.943 %		15:12:02
2	Y 371.029	653593.9	653593.9	93.008 %		15:12:02
2	Ag 328.068†	218.7	5.2	0.0283 ug/L	0.0283 ppb	15:12:02
2	As 188.979†	-33.0	-6.8	-2.8703 ug/L	-2.8703 ppb	15:12:22
2	B 249.677†	802.4	1336.1	31.431 ug/L	31.431 ppb	15:12:02
2	Ba 233.527†	13.6	-4.4	-0.0355 ug/L	-0.0355 ppb	15:12:22
2	Be 313.107†	-4331.6	-271.7	-0.0996 ug/L	-0.0996 ppb	15:12:02
2	Cd 226.502†	-201.9	-19.4	-0.2288 ug/L	-0.2288 ppb	15:12:22
2	Co 228.616†	-77.3	-3.4	-0.0675 ug/L	-0.0675 ppb	15:12:22
2	Cr 267.716†	148.5	8.4	0.0977 ug/L	0.0977 ppb	15:12:22
2	Cu 324.752†	7807.8	217.0	0.6648 ug/L	0.6648 ppb	15:12:02
2	Mn 257.610†	543.4	8.7	0.0125 ug/L	0.0125 ppb	15:12:22
2	Mo 202.031†	31.9	23.5	1.7453 ug/L	1.7453 ppb	15:12:22
2	Ni 231.604†	96.2	-11.2	-0.2858 ug/L	-0.2858 ppb	15:12:22

2	P 214.914†	239.8	13.3	7.2564 ug/L	7.2564 ppb	15:12:22
2	Pb 220.353†	-53.1	17.1	2.1215 ug/L	2.1215 ppb	15:12:22
2	S 181.975 Axial†	109.2	73.4	95.873 ug/L	95.873 ppb	15:12:22
2	Sb 206.836†	41.4	8.4	2.8955 ug/L	2.8955 ppb	15:12:22
2	Se 196.026†	-21.2	0.8	0.4863 ug/L	0.4863 ppb	15:12:22
2	Si 251.611†	552.6	-24.0	-0.7704 ug/L	-0.7704 ppb	15:12:22
2	Sn 189.927†	13.6	1.9	0.3344 ug/L	0.3344 ppb	15:12:22
2	Ti 334.940†	-1341.9	64.5	0.1075 ug/L	0.1075 ppb	15:12:02
2	Tl 190.801†	-27.1	10.3	3.2534 ug/L	3.2534 ppb	15:12:22
2	U 409.014†	-3279.8	23.9	0.6774 ug/L	0.6774 ppb	15:12:02
2	V 292.402†	-1582.1	-6.8	-0.0257 ug/L	-0.0257 ppb	15:12:02
2	Zn 213.857†	687.6	44.2	0.4303 ug/L	0.4303 ppb	15:12:22
2	SiO2†	592.2	10.9	0.6789 ug/L	0.6789 ppb	15:12:58
3	Sc Radial	4015.0	4015.0	94.5 %		15:11:30
3	Y RADIAL	4227.7	4227.7	96.03 %		15:11:10
3	Al 396.153Radial†	-142.5	8.2	8.1425 ug/L	8.1425 ppb	15:11:10
3	Ca 317.933Radial†	22.5	5.5	10.237 ug/L	10.237 ppb	15:11:30
3	Fe 238.204 Radial†	9.8	0.3	3.6350 ug/L	3.6350 ppb	15:11:30
3	K 766.490 Radial†	4241.5	1319.0	265.86 ug/L	265.86 ppb	15:11:10
3	Mg 279.077 IEC†	1.7	-0.9	-34.845 ug/L	-34.845 ppb	15:11:30
3	Na 589.592 Radial†	3167.5	3146.5	1049.6 ug/L	1049.6 ppb	15:11:10
3	Sr 421.552†	83.9	-1.0	-0.0075 ug/L	-0.0075 ppb	15:11:10
3	Sc 361.383	808530.9	808530.9	95.120 %		15:12:27
3	Y 371.029	661117.5	661117.5	94.079 %		15:12:27
3	Ag 328.068†	207.4	-9.7	-0.0484 ug/L	-0.0484 ppb	15:12:27
3	As 188.979†	-28.1	-1.3	-0.5262 ug/L	-0.5262 ppb	15:12:48
3	B 249.677†	751.7	1272.2	29.929 ug/L	29.929 ppb	15:12:27
3	Ba 233.527†	3.0	-15.7	-0.1275 ug/L	-0.1275 ppb	15:12:48
3	Be 313.107†	-4435.2	-323.6	-0.1187 ug/L	-0.1187 ppb	15:12:27
3	Cd 226.502†	-191.8	-6.1	-0.0713 ug/L	-0.0713 ppb	15:12:48
3	Co 228.616†	-66.8	8.6	0.1801 ug/L	0.1801 ppb	15:12:48
3	Cr 267.716†	149.6	7.6	0.0873 ug/L	0.0873 ppb	15:12:48
3	Cu 324.752†	7890.9	201.6	0.6154 ug/L	0.6154 ppb	15:12:27
3	Mn 257.610†	543.5	1.6	0.0036 ug/L	0.0036 ppb	15:12:48
3	Mo 202.031†	12.9	3.1	0.2339 ug/L	0.2339 ppb	15:12:48
3	Ni 231.604†	101.1	-7.2	-0.1846 ug/L	-0.1846 ppb	15:12:48
3	P 214.914†	236.4	6.5	3.5036 ug/L	3.5036 ppb	15:12:48
3	Pb 220.353†	-73.2	-3.4	-0.4179 ug/L	-0.4179 ppb	15:12:48
3	S 181.975 Axial†	103.5	65.9	86.167 ug/L	86.167 ppb	15:12:48
3	Sb 206.836†	46.2	12.9	4.3605 ug/L	4.3605 ppb	15:12:48
3	Se 196.026†	-25.0	-2.9	-1.7066 ug/L	-1.7066 ppb	15:12:48
3	Si 251.611†	562.9	-20.6	-0.6438 ug/L	-0.6438 ppb	15:12:48
3	Sn 189.927†	10.0	-2.1	-0.3839 ug/L	-0.3839 ppb	15:12:48
3	Ti 334.940†	-1375.5	46.8	0.0787 ug/L	0.0787 ppb	15:12:27
3	Tl 190.801†	-37.1	0.1	0.0444 ug/L	0.0444 ppb	15:12:48
3	U 409.014†	-3227.4	122.2	3.4704 ug/L	3.4704 ppb	15:12:27
3	V 292.402†	-1601.3	-6.2	-0.0363 ug/L	-0.0363 ppb	15:12:27
3	Zn 213.857†	673.2	20.0	0.1947 ug/L	0.1947 ppb	15:12:48
3	SiO2†	534.8	-57.3	-3.8266 ug/L	-3.8266 ppb	15:13:03

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	806542.5	94.886 %		0.8506				0.90%
Sc Radial	4009.5	94.3 %		0.31				0.33%
Y 371.029	659955.4	93.913 %		0.8349				0.89%
Y RADIAL	4260.8	96.79 %		0.651				0.67%
Ag 328.068†	-39.8	-0.1966 ug/L		0.32524	-0.1966 ppb		0.32524	165.47%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	12.7	12.674 ug/L		4.6686	12.674 ppb		4.6686	36.84%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-5.3	-2.2143 ug/L		1.47392	-2.2143 ppb		1.47392	66.57%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	1296.9	30.512 ug/L		0.8055	30.512 ppb		0.8055	2.64%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-9.0	-0.0736 ug/L		0.04800	-0.0736 ppb		0.04800	65.21%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-255.5	-0.0936 ug/L		0.02847	-0.0936 ppb		0.02847	30.40%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	2.9	5.4590 ug/L		4.52355	5.4590 ppb		4.52355	82.86%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated  
Cd 226.502† -12.6 -0.1467 ug/L 0.07896 -0.1467 ppb 0.07896 53.83%  
QC value within limits for Cd 226.502 Recovery = Not calculated  
Co 228.616† 3.2 0.0683 ug/L 0.12550 0.0683 ppb 0.12550 183.86%  
QC value within limits for Co 228.616 Recovery = Not calculated  
Cr 267.716† 7.7 0.0875 ug/L 0.01005 0.0875 ppb 0.01005 11.49%  
QC value within limits for Cr 267.716 Recovery = Not calculated  
Cu 324.752† 186.2 0.5669 ug/L 0.12911 0.5669 ppb 0.12911 22.77%  
QC value within limits for Cu 324.752 Recovery = Not calculated  
Fe 238.204 Radial† -0.1 -0.5477 ug/L 15.87374 -0.5477 ppb 15.87374 >999.9%  
QC value within limits for Fe 238.204 Radial Recovery = Not calculated  
K 766.490 Radial† 1391.8 280.55 ug/L 12.787 280.55 ppb 12.787 4.56%  
QC value greater than the upper limit for K 766.490 Radial Recovery = Not calculated  
Mg 279.077 IEC† -0.6 -22.310 ug/L 16.1333 -22.310 ppb 16.1333 72.32%  
QC value within limits for Mg 279.077 IEC Recovery = Not calculated  
Mn 257.610† 0.6 0.0016 ug/L 0.01200 0.0016 ppb 0.01200 746.36%  
QC value within limits for Mn 257.610 Recovery = Not calculated  
Mo 202.031† 10.3 0.7689 ug/L 0.84691 0.7689 ppb 0.84691 110.15%  
QC value within limits for Mo 202.031 Recovery = Not calculated  
Na 589.592 Radial† 3117.1 1039.7 ug/L 27.01 1039.7 ppb 27.01 2.60%  
QC value greater than the upper limit for Na 589.592 Radial Recovery = Not calculated  
Ni 231.604† -8.2 -0.2095 ug/L 0.06733 -0.2095 ppb 0.06733 32.13%  
QC value within limits for Ni 231.604 Recovery = Not calculated  
P 214.914† 10.6 5.7491 ug/L 1.98232 5.7491 ppb 1.98232 34.48%  
QC value within limits for P 214.914 Recovery = Not calculated  
Pb 220.353† 6.1 0.7647 ug/L 1.27864 0.7647 ppb 1.27864 167.22%  
QC value within limits for Pb 220.353 Recovery = Not calculated  
S 181.975 Axial† 77.0 100.63 ug/L 17.335 100.63 ppb 17.335 17.23%  
QC value greater than the upper limit for S 181.975 Axial Recovery = Not calculated  
Sb 206.836† 6.2 2.1301 ug/L 2.69593 2.1301 ppb 2.69593 126.56%  
QC value within limits for Sb 206.836 Recovery = Not calculated  
Se 196.026† 1.8 1.0376 ug/L 3.05737 1.0376 ppb 3.05737 294.66%  
QC value within limits for Se 196.026 Recovery = Not calculated  
Si 251.611† -31.6 -0.9948 ug/L 0.50230 -0.9948 ppb 0.50230 50.49%  
QC value within limits for Si 251.611 Recovery = Not calculated  
Sn 189.927† 1.4 0.2482 ug/L 0.59366 0.2482 ppb 0.59366 239.20%  
QC value within limits for Sn 189.927 Recovery = Not calculated  
Sr 421.552† 12.6 0.0969 ug/L 0.17891 0.0969 ppb 0.17891 184.58%  
QC value within limits for Sr 421.552 Recovery = Not calculated  
Ti 334.940† 53.1 0.0864 ug/L 0.01842 0.0864 ppb 0.01842 21.31%  
QC value within limits for Ti 334.940 Recovery = Not calculated  
Tl 190.801† 6.0 1.8820 ug/L 1.65453 1.8820 ppb 1.65453 87.91%  
QC value within limits for Tl 190.801 Recovery = Not calculated  
U 409.014† 192.6 5.4702 ug/L 6.04610 5.4702 ppb 6.04610 110.53%  
QC value within limits for U 409.014 Recovery = Not calculated  
V 292.402† -24.4 -0.1558 ug/L 0.21631 -0.1558 ppb 0.21631 138.83%  
QC value within limits for V 292.402 Recovery = Not calculated  
Zn 213.857† 27.6 0.2695 ug/L 0.13936 0.2695 ppb 0.13936 51.70%  
QC value within limits for Zn 213.857 Recovery = Not calculated  
SiO2† -21.9 -1.4814 ug/L 2.25843 -1.4814 ppb 2.25843 152.46%  
QC value within limits for SiO2 Recovery = Not calculated  
QC Failed. Continue with analysis.

Sequence No.: 2

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/16/2010 15:21:46

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	4021.8	4021.8	94.6 %		15:23:58
1	Y RADIAL	4359.5	4359.5	99.03 %		15:23:38
1	Al 396.153Radial†	4868.8	5305.2	5283.4 ug/L	5283.4 ppb	15:23:38
1	Ca 317.933Radial†	2611.7	2742.1	5115.1 ug/L	5115.1 ppb	15:23:58
1	Fe 238.204 Radial†	481.6	499.0	5318.0 ug/L	5318.0 ppb	15:23:58
1	K 766.490 Radial†	28347.3	26790.4	5401.0 ug/L	5401.0 ppb	15:23:38
1	Mg 279.077 IEC†	131.2	136.0	5251.3 ug/L	5251.3 ppb	15:23:58
1	Na 589.592 Radial†	33372.6	35066.4	11697 ug/L	11697 ppb	15:23:38
1	Sr 421.552†	66250.0	69933.7	539.94 ug/L	539.94 ppb	15:23:38
1	Sc 361.383	818520.9	818520.9	96.296 %		15:24:55
1	Y 371.029	661186.4	661186.4	94.088 %		15:24:55
1	Ag 328.068†	100535.2	104175.0	503.49 ug/L	503.49 ppb	15:25:00
1	As 188.979†	1093.7	1164.1	494.21 ug/L	494.21 ppb	15:25:20
1	B 249.677†	20988.7	22278.0	521.84 ug/L	521.84 ppb	15:25:00
1	Ba 233.527†	58799.6	61042.8	496.89 ug/L	496.89 ppb	15:25:00
1	Be 313.107†	1297864.2	1352131.1	497.78 ug/L	497.78 ppb	15:24:55
1	Cd 226.502†	39821.0	41548.4	485.74 ug/L	485.74 ppb	15:25:00
1	Co 228.616†	22874.8	23833.6	497.06 ug/L	497.06 ppb	15:25:00
1	Cr 267.716†	40450.7	41857.1	487.57 ug/L	487.57 ppb	15:25:00
1	Cu 324.752†	166993.2	165323.2	506.17 ug/L	506.17 ppb	15:25:00
1	Mn 257.610†	418653.2	434188.7	501.10 ug/L	501.10 ppb	15:24:55
1	Mo 202.031†	6384.1	6619.2	492.32 ug/L	492.32 ppb	15:25:20
1	Ni 231.604†	18463.1	19059.8	487.90 ug/L	487.90 ppb	15:25:00
1	P 214.914†	4428.3	4356.7	2318.4 ug/L	2318.4 ppb	15:25:20
1	Pb 220.353†	3720.9	3937.5	489.43 ug/L	489.43 ppb	15:25:20
1	S 181.975 Axial†	826.7	815.6	1065.0 ug/L	1065.0 ppb	15:25:20
1	Sb 206.836†	1454.2	1474.5	516.54 ug/L	516.54 ppb	15:25:20
1	Se 196.026†	791.0	844.8	511.60 ug/L	511.60 ppb	15:25:20
1	Si 251.611†	77390.5	79755.4	2479.3 ug/L	2479.3 ppb	15:25:00
1	Sn 189.927†	2605.0	2692.6	483.67 ug/L	483.67 ppb	15:25:20
1	Ti 334.940†	295793.9	308665.7	501.54 ug/L	501.54 ppb	15:25:00
1	Tl 190.801†	1498.5	1595.2	506.94 ug/L	506.94 ppb	15:25:20
1	U 409.014†	13593.6	17631.7	499.17 ug/L	499.17 ppb	15:25:00
1	V 292.402†	63658.0	67784.2	497.47 ug/L	497.47 ppb	15:25:00
1	Zn 213.857†	49816.8	51045.5	493.61 ug/L	493.61 ppb	15:25:00
1	SiO2†	79128.3	81552.8	5424.0 ug/L	5424.0 ppb	15:26:28
2	Sc Radial	4063.3	4063.3	95.6 %		15:24:23
2	Y RADIAL	4244.7	4244.7	96.42 %		15:24:03
2	Al 396.153Radial†	4756.1	5134.7	5113.0 ug/L	5113.0 ppb	15:24:03
2	Ca 317.933Radial†	2639.6	2743.2	5117.1 ug/L	5117.1 ppb	15:24:23
2	Fe 238.204 Radial†	484.7	497.0	5296.8 ug/L	5296.8 ppb	15:24:23
2	K 766.490 Radial†	27804.6	25917.0	5224.9 ug/L	5224.9 ppb	15:24:03
2	Mg 279.077 IEC†	129.8	133.1	5140.7 ug/L	5140.7 ppb	15:24:23
2	Na 589.592 Radial†	32404.4	33693.7	11239 ug/L	11239 ppb	15:24:03
2	Sr 421.552†	64552.6	67443.7	520.71 ug/L	520.71 ppb	15:24:03
2	Sc 361.383	831048.8	831048.8	97.769 %		15:25:26
2	Y 371.029	671777.8	671777.8	95.596 %		15:25:26
2	Ag 328.068†	102001.6	104101.0	503.13 ug/L	503.13 ppb	15:25:31
2	As 188.979†	1105.3	1158.8	491.98 ug/L	491.98 ppb	15:25:51
2	B 249.677†	21465.8	22437.4	525.59 ug/L	525.59 ppb	15:25:31
2	Ba 233.527†	59683.8	61026.6	496.76 ug/L	496.76 ppb	15:25:31
2	Be 313.107†	1322512.8	1357024.3	499.58 ug/L	499.58 ppb	15:25:26
2	Cd 226.502†	40464.3	41583.0	486.15 ug/L	486.15 ppb	15:25:31
2	Co 228.616†	23222.5	23831.1	497.01 ug/L	497.01 ppb	15:25:31
2	Cr 267.716†	40967.8	41752.7	486.35 ug/L	486.35 ppb	15:25:31
2	Cu 324.752†	169146.8	164911.7	504.92 ug/L	504.92 ppb	15:25:31
2	Mn 257.610†	425679.5	434821.4	501.83 ug/L	501.83 ppb	15:25:26
2	Mo 202.031†	6458.4	6595.3	490.54 ug/L	490.54 ppb	15:25:51
2	Ni 231.604†	18763.3	19077.9	488.36 ug/L	488.36 ppb	15:25:31



2	P 214.914†	4462.5	4322.4	2299.6 ug/L	2299.6 ppb	15:25:51
2	Pb 220.353†	3741.6	3900.5	484.80 ug/L	484.80 ppb	15:25:51
2	S 181.975 Axial†	808.1	783.7	1023.2 ug/L	1023.2 ppb	15:25:51
2	Sb 206.836†	1459.3	1456.9	510.52 ug/L	510.52 ppb	15:25:51
2	Se 196.026†	803.0	844.7	511.45 ug/L	511.45 ppb	15:25:51
2	Si 251.611†	78588.1	79768.7	2479.8 ug/L	2479.8 ppb	15:25:31
2	Sn 189.927†	2631.6	2679.0	481.24 ug/L	481.24 ppb	15:25:51
2	Ti 334.940†	299650.7	307979.9	500.44 ug/L	500.44 ppb	15:25:31
2	Tl 190.801†	1496.4	1569.6	498.85 ug/L	498.85 ppb	15:25:51
2	U 409.014†	13706.8	17534.7	496.42 ug/L	496.42 ppb	15:25:31
2	V 292.402†	64492.4	67641.0	496.41 ug/L	496.41 ppb	15:25:31
2	Zn 213.857†	50628.1	51095.4	494.10 ug/L	494.10 ppb	15:25:31
2	SiO2†	77270.0	78413.3	5214.7 ug/L	5214.7 ppb	15:26:33
3	Sc Radial	4033.3	4033.3	94.9 %		15:24:48
3	Y RADIAL	4307.5	4307.5	97.85 %		15:24:28
3	Al 396.153Radial†	4812.6	5231.4	5209.6 ug/L	5209.6 ppb	15:24:28
3	Ca 317.933Radial†	2603.5	2725.7	5084.4 ug/L	5084.4 ppb	15:24:48
3	Fe 238.204 Radial†	481.8	497.7	5304.5 ug/L	5304.5 ppb	15:24:48
3	K 766.490 Radial†	28051.9	26393.9	5321.1 ug/L	5321.1 ppb	15:24:28
3	Mg 279.077 IEC†	127.9	132.1	5100.8 ug/L	5100.8 ppb	15:24:48
3	Na 589.592 Radial†	32789.3	34351.5	11458 ug/L	11458 ppb	15:24:28
3	Sr 421.552†	65723.1	69179.5	534.12 ug/L	534.12 ppb	15:24:28
3	Sc 361.383	828655.1	828655.1	97.488 %		15:25:57
3	Y 371.029	668899.6	668899.6	95.186 %		15:25:57
3	Ag 328.068†	100844.8	103215.8	498.86 ug/L	498.86 ppb	15:26:02
3	As 188.979†	1109.2	1166.1	494.99 ug/L	494.99 ppb	15:26:22
3	B 249.677†	21258.5	22288.3	522.09 ug/L	522.09 ppb	15:26:02
3	Ba 233.527†	59022.4	60524.5	492.67 ug/L	492.67 ppb	15:26:02
3	Be 313.107†	1318848.3	1357172.9	499.62 ug/L	499.62 ppb	15:25:57
3	Cd 226.502†	40007.5	41234.0	482.06 ug/L	482.06 ppb	15:26:02
3	Co 228.616†	22954.6	23625.0	492.72 ug/L	492.72 ppb	15:26:02
3	Cr 267.716†	40488.3	41381.9	482.03 ug/L	482.03 ppb	15:26:02
3	Cu 324.752†	166762.7	162965.9	498.96 ug/L	498.96 ppb	15:26:02
3	Mn 257.610†	425584.2	435981.3	503.17 ug/L	503.17 ppb	15:25:57
3	Mo 202.031†	6437.8	6593.2	490.39 ug/L	490.39 ppb	15:26:22
3	Ni 231.604†	18620.6	18986.9	486.04 ug/L	486.04 ppb	15:26:02
3	P 214.914†	4452.8	4325.5	2302.5 ug/L	2302.5 ppb	15:26:22
3	Pb 220.353†	3761.6	3932.0	488.73 ug/L	488.73 ppb	15:26:22
3	S 181.975 Axial†	821.8	800.0	1044.6 ug/L	1044.6 ppb	15:26:22
3	Sb 206.836†	1462.7	1464.7	513.18 ug/L	513.18 ppb	15:26:22
3	Se 196.026†	785.2	828.7	502.18 ug/L	502.18 ppb	15:26:22
3	Si 251.611†	77604.2	78991.7	2455.5 ug/L	2455.5 ppb	15:26:02
3	Sn 189.927†	2627.5	2682.6	481.87 ug/L	481.87 ppb	15:26:22
3	Ti 334.940†	295523.0	304631.3	495.00 ug/L	495.00 ppb	15:26:02
3	Tl 190.801†	1496.6	1574.2	500.29 ug/L	500.29 ppb	15:26:22
3	U 409.014†	13607.1	17473.0	494.68 ug/L	494.68 ppb	15:26:02
3	V 292.402†	63704.0	67022.9	491.93 ug/L	491.93 ppb	15:26:02
3	Zn 213.857†	49920.6	50519.3	488.49 ug/L	488.49 ppb	15:26:02
3	SiO2†	77691.1	79073.6	5258.7 ug/L	5258.7 ppb	15:26:38

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	826075.0	97.184 %	0.7824			0.81%
Sc Radial	4039.5	95.0 %	0.50			0.53%
Y 371.029	667287.9	94.957 %	0.7793			0.82%
Y RADIAL	4303.9	97.77 %	1.306			1.34%
Ag 328.068†	103830.6	501.83 ug/L	2.573	501.83 ppb	2.573	0.51%
QC value within limits for Ag 328.068 Recovery = 100.37%						
Al 396.153Radial†	5223.7	5202.0 ug/L	85.47	5202.0 ppb	85.47	1.64%
QC value within limits for Al 396.153Radial Recovery = 104.04%						
As 188.979†	1163.0	493.73 ug/L	1.564	493.73 ppb	1.564	0.32%
QC value within limits for As 188.979 Recovery = 98.75%						
B 249.677†	22334.6	523.17 ug/L	2.097	523.17 ppb	2.097	0.40%
QC value within limits for B 249.677 Recovery = 104.63%						
Ba 233.527†	60864.7	495.44 ug/L	2.399	495.44 ppb	2.399	0.48%
QC value within limits for Ba 233.527 Recovery = 99.09%						
Be 313.107†	1355442.8	498.99 ug/L	1.049	498.99 ppb	1.049	0.21%
QC value within limits for Be 313.107 Recovery = 99.80%						
Ca 317.933Radial†	2737.0	5105.5 ug/L	18.31	5105.5 ppb	18.31	0.36%

QC value within limits for Ca 317.933Radial Recovery = 102.11%							
Cd 226.502†	41455.1	484.65 ug/L	2.250	484.65 ppb	2.250	0.46%	
QC value within limits for Cd 226.502 Recovery = 96.93%							
Co 228.616†	23763.2	495.60 ug/L	2.491	495.60 ppb	2.491	0.50%	
QC value within limits for Co 228.616 Recovery = 99.12%							
Cr 267.716†	41663.9	485.32 ug/L	2.909	485.32 ppb	2.909	0.60%	
QC value within limits for Cr 267.716 Recovery = 97.06%							
Cu 324.752†	164400.2	503.35 ug/L	3.854	503.35 ppb	3.854	0.77%	
QC value within limits for Cu 324.752 Recovery = 100.67%							
Fe 238.204 Radial†	497.9	5306.4 ug/L	10.72	5306.4 ppb	10.72	0.20%	
QC value within limits for Fe 238.204 Radial Recovery = 106.13%							
K 766.490 Radial†	26367.1	5315.7 ug/L	88.18	5315.7 ppb	88.18	1.66%	
QC value within limits for K 766.490 Radial Recovery = 106.31%							
Mg 279.077 IEC†	133.7	5164.2 ug/L	77.97	5164.2 ppb	77.97	1.51%	
QC value within limits for Mg 279.077 IEC Recovery = 103.28%							
Mn 257.610†	434997.2	502.03 ug/L	1.051	502.03 ppb	1.051	0.21%	
QC value within limits for Mn 257.610 Recovery = 100.41%							
Mo 202.031†	6602.6	491.08 ug/L	1.075	491.08 ppb	1.075	0.22%	
QC value within limits for Mo 202.031 Recovery = 98.22%							
Na 589.592 Radial†	34370.5	11465 ug/L	229.0	11465 ppb	229.0	2.00%	
QC value greater than the upper limit for Na 589.592 Radial Recovery = 114.65%							
Ni 231.604†	19041.5	487.43 ug/L	1.232	487.43 ppb	1.232	0.25%	
QC value within limits for Ni 231.604 Recovery = 97.49%							
P 214.914†	4334.9	2306.8 ug/L	10.15	2306.8 ppb	10.15	0.44%	
QC value within limits for P 214.914 Recovery = 92.27%							
Pb 220.353†	3923.4	487.65 ug/L	2.497	487.65 ppb	2.497	0.51%	
QC value within limits for Pb 220.353 Recovery = 97.53%							
S 181.975 Axial†	799.8	1044.3 ug/L	20.88	1044.3 ppb	20.88	2.00%	
QC value within limits for S 181.975 Axial Recovery = 104.43%							
Sb 206.836†	1465.3	513.41 ug/L	3.019	513.41 ppb	3.019	0.59%	
QC value within limits for Sb 206.836 Recovery = 102.68%							
Se 196.026†	839.4	508.41 ug/L	5.393	508.41 ppb	5.393	1.06%	
QC value within limits for Se 196.026 Recovery = 101.68%							
Si 251.611†	79505.3	2471.5 ug/L	13.85	2471.5 ppb	13.85	0.56%	
QC value within limits for Si 251.611 Recovery = 98.86%							
Sn 189.927†	2684.7	482.26 ug/L	1.261	482.26 ppb	1.261	0.26%	
QC value within limits for Sn 189.927 Recovery = 96.45%							
Sr 421.552†	68852.3	531.59 ug/L	9.859	531.59 ppb	9.859	1.85%	
QC value within limits for Sr 421.552 Recovery = 106.32%							
Ti 334.940†	307092.3	498.99 ug/L	3.504	498.99 ppb	3.504	0.70%	
QC value within limits for Ti 334.940 Recovery = 99.80%							
Tl 190.801†	1579.7	502.03 ug/L	4.313	502.03 ppb	4.313	0.86%	
QC value within limits for Tl 190.801 Recovery = 100.41%							
U 409.014†	17546.5	496.76 ug/L	2.267	496.76 ppb	2.267	0.46%	
QC value within limits for U 409.014 Recovery = 99.35%							
V 292.402†	67482.7	495.27 ug/L	2.941	495.27 ppb	2.941	0.59%	
QC value within limits for V 292.402 Recovery = 99.05%							
Zn 213.857†	50886.7	492.07 ug/L	3.102	492.07 ppb	3.102	0.63%	
QC value within limits for Zn 213.857 Recovery = 98.41%							
SiO2†	79679.9	5299.1 ug/L	110.33	5299.1 ppb	110.33	2.08%	
QC value within limits for SiO2 Recovery = 99.10%							
QC Failed. Continue with analysis.							

Sequence No.: 3

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/16/2010 15:28:50

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	4164.1	4164.1	98.0 %		15:30:42
1	Y RADIAL	4321.3	4321.3	98.16 %		15:30:42
1	Al 396.153Radial†	-129.0	27.3	27.293 ug/L	27.293 ppb	15:31:02
1	Ca 317.933Radial†	29.5	11.8	21.995 ug/L	21.995 ppb	15:31:02
1	Fe 238.204 Radial†	10.7	0.9	9.5740 ug/L	9.5740 ppb	15:31:02
1	K 766.490 Radial†	4006.8	918.7	185.12 ug/L	185.12 ppb	15:30:42
1	Mg 279.077 IEC†	4.0	1.4	52.535 ug/L	52.535 ppb	15:31:02
1	Na 589.592 Radial†	2644.0	2492.0	831.23 ug/L	831.23 ppb	15:30:42
1	Sr 421.552†	156.7	70.2	0.5415 ug/L	0.5415 ppb	15:30:42
1	Sc 361.383	815455.4	815455.4	95.935 %		15:31:59
1	Y 371.029	668129.0	668129.0	95.076 %		15:31:59
1	Ag 328.068†	131.4	-90.7	-0.4343 ug/L	-0.4343 ppb	15:31:59
1	As 188.979†	-31.7	-4.7	-1.9781 ug/L	-1.9781 ppb	15:32:19
1	B 249.677†	569.4	1075.4	25.299 ug/L	25.299 ppb	15:31:59
1	Ba 233.527†	11.6	-6.8	-0.0532 ug/L	-0.0532 ppb	15:32:19
1	Be 313.107†	-4306.2	-149.6	-0.0549 ug/L	-0.0549 ppb	15:31:59
1	Cd 226.502†	-179.8	8.1	0.0950 ug/L	0.0950 ppb	15:32:19
1	Co 228.616†	-75.6	0.0	0.0016 ug/L	0.0016 ppb	15:32:19
1	Cr 267.716†	127.2	-17.2	-0.2006 ug/L	-0.2006 ppb	15:32:19
1	Cu 324.752†	8052.9	300.0	0.9159 ug/L	0.9159 ppb	15:31:59
1	Mn 257.610†	514.4	-33.6	-0.0399 ug/L	-0.0399 ppb	15:32:19
1	Mo 202.031†	17.8	8.1	0.5995 ug/L	0.5995 ppb	15:32:19
1	Ni 231.604†	111.4	2.6	0.0659 ug/L	0.0659 ppb	15:32:19
1	P 214.914†	240.9	9.1	4.8755 ug/L	4.8755 ppb	15:32:19
1	Pb 220.353†	-54.8	16.4	2.0386 ug/L	2.0386 ppb	15:32:19
1	S 181.975 Axial†	89.5	50.3	65.791 ug/L	65.791 ppb	15:32:19
1	Sb 206.836†	43.3	9.4	3.2009 ug/L	3.2009 ppb	15:32:19
1	Se 196.026†	-20.0	2.5	1.4963 ug/L	1.4963 ppb	15:32:19
1	Si 251.611†	597.7	10.7	0.3264 ug/L	0.3264 ppb	15:32:19
1	Sn 189.927†	12.7	0.6	0.1069 ug/L	0.1069 ppb	15:32:19
1	Ti 334.940†	-1412.2	20.8	0.0301 ug/L	0.0301 ppb	15:31:59
1	Tl 190.801†	-32.1	5.7	1.7949 ug/L	1.7949 ppb	15:32:19
1	U 409.014†	-3185.2	195.0	5.5399 ug/L	5.5399 ppb	15:31:59
1	V 292.402†	-1521.4	91.4	0.6810 ug/L	0.6810 ppb	15:31:59
1	Zn 213.857†	715.8	58.4	0.5670 ug/L	0.5670 ppb	15:32:19
1	SiO2†	539.7	-56.9	-3.8110 ug/L	-3.8110 ppb	15:33:15
2	Sc Radial	4122.0	4122.0	97.0 %		15:31:07
2	Y RADIAL	4243.9	4243.9	96.40 %		15:31:07
2	Al 396.153Radial†	-132.7	22.1	22.138 ug/L	22.138 ppb	15:31:27
2	Ca 317.933Radial†	26.5	9.0	16.852 ug/L	16.852 ppb	15:31:27
2	Fe 238.204 Radial†	8.5	-1.3	-14.223 ug/L	-14.223 ppb	15:31:27
2	K 766.490 Radial†	3964.9	917.3	184.86 ug/L	184.86 ppb	15:31:07
2	Mg 279.077 IEC†	1.7	-0.9	-36.558 ug/L	-36.558 ppb	15:31:27
2	Na 589.592 Radial†	2471.8	2342.0	781.20 ug/L	781.20 ppb	15:31:07
2	Sr 421.552†	70.8	-16.8	-0.1302 ug/L	-0.1302 ppb	15:31:07
2	Sc 361.383	807209.5	807209.5	94.965 %		15:32:24
2	Y 371.029	661387.1	661387.1	94.117 %		15:32:24
2	Ag 328.068†	251.0	36.6	0.1646 ug/L	0.1646 ppb	15:32:24
2	As 188.979†	-35.6	-9.1	-3.8521 ug/L	-3.8521 ppb	15:32:44
2	B 249.677†	586.5	1099.5	25.868 ug/L	25.868 ppb	15:32:24
2	Ba 233.527†	13.1	-5.0	-0.0428 ug/L	-0.0428 ppb	15:32:44
2	Be 313.107†	-4134.3	-14.4	-0.0051 ug/L	-0.0051 ppb	15:32:24
2	Cd 226.502†	-175.2	11.0	0.1305 ug/L	0.1305 ppb	15:32:44
2	Co 228.616†	-55.3	20.7	0.4317 ug/L	0.4317 ppb	15:32:44
2	Cr 267.716†	109.3	-34.6	-0.4050 ug/L	-0.4050 ppb	15:32:44
2	Cu 324.752†	7959.1	287.0	0.8760 ug/L	0.8760 ppb	15:32:24
2	Mn 257.610†	556.9	16.7	0.0194 ug/L	0.0194 ppb	15:32:44
2	Mo 202.031†	12.9	3.2	0.2334 ug/L	0.2334 ppb	15:32:44
2	Ni 231.604†	110.7	3.0	0.0771 ug/L	0.0771 ppb	15:32:44

2	P 214.914†	240.7	11.5	6.2463 ug/L	6.2463 ppb	15:32:44
2	Pb 220.353†	-56.9	13.6	1.6902 ug/L	1.6902 ppb	15:32:44
2	S 181.975 Axial†	137.0	101.3	132.43 ug/L	132.43 ppb	15:32:44
2	Sb 206.836†	46.7	13.5	4.5851 ug/L	4.5851 ppb	15:32:44
2	Se 196.026†	-14.5	8.1	4.6634 ug/L	4.6634 ppb	15:32:44
2	Si 251.611†	560.9	-21.6	-0.6773 ug/L	-0.6773 ppb	15:32:44
2	Sn 189.927†	17.5	5.8	1.0365 ug/L	1.0365 ppb	15:32:44
2	Ti 334.940†	-1362.4	58.3	0.0986 ug/L	0.0986 ppb	15:32:24
2	Tl 190.801†	-37.5	-0.4	-0.1170 ug/L	-0.1170 ppb	15:32:44
2	U 409.014†	-3218.0	126.6	3.5987 ug/L	3.5987 ppb	15:32:24
2	V 292.402†	-1693.3	-105.8	-0.7548 ug/L	-0.7548 ppb	15:32:24
2	Zn 213.857†	755.7	108.0	1.0542 ug/L	1.0542 ppb	15:32:44
2	SiO2†	601.7	14.0	0.9295 ug/L	0.9295 ppb	15:33:20
3	Sc Radial	4232.6	4232.6	99.6 %		15:31:32
3	Y RADIAL	4373.1	4373.1	99.34 %		15:31:32
3	Al 396.153Radial†	-129.1	29.4	29.357 ug/L	29.357 ppb	15:31:52
3	Ca 317.933Radial†	33.0	14.9	27.716 ug/L	27.716 ppb	15:31:52
3	Fe 238.204 Radial†	9.9	-0.1	-0.9543 ug/L	-0.9543 ppb	15:31:52
3	K 766.490 Radial†	3991.4	837.1	168.67 ug/L	168.67 ppb	15:31:32
3	Mg 279.077 IEC†	4.3	1.6	62.957 ug/L	62.957 ppb	15:31:52
3	Na 589.592 Radial†	2453.7	2257.3	752.93 ug/L	752.93 ppb	15:31:32
3	Sr 421.552†	109.2	19.8	0.1527 ug/L	0.1527 ppb	15:31:32
3	Sc 361.383	820055.9	820055.9	96.476 %		15:32:50
3	Y 371.029	670839.1	670839.1	95.462 %		15:32:50
3	Ag 328.068†	223.8	4.3	0.0147 ug/L	0.0147 ppb	15:32:50
3	As 188.979†	-29.0	-1.7	-0.7153 ug/L	-0.7153 ppb	15:33:10
3	B 249.677†	547.8	1049.7	24.695 ug/L	24.695 ppb	15:32:50
3	Ba 233.527†	6.6	-12.0	-0.0964 ug/L	-0.0964 ppb	15:33:10
3	Be 313.107†	-4441.3	-264.4	-0.0965 ug/L	-0.0965 ppb	15:32:50
3	Cd 226.502†	-197.9	-9.7	-0.1113 ug/L	-0.1113 ppb	15:33:10
3	Co 228.616†	-62.5	14.1	0.2954 ug/L	0.2954 ppb	15:33:10
3	Cr 267.716†	98.3	-47.8	-0.5594 ug/L	-0.5594 ppb	15:33:10
3	Cu 324.752†	8060.1	260.4	0.7928 ug/L	0.7928 ppb	15:32:50
3	Mn 257.610†	550.8	1.1	-0.0014 ug/L	-0.0014 ppb	15:33:10
3	Mo 202.031†	16.4	6.5	0.4839 ug/L	0.4839 ppb	15:33:10
3	Ni 231.604†	107.3	-2.3	-0.0598 ug/L	-0.0598 ppb	15:33:10
3	P 214.914†	234.2	0.8	0.2672 ug/L	0.2672 ppb	15:33:10
3	Pb 220.353†	-65.2	6.0	0.7450 ug/L	0.7450 ppb	15:33:10
3	S 181.975 Axial†	93.4	53.9	70.471 ug/L	70.471 ppb	15:33:10
3	Sb 206.836†	39.3	5.1	1.7180 ug/L	1.7180 ppb	15:33:10
3	Se 196.026†	-24.3	-1.9	-1.0934 ug/L	-1.0934 ppb	15:33:10
3	Si 251.611†	576.7	-14.6	-0.4601 ug/L	-0.4601 ppb	15:33:10
3	Sn 189.927†	11.1	-1.1	-0.1873 ug/L	-0.1873 ppb	15:33:10
3	Ti 334.940†	-1284.7	161.2	0.2573 ug/L	0.2573 ppb	15:32:50
3	Tl 190.801†	-33.3	4.6	1.4416 ug/L	1.4416 ppb	15:33:10
3	U 409.014†	-3120.2	281.0	7.9827 ug/L	7.9827 ppb	15:32:50
3	V 292.402†	-1574.5	45.3	0.3516 ug/L	0.3516 ppb	15:32:50
3	Zn 213.857†	714.1	52.4	0.5107 ug/L	0.5107 ppb	15:33:10
3	SiO2†	563.1	-35.9	-2.4065 ug/L	-2.4065 ppb	15:33:25

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	814240.3	95.792 %		0.7657				0.80%
Sc Radial	4172.9	98.2 %		1.31				1.34%
Y 371.029	666785.1	94.885 %		0.6926				0.73%
Y RADIAL	4312.8	97.97 %		1.478				1.51%
Ag 328.068†	-16.6	-0.0850 ug/L		0.31166	-0.0850 ppb		0.31166	366.67%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	26.3	26.262 ug/L		3.7181	26.262 ppb		3.7181	14.16%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-5.2	-2.1819 ug/L		1.57830	-2.1819 ppb		1.57830	72.34%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	1074.9	25.288 ug/L		0.5867	25.288 ppb		0.5867	2.32%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-7.9	-0.0641 ug/L		0.02846	-0.0641 ppb		0.02846	44.38%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-142.8	-0.0521 ug/L		0.04578	-0.0521 ppb		0.04578	87.79%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	11.9	22.188 ug/L		5.4344	22.188 ppb		5.4344	24.49%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated						
Cd 226.502†	3.1	0.0381 ug/L	0.13054	0.0381 ppb	0.13054	342.90%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	11.6	0.2429 ug/L	0.21981	0.2429 ppb	0.21981	90.49%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-33.2	-0.3883 ug/L	0.17997	-0.3883 ppb	0.17997	46.34%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	282.5	0.8616 ug/L	0.06281	0.8616 ppb	0.06281	7.29%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	-0.2	-1.8676 ug/L	11.92453	-1.8676 ppb	11.92453	638.48%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	891.0	179.55 ug/L	9.425	179.55 ppb	9.425	5.25%
QC value greater than the upper limit for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	0.7	26.311 ug/L	54.6955	26.311 ppb	54.6955	207.88%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	-5.2	-0.0073 ug/L	0.03008	-0.0073 ppb	0.03008	411.44%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	5.9	0.4389 ug/L	0.18717	0.4389 ppb	0.18717	42.64%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	2363.8	788.45 ug/L	39.653	788.45 ppb	39.653	5.03%
QC value greater than the upper limit for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	1.1	0.0277 ug/L	0.07600	0.0277 ppb	0.07600	274.19%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	7.1	3.7963 ug/L	3.13220	3.7963 ppb	3.13220	82.51%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	12.0	1.4913 ug/L	0.66935	1.4913 ppb	0.66935	44.88%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	68.5	89.565 ug/L	37.1984	89.565 ppb	37.1984	41.53%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	9.3	3.1680 ug/L	1.43382	3.1680 ppb	1.43382	45.26%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	2.9	1.6887 ug/L	2.88322	1.6887 ppb	2.88322	170.73%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	-8.5	-0.2703 ug/L	0.52803	-0.2703 ppb	0.52803	195.34%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	1.8	0.3187 ug/L	0.63876	0.3187 ppb	0.63876	200.42%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	24.4	0.1880 ug/L	0.33722	0.1880 ppb	0.33722	179.35%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	80.1	0.1287 ug/L	0.11654	0.1287 ppb	0.11654	90.57%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	3.3	1.0398 ug/L	1.01731	1.0398 ppb	1.01731	97.84%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	200.9	5.7071 ug/L	2.19675	5.7071 ppb	2.19675	38.49%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	10.3	0.0926 ug/L	0.75210	0.0926 ppb	0.75210	812.29%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	72.9	0.7106 ug/L	0.29889	0.7106 ppb	0.29889	42.06%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	-26.3	-1.7627 ug/L	2.43497	-1.7627 ppb	2.43497	138.14%
QC value within limits for SiO2 Recovery = Not calculated						
QC Failed. Continue with analysis.						

## =====

## Analysis Begun

Start Time: 2/16/2010 15:39:35

Plasma On Time: 2/15/2010 05:50:42

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\021610.sif

Batch ID:

Results Data Set: 021610

Results Library: C:\pe\Optima3\Results\Results.mdb

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Sequence No.: 1

Autosampler Location: 7

Sample ID: CCV

Date Collected: 2/16/2010 15:39:36

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

## -----

## Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4259.9	4259.9	100 %		15:41:28
1	Y RADIAL	4343.3	4343.3	98.66 %		15:41:28
1	Al 396.153Radial†	4756.7	4905.8	4884.5 ug/L	4884.5 ppb	15:41:28
1	Ca 317.933Radial†	2607.8	2584.0	4820.1 ug/L	4820.1 ppb	15:41:48
1	Fe 238.204 Radial†	479.4	468.3	4991.7 ug/L	4991.7 ppb	15:41:48
1	K 766.490 Radial†	28010.6	24780.1	4995.6 ug/L	4995.6 ppb	15:41:28
1	Mg 279.077 IEC†	128.2	125.2	4834.6 ug/L	4834.6 ppb	15:41:48
1	Na 589.592 Radial†	33517.2	33239.7	11087 ug/L	11087 ppb	15:41:28
1	Sr 421.552†	66107.1	65878.2	508.63 ug/L	508.63 ppb	15:41:28
1	Sc 361.383	831107.2	831107.2	97.776 %		15:42:45
1	Y 371.029	672004.2	672004.2	95.628 %		15:42:45
1	Ag 328.068†	99548.6	101584.9	490.91 ug/L	490.91 ppb	15:42:51
1	As 188.979†	1079.4	1132.2	480.65 ug/L	480.65 ppb	15:43:11
1	B 249.677†	20839.6	21795.5	510.57 ug/L	510.57 ppb	15:42:51
1	Ba 233.527†	58431.5	59741.6	486.29 ug/L	486.29 ppb	15:42:51
1	Be 313.107†	1299727.6	1333626.0	490.96 ug/L	490.96 ppb	15:42:45
1	Cd 226.502†	39622.6	40719.2	476.07 ug/L	476.07 ppb	15:42:51
1	Co 228.616†	22656.4	23250.6	484.90 ug/L	484.90 ppb	15:42:51
1	Cr 267.716†	39927.1	40685.5	473.92 ug/L	473.92 ppb	15:42:51
1	Cu 324.752†	165158.8	160820.8	492.38 ug/L	492.38 ppb	15:42:51
1	Mn 257.610†	418776.2	427730.5	493.63 ug/L	493.63 ppb	15:42:45
1	Mo 202.031†	6308.8	6441.8	479.11 ug/L	479.11 ppb	15:43:11
1	Ni 231.604†	18314.6	18617.6	476.58 ug/L	476.58 ppb	15:42:51
1	P 214.914†	4390.5	4248.4	2261.1 ug/L	2261.1 ppb	15:43:11
1	Pb 220.353†	3676.1	3833.2	476.42 ug/L	476.42 ppb	15:43:11
1	S 181.975 Axial†	798.3	773.6	1010.1 ug/L	1010.1 ppb	15:43:11
1	Sb 206.836†	1439.1	1436.2	503.17 ug/L	503.17 ppb	15:43:11
1	Se 196.026†	779.1	820.2	496.12 ug/L	496.12 ppb	15:43:11
1	Si 251.611†	77027.3	78166.8	2430.0 ug/L	2430.0 ppb	15:42:51
1	Sn 189.927†	2587.5	2633.8	473.08 ug/L	473.08 ppb	15:43:11
1	Ti 334.940†	292656.4	300805.1	488.77 ug/L	488.77 ppb	15:42:51
1	Tl 190.801†	1474.4	1547.0	491.65 ug/L	491.65 ppb	15:43:11
1	U 409.014†	13465.6	17287.0	489.45 ug/L	489.45 ppb	15:42:51
1	V 292.402†	62942.6	66051.3	484.78 ug/L	484.78 ppb	15:42:51
1	Zn 213.857†	49524.1	49962.6	483.18 ug/L	483.18 ppb	15:42:51
1	SiO2†	77288.1	78426.3	5215.9 ug/L	5215.9 ppb	15:44:18
2	Sc Radial	4177.7	4177.7	98.3 %		15:41:53
2	Y RADIAL	4307.6	4307.6	97.85 %		15:41:53
2	Al 396.153Radial†	4722.2	4964.0	4942.6 ug/L	4942.6 ppb	15:41:53
2	Ca 317.933Radial†	2601.0	2628.2	4902.7 ug/L	4902.7 ppb	15:42:13
2	Fe 238.204 Radial†	484.2	482.6	5143.3 ug/L	5143.3 ppb	15:42:13
2	K 766.490 Radial†	27824.0	25140.2	5068.2 ug/L	5068.2 ppb	15:41:53
2	Mg 279.077 IEC†	128.3	127.8	4935.8 ug/L	4935.8 ppb	15:42:13
2	Na 589.592 Radial†	33063.0	33435.6	11153 ug/L	11153 ppb	15:41:53
2	Sr 421.552†	65494.9	66553.4	513.84 ug/L	513.84 ppb	15:41:53
2	Sc 361.383	825773.8	825773.8	97.149 %		15:43:16
2	Y 371.029	667205.7	667205.7	94.945 %		15:43:16

2	Ag 328.068†	99725.0	102424.0	494.99 ug/L	494.99 ppb	15:43:22
2	As 188.979†	1063.1	1122.6	476.64 ug/L	476.64 ppb	15:43:42
2	B 249.677†	20835.1	21928.5	513.67 ug/L	513.67 ppb	15:43:22
2	Ba 233.527†	58399.0	60094.1	489.16 ug/L	489.16 ppb	15:43:22
2	Be 313.107†	1287464.4	1329588.2	489.48 ug/L	489.48 ppb	15:43:16
2	Cd 226.502†	39480.4	40834.5	477.40 ug/L	477.40 ppb	15:43:22
2	Co 228.616†	22615.4	23357.9	487.14 ug/L	487.14 ppb	15:43:22
2	Cr 267.716†	39954.2	40977.1	477.31 ug/L	477.31 ppb	15:43:22
2	Cu 324.752†	165427.2	162188.1	496.57 ug/L	496.57 ppb	15:43:22
2	Mn 257.610†	415240.5	426857.3	492.64 ug/L	492.64 ppb	15:43:16
2	Mo 202.031†	6320.6	6495.6	483.12 ug/L	483.12 ppb	15:43:42
2	Ni 231.604†	18387.7	18813.8	481.61 ug/L	481.61 ppb	15:43:22
2	P 214.914†	4380.9	4267.5	2270.8 ug/L	2270.8 ppb	15:43:42
2	Pb 220.353†	3668.2	3849.4	478.43 ug/L	478.43 ppb	15:43:42
2	S 181.975 Axial†	798.0	778.5	1016.6 ug/L	1016.6 ppb	15:43:42
2	Sb 206.836†	1433.1	1439.5	504.38 ug/L	504.38 ppb	15:43:42
2	Se 196.026†	794.9	841.6	509.11 ug/L	509.11 ppb	15:43:42
2	Si 251.611†	77051.2	78700.2	2446.6 ug/L	2446.6 ppb	15:43:22
2	Sn 189.927†	2582.3	2645.4	475.18 ug/L	475.18 ppb	15:43:42
2	Ti 334.940†	292821.1	302907.8	492.19 ug/L	492.19 ppb	15:43:22
2	Tl 190.801†	1474.8	1557.2	494.88 ug/L	494.88 ppb	15:43:42
2	U 409.014†	13559.2	17472.3	494.69 ug/L	494.69 ppb	15:43:22
2	V 292.402†	62738.6	66257.2	486.31 ug/L	486.31 ppb	15:43:22
2	Zn 213.857†	49493.0	50257.8	486.00 ug/L	486.00 ppb	15:43:22
2	SiO2†	77182.6	78828.2	5242.6 ug/L	5242.6 ppb	15:44:23
3	Sc Radial	4225.0	4225.0	99.4 %		15:42:18
3	Y RADIAL	4350.5	4350.5	98.82 %		15:42:18
3	Al 396.153Radial†	4718.7	4906.6	4885.0 ug/L	4885.0 ppb	15:42:18
3	Ca 317.933Radial†	2598.2	2595.8	4842.2 ug/L	4842.2 ppb	15:42:38
3	Fe 238.204 Radial†	477.5	470.4	5013.8 ug/L	5013.8 ppb	15:42:38
3	K 766.490 Radial†	27778.7	24777.5	4995.1 ug/L	4995.1 ppb	15:42:18
3	Mg 279.077 IEC†	128.2	126.3	4878.0 ug/L	4878.0 ppb	15:42:38
3	Na 589.592 Radial†	32939.3	32934.4	10986 ug/L	10986 ppb	15:42:18
3	Sr 421.552†	65787.7	66101.6	510.35 ug/L	510.35 ppb	15:42:18
3	Sc 361.383	823496.6	823496.6	96.881 %		15:43:47
3	Y 371.029	665622.4	665622.4	94.720 %		15:43:47
3	Ag 328.068†	99636.2	102616.3	495.88 ug/L	495.88 ppb	15:43:53
3	As 188.979†	1079.7	1142.7	485.09 ug/L	485.09 ppb	15:44:13
3	B 249.677†	20975.5	22132.7	518.49 ug/L	518.49 ppb	15:43:53
3	Ba 233.527†	58343.9	60203.5	490.05 ug/L	490.05 ppb	15:43:53
3	Be 313.107†	1285062.9	1330774.2	489.92 ug/L	489.92 ppb	15:43:47
3	Cd 226.502†	39409.3	40873.6	477.87 ug/L	477.87 ppb	15:43:53
3	Co 228.616†	22595.0	23401.4	488.05 ug/L	488.05 ppb	15:43:53
3	Cr 267.716†	39938.7	41074.8	478.45 ug/L	478.45 ppb	15:43:53
3	Cu 324.752†	165205.7	162430.3	497.31 ug/L	497.31 ppb	15:43:53
3	Mn 257.610†	414057.1	426817.8	492.58 ug/L	492.58 ppb	15:43:47
3	Mo 202.031†	6337.0	6530.5	485.70 ug/L	485.70 ppb	15:44:13
3	Ni 231.604†	18296.5	18772.1	480.54 ug/L	480.54 ppb	15:43:53
3	P 214.914†	4391.0	4290.3	2283.4 ug/L	2283.4 ppb	15:44:13
3	Pb 220.353†	3690.3	3882.7	482.56 ug/L	482.56 ppb	15:44:13
3	S 181.975 Axial†	862.6	847.4	1106.6 ug/L	1106.6 ppb	15:44:13
3	Sb 206.836†	1426.6	1436.9	503.57 ug/L	503.57 ppb	15:44:13
3	Se 196.026†	799.5	848.6	512.81 ug/L	512.81 ppb	15:44:13
3	Si 251.611†	76819.5	78680.4	2445.9 ug/L	2445.9 ppb	15:43:53
3	Sn 189.927†	2579.9	2650.3	476.05 ug/L	476.05 ppb	15:44:13
3	Ti 334.940†	292485.1	303394.5	492.98 ug/L	492.98 ppb	15:43:53
3	Tl 190.801†	1485.2	1572.1	499.58 ug/L	499.58 ppb	15:44:13
3	U 409.014†	13313.7	17257.5	488.60 ug/L	488.60 ppb	15:43:53
3	V 292.402†	62782.6	66481.2	487.97 ug/L	487.97 ppb	15:43:53
3	Zn 213.857†	49244.7	50142.4	484.90 ug/L	484.90 ppb	15:43:53
3	SiO2†	77072.2	78934.0	5249.6 ug/L	5249.6 ppb	15:44:28

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	826792.6	97.269 %	0.4596			0.47%
Sc Radial	4220.8	99.3 %	0.97			0.98%
Y 371.029	668277.4	95.098 %	0.4729			0.50%
Y RADIAL	4333.8	98.45 %	0.521			0.53%
Ag 328.068†	102208.4	493.93 ug/L	2.651	493.93 ppb	2.651	0.54%

QC value within limits for Ag 328.068 Recovery = 98.79%						
Al 396.153Radial†	4925.5	4904.0 ug/L	33.38	4904.0 ppb	33.38	0.68%
QC value within limits for Al 396.153Radial Recovery = 98.08%						
As 188.979†	1132.5	480.79 ug/L	4.227	480.79 ppb	4.227	0.88%
QC value within limits for As 188.979 Recovery = 96.16%						
B 249.677†	21952.2	514.24 ug/L	3.992	514.24 ppb	3.992	0.78%
QC value within limits for B 249.677 Recovery = 102.85%						
Ba 233.527†	60013.0	488.50 ug/L	1.964	488.50 ppb	1.964	0.40%
QC value within limits for Ba 233.527 Recovery = 97.70%						
Be 313.107†	1331329.5	490.12 ug/L	0.758	490.12 ppb	0.758	0.15%
QC value within limits for Be 313.107 Recovery = 98.02%						
Ca 317.933Radial†	2602.7	4855.0 ug/L	42.76	4855.0 ppb	42.76	0.88%
QC value within limits for Ca 317.933Radial Recovery = 97.10%						
Cd 226.502†	40809.1	477.11 ug/L	0.937	477.11 ppb	0.937	0.20%
QC value within limits for Cd 226.502 Recovery = 95.42%						
Co 228.616†	23336.6	486.70 ug/L	1.621	486.70 ppb	1.621	0.33%
QC value within limits for Co 228.616 Recovery = 97.34%						
Cr 267.716†	40912.4	476.56 ug/L	2.359	476.56 ppb	2.359	0.50%
QC value within limits for Cr 267.716 Recovery = 95.31%						
Cu 324.752†	161813.1	495.42 ug/L	2.659	495.42 ppb	2.659	0.54%
QC value within limits for Cu 324.752 Recovery = 99.08%						
Fe 238.204 Radial†	473.8	5049.6 ug/L	81.90	5049.6 ppb	81.90	1.62%
QC value within limits for Fe 238.204 Radial Recovery = 100.99%						
K 766.490 Radial†	24899.3	5019.6 ug/L	42.08	5019.6 ppb	42.08	0.84%
QC value within limits for K 766.490 Radial Recovery = 100.39%						
Mg 279.077 IEC†	126.4	4882.8 ug/L	50.80	4882.8 ppb	50.80	1.04%
QC value within limits for Mg 279.077 IEC Recovery = 97.66%						
Mn 257.610†	427135.2	492.95 ug/L	0.592	492.95 ppb	0.592	0.12%
QC value within limits for Mn 257.610 Recovery = 98.59%						
Mo 202.031†	6489.3	482.64 ug/L	3.322	482.64 ppb	3.322	0.69%
QC value within limits for Mo 202.031 Recovery = 96.53%						
Na 589.592 Radial†	33203.2	11075 ug/L	84.3	11075 ppb	84.3	0.76%
QC value greater than the upper limit for Na 589.592 Radial Recovery = 110.75%						
Ni 231.604†	18734.5	479.57 ug/L	2.647	479.57 ppb	2.647	0.55%
QC value within limits for Ni 231.604 Recovery = 95.91%						
P 214.914†	4268.7	2271.8 ug/L	11.18	2271.8 ppb	11.18	0.49%
QC value within limits for P 214.914 Recovery = 90.87%						
Pb 220.353†	3855.1	479.14 ug/L	3.132	479.14 ppb	3.132	0.65%
QC value within limits for Pb 220.353 Recovery = 95.83%						
S 181.975 Axial†	799.8	1044.4 ug/L	53.95	1044.4 ppb	53.95	5.17%
QC value within limits for S 181.975 Axial Recovery = 104.44%						
Sb 206.836†	1437.5	503.71 ug/L	0.618	503.71 ppb	0.618	0.12%
QC value within limits for Sb 206.836 Recovery = 100.74%						
Se 196.026†	836.8	506.01 ug/L	8.763	506.01 ppb	8.763	1.73%
QC value within limits for Se 196.026 Recovery = 101.20%						
Si 251.611†	78515.8	2440.8 ug/L	9.39	2440.8 ppb	9.39	0.38%
QC value within limits for Si 251.611 Recovery = 97.63%						
Sn 189.927†	2643.2	474.77 ug/L	1.529	474.77 ppb	1.529	0.32%
QC value within limits for Sn 189.927 Recovery = 94.95%						
Sr 421.552†	66177.7	510.94 ug/L	2.655	510.94 ppb	2.655	0.52%
QC value within limits for Sr 421.552 Recovery = 102.19%						
Ti 334.940†	302369.1	491.31 ug/L	2.236	491.31 ppb	2.236	0.46%
QC value within limits for Ti 334.940 Recovery = 98.26%						
Tl 190.801†	1558.8	495.37 ug/L	3.986	495.37 ppb	3.986	0.80%
QC value within limits for Tl 190.801 Recovery = 99.07%						
U 409.014†	17338.9	490.91 ug/L	3.298	490.91 ppb	3.298	0.67%
QC value within limits for U 409.014 Recovery = 98.18%						
V 292.402†	66263.2	486.35 ug/L	1.599	486.35 ppb	1.599	0.33%
QC value within limits for V 292.402 Recovery = 97.27%						
Zn 213.857†	50120.9	484.69 ug/L	1.422	484.69 ppb	1.422	0.29%
QC value within limits for Zn 213.857 Recovery = 96.94%						
SiO2†	78729.5	5236.0 ug/L	17.77	5236.0 ppb	17.77	0.34%
QC value within limits for SiO2 Recovery = 97.92%						
QC Failed. Continue with analysis.						



Sequence No.: 2

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/16/2010 15:46:39

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	4241.1	4241.1	99.8 %		15:48:31
1	Y RADIAL	4368.1	4368.1	99.22 %		15:48:31
1	Al 396.153Radial†	-148.3	10.4	10.352 ug/L	10.352 ppb	15:48:31
1	Ca 317.933Radial†	32.6	14.3	26.714 ug/L	26.714 ppb	15:48:51
1	Fe 238.204 Radial†	11.4	1.3	14.240 ug/L	14.240 ppb	15:48:51
1	K 766.490 Radial†	3878.0	715.4	144.15 ug/L	144.15 ppb	15:48:31
1	Mg 279.077 IEC†	-0.3	-3.0	-116.41 ug/L	-116.41 ppb	15:48:51
1	Na 589.592 Radial†	2121.6	1919.4	640.23 ug/L	640.23 ppb	15:48:31
1	Sr 421.552†	43.9	-45.8	-0.3536 ug/L	-0.3536 ppb	15:48:31
1	Sc 361.383	818204.5	818204.5	96.258 %		15:49:48
1	Y 371.029	669456.0	669456.0	95.265 %		15:49:48
1	Ag 328.068†	314.7	99.3	0.4798 ug/L	0.4798 ppb	15:49:48
1	As 188.979†	-27.0	0.3	0.1177 ug/L	0.1177 ppb	15:50:08
1	B 249.677†	552.2	1055.6	24.832 ug/L	24.832 ppb	15:49:48
1	Ba 233.527†	-0.8	-19.7	-0.1599 ug/L	-0.1599 ppb	15:50:08
1	Be 313.107†	-4303.6	-131.8	-0.0485 ug/L	-0.0485 ppb	15:49:48
1	Cd 226.502†	-202.9	-15.3	-0.1806 ug/L	-0.1806 ppb	15:50:08
1	Co 228.616†	-81.4	-5.7	-0.1168 ug/L	-0.1168 ppb	15:50:08
1	Cr 267.716†	89.4	-56.8	-0.6613 ug/L	-0.6613 ppb	15:50:08
1	Cu 324.752†	7896.7	109.6	0.3357 ug/L	0.3357 ppb	15:49:48
1	Mn 257.610†	537.1	-11.7	-0.0074 ug/L	-0.0074 ppb	15:50:08
1	Mo 202.031†	16.7	6.9	0.5117 ug/L	0.5117 ppb	15:50:08
1	Ni 231.604†	110.5	1.3	0.0325 ug/L	0.0325 ppb	15:50:08
1	P 214.914†	245.3	12.8	7.0384 ug/L	7.0384 ppb	15:50:08
1	Pb 220.353†	-72.5	-1.8	-0.2199 ug/L	-0.2199 ppb	15:50:08
1	S 181.975 Axial†	81.8	42.1	54.963 ug/L	54.963 ppb	15:50:08
1	Sb 206.836†	29.8	-4.7	-1.5910 ug/L	-1.5910 ppb	15:50:08
1	Se 196.026†	-25.8	-3.5	-1.9780 ug/L	-1.9780 ppb	15:50:08
1	Si 251.611†	568.9	-21.3	-0.6706 ug/L	-0.6706 ppb	15:50:08
1	Sn 189.927†	7.0	-5.4	-0.9557 ug/L	-0.9557 ppb	15:50:08
1	Ti 334.940†	-1470.6	-34.8	-0.0437 ug/L	-0.0437 ppb	15:49:48
1	Tl 190.801†	-28.0	10.0	3.1653 ug/L	3.1653 ppb	15:50:08
1	U 409.014†	-3347.4	37.6	1.0689 ug/L	1.0689 ppb	15:49:48
1	V 292.402†	-1627.3	-13.2	-0.0905 ug/L	-0.0905 ppb	15:49:48
1	Zn 213.857†	727.3	67.8	0.6589 ug/L	0.6589 ppb	15:50:08
1	SiO2†	632.6	37.6	2.4958 ug/L	2.4958 ppb	15:51:04
2	Sc Radial	4201.1	4201.1	98.8 %		15:48:56
2	Y RADIAL	4334.1	4334.1	98.45 %		15:48:56
2	Al 396.153Radial†	-118.4	39.3	39.201 ug/L	39.201 ppb	15:48:56
2	Ca 317.933Radial†	30.0	12.1	22.516 ug/L	22.516 ppb	15:49:16
2	Fe 238.204 Radial†	6.8	-3.2	-34.259 ug/L	-34.259 ppb	15:49:16
2	K 766.490 Radial†	3886.1	760.5	153.27 ug/L	153.27 ppb	15:48:56
2	Mg 279.077 IEC†	0.2	-2.5	-95.994 ug/L	-95.994 ppb	15:49:16
2	Na 589.592 Radial†	2024.7	1841.6	614.29 ug/L	614.29 ppb	15:48:56
2	Sr 421.552†	93.1	4.4	0.0341 ug/L	0.0341 ppb	15:48:56
2	Sc 361.383	812430.6	812430.6	95.579 %		15:50:13
2	Y 371.029	665130.1	665130.1	94.650 %		15:50:13
2	Ag 328.068†	287.0	72.6	0.3371 ug/L	0.3371 ppb	15:50:13
2	As 188.979†	-16.8	10.7	4.4993 ug/L	4.4993 ppb	15:50:33
2	B 249.677†	508.0	1013.4	23.846 ug/L	23.846 ppb	15:50:13
2	Ba 233.527†	7.2	-11.4	-0.0930 ug/L	-0.0930 ppb	15:50:33
2	Be 313.107†	-4331.8	-193.1	-0.0707 ug/L	-0.0707 ppb	15:50:13
2	Cd 226.502†	-197.2	-10.8	-0.1229 ug/L	-0.1229 ppb	15:50:33
2	Co 228.616†	-58.9	17.2	0.3629 ug/L	0.3629 ppb	15:50:33
2	Cr 267.716†	99.7	-45.4	-0.5284 ug/L	-0.5284 ppb	15:50:33
2	Cu 324.752†	7836.8	105.2	0.3204 ug/L	0.3204 ppb	15:50:13
2	Mn 257.610†	503.4	-43.1	-0.0491 ug/L	-0.0491 ppb	15:50:33
2	Mo 202.031†	30.5	21.4	1.5881 ug/L	1.5881 ppb	15:50:33
2	Ni 231.604†	87.8	-21.7	-0.5555 ug/L	-0.5555 ppb	15:50:33

2	P 214.914†	225.7	-5.9	-3.2785 ug/L	-3.2785 ppb	15:50:33
2	Pb 220.353†	-37.7	34.1	4.2363 ug/L	4.2363 ppb	15:50:33
2	S 181.975 Axial†	77.6	38.2	49.955 ug/L	49.955 ppb	15:50:33
2	Sb 206.836†	40.8	7.0	2.3956 ug/L	2.3956 ppb	15:50:33
2	Se 196.026†	-26.8	-4.7	-2.8431 ug/L	-2.8431 ppb	15:50:33
2	Si 251.611†	583.8	-1.5	-0.0654 ug/L	-0.0654 ppb	15:50:33
2	Sn 189.927†	11.5	-0.6	-0.1037 ug/L	-0.1037 ppb	15:50:33
2	Ti 334.940†	-1380.4	48.6	0.0902 ug/L	0.0902 ppb	15:50:13
2	Tl 190.801†	-37.4	-0.0	-0.0153 ug/L	-0.0153 ppb	15:50:33
2	U 409.014†	-3366.7	-7.3	-0.2009 ug/L	-0.2009 ppb	15:50:13
2	V 292.402†	-1587.2	16.7	0.1465 ug/L	0.1465 ppb	15:50:13
2	Zn 213.857†	717.3	62.7	0.6206 ug/L	0.6206 ppb	15:50:33
2	SiO2†	563.3	-30.2	-2.0566 ug/L	-2.0566 ppb	15:51:09
3	Sc Radial	4228.8	4228.8	99.5 %		15:49:21
3	Y RADIAL	4357.9	4357.9	98.99 %		15:49:21
3	Al 396.153Radial†	-120.7	37.7	37.716 ug/L	37.716 ppb	15:49:21
3	Ca 317.933Radial†	29.2	11.0	20.574 ug/L	20.574 ppb	15:49:41
3	Fe 238.204 Radial†	9.2	-0.8	-8.2961 ug/L	-8.2961 ppb	15:49:41
3	K 766.490 Radial†	3836.1	684.6	137.95 ug/L	137.95 ppb	15:49:21
3	Mg 279.077 IEC†	2.0	-0.7	-28.707 ug/L	-28.707 ppb	15:49:41
3	Na 589.592 Radial†	2003.4	1806.8	602.69 ug/L	602.69 ppb	15:49:21
3	Sr 421.552†	29.4	-60.2	-0.4651 ug/L	-0.4651 ppb	15:49:21
3	Sc 361.383	824445.4	824445.4	96.993 %		15:50:39
3	Y 371.029	674868.4	674868.4	96.035 %		15:50:39
3	Ag 328.068†	174.8	-47.4	-0.2359 ug/L	-0.2359 ppb	15:50:39
3	As 188.979†	-32.3	-5.0	-2.1139 ug/L	-2.1139 ppb	15:50:59
3	B 249.677†	504.9	1002.5	23.586 ug/L	23.586 ppb	15:50:39
3	Ba 233.527†	10.6	-7.9	-0.0649 ug/L	-0.0649 ppb	15:50:59
3	Be 313.107†	-4398.7	-195.9	-0.0718 ug/L	-0.0718 ppb	15:50:39
3	Cd 226.502†	-208.7	-19.7	-0.2284 ug/L	-0.2284 ppb	15:50:59
3	Co 228.616†	-76.1	0.4	0.0084 ug/L	0.0084 ppb	15:50:59
3	Cr 267.716†	104.3	-42.2	-0.4933 ug/L	-0.4933 ppb	15:50:59
3	Cu 324.752†	7957.9	110.6	0.3348 ug/L	0.3348 ppb	15:50:39
3	Mn 257.610†	524.4	-29.1	-0.0332 ug/L	-0.0332 ppb	15:50:59
3	Mo 202.031†	11.2	1.1	0.0818 ug/L	0.0818 ppb	15:50:59
3	Ni 231.604†	89.6	-21.1	-0.5406 ug/L	-0.5406 ppb	15:50:59
3	P 214.914†	254.4	20.3	11.242 ug/L	11.242 ppb	15:50:59
3	Pb 220.353†	-70.3	1.0	0.1392 ug/L	0.1392 ppb	15:50:59
3	S 181.975 Axial†	71.0	30.3	39.560 ug/L	39.560 ppb	15:50:59
3	Sb 206.836†	38.4	4.0	1.3610 ug/L	1.3610 ppb	15:50:59
3	Se 196.026†	-21.7	1.0	0.5518 ug/L	0.5518 ppb	15:50:59
3	Si 251.611†	552.5	-42.6	-1.3301 ug/L	-1.3301 ppb	15:50:59
3	Sn 189.927†	20.6	8.6	1.5499 ug/L	1.5499 ppb	15:50:59
3	Ti 334.940†	-1397.0	52.6	0.0881 ug/L	0.0881 ppb	15:50:39
3	Tl 190.801†	-36.2	1.8	0.5608 ug/L	0.5608 ppb	15:50:59
3	U 409.014†	-3204.8	211.0	5.9947 ug/L	5.9947 ppb	15:50:39
3	V 292.402†	-1638.1	-11.6	-0.0704 ug/L	-0.0704 ppb	15:50:39
3	Zn 213.857†	720.8	55.4	0.5446 ug/L	0.5446 ppb	15:50:59
3	SiO2†	577.0	-24.7	-1.6475 ug/L	-1.6475 ppb	15:51:14

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	818360.2	96.277 %		0.7069			0.73%
Sc Radial	4223.7	99.4 %		0.48			0.48%
Y 371.029	669818.2	95.317 %		0.6943			0.73%
Y RADIAL	4353.4	98.89 %		0.397			0.40%
Ag 328.068†	41.5	0.1937 ug/L		0.37884	0.1937 ppb	0.37884	195.60%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	29.1	29.090 ug/L		16.2440	29.090 ppb	16.2440	55.84%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	2.0	0.8344 ug/L		3.36436	0.8344 ppb	3.36436	403.22%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	1023.8	24.088 ug/L		0.6573	24.088 ppb	0.6573	2.73%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	-13.0	-0.1059 ug/L		0.04878	-0.1059 ppb	0.04878	46.05%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	-173.6	-0.0637 ug/L		0.01313	-0.0637 ppb	0.01313	20.62%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	12.5	23.268 ug/L		3.1381	23.268 ppb	3.1381	13.49%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd	226.502†	-15.3	-0.1773 ug/L	0.05285	-0.1773 ppb	0.05285	29.81%
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co	228.616†	4.0	0.0848 ug/L	0.24877	0.0848 ppb	0.24877	293.22%
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr	267.716†	-48.1	-0.5610 ug/L	0.08861	-0.5610 ppb	0.08861	15.80%
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu	324.752†	108.5	0.3303 ug/L	0.00859	0.3303 ppb	0.00859	2.60%
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe	238.204 Radial†	-0.9	-9.4386 ug/L	24.26959	-9.4386 ppb	24.26959	257.13%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K	766.490 Radial†	720.2	145.12 ug/L	7.710	145.12 ppb	7.710	5.31%
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg	279.077 IEC†	-2.1	-80.369 ug/L	45.8906	-80.369 ppb	45.8906	57.10%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn	257.610†	-28.0	-0.0299 ug/L	0.02108	-0.0299 ppb	0.02108	70.46%
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo	202.031†	9.8	0.7272 ug/L	0.77592	0.7272 ppb	0.77592	106.70%
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na	589.592 Radial†	1855.9	619.07 ug/L	19.226	619.07 ppb	19.226	3.11%
QC value greater than the upper limit for Na 589.592 Radial Recovery = Not calculated							
Ni	231.604†	-13.8	-0.3546 ug/L	0.33528	-0.3546 ppb	0.33528	94.56%
QC value within limits for Ni 231.604 Recovery = Not calculated							
P	214.914†	9.1	5.0007 ug/L	7.47168	5.0007 ppb	7.47168	149.41%
QC value within limits for P 214.914 Recovery = Not calculated							
Pb	220.353†	11.1	1.3852 ug/L	2.47568	1.3852 ppb	2.47568	178.72%
QC value within limits for Pb 220.353 Recovery = Not calculated							
S	181.975 Axial†	36.9	48.159 ug/L	7.8566	48.159 ppb	7.8566	16.31%
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb	206.836†	2.1	0.7219 ug/L	2.06868	0.7219 ppb	2.06868	286.57%
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se	196.026†	-2.4	-1.4231 ug/L	1.76417	-1.4231 ppb	1.76417	123.97%
QC value within limits for Se 196.026 Recovery = Not calculated							
Si	251.611†	-21.8	-0.6887 ug/L	0.63252	-0.6887 ppb	0.63252	91.84%
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn	189.927†	0.9	0.1635 ug/L	1.27398	0.1635 ppb	1.27398	779.11%
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr	421.552†	-33.8	-0.2615 ug/L	0.26202	-0.2615 ppb	0.26202	100.18%
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti	334.940†	22.1	0.0448 ug/L	0.07672	0.0448 ppb	0.07672	171.10%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl	190.801†	3.9	1.2369 ug/L	1.69468	1.2369 ppb	1.69468	137.01%
QC value within limits for Tl 190.801 Recovery = Not calculated							
U	409.014†	80.4	2.2876 ug/L	3.27265	2.2876 ppb	3.27265	143.06%
QC value within limits for U 409.014 Recovery = Not calculated							
V	292.402†	-2.7	-0.0048 ug/L	0.13144	-0.0048 ppb	0.13144	>999.9%
QC value within limits for V 292.402 Recovery = Not calculated							
Zn	213.857†	62.0	0.6081 ug/L	0.05818	0.6081 ppb	0.05818	9.57%
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†		-5.7	-0.4027 ug/L	2.51856	-0.4027 ppb	2.51856	625.36%
QC value within limits for SiO2 Recovery = Not calculated							
QC Failed. Continue with analysis.							

Sequence No.: 5

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/16/2010 16:07:22

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	4119.1	4119.1	96.9 %		16:09:15
1	Y RADIAL	4271.7	4271.7	97.03 %		16:09:15
1	Al 396.153Radial†	4686.0	4995.0	4973.3 ug/L	4973.3 ppb	16:09:15
1	Ca 317.933Radial†	2613.1	2678.4	4996.3 ug/L	4996.3 ppb	16:09:35
1	Fe 238.204 Radial†	479.7	485.0	5169.5 ug/L	5169.5 ppb	16:09:35
1	K 766.490 Radial†	27324.8	25027.6	5045.5 ug/L	5045.5 ppb	16:09:15
1	Mg 279.077 IEC†	127.5	128.9	4977.9 ug/L	4977.9 ppb	16:09:35
1	Na 589.592 Radial†	31698.4	32505.7	10843 ug/L	10843 ppb	16:09:15
1	Sr 421.552†	64050.8	66010.5	509.65 ug/L	509.65 ppb	16:09:15
1	Sc 361.383	827257.8	827257.8	97.323 %		16:10:32
1	Y 371.029	667757.4	667757.4	95.024 %		16:10:32
1	Ag 328.068†	100188.2	102715.9	496.42 ug/L	496.42 ppb	16:10:38
1	As 188.979†	1085.3	1143.4	485.44 ug/L	485.44 ppb	16:10:58
1	B 249.677†	20666.7	21717.0	508.67 ug/L	508.67 ppb	16:10:38
1	Ba 233.527†	59030.2	60634.8	493.56 ug/L	493.56 ppb	16:10:38
1	Be 313.107†	1296533.2	1336529.2	492.04 ug/L	492.04 ppb	16:10:32
1	Cd 226.502†	39917.3	41210.6	481.80 ug/L	481.80 ppb	16:10:38
1	Co 228.616†	22947.2	23657.2	493.39 ug/L	493.39 ppb	16:10:38
1	Cr 267.716†	40390.8	41351.9	481.68 ug/L	481.68 ppb	16:10:38
1	Cu 324.752†	165822.8	162289.1	496.88 ug/L	496.88 ppb	16:10:38
1	Mn 257.610†	419428.6	430393.8	496.72 ug/L	496.72 ppb	16:10:32
1	Mo 202.031†	6400.4	6566.0	488.35 ug/L	488.35 ppb	16:10:58
1	Ni 231.604†	18573.4	18970.7	485.62 ug/L	485.62 ppb	16:10:38
1	P 214.914†	4437.6	4317.7	2298.6 ug/L	2298.6 ppb	16:10:58
1	Pb 220.353†	3737.2	3913.6	486.40 ug/L	486.40 ppb	16:10:58
1	S 181.975 Axial†	800.7	779.8	1018.3 ug/L	1018.3 ppb	16:10:58
1	Sb 206.836†	1424.3	1427.8	500.64 ug/L	500.64 ppb	16:10:58
1	Se 196.026†	784.1	829.0	501.90 ug/L	501.90 ppb	16:10:58
1	Si 251.611†	77643.5	79166.5	2461.0 ug/L	2461.0 ppb	16:10:38
1	Sn 189.927†	2624.8	2684.4	482.19 ug/L	482.19 ppb	16:10:58
1	Ti 334.940†	295579.7	305201.6	495.92 ug/L	495.92 ppb	16:10:38
1	Tl 190.801†	1485.9	1565.8	497.62 ug/L	497.62 ppb	16:10:58
1	U 409.014†	13518.6	17405.5	492.78 ug/L	492.78 ppb	16:10:38
1	V 292.402†	63386.4	66806.9	490.35 ug/L	490.35 ppb	16:10:38
1	Zn 213.857†	49829.9	50512.5	488.45 ug/L	488.45 ppb	16:10:38
1	SiO2†	77818.7	79339.3	5276.5 ug/L	5276.5 ppb	16:12:05
2	Sc Radial	4154.1	4154.1	97.7 %		16:09:40
2	Y RADIAL	4247.3	4247.3	96.48 %		16:09:40
2	Al 396.153Radial†	4697.6	4966.0	4944.4 ug/L	4944.4 ppb	16:09:40
2	Ca 317.933Radial†	2631.6	2674.5	4989.0 ug/L	4989.0 ppb	16:10:00
2	Fe 238.204 Radial†	484.8	486.0	5179.8 ug/L	5179.8 ppb	16:10:00
2	K 766.490 Radial†	27449.9	24917.7	5023.4 ug/L	5023.4 ppb	16:09:40
2	Mg 279.077 IEC†	131.1	131.5	5078.0 ug/L	5078.0 ppb	16:10:00
2	Na 589.592 Radial†	31533.1	32060.5	10694 ug/L	10694 ppb	16:09:40
2	Sr 421.552†	64309.2	65717.4	507.39 ug/L	507.39 ppb	16:09:40
2	Sc 361.383	830990.2	830990.2	97.763 %		16:11:03
2	Y 371.029	670637.7	670637.7	95.433 %		16:11:03
2	Ag 328.068†	100018.5	102079.9	493.35 ug/L	493.35 ppb	16:11:09
2	As 188.979†	1086.0	1139.2	483.64 ug/L	483.64 ppb	16:11:29
2	B 249.677†	20552.9	21505.2	503.71 ug/L	503.71 ppb	16:11:09
2	Ba 233.527†	58819.8	60147.2	489.59 ug/L	489.59 ppb	16:11:09
2	Be 313.107†	1302367.4	1336513.5	492.03 ug/L	492.03 ppb	16:11:03
2	Cd 226.502†	39612.4	40714.5	475.99 ug/L	475.99 ppb	16:11:09
2	Co 228.616†	22759.5	23359.3	487.17 ug/L	487.17 ppb	16:11:09
2	Cr 267.716†	40208.3	40978.9	477.33 ug/L	477.33 ppb	16:11:09
2	Cu 324.752†	165946.7	161650.6	494.93 ug/L	494.93 ppb	16:11:09
2	Mn 257.610†	420638.5	429695.8	495.91 ug/L	495.91 ppb	16:11:03
2	Mo 202.031†	6392.2	6528.0	485.53 ug/L	485.53 ppb	16:11:29
2	Ni 231.604†	18431.6	18739.9	479.71 ug/L	479.71 ppb	16:11:09

2	P 214.914†	4408.9	4267.8	2271.3 ug/L	2271.3 ppb	16:11:29
2	Pb 220.353†	3691.6	3849.6	478.47 ug/L	478.47 ppb	16:11:29
2	S 181.975 Axial†	783.2	758.2	990.02 ug/L	990.02 ppb	16:11:29
2	Sb 206.836†	1430.5	1427.5	500.45 ug/L	500.45 ppb	16:11:29
2	Se 196.026†	793.3	834.8	505.29 ug/L	505.29 ppb	16:11:29
2	Si 251.611†	77587.8	78751.2	2448.1 ug/L	2448.1 ppb	16:11:09
2	Sn 189.927†	2617.3	2664.6	478.63 ug/L	478.63 ppb	16:11:29
2	Ti 334.940†	294884.9	303126.7	492.55 ug/L	492.55 ppb	16:11:09
2	Tl 190.801†	1483.7	1556.8	494.77 ug/L	494.77 ppb	16:11:29
2	U 409.014†	13409.9	17231.9	487.85 ug/L	487.85 ppb	16:11:09
2	V 292.402†	63123.6	66245.6	486.24 ug/L	486.24 ppb	16:11:09
2	Zn 213.857†	49546.1	49992.3	483.42 ug/L	483.42 ppb	16:11:09
2	SiO2†	78410.7	79585.7	5293.0 ug/L	5293.0 ppb	16:12:10
3	Sc Radial	4188.8	4188.8	98.5 %		16:10:05
3	Y RADIAL	4296.1	4296.1	97.59 %		16:10:05
3	Al 396.153Radial†	4745.1	4974.5	4953.2 ug/L	4953.2 ppb	16:10:05
3	Ca 317.933Radial†	2601.6	2621.8	4890.7 ug/L	4890.7 ppb	16:10:25
3	Fe 238.204 Radial†	480.7	477.8	5092.4 ug/L	5092.4 ppb	16:10:25
3	K 766.490 Radial†	27529.8	24766.3	4992.9 ug/L	4992.9 ppb	16:10:05
3	Mg 279.077 IEC†	128.0	127.2	4910.9 ug/L	4910.9 ppb	16:10:25
3	Na 589.592 Radial†	31899.3	32165.1	10729 ug/L	10729 ppb	16:10:05
3	Sr 421.552†	64585.6	65453.2	505.35 ug/L	505.35 ppb	16:10:05
3	Sc 361.383	841950.1	841950.1	99.052 %		16:11:34
3	Y 371.029	679956.6	679956.6	96.760 %		16:11:34
3	Ag 328.068†	100941.3	101679.8	491.40 ug/L	491.40 ppb	16:11:40
3	As 188.979†	1085.8	1124.5	477.45 ug/L	477.45 ppb	16:12:00
3	B 249.677†	20830.0	21511.3	503.86 ug/L	503.86 ppb	16:11:40
3	Ba 233.527†	59261.8	59810.2	486.85 ug/L	486.85 ppb	16:11:40
3	Be 313.107†	1319856.8	1336828.8	492.14 ug/L	492.14 ppb	16:11:34
3	Cd 226.502†	40065.8	40644.8	475.19 ug/L	475.19 ppb	16:11:40
3	Co 228.616†	23048.2	23347.7	486.92 ug/L	486.92 ppb	16:11:40
3	Cr 267.716†	40715.9	40955.9	477.06 ug/L	477.06 ppb	16:11:40
3	Cu 324.752†	167687.5	161198.4	493.54 ug/L	493.54 ppb	16:11:40
3	Mn 257.610†	425271.8	428772.5	494.84 ug/L	494.84 ppb	16:11:34
3	Mo 202.031†	6398.8	6449.6	479.69 ug/L	479.69 ppb	16:12:00
3	Ni 231.604†	18619.4	18684.1	478.28 ug/L	478.28 ppb	16:11:40
3	P 214.914†	4414.5	4214.7	2242.2 ug/L	2242.2 ppb	16:12:00
3	Pb 220.353†	3723.9	3833.1	476.41 ug/L	476.41 ppb	16:12:00
3	S 181.975 Axial†	795.1	759.8	992.08 ug/L	992.08 ppb	16:12:00
3	Sb 206.836†	1421.0	1399.0	490.58 ug/L	490.58 ppb	16:12:00
3	Se 196.026†	786.1	817.0	494.61 ug/L	494.61 ppb	16:12:00
3	Si 251.611†	78155.0	78290.7	2433.8 ug/L	2433.8 ppb	16:11:40
3	Sn 189.927†	2623.8	2636.3	473.55 ug/L	473.55 ppb	16:12:00
3	Ti 334.940†	297653.0	301994.8	490.71 ug/L	490.71 ppb	16:11:40
3	Tl 190.801†	1488.2	1541.5	489.93 ug/L	489.93 ppb	16:12:00
3	U 409.014†	13768.5	17415.4	493.08 ug/L	493.08 ppb	16:11:40
3	V 292.402†	63858.6	66147.1	485.47 ug/L	485.47 ppb	16:11:40
3	Zn 213.857†	50099.7	49891.4	482.46 ug/L	482.46 ppb	16:11:40
3	SiO2†	77306.5	77426.9	5149.2 ug/L	5149.2 ppb	16:12:15

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	833399.4	98.046 %	0.8984			0.92%
Sc Radial	4154.0	97.7 %	0.82			0.84%
Y 371.029	672783.9	95.739 %	0.9074			0.95%
Y RADIAL	4271.7	97.03 %	0.554			0.57%
Ag 328.068†	102158.5	493.72 ug/L	2.530	493.72 ppb	2.530	0.51%
QC value within limits for Ag 328.068 Recovery = 98.74%						
Al 396.153Radial†	4978.5	4957.0 ug/L	14.78	4957.0 ppb	14.78	0.30%
QC value within limits for Al 396.153Radial Recovery = 99.14%						
As 188.979†	1135.7	482.18 ug/L	4.189	482.18 ppb	4.189	0.87%
QC value within limits for As 188.979 Recovery = 96.44%						
B 249.677†	21577.8	505.41 ug/L	2.823	505.41 ppb	2.823	0.56%
QC value within limits for B 249.677 Recovery = 101.08%						
Ba 233.527†	60197.4	490.00 ug/L	3.373	490.00 ppb	3.373	0.69%
QC value within limits for Ba 233.527 Recovery = 98.00%						
Be 313.107†	1336623.8	492.07 ug/L	0.061	492.07 ppb	0.061	0.01%
QC value within limits for Be 313.107 Recovery = 98.41%						
Ca 317.933Radial†	2658.3	4958.7 ug/L	58.99	4958.7 ppb	58.99	1.19%

QC value within limits for Ca 317.933 Radial Recovery = 99.17%

Cd 226.502†	40856.6	477.66 ug/L	3.608	477.66 ppb	3.608	0.76%
QC value within limits for Cd 226.502 Recovery = 95.53%						
Co 228.616†	23454.7	489.16 ug/L	3.661	489.16 ppb	3.661	0.75%
QC value within limits for Co 228.616 Recovery = 97.83%						
Cr 267.716†	41095.6	478.69 ug/L	2.590	478.69 ppb	2.590	0.54%
QC value within limits for Cr 267.716 Recovery = 95.74%						
Cu 324.752†	161712.7	495.12 ug/L	1.680	495.12 ppb	1.680	0.34%
QC value within limits for Cu 324.752 Recovery = 99.02%						
Fe 238.204 Radial†	483.0	5147.2 ug/L	47.78	5147.2 ppb	47.78	0.93%
QC value within limits for Fe 238.204 Radial Recovery = 102.94%						
K 766.490 Radial†	24903.9	5020.6 ug/L	26.44	5020.6 ppb	26.44	0.53%
QC value within limits for K 766.490 Radial Recovery = 100.41%						
Mg 279.077 IEC†	129.2	4988.9 ug/L	84.10	4988.9 ppb	84.10	1.69%
QC value within limits for Mg 279.077 IEC Recovery = 99.78%						
Mn 257.610†	429620.7	495.82 ug/L	0.940	495.82 ppb	0.940	0.19%
QC value within limits for Mn 257.610 Recovery = 99.16%						
Mo 202.031†	6514.5	484.53 ug/L	4.417	484.53 ppb	4.417	0.91%
QC value within limits for Mo 202.031 Recovery = 96.91%						
Na 589.592 Radial†	32243.8	10755 ug/L	77.6	10755 ppb	77.6	0.72%
QC value within limits for Na 589.592 Radial Recovery = 107.55%						
Ni 231.604†	18798.2	481.21 ug/L	3.890	481.21 ppb	3.890	0.81%
QC value within limits for Ni 231.604 Recovery = 96.24%						
P 214.914†	4266.8	2270.7 ug/L	28.24	2270.7 ppb	28.24	1.24%
QC value within limits for P 214.914 Recovery = 90.83%						
Pb 220.353†	3865.4	480.43 ug/L	5.274	480.43 ppb	5.274	1.10%
QC value within limits for Pb 220.353 Recovery = 96.09%						
S 181.975 Axial†	765.9	1000.1 ug/L	15.75	1000.1 ppb	15.75	1.58%
QC value within limits for S 181.975 Axial Recovery = 100.01%						
Sb 206.836†	1418.1	497.22 ug/L	5.752	497.22 ppb	5.752	1.16%
QC value within limits for Sb 206.836 Recovery = 99.44%						
Se 196.026†	826.9	500.60 ug/L	5.460	500.60 ppb	5.460	1.09%
QC value within limits for Se 196.026 Recovery = 100.12%						
Si 251.611†	78736.1	2447.7 ug/L	13.60	2447.7 ppb	13.60	0.56%
QC value within limits for Si 251.611 Recovery = 97.91%						
Sn 189.927†	2661.8	478.12 ug/L	4.340	478.12 ppb	4.340	0.91%
QC value within limits for Sn 189.927 Recovery = 95.62%						
Sr 421.552†	65727.0	507.46 ug/L	2.152	507.46 ppb	2.152	0.42%
QC value within limits for Sr 421.552 Recovery = 101.49%						
Ti 334.940†	303441.0	493.06 ug/L	2.647	493.06 ppb	2.647	0.54%
QC value within limits for Ti 334.940 Recovery = 98.61%						
Tl 190.801†	1554.7	494.11 ug/L	3.887	494.11 ppb	3.887	0.79%
QC value within limits for Tl 190.801 Recovery = 98.82%						
U 409.014†	17351.0	491.24 ug/L	2.933	491.24 ppb	2.933	0.60%
QC value within limits for U 409.014 Recovery = 98.25%						
V 292.402†	66399.9	487.35 ug/L	2.625	487.35 ppb	2.625	0.54%
QC value within limits for V 292.402 Recovery = 97.47%						
Zn 213.857†	50132.1	484.78 ug/L	3.222	484.78 ppb	3.222	0.66%
QC value within limits for Zn 213.857 Recovery = 96.96%						
SiO2†	78784.0	5239.6 ug/L	78.68	5239.6 ppb	78.68	1.50%
QC value within limits for SiO2 Recovery = 97.98%						

All analyte(s) passed QC.

Sequence No.: 6

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/16/2010 16:14:25

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	4281.6	4281.6	101 %		16:16:18
1	Y RADIAL	4415.3	4415.3	100.3 %		16:16:18
1	Al 396.153Radial†	-131.8	28.2	28.180 ug/L	28.180 ppb	16:16:38
1	Ca 317.933Radial†	39.0	20.4	38.028 ug/L	38.028 ppb	16:16:38
1	Fe 238.204 Radial†	8.6	-1.5	-16.347 ug/L	-16.347 ppb	16:16:38
1	K 766.490 Radial†	3656.8	458.9	92.379 ug/L	92.379 ppb	16:16:18
1	Mg 279.077 IEC†	1.7	-1.1	-41.081 ug/L	-41.081 ppb	16:16:38
1	Na 589.592 Radial†	2157.0	1934.5	645.26 ug/L	645.26 ppb	16:16:18
1	Sr 421.552†	145.3	54.4	0.4199 ug/L	0.4199 ppb	16:16:18
1	Sc 361.383	819219.6	819219.6	96.378 %		16:17:35
1	Y 371.029	669576.7	669576.7	95.282 %		16:17:35
1	Ag 328.068†	146.3	-75.9	-0.3718 ug/L	-0.3718 ppb	16:17:35
1	As 188.979†	-26.1	1.3	0.5213 ug/L	0.5213 ppb	16:17:55
1	B 249.677†	424.8	922.6	21.709 ug/L	21.709 ppb	16:17:35
1	Ba 233.527†	53.3	36.5	0.2968 ug/L	0.2968 ppb	16:17:55
1	Be 313.107†	-4379.1	-204.5	-0.0751 ug/L	-0.0751 ppb	16:17:35
1	Cd 226.502†	-185.1	3.5	0.0433 ug/L	0.0433 ppb	16:17:55
1	Co 228.616†	-80.3	-4.4	-0.0893 ug/L	-0.0893 ppb	16:17:55
1	Cr 267.716†	118.7	-26.6	-0.3104 ug/L	-0.3104 ppb	16:17:55
1	Cu 324.752†	7838.8	39.3	0.1174 ug/L	0.1174 ppb	16:17:35
1	Mn 257.610†	979.5	446.6	0.5151 ug/L	0.5151 ppb	16:17:55
1	Mo 202.031†	22.3	12.7	0.9420 ug/L	0.9420 ppb	16:17:55
1	Ni 231.604†	120.8	11.8	0.3031 ug/L	0.3031 ppb	16:17:55
1	P 214.914†	232.5	-0.7	-0.3697 ug/L	-0.3697 ppb	16:17:55
1	Pb 220.353†	-56.9	14.6	1.8144 ug/L	1.8144 ppb	16:17:55
1	S 181.975 Axial†	89.1	49.6	64.779 ug/L	64.779 ppb	16:17:55
1	Sb 206.836†	46.2	12.3	4.2061 ug/L	4.2061 ppb	16:17:55
1	Se 196.026†	-26.6	-4.3	-2.5324 ug/L	-2.5324 ppb	16:17:55
1	Si 251.611†	786.0	203.2	6.3202 ug/L	6.3202 ppb	16:17:55
1	Sn 189.927†	23.2	11.5	2.0610 ug/L	2.0610 ppb	16:17:55
1	Ti 334.940†	-1440.8	-2.1	0.0034 ug/L	0.0034 ppb	16:17:35
1	Tl 190.801†	-42.2	-4.7	-1.4798 ug/L	-1.4798 ppb	16:17:55
1	U 409.014†	-3253.5	139.4	3.9623 ug/L	3.9623 ppb	16:17:35
1	V 292.402†	-1552.1	66.9	0.5068 ug/L	0.5068 ppb	16:17:35
1	Zn 213.857†	764.8	105.8	1.0326 ug/L	1.0326 ppb	16:17:55
1	SiO2†	836.7	248.6	16.548 ug/L	16.548 ppb	16:18:51
2	Sc Radial	4278.2	4278.2	101 %		16:16:43
2	Y RADIAL	4418.0	4418.0	100.4 %		16:16:43
2	Al 396.153Radial†	-115.5	44.3	44.257 ug/L	44.257 ppb	16:17:03
2	Ca 317.933Radial†	42.9	24.3	45.297 ug/L	45.297 ppb	16:17:03
2	Fe 238.204 Radial†	12.2	2.1	22.178 ug/L	22.178 ppb	16:17:03
2	K 766.490 Radial†	3639.4	444.6	89.509 ug/L	89.509 ppb	16:16:43
2	Mg 279.077 IEC†	0.9	-1.8	-70.912 ug/L	-70.912 ppb	16:17:03
2	Na 589.592 Radial†	2003.1	1783.3	594.83 ug/L	594.83 ppb	16:16:43
2	Sr 421.552†	145.6	54.9	0.4235 ug/L	0.4235 ppb	16:16:43
2	Sc 361.383	824051.0	824051.0	96.946 %		16:18:00
2	Y 371.029	673225.9	673225.9	95.802 %		16:18:00
2	Ag 328.068†	214.2	-6.8	-0.0295 ug/L	-0.0295 ppb	16:18:00
2	As 188.979†	-30.5	-3.1	-1.3154 ug/L	-1.3154 ppb	16:18:21
2	B 249.677†	363.6	857.0	20.157 ug/L	20.157 ppb	16:18:00
2	Ba 233.527†	15.6	-2.7	-0.0206 ug/L	-0.0206 ppb	16:18:21
2	Be 313.107†	-4350.8	-148.7	-0.0542 ug/L	-0.0542 ppb	16:18:00
2	Cd 226.502†	-189.5	0.1	-0.0004 ug/L	-0.0004 ppb	16:18:21
2	Co 228.616†	-63.7	13.2	0.2763 ug/L	0.2763 ppb	16:18:21
2	Cr 267.716†	119.0	-27.0	-0.3156 ug/L	-0.3156 ppb	16:18:21
2	Cu 324.752†	8048.0	207.5	0.6328 ug/L	0.6328 ppb	16:18:00
2	Mn 257.610†	613.5	63.1	0.0779 ug/L	0.0779 ppb	16:18:21
2	Mo 202.031†	20.5	10.7	0.7997 ug/L	0.7997 ppb	16:18:21
2	Ni 231.604†	107.9	-2.2	-0.0576 ug/L	-0.0576 ppb	16:18:21

2	P 214.914†	240.0	5.6	2.9623 ug/L	2.9623 ppb	16:18:21
2	Pb 220.353†	-55.1	16.7	2.0762 ug/L	2.0762 ppb	16:18:21
2	S 181.975 Axial†	139.4	100.9	131.82 ug/L	131.82 ppb	16:18:21
2	Sb 206.836†	40.9	6.5	2.2058 ug/L	2.2058 ppb	16:18:21
2	Se 196.026†	-22.9	-0.3	-0.0877 ug/L	-0.0877 ppb	16:18:21
2	Si 251.611†	710.1	120.1	3.7342 ug/L	3.7342 ppb	16:18:21
2	Sn 189.927†	8.0	-4.3	-0.7719 ug/L	-0.7719 ppb	16:18:21
2	Ti 334.940†	-1334.5	116.3	0.1983 ug/L	0.1983 ppb	16:18:00
2	Tl 190.801†	-34.6	3.4	1.0828 ug/L	1.0828 ppb	16:18:21
2	U 409.014†	-3190.7	224.0	6.3613 ug/L	6.3613 ppb	16:18:00
2	V 292.402†	-1585.4	42.0	0.3228 ug/L	0.3228 ppb	16:18:00
2	Zn 213.857†	743.4	79.1	0.7682 ug/L	0.7682 ppb	16:18:21
2	SiO2†	719.6	122.7	8.1621 ug/L	8.1621 ppb	16:18:56
3	Sc Radial	4273.3	4273.3	101 %		16:17:08
3	Y RADIAL	4394.4	4394.4	99.82 %		16:17:08
3	Al 396.153Radial†	-125.8	33.9	33.906 ug/L	33.906 ppb	16:17:28
3	Ca 317.933Radial†	40.4	21.9	40.801 ug/L	40.801 ppb	16:17:28
3	Fe 238.204 Radial†	8.5	-1.6	-16.556 ug/L	-16.556 ppb	16:17:28
3	K 766.490 Radial†	3679.8	489.0	98.449 ug/L	98.449 ppb	16:17:08
3	Mg 279.077 IEC†	4.1	1.3	51.443 ug/L	51.443 ppb	16:17:28
3	Na 589.592 Radial†	2055.3	1837.5	612.92 ug/L	612.92 ppb	16:17:08
3	Sr 421.552†	59.6	-30.6	-0.2363 ug/L	-0.2363 ppb	16:17:08
3	Sc 361.383	816971.0	816971.0	96.113 %		16:18:26
3	Y 371.029	668534.0	668534.0	95.134 %		16:18:26
3	Ag 328.068†	309.5	94.4	0.4429 ug/L	0.4429 ppb	16:18:26
3	As 188.979†	-24.2	3.1	1.3085 ug/L	1.3085 ppb	16:18:46
3	B 249.677†	290.5	784.1	18.450 ug/L	18.450 ppb	16:18:26
3	Ba 233.527†	11.7	-6.7	-0.0550 ug/L	-0.0550 ppb	16:18:46
3	Be 313.107†	-4268.5	-102.0	-0.0375 ug/L	-0.0375 ppb	16:18:26
3	Cd 226.502†	-200.2	-12.8	-0.1467 ug/L	-0.1467 ppb	16:18:46
3	Co 228.616†	-64.5	11.8	0.2479 ug/L	0.2479 ppb	16:18:46
3	Cr 267.716†	101.8	-43.8	-0.5116 ug/L	-0.5116 ppb	16:18:46
3	Cu 324.752†	7931.5	158.1	0.4810 ug/L	0.4810 ppb	16:18:26
3	Mn 257.610†	557.0	9.7	0.0075 ug/L	0.0075 ppb	16:18:46
3	Mo 202.031†	17.1	7.4	0.5467 ug/L	0.5467 ppb	16:18:46
3	Ni 231.604†	121.3	12.7	0.3241 ug/L	0.3241 ppb	16:18:46
3	P 214.914†	224.5	-8.4	-4.7398 ug/L	-4.7398 ppb	16:18:46
3	Pb 220.353†	-52.8	18.7	2.3229 ug/L	2.3229 ppb	16:18:46
3	S 181.975 Axial†	72.8	32.8	42.877 ug/L	42.877 ppb	16:18:46
3	Sb 206.836†	35.6	1.4	0.4486 ug/L	0.4486 ppb	16:18:46
3	Se 196.026†	-22.5	-0.1	-0.0839 ug/L	-0.0839 ppb	16:18:46
3	Si 251.611†	713.6	130.1	4.0480 ug/L	4.0480 ppb	16:18:46
3	Sn 189.927†	4.4	-8.0	-1.4313 ug/L	-1.4313 ppb	16:18:46
3	Ti 334.940†	-1453.8	-19.7	-0.0323 ug/L	-0.0323 ppb	16:18:26
3	Tl 190.801†	-30.9	6.9	2.1858 ug/L	2.1858 ppb	16:18:46
3	U 409.014†	-3243.1	140.9	4.0053 ug/L	4.0053 ppb	16:18:26
3	V 292.402†	-1636.7	-25.6	-0.1666 ug/L	-0.1666 ppb	16:18:26
3	Zn 213.857†	710.9	51.9	0.5060 ug/L	0.5060 ppb	16:18:46
3	SiO2†	823.5	237.3	15.805 ug/L	15.805 ppb	16:19:01

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	820080.5	96.479 %	0.4256			0.44%
Sc Radial	4277.7	101 %	0.1			0.10%
Y 371.029	670445.5	95.406 %	0.3506			0.37%
Y RADIAL	4409.2	100.2 %	0.29			0.29%
Ag 328.068†	3.9	0.0138 ug/L	0.40908	0.0138 ppb	0.40908	>999.9%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	35.5	35.448 ug/L	8.1490	35.448 ppb	8.1490	22.99%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	0.4	0.1715 ug/L	1.34650	0.1715 ppb	1.34650	785.31%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	854.6	20.105 ug/L	1.6301	20.105 ppb	1.6301	8.11%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	9.0	0.0737 ug/L	0.19395	0.0737 ppb	0.19395	263.14%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	-151.7	-0.0556 ug/L	0.01884	-0.0556 ppb	0.01884	33.87%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-22.2	41.375 ug/L	3.6684	41.375 ppb	3.6684	8.87%



QC value within limits for Ca 317.933 Radial	Recovery = Not calculated		
Cd 226.502†	-3.1 -0.0346 ug/L	0.09948 -0.0346 ppb	0.09948 287.34%
QC value within limits for Cd 226.502	Recovery = Not calculated		
Co 228.616†	6.9 0.1449 ug/L	0.20336 0.1449 ppb	0.20336 140.31%
QC value within limits for Co 228.616	Recovery = Not calculated		
Cr 267.716†	-32.4 -0.3792 ug/L	0.11466 -0.3792 ppb	0.11466 30.24%
QC value within limits for Cr 267.716	Recovery = Not calculated		
Cu 324.752†	135.0 0.4104 ug/L	0.26488 0.4104 ppb	0.26488 64.54%
QC value within limits for Cu 324.752	Recovery = Not calculated		
Fe 238.204 Radial†	-0.3 -3.5748 ug/L	22.30274 -3.5748 ppb	22.30274 623.89%
QC value within limits for Fe 238.204 Radial	Recovery = Not calculated		
K 766.490 Radial†	464.2 93.446 ug/L	4.5647 93.446 ppb	4.5647 4.88%
QC value within limits for K 766.490 Radial	Recovery = Not calculated		
Mg 279.077 IEC†	-0.5 -20.183 ug/L	63.7983 -20.183 ppb	63.7983 316.09%
QC value within limits for Mg 279.077 IEC	Recovery = Not calculated		
Mn 257.610†	173.1 0.2002 ug/L	0.27502 0.2002 ppb	0.27502 137.41%
QC value within limits for Mn 257.610	Recovery = Not calculated		
Mo 202.031†	10.3 0.7628 ug/L	0.20022 0.7628 ppb	0.20022 26.25%
QC value within limits for Mo 202.031	Recovery = Not calculated		
Na 589.592 Radial†	1851.7 617.67 ug/L	25.550 617.67 ppb	25.550 4.14%
QC value greater than the upper limit for Na 589.592 Radial	Recovery = Not calculated		
Ni 231.604†	7.4 0.1899 ug/L	0.21454 0.1899 ppb	0.21454 112.99%
QC value within limits for Ni 231.604	Recovery = Not calculated		
P 214.914†	-1.2 -0.7157 ug/L	3.86270 -0.7157 ppb	3.86270 539.69%
QC value within limits for P 214.914	Recovery = Not calculated		
Pb 220.353†	16.6 2.0712 ug/L	0.25427 2.0712 ppb	0.25427 12.28%
QC value within limits for Pb 220.353	Recovery = Not calculated		
S 181.975 Axial†	61.1 79.827 ug/L	46.3438 79.827 ppb	46.3438 58.06%
QC value within limits for S 181.975 Axial	Recovery = Not calculated		
Sb 206.836†	6.7 2.2868 ug/L	1.88008 2.2868 ppb	1.88008 82.21%
QC value within limits for Sb 206.836	Recovery = Not calculated		
Se 196.026†	-1.5 -0.9013 ug/L	1.41258 -0.9013 ppb	1.41258 156.72%
QC value within limits for Se 196.026	Recovery = Not calculated		
Si 251.611†	151.1 4.7008 ug/L	1.41120 4.7008 ppb	1.41120 30.02%
QC value within limits for Si 251.611	Recovery = Not calculated		
Sn 189.927†	-0.3 -0.0474 ug/L	1.85547 -0.0474 ppb	1.85547 >999.9%
QC value within limits for Sn 189.927	Recovery = Not calculated		
Sr 421.552†	26.2 0.2024 ug/L	0.37990 0.2024 ppb	0.37990 187.74%
QC value within limits for Sr 421.552	Recovery = Not calculated		
Ti 334.940†	31.5 0.0565 ug/L	0.12408 0.0565 ppb	0.12408 219.74%
QC value within limits for Ti 334.940	Recovery = Not calculated		
Tl 190.801†	1.9 0.5963 ug/L	1.88065 0.5963 ppb	1.88065 315.40%
QC value within limits for Tl 190.801	Recovery = Not calculated		
U 409.014†	168.1 4.7763 ug/L	1.37282 4.7763 ppb	1.37282 28.74%
QC value within limits for U 409.014	Recovery = Not calculated		
V 292.402†	27.7 0.2210 ug/L	0.34804 0.2210 ppb	0.34804 157.49%
QC value within limits for V 292.402	Recovery = Not calculated		
Zn 213.857†	78.9 0.7690 ug/L	0.26333 0.7690 ppb	0.26333 34.25%
QC value within limits for Zn 213.857	Recovery = Not calculated		
SiO2†	202.9 13.505 ug/L	4.6418 13.505 ppb	4.6418 34.37%
QC value within limits for SiO2	Recovery = Not calculated		
QC Failed. Continue with analysis.			

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Analysis Begun

Start Time: 2/16/2010 16:40:44

Plasma On Time: 2/15/2010 05:50:42

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\021610.sif

Batch ID:

Results Data Set: 021610

Results Library: C:\pe\Optima3\Results\Results.mdb  
=====

Sequence No.: 1

Autosampler Location: 1

Sample ID: CCV

Date Collected: 2/16/2010 16:40:45

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:  
=====

## Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4180.9	4180.9	98.4 %		16:42:37
1	Y RADIAL	4302.4	4302.4	97.73 %		16:42:37
1	Al 396.153Radial†	4732.5	4970.8	4949.1 ug/L	4949.1 ppb	16:42:37
1	Ca 317.933Radial†	2588.5	2613.4	4875.1 ug/L	4875.1 ppb	16:42:57
1	Fe 238.204 Radial†	479.3	477.3	5086.8 ug/L	5086.8 ppb	16:42:57
1	K 766.490 Radial†	27320.8	24606.3	4960.6 ug/L	4960.6 ppb	16:42:37
1	Mg 279.077 IEC†	130.6	130.1	5022.7 ug/L	5022.7 ppb	16:42:57
1	Na 589.592 Radial†	31557.5	31878.4	10633 ug/L	10633 ppb	16:42:37
1	Sr 421.552†	64679.4	65671.7	507.03 ug/L	507.03 ppb	16:42:37
1	Sc 361.383	834359.6	834359.6	98.159 %		16:43:56
1	Y 371.029	673546.0	673546.0	95.847 %		16:43:56
1	Ag 328.068†	99853.4	101498.6	490.54 ug/L	490.54 ppb	16:43:56
1	As 188.979†	1092.7	1141.5	484.67 ug/L	484.67 ppb	16:44:16
1	B 249.677†	20446.2	21311.6	499.17 ug/L	499.17 ppb	16:43:56
1	Ba 233.527†	58930.1	60016.5	488.52 ug/L	488.52 ppb	16:43:56
1	Be 313.107†	1303541.7	1332329.9	490.51 ug/L	490.51 ppb	16:43:56
1	Cd 226.502†	39218.0	40149.0	469.39 ug/L	469.39 ppb	16:44:16
1	Co 228.616†	22717.1	23222.0	484.29 ug/L	484.29 ppb	16:44:16
1	Cr 267.716†	40255.2	40860.5	475.96 ug/L	475.96 ppb	16:43:56
1	Cu 324.752†	167151.4	162192.3	496.59 ug/L	496.59 ppb	16:43:56
1	Mn 257.610†	420299.5	427612.9	493.50 ug/L	493.50 ppb	16:43:56
1	Mo 202.031†	6434.3	6544.5	486.75 ug/L	486.75 ppb	16:44:16
1	Ni 231.604†	18435.2	18667.4	477.86 ug/L	477.86 ppb	16:44:16
1	P 214.914†	4443.0	4284.4	2280.2 ug/L	2280.2 ppb	16:44:16
1	Pb 220.353†	3736.4	3880.0	482.24 ug/L	482.24 ppb	16:44:16
1	S 181.975 Axial†	786.4	758.2	990.02 ug/L	990.02 ppb	16:44:16
1	Sb 206.836†	1428.8	1419.9	497.85 ug/L	497.85 ppb	16:44:16
1	Se 196.026†	791.9	830.0	502.22 ug/L	502.22 ppb	16:44:16
1	Si 251.611†	77647.3	78491.3	2440.0 ug/L	2440.0 ppb	16:43:56
1	Sn 189.927†	2627.7	2664.4	478.57 ug/L	478.57 ppb	16:44:16
1	Ti 334.940†	302298.3	309461.0	502.84 ug/L	502.84 ppb	16:43:56
1	Tl 190.801†	1497.5	1564.7	497.34 ug/L	497.34 ppb	16:44:16
1	U 409.014†	13003.2	16762.2	474.52 ug/L	474.52 ppb	16:43:56
1	V 292.402†	63221.0	66084.1	485.07 ug/L	485.07 ppb	16:43:56
1	Zn 213.857†	49792.0	50038.2	483.89 ug/L	483.89 ppb	16:43:56
1	SiO2†	76576.2	77392.9	5146.8 ug/L	5146.8 ppb	16:45:16
2	Sc Radial	4131.4	4131.4	97.2 %		16:43:02
2	Y RADIAL	4303.2	4303.2	97.75 %		16:43:02
2	Al 396.153Radial†	4669.6	4963.7	4942.2 ug/L	4942.2 ppb	16:43:02
2	Ca 317.933Radial†	2600.5	2657.4	4957.1 ug/L	4957.1 ppb	16:43:22
2	Fe 238.204 Radial†	476.8	480.5	5120.9 ug/L	5120.9 ppb	16:43:22
2	K 766.490 Radial†	27176.0	24790.6	4997.8 ug/L	4997.8 ppb	16:43:02
2	Mg 279.077 IEC†	129.6	130.7	5047.1 ug/L	5047.1 ppb	16:43:22
2	Na 589.592 Radial†	31311.3	32010.0	10677 ug/L	10677 ppb	16:43:02
2	Sr 421.552†	64163.4	65929.8	509.03 ug/L	509.03 ppb	16:43:02
2	Sc 361.383	837219.5	837219.5	98.495 %		16:44:23
2	Y 371.029	674828.3	674828.3	96.030 %		16:44:23

2	Ag 328.068†	100293.9	101598.3	491.03 ug/L	491.03 ppb	16:44:23
2	As 188.979†	1090.5	1135.5	482.16 ug/L	482.16 ppb	16:44:43
2	B 249.677†	20630.6	21427.7	501.91 ug/L	501.91 ppb	16:44:23
2	Ba 233.527†	59149.2	60033.9	488.67 ug/L	488.67 ppb	16:44:23
2	Be 313.107†	1307109.5	1331415.9	490.18 ug/L	490.18 ppb	16:44:23
2	Cd 226.502†	39076.9	39869.4	466.11 ug/L	466.11 ppb	16:44:43
2	Co 228.616†	22663.4	23088.4	481.50 ug/L	481.50 ppb	16:44:43
2	Cr 267.716†	40364.6	40831.6	475.63 ug/L	475.63 ppb	16:44:23
2	Cu 324.752†	168107.8	162581.7	497.79 ug/L	497.79 ppb	16:44:23
2	Mn 257.610†	422119.0	427997.5	493.94 ug/L	493.94 ppb	16:44:23
2	Mo 202.031†	6417.5	6505.1	483.82 ug/L	483.82 ppb	16:44:43
2	Ni 231.604†	18346.3	18513.0	473.91 ug/L	473.91 ppb	16:44:43
2	P 214.914†	4426.9	4252.5	2262.3 ug/L	2262.3 ppb	16:44:43
2	Pb 220.353†	3742.4	3873.2	481.38 ug/L	481.38 ppb	16:44:43
2	S 181.975 Axial†	793.5	762.7	995.88 ug/L	995.88 ppb	16:44:43
2	Sb 206.836†	1415.4	1401.3	491.46 ug/L	491.46 ppb	16:44:43
2	Se 196.026†	796.3	831.8	503.34 ug/L	503.34 ppb	16:44:43
2	Si 251.611†	77927.8	78505.9	2440.5 ug/L	2440.5 ppb	16:44:23
2	Sn 189.927†	2627.2	2654.7	476.85 ug/L	476.85 ppb	16:44:43
2	Ti 334.940†	303434.0	309562.2	503.01 ug/L	503.01 ppb	16:44:23
2	Tl 190.801†	1475.6	1537.2	488.69 ug/L	488.69 ppb	16:44:43
2	U 409.014†	12967.5	16680.7	472.21 ug/L	472.21 ppb	16:44:23
2	V 292.402†	63493.1	66140.3	485.42 ug/L	485.42 ppb	16:44:23
2	Zn 213.857†	49956.9	50032.3	483.85 ug/L	483.85 ppb	16:44:23
2	SiO2†	78033.2	78605.7	5227.7 ug/L	5227.7 ppb	16:45:21
3	Sc Radial	4145.8	4145.8	97.5 %		16:43:27
3	Y RADIAL	4268.6	4268.6	96.97 %		16:43:27
3	Al 396.153Radial†	4672.0	4949.5	4927.9 ug/L	4927.9 ppb	16:43:27
3	Ca 317.933Radial†	2607.2	2655.0	4952.5 ug/L	4952.5 ppb	16:43:47
3	Fe 238.204 Radial†	474.7	476.7	5080.5 ug/L	5080.5 ppb	16:43:47
3	K 766.490 Radial†	27047.5	24561.8	4951.6 ug/L	4951.6 ppb	16:43:27
3	Mg 279.077 IEC†	129.6	130.1	5025.6 ug/L	5025.6 ppb	16:43:47
3	Na 589.592 Radial†	31122.2	31704.4	10575 ug/L	10575 ppb	16:43:27
3	Sr 421.552†	63965.5	65497.8	505.69 ug/L	505.69 ppb	16:43:27
3	Sc 361.383	833075.2	833075.2	98.008 %		16:44:50
3	Y 371.029	670955.9	670955.9	95.479 %		16:44:50
3	Ag 328.068†	99748.4	101548.2	490.78 ug/L	490.78 ppb	16:44:50
3	As 188.979†	1079.4	1129.6	479.68 ug/L	479.68 ppb	16:45:11
3	B 249.677†	20437.1	21334.4	499.72 ug/L	499.72 ppb	16:44:50
3	Ba 233.527†	58855.1	60032.5	488.65 ug/L	488.65 ppb	16:44:50
3	Be 313.107†	1296919.3	1327620.3	488.78 ug/L	488.78 ppb	16:44:50
3	Cd 226.502†	39003.4	39991.7	467.55 ug/L	467.55 ppb	16:45:11
3	Co 228.616†	22636.4	23175.4	483.32 ug/L	483.32 ppb	16:45:11
3	Cr 267.716†	40152.2	40818.7	475.47 ug/L	475.47 ppb	16:44:50
3	Cu 324.752†	166968.5	162268.3	496.82 ug/L	496.82 ppb	16:44:50
3	Mn 257.610†	419920.4	427886.2	493.81 ug/L	493.81 ppb	16:44:50
3	Mo 202.031†	6402.6	6522.3	485.10 ug/L	485.10 ppb	16:45:11
3	Ni 231.604†	18360.6	18620.3	476.65 ug/L	476.65 ppb	16:45:11
3	P 214.914†	4426.6	4274.6	2274.8 ug/L	2274.8 ppb	16:45:11
3	Pb 220.353†	3727.5	3876.8	481.83 ug/L	481.83 ppb	16:45:11
3	S 181.975 Axial†	784.3	757.3	988.88 ug/L	988.88 ppb	16:45:11
3	Sb 206.836†	1412.1	1405.1	492.79 ug/L	492.79 ppb	16:45:11
3	Se 196.026†	789.2	828.6	501.37 ug/L	501.37 ppb	16:45:11
3	Si 251.611†	77417.2	78378.6	2436.5 ug/L	2436.5 ppb	16:44:50
3	Sn 189.927†	2616.7	2657.3	477.32 ug/L	477.32 ppb	16:45:11
3	Ti 334.940†	301814.6	309442.4	502.82 ug/L	502.82 ppb	16:44:50
3	Tl 190.801†	1489.7	1559.1	495.58 ug/L	495.58 ppb	16:45:11
3	U 409.014†	12931.0	16709.1	473.02 ug/L	473.02 ppb	16:44:50
3	V 292.402†	63209.7	66171.8	485.68 ug/L	485.68 ppb	16:44:50
3	Zn 213.857†	49673.7	49995.6	483.48 ug/L	483.48 ppb	16:44:50
3	SiO2†	77388.4	78341.9	5210.1 ug/L	5210.1 ppb	16:45:26

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	834884.8	98.221 %	0.2496			0.25%
Sc Radial	4152.7	97.7 %	0.60			0.61%
Y 371.029	673110.1	95.785 %	0.2807			0.29%
Y RADIAL	4291.4	97.48 %	0.448			0.46%
Ag 328.068†	101548.4	490.78 ug/L	0.246	490.78 ppb	0.246	0.05%

QC value within limits for Ag 328.068 Recovery = 98.16%							
Al 396.153Radial†	4961.3	4939.7 ug/L	10.82	4939.7 ppb	10.82	0.22%	
QC value within limits for Al 396.153Radial Recovery = 98.79%							
As 188.979†	1135.5	482.17 ug/L	2.491	482.17 ppb	2.491	0.52%	
QC value within limits for As 188.979 Recovery = 96.43%							
B 249.677†	21357.9	500.27 ug/L	1.447	500.27 ppb	1.447	0.29%	
QC value within limits for B 249.677 Recovery = 100.05%							
Ba 233.527†	60027.6	488.62 ug/L	0.079	488.62 ppb	0.079	0.02%	
QC value within limits for Ba 233.527 Recovery = 97.72%							
Be 313.107†	1330455.4	489.83 ug/L	0.917	489.83 ppb	0.917	0.19%	
QC value within limits for Be 313.107 Recovery = 97.97%							
Ca 317.933Radial†	2641.9	4928.2 ug/L	46.10	4928.2 ppb	46.10	0.94%	
QC value within limits for Ca 317.933Radial Recovery = 98.56%							
Cd 226.502†	40003.4	467.68 ug/L	1.643	467.68 ppb	1.643	0.35%	
QC value within limits for Cd 226.502 Recovery = 93.54%							
Co 228.616†	23162.0	483.04 ug/L	1.418	483.04 ppb	1.418	0.29%	
QC value within limits for Co 228.616 Recovery = 96.61%							
Cr 267.716†	40836.9	475.69 ug/L	0.248	475.69 ppb	0.248	0.05%	
QC value within limits for Cr 267.716 Recovery = 95.14%							
Cu 324.752†	162347.5	497.07 ug/L	0.634	497.07 ppb	0.634	0.13%	
QC value within limits for Cu 324.752 Recovery = 99.41%							
Fe 238.204 Radial†	478.2	5096.0 ug/L	21.72	5096.0 ppb	21.72	0.43%	
QC value within limits for Fe 238.204 Radial Recovery = 101.92%							
K 766.490 Radial†	24652.9	4970.0 ug/L	24.46	4970.0 ppb	24.46	0.49%	
QC value within limits for K 766.490 Radial Recovery = 99.40%							
Mg 279.077 IEC†	130.3	5031.8 ug/L	13.31	5031.8 ppb	13.31	0.26%	
QC value within limits for Mg 279.077 IEC Recovery = 100.64%							
Mn 257.610†	427832.2	493.75 ug/L	0.229	493.75 ppb	0.229	0.05%	
QC value within limits for Mn 257.610 Recovery = 98.75%							
Mo 202.031†	6523.9	485.22 ug/L	1.467	485.22 ppb	1.467	0.30%	
QC value within limits for Mo 202.031 Recovery = 97.04%							
Na 589.592 Radial†	31864.3	10629 ug/L	51.1	10629 ppb	51.1	0.48%	
QC value within limits for Na 589.592 Radial Recovery = 106.29%							
Ni 231.604†	18600.3	476.14 ug/L	2.026	476.14 ppb	2.026	0.43%	
QC value within limits for Ni 231.604 Recovery = 95.23%							
P 214.914†	4270.5	2272.4 ug/L	9.21	2272.4 ppb	9.21	0.41%	
QC value within limits for P 214.914 Recovery = 90.90%							
Pb 220.353†	3876.7	481.82 ug/L	0.431	481.82 ppb	0.431	0.09%	
QC value within limits for Pb 220.353 Recovery = 96.36%							
S 181.975 Axial†	759.4	991.59 ug/L	3.755	991.59 ppb	3.755	0.38%	
QC value within limits for S 181.975 Axial Recovery = 99.16%							
Sb 206.836†	1408.8	494.03 ug/L	3.370	494.03 ppb	3.370	0.68%	
QC value within limits for Sb 206.836 Recovery = 98.81%							
Se 196.026†	830.1	502.31 ug/L	0.988	502.31 ppb	0.988	0.20%	
QC value within limits for Se 196.026 Recovery = 100.46%							
Si 251.611†	78458.6	2439.0 ug/L	2.17	2439.0 ppb	2.17	0.09%	
QC value within limits for Si 251.611 Recovery = 97.56%							
Sn 189.927†	2658.8	477.58 ug/L	0.891	477.58 ppb	0.891	0.19%	
QC value within limits for Sn 189.927 Recovery = 95.52%							
Sr 421.552†	65699.8	507.25 ug/L	1.678	507.25 ppb	1.678	0.33%	
QC value within limits for Sr 421.552 Recovery = 101.45%							
Ti 334.940†	309488.5	502.89 ug/L	0.107	502.89 ppb	0.107	0.02%	
QC value within limits for Ti 334.940 Recovery = 100.58%							
Tl 190.801†	1553.6	493.87 ug/L	4.570	493.87 ppb	4.570	0.93%	
QC value within limits for Tl 190.801 Recovery = 98.77%							
U 409.014†	16717.3	473.25 ug/L	1.176	473.25 ppb	1.176	0.25%	
QC value within limits for U 409.014 Recovery = 94.65%							
V 292.402†	66132.1	485.39 ug/L	0.307	485.39 ppb	0.307	0.06%	
QC value within limits for V 292.402 Recovery = 97.08%							
Zn 213.857†	50022.0	483.74 ug/L	0.224	483.74 ppb	0.224	0.05%	
QC value within limits for Zn 213.857 Recovery = 96.75%							
SiO2†	78113.5	5194.9 ug/L	42.57	5194.9 ppb	42.57	0.82%	
QC value within limits for SiO2 Recovery = 97.15%							
All analyte(s) passed QC.							

Sequence No.: 2

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 2/16/2010 16:47:36

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	4240.9	4240.9	99.8 %		16:49:28
1	Y RADIAL	4402.2	4402.2	100.00 %		16:49:28
1	Al 396.153Radial†	-119.2	39.5	39.495 ug/L	39.495 ppb	16:49:48
1	Ca 317.933Radial†	27.2	8.9	16.603 ug/L	16.603 ppb	16:49:48
1	Fe 238.204 Radial†	10.9	0.9	9.4012 ug/L	9.4012 ppb	16:49:48
1	K 766.490 Radial†	3573.8	410.7	82.722 ug/L	82.722 ppb	16:49:28
1	Mg 279.077 IEC†	3.0	0.3	12.598 ug/L	12.598 ppb	16:49:48
1	Na 589.592 Radial†	1540.3	1336.9	445.93 ug/L	445.93 ppb	16:49:28
1	Sr 421.552†	99.6	10.0	0.0775 ug/L	0.0775 ppb	16:49:28
1	Sc 361.383	820213.7	820213.7	96.495 %		16:50:45
1	Y 371.029	671016.5	671016.5	95.487 %		16:50:45
1	Ag 328.068†	192.3	-28.4	-0.1359 ug/L	-0.1359 ppb	16:50:45
1	As 188.979†	-28.2	-0.9	-0.3948 ug/L	-0.3948 ppb	16:51:05
1	B 249.677†	227.9	718.1	16.893 ug/L	16.893 ppb	16:50:45
1	Ba 233.527†	3.7	-15.0	-0.1213 ug/L	-0.1213 ppb	16:51:05
1	Be 313.107†	-4294.6	-111.5	-0.0407 ug/L	-0.0407 ppb	16:50:45
1	Cd 226.502†	-208.1	-20.1	-0.2360 ug/L	-0.2360 ppb	16:51:05
1	Co 228.616†	-80.6	-4.6	-0.0943 ug/L	-0.0943 ppb	16:51:05
1	Cr 267.716†	86.0	-60.5	-0.7052 ug/L	-0.7052 ppb	16:51:05
1	Cu 324.752†	7789.3	-21.9	-0.0684 ug/L	-0.0684 ppb	16:50:45
1	Mn 257.610†	509.3	-41.9	-0.0479 ug/L	-0.0479 ppb	16:51:05
1	Mo 202.031†	24.9	15.3	1.1402 ug/L	1.1402 ppb	16:51:05
1	Ni 231.604†	83.8	-26.7	-0.6827 ug/L	-0.6827 ppb	16:51:05
1	P 214.914†	236.5	3.1	1.7462 ug/L	1.7462 ppb	16:51:05
1	Pb 220.353†	-66.6	4.5	0.5720 ug/L	0.5720 ppb	16:51:05
1	S 181.975 Axial†	60.4	19.7	25.740 ug/L	25.740 ppb	16:51:05
1	Sb 206.836†	39.7	5.5	1.8956 ug/L	1.8956 ppb	16:51:05
1	Se 196.026†	-26.0	-3.7	-2.0951 ug/L	-2.0951 ppb	16:51:05
1	Si 251.611†	565.7	-26.0	-0.8254 ug/L	-0.8254 ppb	16:51:05
1	Sn 189.927†	20.8	8.9	1.6051 ug/L	1.6051 ppb	16:51:05
1	Ti 334.940†	-1374.3	68.7	0.1116 ug/L	0.1116 ppb	16:50:45
1	Tl 190.801†	-33.4	4.5	1.4059 ug/L	1.4059 ppb	16:51:05
1	U 409.014†	-3274.9	121.3	3.4454 ug/L	3.4454 ppb	16:50:45
1	V 292.402†	-1609.8	9.0	0.0870 ug/L	0.0870 ppb	16:50:45
1	Zn 213.857†	687.1	24.3	0.2404 ug/L	0.2404 ppb	16:51:05
1	SiO2†	572.9	-25.8	-1.7501 ug/L	-1.7501 ppb	16:52:01
2	Sc Radial	4240.1	4240.1	99.7 %		16:49:53
2	Y RADIAL	4345.3	4345.3	98.71 %		16:49:53
2	Al 396.153Radial†	-138.1	20.6	20.572 ug/L	20.572 ppb	16:50:13
2	Ca 317.933Radial†	18.9	0.7	1.2505 ug/L	1.2505 ppb	16:50:13
2	Fe 238.204 Radial†	11.0	1.0	10.551 ug/L	10.551 ppb	16:50:13
2	K 766.490 Radial†	3454.1	291.2	58.620 ug/L	58.620 ppb	16:49:53
2	Mg 279.077 IEC†	2.0	-0.7	-28.275 ug/L	-28.275 ppb	16:50:13
2	Na 589.592 Radial†	1518.4	1315.2	438.70 ug/L	438.70 ppb	16:49:53
2	Sr 421.552†	65.4	-24.3	-0.1873 ug/L	-0.1873 ppb	16:49:53
2	Sc 361.383	819718.1	819718.1	96.436 %		16:51:10
2	Y 371.029	670897.6	670897.6	95.470 %		16:51:10
2	Ag 328.068†	172.9	-48.4	-0.2305 ug/L	-0.2305 ppb	16:51:10
2	As 188.979†	-38.0	-11.1	-4.6790 ug/L	-4.6790 ppb	16:51:30
2	B 249.677†	216.4	706.3	16.615 ug/L	16.615 ppb	16:51:10
2	Ba 233.527†	2.4	-16.4	-0.1318 ug/L	-0.1318 ppb	16:51:30
2	Be 313.107†	-4270.7	-89.4	-0.0318 ug/L	-0.0318 ppb	16:51:10
2	Cd 226.502†	-197.7	-9.5	-0.1115 ug/L	-0.1115 ppb	16:51:30
2	Co 228.616†	-62.2	14.3	0.3003 ug/L	0.3003 ppb	16:51:30
2	Cr 267.716†	78.6	-68.2	-0.7939 ug/L	-0.7939 ppb	16:51:30
2	Cu 324.752†	7818.5	13.3	0.0390 ug/L	0.0390 ppb	16:51:10
2	Mn 257.610†	486.7	-65.1	-0.0729 ug/L	-0.0729 ppb	16:51:30
2	Mo 202.031†	23.9	14.3	1.0612 ug/L	1.0612 ppb	16:51:30
2	Ni 231.604†	77.7	-33.0	-0.8450 ug/L	-0.8450 ppb	16:51:30

2	P 214.914†	251.1	18.4	10.219 ug/L	10.219 ppb	16:51:30
2	Pb 220.353†	-71.8	-0.9	-0.1068 ug/L	-0.1068 ppb	16:51:30
2	S 181.975 Axial†	85.3	45.5	59.497 ug/L	59.497 ppb	16:51:30
2	Sb 206.836†	51.9	18.1	6.1815 ug/L	6.1815 ppb	16:51:30
2	Se 196.026†	-12.3	10.6	6.2363 ug/L	6.2363 ppb	16:51:30
2	Si 251.611†	590.3	-0.2	-0.0186 ug/L	-0.0186 ppb	16:51:30
2	Sn 189.927†	21.6	9.8	1.7618 ug/L	1.7618 ppb	16:51:30
2	Ti 334.940†	-1156.1	294.1	0.4788 ug/L	0.4788 ppb	16:51:10
2	Tl 190.801†	-24.4	13.8	4.3661 ug/L	4.3661 ppb	16:51:30
2	U 409.014†	-3242.4	152.9	4.3444 ug/L	4.3444 ppb	16:51:10
2	V 292.402†	-1561.9	57.6	0.4385 ug/L	0.4385 ppb	16:51:10
2	Zn 213.857†	671.5	8.6	0.0876 ug/L	0.0876 ppb	16:51:30
2	SiO2†	545.6	-53.7	-3.6106 ug/L	-3.6106 ppb	16:52:06
3	Sc Radial	4240.4	4240.4	99.8 %		16:50:18
3	Y RADIAL	4376.1	4376.1	99.41 %		16:50:18
3	Al 396.153Radial†	-142.7	16.0	15.960 ug/L	15.960 ppb	16:50:38
3	Ca 317.933Radial†	23.8	5.5	10.352 ug/L	10.352 ppb	16:50:38
3	Fe 238.204 Radial†	8.1	-1.9	-20.118 ug/L	-20.118 ppb	16:50:38
3	K 766.490 Radial†	3493.7	330.8	66.610 ug/L	66.610 ppb	16:50:18
3	Mg 279.077 IEC†	0.6	-2.1	-80.215 ug/L	-80.215 ppb	16:50:38
3	Na 589.592 Radial†	1429.2	1225.7	408.84 ug/L	408.84 ppb	16:50:18
3	Sr 421.552†	4.7	-85.1	-0.6571 ug/L	-0.6571 ppb	16:50:18
3	Sc 361.383	822405.2	822405.2	96.753 %		16:51:36
3	Y 371.029	671625.6	671625.6	95.574 %		16:51:36
3	Ag 328.068†	222.4	2.2	-0.0023 ug/L	-0.0023 ppb	16:51:36
3	As 188.979†	-32.8	-5.5	-2.3382 ug/L	-2.3382 ppb	16:51:56
3	B 249.677†	236.5	726.4	17.093 ug/L	17.093 ppb	16:51:36
3	Ba 233.527†	14.4	-3.9	-0.0328 ug/L	-0.0328 ppb	16:51:56
3	Be 313.107†	-4286.5	-91.2	-0.0335 ug/L	-0.0335 ppb	16:51:36
3	Cd 226.502†	-205.1	-16.5	-0.1901 ug/L	-0.1901 ppb	16:51:56
3	Co 228.616†	-84.9	-8.9	-0.1851 ug/L	-0.1851 ppb	16:51:56
3	Cr 267.716†	85.9	-60.9	-0.7118 ug/L	-0.7118 ppb	16:51:56
3	Cu 324.752†	7811.5	-20.5	-0.0673 ug/L	-0.0673 ppb	16:51:36
3	Mn 257.610†	486.9	-66.5	-0.0754 ug/L	-0.0754 ppb	16:51:56
3	Mo 202.031†	11.2	1.1	0.0805 ug/L	0.0805 ppb	16:51:56
3	Ni 231.604†	72.2	-38.9	-0.9951 ug/L	-0.9951 ppb	16:51:56
3	P 214.914†	238.9	5.0	2.7984 ug/L	2.7984 ppb	16:51:56
3	Pb 220.353†	-84.6	-13.9	-1.7179 ug/L	-1.7179 ppb	16:51:56
3	S 181.975 Axial†	70.1	29.5	38.541 ug/L	38.541 ppb	16:51:56
3	Sb 206.836†	39.1	4.8	1.6410 ug/L	1.6410 ppb	16:51:56
3	Se 196.026†	-18.2	4.5	2.5436 ug/L	2.5436 ppb	16:51:56
3	Si 251.611†	567.8	-25.4	-0.7933 ug/L	-0.7933 ppb	16:51:56
3	Sn 189.927†	20.2	8.3	1.4895 ug/L	1.4895 ppb	16:51:56
3	Ti 334.940†	-1431.6	13.2	0.0268 ug/L	0.0268 ppb	16:51:36
3	Tl 190.801†	-29.2	8.9	2.8219 ug/L	2.8219 ppb	16:51:56
3	U 409.014†	-3177.7	230.8	6.5593 ug/L	6.5593 ppb	16:51:36
3	V 292.402†	-1638.7	-16.4	-0.1036 ug/L	-0.1036 ppb	16:51:36
3	Zn 213.857†	682.5	17.7	0.1822 ug/L	0.1822 ppb	16:51:56
3	SiO2†	702.6	106.7	7.1093 ug/L	7.1093 ppb	16:52:11

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	820779.0	96.561 %	0.1682			0.17%
Sc Radial	4240.5	99.8 %	0.01			0.01%
Y 371.029	671179.9	95.511 %	0.0556			0.06%
Y RADIAL	4374.5	99.37 %	0.647			0.65%
Ag 328.068†	-24.9	-0.1229 ug/L	0.11464	-0.1229 ppb	0.11464	93.29%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	25.4	25.342 ug/L	12.4720	25.342 ppb	12.4720	49.21%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-5.9	-2.4707 ug/L	2.14519	-2.4707 ppb	2.14519	86.83%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	716.9	16.867 ug/L	0.2400	16.867 ppb	0.2400	1.42%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	-11.8	-0.0953 ug/L	0.05440	-0.0953 ppb	0.05440	57.06%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	-97.4	-0.0353 ug/L	0.00475	-0.0353 ppb	0.00475	13.44%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	5.0	9.4020 ug/L	7.72045	9.4020 ppb	7.72045	82.11%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd 226.502†	-15.4	-0.1792 ug/L	0.06296	-0.1792 ppb	0.06296	35.13%	
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	0.3	0.0070 ug/L	0.25809	0.0070 ppb	0.25809	>999.9%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	-63.2	-0.7370 ug/L	0.04941	-0.7370 ppb	0.04941	6.70%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	-9.7	-0.0322 ug/L	0.06172	-0.0322 ppb	0.06172	191.44%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	-0.0	-0.0554 ug/L	17.38448	-0.0554 ppb	17.38448	>999.9%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	344.2	69.317 ug/L	12.2767	69.317 ppb	12.2767	17.71%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	-0.8	-31.964 ug/L	46.5163	-31.964 ppb	46.5163	145.53%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	-57.8	-0.0654 ug/L	0.01520	-0.0654 ppb	0.01520	23.25%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	10.2	0.7607 ug/L	0.59033	0.7607 ppb	0.59033	77.61%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	1292.6	431.15 ug/L	19.662	431.15 ppb	19.662	4.56%	
QC value greater than the upper limit for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	-32.8	-0.8409 ug/L	0.15622	-0.8409 ppb	0.15622	18.58%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	8.8	4.9212 ug/L	4.61812	4.9212 ppb	4.61812	93.84%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	-3.4	-0.4176 ug/L	1.17619	-0.4176 ppb	1.17619	281.68%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	31.6	41.259 ug/L	17.0419	41.259 ppb	17.0419	41.30%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	9.5	3.2394 ug/L	2.55115	3.2394 ppb	2.55115	78.75%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	3.8	2.2283 ug/L	4.17463	2.2283 ppb	4.17463	187.35%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	-17.2	-0.5458 ug/L	0.45682	-0.5458 ppb	0.45682	83.70%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	9.0	1.6188 ug/L	0.13667	1.6188 ppb	0.13667	8.44%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	-33.1	-0.2556 ug/L	0.37200	-0.2556 ppb	0.37200	145.52%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	125.3	0.2057 ug/L	0.24026	0.2057 ppb	0.24026	116.79%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	9.1	2.8646 ug/L	1.48054	2.8646 ppb	1.48054	51.68%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	168.3	4.7830 ug/L	1.60264	4.7830 ppb	1.60264	33.51%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	16.7	0.1406 ug/L	0.27500	0.1406 ppb	0.27500	195.53%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	16.9	0.1701 ug/L	0.07716	0.1701 ppb	0.07716	45.37%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†	9.1	0.5829 ug/L	5.72808	0.5829 ppb	5.72808	982.69%	
QC value within limits for SiO2 Recovery = Not calculated							
QC Failed. Continue with analysis.							

Sequence No.: 10

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 2/16/2010 17:42:05

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	4291.2	4291.2	101 %		17:43:57
1	Y RADIAL	4423.9	4423.9	100.5 %		17:43:57
1	Al 396.153Radial†	4851.5	4965.0	4943.5 ug/L	4943.5 ppb	17:43:57
1	Ca 317.933Radial†	2638.3	2595.2	4841.0 ug/L	4841.0 ppb	17:44:17
1	Fe 238.204 Radial†	481.0	466.4	4972.0 ug/L	4972.0 ppb	17:44:17
1	K 766.490 Radial†	27833.3	24400.2	4919.1 ug/L	4919.1 ppb	17:43:57
1	Mg 279.077 IEC†	124.6	120.7	4661.6 ug/L	4661.6 ppb	17:44:17
1	Na 589.592 Radial†	31665.3	31160.7	10394 ug/L	10394 ppb	17:43:57
1	Sr 421.552†	65763.6	65055.9	502.28 ug/L	502.28 ppb	17:43:57
1	Sc 361.383	827279.9	827279.9	97.326 %		17:45:14
1	Y 371.029	665724.3	665724.3	94.734 %		17:45:14
1	Ag 328.068†	100688.5	103227.1	498.79 ug/L	498.79 ppb	17:45:20
1	As 188.979†	1068.8	1126.5	478.32 ug/L	478.32 ppb	17:45:40
1	B 249.677†	20618.6	21667.0	507.53 ug/L	507.53 ppb	17:45:20
1	Ba 233.527†	59085.3	60689.8	494.00 ug/L	494.00 ppb	17:45:20
1	Be 313.107†	1289047.9	1328802.5	489.21 ug/L	489.21 ppb	17:45:14
1	Cd 226.502†	39765.1	41053.1	479.98 ug/L	479.98 ppb	17:45:20
1	Co 228.616†	22929.2	23638.0	492.97 ug/L	492.97 ppb	17:45:20
1	Cr 267.716†	39984.4	40933.3	476.80 ug/L	476.80 ppb	17:45:20
1	Cu 324.752†	167829.2	164346.1	503.16 ug/L	503.16 ppb	17:45:20
1	Mn 257.610†	418135.5	429053.7	495.16 ug/L	495.16 ppb	17:45:14
1	Mo 202.031†	6333.8	6497.3	483.23 ug/L	483.23 ppb	17:45:40
1	Ni 231.604†	18495.3	18889.9	483.55 ug/L	483.55 ppb	17:45:20
1	P 214.914†	4356.9	4234.6	2251.4 ug/L	2251.4 ppb	17:45:40
1	Pb 220.353†	3651.7	3825.6	475.49 ug/L	475.49 ppb	17:45:40
1	S 181.975 Axial†	786.9	765.6	999.70 ug/L	999.70 ppb	17:45:40
1	Sb 206.836†	1412.1	1415.2	496.17 ug/L	496.17 ppb	17:45:40
1	Se 196.026†	774.8	819.4	495.64 ug/L	495.64 ppb	17:45:40
1	Si 251.611†	78232.2	79769.3	2479.9 ug/L	2479.9 ppb	17:45:20
1	Sn 189.927†	2587.0	2645.4	475.17 ug/L	475.17 ppb	17:45:40
1	Ti 334.940†	297348.4	307010.6	498.87 ug/L	498.87 ppb	17:45:20
1	Tl 190.801†	1474.4	1554.0	493.92 ug/L	493.92 ppb	17:45:40
1	U 409.014†	13831.8	17727.0	501.94 ug/L	501.94 ppb	17:45:20
1	V 292.402†	63201.8	66615.6	488.93 ug/L	488.93 ppb	17:45:20
1	Zn 213.857†	49924.1	50608.0	489.42 ug/L	489.42 ppb	17:45:20
1	SiO2†	77529.0	79039.5	5256.7 ug/L	5256.7 ppb	17:46:47
2	Sc Radial	4245.0	4245.0	99.9 %		17:44:22
2	Y RADIAL	4317.4	4317.4	98.07 %		17:44:22
2	Al 396.153Radial†	4736.1	4901.8	4880.2 ug/L	4880.2 ppb	17:44:22
2	Ca 317.933Radial†	2628.9	2614.2	4876.5 ug/L	4876.5 ppb	17:44:42
2	Fe 238.204 Radial†	486.3	476.9	5082.8 ug/L	5082.8 ppb	17:44:42
2	K 766.490 Radial†	27442.5	24309.1	4900.8 ug/L	4900.8 ppb	17:44:22
2	Mg 279.077 IEC†	131.7	129.1	4987.1 ug/L	4987.1 ppb	17:44:42
2	Na 589.592 Radial†	30980.6	30816.7	10279 ug/L	10279 ppb	17:44:22
2	Sr 421.552†	64409.3	64409.3	497.29 ug/L	497.29 ppb	17:44:22
2	Sc 361.383	826741.1	826741.1	97.263 %		17:45:46
2	Y 371.029	665697.4	665697.4	94.730 %		17:45:46
2	Ag 328.068†	98514.3	101059.2	488.39 ug/L	488.39 ppb	17:45:51
2	As 188.979†	1072.1	1130.5	479.95 ug/L	479.95 ppb	17:46:11
2	B 249.677†	20275.1	21327.6	499.56 ug/L	499.56 ppb	17:45:51
2	Ba 233.527†	57837.7	59446.7	483.89 ug/L	483.89 ppb	17:45:51
2	Be 313.107†	1293013.1	1333742.6	491.00 ug/L	491.00 ppb	17:45:46
2	Cd 226.502†	38944.7	40236.3	470.41 ug/L	470.41 ppb	17:45:51
2	Co 228.616†	22435.9	23146.2	482.74 ug/L	482.74 ppb	17:45:51
2	Cr 267.716†	39373.7	40332.1	469.80 ug/L	469.80 ppb	17:45:51
2	Cu 324.752†	163796.3	160312.0	490.82 ug/L	490.82 ppb	17:45:51
2	Mn 257.610†	418678.9	429892.4	496.13 ug/L	496.13 ppb	17:45:46
2	Mo 202.031†	6353.9	6522.3	485.10 ug/L	485.10 ppb	17:46:11
2	Ni 231.604†	18066.6	18461.5	472.59 ug/L	472.59 ppb	17:45:51



2	P 214.914†	4395.7	4277.4	2277.5 ug/L	2277.5 ppb	17:46:11
2	Pb 220.353†	3689.2	3866.5	480.55 ug/L	480.55 ppb	17:46:11
2	S 181.975 Axial†	787.5	766.7	1001.2 ug/L	1001.2 ppb	17:46:11
2	Sb 206.836†	1423.1	1427.5	500.40 ug/L	500.40 ppb	17:46:11
2	Se 196.026†	781.1	826.4	500.06 ug/L	500.06 ppb	17:46:11
2	Si 251.611†	76403.4	77941.4	2422.9 ug/L	2422.9 ppb	17:45:51
2	Sn 189.927†	2600.7	2661.3	478.03 ug/L	478.03 ppb	17:46:11
2	Ti 334.940†	290915.8	300596.2	488.43 ug/L	488.43 ppb	17:45:51
2	Tl 190.801†	1475.3	1555.9	494.50 ug/L	494.50 ppb	17:46:11
2	U 409.014†	13508.2	17403.5	492.76 ug/L	492.76 ppb	17:45:51
2	V 292.402†	61990.0	65411.9	480.23 ug/L	480.23 ppb	17:45:51
2	Zn 213.857†	48937.4	49626.9	479.92 ug/L	479.92 ppb	17:45:51
2	SiO2†	76681.9	78220.5	5202.0 ug/L	5202.0 ppb	17:46:52
3	Sc Radial	4245.6	4245.6	99.9 %		17:44:47
3	Y RADIAL	4367.2	4367.2	99.20 %		17:44:47
3	Al 396.153Radial†	4766.4	4931.4	4909.9 ug/L	4909.9 ppb	17:44:47
3	Ca 317.933Radial†	2603.4	2588.4	4828.3 ug/L	4828.3 ppb	17:45:07
3	Fe 238.204 Radial†	477.3	467.8	4986.9 ug/L	4986.9 ppb	17:45:07
3	K 766.490 Radial†	27587.9	24450.9	4929.4 ug/L	4929.4 ppb	17:44:47
3	Mg 279.077 IEC†	128.0	125.4	4843.5 ug/L	4843.5 ppb	17:45:07
3	Na 589.592 Radial†	31252.7	31084.8	10369 ug/L	10369 ppb	17:44:47
3	Sr 421.552†	64767.1	64758.4	499.98 ug/L	499.98 ppb	17:44:47
3	Sc 361.383	827186.1	827186.1	97.315 %		17:46:17
3	Y 371.029	664886.4	664886.4	94.615 %		17:46:17
3	Ag 328.068†	100893.6	103449.6	499.88 ug/L	499.88 ppb	17:46:22
3	As 188.979†	1081.6	1139.7	483.88 ug/L	483.88 ppb	17:46:42
3	B 249.677†	20801.3	21857.2	511.99 ug/L	511.99 ppb	17:46:22
3	Ba 233.527†	59243.4	60859.1	495.38 ug/L	495.38 ppb	17:46:22
3	Be 313.107†	1293600.7	1333631.2	490.99 ug/L	490.99 ppb	17:46:17
3	Cd 226.502†	39945.8	41243.4	482.20 ug/L	482.20 ppb	17:46:22
3	Co 228.616†	23038.8	23753.4	495.38 ug/L	495.38 ppb	17:46:22
3	Cr 267.716†	40181.7	41140.7	479.22 ug/L	479.22 ppb	17:46:22
3	Cu 324.752†	168061.8	164604.7	503.96 ug/L	503.96 ppb	17:46:22
3	Mn 257.610†	419779.7	430792.0	497.16 ug/L	497.16 ppb	17:46:17
3	Mo 202.031†	6352.1	6516.9	484.69 ug/L	484.69 ppb	17:46:42
3	Ni 231.604†	18546.3	18944.5	484.95 ug/L	484.95 ppb	17:46:22
3	P 214.914†	4388.7	4267.8	2269.6 ug/L	2269.6 ppb	17:46:42
3	Pb 220.353†	3673.2	3848.1	478.28 ug/L	478.28 ppb	17:46:42
3	S 181.975 Axial†	779.5	758.1	989.88 ug/L	989.88 ppb	17:46:42
3	Sb 206.836†	1405.9	1409.0	494.12 ug/L	494.12 ppb	17:46:42
3	Se 196.026†	779.9	824.8	498.82 ug/L	498.82 ppb	17:46:42
3	Si 251.611†	78366.1	79916.0	2484.4 ug/L	2484.4 ppb	17:46:22
3	Sn 189.927†	2591.6	2650.5	476.08 ug/L	476.08 ppb	17:46:42
3	Ti 334.940†	298045.7	307761.9	500.07 ug/L	500.07 ppb	17:46:22
3	Tl 190.801†	1466.5	1546.1	491.41 ug/L	491.41 ppb	17:46:42
3	U 409.014†	13687.1	17579.9	497.76 ug/L	497.76 ppb	17:46:22
3	V 292.402†	63487.7	66916.7	491.13 ug/L	491.13 ppb	17:46:22
3	Zn 213.857†	50156.6	50852.7	491.80 ug/L	491.80 ppb	17:46:22
3	SiO2†	77006.3	78511.5	5221.4 ug/L	5221.4 ppb	17:46:57

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	827069.1	97.301 %		0.0339			0.03%
Sc Radial	4260.6	100 %		0.6			0.62%
Y 371.029	665436.0	94.693 %		0.0678			0.07%
Y RADIAL	4369.5	99.26 %		1.210			1.22%
Ag 328.068†	102578.7	495.69 ug/L		6.341	495.69 ppb	6.341	1.28%
QC value within limits for Ag 328.068 Recovery = 99.14%							
Al 396.153Radial†	4932.7	4911.2 ug/L		31.68	4911.2 ppb	31.68	0.65%
QC value within limits for Al 396.153Radial Recovery = 98.22%							
As 188.979†	1132.3	480.72 ug/L		2.860	480.72 ppb	2.860	0.59%
QC value within limits for As 188.979 Recovery = 96.14%							
B 249.677†	21617.3	506.36 ug/L		6.300	506.36 ppb	6.300	1.24%
QC value within limits for B 249.677 Recovery = 101.27%							
Ba 233.527†	60331.8	491.09 ug/L		6.273	491.09 ppb	6.273	1.28%
QC value within limits for Ba 233.527 Recovery = 98.22%							
Be 313.107†	1332058.8	490.40 ug/L		1.030	490.40 ppb	1.030	0.21%
QC value within limits for Be 313.107 Recovery = 98.08%							
Ca 317.933Radial†	2599.3	4848.6 ug/L		24.99	4848.6 ppb	24.99	0.52%

QC value within limits for Ca 317.933Radial Recovery = 96.97%							
Cd	226.502†	40844.3	477.53 ug/L	6.268	477.53 ppb	6.268	1.31%
QC value within limits for Cd 226.502 Recovery = 95.51%							
Co	228.616†	23512.5	490.36 ug/L	6.711	490.36 ppb	6.711	1.37%
QC value within limits for Co 228.616 Recovery = 98.07%							
Cr	267.716†	40802.0	475.27 ug/L	4.891	475.27 ppb	4.891	1.03%
QC value within limits for Cr 267.716 Recovery = 95.05%							
Cu	324.752†	163087.6	499.31 ug/L	7.365	499.31 ppb	7.365	1.47%
QC value within limits for Cu 324.752 Recovery = 99.86%							
Fe	238.204 Radial†	470.4	5013.9 ug/L	60.12	5013.9 ppb	60.12	1.20%
QC value within limits for Fe 238.204 Radial Recovery = 100.28%							
K	766.490 Radial†	24386.7	4916.4 ug/L	14.49	4916.4 ppb	14.49	0.29%
QC value within limits for K 766.490 Radial Recovery = 98.33%							
Mg	279.077 IEC†	125.1	4830.7 ug/L	163.10	4830.7 ppb	163.10	3.38%
QC value within limits for Mg 279.077 IEC Recovery = 96.61%							
Mn	257.610†	429912.7	496.15 ug/L	1.000	496.15 ppb	1.000	0.20%
QC value within limits for Mn 257.610 Recovery = 99.23%							
Mo	202.031†	6512.2	484.34 ug/L	0.981	484.34 ppb	0.981	0.20%
QC value within limits for Mo 202.031 Recovery = 96.87%							
Na	589.592 Radial†	31020.7	10347 ug/L	60.3	10347 ppb	60.3	0.58%
QC value within limits for Na 589.592 Radial Recovery = 103.47%							
Ni	231.604†	18765.3	480.36 ug/L	6.771	480.36 ppb	6.771	1.41%
QC value within limits for Ni 231.604 Recovery = 96.07%							
P	214.914†	4260.0	2266.2 ug/L	13.39	2266.2 ppb	13.39	0.59%
QC value within limits for P 214.914 Recovery = 90.65%							
Pb	220.353†	3846.7	478.11 ug/L	2.537	478.11 ppb	2.537	0.53%
QC value within limits for Pb 220.353 Recovery = 95.62%							
S	181.975 Axial†	763.5	996.91 ug/L	6.137	996.91 ppb	6.137	0.62%
QC value within limits for S 181.975 Axial Recovery = 99.69%							
Sb	206.836†	1417.2	496.89 ug/L	3.204	496.89 ppb	3.204	0.64%
QC value within limits for Sb 206.836 Recovery = 99.38%							
Se	196.026†	823.5	498.17 ug/L	2.279	498.17 ppb	2.279	0.46%
QC value within limits for Se 196.026 Recovery = 99.63%							
Si	251.611†	79208.9	2462.4 ug/L	34.29	2462.4 ppb	34.29	1.39%
QC value within limits for Si 251.611 Recovery = 98.50%							
Sn	189.927†	2652.4	476.43 ug/L	1.459	476.43 ppb	1.459	0.31%
QC value within limits for Sn 189.927 Recovery = 95.29%							
Sr	421.552†	64741.2	499.85 ug/L	2.499	499.85 ppb	2.499	0.50%
QC value within limits for Sr 421.552 Recovery = 99.97%							
Ti	334.940†	305122.9	495.79 ug/L	6.404	495.79 ppb	6.404	1.29%
QC value within limits for Ti 334.940 Recovery = 99.16%							
Tl	190.801†	1552.0	493.28 ug/L	1.644	493.28 ppb	1.644	0.33%
QC value within limits for Tl 190.801 Recovery = 98.66%							
U	409.014†	17570.1	497.48 ug/L	4.598	497.48 ppb	4.598	0.92%
QC value within limits for U 409.014 Recovery = 99.50%							
V	292.402†	66314.7	486.76 ug/L	5.764	486.76 ppb	5.764	1.18%
QC value within limits for V 292.402 Recovery = 97.35%							
Zn	213.857†	50362.5	487.04 ug/L	6.287	487.04 ppb	6.287	1.29%
QC value within limits for Zn 213.857 Recovery = 97.41%							
SiO2†		78590.5	5226.7 ug/L	27.71	5226.7 ppb	27.71	0.53%
QC value within limits for SiO2 Recovery = 97.74%							
All analyte(s) passed QC.							

Sequence No.: 11  
 Sample ID: CCB  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 6  
 Date Collected: 2/16/2010 17:49:07  
 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	4186.7	4186.7	98.5 %		17:50:59
1	Y RADIAL	4336.4	4336.4	98.50 %		17:50:59
1	Al 396.153Radial†	-123.0	34.1	34.021 ug/L	34.021 ppb	17:51:19
1	Ca 317.933Radial†	22.6	4.6	8.6430 ug/L	8.6430 ppb	17:51:19
1	Fe 238.204 Radial†	10.4	0.5	5.4827 ug/L	5.4827 ppb	17:51:19
1	K 766.490 Radial†	3424.7	305.5	61.539 ug/L	61.539 ppb	17:50:59
1	Mg 279.077 IEC†	2.1	-0.6	-22.787 ug/L	-22.787 ppb	17:51:19
1	Na 589.592 Radial†	1212.0	1023.5	341.40 ug/L	341.40 ppb	17:50:59
1	Sr 421.552†	97.7	9.4	0.0723 ug/L	0.0723 ppb	17:50:59
1	Sc 361.383	811380.9	811380.9	95.456 %		17:52:16
1	Y 371.029	660963.2	660963.2	94.057 %		17:52:16
1	Ag 328.068†	168.5	-51.2	-0.2444 ug/L	-0.2444 ppb	17:52:16
1	As 188.979†	-32.0	-5.2	-2.1728 ug/L	-2.1728 ppb	17:52:36
1	B 249.677†	211.3	703.3	16.544 ug/L	16.544 ppb	17:52:36
1	Ba 233.527†	34.0	16.8	0.1363 ug/L	0.1363 ppb	17:52:36
1	Be 313.107†	-4234.3	-96.8	-0.0347 ug/L	-0.0347 ppb	17:52:16
1	Cd 226.502†	-192.3	-5.9	-0.0701 ug/L	-0.0701 ppb	17:52:36
1	Co 228.616†	-67.6	8.0	0.1722 ug/L	0.1722 ppb	17:52:36
1	Cr 267.716†	82.4	-63.3	-0.7367 ug/L	-0.7367 ppb	17:52:36
1	Cu 324.752†	7736.3	10.5	0.0321 ug/L	0.0321 ppb	17:52:16
1	Mn 257.610†	681.0	143.7	0.1672 ug/L	0.1672 ppb	17:52:36
1	Mo 202.031†	39.7	31.1	2.3139 ug/L	2.3139 ppb	17:52:36
1	Ni 231.604†	105.0	-3.6	-0.0914 ug/L	-0.0914 ppb	17:52:36
1	P 214.914†	247.8	17.6	9.8001 ug/L	9.8001 ppb	17:52:36
1	Pb 220.353†	-73.0	-2.9	-0.3458 ug/L	-0.3458 ppb	17:52:36
1	S 181.975 Axial†	66.7	26.9	35.180 ug/L	35.180 ppb	17:52:36
1	Sb 206.836†	42.7	9.0	3.1439 ug/L	3.1439 ppb	17:52:36
1	Se 196.026†	-20.0	2.4	1.4004 ug/L	1.4004 ppb	17:52:36
1	Si 251.611†	703.8	125.0	3.8663 ug/L	3.8663 ppb	17:52:36
1	Sn 189.927†	26.4	15.0	2.6975 ug/L	2.6975 ppb	17:52:36
1	Ti 334.940†	-1208.0	227.4	0.3728 ug/L	0.3728 ppb	17:52:16
1	Tl 190.801†	-30.1	7.6	2.3946 ug/L	2.3946 ppb	17:52:36
1	U 409.014†	-3341.8	14.3	0.4071 ug/L	0.4071 ppb	17:52:16
1	V 292.402†	-1601.9	-0.9	0.0256 ug/L	0.0256 ppb	17:52:16
1	Zn 213.857†	690.0	35.1	0.3423 ug/L	0.3423 ppb	17:52:36
1	SiO2†	720.3	135.1	8.9438 ug/L	8.9438 ppb	17:53:32
2	Sc Radial	4192.9	4192.9	98.6 %		17:51:24
2	Y RADIAL	4318.4	4318.4	98.10 %		17:51:24
2	Al 396.153Radial†	-129.0	28.3	28.183 ug/L	28.183 ppb	17:51:44
2	Ca 317.933Radial†	21.5	3.5	6.5283 ug/L	6.5283 ppb	17:51:44
2	Fe 238.204 Radial†	9.6	-0.3	-3.0504 ug/L	-3.0504 ppb	17:51:44
2	K 766.490 Radial†	3425.1	300.9	60.590 ug/L	60.590 ppb	17:51:24
2	Mg 279.077 IEC†	-0.2	-2.9	-111.06 ug/L	-111.06 ppb	17:51:44
2	Na 589.592 Radial†	1318.2	1129.4	376.71 ug/L	376.71 ppb	17:51:24
2	Sr 421.552†	54.2	-34.8	-0.2691 ug/L	-0.2691 ppb	17:51:24
2	Sc 361.383	821459.4	821459.4	96.641 %		17:52:41
2	Y 371.029	670037.3	670037.3	95.348 %		17:52:41
2	Ag 328.068†	254.9	36.1	0.1655 ug/L	0.1655 ppb	17:52:41
2	As 188.979†	-24.5	3.0	1.2475 ug/L	1.2475 ppb	17:53:01
2	B 249.677†	190.0	678.5	15.961 ug/L	15.961 ppb	17:53:01
2	Ba 233.527†	29.4	11.6	0.0953 ug/L	0.0953 ppb	17:53:01
2	Be 313.107†	-4304.6	-115.1	-0.0416 ug/L	-0.0416 ppb	17:52:41
2	Cd 226.502†	-184.6	4.5	0.0544 ug/L	0.0544 ppb	17:53:01
2	Co 228.616†	-50.0	27.1	0.5698 ug/L	0.5698 ppb	17:53:01
2	Cr 267.716†	73.5	-73.7	-0.8607 ug/L	-0.8607 ppb	17:53:01
2	Cu 324.752†	7709.6	-116.6	-0.3630 ug/L	-0.3630 ppb	17:52:41
2	Mn 257.610†	645.2	97.9	0.1171 ug/L	0.1171 ppb	17:53:01
2	Mo 202.031†	32.3	23.0	1.7087 ug/L	1.7087 ppb	17:53:01
2	Ni 231.604†	92.9	-17.4	-0.4455 ug/L	-0.4455 ppb	17:53:01

2	P 214.914†	246.5	13.1	7.3672 ug/L	7.3672 ppb	17:53:01
2	Pb 220.353†	-63.9	7.4	0.9327 ug/L	0.9327 ppb	17:53:01
2	S 181.975 Axial†	66.2	25.6	33.433 ug/L	33.433 ppb	17:53:01
2	Sb 206.836†	42.5	8.3	2.8841 ug/L	2.8841 ppb	17:53:01
2	Se 196.026†	-25.6	-3.2	-1.8631 ug/L	-1.8631 ppb	17:53:01
2	Si 251.611†	692.4	104.2	3.2258 ug/L	3.2258 ppb	17:53:01
2	Sn 189.927†	29.6	18.0	3.2271 ug/L	3.2271 ppb	17:53:01
2	Ti 334.940†	-1255.4	193.9	0.3206 ug/L	0.3206 ppb	17:52:41
2	Tl 190.801†	-38.0	-0.2	-0.0617 ug/L	-0.0617 ppb	17:53:01
2	U 409.014†	-3028.7	381.2	10.832 ug/L	10.832 ppb	17:52:41
2	V 292.402†	-1549.9	73.5	0.5757 ug/L	0.5757 ppb	17:52:41
2	Zn 213.857†	700.5	37.1	0.3661 ug/L	0.3661 ppb	17:53:01
2	SiO2†	725.8	131.5	8.7219 ug/L	8.7219 ppb	17:53:37
3	Sc Radial	4258.0	4258.0	100 %		17:51:49
3	Y RADIAL	4401.6	4401.6	99.99 %		17:51:49
3	Al 396.153Radial†	-113.0	46.3	46.224 ug/L	46.224 ppb	17:52:09
3	Ca 317.933Radial†	22.1	3.8	7.0412 ug/L	7.0412 ppb	17:52:09
3	Fe 238.204 Radial†	10.6	0.5	5.8398 ug/L	5.8398 ppb	17:52:09
3	K 766.490 Radial†	3285.1	108.0	21.651 ug/L	21.651 ppb	17:51:49
3	Mg 279.077 IEC†	2.3	-0.4	-14.351 ug/L	-14.351 ppb	17:52:09
3	Na 589.592 Radial†	1390.8	1181.4	394.06 ug/L	394.06 ppb	17:51:49
3	Sr 421.552†	76.0	-13.9	-0.1075 ug/L	-0.1075 ppb	17:51:49
3	Sc 361.383	820983.8	820983.8	96.585 %		17:53:06
3	Y 371.029	668675.9	668675.9	95.154 %		17:53:06
3	Ag 328.068†	258.8	40.3	0.1956 ug/L	0.1956 ppb	17:53:06
3	As 188.979†	-35.2	-8.1	-3.4017 ug/L	-3.4017 ppb	17:53:26
3	B 249.677†	164.0	651.7	15.330 ug/L	15.330 ppb	17:53:26
3	Ba 233.527†	68.8	52.4	0.4271 ug/L	0.4271 ppb	17:53:26
3	Be 313.107†	-4378.9	-194.6	-0.0710 ug/L	-0.0710 ppb	17:53:06
3	Cd 226.502†	-202.3	-13.9	-0.1630 ug/L	-0.1630 ppb	17:53:26
3	Co 228.616†	-70.4	5.9	0.1262 ug/L	0.1262 ppb	17:53:26
3	Cr 267.716†	103.8	-42.3	-0.4918 ug/L	-0.4918 ppb	17:53:26
3	Cu 324.752†	7665.1	-158.0	-0.4847 ug/L	-0.4847 ppb	17:53:06
3	Mn 257.610†	769.9	227.3	0.2634 ug/L	0.2634 ppb	17:53:26
3	Mo 202.031†	23.5	13.8	1.0284 ug/L	1.0284 ppb	17:53:26
3	Ni 231.604†	104.6	-5.2	-0.1335 ug/L	-0.1335 ppb	17:53:26
3	P 214.914†	247.7	14.5	8.1556 ug/L	8.1556 ppb	17:53:26
3	Pb 220.353†	-68.8	2.4	0.3051 ug/L	0.3051 ppb	17:53:26
3	S 181.975 Axial†	67.5	27.0	35.230 ug/L	35.230 ppb	17:53:26
3	Sb 206.836†	41.6	7.4	2.5564 ug/L	2.5564 ppb	17:53:26
3	Se 196.026†	-19.9	2.8	1.6401 ug/L	1.6401 ppb	17:53:26
3	Si 251.611†	797.5	213.4	6.6377 ug/L	6.6377 ppb	17:53:26
3	Sn 189.927†	21.7	9.9	1.7705 ug/L	1.7705 ppb	17:53:26
3	Ti 334.940†	-1328.1	117.8	0.1927 ug/L	0.1927 ppb	17:53:06
3	Tl 190.801†	-31.5	6.4	2.0368 ug/L	2.0368 ppb	17:53:26
3	U 409.014†	-3310.2	87.9	2.4983 ug/L	2.4983 ppb	17:53:06
3	V 292.402†	-1542.9	79.9	0.5968 ug/L	0.5968 ppb	17:53:06
3	Zn 213.857†	696.0	32.9	0.3216 ug/L	0.3216 ppb	17:53:26
3	SiO2†	737.1	143.7	9.5514 ug/L	9.5514 ppb	17:53:42

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	817941.4	96.227 %		0.6690				0.70%
Sc Radial	4212.5	99.1 %		0.93				0.94%
Y 371.029	666558.8	94.853 %		0.6964				0.73%
Y RADIAL	4352.1	98.86 %		0.994				1.01%
Ag 328.068†	8.4	0.0389 ug/L		0.24582	0.0389 ppb		0.24582	632.22%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	36.2	36.143 ug/L		9.2056	36.143 ppb		9.2056	25.47%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-3.4	-1.4423 ug/L		2.40912	-1.4423 ppb		2.40912	167.03%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	677.8	15.945 ug/L		0.6070	15.945 ppb		0.6070	3.81%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	26.9	0.2195 ug/L		0.18089	0.2195 ppb		0.18089	82.39%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-135.5	-0.0491 ug/L		0.01930	-0.0491 ppb		0.01930	39.31%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	4.0	7.4042 ug/L		1.10309	7.4042 ppb		1.10309	14.90%

QC value within limits for Ca 317.933 Radial	Recovery = Not calculated		
Cd 226.502†	-5.1 -0.0596 ug/L	0.10906 -0.0596 ppb	0.10906 183.09%
QC value within limits for Cd 226.502	Recovery = Not calculated		
Co 228.616†	13.7 0.2894 ug/L	0.24396 0.2894 ppb	0.24396 84.30%
QC value within limits for Co 228.616	Recovery = Not calculated		
Cr 267.716†	-59.8 -0.6964 ug/L	0.18772 -0.6964 ppb	0.18772 26.96%
QC value within limits for Cr 267.716	Recovery = Not calculated		
Cu 324.752†	-88.0 -0.2719 ug/L	0.27023 -0.2719 ppb	0.27023 99.40%
QC value within limits for Cu 324.752	Recovery = Not calculated		
Fe 238.204 Radial†	0.3 2.7573 ug/L	5.03282 2.7573 ppb	5.03282 182.52%
QC value within limits for Fe 238.204 Radial	Recovery = Not calculated		
K 766.490 Radial†	238.2 47.927 ug/L	22.7603 47.927 ppb	22.7603 47.49%
QC value within limits for K 766.490 Radial	Recovery = Not calculated		
Mg 279.077 IEC†	-1.3 -49.401 ug/L	53.5682 -49.401 ppb	53.5682 108.44%
QC value within limits for Mg 279.077 IEC	Recovery = Not calculated		
Mn 257.610†	156.3 0.1826 ug/L	0.07432 0.1826 ppb	0.07432 40.71%
QC value within limits for Mn 257.610	Recovery = Not calculated		
Mo 202.031†	22.7 1.6837 ug/L	0.64311 1.6837 ppb	0.64311 38.20%
QC value within limits for Mo 202.031	Recovery = Not calculated		
Na 589.592 Radial†	1111.4 370.72 ug/L	26.836 370.72 ppb	26.836 7.24%
QC value greater than the upper limit for Na 589.592 Radial	Recovery = Not calculated		
Ni 231.604†	-8.7 -0.2235 ug/L	0.19343 -0.2235 ppb	0.19343 86.55%
QC value within limits for Ni 231.604	Recovery = Not calculated		
P 214.914†	15.1 8.4409 ug/L	1.24132 8.4409 ppb	1.24132 14.71%
QC value within limits for P 214.914	Recovery = Not calculated		
Pb 220.353†	2.3 0.2973 ug/L	0.63925 0.2973 ppb	0.63925 215.00%
QC value within limits for Pb 220.353	Recovery = Not calculated		
S 181.975 Axial†	26.5 34.614 ug/L	1.0232 34.614 ppb	1.0232 2.96%
QC value within limits for S 181.975 Axial	Recovery = Not calculated		
Sb 206.836†	8.2 2.8615 ug/L	0.29438 2.8615 ppb	0.29438 10.29%
QC value within limits for Sb 206.836	Recovery = Not calculated		
Se 196.026†	0.6 0.3925 ug/L	1.95704 0.3925 ppb	1.95704 498.64%
QC value within limits for Se 196.026	Recovery = Not calculated		
Si 251.611†	147.5 4.5766 ug/L	1.81347 4.5766 ppb	1.81347 39.62%
QC value within limits for Si 251.611	Recovery = Not calculated		
Sn 189.927†	14.3 2.5650 ug/L	0.73726 2.5650 ppb	0.73726 28.74%
QC value within limits for Sn 189.927	Recovery = Not calculated		
Sr 421.552†	-13.1 -0.1015 ug/L	0.17075 -0.1015 ppb	0.17075 168.31%
QC value within limits for Sr 421.552	Recovery = Not calculated		
Ti 334.940†	179.7 0.2954 ug/L	0.09265 0.2954 ppb	0.09265 31.37%
QC value within limits for Ti 334.940	Recovery = Not calculated		
Tl 190.801†	4.6 1.4566 ug/L	1.32694 1.4566 ppb	1.32694 91.10%
QC value within limits for Tl 190.801	Recovery = Not calculated		
U 409.014†	161.2 4.5792 ug/L	5.51537 4.5792 ppb	5.51537 120.44%
QC value within limits for U 409.014	Recovery = Not calculated		
V 292.402†	50.8 0.3994 ug/L	0.32387 0.3994 ppb	0.32387 81.09%
QC value within limits for V 292.402	Recovery = Not calculated		
Zn 213.857†	35.0 0.3433 ug/L	0.02226 0.3433 ppb	0.02226 6.49%
QC value within limits for Zn 213.857	Recovery = Not calculated		
SiO2†	136.8 9.0724 ug/L	0.42939 9.0724 ppb	0.42939 4.73%
QC value within limits for SiO2	Recovery = Not calculated		
QC Failed. Continue with analysis.			

Sequence No.: 19  
 Sample ID: CCV  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 1  
 Date Collected: 2/16/2010 18:44:43  
 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	4423.7	4423.7	104 %		18:46:35
1	Y RADIAL	4513.0	4513.0	102.5 %		18:46:35
1	Al 396.153Radial†	4727.0	4701.3	4680.0 ug/L	4680.0 ppb	18:46:35
1	Ca 317.933Radial†	2634.5	2513.3	4688.2 ug/L	4688.2 ppb	18:46:55
1	Fe 238.204 Radial†	492.4	463.1	4935.9 ug/L	4935.9 ppb	18:46:55
1	K 766.490 Radial†	27446.5	23202.6	4677.6 ug/L	4677.6 ppb	18:46:35
1	Mg 279.077 IEC†	127.9	120.2	4643.1 ug/L	4643.1 ppb	18:46:55
1	Na 589.592 Radial†	31156.4	29732.1	9917.4 ug/L	9917.4 ppb	18:46:35
1	Sr 421.552†	64585.8	61972.8	478.47 ug/L	478.47 ppb	18:46:35
1	Sc 361.383	840521.3	840521.3	98.884 %		18:47:52
1	Y 371.029	675506.7	675506.7	96.126 %		18:47:52
1	Ag 328.068†	100445.9	101352.0	489.77 ug/L	489.77 ppb	18:47:58
1	As 188.979†	1085.8	1126.4	478.20 ug/L	478.20 ppb	18:48:18
1	B 249.677†	20236.8	20947.2	490.62 ug/L	490.62 ppb	18:47:58
1	Ba 233.527†	59244.5	59894.4	487.52 ug/L	487.52 ppb	18:47:58
1	Be 313.107†	1307828.8	1326930.1	488.50 ug/L	488.50 ppb	18:47:52
1	Cd 226.502†	39865.2	40510.6	473.63 ug/L	473.63 ppb	18:47:58
1	Co 228.616†	22938.6	23276.4	485.44 ug/L	485.44 ppb	18:47:58
1	Cr 267.716†	40172.0	40475.8	471.47 ug/L	471.47 ppb	18:47:58
1	Cu 324.752†	166882.5	160672.1	491.92 ug/L	491.92 ppb	18:47:58
1	Mn 257.610†	423367.2	427576.2	493.46 ug/L	493.46 ppb	18:47:52
1	Mo 202.031†	6375.1	6436.6	478.72 ug/L	478.72 ppb	18:48:18
1	Ni 231.604†	18538.2	18633.9	477.00 ug/L	477.00 ppb	18:47:58
1	P 214.914†	4413.6	4221.4	2246.2 ug/L	2246.2 ppb	18:48:18
1	Pb 220.353†	3709.8	3825.2	475.39 ug/L	475.39 ppb	18:48:18
1	S 181.975 Axial†	784.3	750.2	979.60 ug/L	979.60 ppb	18:48:18
1	Sb 206.836†	1416.0	1396.3	489.61 ug/L	489.61 ppb	18:48:18
1	Se 196.026†	780.4	812.6	491.51 ug/L	491.51 ppb	18:48:18
1	Si 251.611†	77739.8	78005.0	2424.9 ug/L	2424.9 ppb	18:47:58
1	Sn 189.927†	2601.2	2618.0	470.22 ug/L	470.22 ppb	18:48:18
1	Ti 334.940†	297176.5	302023.8	490.75 ug/L	490.75 ppb	18:47:58
1	Tl 190.801†	1485.9	1541.8	490.03 ug/L	490.03 ppb	18:48:18
1	U 409.014†	13544.9	17212.9	487.35 ug/L	487.35 ppb	18:47:58
1	V 292.402†	63437.4	65830.7	483.17 ug/L	483.17 ppb	18:47:58
1	Zn 213.857†	50043.4	49920.5	482.77 ug/L	482.77 ppb	18:47:58
1	SiO2†	77280.2	77533.0	5156.3 ug/L	5156.3 ppb	18:49:25
2	Sc Radial	4311.3	4311.3	101 %		18:47:00
2	Y RADIAL	4408.3	4408.3	100.1 %		18:47:00
2	Al 396.153Radial†	4858.5	4949.5	4928.2 ug/L	4928.2 ppb	18:47:00
2	Ca 317.933Radial†	2637.7	2582.5	4817.3 ug/L	4817.3 ppb	18:47:20
2	Fe 238.204 Radial†	488.8	471.9	5029.5 ug/L	5029.5 ppb	18:47:20
2	K 766.490 Radial†	27776.7	24216.2	4882.0 ug/L	4882.0 ppb	18:47:00
2	Mg 279.077 IEC†	131.7	127.1	4909.4 ug/L	4909.4 ppb	18:47:20
2	Na 589.592 Radial†	31395.1	30748.4	10256 ug/L	10256 ppb	18:47:00
2	Sr 421.552†	66222.7	65205.6	503.44 ug/L	503.44 ppb	18:47:00
2	Sc 361.383	839711.8	839711.8	98.789 %		18:48:23
2	Y 371.029	674614.5	674614.5	95.999 %		18:48:23
2	Ag 328.068†	100390.7	101394.0	489.99 ug/L	489.99 ppb	18:48:29
2	As 188.979†	1093.6	1135.4	481.98 ug/L	481.98 ppb	18:48:49
2	B 249.677†	20299.3	21030.1	492.56 ug/L	492.56 ppb	18:48:29
2	Ba 233.527†	58826.5	59529.0	484.55 ug/L	484.55 ppb	18:48:29
2	Be 313.107†	1303952.9	1324281.7	487.53 ug/L	487.53 ppb	18:48:23
2	Cd 226.502†	39591.9	40272.9	470.84 ug/L	470.84 ppb	18:48:29
2	Co 228.616†	22844.4	23203.4	483.92 ug/L	483.92 ppb	18:48:29
2	Cr 267.716†	39933.1	40273.1	469.11 ug/L	469.11 ppb	18:48:29
2	Cu 324.752†	166992.8	160946.5	492.77 ug/L	492.77 ppb	18:48:29
2	Mn 257.610†	422025.1	426630.5	492.36 ug/L	492.36 ppb	18:48:23
2	Mo 202.031†	6372.3	6440.0	478.98 ug/L	478.98 ppb	18:48:49
2	Ni 231.604†	18364.8	18476.5	472.97 ug/L	472.97 ppb	18:48:29

2	P 214.914†	4413.1	4225.3	2248.2 ug/L	2248.2 ppb	18:48:49
2	Pb 220.353†	3723.3	3842.5	477.57 ug/L	477.57 ppb	18:48:49
2	S 181.975 Axial†	781.2	747.8	976.48 ug/L	976.48 ppb	18:48:49
2	Sb 206.836†	1411.2	1392.8	488.42 ug/L	488.42 ppb	18:48:49
2	Se 196.026†	790.2	823.2	498.04 ug/L	498.04 ppb	18:48:49
2	Si 251.611†	77687.9	78028.2	2425.7 ug/L	2425.7 ppb	18:48:29
2	Sn 189.927†	2598.8	2618.1	470.26 ug/L	470.26 ppb	18:48:49
2	Ti 334.940†	296136.0	301260.2	489.51 ug/L	489.51 ppb	18:48:29
2	Tl 190.801†	1499.3	1556.8	494.74 ug/L	494.74 ppb	18:48:49
2	U 409.014†	13476.0	17156.4	485.74 ug/L	485.74 ppb	18:48:29
2	V 292.402†	63050.1	65500.6	480.78 ug/L	480.78 ppb	18:48:29
2	Zn 213.857†	49729.4	49651.4	480.16 ug/L	480.16 ppb	18:48:29
2	SiO2†	77417.6	77747.4	5170.6 ug/L	5170.6 ppb	18:49:30
3	Sc Radial	4291.4	4291.4	101 %		18:47:25
3	Y RADIAL	4371.3	4371.3	99.30 %		18:47:25
3	Al 396.153Radial†	4797.9	4911.7	4890.2 ug/L	4890.2 ppb	18:47:25
3	Ca 317.933Radial†	2641.8	2598.5	4847.2 ug/L	4847.2 ppb	18:47:45
3	Fe 238.204 Radial†	496.0	481.3	5129.2 ug/L	5129.2 ppb	18:47:45
3	K 766.490 Radial†	27551.8	24119.9	4862.5 ug/L	4862.5 ppb	18:47:25
3	Mg 279.077 IEC†	129.2	125.3	4839.0 ug/L	4839.0 ppb	18:47:45
3	Na 589.592 Radial†	31649.0	31142.9	10388 ug/L	10388 ppb	18:47:25
3	Sr 421.552†	65026.2	64322.0	496.61 ug/L	496.61 ppb	18:47:25
3	Sc 361.383	834625.9	834625.9	98.190 %		18:48:55
3	Y 371.029	671402.6	671402.6	95.542 %		18:48:55
3	Ag 328.068†	100021.7	101637.5	491.19 ug/L	491.19 ppb	18:49:00
3	As 188.979†	1090.7	1139.1	483.57 ug/L	483.57 ppb	18:49:20
3	B 249.677†	20285.8	21141.6	495.16 ug/L	495.16 ppb	18:49:00
3	Ba 233.527†	58838.5	59904.2	487.61 ug/L	487.61 ppb	18:49:00
3	Be 313.107†	1300745.2	1329058.3	489.29 ug/L	489.29 ppb	18:48:55
3	Cd 226.502†	39448.5	40371.0	471.98 ug/L	471.98 ppb	18:49:00
3	Co 228.616†	22794.8	23293.8	485.81 ug/L	485.81 ppb	18:49:00
3	Cr 267.716†	39887.7	40473.2	471.44 ug/L	471.44 ppb	18:49:00
3	Cu 324.752†	166532.4	161507.7	494.49 ug/L	494.49 ppb	18:49:00
3	Mn 257.610†	420682.4	427866.2	493.80 ug/L	493.80 ppb	18:48:55
3	Mo 202.031†	6379.6	6486.7	482.46 ug/L	482.46 ppb	18:49:20
3	Ni 231.604†	18351.2	18575.9	475.51 ug/L	475.51 ppb	18:49:00
3	P 214.914†	4419.2	4258.7	2266.3 ug/L	2266.3 ppb	18:49:20
3	Pb 220.353†	3705.0	3846.9	478.11 ug/L	478.11 ppb	18:49:20
3	S 181.975 Axial†	772.4	743.8	971.14 ug/L	971.14 ppb	18:49:20
3	Sb 206.836†	1428.0	1418.6	497.29 ug/L	497.29 ppb	18:49:20
3	Se 196.026†	790.1	828.0	501.12 ug/L	501.12 ppb	18:49:20
3	Si 251.611†	77443.1	78258.2	2432.8 ug/L	2432.8 ppb	18:49:00
3	Sn 189.927†	2608.9	2644.4	474.99 ug/L	474.99 ppb	18:49:20
3	Ti 334.940†	295445.4	302383.7	491.34 ug/L	491.34 ppb	18:49:00
3	Tl 190.801†	1495.0	1561.7	496.32 ug/L	496.32 ppb	18:49:20
3	U 409.014†	13600.7	17366.5	491.70 ug/L	491.70 ppb	18:49:00
3	V 292.402†	62855.0	65690.8	482.19 ug/L	482.19 ppb	18:49:00
3	Zn 213.857†	49706.3	49934.7	482.89 ug/L	482.89 ppb	18:49:00
3	SiO2†	78140.6	78961.3	5251.5 ug/L	5251.5 ppb	18:49:35

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	838286.3	98.621 %	0.3760			0.38%
Sc Radial	4342.1	102 %	1.7			1.64%
Y 371.029	673841.3	95.889 %	0.3072			0.32%
Y RADIAL	4430.9	100.7 %	1.67			1.66%
Ag 328.068†	101461.2	490.32 ug/L	0.767	490.32 ppb	0.767	0.16%
QC value within limits for Ag 328.068 Recovery = 98.06%						
Al 396.153Radial†	4854.2	4832.8 ug/L	133.73	4832.8 ppb	133.73	2.77%
QC value within limits for Al 396.153Radial Recovery = 96.66%						
As 188.979†	1133.6	481.25 ug/L	2.759	481.25 ppb	2.759	0.57%
QC value within limits for As 188.979 Recovery = 96.25%						
B 249.677†	21039.6	492.78 ug/L	2.279	492.78 ppb	2.279	0.46%
QC value within limits for B 249.677 Recovery = 98.56%						
Ba 233.527†	59775.9	486.56 ug/L	1.739	486.56 ppb	1.739	0.36%
QC value within limits for Ba 233.527 Recovery = 97.31%						
Be 313.107†	1326756.7	488.44 ug/L	0.881	488.44 ppb	0.881	0.18%
QC value within limits for Be 313.107 Recovery = 97.69%						
Ca 317.933Radial†	2564.8	4784.2 ug/L	84.51	4784.2 ppb	84.51	1.77%

QC value within limits for Ca 317.933 Radial Recovery = 95.68%

Cd 226.502†	40384.8	472.15 ug/L	1.404	472.15 ppb	1.404	0.30%
QC value within limits for Cd 226.502 Recovery = 94.43%						
Co 228.616†	23257.9	485.05 ug/L	1.001	485.05 ppb	1.001	0.21%
QC value within limits for Co 228.616 Recovery = 97.01%						
Cr 267.716†	40407.3	470.68 ug/L	1.354	470.68 ppb	1.354	0.29%
QC value within limits for Cr 267.716 Recovery = 94.14%						
Cu 324.752†	161042.1	493.06 ug/L	1.308	493.06 ppb	1.308	0.27%
QC value within limits for Cu 324.752 Recovery = 98.61%						
Fe 238.204 Radial†	472.1	5031.5 ug/L	96.66	5031.5 ppb	96.66	1.92%
QC value within limits for Fe 238.204 Radial Recovery = 100.63%						
K 766.490 Radial†	23846.2	4807.4 ug/L	112.82	4807.4 ppb	112.82	2.35%
QC value within limits for K 766.490 Radial Recovery = 96.15%						
Mg 279.077 IEC†	124.2	4797.2 ug/L	138.02	4797.2 ppb	138.02	2.88%
QC value within limits for Mg 279.077 IEC Recovery = 95.94%						
Mn 257.610†	427357.6	493.21 ug/L	0.751	493.21 ppb	0.751	0.15%
QC value within limits for Mn 257.610 Recovery = 98.64%						
Mo 202.031†	6454.4	480.05 ug/L	2.090	480.05 ppb	2.090	0.44%
QC value within limits for Mo 202.031 Recovery = 96.01%						
Na 589.592 Radial†	30541.1	10187 ug/L	242.8	10187 ppb	242.8	2.38%
QC value within limits for Na 589.592 Radial Recovery = 101.87%						
Ni 231.604†	18562.1	475.16 ug/L	2.039	475.16 ppb	2.039	0.43%
QC value within limits for Ni 231.604 Recovery = 95.03%						
P 214.914†	4235.1	2253.6 ug/L	11.08	2253.6 ppb	11.08	0.49%
QC value within limits for P 214.914 Recovery = 90.14%						
Pb 220.353†	3838.2	477.02 ug/L	1.441	477.02 ppb	1.441	0.30%
QC value within limits for Pb 220.353 Recovery = 95.40%						
S 181.975 Axial†	747.3	975.74 ug/L	4.276	975.74 ppb	4.276	0.44%
QC value within limits for S 181.975 Axial Recovery = 97.57%						
Sb 206.836†	1402.6	491.77 ug/L	4.816	491.77 ppb	4.816	0.98%
QC value within limits for Sb 206.836 Recovery = 98.35%						
Se 196.026†	821.3	496.89 ug/L	4.906	496.89 ppb	4.906	0.99%
QC value within limits for Se 196.026 Recovery = 99.38%						
Si 251.611†	78097.1	2427.8 ug/L	4.34	2427.8 ppb	4.34	0.18%
QC value within limits for Si 251.611 Recovery = 97.11%						
Sn 189.927†	2626.8	471.83 ug/L	2.739	471.83 ppb	2.739	0.58%
QC value within limits for Sn 189.927 Recovery = 94.37%						
Sr 421.552†	63833.5	492.84 ug/L	12.901	492.84 ppb	12.901	2.62%
QC value within limits for Sr 421.552 Recovery = 98.57%						
Ti 334.940†	301889.2	490.53 ug/L	0.935	490.53 ppb	0.935	0.19%
QC value within limits for Ti 334.940 Recovery = 98.11%						
Tl 190.801†	1553.4	493.70 ug/L	3.269	493.70 ppb	3.269	0.66%
QC value within limits for Tl 190.801 Recovery = 98.74%						
U 409.014†	17245.3	488.26 ug/L	3.079	488.26 ppb	3.079	0.63%
QC value within limits for U 409.014 Recovery = 97.65%						
V 292.402†	65674.0	482.05 ug/L	1.205	482.05 ppb	1.205	0.25%
QC value within limits for V 292.402 Recovery = 96.41%						
Zn 213.857†	49835.6	481.94 ug/L	1.545	481.94 ppb	1.545	0.32%
QC value within limits for Zn 213.857 Recovery = 96.39%						
SiO2†	78080.6	5192.8 ug/L	51.30	5192.8 ppb	51.30	0.99%
QC value within limits for SiO2 Recovery = 97.11%						

All analyte(s) passed QC.



Sequence No.: 20

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 2/16/2010 18:51:45

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	4404.2	4404.2	104 %		18:53:37
1	Y RADIAL	4505.0	4505.0	102.3 %		18:53:37
1	Al 396.153Radial†	-129.6	33.9	33.937 ug/L	33.937 ppb	18:53:57
1	Ca 317.933Radial†	25.2	6.0	11.266 ug/L	11.266 ppb	18:53:57
1	Fe 238.204 Radial†	7.5	-2.8	-30.036 ug/L	-30.036 ppb	18:53:57
1	K 766.490 Radial†	3285.1	-0.8	-0.3042 ug/L	-0.3042 ppb	18:53:37
1	Mg 279.077 IEC†	4.2	1.4	53.368 ug/L	53.368 ppb	18:53:57
1	Na 589.592 Radial†	1262.3	1011.3	337.32 ug/L	337.32 ppb	18:53:37
1	Sr 421.552†	145.0	50.1	0.3871 ug/L	0.3871 ppb	18:53:37
1	Sc 361.383	819612.9	819612.9	96.424 %		18:54:54
1	Y 371.029	667058.4	667058.4	94.924 %		18:54:54
1	Ag 328.068†	139.6	-82.9	-0.4117 ug/L	-0.4117 ppb	18:54:54
1	As 188.979†	-25.1	2.3	0.9633 ug/L	0.9633 ppb	18:55:14
1	B 249.677†	-59.7	420.0	9.8855 ug/L	9.8855 ppb	18:55:14
1	Ba 233.527†	19.7	1.6	0.0132 ug/L	0.0132 ppb	18:55:14
1	Be 313.107†	-4266.3	-85.4	-0.0305 ug/L	-0.0305 ppb	18:54:54
1	Cd 226.502†	-208.0	-20.2	-0.2317 ug/L	-0.2317 ppb	18:55:14
1	Co 228.616†	-71.1	5.1	0.1073 ug/L	0.1073 ppb	18:55:14
1	Cr 267.716†	89.7	-56.7	-0.6616 ug/L	-0.6616 ppb	18:55:14
1	Cu 324.752†	7652.6	-157.7	-0.4882 ug/L	-0.4882 ppb	18:54:54
1	Mn 257.610†	713.1	169.8	0.1907 ug/L	0.1907 ppb	18:55:14
1	Mo 202.031†	14.0	4.1	0.2992 ug/L	0.2992 ppb	18:55:14
1	Ni 231.604†	101.2	-8.5	-0.2187 ug/L	-0.2187 ppb	18:55:14
1	P 214.914†	223.7	-10.0	-5.4118 ug/L	-5.4118 ppb	18:55:14
1	Pb 220.353†	-62.7	8.5	1.0653 ug/L	1.0653 ppb	18:55:14
1	S 181.975 Axial†	64.7	24.2	31.673 ug/L	31.673 ppb	18:55:14
1	Sb 206.836†	42.8	8.7	2.9975 ug/L	2.9975 ppb	18:55:14
1	Se 196.026†	-15.3	7.4	4.2439 ug/L	4.2439 ppb	18:55:14
1	Si 251.611†	623.9	34.7	1.0774 ug/L	1.0774 ppb	18:55:14
1	Sn 189.927†	27.7	16.1	2.8833 ug/L	2.8833 ppb	18:55:14
1	Ti 334.940†	-1204.6	243.6	0.3903 ug/L	0.3903 ppb	18:54:54
1	Tl 190.801†	-27.5	10.6	3.3517 ug/L	3.3517 ppb	18:55:14
1	U 409.014†	-3151.7	246.6	7.0089 ug/L	7.0089 ppb	18:54:54
1	V 292.402†	-1536.4	83.9	0.6306 ug/L	0.6306 ppb	18:54:54
1	Zn 213.857†	703.2	41.5	0.4120 ug/L	0.4120 ppb	18:55:14
1	SiO2†	613.7	16.9	1.1196 ug/L	1.1196 ppb	18:56:10
2	Sc Radial	4352.1	4352.1	102 %		18:54:02
2	Y RADIAL	4491.6	4491.6	102.0 %		18:54:02
2	Al 396.153Radial†	-126.5	35.5	35.486 ug/L	35.486 ppb	18:54:22
2	Ca 317.933Radial†	20.4	1.6	3.0645 ug/L	3.0645 ppb	18:54:22
2	Fe 238.204 Radial†	12.1	1.8	18.919 ug/L	18.919 ppb	18:54:22
2	K 766.490 Radial†	3343.2	93.9	18.830 ug/L	18.830 ppb	18:54:02
2	Mg 279.077 IEC†	-0.3	-3.1	-118.05 ug/L	-118.05 ppb	18:54:22
2	Na 589.592 Radial†	1133.2	899.8	300.14 ug/L	300.14 ppb	18:54:02
2	Sr 421.552†	75.2	-16.3	-0.1261 ug/L	-0.1261 ppb	18:54:02
2	Sc 361.383	824141.6	824141.6	96.957 %		18:55:19
2	Y 371.029	670121.5	670121.5	95.360 %		18:55:19
2	Ag 328.068†	259.0	39.4	0.1829 ug/L	0.1829 ppb	18:55:19
2	As 188.979†	-28.2	-0.7	-0.3009 ug/L	-0.3009 ppb	18:55:39
2	B 249.677†	-78.7	400.7	9.4234 ug/L	9.4234 ppb	18:55:39
2	Ba 233.527†	16.5	-1.8	-0.0150 ug/L	-0.0150 ppb	18:55:39
2	Be 313.107†	-4403.2	-202.2	-0.0740 ug/L	-0.0740 ppb	18:55:19
2	Cd 226.502†	-203.4	-14.3	-0.1670 ug/L	-0.1670 ppb	18:55:39
2	Co 228.616†	-70.2	6.4	0.1350 ug/L	0.1350 ppb	18:55:39
2	Cr 267.716†	64.6	-83.0	-0.9714 ug/L	-0.9714 ppb	18:55:39
2	Cu 324.752†	7741.9	-109.2	-0.3406 ug/L	-0.3406 ppb	18:55:19
2	Mn 257.610†	818.5	274.4	0.3232 ug/L	0.3232 ppb	18:55:39
2	Mo 202.031†	15.5	5.5	0.4139 ug/L	0.4139 ppb	18:55:39
2	Ni 231.604†	97.8	-12.6	-0.3236 ug/L	-0.3236 ppb	18:55:39

2	P 214.914†	235.6	1.0	0.6399 ug/L	0.6399 ppb	18:55:39
2	Pb 220.353†	-65.9	5.6	0.7015 ug/L	0.7015 ppb	18:55:39
2	S 181.975 Axial†	66.6	25.8	33.722 ug/L	33.722 ppb	18:55:39
2	Sb 206.836†	35.8	1.3	0.4681 ug/L	0.4681 ppb	18:55:39
2	Se 196.026†	-27.9	-5.4	-3.1043 ug/L	-3.1043 ppb	18:55:39
2	Si 251.611†	682.3	91.4	2.8419 ug/L	2.8419 ppb	18:55:39
2	Sn 189.927†	23.1	11.2	2.0075 ug/L	2.0075 ppb	18:55:39
2	Ti 334.940†	-1370.5	79.3	0.1336 ug/L	0.1336 ppb	18:55:19
2	Tl 190.801†	-35.9	2.1	0.6585 ug/L	0.6585 ppb	18:55:39
2	U 409.014†	-2956.4	466.0	13.238 ug/L	13.238 ppb	18:55:19
2	V 292.402†	-1688.1	-63.8	-0.4357 ug/L	-0.4357 ppb	18:55:19
2	Zn 213.857†	709.4	43.9	0.4280 ug/L	0.4280 ppb	18:55:39
2	SiO2†	664.1	65.4	4.3492 ug/L	4.3492 ppb	18:56:15
3	Sc Radial	4247.1	4247.1	99.9 %		18:54:27
3	Y RADIAL	4366.6	4366.6	99.19 %		18:54:27
3	Al 396.153Radial†	-130.6	28.3	28.230 ug/L	28.230 ppb	18:54:47
3	Ca 317.933Radial†	20.7	2.4	4.4279 ug/L	4.4279 ppb	18:54:47
3	Fe 238.204 Radial†	10.0	-0.0	-0.4951 ug/L	-0.4951 ppb	18:54:47
3	K 766.490 Radial†	3309.1	140.4	28.216 ug/L	28.216 ppb	18:54:27
3	Mg 279.077 IEC†	4.1	1.4	52.175 ug/L	52.175 ppb	18:54:47
3	Na 589.592 Radial†	1221.6	1015.6	338.76 ug/L	338.76 ppb	18:54:27
3	Sr 421.552†	92.8	3.1	0.0236 ug/L	0.0236 ppb	18:54:27
3	Sc 361.383	820645.3	820645.3	96.546 %		18:55:44
3	Y 371.029	669123.9	669123.9	95.218 %		18:55:44
3	Ag 328.068†	150.3	-72.0	-0.3496 ug/L	-0.3496 ppb	18:55:44
3	As 188.979†	-30.8	-3.6	-1.5028 ug/L	-1.5028 ppb	18:56:04
3	B 249.677†	-117.1	360.6	8.4842 ug/L	8.4842 ppb	18:56:04
3	Ba 233.527†	5.0	-13.6	-0.1094 ug/L	-0.1094 ppb	18:56:04
3	Be 313.107†	-4275.8	-89.7	-0.0324 ug/L	-0.0324 ppb	18:55:44
3	Cd 226.502†	-196.7	-8.2	-0.0951 ug/L	-0.0951 ppb	18:56:04
3	Co 228.616†	-68.4	8.0	0.1695 ug/L	0.1695 ppb	18:56:04
3	Cr 267.716†	62.0	-85.4	-0.9960 ug/L	-0.9960 ppb	18:56:04
3	Cu 324.752†	7611.0	-210.8	-0.6495 ug/L	-0.6495 ppb	18:55:44
3	Mn 257.610†	648.2	101.6	0.1150 ug/L	0.1150 ppb	18:56:04
3	Mo 202.031†	25.5	15.9	1.1832 ug/L	1.1832 ppb	18:56:04
3	Ni 231.604†	91.0	-19.2	-0.4925 ug/L	-0.4925 ppb	18:56:04
3	P 214.914†	242.7	9.4	5.3734 ug/L	5.3734 ppb	18:56:04
3	Pb 220.353†	-74.0	-3.1	-0.3778 ug/L	-0.3778 ppb	18:56:04
3	S 181.975 Axial†	53.4	12.4	16.232 ug/L	16.232 ppb	18:56:04
3	Sb 206.836†	40.5	6.3	2.1687 ug/L	2.1687 ppb	18:56:04
3	Se 196.026†	-21.5	1.1	0.6376 ug/L	0.6376 ppb	18:56:04
3	Si 251.611†	612.5	22.1	0.6753 ug/L	0.6753 ppb	18:56:04
3	Sn 189.927†	16.4	4.4	0.7898 ug/L	0.7898 ppb	18:56:04
3	Ti 334.940†	-1310.2	135.9	0.2143 ug/L	0.2143 ppb	18:55:44
3	Tl 190.801†	-32.1	5.9	1.8662 ug/L	1.8662 ppb	18:56:04
3	U 409.014†	-3143.1	259.6	7.3781 ug/L	7.3781 ppb	18:55:44
3	V 292.402†	-1539.0	83.3	0.6351 ug/L	0.6351 ppb	18:55:44
3	Zn 213.857†	705.5	43.0	0.4237 ug/L	0.4237 ppb	18:56:04
3	SiO2†	634.5	37.7	2.4814 ug/L	2.4814 ppb	18:56:20

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	821466.6	96.642 %		0.2792			0.29%
Sc Radial	4334.5	102 %		1.9			1.85%
Y 371.029	668767.9	95.167 %		0.2223			0.23%
Y RADIAL	4454.4	101.2 %		1.73			1.71%
Ag 328.068†	-38.5	-0.1928 ug/L		0.32687	-0.1928 ppb	0.32687	169.55%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	32.6	32.551 ug/L		3.8214	32.551 ppb	3.8214	11.74%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	-0.7	-0.2801 ug/L		1.23321	-0.2801 ppb	1.23321	440.20%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	393.8	9.2644 ug/L		0.71407	9.2644 ppb	0.71407	7.71%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	-4.6	-0.0371 ug/L		0.06424	-0.0371 ppb	0.06424	173.35%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	-125.8	-0.0456 ug/L		0.02458	-0.0456 ppb	0.02458	53.87%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	3.4	6.2529 ug/L		4.39488	6.2529 ppb	4.39488	70.29%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated						
Cd 226.502†	-14.2	-0.1646 ug/L	0.06832	-0.1646 ppb	0.06832	41.51%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	6.5	0.1373 ug/L	0.03116	0.1373 ppb	0.03116	22.70%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-75.0	-0.8763 ug/L	0.18637	-0.8763 ppb	0.18637	21.27%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-159.2	-0.4927 ug/L	0.15449	-0.4927 ppb	0.15449	31.35%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	-0.4	-3.8707 ug/L	24.65148	-3.8707 ppb	24.65148	636.88%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	77.8	15.581 ug/L	14.5353	15.581 ppb	14.5353	93.29%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	-0.1	-4.1676 ug/L	98.62266	-4.1676 ppb	98.62266	>999.9%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	181.9	0.2096 ug/L	0.10537	0.2096 ppb	0.10537	50.27%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	8.5	0.6321 ug/L	0.48068	0.6321 ppb	0.48068	76.05%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	975.6	325.41 ug/L	21.895	325.41 ppb	21.895	6.73%
QC value greater than the upper limit for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	-13.5	-0.3449 ug/L	0.13814	-0.3449 ppb	0.13814	40.05%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	0.1	0.2005 ug/L	5.40605	0.2005 ppb	5.40605	>999.9%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	3.7	0.4630 ug/L	0.75053	0.4630 ppb	0.75053	162.10%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	20.8	27.209 ug/L	9.5613	27.209 ppb	9.5613	35.14%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	5.4	1.8781 ug/L	1.28949	1.8781 ppb	1.28949	68.66%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	1.0	0.5924 ug/L	3.67432	0.5924 ppb	3.67432	620.24%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	49.4	1.5315 ug/L	1.15250	1.5315 ppb	1.15250	75.25%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	10.6	1.8935 ug/L	1.05141	1.8935 ppb	1.05141	55.53%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	12.3	0.0949 ug/L	0.26392	0.0949 ppb	0.26392	278.20%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	152.9	0.2460 ug/L	0.13128	0.2460 ppb	0.13128	53.36%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	6.2	1.9588 ug/L	1.34898	1.9588 ppb	1.34898	68.87%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	324.1	9.2084 ug/L	3.49477	9.2084 ppb	3.49477	37.95%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	34.5	0.2767 ug/L	0.61692	0.2767 ppb	0.61692	223.00%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	42.8	0.4212 ug/L	0.00829	0.4212 ppb	0.00829	1.97%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	40.0	2.6501 ug/L	1.62142	2.6501 ppb	1.62142	61.18%
QC value within limits for SiO2 Recovery = Not calculated						
QC Failed. Continue with analysis.						

Sequence No.: 27

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 2/16/2010 19:41:12

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	4179.5	4179.5	98.3 %		19:43:03
1	Y RADIAL	4288.6	4288.6	97.42 %		19:43:03
1	Al 396.153Radial†	4687.7	4926.8	4905.1 ug/L	4905.1 ppb	19:43:03
1	Ca 317.933Radial†	2655.1	2682.1	5003.1 ug/L	5003.1 ppb	19:43:23
1	Fe 238.204 Radial†	496.7	495.2	5277.2 ug/L	5277.2 ppb	19:43:23
1	K 766.490 Radial†	27083.0	24373.9	4913.7 ug/L	4913.7 ppb	19:43:03
1	Mg 279.077 IEC†	133.2	132.8	5127.7 ug/L	5127.7 ppb	19:43:23
1	Na 589.592 Radial†	30987.2	31309.3	10444 ug/L	10444 ppb	19:43:03
1	Sr 421.552†	64335.8	65344.6	504.51 ug/L	504.51 ppb	19:43:03
1	Sc 361.383	816487.5	816487.5	96.056 %		19:44:21
1	Y 371.029	656358.4	656358.4	93.401 %		19:44:21
1	Ag 328.068†	99919.2	103793.8	501.63 ug/L	501.63 ppb	19:44:26
1	As 188.979†	1073.3	1145.7	486.48 ug/L	486.48 ppb	19:44:46
1	B 249.677†	20138.8	21447.5	502.30 ug/L	502.30 ppb	19:44:26
1	Ba 233.527†	58941.8	61342.9	499.32 ug/L	499.32 ppb	19:44:26
1	Be 313.107†	1280907.8	1337835.2	492.54 ug/L	492.54 ppb	19:44:21
1	Cd 226.502†	39512.5	41330.2	483.19 ug/L	483.19 ppb	19:44:26
1	Co 228.616†	22844.8	23861.5	497.63 ug/L	497.63 ppb	19:44:26
1	Cr 267.716†	39915.6	41404.7	482.30 ug/L	482.30 ppb	19:44:26
1	Cu 324.752†	166450.4	165190.0	505.77 ug/L	505.77 ppb	19:44:26
1	Mn 257.610†	414714.8	431171.4	497.62 ug/L	497.62 ppb	19:44:21
1	Mo 202.031†	6312.9	6561.6	488.03 ug/L	488.03 ppb	19:44:46
1	Ni 231.604†	18414.5	19057.0	487.83 ug/L	487.83 ppb	19:44:26
1	P 214.914†	4384.8	4322.9	2299.6 ug/L	2299.6 ppb	19:44:46
1	Pb 220.353†	3674.4	3898.8	484.53 ug/L	484.53 ppb	19:44:46
1	S 181.975 Axial†	776.4	765.4	999.36 ug/L	999.36 ppb	19:44:46
1	Sb 206.836†	1408.2	1430.3	501.44 ug/L	501.44 ppb	19:44:46
1	Se 196.026†	767.4	822.2	498.28 ug/L	498.28 ppb	19:44:46
1	Si 251.611†	77317.5	79879.5	2483.2 ug/L	2483.2 ppb	19:44:26
1	Sn 189.927†	2574.4	2667.5	479.16 ug/L	479.16 ppb	19:44:46
1	Ti 334.940†	295940.7	309583.5	503.03 ug/L	503.03 ppb	19:44:26
1	Tl 190.801†	1484.8	1584.9	503.66 ug/L	503.66 ppb	19:44:46
1	U 409.014†	13535.8	17606.7	498.48 ug/L	498.48 ppb	19:44:26
1	V 292.402†	62951.6	67213.4	493.28 ug/L	493.28 ppb	19:44:26
1	Zn 213.857†	49794.7	51151.3	494.65 ug/L	494.65 ppb	19:44:26
1	SiO2†	76911.0	79449.1	5283.8 ug/L	5283.8 ppb	19:45:54
2	Sc Radial	4275.0	4275.0	101 %		19:43:28
2	Y RADIAL	4376.7	4376.7	99.42 %		19:43:28
2	Al 396.153Radial†	4814.8	4946.7	4924.9 ug/L	4924.9 ppb	19:43:28
2	Ca 317.933Radial†	2624.0	2590.9	4833.1 ug/L	4833.1 ppb	19:43:48
2	Fe 238.204 Radial†	490.3	477.4	5088.8 ug/L	5088.8 ppb	19:43:48
2	K 766.490 Radial†	27406.8	24080.9	4854.7 ug/L	4854.7 ppb	19:43:28
2	Mg 279.077 IEC†	129.7	126.3	4877.2 ug/L	4877.2 ppb	19:43:48
2	Na 589.592 Radial†	31213.9	30831.1	10284 ug/L	10284 ppb	19:43:28
2	Sr 421.552†	65603.3	65144.1	502.96 ug/L	502.96 ppb	19:43:28
2	Sc 361.383	815668.6	815668.6	95.960 %		19:44:52
2	Y 371.029	656284.8	656284.8	93.391 %		19:44:52
2	Ag 328.068†	99209.0	103158.1	498.51 ug/L	498.51 ppb	19:44:57
2	As 188.979†	1075.8	1149.5	487.98 ug/L	487.98 ppb	19:45:17
2	B 249.677†	19971.0	21293.7	498.73 ug/L	498.73 ppb	19:44:57
2	Ba 233.527†	58438.2	60879.6	495.54 ug/L	495.54 ppb	19:44:57
2	Be 313.107†	1278947.1	1337130.7	492.27 ug/L	492.27 ppb	19:44:52
2	Cd 226.502†	39176.2	41021.0	479.59 ug/L	479.59 ppb	19:44:57
2	Co 228.616†	22562.7	23591.5	492.02 ug/L	492.02 ppb	19:44:57
2	Cr 267.716†	39582.4	41099.1	478.73 ug/L	478.73 ppb	19:44:57
2	Cu 324.752†	165098.3	163955.0	501.98 ug/L	501.98 ppb	19:44:57
2	Mn 257.610†	413683.5	430530.1	496.87 ug/L	496.87 ppb	19:44:52
2	Mo 202.031†	6334.5	6590.7	490.18 ug/L	490.18 ppb	19:45:17
2	Ni 231.604†	18210.4	18863.5	482.88 ug/L	482.88 ppb	19:44:57

2	P 214.914†	4362.2	4303.9	2290.0 ug/L	2290.0 ppb	19:45:17
2	Pb 220.353†	3680.6	3909.1	485.84 ug/L	485.84 ppb	19:45:17
2	S 181.975 Axial†	772.3	761.9	994.90 ug/L	994.90 ppb	19:45:17
2	Sb 206.836†	1398.9	1422.1	498.74 ug/L	498.74 ppb	19:45:17
2	Se 196.026†	772.3	828.1	501.13 ug/L	501.13 ppb	19:45:17
2	Si 251.611†	76726.5	79344.4	2466.5 ug/L	2466.5 ppb	19:44:57
2	Sn 189.927†	2586.5	2682.8	481.88 ug/L	481.88 ppb	19:45:17
2	Ti 334.940†	293328.6	307170.9	499.11 ug/L	499.11 ppb	19:44:57
2	Tl 190.801†	1468.0	1569.0	498.64 ug/L	498.64 ppb	19:45:17
2	U 409.014†	13356.6	17434.1	493.60 ug/L	493.60 ppb	19:44:57
2	V 292.402†	62380.0	66683.6	489.49 ug/L	489.49 ppb	19:44:57
2	Zn 213.857†	49339.8	50729.3	490.59 ug/L	490.59 ppb	19:44:57
2	SiO2†	77165.6	79794.8	5306.8 ug/L	5306.8 ppb	19:45:59
3	Sc Radial	4256.7	4256.7	100 %		19:43:54
3	Y RADIAL	4349.1	4349.1	98.79 %		19:43:54
3	Al 396.153Radial†	4727.8	4880.4	4858.9 ug/L	4858.9 ppb	19:43:54
3	Ca 317.933Radial†	2633.7	2611.8	4872.1 ug/L	4872.1 ppb	19:44:14
3	Fe 238.204 Radial†	489.1	478.4	5098.2 ug/L	5098.2 ppb	19:44:14
3	K 766.490 Radial†	27371.5	24162.7	4871.2 ug/L	4871.2 ppb	19:43:54
3	Mg 279.077 IEC†	127.8	124.9	4824.0 ug/L	4824.0 ppb	19:44:14
3	Na 589.592 Radial†	31166.5	30917.0	10313 ug/L	10313 ppb	19:43:54
3	Sr 421.552†	65058.8	64880.4	500.92 ug/L	500.92 ppb	19:43:54
3	Sc 361.383	829424.6	829424.6	97.578 %		19:45:23
3	Y 371.029	666366.8	666366.8	94.826 %		19:45:23
3	Ag 328.068†	98856.1	101081.8	488.51 ug/L	488.51 ppb	19:45:28
3	As 188.979†	1081.6	1136.8	482.58 ug/L	482.58 ppb	19:45:48
3	B 249.677†	19982.8	20960.7	490.92 ug/L	490.92 ppb	19:45:28
3	Ba 233.527†	58135.4	59559.3	484.80 ug/L	484.80 ppb	19:45:28
3	Be 313.107†	1302246.1	1338903.7	492.90 ug/L	492.90 ppb	19:45:23
3	Cd 226.502†	39048.2	40212.8	470.13 ug/L	470.13 ppb	19:45:28
3	Co 228.616†	22545.7	23184.1	483.52 ug/L	483.52 ppb	19:45:28
3	Cr 267.716†	39506.5	40337.3	469.86 ug/L	469.86 ppb	19:45:28
3	Cu 324.752†	164768.1	160763.1	492.20 ug/L	492.20 ppb	19:45:28
3	Mn 257.610†	420108.2	429964.4	496.22 ug/L	496.22 ppb	19:45:23
3	Mo 202.031†	6340.7	6487.6	482.52 ug/L	482.52 ppb	19:45:48
3	Ni 231.604†	18150.5	18487.5	473.25 ug/L	473.25 ppb	19:45:28
3	P 214.914†	4353.1	4219.1	2244.8 ug/L	2244.8 ppb	19:45:48
3	Pb 220.353†	3700.5	3865.9	480.46 ug/L	480.46 ppb	19:45:48
3	S 181.975 Axial†	771.2	747.4	975.90 ug/L	975.90 ppb	19:45:48
3	Sb 206.836†	1395.6	1394.6	489.17 ug/L	489.17 ppb	19:45:48
3	Se 196.026†	774.6	817.1	494.71 ug/L	494.71 ppb	19:45:48
3	Si 251.611†	76510.2	77796.7	2418.4 ug/L	2418.4 ppb	19:45:28
3	Sn 189.927†	2594.3	2646.1	475.29 ug/L	475.29 ppb	19:45:48
3	Ti 334.940†	292566.0	301319.7	489.61 ug/L	489.61 ppb	19:45:28
3	Tl 190.801†	1477.4	1553.2	493.64 ug/L	493.64 ppb	19:45:48
3	U 409.014†	13600.6	17453.3	494.17 ug/L	494.17 ppb	19:45:28
3	V 292.402†	62278.3	65501.2	480.83 ug/L	480.83 ppb	19:45:28
3	Zn 213.857†	49214.4	49748.1	481.09 ug/L	481.09 ppb	19:45:28
3	SiO2†	77803.7	79115.1	5261.7 ug/L	5261.7 ppb	19:46:04

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	820526.9	96.532 %		0.9078			0.94%
Sc Radial	4237.1	99.7 %		1.19			1.20%
Y 371.029	659670.0	93.873 %		0.8253			0.88%
Y RADIAL	4338.2	98.55 %		1.023			1.04%
Ag 328.068†	102677.9	496.22 ug/L		6.857	496.22 ppb	6.857	1.38%
QC value within limits for Ag 328.068 Recovery = 99.24%							
Al 396.153Radial†	4918.0	4896.3 ug/L		33.85	4896.3 ppb	33.85	0.69%
QC value within limits for Al 396.153Radial Recovery = 97.93%							
As 188.979†	1144.0	485.68 ug/L		2.787	485.68 ppb	2.787	0.57%
QC value within limits for As 188.979 Recovery = 97.14%							
B 249.677†	21233.9	497.32 ug/L		5.822	497.32 ppb	5.822	1.17%
QC value within limits for B 249.677 Recovery = 99.46%							
Ba 233.527†	60593.9	493.22 ug/L		7.530	493.22 ppb	7.530	1.53%
QC value within limits for Ba 233.527 Recovery = 98.64%							
Be 313.107†	1337956.6	492.57 ug/L		0.316	492.57 ppb	0.316	0.06%
QC value within limits for Be 313.107 Recovery = 98.51%							
Ca 317.933Radial†	2628.3	4902.7 ug/L		89.09	4902.7 ppb	89.09	1.82%

QC value within limits for Ca 317.933 Radial Recovery = 98.05%

Cd 226.502†	40854.7	477.64 ug/L	6.745	477.64 ppb	6.745	1.41%
QC value within limits for Cd 226.502 Recovery = 95.53%						
Co 228.616†	23545.7	491.06 ug/L	7.104	491.06 ppb	7.104	1.45%
QC value within limits for Co 228.616 Recovery = 98.21%						
Cr 267.716†	40947.0	476.96 ug/L	6.405	476.96 ppb	6.405	1.34%
QC value within limits for Cr 267.716 Recovery = 95.39%						
Cu 324.752†	163302.7	499.98 ug/L	6.997	499.98 ppb	6.997	1.40%
QC value within limits for Cu 324.752 Recovery = 100.00%						
Fe 238.204 Radial†	483.7	5154.7 ug/L	106.13	5154.7 ppb	106.13	2.06%
QC value within limits for Fe 238.204 Radial Recovery = 103.09%						
K 766.490 Radial†	24205.8	4879.9 ug/L	30.45	4879.9 ppb	30.45	0.62%
QC value within limits for K 766.490 Radial Recovery = 97.60%						
Mg 279.077 IEC†	128.0	4943.0 ug/L	162.16	4943.0 ppb	162.16	3.28%
QC value within limits for Mg 279.077 IEC Recovery = 98.86%						
Mn 257.610†	430555.3	496.90 ug/L	0.699	496.90 ppb	0.699	0.14%
QC value within limits for Mn 257.610 Recovery = 99.38%						
Mo 202.031†	6546.6	486.91 ug/L	3.951	486.91 ppb	3.951	0.81%
QC value within limits for Mo 202.031 Recovery = 97.38%						
Na 589.592 Radial†	31019.1	10347 ug/L	85.0	10347 ppb	85.0	0.82%
QC value within limits for Na 589.592 Radial Recovery = 103.47%						
Ni 231.604†	18802.7	481.32 ug/L	7.414	481.32 ppb	7.414	1.54%
QC value within limits for Ni 231.604 Recovery = 96.26%						
P 214.914†	4282.0	2278.2 ug/L	29.26	2278.2 ppb	29.26	1.28%
QC value within limits for P 214.914 Recovery = 91.13%						
Pb 220.353†	3891.3	483.61 ug/L	2.806	483.61 ppb	2.806	0.58%
QC value within limits for Pb 220.353 Recovery = 96.72%						
S 181.975 Axial†	758.2	990.05 ug/L	12.459	990.05 ppb	12.459	1.26%
QC value within limits for S 181.975 Axial Recovery = 99.01%						
Sb 206.836†	1415.7	496.45 ug/L	6.445	496.45 ppb	6.445	1.30%
QC value within limits for Sb 206.836 Recovery = 99.29%						
Se 196.026†	822.5	498.04 ug/L	3.215	498.04 ppb	3.215	0.65%
QC value within limits for Se 196.026 Recovery = 99.61%						
Si 251.611†	79006.9	2456.1 ug/L	33.66	2456.1 ppb	33.66	1.37%
QC value within limits for Si 251.611 Recovery = 98.24%						
Sn 189.927†	2665.5	478.78 ug/L	3.308	478.78 ppb	3.308	0.69%
QC value within limits for Sn 189.927 Recovery = 95.76%						
Sr 421.552†	65123.0	502.80 ug/L	1.797	502.80 ppb	1.797	0.36%
QC value within limits for Sr 421.552 Recovery = 100.56%						
Ti 334.940†	306024.7	497.25 ug/L	6.899	497.25 ppb	6.899	1.39%
QC value within limits for Ti 334.940 Recovery = 99.45%						
Tl 190.801†	1569.0	498.65 ug/L	5.009	498.65 ppb	5.009	1.00%
QC value within limits for Tl 190.801 Recovery = 99.73%						
U 409.014†	17498.1	495.42 ug/L	2.666	495.42 ppb	2.666	0.54%
QC value within limits for U 409.014 Recovery = 99.08%						
V 292.402†	66466.1	487.87 ug/L	6.381	487.87 ppb	6.381	1.31%
QC value within limits for V 292.402 Recovery = 97.57%						
Zn 213.857†	50542.9	488.78 ug/L	6.959	488.78 ppb	6.959	1.42%
QC value within limits for Zn 213.857 Recovery = 97.76%						
SiO2†	79453.0	5284.1 ug/L	22.55	5284.1 ppb	22.55	0.43%
QC value within limits for SiO2 Recovery = 98.81%						

All analyte(s) passed QC.

Sequence No.: 28

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 2/16/2010 19:48:13

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	4279.8	4279.8	101 %		19:50:05
1	Y RADIAL	4394.1	4394.1	99.82 %		19:50:05
1	Al 396.153Radial†	-137.5	22.5	22.436 ug/L	22.436 ppb	19:50:25
1	Ca 317.933Radial†	25.1	6.6	12.333 ug/L	12.333 ppb	19:50:25
1	Fe 238.204 Radial†	9.2	-0.9	-10.033 ug/L	-10.033 ppb	19:50:25
1	K 766.490 Radial†	3148.9	-43.9	-8.9717 ug/L	-8.9717 ppb	19:50:05
1	Mg 279.077 IEC†	3.4	0.7	25.156 ug/L	25.156 ppb	19:50:25
1	Na 589.592 Radial†	968.9	755.3	251.94 ug/L	251.94 ppb	19:50:05
1	Sr 421.552†	144.4	53.6	0.4139 ug/L	0.4139 ppb	19:50:05
1	Sc 361.383	813397.8	813397.8	95.693 %		19:51:22
1	Y 371.029	662201.9	662201.9	94.233 %		19:51:22
1	Ag 328.068†	285.6	70.8	0.3333 ug/L	0.3333 ppb	19:51:22
1	As 188.979†	-31.0	-4.1	-1.7321 ug/L	-1.7321 ppb	19:51:42
1	B 249.677†	-218.6	253.5	5.9664 ug/L	5.9664 ppb	19:51:42
1	Ba 233.527†	35.0	17.8	0.1446 ug/L	0.1446 ppb	19:51:42
1	Be 313.107†	-4237.9	-89.6	-0.0324 ug/L	-0.0324 ppb	19:51:22
1	Cd 226.502†	-208.3	-22.2	-0.2580 ug/L	-0.2580 ppb	19:51:42
1	Co 228.616†	-80.6	-5.3	-0.1079 ug/L	-0.1079 ppb	19:51:42
1	Cr 267.716†	79.1	-67.0	-0.7815 ug/L	-0.7815 ppb	19:51:42
1	Cu 324.752†	7574.6	-178.6	-0.5501 ug/L	-0.5501 ppb	19:51:22
1	Mn 257.610†	1009.2	484.8	0.5572 ug/L	0.5572 ppb	19:51:22
1	Mo 202.031†	25.0	15.7	1.1643 ug/L	1.1643 ppb	19:51:42
1	Ni 231.604†	105.3	-3.5	-0.0897 ug/L	-0.0897 ppb	19:51:42
1	P 214.914†	245.9	15.0	8.4741 ug/L	8.4741 ppb	19:51:42
1	Pb 220.353†	-67.1	3.4	0.4334 ug/L	0.4334 ppb	19:51:42
1	S 181.975 Axial†	63.3	23.3	30.383 ug/L	30.383 ppb	19:51:42
1	Sb 206.836†	51.1	17.8	6.0699 ug/L	6.0699 ppb	19:51:42
1	Se 196.026†	-21.2	1.2	0.6617 ug/L	0.6617 ppb	19:51:42
1	Si 251.611†	642.2	58.8	1.8179 ug/L	1.8179 ppb	19:51:42
1	Sn 189.927†	23.5	12.0	2.1507 ug/L	2.1507 ppb	19:51:42
1	Ti 334.940†	-1295.8	138.8	0.2232 ug/L	0.2232 ppb	19:51:22
1	Tl 190.801†	-27.9	9.9	3.1295 ug/L	3.1295 ppb	19:51:42
1	U 409.014†	-3192.3	179.2	5.0937 ug/L	5.0937 ppb	19:51:22
1	V 292.402†	-1573.7	32.8	0.2656 ug/L	0.2656 ppb	19:51:22
1	Zn 213.857†	722.5	67.3	0.6593 ug/L	0.6593 ppb	19:51:42
1	SiO2†	635.7	44.8	2.9576 ug/L	2.9576 ppb	19:52:38
2	Sc Radial	4293.4	4293.4	101 %		19:50:30
2	Y RADIAL	4413.7	4413.7	100.3 %		19:50:30
2	Al 396.153Radial†	-119.1	41.1	41.099 ug/L	41.099 ppb	19:50:50
2	Ca 317.933Radial†	26.9	8.3	15.511 ug/L	15.511 ppb	19:50:50
2	Fe 238.204 Radial†	10.2	0.0	0.2538 ug/L	0.2538 ppb	19:50:50
2	K 766.490 Radial†	3206.5	3.2	0.5470 ug/L	0.5470 ppb	19:50:30
2	Mg 279.077 IEC†	1.3	-1.5	-56.951 ug/L	-56.951 ppb	19:50:50
2	Na 589.592 Radial†	908.1	692.1	230.84 ug/L	230.84 ppb	19:50:30
2	Sr 421.552†	134.6	43.4	0.3354 ug/L	0.3354 ppb	19:50:30
2	Sc 361.383	814897.1	814897.1	95.869 %		19:51:47
2	Y 371.029	664062.0	664062.0	94.498 %		19:51:47
2	Ag 328.068†	296.5	81.6	0.3881 ug/L	0.3881 ppb	19:51:47
2	As 188.979†	-25.8	1.4	0.5951 ug/L	0.5951 ppb	19:52:07
2	B 249.677†	-227.2	244.9	5.7608 ug/L	5.7608 ppb	19:52:07
2	Ba 233.527†	40.1	23.0	0.1863 ug/L	0.1863 ppb	19:52:07
2	Be 313.107†	-4326.2	-173.4	-0.0631 ug/L	-0.0631 ppb	19:51:47
2	Cd 226.502†	-190.6	-3.3	-0.0383 ug/L	-0.0383 ppb	19:52:07
2	Co 228.616†	-72.0	3.8	0.0816 ug/L	0.0816 ppb	19:52:07
2	Cr 267.716†	77.2	-69.1	-0.8058 ug/L	-0.8058 ppb	19:52:07
2	Cu 324.752†	7549.9	-218.9	-0.6722 ug/L	-0.6722 ppb	19:51:47
2	Mn 257.610†	692.1	152.2	0.1779 ug/L	0.1779 ppb	19:51:47
2	Mo 202.031†	26.8	17.5	1.3023 ug/L	1.3023 ppb	19:52:07
2	Ni 231.604†	115.3	6.7	0.1723 ug/L	0.1723 ppb	19:52:07

2	P 214.914†	235.5	3.7	2.2154 ug/L	2.2154 ppb	19:52:07
2	Pb 220.353†	-64.8	5.9	0.7464 ug/L	0.7464 ppb	19:52:07
2	S 181.975 Axial†	61.2	20.9	27.353 ug/L	27.353 ppb	19:52:07
2	Sb 206.836†	43.2	9.4	3.2418 ug/L	3.2418 ppb	19:52:07
2	Se 196.026†	-21.5	0.9	0.5475 ug/L	0.5475 ppb	19:52:07
2	Si 251.611†	634.4	49.4	1.5231 ug/L	1.5231 ppb	19:52:07
2	Sn 189.927†	27.2	15.8	2.8370 ug/L	2.8370 ppb	19:52:07
2	Ti 334.940†	-1283.8	153.8	0.2554 ug/L	0.2554 ppb	19:51:47
2	Tl 190.801†	-32.4	5.3	1.6852 ug/L	1.6852 ppb	19:52:07
2	U 409.014†	-3254.4	120.6	3.4273 ug/L	3.4273 ppb	19:51:47
2	V 292.402†	-1626.5	-19.2	-0.1155 ug/L	-0.1155 ppb	19:51:47
2	Zn 213.857†	719.3	62.6	0.6106 ug/L	0.6106 ppb	19:52:07
2	SiO2†	640.8	48.9	3.2247 ug/L	3.2247 ppb	19:52:43
3	Sc Radial	4264.8	4264.8	100 %		19:50:55
3	Y RADIAL	4387.4	4387.4	99.66 %		19:50:55
3	Al 396.153Radial†	-122.1	37.3	37.275 ug/L	37.275 ppb	19:51:15
3	Ca 317.933Radial†	20.9	2.5	4.6948 ug/L	4.6948 ppb	19:51:15
3	Fe 238.204 Radial†	11.0	1.0	10.132 ug/L	10.132 ppb	19:51:15
3	K 766.490 Radial†	3217.8	35.7	7.1149 ug/L	7.1149 ppb	19:50:55
3	Mg 279.077 IEC†	3.0	0.2	9.4282 ug/L	9.4282 ppb	19:51:15
3	Na 589.592 Radial†	937.9	727.8	242.75 ug/L	242.75 ppb	19:50:55
3	Sr 421.552†	67.0	-23.0	-0.1780 ug/L	-0.1780 ppb	19:50:55
3	Sc 361.383	818748.2	818748.2	96.322 %		19:52:13
3	Y 371.029	667754.1	667754.1	95.023 %		19:52:13
3	Ag 328.068†	161.7	-59.8	-0.2867 ug/L	-0.2867 ppb	19:52:13
3	As 188.979†	-31.4	-4.3	-1.8046 ug/L	-1.8046 ppb	19:52:33
3	B 249.677†	-200.2	274.0	6.4445 ug/L	6.4445 ppb	19:52:33
3	Ba 233.527†	15.1	-3.2	-0.0262 ug/L	-0.0262 ppb	19:52:33
3	Be 313.107†	-4255.4	-78.7	-0.0286 ug/L	-0.0286 ppb	19:52:13
3	Cd 226.502†	-208.5	-21.0	-0.2463 ug/L	-0.2463 ppb	19:52:33
3	Co 228.616†	-62.7	13.7	0.2893 ug/L	0.2893 ppb	19:52:33
3	Cr 267.716†	85.1	-61.3	-0.7146 ug/L	-0.7146 ppb	19:52:33
3	Cu 324.752†	7570.3	-234.8	-0.7191 ug/L	-0.7191 ppb	19:52:13
3	Mn 257.610†	765.4	224.9	0.2600 ug/L	0.2600 ppb	19:52:13
3	Mo 202.031†	26.2	16.7	1.2407 ug/L	1.2407 ppb	19:52:33
3	Ni 231.604†	87.9	-22.3	-0.5714 ug/L	-0.5714 ppb	19:52:33
3	P 214.914†	248.5	16.0	9.0492 ug/L	9.0492 ppb	19:52:33
3	Pb 220.353†	-68.1	2.8	0.3632 ug/L	0.3632 ppb	19:52:33
3	S 181.975 Axial†	57.0	16.2	21.214 ug/L	21.214 ppb	19:52:33
3	Sb 206.836†	45.8	11.9	4.0653 ug/L	4.0653 ppb	19:52:33
3	Se 196.026†	-16.9	5.8	3.4243 ug/L	3.4243 ppb	19:52:33
3	Si 251.611†	624.7	36.2	1.1128 ug/L	1.1128 ppb	19:52:33
3	Sn 189.927†	16.1	4.1	0.7375 ug/L	0.7375 ppb	19:52:33
3	Ti 334.940†	-1348.4	93.0	0.1506 ug/L	0.1506 ppb	19:52:13
3	Tl 190.801†	-32.4	5.5	1.7449 ug/L	1.7449 ppb	19:52:33
3	U 409.014†	-3336.9	50.8	1.4449 ug/L	1.4449 ppb	19:52:13
3	V 292.402†	-1669.8	-56.2	-0.3881 ug/L	-0.3881 ppb	19:52:13
3	Zn 213.857†	695.3	34.1	0.3363 ug/L	0.3363 ppb	19:52:33
3	SiO2†	703.6	111.0	7.3646 ug/L	7.3646 ppb	19:52:48

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	815681.0	95.961 %		0.3247			0.34%
Sc Radial	4279.3	101 %		0.3			0.33%
Y 371.029	664672.7	94.585 %		0.4022			0.43%
Y RADIAL	4398.4	99.91 %		0.310			0.31%
Ag 328.068†	30.9	0.1449 ug/L		0.37478	0.1449 ppb	0.37478	258.63%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	33.7	33.603 ug/L		9.8586	33.603 ppb	9.8586	29.34%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	-2.3	-0.9805 ug/L		1.36499	-0.9805 ppb	1.36499	139.21%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	257.5	6.0572 ug/L		0.35077	6.0572 ppb	0.35077	5.79%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	12.5	0.1015 ug/L		0.11257	0.1015 ppb	0.11257	110.85%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	-113.9	-0.0414 ug/L		0.01896	-0.0414 ppb	0.01896	45.82%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	5.8	10.846 ug/L		5.5594	10.846 ppb	5.5594	51.26%



QC value within limits for Ca 317.933Radial Recovery = Not calculated									
Cd	226.502†	-15.5	-0.1809 ug/L	0.12363	-0.1809 ppb	0.12363	68.35%		
QC value within limits for Cd 226.502 Recovery = Not calculated									
Co	228.616†	4.1	0.0877 ug/L	0.19865	0.0877 ppb	0.19865	226.62%		
QC value within limits for Co 228.616 Recovery = Not calculated									
Cr	267.716†	-65.8	-0.7673 ug/L	0.04725	-0.7673 ppb	0.04725	6.16%		
QC value within limits for Cr 267.716 Recovery = Not calculated									
Cu	324.752†	-210.8	-0.6471 ug/L	0.08725	-0.6471 ppb	0.08725	13.48%		
QC value within limits for Cu 324.752 Recovery = Not calculated									
Fe	238.204 Radial†	0.0	0.1176 ug/L	10.08321	0.1176 ppb	10.08321	>999.9%		
QC value within limits for Fe 238.204 Radial Recovery = Not calculated									
K	766.490 Radial†	-1.7	-0.4366 ug/L	8.08827	-0.4366 ppb	8.08827	>999.9%		
QC value within limits for K 766.490 Radial Recovery = Not calculated									
Mg	279.077 IEC†	-0.2	-7.4557 ug/L	43.57992	-7.4557 ppb	43.57992	584.51%		
QC value within limits for Mg 279.077 IEC Recovery = Not calculated									
Mn	257.610†	287.3	0.3317 ug/L	0.19954	0.3317 ppb	0.19954	60.15%		
QC value within limits for Mn 257.610 Recovery = Not calculated									
Mo	202.031†	16.6	1.2358 ug/L	0.06910	1.2358 ppb	0.06910	5.59%		
QC value within limits for Mo 202.031 Recovery = Not calculated									
Na	589.592 Radial†	725.0	241.85 ug/L	10.581	241.85 ppb	10.581	4.37%		
QC value within limits for Na 589.592 Radial Recovery = Not calculated									
Ni	231.604†	-6.4	-0.1629 ug/L	0.37722	-0.1629 ppb	0.37722	231.56%		
QC value within limits for Ni 231.604 Recovery = Not calculated									
P	214.914†	11.6	6.5796 ug/L	3.79043	6.5796 ppb	3.79043	57.61%		
QC value within limits for P 214.914 Recovery = Not calculated									
Pb	220.353†	4.1	0.5143 ug/L	0.20400	0.5143 ppb	0.20400	39.66%		
QC value within limits for Pb 220.353 Recovery = Not calculated									
S	181.975 Axial†	20.1	26.317 ug/L	4.6714	26.317 ppb	4.6714	17.75%		
QC value within limits for S 181.975 Axial Recovery = Not calculated									
Sb	206.836†	13.0	4.4590 ug/L	1.45458	4.4590 ppb	1.45458	32.62%		
QC value within limits for Sb 206.836 Recovery = Not calculated									
Se	196.026†	2.6	1.5445 ug/L	1.62898	1.5445 ppb	1.62898	105.47%		
QC value within limits for Se 196.026 Recovery = Not calculated									
Si	251.611†	48.1	1.4846 ug/L	0.35411	1.4846 ppb	0.35411	23.85%		
QC value within limits for Si 251.611 Recovery = Not calculated									
Sn	189.927†	10.6	1.9084 ug/L	1.07048	1.9084 ppb	1.07048	56.09%		
QC value within limits for Sn 189.927 Recovery = Not calculated									
Sr	421.552†	24.7	0.1904 ug/L	0.32149	0.1904 ppb	0.32149	168.82%		
QC value within limits for Sr 421.552 Recovery = Not calculated									
Ti	334.940†	128.5	0.2097 ug/L	0.05370	0.2097 ppb	0.05370	25.61%		
QC value within limits for Ti 334.940 Recovery = Not calculated									
Tl	190.801†	6.9	2.1865 ug/L	0.81718	2.1865 ppb	0.81718	37.37%		
QC value within limits for Tl 190.801 Recovery = Not calculated									
U	409.014†	116.9	3.3220 ug/L	1.82669	3.3220 ppb	1.82669	54.99%		
QC value within limits for U 409.014 Recovery = Not calculated									
V	292.402†	-14.2	-0.0793 ug/L	0.32833	-0.0793 ppb	0.32833	413.93%		
QC value within limits for V 292.402 Recovery = Not calculated									
Zn	213.857†	54.7	0.5354 ug/L	0.17416	0.5354 ppb	0.17416	32.53%		
QC value within limits for Zn 213.857 Recovery = Not calculated									
SiO2†		68.2	4.5156 ug/L	2.47087	4.5156 ppb	2.47087	54.72%		
QC value within limits for SiO2 Recovery = Not calculated									

All analyte(s) passed QC.

Sequence No.: 38

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 2/16/2010 20:57:12

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	4080.6	4080.6	96.0 %		20:59:24
1	Y RADIAL	4224.3	4224.3	95.96 %		20:59:04
1	Al 396.153Radial†	4643.1	4995.9	4974.1 ug/L	4974.1 ppb	20:59:04
1	Ca 317.933Radial†	2617.0	2707.9	5051.3 ug/L	5051.3 ppb	20:59:24
1	Fe 238.204 Radial†	501.3	512.2	5458.2 ug/L	5458.2 ppb	20:59:24
1	K 766.490 Radial†	26808.3	24755.6	4990.7 ug/L	4990.7 ppb	20:59:04
1	Mg 279.077 IEC†	133.2	136.1	5255.4 ug/L	5255.4 ppb	20:59:24
1	Na 589.592 Radial†	30882.0	31963.8	10662 ug/L	10662 ppb	20:59:04
1	Sr 421.552†	63836.2	66410.7	512.74 ug/L	512.74 ppb	20:59:04
1	Sc 361.383	834330.2	834330.2	98.155 %		21:00:23
1	Y 371.029	668805.9	668805.9	95.173 %		21:00:23
1	Ag 328.068†	99625.6	101270.1	489.58 ug/L	489.58 ppb	21:00:23
1	As 188.979†	1110.2	1159.4	492.32 ug/L	492.32 ppb	21:00:43
1	B 249.677†	20143.7	21004.1	491.86 ug/L	491.86 ppb	21:00:23
1	Ba 233.527†	59657.8	60760.1	494.57 ug/L	494.57 ppb	21:00:23
1	Be 313.107†	1322163.7	1351348.6	497.51 ug/L	497.51 ppb	21:00:23
1	Cd 226.502†	39430.6	40367.0	471.90 ug/L	471.90 ppb	21:00:43
1	Co 228.616†	23056.3	23568.4	491.52 ug/L	491.52 ppb	21:00:43
1	Cr 267.716†	40560.2	41172.7	479.61 ug/L	479.61 ppb	21:00:23
1	Cu 324.752†	168349.4	163418.9	500.38 ug/L	500.38 ppb	21:00:23
1	Mn 257.610†	426429.5	433873.1	500.75 ug/L	500.75 ppb	21:00:23
1	Mo 202.031†	6495.4	6607.0	491.42 ug/L	491.42 ppb	21:00:43
1	Ni 231.604†	18594.9	18830.8	482.04 ug/L	482.04 ppb	21:00:43
1	P 214.914†	4555.1	4398.7	2342.7 ug/L	2342.7 ppb	21:00:43
1	Pb 220.353†	3792.9	3937.7	489.37 ug/L	489.37 ppb	21:00:43
1	S 181.975 Axial†	788.4	760.3	992.75 ug/L	992.75 ppb	21:00:43
1	Sb 206.836†	1429.0	1420.2	498.15 ug/L	498.15 ppb	21:00:43
1	Se 196.026†	802.3	840.7	509.67 ug/L	509.67 ppb	21:00:43
1	Si 251.611†	79165.2	80040.6	2488.2 ug/L	2488.2 ppb	21:00:23
1	Sn 189.927†	2670.1	2707.6	486.36 ug/L	486.36 ppb	21:00:43
1	Ti 334.940†	304517.9	311733.3	506.54 ug/L	506.54 ppb	21:00:23
1	Tl 190.801†	1496.2	1563.5	497.00 ug/L	497.00 ppb	21:00:43
1	U 409.014†	12403.3	16151.6	457.13 ug/L	457.13 ppb	21:00:23
1	V 292.402†	63344.4	66212.0	485.97 ug/L	485.97 ppb	21:00:23
1	Zn 213.857†	50074.1	50327.3	486.62 ug/L	486.62 ppb	21:00:23
1	SiO2†	79109.4	79976.4	5318.9 ug/L	5318.9 ppb	21:01:43
2	Sc Radial	4071.5	4071.5	95.8 %		20:59:49
2	Y RADIAL	4228.3	4228.3	96.05 %		20:59:29
2	Al 396.153Radial†	4682.7	5048.1	5026.2 ug/L	5026.2 ppb	20:59:29
2	Ca 317.933Radial†	2622.6	2719.8	5073.5 ug/L	5073.5 ppb	20:59:49
2	Fe 238.204 Radial†	496.4	508.2	5416.1 ug/L	5416.1 ppb	20:59:49
2	K 766.490 Radial†	26877.2	24890.0	5017.8 ug/L	5017.8 ppb	20:59:29
2	Mg 279.077 IEC†	130.7	133.7	5163.4 ug/L	5163.4 ppb	20:59:49
2	Na 589.592 Radial†	30969.6	32127.2	10716 ug/L	10716 ppb	20:59:29
2	Sr 421.552†	64023.8	66755.3	515.40 ug/L	515.40 ppb	20:59:29
2	Sc 361.383	836755.2	836755.2	98.441 %		21:00:50
2	Y 371.029	670519.8	670519.8	95.417 %		21:00:50
2	Ag 328.068†	100018.9	101375.5	490.07 ug/L	490.07 ppb	21:00:50
2	As 188.979†	1131.4	1177.7	500.00 ug/L	500.00 ppb	21:01:10
2	B 249.677†	20276.3	21079.4	493.63 ug/L	493.63 ppb	21:00:50
2	Ba 233.527†	59866.9	60796.3	494.87 ug/L	494.87 ppb	21:00:50
2	Be 313.107†	1327964.9	1353338.0	498.24 ug/L	498.24 ppb	21:00:50
2	Cd 226.502†	39806.5	40632.5	475.01 ug/L	475.01 ppb	21:01:10
2	Co 228.616†	23267.0	23714.4	494.56 ug/L	494.56 ppb	21:01:10
2	Cr 267.716†	40831.9	41328.9	481.42 ug/L	481.42 ppb	21:00:50
2	Cu 324.752†	169178.3	163763.9	501.42 ug/L	501.42 ppb	21:00:50
2	Mn 257.610†	429077.4	435303.9	502.40 ug/L	502.40 ppb	21:00:50
2	Mo 202.031†	6533.2	6626.3	492.85 ug/L	492.85 ppb	21:01:10
2	Ni 231.604†	18777.8	18961.8	485.39 ug/L	485.39 ppb	21:01:10

2	P 214.914†	4605.8	4436.8	2363.7 ug/L	2363.7 ppb	21:01:10
2	Pb 220.353†	3816.4	3950.4	490.96 ug/L	490.96 ppb	21:01:10
2	S 181.975 Axial†	803.1	772.9	1009.2 ug/L	1009.2 ppb	21:01:10
2	Sb 206.836†	1460.2	1447.6	507.55 ug/L	507.55 ppb	21:01:10
2	Se 196.026†	814.5	850.8	515.40 ug/L	515.40 ppb	21:01:10
2	Si 251.611†	79614.6	80263.3	2495.1 ug/L	2495.1 ppb	21:00:50
2	Sn 189.927†	2705.2	2735.5	491.36 ug/L	491.36 ppb	21:01:10
2	Ti 334.940†	306143.2	312485.2	507.77 ug/L	507.77 ppb	21:00:50
2	Tl 190.801†	1520.1	1583.3	503.25 ug/L	503.25 ppb	21:01:10
2	U 409.014†	12814.1	16532.2	467.94 ug/L	467.94 ppb	21:00:50
2	V 292.402†	63707.1	66393.5	487.33 ug/L	487.33 ppb	21:00:50
2	Zn 213.857†	50505.5	50617.7	489.44 ug/L	489.44 ppb	21:00:50
2	SiO2†	79042.4	79674.9	5298.8 ug/L	5298.8 ppb	21:01:48
3	Sc Radial	4107.4	4107.4	96.6 %		21:00:14
3	Y RADIAL	4303.1	4303.1	97.75 %		20:59:54
3	Al 396.153Radial†	4706.9	5030.4	5008.7 ug/L	5008.7 ppb	20:59:54
3	Ca 317.933Radial†	2643.4	2717.5	5069.1 ug/L	5069.1 ppb	21:00:14
3	Fe 238.204 Radial†	504.4	512.0	5455.6 ug/L	5455.6 ppb	21:00:14
3	K 766.490 Radial†	27217.2	24996.5	5039.3 ug/L	5039.3 ppb	20:59:54
3	Mg 279.077 IEC†	136.5	138.5	5349.9 ug/L	5349.9 ppb	21:00:14
3	Na 589.592 Radial†	31365.0	32253.8	10759 ug/L	10759 ppb	20:59:54
3	Sr 421.552†	64856.3	67032.4	517.54 ug/L	517.54 ppb	20:59:54
3	Sc 361.383	836740.7	836740.7	98.439 %		21:01:18
3	Y 371.029	669708.0	669708.0	95.301 %		21:01:18
3	Ag 328.068†	100101.7	101461.4	490.51 ug/L	490.51 ppb	21:01:18
3	As 188.979†	1120.6	1166.7	495.39 ug/L	495.39 ppb	21:01:38
3	B 249.677†	20399.6	21205.0	496.59 ug/L	496.59 ppb	21:01:18
3	Ba 233.527†	60201.4	61137.1	497.64 ug/L	497.64 ppb	21:01:18
3	Be 313.107†	1328638.2	1354045.4	498.50 ug/L	498.50 ppb	21:01:18
3	Cd 226.502†	39435.1	40255.9	470.60 ug/L	470.60 ppb	21:01:38
3	Co 228.616†	23005.5	23449.1	489.02 ug/L	489.02 ppb	21:01:38
3	Cr 267.716†	40889.3	41388.0	482.11 ug/L	482.11 ppb	21:01:18
3	Cu 324.752†	169544.8	164139.1	502.58 ug/L	502.58 ppb	21:01:18
3	Mn 257.610†	430061.8	436311.5	503.55 ug/L	503.55 ppb	21:01:18
3	Mo 202.031†	6480.8	6573.1	488.90 ug/L	488.90 ppb	21:01:38
3	Ni 231.604†	18601.5	18783.0	480.81 ug/L	480.81 ppb	21:01:38
3	P 214.914†	4564.0	4394.4	2339.9 ug/L	2339.9 ppb	21:01:38
3	Pb 220.353†	3800.0	3933.8	488.89 ug/L	488.89 ppb	21:01:38
3	S 181.975 Axial†	789.4	759.0	991.06 ug/L	991.06 ppb	21:01:38
3	Sb 206.836†	1424.2	1411.1	494.98 ug/L	494.98 ppb	21:01:38
3	Se 196.026†	803.3	839.3	508.84 ug/L	508.84 ppb	21:01:38
3	Si 251.611†	79704.8	80356.3	2498.1 ug/L	2498.1 ppb	21:01:18
3	Sn 189.927†	2666.3	2696.0	484.28 ug/L	484.28 ppb	21:01:38
3	Ti 334.940†	306644.0	312999.3	508.59 ug/L	508.59 ppb	21:01:18
3	Tl 190.801†	1506.0	1569.0	498.79 ug/L	498.79 ppb	21:01:38
3	U 409.014†	12624.5	16339.8	462.47 ug/L	462.47 ppb	21:01:18
3	V 292.402†	63917.0	66607.8	488.81 ug/L	488.81 ppb	21:01:18
3	Zn 213.857†	50604.5	50719.2	490.45 ug/L	490.45 ppb	21:01:18
3	SiO2†	78528.4	79154.1	5264.1 ug/L	5264.1 ppb	21:01:53

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	835942.0	98.345 %	0.1642			0.17%
Sc Radial	4086.5	96.1 %	0.44			0.46%
Y 371.029	669677.9	95.297 %	0.1220			0.13%
Y RADIAL	4251.9	96.59 %	1.008			1.04%
Ag 328.068†	101369.0	490.05 ug/L	0.463	490.05 ppb	0.463	0.09%
QC value within limits for Ag 328.068 Recovery = 98.01%						
Al 396.153Radial†	5024.8	5003.0 ug/L	26.53	5003.0 ppb	26.53	0.53%
QC value within limits for Al 396.153Radial Recovery = 100.06%						
As 188.979†	1167.9	495.90 ug/L	3.867	495.90 ppb	3.867	0.78%
QC value within limits for As 188.979 Recovery = 99.18%						
B 249.677†	21096.2	494.03 ug/L	2.392	494.03 ppb	2.392	0.48%
QC value within limits for B 249.677 Recovery = 98.81%						
Ba 233.527†	60897.8	495.70 ug/L	1.692	495.70 ppb	1.692	0.34%
QC value within limits for Ba 233.527 Recovery = 99.14%						
Be 313.107†	1352910.7	498.08 ug/L	0.516	498.08 ppb	0.516	0.10%
QC value within limits for Be 313.107 Recovery = 99.62%						
Ca 317.933Radial†	2715.1	5064.6 ug/L	11.77	5064.6 ppb	11.77	0.23%

QC value within limits for Ca 317.933 Radial Recovery = 101.29%

Cd	226.502†	40418.5	472.50 ug/L	2.267	472.50 ppb	2.267	0.48%
QC value within limits for Cd 226.502 Recovery = 94.50%							
Co	228.616†	23577.3	491.70 ug/L	2.776	491.70 ppb	2.776	0.56%
QC value within limits for Co 228.616 Recovery = 98.34%							
Cr	267.716†	41296.5	481.05 ug/L	1.294	481.05 ppb	1.294	0.27%
QC value within limits for Cr 267.716 Recovery = 96.21%							
Cu	324.752†	163774.0	501.46 ug/L	1.101	501.46 ppb	1.101	0.22%
QC value within limits for Cu 324.752 Recovery = 100.29%							
Fe	238.204 Radial†	510.8	5443.3 ug/L	23.58	5443.3 ppb	23.58	0.43%
QC value within limits for Fe 238.204 Radial Recovery = 108.87%							
K	766.490 Radial†	24880.7	5015.9 ug/L	24.35	5015.9 ppb	24.35	0.49%
QC value within limits for K 766.490 Radial Recovery = 100.32%							
Mg	279.077 IEC†	136.1	5256.2 ug/L	93.29	5256.2 ppb	93.29	1.77%
QC value within limits for Mg 279.077 IEC Recovery = 105.12%							
Mn	257.610†	435162.9	502.23 ug/L	1.411	502.23 ppb	1.411	0.28%
QC value within limits for Mn 257.610 Recovery = 100.45%							
Mo	202.031†	6602.1	491.06 ug/L	1.999	491.06 ppb	1.999	0.41%
QC value within limits for Mo 202.031 Recovery = 98.21%							
Na	589.592 Radial†	32114.9	10712 ug/L	48.5	10712 ppb	48.5	0.45%
QC value within limits for Na 589.592 Radial Recovery = 107.12%							
Ni	231.604†	18858.5	482.75 ug/L	2.369	482.75 ppb	2.369	0.49%
QC value within limits for Ni 231.604 Recovery = 96.55%							
P	214.914†	4410.0	2348.8 ug/L	13.05	2348.8 ppb	13.05	0.56%
QC value within limits for P 214.914 Recovery = 93.95%							
Pb	220.353†	3940.7	489.74 ug/L	1.086	489.74 ppb	1.086	0.22%
QC value within limits for Pb 220.353 Recovery = 97.95%							
S	181.975 Axial†	764.1	997.68 ug/L	10.033	997.68 ppb	10.033	1.01%
QC value within limits for S 181.975 Axial Recovery = 99.77%							
Sb	206.836†	1426.3	500.23 ug/L	6.533	500.23 ppb	6.533	1.31%
QC value within limits for Sb 206.836 Recovery = 100.05%							
Se	196.026†	843.6	511.30 ug/L	3.572	511.30 ppb	3.572	0.70%
QC value within limits for Se 196.026 Recovery = 102.26%							
Si	251.611†	80220.1	2493.8 ug/L	5.07	2493.8 ppb	5.07	0.20%
QC value within limits for Si 251.611 Recovery = 99.75%							
Sn	189.927†	2713.0	487.33 ug/L	3.636	487.33 ppb	3.636	0.75%
QC value within limits for Sn 189.927 Recovery = 97.47%							
Sr	421.552†	66732.8	515.23 ug/L	2.405	515.23 ppb	2.405	0.47%
QC value within limits for Sr 421.552 Recovery = 103.05%							
Ti	334.940†	312405.9	507.63 ug/L	1.031	507.63 ppb	1.031	0.20%
QC value within limits for Ti 334.940 Recovery = 101.53%							
Tl	190.801†	1571.9	499.68 ug/L	3.219	499.68 ppb	3.219	0.64%
QC value within limits for Tl 190.801 Recovery = 99.94%							
U	409.014†	16341.2	462.51 ug/L	5.407	462.51 ppb	5.407	1.17%
QC value within limits for U 409.014 Recovery = 92.50%							
V	292.402†	66404.5	487.37 ug/L	1.421	487.37 ppb	1.421	0.29%
QC value within limits for V 292.402 Recovery = 97.47%							
Zn	213.857†	50554.7	488.84 ug/L	1.985	488.84 ppb	1.985	0.41%
QC value within limits for Zn 213.857 Recovery = 97.77%							
SiO2†		79601.8	5293.9 ug/L	27.70	5293.9 ppb	27.70	0.52%
QC value within limits for SiO2 Recovery = 99.00%							

All analyte(s) passed QC.

Sequence No.: 39

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 2/16/2010 21:04:03

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	4061.0	4061.0	95.5 %		21:06:15
1	Y RADIAL	4228.7	4228.7	96.06 %		21:05:55
1	Al 396.153Radial†	-129.6	23.4	23.329 ug/L	23.329 ppb	21:05:55
1	Ca 317.933Radial†	17.6	0.1	0.2711 ug/L	0.2711 ppb	21:06:15
1	Fe 238.204 Radial†	11.8	2.2	23.859 ug/L	23.859 ppb	21:06:15
1	K 766.490 Radial†	3097.0	70.2	14.165 ug/L	14.165 ppb	21:05:55
1	Mg 279.077 IEC†	2.6	0.0	0.9769 ug/L	0.9769 ppb	21:06:15
1	Na 589.592 Radial†	243.0	47.3	15.777 ug/L	15.777 ppb	21:05:55
1	Sr 421.552†	38.5	-49.5	-0.3821 ug/L	-0.3821 ppb	21:05:55
1	Sc 361.383	826132.3	826132.3	97.191 %		21:07:12
1	Y 371.029	670161.6	670161.6	95.366 %		21:07:12
1	Ag 328.068†	315.3	96.8	0.4698 ug/L	0.4698 ppb	21:07:12
1	As 188.979†	-28.9	-1.4	-0.5999 ug/L	-0.5999 ppb	21:07:32
1	B 249.677†	-223.8	251.7	5.9171 ug/L	5.9171 ppb	21:07:32
1	Ba 233.527†	8.8	-9.8	-0.0786 ug/L	-0.0786 ppb	21:07:32
1	Be 313.107†	-4178.5	39.8	0.0150 ug/L	0.0150 ppb	21:07:12
1	Cd 226.502†	-208.6	-19.1	-0.2254 ug/L	-0.2254 ppb	21:07:32
1	Co 228.616†	-80.0	-3.4	-0.0704 ug/L	-0.0704 ppb	21:07:32
1	Cr 267.716†	72.0	-75.6	-0.8804 ug/L	-0.8804 ppb	21:07:32
1	Cu 324.752†	8199.6	342.5	1.0479 ug/L	1.0479 ppb	21:07:12
1	Mn 257.610†	815.9	269.8	0.3135 ug/L	0.3135 ppb	21:07:32
1	Mo 202.031†	19.7	9.9	0.7341 ug/L	0.7341 ppb	21:07:32
1	Ni 231.604†	103.9	-6.6	-0.1693 ug/L	-0.1693 ppb	21:07:32
1	P 214.914†	233.2	-2.0	-1.3216 ug/L	-1.3216 ppb	21:07:32
1	Pb 220.353†	-78.7	-7.4	-0.9161 ug/L	-0.9161 ppb	21:07:32
1	S 181.975 Axial†	58.3	17.0	22.253 ug/L	22.253 ppb	21:07:32
1	Sb 206.836†	43.0	8.6	2.9312 ug/L	2.9312 ppb	21:07:32
1	Se 196.026†	-23.4	-0.7	-0.3359 ug/L	-0.3359 ppb	21:07:32
1	Si 251.611†	688.2	95.8	2.9751 ug/L	2.9751 ppb	21:07:32
1	Sn 189.927†	20.2	8.1	1.4568 ug/L	1.4568 ppb	21:07:32
1	Ti 334.940†	-1359.9	93.7	0.1509 ug/L	0.1509 ppb	21:07:12
1	Tl 190.801†	-39.7	-1.8	-0.5494 ug/L	-0.5494 ppb	21:07:32
1	U 409.014†	-3289.4	130.7	3.7117 ug/L	3.7117 ppb	21:07:12
1	V 292.402†	-1623.3	7.1	0.0655 ug/L	0.0655 ppb	21:07:12
1	Zn 213.857†	704.3	36.9	0.3558 ug/L	0.3558 ppb	21:07:32
1	SiO2†	653.9	53.2	3.5284 ug/L	3.5284 ppb	21:08:28
2	Sc Radial	4040.2	4040.2	95.0 %		21:06:40
2	Y RADIAL	4190.2	4190.2	95.18 %		21:06:20
2	Al 396.153Radial†	-145.2	6.3	6.2022 ug/L	6.2022 ppb	21:06:20
2	Ca 317.933Radial†	19.7	2.4	4.4430 ug/L	4.4430 ppb	21:06:40
2	Fe 238.204 Radial†	10.6	1.1	11.971 ug/L	11.971 ppb	21:06:40
2	K 766.490 Radial†	3146.7	139.3	28.112 ug/L	28.112 ppb	21:06:20
2	Mg 279.077 IEC†	4.7	2.3	87.332 ug/L	87.332 ppb	21:06:40
2	Na 589.592 Radial†	206.3	10.0	3.3238 ug/L	3.3238 ppb	21:06:20
2	Sr 421.552†	-3.1	-93.1	-0.7186 ug/L	-0.7186 ppb	21:06:20
2	Sc 361.383	826159.0	826159.0	97.194 %		21:07:37
2	Y 371.029	670488.1	670488.1	95.412 %		21:07:37
2	Ag 328.068†	168.6	-54.2	-0.2575 ug/L	-0.2575 ppb	21:07:37
2	As 188.979†	-31.5	-4.1	-1.7338 ug/L	-1.7338 ppb	21:07:57
2	B 249.677†	-249.7	225.0	5.2917 ug/L	5.2917 ppb	21:07:57
2	Ba 233.527†	28.5	10.5	0.0862 ug/L	0.0862 ppb	21:07:57
2	Be 313.107†	-4170.2	48.6	0.0197 ug/L	0.0197 ppb	21:07:37
2	Cd 226.502†	-208.6	-19.1	-0.2249 ug/L	-0.2249 ppb	21:07:57
2	Co 228.616†	-78.1	-1.5	-0.0285 ug/L	-0.0285 ppb	21:07:57
2	Cr 267.716†	98.5	-48.3	-0.5623 ug/L	-0.5623 ppb	21:07:57
2	Cu 324.752†	8231.9	375.4	1.1490 ug/L	1.1490 ppb	21:07:37
2	Mn 257.610†	770.9	223.4	0.2553 ug/L	0.2553 ppb	21:07:57
2	Mo 202.031†	29.1	19.5	1.4469 ug/L	1.4469 ppb	21:07:57
2	Ni 231.604†	92.2	-18.6	-0.4768 ug/L	-0.4768 ppb	21:07:57

2	P 214.914†	244.7	9.8	5.2128 ug/L	5.2128 ppb	21:07:57
2	Pb 220.353†	-75.5	-4.2	-0.5109 ug/L	-0.5109 ppb	21:07:57
2	S 181.975 Axial†	56.8	15.5	20.280 ug/L	20.280 ppb	21:07:57
2	Sb 206.836†	37.1	2.5	0.8999 ug/L	0.8999 ppb	21:07:57
2	Se 196.026†	-18.1	4.7	2.8084 ug/L	2.8084 ppb	21:07:57
2	Si 251.611†	682.7	90.1	2.7908 ug/L	2.7908 ppb	21:07:57
2	Sn 189.927†	22.5	10.6	1.8974 ug/L	1.8974 ppb	21:07:57
2	Ti 334.940†	-964.4	500.7	0.8065 ug/L	0.8065 ppb	21:07:37
2	Tl 190.801†	-47.1	-9.4	-2.9504 ug/L	-2.9504 ppb	21:07:57
2	U 409.014†	-3346.3	72.2	2.0515 ug/L	2.0515 ppb	21:07:37
2	V 292.402†	-1609.3	21.5	0.1793 ug/L	0.1793 ppb	21:07:37
2	Zn 213.857†	698.0	30.4	0.2960 ug/L	0.2960 ppb	21:07:57
2	SiO2†	633.8	32.6	2.1349 ug/L	2.1349 ppb	21:08:33
3	Sc Radial	4010.6	4010.6	94.3 %		21:07:05
3	Y RADIAL	4315.9	4315.9	98.04 %		21:06:45
3	Al 396.153Radial†	-119.2	32.7	32.672 ug/L	32.672 ppb	21:06:45
3	Ca 317.933Radial†	15.9	-1.4	-2.6988 ug/L	-2.6988 ppb	21:07:05
3	Fe 238.204 Radial†	11.3	1.9	20.147 ug/L	20.147 ppb	21:07:05
3	K 766.490 Radial†	3048.7	59.7	12.048 ug/L	12.048 ppb	21:06:45
3	Mg 279.077 IEC†	2.3	-0.3	-11.327 ug/L	-11.327 ppb	21:07:05
3	Na 589.592 Radial†	254.0	62.2	20.733 ug/L	20.733 ppb	21:06:45
3	Sr 421.552†	23.3	-65.1	-0.5029 ug/L	-0.5029 ppb	21:06:45
3	Sc 361.383	823909.0	823909.0	96.929 %		21:08:02
3	Y 371.029	668640.1	668640.1	95.149 %		21:08:02
3	Ag 328.068†	216.9	-4.0	-0.0175 ug/L	-0.0175 ppb	21:08:02
3	As 188.979†	-33.1	-5.8	-2.4351 ug/L	-2.4351 ppb	21:08:22
3	B 249.677†	-249.3	224.7	5.2819 ug/L	5.2819 ppb	21:08:22
3	Ba 233.527†	-0.8	-19.6	-0.1601 ug/L	-0.1601 ppb	21:08:22
3	Be 313.107†	-4143.3	64.6	0.0238 ug/L	0.0238 ppb	21:08:02
3	Cd 226.502†	-191.1	-1.7	-0.0215 ug/L	-0.0215 ppb	21:08:22
3	Co 228.616†	-64.9	12.0	0.2509 ug/L	0.2509 ppb	21:08:22
3	Cr 267.716†	63.0	-84.7	-0.9873 ug/L	-0.9873 ppb	21:08:22
3	Cu 324.752†	8047.1	207.9	0.6358 ug/L	0.6358 ppb	21:08:02
3	Mn 257.610†	696.8	149.1	0.1744 ug/L	0.1744 ppb	21:08:22
3	Mo 202.031†	18.3	8.4	0.6253 ug/L	0.6253 ppb	21:08:22
3	Ni 231.604†	83.9	-27.0	-0.6912 ug/L	-0.6912 ppb	21:08:22
3	P 214.914†	240.8	6.4	3.4326 ug/L	3.4326 ppb	21:08:22
3	Pb 220.353†	-96.0	-25.4	-3.1456 ug/L	-3.1456 ppb	21:08:22
3	S 181.975 Axial†	65.6	24.8	32.402 ug/L	32.402 ppb	21:08:22
3	Sb 206.836†	33.5	-1.1	-0.3375 ug/L	-0.3375 ppb	21:08:22
3	Se 196.026†	-29.5	-7.1	-4.0741 ug/L	-4.0741 ppb	21:08:22
3	Si 251.611†	702.4	112.3	3.4916 ug/L	3.4916 ppb	21:08:22
3	Sn 189.927†	20.8	8.9	1.5922 ug/L	1.5922 ppb	21:08:22
3	Ti 334.940†	-1428.1	19.5	0.0312 ug/L	0.0312 ppb	21:08:02
3	Tl 190.801†	-28.2	10.0	3.1518 ug/L	3.1518 ppb	21:08:22
3	U 409.014†	-3290.4	120.6	3.4250 ug/L	3.4250 ppb	21:08:02
3	V 292.402†	-1711.3	-88.2	-0.6262 ug/L	-0.6262 ppb	21:08:02
3	Zn 213.857†	701.8	36.3	0.3546 ug/L	0.3546 ppb	21:08:22
3	SiO2†	704.0	106.8	7.1035 ug/L	7.1035 ppb	21:08:38

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	825400.1	97.105 %		0.1519			0.16%
Sc Radial	4037.3	95.0 %		0.60			0.63%
Y 371.029	669763.3	95.309 %		0.1404			0.15%
Y RADIAL	4245.0	96.43 %		1.463			1.52%
Ag 328.068†	12.9	0.0649 ug/L		0.37062	0.0649 ppb	0.37062	570.86%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	20.8	20.735 ug/L		13.4244	20.735 ppb	13.4244	64.74%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	-3.8	-1.5896 ug/L		0.92606	-1.5896 ppb	0.92606	58.26%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	233.8	5.4969 ug/L		0.36396	5.4969 ppb	0.36396	6.62%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	-6.3	-0.0508 ug/L		0.12548	-0.0508 ppb	0.12548	246.78%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	51.0	0.0195 ug/L		0.00441	0.0195 ppb	0.00441	22.63%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	0.4	0.6718 ug/L		3.58772	0.6718 ppb	3.58772	534.07%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated						
Cd 226.502†	-13.3	-0.1572 ug/L	0.11756	-0.1572 ppb	0.11756	74.76%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	2.4	0.0507 ug/L	0.17464	0.0507 ppb	0.17464	344.61%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-69.5	-0.8100 ug/L	0.22110	-0.8100 ppb	0.22110	27.30%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	308.6	0.9442 ug/L	0.27185	0.9442 ppb	0.27185	28.79%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	1.8	18.659 ug/L	6.0821	18.659 ppb	6.0821	32.60%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	89.7	18.108 ug/L	8.7276	18.108 ppb	8.7276	48.20%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	0.7	25.660 ug/L	53.7619	25.660 ppb	53.7619	209.51%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	214.1	0.2477 ug/L	0.06984	0.2477 ppb	0.06984	28.19%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	12.6	0.9354 ug/L	0.44626	0.9354 ppb	0.44626	47.71%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	39.8	13.278 ug/L	8.9697	13.278 ppb	8.9697	67.55%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	-17.4	-0.4457 ug/L	0.26233	-0.4457 ppb	0.26233	58.85%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	4.7	2.4413 ug/L	3.37808	2.4413 ppb	3.37808	138.37%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	-12.3	-1.5242 ug/L	1.41873	-1.5242 ppb	1.41873	93.08%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	19.1	24.978 ug/L	6.5040	24.978 ppb	6.5040	26.04%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	3.3	1.1645 ug/L	1.65033	1.1645 ppb	1.65033	141.72%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-1.0	-0.5338 ug/L	3.44550	-0.5338 ppb	3.44550	645.42%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	99.4	3.0858 ug/L	0.36326	3.0858 ppb	0.36326	11.77%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	9.2	1.6488 ug/L	0.22571	1.6488 ppb	0.22571	13.69%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	-69.2	-0.5345 ug/L	0.17044	-0.5345 ppb	0.17044	31.89%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	204.6	0.3295 ug/L	0.41741	0.3295 ppb	0.41741	126.67%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	-0.4	-0.1160 ug/L	3.07411	-0.1160 ppb	3.07411	>999.9%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	107.8	3.0627 ug/L	0.88743	3.0627 ppb	0.88743	28.98%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	-19.9	-0.1271 ug/L	0.43594	-0.1271 ppb	0.43594	342.93%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	34.5	0.3354 ug/L	0.03420	0.3354 ppb	0.03420	10.19%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	64.2	4.2556 ug/L	2.56287	4.2556 ppb	2.56287	60.22%
QC value within limits for SiO2 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 48

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 2/16/2010 22:07:32

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	4059.7	4059.7	95.5 %		22:09:44
1	Y RADIAL	4222.0	4222.0	95.91 %		22:09:24
1	Al 396.153Radial†	4686.3	5066.0	5044.6 ug/L	5044.6 ppb	22:09:24
1	Ca 317.933Radial†	2617.3	2722.2	5077.9 ug/L	5077.9 ppb	22:09:44
1	Fe 238.204 Radial†	499.5	513.0	5466.8 ug/L	5466.8 ppb	22:09:44
1	K 766.490 Radial†	26902.4	24997.9	5039.5 ug/L	5039.5 ppb	22:09:24
1	Mg 279.077 IEC†	135.1	138.8	5358.3 ug/L	5358.3 ppb	22:09:44
1	Na 589.592 Radial†	31490.7	32766.8	10930 ug/L	10930 ppb	22:09:24
1	Sr 421.552†	64578.4	67530.2	521.38 ug/L	521.38 ppb	22:09:24
1	Sc 361.383	841574.7	841574.7	99.008 %		22:10:42
1	Y 371.029	673588.0	673588.0	95.853 %		22:10:42
1	Ag 328.068†	100691.4	101472.8	490.55 ug/L	490.55 ppb	22:10:47
1	As 188.979†	1109.6	1149.0	487.87 ug/L	487.87 ppb	22:11:07
1	B 249.677†	20235.3	20920.0	489.87 ug/L	489.87 ppb	22:10:47
1	Ba 233.527†	60104.0	60687.5	493.99 ug/L	493.99 ppb	22:10:47
1	Be 313.107†	1339020.5	1356779.1	499.48 ug/L	499.48 ppb	22:10:42
1	Cd 226.502†	40580.7	41182.9	481.44 ug/L	481.44 ppb	22:10:47
1	Co 228.616†	23425.8	23739.4	495.08 ug/L	495.08 ppb	22:10:47
1	Cr 267.716†	40979.3	41240.3	480.39 ug/L	480.39 ppb	22:10:47
1	Cu 324.752†	168824.5	162422.3	497.31 ug/L	497.31 ppb	22:10:47
1	Mn 257.610†	433726.3	437503.3	504.93 ug/L	504.93 ppb	22:10:42
1	Mo 202.031†	6424.5	6478.4	481.87 ug/L	481.87 ppb	22:11:07
1	Ni 231.604†	18941.1	19017.4	486.82 ug/L	486.82 ppb	22:10:47
1	P 214.914†	4531.7	4335.1	2308.0 ug/L	2308.0 ppb	22:11:07
1	Pb 220.353†	3749.9	3861.0	479.86 ug/L	479.86 ppb	22:11:07
1	S 181.975 Axial†	790.0	755.0	985.84 ug/L	985.84 ppb	22:11:07
1	Sb 206.836†	1422.5	1401.0	491.46 ug/L	491.46 ppb	22:11:07
1	Se 196.026†	804.3	835.7	506.72 ug/L	506.72 ppb	22:11:07
1	Si 251.611†	79900.4	80088.8	2489.8 ug/L	2489.8 ppb	22:10:47
1	Sn 189.927†	2671.2	2685.3	482.37 ug/L	482.37 ppb	22:11:07
1	Ti 334.940†	300096.0	304596.5	494.93 ug/L	494.93 ppb	22:10:47
1	Tl 190.801†	1509.7	1564.0	497.06 ug/L	497.06 ppb	22:11:07
1	U 409.014†	13096.9	16743.3	473.93 ug/L	473.93 ppb	22:10:47
1	V 292.402†	64118.4	66438.3	487.52 ug/L	487.52 ppb	22:10:47
1	Zn 213.857†	50696.6	50516.9	488.44 ug/L	488.44 ppb	22:10:47
1	SiO2†	78904.0	79075.2	5259.1 ug/L	5259.1 ppb	22:12:14
2	Sc Radial	4061.7	4061.7	95.5 %		22:10:09
2	Y RADIAL	4303.1	4303.1	97.75 %		22:09:49
2	Al 396.153Radial†	4734.9	5114.5	5093.0 ug/L	5093.0 ppb	22:09:49
2	Ca 317.933Radial†	2612.1	2715.5	5065.4 ug/L	5065.4 ppb	22:10:09
2	Fe 238.204 Radial†	501.0	514.3	5480.4 ug/L	5480.4 ppb	22:10:09
2	K 766.490 Radial†	27203.8	25299.3	5100.3 ug/L	5100.3 ppb	22:09:49
2	Mg 279.077 IEC†	127.9	131.2	5065.7 ug/L	5065.7 ppb	22:10:09
2	Na 589.592 Radial†	31654.7	32922.1	10981 ug/L	10981 ppb	22:09:49
2	Sr 421.552†	65173.3	68119.2	525.93 ug/L	525.93 ppb	22:09:49
2	Sc 361.383	835912.7	835912.7	98.342 %		22:11:13
2	Y 371.029	668417.9	668417.9	95.118 %		22:11:13
2	Ag 328.068†	101090.5	102567.5	495.82 ug/L	495.82 ppb	22:11:18
2	As 188.979†	1118.2	1165.4	494.81 ug/L	494.81 ppb	22:11:38
2	B 249.677†	20459.3	21286.2	498.46 ug/L	498.46 ppb	22:11:18
2	Ba 233.527†	60400.0	61399.7	499.78 ug/L	499.78 ppb	22:11:18
2	Be 313.107†	1326028.9	1352729.0	498.00 ug/L	498.00 ppb	22:11:13
2	Cd 226.502†	40703.1	41585.0	486.15 ug/L	486.15 ppb	22:11:18
2	Co 228.616†	23577.3	24053.8	501.64 ug/L	501.64 ppb	22:11:18
2	Cr 267.716†	41102.8	41646.2	485.11 ug/L	485.11 ppb	22:11:18
2	Cu 324.752†	170139.8	164914.8	504.94 ug/L	504.94 ppb	22:11:18
2	Mn 257.610†	429961.3	436642.0	503.95 ug/L	503.95 ppb	22:11:13
2	Mo 202.031†	6424.5	6522.3	485.13 ug/L	485.13 ppb	22:11:38
2	Ni 231.604†	18922.5	19128.1	489.65 ug/L	489.65 ppb	22:11:18



2	P 214.914†	4531.7	4366.2	2323.8 ug/L	2323.8 ppb	22:11:38
2	Pb 220.353†	3730.0	3866.4	480.54 ug/L	480.54 ppb	22:11:38
2	S 181.975 Axial†	793.1	763.6	997.00 ug/L	997.00 ppb	22:11:38
2	Sb 206.836†	1433.4	1421.9	498.59 ug/L	498.59 ppb	22:11:38
2	Se 196.026†	808.0	845.0	512.19 ug/L	512.19 ppb	22:11:38
2	Si 251.611†	80559.1	81305.3	2527.7 ug/L	2527.7 ppb	22:11:18
2	Sn 189.927†	2662.5	2694.8	484.06 ug/L	484.06 ppb	22:11:38
2	Ti 334.940†	301881.3	308464.9	501.23 ug/L	501.23 ppb	22:11:18
2	Tl 190.801†	1511.3	1575.8	500.82 ug/L	500.82 ppb	22:11:38
2	U 409.014†	13490.6	17233.3	487.84 ug/L	487.84 ppb	22:11:18
2	V 292.402†	64351.2	67113.6	492.47 ug/L	492.47 ppb	22:11:18
2	Zn 213.857†	50842.5	51012.1	493.25 ug/L	493.25 ppb	22:11:18
2	SiO2†	78744.5	79452.9	5284.2 ug/L	5284.2 ppb	22:12:19
3	Sc Radial	4067.0	4067.0	95.7 %		22:10:34
3	Y RADIAL	4274.5	4274.5	97.10 %		22:10:14
3	Al 396.153Radial†	4674.6	5045.0	5023.2 ug/L	5023.2 ppb	22:10:14
3	Ca 317.933Radial†	2618.7	2718.8	5071.6 ug/L	5071.6 ppb	22:10:34
3	Fe 238.204 Radial†	498.8	511.3	5448.6 ug/L	5448.6 ppb	22:10:34
3	K 766.490 Radial†	26943.8	24990.4	5038.0 ug/L	5038.0 ppb	22:10:14
3	Mg 279.077 IEC†	134.7	138.1	5333.9 ug/L	5333.9 ppb	22:10:34
3	Na 589.592 Radial†	31428.1	32642.0	10888 ug/L	10888 ppb	22:10:14
3	Sr 421.552†	64729.8	67566.5	521.66 ug/L	521.66 ppb	22:10:14
3	Sc 361.383	829364.8	829364.8	97.571 %		22:11:44
3	Y 371.029	664180.7	664180.7	94.515 %		22:11:44
3	Ag 328.068†	100021.3	102283.3	494.45 ug/L	494.45 ppb	22:11:49
3	As 188.979†	1119.5	1175.7	499.11 ug/L	499.11 ppb	22:12:09
3	B 249.677†	20131.5	21114.5	494.44 ug/L	494.44 ppb	22:11:49
3	Ba 233.527†	59826.0	61296.3	498.94 ug/L	498.94 ppb	22:11:49
3	Be 313.107†	1316532.6	1353641.9	498.33 ug/L	498.33 ppb	22:11:44
3	Cd 226.502†	40192.0	41387.9	483.85 ug/L	483.85 ppb	22:11:49
3	Co 228.616†	23250.1	23907.7	498.61 ug/L	498.61 ppb	22:11:49
3	Cr 267.716†	40800.5	41666.4	485.35 ug/L	485.35 ppb	22:11:49
3	Cu 324.752†	167825.6	163908.9	501.86 ug/L	501.86 ppb	22:11:49
3	Mn 257.610†	425531.3	435553.6	502.68 ug/L	502.68 ppb	22:11:44
3	Mo 202.031†	6444.4	6594.4	490.49 ug/L	490.49 ppb	22:12:09
3	Ni 231.604†	18785.9	19140.0	489.95 ug/L	489.95 ppb	22:11:49
3	P 214.914†	4548.3	4419.6	2354.1 ug/L	2354.1 ppb	22:12:09
3	Pb 220.353†	3763.2	3930.4	488.47 ug/L	488.47 ppb	22:12:09
3	S 181.975 Axial†	789.0	765.7	999.78 ug/L	999.78 ppb	22:12:09
3	Sb 206.836†	1452.7	1453.2	509.41 ug/L	509.41 ppb	22:12:09
3	Se 196.026†	813.4	857.0	519.11 ug/L	519.11 ppb	22:12:09
3	Si 251.611†	79370.6	80734.0	2509.8 ug/L	2509.8 ppb	22:11:49
3	Sn 189.927†	2676.7	2730.7	490.51 ug/L	490.51 ppb	22:12:09
3	Ti 334.940†	298555.0	307479.4	499.61 ug/L	499.61 ppb	22:11:49
3	Tl 190.801†	1497.4	1573.8	500.17 ug/L	500.17 ppb	22:12:09
3	U 409.014†	13134.7	16976.8	480.56 ug/L	480.56 ppb	22:11:49
3	V 292.402†	63703.0	66966.0	491.47 ug/L	491.47 ppb	22:11:49
3	Zn 213.857†	50326.8	50891.8	492.08 ug/L	492.08 ppb	22:11:49
3	SiO2†	78944.4	80289.9	5339.8 ug/L	5339.8 ppb	22:12:24

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	835617.4	98.307 %	0.7189			0.73%
Sc Radial	4062.8	95.6 %	0.09			0.09%
Y 371.029	668728.9	95.162 %	0.6704			0.70%
Y RADIAL	4266.5	96.92 %	0.934			0.96%
Ag 328.068†	102107.9	493.61 ug/L	2.733	493.61 ppb	2.733	0.55%
QC value within limits for Ag 328.068 Recovery = 98.72%						
Al 396.153Radial†	5075.2	5053.6 ug/L	35.74	5053.6 ppb	35.74	0.71%
QC value within limits for Al 396.153Radial Recovery = 101.07%						
As 188.979†	1163.4	493.93 ug/L	5.673	493.93 ppb	5.673	1.15%
QC value within limits for As 188.979 Recovery = 98.79%						
B 249.677†	21106.9	494.26 ug/L	4.300	494.26 ppb	4.300	0.87%
QC value within limits for B 249.677 Recovery = 98.85%						
Ba 233.527†	61127.8	497.57 ug/L	3.130	497.57 ppb	3.130	0.63%
QC value within limits for Ba 233.527 Recovery = 99.51%						
Be 313.107†	1354383.3	498.60 ug/L	0.773	498.60 ppb	0.773	0.16%
QC value within limits for Be 313.107 Recovery = 99.72%						
Ca 317.933Radial†	2718.8	5071.6 ug/L	6.29	5071.6 ppb	6.29	0.12%

QC value within limits for Ca 317.933 Radial Recovery = 101.43%							
Cd 226.502†	41385.3	483.81 ug/L	2.353	483.81 ppb	2.353	0.49%	
QC value within limits for Cd 226.502 Recovery = 96.76%							
Co 228.616†	23900.3	498.44 ug/L	3.278	498.44 ppb	3.278	0.66%	
QC value within limits for Co 228.616 Recovery = 99.69%							
Cr 267.716†	41517.6	483.62 ug/L	2.798	483.62 ppb	2.798	0.58%	
QC value within limits for Cr 267.716 Recovery = 96.72%							
Cu 324.752†	163748.6	501.37 ug/L	3.836	501.37 ppb	3.836	0.77%	
QC value within limits for Cu 324.752 Recovery = 100.27%							
Fe 238.204 Radial†	512.9	5465.3 ug/L	15.98	5465.3 ppb	15.98	0.29%	
QC value within limits for Fe 238.204 Radial Recovery = 109.31%							
K 766.490 Radial†	25095.9	5059.3 ug/L	35.56	5059.3 ppb	35.56	0.70%	
QC value within limits for K 766.490 Radial Recovery = 101.19%							
Mg 279.077 IEC†	136.0	5252.6 ug/L	162.35	5252.6 ppb	162.35	3.09%	
QC value within limits for Mg 279.077 IEC Recovery = 105.05%							
Mn 257.610†	436566.3	503.85 ug/L	1.128	503.85 ppb	1.128	0.22%	
QC value within limits for Mn 257.610 Recovery = 100.77%							
Mo 202.031†	6531.7	485.83 ug/L	4.350	485.83 ppb	4.350	0.90%	
QC value within limits for Mo 202.031 Recovery = 97.17%							
Na 589.592 Radial†	32776.9	10933 ug/L	46.8	10933 ppb	46.8	0.43%	
QC value within limits for Na 589.592 Radial Recovery = 109.33%							
Ni 231.604†	19095.2	488.81 ug/L	1.729	488.81 ppb	1.729	0.35%	
QC value within limits for Ni 231.604 Recovery = 97.76%							
P 214.914†	4373.6	2328.6 ug/L	23.40	2328.6 ppb	23.40	1.00%	
QC value within limits for P 214.914 Recovery = 93.14%							
Pb 220.353†	3886.0	482.96 ug/L	4.787	482.96 ppb	4.787	0.99%	
QC value within limits for Pb 220.353 Recovery = 96.59%							
S 181.975 Axial†	761.4	994.21 ug/L	7.376	994.21 ppb	7.376	0.74%	
QC value within limits for S 181.975 Axial Recovery = 99.42%							
Sb 206.836†	1425.4	499.82 ug/L	9.038	499.82 ppb	9.038	1.81%	
QC value within limits for Sb 206.836 Recovery = 99.96%							
Se 196.026†	845.9	512.67 ug/L	6.212	512.67 ppb	6.212	1.21%	
QC value within limits for Se 196.026 Recovery = 102.53%							
Si 251.611†	80709.4	2509.1 ug/L	18.94	2509.1 ppb	18.94	0.75%	
QC value within limits for Si 251.611 Recovery = 100.37%							
Sn 189.927†	2703.6	485.65 ug/L	4.297	485.65 ppb	4.297	0.88%	
QC value within limits for Sn 189.927 Recovery = 97.13%							
Sr 421.552†	67738.6	522.99 ug/L	2.549	522.99 ppb	2.549	0.49%	
QC value within limits for Sr 421.552 Recovery = 104.60%							
Ti 334.940†	306846.9	498.59 ug/L	3.273	498.59 ppb	3.273	0.66%	
QC value within limits for Ti 334.940 Recovery = 99.72%							
Tl 190.801†	1571.2	499.35 ug/L	2.011	499.35 ppb	2.011	0.40%	
QC value within limits for Tl 190.801 Recovery = 99.87%							
U 409.014†	16984.5	480.78 ug/L	6.956	480.78 ppb	6.956	1.45%	
QC value within limits for U 409.014 Recovery = 96.16%							
V 292.402†	66839.3	490.49 ug/L	2.617	490.49 ppb	2.617	0.53%	
QC value within limits for V 292.402 Recovery = 98.10%							
Zn 213.857†	50806.9	491.26 ug/L	2.505	491.26 ppb	2.505	0.51%	
QC value within limits for Zn 213.857 Recovery = 98.25%							
Sio2†	79606.0	5294.4 ug/L	41.33	5294.4 ppb	41.33	0.78%	
QC value within limits for Sio2 Recovery = 99.01%							

All analyte(s) passed QC.

Sequence No.: 49

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 2/16/2010 22:14:34

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	3999.0	3999.0	94.1 %		22:16:46
1	Y RADIAL	4234.9	4234.9	96.20 %		22:16:26
1	Al 396.153Radial†	-104.6	47.9	47.844 ug/L	47.844 ppb	22:16:26
1	Ca 317.933Radial†	18.1	0.9	1.6951 ug/L	1.6951 ppb	22:16:46
1	Fe 238.204 Radial†	12.5	3.2	34.027 ug/L	34.027 ppb	22:16:46
1	K 766.490 Radial†	3086.0	108.9	21.998 ug/L	21.998 ppb	22:16:26
1	Mg 279.077 IEC†	-0.3	-3.1	-119.03 ug/L	-119.03 ppb	22:16:46
1	Na 589.592 Radial†	28.6	-176.7	-58.924 ug/L	-58.924 ppb	22:16:26
1	Sr 421.552†	95.2	11.4	0.0878 ug/L	0.0878 ppb	22:16:26
1	Sc 361.383	818463.0	818463.0	96.289 %		22:17:43
1	Y 371.029	664260.0	664260.0	94.526 %		22:17:43
1	Ag 328.068†	327.6	112.6	0.5502 ug/L	0.5502 ppb	22:17:43
1	As 188.979†	-33.3	-6.3	-2.6331 ug/L	-2.6331 ppb	22:18:03
1	B 249.677†	-360.2	107.8	2.5312 ug/L	2.5312 ppb	22:18:03
1	Ba 233.527†	2.5	-16.3	-0.1313 ug/L	-0.1313 ppb	22:18:03
1	Be 313.107†	-4095.7	85.6	0.0321 ug/L	0.0321 ppb	22:17:43
1	Cd 226.502†	-210.4	-23.0	-0.2723 ug/L	-0.2723 ppb	22:18:03
1	Co 228.616†	-71.6	4.5	0.0959 ug/L	0.0959 ppb	22:18:03
1	Cr 267.716†	51.4	-96.3	-1.1202 ug/L	-1.1202 ppb	22:18:03
1	Cu 324.752†	8177.9	399.0	1.2226 ug/L	1.2226 ppb	22:17:43
1	Mn 257.610†	737.7	196.4	0.2347 ug/L	0.2347 ppb	22:18:03
1	Mo 202.031†	29.7	20.4	1.5160 ug/L	1.5160 ppb	22:18:03
1	Ni 231.604†	107.6	-1.7	-0.0446 ug/L	-0.0446 ppb	22:18:03
1	P 214.914†	235.3	2.4	1.0896 ug/L	1.0896 ppb	22:18:03
1	Pb 220.353†	-48.7	23.0	2.8556 ug/L	2.8556 ppb	22:18:03
1	S 181.975 Axial†	57.8	17.1	22.373 ug/L	22.373 ppb	22:18:03
1	Sb 206.836†	45.4	11.5	3.9275 ug/L	3.9275 ppb	22:18:03
1	Se 196.026†	-22.9	-0.4	-0.1238 ug/L	-0.1238 ppb	22:18:03
1	Si 251.611†	688.2	102.4	3.1723 ug/L	3.1723 ppb	22:18:03
1	Sn 189.927†	16.5	4.6	0.8195 ug/L	0.8195 ppb	22:18:03
1	Ti 334.940†	-1263.5	180.7	0.3033 ug/L	0.3033 ppb	22:17:43
1	Tl 190.801†	-42.5	-5.0	-1.5840 ug/L	-1.5840 ppb	22:18:03
1	U 409.014†	-3326.1	60.8	1.7265 ug/L	1.7265 ppb	22:17:43
1	V 292.402†	-1631.4	-17.0	-0.1053 ug/L	-0.1053 ppb	22:17:43
1	Zn 213.857†	697.7	36.8	0.3527 ug/L	0.3527 ppb	22:18:03
1	SiO2†	657.9	63.7	4.2058 ug/L	4.2058 ppb	22:18:59
2	Sc Radial	4045.1	4045.1	95.2 %		22:17:11
2	Y RADIAL	4195.1	4195.1	95.29 %		22:16:51
2	Al 396.153Radial†	-118.5	34.5	34.493 ug/L	34.493 ppb	22:16:51
2	Ca 317.933Radial†	13.7	-3.9	-7.2610 ug/L	-7.2610 ppb	22:17:11
2	Fe 238.204 Radial†	9.0	-0.6	-6.9044 ug/L	-6.9044 ppb	22:17:11
2	K 766.490 Radial†	3123.4	110.7	22.366 ug/L	22.366 ppb	22:16:51
2	Mg 279.077 IEC†	5.3	2.9	110.50 ug/L	110.50 ppb	22:17:11
2	Na 589.592 Radial†	47.3	-157.4	-52.492 ug/L	-52.492 ppb	22:16:51
2	Sr 421.552†	33.7	-54.4	-0.4198 ug/L	-0.4198 ppb	22:16:51
2	Sc 361.383	824608.2	824608.2	97.012 %		22:18:08
2	Y 371.029	668157.7	668157.7	95.081 %		22:18:08
2	Ag 328.068†	145.8	-77.4	-0.3764 ug/L	-0.3764 ppb	22:18:08
2	As 188.979†	-31.3	-3.9	-1.6480 ug/L	-1.6480 ppb	22:18:28
2	B 249.677†	-365.0	105.6	2.4859 ug/L	2.4859 ppb	22:18:28
2	Ba 233.527†	38.6	21.0	0.1695 ug/L	0.1695 ppb	22:18:28
2	Be 313.107†	-4233.3	-24.6	-0.0085 ug/L	-0.0085 ppb	22:18:08
2	Cd 226.502†	-206.4	-17.2	-0.2009 ug/L	-0.2009 ppb	22:18:28
2	Co 228.616†	-75.3	1.3	0.0273 ug/L	0.0273 ppb	22:18:28
2	Cr 267.716†	65.2	-82.5	-0.9614 ug/L	-0.9614 ppb	22:18:28
2	Cu 324.752†	8212.1	371.0	1.1347 ug/L	1.1347 ppb	22:18:08
2	Mn 257.610†	682.2	133.5	0.1488 ug/L	0.1488 ppb	22:18:28
2	Mo 202.031†	12.0	1.9	0.1406 ug/L	0.1406 ppb	22:18:28
2	Ni 231.604†	94.1	-16.5	-0.4226 ug/L	-0.4226 ppb	22:18:28

2	P 214.914†	241.5	6.9	3.6271 ug/L	3.6271 ppb	22:18:28
2	Pb 220.353†	-73.9	-2.6	-0.3176 ug/L	-0.3176 ppb	22:18:28
2	S 181.975 Axial†	53.1	11.8	15.434 ug/L	15.434 ppb	22:18:28
2	Sb 206.836†	47.7	13.5	4.5779 ug/L	4.5779 ppb	22:18:28
2	Se 196.026†	-20.8	1.9	1.0644 ug/L	1.0644 ppb	22:18:28
2	Si 251.611†	651.0	58.7	1.8274 ug/L	1.8274 ppb	22:18:28
2	Sn 189.927†	15.0	2.8	0.5012 ug/L	0.5012 ppb	22:18:28
2	Ti 334.940†	-1314.2	138.2	0.2144 ug/L	0.2144 ppb	22:18:08
2	Tl 190.801†	-35.4	2.6	0.8305 ug/L	0.8305 ppb	22:18:28
2	U 409.014†	-3360.4	51.2	1.4576 ug/L	1.4576 ppb	22:18:08
2	V 292.402†	-1673.5	-47.8	-0.3382 ug/L	-0.3382 ppb	22:18:08
2	Zn 213.857†	676.6	9.7	0.0965 ug/L	0.0965 ppb	22:18:28
2	SiO2†	602.9	1.9	0.1257 ug/L	0.1257 ppb	22:19:04
3	Sc Radial	4013.9	4013.9	94.4 %		22:17:36
3	Y RADIAL	4275.9	4275.9	97.13 %		22:17:16
3	Al 396.153Radial†	-120.8	31.1	31.097 ug/L	31.097 ppb	22:17:16
3	Ca 317.933Radial†	18.6	1.4	2.6490 ug/L	2.6490 ppb	22:17:36
3	Fe 238.204 Radial†	10.7	1.3	13.695 ug/L	13.695 ppb	22:17:36
3	K 766.490 Radial†	3031.0	38.4	7.7754 ug/L	7.7754 ppb	22:17:16
3	Mg 279.077 IEC†	1.4	-1.2	-48.020 ug/L	-48.020 ppb	22:17:36
3	Na 589.592 Radial†	81.9	-120.3	-40.139 ug/L	-40.139 ppb	22:17:16
3	Sr 421.552†	69.5	-16.2	-0.1252 ug/L	-0.1252 ppb	22:17:16
3	Sc 361.383	828879.5	828879.5	97.514 %		22:18:34
3	Y 371.029	672730.1	672730.1	95.731 %		22:18:34
3	Ag 328.068†	289.9	69.6	0.3388 ug/L	0.3388 ppb	22:18:34
3	As 188.979†	-35.2	-7.8	-3.2609 ug/L	-3.2609 ppb	22:18:54
3	B 249.677†	-395.3	76.6	1.7979 ug/L	1.7979 ppb	22:18:54
3	Ba 233.527†	-12.9	-32.0	-0.2602 ug/L	-0.2602 ppb	22:18:54
3	Be 313.107†	-4152.2	81.1	0.0300 ug/L	0.0300 ppb	22:18:34
3	Cd 226.502†	-194.2	-3.7	-0.0445 ug/L	-0.0445 ppb	22:18:54
3	Co 228.616†	-61.6	15.6	0.3273 ug/L	0.3273 ppb	22:18:54
3	Cr 267.716†	81.9	-65.7	-0.7642 ug/L	-0.7642 ppb	22:18:54
3	Cu 324.752†	8219.7	335.2	1.0276 ug/L	1.0276 ppb	22:18:34
3	Mn 257.610†	689.7	137.5	0.1619 ug/L	0.1619 ppb	22:18:54
3	Mo 202.031†	16.8	6.8	0.5060 ug/L	0.5060 ppb	22:18:54
3	Ni 231.604†	115.9	5.3	0.1354 ug/L	0.1354 ppb	22:18:54
3	P 214.914†	230.2	-6.0	-3.5129 ug/L	-3.5129 ppb	22:18:54
3	Pb 220.353†	-85.5	-14.1	-1.7383 ug/L	-1.7383 ppb	22:18:54
3	S 181.975 Axial†	61.1	19.7	25.800 ug/L	25.800 ppb	22:18:54
3	Sb 206.836†	39.2	4.5	1.5367 ug/L	1.5367 ppb	22:18:54
3	Se 196.026†	-22.7	0.1	0.0812 ug/L	0.0812 ppb	22:18:54
3	Si 251.611†	664.5	69.1	2.1475 ug/L	2.1475 ppb	22:18:54
3	Sn 189.927†	13.2	1.0	0.1752 ug/L	0.1752 ppb	22:18:54
3	Ti 334.940†	-1389.1	68.4	0.1162 ug/L	0.1162 ppb	22:18:34
3	Tl 190.801†	-39.6	-1.5	-0.4881 ug/L	-0.4881 ppb	22:18:54
3	U 409.014†	-3468.8	-42.0	-1.1932 ug/L	-1.1932 ppb	22:18:34
3	V 292.402†	-1672.7	-38.0	-0.2732 ug/L	-0.2732 ppb	22:18:34
3	Zn 213.857†	700.2	30.3	0.2912 ug/L	0.2912 ppb	22:18:54
3	SiO2†	658.1	55.3	3.6732 ug/L	3.6732 ppb	22:19:09

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	823983.6	96.938 %		0.6160			0.64%
Sc Radial	4019.3	94.6 %		0.55			0.59%
Y 371.029	668382.6	95.113 %		0.6033			0.63%
Y RADIAL	4235.3	96.21 %		0.918			0.95%
Ag 328.068†	35.0	0.1709 ug/L		0.48559	0.1709 ppb	0.48559	284.15%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	37.8	37.811 ug/L		8.8527	37.811 ppb	8.8527	23.41%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	-6.0	-2.5140 ug/L		0.81299	-2.5140 ppb	0.81299	32.34%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	96.7	2.2716 ug/L		0.41093	2.2716 ppb	0.41093	18.09%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	-9.1	-0.0740 ug/L		0.22049	-0.0740 ppb	0.22049	297.90%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	47.3	0.0179 ug/L		0.02289	0.0179 ppb	0.02289	128.11%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	-0.5	-0.9723 ug/L		5.46702	-0.9723 ppb	5.46702	562.29%

Mg 279.077 IEC†	5530.0	213580 ug/L	1104.3	213580 ppb	1104.3	0.52%
Mn 257.610†	57222.5	57.324 ug/L	0.1473	57.324 ppb	0.1473	0.26%
Mo 202.031†	664.6	50.225 ug/L	0.5434	50.225 ppb	0.5434	1.08%
Na 589.592 Radial†	5665978.2	1889900 ug/L	31664.3	1889900 ppb	31664.3	1.68%
Ni 231.604†	1950.2	49.923 ug/L	0.5290	49.923 ppb	0.5290	1.06%
P 214.914†	421.7	220.91 ug/L	6.703	220.91 ppb	6.703	3.03%
Pb 220.353†	381.9	48.729 ug/L	1.0166	48.729 ppb	1.0166	2.09%
S 181.975 Axial†	154821.7	202350 ug/L	262.5	202350 ppb	262.5	0.13%
Sb 206.836†	193.2	66.440 ug/L	2.3586	66.440 ppb	2.3586	3.55%
Se 196.026†	88.0	53.349 ug/L	3.2224	53.349 ppb	3.2224	6.04%
Si 251.611†	51955.9	1618.5 ug/L	4.86	1618.5 ppb	4.86	0.30%
Sn 189.927†	17.9	13.373 ug/L	0.8893	13.373 ppb	0.8893	6.65%
Sr 421.552†	178837.6	1380.4 ug/L	8.88	1380.4 ppb	8.88	0.64%
Ti 334.940†	27270.9	35.801 ug/L	0.1514	35.801 ppb	0.1514	0.42%
Tl 190.801†	135.2	43.035 ug/L	3.3217	43.035 ppb	3.3217	7.72%
U 409.014†	1373.1	38.820 ug/L	1.1788	38.820 ppb	1.1788	3.04%
V 292.402†	6167.0	49.413 ug/L	0.6763	49.413 ppb	0.6763	1.37%
Zn 213.857†	5965.5	57.731 ug/L	0.1379	57.731 ppb	0.1379	0.24%
SiO2†	52133.6	3474.6 ug/L	12.76	3474.6 ppb	12.76	0.37%

Sequence No.: 58

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/16/2010 23:16:20

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	4026.5	4026.5	94.7 %		23:18:32
1	Y RADIAL	4210.1	4210.1	95.64 %		23:18:12
1	Al 396.153Radial†	4802.1	5228.8	5206.5 ug/L	5206.5 ppb	23:18:12
1	Ca 317.933Radial†	2668.0	2798.4	5220.0 ug/L	5220.0 ppb	23:18:32
1	Fe 238.204 Radial†	506.2	524.3	5587.5 ug/L	5587.5 ppb	23:18:32
1	K 766.490 Radial†	27422.6	25779.2	5197.1 ug/L	5197.1 ppb	23:18:12
1	Mg 279.077 IEC†	138.7	143.7	5549.7 ug/L	5549.7 ppb	23:18:32
1	Na 589.592 Radial†	31297.4	32834.5	10952 ug/L	10952 ppb	23:18:12
1	Sr 421.552†	65138.0	68678.2	530.25 ug/L	530.25 ppb	23:18:12
1	Sc 361.383	826089.9	826089.9	97.186 %		23:19:29
1	Y 371.029	659245.4	659245.4	93.812 %		23:19:29
1	Ag 328.068†	102050.3	104777.4	506.50 ug/L	506.50 ppb	23:19:34
1	As 188.979†	1127.2	1188.2	504.48 ug/L	504.48 ppb	23:19:54
1	B 249.677†	20754.8	21837.7	511.38 ug/L	511.38 ppb	23:19:34
1	Ba 233.527†	61232.1	62986.2	512.69 ug/L	512.69 ppb	23:19:34
1	Be 313.107†	1346800.1	1390135.0	511.77 ug/L	511.77 ppb	23:19:29
1	Cd 226.502†	41203.0	42591.5	497.92 ug/L	497.92 ppb	23:19:34
1	Co 228.616†	23911.1	24682.3	514.76 ug/L	514.76 ppb	23:19:34
1	Cr 267.716†	41538.0	42591.0	496.12 ug/L	496.12 ppb	23:19:34
1	Cu 324.752†	171354.3	168221.6	515.07 ug/L	515.07 ppb	23:19:34
1	Mn 257.610†	437371.9	449466.0	518.73 ug/L	518.73 ppb	23:19:29
1	Mo 202.031†	6572.5	6752.3	502.23 ug/L	502.23 ppb	23:19:54
1	Ni 231.604†	19199.9	19642.3	502.81 ug/L	502.81 ppb	23:19:34
1	P 214.914†	4651.4	4544.1	2420.6 ug/L	2420.6 ppb	23:19:54
1	Pb 220.353†	3833.9	4018.5	499.43 ug/L	499.43 ppb	23:19:54
1	S 181.975 Axial†	806.5	787.0	1027.5 ug/L	1027.5 ppb	23:19:54
1	Sb 206.836†	1471.2	1478.1	518.25 ug/L	518.25 ppb	23:19:54
1	Se 196.026†	831.1	878.5	532.16 ug/L	532.16 ppb	23:19:54
1	Si 251.611†	80975.4	82707.7	2571.2 ug/L	2571.2 ppb	23:19:34
1	Sn 189.927†	2732.3	2798.8	502.74 ug/L	502.74 ppb	23:19:54
1	Ti 334.940†	305188.6	315518.0	512.67 ug/L	512.67 ppb	23:19:34
1	Tl 190.801†	1545.1	1629.0	517.68 ug/L	517.68 ppb	23:19:54
1	U 409.014†	13345.2	17246.8	488.19 ug/L	488.19 ppb	23:19:34
1	V 292.402†	64883.6	68439.5	502.29 ug/L	502.29 ppb	23:19:34
1	Zn 213.857†	51509.1	52312.7	505.83 ug/L	505.83 ppb	23:19:34
1	SiO2†	81260.7	82994.0	5519.8 ug/L	5519.8 ppb	23:21:02
2	Sc Radial	3990.1	3990.1	93.9 %		23:18:57
2	Y RADIAL	4181.1	4181.1	94.98 %		23:18:37
2	Al 396.153Radial†	4715.4	5182.6	5160.2 ug/L	5160.2 ppb	23:18:37
2	Ca 317.933Radial†	2650.7	2805.6	5233.5 ug/L	5233.5 ppb	23:18:57
2	Fe 238.204 Radial†	498.1	520.5	5547.5 ug/L	5547.5 ppb	23:18:57
2	K 766.490 Radial†	27107.0	25706.8	5182.5 ug/L	5182.5 ppb	23:18:37
2	Mg 279.077 IEC†	132.0	137.9	5326.0 ug/L	5326.0 ppb	23:18:57
2	Na 589.592 Radial†	30722.3	32522.9	10848 ug/L	10848 ppb	23:18:37
2	Sr 421.552†	64346.4	68461.5	528.57 ug/L	528.57 ppb	23:18:37
2	Sc 361.383	827941.4	827941.4	97.404 %		23:20:00
2	Y 371.029	660456.5	660456.5	93.985 %		23:20:00
2	Ag 328.068†	101795.1	104280.6	504.10 ug/L	504.10 ppb	23:20:05
2	As 188.979†	1141.7	1200.4	509.60 ug/L	509.60 ppb	23:20:25
2	B 249.677†	20640.0	21672.0	507.50 ug/L	507.50 ppb	23:20:05
2	Ba 233.527†	61096.2	62705.7	510.41 ug/L	510.41 ppb	23:20:05
2	Be 313.107†	1351704.7	1392071.2	512.48 ug/L	512.48 ppb	23:20:00
2	Cd 226.502†	41014.6	42303.2	494.55 ug/L	494.55 ppb	23:20:05
2	Co 228.616†	23898.6	24614.5	513.35 ug/L	513.35 ppb	23:20:05
2	Cr 267.716†	41511.0	42467.7	494.68 ug/L	494.68 ppb	23:20:05
2	Cu 324.752†	171338.3	167811.0	513.81 ug/L	513.81 ppb	23:20:05
2	Mn 257.610†	438079.7	449186.3	518.41 ug/L	518.41 ppb	23:20:00
2	Mo 202.031†	6598.5	6763.9	503.09 ug/L	503.09 ppb	23:20:25
2	Ni 231.604†	19090.7	19486.0	498.81 ug/L	498.81 ppb	23:20:05

2	P 214.914†	4639.1	4520.8	2407.9 ug/L	2407.9 ppb	23:20:25
2	Pb 220.353†	3832.6	4008.3	498.17 ug/L	498.17 ppb	23:20:25
2	S 181.975 Axial†	806.9	785.5	1025.6 ug/L	1025.6 ppb	23:20:25
2	Sb 206.836†	1463.7	1467.0	514.51 ug/L	514.51 ppb	23:20:25
2	Se 196.026†	821.4	866.6	525.10 ug/L	525.10 ppb	23:20:25
2	Si 251.611†	80835.7	82377.9	2560.9 ug/L	2560.9 ppb	23:20:05
2	Sn 189.927†	2736.2	2796.6	502.34 ug/L	502.34 ppb	23:20:25
2	Ti 334.940†	305012.9	314635.4	511.26 ug/L	511.26 ppb	23:20:05
2	Tl 190.801†	1529.5	1609.4	511.49 ug/L	511.49 ppb	23:20:25
2	U 409.014†	13323.1	17193.4	486.68 ug/L	486.68 ppb	23:20:05
2	V 292.402†	64823.2	68228.2	500.77 ug/L	500.77 ppb	23:20:05
2	Zn 213.857†	51402.5	52084.8	503.64 ug/L	503.64 ppb	23:20:05
2	SiO2†	80195.1	81713.0	5434.4 ug/L	5434.4 ppb	23:21:07
3	Sc Radial	4003.7	4003.7	94.2 %		23:19:22
3	Y RADIAL	4165.1	4165.1	94.61 %		23:19:02
3	Al 396.153Radial†	4737.1	5188.6	5166.4 ug/L	5166.4 ppb	23:19:02
3	Ca 317.933Radial†	2658.1	2803.9	5230.3 ug/L	5230.3 ppb	23:19:22
3	Fe 238.204 Radial†	506.9	528.1	5628.4 ug/L	5628.4 ppb	23:19:22
3	K 766.490 Radial†	27081.7	25582.2	5157.4 ug/L	5157.4 ppb	23:19:02
3	Mg 279.077 IEC†	133.9	139.5	5386.8 ug/L	5386.8 ppb	23:19:22
3	Na 589.592 Radial†	30535.2	32213.5	10745 ug/L	10745 ppb	23:19:02
3	Sr 421.552†	63984.3	67845.0	523.81 ug/L	523.81 ppb	23:19:02
3	Sc 361.383	826567.4	826567.4	97.242 %		23:20:31
3	Y 371.029	660565.5	660565.5	94.000 %		23:20:31
3	Ag 328.068†	102708.1	105393.2	509.49 ug/L	509.49 ppb	23:20:36
3	As 188.979†	1144.9	1205.7	511.91 ug/L	511.91 ppb	23:20:56
3	B 249.677†	21070.6	22150.0	518.72 ug/L	518.72 ppb	23:20:36
3	Ba 233.527†	61699.3	63430.3	516.31 ug/L	516.31 ppb	23:20:36
3	Be 313.107†	1352295.4	1394985.4	513.56 ug/L	513.56 ppb	23:20:31
3	Cd 226.502†	41520.5	42893.5	501.45 ug/L	501.45 ppb	23:20:36
3	Co 228.616†	24062.5	24823.8	517.69 ug/L	517.69 ppb	23:20:36
3	Cr 267.716†	41872.5	42910.3	499.84 ug/L	499.84 ppb	23:20:36
3	Cu 324.752†	173029.8	169842.8	520.03 ug/L	520.03 ppb	23:20:36
3	Mn 257.610†	437537.5	449376.2	518.64 ug/L	518.64 ppb	23:20:31
3	Mo 202.031†	6551.2	6726.5	500.32 ug/L	500.32 ppb	23:20:56
3	Ni 231.604†	19315.9	19750.2	505.57 ug/L	505.57 ppb	23:20:36
3	P 214.914†	4607.1	4495.8	2392.8 ug/L	2392.8 ppb	23:20:56
3	Pb 220.353†	3808.7	3990.2	495.91 ug/L	495.91 ppb	23:20:56
3	S 181.975 Axial†	797.8	777.5	1015.2 ug/L	1015.2 ppb	23:20:56
3	Sb 206.836†	1460.1	1465.9	514.08 ug/L	514.08 ppb	23:20:56
3	Se 196.026†	819.5	866.1	525.05 ug/L	525.05 ppb	23:20:56
3	Si 251.611†	81620.4	83322.9	2590.4 ug/L	2590.4 ppb	23:20:36
3	Sn 189.927†	2734.5	2799.4	502.85 ug/L	502.85 ppb	23:20:56
3	Ti 334.940†	307982.1	318209.3	517.06 ug/L	517.06 ppb	23:20:36
3	Tl 190.801†	1541.1	1624.0	516.11 ug/L	516.11 ppb	23:20:56
3	U 409.014†	13547.0	17446.4	493.84 ug/L	493.84 ppb	23:20:36
3	V 292.402†	65589.3	69126.7	507.24 ug/L	507.24 ppb	23:20:36
3	Zn 213.857†	51947.6	52733.1	509.90 ug/L	509.90 ppb	23:20:36
3	SiO2†	80187.6	81842.2	5443.1 ug/L	5443.1 ppb	23:21:12

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	826866.2	97.277 %	0.1131			0.12%
Sc Radial	4006.8	94.3 %	0.43			0.46%
Y 371.029	660089.1	93.932 %	0.1043			0.11%
Y RADIAL	4185.4	95.08 %	0.518			0.54%
Ag 328.068†	104817.1	506.70 ug/L	2.700	506.70 ppb	2.700	0.53%
QC value within limits for Ag 328.068 Recovery = 101.34%						
Al 396.153Radial†	5200.0	5177.7 ug/L	25.13	5177.7 ppb	25.13	0.49%
QC value within limits for Al 396.153Radial Recovery = 103.55%						
As 188.979†	1198.1	508.66 ug/L	3.804	508.66 ppb	3.804	0.75%
QC value within limits for As 188.979 Recovery = 101.73%						
B 249.677†	21886.6	512.53 ug/L	5.698	512.53 ppb	5.698	1.11%
QC value within limits for B 249.677 Recovery = 102.51%						
Ba 233.527†	63040.7	513.13 ug/L	2.975	513.13 ppb	2.975	0.58%
QC value within limits for Ba 233.527 Recovery = 102.63%						
Be 313.107†	1392397.2	512.60 ug/L	0.902	512.60 ppb	0.902	0.18%
QC value within limits for Be 313.107 Recovery = 102.52%						
Ca 317.933Radial†	2802.6	5227.9 ug/L	7.03	5227.9 ppb	7.03	0.13%

QC value within limits for Ca 317.933Radial Recovery = 104.56%							
Cd	226.502†	42596.1	497.97 ug/L	3.450	497.97 ppb	3.450	0.69%
QC value within limits for Cd 226.502 Recovery = 99.59%							
Co	228.616†	24706.8	515.27 ug/L	2.217	515.27 ppb	2.217	0.43%
QC value within limits for Co 228.616 Recovery = 103.05%							
Cr	267.716†	42656.3	496.88 ug/L	2.661	496.88 ppb	2.661	0.54%
QC value within limits for Cr 267.716 Recovery = 99.38%							
Cu	324.752†	168625.1	516.30 ug/L	3.289	516.30 ppb	3.289	0.64%
QC value within limits for Cu 324.752 Recovery = 103.26%							
Fe	238.204 Radial†	524.3	5587.8 ug/L	40.42	5587.8 ppb	40.42	0.72%
QC value greater than the upper limit for Fe 238.204 Radial Recovery = 111.76%							
K	766.490 Radial†	25689.4	5179.0 ug/L	20.07	5179.0 ppb	20.07	0.39%
QC value within limits for K 766.490 Radial Recovery = 103.58%							
Mg	279.077 IEC†	140.4	5420.8 ug/L	115.66	5420.8 ppb	115.66	2.13%
QC value within limits for Mg 279.077 IEC Recovery = 108.42%							
Mn	257.610†	449342.8	518.59 ug/L	0.163	518.59 ppb	0.163	0.03%
QC value within limits for Mn 257.610 Recovery = 103.72%							
Mo	202.031†	6747.6	501.88 ug/L	1.420	501.88 ppb	1.420	0.28%
QC value within limits for Mo 202.031 Recovery = 100.38%							
Na	589.592 Radial†	32523.6	10849 ug/L	103.6	10849 ppb	103.6	0.95%
QC value within limits for Na 589.592 Radial Recovery = 108.49%							
Ni	231.604†	19626.2	502.40 ug/L	3.400	502.40 ppb	3.400	0.68%
QC value within limits for Ni 231.604 Recovery = 100.48%							
P	214.914†	4520.2	2407.1 ug/L	13.93	2407.1 ppb	13.93	0.58%
QC value within limits for P 214.914 Recovery = 96.28%							
Pb	220.353†	4005.7	497.84 ug/L	1.781	497.84 ppb	1.781	0.36%
QC value within limits for Pb 220.353 Recovery = 99.57%							
S	181.975 Axial†	783.3	1022.8 ug/L	6.65	1022.8 ppb	6.65	0.65%
QC value within limits for S 181.975 Axial Recovery = 102.28%							
Sb	206.836†	1470.3	515.62 ug/L	2.292	515.62 ppb	2.292	0.44%
QC value within limits for Sb 206.836 Recovery = 103.12%							
Se	196.026†	870.4	527.44 ug/L	4.090	527.44 ppb	4.090	0.78%
QC value within limits for Se 196.026 Recovery = 105.49%							
Si	251.611†	82802.8	2574.2 ug/L	14.96	2574.2 ppb	14.96	0.58%
QC value within limits for Si 251.611 Recovery = 102.97%							
Sn	189.927†	2798.3	502.65 ug/L	0.270	502.65 ppb	0.270	0.05%
QC value within limits for Sn 189.927 Recovery = 100.53%							
Sr	421.552†	68328.3	527.54 ug/L	3.338	527.54 ppb	3.338	0.63%
QC value within limits for Sr 421.552 Recovery = 105.51%							
Ti	334.940†	316120.9	513.66 ug/L	3.023	513.66 ppb	3.023	0.59%
QC value within limits for Ti 334.940 Recovery = 102.73%							
Tl	190.801†	1620.8	515.09 ug/L	3.220	515.09 ppb	3.220	0.63%
QC value within limits for Tl 190.801 Recovery = 103.02%							
U	409.014†	17295.5	489.57 ug/L	3.778	489.57 ppb	3.778	0.77%
QC value within limits for U 409.014 Recovery = 97.91%							
V	292.402†	68598.1	503.43 ug/L	3.380	503.43 ppb	3.380	0.67%
QC value within limits for V 292.402 Recovery = 100.69%							
Zn	213.857†	52376.9	506.45 ug/L	3.179	506.45 ppb	3.179	0.63%
QC value within limits for Zn 213.857 Recovery = 101.29%							
SiO2†		82183.1	5465.7 ug/L	47.02	5465.7 ppb	47.02	0.86%
QC value within limits for SiO2 Recovery = 102.21%							
QC Failed. Continue with analysis.							



Sequence No.: 59

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/16/2010 23:23:22

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	4045.8	4045.8	95.2 %		23:25:35
1	Y RADIAL	4226.5	4226.5	96.01 %		23:25:15
1	Al 396.153Radial†	-142.7	9.1	9.0750 ug/L	9.0750 ppb	23:25:15
1	Ca 317.933Radial†	38.1	21.7	40.537 ug/L	40.537 ppb	23:25:35
1	Fe 238.204 Radial†	11.8	2.3	24.586 ug/L	24.586 ppb	23:25:35
1	K 766.490 Radial†	3155.2	143.6	28.996 ug/L	28.996 ppb	23:25:15
1	Mg 279.077 IEC†	4.3	1.8	70.604 ug/L	70.604 ppb	23:25:35
1	Na 589.592 Radial†	25.5	-180.3	-60.142 ug/L	-60.142 ppb	23:25:15
1	Sr 421.552†	100.8	16.1	0.1237 ug/L	0.1237 ppb	23:25:15
1	Sc 361.383	816044.7	816044.7	96.004 %		23:26:32
1	Y 371.029	659933.4	659933.4	93.910 %		23:26:32
1	Ag 328.068†	232.6	14.6	0.0727 ug/L	0.0727 ppb	23:26:32
1	As 188.979†	-30.1	-3.0	-1.2732 ug/L	-1.2732 ppb	23:26:52
1	B 249.677†	-330.3	137.9	3.2400 ug/L	3.2400 ppb	23:26:52
1	Ba 233.527†	-7.6	-26.8	-0.2174 ug/L	-0.2174 ppb	23:26:52
1	Be 313.107†	-4032.9	138.3	0.0511 ug/L	0.0511 ppb	23:26:32
1	Cd 226.502†	-217.8	-31.4	-0.3687 ug/L	-0.3687 ppb	23:26:52
1	Co 228.616†	-68.5	7.5	0.1577 ug/L	0.1577 ppb	23:26:52
1	Cr 267.716†	100.6	-44.9	-0.5242 ug/L	-0.5242 ppb	23:26:52
1	Cu 324.752†	8202.2	449.5	1.3754 ug/L	1.3754 ppb	23:26:32
1	Mn 257.610†	655.8	113.4	0.1303 ug/L	0.1303 ppb	23:26:52
1	Mo 202.031†	21.1	11.6	0.8611 ug/L	0.8611 ppb	23:26:52
1	Ni 231.604†	96.0	-13.6	-0.3475 ug/L	-0.3475 ppb	23:26:52
1	P 214.914†	227.2	-5.3	-3.2314 ug/L	-3.2314 ppb	23:26:52
1	Pb 220.353†	-66.9	3.8	0.4756 ug/L	0.4756 ppb	23:26:52
1	S 181.975 Axial†	55.4	14.8	19.286 ug/L	19.286 ppb	23:26:52
1	Sb 206.836†	47.5	13.8	4.7058 ug/L	4.7058 ppb	23:26:52
1	Se 196.026†	-22.5	-0.1	0.0004 ug/L	0.0004 ppb	23:26:52
1	Si 251.611†	632.4	46.4	1.4364 ug/L	1.4364 ppb	23:26:52
1	Sn 189.927†	16.7	4.8	0.8662 ug/L	0.8662 ppb	23:26:52
1	Ti 334.940†	-1358.5	77.9	0.1247 ug/L	0.1247 ppb	23:26:32
1	Tl 190.801†	-41.5	-4.1	-1.2976 ug/L	-1.2976 ppb	23:26:52
1	U 409.014†	-3241.4	138.8	3.9421 ug/L	3.9421 ppb	23:26:32
1	V 292.402†	-1668.9	-61.0	-0.4246 ug/L	-0.4246 ppb	23:26:32
1	Zn 213.857†	771.4	115.8	1.1267 ug/L	1.1267 ppb	23:26:52
1	SiO2†	723.6	134.2	8.9220 ug/L	8.9220 ppb	23:27:48
2	Sc Radial	4048.6	4048.6	95.2 %		23:26:00
2	Y RADIAL	4218.5	4218.5	95.83 %		23:25:40
2	Al 396.153Radial†	-126.3	26.4	26.338 ug/L	26.338 ppb	23:25:40
2	Ca 317.933Radial†	34.1	17.5	32.687 ug/L	32.687 ppb	23:26:00
2	Fe 238.204 Radial†	15.0	5.7	60.062 ug/L	60.062 ppb	23:26:00
2	K 766.490 Radial†	3094.7	77.8	15.706 ug/L	15.706 ppb	23:25:40
2	Mg 279.077 IEC†	3.6	1.1	42.166 ug/L	42.166 ppb	23:26:00
2	Na 589.592 Radial†	30.9	-174.6	-58.237 ug/L	-58.237 ppb	23:25:40
2	Sr 421.552†	83.5	-2.1	-0.0164 ug/L	-0.0164 ppb	23:25:40
2	Sc 361.383	814948.0	814948.0	95.875 %		23:26:57
2	Y 371.029	659239.3	659239.3	93.811 %		23:26:57
2	Ag 328.068†	307.6	93.1	0.4658 ug/L	0.4658 ppb	23:26:57
2	As 188.979†	-26.3	0.9	0.3888 ug/L	0.3888 ppb	23:27:17
2	B 249.677†	-299.0	170.1	3.9912 ug/L	3.9912 ppb	23:27:17
2	Ba 233.527†	22.9	5.0	0.0425 ug/L	0.0425 ppb	23:27:17
2	Be 313.107†	-4013.0	153.5	0.0566 ug/L	0.0566 ppb	23:26:57
2	Cd 226.502†	-202.5	-15.8	-0.1907 ug/L	-0.1907 ppb	23:27:17
2	Co 228.616†	-74.5	1.1	0.0251 ug/L	0.0251 ppb	23:27:17
2	Cr 267.716†	98.1	-47.4	-0.5510 ug/L	-0.5510 ppb	23:27:17
2	Cu 324.752†	8106.5	361.2	1.1084 ug/L	1.1084 ppb	23:26:57
2	Mn 257.610†	749.1	211.6	0.2482 ug/L	0.2482 ppb	23:27:17
2	Mo 202.031†	23.4	13.9	1.0375 ug/L	1.0375 ppb	23:27:17
2	Ni 231.604†	89.3	-20.4	-0.5224 ug/L	-0.5224 ppb	23:27:17

2	P 214.914†	232.4	0.5	-0.0009 ug/L	-0.0009 ppb	23:27:17
2	Pb 220.353†	-60.4	10.5	1.3080 ug/L	1.3080 ppb	23:27:17
2	S 181.975 Axial†	60.4	20.0	26.183 ug/L	26.183 ppb	23:27:17
2	Sb 206.836†	38.7	4.7	1.6286 ug/L	1.6286 ppb	23:27:17
2	Se 196.026†	-22.0	0.4	0.4285 ug/L	0.4285 ppb	23:27:17
2	Si 251.611†	664.5	80.7	2.5033 ug/L	2.5033 ppb	23:27:17
2	Sn 189.927†	17.8	5.9	1.0697 ug/L	1.0697 ppb	23:27:17
2	Ti 334.940†	-1379.4	54.2	0.0887 ug/L	0.0887 ppb	23:26:57
2	Tl 190.801†	-30.8	6.9	2.1910 ug/L	2.1910 ppb	23:27:17
2	U 409.014†	-3329.5	42.5	1.2006 ug/L	1.2006 ppb	23:26:57
2	V 292.402†	-1615.1	-7.3	-0.0437 ug/L	-0.0437 ppb	23:26:57
2	Zn 213.857†	772.4	117.9	1.1437 ug/L	1.1437 ppb	23:27:17
2	SiO2†	686.5	96.5	6.4033 ug/L	6.4033 ppb	23:27:53
3	Sc Radial	3925.5	3925.5	92.3 %		23:26:25
3	Y RADIAL	4140.8	4140.8	94.06 %		23:26:05
3	Al 396.153Radial†	-134.1	13.8	13.738 ug/L	13.738 ppb	23:26:05
3	Ca 317.933Radial†	27.2	11.2	20.801 ug/L	20.801 ppb	23:26:25
3	Fe 238.204 Radial†	10.7	1.5	15.786 ug/L	15.786 ppb	23:26:25
3	K 766.490 Radial†	3064.5	146.9	29.669 ug/L	29.669 ppb	23:26:05
3	Mg 279.077 IEC†	1.9	-0.6	-23.507 ug/L	-23.507 ppb	23:26:25
3	Na 589.592 Radial†	85.9	-114.1	-38.047 ug/L	-38.047 ppb	23:26:05
3	Sr 421.552†	19.7	-68.5	-0.5287 ug/L	-0.5287 ppb	23:26:05
3	Sc 361.383	825003.4	825003.4	97.058 %		23:27:22
3	Y 371.029	667181.1	667181.1	94.942 %		23:27:22
3	Ag 328.068†	211.9	-9.3	-0.0421 ug/L	-0.0421 ppb	23:27:22
3	As 188.979†	-27.1	0.4	0.1550 ug/L	0.1550 ppb	23:27:42
3	B 249.677†	-303.8	168.9	3.9699 ug/L	3.9699 ppb	23:27:42
3	Ba 233.527†	10.3	-8.2	-0.0673 ug/L	-0.0673 ppb	23:27:42
3	Be 313.107†	-4082.6	132.8	0.0487 ug/L	0.0487 ppb	23:27:22
3	Cd 226.502†	-220.0	-31.2	-0.3661 ug/L	-0.3661 ppb	23:27:42
3	Co 228.616†	-63.0	14.0	0.2939 ug/L	0.2939 ppb	23:27:42
3	Cr 267.716†	113.7	-32.5	-0.3790 ug/L	-0.3790 ppb	23:27:42
3	Cu 324.752†	8177.9	331.7	1.0161 ug/L	1.0161 ppb	23:27:22
3	Mn 257.610†	712.0	163.8	0.1915 ug/L	0.1915 ppb	23:27:42
3	Mo 202.031†	21.6	11.8	0.8768 ug/L	0.8768 ppb	23:27:42
3	Ni 231.604†	99.2	-11.3	-0.2893 ug/L	-0.2893 ppb	23:27:42
3	P 214.914†	219.6	-15.7	-8.9148 ug/L	-8.9148 ppb	23:27:42
3	Pb 220.353†	-74.2	-2.9	-0.3615 ug/L	-0.3615 ppb	23:27:42
3	S 181.975 Axial†	59.5	18.4	24.091 ug/L	24.091 ppb	23:27:42
3	Sb 206.836†	37.6	3.1	1.0611 ug/L	1.0611 ppb	23:27:42
3	Se 196.026†	-18.9	3.9	2.3285 ug/L	2.3285 ppb	23:27:42
3	Si 251.611†	662.2	70.0	2.1699 ug/L	2.1699 ppb	23:27:42
3	Sn 189.927†	11.4	-0.9	-0.1521 ug/L	-0.1521 ppb	23:27:42
3	Ti 334.940†	-1470.0	-21.7	-0.0306 ug/L	-0.0306 ppb	23:27:22
3	Tl 190.801†	-27.3	10.9	3.4545 ug/L	3.4545 ppb	23:27:42
3	U 409.014†	-3394.3	18.0	0.5112 ug/L	0.5112 ppb	23:27:22
3	V 292.402†	-1695.0	-69.0	-0.4893 ug/L	-0.4893 ppb	23:27:22
3	Zn 213.857†	776.4	112.2	1.0932 ug/L	1.0932 ppb	23:27:42
3	SiO2†	749.0	152.2	10.122 ug/L	10.122 ppb	23:27:58

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	818665.4	96.313 %	0.6490			0.67%
Sc Radial	4006.6	94.3 %	1.65			1.75%
Y 371.029	662117.9	94.221 %	0.6259			0.66%
Y RADIAL	4195.3	95.30 %	1.075			1.13%
Ag 328.068†	32.8	0.1655 ug/L	0.26634	0.1655 ppb	0.26634	160.97%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	16.4	16.384 ug/L	8.9302	16.384 ppb	8.9302	54.51%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-0.6	-0.2431 ug/L	0.89968	-0.2431 ppb	0.89968	370.06%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	159.0	3.7337 ug/L	0.42772	3.7337 ppb	0.42772	11.46%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	-10.0	-0.0807 ug/L	0.13051	-0.0807 ppb	0.13051	161.69%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	141.5	0.0521 ug/L	0.00403	0.0521 ppb	0.00403	7.73%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	16.8	31.342 ug/L	9.9364	31.342 ppb	9.9364	31.70%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated									
Cd	226.502†	-26.1	-0.3085 ug/L	0.10206	-0.3085 ppb	0.10206	33.08%		
QC value within limits for Cd 226.502 Recovery = Not calculated									
Co	228.616†	7.5	0.1589 ug/L	0.13439	0.1589 ppb	0.13439	84.57%		
QC value within limits for Co 228.616 Recovery = Not calculated									
Cr	267.716†	-41.6	-0.4847 ug/L	0.09253	-0.4847 ppb	0.09253	19.09%		
QC value within limits for Cr 267.716 Recovery = Not calculated									
Cu	324.752†	380.8	1.1667 ug/L	0.18661	1.1667 ppb	0.18661	16.00%		
QC value within limits for Cu 324.752 Recovery = Not calculated									
Fe	238.204 Radial†	3.1	33.478 ug/L	23.4392	33.478 ppb	23.4392	70.01%		
QC value within limits for Fe 238.204 Radial Recovery = Not calculated									
K	766.490 Radial†	122.8	24.790 ug/L	7.8745	24.790 ppb	7.8745	31.76%		
QC value within limits for K 766.490 Radial Recovery = Not calculated									
Mg	279.077 IEC†	0.8	29.754 ug/L	48.2676	29.754 ppb	48.2676	162.22%		
QC value within limits for Mg 279.077 IEC Recovery = Not calculated									
Mn	257.610†	162.9	0.1900 ug/L	0.05898	0.1900 ppb	0.05898	31.04%		
QC value within limits for Mn 257.610 Recovery = Not calculated									
Mo	202.031†	12.4	0.9251 ug/L	0.09758	0.9251 ppb	0.09758	10.55%		
QC value within limits for Mo 202.031 Recovery = Not calculated									
Na	589.592 Radial†	-156.3	-52.142 ug/L	12.2434	-52.142 ppb	12.2434	23.48%		
QC value within limits for Na 589.592 Radial Recovery = Not calculated									
Ni	231.604†	-15.1	-0.3864 ug/L	0.12128	-0.3864 ppb	0.12128	31.39%		
QC value within limits for Ni 231.604 Recovery = Not calculated									
P	214.914†	-6.8	-4.0490 ug/L	4.51284	-4.0490 ppb	4.51284	111.45%		
QC value within limits for P 214.914 Recovery = Not calculated									
Pb	220.353†	3.8	0.4740 ug/L	0.83475	0.4740 ppb	0.83475	176.11%		
QC value within limits for Pb 220.353 Recovery = Not calculated									
S	181.975 Axial†	17.7	23.186 ug/L	3.5360	23.186 ppb	3.5360	15.25%		
QC value within limits for S 181.975 Axial Recovery = Not calculated									
Sb	206.836†	7.2	2.4652 ug/L	1.96110	2.4652 ppb	1.96110	79.55%		
QC value within limits for Sb 206.836 Recovery = Not calculated									
Se	196.026†	1.4	0.9192 ug/L	1.23918	0.9192 ppb	1.23918	134.82%		
QC value within limits for Se 196.026 Recovery = Not calculated									
Si	251.611†	65.7	2.0365 ug/L	0.54578	2.0365 ppb	0.54578	26.80%		
QC value within limits for Si 251.611 Recovery = Not calculated									
Sn	189.927†	3.3	0.5946 ug/L	0.65462	0.5946 ppb	0.65462	110.10%		
QC value within limits for Sn 189.927 Recovery = Not calculated									
Sr	421.552†	-18.2	-0.1405 ug/L	0.34342	-0.1405 ppb	0.34342	244.47%		
QC value within limits for Sr 421.552 Recovery = Not calculated									
Ti	334.940†	36.8	0.0609 ug/L	0.08130	0.0609 ppb	0.08130	133.43%		
QC value within limits for Ti 334.940 Recovery = Not calculated									
Tl	190.801†	4.6	1.4493 ug/L	2.46136	1.4493 ppb	2.46136	169.83%		
QC value within limits for Tl 190.801 Recovery = Not calculated									
U	409.014†	66.4	1.8846 ug/L	1.81487	1.8846 ppb	1.81487	96.30%		
QC value within limits for U 409.014 Recovery = Not calculated									
V	292.402†	-45.8	-0.3192 ug/L	0.24081	-0.3192 ppb	0.24081	75.44%		
QC value within limits for V 292.402 Recovery = Not calculated									
Zn	213.857†	115.3	1.1212 ug/L	0.02568	1.1212 ppb	0.02568	2.29%		
QC value within limits for Zn 213.857 Recovery = Not calculated									
SiO2†	127.6	8.4825 ug/L	1.89806	8.4825 ppb	1.89806	22.38%			
QC value within limits for SiO2 Recovery = Not calculated									
All analyte(s) passed QC.									

Sequence No.: 67

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/17/2010 00:18:12

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	3995.1	3995.1	94.0 %		00:20:24
1	Y RADIAL	4215.5	4215.5	95.76 %		00:20:04
1	Al 396.153Radial†	4811.3	5278.3	5255.9 ug/L	5255.9 ppb	00:20:04
1	Ca 317.933Radial†	2668.6	2821.1	5262.4 ug/L	5262.4 ppb	00:20:24
1	Fe 238.204 Radial†	493.2	514.8	5485.8 ug/L	5485.8 ppb	00:20:24
1	K 766.490 Radial†	27364.2	25944.5	5230.7 ug/L	5230.7 ppb	00:20:04
1	Mg 279.077 IEC†	132.4	138.2	5337.2 ug/L	5337.2 ppb	00:20:24
1	Na 589.592 Radial†	29200.7	30863.2	10295 ug/L	10295 ppb	00:20:04
1	Sr 421.552†	63330.5	67295.2	519.57 ug/L	519.57 ppb	00:20:04
1	Sc 361.383	827950.3	827950.3	97.405 %		00:21:23
1	Y 371.029	659553.9	659553.9	93.856 %		00:21:23
1	Ag 328.068†	101594.8	104073.8	503.10 ug/L	503.10 ppb	00:21:23
1	As 188.979†	1143.5	1202.3	510.49 ug/L	510.49 ppb	00:21:43
1	B 249.677†	20826.4	21863.2	512.02 ug/L	512.02 ppb	00:21:23
1	Ba 233.527†	61430.8	63048.6	513.19 ug/L	513.19 ppb	00:21:23
1	Be 313.107†	1358623.9	1399159.9	515.11 ug/L	515.11 ppb	00:21:23
1	Cd 226.502†	40364.6	41635.5	486.74 ug/L	486.74 ppb	00:21:43
1	Co 228.616†	23628.3	24336.7	507.54 ug/L	507.54 ppb	00:21:43
1	Cr 267.716†	41595.7	42554.2	495.70 ug/L	495.70 ppb	00:21:23
1	Cu 324.752†	172463.1	168963.8	517.35 ug/L	517.35 ppb	00:21:23
1	Mn 257.610†	440111.7	451267.6	520.81 ug/L	520.81 ppb	00:21:23
1	Mo 202.031†	6629.2	6795.3	505.42 ug/L	505.42 ppb	00:21:43
1	Ni 231.604†	19035.4	19429.0	497.35 ug/L	497.35 ppb	00:21:43
1	P 214.914†	4677.2	4559.8	2428.9 ug/L	2428.9 ppb	00:21:43
1	Pb 220.353†	3880.9	4057.8	504.34 ug/L	504.34 ppb	00:21:43
1	S 181.975 Axial†	805.0	783.5	1023.0 ug/L	1023.0 ppb	00:21:43
1	Sb 206.836†	1455.4	1458.5	511.65 ug/L	511.65 ppb	00:21:43
1	Se 196.026†	826.0	871.3	527.64 ug/L	527.64 ppb	00:21:43
1	Si 251.611†	81301.7	82855.5	2575.8 ug/L	2575.8 ppb	00:21:23
1	Sn 189.927†	2745.4	2806.0	504.03 ug/L	504.03 ppb	00:21:43
1	Ti 334.940†	312529.1	322348.5	523.81 ug/L	523.81 ppb	00:21:23
1	Tl 190.801†	1554.5	1635.0	519.71 ug/L	519.71 ppb	00:21:43
1	U 409.014†	12654.1	16506.4	467.17 ug/L	467.17 ppb	00:21:23
1	V 292.402†	64834.7	68239.3	500.85 ug/L	500.85 ppb	00:21:23
1	Zn 213.857†	51642.1	52330.2	506.04 ug/L	506.04 ppb	00:21:23
1	SiO2†	80429.1	81952.4	5450.3 ug/L	5450.3 ppb	00:22:43
2	Sc Radial	3993.4	3993.4	93.9 %		00:20:49
2	Y RADIAL	4145.7	4145.7	94.17 %		00:20:29
2	Al 396.153Radial†	4753.5	5219.1	5196.5 ug/L	5196.5 ppb	00:20:29
2	Ca 317.933Radial†	2660.0	2813.3	5247.8 ug/L	5247.8 ppb	00:20:49
2	Fe 238.204 Radial†	495.1	517.0	5509.2 ug/L	5509.2 ppb	00:20:49
2	K 766.490 Radial†	27113.8	25690.7	5179.5 ug/L	5179.5 ppb	00:20:29
2	Mg 279.077 IEC†	132.1	137.9	5324.5 ug/L	5324.5 ppb	00:20:49
2	Na 589.592 Radial†	28828.8	30480.9	10167 ug/L	10167 ppb	00:20:29
2	Sr 421.552†	62538.2	66481.3	513.28 ug/L	513.28 ppb	00:20:29
2	Sc 361.383	823663.2	823663.2	96.901 %		00:21:51
2	Y 371.029	656546.3	656546.3	93.428 %		00:21:51
2	Ag 328.068†	101053.8	104058.4	503.04 ug/L	503.04 ppb	00:21:51
2	As 188.979†	1147.2	1212.2	514.64 ug/L	514.64 ppb	00:22:11
2	B 249.677†	20692.0	21835.8	511.36 ug/L	511.36 ppb	00:21:51
2	Ba 233.527†	61016.6	62949.5	512.39 ug/L	512.39 ppb	00:21:51
2	Be 313.107†	1349502.7	1397006.8	514.32 ug/L	514.32 ppb	00:21:51
2	Cd 226.502†	40430.0	41918.7	490.05 ug/L	490.05 ppb	00:22:11
2	Co 228.616†	23648.9	24484.2	510.62 ug/L	510.62 ppb	00:22:11
2	Cr 267.716†	41369.1	42542.6	495.56 ug/L	495.56 ppb	00:21:51
2	Cu 324.752†	171171.8	168552.8	516.09 ug/L	516.09 ppb	00:21:51
2	Mn 257.610†	436813.5	450215.6	519.60 ug/L	519.60 ppb	00:21:51
2	Mo 202.031†	6628.6	6830.1	508.01 ug/L	508.01 ppb	00:22:11
2	Ni 231.604†	19043.3	19538.9	500.17 ug/L	500.17 ppb	00:22:11

2	P 214.914†	4670.1	4577.5	2439.0 ug/L	2439.0 ppb	00:22:11
2	Pb 220.353†	3895.8	4094.0	508.80 ug/L	508.80 ppb	00:22:11
2	S 181.975 Axial†	804.7	787.6	1028.3 ug/L	1028.3 ppb	00:22:11
2	Sb 206.836†	1460.2	1471.2	516.07 ug/L	516.07 ppb	00:22:11
2	Se 196.026†	823.7	873.3	528.91 ug/L	528.91 ppb	00:22:11
2	Si 251.611†	80718.3	82687.9	2570.5 ug/L	2570.5 ppb	00:21:51
2	Sn 189.927†	2745.0	2820.2	506.58 ug/L	506.58 ppb	00:22:11
2	Ti 334.940†	310631.4	322060.1	523.34 ug/L	523.34 ppb	00:21:51
2	Tl 190.801†	1541.9	1630.4	518.23 ug/L	518.23 ppb	00:22:11
2	U 409.014†	12601.6	16519.9	467.55 ug/L	467.55 ppb	00:21:51
2	V 292.402†	64525.3	68266.5	501.08 ug/L	501.08 ppb	00:21:51
2	Zn 213.857†	51308.4	52261.8	505.36 ug/L	505.36 ppb	00:21:51
2	SiO2†	80822.5	82788.2	5505.9 ug/L	5505.9 ppb	00:22:49
3	Sc Radial	3987.1	3987.1	93.8 %		00:21:15
3	Y RADIAL	4106.6	4106.6	93.28 %		00:20:54
3	Al 396.153Radial†	4732.0	5204.1	5181.6 ug/L	5181.6 ppb	00:20:54
3	Ca 317.933Radial†	2652.5	2809.7	5241.2 ug/L	5241.2 ppb	00:21:15
3	Fe 238.204 Radial†	498.0	520.8	5550.6 ug/L	5550.6 ppb	00:21:15
3	K 766.490 Radial†	26990.2	25604.4	5162.1 ug/L	5162.1 ppb	00:20:54
3	Mg 279.077 IEC†	134.1	140.2	5415.5 ug/L	5415.5 ppb	00:21:15
3	Na 589.592 Radial†	28953.3	30661.9	10228 ug/L	10228 ppb	00:20:54
3	Sr 421.552†	62429.7	66470.5	513.20 ug/L	513.20 ppb	00:20:54
3	Sc 361.383	824066.7	824066.7	96.948 %		00:22:18
3	Y 371.029	656417.9	656417.9	93.410 %		00:22:18
3	Ag 328.068†	101173.6	104131.0	503.40 ug/L	503.40 ppb	00:22:18
3	As 188.979†	1141.7	1206.0	512.06 ug/L	512.06 ppb	00:22:38
3	B 249.677†	20848.9	21987.2	514.92 ug/L	514.92 ppb	00:22:18
3	Ba 233.527†	61176.3	63083.4	513.47 ug/L	513.47 ppb	00:22:18
3	Be 313.107†	1353297.1	1400238.8	515.51 ug/L	515.51 ppb	00:22:18
3	Cd 226.502†	40371.9	41838.3	489.11 ug/L	489.11 ppb	00:22:38
3	Co 228.616†	23665.2	24489.0	510.72 ug/L	510.72 ppb	00:22:38
3	Cr 267.716†	41441.6	42596.6	496.19 ug/L	496.19 ppb	00:22:18
3	Cu 324.752†	171498.3	168803.1	516.86 ug/L	516.86 ppb	00:22:18
3	Mn 257.610†	437726.1	450936.3	520.43 ug/L	520.43 ppb	00:22:18
3	Mo 202.031†	6615.1	6812.9	506.73 ug/L	506.73 ppb	00:22:38
3	Ni 231.604†	19034.3	19520.0	499.68 ug/L	499.68 ppb	00:22:38
3	P 214.914†	4649.6	4554.0	2425.8 ug/L	2425.8 ppb	00:22:38
3	Pb 220.353†	3874.3	4069.8	505.80 ug/L	505.80 ppb	00:22:38
3	S 181.975 Axial†	810.2	792.8	1035.1 ug/L	1035.1 ppb	00:22:38
3	Sb 206.836†	1462.6	1473.0	516.63 ug/L	516.63 ppb	00:22:38
3	Se 196.026†	829.7	879.1	532.42 ug/L	532.42 ppb	00:22:38
3	Si 251.611†	80902.5	82837.1	2575.2 ug/L	2575.2 ppb	00:22:18
3	Sn 189.927†	2746.9	2820.8	506.68 ug/L	506.68 ppb	00:22:38
3	Ti 334.940†	311132.5	322420.0	523.92 ug/L	523.92 ppb	00:22:18
3	Tl 190.801†	1565.3	1653.7	525.61 ug/L	525.61 ppb	00:22:38
3	U 409.014†	12418.0	16324.1	461.98 ug/L	461.98 ppb	00:22:18
3	V 292.402†	64541.9	68251.0	500.93 ug/L	500.93 ppb	00:22:18
3	Zn 213.857†	51429.5	52360.8	506.32 ug/L	506.32 ppb	00:22:18
3	SiO2†	79567.4	81452.7	5416.9 ug/L	5416.9 ppb	00:22:54

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Std.Dev.	RSD
Sc 361.383	825226.7	97.084 %		0.2785			0.29%
Sc Radial	3991.9	93.9 %		0.10			0.11%
Y 371.029	657506.1	93.565 %		0.2525			0.27%
Y RADIAL	4155.9	94.40 %		1.253			1.33%
Ag 328.068†	104087.7	503.18 ug/L		0.195	503.18 ppb	0.195	0.04%
QC value within limits for Ag 328.068 Recovery = 100.64%							
Al 396.153Radial†	5233.9	5211.3 ug/L		39.32	5211.3 ppb	39.32	0.75%
QC value within limits for Al 396.153Radial Recovery = 104.23%							
As 188.979†	1206.8	512.40 ug/L		2.098	512.40 ppb	2.098	0.41%
QC value within limits for As 188.979 Recovery = 102.48%							
B 249.677†	21895.4	512.77 ug/L		1.892	512.77 ppb	1.892	0.37%
QC value within limits for B 249.677 Recovery = 102.55%							
Ba 233.527†	63027.1	513.02 ug/L		0.564	513.02 ppb	0.564	0.11%
QC value within limits for Ba 233.527 Recovery = 102.60%							
Be 313.107†	1398801.9	514.98 ug/L		0.605	514.98 ppb	0.605	0.12%
QC value within limits for Be 313.107 Recovery = 103.00%							
Ca 317.933Radial†	2814.7	5250.5 ug/L		10.84	5250.5 ppb	10.84	0.21%

QC value within limits for Ca 317.933 Radial Recovery = 105.01%

Cd 226.502†	41797.5	488.63 ug/L	1.706	488.63 ppb	1.706	0.35%
QC value within limits for Cd 226.502 Recovery = 97.73%						
Co 228.616†	24436.6	509.62 ug/L	1.808	509.62 ppb	1.808	0.35%
QC value within limits for Co 228.616 Recovery = 101.92%						
Cr 267.716†	42564.5	495.82 ug/L	0.332	495.82 ppb	0.332	0.07%
QC value within limits for Cr 267.716 Recovery = 99.16%						
Cu 324.752†	168773.2	516.77 ug/L	0.634	516.77 ppb	0.634	0.12%
QC value within limits for Cu 324.752 Recovery = 103.35%						
Fe 238.204 Radial†	517.5	5515.2 ug/L	32.80	5515.2 ppb	32.80	0.59%
QC value greater than the upper limit for Fe 238.204 Radial Recovery = 110.30%						
K 766.490 Radial†	25746.5	5190.8 ug/L	35.67	5190.8 ppb	35.67	0.69%
QC value within limits for K 766.490 Radial Recovery = 103.82%						
Mg 279.077 IEC†	138.8	5359.1 ug/L	49.25	5359.1 ppb	49.25	0.92%
QC value within limits for Mg 279.077 IEC Recovery = 107.18%						
Mn 257.610†	450806.5	520.28 ug/L	0.619	520.28 ppb	0.619	0.12%
QC value within limits for Mn 257.610 Recovery = 104.06%						
Mo 202.031†	6812.8	506.72 ug/L	1.294	506.72 ppb	1.294	0.26%
QC value within limits for Mo 202.031 Recovery = 101.34%						
Na 589.592 Radial†	30668.7	10230 ug/L	63.8	10230 ppb	63.8	0.62%
QC value within limits for Na 589.592 Radial Recovery = 102.30%						
Ni 231.604†	19496.0	499.07 ug/L	1.504	499.07 ppb	1.504	0.30%
QC value within limits for Ni 231.604 Recovery = 99.81%						
P 214.914†	4563.8	2431.3 ug/L	6.91	2431.3 ppb	6.91	0.28%
QC value within limits for P 214.914 Recovery = 97.25%						
Pb 220.353†	4073.9	506.31 ug/L	2.278	506.31 ppb	2.278	0.45%
QC value within limits for Pb 220.353 Recovery = 101.26%						
S 181.975 Axial†	787.9	1028.8 ug/L	6.07	1028.8 ppb	6.07	0.59%
QC value within limits for S 181.975 Axial Recovery = 102.88%						
Sb 206.836†	1467.5	514.78 ug/L	2.725	514.78 ppb	2.725	0.53%
QC value within limits for Sb 206.836 Recovery = 102.96%						
Se 196.026†	874.6	529.65 ug/L	2.479	529.65 ppb	2.479	0.47%
QC value within limits for Se 196.026 Recovery = 105.93%						
Si 251.611†	82793.5	2573.8 ug/L	2.88	2573.8 ppb	2.88	0.11%
QC value within limits for Si 251.611 Recovery = 102.95%						
Sn 189.927†	2815.7	505.77 ug/L	1.502	505.77 ppb	1.502	0.30%
QC value within limits for Sn 189.927 Recovery = 101.15%						
Sr 421.552†	66749.0	515.35 ug/L	3.653	515.35 ppb	3.653	0.71%
QC value within limits for Sr 421.552 Recovery = 103.07%						
Ti 334.940†	322276.2	523.69 ug/L	0.308	523.69 ppb	0.308	0.06%
QC value within limits for Ti 334.940 Recovery = 104.74%						
Tl 190.801†	1639.7	521.18 ug/L	3.904	521.18 ppb	3.904	0.75%
QC value within limits for Tl 190.801 Recovery = 104.24%						
U 409.014†	16450.1	465.56 ug/L	3.111	465.56 ppb	3.111	0.67%
QC value within limits for U 409.014 Recovery = 93.11%						
V 292.402†	68252.3	500.95 ug/L	0.117	500.95 ppb	0.117	0.02%
QC value within limits for V 292.402 Recovery = 100.19%						
Zn 213.857†	52317.6	505.91 ug/L	0.496	505.91 ppb	0.496	0.10%
QC value within limits for Zn 213.857 Recovery = 101.18%						
SiO2†	82064.4	5457.7 ug/L	44.96	5457.7 ppb	44.96	0.82%
QC value within limits for SiO2 Recovery = 102.06%						

QC Failed. Continue with analysis.

Sequence No.: 68

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/17/2010 00:25:03

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	3986.3	3986.3	93.8 %		00:27:16
1	Y RADIAL	4277.4	4277.4	97.16 %		00:26:56
1	Al 396.153Radial†	-129.9	20.5	20.477 ug/L	20.477 ppb	00:26:56
1	Ca 317.933Radial†	33.4	17.3	32.187 ug/L	32.187 ppb	00:27:16
1	Fe 238.204 Radial†	9.6	0.2	2.1581 ug/L	2.1581 ppb	00:27:16
1	K 766.490 Radial†	3074.5	107.0	21.602 ug/L	21.602 ppb	00:26:56
1	Mg 279.077 IEC†	4.7	2.3	90.317 ug/L	90.317 ppb	00:27:16
1	Na 589.592 Radial†	12.4	-193.8	-64.653 ug/L	-64.653 ppb	00:26:56
1	Sr 421.552†	71.3	-13.8	-0.1066 ug/L	-0.1066 ppb	00:26:56
1	Sc 361.383	773428.2	773428.2	90.991 %		00:28:13
1	Y 371.029	624409.3	624409.3	88.855 %		00:28:13
1	Ag 328.068†	277.5	77.3	0.3776 ug/L	0.3776 ppb	00:28:13
1	As 188.979†	-29.3	-3.9	-1.6343 ug/L	-1.6343 ppb	00:28:33
1	B 249.677†	-174.1	290.6	6.8357 ug/L	6.8357 ppb	00:28:33
1	Ba 233.527†	10.3	-7.5	-0.0620 ug/L	-0.0620 ppb	00:28:33
1	Be 313.107†	-4114.1	-182.3	-0.0667 ug/L	-0.0667 ppb	00:28:13
1	Cd 226.502†	-205.5	-30.4	-0.3575 ug/L	-0.3575 ppb	00:28:33
1	Co 228.616†	-71.9	-0.2	0.0004 ug/L	0.0004 ppb	00:28:33
1	Cr 267.716†	84.5	-56.8	-0.6580 ug/L	-0.6580 ppb	00:28:33
1	Cu 324.752†	8165.9	880.4	2.7010 ug/L	2.7010 ppb	00:28:13
1	Mn 257.610†	748.9	253.4	0.2887 ug/L	0.2887 ppb	00:28:33
1	Mo 202.031†	29.2	21.6	1.6086 ug/L	1.6086 ppb	00:28:33
1	Ni 231.604†	105.3	2.2	0.0557 ug/L	0.0557 ppb	00:28:33
1	P 214.914†	225.2	5.5	2.5264 ug/L	2.5264 ppb	00:28:33
1	Pb 220.353†	-89.7	-25.0	-3.0895 ug/L	-3.0895 ppb	00:28:33
1	S 181.975 Axial†	51.9	14.2	18.498 ug/L	18.498 ppb	00:28:33
1	Sb 206.836†	23.8	-9.5	-3.1467 ug/L	-3.1467 ppb	00:28:33
1	Se 196.026†	-28.5	-8.0	-4.6501 ug/L	-4.6501 ppb	00:28:33
1	Si 251.611†	703.8	161.2	5.0042 ug/L	5.0042 ppb	00:28:33
1	Sn 189.927†	20.8	10.3	1.8440 ug/L	1.8440 ppb	00:28:33
1	Ti 334.940†	-1304.2	59.6	0.0983 ug/L	0.0983 ppb	00:28:13
1	Tl 190.801†	-23.9	12.9	4.0616 ug/L	4.0616 ppb	00:28:33
1	U 409.014†	-3511.5	-344.0	-9.7721 ug/L	-9.7721 ppb	00:28:13
1	V 292.402†	-1582.3	-61.6	-0.4409 ug/L	-0.4409 ppb	00:28:13
1	Zn 213.857†	768.9	157.3	1.5310 ug/L	1.5310 ppb	00:28:33
1	SiO2†	709.8	160.6	10.664 ug/L	10.664 ppb	00:29:29
2	Sc Radial	4026.1	4026.1	94.7 %		00:27:41
2	Y RADIAL	4273.4	4273.4	97.07 %		00:27:21
2	Al 396.153Radial†	-138.5	12.8	12.769 ug/L	12.769 ppb	00:27:21
2	Ca 317.933Radial†	61.6	46.7	87.062 ug/L	87.062 ppb	00:27:41
2	Fe 238.204 Radial†	11.0	1.5	16.108 ug/L	16.108 ppb	00:27:41
2	K 766.490 Radial†	3017.2	14.1	2.8390 ug/L	2.8390 ppb	00:27:21
2	Mg 279.077 IEC†	3.3	0.7	28.251 ug/L	28.251 ppb	00:27:41
2	Na 589.592 Radial†	-26.8	-235.4	-78.525 ug/L	-78.525 ppb	00:27:21
2	Sr 421.552†	45.6	-41.7	-0.3227 ug/L	-0.3227 ppb	00:27:21
2	Sc 361.383	836831.2	836831.2	98.450 %		00:28:38
2	Y 371.029	675397.9	675397.9	96.111 %		00:28:38
2	Ag 328.068†	165.4	-59.7	-0.2846 ug/L	-0.2846 ppb	00:28:38
2	As 188.979†	-37.3	-9.6	-4.0280 ug/L	-4.0280 ppb	00:28:58
2	B 249.677†	-204.3	274.3	6.4514 ug/L	6.4514 ppb	00:28:58
2	Ba 233.527†	9.8	-8.9	-0.0718 ug/L	-0.0718 ppb	00:28:58
2	Be 313.107†	-4188.9	84.2	0.0312 ug/L	0.0312 ppb	00:28:38
2	Cd 226.502†	-189.6	2.9	0.0327 ug/L	0.0327 ppb	00:28:58
2	Co 228.616†	-71.1	6.7	0.1420 ug/L	0.1420 ppb	00:28:58
2	Cr 267.716†	104.6	-43.4	-0.5062 ug/L	-0.5062 ppb	00:28:58
2	Cu 324.752†	8110.7	144.3	0.4412 ug/L	0.4412 ppb	00:28:38
2	Mn 257.610†	701.3	142.6	0.1649 ug/L	0.1649 ppb	00:28:58
2	Mo 202.031†	27.0	16.9	1.2615 ug/L	1.2615 ppb	00:28:58
2	Ni 231.604†	115.9	4.2	0.1067 ug/L	0.1067 ppb	00:28:58

2	P 214.914†	230.7	-7.6	-4.3169 ug/L	-4.3169 ppb	00:28:58
2	Pb 220.353†	-76.4	-4.1	-0.4976 ug/L	-0.4976 ppb	00:28:58
2	S 181.975 Axial†	57.7	15.7	20.541 ug/L	20.541 ppb	00:28:58
2	Sb 206.836†	31.2	-4.0	-1.3054 ug/L	-1.3054 ppb	00:28:58
2	Se 196.026†	-33.8	-11.0	-6.3367 ug/L	-6.3367 ppb	00:28:58
2	Si 251.611†	710.2	109.0	3.3819 ug/L	3.3819 ppb	00:28:58
2	Sn 189.927†	19.4	7.1	1.2780 ug/L	1.2780 ppb	00:28:58
2	Ti 334.940†	-1408.8	61.9	0.1091 ug/L	0.1091 ppb	00:28:38
2	Tl 190.801†	-31.4	7.3	2.2922 ug/L	2.2922 ppb	00:28:58
2	U 409.014†	-3374.9	87.1	2.4749 ug/L	2.4749 ppb	00:28:38
2	V 292.402†	-1661.1	-9.9	-0.0512 ug/L	-0.0512 ppb	00:28:38
2	Zn 213.857†	787.6	112.3	1.0921 ug/L	1.0921 ppb	00:28:58
2	SiO2†	742.9	135.1	8.9712 ug/L	8.9712 ppb	00:29:34
3	Sc Radial	3877.8	3877.8	91.2 %		00:28:06
3	Y RADIAL	4258.6	4258.6	96.74 %		00:27:46
3	Al 396.153Radial†	-141.0	4.4	4.3742 ug/L	4.3742 ppb	00:27:46
3	Ca 317.933Radial†	34.1	19.0	35.528 ug/L	35.528 ppb	00:28:06
3	Fe 238.204 Radial†	12.5	3.6	38.510 ug/L	38.510 ppb	00:28:06
3	K 766.490 Radial†	3032.1	152.2	30.726 ug/L	30.726 ppb	00:27:46
3	Mg 279.077 IEC†	3.9	1.5	58.870 ug/L	58.870 ppb	00:28:06
3	Na 589.592 Radial†	15.2	-190.4	-63.504 ug/L	-63.504 ppb	00:27:46
3	Sr 421.552†	52.3	-32.5	-0.2513 ug/L	-0.2513 ppb	00:27:46
3	Sc 361.383	813500.9	813500.9	95.705 %		00:29:03
3	Y 371.029	658175.5	658175.5	93.660 %		00:29:03
3	Ag 328.068†	282.9	67.9	0.3391 ug/L	0.3391 ppb	00:29:03
3	As 188.979†	-36.2	-9.5	-3.9960 ug/L	-3.9960 ppb	00:29:23
3	B 249.677†	-233.2	238.2	5.5984 ug/L	5.5984 ppb	00:29:23
3	Ba 233.527†	8.6	-9.8	-0.0798 ug/L	-0.0798 ppb	00:29:23
3	Be 313.107†	-4107.1	47.7	0.0175 ug/L	0.0175 ppb	00:29:03
3	Cd 226.502†	-207.2	-21.0	-0.2504 ug/L	-0.2504 ppb	00:29:23
3	Co 228.616†	-73.8	1.8	0.0407 ug/L	0.0407 ppb	00:29:23
3	Cr 267.716†	105.1	-39.8	-0.4623 ug/L	-0.4623 ppb	00:29:23
3	Cu 324.752†	8226.3	501.4	1.5391 ug/L	1.5391 ppb	00:29:03
3	Mn 257.610†	782.0	247.3	0.2867 ug/L	0.2867 ppb	00:29:23
3	Mo 202.031†	30.2	21.1	1.5738 ug/L	1.5738 ppb	00:29:23
3	Ni 231.604†	82.7	-27.2	-0.6955 ug/L	-0.6955 ppb	00:29:23
3	P 214.914†	227.1	-4.7	-2.9136 ug/L	-2.9136 ppb	00:29:23
3	Pb 220.353†	-82.7	-12.9	-1.5960 ug/L	-1.5960 ppb	00:29:23
3	S 181.975 Axial†	50.4	9.7	12.691 ug/L	12.691 ppb	00:29:23
3	Sb 206.836†	32.7	-1.5	-0.4468 ug/L	-0.4468 ppb	00:29:23
3	Se 196.026†	-14.5	8.2	4.9136 ug/L	4.9136 ppb	00:29:23
3	Si 251.611†	704.3	123.6	3.8335 ug/L	3.8335 ppb	00:29:23
3	Sn 189.927†	24.8	13.3	2.3890 ug/L	2.3890 ppb	00:29:23
3	Ti 334.940†	-1444.2	-16.1	-0.0246 ug/L	-0.0246 ppb	00:29:03
3	Tl 190.801†	-30.2	7.6	2.3913 ug/L	2.3913 ppb	00:29:23
3	U 409.014†	-3478.5	-119.4	-3.3962 ug/L	-3.3962 ppb	00:29:03
3	V 292.402†	-1677.9	-75.9	-0.5386 ug/L	-0.5386 ppb	00:29:03
3	Zn 213.857†	798.3	146.4	1.4255 ug/L	1.4255 ppb	00:29:23
3	SiO2†	741.6	155.3	10.314 ug/L	10.314 ppb	00:29:39

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	807920.1	95.048 %		3.7726			3.97%
Sc Radial	3963.4	93.2 %		1.80			1.94%
Y 371.029	652660.9	92.875 %		3.6910			3.97%
Y RADIAL	4269.8	96.99 %		0.225			0.23%
Ag 328.068†	28.5	0.1440 ug/L		0.37171	0.1440 ppb	0.37171	258.05%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	12.6	12.540 ug/L		8.0540	12.540 ppb	8.0540	64.23%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	-7.7	-3.2194 ug/L		1.37288	-3.2194 ppb	1.37288	42.64%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	267.7	6.2952 ug/L		0.63329	6.2952 ppb	0.63329	10.06%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	-8.7	-0.0712 ug/L		0.00887	-0.0712 ppb	0.00887	12.46%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	-16.8	-0.0060 ug/L		0.05302	-0.0060 ppb	0.05302	878.54%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	27.7	51.592 ug/L		30.7630	51.592 ppb	30.7630	59.63%



QC value within limits for Ca 317.933 Radial Recovery = Not calculated					
Cd 226.502†	-16.2	-0.1917 ug/L	0.20158	-0.1917 ppb	0.20158 105.14%
QC value within limits for Cd 226.502 Recovery = Not calculated					
Co 228.616†	2.8	0.0610 ug/L	0.07297	0.0610 ppb	0.07297 119.56%
QC value within limits for Co 228.616 Recovery = Not calculated					
Cr 267.716†	-46.7	-0.5422 ug/L	0.10272	-0.5422 ppb	0.10272 18.95%
QC value within limits for Cr 267.716 Recovery = Not calculated					
Cu 324.752†	508.7	1.5604 ug/L	1.13004	1.5604 ppb	1.13004 72.42%
QC value within limits for Cu 324.752 Recovery = Not calculated					
Fe 238.204 Radial†	1.8	18.925 ug/L	18.3389	18.925 ppb	18.3389 96.90%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated					
K 766.490 Radial†	91.1	18.389 ug/L	14.2182	18.389 ppb	14.2182 77.32%
QC value within limits for K 766.490 Radial Recovery = Not calculated					
Mg 279.077 IEC†	1.5	59.146 ug/L	31.0340	59.146 ppb	31.0340 52.47%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated					
Mn 257.610†	214.4	0.2468 ug/L	0.07093	0.2468 ppb	0.07093 28.75%
QC value within limits for Mn 257.610 Recovery = Not calculated					
Mo 202.031†	19.9	1.4813 ug/L	0.19115	1.4813 ppb	0.19115 12.90%
QC value within limits for Mo 202.031 Recovery = Not calculated					
Na 589.592 Radial†	-206.5	-68.894 ug/L	8.3602	-68.894 ppb	8.3602 12.13%
QC value within limits for Na 589.592 Radial Recovery = Not calculated					
Ni 231.604†	-6.9	-0.1777 ug/L	0.44915	-0.1777 ppb	0.44915 252.74%
QC value within limits for Ni 231.604 Recovery = Not calculated					
P 214.914†	-2.3	-1.5681 ug/L	3.61461	-1.5681 ppb	3.61461 230.52%
QC value within limits for P 214.914 Recovery = Not calculated					
Pb 220.353†	-14.0	-1.7277 ug/L	1.30096	-1.7277 ppb	1.30096 75.30%
QC value within limits for Pb 220.353 Recovery = Not calculated					
S 181.975 Axial†	13.2	17.243 ug/L	4.0726	17.243 ppb	4.0726 23.62%
QC value within limits for S 181.975 Axial Recovery = Not calculated					
Sb 206.836†	-5.0	-1.6329 ug/L	1.37940	-1.6329 ppb	1.37940 84.47%
QC value within limits for Sb 206.836 Recovery = Not calculated					
Se 196.026†	-3.6	-2.0244 ug/L	6.06738	-2.0244 ppb	6.06738 299.71%
QC value within limits for Se 196.026 Recovery = Not calculated					
Si 251.611†	131.3	4.0732 ug/L	0.83727	4.0732 ppb	0.83727 20.56%
QC value within limits for Si 251.611 Recovery = Not calculated					
Sn 189.927†	10.2	1.8370 ug/L	0.55550	1.8370 ppb	0.55550 30.24%
QC value within limits for Sn 189.927 Recovery = Not calculated					
Sr 421.552†	-29.3	-0.2268 ug/L	0.11010	-0.2268 ppb	0.11010 48.53%
QC value within limits for Sr 421.552 Recovery = Not calculated					
Ti 334.940†	35.1	0.0609 ug/L	0.07427	0.0609 ppb	0.07427 121.92%
QC value within limits for Ti 334.940 Recovery = Not calculated					
Tl 190.801†	9.2	2.9150 ug/L	0.99423	2.9150 ppb	0.99423 34.11%
QC value within limits for Tl 190.801 Recovery = Not calculated					
U 409.014†	-125.4	-3.5645 ug/L	6.12524	-3.5645 ppb	6.12524 171.84%
QC value within limits for U 409.014 Recovery = Not calculated					
V 292.402†	-49.2	-0.3436 ug/L	0.25786	-0.3436 ppb	0.25786 75.05%
QC value within limits for V 292.402 Recovery = Not calculated					
Zn 213.857†	138.7	1.3495 ug/L	0.22909	1.3495 ppb	0.22909 16.98%
QC value within limits for Zn 213.857 Recovery = Not calculated					
SiO2†	150.3	9.9832 ug/L	0.89368	9.9832 ppb	0.89368 8.95%
QC value within limits for SiO2 Recovery = Not calculated					

All analyte(s) passed QC.

Sequence No.: 76

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/17/2010 01:21:39

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	4179.7	4179.7	98.3 %		01:23:31
1	Y RADIAL	4267.1	4267.1	96.93 %		01:23:31
1	Al 396.153Radial†	4846.1	5087.8	5065.3 ug/L	5065.3 ppb	01:23:31
1	Ca 317.933Radial†	2696.6	2724.2	5081.7 ug/L	5081.7 ppb	01:23:51
1	Fe 238.204 Radial†	499.4	497.8	5305.9 ug/L	5305.9 ppb	01:23:51
1	K 766.490 Radial†	27663.7	24963.5	5032.9 ug/L	5032.9 ppb	01:23:31
1	Mg 279.077 IEC†	140.1	139.8	5398.2 ug/L	5398.2 ppb	01:23:51
1	Na 589.592 Radial†	29385.7	29679.4	9899.9 ug/L	9899.9 ppb	01:23:31
1	Sr 421.552†	63741.4	64737.8	499.82 ug/L	499.82 ppb	01:23:31
1	Sc 361.383	828006.2	828006.2	97.411 %		01:24:49
1	Y 371.029	660648.9	660648.9	94.012 %		01:24:49
1	Ag 328.068†	102467.3	104962.5	507.30 ug/L	507.30 ppb	01:24:54
1	As 188.979†	1140.9	1199.5	509.19 ug/L	509.19 ppb	01:25:14
1	B 249.677†	20859.8	21896.0	512.80 ug/L	512.80 ppb	01:24:54
1	Ba 233.527†	61626.9	63245.6	514.79 ug/L	514.79 ppb	01:24:54
1	Be 313.107†	1356435.9	1396819.5	514.23 ug/L	514.23 ppb	01:24:49
1	Cd 226.502†	41506.9	42805.4	500.45 ug/L	500.45 ppb	01:24:54
1	Co 228.616†	24054.3	24772.4	516.64 ug/L	516.64 ppb	01:24:54
1	Cr 267.716†	41824.5	42786.2	498.39 ug/L	498.39 ppb	01:24:54
1	Cu 324.752†	172444.9	168933.2	517.23 ug/L	517.23 ppb	01:24:54
1	Mn 257.610†	438932.5	450026.5	519.36 ug/L	519.36 ppb	01:24:49
1	Mo 202.031†	6609.0	6774.2	503.84 ug/L	503.84 ppb	01:25:14
1	Ni 231.604†	19309.2	19708.8	504.51 ug/L	504.51 ppb	01:24:54
1	P 214.914†	4689.8	4572.4	2436.1 ug/L	2436.1 ppb	01:25:14
1	Pb 220.353†	3883.8	4060.6	504.64 ug/L	504.64 ppb	01:25:14
1	S 181.975 Axial†	813.0	791.7	1033.8 ug/L	1033.8 ppb	01:25:14
1	Sb 206.836†	1482.3	1486.1	521.03 ug/L	521.03 ppb	01:25:14
1	Se 196.026†	832.6	878.0	530.98 ug/L	530.98 ppb	01:25:14
1	Si 251.611†	81744.8	83304.6	2589.8 ug/L	2589.8 ppb	01:24:54
1	Sn 189.927†	2750.7	2811.1	504.93 ug/L	504.93 ppb	01:25:14
1	Ti 334.940†	307550.6	317216.0	515.42 ug/L	515.42 ppb	01:24:54
1	Tl 190.801†	1549.4	1629.7	517.91 ug/L	517.91 ppb	01:25:14
1	U 409.014†	13568.6	17444.3	493.83 ug/L	493.83 ppb	01:24:54
1	V 292.402†	65367.6	68781.9	504.84 ug/L	504.84 ppb	01:24:54
1	Zn 213.857†	51905.5	52597.1	508.63 ug/L	508.63 ppb	01:24:54
1	SiO2†	79807.7	81308.9	5407.4 ug/L	5407.4 ppb	01:26:21
2	Sc Radial	4179.7	4179.7	98.3 %		01:23:56
2	Y RADIAL	4236.6	4236.6	96.24 %		01:23:56
2	Al 396.153Radial†	4860.8	5102.7	5080.3 ug/L	5080.3 ppb	01:23:56
2	Ca 317.933Radial†	2677.1	2704.4	5044.7 ug/L	5044.7 ppb	01:24:16
2	Fe 238.204 Radial†	497.6	496.0	5286.8 ug/L	5286.8 ppb	01:24:16
2	K 766.490 Radial†	27663.5	24963.3	5032.9 ug/L	5032.9 ppb	01:23:56
2	Mg 279.077 IEC†	136.9	136.5	5272.6 ug/L	5272.6 ppb	01:24:16
2	Na 589.592 Radial†	29437.9	29732.4	9917.6 ug/L	9917.6 ppb	01:23:56
2	Sr 421.552†	63810.1	64807.5	500.36 ug/L	500.36 ppb	01:23:56
2	Sc 361.383	830895.1	830895.1	97.751 %		01:25:20
2	Y 371.029	661530.7	661530.7	94.137 %		01:25:20
2	Ag 328.068†	102695.6	104830.3	506.67 ug/L	506.67 ppb	01:25:25
2	As 188.979†	1140.9	1195.5	507.48 ug/L	507.48 ppb	01:25:45
2	B 249.677†	20861.2	21823.0	511.08 ug/L	511.08 ppb	01:25:25
2	Ba 233.527†	61818.9	63222.2	514.60 ug/L	514.60 ppb	01:25:25
2	Be 313.107†	1358559.4	1394150.5	513.25 ug/L	513.25 ppb	01:25:20
2	Cd 226.502†	41621.1	42774.0	500.08 ug/L	500.08 ppb	01:25:25
2	Co 228.616†	24160.7	24795.4	517.12 ug/L	517.12 ppb	01:25:25
2	Cr 267.716†	41899.7	42713.8	497.55 ug/L	497.55 ppb	01:25:25
2	Cu 324.752†	172482.0	168355.6	515.46 ug/L	515.46 ppb	01:25:25
2	Mn 257.610†	440394.8	449955.8	519.28 ug/L	519.28 ppb	01:25:20
2	Mo 202.031†	6617.0	6758.8	502.69 ug/L	502.69 ppb	01:25:45
2	Ni 231.604†	19348.0	19679.6	503.76 ug/L	503.76 ppb	01:25:25

2	P 214.914†	4665.4	4530.8	2413.3 ug/L	2413.3 ppb	01:25:45
2	Pb 220.353†	3869.8	4032.4	501.16 ug/L	501.16 ppb	01:25:45
2	S 181.975 Axial†	814.2	790.1	1031.6 ug/L	1031.6 ppb	01:25:45
2	Sb 206.836†	1477.8	1476.1	517.59 ug/L	517.59 ppb	01:25:45
2	Se 196.026†	844.3	887.1	536.19 ug/L	536.19 ppb	01:25:45
2	Si 251.611†	81586.0	82850.5	2575.6 ug/L	2575.6 ppb	01:25:25
2	Sn 189.927†	2741.9	2792.3	501.55 ug/L	501.55 ppb	01:25:45
2	Ti 334.940†	307864.4	316439.3	514.17 ug/L	514.17 ppb	01:25:25
2	Tl 190.801†	1544.2	1618.8	514.47 ug/L	514.47 ppb	01:25:45
2	U 409.014†	13399.3	17222.8	487.54 ug/L	487.54 ppb	01:25:25
2	V 292.402†	65533.5	68718.4	504.35 ug/L	504.35 ppb	01:25:25
2	Zn 213.857†	52023.4	52532.4	508.01 ug/L	508.01 ppb	01:25:25
2	SiO2†	81504.0	82759.4	5504.1 ug/L	5504.1 ppb	01:26:26
3	Sc Radial	3778.4	3778.4	88.9 %		01:24:21
3	Y RADIAL	3840.4	3840.4	87.24 %		01:24:21
3	Al 396.153Radial†	4961.1	5740.5	5718.1 ug/L	5718.1 ppb	01:24:21
3	Ca 317.933Radial†	2692.5	3010.9	5616.4 ug/L	5616.4 ppb	01:24:41
3	Fe 238.204 Radial†	503.0	555.8	5922.5 ug/L	5922.5 ppb	01:24:41
3	K 766.490 Radial†	27931.4	28252.3	5696.1 ug/L	5696.1 ppb	01:24:21
3	Mg 279.077 IEC†	137.3	151.8	5861.1 ug/L	5861.1 ppb	01:24:41
3	Na 589.592 Radial†	30100.3	33656.9	11227 ug/L	11227 ppb	01:24:21
3	Sr 421.552†	65459.5	73554.7	567.90 ug/L	567.90 ppb	01:24:21
3	Sc 361.383	819546.3	819546.3	96.416 %		01:25:51
3	Y 371.029	653321.1	653321.1	92.969 %		01:25:51
3	Ag 328.068†	102649.6	106237.4	513.64 ug/L	513.64 ppb	01:25:56
3	As 188.979†	1154.6	1225.8	520.47 ug/L	520.47 ppb	01:26:16
3	B 249.677†	20885.4	22143.6	518.50 ug/L	518.50 ppb	01:25:56
3	Ba 233.527†	61653.6	63926.5	520.35 ug/L	520.35 ppb	01:25:56
3	Be 313.107†	1338661.5	1392758.7	512.75 ug/L	512.75 ppb	01:25:51
3	Cd 226.502†	41645.3	43388.8	507.21 ug/L	507.21 ppb	01:25:56
3	Co 228.616†	24136.7	25112.8	523.72 ug/L	523.72 ppb	01:25:56
3	Cr 267.716†	41970.9	43381.3	505.33 ug/L	505.33 ppb	01:25:56
3	Cu 324.752†	172327.0	170638.3	522.48 ug/L	522.48 ppb	01:25:56
3	Mn 257.610†	434221.0	449791.2	519.13 ug/L	519.13 ppb	01:25:51
3	Mo 202.031†	6589.9	6824.4	507.62 ug/L	507.62 ppb	01:26:16
3	Ni 231.604†	19379.1	19985.9	511.61 ug/L	511.61 ppb	01:25:56
3	P 214.914†	4668.6	4600.1	2450.1 ug/L	2450.1 ppb	01:26:16
3	Pb 220.353†	3877.6	4095.3	509.04 ug/L	509.04 ppb	01:26:16
3	S 181.975 Axial†	797.4	784.2	1023.8 ug/L	1023.8 ppb	01:26:16
3	Sb 206.836†	1467.6	1486.5	521.32 ug/L	521.32 ppb	01:26:16
3	Se 196.026†	817.8	871.5	529.20 ug/L	529.20 ppb	01:26:16
3	Si 251.611†	81710.8	84135.6	2615.6 ug/L	2615.6 ppb	01:25:56
3	Sn 189.927†	2755.2	2845.0	511.10 ug/L	511.10 ppb	01:26:16
3	Ti 334.940†	307813.0	320747.3	521.19 ug/L	521.19 ppb	01:25:56
3	Tl 190.801†	1555.6	1652.6	525.14 ug/L	525.14 ppb	01:26:16
3	U 409.014†	13692.6	17716.7	501.48 ug/L	501.48 ppb	01:25:56
3	V 292.402†	65498.1	69610.0	510.81 ug/L	510.81 ppb	01:25:56
3	Zn 213.857†	52024.8	53270.8	515.06 ug/L	515.06 ppb	01:25:56
3	SiO2†	80287.1	82651.8	5496.8 ug/L	5496.8 ppb	01:26:32

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	826149.2	97.193 %	0.6939			0.71%
Sc Radial	4045.9	95.2 %	5.45			5.73%
Y 371.029	658500.2	93.706 %	0.6413			0.68%
Y RADIAL	4114.7	93.47 %	5.407			5.79%
Ag 328.068†	105343.4	509.20 ug/L	3.858	509.20 ppb	3.858	0.76%
QC value within limits for Ag 328.068 Recovery = 101.84%						
Al 396.153Radial†	5310.3	5287.9 ug/L	372.65	5287.9 ppb	372.65	7.05%
QC value within limits for Al 396.153Radial Recovery = 105.76%						
As 188.979†	1206.9	512.38 ug/L	7.054	512.38 ppb	7.054	1.38%
QC value within limits for As 188.979 Recovery = 102.48%						
B 249.677†	21954.2	514.12 ug/L	3.884	514.12 ppb	3.884	0.76%
QC value within limits for B 249.677 Recovery = 102.82%						
Ba 233.527†	63464.8	516.58 ug/L	3.267	516.58 ppb	3.267	0.63%
QC value within limits for Ba 233.527 Recovery = 103.32%						
Be 313.107†	1394576.2	513.41 ug/L	0.753	513.41 ppb	0.753	0.15%
QC value within limits for Be 313.107 Recovery = 102.68%						
Ca 317.933Radial†	2813.2	5247.6 ug/L	319.93	5247.6 ppb	319.93	6.10%

QC value within limits for Ca 317.933 Radial Recovery = 104.95%

Cd 226.502†	42989.4	502.58 ug/L	4.016	502.58 ppb	4.016	0.80%
QC value within limits for Cd 226.502 Recovery = 100.52%						
Co 228.616†	24893.5	519.16 ug/L	3.960	519.16 ppb	3.960	0.76%
QC value within limits for Co 228.616 Recovery = 103.83%						
Cr 267.716†	42960.4	500.42 ug/L	4.271	500.42 ppb	4.271	0.85%
QC value within limits for Cr 267.716 Recovery = 100.08%						
Cu 324.752†	169309.0	518.39 ug/L	3.649	518.39 ppb	3.649	0.70%
QC value within limits for Cu 324.752 Recovery = 103.68%						
Fe 238.204 Radial†	516.5	5505.1 ug/L	361.65	5505.1 ppb	361.65	6.57%
QC value greater than the upper limit for Fe 238.204 Radial Recovery = 110.10%						
K 766.490 Radial†	26059.7	5254.0 ug/L	382.91	5254.0 ppb	382.91	7.29%
QC value within limits for K 766.490 Radial Recovery = 105.08%						
Mg 279.077 IEC†	142.7	5510.6 ug/L	309.94	5510.6 ppb	309.94	5.62%
QC value greater than the upper limit for Mg 279.077 IEC Recovery = 110.21%						
Mn 257.610†	449924.5	519.25 ug/L	0.117	519.25 ppb	0.117	0.02%
QC value within limits for Mn 257.610 Recovery = 103.85%						
Mo 202.031†	6785.8	504.72 ug/L	2.582	504.72 ppb	2.582	0.51%
QC value within limits for Mo 202.031 Recovery = 100.94%						
Na 589.592 Radial†	31022.9	10348 ug/L	760.9	10348 ppb	760.9	7.35%
QC value within limits for Na 589.592 Radial Recovery = 103.48%						
Ni 231.604†	19791.4	506.63 ug/L	4.329	506.63 ppb	4.329	0.85%
QC value within limits for Ni 231.604 Recovery = 101.33%						
P 214.914†	4567.8	2433.2 ug/L	18.59	2433.2 ppb	18.59	0.76%
QC value within limits for P 214.914 Recovery = 97.33%						
Pb 220.353†	4062.7	504.95 ug/L	3.949	504.95 ppb	3.949	0.78%
QC value within limits for Pb 220.353 Recovery = 100.99%						
S 181.975 Axial†	788.6	1029.7 ug/L	5.26	1029.7 ppb	5.26	0.51%
QC value within limits for S 181.975 Axial Recovery = 102.97%						
Sb 206.836†	1482.9	519.98 ug/L	2.076	519.98 ppb	2.076	0.40%
QC value within limits for Sb 206.836 Recovery = 104.00%						
Se 196.026†	878.9	532.12 ug/L	3.634	532.12 ppb	3.634	0.68%
QC value within limits for Se 196.026 Recovery = 106.42%						
Si 251.611†	83430.3	2593.7 ug/L	20.28	2593.7 ppb	20.28	0.78%
QC value within limits for Si 251.611 Recovery = 103.75%						
Sn 189.927†	2816.2	505.86 ug/L	4.843	505.86 ppb	4.843	0.96%
QC value within limits for Sn 189.927 Recovery = 101.17%						
Sr 421.552†	67700.0	522.69 ug/L	39.148	522.69 ppb	39.148	7.49%
QC value within limits for Sr 421.552 Recovery = 104.54%						
Ti 334.940†	318134.2	516.93 ug/L	3.745	516.93 ppb	3.745	0.72%
QC value within limits for Ti 334.940 Recovery = 103.39%						
Tl 190.801†	1633.7	519.17 ug/L	5.449	519.17 ppb	5.449	1.05%
QC value within limits for Tl 190.801 Recovery = 103.83%						
U 409.014†	17461.3	494.28 ug/L	6.982	494.28 ppb	6.982	1.41%
QC value within limits for U 409.014 Recovery = 98.86%						
V 292.402†	69036.7	506.67 ug/L	3.599	506.67 ppb	3.599	0.71%
QC value within limits for V 292.402 Recovery = 101.33%						
Zn 213.857†	52800.1	510.57 ug/L	3.905	510.57 ppb	3.905	0.76%
QC value within limits for Zn 213.857 Recovery = 102.11%						
SiO2†	82240.0	5469.5 ug/L	53.87	5469.5 ppb	53.87	0.98%
QC value within limits for SiO2 Recovery = 102.28%						

QC Failed. Continue with analysis.

Sequence No.: 77

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/17/2010 01:28:41

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	4057.5	4057.5	95.5 %		01:30:54
1	Y RADIAL	4266.1	4266.1	96.91 %		01:30:34
1	Al 396.153Radial†	-122.4	30.8	30.713 ug/L	30.713 ppb	01:30:34
1	Ca 317.933Radial†	30.4	13.6	25.287 ug/L	25.287 ppb	01:30:54
1	Fe 238.204 Radial†	11.0	1.4	15.352 ug/L	15.352 ppb	01:30:54
1	K 766.490 Radial†	2995.2	-33.7	-6.7830 ug/L	-6.7830 ppb	01:30:34
1	Mg 279.077 IEC†	0.2	-2.6	-98.819 ug/L	-98.819 ppb	01:30:54
1	Na 589.592 Radial†	-15.3	-223.1	-74.425 ug/L	-74.425 ppb	01:30:34
1	Sr 421.552†	81.2	-4.8	-0.0371 ug/L	-0.0371 ppb	01:30:34
1	Sc 361.383	821359.7	821359.7	96.630 %		01:31:51
1	Y 371.029	663885.8	663885.8	94.473 %		01:31:51
1	Ag 328.068†	249.6	30.6	0.1417 ug/L	0.1417 ppb	01:31:51
1	As 188.979†	-29.2	-1.9	-0.7807 ug/L	-0.7807 ppb	01:32:11
1	B 249.677†	-379.9	88.7	2.0847 ug/L	2.0847 ppb	01:32:11
1	Ba 233.527†	13.6	-4.8	-0.0391 ug/L	-0.0391 ppb	01:32:11
1	Be 313.107†	-4018.0	181.0	0.0667 ug/L	0.0667 ppb	01:31:51
1	Cd 226.502†	-194.5	-5.8	-0.0674 ug/L	-0.0674 ppb	01:32:11
1	Co 228.616†	-66.1	10.5	0.2209 ug/L	0.2209 ppb	01:32:11
1	Cr 267.716†	110.9	-34.9	-0.4104 ug/L	-0.4104 ppb	01:32:11
1	Cu 324.752†	8169.4	360.3	1.0980 ug/L	1.0980 ppb	01:31:51
1	Mn 257.610†	784.6	242.2	0.2849 ug/L	0.2849 ppb	01:32:11
1	Mo 202.031†	25.0	15.4	1.1433 ug/L	1.1433 ppb	01:32:11
1	Ni 231.604†	110.4	0.7	0.0179 ug/L	0.0179 ppb	01:32:11
1	P 214.914†	243.2	9.7	5.1603 ug/L	5.1603 ppb	01:32:11
1	Pb 220.353†	-69.2	1.9	0.2418 ug/L	0.2418 ppb	01:32:11
1	S 181.975 Axial†	53.7	12.7	16.589 ug/L	16.589 ppb	01:32:11
1	Sb 206.836†	49.7	15.8	5.3716 ug/L	5.3716 ppb	01:32:11
1	Se 196.026†	-12.6	10.3	6.0791 ug/L	6.0791 ppb	01:32:11
1	Si 251.611†	645.9	56.1	1.7338 ug/L	1.7338 ppb	01:32:11
1	Sn 189.927†	14.4	2.3	0.4161 ug/L	0.4161 ppb	01:32:11
1	Ti 334.940†	-1373.6	71.4	0.1230 ug/L	0.1230 ppb	01:31:51
1	Tl 190.801†	-31.1	6.9	2.1859 ug/L	2.1859 ppb	01:32:11
1	U 409.014†	-3040.1	369.1	10.483 ug/L	10.483 ppb	01:31:51
1	V 292.402†	-1674.4	-55.5	-0.3700 ug/L	-0.3700 ppb	01:31:51
1	Zn 213.857†	750.0	88.4	0.8593 ug/L	0.8593 ppb	01:32:11
1	SiO2†	683.7	88.1	5.8398 ug/L	5.8398 ppb	01:33:07
2	Sc Radial	4071.2	4071.2	95.8 %		01:31:19
2	Y RADIAL	4191.4	4191.4	95.21 %		01:30:59
2	Al 396.153Radial†	-122.6	31.0	30.971 ug/L	30.971 ppb	01:30:59
2	Ca 317.933Radial†	30.5	13.5	25.224 ug/L	25.224 ppb	01:31:19
2	Fe 238.204 Radial†	10.7	1.1	11.981 ug/L	11.981 ppb	01:31:19
2	K 766.490 Radial†	3084.0	48.6	9.8107 ug/L	9.8107 ppb	01:30:59
2	Mg 279.077 IEC†	2.1	-0.5	-19.858 ug/L	-19.858 ppb	01:31:19
2	Na 589.592 Radial†	57.4	-147.1	-49.072 ug/L	-49.072 ppb	01:30:59
2	Sr 421.552†	46.8	-41.0	-0.3167 ug/L	-0.3167 ppb	01:30:59
2	Sc 361.383	815276.1	815276.1	95.914 %		01:32:16
2	Y 371.029	658947.7	658947.7	93.770 %		01:32:16
2	Ag 328.068†	273.8	57.8	0.2769 ug/L	0.2769 ppb	01:32:16
2	As 188.979†	-29.9	-2.9	-1.2063 ug/L	-1.2063 ppb	01:32:36
2	B 249.677†	-355.6	111.2	2.6135 ug/L	2.6135 ppb	01:32:36
2	Ba 233.527†	14.3	-4.0	-0.0338 ug/L	-0.0338 ppb	01:32:36
2	Be 313.107†	-4088.8	76.1	0.0280 ug/L	0.0280 ppb	01:32:16
2	Cd 226.502†	-226.5	-40.6	-0.4761 ug/L	-0.4761 ppb	01:32:36
2	Co 228.616†	-70.2	5.6	0.1198 ug/L	0.1198 ppb	01:32:36
2	Cr 267.716†	81.3	-64.9	-0.7568 ug/L	-0.7568 ppb	01:32:36
2	Cu 324.752†	8091.7	342.3	1.0482 ug/L	1.0482 ppb	01:32:16
2	Mn 257.610†	795.5	259.7	0.3015 ug/L	0.3015 ppb	01:32:36
2	Mo 202.031†	22.2	12.7	0.9429 ug/L	0.9429 ppb	01:32:36
2	Ni 231.604†	101.1	-8.1	-0.2085 ug/L	-0.2085 ppb	01:32:36

2	P 214.914†	249.3	17.9	9.7440 ug/L	9.7440 ppb	01:32:36
2	Pb 220.353†	-72.8	-2.3	-0.2812 ug/L	-0.2812 ppb	01:32:36
2	S 181.975 Axial†	54.3	13.7	17.933 ug/L	17.933 ppb	01:32:36
2	Sb 206.836†	43.8	10.0	3.4314 ug/L	3.4314 ppb	01:32:36
2	Se 196.026†	-34.2	-12.3	-7.1586 ug/L	-7.1586 ppb	01:32:36
2	Si 251.611†	649.5	64.8	2.0092 ug/L	2.0092 ppb	01:32:36
2	Sn 189.927†	24.0	12.4	2.2364 ug/L	2.2364 ppb	01:32:36
2	Ti 334.940†	-1410.0	22.8	0.0419 ug/L	0.0419 ppb	01:32:16
2	Tl 190.801†	-40.4	-3.1	-0.9620 ug/L	-0.9620 ppb	01:32:36
2	U 409.014†	-3340.9	31.9	0.9076 ug/L	0.9076 ppb	01:32:16
2	V 292.402†	-1727.1	-123.3	-0.8802 ug/L	-0.8802 ppb	01:32:16
2	Zn 213.857†	756.2	100.7	0.9805 ug/L	0.9805 ppb	01:32:36
2	SiO2†	655.7	64.1	4.2468 ug/L	4.2468 ppb	01:33:12
3	Sc Radial	4042.1	4042.1	95.1 %		01:31:44
3	Y RADIAL	4261.9	4261.9	96.81 %		01:31:24
3	Al 396.153Radial†	-137.3	14.6	14.567 ug/L	14.567 ppb	01:31:24
3	Ca 317.933Radial†	26.9	10.0	18.564 ug/L	18.564 ppb	01:31:44
3	Fe 238.204 Radial†	11.2	1.7	18.277 ug/L	18.277 ppb	01:31:44
3	K 766.490 Radial†	3031.5	16.5	3.3555 ug/L	3.3555 ppb	01:31:24
3	Mg 279.077 IEC†	6.9	4.6	175.90 ug/L	175.90 ppb	01:31:44
3	Na 589.592 Radial†	19.9	-186.1	-62.080 ug/L	-62.080 ppb	01:31:24
3	Sr 421.552†	76.4	-9.4	-0.0729 ug/L	-0.0729 ppb	01:31:24
3	Sc 361.383	823297.1	823297.1	96.857 %		01:32:41
3	Y 371.029	663829.7	663829.7	94.465 %		01:32:41
3	Ag 328.068†	263.5	44.4	0.2154 ug/L	0.2154 ppb	01:32:41
3	As 188.979†	-25.1	2.4	1.0223 ug/L	1.0223 ppb	01:33:01
3	B 249.677†	-325.7	145.6	3.4230 ug/L	3.4230 ppb	01:33:01
3	Ba 233.527†	38.1	20.5	0.1675 ug/L	0.1675 ppb	01:33:01
3	Be 313.107†	-4094.5	111.8	0.0414 ug/L	0.0414 ppb	01:32:41
3	Cd 226.502†	-228.9	-40.8	-0.4782 ug/L	-0.4782 ppb	01:33:01
3	Co 228.616†	-73.7	2.8	0.0627 ug/L	0.0627 ppb	01:33:01
3	Cr 267.716†	105.5	-40.7	-0.4753 ug/L	-0.4753 ppb	01:33:01
3	Cu 324.752†	8161.9	332.6	1.0168 ug/L	1.0168 ppb	01:32:41
3	Mn 257.610†	788.2	244.0	0.2761 ug/L	0.2761 ppb	01:33:01
3	Mo 202.031†	33.1	23.7	1.7663 ug/L	1.7663 ppb	01:33:01
3	Ni 231.604†	98.9	-11.4	-0.2929 ug/L	-0.2929 ppb	01:33:01
3	P 214.914†	235.7	1.4	0.5456 ug/L	0.5456 ppb	01:33:01
3	Pb 220.353†	-56.0	15.8	1.9582 ug/L	1.9582 ppb	01:33:01
3	S 181.975 Axial†	53.8	12.7	16.537 ug/L	16.537 ppb	01:33:01
3	Sb 206.836†	42.9	8.6	2.9671 ug/L	2.9671 ppb	01:33:01
3	Se 196.026†	-18.6	4.1	2.4508 ug/L	2.4508 ppb	01:33:01
3	Si 251.611†	653.0	61.9	1.9070 ug/L	1.9070 ppb	01:33:01
3	Sn 189.927†	15.4	3.3	0.5944 ug/L	0.5944 ppb	01:33:01
3	Ti 334.940†	-1356.0	92.9	0.1372 ug/L	0.1372 ppb	01:32:41
3	Tl 190.801†	-44.0	-6.3	-1.9976 ug/L	-1.9976 ppb	01:33:01
3	U 409.014†	-3243.3	166.6	4.7330 ug/L	4.7330 ppb	01:32:41
3	V 292.402†	-1620.1	4.6	0.0680 ug/L	0.0680 ppb	01:32:41
3	Zn 213.857†	776.0	113.4	1.1043 ug/L	1.1043 ppb	01:33:01
3	SiO2†	693.8	96.8	6.4063 ug/L	6.4063 ppb	01:33:17

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	819977.6	96.467 %		0.4924			0.51%
Sc Radial	4056.9	95.4 %		0.34			0.36%
Y 371.029	662221.1	94.236 %		0.4034			0.43%
Y RADIAL	4239.8	96.31 %		0.954			0.99%
Ag 328.068†	44.3	0.2113 ug/L		0.06767	0.2113 ppb	0.06767	32.02%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	25.5	25.417 ug/L		9.3972	25.417 ppb	9.3972	36.97%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	-0.8	-0.3216 ug/L		1.18308	-0.3216 ppb	1.18308	367.91%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	115.2	2.7071 ug/L		0.67405	2.7071 ppb	0.67405	24.90%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	3.9	0.0315 ug/L		0.11774	0.0315 ppb	0.11774	373.35%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	122.9	0.0454 ug/L		0.01965	0.0454 ppb	0.01965	43.30%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	12.3	23.025 ug/L		3.8637	23.025 ppb	3.8637	16.78%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd 226.502†	-29.1	-0.3406 ug/L	0.23658	-0.3406 ppb	0.23658	69.47%	
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	6.3	0.1345 ug/L	0.08015	0.1345 ppb	0.08015	59.61%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	-46.9	-0.5475 ug/L	0.18412	-0.5475 ppb	0.18412	33.63%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	345.1	1.0543 ug/L	0.04098	1.0543 ppb	0.04098	3.89%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	1.4	15.203 ug/L	3.1507	15.203 ppb	3.1507	20.72%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	10.5	2.1277 ug/L	8.36468	2.1277 ppb	8.36468	393.13%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	0.5	19.075 ug/L	141.4385	19.075 ppb	141.4385	741.48%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	248.6	0.2875 ug/L	0.01289	0.2875 ppb	0.01289	4.49%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	17.3	1.2842 ug/L	0.42936	1.2842 ppb	0.42936	33.43%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	-185.5	-61.859 ug/L	12.6778	-61.859 ppb	12.6778	20.49%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	-6.3	-0.1612 ug/L	0.16068	-0.1612 ppb	0.16068	99.70%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	9.7	5.1500 ug/L	4.59923	5.1500 ppb	4.59923	89.31%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	5.1	0.6396 ug/L	1.17151	0.6396 ppb	1.17151	183.15%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	13.0	17.020 ug/L	0.7911	17.020 ppb	0.7911	4.65%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	11.5	3.9234 ug/L	1.27552	3.9234 ppb	1.27552	32.51%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	0.7	0.4571 ug/L	6.84033	0.4571 ppb	6.84033	>999.9%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	60.9	1.8833 ug/L	0.13925	1.8833 ppb	0.13925	7.39%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	6.0	1.0823 ug/L	1.00345	1.0823 ppb	1.00345	92.71%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	-18.4	-0.1422 ug/L	0.15218	-0.1422 ppb	0.15218	106.99%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	62.4	0.1007 ug/L	0.05141	0.1007 ppb	0.05141	51.04%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	-0.8	-0.2579 ug/L	2.17885	-0.2579 ppb	2.17885	844.87%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	189.2	5.3746 ug/L	4.81984	5.3746 ppb	4.81984	89.68%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	-58.1	-0.3941 ug/L	0.47454	-0.3941 ppb	0.47454	120.41%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	100.8	0.9814 ug/L	0.12248	0.9814 ppb	0.12248	12.48%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†	83.0	5.4976 ug/L	1.11968	5.4976 ppb	1.11968	20.37%	
QC value within limits for SiO2 Recovery = Not calculated							
All analyte(s) passed QC.							

Sequence No.: 84

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/17/2010 02:18:19

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	4209.1	4209.1	99.0 %		02:20:12
1	Y RADIAL	4271.3	4271.3	97.03 %		02:20:12
1	Al 396.153Radial†	4942.0	5150.1	5127.5 ug/L	5127.5 ppb	02:20:12
1	Ca 317.933Radial†	2699.3	2707.8	5051.0 ug/L	5051.0 ppb	02:20:32
1	Fe 238.204 Radial†	504.7	499.6	5325.3 ug/L	5325.3 ppb	02:20:32
1	K 766.490 Radial†	27702.3	24805.7	5001.0 ug/L	5001.0 ppb	02:20:12
1	Mg 279.077 IEC†	136.6	135.3	5223.9 ug/L	5223.9 ppb	02:20:32
1	Na 589.592 Radial†	29781.0	29869.6	9963.3 ug/L	9963.3 ppb	02:20:12
1	Sr 421.552†	64847.0	65401.0	504.94 ug/L	504.94 ppb	02:20:12
1	Sc 361.383	823589.6	823589.6	96.892 %		02:21:29
1	Y 371.029	656355.7	656355.7	93.401 %		02:21:29
1	Ag 328.068†	102350.7	105406.2	509.45 ug/L	509.45 ppb	02:21:34
1	As 188.979†	1154.6	1220.0	517.83 ug/L	517.83 ppb	02:21:54
1	B 249.677†	20734.7	21881.7	512.46 ug/L	512.46 ppb	02:21:34
1	Ba 233.527†	61527.9	63482.7	516.72 ug/L	516.72 ppb	02:21:34
1	Be 313.107†	1352245.2	1399961.8	515.39 ug/L	515.39 ppb	02:21:29
1	Cd 226.502†	41367.4	42889.9	501.44 ug/L	501.44 ppb	02:21:34
1	Co 228.616†	23941.9	24788.8	516.98 ug/L	516.98 ppb	02:21:34
1	Cr 267.716†	41737.1	42926.2	500.02 ug/L	500.02 ppb	02:21:34
1	Cu 324.752†	172385.9	169821.6	519.95 ug/L	519.95 ppb	02:21:34
1	Mn 257.610†	439602.5	453134.4	522.95 ug/L	522.95 ppb	02:21:29
1	Mo 202.031†	6621.6	6823.5	507.50 ug/L	507.50 ppb	02:21:54
1	Ni 231.604†	19256.5	19760.7	505.84 ug/L	505.84 ppb	02:21:34
1	P 214.914†	4686.1	4594.4	2447.8 ug/L	2447.8 ppb	02:21:54
1	Pb 220.353†	3864.0	4061.5	504.77 ug/L	504.77 ppb	02:21:54
1	S 181.975 Axial†	811.5	794.6	1037.6 ug/L	1037.6 ppb	02:21:54
1	Sb 206.836†	1483.4	1495.3	524.26 ug/L	524.26 ppb	02:21:54
1	Se 196.026†	830.0	880.0	532.18 ug/L	532.18 ppb	02:21:54
1	Si 251.611†	81433.7	83433.6	2593.8 ug/L	2593.8 ppb	02:21:34
1	Sn 189.927†	2744.7	2820.2	506.54 ug/L	506.54 ppb	02:21:54
1	Ti 334.940†	307158.8	318504.8	517.53 ug/L	517.53 ppb	02:21:34
1	Tl 190.801†	1565.4	1654.4	525.86 ug/L	525.86 ppb	02:21:54
1	U 409.014†	13418.8	17364.8	491.55 ug/L	491.55 ppb	02:21:34
1	V 292.402†	65231.7	69001.6	506.47 ug/L	506.47 ppb	02:21:34
1	Zn 213.857†	51754.1	52726.6	509.88 ug/L	509.88 ppb	02:21:34
1	SiO2†	81108.1	83090.3	5526.1 ug/L	5526.1 ppb	02:23:02
2	Sc Radial	4145.3	4145.3	97.5 %		02:20:37
2	Y RADIAL	4198.1	4198.1	95.36 %		02:20:37
2	Al 396.153Radial†	4841.8	5124.2	5101.8 ug/L	5101.8 ppb	02:20:37
2	Ca 317.933Radial†	2686.7	2736.8	5105.3 ug/L	5105.3 ppb	02:20:57
2	Fe 238.204 Radial†	498.8	501.5	5344.7 ug/L	5344.7 ppb	02:20:57
2	K 766.490 Radial†	27523.8	25053.6	5051.1 ug/L	5051.1 ppb	02:20:37
2	Mg 279.077 IEC†	136.3	137.1	5293.3 ug/L	5293.3 ppb	02:20:57
2	Na 589.592 Radial†	29398.2	29940.3	9986.9 ug/L	9986.9 ppb	02:20:37
2	Sr 421.552†	63858.4	65395.9	504.90 ug/L	504.90 ppb	02:20:37
2	Sc 361.383	830303.8	830303.8	97.682 %		02:22:00
2	Y 371.029	660417.4	660417.4	93.979 %		02:22:00
2	Ag 328.068†	102730.0	104940.4	507.21 ug/L	507.21 ppb	02:22:05
2	As 188.979†	1159.0	1214.8	515.66 ug/L	515.66 ppb	02:22:25
2	B 249.677†	20839.8	21816.3	510.92 ug/L	510.92 ppb	02:22:05
2	Ba 233.527†	61576.0	63018.5	512.95 ug/L	512.95 ppb	02:22:05
2	Be 313.107†	1366388.9	1403155.5	516.56 ug/L	516.56 ppb	02:22:00
2	Cd 226.502†	41440.9	42619.9	498.27 ug/L	498.27 ppb	02:22:05
2	Co 228.616†	24069.6	24719.7	515.54 ug/L	515.54 ppb	02:22:05
2	Cr 267.716†	41878.0	42722.2	497.64 ug/L	497.64 ppb	02:22:05
2	Cu 324.752†	172970.1	168981.0	517.38 ug/L	517.38 ppb	02:22:05
2	Mn 257.610†	443352.1	453304.1	523.14 ug/L	523.14 ppb	02:22:00
2	Mo 202.031†	6630.7	6777.6	504.09 ug/L	504.09 ppb	02:22:25
2	Ni 231.604†	19322.9	19668.0	503.47 ug/L	503.47 ppb	02:22:05



2	P 214.914†	4679.7	4548.8	2422.9 ug/L	2422.9 ppb	02:22:25
2	Pb 220.353†	3850.6	4015.6	499.07 ug/L	499.07 ppb	02:22:25
2	S 181.975 Axial†	813.5	789.9	1031.4 ug/L	1031.4 ppb	02:22:25
2	Sb 206.836†	1473.7	1473.0	516.59 ug/L	516.59 ppb	02:22:25
2	Se 196.026†	835.4	878.5	531.40 ug/L	531.40 ppb	02:22:25
2	Si 251.611†	81654.4	82979.9	2579.7 ug/L	2579.7 ppb	02:22:05
2	Sn 189.927†	2746.6	2799.2	502.79 ug/L	502.79 ppb	02:22:25
2	Ti 334.940†	308061.5	316865.4	514.87 ug/L	514.87 ppb	02:22:05
2	Tl 190.801†	1555.4	1631.4	518.48 ug/L	518.48 ppb	02:22:25
2	U 409.014†	13400.7	17233.9	487.84 ug/L	487.84 ppb	02:22:05
2	V 292.402†	65430.1	68660.2	503.94 ug/L	503.94 ppb	02:22:05
2	Zn 213.857†	51943.1	52488.1	507.57 ug/L	507.57 ppb	02:22:05
2	SiO2†	81106.8	82412.2	5481.0 ug/L	5481.0 ppb	02:23:07
3	Sc Radial	4098.0	4098.0	96.4 %		02:21:02
3	Y RADIAL	4191.5	4191.5	95.21 %		02:21:02
3	Al 396.153Radial†	4786.2	5123.8	5101.4 ug/L	5101.4 ppb	02:21:02
3	Ca 317.933Radial†	2724.1	2807.4	5236.8 ug/L	5236.8 ppb	02:21:22
3	Fe 238.204 Radial†	507.7	516.6	5505.3 ug/L	5505.3 ppb	02:21:22
3	K 766.490 Radial†	27251.7	25096.6	5059.7 ug/L	5059.7 ppb	02:21:02
3	Mg 279.077 IEC†	135.9	138.2	5338.3 ug/L	5338.3 ppb	02:21:22
3	Na 589.592 Radial†	28872.9	29742.7	9921.0 ug/L	9921.0 ppb	02:21:02
3	Sr 421.552†	63250.3	65519.6	505.86 ug/L	505.86 ppb	02:21:02
3	Sc 361.383	834062.9	834062.9	98.124 %		02:22:31
3	Y 371.029	664806.2	664806.2	94.604 %		02:22:31
3	Ag 328.068†	102288.7	104016.6	502.81 ug/L	502.81 ppb	02:22:36
3	As 188.979†	1148.2	1198.5	508.77 ug/L	508.77 ppb	02:22:57
3	B 249.677†	20693.5	21571.1	505.14 ug/L	505.14 ppb	02:22:36
3	Ba 233.527†	61328.5	62482.2	508.59 ug/L	508.59 ppb	02:22:36
3	Be 313.107†	1374092.1	1404701.6	517.11 ug/L	517.11 ppb	02:22:31
3	Cd 226.502†	41216.3	42199.8	493.34 ug/L	493.34 ppb	02:22:36
3	Co 228.616†	23905.3	24441.2	509.74 ug/L	509.74 ppb	02:22:36
3	Cr 267.716†	41656.8	42303.5	492.77 ug/L	492.77 ppb	02:22:36
3	Cu 324.752†	172200.5	167398.6	512.54 ug/L	512.54 ppb	02:22:36
3	Mn 257.610†	443865.8	451782.1	521.40 ug/L	521.40 ppb	02:22:31
3	Mo 202.031†	6648.1	6764.8	503.15 ug/L	503.15 ppb	02:22:57
3	Ni 231.604†	19270.7	19525.6	499.82 ug/L	499.82 ppb	02:22:36
3	P 214.914†	4670.1	4517.4	2406.3 ug/L	2406.3 ppb	02:22:57
3	Pb 220.353†	3867.1	4014.6	498.94 ug/L	498.94 ppb	02:22:57
3	S 181.975 Axial†	810.8	783.4	1023.0 ug/L	1023.0 ppb	02:22:57
3	Sb 206.836†	1484.1	1476.8	517.79 ug/L	517.79 ppb	02:22:57
3	Se 196.026†	832.1	871.4	527.72 ug/L	527.72 ppb	02:22:57
3	Si 251.611†	81318.6	82260.9	2557.3 ug/L	2557.3 ppb	02:22:36
3	Sn 189.927†	2738.0	2777.8	498.97 ug/L	498.97 ppb	02:22:57
3	Ti 334.940†	306394.9	313745.5	509.81 ug/L	509.81 ppb	02:22:36
3	Tl 190.801†	1563.3	1632.3	518.74 ug/L	518.74 ppb	02:22:57
3	U 409.014†	13573.1	17347.8	491.07 ug/L	491.07 ppb	02:22:36
3	V 292.402†	65117.2	68039.5	499.42 ug/L	499.42 ppb	02:22:36
3	Zn 213.857†	51661.7	51961.6	502.44 ug/L	502.44 ppb	02:22:36
3	SiO2†	81640.3	82581.6	5492.3 ug/L	5492.3 ppb	02:23:12

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	829318.8	97.566 %		0.6242			0.64%
Sc Radial	4150.8	97.6 %		1.31			1.34%
Y 371.029	660526.4	93.995 %		0.6014			0.64%
Y RADIAL	4220.3	95.87 %		1.006			1.05%
Ag 328.068†	104787.7	506.49 ug/L		3.379	506.49 ppb	3.379	0.67%
QC value within limits for Ag 328.068 Recovery = 101.30%							
Al 396.153Radial†	5132.7	5110.2 ug/L		14.98	5110.2 ppb	14.98	0.29%
QC value within limits for Al 396.153Radial Recovery = 102.20%							
As 188.979†	1211.1	514.09 ug/L		4.732	514.09 ppb	4.732	0.92%
QC value within limits for As 188.979 Recovery = 102.82%							
B 249.677†	21756.4	509.50 ug/L		3.858	509.50 ppb	3.858	0.76%
QC value within limits for B 249.677 Recovery = 101.90%							
Ba 233.527†	62994.5	512.75 ug/L		4.071	512.75 ppb	4.071	0.79%
QC value within limits for Ba 233.527 Recovery = 102.55%							
Be 313.107†	1402606.3	516.35 ug/L		0.880	516.35 ppb	0.880	0.17%
QC value within limits for Be 313.107 Recovery = 103.27%							
Ca 317.933Radial†	2750.7	5131.0 ug/L		95.53	5131.0 ppb	95.53	1.86%

QC value within limits for Ca 317.933 Radial Recovery = 102.62%							
Cd	226.502†	42569.9	497.68 ug/L	4.078	497.68 ppb	4.078	0.82%
QC value within limits for Cd 226.502 Recovery = 99.54%							
Co	228.616†	24649.9	514.09 ug/L	3.836	514.09 ppb	3.836	0.75%
QC value within limits for Co 228.616 Recovery = 102.82%							
Cr	267.716†	42650.6	496.81 ug/L	3.696	496.81 ppb	3.696	0.74%
QC value within limits for Cr 267.716 Recovery = 99.36%							
Cu	324.752†	168733.7	516.63 ug/L	3.762	516.63 ppb	3.762	0.73%
QC value within limits for Cu 324.752 Recovery = 103.33%							
Fe	238.204 Radial†	505.9	5391.8 ug/L	98.77	5391.8 ppb	98.77	1.83%
QC value within limits for Fe 238.204 Radial Recovery = 107.84%							
K	766.490 Radial†	24985.3	5037.3 ug/L	31.67	5037.3 ppb	31.67	0.63%
QC value within limits for K 766.490 Radial Recovery = 100.75%							
Mg	279.077 IEC†	136.9	5285.2 ug/L	57.63	5285.2 ppb	57.63	1.09%
QC value within limits for Mg 279.077 IEC Recovery = 105.70%							
Mn	257.610†	452740.2	522.50 ug/L	0.954	522.50 ppb	0.954	0.18%
QC value within limits for Mn 257.610 Recovery = 104.50%							
Mo	202.031†	6788.6	504.91 ug/L	2.288	504.91 ppb	2.288	0.45%
QC value within limits for Mo 202.031 Recovery = 100.98%							
Na	589.592 Radial†	29850.9	9957.1 ug/L	33.40	9957.1 ppb	33.40	0.34%
QC value within limits for Na 589.592 Radial Recovery = 99.57%							
Ni	231.604†	19651.4	503.04 ug/L	3.031	503.04 ppb	3.031	0.60%
QC value within limits for Ni 231.604 Recovery = 100.61%							
P	214.914†	4553.5	2425.6 ug/L	20.88	2425.6 ppb	20.88	0.86%
QC value within limits for P 214.914 Recovery = 97.03%							
Pb	220.353†	4030.6	500.93 ug/L	3.328	500.93 ppb	3.328	0.66%
QC value within limits for Pb 220.353 Recovery = 100.19%							
S	181.975 Axial†	789.3	1030.7 ug/L	7.35	1030.7 ppb	7.35	0.71%
QC value within limits for S 181.975 Axial Recovery = 103.07%							
Sb	206.836†	1481.7	519.55 ug/L	4.126	519.55 ppb	4.126	0.79%
QC value within limits for Sb 206.836 Recovery = 103.91%							
Se	196.026†	876.6	530.43 ug/L	2.379	530.43 ppb	2.379	0.45%
QC value within limits for Se 196.026 Recovery = 106.09%							
Si	251.611†	82891.5	2576.9 ug/L	18.40	2576.9 ppb	18.40	0.71%
QC value within limits for Si 251.611 Recovery = 103.08%							
Sn	189.927†	2799.0	502.77 ug/L	3.788	502.77 ppb	3.788	0.75%
QC value within limits for Sn 189.927 Recovery = 100.55%							
Sr	421.552†	65438.8	505.23 ug/L	0.540	505.23 ppb	0.540	0.11%
QC value within limits for Sr 421.552 Recovery = 101.05%							
Ti	334.940†	316371.9	514.07 ug/L	3.920	514.07 ppb	3.920	0.76%
QC value within limits for Ti 334.940 Recovery = 102.81%							
Tl	190.801†	1639.5	521.02 ug/L	4.187	521.02 ppb	4.187	0.80%
QC value within limits for Tl 190.801 Recovery = 104.20%							
U	409.014†	17315.4	490.16 ug/L	2.016	490.16 ppb	2.016	0.41%
QC value within limits for U 409.014 Recovery = 98.03%							
V	292.402†	68567.1	503.28 ug/L	3.569	503.28 ppb	3.569	0.71%
QC value within limits for V 292.402 Recovery = 100.66%							
Zn	213.857†	52392.1	506.63 ug/L	3.810	506.63 ppb	3.810	0.75%
QC value within limits for Zn 213.857 Recovery = 101.33%							
SiO2†		82694.7	5499.8 ug/L	23.48	5499.8 ppb	23.48	0.43%
QC value within limits for SiO2 Recovery = 102.85%							
All analyte(s) passed QC.							

Sequence No.: 85

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/17/2010 02:25:22

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	4048.7	4048.7	95.2 %		02:27:35
1	Y RADIAL	4198.9	4198.9	95.38 %		02:27:15
1	Al 396.153Radial†	-143.8	8.0	7.9666 ug/L	7.9666 ppb	02:27:15
1	Ca 317.933Radial†	36.2	19.7	36.732 ug/L	36.732 ppb	02:27:35
1	Fe 238.204 Radial†	19.7	10.6	112.65 ug/L	112.65 ppb	02:27:35
1	K 766.490 Radial†	3129.9	114.6	22.918 ug/L	22.918 ppb	02:27:15
1	Mg 279.077 IEC†	-1.9	-4.8	-183.78 ug/L	-183.78 ppb	02:27:35
1	Na 589.592 Radial†	1657.1	1532.8	511.28 ug/L	511.28 ppb	02:27:15
1	Sr 421.552†	109.3	25.0	0.1926 ug/L	0.1926 ppb	02:27:15
1	Sc 361.383	826600.4	826600.4	97.246 %		02:28:32
1	Y 371.029	669344.2	669344.2	95.249 %		02:28:32
1	Ag 328.068†	305.6	86.6	0.4524 ug/L	0.4524 ppb	02:28:32
1	As 188.979†	-30.2	-2.7	-1.1158 ug/L	-1.1158 ppb	02:28:52
1	B 249.677†	-405.9	64.6	1.4997 ug/L	1.4997 ppb	02:28:52
1	Ba 233.527†	61.4	44.3	0.3613 ug/L	0.3613 ppb	02:28:52
1	Be 313.107†	-4123.6	98.8	0.0372 ug/L	0.0372 ppb	02:28:32
1	Cd 226.502†	-216.6	-27.2	-0.3303 ug/L	-0.3303 ppb	02:28:52
1	Co 228.616†	-62.6	14.5	0.3031 ug/L	0.3031 ppb	02:28:52
1	Cr 267.716†	139.4	-6.3	-0.0710 ug/L	-0.0710 ppb	02:28:52
1	Cu 324.752†	8389.8	533.2	1.6404 ug/L	1.6404 ppb	02:28:32
1	Mn 257.610†	1711.7	1190.4	1.3916 ug/L	1.3916 ppb	02:28:52
1	Mo 202.031†	21.6	11.8	0.8844 ug/L	0.8844 ppb	02:28:52
1	Ni 231.604†	106.4	-4.1	-0.1050 ug/L	-0.1050 ppb	02:28:52
1	P 214.914†	234.1	-1.3	-1.1071 ug/L	-1.1071 ppb	02:28:52
1	Pb 220.353†	-78.3	-6.9	-0.8675 ug/L	-0.8675 ppb	02:28:52
1	S 181.975 Axial†	56.4	15.1	19.753 ug/L	19.753 ppb	02:28:52
1	Sb 206.836†	35.9	1.3	0.4720 ug/L	0.4720 ppb	02:28:52
1	Se 196.026†	-27.3	-4.7	-2.3874 ug/L	-2.3874 ppb	02:28:52
1	Si 251.611†	691.5	98.8	3.0677 ug/L	3.0677 ppb	02:28:52
1	Sn 189.927†	20.6	8.5	1.5382 ug/L	1.5382 ppb	02:28:52
1	Ti 334.940†	-1214.1	244.4	0.4187 ug/L	0.4187 ppb	02:28:32
1	Tl 190.801†	-30.6	7.6	2.4212 ug/L	2.4212 ppb	02:28:52
1	U 409.014†	-3532.8	-117.6	-3.3547 ug/L	-3.3547 ppb	02:28:32
1	V 292.402†	-1747.6	-119.8	-0.8823 ug/L	-0.8823 ppb	02:28:32
1	Zn 213.857†	797.2	132.1	1.2706 ug/L	1.2706 ppb	02:28:52
1	SiO2†	742.9	144.4	9.6040 ug/L	9.6040 ppb	02:29:48
2	Sc Radial	4067.2	4067.2	95.7 %		02:28:00
2	Y RADIAL	4193.0	4193.0	95.25 %		02:27:40
2	Al 396.153Radial†	-131.3	21.8	21.726 ug/L	21.726 ppb	02:27:40
2	Ca 317.933Radial†	33.0	16.1	30.107 ug/L	30.107 ppb	02:28:00
2	Fe 238.204 Radial†	18.5	9.3	98.894 ug/L	98.894 ppb	02:28:00
2	K 766.490 Radial†	3181.1	153.1	30.939 ug/L	30.939 ppb	02:27:40
2	Mg 279.077 IEC†	4.8	2.3	89.104 ug/L	89.104 ppb	02:28:00
2	Na 589.592 Radial†	-63.7	-273.7	-91.285 ug/L	-91.285 ppb	02:27:40
2	Sr 421.552†	116.2	31.7	0.2442 ug/L	0.2442 ppb	02:27:40
2	Sc 361.383	824221.6	824221.6	96.966 %		02:28:57
2	Y 371.029	666667.3	666667.3	94.868 %		02:28:57
2	Ag 328.068†	231.1	10.7	0.0789 ug/L	0.0789 ppb	02:28:57
2	As 188.979†	-32.8	-5.6	-2.3157 ug/L	-2.3157 ppb	02:29:17
2	B 249.677†	-424.1	44.6	1.0317 ug/L	1.0317 ppb	02:29:17
2	Ba 233.527†	60.9	43.9	0.3593 ug/L	0.3593 ppb	02:29:17
2	Be 313.107†	-4301.1	-96.5	-0.0351 ug/L	-0.0351 ppb	02:28:57
2	Cd 226.502†	-208.4	-19.4	-0.2366 ug/L	-0.2366 ppb	02:29:17
2	Co 228.616†	-61.7	15.2	0.3178 ug/L	0.3178 ppb	02:29:17
2	Cr 267.716†	146.3	1.2	0.0131 ug/L	0.0131 ppb	02:29:17
2	Cu 324.752†	8373.1	540.9	1.6584 ug/L	1.6584 ppb	02:28:57
2	Mn 257.610†	1434.5	909.7	1.0553 ug/L	1.0553 ppb	02:29:17
2	Mo 202.031†	20.9	11.0	0.8288 ug/L	0.8288 ppb	02:29:17
2	Ni 231.604†	98.9	-11.5	-0.2957 ug/L	-0.2957 ppb	02:29:17

2	P 214.914†	235.2	0.6	-0.0461 ug/L	-0.0461 ppb	02:29:17
2	Pb 220.353†	-76.8	-5.7	-0.7036 ug/L	-0.7036 ppb	02:29:17
2	S 181.975 Axial†	53.9	12.6	16.521 ug/L	16.521 ppb	02:29:17
2	Sb 206.836†	36.9	2.3	0.8261 ug/L	0.8261 ppb	02:29:17
2	Se 196.026†	-21.5	1.1	0.9891 ug/L	0.9891 ppb	02:29:17
2	Si 251.611†	737.2	148.0	4.6005 ug/L	4.6005 ppb	02:29:17
2	Sn 189.927†	19.8	7.8	1.4109 ug/L	1.4109 ppb	02:29:17
2	Ti 334.940†	-1366.0	84.1	0.1310 ug/L	0.1310 ppb	02:28:57
2	Tl 190.801†	-33.9	4.2	1.3283 ug/L	1.3283 ppb	02:29:17
2	U 409.014†	-3219.4	195.0	5.5280 ug/L	5.5280 ppb	02:28:57
2	V 292.402†	-1655.6	-30.1	-0.2084 ug/L	-0.2084 ppb	02:28:57
2	Zn 213.857†	791.6	128.6	1.2399 ug/L	1.2399 ppb	02:29:17
2	SiO2†	677.6	79.3	5.2640 ug/L	5.2640 ppb	02:29:53
3	Sc Radial	4092.6	4092.6	96.3 %		02:28:25
3	Y RADIAL	4295.9	4295.9	97.59 %		02:28:05
3	Al 396.153Radial†	-127.2	26.9	26.893 ug/L	26.893 ppb	02:28:05
3	Ca 317.933Radial†	37.1	20.2	37.719 ug/L	37.719 ppb	02:28:25
3	Fe 238.204 Radial†	15.0	5.5	58.973 ug/L	58.973 ppb	02:28:25
3	K 766.490 Radial†	3183.6	135.1	27.294 ug/L	27.294 ppb	02:28:05
3	Mg 279.077 IEC†	1.3	-1.3	-51.650 ug/L	-51.650 ppb	02:28:25
3	Na 589.592 Radial†	-40.6	-249.3	-83.149 ug/L	-83.149 ppb	02:28:05
3	Sr 421.552†	89.3	2.9	0.0223 ug/L	0.0223 ppb	02:28:05
3	Sc 361.383	832342.1	832342.1	97.922 %		02:29:22
3	Y 371.029	673352.1	673352.1	95.820 %		02:29:22
3	Ag 328.068†	256.7	34.5	0.1849 ug/L	0.1849 ppb	02:29:22
3	As 188.979†	-31.3	-3.6	-1.5168 ug/L	-1.5168 ppb	02:29:43
3	B 249.677†	-426.5	46.4	1.0813 ug/L	1.0813 ppb	02:29:43
3	Ba 233.527†	42.5	24.6	0.2013 ug/L	0.2013 ppb	02:29:43
3	Be 313.107†	-4236.3	12.9	0.0055 ug/L	0.0055 ppb	02:29:22
3	Cd 226.502†	-206.9	-15.8	-0.1913 ug/L	-0.1913 ppb	02:29:43
3	Co 228.616†	-65.8	11.7	0.2436 ug/L	0.2436 ppb	02:29:43
3	Cr 267.716†	127.1	-19.9	-0.2303 ug/L	-0.2303 ppb	02:29:43
3	Cu 324.752†	8505.3	591.8	1.8154 ug/L	1.8154 ppb	02:29:22
3	Mn 257.610†	1738.5	1205.6	1.3985 ug/L	1.3985 ppb	02:29:43
3	Mo 202.031†	18.6	8.5	0.6365 ug/L	0.6365 ppb	02:29:43
3	Ni 231.604†	122.8	11.9	0.3038 ug/L	0.3038 ppb	02:29:43
3	P 214.914†	229.5	-7.6	-4.6437 ug/L	-4.6437 ppb	02:29:43
3	Pb 220.353†	-67.7	4.5	0.5547 ug/L	0.5547 ppb	02:29:43
3	S 181.975 Axial†	54.0	12.2	15.922 ug/L	15.922 ppb	02:29:43
3	Sb 206.836†	38.7	3.8	1.3112 ug/L	1.3112 ppb	02:29:43
3	Se 196.026†	-27.5	-4.7	-2.5739 ug/L	-2.5739 ppb	02:29:43
3	Si 251.611†	686.4	88.7	2.7558 ug/L	2.7558 ppb	02:29:43
3	Sn 189.927†	12.2	-0.1	-0.0178 ug/L	-0.0178 ppb	02:29:43
3	Ti 334.940†	-1271.8	194.1	0.3252 ug/L	0.3252 ppb	02:29:22
3	Tl 190.801†	-29.2	9.2	2.9261 ug/L	2.9261 ppb	02:29:43
3	U 409.014†	-3469.0	-27.5	-0.7860 ug/L	-0.7860 ppb	02:29:22
3	V 292.402†	-1662.9	-20.9	-0.1536 ug/L	-0.1536 ppb	02:29:22
3	Zn 213.857†	785.2	114.2	1.1009 ug/L	1.1009 ppb	02:29:43
3	SiO2†	744.5	140.8	9.3696 ug/L	9.3696 ppb	02:29:58

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	827721.4	97.378 %	0.4911			0.50%
Sc Radial	4069.5	95.7 %	0.52			0.54%
Y 371.029	669787.9	95.312 %	0.4788			0.50%
Y RADIAL	4229.3	96.07 %	1.313			1.37%
Ag 328.068†	43.9	0.2388 ug/L	0.19250	0.2388 ppb	0.19250	80.63%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	18.9	18.862 ug/L	9.7827	18.862 ppb	9.7827	51.87%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-4.0	-1.6495 ug/L	0.61085	-1.6495 ppb	0.61085	37.03%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	51.8	1.2042 ug/L	0.25711	1.2042 ppb	0.25711	21.35%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	37.6	0.3073 ug/L	0.09181	0.3073 ppb	0.09181	29.88%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	5.1	0.0025 ug/L	0.03625	0.0025 ppb	0.03625	>999.9%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	18.7	34.853 ug/L	4.1398	34.853 ppb	4.1398	11.88%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd	226.502†	-20.8	-0.2527 ug/L	0.07092	-0.2527 ppb	0.07092	28.06%
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co	228.616†	13.8	0.2882 ug/L	0.03932	0.2882 ppb	0.03932	13.64%
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr	267.716†	-8.3	-0.0960 ug/L	0.12363	-0.0960 ppb	0.12363	128.74%
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu	324.752†	555.3	1.7047 ug/L	0.09625	1.7047 ppb	0.09625	5.65%
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe	238.204 Radial†	8.5	90.173 ug/L	27.8815	90.173 ppb	27.8815	30.92%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K	766.490 Radial†	134.3	27.051 ug/L	4.0159	27.051 ppb	4.0159	14.85%
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg	279.077 IEC†	-1.3	-48.776 ug/L	136.4657	-48.776 ppb	136.4657	279.78%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn	257.610†	1101.9	1.2818 ug/L	0.19617	1.2818 ppb	0.19617	15.30%
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo	202.031†	10.4	0.7832 ug/L	0.13007	0.7832 ppb	0.13007	16.61%
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na	589.592 Radial†	336.6	112.28 ug/L	345.566	112.28 ppb	345.566	307.77%
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni	231.604†	-1.3	-0.0323 ug/L	0.30631	-0.0323 ppb	0.30631	948.27%
QC value within limits for Ni 231.604 Recovery = Not calculated							
P	214.914†	-2.8	-1.9323 ug/L	2.40731	-1.9323 ppb	2.40731	124.58%
QC value within limits for P 214.914 Recovery = Not calculated							
Pb	220.353†	-2.7	-0.3388 ug/L	0.77811	-0.3388 ppb	0.77811	229.68%
QC value within limits for Pb 220.353 Recovery = Not calculated							
S	181.975 Axial†	13.3	17.399 ug/L	2.0608	17.399 ppb	2.0608	11.84%
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb	206.836†	2.5	0.8698 ug/L	0.42127	0.8698 ppb	0.42127	48.44%
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se	196.026†	-2.8	-1.3241 ug/L	2.00543	-1.3241 ppb	2.00543	151.46%
QC value within limits for Se 196.026 Recovery = Not calculated							
Si	251.611†	111.8	3.4746 ug/L	0.98740	3.4746 ppb	0.98740	28.42%
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn	189.927†	5.4	0.9771 ug/L	0.86397	0.9771 ppb	0.86397	88.42%
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr	421.552†	19.8	0.1530 ug/L	0.11612	0.1530 ppb	0.11612	75.89%
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti	334.940†	174.2	0.2916 ug/L	0.14672	0.2916 ppb	0.14672	50.31%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl	190.801†	7.0	2.2252 ug/L	0.81676	2.2252 ppb	0.81676	36.70%
QC value within limits for Tl 190.801 Recovery = Not calculated							
U	409.014†	16.6	0.4624 ug/L	4.57105	0.4624 ppb	4.57105	988.53%
QC value within limits for U 409.014 Recovery = Not calculated							
V	292.402†	-56.9	-0.4148 ug/L	0.40580	-0.4148 ppb	0.40580	97.84%
QC value within limits for V 292.402 Recovery = Not calculated							
Zn	213.857†	124.9	1.2038 ug/L	0.09039	1.2038 ppb	0.09039	7.51%
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†		121.5	8.0792 ug/L	2.44085	8.0792 ppb	2.44085	30.21%
QC value within limits for SiO2 Recovery = Not calculated							

All analyte(s) passed QC.

Sequence No.: 86

Sample ID: 1202030969|948071|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 103

Date Collected: 2/17/2010 02:32:09

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202030969|948071|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4040.4	4040.4	95.0 %		02:34:22
1	Y RADIAL	4188.7	4188.7	95.15 %		02:34:02
1	Al 396.153Radial†	-150.3	0.9	0.8387 ug/L	0.8387 ppb	02:34:02
1	Ca 317.933Radial†	36.0	19.6	36.505 ug/L	36.505 ppb	02:34:22
1	Fe 238.204 Radial†	23.8	15.0	159.70 ug/L	159.70 ppb	02:34:22
1	K 766.490 Radial†	2985.3	-30.7	-6.1685 ug/L	-6.1685 ppb	02:34:02
1	Mg 279.077 IEC†	2.9	0.3	12.616 ug/L	12.616 ppb	02:34:22
1	Na 589.592 Radial†	-166.5	-382.3	-127.52 ug/L	-127.52 ppb	02:34:02
1	Sr 421.552†	153.2	71.4	0.5511 ug/L	0.5511 ppb	02:34:02
1	Sc 361.383	832765.3	832765.3	97.971 %		02:35:19
1	Y 371.029	672955.6	672955.6	95.763 %		02:35:19
1	Ag 328.068†	211.1	-12.2	-0.0097 ug/L	-0.0097 ppb	02:35:19
1	As 188.979†	-25.5	2.3	1.0111 ug/L	1.0111 ppb	02:35:39
1	B 249.677†	-454.6	17.9	0.3955 ug/L	0.3955 ppb	02:35:39
1	Ba 233.527†	49.8	32.0	0.2641 ug/L	0.2641 ppb	02:35:39
1	Be 313.107†	-4204.8	47.3	0.0187 ug/L	0.0187 ppb	02:35:19
1	Cd 226.502†	-195.3	-3.9	-0.0611 ug/L	-0.0611 ppb	02:35:39
1	Co 228.616†	-64.6	12.9	0.2687 ug/L	0.2687 ppb	02:35:39
1	Cr 267.716†	175.1	29.0	0.3387 ug/L	0.3387 ppb	02:35:39
1	Cu 324.752†	8517.7	600.0	1.8432 ug/L	1.8432 ppb	02:35:19
1	Mn 257.610†	1973.1	1444.2	1.6809 ug/L	1.6809 ppb	02:35:39
1	Mo 202.031†	23.3	13.3	1.0015 ug/L	1.0015 ppb	02:35:39
1	Ni 231.604†	104.5	-6.9	-0.1763 ug/L	-0.1763 ppb	02:35:39
1	P 214.914†	251.3	14.6	7.6076 ug/L	7.6076 ppb	02:35:39
1	Pb 220.353†	-80.2	-8.3	-1.0427 ug/L	-1.0427 ppb	02:35:39
1	S 181.975 Axial†	63.5	21.9	28.582 ug/L	28.582 ppb	02:35:39
1	Sb 206.836†	37.9	3.0	1.0654 ug/L	1.0654 ppb	02:35:39
1	Se 196.026†	-23.9	-1.0	-0.0763 ug/L	-0.0763 ppb	02:35:39
1	Si 251.611†	1063.3	473.0	14.728 ug/L	14.728 ppb	02:35:39
1	Sn 189.927†	25.1	13.0	2.3406 ug/L	2.3406 ppb	02:35:39
1	Ti 334.940†	-1107.4	362.6	0.5912 ug/L	0.5912 ppb	02:35:19
1	Tl 190.801†	-31.5	7.0	2.2085 ug/L	2.2085 ppb	02:35:39
1	U 409.014†	-3301.7	145.1	4.1016 ug/L	4.1016 ppb	02:35:19
1	V 292.402†	-1681.8	-39.3	-0.2867 ug/L	-0.2867 ppb	02:35:19
1	Zn 213.857†	911.8	242.9	2.3457 ug/L	2.3457 ppb	02:35:39
1	SiO2†	1145.1	549.3	36.597 ug/L	36.597 ppb	02:36:35
2	Sc Radial	4070.3	4070.3	95.8 %		02:34:48
2	Y RADIAL	4248.2	4248.2	96.50 %		02:34:27
2	Al 396.153Radial†	-116.7	37.2	37.126 ug/L	37.126 ppb	02:34:27
2	Ca 317.933Radial†	33.3	16.5	30.713 ug/L	30.713 ppb	02:34:48
2	Fe 238.204 Radial†	26.2	17.3	184.18 ug/L	184.18 ppb	02:34:48
2	K 766.490 Radial†	2961.1	-79.1	-15.930 ug/L	-15.930 ppb	02:34:27
2	Mg 279.077 IEC†	0.5	-2.2	-85.247 ug/L	-85.247 ppb	02:34:48
2	Na 589.592 Radial†	-232.5	-449.9	-150.07 ug/L	-150.07 ppb	02:34:27
2	Sr 421.552†	115.1	30.4	0.2344 ug/L	0.2344 ppb	02:34:27
2	Sc 361.383	819839.7	819839.7	96.451 %		02:35:45
2	Y 371.029	662997.0	662997.0	94.346 %		02:35:45
2	Ag 328.068†	224.1	4.7	0.0830 ug/L	0.0830 ppb	02:35:45
2	As 188.979†	-31.3	-4.2	-1.7089 ug/L	-1.7089 ppb	02:36:05
2	B 249.677†	-431.9	34.1	0.7731 ug/L	0.7731 ppb	02:36:05
2	Ba 233.527†	79.2	63.3	0.5200 ug/L	0.5200 ppb	02:36:05
2	Be 313.107†	-4253.5	-70.9	-0.0240 ug/L	-0.0240 ppb	02:35:45
2	Cd 226.502†	-211.6	-23.9	-0.2976 ug/L	-0.2976 ppb	02:36:05
2	Co 228.616†	-69.0	7.3	0.1524 ug/L	0.1524 ppb	02:36:05
2	Cr 267.716†	167.4	23.8	0.2803 ug/L	0.2803 ppb	02:36:05
2	Cu 324.752†	8391.9	606.6	1.8653 ug/L	1.8653 ppb	02:35:45
2	Mn 257.610†	2052.2	1558.0	1.8186 ug/L	1.8186 ppb	02:36:05
2	Mo 202.031†	33.1	23.9	1.7889 ug/L	1.7889 ppb	02:36:05
2	Ni 231.604†	99.3	-10.6	-0.2704 ug/L	-0.2704 ppb	02:36:05

2	P 214.914†	263.9	31.6	17.035 ug/L	17.035 ppb	02:36:05
2	Pb 220.353†	-66.2	5.0	0.6076 ug/L	0.6076 ppb	02:36:05
2	S 181.975 Axial†	55.0	14.1	18.420 ug/L	18.420 ppb	02:36:05
2	Sb 206.836†	33.0	-1.5	-0.4800 ug/L	-0.4800 ppb	02:36:05
2	Se 196.026†	-22.9	-0.4	0.3643 ug/L	0.3643 ppb	02:36:05
2	Si 251.611†	1008.5	433.3	13.481 ug/L	13.481 ppb	02:36:05
2	Sn 189.927†	8.1	-4.2	-0.7541 ug/L	-0.7541 ppb	02:36:05
2	Ti 334.940†	-895.0	564.9	0.9279 ug/L	0.9279 ppb	02:35:45
2	Tl 190.801†	-28.1	10.0	3.1724 ug/L	3.1724 ppb	02:36:05
2	U 409.014†	-3294.2	99.7	2.8120 ug/L	2.8120 ppb	02:35:45
2	V 292.402†	-1586.6	32.3	0.2347 ug/L	0.2347 ppb	02:35:45
2	Zn 213.857†	924.0	270.2	2.6090 ug/L	2.6090 ppb	02:36:05
2	SiO2†	1061.8	481.3	32.043 ug/L	32.043 ppb	02:36:40
3	Sc Radial	4057.5	4057.5	95.5 %		02:35:13
3	Y RADIAL	4173.6	4173.6	94.81 %		02:34:53
3	Al 396.153Radial†	-126.1	26.9	26.817 ug/L	26.817 ppb	02:34:53
3	Ca 317.933Radial†	38.2	21.7	40.440 ug/L	40.440 ppb	02:35:13
3	Fe 238.204 Radial†	21.8	12.8	136.42 ug/L	136.42 ppb	02:35:13
3	K 766.490 Radial†	3062.8	37.2	7.5473 ug/L	7.5473 ppb	02:34:53
3	Mg 279.077 IEC†	2.3	-0.3	-12.305 ug/L	-12.305 ppb	02:35:13
3	Na 589.592 Radial†	-193.1	-409.4	-136.56 ug/L	-136.56 ppb	02:34:53
3	Sr 421.552†	81.1	-4.8	-0.0374 ug/L	-0.0374 ppb	02:34:53
3	Sc 361.383	824973.9	824973.9	97.055 %		02:36:10
3	Y 371.029	667986.1	667986.1	95.056 %		02:36:10
3	Ag 328.068†	229.6	8.9	0.0855 ug/L	0.0855 ppb	02:36:10
3	As 188.979†	-29.8	-2.4	-0.9716 ug/L	-0.9716 ppb	02:36:30
3	B 249.677†	-424.1	45.0	1.0354 ug/L	1.0354 ppb	02:36:30
3	Ba 233.527†	88.5	72.3	0.5934 ug/L	0.5934 ppb	02:36:30
3	Be 313.107†	-4147.9	65.4	0.0256 ug/L	0.0256 ppb	02:36:10
3	Cd 226.502†	-215.0	-26.1	-0.3176 ug/L	-0.3176 ppb	02:36:30
3	Co 228.616†	-63.6	13.3	0.2778 ug/L	0.2778 ppb	02:36:30
3	Cr 267.716†	156.7	11.8	0.1378 ug/L	0.1378 ppb	02:36:30
3	Cu 324.752†	8416.0	577.3	1.7705 ug/L	1.7705 ppb	02:36:10
3	Mn 257.610†	1969.3	1459.3	1.6972 ug/L	1.6972 ppb	02:36:30
3	Mo 202.031†	30.7	21.1	1.5810 ug/L	1.5810 ppb	02:36:30
3	Ni 231.604†	111.9	1.8	0.0450 ug/L	0.0450 ppb	02:36:30
3	P 214.914†	245.9	11.3	5.8514 ug/L	5.8514 ppb	02:36:30
3	Pb 220.353†	-58.4	13.4	1.6587 ug/L	1.6587 ppb	02:36:30
3	S 181.975 Axial†	61.5	20.5	26.772 ug/L	26.772 ppb	02:36:30
3	Sb 206.836†	41.8	7.4	2.5581 ug/L	2.5581 ppb	02:36:30
3	Se 196.026†	-19.2	3.6	2.5269 ug/L	2.5269 ppb	02:36:30
3	Si 251.611†	1025.9	444.7	13.838 ug/L	13.838 ppb	02:36:30
3	Sn 189.927†	22.3	10.3	1.8629 ug/L	1.8629 ppb	02:36:30
3	Ti 334.940†	-1039.6	421.8	0.6885 ug/L	0.6885 ppb	02:36:10
3	Tl 190.801†	-36.0	2.0	0.6342 ug/L	0.6342 ppb	02:36:30
3	U 409.014†	-3150.3	269.2	7.6326 ug/L	7.6326 ppb	02:36:10
3	V 292.402†	-1507.5	124.0	0.9141 ug/L	0.9141 ppb	02:36:10
3	Zn 213.857†	925.0	265.3	2.5666 ug/L	2.5666 ppb	02:36:30
3	SiO2†	1012.6	423.8	28.212 ug/L	28.212 ppb	02:36:45

Mean Data: 1202030969|948071|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	825859.6	97.159 %		0.7657				0.79%
Sc Radial	4056.1	95.4 %		0.35				0.37%
Y 371.029	667979.6	95.055 %		0.7086				0.75%
Y RADIAL	4203.5	95.49 %		0.896				0.94%
Ag 328.068†	0.5	0.0529 ug/L		0.05429	0.0529 ppb		0.05429	102.56%
Al 396.153Radial†	21.7	21.594 ug/L		18.6990	21.594 ppb		18.6990	86.59%
As 188.979†	-1.4	-0.5564 ug/L		1.40673	-0.5564 ppb		1.40673	252.81%
B 249.677†	32.4	0.7347 ug/L		0.32164	0.7347 ppb		0.32164	43.78%
Ba 233.527†	55.9	0.4592 ug/L		0.17286	0.4592 ppb		0.17286	37.65%
Be 313.107†	13.9	0.0068 ug/L		0.02683	0.0068 ppb		0.02683	396.49%
Ca 317.933Radial†	19.2	35.886 ug/L		4.8929	35.886 ppb		4.8929	13.63%
Cd 226.502†	-17.9	-0.2254 ug/L		0.14265	-0.2254 ppb		0.14265	63.29%
Co 228.616†	11.2	0.2330 ug/L		0.06993	0.2330 ppb		0.06993	30.02%
Cr 267.716†	21.5	0.2522 ug/L		0.10332	0.2522 ppb		0.10332	40.96%
Cu 324.752†	594.6	1.8263 ug/L		0.04960	1.8263 ppb		0.04960	2.72%
Fe 238.204 Radial†	15.1	160.10 ug/L		23.884	160.10 ppb		23.884	14.92%
K 766.490 Radial†	-24.2	-4.8503 ug/L		11.79389	-4.8503 ppb		11.79389	243.16%

Mg 279.077 IEC†	-0.7	-28.312 ug/L	50.8575	-28.312 ppb	50.8575	179.63%
Mn 257.610†	1487.2	1.7322 ug/L	0.07526	1.7322 ppb	0.07526	4.34%
Mo 202.031†	19.4	1.4571 ug/L	0.40804	1.4571 ppb	0.40804	28.00%
Na 589.592 Radial†	-413.9	-138.05 ug/L	11.351	-138.05 ppb	11.351	8.22%
Ni 231.604†	-5.2	-0.1339 ug/L	0.16189	-0.1339 ppb	0.16189	120.91%
P 214.914†	19.2	10.165 ug/L	6.0144	10.165 ppb	6.0144	59.17%
Pb 220.353†	3.4	0.4079 ug/L	1.36175	0.4079 ppb	1.36175	333.87%
S 181.975 Axial†	18.8	24.591 ug/L	5.4208	24.591 ppb	5.4208	22.04%
Sb 206.836†	3.0	1.0478 ug/L	1.51918	1.0478 ppb	1.51918	144.98%
Se 196.026†	0.7	0.9383 ug/L	1.39329	0.9383 ppb	1.39329	148.49%
Si 251.611†	450.3	14.016 ug/L	0.6420	14.016 ppb	0.6420	4.58%
Sn 189.927†	6.4	1.1498 ug/L	1.66601	1.1498 ppb	1.66601	144.90%
Sr 421.552†	32.3	0.2494 ug/L	0.29455	0.2494 ppb	0.29455	118.11%
Ti 334.940†	449.8	0.7359 ug/L	0.17329	0.7359 ppb	0.17329	23.55%
Tl 190.801†	6.3	2.0050 ug/L	1.28126	2.0050 ppb	1.28126	63.90%
U 409.014†	171.3	4.8487 ug/L	2.49567	4.8487 ppb	2.49567	51.47%
V 292.402†	39.0	0.2874 ug/L	0.60212	0.2874 ppb	0.60212	209.53%
Zn 213.857†	259.5	2.5071 ug/L	0.14139	2.5071 ppb	0.14139	5.64%
SiO2†	484.8	32.284 ug/L	4.1977	32.284 ppb	4.1977	13.00%



Sequence No.: 87

Sample ID: 1202030974|948071|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 104

Date Collected: 2/17/2010 02:38:57

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202030974|948071|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4266.5	4266.5	100 %		02:41:11
1	Y RADIAL	4807.1	4807.1	109.2 %		02:41:11
1	Al 396.153Radial†	83517.0	83371.6	83382 ug/L	83382 ppb	02:40:51
1	Ca 317.933Radial†	52133.0	51924.6	96859 ug/L	96859 ppb	02:40:51
1	Fe 238.204 Radial†	17802.4	17727.4	188430 ug/L	188430 ppb	02:40:51
1	K 766.490 Radial†	199287.3	195389.1	39404 ug/L	39404 ppb	02:40:51
1	Mg 279.077 IEC†	954.2	948.0	36421 ug/L	36421 ppb	02:41:11
1	Na 589.592 Radial†	29032.4	28719.5	9579.7 ug/L	9579.7 ppb	02:40:51
1	Sr 421.552†	280262.9	279151.2	2154.7 ug/L	2154.7 ppb	02:40:51
1	Sc 361.383	847863.3	847863.3	99.748 %		02:42:13
1	Y 371.029	746467.2	746467.2	106.22 %		02:42:13
1	Ag 328.068†	50483.9	50384.0	309.05 ug/L	309.05 ppb	02:42:13
1	As 188.979†	2284.4	2318.5	1067.2 ug/L	1067.2 ppb	02:42:18
1	B 249.677†	61172.1	61808.8	1421.0 ug/L	1421.0 ppb	02:42:13
1	Ba 233.527†	224145.9	224694.3	1832.7 ug/L	1832.7 ppb	02:42:13
1	Be 313.107†	2017880.0	2027325.4	757.40 ug/L	757.40 ppb	02:42:13
1	Cd 226.502†	47813.7	48130.2	544.15 ug/L	544.15 ppb	02:42:18
1	Co 228.616†	42186.5	42372.1	870.10 ug/L	870.10 ppb	02:42:18
1	Cr 267.716†	187503.1	187827.8	2190.6 ug/L	2190.6 ppb	02:42:13
1	Cu 324.752†	593695.2	587103.5	1807.6 ug/L	1807.6 ppb	02:42:13
1	Mn 257.610†	4426162.0	4436792.7	5134.4 ug/L	5134.4 ppb	02:42:13
1	Mo 202.031†	6164.1	6169.2	474.19 ug/L	474.19 ppb	02:42:18
1	Ni 231.604†	48433.4	48442.5	1240.3 ug/L	1240.3 ppb	02:42:18
1	P 214.914†	14720.4	14515.7	7575.3 ug/L	7575.3 ppb	02:42:18
1	Pb 220.353†	6151.3	6240.4	774.79 ug/L	774.79 ppb	02:42:18
1	S 181.975 Axial†	3048.8	3013.7	3923.1 ug/L	3923.1 ppb	02:42:18
1	Sb 206.836†	3970.0	3944.4	1340.8 ug/L	1340.8 ppb	02:42:18
1	Se 196.026†	4091.1	4124.8	3017.5 ug/L	3017.5 ppb	02:42:18
1	Si 251.611†	966465.4	968298.7	30169 ug/L	30169 ppb	02:42:13
1	Sn 189.927†	5383.8	5384.8	983.44 ug/L	983.44 ppb	02:42:18
1	Ti 334.940†	3445942.5	3456155.3	5626.7 ug/L	5626.7 ppb	02:42:13
1	Tl 190.801†	3520.2	3568.3	1191.2 ug/L	1191.2 ppb	02:42:18
1	U 409.014†	-9015.8	-5523.5	-183.27 ug/L	-183.27 ppb	02:42:13
1	V 292.402†	158907.3	160986.7	1138.7 ug/L	1138.7 ppb	02:42:13
1	Zn 213.857†	581590.3	582374.2	5645.3 ug/L	5645.3 ppb	02:42:13
1	SiO2†	953265.4	955058.1	63664 ug/L	63664 ppb	02:42:53
2	Sc Radial	4274.9	4274.9	101 %		02:41:37
2	Y RADIAL	4821.4	4821.4	109.5 %		02:41:37
2	Al 396.153Radial†	83424.6	83115.2	83125 ug/L	83125 ppb	02:41:17
2	Ca 317.933Radial†	52002.8	51692.4	96426 ug/L	96426 ppb	02:41:17
2	Fe 238.204 Radial†	17721.8	17612.3	187200 ug/L	187200 ppb	02:41:17
2	K 766.490 Radial†	199060.5	194771.0	39279 ug/L	39279 ppb	02:41:17
2	Mg 279.077 IEC†	959.0	950.9	36536 ug/L	36536 ppb	02:41:37
2	Na 589.592 Radial†	28635.0	28267.1	9428.8 ug/L	9428.8 ppb	02:41:17
2	Sr 421.552†	278861.1	277205.1	2139.7 ug/L	2139.7 ppb	02:41:17
2	Sc 361.383	841725.0	841725.0	99.025 %		02:42:27
2	Y 371.029	741504.4	741504.4	105.52 %		02:42:27
2	Ag 328.068†	50106.5	50372.0	308.58 ug/L	308.58 ppb	02:42:27
2	As 188.979†	2254.6	2305.1	1061.2 ug/L	1061.2 ppb	02:42:32
2	B 249.677†	60638.7	61717.3	1419.0 ug/L	1419.0 ppb	02:42:27
2	Ba 233.527†	222433.0	224603.2	1832.0 ug/L	1832.0 ppb	02:42:27
2	Be 313.107†	1998813.8	2022824.1	755.73 ug/L	755.73 ppb	02:42:27
2	Cd 226.502†	47946.7	48614.0	549.94 ug/L	549.94 ppb	02:42:32
2	Co 228.616†	42386.6	42882.6	880.79 ug/L	880.79 ppb	02:42:32
2	Cr 267.716†	186101.7	187783.5	2190.0 ug/L	2190.0 ppb	02:42:27
2	Cu 324.752†	587354.6	585041.0	1801.2 ug/L	1801.2 ppb	02:42:27
2	Mn 257.610†	4388567.5	4431187.5	5127.8 ug/L	5127.8 ppb	02:42:27
2	Mo 202.031†	6194.0	6244.5	479.68 ug/L	479.68 ppb	02:42:32
2	Ni 231.604†	48597.8	48962.6	1253.6 ug/L	1253.6 ppb	02:42:32

2	P 214.914†	14818.2	14722.0	7692.1 ug/L	7692.1 ppb	02:42:32
2	Pb 220.353†	6228.2	6363.1	790.06 ug/L	790.06 ppb	02:42:32
2	S 181.975 Axial†	3055.0	3042.1	3960.3 ug/L	3960.3 ppb	02:42:32
2	Sb 206.836†	3965.6	3969.0	1349.5 ug/L	1349.5 ppb	02:42:32
2	Se 196.026†	4115.5	4179.3	3045.3 ug/L	3045.3 ppb	02:42:32
2	Si 251.611†	957667.2	966479.7	30112 ug/L	30112 ppb	02:42:27
2	Sn 189.927†	5417.7	5458.4	996.55 ug/L	996.55 ppb	02:42:32
2	Ti 334.940†	3416693.2	3451811.2	5619.5 ug/L	5619.5 ppb	02:42:27
2	Tl 190.801†	3531.7	3605.6	1202.8 ug/L	1202.8 ppb	02:42:32
2	U 409.014†	-8980.9	-5554.1	-184.00 ug/L	-184.00 ppb	02:42:27
2	V 292.402†	157554.7	160782.6	1137.5 ug/L	1137.5 ppb	02:42:27
2	Zn 213.857†	576219.4	581202.4	5634.0 ug/L	5634.0 ppb	02:42:27
2	SiO2†	956134.2	964924.4	64322 ug/L	64322 ppb	02:42:59
3	Sc Radial	4287.5	4287.5	101 %		02:42:02
3	Y RADIAL	4835.2	4835.2	109.8 %		02:42:02
3	Al 396.153Radial†	82669.4	82122.3	82132 ug/L	82132 ppb	02:41:42
3	Ca 317.933Radial†	51334.3	50877.4	94906 ug/L	94906 ppb	02:41:42
3	Fe 238.204 Radial†	17545.6	17385.6	184790 ug/L	184790 ppb	02:41:42
3	K 766.490 Radial†	196547.5	191697.0	38659 ug/L	38659 ppb	02:41:42
3	Mg 279.077 IEC†	962.6	951.7	36569 ug/L	36569 ppb	02:42:02
3	Na 589.592 Radial†	28447.1	27997.1	9338.7 ug/L	9338.7 ppb	02:41:42
3	Sr 421.552†	275935.5	273488.5	2111.0 ug/L	2111.0 ppb	02:41:42
3	Sc 361.383	850104.7	850104.7	100.01 %		02:42:41
3	Y 371.029	748693.1	748693.1	106.54 %		02:42:41
3	Ag 328.068†	50588.0	50354.6	307.70 ug/L	307.70 ppb	02:42:41
3	As 188.979†	2245.1	2273.2	1047.3 ug/L	1047.3 ppb	02:42:46
3	B 249.677†	61468.3	61943.3	1424.8 ug/L	1424.8 ppb	02:42:41
3	Ba 233.527†	224281.1	224236.9	1828.9 ug/L	1828.9 ppb	02:42:41
3	Be 313.107†	2021496.7	2025607.8	756.76 ug/L	756.76 ppb	02:42:41
3	Cd 226.502†	47492.8	47683.0	539.28 ug/L	539.28 ppb	02:42:46
3	Co 228.616†	41894.8	41969.0	861.75 ug/L	861.75 ppb	02:42:46
3	Cr 267.716†	187544.1	187373.3	2185.2 ug/L	2185.2 ppb	02:42:41
3	Cu 324.752†	595504.2	587342.9	1808.1 ug/L	1808.1 ppb	02:42:41
3	Mn 257.610†	4427110.7	4426041.6	5121.7 ug/L	5121.7 ppb	02:42:41
3	Mo 202.031†	6130.1	6119.0	470.15 ug/L	470.15 ppb	02:42:46
3	Ni 231.604†	48091.8	47972.8	1228.3 ug/L	1228.3 ppb	02:42:46
3	P 214.914†	14599.1	14355.4	7488.7 ug/L	7488.7 ppb	02:42:46
3	Pb 220.353†	6121.1	6194.0	769.07 ug/L	769.07 ppb	02:42:46
3	S 181.975 Axial†	3027.4	2984.1	3884.7 ug/L	3884.7 ppb	02:42:46
3	Sb 206.836†	3962.0	3925.8	1334.2 ug/L	1334.2 ppb	02:42:46
3	Se 196.026†	4098.0	4120.9	3003.4 ug/L	3003.4 ppb	02:42:46
3	Si 251.611†	966727.8	966006.5	30098 ug/L	30098 ppb	02:42:41
3	Sn 189.927†	5300.7	5287.5	965.64 ug/L	965.64 ppb	02:42:46
3	Ti 334.940†	3451362.2	3452465.8	5620.4 ug/L	5620.4 ppb	02:42:41
3	Tl 190.801†	3443.2	3481.9	1163.9 ug/L	1163.9 ppb	02:42:46
3	U 409.014†	-8831.8	-5315.7	-176.94 ug/L	-176.94 ppb	02:42:41
3	V 292.402†	159300.8	160960.1	1139.0 ug/L	1139.0 ppb	02:42:41
3	Zn 213.857†	582032.6	581279.2	5635.3 ug/L	5635.3 ppb	02:42:41
3	SiO2†	956687.7	955960.2	63724 ug/L	63724 ppb	02:43:05

Mean Data: 1202030974|948071|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	846564.3	99.595 %	0.5104			0.51%
Sc Radial	4276.3	101 %	0.2			0.25%
Y 371.029	745554.9	106.09 %	0.524			0.49%
Y RADIAL	4821.2	109.5 %	0.32			0.29%
Ag 328.068†	50370.2	308.44 ug/L	0.683	308.44 ppb	0.683	0.22%
Al 396.153Radial†	82869.7	82880 ug/L	659.9	82880 ppb	659.9	0.80%
As 188.979†	2298.9	1058.6 ug/L	10.24	1058.6 ppb	10.24	0.97%
B 249.677†	61823.1	1421.6 ug/L	2.93	1421.6 ppb	2.93	0.21%
Ba 233.527†	224511.5	1831.2 ug/L	2.02	1831.2 ppb	2.02	0.11%
Be 313.107†	2025252.4	756.63 ug/L	0.842	756.63 ppb	0.842	0.11%
Ca 317.933Radial†	51498.2	96064 ug/L	1025.9	96064 ppb	1025.9	1.07%
Cd 226.502†	48142.4	544.46 ug/L	5.334	544.46 ppb	5.334	0.98%
Co 228.616†	42407.9	870.88 ug/L	9.545	870.88 ppb	9.545	1.10%
Cr 267.716†	187661.5	2188.6 ug/L	2.95	2188.6 ppb	2.95	0.13%
Cu 324.752†	586495.8	1805.7 ug/L	3.85	1805.7 ppb	3.85	0.21%
Fe 238.204 Radial†	17575.1	186810 ug/L	1848.2	186810 ppb	1848.2	0.99%
K 766.490 Radial†	193952.4	39114 ug/L	398.8	39114 ppb	398.8	1.02%

Mg 279.077 IEC†	950.2	36509 ug/L	77.6	36509 ppb	77.6	0.21%
Mn 257.610†	4431340.6	5128.0 ug/L	6.38	5128.0 ppb	6.38	0.12%
Mo 202.031†	6177.6	474.67 ug/L	4.785	474.67 ppb	4.785	1.01%
Na 589.592 Radial†	28327.9	9449.1 ug/L	121.75	9449.1 ppb	121.75	1.29%
Ni 231.604†	48459.3	1240.7 ug/L	12.68	1240.7 ppb	12.68	1.02%
P 214.914†	14531.0	7585.4 ug/L	102.07	7585.4 ppb	102.07	1.35%
Pb 220.353†	6265.8	777.98 ug/L	10.851	777.98 ppb	10.851	1.39%
S 181.975 Axial†	3013.3	3922.7 ug/L	37.80	3922.7 ppb	37.80	0.96%
Sb 206.836†	3946.4	1341.5 ug/L	7.64	1341.5 ppb	7.64	0.57%
Se 196.026†	4141.7	3022.1 ug/L	21.33	3022.1 ppb	21.33	0.71%
Si 251.611†	966928.3	30126 ug/L	37.7	30126 ppb	37.7	0.13%
Sn 189.927†	5376.9	981.88 ug/L	15.517	981.88 ppb	15.517	1.58%
Sr 421.552†	276615.0	2135.1 ug/L	22.21	2135.1 ppb	22.21	1.04%
Ti 334.940†	3453477.4	5622.2 ug/L	3.89	5622.2 ppb	3.89	0.07%
Tl 190.801†	3551.9	1186.0 ug/L	20.00	1186.0 ppb	20.00	1.69%
U 409.014†	-5464.4	-181.41 ug/L	3.882	-181.41 ppb	3.882	2.14%
V 292.402†	160909.8	1138.4 ug/L	0.80	1138.4 ppb	0.80	0.07%
Zn 213.857†	581618.6	5638.2 ug/L	6.21	5638.2 ppb	6.21	0.11%
SiO2†	958647.6	63904 ug/L	363.6	63904 ppb	363.6	0.57%

Sequence No.: 88

Sample ID: 245806001|948071|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 105

Date Collected: 2/17/2010 02:45:16

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 245806001|948071|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4128.5	4128.5	97.1 %		02:47:29
1	Y RADIAL	5187.6	5187.6	117.8 %		02:47:09
1	Al 396.153Radial†	32691.1	33819.6	33833 ug/L	33833 ppb	02:47:09
1	Ca 317.933Radial†	5783.8	5937.0	11075 ug/L	11075 ppb	02:47:09
1	Fe 238.204 Radial†	8824.3	9075.9	96456 ug/L	96456 ppb	02:47:09
1	K 766.490 Radial†	25580.8	23167.8	4672.0 ug/L	4672.0 ppb	02:47:09
1	Mg 279.077 IEC†	170.8	173.1	6585.5 ug/L	6585.5 ppb	02:47:29
1	Na 589.592 Radial†	2709.7	2583.0	861.59 ug/L	861.59 ppb	02:47:09
1	Sr 421.552†	10136.3	10347.1	79.810 ug/L	79.810 ppb	02:47:09
1	Sc 361.383	861304.8	861304.8	101.33 %		02:48:27
1	Y 371.029	815455.8	815455.8	116.04 %		02:48:27
1	Ag 328.068†	-4873.2	-5037.0	8.1165 ug/L	8.1165 ppb	02:48:32
1	As 188.979†	-15.9	12.6	42.883 ug/L	42.883 ppb	02:48:52
1	B 249.677†	705.3	1177.9	11.948 ug/L	11.948 ppb	02:48:32
1	Ba 233.527†	59581.3	58781.0	480.42 ug/L	480.42 ppb	02:48:32
1	Be 313.107†	15354.8	19492.6	11.090 ug/L	11.090 ppb	02:48:32
1	Cd 226.502†	547.1	735.4	-1.1945 ug/L	-1.1945 ppb	02:48:52
1	Co 228.616†	1632.7	1690.2	30.402 ug/L	30.402 ppb	02:48:52
1	Cr 267.716†	11516.2	11215.5	132.25 ug/L	132.25 ppb	02:48:32
1	Cu 324.752†	381548.1	368450.0	1132.9 ug/L	1132.9 ppb	02:48:32
1	Mn 257.610†	1680985.8	1658369.9	1922.0 ug/L	1922.0 ppb	02:48:27
1	Mo 202.031†	30.1	19.2	9.0462 ug/L	9.0462 ppb	02:48:52
1	Ni 231.604†	3387.3	3229.4	82.697 ug/L	82.697 ppb	02:48:52
1	P 214.914†	1320.8	1061.5	295.65 ug/L	295.65 ppb	02:48:52
1	Pb 220.353†	44186.5	43680.5	5408.6 ug/L	5408.6 ppb	02:48:32
1	S 181.975 Axial†	159.2	114.2	142.93 ug/L	142.93 ppb	02:48:52
1	Sb 206.836†	206.2	167.8	49.447 ug/L	49.447 ppb	02:48:52
1	Se 196.026†	-436.7	-407.6	74.110 ug/L	74.110 ppb	02:48:52
1	Si 251.611†	699667.0	689878.5	21498 ug/L	21498 ppb	02:48:27
1	Sn 189.927†	6.6	-6.1	2.2187 ug/L	2.2187 ppb	02:48:52
1	Ti 334.940†	1077733.4	1065091.8	1731.8 ug/L	1731.8 ppb	02:48:27
1	Tl 190.801†	-102.8	-62.4	3.4910 ug/L	3.4910 ppb	02:48:52
1	U 409.014†	17759.9	21042.1	586.46 ug/L	586.46 ppb	02:48:27
1	V 292.402†	11396.3	12924.1	78.970 ug/L	78.970 ppb	02:48:32
1	Zn 213.857†	39759.8	38550.6	359.76 ug/L	359.76 ppb	02:48:32
1	SiO2†	691574.8	681885.3	45463 ug/L	45463 ppb	02:50:00
2	Sc Radial	4172.1	4172.1	98.1 %		02:47:54
2	Y RADIAL	5114.8	5114.8	116.2 %		02:47:34
2	Al 396.153Radial†	32182.4	32949.1	32962 ug/L	32962 ppb	02:47:34
2	Ca 317.933Radial†	5695.4	5784.6	10790 ug/L	10790 ppb	02:47:34
2	Fe 238.204 Radial†	8701.4	8855.7	94115 ug/L	94115 ppb	02:47:34
2	K 766.490 Radial†	25030.0	22331.0	4503.2 ug/L	4503.2 ppb	02:47:34
2	Mg 279.077 IEC†	169.4	169.9	6462.0 ug/L	6462.0 ppb	02:47:54
2	Na 589.592 Radial†	2692.7	2536.5	846.07 ug/L	846.07 ppb	02:47:34
2	Sr 421.552†	10028.4	10127.9	78.120 ug/L	78.120 ppb	02:47:34
2	Sc 361.383	846618.8	846618.8	99.601 %		02:48:58
2	Y 371.029	801810.5	801810.5	114.10 %		02:48:58
2	Ag 328.068†	-4825.6	-5072.6	7.1617 ug/L	7.1617 ppb	02:49:03
2	As 188.979†	0.4	28.7	49.111 ug/L	49.111 ppb	02:49:23
2	B 249.677†	728.9	1213.7	13.167 ug/L	13.167 ppb	02:49:03
2	Ba 233.527†	60051.1	60272.7	492.47 ug/L	492.47 ppb	02:49:03
2	Be 313.107†	15564.0	19965.5	11.262 ug/L	11.262 ppb	02:49:03
2	Cd 226.502†	555.3	753.0	-0.7446 ug/L	-0.7446 ppb	02:49:23
2	Co 228.616†	1641.4	1726.9	31.207 ug/L	31.207 ppb	02:49:23
2	Cr 267.716†	11579.9	11476.6	135.24 ug/L	135.24 ppb	02:49:03
2	Cu 324.752†	382579.6	376017.4	1155.9 ug/L	1155.9 ppb	02:49:03
2	Mn 257.610†	1650402.1	1656440.8	1919.5 ug/L	1919.5 ppb	02:48:58
2	Mo 202.031†	31.1	20.7	8.9738 ug/L	8.9738 ppb	02:49:23
2	Ni 231.604†	3384.7	3284.7	84.114 ug/L	84.114 ppb	02:49:23

2	P 214.914†	1333.3	1096.7	312.24 ug/L	312.24 ppb	02:49:23
2	Pb 220.353†	44357.5	44608.7	5523.6 ug/L	5523.6 ppb	02:49:03
2	S 181.975 Axial†	169.6	127.4	160.31 ug/L	160.31 ppb	02:49:23
2	Sb 206.836†	213.7	178.8	53.219 ug/L	53.219 ppb	02:49:23
2	Se 196.026†	-434.2	-412.6	63.627 ug/L	63.627 ppb	02:49:23
2	Si 251.611†	687124.3	689263.4	21479 ug/L	21479 ppb	02:48:58
2	Sn 189.927†	2.5	-10.1	1.4118 ug/L	1.4118 ppb	02:49:23
2	Ti 334.940†	1058822.3	1064554.8	1730.8 ug/L	1730.8 ppb	02:48:58
2	Tl 190.801†	-121.2	-82.6	-2.9065 ug/L	-2.9065 ppb	02:49:23
2	U 409.014†	17685.0	21271.0	593.22 ug/L	593.22 ppb	02:48:58
2	V 292.402†	11483.3	13206.6	81.368 ug/L	81.368 ppb	02:49:03
2	Zn 213.857†	40042.0	39514.6	369.48 ug/L	369.48 ppb	02:49:03
2	SiO2†	693764.9	695923.3	46399 ug/L	46399 ppb	02:50:06
3	Sc Radial	4123.1	4123.1	97.0 %		02:48:20
3	Y RADIAL	5193.9	5193.9	118.0 %		02:48:00
3	Al 396.153Radial†	33006.8	34189.2	34202 ug/L	34202 ppb	02:48:00
3	Ca 317.933Radial†	5789.8	5950.9	11101 ug/L	11101 ppb	02:48:00
3	Fe 238.204 Radial†	8857.9	9122.5	96951 ug/L	96951 ppb	02:48:00
3	K 766.490 Radial†	25500.8	23119.8	4662.3 ug/L	4662.3 ppb	02:48:00
3	Mg 279.077 IEC†	171.6	174.2	6626.8 ug/L	6626.8 ppb	02:48:20
3	Na 589.592 Radial†	2667.6	2543.3	848.33 ug/L	848.33 ppb	02:48:00
3	Sr 421.552†	10187.4	10413.4	80.322 ug/L	80.322 ppb	02:48:00
3	Sc 361.383	848006.1	848006.1	99.764 %		02:49:29
3	Y 371.029	803773.5	803773.5	114.38 %		02:49:29
3	Ag 328.068†	-4910.3	-5149.5	7.7509 ug/L	7.7509 ppb	02:49:34
3	As 188.979†	-9.2	19.1	45.757 ug/L	45.757 ppb	02:49:54
3	B 249.677†	729.4	1213.1	12.692 ug/L	12.692 ppb	02:49:34
3	Ba 233.527†	60408.3	60532.1	494.66 ug/L	494.66 ppb	02:49:34
3	Be 313.107†	15537.3	19913.2	11.246 ug/L	11.246 ppb	02:49:34
3	Cd 226.502†	550.4	747.2	-1.1061 ug/L	-1.1061 ppb	02:49:54
3	Co 228.616†	1642.1	1724.8	31.119 ug/L	31.119 ppb	02:49:54
3	Cr 267.716†	11682.2	11560.1	136.27 ug/L	136.27 ppb	02:49:34
3	Cu 324.752†	385769.1	378586.0	1163.9 ug/L	1163.9 ppb	02:49:34
3	Mn 257.610†	1656357.2	1659699.1	1923.6 ug/L	1923.6 ppb	02:49:29
3	Mo 202.031†	19.0	8.6	8.2979 ug/L	8.2979 ppb	02:49:54
3	Ni 231.604†	3369.2	3263.6	83.573 ug/L	83.573 ppb	02:49:54
3	P 214.914†	1319.3	1080.4	299.69 ug/L	299.69 ppb	02:49:54
3	Pb 220.353†	44836.1	45015.6	5574.0 ug/L	5574.0 ppb	02:49:34
3	S 181.975 Axial†	156.6	114.1	142.70 ug/L	142.70 ppb	02:49:54
3	Sb 206.836†	201.0	165.8	48.718 ug/L	48.718 ppb	02:49:54
3	Se 196.026†	-434.6	-412.3	72.990 ug/L	72.990 ppb	02:49:54
3	Si 251.611†	688399.1	689412.5	21484 ug/L	21484 ppb	02:49:29
3	Sn 189.927†	2.3	-10.3	1.4739 ug/L	1.4739 ppb	02:49:54
3	Ti 334.940†	1061425.5	1065425.0	1732.3 ug/L	1732.3 ppb	02:49:29
3	Tl 190.801†	-115.6	-76.7	-1.0397 ug/L	-1.0397 ppb	02:49:54
3	U 409.014†	17538.5	21095.1	587.90 ug/L	587.90 ppb	02:49:29
3	V 292.402†	11549.0	13253.6	81.275 ug/L	81.275 ppb	02:49:34
3	Zn 213.857†	40227.6	39634.9	370.22 ug/L	370.22 ppb	02:49:34
3	SiO2†	694036.9	695056.4	46342 ug/L	46342 ppb	02:50:11

Mean Data: 245806001|948071|1

Analyte	Mean Corrected	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	851976.6	100.23 %		0.954			0.95%
Sc Radial	4141.2	97.4 %		0.63			0.65%
Y 371.029	807013.3	114.84 %		1.050			0.91%
Y RADIAL	5165.4	117.3 %		1.00			0.85%
Ag 328.068†	-5086.4	7.6764 ug/L		0.48174	7.6764 ppb	0.48174	6.28%
Al 396.153Radial†	33652.6	33666 ug/L		636.9	33666 ppb	636.9	1.89%
As 188.979†	20.1	45.917 ug/L		3.1170	45.917 ppb	3.1170	6.79%
B 249.677†	1201.6	12.602 ug/L		0.6146	12.602 ppb	0.6146	4.88%
Ba 233.527†	59861.9	489.19 ug/L		7.666	489.19 ppb	7.666	1.57%
Be 313.107†	19790.4	11.199 ug/L		0.0949	11.199 ppb	0.0949	0.85%
Ca 317.933Radial†	5890.8	10989 ug/L		172.1	10989 ppb	172.1	1.57%
Cd 226.502†	745.2	-1.0151 ug/L		0.23833	-1.0151 ppb	0.23833	23.48%
Co 228.616†	1714.0	30.909 ug/L		0.4418	30.909 ppb	0.4418	1.43%
Cr 267.716†	11417.4	134.59 ug/L		2.089	134.59 ppb	2.089	1.55%
Cu 324.752†	374351.1	1150.9 ug/L		16.12	1150.9 ppb	16.12	1.40%
Fe 238.204 Radial†	9018.0	95841 ug/L		1514.6	95841 ppb	1514.6	1.58%
K 766.490 Radial†	22872.9	4612.5 ug/L		94.79	4612.5 ppb	94.79	2.06%

Mg 279.077 IEC†	172.4	6558.1 ug/L	85.78	6558.1 ppb	85.78	1.31%
Mn 257.610†	1658169.9	1921.7 ug/L	2.03	1921.7 ppb	2.03	0.11%
Mo 202.031†	16.2	8.7726 ug/L	0.41269	8.7726 ppb	0.41269	4.70%
Na 589.592 Radial†	2554.2	852.00 ug/L	8.381	852.00 ppb	8.381	0.98%
Ni 231.604†	3259.3	83.462 ug/L	0.7153	83.462 ppb	0.7153	0.86%
P 214.914†	1079.5	302.53 ug/L	8.652	302.53 ppb	8.652	2.86%
Pb 220.353†	44434.9	5502.0 ug/L	84.77	5502.0 ppb	84.77	1.54%
S 181.975 Axial†	118.6	148.65 ug/L	10.098	148.65 ppb	10.098	6.79%
Sb 206.836†	170.8	50.461 ug/L	2.4162	50.461 ppb	2.4162	4.79%
Se 196.026†	-410.8	70.243 ug/L	5.7568	70.243 ppb	5.7568	8.20%
Si 251.611†	689518.1	21487 ug/L	10.0	21487 ppb	10.0	0.05%
Sn 189.927†	-8.8	1.7015 ug/L	0.44903	1.7015 ppb	0.44903	26.39%
Sr 421.552†	10296.1	79.417 ug/L	1.1522	79.417 ppb	1.1522	1.45%
Ti 334.940†	1065023.9	1731.6 ug/L	0.73	1731.6 ppb	0.73	0.04%
Tl 190.801†	-73.9	-0.1518 ug/L	3.28991	-0.1518 ppb	3.28991	>999.9%
U 409.014†	21136.1	589.19 ug/L	3.561	589.19 ppb	3.561	0.60%
V 292.402†	13128.1	80.538 ug/L	1.3584	80.538 ppb	1.3584	1.69%
Zn 213.857†	39233.4	366.49 ug/L	5.837	366.49 ppb	5.837	1.59%
SiO2†	690955.0	46068 ug/L	524.5	46068 ppb	524.5	1.14%

Sequence No.: 89

Sample ID: 1202030970|948071|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 106

Date Collected: 2/17/2010 02:52:23

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202030970|948071|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4115.2	4115.2	96.8 %		02:54:36
1	Y RADIAL	5070.3	5070.3	115.2 %		02:54:16
1	Al 396.153Radial†	30815.7	31990.9	32003 ug/L	32003 ppb	02:54:16
1	Ca 317.933Radial†	5448.7	5610.1	10465 ug/L	10465 ppb	02:54:16
1	Fe 238.204 Radial†	8740.6	9018.7	95848 ug/L	95848 ppb	02:54:16
1	K 766.490 Radial†	24852.8	22500.7	4537.5 ug/L	4537.5 ppb	02:54:16
1	Mg 279.077 IEC†	161.7	164.3	6246.4 ug/L	6246.4 ppb	02:54:36
1	Na 589.592 Radial†	2652.2	2532.6	844.77 ug/L	844.77 ppb	02:54:16
1	Sr 421.552†	9454.3	9676.2	74.635 ug/L	74.635 ppb	02:54:16
1	Sc 361.383	855411.4	855411.4	100.64 %		02:55:34
1	Y 371.029	808085.1	808085.1	114.99 %		02:55:34
1	Ag 328.068†	-5068.0	-5263.6	7.0113 ug/L	7.0113 ppb	02:55:39
1	As 188.979†	-47.1	-18.5	29.468 ug/L	29.468 ppb	02:55:59
1	B 249.677†	588.2	1066.4	9.4379 ug/L	9.4379 ppb	02:55:39
1	Ba 233.527†	55572.4	55202.6	451.34 ug/L	451.34 ppb	02:55:39
1	Be 313.107†	11494.4	15761.0	9.6678 ug/L	9.6678 ppb	02:55:39
1	Cd 226.502†	522.5	714.7	-1.4345 ug/L	-1.4345 ppb	02:55:59
1	Co 228.616†	1345.4	1415.8	24.741 ug/L	24.741 ppb	02:55:59
1	Cr 267.716†	7604.3	7406.6	88.017 ug/L	88.017 ppb	02:55:39
1	Cu 324.752†	114923.8	106103.8	329.74 ug/L	329.74 ppb	02:55:39
1	Mn 257.610†	1825522.0	1813422.6	2100.8 ug/L	2100.8 ppb	02:55:34
1	Mo 202.031†	24.0	13.4	8.5607 ug/L	8.5607 ppb	02:55:59
1	Ni 231.604†	2564.8	2435.1	62.355 ug/L	62.355 ppb	02:55:59
1	P 214.914†	988.2	739.9	276.78 ug/L	276.78 ppb	02:55:59
1	Pb 220.353†	2323.1	2382.0	292.77 ug/L	292.77 ppb	02:55:59
1	S 181.975 Axial†	151.5	107.6	134.69 ug/L	134.69 ppb	02:55:59
1	Sb 206.836†	87.3	51.1	9.9777 ug/L	9.9777 ppb	02:55:59
1	Se 196.026†	-446.2	-420.1	64.833 ug/L	64.833 ppb	02:55:59
1	Si 251.611†	698245.0	693222.7	21603 ug/L	21603 ppb	02:55:34
1	Sn 189.927†	-8.8	-21.3	-0.6243 ug/L	-0.6243 ppb	02:55:59
1	Ti 334.940†	1056337.3	1051158.6	1709.2 ug/L	1709.2 ppb	02:55:34
1	Tl 190.801†	-119.3	-79.5	-1.2113 ug/L	-1.2113 ppb	02:55:59
1	U 409.014†	8996.9	12455.3	342.70 ug/L	342.70 ppb	02:55:34
1	V 292.402†	10665.3	12275.3	73.920 ug/L	73.920 ppb	02:55:39
1	Zn 213.857†	38028.6	37100.7	346.92 ug/L	346.92 ppb	02:55:39
1	SiO2†	683862.6	678924.0	45266 ug/L	45266 ppb	02:57:07
2	Sc Radial	4116.4	4116.4	96.8 %		02:55:01
2	Y RADIAL	4987.5	4987.5	113.3 %		02:54:41
2	Al 396.153Radial†	30214.2	31360.8	31373 ug/L	31373 ppb	02:54:41
2	Ca 317.933Radial†	5332.0	5488.0	10237 ug/L	10237 ppb	02:54:41
2	Fe 238.204 Radial†	8588.6	8859.3	94154 ug/L	94154 ppb	02:54:41
2	K 766.490 Radial†	24220.2	21840.3	4404.2 ug/L	4404.2 ppb	02:54:41
2	Mg 279.077 IEC†	162.7	165.3	6286.4 ug/L	6286.4 ppb	02:55:01
2	Na 589.592 Radial†	2469.1	2342.7	781.42 ug/L	781.42 ppb	02:54:41
2	Sr 421.552†	9219.5	9431.0	72.743 ug/L	72.743 ppb	02:54:41
2	Sc 361.383	846340.2	846340.2	99.568 %		02:56:05
2	Y 371.029	798334.4	798334.4	113.60 %		02:56:05
2	Ag 328.068†	-5033.6	-5283.1	6.3544 ug/L	6.3544 ppb	02:56:10
2	As 188.979†	-42.9	-14.7	30.665 ug/L	30.665 ppb	02:56:30
2	B 249.677†	639.9	1124.6	11.083 ug/L	11.083 ppb	02:56:10
2	Ba 233.527†	55601.4	55823.5	456.33 ug/L	456.33 ppb	02:56:10
2	Be 313.107†	11551.5	15940.6	9.7385 ug/L	9.7385 ppb	02:56:10
2	Cd 226.502†	544.3	742.2	-0.9380 ug/L	-0.9380 ppb	02:56:30
2	Co 228.616†	1342.5	1427.2	25.000 ug/L	25.000 ppb	02:56:30
2	Cr 267.716†	7551.4	7434.4	88.310 ug/L	88.310 ppb	02:56:10
2	Cu 324.752†	114704.1	107107.2	332.72 ug/L	332.72 ppb	02:56:10
2	Mn 257.610†	1806806.2	1814068.2	2101.4 ug/L	2101.4 ppb	02:56:05
2	Mo 202.031†	25.4	15.0	8.5478 ug/L	8.5478 ppb	02:56:30
2	Ni 231.604†	2535.9	2433.4	62.311 ug/L	62.311 ppb	02:56:30

2	P 214.914†	985.1	747.3	281.46 ug/L	281.46 ppb	02:56:30
2	Pb 220.353†	2308.1	2391.7	293.98 ug/L	293.98 ppb	02:56:30
2	S 181.975 Axial†	143.5	101.2	126.39 ug/L	126.39 ppb	02:56:30
2	Sb 206.836†	89.1	53.9	10.903 ug/L	10.903 ppb	02:56:30
2	Se 196.026†	-433.9	-412.4	63.796 ug/L	63.796 ppb	02:56:30
2	Si 251.611†	690560.7	692941.6	21594 ug/L	21594 ppb	02:56:05
2	Sn 189.927†	-25.1	-37.8	-3.6373 ug/L	-3.6373 ppb	02:56:30
2	Ti 334.940†	1046420.9	1052449.6	1711.2 ug/L	1711.2 ppb	02:56:05
2	Tl 190.801†	-111.5	-72.8	0.9076 ug/L	0.9076 ppb	02:56:30
2	U 409.014†	8877.6	12431.3	342.21 ug/L	342.21 ppb	02:56:05
2	V 292.402†	10716.9	12440.7	75.363 ug/L	75.363 ppb	02:56:10
2	Zn 213.857†	37924.4	37401.0	350.10 ug/L	350.10 ppb	02:56:10
2	SiO2†	700092.4	702507.5	46838 ug/L	46838 ppb	02:57:13
3	Sc Radial	4125.7	4125.7	97.1 %		02:55:27
3	Y RADIAL	5162.3	5162.3	117.3 %		02:55:07
3	Al 396.153Radial†	31012.2	32112.5	32125 ug/L	32125 ppb	02:55:07
3	Ca 317.933Radial†	5464.8	5612.4	10469 ug/L	10469 ppb	02:55:07
3	Fe 238.204 Radial†	8776.6	9032.9	95999 ug/L	95999 ppb	02:55:07
3	K 766.490 Radial†	24865.4	22448.5	4526.9 ug/L	4526.9 ppb	02:55:07
3	Mg 279.077 IEC†	160.2	162.3	6168.8 ug/L	6168.8 ppb	02:55:27
3	Na 589.592 Radial†	2608.8	2480.9	827.53 ug/L	827.53 ppb	02:55:07
3	Sr 421.552†	9453.4	9650.5	74.436 ug/L	74.436 ppb	02:55:07
3	Sc 361.383	853718.2	853718.2	100.44 %		02:56:36
3	Y 371.029	807069.0	807069.0	114.85 %		02:56:36
3	Ag 328.068†	-5056.3	-5262.0	7.0672 ug/L	7.0672 ppb	02:56:41
3	As 188.979†	-34.4	-5.9	34.772 ug/L	34.772 ppb	02:57:01
3	B 249.677†	567.3	1046.8	8.9517 ug/L	8.9517 ppb	02:56:41
3	Ba 233.527†	55278.4	55019.4	449.86 ug/L	449.86 ppb	02:56:41
3	Be 313.107†	11427.4	15716.9	9.6480 ug/L	9.6480 ppb	02:56:41
3	Cd 226.502†	534.0	727.1	-1.3032 ug/L	-1.3032 ppb	02:57:01
3	Co 228.616†	1364.1	1437.1	25.187 ug/L	25.187 ppb	02:57:01
3	Cr 267.716†	7580.5	7397.9	87.917 ug/L	87.917 ppb	02:56:41
3	Cu 324.752†	114119.3	105529.3	327.98 ug/L	327.98 ppb	02:56:41
3	Mn 257.610†	1816225.8	1807764.5	2094.3 ug/L	2094.3 ppb	02:56:36
3	Mo 202.031†	31.4	20.8	9.1250 ug/L	9.1250 ppb	02:57:01
3	Ni 231.604†	2572.9	2448.2	62.691 ug/L	62.691 ppb	02:57:01
3	P 214.914†	977.0	730.8	271.98 ug/L	271.98 ppb	02:57:01
3	Pb 220.353†	2360.0	2423.3	297.90 ug/L	297.90 ppb	02:57:01
3	S 181.975 Axial†	142.0	98.4	122.65 ug/L	122.65 ppb	02:57:01
3	Sb 206.836†	83.9	47.9	8.9207 ug/L	8.9207 ppb	02:57:01
3	Se 196.026†	-447.1	-421.8	64.290 ug/L	64.290 ppb	02:57:01
3	Si 251.611†	694262.3	690633.4	21522 ug/L	21522 ppb	02:56:36
3	Sn 189.927†	-1.3	-13.9	0.7105 ug/L	0.7105 ppb	02:57:01
3	Ti 334.940†	1053256.8	1050173.2	1707.6 ug/L	1707.6 ppb	02:56:36
3	Tl 190.801†	-117.0	-77.3	-0.5828 ug/L	-0.5828 ppb	02:57:01
3	U 409.014†	9092.8	12568.4	345.90 ug/L	345.90 ppb	02:56:36
3	V 292.402†	10635.3	12266.4	73.848 ug/L	73.848 ppb	02:56:41
3	Zn 213.857†	37703.6	36852.1	344.47 ug/L	344.47 ppb	02:56:41
3	SiO2†	694057.7	690422.4	46033 ug/L	46033 ppb	02:57:18

Mean Data: 1202030970|948071|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	851823.3	100.21 %	0.567			0.57%
Sc Radial	4119.1	96.9 %	0.14			0.14%
Y 371.029	804496.2	114.48 %	0.763			0.67%
Y RADIAL	5073.3	115.2 %	1.99			1.72%
Ag 328.068†	-5269.6	6.8110 ug/L	0.39637	6.8110 ppb	0.39637	5.82%
Al 396.153Radial†	31821.4	31834 ug/L	403.7	31834 ppb	403.7	1.27%
As 188.979†	-13.1	31.635 ug/L	2.7818	31.635 ppb	2.7818	8.79%
B 249.677†	1079.3	9.8243 ug/L	1.11705	9.8243 ppb	1.11705	11.37%
Ba 233.527†	55348.5	452.51 ug/L	3.393	452.51 ppb	3.393	0.75%
Be 313.107†	15806.2	9.6848 ug/L	0.04762	9.6848 ppb	0.04762	0.49%
Ca 317.933Radial†	5570.1	10390 ug/L	132.8	10390 ppb	132.8	1.28%
Cd 226.502†	728.0	-1.2252 ug/L	0.25727	-1.2252 ppb	0.25727	21.00%
Co 228.616†	1426.7	24.976 ug/L	0.2240	24.976 ppb	0.2240	0.90%
Cr 267.716†	7413.0	88.081 ug/L	0.2041	88.081 ppb	0.2041	0.23%
Cu 324.752†	106246.8	330.15 ug/L	2.394	330.15 ppb	2.394	0.73%
Fe 238.204 Radial†	8970.3	95334 ug/L	1024.5	95334 ppb	1024.5	1.07%
K 766.490 Radial†	22263.2	4489.5 ug/L	74.06	4489.5 ppb	74.06	1.65%



Mg 279.077 IEC†	164.0	6233.9 ug/L	59.79	6233.9 ppb	59.79	0.96%
Mn 257.610†	1811751.8	2098.8 ug/L	3.93	2098.8 ppb	3.93	0.19%
Mo 202.031†	16.4	8.7445 ug/L	0.32958	8.7445 ppb	0.32958	3.77%
Na 589.592 Radial†	2452.1	817.91 ug/L	32.750	817.91 ppb	32.750	4.00%
Ni 231.604†	2438.9	62.452 ug/L	0.2076	62.452 ppb	0.2076	0.33%
P 214.914†	739.4	276.74 ug/L	4.740	276.74 ppb	4.740	1.71%
Pb 220.353†	2399.0	294.88 ug/L	2.680	294.88 ppb	2.680	0.91%
S 181.975 Axial†	102.4	127.91 ug/L	6.166	127.91 ppb	6.166	4.82%
Sb 206.836†	50.9	9.9338 ug/L	0.99192	9.9338 ppb	0.99192	9.99%
Se 196.026†	-418.1	64.307 ug/L	0.5186	64.307 ppb	0.5186	0.81%
Si 251.611†	692265.9	21573 ug/L	44.3	21573 ppb	44.3	0.21%
Sn 189.927†	-24.4	-1.1837 ug/L	2.22724	-1.1837 ppb	2.22724	188.16%
Sr 421.552†	9585.9	73.938 ug/L	1.0398	73.938 ppb	1.0398	1.41%
Ti 334.940†	1051260.5	1709.3 ug/L	1.84	1709.3 ppb	1.84	0.11%
Tl 190.801†	-76.6	-0.2955 ug/L	1.08825	-0.2955 ppb	1.08825	368.28%
U 409.014†	12485.0	343.60 ug/L	2.003	343.60 ppb	2.003	0.58%
V 292.402†	12327.5	74.377 ug/L	0.8549	74.377 ppb	0.8549	1.15%
Zn 213.857†	37117.9	347.16 ug/L	2.823	347.16 ppb	2.823	0.81%
SiO2†	690618.0	46046 ug/L	786.3	46046 ppb	786.3	1.71%

Sequence No.: 90

Sample ID: 1202030972|948071|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 107

Date Collected: 2/17/2010 02:59:30

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202030972|948071|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4220.9	4220.9	99.3 %		03:01:44
1	Y RADIAL	5196.2	5196.2	118.0 %		03:01:44
1	Al 396.153Radial†	73554.3	74236.8	74244 ug/L	74244 ppb	03:01:24
1	Ca 317.933Radial†	8417.0	8458.6	15778 ug/L	15778 ppb	03:01:24
1	Fe 238.204 Radial†	9909.5	9969.9	105970 ug/L	105970 ppb	03:01:24
1	K 766.490 Radial†	59771.8	57025.6	11503 ug/L	11503 ppb	03:01:24
1	Mg 279.077 IEC†	390.7	390.8	14986 ug/L	14986 ppb	03:01:44
1	Na 589.592 Radial†	15787.2	15692.5	5234.4 ug/L	5234.4 ppb	03:01:24
1	Sr 421.552†	70565.4	70977.7	547.92 ug/L	547.92 ppb	03:01:24
1	Sc 361.383	849326.2	849326.2	99.920 %		03:02:43
1	Y 371.029	827087.8	827087.8	117.70 %		03:02:43
1	Ag 328.068†	94728.1	94576.6	491.23 ug/L	491.23 ppb	03:02:43
1	As 188.979†	1094.9	1124.1	520.54 ug/L	520.54 ppb	03:03:03
1	B 249.677†	21136.1	21635.0	490.37 ug/L	490.37 ppb	03:02:43
1	Ba 233.527†	132846.4	132934.3	1083.9 ug/L	1083.9 ppb	03:02:43
1	Be 313.107†	1355020.6	1360448.7	505.95 ug/L	505.95 ppb	03:02:43
1	Cd 226.502†	39361.4	39588.6	452.53 ug/L	452.53 ppb	03:03:03
1	Co 228.616†	23636.3	23734.2	488.98 ug/L	488.98 ppb	03:03:03
1	Cr 267.716†	48479.2	48368.4	565.23 ug/L	565.23 ppb	03:02:43
1	Cu 324.752†	2179094.8	2172751.9	6657.4 ug/L	6657.4 ppb	03:02:43
1	Mn 257.610†	2190660.6	2191851.5	2537.9 ug/L	2537.9 ppb	03:02:43
1	Mo 202.031†	6146.2	6140.7	464.71 ug/L	464.71 ppb	03:03:03
1	Ni 231.604†	20778.8	20682.0	529.45 ug/L	529.45 ppb	03:03:03
1	P 214.914†	3831.4	3592.5	610.10 ug/L	610.10 ppb	03:03:03
1	Pb 220.353†	6397.9	6476.6	805.64 ug/L	805.64 ppb	03:03:03
1	S 181.975 Axial†	3980.9	3941.2	5137.1 ug/L	5137.1 ppb	03:03:03
1	Sb 206.836†	1339.3	1304.7	448.78 ug/L	448.78 ppb	03:03:03
1	Se 196.026†	357.9	381.6	567.84 ug/L	567.84 ppb	03:03:03
1	Si 251.611†	910909.9	911029.7	28384 ug/L	28384 ppb	03:02:43
1	Sn 189.927†	2908.1	2897.8	523.79 ug/L	523.79 ppb	03:03:03
1	Ti 334.940†	1690474.2	1693325.6	2752.5 ug/L	2752.5 ppb	03:02:43
1	Tl 190.801†	1377.4	1417.6	479.11 ug/L	479.11 ppb	03:03:03
1	U 409.014†	28411.2	31949.2	894.25 ug/L	894.25 ppb	03:02:43
1	V 292.402†	76934.5	78673.6	559.74 ug/L	559.74 ppb	03:02:43
1	Zn 213.857†	90916.0	90301.3	853.10 ug/L	853.10 ppb	03:02:43
1	SiO2†	902681.6	902787.5	60179 ug/L	60179 ppb	03:04:04
2	Sc Radial	4185.8	4185.8	98.5 %		03:02:09
2	Y RADIAL	5167.3	5167.3	117.4 %		03:02:09
2	Al 396.153Radial†	73910.5	75218.9	75226 ug/L	75226 ppb	03:01:49
2	Ca 317.933Radial†	8453.1	8566.2	15979 ug/L	15979 ppb	03:01:49
2	Fe 238.204 Radial†	9909.1	10053.1	106860 ug/L	106860 ppb	03:01:49
2	K 766.490 Radial†	60090.1	57852.8	11670 ug/L	11670 ppb	03:01:49
2	Mg 279.077 IEC†	384.2	387.4	14856 ug/L	14856 ppb	03:02:09
2	Na 589.592 Radial†	15821.4	15860.3	5290.4 ug/L	5290.4 ppb	03:01:49
2	Sr 421.552†	70796.5	71807.5	554.33 ug/L	554.33 ppb	03:01:49
2	Sc 361.383	845219.4	845219.4	99.437 %		03:03:10
2	Y 371.029	823193.8	823193.8	117.14 %		03:03:10
2	Ag 328.068†	94270.8	94577.3	491.53 ug/L	491.53 ppb	03:03:10
2	As 188.979†	1105.1	1139.7	527.32 ug/L	527.32 ppb	03:03:30
2	B 249.677†	21004.3	21605.2	489.52 ug/L	489.52 ppb	03:03:10
2	Ba 233.527†	132157.7	132887.7	1083.5 ug/L	1083.5 ppb	03:03:10
2	Be 313.107†	1345912.7	1357878.4	505.01 ug/L	505.01 ppb	03:03:10
2	Cd 226.502†	39416.9	39835.8	455.33 ug/L	455.33 ppb	03:03:30
2	Co 228.616†	23643.8	23856.6	491.52 ug/L	491.52 ppb	03:03:30
2	Cr 267.716†	48101.5	48224.4	563.57 ug/L	563.57 ppb	03:03:10
2	Cu 324.752†	2167606.7	2171795.2	6654.6 ug/L	6654.6 ppb	03:03:10
2	Mn 257.610†	2178284.9	2190058.3	2535.9 ug/L	2535.9 ppb	03:03:10
2	Mo 202.031†	6117.2	6141.4	464.83 ug/L	464.83 ppb	03:03:30
2	Ni 231.604†	20799.8	20804.2	532.58 ug/L	532.58 ppb	03:03:30

2	P 214.914†	3791.8	3571.3	598.46 ug/L	598.46 ppb	03:03:30
2	Pb 220.353†	6405.4	6515.2	810.56 ug/L	810.56 ppb	03:03:30
2	S 181.975 Axial†	3968.8	3948.4	5146.2 ug/L	5146.2 ppb	03:03:30
2	Sb 206.836†	1339.6	1311.5	451.09 ug/L	451.09 ppb	03:03:30
2	Se 196.026†	378.0	403.4	583.50 ug/L	583.50 ppb	03:03:30
2	Si 251.611†	905825.7	910346.2	28363 ug/L	28363 ppb	03:03:10
2	Sn 189.927†	2911.1	2915.0	526.91 ug/L	526.91 ppb	03:03:30
2	Ti 334.940†	1682492.3	1693519.0	2752.8 ug/L	2752.8 ppb	03:03:10
2	Tl 190.801†	1382.3	1429.3	482.76 ug/L	482.76 ppb	03:03:30
2	U 409.014†	28145.3	31820.0	890.48 ug/L	890.48 ppb	03:03:10
2	V 292.402†	76467.4	78578.0	558.91 ug/L	558.91 ppb	03:03:10
2	Zn 213.857†	90336.7	90160.8	851.58 ug/L	851.58 ppb	03:03:10
2	SiO2†	916206.6	920778.7	61379 ug/L	61379 ppb	03:04:10
3	Sc Radial	4186.0	4186.0	98.5 %		03:02:34
3	Y RADIAL	5169.6	5169.6	117.4 %		03:02:34
3	Al 396.153Radial†	73824.4	75128.7	75136 ug/L	75136 ppb	03:02:14
3	Ca 317.933Radial†	8454.7	8567.6	15982 ug/L	15982 ppb	03:02:14
3	Fe 238.204 Radial†	9916.3	10060.1	106930 ug/L	106930 ppb	03:02:14
3	K 766.490 Radial†	59941.6	57699.9	11639 ug/L	11639 ppb	03:02:14
3	Mg 279.077 IEC†	388.2	391.5	15013 ug/L	15013 ppb	03:02:34
3	Na 589.592 Radial†	15793.8	15831.8	5280.8 ug/L	5280.8 ppb	03:02:14
3	Sr 421.552†	70580.5	71585.6	552.61 ug/L	552.61 ppb	03:02:14
3	Sc 361.383	844483.4	844483.4	99.350 %		03:03:38
3	Y 371.029	823693.7	823693.7	117.21 %		03:03:38
3	Ag 328.068†	93863.9	94250.4	489.99 ug/L	489.99 ppb	03:03:38
3	As 188.979†	1102.3	1137.9	526.51 ug/L	526.51 ppb	03:03:58
3	B 249.677†	20907.6	21526.3	487.64 ug/L	487.64 ppb	03:03:38
3	Ba 233.527†	131970.5	132815.2	1082.9 ug/L	1082.9 ppb	03:03:38
3	Be 313.107†	1346748.3	1359899.2	505.73 ug/L	505.73 ppb	03:03:38
3	Cd 226.502†	39597.8	40052.4	457.85 ug/L	457.85 ppb	03:03:58
3	Co 228.616†	23716.0	23950.0	493.49 ug/L	493.49 ppb	03:03:58
3	Cr 267.716†	48187.5	48353.1	565.07 ug/L	565.07 ppb	03:03:38
3	Cu 324.752†	2159087.9	2165120.6	6634.1 ug/L	6634.1 ppb	03:03:38
3	Mn 257.610†	2173816.9	2187470.3	2532.9 ug/L	2532.9 ppb	03:03:38
3	Mo 202.031†	6148.4	6178.2	467.57 ug/L	467.57 ppb	03:03:58
3	Ni 231.604†	20833.6	20856.4	533.92 ug/L	533.92 ppb	03:03:58
3	P 214.914†	3819.1	3602.1	619.55 ug/L	619.55 ppb	03:03:58
3	Pb 220.353†	6454.7	6570.5	817.39 ug/L	817.39 ppb	03:03:58
3	S 181.975 Axial†	3984.0	3967.1	5170.8 ug/L	5170.8 ppb	03:03:58
3	Sb 206.836†	1348.7	1321.8	454.66 ug/L	454.66 ppb	03:03:58
3	Se 196.026†	355.1	380.8	570.51 ug/L	570.51 ppb	03:03:58
3	Si 251.611†	903439.9	908738.7	28313 ug/L	28313 ppb	03:03:38
3	Sn 189.927†	2912.3	2918.8	527.59 ug/L	527.59 ppb	03:03:58
3	Ti 334.940†	1677338.2	1689805.8	2746.8 ug/L	2746.8 ppb	03:03:38
3	Tl 190.801†	1363.0	1411.1	476.94 ug/L	476.94 ppb	03:03:58
3	U 409.014†	27862.7	31560.2	883.09 ug/L	883.09 ppb	03:03:38
3	V 292.402†	76369.7	78546.7	558.70 ug/L	558.70 ppb	03:03:38
3	Zn 213.857†	90170.5	90072.8	850.72 ug/L	850.72 ppb	03:03:38
3	SiO2†	901084.4	906360.6	60417 ug/L	60417 ppb	03:04:16

Mean Data: 1202030972|948071|1

Analyte	Mean Corrected	Conc.	Calib.	Std.Dev.	Conc.	Sample	Std.Dev.	RSD
Sc 361.383	846343.0	99.569	%	0.3070				0.31%
Sc Radial	4197.5	98.7	%	0.48				0.48%
Y 371.029	824658.4	117.35	%	0.301				0.26%
Y RADIAL	5177.7	117.6	%	0.36				0.31%
Ag 328.068†	94468.1	490.91	ug/L	0.816	490.91	ppb	0.816	0.17%
Al 396.153Radial†	74861.5	74868	ug/L	543.0	74868	ppb	543.0	0.73%
As 188.979†	1133.9	524.79	ug/L	3.702	524.79	ppb	3.702	0.71%
B 249.677†	21588.8	489.18	ug/L	1.394	489.18	ppb	1.394	0.29%
Ba 233.527†	132879.1	1083.4	ug/L	0.47	1083.4	ppb	0.47	0.04%
Be 313.107†	1359408.8	505.56	ug/L	0.494	505.56	ppb	0.494	0.10%
Ca 317.933Radial†	8530.8	15913	ug/L	116.7	15913	ppb	116.7	0.73%
Cd 226.502†	39825.6	455.24	ug/L	2.664	455.24	ppb	2.664	0.59%
Co 228.616†	23846.9	491.33	ug/L	2.258	491.33	ppb	2.258	0.46%
Cr 267.716†	48315.3	564.62	ug/L	0.915	564.62	ppb	0.915	0.16%
Cu 324.752†	2169889.2	6648.7	ug/L	12.71	6648.7	ppb	12.71	0.19%
Fe 238.204 Radial†	10027.7	106590	ug/L	533.1	106590	ppb	533.1	0.50%
K 766.490 Radial†	57526.1	11604	ug/L	88.8	11604	ppb	88.8	0.77%

Mg 279.077 IEC†	389.9	14952 ug/L	84.1	14952 ppb	84.1	0.56%
Mn 257.610†	2189793.3	2535.6 ug/L	2.50	2535.6 ppb	2.50	0.10%
Mo 202.031†	6153.4	465.70 ug/L	1.619	465.70 ppb	1.619	0.35%
Na 589.592 Radial†	15794.9	5268.5 ug/L	29.96	5268.5 ppb	29.96	0.57%
Ni 231.604†	20780.8	531.98 ug/L	2.291	531.98 ppb	2.291	0.43%
P 214.914†	3588.6	609.37 ug/L	10.564	609.37 ppb	10.564	1.73%
Pb 220.353†	6520.8	811.20 ug/L	5.901	811.20 ppb	5.901	0.73%
S 181.975 Axial†	3952.2	5151.4 ug/L	17.44	5151.4 ppb	17.44	0.34%
Sb 206.836†	1312.7	451.51 ug/L	2.965	451.51 ppb	2.965	0.66%
Se 196.026†	388.6	573.95 ug/L	8.374	573.95 ppb	8.374	1.46%
Si 251.611†	910038.2	28353 ug/L	36.7	28353 ppb	36.7	0.13%
Sn 189.927†	2910.5	526.10 ug/L	2.026	526.10 ppb	2.026	0.39%
Sr 421.552†	71456.9	551.62 ug/L	3.316	551.62 ppb	3.316	0.60%
Ti 334.940†	1692216.8	2750.7 ug/L	3.39	2750.7 ppb	3.39	0.12%
Tl 190.801†	1419.3	479.61 ug/L	2.939	479.61 ppb	2.939	0.61%
U 409.014†	31776.5	889.27 ug/L	5.677	889.27 ppb	5.677	0.64%
V 292.402†	78599.4	559.12 ug/L	0.548	559.12 ppb	0.548	0.10%
Zn 213.857†	90178.3	851.80 ug/L	1.201	851.80 ppb	1.201	0.14%
SiO2†	909975.6	60658 ug/L	635.1	60658 ppb	635.1	1.05%

Sequence No.: 91

Sample ID: 1202030973|948071|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 108

Date Collected: 2/17/2010 03:06:28

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202030973|948071|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4088.5	4088.5	96.2 %		03:08:42
1	Y RADIAL	5133.1	5133.1	116.6 %		03:08:22
1	Al 396.153Radial†	66758.3	69569.0	69574 ug/L	69574 ppb	03:08:22
1	Ca 317.933Radial†	7939.3	8236.4	15364 ug/L	15364 ppb	03:08:22
1	Fe 238.204 Radial†	9194.6	9549.7	101510 ug/L	101510 ppb	03:08:22
1	K 766.490 Radial†	56859.9	55946.8	11285 ug/L	11285 ppb	03:08:22
1	Mg 279.077 IEC†	354.4	365.8	14026 ug/L	14026 ppb	03:08:42
1	Na 589.592 Radial†	16213.8	16650.7	5554.0 ug/L	5554.0 ppb	03:08:22
1	Sr 421.552†	70953.0	73681.5	568.80 ug/L	568.80 ppb	03:08:22
1	Sc 361.383	846903.4	846903.4	99.635 %		03:09:41
1	Y 371.029	806845.0	806845.0	114.82 %		03:09:41
1	Ag 328.068†	95405.9	95528.0	494.34 ug/L	494.34 ppb	03:09:41
1	As 188.979†	1095.7	1128.0	518.52 ug/L	518.52 ppb	03:10:01
1	B 249.677†	21107.4	21666.7	491.83 ug/L	491.83 ppb	03:09:41
1	Ba 233.527†	114585.4	114986.7	937.98 ug/L	937.98 ppb	03:09:41
1	Be 313.107†	1354132.7	1363437.1	506.37 ug/L	506.37 ppb	03:09:41
1	Cd 226.502†	39449.2	39789.3	455.33 ug/L	455.33 ppb	03:10:01
1	Co 228.616†	23753.2	23919.2	493.46 ug/L	493.46 ppb	03:10:01
1	Cr 267.716†	51727.5	51767.4	604.71 ug/L	604.71 ppb	03:09:41
1	Cu 324.752†	369828.8	363090.7	1116.6 ug/L	1116.6 ppb	03:09:41
1	Mn 257.610†	1970880.0	1977536.9	2290.3 ug/L	2290.3 ppb	03:09:41
1	Mo 202.031†	6220.6	6233.0	471.21 ug/L	471.21 ppb	03:10:01
1	Ni 231.604†	21433.9	21399.0	547.82 ug/L	547.82 ppb	03:10:01
1	P 214.914†	2086.4	1852.1	747.05 ug/L	747.05 ppb	03:10:01
1	Pb 220.353†	6599.1	6696.9	835.56 ug/L	835.56 ppb	03:10:01
1	S 181.975 Axial†	3917.1	3888.5	5069.1 ug/L	5069.1 ppb	03:10:01
1	Sb 206.836†	1374.3	1343.6	462.76 ug/L	462.76 ppb	03:10:01
1	Se 196.026†	393.1	417.9	574.51 ug/L	574.51 ppb	03:10:01
1	Si 251.611†	920651.9	923415.4	28770 ug/L	28770 ppb	03:09:41
1	Sn 189.927†	2724.3	2721.7	492.07 ug/L	492.07 ppb	03:10:01
1	Ti 334.940†	1502036.1	1509036.5	2453.0 ug/L	2453.0 ppb	03:09:41
1	Tl 190.801†	1398.5	1442.7	483.35 ug/L	483.35 ppb	03:10:01
1	U 409.014†	25412.1	29020.4	811.47 ug/L	811.47 ppb	03:09:41
1	V 292.402†	75841.7	77797.1	554.26 ug/L	554.26 ppb	03:09:41
1	Zn 213.857†	85557.5	85183.4	811.19 ug/L	811.19 ppb	03:09:41
1	SiO2†	921177.2	923935.3	61589 ug/L	61589 ppb	03:11:02
2	Sc Radial	4109.8	4109.8	96.7 %		03:09:07
2	Y RADIAL	5100.4	5100.4	115.9 %		03:08:47
2	Al 396.153Radial†	66587.3	69032.4	69037 ug/L	69037 ppb	03:08:47
2	Ca 317.933Radial†	7924.1	8177.9	15255 ug/L	15255 ppb	03:08:47
2	Fe 238.204 Radial†	9139.0	9442.7	100370 ug/L	100370 ppb	03:08:47
2	K 766.490 Radial†	56780.2	55558.0	11207 ug/L	11207 ppb	03:08:47
2	Mg 279.077 IEC†	358.1	367.7	14101 ug/L	14101 ppb	03:09:07
2	Na 589.592 Radial†	16138.1	16485.1	5498.8 ug/L	5498.8 ppb	03:08:47
2	Sr 421.552†	70494.2	72824.6	562.19 ug/L	562.19 ppb	03:08:47
2	Sc 361.383	846722.6	846722.6	99.613 %		03:10:08
2	Y 371.029	808420.9	808420.9	115.04 %		03:10:08
2	Ag 328.068†	95426.5	95569.2	494.15 ug/L	494.15 ppb	03:10:08
2	As 188.979†	1110.3	1142.9	524.51 ug/L	524.51 ppb	03:10:28
2	B 249.677†	21165.4	21729.4	493.49 ug/L	493.49 ppb	03:10:08
2	Ba 233.527†	114246.8	114671.4	935.39 ug/L	935.39 ppb	03:10:08
2	Be 313.107†	1355912.3	1365513.8	507.12 ug/L	507.12 ppb	03:10:08
2	Cd 226.502†	39472.6	39821.3	455.83 ug/L	455.83 ppb	03:10:28
2	Co 228.616†	23752.7	23923.8	493.58 ug/L	493.58 ppb	03:10:28
2	Cr 267.716†	51612.1	51662.7	603.47 ug/L	603.47 ppb	03:10:08
2	Cu 324.752†	369486.8	362826.7	1115.7 ug/L	1115.7 ppb	03:10:08
2	Mn 257.610†	1965490.7	1972549.1	2284.4 ug/L	2284.4 ppb	03:10:08
2	Mo 202.031†	6215.5	6229.1	470.83 ug/L	470.83 ppb	03:10:28
2	Ni 231.604†	21413.3	21382.9	547.40 ug/L	547.40 ppb	03:10:28

2	P 214.914†	2078.6	1844.6	743.78 ug/L	743.78 ppb	03:10:28
2	Pb 220.353†	6592.1	6691.3	834.86 ug/L	834.86 ppb	03:10:28
2	S 181.975 Axial†	3911.8	3884.1	5063.4 ug/L	5063.4 ppb	03:10:28
2	Sb 206.836†	1368.7	1338.3	460.88 ug/L	460.88 ppb	03:10:28
2	Se 196.026†	393.9	418.7	571.32 ug/L	571.32 ppb	03:10:28
2	Si 251.611†	918432.9	921385.1	28707 ug/L	28707 ppb	03:10:08
2	Sn 189.927†	2684.0	2681.8	484.88 ug/L	484.88 ppb	03:10:28
2	Ti 334.940†	1498842.4	1506152.4	2448.3 ug/L	2448.3 ppb	03:10:08
2	Tl 190.801†	1391.7	1436.2	481.22 ug/L	481.22 ppb	03:10:28
2	U 409.014†	25598.9	29213.4	817.08 ug/L	817.08 ppb	03:10:08
2	V 292.402†	75934.3	77906.3	555.23 ug/L	555.23 ppb	03:10:08
2	Zn 213.857†	85243.7	84886.8	808.47 ug/L	808.47 ppb	03:10:08
2	SiO2†	917849.1	920791.8	61379 ug/L	61379 ppb	03:11:08
3	Sc Radial	4106.1	4106.1	96.6 %		03:09:32
3	Y RADIAL	5148.7	5148.7	117.0 %		03:09:12
3	Al 396.153Radial†	66851.3	69367.5	69372 ug/L	69372 ppb	03:09:12
3	Ca 317.933Radial†	7927.9	8189.1	15276 ug/L	15276 ppb	03:09:12
3	Fe 238.204 Radial†	9221.1	9536.2	101360 ug/L	101360 ppb	03:09:12
3	K 766.490 Radial†	56936.1	55772.1	11250 ug/L	11250 ppb	03:09:12
3	Mg 279.077 IEC†	362.8	372.9	14300 ug/L	14300 ppb	03:09:32
3	Na 589.592 Radial†	16265.3	16631.7	5547.7 ug/L	5547.7 ppb	03:09:12
3	Sr 421.552†	70932.9	73344.3	566.20 ug/L	566.20 ppb	03:09:12
3	Sc 361.383	853380.0	853380.0	100.40 %		03:10:36
3	Y 371.029	813695.2	813695.2	115.79 %		03:10:36
3	Ag 328.068†	95980.7	95373.8	493.55 ug/L	493.55 ppb	03:10:36
3	As 188.979†	1096.1	1120.1	515.16 ug/L	515.16 ppb	03:10:56
3	B 249.677†	21456.1	21853.2	496.24 ug/L	496.24 ppb	03:10:36
3	Ba 233.527†	115245.2	114771.1	936.23 ug/L	936.23 ppb	03:10:36
3	Be 313.107†	1367318.1	1366255.7	507.39 ug/L	507.39 ppb	03:10:36
3	Cd 226.502†	39620.4	39659.3	453.83 ug/L	453.83 ppb	03:10:56
3	Co 228.616†	23875.6	23860.1	492.23 ug/L	492.23 ppb	03:10:56
3	Cr 267.716†	52050.2	51694.9	603.86 ug/L	603.86 ppb	03:10:36
3	Cu 324.752†	372967.7	363400.2	1117.5 ug/L	1117.5 ppb	03:10:36
3	Mn 257.610†	1982081.8	1973681.9	2285.8 ug/L	2285.8 ppb	03:10:36
3	Mo 202.031†	6255.8	6220.6	470.28 ug/L	470.28 ppb	03:10:56
3	Ni 231.604†	21542.7	21344.1	546.41 ug/L	546.41 ppb	03:10:56
3	P 214.914†	2080.4	1830.2	734.72 ug/L	734.72 ppb	03:10:56
3	Pb 220.353†	6646.1	6693.4	835.09 ug/L	835.09 ppb	03:10:56
3	S 181.975 Axial†	3934.9	3876.4	5053.3 ug/L	5053.3 ppb	03:10:56
3	Sb 206.836†	1350.3	1309.3	451.04 ug/L	451.04 ppb	03:10:56
3	Se 196.026†	389.6	411.4	570.27 ug/L	570.27 ppb	03:10:56
3	Si 251.611†	926262.1	921990.6	28726 ug/L	28726 ppb	03:10:36
3	Sn 189.927†	2713.2	2689.9	486.35 ug/L	486.35 ppb	03:10:56
3	Ti 334.940†	1511581.7	1507103.2	2449.8 ug/L	2449.8 ppb	03:10:36
3	Tl 190.801†	1405.0	1438.5	481.99 ug/L	481.99 ppb	03:10:56
3	U 409.014†	25469.1	28883.6	807.60 ug/L	807.60 ppb	03:10:36
3	V 292.402†	76276.4	77652.3	553.22 ug/L	553.22 ppb	03:10:36
3	Zn 213.857†	85876.0	84849.0	807.96 ug/L	807.96 ppb	03:10:36
3	SiO2†	924741.1	920468.4	61358 ug/L	61358 ppb	03:11:14

Mean Data: 1202030973|948071|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	849002.0	99.882 %	0.4462			0.45%
Sc Radial	4101.5	96.5 %	0.27			0.28%
Y 371.029	809653.7	115.22 %	0.511			0.44%
Y RADIAL	5127.4	116.5 %	0.56			0.48%
Ag 328.068†	95490.4	494.01 ug/L	0.412	494.01 ppb	0.412	0.08%
Al 396.153Radial†	69323.0	69328 ug/L	271.2	69328 ppb	271.2	0.39%
As 188.979†	1130.4	519.40 ug/L	4.737	519.40 ppb	4.737	0.91%
B 249.677†	21749.8	493.85 ug/L	2.230	493.85 ppb	2.230	0.45%
Ba 233.527†	114809.7	936.53 ug/L	1.324	936.53 ppb	1.324	0.14%
Be 313.107†	1365068.9	506.96 ug/L	0.532	506.96 ppb	0.532	0.10%
Ca 317.933Radial†	8201.1	15298 ug/L	57.9	15298 ppb	57.9	0.38%
Cd 226.502†	39756.6	454.99 ug/L	1.041	454.99 ppb	1.041	0.23%
Co 228.616†	23901.0	493.09 ug/L	0.745	493.09 ppb	0.745	0.15%
Cr 267.716†	51708.3	604.01 ug/L	0.634	604.01 ppb	0.634	0.11%
Cu 324.752†	363105.9	1116.6 ug/L	0.91	1116.6 ppb	0.91	0.08%
Fe 238.204 Radial†	9509.6	101080 ug/L	619.3	101080 ppb	619.3	0.61%
K 766.490 Radial†	55759.0	11247 ug/L	39.3	11247 ppb	39.3	0.35%

Mg 279.077 IEC†	368.8	14142 ug/L	141.6	14142 ppb	141.6	1.00%
Mn 257.610†	1974589.3	2286.9 ug/L	3.07	2286.9 ppb	3.07	0.13%
Mo 202.031†	6227.6	470.78 ug/L	0.469	470.78 ppb	0.469	0.10%
Na 589.592 Radial†	16589.2	5533.5 ug/L	30.24	5533.5 ppb	30.24	0.55%
Ni 231.604†	21375.3	547.21 ug/L	0.723	547.21 ppb	0.723	0.13%
P 214.914†	1842.3	741.85 ug/L	6.388	741.85 ppb	6.388	0.86%
Pb 220.353†	6693.9	835.17 ug/L	0.358	835.17 ppb	0.358	0.04%
S 181.975 Axial†	3883.0	5061.9 ug/L	8.00	5061.9 ppb	8.00	0.16%
Sb 206.836†	1330.4	458.23 ug/L	6.293	458.23 ppb	6.293	1.37%
Se 196.026†	416.0	572.03 ug/L	2.209	572.03 ppb	2.209	0.39%
Si 251.611†	922263.7	28734 ug/L	32.5	28734 ppb	32.5	0.11%
Sn 189.927†	2697.8	487.76 ug/L	3.797	487.76 ppb	3.797	0.78%
Sr 421.552†	73283.5	565.73 ug/L	3.333	565.73 ppb	3.333	0.59%
Ti 334.940†	1507430.7	2450.4 ug/L	2.40	2450.4 ppb	2.40	0.10%
Tl 190.801†	1439.1	482.19 ug/L	1.078	482.19 ppb	1.078	0.22%
U 409.014†	29039.2	812.05 ug/L	4.768	812.05 ppb	4.768	0.59%
V 292.402†	77785.3	554.24 ug/L	1.005	554.24 ppb	1.005	0.18%
Zn 213.857†	84973.1	809.21 ug/L	1.738	809.21 ppb	1.738	0.21%
SiO2†	921731.9	61442 ug/L	127.7	61442 ppb	127.7	0.21%

Sequence No.: 92

Sample ID: 1202030971|948071|5

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 109

Date Collected: 2/17/2010 03:13:26

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202030971|948071|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4202.6	4202.6	98.9 %		03:15:19
1	Y RADIAL	4425.4	4425.4	100.5 %		03:15:19
1	Al 396.153Radial†	6265.7	6496.7	6499.2 ug/L	6499.2 ppb	03:15:19
1	Ca 317.933Radial†	1185.6	1180.9	2202.8 ug/L	2202.8 ppb	03:15:39
1	Fe 238.204 Radial†	1785.3	1795.8	19085 ug/L	19085 ppb	03:15:39
1	K 766.490 Radial†	7331.4	4244.0	855.79 ug/L	855.79 ppb	03:15:19
1	Mg 279.077 IEC†	35.1	32.8	1245.3 ug/L	1245.3 ppb	03:15:39
1	Na 589.592 Radial†	489.2	287.8	95.988 ug/L	95.988 ppb	03:15:19
1	Sr 421.552†	2073.2	2007.2	15.482 ug/L	15.482 ppb	03:15:19
1	Sc 361.383	830375.2	830375.2	97.690 %		03:16:36
1	Y 371.029	693269.9	693269.9	98.654 %		03:16:36
1	Ag 328.068†	-747.8	-993.2	1.6112 ug/L	1.6112 ppb	03:16:36
1	As 188.979†	-28.7	-1.1	7.0941 ug/L	7.0941 ppb	03:16:57
1	B 249.677†	-65.1	415.3	6.6493 ug/L	6.6493 ppb	03:16:36
1	Ba 233.527†	12132.7	12400.7	101.31 ug/L	101.31 ppb	03:16:36
1	Be 313.107†	-456.3	3872.0	2.2259 ug/L	2.2259 ppb	03:16:36
1	Cd 226.502†	-38.4	156.2	-0.1080 ug/L	-0.1080 ppb	03:16:57
1	Co 228.616†	270.8	356.1	6.4463 ug/L	6.4463 ppb	03:16:57
1	Cr 267.716†	2378.5	2285.1	26.929 ug/L	26.929 ppb	03:16:36
1	Cu 324.752†	82392.3	76246.3	234.38 ug/L	234.38 ppb	03:16:36
1	Mn 257.610†	339792.6	347257.0	402.35 ug/L	402.35 ppb	03:16:36
1	Mo 202.031†	15.2	5.1	1.8852 ug/L	1.8852 ppb	03:16:57
1	Ni 231.604†	767.0	671.6	17.198 ug/L	17.198 ppb	03:16:57
1	P 214.914†	464.5	233.5	69.429 ug/L	69.429 ppb	03:16:57
1	Pb 220.353†	9024.5	9311.4	1152.9 ug/L	1152.9 ppb	03:16:36
1	S 181.975 Axial†	76.3	35.2	44.784 ug/L	44.784 ppb	03:16:57
1	Sb 206.836†	70.0	36.0	10.707 ug/L	10.707 ppb	03:16:57
1	Se 196.026†	-110.4	-89.6	9.4202 ug/L	9.4202 ppb	03:16:57
1	Si 251.611†	138895.3	141567.1	4411.6 ug/L	4411.6 ppb	03:16:36
1	Sn 189.927†	15.5	3.2	1.2342 ug/L	1.2342 ppb	03:16:57
1	Ti 334.940†	211325.6	217815.1	354.14 ug/L	354.14 ppb	03:16:36
1	Tl 190.801†	-49.8	-11.9	1.0274 ug/L	1.0274 ppb	03:16:57
1	U 409.014†	1122.7	4664.4	130.27 ug/L	130.27 ppb	03:16:36
1	V 292.402†	877.6	2575.6	15.773 ug/L	15.773 ppb	03:16:36
1	Zn 213.857†	8634.9	8151.3	76.274 ug/L	76.274 ppb	03:16:36
1	SiO2†	140858.2	143569.1	9572.2 ug/L	9572.2 ppb	03:17:53
2	Sc Radial	4221.2	4221.2	99.3 %		03:15:44
2	Y RADIAL	4428.3	4428.3	100.6 %		03:15:44
2	Al 396.153Radial†	6245.9	6448.9	6451.4 ug/L	6451.4 ppb	03:15:44
2	Ca 317.933Radial†	1181.6	1171.6	2185.6 ug/L	2185.6 ppb	03:16:05
2	Fe 238.204 Radial†	1787.8	1790.3	19027 ug/L	19027 ppb	03:16:05
2	K 766.490 Radial†	7335.8	4215.9	850.12 ug/L	850.12 ppb	03:15:44
2	Mg 279.077 IEC†	35.5	33.0	1256.3 ug/L	1256.3 ppb	03:16:05
2	Na 589.592 Radial†	508.2	304.7	101.64 ug/L	101.64 ppb	03:15:44
2	Sr 421.552†	2024.9	1949.4	15.035 ug/L	15.035 ppb	03:15:44
2	Sc 361.383	832291.8	832291.8	97.916 %		03:17:02
2	Y 371.029	695961.7	695961.7	99.037 %		03:17:02
2	Ag 328.068†	-825.2	-1070.5	1.2172 ug/L	1.2172 ppb	03:17:02
2	As 188.979†	-21.9	6.0	10.037 ug/L	10.037 ppb	03:17:22
2	B 249.677†	-173.6	304.6	4.0541 ug/L	4.0541 ppb	03:17:02
2	Ba 233.527†	12101.2	12339.9	100.82 ug/L	100.82 ppb	03:17:02
2	Be 313.107†	-369.3	3962.0	2.2588 ug/L	2.2588 ppb	03:17:02
2	Cd 226.502†	-44.3	150.2	-0.1710 ug/L	-0.1710 ppb	03:17:22
2	Co 228.616†	284.9	369.8	6.7325 ug/L	6.7325 ppb	03:17:22
2	Cr 267.716†	2388.1	2289.3	26.975 ug/L	26.975 ppb	03:17:02
2	Cu 324.752†	82723.0	76389.8	234.81 ug/L	234.81 ppb	03:17:02
2	Mn 257.610†	339447.3	346103.4	401.02 ug/L	401.02 ppb	03:17:02
2	Mo 202.031†	11.4	1.2	1.5903 ug/L	1.5903 ppb	03:17:22
2	Ni 231.604†	752.1	654.6	16.763 ug/L	16.763 ppb	03:17:22



2	P 214.914†	467.7	235.6	70.570 ug/L	70.570 ppb	03:17:22
2	Pb 220.353†	9032.9	9298.8	1151.4 ug/L	1151.4 ppb	03:17:02
2	S 181.975 Axial†	68.7	27.2	34.389 ug/L	34.389 ppb	03:17:22
2	Sb 206.836†	62.7	28.4	8.0915 ug/L	8.0915 ppb	03:17:22
2	Se 196.026†	-96.2	-74.9	17.817 ug/L	17.817 ppb	03:17:22
2	Si 251.611†	138893.4	141237.7	4401.3 ug/L	4401.3 ppb	03:17:02
2	Sn 189.927†	5.3	-7.2	-0.6397 ug/L	-0.6397 ppb	03:17:22
2	Ti 334.940†	211761.5	217762.2	354.05 ug/L	354.05 ppb	03:17:02
2	Tl 190.801†	-50.1	-12.1	0.9650 ug/L	0.9650 ppb	03:17:22
2	U 409.014†	1328.8	4872.3	136.18 ug/L	136.18 ppb	03:17:02
2	V 292.402†	915.9	2612.7	16.058 ug/L	16.058 ppb	03:17:02
2	Zn 213.857†	8627.4	8123.3	76.012 ug/L	76.012 ppb	03:17:02
2	SiO2†	137246.7	139548.7	9304.1 ug/L	9304.1 ppb	03:17:58
3	Sc Radial	4216.0	4216.0	99.2 %		03:16:10
3	Y RADIAL	4468.1	4468.1	101.5 %		03:16:10
3	Al 396.153Radial†	6282.3	6493.4	6495.9 ug/L	6495.9 ppb	03:16:10
3	Ca 317.933Radial†	1174.8	1166.2	2175.4 ug/L	2175.4 ppb	03:16:30
3	Fe 238.204 Radial†	1788.0	1792.8	19053 ug/L	19053 ppb	03:16:30
3	K 766.490 Radial†	7431.8	4321.8	871.51 ug/L	871.51 ppb	03:16:10
3	Mg 279.077 IEC†	35.3	32.8	1248.3 ug/L	1248.3 ppb	03:16:30
3	Na 589.592 Radial†	494.2	291.2	97.144 ug/L	97.144 ppb	03:16:10
3	Sr 421.552†	2024.5	1951.4	15.051 ug/L	15.051 ppb	03:16:10
3	Sc 361.383	834145.5	834145.5	98.134 %		03:17:28
3	Y 371.029	696751.1	696751.1	99.149 %		03:17:28
3	Ag 328.068†	-739.5	-981.3	1.6593 ug/L	1.6593 ppb	03:17:28
3	As 188.979†	-18.3	9.7	11.603 ug/L	11.603 ppb	03:17:48
3	B 249.677†	-108.4	371.4	5.6233 ug/L	5.6233 ppb	03:17:28
3	Ba 233.527†	12141.2	12353.3	100.93 ug/L	100.93 ppb	03:17:28
3	Be 313.107†	-496.1	3833.6	2.2127 ug/L	2.2127 ppb	03:17:28
3	Cd 226.502†	-39.7	155.0	-0.1189 ug/L	-0.1189 ppb	03:17:48
3	Co 228.616†	272.0	356.0	6.4455 ug/L	6.4455 ppb	03:17:48
3	Cr 267.716†	2413.6	2309.8	27.218 ug/L	27.218 ppb	03:17:28
3	Cu 324.752†	82949.1	76432.5	234.95 ug/L	234.95 ppb	03:17:28
3	Mn 257.610†	340470.6	346375.8	401.33 ug/L	401.33 ppb	03:17:28
3	Mo 202.031†	24.1	14.1	2.5507 ug/L	2.5507 ppb	03:17:48
3	Ni 231.604†	771.1	672.2	17.214 ug/L	17.214 ppb	03:17:48
3	P 214.914†	447.0	213.6	58.289 ug/L	58.289 ppb	03:17:48
3	Pb 220.353†	9070.4	9316.5	1153.6 ug/L	1153.6 ppb	03:17:28
3	S 181.975 Axial†	70.8	29.2	36.980 ug/L	36.980 ppb	03:17:48
3	Sb 206.836†	84.7	50.6	15.659 ug/L	15.659 ppb	03:17:48
3	Se 196.026†	-107.0	-85.7	11.603 ug/L	11.603 ppb	03:17:48
3	Si 251.611†	139632.2	141675.3	4414.9 ug/L	4414.9 ppb	03:17:28
3	Sn 189.927†	12.1	-0.3	0.5957 ug/L	0.5957 ppb	03:17:48
3	Ti 334.940†	212520.4	218054.9	354.53 ug/L	354.53 ppb	03:17:28
3	Tl 190.801†	-51.1	-13.0	0.6813 ug/L	0.6813 ppb	03:17:48
3	U 409.014†	1047.8	4582.9	127.96 ug/L	127.96 ppb	03:17:28
3	V 292.402†	861.7	2555.4	15.636 ug/L	15.636 ppb	03:17:28
3	Zn 213.857†	8620.8	8097.0	75.748 ug/L	75.748 ppb	03:17:28
3	SiO2†	139390.8	141422.1	9429.0 ug/L	9429.0 ppb	03:18:03

Mean Data: 1202030971|948071|5

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	832270.8	97.913 %		0.2218			0.23%
Sc Radial	4213.2	99.1 %		0.23			0.23%
Y 371.029	695327.6	98.947 %		0.2597			0.26%
Y RADIAL	4440.6	100.9 %		0.54			0.54%
Ag 328.068†	-1015.0	1.4959 ug/L		0.24255	1.4959 ppb	0.24255	16.21%
Al 396.153Radial†	6479.7	6482.2 ug/L		26.69	6482.2 ppb	26.69	0.41%
As 188.979†	4.9	9.5779 ug/L		2.28920	9.5779 ppb	2.28920	23.90%
B 249.677†	363.8	5.4422 ug/L		1.30702	5.4422 ppb	1.30702	24.02%
Ba 233.527†	12364.6	101.02 ug/L		0.260	101.02 ppb	0.260	0.26%
Be 313.107†	3889.2	2.2325 ug/L		0.02372	2.2325 ppb	0.02372	1.06%
Ca 317.933Radial†	1172.9	2187.9 ug/L		13.84	2187.9 ppb	13.84	0.63%
Cd 226.502†	153.8	-0.1326 ug/L		0.03365	-0.1326 ppb	0.03365	25.38%
Co 228.616†	360.7	6.5414 ug/L		0.16551	6.5414 ppb	0.16551	2.53%
Cr 267.716†	2294.7	27.041 ug/L		0.1551	27.041 ppb	0.1551	0.57%
Cu 324.752†	76356.2	234.71 ug/L		0.297	234.71 ppb	0.297	0.13%
Fe 238.204 Radial†	1793.0	19055 ug/L		29.0	19055 ppb	29.0	0.15%
K 766.490 Radial†	4260.6	859.14 ug/L		11.081	859.14 ppb	11.081	1.29%

Mg 279.077 IEC†	32.9	1250.0 ug/L	5.73	1250.0 ppb	5.73	0.46%
Mn 257.610†	346578.7	401.57 ug/L	0.698	401.57 ppb	0.698	0.17%
Mo 202.031†	6.8	2.0087 ug/L	0.49200	2.0087 ppb	0.49200	24.49%
Na 589.592 Radial†	294.6	98.257 ug/L	2.9844	98.257 ppb	2.9844	3.04%
Ni 231.604†	666.1	17.058 ug/L	0.2559	17.058 ppb	0.2559	1.50%
P 214.914†	227.6	66.096 ug/L	6.7852	66.096 ppb	6.7852	10.27%
Pb 220.353†	9308.9	1152.6 ug/L	1.13	1152.6 ppb	1.13	0.10%
S 181.975 Axial†	30.6	38.718 ug/L	5.4111	38.718 ppb	5.4111	13.98%
Sb 206.836†	38.3	11.486 ug/L	3.8437	11.486 ppb	3.8437	33.46%
Se 196.026†	-83.4	12.947 ug/L	4.3569	12.947 ppb	4.3569	33.65%
Si 251.611†	141493.4	4409.3 ug/L	7.10	4409.3 ppb	7.10	0.16%
Sn 189.927†	-1.4	0.3967 ug/L	0.95265	0.3967 ppb	0.95265	240.12%
Sr 421.552†	1969.3	15.189 ug/L	0.2533	15.189 ppb	0.2533	1.67%
Ti 334.940†	217877.4	354.24 ug/L	0.254	354.24 ppb	0.254	0.07%
Tl 190.801†	-12.3	0.8913 ug/L	0.18446	0.8913 ppb	0.18446	20.70%
U 409.014†	4706.5	131.47 ug/L	4.241	131.47 ppb	4.241	3.23%
V 292.402†	2581.2	15.823 ug/L	0.2153	15.823 ppb	0.2153	1.36%
Zn 213.857†	8123.9	76.011 ug/L	0.2628	76.011 ppb	0.2628	0.35%
SiO2†	141513.3	9435.1 ug/L	134.13	9435.1 ppb	134.13	1.42%

Sequence No.: 93  
 Sample ID: CCV  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 7  
 Date Collected: 2/17/2010 03:20:15  
 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	3988.3	3988.3	93.8 %		03:22:27
1	Y RADIAL	4204.7	4204.7	95.51 %		03:22:07
1	Al 396.153Radial†	4902.5	5384.4	5361.8 ug/L	5361.8 ppb	03:22:07
1	Ca 317.933Radial†	2689.4	2848.2	5312.9 ug/L	5312.9 ppb	03:22:27
1	Fe 238.204 Radial†	496.4	519.0	5530.9 ug/L	5530.9 ppb	03:22:27
1	K 766.490 Radial†	27473.3	26110.6	5264.3 ug/L	5264.3 ppb	03:22:07
1	Mg 279.077 IEC†	137.3	143.6	5545.9 ug/L	5545.9 ppb	03:22:27
1	Na 589.592 Radial†	28566.5	30240.2	10087 ug/L	10087 ppb	03:22:07
1	Sr 421.552†	63423.4	67509.3	521.22 ug/L	521.22 ppb	03:22:07
1	Sc 361.383	838414.7	838414.7	98.636 %		03:23:26
1	Y 371.029	670452.7	670452.7	95.407 %		03:23:26
1	Ag 328.068†	103612.3	104817.5	506.69 ug/L	506.69 ppb	03:23:26
1	As 188.979†	1179.7	1224.3	519.77 ug/L	519.77 ppb	03:23:46
1	B 249.677†	20944.8	21716.3	508.55 ug/L	508.55 ppb	03:23:26
1	Ba 233.527†	62010.0	62848.7	511.58 ug/L	511.58 ppb	03:23:26
1	Be 313.107†	1380805.6	1404239.4	516.98 ug/L	516.98 ppb	03:23:26
1	Cd 226.502†	41179.1	41944.1	490.35 ug/L	490.35 ppb	03:23:46
1	Co 228.616†	24027.6	24438.8	509.67 ug/L	509.67 ppb	03:23:46
1	Cr 267.716†	42536.6	42975.1	500.60 ug/L	500.60 ppb	03:23:26
1	Cu 324.752†	175942.4	170281.4	521.38 ug/L	521.38 ppb	03:23:26
1	Mn 257.610†	446023.0	451621.2	521.21 ug/L	521.21 ppb	03:23:26
1	Mo 202.031†	6767.0	6850.1	509.50 ug/L	509.50 ppb	03:23:46
1	Ni 231.604†	19440.4	19595.7	501.62 ug/L	501.62 ppb	03:23:46
1	P 214.914†	4813.0	4637.6	2471.3 ug/L	2471.3 ppb	03:23:46
1	Pb 220.353†	3958.2	4086.5	507.91 ug/L	507.91 ppb	03:23:46
1	S 181.975 Axial†	827.8	796.4	1039.8 ug/L	1039.8 ppb	03:23:46
1	Sb 206.836†	1499.7	1484.8	520.66 ug/L	520.66 ppb	03:23:46
1	Se 196.026†	864.9	900.2	544.68 ug/L	544.68 ppb	03:23:46
1	Si 251.611†	83052.0	83588.2	2598.5 ug/L	2598.5 ppb	03:23:26
1	Sn 189.927†	2784.4	2810.3	504.81 ug/L	504.81 ppb	03:23:46
1	Ti 334.940†	317830.5	323718.6	526.02 ug/L	526.02 ppb	03:23:26
1	Tl 190.801†	1580.4	1641.4	521.74 ug/L	521.74 ppb	03:23:46
1	U 409.014†	13218.5	16916.5	478.80 ug/L	478.80 ppb	03:23:26
1	V 292.402†	66241.1	68834.4	505.23 ug/L	505.23 ppb	03:23:26
1	Zn 213.857†	52367.6	52404.0	506.73 ug/L	506.73 ppb	03:23:26
1	SiO2†	83185.8	83716.6	5567.8 ug/L	5567.8 ppb	03:24:46
2	Sc Radial	3976.1	3976.1	93.5 %		03:22:52
2	Y RADIAL	4141.5	4141.5	94.08 %		03:22:32
2	Al 396.153Radial†	4820.8	5313.0	5290.3 ug/L	5290.3 ppb	03:22:32
2	Ca 317.933Radial†	2681.5	2848.5	5313.6 ug/L	5313.6 ppb	03:22:52
2	Fe 238.204 Radial†	494.8	518.9	5530.0 ug/L	5530.0 ppb	03:22:52
2	K 766.490 Radial†	27140.3	25844.5	5210.6 ug/L	5210.6 ppb	03:22:32
2	Mg 279.077 IEC†	136.6	143.3	5534.8 ug/L	5534.8 ppb	03:22:52
2	Na 589.592 Radial†	28223.2	29966.8	9995.7 ug/L	9995.7 ppb	03:22:32
2	Sr 421.552†	62430.9	66655.9	514.63 ug/L	514.63 ppb	03:22:32
2	Sc 361.383	830162.5	830162.5	97.665 %		03:23:53
2	Y 371.029	664864.0	664864.0	94.612 %		03:23:53
2	Ag 328.068†	102408.6	104629.1	505.79 ug/L	505.79 ppb	03:23:53
2	As 188.979†	1171.4	1227.7	521.20 ug/L	521.20 ppb	03:24:13
2	B 249.677†	20660.8	21636.6	506.67 ug/L	506.67 ppb	03:23:53
2	Ba 233.527†	61495.0	62946.3	512.37 ug/L	512.37 ppb	03:23:53
2	Be 313.107†	1369299.9	1406374.2	517.76 ug/L	517.76 ppb	03:23:53
2	Cd 226.502†	40981.4	42156.6	492.83 ug/L	492.83 ppb	03:24:13
2	Co 228.616†	23880.2	24530.0	511.58 ug/L	511.58 ppb	03:24:13
2	Cr 267.716†	42269.3	43130.2	502.40 ug/L	502.40 ppb	03:23:53
2	Cu 324.752†	173635.3	169692.3	519.58 ug/L	519.58 ppb	03:23:53
2	Mn 257.610†	441545.6	451531.7	521.11 ug/L	521.11 ppb	03:23:53
2	Mo 202.031†	6736.2	6886.8	512.22 ug/L	512.22 ppb	03:24:13
2	Ni 231.604†	19319.7	19668.1	503.47 ug/L	503.47 ppb	03:24:13

2	P 214.914†	4786.8	4659.2	2483.7 ug/L	2483.7 ppb	03:24:13
2	Pb 220.353†	3949.9	4117.9	511.79 ug/L	511.79 ppb	03:24:13
2	S 181.975 Axial†	818.2	794.9	1037.9 ug/L	1037.9 ppb	03:24:13
2	Sb 206.836†	1486.0	1485.8	521.09 ug/L	521.09 ppb	03:24:13
2	Se 196.026†	849.5	893.1	540.55 ug/L	540.55 ppb	03:24:13
2	Si 251.611†	82326.8	83682.7	2601.5 ug/L	2601.5 ppb	03:23:53
2	Sn 189.927†	2762.1	2815.5	505.76 ug/L	505.76 ppb	03:24:13
2	Ti 334.940†	314113.7	323115.9	525.04 ug/L	525.04 ppb	03:23:53
2	Tl 190.801†	1563.8	1640.3	521.38 ug/L	521.38 ppb	03:24:13
2	U 409.014†	13004.0	16830.1	476.34 ug/L	476.34 ppb	03:23:53
2	V 292.402†	65638.0	68884.5	505.62 ug/L	505.62 ppb	03:23:53
2	Zn 213.857†	51872.9	52425.2	506.92 ug/L	506.92 ppb	03:23:53
2	SiO2†	82968.8	84332.7	5608.8 ug/L	5608.8 ppb	03:24:51
3	Sc Radial	4031.1	4031.1	94.8 %		03:23:17
3	Y RADIAL	4215.4	4215.4	95.76 %		03:22:57
3	Al 396.153Radial†	4907.9	5334.5	5312.1 ug/L	5312.1 ppb	03:22:57
3	Ca 317.933Radial†	2708.4	2837.8	5293.5 ug/L	5293.5 ppb	03:23:17
3	Fe 238.204 Radial†	504.3	521.8	5560.2 ug/L	5560.2 ppb	03:23:17
3	K 766.490 Radial†	27468.4	25794.5	5200.5 ug/L	5200.5 ppb	03:22:57
3	Mg 279.077 IEC†	138.9	143.8	5552.6 ug/L	5552.6 ppb	03:23:17
3	Na 589.592 Radial†	28742.1	30102.1	10041 ug/L	10041 ppb	03:22:57
3	Sr 421.552†	63476.4	66847.4	516.11 ug/L	516.11 ppb	03:22:57
3	Sc 361.383	844064.4	844064.4	99.301 %		03:24:21
3	Y 371.029	675288.2	675288.2	96.095 %		03:24:21
3	Ag 328.068†	103931.6	104435.9	504.88 ug/L	504.88 ppb	03:24:21
3	As 188.979†	1175.9	1212.5	514.78 ug/L	514.78 ppb	03:24:41
3	B 249.677†	21127.4	21758.1	509.54 ug/L	509.54 ppb	03:24:21
3	Ba 233.527†	62384.2	62804.7	511.22 ug/L	511.22 ppb	03:24:21
3	Be 313.107†	1389819.8	1403946.9	516.87 ug/L	516.87 ppb	03:24:21
3	Cd 226.502†	41222.1	41707.9	487.58 ug/L	487.58 ppb	03:24:41
3	Co 228.616†	24004.4	24252.3	505.77 ug/L	505.77 ppb	03:24:41
3	Cr 267.716†	42747.9	42899.2	499.72 ug/L	499.72 ppb	03:24:21
3	Cu 324.752†	176557.1	169706.4	519.62 ug/L	519.62 ppb	03:24:21
3	Mn 257.610†	447801.6	450385.6	519.79 ug/L	519.79 ppb	03:24:21
3	Mo 202.031†	6758.9	6796.0	505.48 ug/L	505.48 ppb	03:24:41
3	Ni 231.604†	19446.1	19469.5	498.39 ug/L	498.39 ppb	03:24:41
3	P 214.914†	4825.6	4617.6	2460.5 ug/L	2460.5 ppb	03:24:41
3	Pb 220.353†	3991.4	4093.1	508.70 ug/L	508.70 ppb	03:24:41
3	S 181.975 Axial†	821.7	784.5	1024.3 ug/L	1024.3 ppb	03:24:41
3	Sb 206.836†	1490.3	1465.1	513.85 ug/L	513.85 ppb	03:24:41
3	Se 196.026†	866.0	895.5	541.99 ug/L	541.99 ppb	03:24:41
3	Si 251.611†	83395.9	83371.0	2591.8 ug/L	2591.8 ppb	03:24:21
3	Sn 189.927†	2777.4	2784.4	500.16 ug/L	500.16 ppb	03:24:41
3	Ti 334.940†	318891.2	322629.9	524.25 ug/L	524.25 ppb	03:24:21
3	Tl 190.801†	1576.7	1626.9	517.16 ug/L	517.16 ppb	03:24:41
3	U 409.014†	13136.9	16744.6	473.92 ug/L	473.92 ppb	03:24:21
3	V 292.402†	66735.8	68883.1	505.51 ug/L	505.51 ppb	03:24:21
3	Zn 213.857†	52667.6	52350.7	506.22 ug/L	506.22 ppb	03:24:21
3	SiO2†	83624.3	83593.7	5559.7 ug/L	5559.7 ppb	03:24:56

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	837547.2	98.534 %	0.8225			0.83%
Sc Radial	3998.5	94.1 %	0.68			0.72%
Y 371.029	670201.6	95.371 %	0.7423			0.78%
Y RADIAL	4187.2	95.12 %	0.906			0.95%
Ag 328.068†	104627.5	505.79 ug/L	0.908	505.79 ppb	0.908	0.18%
QC value within limits for Ag 328.068 Recovery = 101.16%						
Al 396.153Radial†	5344.0	5321.4 ug/L	36.64	5321.4 ppb	36.64	0.69%
QC value within limits for Al 396.153Radial Recovery = 106.43%						
As 188.979†	1221.5	518.58 ug/L	3.368	518.58 ppb	3.368	0.65%
QC value within limits for As 188.979 Recovery = 103.72%						
B 249.677†	21703.7	508.25 ug/L	1.458	508.25 ppb	1.458	0.29%
QC value within limits for B 249.677 Recovery = 101.65%						
Ba 233.527†	62866.6	511.72 ug/L	0.588	511.72 ppb	0.588	0.11%
QC value within limits for Ba 233.527 Recovery = 102.34%						
Be 313.107†	1404853.5	517.20 ug/L	0.487	517.20 ppb	0.487	0.09%
QC value within limits for Be 313.107 Recovery = 103.44%						
Ca 317.933Radial†	2844.8	5306.7 ug/L	11.41	5306.7 ppb	11.41	0.21%

QC value within limits for Ca 317.933 Radial Recovery = 106.13%							
Cd 226.502†	41936.2	490.25 ug/L	2.628	490.25 ppb	2.628	0.54%	
QC value within limits for Cd 226.502 Recovery = 98.05%							
Co 228.616†	24407.0	509.01 ug/L	2.958	509.01 ppb	2.958	0.58%	
QC value within limits for Co 228.616 Recovery = 101.80%							
Cr 267.716†	43001.5	500.90 ug/L	1.369	500.90 ppb	1.369	0.27%	
QC value within limits for Cr 267.716 Recovery = 100.18%							
Cu 324.752†	169893.3	520.19 ug/L	1.027	520.19 ppb	1.027	0.20%	
QC value within limits for Cu 324.752 Recovery = 104.04%							
Fe 238.204 Radial†	519.9	5540.4 ug/L	17.21	5540.4 ppb	17.21	0.31%	
QC value greater than the upper limit for Fe 238.204 Radial Recovery = 110.81%							
K 766.490 Radial†	25916.5	5225.2 ug/L	34.28	5225.2 ppb	34.28	0.66%	
QC value within limits for K 766.490 Radial Recovery = 104.50%							
Mg 279.077 IEC†	143.6	5544.4 ug/L	8.99	5544.4 ppb	8.99	0.16%	
QC value greater than the upper limit for Mg 279.077 IEC Recovery = 110.89%							
Mn 257.610†	451179.5	520.70 ug/L	0.793	520.70 ppb	0.793	0.15%	
QC value within limits for Mn 257.610 Recovery = 104.14%							
Mo 202.031†	6844.3	509.07 ug/L	3.392	509.07 ppb	3.392	0.67%	
QC value within limits for Mo 202.031 Recovery = 101.81%							
Na 589.592 Radial†	30103.0	10041 ug/L	45.6	10041 ppb	45.6	0.45%	
QC value within limits for Na 589.592 Radial Recovery = 100.41%							
Ni 231.604†	19577.8	501.16 ug/L	2.573	501.16 ppb	2.573	0.51%	
QC value within limits for Ni 231.604 Recovery = 100.23%							
P 214.914†	4638.1	2471.8 ug/L	11.60	2471.8 ppb	11.60	0.47%	
QC value within limits for P 214.914 Recovery = 98.87%							
Pb 220.353†	4099.1	509.47 ug/L	2.052	509.47 ppb	2.052	0.40%	
QC value within limits for Pb 220.353 Recovery = 101.89%							
S 181.975 Axial†	791.9	1034.0 ug/L	8.42	1034.0 ppb	8.42	0.81%	
QC value within limits for S 181.975 Axial Recovery = 103.40%							
Sb 206.836†	1478.6	518.53 ug/L	4.062	518.53 ppb	4.062	0.78%	
QC value within limits for Sb 206.836 Recovery = 103.71%							
Se 196.026†	896.3	542.41 ug/L	2.100	542.41 ppb	2.100	0.39%	
QC value within limits for Se 196.026 Recovery = 108.48%							
Si 251.611†	83547.3	2597.3 ug/L	4.94	2597.3 ppb	4.94	0.19%	
QC value within limits for Si 251.611 Recovery = 103.89%							
Sn 189.927†	2803.4	503.58 ug/L	2.995	503.58 ppb	2.995	0.59%	
QC value within limits for Sn 189.927 Recovery = 100.72%							
Sr 421.552†	67004.2	517.32 ug/L	3.458	517.32 ppb	3.458	0.67%	
QC value within limits for Sr 421.552 Recovery = 103.46%							
Ti 334.940†	323154.8	525.10 ug/L	0.887	525.10 ppb	0.887	0.17%	
QC value within limits for Ti 334.940 Recovery = 105.02%							
Tl 190.801†	1636.2	520.09 ug/L	2.544	520.09 ppb	2.544	0.49%	
QC value within limits for Tl 190.801 Recovery = 104.02%							
U 409.014†	16830.4	476.35 ug/L	2.442	476.35 ppb	2.442	0.51%	
QC value within limits for U 409.014 Recovery = 95.27%							
V 292.402†	68867.3	505.46 ug/L	0.204	505.46 ppb	0.204	0.04%	
QC value within limits for V 292.402 Recovery = 101.09%							
Zn 213.857†	52393.3	506.62 ug/L	0.360	506.62 ppb	0.360	0.07%	
QC value within limits for Zn 213.857 Recovery = 101.32%							
SiO2†	83881.0	5578.8 ug/L	26.32	5578.8 ppb	26.32	0.47%	
QC value within limits for SiO2 Recovery = 104.32%							
QC Failed. Continue with analysis.							

Sequence No.: 94  
 Sample ID: CCB  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 8  
 Date Collected: 2/17/2010 03:27:07  
 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	4036.7	4036.7	95.0 %		03:29:19
1	Y RADIAL	4207.0	4207.0	95.56 %		03:28:59
1	Al 396.153Radial†	-133.4	18.5	18.495 ug/L	18.495 ppb	03:28:59
1	Ca 317.933Radial†	33.7	17.2	32.061 ug/L	32.061 ppb	03:29:19
1	Fe 238.204 Radial†	11.6	2.2	23.391 ug/L	23.391 ppb	03:29:19
1	K 766.490 Radial†	2911.1	-106.0	-21.371 ug/L	-21.371 ppb	03:28:59
1	Mg 279.077 IEC†	3.2	0.7	25.290 ug/L	25.290 ppb	03:29:19
1	Na 589.592 Radial†	-117.7	-331.0	-110.41 ug/L	-110.41 ppb	03:28:59
1	Sr 421.552†	167.5	86.6	0.6680 ug/L	0.6680 ppb	03:28:59
1	Sc 361.383	823497.3	823497.3	96.881 %		03:30:16
1	Y 371.029	666160.4	666160.4	94.796 %		03:30:16
1	Ag 328.068†	285.5	67.0	0.3271 ug/L	0.3271 ppb	03:30:16
1	As 188.979†	-30.3	-3.0	-1.2561 ug/L	-1.2561 ppb	03:30:36
1	B 249.677†	-275.1	198.0	4.6526 ug/L	4.6526 ppb	03:30:36
1	Ba 233.527†	33.8	16.0	0.1324 ug/L	0.1324 ppb	03:30:36
1	Be 313.107†	-4179.3	25.3	0.0098 ug/L	0.0098 ppb	03:30:16
1	Cd 226.502†	-203.5	-14.5	-0.1710 ug/L	-0.1710 ppb	03:30:36
1	Co 228.616†	-59.0	17.9	0.3746 ug/L	0.3746 ppb	03:30:36
1	Cr 267.716†	138.1	-7.1	-0.0838 ug/L	-0.0838 ppb	03:30:36
1	Cu 324.752†	8516.2	696.2	2.1294 ug/L	2.1294 ppb	03:30:16
1	Mn 257.610†	1065.0	529.6	0.6121 ug/L	0.6121 ppb	03:30:36
1	Mo 202.031†	17.9	8.0	0.5956 ug/L	0.5956 ppb	03:30:36
1	Ni 231.604†	104.9	-5.3	-0.1357 ug/L	-0.1357 ppb	03:30:36
1	P 214.914†	237.0	2.6	1.0116 ug/L	1.0116 ppb	03:30:36
1	Pb 220.353†	-71.0	0.3	0.0412 ug/L	0.0412 ppb	03:30:36
1	S 181.975 Axial†	57.0	15.9	20.810 ug/L	20.810 ppb	03:30:36
1	Sb 206.836†	38.1	3.6	1.2383 ug/L	1.2383 ppb	03:30:36
1	Se 196.026†	-25.8	-3.3	-1.8748 ug/L	-1.8748 ppb	03:30:36
1	Si 251.611†	751.4	163.3	5.0805 ug/L	5.0805 ppb	03:30:36
1	Sn 189.927†	11.8	-0.5	-0.0803 ug/L	-0.0803 ppb	03:30:36
1	Ti 334.940†	-1315.7	134.8	0.2187 ug/L	0.2187 ppb	03:30:16
1	Tl 190.801†	-31.1	7.0	2.2158 ug/L	2.2158 ppb	03:30:36
1	U 409.014†	-3193.9	218.4	6.2022 ug/L	6.2022 ppb	03:30:16
1	V 292.402†	-1533.0	95.0	0.7051 ug/L	0.7051 ppb	03:30:16
1	Zn 213.857†	804.9	143.0	1.3905 ug/L	1.3905 ppb	03:30:36
1	SiO2†	766.6	171.8	11.436 ug/L	11.436 ppb	03:31:32
2	Sc Radial	4034.8	4034.8	94.9 %		03:29:44
2	Y RADIAL	4269.2	4269.2	96.98 %		03:29:24
2	Al 396.153Radial†	-121.8	30.7	30.584 ug/L	30.584 ppb	03:29:24
2	Ca 317.933Radial†	35.4	18.9	35.313 ug/L	35.313 ppb	03:29:44
2	Fe 238.204 Radial†	10.4	0.9	9.4646 ug/L	9.4646 ppb	03:29:44
2	K 766.490 Radial†	3018.9	9.0	1.8431 ug/L	1.8431 ppb	03:29:24
2	Mg 279.077 IEC†	2.1	-0.5	-20.250 ug/L	-20.250 ppb	03:29:44
2	Na 589.592 Radial†	-147.4	-362.3	-120.86 ug/L	-120.86 ppb	03:29:24
2	Sr 421.552†	58.3	-28.4	-0.2195 ug/L	-0.2195 ppb	03:29:24
2	Sc 361.383	825709.2	825709.2	97.141 %		03:30:42
2	Y 371.029	669492.8	669492.8	95.271 %		03:30:42
2	Ag 328.068†	278.3	58.9	0.2771 ug/L	0.2771 ppb	03:30:42
2	As 188.979†	-34.4	-7.1	-2.9730 ug/L	-2.9730 ppb	03:31:02
2	B 249.677†	-289.7	183.7	4.3199 ug/L	4.3199 ppb	03:31:02
2	Ba 233.527†	23.5	5.4	0.0426 ug/L	0.0426 ppb	03:31:02
2	Be 313.107†	-4179.2	36.9	0.0140 ug/L	0.0140 ppb	03:30:42
2	Cd 226.502†	-207.6	-18.2	-0.2123 ug/L	-0.2123 ppb	03:31:02
2	Co 228.616†	-81.4	-4.9	-0.0985 ug/L	-0.0985 ppb	03:31:02
2	Cr 267.716†	105.0	-41.6	-0.4875 ug/L	-0.4875 ppb	03:31:02
2	Cu 324.752†	8514.8	671.3	2.0519 ug/L	2.0519 ppb	03:30:42
2	Mn 257.610†	992.5	451.9	0.5230 ug/L	0.5230 ppb	03:31:02
2	Mo 202.031†	36.5	27.1	2.0157 ug/L	2.0157 ppb	03:31:02
2	Ni 231.604†	109.7	-0.5	-0.0138 ug/L	-0.0138 ppb	03:31:02

2	P 214.914†	228.0	-7.3	-4.4536 ug/L	-4.4536 ppb	03:31:02
2	Pb 220.353†	-75.6	-4.3	-0.5199 ug/L	-0.5199 ppb	03:31:02
2	S 181.975 Axial†	58.9	17.7	23.163 ug/L	23.163 ppb	03:31:02
2	Sb 206.836†	42.5	8.1	2.8048 ug/L	2.8048 ppb	03:31:02
2	Se 196.026†	-29.3	-6.8	-3.9217 ug/L	-3.9217 ppb	03:31:02
2	Si 251.611†	683.5	91.3	2.8217 ug/L	2.8217 ppb	03:31:02
2	Sn 189.927†	20.7	8.7	1.5697 ug/L	1.5697 ppb	03:31:02
2	Ti 334.940†	-1342.0	111.4	0.1846 ug/L	0.1846 ppb	03:30:42
2	Tl 190.801†	-36.4	1.6	0.5067 ug/L	0.5067 ppb	03:31:02
2	U 409.014†	-3182.3	239.2	6.7958 ug/L	6.7958 ppb	03:30:42
2	V 292.402†	-1716.5	-89.7	-0.6103 ug/L	-0.6103 ppb	03:30:42
2	Zn 213.857†	798.8	134.6	1.3093 ug/L	1.3093 ppb	03:31:02
2	SiO2†	726.0	127.9	8.4718 ug/L	8.4718 ppb	03:31:37
3	Sc Radial	4024.1	4024.1	94.7 %		03:30:10
3	Y RADIAL	4241.2	4241.2	96.34 %		03:29:50
3	Al 396.153Radial†	-141.0	10.1	10.086 ug/L	10.086 ppb	03:29:50
3	Ca 317.933Radial†	42.6	26.7	49.751 ug/L	49.751 ppb	03:30:10
3	Fe 238.204 Radial†	13.2	3.9	40.985 ug/L	40.985 ppb	03:30:10
3	K 766.490 Radial†	2907.4	-100.3	-20.229 ug/L	-20.229 ppb	03:29:50
3	Mg 279.077 IEC†	0.5	-2.2	-84.462 ug/L	-84.462 ppb	03:30:10
3	Na 589.592 Radial†	-55.7	-265.9	-88.696 ug/L	-88.696 ppb	03:29:50
3	Sr 421.552†	61.6	-24.7	-0.1912 ug/L	-0.1912 ppb	03:29:50
3	Sc 361.383	829211.3	829211.3	97.553 %		03:31:07
3	Y 371.029	671228.1	671228.1	95.517 %		03:31:07
3	Ag 328.068†	241.7	20.1	0.1084 ug/L	0.1084 ppb	03:31:07
3	As 188.979†	-33.0	-5.5	-2.3084 ug/L	-2.3084 ppb	03:31:27
3	B 249.677†	-307.3	166.9	3.9202 ug/L	3.9202 ppb	03:31:27
3	Ba 233.527†	20.5	2.2	0.0201 ug/L	0.0201 ppb	03:31:27
3	Be 313.107†	-3969.5	270.0	0.1036 ug/L	0.1036 ppb	03:31:07
3	Cd 226.502†	-204.4	-14.0	-0.1678 ug/L	-0.1678 ppb	03:31:27
3	Co 228.616†	-69.2	7.9	0.1613 ug/L	0.1613 ppb	03:31:27
3	Cr 267.716†	149.0	3.0	0.0350 ug/L	0.0350 ppb	03:31:27
3	Cu 324.752†	8561.3	682.0	2.0881 ug/L	2.0881 ppb	03:31:07
3	Mn 257.610†	991.1	446.2	0.5222 ug/L	0.5222 ppb	03:31:27
3	Mo 202.031†	14.0	3.8	0.2898 ug/L	0.2898 ppb	03:31:27
3	Ni 231.604†	84.4	-27.0	-0.6913 ug/L	-0.6913 ppb	03:31:27
3	P 214.914†	242.2	6.3	3.0438 ug/L	3.0438 ppb	03:31:27
3	Pb 220.353†	-72.8	-1.1	-0.1350 ug/L	-0.1350 ppb	03:31:27
3	S 181.975 Axial†	54.0	12.4	16.236 ug/L	16.236 ppb	03:31:27
3	Sb 206.836†	29.2	-5.8	-1.9542 ug/L	-1.9542 ppb	03:31:27
3	Se 196.026†	-23.3	-0.5	-0.1782 ug/L	-0.1782 ppb	03:31:27
3	Si 251.611†	703.0	108.3	3.3711 ug/L	3.3711 ppb	03:31:27
3	Sn 189.927†	10.8	-1.6	-0.2762 ug/L	-0.2762 ppb	03:31:27
3	Ti 334.940†	-300.8	1184.6	1.9372 ug/L	1.9372 ppb	03:31:07
3	Tl 190.801†	-32.4	5.9	1.8699 ug/L	1.8699 ppb	03:31:27
3	U 409.014†	-3299.4	133.1	3.7750 ug/L	3.7750 ppb	03:31:07
3	V 292.402†	-1567.8	70.2	0.5102 ug/L	0.5102 ppb	03:31:07
3	Zn 213.857†	783.4	115.3	1.1207 ug/L	1.1207 ppb	03:31:27
3	SiO2†	746.2	145.4	9.6835 ug/L	9.6835 ppb	03:31:42

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	826139.3	97.192 %	0.3390			0.35%
Sc Radial	4031.9	94.8 %	0.16			0.17%
Y 371.029	668960.5	95.195 %	0.3665			0.38%
Y RADIAL	4239.1	96.29 %	0.708			0.73%
Ag 328.068†	48.7	0.2376 ug/L	0.11459	0.2376 ppb	0.11459	48.24%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	19.8	19.722 ug/L	10.3041	19.722 ppb	10.3041	52.25%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-5.2	-2.1792 ug/L	0.86573	-2.1792 ppb	0.86573	39.73%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	182.9	4.2976 ug/L	0.36671	4.2976 ppb	0.36671	8.53%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	7.9	0.0650 ug/L	0.05938	0.0650 ppb	0.05938	91.29%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	110.7	0.0424 ug/L	0.05297	0.0424 ppb	0.05297	124.85%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	20.9	39.042 ug/L	9.4156	39.042 ppb	9.4156	24.12%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd	226.502†	-15.6	-0.1837 ug/L	0.02484	-0.1837 ppb	0.02484	13.52%
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co	228.616†	7.0	0.1458 ug/L	0.23693	0.1458 ppb	0.23693	162.46%
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr	267.716†	-15.2	-0.1788 ug/L	0.27390	-0.1788 ppb	0.27390	153.21%
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu	324.752†	683.1	2.0898 ug/L	0.03878	2.0898 ppb	0.03878	1.86%
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe	238.204 Radial†	2.3	24.614 ug/L	15.7957	24.614 ppb	15.7957	64.17%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K	766.490 Radial†	-65.8	-13.252 ug/L	13.0855	-13.252 ppb	13.0855	98.74%
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg	279.077 IEC†	-0.7	-26.474 ug/L	55.1400	-26.474 ppb	55.1400	208.28%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn	257.610†	475.9	0.5524 ug/L	0.05166	0.5524 ppb	0.05166	9.35%
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo	202.031†	13.0	0.9671 ug/L	0.92094	0.9671 ppb	0.92094	95.23%
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na	589.592 Radial†	-319.8	-106.66 ug/L	16.409	-106.66 ppb	16.409	15.39%
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni	231.604†	-10.9	-0.2803 ug/L	0.36116	-0.2803 ppb	0.36116	128.86%
QC value within limits for Ni 231.604 Recovery = Not calculated							
P	214.914†	0.5	-0.1327 ug/L	3.87750	-0.1327 ppb	3.87750	>999.9%
QC value within limits for P 214.914 Recovery = Not calculated							
Pb	220.353†	-1.7	-0.2046 ug/L	0.28696	-0.2046 ppb	0.28696	140.28%
QC value within limits for Pb 220.353 Recovery = Not calculated							
S	181.975 Axial†	15.4	20.070 ug/L	3.5222	20.070 ppb	3.5222	17.55%
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb	206.836†	2.0	0.6963 ug/L	2.42535	0.6963 ppb	2.42535	348.34%
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se	196.026†	-3.6	-1.9916 ug/L	1.87449	-1.9916 ppb	1.87449	94.12%
QC value within limits for Se 196.026 Recovery = Not calculated							
Si	251.611†	121.0	3.7578 ug/L	1.17802	3.7578 ppb	1.17802	31.35%
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn	189.927†	2.2	0.4044 ug/L	1.01393	0.4044 ppb	1.01393	250.71%
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr	421.552†	11.1	0.0858 ug/L	0.50447	0.0858 ppb	0.50447	588.26%
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti	334.940†	476.9	0.7802 ug/L	1.00219	0.7802 ppb	1.00219	128.46%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl	190.801†	4.8	1.5308 ug/L	0.90362	1.5308 ppb	0.90362	59.03%
QC value within limits for Tl 190.801 Recovery = Not calculated							
U	409.014†	196.9	5.5910 ug/L	1.60047	5.5910 ppb	1.60047	28.63%
QC value within limits for U 409.014 Recovery = Not calculated							
V	292.402†	25.2	0.2017 ug/L	0.70989	0.2017 ppb	0.70989	351.98%
QC value within limits for V 292.402 Recovery = Not calculated							
Zn	213.857†	131.0	1.2735 ug/L	0.13845	1.2735 ppb	0.13845	10.87%
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†	148.3	148.3	9.8638 ug/L	1.49032	9.8638 ppb	1.49032	15.11%
QC value within limits for SiO2 Recovery = Not calculated							
All analyte(s) passed QC.							



Sequence No.: 95

Sample ID: 245806002|948071|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 110

Date Collected: 2/17/2010 03:33:53

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 245806002|948071|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4195.2	4195.2	98.7 %		03:36:07
1	Y RADIAL	5172.4	5172.4	117.5 %		03:35:47
1	Al 396.153Radial†	45387.6	46149.0	46167 ug/L	46167 ppb	03:35:47
1	Ca 317.933Radial†	11663.0	11799.5	22011 ug/L	22011 ppb	03:35:47
1	Fe 238.204 Radial†	8339.0	8439.6	89694 ug/L	89694 ppb	03:35:47
1	K 766.490 Radial†	34896.0	32187.5	6489.2 ug/L	6489.2 ppb	03:35:47
1	Mg 279.077 IEC†	244.6	245.1	9373.6 ug/L	9373.6 ppb	03:36:07
1	Na 589.592 Radial†	2033.2	1853.1	618.12 ug/L	618.12 ppb	03:35:47
1	Sr 421.552†	20803.3	20989.5	161.90 ug/L	161.90 ppb	03:35:47
1	Sc 361.383	854811.0	854811.0	100.56 %		03:37:05
1	Y 371.029	812734.8	812734.8	115.65 %		03:37:05
1	Ag 328.068†	-4833.7	-5034.2	6.0143 ug/L	6.0143 ppb	03:37:10
1	As 188.979†	-21.5	6.9	38.370 ug/L	38.370 ppb	03:37:30
1	B 249.677†	1659.2	2131.8	35.516 ug/L	35.516 ppb	03:37:10
1	Ba 233.527†	66046.6	65656.7	536.12 ug/L	536.12 ppb	03:37:10
1	Be 313.107†	11343.8	15619.2	9.5232 ug/L	9.5232 ppb	03:37:10
1	Cd 226.502†	541.7	734.2	-0.5639 ug/L	-0.5639 ppb	03:37:30
1	Co 228.616†	1104.8	1177.5	19.984 ug/L	19.984 ppb	03:37:30
1	Cr 267.716†	9514.2	9311.0	110.10 ug/L	110.10 ppb	03:37:10
1	Cu 324.752†	244782.3	235313.0	725.00 ug/L	725.00 ppb	03:37:10
1	Mn 257.610†	1577654.4	1568221.5	1817.2 ug/L	1817.2 ppb	03:37:05
1	Mo 202.031†	67.8	57.0	11.460 ug/L	11.460 ppb	03:37:30
1	Ni 231.604†	2751.9	2622.9	67.169 ug/L	67.169 ppb	03:37:30
1	P 214.914†	1658.6	1407.3	576.98 ug/L	576.98 ppb	03:37:30
1	Pb 220.353†	1711.6	1775.5	221.25 ug/L	221.25 ppb	03:37:30
1	S 181.975 Axial†	320.9	276.2	352.37 ug/L	352.37 ppb	03:37:30
1	Sb 206.836†	77.7	41.6	6.7728 ug/L	6.7728 ppb	03:37:30
1	Se 196.026†	-427.5	-401.7	56.186 ug/L	56.186 ppb	03:37:30
1	Si 251.611†	803726.8	798599.2	24886 ug/L	24886 ppb	03:37:05
1	Sn 189.927†	-6.0	-18.5	1.5296 ug/L	1.5296 ppb	03:37:30
1	Ti 334.940†	1030379.4	1026083.7	1669.7 ug/L	1669.7 ppb	03:37:05
1	Tl 190.801†	-113.0	-73.3	-0.9922 ug/L	-0.9922 ppb	03:37:30
1	U 409.014†	9574.3	13035.7	359.84 ug/L	359.84 ppb	03:37:05
1	V 292.402†	15788.4	17377.0	111.94 ug/L	111.94 ppb	03:37:10
1	Zn 213.857†	34772.8	33889.7	315.93 ug/L	315.93 ppb	03:37:10
1	SiO2†	806534.4	801383.8	53431 ug/L	53431 ppb	03:38:39
2	Sc Radial	4109.1	4109.1	96.7 %		03:36:33
2	Y RADIAL	5077.9	5077.9	115.3 %		03:36:13
2	Al 396.153Radial†	46209.1	47962.5	47981 ug/L	47981 ppb	03:36:13
2	Ca 317.933Radial†	11883.3	12275.0	22897 ug/L	22897 ppb	03:36:13
2	Fe 238.204 Radial†	8498.8	8782.0	93332 ug/L	93332 ppb	03:36:13
2	K 766.490 Radial†	35444.5	33495.8	6753.0 ug/L	6753.0 ppb	03:36:13
2	Mg 279.077 IEC†	243.6	249.2	9528.8 ug/L	9528.8 ppb	03:36:33
2	Na 589.592 Radial†	2017.7	1880.2	627.18 ug/L	627.18 ppb	03:36:13
2	Sr 421.552†	20962.0	21595.4	166.57 ug/L	166.57 ppb	03:36:13
2	Sc 361.383	850591.4	850591.4	100.07 %		03:37:36
2	Y 371.029	809251.6	809251.6	115.16 %		03:37:36
2	Ag 328.068†	-4664.6	-4889.1	7.9224 ug/L	7.9224 ppb	03:37:41
2	As 188.979†	-15.7	12.6	41.639 ug/L	41.639 ppb	03:38:01
2	B 249.677†	1714.2	2194.9	36.409 ug/L	36.409 ppb	03:37:41
2	Ba 233.527†	65290.3	65226.7	532.73 ug/L	532.73 ppb	03:37:41
2	Be 313.107†	11152.1	15483.5	9.4778 ug/L	9.4778 ppb	03:37:41
2	Cd 226.502†	550.5	745.6	-0.8064 ug/L	-0.8064 ppb	03:38:01
2	Co 228.616†	1120.6	1198.7	20.367 ug/L	20.367 ppb	03:38:01
2	Cr 267.716†	9450.0	9293.8	109.97 ug/L	109.97 ppb	03:37:41
2	Cu 324.752†	242379.3	234119.2	721.54 ug/L	721.54 ppb	03:37:41
2	Mn 257.610†	1568969.7	1567325.3	1816.6 ug/L	1816.6 ppb	03:37:36
2	Mo 202.031†	56.7	46.2	10.952 ug/L	10.952 ppb	03:38:01
2	Ni 231.604†	2739.7	2624.3	67.204 ug/L	67.204 ppb	03:38:01

2	P 214.914†	1665.9	1422.8	583.79 ug/L	583.79 ppb	03:38:01
2	Pb 220.353†	1734.5	1806.9	225.19 ug/L	225.19 ppb	03:38:01
2	S 181.975 Axial†	320.9	277.7	353.99 ug/L	353.99 ppb	03:38:01
2	Sb 206.836†	68.2	32.5	3.5162 ug/L	3.5162 ppb	03:38:01
2	Se 196.026†	-421.3	-397.7	70.305 ug/L	70.305 ppb	03:38:01
2	Si 251.611†	800607.9	799447.2	24913 ug/L	24913 ppb	03:37:36
2	Sn 189.927†	-24.5	-37.1	-1.6041 ug/L	-1.6041 ppb	03:38:01
2	Ti 334.940†	1026498.3	1027288.1	1671.8 ug/L	1671.8 ppb	03:37:36
2	Tl 190.801†	-113.1	-73.9	-1.1637 ug/L	-1.1637 ppb	03:38:01
2	U 409.014†	9565.4	13074.0	360.51 ug/L	360.51 ppb	03:37:36
2	V 292.402†	15568.1	17234.7	110.37 ug/L	110.37 ppb	03:37:41
2	Zn 213.857†	34401.9	33690.6	313.45 ug/L	313.45 ppb	03:37:41
2	SiO2†	808768.7	807595.3	53845 ug/L	53845 ppb	03:38:45
3	Sc Radial	4162.3	4162.3	97.9 %		03:36:58
3	Y RADIAL	5194.3	5194.3	118.0 %		03:36:38
3	Al 396.153Radial†	46027.1	47165.8	47184 ug/L	47184 ppb	03:36:38
3	Ca 317.933Radial†	11803.6	12036.5	22453 ug/L	22453 ppb	03:36:38
3	Fe 238.204 Radial†	8434.6	8604.0	91441 ug/L	91441 ppb	03:36:38
3	K 766.490 Radial†	35397.3	32979.1	6648.9 ug/L	6648.9 ppb	03:36:38
3	Mg 279.077 IEC†	244.9	247.4	9458.4 ug/L	9458.4 ppb	03:36:58
3	Na 589.592 Radial†	2072.7	1909.7	637.00 ug/L	637.00 ppb	03:36:38
3	Sr 421.552†	21007.8	21365.1	164.80 ug/L	164.80 ppb	03:36:38
3	Sc 361.383	852197.2	852197.2	100.26 %		03:38:07
3	Y 371.029	811654.6	811654.6	115.50 %		03:38:07
3	Ag 328.068†	-4849.7	-5064.9	6.4475 ug/L	6.4475 ppb	03:38:12
3	As 188.979†	-15.5	12.9	41.285 ug/L	41.285 ppb	03:38:32
3	B 249.677†	1756.3	2233.7	37.629 ug/L	37.629 ppb	03:38:12
3	Ba 233.527†	66114.0	65925.4	538.35 ug/L	538.35 ppb	03:38:12
3	Be 313.107†	11374.6	15684.5	9.5509 ug/L	9.5509 ppb	03:38:12
3	Cd 226.502†	531.0	725.1	-0.8489 ug/L	-0.8489 ppb	03:38:32
3	Co 228.616†	1125.4	1201.3	20.453 ug/L	20.453 ppb	03:38:32
3	Cr 267.716†	9494.4	9320.3	110.24 ug/L	110.24 ppb	03:38:12
3	Cu 324.752†	245378.8	236654.5	729.20 ug/L	729.20 ppb	03:38:12
3	Mn 257.610†	1573216.5	1568606.9	1817.8 ug/L	1817.8 ppb	03:38:07
3	Mo 202.031†	66.7	56.1	11.535 ug/L	11.535 ppb	03:38:32
3	Ni 231.604†	2757.9	2637.3	67.538 ug/L	67.538 ppb	03:38:32
3	P 214.914†	1671.0	1424.8	584.69 ug/L	584.69 ppb	03:38:32
3	Pb 220.353†	1735.0	1804.1	224.85 ug/L	224.85 ppb	03:38:32
3	S 181.975 Axial†	315.4	271.6	346.17 ug/L	346.17 ppb	03:38:32
3	Sb 206.836†	73.3	37.4	5.2531 ug/L	5.2531 ppb	03:38:32
3	Se 196.026†	-417.7	-393.3	66.770 ug/L	66.770 ppb	03:38:32
3	Si 251.611†	802006.6	799334.8	24909 ug/L	24909 ppb	03:38:07
3	Sn 189.927†	-22.0	-34.5	-1.2438 ug/L	-1.2438 ppb	03:38:32
3	Ti 334.940†	1028247.6	1027100.0	1671.4 ug/L	1671.4 ppb	03:38:07
3	Tl 190.801†	-123.0	-83.6	-4.2241 ug/L	-4.2241 ppb	03:38:32
3	U 409.014†	9777.8	13267.9	366.24 ug/L	366.24 ppb	03:38:07
3	V 292.402†	15815.0	17451.7	112.24 ug/L	112.24 ppb	03:38:12
3	Zn 213.857†	34836.6	34059.4	317.32 ug/L	317.32 ppb	03:38:12
3	SiO2†	801857.6	799178.9	53284 ug/L	53284 ppb	03:38:51

Mean Data: 245806002|948071|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	852533.2	100.30 %		0.251				0.25%
Sc Radial	4155.6	97.8 %		1.02				1.05%
Y 371.029	811213.7	115.44 %		0.254				0.22%
Y RADIAL	5148.2	116.9 %		1.40				1.20%
Ag 328.068†	-4996.1	6.7947 ug/L		1.00032	6.7947 ppb		1.00032	14.72%
Al 396.153Radial†	47092.4	47111 ug/L		909.3	47111 ppb		909.3	1.93%
As 188.979†	10.8	40.431 ug/L		1.7940	40.431 ppb		1.7940	4.44%
B 249.677†	2186.8	36.518 ug/L		1.0607	36.518 ppb		1.0607	2.90%
Ba 233.527†	65602.9	535.74 ug/L		2.829	535.74 ppb		2.829	0.53%
Be 313.107†	15595.8	9.5173 ug/L		0.03692	9.5173 ppb		0.03692	0.39%
Ca 317.933Radial†	12037.0	22454 ug/L		443.5	22454 ppb		443.5	1.98%
Cd 226.502†	735.0	-0.7397 ug/L		0.15375	-0.7397 ppb		0.15375	20.79%
Co 228.616†	1192.5	20.268 ug/L		0.2498	20.268 ppb		0.2498	1.23%
Cr 267.716†	9308.4	110.10 ug/L		0.136	110.10 ppb		0.136	0.12%
Cu 324.752†	235362.3	725.25 ug/L		3.835	725.25 ppb		3.835	0.53%
Fe 238.204 Radial†	8608.6	91489 ug/L		1819.8	91489 ppb		1819.8	1.99%
K 766.490 Radial†	32887.4	6630.4 ug/L		132.87	6630.4 ppb		132.87	2.00%

Mg 279.077 IEC†	247.2	9453.6 ug/L	77.72	9453.6 ppb	77.72	0.82%
Mn 257.610†	1568051.2	1817.2 ug/L	0.65	1817.2 ppb	0.65	0.04%
Mo 202.031†	53.1	11.316 ug/L	0.3170	11.316 ppb	0.3170	2.80%
Na 589.592 Radial†	1881.0	627.43 ug/L	9.445	627.43 ppb	9.445	1.51%
Ni 231.604†	2628.2	67.304 ug/L	0.2038	67.304 ppb	0.2038	0.30%
P 214.914†	1418.3	581.82 ug/L	4.216	581.82 ppb	4.216	0.72%
Pb 220.353†	1795.5	223.76 ug/L	2.185	223.76 ppb	2.185	0.98%
S 181.975 Axial†	275.2	350.84 ug/L	4.125	350.84 ppb	4.125	1.18%
Sb 206.836†	37.2	5.1807 ug/L	1.62951	5.1807 ppb	1.62951	31.45%
Se 196.026†	-397.6	64.420 ug/L	7.3468	64.420 ppb	7.3468	11.40%
Si 251.611†	799127.0	24903 ug/L	14.4	24903 ppb	14.4	0.06%
Sn 189.927†	-30.1	-0.4394 ug/L	1.71474	-0.4394 ppb	1.71474	390.22%
Sr 421.552†	21316.7	164.42 ug/L	2.358	164.42 ppb	2.358	1.43%
Ti 334.940†	1026823.9	1671.0 ug/L	1.10	1671.0 ppb	1.10	0.07%
Tl 190.801†	-76.9	-2.1266 ug/L	1.81844	-2.1266 ppb	1.81844	85.51%
U 409.014†	13125.9	362.20 ug/L	3.515	362.20 ppb	3.515	0.97%
V 292.402†	17354.5	111.52 ug/L	1.003	111.52 ppb	1.003	0.90%
Zn 213.857†	33879.9	315.57 ug/L	1.961	315.57 ppb	1.961	0.62%
SiO2†	802719.3	53520 ug/L	291.0	53520 ppb	291.0	0.54%

Sequence No.: 96

Sample ID: 245806003|948071|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 111

Date Collected: 2/17/2010 03:41:02

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 245806003|948071|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4131.5	4131.5	97.2 %		03:43:16
1	Y RADIAL	4923.6	4923.6	111.8 %		03:42:56
1	Al 396.153Radial†	27536.9	28491.8	28503 ug/L	28503 ppb	03:42:56
1	Ca 317.933Radial†	6416.3	6583.5	12281 ug/L	12281 ppb	03:42:56
1	Fe 238.204 Radial†	7331.4	7533.3	80062 ug/L	80062 ppb	03:42:56
1	K 766.490 Radial†	26775.9	24378.2	4916.0 ug/L	4916.0 ppb	03:42:56
1	Mg 279.077 IEC†	153.4	155.1	5905.8 ug/L	5905.8 ppb	03:43:16
1	Na 589.592 Radial†	1881.7	1729.0	576.72 ug/L	576.72 ppb	03:42:56
1	Sr 421.552†	10167.9	10372.0	79.994 ug/L	79.994 ppb	03:42:56
1	Sc 361.383	831830.3	831830.3	97.861 %		03:44:13
1	Y 371.029	752847.0	752847.0	107.13 %		03:44:13
1	Ag 328.068†	-3342.1	-3642.8	8.6768 ug/L	8.6768 ppb	03:44:19
1	As 188.979†	-36.1	-8.6	31.112 ug/L	31.112 ppb	03:44:39
1	B 249.677†	738.5	1236.5	15.925 ug/L	15.925 ppb	03:44:19
1	Ba 233.527†	75579.8	77212.6	629.61 ug/L	629.61 ppb	03:44:19
1	Be 313.107†	111663.6	118442.9	47.695 ug/L	47.695 ppb	03:44:19
1	Cd 226.502†	668.9	879.0	2.3150 ug/L	2.3150 ppb	03:44:39
1	Co 228.616†	2621.2	2757.3	52.757 ug/L	52.757 ppb	03:44:39
1	Cr 267.716†	5045.0	5005.6	59.396 ug/L	59.396 ppb	03:44:39
1	Cu 324.752†	3327022.2	3391635.5	10388 ug/L	10388 ppb	03:44:13
1	Mn 257.610†	1715522.7	1752443.3	2028.9 ug/L	2028.9 ppb	03:44:13
1	Mo 202.031†	31.7	22.0	7.9938 ug/L	7.9938 ppb	03:44:39
1	Ni 231.604†	2344.9	2282.7	58.434 ug/L	58.434 ppb	03:44:39
1	P 214.914†	5034.0	4902.0	600.26 ug/L	600.26 ppb	03:44:19
1	Pb 220.353†	14144.4	14527.0	1792.3 ug/L	1792.3 ppb	03:44:19
1	S 181.975 Axial†	466.9	434.2	562.12 ug/L	562.12 ppb	03:44:39
1	Sb 206.836†	202.7	171.4	51.007 ug/L	51.007 ppb	03:44:39
1	Se 196.026†	-381.7	-366.7	44.995 ug/L	44.995 ppb	03:44:39
1	Si 251.611†	587129.3	599347.9	18677 ug/L	18677 ppb	03:44:13
1	Sn 189.927†	141.1	131.6	26.810 ug/L	26.810 ppb	03:44:39
1	Ti 334.940†	1109808.3	1135554.5	1846.2 ug/L	1846.2 ppb	03:44:13
1	Tl 190.801†	-122.4	-86.0	-2.6137 ug/L	-2.6137 ppb	03:44:39
1	U 409.014†	44056.4	48534.4	1369.5 ug/L	1369.5 ppb	03:44:13
1	V 292.402†	12843.2	14801.2	96.342 ug/L	96.342 ppb	03:44:19
1	Zn 213.857†	58917.5	59517.4	554.48 ug/L	554.48 ppb	03:44:19
1	SiO2†	583089.6	595212.7	39685 ug/L	39685 ppb	03:45:47
2	Sc Radial	4103.9	4103.9	96.5 %		03:43:41
2	Y RADIAL	4819.1	4819.1	109.5 %		03:43:21
2	Al 396.153Radial†	27045.8	28173.3	28184 ug/L	28184 ppb	03:43:21
2	Ca 317.933Radial†	6307.3	6514.9	12153 ug/L	12153 ppb	03:43:21
2	Fe 238.204 Radial†	7216.7	7465.1	79338 ug/L	79338 ppb	03:43:21
2	K 766.490 Radial†	26263.7	24032.6	4846.3 ug/L	4846.3 ppb	03:43:21
2	Mg 279.077 IEC†	149.1	151.7	5776.1 ug/L	5776.1 ppb	03:43:41
2	Na 589.592 Radial†	1840.9	1699.8	566.97 ug/L	566.97 ppb	03:43:21
2	Sr 421.552†	9882.1	10146.2	78.251 ug/L	78.251 ppb	03:43:21
2	Sc 361.383	840513.0	840513.0	98.883 %		03:44:45
2	Y 371.029	760537.7	760537.7	108.23 %		03:44:45
2	Ag 328.068†	-3556.7	-3824.5	7.5821 ug/L	7.5821 ppb	03:44:50
2	As 188.979†	-17.4	10.7	38.755 ug/L	38.755 ppb	03:45:10
2	B 249.677†	803.4	1294.4	17.407 ug/L	17.407 ppb	03:44:50
2	Ba 233.527†	76367.5	77211.4	629.58 ug/L	629.58 ppb	03:44:50
2	Be 313.107†	112957.1	118572.4	47.658 ug/L	47.658 ppb	03:44:50
2	Cd 226.502†	655.8	858.7	2.1482 ug/L	2.1482 ppb	03:45:10
2	Co 228.616†	2588.8	2696.9	51.585 ug/L	51.585 ppb	03:45:10
2	Cr 267.716†	5015.9	4922.9	58.429 ug/L	58.429 ppb	03:45:10
2	Cu 324.752†	3294759.8	3323888.7	10180 ug/L	10180 ppb	03:44:45
2	Mn 257.610†	1699245.8	1717873.6	1989.0 ug/L	1989.0 ppb	03:44:45
2	Mo 202.031†	28.1	18.0	7.6409 ug/L	7.6409 ppb	03:45:10
2	Ni 231.604†	2356.9	2270.0	58.110 ug/L	58.110 ppb	03:45:10

2	P 214.914†	5084.1	4899.6	640.57 ug/L	640.57 ppb	03:44:50
2	Pb 220.353†	14350.4	14586.1	1799.7 ug/L	1799.7 ppb	03:44:50
2	S 181.975 Axial†	458.5	420.8	544.66 ug/L	544.66 ppb	03:45:10
2	Sb 206.836†	188.9	155.3	45.655 ug/L	45.655 ppb	03:45:10
2	Se 196.026†	-365.6	-346.4	54.485 ug/L	54.485 ppb	03:45:10
2	Si 251.611†	581481.9	587439.0	18306 ug/L	18306 ppb	03:44:45
2	Sn 189.927†	126.6	115.4	23.870 ug/L	23.870 ppb	03:45:10
2	Ti 334.940†	1098680.0	1112585.4	1808.8 ug/L	1808.8 ppb	03:44:45
2	Tl 190.801†	-120.1	-82.4	-1.9752 ug/L	-1.9752 ppb	03:45:10
2	U 409.014†	43751.8	47761.2	1347.6 ug/L	1347.6 ppb	03:44:45
2	V 292.402†	13066.7	14891.6	97.094 ug/L	97.094 ppb	03:44:50
2	Zn 213.857†	59587.8	59573.2	555.41 ug/L	555.41 ppb	03:44:50
2	SiO2†	589393.2	595432.5	39699 ug/L	39699 ppb	03:45:52
3	Sc Radial	3863.1	3863.1	90.9 %		03:44:06
3	Y RADIAL	4829.3	4829.3	109.7 %		03:43:46
3	Al 396.153Radial†	27225.7	30118.2	30130 ug/L	30130 ppb	03:43:46
3	Ca 317.933Radial†	6344.5	6963.2	12989 ug/L	12989 ppb	03:43:46
3	Fe 238.204 Radial†	7297.1	8019.7	85232 ug/L	85232 ppb	03:43:46
3	K 766.490 Radial†	26525.7	26017.2	5246.6 ug/L	5246.6 ppb	03:43:46
3	Mg 279.077 IEC†	155.4	168.2	6409.0 ug/L	6409.0 ppb	03:44:06
3	Na 589.592 Radial†	1840.6	1818.3	606.51 ug/L	606.51 ppb	03:43:46
3	Sr 421.552†	9875.8	10777.4	83.119 ug/L	83.119 ppb	03:43:46
3	Sc 361.383	847111.3	847111.3	99.659 %		03:45:16
3	Y 371.029	764705.7	764705.7	108.82 %		03:45:16
3	Ag 328.068†	-3329.2	-3568.3	10.796 ug/L	10.796 ppb	03:45:21
3	As 188.979†	-22.1	6.1	38.132 ug/L	38.132 ppb	03:45:41
3	B 249.677†	665.9	1150.1	13.056 ug/L	13.056 ppb	03:45:21
3	Ba 233.527†	76060.2	76301.5	622.37 ug/L	622.37 ppb	03:45:21
3	Be 313.107†	112479.2	117203.1	47.137 ug/L	47.137 ppb	03:45:21
3	Cd 226.502†	678.4	876.2	1.7421 ug/L	1.7421 ppb	03:45:41
3	Co 228.616†	2604.5	2692.2	51.414 ug/L	51.414 ppb	03:45:41
3	Cr 267.716†	5021.9	4889.4	58.157 ug/L	58.157 ppb	03:45:41
3	Cu 324.752†	3306761.6	3309978.0	10138 ug/L	10138 ppb	03:45:16
3	Mn 257.610†	1704288.2	1709547.8	1979.9 ug/L	1979.9 ppb	03:45:16
3	Mo 202.031†	16.8	6.4	7.2461 ug/L	7.2461 ppb	03:45:41
3	Ni 231.604†	2369.1	2263.7	57.948 ug/L	57.948 ppb	03:45:41
3	P 214.914†	5104.8	4880.3	634.08 ug/L	634.08 ppb	03:45:21
3	Pb 220.353†	14271.5	14393.8	1775.8 ug/L	1775.8 ppb	03:45:21
3	S 181.975 Axial†	465.8	424.5	549.13 ug/L	549.13 ppb	03:45:41
3	Sb 206.836†	189.0	154.0	45.112 ug/L	45.112 ppb	03:45:41
3	Se 196.026†	-365.9	-343.9	75.019 ug/L	75.019 ppb	03:45:41
3	Si 251.611†	583655.6	585039.6	18231 ug/L	18231 ppb	03:45:16
3	Sn 189.927†	133.6	121.5	25.186 ug/L	25.186 ppb	03:45:41
3	Ti 334.940†	1102604.6	1107868.9	1801.2 ug/L	1801.2 ppb	03:45:16
3	Tl 190.801†	-124.5	-85.8	-3.1646 ug/L	-3.1646 ppb	03:45:41
3	U 409.014†	43684.3	47348.9	1335.2 ug/L	1335.2 ppb	03:45:16
3	V 292.402†	13012.5	14734.3	95.082 ug/L	95.082 ppb	03:45:21
3	Zn 213.857†	59353.8	58869.1	547.72 ug/L	547.72 ppb	03:45:21
3	SiO2†	589058.8	590454.1	39367 ug/L	39367 ppb	03:45:58

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Mean Data: 245806003|948071|1

Analyte	Mean Corrected	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	839818.2	98.801 %		0.9017				0.91%
Sc Radial	4032.8	94.9 %		3.47				3.66%
Y 371.029	759363.5	108.06 %		0.856				0.79%
Y RADIAL	4857.3	110.3 %		1.31				1.19%
Ag 328.068†	-3678.5	9.0183 ug/L		1.63396	9.0183 ppb		1.63396	18.12%
Al 396.153Radial†	28927.8	28939 ug/L		1043.6	28939 ppb		1043.6	3.61%
As 188.979†	2.7	36.000 ug/L		4.2442	36.000 ppb		4.2442	11.79%
B 249.677†	1227.0	15.463 ug/L		2.2120	15.463 ppb		2.2120	14.30%
Ba 233.527†	76908.5	627.19 ug/L		4.172	627.19 ppb		4.172	0.67%
Be 313.107†	118072.8	47.497 ug/L		0.3117	47.497 ppb		0.3117	0.66%
Ca 317.933Radial†	6687.2	12474 ug/L		450.4	12474 ppb		450.4	3.61%
Cd 226.502†	871.3	2.0684 ug/L		0.29466	2.0684 ppb		0.29466	14.25%
Co 228.616†	2715.5	51.919 ug/L		0.7313	51.919 ppb		0.7313	1.41%
Cr 267.716†	4939.3	58.661 ug/L		0.6511	58.661 ppb		0.6511	1.11%
Cu 324.752†	3341834.1	10235 ug/L		133.7	10235 ppb		133.7	1.31%
Fe 238.204 Radial†	7672.7	81544 ug/L		3214.4	81544 ppb		3214.4	3.94%
K 766.490 Radial†	24809.4	5003.0 ug/L		213.87	5003.0 ppb		213.87	4.27%

Mg 279.077 IEC†	158.3	6030.3 ug/L	334.34	6030.3 ppb	334.34	5.54%
Mn 257.610†	1726621.6	1999.3 ug/L	26.07	1999.3 ppb	26.07	1.30%
Mo 202.031†	15.5	7.6269 ug/L	0.37406	7.6269 ppb	0.37406	4.90%
Na 589.592 Radial†	1749.0	583.40 ug/L	20.597	583.40 ppb	20.597	3.53%
Ni 231.604†	2272.1	58.164 ug/L	0.2473	58.164 ppb	0.2473	0.43%
P 214.914†	4894.0	624.97 ug/L	21.643	624.97 ppb	21.643	3.46%
Pb 220.353†	14502.3	1789.2 ug/L	12.25	1789.2 ppb	12.25	0.68%
S 181.975 Axial†	426.5	551.97 ug/L	9.073	551.97 ppb	9.073	1.64%
Sb 206.836†	160.3	47.258 ug/L	3.2580	47.258 ppb	3.2580	6.89%
Se 196.026†	-352.3	58.166 ug/L	15.3468	58.166 ppb	15.3468	26.38%
Si 251.611†	590608.8	18405 ug/L	238.8	18405 ppb	238.8	1.30%
Sn 189.927†	122.8	25.288 ug/L	1.4726	25.288 ppb	1.4726	5.82%
Sr 421.552†	10431.9	80.455 ug/L	2.4664	80.455 ppb	2.4664	3.07%
Ti 334.940†	1118669.6	1818.8 ug/L	24.05	1818.8 ppb	24.05	1.32%
Tl 190.801†	-84.7	-2.5845 ug/L	0.59523	-2.5845 ppb	0.59523	23.03%
U 409.014†	47881.5	1350.8 ug/L	17.35	1350.8 ppb	17.35	1.28%
V 292.402†	14809.0	96.173 ug/L	1.0166	96.173 ppb	1.0166	1.06%
Zn 213.857†	59319.9	552.54 ug/L	4.199	552.54 ppb	4.199	0.76%
SiO2†	593699.8	39584 ug/L	187.5	39584 ppb	187.5	0.47%

Sequence No.: 97

Sample ID: 245806004|948071|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 112

Date Collected: 2/17/2010 03:48:10

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 245806004|948071|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4294.7	4294.7	101 %		03:50:05
1	Y RADIAL	4735.7	4735.7	107.6 %		03:50:05
1	Al 396.153Radial†	26916.4	26801.0	26811 ug/L	26811 ppb	03:50:05
1	Ca 317.933Radial†	6033.5	5953.6	11106 ug/L	11106 ppb	03:50:05
1	Fe 238.204 Radial†	5712.0	5643.6	59979 ug/L	59979 ppb	03:50:05
1	K 766.490 Radial†	18734.7	15372.0	3098.7 ug/L	3098.7 ppb	03:50:05
1	Mg 279.077 IEC†	181.0	176.5	6753.4 ug/L	6753.4 ppb	03:50:25
1	Na 589.592 Radial†	1444.9	1223.1	407.96 ug/L	407.96 ppb	03:50:05
1	Sr 421.552†	6168.3	6015.6	46.365 ug/L	46.365 ppb	03:50:05
1	Sc 361.383	847914.0	847914.0	99.754 %		03:51:25
1	Y 371.029	732874.1	732874.1	104.29 %		03:51:25
1	Ag 328.068†	1331.7	1107.3	22.731 ug/L	22.731 ppb	03:51:30
1	As 188.979†	1519.7	1551.8	680.55 ug/L	680.55 ppb	03:51:50
1	B 249.677†	614.5	1097.9	16.009 ug/L	16.009 ppb	03:51:30
1	Ba 233.527†	99814.0	100041.7	814.33 ug/L	814.33 ppb	03:51:30
1	Be 313.107†	232352.6	237265.8	90.703 ug/L	90.703 ppb	03:51:25
1	Cd 226.502†	621.7	818.7	4.1639 ug/L	4.1639 ppb	03:51:50
1	Co 228.616†	1281.2	1363.3	24.631 ug/L	24.631 ppb	03:51:50
1	Cr 267.716†	8371.8	8242.7	95.710 ug/L	95.710 ppb	03:51:30
1	Cu 324.752†	2040405.9	2037352.8	6238.9 ug/L	6238.9 ppb	03:51:25
1	Mn 257.610†	1096914.4	1099054.6	1273.3 ug/L	1273.3 ppb	03:51:25
1	Mo 202.031†	6.9	-3.5	4.5279 ug/L	4.5279 ppb	03:51:50
1	Ni 231.604†	3637.3	3532.8	90.472 ug/L	90.472 ppb	03:51:50
1	P 214.914†	4783.7	4553.5	1246.6 ug/L	1246.6 ppb	03:51:30
1	Pb 220.353†	3618213.5	3627226.0	449330 ug/L	449330 ppb	03:51:25
1	S 181.975 Axial†	286.3	244.1	313.99 ug/L	313.99 ppb	03:51:50
1	Sb 206.836†	6953.2	6934.7	2341.9 ug/L	2341.9 ppb	03:51:50
1	Se 196.026†	-310.5	-287.9	26.159 ug/L	26.159 ppb	03:51:50
1	Si 251.611†	473017.4	473573.7	14758 ug/L	14758 ppb	03:51:25
1	Sn 189.927†	375.6	363.9	67.953 ug/L	67.953 ppb	03:51:50
1	Ti 334.940†	959288.9	963151.7	1564.7 ug/L	1564.7 ppb	03:51:25
1	Tl 190.801†	-102.6	-63.7	-1.3678 ug/L	-1.3678 ppb	03:51:50
1	U 409.014†	127687.2	131517.9	3729.0 ug/L	3729.0 ppb	03:51:25
1	V 292.402†	10863.5	12567.7	87.874 ug/L	87.874 ppb	03:51:30
1	Zn 213.857†	119193.2	118799.9	1141.5 ug/L	1141.5 ppb	03:51:30
1	SiO2†	484695.7	485273.7	32355 ug/L	32355 ppb	03:53:01
2	Sc Radial	4296.2	4296.2	101 %		03:50:30
2	Y RADIAL	4725.2	4725.2	107.3 %		03:50:30
2	Al 396.153Radial†	27010.7	26884.7	26895 ug/L	26895 ppb	03:50:30
2	Ca 317.933Radial†	6014.2	5932.5	11066 ug/L	11066 ppb	03:50:30
2	Fe 238.204 Radial†	5725.6	5655.1	60101 ug/L	60101 ppb	03:50:30
2	K 766.490 Radial†	18780.4	15410.6	3106.5 ug/L	3106.5 ppb	03:50:30
2	Mg 279.077 IEC†	182.1	177.5	6791.3 ug/L	6791.3 ppb	03:50:50
2	Na 589.592 Radial†	1401.6	1179.7	393.50 ug/L	393.50 ppb	03:50:30
2	Sr 421.552†	6159.4	6004.6	46.281 ug/L	46.281 ppb	03:50:30
2	Sc 361.383	847625.1	847625.1	99.720 %		03:51:57
2	Y 371.029	731540.8	731540.8	104.10 %		03:51:57
2	Ag 328.068†	1366.3	1142.5	22.936 ug/L	22.936 ppb	03:52:03
2	As 188.979†	1505.5	1538.1	674.84 ug/L	674.84 ppb	03:52:23
2	B 249.677†	682.2	1166.0	17.592 ug/L	17.592 ppb	03:52:03
2	Ba 233.527†	99283.3	99543.7	810.29 ug/L	810.29 ppb	03:52:03
2	Be 313.107†	232345.4	237337.9	90.736 ug/L	90.736 ppb	03:51:57
2	Cd 226.502†	608.7	805.9	4.0035 ug/L	4.0035 ppb	03:52:23
2	Co 228.616†	1272.4	1354.9	24.447 ug/L	24.447 ppb	03:52:23
2	Cr 267.716†	8410.4	8284.4	96.193 ug/L	96.193 ppb	03:52:03
2	Cu 324.752†	2042473.8	2040123.6	6247.4 ug/L	6247.4 ppb	03:51:57
2	Mn 257.610†	1098751.5	1101271.7	1275.8 ug/L	1275.8 ppb	03:51:57
2	Mo 202.031†	10.9	0.4	4.8291 ug/L	4.8291 ppb	03:52:23
2	Ni 231.604†	3621.7	3518.3	90.102 ug/L	90.102 ppb	03:52:23

2	P 214.914†	4765.3	4536.7	1235.5 ug/L	1235.5 ppb	03:52:03
2	Pb 220.353†	3629868.1	3640149.7	450930 ug/L	450930 ppb	03:51:57
2	S 181.975 Axial†	285.6	243.5	313.23 ug/L	313.23 ppb	03:52:23
2	Sb 206.836†	6908.1	6891.9	2327.4 ug/L	2327.4 ppb	03:52:23
2	Se 196.026†	-304.4	-281.9	30.058 ug/L	30.058 ppb	03:52:23
2	Si 251.611†	473892.6	474613.0	14790 ug/L	14790 ppb	03:51:57
2	Sn 189.927†	373.2	361.6	67.536 ug/L	67.536 ppb	03:52:23
2	Ti 334.940†	960746.8	964941.6	1567.6 ug/L	1567.6 ppb	03:51:57
2	Tl 190.801†	-109.9	-71.1	-3.6470 ug/L	-3.6470 ppb	03:52:23
2	U 409.014†	128042.4	131917.6	3740.3 ug/L	3740.3 ppb	03:51:57
2	V 292.402†	10953.1	12661.2	88.557 ug/L	88.557 ppb	03:52:03
2	Zn 213.857†	118692.2	118338.2	1136.9 ug/L	1136.9 ppb	03:52:03
2	SiO2†	477465.7	478188.9	31882 ug/L	31882 ppb	03:53:07
3	Sc Radial	4257.0	4257.0	100 %		03:50:55
3	Y RADIAL	4680.2	4680.2	106.3 %		03:50:55
3	Al 396.153Radial†	26696.8	26817.3	26828 ug/L	26828 ppb	03:50:55
3	Ca 317.933Radial†	5978.5	5951.5	11102 ug/L	11102 ppb	03:50:55
3	Fe 238.204 Radial†	5634.9	5616.7	59693 ug/L	59693 ppb	03:50:55
3	K 766.490 Radial†	18556.1	15357.7	3095.8 ug/L	3095.8 ppb	03:50:55
3	Mg 279.077 IEC†	181.2	178.3	6822.4 ug/L	6822.4 ppb	03:51:15
3	Na 589.592 Radial†	1307.2	1098.3	366.35 ug/L	366.35 ppb	03:50:55
3	Sr 421.552†	6089.5	5990.9	46.175 ug/L	46.175 ppb	03:50:55
3	Sc 361.383	853589.5	853589.5	100.42 %		03:52:30
3	Y 371.029	737256.1	737256.1	104.91 %		03:52:30
3	Ag 328.068†	1432.5	1198.8	23.065 ug/L	23.065 ppb	03:52:36
3	As 188.979†	1540.7	1562.5	685.01 ug/L	685.01 ppb	03:52:56
3	B 249.677†	681.3	1160.4	17.525 ug/L	17.525 ppb	03:52:36
3	Ba 233.527†	99445.7	99009.7	805.94 ug/L	805.94 ppb	03:52:36
3	Be 313.107†	234002.6	237360.1	90.741 ug/L	90.741 ppb	03:52:30
3	Cd 226.502†	614.7	807.6	4.0651 ug/L	4.0651 ppb	03:52:56
3	Co 228.616†	1281.3	1354.8	24.452 ug/L	24.452 ppb	03:52:56
3	Cr 267.716†	8427.8	8242.7	95.700 ug/L	95.700 ppb	03:52:36
3	Cu 324.752†	2063052.3	2046303.9	6266.3 ug/L	6266.3 ppb	03:52:30
3	Mn 257.610†	1102892.4	1097696.1	1271.7 ug/L	1271.7 ppb	03:52:30
3	Mo 202.031†	8.8	-1.7	4.6422 ug/L	4.6422 ppb	03:52:56
3	Ni 231.604†	3661.8	3533.0	90.477 ug/L	90.477 ppb	03:52:56
3	P 214.914†	4822.2	4560.0	1245.0 ug/L	1245.0 ppb	03:52:36
3	Pb 220.353†	3633896.9	3618726.8	448270 ug/L	448270 ppb	03:52:30
3	S 181.975 Axial†	281.7	237.6	305.52 ug/L	305.52 ppb	03:52:56
3	Sb 206.836†	6979.1	6914.1	2334.9 ug/L	2334.9 ppb	03:52:56
3	Se 196.026†	-311.9	-287.2	25.656 ug/L	25.656 ppb	03:52:56
3	Si 251.611†	476587.8	473976.3	14770 ug/L	14770 ppb	03:52:30
3	Sn 189.927†	368.4	354.2	66.205 ug/L	66.205 ppb	03:52:56
3	Ti 334.940†	966543.5	963981.8	1566.0 ug/L	1566.0 ppb	03:52:30
3	Tl 190.801†	-122.6	-83.0	-7.4309 ug/L	-7.4309 ppb	03:52:56
3	U 409.014†	128886.2	131860.7	3738.8 ug/L	3738.8 ppb	03:52:30
3	V 292.402†	10906.5	12538.0	87.721 ug/L	87.721 ppb	03:52:36
3	Zn 213.857†	118881.6	117695.2	1130.7 ug/L	1130.7 ppb	03:52:36
3	SiO2†	475820.7	473205.1	31550 ug/L	31550 ppb	03:53:12

Mean Data: 245806004|948071|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	849709.5	99.965 %		0.3957			0.40%
Sc Radial	4282.7	101 %		0.5			0.52%
Y 371.029	733890.4	104.43 %		0.426			0.41%
Y RADIAL	4713.7	107.1 %		0.67			0.63%
Ag 328.068†	1149.5	22.911 ug/L		0.1684	22.911 ppb	0.1684	0.73%
Al 396.153Radial†	26834.3	26845 ug/L		44.4	26845 ppb	44.4	0.17%
As 188.979†	1550.8	680.13 ug/L		5.102	680.13 ppb	5.102	0.75%
B 249.677†	1141.4	17.042 ug/L		0.8954	17.042 ppb	0.8954	5.25%
Ba 233.527†	99531.7	810.19 ug/L		4.195	810.19 ppb	4.195	0.52%
Be 313.107†	237321.3	90.727 ug/L		0.0206	90.727 ppb	0.0206	0.02%
Ca 317.933Radial†	5945.9	11091 ug/L		21.7	11091 ppb	21.7	0.20%
Cd 226.502†	810.7	4.0775 ug/L		0.08090	4.0775 ppb	0.08090	1.98%
Co 228.616†	1357.6	24.510 ug/L		0.1049	24.510 ppb	0.1049	0.43%
Cr 267.716†	8256.6	95.867 ug/L		0.2818	95.867 ppb	0.2818	0.29%
Cu 324.752†	2041260.1	6250.8 ug/L		14.02	6250.8 ppb	14.02	0.22%
Fe 238.204 Radial†	5638.5	59924 ug/L		209.5	59924 ppb	209.5	0.35%
K 766.490 Radial†	15380.1	3100.4 ug/L		5.53	3100.4 ppb	5.53	0.18%



Mg 279.077 IEC†	177.4	6789.0 ug/L	34.57	6789.0 ppb	34.57	0.51%
Mn 257.610†	1099340.8	1273.6 ug/L	2.10	1273.6 ppb	2.10	0.17%
Mo 202.031†	-1.6	4.6664 ug/L	0.15203	4.6664 ppb	0.15203	3.26%
Na 589.592 Radial†	1167.0	389.27 ug/L	21.128	389.27 ppb	21.128	5.43%
Ni 231.604†	3528.0	90.350 ug/L	0.2147	90.350 ppb	0.2147	0.24%
P 214.914†	4550.1	1242.4 ug/L	5.99	1242.4 ppb	5.99	0.48%
Pb 220.353†	3628700.8	449510 ug/L	1336.3	449510 ppb	1336.3	0.30%
S 181.975 Axial†	241.7	310.92 ug/L	4.687	310.92 ppb	4.687	1.51%
Sb 206.836†	6913.6	2334.7 ug/L	7.25	2334.7 ppb	7.25	0.31%
Se 196.026†	-285.7	27.291 ug/L	2.4094	27.291 ppb	2.4094	8.83%
Si 251.611†	474054.3	14773 ug/L	16.3	14773 ppb	16.3	0.11%
Sn 189.927†	359.9	67.231 ug/L	0.9129	67.231 ppb	0.9129	1.36%
Sr 421.552†	6003.7	46.274 ug/L	0.0956	46.274 ppb	0.0956	0.21%
Ti 334.940†	964025.0	1566.1 ug/L	1.45	1566.1 ppb	1.45	0.09%
Tl 190.801†	-72.6	-4.1486 ug/L	3.06250	-4.1486 ppb	3.06250	73.82%
U 409.014†	131765.4	3736.0 ug/L	6.15	3736.0 ppb	6.15	0.16%
V 292.402†	12589.0	88.051 ug/L	0.4450	88.051 ppb	0.4450	0.51%
Zn 213.857†	118277.8	1136.4 ug/L	5.41	1136.4 ppb	5.41	0.48%
SiO2†	478889.2	31929 ug/L	404.4	31929 ppb	404.4	1.27%

Sequence No.: 98

Sample ID: 245806005|948071|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 113

Date Collected: 2/17/2010 03:55:24

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 245806005|948071|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4326.6	4326.6	102 %		03:57:18
1	Y RADIAL	5676.1	5676.1	128.9 %		03:57:18
1	Al 396.153Radial†	16170.4	16046.5	16052 ug/L	16052 ppb	03:57:18
1	Ca 317.933Radial†	2990.1	2919.5	5446.0 ug/L	5446.0 ppb	03:57:38
1	Fe 238.204 Radial†	7911.6	7763.1	82505 ug/L	82505 ppb	03:57:18
1	K 766.490 Radial†	20341.9	16814.4	3390.6 ug/L	3390.6 ppb	03:57:18
1	Mg 279.077 IEC†	91.0	86.7	3263.7 ug/L	3263.7 ppb	03:57:38
1	Na 589.592 Radial†	4008.7	3731.5	1244.7 ug/L	1244.7 ppb	03:57:18
1	Sr 421.552†	5752.3	5561.8	42.904 ug/L	42.904 ppb	03:57:18
1	Sc 361.383	858968.0	858968.0	101.05 %		03:58:35
1	Y 371.029	885939.0	885939.0	126.07 %		03:58:35
1	Ag 328.068†	-4572.6	-4752.6	5.3890 ug/L	5.3890 ppb	03:58:41
1	As 188.979†	-35.0	-6.3	27.531 ug/L	27.531 ppb	03:59:01
1	B 249.677†	215.9	695.5	2.8168 ug/L	2.8168 ppb	03:58:41
1	Ba 233.527†	57867.5	57245.1	467.43 ug/L	467.43 ppb	03:58:41
1	Be 313.107†	-4732.5	-344.0	2.7235 ug/L	2.7235 ppb	03:58:41
1	Cd 226.502†	444.1	635.0	-1.0533 ug/L	-1.0533 ppb	03:59:01
1	Co 228.616†	2432.7	2486.2	48.161 ug/L	48.161 ppb	03:59:01
1	Cr 267.716†	19903.2	19545.9	229.18 ug/L	229.18 ppb	03:58:41
1	Cu 324.752†	20335.4	12029.2	41.348 ug/L	41.348 ppb	03:58:41
1	Mn 257.610†	2962436.1	2930967.6	3388.5 ug/L	3388.5 ppb	03:58:35
1	Mo 202.031†	90.1	78.7	12.319 ug/L	12.319 ppb	03:59:01
1	Ni 231.604†	6105.2	5928.1	151.81 ug/L	151.81 ppb	03:59:01
1	P 214.914†	941.1	689.3	312.70 ug/L	312.70 ppb	03:59:01
1	Pb 220.353†	847.9	912.6	108.69 ug/L	108.69 ppb	03:59:01
1	S 181.975 Axial†	134.0	89.7	114.21 ug/L	114.21 ppb	03:59:01
1	Sb 206.836†	55.1	18.9	1.2489 ug/L	1.2489 ppb	03:59:01
1	Se 196.026†	-380.3	-353.0	60.439 ug/L	60.439 ppb	03:59:01
1	Si 251.611†	488309.9	482604.4	15039 ug/L	15039 ppb	03:58:35
1	Sn 189.927†	2.5	-10.2	0.3919 ug/L	0.3919 ppb	03:59:01
1	Ti 334.940†	778961.0	772329.2	1255.8 ug/L	1255.8 ppb	03:58:35
1	Tl 190.801†	-134.0	-93.5	-3.2500 ug/L	-3.2500 ppb	03:59:01
1	U 409.014†	-13292.0	-9638.2	-283.71 ug/L	-283.71 ppb	03:58:35
1	V 292.402†	5458.9	7079.3	37.467 ug/L	37.467 ppb	03:58:41
1	Zn 213.857†	39346.6	38248.4	359.93 ug/L	359.93 ppb	03:58:41
1	SiO2†	484498.5	478825.5	31925 ug/L	31925 ppb	04:00:09
2	Sc Radial	4255.3	4255.3	100 %		03:57:43
2	Y RADIAL	5596.4	5596.4	127.1 %		03:57:43
2	Al 396.153Radial†	15816.8	15959.4	15965 ug/L	15965 ppb	03:57:43
2	Ca 317.933Radial†	2988.6	2967.1	5534.8 ug/L	5534.8 ppb	03:58:03
2	Fe 238.204 Radial†	7753.6	7735.5	82212 ug/L	82212 ppb	03:57:43
2	K 766.490 Radial†	20022.4	16830.0	3393.7 ug/L	3393.7 ppb	03:57:43
2	Mg 279.077 IEC†	93.6	90.8	3421.6 ug/L	3421.6 ppb	03:58:03
2	Na 589.592 Radial†	3820.8	3609.8	1204.1 ug/L	1204.1 ppb	03:57:43
2	Sr 421.552†	5532.1	5436.5	41.936 ug/L	41.936 ppb	03:57:43
2	Sc 361.383	855892.4	855892.4	100.69 %		03:59:06
2	Y 371.029	881555.9	881555.9	125.45 %		03:59:06
2	Ag 328.068†	-4469.8	-4666.7	5.6969 ug/L	5.6969 ppb	03:59:12
2	As 188.979†	-26.4	2.1	31.017 ug/L	31.017 ppb	03:59:32
2	B 249.677†	209.8	690.3	2.7409 ug/L	2.7409 ppb	03:59:12
2	Ba 233.527†	57505.3	57091.1	466.18 ug/L	466.18 ppb	03:59:12
2	Be 313.107†	-4614.6	-243.8	2.7630 ug/L	2.7630 ppb	03:59:12
2	Cd 226.502†	426.7	619.2	-1.2067 ug/L	-1.2067 ppb	03:59:32
2	Co 228.616†	2430.9	2493.1	48.303 ug/L	48.303 ppb	03:59:32
2	Cr 267.716†	19909.8	19623.3	230.08 ug/L	230.08 ppb	03:59:12
2	Cu 324.752†	20353.1	12119.1	41.606 ug/L	41.606 ppb	03:59:12
2	Mn 257.610†	2954188.3	2933310.9	3391.2 ug/L	3391.2 ppb	03:59:06
2	Mo 202.031†	75.5	64.5	11.242 ug/L	11.242 ppb	03:59:32
2	Ni 231.604†	6056.9	5901.7	151.14 ug/L	151.14 ppb	03:59:32

2	P 214.914†	937.0	688.6	312.42 ug/L	312.42 ppb	03:59:32
2	Pb 220.353†	689.1	758.0	89.545 ug/L	89.545 ppb	03:59:32
2	S 181.975 Axial†	132.2	88.4	112.49 ug/L	112.49 ppb	03:59:32
2	Sb 206.836†	51.8	15.8	0.1634 ug/L	0.1634 ppb	03:59:32
2	Se 196.026†	-386.1	-360.1	55.340 ug/L	55.340 ppb	03:59:32
2	Si 251.611†	486635.9	482678.3	15041 ug/L	15041 ppb	03:59:06
2	Sn 189.927†	-6.2	-18.7	-1.1373 ug/L	-1.1373 ppb	03:59:32
2	Ti 334.940†	776910.8	773063.1	1257.0 ug/L	1257.0 ppb	03:59:06
2	Tl 190.801†	-140.5	-100.5	-5.4337 ug/L	-5.4337 ppb	03:59:32
2	U 409.014†	-13103.8	-9498.6	-279.71 ug/L	-279.71 ppb	03:59:06
2	V 292.402†	5411.8	7051.9	37.306 ug/L	37.306 ppb	03:59:12
2	Zn 213.857†	39027.0	38071.0	358.25 ug/L	358.25 ppb	03:59:12
2	SiO2†	485157.4	481202.8	32083 ug/L	32083 ppb	04:00:14
3	Sc Radial	4359.6	4359.6	103 %		03:58:08
3	Y RADIAL	5689.8	5689.8	129.2 %		03:58:08
3	Al 396.153Radial†	16073.7	15831.8	15838 ug/L	15838 ppb	03:58:08
3	Ca 317.933Radial†	2973.6	2881.1	5374.3 ug/L	5374.3 ppb	03:58:28
3	Fe 238.204 Radial†	7897.6	7690.5	81733 ug/L	81733 ppb	03:58:08
3	K 766.490 Radial†	20290.7	16613.0	3350.0 ug/L	3350.0 ppb	03:58:08
3	Mg 279.077 IEC†	90.1	85.1	3202.3 ug/L	3202.3 ppb	03:58:28
3	Na 589.592 Radial†	3958.6	3652.7	1218.4 ug/L	1218.4 ppb	03:58:08
3	Sr 421.552†	5717.8	5485.3	42.314 ug/L	42.314 ppb	03:58:08
3	Sc 361.383	868556.4	868556.4	102.18 %		03:59:38
3	Y 371.029	895275.8	895275.8	127.40 %		03:59:38
3	Ag 328.068†	-4474.7	-4606.8	5.8218 ug/L	5.8218 ppb	03:59:43
3	As 188.979†	-32.4	-3.4	28.594 ug/L	28.594 ppb	04:00:03
3	B 249.677†	178.6	656.7	2.0300 ug/L	2.0300 ppb	03:59:43
3	Ba 233.527†	58433.3	57166.6	466.77 ug/L	466.77 ppb	03:59:43
3	Be 313.107†	-4843.5	-400.9	2.7054 ug/L	2.7054 ppb	03:59:43
3	Cd 226.502†	439.2	625.3	-1.0870 ug/L	-1.0870 ppb	04:00:03
3	Co 228.616†	2428.3	2455.3	47.522 ug/L	47.522 ppb	04:00:03
3	Cr 267.716†	20128.0	19548.5	229.19 ug/L	229.19 ppb	03:59:43
3	Cu 324.752†	20405.3	11875.5	40.833 ug/L	40.833 ppb	03:59:43
3	Mn 257.610†	2989876.0	2925458.8	3382.1 ug/L	3382.1 ppb	03:59:38
3	Mo 202.031†	71.7	59.7	10.847 ug/L	10.847 ppb	04:00:03
3	Ni 231.604†	6069.0	5825.9	149.20 ug/L	149.20 ppb	04:00:03
3	P 214.914†	954.1	691.8	314.72 ug/L	314.72 ppb	04:00:03
3	Pb 220.353†	660.2	719.7	84.818 ug/L	84.818 ppb	04:00:03
3	S 181.975 Axial†	121.3	75.8	96.155 ug/L	96.155 ppb	04:00:03
3	Sb 206.836†	60.3	23.3	2.7457 ug/L	2.7457 ppb	04:00:03
3	Se 196.026†	-400.8	-368.9	48.673 ug/L	48.673 ppb	04:00:03
3	Si 251.611†	493696.0	482541.1	15037 ug/L	15037 ppb	03:59:38
3	Sn 189.927†	3.8	-8.9	0.5916 ug/L	0.5916 ppb	04:00:03
3	Ti 334.940†	788441.6	773097.7	1257.0 ug/L	1257.0 ppb	03:59:38
3	Tl 190.801†	-129.7	-87.8	-1.4830 ug/L	-1.4830 ppb	04:00:03
3	U 409.014†	-13178.9	-9382.3	-276.35 ug/L	-276.35 ppb	03:59:38
3	V 292.402†	5464.5	7025.1	37.179 ug/L	37.179 ppb	03:59:43
3	Zn 213.857†	39716.4	38180.5	359.40 ug/L	359.40 ppb	03:59:43
3	SiO2†	490852.1	479750.7	31986 ug/L	31986 ppb	04:00:20

## Mean Data: 245806005|948071|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	861138.9	101.31 %	0.777			0.77%
Sc Radial	4313.9	101 %	1.3			1.24%
Y 371.029	887590.2	126.31 %	0.997			0.79%
Y RADIAL	5654.1	128.4 %	1.15			0.89%
Ag 328.068†	-4675.4	5.6359 ug/L	0.22273	5.6359 ppb	0.22273	3.95%
Al 396.153Radial†	15945.9	15952 ug/L	108.0	15952 ppb	108.0	0.68%
As 188.979†	-2.5	29.047 ug/L	1.7863	29.047 ppb	1.7863	6.15%
B 249.677†	680.8	2.5293 ug/L	0.43404	2.5293 ppb	0.43404	17.16%
Ba 233.527†	57167.6	466.79 ug/L	0.630	466.79 ppb	0.630	0.13%
Be 313.107†	-329.6	2.7306 ug/L	0.02946	2.7306 ppb	0.02946	1.08%
Ca 317.933Radial†	2922.6	5451.7 ug/L	80.42	5451.7 ppb	80.42	1.48%
Cd 226.502†	626.5	-1.1157 ug/L	0.08064	-1.1157 ppb	0.08064	7.23%
Co 228.616†	2478.2	47.996 ug/L	0.4163	47.996 ppb	0.4163	0.87%
Cr 267.716†	19572.5	229.48 ug/L	0.512	229.48 ppb	0.512	0.22%
Cu 324.752†	12007.9	41.262 ug/L	0.3936	41.262 ppb	0.3936	0.95%
Fe 238.204 Radial†	7729.7	82150 ug/L	389.5	82150 ppb	389.5	0.47%
K 766.490 Radial†	16752.5	3378.1 ug/L	24.40	3378.1 ppb	24.40	0.72%

Mg 279.077 IEC†	87.6	3295.9 ug/L	113.11	3295.9 ppb	113.11	3.43%
Mn 257.610†	2929912.4	3387.3 ug/L	4.68	3387.3 ppb	4.68	0.14%
Mo 202.031†	67.7	11.470 ug/L	0.7618	11.470 ppb	0.7618	6.64%
Na 589.592 Radial†	3664.7	1222.4 ug/L	20.59	1222.4 ppb	20.59	1.68%
Ni 231.604†	5885.2	150.71 ug/L	1.358	150.71 ppb	1.358	0.90%
P 214.914†	689.9	313.28 ug/L	1.252	313.28 ppb	1.252	0.40%
Pb 220.353†	796.7	94.351 ug/L	12.6410	94.351 ppb	12.6410	13.40%
S 181.975 Axial†	84.6	107.62 ug/L	9.967	107.62 ppb	9.967	9.26%
Sb 206.836†	19.3	1.3860 ug/L	1.29659	1.3860 ppb	1.29659	93.55%
Se 196.026†	-360.7	54.817 ug/L	5.9002	54.817 ppb	5.9002	10.76%
Si 251.611†	482607.9	15039 ug/L	2.1	15039 ppb	2.1	0.01%
Sn 189.927†	-12.6	-0.0513 ug/L	0.94583	-0.0513 ppb	0.94583	>999.9%
Sr 421.552†	5494.6	42.384 ug/L	0.4878	42.384 ppb	0.4878	1.15%
Ti 334.940†	772830.0	1256.6 ug/L	0.70	1256.6 ppb	0.70	0.06%
Tl 190.801†	-93.9	-3.3889 ug/L	1.97903	-3.3889 ppb	1.97903	58.40%
U 409.014†	-9506.4	-279.92 ug/L	3.682	-279.92 ppb	3.682	1.32%
V 292.402†	7052.1	37.317 ug/L	0.1445	37.317 ppb	0.1445	0.39%
Zn 213.857†	38166.7	359.20 ug/L	0.861	359.20 ppb	0.861	0.24%
SiO2†	479926.3	31998 ug/L	79.9	31998 ppb	79.9	0.25%

Sequence No.: 99

Sample ID: 245806006|948071|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 114

Date Collected: 2/17/2010 04:02:31

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 245806006|948071|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4174.2	4174.2	98.2 %		04:04:45
1	Y RADIAL	4866.9	4866.9	110.6 %		04:04:25
1	Al 396.153Radial†	22220.0	22787.0	22796 ug/L	22796 ppb	04:04:25
1	Ca 317.933Radial†	6422.5	6522.1	12166 ug/L	12166 ppb	04:04:25
1	Fe 238.204 Radial†	5727.4	5822.5	61880 ug/L	61880 ppb	04:04:25
1	K 766.490 Radial†	18055.7	15215.6	3066.7 ug/L	3066.7 ppb	04:04:25
1	Mg 279.077 IEC†	147.3	147.3	5623.3 ug/L	5623.3 ppb	04:04:45
1	Na 589.592 Radial†	1817.8	1644.1	548.41 ug/L	548.41 ppb	04:04:25
1	Sr 421.552†	7344.7	7389.7	56.967 ug/L	56.967 ppb	04:04:25
1	Sc 361.383	845832.5	845832.5	99.509 %		04:05:42
1	Y 371.029	753284.8	753284.8	107.19 %		04:05:42
1	Ag 328.068†	-1460.4	-1695.3	10.819 ug/L	10.819 ppb	04:05:42
1	As 188.979†	4.3	32.6	38.874 ug/L	38.874 ppb	04:06:02
1	B 249.677†	331.5	815.1	9.0202 ug/L	9.0202 ppb	04:05:42
1	Ba 233.527†	92876.2	93316.0	759.74 ug/L	759.74 ppb	04:05:42
1	Be 313.107†	923168.5	932065.8	345.15 ug/L	345.15 ppb	04:05:42
1	Cd 226.502†	479.9	677.7	2.0768 ug/L	2.0768 ppb	04:06:02
1	Co 228.616†	1711.2	1798.5	34.360 ug/L	34.360 ppb	04:06:02
1	Cr 267.716†	7459.8	7346.9	85.779 ug/L	85.779 ppb	04:05:42
1	Cu 324.752†	1298651.1	1296969.1	3972.8 ug/L	3972.8 ppb	04:05:42
1	Mn 257.610†	1107218.0	1112115.2	1288.6 ug/L	1288.6 ppb	04:05:42
1	Mo 202.031†	13.7	3.3	5.1923 ug/L	5.1923 ppb	04:06:02
1	Ni 231.604†	3168.8	3070.9	78.636 ug/L	78.636 ppb	04:06:02
1	P 214.914†	4348.4	4127.9	1457.8 ug/L	1457.8 ppb	04:06:02
1	Pb 220.353†	63811.7	64200.3	7949.8 ug/L	7949.8 ppb	04:05:42
1	S 181.975 Axial†	225.5	183.7	235.79 ug/L	235.79 ppb	04:06:02
1	Sb 206.836†	272.3	238.0	75.879 ug/L	75.879 ppb	04:06:02
1	Se 196.026†	-286.7	-264.8	45.665 ug/L	45.665 ppb	04:06:02
1	Si 251.611†	502373.1	504241.3	15713 ug/L	15713 ppb	04:05:42
1	Sn 189.927†	167.2	155.4	30.757 ug/L	30.757 ppb	04:06:02
1	Ti 334.940†	752132.0	757338.5	1230.9 ug/L	1230.9 ppb	04:05:42
1	Tl 190.801†	-106.7	-68.1	-5.4614 ug/L	-5.4614 ppb	04:06:02
1	U 409.014†	85175.9	89111.6	2524.2 ug/L	2524.2 ppb	04:05:42
1	V 292.402†	8597.7	10317.5	69.338 ug/L	69.338 ppb	04:05:42
1	Zn 213.857†	50253.2	49813.6	471.04 ug/L	471.04 ppb	04:05:42
1	SiO2†	509503.3	511399.5	34097 ug/L	34097 ppb	04:07:00
2	Sc Radial	4165.6	4165.6	98.0 %		04:05:10
2	Y RADIAL	4854.5	4854.5	110.3 %		04:04:50
2	Al 396.153Radial†	22061.2	22671.9	22681 ug/L	22681 ppb	04:04:50
2	Ca 317.933Radial†	6360.4	6472.3	12073 ug/L	12073 ppb	04:04:50
2	Fe 238.204 Radial†	5703.2	5810.0	61747 ug/L	61747 ppb	04:04:50
2	K 766.490 Radial†	18048.4	15246.3	3073.0 ug/L	3073.0 ppb	04:04:50
2	Mg 279.077 IEC†	144.4	144.6	5520.1 ug/L	5520.1 ppb	04:05:10
2	Na 589.592 Radial†	1683.3	1510.6	503.89 ug/L	503.89 ppb	04:04:50
2	Sr 421.552†	7200.7	7258.4	55.954 ug/L	55.954 ppb	04:04:50
2	Sc 361.383	841999.7	841999.7	99.058 %		04:06:08
2	Y 371.029	751401.5	751401.5	106.93 %		04:06:08
2	Ag 328.068†	-1322.7	-1562.9	11.409 ug/L	11.409 ppb	04:06:08
2	As 188.979†	-10.2	18.0	32.669 ug/L	32.669 ppb	04:06:28
2	B 249.677†	235.7	719.8	6.7982 ug/L	6.7982 ppb	04:06:08
2	Ba 233.527†	92579.7	93441.5	760.76 ug/L	760.76 ppb	04:06:08
2	Be 313.107†	919099.8	932181.4	345.19 ug/L	345.19 ppb	04:06:08
2	Cd 226.502†	475.4	675.4	2.0635 ug/L	2.0635 ppb	04:06:28
2	Co 228.616†	1740.3	1835.7	35.144 ug/L	35.144 ppb	04:06:28
2	Cr 267.716†	7373.4	7293.9	85.159 ug/L	85.159 ppb	04:06:08
2	Cu 324.752†	1288809.2	1292974.2	3960.6 ug/L	3960.6 ppb	04:06:08
2	Mn 257.610†	1100099.7	1109994.0	1286.1 ug/L	1286.1 ppb	04:06:08
2	Mo 202.031†	24.8	14.5	6.0166 ug/L	6.0166 ppb	04:06:28
2	Ni 231.604†	3183.8	3100.5	79.395 ug/L	79.395 ppb	04:06:28

2	P 214.914†	4315.6	4114.7	1453.0 ug/L	1453.0 ppb	04:06:28
2	Pb 220.353†	63498.3	64175.9	7946.8 ug/L	7946.8 ppb	04:06:08
2	S 181.975 Axial†	209.6	168.7	216.18 ug/L	216.18 ppb	04:06:28
2	Sb 206.836†	267.1	234.0	74.584 ug/L	74.584 ppb	04:06:28
2	Se 196.026†	-296.6	-276.1	38.649 ug/L	38.649 ppb	04:06:28
2	Si 251.611†	498870.0	503002.9	15675 ug/L	15675 ppb	04:06:08
2	Sn 189.927†	171.4	160.4	31.630 ug/L	31.630 ppb	04:06:28
2	Ti 334.940†	747672.3	756277.1	1229.2 ug/L	1229.2 ppb	04:06:08
2	Tl 190.801†	-93.1	-54.9	-1.3050 ug/L	-1.3050 ppb	04:06:28
2	U 409.014†	84802.8	89124.6	2524.5 ug/L	2524.5 ppb	04:06:08
2	V 292.402†	8476.3	10234.2	68.767 ug/L	68.767 ppb	04:06:08
2	Zn 213.857†	49982.6	49770.3	470.65 ug/L	470.65 ppb	04:06:08
2	SiO2†	505051.3	509235.8	33952 ug/L	33952 ppb	04:07:06
3	Sc Radial	4181.4	4181.4	98.4 %		04:05:35
3	Y RADIAL	4856.8	4856.8	110.3 %		04:05:15
3	Al 396.153Radial†	22255.6	22784.3	22793 ug/L	22793 ppb	04:05:15
3	Ca 317.933Radial†	6406.2	6494.2	12114 ug/L	12114 ppb	04:05:15
3	Fe 238.204 Radial†	5740.4	5825.7	61915 ug/L	61915 ppb	04:05:15
3	K 766.490 Radial†	18058.0	15186.4	3060.8 ug/L	3060.8 ppb	04:05:15
3	Mg 279.077 IEC†	144.1	143.8	5489.0 ug/L	5489.0 ppb	04:05:35
3	Na 589.592 Radial†	1798.8	1621.6	540.91 ug/L	540.91 ppb	04:05:15
3	Sr 421.552†	7282.6	7313.8	56.381 ug/L	56.381 ppb	04:05:15
3	Sc 361.383	852130.1	852130.1	100.25 %		04:06:34
3	Y 371.029	759958.8	759958.8	108.14 %		04:06:34
3	Ag 328.068†	-1457.5	-1681.5	10.904 ug/L	10.904 ppb	04:06:34
3	As 188.979†	9.2	37.5	40.938 ug/L	40.938 ppb	04:06:54
3	B 249.677†	336.2	817.3	9.0664 ug/L	9.0664 ppb	04:06:34
3	Ba 233.527†	93431.9	93180.4	758.64 ug/L	758.64 ppb	04:06:34
3	Be 313.107†	932078.8	934097.6	345.89 ug/L	345.89 ppb	04:06:34
3	Cd 226.502†	475.4	669.7	1.9775 ug/L	1.9775 ppb	04:06:54
3	Co 228.616†	1726.8	1801.4	34.425 ug/L	34.425 ppb	04:06:54
3	Cr 267.716†	7515.1	7346.7	85.781 ug/L	85.781 ppb	04:06:34
3	Cu 324.752†	1309330.0	1297976.5	3975.9 ug/L	3975.9 ppb	04:06:34
3	Mn 257.610†	1112684.2	1109344.5	1285.4 ug/L	1285.4 ppb	04:06:34
3	Mo 202.031†	19.1	8.6	5.5913 ug/L	5.5913 ppb	04:06:54
3	Ni 231.604†	3186.7	3065.2	78.490 ug/L	78.490 ppb	04:06:54
3	P 214.914†	4330.4	4077.6	1429.3 ug/L	1429.3 ppb	04:06:54
3	Pb 220.353†	64098.2	64012.2	7926.5 ug/L	7926.5 ppb	04:06:34
3	S 181.975 Axial†	223.7	180.3	231.31 ug/L	231.31 ppb	04:06:54
3	Sb 206.836†	266.1	229.8	73.126 ug/L	73.126 ppb	04:06:54
3	Se 196.026†	-293.1	-269.0	43.298 ug/L	43.298 ppb	04:06:54
3	Si 251.611†	504837.2	502968.1	15674 ug/L	15674 ppb	04:06:34
3	Sn 189.927†	166.8	153.8	30.461 ug/L	30.461 ppb	04:06:54
3	Ti 334.940†	756488.5	756098.2	1228.9 ug/L	1228.9 ppb	04:06:34
3	Tl 190.801†	-94.2	-54.9	-1.3061 ug/L	-1.3061 ppb	04:06:54
3	U 409.014†	85505.3	88807.6	2515.5 ug/L	2515.5 ppb	04:06:34
3	V 292.402†	8640.0	10295.8	69.164 ug/L	69.164 ppb	04:06:34
3	Zn 213.857†	50508.2	49694.8	469.87 ug/L	469.87 ppb	04:06:34
3	SiO2†	501173.4	499306.2	33290 ug/L	33290 ppb	04:07:11

## Mean Data: 245806006|948071|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	846654.1	99.605 %		0.6017				0.60%
Sc Radial	4173.8	98.2 %		0.19				0.19%
Y 371.029	754881.7	107.42 %		0.640				0.60%
Y RADIAL	4859.4	110.4 %		0.15				0.14%
Ag 328.068†	-1646.6	11.044 ug/L		0.3185	11.044 ppb		0.3185	2.88%
Al 396.153Radial†	22747.7	22757 ug/L		65.7	22757 ppb		65.7	0.29%
As 188.979†	29.4	37.494 ug/L		4.3039	37.494 ppb		4.3039	11.48%
B 249.677†	784.1	8.2949 ug/L		1.29642	8.2949 ppb		1.29642	15.63%
Ba 233.527†	93312.6	759.71 ug/L		1.057	759.71 ppb		1.057	0.14%
Be 313.107†	932781.6	345.41 ug/L		0.418	345.41 ppb		0.418	0.12%
Ca 317.933Radial†	6496.2	12118 ug/L		46.6	12118 ppb		46.6	0.38%
Cd 226.502†	674.3	2.0393 ug/L		0.05391	2.0393 ppb		0.05391	2.64%
Co 228.616†	1811.9	34.643 ug/L		0.4354	34.643 ppb		0.4354	1.26%
Cr 267.716†	7329.2	85.573 ug/L		0.3588	85.573 ppb		0.3588	0.42%
Cu 324.752†	1295973.3	3969.8 ug/L		8.11	3969.8 ppb		8.11	0.20%
Fe 238.204 Radial†	5819.4	61847 ug/L		88.4	61847 ppb		88.4	0.14%
K 766.490 Radial†	15216.1	3066.8 ug/L		6.07	3066.8 ppb		6.07	0.20%

Mg 279.077 IEC†	145.2	5544.2 ug/L	70.32	5544.2 ppb	70.32	1.27%
Mn 257.610†	1110484.6	1286.7 ug/L	1.67	1286.7 ppb	1.67	0.13%
Mo 202.031†	8.8	5.6001 ug/L	0.41222	5.6001 ppb	0.41222	7.36%
Na 589.592 Radial†	1592.1	531.07 ug/L	23.835	531.07 ppb	23.835	4.49%
Ni 231.604†	3078.9	78.840 ug/L	0.4857	78.840 ppb	0.4857	0.62%
P 214.914†	4106.7	1446.7 ug/L	15.27	1446.7 ppb	15.27	1.06%
Pb 220.353†	64129.4	7941.0 ug/L	12.68	7941.0 ppb	12.68	0.16%
S 181.975 Axial†	177.5	227.76 ug/L	10.274	227.76 ppb	10.274	4.51%
Sb 206.836†	233.9	74.529 ug/L	1.3773	74.529 ppb	1.3773	1.85%
Se 196.026†	-270.0	42.537 ug/L	3.5694	42.537 ppb	3.5694	8.39%
Si 251.611†	503404.1	15687 ug/L	22.6	15687 ppb	22.6	0.14%
Sn 189.927†	156.5	30.949 ug/L	0.6076	30.949 ppb	0.6076	1.96%
Sr 421.552†	7320.6	56.434 ug/L	0.5088	56.434 ppb	0.5088	0.90%
Ti 334.940†	756571.3	1229.7 ug/L	1.09	1229.7 ppb	1.09	0.09%
Tl 190.801†	-59.3	-2.6909 ug/L	2.39941	-2.6909 ppb	2.39941	89.17%
U 409.014†	89014.6	2521.4 ug/L	5.10	2521.4 ppb	5.10	0.20%
V 292.402†	10282.5	69.089 ug/L	0.2928	69.089 ppb	0.2928	0.42%
Zn 213.857†	49759.5	470.52 ug/L	0.595	470.52 ppb	0.595	0.13%
SiO2†	506647.2	33780 ug/L	430.0	33780 ppb	430.0	1.27%

Sequence No.: 100

Sample ID: 245806007|948071|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 115

Date Collected: 2/17/2010 04:09:23

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 245806007|948071|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4128.7	4128.7	97.1 %		04:11:37
1	Y RADIAL	4753.9	4753.9	108.0 %		04:11:17
1	Al 396.153Radial†	47416.7	48979.0	48998 ug/L	48998 ppb	04:11:17
1	Ca 317.933Radial†	12861.0	13223.3	24666 ug/L	24666 ppb	04:11:17
1	Fe 238.204 Radial†	7038.1	7236.4	76906 ug/L	76906 ppb	04:11:17
1	K 766.490 Radial†	50614.6	48940.8	9870.1 ug/L	9870.1 ppb	04:11:17
1	Mg 279.077 IEC†	272.4	277.8	10649 ug/L	10649 ppb	04:11:37
1	Na 589.592 Radial†	888.0	707.2	235.89 ug/L	235.89 ppb	04:11:17
1	Sr 421.552†	23886.1	24503.2	189.01 ug/L	189.01 ppb	04:11:17
1	Sc 361.383	851701.2	851701.2	100.20 %		04:12:34
1	Y 371.029	745231.5	745231.5	106.05 %		04:12:34
1	Ag 328.068†	-3753.7	-3973.9	6.9079 ug/L	6.9079 ppb	04:12:40
1	As 188.979†	-5.6	22.7	45.350 ug/L	45.350 ppb	04:13:00
1	B 249.677†	716.2	1196.7	15.545 ug/L	15.545 ppb	04:12:40
1	Ba 233.527†	93087.5	92883.7	756.85 ug/L	756.85 ppb	04:12:40
1	Be 313.107†	41301.4	45558.4	21.393 ug/L	21.393 ppb	04:12:40
1	Cd 226.502†	919.4	1113.1	5.1652 ug/L	5.1652 ppb	04:13:00
1	Co 228.616†	1952.7	2027.7	37.208 ug/L	37.208 ppb	04:13:00
1	Cr 267.716†	6010.3	5848.7	69.634 ug/L	69.634 ppb	04:13:00
1	Cu 324.752†	328866.4	320118.8	984.03 ug/L	984.03 ppb	04:12:40
1	Mn 257.610†	2178611.9	2173713.0	2514.3 ug/L	2514.3 ppb	04:12:34
1	Mo 202.031†	12.4	1.9	6.4084 ug/L	6.4084 ppb	04:13:00
1	Ni 231.604†	2482.5	2364.1	60.528 ug/L	60.528 ppb	04:13:00
1	P 214.914†	3126.0	2877.9	1352.2 ug/L	1352.2 ppb	04:13:00
1	Pb 220.353†	6174.7	6236.0	775.51 ug/L	775.51 ppb	04:13:00
1	S 181.975 Axial†	1265.8	1220.4	1585.8 ug/L	1585.8 ppb	04:13:00
1	Sb 206.836†	84.7	48.9	7.7368 ug/L	7.7368 ppb	04:13:00
1	Se 196.026†	-361.0	-336.9	52.851 ug/L	52.851 ppb	04:13:00
1	Si 251.611†	905739.1	903326.9	28150 ug/L	28150 ppb	04:12:34
1	Sn 189.927†	-96.1	-108.5	-14.412 ug/L	-14.412 ppb	04:13:00
1	Ti 334.940†	1263796.1	1262777.7	2054.7 ug/L	2054.7 ppb	04:12:34
1	Tl 190.801†	-137.0	-97.6	-2.2661 ug/L	-2.2661 ppb	04:13:00
1	U 409.014†	6205.1	9708.0	266.86 ug/L	266.86 ppb	04:12:40
1	V 292.402†	18418.7	20059.4	132.62 ug/L	132.62 ppb	04:12:40
1	Zn 213.857†	47835.2	47052.4	446.00 ug/L	446.00 ppb	04:12:40
1	SiO2†	899722.0	897314.6	59827 ug/L	59827 ppb	04:14:08
2	Sc Radial	4155.9	4155.9	97.8 %		04:12:02
2	Y RADIAL	4768.0	4768.0	108.3 %		04:11:42
2	Al 396.153Radial†	47081.1	48316.7	48336 ug/L	48336 ppb	04:11:42
2	Ca 317.933Radial†	12823.7	13098.7	24434 ug/L	24434 ppb	04:11:42
2	Fe 238.204 Radial†	6988.2	7138.0	75861 ug/L	75861 ppb	04:11:42
2	K 766.490 Radial†	50401.1	48382.1	9757.4 ug/L	9757.4 ppb	04:11:42
2	Mg 279.077 IEC†	278.8	282.4	10828 ug/L	10828 ppb	04:12:02
2	Na 589.592 Radial†	850.5	662.9	221.12 ug/L	221.12 ppb	04:11:42
2	Sr 421.552†	23581.0	24030.4	185.36 ug/L	185.36 ppb	04:11:42
2	Sc 361.383	847505.0	847505.0	99.705 %		04:13:05
2	Y 371.029	743443.2	743443.2	105.79 %		04:13:05
2	Ag 328.068†	-3722.6	-3961.3	6.6208 ug/L	6.6208 ppb	04:13:11
2	As 188.979†	-17.8	10.5	39.881 ug/L	39.881 ppb	04:13:31
2	B 249.677†	759.6	1243.8	16.821 ug/L	16.821 ppb	04:13:11
2	Ba 233.527†	92872.3	93127.9	758.80 ug/L	758.80 ppb	04:13:11
2	Be 313.107†	41331.6	45792.9	21.462 ug/L	21.462 ppb	04:13:11
2	Cd 226.502†	931.0	1129.3	5.4635 ug/L	5.4635 ppb	04:13:31
2	Co 228.616†	1955.2	2039.8	37.492 ug/L	37.492 ppb	04:13:31
2	Cr 267.716†	6064.8	5933.0	70.596 ug/L	70.596 ppb	04:13:31
2	Cu 324.752†	329721.1	322601.1	991.57 ug/L	991.57 ppb	04:13:11
2	Mn 257.610†	2158184.8	2163991.0	2503.0 ug/L	2503.0 ppb	04:13:05
2	Mo 202.031†	9.7	-0.8	6.1236 ug/L	6.1236 ppb	04:13:31
2	Ni 231.604†	2482.3	2376.1	60.835 ug/L	60.835 ppb	04:13:31



2	P 214.914†	3127.3	2894.6	1360.7 ug/L	1360.7 ppb	04:13:31
2	Pb 220.353†	6202.0	6293.9	782.64 ug/L	782.64 ppb	04:13:31
2	S 181.975 Axial†	1260.2	1221.0	1586.7 ug/L	1586.7 ppb	04:13:31
2	Sb 206.836†	98.1	62.7	12.429 ug/L	12.429 ppb	04:13:31
2	Se 196.026†	-357.6	-335.3	50.396 ug/L	50.396 ppb	04:13:31
2	Si 251.611†	896383.0	898418.9	27997 ug/L	27997 ppb	04:13:05
2	Sn 189.927†	-113.5	-126.4	-17.677 ug/L	-17.677 ppb	04:13:31
2	Ti 334.940†	1252849.5	1258043.8	2047.0 ug/L	2047.0 ppb	04:13:05
2	Tl 190.801†	-143.9	-105.3	-4.7911 ug/L	-4.7911 ppb	04:13:31
2	U 409.014†	6327.4	9861.2	271.33 ug/L	271.33 ppb	04:13:11
2	V 292.402†	18517.1	20249.1	134.17 ug/L	134.17 ppb	04:13:11
2	Zn 213.857†	47845.3	47298.8	448.55 ug/L	448.55 ppb	04:13:11
2	SiO2†	905969.3	908026.3	60541 ug/L	60541 ppb	04:14:14
3	Sc Radial	4120.3	4120.3	96.9 %		04:12:27
3	Y RADIAL	4741.4	4741.4	107.7 %		04:12:07
3	Al 396.153Radial†	47930.8	49609.2	49629 ug/L	49629 ppb	04:12:07
3	Ca 317.933Radial†	13043.9	13439.1	25069 ug/L	25069 ppb	04:12:07
3	Fe 238.204 Radial†	7126.2	7342.1	78030 ug/L	78030 ppb	04:12:07
3	K 766.490 Radial†	51271.6	49725.3	10028 ug/L	10028 ppb	04:12:07
3	Mg 279.077 IEC†	271.2	277.1	10620 ug/L	10620 ppb	04:12:27
3	Na 589.592 Radial†	934.9	757.5	252.67 ug/L	252.67 ppb	04:12:07
3	Sr 421.552†	24048.1	24720.6	190.69 ug/L	190.69 ppb	04:12:07
3	Sc 361.383	858241.4	858241.4	100.97 %		04:13:37
3	Y 371.029	752271.8	752271.8	107.05 %		04:13:37
3	Ag 328.068†	-3719.9	-3911.9	7.5751 ug/L	7.5751 ppb	04:13:42
3	As 188.979†	-16.9	11.5	40.842 ug/L	40.842 ppb	04:14:02
3	B 249.677†	732.7	1207.6	15.618 ug/L	15.618 ppb	04:13:42
3	Ba 233.527†	92728.1	91819.8	748.24 ug/L	748.24 ppb	04:13:42
3	Be 313.107†	41288.2	45231.2	21.253 ug/L	21.253 ppb	04:13:42
3	Cd 226.502†	943.3	1129.8	5.2447 ug/L	5.2447 ppb	04:14:02
3	Co 228.616†	1971.7	2031.7	37.289 ug/L	37.289 ppb	04:14:02
3	Cr 267.716†	6010.0	5802.7	69.120 ug/L	69.120 ppb	04:14:02
3	Cu 324.752†	328730.6	317483.2	976.02 ug/L	976.02 ppb	04:13:42
3	Mn 257.610†	2185019.9	2163490.6	2502.6 ug/L	2502.6 ppb	04:13:37
3	Mo 202.031†	9.4	-1.2	6.2670 ug/L	6.2670 ppb	04:14:02
3	Ni 231.604†	2487.1	2349.7	60.161 ug/L	60.161 ppb	04:14:02
3	P 214.914†	3130.7	2858.7	1342.4 ug/L	1342.4 ppb	04:14:02
3	Pb 220.353†	6248.5	6262.1	778.79 ug/L	778.79 ppb	04:14:02
3	S 181.975 Axial†	1278.4	1223.3	1589.5 ug/L	1589.5 ppb	04:14:02
3	Sb 206.836†	101.6	65.0	13.155 ug/L	13.155 ppb	04:14:02
3	Se 196.026†	-364.6	-337.8	55.999 ug/L	55.999 ppb	04:14:02
3	Si 251.611†	908832.6	899502.4	28031 ug/L	28031 ppb	04:13:37
3	Sn 189.927†	-107.6	-119.2	-16.253 ug/L	-16.253 ppb	04:14:02
3	Ti 334.940†	1268045.7	1257374.9	2046.0 ug/L	2046.0 ppb	04:13:37
3	Tl 190.801†	-134.6	-94.2	-1.3122 ug/L	-1.3122 ppb	04:14:02
3	U 409.014†	6354.0	9808.2	269.58 ug/L	269.58 ppb	04:13:42
3	V 292.402†	18488.3	19988.2	131.96 ug/L	131.96 ppb	04:13:42
3	Zn 213.857†	47739.9	46594.2	441.38 ug/L	441.38 ppb	04:13:42
3	SiO2†	899231.4	889986.1	59338 ug/L	59338 ppb	04:14:20

Mean Data: 245806007|948071|1

Analyte	Mean Corrected	Conc. Units	Calib.	Std.Dev.	Conc. Units	Std.Dev.	RSD
Sc 361.383	852482.5	100.29 %		0.637			0.63%
Sc Radial	4135.0	97.3 %		0.44			0.45%
Y 371.029	746982.2	106.30 %		0.664			0.62%
Y RADIAL	4754.4	108.0 %		0.30			0.28%
Ag 328.068†	-3949.1	7.0346 ug/L		0.48960	7.0346 ppb	0.48960	6.96%
Al 396.153Radial†	48968.3	48987 ug/L		646.6	48987 ppb	646.6	1.32%
As 188.979†	14.9	42.024 ug/L		2.9198	42.024 ppb	2.9198	6.95%
B 249.677†	1216.0	15.995 ug/L		0.7169	15.995 ppb	0.7169	4.48%
Ba 233.527†	92610.4	754.63 ug/L		5.618	754.63 ppb	5.618	0.74%
Be 313.107†	45527.5	21.370 ug/L		0.1064	21.370 ppb	0.1064	0.50%
Ca 317.933Radial†	13253.7	24723 ug/L		321.3	24723 ppb	321.3	1.30%
Cd 226.502†	1124.0	5.2912 ug/L		0.15447	5.2912 ppb	0.15447	2.92%
Co 228.616†	2033.1	37.329 ug/L		0.1462	37.329 ppb	0.1462	0.39%
Cr 267.716†	5861.5	69.783 ug/L		0.7492	69.783 ppb	0.7492	1.07%
Cu 324.752†	320067.7	983.87 ug/L		7.778	983.87 ppb	7.778	0.79%
Fe 238.204 Radial†	7238.8	76932 ug/L		1084.7	76932 ppb	1084.7	1.41%
K 766.490 Radial†	49016.1	9885.3 ug/L		136.10	9885.3 ppb	136.10	1.38%

Mg 279.077 IEC†	279.1	10699 ug/L	113.0	10699 ppb	113.0	1.06%
Mn 257.610†	2167064.9	2506.6 ug/L	6.64	2506.6 ppb	6.64	0.26%
Mo 202.031†	0.0	6.2663 ug/L	0.14241	6.2663 ppb	0.14241	2.27%
Na 589.592 Radial†	709.2	236.56 ug/L	15.786	236.56 ppb	15.786	6.67%
Ni 231.604†	2363.3	60.508 ug/L	0.3377	60.508 ppb	0.3377	0.56%
P 214.914†	2877.0	1351.8 ug/L	9.12	1351.8 ppb	9.12	0.67%
Pb 220.353†	6264.0	778.98 ug/L	3.569	778.98 ppb	3.569	0.46%
S 181.975 Axial†	1221.5	1587.3 ug/L	1.89	1587.3 ppb	1.89	0.12%
Sb 206.836†	58.8	11.107 ug/L	2.9413	11.107 ppb	2.9413	26.48%
Se 196.026†	-336.7	53.082 ug/L	2.8088	53.082 ppb	2.8088	5.29%
Si 251.611†	900416.1	28059 ug/L	80.3	28059 ppb	80.3	0.29%
Sn 189.927†	-118.0	-16.114 ug/L	1.6367	-16.114 ppb	1.6367	10.16%
Sr 421.552†	24418.1	188.35 ug/L	2.722	188.35 ppb	2.722	1.45%
Ti 334.940†	1259398.8	2049.2 ug/L	4.78	2049.2 ppb	4.78	0.23%
Tl 190.801†	-99.0	-2.7898 ug/L	1.79763	-2.7898 ppb	1.79763	64.44%
U 409.014†	9792.5	269.25 ug/L	2.253	269.25 ppb	2.253	0.84%
V 292.402†	20098.9	132.91 ug/L	1.134	132.91 ppb	1.134	0.85%
Zn 213.857†	46981.8	445.31 ug/L	3.638	445.31 ppb	3.638	0.82%
SiO2†	898442.3	59902 ug/L	604.9	59902 ppb	604.9	1.01%

Sequence No.: 101

Sample ID: 245806008|948071|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 116

Date Collected: 2/17/2010 04:16:32

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 245806008|948071|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4276.6	4276.6	101 %		04:18:26
1	Y RADIAL	5283.3	5283.3	120.0 %		04:18:26
1	Al 396.153Radial†	18094.5	18144.6	18152 ug/L	18152 ppb	04:18:26
1	Ca 317.933Radial†	4013.8	3971.3	7407.9 ug/L	7407.9 ppb	04:18:26
1	Fe 238.204 Radial†	8104.5	8045.7	85510 ug/L	85510 ppb	04:18:26
1	K 766.490 Radial†	22005.5	18701.4	3771.3 ug/L	3771.3 ppb	04:18:26
1	Mg 279.077 IEC†	94.1	90.8	3417.4 ug/L	3417.4 ppb	04:18:46
1	Na 589.592 Radial†	4376.5	4143.0	1382.0 ug/L	1382.0 ppb	04:18:26
1	Sr 421.552†	8033.6	7895.4	60.908 ug/L	60.908 ppb	04:18:26
1	Sc 361.383	846233.3	846233.3	99.556 %		04:19:43
1	Y 371.029	821736.0	821736.0	116.94 %		04:19:43
1	Ag 328.068†	-4719.2	-4967.9	5.3884 ug/L	5.3884 ppb	04:19:48
1	As 188.979†	-42.9	-14.7	29.627 ug/L	29.627 ppb	04:20:08
1	B 249.677†	640.2	1124.9	12.172 ug/L	12.172 ppb	04:19:48
1	Ba 233.527†	35640.7	35780.9	293.28 ug/L	293.28 ppb	04:19:48
1	Be 313.107†	-11719.5	-7432.6	1.4128 ug/L	1.4128 ppb	04:19:48
1	Cd 226.502†	461.5	659.0	-1.1130 ug/L	-1.1130 ppb	04:20:08
1	Co 228.616†	6736.2	6845.1	137.77 ug/L	137.77 ppb	04:20:08
1	Cr 267.716†	13461.3	13371.7	157.42 ug/L	157.42 ppb	04:19:48
1	Cu 324.752†	22985.4	14993.8	50.571 ug/L	50.571 ppb	04:19:48
1	Mn 257.610†	1813521.5	1821042.8	2108.7 ug/L	2108.7 ppb	04:19:43
1	Mo 202.031†	59.7	49.5	10.403 ug/L	10.403 ppb	04:20:08
1	Ni 231.604†	3832.4	3736.0	95.608 ug/L	95.608 ppb	04:20:08
1	P 214.914†	1064.1	826.9	385.34 ug/L	385.34 ppb	04:20:08
1	Pb 220.353†	451.0	526.6	61.060 ug/L	61.060 ppb	04:20:08
1	S 181.975 Axial†	248.3	206.5	266.43 ug/L	266.43 ppb	04:20:08
1	Sb 206.836†	51.8	16.4	-1.5992 ug/L	-1.5992 ppb	04:20:08
1	Se 196.026†	-401.6	-380.1	54.381 ug/L	54.381 ppb	04:20:08
1	Si 251.611†	536703.8	538486.0	16781 ug/L	16781 ppb	04:19:43
1	Sn 189.927†	8.4	-4.2	1.8159 ug/L	1.8159 ppb	04:20:08
1	Ti 334.940†	1116275.6	1122748.8	1825.6 ug/L	1825.6 ppb	04:19:43
1	Tl 190.801†	-118.5	-79.9	-0.7874 ug/L	-0.7874 ppb	04:20:08
1	U 409.014†	-12251.9	-8791.4	-259.83 ug/L	-259.83 ppb	04:19:43
1	V 292.402†	7622.4	9333.7	52.800 ug/L	52.800 ppb	04:19:48
1	Zn 213.857†	34287.6	33752.9	315.95 ug/L	315.95 ppb	04:19:48
1	SiO2†	546792.7	548612.6	36578 ug/L	36578 ppb	04:21:16
2	Sc Radial	4299.9	4299.9	101 %		04:18:51
2	Y RADIAL	5314.6	5314.6	120.7 %		04:18:51
2	Al 396.153Radial†	18244.3	18195.4	18202 ug/L	18202 ppb	04:18:51
2	Ca 317.933Radial†	4042.5	3978.1	7420.6 ug/L	7420.6 ppb	04:18:51
2	Fe 238.204 Radial†	8161.2	8058.1	85643 ug/L	85643 ppb	04:18:51
2	K 766.490 Radial†	22101.8	18678.3	3766.7 ug/L	3766.7 ppb	04:18:51
2	Mg 279.077 IEC†	93.2	89.4	3364.0 ug/L	3364.0 ppb	04:19:11
2	Na 589.592 Radial†	4374.7	4117.8	1373.5 ug/L	1373.5 ppb	04:18:51
2	Sr 421.552†	8049.2	7867.7	60.693 ug/L	60.693 ppb	04:18:51
2	Sc 361.383	862242.4	862242.4	101.44 %		04:20:14
2	Y 371.029	836318.6	836318.6	119.01 %		04:20:14
2	Ag 328.068†	-4796.8	-4956.4	5.4798 ug/L	5.4798 ppb	04:20:19
2	As 188.979†	-54.5	-25.5	25.163 ug/L	25.163 ppb	04:20:40
2	B 249.677†	563.1	1037.0	10.091 ug/L	10.091 ppb	04:20:19
2	Ba 233.527†	35787.8	35261.2	289.06 ug/L	289.06 ppb	04:20:19
2	Be 313.107†	-11526.0	-7023.3	1.5667 ug/L	1.5667 ppb	04:20:19
2	Cd 226.502†	466.8	655.7	-1.1660 ug/L	-1.1660 ppb	04:20:40
2	Co 228.616†	6730.8	6714.1	135.03 ug/L	135.03 ppb	04:20:40
2	Cr 267.716†	13474.7	13133.8	154.66 ug/L	154.66 ppb	04:20:19
2	Cu 324.752†	23552.4	15124.2	50.975 ug/L	50.975 ppb	04:20:19
2	Mn 257.610†	1845747.0	1818989.7	2106.3 ug/L	2106.3 ppb	04:20:14
2	Mo 202.031†	48.4	37.2	9.5011 ug/L	9.5011 ppb	04:20:40
2	Ni 231.604†	3855.2	3687.0	94.355 ug/L	94.355 ppb	04:20:40

2	P 214.914†	1068.3	811.1	376.41 ug/L	376.41 ppb	04:20:40
2	Pb 220.353†	443.1	510.4	59.052 ug/L	59.052 ppb	04:20:40
2	S 181.975 Axial†	245.2	198.8	256.38 ug/L	256.38 ppb	04:20:40
2	Sb 206.836†	44.5	8.2	-4.4153 ug/L	-4.4153 ppb	04:20:40
2	Se 196.026†	-397.0	-368.1	61.818 ug/L	61.818 ppb	04:20:40
2	Si 251.611†	547621.2	539239.2	16804 ug/L	16804 ppb	04:20:14
2	Sn 189.927†	-2.1	-14.7	-0.0667 ug/L	-0.0667 ppb	04:20:40
2	Ti 334.940†	1138379.9	1123721.4	1827.2 ug/L	1827.2 ppb	04:20:14
2	Tl 190.801†	-126.7	-85.8	-2.6251 ug/L	-2.6251 ppb	04:20:40
2	U 409.014†	-12347.7	-8657.3	-256.03 ug/L	-256.03 ppb	04:20:14
2	V 292.402†	7590.2	9159.8	51.514 ug/L	51.514 ppb	04:20:19
2	Zn 213.857†	34481.1	33304.1	311.56 ug/L	311.56 ppb	04:20:19
2	SiO2†	544390.0	536046.6	35740 ug/L	35740 ppb	04:21:22
3	Sc Radial	4246.8	4246.8	99.9 %		04:19:16
3	Y RADIAL	5264.1	5264.1	119.6 %		04:19:16
3	Al 396.153Radial†	18013.4	18190.0	18197 ug/L	18197 ppb	04:19:16
3	Ca 317.933Radial†	4003.4	3989.0	7440.9 ug/L	7440.9 ppb	04:19:16
3	Fe 238.204 Radial†	8067.8	8065.6	85722 ug/L	85722 ppb	04:19:16
3	K 766.490 Radial†	21914.5	18764.3	3784.0 ug/L	3784.0 ppb	04:19:16
3	Mg 279.077 IEC†	95.4	92.8	3492.6 ug/L	3492.6 ppb	04:19:36
3	Na 589.592 Radial†	4407.1	4204.3	1402.4 ug/L	1402.4 ppb	04:19:16
3	Sr 421.552†	7975.5	7893.4	60.892 ug/L	60.892 ppb	04:19:16
3	Sc 361.383	861457.7	861457.7	101.35 %		04:20:45
3	Y 371.029	834579.3	834579.3	118.76 %		04:20:45
3	Ag 328.068†	-4842.0	-5005.3	5.2726 ug/L	5.2726 ppb	04:20:51
3	As 188.979†	-51.0	-22.0	26.672 ug/L	26.672 ppb	04:21:11
3	B 249.677†	646.4	1119.7	12.022 ug/L	12.022 ppb	04:20:51
3	Ba 233.527†	35872.3	35376.7	290.00 ug/L	290.00 ppb	04:20:51
3	Be 313.107†	-11430.2	-6939.2	1.6040 ug/L	1.6040 ppb	04:20:51
3	Cd 226.502†	474.6	663.8	-1.0790 ug/L	-1.0790 ppb	04:21:11
3	Co 228.616†	6725.3	6714.8	135.04 ug/L	135.04 ppb	04:21:11
3	Cr 267.716†	13382.3	13054.7	153.74 ug/L	153.74 ppb	04:20:51
3	Cu 324.752†	23546.4	15139.4	51.027 ug/L	51.027 ppb	04:20:51
3	Mn 257.610†	1850426.5	1825264.2	2113.6 ug/L	2113.6 ppb	04:20:45
3	Mo 202.031†	53.3	42.1	9.8697 ug/L	9.8697 ppb	04:21:11
3	Ni 231.604†	3863.1	3698.2	94.643 ug/L	94.643 ppb	04:21:11
3	P 214.914†	1054.5	798.5	369.31 ug/L	369.31 ppb	04:21:11
3	Pb 220.353†	410.4	478.5	55.097 ug/L	55.097 ppb	04:21:11
3	S 181.975 Axial†	249.2	203.0	261.90 ug/L	261.90 ppb	04:21:11
3	Sb 206.836†	49.3	12.9	-2.8493 ug/L	-2.8493 ppb	04:21:11
3	Se 196.026†	-394.6	-366.0	63.274 ug/L	63.274 ppb	04:21:11
3	Si 251.611†	548864.7	540957.8	16858 ug/L	16858 ppb	04:20:45
3	Sn 189.927†	-10.9	-23.4	-1.6247 ug/L	-1.6247 ppb	04:21:11
3	Ti 334.940†	1139097.5	1125451.6	1830.0 ug/L	1830.0 ppb	04:20:45
3	Tl 190.801†	-134.1	-93.2	-4.9108 ug/L	-4.9108 ppb	04:21:11
3	U 409.014†	-12407.8	-8727.7	-258.04 ug/L	-258.04 ppb	04:20:45
3	V 292.402†	7561.9	9138.7	51.351 ug/L	51.351 ppb	04:20:51
3	Zn 213.857†	34455.6	33310.0	311.61 ug/L	311.61 ppb	04:20:51
3	SiO2†	552721.4	544756.0	36321 ug/L	36321 ppb	04:21:27

Mean Data: 245806008|948071|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	856644.5	100.78 %	1.062			1.05%
Sc Radial	4274.4	101 %	0.6			0.62%
Y 371.029	830878.0	118.24 %	1.133			0.96%
Y RADIAL	5287.4	120.1 %	0.58			0.48%
Ag 328.068†	-4976.6	5.3803 ug/L	0.10382	5.3803 ppb	0.10382	1.93%
Al 396.153Radial†	18176.7	18184 ug/L	27.9	18184 ppb	27.9	0.15%
As 188.979†	-20.7	27.154 ug/L	2.2710	27.154 ppb	2.2710	8.36%
B 249.677†	1093.9	11.428 ug/L	1.1609	11.428 ppb	1.1609	10.16%
Ba 233.527†	35472.9	290.78 ug/L	2.214	290.78 ppb	2.214	0.76%
Be 313.107†	-7131.7	1.5279 ug/L	0.10137	1.5279 ppb	0.10137	6.63%
Ca 317.933Radial†	3979.4	7423.1 ug/L	16.64	7423.1 ppb	16.64	0.22%
Cd 226.502†	659.5	-1.1193 ug/L	0.04386	-1.1193 ppb	0.04386	3.92%
Co 228.616†	6758.0	135.94 ug/L	1.579	135.94 ppb	1.579	1.16%
Cr 267.716†	13186.8	155.27 ug/L	1.919	155.27 ppb	1.919	1.24%
Cu 324.752†	15085.8	50.858 ug/L	0.2496	50.858 ppb	0.2496	0.49%
Fe 238.204 Radial†	8056.5	85625 ug/L	106.9	85625 ppb	106.9	0.12%
K 766.490 Radial†	18714.6	3774.0 ug/L	8.97	3774.0 ppb	8.97	0.24%

Mg 279.077 IEC†	91.0	3424.7 ug/L	64.63	3424.7 ppb	64.63	1.89%
Mn 257.610†	1821765.5	2109.5 ug/L	3.69	2109.5 ppb	3.69	0.18%
Mo 202.031†	42.9	9.9245 ug/L	0.45340	9.9245 ppb	0.45340	4.57%
Na 589.592 Radial†	4155.1	1386.0 ug/L	14.84	1386.0 ppb	14.84	1.07%
Ni 231.604†	3707.1	94.869 ug/L	0.6560	94.869 ppb	0.6560	0.69%
P 214.914†	812.2	377.02 ug/L	8.029	377.02 ppb	8.029	2.13%
Pb 220.353†	505.2	58.403 ug/L	3.0342	58.403 ppb	3.0342	5.20%
S 181.975 Axial†	202.7	261.57 ug/L	5.032	261.57 ppb	5.032	1.92%
Sb 206.836†	12.5	-2.9546 ug/L	1.41099	-2.9546 ppb	1.41099	47.76%
Se 196.026†	-371.4	59.825 ug/L	4.7697	59.825 ppb	4.7697	7.97%
Si 251.611†	539561.0	16814 ug/L	39.5	16814 ppb	39.5	0.23%
Sn 189.927†	-14.1	0.0415 ug/L	1.72287	0.0415 ppb	1.72287	>999.9%
Sr 421.552†	7885.5	60.831 ug/L	0.1195	60.831 ppb	0.1195	0.20%
Ti 334.940†	1123973.9	1827.6 ug/L	2.22	1827.6 ppb	2.22	0.12%
Tl 190.801†	-86.3	-2.7744 ug/L	2.06579	-2.7744 ppb	2.06579	74.46%
U 409.014†	-8725.5	-257.97 ug/L	1.901	-257.97 ppb	1.901	0.74%
V 292.402†	9210.7	51.888 ug/L	0.7937	51.888 ppb	0.7937	1.53%
Zn 213.857†	33455.6	313.04 ug/L	2.523	313.04 ppb	2.523	0.81%
SiO2†	543138.4	36213 ug/L	429.2	36213 ppb	429.2	1.19%

Sequence No.: 102

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/17/2010 04:23:39

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	4106.7	4106.7	96.6 %		04:25:52
1	Y RADIAL	4274.2	4274.2	97.09 %		04:25:32
1	Al 396.153Radial†	4970.9	5304.5	5282.1 ug/L	5282.1 ppb	04:25:32
1	Ca 317.933Radial†	2775.7	2854.8	5325.4 ug/L	5325.4 ppb	04:25:52
1	Fe 238.204 Radial†	515.0	523.1	5574.2 ug/L	5574.2 ppb	04:25:52
1	K 766.490 Radial†	27695.9	25496.9	5140.3 ug/L	5140.3 ppb	04:25:32
1	Mg 279.077 IEC†	138.3	140.4	5422.5 ug/L	5422.5 ppb	04:25:52
1	Na 589.592 Radial†	30325.6	31183.5	10402 ug/L	10402 ppb	04:25:32
1	Sr 421.552†	65180.1	67379.3	520.22 ug/L	520.22 ppb	04:25:32
1	Sc 361.383	843295.8	843295.8	99.210 %		04:26:49
1	Y 371.029	675064.4	675064.4	96.063 %		04:26:49
1	Ag 328.068†	104366.3	104969.4	507.43 ug/L	507.43 ppb	04:26:54
1	As 188.979†	1182.2	1220.0	517.86 ug/L	517.86 ppb	04:27:14
1	B 249.677†	20984.8	21633.7	506.59 ug/L	506.59 ppb	04:26:54
1	Ba 233.527†	62384.2	62862.0	511.69 ug/L	511.69 ppb	04:26:54
1	Be 313.107†	1395355.0	1410801.7	519.36 ug/L	519.36 ppb	04:26:49
1	Cd 226.502†	42253.8	42785.6	500.19 ug/L	500.19 ppb	04:26:54
1	Co 228.616†	24342.5	24615.1	513.36 ug/L	513.36 ppb	04:26:54
1	Cr 267.716†	42798.4	42989.4	500.76 ug/L	500.76 ppb	04:26:54
1	Cu 324.752†	175717.3	169022.0	517.52 ug/L	517.52 ppb	04:26:54
1	Mn 257.610†	448208.3	451206.5	520.74 ug/L	520.74 ppb	04:26:49
1	Mo 202.031†	6747.7	6790.9	505.10 ug/L	505.10 ppb	04:27:14
1	Ni 231.604†	19637.4	19680.2	503.78 ug/L	503.78 ppb	04:26:54
1	P 214.914†	4795.4	4591.6	2446.5 ug/L	2446.5 ppb	04:27:14
1	Pb 220.353†	3985.6	4090.9	508.43 ug/L	508.43 ppb	04:27:14
1	S 181.975 Axial†	832.5	796.2	1039.7 ug/L	1039.7 ppb	04:27:14
1	Sb 206.836†	1496.0	1472.2	516.33 ug/L	516.33 ppb	04:27:14
1	Se 196.026†	850.0	880.1	533.08 ug/L	533.08 ppb	04:27:14
1	Si 251.611†	83485.7	83538.0	2597.0 ug/L	2597.0 ppb	04:26:54
1	Sn 189.927†	2788.3	2797.9	502.59 ug/L	502.59 ppb	04:27:14
1	Ti 334.940†	312223.1	316201.4	513.80 ug/L	513.80 ppb	04:26:54
1	Tl 190.801†	1575.9	1627.5	517.24 ug/L	517.24 ppb	04:27:14
1	U 409.014†	13771.6	17396.4	492.43 ug/L	492.43 ppb	04:26:54
1	V 292.402†	66868.0	69077.6	506.96 ug/L	506.96 ppb	04:26:54
1	Zn 213.857†	52608.7	52339.7	506.08 ug/L	506.08 ppb	04:26:54
1	SiO2†	83599.4	83645.3	5563.2 ug/L	5563.2 ppb	04:28:22
2	Sc Radial	4119.9	4119.9	96.9 %		04:26:17
2	Y RADIAL	4277.3	4277.3	97.16 %		04:25:57
2	Al 396.153Radial†	4880.4	5194.6	5172.2 ug/L	5172.2 ppb	04:25:57
2	Ca 317.933Radial†	2782.7	2852.9	5321.7 ug/L	5321.7 ppb	04:26:17
2	Fe 238.204 Radial†	515.8	522.2	5564.6 ug/L	5564.6 ppb	04:26:17
2	K 766.490 Radial†	27365.8	25064.2	5053.0 ug/L	5053.0 ppb	04:25:57
2	Mg 279.077 IEC†	142.1	143.9	5559.2 ug/L	5559.2 ppb	04:26:17
2	Na 589.592 Radial†	30048.8	30797.1	10273 ug/L	10273 ppb	04:25:57
2	Sr 421.552†	64714.2	66681.8	514.83 ug/L	514.83 ppb	04:25:57
2	Sc 361.383	843276.6	843276.6	99.208 %		04:27:20
2	Y 371.029	674262.0	674262.0	95.949 %		04:27:20
2	Ag 328.068†	103730.4	104330.8	504.35 ug/L	504.35 ppb	04:27:25
2	As 188.979†	1179.7	1217.5	516.76 ug/L	516.76 ppb	04:27:46
2	B 249.677†	20888.5	21537.2	504.33 ug/L	504.33 ppb	04:27:25
2	Ba 233.527†	61816.1	62290.8	507.04 ug/L	507.04 ppb	04:27:25
2	Be 313.107†	1395500.6	1410980.5	519.42 ug/L	519.42 ppb	04:27:20
2	Cd 226.502†	41788.7	42317.8	494.72 ug/L	494.72 ppb	04:27:25
2	Co 228.616†	24132.4	24403.9	508.96 ug/L	508.96 ppb	04:27:25
2	Cr 267.716†	42474.0	42663.4	496.96 ug/L	496.96 ppb	04:27:25
2	Cu 324.752†	174494.3	167793.2	513.75 ug/L	513.75 ppb	04:27:25
2	Mn 257.610†	449883.6	452905.4	522.69 ug/L	522.69 ppb	04:27:20
2	Mo 202.031†	6729.2	6772.4	503.73 ug/L	503.73 ppb	04:27:46
2	Ni 231.604†	19543.8	19586.3	501.38 ug/L	501.38 ppb	04:27:25

2	P 214.914†	4813.0	4609.4	2457.1 ug/L	2457.1 ppb	04:27:46
2	Pb 220.353†	4009.0	4114.6	511.34 ug/L	511.34 ppb	04:27:46
2	S 181.975 Axial†	831.1	794.8	1037.9 ug/L	1037.9 ppb	04:27:46
2	Sb 206.836†	1512.5	1488.9	521.97 ug/L	521.97 ppb	04:27:46
2	Se 196.026†	863.1	893.3	540.74 ug/L	540.74 ppb	04:27:46
2	Si 251.611†	82810.2	82859.0	2575.9 ug/L	2575.9 ppb	04:27:25
2	Sn 189.927†	2792.9	2802.6	503.43 ug/L	503.43 ppb	04:27:46
2	Ti 334.940†	309514.0	313477.8	509.37 ug/L	509.37 ppb	04:27:25
2	Tl 190.801†	1576.1	1627.8	517.33 ug/L	517.33 ppb	04:27:46
2	U 409.014†	13767.1	17392.2	492.32 ug/L	492.32 ppb	04:27:25
2	V 292.402†	66367.8	68575.0	503.31 ug/L	503.31 ppb	04:27:25
2	Zn 213.857†	52320.3	52050.2	503.28 ug/L	503.28 ppb	04:27:25
2	SiO2†	83265.7	83310.9	5540.9 ug/L	5540.9 ppb	04:28:27
3	Sc Radial	4101.4	4101.4	96.5 %		04:26:42
3	Y RADIAL	4361.5	4361.5	99.07 %		04:26:22
3	Al 396.153Radial†	5016.2	5358.1	5335.5 ug/L	5335.5 ppb	04:26:22
3	Ca 317.933Radial†	2775.9	2858.8	5332.7 ug/L	5332.7 ppb	04:26:42
3	Fe 238.204 Radial†	512.4	521.0	5552.7 ug/L	5552.7 ppb	04:26:42
3	K 766.490 Radial†	28041.2	25891.8	5220.0 ug/L	5220.0 ppb	04:26:22
3	Mg 279.077 IEC†	138.6	140.9	5442.2 ug/L	5442.2 ppb	04:26:42
3	Na 589.592 Radial†	30556.4	31463.3	10495 ug/L	10495 ppb	04:26:22
3	Sr 421.552†	66413.6	68744.9	530.76 ug/L	530.76 ppb	04:26:22
3	Sc 361.383	841227.0	841227.0	98.967 %		04:27:51
3	Y 371.029	671657.9	671657.9	95.579 %		04:27:51
3	Ag 328.068†	105579.4	106453.9	514.57 ug/L	514.57 ppb	04:27:57
3	As 188.979†	1181.6	1222.3	518.89 ug/L	518.89 ppb	04:28:17
3	B 249.677†	21476.6	22182.8	519.49 ug/L	519.49 ppb	04:27:57
3	Ba 233.527†	63006.7	63645.7	518.07 ug/L	518.07 ppb	04:27:57
3	Be 313.107†	1390249.8	1409102.1	518.76 ug/L	518.76 ppb	04:27:51
3	Cd 226.502†	42690.1	43331.3	506.58 ug/L	506.58 ppb	04:27:57
3	Co 228.616†	24670.5	25007.0	521.52 ug/L	521.52 ppb	04:27:57
3	Cr 267.716†	43297.7	43600.0	507.87 ug/L	507.87 ppb	04:27:57
3	Cu 324.752†	178070.1	171834.9	526.12 ug/L	526.12 ppb	04:27:57
3	Mn 257.610†	448555.2	452668.0	522.42 ug/L	522.42 ppb	04:27:51
3	Mo 202.031†	6771.1	6831.3	508.10 ug/L	508.10 ppb	04:28:17
3	Ni 231.604†	19924.0	20018.5	512.44 ug/L	512.44 ppb	04:27:57
3	P 214.914†	4817.7	4626.0	2463.9 ug/L	2463.9 ppb	04:28:17
3	Pb 220.353†	3996.4	4111.7	511.02 ug/L	511.02 ppb	04:28:17
3	S 181.975 Axial†	846.2	812.1	1060.4 ug/L	1060.4 ppb	04:28:17
3	Sb 206.836†	1517.9	1498.1	525.22 ug/L	525.22 ppb	04:28:17
3	Se 196.026†	862.8	895.1	541.76 ug/L	541.76 ppb	04:28:17
3	Si 251.611†	84506.3	84776.2	2635.6 ug/L	2635.6 ppb	04:27:57
3	Sn 189.927†	2807.4	2824.1	507.29 ug/L	507.29 ppb	04:28:17
3	Ti 334.940†	316071.4	320863.9	521.37 ug/L	521.37 ppb	04:27:57
3	Tl 190.801†	1574.5	1630.1	518.06 ug/L	518.06 ppb	04:28:17
3	U 409.014†	14198.4	17861.8	505.64 ug/L	505.64 ppb	04:27:57
3	V 292.402†	67683.0	70066.9	514.18 ug/L	514.18 ppb	04:27:57
3	Zn 213.857†	53341.2	53210.3	514.52 ug/L	514.52 ppb	04:27:57
3	SiO2†	83506.3	83758.5	5570.6 ug/L	5570.6 ppb	04:28:32

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	842599.8	99.128 %		0.1399			0.14%
Sc Radial	4109.3	96.7 %		0.22			0.23%
Y 371.029	673661.4	95.864 %		0.2534			0.26%
Y RADIAL	4304.3	97.78 %		1.125			1.15%
Ag 328.068†	105251.4	508.79 ug/L		5.243	508.79 ppb	5.243	1.03%
QC value within limits for Ag 328.068 Recovery = 101.76%							
Al 396.153Radial†	5285.7	5263.3 ug/L		83.26	5263.3 ppb	83.26	1.58%
QC value within limits for Al 396.153Radial Recovery = 105.27%							
As 188.979†	1219.9	517.84 ug/L		1.064	517.84 ppb	1.064	0.21%
QC value within limits for As 188.979 Recovery = 103.57%							
B 249.677†	21784.6	510.14 ug/L		8.176	510.14 ppb	8.176	1.60%
QC value within limits for B 249.677 Recovery = 102.03%							
Ba 233.527†	62932.8	512.27 ug/L		5.535	512.27 ppb	5.535	1.08%
QC value within limits for Ba 233.527 Recovery = 102.45%							
Be 313.107†	1410294.8	519.18 ug/L		0.368	519.18 ppb	0.368	0.07%
QC value within limits for Be 313.107 Recovery = 103.84%							
Ca 317.933Radial†	2855.5	5326.6 ug/L		5.59	5326.6 ppb	5.59	0.10%

QC value within limits for Ca 317.933 Radial Recovery = 106.53%							
Cd 226.502†	42811.6	500.50 ug/L	5.937	500.50 ppb	5.937	1.19%	
QC value within limits for Cd 226.502 Recovery = 100.10%							
Co 228.616†	24675.3	514.61 ug/L	6.374	514.61 ppb	6.374	1.24%	
QC value within limits for Co 228.616 Recovery = 102.92%							
Cr 267.716†	43084.3	501.86 ug/L	5.536	501.86 ppb	5.536	1.10%	
QC value within limits for Cr 267.716 Recovery = 100.37%							
Cu 324.752†	169550.0	519.13 ug/L	6.339	519.13 ppb	6.339	1.22%	
QC value within limits for Cu 324.752 Recovery = 103.83%							
Fe 238.204 Radial†	522.1	5563.9 ug/L	10.79	5563.9 ppb	10.79	0.19%	
QC value greater than the upper limit for Fe 238.204 Radial Recovery = 111.28%							
K 766.490 Radial†	25484.3	5137.8 ug/L	83.52	5137.8 ppb	83.52	1.63%	
QC value within limits for K 766.490 Radial Recovery = 102.76%							
Mg 279.077 IEC†	141.8	5474.6 ug/L	73.88	5474.6 ppb	73.88	1.35%	
QC value within limits for Mg 279.077 IEC Recovery = 109.49%							
Mn 257.610†	452260.0	521.95 ug/L	1.058	521.95 ppb	1.058	0.20%	
QC value within limits for Mn 257.610 Recovery = 104.39%							
Mo 202.031†	6798.2	505.64 ug/L	2.238	505.64 ppb	2.238	0.44%	
QC value within limits for Mo 202.031 Recovery = 101.13%							
Na 589.592 Radial†	31147.9	10390 ug/L	111.6	10390 ppb	111.6	1.07%	
QC value within limits for Na 589.592 Radial Recovery = 103.90%							
Ni 231.604†	19761.7	505.87 ug/L	5.819	505.87 ppb	5.819	1.15%	
QC value within limits for Ni 231.604 Recovery = 101.17%							
P 214.914†	4609.0	2455.8 ug/L	8.79	2455.8 ppb	8.79	0.36%	
QC value within limits for P 214.914 Recovery = 98.23%							
Pb 220.353†	4105.7	510.26 ug/L	1.596	510.26 ppb	1.596	0.31%	
QC value within limits for Pb 220.353 Recovery = 102.05%							
S 181.975 Axial†	801.1	1046.0 ug/L	12.52	1046.0 ppb	12.52	1.20%	
QC value within limits for S 181.975 Axial Recovery = 104.60%							
Sb 206.836†	1486.4	521.17 ug/L	4.500	521.17 ppb	4.500	0.86%	
QC value within limits for Sb 206.836 Recovery = 104.23%							
Se 196.026†	889.5	538.52 ug/L	4.745	538.52 ppb	4.745	0.88%	
QC value within limits for Se 196.026 Recovery = 107.70%							
Si 251.611†	83724.4	2602.8 ug/L	30.27	2602.8 ppb	30.27	1.16%	
QC value within limits for Si 251.611 Recovery = 104.11%							
Sn 189.927†	2808.2	504.43 ug/L	2.508	504.43 ppb	2.508	0.50%	
QC value within limits for Sn 189.927 Recovery = 100.89%							
Sr 421.552†	67602.0	521.94 ug/L	8.103	521.94 ppb	8.103	1.55%	
QC value within limits for Sr 421.552 Recovery = 104.39%							
Ti 334.940†	316847.7	514.85 ug/L	6.071	514.85 ppb	6.071	1.18%	
QC value within limits for Ti 334.940 Recovery = 102.97%							
Tl 190.801†	1628.5	517.54 ug/L	0.449	517.54 ppb	0.449	0.09%	
QC value within limits for Tl 190.801 Recovery = 103.51%							
U 409.014†	17550.2	496.79 ug/L	7.657	496.79 ppb	7.657	1.54%	
QC value within limits for U 409.014 Recovery = 99.36%							
V 292.402†	69239.8	508.15 ug/L	5.535	508.15 ppb	5.535	1.09%	
QC value within limits for V 292.402 Recovery = 101.63%							
Zn 213.857†	52533.4	507.96 ug/L	5.849	507.96 ppb	5.849	1.15%	
QC value within limits for Zn 213.857 Recovery = 101.59%							
SiO2†	83571.6	5558.2 ug/L	15.46	5558.2 ppb	15.46	0.28%	
QC value within limits for SiO2 Recovery = 103.94%							
QC Failed. Continue with analysis.							



Sequence No.: 103

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/17/2010 04:30:43

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	4229.8	4229.8	99.5 %		04:32:36
1	Y RADIAL	4288.3	4288.3	97.41 %		04:32:36
1	Al 396.153Radial†	-145.8	12.5	12.411 ug/L	12.411 ppb	04:32:36
1	Ca 317.933Radial†	38.2	20.1	37.505 ug/L	37.505 ppb	04:32:56
1	Fe 238.204 Radial†	11.7	1.7	17.774 ug/L	17.774 ppb	04:32:56
1	K 766.490 Radial†	3014.7	-141.9	-28.622 ug/L	-28.622 ppb	04:32:36
1	Mg 279.077 IEC†	2.3	-0.4	-14.278 ug/L	-14.278 ppb	04:32:56
1	Na 589.592 Radial†	-7.4	-214.5	-71.552 ug/L	-71.552 ppb	04:32:36
1	Sr 421.552†	71.7	-17.7	-0.1371 ug/L	-0.1371 ppb	04:32:36
1	Sc 361.383	826809.2	826809.2	97.271 %		04:33:52
1	Y 371.029	668742.5	668742.5	95.164 %		04:33:52
1	Ag 328.068†	304.2	85.0	0.4116 ug/L	0.4116 ppb	04:33:52
1	As 188.979†	-27.1	0.4	0.1799 ug/L	0.1799 ppb	04:34:12
1	B 249.677†	-416.0	54.2	1.2727 ug/L	1.2727 ppb	04:34:12
1	Ba 233.527†	56.1	38.8	0.3148 ug/L	0.3148 ppb	04:34:12
1	Be 313.107†	-4091.3	133.0	0.0499 ug/L	0.0499 ppb	04:33:52
1	Cd 226.502†	-195.5	-5.5	-0.0657 ug/L	-0.0657 ppb	04:34:12
1	Co 228.616†	-66.6	10.4	0.2192 ug/L	0.2192 ppb	04:34:12
1	Cr 267.716†	123.1	-23.1	-0.2697 ug/L	-0.2697 ppb	04:34:12
1	Cu 324.752†	8791.0	943.5	2.8892 ug/L	2.8892 ppb	04:33:52
1	Mn 257.610†	1229.8	694.6	0.8035 ug/L	0.8035 ppb	04:34:12
1	Mo 202.031†	29.1	19.4	1.4438 ug/L	1.4438 ppb	04:34:12
1	Ni 231.604†	109.7	-0.8	-0.0194 ug/L	-0.0194 ppb	04:34:12
1	P 214.914†	239.2	3.9	1.6010 ug/L	1.6010 ppb	04:34:12
1	Pb 220.353†	17.2	91.2	11.305 ug/L	11.305 ppb	04:34:12
1	S 181.975 Axial†	58.4	17.1	22.373 ug/L	22.373 ppb	04:34:12
1	Sb 206.836†	42.4	7.9	2.7006 ug/L	2.7006 ppb	04:34:12
1	Se 196.026†	-21.9	0.8	0.5393 ug/L	0.5393 ppb	04:34:12
1	Si 251.611†	736.6	145.0	4.4996 ug/L	4.4996 ppb	04:34:12
1	Sn 189.927†	15.3	3.1	0.5574 ug/L	0.5574 ppb	04:34:12
1	Ti 334.940†	-1168.9	291.2	0.4791 ug/L	0.4791 ppb	04:33:52
1	Tl 190.801†	-38.9	-0.9	-0.2672 ug/L	-0.2672 ppb	04:34:12
1	U 409.014†	-3385.2	35.0	0.9933 ug/L	0.9933 ppb	04:33:52
1	V 292.402†	-1676.4	-46.2	-0.3153 ug/L	-0.3153 ppb	04:33:52
1	Zn 213.857†	799.7	134.4	1.3049 ug/L	1.3049 ppb	04:34:12
1	SiO2†	717.6	118.3	7.8451 ug/L	7.8451 ppb	04:35:08
2	Sc Radial	4209.0	4209.0	99.0 %		04:33:01
2	Y RADIAL	4300.6	4300.6	97.69 %		04:33:01
2	Al 396.153Radial†	-140.6	17.0	16.962 ug/L	16.962 ppb	04:33:01
2	Ca 317.933Radial†	40.4	22.5	41.937 ug/L	41.937 ppb	04:33:21
2	Fe 238.204 Radial†	12.1	2.2	23.464 ug/L	23.464 ppb	04:33:21
2	K 766.490 Radial†	2976.5	-165.4	-33.379 ug/L	-33.379 ppb	04:33:01
2	Mg 279.077 IEC†	0.4	-2.3	-87.396 ug/L	-87.396 ppb	04:33:21
2	Na 589.592 Radial†	6.4	-200.6	-66.909 ug/L	-66.909 ppb	04:33:01
2	Sr 421.552†	60.3	-29.0	-0.2239 ug/L	-0.2239 ppb	04:33:01
2	Sc 361.383	832788.5	832788.5	97.974 %		04:34:18
2	Y 371.029	673507.2	673507.2	95.842 %		04:34:18
2	Ag 328.068†	234.6	11.7	0.0573 ug/L	0.0573 ppb	04:34:18
2	As 188.979†	-31.0	-3.3	-1.3802 ug/L	-1.3802 ppb	04:34:38
2	B 249.677†	-433.1	39.9	0.9341 ug/L	0.9341 ppb	04:34:38
2	Ba 233.527†	35.6	17.5	0.1421 ug/L	0.1421 ppb	04:34:38
2	Be 313.107†	-4266.8	-15.9	-0.0053 ug/L	-0.0053 ppb	04:34:18
2	Cd 226.502†	-208.7	-17.6	-0.2067 ug/L	-0.2067 ppb	04:34:38
2	Co 228.616†	-72.9	4.5	0.0967 ug/L	0.0967 ppb	04:34:38
2	Cr 267.716†	109.3	-38.1	-0.4456 ug/L	-0.4456 ppb	04:34:38
2	Cu 324.752†	8616.7	700.8	2.1435 ug/L	2.1435 ppb	04:34:18
2	Mn 257.610†	908.4	357.5	0.4182 ug/L	0.4182 ppb	04:34:38
2	Mo 202.031†	28.8	18.9	1.4068 ug/L	1.4068 ppb	04:34:38
2	Ni 231.604†	98.8	-12.7	-0.3259 ug/L	-0.3259 ppb	04:34:38

2	P 214.914†	238.5	1.5	0.3992 ug/L	0.3992 ppb	04:34:38
2	Pb 220.353†	6.5	80.2	9.9359 ug/L	9.9359 ppb	04:34:38
2	S 181.975 Axial†	62.3	20.7	27.022 ug/L	27.022 ppb	04:34:38
2	Sb 206.836†	40.3	5.4	1.8807 ug/L	1.8807 ppb	04:34:38
2	Se 196.026†	-22.6	0.3	0.2473 ug/L	0.2473 ppb	04:34:38
2	Si 251.611†	692.4	94.4	2.9251 ug/L	2.9251 ppb	04:34:38
2	Sn 189.927†	16.6	4.4	0.7874 ug/L	0.7874 ppb	04:34:38
2	Ti 334.940†	-1324.3	141.2	0.2398 ug/L	0.2398 ppb	04:34:18
2	Tl 190.801†	-35.2	3.2	1.0150 ug/L	1.0150 ppb	04:34:38
2	U 409.014†	-3229.0	219.4	6.2317 ug/L	6.2317 ppb	04:34:18
2	V 292.402†	-1687.2	-44.8	-0.2976 ug/L	-0.2976 ppb	04:34:18
2	Zn 213.857†	798.2	127.0	1.2347 ug/L	1.2347 ppb	04:34:38
2	SiO2†	731.1	126.7	8.4110 ug/L	8.4110 ppb	04:35:13
3	Sc Radial	4194.0	4194.0	98.7 %		04:33:26
3	Y RADIAL	4316.0	4316.0	98.04 %		04:33:26
3	Al 396.153Radial†	-131.0	26.3	26.281 ug/L	26.281 ppb	04:33:26
3	Ca 317.933Radial†	33.5	15.6	29.136 ug/L	29.136 ppb	04:33:46
3	Fe 238.204 Radial†	11.3	1.4	14.777 ug/L	14.777 ppb	04:33:46
3	K 766.490 Radial†	3191.6	63.4	12.814 ug/L	12.814 ppb	04:33:26
3	Mg 279.077 IEC†	1.7	-1.0	-39.316 ug/L	-39.316 ppb	04:33:46
3	Na 589.592 Radial†	-54.9	-262.7	-87.629 ug/L	-87.629 ppb	04:33:26
3	Sr 421.552†	194.2	107.0	0.8258 ug/L	0.8258 ppb	04:33:26
3	Sc 361.383	827640.9	827640.9	97.369 %		04:34:43
3	Y 371.029	669589.3	669589.3	95.284 %		04:34:43
3	Ag 328.068†	255.8	35.0	0.1683 ug/L	0.1683 ppb	04:34:43
3	As 188.979†	-34.9	-7.5	-3.1629 ug/L	-3.1629 ppb	04:35:03
3	B 249.677†	-421.8	48.7	1.1440 ug/L	1.1440 ppb	04:35:03
3	Ba 233.527†	33.8	15.9	0.1285 ug/L	0.1285 ppb	04:35:03
3	Be 313.107†	-4243.3	-18.8	-0.0064 ug/L	-0.0064 ppb	04:34:43
3	Cd 226.502†	-204.0	-14.1	-0.1649 ug/L	-0.1649 ppb	04:35:03
3	Co 228.616†	-70.4	6.5	0.1364 ug/L	0.1364 ppb	04:35:03
3	Cr 267.716†	105.8	-41.0	-0.4792 ug/L	-0.4792 ppb	04:35:03
3	Cu 324.752†	8543.4	680.2	2.0813 ug/L	2.0813 ppb	04:34:43
3	Mn 257.610†	843.0	296.0	0.3445 ug/L	0.3445 ppb	04:35:03
3	Mo 202.031†	14.2	4.1	0.3080 ug/L	0.3080 ppb	04:35:03
3	Ni 231.604†	124.1	14.0	0.3573 ug/L	0.3573 ppb	04:35:03
3	P 214.914†	230.5	-5.3	-3.3320 ug/L	-3.3320 ppb	04:35:03
3	Pb 220.353†	5.0	78.7	9.7480 ug/L	9.7480 ppb	04:35:03
3	S 181.975 Axial†	53.5	12.0	15.707 ug/L	15.707 ppb	04:35:03
3	Sb 206.836†	46.7	12.3	4.1575 ug/L	4.1575 ppb	04:35:03
3	Se 196.026†	-23.3	-0.6	-0.2950 ug/L	-0.2950 ppb	04:35:03
3	Si 251.611†	683.3	89.5	2.7852 ug/L	2.7852 ppb	04:35:03
3	Sn 189.927†	14.3	2.1	0.3767 ug/L	0.3767 ppb	04:35:03
3	Ti 334.940†	-1307.5	150.1	0.2495 ug/L	0.2495 ppb	04:34:43
3	Tl 190.801†	-23.7	14.8	4.6753 ug/L	4.6753 ppb	04:35:03
3	U 409.014†	-3292.6	133.6	3.7935 ug/L	3.7935 ppb	04:34:43
3	V 292.402†	-1679.2	-47.2	-0.3335 ug/L	-0.3335 ppb	04:34:43
3	Zn 213.857†	783.0	116.4	1.1286 ug/L	1.1286 ppb	04:35:03
3	SiO2†	664.9	63.3	4.2154 ug/L	4.2154 ppb	04:35:18

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	829079.5	97.538 %		0.3810			0.39%
Sc Radial	4210.9	99.1 %		0.42			0.43%
Y 371.029	670613.0	95.430 %		0.3617			0.38%
Y RADIAL	4301.6	97.72 %		0.314			0.32%
Ag 328.068†	43.9	0.2124 ug/L		0.18121	0.2124 ppb	0.18121	85.31%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	18.6	18.552 ug/L		7.0702	18.552 ppb	7.0702	38.11%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	-3.5	-1.4544 ug/L		1.67264	-1.4544 ppb	1.67264	115.00%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	47.6	1.1169 ug/L		0.17091	1.1169 ppb	0.17091	15.30%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	24.1	0.1951 ug/L		0.10382	0.1951 ppb	0.10382	53.21%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	32.8	0.0128 ug/L		0.03220	0.0128 ppb	0.03220	252.50%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	19.4	36.192 ug/L		6.5008	36.192 ppb	6.5008	17.96%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated					
Cd 226.502†	-12.4	-0.1458 ug/L	0.07241	-0.1458 ppb	0.07241 49.68%
QC value within limits for Cd 226.502 Recovery = Not calculated					
Co 228.616†	7.1	0.1508 ug/L	0.06253	0.1508 ppb	0.06253 41.47%
QC value within limits for Co 228.616 Recovery = Not calculated					
Cr 267.716†	-34.1	-0.3982 ug/L	0.11250	-0.3982 ppb	0.11250 28.25%
QC value within limits for Cr 267.716 Recovery = Not calculated					
Cu 324.752†	774.9	2.3713 ug/L	0.44958	2.3713 ppb	0.44958 18.96%
QC value within limits for Cu 324.752 Recovery = Not calculated					
Fe 238.204 Radial†	1.8	18.671 ug/L	4.4122	18.671 ppb	4.4122 23.63%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated					
K 766.490 Radial†	-81.3	-16.396 ug/L	25.4077	-16.396 ppb	25.4077 154.96%
QC value within limits for K 766.490 Radial Recovery = Not calculated					
Mg 279.077 IEC†	-1.2	-46.997 ug/L	37.1588	-46.997 ppb	37.1588 79.07%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated					
Mn 257.610†	449.4	0.5221 ug/L	0.24650	0.5221 ppb	0.24650 47.22%
QC value within limits for Mn 257.610 Recovery = Not calculated					
Mo 202.031†	14.1	1.0529 ug/L	0.64533	1.0529 ppb	0.64533 61.29%
QC value within limits for Mo 202.031 Recovery = Not calculated					
Na 589.592 Radial†	-225.9	-75.363 ug/L	10.8731	-75.363 ppb	10.8731 14.43%
QC value within limits for Na 589.592 Radial Recovery = Not calculated					
Ni 231.604†	0.2	0.0040 ug/L	0.34223	0.0040 ppb	0.34223 >999.9%
QC value within limits for Ni 231.604 Recovery = Not calculated					
P 214.914†	0.1	-0.4439 ug/L	2.57233	-0.4439 ppb	2.57233 579.43%
QC value within limits for P 214.914 Recovery = Not calculated					
Pb 220.353†	83.4	10.330 ug/L	0.8500	10.330 ppb	0.8500 8.23%
QC value greater than the upper limit for Pb 220.353 Recovery = Not calculated					
S 181.975 Axial†	16.6	21.701 ug/L	5.6872	21.701 ppb	5.6872 26.21%
QC value within limits for S 181.975 Axial Recovery = Not calculated					
Sb 206.836†	8.5	2.9129 ug/L	1.15318	2.9129 ppb	1.15318 39.59%
QC value within limits for Sb 206.836 Recovery = Not calculated					
Se 196.026†	0.2	0.1639 ug/L	0.42337	0.1639 ppb	0.42337 258.36%
QC value within limits for Se 196.026 Recovery = Not calculated					
Si 251.611†	109.6	3.4033 ug/L	0.95200	3.4033 ppb	0.95200 27.97%
QC value within limits for Si 251.611 Recovery = Not calculated					
Sn 189.927†	3.2	0.5738 ug/L	0.20584	0.5738 ppb	0.20584 35.87%
QC value within limits for Sn 189.927 Recovery = Not calculated					
Sr 421.552†	20.1	0.1549 ug/L	0.58262	0.1549 ppb	0.58262 376.06%
QC value within limits for Sr 421.552 Recovery = Not calculated					
Ti 334.940†	194.2	0.3228 ug/L	0.13547	0.3228 ppb	0.13547 41.97%
QC value within limits for Ti 334.940 Recovery = Not calculated					
Tl 190.801†	5.7	1.8077 ug/L	2.56485	1.8077 ppb	2.56485 141.89%
QC value within limits for Tl 190.801 Recovery = Not calculated					
U 409.014†	129.3	3.6728 ug/L	2.62132	3.6728 ppb	2.62132 71.37%
QC value within limits for U 409.014 Recovery = Not calculated					
V 292.402†	-46.0	-0.3155 ug/L	0.01799	-0.3155 ppb	0.01799 5.70%
QC value within limits for V 292.402 Recovery = Not calculated					
Zn 213.857†	125.9	1.2227 ug/L	0.08877	1.2227 ppb	0.08877 7.26%
QC value within limits for Zn 213.857 Recovery = Not calculated					
SiO2†	102.8	6.8238 ug/L	2.27662	6.8238 ppb	2.27662 33.36%
QC value within limits for SiO2 Recovery = Not calculated					
QC Failed. Continue with analysis.					

## =====

Reprocessing Begun

Logged In Analyst: Optima3

Technique: ICP Continuous

Results Data Set (original): 022310

Results Library (original): C:\pe\Optima3\Results\Results.mdb

Results Data Set (reprocessed): 022310A

Results Library (reprocessed): C:\pe\Optima3\Results\Results.mdb

## =====

Method Loaded

Method Name: General Eng.2AX

Method Last Saved: 2/23/2010 12:39:25

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: 2/23/2010 10:37:42

Analyst:

Data Type: Reprocessed on 2/23/2010 12:42:16

Logged In Analyst (Original) : Optima3

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

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Replicate Data: S0

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Analysis Time
1	Sc 361.383	895840.5	895840.5	99.531 %	10:40:52
1	Sc Radial	4251.3	4251.3	99.9 %	10:39:35
1	Y 371.029	758955.3	758955.3	99.543 %	10:40:52
1	Y RADIAL	4687.6	4687.6	99.91 %	10:39:35
1	Ag 328.068†	244.2	245.3	[0.00] ug/L	10:40:52

1	Al 396.153Radial†	-107.8	-107.8	[0.00]	ug/L	10:39:55
1	As 188.979†	-19.0	-19.1	[0.00]	ug/L	10:41:12
1	B 249.677†	-364.1	-365.8	[0.00]	ug/L	10:41:12
1	Ba 233.527†	-18.2	-18.3	[0.00]	ug/L	10:41:12
1	Be 313.107†	-3867.8	-3886.0	[0.00]	ug/L	10:40:52
1	Ca 317.933Radial†	15.2	15.2	[0.00]	ug/L	10:39:55
1	Cd 226.502†	-180.3	-181.2	[0.00]	ug/L	10:41:12
1	Co 228.616†	-63.6	-63.9	[0.00]	ug/L	10:41:12
1	Cr 267.716†	60.2	60.5	[0.00]	ug/L	10:41:12
1	Cu 324.752†	6072.0	6100.6	[0.00]	ug/L	10:40:52
1	Fe 238.204 Radial†	11.4	11.4	[0.00]	ug/L	10:39:55
1	K 766.490 Radial†	2616.5	2617.8	[0.00]	ug/L	10:39:35
1	Mg 279.077 IEC†	4.0	4.0	[0.00]	ug/L	10:39:55
1	Mn 257.610†	443.7	445.7	[0.00]	ug/L	10:41:12
1	Mo 202.031†	-1.8	-1.8	[0.00]	ug/L	10:41:12
1	Na 589.592 Radial†	-719.5	-719.9	[0.00]	ug/L	10:39:35
1	Ni 231.604†	46.4	46.6	[0.00]	ug/L	10:41:12
1	P 214.914†	205.5	206.4	[0.00]	ug/L	10:41:12
1	Pb 220.353†	-61.4	-61.7	[0.00]	ug/L	10:41:12
1	S 181.975 Axial†	35.0	35.2	[0.00]	ug/L	10:41:12
1	Sb 206.836†	30.2	30.3	[0.00]	ug/L	10:41:12
1	Se 196.026†	-17.3	-17.3	[0.00]	ug/L	10:41:12
1	Si 251.611†	555.6	558.2	[0.00]	ug/L	10:41:12
1	Sn 189.927†	12.7	12.8	[0.00]	ug/L	10:41:12
1	Sr 421.552†	49.2	49.2	[0.00]	ug/L	10:39:35
1	Ti 334.940†	-1294.3	-1300.4	[0.00]	ug/L	10:40:52
1	Tl 190.801†	-26.3	-26.4	[0.00]	ug/L	10:41:12
1	U 409.014†	-2868.7	-2882.2	[0.00]	ug/L	10:40:52
1	V 292.402†	-1410.0	-1416.6	[0.00]	ug/L	10:40:52
1	Zn 213.857†	543.7	546.3	[0.00]	ug/L	10:41:12
1	SiO2†	519.6	522.1	[0.00]	ug/L	10:42:08
2	Sc 361.383	905217.3	905217.3	100.57	%	10:41:17
2	Sc Radial	4235.4	4235.4	99.6	%	10:40:00
2	Y 371.029	767171.8	767171.8	100.62	%	10:41:17
2	Y RADIAL	4682.2	4682.2	99.79	%	10:40:00
2	Ag 328.068†	177.1	176.0	[0.00]	ug/L	10:41:17
2	Al 396.153Radial†	-112.8	-113.3	[0.00]	ug/L	10:40:20
2	As 188.979†	-24.2	-24.1	[0.00]	ug/L	10:41:37
2	B 249.677†	-376.1	-374.0	[0.00]	ug/L	10:41:37
2	Ba 233.527†	-2.6	-2.6	[0.00]	ug/L	10:41:37
2	Be 313.107†	-3859.5	-3837.5	[0.00]	ug/L	10:41:17
2	Ca 317.933Radial†	17.5	17.6	[0.00]	ug/L	10:40:20
2	Cd 226.502†	-176.6	-175.6	[0.00]	ug/L	10:41:37
2	Co 228.616†	-56.6	-56.3	[0.00]	ug/L	10:41:37
2	Cr 267.716†	79.5	79.0	[0.00]	ug/L	10:41:37
2	Cu 324.752†	6120.1	6085.3	[0.00]	ug/L	10:41:17
2	Fe 238.204 Radial†	9.2	9.3	[0.00]	ug/L	10:40:20
2	K 766.490 Radial†	2538.3	2549.1	[0.00]	ug/L	10:40:00
2	Mg 279.077 IEC†	2.9	2.9	[0.00]	ug/L	10:40:20
2	Mn 257.610†	419.5	417.1	[0.00]	ug/L	10:41:37
2	Mo 202.031†	7.5	7.4	[0.00]	ug/L	10:41:37
2	Na 589.592 Radial†	-793.5	-796.9	[0.00]	ug/L	10:40:00
2	Ni 231.604†	51.0	50.7	[0.00]	ug/L	10:41:37
2	P 214.914†	204.8	203.6	[0.00]	ug/L	10:41:37
2	Pb 220.353†	-52.4	-52.1	[0.00]	ug/L	10:41:37
2	S 181.975 Axial†	35.7	35.5	[0.00]	ug/L	10:41:37
2	Sb 206.836†	39.9	39.7	[0.00]	ug/L	10:41:37
2	Se 196.026†	-21.1	-21.0	[0.00]	ug/L	10:41:37
2	Si 251.611†	524.3	521.3	[0.00]	ug/L	10:41:37
2	Sn 189.927†	7.3	7.3	[0.00]	ug/L	10:41:37
2	Sr 421.552†	54.4	54.7	[0.00]	ug/L	10:40:00
2	Ti 334.940†	-1316.2	-1308.8	[0.00]	ug/L	10:41:17
2	Tl 190.801†	-34.9	-34.7	[0.00]	ug/L	10:41:37
2	U 409.014†	-2745.8	-2730.2	[0.00]	ug/L	10:41:17
2	V 292.402†	-1443.0	-1434.8	[0.00]	ug/L	10:41:17
2	Zn 213.857†	568.1	564.9	[0.00]	ug/L	10:41:37
2	SiO2†	565.6	562.4	[0.00]	ug/L	10:42:13
3	Sc 361.383	899131.7	899131.7	99.897	%	10:41:43
3	Sc Radial	4273.9	4273.9	100	%	10:40:25
3	Y 371.029	761199.7	761199.7	99.837	%	10:41:43
3	Y RADIAL	4706.4	4706.4	100.3	%	10:40:25

3	Ag 328.068†	266.3	266.6	[0.00]	ug/L	10:41:43
3	Al 396.153Radial†	-111.7	-111.2	[0.00]	ug/L	10:40:45
3	As 188.979†	-18.4	-18.4	[0.00]	ug/L	10:42:03
3	B 249.677†	-378.7	-379.1	[0.00]	ug/L	10:42:03
3	Ba 233.527†	-6.6	-6.6	[0.00]	ug/L	10:42:03
3	Be 313.107†	-3832.3	-3836.2	[0.00]	ug/L	10:41:43
3	Ca 317.933Radial†	13.7	13.6	[0.00]	ug/L	10:40:45
3	Cd 226.502†	-193.0	-193.2	[0.00]	ug/L	10:42:03
3	Co 228.616†	-65.4	-65.5	[0.00]	ug/L	10:42:03
3	Cr 267.716†	58.4	58.4	[0.00]	ug/L	10:42:03
3	Cu 324.752†	6039.2	6045.5	[0.00]	ug/L	10:41:43
3	Fe 238.204 Radial†	9.9	9.9	[0.00]	ug/L	10:40:45
3	K 766.490 Radial†	2515.3	2503.3	[0.00]	ug/L	10:40:25
3	Mg 279.077 IEC†	1.3	1.3	[0.00]	ug/L	10:40:45
3	Mn 257.610†	447.2	447.7	[0.00]	ug/L	10:42:03
3	Mo 202.031†	12.5	12.5	[0.00]	ug/L	10:42:03
3	Na 589.592 Radial†	-707.6	-704.2	[0.00]	ug/L	10:40:25
3	Ni 231.604†	59.6	59.6	[0.00]	ug/L	10:42:03
3	P 214.914†	195.8	196.0	[0.00]	ug/L	10:42:03
3	Pb 220.353†	-81.3	-81.3	[0.00]	ug/L	10:42:03
3	S 181.975 Axial†	40.4	40.4	[0.00]	ug/L	10:42:03
3	Sb 206.836†	40.0	40.0	[0.00]	ug/L	10:42:03
3	Se 196.026†	-23.7	-23.7	[0.00]	ug/L	10:42:03
3	Si 251.611†	522.4	523.0	[0.00]	ug/L	10:42:03
3	Sn 189.927†	11.2	11.2	[0.00]	ug/L	10:42:03
3	Sr 421.552†	6.5	6.5	[0.00]	ug/L	10:40:25
3	Ti 334.940†	-1235.0	-1236.3	[0.00]	ug/L	10:41:43
3	Tl 190.801†	-32.5	-32.5	[0.00]	ug/L	10:42:03
3	U 409.014†	-2833.5	-2836.4	[0.00]	ug/L	10:41:43
3	V 292.402†	-1438.4	-1439.9	[0.00]	ug/L	10:41:43
3	Zn 213.857†	561.3	561.9	[0.00]	ug/L	10:42:03
3	SiO2†	569.5	570.0	[0.00]	ug/L	10:42:18

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Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	900063.2	4757.26	0.53%	100.00 %
Sc Radial	4253.5	19.32	0.45%	100 %
Y 371.029	762442.3	4246.85	0.56%	100.00 %
Y RADIAL	4692.1	12.68	0.27%	100.0 %
Ag 328.068†	229.3	47.35	20.65%	[0.00] ug/L
Al 396.153Radial†	-110.8	2.77	2.50%	[0.00] ug/L
As 188.979†	-20.5	3.07	14.95%	[0.00] ug/L
B 249.677†	-373.0	6.71	1.80%	[0.00] ug/L
Ba 233.527†	-9.1	8.14	89.03%	[0.00] ug/L
Be 313.107†	-3853.3	28.38	0.74%	[0.00] ug/L
Ca 317.933Radial†	15.5	2.01	13.01%	[0.00] ug/L
Cd 226.502†	-183.3	8.97	4.89%	[0.00] ug/L
Co 228.616†	-61.9	4.92	7.94%	[0.00] ug/L
Cr 267.716†	66.0	11.33	17.17%	[0.00] ug/L
Cu 324.752†	6077.1	28.47	0.47%	[0.00] ug/L
Fe 238.204 Radial†	10.2	1.10	10.82%	[0.00] ug/L
K 766.490 Radial†	2556.8	57.63	2.25%	[0.00] ug/L
Mg 279.077 IEC†	2.8	1.36	49.52%	[0.00] ug/L
Mn 257.610†	436.8	17.14	3.92%	[0.00] ug/L
Mo 202.031†	6.1	7.25	119.42%	[0.00] ug/L
Na 589.592 Radial†	-740.4	49.61	6.70%	[0.00] ug/L
Ni 231.604†	52.3	6.65	12.71%	[0.00] ug/L
P 214.914†	202.0	5.38	2.66%	[0.00] ug/L
Pb 220.353†	-65.0	14.93	22.95%	[0.00] ug/L
S 181.975 Axial†	37.0	2.96	7.98%	[0.00] ug/L
Sb 206.836†	36.7	5.51	15.02%	[0.00] ug/L
Se 196.026†	-20.7	3.21	15.49%	[0.00] ug/L
Si 251.611†	534.1	20.85	3.90%	[0.00] ug/L
Sn 189.927†	10.4	2.82	27.03%	[0.00] ug/L
Sr 421.552†	36.8	26.39	71.74%	[0.00] ug/L
Ti 334.940†	-1281.8	39.63	3.09%	[0.00] ug/L
Tl 190.801†	-31.2	4.30	13.78%	[0.00] ug/L
U 409.014†	-2816.3	77.97	2.77%	[0.00] ug/L
V 292.402†	-1430.4	12.22	0.85%	[0.00] ug/L

Zn 213.857†	557.7	10.02	1.80%	[0.00] ug/L
SiO2†	551.5	25.76	4.67%	[0.00] ug/L

Sequence No.: 2

Sample ID: S0.1

Analyst:

Logged In Analyst (Original) : Optima3

Initial Sample Wt:

Dilution:

Autosampler Location: 2

Date Collected: 2/23/2010 10:44:29

Data Type: Reprocessed on 2/23/2010 12:42:18

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Units	Analysis Time
1	Sc 361.383	891672.7	891672.7	99.068	%	10:46:54
1	Sc Radial	4519.2	4519.2	106	%	10:46:27
1	Y 371.029	752776.2	752776.2	98.732	%	10:46:54
1	Y RADIAL	4974.4	4974.4	106.0	%	10:46:27
1	Ag 328.068†	22198.2	22177.7	[100]	ug/L	10:46:54
1	As 188.979†	187.9	210.2	[100]	ug/L	10:47:14
1	B 249.677†	3567.9	3974.4	[100]	ug/L	10:46:54
1	Ba 233.527†	13048.6	13180.5	[100]	ug/L	10:46:54
1	Be 313.107†	263035.2	269363.5	[100]	ug/L	10:46:54
1	Cd 226.502†	8592.6	8856.8	[100]	ug/L	10:46:54
1	Co 228.616†	4716.3	4822.6	[100]	ug/L	10:47:14
1	Cr 267.716†	9140.2	9160.2	[100]	ug/L	10:46:54
1	Cu 324.752†	39374.9	33668.2	[100]	ug/L	10:46:54
1	K 766.490 Radial†	7859.9	4841.1	[1000]	ug/L	10:46:22
1	Mn 257.610†	91567.1	91991.9	[100]	ug/L	10:46:54
1	Mo 202.031†	1383.5	1390.4	[100]	ug/L	10:47:14
1	Ni 231.604†	3970.8	3955.9	[100]	ug/L	10:47:14
1	P 214.914†	1027.1	834.8	[500]	ug/L	10:47:14
1	Pb 220.353†	763.8	836.0	[100]	ug/L	10:47:14
1	S 181.975 Axial†	169.6	134.1	[200]	ug/L	10:47:14
1	Sb 206.836†	319.5	285.8	[100]	ug/L	10:47:14
1	Se 196.026†	132.3	154.3	[100]	ug/L	10:47:14
1	Si 251.611†	16049.5	15666.3	[500]	ug/L	10:46:54
1	Sn 189.927†	558.0	552.8	[100]	ug/L	10:47:14
1	Sr 421.552†	15243.0	14310.1	[100]	ug/L	10:46:27
1	Ti 334.940†	64268.9	66155.5	[100]	ug/L	10:46:54
1	Tl 190.801†	290.6	324.5	[100]	ug/L	10:47:14
1	U 409.014†	1007.2	3832.9	[100]	ug/L	10:46:54
1	V 292.402†	12926.8	14478.9	[100]	ug/L	10:46:54
1	Zn 213.857†	10644.5	10187.0	[100]	ug/L	10:46:54
1	SiO2†	15951.0	15549.6	[1069.5]	ug/L	10:48:11
2	Sc 361.383	909921.5	909921.5	101.10	%	10:47:20
2	Sc Radial	3973.4	3973.4	93.4	%	10:46:37
2	Y 371.029	767317.3	767317.3	100.64	%	10:47:20
2	Y RADIAL	4379.6	4379.6	93.34	%	10:46:37
2	Ag 328.068†	22100.6	21631.8	[100]	ug/L	10:47:20
2	As 188.979†	196.7	215.1	[100]	ug/L	10:47:40
2	B 249.677†	3576.2	3910.4	[100]	ug/L	10:47:20
2	Ba 233.527†	12961.6	12830.3	[100]	ug/L	10:47:20
2	Be 313.107†	261260.1	262282.8	[100]	ug/L	10:47:20
2	Cd 226.502†	8561.9	8652.5	[100]	ug/L	10:47:20
2	Co 228.616†	4678.8	4690.0	[100]	ug/L	10:47:40
2	Cr 267.716†	9011.8	8848.2	[100]	ug/L	10:47:20
2	Cu 324.752†	39444.2	32939.7	[100]	ug/L	10:47:20
2	K 766.490 Radial†	8012.3	6020.3	[1000]	ug/L	10:46:32
2	Mn 257.610†	91144.9	89720.6	[100]	ug/L	10:47:20
2	Mo 202.031†	1387.7	1366.6	[100]	ug/L	10:47:40
2	Ni 231.604†	3948.7	3853.6	[100]	ug/L	10:47:40
2	P 214.914†	1037.8	824.5	[500]	ug/L	10:47:40
2	Pb 220.353†	761.8	818.5	[100]	ug/L	10:47:40
2	S 181.975 Axial†	173.5	134.6	[200]	ug/L	10:47:40
2	Sb 206.836†	326.8	286.6	[100]	ug/L	10:47:40
2	Se 196.026†	128.3	147.6	[100]	ug/L	10:47:40
2	Si 251.611†	15983.3	15276.0	[500]	ug/L	10:47:20
2	Sn 189.927†	554.9	538.5	[100]	ug/L	10:47:40
2	Sr 421.552†	15418.6	16468.7	[100]	ug/L	10:46:37
2	Ti 334.940†	64081.0	64668.6	[100]	ug/L	10:47:20
2	Tl 190.801†	285.0	313.1	[100]	ug/L	10:47:40



2	U 409.014†	1081.5	3886.0	[100]	ug/L	10:47:20
2	V 292.402†	12885.3	14176.2	[100]	ug/L	10:47:20
2	Zn 213.857†	10684.2	10010.8	[100]	ug/L	10:47:20
2	SiO2†	15928.0	15203.9	[1069.5]	ug/L	10:48:16
3	Sc 361.383	909771.2	909771.2	101.08	%	10:47:45
3	Sc Radial	4100.6	4100.6	96.4	%	10:46:47
3	Y 371.029	768136.4	768136.4	100.75	%	10:47:45
3	Y RADIAL	4554.8	4554.8	97.07	%	10:46:47
3	Ag 328.068†	22141.3	21675.7	[100]	ug/L	10:47:45
3	As 188.979†	205.3	223.6	[100]	ug/L	10:48:05
3	B 249.677†	3546.8	3881.9	[100]	ug/L	10:47:45
3	Ba 233.527†	12994.0	12864.5	[100]	ug/L	10:47:45
3	Be 313.107†	262056.2	263113.1	[100]	ug/L	10:47:45
3	Cd 226.502†	8511.9	8604.4	[100]	ug/L	10:47:45
3	Co 228.616†	4678.7	4690.7	[100]	ug/L	10:48:05
3	Cr 267.716†	9035.2	8872.8	[100]	ug/L	10:47:45
3	Cu 324.752†	39480.7	32982.3	[100]	ug/L	10:47:45
3	K 766.490 Radial†	8016.9	5759.1	[1000]	ug/L	10:46:42
3	Mn 257.610†	91093.0	89684.1	[100]	ug/L	10:47:45
3	Mo 202.031†	1380.7	1359.9	[100]	ug/L	10:48:05
3	Ni 231.604†	3953.9	3859.4	[100]	ug/L	10:48:05
3	P 214.914†	1023.6	810.6	[500]	ug/L	10:48:05
3	Pb 220.353†	750.5	807.5	[100]	ug/L	10:48:05
3	S 181.975 Axial†	173.5	134.6	[200]	ug/L	10:48:05
3	Sb 206.836†	321.6	281.5	[100]	ug/L	10:48:05
3	Se 196.026†	122.4	141.8	[100]	ug/L	10:48:05
3	Si 251.611†	15979.0	15274.4	[500]	ug/L	10:47:45
3	Sn 189.927†	547.8	531.6	[100]	ug/L	10:48:05
3	Sr 421.552†	15184.6	15714.0	[100]	ug/L	10:46:47
3	Ti 334.940†	64132.9	64730.4	[100]	ug/L	10:47:45
3	Tl 190.801†	281.0	309.2	[100]	ug/L	10:48:05
3	U 409.014†	1114.6	3919.0	[100]	ug/L	10:47:45
3	V 292.402†	12798.5	14092.4	[100]	ug/L	10:47:45
3	Zn 213.857†	10691.9	10020.1	[100]	ug/L	10:47:45
3	SiO2†	15847.1	15126.5	[1069.5]	ug/L	10:48:21

## Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc.	Units
Sc 361.383	903788.5	10492.79	1.16%	100.41	%
Sc Radial	4197.8	285.56	6.80%	98.7	%
Y 371.029	762743.3	8641.48	1.13%	100.04	%
Y RADIAL	4636.3	305.66	6.59%	98.81	%
Ag 328.068†	21828.4	303.31	1.39%	[100]	ug/L
As 188.979†	216.3	6.80	3.14%	[100]	ug/L
B 249.677†	3922.2	47.38	1.21%	[100]	ug/L
Ba 233.527†	12958.4	193.07	1.49%	[100]	ug/L
Be 313.107†	264919.8	3870.68	1.46%	[100]	ug/L
Cd 226.502†	8704.5	134.01	1.54%	[100]	ug/L
Co 228.616†	4734.4	76.35	1.61%	[100]	ug/L
Cr 267.716†	8960.4	173.46	1.94%	[100]	ug/L
Cu 324.752†	33196.7	408.88	1.23%	[100]	ug/L
K 766.490 Radial†	5540.2	619.35	11.18%	[1000]	ug/L
Mn 257.610†	90465.5	1322.00	1.46%	[100]	ug/L
Mo 202.031†	1372.3	16.05	1.17%	[100]	ug/L
Ni 231.604†	3889.6	57.45	1.48%	[100]	ug/L
P 214.914†	823.3	12.10	1.47%	[500]	ug/L
Pb 220.353†	820.7	14.38	1.75%	[100]	ug/L
S 181.975 Axial†	134.5	0.28	0.21%	[200]	ug/L
Sb 206.836†	284.6	2.73	0.96%	[100]	ug/L
Se 196.026†	147.9	6.24	4.22%	[100]	ug/L
Si 251.611†	15405.6	225.84	1.47%	[500]	ug/L
Sn 189.927†	541.0	10.83	2.00%	[100]	ug/L
Sr 421.552†	15497.6	1095.44	7.07%	[100]	ug/L
Ti 334.940†	65184.8	841.21	1.29%	[100]	ug/L
Tl 190.801†	315.6	7.96	2.52%	[100]	ug/L
U 409.014†	3879.3	43.40	1.12%	[100]	ug/L
V 292.402†	14249.1	203.31	1.43%	[100]	ug/L
Zn 213.857†	10072.6	99.17	0.98%	[100]	ug/L
SiO2†	15293.3	225.24	1.47%	[1069.5]	ug/L

Sequence No.: 3

Sample ID: S0.5

Analyst:

Logged In Analyst (Original) : Optima3

Initial Sample Wt:

Dilution:

Autosampler Location: 3

Date Collected: 2/23/2010 10:50:31

Data Type: Reprocessed on 2/23/2010 12:42:24

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: S0.5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Units	Analysis Time
1	Sc 361.383	900323.3	900323.3	100.03	%	10:53:41
1	Sc Radial	4256.3	4256.3	100	%	10:52:23
1	Y 371.029	750565.4	750565.4	98.442	%	10:53:41
1	Y RADIAL	4638.2	4638.2	98.85	%	10:52:23
1	Ag 328.068†	109543.2	109282.3	[500]	ug/L	10:53:46
1	Al 396.153Radial†	5378.3	5485.6	[5000]	ug/L	10:52:23
1	As 188.979†	1073.7	1093.9	[500]	ug/L	10:54:06
1	B 249.677†	20315.6	20682.7	[500]	ug/L	10:53:46
1	Ba 233.527†	64027.8	64018.5	[500]	ug/L	10:53:46
1	Be 313.107†	1312793.2	1316267.2	[500]	ug/L	10:53:41
1	Ca 317.933Radial†	2558.4	2541.3	[5000]	ug/L	10:52:43
1	Cd 226.502†	43089.3	43260.2	[500]	ug/L	10:53:46
1	Co 228.616†	23900.9	23955.9	[500]	ug/L	10:53:46
1	Cr 267.716†	44711.3	44632.4	[500]	ug/L	10:53:46
1	Cu 324.752†	171573.6	165446.9	[500]	ug/L	10:53:46
1	K 766.490 Radial†	29165.2	26589.6	[5000]	ug/L	10:52:23
1	Mg 279.077 IEC†	117.2	114.4	[5000]	ug/L	10:52:43
1	Mn 257.610†	438677.8	438114.2	[500]	ug/L	10:53:41
1	Mo 202.031†	6854.5	6846.4	[500]	ug/L	10:54:06
1	Ni 231.604†	19835.1	19777.1	[500]	ug/L	10:53:46
1	P 214.914†	4281.2	4077.9	[2500]	ug/L	10:54:06
1	Pb 220.353†	3932.5	3996.4	[500]	ug/L	10:54:06
1	S 181.975 Axial†	726.7	689.5	[1000]	ug/L	10:54:06
1	Sb 206.836†	1467.3	1430.2	[500]	ug/L	10:54:06
1	Se 196.026†	731.3	751.8	[500]	ug/L	10:54:06
1	Si 251.611†	78417.2	77860.4	[2500]	ug/L	10:53:46
1	Sn 189.927†	2762.1	2750.8	[500]	ug/L	10:54:06
1	Sr 421.552†	76092.5	76006.6	[500]	ug/L	10:52:23
1	Ti 334.940†	324664.6	325852.6	[500]	ug/L	10:53:41
1	Tl 190.801†	1528.1	1558.8	[500]	ug/L	10:54:06
1	U 409.014†	15531.1	18342.9	[500]	ug/L	10:53:46
1	V 292.402†	70288.7	71698.8	[500]	ug/L	10:53:46
1	Zn 213.857†	50466.1	49893.8	[500]	ug/L	10:53:46
1	SiO2†	77434.5	76860.6	[5347.5]	ug/L	10:55:14
2	Sc 361.383	903758.2	903758.2	100.41	%	10:54:12
2	Sc Radial	4228.2	4228.2	99.4	%	10:52:48
2	Y 371.029	752751.8	752751.8	98.729	%	10:54:12
2	Y RADIAL	4643.7	4643.7	98.97	%	10:52:48
2	Ag 328.068†	110294.8	109614.5	[500]	ug/L	10:54:17
2	Al 396.153Radial†	5368.3	5511.3	[5000]	ug/L	10:52:48
2	As 188.979†	1096.6	1112.7	[500]	ug/L	10:54:38
2	B 249.677†	20407.6	20697.1	[500]	ug/L	10:54:17
2	Ba 233.527†	64321.9	64068.0	[500]	ug/L	10:54:17
2	Be 313.107†	1317297.0	1315764.5	[500]	ug/L	10:54:12
2	Ca 317.933Radial†	2568.2	2568.1	[5000]	ug/L	10:53:09
2	Cd 226.502†	43253.2	43259.7	[500]	ug/L	10:54:17
2	Co 228.616†	24083.7	24047.2	[500]	ug/L	10:54:17
2	Cr 267.716†	44907.2	44657.6	[500]	ug/L	10:54:17
2	Cu 324.752†	172308.5	165526.9	[500]	ug/L	10:54:17
2	K 766.490 Radial†	29045.9	26663.1	[5000]	ug/L	10:52:48
2	Mg 279.077 IEC†	117.0	114.9	[5000]	ug/L	10:53:09
2	Mn 257.610†	441270.2	439029.2	[500]	ug/L	10:54:12
2	Mo 202.031†	6863.7	6829.6	[500]	ug/L	10:54:38
2	Ni 231.604†	19905.6	19771.9	[500]	ug/L	10:54:17
2	P 214.914†	4297.7	4078.1	[2500]	ug/L	10:54:38
2	Pb 220.353†	3979.3	4028.0	[500]	ug/L	10:54:38
2	S 181.975 Axial†	723.2	683.2	[1000]	ug/L	10:54:38
2	Sb 206.836†	1455.8	1413.2	[500]	ug/L	10:54:38

2	Se 196.026†	734.2	751.9	[500]	ug/L	10:54:38
2	Si 251.611†	78823.9	77967.5	[2500]	ug/L	10:54:17
2	Sn 189.927†	2777.4	2755.6	[500]	ug/L	10:54:38
2	Sr 421.552†	75741.3	76158.1	[500]	ug/L	10:52:48
2	Ti 334.940†	326293.8	326241.5	[500]	ug/L	10:54:12
2	Tl 190.801†	1532.3	1557.2	[500]	ug/L	10:54:38
2	U 409.014†	15585.9	18338.5	[500]	ug/L	10:54:17
2	V 292.402†	70570.4	71712.3	[500]	ug/L	10:54:17
2	Zn 213.857†	50835.7	50070.2	[500]	ug/L	10:54:17
2	SiO2†	79038.6	78163.9	[5347.5]	ug/L	10:55:19
3	Sc 361.383	923923.2	923923.2	102.65	%	10:54:44
3	Sc Radial	4272.5	4272.5	100	%	10:53:14
3	Y 371.029	769970.9	769970.9	100.99	%	10:54:44
3	Y RADIAL	4695.6	4695.6	100.1	%	10:53:14
3	Ag 328.068†	108677.4	105641.5	[500]	ug/L	10:54:49
3	Al 396.153Radial†	5415.2	5501.9	[5000]	ug/L	10:53:14
3	As 188.979†	1076.6	1069.3	[500]	ug/L	10:55:09
3	B 249.677†	20096.6	19950.5	[500]	ug/L	10:54:49
3	Ba 233.527†	63178.8	61556.3	[500]	ug/L	10:54:49
3	Be 313.107†	1346718.2	1315792.9	[500]	ug/L	10:54:44
3	Ca 317.933Radial†	2564.0	2537.1	[5000]	ug/L	10:53:34
3	Cd 226.502†	42442.6	41529.9	[500]	ug/L	10:54:49
3	Co 228.616†	23631.9	23083.6	[500]	ug/L	10:54:49
3	Cr 267.716†	44091.6	42887.0	[500]	ug/L	10:54:49
3	Cu 324.752†	169944.9	159479.0	[500]	ug/L	10:54:49
3	K 766.490 Radial†	29199.6	26513.0	[5000]	ug/L	10:53:14
3	Mg 279.077 IEC†	117.2	113.9	[5000]	ug/L	10:53:34
3	Mn 257.610†	449647.7	437598.8	[500]	ug/L	10:54:44
3	Mo 202.031†	6850.6	6667.6	[500]	ug/L	10:55:09
3	Ni 231.604†	19515.8	18959.5	[500]	ug/L	10:54:49
3	P 214.914†	4291.0	3978.1	[2500]	ug/L	10:55:09
3	Pb 220.353†	3937.9	3901.2	[500]	ug/L	10:55:09
3	S 181.975 Axial†	717.9	662.3	[1000]	ug/L	10:55:09
3	Sb 206.836†	1463.6	1389.1	[500]	ug/L	10:55:09
3	Se 196.026†	736.9	738.5	[500]	ug/L	10:55:09
3	Si 251.611†	77563.1	75025.9	[2500]	ug/L	10:54:49
3	Sn 189.927†	2774.8	2692.7	[500]	ug/L	10:55:09
3	Sr 421.552†	76283.5	75907.6	[500]	ug/L	10:53:14
3	Ti 334.940†	333418.8	326090.2	[500]	ug/L	10:54:44
3	Tl 190.801†	1521.7	1513.6	[500]	ug/L	10:55:09
3	U 409.014†	15506.4	17922.2	[500]	ug/L	10:54:49
3	V 292.402†	69454.9	69091.7	[500]	ug/L	10:54:49
3	Zn 213.857†	49917.0	48070.2	[500]	ug/L	10:54:49
3	SiO2†	77323.4	74775.1	[5347.5]	ug/L	10:55:24

## Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	909334.9	12750.06	1.40%	101.03	%
Sc Radial	4252.4	22.42	0.53%	100.0	%
Y 371.029	757762.7	10629.01	1.40%	99.386	%
Y RADIAL	4659.2	31.66	0.68%	99.30	%
Ag 328.068†	108179.4	2204.17	2.04%	[500]	ug/L
Al 396.153Radial†	5499.6	12.96	0.24%	[5000]	ug/L
As 188.979†	1092.0	21.74	1.99%	[500]	ug/L
B 249.677†	20443.5	426.95	2.09%	[500]	ug/L
Ba 233.527†	63214.3	1436.04	2.27%	[500]	ug/L
Be 313.107†	1315941.5	282.38	0.02%	[500]	ug/L
Ca 317.933Radial†	2548.8	16.83	0.66%	[5000]	ug/L
Cd 226.502†	42683.3	998.86	2.34%	[500]	ug/L
Co 228.616†	23695.5	531.94	2.24%	[500]	ug/L
Cr 267.716†	44059.0	1015.06	2.30%	[500]	ug/L
Cu 324.752†	163484.3	3468.87	2.12%	[500]	ug/L
K 766.490 Radial†	26588.6	75.02	0.28%	[5000]	ug/L
Mg 279.077 IEC†	114.4	0.51	0.45%	[5000]	ug/L
Mn 257.610†	438247.4	724.44	0.17%	[500]	ug/L
Mo 202.031†	6781.2	98.75	1.46%	[500]	ug/L
Ni 231.604†	19502.8	470.54	2.41%	[500]	ug/L
P 214.914†	4044.7	57.68	1.43%	[2500]	ug/L
Pb 220.353†	3975.2	66.02	1.66%	[500]	ug/L

S 181.975 Axial†	678.3	14.20	2.09%	[1000]	ug/L
Sb 206.836†	1410.8	20.65	1.46%	[500]	ug/L
Se 196.026†	747.4	7.69	1.03%	[500]	ug/L
Si 251.611†	76951.3	1668.26	2.17%	[2500]	ug/L
Sn 189.927†	2733.1	35.00	1.28%	[500]	ug/L
Sr 421.552†	76024.1	126.19	0.17%	[500]	ug/L
Ti 334.940†	326061.4	196.03	0.06%	[500]	ug/L
Tl 190.801†	1543.2	25.69	1.66%	[500]	ug/L
U 409.014†	18201.2	241.61	1.33%	[500]	ug/L
V 292.402†	70834.2	1509.15	2.13%	[500]	ug/L
Zn 213.857†	49344.7	1107.27	2.24%	[500]	ug/L
SiO2†	76599.9	1709.41	2.23%	[5347.5]	ug/L

Sequence No.: 4  
 Sample ID: SCAL  
 Analyst:  
 Logged In Analyst (Original) : Optima3  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 4  
 Date Collected: 2/23/2010 10:57:35  
 Data Type: Reprocessed on 2/23/2010 12:42:25  
 Initial Sample Vol:  
 Sample Prep Vol:

## Replicate Data: SCAL

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Analysis Time
1	Sc 361.383	891910.2	891910.2	99.094 %	11:00:52
1	Sc Radial	4245.1	4245.1	99.8 %	10:59:28
1	Y 371.029	744742.4	744742.4	97.679 %	11:00:52
1	Y RADIAL	4634.9	4634.9	98.78 %	10:59:28
1	Ag 328.068†	216642.1	218393.1	[1000] ug/L	11:00:52
1	Al 396.153Radial†	10786.9	10919.1	[10000] ug/L	10:59:28
1	As 188.979†	2169.6	2209.9	[1000] ug/L	11:01:12
1	B 249.677†	41480.7	42232.8	[1000] ug/L	11:00:52
1	Ba 233.527†	127494.5	128669.0	[1000] ug/L	11:00:52
1	Be 313.107†	2653232.1	2681338.7	[1000] ug/L	11:00:47
1	Ca 317.933Radial†	5118.1	5112.7	[10000] ug/L	10:59:28
1	Cd 226.502†	85611.0	86576.9	[1000] ug/L	11:00:52
1	Co 228.616†	47510.9	48007.2	[1000] ug/L	11:00:52
1	Cr 267.716†	88787.8	89533.4	[1000] ug/L	11:00:52
1	Cu 324.752†	337960.7	334972.9	[1000] ug/L	11:00:52
1	Fe 238.204 Radial†	785.9	777.3	[10000] ug/L	10:59:48
1	K 766.490 Radial†	55587.7	53141.1	[10000] ug/L	10:59:28
1	Mg 279.077 IEC†	229.7	227.5	[10000] ug/L	10:59:48
1	Mn 257.610†	882531.1	890161.6	[1000] ug/L	11:00:47
1	Mo 202.031†	13476.9	13594.0	[1000] ug/L	11:01:12
1	Na 589.592 Radial†	33142.6	33948.6	[10000] ug/L	10:59:28
1	Ni 231.604†	39197.0	39503.0	[1000] ug/L	11:00:52
1	P 214.914†	8340.5	8214.7	[5000] ug/L	11:01:12
1	Pb 220.353†	7911.5	8048.8	[1000] ug/L	11:01:12
1	S 181.975 Axial†	1383.9	1359.5	[2000] ug/L	11:01:12
1	Sb 206.836†	2854.7	2844.1	[1000] ug/L	11:01:12
1	Se 196.026†	1477.1	1511.3	[1000] ug/L	11:01:12
1	Si 251.611†	155728.5	156617.9	[5000] ug/L	11:00:52
1	Sn 189.927†	5486.1	5525.8	[1000] ug/L	11:01:12
1	Sr 421.552†	149204.2	149463.0	[1000] ug/L	10:59:28
1	Ti 334.940†	651627.1	658865.4	[1000] ug/L	11:00:47
1	Tl 190.801†	3041.6	3100.6	[1000] ug/L	11:01:12
1	U 409.014†	34095.7	37223.7	[1000] ug/L	11:00:52
1	V 292.402†	142270.3	145001.3	[1000] ug/L	11:00:52
1	Zn 213.857†	99796.5	100151.0	[1000] ug/L	11:00:52
1	SiO2†	155863.5	156736.7	[10695] ug/L	11:02:22
2	Sc 361.383	888123.5	888123.5	98.673 %	11:01:24
2	Sc Radial	4238.9	4238.9	99.7 %	10:59:53
2	Y 371.029	740212.2	740212.2	97.084 %	11:01:24
2	Y RADIAL	4662.0	4662.0	99.36 %	10:59:53
2	Ag 328.068†	215558.5	218227.1	[1000] ug/L	11:01:24
2	Al 396.153Radial†	10911.0	11059.4	[10000] ug/L	10:59:53
2	As 188.979†	2174.9	2224.6	[1000] ug/L	11:01:44
2	B 249.677†	41324.3	42252.9	[1000] ug/L	11:01:24
2	Ba 233.527†	126728.9	128441.7	[1000] ug/L	11:01:24
2	Be 313.107†	2671625.9	2711395.8	[1000] ug/L	11:01:19
2	Ca 317.933Radial†	5131.3	5133.5	[10000] ug/L	10:59:53
2	Cd 226.502†	84910.5	86235.4	[1000] ug/L	11:01:24
2	Co 228.616†	47317.7	48015.8	[1000] ug/L	11:01:24
2	Cr 267.716†	88245.6	89366.0	[1000] ug/L	11:01:24
2	Cu 324.752†	336722.4	335172.1	[1000] ug/L	11:01:24
2	Fe 238.204 Radial†	787.6	780.2	[10000] ug/L	11:00:13
2	K 766.490 Radial†	56091.1	53727.5	[10000] ug/L	10:59:53
2	Mg 279.077 IEC†	226.8	224.8	[10000] ug/L	11:00:13
2	Mn 257.610†	890113.8	901643.4	[1000] ug/L	11:01:19
2	Mo 202.031†	13455.5	13630.4	[1000] ug/L	11:01:44
2	Na 589.592 Radial†	33331.2	34186.3	[10000] ug/L	10:59:53
2	Ni 231.604†	38960.7	39432.2	[1000] ug/L	11:01:24

2	P 214.914†	8345.5	8255.6	[5000] ug/L	11:01:44
2	Pb 220.353†	7907.6	8078.9	[1000] ug/L	11:01:44
2	S 181.975 Axial†	1373.4	1354.9	[2000] ug/L	11:01:44
2	Sb 206.836†	2879.1	2881.1	[1000] ug/L	11:01:44
2	Se 196.026†	1477.3	1517.8	[1000] ug/L	11:01:44
2	Si 251.611†	154934.5	156483.3	[5000] ug/L	11:01:24
2	Sn 189.927†	5443.4	5506.1	[1000] ug/L	11:01:44
2	Sr 421.552†	150616.7	151098.6	[1000] ug/L	10:59:53
2	Ti 334.940†	658117.6	668247.0	[1000] ug/L	11:01:19
2	Tl 190.801†	3044.3	3116.4	[1000] ug/L	11:01:44
2	U 409.014†	33948.1	37220.8	[1000] ug/L	11:01:24
2	V 292.402†	141298.1	144628.1	[1000] ug/L	11:01:24
2	Zn 213.857†	99168.2	99943.7	[1000] ug/L	11:01:24
2	SiO2†	153428.2	154939.3	[10695] ug/L	11:02:27
3	Sc 361.383	881663.0	881663.0	97.956 %	11:01:56
3	Sc Radial	4247.4	4247.4	99.9 %	11:00:19
3	Y 371.029	737020.6	737020.6	96.666 %	11:01:56
3	Y RADIAL	4661.7	4661.7	99.35 %	11:00:19
3	Ag 328.068†	213438.7	217663.8	[1000] ug/L	11:01:56
3	Al 396.153Radial†	10923.7	11050.3	[10000] ug/L	11:00:19
3	As 188.979†	2182.0	2248.1	[1000] ug/L	11:02:16
3	B 249.677†	40835.8	42060.9	[1000] ug/L	11:01:56
3	Ba 233.527†	125483.7	128111.6	[1000] ug/L	11:01:56
3	Be 313.107†	2637900.5	2696806.4	[1000] ug/L	11:01:51
3	Ca 317.933Radial†	5168.9	5160.9	[10000] ug/L	11:00:19
3	Cd 226.502†	84269.5	86211.5	[1000] ug/L	11:01:56
3	Co 228.616†	46771.3	47809.3	[1000] ug/L	11:01:56
3	Cr 267.716†	87584.3	89346.2	[1000] ug/L	11:01:56
3	Cu 324.752†	332586.7	333450.6	[1000] ug/L	11:01:56
3	Fe 238.204 Radial†	789.5	780.5	[10000] ug/L	11:00:39
3	K 766.490 Radial†	56106.6	53631.2	[10000] ug/L	11:00:19
3	Mg 279.077 IEC†	229.7	227.3	[10000] ug/L	11:00:39
3	Mn 257.610†	877241.1	895112.1	[1000] ug/L	11:01:51
3	Mo 202.031†	13566.5	13843.6	[1000] ug/L	11:02:16
3	Na 589.592 Radial†	33197.9	33986.4	[10000] ug/L	11:00:19
3	Ni 231.604†	38604.3	39357.7	[1000] ug/L	11:01:56
3	P 214.914†	8390.1	8363.1	[5000] ug/L	11:02:16
3	Pb 220.353†	7939.3	8170.0	[1000] ug/L	11:02:16
3	S 181.975 Axial†	1396.3	1388.4	[2000] ug/L	11:02:16
3	Sb 206.836†	2893.4	2917.1	[1000] ug/L	11:02:16
3	Se 196.026†	1486.7	1538.4	[1000] ug/L	11:02:16
3	Si 251.611†	153339.1	156005.1	[5000] ug/L	11:01:56
3	Sn 189.927†	5496.2	5600.5	[1000] ug/L	11:02:16
3	Sr 421.552†	150890.2	151072.2	[1000] ug/L	11:00:19
3	Ti 334.940†	648705.2	663525.4	[1000] ug/L	11:01:51
3	Tl 190.801†	3057.3	3152.4	[1000] ug/L	11:02:16
3	U 409.014†	33467.9	36982.6	[1000] ug/L	11:01:56
3	V 292.402†	139957.1	144308.4	[1000] ug/L	11:01:56
3	Zn 213.857†	98088.9	99578.3	[1000] ug/L	11:01:56
3	SiO2†	154547.5	157221.4	[10695] ug/L	11:02:32

## Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	887232.2	5181.41	0.58%	98.574	%
Sc Radial	4243.8	4.37	0.10%	99.8	%
Y 371.029	740658.4	3880.17	0.52%	97.143	%
Y RADIAL	4652.9	15.56	0.33%	99.16	%
Ag 328.068†	218094.7	382.25	0.18%	[1000]	ug/L
Al 396.153Radial†	11009.6	78.52	0.71%	[10000]	ug/L
As 188.979†	2227.5	19.22	0.86%	[1000]	ug/L
B 249.677†	42182.2	105.48	0.25%	[1000]	ug/L
Ba 233.527†	128407.5	280.27	0.22%	[1000]	ug/L
Be 313.107†	2696513.6	15030.70	0.56%	[1000]	ug/L
Ca 317.933Radial†	5135.7	24.16	0.47%	[10000]	ug/L
Cd 226.502†	86341.3	204.44	0.24%	[1000]	ug/L
Co 228.616†	47944.1	116.80	0.24%	[1000]	ug/L
Cr 267.716†	89415.2	102.87	0.12%	[1000]	ug/L
Cu 324.752†	334531.9	941.67	0.28%	[1000]	ug/L
Fe 238.204 Radial†	779.3	1.76	0.23%	[10000]	ug/L

K 766.490 Radial†	53499.9	314.48	0.59%	[10000]	ug/L
Mg 279.077 IEC†	226.5	1.48	0.65%	[10000]	ug/L
Mn 257.610†	895639.0	5759.03	0.64%	[1000]	ug/L
Mo 202.031†	13689.3	134.80	0.98%	[1000]	ug/L
Na 589.592 Radial†	34040.4	127.76	0.38%	[10000]	ug/L
Ni 231.604†	39431.0	72.66	0.18%	[1000]	ug/L
P 214.914†	8277.8	76.67	0.93%	[5000]	ug/L
Pb 220.353†	8099.3	63.08	0.78%	[1000]	ug/L
S 181.975 Axial†	1367.6	18.17	1.33%	[2000]	ug/L
Sb 206.836†	2880.8	36.47	1.27%	[1000]	ug/L
Se 196.026†	1522.5	14.14	0.93%	[1000]	ug/L
Si 251.611†	156368.7	322.03	0.21%	[5000]	ug/L
Sn 189.927†	5544.1	49.81	0.90%	[1000]	ug/L
Sr 421.552†	150544.6	936.80	0.62%	[1000]	ug/L
Ti 334.940†	663545.9	4690.80	0.71%	[1000]	ug/L
Tl 190.801†	3123.2	26.50	0.85%	[1000]	ug/L
U 409.014†	37142.4	138.32	0.37%	[1000]	ug/L
V 292.402†	144645.9	346.78	0.24%	[1000]	ug/L
Zn 213.857†	99891.0	289.99	0.29%	[1000]	ug/L
SiO2†	156299.2	1202.33	0.77%	[10695]	ug/L

Sequence No.: 5

Sample ID: S10

Analyst:

Logged In Analyst (Original) : Optima3

Initial Sample Wt:

Dilution:

Autosampler Location: 5

Date Collected: 2/23/2010 11:04:43

Data Type: Reprocessed on 2/23/2010 12:42:26

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: S10

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Analysis Time
1	Sc 361.383	883668.8	883668.8	98.179 %	11:07:54
1	Sc Radial	4142.8	4142.8	97.4 %	11:06:57
1	Y 371.029	731362.3	731362.3	95.924 %	11:07:54
1	Y RADIAL	4513.4	4513.4	96.19 %	11:06:57
1	Al 396.153Radial†	53617.4	55161.6	[50000] ug/L	11:06:37
1	Ca 317.933Radial†	24434.2	25072.0	[50000] ug/L	11:06:37
1	Fe 238.204 Radial†	1521.2	1551.6	[20000] ug/L	11:06:57
1	Mg 279.077 IEC†	1067.1	1092.9	[50000] ug/L	11:06:57
1	Na 589.592 Radial†	66830.1	69357.2	[20000] ug/L	11:06:37
2	Sc 361.383	886219.7	886219.7	98.462 %	11:08:00
2	Sc Radial	4127.8	4127.8	97.0 %	11:07:22
2	Y 371.029	732471.7	732471.7	96.069 %	11:08:00
2	Y RADIAL	4512.0	4512.0	96.16 %	11:07:22
2	Al 396.153Radial†	53806.5	55555.7	[50000] ug/L	11:07:02
2	Ca 317.933Radial†	24580.6	25313.6	[50000] ug/L	11:07:02
2	Fe 238.204 Radial†	1517.7	1553.7	[20000] ug/L	11:07:22
2	Mg 279.077 IEC†	1071.8	1101.7	[50000] ug/L	11:07:22
2	Na 589.592 Radial†	66841.1	69616.9	[20000] ug/L	11:07:02
3	Sc 361.383	883561.2	883561.2	98.167 %	11:08:05
3	Sc Radial	4141.9	4141.9	97.4 %	11:07:47
3	Y 371.029	731261.2	731261.2	95.910 %	11:08:05
3	Y RADIAL	4503.9	4503.9	95.99 %	11:07:47
3	Al 396.153Radial†	53386.3	54936.3	[50000] ug/L	11:07:27
3	Ca 317.933Radial†	24290.9	24930.3	[50000] ug/L	11:07:27
3	Fe 238.204 Radial†	1516.5	1547.2	[20000] ug/L	11:07:47
3	Mg 279.077 IEC†	1074.4	1100.7	[50000] ug/L	11:07:47
3	Na 589.592 Radial†	65887.7	68404.4	[20000] ug/L	11:07:27

## Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	884483.2	1504.77	0.17%	98.269 %
Sc Radial	4137.5	8.38	0.20%	97.3 %
Y 371.029	731698.4	671.64	0.09%	95.968 %
Y RADIAL	4509.8	5.12	0.11%	96.11 %
Al 396.153Radial†	55217.9	313.52	0.57%	[50000] ug/L
Ca 317.933Radial†	25105.3	193.84	0.77%	[50000] ug/L
Fe 238.204 Radial†	1550.8	3.33	0.21%	[20000] ug/L
Mg 279.077 IEC†	1098.4	4.81	0.44%	[50000] ug/L
Na 589.592 Radial†	69126.2	638.43	0.92%	[20000] ug/L

## Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	217.8	0.00000	0.999995	
Al 396.153Radial	3	Lin Thru 0	0.0	1.104	0.00000	1.000000	
As 188.979	3	Lin Thru 0	0.0	2.218	0.00000	0.999967	
B 249.677	3	Lin Thru 0	0.0	41.90	0.00000	0.999908	
Ba 233.527	3	Lin Thru 0	0.0	128.0	0.00000	0.999980	
Be 313.107	3	Lin Thru 0	0.0	2683	0.00000	0.999953	
Ca 317.933Radial	3	Lin Thru 0	0.0	0.5026	0.00000	0.999989	
Cd 226.502	3	Lin Thru 0	0.0	86.15	0.00000	0.999989	
Co 228.616	3	Lin Thru 0	0.0	47.83	0.00000	0.999989	
Cr 267.716	3	Lin Thru 0	0.0	89.16	0.00000	0.999983	
Cu 324.752	3	Lin Thru 0	0.0	333.0	0.00000	0.999959	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.0776	0.00000	0.999998	



K 766.490 Radial	3	Lin Thru 0	0.0	5.345	0.00000	0.999992
Mg 279.077 IEC	3	Lin Thru 0	0.0	0.0220	0.00000	0.999975
Mn 257.610	3	Lin Thru 0	0.0	891.9	0.00000	0.999963
Mo 202.031	3	Lin Thru 0	0.0	13.66	0.00000	0.999993
Na 589.592 Radia	2	Lin Thru 0	0.0	3.446	0.00000	0.999982
Ni 231.604	3	Lin Thru 0	0.0	39.34	0.00000	0.999990
P 214.914	3	Lin Thru 0	0.0	1.648	0.00000	0.999959
Pb 220.353	3	Lin Thru 0	0.0	8.071	0.00000	0.999972
S 181.975 Axial	3	Lin Thru 0	0.0	0.6826	0.00000	0.999994
Sb 206.836	3	Lin Thru 0	0.0	2.869	0.00000	0.999966
Se 196.026	3	Lin Thru 0	0.0	1.517	0.00000	0.999971
Si 251.611	3	Lin Thru 0	0.0	31.17	0.00000	0.999980
Sn 189.927	3	Lin Thru 0	0.0	5.528	0.00000	0.999982
Sr 421.552	3	Lin Thru 0	0.0	150.9	0.00000	0.999989
Ti 334.940	3	Lin Thru 0	0.0	661.2	0.00000	0.999976
Tl 190.801	3	Lin Thru 0	0.0	3.116	0.00000	0.999988
U 409.014	3	Lin Thru 0	0.0	37.01	0.00000	0.999959
V 292.402	3	Lin Thru 0	0.0	144.0	0.00000	0.999966
Zn 213.857	3	Lin Thru 0	0.0	99.66	0.00000	0.999988
SiO2	3	Lin Thru 0	0.0	14.55	0.00000	0.999967

Sequence No.: 6

Sample ID: ICV

Analyst:

Logged In Analyst (Original) : Optima3

Initial Sample Wt:

Dilution:

Autosampler Location: 9

Date Collected: 2/23/2010 11:10:17

Data Type: Reprocessed on 2/23/2010 12:42:27

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 361.383	915874.4	915874.4	101.76 %		11:13:27
1	Sc Radial	4252.1	4252.1	100.0 %		11:12:09
1	Y 371.029	765461.2	765461.2	100.40 %		11:13:27
1	Y RADIAL	4657.5	4657.5	99.26 %		11:12:09
1	Ag 328.068†	57664.7	56439.9	262.37 ug/L	262.37 ppb	11:13:27
1	Al 396.153Radial†	5487.0	5599.7	5045.4 ug/L	5045.4 ppb	11:12:09
1	As 188.979†	1055.5	1057.8	481.02 ug/L	481.02 ppb	11:13:47
1	B 249.677†	21613.3	21613.1	513.53 ug/L	513.53 ppb	11:13:27
1	Ba 233.527†	66256.4	65121.7	509.94 ug/L	509.94 ppb	11:13:27
1	Be 313.107†	698759.7	690549.9	258.46 ug/L	258.46 ppb	11:13:27
1	Ca 317.933Radial†	2585.1	2570.5	5114.2 ug/L	5114.2 ppb	11:12:30
1	Cd 226.502†	43492.1	42924.6	498.11 ug/L	498.11 ppb	11:13:27
1	Co 228.616†	24233.1	23876.7	499.37 ug/L	499.37 ppb	11:13:47
1	Cr 267.716†	44140.7	43312.7	486.80 ug/L	486.80 ppb	11:13:27
1	Cu 324.752†	178343.5	169187.6	508.06 ug/L	508.06 ppb	11:13:27
1	Fe 238.204 Radial†	414.8	404.8	5229.6 ug/L	5229.6 ppb	11:12:30
1	K 766.490 Radial†	15818.9	13267.7	2478.7 ug/L	2478.7 ppb	11:12:09
1	Mg 279.077 IEC†	121.5	118.8	5400.6 ug/L	5400.6 ppb	11:12:30
1	Mn 257.610†	463611.0	455170.6	510.63 ug/L	510.63 ppb	11:13:27
1	Mo 202.031†	7432.8	7298.4	534.58 ug/L	534.58 ppb	11:13:47
1	Na 589.592 Radial†	7901.1	8644.2	2508.6 ug/L	2508.6 ppb	11:12:09
1	Ni 231.604†	19885.6	19490.0	495.09 ug/L	495.09 ppb	11:13:47
1	P 214.914†	4380.1	4102.4	2390.5 ug/L	2390.5 ppb	11:13:47
1	Pb 220.353†	4067.2	4062.0	504.91 ug/L	504.91 ppb	11:13:47
1	S 181.975 Axial†	1755.0	1687.7	2471.4 ug/L	2471.4 ppb	11:13:47
1	Sb 206.836†	1487.3	1424.9	515.94 ug/L	515.94 ppb	11:13:47
1	Se 196.026†	3960.7	3913.1	2597.8 ug/L	2597.8 ppb	11:13:47
1	Si 251.611†	152917.6	149743.6	4797.2 ug/L	4797.2 ppb	11:13:27
1	Sn 189.927†	3009.6	2947.2	533.79 ug/L	533.79 ppb	11:13:47
1	Sr 421.552†	79876.1	79867.3	529.31 ug/L	529.31 ppb	11:12:09
1	Ti 334.940†	328821.3	324426.5	490.53 ug/L	490.53 ppb	11:13:27
1	Tl 190.801†	1654.7	1657.3	535.23 ug/L	535.23 ppb	11:13:47
1	U 409.014†	15558.4	18106.1	487.56 ug/L	487.56 ppb	11:13:27
1	V 292.402†	72488.0	72667.0	511.63 ug/L	511.63 ppb	11:13:27
1	Zn 213.857†	52692.6	51225.3	509.38 ug/L	509.38 ppb	11:13:27
1	SiO2†	152215.6	149036.3	10226 ug/L	10226 ppb	11:14:45
2	Sc 361.383	906969.3	906969.3	100.77 %		11:13:53
2	Sc Radial	4318.7	4318.7	102 %		11:12:35
2	Y 371.029	759036.8	759036.8	99.553 %		11:13:53
2	Y RADIAL	4733.1	4733.1	100.9 %		11:12:35
2	Ag 328.068†	56985.1	56321.8	261.83 ug/L	261.83 ppb	11:13:53
2	Al 396.153Radial†	5530.1	5557.5	5006.7 ug/L	5006.7 ppb	11:12:35
2	As 188.979†	1049.9	1062.4	483.05 ug/L	483.05 ppb	11:14:13
2	B 249.677†	21279.9	21490.8	510.59 ug/L	510.59 ppb	11:13:53
2	Ba 233.527†	65380.1	64891.4	508.14 ug/L	508.14 ppb	11:13:53
2	Be 313.107†	692294.5	690876.3	258.58 ug/L	258.58 ppb	11:13:53
2	Ca 317.933Radial†	2596.7	2542.1	5057.7 ug/L	5057.7 ppb	11:12:55
2	Cd 226.502†	42889.7	42746.4	496.04 ug/L	496.04 ppb	11:13:53
2	Co 228.616†	24401.4	24277.6	507.78 ug/L	507.78 ppb	11:14:13
2	Cr 267.716†	43720.3	43321.4	486.90 ug/L	486.90 ppb	11:13:53
2	Cu 324.752†	176600.1	169178.2	508.03 ug/L	508.03 ppb	11:13:53
2	Fe 238.204 Radial†	420.1	403.6	5214.3 ug/L	5214.3 ppb	11:12:55
2	K 766.490 Radial†	15988.8	13190.7	2464.3 ug/L	2464.3 ppb	11:12:35
2	Mg 279.077 IEC†	119.9	115.4	5243.1 ug/L	5243.1 ppb	11:12:55
2	Mn 257.610†	458163.0	454237.5	509.58 ug/L	509.58 ppb	11:13:53
2	Mo 202.031†	7501.4	7438.2	544.81 ug/L	544.81 ppb	11:14:13
2	Na 589.592 Radial†	7957.2	8577.5	2489.2 ug/L	2489.2 ppb	11:12:35
2	Ni 231.604†	20057.8	19852.7	504.31 ug/L	504.31 ppb	11:14:13

2	P 214.914†	4443.2	4207.4	2454.2 ug/L	2454.2 ppb	11:14:13
2	Pb 220.353†	4086.8	4120.7	512.20 ug/L	512.20 ppb	11:14:13
2	S 181.975 Axial†	1786.0	1735.3	2541.2 ug/L	2541.2 ppb	11:14:13
2	Sb 206.836†	1495.5	1447.4	524.15 ug/L	524.15 ppb	11:14:13
2	Se 196.026†	4008.9	3999.1	2654.6 ug/L	2654.6 ppb	11:14:13
2	Si 251.611†	151012.2	149328.2	4783.7 ug/L	4783.7 ppb	11:13:53
2	Sn 189.927†	3031.7	2998.1	543.00 ug/L	543.00 ppb	11:14:13
2	Sr 421.552†	80806.5	79550.4	527.21 ug/L	527.21 ppb	11:12:35
2	Ti 334.940†	325113.9	323920.1	489.77 ug/L	489.77 ppb	11:13:53
2	Tl 190.801†	1662.1	1680.7	542.68 ug/L	542.68 ppb	11:14:13
2	U 409.014†	15276.8	17976.7	484.06 ug/L	484.06 ppb	11:13:53
2	V 292.402†	71845.2	72728.6	512.19 ug/L	512.19 ppb	11:13:53
2	Zn 213.857†	51994.9	51041.3	507.48 ug/L	507.48 ppb	11:13:53
2	SiO2†	152512.7	150799.9	10346 ug/L	10346 ppb	11:14:50
3	Sc 361.383	910711.5	910711.5	101.18 %		11:14:19
3	Sc Radial	4267.6	4267.6	100 %		11:13:00
3	Y 371.029	762735.4	762735.4	100.04 %		11:14:19
3	Y RADIAL	4678.6	4678.6	99.71 %		11:13:00
3	Ag 328.068†	57183.4	56285.5	261.66 ug/L	261.66 ppb	11:14:19
3	Al 396.153Radial†	5473.4	5566.2	5014.8 ug/L	5014.8 ppb	11:13:00
3	As 188.979†	1058.8	1067.0	485.12 ug/L	485.12 ppb	11:14:39
3	B 249.677†	21334.5	21458.0	509.81 ug/L	509.81 ppb	11:14:19
3	Ba 233.527†	65509.9	64753.1	507.06 ug/L	507.06 ppb	11:14:19
3	Be 313.107†	694998.9	690726.0	258.53 ug/L	258.53 ppb	11:14:19
3	Ca 317.933Radial†	2602.0	2578.0	5129.2 ug/L	5129.2 ppb	11:13:20
3	Cd 226.502†	43081.7	42761.3	496.22 ug/L	496.22 ppb	11:14:19
3	Co 228.616†	24419.7	24196.1	506.07 ug/L	506.07 ppb	11:14:39
3	Cr 267.716†	43886.5	43307.3	486.74 ug/L	486.74 ppb	11:14:19
3	Cu 324.752†	176910.2	168764.6	506.79 ug/L	506.79 ppb	11:14:19
3	Fe 238.204 Radial†	415.9	404.4	5224.7 ug/L	5224.7 ppb	11:13:20
3	K 766.490 Radial†	15897.1	13288.1	2482.5 ug/L	2482.5 ppb	11:13:00
3	Mg 279.077 IEC†	118.8	115.7	5257.4 ug/L	5257.4 ppb	11:13:20
3	Mn 257.610†	459289.6	453482.6	508.74 ug/L	508.74 ppb	11:14:19
3	Mo 202.031†	7484.0	7390.4	541.32 ug/L	541.32 ppb	11:14:39
3	Na 589.592 Radial†	7898.0	8612.4	2499.3 ug/L	2499.3 ppb	11:13:00
3	Ni 231.604†	20066.0	19779.0	502.44 ug/L	502.44 ppb	11:14:39
3	P 214.914†	4430.2	4176.4	2435.7 ug/L	2435.7 ppb	11:14:39
3	Pb 220.353†	4062.8	4080.3	507.19 ug/L	507.19 ppb	11:14:39
3	S 181.975 Axial†	1780.1	1722.2	2522.0 ug/L	2522.0 ppb	11:14:39
3	Sb 206.836†	1525.3	1470.7	532.17 ug/L	532.17 ppb	11:14:39
3	Se 196.026†	4005.4	3979.2	2641.5 ug/L	2641.5 ppb	11:14:39
3	Si 251.611†	151133.7	148832.4	4767.9 ug/L	4767.9 ppb	11:14:19
3	Sn 189.927†	3035.7	2989.8	541.50 ug/L	541.50 ppb	11:14:39
3	Sr 421.552†	79944.6	79644.8	527.84 ug/L	527.84 ppb	11:13:00
3	Ti 334.940†	326102.4	323571.3	489.25 ug/L	489.25 ppb	11:14:19
3	Tl 190.801†	1655.9	1667.8	538.53 ug/L	538.53 ppb	11:14:39
3	U 409.014†	15420.2	18056.2	486.21 ug/L	486.21 ppb	11:14:19
3	V 292.402†	72026.1	72614.4	511.35 ug/L	511.35 ppb	11:14:19
3	Zn 213.857†	52104.9	50937.9	506.45 ug/L	506.45 ppb	11:14:19
3	SiO2†	152262.5	149930.7	10287 ug/L	10287 ppb	11:14:55

## Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	911185.1	101.24 %	0.497			0.49%
Sc Radial	4279.4	101 %	0.8			0.81%
Y 371.029	762411.2	99.996 %	0.4229			0.42%
Y RADIAL	4689.7	99.95 %	0.832			0.83%
Ag 328.068†	56349.1	261.95 ug/L	0.371	261.95 ppb	0.371	0.14%
QC value within limits for Ag 328.068 Recovery = 104.78%						
Al 396.153Radial†	5574.4	5022.3 ug/L	20.43	5022.3 ppb	20.43	0.41%
QC value within limits for Al 396.153Radial Recovery = 100.45%						
As 188.979†	1062.4	483.06 ug/L	2.050	483.06 ppb	2.050	0.42%
QC value within limits for As 188.979 Recovery = 96.61%						
B 249.677†	21520.6	511.31 ug/L	1.962	511.31 ppb	1.962	0.38%
QC value within limits for B 249.677 Recovery = 102.26%						
Ba 233.527†	64922.1	508.38 ug/L	1.455	508.38 ppb	1.455	0.29%
QC value within limits for Ba 233.527 Recovery = 101.68%						
Be 313.107†	690717.4	258.52 ug/L	0.060	258.52 ppb	0.060	0.02%
QC value within limits for Be 313.107 Recovery = 103.41%						

Ca 317.933Radial†	2563.5	5100.4 ug/L	37.73	5100.4 ppb	37.73	0.74%
QC value within limits for Ca 317.933Radial Recovery = 102.01%						
Cd 226.502†	42810.8	496.79 ug/L	1.144	496.79 ppb	1.144	0.23%
QC value within limits for Cd 226.502 Recovery = 99.36%						
Co 228.616†	24116.8	504.41 ug/L	4.442	504.41 ppb	4.442	0.88%
QC value within limits for Co 228.616 Recovery = 100.88%						
Cr 267.716†	43313.8	486.82 ug/L	0.080	486.82 ppb	0.080	0.02%
QC value within limits for Cr 267.716 Recovery = 97.36%						
Cu 324.752†	169043.5	507.63 ug/L	0.725	507.63 ppb	0.725	0.14%
QC value within limits for Cu 324.752 Recovery = 101.53%						
Fe 238.204 Radial†	404.2	5222.9 ug/L	7.83	5222.9 ppb	7.83	0.15%
QC value within limits for Fe 238.204 Radial Recovery = 104.46%						
K 766.490 Radial†	13248.8	2475.2 ug/L	9.59	2475.2 ppb	9.59	0.39%
QC value within limits for K 766.490 Radial Recovery = 99.01%						
Mg 279.077 IEC†	116.6	5300.4 ug/L	87.12	5300.4 ppb	87.12	1.64%
QC value within limits for Mg 279.077 IEC Recovery = 106.01%						
Mn 257.610†	454296.9	509.65 ug/L	0.945	509.65 ppb	0.945	0.19%
QC value within limits for Mn 257.610 Recovery = 101.93%						
Mo 202.031†	7375.7	540.24 ug/L	5.201	540.24 ppb	5.201	0.96%
QC value within limits for Mo 202.031 Recovery = 108.05%						
Na 589.592 Radial†	8611.3	2499.0 ug/L	9.69	2499.0 ppb	9.69	0.39%
QC value within limits for Na 589.592 Radial Recovery = 99.96%						
Ni 231.604†	19707.3	500.61 ug/L	4.870	500.61 ppb	4.870	0.97%
QC value within limits for Ni 231.604 Recovery = 100.12%						
P 214.914†	4162.1	2426.8 ug/L	32.79	2426.8 ppb	32.79	1.35%
QC value within limits for P 214.914 Recovery = 97.07%						
Pb 220.353†	4087.7	508.10 ug/L	3.726	508.10 ppb	3.726	0.73%
QC value within limits for Pb 220.353 Recovery = 101.62%						
S 181.975 Axial†	1715.1	2511.6 ug/L	36.06	2511.6 ppb	36.06	1.44%
QC value within limits for S 181.975 Axial Recovery = 100.46%						
Sb 206.836†	1447.7	524.09 ug/L	8.116	524.09 ppb	8.116	1.55%
QC value within limits for Sb 206.836 Recovery = 104.82%						
Se 196.026†	3963.8	2631.3 ug/L	29.70	2631.3 ppb	29.70	1.13%
QC value within limits for Se 196.026 Recovery = 105.25%						
Si 251.611†	149301.4	4782.9 ug/L	14.67	4782.9 ppb	14.67	0.31%
QC value within limits for Si 251.611 Recovery = 95.66%						
Sn 189.927†	2978.4	539.43 ug/L	4.943	539.43 ppb	4.943	0.92%
QC value within limits for Sn 189.927 Recovery = 107.89%						
Sr 421.552†	79687.5	528.12 ug/L	1.078	528.12 ppb	1.078	0.20%
QC value within limits for Sr 421.552 Recovery = 105.62%						
Ti 334.940†	323972.6	489.85 ug/L	0.643	489.85 ppb	0.643	0.13%
QC value within limits for Ti 334.940 Recovery = 97.97%						
Tl 190.801†	1668.6	538.81 ug/L	3.733	538.81 ppb	3.733	0.69%
QC value within limits for Tl 190.801 Recovery = 107.76%						
U 409.014†	18046.3	485.94 ug/L	1.762	485.94 ppb	1.762	0.36%
QC value within limits for U 409.014 Recovery = 97.19%						
V 292.402†	72670.0	511.73 ug/L	0.428	511.73 ppb	0.428	0.08%
QC value within limits for V 292.402 Recovery = 102.35%						
Zn 213.857†	51068.2	507.77 ug/L	1.485	507.77 ppb	1.485	0.29%
QC value within limits for Zn 213.857 Recovery = 101.55%						
SiO2†	149922.3	10286 ug/L	60.5	10286 ppb	60.5	0.59%
QC value within limits for SiO2 Recovery = 96.18%						
All analyte(s) passed QC.						

Sequence No.: 7  
 Sample ID: ICB  
 Analyst:  
 Logged In Analyst (Original) : Optima3  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 10  
 Date Collected: 2/23/2010 11:17:06  
 Data Type: Reprocessed on 2/23/2010 12:42:28  
 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 361.383	898367.4	898367.4	99.812 %		11:20:16
1	Sc Radial	4291.3	4291.3	101 %		11:18:59
1	Y 371.029	760183.8	760183.8	99.704 %		11:20:16
1	Y RADIAL	4722.1	4722.1	100.6 %		11:18:59
1	Ag 328.068†	235.0	6.1	0.0327 ug/L	0.0327 ppb	11:20:16
1	Al 396.153Radial†	-110.3	1.4	1.2756 ug/L	1.2756 ppb	11:19:19
1	As 188.979†	-12.9	7.6	3.4483 ug/L	3.4483 ppb	11:20:36
1	B 249.677†	-219.1	153.4	3.6585 ug/L	3.6585 ppb	11:20:36
1	Ba 233.527†	3.8	13.0	0.1028 ug/L	0.1028 ppb	11:20:36
1	Be 313.107†	-3824.8	21.2	0.0079 ug/L	0.0079 ppb	11:20:16
1	Ca 317.933Radial†	17.3	1.7	3.4407 ug/L	3.4407 ppb	11:19:19
1	Cd 226.502†	-171.0	12.0	0.1378 ug/L	0.1378 ppb	11:20:36
1	Co 228.616†	-68.7	-6.9	-0.1449 ug/L	-0.1449 ppb	11:20:36
1	Cr 267.716†	76.1	10.2	0.1157 ug/L	0.1157 ppb	11:20:36
1	Cu 324.752†	5987.3	-78.5	-0.2362 ug/L	-0.2362 ppb	11:20:16
1	Fe 238.204 Radial†	11.6	1.3	16.477 ug/L	16.477 ppb	11:19:19
1	K 766.490 Radial†	2615.4	35.6	6.6581 ug/L	6.6581 ppb	11:18:59
1	Mg 279.077 IEC†	3.8	1.0	44.821 ug/L	44.821 ppb	11:19:19
1	Mn 257.610†	431.1	-4.9	-0.0057 ug/L	-0.0057 ppb	11:20:36
1	Mo 202.031†	8.5	2.5	0.1825 ug/L	0.1825 ppb	11:20:36
1	Na 589.592 Radial†	-739.3	7.5	2.1807 ug/L	2.1807 ppb	11:18:59
1	Ni 231.604†	65.8	13.6	0.3448 ug/L	0.3448 ppb	11:20:36
1	P 214.914†	195.8	-5.9	-3.5251 ug/L	-3.5251 ppb	11:20:36
1	Pb 220.353†	-58.7	6.2	0.7686 ug/L	0.7686 ppb	11:20:36
1	S 181.975 Axial†	35.3	-1.6	-2.4172 ug/L	-2.4172 ppb	11:20:36
1	Sb 206.836†	47.6	11.0	3.8684 ug/L	3.8684 ppb	11:20:36
1	Se 196.026†	-20.7	-0.0	0.0262 ug/L	0.0262 ppb	11:20:36
1	Si 251.611†	552.4	19.3	0.6174 ug/L	0.6174 ppb	11:20:36
1	Sn 189.927†	23.4	13.0	2.3596 ug/L	2.3596 ppb	11:20:36
1	Sr 421.552†	53.6	16.4	0.1084 ug/L	0.1084 ppb	11:18:59
1	Ti 334.940†	-1272.4	7.0	0.0064 ug/L	0.0064 ppb	11:20:16
1	Tl 190.801†	-25.5	5.7	1.8304 ug/L	1.8304 ppb	11:20:36
1	U 409.014†	-2728.6	82.5	2.2278 ug/L	2.2278 ppb	11:20:16
1	V 292.402†	-1374.2	53.6	0.3774 ug/L	0.3774 ppb	11:20:16
1	Zn 213.857†	561.9	5.2	0.0482 ug/L	0.0482 ppb	11:20:36
1	SiO2†	584.6	34.2	2.3440 ug/L	2.3440 ppb	11:21:32
2	Sc 361.383	903933.7	903933.7	100.43 %		11:20:42
2	Sc Radial	4159.5	4159.5	97.8 %		11:19:24
2	Y 371.029	765270.9	765270.9	100.37 %		11:20:42
2	Y RADIAL	4604.7	4604.7	98.14 %		11:19:24
2	Ag 328.068†	253.1	22.7	0.0905 ug/L	0.0905 ppb	11:20:42
2	Al 396.153Radial†	-108.1	0.3	0.1930 ug/L	0.1930 ppb	11:19:45
2	As 188.979†	-26.7	-6.1	-2.7645 ug/L	-2.7645 ppb	11:21:02
2	B 249.677†	-248.2	125.8	3.0089 ug/L	3.0089 ppb	11:21:02
2	Ba 233.527†	-11.3	-2.2	-0.0171 ug/L	-0.0171 ppb	11:21:02
2	Be 313.107†	-3916.3	-46.3	-0.0175 ug/L	-0.0175 ppb	11:20:42
2	Ca 317.933Radial†	16.3	1.2	2.3081 ug/L	2.3081 ppb	11:19:45
2	Cd 226.502†	-183.5	0.6	0.0120 ug/L	0.0120 ppb	11:21:02
2	Co 228.616†	-62.5	-0.3	-0.0026 ug/L	-0.0026 ppb	11:21:02
2	Cr 267.716†	74.2	7.9	0.0835 ug/L	0.0835 ppb	11:21:02
2	Cu 324.752†	6074.0	-29.1	-0.0917 ug/L	-0.0917 ppb	11:20:42
2	Fe 238.204 Radial†	7.0	-3.0	-38.728 ug/L	-38.728 ppb	11:19:45
2	K 766.490 Radial†	2489.7	-10.8	-2.0295 ug/L	-2.0295 ppb	11:19:24
2	Mg 279.077 IEC†	2.3	-0.4	-16.535 ug/L	-16.535 ppb	11:19:45
2	Mn 257.610†	462.0	23.2	0.0229 ug/L	0.0229 ppb	11:21:02
2	Mo 202.031†	19.6	13.4	0.9784 ug/L	0.9784 ppb	11:21:02
2	Na 589.592 Radial†	-721.4	2.6	0.7590 ug/L	0.7590 ppb	11:19:24
2	Ni 231.604†	57.9	5.4	0.1366 ug/L	0.1366 ppb	11:21:02

2	P 214.914†	200.1	-2.8	-1.6265 ug/L	-1.6265 ppb	11:21:02
2	Pb 220.353†	-50.9	14.3	1.7804 ug/L	1.7804 ppb	11:21:02
2	S 181.975 Axial†	41.6	4.4	6.4181 ug/L	6.4181 ppb	11:21:02
2	Sb 206.836†	49.6	12.7	4.4358 ug/L	4.4358 ppb	11:21:02
2	Se 196.026†	-33.9	-13.1	-8.7383 ug/L	-8.7383 ppb	11:21:02
2	Si 251.611†	554.3	17.8	0.5583 ug/L	0.5583 ppb	11:21:02
2	Sn 189.927†	11.3	0.8	0.1538 ug/L	0.1538 ppb	11:21:02
2	Sr 421.552†	0.9	-35.8	-0.2374 ug/L	-0.2374 ppb	11:19:24
2	Ti 334.940†	-1347.0	-59.5	-0.0901 ug/L	-0.0901 ppb	11:20:42
2	Tl 190.801†	-32.2	-0.8	-0.2595 ug/L	-0.2595 ppb	11:21:02
2	U 409.014†	-2679.0	148.8	4.0237 ug/L	4.0237 ppb	11:20:42
2	V 292.402†	-1380.2	56.1	0.4166 ug/L	0.4166 ppb	11:20:42
2	Zn 213.857†	549.4	-10.7	-0.1021 ug/L	-0.1021 ppb	11:21:02
2	SiO2†	578.9	24.9	1.6858 ug/L	1.6858 ppb	11:21:37
3	Sc 361.383	904058.5	904058.5	100.44 %		11:21:07
3	Sc Radial	4220.4	4220.4	99.2 %		11:19:50
3	Y 371.029	765367.6	765367.6	100.38 %		11:21:07
3	Y RADIAL	4663.3	4663.3	99.39 %		11:19:50
3	Ag 328.068†	187.1	-43.1	-0.1882 ug/L	-0.1882 ppb	11:21:07
3	Al 396.153Radial†	-103.4	6.5	5.8961 ug/L	5.8961 ppb	11:20:10
3	As 188.979†	-18.2	2.4	1.0811 ug/L	1.0811 ppb	11:21:27
3	B 249.677†	-284.4	89.8	2.1369 ug/L	2.1369 ppb	11:21:27
3	Ba 233.527†	-4.4	4.8	0.0380 ug/L	0.0380 ppb	11:21:27
3	Be 313.107†	-3895.7	-25.2	-0.0093 ug/L	-0.0093 ppb	11:21:07
3	Ca 317.933Radial†	16.0	0.7	1.3994 ug/L	1.3994 ppb	11:20:10
3	Cd 226.502†	-182.4	1.7	0.0163 ug/L	0.0163 ppb	11:21:27
3	Co 228.616†	-69.0	-6.7	-0.1408 ug/L	-0.1408 ppb	11:21:27
3	Cr 267.716†	75.4	9.1	0.1043 ug/L	0.1043 ppb	11:21:27
3	Cu 324.752†	6061.1	-42.9	-0.1280 ug/L	-0.1280 ppb	11:21:07
3	Fe 238.204 Radial†	13.3	3.2	40.910 ug/L	40.910 ppb	11:20:10
3	K 766.490 Radial†	2578.2	41.7	7.7947 ug/L	7.7947 ppb	11:19:50
3	Mg 279.077 IEC†	3.3	0.5	24.901 ug/L	24.901 ppb	11:20:10
3	Mn 257.610†	464.7	25.8	0.0319 ug/L	0.0319 ppb	11:21:27
3	Mo 202.031†	11.9	5.8	0.4256 ug/L	0.4256 ppb	11:21:27
3	Na 589.592 Radial†	-716.9	17.8	5.1795 ug/L	5.1795 ppb	11:19:50
3	Ni 231.604†	62.5	9.9	0.2506 ug/L	0.2506 ppb	11:21:27
3	P 214.914†	194.8	-8.1	-4.9115 ug/L	-4.9115 ppb	11:21:27
3	Pb 220.353†	-50.8	14.5	1.7885 ug/L	1.7885 ppb	11:21:27
3	S 181.975 Axial†	34.1	-3.1	-4.5691 ug/L	-4.5691 ppb	11:21:27
3	Sb 206.836†	38.9	2.0	0.7331 ug/L	0.7331 ppb	11:21:27
3	Se 196.026†	-26.0	-5.2	-3.2987 ug/L	-3.2987 ppb	11:21:27
3	Si 251.611†	562.9	26.3	0.8384 ug/L	0.8384 ppb	11:21:27
3	Sn 189.927†	16.7	6.2	1.1179 ug/L	1.1179 ppb	11:21:27
3	Sr 421.552†	18.6	-18.1	-0.1197 ug/L	-0.1197 ppb	11:19:50
3	Ti 334.940†	-1264.0	23.4	0.0323 ug/L	0.0323 ppb	11:21:07
3	Tl 190.801†	-36.9	-5.6	-1.7884 ug/L	-1.7884 ppb	11:21:27
3	U 409.014†	-2729.9	98.4	2.6537 ug/L	2.6537 ppb	11:21:07
3	V 292.402†	-1467.1	-30.2	-0.2040 ug/L	-0.2040 ppb	11:21:07
3	Zn 213.857†	549.5	-10.6	-0.1140 ug/L	-0.1140 ppb	11:21:27
3	SiO2†	574.0	20.0	1.3601 ug/L	1.3601 ppb	11:21:42

## Mean Data: ICB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	902119.8	100.23 %		0.361			0.36%
Sc Radial	4223.8	99.3 %		1.55			1.56%
Y 371.029	763607.4	100.15 %		0.389			0.39%
Y RADIAL	4663.4	99.39 %		1.251			1.26%
Ag 328.068†	-4.8	-0.0217 ug/L		0.14709	-0.0217 ppb	0.14709	677.77%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	2.7	2.4549 ug/L		3.02892	2.4549 ppb	3.02892	123.38%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	1.3	0.5883 ug/L		3.13561	0.5883 ppb	3.13561	533.00%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	123.0	2.9348 ug/L		0.76352	2.9348 ppb	0.76352	26.02%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	5.2	0.0412 ug/L		0.06002	0.0412 ppb	0.06002	145.60%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	-16.8	-0.0063 ug/L		0.01296	-0.0063 ppb	0.01296	206.36%
QC value within limits for Be 313.107 Recovery = Not calculated							

Ca 317.933Radial†	1.2	2.3827 ug/L	1.02274	2.3827 ppb	1.02274	42.92%
QC value within limits for Ca 317.933Radial	Recovery = Not calculated					
Cd 226.502†	4.8	0.0553 ug/L	0.07141	0.0553 ppb	0.07141	129.03%
QC value within limits for Cd 226.502	Recovery = Not calculated					
Co 228.616†	-4.7	-0.0961 ug/L	0.08101	-0.0961 ppb	0.08101	84.29%
QC value within limits for Co 228.616	Recovery = Not calculated					
Cr 267.716†	9.0	0.1011 ug/L	0.01634	0.1011 ppb	0.01634	16.16%
QC value within limits for Cr 267.716	Recovery = Not calculated					
Cu 324.752†	-50.2	-0.1520 ug/L	0.07520	-0.1520 ppb	0.07520	49.49%
QC value within limits for Cu 324.752	Recovery = Not calculated					
Fe 238.204 Radial†	0.5	6.2197 ug/L	40.79766	6.2197 ppb	40.79766	655.94%
QC value within limits for Fe 238.204 Radial	Recovery = Not calculated					
K 766.490 Radial†	22.1	4.1411 ug/L	5.37404	4.1411 ppb	5.37404	129.77%
QC value within limits for K 766.490 Radial	Recovery = Not calculated					
Mg 279.077 IEC†	0.4	17.729 ug/L	31.3006	17.729 ppb	31.3006	176.55%
QC value within limits for Mg 279.077 IEC	Recovery = Not calculated					
Mn 257.610†	14.7	0.0163 ug/L	0.01966	0.0163 ppb	0.01966	120.22%
QC value within limits for Mn 257.610	Recovery = Not calculated					
Mo 202.031†	7.2	0.5288 ug/L	0.40785	0.5288 ppb	0.40785	77.12%
QC value within limits for Mo 202.031	Recovery = Not calculated					
Na 589.592 Radial†	9.3	2.7064 ug/L	2.25662	2.7064 ppb	2.25662	83.38%
QC value within limits for Na 589.592 Radial	Recovery = Not calculated					
Ni 231.604†	9.6	0.2440 ug/L	0.10428	0.2440 ppb	0.10428	42.74%
QC value within limits for Ni 231.604	Recovery = Not calculated					
P 214.914†	-5.6	-3.3543 ug/L	1.64915	-3.3543 ppb	1.64915	49.16%
QC value within limits for P 214.914	Recovery = Not calculated					
Pb 220.353†	11.7	1.4458 ug/L	0.58650	1.4458 ppb	0.58650	40.56%
QC value within limits for Pb 220.353	Recovery = Not calculated					
S 181.975 Axial†	-0.1	-0.1894 ug/L	5.82254	-0.1894 ppb	5.82254	>999.9%
QC value within limits for S 181.975 Axial	Recovery = Not calculated					
Sb 206.836†	8.6	3.0125 ug/L	1.99423	3.0125 ppb	1.99423	66.20%
QC value within limits for Sb 206.836	Recovery = Not calculated					
Se 196.026†	-6.1	-4.0036 ug/L	4.42456	-4.0036 ppb	4.42456	110.51%
QC value within limits for Se 196.026	Recovery = Not calculated					
Si 251.611†	21.1	0.6714 ug/L	0.14765	0.6714 ppb	0.14765	21.99%
QC value within limits for Si 251.611	Recovery = Not calculated					
Sn 189.927†	6.7	1.2104 ug/L	1.10580	1.2104 ppb	1.10580	91.36%
QC value within limits for Sn 189.927	Recovery = Not calculated					
Sr 421.552†	-12.5	-0.0829 ug/L	0.17585	-0.0829 ppb	0.17585	212.14%
QC value within limits for Sr 421.552	Recovery = Not calculated					
Ti 334.940†	-9.7	-0.0171 ug/L	0.06448	-0.0171 ppb	0.06448	376.88%
QC value within limits for Ti 334.940	Recovery = Not calculated					
Tl 190.801†	-0.2	-0.0725 ug/L	1.81664	-0.0725 ppb	1.81664	>999.9%
QC value within limits for Tl 190.801	Recovery = Not calculated					
U 409.014†	109.9	2.9684 ug/L	0.93841	2.9684 ppb	0.93841	31.61%
QC value within limits for U 409.014	Recovery = Not calculated					
V 292.402†	26.5	0.1967 ug/L	0.34755	0.1967 ppb	0.34755	176.71%
QC value within limits for V 292.402	Recovery = Not calculated					
Zn 213.857†	-5.4	-0.0560 ug/L	0.09042	-0.0560 ppb	0.09042	161.56%
QC value within limits for Zn 213.857	Recovery = Not calculated					
SiO2†	26.4	1.7966 ug/L	0.50122	1.7966 ppb	0.50122	27.90%
QC value within limits for SiO2	Recovery = Not calculated					
All analyte(s) passed QC.						

Sequence No.: 8

Sample ID: PQL

Analyst:

Logged In Analyst (Original) : Optima3

Initial Sample Wt:

Dilution:

Autosampler Location: 11

Date Collected: 2/23/2010 11:23:53

Data Type: Reprocessed on 2/23/2010 12:42:29

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: PQL

Rep#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc 361.383	922973.3	922973.3	102.55 %		11:27:04
1	Sc Radial	4322.8	4322.8	102 %		11:25:47
1	Y 371.029	779722.9	779722.9	102.27 %		11:27:04
1	Y RADIAL	4763.7	4763.7	101.5 %		11:25:47
1	Ag 328.068†	1453.4	1188.0	5.4609 ug/L	5.4609 ppb	11:27:09
1	Al 396.153Radial†	125.9	234.6	211.98 ug/L	211.98 ppb	11:26:07
1	As 188.979†	30.1	49.9	22.525 ug/L	22.525 ppb	11:27:29
1	B 249.677†	1648.1	1980.1	47.224 ug/L	47.224 ppb	11:27:09
1	Ba 233.527†	647.3	640.4	5.0166 ug/L	5.0166 ppb	11:27:29
1	Be 313.107†	9653.7	13267.4	4.9557 ug/L	4.9557 ppb	11:27:09
1	Ca 317.933Radial†	125.1	107.7	214.22 ug/L	214.22 ppb	11:26:07
1	Cd 226.502†	252.5	429.5	4.9884 ug/L	4.9884 ppb	11:27:29
1	Co 228.616†	185.3	242.6	5.0847 ug/L	5.0847 ppb	11:27:29
1	Cr 267.716†	507.4	428.8	4.8043 ug/L	4.8043 ppb	11:27:29
1	Cu 324.752†	9579.0	3264.1	9.7761 ug/L	9.7761 ppb	11:27:09
1	Fe 238.204 Radial†	19.2	8.7	112.26 ug/L	112.26 ppb	11:26:07
1	K 766.490 Radial†	3349.8	739.3	138.11 ug/L	138.11 ppb	11:25:47
1	Mg 279.077 IEC†	9.7	6.8	308.82 ug/L	308.82 ppb	11:26:07
1	Mn 257.610†	9868.6	9186.8	10.299 ug/L	10.299 ppb	11:27:09
1	Mo 202.031†	148.6	138.9	10.173 ug/L	10.173 ppb	11:27:29
1	Na 589.592 Radial†	338.7	1073.6	311.57 ug/L	311.57 ppb	11:25:47
1	Ni 231.604†	247.9	189.4	4.8115 ug/L	4.8115 ppb	11:27:29
1	P 214.914†	444.0	231.0	138.26 ug/L	138.26 ppb	11:27:29
1	Pb 220.353†	26.9	91.3	11.367 ug/L	11.367 ppb	11:27:29
1	S 181.975 Axial†	103.4	63.8	93.420 ug/L	93.420 ppb	11:27:29
1	Sb 206.836†	66.9	28.6	10.338 ug/L	10.338 ppb	11:27:29
1	Se 196.026†	24.4	44.5	29.701 ug/L	29.701 ppb	11:27:29
1	Si 251.611†	3544.7	2922.6	93.630 ug/L	93.630 ppb	11:27:29
1	Sn 189.927†	75.0	62.7	11.372 ug/L	11.372 ppb	11:27:29
1	Sr 421.552†	800.7	751.1	4.9765 ug/L	4.9765 ppb	11:25:47
1	Ti 334.940†	2047.7	3278.7	4.9354 ug/L	4.9354 ppb	11:27:09
1	Tl 190.801†	35.0	65.3	21.023 ug/L	21.023 ppb	11:27:29
1	U 409.014†	-712.1	2121.9	57.310 ug/L	57.310 ppb	11:27:04
1	V 292.402†	-726.9	721.6	5.2455 ug/L	5.2455 ppb	11:27:09
1	Zn 213.857†	1588.8	991.7	9.8898 ug/L	9.8898 ppb	11:27:29
1	SiO2†	3688.6	3045.5	208.98 ug/L	208.98 ppb	11:28:35
2	Sc 361.383	933203.4	933203.4	103.68 %		11:27:34
2	Sc Radial	4322.2	4322.2	102 %		11:26:12
2	Y 371.029	788115.9	788115.9	103.37 %		11:27:34
2	Y RADIAL	4800.4	4800.4	102.3 %		11:26:12
2	Ag 328.068†	1415.8	1136.2	5.2213 ug/L	5.2213 ppb	11:27:39
2	Al 396.153Radial†	126.2	235.0	212.35 ug/L	212.35 ppb	11:26:32
2	As 188.979†	39.5	58.7	26.489 ug/L	26.489 ppb	11:27:59
2	B 249.677†	1569.6	1886.8	44.997 ug/L	44.997 ppb	11:27:39
2	Ba 233.527†	653.2	639.2	5.0059 ug/L	5.0059 ppb	11:27:59
2	Be 313.107†	9455.0	12972.5	4.8454 ug/L	4.8454 ppb	11:27:39
2	Ca 317.933Radial†	125.4	108.0	214.79 ug/L	214.79 ppb	11:26:32
2	Cd 226.502†	241.1	415.8	4.8296 ug/L	4.8296 ppb	11:27:59
2	Co 228.616†	167.6	223.5	4.6839 ug/L	4.6839 ppb	11:27:59
2	Cr 267.716†	496.1	412.5	4.6211 ug/L	4.6211 ppb	11:27:59
2	Cu 324.752†	9405.2	2994.1	8.9659 ug/L	8.9659 ppb	11:27:39
2	Fe 238.204 Radial†	18.9	8.4	108.94 ug/L	108.94 ppb	11:26:32
2	K 766.490 Radial†	3419.9	808.9	151.12 ug/L	151.12 ppb	11:26:12
2	Mg 279.077 IEC†	6.5	3.6	163.44 ug/L	163.44 ppb	11:26:32
2	Mn 257.610†	9771.8	8987.9	10.081 ug/L	10.081 ppb	11:27:39
2	Mo 202.031†	137.6	126.7	9.2819 ug/L	9.2819 ppb	11:27:59
2	Na 589.592 Radial†	337.8	1072.8	311.32 ug/L	311.32 ppb	11:26:12
2	Ni 231.604†	273.2	211.2	5.3660 ug/L	5.3660 ppb	11:27:59



2	P 214.914†	449.8	231.8	138.93 ug/L	138.93 ppb	11:27:59
2	Pb 220.353†	23.5	87.7	10.914 ug/L	10.914 ppb	11:27:59
2	S 181.975 Axial†	98.4	57.9	84.762 ug/L	84.762 ppb	11:27:59
2	Sb 206.836†	57.8	19.1	6.9807 ug/L	6.9807 ppb	11:27:59
2	Se 196.026†	20.5	40.5	27.045 ug/L	27.045 ppb	11:27:59
2	Si 251.611†	3542.9	2882.9	92.369 ug/L	92.369 ppb	11:27:59
2	Sn 189.927†	63.6	50.9	9.2475 ug/L	9.2475 ppb	11:27:59
2	Sr 421.552†	818.0	768.3	5.0904 ug/L	5.0904 ppb	11:26:12
2	Ti 334.940†	1970.1	3181.9	4.8017 ug/L	4.8017 ppb	11:27:39
2	Tl 190.801†	34.1	64.1	20.626 ug/L	20.626 ppb	11:27:59
2	U 409.014†	-776.1	2067.7	55.847 ug/L	55.847 ppb	11:27:34
2	V 292.402†	-804.6	654.4	4.7619 ug/L	4.7619 ppb	11:27:39
2	Zn 213.857†	1588.0	973.9	9.7098 ug/L	9.7098 ppb	11:27:59
2	SiO2†	3728.2	3044.3	208.92 ug/L	208.92 ppb	11:28:40
3	Sc 361.383	926208.5	926208.5	102.90 %		11:28:05
3	Sc Radial	4317.9	4317.9	102 %		11:26:37
3	Y 371.029	782879.3	782879.3	102.68 %		11:28:05
3	Y RADIAL	4792.4	4792.4	102.1 %		11:26:37
3	Ag 328.068†	1301.0	1034.9	4.7638 ug/L	4.7638 ppb	11:28:10
3	Al 396.153Radial†	130.7	239.5	216.41 ug/L	216.41 ppb	11:26:57
3	As 188.979†	44.3	63.6	28.721 ug/L	28.721 ppb	11:28:30
3	B 249.677†	1632.2	1959.0	46.719 ug/L	46.719 ppb	11:28:10
3	Ba 233.527†	673.7	663.8	5.1998 ug/L	5.1998 ppb	11:28:30
3	Be 313.107†	9347.3	12936.7	4.8321 ug/L	4.8321 ppb	11:28:10
3	Ca 317.933Radial†	120.7	103.4	205.72 ug/L	205.72 ppb	11:26:57
3	Cd 226.502†	254.5	430.7	5.0002 ug/L	5.0002 ppb	11:28:30
3	Co 228.616†	181.4	238.2	4.9914 ug/L	4.9914 ppb	11:28:30
3	Cr 267.716†	524.2	443.5	4.9710 ug/L	4.9710 ppb	11:28:30
3	Cu 324.752†	9429.6	3086.3	9.2444 ug/L	9.2444 ppb	11:28:10
3	Fe 238.204 Radial†	19.9	9.4	121.79 ug/L	121.79 ppb	11:26:57
3	K 766.490 Radial†	3329.4	723.1	135.07 ug/L	135.07 ppb	11:26:37
3	Mg 279.077 IEC†	8.6	5.7	258.72 ug/L	258.72 ppb	11:26:57
3	Mn 257.610†	9661.4	8951.8	10.038 ug/L	10.038 ppb	11:28:10
3	Mo 202.031†	145.6	135.5	9.9248 ug/L	9.9248 ppb	11:28:30
3	Na 589.592 Radial†	360.5	1095.5	317.92 ug/L	317.92 ppb	11:26:37
3	Ni 231.604†	273.9	213.8	5.4315 ug/L	5.4315 ppb	11:28:30
3	P 214.914†	440.0	225.5	135.05 ug/L	135.05 ppb	11:28:30
3	Pb 220.353†	31.4	95.5	11.889 ug/L	11.889 ppb	11:28:30
3	S 181.975 Axial†	111.0	70.8	103.73 ug/L	103.73 ppb	11:28:30
3	Sb 206.836†	67.6	29.0	10.473 ug/L	10.473 ppb	11:28:30
3	Se 196.026†	28.1	48.0	32.065 ug/L	32.065 ppb	11:28:30
3	Si 251.611†	3569.4	2934.5	94.015 ug/L	94.015 ppb	11:28:30
3	Sn 189.927†	74.4	61.9	11.231 ug/L	11.231 ppb	11:28:30
3	Sr 421.552†	799.3	750.6	4.9735 ug/L	4.9735 ppb	11:26:37
3	Ti 334.940†	1944.4	3171.3	4.7774 ug/L	4.7774 ppb	11:28:10
3	Tl 190.801†	28.9	59.3	19.082 ug/L	19.082 ppb	11:28:30
3	U 409.014†	-839.3	2000.7	54.034 ug/L	54.034 ppb	11:28:05
3	V 292.402†	-720.6	730.2	5.2931 ug/L	5.2931 ppb	11:28:10
3	Zn 213.857†	1598.7	995.9	9.9275 ug/L	9.9275 ppb	11:28:30
3	SiO2†	3667.1	3012.1	206.68 ug/L	206.68 ppb	11:28:45

## Mean Data: PQL

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	927461.7	103.04 %		0.581			0.56%
Sc Radial	4321.0	102 %		0.1			0.06%
Y 371.029	783572.7	102.77 %		0.556			0.54%
Y RADIAL	4785.5	102.0 %		0.41			0.40%
Ag 328.068†	1119.7	5.1487 ug/L		0.35419	5.1487 ppb	0.35419	6.88%
QC value within limits for Ag 328.068 Recovery = 102.97%							
Al 396.153Radial†	236.4	213.58 ug/L		2.456	213.58 ppb	2.456	1.15%
QC value within limits for Al 396.153Radial Recovery = 106.79%							
As 188.979†	57.4	25.912 ug/L		3.1382	25.912 ppb	3.1382	12.11%
QC value within limits for As 188.979 Recovery = 86.37%							
B 249.677†	1942.0	46.314 ug/L		1.1674	46.314 ppb	1.1674	2.52%
QC value within limits for B 249.677 Recovery = 92.63%							
Ba 233.527†	647.8	5.0741 ug/L		0.10897	5.0741 ppb	0.10897	2.15%
QC value within limits for Ba 233.527 Recovery = 101.48%							
Be 313.107†	13058.9	4.8777 ug/L		0.06783	4.8777 ppb	0.06783	1.39%
QC value within limits for Be 313.107 Recovery = 97.55%							

Ca 317.933Radial†	106.3	211.58 ug/L	5.079	211.58 ppb	5.079	2.40%
QC value within limits for Ca 317.933Radial Recovery = 105.79%						
Cd 226.502†	425.3	4.9394 ug/L	0.09529	4.9394 ppb	0.09529	1.93%
QC value within limits for Cd 226.502 Recovery = 98.79%						
Co 228.616†	234.8	4.9200 ug/L	0.20971	4.9200 ppb	0.20971	4.26%
QC value within limits for Co 228.616 Recovery = 98.40%						
Cr 267.716†	428.2	4.7988 ug/L	0.17504	4.7988 ppb	0.17504	3.65%
QC value within limits for Cr 267.716 Recovery = 95.98%						
Cu 324.752†	3114.8	9.3288 ug/L	0.41167	9.3288 ppb	0.41167	4.41%
QC value within limits for Cu 324.752 Recovery = 93.29%						
Fe 238.204 Radial†	8.9	114.33 ug/L	6.666	114.33 ppb	6.666	5.83%
QC value within limits for Fe 238.204 Radial Recovery = 114.33%						
K 766.490 Radial†	757.1	141.43 ug/L	8.529	141.43 ppb	8.529	6.03%
QC value within limits for K 766.490 Radial Recovery = 94.29%						
Mg 279.077 IEC†	5.4	243.66 ug/L	73.846	243.66 ppb	73.846	30.31%
QC value within limits for Mg 279.077 IEC Recovery = 81.22%						
Mn 257.610†	9042.2	10.139 ug/L	0.1396	10.139 ppb	0.1396	1.38%
QC value within limits for Mn 257.610 Recovery = 101.39%						
Mo 202.031†	133.7	9.7932 ug/L	0.45986	9.7932 ppb	0.45986	4.70%
QC value within limits for Mo 202.031 Recovery = 97.93%						
Na 589.592 Radial†	1080.6	313.61 ug/L	3.742	313.61 ppb	3.742	1.19%
QC value within limits for Na 589.592 Radial Recovery = 104.54%						
Ni 231.604†	204.8	5.2030 ug/L	0.34064	5.2030 ppb	0.34064	6.55%
QC value within limits for Ni 231.604 Recovery = 104.06%						
P 214.914†	229.4	137.42 ug/L	2.075	137.42 ppb	2.075	1.51%
QC value within limits for P 214.914 Recovery = 91.61%						
Pb 220.353†	91.5	11.390 ug/L	0.4877	11.390 ppb	0.4877	4.28%
QC value within limits for Pb 220.353 Recovery = 113.90%						
S 181.975 Axial†	64.2	93.970 ug/L	9.4951	93.970 ppb	9.4951	10.10%
QC value within limits for S 181.975 Axial Recovery = 93.97%						
Sb 206.836†	25.5	9.2640 ug/L	1.97853	9.2640 ppb	1.97853	21.36%
QC value within limits for Sb 206.836 Recovery = 92.64%						
Se 196.026†	44.3	29.604 ug/L	2.5114	29.604 ppb	2.5114	8.48%
QC value within limits for Se 196.026 Recovery = 98.68%						
Si 251.611†	2913.3	93.338 ug/L	0.8609	93.338 ppb	0.8609	0.92%
QC value within limits for Si 251.611 Recovery = 93.34%						
Sn 189.927†	58.5	10.617 ug/L	1.1879	10.617 ppb	1.1879	11.19%
QC value within limits for Sn 189.927 Recovery = 106.17%						
Sr 421.552†	756.7	5.0135 ug/L	0.06663	5.0135 ppb	0.06663	1.33%
QC value within limits for Sr 421.552 Recovery = 100.27%						
Ti 334.940†	3210.6	4.8381 ug/L	0.08508	4.8381 ppb	0.08508	1.76%
QC value within limits for Ti 334.940 Recovery = 96.76%						
Tl 190.801†	62.9	20.244 ug/L	1.0250	20.244 ppb	1.0250	5.06%
QC value within limits for Tl 190.801 Recovery = 101.22%						
U 409.014†	2063.4	55.731 ug/L	1.6413	55.731 ppb	1.6413	2.94%
QC value within limits for U 409.014 Recovery = 111.46%						
V 292.402†	702.1	5.1002 ug/L	0.29389	5.1002 ppb	0.29389	5.76%
QC value within limits for V 292.402 Recovery = 102.00%						
Zn 213.857†	987.2	9.8424 ug/L	0.11634	9.8424 ppb	0.11634	1.18%
QC value within limits for Zn 213.857 Recovery = 98.42%						
SiO2†	3034.0	208.19 ug/L	1.307	208.19 ppb	1.307	0.63%
QC value within limits for SiO2 Recovery = 97.74%						
All analyte(s) passed QC.						

Sequence No.: 9

Sample ID: ICSA

Analyst:

Logged In Analyst (Original) : Optima3

Initial Sample Wt:

Dilution:

Autosampler Location: 13

Date Collected: 2/23/2010 11:30:57

Data Type: Reprocessed on 2/23/2010 12:42:31

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 361.383	763627.9	763627.9	84.842 %		11:33:22
1	Sc Radial	3775.6	3775.6	88.8 %		11:32:55
1	Y 371.029	630188.0	630188.0	82.654 %		11:33:22
1	Y RADIAL	4144.2	4144.2	88.32 %		11:32:55
1	Ag 328.068†	-9724.8	-11691.7	-1.0139 ug/L	-1.0139 ppb	11:33:22
1	Al 396.153Radial†	502912.8	566680.5	513210 ug/L	513210 ppb	11:32:50
1	As 188.979†	-86.5	-81.4	8.2300 ug/L	8.2300 ppb	11:33:42
1	B 249.677†	488.3	948.5	-8.6119 ug/L	-8.6119 ppb	11:33:22
1	Ba 233.527†	-469.3	-544.0	1.6452 ug/L	1.6452 ppb	11:33:42
1	Be 313.107†	-4182.4	-1076.4	-0.4498 ug/L	-0.4498 ppb	11:33:22
1	Ca 317.933Radial†	213503.6	240512.7	478520 ug/L	478520 ppb	11:32:50
1	Cd 226.502†	1212.0	1611.9	-1.1550 ug/L	-1.1550 ppb	11:33:42
1	Co 228.616†	-40.1	14.6	-2.4717 ug/L	-2.4717 ppb	11:33:42
1	Cr 267.716†	-1105.0	-1368.4	2.9607 ug/L	2.9607 ppb	11:33:42
1	Cu 324.752†	3516.0	-1933.0	4.3578 ug/L	4.3578 ppb	11:33:22
1	Fe 238.204 Radial†	13266.2	14935.3	192420 ug/L	192420 ppb	11:32:55
1	K 766.490 Radial†	2442.2	194.5	-123.67 ug/L	-123.67 ppb	11:32:55
1	Mg 279.077 IEC†	9839.2	11081.9	503460 ug/L	503460 ppb	11:32:55
1	Mn 257.610†	1572.0	1416.1	-0.0012 ug/L	-0.0012 ppb	11:33:22
1	Mo 202.031†	-233.2	-281.0	0.0665 ug/L	0.0665 ppb	11:33:42
1	Na 589.592 Radial†	-517.4	157.5	45.707 ug/L	45.707 ppb	11:32:55
1	Ni 231.604†	177.3	156.6	3.9813 ug/L	3.9813 ppb	11:33:42
1	P 214.914†	156.0	-18.2	-37.622 ug/L	-37.622 ppb	11:33:42
1	Pb 220.353†	-775.5	-849.0	-12.456 ug/L	-12.456 ppb	11:33:42
1	S 181.975 Axial†	55.7	28.7	-54.210 ug/L	-54.210 ppb	11:33:42
1	Sb 206.836†	59.4	33.3	-5.8554 ug/L	-5.8554 ppb	11:33:42
1	Se 196.026†	-795.1	-916.5	-9.1005 ug/L	-9.1005 ppb	11:33:42
1	Si 251.611†	491.6	45.3	1.7051 ug/L	1.7051 ppb	11:33:42
1	Sn 189.927†	-349.3	-422.2	-2.4140 ug/L	-2.4140 ppb	11:33:42
1	Sr 421.552†	533.5	564.2	0.1664 ug/L	0.1664 ppb	11:32:55
1	Ti 334.940†	-13119.2	-14181.3	1.5840 ug/L	1.5840 ppb	11:33:22
1	Tl 190.801†	-69.5	-50.7	-16.486 ug/L	-16.486 ppb	11:33:42
1	U 409.014†	-1118.9	1497.4	18.560 ug/L	18.560 ppb	11:33:22
1	V 292.402†	1019.1	2631.6	-0.2116 ug/L	-0.2116 ppb	11:33:42
1	Zn 213.857†	2743.4	2675.9	-1.9624 ug/L	-1.9624 ppb	11:33:42
1	SiO2†	494.5	31.3	2.7128 ug/L	2.7128 ppb	11:34:38
2	Sc 361.383	766805.1	766805.1	85.195 %		11:33:48
2	Sc Radial	3784.0	3784.0	89.0 %		11:33:05
2	Y 371.029	633215.5	633215.5	83.051 %		11:33:48
2	Y RADIAL	4161.1	4161.1	88.68 %		11:33:05
2	Ag 328.068†	-9883.4	-11830.3	-1.8999 ug/L	-1.8999 ppb	11:33:48
2	Al 396.153Radial†	526488.4	591936.5	536090 ug/L	536090 ppb	11:33:00
2	As 188.979†	-85.1	-79.3	9.1745 ug/L	9.1745 ppb	11:34:08
2	B 249.677†	408.9	852.9	-10.893 ug/L	-10.893 ppb	11:33:48
2	Ba 233.527†	-459.7	-530.5	1.7501 ug/L	1.7501 ppb	11:34:08
2	Be 313.107†	-4145.9	-1013.1	-0.4277 ug/L	-0.4277 ppb	11:33:48
2	Ca 317.933Radial†	221980.2	249512.5	496430 ug/L	496430 ppb	11:33:00
2	Cd 226.502†	1214.9	1609.3	-1.1834 ug/L	-1.1834 ppb	11:34:08
2	Co 228.616†	-4.0	57.2	-1.5756 ug/L	-1.5756 ppb	11:34:08
2	Cr 267.716†	-1118.5	-1378.9	2.8416 ug/L	2.8416 ppb	11:34:08
2	Cu 324.752†	3482.9	-1989.0	4.1887 ug/L	4.1887 ppb	11:33:48
2	Fe 238.204 Radial†	13294.3	14933.9	192400 ug/L	192400 ppb	11:33:05
2	K 766.490 Radial†	2229.8	-50.3	-175.47 ug/L	-175.47 ppb	11:33:05
2	Mg 279.077 IEC†	9880.3	11103.6	504450 ug/L	504450 ppb	11:33:05
2	Mn 257.610†	1564.6	1399.7	-0.0618 ug/L	-0.0618 ppb	11:33:48
2	Mo 202.031†	-218.3	-262.3	1.6455 ug/L	1.6455 ppb	11:34:08
2	Na 589.592 Radial†	-506.6	170.9	49.583 ug/L	49.583 ppb	11:33:05
2	Ni 231.604†	169.5	146.6	3.7259 ug/L	3.7259 ppb	11:34:08

2	P 214.914†	123.1	-57.6	-55.735 ug/L	-55.735 ppb	11:34:08
2	Pb 220.353†	-793.6	-866.5	-9.6052 ug/L	-9.6052 ppb	11:34:08
2	S 181.975 Axial†	54.5	26.9	-61.009 ug/L	-61.009 ppb	11:34:08
2	Sb 206.836†	89.7	68.6	5.8926 ug/L	5.8926 ppb	11:34:08
2	Se 196.026†	-793.6	-910.8	-5.6429 ug/L	-5.6429 ppb	11:34:08
2	Si 251.611†	481.3	30.7	1.2226 ug/L	1.2226 ppb	11:34:08
2	Sn 189.927†	-338.1	-407.2	3.4756 ug/L	3.4756 ppb	11:34:08
2	Sr 421.552†	549.6	581.0	0.1442 ug/L	0.1442 ppb	11:33:05
2	Ti 334.940†	-13535.0	-14605.4	3.2635 ug/L	3.2635 ppb	11:33:48
2	Tl 190.801†	-80.0	-62.7	-20.341 ug/L	-20.341 ppb	11:34:08
2	U 409.014†	-1126.7	1493.7	18.462 ug/L	18.462 ppb	11:33:48
2	V 292.402†	1012.2	2618.6	-0.2603 ug/L	-0.2603 ppb	11:34:08
2	Zn 213.857†	2748.9	2668.9	-2.0281 ug/L	-2.0281 ppb	11:34:08
2	SiO2†	531.9	72.8	5.5256 ug/L	5.5256 ppb	11:34:43
3	Sc 361.383	777612.4	777612.4	86.395 %		11:34:13
3	Sc Radial	3729.4	3729.4	87.7 %		11:33:15
3	Y 371.029	641522.6	641522.6	84.140 %		11:34:13
3	Y RADIAL	4091.3	4091.3	87.20 %		11:33:15
3	Ag 328.068†	-9943.2	-11738.2	-1.4321 ug/L	-1.4321 ppb	11:34:13
3	Al 396.153Radial†	512772.0	584947.5	529760 ug/L	529760 ppb	11:33:10
3	As 188.979†	-79.6	-71.6	12.674 ug/L	12.674 ppb	11:34:33
3	B 249.677†	377.0	809.3	-11.938 ug/L	-11.938 ppb	11:34:13
3	Ba 233.527†	-502.8	-572.8	1.4193 ug/L	1.4193 ppb	11:34:33
3	Be 313.107†	-4286.7	-1108.5	-0.4623 ug/L	-0.4623 ppb	11:34:13
3	Ca 317.933Radial†	217262.8	247781.4	492980 ug/L	492980 ppb	11:33:10
3	Cd 226.502†	1230.6	1607.7	-1.2028 ug/L	-1.2028 ppb	11:34:33
3	Co 228.616†	-14.0	45.7	-1.8191 ug/L	-1.8191 ppb	11:34:33
3	Cr 267.716†	-1093.0	-1331.1	3.3754 ug/L	3.3754 ppb	11:34:33
3	Cu 324.752†	3434.9	-2101.3	3.8465 ug/L	3.8465 ppb	11:34:13
3	Fe 238.204 Radial†	13104.5	14936.1	192430 ug/L	192430 ppb	11:33:15
3	K 766.490 Radial†	2293.0	58.5	-153.96 ug/L	-153.96 ppb	11:33:15
3	Mg 279.077 IEC†	9773.7	11144.5	506300 ug/L	506300 ppb	11:33:15
3	Mn 257.610†	1638.3	1459.4	-0.0680 ug/L	-0.0680 ppb	11:34:13
3	Mo 202.031†	-226.6	-268.3	1.1679 ug/L	1.1679 ppb	11:34:33
3	Na 589.592 Radial†	-523.3	143.5	41.645 ug/L	41.645 ppb	11:33:15
3	Ni 231.604†	174.2	149.3	3.7952 ug/L	3.7952 ppb	11:34:33
3	P 214.914†	173.1	-1.7	-23.394 ug/L	-23.394 ppb	11:34:33
3	Pb 220.353†	-749.0	-801.9	-2.9778 ug/L	-2.9778 ppb	11:34:33
3	S 181.975 Axial†	55.4	27.0	-59.666 ug/L	-59.666 ppb	11:34:33
3	Sb 206.836†	62.6	35.8	-5.4000 ug/L	-5.4000 ppb	11:34:33
3	Se 196.026†	-778.3	-880.1	14.742 ug/L	14.742 ppb	11:34:33
3	Si 251.611†	443.2	-21.2	-0.4387 ug/L	-0.4387 ppb	11:34:33
3	Sn 189.927†	-347.9	-413.1	1.7909 ug/L	1.7909 ppb	11:34:33
3	Sr 421.552†	537.4	576.1	0.1371 ug/L	0.1371 ppb	11:33:15
3	Ti 334.940†	-13489.1	-14331.4	3.0589 ug/L	3.0589 ppb	11:34:13
3	Tl 190.801†	-65.6	-44.7	-14.561 ug/L	-14.561 ppb	11:34:33
3	U 409.014†	-778.8	1914.8	29.837 ug/L	29.837 ppb	11:34:13
3	V 292.402†	981.0	2565.9	-0.5791 ug/L	-0.5791 ppb	11:34:33
3	Zn 213.857†	2711.5	2580.8	-2.9159 ug/L	-2.9159 ppb	11:34:33
3	SiO2†	500.1	27.3	2.4132 ug/L	2.4132 ppb	11:34:49

## Mean Data: ICSA

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	769348.5	85.477 %		0.8145			0.95%
Sc Radial	3763.0	88.5 %		0.69			0.78%
Y 371.029	634975.4	83.282 %		0.7697			0.92%
Y RADIAL	4132.2	88.07 %		0.775			0.88%
Ag 328.068†	-11753.4	-1.4486 ug/L		0.44323	-1.4486 ppb	0.44323	30.60%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	581188.1	526350 ug/L		11810.4	526350 ppb	11810.4	2.24%
QC value within limits for Al 396.153Radial Recovery = 105.27%							
As 188.979†	-77.4	10.026 ug/L		2.3414	10.026 ppb	2.3414	23.35%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	870.2	-10.481 ug/L		1.7009	-10.481 ppb	1.7009	16.23%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	-549.1	1.6049 ug/L		0.16904	1.6049 ppb	0.16904	10.53%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	-1066.0	-0.4466 ug/L		0.01751	-0.4466 ppb	0.01751	3.92%
QC value within limits for Be 313.107 Recovery = Not calculated							

Ca 317.933Radial†	245935.5	489310 ug/L	9501.2	489310 ppb	9501.2	1.94%
QC value within limits for Ca 317.933Radial Recovery = 97.86%						
Cd 226.502†	1609.7	-1.1804 ug/L	0.02403	-1.1804 ppb	0.02403	2.04%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	39.2	-1.9554 ug/L	0.46334	-1.9554 ppb	0.46334	23.69%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-1359.5	3.0592 ug/L	0.28020	3.0592 ppb	0.28020	9.16%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-2007.7	4.1310 ug/L	0.26047	4.1310 ppb	0.26047	6.31%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	14935.1	192410 ug/L	14.2	192410 ppb	14.2	0.01%
QC value within limits for Fe 238.204 Radial Recovery = 96.21%						
K 766.490 Radial†	67.6	-151.03 ug/L	26.021	-151.03 ppb	26.021	17.23%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	11110.0	504740 ug/L	1446.4	504740 ppb	1446.4	0.29%
QC value within limits for Mg 279.077 IEC Recovery = 100.95%						
Mn 257.610†	1425.1	-0.0436 ug/L	0.03692	-0.0436 ppb	0.03692	84.59%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	-270.5	0.9599 ug/L	0.80980	0.9599 ppb	0.80980	84.36%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	157.3	45.645 ug/L	3.9694	45.645 ppb	3.9694	8.70%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	150.9	3.8341 ug/L	0.13208	3.8341 ppb	0.13208	3.44%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	-25.8	-38.917 ug/L	16.2089	-38.917 ppb	16.2089	41.65%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	-839.1	-8.3463 ug/L	4.86289	-8.3463 ppb	4.86289	58.26%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	27.5	-58.295 ug/L	3.6010	-58.295 ppb	3.6010	6.18%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	45.9	-1.7876 ug/L	6.65514	-1.7876 ppb	6.65514	372.29%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-902.5	-0.0003 ug/L	12.88414	-0.0003 ppb	12.88414	>999.9%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	18.3	0.8297 ug/L	1.12464	0.8297 ppb	1.12464	135.55%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	-414.2	0.9508 ug/L	3.03333	0.9508 ppb	3.03333	319.03%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	573.8	0.1493 ug/L	0.01528	0.1493 ppb	0.01528	10.24%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	-14372.7	2.6355 ug/L	0.91630	2.6355 ppb	0.91630	34.77%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	-52.7	-17.129 ug/L	2.9433	-17.129 ppb	2.9433	17.18%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	1635.3	22.286 ug/L	6.5391	22.286 ppb	6.5391	29.34%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	2605.4	-0.3503 ug/L	0.19959	-0.3503 ppb	0.19959	56.97%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	2641.9	-2.3021 ug/L	0.53253	-2.3021 ppb	0.53253	23.13%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	43.8	3.5505 ug/L	1.71704	3.5505 ppb	1.71704	48.36%
QC value within limits for SiO2 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 10

Sample ID: ICSAB

Analyst:

Logged In Analyst (Original) : Optima3

Initial Sample Wt:

Dilution:

Autosampler Location: 14

Date Collected: 2/23/2010 11:37:00

Data Type: Reprocessed on 2/23/2010 12:42:32

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 361.383	782635.5	782635.5	86.953 %		11:40:11
1	Sc Radial	3748.2	3748.2	88.1 %		11:39:13
1	Y 371.029	645003.9	645003.9	84.597 %		11:40:11
1	Y RADIAL	4101.6	4101.6	87.42 %		11:39:13
1	Ag 328.068†	41713.3	47742.7	273.58 ug/L	273.58 ppb	11:40:11
1	Al 396.153Radial†	511782.3	580893.5	526060 ug/L	526060 ppb	11:38:53
1	As 188.979†	923.2	1082.2	536.10 ug/L	536.10 ppb	11:40:31
1	B 249.677†	19378.5	22659.1	508.17 ug/L	508.17 ppb	11:40:11
1	Ba 233.527†	54501.7	62688.3	496.68 ug/L	496.68 ppb	11:40:11
1	Be 313.107†	568498.9	657650.5	246.18 ug/L	246.18 ppb	11:40:11
1	Ca 317.933Radial†	217200.3	246468.5	490370 ug/L	490370 ppb	11:38:53
1	Cd 226.502†	35640.1	41170.9	458.33 ug/L	458.33 ppb	11:40:31
1	Co 228.616†	18276.1	21080.2	438.06 ug/L	438.06 ppb	11:40:31
1	Cr 267.716†	36394.3	41789.0	487.58 ug/L	487.58 ppb	11:40:11
1	Cu 324.752†	162671.6	181002.0	553.45 ug/L	553.45 ppb	11:40:11
1	Fe 238.204 Radial†	13209.2	14979.9	193000 ug/L	193000 ppb	11:39:13
1	K 766.490 Radial†	29389.4	30795.0	5594.5 ug/L	5594.5 ppb	11:38:53
1	Mg 279.077 IEC†	9895.3	11226.6	510040 ug/L	510040 ppb	11:39:13
1	Mn 257.610†	372959.1	428481.5	478.61 ug/L	478.61 ppb	11:40:11
1	Mo 202.031†	5600.4	6434.6	491.72 ug/L	491.72 ppb	11:40:31
1	Na 589.592 Radial†	15895.5	18778.9	5449.7 ug/L	5449.7 ppb	11:38:53
1	Ni 231.604†	15270.8	17509.8	444.80 ug/L	444.80 ppb	11:40:31
1	P 214.914†	3801.2	4169.5	2401.7 ug/L	2401.7 ppb	11:40:31
1	Pb 220.353†	2491.3	2930.2	459.50 ug/L	459.50 ppb	11:40:31
1	S 181.975 Axial†	1640.0	1849.1	2610.2 ug/L	2610.2 ppb	11:40:31
1	Sb 206.836†	1420.9	1597.4	556.87 ug/L	556.87 ppb	11:40:31
1	Se 196.026†	2575.5	2982.6	2564.8 ug/L	2564.8 ppb	11:40:31
1	Si 251.611†	143064.9	163996.4	5255.2 ug/L	5255.2 ppb	11:40:11
1	Sn 189.927†	2018.9	2311.4	494.19 ug/L	494.19 ppb	11:40:31
1	Sr 421.552†	68506.5	77706.0	511.36 ug/L	511.36 ppb	11:38:53
1	Ti 334.940†	276245.7	318975.7	506.12 ug/L	506.12 ppb	11:40:11
1	Tl 190.801†	1171.5	1378.5	445.75 ug/L	445.75 ppb	11:40:31
1	U 409.014†	14737.5	19765.0	511.01 ug/L	511.01 ppb	11:40:11
1	V 292.402†	64203.3	75266.9	511.29 ug/L	511.29 ppb	11:40:11
1	Zn 213.857†	45981.3	52322.7	492.56 ug/L	492.56 ppb	11:40:11
1	SiO2†	144005.6	165060.9	11328 ug/L	11328 ppb	11:41:28
2	Sc 361.383	779419.6	779419.6	86.596 %		11:40:37
2	Sc Radial	3738.9	3738.9	87.9 %		11:39:38
2	Y 371.029	642042.6	642042.6	84.209 %		11:40:37
2	Y RADIAL	4114.5	4114.5	87.69 %		11:39:38
2	Ag 328.068†	41430.5	47614.0	273.00 ug/L	273.00 ppb	11:40:37
2	Al 396.153Radial†	523589.9	595772.1	539540 ug/L	539540 ppb	11:39:18
2	As 188.979†	907.0	1067.9	529.75 ug/L	529.75 ppb	11:40:57
2	B 249.677†	19317.5	22680.5	508.60 ug/L	508.60 ppb	11:40:37
2	Ba 233.527†	54077.6	62457.3	494.89 ug/L	494.89 ppb	11:40:37
2	Be 313.107†	564801.5	656078.4	245.60 ug/L	245.60 ppb	11:40:37
2	Ca 317.933Radial†	221232.9	251669.8	500720 ug/L	500720 ppb	11:39:18
2	Cd 226.502†	35442.0	41111.2	457.59 ug/L	457.59 ppb	11:40:57
2	Co 228.616†	18242.3	21127.9	439.05 ug/L	439.05 ppb	11:40:57
2	Cr 267.716†	36138.2	41665.9	486.25 ug/L	486.25 ppb	11:40:37
2	Cu 324.752†	161547.2	180475.4	551.90 ug/L	551.90 ppb	11:40:37
2	Fe 238.204 Radial†	13209.2	15017.2	193490 ug/L	193490 ppb	11:39:38
2	K 766.490 Radial†	29794.6	31339.0	5692.7 ug/L	5692.7 ppb	11:39:18
2	Mg 279.077 IEC†	9885.3	11243.2	510790 ug/L	510790 ppb	11:39:38
2	Mn 257.610†	370741.8	427690.8	477.74 ug/L	477.74 ppb	11:40:37
2	Mo 202.031†	5581.6	6439.4	492.23 ug/L	492.23 ppb	11:40:57
2	Na 589.592 Radial†	16258.2	19236.5	5582.5 ug/L	5582.5 ppb	11:39:18
2	Ni 231.604†	15158.2	17452.2	443.33 ug/L	443.33 ppb	11:40:57

2	P 214.914†	3805.2	4192.2	2418.7 ug/L	2418.7 ppb	11:40:57
2	Pb 220.353†	2484.0	2933.6	462.82 ug/L	462.82 ppb	11:40:57
2	S 181.975 Axial†	1619.0	1832.6	2583.6 ug/L	2583.6 ppb	11:40:57
2	Sb 206.836†	1407.5	1588.7	553.46 ug/L	553.46 ppb	11:40:57
2	Se 196.026†	2567.2	2985.3	2568.0 ug/L	2568.0 ppb	11:40:57
2	Si 251.611†	142192.6	163668.0	5244.6 ug/L	5244.6 ppb	11:40:37
2	Sn 189.927†	2006.0	2306.1	495.05 ug/L	495.05 ppb	11:40:57
2	Sr 421.552†	70036.6	79640.3	524.11 ug/L	524.11 ppb	11:39:18
2	Ti 334.940†	274616.0	318404.6	506.59 ug/L	506.59 ppb	11:40:37
2	Tl 190.801†	1183.2	1397.6	451.86 ug/L	451.86 ppb	11:40:57
2	U 409.014†	14385.6	19428.5	501.87 ug/L	501.87 ppb	11:40:37
2	V 292.402†	63814.1	75122.1	510.21 ug/L	510.21 ppb	11:40:37
2	Zn 213.857†	45791.8	52322.0	492.50 ug/L	492.50 ppb	11:40:37
2	SiO2†	144512.2	166329.2	11415 ug/L	11415 ppb	11:41:34
3	Sc 361.383	779540.3	779540.3	86.610 %		11:41:03
3	Sc Radial	3761.9	3761.9	88.4 %		11:40:03
3	Y 371.029	641710.1	641710.1	84.165 %		11:41:03
3	Y RADIAL	4139.4	4139.4	88.22 %		11:40:03
3	Ag 328.068†	41477.8	47661.3	272.99 ug/L	272.99 ppb	11:41:03
3	Al 396.153Radial†	515559.0	583055.8	528020 ug/L	528020 ppb	11:39:43
3	As 188.979†	916.4	1078.6	534.28 ug/L	534.28 ppb	11:41:23
3	B 249.677†	19308.4	22666.6	508.46 ug/L	508.46 ppb	11:41:03
3	Ba 233.527†	54170.4	62554.7	495.62 ug/L	495.62 ppb	11:41:03
3	Be 313.107†	565647.8	656954.5	245.93 ug/L	245.93 ppb	11:41:03
3	Ca 317.933Radial†	217603.9	246030.3	489500 ug/L	489500 ppb	11:39:43
3	Cd 226.502†	35542.3	41220.7	458.99 ug/L	458.99 ppb	11:41:23
3	Co 228.616†	18276.0	21163.5	439.82 ug/L	439.82 ppb	11:41:23
3	Cr 267.716†	36260.8	41801.0	487.65 ug/L	487.65 ppb	11:41:03
3	Cu 324.752†	162319.4	181338.1	554.42 ug/L	554.42 ppb	11:41:03
3	Fe 238.204 Radial†	13206.1	14922.1	192260 ug/L	192260 ppb	11:40:03
3	K 766.490 Radial†	29372.8	30655.2	5568.6 ug/L	5568.6 ppb	11:39:43
3	Mg 279.077 IEC†	9893.3	11183.6	508090 ug/L	508090 ppb	11:40:03
3	Mn 257.610†	371976.1	429049.6	479.25 ug/L	479.25 ppb	11:41:03
3	Mo 202.031†	5631.8	6496.5	496.18 ug/L	496.18 ppb	11:41:23
3	Na 589.592 Radial†	15885.8	18702.5	5427.5 ug/L	5427.5 ppb	11:39:43
3	Ni 231.604†	15201.5	17499.4	444.53 ug/L	444.53 ppb	11:41:23
3	P 214.914†	3825.1	4214.4	2429.9 ug/L	2429.9 ppb	11:41:23
3	Pb 220.353†	2511.0	2964.3	464.21 ug/L	464.21 ppb	11:41:23
3	S 181.975 Axial†	1628.6	1843.3	2601.5 ug/L	2601.5 ppb	11:41:23
3	Sb 206.836†	1404.6	1585.1	552.64 ug/L	552.64 ppb	11:41:23
3	Se 196.026†	2572.2	2990.5	2567.8 ug/L	2567.8 ppb	11:41:23
3	Si 251.611†	142651.3	164172.1	5260.8 ug/L	5260.8 ppb	11:41:03
3	Sn 189.927†	2019.9	2321.8	495.96 ug/L	495.96 ppb	11:41:23
3	Sr 421.552†	68790.1	77744.5	511.62 ug/L	511.62 ppb	11:39:43
3	Ti 334.940†	275594.2	319484.9	506.93 ug/L	506.93 ppb	11:41:03
3	Tl 190.801†	1157.1	1367.2	442.12 ug/L	442.12 ppb	11:41:23
3	U 409.014†	14674.5	19759.6	510.95 ug/L	510.95 ppb	11:41:03
3	V 292.402†	64018.2	75346.3	511.97 ug/L	511.97 ppb	11:41:03
3	Zn 213.857†	45815.0	52340.6	492.86 ug/L	492.86 ppb	11:41:03
3	SiO2†	141937.2	163330.3	11209 ug/L	11209 ppb	11:41:39

## Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	780531.8	86.720 %		0.2025			0.23%
Sc Radial	3749.6	88.2 %		0.27			0.31%
Y 371.029	642918.9	84.324 %		0.2378			0.28%
Y RADIAL	4118.5	87.78 %		0.410			0.47%
Ag 328.068†	47672.7	273.19 ug/L		0.337	273.19 ppb	0.337	0.12%
QC value within limits for Ag 328.068 Recovery = 109.28%							
Al 396.153Radial†	586573.8	531200 ug/L		7280.5	531200 ppb	7280.5	1.37%
QC value within limits for Al 396.153Radial Recovery = 106.24%							
As 188.979†	1076.3	533.38 ug/L		3.274	533.38 ppb	3.274	0.61%
QC value within limits for As 188.979 Recovery = 106.68%							
B 249.677†	22668.7	508.41 ug/L		0.220	508.41 ppb	0.220	0.04%
QC value within limits for B 249.677 Recovery = 101.68%							
Ba 233.527†	62566.8	495.73 ug/L		0.901	495.73 ppb	0.901	0.18%
QC value within limits for Ba 233.527 Recovery = 99.15%							
Be 313.107†	656894.5	245.90 ug/L		0.295	245.90 ppb	0.295	0.12%
QC value within limits for Be 313.107 Recovery = 98.36%							

Ca 317.933 Radial†	248056.2	493530 ug/L	6241.6	493530 ppb	6241.6	1.26%
QC value within limits for Ca 317.933 Radial Recovery = 98.71%						
Cd 226.502†	41167.6	458.30 ug/L	0.701	458.30 ppb	0.701	0.15%
QC value within limits for Cd 226.502 Recovery = 91.66%						
Co 228.616†	21123.9	438.98 ug/L	0.883	438.98 ppb	0.883	0.20%
QC value within limits for Co 228.616 Recovery = 87.80%						
Cr 267.716†	41751.9	487.16 ug/L	0.789	487.16 ppb	0.789	0.16%
QC value within limits for Cr 267.716 Recovery = 97.43%						
Cu 324.752†	180938.5	553.26 ug/L	1.271	553.26 ppb	1.271	0.23%
QC value within limits for Cu 324.752 Recovery = 110.65%						
Fe 238.204 Radial†	14973.0	192920 ug/L	617.7	192920 ppb	617.7	0.32%
QC value within limits for Fe 238.204 Radial Recovery = 96.46%						
K 766.490 Radial†	30929.7	5618.6 ug/L	65.49	5618.6 ppb	65.49	1.17%
QC value within limits for K 766.490 Radial Recovery = 112.37%						
Mg 279.077 IEC†	11217.8	509640 ug/L	1396.7	509640 ppb	1396.7	0.27%
QC value within limits for Mg 279.077 IEC Recovery = 101.93%						
Mn 257.610†	428407.3	478.53 ug/L	0.759	478.53 ppb	0.759	0.16%
QC value within limits for Mn 257.610 Recovery = 95.71%						
Mo 202.031†	6456.8	493.38 ug/L	2.442	493.38 ppb	2.442	0.49%
QC value within limits for Mo 202.031 Recovery = 98.68%						
Na 589.592 Radial†	18906.0	5486.6 ug/L	83.80	5486.6 ppb	83.80	1.53%
QC value within limits for Na 589.592 Radial Recovery = 109.73%						
Ni 231.604†	17487.1	444.22 ug/L	0.781	444.22 ppb	0.781	0.18%
QC value within limits for Ni 231.604 Recovery = 88.84%						
P 214.914†	4192.0	2416.8 ug/L	14.18	2416.8 ppb	14.18	0.59%
QC value within limits for P 214.914 Recovery = 96.67%						
Pb 220.353†	2942.7	462.18 ug/L	2.421	462.18 ppb	2.421	0.52%
QC value within limits for Pb 220.353 Recovery = 92.44%						
S 181.975 Axial†	1841.7	2598.4 ug/L	13.58	2598.4 ppb	13.58	0.52%
QC value within limits for S 181.975 Axial Recovery = 103.94%						
Sb 206.836†	1590.4	554.33 ug/L	2.245	554.33 ppb	2.245	0.40%
QC value within limits for Sb 206.836 Recovery = 110.87%						
Se 196.026†	2986.1	2566.9 ug/L	1.75	2566.9 ppb	1.75	0.07%
QC value within limits for Se 196.026 Recovery = 102.67%						
Si 251.611†	163945.5	5253.5 ug/L	8.19	5253.5 ppb	8.19	0.16%
QC value within limits for Si 251.611 Recovery = 105.07%						
Sn 189.927†	2313.1	495.07 ug/L	0.886	495.07 ppb	0.886	0.18%
QC value within limits for Sn 189.927 Recovery = 99.01%						
Sr 421.552†	78363.6	515.70 ug/L	7.283	515.70 ppb	7.283	1.41%
QC value within limits for Sr 421.552 Recovery = 103.14%						
Ti 334.940†	318955.1	506.55 ug/L	0.408	506.55 ppb	0.408	0.08%
QC value within limits for Ti 334.940 Recovery = 101.31%						
Tl 190.801†	1381.1	446.58 ug/L	4.924	446.58 ppb	4.924	1.10%
QC value within limits for Tl 190.801 Recovery = 89.32%						
U 409.014†	19651.0	507.95 ug/L	5.261	507.95 ppb	5.261	1.04%
QC value within limits for U 409.014 Recovery = 101.59%						
V 292.402†	75245.1	511.16 ug/L	0.886	511.16 ppb	0.886	0.17%
QC value within limits for V 292.402 Recovery = 102.23%						
Zn 213.857†	52328.5	492.64 ug/L	0.191	492.64 ppb	0.191	0.04%
QC value within limits for Zn 213.857 Recovery = 98.53%						
SiO2†	164906.8	11318 ug/L	103.5	11318 ppb	103.5	0.91%
QC value within limits for SiO2 Recovery = 105.82%						
All analyte(s) passed QC.						



Sequence No.: 11

Sample ID: LR1

Analyst:

Logged In Analyst (Original) : Optima3

Initial Sample Wt:

Dilution:

Autosampler Location: 15

Date Collected: 2/23/2010 11:43:50

Data Type: Reprocessed on 2/23/2010 12:42:33

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 361.383	762099.3	762099.3	84.672 %		11:47:01
1	Sc Radial	3718.7	3718.7	87.4 %		11:46:03
1	Y 371.029	631025.1	631025.1	82.764 %		11:47:01
1	Y RADIAL	4098.5	4098.5	87.35 %		11:46:03
1	Ag 328.068†	-22982.8	-27372.8	-7.8961 ug/L	-7.8961 ppb	11:47:01
1	Al 396.153Radial†	500717.0	572842.5	518790 ug/L	518790 ppb	11:45:43
1	As 188.979†	-197.7	-213.0	7.1013 ug/L	7.1013 ppb	11:47:21
1	B 249.677†	1572.8	2230.4	-18.278 ug/L	-18.278 ppb	11:47:01
1	Ba 233.527†	-1433.1	-1683.4	0.3156 ug/L	0.3156 ppb	11:47:21
1	Be 313.107†	-10093.3	-8067.2	-3.0374 ug/L	-3.0374 ppb	11:47:01
1	Ca 317.933Radial†	212588.7	243148.5	483770 ug/L	483770 ppb	11:45:43
1	Cd 226.502†	3141.7	3893.7	2.3655 ug/L	2.3655 ppb	11:47:21
1	Co 228.616†	233.6	337.9	0.6393 ug/L	0.6393 ppb	11:47:21
1	Cr 267.716†	-1041.3	-1295.8	22.009 ug/L	22.009 ppb	11:47:21
1	Cu 324.752†	717.8	-5229.4	0.1017 ug/L	0.1017 ppb	11:47:01
1	Fe 238.204 Radial†	29881.4	34168.9	440210 ug/L	440210 ppb	11:46:03
1	K 766.490 Radial†	2437.9	231.8	-317.26 ug/L	-317.26 ppb	11:45:43
1	Mg 279.077 IEC†	9593.6	10970.6	498140 ug/L	498140 ppb	11:46:03
1	Mn 257.610†	-19449.3	-23407.1	-3.1522 ug/L	-3.1522 ppb	11:47:01
1	Mo 202.031†	-467.9	-558.6	-0.9542 ug/L	-0.9542 ppb	11:47:21
1	Na 589.592 Radial†	1535165.1	1756697.9	509800 ug/L	509800 ppb	11:45:43
1	Ni 231.604†	253.6	247.2	6.2801 ug/L	6.2801 ppb	11:47:21
1	P 214.914†	504.8	394.2	16.342 ug/L	16.342 ppb	11:47:21
1	Pb 220.353†	-566.4	-603.9	-7.6789 ug/L	-7.6789 ppb	11:47:21
1	S 181.975 Axial†	74.6	51.1	-22.415 ug/L	-22.415 ppb	11:47:21
1	Sb 206.836†	67.2	42.6	-5.9643 ug/L	-5.9643 ppb	11:47:21
1	Se 196.026†	-1848.0	-2161.9	-57.453 ug/L	-57.453 ppb	11:47:21
1	Si 251.611†	-467.8	-1086.6	-34.355 ug/L	-34.355 ppb	11:47:21
1	Sn 189.927†	-363.6	-439.9	-18.906 ug/L	-18.906 ppb	11:47:21
1	Sr 421.552†	746.9	817.5	1.8061 ug/L	1.8061 ppb	11:46:03
1	Ti 334.940†	-8706.2	-9000.5	4.6079 ug/L	4.6079 ppb	11:47:01
1	Tl 190.801†	-104.8	-92.6	-30.033 ug/L	-30.033 ppb	11:47:21
1	U 409.014†	421872.8	501061.2	13489 ug/L	13489 ppb	11:47:01
1	V 292.402†	2745.4	4672.9	3.3113 ug/L	3.3113 ppb	11:47:21
1	Zn 213.857†	5249.9	5642.6	-9.2771 ug/L	-9.2771 ppb	11:47:21
1	SiO2†	-501.1	-1143.3	-77.442 ug/L	-77.442 ppb	11:48:18
2	Sc 361.383	755963.6	755963.6	83.990 %		11:47:27
2	Sc Radial	3688.1	3688.1	86.7 %		11:46:28
2	Y 371.029	625718.1	625718.1	82.068 %		11:47:27
2	Y RADIAL	4037.0	4037.0	86.04 %		11:46:28
2	Ag 328.068†	-22804.5	-27380.8	-8.2815 ug/L	-8.2815 ppb	11:47:27
2	Al 396.153Radial†	502447.8	579594.2	524910 ug/L	524910 ppb	11:46:08
2	As 188.979†	-201.4	-219.3	4.0482 ug/L	4.0482 ppb	11:47:47
2	B 249.677†	1545.5	2213.1	-18.533 ug/L	-18.533 ppb	11:47:27
2	Ba 233.527†	-1420.9	-1682.6	0.2923 ug/L	0.2923 ppb	11:47:47
2	Be 313.107†	-10035.6	-8095.3	-3.0419 ug/L	-3.0419 ppb	11:47:27
2	Ca 317.933Radial†	213123.5	245784.3	489010 ug/L	489010 ppb	11:46:08
2	Cd 226.502†	3143.4	3925.9	2.8346 ug/L	2.8346 ppb	11:47:47
2	Co 228.616†	220.0	323.8	0.3495 ug/L	0.3495 ppb	11:47:47
2	Cr 267.716†	-1083.1	-1355.5	21.258 ug/L	21.258 ppb	11:47:47
2	Cu 324.752†	732.9	-5204.5	0.1395 ug/L	0.1395 ppb	11:47:27
2	Fe 238.204 Radial†	29569.9	34093.4	439240 ug/L	439240 ppb	11:46:28
2	K 766.490 Radial†	2357.2	161.8	-334.73 ug/L	-334.73 ppb	11:46:08
2	Mg 279.077 IEC†	9502.0	10956.1	497480 ug/L	497480 ppb	11:46:28
2	Mn 257.610†	-19251.3	-23357.8	-3.1661 ug/L	-3.1661 ppb	11:47:27
2	Mo 202.031†	-490.8	-590.4	-3.2938 ug/L	-3.2938 ppb	11:47:47
2	Na 589.592 Radial†	1542603.2	1779856.6	516520 ug/L	516520 ppb	11:46:08
2	Ni 231.604†	259.4	256.6	6.5170 ug/L	6.5170 ppb	11:47:47

2	P 214.914†	490.9	382.5	11.535 ug/L	11.535 ppb	11:47:47
2	Pb 220.353†	-553.8	-594.4	-5.0536 ug/L	-5.0536 ppb	11:47:47
2	S 181.975 Axial†	68.5	44.5	-33.167 ug/L	-33.167 ppb	11:47:47
2	Sb 206.836†	52.2	25.5	-12.151 ug/L	-12.151 ppb	11:47:47
2	Se 196.026†	-1856.2	-2189.3	-78.616 ug/L	-78.616 ppb	11:47:47
2	Si 251.611†	-411.4	-1024.0	-32.318 ug/L	-32.318 ppb	11:47:47
2	Sn 189.927†	-361.4	-440.8	-18.080 ug/L	-18.080 ppb	11:47:47
2	Sr 421.552†	756.3	835.5	1.8863 ug/L	1.8863 ppb	11:46:28
2	Ti 334.940†	-7184.7	-7272.4	7.9903 ug/L	7.9903 ppb	11:47:27
2	Tl 190.801†	-97.3	-84.7	-27.479 ug/L	-27.479 ppb	11:47:47
2	U 409.014†	417666.4	500096.9	13463 ug/L	13463 ppb	11:47:27
2	V 292.402†	2734.2	4685.8	3.4451 ug/L	3.4451 ppb	11:47:47
2	Zn 213.857†	5221.9	5659.6	-8.9632 ug/L	-8.9632 ppb	11:47:47
2	SiO2†	-409.6	-1039.1	-70.221 ug/L	-70.221 ppb	11:48:23
3	Sc 361.383	768050.6	768050.6	85.333 %		11:47:52
3	Sc Radial	3701.7	3701.7	87.0 %		11:46:54
3	Y 371.029	634335.4	634335.4	83.198 %		11:47:52
3	Y RADIAL	4073.7	4073.7	86.82 %		11:46:54
3	Ag 328.068†	-23330.9	-27570.4	-9.3803 ug/L	-9.3803 ppb	11:47:52
3	Al 396.153Radial†	498188.5	572569.5	518550 ug/L	518550 ppb	11:46:34
3	As 188.979†	-181.9	-192.7	15.811 ug/L	15.811 ppb	11:48:12
3	B 249.677†	1505.6	2137.3	-20.193 ug/L	-20.193 ppb	11:47:52
3	Ba 233.527†	-1472.9	-1716.9	-0.0020 ug/L	-0.0020 ppb	11:48:12
3	Be 313.107†	-10145.7	-8036.2	-3.0248 ug/L	-3.0248 ppb	11:47:52
3	Ca 317.933Radial†	211628.9	243163.2	483800 ug/L	483800 ppb	11:46:34
3	Cd 226.502†	3109.0	3826.7	1.7822 ug/L	1.7822 ppb	11:48:12
3	Co 228.616†	232.7	334.6	0.5915 ug/L	0.5915 ppb	11:48:12
3	Cr 267.716†	-1033.3	-1276.9	22.044 ug/L	22.044 ppb	11:48:12
3	Cu 324.752†	721.1	-5232.1	-0.0049 ug/L	-0.0049 ppb	11:47:52
3	Fe 238.204 Radial†	29617.0	34022.1	438320 ug/L	438320 ppb	11:46:54
3	K 766.490 Radial†	2515.9	334.2	-297.43 ug/L	-297.43 ppb	11:46:34
3	Mg 279.077 IEC†	9528.0	10945.7	497010 ug/L	497010 ppb	11:46:54
3	Mn 257.610†	-19505.7	-23295.2	-3.1672 ug/L	-3.1672 ppb	11:47:52
3	Mo 202.031†	-497.9	-589.5	-3.3602 ug/L	-3.3602 ppb	11:48:12
3	Na 589.592 Radial†	1522946.2	1750728.3	508070 ug/L	508070 ppb	11:46:34
3	Ni 231.604†	266.1	259.6	6.5935 ug/L	6.5935 ppb	11:48:12
3	P 214.914†	487.4	369.1	2.6053 ug/L	2.6053 ppb	11:48:12
3	Pb 220.353†	-509.9	-532.6	1.3050 ug/L	1.3050 ppb	11:48:12
3	S 181.975 Axial†	69.6	44.5	-31.947 ug/L	-31.947 ppb	11:48:12
3	Sb 206.836†	33.2	2.2	-20.078 ug/L	-20.078 ppb	11:48:12
3	Se 196.026†	-1842.9	-2139.0	-48.257 ug/L	-48.257 ppb	11:48:12
3	Si 251.611†	-439.5	-1049.2	-33.127 ug/L	-33.127 ppb	11:48:12
3	Sn 189.927†	-364.9	-438.0	-18.460 ug/L	-18.460 ppb	11:48:12
3	Sr 421.552†	771.2	849.4	2.0171 ug/L	2.0171 ppb	11:46:54
3	Ti 334.940†	-8518.8	-8701.2	5.1582 ug/L	5.1582 ppb	11:47:52
3	Tl 190.801†	-112.3	-100.3	-32.529 ug/L	-32.529 ppb	11:48:12
3	U 409.014†	425079.1	500957.9	13486 ug/L	13486 ppb	11:47:52
3	V 292.402†	2847.3	4767.1	4.1814 ug/L	4.1814 ppb	11:48:12
3	Zn 213.857†	5223.7	5563.8	-9.7868 ug/L	-9.7868 ppb	11:48:12
3	SiO2†	-403.5	-1024.4	-69.209 ug/L	-69.209 ppb	11:48:28

## Mean Data: LR1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	762037.8	84.665 %		0.6715			0.79%
Sc Radial	3702.8	87.1 %		0.36			0.41%
Y 371.029	630359.5	82.676 %		0.5701			0.69%
Y RADIAL	4069.7	86.74 %		0.659			0.76%
Ag 328.068†	-27441.3	-8.5193 ug/L		0.77014	-8.5193 ppb	0.77014	9.04%
Al 396.153Radial†	575002.1	520750 ug/L		3603.8	520750 ppb	3603.8	0.69%
QC value within limits for Al 396.153Radial Recovery = 104.15%							
As 188.979†	-208.3	8.9869 ug/L		6.10406	8.9869 ppb	6.10406	67.92%
B 249.677†	2193.6	-19.001 ug/L		1.0400	-19.001 ppb	1.0400	5.47%
Ba 233.527†	-1694.3	0.2020 ug/L		0.17705	0.2020 ppb	0.17705	87.67%
Be 313.107†	-8066.2	-3.0347 ug/L		0.00886	-3.0347 ppb	0.00886	0.29%
Ca 317.933Radial†	244032.0	485520 ug/L		3019.3	485520 ppb	3019.3	0.62%
QC value within limits for Ca 317.933Radial Recovery = 97.10%							
Cd 226.502†	3882.1	2.3274 ug/L		0.52723	2.3274 ppb	0.52723	22.65%
Co 228.616†	332.1	0.5268 ug/L		0.15535	0.5268 ppb	0.15535	29.49%
Cr 267.716†	-1309.4	21.770 ug/L		0.4440	21.770 ppb	0.4440	2.84%

Cu 324.752†	-5222.0	0.0788 ug/L	0.07491	0.0788 ppb	0.07491	95.11%
Fe 238.204 Radial†	34094.8	439250 ug/L	945.6	439250 ppb	945.6	0.22%
QC value less than the lower limit for Fe 238.204 Radial Recovery = 87.85%						
K 766.490 Radial†	242.6	-316.48 ug/L	18.659	-316.48 ppb	18.659	5.90%
Mg 279.077 IEC†	10957.5	497540 ug/L	567.7	497540 ppb	567.7	0.11%
QC value within limits for Mg 279.077 IEC Recovery = 99.51%						
Mn 257.610†	-23353.4	-3.1619 ug/L	0.00838	-3.1619 ppb	0.00838	0.27%
Mo 202.031†	-579.5	-2.5361 ug/L	1.37036	-2.5361 ppb	1.37036	54.03%
Na 589.592 Radial†	1762427.6	511460 ug/L	4465.1	511460 ppb	4465.1	0.87%
QC value within limits for Na 589.592 Radial Recovery = 102.29%						
Ni 231.604†	254.5	6.4635 ug/L	0.16338	6.4635 ppb	0.16338	2.53%
P 214.914†	381.9	10.161 ug/L	6.9706	10.161 ppb	6.9706	68.60%
Pb 220.353†	-576.9	-3.8092 ug/L	4.61941	-3.8092 ppb	4.61941	121.27%
S 181.975 Axial†	46.7	-29.176 ug/L	5.8872	-29.176 ppb	5.8872	20.18%
Sb 206.836†	23.4	-12.731 ug/L	7.0747	-12.731 ppb	7.0747	55.57%
Se 196.026†	-2163.4	-61.442 ug/L	15.5675	-61.442 ppb	15.5675	25.34%
Si 251.611†	-1053.3	-33.267 ug/L	1.0255	-33.267 ppb	1.0255	3.08%
Sn 189.927†	-439.6	-18.482 ug/L	0.4137	-18.482 ppb	0.4137	2.24%
Sr 421.552†	834.1	1.9031 ug/L	0.10651	1.9031 ppb	0.10651	5.60%
Ti 334.940†	-8324.7	5.9188 ug/L	1.81497	5.9188 ppb	1.81497	30.66%
Tl 190.801†	-92.5	-30.014 ug/L	2.5252	-30.014 ppb	2.5252	8.41%
U 409.014†	500705.4	13479 ug/L	14.3	13479 ppb	14.3	0.11%
QC value less than the lower limit for U 409.014 Recovery = 89.86%						
V 292.402†	4708.6	3.6459 ug/L	0.46850	3.6459 ppb	0.46850	12.85%
Zn 213.857†	5622.0	-9.3423 ug/L	0.41569	-9.3423 ppb	0.41569	4.45%
SiO2†	-1068.9	-72.291 ug/L	4.4897	-72.291 ppb	4.4897	6.21%

QC Failed. Continue with analysis.

Sequence No.: 12

Sample ID: LR2

Analyst:

Logged In Analyst (Original) : Optima3

Initial Sample Wt:

Dilution:

Autosampler Location: 16

Date Collected: 2/23/2010 11:50:38

Data Type: Reprocessed on 2/23/2010 12:42:34

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 361.383	882388.7	882388.7	98.036 %		11:54:13
1	Sc Radial	4083.5	4083.5	96.0 %		11:52:36
1	Y 371.029	726949.1	726949.1	95.345 %		11:54:13
1	Y RADIAL	4457.5	4457.5	95.00 %		11:52:36
1	Ag 328.068†	-8113.4	-8505.2	0.7527 ug/L	0.7527 ppb	11:54:18
1	Al 396.153Radial†	386.7	513.6	-0.4598 ug/L	-0.4598 ppb	11:52:36
1	As 188.979†	21057.1	21499.4	9751.2 ug/L	9751.2 ppb	11:54:18
1	B 249.677†	200438.6	204826.4	4862.0 ug/L	4862.0 ppb	11:54:18
1	Ba 233.527†	1681735.0	1715429.8	13421 ug/L	13421 ppb	11:54:13
1	Be 313.107†	7369759.5	7521231.0	2824.7 ug/L	2824.7 ppb	11:54:07
1	Ca 317.933Radial†	24.7	10.3	20.396 ug/L	20.396 ppb	11:52:56
1	Cd 226.502†	809957.7	826364.7	9597.8 ug/L	9597.8 ppb	11:54:13
1	Co 228.616†	431518.8	440224.1	9202.3 ug/L	9202.3 ppb	11:54:18
1	Cr 267.716†	2060497.4	2101703.7	23586 ug/L	23586 ppb	11:54:13
1	Cu 324.752†	6465550.3	6588979.9	19786 ug/L	19786 ppb	11:54:07
1	Fe 238.204 Radial†	-8.5	-19.1	29.577 ug/L	29.577 ppb	11:52:56
1	K 766.490 Radial†	1544448.2	1606221.4	300490 ug/L	300490 ppb	11:52:31
1	Mg 279.077 IEC†	-5.6	-8.6	-289.33 ug/L	-289.33 ppb	11:52:56
1	Mn 257.610†	8077318.7	8238672.7	9237.1 ug/L	9237.1 ppb	11:54:07
1	Mo 202.031†	128620.9	131191.1	9600.9 ug/L	9600.9 ppb	11:54:18
1	Na 589.592 Radial†	-201.1	530.9	154.08 ug/L	154.08 ppb	11:52:36
1	Ni 231.604†	363705.0	370937.8	9422.9 ug/L	9422.9 ppb	11:54:18
1	P 214.914†	30464.4	30872.6	14900 ug/L	14900 ppb	11:54:18
1	Pb 220.353†	192602.0	196524.9	24363 ug/L	24363 ppb	11:54:18
1	S 181.975 Axial†	35421.2	36093.6	52876 ug/L	52876 ppb	11:54:18
1	Sb 206.836†	30032.7	30597.6	11026 ug/L	11026 ppb	11:54:18
1	Se 196.026†	15007.9	15329.2	10136 ug/L	10136 ppb	11:54:18
1	Si 251.611†	1434695.4	1462898.6	46811 ug/L	46811 ppb	11:54:13
1	Sn 189.927†	55770.8	56877.5	10290 ug/L	10290 ppb	11:54:18
1	Sr 421.552†	1379249.8	1436662.0	9522.0 ug/L	9522.0 ppb	11:52:31
1	Ti 334.940†	6208018.0	6333648.1	9570.7 ug/L	9570.7 ppb	11:54:07
1	Tl 190.801†	28971.4	29583.0	9558.2 ug/L	9558.2 ppb	11:54:18
1	U 409.014†	-1464.1	1322.9	-16.979 ug/L	-16.979 ppb	11:54:18
1	V 292.402†	1392428.8	1421750.0	9987.6 ug/L	9987.6 ppb	11:54:13
1	Zn 213.857†	1362755.8	1389494.5	13856 ug/L	13856 ppb	11:54:13
1	SiO2†	1419310.1	1447187.8	99173 ug/L	99173 ppb	11:55:03
2	Sc 361.383	878695.9	878695.9	97.626 %		11:54:32
2	Sc Radial	4048.2	4048.2	95.2 %		11:53:06
2	Y 371.029	724487.8	724487.8	95.022 %		11:54:32
2	Y RADIAL	4442.2	4442.2	94.67 %		11:53:06
2	Ag 328.068†	-8120.1	-8546.9	0.5774 ug/L	0.5774 ppb	11:54:37
2	Al 396.153Radial†	380.0	510.0	-3.1977 ug/L	-3.1977 ppb	11:53:06
2	As 188.979†	20817.0	21343.7	9682.0 ug/L	9682.0 ppb	11:54:37
2	B 249.677†	198638.8	203842.1	4838.5 ug/L	4838.5 ppb	11:54:37
2	Ba 233.527†	1675805.1	1716564.8	13430 ug/L	13430 ppb	11:54:32
2	Be 313.107†	7426205.9	7610642.3	2858.3 ug/L	2858.3 ppb	11:54:26
2	Ca 317.933Radial†	28.4	14.4	28.648 ug/L	28.648 ppb	11:53:26
2	Cd 226.502†	808960.7	828815.5	9626.3 ug/L	9626.3 ppb	11:54:32
2	Co 228.616†	429995.2	440513.4	9208.1 ug/L	9208.1 ppb	11:54:37
2	Cr 267.716†	2055121.6	2105030.1	23624 ug/L	23624 ppb	11:54:32
2	Cu 324.752†	6511173.4	6663428.6	20010 ug/L	20010 ppb	11:54:26
2	Fe 238.204 Radial†	-9.1	-19.7	21.704 ug/L	21.704 ppb	11:53:26
2	K 766.490 Radial†	1582654.9	1660363.3	310620 ug/L	310620 ppb	11:53:01
2	Mg 279.077 IEC†	-2.2	-5.0	-127.19 ug/L	-127.19 ppb	11:53:26
2	Mn 257.610†	8137961.0	8335415.1	9345.5 ug/L	9345.5 ppb	11:54:26
2	Mo 202.031†	127952.0	131057.4	9591.1 ug/L	9591.1 ppb	11:54:37
2	Na 589.592 Radial†	-264.9	462.0	134.07 ug/L	134.07 ppb	11:53:06
2	Ni 231.604†	362397.8	371157.9	9428.5 ug/L	9428.5 ppb	11:54:37

2	P 214.914†	30344.7	30880.5	14861 ug/L	14861 ppb	11:54:37
2	Pb 220.353†	191799.6	196528.6	24364 ug/L	24364 ppb	11:54:37
2	S 181.975 Axial†	35085.4	35901.6	52594 ug/L	52594 ppb	11:54:37
2	Sb 206.836†	29834.6	30523.4	11000 ug/L	11000 ppb	11:54:37
2	Se 196.026†	14892.2	15275.0	10100 ug/L	10100 ppb	11:54:37
2	Si 251.611†	1425805.1	1459942.3	46717 ug/L	46717 ppb	11:54:32
2	Sn 189.927†	55653.1	56996.0	10311 ug/L	10311 ppb	11:54:37
2	Sr 421.552†	1409895.6	1481362.4	9818.3 ug/L	9818.3 ppb	11:53:01
2	Ti 334.940†	6250927.8	6404213.6	9677.4 ug/L	9677.4 ppb	11:54:26
2	Tl 190.801†	28876.3	29609.7	9568.2 ug/L	9568.2 ppb	11:54:37
2	U 409.014†	-1703.6	1071.2	-23.860 ug/L	-23.860 ppb	11:54:37
2	V 292.402†	1387062.9	1422222.5	9990.6 ug/L	9990.6 ppb	11:54:32
2	Zn 213.857†	1359659.2	1392164.3	13882 ug/L	13882 ppb	11:54:32
2	SiO2†	1412377.4	1446170.7	99103 ug/L	99103 ppb	11:55:09
3	Sc 361.383	879658.4	879658.4	97.733 %		11:54:52
3	Sc Radial	4131.9	4131.9	97.1 %		11:53:37
3	Y 371.029	724149.6	724149.6	94.978 %		11:54:52
3	Y RADIAL	4507.6	4507.6	96.07 %		11:53:37
3	Ag 328.068†	-8157.6	-8576.1	0.4373 ug/L	0.4373 ppb	11:54:57
3	Al 396.153Radial†	379.5	501.5	-12.494 ug/L	-12.494 ppb	11:53:37
3	As 188.979†	21084.9	21594.5	9794.9 ug/L	9794.9 ppb	11:54:57
3	B 249.677†	200236.8	205254.5	4872.1 ug/L	4872.1 ppb	11:54:57
3	Ba 233.527†	1680205.3	1719188.9	13450 ug/L	13450 ppb	11:54:52
3	Be 313.107†	7427825.9	7603976.6	2855.8 ug/L	2855.8 ppb	11:54:46
3	Ca 317.933Radial†	30.0	15.4	30.703 ug/L	30.703 ppb	11:53:57
3	Cd 226.502†	811672.5	830683.6	9648.0 ug/L	9648.0 ppb	11:54:52
3	Co 228.616†	432213.3	442300.9	9245.5 ug/L	9245.5 ppb	11:54:57
3	Cr 267.716†	2058304.7	2105983.6	23634 ug/L	23634 ppb	11:54:52
3	Cu 324.752†	6500993.2	6645714.5	19956 ug/L	19956 ppb	11:54:46
3	Fe 238.204 Radial†	-8.3	-18.7	35.658 ug/L	35.658 ppb	11:53:57
3	K 766.490 Radial†	1589947.4	1634199.9	305720 ug/L	305720 ppb	11:53:32
3	Mg 279.077 IEC†	-0.5	-3.3	-48.321 ug/L	-48.321 ppb	11:53:57
3	Mn 257.610†	8154831.4	8343555.8	9354.7 ug/L	9354.7 ppb	11:54:46
3	Mo 202.031†	128508.3	131483.1	9622.3 ug/L	9622.3 ppb	11:54:57
3	Na 589.592 Radial†	-229.7	503.9	146.23 ug/L	146.23 ppb	11:53:37
3	Ni 231.604†	363989.2	372380.1	9459.5 ug/L	9459.5 ppb	11:54:57
3	P 214.914†	30581.5	31088.8	14998 ug/L	14998 ppb	11:54:57
3	Pb 220.353†	193059.3	197602.6	24497 ug/L	24497 ppb	11:54:57
3	S 181.975 Axial†	35462.9	36248.5	53102 ug/L	53102 ppb	11:54:57
3	Sb 206.836†	30094.0	30755.4	11082 ug/L	11082 ppb	11:54:57
3	Se 196.026†	15075.7	15446.1	10213 ug/L	10213 ppb	11:54:57
3	Si 251.611†	1429109.3	1461725.0	46773 ug/L	46773 ppb	11:54:52
3	Sn 189.927†	55870.1	57155.6	10340 ug/L	10340 ppb	11:54:57
3	Sr 421.552†	1413097.6	1454663.5	9641.3 ug/L	9641.3 ppb	11:53:32
3	Ti 334.940†	6253920.9	6400270.0	9671.4 ug/L	9671.4 ppb	11:54:46
3	Tl 190.801†	29095.3	29801.5	9629.5 ug/L	9629.5 ppb	11:54:57
3	U 409.014†	-1480.7	1301.2	-17.673 ug/L	-17.673 ppb	11:54:57
3	V 292.402†	1388416.2	1422052.6	9989.9 ug/L	9989.9 ppb	11:54:52
3	Zn 213.857†	1363376.9	1394444.4	13905 ug/L	13905 ppb	11:54:52
3	SiO2†	1417724.5	1450058.8	99369 ug/L	99369 ppb	11:55:15

## Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	880247.7	97.798 %	0.2128			0.22%
Sc Radial	4087.9	96.1 %	0.99			1.03%
Y 371.029	725195.5	95.115 %	0.2004			0.21%
Y RADIAL	4469.1	95.25 %	0.729			0.77%
Ag 328.068†	-8542.8	0.5891 ug/L	0.15801	0.5891 ppb	0.15801	26.82%
Al 396.153Radial†	508.4	-5.3837 ug/L	6.30772	-5.3837 ppb	6.30772	117.16%
As 188.979†	21479.2	9742.7 ug/L	56.95	9742.7 ppb	56.95	0.58%
QC value within limits for As 188.979 Recovery = 97.43%						
B 249.677†	204641.0	4857.5 ug/L	17.24	4857.5 ppb	17.24	0.35%
QC value within limits for B 249.677 Recovery = 97.15%						
Ba 233.527†	1717061.2	13434 ug/L	15.1	13434 ppb	15.1	0.11%
QC value less than the lower limit for Ba 233.527 Recovery = 89.56%						
Be 313.107†	7578616.6	2846.3 ug/L	18.70	2846.3 ppb	18.70	0.66%
QC value within limits for Be 313.107 Recovery = 94.88%						
Ca 317.933Radial†	13.4	26.582 ug/L	5.4551	26.582 ppb	5.4551	20.52%
Cd 226.502†	828621.3	9624.0 ug/L	25.15	9624.0 ppb	25.15	0.26%

QC value within limits for Cd 226.502 Recovery = 96.24%							
Co 228.616†	441012.8	9218.6 ug/L	23.48	9218.6 ppb	23.48	0.25%	
QC value within limits for Co 228.616 Recovery = 92.19%							
Cr 267.716†	2104239.1	23615 ug/L	25.2	23615 ppb	25.2	0.11%	
QC value within limits for Cr 267.716 Recovery = 94.46%							
Cu 324.752†	6632707.7	19917 ug/L	116.8	19917 ppb	116.8	0.59%	
QC value within limits for Cu 324.752 Recovery = 99.59%							
Fe 238.204 Radial†	-19.2	28.980 ug/L	6.9961	28.980 ppb	6.9961	24.14%	
K 766.490 Radial†	1633594.8	305610 ug/L	5065.6	305610 ppb	5065.6	1.66%	
QC value within limits for K 766.490 Radial Recovery = 101.87%							
Mg 279.077 IEC†	-5.6	-154.95 ug/L	122.879	-154.95 ppb	122.879	79.30%	
Mn 257.610†	8305881.2	9312.4 ug/L	65.41	9312.4 ppb	65.41	0.70%	
QC value within limits for Mn 257.610 Recovery = 93.12%							
Mo 202.031†	131243.9	9604.8 ug/L	15.93	9604.8 ppb	15.93	0.17%	
QC value within limits for Mo 202.031 Recovery = 96.05%							
Na 589.592 Radial†	498.9	144.79 ug/L	10.080	144.79 ppb	10.080	6.96%	
Ni 231.604†	371491.9	9437.0 ug/L	19.74	9437.0 ppb	19.74	0.21%	
QC value within limits for Ni 231.604 Recovery = 94.37%							
P 214.914†	30947.3	14919 ug/L	70.6	14919 ppb	70.6	0.47%	
QC value within limits for P 214.914 Recovery = 99.46%							
Pb 220.353†	196885.3	24408 ug/L	77.0	24408 ppb	77.0	0.32%	
QC value within limits for Pb 220.353 Recovery = 97.63%							
S 181.975 Axial†	36081.2	52857 ug/L	254.6	52857 ppb	254.6	0.48%	
QC value within limits for S 181.975 Axial Recovery = 105.71%							
Sb 206.836†	30625.4	11036 ug/L	41.9	11036 ppb	41.9	0.38%	
QC value greater than the upper limit for Sb 206.836 Recovery = 110.36%							
Se 196.026†	15350.1	10149 ug/L	57.7	10149 ppb	57.7	0.57%	
QC value within limits for Se 196.026 Recovery = 101.49%							
Si 251.611†	1461522.0	46767 ug/L	47.7	46767 ppb	47.7	0.10%	
QC value within limits for Si 251.611 Recovery = 93.53%							
Sn 189.927†	57009.7	10314 ug/L	25.3	10314 ppb	25.3	0.24%	
QC value within limits for Sn 189.927 Recovery = 103.14%							
Sr 421.552†	1457562.6	9660.5 ug/L	149.07	9660.5 ppb	149.07	1.54%	
QC value within limits for Sr 421.552 Recovery = 96.61%							
Ti 334.940†	6379377.2	9639.9 ug/L	59.95	9639.9 ppb	59.95	0.62%	
QC value within limits for Ti 334.940 Recovery = 96.40%							
Tl 190.801†	29664.7	9585.3 ug/L	38.63	9585.3 ppb	38.63	0.40%	
QC value within limits for Tl 190.801 Recovery = 95.85%							
U 409.014†	1231.8	-19.504 ug/L	3.7885	-19.504 ppb	3.7885	19.42%	
V 292.402†	1422008.4	9989.3 ug/L	1.57	9989.3 ppb	1.57	0.02%	
QC value within limits for V 292.402 Recovery = 99.89%							
Zn 213.857†	1392034.4	13881 ug/L	24.6	13881 ppb	24.6	0.18%	
QC value within limits for Zn 213.857 Recovery = 92.54%							
SiO2†	1447805.8	99215 ug/L	138.1	99215 ppb	138.1	0.14%	
QC value within limits for SiO2 Recovery = 92.72%							
QC Failed. Continue with analysis.							

Sequence No.: 13

Sample ID: CCV

Analyst:

Logged In Analyst (Original) : Optima3

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/23/2010 11:57:25

Data Type: Reprocessed on 2/23/2010 12:42:35

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 361.383	921577.5	921577.5	102.39 %		12:00:35
1	Sc Radial	3882.6	3882.6	91.3 %		11:59:18
1	Y 371.029	766594.4	766594.4	100.54 %		12:00:35
1	Y RADIAL	4267.1	4267.1	90.94 %		11:59:18
1	Ag 328.068†	109678.6	106888.8	494.05 ug/L	494.05 ppb	12:00:40
1	Al 396.153Radial†	5431.6	6061.3	5465.2 ug/L	5465.2 ppb	11:59:18
1	As 188.979†	1199.4	1191.9	541.58 ug/L	541.58 ppb	12:01:00
1	B 249.677†	21580.9	21450.1	509.62 ug/L	509.62 ppb	12:00:40
1	Ba 233.527†	64326.8	62834.2	492.04 ug/L	492.04 ppb	12:00:40
1	Be 313.107†	1341859.1	1314386.4	490.94 ug/L	490.94 ppb	12:00:35
1	Ca 317.933Radial†	2600.9	2833.9	5638.3 ug/L	5638.3 ppb	11:59:38
1	Cd 226.502†	43860.0	43019.4	499.18 ug/L	499.18 ppb	12:00:40
1	Co 228.616†	24156.4	23654.4	494.63 ug/L	494.63 ppb	12:00:40
1	Cr 267.716†	44977.1	43861.1	492.96 ug/L	492.96 ppb	12:00:40
1	Cu 324.752†	170861.0	160795.1	482.88 ug/L	482.88 ppb	12:00:40
1	Fe 238.204 Radial†	394.8	422.4	5456.3 ug/L	5456.3 ppb	11:59:38
1	K 766.490 Radial†	30234.8	30566.6	5711.8 ug/L	5711.8 ppb	11:59:18
1	Mg 279.077 IEC†	118.1	126.6	5754.9 ug/L	5754.9 ppb	11:59:38
1	Mn 257.610†	448806.4	437892.1	491.26 ug/L	491.26 ppb	12:00:35
1	Mo 202.031†	6978.9	6809.9	498.86 ug/L	498.86 ppb	12:01:00
1	Na 589.592 Radial†	32556.0	36406.7	10565 ug/L	10565 ppb	11:59:18
1	Ni 231.604†	20112.5	19590.6	497.65 ug/L	497.65 ppb	12:00:40
1	P 214.914†	4422.2	4117.0	2403.9 ug/L	2403.9 ppb	12:01:00
1	Pb 220.353†	4154.9	4123.0	512.46 ug/L	512.46 ppb	12:01:00
1	S 181.975 Axial†	756.2	701.5	1026.6 ug/L	1026.6 ppb	12:01:00
1	Sb 206.836†	1536.0	1463.5	528.10 ug/L	528.10 ppb	12:01:00
1	Se 196.026†	756.8	759.8	519.43 ug/L	519.43 ppb	12:01:00
1	Si 251.611†	79180.0	76797.4	2457.5 ug/L	2457.5 ppb	12:00:40
1	Sn 189.927†	2848.7	2771.8	502.14 ug/L	502.14 ppb	12:01:00
1	Sr 421.552†	73649.7	80649.2	534.49 ug/L	534.49 ppb	11:59:18
1	Ti 334.940†	328993.3	322594.7	487.80 ug/L	487.80 ppb	12:00:35
1	Tl 190.801†	1551.3	1546.3	499.52 ug/L	499.52 ppb	12:01:00
1	U 409.014†	15163.0	17625.3	474.53 ug/L	474.53 ppb	12:00:40
1	V 292.402†	70289.9	70079.4	493.11 ug/L	493.11 ppb	12:00:40
1	Zn 213.857†	51371.4	49614.4	493.20 ug/L	493.20 ppb	12:00:40
1	Sio2†	79492.5	77085.2	5282.8 ug/L	5282.8 ppb	12:02:08
2	Sc 361.383	911964.6	911964.6	101.32 %		12:01:06
2	Sc Radial	4140.6	4140.6	97.3 %		11:59:43
2	Y 371.029	759889.1	759889.1	99.665 %		12:01:06
2	Y RADIAL	4532.6	4532.6	96.60 %		11:59:43
2	Ag 328.068†	109875.1	108211.9	499.99 ug/L	499.99 ppb	12:01:12
2	Al 396.153Radial†	5318.2	5574.0	5023.6 ug/L	5023.6 ppb	11:59:43
2	As 188.979†	1183.5	1188.6	539.98 ug/L	539.98 ppb	12:01:32
2	B 249.677†	21633.0	21723.6	516.21 ug/L	516.21 ppb	12:01:12
2	Ba 233.527†	64698.7	63863.5	500.08 ug/L	500.08 ppb	12:01:12
2	Be 313.107†	1338088.4	1324479.1	494.71 ug/L	494.71 ppb	12:01:06
2	Ca 317.933Radial†	2495.1	2547.7	5068.8 ug/L	5068.8 ppb	12:00:03
2	Cd 226.502†	44006.9	43615.9	506.17 ug/L	506.17 ppb	12:01:12
2	Co 228.616†	24280.7	24025.7	502.41 ug/L	502.41 ppb	12:01:12
2	Cr 267.716†	45156.0	44500.7	500.09 ug/L	500.09 ppb	12:01:12
2	Cu 324.752†	170613.3	162309.7	487.39 ug/L	487.39 ppb	12:01:12
2	Fe 238.204 Radial†	379.9	380.1	4912.2 ug/L	4912.2 ppb	12:00:03
2	K 766.490 Radial†	29751.5	28006.0	5233.3 ug/L	5233.3 ppb	11:59:43
2	Mg 279.077 IEC†	113.2	113.6	5161.1 ug/L	5161.1 ppb	12:00:03
2	Mn 257.610†	446822.6	440554.5	494.22 ug/L	494.22 ppb	12:01:06
2	Mo 202.031†	6989.5	6892.2	504.83 ug/L	504.83 ppb	12:01:32
2	Na 589.592 Radial†	31766.9	33373.5	9685.1 ug/L	9685.1 ppb	11:59:43
2	Ni 231.604†	20169.1	19853.6	504.33 ug/L	504.33 ppb	12:01:12

2	P 214.914†	4426.8	4167.0	2433.8 ug/L	2433.8 ppb	12:01:32
2	Pb 220.353†	4159.4	4170.1	518.27 ug/L	518.27 ppb	12:01:32
2	S 181.975 Axial†	740.7	694.0	1015.7 ug/L	1015.7 ppb	12:01:32
2	Sb 206.836†	1543.1	1486.2	536.34 ug/L	536.34 ppb	12:01:32
2	Se 196.026†	765.8	776.6	528.78 ug/L	528.78 ppb	12:01:32
2	Si 251.611†	79337.5	77768.0	2488.6 ug/L	2488.6 ppb	12:01:12
2	Sn 189.927†	2876.1	2828.1	512.26 ug/L	512.26 ppb	12:01:32
2	Sr 421.552†	71668.8	73586.5	487.68 ug/L	487.68 ppb	11:59:43
2	Ti 334.940†	327958.0	324959.8	491.35 ug/L	491.35 ppb	12:01:06
2	Tl 190.801†	1569.2	1579.9	510.31 ug/L	510.31 ppb	12:01:32
2	U 409.014†	15210.5	17828.2	480.06 ug/L	480.06 ppb	12:01:12
2	V 292.402†	70615.9	71124.8	500.52 ug/L	500.52 ppb	12:01:12
2	Zn 213.857†	51538.3	50308.0	500.19 ug/L	500.19 ppb	12:01:12
2	SiO2†	79009.3	77426.7	5306.1 ug/L	5306.1 ppb	12:02:13
3	Sc 361.383	905655.5	905655.5	100.62 %		12:01:38
3	Sc Radial	4114.3	4114.3	96.7 %		12:00:08
3	Y 371.029	754058.0	754058.0	98.900 %		12:01:38
3	Y RADIAL	4524.3	4524.3	96.43 %		12:00:08
3	Ag 328.068†	109944.7	109036.5	503.81 ug/L	503.81 ppb	12:01:43
3	Al 396.153Radial†	5250.1	5538.6	4991.4 ug/L	4991.4 ppb	12:00:08
3	As 188.979†	1176.4	1189.6	540.48 ug/L	540.48 ppb	12:02:03
3	B 249.677†	21687.1	21926.2	521.02 ug/L	521.02 ppb	12:01:43
3	Ba 233.527†	64896.8	64505.3	505.10 ug/L	505.10 ppb	12:01:43
3	Be 313.107†	1334928.8	1330539.0	496.98 ug/L	496.98 ppb	12:01:38
3	Ca 317.933Radial†	2505.1	2574.4	5122.0 ug/L	5122.0 ppb	12:00:28
3	Cd 226.502†	44211.9	44122.2	512.04 ug/L	512.04 ppb	12:01:43
3	Co 228.616†	24371.9	24283.3	507.80 ug/L	507.80 ppb	12:01:43
3	Cr 267.716†	45244.4	44899.1	504.57 ug/L	504.57 ppb	12:01:43
3	Cu 324.752†	170954.2	163821.5	491.93 ug/L	491.93 ppb	12:01:43
3	Fe 238.204 Radial†	381.8	384.6	4969.7 ug/L	4969.7 ppb	12:00:28
3	K 766.490 Radial†	29580.1	28024.8	5236.8 ug/L	5236.8 ppb	12:00:08
3	Mg 279.077 IEC†	116.0	117.2	5325.7 ug/L	5325.7 ppb	12:00:28
3	Mn 257.610†	446928.1	443731.5	497.78 ug/L	497.78 ppb	12:01:38
3	Mo 202.031†	6978.4	6929.2	507.54 ug/L	507.54 ppb	12:02:03
3	Na 589.592 Radial†	31598.8	33408.9	9695.4 ug/L	9695.4 ppb	12:00:08
3	Ni 231.604†	20244.7	20067.3	509.76 ug/L	509.76 ppb	12:01:43
3	P 214.914†	4434.7	4205.3	2456.1 ug/L	2456.1 ppb	12:02:03
3	Pb 220.353†	4140.4	4179.9	519.47 ug/L	519.47 ppb	12:02:03
3	S 181.975 Axial†	748.7	707.0	1034.8 ug/L	1034.8 ppb	12:02:03
3	Sb 206.836†	1545.3	1499.0	540.92 ug/L	540.92 ppb	12:02:03
3	Se 196.026†	762.5	778.5	530.27 ug/L	530.27 ppb	12:02:03
3	Si 251.611†	79558.8	78533.4	2513.1 ug/L	2513.1 ppb	12:01:43
3	Sn 189.927†	2874.4	2846.2	515.54 ug/L	515.54 ppb	12:02:03
3	Sr 421.552†	71185.4	73558.7	487.50 ug/L	487.50 ppb	12:00:08
3	Ti 334.940†	327536.2	326795.5	494.11 ug/L	494.11 ppb	12:01:38
3	Tl 190.801†	1565.8	1587.3	512.71 ug/L	512.71 ppb	12:02:03
3	U 409.014†	15173.2	17895.8	481.87 ug/L	481.87 ppb	12:01:43
3	V 292.402†	70810.1	71803.3	505.26 ug/L	505.26 ppb	12:01:43
3	Zn 213.857†	51755.0	50877.7	505.86 ug/L	505.86 ppb	12:01:43
3	SiO2†	79154.6	78114.3	5353.3 ug/L	5353.3 ppb	12:02:19

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	913065.9	101.44 %	0.891			0.88%
Sc Radial	4045.8	95.1 %	3.34			3.51%
Y 371.029	760180.5	99.703 %	0.8228			0.83%
Y RADIAL	4441.3	94.66 %	3.218			3.40%
Ag 328.068†	108045.7	499.28 ug/L	4.919	499.28 ppb	4.919	0.99%
QC value within limits for Ag 328.068 Recovery = 99.86%						
Al 396.153Radial†	5724.6	5160.1 ug/L	264.75	5160.1 ppb	264.75	5.13%
QC value within limits for Al 396.153Radial Recovery = 103.20%						
As 188.979†	1190.0	540.68 ug/L	0.816	540.68 ppb	0.816	0.15%
QC value within limits for As 188.979 Recovery = 108.14%						
B 249.677†	21700.0	515.62 ug/L	5.726	515.62 ppb	5.726	1.11%
QC value within limits for B 249.677 Recovery = 103.12%						
Ba 233.527†	63734.3	499.07 ug/L	6.590	499.07 ppb	6.590	1.32%
QC value within limits for Ba 233.527 Recovery = 99.81%						
Be 313.107†	1323134.9	494.21 ug/L	3.048	494.21 ppb	3.048	0.62%
QC value within limits for Be 313.107 Recovery = 98.84%						



Ca 317.933Radial†	2652.0	5276.4 ug/L	314.53	5276.4 ppb	314.53	5.96%
QC value within limits for Ca 317.933Radial Recovery = 105.53%						
Cd 226.502†	43585.8	505.80 ug/L	6.438	505.80 ppb	6.438	1.27%
QC value within limits for Cd 226.502 Recovery = 101.16%						
Co 228.616†	23987.8	501.61 ug/L	6.618	501.61 ppb	6.618	1.32%
QC value within limits for Co 228.616 Recovery = 100.32%						
Cr 267.716†	44420.3	499.20 ug/L	5.855	499.20 ppb	5.855	1.17%
QC value within limits for Cr 267.716 Recovery = 99.84%						
Cu 324.752†	162308.8	487.40 ug/L	4.529	487.40 ppb	4.529	0.93%
QC value within limits for Cu 324.752 Recovery = 97.48%						
Fe 238.204 Radial†	395.7	5112.7 ug/L	298.92	5112.7 ppb	298.92	5.85%
QC value within limits for Fe 238.204 Radial Recovery = 102.25%						
K 766.490 Radial†	28865.8	5394.0 ug/L	275.28	5394.0 ppb	275.28	5.10%
QC value within limits for K 766.490 Radial Recovery = 107.88%						
Mg 279.077 IEC†	119.1	5413.9 ug/L	306.59	5413.9 ppb	306.59	5.66%
QC value within limits for Mg 279.077 IEC Recovery = 108.28%						
Mn 257.610†	440726.1	494.42 ug/L	3.263	494.42 ppb	3.263	0.66%
QC value within limits for Mn 257.610 Recovery = 98.88%						
Mo 202.031†	6877.1	503.75 ug/L	4.443	503.75 ppb	4.443	0.88%
QC value within limits for Mo 202.031 Recovery = 100.75%						
Na 589.592 Radial†	34396.4	9982.0 ug/L	505.26	9982.0 ppb	505.26	5.06%
QC value within limits for Na 589.592 Radial Recovery = 99.82%						
Ni 231.604†	19837.2	503.92 ug/L	6.065	503.92 ppb	6.065	1.20%
QC value within limits for Ni 231.604 Recovery = 100.78%						
P 214.914†	4163.1	2431.3 ug/L	26.19	2431.3 ppb	26.19	1.08%
QC value within limits for P 214.914 Recovery = 97.25%						
Pb 220.353†	4157.7	516.74 ug/L	3.751	516.74 ppb	3.751	0.73%
QC value within limits for Pb 220.353 Recovery = 103.35%						
S 181.975 Axial†	700.8	1025.7 ug/L	9.61	1025.7 ppb	9.61	0.94%
QC value within limits for S 181.975 Axial Recovery = 102.57%						
Sb 206.836†	1482.9	535.12 ug/L	6.496	535.12 ppb	6.496	1.21%
QC value within limits for Sb 206.836 Recovery = 107.02%						
Se 196.026†	771.6	526.16 ug/L	5.877	526.16 ppb	5.877	1.12%
QC value within limits for Se 196.026 Recovery = 105.23%						
Si 251.611†	77699.6	2486.4 ug/L	27.86	2486.4 ppb	27.86	1.12%
QC value within limits for Si 251.611 Recovery = 99.46%						
Sn 189.927†	2815.4	509.98 ug/L	6.986	509.98 ppb	6.986	1.37%
QC value within limits for Sn 189.927 Recovery = 102.00%						
Sr 421.552†	75931.5	503.22 ug/L	27.077	503.22 ppb	27.077	5.38%
QC value within limits for Sr 421.552 Recovery = 100.64%						
Ti 334.940†	324783.3	491.09 ug/L	3.164	491.09 ppb	3.164	0.64%
QC value within limits for Ti 334.940 Recovery = 98.22%						
Tl 190.801†	1571.2	507.51 ug/L	7.025	507.51 ppb	7.025	1.38%
QC value within limits for Tl 190.801 Recovery = 101.50%						
U 409.014†	17783.1	478.82 ug/L	3.823	478.82 ppb	3.823	0.80%
QC value within limits for U 409.014 Recovery = 95.76%						
V 292.402†	71002.5	499.63 ug/L	6.127	499.63 ppb	6.127	1.23%
QC value within limits for V 292.402 Recovery = 99.93%						
Zn 213.857†	50266.7	499.75 ug/L	6.341	499.75 ppb	6.341	1.27%
QC value within limits for Zn 213.857 Recovery = 99.95%						
SiO2†	77542.1	5314.1 ug/L	35.90	5314.1 ppb	35.90	0.68%
QC value within limits for SiO2 Recovery = 99.38%						
All analyte(s) passed QC.						

Sequence No.: 14

Sample ID: CCB

Analyst:

Logged In Analyst (Original) : Optima3

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/23/2010 12:04:28

Data Type: Reprocessed on 2/23/2010 12:42:36

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 361.383	909691.3	909691.3	101.07 %		12:07:38
1	Sc Radial	4155.8	4155.8	97.7 %		12:06:21
1	Y 371.029	768392.1	768392.1	100.78 %		12:07:38
1	Y RADIAL	4619.7	4619.7	98.46 %		12:06:21
1	Ag 328.068†	292.0	59.6	0.2704 ug/L	0.2704 ppb	12:07:43
1	Al 396.153Radial†	-102.3	6.0	5.4442 ug/L	5.4442 ppb	12:06:21
1	As 188.979†	-0.4	20.2	9.0795 ug/L	9.0795 ppb	12:08:03
1	B 249.677†	258.7	628.9	15.010 ug/L	15.010 ppb	12:08:03
1	Ba 233.527†	7.7	16.8	0.1320 ug/L	0.1320 ppb	12:08:03
1	Be 313.107†	-3884.6	9.7	0.0035 ug/L	0.0035 ppb	12:07:43
1	Ca 317.933Radial†	14.5	-0.6	-1.2173 ug/L	-1.2173 ppb	12:06:41
1	Cd 226.502†	-162.5	22.6	0.2636 ug/L	0.2636 ppb	12:08:03
1	Co 228.616†	-43.6	18.8	0.3936 ug/L	0.3936 ppb	12:08:03
1	Cr 267.716†	78.3	11.5	0.1276 ug/L	0.1276 ppb	12:08:03
1	Cu 324.752†	6284.3	140.6	0.4210 ug/L	0.4210 ppb	12:07:43
1	Fe 238.204 Radial†	8.8	-1.2	-15.724 ug/L	-15.724 ppb	12:06:41
1	K 766.490 Radial†	3195.7	714.1	133.60 ug/L	133.60 ppb	12:06:21
1	Mg 279.077 IEC†	0.7	-2.0	-92.160 ug/L	-92.160 ppb	12:06:41
1	Mn 257.610†	477.2	35.3	0.0418 ug/L	0.0418 ppb	12:08:03
1	Mo 202.031†	10.9	4.7	0.3417 ug/L	0.3417 ppb	12:08:03
1	Na 589.592 Radial†	-716.3	7.2	2.1001 ug/L	2.1001 ppb	12:06:21
1	Ni 231.604†	51.2	-1.7	-0.0426 ug/L	-0.0426 ppb	12:08:03
1	P 214.914†	207.3	3.0	1.7990 ug/L	1.7990 ppb	12:08:03
1	Pb 220.353†	-23.2	42.1	5.2206 ug/L	5.2206 ppb	12:08:03
1	S 181.975 Axial†	34.1	-3.3	-4.8746 ug/L	-4.8746 ppb	12:08:03
1	Sb 206.836†	62.9	25.5	8.9481 ug/L	8.9481 ppb	12:08:03
1	Se 196.026†	-31.1	-10.1	-6.6878 ug/L	-6.6878 ppb	12:08:03
1	Si 251.611†	669.8	128.5	4.1193 ug/L	4.1193 ppb	12:08:03
1	Sn 189.927†	25.7	15.0	2.7134 ug/L	2.7134 ppb	12:08:03
1	Sr 421.552†	61.1	25.8	0.1710 ug/L	0.1710 ppb	12:06:21
1	Ti 334.940†	-1329.3	-33.4	-0.0436 ug/L	-0.0436 ppb	12:07:43
1	Tl 190.801†	-37.4	-5.8	-1.8708 ug/L	-1.8708 ppb	12:08:03
1	U 409.014†	-2813.8	32.2	0.8714 ug/L	0.8714 ppb	12:07:38
1	V 292.402†	-1363.0	81.9	0.5754 ug/L	0.5754 ppb	12:07:43
1	Zn 213.857†	735.1	169.6	1.7041 ug/L	1.7041 ppb	12:08:03
1	SiO2†	686.1	127.4	8.7416 ug/L	8.7416 ppb	12:09:09
2	Sc 361.383	923548.0	923548.0	102.61 %		12:08:08
2	Sc Radial	4155.7	4155.7	97.7 %		12:06:46
2	Y 371.029	780343.4	780343.4	102.35 %		12:08:08
2	Y RADIAL	4577.3	4577.3	97.55 %		12:06:46
2	Ag 328.068†	291.3	54.6	0.2512 ug/L	0.2512 ppb	12:08:13
2	Al 396.153Radial†	-138.0	-30.5	-27.643 ug/L	-27.643 ppb	12:06:46
2	As 188.979†	8.8	29.2	13.139 ug/L	13.139 ppb	12:08:33
2	B 249.677†	231.1	598.2	14.276 ug/L	14.276 ppb	12:08:33
2	Ba 233.527†	10.9	19.8	0.1534 ug/L	0.1534 ppb	12:08:33
2	Be 313.107†	-3905.9	46.7	0.0174 ug/L	0.0174 ppb	12:08:13
2	Ca 317.933Radial†	17.9	2.8	5.5879 ug/L	5.5879 ppb	12:07:06
2	Cd 226.502†	-168.5	19.1	0.2210 ug/L	0.2210 ppb	12:08:33
2	Co 228.616†	-64.9	-1.3	-0.0257 ug/L	-0.0257 ppb	12:08:33
2	Cr 267.716†	81.3	13.3	0.1495 ug/L	0.1495 ppb	12:08:33
2	Cu 324.752†	6355.2	116.4	0.3517 ug/L	0.3517 ppb	12:08:13
2	Fe 238.204 Radial†	9.9	-0.0	-0.6057 ug/L	-0.6057 ppb	12:07:06
2	K 766.490 Radial†	3188.7	707.0	132.27 ug/L	132.27 ppb	12:06:46
2	Mg 279.077 IEC†	1.8	-1.0	-43.228 ug/L	-43.228 ppb	12:07:06
2	Mn 257.610†	501.4	51.8	0.0598 ug/L	0.0598 ppb	12:08:33
2	Mo 202.031†	14.8	8.3	0.6083 ug/L	0.6083 ppb	12:08:33
2	Na 589.592 Radial†	-721.9	1.5	0.4333 ug/L	0.4333 ppb	12:06:46
2	Ni 231.604†	54.5	0.8	0.0208 ug/L	0.0208 ppb	12:08:33

2	P 214.914†	204.4	-2.8	-1.7819 ug/L	-1.7819 ppb	12:08:33
2	Pb 220.353†	-14.6	50.8	6.2851 ug/L	6.2851 ppb	12:08:33
2	S 181.975 Axial†	44.9	6.7	9.8806 ug/L	9.8806 ppb	12:08:33
2	Sb 206.836†	55.6	17.5	6.1386 ug/L	6.1386 ppb	12:08:33
2	Se 196.026†	-20.9	0.4	0.2410 ug/L	0.2410 ppb	12:08:33
2	Si 251.611†	688.8	137.1	4.3913 ug/L	4.3913 ppb	12:08:33
2	Sn 189.927†	21.4	10.4	1.8839 ug/L	1.8839 ppb	12:08:33
2	Sr 421.552†	57.8	22.4	0.1481 ug/L	0.1481 ppb	12:06:46
2	Ti 334.940†	-1316.5	-1.2	0.0040 ug/L	0.0040 ppb	12:08:13
2	Tl 190.801†	-38.7	-6.5	-2.0911 ug/L	-2.0911 ppb	12:08:33
2	U 409.014†	-3028.9	-135.6	-3.6646 ug/L	-3.6646 ppb	12:08:08
2	V 292.402†	-1545.2	-75.4	-0.5230 ug/L	-0.5230 ppb	12:08:13
2	Zn 213.857†	716.4	140.5	1.4093 ug/L	1.4093 ppb	12:08:33
2	SiO2†	668.4	99.9	6.8485 ug/L	6.8485 ppb	12:09:14
3	Sc 361.383	898349.9	898349.9	99.810 %		12:08:38
3	Sc Radial	4184.8	4184.8	98.4 %		12:07:11
3	Y 371.029	757882.0	757882.0	99.402 %		12:08:38
3	Y RADIAL	4587.8	4587.8	97.78 %		12:07:11
3	Ag 328.068†	219.7	-9.2	-0.0408 ug/L	-0.0408 ppb	12:08:43
3	Al 396.153Radial†	-140.3	-31.8	-28.874 ug/L	-28.874 ppb	12:07:11
3	As 188.979†	7.4	28.0	12.616 ug/L	12.616 ppb	12:09:03
3	B 249.677†	201.2	574.5	13.708 ug/L	13.708 ppb	12:09:03
3	Ba 233.527†	9.2	18.3	0.1424 ug/L	0.1424 ppb	12:09:03
3	Be 313.107†	-3780.2	65.9	0.0242 ug/L	0.0242 ppb	12:08:43
3	Ca 317.933Radial†	22.5	7.4	14.675 ug/L	14.675 ppb	12:07:31
3	Cd 226.502†	-161.6	21.4	0.2476 ug/L	0.2476 ppb	12:09:03
3	Co 228.616†	-63.3	-1.5	-0.0289 ug/L	-0.0289 ppb	12:09:03
3	Cr 267.716†	84.5	18.7	0.2098 ug/L	0.2098 ppb	12:09:03
3	Cu 324.752†	6276.9	211.8	0.6364 ug/L	0.6364 ppb	12:08:43
3	Fe 238.204 Radial†	10.9	0.9	12.139 ug/L	12.139 ppb	12:07:31
3	K 766.490 Radial†	3145.8	640.7	119.85 ug/L	119.85 ppb	12:07:11
3	Mg 279.077 IEC†	3.4	0.7	32.413 ug/L	32.413 ppb	12:07:31
3	Mn 257.610†	472.5	36.6	0.0409 ug/L	0.0409 ppb	12:09:03
3	Mo 202.031†	22.8	16.8	1.2292 ug/L	1.2292 ppb	12:09:03
3	Na 589.592 Radial†	-712.5	16.1	4.6806 ug/L	4.6806 ppb	12:07:11
3	Ni 231.604†	54.6	2.4	0.0605 ug/L	0.0605 ppb	12:09:03
3	P 214.914†	196.0	-5.7	-3.5837 ug/L	-3.5837 ppb	12:09:03
3	Pb 220.353†	-12.4	52.6	6.5147 ug/L	6.5147 ppb	12:09:03
3	S 181.975 Axial†	40.3	3.4	4.9258 ug/L	4.9258 ppb	12:09:03
3	Sb 206.836†	68.6	32.0	11.216 ug/L	11.216 ppb	12:09:03
3	Se 196.026†	-24.8	-4.2	-2.7150 ug/L	-2.7150 ppb	12:09:03
3	Si 251.611†	658.8	126.0	4.0254 ug/L	4.0254 ppb	12:09:03
3	Sn 189.927†	24.5	14.1	2.5555 ug/L	2.5555 ppb	12:09:03
3	Sr 421.552†	18.7	-17.8	-0.1182 ug/L	-0.1182 ppb	12:07:11
3	Ti 334.940†	-1384.8	-105.6	-0.1607 ug/L	-0.1607 ppb	12:08:43
3	Tl 190.801†	-29.6	1.5	0.4895 ug/L	0.4895 ppb	12:09:03
3	U 409.014†	-2796.5	14.4	0.3875 ug/L	0.3875 ppb	12:08:38
3	V 292.402†	-1491.7	-64.1	-0.4283 ug/L	-0.4283 ppb	12:08:43
3	Zn 213.857†	715.4	159.1	1.5929 ug/L	1.5929 ppb	12:09:03
3	SiO2†	670.8	120.6	8.2499 ug/L	8.2499 ppb	12:09:19

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	910529.7	101.16 %		1.402				1.39%
Sc Radial	4165.4	97.9 %		0.39				0.40%
Y 371.029	768872.5	100.84 %		1.474				1.46%
Y RADIAL	4594.9	97.93 %		0.470				0.48%
Ag 328.068†	35.0	0.1602 ug/L		0.17440	0.1602 ppb		0.17440	108.83%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-18.8	-17.024 ug/L		19.4681	-17.024 ppb		19.4681	114.35%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	25.8	11.612 ug/L		2.2083	11.612 ppb		2.2083	19.02%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	600.5	14.331 ug/L		0.6525	14.331 ppb		0.6525	4.55%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	18.3	0.1426 ug/L		0.01071	0.1426 ppb		0.01071	7.51%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	40.8	0.0150 ug/L		0.01054	0.0150 ppb		0.01054	70.11%
QC value within limits for Be 313.107 Recovery = Not calculated								

Ca 317.933Radial†	3.2	6.3486 ug/L	7.97349	6.3486 ppb	7.97349	125.59%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	21.0	0.2441 ug/L	0.02151	0.2441 ppb	0.02151	8.81%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	5.3	0.1130 ug/L	0.24303	0.1130 ppb	0.24303	215.11%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	14.5	0.1623 ug/L	0.04255	0.1623 ppb	0.04255	26.21%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	156.3	0.4697 ug/L	0.14848	0.4697 ppb	0.14848	31.61%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	-0.1	-1.3970 ug/L	13.94836	-1.3970 ppb	13.94836	998.47%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	687.3	128.58 ug/L	7.582	128.58 ppb	7.582	5.90%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	-0.8	-34.325 ug/L	62.7621	-34.325 ppb	62.7621	182.85%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	41.2	0.0475 ug/L	0.01067	0.0475 ppb	0.01067	22.46%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	9.9	0.7264 ug/L	0.45541	0.7264 ppb	0.45541	62.69%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	8.3	2.4046 ug/L	2.13994	2.4046 ppb	2.13994	88.99%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	0.5	0.0129 ug/L	0.05199	0.0129 ppb	0.05199	402.72%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	-1.8	-1.1888 ug/L	2.73990	-1.1888 ppb	2.73990	230.47%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	48.5	6.0068 ug/L	0.69049	6.0068 ppb	0.69049	11.50%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	2.3	3.3106 ug/L	7.50903	3.3106 ppb	7.50903	226.82%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	25.0	8.7677 ug/L	2.54367	8.7677 ppb	2.54367	29.01%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-4.6	-3.0539 ug/L	3.47685	-3.0539 ppb	3.47685	113.85%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	130.5	4.1787 ug/L	0.19000	4.1787 ppb	0.19000	4.55%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	13.2	2.3842 ug/L	0.44045	2.3842 ppb	0.44045	18.47%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	10.1	0.0670 ug/L	0.16075	0.0670 ppb	0.16075	239.99%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	-46.8	-0.0668 ug/L	0.08475	-0.0668 ppb	0.08475	126.94%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	-3.6	-1.1575 ug/L	1.43059	-1.1575 ppb	1.43059	123.60%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	-29.7	-0.8019 ug/L	2.49097	-0.8019 ppb	2.49097	310.64%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	-19.2	-0.1253 ug/L	0.60866	-0.1253 ppb	0.60866	485.78%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	156.4	1.5688 ug/L	0.14887	1.5688 ppb	0.14887	9.49%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	115.9	7.9467 ug/L	0.98229	7.9467 ppb	0.98229	12.36%
QC value within limits for SiO2 Recovery = Not calculated						
All analyte(s) passed QC.						

Sequence No.: 15

Sample ID: LR1

Analyst: HSC

Logged In Analyst (Original) : Optima3

Initial Sample Wt:

Dilution:

Autosampler Location: 37

Date Collected: 2/23/2010 12:18:14

Data Type: Reprocessed on 2/23/2010 12:42:38

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 361.383	897363.4	897363.4	99.700 %		12:21:24
1	Sc Radial	3925.3	3925.3	92.3 %		12:20:27
1	Y 371.029	752479.8	752479.8	98.693 %		12:21:24
1	Y RADIAL	4448.5	4448.5	94.81 %		12:20:07
1	Ag 328.068†	-25381.5	-25687.2	-3.9886 ug/L	-3.9886 ppb	12:21:24
1	Al 396.153Radial†	-117.5	-16.6	-13.826 ug/L	-13.826 ppb	12:20:07
1	As 188.979†	-196.0	-176.1	7.4021 ug/L	7.4021 ppb	12:21:45
1	B 249.677†	2257.4	2637.2	2.7679 ug/L	2.7679 ppb	12:21:24
1	Ba 233.527†	-1629.0	-1624.8	-1.2983 ug/L	-1.2983 ppb	12:21:24
1	Be 313.107†	-3811.9	29.9	0.0105 ug/L	0.0105 ppb	12:21:24
1	Ca 317.933Radial†	12.1	-2.4	-4.7669 ug/L	-4.7669 ppb	12:20:27
1	Cd 226.502†	3013.6	3206.0	-1.0143 ug/L	-1.0143 ppb	12:21:24
1	Co 228.616†	722.2	786.3	11.033 ug/L	11.033 ppb	12:21:45
1	Cr 267.716†	-553.5	-621.1	28.298 ug/L	28.298 ppb	12:21:24
1	Cu 324.752†	-139.2	-6216.7	0.8893 ug/L	0.8893 ppb	12:21:24
1	Fe 238.204 Radial†	26528.3	28736.6	370220 ug/L	370220 ppb	12:20:07
1	K 766.490 Radial†	2706.6	376.1	70.417 ug/L	70.417 ppb	12:20:07
1	Mg 279.077 IEC†	8.0	5.9	-117.76 ug/L	-117.76 ppb	12:20:27
1	Mn 257.610†	-31454.6	-31986.1	0.6922 ug/L	0.6922 ppb	12:21:24
1	Mo 202.031†	-323.6	-330.7	4.5402 ug/L	4.5402 ppb	12:21:24
1	Na 589.592 Radial†	-696.6	-14.5	-4.2122 ug/L	-4.2122 ppb	12:20:07
1	Ni 231.604†	116.5	64.5	1.6304 ug/L	1.6304 ppb	12:21:45
1	P 214.914†	648.7	448.7	-22.297 ug/L	-22.297 ppb	12:21:45
1	Pb 220.353†	197.8	263.4	-7.4336 ug/L	-7.4336 ppb	12:21:45
1	S 181.975 Axial†	58.3	21.4	31.339 ug/L	31.339 ppb	12:21:45
1	Sb 206.836†	19.2	-17.4	-10.610 ug/L	-10.610 ppb	12:21:45
1	Se 196.026†	-1589.6	-1573.7	117.08 ug/L	117.08 ppb	12:21:45
1	Si 251.611†	-479.0	-1014.6	-32.251 ug/L	-32.251 ppb	12:21:24
1	Sn 189.927†	-18.9	-29.4	-26.567 ug/L	-26.567 ppb	12:21:45
1	Sr 421.552†	69.4	38.5	0.2550 ug/L	0.2550 ppb	12:20:07
1	Ti 334.940†	-1455.8	-178.3	-0.3204 ug/L	-0.3204 ppb	12:21:24
1	Tl 190.801†	-45.6	-14.5	-5.0116 ug/L	-5.0116 ppb	12:21:45
1	U 409.014†	-241.1	2574.4	27.371 ug/L	27.371 ppb	12:21:24
1	V 292.402†	6977.7	8429.1	4.3991 ug/L	4.3991 ppb	12:21:24
1	Zn 213.857†	4114.9	3569.5	-19.572 ug/L	-19.572 ppb	12:21:45
1	SiO2†	-516.8	-1069.9	-72.849 ug/L	-72.849 ppb	12:22:42
2	Sc 361.383	890905.0	890905.0	98.982 %		12:21:50
2	Sc Radial	3891.2	3891.2	91.5 %		12:20:52
2	Y 371.029	747754.9	747754.9	98.074 %		12:21:50
2	Y RADIAL	4346.1	4346.1	92.63 %		12:20:32
2	Ag 328.068†	-25285.3	-25774.6	-3.6302 ug/L	-3.6302 ppb	12:21:50
2	Al 396.153Radial†	-134.7	-36.5	-31.871 ug/L	-31.871 ppb	12:20:32
2	As 188.979†	-198.3	-179.8	6.3053 ug/L	6.3053 ppb	12:22:11
2	B 249.677†	2205.6	2601.2	1.5072 ug/L	1.5072 ppb	12:21:50
2	Ba 233.527†	-1555.7	-1562.6	-0.7372 ug/L	-0.7372 ppb	12:21:50
2	Be 313.107†	-3750.2	64.5	0.0235 ug/L	0.0235 ppb	12:21:50
2	Ca 317.933Radial†	13.9	-0.3	-0.6374 ug/L	-0.6374 ppb	12:20:52
2	Cd 226.502†	3045.5	3260.2	-0.6404 ug/L	-0.6404 ppb	12:21:50
2	Co 228.616†	709.2	778.4	10.833 ug/L	10.833 ppb	12:22:11
2	Cr 267.716†	-607.6	-679.8	27.874 ug/L	27.874 ppb	12:21:50
2	Cu 324.752†	-306.0	-6386.3	0.5103 ug/L	0.5103 ppb	12:21:50
2	Fe 238.204 Radial†	26473.7	28928.9	372700 ug/L	372700 ppb	12:20:32
2	K 766.490 Radial†	2579.1	262.5	49.164 ug/L	49.164 ppb	12:20:32
2	Mg 279.077 IEC†	10.4	8.6	0.8242 ug/L	0.8242 ppb	12:20:52
2	Mn 257.610†	-31339.2	-32098.2	0.8062 ug/L	0.8062 ppb	12:21:50
2	Mo 202.031†	-325.4	-334.8	4.4286 ug/L	4.4286 ppb	12:21:50
2	Na 589.592 Radial†	-728.7	-56.2	-16.305 ug/L	-16.305 ppb	12:20:32
2	Ni 231.604†	165.3	114.7	2.9054 ug/L	2.9054 ppb	12:22:11

2	P 214.914†	641.1	445.7	-25.986 ug/L	-25.986 ppb	12:22:11
2	Pb 220.353†	224.7	292.1	-4.1547 ug/L	-4.1547 ppb	12:22:11
2	S 181.975 Axial†	50.5	14.0	20.552 ug/L	20.552 ppb	12:22:11
2	Sb 206.836†	44.8	8.5	-1.5870 ug/L	-1.5870 ppb	12:22:11
2	Se 196.026†	-1590.7	-1586.4	116.49 ug/L	116.49 ppb	12:22:11
2	Si 251.611†	-457.9	-996.8	-31.676 ug/L	-31.676 ppb	12:21:50
2	Sn 189.927†	-18.1	-28.7	-26.584 ug/L	-26.584 ppb	12:22:11
2	Sr 421.552†	70.5	40.3	0.2669 ug/L	0.2669 ppb	12:20:32
2	Ti 334.940†	-1419.1	-151.9	-0.2903 ug/L	-0.2903 ppb	12:21:50
2	Tl 190.801†	-48.5	-17.8	-6.0667 ug/L	-6.0667 ppb	12:22:11
2	U 409.014†	-178.3	2636.1	28.759 ug/L	28.759 ppb	12:21:50
2	V 292.402†	6910.3	8411.8	3.9194 ug/L	3.9194 ppb	12:21:50
2	Zn 213.857†	4098.0	3582.4	-19.821 ug/L	-19.821 ppb	12:22:11
2	SiO2†	-581.8	-1139.3	-77.614 ug/L	-77.614 ppb	12:22:47
3	Sc 361.383	893551.1	893551.1	99.276 %		12:22:16
3	Sc Radial	3884.2	3884.2	91.3 %		12:21:17
3	Y 371.029	749920.2	749920.2	98.358 %		12:22:16
3	Y RADIAL	4339.4	4339.4	92.48 %		12:20:57
3	Ag 328.068†	-25400.7	-25815.2	-3.5156 ug/L	-3.5156 ppb	12:22:16
3	Al 396.153Radial†	-141.3	-44.0	-38.590 ug/L	-38.590 ppb	12:20:57
3	As 188.979†	-193.1	-174.0	9.1516 ug/L	9.1516 ppb	12:22:37
3	B 249.677†	2300.7	2690.5	3.4772 ug/L	3.4772 ppb	12:22:16
3	Ba 233.527†	-1675.4	-1678.5	-1.6125 ug/L	-1.6125 ppb	12:22:16
3	Be 313.107†	-3775.8	49.9	0.0181 ug/L	0.0181 ppb	12:22:16
3	Ca 317.933Radial†	10.6	-3.9	-7.7657 ug/L	-7.7657 ppb	12:21:17
3	Cd 226.502†	3032.9	3238.3	-0.9955 ug/L	-0.9955 ppb	12:22:16
3	Co 228.616†	737.8	805.1	11.374 ug/L	11.374 ppb	12:22:37
3	Cr 267.716†	-616.6	-687.1	27.886 ug/L	27.886 ppb	12:22:16
3	Cu 324.752†	-257.1	-6336.1	0.7131 ug/L	0.7131 ppb	12:22:16
3	Fe 238.204 Radial†	26495.8	29004.7	373680 ug/L	373680 ppb	12:20:57
3	K 766.490 Radial†	2682.2	380.4	71.222 ug/L	71.222 ppb	12:20:57
3	Mg 279.077 IEC†	12.1	10.5	88.041 ug/L	88.041 ppb	12:21:17
3	Mn 257.610†	-31429.6	-32095.5	0.9021 ug/L	0.9021 ppb	12:22:16
3	Mo 202.031†	-339.5	-348.1	3.5358 ug/L	3.5358 ppb	12:22:16
3	Na 589.592 Radial†	-731.7	-60.9	-17.677 ug/L	-17.677 ppb	12:20:57
3	Ni 231.604†	140.6	89.3	2.2592 ug/L	2.2592 ppb	12:22:37
3	P 214.914†	656.3	459.1	-18.684 ug/L	-18.684 ppb	12:22:37
3	Pb 220.353†	227.1	293.8	-4.0486 ug/L	-4.0486 ppb	12:22:37
3	S 181.975 Axial†	54.4	17.8	26.096 ug/L	26.096 ppb	12:22:37
3	Sb 206.836†	20.8	-15.8	-10.079 ug/L	-10.079 ppb	12:22:37
3	Se 196.026†	-1587.4	-1578.3	124.85 ug/L	124.85 ppb	12:22:37
3	Si 251.611†	-477.5	-1015.1	-32.251 ug/L	-32.251 ppb	12:22:16
3	Sn 189.927†	-14.5	-25.0	-25.981 ug/L	-25.981 ppb	12:22:37
3	Sr 421.552†	106.8	80.2	0.5317 ug/L	0.5317 ppb	12:20:57
3	Ti 334.940†	-1423.5	-152.0	-0.2983 ug/L	-0.2983 ppb	12:22:16
3	Tl 190.801†	-51.1	-20.3	-6.8581 ug/L	-6.8581 ppb	12:22:37
3	U 409.014†	-204.2	2610.6	27.957 ug/L	27.957 ppb	12:22:16
3	V 292.402†	6940.9	8422.0	3.8344 ug/L	3.8344 ppb	12:22:16
3	Zn 213.857†	4100.1	3572.3	-20.065 ug/L	-20.065 ppb	12:22:37
3	SiO2†	-365.7	-919.8	-62.507 ug/L	-62.507 ppb	12:22:52

## Mean Data: LR1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	893939.8	99.320 %		0.3607			0.36%
Sc Radial	3900.2	91.7 %		0.52			0.56%
Y 371.029	750051.6	98.375 %		0.3102			0.32%
Y RADIAL	4378.0	93.31 %		1.303			1.40%
Ag 328.068†	-25759.0	-3.7115 ug/L		0.24677	-3.7115 ppb	0.24677	6.65%
Al 396.153Radial†	-32.3	-28.095 ug/L		12.8062	-28.095 ppb	12.8062	45.58%
As 188.979†	-176.6	7.6197 ug/L		1.43560	7.6197 ppb	1.43560	18.84%
B 249.677†	2642.9	2.5841 ug/L		0.99779	2.5841 ppb	0.99779	38.61%
Ba 233.527†	-1621.9	-1.2160 ug/L		0.44340	-1.2160 ppb	0.44340	36.46%
Be 313.107†	48.1	0.0174 ug/L		0.00654	0.0174 ppb	0.00654	37.62%
Ca 317.933Radial†	-2.2	-4.3900 ug/L		3.57904	-4.3900 ppb	3.57904	81.53%
Cd 226.502†	3234.8	-0.8834 ug/L		0.21066	-0.8834 ppb	0.21066	23.85%
Co 228.616†	789.9	11.080 ug/L		0.2735	11.080 ppb	0.2735	2.47%
Cr 267.716†	-662.7	28.019 ug/L		0.2411	28.019 ppb	0.2411	0.86%
Cu 324.752†	-6313.0	0.7042 ug/L		0.18963	0.7042 ppb	0.18963	26.93%
Fe 238.204 Radial†	28890.1	372200 ug/L		1780.9	372200 ppb	1780.9	0.48%

K 766.490 Radial†	339.7	63.601 ug/L	12.5093	63.601 ppb	12.5093	19.67%
Mg 279.077 IEC†	8.4	-9.6314 ug/L	103.29751	-9.6314 ppb	103.29751	>999.9%
Mn 257.610†	-32059.9	0.8002 ug/L	0.10510	0.8002 ppb	0.10510	13.14%
Mo 202.031†	-337.9	4.1682 ug/L	0.55050	4.1682 ppb	0.55050	13.21%
Na 589.592 Radial†	-43.9	-12.731 ug/L	7.4096	-12.731 ppb	7.4096	58.20%
Ni 231.604†	89.5	2.2650 ug/L	0.63750	2.2650 ppb	0.63750	28.15%
P 214.914†	451.1	-22.322 ug/L	3.6507	-22.322 ppb	3.6507	16.35%
Pb 220.353†	283.1	-5.2123 ug/L	1.92446	-5.2123 ppb	1.92446	36.92%
S 181.975 Axial†	17.7	25.995 ug/L	5.3939	25.995 ppb	5.3939	20.75%
Sb 206.836†	-8.2	-7.4253 ug/L	5.06309	-7.4253 ppb	5.06309	68.19%
Se 196.026†	-1579.5	119.47 ug/L	4.667	119.47 ppb	4.667	3.91%
Si 251.611†	-1008.8	-32.059 ug/L	0.3323	-32.059 ppb	0.3323	1.04%
Sn 189.927†	-27.7	-26.377 ug/L	0.3437	-26.377 ppb	0.3437	1.30%
Sr 421.552†	53.0	0.3512 ug/L	0.15648	0.3512 ppb	0.15648	44.56%
Ti 334.940†	-160.8	-0.3030 ug/L	0.01561	-0.3030 ppb	0.01561	5.15%
Tl 190.801†	-17.5	-5.9788 ug/L	0.92638	-5.9788 ppb	0.92638	15.49%
U 409.014†	2607.0	28.029 ug/L	0.6968	28.029 ppb	0.6968	2.49%
V 292.402†	8421.0	4.0510 ug/L	0.30448	4.0510 ppb	0.30448	7.52%
Zn 213.857†	3574.7	-19.819 ug/L	0.2466	-19.819 ppb	0.2466	1.24%
SiO2†	-1043.0	-70.990 ug/L	7.7232	-70.990 ppb	7.7232	10.88%

Sequence No.: 16

Sample ID: CCV

Analyst:

Logged In Analyst (Original) : Optima3

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/23/2010 12:25:04

Data Type: Reprocessed on 2/23/2010 12:42:39

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 361.383	917533.4	917533.4	101.94 %		12:28:14
1	Sc Radial	4202.1	4202.1	98.8 %		12:26:56
1	Y 371.029	762477.0	762477.0	100.00 %		12:28:14
1	Y RADIAL	4610.8	4610.8	98.27 %		12:26:56
1	Ag 328.068†	110168.5	107841.5	498.29 ug/L	498.29 ppb	12:28:19
1	Al 396.153Radial†	5406.0	5582.9	5032.1 ug/L	5032.1 ppb	12:26:56
1	As 188.979†	1112.2	1111.5	505.16 ug/L	505.16 ppb	12:28:39
1	B 249.677†	20661.2	20640.8	490.36 ug/L	490.36 ppb	12:28:19
1	Ba 233.527†	64878.5	63652.3	498.42 ug/L	498.42 ppb	12:28:19
1	Be 313.107†	1338075.9	1316451.6	491.70 ug/L	491.70 ppb	12:28:14
1	Ca 317.933Radial†	2519.1	2534.5	5042.7 ug/L	5042.7 ppb	12:27:16
1	Cd 226.502†	44133.2	43476.2	504.54 ug/L	504.54 ppb	12:28:19
1	Co 228.616†	24435.1	24031.8	502.55 ug/L	502.55 ppb	12:28:19
1	Cr 267.716†	45223.4	44296.3	497.79 ug/L	497.79 ppb	12:28:19
1	Cu 324.752†	170806.5	161477.2	484.89 ug/L	484.89 ppb	12:28:19
1	Fe 238.204 Radial†	387.9	382.5	4942.4 ug/L	4942.4 ppb	12:27:16
1	K 766.490 Radial†	29424.5	27228.2	5087.7 ug/L	5087.7 ppb	12:26:56
1	Mg 279.077 IEC†	115.1	113.8	5172.2 ug/L	5172.2 ppb	12:27:16
1	Mn 257.610†	449899.6	440896.4	494.60 ug/L	494.60 ppb	12:28:14
1	Mo 202.031†	6930.8	6792.7	497.55 ug/L	497.55 ppb	12:28:39
1	Na 589.592 Radial†	32985.7	34130.1	9904.7 ug/L	9904.7 ppb	12:26:56
1	Ni 231.604†	20208.4	19771.3	502.24 ug/L	502.24 ppb	12:28:19
1	P 214.914†	4411.5	4125.5	2409.0 ug/L	2409.0 ppb	12:28:39
1	Pb 220.353†	4084.1	4071.4	506.02 ug/L	506.02 ppb	12:28:39
1	S 181.975 Axial†	734.2	683.2	999.90 ug/L	999.90 ppb	12:28:39
1	Sb 206.836†	1485.9	1420.9	513.30 ug/L	513.30 ppb	12:28:39
1	Se 196.026†	752.6	759.0	517.28 ug/L	517.28 ppb	12:28:39
1	Si 251.611†	79241.7	77198.8	2470.4 ug/L	2470.4 ppb	12:28:19
1	Sn 189.927†	2844.9	2780.3	503.60 ug/L	503.60 ppb	12:28:39
1	Sr 421.552†	73801.0	74668.3	494.85 ug/L	494.85 ppb	12:26:56
1	Ti 334.940†	321943.9	317095.8	479.45 ug/L	479.45 ppb	12:28:19
1	Tl 190.801†	1557.9	1559.5	503.67 ug/L	503.67 ppb	12:28:39
1	U 409.014†	15293.0	17818.0	479.78 ug/L	479.78 ppb	12:28:19
1	V 292.402†	70515.9	70603.7	496.81 ug/L	496.81 ppb	12:28:19
1	Zn 213.857†	51505.5	49967.2	496.79 ug/L	496.79 ppb	12:28:19
1	SiO2†	80190.9	78112.5	5353.5 ug/L	5353.5 ppb	12:29:46
2	Sc 361.383	923787.2	923787.2	102.64 %		12:28:45
2	Sc Radial	4111.0	4111.0	96.6 %		12:27:21
2	Y 371.029	768155.5	768155.5	100.75 %		12:28:45
2	Y RADIAL	4516.9	4516.9	96.27 %		12:27:21
2	Ag 328.068†	109212.8	106178.7	490.66 ug/L	490.66 ppb	12:28:50
2	Al 396.153Radial†	5289.7	5583.9	5032.8 ug/L	5032.8 ppb	12:27:21
2	As 188.979†	1128.7	1120.2	509.05 ug/L	509.05 ppb	12:29:10
2	B 249.677†	20497.4	20344.0	483.29 ug/L	483.29 ppb	12:28:50
2	Ba 233.527†	64433.5	62787.9	491.66 ug/L	491.66 ppb	12:28:50
2	Be 313.107†	1348553.6	1317774.3	492.17 ug/L	492.17 ppb	12:28:45
2	Ca 317.933Radial†	2510.7	2582.2	5137.6 ug/L	5137.6 ppb	12:27:41
2	Cd 226.502†	43776.0	42835.1	497.09 ug/L	497.09 ppb	12:28:50
2	Co 228.616†	24225.1	23664.9	494.89 ug/L	494.89 ppb	12:28:50
2	Cr 267.716†	44970.1	43749.2	491.66 ug/L	491.66 ppb	12:28:50
2	Cu 324.752†	169546.3	159115.0	477.81 ug/L	477.81 ppb	12:28:50
2	Fe 238.204 Radial†	385.5	388.7	5022.8 ug/L	5022.8 ppb	12:27:41
2	K 766.490 Radial†	28957.9	27405.2	5120.8 ug/L	5120.8 ppb	12:27:21
2	Mg 279.077 IEC†	114.6	115.8	5262.1 ug/L	5262.1 ppb	12:27:41
2	Mn 257.610†	452046.9	440000.9	493.60 ug/L	493.60 ppb	12:28:45
2	Mo 202.031†	7007.7	6821.7	499.68 ug/L	499.68 ppb	12:29:10
2	Na 589.592 Radial†	32156.3	34011.5	9870.3 ug/L	9870.3 ppb	12:27:21
2	Ni 231.604†	20152.7	19582.8	497.46 ug/L	497.46 ppb	12:28:50



2	P 214.914†	4458.2	4141.7	2420.2 ug/L	2420.2 ppb	12:29:10
2	Pb 220.353†	4112.6	4072.0	506.10 ug/L	506.10 ppb	12:29:10
2	S 181.975 Axial†	744.8	688.6	1007.8 ug/L	1007.8 ppb	12:29:10
2	Sb 206.836†	1499.6	1424.4	514.63 ug/L	514.63 ppb	12:29:10
2	Se 196.026†	768.2	769.2	524.24 ug/L	524.24 ppb	12:29:10
2	Si 251.611†	78621.6	76068.3	2434.1 ug/L	2434.1 ppb	12:28:50
2	Sn 189.927†	2880.8	2796.4	506.52 ug/L	506.52 ppb	12:29:10
2	Sr 421.552†	72255.5	74723.9	495.22 ug/L	495.22 ppb	12:27:21
2	Ti 334.940†	319691.3	312763.1	472.91 ug/L	472.91 ppb	12:28:50
2	Tl 190.801†	1562.3	1553.4	501.69 ug/L	501.69 ppb	12:29:10
2	U 409.014†	14841.0	17276.1	465.14 ug/L	465.14 ppb	12:28:50
2	V 292.402†	70160.3	69789.0	491.16 ug/L	491.16 ppb	12:28:50
2	Zn 213.857†	51018.7	49150.8	488.62 ug/L	488.62 ppb	12:28:50
2	SiO2†	79437.7	76846.2	5266.4 ug/L	5266.4 ppb	12:29:51
3	Sc 361.383	918795.0	918795.0	102.08 %		12:29:16
3	Sc Radial	4174.8	4174.8	98.1 %		12:27:46
3	Y 371.029	765000.0	765000.0	100.34 %		12:29:16
3	Y RADIAL	4597.9	4597.9	97.99 %		12:27:46
3	Ag 328.068†	111756.3	109248.5	504.80 ug/L	504.80 ppb	12:29:21
3	Al 396.153Radial†	5421.5	5634.5	5078.7 ug/L	5078.7 ppb	12:27:46
3	As 188.979†	1122.1	1119.7	508.94 ug/L	508.94 ppb	12:29:41
3	B 249.677†	21120.8	21063.2	500.42 ug/L	500.42 ppb	12:29:21
3	Ba 233.527†	65867.2	64533.5	505.32 ug/L	505.32 ppb	12:29:21
3	Be 313.107†	1340368.0	1316894.6	491.88 ug/L	491.88 ppb	12:29:16
3	Ca 317.933Radial†	2533.8	2566.1	5105.4 ug/L	5105.4 ppb	12:28:06
3	Cd 226.502†	44842.5	44111.6	511.92 ug/L	511.92 ppb	12:29:21
3	Co 228.616†	24782.7	24339.3	508.96 ug/L	508.96 ppb	12:29:21
3	Cr 267.716†	45998.2	44994.5	505.64 ug/L	505.64 ppb	12:29:21
3	Cu 324.752†	174011.5	164386.7	493.63 ug/L	493.63 ppb	12:29:21
3	Fe 238.204 Radial†	390.7	387.9	5013.0 ug/L	5013.0 ppb	12:28:06
3	K 766.490 Radial†	29487.9	27487.1	5136.1 ug/L	5136.1 ppb	12:27:46
3	Mg 279.077 IEC†	115.9	115.3	5242.1 ug/L	5242.1 ppb	12:28:06
3	Mn 257.610†	448664.9	439080.9	492.57 ug/L	492.57 ppb	12:29:16
3	Mo 202.031†	6959.1	6811.2	498.91 ug/L	498.91 ppb	12:29:41
3	Na 589.592 Radial†	32703.4	34060.3	9884.4 ug/L	9884.4 ppb	12:27:46
3	Ni 231.604†	20557.7	20086.3	510.24 ug/L	510.24 ppb	12:29:21
3	P 214.914†	4438.2	4145.7	2419.5 ug/L	2419.5 ppb	12:29:41
3	Pb 220.353†	4082.8	4064.6	505.18 ug/L	505.18 ppb	12:29:41
3	S 181.975 Axial†	742.8	690.7	1010.8 ug/L	1010.8 ppb	12:29:41
3	Sb 206.836†	1496.9	1429.6	516.43 ug/L	516.43 ppb	12:29:41
3	Se 196.026†	755.8	761.1	518.88 ug/L	518.88 ppb	12:29:41
3	Si 251.611†	80646.8	78468.4	2511.1 ug/L	2511.1 ppb	12:29:21
3	Sn 189.927†	2862.8	2794.0	506.09 ug/L	506.09 ppb	12:29:41
3	Sr 421.552†	73477.6	74826.1	495.90 ug/L	495.90 ppb	12:27:46
3	Ti 334.940†	327395.4	322002.5	486.87 ug/L	486.87 ppb	12:29:21
3	Tl 190.801†	1567.8	1567.1	506.12 ug/L	506.12 ppb	12:29:41
3	U 409.014†	15533.7	18033.3	485.57 ug/L	485.57 ppb	12:29:21
3	V 292.402†	71907.5	71872.0	505.63 ug/L	505.63 ppb	12:29:21
3	Zn 213.857†	52226.7	50604.2	503.10 ug/L	503.10 ppb	12:29:21
3	SiO2†	78728.7	76572.2	5247.6 ug/L	5247.6 ppb	12:29:57

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	920038.5	102.22 %	0.367			0.36%
Sc Radial	4162.6	97.9 %	1.10			1.12%
Y 371.029	765210.8	100.36 %	0.373			0.37%
Y RADIAL	4575.2	97.51 %	1.085			1.11%
Ag 328.068†	107756.3	497.91 ug/L	7.076	497.91 ppb	7.076	1.42%
QC value within limits for Ag 328.068 Recovery = 99.58%						
Al 396.153Radial†	5600.4	5047.8 ug/L	26.70	5047.8 ppb	26.70	0.53%
QC value within limits for Al 396.153Radial Recovery = 100.96%						
As 188.979†	1117.2	507.71 ug/L	2.213	507.71 ppb	2.213	0.44%
QC value within limits for As 188.979 Recovery = 101.54%						
B 249.677†	20682.6	491.36 ug/L	8.606	491.36 ppb	8.606	1.75%
QC value within limits for B 249.677 Recovery = 98.27%						
Ba 233.527†	63657.9	498.47 ug/L	6.833	498.47 ppb	6.833	1.37%
QC value within limits for Ba 233.527 Recovery = 99.69%						
Be 313.107†	1317040.2	491.92 ug/L	0.241	491.92 ppb	0.241	0.05%
QC value within limits for Be 313.107 Recovery = 98.38%						

Ca 317.933Radial†	2560.9	5095.2 ug/L	48.27	5095.2 ppb	48.27	0.95%
QC value within limits for Ca 317.933Radial Recovery = 101.90%						
Cd 226.502†	43474.3	504.51 ug/L	7.415	504.51 ppb	7.415	1.47%
QC value within limits for Cd 226.502 Recovery = 100.90%						
Co 228.616†	24012.0	502.13 ug/L	7.045	502.13 ppb	7.045	1.40%
QC value within limits for Co 228.616 Recovery = 100.43%						
Cr 267.716†	44346.7	498.36 ug/L	7.006	498.36 ppb	7.006	1.41%
QC value within limits for Cr 267.716 Recovery = 99.67%						
Cu 324.752†	161659.6	485.45 ug/L	7.924	485.45 ppb	7.924	1.63%
QC value within limits for Cu 324.752 Recovery = 97.09%						
Fe 238.204 Radial†	386.4	4992.7 ug/L	43.86	4992.7 ppb	43.86	0.88%
QC value within limits for Fe 238.204 Radial Recovery = 99.85%						
K 766.490 Radial†	27373.5	5114.9 ug/L	24.74	5114.9 ppb	24.74	0.48%
QC value within limits for K 766.490 Radial Recovery = 102.30%						
Mg 279.077 IEC†	115.0	5225.4 ug/L	47.21	5225.4 ppb	47.21	0.90%
QC value within limits for Mg 279.077 IEC Recovery = 104.51%						
Mn 257.610†	439992.8	493.59 ug/L	1.016	493.59 ppb	1.016	0.21%
QC value within limits for Mn 257.610 Recovery = 98.72%						
Mo 202.031†	6808.5	498.71 ug/L	1.077	498.71 ppb	1.077	0.22%
QC value within limits for Mo 202.031 Recovery = 99.74%						
Na 589.592 Radial†	34067.3	9886.5 ug/L	17.29	9886.5 ppb	17.29	0.17%
QC value within limits for Na 589.592 Radial Recovery = 98.86%						
Ni 231.604†	19813.5	503.31 ug/L	6.461	503.31 ppb	6.461	1.28%
QC value within limits for Ni 231.604 Recovery = 100.66%						
P 214.914†	4137.6	2416.2 ug/L	6.28	2416.2 ppb	6.28	0.26%
QC value within limits for P 214.914 Recovery = 96.65%						
Pb 220.353†	4069.3	505.77 ug/L	0.510	505.77 ppb	0.510	0.10%
QC value within limits for Pb 220.353 Recovery = 101.15%						
S 181.975 Axial†	687.5	1006.2 ug/L	5.65	1006.2 ppb	5.65	0.56%
QC value within limits for S 181.975 Axial Recovery = 100.62%						
Sb 206.836†	1425.0	514.79 ug/L	1.572	514.79 ppb	1.572	0.31%
QC value within limits for Sb 206.836 Recovery = 102.96%						
Se 196.026†	763.1	520.13 ug/L	3.645	520.13 ppb	3.645	0.70%
QC value within limits for Se 196.026 Recovery = 104.03%						
Si 251.611†	77245.2	2471.9 ug/L	38.52	2471.9 ppb	38.52	1.56%
QC value within limits for Si 251.611 Recovery = 98.88%						
Sn 189.927†	2790.2	505.40 ug/L	1.577	505.40 ppb	1.577	0.31%
QC value within limits for Sn 189.927 Recovery = 101.08%						
Sr 421.552†	74739.4	495.32 ug/L	0.530	495.32 ppb	0.530	0.11%
QC value within limits for Sr 421.552 Recovery = 99.06%						
Ti 334.940†	317287.1	479.74 ug/L	6.983	479.74 ppb	6.983	1.46%
QC value within limits for Ti 334.940 Recovery = 95.95%						
Tl 190.801†	1560.0	503.83 ug/L	2.215	503.83 ppb	2.215	0.44%
QC value within limits for Tl 190.801 Recovery = 100.77%						
U 409.014†	17709.1	476.83 ug/L	10.529	476.83 ppb	10.529	2.21%
QC value within limits for U 409.014 Recovery = 95.37%						
V 292.402†	70754.9	497.86 ug/L	7.293	497.86 ppb	7.293	1.46%
QC value within limits for V 292.402 Recovery = 99.57%						
Zn 213.857†	49907.4	496.17 ug/L	7.261	496.17 ppb	7.261	1.46%
QC value within limits for Zn 213.857 Recovery = 99.23%						
SiO2†	77176.9	5289.1 ug/L	56.48	5289.1 ppb	56.48	1.07%
QC value within limits for SiO2 Recovery = 98.91%						
All analyte(s) passed QC.						

Sequence No.: 17

Sample ID: CCB

Analyst:

Logged In Analyst (Original) : Optima3

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/23/2010 12:32:06

Data Type: Reprocessed on 2/23/2010 12:42:40

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 361.383	923059.3	923059.3	102.55 %		12:35:16
1	Sc Radial	4161.8	4161.8	97.8 %		12:33:59
1	Y 371.029	778461.9	778461.9	102.10 %		12:35:16
1	Y RADIAL	4589.6	4589.6	97.82 %		12:33:59
1	Ag 328.068†	324.8	87.4	0.4053 ug/L	0.4053 ppb	12:35:21
1	Al 396.153Radial†	-125.6	-17.6	-15.977 ug/L	-15.977 ppb	12:33:59
1	As 188.979†	-12.3	8.6	3.8611 ug/L	3.8611 ppb	12:35:41
1	B 249.677†	-150.3	226.4	5.3977 ug/L	5.3977 ppb	12:35:41
1	Ba 233.527†	12.9	21.7	0.1689 ug/L	0.1689 ppb	12:35:41
1	Be 313.107†	-3912.6	38.2	0.0137 ug/L	0.0137 ppb	12:35:21
1	Ca 317.933Radial†	15.9	0.8	1.6150 ug/L	1.6150 ppb	12:34:19
1	Cd 226.502†	-181.9	6.0	0.0660 ug/L	0.0660 ppb	12:35:41
1	Co 228.616†	-56.0	7.4	0.1545 ug/L	0.1545 ppb	12:35:41
1	Cr 267.716†	66.3	-1.3	-0.0144 ug/L	-0.0144 ppb	12:35:41
1	Cu 324.752†	6067.4	-160.9	-0.4836 ug/L	-0.4836 ppb	12:35:21
1	Fe 238.204 Radial†	12.8	2.9	37.328 ug/L	37.328 ppb	12:34:19
1	K 766.490 Radial†	2694.3	197.0	36.846 ug/L	36.846 ppb	12:33:59
1	Mg 279.077 IEC†	1.5	-1.2	-55.584 ug/L	-55.584 ppb	12:34:19
1	Mn 257.610†	450.5	2.5	0.0087 ug/L	0.0087 ppb	12:35:41
1	Mo 202.031†	10.7	4.4	0.3252 ug/L	0.3252 ppb	12:35:41
1	Na 589.592 Radial†	-729.1	-4.8	-1.3828 ug/L	-1.3828 ppb	12:33:59
1	Ni 231.604†	48.6	-4.9	-0.1242 ug/L	-0.1242 ppb	12:35:41
1	P 214.914†	209.4	2.2	1.3706 ug/L	1.3706 ppb	12:35:41
1	Pb 220.353†	-49.5	16.7	2.0673 ug/L	2.0673 ppb	12:35:41
1	S 181.975 Axial†	40.9	2.8	4.0977 ug/L	4.0977 ppb	12:35:41
1	Sb 206.836†	50.2	12.2	4.2614 ug/L	4.2614 ppb	12:35:41
1	Se 196.026†	-26.7	-5.3	-3.3704 ug/L	-3.3704 ppb	12:35:41
1	Si 251.611†	571.1	22.7	0.7248 ug/L	0.7248 ppb	12:35:41
1	Sn 189.927†	7.9	-2.7	-0.4864 ug/L	-0.4864 ppb	12:35:41
1	Sr 421.552†	41.7	5.8	0.0387 ug/L	0.0387 ppb	12:33:59
1	Ti 334.940†	-1476.2	-157.6	-0.2356 ug/L	-0.2356 ppb	12:35:21
1	Tl 190.801†	-29.7	2.2	0.7143 ug/L	0.7143 ppb	12:35:41
1	U 409.014†	-2714.9	169.0	4.5615 ug/L	4.5615 ppb	12:35:16
1	V 292.402†	-1601.6	-131.3	-0.9045 ug/L	-0.9045 ppb	12:35:21
1	Zn 213.857†	603.6	30.8	0.3051 ug/L	0.3051 ppb	12:35:41
1	SiO2†	580.8	14.9	1.0132 ug/L	1.0132 ppb	12:36:47
2	Sc 361.383	922067.6	922067.6	102.44 %		12:35:46
2	Sc Radial	4144.4	4144.4	97.4 %		12:34:24
2	Y 371.029	778634.5	778634.5	102.12 %		12:35:46
2	Y RADIAL	4564.9	4564.9	97.29 %		12:34:24
2	Ag 328.068†	291.1	54.9	0.2561 ug/L	0.2561 ppb	12:35:51
2	Al 396.153Radial†	-112.4	-4.6	-4.2149 ug/L	-4.2149 ppb	12:34:24
2	As 188.979†	-21.1	-0.1	-0.0496 ug/L	-0.0496 ppb	12:36:11
2	B 249.677†	-169.0	208.0	4.9603 ug/L	4.9603 ppb	12:36:11
2	Ba 233.527†	15.0	23.8	0.1872 ug/L	0.1872 ppb	12:36:11
2	Be 313.107†	-3867.3	78.2	0.0286 ug/L	0.0286 ppb	12:35:51
2	Ca 317.933Radial†	15.7	0.6	1.2928 ug/L	1.2928 ppb	12:34:44
2	Cd 226.502†	-167.4	19.9	0.2299 ug/L	0.2299 ppb	12:36:11
2	Co 228.616†	-67.3	-3.8	-0.0784 ug/L	-0.0784 ppb	12:36:11
2	Cr 267.716†	75.5	7.7	0.0867 ug/L	0.0867 ppb	12:36:11
2	Cu 324.752†	6175.7	-48.8	-0.1477 ug/L	-0.1477 ppb	12:35:51
2	Fe 238.204 Radial†	11.4	1.5	19.708 ug/L	19.708 ppb	12:34:44
2	K 766.490 Radial†	2670.0	183.6	34.349 ug/L	34.349 ppb	12:34:24
2	Mg 279.077 IEC†	-1.4	-4.2	-189.36 ug/L	-189.36 ppb	12:34:44
2	Mn 257.610†	466.9	19.0	0.0310 ug/L	0.0310 ppb	12:36:11
2	Mo 202.031†	10.0	3.7	0.2723 ug/L	0.2723 ppb	12:36:11
2	Na 589.592 Radial†	-713.3	8.3	2.3966 ug/L	2.3966 ppb	12:34:24
2	Ni 231.604†	38.5	-14.7	-0.3734 ug/L	-0.3734 ppb	12:36:11

2	P 214.914†	196.1	-10.6	-6.4255 ug/L	-6.4255 ppb	12:36:11
2	Pb 220.353†	-39.2	26.7	3.3113 ug/L	3.3113 ppb	12:36:11
2	S 181.975 Axial†	40.5	2.5	3.6835 ug/L	3.6835 ppb	12:36:11
2	Sb 206.836†	36.7	-0.9	-0.2687 ug/L	-0.2687 ppb	12:36:11
2	Se 196.026†	-30.0	-8.6	-5.5972 ug/L	-5.5972 ppb	12:36:11
2	Si 251.611†	556.3	8.9	0.2814 ug/L	0.2814 ppb	12:36:11
2	Sn 189.927†	21.1	10.2	1.8406 ug/L	1.8406 ppb	12:36:11
2	Sr 421.552†	52.1	16.7	0.1104 ug/L	0.1104 ppb	12:34:24
2	Ti 334.940†	-1465.5	-148.7	-0.2112 ug/L	-0.2112 ppb	12:35:51
2	Tl 190.801†	-19.6	12.1	3.8886 ug/L	3.8886 ppb	12:36:11
2	U 409.014†	-2728.0	153.3	4.1411 ug/L	4.1411 ppb	12:35:46
2	V 292.402†	-1409.2	54.9	0.3867 ug/L	0.3867 ppb	12:35:51
2	Zn 213.857†	606.7	34.5	0.3462 ug/L	0.3462 ppb	12:36:11
2	SiO2†	597.8	32.1	2.1949 ug/L	2.1949 ppb	12:36:52
3	Sc 361.383	921823.0	921823.0	102.42 %		12:36:16
3	Sc Radial	4165.7	4165.7	97.9 %		12:34:49
3	Y 371.029	778710.3	778710.3	102.13 %		12:36:16
3	Y RADIAL	4619.5	4619.5	98.45 %		12:34:49
3	Ag 328.068†	204.5	-29.7	-0.1318 ug/L	-0.1318 ppb	12:36:21
3	Al 396.153Radial†	-127.8	-19.7	-17.873 ug/L	-17.873 ppb	12:34:49
3	As 188.979†	-20.5	0.5	0.2324 ug/L	0.2324 ppb	12:36:41
3	B 249.677†	-184.4	192.9	4.6014 ug/L	4.6014 ppb	12:36:41
3	Ba 233.527†	15.8	24.6	0.1923 ug/L	0.1923 ppb	12:36:41
3	Be 313.107†	-3832.8	110.9	0.0407 ug/L	0.0407 ppb	12:36:21
3	Ca 317.933Radial†	16.9	1.8	3.5629 ug/L	3.5629 ppb	12:35:09
3	Cd 226.502†	-191.6	-3.8	-0.0451 ug/L	-0.0451 ppb	12:36:41
3	Co 228.616†	-76.8	-13.1	-0.2722 ug/L	-0.2722 ppb	12:36:41
3	Cr 267.716†	77.1	9.2	0.1052 ug/L	0.1052 ppb	12:36:41
3	Cu 324.752†	6239.2	14.8	0.0456 ug/L	0.0456 ppb	12:36:21
3	Fe 238.204 Radial†	11.0	1.0	12.921 ug/L	12.921 ppb	12:35:09
3	K 766.490 Radial†	2745.9	247.1	46.223 ug/L	46.223 ppb	12:34:49
3	Mg 279.077 IEC†	1.5	-1.2	-53.217 ug/L	-53.217 ppb	12:35:09
3	Mn 257.610†	460.1	12.4	0.0173 ug/L	0.0173 ppb	12:36:41
3	Mo 202.031†	13.5	7.1	0.5234 ug/L	0.5234 ppb	12:36:41
3	Na 589.592 Radial†	-704.9	20.6	5.9706 ug/L	5.9706 ppb	12:34:49
3	Ni 231.604†	60.0	6.3	0.1591 ug/L	0.1591 ppb	12:36:41
3	P 214.914†	198.7	-8.0	-4.8743 ug/L	-4.8743 ppb	12:36:41
3	Pb 220.353†	-60.0	6.4	0.7931 ug/L	0.7931 ppb	12:36:41
3	S 181.975 Axial†	37.4	-0.5	-0.7696 ug/L	-0.7696 ppb	12:36:41
3	Sb 206.836†	51.0	13.1	4.6229 ug/L	4.6229 ppb	12:36:41
3	Se 196.026†	-19.9	1.3	0.8888 ug/L	0.8888 ppb	12:36:41
3	Si 251.611†	545.1	-1.9	-0.0664 ug/L	-0.0664 ppb	12:36:41
3	Sn 189.927†	25.8	14.7	2.6634 ug/L	2.6634 ppb	12:36:41
3	Sr 421.552†	36.8	0.8	0.0055 ug/L	0.0055 ppb	12:34:49
3	Ti 334.940†	-1515.2	-197.7	-0.2939 ug/L	-0.2939 ppb	12:36:21
3	Tl 190.801†	-32.0	-0.1	-0.0184 ug/L	-0.0184 ppb	12:36:41
3	U 409.014†	-2910.0	-25.0	-0.6776 ug/L	-0.6776 ppb	12:36:16
3	V 292.402†	-1465.0	0.0	0.0037 ug/L	0.0037 ppb	12:36:21
3	Zn 213.857†	599.2	27.4	0.2716 ug/L	0.2716 ppb	12:36:41
3	SiO2†	587.6	22.2	1.5140 ug/L	1.5140 ppb	12:36:57

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	922316.6	102.47 %		0.073			0.07%
Sc Radial	4157.3	97.7 %		0.27			0.27%
Y 371.029	778602.2	102.12 %		0.017			0.02%
Y RADIAL	4591.4	97.85 %		0.582			0.60%
Ag 328.068†	37.5	0.1765 ug/L		0.27725	0.1765 ppb	0.27725	157.05%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	-14.0	-12.688 ug/L		7.3991	-12.688 ppb	7.3991	58.31%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	3.0	1.3480 ug/L		2.18098	1.3480 ppb	2.18098	161.80%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	209.1	4.9865 ug/L		0.39878	4.9865 ppb	0.39878	8.00%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	23.4	0.1828 ug/L		0.01232	0.1828 ppb	0.01232	6.74%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	75.8	0.0277 ug/L		0.01352	0.0277 ppb	0.01352	48.86%
QC value within limits for Be 313.107 Recovery = Not calculated							

Ca 317.933Radial†	1.1	2.1569 ug/L	1.22824	2.1569 ppb	1.22824	56.95%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	7.4	0.0836 ug/L	0.13837	0.0836 ppb	0.13837	165.48%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-3.2	-0.0654 ug/L	0.21366	-0.0654 ppb	0.21366	326.72%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	5.2	0.0592 ug/L	0.06441	0.0592 ppb	0.06441	108.84%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-64.9	-0.1952 ug/L	0.26781	-0.1952 ppb	0.26781	137.18%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	1.8	23.319 ug/L	12.5978	23.319 ppb	12.5978	54.02%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	209.2	39.140 ug/L	6.2602	39.140 ppb	6.2602	15.99%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	-2.2	-99.386 ug/L	77.9263	-99.386 ppb	77.9263	78.41%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	11.3	0.0190 ug/L	0.01121	0.0190 ppb	0.01121	59.05%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	5.1	0.3736 ug/L	0.13240	0.3736 ppb	0.13240	35.44%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	8.0	2.3281 ug/L	3.67720	2.3281 ppb	3.67720	157.95%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	-4.4	-0.1128 ug/L	0.26642	-0.1128 ppb	0.26642	236.13%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	-5.5	-3.3097 ug/L	4.12682	-3.3097 ppb	4.12682	124.69%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	16.6	2.0573 ug/L	1.25911	2.0573 ppb	1.25911	61.20%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	1.6	2.3372 ug/L	2.69853	2.3372 ppb	2.69853	115.46%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	8.2	2.8719 ug/L	2.72582	2.8719 ppb	2.72582	94.91%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-4.2	-2.6929 ug/L	3.29565	-2.6929 ppb	3.29565	122.38%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	9.9	0.3133 ug/L	0.39653	0.3133 ppb	0.39653	126.58%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	7.4	1.3392 ug/L	1.63364	1.3392 ppb	1.63364	121.99%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	7.8	0.0515 ug/L	0.05363	0.0515 ppb	0.05363	104.14%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	-168.0	-0.2469 ug/L	0.04249	-0.2469 ppb	0.04249	17.21%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	4.8	1.5281 ug/L	2.07674	1.5281 ppb	2.07674	135.90%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	99.1	2.6750 ug/L	2.91105	2.6750 ppb	2.91105	108.82%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	-25.4	-0.1714 ug/L	0.66313	-0.1714 ppb	0.66313	387.00%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	30.9	0.3077 ug/L	0.03736	0.3077 ppb	0.03736	12.14%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	23.1	1.5740 ug/L	0.59316	1.5740 ppb	0.59316	37.68%
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: 7  
 Date Collected: 2/23/2010 13:03:47  
 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	4219.4	4219.4	99.2 %		13:05:39
1	Y RADIAL	4634.2	4634.2	98.77 %		13:05:39
1	Al 396.153Radial†	5242.9	5396.1	4862.6 ug/L	4862.6 ppb	13:05:39
1	Ca 317.933Radial†	2490.8	2495.5	4965.0 ug/L	4965.0 ppb	13:05:59
1	Fe 238.204 Radial†	378.9	371.8	4805.3 ug/L	4805.3 ppb	13:05:59
1	K 766.490 Radial†	28685.2	26360.8	4925.6 ug/L	4925.6 ppb	13:05:39
1	Mg 279.077 IEC†	116.6	114.8	5217.0 ug/L	5217.0 ppb	13:05:59
1	Na 589.592 Radial†	31612.9	32609.4	9463.4 ug/L	9463.4 ppb	13:05:39
1	Sr 421.552†	71826.2	72371.3	479.63 ug/L	479.63 ppb	13:05:39
1	Sc 361.383	907508.6	907508.6	100.83 %		13:06:57
1	Y 371.029	754725.7	754725.7	98.988 %		13:06:57
1	Ag 328.068†	110364.0	109229.3	504.65 ug/L	504.65 ppb	13:07:02
1	As 188.979†	1107.9	1119.3	508.74 ug/L	508.74 ppb	13:07:22
1	B 249.677†	20418.8	20624.2	489.97 ug/L	489.97 ppb	13:07:02
1	Ba 233.527†	65027.7	64503.3	505.08 ug/L	505.08 ppb	13:07:02
1	Be 313.107†	1323657.5	1316651.2	491.80 ug/L	491.80 ppb	13:06:57
1	Cd 226.502†	44210.1	44030.7	510.99 ug/L	510.99 ppb	13:07:02
1	Co 228.616†	24527.2	24387.9	509.98 ug/L	509.98 ppb	13:07:02
1	Cr 267.716†	45261.6	44824.2	503.71 ug/L	503.71 ppb	13:07:02
1	Cu 324.752†	171538.3	164053.8	492.62 ug/L	492.62 ppb	13:07:02
1	Mn 257.610†	445764.0	441670.0	495.45 ug/L	495.45 ppb	13:06:57
1	Mo 202.031†	6932.1	6869.2	503.14 ug/L	503.14 ppb	13:07:22
1	Ni 231.604†	20225.6	20007.3	508.24 ug/L	508.24 ppb	13:07:02
1	P 214.914†	4408.3	4170.1	2434.7 ug/L	2434.7 ppb	13:07:22
1	Pb 220.353†	4056.6	4088.3	508.11 ug/L	508.11 ppb	13:07:22
1	S 181.975 Axial†	751.1	707.9	1036.1 ug/L	1036.1 ppb	13:07:22
1	Sb 206.836†	1476.4	1427.6	515.85 ug/L	515.85 ppb	13:07:22
1	Se 196.026†	756.5	771.0	524.76 ug/L	524.76 ppb	13:07:22
1	Si 251.611†	79408.0	78222.3	2503.2 ug/L	2503.2 ppb	13:07:02
1	Sn 189.927†	2848.4	2814.6	509.79 ug/L	509.79 ppb	13:07:22
1	Ti 334.940†	326208.7	324814.2	491.11 ug/L	491.11 ppb	13:06:57
1	Tl 190.801†	1542.6	1561.2	504.26 ug/L	504.26 ppb	13:07:22
1	U 409.014†	15171.6	17863.4	481.01 ug/L	481.01 ppb	13:07:02
1	V 292.402†	70842.4	71691.7	504.45 ug/L	504.45 ppb	13:07:02
1	Zn 213.857†	51468.8	50488.8	501.99 ug/L	501.99 ppb	13:07:02
1	SiO2†	79473.9	78270.3	5364.1 ug/L	5364.1 ppb	13:08:30
2	Sc Radial	4042.0	4042.0	95.0 %		13:06:04
2	Y RADIAL	4421.1	4421.1	94.23 %		13:06:04
2	Al 396.153Radial†	5224.5	5608.7	5055.3 ug/L	5055.3 ppb	13:06:04
2	Ca 317.933Radial†	2490.6	2605.4	5183.8 ug/L	5183.8 ppb	13:06:24
2	Fe 238.204 Radial†	382.1	391.9	5064.2 ug/L	5064.2 ppb	13:06:24
2	K 766.490 Radial†	28547.1	27484.4	5135.6 ug/L	5135.6 ppb	13:06:04
2	Mg 279.077 IEC†	111.9	115.0	5226.4 ug/L	5226.4 ppb	13:06:24
2	Na 589.592 Radial†	31428.5	33813.6	9812.8 ug/L	9812.8 ppb	13:06:04
2	Sr 421.552†	71309.0	75004.2	497.08 ug/L	497.08 ppb	13:06:04
2	Sc 361.383	920688.8	920688.8	102.29 %		13:07:28
2	Y 371.029	766081.7	766081.7	100.48 %		13:07:28
2	Ag 328.068†	109579.9	106895.7	493.97 ug/L	493.97 ppb	13:07:33
2	As 188.979†	1113.1	1108.7	503.99 ug/L	503.99 ppb	13:07:53
2	B 249.677†	20234.4	20154.0	478.75 ug/L	478.75 ppb	13:07:33
2	Ba 233.527†	64419.0	62985.0	493.20 ug/L	493.20 ppb	13:07:33
2	Be 313.107†	1342856.8	1316626.8	491.78 ug/L	491.78 ppb	13:07:28
2	Cd 226.502†	43866.9	43067.5	499.78 ug/L	499.78 ppb	13:07:33
2	Co 228.616†	24207.5	23727.1	496.16 ug/L	496.16 ppb	13:07:33
2	Cr 267.716†	44984.5	43910.8	493.48 ug/L	493.48 ppb	13:07:33
2	Cu 324.752†	170284.7	160392.8	481.65 ug/L	481.65 ppb	13:07:33
2	Mn 257.610†	450123.6	439602.9	493.16 ug/L	493.16 ppb	13:07:28
2	Mo 202.031†	6984.9	6822.4	499.73 ug/L	499.73 ppb	13:07:53
2	Ni 231.604†	20132.8	19629.4	498.64 ug/L	498.64 ppb	13:07:33

2	P 214.914†	4450.8	4149.0	2423.8 ug/L	2423.8 ppb	13:07:53
2	Pb 220.353†	4082.6	4056.2	504.14 ug/L	504.14 ppb	13:07:53
2	S 181.975 Axial†	748.7	694.9	1017.1 ug/L	1017.1 ppb	13:07:53
2	Sb 206.836†	1504.8	1434.4	518.05 ug/L	518.05 ppb	13:07:53
2	Se 196.026†	763.5	767.1	523.01 ug/L	523.01 ppb	13:07:53
2	Si 251.611†	78723.9	76426.1	2445.6 ug/L	2445.6 ppb	13:07:33
2	Sn 189.927†	2862.0	2787.5	504.91 ug/L	504.91 ppb	13:07:53
2	Ti 334.940†	330062.0	323949.7	489.83 ug/L	489.83 ppb	13:07:28
2	Tl 190.801†	1556.9	1553.3	501.79 ug/L	501.79 ppb	13:07:53
2	U 409.014†	15159.8	17636.5	474.87 ug/L	474.87 ppb	13:07:33
2	V 292.402†	70374.4	70228.2	494.20 ug/L	494.20 ppb	13:07:33
2	Zn 213.857†	51136.9	49433.7	491.44 ug/L	491.44 ppb	13:07:33
2	SiO2†	78201.6	75898.2	5201.3 ug/L	5201.3 ppb	13:08:35
3	Sc Radial	4056.7	4056.7	95.4 %		13:06:29
3	Y RADIAL	4416.3	4416.3	94.12 %		13:06:29
3	Al 396.153Radial†	5251.7	5617.3	5063.0 ug/L	5063.0 ppb	13:06:29
3	Ca 317.933Radial†	2471.4	2575.8	5124.8 ug/L	5124.8 ppb	13:06:49
3	Fe 238.204 Radial†	382.5	390.9	5051.0 ug/L	5051.0 ppb	13:06:49
3	K 766.490 Radial†	28612.5	27444.0	5128.1 ug/L	5128.1 ppb	13:06:29
3	Mg 279.077 IEC†	110.1	112.7	5121.9 ug/L	5121.9 ppb	13:06:49
3	Na 589.592 Radial†	31482.6	33750.5	9794.5 ug/L	9794.5 ppb	13:06:29
3	Sr 421.552†	71295.1	74717.5	495.18 ug/L	495.18 ppb	13:06:29
3	Sc 361.383	912366.2	912366.2	101.37 %		13:07:59
3	Y 371.029	759091.1	759091.1	99.560 %		13:07:59
3	Ag 328.068†	110020.7	108307.8	500.47 ug/L	500.47 ppb	13:08:04
3	As 188.979†	1112.8	1118.3	508.34 ug/L	508.34 ppb	13:08:25
3	B 249.677†	20375.2	20473.4	486.35 ug/L	486.35 ppb	13:08:04
3	Ba 233.527†	64834.9	63969.7	500.91 ug/L	500.91 ppb	13:08:04
3	Be 313.107†	1331914.2	1317807.0	492.23 ug/L	492.23 ppb	13:07:59
3	Cd 226.502†	44101.1	43689.7	507.01 ug/L	507.01 ppb	13:08:04
3	Co 228.616†	24346.6	24080.2	503.54 ug/L	503.54 ppb	13:08:04
3	Cr 267.716†	45107.6	44433.3	499.34 ug/L	499.34 ppb	13:08:04
3	Cu 324.752†	171118.6	162734.0	488.68 ug/L	488.68 ppb	13:08:04
3	Mn 257.610†	447370.6	440901.1	494.62 ug/L	494.62 ppb	13:07:59
3	Mo 202.031†	6943.0	6843.3	501.27 ug/L	501.27 ppb	13:08:25
3	Ni 231.604†	20177.7	19853.3	504.33 ug/L	504.33 ppb	13:08:04
3	P 214.914†	4415.1	4153.5	2425.2 ug/L	2425.2 ppb	13:08:25
3	Pb 220.353†	4068.9	4079.1	506.98 ug/L	506.98 ppb	13:08:25
3	S 181.975 Axial†	740.6	693.6	1015.2 ug/L	1015.2 ppb	13:08:25
3	Sb 206.836†	1482.2	1425.6	515.03 ug/L	515.03 ppb	13:08:25
3	Se 196.026†	745.6	756.3	515.84 ug/L	515.84 ppb	13:08:25
3	Si 251.611†	79272.4	77669.3	2485.5 ug/L	2485.5 ppb	13:08:04
3	Sn 189.927†	2843.2	2794.4	506.16 ug/L	506.16 ppb	13:08:25
3	Ti 334.940†	327405.4	324272.2	490.32 ug/L	490.32 ppb	13:07:59
3	Tl 190.801†	1557.9	1568.1	506.53 ug/L	506.53 ppb	13:08:25
3	U 409.014†	15147.8	17759.8	478.19 ug/L	478.19 ppb	13:08:04
3	V 292.402†	70542.3	71021.5	499.73 ug/L	499.73 ppb	13:08:04
3	Zn 213.857†	51362.8	50112.5	498.21 ug/L	498.21 ppb	13:08:04
3	SiO2†	80483.7	78846.9	5403.8 ug/L	5403.8 ppb	13:08:40

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	913521.2	101.50 %	0.741			0.73%
Sc Radial	4106.0	96.5 %	2.31			2.40%
Y 371.029	759966.1	99.675 %	0.7513			0.75%
Y RADIAL	4490.6	95.71 %	2.652			2.77%
Ag 328.068†	108144.3	499.70 ug/L	5.380	499.70 ppb	5.380	1.08%
QC value within limits for Ag 328.068 Recovery = 99.94%						
Al 396.153Radial†	5540.7	4993.6 ug/L	113.52	4993.6 ppb	113.52	2.27%
QC value within limits for Al 396.153Radial Recovery = 99.87%						
As 188.979†	1115.5	507.02 ug/L	2.635	507.02 ppb	2.635	0.52%
QC value within limits for As 188.979 Recovery = 101.40%						
B 249.677†	20417.2	485.02 ug/L	5.728	485.02 ppb	5.728	1.18%
QC value within limits for B 249.677 Recovery = 97.00%						
Ba 233.527†	63819.3	499.73 ug/L	6.024	499.73 ppb	6.024	1.21%
QC value within limits for Ba 233.527 Recovery = 99.95%						
Be 313.107†	1317028.3	491.94 ug/L	0.251	491.94 ppb	0.251	0.05%
QC value within limits for Be 313.107 Recovery = 98.39%						
Ca 317.933Radial†	2558.9	5091.2 ug/L	113.17	5091.2 ppb	113.17	2.22%

QC value within limits for Ca 317.933 Radial Recovery = 101.82%							
Cd	226.502†	43596.0	505.93 ug/L	5.685	505.93 ppb	5.685	1.12%
QC value within limits for Cd 226.502 Recovery = 101.19%							
Co	228.616†	24065.1	503.23 ug/L	6.919	503.23 ppb	6.919	1.37%
QC value within limits for Co 228.616 Recovery = 100.65%							
Cr	267.716†	44389.4	498.84 ug/L	5.135	498.84 ppb	5.135	1.03%
QC value within limits for Cr 267.716 Recovery = 99.77%							
Cu	324.752†	162393.5	487.65 ug/L	5.560	487.65 ppb	5.560	1.14%
QC value within limits for Cu 324.752 Recovery = 97.53%							
Fe	238.204 Radial†	384.9	4973.5 ug/L	145.77	4973.5 ppb	145.77	2.93%
QC value within limits for Fe 238.204 Radial Recovery = 99.47%							
K	766.490 Radial†	27096.4	5063.1 ug/L	119.13	5063.1 ppb	119.13	2.35%
QC value within limits for K 766.490 Radial Recovery = 101.26%							
Mg	279.077 IEC†	114.2	5188.5 ug/L	57.80	5188.5 ppb	57.80	1.11%
QC value within limits for Mg 279.077 IEC Recovery = 103.77%							
Mn	257.610†	440724.7	494.41 ug/L	1.160	494.41 ppb	1.160	0.23%
QC value within limits for Mn 257.610 Recovery = 98.88%							
Mo	202.031†	6845.0	501.38 ug/L	1.704	501.38 ppb	1.704	0.34%
QC value within limits for Mo 202.031 Recovery = 100.28%							
Na	589.592 Radial†	33391.2	9690.2 ug/L	196.69	9690.2 ppb	196.69	2.03%
QC value within limits for Na 589.592 Radial Recovery = 96.90%							
Ni	231.604†	19830.0	503.73 ug/L	4.826	503.73 ppb	4.826	0.96%
QC value within limits for Ni 231.604 Recovery = 100.75%							
P	214.914†	4157.5	2427.9 ug/L	5.89	2427.9 ppb	5.89	0.24%
QC value within limits for P 214.914 Recovery = 97.12%							
Pb	220.353†	4074.5	506.41 ug/L	2.045	506.41 ppb	2.045	0.40%
QC value within limits for Pb 220.353 Recovery = 101.28%							
S	181.975 Axial†	698.8	1022.8 ug/L	11.59	1022.8 ppb	11.59	1.13%
QC value within limits for S 181.975 Axial Recovery = 102.28%							
Sb	206.836†	1429.2	516.31 ug/L	1.562	516.31 ppb	1.562	0.30%
QC value within limits for Sb 206.836 Recovery = 103.26%							
Se	196.026†	764.8	521.20 ug/L	4.725	521.20 ppb	4.725	0.91%
QC value within limits for Se 196.026 Recovery = 104.24%							
Si	251.611†	77439.3	2478.1 ug/L	29.49	2478.1 ppb	29.49	1.19%
QC value within limits for Si 251.611 Recovery = 99.12%							
Sn	189.927†	2798.8	506.96 ug/L	2.535	506.96 ppb	2.535	0.50%
QC value within limits for Sn 189.927 Recovery = 101.39%							
Sr	421.552†	74031.0	490.63 ug/L	9.573	490.63 ppb	9.573	1.95%
QC value within limits for Sr 421.552 Recovery = 98.13%							
Ti	334.940†	324345.4	490.42 ug/L	0.642	490.42 ppb	0.642	0.13%
QC value within limits for Ti 334.940 Recovery = 98.08%							
Tl	190.801†	1560.8	504.19 ug/L	2.371	504.19 ppb	2.371	0.47%
QC value within limits for Tl 190.801 Recovery = 100.84%							
U	409.014†	17753.2	478.03 ug/L	3.072	478.03 ppb	3.072	0.64%
QC value within limits for U 409.014 Recovery = 95.61%							
V	292.402†	70980.5	499.46 ug/L	5.132	499.46 ppb	5.132	1.03%
QC value within limits for V 292.402 Recovery = 99.89%							
Zn	213.857†	50011.7	497.21 ug/L	5.345	497.21 ppb	5.345	1.08%
QC value within limits for Zn 213.857 Recovery = 99.44%							
SiO2†		77671.8	5323.1 ug/L	107.35	5323.1 ppb	107.35	2.02%
QC value within limits for SiO2 Recovery = 99.54%							

All analyte(s) passed QC.



Sequence No.: 4  
 Sample ID: CCB  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 8  
 Date Collected: 2/23/2010 13:10:51  
 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	4372.5	4372.5	103 %		13:12:43
1	Y RADIAL	4827.5	4827.5	102.9 %		13:12:43
1	Al 396.153Radial†	-118.5	-4.5	-4.0590 ug/L	-4.0590 ppb	13:12:43
1	Ca 317.933Radial†	19.9	3.9	7.7435 ug/L	7.7435 ppb	13:13:03
1	Fe 238.204 Radial†	11.2	0.7	9.0474 ug/L	9.0474 ppb	13:13:03
1	K 766.490 Radial†	2650.7	21.8	4.0676 ug/L	4.0676 ppb	13:12:43
1	Mg 279.077 IEC†	0.9	-1.9	-86.589 ug/L	-86.589 ppb	13:13:03
1	Na 589.592 Radial†	-745.9	14.7	4.2694 ug/L	4.2694 ppb	13:12:43
1	Sr 421.552†	7.3	-29.7	-0.1966 ug/L	-0.1966 ppb	13:12:43
1	Sc 361.383	918906.0	918906.0	102.09 %		13:14:00
1	Y 371.029	776503.0	776503.0	101.84 %		13:14:00
1	Ag 328.068†	211.0	-22.7	-0.1032 ug/L	-0.1032 ppb	13:14:05
1	As 188.979†	-19.0	1.9	0.8549 ug/L	0.8549 ppb	13:14:25
1	B 249.677†	-398.6	-17.5	-0.4190 ug/L	-0.4190 ppb	13:14:25
1	Ba 233.527†	15.1	23.9	0.1867 ug/L	0.1867 ppb	13:14:25
1	Be 313.107†	-3826.1	105.7	0.0387 ug/L	0.0387 ppb	13:14:05
1	Cd 226.502†	-188.9	-1.7	-0.0209 ug/L	-0.0209 ppb	13:14:25
1	Co 228.616†	-69.4	-6.0	-0.1258 ug/L	-0.1258 ppb	13:14:25
1	Cr 267.716†	94.1	26.2	0.2941 ug/L	0.2941 ppb	13:14:25
1	Cu 324.752†	6102.8	-99.4	-0.2991 ug/L	-0.2991 ppb	13:14:05
1	Mn 257.610†	467.9	21.4	0.0285 ug/L	0.0285 ppb	13:14:25
1	Mo 202.031†	7.3	1.1	0.0804 ug/L	0.0804 ppb	13:14:25
1	Ni 231.604†	51.2	-2.2	-0.0561 ug/L	-0.0561 ppb	13:14:25
1	P 214.914†	208.7	2.4	1.5147 ug/L	1.5147 ppb	13:14:25
1	Pb 220.353†	-42.6	23.3	2.8812 ug/L	2.8812 ppb	13:14:25
1	S 181.975 Axial†	41.0	3.1	4.5342 ug/L	4.5342 ppb	13:14:25
1	Sb 206.836†	37.5	0.0	0.0098 ug/L	0.0098 ppb	13:14:25
1	Se 196.026†	-20.3	0.9	0.5896 ug/L	0.5896 ppb	13:14:25
1	Si 251.611†	533.9	-11.2	-0.3615 ug/L	-0.3615 ppb	13:14:25
1	Sn 189.927†	8.1	-2.5	-0.4586 ug/L	-0.4586 ppb	13:14:25
1	Ti 334.940†	-1502.8	-190.2	-0.2805 ug/L	-0.2805 ppb	13:14:05
1	Tl 190.801†	-28.3	3.5	1.1147 ug/L	1.1147 ppb	13:14:25
1	U 409.014†	-2806.2	67.6	1.8262 ug/L	1.8262 ppb	13:14:00
1	V 292.402†	-1469.1	-8.6	-0.0577 ug/L	-0.0577 ppb	13:14:05
1	Zn 213.857†	615.3	45.0	0.4506 ug/L	0.4506 ppb	13:14:25
1	SiO2†	551.9	-10.9	-0.7502 ug/L	-0.7502 ppb	13:15:31
2	Sc Radial	4130.3	4130.3	97.1 %		13:13:08
2	Y RADIAL	4597.7	4597.7	97.99 %		13:13:08
2	Al 396.153Radial†	-106.4	1.2	1.1175 ug/L	1.1175 ppb	13:13:08
2	Ca 317.933Radial†	25.1	10.4	20.710 ug/L	20.710 ppb	13:13:28
2	Fe 238.204 Radial†	8.3	-1.6	-20.960 ug/L	-20.960 ppb	13:13:28
2	K 766.490 Radial†	2749.2	274.5	51.341 ug/L	51.341 ppb	13:13:08
2	Mg 279.077 IEC†	-2.7	-5.5	-251.86 ug/L	-251.86 ppb	13:13:28
2	Na 589.592 Radial†	-729.6	-11.0	-3.1879 ug/L	-3.1879 ppb	13:13:08
2	Sr 421.552†	43.3	7.8	0.0513 ug/L	0.0513 ppb	13:13:08
2	Sc 361.383	933569.4	933569.4	103.72 %		13:14:30
2	Y 371.029	788435.0	788435.0	103.41 %		13:14:30
2	Ag 328.068†	328.7	87.6	0.3897 ug/L	0.3897 ppb	13:14:35
2	As 188.979†	-19.7	1.5	0.6646 ug/L	0.6646 ppb	13:14:56
2	B 249.677†	-404.4	-16.9	-0.3999 ug/L	-0.3999 ppb	13:14:56
2	Ba 233.527†	12.6	21.3	0.1654 ug/L	0.1654 ppb	13:14:56
2	Be 313.107†	-3842.7	148.5	0.0551 ug/L	0.0551 ppb	13:14:35
2	Cd 226.502†	-175.6	14.0	0.1665 ug/L	0.1665 ppb	13:14:56
2	Co 228.616†	-61.3	2.9	0.0605 ug/L	0.0605 ppb	13:14:56
2	Cr 267.716†	75.6	6.9	0.0728 ug/L	0.0728 ppb	13:14:56
2	Cu 324.752†	6183.2	-115.9	-0.3526 ug/L	-0.3526 ppb	13:14:35
2	Mn 257.610†	460.2	6.9	0.0159 ug/L	0.0159 ppb	13:14:56
2	Mo 202.031†	7.3	1.0	0.0702 ug/L	0.0702 ppb	13:14:56
2	Ni 231.604†	67.3	12.5	0.3183 ug/L	0.3183 ppb	13:14:56

2	P 214.914†	214.1	4.4	2.7666 ug/L	2.7666 ppb	13:14:56
2	Pb 220.353†	-69.2	-1.7	-0.2115 ug/L	-0.2115 ppb	13:14:56
2	S 181.975 Axial†	48.3	9.5	13.938 ug/L	13.938 ppb	13:14:56
2	Sb 206.836†	43.8	5.5	1.9375 ug/L	1.9375 ppb	13:14:56
2	Se 196.026†	-30.3	-8.5	-5.6950 ug/L	-5.6950 ppb	13:14:56
2	Si 251.611†	554.2	0.2	0.0044 ug/L	0.0044 ppb	13:14:56
2	Sn 189.927†	15.9	4.9	0.8940 ug/L	0.8940 ppb	13:14:56
2	Ti 334.940†	-1412.8	-80.3	-0.1009 ug/L	-0.1009 ppb	13:14:35
2	Tl 190.801†	-30.1	2.2	0.6969 ug/L	0.6969 ppb	13:14:56
2	U 409.014†	-2672.1	240.0	6.4877 ug/L	6.4877 ppb	13:14:30
2	V 292.402†	-1504.2	-19.8	-0.1257 ug/L	-0.1257 ppb	13:14:35
2	Zn 213.857†	617.2	37.3	0.3762 ug/L	0.3762 ppb	13:14:56
2	SiO2†	566.5	-5.3	-0.3656 ug/L	-0.3656 ppb	13:15:36
3	Sc Radial	4238.8	4238.8	99.7 %		13:13:34
3	Y RADIAL	4679.3	4679.3	99.73 %		13:13:34
3	Al 396.153Radial†	-122.1	-11.7	-10.658 ug/L	-10.658 ppb	13:13:34
3	Ca 317.933Radial†	18.6	3.2	6.3833 ug/L	6.3833 ppb	13:13:54
3	Fe 238.204 Radial†	11.0	0.8	10.666 ug/L	10.666 ppb	13:13:54
3	K 766.490 Radial†	2703.5	156.2	29.204 ug/L	29.204 ppb	13:13:34
3	Mg 279.077 IEC†	4.3	1.6	70.715 ug/L	70.715 ppb	13:13:54
3	Na 589.592 Radial†	-666.6	71.5	20.739 ug/L	20.739 ppb	13:13:34
3	Sr 421.552†	13.3	-23.4	-0.1553 ug/L	-0.1553 ppb	13:13:34
3	Sc 361.383	911379.9	911379.9	101.26 %		13:15:01
3	Y 371.029	769704.0	769704.0	100.95 %		13:15:01
3	Ag 328.068†	169.0	-62.4	-0.2871 ug/L	-0.2871 ppb	13:15:06
3	As 188.979†	-24.4	-3.6	-1.6037 ug/L	-1.6037 ppb	13:15:26
3	B 249.677†	-404.4	-26.4	-0.6313 ug/L	-0.6313 ppb	13:15:26
3	Ba 233.527†	4.8	13.8	0.1070 ug/L	0.1070 ppb	13:15:26
3	Be 313.107†	-3844.9	56.1	0.0206 ug/L	0.0206 ppb	13:15:06
3	Cd 226.502†	-179.8	5.7	0.0655 ug/L	0.0655 ppb	13:15:26
3	Co 228.616†	-66.1	-3.4	-0.0698 ug/L	-0.0698 ppb	13:15:26
3	Cr 267.716†	72.9	6.0	0.0671 ug/L	0.0671 ppb	13:15:26
3	Cu 324.752†	6219.2	64.8	0.1946 ug/L	0.1946 ppb	13:15:06
3	Mn 257.610†	456.5	13.9	0.0138 ug/L	0.0138 ppb	13:15:26
3	Mo 202.031†	11.2	5.0	0.3667 ug/L	0.3667 ppb	13:15:26
3	Ni 231.604†	53.0	0.1	0.0014 ug/L	0.0014 ppb	13:15:26
3	P 214.914†	217.5	12.7	7.6748 ug/L	7.6748 ppb	13:15:26
3	Pb 220.353†	-52.7	13.0	1.6032 ug/L	1.6032 ppb	13:15:26
3	S 181.975 Axial†	37.6	0.1	0.1845 ug/L	0.1845 ppb	13:15:26
3	Sb 206.836†	48.6	11.3	3.9619 ug/L	3.9619 ppb	13:15:26
3	Se 196.026†	-25.2	-4.2	-2.7191 ug/L	-2.7191 ppb	13:15:26
3	Si 251.611†	536.6	-4.2	-0.1396 ug/L	-0.1396 ppb	13:15:26
3	Sn 189.927†	11.8	1.3	0.2275 ug/L	0.2275 ppb	13:15:26
3	Ti 334.940†	-1389.7	-90.6	-0.1425 ug/L	-0.1425 ppb	13:15:06
3	Tl 190.801†	-39.9	-8.2	-2.6184 ug/L	-2.6184 ppb	13:15:26
3	U 409.014†	-2805.6	45.5	1.2290 ug/L	1.2290 ppb	13:15:01
3	V 292.402†	-1548.2	-98.5	-0.6764 ug/L	-0.6764 ppb	13:15:06
3	Zn 213.857†	617.5	52.1	0.5210 ug/L	0.5210 ppb	13:15:26
3	SiO2†	566.7	8.1	0.5488 ug/L	0.5488 ppb	13:15:41

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	921285.1	102.36 %	1.254			1.22%
Sc Radial	4247.2	99.9 %	2.85			2.86%
Y 371.029	778214.0	102.07 %	1.244			1.22%
Y RADIAL	4701.5	100.2 %	2.48			2.48%
Ag 328.068†	0.8	-0.0002 ug/L	0.34994	-0.0002 ppb	0.34994	>999.9%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-5.0	-4.5332 ug/L	5.90208	-4.5332 ppb	5.90208	130.20%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-0.1	-0.0281 ug/L	1.36788	-0.0281 ppb	1.36788	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-20.3	-0.4834 ug/L	0.12844	-0.4834 ppb	0.12844	26.57%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	19.7	0.1531 ug/L	0.04129	0.1531 ppb	0.04129	26.97%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	103.4	0.0381 ug/L	0.01724	0.0381 ppb	0.01724	45.21%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	5.8	11.612 ug/L	7.9084	11.612 ppb	7.9084	68.10%

QC value within limits for Ca 317.933 Radial	Recovery = Not calculated	
Cd 226.502†	6.0 0.0704 ug/L 0.09377 0.0704 ppb	0.09377 133.24%
QC value within limits for Cd 226.502	Recovery = Not calculated	
Co 228.616†	-2.2 -0.0450 ug/L 0.09560 -0.0450 ppb	0.09560 212.45%
QC value within limits for Co 228.616	Recovery = Not calculated	
Cr 267.716†	13.1 0.1447 ug/L 0.12947 0.1447 ppb	0.12947 89.49%
QC value within limits for Cr 267.716	Recovery = Not calculated	
Cu 324.752†	-50.2 -0.1524 ug/L 0.30168 -0.1524 ppb	0.30168 197.97%
QC value within limits for Cu 324.752	Recovery = Not calculated	
Fe 238.204 Radial†	-0.0 -0.4156 ug/L 17.81049 -0.4156 ppb	17.81049 >999.9%
QC value within limits for Fe 238.204 Radial	Recovery = Not calculated	
K 766.490 Radial†	150.8 28.204 ug/L 23.6523 28.204 ppb	23.6523 83.86%
QC value within limits for K 766.490 Radial	Recovery = Not calculated	
Mg 279.077 IEC†	-2.0 -89.246 ug/L 161.3061 -89.246 ppb	161.3061 180.74%
QC value within limits for Mg 279.077 IEC	Recovery = Not calculated	
Mn 257.610†	14.1 0.0194 ug/L 0.00793 0.0194 ppb	0.00793 40.89%
QC value within limits for Mn 257.610	Recovery = Not calculated	
Mo 202.031†	2.4 0.1724 ug/L 0.16834 0.1724 ppb	0.16834 97.63%
QC value within limits for Mo 202.031	Recovery = Not calculated	
Na 589.592 Radial†	25.1 7.2736 ug/L 12.24325 7.2736 ppb	12.24325 168.32%
QC value within limits for Na 589.592 Radial	Recovery = Not calculated	
Ni 231.604†	3.5 0.0879 ug/L 0.20158 0.0879 ppb	0.20158 229.36%
QC value within limits for Ni 231.604	Recovery = Not calculated	
P 214.914†	6.5 3.9854 ug/L 3.25586 3.9854 ppb	3.25586 81.70%
QC value within limits for P 214.914	Recovery = Not calculated	
Pb 220.353†	11.5 1.4243 ug/L 1.55408 1.4243 ppb	1.55408 109.11%
QC value within limits for Pb 220.353	Recovery = Not calculated	
S 181.975 Axial†	4.2 6.2189 ug/L 7.02971 6.2189 ppb	7.02971 113.04%
QC value within limits for S 181.975 Axial	Recovery = Not calculated	
Sb 206.836†	5.6 1.9697 ug/L 1.97625 1.9697 ppb	1.97625 100.33%
QC value within limits for Sb 206.836	Recovery = Not calculated	
Se 196.026†	-4.0 -2.6082 ug/L 3.14377 -2.6082 ppb	3.14377 120.53%
QC value within limits for Se 196.026	Recovery = Not calculated	
Si 251.611†	-5.1 -0.1656 ug/L 0.18435 -0.1656 ppb	0.18435 111.33%
QC value within limits for Si 251.611	Recovery = Not calculated	
Sn 189.927†	1.2 0.2209 ug/L 0.67629 0.2209 ppb	0.67629 306.09%
QC value within limits for Sn 189.927	Recovery = Not calculated	
Sr 421.552†	-15.1 -0.1002 ug/L 0.13280 -0.1002 ppb	0.13280 132.51%
QC value within limits for Sr 421.552	Recovery = Not calculated	
Ti 334.940†	-120.4 -0.1746 ug/L 0.09397 -0.1746 ppb	0.09397 53.81%
QC value within limits for Ti 334.940	Recovery = Not calculated	
Tl 190.801†	-0.8 -0.2689 ug/L 2.04540 -0.2689 ppb	2.04540 760.55%
QC value within limits for Tl 190.801	Recovery = Not calculated	
U 409.014†	117.7 3.1810 ug/L 2.87926 3.1810 ppb	2.87926 90.51%
QC value within limits for U 409.014	Recovery = Not calculated	
V 292.402†	-42.3 -0.2866 ug/L 0.33929 -0.2866 ppb	0.33929 118.39%
QC value within limits for V 292.402	Recovery = Not calculated	
Zn 213.857†	44.8 0.4492 ug/L 0.07242 0.4492 ppb	0.07242 16.12%
QC value within limits for Zn 213.857	Recovery = Not calculated	
SiO2†	-2.7 -0.1890 ug/L 0.66725 -0.1890 ppb	0.66725 352.98%
QC value within limits for SiO2	Recovery = Not calculated	

All analyte(s) passed QC.

## =====

## Analysis Begun

Start Time: 2/23/2010 14:04:56

Plasma On Time: 2/22/2010 05:55:10

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\022310B.sif

Batch ID:

Results Data Set: 022310A

Results Library: C:\pe\Optima3\Results\Results.mdb

=====

Sequence No.: 1

Autosampler Location: 7

Sample ID: CCV

Date Collected: 2/23/2010 14:04:57

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

## -----

## Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3971.4	3971.4	93.4 %		14:07:09
1	Y RADIAL	4487.7	4487.7	95.64 %		14:06:49
1	Al 396.153Radial†	5306.8	5794.6	5223.5 ug/L	5223.5 ppb	14:06:49
1	Ca 317.933Radial†	2539.4	2704.4	5380.7 ug/L	5380.7 ppb	14:07:09
1	Fe 238.204 Radial†	393.3	411.1	5311.3 ug/L	5311.3 ppb	14:07:09
1	K 766.490 Radial†	28933.8	28432.8	5312.7 ug/L	5312.7 ppb	14:06:49
1	Mg 279.077 IEC†	114.2	119.6	5434.6 ug/L	5434.6 ppb	14:07:09
1	Na 589.592 Radial†	33562.3	36687.3	10647 ug/L	10647 ppb	14:06:49
1	Sr 421.552†	73917.1	79132.3	524.44 ug/L	524.44 ppb	14:06:49
1	Sc 361.383	914094.0	914094.0	101.56 %		14:08:06
1	Y 371.029	759983.4	759983.4	99.678 %		14:08:06
1	Ag 328.068†	110716.4	108787.7	502.76 ug/L	502.76 ppb	14:08:11
1	As 188.979†	1115.1	1118.5	508.42 ug/L	508.42 ppb	14:08:31
1	B 249.677†	20401.1	20460.9	486.00 ug/L	486.00 ppb	14:08:11
1	Ba 233.527†	65269.6	64276.9	503.32 ug/L	503.32 ppb	14:08:11
1	Be 313.107†	1352259.2	1335356.0	498.75 ug/L	498.75 ppb	14:08:06
1	Cd 226.502†	44339.1	43841.8	508.75 ug/L	508.75 ppb	14:08:11
1	Co 228.616†	24520.3	24205.8	506.18 ug/L	506.18 ppb	14:08:11
1	Cr 267.716†	45502.0	44737.5	502.78 ug/L	502.78 ppb	14:08:11
1	Cu 324.752†	172499.6	163774.7	491.81 ug/L	491.81 ppb	14:08:11
1	Mn 257.610†	454473.9	447061.1	501.54 ug/L	501.54 ppb	14:08:06
1	Mo 202.031†	6970.2	6857.1	502.30 ug/L	502.30 ppb	14:08:31
1	Ni 231.604†	20295.5	19931.7	506.32 ug/L	506.32 ppb	14:08:11
1	P 214.914†	4456.6	4186.2	2444.3 ug/L	2444.3 ppb	14:08:31
1	Pb 220.353†	4052.3	4055.2	504.02 ug/L	504.02 ppb	14:08:31
1	S 181.975 Axial†	750.5	701.9	1027.3 ug/L	1027.3 ppb	14:08:31
1	Sb 206.836†	1509.6	1449.7	523.51 ug/L	523.51 ppb	14:08:31
1	Se 196.026†	757.6	766.7	523.53 ug/L	523.53 ppb	14:08:31
1	Si 251.611†	79832.4	78072.8	2498.4 ug/L	2498.4 ppb	14:08:11
1	Sn 189.927†	2857.3	2803.0	507.74 ug/L	507.74 ppb	14:08:31
1	Ti 334.940†	324558.1	320858.1	485.16 ug/L	485.16 ppb	14:08:11
1	Tl 190.801†	1560.2	1567.5	506.30 ug/L	506.30 ppb	14:08:31
1	U 409.014†	15448.0	18027.1	485.38 ug/L	485.38 ppb	14:08:11
1	V 292.402†	71182.5	71520.3	503.19 ug/L	503.19 ppb	14:08:11
1	Zn 213.857†	51722.2	50370.6	500.74 ug/L	500.74 ppb	14:08:11
1	SiO2†	78952.9	77189.5	5289.9 ug/L	5289.9 ppb	14:09:39
2	Sc Radial	3957.6	3957.6	93.0 %		14:07:34
2	Y RADIAL	4411.2	4411.2	94.01 %		14:07:14
2	Al 396.153Radial†	5195.9	5695.2	5133.3 ug/L	5133.3 ppb	14:07:14
2	Ca 317.933Radial†	2518.0	2690.8	5353.5 ug/L	5353.5 ppb	14:07:34
2	Fe 238.204 Radial†	393.7	413.0	5335.6 ug/L	5335.6 ppb	14:07:34
2	K 766.490 Radial†	28366.0	27930.4	5218.8 ug/L	5218.8 ppb	14:07:14
2	Mg 279.077 IEC†	114.0	119.7	5441.2 ug/L	5441.2 ppb	14:07:34
2	Na 589.592 Radial†	32484.4	35653.8	10347 ug/L	10347 ppb	14:07:14
2	Sr 421.552†	72022.4	77371.1	512.77 ug/L	512.77 ppb	14:07:14
2	Sc 361.383	910791.4	910791.4	101.19 %		14:08:37
2	Y 371.029	757662.9	757662.9	99.373 %		14:08:37

2	Ag 328.068†	109694.8	108173.4	499.94 ug/L	499.94 ppb	14:08:42
2	As 188.979†	1129.7	1137.0	516.72 ug/L	516.72 ppb	14:09:02
2	B 249.677†	20047.8	20184.6	479.41 ug/L	479.41 ppb	14:08:42
2	Ba 233.527†	64608.4	63856.5	500.03 ug/L	500.03 ppb	14:08:42
2	Be 313.107†	1347737.4	1335715.6	498.88 ug/L	498.88 ppb	14:08:37
2	Cd 226.502†	43886.6	43553.0	505.39 ug/L	505.39 ppb	14:08:42
2	Co 228.616†	24294.0	24069.7	503.35 ug/L	503.35 ppb	14:08:42
2	Cr 267.716†	45099.4	44502.2	500.14 ug/L	500.14 ppb	14:08:42
2	Cu 324.752†	170318.8	162235.5	487.19 ug/L	487.19 ppb	14:08:42
2	Mn 257.610†	451433.5	445679.2	499.99 ug/L	499.99 ppb	14:08:37
2	Mo 202.031†	6995.1	6906.6	505.92 ug/L	505.92 ppb	14:09:02
2	Ni 231.604†	20212.0	19921.6	506.06 ug/L	506.06 ppb	14:08:42
2	P 214.914†	4450.6	4196.1	2451.2 ug/L	2451.2 ppb	14:09:02
2	Pb 220.353†	4091.9	4108.7	510.65 ug/L	510.65 ppb	14:09:02
2	S 181.975 Axial†	750.5	704.7	1031.3 ug/L	1031.3 ppb	14:09:02
2	Sb 206.836†	1514.2	1459.7	527.18 ug/L	527.18 ppb	14:09:02
2	Se 196.026†	747.7	759.6	518.95 ug/L	518.95 ppb	14:09:02
2	Si 251.611†	78932.0	77468.1	2478.9 ug/L	2478.9 ppb	14:08:42
2	Sn 189.927†	2884.3	2839.9	514.42 ug/L	514.42 ppb	14:09:02
2	Ti 334.940†	321112.0	318611.4	481.76 ug/L	481.76 ppb	14:08:42
2	Tl 190.801†	1561.4	1574.2	508.44 ug/L	508.44 ppb	14:09:02
2	U 409.014†	15142.4	17780.3	478.71 ug/L	478.71 ppb	14:08:42
2	V 292.402†	70461.2	71061.7	500.05 ug/L	500.05 ppb	14:08:42
2	Zn 213.857†	51166.5	50006.1	497.09 ug/L	497.09 ppb	14:08:42
2	SiO2†	78594.8	77117.6	5284.9 ug/L	5284.9 ppb	14:09:44
3	Sc Radial	3942.9	3942.9	92.7 %		14:07:59
3	Y RADIAL	4535.9	4535.9	96.67 %		14:07:39
3	Al 396.153Radial†	5342.9	5874.6	5296.3 ug/L	5296.3 ppb	14:07:39
3	Ca 317.933Radial†	2525.7	2709.2	5390.2 ug/L	5390.2 ppb	14:07:59
3	Fe 238.204 Radial†	393.9	414.7	5358.0 ug/L	5358.0 ppb	14:07:59
3	K 766.490 Radial†	29252.2	29000.1	5418.7 ug/L	5418.7 ppb	14:07:39
3	Mg 279.077 IEC†	118.1	124.7	5666.9 ug/L	5666.9 ppb	14:07:59
3	Na 589.592 Radial†	33802.1	37205.5	10797 ug/L	10797 ppb	14:07:39
3	Sr 421.552†	74499.3	80331.9	532.39 ug/L	532.39 ppb	14:07:39
3	Sc 361.383	925606.5	925606.5	102.84 %		14:09:08
3	Y 371.029	769215.3	769215.3	100.89 %		14:09:08
3	Ag 328.068†	110593.2	107311.9	495.99 ug/L	495.99 ppb	14:09:13
3	As 188.979†	1117.5	1107.2	503.30 ug/L	503.30 ppb	14:09:33
3	B 249.677†	20384.1	20194.5	479.65 ug/L	479.65 ppb	14:09:13
3	Ba 233.527†	65176.5	63387.0	496.36 ug/L	496.36 ppb	14:09:13
3	Be 313.107†	1371389.2	1337397.2	499.50 ug/L	499.50 ppb	14:09:08
3	Cd 226.502†	44441.2	43398.1	503.59 ug/L	503.59 ppb	14:09:13
3	Co 228.616†	24552.1	23936.5	500.54 ug/L	500.54 ppb	14:09:13
3	Cr 267.716†	45490.0	44168.7	496.40 ug/L	496.40 ppb	14:09:13
3	Cu 324.752†	172047.6	161222.6	484.16 ug/L	484.16 ppb	14:09:13
3	Mn 257.610†	459168.9	446060.7	500.41 ug/L	500.41 ppb	14:09:08
3	Mo 202.031†	6956.3	6758.3	495.07 ug/L	495.07 ppb	14:09:33
3	Ni 231.604†	20302.8	19690.2	500.18 ug/L	500.18 ppb	14:09:13
3	P 214.914†	4434.3	4109.9	2399.4 ug/L	2399.4 ppb	14:09:33
3	Pb 220.353†	4078.6	4031.0	501.03 ug/L	501.03 ppb	14:09:33
3	S 181.975 Axial†	747.4	689.8	1009.5 ug/L	1009.5 ppb	14:09:33
3	Sb 206.836†	1501.6	1423.4	514.15 ug/L	514.15 ppb	14:09:33
3	Se 196.026†	750.4	750.4	512.91 ug/L	512.91 ppb	14:09:33
3	Si 251.611†	79726.0	76991.7	2463.8 ug/L	2463.8 ppb	14:09:13
3	Sn 189.927†	2874.4	2784.6	504.42 ug/L	504.42 ppb	14:09:33
3	Ti 334.940†	324431.5	316760.2	478.95 ug/L	478.95 ppb	14:09:13
3	Tl 190.801†	1550.0	1538.5	496.96 ug/L	496.96 ppb	14:09:33
3	U 409.014†	15127.1	17525.9	471.85 ug/L	471.85 ppb	14:09:13
3	V 292.402†	71243.7	70708.1	497.43 ug/L	497.43 ppb	14:09:13
3	Zn 213.857†	51741.8	49756.3	494.62 ug/L	494.62 ppb	14:09:13
3	SiO2†	78845.8	76118.5	5216.5 ug/L	5216.5 ppb	14:09:49

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Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	916830.6	101.86 %	0.864			0.85%
Sc Radial	3957.3	93.0 %	0.33			0.36%
Y 371.029	762287.2	99.980 %	0.8015			0.80%
Y RADIAL	4478.2	95.44 %	1.340			1.40%
Ag 328.068†	108091.0	499.56 ug/L	3.403	499.56 ppb	3.403	0.68%

QC value within limits for Ag 328.068 Recovery = 99.91%						
Al 396.153Radial†	5788.2	5217.7 ug/L	81.65	5217.7 ppb	81.65	1.56%
QC value within limits for Al 396.153Radial Recovery = 104.35%						
As 188.979†	1120.9	509.48 ug/L	6.769	509.48 ppb	6.769	1.33%
QC value within limits for As 188.979 Recovery = 101.90%						
B 249.677†	20280.0	481.69 ug/L	3.737	481.69 ppb	3.737	0.78%
QC value within limits for B 249.677 Recovery = 96.34%						
Ba 233.527†	63840.2	499.91 ug/L	3.483	499.91 ppb	3.483	0.70%
QC value within limits for Ba 233.527 Recovery = 99.98%						
Be 313.107†	1336156.3	499.04 ug/L	0.400	499.04 ppb	0.400	0.08%
QC value within limits for Be 313.107 Recovery = 99.81%						
Ca 317.933Radial†	2701.5	5374.8 ug/L	19.04	5374.8 ppb	19.04	0.35%
QC value within limits for Ca 317.933Radial Recovery = 107.50%						
Cd 226.502†	43597.6	505.91 ug/L	2.619	505.91 ppb	2.619	0.52%
QC value within limits for Cd 226.502 Recovery = 101.18%						
Co 228.616†	24070.7	503.36 ug/L	2.818	503.36 ppb	2.818	0.56%
QC value within limits for Co 228.616 Recovery = 100.67%						
Cr 267.716†	44469.5	499.78 ug/L	3.205	499.78 ppb	3.205	0.64%
QC value within limits for Cr 267.716 Recovery = 99.96%						
Cu 324.752†	162410.9	487.72 ug/L	3.854	487.72 ppb	3.854	0.79%
QC value within limits for Cu 324.752 Recovery = 97.54%						
Fe 238.204 Radial†	412.9	5335.0 ug/L	23.37	5335.0 ppb	23.37	0.44%
QC value within limits for Fe 238.204 Radial Recovery = 106.70%						
K 766.490 Radial†	28454.4	5316.7 ug/L	100.04	5316.7 ppb	100.04	1.88%
QC value within limits for K 766.490 Radial Recovery = 106.33%						
Mg 279.077 IEC†	121.3	5514.3 ug/L	132.23	5514.3 ppb	132.23	2.40%
QC value greater than the upper limit for Mg 279.077 IEC Recovery = 110.29%						
Mn 257.610†	446267.0	500.65 ug/L	0.800	500.65 ppb	0.800	0.16%
QC value within limits for Mn 257.610 Recovery = 100.13%						
Mo 202.031†	6840.7	501.10 ug/L	5.525	501.10 ppb	5.525	1.10%
QC value within limits for Mo 202.031 Recovery = 100.22%						
Na 589.592 Radial†	36515.5	10597 ug/L	229.3	10597 ppb	229.3	2.16%
QC value within limits for Na 589.592 Radial Recovery = 105.97%						
Ni 231.604†	19847.8	504.19 ug/L	3.471	504.19 ppb	3.471	0.69%
QC value within limits for Ni 231.604 Recovery = 100.84%						
P 214.914†	4164.1	2431.6 ug/L	28.11	2431.6 ppb	28.11	1.16%
QC value within limits for P 214.914 Recovery = 97.27%						
Pb 220.353†	4065.0	505.23 ug/L	4.923	505.23 ppb	4.923	0.97%
QC value within limits for Pb 220.353 Recovery = 101.05%						
S 181.975 Axial†	698.8	1022.7 ug/L	11.64	1022.7 ppb	11.64	1.14%
QC value within limits for S 181.975 Axial Recovery = 102.27%						
Sb 206.836†	1444.3	521.61 ug/L	6.719	521.61 ppb	6.719	1.29%
QC value within limits for Sb 206.836 Recovery = 104.32%						
Se 196.026†	758.9	518.46 ug/L	5.329	518.46 ppb	5.329	1.03%
QC value within limits for Se 196.026 Recovery = 103.69%						
Si 251.611†	77510.9	2480.4 ug/L	17.34	2480.4 ppb	17.34	0.70%
QC value within limits for Si 251.611 Recovery = 99.22%						
Sn 189.927†	2809.2	508.86 ug/L	5.091	508.86 ppb	5.091	1.00%
QC value within limits for Sn 189.927 Recovery = 101.77%						
Sr 421.552†	78945.1	523.20 ug/L	9.870	523.20 ppb	9.870	1.89%
QC value within limits for Sr 421.552 Recovery = 104.64%						
Ti 334.940†	318743.2	481.96 ug/L	3.108	481.96 ppb	3.108	0.64%
QC value within limits for Ti 334.940 Recovery = 96.39%						
Tl 190.801†	1560.1	503.90 ug/L	6.103	503.90 ppb	6.103	1.21%
QC value within limits for Tl 190.801 Recovery = 100.78%						
U 409.014†	17777.8	478.65 ug/L	6.767	478.65 ppb	6.767	1.41%
QC value within limits for U 409.014 Recovery = 95.73%						
V 292.402†	71096.7	500.23 ug/L	2.884	500.23 ppb	2.884	0.58%
QC value within limits for V 292.402 Recovery = 100.05%						
Zn 213.857†	50044.3	497.48 ug/L	3.080	497.48 ppb	3.080	0.62%
QC value within limits for Zn 213.857 Recovery = 99.50%						
SiO2†	76808.5	5263.8 ug/L	41.00	5263.8 ppb	41.00	0.78%
QC value within limits for SiO2 Recovery = 98.43%						
QC Failed. Continue with analysis.						

Sequence No.: 2  
 Sample ID: CCB  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 8  
 Date Collected: 2/23/2010 14:11:59  
 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	3964.8	3964.8	93.2 %		14:14:12
1	Y RADIAL	4413.8	4413.8	94.07 %		14:13:52
1	Al 396.153Radial†	-101.8	1.6	1.4322 ug/L	1.4322 ppb	14:13:52
1	Ca 317.933Radial†	22.9	9.1	18.165 ug/L	18.165 ppb	14:14:12
1	Fe 238.204 Radial†	10.4	0.9	12.003 ug/L	12.003 ppb	14:14:12
1	K 766.490 Radial†	2572.5	203.0	37.982 ug/L	37.982 ppb	14:13:52
1	Mg 279.077 IEC†	3.0	0.5	21.341 ug/L	21.341 ppb	14:14:12
1	Na 589.592 Radial†	-714.3	-26.0	-7.5426 ug/L	-7.5426 ppb	14:13:52
1	Sr 421.552†	33.1	-1.2	-0.0084 ug/L	-0.0084 ppb	14:13:52
1	Sc 361.383	904845.5	904845.5	100.53 %		14:15:09
1	Y 371.029	762943.6	762943.6	100.07 %		14:15:09
1	Ag 328.068†	320.4	89.4	0.4142 ug/L	0.4142 ppb	14:15:14
1	As 188.979†	-19.9	0.7	0.3360 ug/L	0.3360 ppb	14:15:34
1	B 249.677†	-454.0	-78.7	-1.8792 ug/L	-1.8792 ppb	14:15:34
1	Ba 233.527†	4.6	13.7	0.1070 ug/L	0.1070 ppb	14:15:34
1	Be 313.107†	-3951.2	-77.0	-0.0291 ug/L	-0.0291 ppb	14:15:14
1	Cd 226.502†	-194.9	-10.6	-0.1244 ug/L	-0.1244 ppb	14:15:34
1	Co 228.616†	-64.6	-2.3	-0.0472 ug/L	-0.0472 ppb	14:15:34
1	Cr 267.716†	90.2	23.7	0.2673 ug/L	0.2673 ppb	14:15:34
1	Cu 324.752†	6036.1	-72.9	-0.2177 ug/L	-0.2177 ppb	14:15:14
1	Mn 257.610†	465.6	26.3	0.0298 ug/L	0.0298 ppb	14:15:34
1	Mo 202.031†	11.5	5.3	0.3926 ug/L	0.3926 ppb	14:15:34
1	Ni 231.604†	52.6	-0.0	-0.0001 ug/L	-0.0001 ppb	14:15:34
1	P 214.914†	214.7	11.6	7.0601 ug/L	7.0601 ppb	14:15:34
1	Pb 220.353†	-54.5	10.9	1.3466 ug/L	1.3466 ppb	14:15:34
1	S 181.975 Axial†	40.2	2.9	4.2592 ug/L	4.2592 ppb	14:15:34
1	Sb 206.836†	45.4	8.5	2.9843 ug/L	2.9843 ppb	14:15:34
1	Se 196.026†	-23.2	-2.4	-1.5600 ug/L	-1.5600 ppb	14:15:34
1	Si 251.611†	547.5	10.5	0.3306 ug/L	0.3306 ppb	14:15:34
1	Sn 189.927†	16.5	5.9	1.0780 ug/L	1.0780 ppb	14:15:34
1	Ti 334.940†	-1401.5	-112.3	-0.1686 ug/L	-0.1686 ppb	14:15:14
1	Tl 190.801†	-42.9	-11.4	-3.6737 ug/L	-3.6737 ppb	14:15:34
1	U 409.014†	-2881.1	-49.7	-1.3438 ug/L	-1.3438 ppb	14:15:09
1	V 292.402†	-1463.7	-25.6	-0.1758 ug/L	-0.1758 ppb	14:15:14
1	Zn 213.857†	610.5	49.6	0.4963 ug/L	0.4963 ppb	14:15:34
1	SiO2†	547.9	-6.5	-0.4576 ug/L	-0.4576 ppb	14:16:40
2	Sc Radial	3929.9	3929.9	92.4 %		14:14:37
2	Y RADIAL	4523.8	4523.8	96.41 %		14:14:17
2	Al 396.153Radial†	-110.1	-8.4	-7.6239 ug/L	-7.6239 ppb	14:14:17
2	Ca 317.933Radial†	15.5	1.3	2.6435 ug/L	2.6435 ppb	14:14:37
2	Fe 238.204 Radial†	10.5	1.2	15.359 ug/L	15.359 ppb	14:14:37
2	K 766.490 Radial†	2796.6	470.1	87.960 ug/L	87.960 ppb	14:14:17
2	Mg 279.077 IEC†	3.8	1.4	63.946 ug/L	63.946 ppb	14:14:37
2	Na 589.592 Radial†	-768.7	-91.7	-26.598 ug/L	-26.598 ppb	14:14:17
2	Sr 421.552†	42.8	9.6	0.0633 ug/L	0.0633 ppb	14:14:17
2	Sc 361.383	915627.4	915627.4	101.73 %		14:15:39
2	Y 371.029	773618.2	773618.2	101.47 %		14:15:39
2	Ag 328.068†	211.0	-21.9	-0.0958 ug/L	-0.0958 ppb	14:15:44
2	As 188.979†	-27.6	-6.6	-2.9747 ug/L	-2.9747 ppb	14:16:04
2	B 249.677†	-454.3	-73.7	-1.7605 ug/L	-1.7605 ppb	14:16:04
2	Ba 233.527†	-3.8	5.4	0.0423 ug/L	0.0423 ppb	14:16:04
2	Be 313.107†	-3848.3	70.4	0.0257 ug/L	0.0257 ppb	14:15:44
2	Cd 226.502†	-196.7	-10.1	-0.1188 ug/L	-0.1188 ppb	14:16:04
2	Co 228.616†	-62.0	1.0	0.0238 ug/L	0.0238 ppb	14:16:04
2	Cr 267.716†	63.9	-3.1	-0.0334 ug/L	-0.0334 ppb	14:16:04
2	Cu 324.752†	6133.5	-47.9	-0.1422 ug/L	-0.1422 ppb	14:15:44
2	Mn 257.610†	461.6	16.9	0.0179 ug/L	0.0179 ppb	14:16:04
2	Mo 202.031†	20.4	14.0	1.0257 ug/L	1.0257 ppb	14:16:04
2	Ni 231.604†	45.6	-7.5	-0.1900 ug/L	-0.1900 ppb	14:16:04

2	P 214.914†	200.4	-5.0	-3.0207 ug/L	-3.0207 ppb	14:16:04
2	Pb 220.353†	-45.0	20.8	2.5794 ug/L	2.5794 ppb	14:16:04
2	S 181.975 Axial†	40.9	3.2	4.6367 ug/L	4.6367 ppb	14:16:04
2	Sb 206.836†	43.4	6.0	2.1271 ug/L	2.1271 ppb	14:16:04
2	Se 196.026†	-15.4	5.5	3.7094 ug/L	3.7094 ppb	14:16:04
2	Si 251.611†	560.2	16.5	0.5172 ug/L	0.5172 ppb	14:16:04
2	Sn 189.927†	21.3	10.5	1.8984 ug/L	1.8984 ppb	14:16:04
2	Ti 334.940†	-1476.8	-169.9	-0.2610 ug/L	-0.2610 ppb	14:15:44
2	Tl 190.801†	-37.6	-5.8	-1.8480 ug/L	-1.8480 ppb	14:16:04
2	U 409.014†	-2927.3	-61.3	-1.6589 ug/L	-1.6589 ppb	14:15:39
2	V 292.402†	-1493.8	-38.0	-0.2531 ug/L	-0.2531 ppb	14:15:44
2	Zn 213.857†	612.7	44.6	0.4464 ug/L	0.4464 ppb	14:16:04
2	SiO2†	536.1	-24.5	-1.7146 ug/L	-1.7146 ppb	14:16:45
3	Sc Radial	3967.7	3967.7	93.3 %		14:15:02
3	Y RADIAL	4472.1	4472.1	95.31 %		14:14:42
3	Al 396.153Radial†	-114.7	-12.2	-11.094 ug/L	-11.094 ppb	14:14:42
3	Ca 317.933Radial†	21.9	8.0	15.983 ug/L	15.983 ppb	14:15:02
3	Fe 238.204 Radial†	10.2	0.8	10.200 ug/L	10.200 ppb	14:15:02
3	K 766.490 Radial†	2645.4	279.2	52.236 ug/L	52.236 ppb	14:14:42
3	Mg 279.077 IEC†	4.3	1.8	83.555 ug/L	83.555 ppb	14:15:02
3	Na 589.592 Radial†	-701.2	-11.4	-3.3011 ug/L	-3.3011 ppb	14:14:42
3	Sr 421.552†	50.5	17.4	0.1150 ug/L	0.1150 ppb	14:14:42
3	Sc 361.383	907783.6	907783.6	100.86 %		14:16:09
3	Y 371.029	766801.4	766801.4	100.57 %		14:16:09
3	Ag 328.068†	305.0	73.1	0.3381 ug/L	0.3381 ppb	14:16:14
3	As 188.979†	-26.5	-5.8	-2.5959 ug/L	-2.5959 ppb	14:16:34
3	B 249.677†	-491.0	-113.9	-2.7203 ug/L	-2.7203 ppb	14:16:34
3	Ba 233.527†	3.5	12.6	0.0976 ug/L	0.0976 ppb	14:16:34
3	Be 313.107†	-3984.4	-97.3	-0.0366 ug/L	-0.0366 ppb	14:16:14
3	Cd 226.502†	-196.2	-11.2	-0.1313 ug/L	-0.1313 ppb	14:16:34
3	Co 228.616†	-64.3	-1.8	-0.0375 ug/L	-0.0375 ppb	14:16:34
3	Cr 267.716†	81.9	15.2	0.1718 ug/L	0.1718 ppb	14:16:34
3	Cu 324.752†	6161.4	31.9	0.0973 ug/L	0.0973 ppb	14:16:14
3	Mn 257.610†	469.3	28.5	0.0295 ug/L	0.0295 ppb	14:16:34
3	Mo 202.031†	6.1	-0.0	-0.0009 ug/L	-0.0009 ppb	14:16:34
3	Ni 231.604†	33.8	-18.8	-0.4790 ug/L	-0.4790 ppb	14:16:34
3	P 214.914†	207.4	3.6	2.1870 ug/L	2.1870 ppb	14:16:34
3	Pb 220.353†	-61.1	4.5	0.5485 ug/L	0.5485 ppb	14:16:34
3	S 181.975 Axial†	43.5	6.1	8.9119 ug/L	8.9119 ppb	14:16:34
3	Sb 206.836†	36.6	-0.4	-0.1141 ug/L	-0.1141 ppb	14:16:34
3	Se 196.026†	-26.1	-5.2	-3.3809 ug/L	-3.3809 ppb	14:16:34
3	Si 251.611†	536.7	-2.0	-0.0657 ug/L	-0.0657 ppb	14:16:34
3	Sn 189.927†	15.3	4.7	0.8594 ug/L	0.8594 ppb	14:16:34
3	Ti 334.940†	-1409.4	-115.6	-0.1788 ug/L	-0.1788 ppb	14:16:14
3	Tl 190.801†	-34.3	-2.8	-0.8986 ug/L	-0.8986 ppb	14:16:34
3	U 409.014†	-2905.9	-64.9	-1.7560 ug/L	-1.7560 ppb	14:16:09
3	V 292.402†	-1512.4	-69.1	-0.4831 ug/L	-0.4831 ppb	14:16:14
3	Zn 213.857†	602.5	39.7	0.3996 ug/L	0.3996 ppb	14:16:34
3	SiO2†	572.9	16.5	1.1347 ug/L	1.1347 ppb	14:16:50

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	909418.8	101.04 %		0.619			0.61%
Sc Radial	3954.1	93.0 %		0.49			0.53%
Y 371.029	767787.7	100.70 %		0.709			0.70%
Y RADIAL	4469.9	95.27 %		1.172			1.23%
Ag 328.068†	46.8	0.2188 ug/L		0.27512	0.2188 ppb	0.27512	125.72%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	-6.3	-5.7617 ug/L		6.46715	-5.7617 ppb	6.46715	112.24%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	-3.9	-1.7449 ug/L		1.81197	-1.7449 ppb	1.81197	103.85%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	-88.7	-2.1200 ug/L		0.52326	-2.1200 ppb	0.52326	24.68%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	10.6	0.0823 ug/L		0.03495	0.0823 ppb	0.03495	42.46%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	-34.6	-0.0134 ug/L		0.03400	-0.0134 ppb	0.03400	254.41%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	6.2	12.264 ug/L		8.4025	12.264 ppb	8.4025	68.52%



QC value within limits for Ca 317.933 Radial Recovery = Not calculated									
Cd	226.502†	-10.6	-0.1248 ug/L	0.00626	-0.1248 ppb	0.00626	5.02%		
QC value within limits for Cd 226.502 Recovery = Not calculated									
Co	228.616†	-1.0	-0.0203 ug/L	0.03853	-0.0203 ppb	0.03853	189.58%		
QC value within limits for Co 228.616 Recovery = Not calculated									
Cr	267.716†	11.9	0.1352 ug/L	0.15362	0.1352 ppb	0.15362	113.59%		
QC value within limits for Cr 267.716 Recovery = Not calculated									
Cu	324.752†	-29.7	-0.0875 ug/L	0.16446	-0.0875 ppb	0.16446	187.96%		
QC value within limits for Cu 324.752 Recovery = Not calculated									
Fe	238.204 Radial†	1.0	12.521 ug/L	2.6180	12.521 ppb	2.6180	20.91%		
QC value within limits for Fe 238.204 Radial Recovery = Not calculated									
K	766.490 Radial†	317.5	59.393 ug/L	25.7461	59.393 ppb	25.7461	43.35%		
QC value within limits for K 766.490 Radial Recovery = Not calculated									
Mg	279.077 IEC†	1.2	56.280 ug/L	31.8072	56.280 ppb	31.8072	56.52%		
QC value within limits for Mg 279.077 IEC Recovery = Not calculated									
Mn	257.610†	23.9	0.0257 ug/L	0.00681	0.0257 ppb	0.00681	26.46%		
QC value within limits for Mn 257.610 Recovery = Not calculated									
Mo	202.031†	6.4	0.4724 ug/L	0.51792	0.4724 ppb	0.51792	109.63%		
QC value within limits for Mo 202.031 Recovery = Not calculated									
Na	589.592 Radial†	-43.0	-12.481 ug/L	12.4085	-12.481 ppb	12.4085	99.42%		
QC value within limits for Na 589.592 Radial Recovery = Not calculated									
Ni	231.604†	-8.8	-0.2230 ug/L	0.24119	-0.2230 ppb	0.24119	108.15%		
QC value within limits for Ni 231.604 Recovery = Not calculated									
P	214.914†	3.4	2.0754 ug/L	5.04135	2.0754 ppb	5.04135	242.91%		
QC value within limits for P 214.914 Recovery = Not calculated									
Pb	220.353†	12.0	1.4915 ug/L	1.02320	1.4915 ppb	1.02320	68.60%		
QC value within limits for Pb 220.353 Recovery = Not calculated									
S	181.975 Axial†	4.1	5.9359 ug/L	2.58421	5.9359 ppb	2.58421	43.54%		
QC value within limits for S 181.975 Axial Recovery = Not calculated									
Sb	206.836†	4.7	1.6658 ug/L	1.59989	1.6658 ppb	1.59989	96.04%		
QC value within limits for Sb 206.836 Recovery = Not calculated									
Se	196.026†	-0.7	-0.4105 ug/L	3.68225	-0.4105 ppb	3.68225	896.98%		
QC value within limits for Se 196.026 Recovery = Not calculated									
Si	251.611†	8.3	0.2607 ug/L	0.29769	0.2607 ppb	0.29769	114.18%		
QC value within limits for Si 251.611 Recovery = Not calculated									
Sn	189.927†	7.1	1.2786 ug/L	0.54779	1.2786 ppb	0.54779	42.84%		
QC value within limits for Sn 189.927 Recovery = Not calculated									
Sr	421.552†	8.6	0.0567 ug/L	0.06195	0.0567 ppb	0.06195	109.35%		
QC value within limits for Sr 421.552 Recovery = Not calculated									
Ti	334.940†	-132.6	-0.2028 ug/L	0.05067	-0.2028 ppb	0.05067	24.98%		
QC value within limits for Ti 334.940 Recovery = Not calculated									
Tl	190.801†	-6.7	-2.1401 ug/L	1.41041	-2.1401 ppb	1.41041	65.90%		
QC value within limits for Tl 190.801 Recovery = Not calculated									
U	409.014†	-58.6	-1.5862 ug/L	0.21549	-1.5862 ppb	0.21549	13.59%		
QC value within limits for U 409.014 Recovery = Not calculated									
V	292.402†	-44.2	-0.3040 ug/L	0.15989	-0.3040 ppb	0.15989	52.59%		
QC value within limits for V 292.402 Recovery = Not calculated									
Zn	213.857†	44.6	0.4475 ug/L	0.04834	0.4475 ppb	0.04834	10.80%		
QC value within limits for Zn 213.857 Recovery = Not calculated									
SiO2†		-4.8	-0.3459 ug/L	1.42794	-0.3459 ppb	1.42794	412.86%		
QC value within limits for SiO2 Recovery = Not calculated									
All analyte(s) passed QC.									

Sequence No.: 3

Sample ID: 1202030969|948071|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 38

Date Collected: 2/23/2010 14:19:00

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202030969|948071|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4106.5	4106.5	96.5 %		14:20:52
1	Y RADIAL	4584.2	4584.2	97.70 %		14:20:52
1	Al 396.153Radial†	-112.1	-5.4	-4.8358 ug/L	-4.8358 ppb	14:20:52
1	Ca 317.933Radial†	30.9	16.6	32.951 ug/L	32.951 ppb	14:21:12
1	Fe 238.204 Radial†	13.9	4.2	54.698 ug/L	54.698 ppb	14:21:12
1	K 766.490 Radial†	2624.0	161.2	30.136 ug/L	30.136 ppb	14:20:52
1	Mg 279.077 IEC†	2.4	-0.3	-13.344 ug/L	-13.344 ppb	14:21:12
1	Na 589.592 Radial†	-618.7	99.5	28.864 ug/L	28.864 ppb	14:20:52
1	Sr 421.552†	64.3	29.8	0.1973 ug/L	0.1973 ppb	14:20:52
1	Sc 361.383	912325.4	912325.4	101.36 %		14:22:09
1	Y 371.029	768422.7	768422.7	100.78 %		14:22:09
1	Ag 328.068†	304.1	70.7	0.3394 ug/L	0.3394 ppb	14:22:14
1	As 188.979†	-16.7	4.0	1.8214 ug/L	1.8214 ppb	14:22:34
1	B 249.677†	-492.1	-112.5	-2.6935 ug/L	-2.6935 ppb	14:22:34
1	Ba 233.527†	22.1	31.0	0.2433 ug/L	0.2433 ppb	14:22:34
1	Be 313.107†	-3841.2	63.6	0.0241 ug/L	0.0241 ppb	14:22:14
1	Cd 226.502†	-176.5	9.2	0.1012 ug/L	0.1012 ppb	14:22:34
1	Co 228.616†	-86.6	-23.5	-0.4938 ug/L	-0.4938 ppb	14:22:34
1	Cr 267.716†	125.2	57.5	0.6493 ug/L	0.6493 ppb	14:22:34
1	Cu 324.752†	6067.4	-91.3	-0.2720 ug/L	-0.2720 ppb	14:22:14
1	Mn 257.610†	818.9	371.0	0.4219 ug/L	0.4219 ppb	14:22:34
1	Mo 202.031†	-1.2	-7.2	-0.5253 ug/L	-0.5253 ppb	14:22:34
1	Ni 231.604†	71.4	18.1	0.4604 ug/L	0.4604 ppb	14:22:34
1	P 214.914†	206.4	1.6	0.9865 ug/L	0.9865 ppb	14:22:34
1	Pb 220.353†	-60.1	5.8	0.7075 ug/L	0.7075 ppb	14:22:34
1	S 181.975 Axial†	40.6	3.0	4.3732 ug/L	4.3732 ppb	14:22:34
1	Sb 206.836†	50.5	13.2	4.5886 ug/L	4.5886 ppb	14:22:34
1	Se 196.026†	-22.7	-1.7	-0.9449 ug/L	-0.9449 ppb	14:22:34
1	Si 251.611†	934.9	388.2	12.459 ug/L	12.459 ppb	14:22:34
1	Sn 189.927†	13.9	3.3	0.5939 ug/L	0.5939 ppb	14:22:34
1	Ti 334.940†	-1198.6	99.3	0.1548 ug/L	0.1548 ppb	14:22:14
1	Tl 190.801†	-36.3	-4.6	-1.4619 ug/L	-1.4619 ppb	14:22:34
1	U 409.014†	-2798.1	55.8	1.5001 ug/L	1.5001 ppb	14:22:09
1	V 292.402†	-1467.8	-17.7	-0.1360 ug/L	-0.1360 ppb	14:22:14
1	Zn 213.857†	782.3	214.1	2.1373 ug/L	2.1373 ppb	14:22:34
1	SiO2†	988.8	424.1	29.151 ug/L	29.151 ppb	14:23:40
2	Sc Radial	4146.2	4146.2	97.5 %		14:21:17
2	Y RADIAL	4520.1	4520.1	96.33 %		14:21:17
2	Al 396.153Radial†	-124.2	-16.7	-15.107 ug/L	-15.107 ppb	14:21:17
2	Ca 317.933Radial†	30.3	15.6	31.045 ug/L	31.045 ppb	14:21:37
2	Fe 238.204 Radial†	17.0	7.2	92.914 ug/L	92.914 ppb	14:21:37
2	K 766.490 Radial†	2613.8	124.7	23.323 ug/L	23.323 ppb	14:21:17
2	Mg 279.077 IEC†	4.2	1.5	70.172 ug/L	70.172 ppb	14:21:37
2	Na 589.592 Radial†	-703.2	18.9	5.4986 ug/L	5.4986 ppb	14:21:17
2	Sr 421.552†	38.8	3.0	0.0195 ug/L	0.0195 ppb	14:21:17
2	Sc 361.383	903813.0	903813.0	100.42 %		14:22:39
2	Y 371.029	762572.0	762572.0	100.02 %		14:22:39
2	Ag 328.068†	309.9	79.3	0.3876 ug/L	0.3876 ppb	14:22:44
2	As 188.979†	-14.8	5.8	2.6422 ug/L	2.6422 ppb	14:23:05
2	B 249.677†	-498.3	-123.3	-2.9568 ug/L	-2.9568 ppb	14:23:05
2	Ba 233.527†	26.1	35.1	0.2768 ug/L	0.2768 ppb	14:23:05
2	Be 313.107†	-3844.7	24.5	0.0096 ug/L	0.0096 ppb	14:22:44
2	Cd 226.502†	-178.2	5.9	0.0599 ug/L	0.0599 ppb	14:23:05
2	Co 228.616†	-57.6	4.5	0.0936 ug/L	0.0936 ppb	14:23:05
2	Cr 267.716†	106.2	39.8	0.4531 ug/L	0.4531 ppb	14:23:05
2	Cu 324.752†	6068.6	-33.7	-0.0990 ug/L	-0.0990 ppb	14:22:44
2	Mn 257.610†	827.9	387.6	0.4409 ug/L	0.4409 ppb	14:23:05
2	Mo 202.031†	12.4	6.3	0.4683 ug/L	0.4683 ppb	14:23:05
2	Ni 231.604†	67.8	15.2	0.3855 ug/L	0.3855 ppb	14:23:05

2	P 214.914†	220.6	17.7	10.692 ug/L	10.692 ppb	14:23:05
2	Pb 220.353†	-44.4	20.8	2.5710 ug/L	2.5710 ppb	14:23:05
2	S 181.975 Axial†	48.3	11.1	16.218 ug/L	16.218 ppb	14:23:05
2	Sb 206.836†	46.6	9.7	3.4226 ug/L	3.4226 ppb	14:23:05
2	Se 196.026†	-22.5	-1.7	-0.8458 ug/L	-0.8458 ppb	14:23:05
2	Si 251.611†	962.6	424.5	13.611 ug/L	13.611 ppb	14:23:05
2	Sn 189.927†	21.9	11.4	2.0597 ug/L	2.0597 ppb	14:23:05
2	Ti 334.940†	-1145.9	140.7	0.2088 ug/L	0.2088 ppb	14:22:44
2	Tl 190.801†	-33.7	-2.4	-0.7528 ug/L	-0.7528 ppb	14:23:05
2	U 409.014†	-2640.8	186.4	5.0256 ug/L	5.0256 ppb	14:22:39
2	V 292.402†	-1460.1	-23.6	-0.1600 ug/L	-0.1600 ppb	14:22:44
2	Zn 213.857†	774.9	214.0	2.1312 ug/L	2.1312 ppb	14:23:05
2	SiO2†	965.8	410.2	28.175 ug/L	28.175 ppb	14:23:45
3	Sc Radial	4033.9	4033.9	94.8 %		14:21:43
3	Y RADIAL	4454.0	4454.0	94.93 %		14:21:43
3	Al 396.153Radial†	-116.9	-12.5	-11.364 ug/L	-11.364 ppb	14:21:43
3	Ca 317.933Radial†	30.0	16.1	32.115 ug/L	32.115 ppb	14:22:03
3	Fe 238.204 Radial†	16.1	6.8	87.863 ug/L	87.863 ppb	14:22:03
3	K 766.490 Radial†	2660.8	248.9	46.555 ug/L	46.555 ppb	14:21:43
3	Mg 279.077 IEC†	1.8	-0.9	-40.071 ug/L	-40.071 ppb	14:22:03
3	Na 589.592 Radial†	-666.1	38.0	11.038 ug/L	11.038 ppb	14:21:43
3	Sr 421.552†	89.3	57.3	0.3799 ug/L	0.3799 ppb	14:21:43
3	Sc 361.383	916225.4	916225.4	101.80 %		14:23:10
3	Y 371.029	773226.3	773226.3	101.41 %		14:23:10
3	Ag 328.068†	270.9	36.8	0.1947 ug/L	0.1947 ppb	14:23:15
3	As 188.979†	-20.1	0.8	0.3770 ug/L	0.3770 ppb	14:23:35
3	B 249.677†	-526.4	-144.1	-3.4550 ug/L	-3.4550 ppb	14:23:35
3	Ba 233.527†	18.4	27.2	0.2159 ug/L	0.2159 ppb	14:23:35
3	Be 313.107†	-3922.6	-0.1	0.0006 ug/L	0.0006 ppb	14:23:15
3	Cd 226.502†	-185.8	0.8	0.0014 ug/L	0.0014 ppb	14:23:35
3	Co 228.616†	-53.8	9.1	0.1895 ug/L	0.1895 ppb	14:23:35
3	Cr 267.716†	107.1	39.2	0.4472 ug/L	0.4472 ppb	14:23:35
3	Cu 324.752†	6178.5	-7.6	-0.0201 ug/L	-0.0201 ppb	14:23:15
3	Mn 257.610†	843.1	391.3	0.4491 ug/L	0.4491 ppb	14:23:35
3	Mo 202.031†	14.5	8.2	0.6062 ug/L	0.6062 ppb	14:23:35
3	Ni 231.604†	73.3	19.7	0.5007 ug/L	0.5007 ppb	14:23:35
3	P 214.914†	211.3	5.5	3.3109 ug/L	3.3109 ppb	14:23:35
3	Pb 220.353†	-57.5	8.5	1.0467 ug/L	1.0467 ppb	14:23:35
3	S 181.975 Axial†	48.1	10.3	15.032 ug/L	15.032 ppb	14:23:35
3	Sb 206.836†	40.6	3.2	1.1510 ug/L	1.1510 ppb	14:23:35
3	Se 196.026†	-28.1	-6.9	-4.2733 ug/L	-4.2733 ppb	14:23:35
3	Si 251.611†	981.4	429.9	13.785 ug/L	13.785 ppb	14:23:35
3	Sn 189.927†	22.5	11.7	2.1156 ug/L	2.1156 ppb	14:23:35
3	Ti 334.940†	-1106.2	195.2	0.3011 ug/L	0.3011 ppb	14:23:15
3	Tl 190.801†	-44.2	-12.2	-3.9268 ug/L	-3.9268 ppb	14:23:35
3	U 409.014†	-2739.9	124.7	3.3575 ug/L	3.3575 ppb	14:23:10
3	V 292.402†	-1389.1	65.9	0.4581 ug/L	0.4581 ppb	14:23:15
3	Zn 213.857†	771.9	200.6	1.9968 ug/L	1.9968 ppb	14:23:35
3	SiO2†	1038.9	469.1	32.215 ug/L	32.215 ppb	14:23:50

## Mean Data: 1202030969|948071|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	910787.9	101.19 %		0.705			0.70%
Sc Radial	4095.5	96.3 %		1.34			1.39%
Y 371.029	768073.6	100.74 %		0.700			0.69%
Y RADIAL	4519.4	96.32 %		1.387			1.44%
Ag 328.068†	62.3	0.3072 ug/L		0.10040	0.3072 ppb	0.10040	32.68%
Al 396.153Radial†	-11.5	-10.436 ug/L		5.1983	-10.436 ppb	5.1983	49.81%
As 188.979†	3.5	1.6136 ug/L		1.14684	1.6136 ppb	1.14684	71.08%
B 249.677†	-126.6	-3.0351 ug/L		0.38672	-3.0351 ppb	0.38672	12.74%
Ba 233.527†	31.1	0.2454 ug/L		0.03048	0.2454 ppb	0.03048	12.43%
Be 313.107†	29.3	0.0114 ug/L		0.01182	0.0114 ppb	0.01182	103.41%
Ca 317.933Radial†	16.1	32.037 ug/L		0.9556	32.037 ppb	0.9556	2.98%
Cd 226.502†	5.3	0.0542 ug/L		0.05013	0.0542 ppb	0.05013	92.58%
Co 228.616†	-3.3	-0.0703 ug/L		0.36994	-0.0703 ppb	0.36994	526.56%
Cr 267.716†	45.5	0.5165 ug/L		0.11503	0.5165 ppb	0.11503	22.27%
Cu 324.752†	-44.2	-0.1304 ug/L		0.12885	-0.1304 ppb	0.12885	98.82%
Fe 238.204 Radial†	6.1	78.491 ug/L		20.7601	78.491 ppb	20.7601	26.45%
K 766.490 Radial†	178.3	33.338 ug/L		11.9421	33.338 ppb	11.9421	35.82%

Mg 279.077 IEC†	0.1	5.5853 ug/L	57.50770	5.5853 ppb	57.50770 >999.9%
Mn 257.610†	383.3	0.4373 ug/L	0.01393	0.4373 ppb	0.01393 3.19%
Mo 202.031†	2.4	0.1831 ug/L	0.61735	0.1831 ppb	0.61735 337.24%
Na 589.592 Radial†	52.1	15.134 ug/L	12.2094	15.134 ppb	12.2094 80.68%
Ni 231.604†	17.7	0.4489 ug/L	0.05847	0.4489 ppb	0.05847 13.03%
P 214.914†	8.3	4.9963 ug/L	5.06736	4.9963 ppb	5.06736 101.42%
Pb 220.353†	11.7	1.4417 ug/L	0.99258	1.4417 ppb	0.99258 68.85%
S 181.975 Axial†	8.1	11.874 ug/L	6.5233	11.874 ppb	6.5233 54.94%
Sb 206.836†	8.7	3.0541 ug/L	1.74816	3.0541 ppb	1.74816 57.24%
Se 196.026†	-3.4	-2.0213 ug/L	1.95091	-2.0213 ppb	1.95091 96.52%
Si 251.611†	414.2	13.285 ug/L	0.7209	13.285 ppb	0.7209 5.43%
Sn 189.927†	8.8	1.5897 ug/L	0.86284	1.5897 ppb	0.86284 54.28%
Sr 421.552†	30.0	0.1989 ug/L	0.18020	0.1989 ppb	0.18020 90.62%
Ti 334.940†	145.0	0.2216 ug/L	0.07398	0.2216 ppb	0.07398 33.39%
Tl 190.801†	-6.4	-2.0472 ug/L	1.66598	-2.0472 ppb	1.66598 81.38%
U 409.014†	122.3	3.2944 ug/L	1.76360	3.2944 ppb	1.76360 53.53%
V 292.402†	8.2	0.0540 ug/L	0.35014	0.0540 ppb	0.35014 648.05%
Zn 213.857†	209.6	2.0884 ug/L	0.07943	2.0884 ppb	0.07943 3.80%
SiO2†	434.5	29.847 ug/L	2.1085	29.847 ppb	2.1085 7.06%

Sequence No.: 4  
 Sample ID: 1202030974|948071|1  
 Analyst: HSC  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 39  
 Date Collected: 2/23/2010 14:26:01  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

## Replicate Data: 1202030974|948071|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4220.3	4220.3	99.2 %		14:28:14
1	Y RADIAL	5124.8	5124.8	109.2 %		14:28:14
1	Al 396.153Radial†	98662.2	99549.6	90134 ug/L	90134 ppb	14:27:54
1	Ca 317.933Radial†	50202.9	50582.7	100640 ug/L	100640 ppb	14:27:54
1	Fe 238.204 Radial†	13818.0	13916.6	179320 ug/L	179320 ppb	14:28:14
1	K 766.490 Radial†	226481.1	225707.1	42187 ug/L	42187 ppb	14:27:54
1	Mg 279.077 IEC†	845.7	849.6	38433 ug/L	38433 ppb	14:28:14
1	Na 589.592 Radial†	34391.2	35402.2	10274 ug/L	10274 ppb	14:27:54
1	Sr 421.552†	334373.4	336968.8	2232.6 ug/L	2232.6 ppb	14:27:54
1	Sc 361.383	913157.9	913157.9	101.45 %		14:29:15
1	Y 371.029	835696.6	835696.6	109.61 %		14:29:15
1	Ag 328.068†	53829.0	52827.8	301.33 ug/L	301.33 ppb	14:29:15
1	As 188.979†	2176.5	2165.8	1064.9 ug/L	1064.9 ppb	14:29:20
1	B 249.677†	61067.2	60564.5	1413.7 ug/L	1413.7 ppb	14:29:15
1	Ba 233.527†	242020.5	238559.0	1871.5 ug/L	1871.5 ppb	14:29:15
1	Be 313.107†	2010774.2	1985793.0	752.56 ug/L	752.56 ppb	14:29:15
1	Cd 226.502†	51077.6	50528.5	568.75 ug/L	568.75 ppb	14:29:20
1	Co 228.616†	43081.9	42526.0	875.95 ug/L	875.95 ppb	14:29:20
1	Cr 267.716†	202961.6	199985.1	2261.8 ug/L	2261.8 ppb	14:29:15
1	Cu 324.752†	596286.7	581658.8	1756.2 ug/L	1756.2 ppb	14:29:15
1	Mn 257.610†	4557926.6	4492128.9	5052.6 ug/L	5052.6 ppb	14:29:15
1	Mo 202.031†	6359.1	6261.9	473.38 ug/L	473.38 ppb	14:29:20
1	Ni 231.604†	50535.1	49758.1	1264.2 ug/L	1264.2 ppb	14:29:20
1	P 214.914†	14006.5	13603.6	7794.9 ug/L	7794.9 ppb	14:29:20
1	Pb 220.353†	6511.1	6482.8	804.20 ug/L	804.20 ppb	14:29:20
1	S 181.975 Axial†	2833.3	2755.6	4019.9 ug/L	4019.9 ppb	14:29:20
1	Sb 206.836†	3445.9	3359.8	1177.6 ug/L	1177.6 ppb	14:29:20
1	Se 196.026†	3706.2	3673.7	2982.0 ug/L	2982.0 ppb	14:29:20
1	Si 251.611†	1341507.5	1321736.1	42395 ug/L	42395 ppb	14:29:15
1	Sn 189.927†	5536.7	5446.8	992.98 ug/L	992.98 ppb	14:29:20
1	Ti 334.940†	3694889.4	3643186.4	5519.7 ug/L	5519.7 ppb	14:29:15
1	Tl 190.801†	3537.3	3517.8	1192.5 ug/L	1192.5 ppb	14:29:20
1	U 409.014†	-8771.4	-5829.4	-182.97 ug/L	-182.97 ppb	14:29:15
1	V 292.402†	174056.6	172991.0	1175.2 ug/L	1175.2 ppb	14:29:15
1	Zn 213.857†	583691.2	574763.3	5730.0 ug/L	5730.0 ppb	14:29:15
1	SiO2†	1345351.1	1325507.2	91061 ug/L	91061 ppb	14:29:55
2	Sc Radial	4246.9	4246.9	99.8 %		14:28:39
2	Y RADIAL	5137.9	5137.9	109.5 %		14:28:39
2	Al 396.153Radial†	98908.9	99174.8	89795 ug/L	89795 ppb	14:28:19
2	Ca 317.933Radial†	50232.5	50295.8	100070 ug/L	100070 ppb	14:28:19
2	Fe 238.204 Radial†	13890.0	13901.6	179130 ug/L	179130 ppb	14:28:39
2	K 766.490 Radial†	225968.1	223765.7	41824 ug/L	41824 ppb	14:28:19
2	Mg 279.077 IEC†	841.7	840.3	38007 ug/L	38007 ppb	14:28:39
2	Na 589.592 Radial†	34170.6	34964.5	10147 ug/L	10147 ppb	14:28:19
2	Sr 421.552†	333664.9	334151.4	2214.0 ug/L	2214.0 ppb	14:28:19
2	Sc 361.383	909318.9	909318.9	101.03 %		14:29:29
2	Y 371.029	832744.9	832744.9	109.22 %		14:29:29
2	Ag 328.068†	53725.0	52948.8	301.86 ug/L	301.86 ppb	14:29:29
2	As 188.979†	2195.8	2194.0	1077.7 ug/L	1077.7 ppb	14:29:34
2	B 249.677†	61036.2	60787.9	1419.1 ug/L	1419.1 ppb	14:29:29
2	Ba 233.527†	241226.3	238780.1	1873.2 ug/L	1873.2 ppb	14:29:29
2	Be 313.107†	2005805.7	1989242.2	753.87 ug/L	753.87 ppb	14:29:29
2	Cd 226.502†	51078.3	50741.7	571.24 ug/L	571.24 ppb	14:29:34
2	Co 228.616†	43017.6	42641.7	878.35 ug/L	878.35 ppb	14:29:34
2	Cr 267.716†	202252.6	200127.9	2263.4 ug/L	2263.4 ppb	14:29:29
2	Cu 324.752†	595661.0	583520.8	1761.8 ug/L	1761.8 ppb	14:29:29
2	Mn 257.610†	4543091.3	4496411.2	5057.4 ug/L	5057.4 ppb	14:29:29
2	Mo 202.031†	6371.5	6300.6	476.19 ug/L	476.19 ppb	14:29:34
2	Ni 231.604†	50440.5	49874.8	1267.2 ug/L	1267.2 ppb	14:29:34

2	P 214.914†	13970.7	13626.4	7807.7 ug/L	7807.7 ppb	14:29:34
2	Pb 220.353†	6506.1	6504.9	806.88 ug/L	806.88 ppb	14:29:34
2	S 181.975 Axial†	2806.0	2740.4	3997.8 ug/L	3997.8 ppb	14:29:34
2	Sb 206.836†	3431.3	3359.7	1177.6 ug/L	1177.6 ppb	14:29:34
2	Se 196.026†	3682.7	3665.9	2976.2 ug/L	2976.2 ppb	14:29:34
2	Si 251.611†	1337929.0	1323776.4	42461 ug/L	42461 ppb	14:29:29
2	Sn 189.927†	5494.5	5428.1	989.50 ug/L	989.50 ppb	14:29:34
2	Ti 334.940†	3686665.1	3650421.1	5530.6 ug/L	5530.6 ppb	14:29:29
2	Tl 190.801†	3514.0	3509.5	1190.0 ug/L	1190.0 ppb	14:29:34
2	U 409.014†	-8938.6	-6031.3	-188.41 ug/L	-188.41 ppb	14:29:29
2	V 292.402†	173838.4	173499.4	1178.7 ug/L	1178.7 ppb	14:29:29
2	Zn 213.857†	581797.0	575317.3	5735.6 ug/L	5735.6 ppb	14:29:29
2	SiO2†	1352180.4	1337865.3	91910 ug/L	91910 ppb	14:30:01
3	Sc Radial	4230.2	4230.2	99.5 %		14:29:04
3	Y RADIAL	5117.9	5117.9	109.1 %		14:29:04
3	Al 396.153Radial†	98875.8	99532.6	90119 ug/L	90119 ppb	14:28:44
3	Ca 317.933Radial†	50047.5	50308.4	100090 ug/L	100090 ppb	14:28:44
3	Fe 238.204 Radial†	13895.1	13961.7	179900 ug/L	179900 ppb	14:29:04
3	K 766.490 Radial†	225787.9	224478.0	41957 ug/L	41957 ppb	14:28:44
3	Mg 279.077 IEC†	838.5	840.4	38011 ug/L	38011 ppb	14:29:04
3	Na 589.592 Radial†	34180.6	35109.7	10189 ug/L	10189 ppb	14:28:44
3	Sr 421.552†	333307.3	335111.1	2220.3 ug/L	2220.3 ppb	14:28:44
3	Sc 361.383	915194.0	915194.0	101.68 %		14:29:43
3	Y 371.029	838564.3	838564.3	109.98 %		14:29:43
3	Ag 328.068†	53991.6	52869.6	301.72 ug/L	301.72 ppb	14:29:43
3	As 188.979†	2170.1	2154.7	1060.1 ug/L	1060.1 ppb	14:29:48
3	B 249.677†	61586.3	60941.1	1422.6 ug/L	1422.6 ppb	14:29:43
3	Ba 233.527†	242484.7	238484.8	1870.9 ug/L	1870.9 ppb	14:29:43
3	Be 313.107†	2018494.9	1988976.5	753.75 ug/L	753.75 ppb	14:29:43
3	Cd 226.502†	51353.0	50687.3	570.53 ug/L	570.53 ppb	14:29:48
3	Co 228.616†	43357.5	42702.6	879.64 ug/L	879.64 ppb	14:29:48
3	Cr 267.716†	203480.9	200050.8	2262.6 ug/L	2262.6 ppb	14:29:43
3	Cu 324.752†	599152.1	583169.2	1760.8 ug/L	1760.8 ppb	14:29:43
3	Mn 257.610†	4564983.0	4489073.6	5049.3 ug/L	5049.3 ppb	14:29:43
3	Mo 202.031†	6415.5	6303.4	476.45 ug/L	476.45 ppb	14:29:48
3	Ni 231.604†	50864.0	49970.7	1269.6 ug/L	1269.6 ppb	14:29:48
3	P 214.914†	13996.9	13563.4	7769.2 ug/L	7769.2 ppb	14:29:48
3	Pb 220.353†	6581.5	6537.7	810.93 ug/L	810.93 ppb	14:29:48
3	S 181.975 Axial†	2853.2	2769.0	4039.5 ug/L	4039.5 ppb	14:29:48
3	Sb 206.836†	3496.6	3402.1	1192.6 ug/L	1192.6 ppb	14:29:48
3	Se 196.026†	3739.3	3698.2	2999.9 ug/L	2999.9 ppb	14:29:48
3	Si 251.611†	1344526.7	1321763.6	42396 ug/L	42396 ppb	14:29:43
3	Sn 189.927†	5593.1	5490.2	1000.7 ug/L	1000.7 ppb	14:29:48
3	Ti 334.940†	3704023.6	3644067.1	5521.0 ug/L	5521.0 ppb	14:29:43
3	Tl 190.801†	3530.8	3503.7	1188.0 ug/L	1188.0 ppb	14:29:48
3	U 409.014†	-8855.9	-5893.2	-184.77 ug/L	-184.77 ppb	14:29:43
3	V 292.402†	174605.7	173149.4	1176.2 ug/L	1176.2 ppb	14:29:43
3	Zn 213.857†	584663.5	574439.6	5726.7 ug/L	5726.7 ppb	14:29:43
3	SiO2†	1350149.4	1327276.0	91183 ug/L	91183 ppb	14:30:06

Mean Data: 1202030974|948071|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	912556.9	101.39 %	0.331			0.33%
Sc Radial	4232.5	99.5 %	0.32			0.32%
Y 371.029	835668.6	109.60 %	0.382			0.35%
Y RADIAL	5126.9	109.3 %	0.22			0.20%
Ag 328.068†	52882.1	301.63 ug/L	0.271	301.63 ppb	0.271	0.09%
Al 396.153Radial†	99419.0	90016 ug/L	191.8	90016 ppb	191.8	0.21%
As 188.979†	2171.5	1067.6 ug/L	9.08	1067.6 ppb	9.08	0.85%
B 249.677†	60764.5	1418.5 ug/L	4.47	1418.5 ppb	4.47	0.32%
Ba 233.527†	238608.0	1871.9 ug/L	1.19	1871.9 ppb	1.19	0.06%
Be 313.107†	1988003.9	753.39 ug/L	0.724	753.39 ppb	0.724	0.10%
Ca 317.933Radial†	50395.6	100270 ug/L	322.5	100270 ppb	322.5	0.32%
Cd 226.502†	50652.5	570.17 ug/L	1.286	570.17 ppb	1.286	0.23%
Co 228.616†	42623.4	877.98 ug/L	1.872	877.98 ppb	1.872	0.21%
Cr 267.716†	200054.6	2262.6 ug/L	0.79	2262.6 ppb	0.79	0.04%
Cu 324.752†	582782.9	1759.6 ug/L	2.97	1759.6 ppb	2.97	0.17%
Fe 238.204 Radial†	13926.6	179450 ug/L	403.0	179450 ppb	403.0	0.22%
K 766.490 Radial†	224650.3	41989 ug/L	183.6	41989 ppb	183.6	0.44%

Mg 279.077 IEC†	226.5	1.48	0.65%	[10000]	ug/L
Mn 257.610†	895639.0	5759.03	0.64%	[1000]	ug/L
Mo 202.031†	13689.3	134.80	0.98%	[1000]	ug/L
Na 589.592 Radial†	34040.4	127.76	0.38%	[10000]	ug/L
Ni 231.604†	39431.0	72.66	0.18%	[1000]	ug/L
P 214.914†	8277.8	76.67	0.93%	[5000]	ug/L
Pb 220.353†	8099.3	63.08	0.78%	[1000]	ug/L
S 181.975 Axial†	1367.6	18.17	1.33%	[2000]	ug/L
Sb 206.836†	2880.8	36.47	1.27%	[1000]	ug/L
Se 196.026†	1522.5	14.14	0.93%	[1000]	ug/L
Si 251.611†	156368.7	322.03	0.21%	[5000]	ug/L
Sn 189.927†	5544.1	49.81	0.90%	[1000]	ug/L
Sr 421.552†	150544.6	936.80	0.62%	[1000]	ug/L
Ti 334.940†	663545.9	4690.80	0.71%	[1000]	ug/L
Tl 190.801†	3123.2	26.50	0.85%	[1000]	ug/L
U 409.014†	37142.4	138.32	0.37%	[1000]	ug/L
V 292.402†	144645.9	346.78	0.24%	[1000]	ug/L
Zn 213.857†	99891.0	289.99	0.29%	[1000]	ug/L
SiO2†	156299.2	1202.33	0.77%	[10695]	ug/L

Sequence No.: 5  
 Sample ID: 245806001|948071|2  
 Analyst: HSC  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 40  
 Date Collected: 2/23/2010 14:32:17  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

## Replicate Data: 245806001|948071|2

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4330.7	4330.7	102 %		14:34:10
1	Y RADIAL	5164.9	5164.9	110.1 %		14:34:10
1	Al 396.153Radial†	20045.6	19799.1	17931 ug/L	17931 ppb	14:34:10
1	Ca 317.933Radial†	2809.6	2744.0	5459.4 ug/L	5459.4 ppb	14:34:30
1	Fe 238.204 Radial†	3616.5	3541.9	45632 ug/L	45632 ppb	14:34:10
1	K 766.490 Radial†	16236.4	13390.3	2502.7 ug/L	2502.7 ppb	14:34:10
1	Mg 279.077 IEC†	83.4	79.1	3548.2 ug/L	3548.2 ppb	14:34:30
1	Na 589.592 Radial†	1381.6	2097.3	608.66 ug/L	608.66 ppb	14:34:10
1	Sr 421.552†	6037.4	5893.0	39.017 ug/L	39.017 ppb	14:34:10
1	Sc 361.383	928472.0	928472.0	103.16 %		14:35:27
1	Y 371.029	845469.3	845469.3	110.89 %		14:35:27
1	Ag 328.068†	-2648.0	-2796.3	1.0419 ug/L	1.0419 ppb	14:35:27
1	As 188.979†	-24.1	-2.9	16.853 ug/L	16.853 ppb	14:35:47
1	B 249.677†	325.7	688.7	8.9725 ug/L	8.9725 ppb	14:35:27
1	Ba 233.527†	33048.2	32046.2	251.81 ug/L	251.81 ppb	14:35:27
1	Be 313.107†	6452.2	10108.1	5.7205 ug/L	5.7205 ppb	14:35:27
1	Cd 226.502†	199.2	376.4	-0.2530 ug/L	-0.2530 ppb	14:35:47
1	Co 228.616†	838.4	874.7	15.918 ug/L	15.918 ppb	14:35:47
1	Cr 267.716†	6128.6	5875.1	70.174 ug/L	70.174 ppb	14:35:47
1	Cu 324.752†	202356.3	190087.6	573.05 ug/L	573.05 ppb	14:35:27
1	Mn 257.610†	881714.3	854299.3	962.19 ug/L	962.19 ppb	14:35:27
1	Mo 202.031†	14.3	7.8	4.1764 ug/L	4.1764 ppb	14:35:47
1	Ni 231.604†	1847.1	1738.3	44.172 ug/L	44.172 ppb	14:35:47
1	P 214.914†	779.1	553.2	190.01 ug/L	190.01 ppb	14:35:47
1	Pb 220.353†	24189.1	23514.0	2912.1 ug/L	2912.1 ppb	14:35:27
1	S 181.975 Axial†	85.3	45.6	63.467 ug/L	63.467 ppb	14:35:47
1	Sb 206.836†	98.8	59.0	16.909 ug/L	16.909 ppb	14:35:47
1	Se 196.026†	-214.9	-187.6	18.453 ug/L	18.453 ppb	14:35:47
1	Si 251.611†	576923.1	558736.6	17924 ug/L	17924 ppb	14:35:27
1	Sn 189.927†	1.9	-8.6	-3.2059 ug/L	-3.2059 ppb	14:35:47
1	Ti 334.940†	585571.2	568936.0	860.75 ug/L	860.75 ppb	14:35:27
1	Tl 190.801†	-84.5	-50.7	-4.7398 ug/L	-4.7398 ppb	14:35:47
1	U 409.014†	9482.3	12008.4	319.13 ug/L	319.13 ppb	14:35:27
1	V 292.402†	5752.8	7007.2	41.765 ug/L	41.765 ppb	14:35:27
1	Zn 213.857†	20986.3	19786.4	190.66 ug/L	190.66 ppb	14:35:27
1	SiO2†	565319.0	547470.2	37616 ug/L	37616 ppb	14:36:45
2	Sc Radial	4214.5	4214.5	99.1 %		14:34:35
2	Y RADIAL	5061.2	5061.2	107.9 %		14:34:35
2	Al 396.153Radial†	20029.3	20325.7	18408 ug/L	18408 ppb	14:34:35
2	Ca 317.933Radial†	2756.2	2766.3	5503.8 ug/L	5503.8 ppb	14:34:55
2	Fe 238.204 Radial†	3614.7	3638.0	46870 ug/L	46870 ppb	14:34:35
2	K 766.490 Radial†	16138.6	13731.4	2566.5 ug/L	2566.5 ppb	14:34:35
2	Mg 279.077 IEC†	76.3	74.2	3325.3 ug/L	3325.3 ppb	14:34:55
2	Na 589.592 Radial†	1307.4	2059.9	597.78 ug/L	597.78 ppb	14:34:35
2	Sr 421.552†	6034.2	6053.4	40.080 ug/L	40.080 ppb	14:34:35
2	Sc 361.383	932311.5	932311.5	103.58 %		14:35:53
2	Y 371.029	847483.3	847483.3	111.15 %		14:35:53
2	Ag 328.068†	-2664.6	-2801.8	1.4069 ug/L	1.4069 ppb	14:35:53
2	As 188.979†	-16.7	4.4	20.395 ug/L	20.395 ppb	14:36:13
2	B 249.677†	337.0	698.3	9.0031 ug/L	9.0031 ppb	14:35:53
2	Ba 233.527†	33041.9	31908.1	250.77 ug/L	250.77 ppb	14:35:53
2	Be 313.107†	6451.4	10081.5	5.7013 ug/L	5.7013 ppb	14:35:53
2	Cd 226.502†	228.9	404.3	-0.0591 ug/L	-0.0591 ppb	14:36:13
2	Co 228.616†	797.7	832.0	15.015 ug/L	15.015 ppb	14:36:13
2	Cr 267.716†	6047.2	5772.0	69.140 ug/L	69.140 ppb	14:36:13
2	Cu 324.752†	202690.0	189601.9	571.66 ug/L	571.66 ppb	14:35:53
2	Mn 257.610†	881601.3	850670.1	958.25 ug/L	958.25 ppb	14:35:53
2	Mo 202.031†	7.0	0.7	3.7537 ug/L	3.7537 ppb	14:36:13
2	Ni 231.604†	1822.2	1706.8	43.373 ug/L	43.373 ppb	14:36:13



2	P 214.914†	783.5	554.4	190.12 ug/L	190.12 ppb	14:36:13
2	Pb 220.353†	24212.0	23439.6	2902.8 ug/L	2902.8 ppb	14:35:53
2	S 181.975 Axial†	87.9	47.8	66.568 ug/L	66.568 ppb	14:36:13
2	Sb 206.836†	109.8	69.3	20.463 ug/L	20.463 ppb	14:36:13
2	Se 196.026†	-218.6	-190.3	20.516 ug/L	20.516 ppb	14:36:13
2	Si 251.611†	577885.2	557362.2	17880 ug/L	17880 ppb	14:35:53
2	Sn 189.927†	3.6	-7.0	-2.9737 ug/L	-2.9737 ppb	14:36:13
2	Ti 334.940†	585177.9	566218.6	856.67 ug/L	856.67 ppb	14:35:53
2	Tl 190.801†	-80.1	-46.1	-3.3037 ug/L	-3.3037 ppb	14:36:13
2	U 409.014†	9178.8	11677.6	310.05 ug/L	310.05 ppb	14:35:53
2	V 292.402†	5884.9	7111.8	42.287 ug/L	42.287 ppb	14:35:53
2	Zn 213.857†	21011.3	19726.8	189.88 ug/L	189.88 ppb	14:35:53
2	SiO2†	560497.9	540558.9	37141 ug/L	37141 ppb	14:36:50
3	Sc Radial	4187.0	4187.0	98.4 %		14:35:00
3	Y RADIAL	5027.4	5027.4	107.1 %		14:35:00
3	Al 396.153Radial†	20160.1	20591.1	18648 ug/L	18648 ppb	14:35:00
3	Ca 317.933Radial†	2751.6	2779.8	5530.7 ug/L	5530.7 ppb	14:35:20
3	Fe 238.204 Radial†	3637.2	3684.8	47473 ug/L	47473 ppb	14:35:00
3	K 766.490 Radial†	16125.9	13825.3	2584.1 ug/L	2584.1 ppb	14:35:00
3	Mg 279.077 IEC†	81.6	80.1	3590.9 ug/L	3590.9 ppb	14:35:20
3	Na 589.592 Radial†	1375.1	2137.3	620.24 ug/L	620.24 ppb	14:35:00
3	Sr 421.552†	6099.7	6159.8	40.785 ug/L	40.785 ppb	14:35:00
3	Sc 361.383	936635.5	936635.5	104.06 %		14:36:19
3	Y 371.029	850104.6	850104.6	111.50 %		14:36:19
3	Ag 328.068†	-2723.5	-2846.5	1.3805 ug/L	1.3805 ppb	14:36:19
3	As 188.979†	-11.2	9.8	22.879 ug/L	22.879 ppb	14:36:39
3	B 249.677†	377.2	735.5	9.7916 ug/L	9.7916 ppb	14:36:19
3	Ba 233.527†	32755.2	31485.4	247.49 ug/L	247.49 ppb	14:36:19
3	Be 313.107†	6356.7	9961.8	5.6411 ug/L	5.6411 ppb	14:36:19
3	Cd 226.502†	229.9	404.2	-0.1220 ug/L	-0.1220 ppb	14:36:39
3	Co 228.616†	829.7	859.2	15.589 ug/L	15.589 ppb	14:36:39
3	Cr 267.716†	6073.4	5770.3	69.176 ug/L	69.176 ppb	14:36:39
3	Cu 324.752†	202032.7	188066.9	567.08 ug/L	567.08 ppb	14:36:19
3	Mn 257.610†	877514.7	842814.0	949.49 ug/L	949.49 ppb	14:36:19
3	Mo 202.031†	15.1	8.4	4.3674 ug/L	4.3674 ppb	14:36:39
3	Ni 231.604†	1830.0	1706.2	43.357 ug/L	43.357 ppb	14:36:39
3	P 214.914†	772.9	540.7	182.31 ug/L	182.31 ppb	14:36:39
3	Pb 220.353†	24055.0	23180.8	2870.8 ug/L	2870.8 ppb	14:36:19
3	S 181.975 Axial†	87.0	46.6	64.707 ug/L	64.707 ppb	14:36:39
3	Sb 206.836†	111.2	70.2	20.798 ug/L	20.798 ppb	14:36:39
3	Se 196.026†	-205.7	-177.0	31.187 ug/L	31.187 ppb	14:36:39
3	Si 251.611†	575508.3	552502.6	17724 ug/L	17724 ppb	14:36:19
3	Sn 189.927†	6.8	-3.9	-2.4512 ug/L	-2.4512 ppb	14:36:39
3	Ti 334.940†	583176.4	561687.2	849.79 ug/L	849.79 ppb	14:36:19
3	Tl 190.801†	-76.8	-42.6	-2.2818 ug/L	-2.2818 ppb	14:36:39
3	U 409.014†	9398.1	11847.4	314.57 ug/L	314.57 ppb	14:36:19
3	V 292.402†	5832.0	7034.8	41.693 ug/L	41.693 ppb	14:36:19
3	Zn 213.857†	20920.6	19546.0	187.98 ug/L	187.98 ppb	14:36:19
3	SiO2†	574161.8	551191.3	37872 ug/L	37872 ppb	14:36:56

Mean Data: 245806001|948071|2

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	932473.0	103.60 %	0.454			0.44%
Sc Radial	4244.1	99.8 %	1.79			1.80%
Y 371.029	847685.7	111.18 %	0.305			0.27%
Y RADIAL	5084.5	108.4 %	1.53			1.41%
Ag 328.068†	-2814.9	1.2764 ug/L	0.20355	1.2764 ppb	0.20355	15.95%
Al 396.153Radial†	20238.6	18329 ug/L	365.1	18329 ppb	365.1	1.99%
As 188.979†	3.8	20.042 ug/L	3.0283	20.042 ppb	3.0283	15.11%
B 249.677†	707.5	9.2558 ug/L	0.46432	9.2558 ppb	0.46432	5.02%
Ba 233.527†	31813.2	250.02 ug/L	2.257	250.02 ppb	2.257	0.90%
Be 313.107†	10050.4	5.6876 ug/L	0.04143	5.6876 ppb	0.04143	0.73%
Ca 317.933Radial†	2763.4	5498.0 ug/L	36.00	5498.0 ppb	36.00	0.65%
Cd 226.502†	395.0	-0.1447 ug/L	0.09892	-0.1447 ppb	0.09892	68.37%
Co 228.616†	855.3	15.508 ug/L	0.4572	15.508 ppb	0.4572	2.95%
Cr 267.716†	5805.8	69.497 ug/L	0.5866	69.497 ppb	0.5866	0.84%
Cu 324.752†	189252.1	570.60 ug/L	3.123	570.60 ppb	3.123	0.55%
Fe 238.204 Radial†	3621.6	46658 ug/L	938.7	46658 ppb	938.7	2.01%
K 766.490 Radial†	13649.0	2551.1 ug/L	42.82	2551.1 ppb	42.82	1.68%

Mg 279.077 IEC†	77.8	3488.1 ug/L	142.60	3488.1 ppb	142.60	4.09%
Mn 257.610†	849261.1	956.64 ug/L	6.499	956.64 ppb	6.499	0.68%
Mo 202.031†	5.6	4.0992 ug/L	0.31406	4.0992 ppb	0.31406	7.66%
Na 589.592 Radial†	2098.2	608.89 ug/L	11.233	608.89 ppb	11.233	1.84%
Ni 231.604†	1717.1	43.634 ug/L	0.4661	43.634 ppb	0.4661	1.07%
P 214.914†	549.4	187.48 ug/L	4.480	187.48 ppb	4.480	2.39%
Pb 220.353†	23378.1	2895.2 ug/L	21.69	2895.2 ppb	21.69	0.75%
S 181.975 Axial†	46.7	64.914 ug/L	1.5612	64.914 ppb	1.5612	2.40%
Sb 206.836†	66.2	19.390 ug/L	2.1551	19.390 ppb	2.1551	11.11%
Se 196.026†	-185.0	23.385 ug/L	6.8346	23.385 ppb	6.8346	29.23%
Si 251.611†	556200.4	17843 ug/L	105.1	17843 ppb	105.1	0.59%
Sn 189.927†	-6.5	-2.8770 ug/L	0.38654	-2.8770 ppb	0.38654	13.44%
Sr 421.552†	6035.4	39.961 ug/L	0.8900	39.961 ppb	0.8900	2.23%
Ti 334.940†	565613.9	855.74 ug/L	5.537	855.74 ppb	5.537	0.65%
Tl 190.801†	-46.5	-3.4418 ug/L	1.23484	-3.4418 ppb	1.23484	35.88%
U 409.014†	11844.5	314.58 ug/L	4.539	314.58 ppb	4.539	1.44%
V 292.402†	7051.3	41.915 ug/L	0.3240	41.915 ppb	0.3240	0.77%
Zn 213.857†	19686.4	189.51 ug/L	1.376	189.51 ppb	1.376	0.73%
SiO2†	546406.8	37543 ug/L	370.7	37543 ppb	370.7	0.99%

Sequence No.: 6

Sample ID: 1202030970|948071|2

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 41

Date Collected: 2/23/2010 14:39:06

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202030970|948071|2

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4184.8	4184.8	98.4 %		14:40:59
1	Y RADIAL	5024.7	5024.7	107.1 %		14:40:59
1	Al 396.153Radial†	19569.9	20002.1	18115 ug/L	18115 ppb	14:40:59
1	Ca 317.933Radial†	2649.7	2677.8	5327.7 ug/L	5327.7 ppb	14:41:19
1	Fe 238.204 Radial†	3656.7	3706.6	47754 ug/L	47754 ppb	14:40:59
1	K 766.490 Radial†	16283.9	13994.6	2615.8 ug/L	2615.8 ppb	14:40:59
1	Mg 279.077 IEC†	76.8	75.3	3372.7 ug/L	3372.7 ppb	14:41:19
1	Na 589.592 Radial†	1387.7	2150.8	624.17 ug/L	624.17 ppb	14:40:59
1	Sr 421.552†	5808.4	5867.0	38.846 ug/L	38.846 ppb	14:40:59
1	Sc 361.383	923825.0	923825.0	102.64 %		14:42:16
1	Y 371.029	841468.1	841468.1	110.36 %		14:42:16
1	Ag 328.068†	-2800.3	-2957.6	1.0549 ug/L	1.0549 ppb	14:42:21
1	As 188.979†	-27.1	-5.9	16.024 ug/L	16.024 ppb	14:42:41
1	B 249.677†	147.3	516.5	4.5276 ug/L	4.5276 ppb	14:42:21
1	Ba 233.527†	30840.1	30056.0	236.33 ug/L	236.33 ppb	14:42:21
1	Be 313.107†	4332.9	8074.7	4.9764 ug/L	4.9764 ppb	14:42:21
1	Cd 226.502†	223.1	400.7	-0.2215 ug/L	-0.2215 ppb	14:42:41
1	Co 228.616†	686.0	730.3	12.857 ug/L	12.857 ppb	14:42:41
1	Cr 267.716†	4220.7	4046.2	49.912 ug/L	49.912 ppb	14:42:21
1	Cu 324.752†	60751.0	53111.3	161.91 ug/L	161.91 ppb	14:42:21
1	Mn 257.610†	979086.8	953466.7	1073.6 ug/L	1073.6 ppb	14:42:16
1	Mo 202.031†	16.1	9.6	4.4726 ug/L	4.4726 ppb	14:42:41
1	Ni 231.604†	1389.9	1301.8	33.080 ug/L	33.080 ppb	14:42:41
1	P 214.914†	586.2	369.1	158.33 ug/L	158.33 ppb	14:42:41
1	Pb 220.353†	1257.3	1290.0	158.43 ug/L	158.43 ppb	14:42:41
1	S 181.975 Axial†	81.4	42.2	58.470 ug/L	58.470 ppb	14:42:41
1	Sb 206.836†	65.4	27.0	5.6564 ug/L	5.6564 ppb	14:42:41
1	Se 196.026†	-228.1	-201.5	15.891 ug/L	15.891 ppb	14:42:41
1	Si 251.611†	574333.1	559026.4	17933 ug/L	17933 ppb	14:42:16
1	Sn 189.927†	-5.5	-15.8	-4.6469 ug/L	-4.6469 ppb	14:42:41
1	Ti 334.940†	586739.7	572929.9	866.85 ug/L	866.85 ppb	14:42:16
1	Tl 190.801†	-69.2	-36.2	0.5265 ug/L	0.5265 ppb	14:42:41
1	U 409.014†	4686.2	7381.9	193.92 ug/L	193.92 ppb	14:42:16
1	V 292.402†	5635.4	6920.9	40.617 ug/L	40.617 ppb	14:42:21
1	Zn 213.857†	20044.2	18970.9	182.79 ug/L	182.79 ppb	14:42:21
1	SiO2†	569107.5	553917.9	38059 ug/L	38059 ppb	14:43:48
2	Sc Radial	4160.4	4160.4	97.8 %		14:41:24
2	Y RADIAL	4943.5	4943.5	105.4 %		14:41:24
2	Al 396.153Radial†	19298.3	19841.1	17969 ug/L	17969 ppb	14:41:24
2	Ca 317.933Radial†	2657.2	2701.2	5374.2 ug/L	5374.2 ppb	14:41:44
2	Fe 238.204 Radial†	3620.3	3691.2	47555 ug/L	47555 ppb	14:41:24
2	K 766.490 Radial†	15962.8	13763.4	2572.5 ug/L	2572.5 ppb	14:41:24
2	Mg 279.077 IEC†	76.0	75.0	3357.3 ug/L	3357.3 ppb	14:41:44
2	Na 589.592 Radial†	1442.3	2214.9	642.77 ug/L	642.77 ppb	14:41:24
2	Sr 421.552†	5711.9	5803.0	38.421 ug/L	38.421 ppb	14:41:24
2	Sc 361.383	921711.8	921711.8	102.41 %		14:42:46
2	Y 371.029	839160.1	839160.1	110.06 %		14:42:46
2	Ag 328.068†	-2831.5	-2994.3	0.8301 ug/L	0.8301 ppb	14:42:51
2	As 188.979†	-40.7	-19.2	10.002 ug/L	10.002 ppb	14:43:11
2	B 249.677†	186.2	554.8	5.4745 ug/L	5.4745 ppb	14:42:51
2	Ba 233.527†	30728.8	30016.2	236.01 ug/L	236.01 ppb	14:42:51
2	Be 313.107†	4351.6	8102.6	4.9866 ug/L	4.9866 ppb	14:42:51
2	Cd 226.502†	235.0	412.8	-0.0626 ug/L	-0.0626 ppb	14:43:11
2	Co 228.616†	685.3	731.2	12.879 ug/L	12.879 ppb	14:43:11
2	Cr 267.716†	4181.6	4017.4	49.572 ug/L	49.572 ppb	14:42:51
2	Cu 324.752†	60872.7	53365.8	162.66 ug/L	162.66 ppb	14:42:51
2	Mn 257.610†	976602.7	953228.0	1073.3 ug/L	1073.3 ppb	14:42:46
2	Mo 202.031†	13.8	7.4	4.2959 ug/L	4.2959 ppb	14:43:11
2	Ni 231.604†	1373.0	1288.4	32.740 ug/L	32.740 ppb	14:43:11

2	P 214.914†	588.9	373.0	160.68 ug/L	160.68 ppb	14:43:11
2	Pb 220.353†	1259.8	1295.3	159.08 ug/L	159.08 ppb	14:43:11
2	S 181.975 Axial†	81.9	42.9	59.486 ug/L	59.486 ppb	14:43:11
2	Sb 206.836†	55.6	17.6	2.3938 ug/L	2.3938 ppb	14:43:11
2	Se 196.026†	-219.6	-193.7	20.448 ug/L	20.448 ppb	14:43:11
2	Si 251.611†	572464.5	558484.7	17916 ug/L	17916 ppb	14:42:46
2	Sn 189.927†	-7.5	-17.7	-4.9828 ug/L	-4.9828 ppb	14:43:11
2	Ti 334.940†	585306.4	572840.9	866.72 ug/L	866.72 ppb	14:42:46
2	Tl 190.801†	-77.8	-44.8	-2.2278 ug/L	-2.2278 ppb	14:43:11
2	U 409.014†	4446.4	7158.2	187.90 ug/L	187.90 ppb	14:42:46
2	V 292.402†	5650.5	6948.2	40.822 ug/L	40.822 ppb	14:42:51
2	Zn 213.857†	20052.5	19023.8	183.35 ug/L	183.35 ppb	14:42:51
2	SiO2†	573318.3	559301.0	38429 ug/L	38429 ppb	14:43:53
3	Sc Radial	4238.3	4238.3	99.6 %		14:41:49
3	Y RADIAL	5057.1	5057.1	107.8 %		14:41:49
3	Al 396.153Radial†	19697.4	19878.9	18003 ug/L	18003 ppb	14:41:49
3	Ca 317.933Radial†	2647.9	2642.0	5256.5 ug/L	5256.5 ppb	14:42:09
3	Fe 238.204 Radial†	3695.5	3698.6	47651 ug/L	47651 ppb	14:41:49
3	K 766.490 Radial†	16407.4	13909.6	2599.9 ug/L	2599.9 ppb	14:41:49
3	Mg 279.077 IEC†	78.6	76.2	3411.6 ug/L	3411.6 ppb	14:42:09
3	Na 589.592 Radial†	1437.5	2183.0	633.52 ug/L	633.52 ppb	14:41:49
3	Sr 421.552†	5817.5	5801.7	38.413 ug/L	38.413 ppb	14:41:49
3	Sc 361.383	930341.2	930341.2	103.36 %		14:43:17
3	Y 371.029	845765.0	845765.0	110.93 %		14:43:17
3	Ag 328.068†	-2784.2	-2922.9	1.1857 ug/L	1.1857 ppb	14:43:22
3	As 188.979†	-36.8	-15.1	11.864 ug/L	11.864 ppb	14:43:42
3	B 249.677†	166.5	534.1	4.9646 ug/L	4.9646 ppb	14:43:22
3	Ba 233.527†	30657.8	29669.2	233.30 ug/L	233.30 ppb	14:43:22
3	Be 313.107†	4401.8	8111.8	4.9864 ug/L	4.9864 ppb	14:43:22
3	Cd 226.502†	229.9	405.7	-0.1538 ug/L	-0.1538 ppb	14:43:42
3	Co 228.616†	683.5	723.1	12.711 ug/L	12.711 ppb	14:43:42
3	Cr 267.716†	4279.9	4074.6	50.222 ug/L	50.222 ppb	14:43:22
3	Cu 324.752†	60621.9	52571.9	160.28 ug/L	160.28 ppb	14:43:22
3	Mn 257.610†	983140.6	950707.4	1070.5 ug/L	1070.5 ppb	14:43:17
3	Mo 202.031†	8.9	2.6	3.9489 ug/L	3.9489 ppb	14:43:42
3	Ni 231.604†	1357.6	1261.1	32.045 ug/L	32.045 ppb	14:43:42
3	P 214.914†	576.3	355.5	150.44 ug/L	150.44 ppb	14:43:42
3	Pb 220.353†	1237.7	1262.4	155.01 ug/L	155.01 ppb	14:43:42
3	S 181.975 Axial†	75.6	36.1	49.541 ug/L	49.541 ppb	14:43:42
3	Sb 206.836†	60.7	22.0	3.9278 ug/L	3.9278 ppb	14:43:42
3	Se 196.026†	-216.2	-188.5	24.188 ug/L	24.188 ppb	14:43:42
3	Si 251.611†	576672.1	557370.1	17880 ug/L	17880 ppb	14:43:17
3	Sn 189.927†	-4.1	-14.4	-4.4122 ug/L	-4.4122 ppb	14:43:42
3	Ti 334.940†	589709.8	571799.5	865.13 ug/L	865.13 ppb	14:43:17
3	Tl 190.801†	-84.1	-50.1	-3.9682 ug/L	-3.9682 ppb	14:43:42
3	U 409.014†	4587.7	7254.6	190.49 ug/L	190.49 ppb	14:43:17
3	V 292.402†	5651.7	6898.2	40.463 ug/L	40.463 ppb	14:43:22
3	Zn 213.857†	20038.5	18828.7	181.38 ug/L	181.38 ppb	14:43:22
3	SiO2†	572408.6	553228.0	38011 ug/L	38011 ppb	14:43:59

Mean Data: 1202030970|948071|2

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	925292.6	102.80 %		0.500				0.49%
Sc Radial	4194.5	98.6 %		0.94				0.95%
Y 371.029	842131.1	110.45 %		0.440				0.40%
Y RADIAL	5008.5	106.7 %		1.25				1.17%
Ag 328.068†	-2958.3	1.0236 ug/L		0.17989	1.0236 ppb		0.17989	17.57%
Al 396.153Radial†	19907.4	18029 ug/L		76.3	18029 ppb		76.3	0.42%
As 188.979†	-13.4	12.630 ug/L		3.0829	12.630 ppb		3.0829	24.41%
B 249.677†	535.1	4.9889 ug/L		0.47392	4.9889 ppb		0.47392	9.50%
Ba 233.527†	29913.8	235.21 ug/L		1.663	235.21 ppb		1.663	0.71%
Be 313.107†	8096.4	4.9831 ug/L		0.00579	4.9831 ppb		0.00579	0.12%
Ca 317.933Radial†	2673.7	5319.5 ug/L		59.29	5319.5 ppb		59.29	1.11%
Cd 226.502†	406.4	-0.1460 ug/L		0.07975	-0.1460 ppb		0.07975	54.64%
Co 228.616†	728.2	12.816 ug/L		0.0915	12.816 ppb		0.0915	0.71%
Cr 267.716†	4046.0	49.902 ug/L		0.3247	49.902 ppb		0.3247	0.65%
Cu 324.752†	53016.3	161.62 ug/L		1.216	161.62 ppb		1.216	0.75%
Fe 238.204 Radial†	3698.8	47653 ug/L		99.4	47653 ppb		99.4	0.21%
K 766.490 Radial†	13889.2	2596.0 ug/L		21.90	2596.0 ppb		21.90	0.84%

Mg 279.077 IEC†	75.5	3380.5 ug/L	27.99	3380.5 ppb	27.99	0.83%
Mn 257.610†	952467.4	1072.5 ug/L	1.72	1072.5 ppb	1.72	0.16%
Mo 202.031†	6.5	4.2391 ug/L	0.26640	4.2391 ppb	0.26640	6.28%
Na 589.592 Radial†	2182.9	633.49 ug/L	9.300	633.49 ppb	9.300	1.47%
Ni 231.604†	1283.8	32.622 ug/L	0.5274	32.622 ppb	0.5274	1.62%
P 214.914†	365.9	156.48 ug/L	5.364	156.48 ppb	5.364	3.43%
Pb 220.353†	1282.6	157.51 ug/L	2.189	157.51 ppb	2.189	1.39%
S 181.975 Axial†	40.4	55.832 ug/L	5.4722	55.832 ppb	5.4722	9.80%
Sb 206.836†	22.2	3.9927 ug/L	1.63230	3.9927 ppb	1.63230	40.88%
Se 196.026†	-194.6	20.175 ug/L	4.1553	20.175 ppb	4.1553	20.60%
Si 251.611†	558293.7	17910 ug/L	27.1	17910 ppb	27.1	0.15%
Sn 189.927†	-16.0	-4.6806 ug/L	0.28676	-4.6806 ppb	0.28676	6.13%
Sr 421.552†	5823.9	38.560 ug/L	0.2476	38.560 ppb	0.2476	0.64%
Ti 334.940†	572523.4	866.23 ug/L	0.960	866.23 ppb	0.960	0.11%
Tl 190.801†	-43.7	-1.8898 ug/L	2.26631	-1.8898 ppb	2.26631	119.92%
U 409.014†	7264.9	190.77 ug/L	3.021	190.77 ppb	3.021	1.58%
V 292.402†	6922.4	40.634 ug/L	0.1798	40.634 ppb	0.1798	0.44%
Zn 213.857†	18941.1	182.50 ug/L	1.012	182.50 ppb	1.012	0.55%
SiO2†	555482.3	38166 ug/L	228.5	38166 ppb	228.5	0.60%

Sequence No.: 7

Sample ID: 1202030972|948071|2

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 42

Date Collected: 2/23/2010 14:46:09

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202030972|948071|2

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4134.6	4134.6	97.2 %		14:48:02
1	Y RADIAL	4992.4	4992.4	106.4 %		14:48:02
1	Al 396.153Radial†	43126.8	44478.0	40270 ug/L	40270 ppb	14:48:02
1	Ca 317.933Radial†	4140.2	4243.8	8443.5 ug/L	8443.5 ppb	14:48:02
1	Fe 238.204 Radial†	4092.0	4199.5	54112 ug/L	54112 ppb	14:48:02
1	K 766.490 Radial†	35622.8	34090.7	6373.1 ug/L	6373.1 ppb	14:48:02
1	Mg 279.077 IEC†	168.3	170.4	7689.7 ug/L	7689.7 ppb	14:48:22
1	Na 589.592 Radial†	9755.2	10776.1	3127.3 ug/L	3127.3 ppb	14:48:02
1	Sr 421.552†	42845.0	44040.6	291.83 ug/L	291.83 ppb	14:48:02
1	Sc 361.383	910340.1	910340.1	101.14 %		14:49:20
1	Y 371.029	839987.2	839987.2	110.17 %		14:49:20
1	Ag 328.068†	49873.0	49080.6	242.69 ug/L	242.69 ppb	14:49:20
1	As 188.979†	498.5	513.4	255.29 ug/L	255.29 ppb	14:49:40
1	B 249.677†	10005.9	10265.9	235.49 ug/L	235.49 ppb	14:49:20
1	Ba 233.527†	70585.7	69798.0	547.47 ug/L	547.47 ppb	14:49:20
1	Be 313.107†	655000.6	651459.5	245.86 ug/L	245.86 ppb	14:49:20
1	Cd 226.502†	21123.7	21068.6	239.23 ug/L	239.23 ppb	14:49:40
1	Co 228.616†	12122.5	12047.6	248.94 ug/L	248.94 ppb	14:49:40
1	Cr 267.716†	25584.2	25229.4	288.34 ug/L	288.34 ppb	14:49:40
1	Cu 324.752†	1071328.9	1053157.4	3165.1 ug/L	3165.1 ppb	14:49:20
1	Mn 257.610†	1128576.5	1115399.0	1255.6 ug/L	1255.6 ppb	14:49:20
1	Mo 202.031†	3164.7	3122.9	232.84 ug/L	232.84 ppb	14:49:40
1	Ni 231.604†	11011.4	10834.8	275.25 ug/L	275.25 ppb	14:49:40
1	P 214.914†	2175.5	1948.9	523.40 ug/L	523.40 ppb	14:49:40
1	Pb 220.353†	3376.7	3403.6	423.14 ug/L	423.14 ppb	14:49:40
1	S 181.975 Axial†	1798.5	1741.2	2543.2 ug/L	2543.2 ppb	14:49:40
1	Sb 206.836†	660.6	616.4	218.58 ug/L	218.58 ppb	14:49:40
1	Se 196.026†	138.9	158.0	273.26 ug/L	273.26 ppb	14:49:40
1	Si 251.611†	618389.4	610874.1	19594 ug/L	19594 ppb	14:49:20
1	Sn 189.927†	1505.7	1478.3	265.83 ug/L	265.83 ppb	14:49:40
1	Ti 334.940†	904493.2	895564.1	1354.7 ug/L	1354.7 ppb	14:49:20
1	Tl 190.801†	678.2	701.8	240.77 ug/L	240.77 ppb	14:49:40
1	U 409.014†	14763.9	17413.5	463.72 ug/L	463.72 ppb	14:49:20
1	V 292.402†	40508.5	41481.7	282.85 ug/L	282.85 ppb	14:49:20
1	Zn 213.857†	45476.8	44405.7	431.45 ug/L	431.45 ppb	14:49:20
1	SiO2†	624944.9	617338.3	42410 ug/L	42410 ppb	14:50:37
2	Sc Radial	4097.2	4097.2	96.3 %		14:48:27
2	Y RADIAL	5023.4	5023.4	107.1 %		14:48:27
2	Al 396.153Radial†	42740.5	44482.1	40274 ug/L	40274 ppb	14:48:27
2	Ca 317.933Radial†	4080.6	4220.8	8397.8 ug/L	8397.8 ppb	14:48:27
2	Fe 238.204 Radial†	4055.5	4200.0	54118 ug/L	54118 ppb	14:48:27
2	K 766.490 Radial†	35294.2	34084.1	6371.9 ug/L	6371.9 ppb	14:48:27
2	Mg 279.077 IEC†	172.6	176.4	7962.6 ug/L	7962.6 ppb	14:48:47
2	Na 589.592 Radial†	9584.4	10690.5	3102.4 ug/L	3102.4 ppb	14:48:27
2	Sr 421.552†	42396.1	43976.9	291.41 ug/L	291.41 ppb	14:48:27
2	Sc 361.383	923996.8	923996.8	102.66 %		14:49:46
2	Y 371.029	851901.3	851901.3	111.73 %		14:49:46
2	Ag 328.068†	50735.0	49191.5	243.20 ug/L	243.20 ppb	14:49:46
2	As 188.979†	511.8	519.1	257.86 ug/L	257.86 ppb	14:50:06
2	B 249.677†	10191.9	10300.9	236.33 ug/L	236.33 ppb	14:49:46
2	Ba 233.527†	71527.2	69683.7	546.58 ug/L	546.58 ppb	14:49:46
2	Be 313.107†	664662.0	651299.0	245.79 ug/L	245.79 ppb	14:49:46
2	Cd 226.502†	21321.0	20952.0	237.87 ug/L	237.87 ppb	14:50:06
2	Co 228.616†	12178.0	11924.5	246.36 ug/L	246.36 ppb	14:50:06
2	Cr 267.716†	25739.8	25007.1	285.84 ug/L	285.84 ppb	14:50:06
2	Cu 324.752†	1087053.7	1052819.4	3164.1 ug/L	3164.1 ppb	14:49:46
2	Mn 257.610†	1144648.3	1114562.5	1254.6 ug/L	1254.6 ppb	14:49:46
2	Mo 202.031†	3185.4	3096.8	230.93 ug/L	230.93 ppb	14:50:06
2	Ni 231.604†	11074.4	10735.3	272.72 ug/L	272.72 ppb	14:50:06

2	P 214.914†	2191.2	1932.4	513.53 ug/L	513.53 ppb	14:50:06
2	Pb 220.353†	3410.5	3387.2	421.10 ug/L	421.10 ppb	14:50:06
2	S 181.975 Axial†	1816.6	1732.6	2530.6 ug/L	2530.6 ppb	14:50:06
2	Sb 206.836†	661.8	607.9	215.51 ug/L	215.51 ppb	14:50:06
2	Se 196.026†	146.9	163.8	277.07 ug/L	277.07 ppb	14:50:06
2	Si 251.611†	628007.6	611206.6	19605 ug/L	19605 ppb	14:49:46
2	Sn 189.927†	1500.7	1451.4	260.96 ug/L	260.96 ppb	14:50:06
2	Ti 334.940†	917464.9	894982.3	1353.8 ug/L	1353.8 ppb	14:49:46
2	Tl 190.801†	677.1	690.7	237.24 ug/L	237.24 ppb	14:50:06
2	U 409.014†	15084.9	17510.4	466.35 ug/L	466.35 ppb	14:49:46
2	V 292.402†	41006.4	41374.7	282.09 ug/L	282.09 ppb	14:49:46
2	Zn 213.857†	46116.3	44364.0	431.04 ug/L	431.04 ppb	14:49:46
2	SiO2†	623697.4	606990.7	41699 ug/L	41699 ppb	14:50:43
3	Sc Radial	4249.6	4249.6	99.9 %		14:48:52
3	Y RADIAL	5149.7	5149.7	109.8 %		14:48:52
3	Al 396.153Radial†	43750.0	43901.0	39748 ug/L	39748 ppb	14:48:52
3	Ca 317.933Radial†	4189.5	4177.9	8312.3 ug/L	8312.3 ppb	14:48:52
3	Fe 238.204 Radial†	4130.7	4124.3	53143 ug/L	53143 ppb	14:48:52
3	K 766.490 Radial†	36190.6	33667.1	6294.0 ug/L	6294.0 ppb	14:48:52
3	Mg 279.077 IEC†	173.3	170.7	7706.0 ug/L	7706.0 ppb	14:49:12
3	Na 589.592 Radial†	9843.6	10593.0	3074.1 ug/L	3074.1 ppb	14:48:52
3	Sr 421.552†	43355.6	43358.7	287.31 ug/L	287.31 ppb	14:48:52
3	Sc 361.383	917756.1	917756.1	101.97 %		14:50:12
3	Y 371.029	845538.5	845538.5	110.90 %		14:50:12
3	Ag 328.068†	50381.1	49180.5	242.86 ug/L	242.86 ppb	14:50:12
3	As 188.979†	499.5	510.4	253.73 ug/L	253.73 ppb	14:50:32
3	B 249.677†	10064.0	10242.9	235.11 ug/L	235.11 ppb	14:50:12
3	Ba 233.527†	71423.1	70055.3	549.46 ug/L	549.46 ppb	14:50:12
3	Be 313.107†	659725.8	650860.5	245.64 ug/L	245.64 ppb	14:50:12
3	Cd 226.502†	21225.2	20999.3	238.52 ug/L	238.52 ppb	14:50:32
3	Co 228.616†	12172.4	11999.7	247.94 ug/L	247.94 ppb	14:50:32
3	Cr 267.716†	25693.2	25131.9	287.15 ug/L	287.15 ppb	14:50:32
3	Cu 324.752†	1079712.6	1052820.2	3164.1 ug/L	3164.1 ppb	14:50:12
3	Mn 257.610†	1139445.4	1117041.7	1257.3 ug/L	1257.3 ppb	14:50:12
3	Mo 202.031†	3151.9	3085.1	230.00 ug/L	230.00 ppb	14:50:32
3	Ni 231.604†	11037.4	10772.3	273.66 ug/L	273.66 ppb	14:50:32
3	P 214.914†	2167.4	1923.6	508.86 ug/L	508.86 ppb	14:50:32
3	Pb 220.353†	3394.8	3394.3	421.98 ug/L	421.98 ppb	14:50:32
3	S 181.975 Axial†	1813.5	1741.5	2543.8 ug/L	2543.8 ppb	14:50:32
3	Sb 206.836†	646.7	597.5	211.92 ug/L	211.92 ppb	14:50:32
3	Se 196.026†	143.8	161.7	272.67 ug/L	272.67 ppb	14:50:32
3	Si 251.611†	625094.0	612509.0	19646 ug/L	19646 ppb	14:50:12
3	Sn 189.927†	1505.0	1465.5	263.56 ug/L	263.56 ppb	14:50:32
3	Ti 334.940†	913198.6	896875.4	1356.6 ug/L	1356.6 ppb	14:50:12
3	Tl 190.801†	681.8	699.9	240.20 ug/L	240.20 ppb	14:50:32
3	U 409.014†	14701.9	17234.7	459.01 ug/L	459.01 ppb	14:50:12
3	V 292.402†	40932.9	41574.2	283.58 ug/L	283.58 ppb	14:50:12
3	Zn 213.857†	45891.1	44448.7	432.03 ug/L	432.03 ppb	14:50:12
3	SiO2†	629475.0	616788.2	42372 ug/L	42372 ppb	14:50:48

Mean Data: 1202030972|948071|2

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	917364.3	101.92 %	0.760			0.75%
Sc Radial	4160.5	97.8 %	1.87			1.91%
Y 371.029	845809.0	110.93 %	0.782			0.70%
Y RADIAL	5055.2	107.7 %	1.78			1.65%
Ag 328.068†	49150.9	242.92 ug/L	0.258	242.92 ppb	0.258	0.11%
Al 396.153Radial†	44287.0	40097 ug/L	302.7	40097 ppb	302.7	0.75%
As 188.979†	514.3	255.63 ug/L	2.081	255.63 ppb	2.081	0.81%
B 249.677†	10269.9	235.64 ug/L	0.628	235.64 ppb	0.628	0.27%
Ba 233.527†	69845.7	547.84 ug/L	1.472	547.84 ppb	1.472	0.27%
Be 313.107†	651206.3	245.76 ug/L	0.113	245.76 ppb	0.113	0.05%
Ca 317.933Radial†	4214.2	8384.5 ug/L	66.56	8384.5 ppb	66.56	0.79%
Cd 226.502†	21006.6	238.54 ug/L	0.678	238.54 ppb	0.678	0.28%
Co 228.616†	11990.6	247.75 ug/L	1.299	247.75 ppb	1.299	0.52%
Cr 267.716†	25122.8	287.11 ug/L	1.248	287.11 ppb	1.248	0.43%
Cu 324.752†	1052932.3	3164.4 ug/L	0.60	3164.4 ppb	0.60	0.02%
Fe 238.204 Radial†	4174.6	53791 ug/L	561.1	53791 ppb	561.1	1.04%
K 766.490 Radial†	33947.3	6346.3 ug/L	45.37	6346.3 ppb	45.37	0.71%

Mg 279.077 IEC†	172.5	7786.1 ug/L	153.09	7786.1 ppb	153.09	1.97%
Mn 257.610†	1115667.7	1255.9 ug/L	1.37	1255.9 ppb	1.37	0.11%
Mo 202.031†	3101.6	231.26 ug/L	1.447	231.26 ppb	1.447	0.63%
Na 589.592 Radial†	10686.5	3101.3 ug/L	26.59	3101.3 ppb	26.59	0.86%
Ni 231.604†	10780.8	273.87 ug/L	1.278	273.87 ppb	1.278	0.47%
P 214.914†	1935.0	515.26 ug/L	7.424	515.26 ppb	7.424	1.44%
Pb 220.353†	3395.0	422.07 ug/L	1.023	422.07 ppb	1.023	0.24%
S 181.975 Axial†	1738.4	2539.2 ug/L	7.47	2539.2 ppb	7.47	0.29%
Sb 206.836†	607.3	215.34 ug/L	3.330	215.34 ppb	3.330	1.55%
Se 196.026†	161.2	274.33 ug/L	2.390	274.33 ppb	2.390	0.87%
Si 251.611†	611529.9	19615 ug/L	27.7	19615 ppb	27.7	0.14%
Sn 189.927†	1465.1	263.45 ug/L	2.436	263.45 ppb	2.436	0.92%
Sr 421.552†	43792.1	290.19 ug/L	2.496	290.19 ppb	2.496	0.86%
Ti 334.940†	895807.2	1355.0 ug/L	1.47	1355.0 ppb	1.47	0.11%
Tl 190.801†	697.5	239.40 ug/L	1.895	239.40 ppb	1.895	0.79%
U 409.014†	17386.2	463.03 ug/L	3.720	463.03 ppb	3.720	0.80%
V 292.402†	41476.9	282.84 ug/L	0.746	282.84 ppb	0.746	0.26%
Zn 213.857†	44406.1	431.51 ug/L	0.498	431.51 ppb	0.498	0.12%
SiO2†	613705.7	42161 ug/L	400.0	42161 ppb	400.0	0.95%



Sequence No.: 8

Sample ID: 1202030973|948071|2

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 43

Date Collected: 2/23/2010 14:52:59

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202030973|948071|2

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4094.4	4094.4	96.3 %		14:54:52
1	Y RADIAL	4956.7	4956.7	105.6 %		14:54:52
1	Al 396.153Radial†	40681.5	42373.0	38363 ug/L	38363 ppb	14:54:52
1	Ca 317.933Radial†	3963.9	4102.5	8162.2 ug/L	8162.2 ppb	14:54:52
1	Fe 238.204 Radial†	3801.9	3939.5	50762 ug/L	50762 ppb	14:54:52
1	K 766.490 Radial†	35001.0	33804.2	6319.6 ug/L	6319.6 ppb	14:54:52
1	Mg 279.077 IEC†	160.8	164.3	7418.0 ug/L	7418.0 ppb	14:55:12
1	Na 589.592 Radial†	9861.7	10985.3	3188.0 ug/L	3188.0 ppb	14:54:52
1	Sr 421.552†	43248.7	44892.4	297.48 ug/L	297.48 ppb	14:54:52
1	Sc 361.383	902816.7	902816.7	100.31 %		14:56:09
1	Y 371.029	826939.9	826939.9	108.46 %		14:56:09
1	Ag 328.068†	51901.9	51514.3	252.90 ug/L	252.90 ppb	14:56:09
1	As 188.979†	525.6	544.5	267.66 ug/L	267.66 ppb	14:56:29
1	B 249.677†	10353.6	10694.9	246.24 ug/L	246.24 ppb	14:56:09
1	Ba 233.527†	62928.5	62745.7	492.30 ug/L	492.30 ppb	14:56:09
1	Be 313.107†	676371.4	678161.8	255.59 ug/L	255.59 ppb	14:56:09
1	Cd 226.502†	22023.4	22139.6	252.01 ug/L	252.01 ppb	14:56:29
1	Co 228.616†	12662.2	12685.5	262.51 ug/L	262.51 ppb	14:56:29
1	Cr 267.716†	28370.5	28218.0	321.56 ug/L	321.56 ppb	14:56:29
1	Cu 324.752†	189976.9	183320.3	552.94 ug/L	552.94 ppb	14:56:09
1	Mn 257.610†	1045955.1	1042328.1	1173.4 ug/L	1173.4 ppb	14:56:09
1	Mo 202.031†	3325.7	3309.5	246.24 ug/L	246.24 ppb	14:56:29
1	Ni 231.604†	11826.5	11738.2	298.20 ug/L	298.20 ppb	14:56:29
1	P 214.914†	1145.5	939.9	432.10 ug/L	432.10 ppb	14:56:29
1	Pb 220.353†	3635.1	3689.1	460.01 ug/L	460.01 ppb	14:56:29
1	S 181.975 Axial†	1852.8	1810.1	2644.6 ug/L	2644.6 ppb	14:56:29
1	Sb 206.836†	689.7	650.9	231.17 ug/L	231.17 ppb	14:56:29
1	Se 196.026†	163.8	184.0	279.97 ug/L	279.97 ppb	14:56:29
1	Si 251.611†	639204.5	636720.8	20423 ug/L	20423 ppb	14:56:09
1	Sn 189.927†	1437.7	1422.8	255.94 ug/L	255.94 ppb	14:56:29
1	Ti 334.940†	833892.6	832631.1	1259.5 ug/L	1259.5 ppb	14:56:09
1	Tl 190.801†	726.4	755.4	256.74 ug/L	256.74 ppb	14:56:29
1	U 409.014†	13521.4	16296.5	433.85 ug/L	433.85 ppb	14:56:09
1	V 292.402†	41245.2	42549.8	290.97 ug/L	290.97 ppb	14:56:09
1	Zn 213.857†	44174.1	43481.7	426.06 ug/L	426.06 ppb	14:56:09
1	SiO2†	647982.0	645454.2	44342 ug/L	44342 ppb	14:57:27
2	Sc Radial	4097.9	4097.9	96.3 %		14:55:17
2	Y RADIAL	4933.3	4933.3	105.1 %		14:55:17
2	Al 396.153Radial†	40391.4	42036.3	38058 ug/L	38058 ppb	14:55:17
2	Ca 317.933Radial†	3946.2	4080.6	8118.7 ug/L	8118.7 ppb	14:55:17
2	Fe 238.204 Radial†	3799.5	3933.6	50686 ug/L	50686 ppb	14:55:17
2	K 766.490 Radial†	34720.0	33481.9	6259.3 ug/L	6259.3 ppb	14:55:17
2	Mg 279.077 IEC†	160.1	163.4	7376.2 ug/L	7376.2 ppb	14:55:37
2	Na 589.592 Radial†	9769.8	10881.3	3157.8 ug/L	3157.8 ppb	14:55:17
2	Sr 421.552†	42884.6	44476.6	294.72 ug/L	294.72 ppb	14:55:17
2	Sc 361.383	913074.5	913074.5	101.45 %		14:56:35
2	Y 371.029	835370.7	835370.7	109.57 %		14:56:35
2	Ag 328.068†	52589.6	51610.9	253.32 ug/L	253.32 ppb	14:56:35
2	As 188.979†	529.9	542.9	266.94 ug/L	266.94 ppb	14:56:55
2	B 249.677†	10503.2	10726.5	247.01 ug/L	247.01 ppb	14:56:35
2	Ba 233.527†	63802.5	62902.5	493.53 ug/L	493.53 ppb	14:56:35
2	Be 313.107†	685685.5	679767.7	256.19 ug/L	256.19 ppb	14:56:35
2	Cd 226.502†	22112.1	21980.3	250.17 ug/L	250.17 ppb	14:56:55
2	Co 228.616†	12704.7	12585.6	260.42 ug/L	260.42 ppb	14:56:55
2	Cr 267.716†	28349.7	27879.7	317.76 ug/L	317.76 ppb	14:56:55
2	Cu 324.752†	192063.8	183249.8	552.72 ug/L	552.72 ppb	14:56:35
2	Mn 257.610†	1060767.0	1045214.1	1176.6 ug/L	1176.6 ppb	14:56:35
2	Mo 202.031†	3355.2	3301.3	245.63 ug/L	245.63 ppb	14:56:55
2	Ni 231.604†	11821.8	11601.0	294.71 ug/L	294.71 ppb	14:56:55

2	P 214.914†	1155.5	937.0	430.32 ug/L	430.32 ppb	14:56:55
2	Pb 220.353†	3638.8	3651.9	455.35 ug/L	455.35 ppb	14:56:55
2	S 181.975 Axial†	1872.6	1808.9	2642.9 ug/L	2642.9 ppb	14:56:55
2	Sb 206.836†	704.4	657.6	233.48 ug/L	233.48 ppb	14:56:55
2	Se 196.026†	152.7	171.2	271.35 ug/L	271.35 ppb	14:56:55
2	Si 251.611†	648213.4	638442.2	20478 ug/L	20478 ppb	14:56:35
2	Sn 189.927†	1444.6	1413.6	254.27 ug/L	254.27 ppb	14:56:55
2	Ti 334.940†	844028.0	833282.3	1260.5 ug/L	1260.5 ppb	14:56:35
2	Tl 190.801†	713.5	734.5	250.06 ug/L	250.06 ppb	14:56:55
2	U 409.014†	13746.1	16366.5	435.76 ug/L	435.76 ppb	14:56:35
2	V 292.402†	41833.6	42667.9	291.80 ug/L	291.80 ppb	14:56:35
2	Zn 213.857†	44784.0	43588.1	427.16 ug/L	427.16 ppb	14:56:35
2	SiO2†	646496.2	636732.1	43742 ug/L	43742 ppb	14:57:33
3	Sc Radial	4072.5	4072.5	95.7 %		14:55:42
3	Y RADIAL	4916.9	4916.9	104.8 %		14:55:42
3	Al 396.153Radial†	40131.3	42025.8	38049 ug/L	38049 ppb	14:55:42
3	Ca 317.933Radial†	3910.1	4068.5	8094.6 ug/L	8094.6 ppb	14:55:42
3	Fe 238.204 Radial†	3770.8	3928.2	50616 ug/L	50616 ppb	14:55:42
3	K 766.490 Radial†	34369.2	33340.1	6232.8 ug/L	6232.8 ppb	14:55:42
3	Mg 279.077 IEC†	161.8	166.3	7505.8 ug/L	7505.8 ppb	14:56:02
3	Na 589.592 Radial†	9659.9	10829.6	3142.8 ug/L	3142.8 ppb	14:55:42
3	Sr 421.552†	42593.4	44449.8	294.55 ug/L	294.55 ppb	14:55:42
3	Sc 361.383	900183.2	900183.2	100.01 %		14:57:01
3	Y 371.029	822398.2	822398.2	107.86 %		14:57:01
3	Ag 328.068†	51869.5	51633.3	253.40 ug/L	253.40 ppb	14:57:01
3	As 188.979†	540.1	560.5	274.86 ug/L	274.86 ppb	14:57:21
3	B 249.677†	10362.4	10734.0	247.19 ug/L	247.19 ppb	14:57:01
3	Ba 233.527†	63090.0	63090.8	494.99 ug/L	494.99 ppb	14:57:01
3	Be 313.107†	674044.8	677808.2	255.46 ug/L	255.46 ppb	14:57:01
3	Cd 226.502†	22015.8	22196.2	252.68 ug/L	252.68 ppb	14:57:21
3	Co 228.616†	12642.2	12702.4	262.87 ug/L	262.87 ppb	14:57:21
3	Cr 267.716†	28255.1	28185.4	321.18 ug/L	321.18 ppb	14:57:21
3	Cu 324.752†	189307.2	183204.9	552.58 ug/L	552.58 ppb	14:57:01
3	Mn 257.610†	1046627.8	1046051.4	1177.5 ug/L	1177.5 ppb	14:57:01
3	Mo 202.031†	3321.4	3314.9	246.62 ug/L	246.62 ppb	14:57:21
3	Ni 231.604†	11795.4	11741.5	298.28 ug/L	298.28 ppb	14:57:21
3	P 214.914†	1141.8	939.6	432.04 ug/L	432.04 ppb	14:57:21
3	Pb 220.353†	3619.6	3684.1	459.34 ug/L	459.34 ppb	14:57:21
3	S 181.975 Axial†	1871.0	1833.7	2679.1 ug/L	2679.1 ppb	14:57:21
3	Sb 206.836†	689.3	652.5	231.75 ug/L	231.75 ppb	14:57:21
3	Se 196.026†	169.8	190.5	283.83 ug/L	283.83 ppb	14:57:21
3	Si 251.611†	639198.9	638579.5	20483 ug/L	20483 ppb	14:57:01
3	Sn 189.927†	1442.3	1431.7	257.54 ug/L	257.54 ppb	14:57:21
3	Ti 334.940†	832532.5	833703.3	1261.1 ug/L	1261.1 ppb	14:57:01
3	Tl 190.801†	714.8	745.9	253.73 ug/L	253.73 ppb	14:57:21
3	U 409.014†	13476.3	16290.8	433.71 ug/L	433.71 ppb	14:57:01
3	V 292.402†	41123.2	42548.1	290.99 ug/L	290.99 ppb	14:57:01
3	Zn 213.857†	44119.5	43555.9	426.83 ug/L	426.83 ppb	14:57:01
3	SiO2†	644064.5	643427.1	44202 ug/L	44202 ppb	14:57:38

## Mean Data: 1202030973|948071|2

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	905358.1	100.59 %	0.757			0.75%
Sc Radial	4088.3	96.1 %	0.32			0.34%
Y 371.029	828236.3	108.63 %	0.863			0.79%
Y RADIAL	4935.6	105.2 %	0.43			0.41%
Ag 328.068†	51586.1	253.21 ug/L	0.270	253.21 ppb	0.270	0.11%
Al 396.153Radial†	42145.0	38157 ug/L	178.8	38157 ppb	178.8	0.47%
As 188.979†	549.3	269.82 ug/L	4.381	269.82 ppb	4.381	1.62%
B 249.677†	10718.5	246.81 ug/L	0.506	246.81 ppb	0.506	0.21%
Ba 233.527†	62913.0	493.61 ug/L	1.347	493.61 ppb	1.347	0.27%
Be 313.107†	678579.2	255.75 ug/L	0.389	255.75 ppb	0.389	0.15%
Ca 317.933Radial†	4083.8	8125.2 ug/L	34.28	8125.2 ppb	34.28	0.42%
Cd 226.502†	22105.3	251.62 ug/L	1.302	251.62 ppb	1.302	0.52%
Co 228.616†	12657.9	261.93 ug/L	1.321	261.93 ppb	1.321	0.50%
Cr 267.716†	28094.3	320.17 ug/L	2.093	320.17 ppb	2.093	0.65%
Cu 324.752†	183258.3	552.75 ug/L	0.179	552.75 ppb	0.179	0.03%
Fe 238.204 Radial†	3933.8	50688 ug/L	72.9	50688 ppb	72.9	0.14%
K 766.490 Radial†	33542.1	6270.6 ug/L	44.48	6270.6 ppb	44.48	0.71%

Mg 279.077 IEC†	164.7	7433.3 ug/L	66.14	7433.3 ppb	66.14	0.89%
Mn 257.610†	1044531.2	1175.8 ug/L	2.18	1175.8 ppb	2.18	0.19%
Mo 202.031†	3308.6	246.16 ug/L	0.499	246.16 ppb	0.499	0.20%
Na 589.592 Radial†	10898.7	3162.8 ug/L	23.02	3162.8 ppb	23.02	0.73%
Ni 231.604†	11693.6	297.07 ug/L	2.037	297.07 ppb	2.037	0.69%
P 214.914†	938.8	431.48 ug/L	1.012	431.48 ppb	1.012	0.23%
Pb 220.353†	3675.0	458.23 ug/L	2.519	458.23 ppb	2.519	0.55%
S 181.975 Axial†	1817.6	2655.5 ug/L	20.46	2655.5 ppb	20.46	0.77%
Sb 206.836†	653.7	232.13 ug/L	1.202	232.13 ppb	1.202	0.52%
Se 196.026†	181.9	278.38 ug/L	6.390	278.38 ppb	6.390	2.30%
Si 251.611†	637914.2	20461 ug/L	33.2	20461 ppb	33.2	0.16%
Sn 189.927†	1422.7	255.91 ug/L	1.636	255.91 ppb	1.636	0.64%
Sr 421.552†	44606.3	295.58 ug/L	1.644	295.58 ppb	1.644	0.56%
Ti 334.940†	833205.6	1260.3 ug/L	0.81	1260.3 ppb	0.81	0.06%
Tl 190.801†	745.3	253.51 ug/L	3.347	253.51 ppb	3.347	1.32%
U 409.014†	16317.9	434.44 ug/L	1.144	434.44 ppb	1.144	0.26%
V 292.402†	42588.6	291.25 ug/L	0.472	291.25 ppb	0.472	0.16%
Zn 213.857†	43541.9	426.69 ug/L	0.565	426.69 ppb	0.565	0.13%
SiO2†	641871.1	44095 ug/L	313.6	44095 ppb	313.6	0.71%

Sequence No.: 9

Sample ID: 1202030971|948071|10

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 44

Date Collected: 2/23/2010 14:59:49

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202030971|948071|10

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4347.3	4347.3	102 %		15:01:42
1	Y RADIAL	4882.1	4882.1	104.1 %		15:01:42
1	Al 396.153Radial†	3863.0	3890.4	3523.3 ug/L	3523.3 ppb	15:01:42
1	Ca 317.933Radial†	583.8	555.7	1105.7 ug/L	1105.7 ppb	15:02:02
1	Fe 238.204 Radial†	727.4	701.5	9038.4 ug/L	9038.4 ppb	15:02:02
1	K 766.490 Radial†	5320.7	2649.2	495.14 ug/L	495.14 ppb	15:01:42
1	Mg 279.077 IEC†	18.9	15.8	707.08 ug/L	707.08 ppb	15:02:02
1	Na 589.592 Radial†	-396.8	352.1	102.17 ug/L	102.17 ppb	15:01:42
1	Sr 421.552†	1215.8	1152.8	7.6322 ug/L	7.6322 ppb	15:01:42
1	Sc 361.383	920371.9	920371.9	102.26 %		15:02:59
1	Y 371.029	787435.2	787435.2	103.28 %		15:02:59
1	Ag 328.068†	-363.3	-584.6	0.0644 ug/L	0.0644 ppb	15:03:04
1	As 188.979†	-25.4	-4.3	1.6281 ug/L	1.6281 ppb	15:03:24
1	B 249.677†	-340.4	40.0	-0.5233 ug/L	-0.5233 ppb	15:03:04
1	Ba 233.527†	6576.3	6440.3	50.601 ug/L	50.601 ppb	15:03:04
1	Be 313.107†	-1866.6	2027.9	1.1388 ug/L	1.1388 ppb	15:03:04
1	Cd 226.502†	-107.1	78.6	-0.0031 ug/L	-0.0031 ppb	15:03:24
1	Co 228.616†	116.1	175.5	3.2048 ug/L	3.2048 ppb	15:03:24
1	Cr 267.716†	1252.9	1159.2	13.849 ug/L	13.849 ppb	15:03:24
1	Cu 324.752†	43937.6	36891.0	111.22 ug/L	111.22 ppb	15:03:04
1	Mn 257.610†	177818.8	173458.3	195.34 ug/L	195.34 ppb	15:02:59
1	Mo 202.031†	17.1	10.6	1.4935 ug/L	1.4935 ppb	15:03:24
1	Ni 231.604†	418.3	356.8	9.0657 ug/L	9.0657 ppb	15:03:24
1	P 214.914†	320.8	111.7	39.370 ug/L	39.370 ppb	15:03:24
1	Pb 220.353†	4657.8	4620.0	572.16 ug/L	572.16 ppb	15:03:24
1	S 181.975 Axial†	53.7	15.5	21.978 ug/L	21.978 ppb	15:03:24
1	Sb 206.836†	52.8	15.0	4.4965 ug/L	4.4965 ppb	15:03:24
1	Se 196.026†	-55.1	-33.2	6.2836 ug/L	6.2836 ppb	15:03:24
1	Si 251.611†	113676.5	110634.0	3549.1 ug/L	3549.1 ppb	15:03:04
1	Sn 189.927†	5.2	-5.3	-1.2886 ug/L	-1.2886 ppb	15:03:24
1	Ti 334.940†	112757.4	111551.1	168.77 ug/L	168.77 ppb	15:03:04
1	Tl 190.801†	-53.3	-20.9	-4.4163 ug/L	-4.4163 ppb	15:03:24
1	U 409.014†	-445.4	2380.7	63.269 ug/L	63.269 ppb	15:02:59
1	V 292.402†	-67.5	1364.4	8.1207 ug/L	8.1207 ppb	15:03:04
1	Zn 213.857†	4516.7	3859.3	37.165 ug/L	37.165 ppb	15:03:24
1	SiO2†	115556.1	112454.8	7726.6 ug/L	7726.6 ppb	15:04:30
2	Sc Radial	4101.8	4101.8	96.4 %		15:02:07
2	Y RADIAL	4620.9	4620.9	98.48 %		15:02:07
2	Al 396.153Radial†	3876.8	4130.9	3741.2 ug/L	3741.2 ppb	15:02:07
2	Ca 317.933Radial†	580.7	586.7	1167.3 ug/L	1167.3 ppb	15:02:27
2	Fe 238.204 Radial†	727.5	744.2	9588.0 ug/L	9588.0 ppb	15:02:27
2	K 766.490 Radial†	5282.0	2920.6	545.88 ug/L	545.88 ppb	15:02:07
2	Mg 279.077 IEC†	16.4	14.2	636.21 ug/L	636.21 ppb	15:02:27
2	Na 589.592 Radial†	-307.8	421.2	122.23 ug/L	122.23 ppb	15:02:07
2	Sr 421.552†	1238.5	1247.5	8.2596 ug/L	8.2596 ppb	15:02:07
2	Sc 361.383	870949.9	870949.9	96.765 %		15:03:29
2	Y 371.029	744609.0	744609.0	97.661 %		15:03:29
2	Ag 328.068†	-275.1	-513.7	0.5645 ug/L	0.5645 ppb	15:03:34
2	As 188.979†	-20.7	-0.8	3.4514 ug/L	3.4514 ppb	15:03:54
2	B 249.677†	-293.1	70.1	0.1053 ug/L	0.1053 ppb	15:03:34
2	Ba 233.527†	6702.5	6935.7	54.490 ug/L	54.490 ppb	15:03:34
2	Be 313.107†	-1985.8	1801.1	1.0838 ug/L	1.0838 ppb	15:03:34
2	Cd 226.502†	-109.4	70.3	-0.1562 ug/L	-0.1562 ppb	15:03:54
2	Co 228.616†	111.1	176.7	3.1964 ug/L	3.1964 ppb	15:03:54
2	Cr 267.716†	1291.3	1268.5	15.130 ug/L	15.130 ppb	15:03:54
2	Cu 324.752†	44690.0	40106.8	120.91 ug/L	120.91 ppb	15:03:34
2	Mn 257.610†	180124.4	185708.6	209.13 ug/L	209.13 ppb	15:03:29
2	Mo 202.031†	10.7	5.0	1.1238 ug/L	1.1238 ppb	15:03:54
2	Ni 231.604†	428.1	390.0	9.9119 ug/L	9.9119 ppb	15:03:54

2	P 214.914†	328.5	137.5	52.719 ug/L	52.719 ppb	15:03:54
2	Pb 220.353†	4672.9	4894.2	606.11 ug/L	606.11 ppb	15:03:54
2	S 181.975 Axial†	53.3	18.0	25.658 ug/L	25.658 ppb	15:03:54
2	Sb 206.836†	49.0	13.9	4.1025 ug/L	4.1025 ppb	15:03:54
2	Se 196.026†	-65.4	-46.9	-1.0378 ug/L	-1.0378 ppb	15:03:54
2	Si 251.611†	115826.5	119164.1	3822.8 ug/L	3822.8 ppb	15:03:34
2	Sn 189.927†	15.7	5.8	0.6998 ug/L	0.6998 ppb	15:03:54
2	Ti 334.940†	115015.2	120141.6	181.78 ug/L	181.78 ppb	15:03:34
2	Tl 190.801†	-44.4	-14.7	-2.2577 ug/L	-2.2577 ppb	15:03:54
2	U 409.014†	-523.9	2274.9	60.343 ug/L	60.343 ppb	15:03:29
2	V 292.402†	76.6	1509.6	9.0216 ug/L	9.0216 ppb	15:03:34
2	Zn 213.857†	4502.0	4094.8	39.427 ug/L	39.427 ppb	15:03:54
2	SiO2†	115874.3	119196.1	8189.8 ug/L	8189.8 ppb	15:04:35
3	Sc Radial	4135.8	4135.8	97.2 %		15:02:32
3	Y RADIAL	4643.8	4643.8	98.97 %		15:02:32
3	Al 396.153Radial†	3814.0	4033.4	3652.8 ug/L	3652.8 ppb	15:02:32
3	Ca 317.933Radial†	575.7	576.6	1147.3 ug/L	1147.3 ppb	15:02:52
3	Fe 238.204 Radial†	734.2	744.9	9597.4 ug/L	9597.4 ppb	15:02:52
3	K 766.490 Radial†	5226.1	2818.2	526.73 ug/L	526.73 ppb	15:02:32
3	Mg 279.077 IEC†	17.7	15.5	692.31 ug/L	692.31 ppb	15:02:52
3	Na 589.592 Radial†	-258.3	474.7	137.77 ug/L	137.77 ppb	15:02:32
3	Sr 421.552†	1186.4	1183.4	7.8347 ug/L	7.8347 ppb	15:02:32
3	Sc 361.383	926177.6	926177.6	102.90 %		15:04:00
3	Y 371.029	790463.1	790463.1	103.68 %		15:04:00
3	Ag 328.068†	-341.5	-561.2	0.3415 ug/L	0.3415 ppb	15:04:05
3	As 188.979†	-24.9	-3.7	2.0277 ug/L	2.0277 ppb	15:04:25
3	B 249.677†	-418.4	-33.6	-2.3705 ug/L	-2.3705 ppb	15:04:05
3	Ba 233.527†	6546.0	6370.6	50.074 ug/L	50.074 ppb	15:04:05
3	Be 313.107†	-1920.1	1987.4	1.1176 ug/L	1.1176 ppb	15:04:05
3	Cd 226.502†	-118.7	67.9	-0.1846 ug/L	-0.1846 ppb	15:04:25
3	Co 228.616†	95.5	154.8	2.7680 ug/L	2.7680 ppb	15:04:25
3	Cr 267.716†	1266.1	1164.5	13.960 ug/L	13.960 ppb	15:04:25
3	Cu 324.752†	43432.1	36130.4	108.97 ug/L	108.97 ppb	15:04:05
3	Mn 257.610†	179760.8	174255.5	196.29 ug/L	196.29 ppb	15:04:00
3	Mo 202.031†	9.2	2.9	0.9717 ug/L	0.9717 ppb	15:04:25
3	Ni 231.604†	407.3	343.5	8.7292 ug/L	8.7292 ppb	15:04:25
3	P 214.914†	317.6	106.6	36.289 ug/L	36.289 ppb	15:04:25
3	Pb 220.353†	4649.1	4583.0	567.55 ug/L	567.55 ppb	15:04:25
3	S 181.975 Axial†	45.5	7.2	9.8537 ug/L	9.8537 ppb	15:04:25
3	Sb 206.836†	41.4	3.5	0.5006 ug/L	0.5006 ppb	15:04:25
3	Se 196.026†	-60.9	-38.5	4.5005 ug/L	4.5005 ppb	15:04:25
3	Si 251.611†	112629.8	108919.9	3494.1 ug/L	3494.1 ppb	15:04:05
3	Sn 189.927†	8.8	-1.9	-0.6888 ug/L	-0.6888 ppb	15:04:25
3	Ti 334.940†	111645.3	109779.2	166.10 ug/L	166.10 ppb	15:04:05
3	Tl 190.801†	-38.7	-6.4	0.2267 ug/L	0.2267 ppb	15:04:25
3	U 409.014†	-394.4	2433.0	64.618 ug/L	64.618 ppb	15:04:00
3	V 292.402†	-69.5	1362.9	8.0259 ug/L	8.0259 ppb	15:04:05
3	Zn 213.857†	4542.8	3857.1	37.064 ug/L	37.064 ppb	15:04:25
3	SiO2†	115832.7	112015.2	7696.4 ug/L	7696.4 ppb	15:04:40

Mean Data: 1202030971|948071|10

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	905833.1	100.64 %	3.372			3.35%
Sc Radial	4195.0	98.6 %	3.13			3.17%
Y 371.029	774169.1	101.54 %	3.363			3.31%
Y RADIAL	4715.6	100.5 %	3.08			3.07%
Ag 328.068†	-553.2	0.3235 ug/L	0.25056	0.3235 ppb	0.25056	77.46%
Al 396.153Radial†	4018.2	3639.1 ug/L	109.57	3639.1 ppb	109.57	3.01%
As 188.979†	-2.9	2.3690 ug/L	0.95839	2.3690 ppb	0.95839	40.46%
B 249.677†	25.5	-0.9295 ug/L	1.28688	-0.9295 ppb	1.28688	138.45%
Ba 233.527†	6582.2	51.722 ug/L	2.4119	51.722 ppb	2.4119	4.66%
Be 313.107†	1938.8	1.1134 ug/L	0.02774	1.1134 ppb	0.02774	2.49%
Ca 317.933Radial†	573.0	1140.1 ug/L	31.44	1140.1 ppb	31.44	2.76%
Cd 226.502†	72.3	-0.1146 ug/L	0.09766	-0.1146 ppb	0.09766	85.20%
Co 228.616†	169.0	3.0564 ug/L	0.24982	3.0564 ppb	0.24982	8.17%
Cr 267.716†	1197.4	14.313 ug/L	0.7094	14.313 ppb	0.7094	4.96%
Cu 324.752†	37709.4	113.70 ug/L	6.345	113.70 ppb	6.345	5.58%
Fe 238.204 Radial†	730.2	9408.0 ug/L	320.06	9408.0 ppb	320.06	3.40%
K 766.490 Radial†	2796.0	522.58 ug/L	25.624	522.58 ppb	25.624	4.90%

Mg 279.077 IEC†	15.1	678.53 ug/L	37.386	678.53 ppb	37.386	5.51%
Mn 257.610†	177807.5	200.26 ug/L	7.703	200.26 ppb	7.703	3.85%
Mo 202.031†	6.2	1.1963 ug/L	0.26833	1.1963 ppb	0.26833	22.43%
Na 589.592 Radial†	416.0	120.72 ug/L	17.848	120.72 ppb	17.848	14.78%
Ni 231.604†	363.4	9.2356 ug/L	0.60941	9.2356 ppb	0.60941	6.60%
P 214.914†	118.6	42.793 ug/L	8.7331	42.793 ppb	8.7331	20.41%
Pb 220.353†	4699.1	581.94 ug/L	21.059	581.94 ppb	21.059	3.62%
S 181.975 Axial†	13.5	19.163 ug/L	8.2696	19.163 ppb	8.2696	43.15%
Sb 206.836†	10.8	3.0332 ug/L	2.20215	3.0332 ppb	2.20215	72.60%
Se 196.026†	-39.5	3.2488 ug/L	3.81788	3.2488 ppb	3.81788	117.52%
Si 251.611†	112906.0	3622.0 ug/L	176.02	3622.0 ppb	176.02	4.86%
Sn 189.927†	-0.5	-0.4259 ug/L	1.01992	-0.4259 ppb	1.01992	239.50%
Sr 421.552†	1194.6	7.9089 ug/L	0.32021	7.9089 ppb	0.32021	4.05%
Ti 334.940†	113824.0	172.21 ug/L	8.389	172.21 ppb	8.389	4.87%
Tl 190.801†	-14.0	-2.1491 ug/L	2.32344	-2.1491 ppb	2.32344	108.11%
U 409.014†	2362.9	62.744 ug/L	2.1853	62.744 ppb	2.1853	3.48%
V 292.402†	1412.3	8.3894 ug/L	0.54954	8.3894 ppb	0.54954	6.55%
Zn 213.857†	3937.1	37.885 ug/L	1.3364	37.885 ppb	1.3364	3.53%
SiO2†	114555.4	7870.9 ug/L	276.55	7870.9 ppb	276.55	3.51%

Sequence No.: 10  
 Sample ID: CCV  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 7  
 Date Collected: 2/23/2010 15:06:51  
 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	3924.9	3924.9	92.3 %		15:09:03
1	Y RADIAL	4390.1	4390.1	93.57 %		15:08:43
1	Al 396.153Radial†	5169.0	5712.6	5148.9 ug/L	5148.9 ppb	15:08:43
1	Ca 317.933Radial†	2496.3	2689.9	5351.7 ug/L	5351.7 ppb	15:09:03
1	Fe 238.204 Radial†	387.9	410.2	5299.7 ug/L	5299.7 ppb	15:09:03
1	K 766.490 Radial†	28286.9	28098.9	5250.4 ug/L	5250.4 ppb	15:08:43
1	Mg 279.077 IEC†	112.5	119.2	5416.5 ug/L	5416.5 ppb	15:09:03
1	Na 589.592 Radial†	31678.4	35071.6	10178 ug/L	10178 ppb	15:08:43
1	Sr 421.552†	70985.5	76893.2	509.60 ug/L	509.60 ppb	15:08:43
1	Sc 361.383	893296.7	893296.7	99.248 %		15:10:01
1	Y 371.029	743691.4	743691.4	97.541 %		15:10:01
1	Ag 328.068†	109119.8	109717.0	507.03 ug/L	507.03 ppb	15:10:06
1	As 188.979†	1106.2	1135.1	516.00 ug/L	516.00 ppb	15:10:26
1	B 249.677†	19977.9	20502.2	486.97 ug/L	486.97 ppb	15:10:06
1	Ba 233.527†	64286.9	64783.0	507.28 ug/L	507.28 ppb	15:10:06
1	Be 313.107†	1328064.1	1341977.0	501.25 ug/L	501.25 ppb	15:10:01
1	Cd 226.502†	43642.0	44155.9	512.40 ug/L	512.40 ppb	15:10:06
1	Co 228.616†	24200.3	24445.5	511.18 ug/L	511.18 ppb	15:10:06
1	Cr 267.716†	44865.4	45139.2	507.29 ug/L	507.29 ppb	15:10:06
1	Cu 324.752†	169272.4	164477.5	493.92 ug/L	493.92 ppb	15:10:06
1	Mn 257.610†	445117.5	448052.3	502.65 ug/L	502.65 ppb	15:10:01
1	Mo 202.031†	6908.3	6954.6	509.43 ug/L	509.43 ppb	15:10:26
1	Ni 231.604†	20015.4	20114.7	510.97 ug/L	510.97 ppb	15:10:06
1	P 214.914†	4381.8	4213.0	2460.1 ug/L	2460.1 ppb	15:10:26
1	Pb 220.353†	4041.9	4137.6	514.24 ug/L	514.24 ppb	15:10:26
1	S 181.975 Axial†	738.6	707.1	1034.9 ug/L	1034.9 ppb	15:10:26
1	Sb 206.836†	1477.5	1452.0	524.54 ug/L	524.54 ppb	15:10:26
1	Se 196.026†	743.4	769.7	525.50 ug/L	525.50 ppb	15:10:26
1	Si 251.611†	78681.3	78743.2	2519.8 ug/L	2519.8 ppb	15:10:06
1	Sn 189.927†	2829.3	2840.3	514.49 ug/L	514.49 ppb	15:10:26
1	Ti 334.940†	326380.3	330134.3	499.18 ug/L	499.18 ppb	15:10:01
1	Tl 190.801†	1552.7	1595.6	515.42 ug/L	515.42 ppb	15:10:26
1	U 409.014†	15141.3	18072.2	486.59 ug/L	486.59 ppb	15:10:06
1	V 292.402†	69952.5	71912.8	506.01 ug/L	506.01 ppb	15:10:06
1	Zn 213.857†	50920.0	50748.0	504.50 ug/L	504.50 ppb	15:10:06
1	SiO2†	77937.1	77976.0	5343.8 ug/L	5343.8 ppb	15:11:34
2	Sc Radial	3923.7	3923.7	92.2 %		15:09:28
2	Y RADIAL	4432.9	4432.9	94.48 %		15:09:08
2	Al 396.153Radial†	5237.5	5788.5	5218.3 ug/L	5218.3 ppb	15:09:08
2	Ca 317.933Radial†	2482.1	2675.3	5322.8 ug/L	5322.8 ppb	15:09:28
2	Fe 238.204 Radial†	380.3	402.1	5194.7 ug/L	5194.7 ppb	15:09:28
2	K 766.490 Radial†	28616.6	28465.1	5318.9 ug/L	5318.9 ppb	15:09:08
2	Mg 279.077 IEC†	111.7	118.4	5378.9 ug/L	5378.9 ppb	15:09:28
2	Na 589.592 Radial†	32166.3	35610.3	10334 ug/L	10334 ppb	15:09:08
2	Sr 421.552†	72055.4	78075.1	517.43 ug/L	517.43 ppb	15:09:08
2	Sc 361.383	910274.8	910274.8	101.13 %		15:10:32
2	Y 371.029	757544.9	757544.9	99.358 %		15:10:32
2	Ag 328.068†	109461.9	108004.7	499.12 ug/L	499.12 ppb	15:10:37
2	As 188.979†	1086.2	1094.6	497.67 ug/L	497.67 ppb	15:10:57
2	B 249.677†	20220.0	20366.1	483.77 ug/L	483.77 ppb	15:10:37
2	Ba 233.527†	64267.4	63555.5	497.68 ug/L	497.68 ppb	15:10:37
2	Be 313.107†	1330740.0	1319664.8	492.92 ug/L	492.92 ppb	15:10:32
2	Cd 226.502†	43777.5	43469.8	504.44 ug/L	504.44 ppb	15:10:37
2	Co 228.616†	24147.0	23938.1	500.56 ug/L	500.56 ppb	15:10:37
2	Cr 267.716†	44895.3	44325.7	498.15 ug/L	498.15 ppb	15:10:37
2	Cu 324.752†	170176.9	162190.7	487.05 ug/L	487.05 ppb	15:10:37
2	Mn 257.610†	446423.9	440979.0	494.71 ug/L	494.71 ppb	15:10:32
2	Mo 202.031†	6847.1	6764.2	495.49 ug/L	495.49 ppb	15:10:57
2	Ni 231.604†	20108.9	19831.0	503.76 ug/L	503.76 ppb	15:10:37

2	P 214.914†	4353.5	4102.6	2394.5 ug/L	2394.5 ppb	15:10:57
2	Pb 220.353†	4025.6	4045.4	502.81 ug/L	502.81 ppb	15:10:57
2	S 181.975 Axial†	740.5	695.1	1017.4 ug/L	1017.4 ppb	15:10:57
2	Sb 206.836†	1463.5	1410.4	509.54 ug/L	509.54 ppb	15:10:57
2	Se 196.026†	732.8	745.2	508.98 ug/L	508.98 ppb	15:10:57
2	Si 251.611†	78873.8	77454.8	2478.6 ug/L	2478.6 ppb	15:10:37
2	Sn 189.927†	2816.4	2774.4	502.57 ug/L	502.57 ppb	15:10:57
2	Ti 334.940†	326791.2	324407.0	490.53 ug/L	490.53 ppb	15:10:32
2	Tl 190.801†	1527.7	1541.8	498.09 ug/L	498.09 ppb	15:10:57
2	U 409.014†	14981.0	17629.2	474.65 ug/L	474.65 ppb	15:10:37
2	V 292.402†	70259.6	70901.8	498.80 ug/L	498.80 ppb	15:10:37
2	Zn 213.857†	51017.7	49887.7	495.94 ug/L	495.94 ppb	15:10:37
2	SiO2†	78251.7	76822.3	5264.9 ug/L	5264.9 ppb	15:11:39
3	Sc Radial	3944.6	3944.6	92.7 %		15:09:53
3	Y RADIAL	4371.9	4371.9	93.18 %		15:09:33
3	Al 396.153Radial†	5165.6	5680.9	5120.7 ug/L	5120.7 ppb	15:09:33
3	Ca 317.933Radial†	2473.3	2651.6	5275.6 ug/L	5275.6 ppb	15:09:53
3	Fe 238.204 Radial†	383.4	403.2	5209.9 ug/L	5209.9 ppb	15:09:53
3	K 766.490 Radial†	28222.9	27876.6	5208.9 ug/L	5208.9 ppb	15:09:33
3	Mg 279.077 IEC†	108.0	113.7	5168.6 ug/L	5168.6 ppb	15:09:53
3	Na 589.592 Radial†	31526.2	34735.7	10080 ug/L	10080 ppb	15:09:33
3	Sr 421.552†	70861.9	76375.0	506.16 ug/L	506.16 ppb	15:09:33
3	Sc 361.383	907260.5	907260.5	100.80 %		15:11:03
3	Y 371.029	754666.7	754666.7	98.980 %		15:11:03
3	Ag 328.068†	108853.1	107760.3	498.00 ug/L	498.00 ppb	15:11:08
3	As 188.979†	1097.2	1109.0	504.20 ug/L	504.20 ppb	15:11:28
3	B 249.677†	20051.3	20265.2	481.36 ug/L	481.36 ppb	15:11:08
3	Ba 233.527†	63960.6	63462.3	496.94 ug/L	496.94 ppb	15:11:08
3	Be 313.107†	1324183.5	1317531.9	492.12 ug/L	492.12 ppb	15:11:03
3	Cd 226.502†	43470.6	43309.0	502.57 ug/L	502.57 ppb	15:11:08
3	Co 228.616†	24073.4	23944.3	500.69 ug/L	500.69 ppb	15:11:08
3	Cr 267.716†	44671.2	44250.9	497.31 ug/L	497.31 ppb	15:11:08
3	Cu 324.752†	169018.4	161600.5	485.28 ug/L	485.28 ppb	15:11:08
3	Mn 257.610†	444795.9	440830.5	494.55 ug/L	494.55 ppb	15:11:03
3	Mo 202.031†	6866.7	6806.2	498.56 ug/L	498.56 ppb	15:11:28
3	Ni 231.604†	19942.8	19732.3	501.25 ug/L	501.25 ppb	15:11:08
3	P 214.914†	4368.7	4132.0	2412.7 ug/L	2412.7 ppb	15:11:28
3	Pb 220.353†	4028.2	4061.3	504.77 ug/L	504.77 ppb	15:11:28
3	S 181.975 Axial†	754.8	711.8	1041.8 ug/L	1041.8 ppb	15:11:28
3	Sb 206.836†	1464.5	1416.2	511.64 ug/L	511.64 ppb	15:11:28
3	Se 196.026†	739.8	754.6	515.24 ug/L	515.24 ppb	15:11:28
3	Si 251.611†	78337.6	77182.0	2469.9 ug/L	2469.9 ppb	15:11:08
3	Sn 189.927†	2815.3	2782.6	504.04 ug/L	504.04 ppb	15:11:28
3	Ti 334.940†	326076.7	324771.7	491.09 ug/L	491.09 ppb	15:11:03
3	Tl 190.801†	1529.6	1548.7	500.31 ug/L	500.31 ppb	15:11:28
3	U 409.014†	14873.5	17571.8	473.10 ug/L	473.10 ppb	15:11:08
3	V 292.402†	69735.8	70613.1	496.83 ug/L	496.83 ppb	15:11:08
3	Zn 213.857†	50693.6	49733.7	494.41 ug/L	494.41 ppb	15:11:08
3	SiO2†	77432.5	76266.7	5226.6 ug/L	5226.6 ppb	15:11:44

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	903610.7	100.39 %	1.006			1.00%
Sc Radial	3931.1	92.4 %	0.28			0.30%
Y 371.029	751967.7	98.626 %	0.9588			0.97%
Y RADIAL	4398.3	93.74 %	0.668			0.71%
Ag 328.068†	108494.0	501.38 ug/L	4.926	501.38 ppb	4.926	0.98%
QC value within limits for Ag 328.068 Recovery = 100.28%						
Al 396.153Radial†	5727.4	5162.7 ug/L	50.22	5162.7 ppb	50.22	0.97%
QC value within limits for Al 396.153Radial Recovery = 103.25%						
As 188.979†	1112.9	505.96 ug/L	9.288	505.96 ppb	9.288	1.84%
QC value within limits for As 188.979 Recovery = 101.19%						
B 249.677†	20377.8	484.04 ug/L	2.815	484.04 ppb	2.815	0.58%
QC value within limits for B 249.677 Recovery = 96.81%						
Ba 233.527†	63933.6	500.63 ug/L	5.769	500.63 ppb	5.769	1.15%
QC value within limits for Ba 233.527 Recovery = 100.13%						
Be 313.107†	1326391.3	495.43 ug/L	5.057	495.43 ppb	5.057	1.02%
QC value within limits for Be 313.107 Recovery = 99.09%						
Ca 317.933Radial†	2672.3	5316.7 ug/L	38.44	5316.7 ppb	38.44	0.72%



QC value within limits for Ca 317.933 Radial Recovery = 106.33%							
Cd 226.502†	43644.9	506.47 ug/L	5.220	506.47 ppb	5.220	1.03%	
QC value within limits for Cd 226.502 Recovery = 101.29%							
Co 228.616†	24109.3	504.14 ug/L	6.094	504.14 ppb	6.094	1.21%	
QC value within limits for Co 228.616 Recovery = 100.83%							
Cr 267.716†	44571.9	500.92 ug/L	5.535	500.92 ppb	5.535	1.11%	
QC value within limits for Cr 267.716 Recovery = 100.18%							
Cu 324.752†	162756.2	488.75 ug/L	4.562	488.75 ppb	4.562	0.93%	
QC value within limits for Cu 324.752 Recovery = 97.75%							
Fe 238.204 Radial†	405.2	5234.8 ug/L	56.76	5234.8 ppb	56.76	1.08%	
QC value within limits for Fe 238.204 Radial Recovery = 104.70%							
K 766.490 Radial†	28146.9	5259.4 ug/L	55.55	5259.4 ppb	55.55	1.06%	
QC value within limits for K 766.490 Radial Recovery = 105.19%							
Mg 279.077 IEC†	117.1	5321.3 ug/L	133.56	5321.3 ppb	133.56	2.51%	
QC value within limits for Mg 279.077 IEC Recovery = 106.43%							
Mn 257.610†	443287.3	497.31 ug/L	4.630	497.31 ppb	4.630	0.93%	
QC value within limits for Mn 257.610 Recovery = 99.46%							
Mo 202.031†	6841.7	501.16 ug/L	7.324	501.16 ppb	7.324	1.46%	
QC value within limits for Mo 202.031 Recovery = 100.23%							
Na 589.592 Radial†	35139.2	10198 ug/L	128.0	10198 ppb	128.0	1.26%	
QC value within limits for Na 589.592 Radial Recovery = 101.98%							
Ni 231.604†	19892.7	505.33 ug/L	5.042	505.33 ppb	5.042	1.00%	
QC value within limits for Ni 231.604 Recovery = 101.07%							
P 214.914†	4149.2	2422.4 ug/L	33.89	2422.4 ppb	33.89	1.40%	
QC value within limits for P 214.914 Recovery = 96.90%							
Pb 220.353†	4081.4	507.27 ug/L	6.109	507.27 ppb	6.109	1.20%	
QC value within limits for Pb 220.353 Recovery = 101.45%							
S 181.975 Axial†	704.7	1031.4 ug/L	12.61	1031.4 ppb	12.61	1.22%	
QC value within limits for S 181.975 Axial Recovery = 103.14%							
Sb 206.836†	1426.2	515.24 ug/L	8.122	515.24 ppb	8.122	1.58%	
QC value within limits for Sb 206.836 Recovery = 103.05%							
Se 196.026†	756.5	516.58 ug/L	8.339	516.58 ppb	8.339	1.61%	
QC value within limits for Se 196.026 Recovery = 103.32%							
Si 251.611†	77793.3	2489.4 ug/L	26.66	2489.4 ppb	26.66	1.07%	
QC value within limits for Si 251.611 Recovery = 99.58%							
Sn 189.927†	2799.1	507.03 ug/L	6.502	507.03 ppb	6.502	1.28%	
QC value within limits for Sn 189.927 Recovery = 101.41%							
Sr 421.552†	77114.4	511.06 ug/L	5.775	511.06 ppb	5.775	1.13%	
QC value within limits for Sr 421.552 Recovery = 102.21%							
Ti 334.940†	326437.7	493.60 ug/L	4.842	493.60 ppb	4.842	0.98%	
QC value within limits for Ti 334.940 Recovery = 98.72%							
Tl 190.801†	1562.0	504.61 ug/L	9.429	504.61 ppb	9.429	1.87%	
QC value within limits for Tl 190.801 Recovery = 100.92%							
U 409.014†	17757.7	478.11 ug/L	7.382	478.11 ppb	7.382	1.54%	
QC value within limits for U 409.014 Recovery = 95.62%							
V 292.402†	71142.6	500.54 ug/L	4.834	500.54 ppb	4.834	0.97%	
QC value within limits for V 292.402 Recovery = 100.11%							
Zn 213.857†	50123.1	498.28 ug/L	5.439	498.28 ppb	5.439	1.09%	
QC value within limits for Zn 213.857 Recovery = 99.66%							
SiO2†	77021.7	5278.4 ug/L	59.73	5278.4 ppb	59.73	1.13%	
QC value within limits for SiO2 Recovery = 98.71%							
All analyte(s) passed QC.							

Sequence No.: 11  
 Sample ID: CCB  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 8  
 Date Collected: 2/23/2010 15:13:54  
 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	4078.5	4078.5	95.9 %		15:15:47
1	Y RADIAL	4502.1	4502.1	95.95 %		15:15:47
1	Al 396.153Radial†	-119.2	-13.6	-12.277 ug/L	-12.277 ppb	15:15:47
1	Ca 317.933Radial†	23.6	9.1	18.112 ug/L	18.112 ppb	15:16:07
1	Fe 238.204 Radial†	11.0	1.3	16.826 ug/L	16.826 ppb	15:16:07
1	K 766.490 Radial†	2674.5	232.6	43.509 ug/L	43.509 ppb	15:15:47
1	Mg 279.077 IEC†	1.2	-1.5	-68.108 ug/L	-68.108 ppb	15:16:07
1	Na 589.592 Radial†	-759.4	-51.6	-14.986 ug/L	-14.986 ppb	15:15:47
1	Sr 421.552†	35.2	-0.1	-0.0005 ug/L	-0.0005 ppb	15:15:47
1	Sc 361.383	894448.4	894448.4	99.376 %		15:17:04
1	Y 371.029	757508.1	757508.1	99.353 %		15:17:04
1	Ag 328.068†	196.3	-31.8	-0.1407 ug/L	-0.1407 ppb	15:17:04
1	As 188.979†	-21.3	-0.9	-0.4226 ug/L	-0.4226 ppb	15:17:24
1	B 249.677†	-402.0	-31.5	-0.7553 ug/L	-0.7553 ppb	15:17:24
1	Ba 233.527†	4.2	13.4	0.1041 ug/L	0.1041 ppb	15:17:24
1	Be 313.107†	-3835.3	-6.1	-0.0026 ug/L	-0.0026 ppb	15:17:04
1	Cd 226.502†	-179.0	3.2	0.0348 ug/L	0.0348 ppb	15:17:24
1	Co 228.616†	-67.0	-5.5	-0.1168 ug/L	-0.1168 ppb	15:17:24
1	Cr 267.716†	67.4	1.8	0.0222 ug/L	0.0222 ppb	15:17:24
1	Cu 324.752†	6165.4	127.0	0.3839 ug/L	0.3839 ppb	15:17:04
1	Mn 257.610†	485.1	51.3	0.0620 ug/L	0.0620 ppb	15:17:24
1	Mo 202.031†	-0.9	-6.9	-0.5068 ug/L	-0.5068 ppb	15:17:24
1	Ni 231.604†	81.9	30.1	0.7661 ug/L	0.7661 ppb	15:17:24
1	P 214.914†	211.8	11.1	6.6497 ug/L	6.6497 ppb	15:17:24
1	Pb 220.353†	-45.9	18.9	2.3323 ug/L	2.3323 ppb	15:17:24
1	S 181.975 Axial†	42.0	5.2	7.5949 ug/L	7.5949 ppb	15:17:24
1	Sb 206.836†	28.4	-8.1	-2.8146 ug/L	-2.8146 ppb	15:17:24
1	Se 196.026†	-22.3	-1.8	-1.1269 ug/L	-1.1269 ppb	15:17:24
1	Si 251.611†	633.7	103.5	3.3280 ug/L	3.3280 ppb	15:17:24
1	Sn 189.927†	14.8	4.5	0.8079 ug/L	0.8079 ppb	15:17:24
1	Ti 334.940†	-1380.2	-107.0	-0.1527 ug/L	-0.1527 ppb	15:17:04
1	Tl 190.801†	-42.8	-11.8	-3.7957 ug/L	-3.7957 ppb	15:17:24
1	U 409.014†	-2903.4	-105.3	-2.8486 ug/L	-2.8486 ppb	15:17:04
1	V 292.402†	-1489.7	-68.6	-0.4926 ug/L	-0.4926 ppb	15:17:04
1	Zn 213.857†	635.9	82.2	0.8171 ug/L	0.8171 ppb	15:17:24
1	SiO2†	661.1	113.8	7.8295 ug/L	7.8295 ppb	15:18:20
2	Sc Radial	4131.3	4131.3	97.1 %		15:16:12
2	Y RADIAL	4570.0	4570.0	97.40 %		15:16:12
2	Al 396.153Radial†	-120.3	-13.1	-11.893 ug/L	-11.893 ppb	15:16:12
2	Ca 317.933Radial†	24.5	9.8	19.509 ug/L	19.509 ppb	15:16:32
2	Fe 238.204 Radial†	8.9	-1.0	-13.298 ug/L	-13.298 ppb	15:16:32
2	K 766.490 Radial†	2716.1	239.6	44.830 ug/L	44.830 ppb	15:16:12
2	Mg 279.077 IEC†	-0.1	-2.8	-128.57 ug/L	-128.57 ppb	15:16:32
2	Na 589.592 Radial†	-746.3	-28.0	-8.1282 ug/L	-8.1282 ppb	15:16:12
2	Sr 421.552†	30.2	-5.7	-0.0380 ug/L	-0.0380 ppb	15:16:12
2	Sc 361.383	897558.7	897558.7	99.722 %		15:17:29
2	Y 371.029	760068.8	760068.8	99.689 %		15:17:29
2	Ag 328.068†	213.1	-15.6	-0.0700 ug/L	-0.0700 ppb	15:17:29
2	As 188.979†	-26.3	-5.8	-2.6238 ug/L	-2.6238 ppb	15:17:50
2	B 249.677†	-344.1	27.9	0.6684 ug/L	0.6684 ppb	15:17:50
2	Ba 233.527†	-6.2	2.9	0.0223 ug/L	0.0223 ppb	15:17:50
2	Be 313.107†	-3774.8	68.0	0.0249 ug/L	0.0249 ppb	15:17:29
2	Cd 226.502†	-175.9	6.9	0.0805 ug/L	0.0805 ppb	15:17:50
2	Co 228.616†	-77.3	-15.6	-0.3252 ug/L	-0.3252 ppb	15:17:50
2	Cr 267.716†	79.6	13.9	0.1574 ug/L	0.1574 ppb	15:17:50
2	Cu 324.752†	6133.3	73.2	0.2234 ug/L	0.2234 ppb	15:17:29
2	Mn 257.610†	481.3	45.8	0.0553 ug/L	0.0553 ppb	15:17:50
2	Mo 202.031†	11.2	5.1	0.3745 ug/L	0.3745 ppb	15:17:50
2	Ni 231.604†	51.5	-0.6	-0.0160 ug/L	-0.0160 ppb	15:17:50

2	P 214.914†	209.9	8.4	5.0797 ug/L	5.0797 ppb	15:17:50
2	Pb 220.353†	-44.1	20.8	2.5808 ug/L	2.5808 ppb	15:17:50
2	S 181.975 Axial†	43.8	6.9	10.137 ug/L	10.137 ppb	15:17:50
2	Sb 206.836†	37.3	0.7	0.2918 ug/L	0.2918 ppb	15:17:50
2	Se 196.026†	-29.1	-8.5	-5.6634 ug/L	-5.6634 ppb	15:17:50
2	Si 251.611†	649.6	117.3	3.7575 ug/L	3.7575 ppb	15:17:50
2	Sn 189.927†	20.9	10.5	1.9031 ug/L	1.9031 ppb	15:17:50
2	Ti 334.940†	-1400.6	-122.7	-0.1693 ug/L	-0.1693 ppb	15:17:29
2	Tl 190.801†	-27.0	4.1	1.3223 ug/L	1.3223 ppb	15:17:50
2	U 409.014†	-3083.3	-275.6	-7.4464 ug/L	-7.4464 ppb	15:17:29
2	V 292.402†	-1426.0	0.4	-0.0063 ug/L	-0.0063 ppb	15:17:29
2	Zn 213.857†	638.1	82.2	0.8266 ug/L	0.8266 ppb	15:17:50
2	SiO2†	683.2	133.6	9.1687 ug/L	9.1687 ppb	15:18:25
3	Sc Radial	4084.3	4084.3	96.0 %		15:16:38
3	Y RADIAL	4492.4	4492.4	95.75 %		15:16:38
3	Al 396.153Radial†	-121.6	-15.8	-14.342 ug/L	-14.342 ppb	15:16:38
3	Ca 317.933Radial†	23.9	9.4	18.665 ug/L	18.665 ppb	15:16:58
3	Fe 238.204 Radial†	13.1	3.4	44.399 ug/L	44.399 ppb	15:16:58
3	K 766.490 Radial†	2692.5	247.3	46.256 ug/L	46.256 ppb	15:16:38
3	Mg 279.077 IEC†	2.5	-0.1	-5.3111 ug/L	-5.3111 ppb	15:16:58
3	Na 589.592 Radial†	-726.8	-16.5	-4.7922 ug/L	-4.7922 ppb	15:16:38
3	Sr 421.552†	51.3	16.7	0.1102 ug/L	0.1102 ppb	15:16:38
3	Sc 361.383	904841.5	904841.5	100.53 %		15:17:55
3	Y 371.029	765641.5	765641.5	100.42 %		15:17:55
3	Ag 328.068†	288.0	57.1	0.2773 ug/L	0.2773 ppb	15:17:55
3	As 188.979†	-18.0	2.6	1.1824 ug/L	1.1824 ppb	15:18:15
3	B 249.677†	-413.1	-38.0	-0.9149 ug/L	-0.9149 ppb	15:18:15
3	Ba 233.527†	5.7	14.8	0.1176 ug/L	0.1176 ppb	15:18:15
3	Be 313.107†	-3858.1	15.6	0.0051 ug/L	0.0051 ppb	15:17:55
3	Cd 226.502†	-189.2	-4.9	-0.0619 ug/L	-0.0619 ppb	15:18:15
3	Co 228.616†	-54.7	7.5	0.1573 ug/L	0.1573 ppb	15:18:15
3	Cr 267.716†	86.2	19.8	0.2269 ug/L	0.2269 ppb	15:18:15
3	Cu 324.752†	6096.4	-12.9	-0.0362 ug/L	-0.0362 ppb	15:17:55
3	Mn 257.610†	475.6	36.2	0.0452 ug/L	0.0452 ppb	15:18:15
3	Mo 202.031†	8.8	2.7	0.1999 ug/L	0.1999 ppb	15:18:15
3	Ni 231.604†	49.9	-2.7	-0.0692 ug/L	-0.0692 ppb	15:18:15
3	P 214.914†	186.5	-16.6	-10.065 ug/L	-10.065 ppb	15:18:15
3	Pb 220.353†	-40.6	24.6	3.0429 ug/L	3.0429 ppb	15:18:15
3	S 181.975 Axial†	45.7	8.4	12.265 ug/L	12.265 ppb	15:18:15
3	Sb 206.836†	35.5	-1.3	-0.4420 ug/L	-0.4420 ppb	15:18:15
3	Se 196.026†	-24.6	-3.7	-2.3234 ug/L	-2.3234 ppb	15:18:15
3	Si 251.611†	625.3	87.8	2.8156 ug/L	2.8156 ppb	15:18:15
3	Sn 189.927†	18.0	7.5	1.3531 ug/L	1.3531 ppb	15:18:15
3	Ti 334.940†	-1504.7	-215.0	-0.3220 ug/L	-0.3220 ppb	15:17:55
3	Tl 190.801†	-23.3	8.0	2.5688 ug/L	2.5688 ppb	15:18:15
3	U 409.014†	-2848.5	-17.2	-0.4700 ug/L	-0.4700 ppb	15:17:55
3	V 292.402†	-1398.6	39.2	0.2678 ug/L	0.2678 ppb	15:17:55
3	Zn 213.857†	631.8	70.8	0.7043 ug/L	0.7043 ppb	15:18:15
3	SiO2†	685.4	130.3	8.9482 ug/L	8.9482 ppb	15:18:30

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	898949.6	99.876 %	0.5927			0.59%
Sc Radial	4098.0	96.3 %	0.68			0.71%
Y 371.029	761072.8	99.820 %	0.5454			0.55%
Y RADIAL	4521.5	96.37 %	0.900			0.93%
Ag 328.068†	3.2	0.0222 ug/L	0.22371	0.0222 ppb	0.22371	>999.9%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-14.2	-12.837 ug/L	1.3174	-12.837 ppb	1.3174	10.26%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-1.4	-0.6213 ug/L	1.91090	-0.6213 ppb	1.91090	307.55%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-13.9	-0.3339 ug/L	0.87167	-0.3339 ppb	0.87167	261.03%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	10.4	0.0814 ug/L	0.05155	0.0814 ppb	0.05155	63.36%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	25.8	0.0091 ug/L	0.01421	0.0091 ppb	0.01421	155.96%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	9.4	18.762 ug/L	0.7039	18.762 ppb	0.7039	3.75%

QC value within limits for Ca 317.933 Radial	Recovery = Not calculated		
Cd 226.502†	1.7 0.0178 ug/L	0.07270 0.0178 ppb	0.07270 408.00%
QC value within limits for Cd 226.502	Recovery = Not calculated		
Co 228.616†	-4.6 -0.0949 ug/L	0.24200 -0.0949 ppb	0.24200 254.98%
QC value within limits for Co 228.616	Recovery = Not calculated		
Cr 267.716†	11.8 0.1355 ug/L	0.10409 0.1355 ppb	0.10409 76.83%
QC value within limits for Cr 267.716	Recovery = Not calculated		
Cu 324.752†	62.4 0.1904 ug/L	0.21195 0.1904 ppb	0.21195 111.34%
QC value within limits for Cu 324.752	Recovery = Not calculated		
Fe 238.204 Radial†	1.2 15.976 ug/L	28.8576 15.976 ppb	28.8576 180.63%
QC value within limits for Fe 238.204 Radial	Recovery = Not calculated		
K 766.490 Radial†	239.8 44.865 ug/L	1.3737 44.865 ppb	1.3737 3.06%
QC value within limits for K 766.490 Radial	Recovery = Not calculated		
Mg 279.077 IEC†	-1.5 -67.330 ug/L	61.6338 -67.330 ppb	61.6338 91.54%
QC value within limits for Mg 279.077 IEC	Recovery = Not calculated		
Mn 257.610†	44.5 0.0542 ug/L	0.00845 0.0542 ppb	0.00845 15.59%
QC value within limits for Mn 257.610	Recovery = Not calculated		
Mo 202.031†	0.3 0.0226 ug/L	0.46664 0.0226 ppb	0.46664 >999.9%
QC value within limits for Mo 202.031	Recovery = Not calculated		
Na 589.592 Radial†	-32.1 -9.3022 ug/L	5.19738 -9.3022 ppb	5.19738 55.87%
QC value within limits for Na 589.592 Radial	Recovery = Not calculated		
Ni 231.604†	8.9 0.2270 ug/L	0.46765 0.2270 ppb	0.46765 206.06%
QC value within limits for Ni 231.604	Recovery = Not calculated		
P 214.914†	1.0 0.5546 ug/L	9.23071 0.5546 ppb	9.23071 >999.9%
QC value within limits for P 214.914	Recovery = Not calculated		
Pb 220.353†	21.4 2.6520 ug/L	0.36058 2.6520 ppb	0.36058 13.60%
QC value within limits for Pb 220.353	Recovery = Not calculated		
S 181.975 Axial†	6.8 9.9989 ug/L	2.33816 9.9989 ppb	2.33816 23.38%
QC value within limits for S 181.975 Axial	Recovery = Not calculated		
Sb 206.836†	-2.9 -0.9883 ug/L	1.62362 -0.9883 ppb	1.62362 164.29%
QC value within limits for Sb 206.836	Recovery = Not calculated		
Se 196.026†	-4.7 -3.0379 ug/L	2.35116 -3.0379 ppb	2.35116 77.39%
QC value within limits for Se 196.026	Recovery = Not calculated		
Si 251.611†	102.9 3.3004 ug/L	0.47153 3.3004 ppb	0.47153 14.29%
QC value within limits for Si 251.611	Recovery = Not calculated		
Sn 189.927†	7.5 1.3547 ug/L	0.54760 1.3547 ppb	0.54760 40.42%
QC value within limits for Sn 189.927	Recovery = Not calculated		
Sr 421.552†	3.6 0.0239 ug/L	0.07709 0.0239 ppb	0.07709 322.63%
QC value within limits for Sr 421.552	Recovery = Not calculated		
Ti 334.940†	-148.2 -0.2147 ug/L	0.09337 -0.2147 ppb	0.09337 43.49%
QC value within limits for Ti 334.940	Recovery = Not calculated		
Tl 190.801†	0.1 0.0318 ug/L	3.37277 0.0318 ppb	3.37277 >999.9%
QC value within limits for Tl 190.801	Recovery = Not calculated		
U 409.014†	-132.7 -3.5883 ug/L	3.54653 -3.5883 ppb	3.54653 98.84%
QC value within limits for U 409.014	Recovery = Not calculated		
V 292.402†	-9.7 -0.0770 ug/L	0.38513 -0.0770 ppb	0.38513 499.87%
QC value within limits for V 292.402	Recovery = Not calculated		
Zn 213.857†	78.4 0.7827 ug/L	0.06804 0.7827 ppb	0.06804 8.69%
QC value within limits for Zn 213.857	Recovery = Not calculated		
SiO2†	125.9 8.6488 ug/L	0.71803 8.6488 ppb	0.71803 8.30%
QC value within limits for SiO2	Recovery = Not calculated		

All analyte(s) passed QC.

Sequence No.: 13

Sample ID: 245806003|948071|2

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 46

Date Collected: 2/23/2010 15:27:30

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 245806003|948071|2

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4166.7	4166.7	98.0 %		15:29:23
1	Y RADIAL	4850.4	4850.4	103.4 %		15:29:23
1	Al 396.153Radial†	15794.8	16234.8	14703 ug/L	14703 ppb	15:29:23
1	Ca 317.933Radial†	2966.0	3012.4	5993.4 ug/L	5993.4 ppb	15:29:43
1	Fe 238.204 Radial†	2827.9	2876.7	37062 ug/L	37062 ppb	15:29:43
1	K 766.490 Radial†	16037.6	13815.1	2582.1 ug/L	2582.1 ppb	15:29:23
1	Mg 279.077 IEC†	71.7	70.4	3161.2 ug/L	3161.2 ppb	15:29:43
1	Na 589.592 Radial†	916.2	1675.6	486.27 ug/L	486.27 ppb	15:29:23
1	Sr 421.552†	5932.9	6019.8	39.853 ug/L	39.853 ppb	15:29:23
1	Sc 361.383	928675.4	928675.4	103.18 %		15:30:41
1	Y 371.029	821125.4	821125.4	107.70 %		15:30:41
1	Ag 328.068†	-1735.3	-1911.1	2.1991 ug/L	2.1991 ppb	15:30:46
1	As 188.979†	-28.5	-7.1	12.765 ug/L	12.765 ppb	15:31:06
1	B 249.677†	73.6	444.3	4.5062 ug/L	4.5062 ppb	15:30:46
1	Ba 233.527†	41301.9	40038.6	313.99 ug/L	313.99 ppb	15:30:46
1	Be 313.107†	53357.4	55566.7	22.620 ug/L	22.620 ppb	15:30:46
1	Cd 226.502†	273.5	448.4	1.5248 ug/L	1.5248 ppb	15:31:06
1	Co 228.616†	1278.3	1300.8	25.035 ug/L	25.035 ppb	15:31:06
1	Cr 267.716†	2695.9	2546.8	31.898 ug/L	31.898 ppb	15:31:06
1	Cu 324.752†	1645047.1	1588286.5	4771.1 ug/L	4771.1 ppb	15:30:41
1	Mn 257.610†	867072.1	839920.9	945.24 ug/L	945.24 ppb	15:30:41
1	Mo 202.031†	4.6	-1.6	2.8331 ug/L	2.8331 ppb	15:31:06
1	Ni 231.604†	1222.8	1132.8	28.777 ug/L	28.777 ppb	15:31:06
1	P 214.914†	2893.6	2602.4	605.69 ug/L	605.69 ppb	15:31:06
1	Pb 220.353†	7209.7	7052.6	870.26 ug/L	870.26 ppb	15:31:06
1	S 181.975 Axial†	224.1	180.2	261.20 ug/L	261.20 ppb	15:31:06
1	Sb 206.836†	93.3	53.7	15.442 ug/L	15.442 ppb	15:31:06
1	Se 196.026†	-162.8	-137.0	25.099 ug/L	25.099 ppb	15:31:06
1	Si 251.611†	447893.8	433560.2	13909 ug/L	13909 ppb	15:30:41
1	Sn 189.927†	64.5	52.1	8.3582 ug/L	8.3582 ppb	15:31:06
1	Ti 334.940†	573040.2	556666.8	842.16 ug/L	842.16 ppb	15:30:41
1	Tl 190.801†	-80.5	-46.8	-3.7387 ug/L	-3.7387 ppb	15:31:06
1	U 409.014†	22645.4	24763.9	664.85 ug/L	664.85 ppb	15:30:46
1	V 292.402†	6307.9	7544.0	47.415 ug/L	47.415 ppb	15:30:46
1	Zn 213.857†	29265.6	27806.2	266.83 ug/L	266.83 ppb	15:30:46
1	SiO2†	445481.9	431205.2	29627 ug/L	29627 ppb	15:32:14
2	Sc Radial	4129.0	4129.0	97.1 %		15:29:48
2	Y RADIAL	4829.9	4829.9	102.9 %		15:29:48
2	Al 396.153Radial†	15880.4	16470.3	14916 ug/L	14916 ppb	15:29:48
2	Ca 317.933Radial†	2957.6	3031.3	6031.1 ug/L	6031.1 ppb	15:30:09
2	Fe 238.204 Radial†	2812.7	2887.4	37200 ug/L	37200 ppb	15:30:09
2	K 766.490 Radial†	16056.7	13984.4	2613.7 ug/L	2613.7 ppb	15:29:48
2	Mg 279.077 IEC†	65.4	64.6	2897.4 ug/L	2897.4 ppb	15:30:09
2	Na 589.592 Radial†	944.7	1713.6	497.28 ug/L	497.28 ppb	15:29:48
2	Sr 421.552†	5901.1	6042.4	40.003 ug/L	40.003 ppb	15:29:48
2	Sc 361.383	931435.5	931435.5	103.49 %		15:31:12
2	Y 371.029	824425.5	824425.5	108.13 %		15:31:12
2	Ag 328.068†	-1762.4	-1932.3	2.1434 ug/L	2.1434 ppb	15:31:17
2	As 188.979†	-31.8	-10.2	11.358 ug/L	11.358 ppb	15:31:37
2	B 249.677†	55.4	426.5	4.0604 ug/L	4.0604 ppb	15:31:17
2	Ba 233.527†	41361.4	39977.4	313.51 ug/L	313.51 ppb	15:31:17
2	Be 313.107†	53568.8	55617.7	22.631 ug/L	22.631 ppb	15:31:17
2	Cd 226.502†	274.0	448.1	1.5080 ug/L	1.5080 ppb	15:31:37
2	Co 228.616†	1265.1	1284.4	24.699 ug/L	24.699 ppb	15:31:37
2	Cr 267.716†	2696.2	2539.4	31.828 ug/L	31.828 ppb	15:31:37
2	Cu 324.752†	1645353.5	1583858.0	4757.8 ug/L	4757.8 ppb	15:31:12
2	Mn 257.610†	865300.6	835719.0	940.55 ug/L	940.55 ppb	15:31:12
2	Mo 202.031†	13.1	6.6	3.4427 ug/L	3.4427 ppb	15:31:37
2	Ni 231.604†	1238.2	1144.2	29.066 ug/L	29.066 ppb	15:31:37

2	P 214.914†	2890.3	2590.9	601.31 ug/L	601.31 ppb	15:31:37
2	Pb 220.353†	7215.4	7037.4	868.41 ug/L	868.41 ppb	15:31:37
2	S 181.975 Axial†	217.3	172.9	250.57 ug/L	250.57 ppb	15:31:37
2	Sb 206.836†	105.1	64.9	19.344 ug/L	19.344 ppb	15:31:37
2	Se 196.026†	-170.3	-143.9	21.029 ug/L	21.029 ppb	15:31:37
2	Si 251.611†	446685.2	431105.9	13830 ug/L	13830 ppb	15:31:12
2	Sn 189.927†	63.9	51.3	8.2155 ug/L	8.2155 ppb	15:31:37
2	Ti 334.940†	572439.8	554440.9	838.82 ug/L	838.82 ppb	15:31:12
2	Tl 190.801†	-80.1	-46.2	-3.6191 ug/L	-3.6191 ppb	15:31:37
2	U 409.014†	22773.5	24822.7	666.42 ug/L	666.42 ppb	15:31:17
2	V 292.402†	6370.1	7586.0	47.697 ug/L	47.697 ppb	15:31:17
2	Zn 213.857†	29296.9	27752.4	266.29 ug/L	266.29 ppb	15:31:17
2	SiO2†	445274.8	429725.6	29526 ug/L	29526 ppb	15:32:20
3	Sc Radial	4112.8	4112.8	96.7 %		15:30:14
3	Y RADIAL	4811.0	4811.0	102.5 %		15:30:14
3	Al 396.153Radial†	15583.5	16227.4	14696 ug/L	14696 ppb	15:30:14
3	Ca 317.933Radial†	2956.3	3041.9	6052.2 ug/L	6052.2 ppb	15:30:34
3	Fe 238.204 Radial†	2809.7	2895.7	37307 ug/L	37307 ppb	15:30:34
3	K 766.490 Radial†	15886.2	13872.9	2592.9 ug/L	2592.9 ppb	15:30:14
3	Mg 279.077 IEC†	69.0	68.6	3080.2 ug/L	3080.2 ppb	15:30:34
3	Na 589.592 Radial†	929.7	1701.9	493.89 ug/L	493.89 ppb	15:30:14
3	Sr 421.552†	5833.7	5996.5	39.699 ug/L	39.699 ppb	15:30:14
3	Sc 361.383	938451.2	938451.2	104.27 %		15:31:44
3	Y 371.029	829685.9	829685.9	108.82 %		15:31:44
3	Ag 328.068†	-1703.6	-1863.2	2.4995 ug/L	2.4995 ppb	15:31:49
3	As 188.979†	-18.5	2.7	17.247 ug/L	17.247 ppb	15:32:09
3	B 249.677†	-0.6	372.3	2.7503 ug/L	2.7503 ppb	15:31:49
3	Ba 233.527†	41163.4	39488.7	309.70 ug/L	309.70 ppb	15:31:49
3	Be 313.107†	53247.8	54922.9	22.374 ug/L	22.374 ppb	15:31:49
3	Cd 226.502†	248.0	421.1	1.1815 ug/L	1.1815 ppb	15:32:09
3	Co 228.616†	1283.7	1293.1	24.874 ug/L	24.874 ppb	15:32:09
3	Cr 267.716†	2702.9	2526.3	31.695 ug/L	31.695 ppb	15:32:09
3	Cu 324.752†	1656151.6	1582328.3	4753.2 ug/L	4753.2 ppb	15:31:44
3	Mn 257.610†	874002.7	837814.1	942.90 ug/L	942.90 ppb	15:31:44
3	Mo 202.031†	5.1	-1.1	2.8850 ug/L	2.8850 ppb	15:32:09
3	Ni 231.604†	1223.9	1121.5	28.490 ug/L	28.490 ppb	15:32:09
3	P 214.914†	2908.0	2587.0	599.73 ug/L	599.73 ppb	15:32:09
3	Pb 220.353†	7215.1	6985.0	861.86 ug/L	861.86 ppb	15:32:09
3	S 181.975 Axial†	218.0	172.1	249.30 ug/L	249.30 ppb	15:32:09
3	Sb 206.836†	89.1	48.7	13.718 ug/L	13.718 ppb	15:32:09
3	Se 196.026†	-175.6	-147.7	18.841 ug/L	18.841 ppb	15:32:09
3	Si 251.611†	451111.4	432124.2	13862 ug/L	13862 ppb	15:31:44
3	Sn 189.927†	66.5	53.4	8.5917 ug/L	8.5917 ppb	15:32:09
3	Ti 334.940†	577400.9	555063.6	839.75 ug/L	839.75 ppb	15:31:44
3	Tl 190.801†	-81.2	-46.7	-3.7320 ug/L	-3.7320 ppb	15:32:09
3	U 409.014†	22530.2	24424.8	655.66 ug/L	655.66 ppb	15:31:49
3	V 292.402†	6314.3	7486.5	46.965 ug/L	46.965 ppb	15:31:49
3	Zn 213.857†	29136.1	27386.6	262.61 ug/L	262.61 ppb	15:31:49
3	SiO2†	451026.5	432025.4	29684 ug/L	29684 ppb	15:32:25

## Mean Data: 245806003|948071|2

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	932854.1	103.64 %	0.560			0.54%
Sc Radial	4136.2	97.2 %	0.65			0.67%
Y 371.029	825078.9	108.22 %	0.566			0.52%
Y RADIAL	4830.4	102.9 %	0.42			0.41%
Ag 328.068†	-1902.2	2.2806 ug/L	0.19157	2.2806 ppb	0.19157	8.40%
Al 396.153Radial†	16310.8	14772 ug/L	125.1	14772 ppb	125.1	0.85%
As 188.979†	-4.9	13.790 ug/L	3.0754	13.790 ppb	3.0754	22.30%
B 249.677†	414.4	3.7723 ug/L	0.91274	3.7723 ppb	0.91274	24.20%
Ba 233.527†	39834.9	312.40 ug/L	2.351	312.40 ppb	2.351	0.75%
Be 313.107†	55369.1	22.542 ug/L	0.1451	22.542 ppb	0.1451	0.64%
Ca 317.933Radial†	3028.6	6025.6 ug/L	29.80	6025.6 ppb	29.80	0.49%
Cd 226.502†	439.2	1.4048 ug/L	0.19353	1.4048 ppb	0.19353	13.78%
Co 228.616†	1292.8	24.869 ug/L	0.1683	24.869 ppb	0.1683	0.68%
Cr 267.716†	2537.5	31.807 ug/L	0.1034	31.807 ppb	0.1034	0.33%
Cu 324.752†	1584824.3	4760.7 ug/L	9.28	4760.7 ppb	9.28	0.20%
Fe 238.204 Radial†	2886.6	37190 ug/L	122.6	37190 ppb	122.6	0.33%
K 766.490 Radial†	13890.8	2596.2 ug/L	16.09	2596.2 ppb	16.09	0.62%

Mg 279.077 IEC†	67.9	3046.3 ug/L	135.15	3046.3 ppb	135.15	4.44%
Mn 257.610†	837818.0	942.90 ug/L	2.343	942.90 ppb	2.343	0.25%
Mo 202.031†	1.3	3.0536 ug/L	0.33798	3.0536 ppb	0.33798	11.07%
Na 589.592 Radial†	1697.0	492.48 ug/L	5.640	492.48 ppb	5.640	1.15%
Ni 231.604†	1132.8	28.778 ug/L	0.2879	28.778 ppb	0.2879	1.00%
P 214.914†	2593.5	602.24 ug/L	3.086	602.24 ppb	3.086	0.51%
Pb 220.353†	7025.0	866.85 ug/L	4.414	866.85 ppb	4.414	0.51%
S 181.975 Axial†	175.1	253.69 ug/L	6.538	253.69 ppb	6.538	2.58%
Sb 206.836†	55.8	16.168 ug/L	2.8826	16.168 ppb	2.8826	17.83%
Se 196.026†	-142.9	21.656 ug/L	3.1760	21.656 ppb	3.1760	14.67%
Si 251.611†	432263.4	13867 ug/L	39.6	13867 ppb	39.6	0.29%
Sn 189.927†	52.3	8.3885 ug/L	0.18991	8.3885 ppb	0.18991	2.26%
Sr 421.552†	6019.5	39.852 ug/L	0.1522	39.852 ppb	0.1522	0.38%
Ti 334.940†	555390.4	840.24 ug/L	1.723	840.24 ppb	1.723	0.21%
Tl 190.801†	-46.6	-3.6966 ug/L	0.06716	-3.6966 ppb	0.06716	1.82%
U 409.014†	24670.5	662.31 ug/L	5.813	662.31 ppb	5.813	0.88%
V 292.402†	7538.8	47.359 ug/L	0.3695	47.359 ppb	0.3695	0.78%
Zn 213.857†	27648.4	265.24 ug/L	2.296	265.24 ppb	2.296	0.87%
SiO2†	430985.4	29612 ug/L	80.1	29612 ppb	80.1	0.27%

Sequence No.: 14

Sample ID: 245806004|948071|2

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 47

Date Collected: 2/23/2010 15:34:37

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 245806004|948071|2

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4022.0	4022.0	94.6 %		15:36:50
1	Y RADIAL	4724.7	4724.7	100.7 %		15:36:30
1	Al 396.153Radial†	15772.0	16790.5	15206 ug/L	15206 ppb	15:36:30
1	Ca 317.933Radial†	2927.9	3081.0	6129.9 ug/L	6129.9 ppb	15:36:50
1	Fe 238.204 Radial†	2317.2	2440.4	31441 ug/L	31441 ppb	15:36:50
1	K 766.490 Radial†	12212.2	10358.4	1935.4 ug/L	1935.4 ppb	15:36:30
1	Mg 279.077 IEC†	82.0	84.0	3783.9 ug/L	3783.9 ppb	15:36:50
1	Na 589.592 Radial†	721.2	1503.0	436.19 ug/L	436.19 ppb	15:36:30
1	Sr 421.552†	4002.7	4196.3	27.767 ug/L	27.767 ppb	15:36:30
1	Sc 361.383	913987.5	913987.5	101.55 %		15:37:47
1	Y 371.029	791464.5	791464.5	103.81 %		15:37:47
1	Ag 328.068†	602.7	364.2	9.8434 ug/L	9.8434 ppb	15:37:53
1	As 188.979†	762.1	771.0	361.67 ug/L	361.67 ppb	15:38:13
1	B 249.677†	-24.0	349.3	3.1906 ug/L	3.1906 ppb	15:37:53
1	Ba 233.527†	54384.8	53565.4	419.46 ug/L	419.46 ppb	15:37:53
1	Be 313.107†	116884.5	118957.0	46.100 ug/L	46.100 ppb	15:37:53
1	Cd 226.502†	229.8	409.6	1.9189 ug/L	1.9189 ppb	15:38:13
1	Co 228.616†	625.0	677.5	12.257 ug/L	12.257 ppb	15:38:13
1	Cr 267.716†	4495.5	4361.1	51.193 ug/L	51.193 ppb	15:38:13
1	Cu 324.752†	971929.9	951045.7	2856.5 ug/L	2856.5 ppb	15:37:47
1	Mn 257.610†	582533.0	573221.5	645.64 ug/L	645.64 ppb	15:37:47
1	Mo 202.031†	-2.9	-8.9	1.8636 ug/L	1.8636 ppb	15:38:13
1	Ni 231.604†	1981.3	1898.8	48.255 ug/L	48.255 ppb	15:38:13
1	P 214.914†	2616.5	2374.6	852.43 ug/L	852.43 ppb	15:38:13
1	Pb 220.353†	2248139.4	2213954.8	274320 ug/L	274320 ppb	15:37:47
1	S 181.975 Axial†	127.7	88.7	127.11 ug/L	127.11 ppb	15:38:13
1	Sb 206.836†	3555.5	3464.6	1205.0 ug/L	1205.0 ppb	15:38:13
1	Se 196.026†	-154.3	-131.2	11.389 ug/L	11.389 ppb	15:38:13
1	Si 251.611†	358664.5	352666.2	11313 ug/L	11313 ppb	15:37:53
1	Sn 189.927†	198.4	184.9	32.739 ug/L	32.739 ppb	15:38:13
1	Ti 334.940†	521540.5	514876.8	778.35 ug/L	778.35 ppb	15:37:47
1	Tl 190.801†	-73.5	-41.2	-3.8363 ug/L	-3.8363 ppb	15:38:13
1	U 409.014†	70699.0	72438.2	1953.6 ug/L	1953.6 ppb	15:37:53
1	V 292.402†	5357.6	6706.5	44.949 ug/L	44.949 ppb	15:37:53
1	Zn 213.857†	59322.2	57860.7	571.71 ug/L	571.71 ppb	15:37:53
1	SiO2†	367854.5	361698.9	24852 ug/L	24852 ppb	15:39:21
2	Sc Radial	3954.8	3954.8	93.0 %		15:37:15
2	Y RADIAL	4682.3	4682.3	99.79 %		15:36:55
2	Al 396.153Radial†	15667.1	16961.4	15361 ug/L	15361 ppb	15:36:55
2	Ca 317.933Radial†	2891.6	3094.6	6157.0 ug/L	6157.0 ppb	15:37:15
2	Fe 238.204 Radial†	2278.6	2440.6	31444 ug/L	31444 ppb	15:37:15
2	K 766.490 Radial†	12079.2	10435.0	1949.8 ug/L	1949.8 ppb	15:36:55
2	Mg 279.077 IEC†	86.1	89.9	4052.8 ug/L	4052.8 ppb	15:37:15
2	Na 589.592 Radial†	702.6	1496.1	434.16 ug/L	434.16 ppb	15:36:55
2	Sr 421.552†	3909.6	4168.1	27.580 ug/L	27.580 ppb	15:36:55
2	Sc 361.383	907732.0	907732.0	100.85 %		15:38:19
2	Y 371.029	786730.2	786730.2	103.19 %		15:38:19
2	Ag 328.068†	549.9	315.9	9.6265 ug/L	9.6265 ppb	15:38:24
2	As 188.979†	772.8	786.8	368.78 ug/L	368.78 ppb	15:38:44
2	B 249.677†	-80.4	293.3	1.8525 ug/L	1.8525 ppb	15:38:24
2	Ba 233.527†	53842.0	53396.3	418.14 ug/L	418.14 ppb	15:38:24
2	Be 313.107†	116252.7	119123.8	46.161 ug/L	46.161 ppb	15:38:24
2	Cd 226.502†	227.9	409.3	1.9133 ug/L	1.9133 ppb	15:38:44
2	Co 228.616†	616.0	672.7	12.156 ug/L	12.156 ppb	15:38:44
2	Cr 267.716†	4469.2	4365.5	51.245 ug/L	51.245 ppb	15:38:44
2	Cu 324.752†	965509.5	951275.4	2857.2 ug/L	2857.2 ppb	15:38:19
2	Mn 257.610†	577436.3	572121.1	644.39 ug/L	644.39 ppb	15:38:19
2	Mo 202.031†	-8.0	-14.0	1.4862 ug/L	1.4862 ppb	15:38:44
2	Ni 231.604†	1952.0	1883.2	47.858 ug/L	47.858 ppb	15:38:44



2	P 214.914†	2646.7	2422.3	881.26 ug/L	881.26 ppb	15:38:44
2	Pb 220.353†	2230215.4	2211438.7	274010 ug/L	274010 ppb	15:38:19
2	S 181.975 Axial†	142.3	104.0	149.54 ug/L	149.54 ppb	15:38:44
2	Sb 206.836†	3542.2	3475.6	1208.8 ug/L	1208.8 ppb	15:38:44
2	Se 196.026†	-147.3	-125.4	15.261 ug/L	15.261 ppb	15:38:44
2	Si 251.611†	355852.2	352311.7	11302 ug/L	11302 ppb	15:38:24
2	Sn 189.927†	189.3	177.3	31.363 ug/L	31.363 ppb	15:38:44
2	Ti 334.940†	517520.1	514429.7	777.66 ug/L	777.66 ppb	15:38:19
2	Tl 190.801†	-84.4	-52.5	-7.4816 ug/L	-7.4816 ppb	15:38:44
2	U 409.014†	70042.6	72267.1	1949.0 ug/L	1949.0 ppb	15:38:24
2	V 292.402†	5336.5	6721.9	45.047 ug/L	45.047 ppb	15:38:24
2	Zn 213.857†	58884.2	57829.0	571.39 ug/L	571.39 ppb	15:38:24
2	SiO2†	365658.5	362017.8	24874 ug/L	24874 ppb	15:39:26
3	Sc Radial	4001.5	4001.5	94.1 %		15:37:40
3	Y RADIAL	4598.2	4598.2	98.00 %		15:37:20
3	Al 396.153Radial†	15470.9	16556.2	14994 ug/L	14994 ppb	15:37:20
3	Ca 317.933Radial†	2920.3	3088.8	6145.5 ug/L	6145.5 ppb	15:37:40
3	Fe 238.204 Radial†	2304.8	2439.8	31433 ug/L	31433 ppb	15:37:40
3	K 766.490 Radial†	12033.7	10235.0	1912.4 ug/L	1912.4 ppb	15:37:20
3	Mg 279.077 IEC†	84.7	87.3	3935.0 ug/L	3935.0 ppb	15:37:40
3	Na 589.592 Radial†	706.0	1490.8	432.63 ug/L	432.63 ppb	15:37:20
3	Sr 421.552†	3905.2	4114.4	27.224 ug/L	27.224 ppb	15:37:20
3	Sc 361.383	906308.7	906308.7	100.69 %		15:38:50
3	Y 371.029	784921.9	784921.9	102.95 %		15:38:50
3	Ag 328.068†	484.2	251.6	9.3144 ug/L	9.3144 ppb	15:38:55
3	As 188.979†	763.5	778.8	365.17 ug/L	365.17 ppb	15:39:15
3	B 249.677†	-34.0	339.2	2.9500 ug/L	2.9500 ppb	15:38:55
3	Ba 233.527†	54150.5	53786.5	421.19 ug/L	421.19 ppb	15:38:55
3	Be 313.107†	116620.5	119670.1	46.363 ug/L	46.363 ppb	15:38:55
3	Cd 226.502†	231.4	413.1	1.9632 ug/L	1.9632 ppb	15:39:15
3	Co 228.616†	628.1	685.7	12.434 ug/L	12.434 ppb	15:39:15
3	Cr 267.716†	4476.6	4379.8	51.397 ug/L	51.397 ppb	15:39:15
3	Cu 324.752†	959674.9	946984.5	2844.3 ug/L	2844.3 ppb	15:38:50
3	Mn 257.610†	577574.3	573157.3	645.56 ug/L	645.56 ppb	15:38:50
3	Mo 202.031†	6.4	0.3	2.5342 ug/L	2.5342 ppb	15:39:15
3	Ni 231.604†	1982.8	1916.9	48.714 ug/L	48.714 ppb	15:39:15
3	P 214.914†	2631.1	2410.9	876.82 ug/L	876.82 ppb	15:39:15
3	Pb 220.353†	2234836.4	2219500.7	275010 ug/L	275010 ppb	15:38:50
3	S 181.975 Axial†	140.7	102.7	147.62 ug/L	147.62 ppb	15:39:15
3	Sb 206.836†	3552.2	3491.0	1214.2 ug/L	1214.2 ppb	15:39:15
3	Se 196.026†	-141.3	-119.6	19.026 ug/L	19.026 ppb	15:39:15
3	Si 251.611†	358622.7	355617.2	11408 ug/L	11408 ppb	15:38:55
3	Sn 189.927†	180.2	168.5	29.771 ug/L	29.771 ppb	15:39:15
3	Ti 334.940†	516298.1	514022.0	777.04 ug/L	777.04 ppb	15:38:50
3	Tl 190.801†	-66.3	-34.6	-1.7462 ug/L	-1.7462 ppb	15:39:15
3	U 409.014†	70713.9	73042.8	1970.0 ug/L	1970.0 ppb	15:38:55
3	V 292.402†	5449.0	6841.9	45.935 ug/L	45.935 ppb	15:38:55
3	Zn 213.857†	59329.6	58363.1	576.77 ug/L	576.77 ppb	15:38:55
3	SiO2†	363930.2	360870.7	24795 ug/L	24795 ppb	15:39:31

## Mean Data: 245806004|948071|2

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	909342.7	101.03 %		0.454			0.45%
Sc Radial	3992.8	93.9 %		0.81			0.86%
Y 371.029	787705.6	103.31 %		0.443			0.43%
Y RADIAL	4668.4	99.50 %		1.372			1.38%
Ag 328.068†	310.6	9.5948 ug/L		0.26596	9.5948 ppb	0.26596	2.77%
Al 396.153Radial†	16769.4	15187 ug/L		184.3	15187 ppb	184.3	1.21%
As 188.979†	778.9	365.21 ug/L		3.556	365.21 ppb	3.556	0.97%
B 249.677†	327.3	2.6644 ug/L		0.71331	2.6644 ppb	0.71331	26.77%
Ba 233.527†	53582.7	419.60 ug/L		1.529	419.60 ppb	1.529	0.36%
Be 313.107†	119250.3	46.208 ug/L		0.1376	46.208 ppb	0.1376	0.30%
Ca 317.933Radial†	3088.2	6144.2 ug/L		13.60	6144.2 ppb	13.60	0.22%
Cd 226.502†	410.7	1.9318 ug/L		0.02735	1.9318 ppb	0.02735	1.42%
Co 228.616†	678.6	12.282 ug/L		0.1405	12.282 ppb	0.1405	1.14%
Cr 267.716†	4368.8	51.278 ug/L		0.1061	51.278 ppb	0.1061	0.21%
Cu 324.752†	949768.5	2852.6 ug/L		7.25	2852.6 ppb	7.25	0.25%
Fe 238.204 Radial†	2440.3	31439 ug/L		5.3	31439 ppb	5.3	0.02%
K 766.490 Radial†	10342.8	1932.5 ug/L		18.88	1932.5 ppb	18.88	0.98%

Mg 279.077 IEC†	87.1	3923.9 ug/L	134.77	3923.9 ppb	134.77	3.43%
Mn 257.610†	572833.3	645.20 ug/L	0.697	645.20 ppb	0.697	0.11%
Mo 202.031†	-7.5	1.9613 ug/L	0.53080	1.9613 ppb	0.53080	27.06%
Na 589.592 Radial†	1496.6	434.33 ug/L	1.785	434.33 ppb	1.785	0.41%
Ni 231.604†	1899.6	48.275 ug/L	0.4283	48.275 ppb	0.4283	0.89%
P 214.914†	2402.6	870.17 ug/L	15.521	870.17 ppb	15.521	1.78%
Pb 220.353†	2214964.7	274450 ug/L	511.1	274450 ppb	511.1	0.19%
S 181.975 Axial†	98.5	141.42 ug/L	12.433	141.42 ppb	12.433	8.79%
Sb 206.836†	3477.1	1209.4 ug/L	4.61	1209.4 ppb	4.61	0.38%
Se 196.026†	-125.4	15.225 ug/L	3.8183	15.225 ppb	3.8183	25.08%
Si 251.611†	353531.7	11341 ug/L	58.2	11341 ppb	58.2	0.51%
Sn 189.927†	176.9	31.291 ug/L	1.4853	31.291 ppb	1.4853	4.75%
Sr 421.552†	4159.6	27.523 ug/L	0.2758	27.523 ppb	0.2758	1.00%
Ti 334.940†	514442.8	777.68 ug/L	0.655	777.68 ppb	0.655	0.08%
Tl 190.801†	-42.8	-4.3547 ug/L	2.90267	-4.3547 ppb	2.90267	66.66%
U 409.014†	72582.7	1957.5 ug/L	11.01	1957.5 ppb	11.01	0.56%
V 292.402†	6756.8	45.310 ug/L	0.5434	45.310 ppb	0.5434	1.20%
Zn 213.857†	58017.6	573.29 ug/L	3.014	573.29 ppb	3.014	0.53%
SiO2†	361529.1	24840 ug/L	40.7	24840 ppb	40.7	0.16%

Sequence No.: 16

Sample ID: 245806006|948071|2

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 49

Date Collected: 2/23/2010 15:48:49

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 245806006|948071|2

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4030.7	4030.7	94.8 %		15:50:43
1	Y RADIAL	4673.4	4673.4	99.60 %		15:50:43
1	Al 396.153Radial†	13619.1	14482.7	13116 ug/L	13116 ppb	15:50:43
1	Ca 317.933Radial†	3074.4	3228.8	6424.1 ug/L	6424.1 ppb	15:51:03
1	Fe 238.204 Radial†	2239.8	2353.4	30321 ug/L	30321 ppb	15:51:03
1	K 766.490 Radial†	11915.8	10017.7	1871.6 ug/L	1871.6 ppb	15:50:43
1	Mg 279.077 IEC†	65.0	65.8	2960.8 ug/L	2960.8 ppb	15:51:03
1	Na 589.592 Radial†	983.4	1778.2	516.03 ug/L	516.03 ppb	15:50:43
1	Sr 421.552†	4597.7	4815.1	31.866 ug/L	31.866 ppb	15:50:43
1	Sc 361.383	913322.1	913322.1	101.47 %		15:52:00
1	Y 371.029	806757.3	806757.3	105.81 %		15:52:00
1	Ag 328.068†	-654.7	-874.6	4.3172 ug/L	4.3172 ppb	15:52:05
1	As 188.979†	-1.3	19.2	21.098 ug/L	21.098 ppb	15:52:25
1	B 249.677†	-226.0	150.2	-1.3926 ug/L	-1.3926 ppb	15:52:05
1	Ba 233.527†	51246.0	50511.2	395.55 ug/L	395.55 ppb	15:52:05
1	Be 313.107†	461605.9	458757.9	172.36 ug/L	172.36 ppb	15:52:00
1	Cd 226.502†	168.7	349.6	1.2041 ug/L	1.2041 ppb	15:52:25
1	Co 228.616†	853.1	902.7	17.317 ug/L	17.317 ppb	15:52:25
1	Cr 267.716†	4135.1	4009.1	47.390 ug/L	47.390 ppb	15:52:05
1	Cu 324.752†	674532.8	658663.3	1978.8 ug/L	1978.8 ppb	15:52:00
1	Mn 257.610†	591454.7	582431.6	655.89 ug/L	655.89 ppb	15:52:00
1	Mo 202.031†	10.6	4.4	2.7537 ug/L	2.7537 ppb	15:52:25
1	Ni 231.604†	1670.5	1593.9	40.502 ug/L	40.502 ppb	15:52:25
1	P 214.914†	2316.7	2081.0	848.86 ug/L	848.86 ppb	15:52:25
1	Pb 220.353†	34621.5	34183.9	4234.0 ug/L	4234.0 ppb	15:52:05
1	S 181.975 Axial†	114.6	75.9	108.76 ug/L	108.76 ppb	15:52:25
1	Sb 206.836†	137.2	98.5	31.964 ug/L	31.964 ppb	15:52:25
1	Se 196.026†	-144.7	-121.9	14.066 ug/L	14.066 ppb	15:52:25
1	Si 251.611†	411217.0	404713.1	12983 ug/L	12983 ppb	15:52:00
1	Sn 189.927†	85.5	73.8	12.760 ug/L	12.760 ppb	15:52:25
1	Ti 334.940†	411351.0	406661.1	615.08 ug/L	615.08 ppb	15:52:00
1	Tl 190.801†	-64.1	-32.0	-2.1927 ug/L	-2.1927 ppb	15:52:25
1	U 409.014†	45904.5	48054.4	1294.9 ug/L	1294.9 ppb	15:52:00
1	V 292.402†	4376.9	5743.8	37.340 ug/L	37.340 ppb	15:52:05
1	Zn 213.857†	25764.8	24833.1	241.71 ug/L	241.71 ppb	15:52:05
1	SiO2†	409208.7	402716.6	27670 ug/L	27670 ppb	15:53:32
2	Sc Radial	4077.7	4077.7	95.9 %		15:51:08
2	Y RADIAL	4711.3	4711.3	100.4 %		15:51:08
2	Al 396.153Radial†	13598.1	14295.5	12947 ug/L	12947 ppb	15:51:08
2	Ca 317.933Radial†	2987.8	3101.3	6170.2 ug/L	6170.2 ppb	15:51:28
2	Fe 238.204 Radial†	2185.7	2269.8	29243 ug/L	29243 ppb	15:51:28
2	K 766.490 Radial†	11952.2	9911.0	1851.7 ug/L	1851.7 ppb	15:51:08
2	Mg 279.077 IEC†	66.0	66.1	2974.5 ug/L	2974.5 ppb	15:51:28
2	Na 589.592 Radial†	991.9	1775.0	515.11 ug/L	515.11 ppb	15:51:08
2	Sr 421.552†	4529.5	4688.1	31.026 ug/L	31.026 ppb	15:51:08
2	Sc 361.383	905537.5	905537.5	100.61 %		15:52:30
2	Y 371.029	799854.6	799854.6	104.91 %		15:52:30
2	Ag 328.068†	-681.1	-906.3	3.8459 ug/L	3.8459 ppb	15:52:36
2	As 188.979†	-12.4	8.2	15.855 ug/L	15.855 ppb	15:52:56
2	B 249.677†	-226.8	147.6	-1.2816 ug/L	-1.2816 ppb	15:52:36
2	Ba 233.527†	51324.2	51023.1	399.52 ug/L	399.52 ppb	15:52:36
2	Be 313.107†	458176.6	459260.0	172.55 ug/L	172.55 ppb	15:52:30
2	Cd 226.502†	190.5	372.7	1.5834 ug/L	1.5834 ppb	15:52:56
2	Co 228.616†	853.6	910.3	17.496 ug/L	17.496 ppb	15:52:56
2	Cr 267.716†	4081.4	3990.8	47.084 ug/L	47.084 ppb	15:52:36
2	Cu 324.752†	667213.9	657103.2	1974.1 ug/L	1974.1 ppb	15:52:30
2	Mn 257.610†	586842.4	582857.9	656.26 ug/L	656.26 ppb	15:52:30
2	Mo 202.031†	6.8	0.7	2.3958 ug/L	2.3958 ppb	15:52:56
2	Ni 231.604†	1685.7	1623.2	41.248 ug/L	41.248 ppb	15:52:56

2	P 214.914†	2341.6	2125.4	877.53 ug/L	877.53 ppb	15:52:56
2	Pb 220.353†	34605.4	34461.2	4268.5 ug/L	4268.5 ppb	15:52:36
2	S 181.975 Axial†	114.7	76.9	110.27 ug/L	110.27 ppb	15:52:56
2	Sb 206.836†	155.1	117.5	38.602 ug/L	38.602 ppb	15:52:56
2	Se 196.026†	-151.3	-129.7	5.5578 ug/L	5.5578 ppb	15:52:56
2	Si 251.611†	407675.1	404676.4	12982 ug/L	12982 ppb	15:52:30
2	Sn 189.927†	83.0	72.1	12.458 ug/L	12.458 ppb	15:52:56
2	Ti 334.940†	407282.0	406101.6	614.20 ug/L	614.20 ppb	15:52:30
2	Tl 190.801†	-68.2	-36.6	-3.6845 ug/L	-3.6845 ppb	15:52:56
2	U 409.014†	45280.0	47822.5	1288.8 ug/L	1288.8 ppb	15:52:30
2	V 292.402†	4240.0	5644.8	36.796 ug/L	36.796 ppb	15:52:36
2	Zn 213.857†	25764.4	25050.9	244.06 ug/L	244.06 ppb	15:52:36
2	SiO2†	411939.3	408897.4	28095 ug/L	28095 ppb	15:53:38
3	Sc Radial	3990.7	3990.7	93.8 %		15:51:33
3	Y RADIAL	4663.9	4663.9	99.40 %		15:51:33
3	Al 396.153Radial†	13652.1	14662.2	13279 ug/L	13279 ppb	15:51:33
3	Ca 317.933Radial†	3034.6	3219.0	6404.6 ug/L	6404.6 ppb	15:51:53
3	Fe 238.204 Radial†	2229.5	2366.1	30484 ug/L	30484 ppb	15:51:53
3	K 766.490 Radial†	11987.2	10220.0	1909.4 ug/L	1909.4 ppb	15:51:33
3	Mg 279.077 IEC†	61.1	62.3	2801.1 ug/L	2801.1 ppb	15:51:53
3	Na 589.592 Radial†	959.7	1763.3	511.72 ug/L	511.72 ppb	15:51:33
3	Sr 421.552†	4570.4	4834.7	31.996 ug/L	31.996 ppb	15:51:33
3	Sc 361.383	914302.9	914302.9	101.58 %		15:53:01
3	Y 371.029	806830.4	806830.4	105.82 %		15:53:01
3	Ag 328.068†	-773.7	-991.0	3.8264 ug/L	3.8264 ppb	15:53:06
3	As 188.979†	-7.4	13.3	18.451 ug/L	18.451 ppb	15:53:26
3	B 249.677†	-175.4	200.3	-0.2240 ug/L	-0.2240 ppb	15:53:06
3	Ba 233.527†	51459.8	50667.5	396.78 ug/L	396.78 ppb	15:53:06
3	Be 313.107†	461864.2	458524.2	172.28 ug/L	172.28 ppb	15:53:01
3	Cd 226.502†	177.2	357.8	1.2833 ug/L	1.2833 ppb	15:53:26
3	Co 228.616†	856.3	904.9	17.359 ug/L	17.359 ppb	15:53:26
3	Cr 267.716†	4168.8	4037.9	47.727 ug/L	47.727 ppb	15:53:06
3	Cu 324.752†	675560.8	658962.2	1979.7 ug/L	1979.7 ppb	15:53:01
3	Mn 257.610†	593179.9	583504.6	657.11 ug/L	657.11 ppb	15:53:01
3	Mo 202.031†	2.6	-3.5	2.1855 ug/L	2.1855 ppb	15:53:26
3	Ni 231.604†	1651.9	1573.9	39.993 ug/L	39.993 ppb	15:53:26
3	P 214.914†	2307.0	2069.0	841.29 ug/L	841.29 ppb	15:53:26
3	Pb 220.353†	34674.7	34199.7	4236.0 ug/L	4236.0 ppb	15:53:06
3	S 181.975 Axial†	109.7	71.0	101.52 ug/L	101.52 ppb	15:53:26
3	Sb 206.836†	147.3	108.3	35.330 ug/L	35.330 ppb	15:53:26
3	Se 196.026†	-145.8	-122.8	13.995 ug/L	13.995 ppb	15:53:26
3	Si 251.611†	412922.9	405957.7	13023 ug/L	13023 ppb	15:53:01
3	Sn 189.927†	77.1	65.5	11.229 ug/L	11.229 ppb	15:53:26
3	Ti 334.940†	412248.9	407110.2	615.77 ug/L	615.77 ppb	15:53:01
3	Tl 190.801†	-69.8	-37.5	-3.9614 ug/L	-3.9614 ppb	15:53:26
3	U 409.014†	46128.6	48226.4	1299.5 ug/L	1299.5 ppb	15:53:01
3	V 292.402†	4273.3	5637.2	36.573 ug/L	36.573 ppb	15:53:06
3	Zn 213.857†	25972.1	25009.9	243.46 ug/L	243.46 ppb	15:53:06
3	SiO2†	409751.5	402818.4	27677 ug/L	27677 ppb	15:53:43

Mean Data: 245806006|948071|2

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	911054.2	101.22 %		0.534			0.53%
Sc Radial	4033.0	94.8 %		1.02			1.08%
Y 371.029	804480.8	105.51 %		0.525			0.50%
Y RADIAL	4682.9	99.80 %		0.534			0.54%
Ag 328.068†	-924.0	3.9965 ug/L		0.27792	3.9965 ppb	0.27792	6.95%
Al 396.153Radial†	14480.1	13114 ug/L		166.1	13114 ppb	166.1	1.27%
As 188.979†	13.6	18.468 ug/L		2.6218	18.468 ppb	2.6218	14.20%
B 249.677†	166.0	-0.9661 ug/L		0.64507	-0.9661 ppb	0.64507	66.77%
Ba 233.527†	50733.9	397.28 ug/L		2.030	397.28 ppb	2.030	0.51%
Be 313.107†	458847.3	172.40 ug/L		0.138	172.40 ppb	0.138	0.08%
Ca 317.933Radial†	3183.0	6333.0 ug/L		141.26	6333.0 ppb	141.26	2.23%
Cd 226.502†	360.0	1.3569 ug/L		0.20007	1.3569 ppb	0.20007	14.74%
Co 228.616†	906.0	17.391 ug/L		0.0937	17.391 ppb	0.0937	0.54%
Cr 267.716†	4012.6	47.400 ug/L		0.3214	47.400 ppb	0.3214	0.68%
Cu 324.752†	658242.9	1977.5 ug/L		3.03	1977.5 ppb	3.03	0.15%
Fe 238.204 Radial†	2329.8	30016 ug/L		674.2	30016 ppb	674.2	2.25%
K 766.490 Radial†	10049.6	1877.6 ug/L		29.33	1877.6 ppb	29.33	1.56%

Mg 279.077 IEC†	64.8	2912.1 ug/L	96.40	2912.1 ppb	96.40	3.31%
Mn 257.610†	582931.4	656.42 ug/L	0.629	656.42 ppb	0.629	0.10%
Mo 202.031†	0.5	2.4450 ug/L	0.28730	2.4450 ppb	0.28730	11.75%
Na 589.592 Radial†	1772.2	514.29 ug/L	2.272	514.29 ppb	2.272	0.44%
Ni 231.604†	1597.0	40.581 ug/L	0.6310	40.581 ppb	0.6310	1.56%
P 214.914†	2091.8	855.89 ug/L	19.119	855.89 ppb	19.119	2.23%
Pb 220.353†	34281.6	4246.2 ug/L	19.34	4246.2 ppb	19.34	0.46%
S 181.975 Axial†	74.6	106.85 ug/L	4.681	106.85 ppb	4.681	4.38%
Sb 206.836†	108.1	35.298 ug/L	3.3192	35.298 ppb	3.3192	9.40%
Se 196.026†	-124.8	11.206 ug/L	4.8918	11.206 ppb	4.8918	43.65%
Si 251.611†	405115.7	12996 ug/L	23.4	12996 ppb	23.4	0.18%
Sn 189.927†	70.5	12.149 ug/L	0.8106	12.149 ppb	0.8106	6.67%
Sr 421.552†	4779.3	31.629 ug/L	0.5263	31.629 ppb	0.5263	1.66%
Ti 334.940†	406624.3	615.01 ug/L	0.785	615.01 ppb	0.785	0.13%
Tl 190.801†	-35.4	-3.2795 ug/L	0.95135	-3.2795 ppb	0.95135	29.01%
U 409.014†	48034.4	1294.4 ug/L	5.40	1294.4 ppb	5.40	0.42%
V 292.402†	5675.3	36.903 ug/L	0.3949	36.903 ppb	0.3949	1.07%
Zn 213.857†	24964.6	243.08 ug/L	1.221	243.08 ppb	1.221	0.50%
SiO2†	404810.8	27814 ug/L	243.2	27814 ppb	243.2	0.87%

Sequence No.: 17

Sample ID: 245806007|948071|2

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 50

Date Collected: 2/23/2010 15:55:55

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 245806007|948071|2

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4143.4	4143.4	97.4 %		15:57:48
1	Y RADIAL	4798.6	4798.6	102.3 %		15:57:48
1	Al 396.153Radial†	28500.8	29369.1	26598 ug/L	26598 ppb	15:57:48
1	Ca 317.933Radial†	6113.6	6260.6	12456 ug/L	12456 ppb	15:57:48
1	Fe 238.204 Radial†	2816.9	2881.6	37125 ug/L	37125 ppb	15:58:08
1	K 766.490 Radial†	30059.6	28301.8	5290.2 ug/L	5290.2 ppb	15:57:48
1	Mg 279.077 IEC†	121.1	121.6	5487.1 ug/L	5487.1 ppb	15:58:08
1	Na 589.592 Radial†	62.6	804.6	233.50 ug/L	233.50 ppb	15:57:48
1	Sr 421.552†	14403.6	14749.6	97.666 ug/L	97.666 ppb	15:57:48
1	Sc 361.383	910865.1	910865.1	101.20 %		15:59:05
1	Y 371.029	796082.4	796082.4	104.41 %		15:59:05
1	Ag 328.068†	-1963.1	-2169.1	1.4628 ug/L	1.4628 ppb	15:59:05
1	As 188.979†	-17.1	3.6	19.112 ug/L	19.112 ppb	15:59:25
1	B 249.677†	18.8	391.6	3.2538 ug/L	3.2538 ppb	15:59:05
1	Ba 233.527†	50030.9	49446.7	387.53 ug/L	387.53 ppb	15:59:05
1	Be 313.107†	18074.3	21713.2	10.391 ug/L	10.391 ppb	15:59:05
1	Cd 226.502†	420.4	598.8	3.1656 ug/L	3.1656 ppb	15:59:25
1	Co 228.616†	986.9	1037.1	19.193 ug/L	19.193 ppb	15:59:25
1	Cr 267.716†	3360.1	3254.2	40.076 ug/L	40.076 ppb	15:59:25
1	Cu 324.752†	169417.9	161331.6	486.34 ug/L	486.34 ppb	15:59:05
1	Mn 257.610†	1121945.6	1108203.5	1245.9 ug/L	1245.9 ppb	15:59:05
1	Mo 202.031†	-9.8	-15.8	1.8754 ug/L	1.8754 ppb	15:59:25
1	Ni 231.604†	1355.7	1287.3	32.708 ug/L	32.708 ppb	15:59:25
1	P 214.914†	1594.3	1373.3	713.68 ug/L	713.68 ppb	15:59:25
1	Pb 220.353†	3708.9	3730.0	463.59 ug/L	463.59 ppb	15:59:25
1	S 181.975 Axial†	582.9	539.0	784.61 ug/L	784.61 ppb	15:59:25
1	Sb 206.836†	60.3	22.9	3.4626 ug/L	3.4626 ppb	15:59:25
1	Se 196.026†	-170.9	-148.2	17.818 ug/L	17.818 ppb	15:59:25
1	Si 251.611†	578196.6	570805.6	18311 ug/L	18311 ppb	15:59:05
1	Sn 189.927†	-78.0	-87.5	-15.750 ug/L	-15.750 ppb	15:59:25
1	Ti 334.940†	676285.5	669547.2	1013.8 ug/L	1013.8 ppb	15:59:05
1	Tl 190.801†	-86.9	-54.7	-3.4475 ug/L	-3.4475 ppb	15:59:25
1	U 409.014†	2860.3	5642.7	148.16 ug/L	148.16 ppb	15:59:05
1	V 292.402†	9617.4	10933.7	69.798 ug/L	69.798 ppb	15:59:05
1	Zn 213.857†	24371.3	23524.6	229.63 ug/L	229.63 ppb	15:59:05
1	SiO2†	582366.8	574909.0	39501 ug/L	39501 ppb	16:00:23
2	Sc Radial	4207.7	4207.7	98.9 %		15:58:13
2	Y RADIAL	4839.5	4839.5	103.1 %		15:58:13
2	Al 396.153Radial†	28890.8	29316.6	26550 ug/L	26550 ppb	15:58:13
2	Ca 317.933Radial†	6213.8	6266.1	12467 ug/L	12467 ppb	15:58:13
2	Fe 238.204 Radial†	2833.1	2853.8	36767 ug/L	36767 ppb	15:58:33
2	K 766.490 Radial†	30435.1	28210.2	5273.0 ug/L	5273.0 ppb	15:58:13
2	Mg 279.077 IEC†	117.8	116.3	5247.0 ug/L	5247.0 ppb	15:58:33
2	Na 589.592 Radial†	107.9	849.5	246.52 ug/L	246.52 ppb	15:58:13
2	Sr 421.552†	14579.4	14701.6	97.347 ug/L	97.347 ppb	15:58:13
2	Sc 361.383	907776.6	907776.6	100.86 %		15:59:31
2	Y 371.029	793522.7	793522.7	104.08 %		15:59:31
2	Ag 328.068†	-2028.7	-2240.8	1.0284 ug/L	1.0284 ppb	15:59:31
2	As 188.979†	-23.2	-2.5	16.275 ug/L	16.275 ppb	15:59:51
2	B 249.677†	54.2	426.7	4.1499 ug/L	4.1499 ppb	15:59:31
2	Ba 233.527†	50130.4	49713.6	389.60 ug/L	389.60 ppb	15:59:31
2	Be 313.107†	18223.0	21921.5	10.470 ug/L	10.470 ppb	15:59:31
2	Cd 226.502†	415.7	595.5	3.1632 ug/L	3.1632 ppb	15:59:51
2	Co 228.616†	984.1	1037.6	19.210 ug/L	19.210 ppb	15:59:51
2	Cr 267.716†	3362.8	3268.2	40.202 ug/L	40.202 ppb	15:59:51
2	Cu 324.752†	168111.7	160606.1	484.15 ug/L	484.15 ppb	15:59:31
2	Mn 257.610†	1121804.1	1111835.2	1250.0 ug/L	1250.0 ppb	15:59:31
2	Mo 202.031†	-1.6	-7.6	2.4448 ug/L	2.4448 ppb	15:59:51
2	Ni 231.604†	1319.5	1256.0	31.911 ug/L	31.911 ppb	15:59:51

2	P 214.914†	1586.2	1370.7	712.80 ug/L	712.80 ppb	15:59:51
2	Pb 220.353†	3692.2	3725.9	463.11 ug/L	463.11 ppb	15:59:51
2	S 181.975 Axial†	586.0	544.0	791.91 ug/L	791.91 ppb	15:59:51
2	Sb 206.836†	73.3	36.0	8.0627 ug/L	8.0627 ppb	15:59:51
2	Se 196.026†	-169.8	-147.6	17.080 ug/L	17.080 ppb	15:59:51
2	Si 251.611†	576507.1	571074.3	18320 ug/L	18320 ppb	15:59:31
2	Sn 189.927†	-73.9	-83.7	-15.035 ug/L	-15.035 ppb	15:59:51
2	Ti 334.940†	674432.3	669983.5	1014.5 ug/L	1014.5 ppb	15:59:31
2	Tl 190.801†	-90.6	-58.6	-4.6884 ug/L	-4.6884 ppb	15:59:51
2	U 409.014†	2567.4	5361.9	140.61 ug/L	140.61 ppb	15:59:31
2	V 292.402†	9538.9	10888.3	69.523 ug/L	69.523 ppb	15:59:31
2	Zn 213.857†	24283.1	23519.1	229.64 ug/L	229.64 ppb	15:59:31
2	SiO2†	577982.7	572520.1	39337 ug/L	39337 ppb	16:00:28
3	Sc Radial	4127.9	4127.9	97.0 %		15:58:38
3	Y RADIAL	4762.6	4762.6	101.5 %		15:58:38
3	Al 396.153Radial†	28478.4	29455.9	26677 ug/L	26677 ppb	15:58:38
3	Ca 317.933Radial†	6087.9	6257.7	12450 ug/L	12450 ppb	15:58:38
3	Fe 238.204 Radial†	2820.7	2896.4	37316 ug/L	37316 ppb	15:58:58
3	K 766.490 Radial†	29761.1	28110.0	5254.3 ug/L	5254.3 ppb	15:58:38
3	Mg 279.077 IEC†	120.3	121.2	5467.6 ug/L	5467.6 ppb	15:58:58
3	Na 589.592 Radial†	70.4	812.9	235.89 ug/L	235.89 ppb	15:58:38
3	Sr 421.552†	14295.0	14693.3	97.292 ug/L	97.292 ppb	15:58:38
3	Sc 361.383	904274.3	904274.3	100.47 %		15:59:57
3	Y 371.029	789669.1	789669.1	103.57 %		15:59:57
3	Ag 328.068†	-1935.9	-2156.2	1.5800 ug/L	1.5800 ppb	15:59:57
3	As 188.979†	-25.1	-4.4	15.527 ug/L	15.527 ppb	16:00:17
3	B 249.677†	-42.4	330.7	1.7711 ug/L	1.7711 ppb	15:59:57
3	Ba 233.527†	49806.1	49583.3	388.60 ug/L	388.60 ppb	15:59:57
3	Be 313.107†	17893.1	21663.0	10.374 ug/L	10.374 ppb	15:59:57
3	Cd 226.502†	433.0	614.3	3.3251 ug/L	3.3251 ppb	16:00:17
3	Co 228.616†	986.4	1043.7	19.329 ug/L	19.329 ppb	16:00:17
3	Cr 267.716†	3345.8	3264.2	40.207 ug/L	40.207 ppb	16:00:17
3	Cu 324.752†	167640.4	160782.6	484.71 ug/L	484.71 ppb	15:59:57
3	Mn 257.610†	1116572.2	1110935.6	1249.0 ug/L	1249.0 ppb	15:59:57
3	Mo 202.031†	-0.4	-6.5	2.5679 ug/L	2.5679 ppb	16:00:17
3	Ni 231.604†	1350.2	1291.6	32.818 ug/L	32.818 ppb	16:00:17
3	P 214.914†	1593.6	1384.2	720.45 ug/L	720.45 ppb	16:00:17
3	Pb 220.353†	3668.1	3716.1	461.86 ug/L	461.86 ppb	16:00:17
3	S 181.975 Axial†	584.4	544.6	792.86 ug/L	792.86 ppb	16:00:17
3	Sb 206.836†	60.4	23.4	3.6667 ug/L	3.6667 ppb	16:00:17
3	Se 196.026†	-181.1	-159.6	10.907 ug/L	10.907 ppb	16:00:17
3	Si 251.611†	574705.3	571494.8	18333 ug/L	18333 ppb	15:59:57
3	Sn 189.927†	-72.0	-82.1	-14.785 ug/L	-14.785 ppb	16:00:17
3	Ti 334.940†	671854.4	670007.5	1014.5 ug/L	1014.5 ppb	15:59:57
3	Tl 190.801†	-81.8	-50.2	-1.9920 ug/L	-1.9920 ppb	16:00:17
3	U 409.014†	2670.5	5474.4	143.59 ug/L	143.59 ppb	15:59:57
3	V 292.402†	9381.5	10768.2	68.620 ug/L	68.620 ppb	15:59:57
3	Zn 213.857†	24166.7	23496.4	229.32 ug/L	229.32 ppb	15:59:57
3	SiO2†	572884.6	569665.2	39141 ug/L	39141 ppb	16:00:34

Mean Data: 245806007|948071|2

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	907638.7	100.84 %		0.366			0.36%
Sc Radial	4159.7	97.8 %		0.99			1.02%
Y 371.029	793091.4	104.02 %		0.423			0.41%
Y RADIAL	4800.2	102.3 %		0.82			0.80%
Ag 328.068†	-2188.7	1.3571 ug/L		0.29063	1.3571 ppb	0.29063	21.42%
Al 396.153Radial†	29380.5	26608 ug/L		63.7	26608 ppb	63.7	0.24%
As 188.979†	-1.1	16.971 ug/L		1.8912	16.971 ppb	1.8912	11.14%
B 249.677†	383.0	3.0583 ug/L		1.20141	3.0583 ppb	1.20141	39.28%
Ba 233.527†	49581.2	388.57 ug/L		1.037	388.57 ppb	1.037	0.27%
Be 313.107†	21765.9	10.412 ug/L		0.0513	10.412 ppb	0.0513	0.49%
Ca 317.933Radial†	6261.5	12458 ug/L		8.4	12458 ppb	8.4	0.07%
Cd 226.502†	602.8	3.2180 ug/L		0.09276	3.2180 ppb	0.09276	2.88%
Co 228.616†	1039.5	19.244 ug/L		0.0743	19.244 ppb	0.0743	0.39%
Cr 267.716†	3262.2	40.162 ug/L		0.0739	40.162 ppb	0.0739	0.18%
Cu 324.752†	160906.8	485.07 ug/L		1.140	485.07 ppb	1.140	0.24%
Fe 238.204 Radial†	2877.3	37069 ug/L		278.9	37069 ppb	278.9	0.75%
K 766.490 Radial†	28207.3	5272.5 ug/L		17.94	5272.5 ppb	17.94	0.34%

Mg 279.077 IEC†	119.7	5400.6 ug/L	133.35	5400.6 ppb	133.35	2.47%
Mn 257.610†	1110324.8	1248.3 ug/L	2.11	1248.3 ppb	2.11	0.17%
Mo 202.031†	-10.0	2.2960 ug/L	0.36944	2.2960 ppb	0.36944	16.09%
Na 589.592 Radial†	822.3	238.64 ug/L	6.929	238.64 ppb	6.929	2.90%
Ni 231.604†	1278.3	32.479 ug/L	0.4949	32.479 ppb	0.4949	1.52%
P 214.914†	1376.1	715.64 ug/L	4.186	715.64 ppb	4.186	0.58%
Pb 220.353†	3724.0	462.86 ug/L	0.891	462.86 ppb	0.891	0.19%
S 181.975 Axial†	542.5	789.80 ug/L	4.515	789.80 ppb	4.515	0.57%
Sb 206.836†	27.4	5.0640 ug/L	2.59897	5.0640 ppb	2.59897	51.32%
Se 196.026†	-151.8	15.268 ug/L	3.7953	15.268 ppb	3.7953	24.86%
Si 251.611†	571124.9	18322 ug/L	11.1	18322 ppb	11.1	0.06%
Sn 189.927†	-84.4	-15.190 ug/L	0.5012	-15.190 ppb	0.5012	3.30%
Sr 421.552†	14714.8	97.435 ug/L	0.2017	97.435 ppb	0.2017	0.21%
Ti 334.940†	669846.0	1014.2 ug/L	0.40	1014.2 ppb	0.40	0.04%
Tl 190.801†	-54.5	-3.3760 ug/L	1.34964	-3.3760 ppb	1.34964	39.98%
U 409.014†	5493.0	144.12 ug/L	3.801	144.12 ppb	3.801	2.64%
V 292.402†	10863.4	69.314 ug/L	0.6160	69.314 ppb	0.6160	0.89%
Zn 213.857†	23513.4	229.53 ug/L	0.181	229.53 ppb	0.181	0.08%
SiO2†	572364.8	39326 ug/L	180.4	39326 ppb	180.4	0.46%



Sequence No.: 19  
 Sample ID: CCV  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 7  
 Date Collected: 2/23/2010 16:09:47  
 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	4074.5	4074.5	95.8 %		16:11:40
1	Y RADIAL	4466.8	4466.8	95.20 %		16:11:40
1	Al 396.153Radial†	5168.3	5506.3	4962.8 ug/L	4962.8 ppb	16:11:40
1	Ca 317.933Radial†	2483.6	2577.3	5127.8 ug/L	5127.8 ppb	16:12:00
1	Fe 238.204 Radial†	382.6	389.2	5029.5 ug/L	5029.5 ppb	16:12:00
1	K 766.490 Radial†	28349.6	27038.9	5052.3 ug/L	5052.3 ppb	16:11:40
1	Mg 279.077 IEC†	111.2	113.3	5149.8 ug/L	5149.8 ppb	16:12:00
1	Na 589.592 Radial†	31834.0	33973.6	9859.3 ug/L	9859.3 ppb	16:11:40
1	Sr 421.552†	71143.0	74233.2	491.97 ug/L	491.97 ppb	16:11:40
1	Sc 361.383	915957.5	915957.5	101.77 %		16:12:57
1	Y 371.029	761917.7	761917.7	99.931 %		16:12:57
1	Ag 328.068†	108312.5	106203.7	490.77 ug/L	490.77 ppb	16:13:03
1	As 188.979†	1100.2	1101.7	500.69 ug/L	500.69 ppb	16:13:23
1	B 249.677†	19704.7	19735.7	468.78 ug/L	468.78 ppb	16:13:03
1	Ba 233.527†	63748.1	62651.1	490.59 ug/L	490.59 ppb	16:13:03
1	Be 313.107†	1333845.9	1314553.4	490.97 ug/L	490.97 ppb	16:12:57
1	Cd 226.502†	43136.9	42571.6	494.03 ug/L	494.03 ppb	16:13:03
1	Co 228.616†	23905.0	23552.1	492.52 ug/L	492.52 ppb	16:13:03
1	Cr 267.716†	44346.6	43511.1	488.99 ug/L	488.99 ppb	16:13:03
1	Cu 324.752†	167978.8	158986.8	477.42 ug/L	477.42 ppb	16:13:03
1	Mn 257.610†	447493.5	439291.4	492.81 ug/L	492.81 ppb	16:12:57
1	Mo 202.031†	6865.4	6740.2	493.72 ug/L	493.72 ppb	16:13:23
1	Ni 231.604†	19795.5	19399.7	492.80 ug/L	492.80 ppb	16:13:03
1	P 214.914†	4357.6	4080.0	2382.7 ug/L	2382.7 ppb	16:13:23
1	Pb 220.353†	4183.6	4176.0	518.95 ug/L	518.95 ppb	16:13:23
1	S 181.975 Axial†	735.6	685.8	1003.8 ug/L	1003.8 ppb	16:13:23
1	Sb 206.836†	1462.4	1400.3	505.95 ug/L	505.95 ppb	16:13:23
1	Se 196.026†	731.8	739.8	504.86 ug/L	504.86 ppb	16:13:23
1	Si 251.611†	77780.3	75896.4	2428.7 ug/L	2428.7 ppb	16:13:03
1	Sn 189.927†	2799.6	2740.6	496.43 ug/L	496.43 ppb	16:13:23
1	Ti 334.940†	316918.7	312701.2	472.82 ug/L	472.82 ppb	16:13:03
1	Tl 190.801†	1515.0	1519.9	490.97 ug/L	490.97 ppb	16:13:23
1	U 409.014†	15057.4	17612.4	474.24 ug/L	474.24 ppb	16:13:03
1	V 292.402†	69445.3	69670.6	490.26 ug/L	490.26 ppb	16:13:03
1	Zn 213.857†	50348.9	48917.5	486.31 ug/L	486.31 ppb	16:13:03
1	SiO2†	78349.1	76438.1	5238.5 ug/L	5238.5 ppb	16:14:30
2	Sc Radial	4060.0	4060.0	95.4 %		16:12:05
2	Y RADIAL	4461.9	4461.9	95.10 %		16:12:05
2	Al 396.153Radial†	5229.2	5589.2	5037.5 ug/L	5037.5 ppb	16:12:05
2	Ca 317.933Radial†	2458.1	2559.8	5093.0 ug/L	5093.0 ppb	16:12:25
2	Fe 238.204 Radial†	382.3	390.4	5044.3 ug/L	5044.3 ppb	16:12:25
2	K 766.490 Radial†	28453.3	27252.9	5092.3 ug/L	5092.3 ppb	16:12:05
2	Mg 279.077 IEC†	111.5	114.1	5183.9 ug/L	5183.9 ppb	16:12:25
2	Na 589.592 Radial†	32145.8	34418.6	9988.4 ug/L	9988.4 ppb	16:12:05
2	Sr 421.552†	71917.5	75309.1	499.10 ug/L	499.10 ppb	16:12:05
2	Sc 361.383	897731.4	897731.4	99.741 %		16:13:28
2	Y 371.029	748121.4	748121.4	98.122 %		16:13:28
2	Ag 328.068†	110089.2	110145.8	508.93 ug/L	508.93 ppb	16:13:34
2	As 188.979†	1094.7	1118.0	508.20 ug/L	508.20 ppb	16:13:54
2	B 249.677†	20205.3	20630.7	490.09 ug/L	490.09 ppb	16:13:34
2	Ba 233.527†	64403.0	64579.4	505.69 ug/L	505.69 ppb	16:13:34
2	Be 313.107†	1306911.1	1314158.9	490.86 ug/L	490.86 ppb	16:13:28
2	Cd 226.502†	43768.2	44065.2	511.37 ug/L	511.37 ppb	16:13:34
2	Co 228.616†	24261.7	24386.7	509.96 ug/L	509.96 ppb	16:13:34
2	Cr 267.716†	44986.3	45037.1	506.12 ug/L	506.12 ppb	16:13:34
2	Cu 324.752†	171449.8	165818.0	497.93 ug/L	497.93 ppb	16:13:34
2	Mn 257.610†	437942.5	438643.2	492.09 ug/L	492.09 ppb	16:13:28
2	Mo 202.031†	6857.7	6869.4	503.18 ug/L	503.18 ppb	16:13:54
2	Ni 231.604†	20098.1	20098.0	510.54 ug/L	510.54 ppb	16:13:34

2	P 214.914†	4347.0	4156.3	2425.1 ug/L	2425.1 ppb	16:13:54
2	Pb 220.353†	4197.0	4272.9	530.99 ug/L	530.99 ppb	16:13:54
2	S 181.975 Axial†	730.1	694.9	1017.1 ug/L	1017.1 ppb	16:13:54
2	Sb 206.836†	1448.7	1415.8	511.70 ug/L	511.70 ppb	16:13:54
2	Se 196.026†	735.4	758.1	516.99 ug/L	516.99 ppb	16:13:54
2	Si 251.611†	79239.7	78911.3	2525.3 ug/L	2525.3 ppb	16:13:34
2	Sn 189.927†	2805.9	2802.8	507.67 ug/L	507.67 ppb	16:13:54
2	Ti 334.940†	321889.1	324006.9	489.90 ug/L	489.90 ppb	16:13:34
2	Tl 190.801†	1529.1	1564.3	505.23 ug/L	505.23 ppb	16:13:54
2	U 409.014†	15183.8	18039.5	485.74 ug/L	485.74 ppb	16:13:34
2	V 292.402†	70444.6	72058.0	506.97 ug/L	506.97 ppb	16:13:34
2	Zn 213.857†	51140.7	50715.8	504.21 ug/L	504.21 ppb	16:13:34
2	SiO2†	77437.7	77087.3	5282.9 ug/L	5282.9 ppb	16:14:35
3	Sc Radial	4025.0	4025.0	94.6 %		16:12:30
3	Y RADIAL	4432.7	4432.7	94.47 %		16:12:30
3	Al 396.153Radial†	5150.6	5553.8	5005.8 ug/L	5005.8 ppb	16:12:30
3	Ca 317.933Radial†	2465.8	2590.4	5153.8 ug/L	5153.8 ppb	16:12:50
3	Fe 238.204 Radial†	384.7	396.4	5121.4 ug/L	5121.4 ppb	16:12:50
3	K 766.490 Radial†	28185.4	27229.1	5087.8 ug/L	5087.8 ppb	16:12:30
3	Mg 279.077 IEC†	112.5	116.1	5275.9 ug/L	5275.9 ppb	16:12:50
3	Na 589.592 Radial†	31707.7	34248.5	9939.0 ug/L	9939.0 ppb	16:12:30
3	Sr 421.552†	70879.0	74866.9	496.17 ug/L	496.17 ppb	16:12:30
3	Sc 361.383	910144.2	910144.2	101.12 %		16:13:59
3	Y 371.029	757936.6	757936.6	99.409 %		16:13:59
3	Ag 328.068†	107929.6	106504.8	492.18 ug/L	492.18 ppb	16:14:05
3	As 188.979†	1085.8	1094.3	497.39 ug/L	497.39 ppb	16:14:25
3	B 249.677†	19711.3	19865.9	471.87 ug/L	471.87 ppb	16:14:05
3	Ba 233.527†	63522.2	62827.7	491.97 ug/L	491.97 ppb	16:14:05
3	Be 313.107†	1323555.5	1312748.6	490.30 ug/L	490.30 ppb	16:13:59
3	Cd 226.502†	43080.4	42786.5	496.51 ug/L	496.51 ppb	16:14:05
3	Co 228.616†	23826.6	23624.6	494.04 ug/L	494.04 ppb	16:14:05
3	Cr 267.716†	44215.9	43660.2	490.67 ug/L	490.67 ppb	16:14:05
3	Cu 324.752†	167502.7	159570.2	479.18 ug/L	479.18 ppb	16:14:05
3	Mn 257.610†	444655.0	439293.0	492.82 ug/L	492.82 ppb	16:13:59
3	Mo 202.031†	6847.6	6765.7	495.59 ug/L	495.59 ppb	16:14:25
3	Ni 231.604†	19755.7	19484.6	494.96 ug/L	494.96 ppb	16:14:05
3	P 214.914†	4354.0	4103.8	2396.8 ug/L	2396.8 ppb	16:14:25
3	Pb 220.353†	4190.8	4209.4	523.10 ug/L	523.10 ppb	16:14:25
3	S 181.975 Axial†	729.7	684.6	1001.9 ug/L	1001.9 ppb	16:14:25
3	Sb 206.836†	1469.7	1416.7	511.75 ug/L	511.75 ppb	16:14:25
3	Se 196.026†	729.6	742.3	506.79 ug/L	506.79 ppb	16:14:25
3	Si 251.611†	77539.7	76146.7	2436.7 ug/L	2436.7 ppb	16:14:05
3	Sn 189.927†	2803.6	2762.1	500.32 ug/L	500.32 ppb	16:14:25
3	Ti 334.940†	315909.5	313692.1	474.31 ug/L	474.31 ppb	16:14:05
3	Tl 190.801†	1519.0	1533.4	495.29 ug/L	495.29 ppb	16:14:25
3	U 409.014†	14925.9	17576.9	473.26 ug/L	473.26 ppb	16:14:05
3	V 292.402†	69145.4	69809.9	491.24 ug/L	491.24 ppb	16:14:05
3	Zn 213.857†	50291.0	49176.3	488.88 ug/L	488.88 ppb	16:14:05
3	SiO2†	77224.2	75817.4	5195.8 ug/L	5195.8 ppb	16:14:40

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	907944.4	100.88 %	1.034			1.03%
Sc Radial	4053.1	95.3 %	0.60			0.63%
Y 371.029	755991.9	99.154 %	0.9313			0.94%
Y RADIAL	4453.8	94.92 %	0.394			0.41%
Ag 328.068†	107618.1	497.29 ug/L	10.104	497.29 ppb	10.104	2.03%
QC value within limits for Ag 328.068 Recovery = 99.46%						
Al 396.153Radial†	5549.8	5002.0 ug/L	37.47	5002.0 ppb	37.47	0.75%
QC value within limits for Al 396.153Radial Recovery = 100.04%						
As 188.979†	1104.7	502.09 ug/L	5.542	502.09 ppb	5.542	1.10%
QC value within limits for As 188.979 Recovery = 100.42%						
B 249.677†	20077.5	476.91 ug/L	11.514	476.91 ppb	11.514	2.41%
QC value within limits for B 249.677 Recovery = 95.38%						
Ba 233.527†	63352.7	496.08 ug/L	8.347	496.08 ppb	8.347	1.68%
QC value within limits for Ba 233.527 Recovery = 99.22%						
Be 313.107†	1313820.3	490.71 ug/L	0.359	490.71 ppb	0.359	0.07%
QC value within limits for Be 313.107 Recovery = 98.14%						
Ca 317.933Radial†	2575.8	5124.9 ug/L	30.53	5124.9 ppb	30.53	0.60%

QC value within limits for Ca 317.933Radial Recovery = 102.50%							
Cd 226.502†	43141.1	500.64 ug/L	9.381	500.64 ppb	9.381	1.87%	
QC value within limits for Cd 226.502 Recovery = 100.13%							
Co 228.616†	23854.5	498.84 ug/L	9.658	498.84 ppb	9.658	1.94%	
QC value within limits for Co 228.616 Recovery = 99.77%							
Cr 267.716†	44069.5	495.26 ug/L	9.445	495.26 ppb	9.445	1.91%	
QC value within limits for Cr 267.716 Recovery = 99.05%							
Cu 324.752†	161458.3	484.85 ug/L	11.367	484.85 ppb	11.367	2.34%	
QC value within limits for Cu 324.752 Recovery = 96.97%							
Fe 238.204 Radial†	392.0	5065.1 ug/L	49.31	5065.1 ppb	49.31	0.97%	
QC value within limits for Fe 238.204 Radial Recovery = 101.30%							
K 766.490 Radial†	27173.6	5077.5 ug/L	21.92	5077.5 ppb	21.92	0.43%	
QC value within limits for K 766.490 Radial Recovery = 101.55%							
Mg 279.077 IEC†	114.5	5203.2 ug/L	65.19	5203.2 ppb	65.19	1.25%	
QC value within limits for Mg 279.077 IEC Recovery = 104.06%							
Mn 257.610†	439075.9	492.57 ug/L	0.421	492.57 ppb	0.421	0.09%	
QC value within limits for Mn 257.610 Recovery = 98.51%							
Mo 202.031†	6791.8	497.49 ug/L	5.008	497.49 ppb	5.008	1.01%	
QC value within limits for Mo 202.031 Recovery = 99.50%							
Na 589.592 Radial†	34213.6	9928.9 ug/L	65.16	9928.9 ppb	65.16	0.66%	
QC value within limits for Na 589.592 Radial Recovery = 99.29%							
Ni 231.604†	19660.8	499.43 ug/L	9.679	499.43 ppb	9.679	1.94%	
QC value within limits for Ni 231.604 Recovery = 99.89%							
P 214.914†	4113.3	2401.5 ug/L	21.58	2401.5 ppb	21.58	0.90%	
QC value within limits for P 214.914 Recovery = 96.06%							
Pb 220.353†	4219.4	524.35 ug/L	6.114	524.35 ppb	6.114	1.17%	
QC value within limits for Pb 220.353 Recovery = 104.87%							
S 181.975 Axial†	688.4	1007.6 ug/L	8.26	1007.6 ppb	8.26	0.82%	
QC value within limits for S 181.975 Axial Recovery = 100.76%							
Sb 206.836†	1410.9	509.80 ug/L	3.330	509.80 ppb	3.330	0.65%	
QC value within limits for Sb 206.836 Recovery = 101.96%							
Se 196.026†	746.7	509.54 ug/L	6.517	509.54 ppb	6.517	1.28%	
QC value within limits for Se 196.026 Recovery = 101.91%							
Si 251.611†	76984.8	2463.5 ug/L	53.61	2463.5 ppb	53.61	2.18%	
QC value within limits for Si 251.611 Recovery = 98.54%							
Sn 189.927†	2768.5	501.47 ug/L	5.711	501.47 ppb	5.711	1.14%	
QC value within limits for Sn 189.927 Recovery = 100.29%							
Sr 421.552†	74803.1	495.75 ug/L	3.584	495.75 ppb	3.584	0.72%	
QC value within limits for Sr 421.552 Recovery = 99.15%							
Ti 334.940†	316800.1	479.01 ug/L	9.460	479.01 ppb	9.460	1.97%	
QC value within limits for Ti 334.940 Recovery = 95.80%							
Tl 190.801†	1539.2	497.16 ug/L	7.310	497.16 ppb	7.310	1.47%	
QC value within limits for Tl 190.801 Recovery = 99.43%							
U 409.014†	17742.9	477.75 ug/L	6.939	477.75 ppb	6.939	1.45%	
QC value within limits for U 409.014 Recovery = 95.55%							
V 292.402†	70512.9	496.16 ug/L	9.375	496.16 ppb	9.375	1.89%	
QC value within limits for V 292.402 Recovery = 99.23%							
Zn 213.857†	49603.2	493.13 ug/L	9.680	493.13 ppb	9.680	1.96%	
QC value within limits for Zn 213.857 Recovery = 98.63%							
SiO2†	76447.6	5239.1 ug/L	43.53	5239.1 ppb	43.53	0.83%	
QC value within limits for SiO2 Recovery = 97.97%							
All analyte(s) passed QC.							

Sequence No.: 20

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/23/2010 16:16:50

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	4059.7	4059.7	95.4 %		16:18:43
1	Y RADIAL	4484.4	4484.4	95.57 %		16:18:43
1	Al 396.153Radial†	-104.4	1.3	1.2056 ug/L	1.2056 ppb	16:18:43
1	Ca 317.933Radial†	19.3	4.8	9.4994 ug/L	9.4994 ppb	16:19:03
1	Fe 238.204 Radial†	10.4	0.7	9.0777 ug/L	9.0777 ppb	16:19:03
1	K 766.490 Radial†	2540.7	105.2	19.686 ug/L	19.686 ppb	16:18:43
1	Mg 279.077 IEC†	1.9	-0.8	-36.410 ug/L	-36.410 ppb	16:19:03
1	Na 589.592 Radial†	-704.1	2.7	0.7736 ug/L	0.7736 ppb	16:18:43
1	Sr 421.552†	74.1	40.9	0.2710 ug/L	0.2710 ppb	16:18:43
1	Sc 361.383	890757.6	890757.6	98.966 %		16:20:00
1	Y 371.029	753742.0	753742.0	98.859 %		16:20:00
1	Ag 328.068†	255.5	28.8	0.1372 ug/L	0.1372 ppb	16:20:00
1	As 188.979†	-13.5	6.9	3.1206 ug/L	3.1206 ppb	16:20:20
1	B 249.677†	-448.2	-79.9	-1.9074 ug/L	-1.9074 ppb	16:20:20
1	Ba 233.527†	-15.6	-6.6	-0.0524 ug/L	-0.0524 ppb	16:20:20
1	Be 313.107†	-3846.2	-33.1	-0.0128 ug/L	-0.0128 ppb	16:20:00
1	Cd 226.502†	-178.6	2.8	0.0307 ug/L	0.0307 ppb	16:20:20
1	Co 228.616†	-77.5	-16.4	-0.3413 ug/L	-0.3413 ppb	16:20:20
1	Cr 267.716†	71.7	6.4	0.0745 ug/L	0.0745 ppb	16:20:20
1	Cu 324.752†	6177.4	164.8	0.4985 ug/L	0.4985 ppb	16:20:00
1	Mn 257.610†	476.6	44.8	0.0526 ug/L	0.0526 ppb	16:20:20
1	Mo 202.031†	8.2	2.3	0.1661 ug/L	0.1661 ppb	16:20:20
1	Ni 231.604†	58.0	6.3	0.1606 ug/L	0.1606 ppb	16:20:20
1	P 214.914†	212.9	13.1	7.8471 ug/L	7.8471 ppb	16:20:20
1	Pb 220.353†	120.6	186.9	23.158 ug/L	23.158 ppb	16:20:20
1	S 181.975 Axial†	42.0	5.4	7.9821 ug/L	7.9821 ppb	16:20:20
1	Sb 206.836†	41.0	4.7	1.6637 ug/L	1.6637 ppb	16:20:20
1	Se 196.026†	-17.7	2.8	1.8644 ug/L	1.8644 ppb	16:20:20
1	Si 251.611†	595.9	68.0	2.1790 ug/L	2.1790 ppb	16:20:20
1	Sn 189.927†	16.2	6.0	1.0835 ug/L	1.0835 ppb	16:20:20
1	Ti 334.940†	-1401.8	-134.7	-0.1971 ug/L	-0.1971 ppb	16:20:00
1	Tl 190.801†	-34.0	-3.1	-1.0025 ug/L	-1.0025 ppb	16:20:20
1	U 409.014†	-2989.8	-204.8	-5.5339 ug/L	-5.5339 ppb	16:20:00
1	V 292.402†	-1493.3	-78.5	-0.5550 ug/L	-0.5550 ppb	16:20:00
1	Zn 213.857†	629.8	78.7	0.7870 ug/L	0.7870 ppb	16:20:20
1	SiO2†	576.5	31.1	2.1294 ug/L	2.1294 ppb	16:21:16
2	Sc Radial	3897.0	3897.0	91.6 %		16:19:08
2	Y RADIAL	4299.2	4299.2	91.63 %		16:19:08
2	Al 396.153Radial†	-125.6	-26.3	-23.855 ug/L	-23.855 ppb	16:19:08
2	Ca 317.933Radial†	25.2	12.0	23.956 ug/L	23.956 ppb	16:19:28
2	Fe 238.204 Radial†	12.1	3.0	38.864 ug/L	38.864 ppb	16:19:28
2	K 766.490 Radial†	2624.3	307.7	57.553 ug/L	57.553 ppb	16:19:08
2	Mg 279.077 IEC†	1.8	-0.8	-36.585 ug/L	-36.585 ppb	16:19:28
2	Na 589.592 Radial†	-703.1	-27.1	-7.8717 ug/L	-7.8717 ppb	16:19:08
2	Sr 421.552†	31.4	-2.5	-0.0167 ug/L	-0.0167 ppb	16:19:08
2	Sc 361.383	911609.3	911609.3	101.28 %		16:20:25
2	Y 371.029	771686.3	771686.3	101.21 %		16:20:25
2	Ag 328.068†	212.1	-20.0	-0.0823 ug/L	-0.0823 ppb	16:20:25
2	As 188.979†	-22.9	-2.0	-0.9107 ug/L	-0.9107 ppb	16:20:45
2	B 249.677†	-482.0	-102.9	-2.4617 ug/L	-2.4617 ppb	16:20:45
2	Ba 233.527†	2.9	12.0	0.0939 ug/L	0.0939 ppb	16:20:45
2	Be 313.107†	-3867.6	34.7	0.0125 ug/L	0.0125 ppb	16:20:25
2	Cd 226.502†	-177.9	7.7	0.0855 ug/L	0.0855 ppb	16:20:45
2	Co 228.616†	-73.1	-10.2	-0.2117 ug/L	-0.2117 ppb	16:20:45
2	Cr 267.716†	69.3	2.5	0.0306 ug/L	0.0306 ppb	16:20:45
2	Cu 324.752†	6144.6	-10.4	-0.0296 ug/L	-0.0296 ppb	16:20:25
2	Mn 257.610†	500.5	57.4	0.0696 ug/L	0.0696 ppb	16:20:45
2	Mo 202.031†	16.4	10.2	0.7464 ug/L	0.7464 ppb	16:20:45
2	Ni 231.604†	63.0	9.9	0.2518 ug/L	0.2518 ppb	16:20:45

2	P 214.914†	208.9	4.2	2.5135 ug/L	2.5135 ppb	16:20:45
2	Pb 220.353†	99.3	163.1	20.197 ug/L	20.197 ppb	16:20:45
2	S 181.975 Axial†	48.0	10.4	15.179 ug/L	15.179 ppb	16:20:45
2	Sb 206.836†	41.1	3.9	1.3724 ug/L	1.3724 ppb	16:20:45
2	Se 196.026†	-33.9	-12.8	-8.2863 ug/L	-8.2863 ppb	16:20:45
2	Si 251.611†	602.2	60.4	1.9297 ug/L	1.9297 ppb	16:20:45
2	Sn 189.927†	14.1	3.5	0.6413 ug/L	0.6413 ppb	16:20:45
2	Ti 334.940†	-1434.7	-134.7	-0.1979 ug/L	-0.1979 ppb	16:20:25
2	Tl 190.801†	-24.6	6.9	2.2184 ug/L	2.2184 ppb	16:20:45
2	U 409.014†	-2821.9	30.1	0.8078 ug/L	0.8078 ppb	16:20:25
2	V 292.402†	-1504.7	-55.2	-0.3770 ug/L	-0.3770 ppb	16:20:25
2	Zn 213.857†	633.4	67.7	0.6717 ug/L	0.6717 ppb	16:20:45
2	SiO2†	628.5	69.1	4.7257 ug/L	4.7257 ppb	16:21:21
3	Sc Radial	4155.6	4155.6	97.7 %		16:19:33
3	Y RADIAL	4616.6	4616.6	98.39 %		16:19:33
3	Al 396.153Radial†	-113.5	-5.4	-4.9417 ug/L	-4.9417 ppb	16:19:33
3	Ca 317.933Radial†	24.3	9.4	18.749 ug/L	18.749 ppb	16:19:54
3	Fe 238.204 Radial†	9.6	-0.3	-4.2419 ug/L	-4.2419 ppb	16:19:54
3	K 766.490 Radial†	2696.2	203.0	37.963 ug/L	37.963 ppb	16:19:33
3	Mg 279.077 IEC†	0.9	-1.8	-82.717 ug/L	-82.717 ppb	16:19:54
3	Na 589.592 Radial†	-652.3	72.7	21.089 ug/L	21.089 ppb	16:19:33
3	Sr 421.552†	61.1	25.8	0.1707 ug/L	0.1707 ppb	16:19:33
3	Sc 361.383	901597.6	901597.6	100.17 %		16:20:51
3	Y 371.029	763905.7	763905.7	100.19 %		16:20:51
3	Ag 328.068†	229.6	-0.1	-0.0039 ug/L	-0.0039 ppb	16:20:51
3	As 188.979†	-23.5	-3.0	-1.3440 ug/L	-1.3440 ppb	16:21:11
3	B 249.677†	-457.3	-83.6	-1.9945 ug/L	-1.9945 ppb	16:21:11
3	Ba 233.527†	-0.9	8.2	0.0628 ug/L	0.0628 ppb	16:21:11
3	Be 313.107†	-3913.0	-53.1	-0.0201 ug/L	-0.0201 ppb	16:20:51
3	Cd 226.502†	-190.3	-6.7	-0.0775 ug/L	-0.0775 ppb	16:21:11
3	Co 228.616†	-61.1	0.9	0.0196 ug/L	0.0196 ppb	16:21:11
3	Cr 267.716†	75.0	8.9	0.0985 ug/L	0.0985 ppb	16:21:11
3	Cu 324.752†	6102.8	15.2	0.0461 ug/L	0.0461 ppb	16:20:51
3	Mn 257.610†	514.4	76.7	0.0889 ug/L	0.0889 ppb	16:21:11
3	Mo 202.031†	9.0	2.9	0.2096 ug/L	0.2096 ppb	16:21:11
3	Ni 231.604†	59.0	6.5	0.1663 ug/L	0.1663 ppb	16:21:11
3	P 214.914†	212.1	9.7	5.8912 ug/L	5.8912 ppb	16:21:11
3	Pb 220.353†	100.9	165.7	20.534 ug/L	20.534 ppb	16:21:11
3	S 181.975 Axial†	37.8	0.7	1.0278 ug/L	1.0278 ppb	16:21:11
3	Sb 206.836†	39.6	2.9	0.9980 ug/L	0.9980 ppb	16:21:11
3	Se 196.026†	-31.6	-10.8	-7.1640 ug/L	-7.1640 ppb	16:21:11
3	Si 251.611†	587.8	52.6	1.6853 ug/L	1.6853 ppb	16:21:11
3	Sn 189.927†	7.6	-2.8	-0.5079 ug/L	-0.5079 ppb	16:21:11
3	Ti 334.940†	-1365.4	-81.3	-0.1132 ug/L	-0.1132 ppb	16:20:51
3	Tl 190.801†	-26.4	4.8	1.5477 ug/L	1.5477 ppb	16:21:11
3	U 409.014†	-2860.0	-38.8	-1.0494 ug/L	-1.0494 ppb	16:20:51
3	V 292.402†	-1524.6	-91.6	-0.6359 ug/L	-0.6359 ppb	16:20:51
3	Zn 213.857†	625.2	66.4	0.6661 ug/L	0.6661 ppb	16:21:11
3	SiO2†	578.8	26.3	1.8002 ug/L	1.8002 ppb	16:21:26

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	901321.5	100.14 %	1.159			1.16%
Sc Radial	4037.4	94.9 %	3.07			3.24%
Y 371.029	763111.3	100.09 %	1.180			1.18%
Y RADIAL	4466.7	95.20 %	3.397			3.57%
Ag 328.068†	2.9	0.0170 ug/L	0.11122	0.0170 ppb	0.11122	653.76%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-10.1	-9.1970 ug/L	13.06094	-9.1970 ppb	13.06094	142.01%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	0.6	0.2886 ug/L	2.46209	0.2886 ppb	2.46209	852.98%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-88.8	-2.1212 ug/L	0.29805	-2.1212 ppb	0.29805	14.05%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	4.5	0.0348 ug/L	0.07706	0.0348 ppb	0.07706	221.48%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	-17.2	-0.0068 ug/L	0.01707	-0.0068 ppb	0.01707	251.09%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	8.7	17.401 ug/L	7.3218	17.401 ppb	7.3218	42.08%

QC value within limits for Ca 317.933 Radial	Recovery = Not calculated		
Cd 226.502†	1.3 0.0129 ug/L	0.08294 0.0129 ppb	0.08294 643.52%
QC value within limits for Cd 226.502	Recovery = Not calculated		
Co 228.616†	-8.6 -0.1778 ug/L	0.18281 -0.1778 ppb	0.18281 102.84%
QC value within limits for Co 228.616	Recovery = Not calculated		
Cr 267.716†	5.9 0.0679 ug/L	0.03445 0.0679 ppb	0.03445 50.75%
QC value within limits for Cr 267.716	Recovery = Not calculated		
Cu 324.752†	56.6 0.1717 ug/L	0.28553 0.1717 ppb	0.28553 166.32%
QC value within limits for Cu 324.752	Recovery = Not calculated		
Fe 238.204 Radial†	1.1 14.567 ug/L	22.0710 14.567 ppb	22.0710 151.52%
QC value within limits for Fe 238.204 Radial	Recovery = Not calculated		
K 766.490 Radial†	205.3 38.401 ug/L	18.9369 38.401 ppb	18.9369 49.31%
QC value within limits for K 766.490 Radial	Recovery = Not calculated		
Mg 279.077 IEC†	-1.1 -51.904 ug/L	26.6851 -51.904 ppb	26.6851 51.41%
QC value within limits for Mg 279.077 IEC	Recovery = Not calculated		
Mn 257.610†	59.6 0.0704 ug/L	0.01818 0.0704 ppb	0.01818 25.83%
QC value within limits for Mn 257.610	Recovery = Not calculated		
Mo 202.031†	5.1 0.3740 ug/L	0.32320 0.3740 ppb	0.32320 86.42%
QC value within limits for Mo 202.031	Recovery = Not calculated		
Na 589.592 Radial†	16.1 4.6636 ug/L	14.86691 4.6636 ppb	14.86691 318.79%
QC value within limits for Na 589.592 Radial	Recovery = Not calculated		
Ni 231.604†	7.6 0.1929 ug/L	0.05107 0.1929 ppb	0.05107 26.48%
QC value within limits for Ni 231.604	Recovery = Not calculated		
P 214.914†	9.0 5.4172 ug/L	2.69820 5.4172 ppb	2.69820 49.81%
QC value within limits for P 214.914	Recovery = Not calculated		
Pb 220.353†	171.9 21.297 ug/L	1.6208 21.297 ppb	1.6208 7.61%
QC value greater than the upper limit for Pb 220.353	Recovery = Not calculated		
S 181.975 Axial†	5.5 8.0630 ug/L	7.07599 8.0630 ppb	7.07599 87.76%
QC value within limits for S 181.975 Axial	Recovery = Not calculated		
Sb 206.836†	3.8 1.3447 ug/L	0.33370 1.3447 ppb	0.33370 24.82%
QC value within limits for Sb 206.836	Recovery = Not calculated		
Se 196.026†	-6.9 -4.5286 ug/L	5.56490 -4.5286 ppb	5.56490 122.88%
QC value within limits for Se 196.026	Recovery = Not calculated		
Si 251.611†	60.3 1.9313 ug/L	0.24689 1.9313 ppb	0.24689 12.78%
QC value within limits for Si 251.611	Recovery = Not calculated		
Sn 189.927†	2.2 0.4057 ug/L	0.82143 0.4057 ppb	0.82143 202.49%
QC value within limits for Sn 189.927	Recovery = Not calculated		
Sr 421.552†	21.4 0.1416 ug/L	0.14605 0.1416 ppb	0.14605 103.11%
QC value within limits for Sr 421.552	Recovery = Not calculated		
Ti 334.940†	-116.9 -0.1694 ug/L	0.04867 -0.1694 ppb	0.04867 28.73%
QC value within limits for Ti 334.940	Recovery = Not calculated		
Tl 190.801†	2.9 0.9212 ug/L	1.69939 0.9212 ppb	1.69939 184.47%
QC value within limits for Tl 190.801	Recovery = Not calculated		
U 409.014†	-71.2 -1.9252 ug/L	3.26030 -1.9252 ppb	3.26030 169.35%
QC value within limits for U 409.014	Recovery = Not calculated		
V 292.402†	-75.1 -0.5226 ug/L	0.13241 -0.5226 ppb	0.13241 25.34%
QC value within limits for V 292.402	Recovery = Not calculated		
Zn 213.857†	70.9 0.7083 ug/L	0.06821 0.7083 ppb	0.06821 9.63%
QC value within limits for Zn 213.857	Recovery = Not calculated		
SiO2†	42.1 2.8851 ug/L	1.60248 2.8851 ppb	1.60248 55.54%
QC value within limits for SiO2	Recovery = Not calculated		
QC Failed. Continue with analysis.			

## ===== Analysis Begun

Start Time: 2/23/2010 16:57:44

Plasma On Time: 2/22/2010 05:55:10

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\022310C.sif

Batch ID:

Results Data Set: 022310A

Results Library: C:\pe\Optima3\Results\Results.mdb
=====

Sequence No.: 1

Autosampler Location: 7

Sample ID: CCV

Date Collected: 2/23/2010 16:57:45

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:
=====

## Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4106.2	4106.2	96.5 %		16:59:37
1	Y RADIAL	4490.6	4490.6	95.71 %		16:59:37
1	Al 396.153Radial†	5225.7	5524.0	4978.4 ug/L	4978.4 ppb	16:59:37
1	Ca 317.933Radial†	2453.7	2526.3	5026.4 ug/L	5026.4 ppb	16:59:57
1	Fe 238.204 Radial†	379.9	383.3	4953.7 ug/L	4953.7 ppb	16:59:57
1	K 766.490 Radial†	28306.7	26765.8	5001.2 ug/L	5001.2 ppb	16:59:37
1	Mg 279.077 IEC†	109.5	110.7	5031.2 ug/L	5031.2 ppb	16:59:57
1	Na 589.592 Radial†	32107.9	34000.5	9867.1 ug/L	9867.1 ppb	16:59:37
1	Sr 421.552†	71659.7	74194.6	491.71 ug/L	491.71 ppb	16:59:37
1	Sc 361.383	898824.3	898824.3	99.862 %		17:00:55
1	Y 371.029	748492.7	748492.7	98.170 %		17:00:55
1	Ag 328.068†	106888.8	106806.8	493.53 ug/L	493.53 ppb	17:01:00
1	As 188.979†	1077.8	1099.8	499.83 ug/L	499.83 ppb	17:01:20
1	B 249.677†	19370.8	19770.4	469.61 ug/L	469.61 ppb	17:01:00
1	Ba 233.527†	62886.6	62982.4	493.18 ug/L	493.18 ppb	17:01:00
1	Be 313.107†	1313541.7	1319205.5	492.71 ug/L	492.71 ppb	17:00:55
1	Cd 226.502†	42718.3	42960.5	498.55 ug/L	498.55 ppb	17:01:00
1	Co 228.616†	23615.5	23710.0	495.84 ug/L	495.84 ppb	17:01:00
1	Cr 267.716†	43805.9	43800.3	492.23 ug/L	492.23 ppb	17:01:00
1	Cu 324.752†	165723.7	159875.0	480.09 ug/L	480.09 ppb	17:01:00
1	Mn 257.610†	440367.7	440537.8	494.21 ug/L	494.21 ppb	17:00:55
1	Mo 202.031†	6860.1	6863.5	502.74 ug/L	502.74 ppb	17:01:20
1	Ni 231.604†	19621.0	19595.7	497.78 ug/L	497.78 ppb	17:01:00
1	P 214.914†	4340.7	4144.6	2421.6 ug/L	2421.6 ppb	17:01:20
1	Pb 220.353†	4104.0	4174.7	518.82 ug/L	518.82 ppb	17:01:20
1	S 181.975 Axial†	738.1	702.1	1027.6 ug/L	1027.6 ppb	17:01:20
1	Sb 206.836†	1455.9	1421.2	513.56 ug/L	513.56 ppb	17:01:20
1	Se 196.026†	732.5	754.2	514.15 ug/L	514.15 ppb	17:01:20
1	Si 251.611†	76758.0	76329.6	2442.5 ug/L	2442.5 ppb	17:01:00
1	Sn 189.927†	2799.3	2792.7	505.85 ug/L	505.85 ppb	17:01:20
1	Ti 334.940†	312841.4	314554.4	475.62 ug/L	475.62 ppb	17:01:00
1	Tl 190.801†	1526.6	1559.9	503.82 ug/L	503.82 ppb	17:01:20
1	U 409.014†	14700.5	17537.1	472.20 ug/L	472.20 ppb	17:01:00
1	V 292.402†	68596.8	70121.8	493.53 ug/L	493.53 ppb	17:01:00
1	Zn 213.857†	49795.4	49306.3	490.19 ug/L	490.19 ppb	17:01:00
1	SiO2†	76812.2	76366.5	5233.4 ug/L	5233.4 ppb	17:02:27
2	Sc Radial	3981.5	3981.5	93.6 %		17:00:02
2	Y RADIAL	4401.0	4401.0	93.80 %		17:00:02
2	Al 396.153Radial†	5090.1	5548.7	5000.7 ug/L	5000.7 ppb	17:00:02
2	Ca 317.933Radial†	2445.5	2597.2	5167.3 ug/L	5167.3 ppb	17:00:22
2	Fe 238.204 Radial†	376.5	392.1	5066.4 ug/L	5066.4 ppb	17:00:22
2	K 766.490 Radial†	27980.6	27335.8	5107.8 ug/L	5107.8 ppb	17:00:02
2	Mg 279.077 IEC†	112.7	117.7	5347.8 ug/L	5347.8 ppb	17:00:22
2	Na 589.592 Radial†	31326.9	34207.8	9927.2 ug/L	9927.2 ppb	17:00:02
2	Sr 421.552†	70050.6	74800.4	495.73 ug/L	495.73 ppb	17:00:02
2	Sc 361.383	892062.3	892062.3	99.111 %		17:01:26
2	Y 371.029	742174.7	742174.7	97.342 %		17:01:26

2	Ag 328.068†	107549.0	108284.2	500.36 ug/L	500.36 ppb	17:01:31
2	As 188.979†	1087.4	1117.7	507.95 ug/L	507.95 ppb	17:01:51
2	B 249.677†	19518.3	20066.3	476.64 ug/L	476.64 ppb	17:01:31
2	Ba 233.527†	63005.8	63580.1	497.86 ug/L	497.86 ppb	17:01:31
2	Be 313.107†	1301873.5	1317403.2	492.05 ug/L	492.05 ppb	17:01:26
2	Cd 226.502†	42819.8	43387.1	503.49 ug/L	503.49 ppb	17:01:31
2	Co 228.616†	23722.5	23997.2	501.84 ug/L	501.84 ppb	17:01:31
2	Cr 267.716†	44030.3	44359.2	498.51 ug/L	498.51 ppb	17:01:31
2	Cu 324.752†	166333.2	161747.9	485.72 ug/L	485.72 ppb	17:01:31
2	Mn 257.610†	437501.2	440988.3	494.71 ug/L	494.71 ppb	17:01:26
2	Mo 202.031†	6838.8	6894.1	504.98 ug/L	504.98 ppb	17:01:51
2	Ni 231.604†	19638.0	19761.8	502.00 ug/L	502.00 ppb	17:01:31
2	P 214.914†	4337.7	4174.6	2438.6 ug/L	2438.6 ppb	17:01:51
2	Pb 220.353†	4066.5	4168.0	517.99 ug/L	517.99 ppb	17:01:51
2	S 181.975 Axial†	727.3	696.8	1019.9 ug/L	1019.9 ppb	17:01:51
2	Sb 206.836†	1463.5	1440.0	520.17 ug/L	520.17 ppb	17:01:51
2	Se 196.026†	724.8	752.0	513.07 ug/L	513.07 ppb	17:01:51
2	Si 251.611†	77025.2	77181.9	2469.8 ug/L	2469.8 ppb	17:01:31
2	Sn 189.927†	2787.8	2802.4	507.60 ug/L	507.60 ppb	17:01:51
2	Ti 334.940†	314156.9	318256.4	481.21 ug/L	481.21 ppb	17:01:31
2	Tl 190.801†	1524.1	1569.0	506.74 ug/L	506.74 ppb	17:01:51
2	U 409.014†	14784.5	17733.4	477.48 ug/L	477.48 ppb	17:01:31
2	V 292.402†	68752.5	70799.6	498.25 ug/L	498.25 ppb	17:01:31
2	Zn 213.857†	49935.9	49826.1	495.35 ug/L	495.35 ppb	17:01:31
2	SiO2†	76296.8	76429.6	5237.6 ug/L	5237.6 ppb	17:02:32
3	Sc Radial	4008.9	4008.9	94.2 %		17:00:27
3	Y RADIAL	4385.8	4385.8	93.47 %		17:00:27
3	Al 396.153Radial†	5104.2	5526.4	4980.8 ug/L	4980.8 ppb	17:00:27
3	Ca 317.933Radial†	2453.0	2587.2	5147.6 ug/L	5147.6 ppb	17:00:47
3	Fe 238.204 Radial†	380.2	393.2	5080.9 ug/L	5080.9 ppb	17:00:47
3	K 766.490 Radial†	28068.6	27224.5	5087.0 ug/L	5087.0 ppb	17:00:27
3	Mg 279.077 IEC†	111.0	115.0	5228.7 ug/L	5228.7 ppb	17:00:47
3	Na 589.592 Radial†	31534.8	34199.3	9924.8 ug/L	9924.8 ppb	17:00:27
3	Sr 421.552†	70670.7	74946.0	496.69 ug/L	496.69 ppb	17:00:27
3	Sc 361.383.	896894.6	896894.6	99.648 %		17:01:57
3	Y 371.029	747047.1	747047.1	97.981 %		17:01:57
3	Ag 328.068†	106815.7	106963.7	494.28 ug/L	494.28 ppb	17:02:02
3	As 188.979†	1083.7	1108.0	503.59 ug/L	503.59 ppb	17:02:22
3	B 249.677†	19389.2	19830.7	471.03 ug/L	471.03 ppb	17:02:02
3	Ba 233.527†	62762.9	62993.8	493.27 ug/L	493.27 ppb	17:02:02
3	Be 313.107†	1310115.6	1318597.3	492.49 ug/L	492.49 ppb	17:01:57
3	Cd 226.502†	42625.9	42959.8	498.53 ug/L	498.53 ppb	17:02:02
3	Co 228.616†	23542.1	23687.2	495.35 ug/L	495.35 ppb	17:02:02
3	Cr 267.716†	43785.1	43873.8	493.06 ug/L	493.06 ppb	17:02:02
3	Cu 324.752†	165456.7	159964.1	480.36 ug/L	480.36 ppb	17:02:02
3	Mn 257.610†	440344.8	441463.6	495.25 ug/L	495.25 ppb	17:01:57
3	Mo 202.031†	6797.4	6815.3	499.22 ug/L	499.22 ppb	17:02:22
3	Ni 231.604†	19508.3	19524.9	495.98 ug/L	495.98 ppb	17:02:02
3	P 214.914†	4311.3	4124.5	2409.2 ug/L	2409.2 ppb	17:02:22
3	Pb 220.353†	4064.7	4144.1	515.01 ug/L	515.01 ppb	17:02:22
3	S 181.975 Axial†	732.6	698.2	1021.9 ug/L	1021.9 ppb	17:02:22
3	Sb 206.836†	1457.3	1425.7	515.05 ug/L	515.05 ppb	17:02:22
3	Se 196.026†	743.2	766.5	522.69 ug/L	522.69 ppb	17:02:22
3	Si 251.611†	76553.8	76290.2	2441.2 ug/L	2441.2 ppb	17:02:02
3	Sn 189.927†	2787.2	2786.6	504.75 ug/L	504.75 ppb	17:02:22
3	Ti 334.940†	312598.3	314984.5	476.27 ug/L	476.27 ppb	17:02:02
3	Tl 190.801†	1530.7	1567.4	506.21 ug/L	506.21 ppb	17:02:22
3	U 409.014†	14879.2	17748.0	477.89 ug/L	477.89 ppb	17:02:02
3	V 292.402†	68349.0	70020.9	492.77 ug/L	492.77 ppb	17:02:02
3	Zn 213.857†	49583.2	49200.7	489.12 ug/L	489.12 ppb	17:02:02
3	SiO2†	77728.0	77451.1	5308.0 ug/L	5308.0 ppb	17:02:37

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Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	895927.0	99.540 %	0.3870			0.39%
Sc Radial	4032.2	94.8 %	1.54			1.63%
Y 371.029	745904.8	97.831 %	0.4342			0.44%
Y RADIAL	4425.8	94.33 %	1.207			1.28%
Ag 328.068†	107351.6	496.06 ug/L	3.747	496.06 ppb	3.747	0.76%



QC value within limits for Ag 328.068 Recovery = 99.21%							
Al	396.153Radial†	5533.0	4986.6 ug/L	12.20	4986.6 ppb	12.20	0.24%
QC value within limits for Al 396.153Radial Recovery = 99.73%							
As	188.979†	1108.5	503.79 ug/L	4.064	503.79 ppb	4.064	0.81%
QC value within limits for As 188.979 Recovery = 100.76%							
B	249.677†	19889.1	472.43 ug/L	3.716	472.43 ppb	3.716	0.79%
QC value within limits for B 249.677 Recovery = 94.49%							
Ba	233.527†	63185.4	494.77 ug/L	2.677	494.77 ppb	2.677	0.54%
QC value within limits for Ba 233.527 Recovery = 98.95%							
Be	313.107†	1318402.0	492.42 ug/L	0.335	492.42 ppb	0.335	0.07%
QC value within limits for Be 313.107 Recovery = 98.48%							
Ca	317.933Radial†	2570.2	5113.7 ug/L	76.31	5113.7 ppb	76.31	1.49%
QC value within limits for Ca 317.933Radial Recovery = 102.27%							
Cd	226.502†	43102.5	500.19 ug/L	2.861	500.19 ppb	2.861	0.57%
QC value within limits for Cd 226.502 Recovery = 100.04%							
Co	228.616†	23798.1	497.68 ug/L	3.611	497.68 ppb	3.611	0.73%
QC value within limits for Co 228.616 Recovery = 99.54%							
Cr	267.716†	44011.1	494.60 ug/L	3.413	494.60 ppb	3.413	0.69%
QC value within limits for Cr 267.716 Recovery = 98.92%							
Cu	324.752†	160529.0	482.05 ug/L	3.173	482.05 ppb	3.173	0.66%
QC value within limits for Cu 324.752 Recovery = 96.41%							
Fe	238.204 Radial†	389.6	5033.6 ug/L	69.65	5033.6 ppb	69.65	1.38%
QC value within limits for Fe 238.204 Radial Recovery = 100.67%							
K	766.490 Radial†	27108.7	5065.3 ug/L	56.49	5065.3 ppb	56.49	1.12%
QC value within limits for K 766.490 Radial Recovery = 101.31%							
Mg	279.077 IEC†	114.5	5202.6 ug/L	159.89	5202.6 ppb	159.89	3.07%
QC value within limits for Mg 279.077 IEC Recovery = 104.05%							
Mn	257.610†	440996.6	494.72 ug/L	0.521	494.72 ppb	0.521	0.11%
QC value within limits for Mn 257.610 Recovery = 98.94%							
Mo	202.031†	6857.6	502.31 ug/L	2.906	502.31 ppb	2.906	0.58%
QC value within limits for Mo 202.031 Recovery = 100.46%							
Na	589.592 Radial†	34135.8	9906.4 ug/L	34.04	9906.4 ppb	34.04	0.34%
QC value within limits for Na 589.592 Radial Recovery = 99.06%							
Ni	231.604†	19627.5	498.59 ug/L	3.088	498.59 ppb	3.088	0.62%
QC value within limits for Ni 231.604 Recovery = 99.72%							
P	214.914†	4147.9	2423.1 ug/L	14.75	2423.1 ppb	14.75	0.61%
QC value within limits for P 214.914 Recovery = 96.92%							
Pb	220.353†	4162.3	517.28 ug/L	2.003	517.28 ppb	2.003	0.39%
QC value within limits for Pb 220.353 Recovery = 103.46%							
S	181.975 Axial†	699.0	1023.1 ug/L	3.97	1023.1 ppb	3.97	0.39%
QC value within limits for S 181.975 Axial Recovery = 102.31%							
Sb	206.836†	1429.0	516.26 ug/L	3.470	516.26 ppb	3.470	0.67%
QC value within limits for Sb 206.836 Recovery = 103.25%							
Se	196.026†	757.6	516.64 ug/L	5.268	516.64 ppb	5.268	1.02%
QC value within limits for Se 196.026 Recovery = 103.33%							
Si	251.611†	76600.6	2451.2 ug/L	16.13	2451.2 ppb	16.13	0.66%
QC value within limits for Si 251.611 Recovery = 98.05%							
Sn	189.927†	2793.9	506.07 ug/L	1.437	506.07 ppb	1.437	0.28%
QC value within limits for Sn 189.927 Recovery = 101.21%							
Sr	421.552†	74647.0	494.71 ug/L	2.641	494.71 ppb	2.641	0.53%
QC value within limits for Sr 421.552 Recovery = 98.94%							
Ti	334.940†	315931.7	477.70 ug/L	3.056	477.70 ppb	3.056	0.64%
QC value within limits for Ti 334.940 Recovery = 95.54%							
Tl	190.801†	1565.4	505.59 ug/L	1.556	505.59 ppb	1.556	0.31%
QC value within limits for Tl 190.801 Recovery = 101.12%							
U	409.014†	17672.8	475.86 ug/L	3.171	475.86 ppb	3.171	0.67%
QC value within limits for U 409.014 Recovery = 95.17%							
V	292.402†	70314.1	494.85 ug/L	2.972	494.85 ppb	2.972	0.60%
QC value within limits for V 292.402 Recovery = 98.97%							
Zn	213.857†	49444.4	491.55 ug/L	3.333	491.55 ppb	3.333	0.68%
QC value within limits for Zn 213.857 Recovery = 98.31%							
SiO2†		76749.1	5259.7 ug/L	41.90	5259.7 ppb	41.90	0.80%
QC value within limits for SiO2 Recovery = 98.36%							
All analyte(s) passed QC.							

Sequence No.: 2

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/23/2010 17:04:47

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	3968.0	3968.0	93.3 %		17:07:00
1	Y RADIAL	4383.8	4383.8	93.43 %		17:06:40
1	Al 396.153Radial†	-90.7	13.5	12.207 ug/L	12.207 ppb	17:06:40
1	Ca 317.933Radial†	21.5	7.6	15.131 ug/L	15.131 ppb	17:07:00
1	Fe 238.204 Radial†	11.2	1.8	23.468 ug/L	23.468 ppb	17:07:00
1	K 766.490 Radial†	2690.7	327.5	61.273 ug/L	61.273 ppb	17:06:40
1	Mg 279.077 IEC†	1.1	-1.6	-73.139 ug/L	-73.139 ppb	17:07:00
1	Na 589.592 Radial†	-716.7	-27.9	-8.1095 ug/L	-8.1095 ppb	17:06:40
1	Sr 421.552†	52.8	19.8	0.1310 ug/L	0.1310 ppb	17:06:40
1	Sc 361.383	889032.5	889032.5	98.774 %		17:07:57
1	Y 371.029	752324.2	752324.2	98.673 %		17:07:57
1	Ag 328.068†	306.3	80.8	0.3812 ug/L	0.3812 ppb	17:07:57
1	As 188.979†	-25.9	-5.7	-2.5512 ug/L	-2.5512 ppb	17:08:17
1	B 249.677†	-454.3	-87.0	-2.0792 ug/L	-2.0792 ppb	17:08:17
1	Ba 233.527†	-10.3	-1.3	-0.0108 ug/L	-0.0108 ppb	17:08:17
1	Be 313.107†	-3789.5	16.8	0.0058 ug/L	0.0058 ppb	17:07:57
1	Cd 226.502†	-194.8	-13.9	-0.1656 ug/L	-0.1656 ppb	17:08:17
1	Co 228.616†	-71.9	-10.9	-0.2264 ug/L	-0.2264 ppb	17:08:17
1	Cr 267.716†	51.5	-13.9	-0.1517 ug/L	-0.1517 ppb	17:08:17
1	Cu 324.752†	6040.1	37.9	0.1188 ug/L	0.1188 ppb	17:07:57
1	Mn 257.610†	488.8	58.0	0.0704 ug/L	0.0704 ppb	17:08:17
1	Mo 202.031†	8.5	2.6	0.1891 ug/L	0.1891 ppb	17:08:17
1	Ni 231.604†	49.2	-2.5	-0.0624 ug/L	-0.0624 ppb	17:08:17
1	P 214.914†	196.9	-2.7	-1.6827 ug/L	-1.6827 ppb	17:08:17
1	Pb 220.353†	26.8	92.2	11.420 ug/L	11.420 ppb	17:08:17
1	S 181.975 Axial†	31.4	-5.3	-7.7184 ug/L	-7.7184 ppb	17:08:17
1	Sb 206.836†	33.6	-2.6	-0.8864 ug/L	-0.8864 ppb	17:08:17
1	Se 196.026†	-27.2	-6.8	-4.4301 ug/L	-4.4301 ppb	17:08:17
1	Si 251.611†	540.9	13.5	0.4305 ug/L	0.4305 ppb	17:08:17
1	Sn 189.927†	22.5	12.3	2.2321 ug/L	2.2321 ppb	17:08:17
1	Ti 334.940†	-1407.3	-143.0	-0.2052 ug/L	-0.2052 ppb	17:07:57
1	Tl 190.801†	-31.5	-0.7	-0.2103 ug/L	-0.2103 ppb	17:08:17
1	U 409.014†	-3025.8	-247.1	-6.6789 ug/L	-6.6789 ppb	17:07:57
1	V 292.402†	-1495.9	-84.0	-0.5978 ug/L	-0.5978 ppb	17:07:57
1	Zn 213.857†	646.2	96.6	0.9656 ug/L	0.9656 ppb	17:08:17
1	SiO2†	555.8	11.2	0.7638 ug/L	0.7638 ppb	17:09:13
2	Sc Radial	3990.8	3990.8	93.8 %		17:07:25
2	Y RADIAL	4522.7	4522.7	96.39 %		17:07:05
2	Al 396.153Radial†	-104.7	-0.8	-0.7963 ug/L	-0.7963 ppb	17:07:05
2	Ca 317.933Radial†	19.9	5.7	11.437 ug/L	11.437 ppb	17:07:25
2	Fe 238.204 Radial†	11.6	2.2	28.406 ug/L	28.406 ppb	17:07:25
2	K 766.490 Radial†	2633.6	250.2	46.810 ug/L	46.810 ppb	17:07:05
2	Mg 279.077 IEC†	4.6	2.2	99.490 ug/L	99.490 ppb	17:07:25
2	Na 589.592 Radial†	-678.5	17.2	4.9936 ug/L	4.9936 ppb	17:07:05
2	Sr 421.552†	25.8	-9.2	-0.0614 ug/L	-0.0614 ppb	17:07:05
2	Sc 361.383	887062.8	887062.8	98.556 %		17:08:22
2	Y 371.029	750654.2	750654.2	98.454 %		17:08:22
2	Ag 328.068†	205.4	-20.9	-0.0865 ug/L	-0.0865 ppb	17:08:22
2	As 188.979†	-26.3	-6.1	-2.7523 ug/L	-2.7523 ppb	17:08:42
2	B 249.677†	-494.3	-128.6	-3.0723 ug/L	-3.0723 ppb	17:08:42
2	Ba 233.527†	9.5	18.8	0.1460 ug/L	0.1460 ppb	17:08:42
2	Be 313.107†	-3885.0	-88.7	-0.0337 ug/L	-0.0337 ppb	17:08:22
2	Cd 226.502†	-165.5	15.4	0.1751 ug/L	0.1751 ppb	17:08:42
2	Co 228.616†	-65.7	-4.7	-0.0964 ug/L	-0.0964 ppb	17:08:42
2	Cr 267.716†	68.3	3.3	0.0408 ug/L	0.0408 ppb	17:08:42
2	Cu 324.752†	6073.7	85.6	0.2610 ug/L	0.2610 ppb	17:08:22
2	Mn 257.610†	491.1	61.4	0.0676 ug/L	0.0676 ppb	17:08:42
2	Mo 202.031†	21.3	15.6	1.1425 ug/L	1.1425 ppb	17:08:42
2	Ni 231.604†	54.4	2.9	0.0740 ug/L	0.0740 ppb	17:08:42

2	P 214.914†	210.0	11.0	6.5997 ug/L	6.5997 ppb	17:08:42
2	Pb 220.353†	22.9	88.3	10.940 ug/L	10.940 ppb	17:08:42
2	S 181.975 Axial†	45.8	9.5	13.883 ug/L	13.883 ppb	17:08:42
2	Sb 206.836†	34.2	-2.0	-0.6531 ug/L	-0.6531 ppb	17:08:42
2	Se 196.026†	-23.3	-2.9	-1.8326 ug/L	-1.8326 ppb	17:08:42
2	Si 251.611†	550.7	24.6	0.7761 ug/L	0.7761 ppb	17:08:42
2	Sn 189.927†	12.5	2.2	0.3991 ug/L	0.3991 ppb	17:08:42
2	Ti 334.940†	-1440.9	-180.2	-0.2772 ug/L	-0.2772 ppb	17:08:22
2	Tl 190.801†	-33.0	-2.3	-0.7381 ug/L	-0.7381 ppb	17:08:42
2	U 409.014†	-2935.6	-162.4	-4.3915 ug/L	-4.3915 ppb	17:08:22
2	V 292.402†	-1504.3	-95.9	-0.6600 ug/L	-0.6600 ppb	17:08:22
2	Zn 213.857†	627.6	79.1	0.7886 ug/L	0.7886 ppb	17:08:42
2	SiO2†	529.4	-14.4	-1.0187 ug/L	-1.0187 ppb	17:09:18
3	Sc Radial	3967.1	3967.1	93.3 %		17:07:50
3	Y RADIAL	4436.9	4436.9	94.56 %		17:07:30
3	Al 396.153Radial†	-108.3	-5.3	-4.8405 ug/L	-4.8405 ppb	17:07:30
3	Ca 317.933Radial†	24.5	10.8	21.447 ug/L	21.447 ppb	17:07:50
3	Fe 238.204 Radial†	11.0	1.6	21.162 ug/L	21.162 ppb	17:07:50
3	K 766.490 Radial†	2617.7	249.9	46.745 ug/L	46.745 ppb	17:07:30
3	Mg 279.077 IEC†	3.6	1.1	49.192 ug/L	49.192 ppb	17:07:50
3	Na 589.592 Radial†	-718.7	-30.3	-8.7800 ug/L	-8.7800 ppb	17:07:30
3	Sr 421.552†	12.8	-23.1	-0.1531 ug/L	-0.1531 ppb	17:07:30
3	Sc 361.383	895237.9	895237.9	99.464 %		17:08:48
3	Y 371.029	758264.4	758264.4	99.452 %		17:08:48
3	Ag 328.068†	186.1	-42.3	-0.1856 ug/L	-0.1856 ppb	17:08:48
3	As 188.979†	-16.0	4.5	2.0216 ug/L	2.0216 ppb	17:09:08
3	B 249.677†	-444.6	-74.1	-1.7703 ug/L	-1.7703 ppb	17:09:08
3	Ba 233.527†	8.9	18.1	0.1422 ug/L	0.1422 ppb	17:09:08
3	Be 313.107†	-3904.1	-71.9	-0.0274 ug/L	-0.0274 ppb	17:08:48
3	Cd 226.502†	-180.6	1.8	0.0182 ug/L	0.0182 ppb	17:09:08
3	Co 228.616†	-71.4	-9.8	-0.2053 ug/L	-0.2053 ppb	17:09:08
3	Cr 267.716†	81.8	16.3	0.1855 ug/L	0.1855 ppb	17:09:08
3	Cu 324.752†	6102.5	58.3	0.1778 ug/L	0.1778 ppb	17:08:48
3	Mn 257.610†	481.4	47.2	0.0529 ug/L	0.0529 ppb	17:09:08
3	Mo 202.031†	8.1	2.1	0.1569 ug/L	0.1569 ppb	17:09:08
3	Ni 231.604†	65.6	13.7	0.3471 ug/L	0.3471 ppb	17:09:08
3	P 214.914†	210.8	9.9	5.9851 ug/L	5.9851 ppb	17:09:08
3	Pb 220.353†	39.1	104.3	12.920 ug/L	12.920 ppb	17:09:08
3	S 181.975 Axial†	39.8	3.0	4.3755 ug/L	4.3755 ppb	17:09:08
3	Sb 206.836†	44.5	8.1	2.8238 ug/L	2.8238 ppb	17:09:08
3	Se 196.026†	-17.7	2.9	2.0100 ug/L	2.0100 ppb	17:09:08
3	Si 251.611†	558.7	27.6	0.8819 ug/L	0.8819 ppb	17:09:08
3	Sn 189.927†	14.1	3.7	0.6776 ug/L	0.6776 ppb	17:09:08
3	Ti 334.940†	-1446.2	-172.2	-0.2604 ug/L	-0.2604 ppb	17:08:48
3	Tl 190.801†	-35.4	-4.4	-1.4194 ug/L	-1.4194 ppb	17:09:08
3	U 409.014†	-2906.2	-105.6	-2.8572 ug/L	-2.8572 ppb	17:08:48
3	V 292.402†	-1423.7	-1.0	-0.0119 ug/L	-0.0119 ppb	17:08:48
3	Zn 213.857†	616.2	61.8	0.6145 ug/L	0.6145 ppb	17:09:08
3	SiO2†	545.0	-3.5	-0.2462 ug/L	-0.2462 ppb	17:09:23

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	890444.4	98.931 %	0.4740			0.48%
Sc Radial	3975.3	93.5 %	0.32			0.34%
Y 371.029	753747.6	98.860 %	0.5246			0.53%
Y RADIAL	4447.8	94.79 %	1.493			1.58%
Ag 328.068†	5.9	0.0364 ug/L	0.30274	0.0364 ppb	0.30274	832.18%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	2.4	2.1900 ug/L	8.90738	2.1900 ppb	8.90738	406.73%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-2.4	-1.0940 ug/L	2.70000	-1.0940 ppb	2.70000	246.81%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-96.5	-2.3073 ug/L	0.68030	-2.3073 ppb	0.68030	29.49%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	11.9	0.0925 ug/L	0.08943	0.0925 ppb	0.08943	96.71%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	-47.9	-0.0184 ug/L	0.02119	-0.0184 ppb	0.02119	114.99%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	8.0	16.005 ug/L	5.0618	16.005 ppb	5.0618	31.63%

QC value within limits for Ca 317.933 Radial	Recovery = Not calculated		
Cd 226.502†	1.1 0.0093 ug/L	0.17053 0.0093 ppb	0.17053 >999.9%
QC value within limits for Cd 226.502	Recovery = Not calculated		
Co 228.616†	-8.5 -0.1760 ug/L	0.06978 -0.1760 ppb	0.06978 39.64%
QC value within limits for Co 228.616	Recovery = Not calculated		
Cr 267.716†	1.9 0.0249 ug/L	0.16917 0.0249 ppb	0.16917 680.35%
QC value within limits for Cr 267.716	Recovery = Not calculated		
Cu 324.752†	60.6 0.1859 ug/L	0.07147 0.1859 ppb	0.07147 38.45%
QC value within limits for Cu 324.752	Recovery = Not calculated		
Fe 238.204 Radial†	1.9 24.345 ug/L	3.7005 24.345 ppb	3.7005 15.20%
QC value within limits for Fe 238.204 Radial	Recovery = Not calculated		
K 766.490 Radial†	275.9 51.609 ug/L	8.3692 51.609 ppb	8.3692 16.22%
QC value within limits for K 766.490 Radial	Recovery = Not calculated		
Mg 279.077 IEC†	0.6 25.181 ug/L	88.7841 25.181 ppb	88.7841 352.58%
QC value within limits for Mg 279.077 IEC	Recovery = Not calculated		
Mn 257.610†	55.5 0.0636 ug/L	0.00936 0.0636 ppb	0.00936 14.71%
QC value within limits for Mn 257.610	Recovery = Not calculated		
Mo 202.031†	6.8 0.4962 ug/L	0.55996 0.4962 ppb	0.55996 112.85%
QC value within limits for Mo 202.031	Recovery = Not calculated		
Na 589.592 Radial†	-13.7 -3.9653 ug/L	7.76590 -3.9653 ppb	7.76590 195.85%
QC value within limits for Na 589.592 Radial	Recovery = Not calculated		
Ni 231.604†	4.7 0.1196 ug/L	0.20854 0.1196 ppb	0.20854 174.39%
QC value within limits for Ni 231.604	Recovery = Not calculated		
P 214.914†	6.1 3.6340 ug/L	4.61470 3.6340 ppb	4.61470 126.99%
QC value within limits for P 214.914	Recovery = Not calculated		
Pb 220.353†	94.9 11.760 ug/L	1.0326 11.760 ppb	1.0326 8.78%
QC value greater than the upper limit for Pb 220.353	Recovery = Not calculated		
S 181.975 Axial†	2.4 3.5132 ug/L	10.82628 3.5132 ppb	10.82628 308.16%
QC value within limits for S 181.975 Axial	Recovery = Not calculated		
Sb 206.836†	1.2 0.4281 ug/L	2.07802 0.4281 ppb	2.07802 485.44%
QC value within limits for Sb 206.836	Recovery = Not calculated		
Se 196.026†	-2.3 -1.4176 ug/L	3.24007 -1.4176 ppb	3.24007 228.57%
QC value within limits for Se 196.026	Recovery = Not calculated		
Si 251.611†	21.9 0.6962 ug/L	0.23608 0.6962 ppb	0.23608 33.91%
QC value within limits for Si 251.611	Recovery = Not calculated		
Sn 189.927†	6.1 1.1029 ug/L	0.98774 1.1029 ppb	0.98774 89.56%
QC value within limits for Sn 189.927	Recovery = Not calculated		
Sr 421.552†	-4.2 -0.0278 ug/L	0.14499 -0.0278 ppb	0.14499 521.38%
QC value within limits for Sr 421.552	Recovery = Not calculated		
Ti 334.940†	-165.1 -0.2476 ug/L	0.03767 -0.2476 ppb	0.03767 15.21%
QC value within limits for Ti 334.940	Recovery = Not calculated		
Tl 190.801†	-2.5 -0.7893 ug/L	0.60619 -0.7893 ppb	0.60619 76.80%
QC value within limits for Tl 190.801	Recovery = Not calculated		
U 409.014†	-171.7 -4.6425 ug/L	1.92316 -4.6425 ppb	1.92316 41.42%
QC value within limits for U 409.014	Recovery = Not calculated		
V 292.402†	-60.3 -0.4232 ug/L	0.35758 -0.4232 ppb	0.35758 84.49%
QC value within limits for V 292.402	Recovery = Not calculated		
Zn 213.857†	79.2 0.7896 ug/L	0.17558 0.7896 ppb	0.17558 22.24%
QC value within limits for Zn 213.857	Recovery = Not calculated		
SiO2†	-2.2 -0.1670 ug/L	0.89390 -0.1670 ppb	0.89390 535.15%
QC value within limits for SiO2	Recovery = Not calculated		
QC Failed. Continue with analysis.			

=====  
Analysis Begun

Start Time: 2/23/2010 17:25:38

Plasma On Time: 2/22/2010 05:55:10

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\022310C.sif

Batch ID:

Results Data Set: 022310A

Results Library: C:\pe\Optima3\Results\Results.mdb

=====  
Sequence No.: 1

Autosampler Location: 7

Sample ID: CCV

Date Collected: 2/23/2010 17:25:39

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:  
=====

## Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3991.4	3991.4	93.8 %		17:27:32
1	Y RADIAL	4358.2	4358.2	92.88 %		17:27:32
1	Al 396.153Radial†	5151.5	5600.7	5047.9 ug/L	5047.9 ppb	17:27:32
1	Ca 317.933Radial†	2489.4	2637.4	5247.4 ug/L	5247.4 ppb	17:27:52
1	Fe 238.204 Radial†	384.9	400.0	5168.6 ug/L	5168.6 ppb	17:27:52
1	K 766.490 Radial†	28009.5	27292.6	5099.6 ug/L	5099.6 ppb	17:27:32
1	Mg 279.077 IEC†	115.3	120.1	5459.1 ug/L	5459.1 ppb	17:27:52
1	Na 589.592 Radial†	32214.8	35071.3	10178 ug/L	10178 ppb	17:27:32
1	Sr 421.552†	71131.1	75766.7	502.13 ug/L	502.13 ppb	17:27:32
1	Sc 361.383	888136.2	888136.2	98.675 %		17:28:49
1	Y 371.029	739501.5	739501.5	96.991 %		17:28:49
1	Ag 328.068†	106829.5	108034.8	499.25 ug/L	499.25 ppb	17:28:54
1	As 188.979†	1071.9	1106.9	503.10 ug/L	503.10 ppb	17:29:14
1	B 249.677†	19349.3	19982.1	474.61 ug/L	474.61 ppb	17:28:54
1	Ba 233.527†	62716.1	63567.4	497.77 ug/L	497.77 ppb	17:28:54
1	Be 313.107†	1302809.7	1324158.6	494.57 ug/L	494.57 ppb	17:28:49
1	Cd 226.502†	42610.9	43366.5	503.24 ug/L	503.24 ppb	17:28:54
1	Co 228.616†	23572.8	23951.3	500.87 ug/L	500.87 ppb	17:28:54
1	Cr 267.716†	43775.7	44297.6	497.83 ug/L	497.83 ppb	17:28:54
1	Cu 324.752†	165839.6	161989.5	486.45 ug/L	486.45 ppb	17:28:54
1	Mn 257.610†	437072.3	442505.0	496.42 ug/L	496.42 ppb	17:28:49
1	Mo 202.031†	6787.9	6873.0	503.45 ug/L	503.45 ppb	17:29:14
1	Ni 231.604†	19542.0	19752.1	501.76 ug/L	501.76 ppb	17:28:54
1	P 214.914†	4334.5	4190.6	2448.1 ug/L	2448.1 ppb	17:29:14
1	Pb 220.353†	4034.2	4153.4	516.18 ug/L	516.18 ppb	17:29:14
1	S 181.975 Axial†	726.1	698.8	1022.7 ug/L	1022.7 ppb	17:29:14
1	Sb 206.836†	1445.8	1428.5	516.14 ug/L	516.14 ppb	17:29:14
1	Se 196.026†	722.9	753.3	514.25 ug/L	514.25 ppb	17:29:14
1	Si 251.611†	76672.2	77167.7	2469.3 ug/L	2469.3 ppb	17:28:54
1	Sn 189.927†	2776.5	2803.4	507.80 ug/L	507.80 ppb	17:29:14
1	Ti 334.940†	312510.8	317989.4	480.80 ug/L	480.80 ppb	17:28:54
1	Tl 190.801†	1520.0	1571.6	507.58 ug/L	507.58 ppb	17:29:14
1	U 409.014†	14791.5	17806.4	479.44 ug/L	479.44 ppb	17:28:54
1	V 292.402†	68465.3	70815.1	498.33 ug/L	498.33 ppb	17:28:54
1	Zn 213.857†	49646.6	49755.6	494.63 ug/L	494.63 ppb	17:28:54
1	SiO2†	76750.6	77229.8	5292.6 ug/L	5292.6 ppb	17:30:22
2	Sc Radial	3982.8	3982.8	93.6 %		17:27:57
2	Y RADIAL	4375.7	4375.7	93.26 %		17:27:57
2	Al 396.153Radial†	5134.8	5594.6	5042.5 ug/L	5042.5 ppb	17:27:57
2	Ca 317.933Radial†	2442.9	2593.4	5159.9 ug/L	5159.9 ppb	17:28:17
2	Fe 238.204 Radial†	379.1	394.7	5099.7 ug/L	5099.7 ppb	17:28:17
2	K 766.490 Radial†	28009.4	27356.5	5111.6 ug/L	5111.6 ppb	17:27:57
2	Mg 279.077 IEC†	113.5	118.4	5382.4 ug/L	5382.4 ppb	17:28:17
2	Na 589.592 Radial†	32016.9	34933.4	10138 ug/L	10138 ppb	17:27:57
2	Sr 421.552†	70935.6	75720.3	501.83 ug/L	501.83 ppb	17:27:57
2	Sc 361.383	891162.3	891162.3	99.011 %		17:29:20
2	Y 371.029	741011.3	741011.3	97.189 %		17:29:20

2	Ag 328.068†	109321.2	110183.8	509.11 ug/L	509.11 ppb	17:29:25
2	As 188.979†	1080.5	1111.9	505.43 ug/L	505.43 ppb	17:29:45
2	B 249.677†	20039.1	20612.2	489.64 ug/L	489.64 ppb	17:29:25
2	Ba 233.527†	64018.3	64666.9	506.37 ug/L	506.37 ppb	17:29:25
2	Be 313.107†	1303773.8	1320649.0	493.28 ug/L	493.28 ppb	17:29:20
2	Cd 226.502†	43399.9	44016.7	510.81 ug/L	510.81 ppb	17:29:25
2	Co 228.616†	24054.8	24357.0	509.33 ug/L	509.33 ppb	17:29:25
2	Cr 267.716†	44534.1	44912.9	504.73 ug/L	504.73 ppb	17:29:25
2	Cu 324.752†	170515.5	166141.5	498.90 ug/L	498.90 ppb	17:29:25
2	Mn 257.610†	439631.6	443585.8	497.62 ug/L	497.62 ppb	17:29:20
2	Mo 202.031†	6761.4	6822.8	499.77 ug/L	499.77 ppb	17:29:45
2	Ni 231.604†	19910.1	20056.6	509.49 ug/L	509.49 ppb	17:29:25
2	P 214.914†	4323.7	4164.9	2430.0 ug/L	2430.0 ppb	17:29:45
2	Pb 220.353†	4012.5	4117.6	511.74 ug/L	511.74 ppb	17:29:45
2	S 181.975 Axial†	723.8	694.0	1015.7 ug/L	1015.7 ppb	17:29:45
2	Sb 206.836†	1446.8	1424.5	514.60 ug/L	514.60 ppb	17:29:45
2	Se 196.026†	728.9	756.9	516.37 ug/L	516.37 ppb	17:29:45
2	Si 251.611†	78535.3	78785.6	2521.3 ug/L	2521.3 ppb	17:29:25
2	Sn 189.927†	2757.3	2774.4	502.54 ug/L	502.54 ppb	17:29:45
2	Ti 334.940†	319592.7	324066.6	489.98 ug/L	489.98 ppb	17:29:25
2	Tl 190.801†	1507.3	1553.6	501.82 ug/L	501.82 ppb	17:29:45
2	U 409.014†	15349.7	18319.3	493.29 ug/L	493.29 ppb	17:29:25
2	V 292.402†	69783.8	71911.2	505.91 ug/L	505.91 ppb	17:29:25
2	Zn 213.857†	50722.9	50671.8	503.77 ug/L	503.77 ppb	17:29:25
2	SiO2†	76406.1	76617.7	5250.7 ug/L	5250.7 ppb	17:30:27
3	Sc Radial	4077.8	4077.8	95.9 %		17:28:22
3	Y RADIAL	4474.1	4474.1	95.36 %		17:28:22
3	Al 396.153Radial†	5261.7	5599.2	5046.4 ug/L	5046.4 ppb	17:28:22
3	Ca 317.933Radial†	2480.0	2571.4	5116.1 ug/L	5116.1 ppb	17:28:42
3	Fe 238.204 Radial†	387.1	393.6	5085.6 ug/L	5085.6 ppb	17:28:42
3	K 766.490 Radial†	28765.8	27448.7	5128.8 ug/L	5128.8 ppb	17:28:22
3	Mg 279.077 IEC†	110.4	112.4	5108.6 ug/L	5108.6 ppb	17:28:42
3	Na 589.592 Radial†	32900.2	35058.4	10174 ug/L	10174 ppb	17:28:22
3	Sr 421.552†	72960.1	76067.6	504.13 ug/L	504.13 ppb	17:28:22
3	Sc 361.383	882659.4	882659.4	98.066 %		17:29:51
3	Y 371.029	735061.8	735061.8	96.409 %		17:29:51
3	Ag 328.068†	108265.3	110170.7	509.06 ug/L	509.06 ppb	17:29:56
3	As 188.979†	1074.7	1116.4	507.47 ug/L	507.47 ppb	17:30:16
3	B 249.677†	19821.0	20584.8	488.99 ug/L	488.99 ppb	17:29:56
3	Ba 233.527†	63361.4	64619.8	506.00 ug/L	506.00 ppb	17:29:56
3	Be 313.107†	1290713.5	1320016.2	493.05 ug/L	493.05 ppb	17:29:51
3	Cd 226.502†	43080.9	44113.6	511.93 ug/L	511.93 ppb	17:29:56
3	Co 228.616†	23806.4	24337.7	508.94 ug/L	508.94 ppb	17:29:56
3	Cr 267.716†	44303.5	45111.1	506.96 ug/L	506.96 ppb	17:29:56
3	Cu 324.752†	168019.4	165255.2	496.24 ug/L	496.24 ppb	17:29:56
3	Mn 257.610†	433903.7	442022.3	495.88 ug/L	495.88 ppb	17:29:51
3	Mo 202.031†	6786.4	6914.1	506.45 ug/L	506.45 ppb	17:30:16
3	Ni 231.604†	19710.0	20046.4	509.23 ug/L	509.23 ppb	17:29:56
3	P 214.914†	4291.7	4174.3	2436.3 ug/L	2436.3 ppb	17:30:16
3	Pb 220.353†	4031.6	4176.1	519.00 ug/L	519.00 ppb	17:30:16
3	S 181.975 Axial†	732.5	709.9	1039.1 ug/L	1039.1 ppb	17:30:16
3	Sb 206.836†	1449.5	1441.4	520.73 ug/L	520.73 ppb	17:30:16
3	Se 196.026†	727.5	762.6	520.12 ug/L	520.12 ppb	17:30:16
3	Si 251.611†	77582.9	78578.5	2514.6 ug/L	2514.6 ppb	17:29:56
3	Sn 189.927†	2769.7	2813.9	509.69 ug/L	509.69 ppb	17:30:16
3	Ti 334.940†	316415.9	323936.6	489.80 ug/L	489.80 ppb	17:29:56
3	Tl 190.801†	1519.9	1581.1	510.64 ug/L	510.64 ppb	17:30:16
3	U 409.014†	14943.0	18053.9	486.12 ug/L	486.12 ppb	17:29:56
3	V 292.402†	69342.7	72140.4	507.58 ug/L	507.58 ppb	17:29:56
3	Zn 213.857†	50181.5	50613.3	503.19 ug/L	503.19 ppb	17:29:56
3	SiO2†	78336.3	79329.3	5436.8 ug/L	5436.8 ppb	17:30:32

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	887319.3	98.584 %	0.4788			0.49%
Sc Radial	4017.3	94.4 %	1.24			1.31%
Y 371.029	738524.8	96.863 %	0.4056			0.42%
Y RADIAL	4402.7	93.83 %	1.332			1.42%
Ag 328.068†	109463.1	505.81 ug/L	5.683	505.81 ppb	5.683	1.12%

QC value within limits for Ag 328.068 Recovery = 101.16%						
Al 396.153Radial†	5598.2	5045.6 ug/L	2.77	5045.6 ppb	2.77	0.05%
QC value within limits for Al 396.153Radial Recovery = 100.91%						
As 188.979†	1111.7	505.34 ug/L	2.185	505.34 ppb	2.185	0.43%
QC value within limits for As 188.979 Recovery = 101.07%						
B 249.677†	20393.0	484.41 ug/L	8.492	484.41 ppb	8.492	1.75%
QC value within limits for B 249.677 Recovery = 96.88%						
Ba 233.527†	64284.7	503.38 ug/L	4.865	503.38 ppb	4.865	0.97%
QC value within limits for Ba 233.527 Recovery = 100.68%						
Be 313.107†	1321608.0	493.63 ug/L	0.820	493.63 ppb	0.820	0.17%
QC value within limits for Be 313.107 Recovery = 98.73%						
Ca 317.933Radial†	2600.8	5174.5 ug/L	66.85	5174.5 ppb	66.85	1.29%
QC value within limits for Ca 317.933Radial Recovery = 103.49%						
Cd 226.502†	43832.3	508.66 ug/L	4.724	508.66 ppb	4.724	0.93%
QC value within limits for Cd 226.502 Recovery = 101.73%						
Co 228.616†	24215.3	506.38 ug/L	4.774	506.38 ppb	4.774	0.94%
QC value within limits for Co 228.616 Recovery = 101.28%						
Cr 267.716†	44773.9	503.17 ug/L	4.758	503.17 ppb	4.758	0.95%
QC value within limits for Cr 267.716 Recovery = 100.63%						
Cu 324.752†	164462.1	493.86 ug/L	6.561	493.86 ppb	6.561	1.33%
QC value within limits for Cu 324.752 Recovery = 98.77%						
Fe 238.204 Radial†	396.1	5118.0 ug/L	44.41	5118.0 ppb	44.41	0.87%
QC value within limits for Fe 238.204 Radial Recovery = 102.36%						
K 766.490 Radial†	27365.9	5113.3 ug/L	14.70	5113.3 ppb	14.70	0.29%
QC value within limits for K 766.490 Radial Recovery = 102.27%						
Mg 279.077 IEC†	117.0	5316.7 ug/L	184.27	5316.7 ppb	184.27	3.47%
QC value within limits for Mg 279.077 IEC Recovery = 106.33%						
Mn 257.610†	442704.4	496.64 ug/L	0.893	496.64 ppb	0.893	0.18%
QC value within limits for Mn 257.610 Recovery = 99.33%						
Mo 202.031†	6870.0	503.22 ug/L	3.346	503.22 ppb	3.346	0.66%
QC value within limits for Mo 202.031 Recovery = 100.64%						
Na 589.592 Radial†	35021.0	10163 ug/L	22.1	10163 ppb	22.1	0.22%
QC value within limits for Na 589.592 Radial Recovery = 101.63%						
Ni 231.604†	19951.7	506.82 ug/L	4.392	506.82 ppb	4.392	0.87%
QC value within limits for Ni 231.604 Recovery = 101.36%						
P 214.914†	4176.6	2438.1 ug/L	9.19	2438.1 ppb	9.19	0.38%
QC value within limits for P 214.914 Recovery = 97.53%						
Pb 220.353†	4149.1	515.64 ug/L	3.662	515.64 ppb	3.662	0.71%
QC value within limits for Pb 220.353 Recovery = 103.13%						
S 181.975 Axial†	700.9	1025.9 ug/L	11.99	1025.9 ppb	11.99	1.17%
QC value within limits for S 181.975 Axial Recovery = 102.59%						
Sb 206.836†	1431.5	517.15 ug/L	3.189	517.15 ppb	3.189	0.62%
QC value within limits for Sb 206.836 Recovery = 103.43%						
Se 196.026†	757.6	516.91 ug/L	2.970	516.91 ppb	2.970	0.57%
QC value within limits for Se 196.026 Recovery = 103.38%						
Si 251.611†	78177.3	2501.7 ug/L	28.25	2501.7 ppb	28.25	1.13%
QC value within limits for Si 251.611 Recovery = 100.07%						
Sn 189.927†	2797.2	506.67 ug/L	3.701	506.67 ppb	3.701	0.73%
QC value within limits for Sn 189.927 Recovery = 101.33%						
Sr 421.552†	75851.5	502.70 ug/L	1.250	502.70 ppb	1.250	0.25%
QC value within limits for Sr 421.552 Recovery = 100.54%						
Ti 334.940†	321997.5	486.86 ug/L	5.248	486.86 ppb	5.248	1.08%
QC value within limits for Ti 334.940 Recovery = 97.37%						
Tl 190.801†	1568.7	506.68 ug/L	4.475	506.68 ppb	4.475	0.88%
QC value within limits for Tl 190.801 Recovery = 101.34%						
U 409.014†	18059.9	486.29 ug/L	6.927	486.29 ppb	6.927	1.42%
QC value within limits for U 409.014 Recovery = 97.26%						
V 292.402†	71622.2	503.94 ug/L	4.929	503.94 ppb	4.929	0.98%
QC value within limits for V 292.402 Recovery = 100.79%						
Zn 213.857†	50346.9	500.53 ug/L	5.116	500.53 ppb	5.116	1.02%
QC value within limits for Zn 213.857 Recovery = 100.11%						
SiO2†	77725.6	5326.7 ug/L	97.63	5326.7 ppb	97.63	1.83%
QC value within limits for SiO2 Recovery = 99.61%						
All analyte(s) passed QC.						

Sequence No.: 2  
 Sample ID: CCB  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 8  
 Date Collected: 2/23/2010 17:32:43  
 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	3935.7	3935.7	92.5 %		17:34:56
1	Y RADIAL	4539.1	4539.1	96.74 %		17:34:36
1	Al 396.153Radial†	-94.2	8.9	8.0821 ug/L	8.0821 ppb	17:34:36
1	Ca 317.933Radial†	15.2	0.9	1.8312 ug/L	1.8312 ppb	17:34:56
1	Fe 238.204 Radial†	11.8	2.6	33.149 ug/L	33.149 ppb	17:34:56
1	K 766.490 Radial†	2675.3	334.6	62.602 ug/L	62.602 ppb	17:34:36
1	Mg 279.077 IEC†	1.8	-0.9	-38.709 ug/L	-38.709 ppb	17:34:56
1	Na 589.592 Radial†	-720.8	-38.6	-11.215 ug/L	-11.215 ppb	17:34:36
1	Sr 421.552†	35.6	1.6	0.0109 ug/L	0.0109 ppb	17:34:36
1	Sc 361.383	915744.6	915744.6	101.74 %		17:35:52
1	Y 371.029	774721.8	774721.8	101.61 %		17:35:52
1	Ag 328.068†	274.3	40.2	0.1958 ug/L	0.1958 ppb	17:35:57
1	As 188.979†	-19.5	1.3	0.6129 ug/L	0.6129 ppb	17:36:17
1	B 249.677†	-426.7	-46.4	-1.1131 ug/L	-1.1131 ppb	17:36:17
1	Ba 233.527†	5.8	14.8	0.1169 ug/L	0.1169 ppb	17:36:17
1	Be 313.107†	-3870.5	49.0	0.0180 ug/L	0.0180 ppb	17:35:57
1	Cd 226.502†	-173.8	12.5	0.1419 ug/L	0.1419 ppb	17:36:17
1	Co 228.616†	-70.6	-7.5	-0.1558 ug/L	-0.1558 ppb	17:36:17
1	Cr 267.716†	88.5	21.0	0.2385 ug/L	0.2385 ppb	17:36:17
1	Cu 324.752†	6161.6	-21.0	-0.0613 ug/L	-0.0613 ppb	17:35:57
1	Mn 257.610†	439.8	-4.6	-0.0003 ug/L	-0.0003 ppb	17:36:17
1	Mo 202.031†	12.0	5.7	0.4194 ug/L	0.4194 ppb	17:36:17
1	Ni 231.604†	63.9	10.5	0.2678 ug/L	0.2678 ppb	17:36:17
1	P 214.914†	210.7	5.0	3.0468 ug/L	3.0468 ppb	17:36:17
1	Pb 220.353†	12.0	76.8	9.5129 ug/L	9.5129 ppb	17:36:17
1	S 181.975 Axial†	38.1	0.4	0.5467 ug/L	0.5467 ppb	17:36:17
1	Sb 206.836†	44.2	6.8	2.3767 ug/L	2.3767 ppb	17:36:17
1	Se 196.026†	-26.7	-5.5	-3.5186 ug/L	-3.5186 ppb	17:36:17
1	Si 251.611†	526.0	-17.2	-0.5569 ug/L	-0.5569 ppb	17:36:17
1	Sn 189.927†	13.5	2.8	0.5035 ug/L	0.5035 ppb	17:36:17
1	Ti 334.940†	-1380.7	-75.2	-0.1104 ug/L	-0.1104 ppb	17:35:57
1	Tl 190.801†	-43.2	-11.3	-3.6260 ug/L	-3.6260 ppb	17:36:17
1	U 409.014†	-2873.8	-8.3	-0.2290 ug/L	-0.2290 ppb	17:35:52
1	V 292.402†	-1432.9	22.1	0.1534 ug/L	0.1534 ppb	17:35:57
1	Zn 213.857†	570.5	3.1	0.0242 ug/L	0.0242 ppb	17:36:17
1	SiO2†	557.6	-3.4	-0.2458 ug/L	-0.2458 ppb	17:37:23
2	Sc Radial	3951.6	3951.6	92.9 %		17:35:21
2	Y RADIAL	4479.2	4479.2	95.46 %		17:35:01
2	Al 396.153Radial†	-127.7	-26.7	-24.210 ug/L	-24.210 ppb	17:35:01
2	Ca 317.933Radial†	19.8	5.8	11.622 ug/L	11.622 ppb	17:35:21
2	Fe 238.204 Radial†	12.3	3.1	39.980 ug/L	39.980 ppb	17:35:21
2	K 766.490 Radial†	2570.1	209.7	39.244 ug/L	39.244 ppb	17:35:01
2	Mg 279.077 IEC†	0.9	-1.8	-82.747 ug/L	-82.747 ppb	17:35:21
2	Na 589.592 Radial†	-745.3	-61.9	-17.967 ug/L	-17.967 ppb	17:35:01
2	Sr 421.552†	51.3	18.4	0.1219 ug/L	0.1219 ppb	17:35:01
2	Sc 361.383	901866.4	901866.4	100.20 %		17:36:23
2	Y 371.029	762131.7	762131.7	99.959 %		17:36:23
2	Ag 328.068†	275.8	46.0	0.2204 ug/L	0.2204 ppb	17:36:28
2	As 188.979†	-25.1	-4.5	-2.0223 ug/L	-2.0223 ppb	17:36:48
2	B 249.677†	-427.4	-53.6	-1.2851 ug/L	-1.2851 ppb	17:36:48
2	Ba 233.527†	-10.8	-1.7	-0.0127 ug/L	-0.0127 ppb	17:36:48
2	Be 313.107†	-3927.6	-66.4	-0.0253 ug/L	-0.0253 ppb	17:36:28
2	Cd 226.502†	-189.3	-5.6	-0.0684 ug/L	-0.0684 ppb	17:36:48
2	Co 228.616†	-67.3	-5.3	-0.1104 ug/L	-0.1104 ppb	17:36:48
2	Cr 267.716†	86.4	20.2	0.2295 ug/L	0.2295 ppb	17:36:48
2	Cu 324.752†	6093.6	4.3	0.0142 ug/L	0.0142 ppb	17:36:28
2	Mn 257.610†	453.2	15.4	0.0246 ug/L	0.0246 ppb	17:36:48
2	Mo 202.031†	7.3	1.3	0.0951 ug/L	0.0951 ppb	17:36:48
2	Ni 231.604†	52.0	-0.4	-0.0101 ug/L	-0.0101 ppb	17:36:48



2	P 214.914†	207.4	4.9	2.9332 ug/L	2.9332 ppb	17:36:48
2	Pb 220.353†	-8.6	56.5	6.9865 ug/L	6.9865 ppb	17:36:48
2	S 181.975 Axial†	39.2	2.1	3.1220 ug/L	3.1220 ppb	17:36:48
2	Sb 206.836†	44.6	7.8	2.7257 ug/L	2.7257 ppb	17:36:48
2	Se 196.026†	-25.0	-4.3	-2.7002 ug/L	-2.7002 ppb	17:36:48
2	Si 251.611†	546.7	11.4	0.3660 ug/L	0.3660 ppb	17:36:48
2	Sn 189.927†	10.3	-0.2	-0.0279 ug/L	-0.0279 ppb	17:36:48
2	Ti 334.940†	-1451.7	-167.0	-0.2451 ug/L	-0.2451 ppb	17:36:28
2	Tl 190.801†	-33.8	-2.6	-0.8202 ug/L	-0.8202 ppb	17:36:48
2	U 409.014†	-2757.7	64.1	1.7275 ug/L	1.7275 ppb	17:36:23
2	V 292.402†	-1481.4	-48.0	-0.3361 ug/L	-0.3361 ppb	17:36:28
2	Zn 213.857†	575.7	16.8	0.1631 ug/L	0.1631 ppb	17:36:48
2	SiO2†	574.1	21.4	1.4690 ug/L	1.4690 ppb	17:37:28
3	Sc Radial	3967.2	3967.2	93.3 %		17:35:46
3	Y RADIAL	4492.5	4492.5	95.75 %		17:35:26
3	Al 396.153Radial†	-117.2	-14.9	-13.490 ug/L	-13.490 ppb	17:35:26
3	Ca 317.933Radial†	17.7	3.5	6.9224 ug/L	6.9224 ppb	17:35:46
3	Fe 238.204 Radial†	12.3	3.0	38.084 ug/L	38.084 ppb	17:35:46
3	K 766.490 Radial†	2720.1	359.7	67.293 ug/L	67.293 ppb	17:35:26
3	Mg 279.077 IEC†	2.6	0.1	2.7160 ug/L	2.7160 ppb	17:35:46
3	Na 589.592 Radial†	-712.4	-23.4	-6.8014 ug/L	-6.8014 ppb	17:35:26
3	Sr 421.552†	48.1	14.8	0.0982 ug/L	0.0982 ppb	17:35:26
3	Sc 361.383	905862.8	905862.8	100.64 %		17:36:53
3	Y 371.029	765400.7	765400.7	100.39 %		17:36:53
3	Ag 328.068†	257.1	26.2	0.1373 ug/L	0.1373 ppb	17:36:58
3	As 188.979†	-16.9	3.8	1.7067 ug/L	1.7067 ppb	17:37:18
3	B 249.677†	-476.4	-100.4	-2.4029 ug/L	-2.4029 ppb	17:37:18
3	Ba 233.527†	-12.4	-3.2	-0.0233 ug/L	-0.0233 ppb	17:37:18
3	Be 313.107†	-3839.6	38.3	0.0141 ug/L	0.0141 ppb	17:36:58
3	Cd 226.502†	-192.1	-7.6	-0.0932 ug/L	-0.0932 ppb	17:37:18
3	Co 228.616†	-64.3	-2.0	-0.0406 ug/L	-0.0406 ppb	17:37:18
3	Cr 267.716†	58.8	-7.6	-0.0788 ug/L	-0.0788 ppb	17:37:18
3	Cu 324.752†	6041.9	-73.9	-0.2164 ug/L	-0.2164 ppb	17:36:58
3	Mn 257.610†	463.2	23.4	0.0299 ug/L	0.0299 ppb	17:37:18
3	Mo 202.031†	17.1	10.9	0.8004 ug/L	0.8004 ppb	17:37:18
3	Ni 231.604†	54.6	2.0	0.0503 ug/L	0.0503 ppb	17:37:18
3	P 214.914†	214.0	10.6	6.4522 ug/L	6.4522 ppb	17:37:18
3	Pb 220.353†	13.8	78.7	9.7517 ug/L	9.7517 ppb	17:37:18
3	S 181.975 Axial†	43.4	6.0	8.8555 ug/L	8.8555 ppb	17:37:18
3	Sb 206.836†	39.7	2.8	1.0056 ug/L	1.0056 ppb	17:37:18
3	Se 196.026†	-21.7	-0.8	-0.4206 ug/L	-0.4206 ppb	17:37:18
3	Si 251.611†	547.9	10.3	0.3195 ug/L	0.3195 ppb	17:37:18
3	Sn 189.927†	15.9	5.4	0.9792 ug/L	0.9792 ppb	17:37:18
3	Ti 334.940†	-1326.6	-36.3	-0.0514 ug/L	-0.0514 ppb	17:36:58
3	Tl 190.801†	-40.5	-9.0	-2.9021 ug/L	-2.9021 ppb	17:37:18
3	U 409.014†	-3068.7	-232.8	-6.2953 ug/L	-6.2953 ppb	17:36:53
3	V 292.402†	-1427.3	12.2	0.0788 ug/L	0.0788 ppb	17:36:58
3	Zn 213.857†	583.2	21.7	0.2125 ug/L	0.2125 ppb	17:37:18
3	SiO2†	554.2	-0.9	-0.0806 ug/L	-0.0806 ppb	17:37:33

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	907824.6	100.86 %	0.794			0.79%
Sc Radial	3951.5	92.9 %	0.37			0.40%
Y 371.029	767418.0	100.65 %	0.857			0.85%
Y RADIAL	4503.6	95.98 %	0.671			0.70%
Ag 328.068†	37.5	0.1845 ug/L	0.04268	0.1845 ppb	0.04268	23.13%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-10.9	-9.8727 ug/L	16.44711	-9.8727 ppb	16.44711	166.59%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	0.2	0.0991 ug/L	1.91687	0.0991 ppb	1.91687	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-66.8	-1.6004 ug/L	0.70031	-1.6004 ppb	0.70031	43.76%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	3.3	0.0270 ug/L	0.07807	0.0270 ppb	0.07807	289.64%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	6.9	0.0023 ug/L	0.02398	0.0023 ppb	0.02398	>999.9%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	3.4	6.7920 ug/L	4.89682	6.7920 ppb	4.89682	72.10%

QC value within limits for Ca 317.933 Radial	Recovery = Not calculated		
Cd 226.502†	-0.2 -0.0065 ug/L	0.12920 -0.0065 ppb	0.12920 >999.9%
QC value within limits for Cd 226.502	Recovery = Not calculated		
Co 228.616†	-4.9 -0.1023 ug/L	0.05806 -0.1023 ppb	0.05806 56.78%
QC value within limits for Co 228.616	Recovery = Not calculated		
Cr 267.716†	11.2 0.1297 ug/L	0.18067 0.1297 ppb	0.18067 139.28%
QC value within limits for Cr 267.716	Recovery = Not calculated		
Cu 324.752†	-30.2 -0.0878 ug/L	0.11756 -0.0878 ppb	0.11756 133.85%
QC value within limits for Cu 324.752	Recovery = Not calculated		
Fe 238.204 Radial†	2.9 37.071 ug/L	3.5268 37.071 ppb	3.5268 9.51%
QC value within limits for Fe 238.204 Radial	Recovery = Not calculated		
K 766.490 Radial†	301.3 56.379 ug/L	15.0242 56.379 ppb	15.0242 26.65%
QC value within limits for K 766.490 Radial	Recovery = Not calculated		
Mg 279.077 IEC†	-0.9 -39.580 ug/L	42.7384 -39.580 ppb	42.7384 107.98%
QC value within limits for Mg 279.077 IEC	Recovery = Not calculated		
Mn 257.610†	11.4 0.0181 ug/L	0.01609 0.0181 ppb	0.01609 89.08%
QC value within limits for Mn 257.610	Recovery = Not calculated		
Mo 202.031†	5.9 0.4383 ug/L	0.35301 0.4383 ppb	0.35301 80.54%
QC value within limits for Mo 202.031	Recovery = Not calculated		
Na 589.592 Radial†	-41.3 -11.995 ug/L	5.6236 -11.995 ppb	5.6236 46.88%
QC value within limits for Na 589.592 Radial	Recovery = Not calculated		
Ni 231.604†	4.0 0.1026 ug/L	0.14615 0.1026 ppb	0.14615 142.40%
QC value within limits for Ni 231.604	Recovery = Not calculated		
P 214.914†	6.8 4.1441 ug/L	1.99971 4.1441 ppb	1.99971 48.25%
QC value within limits for P 214.914	Recovery = Not calculated		
Pb 220.353†	70.7 8.7504 ug/L	1.53222 8.7504 ppb	1.53222 17.51%
QC value within limits for Pb 220.353	Recovery = Not calculated		
S 181.975 Axial†	2.8 4.1747 ug/L	4.25329 4.1747 ppb	4.25329 101.88%
QC value within limits for S 181.975 Axial	Recovery = Not calculated		
Sb 206.836†	5.8 2.0360 ug/L	0.90925 2.0360 ppb	0.90925 44.66%
QC value within limits for Sb 206.836	Recovery = Not calculated		
Se 196.026†	-3.5 -2.2131 ug/L	1.60538 -2.2131 ppb	1.60538 72.54%
QC value within limits for Se 196.026	Recovery = Not calculated		
Si 251.611†	1.5 0.0429 ug/L	0.51993 0.0429 ppb	0.51993 >999.9%
QC value within limits for Si 251.611	Recovery = Not calculated		
Sn 189.927†	2.7 0.4849 ug/L	0.50380 0.4849 ppb	0.50380 103.89%
QC value within limits for Sn 189.927	Recovery = Not calculated		
Sr 421.552†	11.6 0.0770 ug/L	0.05848 0.0770 ppb	0.05848 75.96%
QC value within limits for Sr 421.552	Recovery = Not calculated		
Ti 334.940†	-92.8 -0.1356 ug/L	0.09926 -0.1356 ppb	0.09926 73.19%
QC value within limits for Ti 334.940	Recovery = Not calculated		
Tl 190.801†	-7.6 -2.4494 ug/L	1.45665 -2.4494 ppb	1.45665 59.47%
QC value within limits for Tl 190.801	Recovery = Not calculated		
U 409.014†	-59.0 -1.5989 ug/L	4.18313 -1.5989 ppb	4.18313 261.62%
QC value within limits for U 409.014	Recovery = Not calculated		
V 292.402†	-4.6 -0.0346 ug/L	0.26370 -0.0346 ppb	0.26370 761.50%
QC value within limits for V 292.402	Recovery = Not calculated		
Zn 213.857†	13.9 0.1333 ug/L	0.09763 0.1333 ppb	0.09763 73.26%
QC value within limits for Zn 213.857	Recovery = Not calculated		
SiO2†	5.7 0.3809 ug/L	0.94599 0.3809 ppb	0.94599 248.37%
QC value within limits for SiO2	Recovery = Not calculated		

All analyte(s) passed QC.

Sequence No.: 4  
 Sample ID: 245806004|948071|100  
 Analyst: HSC  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 39  
 Date Collected: 2/23/2010 17:46:49  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

## Replicate Data: 245806004|948071|100

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3999.4	3999.4	94.0 %		17:48:41
1	Y RADIAL	4411.1	4411.1	94.01 %		17:48:41
1	Al 396.153Radial†	540.9	686.1	621.30 ug/L	621.30 ppb	17:48:41
1	Ca 317.933Radial†	143.0	136.6	271.77 ug/L	271.77 ppb	17:49:02
1	Fe 238.204 Radial†	105.9	102.4	1319.7 ug/L	1319.7 ppb	17:49:02
1	K 766.490 Radial†	3015.8	650.7	121.62 ug/L	121.62 ppb	17:48:41
1	Mg 279.077 IEC†	5.1	2.7	122.39 ug/L	122.39 ppb	17:49:02
1	Na 589.592 Radial†	-584.6	118.6	34.415 ug/L	34.415 ppb	17:48:41
1	Sr 421.552†	184.8	159.7	1.0566 ug/L	1.0566 ppb	17:48:41
1	Sc 361.383	887103.1	887103.1	98.560 %		17:49:58
1	Y 371.029	750509.9	750509.9	98.435 %		17:49:58
1	Ag 328.068†	258.6	33.1	0.4913 ug/L	0.4913 ppb	17:49:58
1	As 188.979†	8.6	29.3	13.779 ug/L	13.779 ppb	17:50:18
1	B 249.677†	-571.3	-206.7	-5.1496 ug/L	-5.1496 ppb	17:50:18
1	Ba 233.527†	2217.3	2258.8	17.687 ug/L	17.687 ppb	17:50:18
1	Be 313.107†	1060.2	4929.0	1.9114 ug/L	1.9114 ppb	17:49:58
1	Cd 226.502†	-174.4	6.3	-0.0447 ug/L	-0.0447 ppb	17:50:18
1	Co 228.616†	-40.9	20.4	0.3486 ug/L	0.3486 ppb	17:50:18
1	Cr 267.716†	247.1	184.7	2.1659 ug/L	2.1659 ppb	17:50:18
1	Cu 324.752†	44880.9	39459.5	118.52 ug/L	118.52 ppb	17:49:58
1	Mn 257.610†	24824.2	24750.1	27.875 ug/L	27.875 ppb	17:49:58
1	Mo 202.031†	15.1	9.2	0.7813 ug/L	0.7813 ppb	17:50:18
1	Ni 231.604†	147.7	97.6	2.4798 ug/L	2.4798 ppb	17:50:18
1	P 214.914†	309.1	111.6	43.280 ug/L	43.280 ppb	17:50:18
1	Pb 220.353†	100078.4	101605.5	12590 ug/L	12590 ppb	17:49:58
1	S 181.975 Axial†	40.0	3.5	5.0238 ug/L	5.0238 ppb	17:50:18
1	Sb 206.836†	192.2	158.3	55.078 ug/L	55.078 ppb	17:50:18
1	Se 196.026†	-30.4	-10.1	-2.5633 ug/L	-2.5633 ppb	17:50:18
1	Si 251.611†	15915.7	15614.1	500.89 ug/L	500.89 ppb	17:49:58
1	Sn 189.927†	14.0	3.8	0.6633 ug/L	0.6633 ppb	17:50:18
1	Ti 334.940†	20121.1	21696.9	32.804 ug/L	32.804 ppb	17:49:58
1	Tl 190.801†	-29.7	1.1	0.7563 ug/L	0.7563 ppb	17:50:18
1	U 409.014†	282.5	3102.9	83.688 ug/L	83.688 ppb	17:49:58
1	V 292.402†	-1207.6	205.2	1.3694 ug/L	1.3694 ppb	17:49:58
1	Zn 213.857†	2977.5	2463.3	24.344 ug/L	24.344 ppb	17:50:18
1	SiO2†	15946.6	15628.1	1073.8 ug/L	1073.8 ppb	17:51:15
2	Sc Radial	4029.2	4029.2	94.7 %		17:49:07
2	Y RADIAL	4430.8	4430.8	94.43 %		17:49:07
2	Al 396.153Radial†	522.2	662.1	599.60 ug/L	599.60 ppb	17:49:07
2	Ca 317.933Radial†	142.5	134.9	268.45 ug/L	268.45 ppb	17:49:27
2	Fe 238.204 Radial†	107.2	103.0	1326.6 ug/L	1326.6 ppb	17:49:27
2	K 766.490 Radial†	2877.1	480.5	89.793 ug/L	89.793 ppb	17:49:07
2	Mg 279.077 IEC†	3.9	1.4	60.714 ug/L	60.714 ppb	17:49:27
2	Na 589.592 Radial†	-660.4	43.2	12.526 ug/L	12.526 ppb	17:49:07
2	Sr 421.552†	206.0	180.7	1.1957 ug/L	1.1957 ppb	17:49:07
2	Sc 361.383	895212.0	895212.0	99.461 %		17:50:24
2	Y 371.029	756854.1	756854.1	99.267 %		17:50:24
2	Ag 328.068†	194.4	-33.9	0.1881 ug/L	0.1881 ppb	17:50:24
2	As 188.979†	16.2	36.8	17.185 ug/L	17.185 ppb	17:50:44
2	B 249.677†	-587.8	-218.0	-5.4199 ug/L	-5.4199 ppb	17:50:44
2	Ba 233.527†	2208.7	2229.8	17.461 ug/L	17.461 ppb	17:50:44
2	Be 313.107†	1021.2	4880.0	1.8928 ug/L	1.8928 ppb	17:50:24
2	Cd 226.502†	-166.6	15.8	0.0639 ug/L	0.0639 ppb	17:50:44
2	Co 228.616†	-39.2	22.5	0.3903 ug/L	0.3903 ppb	17:50:44
2	Cr 267.716†	261.7	197.1	2.3066 ug/L	2.3066 ppb	17:50:44
2	Cu 324.752†	45258.3	39426.4	118.42 ug/L	118.42 ppb	17:50:24
2	Mn 257.610†	24979.8	24678.3	27.797 ug/L	27.797 ppb	17:50:24
2	Mo 202.031†	6.4	0.3	0.1295 ug/L	0.1295 ppb	17:50:44
2	Ni 231.604†	139.3	87.7	2.2294 ug/L	2.2294 ppb	17:50:44

2	P 214.914†	320.5	120.1	48.488 ug/L	48.488 ppb	17:50:44
2	Pb 220.353†	100789.6	101400.8	12564 ug/L	12564 ppb	17:50:24
2	S 181.975 Axial†	40.6	3.8	5.4975 ug/L	5.4975 ppb	17:50:44
2	Sb 206.836†	178.3	142.5	49.580 ug/L	49.580 ppb	17:50:44
2	Se 196.026†	-26.2	-5.7	0.3953 ug/L	0.3953 ppb	17:50:44
2	Si 251.611†	16022.0	15574.7	499.63 ug/L	499.63 ppb	17:50:24
2	Sn 189.927†	20.6	10.3	1.8378 ug/L	1.8378 ppb	17:50:44
2	Ti 334.940†	20192.1	21583.3	32.637 ug/L	32.637 ppb	17:50:24
2	Tl 190.801†	-27.7	3.4	1.4853 ug/L	1.4853 ppb	17:50:44
2	U 409.014†	212.0	3029.4	81.699 ug/L	81.699 ppb	17:50:24
2	V 292.402†	-1189.9	234.1	1.5547 ug/L	1.5547 ppb	17:50:24
2	Zn 213.857†	2968.6	2427.0	23.980 ug/L	23.980 ppb	17:50:44
2	SiO2†	15795.5	15329.6	1053.3 ug/L	1053.3 ppb	17:51:20
3	Sc Radial	4112.4	4112.4	96.7 %		17:49:32
3	Y RADIAL	4529.9	4529.9	96.54 %		17:49:32
3	Al 396.153Radial†	533.9	663.0	600.43 ug/L	600.43 ppb	17:49:32
3	Ca 317.933Radial†	142.8	132.2	263.06 ug/L	263.06 ppb	17:49:52
3	Fe 238.204 Radial†	107.3	100.8	1298.9 ug/L	1298.9 ppb	17:49:52
3	K 766.490 Radial†	2995.0	541.0	101.11 ug/L	101.11 ppb	17:49:32
3	Mg 279.077 IEC†	6.7	4.2	188.91 ug/L	188.91 ppb	17:49:52
3	Na 589.592 Radial†	-658.2	59.6	17.286 ug/L	17.286 ppb	17:49:32
3	Sr 421.552†	161.8	130.6	0.8633 ug/L	0.8633 ppb	17:49:32
3	Sc 361.383	888085.6	888085.6	98.669 %		17:50:49
3	Y 371.029	751603.2	751603.2	98.578 %		17:50:49
3	Ag 328.068†	174.9	-52.0	0.0990 ug/L	0.0990 ppb	17:50:49
3	As 188.979†	5.9	26.5	12.524 ug/L	12.524 ppb	17:51:09
3	B 249.677†	-580.9	-215.8	-5.3630 ug/L	-5.3630 ppb	17:51:09
3	Ba 233.527†	2184.6	2223.2	17.409 ug/L	17.409 ppb	17:51:09
3	Be 313.107†	973.9	4840.3	1.8776 ug/L	1.8776 ppb	17:50:49
3	Cd 226.502†	-172.9	8.1	-0.0229 ug/L	-0.0229 ppb	17:51:09
3	Co 228.616†	-41.6	19.8	0.3345 ug/L	0.3345 ppb	17:51:09
3	Cr 267.716†	245.7	183.0	2.1473 ug/L	2.1473 ppb	17:51:09
3	Cu 324.752†	44483.4	39006.2	117.16 ug/L	117.16 ppb	17:50:49
3	Mn 257.610†	24655.5	24551.2	27.647 ug/L	27.647 ppb	17:50:49
3	Mo 202.031†	8.1	2.1	0.2572 ug/L	0.2572 ppb	17:51:09
3	Ni 231.604†	133.1	82.5	2.0979 ug/L	2.0979 ppb	17:51:09
3	P 214.914†	296.2	98.2	35.419 ug/L	35.419 ppb	17:51:09
3	Pb 220.353†	99464.0	100870.5	12498 ug/L	12498 ppb	17:50:49
3	S 181.975 Axial†	33.7	-2.9	-4.4096 ug/L	-4.4096 ppb	17:51:09
3	Sb 206.836†	175.1	140.7	48.944 ug/L	48.944 ppb	17:51:09
3	Se 196.026†	-24.3	-3.9	1.4558 ug/L	1.4558 ppb	17:51:09
3	Si 251.611†	15745.4	15423.6	494.78 ug/L	494.78 ppb	17:50:49
3	Sn 189.927†	16.2	6.0	1.0610 ug/L	1.0610 ppb	17:51:09
3	Ti 334.940†	19919.1	21469.6	32.455 ug/L	32.455 ppb	17:50:49
3	Tl 190.801†	-32.0	-1.2	-0.0006 ug/L	-0.0006 ppb	17:51:09
3	U 409.014†	169.8	2988.4	80.596 ug/L	80.596 ppb	17:50:49
3	V 292.402†	-1126.5	288.7	1.9406 ug/L	1.9406 ppb	17:50:49
3	Zn 213.857†	2972.5	2454.9	24.266 ug/L	24.266 ppb	17:51:09
3	SiO2†	15745.3	15406.2	1058.5 ug/L	1058.5 ppb	17:51:25

Mean Data: 245806004|948071|100

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	890133.6	98.897 %	0.4917			0.50%
Sc Radial	4047.0	95.1 %	1.38			1.45%
Y 371.029	752989.1	98.760 %	0.4448			0.45%
Y RADIAL	4457.3	95.00 %	1.357			1.43%
Ag 328.068†	-17.6	0.2594 ug/L	0.20565	0.2594 ppb	0.20565	79.27%
Al 396.153Radial†	670.4	607.11 ug/L	12.299	607.11 ppb	12.299	2.03%
As 188.979†	30.8	14.496 ug/L	2.4116	14.496 ppb	2.4116	16.64%
B 249.677†	-213.5	-5.3108 ug/L	0.14253	-5.3108 ppb	0.14253	2.68%
Ba 233.527†	2237.3	17.519 ug/L	0.1478	17.519 ppb	0.1478	0.84%
Be 313.107†	4883.1	1.8939 ug/L	0.01695	1.8939 ppb	0.01695	0.89%
Ca 317.933Radial†	134.6	267.76 ug/L	4.394	267.76 ppb	4.394	1.64%
Cd 226.502†	10.1	-0.0013 ug/L	0.05747	-0.0013 ppb	0.05747	>999.9%
Co 228.616†	20.9	0.3578 ug/L	0.02901	0.3578 ppb	0.02901	8.11%
Cr 267.716†	188.3	2.2066 ug/L	0.08707	2.2066 ppb	0.08707	3.95%
Cu 324.752†	39297.4	118.03 ug/L	0.759	118.03 ppb	0.759	0.64%
Fe 238.204 Radial†	102.1	1315.1 ug/L	14.44	1315.1 ppb	14.44	1.10%
K 766.490 Radial†	557.4	104.17 ug/L	16.133	104.17 ppb	16.133	15.49%

Mg 279.077 IEC†	2.8	124.01 ug/L	64.115	124.01 ppb	64.115	51.70%
Mn 257.610†	24659.8	27.773 ug/L	0.1158	27.773 ppb	0.1158	0.42%
Mo 202.031†	3.9	0.3893 ug/L	0.34542	0.3893 ppb	0.34542	88.72%
Na 589.592 Radial†	73.8	21.409 ug/L	11.5125	21.409 ppb	11.5125	53.77%
Ni 231.604†	89.3	2.2691 ug/L	0.19400	2.2691 ppb	0.19400	8.55%
P 214.914†	110.0	42.396 ug/L	6.5794	42.396 ppb	6.5794	15.52%
Pb 220.353†	101292.3	12551 ug/L	47.0	12551 ppb	47.0	0.37%
S 181.975 Axial†	1.5	2.0372 ug/L	5.58814	2.0372 ppb	5.58814	274.30%
Sb 206.836†	147.2	51.201 ug/L	3.3727	51.201 ppb	3.3727	6.59%
Se 196.026†	-6.6	-0.2374 ug/L	2.08289	-0.2374 ppb	2.08289	877.41%
Si 251.611†	15537.5	498.44 ug/L	3.224	498.44 ppb	3.224	0.65%
Sn 189.927†	6.7	1.1874 ug/L	0.59733	1.1874 ppb	0.59733	50.31%
Sr 421.552†	157.0	1.0385 ug/L	0.16691	1.0385 ppb	0.16691	16.07%
Ti 334.940†	21583.3	32.632 ug/L	0.1746	32.632 ppb	0.1746	0.53%
Tl 190.801†	1.1	0.7470 ug/L	0.74302	0.7470 ppb	0.74302	99.47%
U 409.014†	3040.2	81.994 ug/L	1.5672	81.994 ppb	1.5672	1.91%
V 292.402†	242.7	1.6215 ug/L	0.29141	1.6215 ppb	0.29141	17.97%
Zn 213.857†	2448.4	24.197 ug/L	0.1916	24.197 ppb	0.1916	0.79%
SiO2†	15454.6	1061.9 ug/L	10.64	1061.9 ppb	10.64	1.00%

Sequence No.: 5  
 Sample ID: 245806005|948071|2  
 Analyst: HSC  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 40  
 Date Collected: 2/23/2010 17:53:35  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Replicate Data: 245806005|948071|2

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4120.6	4120.6	96.9 %		17:55:27
1	Y RADIAL	5181.7	5181.7	110.4 %		17:55:27
1	Al 396.153Radial†	10805.6	11265.1	10202 ug/L	10202 ppb	17:55:27
1	Ca 317.933Radial†	1466.9	1498.8	2981.9 ug/L	2981.9 ppb	17:55:47
1	Fe 238.204 Radial†	3065.1	3153.8	40632 ug/L	40632 ppb	17:55:47
1	K 766.490 Radial†	15097.2	13027.7	2435.1 ug/L	2435.1 ppb	17:55:27
1	Mg 279.077 IEC†	45.0	43.7	1944.4 ug/L	1944.4 ppb	17:55:47
1	Na 589.592 Radial†	3759.1	4620.7	1341.0 ug/L	1341.0 ppb	17:55:27
1	Sr 421.552†	3404.3	3477.4	23.025 ug/L	23.025 ppb	17:55:27
1	Sc 361.383	924978.0	924978.0	102.77 %		17:56:45
1	Y 371.029	883916.1	883916.1	115.93 %		17:56:45
1	Ag 328.068†	-2353.8	-2519.8	1.1035 ug/L	1.1035 ppb	17:56:50
1	As 188.979†	-24.2	-3.0	13.563 ug/L	13.563 ppb	17:57:10
1	B 249.677†	-267.9	112.2	-3.9923 ug/L	-3.9923 ppb	17:56:50
1	Ba 233.527†	30933.3	30109.2	236.48 ug/L	236.48 ppb	17:56:50
1	Be 313.107†	-3736.4	217.5	1.5020 ug/L	1.5020 ppb	17:56:50
1	Cd 226.502†	151.2	330.4	-0.3420 ug/L	-0.3420 ppb	17:57:10
1	Co 228.616†	1185.8	1215.8	23.588 ug/L	23.588 ppb	17:57:10
1	Cr 267.716†	10753.1	10397.5	120.58 ug/L	120.58 ppb	17:56:50
1	Cu 324.752†	12211.5	5805.4	19.665 ug/L	19.665 ppb	17:56:50
1	Mn 257.610†	1569696.4	1526978.9	1716.0 ug/L	1716.0 ppb	17:56:45
1	Mo 202.031†	41.6	34.4	5.7099 ug/L	5.7099 ppb	17:57:10
1	Ni 231.604†	3134.7	2998.0	76.187 ug/L	76.187 ppb	17:57:10
1	P 214.914†	534.0	317.5	159.04 ug/L	159.04 ppb	17:57:10
1	Pb 220.353†	253.6	311.8	36.406 ug/L	36.406 ppb	17:57:10
1	S 181.975 Axial†	75.4	36.3	51.328 ug/L	51.328 ppb	17:57:10
1	Sb 206.836†	56.4	18.2	3.7402 ug/L	3.7402 ppb	17:57:10
1	Se 196.026†	-197.2	-171.1	13.802 ug/L	13.802 ppb	17:57:10
1	Si 251.611†	457940.6	445071.5	14278 ug/L	14278 ppb	17:56:45
1	Sn 189.927†	11.9	1.2	-1.5889 ug/L	-1.5889 ppb	17:57:10
1	Ti 334.940†	423972.9	413834.7	626.16 ug/L	626.16 ppb	17:56:45
1	Tl 190.801†	-89.7	-56.1	-4.7931 ug/L	-4.7931 ppb	17:57:10
1	U 409.014†	-8463.2	-5419.0	-151.32 ug/L	-151.32 ppb	17:56:45
1	V 292.402†	2454.1	3818.4	19.680 ug/L	19.680 ppb	17:56:50
1	Zn 213.857†	19869.2	18776.3	181.82 ug/L	181.82 ppb	17:56:50
1	SiO2†	442508.9	430038.1	29547 ug/L	29547 ppb	17:58:18
2	Sc Radial	4050.8	4050.8	95.2 %		17:55:53
2	Y RADIAL	5073.8	5073.8	108.1 %		17:55:53
2	Al 396.153Radial†	10554.1	11193.1	10137 ug/L	10137 ppb	17:55:53
2	Ca 317.933Radial†	1463.8	1521.6	3027.3 ug/L	3027.3 ppb	17:56:13
2	Fe 238.204 Radial†	3058.6	3201.5	41247 ug/L	41247 ppb	17:56:13
2	K 766.490 Radial†	14891.6	13080.3	2445.0 ug/L	2445.0 ppb	17:55:53
2	Mg 279.077 IEC†	40.8	40.1	1778.5 ug/L	1778.5 ppb	17:56:13
2	Na 589.592 Radial†	3597.8	4518.3	1311.2 ug/L	1311.2 ppb	17:55:53
2	Sr 421.552†	3287.4	3415.2	22.613 ug/L	22.613 ppb	17:55:53
2	Sc 361.383	914032.3	914032.3	101.55 %		17:57:16
2	Y 371.029	873019.4	873019.4	114.50 %		17:57:16
2	Ag 328.068†	-2345.2	-2538.7	1.2079 ug/L	1.2079 ppb	17:57:21
2	As 188.979†	-22.1	-1.3	14.463 ug/L	14.463 ppb	17:57:41
2	B 249.677†	-165.4	210.1	-1.7571 ug/L	-1.7571 ppb	17:57:21
2	Ba 233.527†	30904.4	30441.2	239.09 ug/L	239.09 ppb	17:57:21
2	Be 313.107†	-3790.8	120.4	1.4558 ug/L	1.4558 ppb	17:57:21
2	Cd 226.502†	147.4	328.5	-0.4289 ug/L	-0.4289 ppb	17:57:41
2	Co 228.616†	1162.3	1206.4	23.394 ug/L	23.394 ppb	17:57:41
2	Cr 267.716†	10681.0	10451.8	121.25 ug/L	121.25 ppb	17:57:21
2	Cu 324.752†	12202.3	5938.7	20.098 ug/L	20.098 ppb	17:57:21
2	Mn 257.610†	1543862.3	1519830.6	1708.0 ug/L	1708.0 ppb	17:57:16
2	Mo 202.031†	43.0	36.3	5.8937 ug/L	5.8937 ppb	17:57:41
2	Ni 231.604†	3066.5	2967.3	75.408 ug/L	75.408 ppb	17:57:41

2	P 214.914†	511.3	301.5	148.71 ug/L	148.71 ppb	17:57:41
2	Pb 220.353†	251.9	313.1	36.482 ug/L	36.482 ppb	17:57:41
2	S 181.975 Axial†	77.4	39.2	55.516 ug/L	55.516 ppb	17:57:41
2	Sb 206.836†	47.0	9.6	0.7480 ug/L	0.7480 ppb	17:57:41
2	Se 196.026†	-184.0	-160.5	22.753 ug/L	22.753 ppb	17:57:41
2	Si 251.611†	448960.4	441564.8	14165 ug/L	14165 ppb	17:57:16
2	Sn 189.927†	13.0	2.3	-1.4074 ug/L	-1.4074 ppb	17:57:41
2	Ti 334.940†	415990.6	410914.8	621.76 ug/L	621.76 ppb	17:57:16
2	Tl 190.801†	-79.1	-46.7	-1.8486 ug/L	-1.8486 ppb	17:57:41
2	U 409.014†	-8429.7	-5484.6	-153.16 ug/L	-153.16 ppb	17:57:16
2	V 292.402†	2472.8	3865.5	19.917 ug/L	19.917 ppb	17:57:21
2	Zn 213.857†	19887.5	19025.8	184.23 ug/L	184.23 ppb	17:57:21
2	SiO2†	445696.8	438333.8	30117 ug/L	30117 ppb	17:58:24
3	Sc Radial	4065.2	4065.2	95.6 %		17:56:18
3	Y RADIAL	5130.9	5130.9	109.4 %		17:56:18
3	Al 396.153Radial†	10563.3	11163.4	10110 ug/L	10110 ppb	17:56:18
3	Ca 317.933Radial†	1453.7	1505.5	2995.4 ug/L	2995.4 ppb	17:56:38
3	Fe 238.204 Radial†	3043.0	3173.8	40890 ug/L	40890 ppb	17:56:38
3	K 766.490 Radial†	14997.1	13135.0	2455.2 ug/L	2455.2 ppb	17:56:18
3	Mg 279.077 IEC†	42.9	42.1	1870.8 ug/L	1870.8 ppb	17:56:38
3	Na 589.592 Radial†	3580.6	4486.8	1302.1 ug/L	1302.1 ppb	17:56:18
3	Sr 421.552†	3304.4	3420.6	22.649 ug/L	22.649 ppb	17:56:18
3	Sc 361.383	909346.4	909346.4	101.03 %		17:57:47
3	Y 371.029	867673.2	867673.2	113.80 %		17:57:47
3	Ag 328.068†	-2240.3	-2446.8	1.5233 ug/L	1.5233 ppb	17:57:52
3	As 188.979†	-21.9	-1.2	14.406 ug/L	14.406 ppb	17:58:12
3	B 249.677†	-120.5	253.7	-0.6594 ug/L	-0.6594 ppb	17:57:52
3	Ba 233.527†	30991.4	30684.1	240.98 ug/L	240.98 ppb	17:57:52
3	Be 313.107†	-3805.3	86.9	1.4359 ug/L	1.4359 ppb	17:57:52
3	Cd 226.502†	170.4	352.0	-0.1195 ug/L	-0.1195 ppb	17:58:12
3	Co 228.616†	1168.9	1218.8	23.667 ug/L	23.667 ppb	17:58:12
3	Cr 267.716†	10813.5	10637.1	123.29 ug/L	123.29 ppb	17:57:52
3	Cu 324.752†	12265.3	6062.9	20.455 ug/L	20.455 ppb	17:57:52
3	Mn 257.610†	1527337.1	1511308.1	1698.4 ug/L	1698.4 ppb	17:57:47
3	Mo 202.031†	47.8	41.2	6.2246 ug/L	6.2246 ppb	17:58:12
3	Ni 231.604†	3059.1	2975.6	75.617 ug/L	75.617 ppb	17:58:12
3	P 214.914†	540.8	333.3	168.17 ug/L	168.17 ppb	17:58:12
3	Pb 220.353†	231.6	294.3	34.186 ug/L	34.186 ppb	17:58:12
3	S 181.975 Axial†	64.5	26.8	37.409 ug/L	37.409 ppb	17:58:12
3	Sb 206.836†	44.6	7.4	-0.0080 ug/L	-0.0080 ppb	17:58:12
3	Se 196.026†	-188.5	-165.9	18.057 ug/L	18.057 ppb	17:58:12
3	Si 251.611†	444135.2	439067.0	14085 ug/L	14085 ppb	17:57:47
3	Sn 189.927†	1.7	-8.7	-3.3910 ug/L	-3.3910 ppb	17:58:12
3	Ti 334.940†	411686.5	408765.5	618.50 ug/L	618.50 ppb	17:57:47
3	Tl 190.801†	-88.9	-56.8	-5.1539 ug/L	-5.1539 ppb	17:58:12
3	U 409.014†	-8530.1	-5626.8	-156.97 ug/L	-156.97 ppb	17:57:47
3	V 292.402†	2449.8	3855.2	19.900 ug/L	19.900 ppb	17:57:52
3	Zn 213.857†	19900.9	19140.0	185.43 ug/L	185.43 ppb	17:57:52
3	SiO2†	445779.3	440677.0	30278 ug/L	30278 ppb	17:58:29

## Mean Data: 245806005|948071|2

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	916118.9	101.78 %	0.891			0.88%
Sc Radial	4078.9	95.9 %	0.87			0.90%
Y 371.029	874869.6	114.75 %	1.086			0.95%
Y RADIAL	5128.8	109.3 %	1.15			1.05%
Ag 328.068†	-2501.7	1.2783 ug/L	0.21856	1.2783 ppb	0.21856	17.10%
Al 396.153Radial†	11207.2	10150 ug/L	47.4	10150 ppb	47.4	0.47%
As 188.979†	-1.8	14.144 ug/L	0.5040	14.144 ppb	0.5040	3.56%
B 249.677†	192.0	-2.1363 ug/L	1.69848	-2.1363 ppb	1.69848	79.51%
Ba 233.527†	30411.5	238.85 ug/L	2.259	238.85 ppb	2.259	0.95%
Be 313.107†	141.6	1.4646 ug/L	0.03392	1.4646 ppb	0.03392	2.32%
Ca 317.933Radial†	1508.6	3001.5 ug/L	23.28	3001.5 ppb	23.28	0.78%
Cd 226.502†	337.0	-0.2968 ug/L	0.15954	-0.2968 ppb	0.15954	53.76%
Co 228.616†	1213.7	23.550 ug/L	0.1404	23.550 ppb	0.1404	0.60%
Cr 267.716†	10495.5	121.70 ug/L	1.414	121.70 ppb	1.414	1.16%
Cu 324.752†	5935.7	20.073 ug/L	0.3957	20.073 ppb	0.3957	1.97%
Fe 238.204 Radial†	3176.4	40923 ug/L	308.9	40923 ppb	308.9	0.75%
K 766.490 Radial†	13081.0	2445.1 ug/L	10.04	2445.1 ppb	10.04	0.41%

Mg 279.077 IEC†	42.0	1864.6 ug/L	83.13	1864.6 ppb	83.13	4.46%
Mn 257.610†	1519372.5	1707.5 ug/L	8.78	1707.5 ppb	8.78	0.51%
Mo 202.031†	37.3	5.9428 ug/L	0.26083	5.9428 ppb	0.26083	4.39%
Na 589.592 Radial†	4541.9	1318.1 ug/L	20.33	1318.1 ppb	20.33	1.54%
Ni 231.604†	2980.3	75.737 ug/L	0.4034	75.737 ppb	0.4034	0.53%
P 214.914†	317.4	158.64 ug/L	9.737	158.64 ppb	9.737	6.14%
Pb 220.353†	306.4	35.691 ug/L	1.3042	35.691 ppb	1.3042	3.65%
S 181.975 Axial†	34.1	48.084 ug/L	9.4797	48.084 ppb	9.4797	19.71%
Sb 206.836†	11.7	1.4934 ug/L	1.98218	1.4934 ppb	1.98218	132.73%
Se 196.026†	-165.8	18.204 ug/L	4.4774	18.204 ppb	4.4774	24.60%
Si 251.611†	441901.1	14176 ug/L	96.8	14176 ppb	96.8	0.68%
Sn 189.927†	-1.7	-2.1291 ug/L	1.09662	-2.1291 ppb	1.09662	51.51%
Sr 421.552†	3437.7	22.762 ug/L	0.2283	22.762 ppb	0.2283	1.00%
Ti 334.940†	411171.7	622.14 ug/L	3.843	622.14 ppb	3.843	0.62%
Tl 190.801†	-53.2	-3.9319 ug/L	1.81319	-3.9319 ppb	1.81319	46.12%
U 409.014†	-5510.1	-153.82 ug/L	2.881	-153.82 ppb	2.881	1.87%
V 292.402†	3846.4	19.832 ug/L	0.1321	19.832 ppb	0.1321	0.67%
Zn 213.857†	18980.7	183.83 ug/L	1.841	183.83 ppb	1.841	1.00%
SiO2†	436349.6	29981 ug/L	384.1	29981 ppb	384.1	1.28%



## =====

Analysis Begun

Start Time: 2/23/2010 17:59:26      Plasma On Time: 2/22/2010 05:55:10  
 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\022310C.sif  
 Batch ID:  
 Results Data Set: 022310A  
 Results Library: C:\pe\Optima3\Results\Results.mdb

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Sequence No.: 1      Autosampler Location: 41  
 Sample ID: 245806008|948071|2      Date Collected: 2/23/2010 17:59:27  
 Analyst: HSC      Data Type: Original  
 Initial Sample Wt:      Initial Sample Vol:  
 Dilution:      Sample Prep Vol:

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Replicate Data: 245806008|948071|2

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4132.7	4132.7	97.2 %		18:01:20
1	Y RADIAL	5046.6	5046.6	107.6 %		18:01:20
1	Al 396.153Radial†	11139.7	11576.1	10484 ug/L	10484 ppb	18:01:20
1	Ca 317.933Radial†	1825.8	1863.7	3708.0 ug/L	3708.0 ppb	18:01:40
1	Fe 238.204 Radial†	3061.1	3140.3	40460 ug/L	40460 ppb	18:01:40
1	K 766.490 Radial†	15646.0	13546.6	2532.3 ug/L	2532.3 ppb	18:01:20
1	Mg 279.077 IEC†	46.4	45.0	2002.7 ug/L	2002.7 ppb	18:01:40
1	Na 589.592 Radial†	3175.4	4008.6	1163.3 ug/L	1163.3 ppb	18:01:20
1	Sr 421.552†	4651.3	4750.5	31.458 ug/L	31.458 ppb	18:01:20
1	Sc 361.383	903304.9	903304.9	100.36 %		18:02:37
1	Y 371.029	832007.1	832007.1	109.12 %		18:02:37
1	Ag 328.068†	-2323.5	-2544.5	0.9319 ug/L	0.9319 ppb	18:02:42
1	As 188.979†	-41.1	-20.4	7.7389 ug/L	7.7389 ppb	18:03:02
1	B 249.677†	17.8	390.6	2.5597 ug/L	2.5597 ppb	18:02:42
1	Ba 233.527†	18770.4	18712.2	147.47 ug/L	147.47 ppb	18:02:42
1	Be 313.107†	-7618.0	-3737.4	0.5623 ug/L	0.5623 ppb	18:02:42
1	Cd 226.502†	143.5	326.3	-0.3847 ug/L	-0.3847 ppb	18:03:02
1	Co 228.616†	3180.3	3230.8	65.202 ug/L	65.202 ppb	18:03:02
1	Cr 267.716†	6888.1	6797.4	80.181 ug/L	80.181 ppb	18:02:42
1	Cu 324.752†	13238.1	7113.5	23.566 ug/L	23.566 ppb	18:02:42
1	Mn 257.610†	893082.5	889440.7	1001.1 ug/L	1001.1 ppb	18:02:37
1	Mo 202.031†	37.5	31.3	5.4721 ug/L	5.4721 ppb	18:03:02
1	Ni 231.604†	1898.2	1839.0	46.703 ug/L	46.703 ppb	18:03:02
1	P 214.914†	575.9	371.8	191.38 ug/L	191.38 ppb	18:03:02
1	Pb 220.353†	202.8	267.1	30.953 ug/L	30.953 ppb	18:03:02
1	S 181.975 Axial†	110.8	73.4	105.57 ug/L	105.57 ppb	18:03:02
1	Sb 206.836†	41.1	4.3	-1.9277 ug/L	-1.9277 ppb	18:03:02
1	Se 196.026†	-179.9	-158.5	21.580 ug/L	21.580 ppb	18:03:02
1	Si 251.611†	392535.5	390592.7	12530 ug/L	12530 ppb	18:02:37
1	Sn 189.927†	3.2	-7.3	-2.9824 ug/L	-2.9824 ppb	18:03:02
1	Ti 334.940†	570178.8	569414.4	861.55 ug/L	861.55 ppb	18:02:37
1	Tl 190.801†	-68.9	-37.4	-0.4567 ug/L	-0.4567 ppb	18:03:02
1	U 409.014†	-7084.3	-4242.6	-119.42 ug/L	-119.42 ppb	18:02:37
1	V 292.402†	3510.0	4927.8	27.232 ug/L	27.232 ppb	18:02:42
1	Zn 213.857†	16697.5	16079.9	154.97 ug/L	154.97 ppb	18:02:42
1	SiO2†	395023.1	393054.0	27006 ug/L	27006 ppb	18:04:09
2	Sc Radial	4079.0	4079.0	95.9 %		18:01:45
2	Y RADIAL	4996.9	4996.9	106.5 %		18:01:45
2	Al 396.153Radial†	11049.8	11633.3	10536 ug/L	10536 ppb	18:01:45
2	Ca 317.933Radial†	1811.2	1873.2	3726.9 ug/L	3726.9 ppb	18:02:05
2	Fe 238.204 Radial†	3040.2	3160.0	40714 ug/L	40714 ppb	18:02:05
2	K 766.490 Radial†	15492.7	13598.7	2542.1 ug/L	2542.1 ppb	18:01:45
2	Mg 279.077 IEC†	41.0	40.0	1776.5 ug/L	1776.5 ppb	18:02:05
2	Na 589.592 Radial†	3071.6	3943.4	1144.4 ug/L	1144.4 ppb	18:01:45
2	Sr 421.552†	4622.2	4783.2	31.675 ug/L	31.675 ppb	18:01:45
2	Sc 361.383	911960.2	911960.2	101.32 %		18:03:08
2	Y 371.029	838808.0	838808.0	110.02 %		18:03:08

2	Ag 328.068†	-2432.5	-2630.1	0.6097 ug/L	0.6097 ppb	18:03:13
2	As 188.979†	-41.3	-20.2	7.8972 ug/L	7.8972 ppb	18:03:33
2	B 249.677†	117.9	489.3	4.8744 ug/L	4.8744 ppb	18:03:13
2	Ba 233.527†	18720.5	18485.4	145.70 ug/L	145.70 ppb	18:03:13
2	Be 313.107†	-7695.6	-3741.9	0.5659 ug/L	0.5659 ppb	18:03:13
2	Cd 226.502†	150.2	331.6	-0.3487 ug/L	-0.3487 ppb	18:03:33
2	Co 228.616†	3191.9	3212.2	64.802 ug/L	64.802 ppb	18:03:33
2	Cr 267.716†	6919.5	6763.3	79.819 ug/L	79.819 ppb	18:03:13
2	Cu 324.752†	13388.5	7136.8	23.648 ug/L	23.648 ppb	18:03:13
2	Mn 257.610†	904510.9	892274.2	1004.4 ug/L	1004.4 ppb	18:03:08
2	Mo 202.031†	28.2	21.8	4.7972 ug/L	4.7972 ppb	18:03:33
2	Ni 231.604†	1902.7	1825.6	46.361 ug/L	46.361 ppb	18:03:33
2	P 214.914†	563.0	353.6	180.13 ug/L	180.13 ppb	18:03:33
2	Pb 220.353†	232.3	294.3	34.301 ug/L	34.301 ppb	18:03:33
2	S 181.975 Axial†	110.4	72.0	103.45 ug/L	103.45 ppb	18:03:33
2	Sb 206.836†	37.7	0.5	-3.2676 ug/L	-3.2676 ppb	18:03:33
2	Se 196.026†	-177.9	-154.9	24.774 ug/L	24.774 ppb	18:03:33
2	Si 251.611†	397265.4	391548.7	12561 ug/L	12561 ppb	18:03:08
2	Sn 189.927†	4.5	-6.0	-2.7584 ug/L	-2.7584 ppb	18:03:33
2	Ti 334.940†	577183.1	570935.2	863.87 ug/L	863.87 ppb	18:03:08
2	Tl 190.801†	-78.4	-46.2	-3.2255 ug/L	-3.2255 ppb	18:03:33
2	U 409.014†	-7058.8	-4150.5	-116.96 ug/L	-116.96 ppb	18:03:08
2	V 292.402†	3368.5	4755.0	25.983 ug/L	25.983 ppb	18:03:13
2	Zn 213.857†	16693.8	15918.3	153.31 ug/L	153.31 ppb	18:03:13
2	SiO2†	393972.0	388280.9	26678 ug/L	26678 ppb	18:04:15
3	Sc Radial	4108.6	4108.6	96.6 %		18:02:10
3	Y RADIAL	4983.2	4983.2	106.2 %		18:02:10
3	Al 396.153Radial†	11087.9	11589.8	10496 ug/L	10496 ppb	18:02:10
3	Ca 317.933Radial†	1815.4	1864.0	3708.5 ug/L	3708.5 ppb	18:02:30
3	Fe 238.204 Radial†	3038.8	3135.8	40402 ug/L	40402 ppb	18:02:30
3	K 766.490 Radial†	15536.2	13527.5	2528.7 ug/L	2528.7 ppb	18:02:10
3	Mg 279.077 IEC†	40.6	39.3	1743.7 ug/L	1743.7 ppb	18:02:30
3	Na 589.592 Radial†	3183.8	4036.4	1171.4 ug/L	1171.4 ppb	18:02:10
3	Sr 421.552†	4667.5	4795.4	31.756 ug/L	31.756 ppb	18:02:10
3	Sc 361.383	900492.3	900492.3	100.05 %		18:03:38
3	Y 371.029	829467.6	829467.6	108.79 %		18:03:38
3	Ag 328.068†	-2369.3	-2597.5	0.6666 ug/L	0.6666 ppb	18:03:43
3	As 188.979†	-35.0	-14.4	10.395 ug/L	10.395 ppb	18:04:03
3	B 249.677†	-15.3	357.7	1.7823 ug/L	1.7823 ppb	18:03:43
3	Ba 233.527†	18525.3	18525.7	146.01 ug/L	146.01 ppb	18:03:43
3	Be 313.107†	-7613.1	-3756.2	0.5517 ug/L	0.5517 ppb	18:03:43
3	Cd 226.502†	157.1	340.3	-0.2155 ug/L	-0.2155 ppb	18:04:03
3	Co 228.616†	3176.7	3237.1	65.334 ug/L	65.334 ppb	18:04:03
3	Cr 267.716†	6813.7	6744.5	79.579 ug/L	79.579 ppb	18:03:43
3	Cu 324.752†	13152.2	7068.9	23.429 ug/L	23.429 ppb	18:03:43
3	Mn 257.610†	889614.2	888753.3	1000.4 ug/L	1000.4 ppb	18:03:38
3	Mo 202.031†	16.6	10.5	3.9505 ug/L	3.9505 ppb	18:04:03
3	Ni 231.604†	1874.0	1820.8	46.241 ug/L	46.241 ppb	18:04:03
3	P 214.914†	564.0	361.7	185.29 ug/L	185.29 ppb	18:04:03
3	Pb 220.353†	221.7	286.7	33.380 ug/L	33.380 ppb	18:04:03
3	S 181.975 Axial†	107.4	70.3	101.05 ug/L	101.05 ppb	18:04:03
3	Sb 206.836†	55.4	18.7	3.0563 ug/L	3.0563 ppb	18:04:03
3	Se 196.026†	-184.2	-163.5	18.139 ug/L	18.139 ppb	18:04:03
3	Si 251.611†	390346.5	389626.3	12499 ug/L	12499 ppb	18:03:38
3	Sn 189.927†	-1.2	-11.7	-3.7712 ug/L	-3.7712 ppb	18:04:03
3	Ti 334.940†	567351.7	568363.1	859.99 ug/L	859.99 ppb	18:03:38
3	Tl 190.801†	-67.4	-36.1	-0.0571 ug/L	-0.0571 ppb	18:04:03
3	U 409.014†	-7040.6	-4221.0	-118.83 ug/L	-118.83 ppb	18:03:38
3	V 292.402†	3369.0	4797.9	26.314 ug/L	26.314 ppb	18:03:43
3	Zn 213.857†	16526.0	15960.5	153.78 ug/L	153.78 ppb	18:03:43
3	SiO2†	393707.9	392968.7	27000 ug/L	27000 ppb	18:04:20

Mean Data: 245806008|948071|2

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	905252.5	100.58 %	0.664			0.66%
Sc Radial	4106.8	96.5 %	0.63			0.65%
Y 371.029	833427.5	109.31 %	0.633			0.58%
Y RADIAL	5008.9	106.8 %	0.71			0.67%
Ag 328.068†	-2590.7	0.7361 ug/L	0.17198	0.7361 ppb	0.17198	23.36%

Al 396.153Radial†	11599.8	10505 ug/L	27.1	10505 ppb	27.1	0.26%
As 188.979†	-18.4	8.6771 ug/L	1.49013	8.6771 ppb	1.49013	17.17%
B 249.677†	412.5	3.0721 ug/L	1.60846	3.0721 ppb	1.60846	52.36%
Ba 233.527†	18574.4	146.39 ug/L	0.944	146.39 ppb	0.944	0.64%
Be 313.107†	-3745.2	0.5600 ug/L	0.00736	0.5600 ppb	0.00736	1.31%
Ca 317.933Radial†	1867.0	3714.5 ug/L	10.80	3714.5 ppb	10.80	0.29%
Cd 226.502†	332.7	-0.3163 ug/L	0.08914	-0.3163 ppb	0.08914	28.18%
Co 228.616†	3226.7	65.113 ug/L	0.2770	65.113 ppb	0.2770	0.43%
Cr 267.716†	6768.4	79.860 ug/L	0.3027	79.860 ppb	0.3027	0.38%
Cu 324.752†	7106.4	23.548 ug/L	0.1109	23.548 ppb	0.1109	0.47%
Fe 238.204 Radial†	3145.4	40525 ug/L	165.9	40525 ppb	165.9	0.41%
K 766.490 Radial†	13557.6	2534.4 ug/L	6.90	2534.4 ppb	6.90	0.27%
Mg 279.077 IEC†	41.4	1841.0 ug/L	141.05	1841.0 ppb	141.05	7.66%
Mn 257.610†	890156.1	1002.0 ug/L	2.11	1002.0 ppb	2.11	0.21%
Mo 202.031†	21.2	4.7399 ug/L	0.76239	4.7399 ppb	0.76239	16.08%
Na 589.592 Radial†	3996.1	1159.7 ug/L	13.86	1159.7 ppb	13.86	1.19%
Ni 231.604†	1828.5	46.435 ug/L	0.2399	46.435 ppb	0.2399	0.52%
P 214.914†	362.4	185.60 ug/L	5.630	185.60 ppb	5.630	3.03%
Pb 220.353†	282.7	32.878 ug/L	1.7300	32.878 ppb	1.7300	5.26%
S 181.975 Axial†	71.9	103.36 ug/L	2.262	103.36 ppb	2.262	2.19%
Sb 206.836†	7.8	-0.7130 ug/L	3.33238	-0.7130 ppb	3.33238	467.37%
Se 196.026†	-159.0	21.498 ug/L	3.3181	21.498 ppb	3.3181	15.43%
Si 251.611†	390589.2	12530 ug/L	30.8	12530 ppb	30.8	0.25%
Sn 189.927†	-8.3	-3.1707 ug/L	0.53200	-3.1707 ppb	0.53200	16.78%
Sr 421.552†	4776.4	31.629 ug/L	0.1539	31.629 ppb	0.1539	0.49%
Ti 334.940†	569570.9	861.80 ug/L	1.957	861.80 ppb	1.957	0.23%
Tl 190.801†	-39.9	-1.2464 ug/L	1.72554	-1.2464 ppb	1.72554	138.44%
U 409.014†	-4204.7	-118.40 ug/L	1.285	-118.40 ppb	1.285	1.09%
V 292.402†	4826.9	26.510 ug/L	0.6468	26.510 ppb	0.6468	2.44%
Zn 213.857†	15986.2	154.02 ug/L	0.854	154.02 ppb	0.854	0.55%
SiO2†	391434.5	26895 ug/L	187.7	26895 ppb	187.7	0.70%

Sequence No.: 7

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 2/23/2010 18:40:32

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	3876.0	3876.0	91.1 %		18:42:44
1	Y RADIAL	4433.9	4433.9	94.50 %		18:42:23
1	Al 396.153Radial†	5244.9	5866.6	5288.6 ug/L	5288.6 ppb	18:42:23
1	Ca 317.933Radial†	2448.5	2671.6	5315.3 ug/L	5315.3 ppb	18:42:44
1	Fe 238.204 Radial†	375.4	401.8	5191.4 ug/L	5191.4 ppb	18:42:44
1	K 766.490 Radial†	28460.4	28676.2	5358.3 ug/L	5358.3 ppb	18:42:23
1	Mg 279.077 IEC†	108.5	116.3	5286.4 ug/L	5286.4 ppb	18:42:44
1	Na 589.592 Radial†	32141.1	36012.5	10451 ug/L	10451 ppb	18:42:23
1	Sr 421.552†	72080.3	79065.4	523.99 ug/L	523.99 ppb	18:42:23
1	Sc 361.383	894270.7	894270.7	99.356 %		18:43:41
1	Y 371.029	746702.0	746702.0	97.936 %		18:43:41
1	Ag 328.068†	107923.5	108393.2	500.91 ug/L	500.91 ppb	18:43:46
1	As 188.979†	1097.0	1124.6	511.13 ug/L	511.13 ppb	18:44:06
1	B 249.677†	19539.4	20038.9	475.97 ug/L	475.97 ppb	18:43:46
1	Ba 233.527†	63215.7	63634.3	498.29 ug/L	498.29 ppb	18:43:46
1	Be 313.107†	1315242.7	1327615.1	495.86 ug/L	495.86 ppb	18:43:41
1	Cd 226.502†	42799.5	43260.0	502.01 ug/L	502.01 ppb	18:43:46
1	Co 228.616†	23624.2	23839.1	498.52 ug/L	498.52 ppb	18:43:46
1	Cr 267.716†	44243.5	44464.1	499.70 ug/L	499.70 ppb	18:43:46
1	Cu 324.752†	167595.7	162604.2	488.29 ug/L	488.29 ppb	18:43:46
1	Mn 257.610†	437336.6	439732.5	493.32 ug/L	493.32 ppb	18:43:41
1	Mo 202.031†	6841.9	6880.2	503.98 ug/L	503.98 ppb	18:44:06
1	Ni 231.604†	19695.8	19771.1	502.24 ug/L	502.24 ppb	18:43:46
1	P 214.914†	4329.0	4155.0	2426.2 ug/L	2426.2 ppb	18:44:06
1	Pb 220.353†	4027.4	4118.5	511.90 ug/L	511.90 ppb	18:44:06
1	S 181.975 Axial†	726.2	693.9	1015.5 ug/L	1015.5 ppb	18:44:06
1	Sb 206.836†	1467.4	1440.2	520.20 ug/L	520.20 ppb	18:44:06
1	Se 196.026†	735.3	760.8	519.23 ug/L	519.23 ppb	18:44:06
1	Si 251.611†	77282.8	77249.3	2471.9 ug/L	2471.9 ppb	18:43:46
1	Sn 189.927†	2789.9	2797.6	506.76 ug/L	506.76 ppb	18:44:06
1	Ti 334.940†	315176.4	318499.7	481.60 ug/L	481.60 ppb	18:43:46
1	Tl 190.801†	1516.8	1557.8	503.17 ug/L	503.17 ppb	18:44:06
1	U 409.014†	14881.6	17794.3	479.11 ug/L	479.11 ppb	18:43:46
1	V 292.402†	69209.6	71088.3	500.23 ug/L	500.23 ppb	18:43:46
1	Zn 213.857†	50032.4	49798.8	495.05 ug/L	495.05 ppb	18:43:46
1	SiO2†	76912.7	76859.4	5267.2 ug/L	5267.2 ppb	18:45:14
2	Sc Radial	3835.6	3835.6	90.2 %		18:43:09
2	Y RADIAL	4397.5	4397.5	93.72 %		18:42:49
2	Al 396.153Radial†	5209.8	5888.2	5308.5 ug/L	5308.5 ppb	18:42:49
2	Ca 317.933Radial†	2427.0	2676.0	5324.1 ug/L	5324.1 ppb	18:43:09
2	Fe 238.204 Radial†	372.7	403.1	5208.6 ug/L	5208.6 ppb	18:43:09
2	K 766.490 Radial†	28163.0	28674.8	5358.1 ug/L	5358.1 ppb	18:42:49
2	Mg 279.077 IEC†	109.6	118.8	5397.6 ug/L	5397.6 ppb	18:43:09
2	Na 589.592 Radial†	31781.9	35985.2	10443 ug/L	10443 ppb	18:42:49
2	Sr 421.552†	71346.9	79084.1	524.12 ug/L	524.12 ppb	18:42:49
2	Sc 361.383	904171.8	904171.8	100.46 %		18:44:12
2	Y 371.029	753473.3	753473.3	98.824 %		18:44:12
2	Ag 328.068†	109499.4	108772.5	502.65 ug/L	502.65 ppb	18:44:17
2	As 188.979†	1088.7	1104.2	501.96 ug/L	501.96 ppb	18:44:37
2	B 249.677†	19925.5	20207.9	480.00 ug/L	480.00 ppb	18:44:17
2	Ba 233.527†	63813.0	63532.2	497.50 ug/L	497.50 ppb	18:44:17
2	Be 313.107†	1330846.4	1328652.2	496.25 ug/L	496.25 ppb	18:44:12
2	Cd 226.502†	43425.5	43411.5	503.76 ug/L	503.76 ppb	18:44:17
2	Co 228.616†	23936.7	23889.9	499.57 ug/L	499.57 ppb	18:44:17
2	Cr 267.716†	44739.0	44469.8	499.77 ug/L	499.77 ppb	18:44:17
2	Cu 324.752†	170004.5	163154.8	489.95 ug/L	489.95 ppb	18:44:17
2	Mn 257.610†	443913.5	441459.5	495.25 ug/L	495.25 ppb	18:44:12
2	Mo 202.031†	6835.2	6798.0	497.97 ug/L	497.97 ppb	18:44:37
2	Ni 231.604†	19946.2	19803.2	503.06 ug/L	503.06 ppb	18:44:17

2	P 214.914†	4315.4	4093.7	2388.5 ug/L	2388.5 ppb	18:44:37
2	Pb 220.353†	4017.5	4064.3	505.17 ug/L	505.17 ppb	18:44:37
2	S 181.975 Axial†	736.0	695.6	1018.0 ug/L	1018.0 ppb	18:44:37
2	Sb 206.836†	1440.1	1396.8	504.83 ug/L	504.83 ppb	18:44:37
2	Se 196.026†	727.2	744.6	508.63 ug/L	508.63 ppb	18:44:37
2	Si 251.611†	78315.0	77425.0	2477.7 ug/L	2477.7 ppb	18:44:17
2	Sn 189.927†	2772.2	2749.1	498.00 ug/L	498.00 ppb	18:44:37
2	Ti 334.940†	319174.5	319006.0	482.36 ug/L	482.36 ppb	18:44:17
2	Tl 190.801†	1532.6	1556.9	502.87 ug/L	502.87 ppb	18:44:37
2	U 409.014†	15181.7	17928.9	482.74 ug/L	482.74 ppb	18:44:17
2	V 292.402†	70083.7	71195.6	500.89 ug/L	500.89 ppb	18:44:17
2	Zn 213.857†	50712.4	49924.3	496.30 ug/L	496.30 ppb	18:44:17
2	SiO2†	78177.8	77271.0	5295.6 ug/L	5295.6 ppb	18:45:19
3	Sc Radial	3890.9	3890.9	91.5 %		18:43:34
3	Y RADIAL	4402.1	4402.1	93.82 %		18:43:14
3	Al 396.153Radial†	5185.7	5779.8	5210.2 ug/L	5210.2 ppb	18:43:14
3	Ca 317.933Radial†	2458.7	2672.4	5316.9 ug/L	5316.9 ppb	18:43:34
3	Fe 238.204 Radial†	379.8	405.1	5233.4 ug/L	5233.4 ppb	18:43:34
3	K 766.490 Radial†	28197.2	28268.7	5282.2 ug/L	5282.2 ppb	18:43:14
3	Mg 279.077 IEC†	113.5	121.3	5514.7 ug/L	5514.7 ppb	18:43:34
3	Na 589.592 Radial†	31585.0	35269.4	10235 ug/L	10235 ppb	18:43:14
3	Sr 421.552†	71272.6	77879.2	516.13 ug/L	516.13 ppb	18:43:14
3	Sc 361.383	898710.2	898710.2	99.850 %		18:44:43
3	Y 371.029	749591.0	749591.0	98.314 %		18:44:43
3	Ag 328.068†	107910.1	107843.3	498.38 ug/L	498.38 ppb	18:44:48
3	As 188.979†	1086.3	1108.5	503.86 ug/L	503.86 ppb	18:45:08
3	B 249.677†	19712.5	20115.1	477.79 ug/L	477.79 ppb	18:44:48
3	Ba 233.527†	63138.5	63242.7	495.23 ug/L	495.23 ppb	18:44:48
3	Be 313.107†	1321927.0	1327770.4	495.91 ug/L	495.91 ppb	18:44:43
3	Cd 226.502†	42810.1	43057.8	499.65 ug/L	499.65 ppb	18:44:48
3	Co 228.616†	23691.2	23788.8	497.47 ug/L	497.47 ppb	18:44:48
3	Cr 267.716†	44301.1	44301.8	497.88 ug/L	497.88 ppb	18:44:48
3	Cu 324.752†	167388.6	161563.5	485.17 ug/L	485.17 ppb	18:44:48
3	Mn 257.610†	440914.2	441141.2	494.89 ug/L	494.89 ppb	18:44:43
3	Mo 202.031†	6830.2	6834.5	500.63 ug/L	500.63 ppb	18:45:08
3	Ni 231.604†	19607.2	19584.4	497.49 ug/L	497.49 ppb	18:44:48
3	P 214.914†	4306.9	4111.4	2400.2 ug/L	2400.2 ppb	18:45:08
3	Pb 220.353†	4029.0	4100.1	509.60 ug/L	509.60 ppb	18:45:08
3	S 181.975 Axial†	722.8	686.8	1005.2 ug/L	1005.2 ppb	18:45:08
3	Sb 206.836†	1455.7	1421.2	513.45 ug/L	513.45 ppb	18:45:08
3	Se 196.026†	723.9	745.7	509.41 ug/L	509.41 ppb	18:45:08
3	Si 251.611†	77190.6	76772.6	2456.7 ug/L	2456.7 ppb	18:44:48
3	Sn 189.927†	2784.7	2778.4	503.30 ug/L	503.30 ppb	18:45:08
3	Ti 334.940†	314844.3	316600.1	478.71 ug/L	478.71 ppb	18:44:48
3	Tl 190.801†	1503.5	1537.0	496.47 ug/L	496.47 ppb	18:45:08
3	U 409.014†	14927.0	17765.7	478.34 ug/L	478.34 ppb	18:44:48
3	V 292.402†	69195.2	70729.8	497.69 ug/L	497.69 ppb	18:44:48
3	Zn 213.857†	50054.4	49572.0	492.81 ug/L	492.81 ppb	18:44:48
3	SiO2†	76743.7	76307.7	5229.4 ug/L	5229.4 ppb	18:45:24

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	899050.9	99.888 %	0.5510			0.55%
Sc Radial	3867.5	90.9 %	0.67			0.74%
Y 371.029	749922.1	98.358 %	0.4456			0.45%
Y RADIAL	4411.2	94.01 %	0.422			0.45%
Ag 328.068†	108336.3	500.65 ug/L	2.146	500.65 ppb	2.146	0.43%
QC value within limits for Ag 328.068 Recovery = 100.13%						
Al 396.153Radial†	5844.9	5269.1 ug/L	51.94	5269.1 ppb	51.94	0.99%
QC value within limits for Al 396.153Radial Recovery = 105.38%						
As 188.979†	1112.5	505.65 ug/L	4.839	505.65 ppb	4.839	0.96%
QC value within limits for As 188.979 Recovery = 101.13%						
B 249.677†	20120.6	477.92 ug/L	2.017	477.92 ppb	2.017	0.42%
QC value within limits for B 249.677 Recovery = 95.58%						
Ba 233.527†	63469.7	497.01 ug/L	1.589	497.01 ppb	1.589	0.32%
QC value within limits for Ba 233.527 Recovery = 99.40%						
Be 313.107†	1328012.6	496.01 ug/L	0.211	496.01 ppb	0.211	0.04%
QC value within limits for Be 313.107 Recovery = 99.20%						
Ca 317.933Radial†	2673.3	5318.8 ug/L	4.66	5318.8 ppb	4.66	0.09%

QC value within limits for Ca 317.933 Radial Recovery = 106.38%

Cd 226.502†	43243.1	501.81 ug/L	2.063	501.81 ppb	2.063	0.41%
QC value within limits for Cd 226.502 Recovery = 100.36%						
Co 228.616†	23839.3	498.52 ug/L	1.051	498.52 ppb	1.051	0.21%
QC value within limits for Co 228.616 Recovery = 99.70%						
Cr 267.716†	44411.9	499.12 ug/L	1.070	499.12 ppb	1.070	0.21%
QC value within limits for Cr 267.716 Recovery = 99.82%						
Cu 324.752†	162440.8	487.80 ug/L	2.425	487.80 ppb	2.425	0.50%
QC value within limits for Cu 324.752 Recovery = 97.56%						
Fe 238.204 Radial†	403.3	5211.1 ug/L	21.12	5211.1 ppb	21.12	0.41%
QC value within limits for Fe 238.204 Radial Recovery = 104.22%						
K 766.490 Radial†	28539.9	5332.8 ug/L	43.89	5332.8 ppb	43.89	0.82%
QC value within limits for K 766.490 Radial Recovery = 106.66%						
Mg 279.077 IEC†	118.8	5399.6 ug/L	114.17	5399.6 ppb	114.17	2.11%
QC value within limits for Mg 279.077 IEC Recovery = 107.99%						
Mn 257.610†	440777.7	494.49 ug/L	1.028	494.49 ppb	1.028	0.21%
QC value within limits for Mn 257.610 Recovery = 98.90%						
Mo 202.031†	6837.6	500.86 ug/L	3.011	500.86 ppb	3.011	0.60%
QC value within limits for Mo 202.031 Recovery = 100.17%						
Na 589.592 Radial†	35755.7	10376 ug/L	122.3	10376 ppb	122.3	1.18%
QC value within limits for Na 589.592 Radial Recovery = 103.76%						
Ni 231.604†	19719.6	500.93 ug/L	3.003	500.93 ppb	3.003	0.60%
QC value within limits for Ni 231.604 Recovery = 100.19%						
P 214.914†	4120.0	2405.0 ug/L	19.26	2405.0 ppb	19.26	0.80%
QC value within limits for P 214.914 Recovery = 96.20%						
Pb 220.353†	4094.3	508.89 ug/L	3.419	508.89 ppb	3.419	0.67%
QC value within limits for Pb 220.353 Recovery = 101.78%						
S 181.975 Axial†	692.1	1012.9 ug/L	6.80	1012.9 ppb	6.80	0.67%
QC value within limits for S 181.975 Axial Recovery = 101.29%						
Sb 206.836†	1419.4	512.83 ug/L	7.705	512.83 ppb	7.705	1.50%
QC value within limits for Sb 206.836 Recovery = 102.57%						
Se 196.026†	750.4	512.42 ug/L	5.908	512.42 ppb	5.908	1.15%
QC value within limits for Se 196.026 Recovery = 102.48%						
Si 251.611†	77149.0	2468.8 ug/L	10.84	2468.8 ppb	10.84	0.44%
QC value within limits for Si 251.611 Recovery = 98.75%						
Sn 189.927†	2775.1	502.68 ug/L	4.412	502.68 ppb	4.412	0.88%
QC value within limits for Sn 189.927 Recovery = 100.54%						
Sr 421.552†	78676.2	521.42 ug/L	4.575	521.42 ppb	4.575	0.88%
QC value within limits for Sr 421.552 Recovery = 104.28%						
Ti 334.940†	318035.3	480.89 ug/L	1.925	480.89 ppb	1.925	0.40%
QC value within limits for Ti 334.940 Recovery = 96.18%						
Tl 190.801†	1550.6	500.83 ug/L	3.783	500.83 ppb	3.783	0.76%
QC value within limits for Tl 190.801 Recovery = 100.17%						
U 409.014†	17829.6	480.06 ug/L	2.354	480.06 ppb	2.354	0.49%
QC value within limits for U 409.014 Recovery = 96.01%						
V 292.402†	71004.6	499.60 ug/L	1.689	499.60 ppb	1.689	0.34%
QC value within limits for V 292.402 Recovery = 99.92%						
Zn 213.857†	49765.1	494.72 ug/L	1.772	494.72 ppb	1.772	0.36%
QC value within limits for Zn 213.857 Recovery = 98.94%						
SiO2†	76812.7	5264.1 ug/L	33.24	5264.1 ppb	33.24	0.63%
QC value within limits for SiO2 Recovery = 98.44%						

All analyte(s) passed QC.

Sequence No.: 8

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 2/23/2010 18:47:34

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	4120.3	4120.3	96.9 %		18:49:26
1	Y RADIAL	4579.2	4579.2	97.59 %		18:49:26
1	Al 396.153Radial†	-106.0	1.3	1.1577 ug/L	1.1577 ppb	18:49:26
1	Ca 317.933Radial†	22.7	8.0	15.859 ug/L	15.859 ppb	18:49:46
1	Fe 238.204 Radial†	12.9	3.2	40.614 ug/L	40.614 ppb	18:49:46
1	K 766.490 Radial†	2662.8	192.1	35.947 ug/L	35.947 ppb	18:49:26
1	Mg 279.077 IEC†	-2.5	-5.4	-243.91 ug/L	-243.91 ppb	18:49:46
1	Na 589.592 Radial†	-800.6	-86.1	-25.000 ug/L	-25.000 ppb	18:49:26
1	Sr 421.552†	18.6	-17.6	-0.1167 ug/L	-0.1167 ppb	18:49:26
1	K 361.383	892622.1	892622.1	99.173 %		18:50:43
1	Y 371.029	756417.9	756417.9	99.210 %		18:50:43
1	Ag 328.068†	234.7	7.4	0.0455 ug/L	0.0455 ppb	18:50:43
1	As 188.979†	-24.0	-3.7	-1.6577 ug/L	-1.6577 ppb	18:51:03
1	B 249.677†	-413.7	-44.1	-1.0592 ug/L	-1.0592 ppb	18:51:03
1	Ba 233.527†	9.5	18.7	0.1464 ug/L	0.1464 ppb	18:51:03
1	Be 313.107†	-3773.9	47.9	0.0177 ug/L	0.0177 ppb	18:50:43
1	Cd 226.502†	-191.3	-9.6	-0.1159 ug/L	-0.1159 ppb	18:51:03
1	Co 228.616†	-78.5	-17.3	-0.3602 ug/L	-0.3602 ppb	18:51:03
1	Cr 267.716†	77.5	12.2	0.1403 ug/L	0.1403 ppb	18:51:03
1	Cu 324.752†	6073.8	47.3	0.1449 ug/L	0.1449 ppb	18:50:43
1	Mn 257.610†	502.3	69.6	0.0920 ug/L	0.0920 ppb	18:51:03
1	Mo 202.031†	12.0	6.1	0.4476 ug/L	0.4476 ppb	18:51:03
1	Ni 231.604†	53.2	1.3	0.0345 ug/L	0.0345 ppb	18:51:03
1	P 214.914†	197.7	-2.7	-1.6738 ug/L	-1.6738 ppb	18:51:03
1	Pb 220.353†	-9.9	55.0	6.8172 ug/L	6.8172 ppb	18:51:03
1	S 181.975 Axial†	36.4	-0.4	-0.5607 ug/L	-0.5607 ppb	18:51:03
1	Sb 206.836†	45.9	9.6	3.3585 ug/L	3.3585 ppb	18:51:03
1	Se 196.026†	-22.3	-1.8	-1.0661 ug/L	-1.0661 ppb	18:51:03
1	Si 251.611†	561.3	31.8	1.0144 ug/L	1.0144 ppb	18:51:03
1	Sn 189.927†	11.5	1.2	0.2123 ug/L	0.2123 ppb	18:51:03
1	Ti 334.940†	-1329.3	-58.5	-0.0661 ug/L	-0.0661 ppb	18:50:43
1	Tl 190.801†	-25.0	6.0	1.9373 ug/L	1.9373 ppb	18:51:03
1	U 409.014†	-2833.6	-41.0	-1.1122 ug/L	-1.1122 ppb	18:50:43
1	V 292.402†	-1468.9	-50.7	-0.3583 ug/L	-0.3583 ppb	18:50:43
1	Zn 213.857†	573.7	20.8	0.2024 ug/L	0.2024 ppb	18:51:03
1	SiO2†	626.5	80.3	5.5027 ug/L	5.5027 ppb	18:51:59
2	Sc Radial	4026.2	4026.2	94.7 %		18:49:51
2	Y RADIAL	4451.1	4451.1	94.86 %		18:49:51
2	Al 396.153Radial†	-131.0	-27.6	-25.003 ug/L	-25.003 ppb	18:49:51
2	Ca 317.933Radial†	17.4	2.9	5.7351 ug/L	5.7351 ppb	18:50:11
2	Fe 238.204 Radial†	11.6	2.1	27.154 ug/L	27.154 ppb	18:50:11
2	K 766.490 Radial†	2677.3	271.6	50.823 ug/L	50.823 ppb	18:49:51
2	Mg 279.077 IEC†	-1.5	-4.3	-194.78 ug/L	-194.78 ppb	18:50:11
2	Na 589.592 Radial†	-751.4	-53.4	-15.501 ug/L	-15.501 ppb	18:49:51
2	Sr 421.552†	21.8	-13.7	-0.0911 ug/L	-0.0911 ppb	18:49:51
2	Sc 361.383	887516.8	887516.8	98.606 %		18:51:08
2	Y 371.029	751755.2	751755.2	98.598 %		18:51:08
2	Ag 328.068†	179.0	-47.8	-0.2074 ug/L	-0.2074 ppb	18:51:08
2	As 188.979†	-24.3	-4.1	-1.8445 ug/L	-1.8445 ppb	18:51:28
2	B 249.677†	-451.9	-85.3	-2.0394 ug/L	-2.0394 ppb	18:51:28
2	Ba 233.527†	-4.3	4.8	0.0373 ug/L	0.0373 ppb	18:51:28
2	Be 313.107†	-3761.4	38.7	0.0142 ug/L	0.0142 ppb	18:51:08
2	Cd 226.502†	-187.9	-7.2	-0.0879 ug/L	-0.0879 ppb	18:51:28
2	Co 228.616†	-75.2	-14.3	-0.2996 ug/L	-0.2996 ppb	18:51:28
2	Cr 267.716†	65.9	0.9	0.0147 ug/L	0.0147 ppb	18:51:28
2	Cu 324.752†	6018.2	26.2	0.0838 ug/L	0.0838 ppb	18:51:08
2	Mn 257.610†	486.5	56.5	0.0740 ug/L	0.0740 ppb	18:51:28
2	Mo 202.031†	7.4	1.4	0.1054 ug/L	0.1054 ppb	18:51:28
2	Ni 231.604†	53.3	1.7	0.0435 ug/L	0.0435 ppb	18:51:28

2	P 214.914†	189.6	-9.7	-5.9385 ug/L	-5.9385 ppb	18:51:28
2	Pb 220.353†	-18.7	46.0	5.6969 ug/L	5.6969 ppb	18:51:28
2	S 181.975 Axial†	35.5	-1.1	-1.5433 ug/L	-1.5433 ppb	18:51:28
2	Sb 206.836†	44.9	8.8	3.0688 ug/L	3.0688 ppb	18:51:28
2	Se 196.026†	-27.3	-7.0	-4.5416 ug/L	-4.5416 ppb	18:51:28
2	Si 251.611†	607.6	82.0	2.6291 ug/L	2.6291 ppb	18:51:28
2	Sn 189.927†	9.8	-0.5	-0.0858 ug/L	-0.0858 ppb	18:51:28
2	Ti 334.940†	-1335.3	-72.4	-0.0898 ug/L	-0.0898 ppb	18:51:08
2	Tl 190.801†	-32.6	-1.8	-0.5801 ug/L	-0.5801 ppb	18:51:28
2	U 409.014†	-3026.4	-252.9	-6.8377 ug/L	-6.8377 ppb	18:51:08
2	V 292.402†	-1466.5	-56.8	-0.4133 ug/L	-0.4133 ppb	18:51:08
2	Zn 213.857†	563.1	13.3	0.1292 ug/L	0.1292 ppb	18:51:28
2	SiO2†	620.8	78.1	5.3629 ug/L	5.3629 ppb	18:52:04
3	Sc Radial	4034.5	4034.5	94.9 %		18:50:16
3	Y RADIAL	4444.1	4444.1	94.71 %		18:50:16
3	Al 396.153Radial†	-133.8	-30.3	-27.475 ug/L	-27.475 ppb	18:50:16
3	Ca 317.933Radial†	25.5	11.4	22.756 ug/L	22.756 ppb	18:50:36
3	Fe 238.204 Radial†	11.1	1.5	19.868 ug/L	19.868 ppb	18:50:36
3	K 766.490 Radial†	2432.6	7.8	1.4593 ug/L	1.4593 ppb	18:50:16
3	Mg 279.077 IEC†	4.0	1.4	65.333 ug/L	65.333 ppb	18:50:36
3	Na 589.592 Radial†	-729.9	-29.2	-8.4647 ug/L	-8.4647 ppb	18:50:16
3	Sr 421.552†	19.9	-15.8	-0.1047 ug/L	-0.1047 ppb	18:50:16
3	Sc 361.383	889928.6	889928.6	98.874 %		18:51:33
3	Y 371.029	752888.1	752888.1	98.747 %		18:51:33
3	Ag 328.068†	215.6	-11.3	-0.0465 ug/L	-0.0465 ppb	18:51:33
3	As 188.979†	-24.2	-3.9	-1.7611 ug/L	-1.7611 ppb	18:51:53
3	B 249.677†	-440.3	-72.3	-1.7296 ug/L	-1.7296 ppb	18:51:53
3	Ba 233.527†	0.8	9.9	0.0769 ug/L	0.0769 ppb	18:51:53
3	Be 313.107†	-3854.4	-45.1	-0.0172 ug/L	-0.0172 ppb	18:51:33
3	Cd 226.502†	-170.3	11.1	0.1258 ug/L	0.1258 ppb	18:51:53
3	Co 228.616†	-53.3	8.0	0.1678 ug/L	0.1678 ppb	18:51:53
3	Cr 267.716†	52.2	-13.2	-0.1455 ug/L	-0.1455 ppb	18:51:53
3	Cu 324.752†	6008.5	-0.2	0.0016 ug/L	0.0016 ppb	18:51:33
3	Mn 257.610†	467.7	36.2	0.0399 ug/L	0.0399 ppb	18:51:53
3	Mo 202.031†	6.1	0.1	0.0088 ug/L	0.0088 ppb	18:51:53
3	Ni 231.604†	48.4	-3.4	-0.0855 ug/L	-0.0855 ppb	18:51:53
3	P 214.914†	206.9	7.3	4.3875 ug/L	4.3875 ppb	18:51:53
3	Pb 220.353†	-15.8	49.1	6.0703 ug/L	6.0703 ppb	18:51:53
3	S 181.975 Axial†	37.0	0.4	0.5876 ug/L	0.5876 ppb	18:51:53
3	Sb 206.836†	33.9	-2.4	-0.8210 ug/L	-0.8210 ppb	18:51:53
3	Se 196.026†	-23.6	-3.2	-2.0495 ug/L	-2.0495 ppb	18:51:53
3	Si 251.611†	614.6	87.5	2.8066 ug/L	2.8066 ppb	18:51:53
3	Sn 189.927†	13.7	3.5	0.6279 ug/L	0.6279 ppb	18:51:53
3	Ti 334.940†	-1390.9	-124.9	-0.1901 ug/L	-0.1901 ppb	18:51:33
3	Tl 190.801†	-30.3	0.6	0.1795 ug/L	0.1795 ppb	18:51:53
3	U 409.014†	-2868.7	-85.1	-2.3004 ug/L	-2.3004 ppb	18:51:33
3	V 292.402†	-1491.1	-77.7	-0.5450 ug/L	-0.5450 ppb	18:51:33
3	Zn 213.857†	565.0	13.7	0.1350 ug/L	0.1350 ppb	18:51:53
3	SiO2†	574.3	29.3	2.0129 ug/L	2.0129 ppb	18:52:09

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	890022.5	98.884 %	0.2837			0.29%
Sc Radial	4060.4	95.5 %	1.22			1.28%
Y 371.029	753687.1	98.852 %	0.3190			0.32%
Y RADIAL	4491.4	95.72 %	1.621			1.69%
Ag 328.068†	-17.3	-0.0694 ug/L	0.12802	-0.0694 ppb	0.12802	184.33%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-18.9	-17.107 ug/L	15.8656	-17.107 ppb	15.8656	92.75%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-3.9	-1.7544 ug/L	0.09358	-1.7544 ppb	0.09358	5.33%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-67.3	-1.6094 ug/L	0.50106	-1.6094 ppb	0.50106	31.13%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	11.1	0.0869 ug/L	0.05521	0.0869 ppb	0.05521	63.56%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	13.8	0.0049 ug/L	0.01921	0.0049 ppb	0.01921	394.66%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	7.4	14.783 ug/L	8.5611	14.783 ppb	8.5611	57.91%



QC value within limits for Ca 317.933 Radial Recovery = Not calculated						
Cd 226.502†	-1.9	-0.0260 ug/L	0.13223	-0.0260 ppb	0.13223	508.74%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-7.9	-0.1640 ug/L	0.28896	-0.1640 ppb	0.28896	176.20%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-0.0	0.0032 ug/L	0.14326	0.0032 ppb	0.14326	>999.9%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	24.4	0.0768 ug/L	0.07191	0.0768 ppb	0.07191	93.65%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	2.3	29.212 ug/L	10.5253	29.212 ppb	10.5253	36.03%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	157.2	29.410 ug/L	25.3229	29.410 ppb	25.3229	86.10%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	-2.7	-124.45 ug/L	166.183	-124.45 ppb	166.183	133.53%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	54.1	0.0687 ug/L	0.02648	0.0687 ppb	0.02648	38.57%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	2.5	0.1873 ug/L	0.23055	0.1873 ppb	0.23055	123.11%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	-56.2	-16.322 ug/L	8.2980	-16.322 ppb	8.2980	50.84%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	-0.1	-0.0025 ug/L	0.07204	-0.0025 ppb	0.07204	>999.9%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	-1.7	-1.0749 ug/L	5.18899	-1.0749 ppb	5.18899	482.72%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	50.0	6.1948 ug/L	0.57040	6.1948 ppb	0.57040	9.21%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	-0.3	-0.5055 ug/L	1.06653	-0.5055 ppb	1.06653	211.00%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	5.3	1.8688 ug/L	2.33390	1.8688 ppb	2.33390	124.89%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-4.0	-2.5524 ug/L	1.79151	-2.5524 ppb	1.79151	70.19%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	67.1	2.1500 ug/L	0.98750	2.1500 ppb	0.98750	45.93%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	1.4	0.2515 ug/L	0.35848	0.2515 ppb	0.35848	142.56%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	-15.7	-0.1042 ug/L	0.01285	-0.1042 ppb	0.01285	12.33%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	-85.3	-0.1153 ug/L	0.06586	-0.1153 ppb	0.06586	57.11%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	1.6	0.5122 ug/L	1.29129	0.5122 ppb	1.29129	252.10%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	-126.3	-3.4168 ug/L	3.02160	-3.4168 ppb	3.02160	88.43%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	-61.7	-0.4388 ug/L	0.09593	-0.4388 ppb	0.09593	21.86%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	15.9	0.1555 ug/L	0.04072	0.1555 ppb	0.04072	26.18%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	62.6	4.2929 ug/L	1.97570	4.2929 ppb	1.97570	46.02%
QC value within limits for SiO2 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 18  
 Sample ID: CCV  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 1  
 Date Collected: 2/23/2010 19:55:43  
 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	4089.7	4089.7	96.1 %		19:57:35
1	Y RADIAL	4464.9	4464.9	95.16 %		19:57:35
1	Al 396.153Radial†	5293.8	5616.7	5061.9 ug/L	5061.9 ppb	19:57:35
1	Ca 317.933Radial†	2545.3	2631.9	5236.3 ug/L	5236.3 ppb	19:57:55
1	Fe 238.204 Radial†	391.3	396.8	5127.8 ug/L	5127.8 ppb	19:57:55
1	K 766.490 Radial†	28830.9	27429.4	5125.2 ug/L	5125.2 ppb	19:57:35
1	Mg 279.077 IEC†	112.2	114.0	5179.3 ug/L	5179.3 ppb	19:57:55
1	Na 589.592 Radial†	32871.4	34928.9	10136 ug/L	10136 ppb	19:57:35
1	Sr 421.552†	72793.3	75673.3	501.51 ug/L	501.51 ppb	19:57:35
1	Sc 361.383	887119.7	887119.7	98.562 %		19:58:52
1	Y 371.029	738907.0	738907.0	96.913 %		19:58:52
1	Ag 328.068†	110727.6	112113.8	518.03 ug/L	518.03 ppb	19:58:57
1	As 188.979†	1112.6	1149.4	522.40 ug/L	522.40 ppb	19:59:18
1	B 249.677†	20297.6	20966.7	498.06 ug/L	498.06 ppb	19:58:57
1	Ba 233.527†	64935.7	65892.3	515.97 ug/L	515.97 ppb	19:58:57
1	Be 313.107†	1318190.4	1341276.5	500.99 ug/L	500.99 ppb	19:58:52
1	Cd 226.502†	44237.3	45066.0	522.99 ug/L	522.99 ppb	19:58:57
1	Co 228.616†	24449.1	24867.8	520.02 ug/L	520.02 ppb	19:58:57
1	Cr 267.716†	45372.4	45968.4	516.59 ug/L	516.59 ppb	19:58:57
1	Cu 324.752†	172144.8	168579.3	506.22 ug/L	506.22 ppb	19:58:57
1	Mn 257.610†	441538.2	447543.6	502.07 ug/L	502.07 ppb	19:58:52
1	Mo 202.031†	6902.2	6996.9	512.51 ug/L	512.51 ppb	19:59:18
1	Ni 231.604†	20227.1	20469.9	519.99 ug/L	519.99 ppb	19:58:57
1	P 214.914†	4406.0	4268.2	2491.4 ug/L	2491.4 ppb	19:59:18
1	Pb 220.353†	4083.8	4208.4	523.02 ug/L	523.02 ppb	19:59:18
1	S 181.975 Axial†	741.5	715.3	1046.9 ug/L	1046.9 ppb	19:59:18
1	Sb 206.836†	1492.2	1477.2	533.52 ug/L	533.52 ppb	19:59:18
1	Se 196.026†	748.4	780.0	531.77 ug/L	531.77 ppb	19:59:18
1	Si 251.611†	79728.9	80358.0	2571.6 ug/L	2571.6 ppb	19:58:57
1	Sn 189.927†	2842.4	2873.4	520.47 ug/L	520.47 ppb	19:59:18
1	Ti 334.940†	323938.6	329946.8	498.90 ug/L	498.90 ppb	19:58:57
1	Tl 190.801†	1546.6	1600.4	516.88 ug/L	516.88 ppb	19:59:18
1	U 409.014†	15463.4	18505.3	498.29 ug/L	498.29 ppb	19:58:57
1	V 292.402†	71076.3	73543.7	517.41 ug/L	517.41 ppb	19:58:57
1	Zn 213.857†	51650.2	51846.1	515.47 ug/L	515.47 ppb	19:58:57
1	SiO2†	77607.3	78188.1	5358.2 ug/L	5358.2 ppb	20:00:25
2	Sc Radial	4010.2	4010.2	94.3 %		19:58:00
2	Y RADIAL	4409.9	4409.9	93.99 %		19:58:00
2	Al 396.153Radial†	5198.9	5625.0	5069.8 ug/L	5069.8 ppb	19:58:00
2	Ca 317.933Radial†	2537.3	2675.8	5323.8 ug/L	5323.8 ppb	19:58:20
2	Fe 238.204 Radial†	393.8	407.5	5264.8 ug/L	5264.8 ppb	19:58:20
2	K 766.490 Radial†	28370.0	27534.5	5144.8 ug/L	5144.8 ppb	19:58:00
2	Mg 279.077 IEC†	114.7	118.9	5401.9 ug/L	5401.9 ppb	19:58:20
2	Na 589.592 Radial†	32200.2	34894.1	10126 ug/L	10126 ppb	19:58:00
2	Sr 421.552†	71627.1	75936.0	503.25 ug/L	503.25 ppb	19:58:00
2	Sc 361.383	899002.7	899002.7	99.882 %		19:59:23
2	Y 371.029	748358.9	748358.9	98.153 %		19:59:23
2	Ag 328.068†	108729.4	108628.3	502.02 ug/L	502.02 ppb	19:59:29
2	As 188.979†	1105.4	1127.2	512.32 ug/L	512.32 ppb	19:59:49
2	B 249.677†	19847.4	20243.7	480.83 ug/L	480.83 ppb	19:59:29
2	Ba 233.527†	63927.3	64011.8	501.25 ug/L	501.25 ppb	19:59:29
2	Be 313.107†	1335072.9	1340501.0	500.67 ug/L	500.67 ppb	19:59:23
2	Cd 226.502†	43575.6	43810.3	508.39 ug/L	508.39 ppb	19:59:29
2	Co 228.616†	24112.6	24203.0	506.13 ug/L	506.13 ppb	19:59:29
2	Cr 267.716†	44716.1	44702.9	502.39 ug/L	502.39 ppb	19:59:29
2	Cu 324.752†	168670.6	162792.4	488.86 ug/L	488.86 ppb	19:59:29
2	Mn 257.610†	446724.8	446814.9	501.26 ug/L	501.26 ppb	19:59:23
2	Mo 202.031†	6909.3	6911.4	506.27 ug/L	506.27 ppb	19:59:49
2	Ni 231.604†	19984.3	19955.6	506.92 ug/L	506.92 ppb	19:59:29

2	P 214.914†	4390.0	4193.1	2449.1 ug/L	2449.1 ppb	19:59:49
2	Pb 220.353†	4103.6	4173.5	518.67 ug/L	518.67 ppb	19:59:49
2	S 181.975 Axial†	737.3	701.1	1026.1 ug/L	1026.1 ppb	19:59:49
2	Sb 206.836†	1489.5	1454.5	525.39 ug/L	525.39 ppb	19:59:49
2	Se 196.026†	740.9	762.5	520.59 ug/L	520.59 ppb	19:59:49
2	Si 251.611†	78306.1	77864.3	2491.7 ug/L	2491.7 ppb	19:59:29
2	Sn 189.927†	2847.3	2840.2	514.47 ug/L	514.47 ppb	19:59:49
2	Ti 334.940†	318402.8	320060.2	483.95 ug/L	483.95 ppb	19:59:29
2	Tl 190.801†	1541.5	1574.5	508.55 ug/L	508.55 ppb	19:59:49
2	U 409.014†	14952.5	17786.4	478.88 ug/L	478.88 ppb	19:59:29
2	V 292.402†	69928.0	71440.9	502.70 ug/L	502.70 ppb	19:59:29
2	Zn 213.857†	50786.0	50288.2	499.92 ug/L	499.92 ppb	19:59:29
2	SiO2†	79343.6	78885.7	5406.3 ug/L	5406.3 ppb	20:00:30
3	Sc Radial	4054.7	4054.7	95.3 %		19:58:25
3	Y RADIAL	4421.6	4421.6	94.24 %		19:58:25
3	Al 396.153Radial†	5296.3	5666.9	5107.9 ug/L	5107.9 ppb	19:58:25
3	Ca 317.933Radial†	2522.8	2631.1	5234.8 ug/L	5234.8 ppb	19:58:45
3	Fe 238.204 Radial†	390.9	399.8	5166.4 ug/L	5166.4 ppb	19:58:45
3	K 766.490 Radial†	28846.6	27704.9	5176.7 ug/L	5176.7 ppb	19:58:25
3	Mg 279.077 IEC†	115.4	118.3	5377.0 ug/L	5377.0 ppb	19:58:45
3	Na 589.592 Radial†	32850.9	35202.6	10216 ug/L	10216 ppb	19:58:25
3	Sr 421.552†	73176.8	76729.5	508.51 ug/L	508.51 ppb	19:58:25
3	Sc 361.383	907783.5	907783.5	100.86 %		19:59:54
3	Y 371.029	755254.2	755254.2	99.057 %		19:59:54
3	Ag 328.068†	109419.7	108259.8	500.29 ug/L	500.29 ppb	20:00:00
3	As 188.979†	1109.6	1120.7	509.34 ug/L	509.34 ppb	20:00:20
3	B 249.677†	20120.2	20322.0	482.72 ug/L	482.72 ppb	20:00:00
3	Ba 233.527†	64214.0	63677.0	498.63 ug/L	498.63 ppb	20:00:00
3	Be 313.107†	1346634.3	1339035.0	500.12 ug/L	500.12 ppb	19:59:54
3	Cd 226.502†	43823.8	43634.4	506.35 ug/L	506.35 ppb	20:00:00
3	Co 228.616†	24145.6	24002.1	501.93 ug/L	501.93 ppb	20:00:00
3	Cr 267.716†	44930.1	44482.1	499.90 ug/L	499.90 ppb	20:00:00
3	Cu 324.752†	169850.0	162328.4	487.46 ug/L	487.46 ppb	20:00:00
3	Mn 257.610†	450104.4	445839.6	500.16 ug/L	500.16 ppb	19:59:54
3	Mo 202.031†	6903.8	6839.0	500.96 ug/L	500.96 ppb	20:00:20
3	Ni 231.604†	20057.0	19834.1	503.84 ug/L	503.84 ppb	20:00:00
3	P 214.914†	4389.7	4150.3	2423.5 ug/L	2423.5 ppb	20:00:20
3	Pb 220.353†	4077.2	4107.6	510.51 ug/L	510.51 ppb	20:00:20
3	S 181.975 Axial†	735.0	691.7	1012.4 ug/L	1012.4 ppb	20:00:20
3	Sb 206.836†	1488.0	1438.6	519.67 ug/L	519.67 ppb	20:00:20
3	Se 196.026†	740.3	754.7	515.18 ug/L	515.18 ppb	20:00:20
3	Si 251.611†	78653.6	77450.6	2478.4 ug/L	2478.4 ppb	20:00:00
3	Sn 189.927†	2852.0	2817.3	510.31 ug/L	510.31 ppb	20:00:20
3	Ti 334.940†	319864.7	318426.2	481.47 ug/L	481.47 ppb	20:00:00
3	Tl 190.801†	1552.5	1570.5	507.24 ug/L	507.24 ppb	20:00:20
3	U 409.014†	15005.3	17694.0	476.40 ug/L	476.40 ppb	20:00:00
3	V 292.402†	70248.0	71081.0	500.13 ug/L	500.13 ppb	20:00:00
3	Zn 213.857†	51065.6	50073.6	497.81 ug/L	497.81 ppb	20:00:00
3	SiO2†	78385.4	77167.2	5288.4 ug/L	5288.4 ppb	20:00:35

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	897968.6	99.767 %	1.1522			1.15%
Sc Radial	4051.5	95.3 %	0.94			0.98%
Y 371.029	747506.7	98.041 %	1.0764			1.10%
Y RADIAL	4432.2	94.46 %	0.617			0.65%
Ag 328.068†	109667.3	506.78 ug/L	9.780	506.78 ppb	9.780	1.93%
QC value within limits for Ag 328.068 Recovery = 101.36%						
Al 396.153Radial†	5636.2	5079.9 ug/L	24.62	5079.9 ppb	24.62	0.48%
QC value within limits for Al 396.153Radial Recovery = 101.60%						
As 188.979†	1132.4	514.69 ug/L	6.842	514.69 ppb	6.842	1.33%
QC value within limits for As 188.979 Recovery = 102.94%						
B 249.677†	20510.8	487.20 ug/L	9.452	487.20 ppb	9.452	1.94%
QC value within limits for B 249.677 Recovery = 97.44%						
Ba 233.527†	64527.0	505.28 ug/L	9.346	505.28 ppb	9.346	1.85%
QC value within limits for Ba 233.527 Recovery = 101.06%						
Be 313.107†	1340270.9	500.59 ug/L	0.442	500.59 ppb	0.442	0.09%
QC value within limits for Be 313.107 Recovery = 100.12%						
Ca 317.933Radial†	2646.2	5265.0 ug/L	50.94	5265.0 ppb	50.94	0.97%

QC value within limits for Ca 317.933 Radial Recovery = 105.30%

Cd 226.502†	44170.3	512.58 ug/L	9.075	512.58 ppb	9.075	1.77%
QC value within limits for Cd 226.502 Recovery = 102.52%						
Co 228.616†	24357.6	509.36 ug/L	9.467	509.36 ppb	9.467	1.86%
QC value within limits for Co 228.616 Recovery = 101.87%						
Cr 267.716†	45051.1	506.29 ug/L	9.000	506.29 ppb	9.000	1.78%
QC value within limits for Cr 267.716 Recovery = 101.26%						
Cu 324.752†	164566.7	494.18 ug/L	10.449	494.18 ppb	10.449	2.11%
QC value within limits for Cu 324.752 Recovery = 98.84%						
Fe 238.204 Radial†	401.4	5186.3 ug/L	70.63	5186.3 ppb	70.63	1.36%
QC value within limits for Fe 238.204 Radial Recovery = 103.73%						
K 766.490 Radial†	27556.2	5148.9 ug/L	26.00	5148.9 ppb	26.00	0.51%
QC value within limits for K 766.490 Radial Recovery = 102.98%						
Mg 279.077 IEC†	117.0	5319.4 ug/L	121.98	5319.4 ppb	121.98	2.29%
QC value within limits for Mg 279.077 IEC Recovery = 106.39%						
Mn 257.610†	446732.7	501.16 ug/L	0.961	501.16 ppb	0.961	0.19%
QC value within limits for Mn 257.610 Recovery = 100.23%						
Mo 202.031†	6915.8	506.58 ug/L	5.781	506.58 ppb	5.781	1.14%
QC value within limits for Mo 202.031 Recovery = 101.32%						
Na 589.592 Radial†	35008.6	10160 ug/L	49.0	10160 ppb	49.0	0.48%
QC value within limits for Na 589.592 Radial Recovery = 101.60%						
Ni 231.604†	20086.5	510.25 ug/L	8.574	510.25 ppb	8.574	1.68%
QC value within limits for Ni 231.604 Recovery = 102.05%						
P 214.914†	4203.9	2454.7 ug/L	34.31	2454.7 ppb	34.31	1.40%
QC value within limits for P 214.914 Recovery = 98.19%						
Pb 220.353†	4163.2	517.40 ug/L	6.349	517.40 ppb	6.349	1.23%
QC value within limits for Pb 220.353 Recovery = 103.48%						
S 181.975 Axial†	702.7	1028.5 ug/L	17.41	1028.5 ppb	17.41	1.69%
QC value within limits for S 181.975 Axial Recovery = 102.85%						
Sb 206.836†	1456.8	526.19 ug/L	6.961	526.19 ppb	6.961	1.32%
QC value within limits for Sb 206.836 Recovery = 105.24%						
Se 196.026†	765.7	522.51 ug/L	8.461	522.51 ppb	8.461	1.62%
QC value within limits for Se 196.026 Recovery = 104.50%						
Si 251.611†	78557.6	2513.9 ug/L	50.39	2513.9 ppb	50.39	2.00%
QC value within limits for Si 251.611 Recovery = 100.56%						
Sn 189.927†	2843.6	515.08 ug/L	5.106	515.08 ppb	5.106	0.99%
QC value within limits for Sn 189.927 Recovery = 103.02%						
Sr 421.552†	76112.9	504.43 ug/L	3.645	504.43 ppb	3.645	0.72%
QC value within limits for Sr 421.552 Recovery = 100.89%						
Ti 334.940†	322811.1	488.11 ug/L	9.426	488.11 ppb	9.426	1.93%
QC value within limits for Ti 334.940 Recovery = 97.62%						
Tl 190.801†	1581.8	510.89 ug/L	5.230	510.89 ppb	5.230	1.02%
QC value within limits for Tl 190.801 Recovery = 102.18%						
U 409.014†	17995.2	484.52 ug/L	11.986	484.52 ppb	11.986	2.47%
QC value within limits for U 409.014 Recovery = 96.90%						
V 292.402†	72021.9	506.75 ug/L	9.326	506.75 ppb	9.326	1.84%
QC value within limits for V 292.402 Recovery = 101.35%						
Zn 213.857†	50736.0	504.40 ug/L	9.645	504.40 ppb	9.645	1.91%
QC value within limits for Zn 213.857 Recovery = 100.88%						
SiO2†	78080.4	5351.0 ug/L	59.30	5351.0 ppb	59.30	1.11%
QC value within limits for SiO2 Recovery = 100.07%						

All analyte(s) passed QC.

Sequence No.: 19  
 Sample ID: CCB  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 6  
 Date Collected: 2/23/2010 20:02:45  
 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	3933.6	3933.6	92.5 %		20:04:57
1	Y RADIAL	4486.8	4486.8	95.62 %		20:04:37
1	Al 396.153Radial†	-144.9	-45.9	-41.655 ug/L	-41.655 ppb	20:04:37
1	Ca 317.933Radial†	14.6	0.3	0.5996 ug/L	0.5996 ppb	20:04:57
1	Fe 238.204 Radial†	13.1	4.0	51.465 ug/L	51.465 ppb	20:04:57
1	K 766.490 Radial†	2712.9	376.7	70.486 ug/L	70.486 ppb	20:04:37
1	Mg 279.077 IEC†	1.9	-0.7	-32.088 ug/L	-32.088 ppb	20:04:57
1	Na 589.592 Radial†	-726.9	-45.6	-13.243 ug/L	-13.243 ppb	20:04:37
1	Sr 421.552†	-0.2	-37.0	-0.2451 ug/L	-0.2451 ppb	20:04:37
1	Sc 361.383	916157.8	916157.8	101.79 %		20:05:54
1	Y 371.029	773781.7	773781.7	101.49 %		20:05:54
1	Ag 328.068†	240.9	7.4	0.0489 ug/L	0.0489 ppb	20:05:59
1	As 188.979†	-24.3	-3.4	-1.5144 ug/L	-1.5144 ppb	20:06:19
1	B 249.677†	-465.3	-84.2	-2.0154 ug/L	-2.0154 ppb	20:06:19
1	Ba 233.527†	-3.1	6.1	0.0484 ug/L	0.0484 ppb	20:06:19
1	Be 313.107†	-3889.6	32.0	0.0116 ug/L	0.0116 ppb	20:05:59
1	Cd 226.502†	-191.8	-5.2	-0.0652 ug/L	-0.0652 ppb	20:06:19
1	Co 228.616†	-87.6	-24.1	-0.5023 ug/L	-0.5023 ppb	20:06:19
1	Cr 267.716†	70.6	3.4	0.0423 ug/L	0.0423 ppb	20:06:19
1	Cu 324.752†	6184.2	-1.6	-0.0014 ug/L	-0.0014 ppb	20:05:59
1	Mn 257.610†	489.9	44.5	0.0562 ug/L	0.0562 ppb	20:06:19
1	Mo 202.031†	18.4	12.0	0.8837 ug/L	0.8837 ppb	20:06:19
1	Ni 231.604†	64.4	10.9	0.2776 ug/L	0.2776 ppb	20:06:19
1	P 214.914†	220.2	14.3	8.6383 ug/L	8.6383 ppb	20:06:19
1	Pb 220.353†	-36.0	29.6	3.6588 ug/L	3.6588 ppb	20:06:19
1	S 181.975 Axial†	33.8	-3.8	-5.5895 ug/L	-5.5895 ppb	20:06:19
1	Sb 206.836†	44.2	6.8	2.3621 ug/L	2.3621 ppb	20:06:19
1	Se 196.026†	-22.1	-1.0	-0.5120 ug/L	-0.5120 ppb	20:06:19
1	Si 251.611†	606.0	61.2	1.9513 ug/L	1.9513 ppb	20:06:19
1	Sn 189.927†	7.2	-3.3	-0.6035 ug/L	-0.6035 ppb	20:06:19
1	Ti 334.940†	-1409.0	-102.5	-0.1518 ug/L	-0.1518 ppb	20:05:59
1	Tl 190.801†	-37.3	-5.4	-1.7385 ug/L	-1.7385 ppb	20:06:19
1	U 409.014†	-2912.8	-45.4	-1.2322 ug/L	-1.2322 ppb	20:05:54
1	V 292.402†	-1525.0	-67.7	-0.4682 ug/L	-0.4682 ppb	20:05:59
1	Zn 213.857†	563.8	-3.8	-0.0476 ug/L	-0.0476 ppb	20:06:19
1	SiO2†	639.5	76.8	5.2535 ug/L	5.2535 ppb	20:07:25
2	Sc Radial	3937.4	3937.4	92.6 %		20:05:22
2	Y RADIAL	4423.5	4423.5	94.28 %		20:05:02
2	Al 396.153Radial†	-128.3	-27.9	-25.243 ug/L	-25.243 ppb	20:05:02
2	Ca 317.933Radial†	15.4	1.1	2.2634 ug/L	2.2634 ppb	20:05:22
2	Fe 238.204 Radial†	11.1	1.8	22.922 ug/L	22.922 ppb	20:05:22
2	K 766.490 Radial†	2754.1	418.5	78.298 ug/L	78.298 ppb	20:05:02
2	Mg 279.077 IEC†	4.3	1.9	85.876 ug/L	85.876 ppb	20:05:22
2	Na 589.592 Radial†	-755.5	-75.8	-22.010 ug/L	-22.010 ppb	20:05:02
2	Sr 421.552†	34.2	0.2	0.0014 ug/L	0.0014 ppb	20:05:02
2	Sc 361.383	899766.5	899766.5	99.967 %		20:06:24
2	Y 371.029	759001.3	759001.3	99.549 %		20:06:24
2	Ag 328.068†	157.5	-71.8	-0.3182 ug/L	-0.3182 ppb	20:06:29
2	As 188.979†	-16.2	4.3	1.9372 ug/L	1.9372 ppb	20:06:49
2	B 249.677†	-468.4	-95.6	-2.2861 ug/L	-2.2861 ppb	20:06:49
2	Ba 233.527†	2.8	11.9	0.0941 ug/L	0.0941 ppb	20:06:49
2	Be 313.107†	-3880.8	-28.8	-0.0112 ug/L	-0.0112 ppb	20:06:29
2	Cd 226.502†	-190.0	-6.8	-0.0818 ug/L	-0.0818 ppb	20:06:49
2	Co 228.616†	-62.3	-0.4	-0.0074 ug/L	-0.0074 ppb	20:06:49
2	Cr 267.716†	63.7	-2.2	-0.0210 ug/L	-0.0210 ppb	20:06:49
2	Cu 324.752†	6119.1	44.0	0.1359 ug/L	0.1359 ppb	20:06:29
2	Mn 257.610†	490.2	53.5	0.0587 ug/L	0.0587 ppb	20:06:49
2	Mo 202.031†	6.4	0.3	0.0251 ug/L	0.0251 ppb	20:06:49
2	Ni 231.604†	65.2	12.9	0.3279 ug/L	0.3279 ppb	20:06:49

2	P 214.914†	200.9	-1.1	-0.7034 ug/L	-0.7034 ppb	20:06:49
2	Pb 220.353†	-38.2	26.8	3.3132 ug/L	3.3132 ppb	20:06:49
2	S 181.975 Axial†	38.8	1.8	2.6424 ug/L	2.6424 ppb	20:06:49
2	Sb 206.836†	38.4	1.7	0.6033 ug/L	0.6033 ppb	20:06:49
2	Se 196.026†	-28.6	-7.9	-5.1441 ug/L	-5.1441 ppb	20:06:49
2	Si 251.611†	616.6	82.7	2.6513 ug/L	2.6513 ppb	20:06:49
2	Sn 189.927†	9.4	-1.0	-0.1820 ug/L	-0.1820 ppb	20:06:49
2	Ti 334.940†	-1420.9	-139.6	-0.2158 ug/L	-0.2158 ppb	20:06:29
2	Tl 190.801†	-34.9	-3.7	-1.1912 ug/L	-1.1912 ppb	20:06:49
2	U 409.014†	-2983.1	-167.8	-4.5367 ug/L	-4.5367 ppb	20:06:24
2	V 292.402†	-1407.5	22.5	0.1466 ug/L	0.1466 ppb	20:06:29
2	Zn 213.857†	576.2	18.7	0.1815 ug/L	0.1815 ppb	20:06:49
2	SiO2†	593.6	42.3	2.9032 ug/L	2.9032 ppb	20:07:30
3	Sc Radial	3954.2	3954.2	93.0 %		20:05:47
3	Y RADIAL	4413.6	4413.6	94.06 %		20:05:27
3	Al 396.153Radial†	-117.2	-15.3	-13.861 ug/L	-13.861 ppb	20:05:27
3	Ca 317.933Radial†	19.7	5.7	11.291 ug/L	11.291 ppb	20:05:47
3	Fe 238.204 Radial†	9.1	-0.4	-5.6494 ug/L	-5.6494 ppb	20:05:47
3	K 766.490 Radial†	2623.6	265.5	49.679 ug/L	49.679 ppb	20:05:27
3	Mg 279.077 IEC†	-2.0	-4.9	-221.97 ug/L	-221.97 ppb	20:05:47
3	Na 589.592 Radial†	-821.3	-143.1	-41.527 ug/L	-41.527 ppb	20:05:27
3	Sr 421.552†	18.9	-16.5	-0.1095 ug/L	-0.1095 ppb	20:05:27
3	Sc 361.383	906085.7	906085.7	100.67 %		20:06:54
3	Y 371.029	765417.0	765417.0	100.39 %		20:06:54
3	Ag 328.068†	303.9	72.6	0.3319 ug/L	0.3319 ppb	20:06:59
3	As 188.979†	-15.1	5.5	2.4776 ug/L	2.4776 ppb	20:07:19
3	B 249.677†	-450.7	-74.7	-1.7829 ug/L	-1.7829 ppb	20:07:19
3	Ba 233.527†	2.2	11.4	0.0883 ug/L	0.0883 ppb	20:07:19
3	Be 313.107†	-3932.1	-52.7	-0.0199 ug/L	-0.0199 ppb	20:06:59
3	Cd 226.502†	-187.6	-3.1	-0.0351 ug/L	-0.0351 ppb	20:07:19
3	Co 228.616†	-52.8	9.5	0.1996 ug/L	0.1996 ppb	20:07:19
3	Cr 267.716†	64.0	-2.4	-0.0272 ug/L	-0.0272 ppb	20:07:19
3	Cu 324.752†	6217.5	99.1	0.2980 ug/L	0.2980 ppb	20:06:59
3	Mn 257.610†	457.9	18.0	0.0287 ug/L	0.0287 ppb	20:07:19
3	Mo 202.031†	10.2	4.1	0.2962 ug/L	0.2962 ppb	20:07:19
3	Ni 231.604†	57.8	5.1	0.1295 ug/L	0.1295 ppb	20:07:19
3	P 214.914†	210.5	7.0	4.2130 ug/L	4.2130 ppb	20:07:19
3	Pb 220.353†	-36.9	28.4	3.5148 ug/L	3.5148 ppb	20:07:19
3	S 181.975 Axial†	40.2	2.9	4.1922 ug/L	4.1922 ppb	20:07:19
3	Sb 206.836†	42.3	5.4	1.8740 ug/L	1.8740 ppb	20:07:19
3	Se 196.026†	-22.7	-1.9	-1.2521 ug/L	-1.2521 ppb	20:07:19
3	Si 251.611†	618.8	80.5	2.5802 ug/L	2.5802 ppb	20:07:19
3	Sn 189.927†	10.6	0.1	0.0268 ug/L	0.0268 ppb	20:07:19
3	Ti 334.940†	-1365.8	-74.9	-0.0931 ug/L	-0.0931 ppb	20:06:59
3	Tl 190.801†	-29.0	2.4	0.7747 ug/L	0.7747 ppb	20:07:19
3	U 409.014†	-2887.3	-51.8	-1.3998 ug/L	-1.3998 ppb	20:06:54
3	V 292.402†	-1463.0	-22.8	-0.1602 ug/L	-0.1602 ppb	20:06:59
3	Zn 213.857†	577.2	15.7	0.1572 ug/L	0.1572 ppb	20:07:19
3	SiO2†	642.6	86.9	5.9599 ug/L	5.9599 ppb	20:07:35

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	907336.7	100.81 %	0.918			0.91%
Sc Radial	3941.7	92.7 %	0.26			0.28%
Y 371.029	766066.6	100.48 %	0.972			0.97%
Y RADIAL	4441.3	94.65 %	0.846			0.89%
Ag 328.068†	2.7	0.0209 ug/L	0.32597	0.0209 ppb	0.32597	>999.9%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-29.7	-26.920 ug/L	13.9727	-26.920 ppb	13.9727	51.90%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	2.1	0.9668 ug/L	2.16566	0.9668 ppb	2.16566	224.00%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-84.8	-2.0281 ug/L	0.25185	-2.0281 ppb	0.25185	12.42%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	9.8	0.0769 ug/L	0.02485	0.0769 ppb	0.02485	32.32%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	-16.5	-0.0065 ug/L	0.01626	-0.0065 ppb	0.01626	249.30%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	2.4	4.7180 ug/L	5.75289	4.7180 ppb	5.75289	121.93%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated						
Cd 226.502†	-5.0	-0.0607 ug/L	0.02369	-0.0607 ppb	0.02369	39.04%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-5.0	-0.1034 ug/L	0.36069	-0.1034 ppb	0.36069	348.95%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-0.4	-0.0020 ug/L	0.03847	-0.0020 ppb	0.03847	>999.9%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	47.2	0.1442 ug/L	0.14991	0.1442 ppb	0.14991	103.99%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	1.8	22.913 ug/L	28.5574	22.913 ppb	28.5574	124.64%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	353.6	66.154 ug/L	14.7926	66.154 ppb	14.7926	22.36%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	-1.2	-56.062 ug/L	155.3189	-56.062 ppb	155.3189	277.05%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	38.7	0.0479 ug/L	0.01665	0.0479 ppb	0.01665	34.77%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	5.5	0.4017 ug/L	0.43893	0.4017 ppb	0.43893	109.27%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	-88.2	-25.594 ug/L	14.4787	-25.594 ppb	14.4787	56.57%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	9.6	0.2450 ug/L	0.10315	0.2450 ppb	0.10315	42.10%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	6.8	4.0493 ug/L	4.67303	4.0493 ppb	4.67303	115.40%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	28.3	3.4956 ug/L	0.17359	3.4956 ppb	0.17359	4.97%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	0.3	0.4150 ug/L	5.25751	0.4150 ppb	5.25751	>999.9%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	4.6	1.6131 ug/L	0.90795	1.6131 ppb	0.90795	56.29%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-3.6	-2.3027 ug/L	2.48836	-2.3027 ppb	2.48836	108.06%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	74.8	2.3943 ug/L	0.38528	2.3943 ppb	0.38528	16.09%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	-1.4	-0.2529 ug/L	0.32108	-0.2529 ppb	0.32108	126.96%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	-17.8	-0.1177 ug/L	0.12346	-0.1177 ppb	0.12346	104.85%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	-105.7	-0.1536 ug/L	0.06140	-0.1536 ppb	0.06140	39.99%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	-2.2	-0.7183 ug/L	1.32163	-0.7183 ppb	1.32163	183.98%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	-88.3	-2.3896 ug/L	1.86139	-2.3896 ppb	1.86139	77.90%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	-22.7	-0.1606 ug/L	0.30735	-0.1606 ppb	0.30735	191.37%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	10.2	0.0971 ug/L	0.12582	0.0971 ppb	0.12582	129.64%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	68.6	4.7056 ug/L	1.60032	4.7056 ppb	1.60032	34.01%
QC value within limits for SiO2 Recovery = Not calculated						
All analyte(s) passed QC.						

Sequence No.: 29

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 2/23/2010 21:12:40

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	4104.2	4104.2	96.5 %		21:14:32
1	Y RADIAL	4529.0	4529.0	96.53 %		21:14:32
1	Al 396.153Radial†	5440.5	5749.3	5181.8 ug/L	5181.8 ppb	21:14:32
1	Ca 317.933Radial†	2546.7	2623.9	5220.6 ug/L	5220.6 ppb	21:14:52
1	Fe 238.204 Radial†	376.7	380.2	4913.9 ug/L	4913.9 ppb	21:14:52
1	K 766.490 Radial†	29643.3	28165.2	5262.7 ug/L	5262.7 ppb	21:14:32
1	Mg 279.077 IEC†	115.6	117.0	5318.7 ug/L	5318.7 ppb	21:14:52
1	Na 589.592 Radial†	33775.5	35744.8	10373 ug/L	10373 ppb	21:14:32
1	Sr 421.552†	74441.8	77113.6	511.06 ug/L	511.06 ppb	21:14:32
1	Sc 361.383	894540.6	894540.6	99.386 %		21:15:50
1	Y 371.029	742791.9	742791.9	97.423 %		21:15:50
1	Ag 328.068†	109112.5	109556.8	506.19 ug/L	506.19 ppb	21:15:55
1	As 188.979†	1120.1	1147.5	521.51 ug/L	521.51 ppb	21:16:15
1	B 249.677†	19899.1	20394.9	484.47 ug/L	484.47 ppb	21:15:55
1	Ba 233.527†	64703.0	65111.6	509.84 ug/L	509.84 ppb	21:15:55
1	Be 313.107†	1332006.0	1344082.6	502.04 ug/L	502.04 ppb	21:15:50
1	Cd 226.502†	43973.5	44428.3	515.60 ug/L	515.60 ppb	21:15:55
1	Co 228.616†	24284.8	24496.6	512.27 ug/L	512.27 ppb	21:15:55
1	Cr 267.716†	44987.1	45198.8	507.93 ug/L	507.93 ppb	21:15:55
1	Cu 324.752†	169044.2	164010.7	492.50 ug/L	492.50 ppb	21:15:55
1	Mn 257.610†	447279.7	449604.2	504.36 ug/L	504.36 ppb	21:15:50
1	Mo 202.031†	6996.8	7033.9	515.20 ug/L	515.20 ppb	21:16:15
1	Ni 231.604†	20104.6	20176.4	512.53 ug/L	512.53 ppb	21:15:55
1	P 214.914†	4470.1	4295.6	2511.0 ug/L	2511.0 ppb	21:16:15
1	Pb 220.353†	4146.5	4237.1	526.63 ug/L	526.63 ppb	21:16:15
1	S 181.975 Axial†	756.4	724.1	1059.7 ug/L	1059.7 ppb	21:16:15
1	Sb 206.836†	1502.8	1475.4	532.98 ug/L	532.98 ppb	21:16:15
1	Se 196.026†	763.2	788.6	536.77 ug/L	536.77 ppb	21:16:15
1	Si 251.611†	78712.3	78664.1	2517.2 ug/L	2517.2 ppb	21:15:55
1	Sn 189.927†	2894.4	2901.9	525.62 ug/L	525.62 ppb	21:16:15
1	Ti 334.940†	326805.8	330105.2	499.13 ug/L	499.13 ppb	21:15:50
1	Tl 190.801†	1566.7	1607.6	519.26 ug/L	519.26 ppb	21:16:15
1	U 409.014†	14809.8	17717.5	477.05 ug/L	477.05 ppb	21:15:55
1	V 292.402†	70143.2	72006.7	506.78 ug/L	506.78 ppb	21:15:55
1	Zn 213.857†	51199.3	50957.6	506.65 ug/L	506.65 ppb	21:15:55
1	SiO2†	78547.5	78480.9	5378.3 ug/L	5378.3 ppb	21:17:23
2	Sc Radial	4113.8	4113.8	96.7 %		21:14:57
2	Y RADIAL	4481.0	4481.0	95.50 %		21:14:57
2	Al 396.153Radial†	5405.5	5699.8	5137.2 ug/L	5137.2 ppb	21:14:57
2	Ca 317.933Radial†	2572.0	2643.9	5260.2 ug/L	5260.2 ppb	21:15:17
2	Fe 238.204 Radial†	388.1	391.1	5053.9 ug/L	5053.9 ppb	21:15:17
2	K 766.490 Radial†	29500.9	27946.0	5221.8 ug/L	5221.8 ppb	21:14:57
2	Mg 279.077 IEC†	118.4	119.7	5440.8 ug/L	5440.8 ppb	21:15:17
2	Na 589.592 Radial†	33389.5	35263.7	10234 ug/L	10234 ppb	21:14:57
2	Sr 421.552†	73604.7	76067.5	504.13 ug/L	504.13 ppb	21:14:57
2	Sc 361.383	899290.6	899290.6	99.914 %		21:16:21
2	Y 371.029	747105.5	747105.5	97.988 %		21:16:21
2	Ag 328.068†	110572.6	110438.3	510.29 ug/L	510.29 ppb	21:16:26
2	As 188.979†	1134.3	1155.8	525.26 ug/L	525.26 ppb	21:16:46
2	B 249.677†	20299.4	20689.8	491.48 ug/L	491.48 ppb	21:16:26
2	Ba 233.527†	65208.7	65273.9	511.12 ug/L	511.12 ppb	21:16:26
2	Be 313.107†	1341517.0	1346522.8	502.95 ug/L	502.95 ppb	21:16:21
2	Cd 226.502†	44465.2	44686.7	518.59 ug/L	518.59 ppb	21:16:26
2	Co 228.616†	24505.8	24588.8	514.18 ug/L	514.18 ppb	21:16:26
2	Cr 267.716†	45554.1	45527.2	511.63 ug/L	511.63 ppb	21:16:26
2	Cu 324.752†	171749.1	165819.5	497.94 ug/L	497.94 ppb	21:16:26
2	Mn 257.610†	449791.8	449741.4	504.52 ug/L	504.52 ppb	21:16:21
2	Mo 202.031†	6983.7	6983.7	511.54 ug/L	511.54 ppb	21:16:46
2	Ni 231.604†	20313.5	20278.6	515.13 ug/L	515.13 ppb	21:16:26



2	P 214.914†	4482.4	4284.2	2502.8 ug/L	2502.8 ppb	21:16:46
2	Pb 220.353†	4145.3	4213.9	523.72 ug/L	523.72 ppb	21:16:46
2	S 181.975 Axial†	756.1	719.7	1053.3 ug/L	1053.3 ppb	21:16:46
2	Sb 206.836†	1512.5	1477.1	533.43 ug/L	533.43 ppb	21:16:46
2	Se 196.026†	754.1	775.4	528.51 ug/L	528.51 ppb	21:16:46
2	Si 251.611†	79759.9	79294.3	2537.5 ug/L	2537.5 ppb	21:16:26
2	Sn 189.927†	2884.2	2876.3	520.99 ug/L	520.99 ppb	21:16:46
2	Ti 334.940†	328571.5	330135.6	499.17 ug/L	499.17 ppb	21:16:21
2	Tl 190.801†	1559.0	1591.5	514.10 ug/L	514.10 ppb	21:16:46
2	U 409.014†	15070.7	17899.9	481.95 ug/L	481.95 ppb	21:16:26
2	V 292.402†	71026.2	72517.6	510.26 ug/L	510.26 ppb	21:16:26
2	Zn 213.857†	51728.8	51215.5	509.20 ug/L	509.20 ppb	21:16:26
2	SiO2†	79084.3	78600.7	5386.6 ug/L	5386.6 ppb	21:17:28
3	Sc Radial	4069.3	4069.3	95.7 %		21:15:22
3	Y RADIAL	4512.8	4512.8	96.18 %		21:15:22
3	Al 396.153Radial†	5359.4	5712.9	5149.3 ug/L	5149.3 ppb	21:15:22
3	Ca 317.933Radial†	2536.1	2635.5	5243.6 ug/L	5243.6 ppb	21:15:42
3	Fe 238.204 Radial†	378.5	385.4	4980.6 ug/L	4980.6 ppb	21:15:42
3	K 766.490 Radial†	29457.6	28234.7	5275.8 ug/L	5275.8 ppb	21:15:22
3	Mg 279.077 IEC†	112.8	115.2	5236.1 ug/L	5236.1 ppb	21:15:42
3	Na 589.592 Radial†	33477.2	35733.5	10370 ug/L	10370 ppb	21:15:22
3	Sr 421.552†	73505.7	76797.5	508.96 ug/L	508.96 ppb	21:15:22
3	Sc 361.383	905610.0	905610.0	100.62 %		21:16:52
3	Y 371.029	751059.0	751059.0	98.507 %		21:16:52
3	Ag 328.068†	109011.5	108114.4	499.57 ug/L	499.57 ppb	21:16:57
3	As 188.979†	1113.0	1126.7	512.19 ug/L	512.19 ppb	21:17:18
3	B 249.677†	19952.3	20203.0	479.90 ug/L	479.90 ppb	21:16:57
3	Ba 233.527†	64593.3	64206.8	502.76 ug/L	502.76 ppb	21:16:57
3	Be 313.107†	1349324.8	1344913.6	502.35 ug/L	502.35 ppb	21:16:52
3	Cd 226.502†	44108.5	44021.7	510.87 ug/L	510.87 ppb	21:16:57
3	Co 228.616†	24380.2	24292.8	507.98 ug/L	507.98 ppb	21:16:57
3	Cr 267.716†	45097.4	44755.2	502.95 ug/L	502.95 ppb	21:16:57
3	Cu 324.752†	168887.3	161775.7	485.80 ug/L	485.80 ppb	21:16:57
3	Mn 257.610†	453289.6	450076.4	504.90 ug/L	504.90 ppb	21:16:52
3	Mo 202.031†	6962.8	6914.1	506.44 ug/L	506.44 ppb	21:17:18
3	Ni 231.604†	20183.5	20007.5	508.24 ug/L	508.24 ppb	21:16:57
3	P 214.914†	4457.0	4227.7	2470.9 ug/L	2470.9 ppb	21:17:18
3	Pb 220.353†	4111.0	4150.9	515.91 ug/L	515.91 ppb	21:17:18
3	S 181.975 Axial†	756.4	714.7	1046.0 ug/L	1046.0 ppb	21:17:18
3	Sb 206.836†	1495.8	1450.0	523.76 ug/L	523.76 ppb	21:17:18
3	Se 196.026†	749.4	765.5	521.74 ug/L	521.74 ppb	21:17:18
3	Si 251.611†	78821.3	77804.4	2489.7 ug/L	2489.7 ppb	21:16:57
3	Sn 189.927†	2871.6	2843.6	515.09 ug/L	515.09 ppb	21:17:18
3	Ti 334.940†	331326.2	330578.6	499.86 ug/L	499.86 ppb	21:16:52
3	Tl 190.801†	1557.2	1578.9	510.08 ug/L	510.08 ppb	21:17:18
3	U 409.014†	14766.4	17492.2	470.96 ug/L	470.96 ppb	21:16:57
3	V 292.402†	70197.2	71197.7	501.02 ug/L	501.02 ppb	21:16:57
3	Zn 213.857†	51256.8	50385.1	500.93 ug/L	500.93 ppb	21:16:57
3	SiO2†	78460.8	77428.8	5306.2 ug/L	5306.2 ppb	21:17:33

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	899813.7	99.972 %	0.6170			0.62%
Sc Radial	4095.8	96.3 %	0.55			0.57%
Y 371.029	746985.5	97.973 %	0.5423			0.55%
Y RADIAL	4507.6	96.07 %	0.520			0.54%
Ag 328.068†	109369.9	505.35 ug/L	5.410	505.35 ppb	5.410	1.07%
QC value within limits for Ag 328.068 Recovery = 101.07%						
Al 396.153Radial†	5720.7	5156.1 ug/L	23.06	5156.1 ppb	23.06	0.45%
QC value within limits for Al 396.153Radial Recovery = 103.12%						
As 188.979†	1143.3	519.65 ug/L	6.733	519.65 ppb	6.733	1.30%
QC value within limits for As 188.979 Recovery = 103.93%						
B 249.677†	20429.3	485.28 ug/L	5.836	485.28 ppb	5.836	1.20%
QC value within limits for B 249.677 Recovery = 97.06%						
Ba 233.527†	64864.1	507.91 ug/L	4.501	507.91 ppb	4.501	0.89%
QC value within limits for Ba 233.527 Recovery = 101.58%						
Be 313.107†	1345173.0	502.44 ug/L	0.462	502.44 ppb	0.462	0.09%
QC value within limits for Be 313.107 Recovery = 100.49%						
Ca 317.933Radial†	2634.4	5241.5 ug/L	19.92	5241.5 ppb	19.92	0.38%

QC value within limits for Ca 317.933 Radial Recovery = 104.83%

Cd 226.502†	44378.9	515.02 ug/L	3.892	515.02 ppb	3.892	0.76%
QC value within limits for Cd 226.502 Recovery = 103.00%						
Co 228.616†	24459.4	511.48 ug/L	3.175	511.48 ppb	3.175	0.62%
QC value within limits for Co 228.616 Recovery = 102.30%						
Cr 267.716†	45160.4	507.50 ug/L	4.353	507.50 ppb	4.353	0.86%
QC value within limits for Cr 267.716 Recovery = 101.50%						
Cu 324.752†	163868.6	492.08 ug/L	6.081	492.08 ppb	6.081	1.24%
QC value within limits for Cu 324.752 Recovery = 98.42%						
Fe 238.204 Radial†	385.6	4982.8 ug/L	70.04	4982.8 ppb	70.04	1.41%
QC value within limits for Fe 238.204 Radial Recovery = 99.66%						
K 766.490 Radial†	28115.3	5253.4 ug/L	28.17	5253.4 ppb	28.17	0.54%
QC value within limits for K 766.490 Radial Recovery = 105.07%						
Mg 279.077 IEC†	117.3	5331.9 ug/L	102.94	5331.9 ppb	102.94	1.93%
QC value within limits for Mg 279.077 IEC Recovery = 106.64%						
Mn 257.610†	449807.3	504.59 ug/L	0.277	504.59 ppb	0.277	0.05%
QC value within limits for Mn 257.610 Recovery = 100.92%						
Mo 202.031†	6977.2	511.06 ug/L	4.400	511.06 ppb	4.400	0.86%
QC value within limits for Mo 202.031 Recovery = 102.21%						
Na 589.592 Radial†	35580.7	10326 ug/L	79.7	10326 ppb	79.7	0.77%
QC value within limits for Na 589.592 Radial Recovery = 103.26%						
Ni 231.604†	20154.2	511.97 ug/L	3.478	511.97 ppb	3.478	0.68%
QC value within limits for Ni 231.604 Recovery = 102.39%						
P 214.914†	4269.2	2494.9 ug/L	21.16	2494.9 ppb	21.16	0.85%
QC value within limits for P 214.914 Recovery = 99.80%						
Pb 220.353†	4200.6	522.09 ug/L	5.542	522.09 ppb	5.542	1.06%
QC value within limits for Pb 220.353 Recovery = 104.42%						
S 181.975 Axial†	719.5	1053.0 ug/L	6.85	1053.0 ppb	6.85	0.65%
QC value within limits for S 181.975 Axial Recovery = 105.30%						
Sb 206.836†	1467.5	530.06 ug/L	5.459	530.06 ppb	5.459	1.03%
QC value within limits for Sb 206.836 Recovery = 106.01%						
Se 196.026†	776.5	529.01 ug/L	7.526	529.01 ppb	7.526	1.42%
QC value within limits for Se 196.026 Recovery = 105.80%						
Si 251.611†	78587.6	2514.8 ug/L	23.96	2514.8 ppb	23.96	0.95%
QC value within limits for Si 251.611 Recovery = 100.59%						
Sn 189.927†	2873.9	520.57 ug/L	5.281	520.57 ppb	5.281	1.01%
QC value within limits for Sn 189.927 Recovery = 104.11%						
Sr 421.552†	76659.5	508.05 ug/L	3.556	508.05 ppb	3.556	0.70%
QC value within limits for Sr 421.552 Recovery = 101.61%						
Ti 334.940†	330273.1	499.39 ug/L	0.411	499.39 ppb	0.411	0.08%
QC value within limits for Ti 334.940 Recovery = 99.88%						
Tl 190.801†	1592.7	514.48 ug/L	4.603	514.48 ppb	4.603	0.89%
QC value within limits for Tl 190.801 Recovery = 102.90%						
U 409.014†	17703.2	476.65 ug/L	5.506	476.65 ppb	5.506	1.16%
QC value within limits for U 409.014 Recovery = 95.33%						
V 292.402†	71907.4	506.02 ug/L	4.670	506.02 ppb	4.670	0.92%
QC value within limits for V 292.402 Recovery = 101.20%						
Zn 213.857†	50852.8	505.59 ug/L	4.231	505.59 ppb	4.231	0.84%
QC value within limits for Zn 213.857 Recovery = 101.12%						
SiO2†	78170.1	5357.0 ug/L	44.20	5357.0 ppb	44.20	0.83%
QC value within limits for SiO2 Recovery = 100.18%						

All analyte(s) passed QC.

Sequence No.: 30

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 2/23/2010 21:19:43

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	4079.9	4079.9	95.9 %		21:21:35
1	Y RADIAL	4544.0	4544.0	96.84 %		21:21:35
1	Al 396.153Radial†	-114.8	-8.9	-8.1061 ug/L	-8.1061 ppb	21:21:35
1	Ca 317.933Radial†	16.0	1.2	2.3684 ug/L	2.3684 ppb	21:21:55
1	Fe 238.204 Radial†	11.0	1.3	16.578 ug/L	16.578 ppb	21:21:55
1	K 766.490 Radial†	2912.6	479.8	89.736 ug/L	89.736 ppb	21:21:35
1	Mg 279.077 IEC†	0.8	-1.9	-88.054 ug/L	-88.054 ppb	21:21:55
1	Na 589.592 Radial†	-399.5	323.9	93.995 ug/L	93.995 ppb	21:21:35
1	Sr 421.552†	82.0	48.7	0.3227 ug/L	0.3227 ppb	21:21:35
1	Sc 361.383	913981.6	913981.6	101.55 %		21:22:52
1	Y 371.029	769281.3	769281.3	100.90 %		21:22:52
1	Ag 328.068†	269.8	36.4	0.1725 ug/L	0.1725 ppb	21:22:57
1	As 188.979†	-23.3	-2.4	-1.0702 ug/L	-1.0702 ppb	21:23:17
1	B 249.677†	-511.5	-130.7	-3.1225 ug/L	-3.1225 ppb	21:23:17
1	Ba 233.527†	10.0	19.0	0.1485 ug/L	0.1485 ppb	21:23:17
1	Be 313.107†	-3936.1	-22.9	-0.0091 ug/L	-0.0091 ppb	21:22:57
1	Cd 226.502†	-185.8	0.4	0.0025 ug/L	0.0025 ppb	21:23:17
1	Co 228.616†	-71.5	-8.5	-0.1758 ug/L	-0.1758 ppb	21:23:17
1	Cr 267.716†	77.6	10.4	0.1184 ug/L	0.1184 ppb	21:23:17
1	Cu 324.752†	6033.8	-135.2	-0.4044 ug/L	-0.4044 ppb	21:22:57
1	Mn 257.610†	463.7	19.8	0.0275 ug/L	0.0275 ppb	21:23:17
1	Mo 202.031†	10.2	4.0	0.2924 ug/L	0.2924 ppb	21:23:17
1	Ni 231.604†	62.5	9.2	0.2349 ug/L	0.2349 ppb	21:23:17
1	P 214.914†	224.7	19.2	11.722 ug/L	11.722 ppb	21:23:17
1	Pb 220.353†	-36.5	29.1	3.6073 ug/L	3.6073 ppb	21:23:17
1	S 181.975 Axial†	47.4	9.6	14.061 ug/L	14.061 ppb	21:23:17
1	Sb 206.836†	40.7	3.4	1.2127 ug/L	1.2127 ppb	21:23:17
1	Se 196.026†	-25.7	-4.6	-2.9790 ug/L	-2.9790 ppb	21:23:17
1	Si 251.611†	563.5	20.8	0.6636 ug/L	0.6636 ppb	21:23:17
1	Sn 189.927†	16.7	6.0	1.0937 ug/L	1.0937 ppb	21:23:17
1	Ti 334.940†	-1460.6	-156.6	-0.2287 ug/L	-0.2287 ppb	21:22:57
1	Tl 190.801†	-25.3	6.3	2.0199 ug/L	2.0199 ppb	21:23:17
1	U 409.014†	-2919.9	-59.2	-1.6005 ug/L	-1.6005 ppb	21:22:52
1	V 292.402†	-1486.3	-33.2	-0.2334 ug/L	-0.2334 ppb	21:22:57
1	Zn 213.857†	563.8	-2.4	-0.0279 ug/L	-0.0279 ppb	21:23:17
1	SiO2†	571.0	10.8	0.7343 ug/L	0.7343 ppb	21:24:23
2	Sc Radial	4098.4	4098.4	96.4 %		21:22:00
2	Y RADIAL	4528.6	4528.6	96.52 %		21:22:00
2	Al 396.153Radial†	-137.4	-31.8	-28.833 ug/L	-28.833 ppb	21:22:00
2	Ca 317.933Radial†	19.0	4.3	8.4818 ug/L	8.4818 ppb	21:22:20
2	Fe 238.204 Radial†	8.5	-1.4	-17.891 ug/L	-17.891 ppb	21:22:20
2	K 766.490 Radial†	2731.5	278.2	52.013 ug/L	52.013 ppb	21:22:00
2	Mg 279.077 IEC†	2.0	-0.7	-32.447 ug/L	-32.447 ppb	21:22:20
2	Na 589.592 Radial†	-514.9	205.9	59.759 ug/L	59.759 ppb	21:22:00
2	Sr 421.552†	91.4	58.1	0.3852 ug/L	0.3852 ppb	21:22:00
2	Sc 361.383	915140.5	915140.5	101.68 %		21:23:22
2	Y 371.029	771725.3	771725.3	101.22 %		21:23:22
2	Ag 328.068†	287.2	53.1	0.2368 ug/L	0.2368 ppb	21:23:27
2	As 188.979†	-17.0	3.8	1.7058 ug/L	1.7058 ppb	21:23:47
2	B 249.677†	-520.3	-138.8	-3.3094 ug/L	-3.3094 ppb	21:23:47
2	Ba 233.527†	37.7	46.2	0.3589 ug/L	0.3589 ppb	21:23:47
2	Be 313.107†	-3878.9	38.3	0.0134 ug/L	0.0134 ppb	21:23:27
2	Cd 226.502†	-185.3	1.1	0.0140 ug/L	0.0140 ppb	21:23:47
2	Co 228.616†	-75.8	-12.6	-0.2617 ug/L	-0.2617 ppb	21:23:47
2	Cr 267.716†	65.3	-1.8	-0.0218 ug/L	-0.0218 ppb	21:23:47
2	Cu 324.752†	6073.6	-103.6	-0.3113 ug/L	-0.3113 ppb	21:23:27
2	Mn 257.610†	482.8	38.0	0.0422 ug/L	0.0422 ppb	21:23:47
2	Mo 202.031†	8.9	2.7	0.1940 ug/L	0.1940 ppb	21:23:47
2	Ni 231.604†	54.5	1.3	0.0329 ug/L	0.0329 ppb	21:23:47

2	P 214.914†	206.4	1.0	0.6538 ug/L	0.6538 ppb	21:23:47
2	Pb 220.353†	-44.1	21.7	2.6813 ug/L	2.6813 ppb	21:23:47
2	S 181.975 Axial†	37.9	0.2	0.3633 ug/L	0.3633 ppb	21:23:47
2	Sb 206.836†	53.0	15.4	5.3902 ug/L	5.3902 ppb	21:23:47
2	Se 196.026†	-23.3	-2.2	-1.5273 ug/L	-1.5273 ppb	21:23:47
2	Si 251.611†	571.4	27.8	0.8903 ug/L	0.8903 ppb	21:23:47
2	Sn 189.927†	15.6	4.9	0.8920 ug/L	0.8920 ppb	21:23:47
2	Ti 334.940†	-1565.8	-258.2	-0.3861 ug/L	-0.3861 ppb	21:23:27
2	Tl 190.801†	-35.3	-3.5	-1.1391 ug/L	-1.1391 ppb	21:23:47
2	U 409.014†	-2915.7	-51.4	-1.3871 ug/L	-1.3871 ppb	21:23:22
2	V 292.402†	-1550.3	-94.4	-0.6526 ug/L	-0.6526 ppb	21:23:27
2	Zn 213.857†	563.8	-3.1	-0.0286 ug/L	-0.0286 ppb	21:23:47
2	SiO2†	578.6	17.5	1.1984 ug/L	1.1984 ppb	21:24:28
3	Sc Radial	4071.3	4071.3	95.7 %		21:22:25
3	Y RADIAL	4480.9	4480.9	95.50 %		21:22:25
3	Al 396.153Radial†	-152.3	-48.3	-43.791 ug/L	-43.791 ppb	21:22:25
3	Ca 317.933Radial†	18.0	3.4	6.6656 ug/L	6.6656 ppb	21:22:45
3	Fe 238.204 Radial†	12.2	2.6	33.032 ug/L	33.032 ppb	21:22:45
3	K 766.490 Radial†	2823.2	392.8	73.456 ug/L	73.456 ppb	21:22:25
3	Mg 279.077 IEC†	1.4	-1.3	-57.233 ug/L	-57.233 ppb	21:22:45
3	Na 589.592 Radial†	-513.7	203.7	59.100 ug/L	59.100 ppb	21:22:25
3	Sr 421.552†	104.9	72.9	0.4829 ug/L	0.4829 ppb	21:22:25
3	Sc 361.383	919690.2	919690.2	102.18 %		21:23:52
3	Y 371.029	774865.5	774865.5	101.63 %		21:23:52
3	Ag 328.068†	128.5	-103.6	-0.4666 ug/L	-0.4666 ppb	21:23:58
3	As 188.979†	-30.1	-9.0	-4.0375 ug/L	-4.0375 ppb	21:24:18
3	B 249.677†	-533.4	-149.1	-3.5635 ug/L	-3.5635 ppb	21:24:18
3	Ba 233.527†	19.5	28.2	0.2206 ug/L	0.2206 ppb	21:24:18
3	Be 313.107†	-3775.9	158.0	0.0583 ug/L	0.0583 ppb	21:23:58
3	Cd 226.502†	-187.0	0.3	0.0004 ug/L	0.0004 ppb	21:24:18
3	Co 228.616†	-70.4	-7.0	-0.1440 ug/L	-0.1440 ppb	21:24:18
3	Cr 267.716†	43.2	-23.7	-0.2627 ug/L	-0.2627 ppb	21:24:18
3	Cu 324.752†	6198.3	-11.1	-0.0314 ug/L	-0.0314 ppb	21:23:58
3	Mn 257.610†	471.0	24.1	0.0326 ug/L	0.0326 ppb	21:24:18
3	Mo 202.031†	13.0	6.7	0.4916 ug/L	0.4916 ppb	21:24:18
3	Ni 231.604†	68.8	15.0	0.3806 ug/L	0.3806 ppb	21:24:18
3	P 214.914†	204.4	-2.0	-1.2702 ug/L	-1.2702 ppb	21:24:18
3	Pb 220.353†	-35.5	30.2	3.7368 ug/L	3.7368 ppb	21:24:18
3	S 181.975 Axial†	40.4	2.5	3.6052 ug/L	3.6052 ppb	21:24:18
3	Sb 206.836†	39.9	2.3	0.8181 ug/L	0.8181 ppb	21:24:18
3	Se 196.026†	-32.3	-10.9	-7.0769 ug/L	-7.0769 ppb	21:24:18
3	Si 251.611†	571.5	25.2	0.8023 ug/L	0.8023 ppb	21:24:18
3	Sn 189.927†	10.8	0.1	0.0214 ug/L	0.0214 ppb	21:24:18
3	Ti 334.940†	-1475.1	-161.8	-0.2388 ug/L	-0.2388 ppb	21:23:58
3	Tl 190.801†	-31.7	0.2	0.0673 ug/L	0.0673 ppb	21:24:18
3	U 409.014†	-2893.4	-15.4	-0.4203 ug/L	-0.4203 ppb	21:23:52
3	V 292.402†	-1505.8	-43.2	-0.2996 ug/L	-0.2996 ppb	21:23:58
3	Zn 213.857†	572.2	2.3	0.0160 ug/L	0.0160 ppb	21:24:18
3	SiO2†	611.0	46.5	3.1787 ug/L	3.1787 ppb	21:24:33

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	916270.8	101.80 %	0.335			0.33%
Sc Radial	4083.2	96.0 %	0.33			0.34%
Y 371.029	771957.4	101.25 %	0.367			0.36%
Y RADIAL	4517.8	96.29 %	0.700			0.73%
Ag 328.068†	-4.7	-0.0191 ug/L	0.38890	-0.0191 ppb	0.38890	>999.9%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-29.7	-26.910 ug/L	17.9202	-26.910 ppb	17.9202	66.59%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-2.5	-1.1340 ug/L	2.87222	-1.1340 ppb	2.87222	253.29%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-139.6	-3.3318 ug/L	0.22133	-3.3318 ppb	0.22133	6.64%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	31.1	0.2427 ug/L	0.10691	0.2427 ppb	0.10691	44.06%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	57.8	0.0209 ug/L	0.03432	0.0209 ppb	0.03432	164.39%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	2.9	5.8386 ug/L	3.13953	5.8386 ppb	3.13953	53.77%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd	226.502†	0.6	0.0056 ug/L	0.00733	0.0056 ppb	0.00733	130.48%
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co	228.616†	-9.3	-0.1938 ug/L	0.06092	-0.1938 ppb	0.06092	31.43%
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr	267.716†	-5.0	-0.0554 ug/L	0.19277	-0.0554 ppb	0.19277	348.17%
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu	324.752†	-83.3	-0.2490 ug/L	0.19416	-0.2490 ppb	0.19416	77.97%
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe	238.204 Radial†	0.8	10.573 ug/L	25.9871	10.573 ppb	25.9871	245.79%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K	766.490 Radial†	383.6	71.735 ug/L	18.9198	71.735 ppb	18.9198	26.37%
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg	279.077 IEC†	-1.3	-59.245 ug/L	27.8579	-59.245 ppb	27.8579	47.02%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn	257.610†	27.3	0.0341 ug/L	0.00749	0.0341 ppb	0.00749	21.96%
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo	202.031†	4.4	0.3260 ug/L	0.15163	0.3260 ppb	0.15163	46.51%
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na	589.592 Radial†	244.5	70.951 ug/L	19.9591	70.951 ppb	19.9591	28.13%
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni	231.604†	8.5	0.2161 ug/L	0.17459	0.2161 ppb	0.17459	80.78%
QC value within limits for Ni 231.604 Recovery = Not calculated							
P	214.914†	6.0	3.7018 ug/L	7.01173	3.7018 ppb	7.01173	189.42%
QC value within limits for P 214.914 Recovery = Not calculated							
Pb	220.353†	27.0	3.3418 ug/L	0.57563	3.3418 ppb	0.57563	17.23%
QC value within limits for Pb 220.353 Recovery = Not calculated							
S	181.975 Axial†	4.1	6.0098 ug/L	7.15847	6.0098 ppb	7.15847	119.11%
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb	206.836†	7.0	2.4737 ug/L	2.53344	2.4737 ppb	2.53344	102.42%
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se	196.026†	-5.9	-3.8611 ug/L	2.87804	-3.8611 ppb	2.87804	74.54%
QC value within limits for Se 196.026 Recovery = Not calculated							
Si	251.611†	24.6	0.7854 ug/L	0.11430	0.7854 ppb	0.11430	14.55%
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn	189.927†	3.7	0.6690 ug/L	0.56984	0.6690 ppb	0.56984	85.18%
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr	421.552†	59.9	0.3969 ug/L	0.08073	0.3969 ppb	0.08073	20.34%
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti	334.940†	-192.2	-0.2845 ug/L	0.08808	-0.2845 ppb	0.08808	30.96%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl	190.801†	1.0	0.3161 ug/L	1.59408	0.3161 ppb	1.59408	504.37%
QC value within limits for Tl 190.801 Recovery = Not calculated							
U	409.014†	-42.0	-1.1360 ug/L	0.62888	-1.1360 ppb	0.62888	55.36%
QC value within limits for U 409.014 Recovery = Not calculated							
V	292.402†	-56.9	-0.3952 ug/L	0.22535	-0.3952 ppb	0.22535	57.03%
QC value within limits for V 292.402 Recovery = Not calculated							
Zn	213.857†	-1.1	-0.0135 ug/L	0.02553	-0.0135 ppb	0.02553	188.76%
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†		24.9	1.7038 ug/L	1.29825	1.7038 ppb	1.29825	76.20%
QC value within limits for SiO2 Recovery = Not calculated							
All analyte(s) passed QC.							

Sequence No.: 39

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 2/23/2010 22:21:35

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	3841.3	3841.3	90.3 %		22:23:47
1	Y RADIAL	4242.2	4242.2	90.41 %		22:23:27
1	Al 396.153Radial†	5336.8	6020.3	5427.7 ug/L	5427.7 ppb	22:23:27
1	Ca 317.933Radial†	2510.5	2764.5	5500.2 ug/L	5500.2 ppb	22:23:47
1	Fe 238.204 Radial†	376.6	406.9	5256.9 ug/L	5256.9 ppb	22:23:47
1	K 766.490 Radial†	28833.0	29370.9	5488.3 ug/L	5488.3 ppb	22:23:27
1	Mg 279.077 IEC†	110.0	119.0	5409.4 ug/L	5409.4 ppb	22:23:47
1	Na 589.592 Radial†	31405.8	35516.9	10307 ug/L	10307 ppb	22:23:27
1	Sr 421.552†	71381.1	79005.6	523.60 ug/L	523.60 ppb	22:23:27
1	Sc 361.383	904620.6	904620.6	100.51 %		22:24:44
1	Y 371.029	751980.7	751980.7	98.628 %		22:24:44
1	Ag 328.068†	110459.9	109674.1	506.84 ug/L	506.84 ppb	22:24:49
1	As 188.979†	1112.8	1127.7	512.62 ug/L	512.62 ppb	22:25:10
1	B 249.677†	20196.6	20467.8	486.16 ug/L	486.16 ppb	22:24:49
1	Ba 233.527†	65323.3	65003.3	509.00 ug/L	509.00 ppb	22:24:49
1	Be 313.107†	1340888.9	1337986.9	499.76 ug/L	499.76 ppb	22:24:44
1	Cd 226.502†	44523.9	44482.9	516.20 ug/L	516.20 ppb	22:24:49
1	Co 228.616†	24583.9	24522.0	512.78 ug/L	512.78 ppb	22:24:49
1	Cr 267.716†	45567.8	45272.3	508.78 ug/L	508.78 ppb	22:24:49
1	Cu 324.752†	171383.9	164443.3	493.82 ug/L	493.82 ppb	22:24:49
1	Mn 257.610†	448923.2	446224.8	500.60 ug/L	500.60 ppb	22:24:44
1	Mo 202.031†	6974.3	6933.1	507.86 ug/L	507.86 ppb	22:25:10
1	Ni 231.604†	20398.3	20243.2	514.23 ug/L	514.23 ppb	22:24:49
1	P 214.914†	4458.3	4233.8	2472.9 ug/L	2472.9 ppb	22:25:10
1	Pb 220.353†	4101.9	4146.3	515.38 ug/L	515.38 ppb	22:25:10
1	S 181.975 Axial†	756.2	715.4	1047.0 ug/L	1047.0 ppb	22:25:10
1	Sb 206.836†	1511.0	1466.7	529.70 ug/L	529.70 ppb	22:25:10
1	Se 196.026†	764.5	781.3	532.99 ug/L	532.99 ppb	22:25:10
1	Si 251.611†	79925.3	78988.5	2527.7 ug/L	2527.7 ppb	22:24:49
1	Sn 189.927†	2890.2	2865.2	519.02 ug/L	519.02 ppb	22:25:10
1	Ti 334.940†	327646.2	327277.4	494.89 ug/L	494.89 ppb	22:24:44
1	Tl 190.801†	1557.8	1581.2	510.73 ug/L	510.73 ppb	22:25:10
1	U 409.014†	14980.3	17721.1	477.10 ug/L	477.10 ppb	22:24:49
1	V 292.402†	71021.0	72093.6	507.23 ug/L	507.23 ppb	22:24:49
1	Zn 213.857†	51862.0	51043.0	507.44 ug/L	507.44 ppb	22:24:49
1	SiO2†	78270.4	77324.6	5299.0 ug/L	5299.0 ppb	22:26:17
2	Sc Radial	3904.2	3904.2	91.8 %		22:24:12
2	Y RADIAL	4345.8	4345.8	92.62 %		22:23:52
2	Al 396.153Radial†	5198.1	5774.0	5204.5 ug/L	5204.5 ppb	22:23:52
2	Ca 317.933Radial†	2520.2	2730.2	5432.0 ug/L	5432.0 ppb	22:24:12
2	Fe 238.204 Radial†	372.0	395.1	5105.9 ug/L	5105.9 ppb	22:24:12
2	K 766.490 Radial†	28297.0	28272.1	5282.9 ug/L	5282.9 ppb	22:23:52
2	Mg 279.077 IEC†	114.5	122.0	5543.6 ug/L	5543.6 ppb	22:24:12
2	Na 589.592 Radial†	30291.7	33742.3	9792.2 ug/L	9792.2 ppb	22:23:52
2	Sr 421.552†	69213.9	75369.9	499.50 ug/L	499.50 ppb	22:23:52
2	Sc 361.383	898911.0	898911.0	99.872 %		22:25:15
2	Y 371.029	748412.3	748412.3	98.160 %		22:25:15
2	Ag 328.068†	110063.1	109974.8	508.17 ug/L	508.17 ppb	22:25:21
2	As 188.979†	1108.9	1130.9	514.01 ug/L	514.01 ppb	22:25:41
2	B 249.677†	20219.6	20618.4	489.77 ug/L	489.77 ppb	22:25:21
2	Ba 233.527†	64958.9	65051.3	509.38 ug/L	509.38 ppb	22:25:21
2	Be 313.107†	1329146.7	1334703.6	498.53 ug/L	498.53 ppb	22:25:15
2	Cd 226.502†	44224.8	44464.8	516.01 ug/L	516.01 ppb	22:25:21
2	Co 228.616†	24456.4	24549.7	513.37 ug/L	513.37 ppb	22:25:21
2	Cr 267.716†	45360.4	45352.6	509.67 ug/L	509.67 ppb	22:25:21
2	Cu 324.752†	170821.1	164962.9	495.37 ug/L	495.37 ppb	22:25:21
2	Mn 257.610†	443483.6	443615.2	497.65 ug/L	497.65 ppb	22:25:15
2	Mo 202.031†	6952.9	6955.8	509.50 ug/L	509.50 ppb	22:25:41
2	Ni 231.604†	20342.9	20316.6	516.10 ug/L	516.10 ppb	22:25:21

2	P 214.914†	4412.8	4216.4	2462.1 ug/L	2462.1 ppb	22:25:41
2	Pb 220.353†	4096.4	4166.7	517.87 ug/L	517.87 ppb	22:25:41
2	S 181.975 Axial†	749.1	713.0	1043.6 ug/L	1043.6 ppb	22:25:41
2	Sb 206.836†	1489.3	1454.5	525.49 ug/L	525.49 ppb	22:25:41
2	Se 196.026†	756.8	778.5	530.67 ug/L	530.67 ppb	22:25:41
2	Si 251.611†	79381.7	78949.3	2526.4 ug/L	2526.4 ppb	22:25:21
2	Sn 189.927†	2866.1	2859.4	517.97 ug/L	517.97 ppb	22:25:41
2	Ti 334.940†	324630.4	326328.3	493.43 ug/L	493.43 ppb	22:25:15
2	Tl 190.801†	1556.9	1590.1	513.57 ug/L	513.57 ppb	22:25:41
2	U 409.014†	15125.8	17961.4	483.61 ug/L	483.61 ppb	22:25:21
2	V 292.402†	70815.8	72337.0	508.98 ug/L	508.98 ppb	22:25:21
2	Zn 213.857†	51466.0	50974.3	506.76 ug/L	506.76 ppb	22:25:21
2	SiO2†	79789.0	79339.8	5437.5 ug/L	5437.5 ppb	22:26:23
3	Sc Radial	3936.1	3936.1	92.5 %		22:24:37
3	Y RADIAL	4428.2	4428.2	94.38 %		22:24:17
3	Al 396.153Radial†	5324.5	5864.7	5286.8 ug/L	5286.8 ppb	22:24:17
3	Ca 317.933Radial†	2526.7	2715.0	5401.8 ug/L	5401.8 ppb	22:24:37
3	Fe 238.204 Radial†	378.9	399.2	5158.7 ug/L	5158.7 ppb	22:24:37
3	K 766.490 Radial†	28845.6	28615.4	5347.1 ug/L	5347.1 ppb	22:24:17
3	Mg 279.077 IEC†	116.0	122.6	5573.8 ug/L	5573.8 ppb	22:24:37
3	Na 589.592 Radial†	31022.2	34264.8	9943.8 ug/L	9943.8 ppb	22:24:17
3	Sr 421.552†	70648.0	76309.5	505.73 ug/L	505.73 ppb	22:24:17
3	Sc 361.383	911047.1	911047.1	101.22 %		22:25:47
3	Y 371.029	758587.4	758587.4	99.494 %		22:25:47
3	Ag 328.068†	110357.8	108798.0	502.76 ug/L	502.76 ppb	22:25:52
3	As 188.979†	1134.3	1141.1	518.65 ug/L	518.65 ppb	22:26:12
3	B 249.677†	20179.9	20309.6	482.42 ug/L	482.42 ppb	22:25:52
3	Ba 233.527†	64932.5	64158.8	502.39 ug/L	502.39 ppb	22:25:52
3	Be 313.107†	1354089.3	1341617.2	501.11 ug/L	501.11 ppb	22:25:47
3	Cd 226.502†	44243.4	43893.4	509.37 ug/L	509.37 ppb	22:25:52
3	Co 228.616†	24433.7	24201.1	506.07 ug/L	506.07 ppb	22:25:52
3	Cr 267.716†	45439.2	44825.4	503.75 ug/L	503.75 ppb	22:25:52
3	Cu 324.752†	171164.3	163023.5	489.55 ug/L	489.55 ppb	22:25:52
3	Mn 257.610†	450527.7	444659.1	498.83 ug/L	498.83 ppb	22:25:47
3	Mo 202.031†	7017.6	6926.9	507.40 ug/L	507.40 ppb	22:26:12
3	Ni 231.604†	20336.3	20038.8	509.04 ug/L	509.04 ppb	22:25:52
3	P 214.914†	4482.5	4226.4	2469.3 ug/L	2469.3 ppb	22:26:12
3	Pb 220.353†	4136.0	4151.2	515.96 ug/L	515.96 ppb	22:26:12
3	S 181.975 Axial†	762.6	716.3	1048.4 ug/L	1048.4 ppb	22:26:12
3	Sb 206.836†	1510.0	1455.1	525.63 ug/L	525.63 ppb	22:26:12
3	Se 196.026†	762.1	773.6	527.60 ug/L	527.60 ppb	22:26:12
3	Si 251.611†	79509.2	78016.4	2496.5 ug/L	2496.5 ppb	22:25:52
3	Sn 189.927†	2904.2	2858.8	517.85 ug/L	517.85 ppb	22:26:12
3	Ti 334.940†	329454.1	326763.9	494.08 ug/L	494.08 ppb	22:25:47
3	Tl 190.801†	1579.7	1591.8	514.17 ug/L	514.17 ppb	22:26:12
3	U 409.014†	15222.3	17855.0	480.74 ug/L	480.74 ppb	22:25:52
3	V 292.402†	70839.0	71415.4	502.55 ug/L	502.55 ppb	22:25:52
3	Zn 213.857†	51630.0	50449.8	501.55 ug/L	501.55 ppb	22:25:52
3	SiO2†	78966.6	77463.1	5308.6 ug/L	5308.6 ppb	22:26:28

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	904859.5	100.53 %	0.675			0.67%
Sc Radial	3893.8	91.5 %	1.13			1.24%
Y 371.029	752993.5	98.761 %	0.6771			0.69%
Y RADIAL	4338.7	92.47 %	1.987			2.15%
Ag 328.068†	109482.3	505.92 ug/L	2.819	505.92 ppb	2.819	0.56%
QC value within limits for Ag 328.068 Recovery = 101.18%						
Al 396.153Radial†	5886.3	5306.3 ug/L	112.89	5306.3 ppb	112.89	2.13%
QC value within limits for Al 396.153Radial Recovery = 106.13%						
As 188.979†	1133.2	515.10 ug/L	3.159	515.10 ppb	3.159	0.61%
QC value within limits for As 188.979 Recovery = 103.02%						
B 249.677†	20465.3	486.12 ug/L	3.679	486.12 ppb	3.679	0.76%
QC value within limits for B 249.677 Recovery = 97.22%						
Ba 233.527†	64737.8	506.93 ug/L	3.929	506.93 ppb	3.929	0.77%
QC value within limits for Ba 233.527 Recovery = 101.39%						
Be 313.107†	1338102.5	499.80 ug/L	1.290	499.80 ppb	1.290	0.26%
QC value within limits for Be 313.107 Recovery = 99.96%						
Ca 317.933Radial†	2736.6	5444.7 ug/L	50.40	5444.7 ppb	50.40	0.93%

QC value within limits for Ca 317.933 Radial Recovery = 108.89%

Cd 226.502†	44280.3	513.86 ug/L	3.892	513.86 ppb	3.892	0.76%
QC value within limits for Cd 226.502 Recovery = 102.77%						
Co 228.616†	24424.3	510.74 ug/L	4.054	510.74 ppb	4.054	0.79%
QC value within limits for Co 228.616 Recovery = 102.15%						
Cr 267.716†	45150.1	507.40 ug/L	3.191	507.40 ppb	3.191	0.63%
QC value within limits for Cr 267.716 Recovery = 101.48%						
Cu 324.752†	164143.3	492.91 ug/L	3.014	492.91 ppb	3.014	0.61%
QC value within limits for Cu 324.752 Recovery = 98.58%						
Fe 238.204 Radial†	400.4	5173.8 ug/L	76.66	5173.8 ppb	76.66	1.48%
QC value within limits for Fe 238.204 Radial Recovery = 103.48%						
K 766.490 Radial†	28752.8	5372.8 ug/L	105.05	5372.8 ppb	105.05	1.96%
QC value within limits for K 766.490 Radial Recovery = 107.46%						
Mg 279.077 IEC†	121.2	5508.9 ug/L	87.51	5508.9 ppb	87.51	1.59%
QC value greater than the upper limit for Mg 279.077 IEC Recovery = 110.18%						
Mn 257.610†	444833.0	499.03 ug/L	1.483	499.03 ppb	1.483	0.30%
QC value within limits for Mn 257.610 Recovery = 99.81%						
Mo 202.031†	6938.6	508.25 ug/L	1.107	508.25 ppb	1.107	0.22%
QC value within limits for Mo 202.031 Recovery = 101.65%						
Na 589.592 Radial†	34508.0	10014 ug/L	264.6	10014 ppb	264.6	2.64%
QC value within limits for Na 589.592 Radial Recovery = 100.14%						
Ni 231.604†	20199.5	513.12 ug/L	3.656	513.12 ppb	3.656	0.71%
QC value within limits for Ni 231.604 Recovery = 102.62%						
P 214.914†	4225.5	2468.1 ug/L	5.49	2468.1 ppb	5.49	0.22%
QC value within limits for P 214.914 Recovery = 98.73%						
Pb 220.353†	4154.7	516.40 ug/L	1.305	516.40 ppb	1.305	0.25%
QC value within limits for Pb 220.353 Recovery = 103.28%						
S 181.975 Axial†	714.9	1046.3 ug/L	2.48	1046.3 ppb	2.48	0.24%
QC value within limits for S 181.975 Axial Recovery = 104.63%						
Sb 206.836†	1458.8	526.94 ug/L	2.390	526.94 ppb	2.390	0.45%
QC value within limits for Sb 206.836 Recovery = 105.39%						
Se 196.026†	777.8	530.42 ug/L	2.706	530.42 ppb	2.706	0.51%
QC value within limits for Se 196.026 Recovery = 106.08%						
Si 251.611†	78651.4	2516.9 ug/L	17.64	2516.9 ppb	17.64	0.70%
QC value within limits for Si 251.611 Recovery = 100.68%						
Sn 189.927†	2861.1	518.28 ug/L	0.646	518.28 ppb	0.646	0.12%
QC value within limits for Sn 189.927 Recovery = 103.66%						
Sr 421.552†	76895.0	509.61 ug/L	12.508	509.61 ppb	12.508	2.45%
QC value within limits for Sr 421.552 Recovery = 101.92%						
Ti 334.940†	326789.8	494.13 ug/L	0.731	494.13 ppb	0.731	0.15%
QC value within limits for Ti 334.940 Recovery = 98.83%						
Tl 190.801†	1587.7	512.82 ug/L	1.838	512.82 ppb	1.838	0.36%
QC value within limits for Tl 190.801 Recovery = 102.56%						
U 409.014†	17845.9	480.49 ug/L	3.262	480.49 ppb	3.262	0.68%
QC value within limits for U 409.014 Recovery = 96.10%						
V 292.402†	71948.7	506.25 ug/L	3.329	506.25 ppb	3.329	0.66%
QC value within limits for V 292.402 Recovery = 101.25%						
Zn 213.857†	50822.4	505.25 ug/L	3.227	505.25 ppb	3.227	0.64%
QC value within limits for Zn 213.857 Recovery = 101.05%						
SiO2†	78042.5	5348.4 ug/L	77.31	5348.4 ppb	77.31	1.45%
QC value within limits for SiO2 Recovery = 100.02%						

QC Failed. Continue with analysis.



Sequence No.: 40  
 Sample ID: CCB  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 6  
 Date Collected: 2/23/2010 22:28:38  
 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	3950.6	3950.6	92.9 %		22:30:49
1	Y RADIAL	4521.2	4521.2	96.36 %		22:30:29
1	Al 396.153Radial†	-138.3	-38.2	-34.609 ug/L	-34.609 ppb	22:30:29
1	Ca 317.933Radial†	17.1	3.0	5.8719 ug/L	5.8719 ppb	22:30:49
1	Fe 238.204 Radial†	12.0	2.8	35.835 ug/L	35.835 ppb	22:30:49
1	K 766.490 Radial†	2655.2	302.0	56.505 ug/L	56.505 ppb	22:30:29
1	Mg 279.077 IEC†	-0.0	-2.8	-126.47 ug/L	-126.47 ppb	22:30:49
1	Na 589.592 Radial†	-730.5	-46.2	-13.397 ug/L	-13.397 ppb	22:30:29
1	Sr 421.552†	48.1	15.0	0.0996 ug/L	0.0996 ppb	22:30:29
1	Sc 361.383	893209.9	893209.9	99.239 %		22:31:46
1	Y 371.029	754717.8	754717.8	98.987 %		22:31:46
1	Ag 328.068†	246.2	18.8	0.1026 ug/L	0.1026 ppb	22:31:46
1	As 188.979†	-26.0	-5.6	-2.5375 ug/L	-2.5375 ppb	22:32:06
1	B 249.677†	-449.1	-79.6	-1.9050 ug/L	-1.9050 ppb	22:32:06
1	Ba 233.527†	12.7	21.9	0.1704 ug/L	0.1704 ppb	22:32:06
1	Be 313.107†	-3776.8	47.5	0.0170 ug/L	0.0170 ppb	22:31:46
1	Cd 226.502†	-192.8	-11.0	-0.1325 ug/L	-0.1325 ppb	22:32:06
1	Co 228.616†	-69.7	-8.3	-0.1720 ug/L	-0.1720 ppb	22:32:06
1	Cr 267.716†	63.1	-2.4	-0.0204 ug/L	-0.0204 ppb	22:32:06
1	Cu 324.752†	6039.1	8.3	0.0326 ug/L	0.0326 ppb	22:31:46
1	Mn 257.610†	467.4	34.1	0.0470 ug/L	0.0470 ppb	22:32:06
1	Mo 202.031†	14.4	8.5	0.6227 ug/L	0.6227 ppb	22:32:06
1	Ni 231.604†	83.2	31.5	0.8005 ug/L	0.8005 ppb	22:32:06
1	P 214.914†	198.2	-2.3	-1.4407 ug/L	-1.4407 ppb	22:32:06
1	Pb 220.353†	-52.0	12.7	1.5615 ug/L	1.5615 ppb	22:32:06
1	S 181.975 Axial†	46.4	9.7	14.227 ug/L	14.227 ppb	22:32:06
1	Sb 206.836†	35.6	-0.9	-0.2687 ug/L	-0.2687 ppb	22:32:06
1	Se 196.026†	-28.0	-7.5	-4.8334 ug/L	-4.8334 ppb	22:32:06
1	Si 251.611†	590.3	60.7	1.9383 ug/L	1.9383 ppb	22:32:06
1	Sn 189.927†	17.3	7.0	1.2673 ug/L	1.2673 ppb	22:32:06
1	Ti 334.940†	-1486.9	-216.5	-0.3117 ug/L	-0.3117 ppb	22:31:46
1	Tl 190.801†	-22.8	8.2	2.6431 ug/L	2.6431 ppb	22:32:06
1	U 409.014†	-3174.3	-382.3	-10.335 ug/L	-10.335 ppb	22:31:46
1	V 292.402†	-1530.7	-112.0	-0.7958 ug/L	-0.7958 ppb	22:31:46
1	Zn 213.857†	576.1	22.8	0.2182 ug/L	0.2182 ppb	22:32:06
1	SiO2†	606.6	59.8	4.0898 ug/L	4.0898 ppb	22:33:02
2	Sc Radial	3959.8	3959.8	93.1 %		22:31:15
2	Y RADIAL	4470.8	4470.8	95.28 %		22:30:55
2	Al 396.153Radial†	-105.9	-2.9	-2.6547 ug/L	-2.6547 ppb	22:30:55
2	Ca 317.933Radial†	17.6	3.4	6.8225 ug/L	6.8225 ppb	22:31:15
2	Fe 238.204 Radial†	8.9	-0.6	-7.8672 ug/L	-7.8672 ppb	22:31:15
2	K 766.490 Radial†	2634.8	273.5	51.168 ug/L	51.168 ppb	22:30:55
2	Mg 279.077 IEC†	0.2	-2.6	-117.18 ug/L	-117.18 ppb	22:31:15
2	Na 589.592 Radial†	-704.0	-15.8	-4.5915 ug/L	-4.5915 ppb	22:30:55
2	Sr 421.552†	62.4	30.3	0.2006 ug/L	0.2006 ppb	22:30:55
2	Sc 361.383	906674.6	906674.6	100.73 %		22:32:12
2	Y 371.029	766427.4	766427.4	100.52 %		22:32:12
2	Ag 328.068†	256.4	25.2	0.1138 ug/L	0.1138 ppb	22:32:12
2	As 188.979†	-19.8	0.8	0.3719 ug/L	0.3719 ppb	22:32:32
2	B 249.677†	-451.1	-74.9	-1.7854 ug/L	-1.7854 ppb	22:32:32
2	Ba 233.527†	22.4	31.4	0.2443 ug/L	0.2443 ppb	22:32:32
2	Be 313.107†	-3790.1	90.8	0.0334 ug/L	0.0334 ppb	22:32:12
2	Cd 226.502†	-190.0	-5.3	-0.0604 ug/L	-0.0604 ppb	22:32:32
2	Co 228.616†	-64.5	-2.1	-0.0444 ug/L	-0.0444 ppb	22:32:32
2	Cr 267.716†	67.1	0.7	0.0070 ug/L	0.0070 ppb	22:32:32
2	Cu 324.752†	6053.2	-68.1	-0.2037 ug/L	-0.2037 ppb	22:32:12
2	Mn 257.610†	464.2	24.0	0.0309 ug/L	0.0309 ppb	22:32:32
2	Mo 202.031†	1.7	-4.4	-0.3246 ug/L	-0.3246 ppb	22:32:32
2	Ni 231.604†	62.4	9.7	0.2453 ug/L	0.2453 ppb	22:32:32

2	P 214.914†	197.3	-6.2	-3.7101 ug/L	-3.7101 ppb	22:32:32
2	Pb 220.353†	-42.1	23.3	2.8811 ug/L	2.8811 ppb	22:32:32
2	S 181.975 Axial†	44.6	7.3	10.656 ug/L	10.656 ppb	22:32:32
2	Sb 206.836†	41.1	4.1	1.4143 ug/L	1.4143 ppb	22:32:32
2	Se 196.026†	-34.9	-14.0	-9.2268 ug/L	-9.2268 ppb	22:32:32
2	Si 251.611†	592.3	53.8	1.7295 ug/L	1.7295 ppb	22:32:32
2	Sn 189.927†	2.6	-7.9	-1.4263 ug/L	-1.4263 ppb	22:32:32
2	Ti 334.940†	-1413.4	-121.3	-0.1721 ug/L	-0.1721 ppb	22:32:12
2	Tl 190.801†	-33.5	-2.0	-0.6537 ug/L	-0.6537 ppb	22:32:32
2	U 409.014†	-2910.0	-72.5	-1.9578 ug/L	-1.9578 ppb	22:32:12
2	V 292.402†	-1481.1	-39.9	-0.2860 ug/L	-0.2860 ppb	22:32:12
2	Zn 213.857†	575.1	13.2	0.1320 ug/L	0.1320 ppb	22:32:32
2	SiO2†	614.6	58.6	4.0359 ug/L	4.0359 ppb	22:33:07
3	Sc Radial	3985.5	3985.5	93.7 %		22:31:40
3	Y RADIAL	4481.5	4481.5	95.51 %		22:31:20
3	Al 396.153Radial†	-104.7	-0.9	-0.8614 ug/L	-0.8614 ppb	22:31:20
3	Ca 317.933Radial†	20.6	6.5	13.027 ug/L	13.027 ppb	22:31:40
3	Fe 238.204 Radial†	10.0	0.4	5.6066 ug/L	5.6066 ppb	22:31:40
3	K 766.490 Radial†	2840.4	474.7	88.805 ug/L	88.805 ppb	22:31:20
3	Mg 279.077 IEC†	2.5	-0.1	-4.9124 ug/L	-4.9124 ppb	22:31:40
3	Na 589.592 Radial†	-713.0	-20.6	-5.9751 ug/L	-5.9751 ppb	22:31:20
3	Sr 421.552†	80.7	49.3	0.3267 ug/L	0.3267 ppb	22:31:20
3	Sc 361.383	891052.3	891052.3	98.999 %		22:32:37
3	Y 371.029	753542.1	753542.1	98.833 %		22:32:37
3	Ag 328.068†	244.9	18.0	0.0867 ug/L	0.0867 ppb	22:32:37
3	As 188.979†	-30.0	-9.7	-4.3954 ug/L	-4.3954 ppb	22:32:57
3	B 249.677†	-490.3	-122.3	-2.9194 ug/L	-2.9194 ppb	22:32:57
3	Ba 233.527†	3.2	12.3	0.0946 ug/L	0.0946 ppb	22:32:57
3	Be 313.107†	-3709.4	106.4	0.0388 ug/L	0.0388 ppb	22:32:37
3	Cd 226.502†	-194.4	-13.1	-0.1535 ug/L	-0.1535 ppb	22:32:57
3	Co 228.616†	-76.9	-15.8	-0.3276 ug/L	-0.3276 ppb	22:32:57
3	Cr 267.716†	68.3	3.0	0.0356 ug/L	0.0356 ppb	22:32:57
3	Cu 324.752†	6095.2	79.7	0.2437 ug/L	0.2437 ppb	22:32:37
3	Mn 257.610†	455.3	23.0	0.0266 ug/L	0.0266 ppb	22:32:57
3	Mo 202.031†	12.4	6.5	0.4764 ug/L	0.4764 ppb	22:32:57
3	Ni 231.604†	70.1	18.5	0.4710 ug/L	0.4710 ppb	22:32:57
3	P 214.914†	201.4	1.4	0.7991 ug/L	0.7991 ppb	22:32:57
3	Pb 220.353†	-45.5	19.1	2.3691 ug/L	2.3691 ppb	22:32:57
3	S 181.975 Axial†	39.6	3.0	4.4071 ug/L	4.4071 ppb	22:32:57
3	Sb 206.836†	42.5	6.2	2.1701 ug/L	2.1701 ppb	22:32:57
3	Se 196.026†	-30.7	-10.3	-6.7638 ug/L	-6.7638 ppb	22:32:57
3	Si 251.611†	592.2	64.1	2.0491 ug/L	2.0491 ppb	22:32:57
3	Sn 189.927†	10.9	0.6	0.1064 ug/L	0.1064 ppb	22:32:57
3	Ti 334.940†	-1512.9	-246.4	-0.3673 ug/L	-0.3673 ppb	22:32:37
3	Tl 190.801†	-33.9	-3.0	-0.9707 ug/L	-0.9707 ppb	22:32:57
3	U 409.014†	-3057.2	-271.9	-7.3465 ug/L	-7.3465 ppb	22:32:37
3	V 292.402†	-1549.2	-134.5	-0.9414 ug/L	-0.9414 ppb	22:32:37
3	Zn 213.857†	564.3	12.3	0.1197 ug/L	0.1197 ppb	22:32:57
3	SiO2†	600.9	55.4	3.7952 ug/L	3.7952 ppb	22:33:12

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	896978.9	99.657 %	0.9406			0.94%
Sc Radial	3965.3	93.2 %	0.42			0.46%
Y 371.029	758229.1	99.447 %	0.9344			0.94%
Y RADIAL	4491.2	95.72 %	0.566			0.59%
Ag 328.068†	20.7	0.1010 ug/L	0.01363	0.1010 ppb	0.01363	13.50%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-14.0	-12.708 ug/L	18.9874	-12.708 ppb	18.9874	149.41%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-4.9	-2.1870 ug/L	2.40291	-2.1870 ppb	2.40291	109.87%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-92.3	-2.2033 ug/L	0.62308	-2.2033 ppb	0.62308	28.28%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	21.9	0.1698 ug/L	0.07489	0.1698 ppb	0.07489	44.11%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	81.6	0.0297 ug/L	0.01138	0.0297 ppb	0.01138	38.28%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	4.3	8.5738 ug/L	3.88575	8.5738 ppb	3.88575	45.32%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd 226.502†	-9.8	-0.1154 ug/L	0.04886	-0.1154 ppb	0.04886	42.32%	
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	-8.7	-0.1813 ug/L	0.14185	-0.1813 ppb	0.14185	78.22%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	0.4	0.0074 ug/L	0.02803	0.0074 ppb	0.02803	378.27%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	6.7	0.0242 ug/L	0.22383	0.0242 ppb	0.22383	924.19%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	0.9	11.192 ug/L	22.3802	11.192 ppb	22.3802	199.97%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	350.1	65.493 ug/L	20.3646	65.493 ppb	20.3646	31.09%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	-1.8	-82.857 ug/L	67.6611	-82.857 ppb	67.6611	81.66%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	27.0	0.0348 ug/L	0.01074	0.0348 ppb	0.01074	30.87%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	3.5	0.2582 ug/L	0.50997	0.2582 ppb	0.50997	197.55%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	-27.5	-7.9878 ug/L	4.73519	-7.9878 ppb	4.73519	59.28%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	19.9	0.5056 ug/L	0.27923	0.5056 ppb	0.27923	55.23%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	-2.4	-1.4506 ug/L	2.25461	-1.4506 ppb	2.25461	155.43%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	18.3	2.2706 ug/L	0.66534	2.2706 ppb	0.66534	29.30%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	6.7	9.7632 ug/L	4.97020	9.7632 ppb	4.97020	50.91%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	3.2	1.1052 ug/L	1.24842	1.1052 ppb	1.24842	112.95%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	-10.6	-6.9414 ug/L	2.20207	-6.9414 ppb	2.20207	31.72%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	59.5	1.9056 ug/L	0.16225	1.9056 ppb	0.16225	8.51%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	-0.1	-0.0175 ug/L	1.35109	-0.0175 ppb	1.35109	>999.9%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	31.5	0.2089 ug/L	0.11377	0.2089 ppb	0.11377	54.45%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	-194.7	-0.2837 ug/L	0.10057	-0.2837 ppb	0.10057	35.45%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	1.1	0.3396 ug/L	2.00118	0.3396 ppb	2.00118	589.33%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	-242.2	-6.5465 ug/L	4.24568	-6.5465 ppb	4.24568	64.85%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	-95.4	-0.6744 ug/L	0.34413	-0.6744 ppb	0.34413	51.03%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	16.1	0.1566 ug/L	0.05368	0.1566 ppb	0.05368	34.27%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†	57.9	3.9736 ug/L	0.15686	3.9736 ppb	0.15686	3.95%	
QC value within limits for SiO2 Recovery = Not calculated							
All analyte(s) passed QC.							

Sequence No.: 46

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 2/23/2010 23:09:24

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	3963.7	3963.7	93.2 %		23:11:36
1	Y RADIAL	4405.5	4405.5	93.89 %		23:11:16
1	Al 396.153Radial†	5313.7	5813.1	5239.9 ug/L	5239.9 ppb	23:11:16
1	Ca 317.933Radial†	2563.1	2735.1	5441.7 ug/L	5441.7 ppb	23:11:36
1	Fe 238.204 Radial†	394.7	413.4	5340.7 ug/L	5340.7 ppb	23:11:36
1	K 766.490 Radial†	28883.4	28439.0	5313.9 ug/L	5313.9 ppb	23:11:16
1	Mg 279.077 IEC†	118.7	124.6	5662.0 ug/L	5662.0 ppb	23:11:36
1	Na 589.592 Radial†	32694.3	35825.6	10397 ug/L	10397 ppb	23:11:16
1	Sr 421.552†	72298.3	77548.8	513.94 ug/L	513.94 ppb	23:11:16
1	Sc 361.383	907323.5	907323.5	100.81 %		23:12:34
1	Y 371.029	754397.0	754397.0	98.945 %		23:12:34
1	Ag 328.068†	110397.4	109284.7	505.06 ug/L	505.06 ppb	23:12:39
1	As 188.979†	1129.8	1141.3	518.82 ug/L	518.82 ppb	23:12:59
1	B 249.677†	20275.1	20485.8	486.58 ug/L	486.58 ppb	23:12:39
1	Ba 233.527†	65010.5	64499.5	505.07 ug/L	505.07 ppb	23:12:39
1	Be 313.107†	1357457.6	1350448.6	504.41 ug/L	504.41 ppb	23:12:34
1	Cd 226.502†	44443.5	44271.2	513.73 ug/L	513.73 ppb	23:12:39
1	Co 228.616†	24548.6	24414.1	510.52 ug/L	510.52 ppb	23:12:39
1	Cr 267.716†	45459.9	45030.1	506.07 ug/L	506.07 ppb	23:12:39
1	Cu 324.752†	171704.1	164253.0	493.25 ug/L	493.25 ppb	23:12:39
1	Mn 257.610†	453863.0	449794.4	504.60 ug/L	504.60 ppb	23:12:34
1	Mo 202.031†	7018.8	6956.5	509.58 ug/L	509.58 ppb	23:12:59
1	Ni 231.604†	20349.7	20134.6	511.47 ug/L	511.47 ppb	23:12:39
1	P 214.914†	4485.7	4247.7	2481.4 ug/L	2481.4 ppb	23:12:59
1	Pb 220.353†	4128.9	4160.9	517.14 ug/L	517.14 ppb	23:12:59
1	S 181.975 Axial†	761.5	718.3	1051.3 ug/L	1051.3 ppb	23:12:59
1	Sb 206.836†	1511.0	1462.2	528.19 ug/L	528.19 ppb	23:12:59
1	Se 196.026†	763.2	777.8	530.96 ug/L	530.96 ppb	23:12:59
1	Si 251.611†	79642.2	78470.7	2511.1 ug/L	2511.1 ppb	23:12:39
1	Sn 189.927†	2913.1	2879.4	521.57 ug/L	521.57 ppb	23:12:59
1	Ti 334.940†	331871.5	330497.7	499.73 ug/L	499.73 ppb	23:12:34
1	Tl 190.801†	1569.1	1587.7	512.91 ug/L	512.91 ppb	23:12:59
1	U 409.014†	15189.5	17884.3	481.51 ug/L	481.51 ppb	23:12:39
1	V 292.402†	70873.9	71737.2	504.78 ug/L	504.78 ppb	23:12:39
1	Zn 213.857†	51742.9	50771.1	504.72 ug/L	504.72 ppb	23:12:39
1	SiO2†	80561.2	79365.0	5439.2 ug/L	5439.2 ppb	23:14:07
2	Sc Radial	3921.5	3921.5	92.2 %		23:12:01
2	Y RADIAL	4364.2	4364.2	93.01 %		23:11:41
2	Al 396.153Radial†	5272.6	5829.8	5254.7 ug/L	5254.7 ppb	23:11:41
2	Ca 317.933Radial†	2528.3	2726.9	5425.5 ug/L	5425.5 ppb	23:12:01
2	Fe 238.204 Radial†	387.4	410.0	5298.2 ug/L	5298.2 ppb	23:12:01
2	K 766.490 Radial†	28841.2	28726.3	5367.6 ug/L	5367.6 ppb	23:11:41
2	Mg 279.077 IEC†	114.0	120.9	5492.8 ug/L	5492.8 ppb	23:12:01
2	Na 589.592 Radial†	32676.4	36183.2	10501 ug/L	10501 ppb	23:11:41
2	Sr 421.552†	72029.7	78091.2	517.54 ug/L	517.54 ppb	23:11:41
2	Sc 361.383	897149.9	897149.9	99.676 %		23:13:05
2	Y 371.029	745043.7	745043.7	97.718 %		23:13:05
2	Ag 328.068†	110184.4	110312.9	509.80 ug/L	509.80 ppb	23:13:10
2	As 188.979†	1122.5	1146.7	521.23 ug/L	521.23 ppb	23:13:30
2	B 249.677†	20157.7	20596.1	489.20 ug/L	489.20 ppb	23:13:10
2	Ba 233.527†	65091.0	65311.5	511.42 ug/L	511.42 ppb	23:13:10
2	Be 313.107†	1343271.5	1351486.7	504.80 ug/L	504.80 ppb	23:13:05
2	Cd 226.502†	44413.6	44741.1	519.20 ug/L	519.20 ppb	23:13:10
2	Co 228.616†	24549.5	24691.2	516.32 ug/L	516.32 ppb	23:13:10
2	Cr 267.716†	45440.0	45521.6	511.59 ug/L	511.59 ppb	23:13:10
2	Cu 324.752†	170847.9	165325.6	496.47 ug/L	496.47 ppb	23:13:10
2	Mn 257.610†	450367.8	451393.4	506.39 ug/L	506.39 ppb	23:13:05
2	Mo 202.031†	7024.0	7040.8	515.74 ug/L	515.74 ppb	23:13:30
2	Ni 231.604†	20424.1	20438.1	519.18 ug/L	519.18 ppb	23:13:10

2	P 214.914†	4480.3	4292.8	2508.2 ug/L	2508.2 ppb	23:13:30
2	Pb 220.353†	4133.9	4212.4	523.54 ug/L	523.54 ppb	23:13:30
2	S 181.975 Axial†	757.1	722.5	1057.4 ug/L	1057.4 ppb	23:13:30
2	Sb 206.836†	1513.6	1481.8	535.21 ug/L	535.21 ppb	23:13:30
2	Se 196.026†	768.1	791.3	539.71 ug/L	539.71 ppb	23:13:30
2	Si 251.611†	79511.6	79235.6	2535.5 ug/L	2535.5 ppb	23:13:10
2	Sn 189.927†	2899.0	2898.0	524.94 ug/L	524.94 ppb	23:13:30
2	Ti 334.940†	329056.2	331406.5	501.11 ug/L	501.11 ppb	23:13:05
2	Tl 190.801†	1570.5	1606.8	518.99 ug/L	518.99 ppb	23:13:30
2	U 409.014†	14918.2	17782.8	478.76 ug/L	478.76 ppb	23:13:10
2	V 292.402†	70998.4	72659.4	511.26 ug/L	511.26 ppb	23:13:10
2	Zn 213.857†	51655.4	51265.4	509.64 ug/L	509.64 ppb	23:13:10
2	SiO2†	78936.9	78641.8	5389.3 ug/L	5389.3 ppb	23:14:12
3	Sc Radial	3923.2	3923.2	92.2 %		23:12:27
3	Y RADIAL	4475.7	4475.7	95.39 %		23:12:06
3	Al 396.153Radial†	5385.1	5949.3	5363.0 ug/L	5363.0 ppb	23:12:06
3	Ca 317.933Radial†	2539.4	2737.7	5447.0 ug/L	5447.0 ppb	23:12:27
3	Fe 238.204 Radial†	387.5	410.0	5297.3 ug/L	5297.3 ppb	23:12:27
3	K 766.490 Radial†	29275.4	29183.5	5453.1 ug/L	5453.1 ppb	23:12:06
3	Mg 279.077 IEC†	115.2	122.1	5549.6 ug/L	5549.6 ppb	23:12:27
3	Na 589.592 Radial†	32988.9	36506.7	10594 ug/L	10594 ppb	23:12:06
3	Sr 421.552†	73650.3	79814.5	528.96 ug/L	528.96 ppb	23:12:06
3	Sc 361.383	894029.5	894029.5	99.330 %		23:13:36
3	Y 371.029	743180.0	743180.0	97.474 %		23:13:36
3	Ag 328.068†	110038.0	110551.3	510.89 ug/L	510.89 ppb	23:13:42
3	As 188.979†	1130.8	1159.0	526.78 ug/L	526.78 ppb	23:14:02
3	B 249.677†	20139.0	20647.9	490.44 ug/L	490.44 ppb	23:13:42
3	Ba 233.527†	64710.1	65156.0	510.21 ug/L	510.21 ppb	23:13:42
3	Be 313.107†	1336578.8	1349452.5	504.04 ug/L	504.04 ppb	23:13:36
3	Cd 226.502†	44107.7	44588.7	517.43 ug/L	517.43 ppb	23:13:42
3	Co 228.616†	24390.5	24617.0	514.77 ug/L	514.77 ppb	23:13:42
3	Cr 267.716†	45274.6	45514.1	511.50 ug/L	511.50 ppb	23:13:42
3	Cu 324.752†	170865.7	165941.7	498.32 ug/L	498.32 ppb	23:13:42
3	Mn 257.610†	447523.7	450107.2	504.95 ug/L	504.95 ppb	23:13:36
3	Mo 202.031†	6977.9	7018.9	514.14 ug/L	514.14 ppb	23:14:02
3	Ni 231.604†	20185.4	20269.3	514.89 ug/L	514.89 ppb	23:13:42
3	P 214.914†	4469.7	4297.8	2510.9 ug/L	2510.9 ppb	23:14:02
3	Pb 220.353†	4130.8	4223.7	524.97 ug/L	524.97 ppb	23:14:02
3	S 181.975 Axial†	756.7	724.7	1060.7 ug/L	1060.7 ppb	23:14:02
3	Sb 206.836†	1506.0	1479.5	534.38 ug/L	534.38 ppb	23:14:02
3	Se 196.026†	763.9	789.8	538.74 ug/L	538.74 ppb	23:14:02
3	Si 251.611†	79305.9	79307.0	2537.8 ug/L	2537.8 ppb	23:13:42
3	Sn 189.927†	2890.5	2899.6	525.23 ug/L	525.23 ppb	23:14:02
3	Ti 334.940†	327444.3	330936.0	500.40 ug/L	500.40 ppb	23:13:36
3	Tl 190.801†	1563.5	1605.3	518.52 ug/L	518.52 ppb	23:14:02
3	U 409.014†	14976.8	17894.2	481.77 ug/L	481.77 ppb	23:13:42
3	V 292.402†	70674.3	72581.7	510.71 ug/L	510.71 ppb	23:13:42
3	Zn 213.857†	51423.8	51213.2	509.14 ug/L	509.14 ppb	23:13:42
3	SiO2†	79150.7	79133.4	5423.1 ug/L	5423.1 ppb	23:14:17

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	899501.0	99.938 %	0.7724			0.77%
Sc Radial	3936.1	92.5 %	0.56			0.61%
Y 371.029	747540.2	98.045 %	0.7884			0.80%
Y RADIAL	4415.1	94.10 %	1.202			1.28%
Ag 328.068†	110049.6	508.58 ug/L	3.098	508.58 ppb	3.098	0.61%
QC value within limits for Ag 328.068 Recovery = 101.72%						
Al 396.153Radial†	5864.1	5285.9 ug/L	67.23	5285.9 ppb	67.23	1.27%
QC value within limits for Al 396.153Radial Recovery = 105.72%						
As 188.979†	1149.0	522.28 ug/L	4.083	522.28 ppb	4.083	0.78%
QC value within limits for As 188.979 Recovery = 104.46%						
B 249.677†	20576.6	488.74 ug/L	1.972	488.74 ppb	1.972	0.40%
QC value within limits for B 249.677 Recovery = 97.75%						
Ba 233.527†	64989.0	508.90 ug/L	3.374	508.90 ppb	3.374	0.66%
QC value within limits for Ba 233.527 Recovery = 101.78%						
Be 313.107†	1350462.6	504.42 ug/L	0.380	504.42 ppb	0.380	0.08%
QC value within limits for Be 313.107 Recovery = 100.88%						
Ca 317.933Radial†	2733.2	5438.0 ug/L	11.21	5438.0 ppb	11.21	0.21%

QC value within limits for Ca 317.933Radial Recovery = 108.76%							
Cd 226.502†	44533.7	516.79 ug/L	2.787	516.79 ppb	2.787	0.54%	
QC value within limits for Cd 226.502 Recovery = 103.36%							
Co 228.616†	24574.1	513.87 ug/L	3.005	513.87 ppb	3.005	0.58%	
QC value within limits for Co 228.616 Recovery = 102.77%							
Cr 267.716†	45355.3	509.72 ug/L	3.162	509.72 ppb	3.162	0.62%	
QC value within limits for Cr 267.716 Recovery = 101.94%							
Cu 324.752†	165173.4	496.01 ug/L	2.565	496.01 ppb	2.565	0.52%	
QC value within limits for Cu 324.752 Recovery = 99.20%							
Fe 238.204 Radial†	411.1	5312.1 ug/L	24.82	5312.1 ppb	24.82	0.47%	
QC value within limits for Fe 238.204 Radial Recovery = 106.24%							
K 766.490 Radial†	28782.9	5378.2 ug/L	70.21	5378.2 ppb	70.21	1.31%	
QC value within limits for K 766.490 Radial Recovery = 107.56%							
Mg 279.077 IEC†	122.5	5568.1 ug/L	86.14	5568.1 ppb	86.14	1.55%	
QC value greater than the upper limit for Mg 279.077 IEC Recovery = 111.36%							
Mn 257.610†	450431.6	505.31 ug/L	0.952	505.31 ppb	0.952	0.19%	
QC value within limits for Mn 257.610 Recovery = 101.06%							
Mo 202.031†	7005.4	513.15 ug/L	3.196	513.15 ppb	3.196	0.62%	
QC value within limits for Mo 202.031 Recovery = 102.63%							
Na 589.592 Radial†	36171.9	10497 ug/L	98.9	10497 ppb	98.9	0.94%	
QC value within limits for Na 589.592 Radial Recovery = 104.97%							
Ni 231.604†	20280.7	515.18 ug/L	3.864	515.18 ppb	3.864	0.75%	
QC value within limits for Ni 231.604 Recovery = 103.04%							
P 214.914†	4279.5	2500.2 ug/L	16.30	2500.2 ppb	16.30	0.65%	
QC value within limits for P 214.914 Recovery = 100.01%							
Pb 220.353†	4199.0	521.88 ug/L	4.168	521.88 ppb	4.168	0.80%	
QC value within limits for Pb 220.353 Recovery = 104.38%							
S 181.975 Axial†	721.9	1056.5 ug/L	4.75	1056.5 ppb	4.75	0.45%	
QC value within limits for S 181.975 Axial Recovery = 105.65%							
Sb 206.836†	1474.5	532.59 ug/L	3.836	532.59 ppb	3.836	0.72%	
QC value within limits for Sb 206.836 Recovery = 106.52%							
Se 196.026†	786.3	536.47 ug/L	4.795	536.47 ppb	4.795	0.89%	
QC value within limits for Se 196.026 Recovery = 107.29%							
Si 251.611†	79004.4	2528.1 ug/L	14.83	2528.1 ppb	14.83	0.59%	
QC value within limits for Si 251.611 Recovery = 101.13%							
Sn 189.927†	2892.3	523.92 ug/L	2.033	523.92 ppb	2.033	0.39%	
QC value within limits for Sn 189.927 Recovery = 104.78%							
Sr 421.552†	78484.8	520.15 ug/L	7.841	520.15 ppb	7.841	1.51%	
QC value within limits for Sr 421.552 Recovery = 104.03%							
Ti 334.940†	330946.7	500.41 ug/L	0.693	500.41 ppb	0.693	0.14%	
QC value within limits for Ti 334.940 Recovery = 100.08%							
Tl 190.801†	1599.9	516.81 ug/L	3.386	516.81 ppb	3.386	0.66%	
QC value within limits for Tl 190.801 Recovery = 103.36%							
U 409.014†	17853.8	480.68 ug/L	1.667	480.68 ppb	1.667	0.35%	
QC value within limits for U 409.014 Recovery = 96.14%							
V 292.402†	72326.1	508.92 ug/L	3.594	508.92 ppb	3.594	0.71%	
QC value within limits for V 292.402 Recovery = 101.78%							
Zn 213.857†	51083.2	507.83 ug/L	2.704	507.83 ppb	2.704	0.53%	
QC value within limits for Zn 213.857 Recovery = 101.57%							
SiO2†	79046.7	5417.2 ug/L	25.45	5417.2 ppb	25.45	0.47%	
QC value within limits for SiO2 Recovery = 101.30%							
QC Failed. Continue with analysis.							

Sequence No.: 47

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 2/23/2010 23:16:27

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	3983.1	3983.1	93.6 %		23:18:39
1	Y RADIAL	4442.8	4442.8	94.69 %		23:18:19
1	Al 396.153Radial†	-131.3	-29.4	-26.676 ug/L	-26.676 ppb	23:18:19
1	Ca 317.933Radial†	17.7	3.4	6.7546 ug/L	6.7546 ppb	23:18:39
1	Fe 238.204 Radial†	9.2	-0.4	-4.5428 ug/L	-4.5428 ppb	23:18:39
1	K 766.490 Radial†	2794.5	427.5	79.984 ug/L	79.984 ppb	23:18:19
1	Mg 279.077 IEC†	0.7	-2.0	-89.827 ug/L	-89.827 ppb	23:18:39
1	Na 589.592 Radial†	-789.0	-102.2	-29.654 ug/L	-29.654 ppb	23:18:19
1	Sr 421.552†	96.8	66.6	0.4416 ug/L	0.4416 ppb	23:18:19
1	Sc 361.383	894012.1	894012.1	99.328 %		23:19:36
1	Y 371.029	755366.5	755366.5	99.072 %		23:19:36
1	Ag 328.068†	237.1	9.4	0.0431 ug/L	0.0431 ppb	23:19:36
1	As 188.979†	-25.1	-4.8	-2.1528 ug/L	-2.1528 ppb	23:19:56
1	B 249.677†	-452.0	-82.1	-1.9583 ug/L	-1.9583 ppb	23:19:56
1	Ba 233.527†	7.8	17.0	0.1307 ug/L	0.1307 ppb	23:19:56
1	Be 313.107†	-3835.9	-8.6	-0.0038 ug/L	-0.0038 ppb	23:19:36
1	Cd 226.502†	-192.4	-10.4	-0.1215 ug/L	-0.1215 ppb	23:19:56
1	Co 228.616†	-70.7	-9.3	-0.1917 ug/L	-0.1917 ppb	23:19:56
1	Cr 267.716†	69.6	4.1	0.0465 ug/L	0.0465 ppb	23:19:56
1	Cu 324.752†	6139.7	104.1	0.3157 ug/L	0.3157 ppb	23:19:36
1	Mn 257.610†	448.9	15.1	0.0201 ug/L	0.0201 ppb	23:19:56
1	Mo 202.031†	17.4	11.4	0.8368 ug/L	0.8368 ppb	23:19:56
1	Ni 231.604†	56.3	4.4	0.1114 ug/L	0.1114 ppb	23:19:56
1	P 214.914†	200.0	-0.7	-0.4454 ug/L	-0.4454 ppb	23:19:56
1	Pb 220.353†	-56.4	8.3	1.0241 ug/L	1.0241 ppb	23:19:56
1	S 181.975 Axial†	38.9	2.2	3.1718 ug/L	3.1718 ppb	23:19:56
1	Sb 206.836†	35.7	-0.8	-0.2187 ug/L	-0.2187 ppb	23:19:56
1	Se 196.026†	-20.9	-0.3	-0.2356 ug/L	-0.2356 ppb	23:19:56
1	Si 251.611†	602.8	72.7	2.3231 ug/L	2.3231 ppb	23:19:56
1	Sn 189.927†	23.0	12.7	2.2950 ug/L	2.2950 ppb	23:19:56
1	Ti 334.940†	-1439.0	-166.9	-0.2416 ug/L	-0.2416 ppb	23:19:36
1	Tl 190.801†	-31.6	-0.6	-0.1883 ug/L	-0.1883 ppb	23:19:56
1	U 409.014†	-3016.2	-220.4	-5.9550 ug/L	-5.9550 ppb	23:19:36
1	V 292.402†	-1536.2	-116.2	-0.8072 ug/L	-0.8072 ppb	23:19:36
1	Zn 213.857†	568.7	14.8	0.1482 ug/L	0.1482 ppb	23:19:56
1	SiO2†	630.3	83.0	5.6834 ug/L	5.6834 ppb	23:20:52
2	Sc Radial	3946.0	3946.0	92.8 %		23:19:04
2	Y RADIAL	4517.5	4517.5	96.28 %		23:18:44
2	Al 396.153Radial†	-106.5	-4.0	-3.6190 ug/L	-3.6190 ppb	23:18:44
2	Ca 317.933Radial†	17.3	3.2	6.3777 ug/L	6.3777 ppb	23:19:04
2	Fe 238.204 Radial†	11.5	2.3	29.009 ug/L	29.009 ppb	23:19:04
2	K 766.490 Radial†	2755.2	413.1	77.305 ug/L	77.305 ppb	23:18:44
2	Mg 279.077 IEC†	2.6	0.0	1.1464 ug/L	1.1464 ppb	23:19:04
2	Na 589.592 Radial†	-818.3	-141.7	-41.134 ug/L	-41.134 ppb	23:18:44
2	Sr 421.552†	12.3	-23.5	-0.1557 ug/L	-0.1557 ppb	23:18:44
2	Sc 361.383	896804.0	896804.0	99.638 %		23:20:01
2	Y 371.029	757231.2	757231.2	99.317 %		23:20:01
2	Ag 328.068†	204.8	-23.7	-0.0963 ug/L	-0.0963 ppb	23:20:01
2	As 188.979†	-18.0	2.5	1.1330 ug/L	1.1330 ppb	23:20:21
2	B 249.677†	-498.5	-127.3	-3.0429 ug/L	-3.0429 ppb	23:20:21
2	Ba 233.527†	9.8	19.0	0.1485 ug/L	0.1485 ppb	23:20:21
2	Be 313.107†	-3880.7	-41.6	-0.0161 ug/L	-0.0161 ppb	23:20:01
2	Cd 226.502†	-197.9	-15.3	-0.1814 ug/L	-0.1814 ppb	23:20:21
2	Co 228.616†	-67.1	-5.4	-0.1133 ug/L	-0.1133 ppb	23:20:21
2	Cr 267.716†	76.3	10.6	0.1239 ug/L	0.1239 ppb	23:20:21
2	Cu 324.752†	6024.5	-30.7	-0.0870 ug/L	-0.0870 ppb	23:20:01
2	Mn 257.610†	461.5	26.3	0.0324 ug/L	0.0324 ppb	23:20:21
2	Mo 202.031†	7.9	1.8	0.1359 ug/L	0.1359 ppb	23:20:21
2	Ni 231.604†	71.9	19.9	0.5049 ug/L	0.5049 ppb	23:20:21

2	P 214.914†	201.6	0.3	0.1909 ug/L	0.1909 ppb	23:20:21
2	Pb 220.353†	-41.6	23.3	2.8822 ug/L	2.8822 ppb	23:20:21
2	S 181.975 Axial†	38.7	1.8	2.6897 ug/L	2.6897 ppb	23:20:21
2	Sb 206.836†	44.0	7.4	2.6019 ug/L	2.6019 ppb	23:20:21
2	Se 196.026†	-36.8	-16.2	-10.587 ug/L	-10.587 ppb	23:20:21
2	Si 251.611†	598.0	66.0	2.1153 ug/L	2.1153 ppb	23:20:21
2	Sn 189.927†	13.9	3.5	0.6338 ug/L	0.6338 ppb	23:20:21
2	Ti 334.940†	-1442.0	-165.4	-0.2466 ug/L	-0.2466 ppb	23:20:01
2	Tl 190.801†	-19.7	11.5	3.6849 ug/L	3.6849 ppb	23:20:21
2	U 409.014†	-3052.6	-247.5	-6.6903 ug/L	-6.6903 ppb	23:20:01
2	V 292.402†	-1481.9	-56.9	-0.4097 ug/L	-0.4097 ppb	23:20:01
2	Zn 213.857†	585.8	30.3	0.2963 ug/L	0.2963 ppb	23:20:21
2	SiO2†	656.3	107.2	7.3627 ug/L	7.3627 ppb	23:20:57
3	Sc Radial	3978.1	3978.1	93.5 %		23:19:29
3	Y RADIAL	4588.1	4588.1	97.78 %		23:19:09
3	Al 396.153Radial†	-101.2	2.6	2.3117 ug/L	2.3117 ppb	23:19:09
3	Ca 317.933Radial†	14.6	0.2	0.3040 ug/L	0.3040 ppb	23:19:29
3	Fe 238.204 Radial†	11.0	1.5	19.859 ug/L	19.859 ppb	23:19:29
3	K 766.490 Radial†	2831.0	470.3	87.991 ug/L	87.991 ppb	23:19:09
3	Mg 279.077 IEC†	0.7	-2.0	-90.406 ug/L	-90.406 ppb	23:19:29
3	Na 589.592 Radial†	-795.9	-110.7	-32.113 ug/L	-32.113 ppb	23:19:09
3	Sr 421.552†	22.3	-13.0	-0.0858 ug/L	-0.0858 ppb	23:19:09
3	Sc 361.383	894633.2	894633.2	99.397 %		23:20:26
3	Y 371.029	755399.8	755399.8	99.076 %		23:20:26
3	Ag 328.068†	242.6	14.8	0.0753 ug/L	0.0753 ppb	23:20:26
3	As 188.979†	-11.1	9.4	4.2183 ug/L	4.2183 ppb	23:20:47
3	B 249.677†	-504.8	-134.9	-3.2219 ug/L	-3.2219 ppb	23:20:47
3	Ba 233.527†	-4.4	4.7	0.0353 ug/L	0.0353 ppb	23:20:47
3	Be 313.107†	-3835.9	-6.0	-0.0029 ug/L	-0.0029 ppb	23:20:26
3	Cd 226.502†	-207.8	-25.8	-0.3027 ug/L	-0.3027 ppb	23:20:47
3	Co 228.616†	-74.1	-12.6	-0.2636 ug/L	-0.2636 ppb	23:20:47
3	Cr 267.716†	60.7	-4.9	-0.0516 ug/L	-0.0516 ppb	23:20:47
3	Cu 324.752†	6045.5	5.1	0.0202 ug/L	0.0202 ppb	23:20:26
3	Mn 257.610†	454.3	20.2	0.0283 ug/L	0.0283 ppb	23:20:47
3	Mo 202.031†	8.8	2.8	0.2030 ug/L	0.2030 ppb	23:20:47
3	Ni 231.604†	55.6	3.6	0.0910 ug/L	0.0910 ppb	23:20:47
3	P 214.914†	206.0	5.2	3.1575 ug/L	3.1575 ppb	23:20:47
3	Pb 220.353†	-46.7	18.0	2.2306 ug/L	2.2306 ppb	23:20:47
3	S 181.975 Axial†	41.9	5.2	7.5590 ug/L	7.5590 ppb	23:20:47
3	Sb 206.836†	29.4	-7.1	-2.4578 ug/L	-2.4578 ppb	23:20:47
3	Se 196.026†	-34.1	-13.6	-8.8851 ug/L	-8.8851 ppb	23:20:47
3	Si 251.611†	596.7	66.2	2.1201 ug/L	2.1201 ppb	23:20:47
3	Sn 189.927†	16.7	6.4	1.1552 ug/L	1.1552 ppb	23:20:47
3	Ti 334.940†	-1473.0	-200.1	-0.2922 ug/L	-0.2922 ppb	23:20:26
3	Tl 190.801†	-49.0	-18.1	-5.8163 ug/L	-5.8163 ppb	23:20:47
3	U 409.014†	-3049.6	-251.9	-6.8085 ug/L	-6.8085 ppb	23:20:26
3	V 292.402†	-1566.8	-145.9	-1.0275 ug/L	-1.0275 ppb	23:20:26
3	Zn 213.857†	575.4	21.1	0.2086 ug/L	0.2086 ppb	23:20:47
3	SiO2†	587.5	39.6	2.7157 ug/L	2.7157 ppb	23:21:02

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	895149.8	99.454 %	0.1629			0.16%
Sc Radial	3969.1	93.3 %	0.47			0.51%
Y 371.029	755999.2	99.155 %	0.1400			0.14%
Y RADIAL	4516.1	96.25 %	1.548			1.61%
Ag 328.068†	0.1	0.0074 ug/L	0.09123	0.0074 ppb	0.09123	>999.9%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-10.3	-9.3276 ug/L	15.31359	-9.3276 ppb	15.31359	164.17%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	2.4	1.0662 ug/L	3.18610	1.0662 ppb	3.18610	298.84%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-114.8	-2.7410 ug/L	0.68375	-2.7410 ppb	0.68375	24.95%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	13.6	0.1048 ug/L	0.06088	0.1048 ppb	0.06088	58.07%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	-18.7	-0.0076 ug/L	0.00736	-0.0076 ppb	0.00736	97.08%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	2.3	4.4787 ug/L	3.62034	4.4787 ppb	3.62034	80.83%



QC value within limits for Ca 317.933 Radial Recovery = Not calculated						
Cd 226.502†	-17.2	-0.2018 ug/L	0.09234	-0.2018 ppb	0.09234	45.75%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-9.1	-0.1895 ug/L	0.07515	-0.1895 ppb	0.07515	39.65%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	3.3	0.0396 ug/L	0.08793	0.0396 ppb	0.08793	222.02%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	26.2	0.0830 ug/L	0.20858	0.0830 ppb	0.20858	251.36%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	1.1	14.775 ug/L	17.3438	14.775 ppb	17.3438	117.39%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	437.0	81.760 ug/L	5.5601	81.760 ppb	5.5601	6.80%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	-1.3	-59.696 ug/L	52.6915	-59.696 ppb	52.6915	88.27%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	20.5	0.0269 ug/L	0.00622	0.0269 ppb	0.00622	23.11%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	5.3	0.3919 ug/L	0.38675	0.3919 ppb	0.38675	98.68%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	-118.2	-34.300 ug/L	6.0445	-34.300 ppb	6.0445	17.62%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	9.3	0.2358 ug/L	0.23326	0.2358 ppb	0.23326	98.93%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	1.6	0.9676 ug/L	1.92293	0.9676 ppb	1.92293	198.72%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	16.5	2.0456 ug/L	0.94277	2.0456 ppb	0.94277	46.09%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	3.1	4.4735 ug/L	2.68297	4.4735 ppb	2.68297	59.97%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	-0.2	-0.0249 ug/L	2.53542	-0.0249 ppb	2.53542	>999.9%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-10.0	-6.5691 ug/L	5.55065	-6.5691 ppb	5.55065	84.50%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	68.3	2.1861 ug/L	0.11860	2.1861 ppb	0.11860	5.42%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	7.5	1.3613 ug/L	0.84958	1.3613 ppb	0.84958	62.41%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	10.1	0.0667 ug/L	0.32657	0.0667 ppb	0.32657	489.70%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	-177.5	-0.2601 ug/L	0.02791	-0.2601 ppb	0.02791	10.73%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	-2.4	-0.7732 ug/L	4.77753	-0.7732 ppb	4.77753	617.88%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	-239.9	-6.4846 ug/L	0.46244	-6.4846 ppb	0.46244	7.13%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	-106.3	-0.7481 ug/L	0.31314	-0.7481 ppb	0.31314	41.86%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	22.1	0.2177 ug/L	0.07448	0.2177 ppb	0.07448	34.21%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	76.6	5.2539 ug/L	2.35304	5.2539 ppb	2.35304	44.79%
QC value within limits for SiO2 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 54

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 2/24/2010 00:05:02

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	3900.0	3900.0	91.7 %		00:07:14
1	Y RADIAL	4424.4	4424.4	94.30 %		00:06:54
1	Al 396.153Radial†	5359.1	5955.7	5369.0 ug/L	5369.0 ppb	00:06:54
1	Ca 317.933Radial†	2533.9	2748.1	5467.7 ug/L	5467.7 ppb	00:07:14
1	Fe 238.204 Radial†	386.0	410.8	5308.3 ug/L	5308.3 ppb	00:07:14
1	K 766.490 Radial†	29175.4	29263.2	5467.9 ug/L	5467.9 ppb	00:06:54
1	Mg 279.077 IEC†	114.0	121.5	5523.4 ug/L	5523.4 ppb	00:07:14
1	Na 589.592 Radial†	33476.9	37251.7	10811 ug/L	10811 ppb	00:06:54
1	Sr 421.552†	73501.6	80127.3	531.03 ug/L	531.03 ppb	00:06:54
1	Sc 361.383	902167.3	902167.3	100.23 %		00:08:11
1	Y 371.029	750751.6	750751.6	98.467 %		00:08:11
1	Ag 328.068†	109690.3	109205.2	504.69 ug/L	504.69 ppb	00:08:16
1	As 188.979†	1124.1	1142.0	519.10 ug/L	519.10 ppb	00:08:37
1	B 249.677†	20035.2	20361.4	483.62 ug/L	483.62 ppb	00:08:16
1	Ba 233.527†	64681.2	64539.5	505.38 ug/L	505.38 ppb	00:08:16
1	Be 313.107†	1343530.3	1344250.1	502.09 ug/L	502.09 ppb	00:08:11
1	Cd 226.502†	44041.3	44121.9	512.00 ug/L	512.00 ppb	00:08:16
1	Co 228.616†	24276.9	24282.2	507.77 ug/L	507.77 ppb	00:08:16
1	Cr 267.716†	45213.4	45042.0	506.20 ug/L	506.20 ppb	00:08:16
1	Cu 324.752†	170536.3	164061.5	492.67 ug/L	492.67 ppb	00:08:16
1	Mn 257.610†	447204.2	445724.3	500.04 ug/L	500.04 ppb	00:08:11
1	Mo 202.031†	6989.0	6966.6	510.31 ug/L	510.31 ppb	00:08:37
1	Ni 231.604†	20254.4	20154.9	511.99 ug/L	511.99 ppb	00:08:16
1	P 214.914†	4454.0	4241.6	2477.8 ug/L	2477.8 ppb	00:08:37
1	Pb 220.353†	4086.0	4141.5	514.77 ug/L	514.77 ppb	00:08:37
1	S 181.975 Axial†	760.9	722.1	1056.9 ug/L	1056.9 ppb	00:08:37
1	Sb 206.836†	1501.8	1461.6	527.94 ug/L	527.94 ppb	00:08:37
1	Se 196.026†	741.4	760.4	519.36 ug/L	519.36 ppb	00:08:37
1	Si 251.611†	78962.8	78244.5	2503.8 ug/L	2503.8 ppb	00:08:16
1	Sn 189.927†	2876.3	2859.1	517.92 ug/L	517.92 ppb	00:08:37
1	Ti 334.940†	327553.6	328071.4	496.07 ug/L	496.07 ppb	00:08:11
1	Tl 190.801†	1564.5	1592.1	514.26 ug/L	514.26 ppb	00:08:37
1	U 409.014†	15036.6	17817.8	479.71 ug/L	479.71 ppb	00:08:16
1	V 292.402†	70693.9	71959.4	506.34 ug/L	506.34 ppb	00:08:16
1	Zn 213.857†	51344.2	50666.7	503.68 ug/L	503.68 ppb	00:08:16
1	SiO2†	78426.3	77691.9	5324.2 ug/L	5324.2 ppb	00:09:44
2	Sc Radial	3924.8	3924.8	92.3 %		00:07:39
2	Y RADIAL	4412.9	4412.9	94.05 %		00:07:19
2	Al 396.153Radial†	5330.4	5887.7	5307.6 ug/L	5307.6 ppb	00:07:19
2	Ca 317.933Radial†	2534.8	2731.7	5435.0 ug/L	5435.0 ppb	00:07:39
2	Fe 238.204 Radial†	376.2	397.5	5136.8 ug/L	5136.8 ppb	00:07:39
2	K 766.490 Radial†	29094.2	28974.5	5414.0 ug/L	5414.0 ppb	00:07:19
2	Mg 279.077 IEC†	116.0	122.9	5587.4 ug/L	5587.4 ppb	00:07:39
2	Na 589.592 Radial†	33284.0	36812.3	10683 ug/L	10683 ppb	00:07:19
2	Sr 421.552†	73206.3	79301.6	525.56 ug/L	525.56 ppb	00:07:19
2	Sc 361.383	900374.6	900374.6	100.03 %		00:08:43
2	Y 371.029	748682.1	748682.1	98.195 %		00:08:43
2	Ag 328.068†	110865.0	110597.3	511.05 ug/L	511.05 ppb	00:08:48
2	As 188.979†	1106.7	1126.8	512.22 ug/L	512.22 ppb	00:09:08
2	B 249.677†	20371.9	20737.8	492.61 ug/L	492.61 ppb	00:08:48
2	Ba 233.527†	65488.3	65474.7	512.69 ug/L	512.69 ppb	00:08:48
2	Be 313.107†	1341511.1	1344900.4	502.34 ug/L	502.34 ppb	00:08:43
2	Cd 226.502†	44525.3	44693.2	518.66 ug/L	518.66 ppb	00:08:48
2	Co 228.616†	24628.0	24681.4	516.11 ug/L	516.11 ppb	00:08:48
2	Cr 267.716†	45715.8	45634.0	512.83 ug/L	512.83 ppb	00:08:48
2	Cu 324.752†	172222.7	166086.0	498.74 ug/L	498.74 ppb	00:08:48
2	Mn 257.610†	447453.3	446861.7	501.29 ug/L	501.29 ppb	00:08:43
2	Mo 202.031†	6939.7	6931.2	507.71 ug/L	507.71 ppb	00:09:08
2	Ni 231.604†	20480.3	20420.9	518.75 ug/L	518.75 ppb	00:08:48

2	P 214.914†	4392.9	4189.4	2445.0 ug/L	2445.0 ppb	00:09:08
2	Pb 220.353†	4083.8	4147.4	515.50 ug/L	515.50 ppb	00:09:08
2	S 181.975 Axial†	744.0	706.7	1034.3 ug/L	1034.3 ppb	00:09:08
2	Sb 206.836†	1490.3	1453.1	524.88 ug/L	524.88 ppb	00:09:08
2	Se 196.026†	752.3	772.7	526.96 ug/L	526.96 ppb	00:09:08
2	Si 251.611†	79896.7	79335.0	2538.8 ug/L	2538.8 ppb	00:08:48
2	Sn 189.927†	2848.9	2837.5	514.01 ug/L	514.01 ppb	00:09:08
2	Ti 334.940†	327462.7	328631.2	496.91 ug/L	496.91 ppb	00:08:43
2	Tl 190.801†	1545.4	1576.1	509.10 ug/L	509.10 ppb	00:09:08
2	U 409.014†	15274.5	18085.5	486.95 ug/L	486.95 ppb	00:08:48
2	V 292.402†	71292.2	72698.0	511.46 ug/L	511.46 ppb	00:08:48
2	Zn 213.857†	52005.3	51429.6	511.31 ug/L	511.31 ppb	00:08:48
2	SiO2†	80008.9	79429.7	5443.7 ug/L	5443.7 ppb	00:09:50
3	Sc Radial	3926.5	3926.5	92.3 %		00:08:04
3	Y RADIAL	4491.7	4491.7	95.73 %		00:07:44
3	Al 396.153Radial†	5436.5	6000.1	5409.0 ug/L	5409.0 ppb	00:07:44
3	Ca 317.933Radial†	2529.2	2724.4	5420.5 ug/L	5420.5 ppb	00:08:04
3	Fe 238.204 Radial†	380.5	402.0	5194.6 ug/L	5194.6 ppb	00:08:04
3	K 766.490 Radial†	29512.1	29413.7	5496.1 ug/L	5496.1 ppb	00:07:44
3	Mg 279.077 IEC†	113.5	120.2	5463.5 ug/L	5463.5 ppb	00:08:04
3	Na 589.592 Radial†	33611.2	37151.4	10781 ug/L	10781 ppb	00:07:44
3	Sr 421.552†	74234.7	80381.7	532.72 ug/L	532.72 ppb	00:07:44
3	Sc 361.383	889350.2	889350.2	98.810 %		00:09:14
3	Y 371.029	740152.9	740152.9	97.077 %		00:09:14
3	Ag 328.068†	108541.0	109619.2	506.57 ug/L	506.57 ppb	00:09:19
3	As 188.979†	1121.1	1155.1	524.98 ug/L	524.98 ppb	00:09:39
3	B 249.677†	19852.3	20464.3	486.10 ug/L	486.10 ppb	00:09:19
3	Ba 233.527†	63865.4	64643.8	506.19 ug/L	506.19 ppb	00:09:19
3	Be 313.107†	1322336.3	1342118.1	501.30 ug/L	501.30 ppb	00:09:14
3	Cd 226.502†	43431.8	44138.3	512.20 ug/L	512.20 ppb	00:09:19
3	Co 228.616†	23929.1	24279.2	507.72 ug/L	507.72 ppb	00:09:19
3	Cr 267.716†	44733.0	45205.8	508.03 ug/L	508.03 ppb	00:09:19
3	Cu 324.752†	168191.6	164140.5	492.91 ug/L	492.91 ppb	00:09:19
3	Mn 257.610†	441009.2	445884.7	500.21 ug/L	500.21 ppb	00:09:14
3	Mo 202.031†	6959.0	7036.8	515.44 ug/L	515.44 ppb	00:09:39
3	Ni 231.604†	19930.3	20118.1	511.05 ug/L	511.05 ppb	00:09:19
3	P 214.914†	4424.8	4276.1	2498.8 ug/L	2498.8 ppb	00:09:39
3	Pb 220.353†	4074.9	4189.0	520.70 ug/L	520.70 ppb	00:09:39
3	S 181.975 Axial†	757.4	729.5	1067.7 ug/L	1067.7 ppb	00:09:39
3	Sb 206.836†	1495.7	1477.0	533.51 ug/L	533.51 ppb	00:09:39
3	Se 196.026†	743.8	773.5	527.67 ug/L	527.67 ppb	00:09:39
3	Si 251.611†	77960.0	78364.9	2507.6 ug/L	2507.6 ppb	00:09:19
3	Sn 189.927†	2861.3	2885.3	522.65 ug/L	522.65 ppb	00:09:39
3	Ti 334.940†	322720.7	327890.0	495.80 ug/L	495.80 ppb	00:09:14
3	Tl 190.801†	1560.4	1610.4	520.14 ug/L	520.14 ppb	00:09:39
3	U 409.014†	14580.2	17572.1	473.09 ug/L	473.09 ppb	00:09:19
3	V 292.402†	69756.6	72027.3	506.88 ug/L	506.88 ppb	00:09:19
3	Zn 213.857†	50606.0	50657.9	503.61 ug/L	503.61 ppb	00:09:19
3	SiO2†	78123.4	78512.9	5380.5 ug/L	5380.5 ppb	00:09:55

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	897297.4	99.693 %		0.7711			0.77%
Sc Radial	3917.1	92.1 %		0.35			0.38%
Y 371.029	746528.9	97.913 %		0.7368			0.75%
Y RADIAL	4443.0	94.69 %		0.907			0.96%
Ag 328.068†	109807.2	507.44 ug/L		3.266	507.44 ppb	3.266	0.64%
QC value within limits for Ag 328.068 Recovery = 101.49%							
Al 396.153Radial†	5947.8	5361.9 ug/L		51.08	5361.9 ppb	51.08	0.95%
QC value within limits for Al 396.153Radial Recovery = 107.24%							
As 188.979†	1141.3	518.77 ug/L		6.387	518.77 ppb	6.387	1.23%
QC value within limits for As 188.979 Recovery = 103.75%							
B 249.677†	20521.2	487.44 ug/L		4.643	487.44 ppb	4.643	0.95%
QC value within limits for B 249.677 Recovery = 97.49%							
Ba 233.527†	64886.0	508.09 ug/L		4.007	508.09 ppb	4.007	0.79%
QC value within limits for Ba 233.527 Recovery = 101.62%							
Be 313.107†	1343756.2	501.91 ug/L		0.543	501.91 ppb	0.543	0.11%
QC value within limits for Be 313.107 Recovery = 100.38%							
Ca 317:933Radial†	2734.8	5441.0 ug/L		24.15	5441.0 ppb	24.15	0.44%

QC value within limits for Ca 317.933 Radial Recovery = 108.82%

Cd 226.502†	44317.8	514.29 ug/L	3.786	514.29 ppb	3.786	0.74%
QC value within limits for Cd 226.502 Recovery = 102.86%						
Co 228.616†	24414.3	510.54 ug/L	4.831	510.54 ppb	4.831	0.95%
QC value within limits for Co 228.616 Recovery = 102.11%						
Cr 267.716†	45293.9	509.02 ug/L	3.423	509.02 ppb	3.423	0.67%
QC value within limits for Cr 267.716 Recovery = 101.80%						
Cu 324.752†	164762.7	494.78 ug/L	3.437	494.78 ppb	3.437	0.69%
QC value within limits for Cu 324.752 Recovery = 98.96%						
Fe 238.204 Radial†	403.5	5213.2 ug/L	87.24	5213.2 ppb	87.24	1.67%
QC value within limits for Fe 238.204 Radial Recovery = 104.26%						
K 766.490 Radial†	29217.1	5459.3 ug/L	41.74	5459.3 ppb	41.74	0.76%
QC value within limits for K 766.490 Radial Recovery = 109.19%						
Mg 279.077 IEC†	121.6	5524.8 ug/L	61.98	5524.8 ppb	61.98	1.12%
QC value greater than the upper limit for Mg 279.077 IEC Recovery = 110.50%						
Mn 257.610†	446156.9	500.51 ug/L	0.681	500.51 ppb	0.681	0.14%
QC value within limits for Mn 257.610 Recovery = 100.10%						
Mo 202.031†	6978.2	511.15 ug/L	3.932	511.15 ppb	3.932	0.77%
QC value within limits for Mo 202.031 Recovery = 102.23%						
Na 589.592 Radial†	37071.8	10758 ug/L	66.8	10758 ppb	66.8	0.62%
QC value within limits for Na 589.592 Radial Recovery = 107.58%						
Ni 231.604†	20231.3	513.93 ug/L	4.197	513.93 ppb	4.197	0.82%
QC value within limits for Ni 231.604 Recovery = 102.79%						
P 214.914†	4235.7	2473.9 ug/L	27.13	2473.9 ppb	27.13	1.10%
QC value within limits for P 214.914 Recovery = 98.96%						
Pb 220.353†	4159.3	516.99 ug/L	3.231	516.99 ppb	3.231	0.63%
QC value within limits for Pb 220.353 Recovery = 103.40%						
S 181.975 Axial†	719.5	1053.0 ug/L	17.02	1053.0 ppb	17.02	1.62%
QC value within limits for S 181.975 Axial Recovery = 105.30%						
Sb 206.836†	1463.9	528.77 ug/L	4.376	528.77 ppb	4.376	0.83%
QC value within limits for Sb 206.836 Recovery = 105.75%						
Se 196.026†	768.9	524.66 ug/L	4.607	524.66 ppb	4.607	0.88%
QC value within limits for Se 196.026 Recovery = 104.93%						
Si 251.611†	78648.1	2516.7 ug/L	19.21	2516.7 ppb	19.21	0.76%
QC value within limits for Si 251.611 Recovery = 100.67%						
Sn 189.927†	2860.7	518.19 ug/L	4.327	518.19 ppb	4.327	0.83%
QC value within limits for Sn 189.927 Recovery = 103.64%						
Sr 421.552†	79936.9	529.77 ug/L	3.742	529.77 ppb	3.742	0.71%
QC value within limits for Sr 421.552 Recovery = 105.95%						
Ti 334.940†	328197.5	496.26 ug/L	0.576	496.26 ppb	0.576	0.12%
QC value within limits for Ti 334.940 Recovery = 99.25%						
Tl 190.801†	1592.9	514.50 ug/L	5.526	514.50 ppb	5.526	1.07%
QC value within limits for Tl 190.801 Recovery = 102.90%						
U 409.014†	17825.1	479.92 ug/L	6.936	479.92 ppb	6.936	1.45%
QC value within limits for U 409.014 Recovery = 95.98%						
V 292.402†	72228.2	508.23 ug/L	2.816	508.23 ppb	2.816	0.55%
QC value within limits for V 292.402 Recovery = 101.65%						
Zn 213.857†	50918.1	506.20 ug/L	4.424	506.20 ppb	4.424	0.87%
QC value within limits for Zn 213.857 Recovery = 101.24%						
SiO2†	78544.9	5382.8 ug/L	59.77	5382.8 ppb	59.77	1.11%
QC value within limits for SiO2 Recovery = 100.66%						

QC Failed. Continue with analysis.

Sequence No.: 55

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 2/24/2010 00:12:04

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	4030.6	4030.6	94.8 %		00:13:56
1	Y RADIAL	4506.0	4506.0	96.03 %		00:13:56
1	Al 396.153Radial†	-104.1	0.9	0.7916 ug/L	0.7916 ppb	00:13:56
1	Ca 317.933Radial†	18.2	3.7	7.4144 ug/L	7.4144 ppb	00:14:16
1	Fe 238.204 Radial†	12.8	3.3	42.595 ug/L	42.595 ppb	00:14:16
1	K 766.490 Radial†	2817.9	417.0	77.994 ug/L	77.994 ppb	00:13:56
1	Mg 279.077 IEC†	-2.0	-4.9	-221.48 ug/L	-221.48 ppb	00:14:16
1	Na 589.592 Radial†	-505.7	206.7	59.978 ug/L	59.978 ppb	00:13:56
1	Sr 421.552†	80.5	48.2	0.3191 ug/L	0.3191 ppb	00:13:56
1	Sc 361.383	897287.6	897287.6	99.692 %		00:15:13
1	Y 371.029	758201.2	758201.2	99.444 %		00:15:13
1	Ag 328.068†	216.5	-12.1	-0.0352 ug/L	-0.0352 ppb	00:15:13
1	As 188.979†	-20.6	-0.1	-0.0609 ug/L	-0.0609 ppb	00:15:33
1	B 249.677†	-430.0	-58.4	-1.3996 ug/L	-1.3996 ppb	00:15:33
1	Ba 233.527†	19.5	28.7	0.2254 ug/L	0.2254 ppb	00:15:33
1	Be 313.107†	-3745.5	96.1	0.0354 ug/L	0.0354 ppb	00:15:13
1	Cd 226.502†	-184.4	-1.6	-0.0249 ug/L	-0.0249 ppb	00:15:33
1	Co 228.616†	-59.6	2.2	0.0472 ug/L	0.0472 ppb	00:15:33
1	Cr 267.716†	57.9	-8.0	-0.0815 ug/L	-0.0815 ppb	00:15:33
1	Cu 324.752†	6068.0	9.7	0.0366 ug/L	0.0366 ppb	00:15:13
1	Mn 257.610†	478.9	43.5	0.0621 ug/L	0.0621 ppb	00:15:33
1	Mo 202.031†	16.6	10.6	0.7779 ug/L	0.7779 ppb	00:15:33
1	Ni 231.604†	58.6	6.5	0.1651 ug/L	0.1651 ppb	00:15:33
1	P 214.914†	219.3	17.9	10.824 ug/L	10.824 ppb	00:15:33
1	Pb 220.353†	-66.1	-1.3	-0.1624 ug/L	-0.1624 ppb	00:15:33
1	S 181.975 Axial†	42.7	5.8	8.5495 ug/L	8.5495 ppb	00:15:33
1	Sb 206.836†	40.9	4.3	1.5119 ug/L	1.5119 ppb	00:15:33
1	Se 196.026†	-27.3	-6.7	-4.2922 ug/L	-4.2922 ppb	00:15:33
1	Si 251.611†	612.6	80.3	2.5679 ug/L	2.5679 ppb	00:15:33
1	Sn 189.927†	4.9	-5.5	-0.9944 ug/L	-0.9944 ppb	00:15:33
1	Ti 334.940†	-1402.9	-125.4	-0.1663 ug/L	-0.1663 ppb	00:15:13
1	Tl 190.801†	-29.2	1.9	0.6210 ug/L	0.6210 ppb	00:15:33
1	U 409.014†	-3164.7	-358.3	-9.6850 ug/L	-9.6850 ppb	00:15:13
1	V 292.402†	-1439.3	-13.4	-0.1105 ug/L	-0.1105 ppb	00:15:13
1	Zn 213.857†	567.2	11.2	0.1053 ug/L	0.1053 ppb	00:15:33
1	SiO2†	611.2	61.6	4.2124 ug/L	4.2124 ppb	00:16:29
2	Sc Radial	4131.6	4131.6	97.1 %		00:14:21
2	Y RADIAL	4604.2	4604.2	98.13 %		00:14:21
2	Al 396.153Radial†	-110.4	-2.9	-2.6942 ug/L	-2.6942 ppb	00:14:21
2	Ca 317.933Radial†	19.7	4.8	9.4904 ug/L	9.4904 ppb	00:14:41
2	Fe 238.204 Radial†	10.2	0.3	3.8567 ug/L	3.8567 ppb	00:14:41
2	K 766.490 Radial†	2775.6	300.7	56.229 ug/L	56.229 ppb	00:14:21
2	Mg 279.077 IEC†	3.1	0.4	18.529 ug/L	18.529 ppb	00:14:41
2	Na 589.592 Radial†	-511.8	213.5	61.958 ug/L	61.958 ppb	00:14:21
2	Sr 421.552†	65.7	30.9	0.2047 ug/L	0.2047 ppb	00:14:21
2	Sc 361.383	891155.7	891155.7	99.010 %		00:15:38
2	Y 371.029	753386.0	753386.0	98.812 %		00:15:38
2	Ag 328.068†	266.8	40.1	0.1897 ug/L	0.1897 ppb	00:15:38
2	As 188.979†	-21.2	-0.9	-0.3901 ug/L	-0.3901 ppb	00:15:58
2	B 249.677†	-448.8	-80.4	-1.9188 ug/L	-1.9188 ppb	00:15:58
2	Ba 233.527†	18.5	27.8	0.2158 ug/L	0.2158 ppb	00:15:58
2	Be 313.107†	-3669.4	147.2	0.0538 ug/L	0.0538 ppb	00:15:38
2	Cd 226.502†	-193.4	-12.0	-0.1416 ug/L	-0.1416 ppb	00:15:58
2	Co 228.616†	-62.1	-0.8	-0.0135 ug/L	-0.0135 ppb	00:15:58
2	Cr 267.716†	65.3	-0.0	0.0023 ug/L	0.0023 ppb	00:15:58
2	Cu 324.752†	6014.1	-3.0	-0.0038 ug/L	-0.0038 ppb	00:15:38
2	Mn 257.610†	468.7	36.5	0.0405 ug/L	0.0405 ppb	00:15:58
2	Mo 202.031†	19.5	13.6	0.9950 ug/L	0.9950 ppb	00:15:58
2	Ni 231.604†	64.0	12.3	0.3134 ug/L	0.3134 ppb	00:15:58

2	P 214.914†	206.0	6.0	3.6493 ug/L	3.6493 ppb	00:15:58
2	Pb 220.353†	-61.4	3.0	0.3765 ug/L	0.3765 ppb	00:15:58
2	S 181.975 Axial†	42.8	6.1	9.0085 ug/L	9.0085 ppb	00:15:58
2	Sb 206.836†	38.7	2.4	0.8432 ug/L	0.8432 ppb	00:15:58
2	Se 196.026†	-20.4	0.1	0.0588 ug/L	0.0588 ppb	00:15:58
2	Si 251.611†	562.8	34.3	1.0885 ug/L	1.0885 ppb	00:15:58
2	Sn 189.927†	6.0	-4.3	-0.7844 ug/L	-0.7844 ppb	00:15:58
2	Ti 334.940†	-1558.0	-291.8	-0.4376 ug/L	-0.4376 ppb	00:15:38
2	Tl 190.801†	-34.8	-3.9	-1.2525 ug/L	-1.2525 ppb	00:15:58
2	U 409.014†	-3112.6	-327.5	-8.8493 ug/L	-8.8493 ppb	00:15:38
2	V 292.402†	-1519.0	-103.8	-0.7231 ug/L	-0.7231 ppb	00:15:38
2	Zn 213.857†	571.9	19.9	0.1972 ug/L	0.1972 ppb	00:15:58
2	SiO2†	632.6	87.4	5.9805 ug/L	5.9805 ppb	00:16:34
3	Sc Radial	4107.9	4107.9	96.6 %		00:14:46
3	Y RADIAL	4525.5	4525.5	96.45 %		00:14:46
3	Al 396.153Radial†	-112.8	-6.1	-5.4988 ug/L	-5.4988 ppb	00:14:46
3	Ca 317.933Radial†	19.9	5.2	10.253 ug/L	10.253 ppb	00:15:06
3	Fe 238.204 Radial†	13.7	4.0	51.413 ug/L	51.413 ppb	00:15:06
3	K 766.490 Radial†	2813.9	356.9	66.750 ug/L	66.750 ppb	00:14:46
3	Mg 279.077 IEC†	2.1	-0.6	-27.325 ug/L	-27.325 ppb	00:15:06
3	Na 589.592 Radial†	-582.4	137.3	39.847 ug/L	39.847 ppb	00:14:46
3	Sr 421.552†	71.0	36.7	0.2430 ug/L	0.2430 ppb	00:14:46
3	Sc 361.383	894856.4	894856.4	99.422 %		00:16:03
3	Y 371.029	755828.2	755828.2	99.133 %		00:16:03
3	Ag 328.068†	205.6	-22.5	-0.0829 ug/L	-0.0829 ppb	00:16:03
3	As 188.979†	-18.1	2.3	1.0492 ug/L	1.0492 ppb	00:16:24
3	B 249.677†	-429.6	-59.1	-1.4193 ug/L	-1.4193 ppb	00:16:24
3	Ba 233.527†	9.4	18.6	0.1453 ug/L	0.1453 ppb	00:16:24
3	Be 313.107†	-3783.0	48.2	0.0173 ug/L	0.0173 ppb	00:16:03
3	Cd 226.502†	-177.5	4.8	0.0485 ug/L	0.0485 ppb	00:16:24
3	Co 228.616†	-62.2	-0.6	-0.0130 ug/L	-0.0130 ppb	00:16:24
3	Cr 267.716†	67.0	1.5	0.0240 ug/L	0.0240 ppb	00:16:24
3	Cu 324.752†	6008.5	-33.7	-0.0927 ug/L	-0.0927 ppb	00:16:03
3	Mn 257.610†	443.1	8.9	0.0161 ug/L	0.0161 ppb	00:16:24
3	Mo 202.031†	5.6	-0.5	-0.0299 ug/L	-0.0299 ppb	00:16:24
3	Ni 231.604†	63.7	11.7	0.2983 ug/L	0.2983 ppb	00:16:24
3	P 214.914†	197.5	-3.4	-2.0959 ug/L	-2.0959 ppb	00:16:24
3	Pb 220.353†	-78.4	-13.8	-1.7144 ug/L	-1.7144 ppb	00:16:24
3	S 181.975 Axial†	33.5	-3.3	-4.8286 ug/L	-4.8286 ppb	00:16:24
3	Sb 206.836†	46.9	10.4	3.6542 ug/L	3.6542 ppb	00:16:24
3	Se 196.026†	-29.0	-8.4	-5.4010 ug/L	-5.4010 ppb	00:16:24
3	Si 251.611†	586.2	55.5	1.7797 ug/L	1.7797 ppb	00:16:24
3	Sn 189.927†	16.6	6.2	1.1256 ug/L	1.1256 ppb	00:16:24
3	Ti 334.940†	-1481.9	-208.8	-0.3076 ug/L	-0.3076 ppb	00:16:03
3	Tl 190.801†	-24.1	7.0	2.2468 ug/L	2.2468 ppb	00:16:24
3	U 409.014†	-3178.9	-381.1	-10.304 ug/L	-10.304 ppb	00:16:03
3	V 292.402†	-1543.9	-122.5	-0.8781 ug/L	-0.8781 ppb	00:16:03
3	Zn 213.857†	580.9	26.6	0.2578 ug/L	0.2578 ppb	00:16:24
3	SiO2†	613.0	65.1	4.4738 ug/L	4.4738 ppb	00:16:39

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	894433.2	99.374 %	0.3431			0.35%
Sc Radial	4090.0	96.2 %	1.24			1.29%
Y 371.029	755805.1	99.129 %	0.3158			0.32%
Y RADIAL	4545.2	96.87 %	1.109			1.14%
Ag 328.068†	1.8	0.0239 ug/L	0.14558	0.0239 ppb	0.14558	609.26%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-2.7	-2.4671 ug/L	3.15131	-2.4671 ppb	3.15131	127.73%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	0.4	0.1994 ug/L	0.75411	0.1994 ppb	0.75411	378.20%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-66.0	-1.5792 ug/L	0.29426	-1.5792 ppb	0.29426	18.63%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	25.1	0.1955 ug/L	0.04373	0.1955 ppb	0.04373	22.37%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	97.2	0.0355 ug/L	0.01829	0.0355 ppb	0.01829	51.52%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	4.6	9.0527 ug/L	1.46916	9.0527 ppb	1.46916	16.23%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated						
Cd 226.502†	-3.0	-0.0393 ug/L	0.09586	-0.0393 ppb	0.09586	243.66%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	0.3	0.0069 ug/L	0.03488	0.0069 ppb	0.03488	506.31%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-2.2	-0.0184 ug/L	0.05571	-0.0184 ppb	0.05571	303.36%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-9.0	-0.0200 ug/L	0.06617	-0.0200 ppb	0.06617	331.63%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	2.5	32.622 ug/L	25.2984	32.622 ppb	25.2984	77.55%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	358.2	66.991 ug/L	10.8842	66.991 ppb	10.8842	16.25%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	-1.7	-76.758 ug/L	127.4107	-76.758 ppb	127.4107	165.99%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	29.6	0.0396 ug/L	0.02298	0.0396 ppb	0.02298	58.06%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	7.9	0.5810 ug/L	0.54009	0.5810 ppb	0.54009	92.96%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	185.8	53.927 ug/L	12.2345	53.927 ppb	12.2345	22.69%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	10.2	0.2589 ug/L	0.08166	0.2589 ppb	0.08166	31.53%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	6.8	4.1257 ug/L	6.47298	4.1257 ppb	6.47298	156.89%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	-4.0	-0.5001 ug/L	1.08556	-0.5001 ppb	1.08556	217.08%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	2.9	4.2431 ug/L	7.85971	4.2431 ppb	7.85971	185.23%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	5.7	2.0031 ug/L	1.46846	2.0031 ppb	1.46846	73.31%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-5.0	-3.2115 ug/L	2.88590	-3.2115 ppb	2.88590	89.86%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	56.7	1.8120 ug/L	0.74026	1.8120 ppb	0.74026	40.85%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	-1.2	-0.2177 ug/L	1.16810	-0.2177 ppb	1.16810	536.46%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	38.6	0.2556 ug/L	0.05822	0.2556 ppb	0.05822	22.78%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	-208.6	-0.3038 ug/L	0.13573	-0.3038 ppb	0.13573	44.67%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	1.7	0.5384 ug/L	1.75113	0.5384 ppb	1.75113	325.23%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	-355.6	-9.6127 ug/L	0.72991	-9.6127 ppb	0.72991	7.59%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	-79.9	-0.5706 ug/L	0.40586	-0.5706 ppb	0.40586	71.13%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	19.3	0.1868 ug/L	0.07677	0.1868 ppb	0.07677	41.10%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	71.4	4.8889 ug/L	0.95432	4.8889 ppb	0.95432	19.52%
QC value within limits for SiO2 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 63

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/24/2010 01:06:54

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	3977.6	3977.6	93.5 %		01:09:06
1	Y RADIAL	4479.5	4479.5	95.47 %		01:08:46
1	Al 396.153Radial†	5391.5	5876.3	5297.0 ug/L	5297.0 ppb	01:08:46
1	Ca 317.933Radial†	2606.0	2771.3	5513.7 ug/L	5513.7 ppb	01:09:06
1	Fe 238.204 Radial†	398.2	415.6	5370.3 ug/L	5370.3 ppb	01:09:06
1	K 766.490 Radial†	29439.9	28925.2	5404.5 ug/L	5404.5 ppb	01:08:46
1	Mg 279.077 IEC†	121.4	127.1	5774.8 ug/L	5774.8 ppb	01:09:06
1	Na 589.592 Radial†	35576.7	38784.8	11256 ug/L	11256 ppb	01:08:46
1	Sr 421.552†	76648.5	81928.5	542.97 ug/L	542.97 ppb	01:08:46
1	Sc 361.383	908306.6	908306.6	100.92 %		01:10:03
1	Y 371.029	757297.9	757297.9	99.325 %		01:10:03
1	Ag 328.068†	112631.2	111379.7	514.72 ug/L	514.72 ppb	01:10:09
1	As 188.979†	1126.2	1136.5	516.73 ug/L	516.73 ppb	01:10:29
1	B 249.677†	20687.2	20872.4	495.79 ug/L	495.79 ppb	01:10:09
1	Ba 233.527†	65949.5	65360.2	511.81 ug/L	511.81 ppb	01:10:09
1	Be 313.107†	1380026.4	1371355.1	512.22 ug/L	512.22 ppb	01:10:03
1	Cd 226.502†	44706.4	44484.0	516.20 ug/L	516.20 ppb	01:10:09
1	Co 228.616†	24706.8	24544.5	513.24 ug/L	513.24 ppb	01:10:09
1	Cr 267.716†	46090.6	45606.3	512.55 ug/L	512.55 ppb	01:10:09
1	Cu 324.752†	175102.6	167436.3	502.81 ug/L	502.81 ppb	01:10:09
1	Mn 257.610†	457410.8	452822.6	507.99 ug/L	507.99 ppb	01:10:03
1	Mo 202.031†	7062.7	6992.5	512.21 ug/L	512.21 ppb	01:10:29
1	Ni 231.604†	20556.1	20317.2	516.11 ug/L	516.11 ppb	01:10:09
1	P 214.914†	4479.5	4236.8	2472.8 ug/L	2472.8 ppb	01:10:29
1	Pb 220.353†	4118.9	4146.6	515.38 ug/L	515.38 ppb	01:10:29
1	S 181.975 Axial†	754.4	710.5	1039.9 ug/L	1039.9 ppb	01:10:29
1	Sb 206.836†	1506.5	1456.1	526.07 ug/L	526.07 ppb	01:10:29
1	Se 196.026†	764.4	778.2	531.30 ug/L	531.30 ppb	01:10:29
1	Si 251.611†	80711.3	79444.6	2542.3 ug/L	2542.3 ppb	01:10:09
1	Sn 189.927†	2890.7	2854.0	516.99 ug/L	516.99 ppb	01:10:29
1	Ti 334.940†	336231.1	334461.4	505.72 ug/L	505.72 ppb	01:10:03
1	Tl 190.801†	1581.5	1598.4	516.35 ug/L	516.35 ppb	01:10:29
1	U 409.014†	15477.2	18153.0	488.75 ug/L	488.75 ppb	01:10:09
1	V 292.402†	72372.9	73146.5	514.60 ug/L	514.60 ppb	01:10:09
1	Zn 213.857†	52310.2	51277.7	509.76 ug/L	509.76 ppb	01:10:09
1	SiO2†	79596.4	78322.5	5367.5 ug/L	5367.5 ppb	01:11:37
2	Sc Radial	3974.9	3974.9	93.5 %		01:09:31
2	Y RADIAL	4472.0	4472.0	95.31 %		01:09:11
2	Al 396.153Radial†	5450.0	5942.8	5356.8 ug/L	5356.8 ppb	01:09:11
2	Ca 317.933Radial†	2606.9	2774.1	5519.3 ug/L	5519.3 ppb	01:09:31
2	Fe 238.204 Radial†	405.0	423.2	5467.4 ug/L	5467.4 ppb	01:09:31
2	K 766.490 Radial†	29450.6	28957.9	5410.6 ug/L	5410.6 ppb	01:09:11
2	Mg 279.077 IEC†	115.4	120.8	5488.9 ug/L	5488.9 ppb	01:09:31
2	Na 589.592 Radial†	35588.5	38823.1	11267 ug/L	11267 ppb	01:09:11
2	Sr 421.552†	76825.1	82172.8	544.59 ug/L	544.59 ppb	01:09:11
2	Sc 361.383	898435.0	898435.0	99.819 %		01:10:35
2	Y 371.029	748796.3	748796.3	98.210 %		01:10:35
2	Ag 328.068†	112801.3	112776.4	521.18 ug/L	521.18 ppb	01:10:40
2	As 188.979†	1155.0	1177.6	535.24 ug/L	535.24 ppb	01:11:00
2	B 249.677†	20836.2	21246.9	504.69 ug/L	504.69 ppb	01:10:40
2	Ba 233.527†	66024.4	66153.2	518.02 ug/L	518.02 ppb	01:10:40
2	Be 313.107†	1363447.9	1369772.1	511.63 ug/L	511.63 ppb	01:10:35
2	Cd 226.502†	44791.3	45055.8	522.84 ug/L	522.84 ppb	01:10:40
2	Co 228.616†	24812.6	24919.5	521.10 ug/L	521.10 ppb	01:10:40
2	Cr 267.716†	46187.5	46205.2	519.28 ug/L	519.28 ppb	01:10:40
2	Cu 324.752†	175744.0	169985.4	510.46 ug/L	510.46 ppb	01:10:40
2	Mn 257.610†	452736.4	453120.0	508.35 ug/L	508.35 ppb	01:10:35
2	Mo 202.031†	7098.8	7105.6	520.49 ug/L	520.49 ppb	01:11:00
2	Ni 231.604†	20568.4	20553.4	522.11 ug/L	522.11 ppb	01:10:40



2	P 214.914†	4486.9	4293.0	2505.5 ug/L	2505.5 ppb	01:11:00
2	Pb 220.353†	4152.1	4224.6	525.07 ug/L	525.07 ppb	01:11:00
2	S 181.975 Axial†	775.8	740.2	1083.3 ug/L	1083.3 ppb	01:11:00
2	Sb 206.836†	1533.7	1499.7	541.65 ug/L	541.65 ppb	01:11:00
2	Se 196.026†	767.1	789.2	538.89 ug/L	538.89 ppb	01:11:00
2	Si 251.611†	80922.2	80534.7	2577.1 ug/L	2577.1 ppb	01:10:40
2	Sn 189.927†	2928.1	2922.9	529.46 ug/L	529.46 ppb	01:11:00
2	Ti 334.940†	332419.0	334303.2	505.50 ug/L	505.50 ppb	01:10:35
2	Tl 190.801†	1579.1	1613.2	521.06 ug/L	521.06 ppb	01:11:00
2	U 409.014†	15604.6	18449.1	496.73 ug/L	496.73 ppb	01:10:40
2	V 292.402†	72392.2	73953.8	520.32 ug/L	520.32 ppb	01:10:40
2	Zn 213.857†	52526.4	52063.9	517.59 ug/L	517.59 ppb	01:10:40
2	SiO2†	80949.1	80544.3	5519.9 ug/L	5519.9 ppb	01:11:42
3	Sc Radial	3960.6	3960.6	93.1 %		01:09:56
3	Y RADIAL	4456.3	4456.3	94.98 %		01:09:36
3	Al 396.153Radial†	5383.6	5892.5	5311.6 ug/L	5311.6 ppb	01:09:36
3	Ca 317.933Radial†	2588.8	2764.8	5500.7 ug/L	5500.7 ppb	01:09:56
3	Fe 238.204 Radial†	404.8	424.6	5485.7 ug/L	5485.7 ppb	01:09:56
3	K 766.490 Radial†	29237.2	28842.8	5389.1 ug/L	5389.1 ppb	01:09:36
3	Mg 279.077 IEC†	115.5	121.3	5514.3 ug/L	5514.3 ppb	01:09:56
3	Na 589.592 Radial†	34944.2	38269.0	11106 ug/L	11106 ppb	01:09:36
3	Sr 421.552†	75477.3	81022.7	536.97 ug/L	536.97 ppb	01:09:36
3	Sc 361.383	899287.5	899287.5	99.914 %		01:11:06
3	Y 371.029	749258.0	749258.0	98.271 %		01:11:06
3	Ag 328.068†	112562.7	112430.5	519.59 ug/L	519.59 ppb	01:11:11
3	As 188.979†	1130.8	1152.3	523.85 ug/L	523.85 ppb	01:11:31
3	B 249.677†	20745.2	21136.0	502.05 ug/L	502.05 ppb	01:11:11
3	Ba 233.527†	65837.1	65903.0	516.06 ug/L	516.06 ppb	01:11:11
3	Be 313.107†	1365275.5	1370306.4	511.82 ug/L	511.82 ppb	01:11:06
3	Cd 226.502†	44666.1	44888.0	520.89 ug/L	520.89 ppb	01:11:11
3	Co 228.616†	24716.5	24799.7	518.58 ug/L	518.58 ppb	01:11:11
3	Cr 267.716†	46161.7	46135.6	518.50 ug/L	518.50 ppb	01:11:11
3	Cu 324.752†	175154.4	169228.4	508.19 ug/L	508.19 ppb	01:11:11
3	Mn 257.610†	453470.4	453424.7	508.69 ug/L	508.69 ppb	01:11:06
3	Mo 202.031†	7041.7	7041.7	515.82 ug/L	515.82 ppb	01:11:31
3	Ni 231.604†	20567.8	20533.2	521.60 ug/L	521.60 ppb	01:11:11
3	P 214.914†	4458.1	4259.9	2485.8 ug/L	2485.8 ppb	01:11:31
3	Pb 220.353†	4106.8	4175.3	518.94 ug/L	518.94 ppb	01:11:31
3	S 181.975 Axial†	739.4	703.0	1028.8 ug/L	1028.8 ppb	01:11:31
3	Sb 206.836†	1509.6	1474.2	532.54 ug/L	532.54 ppb	01:11:31
3	Se 196.026†	760.3	781.6	533.94 ug/L	533.94 ppb	01:11:31
3	Si 251.611†	80680.3	80215.7	2567.0 ug/L	2567.0 ppb	01:11:11
3	Sn 189.927†	2889.7	2881.8	522.01 ug/L	522.01 ppb	01:11:31
3	Ti 334.940†	332805.0	334373.8	505.60 ug/L	505.60 ppb	01:11:06
3	Tl 190.801†	1571.4	1604.0	518.13 ug/L	518.13 ppb	01:11:31
3	U 409.014†	15594.6	18424.3	496.06 ug/L	496.06 ppb	01:11:11
3	V 292.402†	72200.0	73692.7	518.44 ug/L	518.44 ppb	01:11:11
3	Zn 213.857†	52321.2	51808.6	515.03 ug/L	515.03 ppb	01:11:11
3	SiO2†	78501.7	78017.9	5346.5 ug/L	5346.5 ppb	01:11:47

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	902009.7	100.22 %	0.608			0.61%
Sc Radial	3971.1	93.4 %	0.22			0.23%
Y 371.029	751784.1	98.602 %	0.6270			0.64%
Y RADIAL	4469.3	95.25 %	0.252			0.26%
Ag 328.068†	112195.5	518.50 ug/L	3.366	518.50 ppb	3.366	0.65%
QC value within limits for Ag 328.068 Recovery = 103.70%						
Al 396.153Radial†	5903.9	5321.8 ug/L	31.20	5321.8 ppb	31.20	0.59%
QC value within limits for Al 396.153Radial Recovery = 106.44%						
As 188.979†	1155.5	525.27 ug/L	9.336	525.27 ppb	9.336	1.78%
QC value within limits for As 188.979 Recovery = 105.05%						
B 249.677†	21085.1	500.84 ug/L	4.570	500.84 ppb	4.570	0.91%
QC value within limits for B 249.677 Recovery = 100.17%						
Ba 233.527†	65805.5	515.30 ug/L	3.175	515.30 ppb	3.175	0.62%
QC value within limits for Ba 233.527 Recovery = 103.06%						
Be 313.107†	1370477.9	511.89 ug/L	0.300	511.89 ppb	0.300	0.06%
QC value within limits for Be 313.107 Recovery = 102.38%						
Ca 317.933Radial†	2770.0	5511.3 ug/L	9.55	5511.3 ppb	9.55	0.17%

QC value greater than the upper limit for Ca 317.933Radial				Recovery = 110.23%			
Cd	226.502†	44809.2	519.98 ug/L	3.409	519.98 ppb	3.409	0.66%
QC value within limits for Cd 226.502				Recovery = 104.00%			
Co	228.616†	24754.6	517.64 ug/L	4.013	517.64 ppb	4.013	0.78%
QC value within limits for Co 228.616				Recovery = 103.53%			
Cr	267.716†	45982.4	516.77 ug/L	3.681	516.77 ppb	3.681	0.71%
QC value within limits for Cr 267.716				Recovery = 103.35%			
Cu	324.752†	168883.4	507.15 ug/L	3.932	507.15 ppb	3.932	0.78%
QC value within limits for Cu 324.752				Recovery = 101.43%			
Fe	238.204 Radial†	421.1	5441.1 ug/L	62.02	5441.1 ppb	62.02	1.14%
QC value within limits for Fe 238.204 Radial				Recovery = 108.82%			
K	766.490 Radial†	28908.6	5401.4 ug/L	11.06	5401.4 ppb	11.06	0.20%
QC value within limits for K 766.490 Radial				Recovery = 108.03%			
Mg	279.077 IEC†	123.1	5592.6 ug/L	158.23	5592.6 ppb	158.23	2.83%
QC value greater than the upper limit for Mg 279.077 IEC				Recovery = 111.85%			
Mn	257.610†	453122.5	508.34 ug/L	0.349	508.34 ppb	0.349	0.07%
QC value within limits for Mn 257.610				Recovery = 101.67%			
Mo	202.031†	7046.6	516.18 ug/L	4.151	516.18 ppb	4.151	0.80%
QC value within limits for Mo 202.031				Recovery = 103.24%			
Na	589.592 Radial†	38625.7	11209 ug/L	89.8	11209 ppb	89.8	0.80%
QC value greater than the upper limit for Na 589.592 Radial				Recovery = 112.09%			
Ni	231.604†	20467.9	519.94 ug/L	3.326	519.94 ppb	3.326	0.64%
QC value within limits for Ni 231.604				Recovery = 103.99%			
P	214.914†	4263.3	2488.0 ug/L	16.43	2488.0 ppb	16.43	0.66%
QC value within limits for P 214.914				Recovery = 99.52%			
Pb	220.353†	4182.2	519.80 ug/L	4.900	519.80 ppb	4.900	0.94%
QC value within limits for Pb 220.353				Recovery = 103.96%			
S	181.975 Axial†	717.9	1050.7 ug/L	28.79	1050.7 ppb	28.79	2.74%
QC value within limits for S 181.975 Axial				Recovery = 105.07%			
Sb	206.836†	1476.7	533.42 ug/L	7.827	533.42 ppb	7.827	1.47%
QC value within limits for Sb 206.836				Recovery = 106.68%			
Se	196.026†	783.0	534.71 ug/L	3.853	534.71 ppb	3.853	0.72%
QC value within limits for Se 196.026				Recovery = 106.94%			
Si	251.611†	80065.0	2562.1 ug/L	17.93	2562.1 ppb	17.93	0.70%
QC value within limits for Si 251.611				Recovery = 102.49%			
Sn	189.927†	2886.2	522.82 ug/L	6.273	522.82 ppb	6.273	1.20%
QC value within limits for Sn 189.927				Recovery = 104.56%			
Sr	421.552†	81708.0	541.51 ug/L	4.016	541.51 ppb	4.016	0.74%
QC value within limits for Sr 421.552				Recovery = 108.30%			
Ti	334.940†	334379.5	505.60 ug/L	0.111	505.60 ppb	0.111	0.02%
QC value within limits for Ti 334.940				Recovery = 101.12%			
Tl	190.801†	1605.2	518.52 ug/L	2.380	518.52 ppb	2.380	0.46%
QC value within limits for Tl 190.801				Recovery = 103.70%			
U	409.014†	18342.2	493.85 ug/L	4.424	493.85 ppb	4.424	0.90%
QC value within limits for U 409.014				Recovery = 98.77%			
V	292.402†	73597.7	517.79 ug/L	2.912	517.79 ppb	2.912	0.56%
QC value within limits for V 292.402				Recovery = 103.56%			
Zn	213.857†	51716.8	514.12 ug/L	3.990	514.12 ppb	3.990	0.78%
QC value within limits for Zn 213.857				Recovery = 102.82%			
SiO2†		78961.6	5411.3 ug/L	94.66	5411.3 ppb	94.66	1.75%
QC value within limits for SiO2				Recovery = 101.19%			
QC Failed. Continue with analysis.							

Sequence No.: 64  
 Sample ID: CCB  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 8  
 Date Collected: 2/24/2010 01:13:56  
 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	3912.6	3912.6	92.0 %		01:16:09
1	Y RADIAL	4485.5	4485.5	95.60 %		01:15:49
1	Al 396.153Radial†	-115.8	-15.1	-13.701 ug/L	-13.701 ppb	01:15:49
1	Ca 317.933Radial†	17.4	3.5	6.8825 ug/L	6.8825 ppb	01:16:09
1	Fe 238.204 Radial†	12.4	3.3	42.794 ug/L	42.794 ppb	01:16:09
1	K 766.490 Radial†	2866.7	559.8	104.73 ug/L	104.73 ppb	01:15:49
1	Mg 279.077 IEC†	1.4	-1.2	-55.979 ug/L	-55.979 ppb	01:16:09
1	Na 589.592 Radial†	-742.8	-67.2	-19.505 ug/L	-19.505 ppb	01:15:49
1	Sr 421.552†	59.3	27.7	0.1834 ug/L	0.1834 ppb	01:15:49
1	Sc 361.383	893579.4	893579.4	99.280 %		01:17:06
1	Y 371.029	756602.6	756602.6	99.234 %		01:17:06
1	Ag 328.068†	325.5	98.5	0.4686 ug/L	0.4686 ppb	01:17:06
1	As 188.979†	-22.8	-2.5	-1.0977 ug/L	-1.0977 ppb	01:17:26
1	B 249.677†	-374.3	-4.0	-0.1033 ug/L	-0.1033 ppb	01:17:26
1	Ba 233.527†	16.5	25.7	0.2012 ug/L	0.2012 ppb	01:17:26
1	Be 313.107†	-3589.6	237.6	0.0882 ug/L	0.0882 ppb	01:17:06
1	Cd 226.502†	-180.7	1.3	0.0099 ug/L	0.0099 ppb	01:17:26
1	Co 228.616†	-57.8	3.7	0.0780 ug/L	0.0780 ppb	01:17:26
1	Cr 267.716†	91.7	26.4	0.3021 ug/L	0.3021 ppb	01:17:26
1	Cu 324.752†	6051.5	18.3	0.0607 ug/L	0.0607 ppb	01:17:06
1	Mn 257.610†	485.7	52.4	0.0653 ug/L	0.0653 ppb	01:17:26
1	Mo 202.031†	16.4	10.5	0.7714 ug/L	0.7714 ppb	01:17:26
1	Ni 231.604†	71.0	19.2	0.4877 ug/L	0.4877 ppb	01:17:26
1	P 214.914†	208.3	7.8	4.6881 ug/L	4.6881 ppb	01:17:26
1	Pb 220.353†	-52.5	12.1	1.4971 ug/L	1.4971 ppb	01:17:26
1	S 181.975 Axial†	41.1	4.3	6.3226 ug/L	6.3226 ppb	01:17:26
1	Sb 206.836†	51.5	15.2	5.3110 ug/L	5.3110 ppb	01:17:26
1	Se 196.026†	-25.9	-5.4	-3.4011 ug/L	-3.4011 ppb	01:17:26
1	Si 251.611†	587.0	57.1	1.8229 ug/L	1.8229 ppb	01:17:26
1	Sn 189.927†	10.9	0.6	0.1048 ug/L	0.1048 ppb	01:17:26
1	Ti 334.940†	-1370.6	-98.8	-0.1411 ug/L	-0.1411 ppb	01:17:06
1	Tl 190.801†	-29.1	1.9	0.6179 ug/L	0.6179 ppb	01:17:26
1	U 409.014†	-3036.6	-242.3	-6.5537 ug/L	-6.5537 ppb	01:17:06
1	V 292.402†	-1496.6	-77.0	-0.5435 ug/L	-0.5435 ppb	01:17:06
1	Zn 213.857†	571.5	18.0	0.1710 ug/L	0.1710 ppb	01:17:26
1	SiO2†	555.5	8.1	0.5328 ug/L	0.5328 ppb	01:18:22
2	Sc Radial	3985.0	3985.0	93.7 %		01:16:34
2	Y RADIAL	4487.3	4487.3	95.64 %		01:16:14
2	Al 396.153Radial†	-100.7	3.3	2.9533 ug/L	2.9533 ppb	01:16:14
2	Ca 317.933Radial†	17.2	2.9	5.7657 ug/L	5.7657 ppb	01:16:34
2	Fe 238.204 Radial†	11.2	1.8	23.184 ug/L	23.184 ppb	01:16:34
2	K 766.490 Radial†	2810.6	443.2	82.934 ug/L	82.934 ppb	01:16:14
2	Mg 279.077 IEC†	1.5	-1.1	-50.400 ug/L	-50.400 ppb	01:16:34
2	Na 589.592 Radial†	-832.9	-148.6	-43.136 ug/L	-43.136 ppb	01:16:14
2	Sr 421.552†	79.6	48.1	0.3190 ug/L	0.3190 ppb	01:16:14
2	Sc 361.383	883431.1	883431.1	98.152 %		01:17:31
2	Y 371.029	746881.5	746881.5	97.959 %		01:17:31
2	Ag 328.068†	344.2	121.4	0.5729 ug/L	0.5729 ppb	01:17:31
2	As 188.979†	-22.0	-1.9	-0.8604 ug/L	-0.8604 ppb	01:17:51
2	B 249.677†	-382.9	-17.1	-0.4131 ug/L	-0.4131 ppb	01:17:51
2	Ba 233.527†	12.1	21.5	0.1686 ug/L	0.1686 ppb	01:17:51
2	Be 313.107†	-3697.6	86.0	0.0315 ug/L	0.0315 ppb	01:17:31
2	Cd 226.502†	-183.0	-3.1	-0.0406 ug/L	-0.0406 ppb	01:17:51
2	Co 228.616†	-54.6	6.3	0.1343 ug/L	0.1343 ppb	01:17:51
2	Cr 267.716†	86.0	21.6	0.2489 ug/L	0.2489 ppb	01:17:51
2	Cu 324.752†	6024.5	60.8	0.1898 ug/L	0.1898 ppb	01:17:31
2	Mn 257.610†	463.0	34.9	0.0435 ug/L	0.0435 ppb	01:17:51
2	Mo 202.031†	14.7	8.9	0.6564 ug/L	0.6564 ppb	01:17:51
2	Ni 231.604†	63.0	11.8	0.3004 ug/L	0.3004 ppb	01:17:51

2	P 214.914†	200.0	1.7	0.9802 ug/L	0.9802 ppb	01:17:51
2	Pb 220.353†	-45.8	18.4	2.2795 ug/L	2.2795 ppb	01:17:51
2	S 181.975 Axial†	37.6	1.3	1.9215 ug/L	1.9215 ppb	01:17:51
2	Sb 206.836†	38.1	2.1	0.7372 ug/L	0.7372 ppb	01:17:51
2	Se 196.026†	-27.3	-7.1	-4.6324 ug/L	-4.6324 ppb	01:17:51
2	Si 251.611†	576.1	52.8	1.6870 ug/L	1.6870 ppb	01:17:51
2	Sn 189.927†	7.9	-2.4	-0.4299 ug/L	-0.4299 ppb	01:17:51
2	Ti 334.940†	-1418.0	-162.9	-0.2368 ug/L	-0.2368 ppb	01:17:31
2	Tl 190.801†	-35.9	-5.4	-1.7347 ug/L	-1.7347 ppb	01:17:51
2	U 409.014†	-3153.3	-396.4	-10.714 ug/L	-10.714 ppb	01:17:31
2	V 292.402†	-1411.4	-7.6	-0.0681 ug/L	-0.0681 ppb	01:17:31
2	Zn 213.857†	592.3	45.8	0.4537 ug/L	0.4537 ppb	01:17:51
2	SiO2†	581.6	41.1	2.8035 ug/L	2.8035 ppb	01:18:27
3	Sc Radial	3979.3	3979.3	93.6 %		01:16:59
3	Y RADIAL	4518.5	4518.5	96.30 %		01:16:39
3	Al 396.153Radial†	-109.9	-6.7	-6.1435 ug/L	-6.1435 ppb	01:16:39
3	Ca 317.933Radial†	16.4	2.1	4.2075 ug/L	4.2075 ppb	01:16:59
3	Fe 238.204 Radial†	12.9	3.6	46.218 ug/L	46.218 ppb	01:16:59
3	K 766.490 Radial†	2765.5	399.4	74.723 ug/L	74.723 ppb	01:16:39
3	Mg 279.077 IEC†	2.5	-0.1	-3.5038 ug/L	-3.5038 ppb	01:16:59
3	Na 589.592 Radial†	-790.6	-104.7	-30.393 ug/L	-30.393 ppb	01:16:39
3	Sr 421.552†	102.3	72.6	0.4811 ug/L	0.4811 ppb	01:16:39
3	Sc 361.383	899771.0	899771.0	99.968 %		01:17:56
3	Y 371.029	760814.7	760814.7	99.787 %		01:17:56
3	Ag 328.068†	282.8	53.5	0.2612 ug/L	0.2612 ppb	01:17:56
3	As 188.979†	-23.9	-3.4	-1.5311 ug/L	-1.5311 ppb	01:18:16
3	B 249.677†	-369.3	3.6	0.0777 ug/L	0.0777 ppb	01:18:16
3	Ba 233.527†	11.1	20.3	0.1582 ug/L	0.1582 ppb	01:18:16
3	Be 313.107†	-3798.0	54.1	0.0196 ug/L	0.0196 ppb	01:17:56
3	Cd 226.502†	-191.5	-8.3	-0.1016 ug/L	-0.1016 ppb	01:18:16
3	Co 228.616†	-66.3	-4.4	-0.0894 ug/L	-0.0894 ppb	01:18:16
3	Cr 267.716†	83.9	17.9	0.2061 ug/L	0.2061 ppb	01:18:16
3	Cu 324.752†	5978.2	-97.0	-0.2860 ug/L	-0.2860 ppb	01:17:56
3	Mn 257.610†	469.3	32.6	0.0413 ug/L	0.0413 ppb	01:18:16
3	Mo 202.031†	23.0	17.0	1.2464 ug/L	1.2464 ppb	01:18:16
3	Ni 231.604†	73.2	20.9	0.5318 ug/L	0.5318 ppb	01:18:16
3	P 214.914†	210.5	8.5	5.1996 ug/L	5.1996 ppb	01:18:16
3	Pb 220.353†	-48.1	16.9	2.0946 ug/L	2.0946 ppb	01:18:16
3	S 181.975 Axial†	35.9	-1.2	-1.6904 ug/L	-1.6904 ppb	01:18:16
3	Sb 206.836†	35.0	-1.7	-0.5609 ug/L	-0.5609 ppb	01:18:16
3	Se 196.026†	-32.7	-12.0	-7.7516 ug/L	-7.7516 ppb	01:18:16
3	Si 251.611†	565.9	32.0	1.0105 ug/L	1.0105 ppb	01:18:16
3	Sn 189.927†	12.8	2.4	0.4323 ug/L	0.4323 ppb	01:18:16
3	Ti 334.940†	-1437.2	-155.9	-0.2329 ug/L	-0.2329 ppb	01:17:56
3	Tl 190.801†	-41.1	-9.9	-3.1747 ug/L	-3.1747 ppb	01:18:16
3	U 409.014†	-2995.9	-180.7	-4.8872 ug/L	-4.8872 ppb	01:17:56
3	V 292.402†	-1527.7	-97.8	-0.6771 ug/L	-0.6771 ppb	01:17:56
3	Zn 213.857†	594.6	37.0	0.3618 ug/L	0.3618 ppb	01:18:16
3	SiO2†	591.9	40.6	2.7534 ug/L	2.7534 ppb	01:18:32

## Mean Data: CCS

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	892260.5	99.133 %	0.9165			0.92%
Sc Radial	3959.0	93.1 %	0.95			1.02%
Y 371.029	754766.3	98.993 %	0.9372			0.95%
Y RADIAL	4497.1	95.84 %	0.395			0.41%
Ag 328.068†	91.1	0.4342 ug/L	0.15864	0.4342 ppb	0.15864	36.53%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-6.2	-5.6306 ug/L	8.33920	-5.6306 ppb	8.33920	148.11%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-2.6	-1.1631 ug/L	0.34008	-1.1631 ppb	0.34008	29.24%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-5.9	-0.1462 ug/L	0.24822	-0.1462 ppb	0.24822	169.77%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	22.5	0.1760 ug/L	0.02239	0.1760 ppb	0.02239	12.72%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	125.9	0.0464 ug/L	0.03666	0.0464 ppb	0.03666	78.94%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	2.8	5.6186 ug/L	1.34352	5.6186 ppb	1.34352	23.91%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated					
Cd 226.502†	-3.4	-0.0441 ug/L	0.05584	-0.0441 ppb	0.05584 126.55%
QC value within limits for Cd 226.502 Recovery = Not calculated					
Co 228.616†	1.9	0.0410 ug/L	0.11633	0.0410 ppb	0.11633 283.82%
QC value within limits for Co 228.616 Recovery = Not calculated					
Cr 267.716†	22.0	0.2524 ug/L	0.04811	0.2524 ppb	0.04811 19.06%
QC value within limits for Cr 267.716 Recovery = Not calculated					
Cu 324.752†	-6.0	-0.0119 ug/L	0.24606	-0.0119 ppb	0.24606 >999.9%
QC value within limits for Cu 324.752 Recovery = Not calculated					
Fe 238.204 Radial†	2.9	37.399 ug/L	12.4289	37.399 ppb	12.4289 33.23%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated					
K 766.490 Radial†	467.4	87.461 ug/L	15.5059	87.461 ppb	15.5059 17.73%
QC value within limits for K 766.490 Radial Recovery = Not calculated					
Mg 279.077 IEC†	-0.8	-36.628 ug/L	28.8214	-36.628 ppb	28.8214 78.69%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated					
Mn 257.610†	40.0	0.0500 ug/L	0.01326	0.0500 ppb	0.01326 26.50%
QC value within limits for Mn 257.610 Recovery = Not calculated					
Mo 202.031†	12.1	0.8914 ug/L	0.31276	0.8914 ppb	0.31276 35.09%
QC value within limits for Mo 202.031 Recovery = Not calculated					
Na 589.592 Radial†	-106.9	-31.012 ug/L	11.8277	-31.012 ppb	11.8277 38.14%
QC value within limits for Na 589.592 Radial Recovery = Not calculated					
Ni 231.604†	17.3	0.4400 ug/L	0.12287	0.4400 ppb	0.12287 27.93%
QC value within limits for Ni 231.604 Recovery = Not calculated					
P 214.914†	6.0	3.6226 ug/L	2.30267	3.6226 ppb	2.30267 63.56%
QC value within limits for P 214.914 Recovery = Not calculated					
Pb 220.353†	15.8	1.9570 ug/L	0.40893	1.9570 ppb	0.40893 20.90%
QC value within limits for Pb 220.353 Recovery = Not calculated					
S 181.975 Axial†	1.5	2.1846 ug/L	4.01296	2.1846 ppb	4.01296 183.70%
QC value within limits for S 181.975 Axial Recovery = Not calculated					
Sb 206.836†	5.2	1.8291 ug/L	3.08445	1.8291 ppb	3.08445 168.63%
QC value within limits for Sb 206.836 Recovery = Not calculated					
Se 196.026†	-8.2	-5.2617 ug/L	2.24249	-5.2617 ppb	2.24249 42.62%
QC value within limits for Se 196.026 Recovery = Not calculated					
Si 251.611†	47.3	1.5068 ug/L	0.43513	1.5068 ppb	0.43513 28.88%
QC value within limits for Si 251.611 Recovery = Not calculated					
Sn 189.927†	0.2	0.0358 ug/L	0.43524	0.0358 ppb	0.43524 >999.9%
QC value within limits for Sn 189.927 Recovery = Not calculated					
Sr 421.552†	49.5	0.3279 ug/L	0.14905	0.3279 ppb	0.14905 45.46%
QC value within limits for Sr 421.552 Recovery = Not calculated					
Ti 334.940†	-139.2	-0.2036 ug/L	0.05416	-0.2036 ppb	0.05416 26.60%
QC value within limits for Ti 334.940 Recovery = Not calculated					
Tl 190.801†	-4.5	-1.4305 ug/L	1.91452	-1.4305 ppb	1.91452 133.84%
QC value within limits for Tl 190.801 Recovery = Not calculated					
U 409.014†	-273.1	-7.3850 ug/L	3.00116	-7.3850 ppb	3.00116 40.64%
QC value within limits for U 409.014 Recovery = Not calculated					
V 292.402†	-60.8	-0.4296 ug/L	0.32012	-0.4296 ppb	0.32012 74.52%
QC value within limits for V 292.402 Recovery = Not calculated					
Zn 213.857†	33.6	0.3289 ug/L	0.14421	0.3289 ppb	0.14421 43.85%
QC value within limits for Zn 213.857 Recovery = Not calculated					
SiO2†	29.9	2.0299 ug/L	1.29674	2.0299 ppb	1.29674 63.88%
QC value within limits for SiO2 Recovery = Not calculated					

All analyte(s) passed QC.

Sequence No.: 74  
 Sample ID: CCV  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 7  
 Date Collected: 2/24/2010 02:22:15  
 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	3658.7	3658.7	86.0 %		02:24:07
1	Y RADIAL	4044.0	4044.0	86.19 %		02:24:07
1	Al 396.153Radial†	5592.1	6612.1	5963.2 ug/L	5963.2 ppb	02:24:07
1	Ca 317.933Radial†	2606.5	3014.9	5998.3 ug/L	5998.3 ppb	02:24:27
1	Fe 238.204 Radial†	399.4	454.1	5866.0 ug/L	5866.0 ppb	02:24:27
1	K 766.490 Radial†	29876.1	32177.1	6012.6 ug/L	6012.6 ppb	02:24:07
1	Mg 279.077 IEC†	116.6	132.8	6033.1 ug/L	6033.1 ppb	02:24:27
1	Na 589.592 Radial†	33540.4	39734.2	11531 ug/L	11531 ppb	02:24:07
1	Sr 421.552†	75569.0	87819.5	582.01 ug/L	582.01 ppb	02:24:07
1	Sc 361.383	907511.4	907511.4	100.83 %		02:25:25
1	Y 371.029	754227.9	754227.9	98.923 %		02:25:25
1	Ag 328.068†	112524.5	111371.6	514.83 ug/L	514.83 ppb	02:25:30
1	As 188.979†	1139.0	1150.2	522.97 ug/L	522.97 ppb	02:25:50
1	B 249.677†	20578.7	20782.8	493.56 ug/L	493.56 ppb	02:25:30
1	Ba 233.527†	66210.9	65676.6	514.30 ug/L	514.30 ppb	02:25:30
1	Be 313.107†	1370813.3	1363415.9	509.26 ug/L	509.26 ppb	02:25:25
1	Cd 226.502†	45023.8	44837.6	520.26 ug/L	520.26 ppb	02:25:30
1	Co 228.616†	24874.9	24732.6	517.17 ug/L	517.17 ppb	02:25:30
1	Cr 267.716†	46203.2	45758.0	514.29 ug/L	514.29 ppb	02:25:30
1	Cu 324.752†	174568.1	167058.2	501.70 ug/L	501.70 ppb	02:25:30
1	Mn 257.610†	458062.0	453865.7	509.20 ug/L	509.20 ppb	02:25:25
1	Mo 202.031†	7093.4	7029.1	514.94 ug/L	514.94 ppb	02:25:50
1	Ni 231.604†	20619.8	20398.3	518.17 ug/L	518.17 ppb	02:25:30
1	P 214.914†	4512.9	4273.8	2495.3 ug/L	2495.3 ppb	02:25:50
1	Pb 220.353†	4170.2	4201.1	522.23 ug/L	522.23 ppb	02:25:50
1	S 181.975 Axial†	761.9	718.6	1051.6 ug/L	1051.6 ppb	02:25:50
1	Sb 206.836†	1509.0	1460.0	527.52 ug/L	527.52 ppb	02:25:50
1	Se 196.026†	771.9	786.3	538.20 ug/L	538.20 ppb	02:25:50
1	Si 251.611†	80932.2	79733.9	2551.5 ug/L	2551.5 ppb	02:25:30
1	Sn 189.927†	2920.5	2886.1	522.85 ug/L	522.85 ppb	02:25:50
1	Ti 334.940†	335575.5	334103.2	505.22 ug/L	505.22 ppb	02:25:25
1	Tl 190.801†	1590.6	1608.8	519.68 ug/L	519.68 ppb	02:25:50
1	U 409.014†	15405.4	18095.2	487.13 ug/L	487.13 ppb	02:25:30
1	V 292.402†	72193.8	73031.7	513.77 ug/L	513.77 ppb	02:25:30
1	Zn 213.857†	52497.2	51508.7	511.99 ug/L	511.99 ppb	02:25:30
1	SiO2†	79755.0	78548.9	5383.0 ug/L	5383.0 ppb	02:26:58
2	Sc Radial	3998.5	3998.5	94.0 %		02:24:32
2	Y RADIAL	4409.5	4409.5	93.98 %		02:24:32
2	Al 396.153Radial†	5380.7	5834.7	5259.2 ug/L	5259.2 ppb	02:24:32
2	Ca 317.933Radial†	2577.3	2726.3	5424.1 ug/L	5424.1 ppb	02:24:52
2	Fe 238.204 Radial†	394.9	409.9	5295.8 ug/L	5295.8 ppb	02:24:52
2	K 766.490 Radial†	29192.8	28498.0	5325.0 ug/L	5325.0 ppb	02:24:32
2	Mg 279.077 IEC†	115.4	120.1	5456.1 ug/L	5456.1 ppb	02:24:52
2	Na 589.592 Radial†	32662.4	35485.9	10298 ug/L	10298 ppb	02:24:32
2	Sr 421.552†	73153.8	77782.7	515.49 ug/L	515.49 ppb	02:24:32
2	Sc 361.383	908406.2	908406.2	100.93 %		02:25:56
2	Y 371.029	755790.4	755790.4	99.128 %		02:25:56
2	Ag 328.068†	113313.3	112043.2	517.76 ug/L	517.76 ppb	02:26:01
2	As 188.979†	1140.7	1150.7	523.08 ug/L	523.08 ppb	02:26:21
2	B 249.677†	20776.0	20958.1	497.83 ug/L	497.83 ppb	02:26:01
2	Ba 233.527†	66473.3	65872.0	515.81 ug/L	515.81 ppb	02:26:01
2	Be 313.107†	1373274.5	1364515.3	509.67 ug/L	509.67 ppb	02:25:56
2	Cd 226.502†	45211.7	44979.8	521.97 ug/L	521.97 ppb	02:26:01
2	Co 228.616†	25022.0	24854.1	519.72 ug/L	519.72 ppb	02:26:01
2	Cr 267.716†	46418.5	45926.2	516.13 ug/L	516.13 ppb	02:26:01
2	Cu 324.752†	176348.0	168651.2	506.45 ug/L	506.45 ppb	02:26:01
2	Mn 257.610†	457661.3	453021.2	508.22 ug/L	508.22 ppb	02:25:56
2	Mo 202.031†	7110.8	7039.4	515.64 ug/L	515.64 ppb	02:26:21
2	Ni 231.604†	20695.3	20453.0	519.56 ug/L	519.56 ppb	02:26:01

2	P 214.914†	4517.1	4273.6	2494.5 ug/L	2494.5 ppb	02:26:21
2	Pb 220.353†	4144.3	4171.3	518.45 ug/L	518.45 ppb	02:26:21
2	S 181.975 Axial†	773.1	728.9	1066.8 ug/L	1066.8 ppb	02:26:21
2	Sb 206.836†	1525.7	1475.0	532.80 ug/L	532.80 ppb	02:26:21
2	Se 196.026†	764.3	778.0	530.94 ug/L	530.94 ppb	02:26:21
2	Si 251.611†	81660.2	80376.1	2572.1 ug/L	2572.1 ppb	02:26:01
2	Sn 189.927†	2923.9	2886.6	522.87 ug/L	522.87 ppb	02:26:21
2	Ti 334.940†	335886.0	334082.9	505.16 ug/L	505.16 ppb	02:25:56
2	Tl 190.801†	1579.5	1596.2	515.61 ug/L	515.61 ppb	02:26:21
2	U 409.014†	15373.7	18048.8	485.94 ug/L	485.94 ppb	02:26:01
2	V 292.402†	72770.8	73532.9	517.33 ug/L	517.33 ppb	02:26:01
2	Zn 213.857†	52825.6	51782.8	514.81 ug/L	514.81 ppb	02:26:01
2	SiO2†	79810.9	78526.4	5381.4 ug/L	5381.4 ppb	02:27:03
3	Sc Radial	3960.8	3960.8	93.1 %		02:24:57
3	Y RADIAL	4350.2	4350.2	92.71 %		02:24:57
3	Al 396.153Radial†	5336.1	5841.2	5265.1 ug/L	5265.1 ppb	02:24:57
3	Ca 317.933Radial†	2554.1	2727.4	5426.3 ug/L	5426.3 ppb	02:25:17
3	Fe 238.204 Radial†	389.8	408.4	5277.6 ug/L	5277.6 ppb	02:25:17
3	K 766.490 Radial†	29084.3	28677.0	5358.5 ug/L	5358.5 ppb	02:24:57
3	Mg 279.077 IEC†	116.6	122.5	5565.5 ug/L	5565.5 ppb	02:25:17
3	Na 589.592 Radial†	32244.9	35368.3	10264 ug/L	10264 ppb	02:24:57
3	Sr 421.552†	72124.5	77418.1	513.08 ug/L	513.08 ppb	02:24:57
3	Sc 361.383	909464.6	909464.6	101.04 %		02:26:27
3	Y 371.029	756008.9	756008.9	99.156 %		02:26:27
3	Ag 328.068†	112763.3	111368.3	514.65 ug/L	514.65 ppb	02:26:32
3	As 188.979†	1147.2	1155.9	525.43 ug/L	525.43 ppb	02:26:52
3	B 249.677†	20700.9	20859.8	495.49 ug/L	495.49 ppb	02:26:32
3	Ba 233.527†	66367.5	65690.5	514.39 ug/L	514.39 ppb	02:26:32
3	Be 313.107†	1374101.1	1363749.8	509.38 ug/L	509.38 ppb	02:26:27
3	Cd 226.502†	45054.2	44771.8	519.56 ug/L	519.56 ppb	02:26:32
3	Co 228.616†	24983.6	24787.3	518.33 ug/L	518.33 ppb	02:26:32
3	Cr 267.716†	46267.0	45722.7	513.84 ug/L	513.84 ppb	02:26:32
3	Cu 324.752†	175333.1	167443.5	502.82 ug/L	502.82 ppb	02:26:32
3	Mn 257.610†	458923.8	453742.9	509.02 ug/L	509.02 ppb	02:26:27
3	Mo 202.031†	7115.2	7035.6	515.36 ug/L	515.36 ppb	02:26:52
3	Ni 231.604†	20734.3	20467.6	519.93 ug/L	519.93 ppb	02:26:32
3	P 214.914†	4528.9	4280.0	2499.2 ug/L	2499.2 ppb	02:26:52
3	Pb 220.353†	4185.4	4207.1	522.89 ug/L	522.89 ppb	02:26:52
3	S 181.975 Axial†	773.6	728.6	1066.3 ug/L	1066.3 ppb	02:26:52
3	Sb 206.836†	1537.3	1484.7	536.23 ug/L	536.23 ppb	02:26:52
3	Se 196.026†	766.8	779.6	531.96 ug/L	531.96 ppb	02:26:52
3	Si 251.611†	81177.6	79804.3	2553.8 ug/L	2553.8 ppb	02:26:32
3	Sn 189.927†	2940.6	2899.8	525.26 ug/L	525.26 ppb	02:26:52
3	Ti 334.940†	336312.3	334117.5	505.20 ug/L	505.20 ppb	02:26:27
3	Tl 190.801†	1604.7	1619.3	523.05 ug/L	523.05 ppb	02:26:52
3	U 409.014†	15471.8	18128.2	488.09 ug/L	488.09 ppb	02:26:32
3	V 292.402†	72519.9	73200.7	515.03 ug/L	515.03 ppb	02:26:32
3	Zn 213.857†	52683.8	51581.5	512.80 ug/L	512.80 ppb	02:26:32
3	SiO2†	80352.9	78970.7	5411.9 ug/L	5411.9 ppb	02:27:08

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	908460.7	100.93 %	0.109			0.11%
Sc Radial	3872.7	91.0 %	4.38			4.81%
Y 371.029	755342.4	99.069 %	0.1274			0.13%
Y RADIAL	4267.9	90.96 %	4.180			4.60%
Ag 328.068†	111594.4	515.75 ug/L	1.748	515.75 ppb	1.748	0.34%
QC value within limits for Ag 328.068 Recovery = 103.15%						
Al 396.153Radial†	6096.0	5495.8 ug/L	404.80	5495.8 ppb	404.80	7.37%
QC value within limits for Al 396.153Radial Recovery = 109.92%						
As 188.979†	1152.3	523.83 ug/L	1.388	523.83 ppb	1.388	0.27%
QC value within limits for As 188.979 Recovery = 104.77%						
B 249.677†	20866.9	495.63 ug/L	2.138	495.63 ppb	2.138	0.43%
QC value within limits for B 249.677 Recovery = 99.13%						
Ba 233.527†	65746.4	514.83 ug/L	0.850	514.83 ppb	0.850	0.17%
QC value within limits for Ba 233.527 Recovery = 102.97%						
Be 313.107†	1363893.7	509.43 ug/L	0.210	509.43 ppb	0.210	0.04%
QC value within limits for Be 313.107 Recovery = 101.89%						
Ca 317.933Radial†	2822.8	5616.3 ug/L	330.88	5616.3 ppb	330.88	5.89%

QC value greater than the upper limit for Ca 317.933 Radial Recovery = 112.33%							
Cd 226.502†	44863.0	520.59 ug/L	1.241	520.59 ppb	1.241	0.24%	
QC value within limits for Cd 226.502 Recovery = 104.12%							
Co 228.616†	24791.3	518.41 ug/L	1.276	518.41 ppb	1.276	0.25%	
QC value within limits for Co 228.616 Recovery = 103.68%							
Cr 267.716†	45802.3	514.76 ug/L	1.212	514.76 ppb	1.212	0.24%	
QC value within limits for Cr 267.716 Recovery = 102.95%							
Cu 324.752†	167717.7	503.66 ug/L	2.485	503.66 ppb	2.485	0.49%	
QC value within limits for Cu 324.752 Recovery = 100.73%							
Fe 238.204 Radial†	424.1	5479.8 ug/L	334.57	5479.8 ppb	334.57	6.11%	
QC value within limits for Fe 238.204 Radial Recovery = 109.60%							
K 766.490 Radial†	29784.0	5565.3 ug/L	387.70	5565.3 ppb	387.70	6.97%	
QC value greater than the upper limit for K 766.490 Radial Recovery = 111.31%							
Mg 279.077 IEC†	125.1	5684.9 ug/L	306.48	5684.9 ppb	306.48	5.39%	
QC value greater than the upper limit for Mg 279.077 IEC Recovery = 113.70%							
Mn 257.610†	453543.3	508.81 ug/L	0.522	508.81 ppb	0.522	0.10%	
QC value within limits for Mn 257.610 Recovery = 101.76%							
Mo 202.031†	7034.7	515.31 ug/L	0.355	515.31 ppb	0.355	0.07%	
QC value within limits for Mo 202.031 Recovery = 103.06%							
Na 589.592 Radial†	36862.8	10698 ug/L	721.9	10698 ppb	721.9	6.75%	
QC value within limits for Na 589.592 Radial Recovery = 106.98%							
Ni 231.604†	20439.6	519.22 ug/L	0.928	519.22 ppb	0.928	0.18%	
QC value within limits for Ni 231.604 Recovery = 103.84%							
P 214.914†	4275.8	2496.4 ug/L	2.51	2496.4 ppb	2.51	0.10%	
QC value within limits for P 214.914 Recovery = 99.85%							
Pb 220.353†	4193.2	521.19 ug/L	2.397	521.19 ppb	2.397	0.46%	
QC value within limits for Pb 220.353 Recovery = 104.24%							
S 181.975 Axial†	725.4	1061.6 ug/L	8.67	1061.6 ppb	8.67	0.82%	
QC value within limits for S 181.975 Axial Recovery = 106.16%							
Sb 206.836†	1473.2	532.18 ug/L	4.387	532.18 ppb	4.387	0.82%	
QC value within limits for Sb 206.836 Recovery = 106.44%							
Se 196.026†	781.3	533.70 ug/L	3.931	533.70 ppb	3.931	0.74%	
QC value within limits for Se 196.026 Recovery = 106.74%							
Si 251.611†	79971.4	2559.1 ug/L	11.30	2559.1 ppb	11.30	0.44%	
QC value within limits for Si 251.611 Recovery = 102.37%							
Sn 189.927†	2890.8	523.66 ug/L	1.383	523.66 ppb	1.383	0.26%	
QC value within limits for Sn 189.927 Recovery = 104.73%							
Sr 421.552†	81006.8	536.86 ug/L	39.121	536.86 ppb	39.121	7.29%	
QC value within limits for Sr 421.552 Recovery = 107.37%							
Ti 334.940†	334101.2	505.19 ug/L	0.031	505.19 ppb	0.031	0.01%	
QC value within limits for Ti 334.940 Recovery = 101.04%							
Tl 190.801†	1608.1	519.44 ug/L	3.729	519.44 ppb	3.729	0.72%	
QC value within limits for Tl 190.801 Recovery = 103.89%							
U 409.014†	18090.7	487.05 ug/L	1.079	487.05 ppb	1.079	0.22%	
QC value within limits for U 409.014 Recovery = 97.41%							
V 292.402†	73255.1	515.38 ug/L	1.805	515.38 ppb	1.805	0.35%	
QC value within limits for V 292.402 Recovery = 103.08%							
Zn 213.857†	51624.3	513.20 ug/L	1.453	513.20 ppb	1.453	0.28%	
QC value within limits for Zn 213.857 Recovery = 102.64%							
SiO2†	78682.0	5392.1 ug/L	17.20	5392.1 ppb	17.20	0.32%	
QC value within limits for SiO2 Recovery = 100.83%							
QC Failed. Continue with analysis.							



Sequence No.: 75

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/24/2010 02:29:18

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	3969.6	3969.6	93.3 %		02:31:32
1	Y RADIAL	4508.4	4508.4	96.09 %		02:31:12
1	Al 396.153Radial†	-118.3	-15.9	-14.456 ug/L	-14.456 ppb	02:31:12
1	Ca 317.933Radial†	20.9	6.9	13.693 ug/L	13.693 ppb	02:31:32
1	Fe 238.204 Radial†	9.2	-0.3	-3.7871 ug/L	-3.7871 ppb	02:31:32
1	K 766.490 Radial†	2681.3	316.3	59.186 ug/L	59.186 ppb	02:31:12
1	Mg 279.077 IEC†	0.5	-2.3	-102.43 ug/L	-102.43 ppb	02:31:32
1	Na 589.592 Radial†	-775.7	-90.9	-26.368 ug/L	-26.368 ppb	02:31:12
1	Sr 421.552†	74.7	43.3	0.2866 ug/L	0.2866 ppb	02:31:12
1	Sc 361.383	890238.3	890238.3	98.908 %		02:32:28
1	Y 371.029	751595.6	751595.6	98.577 %		02:32:28
1	Ag 328.068†	267.0	40.7	0.1925 ug/L	0.1925 ppb	02:32:28
1	As 188.979†	-31.9	-11.7	-5.2928 ug/L	-5.2928 ppb	02:32:48
1	B 249.677†	-424.7	-56.4	-1.3453 ug/L	-1.3453 ppb	02:32:48
1	Ba 233.527†	2.0	11.2	0.0870 ug/L	0.0870 ppb	02:32:48
1	Be 313.107†	-3744.2	67.7	0.0247 ug/L	0.0247 ppb	02:32:28
1	Cd 226.502†	-186.5	-5.2	-0.0619 ug/L	-0.0619 ppb	02:32:48
1	Co 228.616†	-74.0	-12.9	-0.2676 ug/L	-0.2676 ppb	02:32:48
1	Cr 267.716†	83.2	18.2	0.2069 ug/L	0.2069 ppb	02:32:48
1	Cu 324.752†	5974.1	-37.0	-0.1063 ug/L	-0.1063 ppb	02:32:28
1	Mn 257.610†	434.1	2.1	0.0061 ug/L	0.0061 ppb	02:32:48
1	Mo 202.031†	9.7	3.7	0.2741 ug/L	0.2741 ppb	02:32:48
1	Ni 231.604†	66.3	14.7	0.3734 ug/L	0.3734 ppb	02:32:48
1	P 214.914†	200.2	0.4	0.2525 ug/L	0.2525 ppb	02:32:48
1	Pb 220.353†	-51.1	13.3	1.6483 ug/L	1.6483 ppb	02:32:48
1	S 181.975 Axial†	43.4	6.8	9.9568 ug/L	9.9568 ppb	02:32:48
1	Sb 206.836†	42.2	6.0	2.0881 ug/L	2.0881 ppb	02:32:48
1	Se 196.026†	-26.6	-6.1	-4.0644 ug/L	-4.0644 ppb	02:32:48
1	Si 251.611†	565.9	38.0	1.2151 ug/L	1.2151 ppb	02:32:48
1	Sn 189.927†	7.2	-3.2	-0.5688 ug/L	-0.5688 ppb	02:32:48
1	Ti 334.940†	-1426.3	-160.2	-0.2281 ug/L	-0.2281 ppb	02:32:28
1	Tl 190.801†	-37.8	-7.0	-2.2540 ug/L	-2.2540 ppb	02:32:48
1	U 409.014†	-3126.5	-344.7	-9.3144 ug/L	-9.3144 ppb	02:32:28
1	V 292.402†	-1430.8	-16.2	-0.1274 ug/L	-0.1274 ppb	02:32:28
1	Zn 213.857†	583.9	32.7	0.3264 ug/L	0.3264 ppb	02:32:48
1	SiO2†	556.2	10.9	0.7388 ug/L	0.7388 ppb	02:33:44
2	Sc Radial	3961.5	3961.5	93.1 %		02:31:57
2	Y RADIAL	4504.9	4504.9	96.01 %		02:31:37
2	Al 396.153Radial†	-121.7	-19.9	-18.088 ug/L	-18.088 ppb	02:31:37
2	Ca 317.933Radial†	15.8	1.5	2.9577 ug/L	2.9577 ppb	02:31:57
2	Fe 238.204 Radial†	12.7	3.5	44.467 ug/L	44.467 ppb	02:31:57
2	K 766.490 Radial†	2720.1	363.9	68.090 ug/L	68.090 ppb	02:31:37
2	Mg 279.077 IEC†	2.2	-0.3	-15.411 ug/L	-15.411 ppb	02:31:57
2	Na 589.592 Radial†	-803.1	-122.0	-35.399 ug/L	-35.399 ppb	02:31:37
2	Sr 421.552†	38.7	4.8	0.0318 ug/L	0.0318 ppb	02:31:37
2	Sc 361.383	898218.7	898218.7	99.795 %		02:32:54
2	Y 371.029	759977.6	759977.6	99.677 %		02:32:54
2	Ag 328.068†	211.8	-17.1	-0.0627 ug/L	-0.0627 ppb	02:32:54
2	As 188.979†	-24.1	-3.6	-1.6078 ug/L	-1.6078 ppb	02:33:14
2	B 249.677†	-448.1	-76.1	-1.8234 ug/L	-1.8234 ppb	02:33:14
2	Ba 233.527†	20.4	29.6	0.2317 ug/L	0.2317 ppb	02:33:14
2	Be 313.107†	-3773.1	72.4	0.0264 ug/L	0.0264 ppb	02:32:54
2	Cd 226.502†	-188.3	-5.4	-0.0678 ug/L	-0.0678 ppb	02:33:14
2	Co 228.616†	-66.0	-4.2	-0.0871 ug/L	-0.0871 ppb	02:33:14
2	Cr 267.716†	71.4	5.5	0.0676 ug/L	0.0676 ppb	02:33:14
2	Cu 324.752†	5987.0	-77.8	-0.2288 ug/L	-0.2288 ppb	02:32:54
2	Mn 257.610†	459.4	23.5	0.0313 ug/L	0.0313 ppb	02:33:14
2	Mo 202.031†	14.9	8.9	0.6525 ug/L	0.6525 ppb	02:33:14
2	Ni 231.604†	77.5	25.3	0.6441 ug/L	0.6441 ppb	02:33:14

2	P 214.914†	213.1	11.5	6.9690 ug/L	6.9690 ppb	02:33:14
2	Pb 220.353†	-66.7	-1.8	-0.2355 ug/L	-0.2355 ppb	02:33:14
2	S 181.975 Axial†	41.3	4.3	6.3007 ug/L	6.3007 ppb	02:33:14
2	Sb 206.836†	43.9	7.3	2.5870 ug/L	2.5870 ppb	02:33:14
2	Se 196.026†	-23.4	-2.8	-1.6935 ug/L	-1.6935 ppb	02:33:14
2	Si 251.611†	567.2	34.2	1.0902 ug/L	1.0902 ppb	02:33:14
2	Sn 189.927†	19.2	8.8	1.5892 ug/L	1.5892 ppb	02:33:14
2	Ti 334.940†	-1447.7	-168.9	-0.2517 ug/L	-0.2517 ppb	02:32:54
2	Tl 190.801†	-39.7	-8.6	-2.7589 ug/L	-2.7589 ppb	02:33:14
2	U 409.014†	-2985.4	-175.2	-4.7404 ug/L	-4.7404 ppb	02:32:54
2	V 292.402†	-1491.3	-63.9	-0.4502 ug/L	-0.4502 ppb	02:32:54
2	Zn 213.857†	576.6	20.1	0.1915 ug/L	0.1915 ppb	02:33:14
2	SiO2†	569.5	19.2	1.3003 ug/L	1.3003 ppb	02:33:49
3	Sc Radial	3907.1	3907.1	91.9 %		02:32:22
3	Y RADIAL	4561.8	4561.8	97.22 %		02:32:02
3	Al 396.153Radial†	-115.6	-15.0	-13.623 ug/L	-13.623 ppb	02:32:02
3	Ca 317.933Radial†	15.3	1.2	2.3919 ug/L	2.3919 ppb	02:32:22
3	Fe 238.204 Radial†	12.9	3.9	50.225 ug/L	50.225 ppb	02:32:22
3	K 766.490 Radial†	2747.8	434.6	81.336 ug/L	81.336 ppb	02:32:02
3	Mg 279.077 IEC†	2.2	-0.3	-15.753 ug/L	-15.753 ppb	02:32:22
3	Na 589.592 Radial†	-842.4	-176.8	-51.299 ug/L	-51.299 ppb	02:32:02
3	Sr 421.552†	29.5	-4.7	-0.0309 ug/L	-0.0309 ppb	02:32:02
3	Sc 361.383	894282.7	894282.7	99.358 %		02:33:19
3	Y 371.029	755897.1	755897.1	99.142 %		02:33:19
3	Ag 328.068†	290.8	63.3	0.3075 ug/L	0.3075 ppb	02:33:19
3	As 188.979†	-9.3	11.2	5.0633 ug/L	5.0633 ppb	02:33:39
3	B 249.677†	-465.0	-95.0	-2.2750 ug/L	-2.2750 ppb	02:33:39
3	Ba 233.527†	10.2	19.4	0.1520 ug/L	0.1520 ppb	02:33:39
3	Be 313.107†	-3767.6	61.3	0.0221 ug/L	0.0221 ppb	02:33:19
3	Cd 226.502†	-203.1	-21.1	-0.2506 ug/L	-0.2506 ppb	02:33:39
3	Co 228.616†	-76.4	-14.9	-0.3118 ug/L	-0.3118 ppb	02:33:39
3	Cr 267.716†	76.4	10.9	0.1275 ug/L	0.1275 ppb	02:33:39
3	Cu 324.752†	5921.8	-117.1	-0.3466 ug/L	-0.3466 ppb	02:33:19
3	Mn 257.610†	461.2	27.4	0.0363 ug/L	0.0363 ppb	02:33:39
3	Mo 202.031†	9.2	3.2	0.2372 ug/L	0.2372 ppb	02:33:39
3	Ni 231.604†	58.9	6.9	0.1765 ug/L	0.1765 ppb	02:33:39
3	P 214.914†	201.4	0.7	0.4547 ug/L	0.4547 ppb	02:33:39
3	Pb 220.353†	-54.2	10.5	1.2911 ug/L	1.2911 ppb	02:33:39
3	S 181.975 Axial†	39.6	2.8	4.1186 ug/L	4.1186 ppb	02:33:39
3	Sb 206.836†	40.1	3.7	1.2886 ug/L	1.2886 ppb	02:33:39
3	Se 196.026†	-26.8	-6.3	-4.0020 ug/L	-4.0020 ppb	02:33:39
3	Si 251.611†	589.2	58.8	1.8847 ug/L	1.8847 ppb	02:33:39
3	Sn 189.927†	8.5	-1.9	-0.3442 ug/L	-0.3442 ppb	02:33:39
3	Ti 334.940†	-1501.4	-229.3	-0.3435 ug/L	-0.3435 ppb	02:33:19
3	Tl 190.801†	-27.7	3.3	1.0536 ug/L	1.0536 ppb	02:33:39
3	U 409.014†	-2948.9	-151.7	-4.1053 ug/L	-4.1053 ppb	02:33:19
3	V 292.402†	-1494.2	-73.5	-0.5218 ug/L	-0.5218 ppb	02:33:19
3	Zn 213.857†	575.4	21.5	0.2071 ug/L	0.2071 ppb	02:33:39
3	SiO2†	558.5	10.6	0.7234 ug/L	0.7234 ppb	02:33:54

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	894246.5	99.354 %		0.4433			0.45%
Sc Radial	3946.1	92.8 %		0.80			0.86%
Y 371.029	755823.4	99.132 %		0.5497			0.55%
Y RADIAL	4525.0	96.44 %		0.679			0.70%
Ag 328.068†	29.0	0.1458 ug/L		0.18949	0.1458 ppb	0.18949	130.00%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	-17.0	-15.389 ug/L		2.3744	-15.389 ppb	2.3744	15.43%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	-1.4	-0.6124 ug/L		5.24930	-0.6124 ppb	5.24930	857.10%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	-75.9	-1.8146 ug/L		0.46492	-1.8146 ppb	0.46492	25.62%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	20.1	0.1569 ug/L		0.07245	0.1569 ppb	0.07245	46.17%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	67.1	0.0244 ug/L		0.00218	0.0244 ppb	0.00218	8.96%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	3.2	6.3474 ug/L		6.36740	6.3474 ppb	6.36740	100.31%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated					
Cd 226.502†	-10.6	-0.1267 ug/L	0.10727	-0.1267 ppb	0.10727 84.64%
QC value within limits for Cd 226.502 Recovery = Not calculated					
Co 228.616†	-10.7	-0.2222 ug/L	0.11905	-0.2222 ppb	0.11905 53.58%
QC value within limits for Co 228.616 Recovery = Not calculated					
Cr 267.716†	11.5	0.1340 ug/L	0.06991	0.1340 ppb	0.06991 52.16%
QC value within limits for Cr 267.716 Recovery = Not calculated					
Cu 324.752†	-77.3	-0.2272 ug/L	0.12016	-0.2272 ppb	0.12016 52.88%
QC value within limits for Cu 324.752 Recovery = Not calculated					
Fe 238.204 Radial†	2.4	30.302 ug/L	29.6619	30.302 ppb	29.6619 97.89%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated					
K 766.490 Radial†	371.6	69.537 ug/L	11.1455	69.537 ppb	11.1455 16.03%
QC value within limits for K 766.490 Radial Recovery = Not calculated					
Mg 279.077 IEC†	-1.0	-44.531 ug/L	50.1422	-44.531 ppb	50.1422 112.60%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated					
Mn 257.610†	17.6	0.0246 ug/L	0.01616	0.0246 ppb	0.01616 65.75%
QC value within limits for Mn 257.610 Recovery = Not calculated					
Mo 202.031†	5.3	0.3879 ug/L	0.22988	0.3879 ppb	0.22988 59.26%
QC value within limits for Mo 202.031 Recovery = Not calculated					
Na 589.592 Radial†	-129.9	-37.689 ug/L	12.6224	-37.689 ppb	12.6224 33.49%
QC value within limits for Na 589.592 Radial Recovery = Not calculated					
Ni 231.604†	15.7	0.3980 ug/L	0.23476	0.3980 ppb	0.23476 58.99%
QC value within limits for Ni 231.604 Recovery = Not calculated					
P 214.914†	4.2	2.5587 ug/L	3.82077	2.5587 ppb	3.82077 149.32%
QC value within limits for P 214.914 Recovery = Not calculated					
Pb 220.353†	7.3	0.9013 ug/L	1.00056	0.9013 ppb	1.00056 111.01%
QC value within limits for Pb 220.353 Recovery = Not calculated					
S 181.975 Axial†	4.6	6.7920 ug/L	2.94997	6.7920 ppb	2.94997 43.43%
QC value within limits for S 181.975 Axial Recovery = Not calculated					
Sb 206.836†	5.7	1.9879 ug/L	0.65498	1.9879 ppb	0.65498 32.95%
QC value within limits for Sb 206.836 Recovery = Not calculated					
Se 196.026†	-5.1	-3.2533 ug/L	1.35116	-3.2533 ppb	1.35116 41.53%
QC value within limits for Se 196.026 Recovery = Not calculated					
Si 251.611†	43.7	1.3967 ug/L	0.42725	1.3967 ppb	0.42725 30.59%
QC value within limits for Si 251.611 Recovery = Not calculated					
Sn 189.927†	1.2	0.2254 ug/L	1.18638	0.2254 ppb	1.18638 526.39%
QC value within limits for Sn 189.927 Recovery = Not calculated					
Sr 421.552†	14.5	0.0958 ug/L	0.16813	0.0958 ppb	0.16813 175.44%
QC value within limits for Sr 421.552 Recovery = Not calculated					
Ti 334.940†	-186.2	-0.2744 ug/L	0.06096	-0.2744 ppb	0.06096 22.21%
QC value within limits for Ti 334.940 Recovery = Not calculated					
Tl 190.801†	-4.1	-1.3198 ug/L	2.07083	-1.3198 ppb	2.07083 156.91%
QC value within limits for Tl 190.801 Recovery = Not calculated					
U 409.014†	-223.9	-6.0534 ug/L	2.84192	-6.0534 ppb	2.84192 46.95%
QC value within limits for U 409.014 Recovery = Not calculated					
V 292.402†	-51.2	-0.3664 ug/L	0.21013	-0.3664 ppb	0.21013 57.34%
QC value within limits for V 292.402 Recovery = Not calculated					
Zn 213.857†	24.8	0.2417 ug/L	0.07377	0.2417 ppb	0.07377 30.52%
QC value within limits for Zn 213.857 Recovery = Not calculated					
SiO2†	13.6	0.9208 ug/L	0.32870	0.9208 ppb	0.32870 35.70%
QC value within limits for SiO2 Recovery = Not calculated					
All analyte(s) passed QC.					

Sequence No.: 83  
 Sample ID: CCV  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 7  
 Date Collected: 2/24/2010 03:23:59  
 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	3986.3	3986.3	93.7 %		03:25:51
1	Y RADIAL	4397.1	4397.1	93.71 %		03:25:51
1	Al 396.153Radial†	5406.0	5879.1	5299.1 ug/L	5299.1 ppb	03:25:51
1	Ca 317.933Radial†	2582.4	2740.1	5451.6 ug/L	5451.6 ppb	03:26:11
1	Fe 238.204 Radial†	396.9	413.3	5340.0 ug/L	5340.0 ppb	03:26:11
1	K 766.490 Radial†	29414.8	28829.9	5387.0 ug/L	5387.0 ppb	03:25:51
1	Mg 279.077 IEC†	114.4	119.3	5423.2 ug/L	5423.2 ppb	03:26:11
1	Na 589.592 Radial†	33205.8	36172.3	10497 ug/L	10497 ppb	03:25:51
1	Sr 421.552†	73748.0	78655.3	521.28 ug/L	521.28 ppb	03:25:51
1	Sc 361.383	901667.5	901667.5	100.18 %		03:27:08
1	Y 371.029	749008.8	749008.8	98.238 %		03:27:08
1	Ag 328.068†	112100.4	111671.6	516.05 ug/L	516.05 ppb	03:27:14
1	As 188.979†	1147.6	1166.1	530.08 ug/L	530.08 ppb	03:27:34
1	B 249.677†	20514.4	20850.9	495.27 ug/L	495.27 ppb	03:27:14
1	Ba 233.527†	65877.2	65769.1	515.00 ug/L	515.00 ppb	03:27:14
1	Be 313.107†	1377119.0	1378522.0	514.90 ug/L	514.90 ppb	03:27:08
1	Cd 226.502†	44755.0	44858.7	520.56 ug/L	520.56 ppb	03:27:14
1	Co 228.616†	24773.0	24790.8	518.41 ug/L	518.41 ppb	03:27:14
1	Cr 267.716†	45930.6	45782.9	514.52 ug/L	514.52 ppb	03:27:14
1	Cu 324.752†	174070.8	167684.0	503.55 ug/L	503.55 ppb	03:27:14
1	Mn 257.610†	460526.4	459270.2	515.23 ug/L	515.23 ppb	03:27:08
1	Mo 202.031†	7160.9	7142.0	523.15 ug/L	523.15 ppb	03:27:34
1	Ni 231.604†	20540.6	20451.7	519.53 ug/L	519.53 ppb	03:27:14
1	P 214.914†	4549.6	4339.5	2535.2 ug/L	2535.2 ppb	03:27:34
1	Pb 220.353†	4191.3	4248.9	528.08 ug/L	528.08 ppb	03:27:34
1	S 181.975 Axial†	782.6	744.1	1089.1 ug/L	1089.1 ppb	03:27:34
1	Sb 206.836†	1555.6	1516.1	547.43 ug/L	547.43 ppb	03:27:34
1	Se 196.026†	777.5	796.8	543.50 ug/L	543.50 ppb	03:27:34
1	Si 251.611†	80724.9	80047.1	2561.5 ug/L	2561.5 ppb	03:27:14
1	Sn 189.927†	2958.1	2942.4	532.98 ug/L	532.98 ppb	03:27:34
1	Ti 334.940†	337368.8	338050.4	511.16 ug/L	511.16 ppb	03:27:08
1	Tl 190.801†	1574.1	1602.5	517.73 ug/L	517.73 ppb	03:27:34
1	U 409.014†	15449.3	18238.0	491.05 ug/L	491.05 ppb	03:27:14
1	V 292.402†	71813.6	73116.3	514.54 ug/L	514.54 ppb	03:27:14
1	Zn 213.857†	52191.5	51541.0	512.38 ug/L	512.38 ppb	03:27:14
1	SiO2†	80993.2	80297.6	5502.9 ug/L	5502.9 ppb	03:28:42
2	Sc Radial	4047.6	4047.6	95.2 %		03:26:16
2	Y RADIAL	4452.9	4452.9	94.90 %		03:26:16
2	Al 396.153Radial†	5451.2	5839.3	5263.0 ug/L	5263.0 ppb	03:26:16
2	Ca 317.933Radial†	2593.5	2710.0	5391.8 ug/L	5391.8 ppb	03:26:36
2	Fe 238.204 Radial†	397.2	407.2	5261.8 ug/L	5261.8 ppb	03:26:36
2	K 766.490 Radial†	29681.5	28634.6	5350.5 ug/L	5350.5 ppb	03:26:16
2	Mg 279.077 IEC†	113.2	116.2	5279.4 ug/L	5279.4 ppb	03:26:36
2	Na 589.592 Radial†	33285.8	35719.4	10366 ug/L	10366 ppb	03:26:16
2	Sr 421.552†	74308.2	78051.4	517.27 ug/L	517.27 ppb	03:26:16
2	Sc 361.383	898192.0	898192.0	99.792 %		03:27:40
2	Y 371.029	746101.9	746101.9	97.857 %		03:27:40
2	Ag 328.068†	112782.7	112788.4	521.17 ug/L	521.17 ppb	03:27:45
2	As 188.979†	1138.2	1161.1	527.82 ug/L	527.82 ppb	03:28:05
2	B 249.677†	20777.0	21193.3	503.44 ug/L	503.44 ppb	03:27:45
2	Ba 233.527†	66306.0	66453.3	520.36 ug/L	520.36 ppb	03:27:45
2	Be 313.107†	1370987.7	1377697.0	514.59 ug/L	514.59 ppb	03:27:40
2	Cd 226.502†	45116.9	45394.2	526.79 ug/L	526.79 ppb	03:27:45
2	Co 228.616†	24953.4	25067.3	524.19 ug/L	524.19 ppb	03:27:45
2	Cr 267.716†	46376.9	46407.5	521.53 ug/L	521.53 ppb	03:27:45
2	Cu 324.752†	175335.1	169623.3	509.36 ug/L	509.36 ppb	03:27:45
2	Mn 257.610†	459200.7	459720.5	515.73 ug/L	515.73 ppb	03:27:40
2	Mo 202.031†	7135.9	7144.7	523.34 ug/L	523.34 ppb	03:28:05
2	Ni 231.604†	20721.6	20712.5	526.15 ug/L	526.15 ppb	03:27:45

2	P 214.914†	4549.1	4356.6	2544.4 ug/L	2544.4 ppb	03:28:05
2	Pb 220.353†	4211.6	4285.4	532.61 ug/L	532.61 ppb	03:28:05
2	S 181.975 Axial†	771.5	736.1	1077.4 ug/L	1077.4 ppb	03:28:05
2	Sb 206.836†	1543.1	1509.6	545.22 ug/L	545.22 ppb	03:28:05
2	Se 196.026†	770.3	792.6	540.51 ug/L	540.51 ppb	03:28:05
2	Si 251.611†	81130.9	80765.7	2584.5 ug/L	2584.5 ppb	03:27:45
2	Sn 189.927†	2953.5	2949.3	534.21 ug/L	534.21 ppb	03:28:05
2	Ti 334.940†	336310.1	338292.5	511.53 ug/L	511.53 ppb	03:27:40
2	Tl 190.801†	1582.0	1616.5	522.20 ug/L	522.20 ppb	03:28:05
2	U 409.014†	15777.7	18626.8	501.55 ug/L	501.55 ppb	03:27:45
2	V 292.402†	72472.0	74053.5	521.08 ug/L	521.08 ppb	03:27:45
2	Zn 213.857†	52741.3	52293.4	519.89 ug/L	519.89 ppb	03:27:45
2	SiO2†	80101.6	79717.0	5463.0 ug/L	5463.0 ppb	03:28:47
3	Sc Radial	3984.7	3984.7	93.7 %		03:26:41
3	Y RADIAL	4333.7	4333.7	92.36 %		03:26:41
3	Al 396.153Radial†	5401.5	5876.7	5296.9 ug/L	5296.9 ppb	03:26:41
3	Ca 317.933Radial†	2590.4	2749.7	5470.8 ug/L	5470.8 ppb	03:27:01
3	Fe 238.204 Radial†	400.4	417.2	5390.3 ug/L	5390.3 ppb	03:27:01
3	K 766.490 Radial†	29087.5	28493.1	5324.0 ug/L	5324.0 ppb	03:26:41
3	Mg 279.077 IEC†	116.6	121.7	5529.8 ug/L	5529.8 ppb	03:27:01
3	Na 589.592 Radial†	32576.4	35514.5	10306 ug/L	10306 ppb	03:26:41
3	Sr 421.552†	73066.9	77959.4	516.66 ug/L	516.66 ppb	03:26:41
3	Sc 361.383	892746.3	892746.3	99.187 %		03:28:11
3	Y 371.029	742435.2	742435.2	97.376 %		03:28:11
3	Ag 328.068†	112293.3	112984.3	522.12 ug/L	522.12 ppb	03:28:16
3	As 188.979†	1134.6	1164.4	529.30 ug/L	529.30 ppb	03:28:36
3	B 249.677†	20622.8	21164.8	502.74 ug/L	502.74 ppb	03:28:16
3	Ba 233.527†	65964.0	66513.8	520.84 ug/L	520.84 ppb	03:28:16
3	Be 313.107†	1361348.7	1376359.4	514.09 ug/L	514.09 ppb	03:28:11
3	Cd 226.502†	44834.1	45384.9	526.67 ug/L	526.67 ppb	03:28:16
3	Co 228.616†	24802.4	25067.6	524.19 ug/L	524.19 ppb	03:28:16
3	Cr 267.716†	46030.6	46341.8	520.81 ug/L	520.81 ppb	03:28:16
3	Cu 324.752†	174106.2	169456.0	508.87 ug/L	508.87 ppb	03:28:16
3	Mn 257.610†	455477.7	458773.9	514.68 ug/L	514.68 ppb	03:28:11
3	Mo 202.031†	7095.1	7147.2	523.53 ug/L	523.53 ppb	03:28:36
3	Ni 231.604†	20594.8	20711.2	526.12 ug/L	526.12 ppb	03:28:16
3	P 214.914†	4532.4	4367.5	2551.0 ug/L	2551.0 ppb	03:28:36
3	Pb 220.353†	4164.3	4263.5	529.89 ug/L	529.89 ppb	03:28:36
3	S 181.975 Axial†	762.4	731.6	1070.8 ug/L	1070.8 ppb	03:28:36
3	Sb 206.836†	1547.9	1523.9	550.16 ug/L	550.16 ppb	03:28:36
3	Se 196.026†	756.5	783.4	534.87 ug/L	534.87 ppb	03:28:36
3	Si 251.611†	80837.9	80966.3	2590.9 ug/L	2590.9 ppb	03:28:16
3	Sn 189.927†	2927.4	2941.0	532.71 ug/L	532.71 ppb	03:28:36
3	Ti 334.940†	333989.3	338008.5	511.09 ug/L	511.09 ppb	03:28:11
3	Tl 190.801†	1565.7	1609.8	520.03 ug/L	520.03 ppb	03:28:36
3	U 409.014†	15473.8	18416.8	495.86 ug/L	495.86 ppb	03:28:16
3	V 292.402†	72090.1	74111.4	521.46 ug/L	521.46 ppb	03:28:16
3	Zn 213.857†	52311.8	52182.9	518.77 ug/L	518.77 ppb	03:28:16
3	SiO2†	80970.8	81082.9	5556.8 ug/L	5556.8 ppb	03:28:52

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	897535.3	99.719 %	0.4996			0.50%
Sc Radial	4006.2	94.2 %	0.84			0.90%
Y 371.029	745848.6	97.824 %	0.4321			0.44%
Y RADIAL	4394.5	93.66 %	1.271			1.36%
Ag 328.068†	112481.4	519.78 ug/L	3.265	519.78 ppb	3.265	0.63%
QC value within limits for Ag 328.068 Recovery = 103.96%						
Al 396.153Radial†	5865.1	5286.3 ug/L	20.22	5286.3 ppb	20.22	0.38%
QC value within limits for Al 396.153Radial Recovery = 105.73%						
As 188.979†	1163.9	529.07 ug/L	1.151	529.07 ppb	1.151	0.22%
QC value within limits for As 188.979 Recovery = 105.81%						
B 249.677†	21069.6	500.48 ug/L	4.527	500.48 ppb	4.527	0.90%
QC value within limits for B 249.677 Recovery = 100.10%						
Ba 233.527†	66245.4	518.73 ug/L	3.239	518.73 ppb	3.239	0.62%
QC value within limits for Ba 233.527 Recovery = 103.75%						
Be 313.107†	1377526.1	514.53 ug/L	0.407	514.53 ppb	0.407	0.08%
QC value within limits for Be 313.107 Recovery = 102.91%						
Ca 317.933Radial†	2733.3	5438.1 ug/L	41.24	5438.1 ppb	41.24	0.76%

QC value within limits for Ca 317.933 Radial Recovery = 108.76%

Cd 226.502†	45212.6	524.67 ug/L	3.562	524.67 ppb	3.562	0.68%
QC value within limits for Cd 226.502 Recovery = 104.93%						
Co 228.616†	24975.2	522.26 ug/L	3.339	522.26 ppb	3.339	0.64%
QC value within limits for Co 228.616 Recovery = 104.45%						
Cr 267.716†	46177.4	518.95 ug/L	3.852	518.95 ppb	3.852	0.74%
QC value within limits for Cr 267.716 Recovery = 103.79%						
Cu 324.752†	168921.1	507.26 ug/L	3.224	507.26 ppb	3.224	0.64%
QC value within limits for Cu 324.752 Recovery = 101.45%						
Fe 238.204 Radial†	412.6	5330.7 ug/L	64.78	5330.7 ppb	64.78	1.22%
QC value within limits for Fe 238.204 Radial Recovery = 106.61%						
K 766.490 Radial†	28652.5	5353.8 ug/L	31.61	5353.8 ppb	31.61	0.59%
QC value within limits for K 766.490 Radial Recovery = 107.08%						
Mg 279.077 IEC†	119.1	5410.8 ug/L	125.69	5410.8 ppb	125.69	2.32%
QC value within limits for Mg 279.077 IEC Recovery = 108.22%						
Mn 257.610†	459254.9	515.21 ug/L	0.530	515.21 ppb	0.530	0.10%
QC value within limits for Mn 257.610 Recovery = 103.04%						
Mo 202.031†	7144.6	523.34 ug/L	0.189	523.34 ppb	0.189	0.04%
QC value within limits for Mo 202.031 Recovery = 104.67%						
Na 589.592 Radial†	35802.0	10390 ug/L	97.7	10390 ppb	97.7	0.94%
QC value within limits for Na 589.592 Radial Recovery = 103.90%						
Ni 231.604†	20625.1	523.93 ug/L	3.816	523.93 ppb	3.816	0.73%
QC value within limits for Ni 231.604 Recovery = 104.79%						
P 214.914†	4354.5	2543.6 ug/L	7.97	2543.6 ppb	7.97	0.31%
QC value within limits for P 214.914 Recovery = 101.74%						
Pb 220.353†	4265.9	530.19 ug/L	2.277	530.19 ppb	2.277	0.43%
QC value within limits for Pb 220.353 Recovery = 106.04%						
S 181.975 Axial†	737.3	1079.1 ug/L	9.27	1079.1 ppb	9.27	0.86%
QC value within limits for S 181.975 Axial Recovery = 107.91%						
Sb 206.836†	1516.5	547.60 ug/L	2.476	547.60 ppb	2.476	0.45%
QC value within limits for Sb 206.836 Recovery = 109.52%						
Se 196.026†	790.9	539.63 ug/L	4.382	539.63 ppb	4.382	0.81%
QC value within limits for Se 196.026 Recovery = 107.93%						
Si 251.611†	80593.0	2579.0 ug/L	15.50	2579.0 ppb	15.50	0.60%
QC value within limits for Si 251.611 Recovery = 103.16%						
Sn 189.927†	2944.2	533.30 ug/L	0.797	533.30 ppb	0.797	0.15%
QC value within limits for Sn 189.927 Recovery = 106.66%						
Sr 421.552†	78222.0	518.40 ug/L	2.505	518.40 ppb	2.505	0.48%
QC value within limits for Sr 421.552 Recovery = 103.68%						
Ti 334.940†	338117.1	511.26 ug/L	0.234	511.26 ppb	0.234	0.05%
QC value within limits for Ti 334.940 Recovery = 102.25%						
Tl 190.801†	1609.6	519.99 ug/L	2.236	519.99 ppb	2.236	0.43%
QC value within limits for Tl 190.801 Recovery = 104.00%						
U 409.014†	18427.2	496.15 ug/L	5.256	496.15 ppb	5.256	1.06%
QC value within limits for U 409.014 Recovery = 99.23%						
V 292.402†	73760.4	519.03 ug/L	3.887	519.03 ppb	3.887	0.75%
QC value within limits for V 292.402 Recovery = 103.81%						
Zn 213.857†	52005.8	517.01 ug/L	4.051	517.01 ppb	4.051	0.78%
QC value within limits for Zn 213.857 Recovery = 103.40%						
SiO2†	80365.8	5507.6 ug/L	47.10	5507.6 ppb	47.10	0.86%
QC value within limits for SiO2 Recovery = 102.99%						

All analyte(s) passed QC.

Sequence No.: 84

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/24/2010 03:31:01

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	4070.8	4070.8	95.7 %		03:32:54
1	Y RADIAL	4492.0	4492.0	95.74 %		03:32:54
1	Al 396.153Radial†	-115.3	-9.7	-8.8092 ug/L	-8.8092 ppb	03:32:54
1	Ca 317.933Radial†	19.5	4.9	9.8448 ug/L	9.8448 ppb	03:33:14
1	Fe 238.204 Radial†	13.7	4.2	53.492 ug/L	53.492 ppb	03:33:14
1	K 766.490 Radial†	2650.6	212.8	39.825 ug/L	39.825 ppb	03:32:54
1	Mg 279.077 IEC†	1.4	-1.3	-60.804 ug/L	-60.804 ppb	03:33:14
1	Na 589.592 Radial†	-799.6	-95.2	-27.615 ug/L	-27.615 ppb	03:32:54
1	Sr 421.552†	83.7	50.7	0.3357 ug/L	0.3357 ppb	03:32:54
1	Sc 361.383	917171.0	917171.0	101.90 %		03:34:11
1	Y 371.029	773105.4	773105.4	101.40 %		03:34:11
1	Ag 328.068†	274.2	39.8	0.1961 ug/L	0.1961 ppb	03:34:16
1	As 188.979†	-23.1	-2.2	-0.9701 ug/L	-0.9701 ppb	03:34:36
1	B 249.677†	-393.3	-13.1	-0.3202 ug/L	-0.3202 ppb	03:34:36
1	Ba 233.527†	3.1	12.2	0.0959 ug/L	0.0959 ppb	03:34:36
1	Be 313.107†	-3729.9	192.9	0.0712 ug/L	0.0712 ppb	03:34:16
1	Cd 226.502†	-181.3	5.4	0.0572 ug/L	0.0572 ppb	03:34:36
1	Co 228.616†	-64.7	-1.5	-0.0319 ug/L	-0.0319 ppb	03:34:36
1	Cr 267.716†	68.6	1.3	0.0186 ug/L	0.0186 ppb	03:34:36
1	Cu 324.752†	6009.7	-179.5	-0.5371 ug/L	-0.5371 ppb	03:34:16
1	Mn 257.610†	478.1	32.3	0.0440 ug/L	0.0440 ppb	03:34:36
1	Mo 202.031†	8.0	1.8	0.1366 ug/L	0.1366 ppb	03:34:36
1	Ni 231.604†	65.2	11.7	0.2964 ug/L	0.2964 ppb	03:34:36
1	P 214.914†	209.4	3.4	2.1554 ug/L	2.1554 ppb	03:34:36
1	Pb 220.353†	-53.1	13.0	1.5986 ug/L	1.5986 ppb	03:34:36
1	S 181.975 Axial†	39.9	2.1	3.1146 ug/L	3.1146 ppb	03:34:36
1	Sb 206.836†	52.4	14.7	5.1444 ug/L	5.1444 ppb	03:34:36
1	Se 196.026†	-34.9	-13.6	-8.7984 ug/L	-8.7984 ppb	03:34:36
1	Si 251.611†	570.5	25.7	0.8233 ug/L	0.8233 ppb	03:34:36
1	Sn 189.927†	12.4	1.7	0.3106 ug/L	0.3106 ppb	03:34:36
1	Ti 334.940†	-1499.0	-189.2	-0.2806 ug/L	-0.2806 ppb	03:34:16
1	Tl 190.801†	-30.3	1.5	0.4683 ug/L	0.4683 ppb	03:34:36
1	U 409.014†	-2812.7	56.0	1.5073 ug/L	1.5073 ppb	03:34:11
1	V 292.402†	-1512.8	-54.1	-0.3797 ug/L	-0.3797 ppb	03:34:16
1	Zn 213.857†	576.5	8.1	0.0719 ug/L	0.0719 ppb	03:34:36
1	SiO2†	604.6	41.8	2.8709 ug/L	2.8709 ppb	03:35:42
2	Sc Radial	4080.0	4080.0	95.9 %		03:33:19
2	Y RADIAL	4518.1	4518.1	96.29 %		03:33:19
2	Al 396.153Radial†	-122.2	-16.7	-15.141 ug/L	-15.141 ppb	03:33:19
2	Ca 317.933Radial†	17.3	2.6	5.1335 ug/L	5.1335 ppb	03:33:39
2	Fe 238.204 Radial†	10.1	0.4	4.7130 ug/L	4.7130 ppb	03:33:39
2	K 766.490 Radial†	2755.1	315.4	59.026 ug/L	59.026 ppb	03:33:19
2	Mg 279.077 IEC†	4.0	1.4	65.509 ug/L	65.509 ppb	03:33:39
2	Na 589.592 Radial†	-818.0	-112.4	-32.613 ug/L	-32.613 ppb	03:33:19
2	Sr 421.552†	24.6	-11.1	-0.0739 ug/L	-0.0739 ppb	03:33:19
2	Sc 361.383	909531.2	909531.2	101.05 %		03:34:41
2	Y 371.029	766723.8	766723.8	100.56 %		03:34:41
2	Ag 328.068†	271.5	39.3	0.1778 ug/L	0.1778 ppb	03:34:46
2	As 188.979†	-23.4	-2.6	-1.1749 ug/L	-1.1749 ppb	03:35:06
2	B 249.677†	-398.2	-21.1	-0.5034 ug/L	-0.5034 ppb	03:35:06
2	Ba 233.527†	-1.3	7.9	0.0602 ug/L	0.0602 ppb	03:35:06
2	Be 313.107†	-3821.5	71.5	0.0265 ug/L	0.0265 ppb	03:34:46
2	Cd 226.502†	-191.5	-6.2	-0.0717 ug/L	-0.0717 ppb	03:35:06
2	Co 228.616†	-61.9	0.7	0.0175 ug/L	0.0175 ppb	03:35:06
2	Cr 267.716†	74.2	7.5	0.0825 ug/L	0.0825 ppb	03:35:06
2	Cu 324.752†	6044.1	-95.9	-0.2888 ug/L	-0.2888 ppb	03:34:46
2	Mn 257.610†	457.7	16.1	0.0158 ug/L	0.0158 ppb	03:35:06
2	Mo 202.031†	23.4	17.1	1.2501 ug/L	1.2501 ppb	03:35:06
2	Ni 231.604†	49.6	-3.2	-0.0810 ug/L	-0.0810 ppb	03:35:06

2	P 214.914†	222.4	18.0	10.998 ug/L	10.998 ppb	03:35:06
2	Pb 220.353†	-56.0	9.6	1.1889 ug/L	1.1889 ppb	03:35:06
2	S 181.975 Axial†	27.8	-9.5	-13.985 ug/L	-13.985 ppb	03:35:06
2	Sb 206.836†	47.8	10.6	3.7162 ug/L	3.7162 ppb	03:35:06
2	Se 196.026†	-24.4	-3.5	-2.2784 ug/L	-2.2784 ppb	03:35:06
2	Si 251.611†	582.5	42.3	1.3419 ug/L	1.3419 ppb	03:35:06
2	Sn 189.927†	11.3	0.8	0.1456 ug/L	0.1456 ppb	03:35:06
2	Ti 334.940†	-1352.9	-57.0	-0.0918 ug/L	-0.0918 ppb	03:34:46
2	Tl 190.801†	-18.1	13.3	4.2662 ug/L	4.2662 ppb	03:35:06
2	U 409.014†	-2774.4	70.7	1.9106 ug/L	1.9106 ppb	03:34:41
2	V 292.402†	-1543.9	-97.4	-0.6545 ug/L	-0.6545 ppb	03:34:46
2	Zn 213.857†	585.1	21.3	0.2137 ug/L	0.2137 ppb	03:35:06
2	SiO2†	605.9	48.1	3.2679 ug/L	3.2679 ppb	03:35:47
3	Sc Radial	4151.2	4151.2	97.6 %		03:33:44
3	Y RADIAL	4604.6	4604.6	98.14 %		03:33:44
3	Al 396.153Radial†	-121.7	-13.9	-12.632 ug/L	-12.632 ppb	03:33:44
3	Ca 317.933Radial†	19.2	4.2	8.4283 ug/L	8.4283 ppb	03:34:04
3	Fe 238.204 Radial†	10.4	0.5	6.2628 ug/L	6.2628 ppb	03:34:04
3	K 766.490 Radial†	2790.2	302.2	56.544 ug/L	56.544 ppb	03:33:44
3	Mg 279.077 IEC†	1.4	-1.3	-60.061 ug/L	-60.061 ppb	03:34:04
3	Na 589.592 Radial†	-788.7	-67.7	-19.660 ug/L	-19.660 ppb	03:33:44
3	Sr 421.552†	32.2	-3.8	-0.0254 ug/L	-0.0254 ppb	03:33:44
3	Sc 361.383	907903.9	907903.9	100.87 %		03:35:11
3	Y 371.029	765878.7	765878.7	100.45 %		03:35:11
3	Ag 328.068†	192.1	-38.9	-0.1775 ug/L	-0.1775 ppb	03:35:16
3	As 188.979†	-25.3	-4.5	-2.0458 ug/L	-2.0458 ppb	03:35:36
3	B 249.677†	-432.4	-55.7	-1.3308 ug/L	-1.3308 ppb	03:35:36
3	Ba 233.527†	12.1	21.1	0.1651 ug/L	0.1651 ppb	03:35:36
3	Be 313.107†	-3680.6	204.5	0.0754 ug/L	0.0754 ppb	03:35:16
3	Cd 226.502†	-189.8	-4.8	-0.0564 ug/L	-0.0564 ppb	03:35:36
3	Co 228.616†	-70.6	-8.1	-0.1663 ug/L	-0.1663 ppb	03:35:36
3	Cr 267.716†	75.7	9.0	0.1018 ug/L	0.1018 ppb	03:35:36
3	Cu 324.752†	5971.5	-157.2	-0.4719 ug/L	-0.4719 ppb	03:35:16
3	Mn 257.610†	480.1	39.1	0.0470 ug/L	0.0470 ppb	03:35:36
3	Mo 202.031†	19.8	13.6	0.9946 ug/L	0.9946 ppb	03:35:36
3	Ni 231.604†	68.5	15.6	0.3969 ug/L	0.3969 ppb	03:35:36
3	P 214.914†	202.9	-0.9	-0.4489 ug/L	-0.4489 ppb	03:35:36
3	Pb 220.353†	-41.5	23.9	2.9648 ug/L	2.9648 ppb	03:35:36
3	S 181.975 Axial†	33.7	-3.6	-5.3003 ug/L	-5.3003 ppb	03:35:36
3	Sb 206.836†	47.9	10.8	3.8067 ug/L	3.8067 ppb	03:35:36
3	Se 196.026†	-24.3	-3.4	-2.2027 ug/L	-2.2027 ppb	03:35:36
3	Si 251.611†	589.4	50.1	1.5956 ug/L	1.5956 ppb	03:35:36
3	Sn 189.927†	16.2	5.7	1.0280 ug/L	1.0280 ppb	03:35:36
3	Ti 334.940†	-1514.2	-219.3	-0.3257 ug/L	-0.3257 ppb	03:35:16
3	Tl 190.801†	-24.9	6.6	2.1011 ug/L	2.1011 ppb	03:35:36
3	U 409.014†	-2831.1	9.6	0.2583 ug/L	0.2583 ppb	03:35:11
3	V 292.402†	-1456.4	-13.4	-0.0804 ug/L	-0.0804 ppb	03:35:16
3	Zn 213.857†	582.3	19.6	0.1934 ug/L	0.1934 ppb	03:35:36
3	SiO2†	585.4	28.9	1.9564 ug/L	1.9564 ppb	03:35:52

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	911535.4	101.27 %	0.550			0.54%
Sc Radial	4100.7	96.4 %	1.03			1.07%
Y 371.029	768569.3	100.80 %	0.518			0.51%
Y RADIAL	4538.2	96.72 %	1.256			1.30%
Ag 328.068†	13.4	0.0655 ug/L	0.21062	0.0655 ppb	0.21062	321.78%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-13.4	-12.194 ug/L	3.1887	-12.194 ppb	3.1887	26.15%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-3.1	-1.3969 ug/L	0.57120	-1.3969 ppb	0.57120	40.89%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-30.0	-0.7181 ug/L	0.53843	-0.7181 ppb	0.53843	74.98%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	13.7	0.1071 ug/L	0.05334	0.1071 ppb	0.05334	49.82%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	156.3	0.0577 ug/L	0.02715	0.0577 ppb	0.02715	47.04%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	3.9	7.8022 ug/L	2.41725	7.8022 ppb	2.41725	30.98%



QC value within limits for Ca 317.933 Radial Recovery = Not calculated						
Cd 226.502†	-1.9	-0.0237 ug/L	0.07041	-0.0237 ppb	0.07041	297.69%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-3.0	-0.0602 ug/L	0.09511	-0.0602 ppb	0.09511	157.91%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	5.9	0.0676 ug/L	0.04352	0.0676 ppb	0.04352	64.36%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-144.2	-0.4326 ug/L	0.12875	-0.4326 ppb	0.12875	29.76%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	1.7	21.489 ug/L	27.7260	21.489 ppb	27.7260	129.02%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	276.8	51.798 ug/L	10.4433	51.798 ppb	10.4433	20.16%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	-0.4	-18.452 ug/L	72.7131	-18.452 ppb	72.7131	394.06%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	29.2	0.0356 ug/L	0.01719	0.0356 ppb	0.01719	48.29%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	10.8	0.7938 ug/L	0.58331	0.7938 ppb	0.58331	73.48%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	-91.8	-26.629 ug/L	6.5329	-26.629 ppb	6.5329	24.53%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	8.0	0.2041 ug/L	0.25194	0.2041 ppb	0.25194	123.46%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	6.9	4.2348 ug/L	5.99998	4.2348 ppb	5.99998	141.68%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	15.5	1.9175 ug/L	0.92989	1.9175 ppb	0.92989	48.50%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	-3.7	-5.3902 ug/L	8.55016	-5.3902 ppb	8.55016	158.62%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	12.0	4.2224 ug/L	0.79972	4.2224 ppb	0.79972	18.94%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-6.8	-4.4265 ug/L	3.78638	-4.4265 ppb	3.78638	85.54%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	39.4	1.2536 ug/L	0.39366	1.2536 ppb	0.39366	31.40%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	2.7	0.4947 ug/L	0.46913	0.4947 ppb	0.46913	94.83%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	11.9	0.0788 ug/L	0.22380	0.0788 ppb	0.22380	284.01%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	-155.2	-0.2327 ug/L	0.12409	-0.2327 ppb	0.12409	53.33%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	7.1	2.2785 ug/L	1.90514	2.2785 ppb	1.90514	83.61%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	45.4	1.2254 ug/L	0.86149	1.2254 ppb	0.86149	70.30%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	-55.0	-0.3715 ug/L	0.28714	-0.3715 ppb	0.28714	77.29%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	16.3	0.1596 ug/L	0.07668	0.1596 ppb	0.07668	48.04%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	39.6	2.6984 ug/L	0.67259	2.6984 ppb	0.67259	24.93%
QC value within limits for SiO2 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 93  
 Sample ID: CCV  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 7  
 Date Collected: 2/24/2010 04:33:39  
 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	3903.9	3903.9	91.8 %		04:35:51
1	Y RADIAL	4463.7	4463.7	95.13 %		04:35:31
1	Al 396.153Radial†	5511.1	6115.5	5513.3 ug/L	5513.3 ppb	04:35:31
1	Ca 317.933Radial†	2565.7	2780.0	5531.0 ug/L	5531.0 ppb	04:35:51
1	Fe 238.204 Radial†	397.7	423.1	5466.7 ug/L	5466.7 ppb	04:35:51
1	K 766.490 Radial†	29880.0	29999.3	5605.5 ug/L	5605.5 ppb	04:35:31
1	Mg 279.077 IEC†	116.0	123.6	5619.2 ug/L	5619.2 ppb	04:35:51
1	Na 589.592 Radial†	34588.2	38426.2	11151 ug/L	11151 ppb	04:35:31
1	Sr 421.552†	76004.5	82774.6	548.58 ug/L	548.58 ppb	04:35:31
1	Sc 361.383	904807.2	904807.2	100.53 %		04:36:49
1	Y 371.029	751021.5	751021.5	98.502 %		04:36:49
1	Ag 328.068†	111976.9	111160.5	513.74 ug/L	513.74 ppb	04:36:54
1	As 188.979†	1145.2	1159.7	527.09 ug/L	527.09 ppb	04:37:14
1	B 249.677†	21630.5	21890.1	520.05 ug/L	520.05 ppb	04:36:54
1	Ba 233.527†	65947.4	65610.8	513.77 ug/L	513.77 ppb	04:36:54
1	Be 313.107†	1366671.2	1363358.8	509.21 ug/L	509.21 ppb	04:36:49
1	Cd 226.502†	44711.5	44660.4	518.24 ug/L	518.24 ppb	04:36:54
1	Co 228.616†	24822.2	24754.0	517.66 ug/L	517.66 ppb	04:36:54
1	Cr 267.716†	45910.1	45603.4	512.52 ug/L	512.52 ppb	04:36:54
1	Cu 324.752†	173692.6	166704.8	500.61 ug/L	500.61 ppb	04:36:54
1	Mn 257.610†	458165.6	455326.5	510.81 ug/L	510.81 ppb	04:36:49
1	Mo 202.031†	7132.2	7088.7	519.26 ug/L	519.26 ppb	04:37:14
1	Ni 231.604†	20489.1	20329.4	516.42 ug/L	516.42 ppb	04:36:54
1	P 214.914†	4524.7	4298.9	2511.0 ug/L	2511.0 ppb	04:37:14
1	Pb 220.353†	4176.0	4219.2	524.43 ug/L	524.43 ppb	04:37:14
1	S 181.975 Axial†	767.4	726.3	1062.9 ug/L	1062.9 ppb	04:37:14
1	Sb 206.836†	1532.8	1488.1	537.50 ug/L	537.50 ppb	04:37:14
1	Se 196.026†	774.0	790.6	539.82 ug/L	539.82 ppb	04:37:14
1	Si 251.611†	80553.6	79597.1	2547.1 ug/L	2547.1 ppb	04:36:54
1	Sn 189.927†	2923.4	2897.6	524.88 ug/L	524.88 ppb	04:37:14
1	Ti 334.940†	327883.0	327445.6	495.12 ug/L	495.12 ppb	04:36:54
1	Tl 190.801†	1585.9	1608.8	519.59 ug/L	519.59 ppb	04:37:14
1	U 409.014†	15465.0	18200.2	490.02 ug/L	490.02 ppb	04:36:54
1	V 292.402†	71827.4	72881.2	512.86 ug/L	512.86 ppb	04:36:54
1	Zn 213.857†	52251.2	51419.5	511.17 ug/L	511.17 ppb	04:36:54
1	SiO2†	80524.9	79551.2	5451.7 ug/L	5451.7 ppb	04:38:21
2	Sc Radial	3927.7	3927.7	92.3 %		04:36:16
2	Y RADIAL	4403.9	4403.9	93.86 %		04:35:56
2	Al 396.153Radial†	5423.6	5984.2	5394.2 ug/L	5394.2 ppb	04:35:56
2	Ca 317.933Radial†	2569.5	2767.1	5505.5 ug/L	5505.5 ppb	04:36:16
2	Fe 238.204 Radial†	396.4	419.1	5414.6 ug/L	5414.6 ppb	04:36:16
2	K 766.490 Radial†	29661.3	29565.0	5524.3 ug/L	5524.3 ppb	04:35:56
2	Mg 279.077 IEC†	116.6	123.6	5615.7 ug/L	5615.7 ppb	04:36:16
2	Na 589.592 Radial†	34041.0	37605.1	10913 ug/L	10913 ppb	04:35:56
2	Sr 421.552†	75082.0	81273.2	538.63 ug/L	538.63 ppb	04:35:56
2	Sc 361.383	895426.9	895426.9	99.485 %		04:37:20
2	Y 371.029	743666.8	743666.8	97.537 %		04:37:20
2	Ag 328.068†	112091.3	112442.4	519.63 ug/L	519.63 ppb	04:37:25
2	As 188.979†	1143.7	1170.1	531.82 ug/L	531.82 ppb	04:37:45
2	B 249.677†	21703.3	22188.7	527.17 ug/L	527.17 ppb	04:37:25
2	Ba 233.527†	65879.1	66229.3	518.61 ug/L	518.61 ppb	04:37:25
2	Be 313.107†	1372903.7	1383865.4	516.87 ug/L	516.87 ppb	04:37:20
2	Cd 226.502†	44735.2	45150.1	523.94 ug/L	523.94 ppb	04:37:25
2	Co 228.616†	24811.1	25001.5	522.83 ug/L	522.83 ppb	04:37:25
2	Cr 267.716†	46035.4	46207.8	519.30 ug/L	519.30 ppb	04:37:25
2	Cu 324.752†	174263.8	169089.0	507.77 ug/L	507.77 ppb	04:37:25
2	Mn 257.610†	458828.9	460767.7	516.91 ug/L	516.91 ppb	04:37:20
2	Mo 202.031†	7110.4	7141.2	523.10 ug/L	523.10 ppb	04:37:45
2	Ni 231.604†	20491.9	20545.7	521.91 ug/L	521.91 ppb	04:37:25

2	P 214.914†	4537.5	4359.0	2546.1 ug/L	2546.1 ppb	04:37:45
2	Pb 220.353†	4179.7	4266.4	530.27 ug/L	530.27 ppb	04:37:45
2	S 181.975 Axial†	771.2	738.2	1080.4 ug/L	1080.4 ppb	04:37:45
2	Sb 206.836†	1529.6	1500.8	542.12 ug/L	542.12 ppb	04:37:45
2	Se 196.026†	765.0	789.7	539.06 ug/L	539.06 ppb	04:37:45
2	Si 251.611†	80576.6	80459.7	2574.7 ug/L	2574.7 ppb	04:37:25
2	Sn 189.927†	2931.1	2935.9	531.80 ug/L	531.80 ppb	04:37:45
2	Ti 334.940†	328415.2	331397.5	501.09 ug/L	501.09 ppb	04:37:25
2	Tl 190.801†	1592.3	1631.7	527.01 ug/L	527.01 ppb	04:37:45
2	U 409.014†	15594.7	18491.7	497.88 ug/L	497.88 ppb	04:37:25
2	V 292.402†	72007.8	73811.0	519.38 ug/L	519.38 ppb	04:37:25
2	Zn 213.857†	52294.2	52007.2	517.03 ug/L	517.03 ppb	04:37:25
2	SiO2†	80192.7	80056.4	5486.3 ug/L	5486.3 ppb	04:38:27
3	Sc Radial	3960.0	3960.0	93.1 %		04:36:42
3	Y RADIAL	4514.0	4514.0	96.21 %		04:36:22
3	Al 396.153Radial†	5446.0	5960.5	5373.1 ug/L	5373.1 ppb	04:36:22
3	Ca 317.933Radial†	2592.3	2768.9	5509.0 ug/L	5509.0 ppb	04:36:42
3	Fe 238.204 Radial†	402.4	422.0	5452.5 ug/L	5452.5 ppb	04:36:42
3	K 766.490 Radial†	30050.5	29721.2	5553.5 ug/L	5553.5 ppb	04:36:22
3	Mg 279.077 IEC†	118.2	124.2	5642.4 ug/L	5642.4 ppb	04:36:42
3	Na 589.592 Radial†	34675.9	37986.5	11024 ug/L	11024 ppb	04:36:22
3	Sr 421.552†	75878.6	81466.2	539.91 ug/L	539.91 ppb	04:36:22
3	Sc 361.383	905588.7	905588.7	100.61 %		04:37:51
3	Y 371.029	753033.3	753033.3	98.766 %		04:37:51
3	Ag 328.068†	111589.6	110679.5	511.52 ug/L	511.52 ppb	04:37:56
3	As 188.979†	1128.6	1142.2	519.18 ug/L	519.18 ppb	04:38:16
3	B 249.677†	21519.9	21761.6	517.00 ug/L	517.00 ppb	04:37:56
3	Ba 233.527†	65690.3	65298.7	511.33 ug/L	511.33 ppb	04:37:56
3	Be 313.107†	1387119.4	1382509.1	516.34 ug/L	516.34 ppb	04:37:51
3	Cd 226.502†	44560.7	44472.2	516.06 ug/L	516.06 ppb	04:37:56
3	Co 228.616†	24630.5	24542.1	513.22 ug/L	513.22 ppb	04:37:56
3	Cr 267.716†	45820.3	45474.8	511.08 ug/L	511.08 ppb	04:37:56
3	Cu 324.752†	173113.3	165980.0	498.44 ug/L	498.44 ppb	04:37:56
3	Mn 257.610†	462483.9	459225.2	515.18 ug/L	515.18 ppb	04:37:51
3	Mo 202.031†	7081.0	7031.7	515.09 ug/L	515.09 ppb	04:38:16
3	Ni 231.604†	20458.5	20281.3	515.20 ug/L	515.20 ppb	04:37:56
3	P 214.914†	4501.8	4272.3	2495.3 ug/L	2495.3 ppb	04:38:16
3	Pb 220.353†	4170.6	4210.2	523.28 ug/L	523.28 ppb	04:38:16
3	S 181.975 Axial†	759.2	717.5	1050.1 ug/L	1050.1 ppb	04:38:16
3	Sb 206.836†	1523.3	1477.3	533.66 ug/L	533.66 ppb	04:38:16
3	Se 196.026†	763.5	779.6	532.47 ug/L	532.47 ppb	04:38:16
3	Si 251.611†	80275.3	79251.4	2536.0 ug/L	2536.0 ppb	04:37:56
3	Sn 189.927†	2931.4	2903.1	525.87 ug/L	525.87 ppb	04:38:16
3	Ti 334.940†	326791.9	326079.7	493.05 ug/L	493.05 ppb	04:37:56
3	Tl 190.801†	1580.6	1602.2	517.51 ug/L	517.51 ppb	04:38:16
3	U 409.014†	15405.3	18127.5	488.06 ug/L	488.06 ppb	04:37:56
3	V 292.402†	71739.8	72732.5	511.77 ug/L	511.77 ppb	04:37:56
3	Zn 213.857†	51993.2	51118.3	508.16 ug/L	508.16 ppb	04:37:56
3	SiO2†	81229.3	80182.2	5495.2 ug/L	5495.2 ppb	04:38:32

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	901940.9	100.21 %	0.628			0.63%
Sc Radial	3930.6	92.4 %	0.66			0.72%
Y 371.029	749240.5	98.268 %	0.6467			0.66%
Y RADIAL	4460.5	95.07 %	1.175			1.24%
Ag 328.068†	111427.4	514.96 ug/L	4.190	514.96 ppb	4.190	0.81%
QC value within limits for Ag 328.068 Recovery = 102.99%						
Al 396.153Radial†	6020.1	5426.9 ug/L	75.57	5426.9 ppb	75.57	1.39%
QC value within limits for Al 396.153Radial Recovery = 108.54%						
As 188.979†	1157.4	526.03 ug/L	6.386	526.03 ppb	6.386	1.21%
QC value within limits for As 188.979 Recovery = 105.21%						
B 249.677†	21946.8	521.41 ug/L	5.220	521.41 ppb	5.220	1.00%
QC value within limits for B 249.677 Recovery = 104.28%						
Ba 233.527†	65712.9	514.57 ug/L	3.708	514.57 ppb	3.708	0.72%
QC value within limits for Ba 233.527 Recovery = 102.91%						
Be 313.107†	1376577.8	514.14 ug/L	4.277	514.14 ppb	4.277	0.83%
QC value within limits for Be 313.107 Recovery = 102.83%						
Ca 317.933Radial†	2772.0	5515.2 ug/L	13.85	5515.2 ppb	13.85	0.25%

QC value greater than the upper limit for Ca 317.933 Radial Recovery = 110.30%

Cd 226.502†	44760.9	519.41 ug/L	4.068	519.41 ppb	4.068	0.78%
QC value within limits for Cd 226.502 Recovery = 103.88%						
Co 228.616†	24765.9	517.90 ug/L	4.808	517.90 ppb	4.808	0.93%
QC value within limits for Co 228.616 Recovery = 103.58%						
Cr 267.716†	45762.0	514.30 ug/L	4.391	514.30 ppb	4.391	0.85%
QC value within limits for Cr 267.716 Recovery = 102.86%						
Cu 324.752†	167257.9	502.27 ug/L	4.880	502.27 ppb	4.880	0.97%
QC value within limits for Cu 324.752 Recovery = 100.45%						
Fe 238.204 Radial†	421.4	5444.6 ug/L	26.91	5444.6 ppb	26.91	0.49%
QC value within limits for Fe 238.204 Radial Recovery = 108.89%						
K 766.490 Radial†	29761.8	5561.1 ug/L	41.11	5561.1 ppb	41.11	0.74%
QC value greater than the upper limit for K 766.490 Radial Recovery = 111.22%						
Mg 279.077 IEC†	123.8	5625.8 ug/L	14.51	5625.8 ppb	14.51	0.26%
QC value greater than the upper limit for Mg 279.077 IEC Recovery = 112.52%						
Mn 257.610†	458439.8	514.30 ug/L	3.142	514.30 ppb	3.142	0.61%
QC value within limits for Mn 257.610 Recovery = 102.86%						
Mo 202.031†	7087.2	519.15 ug/L	4.006	519.15 ppb	4.006	0.77%
QC value within limits for Mo 202.031 Recovery = 103.83%						
Na 589.592 Radial†	38005.9	11029 ug/L	119.2	11029 ppb	119.2	1.08%
QC value greater than the upper limit for Na 589.592 Radial Recovery = 110.29%						
Ni 231.604†	20385.5	517.84 ug/L	3.577	517.84 ppb	3.577	0.69%
QC value within limits for Ni 231.604 Recovery = 103.57%						
P 214.914†	4310.1	2517.5 ug/L	26.03	2517.5 ppb	26.03	1.03%
QC value within limits for P 214.914 Recovery = 100.70%						
Pb 220.353†	4231.9	525.99 ug/L	3.746	525.99 ppb	3.746	0.71%
QC value within limits for Pb 220.353 Recovery = 105.20%						
S 181.975 Axial†	727.3	1064.5 ug/L	15.17	1064.5 ppb	15.17	1.43%
QC value within limits for S 181.975 Axial Recovery = 106.45%						
Sb 206.836†	1488.7	537.76 ug/L	4.235	537.76 ppb	4.235	0.79%
QC value within limits for Sb 206.836 Recovery = 107.55%						
Se 196.026†	786.6	537.12 ug/L	4.041	537.12 ppb	4.041	0.75%
QC value within limits for Se 196.026 Recovery = 107.42%						
Si 251.611†	79769.4	2552.6 ug/L	19.92	2552.6 ppb	19.92	0.78%
QC value within limits for Si 251.611 Recovery = 102.10%						
Sn 189.927†	2912.2	527.52 ug/L	3.744	527.52 ppb	3.744	0.71%
QC value within limits for Sn 189.927 Recovery = 105.50%						
Sr 421.552†	81838.0	542.37 ug/L	5.414	542.37 ppb	5.414	1.00%
QC value within limits for Sr 421.552 Recovery = 108.47%						
Ti 334.940†	328307.6	496.42 ug/L	4.173	496.42 ppb	4.173	0.84%
QC value within limits for Ti 334.940 Recovery = 99.28%						
Tl 190.801†	1614.2	521.37 ug/L	4.991	521.37 ppb	4.991	0.96%
QC value within limits for Tl 190.801 Recovery = 104.27%						
U 409.014†	18273.2	491.99 ug/L	5.201	491.99 ppb	5.201	1.06%
QC value within limits for U 409.014 Recovery = 98.40%						
V 292.402†	73141.6	514.67 ug/L	4.117	514.67 ppb	4.117	0.80%
QC value within limits for V 292.402 Recovery = 102.93%						
Zn 213.857†	51515.0	512.12 ug/L	4.511	512.12 ppb	4.511	0.88%
QC value within limits for Zn 213.857 Recovery = 102.42%						
SiO2†	79930.0	5477.7 ug/L	22.97	5477.7 ppb	22.97	0.42%
QC value within limits for SiO2 Recovery = 102.44%						

QC Failed. Continue with analysis.

Sequence No.: 94  
 Sample ID: CCB  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 8  
 Date Collected: 2/24/2010 04:40:41  
 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	3954.3	3954.3	93.0 %		04:42:54
1	Y RADIAL	4445.5	4445.5	94.75 %		04:42:34
1	Al 396.153Radial†	-95.7	7.8	7.0770 ug/L	7.0770 ppb	04:42:34
1	Ca 317.933Radial†	18.8	4.7	9.3747 ug/L	9.3747 ppb	04:42:54
1	Fe 238.204 Radial†	11.6	2.3	29.593 ug/L	29.593 ppb	04:42:54
1	K 766.490 Radial†	2642.7	285.9	53.508 ug/L	53.508 ppb	04:42:34
1	Mg 279.077 IEC†	1.7	-0.9	-41.259 ug/L	-41.259 ppb	04:42:54
1	Na 589.592 Radial†	-825.4	-147.5	-42.812 ug/L	-42.812 ppb	04:42:34
1	Sr 421.552†	114.7	86.5	0.5736 ug/L	0.5736 ppb	04:42:34
1	Sc 361.383	893015.0	893015.0	99.217 %		04:43:51
1	Y 371.029	752889.6	752889.6	98.747 %		04:43:51
1	Ag 328.068†	242.6	15.2	0.0775 ug/L	0.0775 ppb	04:43:56
1	As 188.979†	-18.2	2.2	0.9764 ug/L	0.9764 ppb	04:44:16
1	B 249.677†	141.2	515.3	12.294 ug/L	12.294 ppb	04:44:16
1	Ba 233.527†	-3.5	5.6	0.0434 ug/L	0.0434 ppb	04:44:16
1	Be 313.107†	-3769.7	53.8	0.0195 ug/L	0.0195 ppb	04:43:56
1	Cd 226.502†	-181.4	0.5	0.0023 ug/L	0.0023 ppb	04:44:16
1	Co 228.616†	-68.1	-6.8	-0.1401 ug/L	-0.1401 ppb	04:44:16
1	Cr 267.716†	66.1	0.6	0.0094 ug/L	0.0094 ppb	04:44:16
1	Cu 324.752†	5974.1	-55.8	-0.1657 ug/L	-0.1657 ppb	04:43:56
1	Mn 257.610†	476.4	43.4	0.0532 ug/L	0.0532 ppb	04:44:16
1	Mo 202.031†	11.7	5.8	0.4238 ug/L	0.4238 ppb	04:44:16
1	Ni 231.604†	50.9	-1.0	-0.0258 ug/L	-0.0258 ppb	04:44:16
1	P 214.914†	193.0	-7.6	-4.5611 ug/L	-4.5611 ppb	04:44:16
1	Pb 220.353†	-54.8	9.8	1.2107 ug/L	1.2107 ppb	04:44:16
1	S 181.975 Axial†	44.9	8.2	12.012 ug/L	12.012 ppb	04:44:16
1	Sb 206.836†	42.1	5.8	2.0289 ug/L	2.0289 ppb	04:44:16
1	Se 196.026†	-31.4	-10.9	-7.0937 ug/L	-7.0937 ppb	04:44:16
1	Si 251.611†	580.4	50.8	1.6245 ug/L	1.6245 ppb	04:44:16
1	Sn 189.927†	15.8	5.5	0.9897 ug/L	0.9897 ppb	04:44:16
1	Ti 334.940†	-1426.3	-155.8	-0.2307 ug/L	-0.2307 ppb	04:43:56
1	Tl 190.801†	-24.3	6.7	2.1427 ug/L	2.1427 ppb	04:44:16
1	U 409.014†	-2816.3	-22.3	-0.6064 ug/L	-0.6064 ppb	04:43:51
1	V 292.402†	-1488.9	-70.2	-0.4872 ug/L	-0.4872 ppb	04:43:56
1	Zn 213.857†	588.2	35.1	0.3486 ug/L	0.3486 ppb	04:44:16
1	SiO2†	622.8	76.2	5.2274 ug/L	5.2274 ppb	04:45:22
2	Sc Radial	3954.3	3954.3	93.0 %		04:43:19
2	Y RADIAL	4486.4	4486.4	95.62 %		04:42:59
2	Al 396.153Radial†	-117.1	-15.2	-13.812 ug/L	-13.812 ppb	04:42:59
2	Ca 317.933Radial†	19.3	5.2	10.426 ug/L	10.426 ppb	04:43:19
2	Fe 238.204 Radial†	12.5	3.3	42.641 ug/L	42.641 ppb	04:43:19
2	K 766.490 Radial†	2803.4	458.8	85.853 ug/L	85.853 ppb	04:42:59
2	Mg 279.077 IEC†	-0.9	-3.7	-167.37 ug/L	-167.37 ppb	04:43:19
2	Na 589.592 Radial†	-858.4	-183.0	-53.115 ug/L	-53.115 ppb	04:42:59
2	Sr 421.552†	33.8	-0.4	-0.0029 ug/L	-0.0029 ppb	04:42:59
2	Sc 361.383	905940.3	905940.3	100.65 %		04:44:21
2	Y 371.029	763989.2	763989.2	100.20 %		04:44:21
2	Ag 328.068†	260.3	29.3	0.1481 ug/L	0.1481 ppb	04:44:26
2	As 188.979†	-22.7	-2.0	-0.8999 ug/L	-0.8999 ppb	04:44:46
2	B 249.677†	124.1	496.2	11.836 ug/L	11.836 ppb	04:44:46
2	Ba 233.527†	-4.0	5.2	0.0415 ug/L	0.0415 ppb	04:44:46
2	Be 313.107†	-3716.8	160.5	0.0589 ug/L	0.0589 ppb	04:44:26
2	Cd 226.502†	-164.1	20.3	0.2309 ug/L	0.2309 ppb	04:44:46
2	Co 228.616†	-71.1	-8.7	-0.1791 ug/L	-0.1791 ppb	04:44:46
2	Cr 267.716†	92.2	25.6	0.2913 ug/L	0.2913 ppb	04:44:46
2	Cu 324.752†	5999.7	-116.4	-0.3464 ug/L	-0.3464 ppb	04:44:26
2	Mn 257.610†	460.8	21.0	0.0346 ug/L	0.0346 ppb	04:44:46
2	Mo 202.031†	21.2	15.0	1.1007 ug/L	1.1007 ppb	04:44:46
2	Ni 231.604†	52.0	-0.7	-0.0173 ug/L	-0.0173 ppb	04:44:46

2	P 214.914†	208.8	5.4	3.3386 ug/L	3.3386 ppb	04:44:46
2	Pb 220.353†	-55.0	10.4	1.2865 ug/L	1.2865 ppb	04:44:46
2	S 181.975 Axial†	43.5	6.1	9.0035 ug/L	9.0035 ppb	04:44:46
2	Sb 206.836†	29.3	-7.6	-2.6148 ug/L	-2.6148 ppb	04:44:46
2	Se 196.026†	-19.7	1.2	0.9042 ug/L	0.9042 ppb	04:44:46
2	Si 251.611†	572.0	34.1	1.0807 ug/L	1.0807 ppb	04:44:46
2	Sn 189.927†	11.9	1.4	0.2577 ug/L	0.2577 ppb	04:44:46
2	Ti 334.940†	-1552.1	-260.2	-0.3779 ug/L	-0.3779 ppb	04:44:26
2	Tl 190.801†	-27.3	4.1	1.3197 ug/L	1.3197 ppb	04:44:46
2	U 409.014†	-2891.6	-56.6	-1.5343 ug/L	-1.5343 ppb	04:44:21
2	V 292.402†	-1464.0	-24.0	-0.1635 ug/L	-0.1635 ppb	04:44:26
2	Zn 213.857†	576.1	14.6	0.1409 ug/L	0.1409 ppb	04:44:46
2	SiO2†	579.7	24.5	1.6515 ug/L	1.6515 ppb	04:45:27
3	Sc Radial	3971.2	3971.2	93.4 %		04:43:44
3	Y RADIAL	4574.7	4574.7	97.50 %		04:43:24
3	Al 396.153Radial†	-111.1	-8.2	-7.4625 ug/L	-7.4625 ppb	04:43:24
3	Ca 317.933Radial†	15.9	1.6	3.2134 ug/L	3.2134 ppb	04:43:44
3	Fe 238.204 Radial†	11.9	2.6	33.518 ug/L	33.518 ppb	04:43:44
3	K 766.490 Radial†	2706.8	342.4	64.083 ug/L	64.083 ppb	04:43:24
3	Mg 279.077 IEC†	1.8	-0.8	-36.254 ug/L	-36.254 ppb	04:43:44
3	Na 589.592 Radial†	-839.0	-158.3	-45.952 ug/L	-45.952 ppb	04:43:24
3	Sr 421.552†	40.6	6.7	0.0442 ug/L	0.0442 ppb	04:43:24
3	Sc 361.383	900646.4	900646.4	100.06 %		04:44:51
3	Y 371.029	759933.8	759933.8	99.671 %		04:44:51
3	Ag 328.068†	228.7	-0.8	0.0079 ug/L	0.0079 ppb	04:44:56
3	As 188.979†	-20.8	-0.3	-0.1139 ug/L	-0.1139 ppb	04:45:16
3	B 249.677†	101.8	474.7	11.323 ug/L	11.323 ppb	04:45:16
3	Ba 233.527†	9.3	18.5	0.1452 ug/L	0.1452 ppb	04:45:16
3	Be 313.107†	-3698.2	157.4	0.0580 ug/L	0.0580 ppb	04:44:56
3	Cd 226.502†	-184.1	-0.6	-0.0109 ug/L	-0.0109 ppb	04:45:16
3	Co 228.616†	-62.0	-0.1	-0.0005 ug/L	-0.0005 ppb	04:45:16
3	Cr 267.716†	96.1	30.1	0.3414 ug/L	0.3414 ppb	04:45:16
3	Cu 324.752†	5916.0	-164.9	-0.4925 ug/L	-0.4925 ppb	04:44:56
3	Mn 257.610†	471.5	34.4	0.0434 ug/L	0.0434 ppb	04:45:16
3	Mo 202.031†	12.5	6.4	0.4736 ug/L	0.4736 ppb	04:45:16
3	Ni 231.604†	64.8	12.5	0.3168 ug/L	0.3168 ppb	04:45:16
3	P 214.914†	209.7	7.6	4.6621 ug/L	4.6621 ppb	04:45:16
3	Pb 220.353†	-50.6	14.4	1.7823 ug/L	1.7823 ppb	04:45:16
3	S 181.975 Axial†	44.4	7.4	10.784 ug/L	10.784 ppb	04:45:16
3	Sb 206.836†	40.5	3.8	1.3433 ug/L	1.3433 ppb	04:45:16
3	Se 196.026†	-23.1	-2.4	-1.4624 ug/L	-1.4624 ppb	04:45:16
3	Si 251.611†	598.4	63.8	2.0420 ug/L	2.0420 ppb	04:45:16
3	Sn 189.927†	13.1	2.7	0.4820 ug/L	0.4820 ppb	04:45:16
3	Ti 334.940†	-1486.8	-204.1	-0.3045 ug/L	-0.3045 ppb	04:44:56
3	Tl 190.801†	-27.3	3.9	1.2432 ug/L	1.2432 ppb	04:45:16
3	U 409.014†	-2889.1	-70.9	-1.9216 ug/L	-1.9216 ppb	04:44:51
3	V 292.402†	-1439.9	-8.6	-0.0620 ug/L	-0.0620 ppb	04:44:56
3	Zn 213.857†	590.7	32.6	0.3211 ug/L	0.3211 ppb	04:45:16
3	SiO2†	579.3	27.5	1.8735 ug/L	1.8735 ppb	04:45:32

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	899867.2	99.978 %		0.7219				0.72%
Sc Radial	3959.9	93.1 %		0.23				0.25%
Y 371.029	758937.5	99.540 %		0.7366				0.74%
Y RADIAL	4502.2	95.95 %		1.407				1.47%
Ag 328.068†	14.6	0.0778 ug/L		0.07013	0.0778 ppb		0.07013	90.12%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-5.2	-4.7326 ug/L		10.70887	-4.7326 ppb		10.70887	226.28%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.0	-0.0125 ug/L		0.94227	-0.0125 ppb		0.94227	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	495.4	11.817 ug/L		0.4858	11.817 ppb		0.4858	4.11%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	9.7	0.0767 ug/L		0.05932	0.0767 ppb		0.05932	77.37%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	123.9	0.0455 ug/L		0.02249	0.0455 ppb		0.02249	49.46%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	3.9	7.6715 ug/L		3.89646	7.6715 ppb		3.89646	50.79%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated					
Cd 226.502†	6.7	0.0741 ug/L	0.13596	0.0741 ppb	0.13596 183.55%
QC value within limits for Cd 226.502 Recovery = Not calculated					
Co 228.616†	-5.2	-0.1066 ug/L	0.09390	-0.1066 ppb	0.09390 88.11%
QC value within limits for Co 228.616 Recovery = Not calculated					
Cr 267.716†	18.8	0.2140 ug/L	0.17901	0.2140 ppb	0.17901 83.63%
QC value within limits for Cr 267.716 Recovery = Not calculated					
Cu 324.752†	-112.4	-0.3349 ug/L	0.16366	-0.3349 ppb	0.16366 48.88%
QC value within limits for Cu 324.752 Recovery = Not calculated					
Fe 238.204 Radial†	2.7	35.251 ug/L	6.6940	35.251 ppb	6.6940 18.99%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated					
K 766.490 Radial†	362.4	67.815 ug/L	16.4926	67.815 ppb	16.4926 24.32%
QC value within limits for K 766.490 Radial Recovery = Not calculated					
Mg 279.077 IEC†	-1.8	-81.627 ug/L	74.2965	-81.627 ppb	74.2965 91.02%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated					
Mn 257.610†	32.9	0.0437 ug/L	0.00933	0.0437 ppb	0.00933 21.35%
QC value within limits for Mn 257.610 Recovery = Not calculated					
Mo 202.031†	9.1	0.6660 ug/L	0.37726	0.6660 ppb	0.37726 56.64%
QC value within limits for Mo 202.031 Recovery = Not calculated					
Na 589.592 Radial†	-163.0	-47.293 ug/L	5.2807	-47.293 ppb	5.2807 11.17%
QC value within limits for Na 589.592 Radial Recovery = Not calculated					
Ni 231.604†	3.6	0.0912 ug/L	0.19539	0.0912 ppb	0.19539 214.19%
QC value within limits for Ni 231.604 Recovery = Not calculated					
P 214.914†	1.8	1.1465 ug/L	4.98705	1.1465 ppb	4.98705 434.97%
QC value within limits for P 214.914 Recovery = Not calculated					
Pb 220.353†	11.5	1.4265 ug/L	0.31043	1.4265 ppb	0.31043 21.76%
QC value within limits for Pb 220.353 Recovery = Not calculated					
S 181.975 Axial†	7.2	10.600 ug/L	1.5125	10.600 ppb	1.5125 14.27%
QC value within limits for S 181.975 Axial Recovery = Not calculated					
Sb 206.836†	0.7	0.2525 ug/L	2.50669	0.2525 ppb	2.50669 992.88%
QC value within limits for Sb 206.836 Recovery = Not calculated					
Se 196.026†	-4.0	-2.5506 ug/L	4.10853	-2.5506 ppb	4.10853 161.08%
QC value within limits for Se 196.026 Recovery = Not calculated					
Si 251.611†	49.6	1.5824 ug/L	0.48206	1.5824 ppb	0.48206 30.46%
QC value within limits for Si 251.611 Recovery = Not calculated					
Sn 189.927†	3.2	0.5765 ug/L	0.37503	0.5765 ppb	0.37503 65.05%
QC value within limits for Sn 189.927 Recovery = Not calculated					
Sr 421.552†	30.9	0.2049 ug/L	0.32011	0.2049 ppb	0.32011 156.21%
QC value within limits for Sr 421.552 Recovery = Not calculated					
Ti 334.940†	-206.7	-0.3044 ug/L	0.07358	-0.3044 ppb	0.07358 24.17%
QC value within limits for Ti 334.940 Recovery = Not calculated					
Tl 190.801†	4.9	1.5685 ug/L	0.49873	1.5685 ppb	0.49873 31.80%
QC value within limits for Tl 190.801 Recovery = Not calculated					
U 409.014†	-49.9	-1.3541 ug/L	0.67585	-1.3541 ppb	0.67585 49.91%
QC value within limits for U 409.014 Recovery = Not calculated					
V 292.402†	-34.3	-0.2376 ug/L	0.22209	-0.2376 ppb	0.22209 93.49%
QC value within limits for V 292.402 Recovery = Not calculated					
Zn 213.857†	27.5	0.2702 ug/L	0.11282	0.2702 ppb	0.11282 41.76%
QC value within limits for Zn 213.857 Recovery = Not calculated					
SiO2†	42.7	2.9175 ug/L	2.00354	2.9175 ppb	2.00354 68.67%
QC value within limits for SiO2 Recovery = Not calculated					
All analyte(s) passed QC.					

Sequence No.: 104

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/24/2010 05:51:19

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	3844.7	3844.7	90.4 %		05:53:31
1	Y RADIAL	4356.6	4356.6	92.85 %		05:53:11
1	Al 396.153Radial†	5271.9	5943.2	5357.8 ug/L	5357.8 ppb	05:53:11
1	Ca 317.933Radial†	2441.1	2685.2	5342.5 ug/L	5342.5 ppb	05:53:31
1	Fe 238.204 Radial†	372.7	402.2	5196.7 ug/L	5196.7 ppb	05:53:31
1	K 766.490 Radial†	32610.6	33521.7	6264.9 ug/L	6264.9 ppb	05:53:11
1	Mg 279.077 IEC†	109.2	118.1	5366.9 ug/L	5366.9 ppb	05:53:31
1	Na 589.592 Radial†	31190.6	35247.8	10229 ug/L	10229 ppb	05:53:11
1	Sr 421.552†	70510.2	77971.6	516.75 ug/L	516.75 ppb	05:53:11
1	Sc 361.383	886306.6	886306.6	98.472 %		05:54:29
1	Y 371.029	737464.2	737464.2	96.724 %		05:54:29
1	Ag 328.068†	108790.1	110249.3	509.46 ug/L	509.46 ppb	05:54:34
1	As 188.979†	1102.8	1140.5	518.34 ug/L	518.34 ppb	05:54:54
1	B 249.677†	20140.4	20825.9	494.72 ug/L	494.72 ppb	05:54:34
1	Ba 233.527†	63892.2	64893.0	508.14 ug/L	508.14 ppb	05:54:34
1	Be 313.107†	1301968.5	1326030.0	495.29 ug/L	495.29 ppb	05:54:29
1	Cd 226.502†	43413.0	44270.2	513.74 ug/L	513.74 ppb	05:54:34
1	Co 228.616†	23973.1	24407.2	510.39 ug/L	510.39 ppb	05:54:34
1	Cr 267.716†	44595.0	45221.1	508.20 ug/L	508.20 ppb	05:54:34
1	Cu 324.752†	169215.8	165765.2	497.78 ug/L	497.78 ppb	05:54:34
1	Mn 257.610†	433755.3	440050.9	493.67 ug/L	493.67 ppb	05:54:29
1	Mo 202.031†	6837.4	6937.4	508.17 ug/L	508.17 ppb	05:54:54
1	Ni 231.604†	19949.5	20206.8	513.31 ug/L	513.31 ppb	05:54:34
1	P 214.914†	4356.1	4221.6	2464.8 ug/L	2464.8 ppb	05:54:54
1	Pb 220.353†	4004.0	4131.1	513.49 ug/L	513.49 ppb	05:54:54
1	S 181.975 Axial†	747.5	722.1	1056.8 ug/L	1056.8 ppb	05:54:54
1	Sb 206.836†	1489.5	1475.9	532.93 ug/L	532.93 ppb	05:54:54
1	Se 196.026†	747.3	779.6	531.67 ug/L	531.67 ppb	05:54:54
1	Si 251.611†	78378.8	79061.2	2530.0 ug/L	2530.0 ppb	05:54:34
1	Sn 189.927†	2830.2	2863.7	518.72 ug/L	518.72 ppb	05:54:54
1	Ti 334.940†	318066.4	324285.0	490.34 ug/L	490.34 ppb	05:54:34
1	Tl 190.801†	1524.2	1579.1	509.99 ug/L	509.99 ppb	05:54:54
1	U 409.014†	14822.2	17868.5	481.09 ug/L	481.09 ppb	05:54:34
1	V 292.402†	69741.9	72254.8	508.38 ug/L	508.38 ppb	05:54:34
1	Zn 213.857†	50762.4	50992.6	506.95 ug/L	506.95 ppb	05:54:34
1	SiO2†	78520.6	79187.8	5427.1 ug/L	5427.1 ppb	05:56:01
2	Sc Radial	3915.3	3915.3	92.0 %		05:53:56
2	Y RADIAL	4325.7	4325.7	92.19 %		05:53:36
2	Al 396.153Radial†	5224.2	5786.3	5216.1 ug/L	5216.1 ppb	05:53:36
2	Ca 317.933Radial†	2472.8	2670.9	5314.1 ug/L	5314.1 ppb	05:53:56
2	Fe 238.204 Radial†	372.2	394.2	5094.1 ug/L	5094.1 ppb	05:53:56
2	K 766.490 Radial†	31871.7	32068.5	5993.2 ug/L	5993.2 ppb	05:53:36
2	Mg 279.077 IEC†	109.2	115.9	5265.7 ug/L	5265.7 ppb	05:53:56
2	Na 589.592 Radial†	30615.9	34001.3	9867.3 ug/L	9867.3 ppb	05:53:36
2	Sr 421.552†	69894.8	75896.5	502.99 ug/L	502.99 ppb	05:53:36
2	Sc 361.383	899704.5	899704.5	99.960 %		05:55:00
2	Y 371.029	747981.1	747981.1	98.103 %		05:55:00
2	Ag 328.068†	109650.3	109464.6	505.81 ug/L	505.81 ppb	05:55:05
2	As 188.979†	1088.6	1109.6	504.39 ug/L	504.39 ppb	05:55:25
2	B 249.677†	20402.6	20783.7	493.74 ug/L	493.74 ppb	05:55:05
2	Ba 233.527†	64526.9	64561.7	505.54 ug/L	505.54 ppb	05:55:05
2	Be 313.107†	1318842.5	1323221.5	494.24 ug/L	494.24 ppb	05:55:00
2	Cd 226.502†	43802.1	44002.9	510.64 ug/L	510.64 ppb	05:55:05
2	Co 228.616†	24217.5	24289.1	507.91 ug/L	507.91 ppb	05:55:05
2	Cr 267.716†	44895.4	44847.3	504.00 ug/L	504.00 ppb	05:55:05
2	Cu 324.752†	170819.1	164810.1	494.91 ug/L	494.91 ppb	05:55:05
2	Mn 257.610†	441023.5	440762.5	494.46 ug/L	494.46 ppb	05:55:00
2	Mo 202.031†	6824.0	6820.6	499.61 ug/L	499.61 ppb	05:55:25
2	Ni 231.604†	20017.2	19972.9	507.36 ug/L	507.36 ppb	05:55:05



2	P 214.914†	4327.2	4126.9	2407.8 ug/L	2407.8 ppb	05:55:25
2	Pb 220.353†	3998.1	4064.7	505.22 ug/L	505.22 ppb	05:55:25
2	S 181.975 Axial†	740.7	704.0	1030.3 ug/L	1030.3 ppb	05:55:25
2	Sb 206.836†	1493.1	1457.0	526.01 ug/L	526.01 ppb	05:55:25
2	Se 196.026†	731.7	752.6	513.57 ug/L	513.57 ppb	05:55:25
2	Si 251.611†	79170.1	78667.5	2517.5 ug/L	2517.5 ppb	05:55:05
2	Sn 189.927†	2821.7	2812.4	509.44 ug/L	509.44 ppb	05:55:25
2	Ti 334.940†	320811.5	322221.2	487.23 ug/L	487.23 ppb	05:55:05
2	Tl 190.801†	1518.5	1550.3	500.75 ug/L	500.75 ppb	05:55:25
2	U 409.014†	14893.9	17716.0	477.00 ug/L	477.00 ppb	05:55:05
2	V 292.402†	70213.1	71671.6	504.22 ug/L	504.22 ppb	05:55:05
2	Zn 213.857†	51347.7	50810.4	505.18 ug/L	505.18 ppb	05:55:05
2	SiO2†	77915.8	77395.4	5304.1 ug/L	5304.1 ppb	05:56:07
3	Sc Radial	3871.3	3871.3	91.0 %		05:54:22
3	Y RADIAL	4434.2	4434.2	94.50 %		05:54:01
3	Al 396.153Radial†	5321.9	5958.1	5371.6 ug/L	5371.6 ppb	05:54:01
3	Ca 317.933Radial†	2449.1	2675.5	5323.1 ug/L	5323.1 ppb	05:54:22
3	Fe 238.204 Radial†	363.8	389.5	5032.7 ug/L	5032.7 ppb	05:54:22
3	K 766.490 Radial†	32174.1	32794.3	6128.9 ug/L	6128.9 ppb	05:54:01
3	Mg 279.077 IEC†	108.8	116.8	5308.1 ug/L	5308.1 ppb	05:54:22
3	Na 589.592 Radial†	31353.4	35189.6	10212 ug/L	10212 ppb	05:54:01
3	Sr 421.552†	71282.2	78284.1	518.82 ug/L	518.82 ppb	05:54:01
3	Sc 361.383	900124.7	900124.7	100.01 %		05:55:31
3	Y 371.029	748656.0	748656.0	98.192 %		05:55:31
3	Ag 328.068†	107186.0	106949.3	494.21 ug/L	494.21 ppb	05:55:36
3	As 188.979†	1114.1	1134.6	515.53 ug/L	515.53 ppb	05:55:56
3	B 249.677†	19824.3	20195.9	479.75 ug/L	479.75 ppb	05:55:36
3	Ba 233.527†	63183.7	63188.6	494.79 ug/L	494.79 ppb	05:55:36
3	Be 313.107†	1321148.0	1324910.9	494.84 ug/L	494.84 ppb	05:55:31
3	Cd 226.502†	42842.0	43022.4	499.26 ug/L	499.26 ppb	05:55:36
3	Co 228.616†	23695.9	23756.2	496.80 ug/L	496.80 ppb	05:55:36
3	Cr 267.716†	44155.8	44086.8	495.45 ug/L	495.45 ppb	05:55:36
3	Cu 324.752†	166673.3	160584.8	482.23 ug/L	482.23 ppb	05:55:36
3	Mn 257.610†	440286.9	439820.0	493.40 ug/L	493.40 ppb	05:55:31
3	Mo 202.031†	6862.1	6855.6	502.16 ug/L	502.16 ppb	05:55:56
3	Ni 231.604†	19671.5	19617.8	498.34 ug/L	498.34 ppb	05:55:36
3	P 214.914†	4394.1	4191.8	2449.9 ug/L	2449.9 ppb	05:55:56
3	Pb 220.353†	4040.4	4105.2	510.29 ug/L	510.29 ppb	05:55:56
3	S 181.975 Axial†	756.3	719.2	1052.6 ug/L	1052.6 ppb	05:55:56
3	Sb 206.836†	1495.4	1458.6	526.71 ug/L	526.71 ppb	05:55:56
3	Se 196.026†	731.1	751.8	512.80 ug/L	512.80 ppb	05:55:56
3	Si 251.611†	77203.4	76664.0	2453.2 ug/L	2453.2 ppb	05:55:36
3	Sn 189.927†	2849.9	2839.3	514.32 ug/L	514.32 ppb	05:55:56
3	Ti 334.940†	313647.3	314907.7	476.17 ug/L	476.17 ppb	05:55:36
3	Tl 190.801†	1524.7	1555.8	502.49 ug/L	502.49 ppb	05:55:56
3	U 409.014†	14516.0	17331.2	466.62 ug/L	466.62 ppb	05:55:36
3	V 292.402†	68844.5	70270.2	494.53 ug/L	494.53 ppb	05:55:36
3	Zn 213.857†	50022.4	49461.3	491.72 ug/L	491.72 ppb	05:55:36
3	SiO2†	78397.1	77840.2	5334.6 ug/L	5334.6 ppb	05:56:12

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	895378.6	99.480 %	0.8732			0.88%
Sc Radial	3877.1	91.1 %	0.84			0.92%
Y 371.029	744700.4	97.673 %	0.8231			0.84%
Y RADIAL	4372.2	93.18 %	1.191			1.28%
Ag 328.068†	108887.8	503.16 ug/L	7.963	503.16 ppb	7.963	1.58%
QC value within limits for Ag 328.068 Recovery = 100.63%						
Al 396.153Radial†	5895.9	5315.2 ug/L	86.09	5315.2 ppb	86.09	1.62%
QC value within limits for Al 396.153Radial Recovery = 106.30%						
As 188.979†	1128.2	512.76 ug/L	7.376	512.76 ppb	7.376	1.44%
QC value within limits for As 188.979 Recovery = 102.55%						
B 249.677†	20601.8	489.40 ug/L	8.373	489.40 ppb	8.373	1.71%
QC value within limits for B 249.677 Recovery = 97.88%						
Ba 233.527†	64214.4	502.83 ug/L	7.077	502.83 ppb	7.077	1.41%
QC value within limits for Ba 233.527 Recovery = 100.57%						
Be 313.107†	1324720.8	494.79 ug/L	0.529	494.79 ppb	0.529	0.11%
QC value within limits for Be 313.107 Recovery = 98.96%						
Ca 317.933Radial†	2677.2	5326.6 ug/L	14.51	5326.6 ppb	14.51	0.27%

QC value within limits for Ca 317.933 Radial Recovery = 106.53%

Cd 226.502†	43765.2	507.88 ug/L	7.624	507.88 ppb	7.624	1.50%
QC value within limits for Cd 226.502 Recovery = 101.58%						
Co 228.616†	24150.8	505.04 ug/L	7.239	505.04 ppb	7.239	1.43%
QC value within limits for Co 228.616 Recovery = 101.01%						
Cr 267.716†	44718.4	502.55 ug/L	6.498	502.55 ppb	6.498	1.29%
QC value within limits for Cr 267.716 Recovery = 100.51%						
Cu 324.752†	163720.0	491.64 ug/L	8.278	491.64 ppb	8.278	1.68%
QC value within limits for Cu 324.752 Recovery = 98.33%						
Fe 238.204 Radial†	395.3	5107.8 ug/L	82.89	5107.8 ppb	82.89	1.62%
QC value within limits for Fe 238.204 Radial Recovery = 102.16%						
K 766.490 Radial†	32794.8	6129.0 ug/L	135.86	6129.0 ppb	135.86	2.22%
QC value greater than the upper limit for K 766.490 Radial Recovery = 122.58%						
Mg 279.077 IEC†	116.9	5313.6 ug/L	50.81	5313.6 ppb	50.81	0.96%
QC value within limits for Mg 279.077 IEC Recovery = 106.27%						
Mn 257.610†	440211.1	493.84 ug/L	0.553	493.84 ppb	0.553	0.11%
QC value within limits for Mn 257.610 Recovery = 98.77%						
Mo 202.031†	6871.2	503.31 ug/L	4.393	503.31 ppb	4.393	0.87%
QC value within limits for Mo 202.031 Recovery = 100.66%						
Na 589.592 Radial†	34812.9	10103 ug/L	204.2	10103 ppb	204.2	2.02%
QC value within limits for Na 589.592 Radial Recovery = 101.03%						
Ni 231.604†	19932.5	506.34 ug/L	7.534	506.34 ppb	7.534	1.49%
QC value within limits for Ni 231.604 Recovery = 101.27%						
P 214.914†	4180.1	2440.8 ug/L	29.54	2440.8 ppb	29.54	1.21%
QC value within limits for P 214.914 Recovery = 97.63%						
Pb 220.353†	4100.3	509.66 ug/L	4.171	509.66 ppb	4.171	0.82%
QC value within limits for Pb 220.353 Recovery = 101.93%						
S 181.975 Axial†	715.1	1046.6 ug/L	14.25	1046.6 ppb	14.25	1.36%
QC value within limits for S 181.975 Axial Recovery = 104.66%						
Sb 206.836†	1463.8	528.55 ug/L	3.810	528.55 ppb	3.810	0.72%
QC value within limits for Sb 206.836 Recovery = 105.71%						
Se 196.026†	761.3	519.35 ug/L	10.683	519.35 ppb	10.683	2.06%
QC value within limits for Se 196.026 Recovery = 103.87%						
Si 251.611†	78130.9	2500.2 ug/L	41.22	2500.2 ppb	41.22	1.65%
QC value within limits for Si 251.611 Recovery = 100.01%						
Sn 189.927†	2838.5	514.16 ug/L	4.644	514.16 ppb	4.644	0.90%
QC value within limits for Sn 189.927 Recovery = 102.83%						
Sr 421.552†	77384.1	512.85 ug/L	8.601	512.85 ppb	8.601	1.68%
QC value within limits for Sr 421.552 Recovery = 102.57%						
Ti 334.940†	320471.3	484.58 ug/L	7.446	484.58 ppb	7.446	1.54%
QC value within limits for Ti 334.940 Recovery = 96.92%						
Tl 190.801†	1561.7	504.41 ug/L	4.911	504.41 ppb	4.911	0.97%
QC value within limits for Tl 190.801 Recovery = 100.88%						
U 409.014†	17638.6	474.90 ug/L	7.458	474.90 ppb	7.458	1.57%
QC value within limits for U 409.014 Recovery = 94.98%						
V 292.402†	71398.9	502.37 ug/L	7.106	502.37 ppb	7.106	1.41%
QC value within limits for V 292.402 Recovery = 100.47%						
Zn 213.857†	50421.4	501.28 ug/L	8.326	501.28 ppb	8.326	1.66%
QC value within limits for Zn 213.857 Recovery = 100.26%						
SiO2†	78141.1	5355.3 ug/L	64.01	5355.3 ppb	64.01	1.20%
QC value within limits for SiO2 Recovery = 100.15%						

QC Failed. Continue with analysis.

Sequence No.: 105

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/24/2010 05:58:22

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	3868.0	3868.0	90.9 %		06:00:35
1	Y RADIAL	4419.5	4419.5	94.19 %		06:00:15
1	Al 396.153Radial†	-130.7	-32.9	-29.812 ug/L	-29.812 ppb	06:00:15
1	Ca 317.933Radial†	16.1	2.2	4.3864 ug/L	4.3864 ppb	06:00:35
1	Fe 238.204 Radial†	8.7	-0.6	-7.3506 ug/L	-7.3506 ppb	06:00:35
1	K 766.490 Radial†	4577.7	2477.7	463.44 ug/L	463.44 ppb	06:00:15
1	Mg 279.077 IEC†	2.2	-0.4	-17.373 ug/L	-17.373 ppb	06:00:35
1	Na 589.592 Radial†	-680.8	-8.3	-2.4174 ug/L	-2.4174 ppb	06:00:15
1	Sr 421.552†	106.1	79.9	0.5292 ug/L	0.5292 ppb	06:00:15
1	Sc 361.383	898968.5	898968.5	99.878 %		06:01:32
1	Y 371.029	759931.2	759931.2	99.671 %		06:01:32
1	Ag 328.068†	364.8	135.9	0.6264 ug/L	0.6264 ppb	06:01:32
1	As 188.979†	-25.0	-4.5	-2.0147 ug/L	-2.0147 ppb	06:01:52
1	B 249.677†	-291.7	80.8	1.9309 ug/L	1.9309 ppb	06:01:52
1	Ba 233.527†	12.8	21.9	0.1693 ug/L	0.1693 ppb	06:01:52
1	Be 313.107†	-3707.6	141.1	0.0517 ug/L	0.0517 ppb	06:01:32
1	Cd 226.502†	-190.7	-7.6	-0.0893 ug/L	-0.0893 ppb	06:01:52
1	Co 228.616†	-64.9	-3.0	-0.0620 ug/L	-0.0620 ppb	06:01:52
1	Cr 267.716†	79.2	13.3	0.1507 ug/L	0.1507 ppb	06:01:52
1	Cu 324.752†	6060.1	-9.7	-0.0244 ug/L	-0.0244 ppb	06:01:32
1	Mn 257.610†	499.7	63.5	0.0711 ug/L	0.0711 ppb	06:01:52
1	Mo 202.031†	8.9	2.8	0.2076 ug/L	0.2076 ppb	06:01:52
1	Ni 231.604†	85.3	33.1	0.8419 ug/L	0.8419 ppb	06:01:52
1	P 214.914†	216.1	14.3	8.7034 ug/L	8.7034 ppb	06:01:52
1	Pb 220.353†	-59.4	5.6	0.6871 ug/L	0.6871 ppb	06:01:52
1	S 181.975 Axial†	45.0	8.0	11.690 ug/L	11.690 ppb	06:01:52
1	Sb 206.836†	40.3	3.7	1.2864 ug/L	1.2864 ppb	06:01:52
1	Se 196.026†	-25.6	-5.0	-3.2984 ug/L	-3.2984 ppb	06:01:52
1	Si 251.611†	641.3	107.9	3.4584 ug/L	3.4584 ppb	06:01:52
1	Sn 189.927†	13.3	2.9	0.5322 ug/L	0.5322 ppb	06:01:52
1	Ti 334.940†	-1538.5	-258.6	-0.3852 ug/L	-0.3852 ppb	06:01:32
1	Tl 190.801†	-29.4	1.7	0.5601 ug/L	0.5601 ppb	06:01:52
1	U 409.014†	-3148.3	-335.9	-9.0751 ug/L	-9.0751 ppb	06:01:32
1	V 292.402†	-1533.2	-104.6	-0.7398 ug/L	-0.7398 ppb	06:01:32
1	Zn 213.857†	565.1	8.1	0.0772 ug/L	0.0772 ppb	06:01:52
1	SiO2†	671.2	120.6	8.2777 ug/L	8.2777 ppb	06:02:48
2	Sc Radial	3889.2	3889.2	91.4 %		06:01:00
2	Y RADIAL	4465.7	4465.7	95.18 %		06:00:40
2	Al 396.153Radial†	-117.4	-17.7	-16.046 ug/L	-16.046 ppb	06:00:40
2	Ca 317.933Radial†	17.1	3.3	6.5037 ug/L	6.5037 ppb	06:01:00
2	Fe 238.204 Radial†	10.9	1.8	22.938 ug/L	22.938 ppb	06:01:00
2	K 766.490 Radial†	4401.4	2256.9	422.24 ug/L	422.24 ppb	06:00:40
2	Mg 279.077 IEC†	4.0	1.7	75.222 ug/L	75.222 ppb	06:01:00
2	Na 589.592 Radial†	-689.8	-14.1	-4.0852 ug/L	-4.0852 ppb	06:00:40
2	Sr 421.552†	63.5	32.7	0.2167 ug/L	0.2167 ppb	06:00:40
2	Sc 361.383	891783.7	891783.7	99.080 %		06:01:57
2	Y 371.029	751795.3	751795.3	98.604 %		06:01:57
2	Ag 328.068†	179.4	-48.2	-0.2076 ug/L	-0.2076 ppb	06:01:57
2	As 188.979†	-19.6	0.8	0.3417 ug/L	0.3417 ppb	06:02:17
2	B 249.677†	-275.5	94.9	2.2604 ug/L	2.2604 ppb	06:02:17
2	Ba 233.527†	8.7	18.0	0.1398 ug/L	0.1398 ppb	06:02:17
2	Be 313.107†	-3747.4	71.1	0.0256 ug/L	0.0256 ppb	06:01:57
2	Cd 226.502†	-205.2	-23.8	-0.2803 ug/L	-0.2803 ppb	06:02:17
2	Co 228.616†	-64.9	-3.6	-0.0725 ug/L	-0.0725 ppb	06:02:17
2	Cr 267.716†	49.8	-15.7	-0.1708 ug/L	-0.1708 ppb	06:02:17
2	Cu 324.752†	6121.9	101.7	0.3126 ug/L	0.3126 ppb	06:01:57
2	Mn 257.610†	460.7	28.1	0.0307 ug/L	0.0307 ppb	06:02:17
2	Mo 202.031†	14.4	8.5	0.6238 ug/L	0.6238 ppb	06:02:17
2	Ni 231.604†	46.5	-5.3	-0.1357 ug/L	-0.1357 ppb	06:02:17

2	P 214.914†	204.1	3.9	2.2985 ug/L	2.2985 ppb	06:02:17
2	Pb 220.353†	-44.9	19.7	2.4361 ug/L	2.4361 ppb	06:02:17
2	S 181.975 Axial†	42.5	5.8	8.5187 ug/L	8.5187 ppb	06:02:17
2	Sb 206.836†	31.6	-4.8	-1.6480 ug/L	-1.6480 ppb	06:02:17
2	Se 196.026†	-27.8	-7.3	-4.7473 ug/L	-4.7473 ppb	06:02:17
2	Si 251.611†	635.7	107.5	3.4398 ug/L	3.4398 ppb	06:02:17
2	Sn 189.927†	9.1	-1.2	-0.2217 ug/L	-0.2217 ppb	06:02:17
2	Ti 334.940†	-1527.8	-260.2	-0.3939 ug/L	-0.3939 ppb	06:01:57
2	Tl 190.801†	-36.5	-5.6	-1.7988 ug/L	-1.7988 ppb	06:02:17
2	U 409.014†	-3194.4	-407.8	-11.021 ug/L	-11.021 ppb	06:01:57
2	V 292.402†	-1489.3	-72.7	-0.5181 ug/L	-0.5181 ppb	06:01:57
2	Zn 213.857†	578.7	26.4	0.2619 ug/L	0.2619 ppb	06:02:17
2	SiO2†	644.5	99.0	6.7828 ug/L	6.7828 ppb	06:02:53
3	Sc Radial	3912.2	3912.2	92.0 %		06:01:25
3	Y RADIAL	4509.5	4509.5	96.11 %		06:01:05
3	Al 396.153Radial†	-117.2	-16.7	-15.077 ug/L	-15.077 ppb	06:01:05
3	Ca 317.933Radial†	16.4	2.4	4.7650 ug/L	4.7650 ppb	06:01:25
3	Fe 238.204 Radial†	8.7	-0.7	-9.5597 ug/L	-9.5597 ppb	06:01:25
3	K 766.490 Radial†	4243.9	2057.3	384.91 ug/L	384.91 ppb	06:01:05
3	Mg 279.077 IEC†	3.3	0.9	40.429 ug/L	40.429 ppb	06:01:25
3	Na 589.592 Radial†	-711.3	-33.0	-9.5777 ug/L	-9.5777 ppb	06:01:05
3	Sr 421.552†	70.0	39.4	0.2608 ug/L	0.2608 ppb	06:01:05
3	Sc 361.383	887351.6	887351.6	98.588 %		06:02:22
3	Y 371.029	749326.0	749326.0	98.280 %		06:02:22
3	Ag 328.068†	208.4	-17.9	-0.0808 ug/L	-0.0808 ppb	06:02:22
3	As 188.979†	-22.4	-2.2	-0.9875 ug/L	-0.9875 ppb	06:02:42
3	B 249.677†	-278.2	90.8	2.1695 ug/L	2.1695 ppb	06:02:42
3	Ba 233.527†	3.7	12.9	0.0990 ug/L	0.0990 ppb	06:02:42
3	Be 313.107†	-3775.8	23.4	0.0080 ug/L	0.0080 ppb	06:02:22
3	Cd 226.502†	-191.1	-10.5	-0.1225 ug/L	-0.1225 ppb	06:02:42
3	Co 228.616†	-76.6	-15.8	-0.3300 ug/L	-0.3300 ppb	06:02:42
3	Cr 267.716†	49.2	-16.1	-0.1787 ug/L	-0.1787 ppb	06:02:42
3	Cu 324.752†	6086.6	96.7	0.2946 ug/L	0.2946 ppb	06:02:22
3	Mn 257.610†	479.4	49.4	0.0528 ug/L	0.0528 ppb	06:02:42
3	Mo 202.031†	5.3	-0.7	-0.0529 ug/L	-0.0529 ppb	06:02:42
3	Ni 231.604†	49.9	-1.7	-0.0439 ug/L	-0.0439 ppb	06:02:42
3	P 214.914†	202.9	3.8	2.2467 ug/L	2.2467 ppb	06:02:42
3	Pb 220.353†	-67.6	-3.6	-0.4424 ug/L	-0.4424 ppb	06:02:42
3	S 181.975 Axial†	37.8	1.3	1.9183 ug/L	1.9183 ppb	06:02:42
3	Sb 206.836†	44.4	8.3	2.8899 ug/L	2.8899 ppb	06:02:42
3	Se 196.026†	-17.1	3.4	2.1960 ug/L	2.1960 ppb	06:02:42
3	Si 251.611†	644.3	119.4	3.8311 ug/L	3.8311 ppb	06:02:42
3	Sn 189.927†	7.7	-2.6	-0.4728 ug/L	-0.4728 ppb	06:02:42
3	Ti 334.940†	-1484.1	-223.6	-0.3370 ug/L	-0.3370 ppb	06:02:22
3	Tl 190.801†	-29.5	1.3	0.4128 ug/L	0.4128 ppb	06:02:42
3	U 409.014†	-3087.2	-315.2	-8.5145 ug/L	-8.5145 ppb	06:02:22
3	V 292.402†	-1501.4	-92.4	-0.6562 ug/L	-0.6562 ppb	06:02:22
3	Zn 213.857†	573.0	23.5	0.2374 ug/L	0.2374 ppb	06:02:42
3	SiO2†	663.8	121.8	8.3690 ug/L	8.3690 ppb	06:02:58

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	892701.3	99.182 %	0.6513			0.66%
Sc Radial	3889.8	91.4 %	0.52			0.57%
Y 371.029	753684.1	98.851 %	0.7278			0.74%
Y RADIAL	4464.9	95.16 %	0.959			1.01%
Ag 328.068†	23.3	0.1127 ug/L	0.44938	0.1127 ppb	0.44938	398.86%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-22.4	-20.311 ug/L	8.2418	-20.311 ppb	8.2418	40.58%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-2.0	-0.8868 ug/L	1.18143	-0.8868 ppb	1.18143	133.22%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	88.8	2.1202 ug/L	0.17019	2.1202 ppb	0.17019	8.03%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	17.6	0.1360 ug/L	0.03532	0.1360 ppb	0.03532	25.97%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	78.5	0.0284 ug/L	0.02201	0.0284 ppb	0.02201	77.47%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	2.6	5.2184 ug/L	1.12911	5.2184 ppb	1.12911	21.64%

QC value within limits for Ca 317.933 Radial	Recovery = Not calculated		
Cd 226.502†	-14.0 -0.1640 ug/L	0.10209 -0.1640 ppb	0.10209 62.25%
QC value within limits for Cd 226.502	Recovery = Not calculated		
Co 228.616†	-7.5 -0.1548 ug/L	0.15180 -0.1548 ppb	0.15180 98.05%
QC value within limits for Co 228.616	Recovery = Not calculated		
Cr 267.716†	-6.2 -0.0663 ug/L	0.18792 -0.0663 ppb	0.18792 283.51%
QC value within limits for Cr 267.716	Recovery = Not calculated		
Cu 324.752†	62.9 0.1942 ug/L	0.18959 0.1942 ppb	0.18959 97.61%
QC value within limits for Cu 324.752	Recovery = Not calculated		
Fe 238.204 Radial†	0.2 2.0093 ug/L	18.15854 2.0093 ppb	18.15854 903.72%
QC value within limits for Fe 238.204 Radial	Recovery = Not calculated		
K 766.490 Radial†	2263.8 423.53 ug/L	39.284 423.53 ppb	39.284 9.28%
QC value greater than the upper limit for K 766.490 Radial	Recovery = Not calculated		
Mg 279.077 IEC†	0.7 32.760 ug/L	46.7715 32.760 ppb	46.7715 142.77%
QC value within limits for Mg 279.077 IEC	Recovery = Not calculated		
Mn 257.610†	47.0 0.0516 ug/L	0.02023 0.0516 ppb	0.02023 39.24%
QC value within limits for Mn 257.610	Recovery = Not calculated		
Mo 202.031†	3.5 0.2595 ug/L	0.34132 0.2595 ppb	0.34132 131.52%
QC value within limits for Mo 202.031	Recovery = Not calculated		
Na 589.592 Radial†	-18.5 -5.3601 ug/L	3.74651 -5.3601 ppb	3.74651 69.90%
QC value within limits for Na 589.592 Radial	Recovery = Not calculated		
Ni 231.604†	8.7 0.2208 ug/L	0.53983 0.2208 ppb	0.53983 244.53%
QC value within limits for Ni 231.604	Recovery = Not calculated		
P 214.914†	7.4 4.4162 ug/L	3.71291 4.4162 ppb	3.71291 84.07%
QC value within limits for P 214.914	Recovery = Not calculated		
Pb 220.353†	7.2 0.8936 ug/L	1.45031 0.8936 ppb	1.45031 162.30%
QC value within limits for Pb 220.353	Recovery = Not calculated		
S 181.975 Axial†	5.0 7.3757 ug/L	4.98518 7.3757 ppb	4.98518 67.59%
QC value within limits for S 181.975 Axial	Recovery = Not calculated		
Sb 206.836†	2.4 0.8428 ug/L	2.30125 0.8428 ppb	2.30125 273.06%
QC value within limits for Sb 206.836	Recovery = Not calculated		
Se 196.026†	-3.0 -1.9499 ug/L	3.66278 -1.9499 ppb	3.66278 187.85%
QC value within limits for Se 196.026	Recovery = Not calculated		
Si 251.611†	111.6 3.5764 ug/L	0.22076 3.5764 ppb	0.22076 6.17%
QC value within limits for Si 251.611	Recovery = Not calculated		
Sn 189.927†	-0.3 -0.0541 ug/L	0.52303 -0.0541 ppb	0.52303 966.43%
QC value within limits for Sn 189.927	Recovery = Not calculated		
Sr 421.552†	50.6 0.3356 ug/L	0.16913 0.3356 ppb	0.16913 50.40%
QC value within limits for Sr 421.552	Recovery = Not calculated		
Ti 334.940†	-247.4 -0.3720 ug/L	0.03062 -0.3720 ppb	0.03062 8.23%
QC value within limits for Ti 334.940	Recovery = Not calculated		
Tl 190.801†	-0.9 -0.2753 ug/L	1.32144 -0.2753 ppb	1.32144 479.98%
QC value within limits for Tl 190.801	Recovery = Not calculated		
U 409.014†	-352.9 -9.5368 ug/L	1.31543 -9.5368 ppb	1.31543 13.79%
QC value within limits for U 409.014	Recovery = Not calculated		
V 292.402†	-89.9 -0.6380 ug/L	0.11195 -0.6380 ppb	0.11195 17.55%
QC value within limits for V 292.402	Recovery = Not calculated		
Zn 213.857†	19.3 0.1922 ug/L	0.10030 0.1922 ppb	0.10030 52.19%
QC value within limits for Zn 213.857	Recovery = Not calculated		
SiO2†	113.8 7.8098 ug/L	0.89060 7.8098 ppb	0.89060 11.40%
QC value within limits for SiO2	Recovery = Not calculated		
QC Failed. Continue with analysis.			

User canceled analysis.

=====  
Analysis Begun

Start Time: 2/24/2010 06:17:09

Plasma On Time: 2/22/2010 05:55:10

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\022310C.sif

Batch ID:

Results Data Set: 022310A

Results Library: C:\pe\Optima3\Results\Results.mdb

=====  
Sequence No.: 104

Autosampler Location: 7

Sample ID: CCV

Date Collected: 2/24/2010 06:17:10

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:  
-----

## Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4033.5	4033.5	94.8 %		06:19:02
1	Y RADIAL	4436.5	4436.5	94.55 %		06:19:02
1	Al 396.153Radial†	5272.5	5671.0	5111.6 ug/L	5111.6 ppb	06:19:02
1	Ca 317.933Radial†	2490.1	2610.4	5193.7 ug/L	5193.7 ppb	06:19:22
1	Fe 238.204 Radial†	375.4	385.7	4984.2 ug/L	4984.2 ppb	06:19:22
1	K 766.490 Radial†	29290.2	28331.6	5294.1 ug/L	5294.1 ppb	06:19:02
1	Mg 279.077 IEC†	109.5	112.7	5124.2 ug/L	5124.2 ppb	06:19:22
1	Na 589.592 Radial†	31786.2	34260.9	9942.6 ug/L	9942.6 ppb	06:19:02
1	Sr 421.552†	71406.2	75265.5	498.81 ug/L	498.81 ppb	06:19:02
1	Sc 361.383	900638.3	900638.3	100.06 %		06:20:19
1	Y 371.029	749075.0	749075.0	98.247 %		06:20:19
1	Ag 328.068†	107720.8	107422.7	496.39 ug/L	496.39 ppb	06:20:25
1	As 188.979†	1111.4	1131.3	514.15 ug/L	514.15 ppb	06:20:45
1	B 249.677†	19698.7	20059.1	476.48 ug/L	476.48 ppb	06:20:25
1	Ba 233.527†	63608.1	63576.7	497.83 ug/L	497.83 ppb	06:20:25
1	Be 313.107†	1329644.7	1332648.8	497.76 ug/L	497.76 ppb	06:20:19
1	Cd 226.502†	43297.6	43453.2	504.27 ug/L	504.27 ppb	06:20:25
1	Co 228.616†	23985.6	24032.2	502.54 ug/L	502.54 ppb	06:20:25
1	Cr 267.716†	44474.4	44380.0	498.74 ug/L	498.74 ppb	06:20:25
1	Cu 324.752†	167152.6	160968.7	483.38 ug/L	483.38 ppb	06:20:25
1	Mn 257.610†	442662.3	441942.8	495.78 ug/L	495.78 ppb	06:20:19
1	Mo 202.031†	6863.8	6853.3	501.99 ug/L	501.99 ppb	06:20:45
1	Ni 231.604†	19898.4	19833.4	503.82 ug/L	503.82 ppb	06:20:25
1	P 214.914†	4387.6	4182.8	2444.1 ug/L	2444.1 ppb	06:20:45
1	Pb 220.353†	4041.9	4104.3	510.13 ug/L	510.13 ppb	06:20:45
1	S 181.975 Axial†	754.3	716.7	1049.0 ug/L	1049.0 ppb	06:20:45
1	Sb 206.836†	1495.2	1457.5	526.26 ug/L	526.26 ppb	06:20:45
1	Se 196.026†	743.8	764.0	520.71 ug/L	520.71 ppb	06:20:45
1	Si 251.611†	77669.3	77085.5	2466.7 ug/L	2466.7 ppb	06:20:25
1	Sn 189.927†	2835.5	2823.2	511.39 ug/L	511.39 ppb	06:20:45
1	Ti 334.940†	323565.7	324640.9	490.89 ug/L	490.89 ppb	06:20:19
1	Tl 190.801†	1530.7	1561.0	504.25 ug/L	504.25 ppb	06:20:45
1	U 409.014†	14467.3	17274.3	465.08 ug/L	465.08 ppb	06:20:25
1	V 292.402†	69345.0	70731.2	497.71 ug/L	497.71 ppb	06:20:25
1	Zn 213.857†	50452.1	49862.2	495.72 ug/L	495.72 ppb	06:20:25
1	SiO2†	76791.5	76190.9	5221.3 ug/L	5221.3 ppb	06:21:53
2	Sc Radial	4003.6	4003.6	94.1 %		06:19:27
2	Y RADIAL	4383.7	4383.7	93.43 %		06:19:27
2	Al 396.153Radial†	5244.4	5682.7	5122.5 ug/L	5122.5 ppb	06:19:27
2	Ca 317.933Radial†	2469.6	2608.4	5189.6 ug/L	5189.6 ppb	06:19:47
2	Fe 238.204 Radial†	375.1	388.4	5018.4 ug/L	5018.4 ppb	06:19:47
2	K 766.490 Radial†	29146.9	28410.0	5308.8 ug/L	5308.8 ppb	06:19:27
2	Mg 279.077 IEC†	110.9	115.1	5230.0 ug/L	5230.0 ppb	06:19:47
2	Na 589.592 Radial†	31374.1	34073.5	9888.2 ug/L	9888.2 ppb	06:19:27
2	Sr 421.552†	70667.3	75042.9	497.34 ug/L	497.34 ppb	06:19:27
2	Sc 361.383	908257.7	908257.7	100.91 %		06:20:51

2	Y 371.029	753518.5	753518.5	98.830 %		06:20:51
2	Ag 328.068†	108151.2	106946.1	494.20 ug/L	494.20 ppb	06:20:56
2	As 188.979†	1100.8	1111.4	505.21 ug/L	505.21 ppb	06:21:16
2	B 249.677†	19907.6	20100.9	477.48 ug/L	477.48 ppb	06:20:56
2	Ba 233.527†	63871.8	63304.7	495.70 ug/L	495.70 ppb	06:20:56
2	Be 313.107†	1333304.1	1325127.9	494.95 ug/L	494.95 ppb	06:20:51
2	Cd 226.502†	43489.8	43280.7	502.26 ug/L	502.26 ppb	06:20:56
2	Co 228.616†	24055.0	23899.9	499.76 ug/L	499.76 ppb	06:20:56
2	Cr 267.716†	44520.5	44052.8	495.07 ug/L	495.07 ppb	06:20:56
2	Cu 324.752†	168022.1	160429.0	481.76 ug/L	481.76 ppb	06:20:56
2	Mn 257.610†	445430.2	440974.5	494.70 ug/L	494.70 ppb	06:20:51
2	Mo 202.031†	6820.1	6752.5	494.62 ug/L	494.62 ppb	06:21:16
2	Ni 231.604†	19944.3	19712.0	500.74 ug/L	500.74 ppb	06:20:56
2	P 214.914†	4349.7	4108.4	2399.2 ug/L	2399.2 ppb	06:21:16
2	Pb 220.353†	4017.9	4046.7	502.96 ug/L	502.96 ppb	06:21:16
2	S 181.975 Axial†	748.3	704.5	1031.1 ug/L	1031.1 ppb	06:21:16
2	Sb 206.836†	1482.6	1432.6	517.28 ug/L	517.28 ppb	06:21:16
2	Se 196.026†	735.6	749.6	511.33 ug/L	511.33 ppb	06:21:16
2	Si 251.611†	78053.5	76815.1	2458.1 ug/L	2458.1 ppb	06:20:56
2	Sn 189.927†	2819.0	2783.1	504.13 ug/L	504.13 ppb	06:21:16
2	Ti 334.940†	325005.2	323354.7	488.94 ug/L	488.94 ppb	06:20:51
2	Tl 190.801†	1523.7	1541.2	497.89 ug/L	497.89 ppb	06:21:16
2	U 409.014†	14565.8	17250.7	464.45 ug/L	464.45 ppb	06:20:56
2	V 292.402†	69452.3	70256.1	494.31 ug/L	494.31 ppb	06:20:56
2	Zn 213.857†	50798.2	49782.2	494.93 ug/L	494.93 ppb	06:20:56
2	SiO2†	78631.7	77370.8	5302.6 ug/L	5302.6 ppb	06:21:58
3	Sc Radial	4016.7	4016.7	94.4 %		06:19:52
3	Y RADIAL	4384.9	4384.9	93.45 %		06:19:52
3	Al 396.153Radial†	5268.6	5690.0	5128.9 ug/L	5128.9 ppb	06:19:52
3	Ca 317.933Radial†	2483.1	2614.0	5200.9 ug/L	5200.9 ppb	06:20:12
3	Fe 238.204 Radial†	377.5	389.5	5033.3 ug/L	5033.3 ppb	06:20:12
3	K 766.490 Radial†	29181.6	28345.2	5296.7 ug/L	5296.7 ppb	06:19:52
3	Mg 279.077 IEC†	116.9	121.0	5500.5 ug/L	5500.5 ppb	06:20:12
3	Na 589.592 Radial†	31049.8	33620.7	9756.8 ug/L	9756.8 ppb	06:19:52
3	Sr 421.552†	70691.2	74821.9	495.87 ug/L	495.87 ppb	06:19:52
3	Sc 361.383	909191.6	909191.6	101.01 %		06:21:22
3	Y 371.029	755388.1	755388.1	99.075 %		06:21:22
3	Ag 328.068†	108199.7	106884.0	493.91 ug/L	493.91 ppb	06:21:27
3	As 188.979†	1110.6	1120.0	509.06 ug/L	509.06 ppb	06:21:47
3	B 249.677†	19857.0	20030.5	475.80 ug/L	475.80 ppb	06:21:27
3	Ba 233.527†	63805.9	63174.4	494.68 ug/L	494.68 ppb	06:21:27
3	Be 313.107†	1335114.5	1325562.9	495.11 ug/L	495.11 ppb	06:21:22
3	Cd 226.502†	43500.5	43247.1	501.87 ug/L	501.87 ppb	06:21:27
3	Co 228.616†	23977.3	23798.5	497.65 ug/L	497.65 ppb	06:21:27
3	Cr 267.716†	44564.1	44050.7	495.05 ug/L	495.05 ppb	06:21:27
3	Cu 324.752†	167675.3	159914.7	480.22 ug/L	480.22 ppb	06:21:27
3	Mn 257.610†	444740.0	439837.9	493.41 ug/L	493.41 ppb	06:21:22
3	Mo 202.031†	6898.5	6823.1	499.79 ug/L	499.79 ppb	06:21:47
3	Ni 231.604†	19893.3	19641.3	498.94 ug/L	498.94 ppb	06:21:27
3	P 214.914†	4403.8	4157.6	2429.4 ug/L	2429.4 ppb	06:21:47
3	Pb 220.353†	4049.6	4073.9	506.36 ug/L	506.36 ppb	06:21:47
3	S 181.975 Axial†	754.6	710.0	1039.2 ug/L	1039.2 ppb	06:21:47
3	Sb 206.836†	1485.1	1433.4	517.81 ug/L	517.81 ppb	06:21:47
3	Se 196.026†	739.1	752.4	513.20 ug/L	513.20 ppb	06:21:47
3	Si 251.611†	77857.0	76541.1	2449.3 ug/L	2449.3 ppb	06:21:27
3	Sn 189.927†	2863.5	2824.3	511.59 ug/L	511.59 ppb	06:21:47
3	Ti 334.940†	325209.2	323225.8	488.72 ug/L	488.72 ppb	06:21:22
3	Tl 190.801†	1532.8	1548.6	500.27 ug/L	500.27 ppb	06:21:47
3	U 409.014†	14644.7	17313.9	466.16 ug/L	466.16 ppb	06:21:27
3	V 292.402†	69469.7	70202.6	494.02 ug/L	494.02 ppb	06:21:27
3	Zn 213.857†	50705.1	49638.3	493.50 ug/L	493.50 ppb	06:21:27
3	SiO2†	78330.2	76992.3	5276.4 ug/L	5276.4 ppb	06:22:03

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	906029.2	100.66 %	0.521			0.52%
Sc Radial	4017.9	94.5 %	0.35			0.37%
Y 371.029	752660.5	98.717 %	0.4253			0.43%
Y RADIAL	4401.7	93.81 %	0.643			0.68%



Ag 328.068†	107084.2	494.83 ug/L	1.354	494.83 ppb	1.354	0.27%
QC value within limits for Ag 328.068 Recovery = 98.97%						
Al 396.153Radial†	5681.2	5121.0 ug/L	8.74	5121.0 ppb	8.74	0.17%
QC value within limits for Al 396.153Radial Recovery = 102.42%						
As 188.979†	1120.9	509.47 ug/L	4.485	509.47 ppb	4.485	0.88%
QC value within limits for As 188.979 Recovery = 101.89%						
B 249.677†	20063.5	476.58 ug/L	0.843	476.58 ppb	0.843	0.18%
QC value within limits for B 249.677 Recovery = 95.32%						
Ba 233.527†	63351.9	496.07 ug/L	1.607	496.07 ppb	1.607	0.32%
QC value within limits for Ba 233.527 Recovery = 99.21%						
Be 313.107†	1327779.9	495.94 ug/L	1.576	495.94 ppb	1.576	0.32%
QC value within limits for Be 313.107 Recovery = 99.19%						
Ca 317.933Radial†	2611.0	5194.7 ug/L	5.72	5194.7 ppb	5.72	0.11%
QC value within limits for Ca 317.933Radial Recovery = 103.89%						
Cd 226.502†	43327.0	502.80 ug/L	1.288	502.80 ppb	1.288	0.26%
QC value within limits for Cd 226.502 Recovery = 100.56%						
Co 228.616†	23910.2	499.99 ug/L	2.452	499.99 ppb	2.452	0.49%
QC value within limits for Co 228.616 Recovery = 100.00%						
Cr 267.716†	44161.2	496.29 ug/L	2.126	496.29 ppb	2.126	0.43%
QC value within limits for Cr 267.716 Recovery = 99.26%						
Cu 324.752†	160437.5	481.78 ug/L	1.582	481.78 ppb	1.582	0.33%
QC value within limits for Cu 324.752 Recovery = 96.36%						
Fe 238.204 Radial†	387.9	5011.9 ug/L	25.17	5011.9 ppb	25.17	0.50%
QC value within limits for Fe 238.204 Radial Recovery = 100.24%						
K 766.490 Radial†	28362.3	5299.8 ug/L	7.84	5299.8 ppb	7.84	0.15%
QC value within limits for K 766.490 Radial Recovery = 106.00%						
Mg 279.077 IEC†	116.3	5284.9 ug/L	194.10	5284.9 ppb	194.10	3.67%
QC value within limits for Mg 279.077 IEC Recovery = 105.70%						
Mn 257.610†	440918.4	494.63 ug/L	1.187	494.63 ppb	1.187	0.24%
QC value within limits for Mn 257.610 Recovery = 98.93%						
Mo 202.031†	6809.6	498.80 ug/L	3.787	498.80 ppb	3.787	0.76%
QC value within limits for Mo 202.031 Recovery = 99.76%						
Na 589.592 Radial†	33985.0	9862.6 ug/L	95.52	9862.6 ppb	95.52	0.97%
QC value within limits for Na 589.592 Radial Recovery = 98.63%						
Ni 231.604†	19728.9	501.17 ug/L	2.468	501.17 ppb	2.468	0.49%
QC value within limits for Ni 231.604 Recovery = 100.23%						
P 214.914†	4149.6	2424.3 ug/L	22.90	2424.3 ppb	22.90	0.94%
QC value within limits for P 214.914 Recovery = 96.97%						
Pb 220.353†	4075.0	506.48 ug/L	3.585	506.48 ppb	3.585	0.71%
QC value within limits for Pb 220.353 Recovery = 101.30%						
S 181.975 Axial†	710.4	1039.8 ug/L	8.97	1039.8 ppb	8.97	0.86%
QC value within limits for S 181.975 Axial Recovery = 103.98%						
Sb 206.836†	1441.2	520.45 ug/L	5.038	520.45 ppb	5.038	0.97%
QC value within limits for Sb 206.836 Recovery = 104.09%						
Se 196.026†	755.3	515.08 ug/L	4.965	515.08 ppb	4.965	0.96%
QC value within limits for Se 196.026 Recovery = 103.02%						
Si 251.611†	76813.9	2458.0 ug/L	8.72	2458.0 ppb	8.72	0.35%
QC value within limits for Si 251.611 Recovery = 98.32%						
Sn 189.927†	2810.2	509.04 ug/L	4.248	509.04 ppb	4.248	0.83%
QC value within limits for Sn 189.927 Recovery = 101.81%						
Sr 421.552†	75043.4	497.34 ug/L	1.470	497.34 ppb	1.470	0.30%
QC value within limits for Sr 421.552 Recovery = 99.47%						
Ti 334.940†	323740.5	489.52 ug/L	1.195	489.52 ppb	1.195	0.24%
QC value within limits for Ti 334.940 Recovery = 97.90%						
Tl 190.801†	1550.2	500.81 ug/L	3.211	500.81 ppb	3.211	0.64%
QC value within limits for Tl 190.801 Recovery = 100.16%						
U 409.014†	17279.6	465.23 ug/L	0.864	465.23 ppb	0.864	0.19%
QC value within limits for U 409.014 Recovery = 93.05%						
V 292.402†	70396.6	495.34 ug/L	2.054	495.34 ppb	2.054	0.41%
QC value within limits for V 292.402 Recovery = 99.07%						
Zn 213.857†	49760.9	494.72 ug/L	1.125	494.72 ppb	1.125	0.23%
QC value within limits for Zn 213.857 Recovery = 98.94%						
SiO2†	76851.3	5266.8 ug/L	41.48	5266.8 ppb	41.48	0.79%
QC value within limits for SiO2 Recovery = 98.49%						
All analyte(s) passed QC.						



Sequence No.: 105

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/24/2010 06:24:14

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	3907.7	3907.7	91.9 %		06:26:26
1	Y RADIAL	4482.7	4482.7	95.54 %		06:26:06
1	Al 396.153Radial†	-117.6	-17.2	-15.673 ug/L	-15.673 ppb	06:26:06
1	Ca 317.933Radial†	16.2	2.2	4.3690 ug/L	4.3690 ppb	06:26:26
1	Fe 238.204 Radial†	10.4	1.2	15.290 ug/L	15.290 ppb	06:26:26
1	K 766.490 Radial†	3359.5	1100.0	205.81 ug/L	205.81 ppb	06:26:06
1	Mg 279.077 IEC†	2.6	0.1	6.0058 ug/L	6.0058 ppb	06:26:26
1	Na 589.592 Radial†	-784.1	-113.1	-32.824 ug/L	-32.824 ppb	06:26:06
1	Sr 421.552†	26.2	-8.3	-0.0550 ug/L	-0.0550 ppb	06:26:06
1	Sc 361.383	896138.7	896138.7	99.564 %		06:27:23
1	Y 371.029	756516.3	756516.3	99.223 %		06:27:23
1	Ag 328.068†	272.0	43.9	0.2078 ug/L	0.2078 ppb	06:27:23
1	As 188.979†	-29.7	-9.3	-4.2054 ug/L	-4.2054 ppb	06:27:43
1	B 249.677†	-402.1	-30.9	-0.7405 ug/L	-0.7405 ppb	06:27:43
1	Ba 233.527†	1.2	10.4	0.0795 ug/L	0.0795 ppb	06:27:43
1	Be 313.107†	-3703.8	133.3	0.0489 ug/L	0.0489 ppb	06:27:23
1	Cd 226.502†	-187.0	-4.5	-0.0547 ug/L	-0.0547 ppb	06:27:43
1	Co 228.616†	-67.5	-5.9	-0.1198 ug/L	-0.1198 ppb	06:27:43
1	Cr 267.716†	74.3	8.6	0.0993 ug/L	0.0993 ppb	06:27:43
1	Cu 324.752†	6104.3	53.9	0.1660 ug/L	0.1660 ppb	06:27:23
1	Mn 257.610†	486.2	51.5	0.0590 ug/L	0.0590 ppb	06:27:43
1	Mo 202.031†	21.4	15.4	1.1266 ug/L	1.1266 ppb	06:27:43
1	Ni 231.604†	81.4	29.4	0.7471 ug/L	0.7471 ppb	06:27:43
1	P 214.914†	197.7	-3.5	-2.1551 ug/L	-2.1551 ppb	06:27:43
1	Pb 220.353†	-79.1	-14.4	-1.7883 ug/L	-1.7883 ppb	06:27:43
1	S 181.975 Axial†	41.7	4.9	7.1335 ug/L	7.1335 ppb	06:27:43
1	Sb 206.836†	38.9	2.3	0.8399 ug/L	0.8399 ppb	06:27:43
1	Se 196.026†	-26.7	-6.1	-3.9879 ug/L	-3.9879 ppb	06:27:43
1	Si 251.611†	598.6	67.1	2.1387 ug/L	2.1387 ppb	06:27:43
1	Sn 189.927†	9.9	-0.4	-0.0808 ug/L	-0.0808 ppb	06:27:43
1	Ti 334.940†	-1485.6	-210.3	-0.3154 ug/L	-0.3154 ppb	06:27:23
1	Tl 190.801†	-33.5	-2.4	-0.7847 ug/L	-0.7847 ppb	06:27:43
1	U 409.014†	-3022.1	-219.0	-5.9204 ug/L	-5.9204 ppb	06:27:23
1	V 292.402†	-1541.4	-117.7	-0.8144 ug/L	-0.8144 ppb	06:27:23
1	Zn 213.857†	592.2	37.1	0.3646 ug/L	0.3646 ppb	06:27:43
1	SiO2†	594.3	45.4	3.0859 ug/L	3.0859 ppb	06:28:39
2	Sc Radial	3882.4	3882.4	91.3 %		06:26:52
2	Y RADIAL	4431.0	4431.0	94.44 %		06:26:32
2	Al 396.153Radial†	-117.2	-17.6	-16.032 ug/L	-16.032 ppb	06:26:32
2	Ca 317.933Radial†	18.2	4.5	8.8951 ug/L	8.8951 ppb	06:26:52
2	Fe 238.204 Radial†	10.6	1.4	18.149 ug/L	18.149 ppb	06:26:52
2	K 766.490 Radial†	3343.8	1106.7	207.06 ug/L	207.06 ppb	06:26:32
2	Mg 279.077 IEC†	3.9	1.6	71.032 ug/L	71.032 ppb	06:26:52
2	Na 589.592 Radial†	-840.0	-180.0	-52.236 ug/L	-52.236 ppb	06:26:32
2	Sr 421.552†	57.6	26.3	0.1742 ug/L	0.1742 ppb	06:26:32
2	Sc 361.383	889663.8	889663.8	98.845 %		06:27:49
2	Y 371.029	750618.1	750618.1	98.449 %		06:27:49
2	Ag 328.068†	212.4	-14.5	-0.0553 ug/L	-0.0553 ppb	06:27:49
2	As 188.979†	-19.1	1.2	0.5286 ug/L	0.5286 ppb	06:28:09
2	B 249.677†	-381.2	-12.7	-0.3049 ug/L	-0.3049 ppb	06:28:09
2	Ba 233.527†	-9.6	-0.6	-0.0049 ug/L	-0.0049 ppb	06:28:09
2	Be 313.107†	-3751.4	58.0	0.0207 ug/L	0.0207 ppb	06:27:49
2	Cd 226.502†	-175.8	5.4	0.0595 ug/L	0.0595 ppb	06:28:09
2	Co 228.616†	-66.5	-5.4	-0.1081 ug/L	-0.1081 ppb	06:28:09
2	Cr 267.716†	52.2	-13.2	-0.1430 ug/L	-0.1430 ppb	06:28:09
2	Cu 324.752†	6058.5	52.2	0.1628 ug/L	0.1628 ppb	06:27:49
2	Mn 257.610†	472.3	40.9	0.0448 ug/L	0.0448 ppb	06:28:09
2	Mo 202.031†	27.2	21.4	1.5705 ug/L	1.5705 ppb	06:28:09
2	Ni 231.604†	71.7	20.3	0.5149 ug/L	0.5149 ppb	06:28:09

2	P 214.914†	209.5	9.9	5.9708 ug/L	5.9708 ppb	06:28:09
2	Pb 220.353†	-50.5	14.0	1.7303 ug/L	1.7303 ppb	06:28:09
2	S 181.975 Axial†	36.9	0.3	0.4237 ug/L	0.4237 ppb	06:28:09
2	Sb 206.836†	49.8	13.7	4.7933 ug/L	4.7933 ppb	06:28:09
2	Se 196.026†	-33.6	-13.3	-8.7307 ug/L	-8.7307 ppb	06:28:09
2	Si 251.611†	589.2	62.0	1.9682 ug/L	1.9682 ppb	06:28:09
2	Sn 189.927†	8.3	-2.0	-0.3585 ug/L	-0.3585 ppb	06:28:09
2	Ti 334.940†	-1539.7	-275.9	-0.4177 ug/L	-0.4177 ppb	06:27:49
2	Tl 190.801†	-34.6	-3.8	-1.2121 ug/L	-1.2121 ppb	06:28:09
2	U 409.014†	-3124.4	-344.6	-9.3139 ug/L	-9.3139 ppb	06:27:49
2	V 292.402†	-1480.4	-67.2	-0.4632 ug/L	-0.4632 ppb	06:27:49
2	Zn 213.857†	559.5	8.3	0.0772 ug/L	0.0772 ppb	06:28:09
2	SiO2†	636.8	92.7	6.3272 ug/L	6.3272 ppb	06:28:44
3	Sc Radial	3892.9	3892.9	91.5 %		06:27:17
3	Y RADIAL	4357.2	4357.2	92.86 %		06:26:57
3	Al 396.153Radial†	-135.9	-37.7	-34.170 ug/L	-34.170 ppb	06:26:57
3	Ca 317.933Radial†	15.1	1.0	2.0376 ug/L	2.0376 ppb	06:27:17
3	Fe 238.204 Radial†	11.9	2.8	35.603 ug/L	35.603 ppb	06:27:17
3	K 766.490 Radial†	3327.2	1078.8	201.83 ug/L	201.83 ppb	06:26:57
3	Mg 279.077 IEC†	0.9	-1.8	-82.791 ug/L	-82.791 ppb	06:27:17
3	Na 589.592 Radial†	-778.8	-110.6	-32.095 ug/L	-32.095 ppb	06:26:57
3	Sr 421.552†	23.5	-11.1	-0.0739 ug/L	-0.0739 ppb	06:26:57
3	Sc 361.383	885640.0	885640.0	98.398 %		06:28:14
3	Y 371.029	748115.1	748115.1	98.121 %		06:28:14
3	Ag 328.068†	231.1	5.5	0.0399 ug/L	0.0399 ppb	06:28:14
3	As 188.979†	-21.0	-0.8	-0.3644 ug/L	-0.3644 ppb	06:28:34
3	B 249.677†	-391.7	-25.1	-0.6054 ug/L	-0.6054 ppb	06:28:34
3	Ba 233.527†	1.3	10.4	0.0812 ug/L	0.0812 ppb	06:28:34
3	Be 313.107†	-3653.8	140.0	0.0518 ug/L	0.0518 ppb	06:28:14
3	Cd 226.502†	-197.5	-17.4	-0.2062 ug/L	-0.2062 ppb	06:28:34
3	Co 228.616†	-60.5	0.5	0.0099 ug/L	0.0099 ppb	06:28:34
3	Cr 267.716†	79.1	14.4	0.1668 ug/L	0.1668 ppb	06:28:34
3	Cu 324.752†	5959.8	-20.3	-0.0549 ug/L	-0.0549 ppb	06:28:14
3	Mn 257.610†	472.0	42.8	0.0549 ug/L	0.0549 ppb	06:28:34
3	Mo 202.031†	8.1	2.1	0.1583 ug/L	0.1583 ppb	06:28:34
3	Ni 231.604†	84.3	33.3	0.8472 ug/L	0.8472 ppb	06:28:34
3	P 214.914†	207.4	8.8	5.2838 ug/L	5.2838 ppb	06:28:34
3	Pb 220.353†	-53.2	11.0	1.3529 ug/L	1.3529 ppb	06:28:34
3	S 181.975 Axial†	32.7	-3.8	-5.6223 ug/L	-5.6223 ppb	06:28:34
3	Sb 206.836†	47.0	11.1	3.8536 ug/L	3.8536 ppb	06:28:34
3	Se 196.026†	-20.6	-0.2	-0.0248 ug/L	-0.0248 ppb	06:28:34
3	Si 251.611†	598.6	74.3	2.3801 ug/L	2.3801 ppb	06:28:34
3	Sn 189.927†	8.2	-2.1	-0.3884 ug/L	-0.3884 ppb	06:28:34
3	Ti 334.940†	-1378.1	-118.8	-0.1694 ug/L	-0.1694 ppb	06:28:14
3	Tl 190.801†	-35.2	-4.6	-1.4722 ug/L	-1.4722 ppb	06:28:34
3	U 409.014†	-3040.7	-273.9	-7.4061 ug/L	-7.4061 ppb	06:28:14
3	V 292.402†	-1491.0	-84.9	-0.6077 ug/L	-0.6077 ppb	06:28:14
3	Zn 213.857†	578.2	29.9	0.2898 ug/L	0.2898 ppb	06:28:34
3	SiO2†	607.3	65.7	4.5068 ug/L	4.5068 ppb	06:28:49

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	890480.8	98.935 %		0.5885				0.59%
Sc Radial	3894.3	91.6 %		0.30				0.33%
Y 371.029	751749.9	98.598 %		0.5657				0.57%
Y RADIAL	4423.6	94.28 %		1.344				1.43%
Ag 328.068†	11.6	0.0641 ug/L		0.13318	0.0641 ppb		0.13318	207.72%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-24.2	-21.958 ug/L		10.5769	-21.958 ppb		10.5769	48.17%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-3.0	-1.3471 ug/L		2.51533	-1.3471 ppb		2.51533	186.73%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-22.9	-0.5503 ug/L		0.22297	-0.5503 ppb		0.22297	40.52%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	6.7	0.0519 ug/L		0.04924	0.0519 ppb		0.04924	94.81%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	110.4	0.0405 ug/L		0.01720	0.0405 ppb		0.01720	42.51%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	2.6	5.1005 ug/L		3.48681	5.1005 ppb		3.48681	68.36%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated						
Cd 226.502†	-5.5	-0.0671 ug/L	0.13325	-0.0671 ppb	0.13325	198.54%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-3.6	-0.0727 ug/L	0.07178	-0.0727 ppb	0.07178	98.79%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	3.3	0.0410 ug/L	0.16289	0.0410 ppb	0.16289	396.84%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	28.6	0.0913 ug/L	0.12662	0.0913 ppb	0.12662	138.69%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	1.8	23.014 ug/L	10.9958	23.014 ppb	10.9958	47.78%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	1095.1	204.90 ug/L	2.729	204.90 ppb	2.729	1.33%
QC value greater than the upper limit for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	-0.0	-1.9177 ug/L	77.21722	-1.9177 ppb	77.21722	>999.9%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	45.1	0.0529 ug/L	0.00732	0.0529 ppb	0.00732	13.84%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	13.0	0.9518 ug/L	0.72217	0.9518 ppb	0.72217	75.87%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	-134.6	-39.052 ug/L	11.4235	-39.052 ppb	11.4235	29.25%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	27.7	0.7030 ug/L	0.17049	0.7030 ppb	0.17049	24.25%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	5.1	3.0332 ug/L	4.50628	3.0332 ppb	4.50628	148.57%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	3.5	0.4316 ug/L	1.93174	0.4316 ppb	1.93174	447.56%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	0.4	0.6450 ug/L	6.38081	0.6450 ppb	6.38081	989.31%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	9.0	3.1623 ug/L	2.06536	3.1623 ppb	2.06536	65.31%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-6.6	-4.2478 ug/L	4.35878	-4.2478 ppb	4.35878	102.61%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	67.8	2.1623 ug/L	0.20692	2.1623 ppb	0.20692	9.57%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	-1.5	-0.2759 ug/L	0.16966	-0.2759 ppb	0.16966	61.49%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	2.3	0.0151 ug/L	0.13808	0.0151 ppb	0.13808	913.26%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	-201.6	-0.3008 ug/L	0.12480	-0.3008 ppb	0.12480	41.48%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	-3.6	-1.1564 ug/L	0.34711	-1.1564 ppb	0.34711	30.02%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	-279.2	-7.5468 ug/L	1.70110	-7.5468 ppb	1.70110	22.54%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	-89.9	-0.6284 ug/L	0.17651	-0.6284 ppb	0.17651	28.09%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	25.1	0.2439 ug/L	0.14913	0.2439 ppb	0.14913	61.15%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	67.9	4.6400 ug/L	1.62478	4.6400 ppb	1.62478	35.02%
QC value within limits for SiO2 Recovery = Not calculated						
QC Failed. Continue with analysis.						

Sequence No.: 10  
 Sample ID: CCV  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 7  
 Date Collected: 2/24/2010 07:41:04  
 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	3842.0	3842.0	90.3 %		07:43:16
1	Y RADIAL	4305.0	4305.0	91.75 %		07:42:56
1	Al 396.153Radial†	5183.4	5849.4	5273.3 ug/L	5273.3 ppb	07:42:56
1	Ca 317.933Radial†	2461.8	2710.1	5391.9 ug/L	5391.9 ppb	07:43:16
1	Fe 238.204 Radial†	370.2	399.7	5164.0 ug/L	5164.0 ppb	07:43:16
1	K 766.490 Radial†	28202.7	28667.1	5356.7 ug/L	5356.7 ppb	07:42:56
1	Mg 279.077 IEC†	111.4	120.5	5478.7 ug/L	5478.7 ppb	07:43:16
1	Na 589.592 Radial†	30575.2	34590.9	10038 ug/L	10038 ppb	07:42:56
1	Sr 421.552†	69501.9	76910.4	509.71 ug/L	509.71 ppb	07:42:56
1	Sc 361.383	900706.2	900706.2	100.07 %		07:44:14
1	Y 371.029	749868.7	749868.7	98.351 %		07:44:14
1	Ag 328.068†	106619.7	106314.3	491.33 ug/L	491.33 ppb	07:44:19
1	As 188.979†	1103.8	1123.5	510.56 ug/L	510.56 ppb	07:44:39
1	B 249.677†	19406.3	19765.4	469.46 ug/L	469.46 ppb	07:44:19
1	Ba 233.527†	62981.8	62946.0	492.90 ug/L	492.90 ppb	07:44:19
1	Be 313.107†	1336660.4	1339559.4	500.29 ug/L	500.29 ppb	07:44:14
1	Cd 226.502†	42926.3	43079.0	499.90 ug/L	499.90 ppb	07:44:19
1	Co 228.616†	23602.0	23647.0	494.52 ug/L	494.52 ppb	07:44:19
1	Cr 267.716†	44130.1	44032.6	494.86 ug/L	494.86 ppb	07:44:19
1	Cu 324.752†	165185.9	158990.9	477.45 ug/L	477.45 ppb	07:44:19
1	Mn 257.610†	443691.3	442937.7	496.90 ug/L	496.90 ppb	07:44:14
1	Mo 202.031†	6838.2	6827.2	500.10 ug/L	500.10 ppb	07:44:39
1	Ni 231.604†	19648.0	19581.7	497.43 ug/L	497.43 ppb	07:44:19
1	P 214.914†	4326.3	4121.2	2407.8 ug/L	2407.8 ppb	07:44:39
1	Pb 220.353†	4002.0	4064.2	505.17 ug/L	505.17 ppb	07:44:39
1	S 181.975 Axial†	759.5	721.9	1056.6 ug/L	1056.6 ppb	07:44:39
1	Sb 206.836†	1468.9	1431.2	516.98 ug/L	516.98 ppb	07:44:39
1	Se 196.026†	731.1	751.2	512.86 ug/L	512.86 ppb	07:44:39
1	Si 251.611†	76635.1	76046.3	2433.4 ug/L	2433.4 ppb	07:44:19
1	Sn 189.927†	2807.9	2795.5	506.39 ug/L	506.39 ppb	07:44:39
1	Ti 334.940†	312338.3	313397.1	473.88 ug/L	473.88 ppb	07:44:19
1	Tl 190.801†	1535.9	1566.0	505.76 ug/L	505.76 ppb	07:44:39
1	U 409.014†	14450.0	17255.9	464.58 ug/L	464.58 ppb	07:44:19
1	V 292.402†	68760.8	70142.2	493.59 ug/L	493.59 ppb	07:44:19
1	Zn 213.857†	50001.4	49408.0	491.18 ug/L	491.18 ppb	07:44:19
1	SiO2†	77931.8	77324.7	5299.3 ug/L	5299.3 ppb	07:45:46
2	Sc Radial	3848.9	3848.9	90.5 %		07:43:41
2	Y RADIAL	4355.9	4355.9	92.83 %		07:43:21
2	Al 396.153Radial†	5266.8	5931.4	5347.3 ug/L	5347.3 ppb	07:43:21
2	Ca 317.933Radial†	2459.0	2702.1	5376.1 ug/L	5376.1 ppb	07:43:41
2	Fe 238.204 Radial†	369.5	398.2	5145.2 ug/L	5145.2 ppb	07:43:41
2	K 766.490 Radial†	28631.6	29085.2	5434.9 ug/L	5434.9 ppb	07:43:21
2	Mg 279.077 IEC†	109.8	118.6	5388.7 ug/L	5388.7 ppb	07:43:41
2	Na 589.592 Radial†	31187.9	35207.4	10217 ug/L	10217 ppb	07:43:21
2	Sr 421.552†	70870.2	78284.8	518.82 ug/L	518.82 ppb	07:43:21
2	Sc 361.383	900169.0	900169.0	100.01 %		07:44:45
2	Y 371.029	749041.9	749041.9	98.242 %		07:44:45
2	Ag 328.068†	106953.4	106711.5	493.15 ug/L	493.15 ppb	07:44:50
2	As 188.979†	1102.7	1123.1	510.38 ug/L	510.38 ppb	07:45:10
2	B 249.677†	19588.5	19959.2	474.08 ug/L	474.08 ppb	07:44:50
2	Ba 233.527†	63064.1	63065.8	493.84 ug/L	493.84 ppb	07:44:50
2	Be 313.107†	1337332.9	1341028.9	500.85 ug/L	500.85 ppb	07:44:45
2	Cd 226.502†	42915.7	43093.9	500.08 ug/L	500.08 ppb	07:44:50
2	Co 228.616†	23657.0	23716.2	495.97 ug/L	495.97 ppb	07:44:50
2	Cr 267.716†	44161.2	44090.0	495.50 ug/L	495.50 ppb	07:44:50
2	Cu 324.752†	166167.8	160071.2	480.69 ug/L	480.69 ppb	07:44:50
2	Mn 257.610†	444340.3	443851.2	497.93 ug/L	497.93 ppb	07:44:45
2	Mo 202.031†	6879.6	6872.8	503.43 ug/L	503.43 ppb	07:45:10
2	Ni 231.604†	19730.5	19675.8	499.82 ug/L	499.82 ppb	07:44:50

2	P 214.914†	4392.0	4189.5	2448.7 ug/L	2448.7 ppb	07:45:10
2	Pb 220.353†	4080.3	4144.8	515.19 ug/L	515.19 ppb	07:45:10
2	S 181.975 Axial†	770.9	733.7	1073.9 ug/L	1073.9 ppb	07:45:10
2	Sb 206.836†	1493.5	1456.6	526.03 ug/L	526.03 ppb	07:45:10
2	Se 196.026†	742.7	763.3	520.79 ug/L	520.79 ppb	07:45:10
2	Si 251.611†	76952.2	76409.0	2445.0 ug/L	2445.0 ppb	07:44:50
2	Sn 189.927†	2847.7	2837.0	513.90 ug/L	513.90 ppb	07:45:10
2	Ti 334.940†	313066.9	314311.9	475.27 ug/L	475.27 ppb	07:44:50
2	Tl 190.801†	1539.6	1570.6	507.25 ug/L	507.25 ppb	07:45:10
2	U 409.014†	14451.7	17266.2	464.85 ug/L	464.85 ppb	07:44:50
2	V 292.402†	68766.0	70188.3	493.96 ug/L	493.96 ppb	07:44:50
2	Zn 213.857†	50116.9	49553.3	492.62 ug/L	492.62 ppb	07:44:50
2	SiO2†	76407.9	75847.4	5197.7 ug/L	5197.7 ppb	07:45:51
3	Sc Radial	3850.7	3850.7	90.5 %		07:44:06
3	Y RADIAL	4348.4	4348.4	92.68 %		07:43:46
3	Al 396.153Radial†	5237.3	5896.0	5315.3 ug/L	5315.3 ppb	07:43:46
3	Ca 317.933Radial†	2466.3	2708.9	5389.5 ug/L	5389.5 ppb	07:44:06
3	Fe 238.204 Radial†	373.6	402.5	5200.6 ug/L	5200.6 ppb	07:44:06
3	K 766.490 Radial†	28627.1	29065.3	5431.2 ug/L	5431.2 ppb	07:43:46
3	Mg 279.077 IEC†	110.5	119.3	5423.9 ug/L	5423.9 ppb	07:44:06
3	Na 589.592 Radial†	30872.1	34842.4	10111 ug/L	10111 ppb	07:43:46
3	Sr 421.552†	70486.4	77824.1	515.77 ug/L	515.77 ppb	07:43:46
3	Sc 361.383	893209.0	893209.0	99.238 %		07:45:16
3	Y 371.029	743207.8	743207.8	97.477 %		07:45:16
3	Ag 328.068†	107826.4	108424.5	501.06 ug/L	501.06 ppb	07:45:21
3	As 188.979†	1095.2	1124.1	510.90 ug/L	510.90 ppb	07:45:41
3	B 249.677†	19798.4	20323.3	482.75 ug/L	482.75 ppb	07:45:21
3	Ba 233.527†	63262.7	63757.3	499.25 ug/L	499.25 ppb	07:45:21
3	Be 313.107†	1321674.1	1335669.4	498.86 ug/L	498.86 ppb	07:45:16
3	Cd 226.502†	42916.2	43428.8	503.96 ug/L	503.96 ppb	07:45:21
3	Co 228.616†	23684.5	23928.2	500.39 ug/L	500.39 ppb	07:45:21
3	Cr 267.716†	44313.7	44587.8	501.09 ug/L	501.09 ppb	07:45:21
3	Cu 324.752†	167241.1	162447.4	487.83 ug/L	487.83 ppb	07:45:21
3	Mn 257.610†	439476.9	442412.5	496.32 ug/L	496.32 ppb	07:45:16
3	Mo 202.031†	6826.6	6872.9	503.44 ug/L	503.44 ppb	07:45:41
3	Ni 231.604†	19754.9	19854.2	504.35 ug/L	504.35 ppb	07:45:21
3	P 214.914†	4355.4	4186.8	2445.6 ug/L	2445.6 ppb	07:45:41
3	Pb 220.353†	3985.3	4080.9	507.25 ug/L	507.25 ppb	07:45:41
3	S 181.975 Axial†	756.8	725.6	1061.9 ug/L	1061.9 ppb	07:45:41
3	Sb 206.836†	1472.0	1446.7	522.51 ug/L	522.51 ppb	07:45:41
3	Se 196.026†	738.8	765.2	522.17 ug/L	522.17 ppb	07:45:41
3	Si 251.611†	77268.3	77327.1	2474.5 ug/L	2474.5 ppb	07:45:21
3	Sn 189.927†	2807.5	2818.6	510.58 ug/L	510.58 ppb	07:45:41
3	Ti 334.940†	314647.7	318344.0	481.36 ug/L	481.36 ppb	07:45:21
3	Tl 190.801†	1524.0	1566.9	506.09 ug/L	506.09 ppb	07:45:41
3	U 409.014†	14633.4	17562.0	472.83 ug/L	472.83 ppb	07:45:21
3	V 292.402†	69127.8	71088.7	500.21 ug/L	500.21 ppb	07:45:21
3	Zn 213.857†	50232.6	50060.4	497.67 ug/L	497.67 ppb	07:45:21
3	SiO2†	77838.5	77884.3	5337.6 ug/L	5337.6 ppb	07:45:57

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	898028.1	99.774 %	0.4646			0.47%
Sc Radial	3847.2	90.4 %	0.11			0.12%
Y 371.029	747372.8	98.024 %	0.4762			0.49%
Y RADIAL	4336.4	92.42 %	0.585			0.63%
Ag 328.068†	107150.1	495.18 ug/L	5.168	495.18 ppb	5.168	1.04%
QC value within limits for Ag 328.068 Recovery = 99.04%						
Al 396.153Radial†	5892.3	5312.0 ug/L	37.14	5312.0 ppb	37.14	0.70%
QC value within limits for Al 396.153Radial Recovery = 106.24%						
As 188.979†	1123.6	510.61 ug/L	0.262	510.61 ppb	0.262	0.05%
QC value within limits for As 188.979 Recovery = 102.12%						
B 249.677†	20016.0	475.43 ug/L	6.747	475.43 ppb	6.747	1.42%
QC value within limits for B 249.677 Recovery = 95.09%						
Ba 233.527†	63256.4	495.33 ug/L	3.430	495.33 ppb	3.430	0.69%
QC value within limits for Ba 233.527 Recovery = 99.07%						
Be 313.107†	1338752.6	500.00 ug/L	1.024	500.00 ppb	1.024	0.20%
QC value within limits for Be 313.107 Recovery = 100.00%						
Ca 317.933Radial†	2707.0	5385.8 ug/L	8.53	5385.8 ppb	8.53	0.16%

QC value within limits for Ca 317.933 Radial Recovery = 107.72%							
Cd 226.502†	43200.6	501.31 ug/L	2.297	501.31 ppb	2.297	0.46%	
QC value within limits for Cd 226.502 Recovery = 100.26%							
Co 228.616†	23763.8	496.96 ug/L	3.058	496.96 ppb	3.058	0.62%	
QC value within limits for Co 228.616 Recovery = 99.39%							
Cr 267.716†	44236.8	497.15 ug/L	3.430	497.15 ppb	3.430	0.69%	
QC value within limits for Cr 267.716 Recovery = 99.43%							
Cu 324.752†	160503.1	481.99 ug/L	5.309	481.99 ppb	5.309	1.10%	
QC value within limits for Cu 324.752 Recovery = 96.40%							
Fe 238.204 Radial†	400.1	5169.9 ug/L	28.18	5169.9 ppb	28.18	0.55%	
QC value within limits for Fe 238.204 Radial Recovery = 103.40%							
K 766.490 Radial†	28939.2	5407.6 ug/L	44.09	5407.6 ppb	44.09	0.82%	
QC value within limits for K 766.490 Radial Recovery = 108.15%							
Mg 279.077 IEC†	119.5	5430.4 ug/L	45.33	5430.4 ppb	45.33	0.83%	
QC value within limits for Mg 279.077 IEC Recovery = 108.61%							
Mn 257.610†	443067.1	497.05 ug/L	0.815	497.05 ppb	0.815	0.16%	
QC value within limits for Mn 257.610 Recovery = 99.41%							
Mo 202.031†	6857.6	502.33 ug/L	1.927	502.33 ppb	1.927	0.38%	
QC value within limits for Mo 202.031 Recovery = 100.47%							
Na 589.592 Radial†	34880.2	10122 ug/L	90.0	10122 ppb	90.0	0.89%	
QC value within limits for Na 589.592 Radial Recovery = 101.22%							
Ni 231.604†	19703.9	500.53 ug/L	3.516	500.53 ppb	3.516	0.70%	
QC value within limits for Ni 231.604 Recovery = 100.11%							
P 214.914†	4165.8	2434.0 ug/L	22.76	2434.0 ppb	22.76	0.94%	
QC value within limits for P 214.914 Recovery = 97.36%							
Pb 220.353†	4096.7	509.20 ug/L	5.284	509.20 ppb	5.284	1.04%	
QC value within limits for Pb 220.353 Recovery = 101.84%							
S 181.975 Axial†	727.1	1064.1 ug/L	8.84	1064.1 ppb	8.84	0.83%	
QC value within limits for S 181.975 Axial Recovery = 106.41%							
Sb 206.836†	1444.8	521.84 ug/L	4.563	521.84 ppb	4.563	0.87%	
QC value within limits for Sb 206.836 Recovery = 104.37%							
Se 196.026†	759.9	518.61 ug/L	5.024	518.61 ppb	5.024	0.97%	
QC value within limits for Se 196.026 Recovery = 103.72%							
Si 251.611†	76594.1	2451.0 ug/L	21.16	2451.0 ppb	21.16	0.86%	
QC value within limits for Si 251.611 Recovery = 98.04%							
Sn 189.927†	2817.0	510.29 ug/L	3.761	510.29 ppb	3.761	0.74%	
QC value within limits for Sn 189.927 Recovery = 102.06%							
Sr 421.552†	77673.1	514.77 ug/L	4.636	514.77 ppb	4.636	0.90%	
QC value within limits for Sr 421.552 Recovery = 102.95%							
Ti 334.940†	315351.0	476.84 ug/L	3.979	476.84 ppb	3.979	0.83%	
QC value within limits for Ti 334.940 Recovery = 95.37%							
Tl 190.801†	1567.8	506.36 ug/L	0.784	506.36 ppb	0.784	0.15%	
QC value within limits for Tl 190.801 Recovery = 101.27%							
U 409.014†	17361.4	467.42 ug/L	4.685	467.42 ppb	4.685	1.00%	
QC value within limits for U 409.014 Recovery = 93.48%							
V 292.402†	70473.1	495.92 ug/L	3.719	495.92 ppb	3.719	0.75%	
QC value within limits for V 292.402 Recovery = 99.18%							
Zn 213.857†	49673.9	493.82 ug/L	3.404	493.82 ppb	3.404	0.69%	
QC value within limits for Zn 213.857 Recovery = 98.76%							
SiO2†	77018.8	5278.2 ug/L	72.32	5278.2 ppb	72.32	1.37%	
QC value within limits for SiO2 Recovery = 98.70%							
All analyte(s) passed QC.							

Sequence No.: 11  
 Sample ID: CCB  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 8  
 Date Collected: 2/24/2010 07:48:06  
 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	4046.3	4046.3	95.1 %		07:49:59
1	Y RADIAL	4467.8	4467.8	95.22 %		07:49:59
1	Al 396.153Radial†	-112.9	-7.9	-7.1911 ug/L	-7.1911 ppb	07:49:59
1	Ca 317.933Radial†	21.6	7.2	14.303 ug/L	14.303 ppb	07:50:19
1	Fe 238.204 Radial†	13.1	3.6	45.757 ug/L	45.757 ppb	07:50:19
1	K 766.490 Radial†	2865.2	455.3	85.182 ug/L	85.182 ppb	07:49:59
1	Mg 279.077 IEC†	2.3	-0.3	-15.454 ug/L	-15.454 ppb	07:50:19
1	Na 589.592 Radial†	-820.5	-122.1	-35.444 ug/L	-35.444 ppb	07:49:59
1	Sr 421.552†	64.5	31.0	0.2055 ug/L	0.2055 ppb	07:49:59
1	Sc 361.383	885902.5	885902.5	98.427 %		07:51:16
1	Y 371.029	749245.1	749245.1	98.269 %		07:51:16
1	Ag 328.068†	222.4	-3.4	0.0022 ug/L	0.0022 ppb	07:51:16
1	As 188.979†	-30.4	-10.3	-4.6492 ug/L	-4.6492 ppb	07:51:36
1	B 249.677†	-398.7	-32.1	-0.7743 ug/L	-0.7743 ppb	07:51:36
1	Ba 233.527†	9.2	18.5	0.1442 ug/L	0.1442 ppb	07:51:36
1	Be 313.107†	-3593.5	202.3	0.0745 ug/L	0.0745 ppb	07:51:16
1	Cd 226.502†	-194.0	-13.8	-0.1661 ug/L	-0.1661 ppb	07:51:36
1	Co 228.616†	-55.7	5.4	0.1145 ug/L	0.1145 ppb	07:51:36
1	Cr 267.716†	80.1	15.4	0.1794 ug/L	0.1794 ppb	07:51:36
1	Cu 324.752†	5950.1	-31.9	-0.0885 ug/L	-0.0885 ppb	07:51:16
1	Mn 257.610†	453.0	23.4	0.0314 ug/L	0.0314 ppb	07:51:36
1	Mo 202.031†	17.1	11.3	0.8273 ug/L	0.8273 ppb	07:51:36
1	Ni 231.604†	69.6	18.4	0.4685 ug/L	0.4685 ppb	07:51:36
1	P 214.914†	205.5	6.7	4.0453 ug/L	4.0453 ppb	07:51:36
1	Pb 220.353†	-58.4	5.7	0.6988 ug/L	0.6988 ppb	07:51:36
1	S 181.975 Axial†	47.8	11.5	16.852 ug/L	16.852 ppb	07:51:36
1	Sb 206.836†	32.8	-3.4	-1.1700 ug/L	-1.1700 ppb	07:51:36
1	Se 196.026†	-14.3	6.2	4.2181 ug/L	4.2181 ppb	07:51:36
1	Si 251.611†	586.3	61.6	1.9649 ug/L	1.9649 ppb	07:51:36
1	Sn 189.927†	6.6	-3.7	-0.6681 ug/L	-0.6681 ppb	07:51:36
1	Ti 334.940†	-1512.1	-254.4	-0.3777 ug/L	-0.3777 ppb	07:51:16
1	Tl 190.801†	-27.8	2.9	0.9396 ug/L	0.9396 ppb	07:51:36
1	U 409.014†	-3100.3	-333.6	-9.0187 ug/L	-9.0187 ppb	07:51:16
1	V 292.402†	-1528.3	-122.3	-0.8610 ug/L	-0.8610 ppb	07:51:16
1	Zn 213.857†	574.8	26.3	0.2542 ug/L	0.2542 ppb	07:51:36
1	SiO2†	614.8	73.1	5.0022 ug/L	5.0022 ppb	07:52:32
2	Sc Radial	4082.3	4082.3	96.0 %		07:50:24
2	Y RADIAL	4514.6	4514.6	96.22 %		07:50:24
2	Al 396.153Radial†	-109.7	-3.5	-3.1860 ug/L	-3.1860 ppb	07:50:24
2	Ca 317.933Radial†	18.0	3.2	6.4593 ug/L	6.4593 ppb	07:50:44
2	Fe 238.204 Radial†	11.7	2.1	26.420 ug/L	26.420 ppb	07:50:44
2	K 766.490 Radial†	2980.3	548.5	102.63 ug/L	102.63 ppb	07:50:24
2	Mg 279.077 IEC†	2.6	-0.1	-3.5029 ug/L	-3.5029 ppb	07:50:44
2	Na 589.592 Radial†	-834.8	-129.5	-37.574 ug/L	-37.574 ppb	07:50:24
2	Sr 421.552†	71.0	37.2	0.2462 ug/L	0.2462 ppb	07:50:24
2	Sc 361.383	889783.9	889783.9	98.858 %		07:51:41
2	Y 371.029	751614.8	751614.8	98.580 %		07:51:41
2	Ag 328.068†	216.0	-10.8	-0.0404 ug/L	-0.0404 ppb	07:51:41
2	As 188.979†	-18.2	2.1	0.9504 ug/L	0.9504 ppb	07:52:01
2	B 249.677†	-426.7	-58.6	-1.4032 ug/L	-1.4032 ppb	07:52:01
2	Ba 233.527†	12.1	21.4	0.1662 ug/L	0.1662 ppb	07:52:01
2	Be 313.107†	-3756.1	53.8	0.0194 ug/L	0.0194 ppb	07:51:41
2	Cd 226.502†	-190.2	-9.1	-0.1089 ug/L	-0.1089 ppb	07:52:01
2	Co 228.616†	-71.9	-10.8	-0.2249 ug/L	-0.2249 ppb	07:52:01
2	Cr 267.716†	66.3	1.1	0.0155 ug/L	0.0155 ppb	07:52:01
2	Cu 324.752†	6074.2	67.3	0.2060 ug/L	0.2060 ppb	07:51:41
2	Mn 257.610†	488.9	57.8	0.0675 ug/L	0.0675 ppb	07:52:01
2	Mo 202.031†	9.7	3.7	0.2747 ug/L	0.2747 ppb	07:52:01
2	Ni 231.604†	68.1	16.6	0.4216 ug/L	0.4216 ppb	07:52:01

2	P 214.914†	210.4	10.8	6.5011 ug/L	6.5011 ppb	07:52:01
2	Pb 220.353†	-58.7	5.7	0.6980 ug/L	0.6980 ppb	07:52:01
2	S 181.975 Axial†	56.0	19.6	28.662 ug/L	28.662 ppb	07:52:01
2	Sb 206.836†	41.8	5.6	1.9709 ug/L	1.9709 ppb	07:52:01
2	Se 196.026†	-30.4	-10.1	-6.5661 ug/L	-6.5661 ppb	07:52:01
2	Si 251.611†	611.9	84.8	2.7166 ug/L	2.7166 ppb	07:52:01
2	Sn 189.927†	14.9	4.6	0.8314 ug/L	0.8314 ppb	07:52:01
2	Ti 334.940†	-1443.7	-178.6	-0.2670 ug/L	-0.2670 ppb	07:51:41
2	Tl 190.801†	-33.6	-2.8	-0.8877 ug/L	-0.8877 ppb	07:52:01
2	U 409.014†	-2953.1	-170.9	-4.6218 ug/L	-4.6218 ppb	07:51:41
2	V 292.402†	-1504.6	-91.5	-0.6442 ug/L	-0.6442 ppb	07:51:41
2	Zn 213.857†	561.3	10.1	0.0940 ug/L	0.0940 ppb	07:52:01
2	SiO2†	642.1	98.0	6.7293 ug/L	6.7293 ppb	07:52:37
3	Sc Radial	3946.8	3946.8	92.8 %		07:50:49
3	Y RADIAL	4396.9	4396.9	93.71 %		07:50:49
3	Al 396.153Radial†	-99.1	4.0	3.5845 ug/L	3.5845 ppb	07:50:49
3	Ca 317.933Radial†	27.9	14.6	29.123 ug/L	29.123 ppb	07:51:09
3	Fe 238.204 Radial†	9.2	-0.3	-3.8675 ug/L	-3.8675 ppb	07:51:09
3	K 766.490 Radial†	2994.1	670.0	125.38 ug/L	125.38 ppb	07:50:49
3	Mg 279.077 IEC†	3.8	1.4	62.848 ug/L	62.848 ppb	07:51:09
3	Na 589.592 Radial†	-967.0	-301.8	-87.571 ug/L	-87.571 ppb	07:50:49
3	Sr 421.552†	34.2	0.1	0.0003 ug/L	0.0003 ppb	07:50:49
3	Sc 361.383	881488.8	881488.8	97.936 %		07:52:06
3	Y 371.029	745084.3	745084.3	97.723 %		07:52:06
3	Ag 328.068†	224.3	-0.3	0.0008 ug/L	0.0008 ppb	07:52:06
3	As 188.979†	-29.8	-9.9	-4.4730 ug/L	-4.4730 ppb	07:52:26
3	B 249.677†	-388.5	-23.7	-0.5665 ug/L	-0.5665 ppb	07:52:26
3	Ba 233.527†	17.9	27.4	0.2125 ug/L	0.2125 ppb	07:52:26
3	Be 313.107†	-3569.7	208.4	0.0770 ug/L	0.0770 ppb	07:52:06
3	Cd 226.502†	-182.6	-3.1	-0.0375 ug/L	-0.0375 ppb	07:52:26
3	Co 228.616†	-51.4	9.5	0.2008 ug/L	0.2008 ppb	07:52:26
3	Cr 267.716†	61.0	-3.7	-0.0393 ug/L	-0.0393 ppb	07:52:26
3	Cu 324.752†	6017.9	67.6	0.2073 ug/L	0.2073 ppb	07:52:06
3	Mn 257.610†	477.1	50.3	0.0534 ug/L	0.0534 ppb	07:52:26
3	Mo 202.031†	19.3	13.6	0.9975 ug/L	0.9975 ppb	07:52:26
3	Ni 231.604†	60.9	9.9	0.2507 ug/L	0.2507 ppb	07:52:26
3	P 214.914†	202.0	4.2	2.5072 ug/L	2.5072 ppb	07:52:26
3	Pb 220.353†	-73.0	-9.5	-1.1721 ug/L	-1.1721 ppb	07:52:26
3	S 181.975 Axial†	48.4	12.4	18.114 ug/L	18.114 ppb	07:52:26
3	Sb 206.836†	36.8	0.9	0.3324 ug/L	0.3324 ppb	07:52:26
3	Se 196.026†	-23.7	-3.5	-2.2859 ug/L	-2.2859 ppb	07:52:26
3	Si 251.611†	586.2	64.4	2.0546 ug/L	2.0546 ppb	07:52:26
3	Sn 189.927†	12.3	2.2	0.3989 ug/L	0.3989 ppb	07:52:26
3	Ti 334.940†	-1441.9	-190.5	-0.2857 ug/L	-0.2857 ppb	07:52:06
3	Tl 190.801†	-26.4	4.3	1.3749 ug/L	1.3749 ppb	07:52:26
3	U 409.014†	-3055.0	-303.1	-8.1886 ug/L	-8.1886 ppb	07:52:06
3	V 292.402†	-1500.5	-101.6	-0.7051 ug/L	-0.7051 ppb	07:52:06
3	Zn 213.857†	576.0	30.4	0.3042 ug/L	0.3042 ppb	07:52:26
3	SiO2†	642.3	104.4	7.1438 ug/L	7.1438 ppb	07:52:42

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	885725.1	98.407 %	0.4611			0.47%
Sc Radial	4025.1	94.6 %	1.65			1.74%
Y 371.029	748648.1	98.191 %	0.4336			0.44%
Y RADIAL	4459.8	95.05 %	1.263			1.33%
Ag 328.068†	-4.8	-0.0125 ug/L	0.02418	-0.0125 ppb	0.02418	193.63%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-2.5	-2.2642 ug/L	5.44658	-2.2642 ppb	5.44658	240.55%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-6.0	-2.7239 ug/L	3.18326	-2.7239 ppb	3.18326	116.86%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-38.2	-0.9147 ug/L	0.43562	-0.9147 ppb	0.43562	47.63%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	22.4	0.1743 ug/L	0.03484	0.1743 ppb	0.03484	19.99%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	154.8	0.0570 ug/L	0.03255	0.0570 ppb	0.03255	57.12%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	8.4	16.629 ug/L	11.5096	16.629 ppb	11.5096	69.22%



QC value within limits for Ca 317.933 Radial Recovery = Not calculated						
Cd 226.502†	-8.7	-0.1042 ug/L	0.06443	-0.1042 ppb	0.06443	61.83%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	1.3	0.0301 ug/L	0.22504	0.0301 ppb	0.22504	747.06%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	4.3	0.0519 ug/L	0.11382	0.0519 ppb	0.11382	219.42%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	34.3	0.1083 ug/L	0.17038	0.1083 ppb	0.17038	157.36%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	1.8	22.770 ug/L	25.0129	22.770 ppb	25.0129	109.85%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	557.9	104.40 ug/L	20.155	104.40 ppb	20.155	19.31%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	0.3	14.630 ug/L	42.1830	14.630 ppb	42.1830	288.32%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	43.8	0.0508 ug/L	0.01820	0.0508 ppb	0.01820	35.84%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	9.5	0.6998 ug/L	0.37791	0.6998 ppb	0.37791	54.00%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	-184.5	-53.530 ug/L	29.5002	-53.530 ppb	29.5002	55.11%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	15.0	0.3803 ug/L	0.11463	0.3803 ppb	0.11463	30.14%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	7.2	4.3512 ug/L	2.01444	4.3512 ppb	2.01444	46.30%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	0.6	0.0749 ug/L	1.07991	0.0749 ppb	1.07991	>999.9%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	14.5	21.209 ug/L	6.4852	21.209 ppb	6.4852	30.58%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	1.0	0.3777 ug/L	1.57093	0.3777 ppb	1.57093	415.88%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-2.5	-1.5446 ug/L	5.43017	-1.5446 ppb	5.43017	351.55%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	70.3	2.2454 ug/L	0.41055	2.2454 ppb	0.41055	18.28%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	1.0	0.1874 ug/L	0.77178	0.1874 ppb	0.77178	411.78%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	22.8	0.1507 ug/L	0.13180	0.1507 ppb	0.13180	87.47%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	-207.8	-0.3101 ug/L	0.05930	-0.3101 ppb	0.05930	19.12%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	1.5	0.4756 ug/L	1.20051	0.4756 ppb	1.20051	252.42%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	-269.2	-7.2764 ug/L	2.33607	-7.2764 ppb	2.33607	32.10%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	-105.1	-0.7368 ug/L	0.11184	-0.7368 ppb	0.11184	15.18%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	22.3	0.2175 ug/L	0.10984	0.2175 ppb	0.10984	50.51%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	91.8	6.2917 ug/L	1.13587	6.2917 ppb	1.13587	18.05%
QC value within limits for SiO2 Recovery = Not calculated						
All analyte(s) passed QC.						

## =====

Analysis Begun

Start Time: 2/24/2010 08:48:43 Plasma On Time: 2/22/2010 05:55:10  
 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\022310I.SIF

Batch ID:

Results Data Set: 022310A

Results Library: C:\pe\Optima3\Results\Results.mdb

=====

Sequence No.: 1  
 Sample ID: 245806001/948071|2  
 Analyst: HSC  
 Initial Sample Wt: *2/24/10*  
 Dilution:

Autosampler Location: 37  
 Date Collected: 2/24/2010 08:48:44  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Replicate Data: 245806001/948071|2

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4011.7	4011.7	94.3 %		08:50:58
1	Y RADIAL	5015.2	5015.2	106.9 %		08:50:38
1	Al 396.153Radial†	27321.5	29079.3	26336 ug/L	26336 ppb	08:50:38
1	Ca 317.933Radial†	5516.3	5833.3	11606 ug/L	11606 ppb	08:50:38
1	Fe 238.204 Radial†	3229.8	3414.3	43988 ug/L	43988 ppb	08:50:58
1	K 766.490 Radial†	21177.2	19897.0	3718.1 ug/L	3718.1 ppb	08:50:38
1	Mg 279.077 IEC†	108.4	112.2	5051.6 ug/L	5051.6 ppb	08:50:58
1	Na 589.592 Radial†	603.8	1380.5	400.63 ug/L	400.63 ppb	08:50:38
1	Sr 421.552†	12050.2	12739.9	84.351 ug/L	84.351 ppb	08:50:38
1	Sc 361.383	921015.0	921015.0	102.33 %		08:51:56
1	Y 371.029	840622.7	840622.7	110.25 %		08:51:56
1	Ag 328.068†	-2583.4	-2753.9	0.8139 ug/L	0.8139 ppb	08:51:56
1	As 188.979†	-9.7	11.1	22.327 ug/L	22.327 ppb	08:52:16
1	B 249.677†	576.5	936.3	15.167 ug/L	15.167 ppb	08:51:56
1	Ba 233.527†	35373.1	34577.6	271.57 ug/L	271.57 ppb	08:51:56
1	Be 313.107†	3839.1	7605.1	4.6764 ug/L	4.6764 ppb	08:51:56
1	Cd 226.502†	217.3	395.7	0.1099 ug/L	0.1099 ppb	08:52:16
1	Co 228.616†	536.0	585.7	10.018 ug/L	10.018 ppb	08:52:16
1	Cr 267.716†	5024.7	4844.4	58.530 ug/L	58.530 ppb	08:52:16
1	Cu 324.752†	125179.8	116255.0	351.32 ug/L	351.32 ppb	08:51:56
1	Mn 257.610†	818912.5	799846.6	900.91 ug/L	900.91 ppb	08:51:56
1	Mo 202.031†	13.8	7.4	4.0924 ug/L	4.0924 ppb	08:52:16
1	Ni 231.604†	1484.6	1398.5	35.540 ug/L	35.540 ppb	08:52:16
1	P 214.914†	859.1	637.6	288.59 ug/L	288.59 ppb	08:52:16
1	Pb 220.353†	883.9	928.8	115.78 ug/L	115.78 ppb	08:52:16
1	S 181.975 Axial†	147.8	107.4	152.37 ug/L	152.37 ppb	08:52:16
1	Sb 206.836†	48.6	10.8	0.0018 ug/L	0.0018 ppb	08:52:16
1	Se 196.026†	-218.9	-193.3	9.5277 ug/L	9.5277 ppb	08:52:16
1	Si 251.611†	613045.4	598565.3	19202 ug/L	19202 ppb	08:51:56
1	Sn 189.927†	-29.9	-39.7	-7.6435 ug/L	-7.6435 ppb	08:52:16
1	Ti 334.940†	547694.4	536516.9	812.48 ug/L	812.48 ppb	08:51:56
1	Tl 190.801†	-71.0	-38.2	-1.4135 ug/L	-1.4135 ppb	08:52:16
1	U 409.014†	4576.1	7288.2	191.80 ug/L	191.80 ppb	08:51:56
1	V 292.402†	7970.7	9219.8	57.207 ug/L	57.207 ppb	08:51:56
1	Zn 213.857†	17749.6	16788.1	161.17 ug/L	161.17 ppb	08:51:56
1	SiO2†	608339.4	593949.0	40809 ug/L	40809 ppb	08:53:13
2	Sc Radial	4044.0	4044.0	95.1 %		08:51:23
2	Y RADIAL	4963.9	4963.9	105.8 %		08:51:03
2	Al 396.153Radial†	27374.0	28903.4	26176 ug/L	26176 ppb	08:51:03
2	Ca 317.933Radial†	5551.5	5823.7	11587 ug/L	11587 ppb	08:51:03
2	Fe 238.204 Radial†	3266.5	3425.6	44133 ug/L	44133 ppb	08:51:23
2	K 766.490 Radial†	21113.9	19651.4	3672.1 ug/L	3672.1 ppb	08:51:03
2	Mg 279.077 IEC†	110.7	113.7	5122.9 ug/L	5122.9 ppb	08:51:23
2	Na 589.592 Radial†	587.4	1358.2	394.15 ug/L	394.15 ppb	08:51:03
2	Sr 421.552†	12045.5	12632.9	83.643 ug/L	83.643 ppb	08:51:03
2	Sc 361.383	913403.8	913403.8	101.48 %		08:52:21
2	Y 371.029	833921.7	833921.7	109.38 %		08:52:21

2	Ag 328.068†	-2514.2	-2706.8	1.0765 ug/L	1.0765 ppb	08:52:21
2	As 188.979†	-14.3	6.5	20.287 ug/L	20.287 ppb	08:52:42
2	B 249.677†	571.8	936.4	15.145 ug/L	15.145 ppb	08:52:21
2	Ba 233.527†	35077.2	34574.0	271.54 ug/L	271.54 ppb	08:52:21
2	Be 313.107†	3727.9	7526.7	4.6471 ug/L	4.6471 ppb	08:52:21
2	Cd 226.502†	212.1	392.3	0.0559 ug/L	0.0559 ppb	08:52:42
2	Co 228.616†	539.9	594.0	10.189 ug/L	10.189 ppb	08:52:42
2	Cr 267.716†	5006.4	4867.3	58.801 ug/L	58.801 ppb	08:52:42
2	Cu 324.752†	124383.2	116489.4	352.03 ug/L	352.03 ppb	08:52:21
2	Mn 257.610†	812005.0	799708.5	900.77 ug/L	900.77 ppb	08:52:21
2	Mo 202.031†	19.1	12.7	4.4944 ug/L	4.4944 ppb	08:52:42
2	Ni 231.604†	1488.6	1414.5	35.947 ug/L	35.947 ppb	08:52:42
2	P 214.914†	862.9	648.3	294.81 ug/L	294.81 ppb	08:52:42
2	Pb 220.353†	890.4	942.4	117.42 ug/L	117.42 ppb	08:52:42
2	S 181.975 Axial†	161.5	122.1	174.03 ug/L	174.03 ppb	08:52:42
2	Sb 206.836†	50.3	12.8	0.7174 ug/L	0.7174 ppb	08:52:42
2	Se 196.026†	-224.8	-200.8	4.9888 ug/L	4.9888 ppb	08:52:42
2	Si 251.611†	608209.0	598791.6	19209 ug/L	19209 ppb	08:52:21
2	Sn 189.927†	-28.4	-38.4	-7.4240 ug/L	-7.4240 ppb	08:52:42
2	Ti 334.940†	543135.4	536484.5	812.42 ug/L	812.42 ppb	08:52:21
2	Tl 190.801†	-69.2	-37.0	-1.0150 ug/L	-1.0150 ppb	08:52:42
2	U 409.014†	4451.7	7202.9	189.47 ug/L	189.47 ppb	08:52:21
2	V 292.402†	7888.7	9203.9	57.077 ug/L	57.077 ppb	08:52:21
2	Zn 213.857†	17642.8	16827.4	161.54 ug/L	161.54 ppb	08:52:21
2	SiO2†	611490.6	602008.0	41363 ug/L	41363 ppb	08:53:19
3	Sc Radial	3997.3	3997.3	94.0 %		08:51:48
3	Y RADIAL	4920.4	4920.4	104.9 %		08:51:28
3	Al 396.153Radial†	27359.9	29224.4	26467 ug/L	26467 ppb	08:51:28
3	Ca 317.933Radial†	5507.6	5845.1	11629 ug/L	11629 ppb	08:51:28
3	Fe 238.204 Radial†	3241.2	3438.7	44303 ug/L	44303 ppb	08:51:48
3	K 766.490 Radial†	21127.1	19924.5	3723.2 ug/L	3723.2 ppb	08:51:28
3	Mg 279.077 IEC†	112.6	117.0	5272.4 ug/L	5272.4 ppb	08:51:48
3	Na 589.592 Radial†	541.2	1316.2	381.98 ug/L	381.98 ppb	08:51:28
3	Sr 421.552†	11949.3	12678.4	83.944 ug/L	83.944 ppb	08:51:28
3	Sc 361.383	903988.3	903988.3	100.44 %		08:52:47
3	Y 371.029	827293.1	827293.1	108.51 %		08:52:47
3	Ag 328.068†	-2468.9	-2687.5	1.2171 ug/L	1.2171 ppb	08:52:47
3	As 188.979†	-23.5	-2.9	16.115 ug/L	16.115 ppb	08:53:07
3	B 249.677†	521.6	892.3	14.064 ug/L	14.064 ppb	08:52:47
3	Ba 233.527†	34845.4	34703.2	272.56 ug/L	272.56 ppb	08:52:47
3	Be 313.107†	3698.8	7536.0	4.6540 ug/L	4.6540 ppb	08:52:47
3	Cd 226.502†	198.5	381.0	-0.0934 ug/L	-0.0934 ppb	08:53:07
3	Co 228.616†	543.7	603.2	10.378 ug/L	10.378 ppb	08:53:07
3	Cr 267.716†	5007.3	4919.5	59.403 ug/L	59.403 ppb	08:53:07
3	Cu 324.752†	123332.2	116719.6	352.74 ug/L	352.74 ppb	08:52:47
3	Mn 257.610†	804543.4	800613.2	901.79 ug/L	901.79 ppb	08:52:47
3	Mo 202.031†	22.6	16.4	4.7768 ug/L	4.7768 ppb	08:53:07
3	Ni 231.604†	1491.2	1432.4	36.400 ug/L	36.400 ppb	08:53:07
3	P 214.914†	861.4	655.6	299.08 ug/L	299.08 ppb	08:53:07
3	Pb 220.353†	891.6	952.7	118.74 ug/L	118.74 ppb	08:53:07
3	S 181.975 Axial†	154.5	116.8	166.20 ug/L	166.20 ppb	08:53:07
3	Sb 206.836†	56.2	19.3	2.9674 ug/L	2.9674 ppb	08:53:07
3	Se 196.026†	-224.6	-202.9	4.1282 ug/L	4.1282 ppb	08:53:07
3	Si 251.611†	602180.5	599031.7	19217 ug/L	19217 ppb	08:52:47
3	Sn 189.927†	-27.3	-37.6	-7.2757 ug/L	-7.2757 ppb	08:53:07
3	Ti 334.940†	538529.0	537472.5	813.91 ug/L	813.91 ppb	08:52:47
3	Tl 190.801†	-88.2	-56.6	-7.3179 ug/L	-7.3179 ppb	08:53:07
3	U 409.014†	4395.5	7192.7	189.18 ug/L	189.18 ppb	08:52:47
3	V 292.402†	7804.2	9200.8	57.035 ug/L	57.035 ppb	08:52:47
3	Zn 213.857†	16822.4	161.46	161.46 ug/L	161.46 ppb	08:52:47
3	SiO2†	607968.0	604776.6	41553 ug/L	41553 ppb	08:53:24

Mean Data: 245806001/948071|2

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	912802.4	101.42 %	0.948			0.93%
Sc Radial	4017.7	94.5 %	0.56			0.59%
Y 371.029	833945.8	109.38 %	0.874			0.80%
Y RADIAL	4966.5	105.8 %	1.01			0.96%
Ag 328.068†	-2716.1	1.0358 ug/L	0.20465	1.0358 ppb	0.20465	19.76%

Al 396.153Radial†	29069.0	26326 ug/L	145.6	26326 ppb	145.6	0.55%
As 188.979†	4.9	19.576 ug/L	3.1665	19.576 ppb	3.1665	16.18%
B 249.677†	921.7	14.792 ug/L	0.6305	14.792 ppb	0.6305	4.26%
Ba 233.527†	34618.3	271.89 ug/L	0.579	271.89 ppb	0.579	0.21%
Be 313.107†	7555.9	4.6591 ug/L	0.01533	4.6591 ppb	0.01533	0.33%
Ca 317.933Radial†	5834.0	11607 ug/L	21.4	11607 ppb	21.4	0.18%
Cd 226.502†	389.6	0.0241 ug/L	0.10529	0.0241 ppb	0.10529	436.07%
Co 228.616†	594.3	10.195 ug/L	0.1802	10.195 ppb	0.1802	1.77%
Cr 267.716†	4877.1	58.911 ug/L	0.4470	58.911 ppb	0.4470	0.76%
Cu 324.752†	116488.0	352.03 ug/L	0.707	352.03 ppb	0.707	0.20%
Fe 238.204 Radial†	3426.2	44141 ug/L	157.5	44141 ppb	157.5	0.36%
K 766.490 Radial†	19824.3	3704.5 ug/L	28.13	3704.5 ppb	28.13	0.76%
Mg 279.077 IEC†	114.3	5149.0 ug/L	112.68	5149.0 ppb	112.68	2.19%
Mn 257.610†	800056.1	901.16 ug/L	0.555	901.16 ppb	0.555	0.06%
Mo 202.031†	12.2	4.4545 ug/L	0.34396	4.4545 ppb	0.34396	7.72%
Na 589.592 Radial†	1351.6	392.25 ug/L	9.469	392.25 ppb	9.469	2.41%
Ni 231.604†	1415.1	35.962 ug/L	0.4301	35.962 ppb	0.4301	1.20%
P 214.914†	647.2	294.16 ug/L	5.270	294.16 ppb	5.270	1.79%
Pb 220.353†	941.3	117.31 ug/L	1.480	117.31 ppb	1.480	1.26%
S 181.975 Axial†	115.5	164.20 ug/L	10.969	164.20 ppb	10.969	6.68%
Sb 206.836†	14.3	1.2289 ug/L	1.54758	1.2289 ppb	1.54758	125.93%
Se 196.026†	-199.0	6.2149 ug/L	2.90106	6.2149 ppb	2.90106	46.68%
Si 251.611†	598796.2	19209 ug/L	7.5	19209 ppb	7.5	0.04%
Sn 189.927†	-38.6	-7.4477 ug/L	0.18502	-7.4477 ppb	0.18502	2.48%
Sr 421.552†	12683.7	83.979 ug/L	0.3556	83.979 ppb	0.3556	0.42%
Ti 334.940†	536824.6	812.94 ug/L	0.843	812.94 ppb	0.843	0.10%
Tl 190.801†	-43.9	-3.2488 ug/L	3.52959	-3.2488 ppb	3.52959	108.64%
U 409.014†	7227.9	190.15 ug/L	1.434	190.15 ppb	1.434	0.75%
V 292.402†	9208.2	57.106 ug/L	0.0893	57.106 ppb	0.0893	0.16%
Zn 213.857†	16812.6	161.39 ug/L	0.194	161.39 ppb	0.194	0.12%
SiO2†	600244.5	41242 ug/L	386.5	41242 ppb	386.5	0.94%

Sequence No.: 2  
 Sample ID: CCV  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 7  
 Date Collected: 2/24/2010 08:55:36  
 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	3844.7	3844.7	90.4 %		08:57:49
1	Y RADIAL	4256.5	4256.5	90.72 %		08:57:29
1	Al 396.153Radial†	5359.4	6040.1	5445.9 ug/L	5445.9 ppb	08:57:29
1	Ca 317.933Radial†	2499.4	2749.7	5470.9 ug/L	5470.9 ppb	08:57:49
1	Fe 238.204 Radial†	383.5	414.1	5349.4 ug/L	5349.4 ppb	08:57:49
1	K 766.490 Radial†	29075.8	29611.0	5532.9 ug/L	5532.9 ppb	08:57:29
1	Mg 279.077 IEC†	106.3	114.9	5220.6 ug/L	5220.6 ppb	08:57:49
1	Na 589.592 Radial†	33441.9	37738.4	10952 ug/L	10952 ppb	08:57:29
1	Sr 421.552†	74200.7	82054.5	543.81 ug/L	543.81 ppb	08:57:29
1	Sc 361.383	891251.1	891251.1	99.021 %		08:58:46
1	Y 371.029	743852.0	743852.0	97.562 %		08:58:46
1	Ag 328.068†	106824.0	107650.9	497.54 ug/L	497.54 ppb	08:58:51
1	As 188.979†	1081.3	1112.5	505.68 ug/L	505.68 ppb	08:59:11
1	B 249.677†	19378.9	19943.5	473.67 ug/L	473.67 ppb	08:58:51
1	Ba 233.527†	62648.6	63277.2	495.50 ug/L	495.50 ppb	08:58:51
1	Be 313.107†	1320981.1	1337895.3	499.68 ug/L	499.68 ppb	08:58:46
1	Cd 226.502†	42298.2	42899.7	497.80 ug/L	497.80 ppb	08:58:51
1	Co 228.616†	23449.9	23743.7	496.53 ug/L	496.53 ppb	08:58:51
1	Cr 267.716†	43807.2	44174.3	496.47 ug/L	496.47 ppb	08:58:51
1	Cu 324.752†	166018.2	161582.6	485.23 ug/L	485.23 ppb	08:58:51
1	Mn 257.610†	437519.4	441408.5	495.21 ug/L	495.21 ppb	08:58:46
1	Mo 202.031†	6791.6	6852.7	501.98 ug/L	501.98 ppb	08:59:11
1	Ni 231.604†	19505.9	19646.5	499.07 ug/L	499.07 ppb	08:58:51
1	P 214.914†	4275.2	4115.5	2402.6 ug/L	2402.6 ppb	08:59:11
1	Pb 220.353†	3965.2	4069.4	505.84 ug/L	505.84 ppb	08:59:11
1	S 181.975 Axial†	726.0	696.1	1018.8 ug/L	1018.8 ppb	08:59:11
1	Sb 206.836†	1437.7	1415.2	511.42 ug/L	511.42 ppb	08:59:11
1	Se 196.026†	729.6	757.5	517.55 ug/L	517.55 ppb	08:59:11
1	Si 251.611†	76478.0	76700.0	2454.4 ug/L	2454.4 ppb	08:58:51
1	Sn 189.927†	2767.0	2783.9	504.31 ug/L	504.31 ppb	08:59:11
1	Ti 334.940†	312130.9	316498.9	478.60 ug/L	478.60 ppb	08:58:51
1	Tl 190.801†	1506.1	1552.2	501.35 ug/L	501.35 ppb	08:59:11
1	U 409.014†	14756.0	17718.2	477.04 ug/L	477.04 ppb	08:58:51
1	V 292.402†	68671.5	70780.9	498.04 ug/L	498.04 ppb	08:58:51
1	Zn 213.857†	49683.3	49616.8	493.23 ug/L	493.23 ppb	08:58:51
1	SiO2†	78418.4	78642.2	5389.7 ug/L	5389.7 ppb	09:00:19
2	Sc Radial	3946.8	3946.8	92.8 %		08:58:14
2	Y RADIAL	4406.1	4406.1	93.91 %		08:57:54
2	Al 396.153Radial†	5276.1	5796.9	5225.5 ug/L	5225.5 ppb	08:57:54
2	Ca 317.933Radial†	2515.1	2695.1	5362.2 ug/L	5362.2 ppb	08:58:14
2	Fe 238.204 Radial†	382.0	401.5	5187.5 ug/L	5187.5 ppb	08:58:14
2	K 766.490 Radial†	28530.2	28190.9	5267.5 ug/L	5267.5 ppb	08:57:54
2	Mg 279.077 IEC†	115.9	122.2	5552.7 ug/L	5552.7 ppb	08:58:14
2	Na 589.592 Radial†	32409.4	35668.8	10351 ug/L	10351 ppb	08:57:54
2	Sr 421.552†	72305.7	77889.0	516.20 ug/L	516.20 ppb	08:57:54
2	Sc 361.383	889514.3	889514.3	98.828 %		08:59:17
2	Y 371.029	742567.5	742567.5	97.393 %		08:59:17
2	Ag 328.068†	106632.4	107667.6	497.57 ug/L	497.57 ppb	08:59:22
2	As 188.979†	1098.4	1132.0	514.41 ug/L	514.41 ppb	08:59:42
2	B 249.677†	19413.9	20017.1	475.47 ug/L	475.47 ppb	08:59:22
2	Ba 233.527†	62305.7	63053.8	493.75 ug/L	493.75 ppb	08:59:22
2	Be 313.107†	1320060.9	1339569.0	500.31 ug/L	500.31 ppb	08:59:17
2	Cd 226.502†	42185.4	42869.0	497.46 ug/L	497.46 ppb	08:59:22
2	Co 228.616†	23244.2	23581.8	493.15 ug/L	493.15 ppb	08:59:22
2	Cr 267.716†	43717.9	44170.3	496.41 ug/L	496.41 ppb	08:59:22
2	Cu 324.752†	165772.0	161660.8	485.47 ug/L	485.47 ppb	08:59:22
2	Mn 257.610†	436106.8	440841.8	494.55 ug/L	494.55 ppb	08:59:17
2	Mo 202.031†	6815.8	6890.6	504.74 ug/L	504.74 ppb	08:59:42
2	Ni 231.604†	19419.5	19597.5	497.83 ug/L	497.83 ppb	08:59:22

2	P 214.914†	4286.3	4135.1	2414.6 ug/L	2414.6 ppb	08:59:42
2	Pb 220.353†	3967.5	4079.5	507.07 ug/L	507.07 ppb	08:59:42
2	S 181.975 Axial†	730.0	701.7	1026.9 ug/L	1026.9 ppb	08:59:42
2	Sb 206.836†	1448.7	1429.2	516.37 ug/L	516.37 ppb	08:59:42
2	Se 196.026†	741.8	771.3	526.14 ug/L	526.14 ppb	08:59:42
2	Si 251.611†	76227.2	76597.1	2451.0 ug/L	2451.0 ppb	08:59:22
2	Sn 189.927†	2768.0	2790.4	505.47 ug/L	505.47 ppb	08:59:42
2	Ti 334.940†	311066.9	316037.7	477.87 ug/L	477.87 ppb	08:59:22
2	Tl 190.801†	1521.2	1570.4	507.22 ug/L	507.22 ppb	08:59:42
2	U 409.014†	14419.1	17406.4	468.63 ug/L	468.63 ppb	08:59:22
2	V 292.402†	68466.9	70709.3	497.60 ug/L	497.60 ppb	08:59:22
2	Zn 213.857†	49430.8	49459.3	491.68 ug/L	491.68 ppb	08:59:22
2	SiO2†	78372.8	78750.7	5397.1 ug/L	5397.1 ppb	09:00:24
3	Sc Radial	3880.2	3880.2	91.2 %		08:58:39
3	Y RADIAL	4399.2	4399.2	93.76 %		08:58:19
3	Al 396.153Radial†	5256.3	5872.8	5294.2 ug/L	5294.2 ppb	08:58:19
3	Ca 317.933Radial†	2489.4	2713.4	5398.6 ug/L	5398.6 ppb	08:58:39
3	Fe 238.204 Radial†	378.5	404.7	5228.7 ug/L	5228.7 ppb	08:58:39
3	K 766.490 Radial†	28608.3	28804.5	5382.2 ug/L	5382.2 ppb	08:58:19
3	Mg 279.077 IEC†	110.5	118.4	5380.6 ug/L	5380.6 ppb	08:58:39
3	Na 589.592 Radial†	32656.4	36539.2	10604 ug/L	10604 ppb	08:58:19
3	Sr 421.552†	72270.0	79187.6	524.80 ug/L	524.80 ppb	08:58:19
3	Sc 361.383	882848.2	882848.2	98.087 %		08:59:48
3	Y 371.029	739137.4	739137.4	96.943 %		08:59:48
3	Ag 328.068†	107987.1	109863.4	507.70 ug/L	507.70 ppb	08:59:53
3	As 188.979†	1074.1	1115.6	507.10 ug/L	507.10 ppb	09:00:13
3	B 249.677†	19746.4	20504.4	487.06 ug/L	487.06 ppb	08:59:53
3	Ba 233.527†	63076.9	64316.0	503.64 ug/L	503.64 ppb	08:59:53
3	Be 313.107†	1315633.4	1345140.7	502.41 ug/L	502.41 ppb	08:59:48
3	Cd 226.502†	42679.8	43695.3	507.06 ug/L	507.06 ppb	08:59:53
3	Co 228.616†	23534.8	24055.6	503.04 ug/L	503.04 ppb	08:59:53
3	Cr 267.716†	44371.8	45171.0	507.65 ug/L	507.65 ppb	08:59:53
3	Cu 324.752†	167851.2	165047.0	495.63 ug/L	495.63 ppb	08:59:53
3	Mn 257.610†	433719.9	441740.3	495.57 ug/L	495.57 ppb	08:59:48
3	Mo 202.031†	6786.1	6912.3	506.33 ug/L	506.33 ppb	09:00:13
3	Ni 231.604†	19680.1	20011.5	508.35 ug/L	508.35 ppb	08:59:53
3	P 214.914†	4256.8	4137.8	2414.2 ug/L	2414.2 ppb	09:00:13
3	Pb 220.353†	3956.5	4098.7	509.44 ug/L	509.44 ppb	09:00:13
3	S 181.975 Axial†	729.5	706.7	1034.3 ug/L	1034.3 ppb	09:00:13
3	Sb 206.836†	1440.0	1431.4	517.21 ug/L	517.21 ppb	09:00:13
3	Se 196.026†	733.4	768.4	524.36 ug/L	524.36 ppb	09:00:13
3	Si 251.611†	77186.6	78157.5	2501.1 ug/L	2501.1 ppb	08:59:53
3	Sn 189.927†	2762.3	2805.8	508.25 ug/L	508.25 ppb	09:00:13
3	Ti 334.940†	315133.8	322560.5	487.74 ug/L	487.74 ppb	08:59:53
3	Tl 190.801†	1511.9	1572.6	507.92 ug/L	507.92 ppb	09:00:13
3	U 409.014†	14762.2	17866.3	481.03 ug/L	481.03 ppb	08:59:53
3	V 292.402†	69443.1	72227.6	508.16 ug/L	508.16 ppb	08:59:53
3	Zn 213.857†	50023.7	50441.5	501.45 ug/L	501.45 ppb	08:59:53
3	SiO2†	76726.8	77671.4	5322.9 ug/L	5322.9 ppb	09:00:29

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	887871.2	98.645 %		0.4928			0.50%
Sc Radial	3890.5	91.5 %		1.22			1.33%
Y 371.029	741852.3	97.299 %		0.3197			0.33%
Y RADIAL	4354.0	92.79 %		1.800			1.94%
Ag 328.068†	108394.0	500.93 ug/L		5.857	500.93 ppb	5.857	1.17%
QC value within limits for Ag 328.068 Recovery = 100.19%							
Al 396.153Radial†	5903.3	5321.9 ug/L		112.79	5321.9 ppb	112.79	2.12%
QC value within limits for Al 396.153Radial Recovery = 106.44%							
As 188.979†	1120.0	509.06 ug/L		4.687	509.06 ppb	4.687	0.92%
QC value within limits for As 188.979 Recovery = 101.81%							
B 249.677†	20155.0	478.73 ug/L		7.267	478.73 ppb	7.267	1.52%
QC value within limits for B 249.677 Recovery = 95.75%							
Ba 233.527†	63549.0	497.63 ug/L		5.274	497.63 ppb	5.274	1.06%
QC value within limits for Ba 233.527 Recovery = 99.53%							
Be 313.107†	1340868.3	500.80 ug/L		1.426	500.80 ppb	1.426	0.28%
QC value within limits for Be 313.107 Recovery = 100.16%							
Ca 317.933Radial†	2719.4	5410.6 ug/L		55.30	5410.6 ppb	55.30	1.02%

QC value within limits for Ca 317.933 Radial Recovery = 108.21%

Cd 226.502†	43154.7	500.78 ug/L	5.444	500.78 ppb	5.444	1.09%
QC value within limits for Cd 226.502 Recovery = 100.16%						
Co 228.616†	23793.7	497.58 ug/L	5.027	497.58 ppb	5.027	1.01%
QC value within limits for Co 228.616 Recovery = 99.52%						
Cr 267.716†	44505.2	500.17 ug/L	6.471	500.17 ppb	6.471	1.29%
QC value within limits for Cr 267.716 Recovery = 100.03%						
Cu 324.752†	162763.5	488.78 ug/L	5.936	488.78 ppb	5.936	1.21%
QC value within limits for Cu 324.752 Recovery = 97.76%						
Fe 238.204 Radial†	406.8	5255.2 ug/L	84.12	5255.2 ppb	84.12	1.60%
QC value within limits for Fe 238.204 Radial Recovery = 105.10%						
K 766.490 Radial†	28868.8	5394.2 ug/L	133.11	5394.2 ppb	133.11	2.47%
QC value within limits for K 766.490 Radial Recovery = 107.88%						
Mg 279.077 IEC†	118.5	5384.6 ug/L	166.08	5384.6 ppb	166.08	3.08%
QC value within limits for Mg 279.077 IEC Recovery = 107.69%						
Mn 257.610†	441330.2	495.11 ug/L	0.517	495.11 ppb	0.517	0.10%
QC value within limits for Mn 257.610 Recovery = 99.02%						
Mo 202.031†	6885.2	504.35 ug/L	2.202	504.35 ppb	2.202	0.44%
QC value within limits for Mo 202.031 Recovery = 100.87%						
Na 589.592 Radial†	36648.8	10636 ug/L	301.6	10636 ppb	301.6	2.84%
QC value within limits for Na 589.592 Radial Recovery = 106.36%						
Ni 231.604†	19751.8	501.75 ug/L	5.747	501.75 ppb	5.747	1.15%
QC value within limits for Ni 231.604 Recovery = 100.35%						
P 214.914†	4129.5	2410.5 ug/L	6.80	2410.5 ppb	6.80	0.28%
QC value within limits for P 214.914 Recovery = 96.42%						
Pb 220.353†	4082.5	507.45 ug/L	1.833	507.45 ppb	1.833	0.36%
QC value within limits for Pb 220.353 Recovery = 101.49%						
S 181.975 Axial†	701.5	1026.7 ug/L	7.79	1026.7 ppb	7.79	0.76%
QC value within limits for S 181.975 Axial Recovery = 102.67%						
Sb 206.836†	1425.3	515.00 ug/L	3.132	515.00 ppb	3.132	0.61%
QC value within limits for Sb 206.836 Recovery = 103.00%						
Se 196.026†	765.7	522.68 ug/L	4.538	522.68 ppb	4.538	0.87%
QC value within limits for Se 196.026 Recovery = 104.54%						
Si 251.611†	77151.5	2468.8 ug/L	27.98	2468.8 ppb	27.98	1.13%
QC value within limits for Si 251.611 Recovery = 98.75%						
Sn 189.927†	2793.4	506.01 ug/L	2.028	506.01 ppb	2.028	0.40%
QC value within limits for Sn 189.927 Recovery = 101.20%						
Sr 421.552†	79710.4	528.27 ug/L	14.126	528.27 ppb	14.126	2.67%
QC value within limits for Sr 421.552 Recovery = 105.65%						
Ti 334.940†	318365.7	481.40 ug/L	5.501	481.40 ppb	5.501	1.14%
QC value within limits for Ti 334.940 Recovery = 96.28%						
Tl 190.801†	1565.1	505.50 ug/L	3.605	505.50 ppb	3.605	0.71%
QC value within limits for Tl 190.801 Recovery = 101.10%						
U 409.014†	17663.6	475.57 ug/L	6.328	475.57 ppb	6.328	1.33%
QC value within limits for U 409.014 Recovery = 95.11%						
V 292.402†	71239.3	501.27 ug/L	5.975	501.27 ppb	5.975	1.19%
QC value within limits for V 292.402 Recovery = 100.25%						
Zn 213.857†	49839.2	495.45 ug/L	5.250	495.45 ppb	5.250	1.06%
QC value within limits for Zn 213.857 Recovery = 99.09%						
SiO2†	78354.8	5369.9 ug/L	40.88	5369.9 ppb	40.88	0.76%
QC value within limits for SiO2 Recovery = 100.42%						

All analyte(s) passed QC.

Sequence No.: 3  
 Sample ID: CCB  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 8  
 Date Collected: 2/24/2010 09:02:40  
 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	3917.7	3917.7	92.1 %		09:04:52
1	Y RADIAL	4583.2	4583.2	97.68 %		09:04:32
1	Al 396.153Radial†	-131.8	-32.3	-29.327 ug/L	-29.327 ppb	09:04:32
1	Ca 317.933Radial†	19.7	6.0	11.843 ug/L	11.843 ppb	09:04:52
1	Fe 238.204 Radial†	14.4	5.4	69.737 ug/L	69.737 ppb	09:04:52
1	K 766.490 Radial†	2802.3	485.8	90.909 ug/L	90.909 ppb	09:04:32
1	Mg 279.077 IEC†	3.0	0.5	21.925 ug/L	21.925 ppb	09:04:52
1	Na 589.592 Radial†	-905.5	-242.8	-70.458 ug/L	-70.458 ppb	09:04:32
1	Sr 421.552†	32.0	-2.0	-0.0134 ug/L	-0.0134 ppb	09:04:32
1	Sc 361.383	906943.6	906943.6	100.76 %		09:05:49
1	Y 371.029	766758.9	766758.9	100.57 %		09:05:49
1	Ag 328.068†	381.1	148.9	0.7062 ug/L	0.7062 ppb	09:05:54
1	As 188.979†	-22.4	-1.7	-0.7606 ug/L	-0.7606 ppb	09:06:14
1	B 249.677†	-336.3	39.2	0.9236 ug/L	0.9236 ppb	09:06:14
1	Ba 233.527†	25.5	34.5	0.2712 ug/L	0.2712 ppb	09:06:14
1	Be 313.107†	-3662.0	219.0	0.0814 ug/L	0.0814 ppb	09:05:54
1	Cd 226.502†	-192.4	-7.7	-0.0963 ug/L	-0.0963 ppb	09:06:14
1	Co 228.616†	-69.3	-6.8	-0.1410 ug/L	-0.1410 ppb	09:06:14
1	Cr 267.716†	45.0	-21.3	-0.2319 ug/L	-0.2319 ppb	09:06:14
1	Cu 324.752†	6098.1	-25.3	-0.0713 ug/L	-0.0713 ppb	09:05:54
1	Mn 257.610†	490.5	50.0	0.0620 ug/L	0.0620 ppb	09:06:14
1	Mo 202.031†	18.4	12.2	0.9000 ug/L	0.9000 ppb	09:06:14
1	Ni 231.604†	62.7	9.9	0.2523 ug/L	0.2523 ppb	09:06:14
1	P 214.914†	203.6	0.0	-0.0313 ug/L	-0.0313 ppb	09:06:14
1	Pb 220.353†	-72.9	-7.3	-0.9218 ug/L	-0.9218 ppb	09:06:14
1	S 181.975 Axial†	38.4	1.1	1.6295 ug/L	1.6295 ppb	09:06:14
1	Sb 206.836†	39.4	2.4	0.8776 ug/L	0.8776 ppb	09:06:14
1	Se 196.026†	-17.1	3.8	2.7089 ug/L	2.7089 ppb	09:06:14
1	Si 251.611†	616.5	77.7	2.4822 ug/L	2.4822 ppb	09:06:14
1	Sn 189.927†	15.7	5.1	0.9262 ug/L	0.9262 ppb	09:06:14
1	Ti 334.940†	-1371.2	-79.0	-0.1188 ug/L	-0.1188 ppb	09:05:54
1	Tl 190.801†	-18.2	13.2	4.2275 ug/L	4.2275 ppb	09:06:14
1	U 409.014†	-2898.7	-60.4	-1.6396 ug/L	-1.6396 ppb	09:05:49
1	V 292.402†	-1446.7	-5.3	-0.0365 ug/L	-0.0365 ppb	09:05:54
1	Zn 213.857†	570.0	8.0	0.0680 ug/L	0.0680 ppb	09:06:14
1	SiO2†	609.0	52.9	3.6098 ug/L	3.6098 ppb	09:07:20
2	Sc Radial	3938.7	3938.7	92.6 %		09:05:17
2	Y RADIAL	4430.8	4430.8	94.43 %		09:04:57
2	Al 396.153Radial†	-125.4	-24.7	-22.391 ug/L	-22.391 ppb	09:04:57
2	Ca 317.933Radial†	18.9	4.9	9.8344 ug/L	9.8344 ppb	09:05:17
2	Fe 238.204 Radial†	11.2	1.9	24.704 ug/L	24.704 ppb	09:05:17
2	K 766.490 Radial†	2857.4	529.1	99.003 ug/L	99.003 ppb	09:04:57
2	Mg 279.077 IEC†	0.2	-2.6	-116.87 ug/L	-116.87 ppb	09:05:17
2	Na 589.592 Radial†	-920.2	-253.5	-73.553 ug/L	-73.553 ppb	09:04:57
2	Sr 421.552†	25.2	-9.6	-0.0634 ug/L	-0.0634 ppb	09:04:57
2	Sc 361.383	906639.5	906639.5	100.73 %		09:06:19
2	Y 371.029	767212.7	767212.7	100.63 %		09:06:19
2	Ag 328.068†	273.5	42.2	0.1967 ug/L	0.1967 ppb	09:06:24
2	As 188.979†	-23.8	-3.1	-1.3875 ug/L	-1.3875 ppb	09:06:44
2	B 249.677†	-367.0	8.6	0.2020 ug/L	0.2020 ppb	09:06:44
2	Ba 233.527†	6.4	15.5	0.1207 ug/L	0.1207 ppb	09:06:44
2	Be 313.107†	-3553.4	325.6	0.1211 ug/L	0.1211 ppb	09:06:24
2	Cd 226.502†	-185.1	-0.4	-0.0062 ug/L	-0.0062 ppb	09:06:44
2	Co 228.616†	-78.0	-15.5	-0.3223 ug/L	-0.3223 ppb	09:06:44
2	Cr 267.716†	82.3	15.7	0.1766 ug/L	0.1766 ppb	09:06:44
2	Cu 324.752†	6064.5	-56.6	-0.1705 ug/L	-0.1705 ppb	09:06:24
2	Mn 257.610†	508.8	68.3	0.0838 ug/L	0.0838 ppb	09:06:44
2	Mo 202.031†	13.8	7.7	0.5624 ug/L	0.5624 ppb	09:06:44
2	Ni 231.604†	75.6	22.8	0.5791 ug/L	0.5791 ppb	09:06:44



2	P 214.914†	210.8	7.2	4.3813 ug/L	4.3813 ppb	09:06:44
2	Pb 220.353†	-64.4	1.1	0.1288 ug/L	0.1288 ppb	09:06:44
2	S 181.975 Axial†	33.4	-3.9	-5.6535 ug/L	-5.6535 ppb	09:06:44
2	Sb 206.836†	34.2	-2.7	-0.9266 ug/L	-0.9266 ppb	09:06:44
2	Se 196.026†	-15.9	5.0	3.3451 ug/L	3.3451 ppb	09:06:44
2	Si 251.611†	602.9	64.3	2.0573 ug/L	2.0573 ppb	09:06:44
2	Sn 189.927†	15.0	4.5	0.8152 ug/L	0.8152 ppb	09:06:44
2	Ti 334.940†	-1360.0	-68.4	-0.0941 ug/L	-0.0941 ppb	09:06:24
2	Tl 190.801†	-34.3	-2.8	-0.8979 ug/L	-0.8979 ppb	09:06:44
2	U 409.014†	-2711.9	124.0	3.3475 ug/L	3.3475 ppb	09:06:19
2	V 292.402†	-1499.2	-57.8	-0.3931 ug/L	-0.3931 ppb	09:06:24
2	Zn 213.857†	586.9	25.0	0.2434 ug/L	0.2434 ppb	09:06:44
2	SiO2†	560.4	4.8	0.3144 ug/L	0.3144 ppb	09:07:25
3	Sc Radial	3930.6	3930.6	92.4 %		09:05:42
3	Y RADIAL	4435.4	4435.4	94.53 %		09:05:22
3	Al 396.153Radial†	-113.2	-11.8	-10.681 ug/L	-10.681 ppb	09:05:22
3	Ca 317.933Radial†	19.5	5.6	11.179 ug/L	11.179 ppb	09:05:42
3	Fe 238.204 Radial†	10.8	1.5	18.955 ug/L	18.955 ppb	09:05:42
3	K 766.490 Radial†	2808.5	482.4	90.276 ug/L	90.276 ppb	09:05:22
3	Mg 279.077 IEC†	1.9	-0.7	-30.868 ug/L	-30.868 ppb	09:05:42
3	Na 589.592 Radial†	-859.7	-190.0	-55.136 ug/L	-55.136 ppb	09:05:22
3	Sr 421.552†	63.7	32.2	0.2130 ug/L	0.2130 ppb	09:05:22
3	Sc 361.383	894844.7	894844.7	99.420 %		09:06:50
3	Y 371.029	758612.7	758612.7	99.498 %		09:06:50
3	Ag 328.068†	261.1	33.3	0.1586 ug/L	0.1586 ppb	09:06:55
3	As 188.979†	-22.8	-2.4	-1.0972 ug/L	-1.0972 ppb	09:07:15
3	B 249.677†	-371.2	-0.4	-0.0129 ug/L	-0.0129 ppb	09:07:15
3	Ba 233.527†	4.4	13.5	0.1054 ug/L	0.1054 ppb	09:07:15
3	Be 313.107†	-3655.5	176.4	0.0655 ug/L	0.0655 ppb	09:06:55
3	Cd 226.502†	-188.6	-6.3	-0.0754 ug/L	-0.0754 ppb	09:07:15
3	Co 228.616†	-60.4	1.2	0.0262 ug/L	0.0262 ppb	09:07:15
3	Cr 267.716†	75.6	10.0	0.1147 ug/L	0.1147 ppb	09:07:15
3	Cu 324.752†	6044.6	2.7	0.0103 ug/L	0.0103 ppb	09:06:55
3	Mn 257.610†	507.2	73.4	0.0854 ug/L	0.0854 ppb	09:07:15
3	Mo 202.031†	15.0	9.0	0.6594 ug/L	0.6594 ppb	09:07:15
3	Ni 231.604†	84.1	32.3	0.8198 ug/L	0.8198 ppb	09:07:15
3	P 214.914†	203.7	2.8	1.7046 ug/L	1.7046 ppb	09:07:15
3	Pb 220.353†	-49.9	14.9	1.8404 ug/L	1.8404 ppb	09:07:15
3	S 181.975 Axial†	38.4	1.6	2.2982 ug/L	2.2982 ppb	09:07:15
3	Sb 206.836†	36.1	-0.4	-0.1244 ug/L	-0.1244 ppb	09:07:15
3	Se 196.026†	-32.7	-12.2	-7.9653 ug/L	-7.9653 ppb	09:07:15
3	Si 251.611†	610.4	79.8	2.5532 ug/L	2.5532 ppb	09:07:15
3	Sn 189.927†	9.2	-1.2	-0.2131 ug/L	-0.2131 ppb	09:07:15
3	Ti 334.940†	-1341.2	-67.2	-0.0969 ug/L	-0.0969 ppb	09:06:55
3	Tl 190.801†	-40.1	-9.1	-2.9127 ug/L	-2.9127 ppb	09:07:15
3	U 409.014†	-2869.9	-70.4	-1.9042 ug/L	-1.9042 ppb	09:06:50
3	V 292.402†	-1472.4	-50.6	-0.3488 ug/L	-0.3488 ppb	09:06:55
3	Zn 213.857†	589.9	35.7	0.3497 ug/L	0.3497 ppb	09:07:15
3	SiO2†	663.8	116.2	7.9664 ug/L	7.9664 ppb	09:07:30

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	902809.3	100.31 %	0.767			0.76%
Sc Radial	3929.0	92.4 %	0.25			0.27%
Y 371.029	764194.8	100.23 %	0.635			0.63%
Y RADIAL	4483.2	95.55 %	1.847			1.93%
Ag 328.068†	74.8	0.3539 ug/L	0.30577	0.3539 ppb	0.30577	86.41%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-22.9	-20.799 ug/L	9.4244	-20.799 ppb	9.4244	45.31%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-2.4	-1.0818 ug/L	0.31375	-1.0818 ppb	0.31375	29.00%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	15.8	0.3709 ug/L	0.49058	0.3709 ppb	0.49058	132.27%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	21.2	0.1658 ug/L	0.09163	0.1658 ppb	0.09163	55.27%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	240.4	0.0893 ug/L	0.02864	0.0893 ppb	0.02864	32.07%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	5.5	10.952 ug/L	1.0234	10.952 ppb	1.0234	9.34%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated									
Cd 226.502†	-4.8	-0.0593 ug/L	0.04716	-0.0593	ppb	0.04716	79.51%		
QC value within limits for Cd 226.502 Recovery = Not calculated									
Co 228.616†	-7.0	-0.1457 ug/L	0.17431	-0.1457	ppb	0.17431	119.62%		
QC value within limits for Co 228.616 Recovery = Not calculated									
Cr 267.716†	1.5	0.0198 ug/L	0.22015	0.0198	ppb	0.22015	>999.9%		
QC value within limits for Cr 267.716 Recovery = Not calculated									
Cu 324.752†	-26.4	-0.0772 ug/L	0.09055	-0.0772	ppb	0.09055	117.32%		
QC value within limits for Cu 324.752 Recovery = Not calculated									
Fe 238.204 Radial†	2.9	37.798 ug/L	27.8082	37.798	ppb	27.8082	73.57%		
QC value within limits for Fe 238.204 Radial Recovery = Not calculated									
K 766.490 Radial†	499.1	93.396 ug/L	4.8662	93.396	ppb	4.8662	5.21%		
QC value within limits for K 766.490 Radial Recovery = Not calculated									
Mg 279.077 IEC†	-0.9	-41.938 ug/L	70.0569	-41.938	ppb	70.0569	167.05%		
QC value within limits for Mg 279.077 IEC Recovery = Not calculated									
Mn 257.610†	63.9	0.0771 ug/L	0.01305	0.0771	ppb	0.01305	16.93%		
QC value within limits for Mn 257.610 Recovery = Not calculated									
Mo 202.031†	9.6	0.7073 ug/L	0.17380	0.7073	ppb	0.17380	24.57%		
QC value within limits for Mo 202.031 Recovery = Not calculated									
Na 589.592 Radial†	-228.7	-66.382 ug/L	9.8620	-66.382	ppb	9.8620	14.86%		
QC value within limits for Na 589.592 Radial Recovery = Not calculated									
Ni 231.604†	21.6	0.5504 ug/L	0.28486	0.5504	ppb	0.28486	51.76%		
QC value within limits for Ni 231.604 Recovery = Not calculated									
P 214.914†	3.4	2.0182 ug/L	2.22298	2.0182	ppb	2.22298	110.15%		
QC value within limits for P 214.914 Recovery = Not calculated									
Pb 220.353†	2.9	0.3491 ug/L	1.39422	0.3491	ppb	1.39422	399.32%		
QC value within limits for Pb 220.353 Recovery = Not calculated									
S 181.975 Axial†	-0.4	-0.5753 ug/L	4.41060	-0.5753	ppb	4.41060	766.70%		
QC value within limits for S 181.975 Axial Recovery = Not calculated									
Sb 206.836†	-0.2	-0.0578 ug/L	0.90392	-0.0578	ppb	0.90392	>999.9%		
QC value within limits for Sb 206.836 Recovery = Not calculated									
Se 196.026†	-1.1	-0.6371 ug/L	6.35436	-0.6371	ppb	6.35436	997.41%		
QC value within limits for Se 196.026 Recovery = Not calculated									
Si 251.611†	74.0	2.3643 ug/L	0.26817	2.3643	ppb	0.26817	11.34%		
QC value within limits for Si 251.611 Recovery = Not calculated									
Sn 189.927†	2.8	0.5094 ug/L	0.62818	0.5094	ppb	0.62818	123.31%		
QC value within limits for Sn 189.927 Recovery = Not calculated									
Sr 421.552†	6.9	0.0454 ug/L	0.14730	0.0454	ppb	0.14730	324.49%		
QC value within limits for Sr 421.552 Recovery = Not calculated									
Ti 334.940†	-71.5	-0.1032 ug/L	0.01356	-0.1032	ppb	0.01356	13.13%		
QC value within limits for Ti 334.940 Recovery = Not calculated									
Tl 190.801†	0.4	0.1389 ug/L	3.68129	0.1389	ppb	3.68129	>999.9%		
QC value within limits for Tl 190.801 Recovery = Not calculated									
U 409.014†	-2.3	-0.0654 ug/L	2.95867	-0.0654	ppb	2.95867	>999.9%		
QC value within limits for U 409.014 Recovery = Not calculated									
V 292.402†	-37.9	-0.2595 ug/L	0.19433	-0.2595	ppb	0.19433	74.89%		
QC value within limits for V 292.402 Recovery = Not calculated									
Zn 213.857†	22.9	0.2204 ug/L	0.14229	0.2204	ppb	0.14229	64.57%		
QC value within limits for Zn 213.857 Recovery = Not calculated									
SiO2†	58.0	3.9635 ug/L	3.83826	3.9635	ppb	3.83826	96.84%		
QC value within limits for SiO2 Recovery = Not calculated									
All analyte(s) passed QC.									

## Daily Performance Report

### Sample ID: Sample

Sample Date/Time: Thursday, February 18, 2010 11:08:36

### Sample Description:

Method File: c:\elandata\Method\daily2.mth

Dataset File: c:\elandata\Dataset\100125\Sample.327

Tuning File: c:\elandata\Tuning\default2.tun

Optimization File: c:\elandata\Optimize\default.dac

Dual Detector Mode: Pulse

Acq. Dead Time(ns): 35

Current Dead Time (ns): 35

### Summary

Analyte	Mass	Meas. Intens.	Mean	Net Intens.	Mean	Net Intens.	SD	Net Intens.	RSD
Be	9.0		1492.1		1492.078		20.751		1.4
Mg	24.0		24345.7		24345.729		268.827		1.1
Co	58.9		55141.4		55141.422		488.165		0.9
Rh	102.9		96829.3		96829.251		315.538		0.3
In	114.9		134330.2		134330.213		527.859		0.4
Pb	208.0		55155.9		55155.879		547.143		1.0
[> Ba	137.9		106513.9		106513.875		754.642		0.7
[ Ba++	69.0		1320.2		0.012		0.000		2.6
[> Ce	139.9		124580.7		124580.670		766.142		0.6
[ CeO	155.9		2940.0		0.024		0.001		2.5
Bkgd	220.0		1.2		1.200		0.837		69.7

### Current Optimization File Data

Current Value	Description
0.91	Nebulizer Gas Flow
4.50	Lens Voltage
1000.00	ICP RF Power
-2000.00	Analog Stage Voltage
1100.00	Pulse Stage Voltage
50.00	Discriminator Threshold
-2.00	AC Rod Offset

### Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	17	4.5	1242.4
Co	59	17	5.3	38851.1
In	115	17	6.3	99610.1

Sample ID: Sample

Report Date/Time: Thursday, February 18, 2010 11:09:55

Page 1

## ICPMS #4 TUNING REPORT

File Name: default2.tun  
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas Peak W
He	3.0	3.0	604	2060	0.671
Be	9.0	8.9	2041	2045	0.681
Mg	24.0	24.0	5678	2065	0.682
Mg	25.0	25.1	5953	2080	0.666
Mg	26.0	26.0	6159	2085	0.636
Co	58.9	58.9	14186	2140	0.644
Rh	102.9	102.9	24873	2230	0.647
In	114.9	114.9	27785	2255	0.669
Ce	139.9	139.9	33847	2310	0.627
Pb	206.0	206.0	49940	2500	0.601
Pb	207.0	207.0	50113	2375	0.623
Pb	208.0	208.0	50436	2570	0.608
U	238.1	238.0	57688	2510	0.682

## ICPMS#4 - Summary Report

Sample ID: Blank

Sample Date/Time: Thursday, February 18, 2010 23:02:29

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\Dataset\100218\Blank.205

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	ug/L			6
>	Sc	45	ug/L		1100591	
[	Ni	60	ug/L			48
>	Ge	74	ug/L		247373	
	As	75	ug/L		-501	
	Se	77	ug/L		4793	
	Se	82	ug/L		25	
[	Kr	83	ug/L			43
>	Lu	175	ug/L		153953	
	Tl	205	ug/L		152	
[	U	238	ug/L			321

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Simple Linear	
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Simple Linear	
As	75Simple Linear	
Se	77Simple Linear	
Se	82Simple Linear	
Kr	83Simple Linear	
Lu	175Simple Linear	
Tl	205Simple Linear	
U	238Simple Linear	

### QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be	9				
>	Sc	45				
[	Ni	60				
>	Ge	74				
	As	75				
	Se	77				
	Se	82				
[	Kr	83				
>	Lu	175				
	Tl	205				
[	U	238				

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

Sample ID: Blank

Report Date/Time: Thursday, February 18, 2010 23:03:13

Page 1

## QC Action

QC Action Line: No QC out of limits detected

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Sample ID: Blank

Report Date/Time: Thursday, February 18, 2010 23:03:13

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## ICPMS#4 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Thursday, February 18, 2010 23:06:36

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\Dataset\100218\Standard 1.206

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	10.000	ug/L	2.020	1450	0.001
>	Sc 45		ug/L		1096251	1096251.409
[	Ni 60	10.000	ug/L	1.511	10591	0.010
>	Ge 74		ug/L		242112	242111.509
	As 75	10.000	ug/L	4.941	5997	0.027
	Se 77		ug/L		6239	0.006
	Se 82	10.000	ug/L	1.670	760	0.003
[	Kr 83		ug/L		38	-0.000
>	Lu 175		ug/L		149798	149798.114
	Tl 205	10.000	ug/L	1.833	17095	0.113
[	U 238	10.000	ug/L	0.828	109430	0.728

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
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	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

### QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[ Be 9					
> Sc 45					
[ Ni 60					
> Ge 74					
As 75					
Se 77					
Se 82					
[ Kr 83					
> Lu 175					
Tl 205					
[ U 238					

### QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

Sample ID: Standard 1

Report Date/Time: Thursday, February 18, 2010 23:07:17

Page 1

## QC Action

QC Action Line: No QC out of limits detected

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Sample ID: Standard 1

Report Date/Time: Thursday, February 18, 2010 23:07:17

Page 2



## ICPMS#4 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Thursday, February 18, 2010 23:10:41

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\Dataset\100218\Standard 2.207

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	99.954	ug/L	0.785	13685	0.013
> Sc	45		ug/L		1087261	1087261.185
Ni	60	99.950	ug/L	1.321	99620	0.092
> Ge	74		ug/L		237644	237644.436
As	75	100.013	ug/L	0.558	64037	0.272
Se	77		ug/L		11602	0.029
Se	82	99.969	ug/L	0.952	7029	0.029
Kr	83		ug/L		47	0.000
> Lu	175		ug/L		147824	147824.099
Tl	205	99.984	ug/L	0.973	164647	1.113
U	238	99.975	ug/L	1.026	1051030	7.108

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
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	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

### QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Be	9					
> Sc	45					
Ni	60					
> Ge	74					
As	75					
Se	77					
Se	82					
Kr	83					
> Lu	175					
Tl	205					
U	238					

### QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

Sample ID: Standard 2

Report Date/Time: Thursday, February 18, 2010 23:11:22

Page 1

## QC Action

QC Action Line: No QC out of limits detected

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Sample ID: Standard 2

Report Date/Time: Thursday, February 18, 2010 23:11:22

Page 2

## ICPMS#4 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Thursday, February 18, 2010 23:14:46

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\Dataset\100218\QC Std 1.208

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	52.431	ug/L	1.792	7157	0.007
>	Sc 45		ug/L		1083620	1083619.719
[	Ni 60	52.172	ug/L	0.847	51846	0.048
>	Ge 74		ug/L		239741	239741.232
	As 75	49.357	ug/L	1.178	31639	0.134
	Se 77		ug/L		8761	0.017
	Se 82	50.161	ug/L	0.586	3570	0.015
[	Kr 83		ug/L		45	0.000
>	Lu 175		ug/L		149686	149686.412
	Tl 205	48.389	ug/L	0.595	80754	0.539
[	U 238	52.783	ug/L	1.028	561960	3.753

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
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	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

### QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be 9	104.862				
>	Sc 45		98.5			
[	Ni 60	104.343				
>	Ge 74		96.9			
	As 75	98.713				
	Se 77					
	Se 82	100.322				
[	Kr 83					
>	Lu 175		97.2			
	Tl 205	96.777				
[	U 238	105.566				

### QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

Sample ID: QC Std 1

Report Date/Time: Thursday, February 18, 2010 23:15:27

Page 1

## QC Action

QC Action Line: No QC out of limits detected

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Sample ID: QC Std 1

Report Date/Time: Thursday, February 18, 2010 23:15:27

Page 2

## ICPMS#4 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Thursday, February 18, 2010 23:18:53

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl soll.mth

Dataset File: c:\elandata\Dataset\100218\QC Std 2.209

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	0.003	ug/L	1169.608	6	0.000
>	Sc 45		ug/L		1090622	1090621.875
[	Ni 60	0.015	ug/L	34.323	62	0.000
>	Ge 74		ug/L		246907	246907.308
	As 75	0.023	ug/L	2726.919	-484	0.000
	Se 77		ug/L		4910	0.001
	Se 82	0.180	ug/L	91.561	38	0.000
[	Kr 83		ug/L		40	-0.000
>	Lu 175		ug/L		152376	152375.930
	Tl 205	0.228	ug/L	5.966	538	0.003
[	U 238	0.019	ug/L	6.810	524	0.001

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
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	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

### QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be 9					
>	Sc 45		99.1			
[	Ni 60					
>	Ge 74		99.8			
	As 75					
	Se 77					
	Se 82					
[	Kr 83					
>	Lu 175		99.0			
	Tl 205					
[	U 238					

### QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

Sample ID: QC Std 2

Report Date/Time: Thursday, February 18, 2010 23:19:37

Page 1

## QC Action

QC Action Line: No QC out of limits detected

## ICPMS#4 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Thursday, February 18, 2010 23:23:01

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\Dataset\100218\QC Std 3.210

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	0.635	ug/L	4.623	93	0.000
>	Sc 45		ug/L		1089785	1089785.492
[	Ni 60	2.286	ug/L	2.191	2329	0.002
>	Ge 74		ug/L		243048	243047.659
	As 75	5.988	ug/L	7.193	3461	0.016
	Se 77		ug/L		5978	0.005
	Se 82	5.911	ug/L	7.295	448	0.002
[	Kr 83		ug/L		39	-0.000
>	Lu 175		ug/L		150807	150807.015
	Tl 205	1.123	ug/L	0.963	2035	0.013
[	U 238	0.229	ug/L	1.542	2768	0.016

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
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	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

### QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be 9	126.959				
>	Sc 45		99.0			
[	Ni 60	114.282				
>	Ge 74		98.3			
	As 75	119.754				
	Se 77					
	Se 82	118.221				
[	Kr 83					
>	Lu 175		98.0			
	Tl 205	112.349				
[	U 238	114.427				

### QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

Sample ID: QC Std 3

Report Date/Time: Thursday, February 18, 2010 23:23:43

Page 1

## QC Action

QC Action Line: No QC out of limits detected

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Sample ID: QC Std 3

Report Date/Time: Thursday, February 18, 2010 23:23:43

Page 2



## ICPMS#4 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Thursday, February 18, 2010 23:27:07

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl soll.mth

Dataset File: c:\elandata\Dataset\100218\QC Std 4.211

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.076	ug/L	68.469	14	0.000
> Sc	45		ug/L		948851	948850.913
Ni	60	4.907	ug/L	2.113	4307	0.004
> Ge	74		ug/L		206336	206335.806
As	75	-0.361	ug/L	119.845	-620	-0.001
Se	77		ug/L		6325	0.011
Se	82	-0.571	ug/L	13.130	-14	-0.000
Kr	83		ug/L		100	0.000
> Lu	175		ug/L		131482	131482.277
Tl	205	0.021	ug/L	48.394	160	0.000
U	238	-0.016	ug/L	9.238	122	-0.001

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
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	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

### QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Be	9					
> Sc	45		86.2			
Ni	60	148.240				
> Ge	74		83.4			
As	75					
Se	77					
Se	82					
Kr	83					
> Lu	175		85.4			
Tl	205					
U	238					

### QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

Sample ID: QC Std 4

Report Date/Time: Thursday, February 18, 2010 23:27:50

Page 1

## QC Action

QC Action Line: No QC out of limits detected

## ICPMS#4 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Thursday, February 18, 2010 23:31:14

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\Dataset\100218\QC Std 5.212

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	19.659	ug/L	2.035	2248	0.002
[>	Sc 45		ug/L		906767	906766.975
[	Ni 60	24.405	ug/L	1.964	20313	0.022
[>	Ge 74		ug/L		200416	200415.698
	As 75	19.841	ug/L	2.284	10389	0.054
	Se 77		ug/L		7640	0.019
	Se 82	21.097	ug/L	3.704	1267	0.006
[	Kr 83		ug/L		108	0.000
[>	Lu 175		ug/L		127796	127796.049
	Tl 205	17.937	ug/L	1.124	25640	0.200
[	U 238	21.499	ug/L	0.432	195603	1.528

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
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	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

### QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be 9	98.297				
[>	Sc 45		82.4			
[	Ni 60	104.698				
[>	Ge 74		81.0			
	As 75	99.206				
	Se 77					
	Se 82	105.485				
[	Kr 83					
[>	Lu 175		83.0			
	Tl 205	89.687				
[	U 238	107.495				

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

Sample ID: QC Std 5

Report Date/Time: Thursday, February 18, 2010 23:31:57

Page 1

## QC Action

QC Action Line: No QC out of limits detected

## ICPMS#4 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, February 18, 2010 23:35:22

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\Dataset\100218\QC Std 6.213

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	51.784	ug/L	0.816	6839	0.007
Sc	45		ug/L		1048387	1048387.349
Ni	60	52.039	ug/L	1.113	50034	0.048
Ge	74		ug/L		233709	233708.567
As	75	47.677	ug/L	0.898	29775	0.129
Se	77		ug/L		8464	0.017
Se	82	49.937	ug/L	1.479	3465	0.015
Kr	83		ug/L		39	-0.000
Lu	175		ug/L		146986	146985.764
Tl	205	47.313	ug/L	0.867	77541	0.527
U	238	51.860	ug/L	0.921	542224	3.687

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
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	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

### QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Be	9	103.568				
Sc	45		95.3			
Ni	60	104.079				
Ge	74		94.5			
As	75	95.355				
Se	77					
Se	82	99.873				
Kr	83					
Lu	175		95.5			
Tl	205	94.626				
U	238	103.720				

### QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

Sample ID: QC Std 6

Report Date/Time: Thursday, February 18, 2010 23:36:05

Page 1

## QC Action

QC Action Line: No QC out of limits detected

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Sample ID: QC Std 6

Report Date/Time: Thursday, February 18, 2010 23:36:05

Page 2

## ICPMS#4 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, February 18, 2010 23:39:31

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\Vanl soil.mth

Dataset File: c:\elandata\Dataset\100218\QC Std 7.214

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.008	ug/L	280.248	7	0.000
> Sc	45		ug/L		1084765	1084764.750
[ Ni	60	0.016	ug/L	32.163	63	0.000
> Ge	74		ug/L		242949	242948.878
As	75	-0.171	ug/L	163.694	-604	-0.000
Se	77		ug/L		4988	0.001
Se	82	0.226	ug/L	33.131	40	0.000
[ Kr	83		ug/L		36	-0.000
> Lu	175		ug/L		151807	151806.836
Tl	205	0.216	ug/L	5.157	516	0.002
[ U	238	0.014	ug/L	6.980	469	0.001

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
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	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

### QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[ Be	9					
> Sc	45		98.6			
[ Ni	60					
> Ge	74		98.2			
As	75					
Se	77					
Se	82					
[ Kr	83					
> Lu	175		98.6			
Tl	205					
[ U	238					

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

Sample ID: QC Std 7

Report Date/Time: Thursday, February 18, 2010 23:40:14

Page 1

## QC Action

QC Action Line: No QC out of limits detected



## ICPMS#4 - Summary Report

Sample ID: QC Std 10

Sample Date/Time: Thursday, February 18, 2010 23:43:38

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\Dataset\100218\QC Std 10.215

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	1008.870	ug/L	1.164	119213	0.127
>	Sc 45		ug/L		938761	938760.582
[	Ni 60	932.998	ug/L	1.134	802533	0.855
>	Ge 74		ug/L		208263	208262.867
	As 75	922.279	ug/L	0.681	520995	2.504
	Se 77		ug/L		28092	0.116
	Se 82	491.363	ug/L	1.213	30198	0.145
[	Kr 83		ug/L		80	0.000
>	Lu 175		ug/L		129481	129480.787
	Tl 205	459.892	ug/L	0.403	662859	5.118
[	U 238	4960.205	ug/L	0.816	45662282	352.641

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
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	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

### QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be 9	100.887				
>	Sc 45		85.3			
[	Ni 60	93.300				
>	Ge 74		84.2			
	As 75	92.228				
	Se 77					
	Se 82	98.273				
[	Kr 83					
>	Lu 175		84.1			
	Tl 205	91.978				
[	U 238	99.204				

### QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

Sample ID: QC Std 10

Report Date/Time: Thursday, February 18, 2010 23:44:19

Page 1

## QC Action

QC Action Line: No QC out of limits detected

## ICPMS#4 - Summary Report

Sample ID: QC Std 11

Sample Date/Time: Thursday, February 18, 2010 23:47:43

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\Dataset\100218\QC Std 11.216

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	52.724	ug/L	1.005	6845	0.007
>	Sc 45		ug/L		1030583	1030583.161
[	Ni 60	52.986	ug/L	0.147	50078	0.049
>	Ge 74		ug/L		230063	230063.156
	As 75	49.491	ug/L	0.252	30444	0.134
	Se 77		ug/L		8126	0.016
	Se 82	52.221	ug/L	1.705	3565	0.015
[	Kr 83		ug/L		39	-0.000
>	Lu 175		ug/L		144528	144527.513
	Tl 205	49.483	ug/L	1.428	79737	0.551
[	U 238	54.693	ug/L	1.370	562279	3.888

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
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	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

### QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be 9	105.449				
>	Sc 45		93.6			
[	Ni 60	105.971				
>	Ge 74		93.0			
	As 75	98.982				
	Se 77					
	Se 82	104.442				
[	Kr 83					
>	Lu 175		93.9			
	Tl 205	98.966				
[	U 238	109.386				

### QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

Sample ID: QC Std 11

Report Date/Time: Thursday, February 18, 2010 23:48:25

Page 1

## QC Action

QC Action Line: No QC out of limits detected

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Sample ID: QC Std 11

Report Date/Time: Thursday, February 18, 2010 23:48:25

Page 2

## ICPMS#4 - Summary Report

Sample ID: QC Std 12

Sample Date/Time: Thursday, February 18, 2010 23:51:50

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\Dataset\100218\QC Std 12.217

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.058	ug/L	27.497	13	0.000
> Sc	45		ug/L		1069079	1069078.668
Ni	60	0.052	ug/L	7.754	97	0.000
> Ge	74		ug/L		239734	239733.962
As	75	0.019	ug/L	1784.688	-475	0.000
Se	77		ug/L		4698	0.000
Se	82	0.103	ug/L	153.057	31	0.000
Kr	83		ug/L		45	0.000
> Lu	175		ug/L		150818	150818.484
Tl	205	0.350	ug/L	3.080	736	0.004
U	238	0.190	ug/L	6.574	2347	0.013

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
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	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

### QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Be	9					
> Sc	45		97.1			
Ni	60					
> Ge	74		96.9			
As	75					
Se	77					
Se	82					
Kr	83					
> Lu	175		98.0			
Tl	205					
U	238					

### QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

Sample ID: QC Std 12

Report Date/Time: Thursday, February 18, 2010 23:52:34

Page 1

## QC Action

QC Action Line: No QC out of limits detected

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Sample ID: QC Std 12

Report Date/Time: Thursday, February 18, 2010 23:52:34

Page 2

## ICPMS#4 - Summary Report

Sample ID: 1202030975

Sample Date/Time: Thursday, February 18, 2010 23:56:01

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 948073|2|skj

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\Dataset\100218\1202030975.218

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[ Be	9	0.008	ug/L	430.732	7	0.000
> Sc	45		ug/L		1081865	1081865.117
[ Ni	60	0.192	ug/L	1.946	237	0.000
> Ge	74		ug/L		234744	234744.098
As	75	0.116	ug/L	144.091	-402	0.000
Se	77		ug/L		3504	-0.004
Se	82	0.376	ug/L	45.272	49	0.000
[ Kr	83		ug/L		40	-0.000
> Lu	175		ug/L		150351	150350.971
Tl	205	0.189	ug/L	1.478	465	0.002
[ U	238	0.150	ug/L	9.942	1914	0.011

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
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	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

### QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[ Be	9					
> Sc	45		98.3			
[ Ni	60					
> Ge	74		94.9			
As	75					
Se	77					
Se	82					
[ Kr	83					
> Lu	175		97.7			
Tl	205					
[ U	238					

### QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

Sample ID: 1202030975

Report Date/Time: Thursday, February 18, 2010 23:56:45

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## QC Action

QC Action Line: No QC out of limits detected

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Sample ID: 1202030975

Report Date/Time: Thursday, February 18, 2010 23:56:45

Page 2



## ICPMS#4 - Summary Report

Sample ID: 1202030980

Sample Date/Time: Friday, February 19, 2010 00:00:12

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 948073|40|skj

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\Dataset\100218\1202030980.219

### Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[ Be 9	22.134	ug/L	1.814	3059	0.003
> Sc 45		ug/L		1096205	1096204.890
[ Ni 60	37.728	ug/L	1.258	37936	0.035
> Ge 74		ug/L		243326	243326.054
[ As 75	30.376	ug/L	2.157	19573	0.082
Se 77		ug/L		8613	0.016
Se 82	81.683	ug/L	0.818	5885	0.024
[ Kr 83		ug/L		45	0.000
> Lu 175		ug/L		153816	153815.962
Tl 205	31.757	ug/L	0.930	54519	0.353
[ U 238	0.543	ug/L	1.945	6255	0.039

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
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	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

### QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[ Be 9					
> Sc 45		99.6			
[ Ni 60					
> Ge 74		98.4			
As 75					
Se 77					
Se 82					
[ Kr 83					
> Lu 175		99.9			
Tl 205					
[ U 238					

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

Sample ID: 1202030980

Report Date/Time: Friday, February 19, 2010 00:00:57

Page 1

## QC Action

QC Action Line: No QC out of limits detected

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Sample ID: 1202030980

Report Date/Time: Friday, February 19, 2010 00:00:57

Page 2

## ICPMS#4 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, February 19, 2010 00:04:22

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\Dataset\100218\QC Std 6.220

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	51.442	ug/L	1.812	6853	0.006
>	Sc 45		ug/L		1057695	1057695.424
[	Ni 60	51.322	ug/L	0.678	49780	0.047
>	Ge 74		ug/L		234056	234056.127
	As 75	48.693	ug/L	0.708	30465	0.132
	Se 77		ug/L		8202	0.016
	Se 82	49.404	ug/L	2.971	3433	0.015
[	Kr 83		ug/L		45	0.000
>	Lu 175		ug/L		146388	146388.399
	Tl 205	47.883	ug/L	0.535	78160	0.533
[	U 238	52.756	ug/L	0.152	549345	3.751

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
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	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

### QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be 9	102.885				
>	Sc 45		96.1			
[	Ni 60	102.645				
>	Ge 74		94.6			
	As 75	97.387				
	Se 77					
	Se 82	98.809				
[	Kr 83					
>	Lu 175		95.1			
	Tl 205	95.767				
[	U 238	105.511				

### QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

Sample ID: QC Std 6

Report Date/Time: Friday, February 19, 2010 00:05:05

Page 1

## QC Action

QC Action Line: No QC out of limits detected

## ICPMS#4 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, February 19, 2010 00:08:31

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\Dataset\100218\QC Std 7.221

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[ Be	9	0.011	ug/L	202.806	7	0.000
[> Sc	45		ug/L		1074701	1074700.799
[ Ni	60	0.024	ug/L	26.213	70	0.000
[> Ge	74		ug/L		241361	241361.305
As	75	-0.131	ug/L	233.673	-574	-0.000
Se	77		ug/L		4780	0.000
Se	82	0.042	ug/L	181.102	27	0.000
[ Kr	83		ug/L		37	-0.000
[> Lu	175		ug/L		151374	151374.304
Tl	205	0.304	ug/L	6.350	662	0.003
[ U	238	0.034	ug/L	9.854	680	0.002

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
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	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

### QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[ Be	9					
[> Sc	45		97.6			
[ Ni	60					
[> Ge	74		97.6			
As	75					
Se	77					
Se	82					
[ Kr	83					
[> Lu	175		98.3			
Tl	205					
[ U	238					

### QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

Sample ID: QC Std 7

Report Date/Time: Friday, February 19, 2010 00:09:15

Page 1

## QC Action

QC Action Line: No QC out of limits detected

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Sample ID: QC Std 7

Report Date/Time: Friday, February 19, 2010 00:09:15

Page 2

## ICPMS#4 - Summary Report

Sample ID: 245806001

Sample Date/Time: Friday, February 19, 2010 00:12:42

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 948073|2|skj

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\Dataset\100218\245806001.222

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	6.617	ug/L	3.256	931	0.001
[>	Sc 45		ug/L		1110803	1110803.361
[	Ni 60	34.343	ug/L	3.674	34993	0.031
[>	Ge 74		ug/L		224910	224909.954
	As 75	7.053	ug/L	6.405	3849	0.019
	Se 77		ug/L		3196	-0.005
	Se 82	2.324	ug/L	5.742	177	0.001
[	Kr 83		ug/L		128	0.000
[>	Lu 175		ug/L		157787	157786.814
	Tl 205	0.419	ug/L	19.830	889	0.005
[	U 238	402.886	ug/L	3.435	4517386	28.643

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
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	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

### QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[ Be 9					
[> Sc 45		100.9			
[ Ni 60					
[> Ge 74		90.9			
As 75					
Se 77					
Se 82					
[ Kr 83					
[> Lu 175		102.5			
Tl 205					
[ U 238					

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

Sample ID: 245806001

Report Date/Time: Friday, February 19, 2010 00:13:27

Page 1

## QC Action

QC Action Line: No QC out of limits detected

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Sample ID: 245806001

Report Date/Time: Friday, February 19, 2010 00:13:27

Page 2



## ICPMS#4 - Summary Report

Sample ID: 1202030976

Sample Date/Time: Friday, February 19, 2010 00:16:54

Sample Type:

Sample Description: LANL 6020 DUP

Number of Replicates: 3

Batch ID: 948073|2|skj

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\Dataset\100218\1202030976.223

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	5.279	ug/L	1.798	715	0.001
[>	Sc 45		ug/L		1068224	1068223.617
[	Ni 60	22.577	ug/L	5.189	22122	0.021
[>	Ge 74		ug/L		220576	220576.146
	As 75	6.243	ug/L	7.964	3286	0.017
	Se 77		ug/L		2928	-0.006
	Se 82	2.194	ug/L	13.533	165	0.001
[	Kr 83		ug/L		93	0.000
[>	Lu 175		ug/L		157584	157583.609
	Tl 205	0.332	ug/L	2.050	738	0.004
[	U 238	327.019	ug/L	5.407	3659481	23.249

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
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	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

### QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be 9				
[>	Sc 45		97.1		
[	Ni 60				
[>	Ge 74		89.2		
	As 75				
	Se 77				
	Se 82				
[	Kr 83				
[>	Lu 175		102.4		
	Tl 205				
[	U 238				

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

Sample ID: 1202030976

Report Date/Time: Friday, February 19, 2010 00:17:40

Page 1

## QC Action

QC Action Line: No QC out of limits detected

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Sample ID: 1202030976

Report Date/Time: Friday, February 19, 2010 00:17:40

Page 2

## ICPMS#4 - Summary Report

Sample ID: 1202030978

Sample Date/Time: Friday, February 19, 2010 00:21:07

Sample Type:

Sample Description: LANL 6020 MS

Number of Replicates: 3

Batch ID: 948073|2|skj

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\Dataset\100218\1202030978.224

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	32.061	ug/L	2.157	4438	0.004
>	Sc 45		ug/L		1098340	1098340.353
[	Ni 60	56.683	ug/L	0.263	57091	0.052
>	Ge 74		ug/L		217104	217104.449
	As 75	50.346	ug/L	0.820	29232	0.137
	Se 77		ug/L		3278	-0.004
	Se 82	11.215	ug/L	5.522	740	0.003
[	Kr 83		ug/L		136	0.000
>	Lu 175		ug/L		159072	159071.648
	Tl 205	41.844	ug/L	0.974	74237	0.466
[	U 238	496.495	ug/L	1.253	5615219	35.298

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
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	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

### QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be 9				
>	Sc 45		99.8		
[	Ni 60				
>	Ge 74		87.8		
	As 75				
	Se 77				
	Se 82				
[	Kr 83				
>	Lu 175		103.3		
	Tl 205				
[	U 238				

### QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

Sample ID: 1202030978

Report Date/Time: Friday, February 19, 2010 00:21:53

Page 1

## QC Action

QC Action Line: No QC out of limits detected

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Sample ID: 1202030978

Report Date/Time: Friday, February 19, 2010 00:21:53

Page 2

## ICPMS#4 - Summary Report

Sample ID: 1202030979

Sample Date/Time: Friday, February 19, 2010 00:25:21

Sample Type:

Sample Description: LANL 6020 MSD

Number of Replicates: 3

Batch ID: 948073|2|skj

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\Dataset\100218\1202030979.225

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[ Be	9	33.979	ug/L	2.457	4615	0.004
> Sc	45		ug/L		1077836	1077836.498
[ Ni	60	51.271	ug/L	1.313	50677	0.047
> Ge	74		ug/L		217876	217876.125
As	75	44.119	ug/L	1.013	25653	0.120
Se	77		ug/L		3161	-0.005
Se	82	10.338	ug/L	5.983	686	0.003
[ Kr	83		ug/L		113	0.000
> Lu	175		ug/L		159023	159022.811
Tl	205	41.721	ug/L	0.998	74001	0.464
[ U	238	498.739	ug/L	0.172	5638906	35.457

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
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	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

### QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[ Be	9					
> Sc	45		97.9			
[ Ni	60					
> Ge	74		88.1			
As	75					
Se	77					
Se	82					
[ Kr	83					
> Lu	175		103.3			
Tl	205					
[ U	238					

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

Sample ID: 1202030979

Report Date/Time: Friday, February 19, 2010 00:26:07

Page 1

## QC Action

QC Action Line: No QC out of limits detected

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Sample ID: 1202030979

Report Date/Time: Friday, February 19, 2010 00:26:07

Page 2

## ICPMS#4 - Summary Report

Sample ID: 1202030977

Sample Date/Time: Friday, February 19, 2010 00:29:34

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 948073|10|skj

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\Dataset\100218\1202030977.226

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	1.728	ug/L	4.136	225	0.000
> Sc	45		ug/L		1009029	1009028.670
Ni	60	7.745	ug/L	0.891	7204	0.007
> Ge	74		ug/L		222362	222362.106
As	75	2.136	ug/L	13.995	839	0.006
Se	77		ug/L		3119	-0.005
Se	82	0.775	ug/L	21.245	73	0.000
Kr	83		ug/L		49	0.000
> Lu	175		ug/L		151151	151150.934
Tl	205	0.306	ug/L	7.595	664	0.003
U	238	87.759	ug/L	0.430	943362	6.239

### Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

### QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Be	9					
> Sc	45		91.7			
Ni	60					
> Ge	74		89.9			
As	75					
Se	77					
Se	82					
Kr	83					
> Lu	175		98.2			
Tl	205					
U	238					

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

Sample ID: 1202030977

Report Date/Time: Friday, February 19, 2010 00:30:18

Page 1

## QC Action

QC Action Line: No QC out of limits detected

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Sample ID: 1202030977

Report Date/Time: Friday, February 19, 2010 00:30:18

Page 2



## ICPMS#4 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, February 19, 2010 00:33:43

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\Dataset\100218\QC Std 6.227

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	56.556	ug/L	0.507	7179	0.007
> Sc	45		ug/L		1007777	1007777.067
Ni	60	50.851	ug/L	0.589	46995	0.047
> Ge	74		ug/L		221917	221916.790
As	75	49.088	ug/L	1.194	29121	0.133
Se	77		ug/L		7303	0.014
Se	82	50.691	ug/L	0.699	3340	0.015
Kr	83		ug/L		43	0.000
> Lu	175		ug/L		148582	148581.949
Tl	205	46.658	ug/L	0.708	77306	0.519
U	238	50.957	ug/L	0.445	538574	3.623

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
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	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

### QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Be	9	113.113				
> Sc	45		91.6			
Ni	60	101.701				
> Ge	74		89.7			
As	75	98.175				
Se	77					
Se	82	101.381				
Kr	83					
> Lu	175		96.5			
Tl	205	93.315				
U	238	101.914				

### QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 6	Be	9CCV is out of limits ( +/- 10%)

Sample ID: QC Std 6

Report Date/Time: Friday, February 19, 2010 00:34:26

Page 1

## QC Action

QC Action Line: Continue

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Sample ID: QC Std 6

Report Date/Time: Friday, February 19, 2010 00:34:26

Page 2

## ICPMS#4 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, February 19, 2010 00:37:52

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\Dataset\100218\QC Std 7.228

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.009	ug/L	263.038	6	0.000
> Sc	45		ug/L		1004654	1004654.229
Ni	60	0.015	ug/L	26.726	57	0.000
> Ge	74		ug/L		226621	226620.945
As	75	0.269	ug/L	127.081	-293	0.001
Se	77		ug/L		3955	-0.002
Se	82	0.222	ug/L	67.785	37	0.000
Kr	83		ug/L		34	-0.000
> Lu	175		ug/L		148210	148210.495
Tl	205	0.212	ug/L	14.950	496	0.002
U	238	0.033	ug/L	2.568	661	0.002

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
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	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

### QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Be	9					
> Sc	45		91.3			
Ni	60					
> Ge	74		91.6			
As	75					
Se	77					
Se	82					
Kr	83					
> Lu	175		96.3			
Tl	205					
U	238					

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

Sample ID: QC Std 7

Report Date/Time: Friday, February 19, 2010 00:38:36

Page 1

## QC Action

QC Action Line: No QC out of limits detected

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Sample ID: QC Std 7

Report Date/Time: Friday, February 19, 2010 00:38:36

Page 2

## ICPMS#4 - Summary Report

Sample ID: 245806002

Sample Date/Time: Friday, February 19, 2010 00:42:02

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 948073|2|skj

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\Dataset\100218\245806002.229

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	164.139	ug/L	0.999	22369	0.021
> Sc	45		ug/L		1082545	1082545.013
Ni	60	34.817	ug/L	0.762	34578	0.032
> Ge	74		ug/L		216759	216759.418
As	75	13.698	ug/L	1.508	7622	0.037
Se	77		ug/L		3079	-0.005
Se	82	3.105	ug/L	14.748	220	0.001
Kr	83		ug/L		137	0.000
> Lu	175		ug/L		156806	156806.143
Tl	205	0.676	ug/L	3.686	1335	0.008
U	238	338.501	ug/L	1.428	3773732	24.065

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
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	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

### QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Be	9					
> Sc	45		98.4			
Ni	60					
> Ge	74		87.6			
As	75					
Se	77					
Se	82					
Kr	83					
> Lu	175		101.9			
Tl	205					
U	238					

### QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

Sample ID: 245806002

Report Date/Time: Friday, February 19, 2010 00:42:47

Page 1

## QC Action

QC Action Line: No QC out of limits detected

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Sample ID: 245806002

Report Date/Time: Friday, February 19, 2010 00:42:47

Page 2

## ICPMS#4 - Summary Report

Sample ID: 245806003

Sample Date/Time: Friday, February 19, 2010 00:46:14

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 948073|2|skj

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\Dataset\100218\245806003.230

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	35.520	ug/L	2.938	4536	0.004
> Sc	45		ug/L		1013974	1013974.129
Ni	60	27.739	ug/L	2.427	25803	0.025
> Ge	74		ug/L		210916	210916.197
As	75	7.699	ug/L	5.639	3976	0.021
Se	77		ug/L		2638	-0.007
Se	82	1.901	ug/L	15.679	140	0.001
Kr	83		ug/L		83	0.000
> Lu	175		ug/L		150377	150376.724
Tl	205	0.314	ug/L	5.465	674	0.003
U	238	784.247	ug/L	1.995	8382203	55.755

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
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	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

### QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Be	9					
> Sc	45		92.1			
Ni	60					
> Ge	74		85.3			
As	75					
Se	77					
Se	82					
Kr	83					
> Lu	175		97.7			
Tl	205					
U	238					

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

Sample ID: 245806003

Report Date/Time: Friday, February 19, 2010 00:47:00

Page 1

## QC Action

QC Action Line: No QC out of limits detected

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Sample ID: 245806003

Report Date/Time: Friday, February 19, 2010 00:47:00

Page 2



## ICPMS#4 - Summary Report

Sample ID: 245806004

Sample Date/Time: Friday, February 19, 2010 00:50:27

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 948073|2|skj

Method File: c:\elandata\Method\ani soil.mth

Dataset File: c:\elandata\Dataset\100218\245806004.231

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	66.069	ug/L	2.591	8168	0.008
>	Sc 45		ug/L		981871	981871.263
[	Ni 60	37.928	ug/L	0.519	34163	0.035
>	Ge 74		ug/L		209015	209015.474
	As 75	10.260	ug/L	4.572	5396	0.028
	Se 77		ug/L		3161	-0.004
	Se 82	1.125	ug/L	5.500	90	0.000
[	Kr 83		ug/L		62	0.000
>	Lu 175		ug/L		149801	149800.806
	Tl 205	0.169	ug/L	3.376	429	0.002
[	U 238	1622.319	ug/L	1.334	17277971	115.337

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
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	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

### QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be 9					
>	Sc 45		89.2			
[	Ni 60					
>	Ge 74		84.5			
	As 75					
	Se 77					
	Se 82					
[	Kr 83					
>	Lu 175		97.3			
	Tl 205					
[	U 238					

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

Sample ID: 245806004

Report Date/Time: Friday, February 19, 2010 00:51:12

Page 1

## QC Action

QC Action Line: No QC out of limits detected

---

Sample ID: 245806004

Report Date/Time: Friday, February 19, 2010 00:51:12

Page 2

## ICPMS#4 - Summary Report

Sample ID: 245806005

Sample Date/Time: Friday, February 19, 2010 00:54:40

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 948073|2|skj

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\Dataset\100218\245806005.232

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	1.822	ug/L	0.807	231	0.000
> Sc	45		ug/L		985144	985144.120
Ni	60	20.190	ug/L	0.373	18267	0.018
> Ge	74		ug/L		207159	207158.981
As	75	4.163	ug/L	13.407	1921	0.011
Se	77		ug/L		3174	-0.004
Se	82	1.538	ug/L	32.987	115	0.000
Kr	83		ug/L		94	0.000
> Lu	175		ug/L		159001	159000.553
Tl	205	0.143	ug/L	4.111	410	0.002
U	238	2.577	ug/L	3.174	29462	0.183

### Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

### QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Be	9					
> Sc	45			89.5		
Ni	60					
> Ge	74			83.7		
As	75					
Se	77					
Se	82					
Kr	83					
> Lu	175			103.3		
Tl	205					
U	238					

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

Sample ID: 245806005

Report Date/Time: Friday, February 19, 2010 00:55:26

Page 1

## QC Action

QC Action Line: No QC out of limits detected

---

Sample ID: 245806005

Report Date/Time: Friday, February 19, 2010 00:55:26

Page 2

## ICPMS#4 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, February 19, 2010 00:58:51

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\Dataset\100218\QC Std 6.233

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	58.649	ug/L	1.584	7089	0.007
> Sc	45		ug/L		959859	959858.789
Ni	60	51.599	ug/L	0.812	45419	0.047
> Ge	74		ug/L		214635	214634.637
As	75	49.507	ug/L	2.150	28410	0.134
Se	77		ug/L		6755	0.012
Se	82	49.422	ug/L	0.544	3150	0.015
Kr	83		ug/L		38	0.000
> Lu	175		ug/L		149958	149957.791
Tl	205	45.794	ug/L	0.299	76576	0.510
U	238	50.206	ug/L	0.853	535570	3.569

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
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	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

### QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Be	9	117.299				
> Sc	45		87.2			
Ni	60	103.198				
> Ge	74		86.8			
As	75	99.015				
Se	77					
Se	82	98.844				
Kr	83					
> Lu	175		97.4			
Tl	205	91.588				
U	238	100.413				

### QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 6	Be	9CCV is out of limits ( +/- 10%)

Sample ID: QC Std 6

Report Date/Time: Friday, February 19, 2010 00:59:34

Page 1

## QC Action

QC Action Line: Continue

---

Sample ID: QC Std 6

Report Date/Time: Friday, February 19, 2010 00:59:34

Page 2

## ICPMS#4 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, February 19, 2010 01:02:59

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\ani sol.mth

Dataset File: c:\elandata\Dataset\100218\QC Std 7.234

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.012	ug/L	142.433	6	0.000
> Sc	45		ug/L		947390	947390.465
Ni	60	0.024	ug/L	20.659	62	0.000
> Ge	74		ug/L		217441	217441.212
As	75	0.270	ug/L	138.613	-281	0.001
Se	77		ug/L		3664	-0.003
Se	82	0.141	ug/L	117.735	31	0.000
Kr	83		ug/L		37	-0.000
> Lu	175		ug/L		148384	148383.864
Tl	205	0.174	ug/L	11.421	434	0.002
U	238	0.049	ug/L	4.476	827	0.003

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
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	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

### QC Calculated Values

Analyte	Mass	QC Std	% Recovery	Int Std	% Recovery	Spike	% Recovery	Dilution	% Diff	Dup. Rel.	% Diff
Be	9										
> Sc	45				86.1						
Ni	60										
> Ge	74				87.9						
As	75										
Se	77										
Se	82										
Kr	83										
> Lu	175				96.4						
Tl	205										
U	238										

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

Sample ID: QC Std 7

Report Date/Time: Friday, February 19, 2010 01:03:43

Page 1

## QC Action

QC Action Line: No QC out of limits detected



## ICPMS#4 - Summary Report

Sample ID: 245806006

Sample Date/Time: Friday, February 19, 2010 01:07:11

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 948073|2|skj

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\Dataset\100218\245806006.235

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	48.892	ug/L	1.728	5924	0.006
> Sc	45		ug/L		961743	961742.817
Ni	60	34.614	ug/L	2.445	30544	0.032
> Ge	74		ug/L		204066	204065.858
As	75	16.871	ug/L	3.794	8930	0.046
Se	77		ug/L		3100	-0.004
Se	82	1.435	ug/L	3.616	107	0.000
Kr	83		ug/L		74	0.000
> Lu	175		ug/L		148158	148157.568
Tl	205	0.238	ug/L	5.764	539	0.003
U	238	1604.796	ug/L	1.180	16902694	114.091

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
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	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

### QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Be	9					
> Sc	45		87.4			
Ni	60					
> Ge	74		82.5			
As	75					
Se	77					
Se	82					
Kr	83					
> Lu	175		96.2			
Tl	205					
U	238					

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

Sample ID: 245806006

Report Date/Time: Friday, February 19, 2010 01:07:57

Page 1

## QC Action

QC Action Line: No QC out of limits detected

---

Sample ID: 245806006

Report Date/Time: Friday, February 19, 2010 01:07:57

Page 2

## ICPMS#4 - Summary Report

Sample ID: 245806007

Sample Date/Time: Friday, February 19, 2010 01:11:25

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 948073|2|skj

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\Dataset\100218\245806007.236

### Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[ Be 9	11.286	ug/L	2.399	1456	0.001
> Sc 45		ug/L		1021354	1021353.722
[ Ni 60	26.669	ug/L	0.201	25001	0.024
> Ge 74		ug/L		208153	208152.682
[ As 75	9.766	ug/L	6.918	5094	0.027
Se 77		ug/L		3223	-0.004
Se 82	1.850	ug/L	34.311	134	0.001
[ Kr 83		ug/L		76	0.000
> Lu 175		ug/L		152765	152765.052
Tl 205	0.459	ug/L	3.823	932	0.005
[ U 238	177.591	ug/L	0.294	1929089	12.626

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
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	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

### QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[ Be 9					
> Sc 45		92.8			
[ Ni 60					
> Ge 74		84.1			
[ As 75					
Se 77					
Se 82					
[ Kr 83					
> Lu 175		99.2			
Tl 205					
[ U 238					

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

Sample ID: 245806007

Report Date/Time: Friday, February 19, 2010 01:12:12

Page 1

## QC Action

QC Action Line: No QC out of limits detected

---

Sample ID: 245806007

Report Date/Time: Friday, February 19, 2010 01:12:12

Page 2

## ICPMS#4 - Summary Report

Sample ID: 245806008

Sample Date/Time: Friday, February 19, 2010 01:15:35

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 948073|2|skj

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\Dataset\100218\245806008.237

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[ Be	9	1.552	ug/L	5.773	201	0.000
[> Sc	45		ug/L		1002469	1002469.316
[ Ni	60	20.237	ug/L	0.641	18631	0.019
[> Ge	74		ug/L		210377	210377.307
[ As	75	4.010	ug/L	16.661	1867	0.011
[ Se	77		ug/L		3176	-0.004
[ Se	82	1.373	ug/L	46.354	106	0.000
[ Kr	83		ug/L		87	0.000
[> Lu	175		ug/L		160491	160491.115
[ Tl	205	0.144	ug/L	12.649	416	0.002
[ U	238	2.773	ug/L	0.974	31977	0.197

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
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	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

### QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[ Be	9					
[> Sc	45		91.1			
[ Ni	60					
[> Ge	74		85.0			
[ As	75					
[ Se	77					
[ Se	82					
[ Kr	83					
[> Lu	175		104.2			
[ Tl	205					
[ U	238					

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

Sample ID: 245806008

Report Date/Time: Friday, February 19, 2010 01:16:17

Page 1

## QC Action

QC Action Line: No QC out of limits detected

---

Sample ID: 245806008

Report Date/Time: Friday, February 19, 2010 01:16:17

Page 2

## ICPMS#4 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, February 19, 2010 01:19:42

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\Dataset\100218\QC Std 6.238

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	58.279	ug/L	0.970	7087	0.007
> Sc	45		ug/L		965473	965473.149
Ni	60	50.797	ug/L	0.959	44979	0.047
> Ge	74		ug/L		214526	214526.421
As	75	48.922	ug/L	0.596	28057	0.133
Se	77		ug/L		6801	0.012
Se	82	49.654	ug/L	0.967	3163	0.015
Kr	83		ug/L		39	0.000
> Lu	175		ug/L		148764	148763.731
Tl	205	46.056	ug/L	1.012	76400	0.513
U	238	50.584	ug/L	1.594	535291	3.596

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
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	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

### QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Be	9	116.559				
> Sc	45		87.7			
Ni	60	101.594				
> Ge	74		86.7			
As	75	97.844				
Se	77					
Se	82	99.308				
Kr	83					
> Lu	175		96.6			
Tl	205	92.112				
U	238	101.169				

### QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 6	Be	9CCV is out of limits ( +/- 10%)

Sample ID: QC Std 6

Report Date/Time: Friday, February 19, 2010 01:20:25

Page 1

## QC Action

QC Action Line: Continue

---

Sample ID: QC Std 6

Report Date/Time: Friday, February 19, 2010 01:20:25

Page 2



## ICPMS#4 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, February 19, 2010 01:23:50

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\Dataset\100218\QC Std 7.239

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	0.036	ug/L	86.516	9	0.000
>	Sc 45		ug/L		963845	963844.841
[	Ni 60	0.010	ug/L	50.238	51	0.000
>	Ge 74		ug/L		219621	219621.200
	As 75	-0.016	ug/L	2348.859	-454	-0.000
	Se 77		ug/L		3674	-0.003
	Se 82	0.203	ug/L	21.801	35	0.000
[	Kr 83		ug/L		34	-0.000
>	Lu 175		ug/L		149844	149843.932
	Tl 205	0.171	ug/L	17.037	434	0.002
[	U 238	0.037	ug/L	7.247	705	0.003

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
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	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

### QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Be 9					
>	Sc 45		87.6			
[	Ni 60					
>	Ge 74		88.8			
	As 75					
	Se 77					
	Se 82					
[	Kr 83					
>	Lu 175		97.3			
	Tl 205					
[	U 238					

### QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

Sample ID: QC Std 7

Report Date/Time: Friday, February 19, 2010 01:24:34

Page 1

## QC Action

QC Action Line: No QC out of limits detected

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Sample ID: QC Std 7

Report Date/Time: Friday, February 19, 2010 01:24:34

Page 2

## Daily Performance Report

### Sample ID: Sample

Sample Date/Time: Friday, February 19, 2010 10:06:02

### Sample Description:

Method File: c:\elandata\Method\daily2.mth

Dataset File: c:\elandata\Dataset\100125\Sample.328

Tuning File: c:\elandata\Tuning\default2.tun

Optimization File: c:\elandata\Optimize\default.dac

Dual Detector Mode: Pulse

Acq. Dead Time(ns): 35

Current Dead Time (ns): 35

### Summary

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
Be	9.0	1489.1	1489.078	43.184	2.9
Mg	24.0	28749.5	28749.501	232.437	0.8
Co	58.9	59460.1	59460.089	361.476	0.6
Rh	102.9	98298.8	98298.839	439.007	0.4
In	114.9	131859.2	131859.189	1277.638	1.0
Pb	208.0	52661.5	52661.486	238.973	0.5
[> Ba	137.9	107737.7	107737.683	629.177	0.6
[ Ba++	69.0	1366.9	0.013	0.000	1.4
[> Ce	139.9	127413.9	127413.911	1095.808	0.9
[ CeO	155.9	3206.9	0.025	0.000	0.8
Bkgd	220.0	1.3	1.300	1.037	79.8

### Current Optimization File Data

Current Value	Description
0.91	Nebulizer Gas Flow
4.50	Lens Voltage
1000.00	ICP RF Power
-2000.00	Analog Stage Voltage
1100.00	Pulse Stage Voltage
50.00	Discriminator Threshold
-2.00	AC Rod Offset

### Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	17	4.8	1330.7
Co	59	17	5.5	40861.7
In	115	17	6.8	95754.8

## ICPMS #4 TUNING REPORT

File Name: default2.tun  
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas Peak W
He	3.0	3.0	606	2060	0.687
Be	9.0	9.0	2044	2045	0.721
Mg	24.0	24.0	5676	2065	0.654
Mg	25.0	25.0	5951	2080	0.655
Mg	26.0	26.0	6158	2085	0.650
Co	58.9	58.9	14184	2140	0.635
Rh	102.9	102.9	24866	2230	0.658
In	114.9	114.9	27778	2255	0.676
Ce	139.9	139.9	33852	2310	0.641
Pb	206.0	206.0	49941	2500	0.663
Pb	207.0	207.0	50113	2375	0.686
Pb	208.0	208.0	50436	2570	0.793
U	238.1	238.1	57706	2510	0.711

## ICPMS#4 - Summary Report

Sample ID: Blank

Sample Date/Time: Friday, February 19, 2010 14:11:54

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100219\Blank.058

### Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be 9		ug/L			0
Sc 45		ug/L		839247	

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	
Sc	45Linear Thru Zero	

### QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Be 9					
Sc 45					

### 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: Blank

Report Date/Time: Friday, February 19, 2010 14:12:07

Page 1

## ICPMS#4 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Friday, February 19, 2010 14:14:05

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100219\Standard 1.059

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	10.000	ug/L	6.843	1301	0.002
Sc	45		ug/L		861432	861431.651

### 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	Dup. Rel. % Diff
Be	9					
Sc	45					

### 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: Standard 1

Report Date/Time: Friday, February 19, 2010 14:14:15

Page 1

## ICPMS#4 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Friday, February 19, 2010 14:16:14

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100219\Standard 2.060

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	100.016	ug/L	3.428	12372	0.015
>	Sc 45		ug/L		805612	805612.142

### 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	Dup. Rel. % Diff
[	Be 9					
>	Sc 45					

### 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: Standard 2

Report Date/Time: Friday, February 19, 2010 14:16:25

Page 1

## ICPMS#4 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Friday, February 19, 2010 14:18:24

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100219\QC Std 1.061

### Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be 9	52.075	ug/L	0.900	6407	0.008
Sc 45		ug/L		800967	800967.104

### 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	Dup. Rel. % Diff
Be 9	104.149				
Sc 45		95.4			

### 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: QC Std 1

Report Date/Time: Friday, February 19, 2010 14:18:35

Page 1



## ICPMS#4 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Friday, February 19, 2010 14:20:36

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100219\QC Std 2.062

### Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be 9	0.052	ug/L	40.369	7	0.000
Sc 45		ug/L		793930	793929.982

### 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	Dup. Rel. % Diff
Be 9					
Sc 45		94.6			

### 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: QC Std 2

Report Date/Time: Friday, February 19, 2010 14:20:49

Page 1

## ICPMS#4 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Friday, February 19, 2010 14:22:48

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100219\QC Std 3.063

### Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be 9	0.496	ug/L	12.307	64	0.000
Sc 45		ug/L		835674	835673.666

### 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	Dup. Rel. % Diff
Be 9	99.196				
Sc 45		99.6			

### 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: QC Std 3

Report Date/Time: Friday, February 19, 2010 14:22:59

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## ICPMS#4 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Friday, February 19, 2010 14:24:59

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100219\QC Std 4.064

### Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be 9	0.102	ug/L	48.484	12	0.000
Sc 45		ug/L		728967	728967.432

### 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	Dup. Rel. % Diff
Be 9					
Sc 45		86.9			

### 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

Sample ID: QC Std 4

Report Date/Time: Friday, February 19, 2010 14:25:11

Page 1

## ICPMS#4 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Friday, February 19, 2010 14:27:11

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100219\QC Std 5.065

### Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be 9	17.927	ug/L	4.768	1909	0.003
Sc 45		ug/L		693507	693506.724

### 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	Dup. Rel. % Diff
Be 9	89.635				
Sc 45		82.6			

### 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: QC Std 5

Report Date/Time: Friday, February 19, 2010 14:27:22

Page 1

## ICPMS#4 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, February 19, 2010 14:29:23

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100219\QC Std 6.066

### Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be 9	50.142	ug/L	1.932	6156	0.008
Sc 45		ug/L		799544	799544.186

### 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	Dup. Rel. % Diff
Be 9	100.284				
Sc 45		95.3			

### 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: QC Std 6

Report Date/Time: Friday, February 19, 2010 14:29:35

Page 1

## ICPMS#4 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, February 19, 2010 14:31:36

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100219\QC Std 7.067

### Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be 9	0.033	ug/L	15.585	4	0.000
Sc 45		ug/L		787111	787111.041

### 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	Dup. Rel. % Diff
Be 9					
Sc 45		93.8			

### 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: QC Std 7

Report Date/Time: Friday, February 19, 2010 14:31:49

Page 1

## ICPMS#4 - Summary Report

Sample ID: 1202030975

Sample Date/Time: Friday, February 19, 2010 14:33:51

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 948073|2|skj

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100219\1202030975.068

### Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be 9	0.011	ug/L	42.317	2	0.000
Sc 45		ug/L		812170	812170.215

### 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	Dup. Rel. % Diff
Be 9					
Sc 45		96.8			

### 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: 1202030975

Report Date/Time: Friday, February 19, 2010 14:34:04

Page 1

## ICPMS#4 - Summary Report

Sample ID: 1202030980

Sample Date/Time: Friday, February 19, 2010 14:36:07

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 948073|40|skj

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100219\1202030980.069

### Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be 9	21.271	ug/L	2.499	2764	0.003
Sc 45		ug/L		846077	846076.780

### 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	Dup. Rel. % Diff
Be 9					
Sc 45		100.8			

### 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: 1202030980

Report Date/Time: Friday, February 19, 2010 14:36:21

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## ICPMS#4 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, February 19, 2010 14:38:21

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100219\QC Std 6.070

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[ Be	9	49.997	ug/L	1.075	6264	0.008
45		ug/L		815746	815746.484	

### 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	Dup. Rel.	% Diff
[ Be	9		99.994								
45				97.2							

### 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 6

Report Date/Time: Friday, February 19, 2010 14:38:33

Page 1

## ICPMS#4 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, February 19, 2010 14:40:34

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100219\QC Std 7.071

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.011	ug/L	43.411	2	0.000
Sc	45		ug/L		800752	800752.085

### 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	Dup. Rel. % Diff
Be	9					
Sc	45		95.4			

### 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: QC Std 7

Report Date/Time: Friday, February 19, 2010 14:40:47

Page 1

## ICPMS#4 - Summary Report

Sample ID: 245806001

Sample Date/Time: Friday, February 19, 2010 14:42:50

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 948073|2|sk|

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100219\245806001.072

### Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be 9	6.540	ug/L	0.692	821	0.001
Sc 45		ug/L		817067	817066.636

### 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	Dup. Rel. % Diff
Be 9					
Sc 45		97.4			

### 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: 245806001

Report Date/Time: Friday, February 19, 2010 14:43:04

Page 1

## ICPMS#4 - Summary Report

Sample ID: 1202030976

Sample Date/Time: Friday, February 19, 2010 14:45:07

Sample Type:

Sample Description: LANL 6020 DUP

Number of Replicates: 3

Batch ID: 948073|2|skj

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100219\1202030976.073

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	4.373	ug/L	2.344	562	0.001
Sc	45		ug/L		835955	835955.087

### 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	Dup. Rel. % Diff
Be	9					
Sc	45		99.6			

### 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: 1202030976

Report Date/Time: Friday, February 19, 2010 14:45:21

Page 1

## ICPMS#4 - Summary Report

Sample ID: 1202030978

Sample Date/Time: Friday, February 19, 2010 14:47:24

Sample Type:

Sample Description: LANL 6020 MS

Number of Replicates: 3

Batch ID: 948073|2|skj

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100219\1202030978.074

### Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be 9	28.373	ug/L	3.126	3507	0.004
Sc 45		ug/L		804738	804737.838

### 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	Dup. Rel. % Diff
Be 9					
Sc 45		95.9			

### 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

Sample ID: 1202030978

Report Date/Time: Friday, February 19, 2010 14:47:39

Page 1

## ICPMS#4 - Summary Report

Sample ID: 1202030979

Sample Date/Time: Friday, February 19, 2010 14:49:43

Sample Type:

Sample Description: LANL 6020 MSD

Number of Replicates: 3

Batch ID: 948073|2|skj

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100219\1202030979.075

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	28.991	ug/L	1.396	3589	0.004
Sc	45		ug/L		806061	806061.152

### 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	Dup. Rel. % Diff
Be	9					
Sc	45		96.0			

### 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: 1202030979

Report Date/Time: Friday, February 19, 2010 14:49:58

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## ICPMS#4 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, February 19, 2010 14:51:58

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100219\QC Std 6.076

### Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be 9	50.412	ug/L	3.532	5967	0.008
Sc 45		ug/L		771150	771150.195

### 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	Dup. Rel. % Diff
Be 9	100.824				
Sc 45		91.9			

### 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

Sample ID: QC Std 6

Report Date/Time: Friday, February 19, 2010 14:52:10

Page 1

## ICPMS#4 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, February 19, 2010 14:54:11

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100219\QC Std 7.077

### Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be 9	0.039	ug/L	42.923	5	0.000
Sc 45		ug/L		785965	785964.801

### 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	Dup. Rel. % Diff
Be 9					
Sc 45		93.7			

### 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: QC Std 7

Report Date/Time: Friday, February 19, 2010 14:54:24

Page 1



## ICPMS#4 - Summary Report

Sample ID: 1202030977

Sample Date/Time: Friday, February 19, 2010 14:56:26

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 948073|10|skj

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100219\1202030977.078

### Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be 9	1.464	ug/L	3.055	179	0.000
Sc 45		ug/L		795000	794999.662

### 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	Dup. Rel. % Diff
Be 9					
Sc 45		94.7			

### 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: 1202030977

Report Date/Time: Friday, February 19, 2010 14:56:40

Page 1

## ICPMS#4 - Summary Report

Sample ID: 245806002

Sample Date/Time: Friday, February 19, 2010 14:58:42

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 948073|2|skj

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100219\245806002.079

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	141.378	ug/L	1.316	17320	0.022
Sc	45		ug/L		797658	797658.028

### 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	Dup. Rel. % Diff
Be	9					
Sc	45		95.0			

### 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: 245806002

Report Date/Time: Friday, February 19, 2010 14:58:56

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## ICPMS#4 - Summary Report

Sample ID: 245806003

Sample Date/Time: Friday, February 19, 2010 15:00:58

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 948073|2|skj

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100219\245806003.080

### Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be 9	29.347	ug/L	2.946	3515	0.005
Sc 45		ug/L		779851	779850.995

### 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	Dup. Rel. % Diff
Be 9					
Sc 45		92.9			

### 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

Sample ID: 245806003

Report Date/Time: Friday, February 19, 2010 15:01:13

Page 1

## ICPMS#4 - Summary Report

Sample ID: 245806004

Sample Date/Time: Friday, February 19, 2010 15:03:15

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 948073|2|skj

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100219\245806004.081

### Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be 9	54.825	ug/L	0.551	6328	0.008
Sc 45		ug/L		751494	751493.812

### 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	Dup. Rel. % Diff
Be 9					
Sc 45		89.5			

### 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: 245806004

Report Date/Time: Friday, February 19, 2010 15:03:30

Page 1

## ICPMS#4 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, February 19, 2010 15:05:30

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100219\QC Std 6.082

### Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be 9	50.238	ug/L	1.772	6175	0.008
Sc 45		ug/L		800328	800328.372

### 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	Dup. Rel. % Diff
Be 9	100.475				
Sc 45		95.4			

### 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: QC Std 6

Report Date/Time: Friday, February 19, 2010 15:05:42

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## ICPMS#4 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, February 19, 2010 15:07:44

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100219\QC Std 7.083

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.031	ug/L	53.222	4	0.000
Sc	45		ug/L		778134	778134.007

### 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	Dup. Rel. % Diff
Be	9					
Sc	45		92.7			

### 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: Friday, February 19, 2010 15:07:56

Page 1

## ICPMS#4 - Summary Report

Sample ID: 245806005

Sample Date/Time: Friday, February 19, 2010 15:10:00

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 948073|2|skj

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100219\245806005.084

### Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be 9	1.540	ug/L	14.263	182	0.000
Sc 45		ug/L		765963	765963.311

### 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	Dup. Rel. % Diff
Be 9					
Sc 45		91.3			

### 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: 245806005

Report Date/Time: Friday, February 19, 2010 15:10:14

Page 1

## ICPMS#4 - Summary Report

Sample ID: 245806006

Sample Date/Time: Friday, February 19, 2010 15:12:18

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 948073|2|skj

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100219\245806006.085

### Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be 9	41.396	ug/L	1.605	4711	0.006
Sc 45		ug/L		740849	740848.801

### 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	Dup. Rel. % Diff
Be 9					
Sc 45		88.3			

### 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: 245806006

Report Date/Time: Friday, February 19, 2010 15:12:33

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## ICPMS#4 - Summary Report

Sample ID: 245806007

Sample Date/Time: Friday, February 19, 2010 15:14:37

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 948073|2|skj

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100219\245806007.086

### Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be 9	9.375	ug/L	5.017	1141	0.001
Sc 45		ug/L		792420	792420.108

### 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	Dup. Rel. % Diff
Be 9					
Sc 45		94.4			

### 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: 245806007

Report Date/Time: Friday, February 19, 2010 15:14:52

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## ICPMS#4 - Summary Report

Sample ID: 245806008

Sample Date/Time: Friday, February 19, 2010 15:16:51

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 948073[2][sk]

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100219\245806008.087

### Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[ Be 9	1.444	ug/L	13.957	176	0.000
[> Sc 45		ug/L		791397	791397.187

### 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	Dup. Rel. % Diff
[ Be 9					
[> Sc 45		94.3			

### 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: 245806008

Report Date/Time: Friday, February 19, 2010 15:17:02

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## ICPMS#4 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, February 19, 2010 15:19:02

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100219\QC Std 6.088

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	52.516	ug/L	4.072	6239	0.008
Sc	45		ug/L		774118	774117.686

### 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	Dup. Rel. % Diff
Be	9	105.032				
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

Sample ID: QC Std 6

Report Date/Time: Friday, February 19, 2010 15:19:14

Page 1

## ICPMS#4 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, February 19, 2010 15:21:16

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be only.mth

Dataset File: C:\elandata\Dataset\100219\QC Std 7.089

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.017	ug/L	76.203	2	0.000
Sc	45		ug/L		758978	758978.019

### 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	Dup. Rel. % Diff
Be	9					
Sc	45		90.4			

### 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: QC Std 7

Report Date/Time: Friday, February 19, 2010 15:21:29

Page 1

Method Name: SOIL  
 Method Description: 7471A, ILM04 ANALYST JXL1  
 Element: Hg

Date: 02/16/2010  
 Technique: FI-MHS  
 Calibration Type:  
 Hg, Calc. Intercept : Linear  
 Wavelength: 253.7 nm  
 Sample Info Name: 021610S1.SIF

Results Data Set Name: 021610S2

Element: Hg Seq. No.: 1 AS Loc.: 1 Date: 02/16/2010  
 Sample ID: Calib Blank

Repl #	SampleConc µg/L	StndConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1			0.0025	0.0025	08:48:33	No
2			0.0023	0.0023	08:49:08	No
Mean:			0.0024			
SD :			0.0001			
%RSD:			3.2649			

Auto-zero performed.

Element: Hg Seq. No.: 2 AS Loc.: 2 Date: 02/16/2010  
 Sample ID: S0.2

Repl #	SampleConc µg/L	StndConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1			0.0017	0.0041	08:50:31	No
2			0.0018	0.0042	08:51:05	No
Mean:			0.0017			
SD :			0.0000			
%RSD:			2.5015			

[Hg] Standard number 1 applied. [0.200]  
 Correlation Coefficient: 1.00000 Slope: 0.00873  
 Intercept : 0.00000

Element: Hg Seq. No.: 3 AS Loc.: 3 Date: 02/16/2010  
 Sample ID: S0.5

Repl #	SampleConc µg/L	StndConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1			0.0035	0.0059	08:52:29	No
2			0.0032	0.0056	08:53:04	No
Mean:			0.0033			
SD :			0.0002			
%RSD:			5.1881			

[Hg] Standard number 2 applied. [0.500]  
 Correlation Coefficient: 0.98999 Slope: 0.00657  
 Intercept : 0.00016

Element: Hg Seq. No.: 4 AS Loc.: 4 Date: 02/16/2010  
 Sample ID: S2.0

Repl #	SampleConc µg/L	StndConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1			0.0104	0.0128	08:54:30	No
2			0.0105	0.0129	08:55:05	No
Mean:			0.0104			
SD :			0.0000			
%RSD:			0.2507			

[Hg] Standard number 3 applied. [2.000]

Correlation Coefficient: 0.99659  
Intercept : 0.00048

Slope: 0.00503

=====

Element: Hg Seq. No.: 5 AS Loc.: 5 Date: 02/16/2010  
Sample ID: S5.0

-----

Repl #	SampleConc µg/L	StndConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1			0.0257	0.0281	08:56:30	No
2			0.0257	0.0281	08:57:05	No
Mean:			0.0257			
SD :			0.0000			
%RSD:			0.1116			
[Hg] Standard number 4 applied. [5.000]						
Correlation Coefficient:			0.99952	Slope: 0.00504		
Intercept :			0.00048			

-----

=====

Element: Hg Seq. No.: 6 AS Loc.: 6 Date: 02/16/2010  
Sample ID: S10

-----

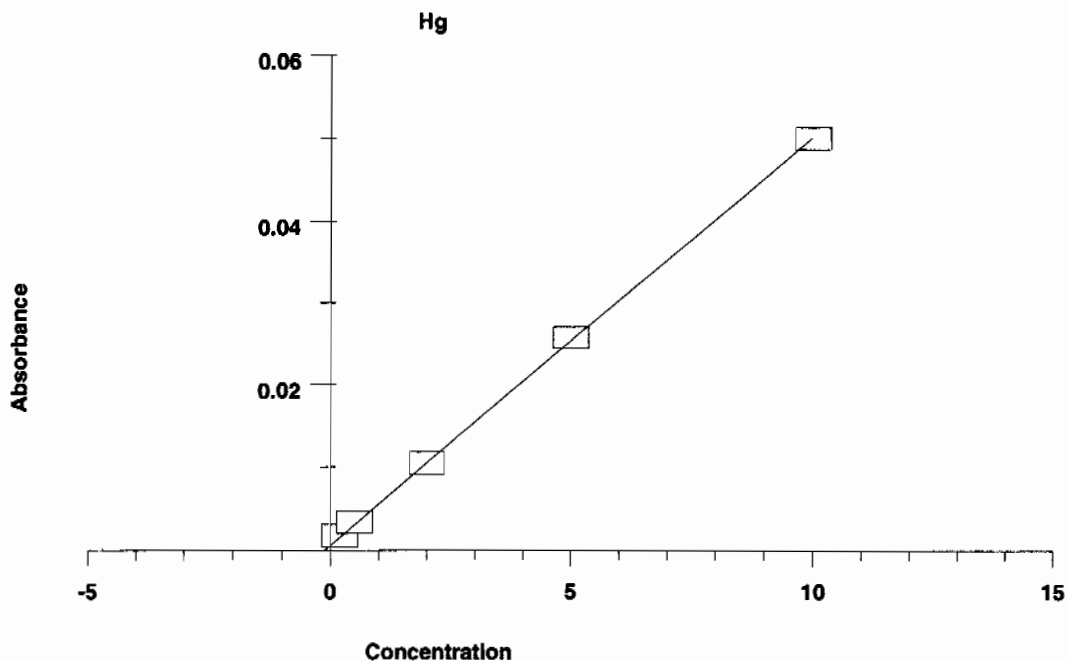
Repl #	SampleConc µg/L	StndConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1			0.0498	0.0522	08:58:31	No
2			0.0500	0.0524	08:59:06	No
Mean:			0.0499			
SD :			0.0001			
%RSD:			0.1977			
[Hg] Standard number 5 applied. [10.00]						
Correlation Coefficient:			0.99983	Slope: 0.00495		
Intercept :			0.00058			

-----

#### Calibration data for Hg

Standard ID	Mean Signal (Pk Height)	Entered Concentration (µg/L)	Calculated Concentration (µg/L)	Standard Deviation	%RSD
Calib Blank	0.0024	---	---	---	---
S0.2	0.0017	0.200	0.235	0.0000	2.5
S0.5	0.0033	0.500	0.557	0.0002	5.2
S2.0	0.0104	2.000	1.990	0.0000	0.3
S5.0	0.0257	5.000	5.075	0.0000	0.1
S10	0.0499	10.000	9.961	0.0001	0.2
Correlation Coefficient:		0.99983	Slope:	0.00495	Intercept: 0.0006

-----



=====

Element: Hg    Seq. No.: 7    AS Loc.: 9    Date: 02/16/2010  
 Sample ID: ICV

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	5.030	5.030	0.0255	0.0279	09:00:34	No
2	5.059	5.059	0.0256	0.0280	09:01:09	No
Mean:	5.044	5.044	0.0256			
SD :	0.0203	0.0203	0.0001			
%RSD:	0.4	0.4	0.3931			

QC value within specified limits.

=====

Element: Hg    Seq. No.: 8    AS Loc.: 10    Date: 02/16/2010  
 Sample ID: ICB

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	-0.020	-0.020	0.0005	0.0029	09:02:31	No
2	-0.070	-0.070	0.0002	0.0026	09:03:06	No
Mean:	-0.045	-0.045	0.0004			
SD :	0.0354	0.0354	0.0002			
%RSD:	78.9	78.9	48.4674			

QC value within specified limits.

=====

Element: Hg    Seq. No.: 9    AS Loc.: 11    Date: 02/16/2010  
 Sample ID: CRDL

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	0.255	0.255	0.0018	0.0042	09:04:28	No
2	0.255	0.255	0.0018	0.0042	09:05:02	No
Mean:	0.255	0.255	0.0018			
SD :	0.0000	0.0000	0.0000			
%RSD:						

QC value within specified limits.

=====

Element: Hg Seq. No.: 10 AS Loc.: 7 Date: 02/16/2010  
Sample ID: CCV

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	5.135	5.135	0.0260	0.0284	09:06:27	No
2	5.108	5.108	0.0259	0.0283	09:07:02	No
Mean:	5.122	5.122	0.0259			
SD :	0.0194	0.0194	0.0001			
%RSD:	0.4	0.4	0.3705			

QC value within specified limits.

=====

Element: Hg Seq. No.: 11 AS Loc.: 8 Date: 02/16/2010  
Sample ID: CCB

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	0.030	0.030	0.0007	0.0031	09:08:30	No
2	0.038	0.038	0.0008	0.0032	09:09:05	No
Mean:	0.034	0.034	0.0008			
SD :	0.0054	0.0054	0.0000			
%RSD:	16.1	16.1	3.5883			

QC value within specified limits.

=====

Element: Hg Seq. No.: 12 AS Loc.: 12 Date: 02/16/2010  
Sample ID: 1202029970|i||947650|MB

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	-0.003	-0.003	0.0006	0.0030	09:10:31	No
2	-0.032	-0.032	0.0004	0.0028	09:11:06	No
Mean:	-0.018	-0.018	0.0005			
SD :	0.0208	0.0208	0.0001			
%RSD:	117.0	117.0	20.7886			

=====

Element: Hg Seq. No.: 13 AS Loc.: 13 Date: 02/16/2010  
Sample ID: 1202029971|i|10||LCS

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	4.056	4.056	0.0207	0.0231	09:12:30	No
2	4.021	4.021	0.0205	0.0229	09:13:05	No
Mean:	4.038	4.038	0.0206			
SD :	0.0245	0.0245	0.0001			
%RSD:	0.6	0.6	0.5896			

=====

Element: Hg Seq. No.: 14 AS Loc.: 14 Date: 02/16/2010  
Sample ID: 245682001|i|||

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	0.033	0.033	0.0007	0.0031	09:14:31	No
2	-0.020	-0.020	0.0005	0.0029	09:15:06	No
Mean:	0.007	0.007	0.0006			
SD :	0.0375	0.0375	0.0002			
%RSD:	551.5	551.5	30.1200			

=====

Element: Hg Seq. No.: 15 AS Loc.: 15 Date: 02/16/2010  
Sample ID: 245682002|i|||



%RSD: 8.9 8.9 6.5532

=====  
 Element: Hg Seq. No.: 21 AS Loc.: 21 Date: 02/16/2010  
 Sample ID: 245682008|i|||

Repl #	SampleConc µg/L	StndConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	0.236	0.236	0.0018	0.0042	09:28:22	No
2	0.226	0.226	0.0017	0.0041	09:28:58	No
Mean:	0.231	0.231	0.0017			
SD :	0.0068	0.0068	0.0000			
%RSD:	3.0	3.0	1.9600			

=====  
 Element: Hg Seq. No.: 22 AS Loc.: 7 Date: 02/16/2010  
 Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	5.287	5.287	0.0268	0.0292	09:30:23	No
2	5.240	5.240	0.0265	0.0289	09:30:58	No
Mean:	5.263	5.263	0.0266			
SD :	0.0336	0.0336	0.0002			
%RSD:	0.6	0.6	0.6245			

QC value within specified limits.

=====  
 Element: Hg Seq. No.: 23 AS Loc.: 8 Date: 02/16/2010  
 Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	-0.006	-0.006	0.0006	0.0030	09:32:26	No
2	-0.012	-0.012	0.0005	0.0029	09:33:01	No
Mean:	-0.009	-0.009	0.0005			
SD :	0.0042	0.0042	0.0000			
%RSD:	48.8	48.8	3.8689			

QC value within specified limits.

=====  
 Element: Hg Seq. No.: 24 AS Loc.: 22 Date: 02/16/2010  
 Sample ID: 245682009|i|||

Repl #	SampleConc µg/L	StndConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	0.275	0.275	0.0019	0.0043	09:34:26	No
2	0.238	0.238	0.0018	0.0042	09:35:01	No
Mean:	0.257	0.257	0.0019			
SD :	0.0259	0.0259	0.0001			
%RSD:	10.1	10.1	6.9142			

=====  
 Element: Hg Seq. No.: 25 AS Loc.: 23 Date: 02/16/2010  
 Sample ID: 245682010|i|||

Repl #	SampleConc µg/L	StndConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	0.378	0.378	0.0025	0.0049	09:36:24	No
2	0.359	0.359	0.0024	0.0048	09:36:59	No
Mean:	0.369	0.369	0.0024			
SD :	0.0136	0.0136	0.0001			
%RSD:	3.7	3.7	2.7863			

=====  
 Element: Hg Seq. No.: 26 AS Loc.: 24 Date: 02/16/2010  
 Sample ID: 245786001|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.139	0.139	0.0013	0.0037	09:38:23	No
2	0.130	0.130	0.0012	0.0036	09:38:58	No
Mean:	0.134	0.134	0.0012			
SD :	0.0064	0.0064	0.0000			
%RSD:	4.7	4.7	2.5206			

=====  
 Element: Hg Seq. No.: 27 AS Loc.: 25 Date: 02/16/2010  
 Sample ID: 245806001|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.245	0.245	0.0018	0.0042	09:40:23	No
2	0.229	0.229	0.0017	0.0041	09:40:58	No
Mean:	0.237	0.237	0.0018			
SD :	0.0115	0.0115	0.0001			
%RSD:	4.8	4.8	3.2354			

=====  
 Element: Hg Seq. No.: 28 AS Loc.: 26 Date: 02/16/2010  
 Sample ID: 1202029972|i|||DUP

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.270	0.270	0.0019	0.0043	09:42:23	No
2	0.246	0.246	0.0018	0.0042	09:42:58	No
Mean:	0.258	0.258	0.0019			
SD :	0.0169	0.0169	0.0001			
%RSD:	6.6	6.6	4.5045			

=====  
 Element: Hg Seq. No.: 29 AS Loc.: 27 Date: 02/16/2010  
 Sample ID: 1202029973|i|||MS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	2.601	2.601	0.0135	0.0159	09:44:23	No
2	2.542	2.542	0.0132	0.0156	09:44:57	No
Mean:	2.572	2.572	0.0133			
SD :	0.0412	0.0412	0.0002			
%RSD:	1.6	1.6	1.5334			

=====  
 Element: Hg Seq. No.: 30 AS Loc.: 28 Date: 02/16/2010  
 Sample ID: 1202029975|i|||MSD

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	2.548	2.548	0.0132	0.0156	09:46:23	No
2	2.555	2.555	0.0132	0.0156	09:46:58	No
Mean:	2.551	2.551	0.0132			
SD :	0.0053	0.0053	0.0000			
%RSD:	0.2	0.2	0.2004			

=====  
 Element: Hg Seq. No.: 31 AS Loc.: 29 Date: 02/16/2010  
 Sample ID: 1202029974|i|5||SDILT

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.070	-0.070	0.0002	0.0026	09:48:24	No
2	-0.067	-0.067	0.0002	0.0026	09:48:59	No
Mean:	-0.069	-0.069	0.0002			
SD :	0.0021	0.0021	0.0000			

%RSD: 3.0 3.0 4.1967

=====  
 Element: Hg Seq. No.: 32 AS Loc.: 30 Date: 02/16/2010  
 Sample ID: 245806002|i|||

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Height	Time	Peak Stored
1	0.309	0.309	0.0021	0.0045	09:50:25	No
2	0.246	0.246	0.0018	0.0042	09:51:00	No
Mean:	0.277	0.277	0.0020			
SD :	0.0445	0.0445	0.0002			
%RSD:	16.0	16.0	11.2574			

=====  
 Element: Hg Seq. No.: 33 AS Loc.: 31 Date: 02/16/2010  
 Sample ID: 245806003|i|||

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Height	Time	Peak Stored
1	0.246	0.246	0.0018	0.0042	09:52:27	No
2	0.220	0.220	0.0017	0.0041	09:53:03	No
Mean:	0.233	0.233	0.0017			
SD :	0.0178	0.0178	0.0001			
%RSD:	7.6	7.6	5.0805			

=====  
 Element: Hg Seq. No.: 34 AS Loc.: 7 Date: 02/16/2010  
 Sample ID: CCV

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Height	Time	Peak Stored
1	5.598	5.598	0.0283	0.0307	09:54:30	No
2	5.744	5.744	0.0290	0.0314	09:55:05	No
Mean:	5.671	5.671	0.0287			
SD :	0.1031	0.1031	0.0005			
%RSD:	1.8	1.8	1.7811			

QC value within specified limits.

=====  
 Element: Hg Seq. No.: 35 AS Loc.: 8 Date: 02/16/2010  
 Sample ID: CCB

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Height	Time	Peak Stored
1	0.017	0.017	0.0007	0.0031	09:56:33	No
2	0.001	0.001	0.0006	0.0030	09:57:08	No
Mean:	0.009	0.009	0.0006			
SD :	0.0107	0.0107	0.0001			
%RSD:	118.3	118.3	8.4126			

QC value within specified limits.

=====  
 Element: Hg Seq. No.: 36 AS Loc.: 32 Date: 02/16/2010  
 Sample ID: 245806004|i|||

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Height	Time	Peak Stored
1	0.315	0.315	0.0021	0.0045	09:58:32	No
2	0.254	0.254	0.0018	0.0042	09:59:06	No
Mean:	0.285	0.285	0.0020			
SD :	0.0429	0.0429	0.0002			
%RSD:	15.1	15.1	10.6570			

=====  
 Element: Hg Seq. No.: 37 AS Loc.: 33 Date: 02/16/2010  
 Sample ID: 245806005|i|||

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	0.340	0.340	0.0023	0.0047	10:00:26	No
2	0.379	0.379	0.0025	0.0049	10:01:01	No
Mean:	0.359	0.359	0.0024			
SD :	0.0278	0.0278	0.0001			
%RSD:	7.7	7.7	5.8285			

=====  
 Element: Hg Seq. No.: 38 AS Loc.: 34 Date: 02/16/2010  
 Sample ID: 245806006|i|||

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	0.252	0.252	0.0018	0.0042	10:02:22	No
2	0.247	0.247	0.0018	0.0042	10:02:57	No
Mean:	0.250	0.250	0.0018			
SD :	0.0033	0.0033	0.0000			
%RSD:	1.3	1.3	0.9112			

=====  
 Element: Hg Seq. No.: 39 AS Loc.: 35 Date: 02/16/2010  
 Sample ID: 245806007|i|||

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	0.466	0.466	0.0029	0.0053	10:04:18	No
2	0.421	0.421	0.0027	0.0051	10:04:53	No
Mean:	0.444	0.444	0.0028			
SD :	0.0315	0.0315	0.0002			
%RSD:	7.1	7.1	5.6140			

=====  
 Element: Hg Seq. No.: 40 AS Loc.: 36 Date: 02/16/2010  
 Sample ID: 245806008|i|||

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	0.423	0.423	0.0027	0.0051	10:06:15	No
2	0.409	0.409	0.0026	0.0050	10:06:50	No
Mean:	0.416	0.416	0.0026			
SD :	0.0099	0.0099	0.0000			
%RSD:	2.4	2.4	1.8551			

=====  
 Element: Hg Seq. No.: 41 AS Loc.: 37 Date: 02/16/2010  
 Sample ID: 1202029993|i||947654|MB

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	0.104	0.104	0.0011	0.0035	10:08:12	No
2	0.069	0.069	0.0009	0.0033	10:08:47	No
Mean:	0.087	0.087	0.0010			
SD :	0.0250	0.0250	0.0001			
%RSD:	28.9	28.9	12.2296			

=====  
 Element: Hg Seq. No.: 42 AS Loc.: 38 Date: 02/16/2010  
 Sample ID: 1202029994|i|10|LCS

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	4.793	4.793	0.0243	0.0267	10:10:10	No
2	4.858	4.858	0.0246	0.0270	10:10:45	No
Mean:	4.826	4.826	0.0245			
SD :	0.0458	0.0458	0.0002			

%RSD: 0.9 0.9 0.9273

=====

Element: Hg Seq. No.: 43 AS Loc.: 39 Date: 02/16/2010  
 Sample ID: 245688001|i|||

-----

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
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=====

Element: Hg Seq. No.: 43 AS Loc.: 7 Date: 02/16/2010  
 Sample ID: CCV

-----

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	5.564	5.564	0.0281	0.0305	10:13:29	No
2	5.567	5.567	0.0281	0.0305	10:14:03	No
Mean:	5.566	5.566	0.0281			
SD :	0.0016	0.0016	0.0000			

%RSD:

QC value within specified limits.

=====

Element: Hg Seq. No.: 44 AS Loc.: 8 Date: 02/16/2010  
 Sample ID: CCB

-----

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	0.092	0.092	0.0010	0.0034	10:15:32	No
2	0.097	0.097	0.0011	0.0035	10:16:06	No
Mean:	0.094	0.094	0.0010			
SD :	0.0035	0.0035	0.0000			
%RSD:	3.7	3.7	1.6345			

=====

Method Name: SOIL

Method Description: 7471A, ILM04 ANALYST JXL1

Element: Hg

Date: 02/16/2010

Technique: FI-MHS

Calibration Type:

Hg, Calc. Intercept : Linear

Wavelength: 253.7 nm

Sample Info Name: 021610S1.SIF

Results Data Set Name: 021610S2

=====

Element: Hg Seq. No.: 45 AS Loc.: 1 Date: 02/16/2010  
 Sample ID: Calib Blank

-----

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1			0.0032	0.0032	10:18:51	No
2			0.0031	0.0031	10:19:26	No
Mean:			0.0031			
SD :			0.0000			
%RSD:			1.1573			

Auto-zero performed.

=====

Element: Hg Seq. No.: 46 AS Loc.: 2 Date: 02/16/2010  
 Sample ID: S0.2

-----

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1			0.0029	0.0060	10:20:48	No
2			0.0029	0.0060	10:21:23	No
Mean:			0.0029			

# Miscellaneous

# Prep LogBook

Analyst: FGA  
 Batch: 948070  
 Lab SOP: GL-MA-E-009 REV# 19

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1202030974	U1062540-1	.514	g
MS	1202030972	U1100120-01	.25	mL
MS	1202030972	U1100120-06	.25	mL
MSD	1202030973	U1100120-01	.25	mL
MSD	1202030973	U1100120-06	.25	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1202030969		SW846 3050B	08-FEB-2010 14:00	0.523 g	50 mL	95.60229	SOIL
LCS	1202030974		SW846 3050B	08-FEB-2010 14:00	0.514 g	50 mL	97.27626	SOIL
SAMPLE	245806001		SW846 3050B	08-FEB-2010 14:00	0.532 g	50 mL	93.98496	SOIL
DUP	1202030970	245806001	SW846 3050B	08-FEB-2010 14:00	0.532 g	50 mL	93.98496	SOIL
SDILT	1202030971	245806001	SW846 3050B	08-FEB-2010 14:00	0.532 g	50 mL	93.98496	SOIL
MS	1202030972	245806001	SW846 3050B	08-FEB-2010 14:00	0.52 g	50 mL	96.15385	SOIL
MSD	1202030973	245806001	SW846 3050B	08-FEB-2010 14:00	0.526 g	50 mL	95.05703	SOIL
SAMPLE	245806002		SW846 3050B	08-FEB-2010 14:00	0.523 g	50 mL	95.60229	SOIL
SAMPLE	245806003		SW846 3050B	08-FEB-2010 14:00	0.521 g	50 mL	95.96929	SOIL
SAMPLE	245806004		SW846 3050B	08-FEB-2010 14:00	0.53 g	50 mL	94.33962	SOIL
SAMPLE	245806005		SW846 3050B	08-FEB-2010 14:00	0.513 g	50 mL	97.46589	SOIL
SAMPLE	245806006		SW846 3050B	08-FEB-2010 14:00	0.522 g	50 mL	95.78544	SOIL
SAMPLE	245806007		SW846 3050B	08-FEB-2010 14:00	0.517 g	50 mL	96.7118	SOIL
SAMPLE	245806008		SW846 3050B	08-FEB-2010 14:00	0.514 g	50 mL	97.27626	SOIL

Reagent/Solvent Lot ID	Amount	Description	Comments
1265209	10 mL	HYDROCHLORIC ACID	Gray, soil w/artifacts.
1264396	1.25 mL	Nitric Acid CONC.	

# Prep LogBook

Analyst: FGA  
 Batch: 948072  
 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	1202030975		SW846 3050B	08-FEB-2010 14:00	LCS	1202030980	U1062540-MS	.515	g
LCS	1202030980		SW846 3050B	08-FEB-2010 14:00	MS	1202030978	U1091015-A	.5	mL
SAMPLE	245806001		SW846 3050B	08-FEB-2010 14:00	MS	1202030978	U1091015-B	.5	mL
DUP	1202030976	245806001	SW846 3050B	08-FEB-2010 14:00	MSD	1202030979	U1091015-A	.5	mL
SDILT	1202030977	245806001	SW846 3050B	08-FEB-2010 14:00	MSD	1202030979	U1091015-B	.5	mL
MS	1202030978	245806001	SW846 3050B	08-FEB-2010 14:00					
MSD	1202030979	245806001	SW846 3050B	08-FEB-2010 14:00					
SAMPLE	245806002		SW846 3050B	08-FEB-2010 14:00					
SAMPLE	245806003		SW846 3050B	08-FEB-2010 14:00					
SAMPLE	245806004		SW846 3050B	08-FEB-2010 14:00					
SAMPLE	245806005		SW846 3050B	08-FEB-2010 14:00					
SAMPLE	245806006		SW846 3050B	08-FEB-2010 14:00					
SAMPLE	245806007		SW846 3050B	08-FEB-2010 14:00					
SAMPLE	245806008		SW846 3050B	08-FEB-2010 14:00					

Reagent/Solvent Lot ID 1203655-02  
 1264396  
 Amount 1.5 mL  
 5 mL  
 Description Hydrogen Peroxide 30%  
 Nitric Acid CONC.

Comments: Gray, soil w/artifacts.



# Prep LogBook

Analyst: TXB3  
 Batch: 947648  
 Lab SOP: GL-MA-E-010 REV# 23

Verified by:

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Type	Sample Id	Lot. Id	Spike Amount	Spike Units
MB	1202029970		SW846 7471A Prep	15-FEB-2010 16:45	LCS	1202029971	U1031809A	.209	g
LCS	1202029971		SW846 7471A Prep	15-FEB-2010 16:45	MS	1202029973	WHG100215-14	.3	mL
SAMPLE	245682001		SW846 7471A Prep	15-FEB-2010 16:45	MSD	1202029975	WHG100215-14	.3	mL
SAMPLE	245682002		SW846 7471A Prep	15-FEB-2010 16:45					
SAMPLE	245682003		SW846 7471A Prep	15-FEB-2010 16:45					
SAMPLE	245682004		SW846 7471A Prep	15-FEB-2010 16:45					
SAMPLE	245682005		SW846 7471A Prep	15-FEB-2010 16:45					
SAMPLE	245682006		SW846 7471A Prep	15-FEB-2010 16:45					
SAMPLE	245682007		SW846 7471A Prep	15-FEB-2010 16:45					
SAMPLE	245682008		SW846 7471A Prep	15-FEB-2010 16:45					
SAMPLE	245682009		SW846 7471A Prep	15-FEB-2010 16:45					
SAMPLE	245682010		SW846 7471A Prep	15-FEB-2010 16:45					
SAMPLE	245786001		SW846 7471A Prep	15-FEB-2010 16:45					
SAMPLE	245806001		SW846 7471A Prep	15-FEB-2010 16:45					
DUP	1202029972	245806001	SW846 7471A Prep	15-FEB-2010 16:45					
MS	1202029973	245806001	SW846 7471A Prep	15-FEB-2010 16:45					
MSD	1202029975	245806001	SW846 7471A Prep	15-FEB-2010 16:45					
SDILT	1202029974	245806001	SW846 7471A Prep	15-FEB-2010 16:45					
SAMPLE	245806002		SW846 7471A Prep	15-FEB-2010 16:45					
SAMPLE	245806003		SW846 7471A Prep	15-FEB-2010 16:45					
SAMPLE	245806004		SW846 7471A Prep	15-FEB-2010 16:45					
SAMPLE	245806005		SW846 7471A Prep	15-FEB-2010 16:45					
SAMPLE	245806006		SW846 7471A Prep	15-FEB-2010 16:45					
SAMPLE	245806007		SW846 7471A Prep	15-FEB-2010 16:45					
SAMPLE	245806008		SW846 7471A Prep	15-FEB-2010 16:45					

Reagent/Solvent Lot ID	Amount	Description
1264796-A	1.125 mL	Hydrochloric Acid Conc.
1257474-I	.375 mL	NITRIC ACID
1264984-C	7.5 mL	5% KMnO4 solution
1255532-C	2 mL	Hg reducing agent

Comments: Sample 245806001 is a dry brown soil.  
 Digestion Start Date: 15-FEB-10 16:45  
 Digestion End Date: 15-FEB-10 17:15

Prep Data Logbook Version 1.1

GEL Laboratories LLC

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Prep LogBook

WHG100215-07	30 uL	Mercury Working Standard 1st Source CAL S 0.2/CRA
WHG100215-08	75 uL	Mercury Working Standard 1st Source CAL S 0.5
WHG100215-11	1.5 mL	Mercury Working 1st Source CAL S 10.0
WHG100215-09	300 uL	Mercury Working 1st Source CAL S 2.0
WHG100215-10	750 uL	Mercury Working 1st Source CAL S 5.0/CCV
WHG100215-12	750 uL	Mercury Working 2nd Source S 5.0/ICV

### DATA EXCEPTION REPORT

<b>Mo. Day Yr.</b> 19-FEB-10	<b>Division:</b> Industrial	<b>Quality Criteria:</b> Specifications	<b>Type:</b> Process
<b>Instrument Type:</b> ICP/MS	<b>Test / Method:</b> SW846 3050B/6020	<b>Matrix Type:</b> Solid	<b>Client Code:</b> LANL
<b>Batch ID:</b> 948073	<b>Sample Numbers:</b> See Below		
<b>Potentially affected work order(s)(SDG): 245806(10-1474)</b> <b>Application Issues:</b> Failed RPD for DUP Failed Recovery for MSD/PSD			
<b>Specification and Requirements Exception Description:</b>  1. Failed RPD for DUP: QC 1202030976DUP  2. Failed Recovery for MSD/PSD: QC 1202030979MSD		<b>DER Disposition:</b>  The matrix spike duplicate recovery failed outside of the control limits for Ni 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.  The sample and sample duplicate % RPD failed outside the control limits for Ni, U, and Be 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:**  
Samantha Jacobs 23-FEB-10

**Data Validator/Group Leader:**  
Rose Jenkins 24-FEB-10

### DATA EXCEPTION REPORT

<b>Mo. Day Yr.</b> 24-FEB-10	<b>Division:</b> Industrial	<b>Quality Criteria:</b> Specifications	<b>Type:</b> Process
<b>Instrument Type:</b> ICP	<b>Test / Method:</b> SW846 3050B/6010B	<b>Matrix Type:</b> Solid	<b>Client Code:</b> LANL
<b>Batch ID:</b> 948071	<b>Sample Numbers:</b> See Below		

**Potentially affected work order(s)(SDG): 245806(10-1474)**

**Application Issues:**

Failed Recovery for MS/PS  
Failed RPD for MS/MSD, or PS/PSD  
Failed RPD for DUP  
Failed Recovery for MSD/PSD

**Specification and Requirements  
Exception Description:**

**DER Disposition:**

1. Failed Recovery for MS/PS:

QC 1202030972MS

2. Failed RPD for DUP:

QC 1202030970DUP

3. Failed RPD for MS/MSD, or PS/PSD:

QC 1202030973MSD

4. Failed Recovery for MSD/PSD:

QC 1202030973MSD

1. The matrix spike recovery failed outside of the control limits for copper, magnesium, manganese and potassium due to possible matrix interferences and/or non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.

2. The sample and sample duplicate % RPD failed outside the control limits for antimony, chromium, cobalt and copper due to possible sample non-homogeneity and/or matrix interference. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.

3. The matrix spike and matrix spike duplicate % RPD failed outside of the control limits for copper due to possible matrix interferences and/or sample non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.

4. The matrix spike duplicate recovery failed outside of the control limits for copper, magnesium, manganese and potassium due to possible matrix interferences and/or non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.

**Originator's Name:**

Helen Camello 24-FEB-10

**Data Validator/Group Leader:**

Louise Smith 24-FEB-10

# Standard Logbook

**Serial ID:** UHG1167639-01      **Opened:** 13-AUG-09      **Amount :** 125 mL  
**Name:** MHGSTOCK1      **Received:** 13-AUG-09      **Catalog Number :** PLHG4-2Y  
**Type:** Source Material      **Expires:** 13-AUG-10      **Lot Number :** 15-37HG  
**Employee:** Bryan Davis      **Solvent :** 10% HNO3  
**Supplier:** Spex  
**Description:** Mercury Source Standard #1 1,000 mg/L  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Mercury	1000 mg/L		

**Serial ID:** UHG1167641-02      **Opened:** 13-AUG-09      **Amount :** 100 mL  
**Name:** MHGSTOCK2      **Received:** 13-AUG-09      **Catalog Number :** AHG1KN-100  
**Type:** Source Material      **Expires:** 13-AUG-10      **Lot Number :** 4905530  
**Employee:** Bryan Davis      **Solvent :** 3% HNO3  
**Supplier:** Ricca Chemical Company  
**Description:** Mercury Source Standard #2 1,000 mg/L  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Mercury	999.7 mg/L		

**Serial ID:** UI031809A      **Opened:** 18-MAR-09      **Catalog Number :** 540  
**Name:** METALSOILSRM      **Received:** 18-MAR-09      **Lot Number :** D061-540  
**Type:** Source Material      **Expires:** 10-OCT-10  
**Employee:** Jamie Johnson  
**Supplier:** ERA  
**Description:** Metals LCS Soil SRM  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Aluminum	10600 mg/kg	Antimony	126 mg/kg
Arsenic	225 mg/kg	Barium	565 mg/kg
Beryllium	162 mg/kg	Boron	107 mg/kg
Cadmium	69.1 mg/kg	Calcium	10000 mg/kg
Chromium	124 mg/kg	Cobalt	115 mg/kg
Copper	66.7 mg/kg	Iron	17600 mg/kg
Lead	223 mg/kg	Magnesium	4260 mg/kg
Manganese	368 mg/kg	Mercury	5.15 mg/kg
Molybdenum	107 mg/kg	Nickel	172 mg/kg
Potassium	4090 mg/kg	Selenium	147 mg/kg
Silver	35.2 mg/kg	Sodium	538 mg/kg
Strontium	117 mg/kg	Thallium	173 mg/kg
Tin	164 mg/kg	Titanium	381 mg/kg
Vanadium	93.9 mg/kg	Zinc	349 mg/kg

# Standard Logbook

**Serial ID:** UI062540-I      **Opened:** 12-JUN-09      **Amount :** 80 g  
**Name:** ICP SOIL SRM      **Received:** 12-JUN-09      **Lot Number :** D062-540  
**Type:** Source Material      **Expires:** 31-JAN-12  
**Employee:** Bryan Davis  
**Supplier:** ERA  
**Description:** Metals Soil LCS SRM ICP/Hg  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Aluminum	10500 mg/kg	Antimony	173 mg/kg
Arsenic	104 mg/kg	Barium	198 mg/kg
Beryllium	77.6 mg/kg	Boron	141 mg/kg
Cadmium	60.7 mg/kg	Calcium	9870 mg/kg
Chromium	236 mg/kg	Cobalt	91.2 mg/kg
Copper	174 mg/kg	Iron	18000 mg/kg
Lead	86 mg/kg	Magnesium	4000 mg/kg
Manganese	558 mg/kg	Mercury	8.46 mg/kg
Molybdenum	48.6 mg/kg	Nickel	134 mg/kg
Phosphorous	736 mg/kg	Potassium	4300 mg/kg
Selenium	286 mg/kg	Silica	2591 mg/kg
Silicon	1211 mg/kg	Silver	30.1 mg/kg
Sodium	1020 mg/kg	Strontium	227 mg/kg
Sulfur	385 mg/kg	Thallium	121 mg/kg
Tin	104 mg/kg	Titanium	462 mg/kg
Vanadium	115 mg/kg	Zinc	594 mg/kg

**Serial ID:** UI062540-MS      **Opened:** 12-JUN-09      **Lot Number :** D062-540  
**Name:** ICPMS SOIL SRM      **Received:** 12-JUN-09  
**Type:** Source Material      **Expires:** 31-JAN-12  
**Employee:** Bryan Davis  
**Supplier:** ERA  
**Description:** Metals Soil LCS SRM ICPMS  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Aluminum	10500 mg/kg	Antimony	67.4 mg/kg
Arsenic	104 mg/kg	Barium	198 mg/kg
Beryllium	77.6 mg/kg	Boron	141 mg/kg
Cadmium	60.6 mg/kg	Calcium	9870 mg/kg
Chromium	236 mg/kg	Cobalt	91.2 mg/kg
Copper	174 mg/kg	Iron	18000 mg/kg
Lead	86 mg/kg	Lithium	10.6 mg/kg
Magnesium	4000 mg/kg	Manganese	558 mg/kg
Mercury	8.46 mg/kg	Molybdenum	48.6 mg/kg
Nickel	134 mg/kg	Phosphorous	755 mg/kg
Potassium	4300 mg/kg	Selenium	286 mg/kg
Silver	30.1 mg/kg	Sodium	1020 mg/kg

# Standard Logbook

Analyte	Concentration	Analyte	Concentration
Strontium	227 mg/kg	Thallium	121 mg/kg
Thorium	9.84 mg/kg	Tin	104 mg/kg
Titanium	462 mg/kg	Uranium	2.13 mg/kg
Uranium-235	.0153 mg/kg	Uranium-238	2.11 mg/kg
Vanadium	92.4 mg/kg	Zinc	594 mg/kg
Zirconium	10.6 mg/kg		

**Serial ID:** UI090422-40      **Opened:** 04-MAY-09      **Amount:** 500 mL  
**Name:** TRACE ICP ICSA SOLN A      **Received:** 22-APR-09      **Catalog Number:** 160005-01-03  
**Type:** Source Material      **Expires:** 04-MAY-10      **Lot Number:** 1013357  
**Employee:** Helen Camello      **Solvent:** 5% HNO3  
**Supplier:** o2si  
**Description:** TRACE ICP ICSA SOLN A mg/L +/- 0.5% IN 5% 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:** Q2SI  
**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:** Q2si  
**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:** Q2SI  
**Description:** Sodium 1000 +/- 3 ug/mL in 1% HNO3  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Sodium	1000 ug/mL		

**Serial ID:** UI090925-40      **Opened:** 23-OCT-09      **Amount :** 500 mL  
**Name:** SECOND SOURCE STD -1      **Received:** 25-SEP-09      **Catalog Number :** SGELMX38-500N  
**Type:** Source Material      **Expires:** 30-SEP-10      **Lot Number :** 4909129  
**Employee:** Helen Camello      **Solvent :** 5%HNO3  
**Supplier:** SPECTRO PURE  
**Description:** SECOND SOURCE STD #1A 5%HNO3  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Arsenic	100 mg/L
Barium	100 mg/L	Boron	100 mg/L
Cadmium	100 mg/L	Calcium	1000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	1000 mg/L
Lead	100 mg/L	Phosphorous	500 mg/L
Potassium	500 mg/L	Selenium	500 mg/L
Sodium	500 mg/L	Strontium	100 mg/L

**Serial ID:** UI090925-41      **Opened:** 23-OCT-09      **Amount :** 500 mL  
**Name:** SECOND SOURCE STD -1      **Received:** 25-SEP-09      **Catalog Number :** SGELMX39-500B  
**Type:** Source Material      **Expires:** 30-SEP-10      **Lot Number :** 4909130  
**Employee:** Helen Camello      **Solvent :** 5%HNO3,TR,HF  
**Supplier:** SPECTRO PURE  
**Description:** SECOND SOURCE STD #1B  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Antimony	100 mg/L	Beryllium	50 mg/L
Magnesium	1000 mg/L	Manganese	100 mg/L

# Standard Logbook

Analyte	Concentration	Analyte	Concentration
Molybdenum	100 mg/L	Nickel	100 mg/L
Silver	50 mg/L	Sulfur	500 mg/L
Thallium	100 mg/L	Tin	100 mg/L
Titanium	100 mg/L	Uranium	100 mg/L
Vanadium	100 mg/L	Zinc	100 mg/L

**Serial ID:** UI091015-42      **Opened:** 28-OCT-09      **Amount :** 500 mL  
**Name:** SI 1000mg/L      **Received:** 15-OCT-09      **Catalog Number :** 060014-02-03  
**Type:** Source Material      **Expires:** 28-OCT-10      **Lot Number :** 1017581  
**Employee:** Helen Camello      **Solvent :** 0.3%H2O(NH4)2SiF6  
**Supplier:** o2si  
**Description:** Silicon 1000mg/L+/-0.3%in H2O(NH4)2SiF6  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

**Serial ID:** UI091015-A      **Opened:** 15-OCT-09      **Catalog Number :** 160067-03  
**Name:** ICP-MS DOE SOIL SPIKE      **Received:** 15-OCT-09      **Lot Number :** 1017142  
**Type:** Source Material      **Expires:** 15-OCT-10  
**Employee:** Francena Armstrong  
**Supplier:** 02si  
**Description:** ICP-MS Spike for soil products.  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Aluminum	200 mg/L	Arsenic	8 mg/L
Barium	5 mg/L	Beryllium	5 mg/L
Boron	10 mg/L	Cadmium	1 mg/L
Calcium	200 mg/L	Chromium	5 mg/L
Cobalt	5 mg/L	Copper	5 mg/L
Iron	200 mg/L	Lead	20 mg/L
Lithium	5 mg/L	Magnesium	200 mg/L
Manganese	5 mg/L	Nickel	5 mg/L
Phosphorus, Total as P	200 mg/L	Potassium	200 mg/L
Selenium	2 mg/L	Sodium	200 mg/L
Strontium	5 mg/L	Thallium	10 mg/L
Thorium	5 mg/L	Uranium	5 mg/L
Uranium-235	.036 mg/L	Uranium-238	4.964 mg/L
Vanadium	5 mg/L	Zinc	5 mg/L

# Standard Logbook

**Serial ID:** UI091015-B      **Opened:** 15-OCT-09      **Catalog Number :** 160067-03  
**Name:** ICP-MS DOE SOIL SPIKE      **Received:** 15-OCT-09      **Lot Number :** 1017142  
**Type:** Source Material      **Expires:** 15-OCT-10  
**Employee:** Francena Armstrong  
**Supplier:** 02si  
**Description:** ICP-MS Spike for Soil Products  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	5 mg/L
Silicon	200 mg/L	Silver	5 mg/L
Tin	5 mg/L	Zirconium	5 mg/L

**Serial ID:** UI091102-40      **Opened:** 16-NOV-09      **Amount :** 500 mL  
**Name:** TRACE CALSTD#1A SOUF      **Received:** 02-NOV-09      **Catalog Number :** HP2270-1-500  
**Type:** Source Material      **Expires:** 31-OCT-10      **Lot Number :** 0930215  
**Employee:** Helen Camello      **Solvent :** HNO3  
**Supplier:** Environmental Express  
**Description:** Trace Calibration Std #1A  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Aluminum	2000 mg/L	Arsenic	200 mg/L
Barium	200 mg/L	Beryllium	200 mg/L
Boron	200 mg/L	Cadmium	200 mg/L
Calcium	2000 mg/L	Chromium	200 mg/L
Cobalt	200 mg/L	Copper	200 mg/L
Iron	2000 mg/L	Lead	200 mg/L
Magnesium	2000 mg/L	Manganese	200 mg/L
Nickel	200 mg/L	Phosphorous	1000 mg/L
Potassium	2000 mg/L	Selenium	200 mg/L
Sodium	2000 mg/L	Strontium	200 mg/L
Thallium	200 mg/L	Uranium	200 mg/L
Vanadium	200 mg/L	Zinc	200 mg/L

**Serial ID:** UI091102-41      **Opened:** 16-NOV-09      **Amount :** 500 mL  
**Name:** TRACE CALSTD#1B SOUF      **Received:** 02-NOV-09      **Catalog Number :** HP2270-2-500  
**Type:** Source Material      **Expires:** 31-OCT-10      **Lot Number :** 0930216  
**Employee:** Helen Camello      **Solvent :** HNO3  
**Supplier:** Environmental Express  
**Description:** Trace Calibration Standard #1B  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Antimony	200 mg/L	Molybdenum	200 mg/L
Silver	200 mg/L	Sulfur	400 mg/L

# Standard Logbook

<b>Analyte</b>	<b>Concentration</b>	<b>Analyte</b>	<b>Concentration</b>
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

<b>Analyte</b>	<b>Concentration</b>	<b>Analyte</b>	<b>Concentration</b>
Silica	2139 mg/L	Silicon	1000 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

<b>Analyte</b>	<b>Concentration</b>	<b>Analyte</b>	<b>Concentration</b>
Aluminum	5000 mg/L	Arsenic	100 mg/L
Barium	250 mg/L	Beryllium	100 mg/L
Cadmium	100 mg/L	Calcium	5000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	5000 mg/L
Lead	500 mg/L	Lithium	100 mg/L
Magnesium	5000 mg/L	Manganese	100 mg/L
Nickel	100 mg/L	Phosphorous	2500 mg/L
Potassium	5000 mg/L	Selenium	50 mg/L
Sodium	5000 mg/L	Strontium	100 mg/L
Thallium	50 mg/L	Thorium	250 mg/L
Uranium	500 mg/L	Vanadium	100 mg/L
Zinc	250 mg/L		

**Serial ID:** UI091212-61      **Opened:** 12-DEC-09      **Amount :** .5 mL  
**Name:** ICPMS High Range 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

# Standard Logbook

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:** 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  
**Description:** ICPMS ICV/CCV Soln C - 10ppm

# Standard Logbook

Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	20 mg/L
Silver	20 mg/L	Tin	20 mg/L
Titanium	20 mg/L	Tungsten	20 mg/L
Zirconium	20 mg/L		

Serial ID: UI091217-12      Opened: 17-DEC-09      Amount : 250 mL  
 Name: ICP-MS ICSAB Master B      Received: 17-DEC-09      Catalog Number : 160033-02  
 Type: Source Material      Expires: 17-DEC-10      Lot Number : 1018212  
 Employee: Paul Boyd      Solvent : +/- 0.5% in 2% HNO3  
 Supplier: 02SI  
 Description: ICPMS ICSAB Master B  
 Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	2 mg/L	Barium	2 mg/L
Beryllium	2 mg/L	Boron	2 mg/L
Cadmium	2 mg/L	Chromium	2 mg/L
Cobalt	2 mg/L	Copper	2 mg/L
Lead	2 mg/L	Lithium	2 mg/L
Manganese	2 mg/L	Nickel	2 mg/L
Selenium	2 mg/L	Strontium	2 mg/L
Thallium	2 mg/L	Thorium	2 mg/L
Uranium	2 mg/L	Vanadium	2 mg/L
Zinc	2 mg/L		

Serial ID: UI091217-13      Opened: 17-DEC-09      Amount : 250 mL  
 Name: ICP-MS ICSAB Master C      Received: 17-DEC-09      Catalog Number : 160033-03  
 Type: Source Material      Expires: 17-DEC-10      Lot Number : 1016926  
 Employee: Paul Boyd      Solvent : +/- 0.5% in 2% HNO3  
 Supplier: 02SI  
 Description: ICPMS ICSAB Master C  
 Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Silver	2 mg/L
Tin	2 mg/L	Tungsten	2 mg/L
Zirconium	2 mg/L		

Serial ID: UI100120-01      Opened: 20-JAN-10      Lot Number : 1018095  
 Name: METALSPIKE-1      Received: 20-JAN-10  
 Type: Source Material      Expires: 20-JAN-11  
 Employee: Bryan Davis  
 Supplier: OS2I

# Standard Logbook

**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:** UI100120-06

**Opened:** 20-JAN-10

**Lot Number :**

1018096

**Name:** METALSPIKE-2

**Received:** 20-JAN-10

**Type:** Source Material

**Expires:** 20-JAN-11

**Employee:** Bryan Davis

**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:** 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:** 02SI

**Description:** ICP-MS ICSA Master A

**Comments:** None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Carbon	2000 mg/L	Chloride	10000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Molybdenum	20 mg/L	Phosphorous	1000 mg/L
Potassium	1000 mg/L	Sodium	1000 mg/L
Sulfur	1000 mg/L	Titanium	20 mg/L

# Standard Logbook

**Serial ID:** UI100210-48      **Opened:** 11-FEB-10      **Amount :** 1000 mL  
**Name:** Trace ICP ICSA      **Received:** 10-FEB-10      **Catalog Number :** 160005-02  
**Type:** Source Material      **Expires:** 11-FEB-11      **Lot Number :** 1018807  
**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:** UI100211-40      **Opened:** 11-FEB-10      **Amount :** 500 mL  
**Name:** ICP HIGH RANGE STD-A      **Received:** 10-FEB-10      **Catalog Number :** 160211-05-03  
**Type:** Source Material      **Expires:** 11-FEB-11      **Lot Number :** 1018409  
**Employee:** Helen Camello      **Solvent :** +/-0.5%in2%HNO3  
**Supplier:** 02SI  
**Description:** ICP HIGH RANGE STD SOLUTION A  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Antimony	10000 ug/L	Arsenic	10000 ug/L
Barium	15000 ug/L	Beryllium	3000 ug/L
Boron	5000 ug/L	Cadmium	10000 ug/L
Chromium	25000 ug/L	Cobalt	10000 ug/L
Copper	20000 ug/L	Lead	25000 ug/L
Manganese	10000 ug/L	Molybdenum	10000 ug/L
Nickel	10000 ug/L	Phosphorous	15000 ug/L
Potassium	300000 ug/L	Selenium	10000 ug/L
Silica	107000 ug/L	Silicon	50000 ug/L
Silver	1000 ug/L	Strontium	10000 ug/L
Sulfur	50000 ug/L	Thallium	10000 ug/L
Tin	10000 ug/L	Titanium	10000 ug/L
Vanadium	10000 ug/L	Zinc	15000 ug/L

**Serial ID:** UI100211-41      **Opened:** 11-FEB-10      **Amount :** 500 mL  
**Name:** ICP HIGH RANGE STD B      **Received:** 10-FEB-10      **Catalog Number :** 160211-05-03  
**Type:** Source Material      **Expires:** 11-FEB-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



# Standard Logbook

<b>Analyte</b>	<b>Concentration</b>	<b>Analyte</b>	<b>Concentration</b>
Sodium	500000 ug/L	Uranium	15000 ug/L

**Serial ID:** UMS090303-01      **Opened:** 03-MAR-09      **Amount :** 250 mL  
**Name:** ICPMSCalSPIKEB      **Received:** 03-MAR-09      **Catalog Number :** ZGEL-100-250  
**Type:** Source Material      **Expires:** 28-FEB-10      **Lot Number :** 14-81JB  
**Employee:** Paul Boyd  
**Supplier:** SPEX  
**Description:** ICPMS Calibration Standard Solution B  
**Comments:** None

<b>Analyte</b>	<b>Concentration</b>	<b>Analyte</b>	<b>Concentration</b>
Arsenic	10 mg/L	Barium	10 mg/L
Beryllium	10 mg/L	Boron	20 mg/L
Cadmium	10 mg/L	Chromium	10 mg/L
Cobalt	10 mg/L	Copper	10 mg/L
Lead	10 mg/L	Lithium	10 mg/L
Manganese	10 mg/L	Nickel	10 mg/L
Selenium	10 mg/L	Silver	10 mg/L
Strontium	10 mg/L	Thallium	10 mg/L
Thorium	10 mg/L	Uranium	10 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

**Serial ID:** UMS090303-02      **Opened:** 03-MAR-09      **Catalog Number :** ZGEL-102-250  
**Name:** ICPMSCalSPIKEA      **Received:** 03-MAR-09      **Lot Number :** 14-83JB  
**Type:** Source Material      **Expires:** 28-FEB-10  
**Employee:** Paul Boyd  
**Supplier:** SPEX  
**Description:** ICPMS Calibration Standard Solution A  
**Comments:** None

<b>Analyte</b>	<b>Concentration</b>	<b>Analyte</b>	<b>Concentration</b>
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

# Standard Logbook

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:** IHG100215-01      **Opened:** 15-FEB-10      **Instrument Id :** Mercury  
**Name:** MHGINTER1      **Received:** 15-FEB-10      **Pipet Id :** Minou1  
**Type:** Intermediate      **Expires:** 16-FEB-10      **Solvent :** 1mL HNO3 + Type1 H2O  
**Employee:** Tara Griffin  
**Supplier:** GEL  
**Description:** Mercury Intermediate 1st Source 200 ug/L  
**Comments:** Prepare fresh daily

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

**Serial ID:** IHG100215-02      **Opened:** 15-FEB-10      **Pipet Id :** Minou1  
**Name:** MHGINTER2      **Received:** 15-FEB-10      **Solvent :** 2% HNO3-1257474  
**Type:** Intermediate      **Expires:** 16-FEB-10  
**Employee:** Tara Griffin  
**Supplier:** GEL  
**Description:** Mercury Intermediate 2nd Source 200 ug/L  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167641-02	Mercury	999.7 mg/L	.05 mL	250 mL	200 ug/L

**Serial ID:** WHG100215-07      **Opened:** 15-FEB-10      **Pipet Id :** Hg1289245  
**Name:** MHGWORKCALSO.2CRA      **Received:** 15-FEB-10      **Solvent :** 2% HNO3-1257474  
**Type:** Working      **Expires:** 22-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.
IHG100215-01	Mercury	200 ug/L	30 uL	30 mL	.2 ug/L

**Serial ID:** WHG100215-08      **Opened:** 15-FEB-10      **Pipet Id :** Hg1289245  
**Name:** MHGWORKCALSO.5      **Received:** 15-FEB-10      **Solvent :** 2% HNO3-1257474  
**Type:** Working      **Expires:** 22-FEB-10  
**Employee:** Tara Griffin      **Verified:** 20-JUL-07  
**Supplier:** GEL  
**Description:** Mercury Working Standard 1st Source CAL S 0.5  
**Comments:** None

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100215-01	Mercury	200 ug/L	75 uL	30 mL	.5 ug/L

Serial ID: WHG100215-09      Opened: 15-FEB-10      Pipet Id : Hq1289245  
 Name: MHGWORKCALS2.0      Received: 15-FEB-10      Solvent : 2% HNO3-1257474  
 Type: Working      Expires: 22-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.
IHG100215-01	Mercury	200 ug/L	300 uL	30 mL	2 ug/L

Serial ID: WHG100215-10      Opened: 15-FEB-10      Pipet Id : Hq1289245  
 Name: MHGWORKCALS5.0CCV      Received: 15-FEB-10      Solvent : 2% HNO3-1257474  
 Type: Working      Expires: 22-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.
IHG100215-01	Mercury	200 ug/L	750 uL	30 mL	5 ug/L

Serial ID: WHG100215-11      Opened: 15-FEB-10      Pipet Id : Hq1289245  
 Name: MHGWORKCALS10.0      Received: 15-FEB-10      Solvent : 2% HNO3-1257474  
 Type: Working      Expires: 22-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.
IHG100215-01	Mercury	200 ug/L	1.5 mL	30 mL	10 ug/L

Serial ID: WHG100215-12      Opened: 15-FEB-10      Pipet Id : Hq1289245  
 Name: MHGWORKS5.0ICV      Received: 15-FEB-10      Solvent : 2% HNO3-1257474  
 Type: Working      Expires: 22-FEB-10  
 Employee: Tara Griffin      Verified: 20-JUL-07  
 Supplier: GEL  
 Description: Mercury Working 2nd Source S 5.0/ICV  
 Comments: None

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100215-02	Mercury	200 ug/L	750 uL	30 mL	5 ug/L

Serial ID: WHG100215-14      Opened: 15-FEB-10      Pipet Id : Hg1289245  
 Name: MHGSOILMSSPIKE      Received: 15-FEB-10      Solvent : 2% HNO3-1257474  
 Type: Working      Expires: 22-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: WI100216-42      Opened: 16-FEB-10      Balance Id : 216  
 Name: TRACE ICP 0.1 PPM STD.      Received: 02-NOV-09      Pipet Id : 3581809  
 Type: Working      Expires: 17-FEB-10      Solvent : 3%HCL and 1%HNO3 -1270010  
 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.
WI100216-44	Aluminum	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100216-44	Antimony	1000 ug/L	10 mL	100 mL	100 ug/L
WI100216-44	Arsenic	1000 ug/L	10 mL	100 mL	100 ug/L
WI100216-44	Barium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100216-44	Beryllium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100216-44	Boron	1000 ug/L	10 mL	100 mL	100 ug/L
WI100216-44	Cadmium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100216-44	Calcium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100216-44	Chromium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100216-44	Cobalt	1000 ug/L	10 mL	100 mL	100 ug/L
WI100216-44	Copper	1000 ug/L	10 mL	100 mL	100 ug/L
WI100216-44	Iron	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100216-44	Lead	1000 ug/L	10 mL	100 mL	100 ug/L
WI100216-44	Magnesium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100216-44	Manganese	1000 ug/L	10 mL	100 mL	100 ug/L
WI100216-44	Molybdenum	1000 ug/L	10 mL	100 mL	100 ug/L
WI100216-44	Nickel	1000 ug/L	10 mL	100 mL	100 ug/L
WI100216-44	Phosphorous	5000 ug/L	10 mL	100 mL	500 ug/L
WI100216-44	Potassium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100216-44	Selenium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100216-44	Silica	10698 ug/L	10 mL	100 mL	1069 ug/L
WI100216-44	Silicon	5000 ug/L	10 mL	100 mL	500 ug/L
WI100216-44	Silver	1000 ug/L	10 mL	100 mL	100 ug/L

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Allquot	Final Vol.	Final Conc.
WI100216-44	Sodium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100216-44	Strontium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100216-44	Sulfur	2000 ug/L	10 mL	100 mL	200 ug/L
WI100216-44	Thallium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100216-44	Tin	1000 ug/L	10 mL	100 mL	100 ug/L
WI100216-44	Titanium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100216-44	Uranium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100216-44	Vanadium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100216-44	Zinc	1000 ug/L	10 mL	100 mL	100 ug/L

**Serial ID:** WI100216-43      **Opened:** 16-FEB-10      **Balance Id :** 216  
**Name:** TRACE ICP 0.5/CCV STD.      **Received:** 02-NOV-09      **Pipet Id :** 3581809  
**Type:** Working      **Expires:** 17-FEB-10      **Solvent :** 3%HCL and 1%HNO3 -1270010  
**Employee:** Helen Camello  
**Supplier:** GEL  
**Description:** TRACE ICP 0.5/CCV CALIBRATION STD.  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Allquot	Final Vol.	Final Conc.
UI090828-42	Sodium	1000 ug/mL	5 mL	1000 mL	5000 UG/L
UI091015-42	Silica	2139 mg/L	2.5 mL	1000 mL	5348.25 UG/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Barium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Boron	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Chromium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Copper	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Iron	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Lead	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Manganese	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Nickel	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Selenium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Strontium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Thallium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Uranium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	1000 mL	500 UG/L

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Allquot	Final Vol.	Final Conc.
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:** WI100216-44      **Opened:** 16-FEB-10      **Balance Id :** 216  
**Name:** TRACE ICP SCAL 1.0      **Received:** 02-NOV-09      **Pipet Id :** 3581809  
**Type:** Working      **Expires:** 17-FEB-10      **Solvent :** 3%HCL and 1 %HNO3-1270010  
**Employee:** Helen Camello  
**Supplier:** o2si  
**Description:** Trace ICP Calibration Standard 1.0ppm  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091015-42	Silica	2139 mg/L	2.5 mL	500 mL	10698 ug/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Barium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Boron	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Chromium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Copper	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Iron	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Lead	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Manganese	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Nickel	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Selenium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Strontium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Thallium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Uranium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Zinc	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Antimony	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	500 mL	1000 ug/L

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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:** WI100216-45      **Opened:** 16-FEB-10      **Balance Id :** 216  
**Name:** TRACE ICP S-10 STD      **Received:** 22-APR-09      **Pipet Id :** 3581809  
**Type:** Working      **Expires:** 17-FEB-10      **Solvent :** 3%HCL and 1%HNO3 -1270010  
**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:** WI100216-46      **Opened:** 16-FEB-10      **Balance Id :** 216  
**Name:** ICP TRACE ICV      **Received:** 25-SEP-09      **Pipet Id :** 3581809  
**Type:** Working      **Expires:** 17-FEB-10      **Solvent :** 3%HCL AND 1%HNO3-1270010  
**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

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Allquot	Final Vol.	Final Conc.
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:** WI100216-47      **Opened:** 16-FEB-10      **Balance Id :** 216  
**Name:** PQL Working Standard      **Received:** 30-JUN-09      **Pipet Id :** 3581809  
**Type:** Working      **Expires:** 17-FEB-10      **Solvent :** 3%HCL & 1%HNO3-1270010  
**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



# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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:** WI100223-42      **Opened:** 23-FEB-10      **Balance Id :** 216  
**Name:** TRACE ICP 0.1 PPM STD.      **Received:** 02-NOV-09      **Pipet Id :** 3581809  
**Type:** Working      **Expires:** 24-FEB-10      **Solvent :** 3%HCL and 1%HNO3 -1272839  
**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.
WI100223-44	Aluminum	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100223-44	Antimony	1000 ug/L	10 mL	100 mL	100 ug/L
WI100223-44	Arsenic	1000 ug/L	10 mL	100 mL	100 ug/L
WI100223-44	Barium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100223-44	Beryllium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100223-44	Boron	1000 ug/L	10 mL	100 mL	100 ug/L
WI100223-44	Cadmium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100223-44	Calcium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100223-44	Chromium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100223-44	Cobalt	1000 ug/L	10 mL	100 mL	100 ug/L
WI100223-44	Copper	1000 ug/L	10 mL	100 mL	100 ug/L
WI100223-44	Iron	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100223-44	Lead	1000 ug/L	10 mL	100 mL	100 ug/L
WI100223-44	Magnesium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100223-44	Manganese	1000 ug/L	10 mL	100 mL	100 ug/L
WI100223-44	Molybdenum	1000 ug/L	10 mL	100 mL	100 ug/L
WI100223-44	Nickel	1000 ug/L	10 mL	100 mL	100 ug/L
WI100223-44	Phosphorous	5000 ug/L	10 mL	100 mL	500 ug/L
WI100223-44	Potassium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100223-44	Selenium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100223-44	Silica	10698 ug/L	10 mL	100 mL	1069 ug/L
WI100223-44	Silicon	5000 ug/L	10 mL	100 mL	500 ug/L
WI100223-44	Silver	1000 ug/L	10 mL	100 mL	100 ug/L

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI100223-44	Sodium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100223-44	Strontium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100223-44	Sulfur	2000 ug/L	10 mL	100 mL	200 ug/L
WI100223-44	Thallium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100223-44	Tin	1000 ug/L	10 mL	100 mL	100 ug/L
WI100223-44	Titanium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100223-44	Uranium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100223-44	Vanadium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100223-44	Zinc	1000 ug/L	10 mL	100 mL	100 ug/L

**Serial ID:** WI100223-43      **Opened:** 23-FEB-10      **Balance Id :** 216  
**Name:** TRACE ICP 0.5/CCV STD.      **Received:** 02-NOV-09      **Pipet Id :** 3581809  
**Type:** Working      **Expires:** 24-FEB-10      **Solvent :** 3%HCL and 1%HNO3 -1272839  
**Employee:** Helen Camello  
**Supplier:** GEL  
**Description:** TRACE ICP 0.5/CCV CALIBRATION STD.  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090828-42	Sodium	1000 ug/mL	5 mL	1000 mL	5000 UG/L
UI091015-42	Silica	2139 mg/L	2.5 mL	1000 mL	5348.25 UG/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Barium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Boron	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Chromium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Copper	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Iron	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Lead	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Manganese	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Nickel	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Selenium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Strontium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Thallium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Uranium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	1000 mL	500 UG/L

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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:** W1100223-44      **Opened:** 23-FEB-10      **Balance Id :** 216  
**Name:** TRACE ICP SCAL 1.0      **Received:** 02-NOV-09      **Pipet Id :** 3581809  
**Type:** Working      **Expires:** 24-FEB-10      **Solvent :** 3%HCL and 1 %HNO3-1272839  
**Employee:** Helen Camello  
**Supplier:** o2si  
**Description:** Trace ICP Calibration Standard 1.0ppm  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091015-42	Silica	2139 mg/L	2.5 mL	500 mL	10698 ug/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Barium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Boron	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Chromium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Copper	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Iron	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Lead	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Manganese	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Nickel	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Selenium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Strontium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Thallium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Uranium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Zinc	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Antimony	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	500 mL	1000 ug/L

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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:** WI100223-45      **Opened:** 23-FEB-10      **Balance Id :** 216  
**Name:** TRACE ICP S-10 STD      **Received:** 22-APR-09      **Pipet Id :** 3581809  
**Type:** Working      **Expires:** 24-FEB-10      **Solvent :** 3%HCL and 1%HNO3 -1272839  
**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:** WI100223-46      **Opened:** 23-FEB-10      **Balance Id :** 216  
**Name:** ICP TRACE ICV      **Received:** 25-SEP-09      **Pipet Id :** 3581809  
**Type:** Working      **Expires:** 24-FEB-10      **Solvent :** 3%HCL AND 1%HNO3-1272839  
**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

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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:** W1100223-47      **Opened:** 23-FEB-10      **Balance Id :** 216  
**Name:** PQL Working Standard      **Received:** 30-JUN-09      **Pipet Id :** 3581809  
**Type:** Working      **Expires:** 24-FEB-10      **Solvent :** 3%HCL &1%HNO3-1272839  
**Employee:** Helen Camello  
**Supplier:** Q2si  
**Description:** PQL Working Standard  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Aluminum	100 mg/L	2 mL	1000 mL	200 ug/L
UI090701-40	Antimony	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Arsenic	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Barium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Beryllium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Boron	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Cadmium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Calcium	100 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Chromium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Cobalt	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Copper	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Iron	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Lead	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Magnesium	150 mg/L	2 mL	1000 mL	300 ug/L
UI090701-40	Manganese	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Molybdenum	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Nickel	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Phosphorous	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Potassium	75 mg/L	2 mL	1000 mL	150 ug/L

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Allquot	Final Vol.	Final Conc.
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:** WMS100217-04B      **Opened:** 17-FEB-10      **Amount :** 50 mL  
**Name:** ICPMS Cal Standard 100      **Received:** 17-FEB-10      **Balance Id :** 40245216  
**Type:** Working      **Expires:** 18-FEB-10      **Pipet Id :** 1758088  
**Employee:** Rose Jenkins      **Solvent :** 2%HNO3/1%HCl- 1269792  
**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
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

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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:** WMS100218-04      **Opened:** 18-FEB-10      **Amount :** 50 mL  
**Name:** ICPMS Cal Standard 100      **Received:** 18-FEB-10      **Balance Id :** 4025216  
**Type:** Working      **Expires:** 19-FEB-10      **Pipet Id :** 3541598  
**Employee:** Paul Boyd      **Solvent :** 2%HNO3/1%HCl-1269792  
**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

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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:** WMS100218-04A      **Opened:** 18-FEB-10      **Balance Id :** 4025216  
**Name:** ICPMS Cal Standard 10      **Received:** 18-FEB-10      **Pipet Id :** 3541598  
**Type:** Working      **Expires:** 19-FEB-10      **Solvent :** 2%HNO3/1%HCl - 1269792  
**Employee:** Paul Boyd  
**Supplier:** GEL  
**Description:** ICPMS Calibration Standard (10 ppb)  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100217-04B	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100217-04B	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS100217-04B	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS100217-04B	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100217-04B	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100217-04B	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS100217-04B	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100217-04B	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100217-04B	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100217-04B	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS100217-04B	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS100217-04B	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100217-04B	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS100217-04B	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100217-04B	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100217-04B	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS100217-04B	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS100217-04B	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS100217-04B	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100217-04B	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100217-04B	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100217-04B	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS100217-04B	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100217-04B	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100217-04B	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100217-04B	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100217-04B	Tin	100 ug/l	5 mL	50 mL	10 ug/l



# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100217-04B	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100217-04B	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS100217-04B	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100217-04B	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100217-04B	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS100217-04B	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

**Serial ID:** WMS100218-05      **Opened:** 18-FEB-10      **Balance Id :** 40245216  
**Name:** ICPMS ICV      **Received:** 18-FEB-10      **Pipet Id :** 3541598  
**Type:** Working      **Expires:** 19-FEB-10      **Solvent :** 2%HNO3/1%HCl - 1269792  
**Employee:** Paul Boyd  
**Supplier:** GEL  
**Description:** ICPMS ICV  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI091217-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI091217-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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:** WMS100218-06      **Opened:** 18-FEB-10      **Balance Id :** 40245216  
**Name:** ICPMS CRDL      **Received:** 18-FEB-10      **Pipet Id :** 3820544  
**Type:** Working      **Expires:** 19-FEB-10      **Solvent :** 2%HNO3/1%HCl - 1269792  
**Employee:** Paul Boyd  
**Supplier:** GEL  
**Description:** ICPMS CRDL  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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:** WMS100218-07      **Opened:** 18-FEB-10      **Balance Id :** 40245216  
**Name:** ICPMS ICSA      **Received:** 18-FEB-10      **Lot Number :** 1010773  
**Type:** Working      **Expires:** 19-FEB-10      **Pipet Id :** 3541598  
**Employee:** Paul Boyd      **Solvent :** 2%HNO3/1%HCl - 1269792  
**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:** WMS100218-08      **Opened:** 18-FEB-10      **Balance Id :** 40245216  
**Name:** ICPMS ICSAB      **Received:** 18-FEB-10      **Pipet Id :** 1758088  
**Type:** Working      **Expires:** 19-FEB-10      **Solvent :** 2%HNO3/1%HCl - 1269792  
**Employee:** Paul Boyd  
**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

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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:** WMS100218-70      **Opened:** 18-FEB-10      **Balance Id :** 40245216  
**Name:** ICPMS LINEAR RANGE ST      **Received:** 18-FEB-10      **Pipet Id :** 1758088  
**Type:** Working      **Expires:** 19-FEB-10      **Solvent :** 2%HNO3/1%HCl - 1269792  
**Employee:** Paul Boyd  
**Supplier:** 02SI  
**Description:** ICPMS LINEAR RANGE STANDARD  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091212-60	Aluminum	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091212-60	Arsenic	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Barium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091212-60	Beryllium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Cadmium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Calcium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091212-60	Chromium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Cobalt	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Copper	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Iron	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091212-60	Lead	500 mg/L	.5 mL	50 mL	5000 ug/L
UI091212-60	Lithium	100 mg/L	.5 mL	50 mL	1000 ug/L

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091212-60	Magnesium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091212-60	Manganese	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Nickel	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Phosphorous	2500 mg/L	.5 mL	50 mL	25000 ug/L
UI091212-60	Potassium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091212-60	Selenium	50 mg/L	.5 mL	50 mL	500 ug/L
UI091212-60	Sodium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI091212-60	Strontium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Thallium	50 mg/L	.5 mL	50 mL	500 ug/L
UI091212-60	Thorium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091212-60	Uranium	500 mg/L	.5 mL	50 mL	5000 ug/L
UI091212-60	Vanadium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-60	Zinc	250 mg/L	.5 mL	50 mL	2500 ug/L
UI091212-61	Antimony	25 mg/L	.5 mL	50 mL	250 ug/L
UI091212-61	Molybdenum	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-61	Silver	25 mg/L	.5 mL	50 mL	250 ug/L
UI091212-61	Tin	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-61	Tungsten	100 mg/L	.5 mL	50 mL	1000 ug/L
UI091212-61	Zirconium	50 mg/L	.5 mL	50 mL	500 ug/L

**Serial ID:** WMS100219-04      **Opened:** 19-FEB-10      **Amount :** 50 mL  
**Name:** ICPMS Cal Standard 100      **Received:** 19-FEB-10      **Balance Id :** 4025216  
**Type:** Working      **Expires:** 20-FEB-10      **Pipet Id :** 3541598  
**Employee:** Paul Boyd      **Solvent :** 2%HNO3/1%HCl-1269792  
**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

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Allquot	Final Vol.	Final Conc.
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:** WMS100219-04A      **Opened:** 19-FEB-10      **Balance Id :** 4025216  
**Name:** ICPMS Cal Standard 10      **Received:** 19-FEB-10      **Pipet Id :** 3541598  
**Type:** Working      **Expires:** 20-FEB-10      **Solvent :** 2%HNO3/1%HCl - 1269792  
**Employee:** Paul Boyd  
**Supplier:** GEL  
**Description:** ICPMS Calibration Standard (10 ppb)  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Allquot	Final Vol.	Final Conc.
WMS100219-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100219-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS100219-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS100219-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100219-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100219-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS100219-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100219-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100219-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100219-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS100219-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS100219-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100219-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS100219-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100219-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100219-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS100219-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS100219-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100219-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100219-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100219-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100219-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS100219-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100219-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100219-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100219-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100219-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS100219-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100219-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS100219-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100219-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100219-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS100219-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

**Serial ID:** WMS100219-05      **Opened:** 19-FEB-10      **Balance Id :** 40245216  
**Name:** ICPMS ICV      **Received:** 19-FEB-10      **Pipet Id :** 3541598  
**Type:** Working      **Expires:** 20-FEB-10      **Solvent :** 2%HNO3/1%HCl - 1269792  
**Employee:** Paul Boyd  
**Supplier:** GEL  
**Description:** ICPMS ICV  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI091217-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI091217-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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:** WMS100219-06      **Opened:** 19-FEB-10      **Balance Id :** 40245216  
**Name:** ICPMS CRDL      **Received:** 19-FEB-10      **Pipet Id :** 3820544  
**Type:** Working      **Expires:** 20-FEB-10      **Solvent :** 2%HNO3/1%HCl - 1269792  
**Employee:** Paul Boyd  
**Supplier:** GEL  
**Description:** ICPMS CRDL  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L



# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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:** WMS100219-07      **Opened:** 19-FEB-10      **Balance Id :** 40245216  
**Name:** ICPMS ICSA      **Received:** 19-FEB-10      **Lot Number :** 1010773  
**Type:** Working      **Expires:** 20-FEB-10      **Pipet Id :** 3541598  
**Employee:** Paul Boyd      **Solvent :** 2%HNO3/1%HCl - 1269792  
**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:** WMS100219-08      **Opened:** 19-FEB-10      **Balance Id :** 40245216  
**Name:** ICPMS ICSAB      **Received:** 19-FEB-10      **Pipet Id :** 1758088  
**Type:** Working      **Expires:** 20-FEB-10      **Solvent :** 2%HNO3/1%HCl - 1269792  
**Employee:** Paul Boyd  
**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

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Allquot	Final Vol.	Final Conc.
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

**Serial ID:** 100202      **Opened:** 02-FEB-10      **Lot Number :** 200930201  
**Name:** I-HCL      **Received:** 02-FEB-10  
**Type:** Reagent/Solvent      **Expires:** 02-FEB-11  
**Employee:** Francena Armstrong  
**Supplier:** J.T. BAKER  
**Description:** HYDROCHLORIC ACID  
**Comments:** None

# Standard Logbook

**Serial ID:** 1100721TCLP      **Opened:** 16-APR-09      **Lot Number :** H02026 L  
**Name:** I-HNO3      **Received:** 02-APR-09  
**Type:** Reagent/Solvent      **Expires:** 02-APR-10  
**Employee:** Clifford Postell  
**Supplier:** BAKER  
**Description:** Nitric Acid CONC.  
**Comments:** None

**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:** 1255532-C      **Opened:** 15-JAN-10      **Balance Id :** BAL-002  
**Name:** B-NaCl.NH2OH.HCl-MER      **Received:** 15-JAN-10  
**Type:** Reagent/Solvent      **Expires:** 15-JUL-10  
**Employee:** Tara Griffin  
**Supplier:** GEL  
**Description:** Hg reducing agent  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1228372-A	B-NH2OH.HCl-MER	N/A	120 g	1000 mL	N/A

# Standard Logbook

**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:** 1264396      **Opened:** 03-FEB-10      **Lot Number :** H51025 L  
**Name:** I-HNO3      **Received:** 02-FEB-10  
**Type:** Reagent/Solvent      **Expires:** 03-FEB-11  
**Employee:** Bryan Davis  
**Supplier:** BAKER  
**Description:** Nitric Acid CONC.  
**Comments:** None

**Serial ID:** 1264796-A      **Opened:** 04-FEB-10      **Lot Number :** 200930201  
**Name:** B-HCl-MER      **Received:** 04-FEB-10  
**Type:** Reagent/Solvent      **Expires:** 04-FEB-11  
**Employee:** Tara Griffin  
**Supplier:** Aristar  
**Description:** Hydrochloric Acid Conc.  
**Comments:** None

**Serial ID:** 1264984-C      **Opened:** 04-FEB-10      **Balance Id :** BAL-002  
**Name:** B-KMnO4-MER      **Received:** 04-FEB-10  
**Type:** Reagent/Solvent      **Expires:** 20-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:** 1265209      **Opened:** 04-FEB-10      **Lot Number :** J02039  
**Name:** I-HCL      **Received:** 04-FEB-10      **Preservative Id :** 5 none  
**Type:** Reagent/Solvent      **Expires:** 04-FEB-11  
**Employee:** Bryan Davis  
**Supplier:** J.T. BAKER  
**Description:** HYDROCHLORIC ACID  
**Comments:** None

# Standard Logbook

Serial ID: 1269792      Opened: 15-FEB-10      Solvent : Type I Water  
Name: B-2%HNO3/1%HCl-ICPMS      Received: 15-FEB-10  
Type: Reagent/Solvent      Expires: 22-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.
100202	I-HCL	36.5-38.0	90 mL	9 l	N/A
1100721TCLP	I-HNO3	69.0-70.0	180 mL	9 l	N/A

Serial ID: 1270010      Opened: 15-FEB-10      Amount : 20 L  
Name: B-ICP-RINSE SOLN      Received: 05-FEB-10      Lot Number : H04040+G34050  
Type: Reagent/Solvent      Expires: 21-FEB-10      Solvent : 3%HCL+1%HNO3  
Employee: Helen Camello  
Supplier: GEL  
Description: 3%HCL+1%HNO3 RINSE SOLN.  
Comments: None

Serial ID: 1272839      Opened: 22-FEB-10      Amount : 20 L  
Name: B-ICP-RINSE SOLN      Received: 12-FEB-10      Lot Number : H04040+G34050  
Type: Reagent/Solvent      Expires: 28-FEB-10      Solvent : 3%HCL+1%HNO3  
Employee: Helen Camello  
Supplier: GEL  
Description: 3%HCL+1%HNO3 RINSE SOLN.  
Comments: None

# **Metals Analysis**

# Case Narrative

**Metals Fractional Narrative  
Los Alamos National Laboratory (LANL)  
SDG 10-1474-1**

**Sample Analysis**

<b>Sample ID</b>	<b>Client ID</b>
245807001	RE15-10-8081
245807002	RE15-10-8082
1202031021	Method Blank (MB) ICP
1202031026	Laboratory Control Sample (LCS)
1202031023	245673001(CAMO-10-9311L) Serial Dilution (SD)
1202031022	245673001(CAMO-10-9311D) Sample Duplicate (DUP)
1202031024	245673001(CAMO-10-9311S) Matrix Spike (MS)
1202031027	Method Blank (MB) ICP-MS
1202031028	Laboratory Control Sample (LCS)
1202031031	245676001(CAWR-10-11786L) Serial Dilution (SD)
1202031029	245676001(CAWR-10-11786D) Sample Duplicate (DUP)
1202031030	245676001(CAWR-10-11786S) Matrix Spike (MS)
1202029965	Method Blank (MB) CVAA
1202029966	Laboratory Control Sample (LCS)
1202029969	245807001(RE15-10-8081L) Serial Dilution (SD)
1202029967	245807001(RE15-10-8081D) Sample Duplicate (DUP)
1202029968	245807001(RE15-10-8081S) Matrix Spike (MS)

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



### **Method/Analysis Information**

**Analytical Batch:** 948088, 948090 and 947646  
**Prep Batch :** 948085, 948089 and 947645  
**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 with the exception of magnesium, which recovered outside of the advisory limits of 70-130%.

**ICSA/ICSAB Statement**

All interference check samples (ICSA and ICSAB) associated with this SDG met the established acceptance criteria.

**Continuing Calibration Blank (CCB) Requirements**

All continuing calibration blanks (CCB) bracketing this batch met the established acceptance criteria.

**Continuing Calibration Verification (CCV) Requirements**

All continuing calibration verifications (CCV) bracketing this SDG met the acceptance criteria.

**Quality Control (QC) Information****Method Blank (MB) Statement**

The MBs analyzed with this SDG met the acceptance criteria.

**Laboratory Control Sample (LCS) Recovery**

The LCS spike recoveries met the acceptance limits.

**Quality Control (QC) Sample Statement**

The following samples were selected as the quality control (QC) samples for this SDG: 245673001, 245676001 and 245807001.

**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 instruments. Dilutions were required for this SDG in order to minimize tin suppression due to matrix interferences.

### **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: Küsterfanson Date: 2/26/10

# Sample Data Summary

## METALS

-1-

## INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1474-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245807001

BASIS: As Received

DATE COLLECTED 26-JAN-10

CLIENT ID: RE15-10-8081

LEVEL: Low

DATE RECEIVED 29-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	02/25/10 16:33	022510-1	948088
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	BAJ	02/20/10 22:38	100220-2	948090
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	02/25/10 16:33	022510-1	948088
7440-39-3	Barium	5	ug/L	U	1	5	5	1	P	HSC	02/25/10 16:33	022510-1	948088
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	BAJ	02/21/10 11:54	100220-7	948090
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	BAJ	02/20/10 22:38	100220-2	948090
7440-70-2	Calcium	200	ug/L	U	50	200	200	1	P	HSC	02/25/10 16:33	022510-1	948088
7440-47-3	Chromium	5	ug/L	U	1	5	5	1	P	HSC	02/25/10 16:33	022510-1	948088
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	02/25/10 16:33	022510-1	948088
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	02/25/10 16:33	022510-1	948088
7439-89-6	Iron	100	ug/L	U	30	100	100	1	P	HSC	02/25/10 16:33	022510-1	948088
7439-92-1	Lead	2	ug/L	U	0.5	2	2	1	MS	BAJ	02/21/10 11:54	100220-7	948090
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	02/25/10 16:33	022510-1	948088
7439-96-5	Manganese	5	ug/L	U	1	5	5	1	MS	BAJ	02/21/10 11:54	100220-7	948090
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JXL1	02/15/10 11:13	021510W1-9	947646
7440-02-0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	02/25/10 16:33	022510-1	948088
7440-09-7	Potassium	180	ug/L		50	150	150	1	P	HSC	02/25/10 16:33	022510-1	948088
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	02/25/10 16:33	022510-1	948088
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	02/25/10 16:33	022510-1	948088
7440-23-5	Sodium	160	ug/L	J	100	300	300	1	P	HSC	02/25/10 16:33	022510-1	948088
7440-28-0	Thallium	1	ug/L	U	0.3	1	1	1	MS	BAJ	02/20/10 22:38	100220-2	948090
7440-61-1	Uranium	0.20	ug/L	U	0.05	0.2	0.2	1	MS	BAJ	02/21/10 13:39	100221-8	948090
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	02/25/10 16:33	022510-1	948088
7440-66-6	Zinc	10	ug/L	U	3.3	10	10	1	P	HSC	02/25/10 16:33	022510-1	948088

## Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
947646	947645	SW846 7470A Prep	20	mL	20	mL	02/12/10	TXB3
948088	948085	SW846 3005A	25	mL	25	mL	02/25/10	AXG2
948090	948089	SW846 3005A	50	mL	50	mL	02/03/10	LYH1

**METALS**  
**-1-**  
**INORGANICS ANALYSIS DATA PACKAGE**

SDG No: 10-1474-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245807002

BASIS: As Received

DATE COLLECTED 26-JAN-10

CLIENT ID: RE15-10-8082

LEVEL: Low

DATE RECEIVED 29-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	02/25/10 16:39	022510-1	948088
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	BAJ	02/20/10 22:44	100220-2	948090
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	02/25/10 16:39	022510-1	948088
7440-39-3	Barium	5	ug/L	U	1	5	5	1	P	HSC	02/25/10 16:39	022510-1	948088
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	BAJ	02/21/10 11:56	100220-7	948090
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	BAJ	02/20/10 22:44	100220-2	948090
7440-70-2	Calcium	200	ug/L	U	50	200	200	1	P	HSC	02/25/10 16:39	022510-1	948088
7440-47-3	Chromium	5	ug/L	U	1	5	5	1	P	HSC	02/25/10 16:39	022510-1	948088
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	02/25/10 16:39	022510-1	948088
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	02/25/10 16:39	022510-1	948088
7439-89-6	Iron	100	ug/L	U	30	100	100	1	P	HSC	02/25/10 16:39	022510-1	948088
7439-92-1	Lead	0.604	ug/L	J	0.5	2	2	1	MS	BAJ	02/21/10 11:56	100220-7	948090
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	02/25/10 16:39	022510-1	948088
7439-96-5	Manganese	5	ug/L	U	1	5	5	1	MS	BAJ	02/21/10 11:56	100220-7	948090
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JXL1	02/15/10 11:25	021510W1-9	947646
7440-02-0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	02/25/10 16:39	022510-1	948088
7440-09-7	Potassium	82.7	ug/L	J	50	150	150	1	P	HSC	02/25/10 16:39	022510-1	948088
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	02/25/10 16:39	022510-1	948088
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	02/25/10 16:39	022510-1	948088
7440-23-5	Sodium	154	ug/L	J	100	300	300	1	P	HSC	02/25/10 16:39	022510-1	948088
7440-28-0	Thallium	1	ug/L	U	0.3	1	1	1	MS	BAJ	02/20/10 22:44	100220-2	948090
7440-61-1	Uranium	0.088	ug/L	J	0.05	0.2	0.2	1	MS	BAJ	02/21/10 13:41	100221-8	948090
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	02/25/10 16:39	022510-1	948088
7440-66-6	Zinc	10	ug/L	U	3.3	10	10	1	P	HSC	02/25/10 16:39	022510-1	948088

**Prep Information:**

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
947646	947645	SW846 7470A Prep	20	mL	20	mL	02/12/10	TXB3
948088	948085	SW846 3005A	25	mL	25	mL	02/25/10	AXG2
948090	948089	SW846 3005A	50	mL	50	mL	02/03/10	LYH1

# **Quality Control Summary**



## METALS

-2a-

## Initial and Continuing Calibration Verification

SDG No: 10-1474-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,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	5.02	ug/L	5	ug/L	100.4	90.0 - 110.0	AV	15-FEB-10 09:34	021510W1-9
	Antimony	51.2	ug/L	50	ug/L	102.4	90.0 - 110.0	MS	20-FEB-10 16:41	100220-2
	Cadmium	50.6	ug/L	50	ug/L	101.2	90.0 - 110.0	MS	20-FEB-10 16:41	100220-2
	Thallium	52.3	ug/L	50	ug/L	104.6	90.0 - 110.0	MS	20-FEB-10 16:41	100220-2
	Beryllium	51.8	ug/L	50	ug/L	103.6	90.0 - 110.0	MS	21-FEB-10 10:39	100220-7
	Lead	51.6	ug/L	50	ug/L	103.2	90.0 - 110.0	MS	21-FEB-10 10:39	100220-7
	Manganese	54.7	ug/L	50	ug/L	109.5	90.0 - 110.0	MS	21-FEB-10 10:39	100220-7
	Uranium	51.2	ug/L	50	ug/L	102.4	90.0 - 110.0	MS	21-FEB-10 12:09	100221-8
	Aluminum	5520	ug/L	5000	ug/L	110.5	90.0 - 110.0	P	25-FEB-10 12:50	022510-1
	Arsenic	493	ug/L	500	ug/L	98.6	90.0 - 110.0	P	25-FEB-10 12:50	022510-1
	Barium	524	ug/L	500	ug/L	104.9	90.0 - 110.0	P	25-FEB-10 12:50	022510-1
	Calcium	5410	ug/L	5000	ug/L	108.1	90.0 - 110.0	P	25-FEB-10 12:50	022510-1
	Chromium	501	ug/L	500	ug/L	100.1	90.0 - 110.0	P	25-FEB-10 12:50	022510-1
	Cobalt	518	ug/L	500	ug/L	103.7	90.0 - 110.0	P	25-FEB-10 12:50	022510-1
	Copper	521	ug/L	500	ug/L	104.1	90.0 - 110.0	P	25-FEB-10 12:50	022510-1
	Iron	5250	ug/L	5000	ug/L	105	90.0 - 110.0	P	25-FEB-10 12:50	022510-1
	Magnesium	5370	ug/L	5000	ug/L	107.5	90.0 - 110.0	P	25-FEB-10 12:50	022510-1
	Nickel	488	ug/L	500	ug/L	97.6	90.0 - 110.0	P	25-FEB-10 12:50	022510-1
	Potassium	2630	ug/L	2500	ug/L	105.1	90.0 - 110.0	P	25-FEB-10 12:50	022510-1
	Selenium	2650	ug/L	2500	ug/L	106.1	90.0 - 110.0	P	25-FEB-10 12:50	022510-1
	Silver	252	ug/L	250	ug/L	101	90.0 - 110.0	P	25-FEB-10 12:50	022510-1
	Sodium	2380	ug/L	2500	ug/L	95.2	90.0 - 110.0	P	25-FEB-10 12:50	022510-1
	Vanadium	500	ug/L	500	ug/L	100.1	90.0 - 110.0	P	25-FEB-10 12:50	022510-1
	Zinc	492	ug/L	500	ug/L	98.3	90.0 - 110.0	P	25-FEB-10 12:50	022510-1
CCV01										
	Mercury	5.04	ug/L	5	ug/L	100.8	80.0 - 120.0	AV	15-FEB-10 09:40	021510W1-9
	Antimony	51.5	ug/L	50	ug/L	102.9	90.0 - 110.0	MS	20-FEB-10 17:11	100220-2
	Cadmium	51.4	ug/L	50	ug/L	102.9	90.0 - 110.0	MS	20-FEB-10 17:11	100220-2
	Thallium	53.3	ug/L	50	ug/L	106.6	90.0 - 110.0	MS	20-FEB-10 17:11	100220-2
	Beryllium	51.8	ug/L	50	ug/L	103.5	90.0 - 110.0	MS	21-FEB-10 10:50	100220-7

SW846

**METALS**  
-2a-  
**Initial and Continuing Calibration Verification**

SDG No: 10-1474-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,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>
	Lead	51	ug/L	50	ug/L	102.1	90.0 - 110.0	MS	21-FEB-10 10:50	100220-7
	Manganese	51.7	ug/L	50	ug/L	103.4	90.0 - 110.0	MS	21-FEB-10 10:50	100220-7
	Uranium	49.1	ug/L	50	ug/L	98.2	90.0 - 110.0	MS	21-FEB-10 12:17	100221-8
	Aluminum	5040	ug/L	5000	ug/L	100.8	90.0 - 110.0	P	25-FEB-10 13:38	022510-1
	Arsenic	504	ug/L	500	ug/L	100.7	90.0 - 110.0	P	25-FEB-10 13:38	022510-1
	Barium	478	ug/L	500	ug/L	95.7	90.0 - 110.0	P	25-FEB-10 13:38	022510-1
	Calcium	5130	ug/L	5000	ug/L	102.6	90.0 - 110.0	P	25-FEB-10 13:38	022510-1
	Chromium	478	ug/L	500	ug/L	95.6	90.0 - 110.0	P	25-FEB-10 13:38	022510-1
	Cobalt	479	ug/L	500	ug/L	95.8	90.0 - 110.0	P	25-FEB-10 13:38	022510-1
	Copper	473	ug/L	500	ug/L	94.6	90.0 - 110.0	P	25-FEB-10 13:38	022510-1
	Iron	5000	ug/L	5000	ug/L	100.1	90.0 - 110.0	P	25-FEB-10 13:38	022510-1
	Magnesium	5210	ug/L	5000	ug/L	104.2	90.0 - 110.0	P	25-FEB-10 13:38	022510-1
	Nickel	479	ug/L	500	ug/L	95.8	90.0 - 110.0	P	25-FEB-10 13:38	022510-1
	Potassium	5200	ug/L	5000	ug/L	104	90.0 - 110.0	P	25-FEB-10 13:38	022510-1
	Selenium	499	ug/L	500	ug/L	99.8	90.0 - 110.0	P	25-FEB-10 13:38	022510-1
	Silver	479	ug/L	500	ug/L	95.9	90.0 - 110.0	P	25-FEB-10 13:38	022510-1
	Sodium	10000	ug/L	10000	ug/L	100.3	90.0 - 110.0	P	25-FEB-10 13:38	022510-1
	Vanadium	481	ug/L	500	ug/L	96.3	90.0 - 110.0	P	25-FEB-10 13:38	022510-1
	Zinc	475	ug/L	500	ug/L	95.1	90.0 - 110.0	P	25-FEB-10 13:38	022510-1
CCV02										
	Mercury	5.12	ug/L	5	ug/L	102.3	80.0 - 120.0	AV	15-FEB-10 10:04	021510W1-9
	Antimony	52.4	ug/L	50	ug/L	104.9	90.0 - 110.0	MS	20-FEB-10 17:30	100220-2
	Cadmium	51.4	ug/L	50	ug/L	102.8	90.0 - 110.0	MS	20-FEB-10 17:30	100220-2
	Thallium	53.8	ug/L	50	ug/L	107.5	90.0 - 110.0	MS	20-FEB-10 17:30	100220-2
	Beryllium	54	ug/L	50	ug/L	108	90.0 - 110.0	MS	21-FEB-10 11:03	100220-7
	Lead	50.3	ug/L	50	ug/L	100.7	90.0 - 110.0	MS	21-FEB-10 11:03	100220-7
	Manganese	50.4	ug/L	50	ug/L	100.9	90.0 - 110.0	MS	21-FEB-10 11:03	100220-7
	Uranium	47.7	ug/L	50	ug/L	95.4	90.0 - 110.0	MS	21-FEB-10 12:35	100221-8
	Aluminum	5060	ug/L	5000	ug/L	101.1	90.0 - 110.0	P	25-FEB-10 14:08	022510-1
	Arsenic	483	ug/L	500	ug/L	96.5	90.0 - 110.0	P	25-FEB-10 14:08	022510-1

SW846

## METALS

-2a-

## Initial and Continuing Calibration Verification

SDG No: 10-1474-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,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	475	ug/L	500	ug/L	94.9	90.0 - 110.0	P	25-FEB-10 14:08	022510-1
	Calcium	5360	ug/L	5000	ug/L	107.3	90.0 - 110.0	P	25-FEB-10 14:08	022510-1
	Chromium	474	ug/L	500	ug/L	94.8	90.0 - 110.0	P	25-FEB-10 14:08	022510-1
	Cobalt	475	ug/L	500	ug/L	94.9	90.0 - 110.0	P	25-FEB-10 14:08	022510-1
	Copper	470	ug/L	500	ug/L	94	90.0 - 110.0	P	25-FEB-10 14:08	022510-1
	Iron	5320	ug/L	5000	ug/L	106.4	90.0 - 110.0	P	25-FEB-10 14:08	022510-1
	Magnesium	5440	ug/L	5000	ug/L	108.8	90.0 - 110.0	P	25-FEB-10 14:08	022510-1
	Nickel	476	ug/L	500	ug/L	95.3	90.0 - 110.0	P	25-FEB-10 14:08	022510-1
	Potassium	5000	ug/L	5000	ug/L	100.1	90.0 - 110.0	P	25-FEB-10 14:08	022510-1
	Selenium	491	ug/L	500	ug/L	98.2	90.0 - 110.0	P	25-FEB-10 14:08	022510-1
	Silver	476	ug/L	500	ug/L	95.2	90.0 - 110.0	P	25-FEB-10 14:08	022510-1
	Sodium	10600	ug/L	10000	ug/L	105.8	90.0 - 110.0	P	25-FEB-10 14:08	022510-1
	Vanadium	478	ug/L	500	ug/L	95.6	90.0 - 110.0	P	25-FEB-10 14:08	022510-1
	Zinc	469	ug/L	500	ug/L	93.8	90.0 - 110.0	P	25-FEB-10 14:08	022510-1
CCV03										
	Mercury	5.14	ug/L	5	ug/L	102.8	80.0 - 120.0	AV	15-FEB-10 10:28	021510W1-9
	Antimony	50.7	ug/L	50	ug/L	101.4	90.0 - 110.0	MS	20-FEB-10 18:19	100220-2
	Cadmium	50.6	ug/L	50	ug/L	101.3	90.0 - 110.0	MS	20-FEB-10 18:19	100220-2
	Thallium	53.4	ug/L	50	ug/L	106.7	90.0 - 110.0	MS	20-FEB-10 18:19	100220-2
	Beryllium	51.4	ug/L	50	ug/L	102.7	90.0 - 110.0	MS	21-FEB-10 11:25	100220-7
	Lead	50.7	ug/L	50	ug/L	101.3	90.0 - 110.0	MS	21-FEB-10 11:25	100220-7
	Manganese	52.5	ug/L	50	ug/L	104.9	90.0 - 110.0	MS	21-FEB-10 11:25	100220-7
	Uranium	46.9	ug/L	50	ug/L	93.8	90.0 - 110.0	MS	21-FEB-10 12:52	100221-8
	Aluminum	5140	ug/L	5000	ug/L	102.8	90.0 - 110.0	P	25-FEB-10 15:31	022510-1
	Arsenic	488	ug/L	500	ug/L	97.6	90.0 - 110.0	P	25-FEB-10 15:31	022510-1
	Barium	487	ug/L	500	ug/L	97.3	90.0 - 110.0	P	25-FEB-10 15:31	022510-1
	Calcium	5170	ug/L	5000	ug/L	103.5	90.0 - 110.0	P	25-FEB-10 15:31	022510-1
	Chromium	485	ug/L	500	ug/L	96.9	90.0 - 110.0	P	25-FEB-10 15:31	022510-1
	Cobalt	488	ug/L	500	ug/L	97.5	90.0 - 110.0	P	25-FEB-10 15:31	022510-1
	Copper	480	ug/L	500	ug/L	95.9	90.0 - 110.0	P	25-FEB-10 15:31	022510-1

SW846

**METALS**  
**-2a-**  
**Initial and Continuing Calibration Verification**

SDG No: 10-1474-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,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>
	Iron	5050	ug/L	5000	ug/L	101	90.0 - 110.0	P	25-FEB-10 15:31	022510-1
	Magnesium	5230	ug/L	5000	ug/L	104.6	90.0 - 110.0	P	25-FEB-10 15:31	022510-1
	Nickel	487	ug/L	500	ug/L	97.5	90.0 - 110.0	P	25-FEB-10 15:31	022510-1
	Potassium	5040	ug/L	5000	ug/L	100.7	90.0 - 110.0	P	25-FEB-10 15:31	022510-1
	Selenium	503	ug/L	500	ug/L	100.5	90.0 - 110.0	P	25-FEB-10 15:31	022510-1
	Silver	486	ug/L	500	ug/L	97.2	90.0 - 110.0	P	25-FEB-10 15:31	022510-1
	Sodium	10300	ug/L	10000	ug/L	103.1	90.0 - 110.0	P	25-FEB-10 15:31	022510-1
	Vanadium	487	ug/L	500	ug/L	97.5	90.0 - 110.0	P	25-FEB-10 15:31	022510-1
	Zinc	482	ug/L	500	ug/L	96.3	90.0 - 110.0	P	25-FEB-10 15:31	022510-1
CCV04	Mercury	5.1	ug/L	5	ug/L	102.1	80.0 - 120.0	AV	15-FEB-10 10:51	021510W1-9
	Antimony	52.9	ug/L	50	ug/L	105.8	90.0 - 110.0	MS	20-FEB-10 18:44	100220-2
	Cadmium	52.9	ug/L	50	ug/L	105.9	90.0 - 110.0	MS	20-FEB-10 18:44	100220-2
	Thallium	54.2	ug/L	50	ug/L	108.3	90.0 - 110.0	MS	20-FEB-10 18:44	100220-2
	Beryllium	51.3	ug/L	50	ug/L	102.6	90.0 - 110.0	MS	21-FEB-10 11:43	100220-7
	Lead	49.9	ug/L	50	ug/L	99.7	90.0 - 110.0	MS	21-FEB-10 11:43	100220-7
	Manganese	51.6	ug/L	50	ug/L	103.1	90.0 - 110.0	MS	21-FEB-10 11:43	100220-7
	Uranium	46.2	ug/L	50	ug/L	92.4	90.0 - 110.0	MS	21-FEB-10 13:13	100221-8
	Aluminum	5060	ug/L	5000	ug/L	101.2	90.0 - 110.0	P	25-FEB-10 16:46	022510-1
	Arsenic	493	ug/L	500	ug/L	98.6	90.0 - 110.0	P	25-FEB-10 16:46	022510-1
	Barium	492	ug/L	500	ug/L	98.3	90.0 - 110.0	P	25-FEB-10 16:46	022510-1
	Calcium	5090	ug/L	5000	ug/L	101.7	90.0 - 110.0	P	25-FEB-10 16:46	022510-1
	Chromium	490	ug/L	500	ug/L	98.1	90.0 - 110.0	P	25-FEB-10 16:46	022510-1
	Cobalt	493	ug/L	500	ug/L	98.6	90.0 - 110.0	P	25-FEB-10 16:46	022510-1
	Copper	484	ug/L	500	ug/L	96.8	90.0 - 110.0	P	25-FEB-10 16:46	022510-1
	Iron	4880	ug/L	5000	ug/L	97.6	90.0 - 110.0	P	25-FEB-10 16:46	022510-1
	Magnesium	5100	ug/L	5000	ug/L	102	90.0 - 110.0	P	25-FEB-10 16:46	022510-1
	Nickel	495	ug/L	500	ug/L	98.9	90.0 - 110.0	P	25-FEB-10 16:46	022510-1
	Potassium	4930	ug/L	5000	ug/L	98.6	90.0 - 110.0	P	25-FEB-10 16:46	022510-1
	Selenium	505	ug/L	500	ug/L	101	90.0 - 110.0	P	25-FEB-10 16:46	022510-1

SW846

**METALS**  
-2a-  
**Initial and Continuing Calibration Verification**

SDG No: 10-1474-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,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	491	ug/L	500	ug/L	98.2	90.0 - 110.0	P	25-FEB-10 16:46	022510-1
	Sodium	9690	ug/L	10000	ug/L	96.9	90.0 - 110.0	P	25-FEB-10 16:46	022510-1
	Vanadium	493	ug/L	500	ug/L	98.6	90.0 - 110.0	P	25-FEB-10 16:46	022510-1
	Zinc	487	ug/L	500	ug/L	97.4	90.0 - 110.0	P	25-FEB-10 16:46	022510-1
CCV05										
	Mercury	5.1	ug/L	5	ug/L	102	80.0 - 120.0	AV	15-FEB-10 11:15	021510W1-9
	Antimony	50.4	ug/L	50	ug/L	100.9	90.0 - 110.0	MS	20-FEB-10 19:21	100220-2
	Cadmium	49.6	ug/L	50	ug/L	99.2	90.0 - 110.0	MS	20-FEB-10 19:21	100220-2
	Thallium	51.8	ug/L	50	ug/L	103.5	90.0 - 110.0	MS	20-FEB-10 19:21	100220-2
	Beryllium	49.9	ug/L	50	ug/L	99.7	90.0 - 110.0	MS	21-FEB-10 11:58	100220-7
	Lead	50.5	ug/L	50	ug/L	101	90.0 - 110.0	MS	21-FEB-10 11:58	100220-7
	Manganese	50.8	ug/L	50	ug/L	101.6	90.0 - 110.0	MS	21-FEB-10 11:58	100220-7
	Uranium	46.4	ug/L	50	ug/L	92.8	90.0 - 110.0	MS	21-FEB-10 13:27	100221-8
CCV06										
	Mercury	5.2	ug/L	5	ug/L	103.9	80.0 - 120.0	AV	15-FEB-10 11:39	021510W1-9
	Antimony	51	ug/L	50	ug/L	102.1	90.0 - 110.0	MS	20-FEB-10 20:04	100220-2
	Cadmium	49.4	ug/L	50	ug/L	98.8	90.0 - 110.0	MS	20-FEB-10 20:04	100220-2
	Thallium	52.5	ug/L	50	ug/L	105.1	90.0 - 110.0	MS	20-FEB-10 20:04	100220-2
	Uranium	46.3	ug/L	50	ug/L	92.6	90.0 - 110.0	MS	21-FEB-10 13:43	100221-8
CCV07										
	Antimony	50.6	ug/L	50	ug/L	101.2	90.0 - 110.0	MS	20-FEB-10 20:28	100220-2
	Cadmium	49.2	ug/L	50	ug/L	98.3	90.0 - 110.0	MS	20-FEB-10 20:28	100220-2
	Thallium	52.4	ug/L	50	ug/L	104.8	90.0 - 110.0	MS	20-FEB-10 20:28	100220-2
CCV08										
	Antimony	51.7	ug/L	50	ug/L	103.3	90.0 - 110.0	MS	20-FEB-10 21:05	100220-2
	Cadmium	49.9	ug/L	50	ug/L	99.9	90.0 - 110.0	MS	20-FEB-10 21:05	100220-2
	Thallium	53.6	ug/L	50	ug/L	107.2	90.0 - 110.0	MS	20-FEB-10 21:05	100220-2
CCV09										
	Antimony	52.5	ug/L	50	ug/L	104.9	90.0 - 110.0	MS	20-FEB-10 21:55	100220-2
	Cadmium	49.7	ug/L	50	ug/L	99.5	90.0 - 110.0	MS	20-FEB-10 21:55	100220-2

SW846

## METALS

-2a-

## Initial and Continuing Calibration Verification

SDG No: 10-1474-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,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>
CCV10	Thallium	54.5	ug/L	50	ug/L	109.1	90.0 - 110.0	MS	20-FEB-10 21:55	100220-2
	Antimony	51.3	ug/L	50	ug/L	102.6	90.0 - 110.0	MS	20-FEB-10 22:50	100220-2
	Cadmium	50	ug/L	50	ug/L	100.1	90.0 - 110.0	MS	20-FEB-10 22:50	100220-2
	Thallium	48.2	ug/L	50	ug/L	96.4	90.0 - 110.0	MS	20-FEB-10 22:50	100220-2

SW846

## METALS

-2b-

## CRDL Standard for AA &amp; ICP

SDG No: 10-1474-1

Contract: LANL01004

Lab Code: GEL

AA CRDL Standard Source: SPEX

ICP CRDL Standard Source Solutions Plus

Instrument ID: ICPMS5,MER536,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Advisory Limits (%R)	M	Analysis Date/Time	Run Number
CRDL01										
	Mercury	.197	ug/L	.2	ug/L	98.4	70.0 - 130.0	AV	15-FEB-10 09:38	021510W1-9
	Thallium	1.28	ug/L	1	ug/L	127.6	70.0 - 130.0	MS	20-FEB-10 16:53	100220-2
	Antimony	3.32	ug/L	3	ug/L	110.6	70.0 - 130.0	MS	20-FEB-10 16:53	100220-2
	Cadmium	1.13	ug/L	1	ug/L	113.4	70.0 - 130.0	MS	20-FEB-10 16:53	100220-2
	Lead	2.45	ug/L	2	ug/L	122.5	70.0 - 130.0	MS	21-FEB-10 10:44	100220-7
	Manganese	6.07	ug/L	5	ug/L	121.3	70.0 - 130.0	MS	21-FEB-10 10:44	100220-7
	Beryllium	.541	ug/L	.5	ug/L	108.2	70.0 - 130.0	MS	21-FEB-10 10:44	100220-7
	Uranium	.25	ug/L	.2	ug/L	125	70.0 - 130.0	MS	21-FEB-10 12:12	100221-8
PQL01										
	Aluminum	206	ug/L	200	ug/L	103	70.0 - 130.0	P	25-FEB-10 13:04	022510-1
	Iron	96.6	ug/L	100	ug/L	96.6	70.0 - 130.0	P	25-FEB-10 13:04	022510-1
	Magnesium	401	ug/L	300	ug/L	133.8	70.0 - 130.0	P	25-FEB-10 13:04	022510-1
	Nickel	4.93	ug/L	5	ug/L	98.6	70.0 - 130.0	P	25-FEB-10 13:04	022510-1
	Potassium	155	ug/L	150	ug/L	103.1	70.0 - 130.0	P	25-FEB-10 13:04	022510-1
	Silver	5.26	ug/L	5	ug/L	105.3	70.0 - 130.0	P	25-FEB-10 13:04	022510-1
	Sodium	272	ug/L	300	ug/L	90.6	70.0 - 130.0	P	25-FEB-10 13:04	022510-1
	Arsenic	29.1	ug/L	30	ug/L	97.1	70.0 - 130.0	P	25-FEB-10 13:04	022510-1
	Barium	5.14	ug/L	5	ug/L	102.8	70.0 - 130.0	P	25-FEB-10 13:04	022510-1
	Chromium	4.73	ug/L	5	ug/L	94.6	70.0 - 130.0	P	25-FEB-10 13:04	022510-1
	Cobalt	4.94	ug/L	5	ug/L	98.8	70.0 - 130.0	P	25-FEB-10 13:04	022510-1
	Copper	9.72	ug/L	10	ug/L	97.2	70.0 - 130.0	P	25-FEB-10 13:04	022510-1
	Vanadium	4.95	ug/L	5	ug/L	99	70.0 - 130.0	P	25-FEB-10 13:04	022510-1
	Zinc	11.5	ug/L	10	ug/L	114.9	70.0 - 130.0	P	25-FEB-10 13:04	022510-1
	Calcium	213	ug/L	200	ug/L	106.3	70.0 - 130.0	P	25-FEB-10 13:04	022510-1
	Selenium	30.7	ug/L	30	ug/L	102.4	70.0 - 130.0	P	25-FEB-10 13:04	022510-1

**Metals**  
**-3a-**  
**Initial and Continuing Calibration Blank Summary**

SDG No.: 10-1474-1

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>
<b>ICB01</b>										
	Mercury	0.066	+/-2	U	0.066	0.2	LIQ	AV	15-FEB-10 09:36	021510W1-9
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	20-FEB-10 16:47	100220-2
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	20-FEB-10 16:47	100220-2
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	20-FEB-10 16:47	100220-2
	Beryllium	0.1	+/-5	U	0.1	0.5	LIQ	MS	21-FEB-10 10:41	100220-7
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	21-FEB-10 10:41	100220-7
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	21-FEB-10 10:41	100220-7
	Uranium	0.05	+/-2	U	0.05	0.2	LIQ	MS	21-FEB-10 12:10	100221-8
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	25-FEB-10 12:57	022510-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	25-FEB-10 12:57	022510-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 12:57	022510-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	25-FEB-10 12:57	022510-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 12:57	022510-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 12:57	022510-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	25-FEB-10 12:57	022510-1
	Iron	-42.67	+/-100	J	30.0	100	LIQ	P	25-FEB-10 12:57	022510-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	25-FEB-10 12:57	022510-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	25-FEB-10 12:57	022510-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	25-FEB-10 12:57	022510-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	25-FEB-10 12:57	022510-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 12:57	022510-1
	Sodium	100	+/-300	U	100	300	LIQ	P	25-FEB-10 12:57	022510-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 12:57	022510-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	25-FEB-10 12:57	022510-1
<b>CCB01</b>										
	Mercury	0.066	+/-2	U	0.066	0.2	LIQ	AV	15-FEB-10 09:42	021510W1-9
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	20-FEB-10 17:17	100220-2
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	20-FEB-10 17:17	100220-2
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	20-FEB-10 17:17	100220-2
	Beryllium	0.1	+/-5	U	0.1	0.5	LIQ	MS	21-FEB-10 10:52	100220-7
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	21-FEB-10 10:52	100220-7

SW846



**Metals**  
**-3a-**  
**Initial and Continuing Calibration Blank Summary**

SDG No.: 10-1474-1

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>
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	21-FEB-10 10:52	100220-7
	Uranium	0.05	+/-2	U	0.05	0.2	LIQ	MS	21-FEB-10 12:19	100221-8
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	25-FEB-10 13:45	022510-1
	Arsenic	11.14	+/-30	J	5.0	30.0	LIQ	P	25-FEB-10 13:45	022510-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 13:45	022510-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	25-FEB-10 13:45	022510-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 13:45	022510-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 13:45	022510-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	25-FEB-10 13:45	022510-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	25-FEB-10 13:45	022510-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	25-FEB-10 13:45	022510-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	25-FEB-10 13:45	022510-1
	Potassium	117.82	+/-150	J	50.0	150	LIQ	P	25-FEB-10 13:45	022510-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	25-FEB-10 13:45	022510-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 13:45	022510-1
	Sodium	100	+/-300	U	100	300	LIQ	P	25-FEB-10 13:45	022510-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 13:45	022510-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	25-FEB-10 13:45	022510-1
<b>CCB02</b>	Mercury	0.066	+/-2	U	0.066	0.2	LIQ	AV	15-FEB-10 10:06	021510W1-9
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	20-FEB-10 17:36	100220-2
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	20-FEB-10 17:36	100220-2
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	20-FEB-10 17:36	100220-2
	Beryllium	0.1	+/-5	U	0.1	0.5	LIQ	MS	21-FEB-10 11:05	100220-7
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	21-FEB-10 11:05	100220-7
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	21-FEB-10 11:05	100220-7
	Uranium	0.05	+/-2	U	0.05	0.2	LIQ	MS	21-FEB-10 12:37	100221-8
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	25-FEB-10 14:15	022510-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	25-FEB-10 14:15	022510-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 14:15	022510-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	25-FEB-10 14:15	022510-1

SW846

**Metals**  
**-3a-**  
**Initial and Continuing Calibration Blank Summary**

SDG No.: 10-1474-1

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>
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 14:15	022510-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 14:15	022510-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	25-FEB-10 14:15	022510-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	25-FEB-10 14:15	022510-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	25-FEB-10 14:15	022510-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	25-FEB-10 14:15	022510-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	25-FEB-10 14:15	022510-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	25-FEB-10 14:15	022510-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 14:15	022510-1
	Sodium	100	+/-300	U	100	300	LIQ	P	25-FEB-10 14:15	022510-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 14:15	022510-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	25-FEB-10 14:15	022510-1
<b>CCB03</b>	Mercury	0.066	+/-2	U	0.066	0.2	LIQ	AV	15-FEB-10 10:30	021510W1-9
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	20-FEB-10 18:26	100220-2
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	20-FEB-10 18:26	100220-2
	Thallium	0.332	+/-1	J	0.3	1.0	LIQ	MS	20-FEB-10 18:26	100220-2
	Beryllium	0.1	+/-5	U	0.1	0.5	LIQ	MS	21-FEB-10 11:27	100220-7
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	21-FEB-10 11:27	100220-7
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	21-FEB-10 11:27	100220-7
	Uranium	0.05	+/-2	U	0.05	0.2	LIQ	MS	21-FEB-10 12:54	100221-8
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	25-FEB-10 15:38	022510-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	25-FEB-10 15:38	022510-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 15:38	022510-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	25-FEB-10 15:38	022510-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 15:38	022510-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 15:38	022510-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	25-FEB-10 15:38	022510-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	25-FEB-10 15:38	022510-1
	Magnesium	112.52	+/-300	J	85.0	300	LIQ	P	25-FEB-10 15:38	022510-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	25-FEB-10 15:38	022510-1

SW846

Metals  
-3a-  
Initial and Continuing Calibration Blank Summary

SDG No. 10-1474-1

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>
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	25-FEB-10 15:38	022510-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	25-FEB-10 15:38	022510-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 15:38	022510-1
	Sodium	100	+/-300	U	100	300	LIQ	P	25-FEB-10 15:38	022510-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 15:38	022510-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	25-FEB-10 15:38	022510-1
<b>CCB04</b>										
	Mercury	-0.097	+/-2	J	0.066	0.2	LIQ	AV	15-FEB-10 10:53	021510W1-9
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	20-FEB-10 18:50	100220-2
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	20-FEB-10 18:50	100220-2
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	20-FEB-10 18:50	100220-2
	Beryllium	0.1	+/-5	U	0.1	0.5	LIQ	MS	21-FEB-10 11:45	100220-7
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	21-FEB-10 11:45	100220-7
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	21-FEB-10 11:45	100220-7
	Uranium	0.05	+/-2	U	0.05	0.2	LIQ	MS	21-FEB-10 13:14	100221-8
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	25-FEB-10 16:53	022510-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	25-FEB-10 16:53	022510-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 16:53	022510-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	25-FEB-10 16:53	022510-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 16:53	022510-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 16:53	022510-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	25-FEB-10 16:53	022510-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	25-FEB-10 16:53	022510-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	25-FEB-10 16:53	022510-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	25-FEB-10 16:53	022510-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	25-FEB-10 16:53	022510-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	25-FEB-10 16:53	022510-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 16:53	022510-1
	Sodium	100	+/-300	U	100	300	LIQ	P	25-FEB-10 16:53	022510-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 16:53	022510-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	25-FEB-10 16:53	022510-1

SW846

Metals  
-3a-  
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1474-1

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>
CCB05	Mercury	-0.108	+/-2	J	0.066	0.2	LIQ	AV	15-FEB-10 11:17	021510W1-9
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	20-FEB-10 19:27	100220-2
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	20-FEB-10 19:27	100220-2
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	20-FEB-10 19:27	100220-2
	Beryllium	0.1	+/-5	U	0.1	0.5	LIQ	MS	21-FEB-10 12:00	100220-7
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	21-FEB-10 12:00	100220-7
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	21-FEB-10 12:00	100220-7
	Uranium	0.05	+/-2	U	0.05	0.2	LIQ	MS	21-FEB-10 13:29	100221-8
CCB06	Mercury	-0.096	+/-2	J	0.066	0.2	LIQ	AV	15-FEB-10 11:41	021510W1-9
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	20-FEB-10 20:10	100220-2
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	20-FEB-10 20:10	100220-2
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	20-FEB-10 20:10	100220-2
	Uranium	0.05	+/-2	U	0.05	0.2	LIQ	MS	21-FEB-10 13:44	100221-8
CCB07	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	20-FEB-10 20:35	100220-2
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	20-FEB-10 20:35	100220-2
	Thallium	0.33	+/-1	J	0.3	1.0	LIQ	MS	20-FEB-10 20:35	100220-2
CCB08	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	20-FEB-10 21:11	100220-2
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	20-FEB-10 21:11	100220-2
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	20-FEB-10 21:11	100220-2
CCB09	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	20-FEB-10 22:01	100220-2
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	20-FEB-10 22:01	100220-2
	Thallium	0.426	+/-1	J	0.3	1.0	LIQ	MS	20-FEB-10 22:01	100220-2
CCB10	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	20-FEB-10 22:56	100220-2
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	20-FEB-10 22:56	100220-2
	Thallium	0.983	+/-1	J	0.3	1.0	LIQ	MS	20-FEB-10 22:56	100220-2

SW846

**METALS**  
**-3b-**  
**PREPARATION BLANK SUMMARY**

SDG NO. 10-1474-1

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>
1202029965	Mercury	-0.115	ug/L	+/-0.2	J	AV	0.066	0.2
1202031021	Aluminum	68	ug/L	+/-200	U	P	68	200
	Arsenic	5	ug/L	+/-30	U	P	5	30
	Barium	1	ug/L	+/-5	U	P	1	5
	Calcium	50	ug/L	+/-200	U	P	50	200
	Chromium	1	ug/L	+/-5	U	P	1	5
	Cobalt	1	ug/L	+/-5	U	P	1	5
	Copper	3	ug/L	+/-10	U	P	3	10
	Iron	30	ug/L	+/-100	U	P	30	100
	Magnesium	107	ug/L	+/-300	J	P	85	300
	Nickel	1.5	ug/L	+/-5	U	P	1.5	5
	Potassium	50	ug/L	+/-150	U	P	50	150
	Selenium	5	ug/L	+/-30	U	P	5	30
	Silver	1	ug/L	+/-5	U	P	1	5
	Sodium	100	ug/L	+/-300	U	P	100	300
	Vanadium	1	ug/L	+/-5	U	P	1	5
	Zinc	3.3	ug/L	+/-10	U	P	3.3	10
1202031027	Antimony	0.5	ug/L	+/-3	U	MS	0.5	3
	Beryllium	0.1	ug/L	+/-0.5	U	MS	0.1	0.5
	Cadmium	0.11	ug/L	+/-1	U	MS	0.11	1
	Lead	0.5	ug/L	+/-2	U	MS	0.5	2
	Manganese	1	ug/L	+/-5	U	MS	1	5
	Thallium	0.3	ug/L	+/-1	U	MS	0.3	1
	Uranium	0.05	ug/L	+/-0.2	U	MS	0.05	0.2

## METALS

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## Interference Check Sample

SDG No: 10-1474-1

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>
<b>ICSA01</b>									
	Aluminum	531000	ug/L	500000	ug/L	106	80.0 – 120.0	25-FEB-10 13:11	022510-1
	Arsenic	9.55	ug/L					25-FEB-10 13:11	022510-1
	Barium	0.543	ug/L					25-FEB-10 13:11	022510-1
	Calcium	492000	ug/L	500000	ug/L	98.4	80.0 – 120.0	25-FEB-10 13:11	022510-1
	Chromium	-0.041	ug/L					25-FEB-10 13:11	022510-1
	Cobalt	-1.44	ug/L					25-FEB-10 13:11	022510-1
	Copper	2.08	ug/L					25-FEB-10 13:11	022510-1
	Iron	187000	ug/L	200000	ug/L	93.5	80.0 – 120.0	25-FEB-10 13:11	022510-1
	Magnesium	500000	ug/L	500000	ug/L	100	80.0 – 120.0	25-FEB-10 13:11	022510-1
	Nickel	3.15	ug/L					25-FEB-10 13:11	022510-1
	Potassium	-183.0	ug/L					25-FEB-10 13:11	022510-1
	Selenium	-48.8	ug/L					25-FEB-10 13:11	022510-1
	Silver	-2.52	ug/L					25-FEB-10 13:11	022510-1
	Sodium	22.8	ug/L					25-FEB-10 13:11	022510-1
	Vanadium	-1.23	ug/L					25-FEB-10 13:11	022510-1
	Zinc	-2.74	ug/L					25-FEB-10 13:11	022510-1
<b>ICSAB01</b>									
	Aluminum	524000	ug/L	500000	ug/L	105	80.0 – 120.0	25-FEB-10 13:18	022510-1
	Arsenic	514	ug/L	500	ug/L	103	80.0 – 120.0	25-FEB-10 13:18	022510-1
	Barium	485	ug/L	500	ug/L	97.1	80.0 – 120.0	25-FEB-10 13:18	022510-1
	Calcium	487000	ug/L	500000	ug/L	97.3	80.0 – 120.0	25-FEB-10 13:18	022510-1
	Chromium	473	ug/L	500	ug/L	94.6	80.0 – 120.0	25-FEB-10 13:18	022510-1
	Cobalt	431	ug/L	500	ug/L	86.2	80.0 – 120.0	25-FEB-10 13:18	022510-1
	Copper	536	ug/L	500	ug/L	107	80.0 – 120.0	25-FEB-10 13:18	022510-1
	Iron	188000	ug/L	200000	ug/L	93.8	80.0 – 120.0	25-FEB-10 13:18	022510-1
	Magnesium	498000	ug/L	500000	ug/L	99.5	80.0 – 120.0	25-FEB-10 13:18	022510-1
	Nickel	437	ug/L	500	ug/L	87.3	80.0 – 120.0	25-FEB-10 13:18	022510-1
	Potassium	5400	ug/L	5000	ug/L	108	80.0 – 120.0	25-FEB-10 13:18	022510-1
	Selenium	2470	ug/L	2500	ug/L	98.9	80.0 – 120.0	25-FEB-10 13:18	022510-1

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**METALS**  
**-4-**  
**Interference Check Sample**

**SDG No:** 10-1474-1

**Contract:** LANL01004

**Lab Code:** GEL

**ICS:**

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<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	265	ug/L	250	ug/L	106	80.0 – 120.0	25-FEB-10 13:18	022510-1
	Sodium	5310	ug/L	5000	ug/L	106	80.0 – 120.0	25-FEB-10 13:18	022510-1
	Vanadium	498	ug/L	500	ug/L	99.7	80.0 – 120.0	25-FEB-10 13:18	022510-1
	Zinc	482	ug/L	500	ug/L	96.5	80.0 – 120.0	25-FEB-10 13:18	022510-1

## METALS

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## Interference Check Sample

SDG No: 10-1474-1

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	0.132	ug/L					20-FEB-10 16:59	100220-2
	Cadmium	0.65	ug/L					20-FEB-10 16:59	100220-2
	Thallium	0.064	ug/L					20-FEB-10 16:59	100220-2
ICSAB01									
	Antimony	21.6	ug/L	20	ug/L	108	80.0 - 120.0	20-FEB-10 17:05	100220-2
	Cadmium	20.1	ug/L	20.44	ug/L	98.5	80.0 - 120.0	20-FEB-10 17:05	100220-2
	Thallium	21.9	ug/L	20	ug/L	109	80.0 - 120.0	20-FEB-10 17:05	100220-2



## METALS

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## Interference Check Sample

SDG No: 10-1474-1

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	0.106	ug/L					21-FEB-10 10:46	100220-7
	Lead	0.257	ug/L					21-FEB-10 10:46	100220-7
	Manganese	6.84	ug/L					21-FEB-10 10:46	100220-7
ICSAB01									
	Beryllium	20.2	ug/L	20	ug/L	101	80.0 - 120.0	21-FEB-10 10:48	100220-7
	Lead	22.1	ug/L	20.19	ug/L	109	80.0 - 120.0	21-FEB-10 10:48	100220-7
	Manganese	29.9	ug/L	25.8	ug/L	116	80.0 - 120.0	21-FEB-10 10:48	100220-7

## METALS

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## Interference Check Sample

SDG No: 10-1474-1

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	0.0	ug/L					21-FEB-10 12:14	100221-8
ICSAB01	Uranium	23.7	ug/L	20	ug/L	118	80.0 - 120.0	21-FEB-10 12:15	100221-8

## METALS

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## Matrix Spike Summary

SDG NO. 10-1474-1

Client ID: RE15-10-8081S

Contract: LANL01004

Level: Low

Matrix: WATER

% Solids:

Sample ID: 245807001

Spike ID: 1202029968

<u>Analyte</u>	<u>Units</u>	<u>Acceptance Limit</u>	<u>Spiked Result</u>	<u>C</u>	<u>Sample Result</u>	<u>C</u>	<u>Spike Added</u>	<u>% Recovery</u>	<u>Qual</u>	<u>M</u>
Mercury	ug/L	75-125	2.11		0.066	U	2	106		AV

## METALS

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## Matrix Spike Summary

SDG NO. 10-1474-1

Client ID CAMO-10-9311S

Contract: ESHL01000

Level: Low

Matrix: GROUND WATER

% Solids:

Sample ID: 245673001

Spike ID: 1202031024

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/L	75-125	5270		68	U	5000	105		P
Arsenic	ug/L	75-125	501		5	U	500	99.9		P
Barium	ug/L	75-125	510		12.5		500	99.4		P
Calcium	ug/L		33700		30000		5000	74.2	N/A	P
Chromium	ug/L	75-125	491		4.86	J	500	97.3		P
Cobalt	ug/L	75-125	467		1	U	500	93.4		P
Copper	ug/L	75-125	516		4.84	J	500	102		P
Iron	ug/L	75-125	5380		30	U	5000	108		P
Magnesium	ug/L	75-125	9790		4690		5000	102		P
Nickel	ug/L	75-125	479		3.7	J	500	95		P
Potassium	ug/L	75-125	5870		745		5000	102		P
Selenium	ug/L	75-125	496		5	U	500	99.1		P
Silver	ug/L	75-125	486		1	U	500	97.2		P
Sodium	ug/L		26500		22300		5000	84.7	N/A	P
Vanadium	ug/L	75-125	505		1.55	J	500	101		P
Zinc	ug/L	75-125	512		28.1		500	96.8		P

## METALS

-5a-

## Matrix Spike Summary

SDG NO. 10-1474-1 Client ID: CAWR-10-11786S

Contract: ESHL01000 Level: Low

Matrix: SURFACE WATER % Solids:

Sample ID: 245676001 Spike ID: 1202031030

<u>Analyte</u>	<u>Units</u>	<u>Acceptance Limit</u>	<u>Spiked Result</u>	<u>C</u>	<u>Sample Result</u>	<u>C</u>	<u>Spike Added</u>	<u>% Recovery</u>	<u>Qual</u>	<u>M</u>
Antimony	ug/L	75-125	217		0.5	U	200	108		MS
Beryllium	ug/L	75-125	54.4		0.1	U	50	109		MS
Cadmium	ug/L	75-125	11.1		0.11	U	10	110		MS
Lead	ug/L	75-125	48.1		0.762	J	40	118		MS
Manganese	ug/L	75-125	88.1		40.3		50	95.7		MS
Thallium	ug/L	75-125	100		0.3	U	100	99.9		MS
Uranium	ug/L	75-125	60.1		3.49		50	113		MS

## Metals

-6-

## Duplicate Sample Summary

SDG No.: 10-1474-1

Contract: LANL01004

Lab Code: GEL

Matrix: LIQUID

Level: Low

Client ID: RE15-10-8081D

Sample ID: 245807001

Duplicate ID: 1202029967

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.: 10-1474-1

Contract: LANL01004

Lab Code: GEL

Matrix: LIQUID

Level: Low

Client ID: CAMO-10-9311D

Sample ID: 245673001

Duplicate ID: 1202031022

Percent Solids for Dup: N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/L		68 U		68 U				P
Arsenic	ug/L		5 U		5 U				P
Barium	ug/L	+/-5	12.5		11.4		9.42		P
Calcium	ug/L	+/-20%	30000		26600		11.8		P
Chromium	ug/L	+/-5	4.86 J		4.55 J		6.62		P
Cobalt	ug/L		1 U		1 U				P
Copper	ug/L	+/-10	4.84 J		4.23 J		13.5		P
Iron	ug/L		30 U		30 U				P
Magnesium	ug/L	+/-20%	4690		4320		8.12		P
Nickel	ug/L	+/-5	3.7 J		2.82 J		26.8		P
Potassium	ug/L	+/-150	745		655		12.8		P
Selenium	ug/L		5 U		5 U				P
Silver	ug/L		1 U		1 U				P
Sodium	ug/L	+/-20%	22300		19700		12.2		P
Vanadium	ug/L	+/-5	1.55 J		1.3 J		17		P
Zinc	ug/L	+/-10	28.1		25.3		10.5		P

## Metals

-6-

## Duplicate Sample Summary

SDG No.: 10-1474-1

Contract: LANL01004

Lab Code: GEL

Matrix: LIQUID

Level: Low

Client ID: CAWR-10-11786D

Sample ID: 245676001

Duplicate ID: 1202031029

Percent Solids for Dup: N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Antimony	ug/L		0.5 U		0.5 U				MS
Beryllium	ug/L		0.1 U		0.1 U				MS
Cadmium	ug/L		0.11 U		0.11 U				MS
Lead	ug/L	+/-2	0.762 J		0.689 J		10.1		MS
Manganese	ug/L	+/-20%	40.3		41.4		2.88		MS
Thallium	ug/L		0.3 U		0.3 U				MS
Uranium	ug/L	+/-20%	3.49		3.59		2.94		MS



## METALS

-7-

## Laboratory Control Sample Summary

SDG NO. 10-1474-1

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>
1202029966	Mercury	ug/L	2	2.04		102	80-120	AV

## METALS

-7-

## Laboratory Control Sample Summary

SDG NO. 10-1474-1

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>
1202031026								
	Copper	ug/L	500	506		101	80-120	P
	Iron	ug/L	5000	5000		100	80-120	P
	Magnesium	ug/L	5000	5330		107	80-120	P
	Nickel	ug/L	500	502		100	80-120	P
	Potassium	ug/L	5000	5050		101	80-120	P
	Selenium	ug/L	500	504		101	80-120	P
	Silver	ug/L	500	482		96.3	80-120	P
	Sodium	ug/L	5000	5180		104	80-120	P
	Vanadium	ug/L	500	505		101	80-120	P
	Zinc	ug/L	500	489		97.7	80-120	P
	Aluminum	ug/L	5000	5220		104	80-120	P
	Arsenic	ug/L	500	499		99.9	80-120	P
	Barium	ug/L	500	499		99.7	80-120	P
	Calcium	ug/L	5000	5270		105	80-120	P
	Chromium	ug/L	500	496		99.1	80-120	P
	Cobalt	ug/L	500	480		96	80-120	P

## METALS

-7-

## Laboratory Control Sample Summary

SDG NO. 10-1474-1

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>
1202031028								
	Antimony	ug/L	50	58		116	80-120	MS
	Beryllium	ug/L	50	59.4		119	80-120	MS
	Cadmium	ug/L	50	53.4		107	80-120	MS
	Lead	ug/L	50	58.2		116	80-120	MS
	Manganese	ug/L	50	54.9		110	80-120	MS
	Thallium	ug/L	50	54.7		109	80-120	MS
	Uranium	ug/L	50	56.7		113	80-120	MS

## METALS

-9-

## Serial Dilution Sample Summary

SDG NO. 10-1474-1

Client ID: RE15-10-8081L

Contract: LANL01004

Matrix: LIQUID

Level: Low

Sample ID: 245807001

Serial Dilution ID: 1202029969

<u>Analyte</u>	<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>
Mercury	.066	U	.33	U				AV

## METALS

-9-

## Serial Dilution Sample Summary

SDG NO. 10-1474-1

Client ID CAMO-10-9311L

Contract: LANL01004

Matrix: LIQUID

Level: Low

Sample ID: 245673001

Serial Dilution ID: 1202031023

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	12.5		12.2	J	2.4			P
Calcium	30000		28300		5.83		10	P
Chromium	4.86	J	5	U	100			P
Cobalt	1	U	5	U				P
Copper	4.84	J	15	U	100			P
Iron	30	U	150	U				P
Magnesium	4690		5000		6.61		10	P
Nickel	3.7	J	7.5	U	100			P
Potassium	745		755		1.34			P
Selenium	5	U	25	U				P
Silver	1	U	5	U				P
Sodium	22300		20300		9.19		10	P
Vanadium	1.55	J	5	U	100			P
Zinc	28.1		36.9	J	31.1			P

## METALS

-9-

## Serial Dilution Sample Summary

SDG NO. 10-1474-1 Client ID CAWR-10-11786L

Contract: LANL01004

Matrix: LIQUID Level: Low

Sample ID: 245676001 Serial Dilution ID: 1202031031

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Antimony	.5	U	2.5	U				MS
Beryllium	.1	U	.5	U				MS
Cadmium	.11	U	.55	U				MS
Lead	.762	J	2.5	U	100			MS
Manganese	40.3		47.1		16.9			MS
Thallium	.3	U	6.5					MS
Uranium	3.49		3.41		2.44			MS

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METALS  
-13-  
SAMPLE PREPARATION SUMMARY

SDG No: 10-1474-1

Method Type: P

Contract: LANL01004

Lab Code: GEL

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<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	948085						
1202031021	MB for batch 948085	MB	G	25-FEB-10	25mL	25mL	
1202031026	LCS for batch 948085	LCS	G	25-FEB-10	25mL	25mL	
1202031024	CAMO-10-9311S	MS	G	25-FEB-10	25mL	25mL	
1202031022	CAMO-10-9311D	DUP	G	25-FEB-10	25mL	25mL	
245807001	RE15-10-8081	SAMPLE	W	25-FEB-10	25mL	25mL	
245807002	RE15-10-8082	SAMPLE	W	25-FEB-10	25mL	25mL	

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SW846

## METALS

-13-

## SAMPLE PREPARATION SUMMARY

SDG No: 10-1474-1

Method Type: MS

Contract: LANL01004

Lab Code: GEL

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<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	948089						
1202031027	MB for batch 948089	MB	SU	03-FEB-10	50mL	50mL	
1202031028	LCS for batch 948089	LCS	SU	03-FEB-10	50mL	50mL	
1202031030	CAWR-10-11786S	MS	SU	03-FEB-10	50mL	50mL	
1202031029	CAWR-10-11786D	DUP	SU	03-FEB-10	50mL	50mL	
245807001	RE15-10-8081	SAMPLE	W	03-FEB-10	50mL	50mL	
245807002	RE15-10-8082	SAMPLE	W	03-FEB-10	50mL	50mL	

SW846



## METALS

-13-

## SAMPLE PREPARATION SUMMARY

SDG No: 10-1474-1

Method Type: AV

Contract: LANL01004

Lab Code: GEL

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<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	947645						
1202029965	MB for batch 947645	MB	W	12-FEB-10	20mL	20mL	
1202029966	LCS for batch 947645	LCS	W	12-FEB-10	20mL	20mL	
1202029968	RE15-10-8081S	MS	W	12-FEB-10	20mL	20mL	
1202029967	RE15-10-8081D	DUP	W	12-FEB-10	20mL	20mL	
245807001	RE15-10-8081	SAMPLE	W	12-FEB-10	20mL	20mL	
245807002	RE15-10-8082	SAMPLE	W	12-FEB-10	20mL	20mL	

SW846

**Metals**  
**-14-**  
**Analysis Run Log**

Contract: LANL01004

Lab Code: GEL

Inst Name: ICPMS5

Start Date: 20-FEB-10

End Date: 21-FEB-10

Client Sdg: 10-1474-1

Method MS

Data File: 100220-2

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	Ti	U	V	Zn
S0.0	1	16:22		X				X															X			
S10	1	16:29		X				X															X			
S100	1	16:35		X				X															X			
ICV01	1	16:41		X				X															X			
ICB01	1	16:47		X				X															X			
CRDL01	1	16:53		X				X															X			
ICSA01	1	16:59		X				X															X			
ICSAB01	1	17:05		X				X															X			
CCV01	1	17:11		X				X															X			
CCB01	1	17:17		X				X															X			
LR01	1	17:23		X				X															X			
CCV02	1	17:30		X				X															X			
CCB02	1	17:36		X				X															X			
	1	17:43																								
	1	17:49																								
	1	17:55																								
	1	18:01																								
	1	18:07																								
	5	18:13																								
CCV03	1	18:19		X				X															X			
CCB03	1	18:26		X				X															X			
	1	18:32																								
	1	18:38																								
CCV04	1	18:44		X				X															X			
CCB04	1	18:50		X				X															X			
	1	18:56																								
	1	19:03																								
	1	19:09																								
	1	19:15																								
CCV05	1	19:21		X				X															X			
CCB05	1	19:27		X				X															X			
	1	19:33																								
	1	19:39																								
	1	19:46																								
	1	19:52																								
	1	19:58																								
CCV06	1	20:04		X				X															X			
CCB06	1	20:10		X				X															X			
1202031027	1	20:16		X				X															X			
1202031028	1	20:22		X				X															X			

[illegible]

Metals  
-14-  
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: ICPMS5

Start Date: 20-FEB-10

End Date: 21-FEB-10

Client Sdg: 10-1474-1

Method MS

Data File: 100220-7

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	Ti	U	V	Zn
S0.0	1	10:33					X							X		X										
S10	1	10:35					X							X		X										
S100	1	10:37					X							X		X										
ICV01	1	10:39					X							X		X										
ICB01	1	10:41					X							X		X										
CRDL01	1	10:44					X							X		X										
ICSA01	1	10:46					X							X		X										
ICSAB01	1	10:48					X							X		X										
CCV01	1	10:50					X							X		X										
CCB01	1	10:52					X							X		X										
//////	1	10:54																								
//////	1	10:56																								
//////	1	10:59																								
//////	1	11:01																								
CCV02	1	11:03					X							X		X										
CCB02	1	11:05					X							X		X										
1202031027	1	11:08					X							X		X										
1202031028	1	11:10					X							X		X										
//////	1	11:12																								
//////	1	11:14																								
//////	1	11:16																								
//////	1	11:18																								
//////	1	11:21																								
//////	1	11:23																								
CCV03	1	11:25					X							X		X										
CCB03	1	11:27					X							X		X										
//////	1	11:30																								
1202031030	1	11:32					X							X		X										
1202031029	1	11:34					X							X		X										
1202031031	5	11:36					X							X		X										
//////	1	11:38																								
//////	1	11:40																								
CCV04	1	11:43					X							X		X										
CCB04	1	11:45					X							X		X										
//////	1	11:47																								
//////	1	11:49																								
//////	1	11:51																								
245807001	1	11:54					X							X		X										
245807002	1	11:56					X							X		X										
CCV05	1	11:58					X							X		X										

Metals  
-14-  
Analysis Run Log

Samp No.	D/F	Run Time					X						X	X						
CCB05	1	12:00					X						X	X						

Metals  
-14-  
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: ICPMS5

Start Date: 21-FEB-10

End Date: 21-FEB-10

Client Sdg: 10-1474-1

Method MS

Data File: 100221-8

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	12:04																						X		
S10	1	12:05																						X		
S100	1	12:07																						X		
ICV01	1	12:09																						X		
ICB01	1	12:10																						X		
CRDL01	1	12:12																						X		
ICSA01	1	12:14																						X		
ICSAB01	1	12:15																						X		
CCV01	1	12:17																						X		
CCB01	1	12:19																						X		
//////	1	12:20																								
//////	1	12:22																								
//////	1	12:24																								
//////	1	12:25																								
//////	1	12:27																								
//////	5	12:29																								
//////	1	12:30																								
//////	1	12:32																								
//////	1	12:34																								
CCV02	1	12:35																						X		
CCB02	1	12:37																						X		
//////	1	12:39																								
//////	1	12:40																								
//////	1	12:42																								
//////	1	12:44																								
//////	1	12:45																								
//////	1	12:47																								
//////	1	12:49																								
//////	1	12:50																								
CCV03	1	12:52																						X		
CCB03	1	12:54																						X		
1202031027	1	12:59																						X		
1202031028	1	13:01																						X		
//////	1	13:02																								
//////	1	13:04																								
//////	1	13:06																								
//////	1	13:08																								
//////	1	13:09																								
//////	1	13:11																								
CCV04	1	13:13																						X		

SW846

**Metals**  
**-14-**  
**Analysis Run Log**

Contract: LANL01004

Lab Code: GEL

Inst Name: OPTIMA3

Start Date: 25-FEB-10

End Date: 25-FEB-10

Client Sdg: 10-1474-1

Method P

Data File: 022510-1

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	12:17	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
S0.1	1	12:24			X	X				X	X	X						X	X	X	X				X	X
S0.5	1	12:31	X		X	X			X	X	X	X			X			X	X	X	X				X	X
SCAL	1	12:38	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
S10	1	12:45	X						X				X		X							X				
ICV01	1	12:50	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ICB01	1	12:57	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
PQL01	1	13:04	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ICSA01	1	13:11	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ICSAB01	1	13:18	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
LR01	1	13:25	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
LR02	1	13:31	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCV01	1	13:38	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCB01	1	13:45	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
LR03	1	13:55	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
LR04	1	14:01	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCV02	1	14:08	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCB02	1	14:15	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
1202031021	1	14:23	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
1202031026	1	14:29	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ZZZZZZ	1	14:36																								
1202031022	1	14:43	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
1202031024	1	14:50	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
1202031023	5	14:57	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ZZZZZZ	1	15:04																								
ZZZZZZ	1	15:10																								
ZZZZZZ	1	15:17																								
ZZZZZZ	1	15:24																								
CCV03	1	15:31	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCB03	1	15:38	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ZZZZZZ	1	15:45																								
ZZZZZZ	1	15:52																								
ZZZZZZ	1	15:59																								
ZZZZZZ	1	16:06																								
ZZZZZZ	1	16:12																								
ZZZZZZ	1	16:19																								
ZZZZZZ	1	16:26																								
245807001	1	16:33	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
245807002	1	16:39	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCV04	1	16:46	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X



Metals  
~~-14-~~  
Analysis Run Log

Samp No.	D/F	Run Time																	
CCB04	1	16:53	X		X	X			X	X	X	X	X		X		X	X	

Metals  
-14-  
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: MER536

Start Date: 15-FEB-10

Client Sdg: 10-1474-1

Method AV

Data File: 021510W1-9

End Date: 15-FEB-10

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	09:22															X									
S0.2	1	09:24															X									
S0.5	1	09:26															X									
S2.0	1	09:28															X									
S5.0	1	09:30															X									
S10	1	09:32															X									
ICV01	1	09:34															X									
ICB01	1	09:36															X									
CRDL01	1	09:38															X									
CCV01	1	09:40															X									
CCB01	1	09:42															X									
TTTTT	1	09:44																								
TTTTT	1	09:46																								
TTTTT	1	09:48																								
TTTTT	1	09:50																								
TTTTT	1	09:52																								
TTTTT	1	09:54																								
TTTTT	1	09:56																								
TTTTT	1	09:58																								
TTTTT	1	10:00																								
TTTTT	5	10:02																								
CCV02	1	10:04															X									
CCB02	1	10:06															X									
TTTTT	1	10:08																								
TTTTT	1	10:10																								
TTTTT	1	10:12																								
TTTTT	1	10:14																								
TTTTT	1	10:16																								
TTTTT	1	10:18																								
TTTTT	1	10:20																								
TTTTT	1	10:22																								
TTTTT	1	10:24																								
TTTTT	1	10:26																								
CCV03	1	10:28															X									
CCB03	1	10:30															X									
TTTTT	5	10:32																								
TTTTT	1	10:34																								
TTTTT	1	10:36																								
TTTTT	1	10:37																								
TTTTT	1	10:39																								

SW846

# Standards

## METALS

-10-

## Instrument Detection Limits

SDG NO. 10-1474-1

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

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METALS  
-10-  
Instrument Detection Limits

SDG NO. 10-1474-1

Contract: LANL01004

Lab Code: GEL

MDL Effective Date: 01-JUL-09

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	<u>Analyte</u>	<u>Wavelength</u> <u>(nm)</u>	<u>MDL</u> <u>ug/L</u>	<u>RDL</u> <u>ug/L</u>
MERCURY				
LIQUID	Mercury		0.066	.2

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**METALS**  
**-10-**  
**Instrument Detection Limits**

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**SDG NO.** 10-1474-1

**Contract:** LANL01004

**Lab Code:** GEL

**MDL Effective Date:** 01-JUL-09

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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: 10-1474-1

Contract: LANL01004

Instrument: OPTIMA3

Effective Dates: 01-FEB-10

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

		Aluminum	Antimony	Arsenic	Barium	Beryllium
Parmname	Wavelength					
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:

10-1474-1

Contract: LANL01004

Instrument: OPTIMA3

Effective Dates:

01-FEB-10

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: 10-1474-1

Contract: LANL01004

Instrument: OPTIMA3

Effective Dates: 01-FEB-10

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: 10-1474-1

Contract: LANL01004

Instrument: OPTIMA3

Effective Dates: 01-FEB-10

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

		Nickel	Phosphorous	Potassium	Selenium	Silica
Parmname	Wavelength					
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: 10-1474-1

Contract: LANL01004

Instrument: OPTIMA3

Effective Dates: 01-FEB-10

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Silicon	Silver	Strontium	Sulfur	Thallium
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	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	0.00000	0.00000	0.00000	0.00000	0.00000

**METALS**  
**-11-**  
**Interelement Correction Factors**

Lab Code: GELGEL Job No: **10-1474-1**

Contract: LANL01004

Instrument: OPTIMA3

Effective Dates: **01-FEB-10**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

		Tin	Titanium	Uranium	Vanadium	Zinc
Parmname	Wavelength					
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	-15.4932	3.30431	0.00000	-2.81282	0.00000
Arsenic	188.979	0.00000	-8.66313	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	-2.20293	0.00000
Beryllium	313.107	0.00000	-2.27027	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	-0.19473	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.39645	-1.41250	0.00000
Cobalt	228.616	0.00000	2.09497	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.55360	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	-9.37529	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	0.81635	-4.04400	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	-8.29801	0.00000	1.88584	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.43915	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	1.05947	-1.91382	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

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**METALS**  
**-12-**  
**Linear Ranges**

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SDG NO. 10-1474-1

Contract: LANL01004

Lab Code: GEL

Instrument IDICPMS5

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<u>Analyte</u>	<u>Integration Time (msec)</u>	<u>LDR</u>	<u>Units</u>	<u>Effective Date</u>
Cobalt	1000	1000	ug/L	01-FEB-10
Copper	1000	1000	ug/L	01-FEB-10
Iron	500	50000	ug/L	01-FEB-10
Lead	1000	5000	ug/L	01-FEB-10
Magnesium	1	50000	ug/L	01-FEB-10
Manganese	1000	1000	ug/L	01-FEB-10
Nickel	1000	1000	ug/L	01-FEB-10
Potassium	1	50000	ug/L	01-FEB-10
Selenium	1000	500	ug/L	01-FEB-10
Silver	1000	250	ug/L	01-FEB-10
Sodium	1	50000	ug/L	01-FEB-10
Thallium	1000	500	ug/L	01-FEB-10
Uranium	1000	5000	ug/L	01-FEB-10
Vanadium	1000	100	ug/L	01-FEB-10
Zinc	1000	2500	ug/L	01-FEB-10
Aluminum	1	50000	ug/L	01-FEB-10
Antimony	1000	250	ug/L	01-FEB-10
Arsenic	1000	1000	ug/L	01-FEB-10
Barium	1000	1000	ug/L	01-FEB-10
Beryllium	1000	1000	ug/L	01-FEB-10
Cadmium	1000	1000	ug/L	01-FEB-10
Calcium	500	50000	ug/L	01-FEB-10
Chromium	1000	1000	ug/L	01-FEB-10

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**METALS**  
-12-  
Linear Ranges

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SDG NO. 10-1474-1

Contract: LANL01004

Lab Code: GEL

Instrument ID OPTIMA3

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<u>Analyte</u>	<u>Integration Time (sec)</u>	<u>LDR</u>	<u>Units</u>	<u>Effective Date</u>
Antimony	20	10000	ug/L	01-FEB-10
Arsenic	20	10000	ug/L	01-FEB-10
Barium	20	15000	ug/L	01-FEB-10
Beryllium	20	3000	ug/L	01-FEB-10
Cadmium	20	10000	ug/L	01-FEB-10
Calcium	20	500000	ug/L	01-FEB-10
Chromium	20	25000	ug/L	01-FEB-10
Cobalt	20	10000	ug/L	01-FEB-10
Copper	20	20000	ug/L	01-FEB-10
Iron	20	500000	ug/L	01-FEB-10
Lead	20	25000	ug/L	01-FEB-10
Magnesium	20	500000	ug/L	01-FEB-10
Manganese	20	10000	ug/L	01-FEB-10
Nickel	20	10000	ug/L	01-FEB-10
Aluminum	20	500000	ug/L	01-FEB-10
Potassium	20	300000	ug/L	01-FEB-10
Selenium	20	10000	ug/L	01-FEB-10
Silver	20	1000	ug/L	01-FEB-10
Sodium	20	500000	ug/L	01-FEB-10
Thallium	20	10000	ug/L	01-FEB-10
Uranium	20	15000	ug/L	01-FEB-10
Vanadium	20	10000	ug/L	01-FEB-10
Zinc	20	15000	ug/L	01-FEB-10

# Raw Data

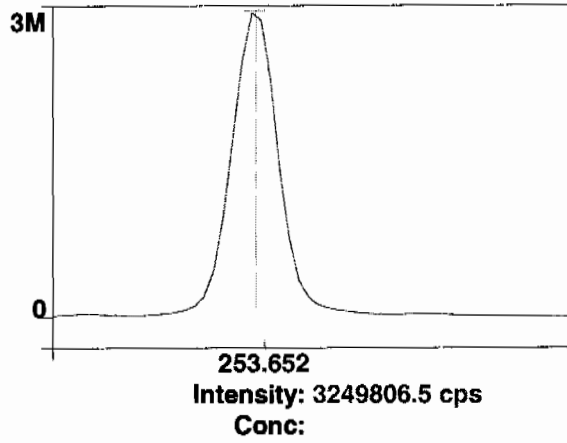


Method: Hg\_ReAlign  
Result: 022610

Sample ID: Hg\_ReAlign

Hg 253.652

Rep: 1



1

## ===== Analysis Begun

Start Time: 2/25/2010 12:17:29

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\022510.sif

Batch ID:

Results Data Set: 022510

Results Library: C:\pe\Optima3\Results\Results.mdb

=====
Sequence No.: 1

Sample ID: S0

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/25/2010 12:17:29

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## ----- Replicate Data: S0

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Analysis Time
1	Sc Radial	3863.0	3863.0	100 %	12:19:42
1	Y RADIAL	4433.2	4433.2	99.58 %	12:19:22
1	Al 396.153Radial†	-101.8	-101.6	[0.00] ug/L	12:19:22
1	Ca 317.933Radial†	15.9	15.9	[0.00] ug/L	12:19:42
1	Fe 238.204 Radial†	13.3	13.2	[0.00] ug/L	12:19:42
1	K 766.490 Radial†	2816.1	2811.7	[0.00] ug/L	12:19:22
1	Mg 279.077 IEC†	0.7	0.7	[0.00] ug/L	12:19:42
1	Na 589.592 Radial†	-900.1	-898.6	[0.00] ug/L	12:19:22
1	Sr 421.552†	27.0	27.0	[0.00] ug/L	12:19:22
1	Sc 361.383	880399.5	880399.5	100.04 %	12:20:38
1	Y 371.029	761132.7	761132.7	100.07 %	12:20:38
1	Ag 328.068†	208.2	208.1	[0.00] ug/L	12:20:38
1	As 188.979†	-19.3	-19.3	[0.00] ug/L	12:20:59
1	B 249.677†	-241.1	-241.0	[0.00] ug/L	12:20:59
1	Ba 233.527†	3.9	3.9	[0.00] ug/L	12:20:59
1	Be 313.107†	-3561.3	-3560.0	[0.00] ug/L	12:20:38
1	Cd 226.502†	-178.2	-178.2	[0.00] ug/L	12:20:59
1	Co 228.616†	-62.9	-62.9	[0.00] ug/L	12:20:59
1	Cr 267.716†	78.5	78.4	[0.00] ug/L	12:20:59
1	Cu 324.752†	5965.4	5963.2	[0.00] ug/L	12:20:38
1	Mn 257.610†	483.8	483.7	[0.00] ug/L	12:20:59
1	Mo 202.031†	7.5	7.5	[0.00] ug/L	12:20:59
1	Ni 231.604†	95.3	95.3	[0.00] ug/L	12:20:59
1	P 214.914†	207.0	206.9	[0.00] ug/L	12:20:59
1	Pb 220.353†	60.8	60.7	[0.00] ug/L	12:20:59
1	S 181.975 Axial†	40.5	40.5	[0.00] ug/L	12:20:59
1	Sb 206.836†	37.5	37.5	[0.00] ug/L	12:20:59
1	Se 196.026†	-25.9	-25.8	[0.00] ug/L	12:20:59
1	Si 251.611†	568.7	568.5	[0.00] ug/L	12:20:59
1	Sn 189.927†	10.9	10.9	[0.00] ug/L	12:20:59
1	Ti 334.940†	-1416.0	-1415.5	[0.00] ug/L	12:20:38
1	Tl 190.801†	-19.8	-19.8	[0.00] ug/L	12:20:59
1	U 409.014†	-2793.3	-2792.2	[0.00] ug/L	12:20:38
1	V 292.402†	-1416.6	-1416.0	[0.00] ug/L	12:20:38
1	Zn 213.857†	741.5	741.2	[0.00] ug/L	12:20:59
1	SiO2†	592.2	592.0	[0.00] ug/L	12:21:54
2	Sc Radial	3860.4	3860.4	100 %	12:20:07
2	Y RADIAL	4567.4	4567.4	102.6 %	12:19:47
2	Al 396.153Radial†	-111.4	-111.3	[0.00] ug/L	12:19:47
2	Ca 317.933Radial†	21.1	21.1	[0.00] ug/L	12:20:07
2	Fe 238.204 Radial†	11.6	11.6	[0.00] ug/L	12:20:07
2	K 766.490 Radial†	2716.4	2714.0	[0.00] ug/L	12:19:47
2	Mg 279.077 IEC†	-0.3	-0.3	[0.00] ug/L	12:20:07
2	Na 589.592 Radial†	-889.6	-888.8	[0.00] ug/L	12:19:47
2	Sr 421.552†	0.7	0.7	[0.00] ug/L	12:19:47
2	Sc 361.383	876161.3	876161.3	99.556 %	12:21:04
2	Y 371.029	755204.3	755204.3	99.286 %	12:21:04

2	Ag 328.068†	232.2	233.3	[0.00]	ug/L	12:21:04
2	As 188.979†	-20.5	-20.6	[0.00]	ug/L	12:21:24
2	B 249.677†	-265.9	-267.1	[0.00]	ug/L	12:21:24
2	Ba 233.527†	23.5	23.6	[0.00]	ug/L	12:21:24
2	Be 313.107†	-3567.2	-3583.2	[0.00]	ug/L	12:21:04
2	Cd 226.502†	-170.3	-171.1	[0.00]	ug/L	12:21:24
2	Co 228.616†	-67.7	-68.0	[0.00]	ug/L	12:21:24
2	Cr 267.716†	80.2	80.6	[0.00]	ug/L	12:21:24
2	Cu 324.752†	5955.3	5981.9	[0.00]	ug/L	12:21:04
2	Mn 257.610†	488.5	490.7	[0.00]	ug/L	12:21:24
2	Mo 202.031†	-1.9	-1.9	[0.00]	ug/L	12:21:24
2	Ni 231.604†	81.0	81.4	[0.00]	ug/L	12:21:24
2	P 214.914†	213.0	214.0	[0.00]	ug/L	12:21:24
2	Pb 220.353†	60.0	60.3	[0.00]	ug/L	12:21:24
2	S 181.975 Axial†	35.9	36.0	[0.00]	ug/L	12:21:24
2	Sb 206.836†	43.6	43.8	[0.00]	ug/L	12:21:24
2	Se 196.026†	-26.4	-26.5	[0.00]	ug/L	12:21:24
2	Si 251.611†	542.0	544.5	[0.00]	ug/L	12:21:24
2	Sn 189.927†	11.3	11.4	[0.00]	ug/L	12:21:24
2	Ti 334.940†	-1403.6	-1409.9	[0.00]	ug/L	12:21:04
2	Tl 190.801†	-27.1	-27.2	[0.00]	ug/L	12:21:24
2	U 409.014†	-3037.6	-3051.1	[0.00]	ug/L	12:21:04
2	V 292.402†	-1469.7	-1476.3	[0.00]	ug/L	12:21:04
2	Zn 213.857†	740.3	743.6	[0.00]	ug/L	12:21:24
2	SiO2†	578.0	580.6	[0.00]	ug/L	12:22:00
3	Sc Radial	3847.5	3847.5	99.8 %		12:20:32
3	Y RADIAL	4354.5	4354.5	97.82 %		12:20:12
3	Al 396.153Radial†	-131.9	-132.2	[0.00]	ug/L	12:20:12
3	Ca 317.933Radial†	19.0	19.0	[0.00]	ug/L	12:20:32
3	Fe 238.204 Radial†	10.2	10.2	[0.00]	ug/L	12:20:32
3	K 766.490 Radial†	2762.7	2769.5	[0.00]	ug/L	12:20:12
3	Mg 279.077 IEC†	3.1	3.1	[0.00]	ug/L	12:20:32
3	Na 589.592 Radial†	-915.4	-917.6	[0.00]	ug/L	12:20:12
3	Sr 421.552†	-1.4	-1.4	[0.00]	ug/L	12:20:12
3	Sc 361.383	883658.1	883658.1	100.41 %		12:21:29
3	Y 371.029	765568.9	765568.9	100.65 %		12:21:29
3	Ag 328.068†	262.2	261.1	[0.00]	ug/L	12:21:29
3	As 188.979†	-20.0	-19.9	[0.00]	ug/L	12:21:49
3	B 249.677†	-327.3	-325.9	[0.00]	ug/L	12:21:49
3	Ba 233.527†	5.6	5.6	[0.00]	ug/L	12:21:49
3	Be 313.107†	-3545.9	-3531.6	[0.00]	ug/L	12:21:29
3	Cd 226.502†	-180.0	-179.3	[0.00]	ug/L	12:21:49
3	Co 228.616†	-63.9	-63.7	[0.00]	ug/L	12:21:49
3	Cr 267.716†	96.7	96.3	[0.00]	ug/L	12:21:49
3	Cu 324.752†	5944.3	5920.2	[0.00]	ug/L	12:21:29
3	Mn 257.610†	460.5	458.6	[0.00]	ug/L	12:21:49
3	Mo 202.031†	8.5	8.4	[0.00]	ug/L	12:21:49
3	Ni 231.604†	72.0	71.7	[0.00]	ug/L	12:21:49
3	P 214.914†	197.4	196.6	[0.00]	ug/L	12:21:49
3	Pb 220.353†	62.8	62.5	[0.00]	ug/L	12:21:49
3	S 181.975 Axial†	31.1	31.0	[0.00]	ug/L	12:21:49
3	Sb 206.836†	35.9	35.8	[0.00]	ug/L	12:21:49
3	Se 196.026†	-21.9	-21.8	[0.00]	ug/L	12:21:49
3	Si 251.611†	583.6	581.2	[0.00]	ug/L	12:21:49
3	Sn 189.927†	6.0	6.0	[0.00]	ug/L	12:21:49
3	Ti 334.940†	-1410.0	-1404.3	[0.00]	ug/L	12:21:29
3	Tl 190.801†	-35.4	-35.3	[0.00]	ug/L	12:21:49
3	U 409.014†	-2873.9	-2862.2	[0.00]	ug/L	12:21:29
3	V 292.402†	-1519.9	-1513.7	[0.00]	ug/L	12:21:29
3	Zn 213.857†	736.5	733.5	[0.00]	ug/L	12:21:49
3	SiO2†	594.5	592.1	[0.00]	ug/L	12:22:05

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Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	880073.0	3759.05	0.43%	100.00 %
Sc Radial	3857.0	8.33	0.22%	100 %
Y 371.029	760635.3	5200.16	0.68%	100.00 %
Y RADIAL	4451.7	107.66	2.42%	100.0 %
Ag 328.068†	234.2	26.52	11.32%	[0.00] ug/L

Al 396.153Radial†	-115.1	15.65	13.60%	[0.00]	ug/L
As 188.979†	-19.9	0.64	3.22%	[0.00]	ug/L
B 249.677†	-278.0	43.52	15.65%	[0.00]	ug/L
Ba 233.527†	11.0	10.92	98.84%	[0.00]	ug/L
Be 313.107†	-3558.2	25.85	0.73%	[0.00]	ug/L
Ca 317.933Radial†	18.7	2.61	13.97%	[0.00]	ug/L
Cd 226.502†	-176.2	4.44	2.52%	[0.00]	ug/L
Co 228.616†	-64.8	2.74	4.22%	[0.00]	ug/L
Cr 267.716†	85.1	9.76	11.47%	[0.00]	ug/L
Cu 324.752†	5955.1	31.63	0.53%	[0.00]	ug/L
Fe 238.204 Radial†	11.7	1.50	12.87%	[0.00]	ug/L
K 766.490 Radial†	2765.1	49.02	1.77%	[0.00]	ug/L
Mg 279.077 IEC†	1.2	1.72	146.81%	[0.00]	ug/L
Mn 257.610†	477.7	16.86	3.53%	[0.00]	ug/L
Mo 202.031†	4.7	5.74	122.92%	[0.00]	ug/L
Na 589.592 Radial†	-901.7	14.66	1.63%	[0.00]	ug/L
Ni 231.604†	82.8	11.86	14.32%	[0.00]	ug/L
P 214.914†	205.8	8.74	4.25%	[0.00]	ug/L
Pb 220.353†	61.2	1.20	1.96%	[0.00]	ug/L
S 181.975 Axial†	35.8	4.76	13.27%	[0.00]	ug/L
Sb 206.836†	39.0	4.22	10.82%	[0.00]	ug/L
Se 196.026†	-24.7	2.56	10.34%	[0.00]	ug/L
Si 251.611†	564.7	18.66	3.30%	[0.00]	ug/L
Sn 189.927†	9.4	3.01	31.95%	[0.00]	ug/L
Sr 421.552†	8.7	15.83	180.99%	[0.00]	ug/L
Ti 334.940†	-1409.9	5.58	0.40%	[0.00]	ug/L
Tl 190.801†	-27.4	7.75	28.25%	[0.00]	ug/L
U 409.014†	-2901.9	133.92	4.61%	[0.00]	ug/L
V 292.402†	-1468.7	49.29	3.36%	[0.00]	ug/L
Zn 213.857†	739.4	5.26	0.71%	[0.00]	ug/L
SiO2†	588.2	6.60	1.12%	[0.00]	ug/L

Sequence No.: 2  
 Sample ID: S0.1  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 2  
 Date Collected: 2/25/2010 12:24:15  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

## Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Analysis Time
1	Sc Radial	3996.7	3996.7	104 %	12:26:27
1	Y RADIAL	4411.5	4411.5	99.10 %	12:26:27
1	K 766.490 Radial†	7718.5	4683.6	[1000] ug/L	12:26:07
1	Sr 421.552†	14526.4	14009.7	[100] ug/L	12:26:27
1	Sc 361.383	921764.2	921764.2	104.74 %	12:27:24
1	Y 371.029	774346.2	774346.2	101.80 %	12:27:24
1	Ag 328.068†	21403.4	20201.1	[100] ug/L	12:27:29
1	As 188.979†	192.8	204.0	[100] ug/L	12:27:49
1	B 249.677†	3460.2	3581.7	[100] ug/L	12:27:29
1	Ba 233.527†	12498.7	11922.3	[100] ug/L	12:27:29
1	Be 313.107†	262851.0	254520.5	[100] ug/L	12:27:24
1	Cd 226.502†	8249.2	8052.3	[100] ug/L	12:27:29
1	Co 228.616†	4589.3	4446.5	[100] ug/L	12:27:49
1	Cr 267.716†	8841.0	8356.0	[100] ug/L	12:27:29
1	Cu 324.752†	37712.1	30051.3	[100] ug/L	12:27:29
1	Mn 257.610†	87168.5	82748.3	[100] ug/L	12:27:29
1	Mo 202.031†	1343.2	1277.8	[100] ug/L	12:27:49
1	Ni 231.604†	3912.9	3653.1	[100] ug/L	12:27:49
1	P 214.914†	1011.4	759.8	[500] ug/L	12:27:49
1	Pb 220.353†	866.3	765.9	[100] ug/L	12:27:49
1	S 181.975 Axial†	170.1	126.6	[200] ug/L	12:27:49
1	Sb 206.836†	315.0	261.7	[100] ug/L	12:27:49
1	Se 196.026†	129.1	148.0	[100] ug/L	12:27:49
1	Si 251.611†	15482.3	14217.3	[500] ug/L	12:27:29
1	Sn 189.927†	550.6	516.3	[100] ug/L	12:27:49
1	Ti 334.940†	60602.8	59271.7	[100] ug/L	12:27:29
1	Tl 190.801†	278.0	292.9	[100] ug/L	12:27:49
1	U 409.014†	717.2	3586.6	[100] ug/L	12:27:24
1	V 292.402†	12383.5	13292.1	[100] ug/L	12:27:29
1	Zn 213.857†	10624.8	9404.8	[100] ug/L	12:27:29
1	SiO2†	15603.5	14309.5	[1069.5] ug/L	12:28:55
2	Sc Radial	3937.0	3937.0	102 %	12:26:52
2	Y RADIAL	4360.1	4360.1	97.94 %	12:26:52
2	K 766.490 Radial†	7980.5	5053.2	[1000] ug/L	12:26:32
2	Sr 421.552†	14327.3	14027.3	[100] ug/L	12:26:52
2	Sc 361.383	922629.0	922629.0	104.84 %	12:27:54
2	Y 371.029	774609.2	774609.2	101.84 %	12:27:54
2	Ag 328.068†	21598.8	20368.4	[100] ug/L	12:27:59
2	As 188.979†	195.4	206.3	[100] ug/L	12:28:19
2	B 249.677†	3489.7	3606.7	[100] ug/L	12:27:59
2	Ba 233.527†	12569.5	11978.7	[100] ug/L	12:27:59
2	Be 313.107†	263659.5	255056.5	[100] ug/L	12:27:54
2	Cd 226.502†	8398.3	8187.1	[100] ug/L	12:27:59
2	Co 228.616†	4551.9	4406.8	[100] ug/L	12:28:19
2	Cr 267.716†	8909.1	8413.0	[100] ug/L	12:27:59
2	Cu 324.752†	37970.2	30263.8	[100] ug/L	12:27:59
2	Mn 257.610†	88128.9	83586.3	[100] ug/L	12:27:59
2	Mo 202.031†	1342.3	1275.7	[100] ug/L	12:28:19
2	Ni 231.604†	3884.7	3622.7	[100] ug/L	12:28:19
2	P 214.914†	1013.0	760.4	[500] ug/L	12:28:19
2	Pb 220.353†	860.1	759.2	[100] ug/L	12:28:19
2	S 181.975 Axial†	170.7	126.9	[200] ug/L	12:28:19
2	Sb 206.836†	305.5	252.4	[100] ug/L	12:28:19
2	Se 196.026†	124.3	143.3	[100] ug/L	12:28:19
2	Si 251.611†	15581.0	14297.6	[500] ug/L	12:27:59
2	Sn 189.927†	545.1	510.5	[100] ug/L	12:28:19
2	Ti 334.940†	61248.0	59832.9	[100] ug/L	12:27:59
2	Tl 190.801†	265.1	280.3	[100] ug/L	12:28:19
2	U 409.014†	891.9	3752.6	[100] ug/L	12:27:54

2	V 292.402†	12572.2	13461.0	[100]	ug/L	12:27:59
2	Zn 213.857†	10711.0	9477.5	[100]	ug/L	12:27:59
2	SiO2†	15621.0	14312.3	[1069.5]	ug/L	12:29:00
3	Sc Radial	3955.0	3955.0	103	%	12:27:17
3	Y RADIAL	4388.0	4388.0	98.57	%	12:27:17
3	K 766.490 Radial†	7936.9	4975.1	[1000]	ug/L	12:26:57
3	Sr 421.552†	14365.6	14000.8	[100]	ug/L	12:27:17
3	Sc 361.383	913005.5	913005.5	103.74	%	12:28:25
3	Y 371.029	765538.5	765538.5	100.64	%	12:28:25
3	Ag 328.068†	21712.9	20695.5	[100]	ug/L	12:28:30
3	As 188.979†	203.0	215.6	[100]	ug/L	12:28:50
3	B 249.677†	3510.3	3661.7	[100]	ug/L	12:28:30
3	Ba 233.527†	12749.1	12278.2	[100]	ug/L	12:28:30
3	Be 313.107†	260377.4	254543.7	[100]	ug/L	12:28:25
3	Cd 226.502†	8441.8	8313.5	[100]	ug/L	12:28:30
3	Co 228.616†	4569.3	4469.4	[100]	ug/L	12:28:50
3	Cr 267.716†	8935.8	8528.3	[100]	ug/L	12:28:30
3	Cu 324.752†	38476.6	31133.6	[100]	ug/L	12:28:30
3	Mn 257.610†	88881.0	85197.4	[100]	ug/L	12:28:30
3	Mo 202.031†	1356.8	1303.2	[100]	ug/L	12:28:50
3	Ni 231.604†	3881.5	3658.7	[100]	ug/L	12:28:50
3	P 214.914†	1001.0	759.0	[500]	ug/L	12:28:50
3	Pb 220.353†	870.2	777.6	[100]	ug/L	12:28:50
3	S 181.975 Axial†	178.2	136.0	[200]	ug/L	12:28:50
3	Sb 206.836†	316.6	266.2	[100]	ug/L	12:28:50
3	Se 196.026†	121.7	142.1	[100]	ug/L	12:28:50
3	Si 251.611†	15690.2	14559.6	[500]	ug/L	12:28:30
3	Sn 189.927†	547.8	518.6	[100]	ug/L	12:28:50
3	Ti 334.940†	61734.4	60917.5	[100]	ug/L	12:28:30
3	Tl 190.801†	274.4	292.0	[100]	ug/L	12:28:50
3	U 409.014†	805.7	3678.5	[100]	ug/L	12:28:25
3	V 292.402†	12683.6	13694.8	[100]	ug/L	12:28:30
3	Zn 213.857†	10835.1	9704.9	[100]	ug/L	12:28:30
3	SiO2†	15685.3	14531.3	[1069.5]	ug/L	12:29:05

## Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	919132.9	5324.05	0.58%	104.44 %
Sc Radial	3962.9	30.64	0.77%	103 %
Y 371.029	771498.0	5162.73	0.67%	101.43 %
Y RADIAL	4386.5	25.72	0.59%	98.54 %
Ag 328.068†	20421.7	251.46	1.23%	[100] ug/L
As 188.979†	208.6	6.16	2.95%	[100] ug/L
B 249.677†	3616.7	40.92	1.13%	[100] ug/L
Ba 233.527†	12059.7	191.28	1.59%	[100] ug/L
Be 313.107†	254706.9	302.97	0.12%	[100] ug/L
Cd 226.502†	8184.3	130.64	1.60%	[100] ug/L
Co 228.616†	4440.9	31.68	0.71%	[100] ug/L
Cr 267.716†	8432.5	87.79	1.04%	[100] ug/L
Cu 324.752†	30482.9	573.44	1.88%	[100] ug/L
K 766.490 Radial†	4904.0	194.83	3.97%	[1000] ug/L
Mn 257.610†	83844.0	1244.72	1.48%	[100] ug/L
Mo 202.031†	1285.6	15.26	1.19%	[100] ug/L
Ni 231.604†	3644.8	19.34	0.53%	[100] ug/L
P 214.914†	759.8	0.70	0.09%	[500] ug/L
Pb 220.353†	767.6	9.33	1.21%	[100] ug/L
S 181.975 Axial†	129.8	5.33	4.10%	[200] ug/L
Sb 206.836†	260.1	7.06	2.71%	[100] ug/L
Se 196.026†	144.5	3.12	2.16%	[100] ug/L
Si 251.611†	14358.2	178.97	1.25%	[500] ug/L
Sn 189.927†	515.1	4.15	0.81%	[100] ug/L
Sr 421.552†	14012.6	13.45	0.10%	[100] ug/L
Ti 334.940†	60007.4	836.69	1.39%	[100] ug/L
Tl 190.801†	288.4	6.99	2.42%	[100] ug/L
U 409.014†	3672.6	83.13	2.26%	[100] ug/L
V 292.402†	13482.6	202.25	1.50%	[100] ug/L
Zn 213.857†	9529.0	156.55	1.64%	[100] ug/L
SiO2†	14384.4	127.28	0.88%	[1069.5] ug/L

Sequence No.: 3  
 Sample ID: S0.5  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 3  
 Date Collected: 2/25/2010 12:31:16  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

## Replicate Data: S0.5

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Analysis Time
1	Sc Radial	3815.9	3815.9	98.9 %	12:33:28
1	Y RADIAL	4273.1	4273.1	95.99 %	12:33:08
1	Al 396.153Radial†	5270.3	5442.1	[5000] ug/L	12:33:08
1	Ca 317.933Radial†	2362.7	2369.5	[5000] ug/L	12:33:28
1	K 766.490 Radial†	28474.2	26015.9	[5000] ug/L	12:33:08
1	Mg 279.077 IEC†	96.2	96.0	[5000] ug/L	12:33:28
1	Sr 421.552†	70971.0	71726.8	[500] ug/L	12:33:08
1	Sc 361.383	909073.5	909073.5	103.30 %	12:34:26
1	Y 371.029	755222.6	755222.6	99.288 %	12:34:26
1	Ag 328.068†	108576.0	104878.1	[500] ug/L	12:34:31
1	As 188.979†	1099.8	1084.6	[500] ug/L	12:34:51
1	B 249.677†	20107.1	19743.7	[500] ug/L	12:34:31
1	Ba 233.527†	63954.8	61903.5	[500] ug/L	12:34:31
1	Be 313.107†	1320359.0	1281796.3	[500] ug/L	12:34:26
1	Cd 226.502†	43069.5	41871.7	[500] ug/L	12:34:31
1	Co 228.616†	23930.0	23231.4	[500] ug/L	12:34:31
1	Cr 267.716†	44886.0	43369.0	[500] ug/L	12:34:31
1	Cu 324.752†	171029.0	159617.9	[500] ug/L	12:34:31
1	Mn 257.610†	435290.4	420926.4	[500] ug/L	12:34:26
1	Mo 202.031†	6740.4	6520.7	[500] ug/L	12:34:51
1	Ni 231.604†	19830.5	19115.1	[500] ug/L	12:34:31
1	P 214.914†	4309.5	3966.3	[2500] ug/L	12:34:51
1	Pb 220.353†	4033.9	3844.1	[500] ug/L	12:34:51
1	S 181.975 Axial†	745.4	685.8	[1000] ug/L	12:34:51
1	Sb 206.836†	1446.9	1361.7	[500] ug/L	12:34:51
1	Se 196.026†	733.5	734.9	[500] ug/L	12:34:51
1	Si 251.611†	78117.1	75060.3	[2500] ug/L	12:34:31
1	Sn 189.927†	2755.5	2658.1	[500] ug/L	12:34:51
1	Ti 334.940†	317468.0	308750.3	[500] ug/L	12:34:31
1	Tl 190.801†	1526.1	1504.8	[500] ug/L	12:34:51
1	U 409.014†	15013.4	17436.4	[500] ug/L	12:34:31
1	V 292.402†	70392.7	69615.8	[500] ug/L	12:34:31
1	Zn 213.857†	50458.4	48109.3	[500] ug/L	12:34:31
1	SiO2†	76580.7	73549.4	[5347.5] ug/L	12:35:58
2	Sc Radial	3837.8	3837.8	99.5 %	12:33:53
2	Y RADIAL	4236.0	4236.0	95.15 %	12:33:33
2	Al 396.153Radial†	5207.1	5348.2	[5000] ug/L	12:33:33
2	Ca 317.933Radial†	2351.6	2344.7	[5000] ug/L	12:33:53
2	K 766.490 Radial†	27888.0	25262.3	[5000] ug/L	12:33:33
2	Mg 279.077 IEC†	100.2	99.5	[5000] ug/L	12:33:53
2	Sr 421.552†	69303.4	69641.1	[500] ug/L	12:33:33
2	Sc 361.383	900648.1	900648.1	102.34 %	12:34:57
2	Y 371.029	747540.3	747540.3	98.278 %	12:34:57
2	Ag 328.068†	107323.5	104637.6	[500] ug/L	12:35:02
2	As 188.979†	1099.6	1094.4	[500] ug/L	12:35:22
2	B 249.677†	19798.2	19624.0	[500] ug/L	12:35:02
2	Ba 233.527†	63354.3	61896.0	[500] ug/L	12:35:02
2	Be 313.107†	1341770.2	1314675.9	[500] ug/L	12:34:57
2	Cd 226.502†	42812.2	42010.3	[500] ug/L	12:35:02
2	Co 228.616†	23624.5	23149.6	[500] ug/L	12:35:02
2	Cr 267.716†	44408.7	43309.1	[500] ug/L	12:35:02
2	Cu 324.752†	168474.8	158670.9	[500] ug/L	12:35:02
2	Mn 257.610†	442284.4	431702.8	[500] ug/L	12:34:57
2	Mo 202.031†	6757.9	6598.9	[500] ug/L	12:35:22
2	Ni 231.604†	19702.1	19169.2	[500] ug/L	12:35:02
2	P 214.914†	4328.7	4024.0	[2500] ug/L	12:35:22
2	Pb 220.353†	4064.7	3910.7	[500] ug/L	12:35:22
2	S 181.975 Axial†	733.3	680.7	[1000] ug/L	12:35:22
2	Sb 206.836†	1426.3	1354.7	[500] ug/L	12:35:22

2	Se 196.026†	722.6	730.8	[500]	ug/L	12:35:22
2	Si 251.611†	77199.6	74871.3	[2500]	ug/L	12:35:02
2	Sn 189.927†	2764.5	2691.9	[500]	ug/L	12:35:22
2	Ti 334.940†	313638.3	307883.1	[500]	ug/L	12:35:02
2	Tl 190.801†	1533.1	1525.5	[500]	ug/L	12:35:22
2	U 409.014†	14833.2	17396.2	[500]	ug/L	12:35:02
2	V 292.402†	69582.3	69461.4	[500]	ug/L	12:35:02
2	Zn 213.857†	50065.1	48181.9	[500]	ug/L	12:35:02
2	SiO2†	77056.7	74708.1	[5347.5]	ug/L	12:36:03
3	Sc Radial	3880.2	3880.2	101	%	12:34:18
3	Y RADIAL	4406.4	4406.4	98.98	%	12:33:58
3	Al 396.153Radial†	5270.8	5354.2	[5000]	ug/L	12:33:58
3	Ca 317.933Radial†	2374.3	2341.3	[5000]	ug/L	12:34:18
3	K 766.490 Radial†	28524.3	25588.1	[5000]	ug/L	12:33:58
3	Mg 279.077 IEC†	102.5	100.8	[5000]	ug/L	12:34:18
3	Sr 421.552†	70910.1	70475.9	[500]	ug/L	12:33:58
3	Sc 361.383	902117.6	902117.6	102.50	%	12:35:28
3	Y 371.029	748965.4	748965.4	98.466	%	12:35:28
3	Ag 328.068†	107987.3	105114.3	[500]	ug/L	12:35:33
3	As 188.979†	1101.7	1094.7	[500]	ug/L	12:35:53
3	B 249.677†	19923.8	19714.9	[500]	ug/L	12:35:33
3	Ba 233.527†	63787.9	62218.1	[500]	ug/L	12:35:33
3	Be 313.107†	1323920.3	1295126.6	[500]	ug/L	12:35:28
3	Cd 226.502†	42964.4	42090.7	[500]	ug/L	12:35:33
3	Co 228.616†	23840.8	23323.0	[500]	ug/L	12:35:33
3	Cr 267.716†	44608.0	43432.8	[500]	ug/L	12:35:33
3	Cu 324.752†	169488.4	159391.6	[500]	ug/L	12:35:33
3	Mn 257.610†	436662.0	425513.9	[500]	ug/L	12:35:28
3	Mo 202.031†	6746.8	6577.2	[500]	ug/L	12:35:53
3	Ni 231.604†	19817.3	19250.3	[500]	ug/L	12:35:33
3	P 214.914†	4289.0	3978.4	[2500]	ug/L	12:35:53
3	Pb 220.353†	4030.4	3870.7	[500]	ug/L	12:35:53
3	S 181.975 Axial†	740.7	686.8	[1000]	ug/L	12:35:53
3	Sb 206.836†	1438.6	1364.4	[500]	ug/L	12:35:53
3	Se 196.026†	733.5	740.3	[500]	ug/L	12:35:53
3	Si 251.611†	77722.8	75258.8	[2500]	ug/L	12:35:33
3	Sn 189.927†	2749.7	2673.1	[500]	ug/L	12:35:53
3	Ti 334.940†	315604.6	309302.2	[500]	ug/L	12:35:33
3	Tl 190.801†	1510.3	1500.9	[500]	ug/L	12:35:53
3	U 409.014†	14830.6	17370.1	[500]	ug/L	12:35:33
3	V 292.402†	69999.6	69757.8	[500]	ug/L	12:35:33
3	Zn 213.857†	50312.8	48343.9	[500]	ug/L	12:35:33
3	SiO2†	77192.6	74718.0	[5347.5]	ug/L	12:36:09

## Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	903946.4	4500.55	0.50%	102.71	%
Sc Radial	3844.6	32.74	0.85%	99.7	%
Y 371.029	750576.1	4086.60	0.54%	98.678	%
Y RADIAL	4305.2	89.63	2.08%	96.71	%
Ag 328.068†	104876.7	238.39	0.23%	[500]	ug/L
Al 396.153Radial†	5381.5	52.57	0.98%	[5000]	ug/L
As 188.979†	1091.2	5.74	0.53%	[500]	ug/L
B 249.677†	19694.2	62.49	0.32%	[500]	ug/L
Ba 233.527†	62005.9	183.86	0.30%	[500]	ug/L
Be 313.107†	1297199.6	16537.56	1.27%	[500]	ug/L
Ca 317.933Radial†	2351.8	15.36	0.65%	[5000]	ug/L
Cd 226.502†	41990.9	110.76	0.26%	[500]	ug/L
Co 228.616†	23234.7	86.75	0.37%	[500]	ug/L
Cr 267.716†	43370.3	61.86	0.14%	[500]	ug/L
Cu 324.752†	159226.8	494.55	0.31%	[500]	ug/L
K 766.490 Radial†	25622.1	377.93	1.48%	[5000]	ug/L
Mg 279.077 IEC†	98.8	2.45	2.48%	[5000]	ug/L
Mn 257.610†	426047.7	5407.96	1.27%	[500]	ug/L
Mo 202.031†	6565.6	40.35	0.61%	[500]	ug/L
Ni 231.604†	19178.2	68.06	0.35%	[500]	ug/L
P 214.914†	3989.6	30.47	0.76%	[2500]	ug/L
Pb 220.353†	3875.2	33.54	0.87%	[500]	ug/L
S 181.975 Axial†	684.4	3.25	0.47%	[1000]	ug/L



Sb 206.836†	1360.3	5.04	0.37%	[500] ug/L
Se 196.026†	735.3	4.78	0.65%	[500] ug/L
Si 251.611†	75063.5	193.81	0.26%	[2500] ug/L
Sn 189.927†	2674.4	16.90	0.63%	[500] ug/L
Sr 421.552†	70614.6	1049.72	1.49%	[500] ug/L
Ti 334.940†	308645.2	715.33	0.23%	[500] ug/L
Tl 190.801†	1510.4	13.22	0.88%	[500] ug/L
U 409.014†	17400.9	33.40	0.19%	[500] ug/L
V 292.402†	69611.7	148.23	0.21%	[500] ug/L
Zn 213.857†	48211.7	120.14	0.25%	[500] ug/L
SiO2†	74325.2	671.84	0.90%	[5347.5] ug/L

Sequence No.: 4

Sample ID: SCAL

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 4

Date Collected: 2/25/2010 12:38:19

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: SCAL

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Analysis Time
1	Sc Radial	3808.4	3808.4	98.7 %	12:40:32
1	Y RADIAL	4299.5	4299.5	96.58 %	12:40:12
1	Al 396.153Radial†	10748.7	11000.8	[10000] ug/L	12:40:12
1	Ca 317.933Radial†	4773.6	4815.8	[10000] ug/L	12:40:12
1	Fe 238.204 Radial†	642.1	638.7	[10000] ug/L	12:40:32
1	K 766.490 Radial†	54727.0	52659.5	[10000] ug/L	12:40:12
1	Mg 279.077 IEC†	197.2	198.5	[10000] ug/L	12:40:32
1	Na 589.592 Radial†	31596.4	32900.8	[10000] ug/L	12:40:12
1	Sr 421.552†	143041.0	144855.5	[1000] ug/L	12:40:12
1	Sc 361.383	865537.0	865537.0	98.348 %	12:41:35
1	Y 371.029	733545.9	733545.9	96.439 %	12:41:35
1	Ag 328.068†	213787.7	217143.9	[1000] ug/L	12:41:35
1	As 188.979†	2209.9	2266.9	[1000] ug/L	12:41:55
1	B 249.677†	40255.2	41209.3	[1000] ug/L	12:41:35
1	Ba 233.527†	126205.4	128313.9	[1000] ug/L	12:41:35
1	Be 313.107†	2632289.2	2680054.4	[1000] ug/L	12:41:30
1	Cd 226.502†	85209.0	86816.3	[1000] ug/L	12:41:35
1	Co 228.616†	47185.3	48042.6	[1000] ug/L	12:41:35
1	Cr 267.716†	88600.0	90002.8	[1000] ug/L	12:41:35
1	Cu 324.752†	332064.5	331686.1	[1000] ug/L	12:41:35
1	Mn 257.610†	863783.8	877812.7	[1000] ug/L	12:41:30
1	Mo 202.031†	13404.2	13624.7	[1000] ug/L	12:41:55
1	Ni 231.604†	38923.9	39494.8	[1000] ug/L	12:41:35
1	P 214.914†	8447.6	8383.7	[5000] ug/L	12:41:55
1	Pb 220.353†	8063.5	8137.8	[1000] ug/L	12:41:55
1	S 181.975 Axial†	1434.4	1422.7	[2000] ug/L	12:41:55
1	Sb 206.836†	2844.1	2852.8	[1000] ug/L	12:41:55
1	Se 196.026†	1478.1	1527.6	[1000] ug/L	12:41:55
1	Si 251.611†	153849.1	155868.2	[5000] ug/L	12:41:35
1	Sn 189.927†	5468.5	5551.0	[1000] ug/L	12:41:55
1	Ti 334.940†	628706.2	640674.6	[1000] ug/L	12:41:35
1	Tl 190.801†	3043.6	3122.2	[1000] ug/L	12:41:55
1	U 409.014†	32570.8	36019.7	[1000] ug/L	12:41:35
1	V 292.402†	140700.8	144532.5	[1000] ug/L	12:41:35
1	Zn 213.857†	98914.5	99836.2	[1000] ug/L	12:41:35
1	SiO2†	153891.4	155887.7	[10695] ug/L	12:43:04
2	Sc Radial	3791.3	3791.3	98.3 %	12:40:57
2	Y RADIAL	4275.5	4275.5	96.04 %	12:40:37
2	Al 396.153Radial†	10639.9	10939.2	[10000] ug/L	12:40:37
2	Ca 317.933Radial†	4752.5	4816.2	[10000] ug/L	12:40:37
2	Fe 238.204 Radial†	639.9	639.3	[10000] ug/L	12:40:57
2	K 766.490 Radial†	54149.5	52322.3	[10000] ug/L	12:40:37
2	Mg 279.077 IEC†	198.9	201.2	[10000] ug/L	12:40:57
2	Na 589.592 Radial†	31096.3	32536.6	[10000] ug/L	12:40:37
2	Sr 421.552†	141512.6	143954.7	[1000] ug/L	12:40:37
2	Sc 361.383	858880.8	858880.8	97.592 %	12:42:07
2	Y 371.029	724636.9	724636.9	95.267 %	12:42:07
2	Ag 328.068†	211388.0	216369.7	[1000] ug/L	12:42:07
2	As 188.979†	2193.0	2267.0	[1000] ug/L	12:42:27
2	B 249.677†	39871.5	41133.3	[1000] ug/L	12:42:07
2	Ba 233.527†	124842.6	127912.0	[1000] ug/L	12:42:07
2	Be 313.107†	2643274.2	2712053.0	[1000] ug/L	12:42:01
2	Cd 226.502†	84171.8	86424.9	[1000] ug/L	12:42:07
2	Co 228.616†	46623.3	47838.6	[1000] ug/L	12:42:07
2	Cr 267.716†	87574.9	89650.6	[1000] ug/L	12:42:07
2	Cu 324.752†	328101.6	330242.1	[1000] ug/L	12:42:07
2	Mn 257.610†	869143.4	890111.1	[1000] ug/L	12:42:01
2	Mo 202.031†	13414.2	13740.6	[1000] ug/L	12:42:27
2	Ni 231.604†	38507.3	39374.6	[1000] ug/L	12:42:07

2	P 214.914†	8424.5	8426.5	[5000] ug/L	12:42:27
2	Pb 220.353†	8076.4	8214.5	[1000] ug/L	12:42:27
2	S 181.975 Axial†	1442.7	1442.4	[2000] ug/L	12:42:27
2	Sb 206.836†	2843.0	2874.1	[1000] ug/L	12:42:27
2	Se 196.026†	1478.9	1540.1	[1000] ug/L	12:42:27
2	Si 251.611†	151986.3	155171.7	[5000] ug/L	12:42:07
2	Sn 189.927†	5497.4	5623.6	[1000] ug/L	12:42:27
2	Ti 334.940†	621431.0	638174.2	[1000] ug/L	12:42:07
2	Tl 190.801†	3030.9	3133.2	[1000] ug/L	12:42:27
2	U 409.014†	32352.1	36052.2	[1000] ug/L	12:42:07
2	V 292.402†	139014.6	143913.4	[1000] ug/L	12:42:07
2	Zn 213.857†	98021.1	99700.2	[1000] ug/L	12:42:07
2	SiO2†	152854.1	156037.5	[10695] ug/L	12:43:09
3	Sc Radial	3798.6	3798.6	98.5 %	12:41:22
3	Y RADIAL	4291.5	4291.5	96.40 %	12:41:02
3	Al 396.153Radial†	10724.6	11004.3	[10000] ug/L	12:41:02
3	Ca 317.933Radial†	4765.6	4820.1	[10000] ug/L	12:41:02
3	Fe 238.204 Radial†	639.3	637.4	[10000] ug/L	12:41:22
3	K 766.490 Radial†	54339.7	52409.1	[10000] ug/L	12:41:02
3	Mg 279.077 IEC†	199.0	200.9	[10000] ug/L	12:41:22
3	Na 589.592 Radial†	31138.9	32518.7	[10000] ug/L	12:41:02
3	Sr 421.552†	142255.3	144431.0	[1000] ug/L	12:41:02
3	Sc 361.383	863416.3	863416.3	98.107 %	12:42:38
3	Y 371.029	730824.4	730824.4	96.081 %	12:42:38
3	Ag 328.068†	212621.8	216489.4	[1000] ug/L	12:42:38
3	As 188.979†	2204.5	2267.0	[1000] ug/L	12:42:58
3	B 249.677†	40203.0	41256.6	[1000] ug/L	12:42:38
3	Ba 233.527†	125631.2	128043.8	[1000] ug/L	12:42:38
3	Be 313.107†	2647845.5	2702484.8	[1000] ug/L	12:42:33
3	Cd 226.502†	84783.5	86595.3	[1000] ug/L	12:42:38
3	Co 228.616†	46929.5	47899.7	[1000] ug/L	12:42:38
3	Cr 267.716†	88024.9	89637.9	[1000] ug/L	12:42:38
3	Cu 324.752†	330297.0	330713.9	[1000] ug/L	12:42:38
3	Mn 257.610†	869497.7	885794.0	[1000] ug/L	12:42:33
3	Mo 202.031†	13465.8	13720.9	[1000] ug/L	12:42:58
3	Ni 231.604†	38723.4	39387.6	[1000] ug/L	12:42:38
3	P 214.914†	8447.1	8404.3	[5000] ug/L	12:42:58
3	Pb 220.353†	8065.7	8160.1	[1000] ug/L	12:42:58
3	S 181.975 Axial†	1439.2	1431.1	[2000] ug/L	12:42:58
3	Sb 206.836†	2851.6	2867.6	[1000] ug/L	12:42:58
3	Se 196.026†	1484.4	1537.8	[1000] ug/L	12:42:58
3	Si 251.611†	153082.1	155470.6	[5000] ug/L	12:42:38
3	Sn 189.927†	5523.7	5620.9	[1000] ug/L	12:42:58
3	Ti 334.940†	625737.3	639218.6	[1000] ug/L	12:42:38
3	Tl 190.801†	3058.4	3144.8	[1000] ug/L	12:42:58
3	U 409.014†	32562.2	36092.3	[1000] ug/L	12:42:38
3	V 292.402†	140010.9	144180.6	[1000] ug/L	12:42:38
3	Zn 213.857†	98551.7	99713.5	[1000] ug/L	12:42:38
3	SiO2†	152217.1	154565.4	[10695] ug/L	12:43:14

## Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	862611.4	3400.33	0.39%	98.016 %
Sc Radial	3799.5	8.59	0.23%	98.5 %
Y 371.029	729669.1	4565.49	0.63%	95.929 %
Y RADIAL	4288.8	12.19	0.28%	96.34 %
Ag 328.068†	216667.7	416.77	0.19%	[1000] ug/L
Al 396.153Radial†	10981.4	36.61	0.33%	[10000] ug/L
As 188.979†	2267.0	0.05	0.00%	[1000] ug/L
B 249.677†	41199.7	62.17	0.15%	[1000] ug/L
Ba 233.527†	128089.9	204.86	0.16%	[1000] ug/L
Be 313.107†	2698197.4	16424.47	0.61%	[1000] ug/L
Ca 317.933Radial†	4817.4	2.40	0.05%	[10000] ug/L
Cd 226.502†	86612.2	196.23	0.23%	[1000] ug/L
Co 228.616†	47926.9	104.71	0.22%	[1000] ug/L
Cr 267.716†	89763.8	207.11	0.23%	[1000] ug/L
Cu 324.752†	330880.7	736.33	0.22%	[1000] ug/L
Fe 238.204 Radial†	638.5	0.97	0.15%	[10000] ug/L
K 766.490 Radial†	52463.6	175.10	0.33%	[10000] ug/L

Mg 279.077 IEC†	200.2	1.44	0.72%	[10000]	ug/L
Mn 257.610†	884572.6	6239.51	0.71%	[1000]	ug/L
Mo 202.031†	13695.4	62.01	0.45%	[1000]	ug/L
Na 589.592 Radial†	32652.0	215.63	0.66%	[10000]	ug/L
Ni 231.604†	39419.0	65.99	0.17%	[1000]	ug/L
P 214.914†	8404.8	21.43	0.26%	[5000]	ug/L
Pb 220.353†	8170.8	39.46	0.48%	[1000]	ug/L
S 181.975 Axial†	1432.1	9.92	0.69%	[2000]	ug/L
Sb 206.836†	2864.8	10.91	0.38%	[1000]	ug/L
Se 196.026†	1535.2	6.61	0.43%	[1000]	ug/L
Si 251.611†	155503.5	349.42	0.22%	[5000]	ug/L
Sn 189.927†	5598.5	41.17	0.74%	[1000]	ug/L
Sr 421.552†	144413.7	450.65	0.31%	[1000]	ug/L
Ti 334.940†	639355.8	1255.85	0.20%	[1000]	ug/L
Tl 190.801†	3133.4	11.34	0.36%	[1000]	ug/L
U 409.014†	36054.7	36.36	0.10%	[1000]	ug/L
V 292.402†	144208.8	310.51	0.22%	[1000]	ug/L
Zn 213.857†	99750.0	74.99	0.08%	[1000]	ug/L
SiO2†	155496.9	810.12	0.52%	[10695]	ug/L

Sequence No.: 5

Sample ID: S10

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 5

Date Collected: 2/25/2010 12:45:26

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	3844.6	3844.6	99.7 %	12:47:39
1	Y RADIAL	4222.1	4222.1	94.84 %	12:47:39
1	Al 396.153Radial†	53274.2	53560.6	[50000] ug/L	12:47:19
1	Ca 317.933Radial†	23013.9	23069.3	[50000] ug/L	12:47:19
1	Fe 238.204 Radial†	1244.5	1236.8	[20000] ug/L	12:47:39
1	Mg 279.077 IEC†	943.8	945.6	[50000] ug/L	12:47:39
1	Na 589.592 Radial†	63855.3	64962.3	[20000] ug/L	12:47:19
1	Sc 361.383	893028.0	893028.0	101.47 %	12:48:36
1	Y 371.029	734538.4	734538.4	96.569 %	12:48:36
2	Sc Radial	3811.3	3811.3	98.8 %	12:48:04
2	Y RADIAL	4182.4	4182.4	93.95 %	12:48:04
2	Al 396.153Radial†	52033.4	52771.9	[50000] ug/L	12:47:44
2	Ca 317.933Radial†	22452.6	22702.9	[50000] ug/L	12:47:44
2	Fe 238.204 Radial†	1220.0	1222.9	[20000] ug/L	12:48:04
2	Mg 279.077 IEC†	937.2	947.3	[50000] ug/L	12:48:04
2	Na 589.592 Radial†	61735.0	63376.4	[20000] ug/L	12:47:44
2	Sc 361.383	882359.1	882359.1	100.26 %	12:48:42
2	Y 371.029	726086.3	726086.3	95.458 %	12:48:42
3	Sc Radial	3845.7	3845.7	99.7 %	12:48:29
3	Y RADIAL	4207.0	4207.0	94.50 %	12:48:29
3	Al 396.153Radial†	52784.0	53054.1	[50000] ug/L	12:48:09
3	Ca 317.933Radial†	22806.9	22855.2	[50000] ug/L	12:48:09
3	Fe 238.204 Radial†	1231.6	1223.6	[20000] ug/L	12:48:29
3	Mg 279.077 IEC†	940.4	942.0	[50000] ug/L	12:48:29
3	Na 589.592 Radial†	62627.9	63713.6	[20000] ug/L	12:48:09
3	Sc 361.383	889473.5	889473.5	101.07 %	12:48:48
3	Y 371.029	731482.8	731482.8	96.167 %	12:48:48

## Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	888286.8	5432.52	0.61%	100.93 %
Sc Radial	3833.9	19.54	0.51%	99.4 %
Y 371.029	730702.5	4279.75	0.59%	96.065 %
Y RADIAL	4203.8	20.07	0.48%	94.43 %
Al 396.153Radial†	53128.9	399.58	0.75%	[50000] ug/L
Ca 317.933Radial†	22875.8	184.05	0.80%	[50000] ug/L
Fe 238.204 Radial†	1227.8	7.85	0.64%	[20000] ug/L
Mg 279.077 IEC†	945.0	2.72	0.29%	[50000] ug/L
Na 589.592 Radial†	64017.4	835.48	1.31%	[20000] ug/L

## Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	215.2	0.00000	0.999908	
Al 396.153Radial	3	Lin Thru 0	0.0	1.064	0.00000	0.999979	
As 188.979	3	Lin Thru 0	0.0	2.249	0.00000	0.999867	
B 249.677	3	Lin Thru 0	0.0	40.80	0.00000	0.999792	
Ba 233.527	3	Lin Thru 0	0.0	127.2	0.00000	0.999908	
Be 313.107	3	Lin Thru 0	0.0	2676	0.00000	0.999871	
Ca 317.933Radial	3	Lin Thru 0	0.0	0.4586	0.00000	0.999946	
Cd 226.502	3	Lin Thru 0	0.0	86.05	0.00000	0.999916	
Co 228.616	3	Lin Thru 0	0.0	47.61	0.00000	0.999908	
Cr 267.716	3	Lin Thru 0	0.0	89.12	0.00000	0.999897	
Cu 324.752	3	Lin Thru 0	0.0	328.2	0.00000	0.999866	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.0619	0.00000	0.999874	
K 766.490 Radial	3	Lin Thru 0	0.0	5.219	0.00000	0.999942	

Mg 279.077 IEC	3	Lin Thru 0	0.0	0.0189	0.00000	0.999927
Mn 257.610	3	Lin Thru 0	0.0	877.8	0.00000	0.999883
Mo 202.031	3	Lin Thru 0	0.0	13.58	0.00000	0.999852
Na 589.592 Radia	2	Lin Thru 0	0.0	3.214	0.00000	0.999968
Ni 231.604	3	Lin Thru 0	0.0	39.18	0.00000	0.999922
P 214.914	3	Lin Thru 0	0.0	1.663	0.00000	0.999762
Pb 220.353	3	Lin Thru 0	0.0	8.083	0.00000	0.999775
S 181.975 Axial	3	Lin Thru 0	0.0	0.7092	0.00000	0.999814
Sb 206.836	3	Lin Thru 0	0.0	2.834	0.00000	0.999767
Se 196.026	3	Lin Thru 0	0.0	1.522	0.00000	0.999847
Si 251.611	3	Lin Thru 0	0.0	30.87	0.00000	0.999884
Sn 189.927	3	Lin Thru 0	0.0	5.545	0.00000	0.999819
Sr 421.552	3	Lin Thru 0	0.0	143.7	0.00000	0.999959
Ti 334.940	3	Lin Thru 0	0.0	634.7	0.00000	0.999892
Tl 190.801	3	Lin Thru 0	0.0	3.109	0.00000	0.999875
U 409.014	3	Lin Thru 0	0.0	35.81	0.00000	0.999900
V 292.402	3	Lin Thru 0	0.0	143.1	0.00000	0.999890
Zn 213.857	3	Lin Thru 0	0.0	99.05	0.00000	0.999905
SiO2	3	Lin Thru 0	0.0	14.40	0.00000	0.999826

Sequence No.: 6

Sample ID: ICV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 9

Date Collected: 2/25/2010 12:50:59

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	3787.2	3787.2	98.2 %		12:53:12
1	Y RADIAL	4280.9	4280.9	96.16 %		12:52:52
1	Al 396.153Radial†	5715.9	5936.3	5553.3 ug/L	5553.3 ppb	12:52:52
1	Ca 317.933Radial†	2447.2	2473.7	5394.4 ug/L	5394.4 ppb	12:53:12
1	Fe 238.204 Radial†	327.0	321.3	5208.4 ug/L	5208.4 ppb	12:53:12
1	K 766.490 Radial†	16243.6	13777.8	2636.1 ug/L	2636.1 ppb	12:52:52
1	Mg 279.077 IEC†	101.3	102.0	5381.0 ug/L	5381.0 ppb	12:53:12
1	Na 589.592 Radial†	6673.1	7697.7	2395.3 ug/L	2395.3 ppb	12:52:52
1	Sr 421.552†	75430.1	76811.2	534.31 ug/L	534.31 ppb	12:52:52
1	Sc 361.383	913785.7	913785.7	103.83 %		12:54:10
1	Y 371.029	759719.5	759719.5	99.880 %		12:54:10
1	Ag 328.068†	55833.2	53539.1	251.92 ug/L	251.92 ppb	12:54:10
1	As 188.979†	1112.4	1091.2	489.46 ug/L	489.46 ppb	12:54:30
1	B 249.677†	21795.9	21269.7	518.98 ug/L	518.98 ppb	12:54:10
1	Ba 233.527†	69195.7	66631.8	524.99 ug/L	524.99 ppb	12:54:10
1	Be 313.107†	702109.3	679764.3	255.10 ug/L	255.10 ppb	12:54:10
1	Cd 226.502†	44823.0	43345.5	503.58 ug/L	503.58 ppb	12:54:30
1	Co 228.616†	25647.3	24766.0	520.34 ug/L	520.34 ppb	12:54:30
1	Cr 267.716†	46283.5	44490.8	500.22 ug/L	500.22 ppb	12:54:10
1	Cu 324.752†	183346.3	170626.9	519.89 ug/L	519.89 ppb	12:54:10
1	Mn 257.610†	459402.6	441975.9	503.82 ug/L	503.82 ppb	12:54:10
1	Mo 202.031†	7431.0	7152.2	527.26 ug/L	527.26 ppb	12:54:30
1	Ni 231.604†	20024.2	19202.6	489.74 ug/L	489.74 ppb	12:54:30
1	P 214.914†	4716.9	4337.1	2507.2 ug/L	2507.2 ppb	12:54:30
1	Pb 220.353†	4416.1	4192.0	520.28 ug/L	520.28 ppb	12:54:30
1	S 181.975 Axial†	1836.8	1733.2	2442.7 ug/L	2442.7 ppb	12:54:30
1	Sb 206.836†	1475.4	1382.0	506.56 ug/L	506.56 ppb	12:54:30
1	Se 196.026†	4149.3	4021.0	2660.3 ug/L	2660.3 ppb	12:54:30
1	Si 251.611†	156519.8	150180.5	4858.7 ug/L	4858.7 ppb	12:54:10
1	Sn 189.927†	3044.2	2922.4	527.66 ug/L	527.66 ppb	12:54:30
1	Ti 334.940†	322705.7	312209.9	491.82 ug/L	491.82 ppb	12:54:10
1	Tl 190.801†	1658.3	1624.6	525.81 ug/L	525.81 ppb	12:54:30
1	U 409.014†	14690.8	17050.7	474.41 ug/L	474.41 ppb	12:54:10
1	V 292.402†	71767.5	70588.4	500.12 ug/L	500.12 ppb	12:54:10
1	Zn 213.857†	51846.5	49194.2	492.04 ug/L	492.04 ppb	12:54:10
1	SiO2†	156150.9	149801.7	10386 ug/L	10386 ppb	12:55:27
2	Sc Radial	3776.4	3776.4	97.9 %		12:53:37
2	Y RADIAL	4279.7	4279.7	96.14 %		12:53:17
2	Al 396.153Radial†	5650.6	5886.2	5506.4 ug/L	5506.4 ppb	12:53:17
2	Ca 317.933Radial†	2452.7	2486.4	5422.1 ug/L	5422.1 ppb	12:53:37
2	Fe 238.204 Radial†	324.4	319.7	5181.4 ug/L	5181.4 ppb	12:53:37
2	K 766.490 Radial†	16093.5	13671.7	2615.8 ug/L	2615.8 ppb	12:53:17
2	Mg 279.077 IEC†	99.9	100.8	5320.4 ug/L	5320.4 ppb	12:53:37
2	Na 589.592 Radial†	6606.3	7648.8	2380.0 ug/L	2380.0 ppb	12:53:17
2	Sr 421.552†	74450.1	76029.1	528.87 ug/L	528.87 ppb	12:53:17
2	Sc 361.383	915363.3	915363.3	104.01 %		12:54:36
2	Y 371.029	761399.8	761399.8	100.10 %		12:54:36
2	Ag 328.068†	56102.2	53705.1	252.68 ug/L	252.68 ppb	12:54:36
2	As 188.979†	1129.9	1106.3	496.17 ug/L	496.17 ppb	12:54:56
2	B 249.677†	21989.5	21419.7	522.67 ug/L	522.67 ppb	12:54:36
2	Ba 233.527†	69182.7	66504.4	523.99 ug/L	523.99 ppb	12:54:36
2	Be 313.107†	704685.7	681075.9	255.59 ug/L	255.59 ppb	12:54:36
2	Cd 226.502†	44811.3	43259.9	502.59 ug/L	502.59 ppb	12:54:56
2	Co 228.616†	25631.0	24707.7	519.11 ug/L	519.11 ppb	12:54:56
2	Cr 267.716†	46424.9	44550.0	500.88 ug/L	500.88 ppb	12:54:36
2	Cu 324.752†	184186.0	171129.9	521.42 ug/L	521.42 ppb	12:54:36
2	Mn 257.610†	460311.5	442087.2	503.95 ug/L	503.95 ppb	12:54:36
2	Mo 202.031†	7414.9	7124.4	525.21 ug/L	525.21 ppb	12:54:56
2	Ni 231.604†	20010.1	19155.9	488.55 ug/L	488.55 ppb	12:54:56

2	P 214.914†	4688.2	4301.6	2485.6 ug/L	2485.6 ppb	12:54:56
2	Pb 220.353†	4408.8	4177.7	518.50 ug/L	518.50 ppb	12:54:56
2	S 181.975 Axial†	1836.8	1730.1	2438.4 ug/L	2438.4 ppb	12:54:56
2	Sb 206.836†	1484.6	1388.4	508.78 ug/L	508.78 ppb	12:54:56
2	Se 196.026†	4153.1	4017.7	2658.1 ug/L	2658.1 ppb	12:54:56
2	Si 251.611†	157101.6	150480.0	4868.4 ug/L	4868.4 ppb	12:54:36
2	Sn 189.927†	3050.8	2923.8	527.92 ug/L	527.92 ppb	12:54:56
2	Ti 334.940†	323603.6	312537.4	492.35 ug/L	492.35 ppb	12:54:36
2	Tl 190.801†	1655.0	1618.6	523.91 ug/L	523.91 ppb	12:54:56
2	U 409.014†	14732.2	17066.0	474.85 ug/L	474.85 ppb	12:54:36
2	V 292.402†	71862.6	70560.7	499.90 ug/L	499.90 ppb	12:54:36
2	Zn 213.857†	51865.3	49126.2	491.36 ug/L	491.36 ppb	12:54:36
2	SiO2†	156137.2	149529.4	10367 ug/L	10367 ppb	12:55:32
3	Sc Radial	3713.3	3713.3	96.3 %		12:54:02
3	Y RADIAL	4164.7	4164.7	93.55 %		12:53:42
3	Al 396.153Radial†	5560.7	5891.0	5510.9 ug/L	5510.9 ppb	12:53:42
3	Ca 317.933Radial†	2401.3	2475.5	5398.5 ug/L	5398.5 ppb	12:54:02
3	Fe 238.204 Radial†	329.3	330.4	5354.4 ug/L	5354.4 ppb	12:54:02
3	K 766.490 Radial†	15891.4	13741.2	2629.1 ug/L	2629.1 ppb	12:53:42
3	Mg 279.077 IEC†	100.0	102.7	5421.2 ug/L	5421.2 ppb	12:54:02
3	Na 589.592 Radial†	6440.8	7591.7	2362.3 ug/L	2362.3 ppb	12:53:42
3	Sr 421.552†	72780.2	75587.5	525.79 ug/L	525.79 ppb	12:53:42
3	Sc 361.383	912594.3	912594.3	103.70 %		12:55:02
3	Y 371.029	760061.1	760061.1	99.925 %		12:55:02
3	Ag 328.068†	55908.1	53681.6	252.63 ug/L	252.63 ppb	12:55:02
3	As 188.979†	1118.2	1098.3	492.63 ug/L	492.63 ppb	12:55:22
3	B 249.677†	21817.8	21318.3	520.16 ug/L	520.16 ppb	12:55:02
3	Ba 233.527†	69017.4	66546.9	524.33 ug/L	524.33 ppb	12:55:02
3	Be 313.107†	702397.1	680924.6	255.53 ug/L	255.53 ppb	12:55:02
3	Cd 226.502†	44434.4	43027.1	499.86 ug/L	499.86 ppb	12:55:22
3	Co 228.616†	25383.2	24543.5	515.65 ug/L	515.65 ppb	12:55:22
3	Cr 267.716†	46254.2	44520.8	500.57 ug/L	500.57 ppb	12:55:02
3	Cu 324.752†	183319.8	170831.9	520.52 ug/L	520.52 ppb	12:55:02
3	Mn 257.610†	458440.7	441626.0	503.43 ug/L	503.43 ppb	12:55:02
3	Mo 202.031†	7370.8	7103.5	523.68 ug/L	523.68 ppb	12:55:22
3	Ni 231.604†	19840.5	19050.6	485.87 ug/L	485.87 ppb	12:55:22
3	P 214.914†	4657.5	4285.8	2476.1 ug/L	2476.1 ppb	12:55:22
3	Pb 220.353†	4372.0	4155.0	515.67 ug/L	515.67 ppb	12:55:22
3	S 181.975 Axial†	1819.2	1718.5	2422.1 ug/L	2422.1 ppb	12:55:22
3	Sb 206.836†	1463.6	1372.4	503.07 ug/L	503.07 ppb	12:55:22
3	Se 196.026†	4108.5	3986.9	2638.3 ug/L	2638.3 ppb	12:55:22
3	Si 251.611†	156318.5	150183.2	4858.8 ug/L	4858.8 ppb	12:55:02
3	Sn 189.927†	3026.3	2909.0	525.23 ug/L	525.23 ppb	12:55:22
3	Ti 334.940†	322101.2	312032.7	491.54 ug/L	491.54 ppb	12:55:02
3	Tl 190.801†	1644.2	1613.0	522.11 ug/L	522.11 ppb	12:55:22
3	U 409.014†	14665.8	17045.0	474.24 ug/L	474.24 ppb	12:55:02
3	V 292.402†	71773.4	70684.4	500.72 ug/L	500.72 ppb	12:55:02
3	Zn 213.857†	51710.8	49128.6	491.38 ug/L	491.38 ppb	12:55:02
3	SiO2†	155733.1	149595.2	10372 ug/L	10372 ppb	12:55:38

## Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	913914.4	103.85 %	0.158			0.15%
Sc Radial	3759.0	97.5 %	1.04			1.06%
Y 371.029	760393.4	99.968 %	0.1168			0.12%
Y RADIAL	4241.8	95.28 %	1.500			1.57%
Ag 328.068†	53641.9	252.41 ug/L	0.426	252.41 ppb	0.426	0.17%
QC value within limits for Ag 328.068 Recovery = 100.96%						
Al 396.153Radial†	5904.5	5523.5 ug/L	25.90	5523.5 ppb	25.90	0.47%
QC value greater than the upper limit for Al 396.153Radial Recovery = 110.47%						
As 188.979†	1098.6	492.75 ug/L	3.355	492.75 ppb	3.355	0.68%
QC value within limits for As 188.979 Recovery = 98.55%						
B 249.677†	21335.9	520.60 ug/L	1.881	520.60 ppb	1.881	0.36%
QC value within limits for B 249.677 Recovery = 104.12%						
Ba 233.527†	66561.0	524.44 ug/L	0.510	524.44 ppb	0.510	0.10%
QC value within limits for Ba 233.527 Recovery = 104.89%						
Be 313.107†	680588.3	255.41 ug/L	0.268	255.41 ppb	0.268	0.11%
QC value within limits for Be 313.107 Recovery = 102.16%						
Ca 317.933Radial†	2478.5	5405.0 ug/L	14.97	5405.0 ppb	14.97	0.28%



QC value within limits for Ca 317.933 Radial Recovery = 108.10%							
Cd	226.502†	43210.8	502.01 ug/L	1.925	502.01 ppb	1.925	0.38%
QC value within limits for Cd 226.502 Recovery = 100.40%							
Co	228.616†	24672.4	518.37 ug/L	2.428	518.37 ppb	2.428	0.47%
QC value within limits for Co 228.616 Recovery = 103.67%							
Cr	267.716†	44520.5	500.56 ug/L	0.331	500.56 ppb	0.331	0.07%
QC value within limits for Cr 267.716 Recovery = 100.11%							
Cu	324.752†	170862.9	520.61 ug/L	0.769	520.61 ppb	0.769	0.15%
QC value within limits for Cu 324.752 Recovery = 104.12%							
Fe	238.204 Radial†	323.8	5248.1 ug/L	93.10	5248.1 ppb	93.10	1.77%
QC value within limits for Fe 238.204 Radial Recovery = 104.96%							
K	766.490 Radial†	13730.2	2627.0 ug/L	10.33	2627.0 ppb	10.33	0.39%
QC value within limits for K 766.490 Radial Recovery = 105.08%							
Mg	279.077 IEC†	101.8	5374.2 ug/L	50.71	5374.2 ppb	50.71	0.94%
QC value within limits for Mg 279.077 IEC Recovery = 107.48%							
Mn	257.610†	441896.4	503.73 ug/L	0.267	503.73 ppb	0.267	0.05%
QC value within limits for Mn 257.610 Recovery = 100.75%							
Mo	202.031†	7126.7	525.39 ug/L	1.796	525.39 ppb	1.796	0.34%
QC value within limits for Mo 202.031 Recovery = 105.08%							
Na	589.592 Radial†	7646.1	2379.2 ug/L	16.52	2379.2 ppb	16.52	0.69%
QC value within limits for Na 589.592 Radial Recovery = 95.17%							
Ni	231.604†	19136.4	488.05 ug/L	1.985	488.05 ppb	1.985	0.41%
QC value within limits for Ni 231.604 Recovery = 97.61%							
P	214.914†	4308.2	2489.6 ug/L	15.96	2489.6 ppb	15.96	0.64%
QC value within limits for P 214.914 Recovery = 99.59%							
Pb	220.353†	4174.9	518.15 ug/L	2.326	518.15 ppb	2.326	0.45%
QC value within limits for Pb 220.353 Recovery = 103.63%							
S	181.975 Axial†	1727.3	2434.4 ug/L	10.90	2434.4 ppb	10.90	0.45%
QC value within limits for S 181.975 Axial Recovery = 97.38%							
Sb	206.836†	1380.9	506.14 ug/L	2.876	506.14 ppb	2.876	0.57%
QC value within limits for Sb 206.836 Recovery = 101.23%							
Se	196.026†	4008.5	2652.2 ug/L	12.09	2652.2 ppb	12.09	0.46%
QC value within limits for Se 196.026 Recovery = 106.09%							
Si	251.611†	150281.3	4862.0 ug/L	5.58	4862.0 ppb	5.58	0.11%
QC value within limits for Si 251.611 Recovery = 97.24%							
Sn	189.927†	2918.4	526.94 ug/L	1.483	526.94 ppb	1.483	0.28%
QC value within limits for Sn 189.927 Recovery = 105.39%							
Sr	421.552†	76142.6	529.66 ug/L	4.311	529.66 ppb	4.311	0.81%
QC value within limits for Sr 421.552 Recovery = 105.93%							
Ti	334.940†	312260.0	491.90 ug/L	0.409	491.90 ppb	0.409	0.08%
QC value within limits for Ti 334.940 Recovery = 98.38%							
Tl	190.801†	1618.7	523.94 ug/L	1.849	523.94 ppb	1.849	0.35%
QC value within limits for Tl 190.801 Recovery = 104.79%							
U	409.014†	17053.9	474.50 ug/L	0.312	474.50 ppb	0.312	0.07%
QC value within limits for U 409.014 Recovery = 94.90%							
V	292.402†	70611.2	500.25 ug/L	0.424	500.25 ppb	0.424	0.08%
QC value within limits for V 292.402 Recovery = 100.05%							
Zn	213.857†	49149.7	491.59 ug/L	0.386	491.59 ppb	0.386	0.08%
QC value within limits for Zn 213.857 Recovery = 98.32%							
SiO2†	149642.1	10375 ug/L	9.8	10375 ppb	9.8	0.09%	
QC value within limits for SiO2 Recovery = 97.01%							
QC Failed. Continue with analysis.							

Sequence No.: 7

Sample ID: ICB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 10

Date Collected: 2/25/2010 12:57:48

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	3864.4	3864.4	100 %		13:00:01
1	Y RADIAL	4333.3	4333.3	97.34 %		12:59:41
1	Al 396.153Radial†	-114.9	0.4	0.4047 ug/L	0.4047 ppb	12:59:41
1	Ca 317.933Radial†	18.1	-0.7	-1.4345 ug/L	-1.4345 ppb	13:00:01
1	Fe 238.204 Radial†	8.6	-3.1	-50.577 ug/L	-50.577 ppb	13:00:01
1	K 766.490 Radial†	2812.4	42.0	8.0380 ug/L	8.0380 ppb	12:59:41
1	Mg 279.077 IEC†	1.7	0.5	26.336 ug/L	26.336 ppb	13:00:01
1	Na 589.592 Radial†	-864.9	38.4	11.962 ug/L	11.962 ppb	12:59:41
1	Sr 421.552†	12.8	4.0	0.0279 ug/L	0.0279 ppb	12:59:41
1	Sc 361.383	903426.7	903426.7	102.65 %		13:00:58
1	Y 371.029	759979.1	759979.1	99.914 %		13:00:58
1	Ag 328.068†	312.6	70.4	0.3161 ug/L	0.3161 ppb	13:00:58
1	As 188.979†	-22.9	-2.4	-1.0673 ug/L	-1.0673 ppb	13:01:18
1	B 249.677†	-163.6	118.6	2.9153 ug/L	2.9153 ppb	13:01:18
1	Ba 233.527†	2.9	-8.2	-0.0658 ug/L	-0.0658 ppb	13:01:18
1	Be 313.107†	-3630.0	22.1	0.0078 ug/L	0.0078 ppb	13:00:58
1	Cd 226.502†	-180.6	0.3	0.0076 ug/L	0.0076 ppb	13:01:18
1	Co 228.616†	-67.6	-1.0	-0.0193 ug/L	-0.0193 ppb	13:01:18
1	Cr 267.716†	64.6	-22.2	-0.2514 ug/L	-0.2514 ppb	13:01:18
1	Cu 324.752†	6040.2	-71.0	-0.2162 ug/L	-0.2162 ppb	13:00:58
1	Mn 257.610†	496.9	6.4	0.0012 ug/L	0.0012 ppb	13:01:18
1	Mo 202.031†	6.1	1.3	0.0918 ug/L	0.0918 ppb	13:01:18
1	Ni 231.604†	78.3	-6.5	-0.1664 ug/L	-0.1664 ppb	13:01:18
1	P 214.914†	205.3	-5.8	-3.3911 ug/L	-3.3911 ppb	13:01:18
1	Pb 220.353†	26.4	-35.4	-4.3757 ug/L	-4.3757 ppb	13:01:18
1	S 181.975 Axial†	43.4	6.4	9.0514 ug/L	9.0514 ppb	13:01:18
1	Sb 206.836†	30.1	-9.7	-3.4076 ug/L	-3.4076 ppb	13:01:18
1	Se 196.026†	-23.4	1.9	1.1192 ug/L	1.1192 ppb	13:01:18
1	Si 251.611†	581.9	2.2	0.0691 ug/L	0.0691 ppb	13:01:18
1	Sn 189.927†	8.4	-1.2	-0.2146 ug/L	-0.2146 ppb	13:01:18
1	Ti 334.940†	-1585.8	-134.9	-0.2126 ug/L	-0.2126 ppb	13:00:58
1	Tl 190.801†	-33.6	-5.3	-1.7107 ug/L	-1.7107 ppb	13:01:18
1	U 409.014†	-3169.7	-185.9	-5.1858 ug/L	-5.1858 ppb	13:00:58
1	V 292.402†	-1492.6	14.7	0.1022 ug/L	0.1022 ppb	13:00:58
1	Zn 213.857†	991.4	226.3	2.2935 ug/L	2.2935 ppb	13:01:18
1	SiO2†	638.3	33.5	2.3257 ug/L	2.3257 ppb	13:02:14
2	Sc Radial	3835.8	3835.8	99.5 %		13:00:26
2	Y RADIAL	4369.6	4369.6	98.16 %		13:00:06
2	Al 396.153Radial†	-106.5	8.0	7.4720 ug/L	7.4720 ppb	13:00:06
2	Ca 317.933Radial†	12.7	-5.9	-12.883 ug/L	-12.883 ppb	13:00:26
2	Fe 238.204 Radial†	8.0	-3.6	-58.396 ug/L	-58.396 ppb	13:00:26
2	K 766.490 Radial†	2770.3	20.5	3.9467 ug/L	3.9467 ppb	13:00:06
2	Mg 279.077 IEC†	2.4	1.3	66.800 ug/L	66.800 ppb	13:00:26
2	Na 589.592 Radial†	-962.1	-65.7	-20.454 ug/L	-20.454 ppb	13:00:06
2	Sr 421.552†	26.1	17.5	0.1217 ug/L	0.1217 ppb	13:00:06
2	Sc 361.383	895507.8	895507.8	101.75 %		13:01:23
2	Y 371.029	754233.9	754233.9	99.158 %		13:01:23
2	Ag 328.068†	160.1	-76.8	-0.3725 ug/L	-0.3725 ppb	13:01:23
2	As 188.979†	-22.0	-1.7	-0.7867 ug/L	-0.7867 ppb	13:01:43
2	B 249.677†	-148.3	132.3	3.2511 ug/L	3.2511 ppb	13:01:43
2	Ba 233.527†	5.1	-6.0	-0.0496 ug/L	-0.0496 ppb	13:01:43
2	Be 313.107†	-3647.0	-25.9	-0.0099 ug/L	-0.0099 ppb	13:01:23
2	Cd 226.502†	-169.3	9.8	0.1200 ug/L	0.1200 ppb	13:01:43
2	Co 228.616†	-64.5	1.4	0.0324 ug/L	0.0324 ppb	13:01:43
2	Cr 267.716†	81.9	-4.6	-0.0562 ug/L	-0.0562 ppb	13:01:43
2	Cu 324.752†	5918.8	-138.4	-0.4226 ug/L	-0.4226 ppb	13:01:23
2	Mn 257.610†	504.3	18.0	0.0120 ug/L	0.0120 ppb	13:01:43
2	Mo 202.031†	13.2	8.3	0.6044 ug/L	0.6044 ppb	13:01:43
2	Ni 231.604†	101.3	16.8	0.4275 ug/L	0.4275 ppb	13:01:43

2	P 214.914†	208.6	-0.8	-0.3650 ug/L	-0.3650 ppb	13:01:43
2	Pb 220.353†	-3.3	-64.5	-7.9643 ug/L	-7.9643 ppb	13:01:43
2	S 181.975 Axial†	37.1	0.6	0.8137 ug/L	0.8137 ppb	13:01:43
2	Sb 206.836†	42.3	2.5	0.9066 ug/L	0.9066 ppb	13:01:43
2	Se 196.026†	-23.8	1.4	0.7220 ug/L	0.7220 ppb	13:01:43
2	Si 251.611†	599.4	24.4	0.7817 ug/L	0.7817 ppb	13:01:43
2	Sn 189.927†	8.6	-0.9	-0.1666 ug/L	-0.1666 ppb	13:01:43
2	Ti 334.940†	-1488.5	-52.9	-0.0889 ug/L	-0.0889 ppb	13:01:23
2	Tl 190.801†	-33.6	-5.6	-1.8005 ug/L	-1.8005 ppb	13:01:43
2	U 409.014†	-3087.8	-132.7	-3.6995 ug/L	-3.6995 ppb	13:01:23
2	V 292.402†	-1527.3	-32.3	-0.2140 ug/L	-0.2140 ppb	13:01:23
2	Zn 213.857†	997.1	240.5	2.4342 ug/L	2.4342 ppb	13:01:43
2	SiO2†	628.5	29.5	2.0302 ug/L	2.0302 ppb	13:02:19
3	Sc Radial	3871.2	3871.2	100 %		13:00:51
3	Y RADIAL	4314.0	4314.0	96.91 %		13:00:31
3	Al 396.153Radial†	-120.0	-4.5	-4.2645 ug/L	-4.2645 ppb	13:00:31
3	Ca 317.933Radial†	14.5	-4.2	-9.1832 ug/L	-9.1832 ppb	13:00:51
3	Fe 238.204 Radial†	10.5	-1.2	-19.042 ug/L	-19.042 ppb	13:00:51
3	K 766.490 Radial†	2693.2	-81.8	-15.657 ug/L	-15.657 ppb	13:00:31
3	Mg 279.077 IEC†	-0.9	-2.1	-110.80 ug/L	-110.80 ppb	13:00:51
3	Na 589.592 Radial†	-932.9	-27.8	-8.6403 ug/L	-8.6403 ppb	13:00:31
3	Sr 421.552†	72.9	63.9	0.4447 ug/L	0.4447 ppb	13:00:31
3	Sc 361.383	910445.1	910445.1	103.45 %		13:01:49
3	Y 371.029	767542.4	767542.4	100.91 %		13:01:49
3	Ag 328.068†	306.2	61.8	0.2821 ug/L	0.2821 ppb	13:01:49
3	As 188.979†	-28.2	-7.3	-3.2559 ug/L	-3.2559 ppb	13:02:09
3	B 249.677†	-184.1	100.1	2.4564 ug/L	2.4564 ppb	13:02:09
3	Ba 233.527†	11.8	0.3	0.0022 ug/L	0.0022 ppb	13:02:09
3	Be 313.107†	-3689.4	-8.1	-0.0031 ug/L	-0.0031 ppb	13:01:49
3	Cd 226.502†	-179.3	2.9	0.0356 ug/L	0.0356 ppb	13:02:09
3	Co 228.616†	-67.5	-0.4	-0.0069 ug/L	-0.0069 ppb	13:02:09
3	Cr 267.716†	76.4	-11.2	-0.1275 ug/L	-0.1275 ppb	13:02:09
3	Cu 324.752†	6052.4	-104.7	-0.3197 ug/L	-0.3197 ppb	13:01:49
3	Mn 257.610†	483.3	-10.5	-0.0093 ug/L	-0.0093 ppb	13:02:09
3	Mo 202.031†	12.4	7.3	0.5369 ug/L	0.5369 ppb	13:02:09
3	Ni 231.604†	80.0	-5.5	-0.1401 ug/L	-0.1401 ppb	13:02:09
3	P 214.914†	206.0	-6.7	-3.9068 ug/L	-3.9068 ppb	13:02:09
3	Pb 220.353†	-1.3	-62.4	-7.7165 ug/L	-7.7165 ppb	13:02:09
3	S 181.975 Axial†	40.0	2.8	4.0137 ug/L	4.0137 ppb	13:02:09
3	Sb 206.836†	37.6	-2.7	-0.9114 ug/L	-0.9114 ppb	13:02:09
3	Se 196.026†	-35.7	-9.8	-6.4957 ug/L	-6.4957 ppb	13:02:09
3	Si 251.611†	586.0	1.7	0.0491 ug/L	0.0491 ppb	13:02:09
3	Sn 189.927†	21.7	11.6	2.0872 ug/L	2.0872 ppb	13:02:09
3	Ti 334.940†	-1476.1	-17.0	-0.0187 ug/L	-0.0187 ppb	13:01:49
3	Tl 190.801†	-28.1	0.3	0.0940 ug/L	0.0940 ppb	13:02:09
3	U 409.014†	-3013.7	-11.3	-0.3119 ug/L	-0.3119 ppb	13:01:49
3	V 292.402†	-1506.5	12.5	0.0950 ug/L	0.0950 ppb	13:01:49
3	Zn 213.857†	990.0	217.5	2.1998 ug/L	2.1998 ppb	13:02:09
3	SiO2†	605.8	-2.7	-0.2002 ug/L	-0.2002 ppb	13:02:24

## Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	903126.6	102.62 %	0.849			0.83%
Sc Radial	3857.1	100 %	0.5			0.49%
Y 371.029	760585.1	99.993 %	0.8775			0.88%
Y RADIAL	4338.9	97.47 %	0.634			0.65%
Ag 328.068†	18.5	0.0752 ug/L	0.38811	0.0752 ppb	0.38811	515.88%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	1.3	1.2041 ug/L	5.90893	1.2041 ppb	5.90893	490.75%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-3.8	-1.7033 ug/L	1.35190	-1.7033 ppb	1.35190	79.37%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	117.0	2.8743 ug/L	0.39894	2.8743 ppb	0.39894	13.88%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	-4.6	-0.0378 ug/L	0.03553	-0.0378 ppb	0.03553	94.08%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	-4.0	-0.0017 ug/L	0.00890	-0.0017 ppb	0.00890	516.93%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-3.6	-7.8334 ug/L	5.84221	-7.8334 ppb	5.84221	74.58%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated						
Cd 226.502†	4.4	0.0544 ug/L	0.05853	0.0544 ppb	0.05853	107.55%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	0.0	0.0021 ug/L	0.02698	0.0021 ppb	0.02698	>999.9%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-12.7	-0.1450 ug/L	0.09874	-0.1450 ppb	0.09874	68.09%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-104.7	-0.3195 ug/L	0.10318	-0.3195 ppb	0.10318	32.29%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	-2.6	-42.672 ug/L	20.8341	-42.672 ppb	20.8341	48.82%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	-6.4	-1.2241 ug/L	12.66554	-1.2241 ppb	12.66554	>999.9%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	-0.1	-5.8890 ug/L	93.08322	-5.8890 ppb	93.08322	>999.9%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	4.6	0.0013 ug/L	0.01066	0.0013 ppb	0.01066	825.47%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	5.6	0.4110 ug/L	0.27851	0.4110 ppb	0.27851	67.76%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	-18.4	-5.7109 ug/L	16.40515	-5.7109 ppb	16.40515	287.26%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	1.6	0.0403 ug/L	0.33556	0.0403 ppb	0.33556	831.71%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	-4.4	-2.5543 ug/L	1.91347	-2.5543 ppb	1.91347	74.91%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	-54.1	-6.6855 ug/L	2.00419	-6.6855 ppb	2.00419	29.98%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	3.3	4.6263 ug/L	4.15289	4.6263 ppb	4.15289	89.77%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	-3.3	-1.1374 ug/L	2.16596	-1.1374 ppb	2.16596	190.42%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-2.2	-1.5515 ug/L	4.28639	-1.5515 ppb	4.28639	276.27%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	9.4	0.3000 ug/L	0.41734	0.3000 ppb	0.41734	139.12%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	3.1	0.5687 ug/L	1.31527	0.5687 ppb	1.31527	231.29%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	28.5	0.1981 ug/L	0.21867	0.1981 ppb	0.21867	110.38%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	-68.3	-0.1068 ug/L	0.09816	-0.1068 ppb	0.09816	91.95%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	-3.5	-1.1391 ug/L	1.06882	-1.1391 ppb	1.06882	93.83%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	-110.0	-3.0657 ug/L	2.49799	-3.0657 ppb	2.49799	81.48%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	-1.7	-0.0056 ug/L	0.18052	-0.0056 ppb	0.18052	>999.9%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	228.1	2.3092 ug/L	0.11796	2.3092 ppb	0.11796	5.11%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	20.1	1.3852 ug/L	1.38096	1.3852 ppb	1.38096	99.69%
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: 2/25/2010 13:04:35

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	3821.9	3821.9	99.1 %		13:06:48
1	Y RADIAL	4386.9	4386.9	98.54 %		13:06:28
1	Al 396.153Radial†	120.3	236.5	221.72 ug/L	221.72 ppb	13:06:28
1	Ca 317.933Radial†	116.5	98.9	215.62 ug/L	215.62 ppb	13:06:48
1	Fe 238.204 Radial†	17.8	6.3	102.00 ug/L	102.00 ppb	13:06:48
1	K 766.490 Radial†	3621.3	889.5	170.22 ug/L	170.22 ppb	13:06:28
1	Mg 279.077 IEC†	8.8	7.7	406.41 ug/L	406.41 ppb	13:06:48
1	Na 589.592 Radial†	-6.4	895.3	278.57 ug/L	278.57 ppb	13:06:28
1	Sr 421.552†	718.5	716.3	4.9814 ug/L	4.9814 ppb	13:06:28
1	Sc 361.383	902846.8	902846.8	102.59 %		13:07:45
1	Y 371.029	758909.8	758909.8	99.773 %		13:07:45
1	Ag 328.068†	1352.6	1084.3	5.0463 ug/L	5.0463 ppb	13:07:45
1	As 188.979†	50.4	69.0	30.748 ug/L	30.748 ppb	13:08:05
1	B 249.677†	1702.1	1937.2	47.450 ug/L	47.450 ppb	13:07:45
1	Ba 233.527†	679.9	651.7	5.1348 ug/L	5.1348 ppb	13:08:05
1	Be 313.107†	10117.4	13420.4	5.0258 ug/L	5.0258 ppb	13:07:45
1	Cd 226.502†	271.8	441.1	5.1279 ug/L	5.1279 ppb	13:08:05
1	Co 228.616†	178.5	238.8	5.0287 ug/L	5.0287 ppb	13:08:05
1	Cr 267.716†	526.0	427.6	4.7956 ug/L	4.7956 ppb	13:08:05
1	Cu 324.752†	9386.2	3194.3	9.7122 ug/L	9.7122 ppb	13:07:45
1	Mn 257.610†	10009.0	9278.8	10.564 ug/L	10.564 ppb	13:07:45
1	Mo 202.031†	147.5	139.1	10.259 ug/L	10.259 ppb	13:08:05
1	Ni 231.604†	292.7	202.5	5.1652 ug/L	5.1652 ppb	13:08:05
1	P 214.914†	452.2	235.0	139.44 ug/L	139.44 ppb	13:08:05
1	Pb 220.353†	100.0	36.3	4.5433 ug/L	4.5433 ppb	13:08:05
1	S 181.975 Axial†	109.1	70.5	99.410 ug/L	99.410 ppb	13:08:05
1	Sb 206.836†	62.2	21.6	7.9731 ug/L	7.9731 ppb	13:08:05
1	Se 196.026†	22.6	46.7	31.053 ug/L	31.053 ppb	13:08:05
1	Si 251.611†	3803.8	3143.1	101.70 ug/L	101.70 ppb	13:07:45
1	Sn 189.927†	63.8	52.7	9.5440 ug/L	9.5440 ppb	13:08:05
1	Ti 334.940†	1836.2	3199.7	5.0152 ug/L	5.0152 ppb	13:07:45
1	Tl 190.801†	31.4	58.0	18.722 ug/L	18.722 ppb	13:08:05
1	U 409.014†	-1266.7	1667.1	46.531 ug/L	46.531 ppb	13:07:45
1	V 292.402†	-886.8	604.3	4.4412 ug/L	4.4412 ppb	13:07:45
1	Zn 213.857†	2091.9	1299.7	13.060 ug/L	13.060 ppb	13:08:05
1	SiO2†	3861.4	3175.8	220.21 ug/L	220.21 ppb	13:09:02
2	Sc Radial	3915.0	3915.0	102 %		13:07:14
2	Y RADIAL	4311.1	4311.1	96.84 %		13:06:53
2	Al 396.153Radial†	95.7	209.4	196.25 ug/L	196.25 ppb	13:06:53
2	Ca 317.933Radial†	119.3	98.9	215.58 ug/L	215.58 ppb	13:07:14
2	Fe 238.204 Radial†	15.9	4.0	64.447 ug/L	64.447 ppb	13:07:14
2	K 766.490 Radial†	3573.8	755.8	144.61 ug/L	144.61 ppb	13:06:53
2	Mg 279.077 IEC†	9.6	8.3	436.57 ug/L	436.57 ppb	13:07:14
2	Na 589.592 Radial†	-55.8	846.7	263.48 ug/L	263.48 ppb	13:06:53
2	Sr 421.552†	695.5	676.4	4.7042 ug/L	4.7042 ppb	13:06:53
2	Sc 361.383	894126.4	894126.4	101.60 %		13:08:11
2	Y 371.029	751832.7	751832.7	98.843 %		13:08:11
2	Ag 328.068†	1403.6	1147.4	5.3299 ug/L	5.3299 ppb	13:08:11
2	As 188.979†	44.7	63.9	28.441 ug/L	28.441 ppb	13:08:31
2	B 249.677†	1723.2	1974.1	48.359 ug/L	48.359 ppb	13:08:11
2	Ba 233.527†	682.3	660.6	5.2044 ug/L	5.2044 ppb	13:08:31
2	Be 313.107†	9942.7	13344.7	4.9973 ug/L	4.9973 ppb	13:08:11
2	Cd 226.502†	268.0	440.0	5.1188 ug/L	5.1188 ppb	13:08:31
2	Co 228.616†	183.5	245.5	5.1708 ug/L	5.1708 ppb	13:08:31
2	Cr 267.716†	511.7	418.5	4.6906 ug/L	4.6906 ppb	13:08:31
2	Cu 324.752†	9274.2	3173.3	9.6463 ug/L	9.6463 ppb	13:08:11
2	Mn 257.610†	9833.1	9200.9	10.471 ug/L	10.471 ppb	13:08:11
2	Mo 202.031†	154.6	147.5	10.870 ug/L	10.870 ppb	13:08:31
2	Ni 231.604†	274.5	187.4	4.7793 ug/L	4.7793 ppb	13:08:31

2	P 214.914†	446.6	233.8	138.79 ug/L	138.79 ppb	13:08:31
2	Pb 220.353†	104.2	41.4	5.1749 ug/L	5.1749 ppb	13:08:31
2	S 181.975 Axial†	107.2	69.7	98.259 ug/L	98.259 ppb	13:08:31
2	Sb 206.836†	60.2	20.2	7.5393 ug/L	7.5393 ppb	13:08:31
2	Se 196.026†	26.2	50.5	33.411 ug/L	33.411 ppb	13:08:31
2	Si 251.611†	3711.0	3088.0	99.904 ug/L	99.904 ppb	13:08:11
2	Sn 189.927†	74.3	63.7	11.522 ug/L	11.522 ppb	13:08:31
2	Ti 334.940†	1765.9	3148.0	4.9314 ug/L	4.9314 ppb	13:08:11
2	Tl 190.801†	36.5	63.4	20.449 ug/L	20.449 ppb	13:08:31
2	U 409.014†	-1267.4	1654.4	46.181 ug/L	46.181 ppb	13:08:11
2	V 292.402†	-811.2	670.2	4.9160 ug/L	4.9160 ppb	13:08:11
2	Zn 213.857†	1886.8	1117.7	11.230 ug/L	11.230 ppb	13:08:31
2	SiO2†	3823.2	3174.9	220.13 ug/L	220.13 ppb	13:09:07
3	Sc Radial	3814.9	3814.9	98.9 %		13:07:39
3	Y RADIAL	4340.8	4340.8	97.51 %		13:07:19
3	Al 396.153Radial†	97.2	213.3	199.94 ug/L	199.94 ppb	13:07:19
3	Ca 317.933Radial†	112.1	94.7	206.51 ug/L	206.51 ppb	13:07:39
3	Fe 238.204 Radial†	19.1	7.6	123.28 ug/L	123.28 ppb	13:07:39
3	K 766.490 Radial†	3506.5	780.1	149.27 ug/L	149.27 ppb	13:07:19
3	Mg 279.077 IEC†	7.9	6.8	361.03 ug/L	361.03 ppb	13:07:39
3	Na 589.592 Radial†	-23.5	877.9	273.18 ug/L	273.18 ppb	13:07:19
3	Sr 421.552†	738.7	738.1	5.1332 ug/L	5.1332 ppb	13:07:19
3	Sc 361.383	901053.1	901053.1	102.38 %		13:08:36
3	Y 371.029	758912.2	758912.2	99.773 %		13:08:36
3	Ag 328.068†	1427.6	1160.2	5.4126 ug/L	5.4126 ppb	13:08:36
3	As 188.979†	44.5	63.4	28.240 ug/L	28.240 ppb	13:08:56
3	B 249.677†	1714.3	1952.4	47.820 ug/L	47.820 ppb	13:08:36
3	Ba 233.527†	671.0	644.3	5.0799 ug/L	5.0799 ppb	13:08:56
3	Be 313.107†	10136.8	13459.0	5.0402 ug/L	5.0402 ppb	13:08:36
3	Cd 226.502†	268.8	438.8	5.0975 ug/L	5.0975 ppb	13:08:56
3	Co 228.616†	158.2	219.4	4.6205 ug/L	4.6205 ppb	13:08:56
3	Cr 267.716†	516.2	419.1	4.7042 ug/L	4.7042 ppb	13:08:56
3	Cu 324.752†	9396.3	3222.4	9.8010 ug/L	9.8010 ppb	13:08:36
3	Mn 257.610†	9914.9	9206.4	10.486 ug/L	10.486 ppb	13:08:36
3	Mo 202.031†	151.9	143.6	10.592 ug/L	10.592 ppb	13:08:56
3	Ni 231.604†	279.3	190.1	4.8474 ug/L	4.8474 ppb	13:08:56
3	P 214.914†	458.2	241.7	143.48 ug/L	143.48 ppb	13:08:56
3	Pb 220.353†	81.1	18.0	2.2765 ug/L	2.2765 ppb	13:08:56
3	S 181.975 Axial†	116.8	78.2	110.23 ug/L	110.23 ppb	13:08:56
3	Sb 206.836†	64.3	23.8	8.7659 ug/L	8.7659 ppb	13:08:56
3	Se 196.026†	17.2	41.6	27.724 ug/L	27.724 ppb	13:08:56
3	Si 251.611†	3778.5	3125.8	101.13 ug/L	101.13 ppb	13:08:36
3	Sn 189.927†	66.3	55.3	10.007 ug/L	10.007 ppb	13:08:56
3	Ti 334.940†	1834.2	3201.4	5.0218 ug/L	5.0218 ppb	13:08:36
3	Tl 190.801†	38.6	65.1	21.016 ug/L	21.016 ppb	13:08:56
3	U 409.014†	-1393.2	1541.1	43.009 ug/L	43.009 ppb	13:08:36
3	V 292.402†	-729.2	756.5	5.4984 ug/L	5.4984 ppb	13:08:36
3	Zn 213.857†	1794.6	1013.4	10.168 ug/L	10.168 ppb	13:08:56
3	SiO2†	3768.8	3092.9	214.44 ug/L	214.44 ppb	13:09:12

## Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	899342.1	102.19 %	0.523			0.51%
Sc Radial	3850.6	99.8 %	1.45			1.45%
Y 371.029	756551.6	99.463 %	0.5373			0.54%
Y RADIAL	4346.3	97.63 %	0.858			0.88%
Ag 328.068†	1130.6	5.2629 ug/L	0.19210	5.2629 ppb	0.19210	3.65%
QC value within limits for Ag 328.068 Recovery = 105.26%						
Al 396.153Radial†	219.7	205.97 ug/L	13.762	205.97 ppb	13.762	6.68%
QC value within limits for Al 396.153Radial Recovery = 102.99%						
As 188.979†	65.4	29.143 ug/L	1.3936	29.143 ppb	1.3936	4.78%
QC value within limits for As 188.979 Recovery = 97.14%						
B 249.677†	1954.6	47.876 ug/L	0.4573	47.876 ppb	0.4573	0.96%
QC value within limits for B 249.677 Recovery = 95.75%						
Ba 233.527†	652.2	5.1397 ug/L	0.06238	5.1397 ppb	0.06238	1.21%
QC value within limits for Ba 233.527 Recovery = 102.79%						
Be 313.107†	13408.0	5.0211 ug/L	0.02184	5.0211 ppb	0.02184	0.43%
QC value within limits for Be 313.107 Recovery = 100.42%						
Ca 317.933Radial†	97.5	212.57 ug/L	5.247	212.57 ppb	5.247	2.47%

QC value within limits for Ca 317.933 Radial Recovery = 106.29%							
Cd 226.502†	440.0	5.1147 ug/L	0.01558	5.1147 ppb	0.01558	0.30%	
QC value within limits for Cd 226.502 Recovery = 102.29%							
Co 228.616†	234.6	4.9400 ug/L	0.28568	4.9400 ppb	0.28568	5.78%	
QC value within limits for Co 228.616 Recovery = 98.80%							
Cr 267.716†	421.7	4.7301 ug/L	0.05710	4.7301 ppb	0.05710	1.21%	
QC value within limits for Cr 267.716 Recovery = 94.60%							
Cu 324.752†	3196.7	9.7198 ug/L	0.07762	9.7198 ppb	0.07762	0.80%	
QC value within limits for Cu 324.752 Recovery = 97.20%							
Fe 238.204 Radial†	6.0	96.577 ug/L	29.7902	96.577 ppb	29.7902	30.85%	
QC value within limits for Fe 238.204 Radial Recovery = 96.58%							
K 766.490 Radial†	808.5	154.70 ug/L	13.639	154.70 ppb	13.639	8.82%	
QC value within limits for K 766.490 Radial Recovery = 103.13%							
Mg 279.077 IEC†	7.6	401.34 ug/L	38.026	401.34 ppb	38.026	9.47%	
QC value greater than the upper limit for Mg 279.077 IEC Recovery = 133.78%							
Mn 257.610†	9228.7	10.507 ug/L	0.0503	10.507 ppb	0.0503	0.48%	
QC value within limits for Mn 257.610 Recovery = 105.07%							
Mo 202.031†	143.4	10.574 ug/L	0.3062	10.574 ppb	0.3062	2.90%	
QC value within limits for Mo 202.031 Recovery = 105.74%							
Na 589.592 Radial†	873.3	271.74 ug/L	7.649	271.74 ppb	7.649	2.81%	
QC value within limits for Na 589.592 Radial Recovery = 90.58%							
Ni 231.604†	193.3	4.9306 ug/L	0.20596	4.9306 ppb	0.20596	4.18%	
QC value within limits for Ni 231.604 Recovery = 98.61%							
P 214.914†	236.8	140.57 ug/L	2.539	140.57 ppb	2.539	1.81%	
QC value within limits for P 214.914 Recovery = 93.71%							
Pb 220.353†	31.9	3.9982 ug/L	1.52417	3.9982 ppb	1.52417	38.12%	
QC value less than the lower limit for Pb 220.353 Recovery = 39.98%							
S 181.975 Axial†	72.8	102.63 ug/L	6.605	102.63 ppb	6.605	6.44%	
QC value within limits for S 181.975 Axial Recovery = 102.63%							
Sb 206.836†	21.9	8.0928 ug/L	0.62200	8.0928 ppb	0.62200	7.69%	
QC value within limits for Sb 206.836 Recovery = 80.93%							
Se 196.026†	46.3	30.729 ug/L	2.8573	30.729 ppb	2.8573	9.30%	
QC value within limits for Se 196.026 Recovery = 102.43%							
Si 251.611†	3119.0	100.91 ug/L	0.916	100.91 ppb	0.916	0.91%	
QC value within limits for Si 251.611 Recovery = 100.91%							
Sn 189.927†	57.3	10.358 ug/L	1.0347	10.358 ppb	1.0347	9.99%	
QC value within limits for Sn 189.927 Recovery = 103.58%							
Sr 421.552†	710.3	4.9396 ug/L	0.21754	4.9396 ppb	0.21754	4.40%	
QC value within limits for Sr 421.552 Recovery = 98.79%							
Ti 334.940†	3183.0	4.9894 ug/L	0.05037	4.9894 ppb	0.05037	1.01%	
QC value within limits for Ti 334.940 Recovery = 99.79%							
Tl 190.801†	62.2	20.063 ug/L	1.1948	20.063 ppb	1.1948	5.96%	
QC value within limits for Tl 190.801 Recovery = 100.31%							
U 409.014†	1620.9	45.240 ug/L	1.9398	45.240 ppb	1.9398	4.29%	
QC value within limits for U 409.014 Recovery = 90.48%							
V 292.402†	677.0	4.9519 ug/L	0.52953	4.9519 ppb	0.52953	10.69%	
QC value within limits for V 292.402 Recovery = 99.04%							
Zn 213.857†	1143.6	11.486 ug/L	1.4627	11.486 ppb	1.4627	12.73%	
QC value within limits for Zn 213.857 Recovery = 114.86%							
SiO2†	3147.9	218.26 ug/L	3.308	218.26 ppb	3.308	1.52%	
QC value within limits for SiO2 Recovery = 102.47%							
QC Failed. Continue with analysis.							

Sequence No.: 9  
 Sample ID: ICSA  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 13  
 Date Collected: 2/25/2010 13:11:23  
 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	3516.8	3516.8	91.2 %		13:13:36
1	Y RADIAL	3851.0	3851.0	86.51 %		13:13:36
1	Al 396.153Radial†	512124.4	561772.4	527950 ug/L	527950 ppb	13:13:16
1	Ca 317.933Radial†	205043.0	224856.1	490350 ug/L	490350 ppb	13:13:16
1	Fe 238.204 Radial†	10540.7	11548.5	186630 ug/L	186630 ppb	13:13:36
1	K 766.490 Radial†	2375.9	-159.3	-194.54 ug/L	-194.54 ppb	13:13:16
1	Mg 279.077 IEC†	8643.7	9478.5	500000 ug/L	500000 ppb	13:13:36
1	Na 589.592 Radial†	-763.4	64.4	20.041 ug/L	20.041 ppb	13:13:36
1	Sr 421.552†	507.6	548.0	0.1505 ug/L	0.1505 ppb	13:13:36
1	Sc 361.383	776594.5	776594.5	88.242 %		13:14:34
1	Y 371.029	636459.0	636459.0	83.675 %		13:14:34
1	Ag 328.068†	-9986.1	-11550.9	-2.9488 ug/L	-2.9488 ppb	13:14:34
1	As 188.979†	-82.9	-74.0	10.658 ug/L	10.658 ppb	13:14:54
1	B 249.677†	547.8	898.8	-8.2804 ug/L	-8.2804 ppb	13:14:34
1	Ba 233.527†	-566.1	-652.6	0.5857 ug/L	0.5857 ppb	13:14:54
1	Be 313.107†	-4021.8	-999.4	-0.4230 ug/L	-0.4230 ppb	13:14:34
1	Cd 226.502†	1198.7	1534.6	-1.4332 ug/L	-1.4332 ppb	13:14:54
1	Co 228.616†	-18.3	44.2	-1.7674 ug/L	-1.7674 ppb	13:14:54
1	Cr 267.716†	-1328.4	-1590.6	-0.0936 ug/L	-0.0936 ppb	13:14:54
1	Cu 324.752†	3059.0	-2488.5	2.2700 ug/L	2.2700 ppb	13:14:34
1	Mn 257.610†	1007.3	663.8	-1.2626 ug/L	-1.2626 ppb	13:14:34
1	Mo 202.031†	-256.3	-295.2	-1.4175 ug/L	-1.4175 ppb	13:14:54
1	Ni 231.604†	182.2	123.7	3.1551 ug/L	3.1551 ppb	13:14:54
1	P 214.914†	168.3	-15.1	-26.963 ug/L	-26.963 ppb	13:14:54
1	Pb 220.353†	-748.0	-908.8	-15.831 ug/L	-15.831 ppb	13:14:54
1	S 181.975 Axial†	62.7	35.2	-49.369 ug/L	-49.369 ppb	13:14:54
1	Sb 206.836†	80.9	52.7	0.8027 ug/L	0.8027 ppb	13:14:54
1	Se 196.026†	-858.5	-948.2	-46.155 ug/L	-46.155 ppb	13:14:54
1	Si 251.611†	499.4	1.3	0.3081 ug/L	0.3081 ppb	13:14:54
1	Sn 189.927†	-354.7	-411.4	2.2179 ug/L	2.2179 ppb	13:14:54
1	Ti 334.940†	-13483.9	-13870.7	3.0447 ug/L	3.0447 ppb	13:14:34
1	Tl 190.801†	-74.8	-57.3	-18.649 ug/L	-18.649 ppb	13:14:54
1	U 409.014†	-1061.1	1699.3	26.217 ug/L	26.217 ppb	13:14:34
1	V 292.402†	825.6	2404.3	-0.9114 ug/L	-0.9114 ppb	13:14:54
1	Zn 213.857†	2867.4	2510.1	-2.5985 ug/L	-2.5985 ppb	13:14:54
1	SiO2†	544.0	28.3	2.5577 ug/L	2.5577 ppb	13:15:50
2	Sc Radial	3499.3	3499.3	90.7 %		13:14:02
2	Y RADIAL	3852.6	3852.6	86.54 %		13:14:02
2	Al 396.153Radial†	516438.1	569344.8	535070 ug/L	535070 ppb	13:13:42
2	Ca 317.933Radial†	206409.9	227491.0	496100 ug/L	496100 ppb	13:13:42
2	Fe 238.204 Radial†	10509.1	11571.7	187000 ug/L	187000 ppb	13:14:02
2	K 766.490 Radial†	2376.8	-145.3	-193.77 ug/L	-193.77 ppb	13:13:42
2	Mg 279.077 IEC†	8605.7	9484.2	500290 ug/L	500290 ppb	13:14:02
2	Na 589.592 Radial†	-773.8	48.8	15.184 ug/L	15.184 ppb	13:14:02
2	Sr 421.552†	504.3	547.1	0.1015 ug/L	0.1015 ppb	13:14:02
2	Sc 361.383	778719.7	778719.7	88.484 %		13:14:59
2	Y 371.029	637401.9	637401.9	83.799 %		13:14:59
2	Ag 328.068†	-10017.8	-11555.8	-2.9304 ug/L	-2.9304 ppb	13:14:59
2	As 188.979†	-77.7	-67.9	13.490 ug/L	13.490 ppb	13:15:19
2	B 249.677†	514.9	859.9	-9.2953 ug/L	-9.2953 ppb	13:14:59
2	Ba 233.527†	-582.0	-668.8	0.4696 ug/L	0.4696 ppb	13:15:19
2	Be 313.107†	-4011.7	-975.6	-0.4132 ug/L	-0.4132 ppb	13:14:59
2	Cd 226.502†	1206.1	1539.3	-1.4176 ug/L	-1.4176 ppb	13:15:19
2	Co 228.616†	3.2	68.5	-1.2577 ug/L	-1.2577 ppb	13:15:19
2	Cr 267.716†	-1316.7	-1573.2	0.1391 ug/L	0.1391 ppb	13:15:19
2	Cu 324.752†	3036.9	-2522.9	2.1882 ug/L	2.1882 ppb	13:14:59
2	Mn 257.610†	974.1	623.2	-1.2840 ug/L	-1.2840 ppb	13:14:59
2	Mo 202.031†	-228.2	-262.6	1.0788 ug/L	1.0788 ppb	13:15:19
2	Ni 231.604†	197.2	-140.1	3.5751 ug/L	3.5751 ppb	13:15:19



2	P 214.914†	167.3	-16.7	-26.390 ug/L	-26.390 ppb	13:15:19
2	Pb 220.353†	-745.3	-903.5	-13.650 ug/L	-13.650 ppb	13:15:19
2	S 181.975 Axial†	67.6	40.6	-43.037 ug/L	-43.037 ppb	13:15:19
2	Sb 206.836†	77.5	48.6	-0.7479 ug/L	-0.7479 ppb	13:15:19
2	Se 196.026†	-865.2	-953.1	-48.312 ug/L	-48.312 ppb	13:15:19
2	Si 251.611†	491.8	-8.9	-0.0490 ug/L	-0.0490 ppb	13:15:19
2	Sn 189.927†	-339.1	-392.7	6.5805 ug/L	6.5805 ppb	13:15:19
2	Ti 334.940†	-13286.3	-13605.7	4.2113 ug/L	4.2113 ppb	13:14:59
2	Tl 190.801†	-81.6	-64.8	-21.064 ug/L	-21.064 ppb	13:15:19
2	U 409.014†	-1253.7	1484.9	20.186 ug/L	20.186 ppb	13:14:59
2	V 292.402†	812.8	2387.3	-1.0569 ug/L	-1.0569 ppb	13:15:19
2	Zn 213.857†	2860.5	2493.4	-2.8254 ug/L	-2.8254 ppb	13:15:19
2	SiO2†	503.9	-18.7	-0.7710 ug/L	-0.7710 ppb	13:15:55
3	Sc Radial	3514.5	3514.5	91.1 %		13:14:27
3	Y RADIAL	3875.9	3875.9	87.07 %		13:14:27
3	Al 396.153Radial†	513660.9	563821.6	529880 ug/L	529880 ppb	13:14:07
3	Ca 317.933Radial†	204750.2	224680.2	489970 ug/L	489970 ppb	13:14:07
3	Fe 238.204 Radial†	10586.5	11606.3	187560 ug/L	187560 ppb	13:14:27
3	K 766.490 Radial†	2531.0	12.5	-161.50 ug/L	-161.50 ppb	13:14:07
3	Mg 279.077 IEC†	8656.8	9499.0	501080 ug/L	501080 ppb	13:14:27
3	Na 589.592 Radial†	-724.1	107.0	33.293 ug/L	33.293 ppb	13:14:27
3	Sr 421.552†	493.8	533.1	0.0503 ug/L	0.0503 ppb	13:14:27
3	Sc 361.383	784074.2	784074.2	89.092 %		13:15:25
3	Y 371.029	643503.1	643503.1	84.601 %		13:15:25
3	Ag 328.068†	-9896.1	-11341.9	-1.6837 ug/L	-1.6837 ppb	13:15:25
3	As 188.979†	-96.5	-88.3	4.5092 ug/L	4.5092 ppb	13:15:45
3	B 249.677†	537.4	881.2	-8.8657 ug/L	-8.8657 ppb	13:15:25
3	Ba 233.527†	-576.0	-657.5	0.5737 ug/L	0.5737 ppb	13:15:45
3	Be 313.107†	-3936.2	-859.8	-0.3706 ug/L	-0.3706 ppb	13:15:25
3	Cd 226.502†	1189.0	1510.7	-1.8081 ug/L	-1.8081 ppb	13:15:45
3	Co 228.616†	2.4	67.5	-1.2857 ug/L	-1.2857 ppb	13:15:45
3	Cr 267.716†	-1354.4	-1605.3	-0.1691 ug/L	-0.1691 ppb	13:15:45
3	Cu 324.752†	2927.7	-2668.9	1.7728 ug/L	1.7728 ppb	13:15:25
3	Mn 257.610†	753.9	368.5	-1.5509 ug/L	-1.5509 ppb	13:15:25
3	Mo 202.031†	-232.5	-265.7	0.8201 ug/L	0.8201 ppb	13:15:45
3	Ni 231.604†	169.0	106.9	2.7270 ug/L	2.7270 ppb	13:15:45
3	P 214.914†	170.5	-14.4	-26.645 ug/L	-26.645 ppb	13:15:45
3	Pb 220.353†	-736.1	-887.5	-12.890 ug/L	-12.890 ppb	13:15:45
3	S 181.975 Axial†	80.5	54.6	-22.371 ug/L	-22.371 ppb	13:15:45
3	Sb 206.836†	50.8	18.0	-11.378 ug/L	-11.378 ppb	13:15:45
3	Se 196.026†	-878.3	-961.1	-51.778 ug/L	-51.778 ppb	13:15:45
3	Si 251.611†	502.4	-0.8	0.2152 ug/L	0.2152 ppb	13:15:45
3	Sn 189.927†	-335.7	-386.2	6.6395 ug/L	6.6395 ppb	13:15:45
3	Ti 334.940†	-13538.4	-13786.1	3.0410 ug/L	3.0410 ppb	13:15:25
3	Tl 190.801†	-61.8	-41.9	-13.683 ug/L	-13.683 ppb	13:15:45
3	U 409.014†	-1255.9	1492.2	20.327 ug/L	20.327 ppb	13:15:25
3	V 292.402†	743.6	2303.3	-1.7123 ug/L	-1.7123 ppb	13:15:45
3	Zn 213.857†	2889.4	2503.7	-2.7992 ug/L	-2.7992 ppb	13:15:45
3	SiO2†	485.2	-43.6	-2.4972 ug/L	-2.4972 ppb	13:16:00

## Mean Data: ICSEA

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	779796.2	88.606 %	0.4380			0.49%
Sc Radial	3510.2	91.0 %	0.25			0.27%
Y 371.029	639121.3	84.025 %	0.5027			0.60%
Y RADIAL	3859.8	86.70 %	0.313			0.36%
Ag 328.068†	-11482.9	-2.5209 ug/L	0.72516	-2.5209 ppb	0.72516	28.77%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	564979.6	530970 ug/L	3680.9	530970 ppb	3680.9	0.69%
QC value within limits for Al 396.153Radial Recovery = 106.19%						
As 188.979†	-76.7	9.5526 ug/L	4.59153	9.5526 ppb	4.59153	48.07%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	880.0	-8.8138 ug/L	0.50947	-8.8138 ppb	0.50947	5.78%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	-659.6	0.5430 ug/L	0.06381	0.5430 ppb	0.06381	11.75%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	-945.0	-0.4023 ug/L	0.02789	-0.4023 ppb	0.02789	6.93%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	225675.8	492140 ug/L	3433.5	492140 ppb	3433.5	0.70%

QC value within limits for Ca 317.933 Radial Recovery = 98.43%							
Cd 226.502†	1528.2	-1.5529 ug/L	0.22109	-1.5529 ppb	0.22109	14.24%	
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	60.0	-1.4369 ug/L	0.28653	-1.4369 ppb	0.28653	19.94%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	-1589.7	-0.0412 ug/L	0.16064	-0.0412 ppb	0.16064	389.71%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	-2560.1	2.0770 ug/L	0.26659	2.0770 ppb	0.26659	12.84%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	11575.5	187060 ug/L	470.0	187060 ppb	470.0	0.25%	
QC value within limits for Fe 238.204 Radial Recovery = 93.53%							
K 766.490 Radial†	-97.4	-183.27 ug/L	18.859	-183.27 ppb	18.859	10.29%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	9487.2	500450 ug/L	557.7	500450 ppb	557.7	0.11%	
QC value within limits for Mg 279.077 IEC Recovery = 100.09%							
Mn 257.610†	551.8	-1.3658 ug/L	0.16064	-1.3658 ppb	0.16064	11.76%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	-274.5	0.1605 ug/L	1.37265	0.1605 ppb	1.37265	855.35%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	73.4	22.839 ug/L	9.3736	22.839 ppb	9.3736	41.04%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	123.6	3.1524 ug/L	0.42404	3.1524 ppb	0.42404	13.45%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	-15.4	-26.666 ug/L	0.2870	-26.666 ppb	0.2870	1.08%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	-899.9	-14.124 ug/L	1.5267	-14.124 ppb	1.5267	10.81%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	43.4	-38.259 ug/L	14.1188	-38.259 ppb	14.1188	36.90%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	39.8	-3.7744 ug/L	6.63034	-3.7744 ppb	6.63034	175.67%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	-954.1	-48.748 ug/L	2.8368	-48.748 ppb	2.8368	5.82%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	-2.8	0.1581 ug/L	0.18527	0.1581 ppb	0.18527	117.17%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	-396.7	5.1459 ug/L	2.53597	5.1459 ppb	2.53597	49.28%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	542.7	0.1008 ug/L	0.05013	0.1008 ppb	0.05013	49.75%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	-13754.1	3.4324 ug/L	0.67461	3.4324 ppb	0.67461	19.65%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	-54.7	-17.798 ug/L	3.7633	-17.798 ppb	3.7633	21.14%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	1558.8	22.243 ug/L	3.4419	22.243 ppb	3.4419	15.47%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	2365.0	-1.2268 ug/L	0.42663	-1.2268 ppb	0.42663	34.77%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	2502.4	-2.7411 ug/L	0.12411	-2.7411 ppb	0.12411	4.53%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†	-11.3	-0.2368 ug/L	2.56942	-0.2368 ppb	2.56942	>999.9%	
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: 2/25/2010 13:18:12  
 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	3513.3	3513.3	91.1 %		13:20:25
1	Y RADIAL	3875.0	3875.0	87.05 %		13:20:25
1	Al 396.153Radial†	512153.2	562373.6	528490 ug/L	528490 ppb	13:20:05
1	Ca 317.933Radial†	205399.9	225476.0	491700 ug/L	491700 ppb	13:20:05
1	Fe 238.204 Radial†	10618.9	11646.1	188220 ug/L	188220 ppb	13:20:25
1	K 766.490 Radial†	29267.8	29366.1	5459.0 ug/L	5459.0 ppb	13:20:05
1	Mg 279.077 IEC†	8604.2	9444.8	498220 ug/L	498220 ppb	13:20:25
1	Na 589.592 Radial†	14934.8	17297.6	5382.4 ug/L	5382.4 ppb	13:20:05
1	Sr 421.552†	65939.7	72382.1	499.86 ug/L	499.86 ppb	13:20:05
1	Sc 361.383	782319.6	782319.6	88.893 %		13:21:23
1	Y 371.029	640245.9	640245.9	84.173 %		13:21:23
1	Ag 328.068†	40921.5	45800.6	265.64 ug/L	265.64 ppb	13:21:23
1	As 188.979†	919.7	1054.6	516.11 ug/L	516.11 ppb	13:21:43
1	B 249.677†	18984.2	21634.3	498.44 ug/L	498.44 ppb	13:21:23
1	Ba 233.527†	54226.9	60991.7	486.26 ug/L	486.26 ppb	13:21:23
1	Be 313.107†	572334.6	647408.0	242.99 ug/L	242.99 ppb	13:21:23
1	Cd 226.502†	35907.0	40569.8	452.39 ug/L	452.39 ppb	13:21:43
1	Co 228.616†	18357.4	20716.0	432.50 ug/L	432.50 ppb	13:21:43
1	Cr 267.716†	36131.0	40560.6	473.53 ug/L	473.53 ppb	13:21:23
1	Cu 324.752†	158733.5	172612.7	535.60 ug/L	535.60 ppb	13:21:23
1	Mn 257.610†	371879.7	417869.7	474.27 ug/L	474.27 ppb	13:21:23
1	Mo 202.031†	5594.1	6288.4	483.63 ug/L	483.63 ppb	13:21:43
1	Ni 231.604†	15368.0	17205.5	438.83 ug/L	438.83 ppb	13:21:43
1	P 214.914†	3884.8	4164.4	2384.1 ug/L	2384.1 ppb	13:21:43
1	Pb 220.353†	2597.2	2860.5	451.33 ug/L	451.33 ppb	13:21:43
1	S 181.975 Axial†	1714.1	1892.4	2569.2 ug/L	2569.2 ppb	13:21:43
1	Sb 206.836†	1392.5	1527.4	538.68 ug/L	538.68 ppb	13:21:43
1	Se 196.026†	2548.1	2891.2	2483.4 ug/L	2483.4 ppb	13:21:43
1	Si 251.611†	141887.6	159052.2	5146.9 ug/L	5146.9 ppb	13:21:23
1	Sn 189.927†	2039.2	2284.6	488.53 ug/L	488.53 ppb	13:21:43
1	Ti 334.940†	272124.4	307537.2	509.42 ug/L	509.42 ppb	13:21:23
1	Tl 190.801†	1200.9	1378.4	446.79 ug/L	446.79 ppb	13:21:43
1	U 409.014†	13691.8	18304.5	488.66 ug/L	488.66 ppb	13:21:23
1	V 292.402†	63473.7	72873.6	498.15 ug/L	498.15 ppb	13:21:23
1	Zn 213.857†	45960.0	50963.4	482.83 ug/L	482.83 ppb	13:21:23
1	SiO2†	142505.8	159724.1	11077 ug/L	11077 ppb	13:22:41
2	Sc Radial	3546.1	3546.1	91.9 %		13:20:50
2	Y RADIAL	3889.8	3889.8	87.38 %		13:20:50
2	Al 396.153Radial†	509339.0	554108.6	520730 ug/L	520730 ppb	13:20:30
2	Ca 317.933Radial†	203931.3	221791.7	483670 ug/L	483670 ppb	13:20:30
2	Fe 238.204 Radial†	10648.6	11570.5	187000 ug/L	187000 ppb	13:20:50
2	K 766.490 Radial†	29106.3	28893.1	5371.1 ug/L	5371.1 ppb	13:20:30
2	Mg 279.077 IEC†	8651.7	9409.0	496330 ug/L	496330 ppb	13:20:50
2	Na 589.592 Radial†	14773.9	16970.9	5280.7 ug/L	5280.7 ppb	13:20:30
2	Sr 421.552†	65581.6	71322.5	492.55 ug/L	492.55 ppb	13:20:30
2	Sc 361.383	784901.8	784901.8	89.186 %		13:21:49
2	Y 371.029	641411.4	641411.4	84.326 %		13:21:49
2	Ag 328.068†	40951.6	45682.9	264.82 ug/L	264.82 ppb	13:21:49
2	As 188.979†	915.0	1045.9	511.97 ug/L	511.97 ppb	13:22:09
2	B 249.677†	19121.4	21717.9	500.69 ug/L	500.69 ppb	13:21:49
2	Ba 233.527†	54324.6	60900.5	485.51 ug/L	485.51 ppb	13:21:49
2	Be 313.107†	574294.3	647487.1	243.02 ug/L	243.02 ppb	13:21:49
2	Cd 226.502†	35980.5	40519.4	451.93 ug/L	451.93 ppb	13:22:09
2	Co 228.616†	18395.5	20690.8	431.98 ug/L	431.98 ppb	13:22:09
2	Cr 267.716†	36164.0	40463.9	472.33 ug/L	472.33 ppb	13:21:49
2	Cu 324.752†	159413.3	172787.4	536.07 ug/L	536.07 ppb	13:21:49
2	Mn 257.610†	372746.1	417464.8	473.77 ug/L	473.77 ppb	13:21:49
2	Mo 202.031†	5603.7	6278.4	482.71 ug/L	482.71 ppb	13:22:09
2	Ni 231.604†	15376.2	17157.8	437.61 ug/L	437.61 ppb	13:22:09

2	P 214.914†	3878.4	4142.8	2370.0 ug/L	2370.0 ppb	13:22:09
2	Pb 220.353†	2591.9	2845.0	447.82 ug/L	447.82 ppb	13:22:09
2	S 181.975 Axial†	1716.5	1888.8	2565.5 ug/L	2565.5 ppb	13:22:09
2	Sb 206.836†	1414.0	1546.5	545.60 ug/L	545.60 ppb	13:22:09
2	Se 196.026†	2547.1	2880.7	2472.8 ug/L	2472.8 ppb	13:22:09
2	Si 251.611†	142214.6	158893.7	5141.8 ug/L	5141.8 ppb	13:21:49
2	Sn 189.927†	2046.2	2284.9	487.23 ug/L	487.23 ppb	13:22:09
2	Ti 334.940†	272971.9	307480.3	508.40 ug/L	508.40 ppb	13:21:49
2	Tl 190.801†	1184.6	1355.7	439.48 ug/L	439.48 ppb	13:22:09
2	U 409.014†	13809.4	18385.7	491.07 ug/L	491.07 ppb	13:21:49
2	V 292.402†	63754.3	72953.4	498.84 ug/L	498.84 ppb	13:21:49
2	Zn 213.857†	46053.9	50898.5	482.36 ug/L	482.36 ppb	13:21:49
2	SiO2†	142304.4	158971.0	11024 ug/L	11024 ppb	13:22:46
3	Sc Radial	3521.8	3521.8	91.3 %		13:21:16
3	Y RADIAL	3862.6	3862.6	86.77 %		13:21:16
3	Al 396.153Radial†	507164.7	555553.4	522080 ug/L	522080 ppb	13:20:56
3	Ca 317.933Radial†	202842.9	222131.5	484410 ug/L	484410 ppb	13:20:56
3	Fe 238.204 Radial†	10603.7	11601.4	187500 ug/L	187500 ppb	13:21:16
3	K 766.490 Radial†	28957.6	28948.8	5381.5 ug/L	5381.5 ppb	13:20:56
3	Mg 279.077 IEC†	8626.6	9446.5	498310 ug/L	498310 ppb	13:21:16
3	Na 589.592 Radial†	14654.6	16951.2	5274.6 ug/L	5274.6 ppb	13:20:56
3	Sr 421.552†	64941.8	71114.5	491.10 ug/L	491.10 ppb	13:20:56
3	Sc 361.383	785255.2	785255.2	89.226 %		13:22:15
3	Y 371.029	643966.9	643966.9	84.662 %		13:22:15
3	Ag 328.068†	41141.5	45875.1	265.86 ug/L	265.86 ppb	13:22:15
3	As 188.979†	920.8	1051.9	514.74 ug/L	514.74 ppb	13:22:35
3	B 249.677†	19147.3	21737.3	501.10 ug/L	501.10 ppb	13:22:15
3	Ba 233.527†	54245.1	60784.0	484.61 ug/L	484.61 ppb	13:22:15
3	Be 313.107†	575688.4	648759.7	243.50 ug/L	243.50 ppb	13:22:15
3	Cd 226.502†	35725.2	40215.1	448.34 ug/L	448.34 ppb	13:22:35
3	Co 228.616†	18229.5	20495.5	427.87 ug/L	427.87 ppb	13:22:35
3	Cr 267.716†	36244.9	40536.3	473.19 ug/L	473.19 ppb	13:22:15
3	Cu 324.752†	159459.1	172758.3	536.01 ug/L	536.01 ppb	13:22:15
3	Mn 257.610†	372233.6	416702.3	472.87 ug/L	472.87 ppb	13:22:15
3	Mo 202.031†	5576.8	6245.5	480.33 ug/L	480.33 ppb	13:22:35
3	Ni 231.604†	15236.2	16993.1	433.41 ug/L	433.41 ppb	13:22:35
3	P 214.914†	3857.4	4117.3	2354.6 ug/L	2354.6 ppb	13:22:35
3	Pb 220.353†	2569.2	2818.2	444.74 ug/L	444.74 ppb	13:22:35
3	S 181.975 Axial†	1700.4	1869.9	2538.6 ug/L	2538.6 ppb	13:22:35
3	Sb 206.836†	1398.1	1527.9	538.89 ug/L	538.89 ppb	13:22:35
3	Se 196.026†	2533.6	2864.2	2463.5 ug/L	2463.5 ppb	13:22:35
3	Si 251.611†	142070.7	158660.7	5134.2 ug/L	5134.2 ppb	13:22:15
3	Sn 189.927†	2028.4	2264.0	483.55 ug/L	483.55 ppb	13:22:35
3	Ti 334.940†	272791.7	307140.6	507.81 ug/L	507.81 ppb	13:22:15
3	Tl 190.801†	1170.4	1339.1	434.15 ug/L	434.15 ppb	13:22:35
3	U 409.014†	13885.1	18463.6	493.19 ug/L	493.19 ppb	13:22:15
3	V 292.402†	63705.0	72866.0	498.16 ug/L	498.16 ppb	13:22:15
3	Zn 213.857†	46002.3	50817.6	481.49 ug/L	481.49 ppb	13:22:15
3	SiO2†	142989.0	159666.4	11073 ug/L	11073 ppb	13:22:51

## Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	784158.8	89.102 %	0.1821			0.20%
Sc Radial	3527.0	91.4 %	0.44			0.48%
Y 371.029	641874.7	84.387 %	0.2502			0.30%
Y RADIAL	3875.8	87.06 %	0.307			0.35%
Ag 328.068†	45786.2	265.44 ug/L	0.544	265.44 ppb	0.544	0.20%
QC value within limits for Ag 328.068 Recovery = 106.18%						
Al 396.153Radial†	557345.2	523770 ug/L	4148.4	523770 ppb	4148.4	0.79%
QC value within limits for Al 396.153Radial Recovery = 104.75%						
As 188.979†	1050.8	514.27 ug/L	2.109	514.27 ppb	2.109	0.41%
QC value within limits for As 188.979 Recovery = 102.85%						
B 249.677†	21696.5	500.08 ug/L	1.430	500.08 ppb	1.430	0.29%
QC value within limits for B 249.677 Recovery = 100.02%						
Ba 233.527†	60892.1	485.46 ug/L	0.828	485.46 ppb	0.828	0.17%
QC value within limits for Ba 233.527 Recovery = 97.09%						
Be 313.107†	647884.9	243.17 ug/L	0.283	243.17 ppb	0.283	0.12%
QC value within limits for Be 313.107 Recovery = 97.27%						
Ca 317.933Radial†	223133.1	486590 ug/L	4440.3	486590 ppb	4440.3	0.91%

QC value within limits for Ca 317.933 Radial Recovery = 97.32%

Cd 226.502†	40434.8	450.89 ug/L	2.217	450.89 ppb	2.217	0.49%
QC value within limits for Cd 226.502 Recovery = 90.18%						
Co 228.616†	20634.1	430.78 ug/L	2.537	430.78 ppb	2.537	0.59%
QC value within limits for Co 228.616 Recovery = 86.16%						
Cr 267.716†	40520.3	473.02 ug/L	0.619	473.02 ppb	0.619	0.13%
QC value within limits for Cr 267.716 Recovery = 94.60%						
Cu 324.752†	172719.5	535.89 ug/L	0.253	535.89 ppb	0.253	0.05%
QC value within limits for Cu 324.752 Recovery = 107.18%						
Fe 238.204 Radial†	11606.0	187570 ug/L	613.8	187570 ppb	613.8	0.33%
QC value within limits for Fe 238.204 Radial Recovery = 93.78%						
K 766.490 Radial†	29069.3	5403.8 ug/L	48.02	5403.8 ppb	48.02	0.89%
QC value within limits for K 766.490 Radial Recovery = 108.08%						
Mg 279.077 IEC†	9433.4	497620 ug/L	1117.1	497620 ppb	1117.1	0.22%
QC value within limits for Mg 279.077 IEC Recovery = 99.52%						
Mn 257.610†	417345.6	473.64 ug/L	0.712	473.64 ppb	0.712	0.15%
QC value within limits for Mn 257.610 Recovery = 94.73%						
Mo 202.031†	6270.8	482.22 ug/L	1.705	482.22 ppb	1.705	0.35%
QC value within limits for Mo 202.031 Recovery = 96.44%						
Na 589.592 Radial†	17073.2	5312.6 ug/L	60.55	5312.6 ppb	60.55	1.14%
QC value within limits for Na 589.592 Radial Recovery = 106.25%						
Ni 231.604†	17118.8	436.61 ug/L	2.842	436.61 ppb	2.842	0.65%
QC value within limits for Ni 231.604 Recovery = 87.32%						
P 214.914†	4141.5	2369.6 ug/L	14.74	2369.6 ppb	14.74	0.62%
QC value within limits for P 214.914 Recovery = 94.78%						
Pb 220.353†	2841.2	447.96 ug/L	3.300	447.96 ppb	3.300	0.74%
QC value within limits for Pb 220.353 Recovery = 89.59%						
S 181.975 Axial†	1883.7	2557.8 ug/L	16.71	2557.8 ppb	16.71	0.65%
QC value within limits for S 181.975 Axial Recovery = 102.31%						
Sb 206.836†	1533.9	541.06 ug/L	3.935	541.06 ppb	3.935	0.73%
QC value within limits for Sb 206.836 Recovery = 108.21%						
Se 196.026†	2878.7	2473.2 ug/L	9.99	2473.2 ppb	9.99	0.40%
QC value within limits for Se 196.026 Recovery = 98.93%						
Si 251.611†	158868.9	5141.0 ug/L	6.36	5141.0 ppb	6.36	0.12%
QC value within limits for Si 251.611 Recovery = 102.82%						
Sn 189.927†	2277.8	486.44 ug/L	2.581	486.44 ppb	2.581	0.53%
QC value within limits for Sn 189.927 Recovery = 97.29%						
Sr 421.552†	71606.3	494.51 ug/L	4.697	494.51 ppb	4.697	0.95%
QC value within limits for Sr 421.552 Recovery = 98.90%						
Ti 334.940†	307386.0	508.54 ug/L	0.815	508.54 ppb	0.815	0.16%
QC value within limits for Ti 334.940 Recovery = 101.71%						
Tl 190.801†	1357.7	440.14 ug/L	6.344	440.14 ppb	6.344	1.44%
QC value within limits for Tl 190.801 Recovery = 88.03%						
U 409.014†	18384.6	490.97 ug/L	2.264	490.97 ppb	2.264	0.46%
QC value within limits for U 409.014 Recovery = 98.19%						
V 292.402†	72897.6	498.38 ug/L	0.395	498.38 ppb	0.395	0.08%
QC value within limits for V 292.402 Recovery = 99.68%						
Zn 213.857†	50893.2	482.23 ug/L	0.675	482.23 ppb	0.675	0.14%
QC value within limits for Zn 213.857 Recovery = 96.45%						
SiO2†	159453.8	11058 ug/L	29.1	11058 ppb	29.1	0.26%
QC value within limits for SiO2 Recovery = 103.39%						

All analyte(s) passed QC.

Sequence No.: 11  
 Sample ID: LR1  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 15  
 Date Collected: 2/25/2010 13:25:01  
 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	3553.2	3553.2	92.1 %		13:27:14
1	Y RADIAL	3936.1	3936.1	88.42 %		13:27:14
1	Al 396.153Radial†	492600.4	534834.6	502640 ug/L	502640 ppb	13:26:54
1	Ca 317.933Radial†	197343.5	214198.4	467110 ug/L	467110 ppb	13:26:54
1	Fe 238.204 Radial†	24241.3	26302.3	425050 ug/L	425050 ppb	13:27:14
1	K 766.490 Radial†	3394.9	920.1	-172.35 ug/L	-172.35 ppb	13:26:54
1	Mg 279.077 IEC†	8333.3	9044.7	476850 ug/L	476850 ppb	13:27:14
1	Na 589.592 Radial†	1459646.4	1585353.1	493300 ug/L	493300 ppb	13:26:54
1	Sr 421.552†	718.4	771.1	1.8765 ug/L	1.8765 ppb	13:27:14
1	Sc 361.383	759227.4	759227.4	86.269 %		13:28:12
1	Y 371.029	625373.1	625373.1	82.217 %		13:28:12
1	Ag 328.068†	-22970.0	-26860.2	-11.287 ug/L	-11.287 ppb	13:28:12
1	As 188.979†	-196.9	-208.3	6.9407 ug/L	6.9407 ppb	13:28:33
1	B 249.677†	1658.2	2200.2	-15.121 ug/L	-15.121 ppb	13:28:12
1	Ba 233.527†	-1635.3	-1906.6	-1.9879 ug/L	-1.9879 ppb	13:28:33
1	Be 313.107†	-9559.3	-7522.6	-2.8413 ug/L	-2.8413 ppb	13:28:12
1	Cd 226.502†	3059.6	3722.8	1.9587 ug/L	1.9587 ppb	13:28:33
1	Co 228.616†	227.6	328.6	0.6923 ug/L	0.6923 ppb	13:28:33
1	Cr 267.716†	-1168.4	-1439.5	19.025 ug/L	19.025 ppb	13:28:33
1	Cu 324.752†	388.9	-5504.3	-1.6594 ug/L	-1.6594 ppb	13:28:12
1	Mn 257.610†	-20250.1	-23951.0	-4.8206 ug/L	-4.8206 ppb	13:28:12
1	Mo 202.031†	-495.0	-578.4	-4.0496 ug/L	-4.0496 ppb	13:28:33
1	Ni 231.604†	279.7	241.4	6.1571 ug/L	6.1571 ppb	13:28:33
1	P 214.914†	537.7	417.5	36.648 ug/L	36.648 ppb	13:28:33
1	Pb 220.353†	-462.4	-597.2	-8.6933 ug/L	-8.6933 ppb	13:28:33
1	S 181.975 Axial†	74.2	50.1	-23.512 ug/L	-23.512 ppb	13:28:33
1	Sb 206.836†	69.5	41.5	-5.5938 ug/L	-5.5938 ppb	13:28:33
1	Se 196.026†	-1947.4	-2232.6	-146.42 ug/L	-146.42 ppb	13:28:33
1	Si 251.611†	-446.5	-1082.2	-34.535 ug/L	-34.535 ppb	13:28:33
1	Sn 189.927†	-369.0	-437.1	-20.247 ug/L	-20.247 ppb	13:28:33
1	Ti 334.940†	-8581.5	-8537.5	4.3615 ug/L	4.3615 ppb	13:28:12
1	Tl 190.801†	-97.4	-85.5	-27.821 ug/L	-27.821 ppb	13:28:33
1	U 409.014†	409715.3	477831.2	13295 ug/L	13295 ppb	13:28:12
1	V 292.402†	2472.0	4334.2	2.5441 ug/L	2.5441 ppb	13:28:33
1	Zn 213.857†	5262.5	5360.6	-9.5081 ug/L	-9.5081 ppb	13:28:33
1	SiO2†	-402.7	-1055.0	-72.082 ug/L	-72.082 ppb	13:29:29
2	Sc Radial	3479.0	3479.0	90.2 %		13:27:40
2	Y RADIAL	3870.2	3870.2	86.94 %		13:27:40
2	Al 396.153Radial†	485998.8	538908.2	506460 ug/L	506460 ppb	13:27:20
2	Ca 317.933Radial†	194518.3	215630.3	470230 ug/L	470230 ppb	13:27:20
2	Fe 238.204 Radial†	24330.3	26961.6	435710 ug/L	435710 ppb	13:27:40
2	K 766.490 Radial†	3211.8	795.6	-197.73 ug/L	-197.73 ppb	13:27:20
2	Mg 279.077 IEC†	8383.0	9292.5	489920 ug/L	489920 ppb	13:27:40
2	Na 589.592 Radial†	1432846.8	1589399.7	494560 ug/L	494560 ppb	13:27:20
2	Sr 421.552†	716.8	785.9	1.9560 ug/L	1.9560 ppb	13:27:40
2	Sc 361.383	762018.1	762018.1	86.586 %		13:28:38
2	Y 371.029	627331.4	627331.4	82.475 %		13:28:38
2	Ag 328.068†	-23087.7	-26898.7	-8.2606 ug/L	-8.2606 ppb	13:28:38
2	As 188.979†	-197.6	-208.3	9.4042 ug/L	9.4042 ppb	13:28:58
2	B 249.677†	1465.5	1970.6	-22.476 ug/L	-22.476 ppb	13:28:38
2	Ba 233.527†	-1578.4	-1833.9	-1.0955 ug/L	-1.0955 ppb	13:28:58
2	Be 313.107†	-9615.9	-7547.4	-2.8506 ug/L	-2.8506 ppb	13:28:38
2	Cd 226.502†	3045.1	3693.1	0.5176 ug/L	0.5176 ppb	13:28:58
2	Co 228.616†	204.5	301.0	-0.0414 ug/L	-0.0414 ppb	13:28:58
2	Cr 267.716†	-1154.1	-1418.0	20.266 ug/L	20.266 ppb	13:28:58
2	Cu 324.752†	311.4	-5595.4	-1.3871 ug/L	-1.3871 ppb	13:28:38
2	Mn 257.610†	-20473.3	-24122.8	-4.4986 ug/L	-4.4986 ppb	13:28:38
2	Mo 202.031†	-498.9	-580.8	-3.3624 ug/L	-3.3624 ppb	13:28:58
2	Ni 231.604†	257.0	214.0	5.4567 ug/L	5.4567 ppb	13:28:58

2	P 214.914†	539.1	416.8	28.649 ug/L	28.649 ppb	13:28:58
2	Pb 220.353†	-499.5	-638.1	-14.069 ug/L	-14.069 ppb	13:28:58
2	S 181.975 Axial†	75.6	51.5	-22.271 ug/L	-22.271 ppb	13:28:58
2	Sb 206.836†	74.3	46.8	-4.0260 ug/L	-4.0260 ppb	13:28:58
2	Se 196.026†	-1943.4	-2219.7	-104.75 ug/L	-104.75 ppb	13:28:58
2	Si 251.611†	-481.4	-1120.7	-35.778 ug/L	-35.778 ppb	13:28:58
2	Sn 189.927†	-386.2	-455.5	-23.609 ug/L	-23.609 ppb	13:28:58
2	Ti 334.940†	-8630.8	-8558.0	3.6686 ug/L	3.6686 ppb	13:28:38
2	Tl 190.801†	-96.4	-83.9	-27.320 ug/L	-27.320 ppb	13:28:58
2	U 409.014†	412016.4	478749.4	13319 ug/L	13319 ppb	13:28:38
2	V 292.402†	2289.2	4112.6	-0.2566 ug/L	-0.2566 ppb	13:28:58
2	Zn 213.857†	5235.9	5307.6	-11.633 ug/L	-11.633 ppb	13:28:58
2	SiO2†	-611.4	-1294.4	-88.699 ug/L	-88.699 ppb	13:29:35
3	Sc Radial	3474.7	3474.7	90.1 %		13:28:05
3	Y RADIAL	3838.0	3838.0	86.22 %		13:28:05
3	Al 396.153Radial†	497415.3	552258.1	519010 ug/L	519010 ppb	13:27:45
3	Ca 317.933Radial†	198416.2	220228.1	480260 ug/L	480260 ppb	13:27:45
3	Fe 238.204 Radial†	24271.8	26930.6	435210 ug/L	435210 ppb	13:28:05
3	K 766.490 Radial†	3083.1	657.3	-231.38 ug/L	-231.38 ppb	13:27:45
3	Mg 279.077 IEC†	8348.4	9265.8	488510 ug/L	488510 ppb	13:28:05
3	Na 589.592 Radial†	1459207.4	1620657.3	504290 ug/L	504290 ppb	13:27:45
3	Sr 421.552†	722.0	792.7	1.9286 ug/L	1.9286 ppb	13:28:05
3	Sc 361.383	765983.5	765983.5	87.036 %		13:29:04
3	Y 371.029	631124.3	631124.3	82.973 %		13:29:04
3	Ag 328.068†	-23102.6	-26777.8	-7.9701 ug/L	-7.9701 ppb	13:29:04
3	As 188.979†	-186.5	-194.3	15.541 ug/L	15.541 ppb	13:29:24
3	B 249.677†	1456.9	1951.9	-22.854 ug/L	-22.854 ppb	13:29:04
3	Ba 233.527†	-1608.7	-1859.3	-1.3101 ug/L	-1.3101 ppb	13:29:24
3	Be 313.107†	-9655.8	-7535.8	-2.8387 ug/L	-2.8387 ppb	13:29:04
3	Cd 226.502†	3082.1	3717.3	0.8469 ug/L	0.8469 ppb	13:29:24
3	Co 228.616†	224.8	323.2	0.4282 ug/L	0.4282 ppb	13:29:24
3	Cr 267.716†	-1066.0	-1309.8	21.441 ug/L	21.441 ppb	13:29:24
3	Cu 324.752†	152.4	-5780.0	-1.9635 ug/L	-1.9635 ppb	13:29:04
3	Mn 257.610†	-21111.3	-24733.4	-5.1862 ug/L	-5.1862 ppb	13:29:04
3	Mo 202.031†	-474.9	-550.3	-1.0305 ug/L	-1.0305 ppb	13:29:24
3	Ni 231.604†	266.6	223.5	5.6989 ug/L	5.6989 ppb	13:29:24
3	P 214.914†	531.4	404.8	25.080 ug/L	25.080 ppb	13:29:24
3	Pb 220.353†	-488.7	-622.6	-9.3415 ug/L	-9.3415 ppb	13:29:24
3	S 181.975 Axial†	92.1	69.9	1.3203 ug/L	1.3203 ppb	13:29:24
3	Sb 206.836†	50.5	19.0	-14.053 ug/L	-14.053 ppb	13:29:24
3	Se 196.026†	-1967.7	-2236.1	-117.18 ug/L	-117.18 ppb	13:29:24
3	Si 251.611†	-424.3	-1052.2	-33.588 ug/L	-33.588 ppb	13:29:24
3	Sn 189.927†	-366.5	-430.5	-17.291 ug/L	-17.291 ppb	13:29:24
3	Ti 334.940†	-6826.0	-6432.8	8.4862 ug/L	8.4862 ppb	13:29:04
3	Tl 190.801†	-105.3	-93.5	-30.379 ug/L	-30.379 ppb	13:29:24
3	U 409.014†	413463.7	477949.0	13297 ug/L	13297 ppb	13:29:04
3	V 292.402†	2325.6	4140.7	-0.0295 ug/L	-0.0295 ppb	13:29:24
3	Zn 213.857†	5266.7	5311.7	-11.517 ug/L	-11.517 ppb	13:29:24
3	SiO2†	-346.5	-986.3	-67.374 ug/L	-67.374 ppb	13:29:40

## Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	762409.7	86.630 %	0.3858			0.45%
Sc Radial	3502.3	90.8 %	1.14			1.26%
Y 371.029	627942.9	82.555 %	0.3844			0.47%
Y RADIAL	3881.5	87.19 %	1.123			1.29%
Ag 328.068†	-26845.6	-9.1726 ug/L	1.83698	-9.1726 ppb	1.83698	20.03%
Al 396.153Radial†	542000.3	509370 ug/L	8565.3	509370 ppb	8565.3	1.68%
QC value within limits for Al 396.153Radial Recovery = 101.87%						
As 188.979†	-203.6	10.629 ug/L	4.4290	10.629 ppb	4.4290	41.67%
B 249.677†	2040.9	-20.150 ug/L	4.3598	-20.150 ppb	4.3598	21.64%
Ba 233.527†	-1866.6	-1.4645 ug/L	0.46579	-1.4645 ppb	0.46579	31.80%
Be 313.107†	-7535.3	-2.8435 ug/L	0.00628	-2.8435 ppb	0.00628	0.22%
Ca 317.933Radial†	216685.6	472530 ug/L	6870.1	472530 ppb	6870.1	1.45%
QC value within limits for Ca 317.933Radial Recovery = 94.51%						
Cd 226.502†	3711.0	1.1077 ug/L	0.75513	1.1077 ppb	0.75513	68.17%
Co 228.616†	317.6	0.3597 ug/L	0.37163	0.3597 ppb	0.37163	103.32%
Cr 267.716†	-1389.1	20.244 ug/L	1.2086	20.244 ppb	1.2086	5.97%
Cu 324.752†	-5626.6	-1.6700 ug/L	0.28835	-1.6700 ppb	0.28835	17.27%

Fe 238.204 Radial†	26731.5	431990 ug/L	6011.9	431990 ppb	6011.9	1.39%
QC value less than the lower limit for Fe 238.204 Radial Recovery = 86.40%						
K 766.490 Radial†	791.0	-200.48 ug/L	29.611	-200.48 ppb	29.611	14.77%
Mg 279.077 IEC†	9201.0	485090 ug/L	7171.9	485090 ppb	7171.9	1.48%
QC value within limits for Mg 279.077 IEC Recovery = 97.02%						
Mn 257.610†	-24269.1	-4.8351 ug/L	0.34403	-4.8351 ppb	0.34403	7.12%
Mo 202.031†	-569.8	-2.8142 ug/L	1.58245	-2.8142 ppb	1.58245	56.23%
Na 589.592 Radial†	1598470.0	497390 ug/L	6012.0	497390 ppb	6012.0	1.21%
QC value within limits for Na 589.592 Radial Recovery = 99.48%						
Ni 231.604†	226.3	5.7709 ug/L	0.35568	5.7709 ppb	0.35568	6.16%
P 214.914†	413.0	30.126 ug/L	5.9240	30.126 ppb	5.9240	19.66%
Pb 220.353†	-619.3	-10.701 ug/L	2.9345	-10.701 ppb	2.9345	27.42%
S 181.975 Axial†	57.2	-14.821 ug/L	13.9926	-14.821 ppb	13.9926	94.41%
Sb 206.836†	35.8	-7.8908 ug/L	5.39357	-7.8908 ppb	5.39357	68.35%
Se 196.026†	-2229.5	-122.78 ug/L	21.394	-122.78 ppb	21.394	17.42%
Si 251.611†	-1085.0	-34.633 ug/L	1.0983	-34.633 ppb	1.0983	3.17%
Sn 189.927†	-441.0	-20.382 ug/L	3.1614	-20.382 ppb	3.1614	15.51%
Sr 421.552†	783.2	1.9204 ug/L	0.04041	1.9204 ppb	0.04041	2.10%
Ti 334.940†	-7842.8	5.5054 ug/L	2.60456	5.5054 ppb	2.60456	47.31%
Tl 190.801†	-87.6	-28.506 ug/L	1.6410	-28.506 ppb	1.6410	5.76%
U 409.014†	478176.5	13303 ug/L	13.5	13303 ppb	13.5	0.10%
QC value less than the lower limit for U 409.014 Recovery = 88.69%						
V 292.402†	4195.8	0.7527 ug/L	1.55559	0.7527 ppb	1.55559	206.68%
Zn 213.857†	5326.7	-10.886 ug/L	1.1947	-10.886 ppb	1.1947	10.97%
SiO2†	-1111.9	-76.052 ug/L	11.2029	-76.052 ppb	11.2029	14.73%

QC Failed. Continue with analysis.



Sequence No.: 12

Sample ID: LR2

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 16

Date Collected: 2/25/2010 13:31:50

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	3745.6	3745.6	97.1 %		13:34:07
1	Y RADIAL	4258.4	4258.4	95.66 %		13:33:47
1	Al 396.153Radial†	374.7	500.9	13.549 ug/L	13.549 ppb	13:33:47
1	Ca 317.933Radial†	28.9	11.1	24.262 ug/L	24.262 ppb	13:34:07
1	Fe 238.204 Radial†	-3.7	-15.4	22.052 ug/L	22.052 ppb	13:34:07
1	K 766.490 Radial†	1555288.4	1598762.3	306290 ug/L	306290 ppb	13:33:42
1	Mg 279.077 IEC†	-1.4	-2.6	-37.682 ug/L	-37.682 ppb	13:34:07
1	Na 589.592 Radial†	-77.4	822.0	255.79 ug/L	255.79 ppb	13:33:47
1	Sr 421.552†	1358065.6	1398432.3	9728.4 ug/L	9728.4 ppb	13:33:42
1	Sc 361.383	873121.5	873121.5	99.210 %		13:35:24
1	Y 371.029	716222.2	716222.2	94.161 %		13:35:24
1	Ag 328.068†	-7965.4	-8263.0	0.7196 ug/L	0.7196 ppb	13:35:30
1	As 188.979†	20905.5	21091.9	9441.5 ug/L	9441.5 ppb	13:35:30
1	B 249.677†	195748.5	197585.0	4816.8 ug/L	4816.8 ppb	13:35:24
1	Ba 233.527†	1622778.9	1635687.8	12878 ug/L	12878 ppb	13:35:24
1	Be 313.107†	7434417.6	7497165.9	2823.5 ug/L	2823.5 ppb	13:35:18
1	Cd 226.502†	802451.8	809016.8	9407.4 ug/L	9407.4 ppb	13:35:24
1	Co 228.616†	428579.8	432056.8	9072.3 ug/L	9072.3 ppb	13:35:30
1	Cr 267.716†	2043521.3	2059705.9	23125 ug/L	23125 ppb	13:35:24
1	Cu 324.752†	6418716.2	6463864.5	19694 ug/L	19694 ppb	13:35:18
1	Mn 257.610†	8086458.7	8150362.4	9285.4 ug/L	9285.4 ppb	13:35:18
1	Mo 202.031†	126986.1	127992.4	9427.3 ug/L	9427.3 ppb	13:35:30
1	Ni 231.604†	360639.7	363428.2	9269.3 ug/L	9269.3 ppb	13:35:30
1	P 214.914†	29735.8	29766.8	14085 ug/L	14085 ppb	13:35:30
1	Pb 220.353†	191021.2	192480.8	23824 ug/L	23824 ppb	13:35:30
1	S 181.975 Axial†	36268.2	36521.1	51494 ug/L	51494 ppb	13:35:30
1	Sb 206.836†	29445.8	29641.2	10811 ug/L	10811 ppb	13:35:30
1	Se 196.026†	14845.1	14988.1	9878.1 ug/L	9878.1 ppb	13:35:30
1	Si 251.611†	1408402.7	1419051.2	45855 ug/L	45855 ppb	13:35:24
1	Sn 189.927†	55544.9	55977.7	10094 ug/L	10094 ppb	13:35:30
1	Ti 334.940†	6180044.6	6230657.6	9808.9 ug/L	9808.9 ppb	13:35:18
1	Tl 190.801†	28770.7	29027.2	9404.1 ug/L	9404.1 ppb	13:35:30
1	U 409.014†	-1725.3	1162.8	-19.221 ug/L	-19.221 ppb	13:35:30
1	V 292.402†	1375858.4	1388281.1	9812.8 ug/L	9812.8 ppb	13:35:24
1	Zn 213.857†	1348023.5	1358016.5	13624 ug/L	13624 ppb	13:35:24
1	SiO2†	1431326.8	1442134.3	99867 ug/L	99867 ppb	13:36:15
2	Sc Radial	3758.0	3758.0	97.4 %		13:34:38
2	Y RADIAL	4267.2	4267.2	95.86 %		13:34:18
2	Al 396.153Radial†	402.4	528.1	33.337 ug/L	33.337 ppb	13:34:18
2	Ca 317.933Radial†	24.0	5.9	12.955 ug/L	12.955 ppb	13:34:38
2	Fe 238.204 Radial†	-4.7	-16.5	8.6177 ug/L	8.6177 ppb	13:34:38
2	K 766.490 Radial†	1588055.8	1627095.3	311720 ug/L	311720 ppb	13:34:13
2	Mg 279.077 IEC†	-0.8	-2.0	-3.5043 ug/L	-3.5043 ppb	13:34:38
2	Na 589.592 Radial†	-55.8	844.4	262.75 ug/L	262.75 ppb	13:34:18
2	Sr 421.552†	1382697.5	1419087.4	9872.1 ug/L	9872.1 ppb	13:34:13
2	Sc 361.383	863117.3	863117.3	98.073 %		13:35:44
2	Y 371.029	708663.3	708663.3	93.167 %		13:35:44
2	Ag 328.068†	-7871.5	-8260.3	0.7549 ug/L	0.7549 ppb	13:35:49
2	As 188.979†	20961.0	21392.7	9575.9 ug/L	9575.9 ppb	13:35:49
2	B 249.677†	193293.8	197369.0	4811.2 ug/L	4811.2 ppb	13:35:44
2	Ba 233.527†	1603606.3	1635097.6	12874 ug/L	12874 ppb	13:35:44
2	Be 313.107†	7433521.2	7583108.8	2855.9 ug/L	2855.9 ppb	13:35:38
2	Cd 226.502†	792297.7	808038.3	9396.1 ug/L	9396.1 ppb	13:35:44
2	Co 228.616†	429817.6	438326.1	9204.0 ug/L	9204.0 ppb	13:35:49
2	Cr 267.716†	2021588.8	2061217.2	23142 ug/L	23142 ppb	13:35:44
2	Cu 324.752†	6426601.6	6546895.2	19947 ug/L	19947 ppb	13:35:38
2	Mn 257.610†	8079678.8	8237924.0	9385.1 ug/L	9385.1 ppb	13:35:38
2	Mo 202.031†	127118.8	129611.4	9546.5 ug/L	9546.5 ppb	13:35:49
2	Ni 231.604†	361723.3	368746.5	9404.9 ug/L	9404.9 ppb	13:35:49

2	P 214.914†	29729.0	30107.2	14241 ug/L	14241 ppb	13:35:49
2	Pb 220.353†	191583.0	195285.4	24171 ug/L	24171 ppb	13:35:49
2	S 181.975 Axial†	36380.7	37059.6	52253 ug/L	52253 ppb	13:35:49
2	Sb 206.836†	29419.2	29958.1	10928 ug/L	10928 ppb	13:35:49
2	Se 196.026†	14828.2	15144.2	9981.0 ug/L	9981.0 ppb	13:35:49
2	Si 251.611†	1389637.4	1416371.7	45767 ug/L	45767 ppb	13:35:44
2	Sn 189.927†	55775.0	56861.3	10254 ug/L	10254 ppb	13:35:49
2	Ti 334.940†	6179428.2	6302231.1	9921.6 ug/L	9921.6 ppb	13:35:38
2	Tl 190.801†	28803.9	29397.2	9524.0 ug/L	9524.0 ppb	13:35:49
2	U 409.014†	-1883.7	981.2	-24.329 ug/L	-24.329 ppb	13:35:49
2	V 292.402†	1360920.2	1389123.8	9820.2 ug/L	9820.2 ppb	13:35:44
2	Zn 213.857†	1332244.0	1357676.1	13619 ug/L	13619 ppb	13:35:44
2	SiO2†	1420583.7	1447902.4	100260 ug/L	100260 ppb	13:36:21
3	Sc Radial	3709.4	3709.4	96.2 %		13:35:08
3	Y RADIAL	4174.0	4174.0	93.76 %		13:34:48
3	Al 396.153Radial†	382.4	512.7	24.604 ug/L	24.604 ppb	13:34:48
3	Ca 317.933Radial†	25.7	8.1	17.634 ug/L	17.634 ppb	13:35:08
3	Fe 238.204 Radial†	-4.8	-16.6	2.7442 ug/L	2.7442 ppb	13:35:08
3	K 766.490 Radial†	1541290.5	1599850.3	306500 ug/L	306500 ppb	13:34:43
3	Mg 279.077 IEC†	0.2	-1.0	46.326 ug/L	46.326 ppb	13:35:08
3	Na 589.592 Radial†	-187.9	706.3	219.77 ug/L	219.77 ppb	13:34:48
3	Sr 421.552†	1339097.5	1392368.8	9686.2 ug/L	9686.2 ppb	13:34:43
3	Sc 361.383	879758.2	879758.2	99.964 %		13:36:04
3	Y 371.029	722260.2	722260.2	94.955 %		13:36:04
3	Ag 328.068†	-7837.9	-8074.9	1.5741 ug/L	1.5741 ppb	13:36:09
3	As 188.979†	21206.9	21234.4	9504.4 ug/L	9504.4 ppb	13:36:09
3	B 249.677†	197619.5	197968.2	4826.2 ug/L	4826.2 ppb	13:36:04
3	Ba 233.527†	1630861.1	1631433.6	12845 ug/L	12845 ppb	13:36:04
3	Be 313.107†	7475497.2	7481730.5	2817.6 ug/L	2817.6 ppb	13:35:58
3	Cd 226.502†	806322.3	806787.1	9381.5 ug/L	9381.5 ppb	13:36:04
3	Co 228.616†	432264.3	432483.8	9081.3 ug/L	9081.3 ppb	13:36:09
3	Cr 267.716†	2056218.3	2056869.0	23093 ug/L	23093 ppb	13:36:04
3	Cu 324.752†	6446101.2	6442452.8	19629 ug/L	19629 ppb	13:35:58
3	Mn 257.610†	8101328.3	8103749.6	9232.3 ug/L	9232.3 ppb	13:35:58
3	Mo 202.031†	127958.4	127999.5	9427.8 ug/L	9427.8 ppb	13:36:09
3	Ni 231.604†	363511.8	363559.1	9272.6 ug/L	9272.6 ppb	13:36:09
3	P 214.914†	29891.5	29696.4	14056 ug/L	14056 ppb	13:36:09
3	Pb 220.353†	192609.6	192617.4	23841 ug/L	23841 ppb	13:36:09
3	S 181.975 Axial†	36613.2	36590.4	51591 ug/L	51591 ppb	13:36:09
3	Sb 206.836†	29777.3	29748.9	10850 ug/L	10850 ppb	13:36:09
3	Se 196.026†	15045.7	15075.8	9935.7 ug/L	9935.7 ppb	13:36:09
3	Si 251.611†	1420445.8	1420389.3	45898 ug/L	45898 ppb	13:36:04
3	Sn 189.927†	56045.0	56055.6	10109 ug/L	10109 ppb	13:36:09
3	Ti 334.940†	6196874.8	6200502.2	9761.4 ug/L	9761.4 ppb	13:35:58
3	Tl 190.801†	29089.9	29127.7	9435.8 ug/L	9435.8 ppb	13:36:09
3	U 409.014†	-1573.3	1328.0	-14.534 ug/L	-14.534 ppb	13:36:09
3	V 292.402†	1385967.9	1387932.5	9810.4 ug/L	9810.4 ppb	13:36:04
3	Zn 213.857†	1355057.0	1354802.4	13592 ug/L	13592 ppb	13:36:04
3	SiO2†	1423284.7	1423205.8	98553 ug/L	98553 ppb	13:36:27

## Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	871999.0	99.083 %	0.9519			0.96%
Sc Radial	3737.7	96.9 %	0.66			0.68%
Y 371.029	715715.3	94.094 %	0.8956			0.95%
Y RADIAL	4233.2	95.09 %	1.156			1.22%
Ag 328.068†	-8199.4	1.0162 ug/L	0.48351	1.0162 ppb	0.48351	47.58%
Al 396.153Radial†	513.9	23.830 ug/L	9.9170	23.830 ppb	9.9170	41.62%
As 188.979†	21239.7	9507.3 ug/L	67.28	9507.3 ppb	67.28	0.71%
QC value within limits for As 188.979 Recovery = 95.07%						
B 249.677†	197640.7	4818.1 ug/L	7.59	4818.1 ppb	7.59	0.16%
QC value within limits for B 249.677 Recovery = 96.36%						
Ba 233.527†	1634073.0	12866 ug/L	18.1	12866 ppb	18.1	0.14%
QC value less than the lower limit for Ba 233.527 Recovery = 85.77%						
Be 313.107†	7520668.4	2832.3 ug/L	20.59	2832.3 ppb	20.59	0.73%
QC value within limits for Be 313.107 Recovery = 94.41%						
Ca 317.933Radial†	8.4	18.284 ug/L	5.6812	18.284 ppb	5.6812	31.07%
Cd 226.502†	807947.4	9395.0 ug/L	12.99	9395.0 ppb	12.99	0.14%
QC value within limits for Cd 226.502 Recovery = 93.95%						

Co 228.616†	434288.9	9119.2 ug/L	73.57	9119.2 ppb	73.57	0.81%
QC value within limits for Co 228.616 Recovery = 91.19%						
Cr 267.716†	2059264.0	23120 ug/L	24.8	23120 ppb	24.8	0.11%
QC value within limits for Cr 267.716 Recovery = 92.48%						
Cu 324.752†	6484404.2	19757 ug/L	168.1	19757 ppb	168.1	0.85%
QC value within limits for Cu 324.752 Recovery = 98.78%						
Fe 238.204 Radial†	-16.2	11.138 ug/L	9.8975	11.138 ppb	9.8975	88.86%
K 766.490 Radial†	1608569.3	308170 ug/L	3075.5	308170 ppb	3075.5	1.00%
QC value within limits for K 766.490 Radial Recovery = 102.72%						
Mg 279.077 IEC†	-1.9	1.7131 ug/L	42.24636	1.7131 ppb	42.24636	>999.9%
Mn 257.610†	8164012.0	9300.9 ug/L	77.61	9300.9 ppb	77.61	0.83%
QC value within limits for Mn 257.610 Recovery = 93.01%						
Mo 202.031†	128534.4	9467.2 ug/L	68.69	9467.2 ppb	68.69	0.73%
QC value within limits for Mo 202.031 Recovery = 94.67%						
Na 589.592 Radial†	790.9	246.10 ug/L	23.070	246.10 ppb	23.070	9.37%
Ni 231.604†	365244.6	9315.6 ug/L	77.37	9315.6 ppb	77.37	0.83%
QC value within limits for Ni 231.604 Recovery = 93.16%						
P 214.914†	29856.8	14127 ug/L	99.6	14127 ppb	99.6	0.70%
QC value within limits for P 214.914 Recovery = 94.18%						
Pb 220.353†	193461.2	23945 ug/L	195.7	23945 ppb	195.7	0.82%
QC value within limits for Pb 220.353 Recovery = 95.78%						
S 181.975 Axial†	36723.7	51779 ug/L	413.0	51779 ppb	413.0	0.80%
QC value within limits for S 181.975 Axial Recovery = 103.56%						
Sb 206.836†	29782.7	10863 ug/L	59.4	10863 ppb	59.4	0.55%
QC value within limits for Sb 206.836 Recovery = 108.63%						
Se 196.026†	15069.4	9931.6 ug/L	51.58	9931.6 ppb	51.58	0.52%
QC value within limits for Se 196.026 Recovery = 99.32%						
Si 251.611†	1418604.1	45840 ug/L	67.1	45840 ppb	67.1	0.15%
QC value within limits for Si 251.611 Recovery = 91.68%						
Sn 189.927†	56298.2	10152 ug/L	88.2	10152 ppb	88.2	0.87%
QC value within limits for Sn 189.927 Recovery = 101.52%						
Sr 421.552†	1403296.2	9762.2 ug/L	97.45	9762.2 ppb	97.45	1.00%
QC value within limits for Sr 421.552 Recovery = 97.62%						
Ti 334.940†	6244463.6	9830.6 ug/L	82.32	9830.6 ppb	82.32	0.84%
QC value within limits for Ti 334.940 Recovery = 98.31%						
Tl 190.801†	29184.1	9454.6 ug/L	62.10	9454.6 ppb	62.10	0.66%
QC value within limits for Tl 190.801 Recovery = 94.55%						
U 409.014†	1157.4	-19.361 ug/L	4.8990	-19.361 ppb	4.8990	25.30%
V 292.402†	1388445.8	9814.5 ug/L	5.11	9814.5 ppb	5.11	0.05%
QC value within limits for V 292.402 Recovery = 98.14%						
Zn 213.857†	1356831.7	13612 ug/L	17.5	13612 ppb	17.5	0.13%
QC value within limits for Zn 213.857 Recovery = 90.75%						
SiO2†	1437747.5	99561 ug/L	895.7	99561 ppb	895.7	0.90%
QC value within limits for SiO2 Recovery = 93.05%						
QC Failed. Continue with analysis.						

Sequence No.: 13

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/25/2010 13:38:38

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	3790.4	3790.4	98.3 %		13:40:50
1	Y RADIAL	4282.6	4282.6	96.20 %		13:40:30
1	Al 396.153Radial†	5206.3	5412.8	5063.9 ug/L	5063.9 ppb	13:40:30
1	Ca 317.933Radial†	2323.1	2345.2	5114.3 ug/L	5114.3 ppb	13:40:50
1	Fe 238.204 Radial†	313.9	307.7	4987.0 ug/L	4987.0 ppb	13:40:50
1	K 766.490 Radial†	29590.4	27344.6	5232.6 ug/L	5232.6 ppb	13:40:30
1	Mg 279.077 IEC†	99.4	99.9	5273.8 ug/L	5273.8 ppb	13:40:50
1	Na 589.592 Radial†	31137.3	32585.4	10139 ug/L	10139 ppb	13:40:30
1	Sr 421.552†	70101.9	71323.4	496.13 ug/L	496.13 ppb	13:40:30
1	Sc 361.383	916114.7	916114.7	104.10 %		13:41:48
1	Y 371.029	759809.7	759809.7	99.891 %		13:41:48
1	Ag 328.068†	106763.5	102329.1	478.51 ug/L	478.51 ppb	13:41:53
1	As 188.979†	1147.6	1122.3	503.20 ug/L	503.20 ppb	13:42:13
1	B 249.677†	21047.9	20497.8	500.22 ug/L	500.22 ppb	13:41:53
1	Ba 233.527†	63031.3	60540.5	477.06 ug/L	477.06 ppb	13:41:53
1	Be 313.107†	1334110.2	1285181.9	481.26 ug/L	481.26 ppb	13:41:48
1	Cd 226.502†	42804.8	41297.0	479.79 ug/L	479.79 ppb	13:41:53
1	Co 228.616†	23550.7	22689.0	476.62 ug/L	476.62 ppb	13:41:53
1	Cr 267.716†	44265.5	42438.9	477.15 ug/L	477.15 ppb	13:41:53
1	Cu 324.752†	167584.4	155036.2	472.38 ug/L	472.38 ppb	13:41:53
1	Mn 257.610†	441588.5	423737.9	483.02 ug/L	483.02 ppb	13:41:48
1	Mo 202.031†	6713.1	6444.3	475.10 ug/L	475.10 ppb	13:42:13
1	Ni 231.604†	19598.8	18745.0	478.09 ug/L	478.09 ppb	13:41:53
1	P 214.914†	4307.5	3932.3	2272.8 ug/L	2272.8 ppb	13:42:13
1	Pb 220.353†	4107.0	3884.2	482.02 ug/L	482.02 ppb	13:42:13
1	S 181.975 Axial†	744.6	679.5	957.07 ug/L	957.07 ppb	13:42:13
1	Sb 206.836†	1470.9	1374.1	501.94 ug/L	501.94 ppb	13:42:13
1	Se 196.026†	741.0	736.5	500.97 ug/L	500.97 ppb	13:42:13
1	Si 251.611†	77222.0	73619.2	2379.1 ug/L	2379.1 ppb	13:41:53
1	Sn 189.927†	2767.6	2649.3	478.36 ug/L	478.36 ppb	13:42:13
1	Ti 334.940†	311314.9	300477.1	473.32 ug/L	473.32 ppb	13:41:53
1	Tl 190.801†	1529.1	1496.4	484.56 ug/L	484.56 ppb	13:42:13
1	U 409.014†	14449.1	16782.5	467.00 ug/L	467.00 ppb	13:41:53
1	V 292.402†	69091.3	67841.8	480.24 ug/L	480.24 ppb	13:41:53
1	Zn 213.857†	50208.7	47493.9	475.04 ug/L	475.04 ppb	13:41:53
1	SiO2†	77219.9	73593.7	5096.5 ug/L	5096.5 ppb	13:43:20
2	Sc Radial	3821.8	3821.8	99.1 %		13:41:15
2	Y RADIAL	4288.7	4288.7	96.34 %		13:40:55
2	Al 396.153Radial†	5232.5	5395.7	5047.5 ug/L	5047.5 ppb	13:40:55
2	Ca 317.933Radial†	2345.4	2348.3	5121.0 ug/L	5121.0 ppb	13:41:15
2	Fe 238.204 Radial†	315.7	306.9	4973.9 ug/L	4973.9 ppb	13:41:15
2	K 766.490 Radial†	29660.8	27168.8	5198.9 ug/L	5198.9 ppb	13:40:55
2	Mg 279.077 IEC†	95.9	95.6	5045.5 ug/L	5045.5 ppb	13:41:15
2	Na 589.592 Radial†	31014.1	32201.3	10020 ug/L	10020 ppb	13:40:55
2	Sr 421.552†	70200.0	70837.5	492.75 ug/L	492.75 ppb	13:40:55
2	Sc 361.383	904548.9	904548.9	102.78 %		13:42:19
2	Y 371.029	750200.0	750200.0	98.628 %		13:42:19
2	Ag 328.068†	106718.7	103596.8	484.41 ug/L	484.41 ppb	13:42:24
2	As 188.979†	1153.1	1141.8	511.92 ug/L	511.92 ppb	13:42:44
2	B 249.677†	21032.0	20740.9	506.16 ug/L	506.16 ppb	13:42:24
2	Ba 233.527†	63115.8	61396.9	483.81 ug/L	483.81 ppb	13:42:24
2	Be 313.107†	1304528.8	1272788.1	476.65 ug/L	476.65 ppb	13:42:19
2	Cd 226.502†	42788.8	41807.2	485.72 ug/L	485.72 ppb	13:42:24
2	Co 228.616†	23690.4	23114.2	485.55 ug/L	485.55 ppb	13:42:24
2	Cr 267.716†	44225.9	42944.1	482.83 ug/L	482.83 ppb	13:42:24
2	Cu 324.752†	167673.7	157181.6	478.91 ug/L	478.91 ppb	13:42:24
2	Mn 257.610†	432797.9	420609.2	479.47 ug/L	479.47 ppb	13:42:19
2	Mo 202.031†	6723.9	6537.3	481.95 ug/L	481.95 ppb	13:42:44
2	Ni 231.604†	19611.1	18997.6	484.53 ug/L	484.53 ppb	13:42:24

2	P 214.914†	4312.5	3990.0	2306.2 ug/L	2306.2 ppb	13:42:44
2	Pb 220.353†	4100.3	3928.2	487.47 ug/L	487.47 ppb	13:42:44
2	S 181.975 Axial†	750.0	693.8	977.32 ug/L	977.32 ppb	13:42:44
2	Sb 206.836†	1480.4	1401.3	511.76 ug/L	511.76 ppb	13:42:44
2	Se 196.026†	736.5	741.3	504.05 ug/L	504.05 ppb	13:42:44
2	Si 251.611†	77219.4	74565.2	2409.7 ug/L	2409.7 ppb	13:42:24
2	Sn 189.927†	2757.7	2673.6	482.76 ug/L	482.76 ppb	13:42:44
2	Ti 334.940†	311832.3	304804.4	480.15 ug/L	480.15 ppb	13:42:24
2	Tl 190.801†	1515.3	1501.7	486.26 ug/L	486.26 ppb	13:42:44
2	U 409.014†	14503.1	17012.5	473.41 ug/L	473.41 ppb	13:42:24
2	V 292.402†	69144.9	68742.6	486.63 ug/L	486.63 ppb	13:42:24
2	Zn 213.857†	50137.3	48041.2	480.52 ug/L	480.52 ppb	13:42:24
2	SiO2†	76754.0	74088.9	5130.7 ug/L	5130.7 ppb	13:43:25
3	Sc Radial	3826.5	3826.5	99.2 %		13:41:40
3	Y RADIAL	4257.3	4257.3	95.63 %		13:41:20
3	Al 396.153Radial†	5192.1	5348.5	5003.7 ug/L	5003.7 ppb	13:41:20
3	Ca 317.933Radial†	2360.3	2360.4	5147.5 ug/L	5147.5 ppb	13:41:40
3	Fe 238.204 Radial†	320.6	311.5	5047.5 ug/L	5047.5 ppb	13:41:40
3	K 766.490 Radial†	29510.6	26980.7	5162.9 ug/L	5162.9 ppb	13:41:20
3	Mg 279.077 IEC†	101.0	100.6	5310.8 ug/L	5310.8 ppb	13:41:40
3	Na 589.592 Radial†	30745.0	31891.8	9923.6 ug/L	9923.6 ppb	13:41:20
3	Sr 421.552†	69836.2	70384.1	489.60 ug/L	489.60 ppb	13:41:20
3	Sc 361.383	921894.5	921894.5	104.75 %		13:42:50
3	Y 371.029	765386.9	765386.9	100.62 %		13:42:50
3	Ag 328.068†	106637.3	101565.5	474.97 ug/L	474.97 ppb	13:42:55
3	As 188.979†	1136.9	1105.3	495.61 ug/L	495.61 ppb	13:43:15
3	B 249.677†	21019.3	20343.8	496.45 ug/L	496.45 ppb	13:42:55
3	Ba 233.527†	63000.6	60131.6	473.84 ug/L	473.84 ppb	13:42:55
3	Be 313.107†	1334145.6	1277180.6	478.27 ug/L	478.27 ppb	13:42:50
3	Cd 226.502†	42764.9	41001.1	476.34 ug/L	476.34 ppb	13:42:55
3	Co 228.616†	23582.9	22577.9	474.29 ug/L	474.29 ppb	13:42:55
3	Cr 267.716†	44260.4	42167.5	474.11 ug/L	474.11 ppb	13:42:55
3	Cu 324.752†	167221.0	153679.9	468.25 ug/L	468.25 ppb	13:42:55
3	Mn 257.610†	440866.9	420389.4	479.21 ug/L	479.21 ppb	13:42:50
3	Mo 202.031†	6715.2	6405.9	472.28 ug/L	472.28 ppb	13:43:15
3	Ni 231.604†	19597.2	18625.4	475.04 ug/L	475.04 ppb	13:42:55
3	P 214.914†	4325.7	3923.7	2268.3 ug/L	2268.3 ppb	13:43:15
3	Pb 220.353†	4108.4	3860.9	479.11 ug/L	479.11 ppb	13:43:15
3	S 181.975 Axial†	737.0	667.8	940.57 ug/L	940.57 ppb	13:43:15
3	Sb 206.836†	1449.6	1344.8	491.53 ug/L	491.53 ppb	13:43:15
3	Se 196.026†	731.3	722.8	492.14 ug/L	492.14 ppb	13:43:15
3	Si 251.611†	77030.2	72971.0	2358.1 ug/L	2358.1 ppb	13:42:55
3	Sn 189.927†	2775.4	2640.1	476.71 ug/L	476.71 ppb	13:43:15
3	Ti 334.940†	311294.3	298582.4	470.34 ug/L	470.34 ppb	13:42:55
3	Tl 190.801†	1522.1	1480.5	479.43 ug/L	479.43 ppb	13:43:15
3	U 409.014†	14396.6	16645.3	463.17 ug/L	463.17 ppb	13:42:55
3	V 292.402†	69123.9	67456.8	477.50 ug/L	477.50 ppb	13:42:55
3	Zn 213.857†	50046.9	47037.1	470.45 ug/L	470.45 ppb	13:42:55
3	SiO2†	77888.0	73766.4	5108.6 ug/L	5108.6 ppb	13:43:31

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	914186.1	103.88 %	1.004			0.97%
Sc Radial	3812.9	98.9 %	0.51			0.51%
Y 371.029	758465.5	99.715 %	1.0100			1.01%
Y RADIAL	4276.2	96.06 %	0.373			0.39%
Ag 328.068†	102497.1	479.30 ug/L	4.772	479.30 ppb	4.772	1.00%
QC value within limits for Ag 328.068 Recovery = 95.86%						
Al 396.153Radial†	5385.7	5038.3 ug/L	31.13	5038.3 ppb	31.13	0.62%
QC value within limits for Al 396.153Radial Recovery = 100.77%						
As 188.979†	1123.1	503.58 ug/L	8.162	503.58 ppb	8.162	1.62%
QC value within limits for As 188.979 Recovery = 100.72%						
B 249.677†	20527.5	500.94 ug/L	4.897	500.94 ppb	4.897	0.98%
QC value within limits for B 249.677 Recovery = 100.19%						
Ba 233.527†	60689.6	478.24 ug/L	5.085	478.24 ppb	5.085	1.06%
QC value within limits for Ba 233.527 Recovery = 95.65%						
Be 313.107†	1278383.6	478.73 ug/L	2.342	478.73 ppb	2.342	0.49%
QC value within limits for Be 313.107 Recovery = 95.75%						
Ca 317.933Radial†	2351.3	5127.6 ug/L	17.52	5127.6 ppb	17.52	0.34%

QC value within limits for Ca 317.933 Radial Recovery = 102.55%							
Cd 226.502†	41368.4	480.62 ug/L	4.746	480.62 ppb	4.746	0.99%	
QC value within limits for Cd 226.502 Recovery = 96.12%							
Co 228.616†	22793.7	478.82 ug/L	5.947	478.82 ppb	5.947	1.24%	
QC value within limits for Co 228.616 Recovery = 95.76%							
Cr 267.716†	42516.8	478.03 ug/L	4.424	478.03 ppb	4.424	0.93%	
QC value within limits for Cr 267.716 Recovery = 95.61%							
Cu 324.752†	155299.2	473.18 ug/L	5.375	473.18 ppb	5.375	1.14%	
QC value within limits for Cu 324.752 Recovery = 94.64%							
Fe 238.204 Radial†	308.7	5002.8 ug/L	39.26	5002.8 ppb	39.26	0.78%	
QC value within limits for Fe 238.204 Radial Recovery = 100.06%							
K 766.490 Radial†	27164.7	5198.1 ug/L	34.82	5198.1 ppb	34.82	0.67%	
QC value within limits for K 766.490 Radial Recovery = 103.96%							
Mg 279.077 IEC†	98.7	5210.1 ug/L	143.70	5210.1 ppb	143.70	2.76%	
QC value within limits for Mg 279.077 IEC Recovery = 104.20%							
Mn 257.610†	421578.8	480.57 ug/L	2.130	480.57 ppb	2.130	0.44%	
QC value within limits for Mn 257.610 Recovery = 96.11%							
Mo 202.031†	6462.5	476.44 ug/L	4.974	476.44 ppb	4.974	1.04%	
QC value within limits for Mo 202.031 Recovery = 95.29%							
Na 589.592 Radial†	32226.2	10028 ug/L	108.1	10028 ppb	108.1	1.08%	
QC value within limits for Na 589.592 Radial Recovery = 100.28%							
Ni 231.604†	18789.3	479.22 ug/L	4.847	479.22 ppb	4.847	1.01%	
QC value within limits for Ni 231.604 Recovery = 95.84%							
P 214.914†	3948.6	2282.5 ug/L	20.72	2282.5 ppb	20.72	0.91%	
QC value within limits for P 214.914 Recovery = 91.30%							
Pb 220.353†	3891.1	482.86 ug/L	4.248	482.86 ppb	4.248	0.88%	
QC value within limits for Pb 220.353 Recovery = 96.57%							
S 181.975 Axial†	680.3	958.32 ug/L	18.405	958.32 ppb	18.405	1.92%	
QC value within limits for S 181.975 Axial Recovery = 95.83%							
Sb 206.836†	1373.4	501.75 ug/L	10.114	501.75 ppb	10.114	2.02%	
QC value within limits for Sb 206.836 Recovery = 100.35%							
Se 196.026†	733.6	499.05 ug/L	6.179	499.05 ppb	6.179	1.24%	
QC value within limits for Se 196.026 Recovery = 99.81%							
Si 251.611†	73718.5	2382.3 ug/L	25.91	2382.3 ppb	25.91	1.09%	
QC value within limits for Si 251.611 Recovery = 95.29%							
Sn 189.927†	2654.3	479.28 ug/L	3.128	479.28 ppb	3.128	0.65%	
QC value within limits for Sn 189.927 Recovery = 95.86%							
Sr 421.552†	70848.3	492.83 ug/L	3.268	492.83 ppb	3.268	0.66%	
QC value within limits for Sr 421.552 Recovery = 98.57%							
Ti 334.940†	301288.0	474.60 ug/L	5.031	474.60 ppb	5.031	1.06%	
QC value within limits for Ti 334.940 Recovery = 94.92%							
Tl 190.801†	1492.9	483.41 ug/L	3.557	483.41 ppb	3.557	0.74%	
QC value within limits for Tl 190.801 Recovery = 96.68%							
U 409.014†	16813.4	467.86 ug/L	5.175	467.86 ppb	5.175	1.11%	
QC value within limits for U 409.014 Recovery = 93.57%							
V 292.402†	68013.7	481.46 ug/L	4.685	481.46 ppb	4.685	0.97%	
QC value within limits for V 292.402 Recovery = 96.29%							
Zn 213.857†	47524.1	475.34 ug/L	5.043	475.34 ppb	5.043	1.06%	
QC value within limits for Zn 213.857 Recovery = 95.07%							
SiO2†	73816.3	5111.9 ug/L	17.34	5111.9 ppb	17.34	0.34%	
QC value within limits for SiO2 Recovery = 95.59%							
All analyte(s) passed QC.							

Sequence No.: 14  
 Sample ID: CCB  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 8  
 Date Collected: 2/25/2010 13:45:41  
 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	3921.6	3921.6	102 %		13:47:53
1	Y RADIAL	4517.7	4517.7	101.5 %		13:47:33
1	Al 396.153Radial†	-114.4	2.6	2.3499 ug/L	2.3499 ppb	13:47:33
1	Ca 317.933Radial†	21.8	2.8	6.0275 ug/L	6.0275 ppb	13:47:53
1	Fe 238.204 Radial†	11.0	-0.9	-14.020 ug/L	-14.020 ppb	13:47:53
1	K 766.490 Radial†	3360.7	540.2	103.47 ug/L	103.47 ppb	13:47:33
1	Mg 279.077 IEC†	1.9	0.7	34.871 ug/L	34.871 ppb	13:47:53
1	Na 589.592 Radial†	-794.9	119.9	37.303 ug/L	37.303 ppb	13:47:33
1	Sr 421.552†	50.1	40.5	0.2818 ug/L	0.2818 ppb	13:47:33
1	Sc 361.383	900421.0	900421.0	102.31 %		13:48:50
1	Y 371.029	758138.7	758138.7	99.672 %		13:48:50
1	Ag 328.068†	230.1	-9.3	-0.0406 ug/L	-0.0406 ppb	13:48:50
1	As 188.979†	4.8	24.6	10.928 ug/L	10.928 ppb	13:49:10
1	B 249.677†	521.4	787.6	19.307 ug/L	19.307 ppb	13:48:50
1	Ba 233.527†	26.1	14.5	0.1132 ug/L	0.1132 ppb	13:49:10
1	Be 313.107†	-3553.0	85.5	0.0320 ug/L	0.0320 ppb	13:48:50
1	Cd 226.502†	-114.8	64.0	0.7438 ug/L	0.7438 ppb	13:49:10
1	Co 228.616†	-70.4	-3.9	-0.0796 ug/L	-0.0796 ppb	13:49:10
1	Cr 267.716†	98.6	11.3	0.1287 ug/L	0.1287 ppb	13:49:10
1	Cu 324.752†	6171.2	76.6	0.2374 ug/L	0.2374 ppb	13:48:50
1	Mn 257.610†	514.4	25.1	0.0257 ug/L	0.0257 ppb	13:49:10
1	Mo 202.031†	19.9	14.8	1.0873 ug/L	1.0873 ppb	13:49:10
1	Ni 231.604†	86.7	2.0	0.0501 ug/L	0.0501 ppb	13:49:10
1	P 214.914†	211.3	0.7	0.4016 ug/L	0.4016 ppb	13:49:10
1	Pb 220.353†	62.4	-0.2	-0.0243 ug/L	-0.0243 ppb	13:49:10
1	S 181.975 Axial†	51.9	14.8	20.936 ug/L	20.936 ppb	13:49:10
1	Sb 206.836†	56.4	16.2	5.7446 ug/L	5.7446 ppb	13:49:10
1	Se 196.026†	-23.6	1.6	1.0374 ug/L	1.0374 ppb	13:49:10
1	Si 251.611†	660.7	81.0	2.6117 ug/L	2.6117 ppb	13:49:10
1	Sn 189.927†	18.1	8.3	1.4976 ug/L	1.4976 ppb	13:49:10
1	Ti 334.940†	-1433.6	8.7	0.0154 ug/L	0.0154 ppb	13:48:50
1	Tl 190.801†	-30.5	-2.4	-0.7627 ug/L	-0.7627 ppb	13:49:10
1	U 409.014†	-3279.6	-303.7	-8.4785 ug/L	-8.4785 ppb	13:48:50
1	V 292.402†	-1498.9	3.7	0.0278 ug/L	0.0278 ppb	13:48:50
1	Zn 213.857†	892.4	132.8	1.3417 ug/L	1.3417 ppb	13:49:10
1	SiO2†	649.5	46.6	3.2035 ug/L	3.2035 ppb	13:50:06
2	Sc Radial	3897.8	3897.8	101 %		13:48:18
2	Y RADIAL	4482.0	4482.0	100.7 %		13:47:58
2	Al 396.153Radial†	-106.0	10.2	9.5528 ug/L	9.5528 ppb	13:47:58
2	Ca 317.933Radial†	25.0	6.0	13.151 ug/L	13.151 ppb	13:48:18
2	Fe 238.204 Radial†	12.1	0.3	4.6055 ug/L	4.6055 ppb	13:48:18
2	K 766.490 Radial†	3449.4	648.3	124.19 ug/L	124.19 ppb	13:47:58
2	Mg 279.077 IEC†	1.1	-0.1	-6.1782 ug/L	-6.1782 ppb	13:48:18
2	Na 589.592 Radial†	-880.2	30.7	9.5675 ug/L	9.5675 ppb	13:47:58
2	Sr 421.552†	23.8	14.8	0.1028 ug/L	0.1028 ppb	13:47:58
2	Sc 361.383	892824.5	892824.5	101.45 %		13:49:16
2	Y 371.029	752703.7	752703.7	98.957 %		13:49:16
2	Ag 328.068†	321.0	82.2	0.3888 ug/L	0.3888 ppb	13:49:16
2	As 188.979†	5.5	25.3	11.256 ug/L	11.256 ppb	13:49:36
2	B 249.677†	394.0	666.4	16.332 ug/L	16.332 ppb	13:49:16
2	Ba 233.527†	24.8	13.4	0.1056 ug/L	0.1056 ppb	13:49:36
2	Be 313.107†	-3527.2	81.4	0.0304 ug/L	0.0304 ppb	13:49:16
2	Cd 226.502†	-111.5	66.3	0.7693 ug/L	0.7693 ppb	13:49:36
2	Co 228.616†	-61.9	3.8	0.0828 ug/L	0.0828 ppb	13:49:36
2	Cr 267.716†	86.5	0.2	0.0052 ug/L	0.0052 ppb	13:49:36
2	Cu 324.752†	5998.8	-41.9	-0.1242 ug/L	-0.1242 ppb	13:49:16
2	Mn 257.610†	528.0	42.7	0.0494 ug/L	0.0494 ppb	13:49:36
2	Mo 202.031†	17.7	12.7	0.9382 ug/L	0.9382 ppb	13:49:36
2	Ni 231.604†	93.0	8.9	0.2275 ug/L	0.2275 ppb	13:49:36

2	P 214.914†	205.5	-3.2	-1.8924 ug/L	-1.8924 ppb	13:49:36
2	Pb 220.353†	48.2	-13.6	-1.6824 ug/L	-1.6824 ppb	13:49:36
2	S 181.975 Axial†	39.8	3.4	4.8180 ug/L	4.8180 ppb	13:49:36
2	Sb 206.836†	58.1	18.3	6.5025 ug/L	6.5025 ppb	13:49:36
2	Se 196.026†	-23.3	1.8	1.1679 ug/L	1.1679 ppb	13:49:36
2	Si 251.611†	696.6	122.0	3.9399 ug/L	3.9399 ppb	13:49:36
2	Sn 189.927†	25.1	15.3	2.7598 ug/L	2.7598 ppb	13:49:36
2	Ti 334.940†	-1439.5	-9.1	-0.0094 ug/L	-0.0094 ppb	13:49:16
2	Tl 190.801†	-25.8	2.0	0.6358 ug/L	0.6358 ppb	13:49:36
2	U 409.014†	-3162.5	-215.5	-6.0183 ug/L	-6.0183 ppb	13:49:16
2	V 292.402†	-1473.6	16.2	0.1140 ug/L	0.1140 ppb	13:49:16
2	Zn 213.857†	871.0	119.1	1.2006 ug/L	1.2006 ppb	13:49:36
2	SiO2†	659.5	61.8	4.2680 ug/L	4.2680 ppb	13:50:11
3	Sc Radial	3887.9	3887.9	101 %		13:48:44
3	Y RADIAL	4557.5	4557.5	102.4 %		13:48:23
3	Al 396.153Radial†	-110.4	5.6	5.1570 ug/L	5.1570 ppb	13:48:23
3	Ca 317.933Radial†	23.5	4.6	10.053 ug/L	10.053 ppb	13:48:44
3	Fe 238.204 Radial†	10.7	-1.0	-16.790 ug/L	-16.790 ppb	13:48:44
3	K 766.490 Radial†	3449.2	656.6	125.79 ug/L	125.79 ppb	13:48:23
3	Mg 279.077 IEC†	1.0	-0.1	-7.4965 ug/L	-7.4965 ppb	13:48:44
3	Na 589.592 Radial†	-811.0	97.2	30.233 ug/L	30.233 ppb	13:48:23
3	Sr 421.552†	48.8	39.7	0.2758 ug/L	0.2758 ppb	13:48:23
3	Sc 361.383	905298.4	905298.4	102.87 %		13:49:41
3	Y 371.029	763531.6	763531.6	100.38 %		13:49:41
3	Ag 328.068†	252.2	11.0	0.0444 ug/L	0.0444 ppb	13:49:41
3	As 188.979†	5.5	25.3	11.245 ug/L	11.245 ppb	13:50:01
3	B 249.677†	431.1	697.1	17.088 ug/L	17.088 ppb	13:49:41
3	Ba 233.527†	23.4	11.7	0.0919 ug/L	0.0919 ppb	13:50:01
3	Be 313.107†	-3560.6	96.9	0.0362 ug/L	0.0362 ppb	13:49:41
3	Cd 226.502†	-112.8	66.5	0.7747 ug/L	0.7747 ppb	13:50:01
3	Co 228.616†	-65.7	1.0	0.0244 ug/L	0.0244 ppb	13:50:01
3	Cr 267.716†	87.2	-0.4	-0.0066 ug/L	-0.0066 ppb	13:50:01
3	Cu 324.752†	6151.4	24.9	0.0737 ug/L	0.0737 ppb	13:49:41
3	Mn 257.610†	520.8	28.7	0.0313 ug/L	0.0313 ppb	13:50:01
3	Mo 202.031†	22.8	17.5	1.2844 ug/L	1.2844 ppb	13:50:01
3	Ni 231.604†	75.3	-9.6	-0.2448 ug/L	-0.2448 ppb	13:50:01
3	P 214.914†	200.9	-10.5	-6.3225 ug/L	-6.3225 ppb	13:50:01
3	Pb 220.353†	66.3	3.3	0.4136 ug/L	0.4136 ppb	13:50:01
3	S 181.975 Axial†	47.4	10.3	14.475 ug/L	14.475 ppb	13:50:01
3	Sb 206.836†	52.0	11.5	4.1182 ug/L	4.1182 ppb	13:50:01
3	Se 196.026†	-23.4	2.0	1.2784 ug/L	1.2784 ppb	13:50:01
3	Si 251.611†	667.6	84.3	2.7136 ug/L	2.7136 ppb	13:50:01
3	Sn 189.927†	23.2	13.2	2.3765 ug/L	2.3765 ppb	13:50:01
3	Ti 334.940†	-1437.9	12.0	0.0200 ug/L	0.0200 ppb	13:49:41
3	Tl 190.801†	-33.3	-5.0	-1.5954 ug/L	-1.5954 ppb	13:50:01
3	U 409.014†	-2908.3	74.6	2.0861 ug/L	2.0861 ppb	13:49:41
3	V 292.402†	-1504.9	5.7	0.0644 ug/L	0.0644 ppb	13:49:41
3	Zn 213.857†	878.6	114.7	1.1618 ug/L	1.1618 ppb	13:50:01
3	SiO2†	714.8	106.7	7.3698 ug/L	7.3698 ppb	13:50:16

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	899514.6	102.21 %	0.714			0.70%
Sc Radial	3902.5	101 %	0.4			0.44%
Y 371.029	758124.7	99.670 %	0.7118			0.71%
Y RADIAL	4519.1	101.5 %	0.85			0.84%
Ag 328.068†	28.0	0.1308 ug/L	0.22736	0.1308 ppb	0.22736	173.76%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	6.1	5.6866 ug/L	3.63051	5.6866 ppb	3.63051	63.84%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	25.1	11.143 ug/L	0.1861	11.143 ppb	0.1861	1.67%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	717.0	17.576 ug/L	1.5464	17.576 ppb	1.5464	8.80%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	13.2	0.1036 ug/L	0.01081	0.1036 ppb	0.01081	10.44%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	87.9	0.0329 ug/L	0.00303	0.0329 ppb	0.00303	9.23%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	4.5	9.7439 ug/L	3.57168	9.7439 ppb	3.57168	36.66%



QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd 226.502†	65.6	0.7626 ug/L	0.01648	0.7626 ppb	0.01648	2.16%	
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	0.3	0.0092 ug/L	0.08227	0.0092 ppb	0.08227	897.23%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	3.7	0.0424 ug/L	0.07495	0.0424 ppb	0.07495	176.73%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	19.8	0.0623 ug/L	0.18104	0.0623 ppb	0.18104	290.59%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	-0.5	-8.7346 ug/L	11.63557	-8.7346 ppb	11.63557	133.21%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	615.0	117.82 ug/L	12.450	117.82 ppb	12.450	10.57%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	0.1	7.0654 ug/L	24.08932	7.0654 ppb	24.08932	340.95%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	32.2	0.0355 ug/L	0.01237	0.0355 ppb	0.01237	34.88%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	15.0	1.1033 ug/L	0.17367	1.1033 ppb	0.17367	15.74%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	82.6	25.701 ug/L	14.4122	25.701 ppb	14.4122	56.08%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	0.4	0.0109 ug/L	0.23856	0.0109 ppb	0.23856	>999.9%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	-4.4	-2.6044 ug/L	3.41812	-2.6044 ppb	3.41812	131.24%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	-3.5	-0.4310 ug/L	1.10563	-0.4310 ppb	1.10563	256.52%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	9.5	13.409 ug/L	8.1115	13.409 ppb	8.1115	60.49%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	15.3	5.4551 ug/L	1.21823	5.4551 ppb	1.21823	22.33%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	1.8	1.1612 ug/L	0.12065	1.1612 ppb	0.12065	10.39%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	95.8	3.0884 ug/L	0.73918	3.0884 ppb	0.73918	23.93%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	12.2	2.2113 ug/L	0.64713	2.2113 ppb	0.64713	29.27%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	31.7	0.2201 ug/L	0.10168	0.2201 ppb	0.10168	46.19%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	3.9	0.0087 ug/L	0.01582	0.0087 ppb	0.01582	182.53%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	-1.8	-0.5741 ug/L	1.12750	-0.5741 ppb	1.12750	196.39%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	-148.2	-4.1369 ug/L	5.52787	-4.1369 ppb	5.52787	133.62%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	8.5	0.0687 ug/L	0.04328	0.0687 ppb	0.04328	62.97%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	122.2	1.2347 ug/L	0.09466	1.2347 ppb	0.09466	7.67%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†	71.7	4.9471 ug/L	2.16457	4.9471 ppb	2.16457	43.75%	
QC value within limits for SiO2 Recovery = Not calculated							
All analyte(s) passed QC.							

## ===== Analysis Begun

Start Time: 2/25/2010 13:55:01

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\022510.sif

Batch ID:

Results Data Set: 022510

Results Library: C:\pe\Optima3\Results\Results.mdb

## ===== Method Loaded

Method Name: General Eng.2AX

Method Last Saved: 2/25/2010 11:39:31

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: 36

Sample ID: LR1

Date Collected: 2/25/2010 13:55:02

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	3816.7	3816.7	99.0 %		13:57:15
1	Y RADIAL	4397.6	4397.6	98.78 %		13:56:55
1	Al 396.153Radial†	-139.4	-25.8	-22.943 ug/L	-22.943 ppb	13:56:55

1	Ca 317.933Radial†	9.1	-9.5	-20.737 ug/L	-20.737 ppb	13:57:15
1	Fe 238.204 Radial†	23840.6	24080.2	389140 ug/L	389140 ppb	13:56:55
1	K 766.490 Radial†	3035.6	302.5	58.023 ug/L	58.023 ppb	13:56:55
1	Mg 279.077 IEC†	10.0	9.0	66.777 ug/L	66.777 ppb	13:57:15
1	Na 589.592 Radial†	-935.0	-43.1	-13.420 ug/L	-13.420 ppb	13:56:55
1	Sr 421.552†	139.4	132.1	0.9191 ug/L	0.9191 ppb	13:56:55
1	Sc 361.383	881329.5	881329.5	100.14 %		13:58:13
1	Y 371.029	738732.3	738732.3	97.120 %		13:58:13
1	Ag 328.068†	-23689.6	-23890.0	0.5324 ug/L	0.5324 ppb	13:58:13
1	As 188.979†	-199.5	-179.2	11.549 ug/L	11.549 ppb	13:58:33
1	B 249.677†	1764.0	2039.5	-13.259 ug/L	-13.259 ppb	13:58:13
1	Ba 233.527†	-1857.5	-1865.9	-2.7512 ug/L	-2.7512 ppb	13:58:13
1	Be 313.107†	-8430.4	-4860.1	-1.8060 ug/L	-1.8060 ppb	13:58:13
1	Cd 226.502†	2838.7	3010.8	-3.2482 ug/L	-3.2482 ppb	13:58:13
1	Co 228.616†	781.8	845.5	12.064 ug/L	12.064 ppb	13:58:33
1	Cr 267.716†	-253.7	-338.4	29.275 ug/L	29.275 ppb	13:58:13
1	Cu 324.752†	64.5	-5890.7	-2.9150 ug/L	-2.9150 ppb	13:58:13
1	Mn 257.610†	-32601.6	-33032.8	0.7820 ug/L	0.7820 ppb	13:58:13
1	Mo 202.031†	-351.9	-356.1	3.9820 ug/L	3.9820 ppb	13:58:13
1	Ni 231.604†	197.9	114.8	2.9199 ug/L	2.9199 ppb	13:58:33
1	P 214.914†	715.0	508.1	-4.3556 ug/L	-4.3556 ppb	13:58:33
1	Pb 220.353†	298.3	236.7	-12.844 ug/L	-12.844 ppb	13:58:33
1	S 181.975 Axial†	52.3	16.4	23.145 ug/L	23.145 ppb	13:58:33
1	Sb 206.836†	21.9	-17.2	-10.967 ug/L	-10.967 ppb	13:58:33
1	Se 196.026†	-1790.4	-1763.2	54.982 ug/L	54.982 ppb	13:58:33
1	Si 251.611†	-709.0	-1272.7	-40.907 ug/L	-40.907 ppb	13:58:13
1	Sn 189.927†	-33.4	-42.8	-30.065 ug/L	-30.065 ppb	13:58:33
1	Ti 334.940†	1355.9	2763.9	-0.0993 ug/L	-0.0993 ppb	13:58:13
1	Tl 190.801†	-64.6	-37.1	-12.212 ug/L	-12.212 ppb	13:58:33
1	U 409.014†	357563.8	359955.8	10007 ug/L	10007 ppb	13:58:13
1	V 292.402†	3473.1	4936.8	-3.3158 ug/L	-3.3158 ppb	13:58:13
1	Zn 213.857†	4428.7	3682.9	-21.049 ug/L	-21.049 ppb	13:58:33
1	SiO2†	-725.6	-1312.8	-90.432 ug/L	-90.432 ppb	13:59:30
2	Sc Radial	3787.3	3787.3	98.2 %		13:57:40
2	Y RADIAL	4358.4	4358.4	97.90 %		13:57:20
2	Al 396.153Radial†	-136.5	-24.0	-21.103 ug/L	-21.103 ppb	13:57:20
2	Ca 317.933Radial†	12.7	-5.7	-12.492 ug/L	-12.492 ppb	13:57:40
2	Fe 238.204 Radial†	23731.4	24156.0	390370 ug/L	390370 ppb	13:57:20
2	K 766.490 Radial†	2882.7	170.7	32.759 ug/L	32.759 ppb	13:57:20
2	Mg 279.077 IEC†	11.7	10.7	158.29 ug/L	158.29 ppb	13:57:40
2	Na 589.592 Radial†	-920.2	-35.4	-11.027 ug/L	-11.027 ppb	13:57:20
2	Sr 421.552†	150.2	144.2	1.0031 ug/L	1.0031 ppb	13:57:20
2	Sc 361.383	888834.6	888834.6	101.00 %		13:58:39
2	Y 371.029	744730.9	744730.9	97.909 %		13:58:39
2	Ag 328.068†	-23818.7	-23818.1	1.2475 ug/L	1.2475 ppb	13:58:39
2	As 188.979†	-189.3	-167.6	17.043 ug/L	17.043 ppb	13:58:59
2	B 249.677†	1900.0	2159.3	-10.518 ug/L	-10.518 ppb	13:58:39
2	Ba 233.527†	-1877.7	-1870.2	-2.7443 ug/L	-2.7443 ppb	13:58:39
2	Be 313.107†	-8535.6	-4893.2	-1.8183 ug/L	-1.8183 ppb	13:58:39
2	Cd 226.502†	2790.1	2938.8	-4.2115 ug/L	-4.2115 ppb	13:58:39
2	Co 228.616†	746.6	804.1	11.169 ug/L	11.169 ppb	13:58:59
2	Cr 267.716†	-259.8	-342.4	29.349 ug/L	29.349 ppb	13:58:39
2	Cu 324.752†	118.8	-5837.4	-2.6890 ug/L	-2.6890 ppb	13:58:39
2	Mn 257.610†	-32694.5	-32849.9	1.1075 ug/L	1.1075 ppb	13:58:39
2	Mo 202.031†	-395.3	-396.0	1.1340 ug/L	1.1340 ppb	13:58:39
2	Ni 231.604†	213.0	128.2	3.2603 ug/L	3.2603 ppb	13:58:59
2	P 214.914†	727.9	514.9	-1.2910 ug/L	-1.2910 ppb	13:58:59
2	Pb 220.353†	282.0	218.1	-15.287 ug/L	-15.287 ppb	13:58:59
2	S 181.975 Axial†	50.6	14.2	20.064 ug/L	20.064 ppb	13:58:59
2	Sb 206.836†	21.1	-18.1	-11.326 ug/L	-11.326 ppb	13:58:59
2	Se 196.026†	-1756.9	-1714.8	90.543 ug/L	90.543 ppb	13:58:59
2	Si 251.611†	-763.8	-1321.0	-42.434 ug/L	-42.434 ppb	13:58:39
2	Sn 189.927†	-19.9	-29.1	-27.661 ug/L	-27.661 ppb	13:58:59
2	Ti 334.940†	1391.8	2788.0	-0.0686 ug/L	-0.0686 ppb	13:58:39
2	Tl 190.801†	-56.3	-28.3	-9.3943 ug/L	-9.3943 ppb	13:58:59
2	U 409.014†	360681.4	360027.9	10009 ug/L	10009 ppb	13:58:39
2	V 292.402†	3727.2	5159.2	-1.9767 ug/L	-1.9767 ppb	13:58:39
2	Zn 213.857†	4389.0	3606.3	-22.009 ug/L	-22.009 ppb	13:58:59
2	SiO2†	-650.9	-1232.7	-84.790 ug/L	-84.790 ppb	13:59:35
3	Sc Radial	3799.6	3799.6	98.5 %		13:58:06
3	Y RADIAL	4366.4	4366.4	98.08 %		13:57:45

3	Al 396.153Radial†	-121.8	-8.6	-6.8083 ug/L	-6.8083 ppb	13:57:45
3	Ca 317.933Radial†	10.9	-7.7	-16.691 ug/L	-16.691 ppb	13:58:06
3	Fe 238.204 Radial†	23731.6	24078.4	389120 ug/L	389120 ppb	13:57:45
3	K 766.490 Radial†	2912.0	190.9	36.631 ug/L	36.631 ppb	13:57:45
3	Mg 279.077 IEC†	8.8	7.8	1.9668 ug/L	1.9668 ppb	13:58:06
3	Na 589.592 Radial†	-922.7	-35.0	-10.877 ug/L	-10.877 ppb	13:57:45
3	Sr 421.552†	155.7	149.3	1.0386 ug/L	1.0386 ppb	13:57:45
3	Sc 361.383	889833.9	889833.9	101.11 %		13:59:05
3	Y 371.029	744818.3	744818.3	97.921 %		13:59:05
3	Ag 328.068†	-23790.0	-23763.2	1.1319 ug/L	1.1319 ppb	13:59:05
3	As 188.979†	-193.0	-170.9	15.234 ug/L	15.234 ppb	13:59:25
3	B 249.677†	1797.8	2056.1	-12.845 ug/L	-12.845 ppb	13:59:05
3	Ba 233.527†	-1788.2	-1779.6	-2.0717 ug/L	-2.0717 ppb	13:59:05
3	Be 313.107†	-8541.2	-4889.3	-1.8171 ug/L	-1.8171 ppb	13:59:05
3	Cd 226.502†	2858.4	3003.2	-3.3377 ug/L	-3.3377 ppb	13:59:05
3	Co 228.616†	753.8	810.4	11.326 ug/L	11.326 ppb	13:59:25
3	Cr 267.716†	-222.4	-305.1	29.655 ug/L	29.655 ppb	13:59:05
3	Cu 324.752†	186.5	-5770.7	-2.5405 ug/L	-2.5405 ppb	13:59:05
3	Mn 257.610†	-32510.7	-32631.7	1.2386 ug/L	1.2386 ppb	13:59:05
3	Mo 202.031†	-358.7	-359.5	3.7301 ug/L	3.7301 ppb	13:59:05
3	Ni 231.604†	199.6	114.6	2.9142 ug/L	2.9142 ppb	13:59:25
3	P 214.914†	721.5	507.8	-4.5740 ug/L	-4.5740 ppb	13:59:25
3	Pb 220.353†	289.0	224.6	-14.327 ug/L	-14.327 ppb	13:59:25
3	S 181.975 Axial†	61.9	25.4	35.841 ug/L	35.841 ppb	13:59:25
3	Sb 206.836†	22.3	-16.9	-10.855 ug/L	-10.855 ppb	13:59:25
3	Se 196.026†	-1756.0	-1712.0	88.530 ug/L	88.530 ppb	13:59:25
3	Si 251.611†	-739.1	-1295.7	-41.649 ug/L	-41.649 ppb	13:59:05
3	Sn 189.927†	-24.0	-33.2	-28.326 ug/L	-28.326 ppb	13:59:25
3	Ti 334.940†	1326.2	2721.5	-0.1520 ug/L	-0.1520 ppb	13:59:05
3	Tl 190.801†	-65.4	-37.2	-12.260 ug/L	-12.260 ppb	13:59:25
3	U 409.014†	360329.2	359278.5	9988.2 ug/L	9988.2 ppb	13:59:05
3	V 292.402†	3641.2	5070.0	-2.4225 ug/L	-2.4225 ppb	13:59:05
3	Zn 213.857†	4395.0	3607.4	-21.808 ug/L	-21.808 ppb	13:59:25
3	SiO2†	-686.3	-1266.9	-87.240 ug/L	-87.240 ppb	13:59:40

## Mean Data: LR1

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	886666.0	100.75 %	0.528			0.52%
Sc Radial	3801.2	98.6 %	0.38			0.39%
Y 371.029	742760.5	97.650 %	0.4587			0.47%
Y RADIAL	4374.1	98.26 %	0.465			0.47%
Ag 328.068†	-23823.8	0.9706 ug/L	0.38386	0.9706 ppb	0.38386	39.55%
Al 396.153Radial†	-19.4	-16.951 ug/L	8.8324	-16.951 ppb	8.8324	52.10%
As 188.979†	-172.6	14.609 ug/L	2.7998	14.609 ppb	2.7998	19.17%
B 249.677†	2085.0	-12.207 ug/L	1.4776	-12.207 ppb	1.4776	12.10%
Ba 233.527†	-1838.6	-2.5224 ug/L	0.39029	-2.5224 ppb	0.39029	15.47%
Be 313.107†	-4880.9	-1.8138 ug/L	0.00676	-1.8138 ppb	0.00676	0.37%
Ca 317.933Radial†	-7.6	-16.640 ug/L	4.1231	-16.640 ppb	4.1231	24.78%
Cd 226.502†	2984.3	-3.5991 ug/L	0.53220	-3.5991 ppb	0.53220	14.79%
Co 228.616†	820.0	11.519 ug/L	0.4781	11.519 ppb	0.4781	4.15%
Cr 267.716†	-328.6	29.426 ug/L	0.2016	29.426 ppb	0.2016	0.69%
Cu 324.752†	-5832.9	-2.7148 ug/L	0.18858	-2.7148 ppb	0.18858	6.95%
Fe 238.204 Radial†	24104.8	389540 ug/L	715.6	389540 ppb	715.6	0.18%
K 766.490 Radial†	221.4	42.471 ug/L	13.6067	42.471 ppb	13.6067	32.04%
Mg 279.077 IEC†	9.2	75.678 ug/L	78.5407	75.678 ppb	78.5407	103.78%
Mn 257.610†	-32838.2	1.0427 ug/L	0.23514	1.0427 ppb	0.23514	22.55%
Mo 202.031†	-370.5	2.9487 ug/L	1.57661	2.9487 ppb	1.57661	53.47%
Na 589.592 Radial†	-37.8	-11.775 ug/L	1.4268	-11.775 ppb	1.4268	12.12%
Ni 231.604†	119.2	3.0315 ug/L	0.19818	3.0315 ppb	0.19818	6.54%
P 214.914†	510.3	-3.4069 ug/L	1.83564	-3.4069 ppb	1.83564	53.88%
Pb 220.353†	226.5	-14.153 ug/L	1.2307	-14.153 ppb	1.2307	8.70%
S 181.975 Axial†	18.7	26.350 ug/L	8.3625	26.350 ppb	8.3625	31.74%
Sb 206.836†	-17.4	-11.049 ug/L	0.2457	-11.049 ppb	0.2457	2.22%
Se 196.026†	-1730.0	78.018 ug/L	19.9755	78.018 ppb	19.9755	25.60%
Si 251.611†	-1296.5	-41.663 ug/L	0.7637	-41.663 ppb	0.7637	1.83%
Sn 189.927†	-35.0	-28.684 ug/L	1.2412	-28.684 ppb	1.2412	4.33%
Sr 421.552†	141.9	0.9870 ug/L	0.06136	0.9870 ppb	0.06136	6.22%
Ti 334.940†	2757.8	-0.1066 ug/L	0.04218	-0.1066 ppb	0.04218	39.55%
Tl 190.801†	-34.2	-11.289 ug/L	1.6409	-11.289 ppb	1.6409	14.54%

U 409.014†	359754.1	10001 ug/L	11.5	10001 ppb	11.5	0.11%
V 292.402†	5055.3	-2.5717 ug/L	0.68190	-2.5717 ppb	0.68190	26.52%
Zn 213.857†	3632.2	-21.622 ug/L	0.5061	-21.622 ppb	0.5061	2.34%
SiO2†	-1270.8	-87.487 ug/L	2.8290	-87.487 ppb	2.8290	3.23%

Sequence No.: 2  
 Sample ID: LR2  
 Analyst: HSC  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 37  
 Date Collected: 2/25/2010 14:01:52  
 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	4403.2	4403.2	114 %		14:03:45
1	Y RADIAL	4900.7	4900.7	110.1 %		14:03:45
1	Al 396.153Radial†	-119.5	10.4	9.7096 ug/L	9.7096 ppb	14:03:45
1	Ca 317.933Radial†	18.0	-2.9	-6.4170 ug/L	-6.4170 ppb	14:04:05
1	Fe 238.204 Radial†	12.1	-1.1	-17.618 ug/L	-17.618 ppb	14:04:05
1	K 766.490 Radial†	3047.6	-95.6	-18.320 ug/L	-18.320 ppb	14:03:45
1	Mg 279.077 IEC†	0.8	-0.5	-25.000 ug/L	-25.000 ppb	14:04:05
1	Na 589.592 Radial†	-906.7	107.4	33.429 ug/L	33.429 ppb	14:03:45
1	Sr 421.552†	46.8	32.3	0.2245 ug/L	0.2245 ppb	14:03:45
1	Sc 361.383	911543.9	911543.9	103.58 %		14:05:02
1	Y 371.029	768995.6	768995.6	101.10 %		14:05:02
1	Ag 328.068†	323.1	77.8	0.3594 ug/L	0.3594 ppb	14:05:07
1	As 188.979†	-12.0	8.4	3.7109 ug/L	3.7109 ppb	14:05:27
1	B 249.677†	-38.0	241.3	5.9293 ug/L	5.9293 ppb	14:05:27
1	Ba 233.527†	1250815.2	1207619.9	9492.3 ug/L	9492.3 ppb	14:05:02
1	Be 313.107†	-3508.7	170.7	0.0638 ug/L	0.0638 ppb	14:05:07
1	Cd 226.502†	-130.7	50.1	0.5829 ug/L	0.5829 ppb	14:05:27
1	Co 228.616†	-285.3	-210.6	0.1485 ug/L	0.1485 ppb	14:05:27
1	Cr 267.716†	81.4	-6.5	-0.0733 ug/L	-0.0733 ppb	14:05:27
1	Cu 324.752†	5966.6	-194.5	-0.5928 ug/L	-0.5928 ppb	14:05:07
1	Mn 257.610†	513.8	18.4	0.0202 ug/L	0.0202 ppb	14:05:27
1	Mo 202.031†	15.2	10.0	0.7375 ug/L	0.7375 ppb	14:05:27
1	Ni 231.604†	66.2	-18.8	-0.4779 ug/L	-0.4779 ppb	14:05:27
1	P 214.914†	206.7	-6.2	-3.5895 ug/L	-3.5895 ppb	14:05:27
1	Pb 220.353†	36.7	-25.8	-3.1799 ug/L	-3.1799 ppb	14:05:27
1	S 181.975 Axial†	43.1	5.7	8.0818 ug/L	8.0818 ppb	14:05:27
1	Sb 206.836†	39.9	-0.4	-0.1266 ug/L	-0.1266 ppb	14:05:27
1	Se 196.026†	-24.5	1.0	0.6337 ug/L	0.6337 ppb	14:05:27
1	Si 251.611†	619.8	33.7	1.0812 ug/L	1.0812 ppb	14:05:27
1	Sn 189.927†	15.4	5.5	0.9852 ug/L	0.9852 ppb	14:05:27
1	Ti 334.940†	-1446.1	13.7	0.0233 ug/L	0.0233 ppb	14:05:07
1	Tl 190.801†	-28.6	-0.2	-0.0438 ug/L	-0.0438 ppb	14:05:27
1	U 409.014†	-3049.9	-42.7	-1.1914 ug/L	-1.1914 ppb	14:05:02
1	V 292.402†	-1441.0	77.5	0.5515 ug/L	0.5515 ppb	14:05:07
1	Zn 213.857†	1017.7	243.1	2.4608 ug/L	2.4608 ppb	14:05:27
1	SiO2†	661.5	50.5	3.4838 ug/L	3.4838 ppb	14:06:33
2	Sc Radial	4038.8	4038.8	105 %		14:04:10
2	Y RADIAL	4530.4	4530.4	101.8 %		14:04:10
2	Al 396.153Radial†	-97.5	22.0	20.609 ug/L	20.609 ppb	14:04:10
2	Ca 317.933Radial†	23.8	4.0	8.8098 ug/L	8.8098 ppb	14:04:30
2	Fe 238.204 Radial†	10.6	-1.5	-24.640 ug/L	-24.640 ppb	14:04:30
2	K 766.490 Radial†	3021.8	120.7	23.112 ug/L	23.112 ppb	14:04:10
2	Mg 279.077 IEC†	3.8	2.4	128.58 ug/L	128.58 ppb	14:04:30
2	Na 589.592 Radial†	-846.5	93.3	29.031 ug/L	29.031 ppb	14:04:10
2	Sr 421.552†	-13.1	-21.3	-0.1479 ug/L	-0.1479 ppb	14:04:10
2	Sc 361.383	920825.7	920825.7	104.63 %		14:05:33
2	Y 371.029	775725.2	775725.2	101.98 %		14:05:33
2	Ag 328.068†	249.6	4.4	0.0102 ug/L	0.0102 ppb	14:05:38
2	As 188.979†	-10.3	10.1	4.4894 ug/L	4.4894 ppb	14:05:58
2	B 249.677†	-71.0	210.1	5.1659 ug/L	5.1659 ppb	14:05:58
2	Ba 233.527†	1260388.6	1204596.9	9468.5 ug/L	9468.5 ppb	14:05:33
2	Be 313.107†	-3672.5	48.3	0.0182 ug/L	0.0182 ppb	14:05:38
2	Cd 226.502†	-130.4	51.5	0.6026 ug/L	0.6026 ppb	14:05:58
2	Co 228.616†	-278.2	-201.0	0.3388 ug/L	0.3388 ppb	14:05:58
2	Cr 267.716†	95.5	6.1	0.0650 ug/L	0.0650 ppb	14:05:58
2	Cu 324.752†	6051.5	-171.5	-0.5267 ug/L	-0.5267 ppb	14:05:38
2	Mn 257.610†	509.8	9.6	0.0033 ug/L	0.0033 ppb	14:05:58
2	Mo 202.031†	15.9	10.6	0.7753 ug/L	0.7753 ppb	14:05:58
2	Ni 231.604†	97.0	10.0	0.2567 ug/L	0.2567 ppb	14:05:58

2	P 214.914†	202.8	-11.9	-7.0405 ug/L	-7.0405 ppb	14:05:58
2	Pb 220.353†	18.3	-43.7	-5.3955 ug/L	-5.3955 ppb	14:05:58
2	S 181.975 Axial†	43.4	5.7	7.9635 ug/L	7.9635 ppb	14:05:58
2	Sb 206.836†	36.9	-3.8	-1.2911 ug/L	-1.2911 ppb	14:05:58
2	Se 196.026†	-28.6	-2.6	-1.7791 ug/L	-1.7791 ppb	14:05:58
2	Si 251.611†	614.3	22.4	0.7170 ug/L	0.7170 ppb	14:05:58
2	Sn 189.927†	16.7	6.6	1.1896 ug/L	1.1896 ppb	14:05:58
2	Ti 334.940†	-1420.7	52.1	0.0704 ug/L	0.0704 ppb	14:05:38
2	Tl 190.801†	-29.5	-0.7	-0.2133 ug/L	-0.2133 ppb	14:05:58
2	U 409.014†	-2835.2	192.1	5.3673 ug/L	5.3673 ppb	14:05:33
2	V 292.402†	-1471.0	62.8	0.4658 ug/L	0.4658 ppb	14:05:38
2	Zn 213.857†	1009.9	225.7	2.2818 ug/L	2.2818 ppb	14:05:58
2	SiO2†	647.5	30.6	2.1023 ug/L	2.1023 ppb	14:06:38
3	Sc Radial	3944.9	3944.9	102 %		14:04:36
3	Y RADIAL	4420.4	4420.4	99.30 %		14:04:36
3	Al 396.153Radial†	-127.0	-9.1	-8.4911 ug/L	-8.4911 ppb	14:04:36
3	Ca 317.933Radial†	27.1	7.8	17.105 ug/L	17.105 ppb	14:04:56
3	Fe 238.204 Radial†	12.2	0.2	3.3843 ug/L	3.3843 ppb	14:04:56
3	K 766.490 Radial†	2981.3	149.7	28.685 ug/L	28.685 ppb	14:04:36
3	Mg 279.077 IEC†	2.3	1.1	58.425 ug/L	58.425 ppb	14:04:56
3	Na 589.592 Radial†	-947.4	-24.6	-7.6621 ug/L	-7.6621 ppb	14:04:36
3	Sr 421.552†	21.5	12.3	0.0852 ug/L	0.0852 ppb	14:04:36
3	Sc 361.383	922407.0	922407.0	104.81 %		14:06:03
3	Y 371.029	777523.1	777523.1	102.22 %		14:06:03
3	Ag 328.068†	232.5	-12.3	-0.0617 ug/L	-0.0617 ppb	14:06:08
3	As 188.979†	-8.3	12.0	5.3228 ug/L	5.3228 ppb	14:06:28
3	B 249.677†	-61.7	219.2	5.3837 ug/L	5.3837 ppb	14:06:28
3	Ba 233.527†	1245409.9	1188240.5	9340.0 ug/L	9340.0 ppb	14:06:03
3	Be 313.107†	-3576.9	145.5	0.0546 ug/L	0.0546 ppb	14:06:08
3	Cd 226.502†	-118.8	62.8	0.7307 ug/L	0.7307 ppb	14:06:28
3	Co 228.616†	-284.4	-206.5	0.1588 ug/L	0.1588 ppb	14:06:28
3	Cr 267.716†	81.3	-7.5	-0.0868 ug/L	-0.0868 ppb	14:06:28
3	Cu 324.752†	6098.8	-136.2	-0.4182 ug/L	-0.4182 ppb	14:06:08
3	Mn 257.610†	491.0	-9.2	-0.0126 ug/L	-0.0126 ppb	14:06:28
3	Mo 202.031†	-2.0	-6.6	-0.4852 ug/L	-0.4852 ppb	14:06:28
3	Ni 231.604†	62.6	-23.0	-0.5848 ug/L	-0.5848 ppb	14:06:28
3	P 214.914†	211.4	-4.1	-2.4025 ug/L	-2.4025 ppb	14:06:28
3	Pb 220.353†	41.9	-21.2	-2.6292 ug/L	-2.6292 ppb	14:06:28
3	S 181.975 Axial†	41.2	3.5	4.9609 ug/L	4.9609 ppb	14:06:28
3	Sb 206.836†	44.1	3.0	1.0736 ug/L	1.0736 ppb	14:06:28
3	Se 196.026†	-25.2	0.7	0.4744 ug/L	0.4744 ppb	14:06:28
3	Si 251.611†	594.7	2.7	0.0941 ug/L	0.0941 ppb	14:06:28
3	Sn 189.927†	15.0	4.9	0.8864 ug/L	0.8864 ppb	14:06:28
3	Ti 334.940†	-1398.4	75.7	0.1140 ug/L	0.1140 ppb	14:06:08
3	Tl 190.801†	-28.8	-0.0	0.0111 ug/L	0.0111 ppb	14:06:28
3	U 409.014†	-2804.5	226.0	6.3119 ug/L	6.3119 ppb	14:06:03
3	V 292.402†	-1544.6	-5.0	-0.0290 ug/L	-0.0290 ppb	14:06:08
3	Zn 213.857†	1021.1	234.8	2.3743 ug/L	2.3743 ppb	14:06:28
3	SiO2†	604.2	-11.7	-0.8013 ug/L	-0.8013 ppb	14:06:43

## Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	918258.9	104.34 %	0.667			0.64%
Sc Radial	4129.0	107 %	6.3			5.86%
Y 371.029	774081.3	101.77 %	0.591			0.58%
Y RADIAL	4617.2	103.7 %	5.65			5.45%
Ag 328.068†	23.3	0.1026 ug/L	0.22523	0.1026 ppb	0.22523	219.50%
Al 396.153Radial†	7.8	7.2759 ug/L	14.70201	7.2759 ppb	14.70201	202.06%
As 188.979†	10.1	4.5077 ug/L	0.80614	4.5077 ppb	0.80614	17.88%
B 249.677†	223.5	5.4930 ug/L	0.39327	5.4930 ppb	0.39327	7.16%
Ba 233.527†	1200152.4	9433.6 ug/L	81.95	9433.6 ppb	81.95	0.87%
Be 313.107†	121.5	0.0456 ug/L	0.02412	0.0456 ppb	0.02412	52.93%
Ca 317.933Radial†	3.0	6.4992 ug/L	11.92986	6.4992 ppb	11.92986	183.56%
Cd 226.502†	54.8	0.6387 ug/L	0.08024	0.6387 ppb	0.08024	12.56%
Co 228.616†	-206.0	0.2153 ug/L	0.10701	0.2153 ppb	0.10701	49.69%
Cr 267.716†	-2.6	-0.0317 ug/L	0.08403	-0.0317 ppb	0.08403	265.15%
Cu 324.752†	-167.4	-0.5126 ug/L	0.08813	-0.5126 ppb	0.08813	17.20%
Fe 238.204 Radial†	-0.8	-12.958 ug/L	14.5816	-12.958 ppb	14.5816	112.53%
K 766.490 Radial†	58.3	11.159 ug/L	25.6812	11.159 ppb	25.6812	230.13%

Mg 279.077 IEC†	1.0	54.002 ug/L	76.8852	54.002 ppb	76.8852 142.38%
Mn 257.610†	6.2	0.0036 ug/L	0.01639	0.0036 ppb	0.01639 449.97%
Mo 202.031†	4.7	0.3425 ug/L	0.71706	0.3425 ppb	0.71706 209.34%
Na 589.592 Radial†	58.7	18.266 ug/L	22.5619	18.266 ppb	22.5619 123.52%
Ni 231.604†	-10.6	-0.2686 ug/L	0.45813	-0.2686 ppb	0.45813 170.54%
P 214.914†	-7.4	-4.3442 ug/L	2.40932	-4.3442 ppb	2.40932 55.46%
Pb 220.353†	-30.2	-3.7349 ug/L	1.46427	-3.7349 ppb	1.46427 39.21%
S 181.975 Axial†	5.0	7.0021 ug/L	1.76869	7.0021 ppb	1.76869 25.26%
Sb 206.836†	-0.4	-0.1147 ug/L	1.18240	-0.1147 ppb	1.18240 >999.9%
Se 196.026†	-0.3	-0.2237 ug/L	1.34940	-0.2237 ppb	1.34940 603.27%
Si 251.611†	19.6	0.6308 ug/L	0.49913	0.6308 ppb	0.49913 79.13%
Sn 189.927†	5.6	1.0204 ug/L	0.15460	1.0204 ppb	0.15460 15.15%
Sr 421.552†	7.8	0.0539 ug/L	0.18816	0.0539 ppb	0.18816 348.93%
Ti 334.940†	47.2	0.0693 ug/L	0.04537	0.0693 ppb	0.04537 65.51%
Tl 190.801†	-0.3	-0.0820 ug/L	0.11701	-0.0820 ppb	0.11701 142.71%
U 409.014†	125.1	3.4959 ug/L	4.08670	3.4959 ppb	4.08670 116.90%
V 292.402†	45.1	0.3294 ug/L	0.31334	0.3294 ppb	0.31334 95.12%
Zn 213.857†	234.6	2.3723 ug/L	0.08953	2.3723 ppb	0.08953 3.77%
SiO2†	23.1	1.5949 ug/L	2.18718	1.5949 ppb	2.18718 137.13%



Sequence No.: 3  
 Sample ID: CCV  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 7  
 Date Collected: 2/25/2010 14:08:55  
 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	3878.2	3878.2	101 %		14:11:08
1	Y RADIAL	4371.2	4371.2	98.19 %		14:10:48
1	Al 396.153Radial†	5250.9	5337.3	4993.2 ug/L	4993.2 ppb	14:10:48
1	Ca 317.933Radial†	2366.9	2335.3	5092.6 ug/L	5092.6 ppb	14:11:08
1	Fe 238.204 Radial†	322.7	309.3	5012.5 ug/L	5012.5 ppb	14:11:08
1	K 766.490 Radial†	28785.8	25863.4	4948.7 ug/L	4948.7 ppb	14:10:48
1	Mg 279.077 IEC†	98.7	97.0	5119.9 ug/L	5119.9 ppb	14:11:08
1	Na 589.592 Radial†	32999.6	33720.9	10493 ug/L	10493 ppb	14:10:48
1	Sr 421.552†	72250.2	71846.6	499.77 ug/L	499.77 ppb	14:10:48
1	Sc 361.383	922334.5	922334.5	104.80 %		14:12:05
1	Y 371.029	765696.2	765696.2	100.67 %		14:12:05
1	Ag 328.068†	105655.8	100580.5	470.36 ug/L	470.36 ppb	14:12:10
1	As 188.979†	1091.7	1061.6	476.13 ug/L	476.13 ppb	14:12:31
1	B 249.677†	19737.3	19110.9	466.25 ug/L	466.25 ppb	14:12:10
1	Ba 233.527†	62386.8	59517.2	469.00 ug/L	469.00 ppb	14:12:10
1	Be 313.107†	1341490.9	1283581.8	480.65 ug/L	480.65 ppb	14:12:05
1	Cd 226.502†	42109.4	40356.2	468.85 ug/L	468.85 ppb	14:12:10
1	Co 228.616†	23336.1	22331.7	469.12 ug/L	469.12 ppb	14:12:10
1	Cr 267.716†	43688.4	41601.5	467.75 ug/L	467.75 ppb	14:12:10
1	Cu 324.752†	165981.8	152421.4	464.41 ug/L	464.41 ppb	14:12:10
1	Mn 257.610†	442228.4	421487.8	480.47 ug/L	480.47 ppb	14:12:05
1	Mo 202.031†	6667.2	6357.1	468.68 ug/L	468.68 ppb	14:12:31
1	Ni 231.604†	19416.9	18444.5	470.42 ug/L	470.42 ppb	14:12:10
1	P 214.914†	4280.0	3878.1	2241.7 ug/L	2241.7 ppb	14:12:31
1	Pb 220.353†	3984.1	3740.4	464.20 ug/L	464.20 ppb	14:12:31
1	S 181.975 Axial†	734.1	664.6	936.14 ug/L	936.14 ppb	14:12:31
1	Sb 206.836†	1421.7	1317.6	481.74 ug/L	481.74 ppb	14:12:31
1	Se 196.026†	719.8	711.6	484.60 ug/L	484.60 ppb	14:12:31
1	Si 251.611†	76057.9	72008.2	2327.0 ug/L	2327.0 ppb	14:12:10
1	Sn 189.927†	2731.7	2597.1	468.96 ug/L	468.96 ppb	14:12:31
1	Ti 334.940†	308172.0	295461.4	465.43 ug/L	465.43 ppb	14:12:10
1	Tl 190.801†	1520.6	1478.4	478.73 ug/L	478.73 ppb	14:12:31
1	U 409.014†	14568.1	16802.4	467.58 ug/L	467.58 ppb	14:12:10
1	V 292.402†	68375.4	66711.1	472.26 ug/L	472.26 ppb	14:12:10
1	Zn 213.857†	49313.7	46314.7	463.19 ug/L	463.19 ppb	14:12:10
1	SiO2†	76564.8	72468.4	5018.5 ug/L	5018.5 ppb	14:13:38
2	Sc Radial	3515.4	3515.4	91.1 %		14:11:33
2	Y RADIAL	4401.4	4401.4	98.87 %		14:11:13
2	Al 396.153Radial†	4848.8	5434.9	5084.5 ug/L	5084.5 ppb	14:11:13
2	Ca 317.933Radial†	2454.7	2674.5	5832.4 ug/L	5832.4 ppb	14:11:33
2	Fe 238.204 Radial†	337.7	358.8	5812.8 ug/L	5812.8 ppb	14:11:33
2	K 766.490 Radial†	26678.3	26505.1	5071.3 ug/L	5071.3 ppb	14:11:13
2	Mg 279.077 IEC†	101.4	110.1	5809.0 ug/L	5809.0 ppb	14:11:33
2	Na 589.592 Radial†	30386.2	34240.1	10654 ug/L	10654 ppb	14:11:13
2	Sr 421.552†	66778.6	73257.8	509.58 ug/L	509.58 ppb	14:11:13
2	Sc 361.383	908111.5	908111.5	103.19 %		14:12:36
2	Y 371.029	753785.4	753785.4	99.099 %		14:12:36
2	Ag 328.068†	106298.0	102781.8	480.86 ug/L	480.86 ppb	14:12:41
2	As 188.979†	1093.5	1079.7	484.43 ug/L	484.43 ppb	14:13:02
2	B 249.677†	19863.7	19528.4	476.32 ug/L	476.32 ppb	14:12:41
2	Ba 233.527†	62792.9	60843.1	479.47 ug/L	479.47 ppb	14:12:41
2	Be 313.107†	1318537.7	1281385.3	479.85 ug/L	479.85 ppb	14:12:36
2	Cd 226.502†	42446.3	41311.9	479.88 ug/L	479.88 ppb	14:12:41
2	Co 228.616†	23484.3	22824.1	479.45 ug/L	479.45 ppb	14:12:41
2	Cr 267.716†	43961.8	42519.3	478.13 ug/L	478.13 ppb	14:12:41
2	Cu 324.752†	166839.1	155732.7	474.54 ug/L	474.54 ppb	14:12:41
2	Mn 257.610†	435755.4	421823.5	480.90 ug/L	480.90 ppb	14:12:36
2	Mo 202.031†	6720.4	6508.2	479.88 ug/L	479.88 ppb	14:13:02
2	Ni 231.604†	19611.8	18923.5	482.64 ug/L	482.64 ppb	14:12:41

2	P 214.914†	4319.4	3980.2	2300.5 ug/L	2300.5 ppb	14:13:02
2	Pb 220.353†	4019.3	3834.0	475.74 ug/L	475.74 ppb	14:13:02
2	S 181.975 Axial†	740.9	682.2	960.97 ug/L	960.97 ppb	14:13:02
2	Sb 206.836†	1430.7	1347.5	492.70 ug/L	492.70 ppb	14:13:02
2	Se 196.026†	724.7	727.1	497.32 ug/L	497.32 ppb	14:13:02
2	Si 251.611†	76491.5	73565.1	2377.3 ug/L	2377.3 ppb	14:12:41
2	Sn 189.927†	2758.5	2663.9	481.08 ug/L	481.08 ppb	14:13:02
2	Ti 334.940†	309963.1	301802.7	475.46 ug/L	475.46 ppb	14:12:41
2	Tl 190.801†	1512.0	1492.8	483.38 ug/L	483.38 ppb	14:13:02
2	U 409.014†	14476.4	16931.3	471.06 ug/L	471.06 ppb	14:12:41
2	V 292.402†	68782.2	68127.2	482.20 ug/L	482.20 ppb	14:12:41
2	Zn 213.857†	49649.6	47377.2	473.71 ug/L	473.71 ppb	14:12:41
2	SiO2†	75671.1	72746.5	5037.5 ug/L	5037.5 ppb	14:13:43
3	Sc Radial	3853.6	3853.6	99.9 %		14:11:58
3	Y RADIAL	4352.3	4352.3	97.77 %		14:11:38
3	Al 396.153Radial†	5324.7	5444.4	5093.4 ug/L	5093.4 ppb	14:11:38
3	Ca 317.933Radial†	2384.5	2367.9	5163.7 ug/L	5163.7 ppb	14:11:58
3	Fe 238.204 Radial†	328.5	317.1	5138.1 ug/L	5138.1 ppb	14:11:58
3	K 766.490 Radial†	28809.9	26069.9	4988.2 ug/L	4988.2 ppb	14:11:38
3	Mg 279.077 IEC†	103.2	102.1	5386.5 ug/L	5386.5 ppb	14:11:58
3	Na 589.592 Radial†	33075.6	34006.1	10581 ug/L	10581 ppb	14:11:38
3	Sr 421.552†	73032.9	73087.8	508.41 ug/L	508.41 ppb	14:11:38
3	Sc 361.383	913347.6	913347.6	103.78 %		14:13:07
3	Y 371.029	757937.7	757937.7	99.645 %		14:13:07
3	Ag 328.068†	106128.5	102027.9	477.15 ug/L	477.15 ppb	14:13:13
3	As 188.979†	1107.1	1086.7	487.38 ug/L	487.38 ppb	14:13:33
3	B 249.677†	19878.5	19432.3	474.09 ug/L	474.09 ppb	14:13:13
3	Ba 233.527†	62624.9	60332.3	475.43 ug/L	475.43 ppb	14:13:13
3	Be 313.107†	1324169.2	1279486.0	479.13 ug/L	479.13 ppb	14:13:07
3	Cd 226.502†	42247.5	40884.6	474.98 ug/L	474.98 ppb	14:13:13
3	Co 228.616†	23400.7	22613.0	475.03 ug/L	475.03 ppb	14:13:13
3	Cr 267.716†	43972.7	42285.6	475.44 ug/L	475.44 ppb	14:13:13
3	Cu 324.752†	166772.6	154741.7	471.48 ug/L	471.48 ppb	14:13:13
3	Mn 257.610†	436917.8	420522.6	479.37 ug/L	479.37 ppb	14:13:07
3	Mo 202.031†	6743.5	6493.1	478.71 ug/L	478.71 ppb	14:13:33
3	Ni 231.604†	19450.4	18659.0	475.89 ug/L	475.89 ppb	14:13:13
3	P 214.914†	4303.9	3941.3	2278.3 ug/L	2278.3 ppb	14:13:33
3	Pb 220.353†	4036.3	3828.0	475.07 ug/L	475.07 ppb	14:13:33
3	S 181.975 Axial†	740.3	677.5	954.26 ug/L	954.26 ppb	14:13:33
3	Sb 206.836†	1445.4	1353.7	494.84 ug/L	494.84 ppb	14:13:33
3	Se 196.026†	722.6	721.0	491.25 ug/L	491.25 ppb	14:13:33
3	Si 251.611†	76279.7	72936.0	2356.9 ug/L	2356.9 ppb	14:13:13
3	Sn 189.927†	2762.5	2652.4	478.93 ug/L	478.93 ppb	14:13:33
3	Ti 334.940†	309664.8	299793.2	472.24 ug/L	472.24 ppb	14:13:13
3	Tl 190.801†	1510.3	1482.7	480.14 ug/L	480.14 ppb	14:13:33
3	U 409.014†	14490.3	16864.3	469.27 ug/L	469.27 ppb	14:13:13
3	V 292.402†	68739.6	67704.0	479.32 ug/L	479.32 ppb	14:13:13
3	Zn 213.857†	49496.4	46953.8	469.58 ug/L	469.58 ppb	14:13:13
3	SiO2†	76319.6	72951.0	5051.8 ug/L	5051.8 ppb	14:13:48

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	914597.9	103.92 %	0.817			0.79%
Sc Radial	3749.1	97.2 %	5.26			5.41%
Y 371.029	759139.8	99.803 %	0.7948			0.80%
Y RADIAL	4375.0	98.28 %	0.557			0.57%
Ag 328.068†	101796.7	476.12 ug/L	5.326	476.12 ppb	5.326	1.12%
QC value within limits for Ag 328.068 Recovery = 95.22%						
Al 396.153Radial†	5405.5	5057.0 ug/L	55.44	5057.0 ppb	55.44	1.10%
QC value within limits for Al 396.153Radial Recovery = 101.14%						
As 188.979†	1076.0	482.65 ug/L	5.832	482.65 ppb	5.832	1.21%
QC value within limits for As 188.979 Recovery = 96.53%						
B 249.677†	19357.2	472.22 ug/L	5.290	472.22 ppb	5.290	1.12%
QC value within limits for B 249.677 Recovery = 94.44%						
Ba 233.527†	60230.9	474.63 ug/L	5.279	474.63 ppb	5.279	1.11%
QC value within limits for Ba 233.527 Recovery = 94.93%						
Be 313.107†	1281484.4	479.88 ug/L	0.758	479.88 ppb	0.758	0.16%
QC value within limits for Be 313.107 Recovery = 95.98%						
Ca 317.933Radial†	2459.2	5362.9 ug/L	408.16	5362.9 ppb	408.16	7.61%

QC value within limits for Ca 317.933 Radial Recovery = 107.26%

Cd 226.502†	40850.9	474.57 ug/L	5.527	474.57 ppb	5.527	1.16%
QC value within limits for Cd 226.502 Recovery = 94.91%						
Co 228.616†	22589.6	474.53 ug/L	5.187	474.53 ppb	5.187	1.09%
QC value within limits for Co 228.616 Recovery = 94.91%						
Cr 267.716†	42135.5	473.77 ug/L	5.391	473.77 ppb	5.391	1.14%
QC value within limits for Cr 267.716 Recovery = 94.75%						
Cu 324.752†	154298.6	470.14 ug/L	5.196	470.14 ppb	5.196	1.11%
QC value within limits for Cu 324.752 Recovery = 94.03%						
Fe 238.204 Radial†	328.4	5321.2 ug/L	430.38	5321.2 ppb	430.38	8.09%
QC value within limits for Fe 238.204 Radial Recovery = 106.42%						
K 766.490 Radial†	26146.2	5002.7 ug/L	62.59	5002.7 ppb	62.59	1.25%
QC value within limits for K 766.490 Radial Recovery = 100.05%						
Mg 279.077 IEC†	103.1	5438.5 ug/L	347.45	5438.5 ppb	347.45	6.39%
QC value within limits for Mg 279.077 IEC Recovery = 108.77%						
Mn 257.610†	421278.0	480.25 ug/L	0.789	480.25 ppb	0.789	0.16%
QC value within limits for Mn 257.610 Recovery = 96.05%						
Mo 202.031†	6452.8	475.76 ug/L	6.158	475.76 ppb	6.158	1.29%
QC value within limits for Mo 202.031 Recovery = 95.15%						
Na 589.592 Radial†	33989.0	10576 ug/L	80.9	10576 ppb	80.9	0.76%
QC value within limits for Na 589.592 Radial Recovery = 105.76%						
Ni 231.604†	18675.7	476.32 ug/L	6.121	476.32 ppb	6.121	1.29%
QC value within limits for Ni 231.604 Recovery = 95.26%						
P 214.914†	3933.2	2273.5 ug/L	29.73	2273.5 ppb	29.73	1.31%
QC value within limits for P 214.914 Recovery = 90.94%						
Pb 220.353†	3800.8	471.67 ug/L	6.481	471.67 ppb	6.481	1.37%
QC value within limits for Pb 220.353 Recovery = 94.33%						
S 181.975 Axial†	674.8	950.46 ug/L	12.844	950.46 ppb	12.844	1.35%
QC value within limits for S 181.975 Axial Recovery = 95.05%						
Sb 206.836†	1339.6	489.76 ug/L	7.030	489.76 ppb	7.030	1.44%
QC value within limits for Sb 206.836 Recovery = 97.95%						
Se 196.026†	719.9	491.06 ug/L	6.361	491.06 ppb	6.361	1.30%
QC value within limits for Se 196.026 Recovery = 98.21%						
Si 251.611†	72836.4	2353.7 ug/L	25.30	2353.7 ppb	25.30	1.07%
QC value within limits for Si 251.611 Recovery = 94.15%						
Sn 189.927†	2637.8	476.32 ug/L	6.471	476.32 ppb	6.471	1.36%
QC value within limits for Sn 189.927 Recovery = 95.26%						
Sr 421.552†	72730.7	505.92 ug/L	5.357	505.92 ppb	5.357	1.06%
QC value within limits for Sr 421.552 Recovery = 101.18%						
Ti 334.940†	299019.1	471.04 ug/L	5.121	471.04 ppb	5.121	1.09%
QC value within limits for Ti 334.940 Recovery = 94.21%						
Tl 190.801†	1484.6	480.75 ug/L	2.384	480.75 ppb	2.384	0.50%
QC value within limits for Tl 190.801 Recovery = 96.15%						
U 409.014†	16866.0	469.30 ug/L	1.742	469.30 ppb	1.742	0.37%
QC value within limits for U 409.014 Recovery = 93.86%						
V 292.402†	67514.1	477.92 ug/L	5.114	477.92 ppb	5.114	1.07%
QC value within limits for V 292.402 Recovery = 95.58%						
Zn 213.857†	46881.9	468.83 ug/L	5.298	468.83 ppb	5.298	1.13%
QC value within limits for Zn 213.857 Recovery = 93.77%						
SiO2†	72722.0	5035.9 ug/L	16.67	5035.9 ppb	16.67	0.33%
QC value within limits for SiO2 Recovery = 94.17%						

All analyte(s) passed QC.

Sequence No.: 4  
 Sample ID: CCB  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 8  
 Date Collected: 2/25/2010 14:15:59  
 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	3875.6	3875.6	100 %		14:18:11
1	Y RADIAL	4377.8	4377.8	98.34 %		14:17:51
1	Al 396.153Radial†	-113.7	1.9	1.7357 ug/L	1.7357 ppb	14:17:51
1	Ca 317.933Radial†	25.9	7.1	15.504 ug/L	15.504 ppb	14:18:11
1	Fe 238.204 Radial†	13.4	1.6	26.121 ug/L	26.121 ppb	14:18:11
1	K 766.490 Radial†	2981.1	201.7	38.628 ug/L	38.628 ppb	14:17:51
1	Mg 279.077 IEC†	4.7	3.5	184.34 ug/L	184.34 ppb	14:18:11
1	Na 589.592 Radial†	-845.5	60.2	18.738 ug/L	18.738 ppb	14:17:51
1	Sr 421.552†	39.7	30.8	0.2141 ug/L	0.2141 ppb	14:17:51
1	Sc 361.383	941381.5	941381.5	106.97 %		14:19:08
1	Y 371.029	792706.6	792706.6	104.22 %		14:19:08
1	Ag 328.068†	263.6	12.3	0.0604 ug/L	0.0604 ppb	14:19:13
1	As 188.979†	-14.3	6.5	2.9136 ug/L	2.9136 ppb	14:19:33
1	B 249.677†	-62.0	220.1	5.3899 ug/L	5.3899 ppb	14:19:33
1	Ba 233.527†	16.4	4.3	0.0369 ug/L	0.0369 ppb	14:19:33
1	Be 313.107†	-3530.7	257.4	0.0965 ug/L	0.0965 ppb	14:19:13
1	Cd 226.502†	-153.3	32.8	0.3806 ug/L	0.3806 ppb	14:19:33
1	Co 228.616†	-70.2	-0.8	-0.0154 ug/L	-0.0154 ppb	14:19:33
1	Cr 267.716†	76.6	-13.5	-0.1518 ug/L	-0.1518 ppb	14:19:33
1	Cu 324.752†	6033.2	-314.9	-0.9637 ug/L	-0.9637 ppb	14:19:13
1	Mn 257.610†	497.7	-12.4	-0.0191 ug/L	-0.0191 ppb	14:19:33
1	Mo 202.031†	18.4	12.6	0.9277 ug/L	0.9277 ppb	14:19:33
1	Ni 231.604†	71.0	-16.4	-0.4192 ug/L	-0.4192 ppb	14:19:33
1	P 214.914†	205.1	-14.1	-8.3008 ug/L	-8.3008 ppb	14:19:33
1	Pb 220.353†	3.0	-58.4	-7.2179 ug/L	-7.2179 ppb	14:19:33
1	S 181.975 Axial†	40.3	1.8	2.5914 ug/L	2.5914 ppb	14:19:33
1	Sb 206.836†	43.6	1.7	0.6194 ug/L	0.6194 ppb	14:19:33
1	Se 196.026†	-15.1	10.6	7.0724 ug/L	7.0724 ppb	14:19:33
1	Si 251.611†	592.9	-10.4	-0.3498 ug/L	-0.3498 ppb	14:19:33
1	Sn 189.927†	6.4	-3.5	-0.6249 ug/L	-0.6249 ppb	14:19:33
1	Ti 334.940†	-1423.4	79.2	0.1073 ug/L	0.1073 ppb	14:19:13
1	Tl 190.801†	-36.2	-6.4	-2.0672 ug/L	-2.0672 ppb	14:19:33
1	U 409.014†	-2706.5	371.6	10.374 ug/L	10.374 ppb	14:19:08
1	V 292.402†	-1416.6	144.4	1.0412 ug/L	1.0412 ppb	14:19:13
1	Zn 213.857†	784.0	-6.5	-0.0657 ug/L	-0.0657 ppb	14:19:33
1	SiO2†	548.7	-75.3	-5.2523 ug/L	-5.2523 ppb	14:20:39
2	Sc Radial	3910.7	3910.7	101 %		14:18:37
2	Y RADIAL	4439.5	4439.5	99.73 %		14:18:17
2	Al 396.153Radial†	-123.2	-6.4	-6.0793 ug/L	-6.0793 ppb	14:18:17
2	Ca 317.933Radial†	27.2	8.1	17.762 ug/L	17.762 ppb	14:18:37
2	Fe 238.204 Radial†	13.6	1.7	27.502 ug/L	27.502 ppb	14:18:37
2	K 766.490 Radial†	2980.2	174.2	33.373 ug/L	33.373 ppb	14:18:17
2	Mg 279.077 IEC†	2.4	1.2	63.600 ug/L	63.600 ppb	14:18:37
2	Na 589.592 Radial†	-956.3	-41.4	-12.896 ug/L	-12.896 ppb	14:18:17
2	Sr 421.552†	40.2	30.9	0.2146 ug/L	0.2146 ppb	14:18:17
2	Sc 361.383	920185.7	920185.7	104.56 %		14:19:39
2	Y 371.029	773906.6	773906.6	101.74 %		14:19:39
2	Ag 328.068†	258.4	13.0	0.0686 ug/L	0.0686 ppb	14:19:44
2	As 188.979†	-13.8	6.8	3.0112 ug/L	3.0112 ppb	14:20:04
2	B 249.677†	-57.7	222.8	5.4567 ug/L	5.4567 ppb	14:20:04
2	Ba 233.527†	21.3	9.3	0.0750 ug/L	0.0750 ppb	14:20:04
2	Be 313.107†	-3675.2	43.2	0.0161 ug/L	0.0161 ppb	14:19:44
2	Cd 226.502†	-164.9	18.5	0.2124 ug/L	0.2124 ppb	14:20:04
2	Co 228.616†	-65.8	1.9	0.0418 ug/L	0.0418 ppb	14:20:04
2	Cr 267.716†	79.3	-9.3	-0.1016 ug/L	-0.1016 ppb	14:20:04
2	Cu 324.752†	6099.4	-121.6	-0.3701 ug/L	-0.3701 ppb	14:19:44
2	Mn 257.610†	474.0	-24.3	-0.0276 ug/L	-0.0276 ppb	14:20:04
2	Mo 202.031†	14.1	8.8	0.6487 ug/L	0.6487 ppb	14:20:04
2	Ni 231.604†	76.7	-9.4	-0.2402 ug/L	-0.2402 ppb	14:20:04

2	P 214.914†	207.3	-7.5	-4.4808 ug/L	-4.4808 ppb	14:20:04
2	Pb 220.353†	16.2	-45.7	-5.6497 ug/L	-5.6497 ppb	14:20:04
2	S 181.975 Axial†	34.3	-3.1	-4.3134 ug/L	-4.3134 ppb	14:20:04
2	Sb 206.836†	41.6	0.8	0.2870 ug/L	0.2870 ppb	14:20:04
2	Se 196.026†	-31.1	-5.0	-3.1999 ug/L	-3.1999 ppb	14:20:04
2	Si 251.611†	586.5	-3.8	-0.1300 ug/L	-0.1300 ppb	14:20:04
2	Sn 189.927†	11.7	1.8	0.3239 ug/L	0.3239 ppb	14:20:04
2	Ti 334.940†	-1477.8	-3.5	-0.0092 ug/L	-0.0092 ppb	14:19:44
2	Tl 190.801†	-29.5	-0.8	-0.2625 ug/L	-0.2625 ppb	14:20:04
2	U 409.014†	-2959.4	71.5	1.9939 ug/L	1.9939 ppb	14:19:39
2	V 292.402†	-1480.7	52.5	0.3772 ug/L	0.3772 ppb	14:19:44
2	Zn 213.857†	770.4	-2.6	-0.0284 ug/L	-0.0284 ppb	14:20:04
2	SiO2†	614.5	-0.5	-0.0531 ug/L	-0.0531 ppb	14:20:44
3	Sc Radial	3948.4	3948.4	102 %		14:19:02
3	Y RADIAL	4468.9	4468.9	100.4 %		14:18:42
3	Al 396.153Radial†	-120.8	-2.9	-2.7898 ug/L	-2.7898 ppb	14:18:42
3	Ca 317.933Radial†	21.3	2.1	4.6845 ug/L	4.6845 ppb	14:19:02
3	Fe 238.204 Radial†	11.4	-0.5	-8.5000 ug/L	-8.5000 ppb	14:19:02
3	K 766.490 Radial†	3032.3	197.0	37.727 ug/L	37.727 ppb	14:18:42
3	Mg 279.077 IEC†	1.1	-0.1	-4.0850 ug/L	-4.0850 ppb	14:19:02
3	Na 589.592 Radial†	-869.4	52.5	16.325 ug/L	16.325 ppb	14:18:42
3	Sr 421.552†	17.4	8.2	0.0571 ug/L	0.0571 ppb	14:18:42
3	Sc 361.383	936346.5	936346.5	106.39 %		14:20:09
3	Y 371.029	787511.1	787511.1	103.53 %		14:20:09
3	Ag 328.068†	356.1	100.6	0.4637 ug/L	0.4637 ppb	14:20:14
3	As 188.979†	-26.5	-5.0	-2.2276 ug/L	-2.2276 ppb	14:20:34
3	B 249.677†	-45.3	235.5	5.7724 ug/L	5.7724 ppb	14:20:34
3	Ba 233.527†	23.5	11.0	0.0876 ug/L	0.0876 ppb	14:20:34
3	Be 313.107†	-3544.5	226.8	0.0849 ug/L	0.0849 ppb	14:20:14
3	Cd 226.502†	-165.4	20.8	0.2428 ug/L	0.2428 ppb	14:20:34
3	Co 228.616†	-64.2	4.5	0.0955 ug/L	0.0955 ppb	14:20:34
3	Cr 267.716†	69.9	-19.4	-0.2195 ug/L	-0.2195 ppb	14:20:34
3	Cu 324.752†	6018.6	-298.3	-0.9111 ug/L	-0.9111 ppb	14:20:14
3	Mn 257.610†	488.6	-18.4	-0.0217 ug/L	-0.0217 ppb	14:20:34
3	Mo 202.031†	12.0	6.6	0.4887 ug/L	0.4887 ppb	14:20:34
3	Ni 231.604†	77.9	-9.6	-0.2454 ug/L	-0.2454 ppb	14:20:34
3	P 214.914†	208.9	-9.5	-5.4977 ug/L	-5.4977 ppb	14:20:34
3	Pb 220.353†	-17.8	-78.0	-9.6423 ug/L	-9.6423 ppb	14:20:34
3	S 181.975 Axial†	38.9	0.7	1.0472 ug/L	1.0472 ppb	14:20:34
3	Sb 206.836†	48.4	6.5	2.3077 ug/L	2.3077 ppb	14:20:34
3	Se 196.026†	-26.9	-0.5	-0.3619 ug/L	-0.3619 ppb	14:20:34
3	Si 251.611†	588.2	-11.9	-0.3904 ug/L	-0.3904 ppb	14:20:34
3	Sn 189.927†	12.8	2.6	0.4768 ug/L	0.4768 ppb	14:20:34
3	Ti 334.940†	-1447.5	49.4	0.0774 ug/L	0.0774 ppb	14:20:14
3	Tl 190.801†	-39.6	-9.7	-3.1343 ug/L	-3.1343 ppb	14:20:34
3	U 409.014†	-2960.0	119.8	3.3460 ug/L	3.3460 ppb	14:20:09
3	V 292.402†	-1496.3	62.4	0.4501 ug/L	0.4501 ppb	14:20:14
3	Zn 213.857†	777.3	-8.9	-0.0856 ug/L	-0.0856 ppb	14:20:34
3	SiO2†	637.6	11.1	0.7575 ug/L	0.7575 ppb	14:20:49

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	932637.9	105.97 %	1.258			1.19%
Sc Radial	3911.6	101 %	0.9			0.93%
Y 371.029	784708.1	103.16 %	1.276			1.24%
Y RADIAL	4428.7	99.48 %	1.045			1.05%
Ag 328.068†	42.0	0.1976 ug/L	0.23053	0.1976 ppb	0.23053	116.69%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-2.5	-2.3778 ug/L	3.92375	-2.3778 ppb	3.92375	165.02%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	2.8	1.2324 ug/L	2.99683	1.2324 ppb	2.99683	243.17%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	226.1	5.5397 ug/L	0.20431	5.5397 ppb	0.20431	3.69%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	8.2	0.0665 ug/L	0.02640	0.0665 ppb	0.02640	39.72%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	175.8	0.0658 ug/L	0.04344	0.0658 ppb	0.04344	65.97%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	5.8	12.650 ug/L	6.9901	12.650 ppb	6.9901	55.26%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd 226.502†	24.0	0.2786 ug/L	0.08966	0.2786 ppb	0.08966	32.18%	
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	1.9	0.0406 ug/L	0.05545	0.0406 ppb	0.05545	136.48%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	-14.1	-0.1576 ug/L	0.05915	-0.1576 ppb	0.05915	37.53%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	-244.9	-0.7483 ug/L	0.32855	-0.7483 ppb	0.32855	43.91%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	0.9	15.041 ug/L	20.3988	15.041 ppb	20.3988	135.62%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	190.9	36.576 ug/L	2.8103	36.576 ppb	2.8103	7.68%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	1.5	81.285 ug/L	95.4504	81.285 ppb	95.4504	117.43%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	-18.4	-0.0228 ug/L	0.00438	-0.0228 ppb	0.00438	19.25%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	9.3	0.6884 ug/L	0.22219	0.6884 ppb	0.22219	32.28%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	23.7	7.3888 ug/L	17.60869	7.3888 ppb	17.60869	238.32%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	-11.8	-0.3016 ug/L	0.10190	-0.3016 ppb	0.10190	33.79%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	-10.4	-6.0931 ug/L	1.97836	-6.0931 ppb	1.97836	32.47%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	-60.7	-7.5033 ug/L	2.01156	-7.5033 ppb	2.01156	26.81%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	-0.2	-0.2249 ug/L	3.62395	-0.2249 ppb	3.62395	>999.9%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	3.0	1.0714 ug/L	1.08356	1.0714 ppb	1.08356	101.14%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	1.7	1.1702 ug/L	5.30476	1.1702 ppb	5.30476	453.33%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	-8.7	-0.2900 ug/L	0.14009	-0.2900 ppb	0.14009	48.30%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	0.3	0.0586 ug/L	0.59684	0.0586 ppb	0.59684	>999.9%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	23.3	0.1619 ug/L	0.09078	0.1619 ppb	0.09078	56.06%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	41.7	0.0585 ug/L	0.06047	0.0585 ppb	0.06047	103.37%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	-5.7	-1.8213 ug/L	1.45160	-1.8213 ppb	1.45160	79.70%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	187.6	5.2380 ug/L	4.49905	5.2380 ppb	4.49905	85.89%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	86.4	0.6228 ug/L	0.36413	0.6228 ppb	0.36413	58.46%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	-6.0	-0.0599 ug/L	0.02900	-0.0599 ppb	0.02900	48.41%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†	-21.6	-1.5160 ug/L	3.26102	-1.5160 ppb	3.26102	215.11%	
QC value within limits for SiO2 Recovery = Not calculated							
All analyte(s) passed QC.							

Sequence No.: 5

Sample ID: 1202031021|948088|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 38

Date Collected: 2/25/2010 14:23:00

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202031021|948088|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4173.6	4173.6	108 %		14:25:12
1	Y RADIAL	4735.2	4735.2	106.4 %		14:24:52
1	Al 396.153Radial†	-117.8	6.2	5.7976 ug/L	5.7976 ppb	14:24:52
1	Ca 317.933Radial†	23.8	3.4	7.3147 ug/L	7.3147 ppb	14:25:12
1	Fe 238.204 Radial†	13.4	0.7	11.755 ug/L	11.755 ppb	14:25:12
1	K 766.490 Radial†	2787.9	-188.6	-36.153 ug/L	-36.153 ppb	14:24:52
1	Mg 279.077 IEC†	1.8	0.5	26.904 ug/L	26.904 ppb	14:25:12
1	Na 589.592 Radial†	-853.0	113.4	35.297 ug/L	35.297 ppb	14:24:52
1	Sr 421.552†	56.0	43.0	0.2990 ug/L	0.2990 ppb	14:24:52
1	Sc 361.383	907559.7	907559.7	103.12 %		14:26:09
1	Y 371.029	764445.4	764445.4	100.50 %		14:26:09
1	Ag 328.068†	250.4	8.7	0.0425 ug/L	0.0425 ppb	14:26:09
1	As 188.979†	-7.3	12.9	5.7214 ug/L	5.7214 ppb	14:26:29
1	B 249.677†	-126.8	155.1	3.7982 ug/L	3.7982 ppb	14:26:29
1	Ba 233.527†	24.8	13.0	0.1037 ug/L	0.1037 ppb	14:26:29
1	Be 313.107†	-3582.0	84.8	0.0321 ug/L	0.0321 ppb	14:26:09
1	Cd 226.502†	-158.4	22.6	0.2624 ug/L	0.2624 ppb	14:26:29
1	Co 228.616†	-57.8	8.8	0.1873 ug/L	0.1873 ppb	14:26:29
1	Cr 267.716†	76.8	-10.6	-0.1187 ug/L	-0.1187 ppb	14:26:29
1	Cu 324.752†	6065.3	-73.5	-0.2256 ug/L	-0.2256 ppb	14:26:09
1	Mn 257.610†	666.6	168.7	0.1923 ug/L	0.1923 ppb	14:26:29
1	Mo 202.031†	19.3	14.0	1.0355 ug/L	1.0355 ppb	14:26:29
1	Ni 231.604†	90.1	4.6	0.1164 ug/L	0.1164 ppb	14:26:29
1	P 214.914†	215.5	3.2	1.9594 ug/L	1.9594 ppb	14:26:29
1	Pb 220.353†	25.7	-36.3	-4.4882 ug/L	-4.4882 ppb	14:26:29
1	S 181.975 Axial†	45.3	8.1	11.435 ug/L	11.435 ppb	14:26:29
1	Sb 206.836†	42.5	2.2	0.8491 ug/L	0.8491 ppb	14:26:29
1	Se 196.026†	-25.0	0.5	0.3522 ug/L	0.3522 ppb	14:26:29
1	Si 251.611†	870.3	279.2	9.0328 ug/L	9.0328 ppb	14:26:29
1	Sn 189.927†	26.8	16.6	2.9932 ug/L	2.9932 ppb	14:26:29
1	Ti 334.940†	-1318.8	131.1	0.2035 ug/L	0.2035 ppb	14:26:09
1	Tl 190.801†	-33.1	-4.6	-1.4865 ug/L	-1.4865 ppb	14:26:29
1	U 409.014†	-2840.1	147.7	4.1243 ug/L	4.1243 ppb	14:26:09
1	V 292.402†	-1440.1	72.2	0.5253 ug/L	0.5253 ppb	14:26:09
1	Zn 213.857†	875.2	109.3	1.1010 ug/L	1.1010 ppb	14:26:29
1	SiO2†	882.1	267.2	18.520 ug/L	18.520 ppb	14:27:25
2	Sc Radial	3964.4	3964.4	103 %		14:25:38
2	Y RADIAL	4583.5	4583.5	103.0 %		14:25:17
2	Al 396.153Radial†	-118.1	0.2	0.1638 ug/L	0.1638 ppb	14:25:17
2	Ca 317.933Radial†	30.5	11.0	24.053 ug/L	24.053 ppb	14:25:38
2	Fe 238.204 Radial†	13.2	1.2	18.803 ug/L	18.803 ppb	14:25:38
2	K 766.490 Radial†	2913.8	69.7	13.344 ug/L	13.344 ppb	14:25:17
2	Mg 279.077 IEC†	5.8	4.5	237.87 ug/L	237.87 ppb	14:25:38
2	Na 589.592 Radial†	-892.4	33.5	10.411 ug/L	10.411 ppb	14:25:17
2	Sr 421.552†	53.9	43.7	0.3039 ug/L	0.3039 ppb	14:25:17
2	Sc 361.383	910486.2	910486.2	103.46 %		14:26:35
2	Y 371.029	766670.8	766670.8	100.79 %		14:26:35
2	Ag 328.068†	319.0	74.2	0.3503 ug/L	0.3503 ppb	14:26:35
2	As 188.979†	-9.9	10.4	4.6115 ug/L	4.6115 ppb	14:26:55
2	B 249.677†	-136.2	146.3	3.5825 ug/L	3.5825 ppb	14:26:55
2	Ba 233.527†	29.8	17.8	0.1403 ug/L	0.1403 ppb	14:26:55
2	Be 313.107†	-3637.7	42.0	0.0165 ug/L	0.0165 ppb	14:26:35
2	Cd 226.502†	-192.0	-9.4	-0.1114 ug/L	-0.1114 ppb	14:26:55
2	Co 228.616†	-51.0	15.6	0.3258 ug/L	0.3258 ppb	14:26:55
2	Cr 267.716†	76.5	-11.2	-0.1240 ug/L	-0.1240 ppb	14:26:55
2	Cu 324.752†	6050.2	-107.0	-0.3252 ug/L	-0.3252 ppb	14:26:35
2	Mn 257.610†	645.8	146.5	0.1591 ug/L	0.1591 ppb	14:26:55
2	Mo 202.031†	2.1	-2.7	-0.1943 ug/L	-0.1943 ppb	14:26:55
2	Ni 231.604†	75.0	-10.3	-0.2624 ug/L	-0.2624 ppb	14:26:55



2	P 214.914†	218.1	5.0	3.0855 ug/L	3.0855 ppb	14:26:55
2	Pb 220.353†	23.2	-38.8	-4.8018 ug/L	-4.8018 ppb	14:26:55
2	S 181.975 Axial†	39.1	2.0	2.8200 ug/L	2.8200 ppb	14:26:55
2	Sb 206.836†	54.9	14.1	4.9971 ug/L	4.9971 ppb	14:26:55
2	Se 196.026†	-18.9	6.5	4.3101 ug/L	4.3101 ppb	14:26:55
2	Si 251.611†	864.6	271.0	8.7808 ug/L	8.7808 ppb	14:26:55
2	Sn 189.927†	24.1	13.9	2.5073 ug/L	2.5073 ppb	14:26:55
2	Ti 334.940†	-1237.1	214.1	0.3209 ug/L	0.3209 ppb	14:26:35
2	Tl 190.801†	-26.0	2.3	0.7413 ug/L	0.7413 ppb	14:26:55
2	U 409.014†	-2981.4	20.1	0.5585 ug/L	0.5585 ppb	14:26:35
2	V 292.402†	-1504.7	14.3	0.0995 ug/L	0.0995 ppb	14:26:35
2	Zn 213.857†	878.3	109.5	1.1046 ug/L	1.1046 ppb	14:26:55
2	SiO2†	888.2	270.4	18.775 ug/L	18.775 ppb	14:27:30
3	Sc Radial	3951.5	3951.5	102 %		14:26:03
3	Y RADIAL	4474.8	4474.8	100.5 %		14:25:43
3	Al 396.153Radial†	-107.8	9.8	9.2010 ug/L	9.2010 ppb	14:25:43
3	Ca 317.933Radial†	27.7	8.3	18.175 ug/L	18.175 ppb	14:26:03
3	Fe 238.204 Radial†	12.3	0.4	5.7923 ug/L	5.7923 ppb	14:26:03
3	K 766.490 Radial†	2824.5	-8.1	-1.5634 ug/L	-1.5634 ppb	14:25:43
3	Mg 279.077 IEC†	2.3	1.1	55.498 ug/L	55.498 ppb	14:26:03
3	Na 589.592 Radial†	-879.4	43.4	13.491 ug/L	13.491 ppb	14:25:43
3	Sr 421.552†	63.4	53.2	0.3698 ug/L	0.3698 ppb	14:25:43
3	Sc 361.383	914711.5	914711.5	103.94 %		14:27:00
3	Y 371.029	771675.1	771675.1	101.45 %		14:27:00
3	Ag 328.068†	145.8	-93.9	-0.4343 ug/L	-0.4343 ppb	14:27:00
3	As 188.979†	-14.2	6.3	2.7872 ug/L	2.7872 ppb	14:27:20
3	B 249.677†	-152.6	131.1	3.2126 ug/L	3.2126 ppb	14:27:20
3	Ba 233.527†	19.5	7.7	0.0617 ug/L	0.0617 ppb	14:27:20
3	Be 313.107†	-3634.4	61.4	0.0237 ug/L	0.0237 ppb	14:27:00
3	Cd 226.502†	-166.9	15.6	0.1806 ug/L	0.1806 ppb	14:27:20
3	Co 228.616†	-53.4	13.4	0.2834 ug/L	0.2834 ppb	14:27:20
3	Cr 267.716†	81.8	-6.4	-0.0711 ug/L	-0.0711 ppb	14:27:20
3	Cu 324.752†	6073.0	-112.0	-0.3418 ug/L	-0.3418 ppb	14:27:00
3	Mn 257.610†	664.8	162.0	0.1828 ug/L	0.1828 ppb	14:27:20
3	Mo 202.031†	17.4	12.1	0.8912 ug/L	0.8912 ppb	14:27:20
3	Ni 231.604†	85.3	-0.7	-0.0183 ug/L	-0.0183 ppb	14:27:20
3	P 214.914†	209.8	-4.0	-2.3304 ug/L	-2.3304 ppb	14:27:20
3	Pb 220.353†	21.8	-40.2	-4.9748 ug/L	-4.9748 ppb	14:27:20
3	S 181.975 Axial†	46.4	8.8	12.446 ug/L	12.446 ppb	14:27:20
3	Sb 206.836†	52.6	11.6	4.1278 ug/L	4.1278 ppb	14:27:20
3	Se 196.026†	-29.7	-3.8	-2.5019 ug/L	-2.5019 ppb	14:27:20
3	Si 251.611†	860.3	263.0	8.5094 ug/L	8.5094 ppb	14:27:20
3	Sn 189.927†	16.1	6.1	1.1034 ug/L	1.1034 ppb	14:27:20
3	Ti 334.940†	-1237.1	219.7	0.3435 ug/L	0.3435 ppb	14:27:00
3	Tl 190.801†	-35.4	-6.7	-2.1391 ug/L	-2.1391 ppb	14:27:20
3	U 409.014†	-2965.6	48.6	1.3553 ug/L	1.3553 ppb	14:27:00
3	V 292.402†	-1463.2	60.9	0.4407 ug/L	0.4407 ppb	14:27:00
3	Zn 213.857†	870.8	98.4	0.9926 ug/L	0.9926 ppb	14:27:20
3	SiO2†	1092.6	463.0	32.123 ug/L	32.123 ppb	14:27:35

Mean Data: 1202031021|948088|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	910919.1	103.50 %		0.409			0.39%
Sc Radial	4029.8	104 %		3.2			3.09%
Y 371.029	767597.1	100.92 %		0.487			0.48%
Y RADIAL	4597.8	103.3 %		2.94			2.84%
Ag 328.068†	-3.7	-0.0138 ug/L		0.39530	-0.0138 ppb	0.39530	>999.9%
Al 396.153Radial†	5.4	5.0541 ug/L		4.56424	5.0541 ppb	4.56424	90.31%
As 188.979†	9.8	4.3734 ug/L		1.48149	4.3734 ppb	1.48149	33.88%
B 249.677†	144.2	3.5311 ug/L		0.29614	3.5311 ppb	0.29614	8.39%
Ba 233.527†	12.8	0.1019 ug/L		0.03936	0.1019 ppb	0.03936	38.62%
Be 313.107†	62.7	0.0241 ug/L		0.00784	0.0241 ppb	0.00784	32.50%
Ca 317.933Radial†	7.6	16.514 ug/L		8.4918	16.514 ppb	8.4918	51.42%
Cd 226.502†	9.6	0.1105 ug/L		0.19647	0.1105 ppb	0.19647	177.75%
Co 228.616†	12.6	0.2655 ug/L		0.07096	0.2655 ppb	0.07096	26.73%
Cr 267.716†	-9.4	-0.1046 ug/L		0.02914	-0.1046 ppb	0.02914	27.86%
Cu 324.752†	-97.5	-0.2975 ug/L		0.06287	-0.2975 ppb	0.06287	21.13%
Fe 238.204 Radial†	0.7	12.117 ug/L		6.5127	12.117 ppb	6.5127	53.75%
K 766.490 Radial†	-42.3	-8.1242 ug/L		25.39262	-8.1242 ppb	25.39262	312.56%



Mg 279.077 IEC†	2.0	106.76 ug/L	114.441	106.76 ppb	114.441	107.20%
Mn 257.610†	159.1	0.1781 ug/L	0.01711	0.1781 ppb	0.01711	9.61%
Mo 202.031†	7.8	0.5774 ug/L	0.67225	0.5774 ppb	0.67225	116.42%
Na 589.592 Radial†	63.4	19.733 ug/L	13.5664	19.733 ppb	13.5664	68.75%
Ni 231.604†	-2.1	-0.0548 ug/L	0.19201	-0.0548 ppb	0.19201	350.65%
P 214.914†	1.4	0.9048 ug/L	2.85782	0.9048 ppb	2.85782	315.83%
Pb 220.353†	-38.4	-4.7549 ug/L	0.24663	-4.7549 ppb	0.24663	5.19%
S 181.975 Axial†	6.3	8.9000 ug/L	5.28966	8.9000 ppb	5.28966	59.43%
Sb 206.836†	9.3	3.3246 ug/L	2.18750	3.3246 ppb	2.18750	65.80%
Se 196.026†	1.0	0.7201 ug/L	3.42089	0.7201 ppb	3.42089	475.03%
Si 251.611†	271.1	8.7743 ug/L	0.26176	8.7743 ppb	0.26176	2.98%
Sn 189.927†	12.2	2.2013 ug/L	0.98135	2.2013 ppb	0.98135	44.58%
Sr 421.552†	46.6	0.3243 ug/L	0.03955	0.3243 ppb	0.03955	12.20%
Ti 334.940†	188.3	0.2893 ug/L	0.07513	0.2893 ppb	0.07513	25.97%
Tl 190.801†	-3.0	-0.9614 ug/L	1.51027	-0.9614 ppb	1.51027	157.08%
U 409.014†	72.1	2.0127 ug/L	1.87155	2.0127 ppb	1.87155	92.99%
V 292.402†	49.1	0.3552 ug/L	0.22542	0.3552 ppb	0.22542	63.47%
Zn 213.857†	105.7	1.0661 ug/L	0.06364	1.0661 ppb	0.06364	5.97%
SiO2†	333.5	23.139 ug/L	7.7807	23.139 ppb	7.7807	33.63%

Sequence No.: 6

Sample ID: 1202031026|948088|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 39

Date Collected: 2/25/2010 14:29:46

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202031026|948088|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3911.4	3911.4	101 %		14:31:59
1	Y RADIAL	4357.2	4357.2	97.88 %		14:31:39
1	Al 396.153Radial†	5501.2	5539.7	5181.8 ug/L	5181.8 ppb	14:31:39
1	Ca 317.933Radial†	2480.3	2427.1	5292.9 ug/L	5292.9 ppb	14:31:59
1	Fe 238.204 Radial†	325.4	309.2	5011.7 ug/L	5011.7 ppb	14:31:59
1	K 766.490 Radial†	29409.0	26234.6	5021.7 ug/L	5021.7 ppb	14:31:39
1	Mg 279.077 IEC†	103.1	100.5	5302.2 ug/L	5302.2 ppb	14:31:59
1	Na 589.592 Radial†	15929.4	16609.4	5168.2 ug/L	5168.2 ppb	14:31:39
1	Sr 421.552†	73727.4	72692.5	505.65 ug/L	505.65 ppb	14:31:39
1	Sc 361.383	912818.2	912818.2	103.72 %		14:32:58
1	Y 371.029	758859.1	758859.1	99.766 %		14:32:58
1	Ag 328.068†	107205.9	103125.9	482.29 ug/L	482.29 ppb	14:32:58
1	As 188.979†	1140.6	1119.6	502.22 ug/L	502.22 ppb	14:33:18
1	B 249.677†	20181.0	19735.1	481.51 ug/L	481.51 ppb	14:32:58
1	Ba 233.527†	65654.7	63288.5	498.72 ug/L	498.72 ppb	14:32:58
1	Be 313.107†	1369181.3	1323623.4	495.71 ug/L	495.71 ppb	14:32:58
1	Cd 226.502†	42749.1	41391.7	480.91 ug/L	480.91 ppb	14:33:18
1	Co 228.616†	23736.2	22949.6	482.09 ug/L	482.09 ppb	14:33:18
1	Cr 267.716†	45822.3	44093.4	495.74 ug/L	495.74 ppb	14:32:58
1	Cu 324.752†	178450.3	166093.7	506.05 ug/L	506.05 ppb	14:32:58
1	Mn 257.610†	457768.4	440869.3	502.54 ug/L	502.54 ppb	14:32:58
1	Mo 202.031†	7065.1	6807.0	501.82 ug/L	501.82 ppb	14:33:18
1	Ni 231.604†	20579.5	19758.5	503.95 ug/L	503.95 ppb	14:33:18
1	P 214.914†	1192.0	943.4	468.91 ug/L	468.91 ppb	14:33:18
1	Pb 220.353†	4199.8	3988.0	494.93 ug/L	494.93 ppb	14:33:18
1	S 181.975 Axial†	3761.7	3591.0	5062.2 ug/L	5062.2 ppb	14:33:18
1	Sb 206.836†	1586.5	1490.6	544.11 ug/L	544.11 ppb	14:33:18
1	Se 196.026†	748.0	745.9	507.27 ug/L	507.27 ppb	14:33:18
1	Si 251.611†	156439.1	150262.5	4861.7 ug/L	4861.7 ppb	14:32:58
1	Sn 189.927†	2956.6	2841.1	513.00 ug/L	513.00 ppb	14:33:18
1	Ti 334.940†	333027.6	322490.9	508.01 ug/L	508.01 ppb	14:32:58
1	Tl 190.801†	1591.4	1561.8	505.90 ug/L	505.90 ppb	14:33:18
1	U 409.014†	15527.4	17827.3	497.39 ug/L	497.39 ppb	14:32:58
1	V 292.402†	72387.3	71259.3	504.50 ug/L	504.50 ppb	14:32:58
1	Zn 213.857†	51564.1	48974.9	489.78 ug/L	489.78 ppb	14:32:58
1	SiO2†	158885.8	152598.0	10581 ug/L	10581 ppb	14:34:18
2	Sc Radial	3894.3	3894.3	101 %		14:32:24
2	Y RADIAL	4381.7	4381.7	98.43 %		14:32:04
2	Al 396.153Radial†	5543.9	5605.9	5244.3 ug/L	5244.3 ppb	14:32:04
2	Ca 317.933Radial†	2464.5	2422.2	5282.1 ug/L	5282.1 ppb	14:32:24
2	Fe 238.204 Radial†	321.5	306.8	4971.7 ug/L	4971.7 ppb	14:32:24
2	K 766.490 Radial†	29611.0	26562.4	5084.5 ug/L	5084.5 ppb	14:32:04
2	Mg 279.077 IEC†	103.3	101.2	5338.6 ug/L	5338.6 ppb	14:32:24
2	Na 589.592 Radial†	15945.8	16694.8	5194.8 ug/L	5194.8 ppb	14:32:04
2	Sr 421.552†	74238.7	73519.1	511.41 ug/L	511.41 ppb	14:32:04
2	Sc 361.383	917130.6	917130.6	104.21 %		14:33:25
2	Y 371.029	761644.8	761644.8	100.13 %		14:33:25
2	Ag 328.068†	107618.9	103036.3	481.86 ug/L	481.86 ppb	14:33:25
2	As 188.979†	1138.7	1112.6	499.12 ug/L	499.12 ppb	14:33:45
2	B 249.677†	20282.2	19740.6	481.66 ug/L	481.66 ppb	14:33:25
2	Ba 233.527†	65926.1	63251.2	498.42 ug/L	498.42 ppb	14:33:25
2	Be 313.107†	1374067.8	1322105.4	495.14 ug/L	495.14 ppb	14:33:25
2	Cd 226.502†	42551.3	41008.1	476.45 ug/L	476.45 ppb	14:33:45
2	Co 228.616†	23650.7	22759.9	478.09 ug/L	478.09 ppb	14:33:45
2	Cr 267.716†	46032.2	44087.1	495.67 ug/L	495.67 ppb	14:33:25
2	Cu 324.752†	179305.2	166105.0	506.08 ug/L	506.08 ppb	14:33:25
2	Mn 257.610†	459635.4	440585.7	502.21 ug/L	502.21 ppb	14:33:25
2	Mo 202.031†	7043.2	6754.0	497.91 ug/L	497.91 ppb	14:33:45
2	Ni 231.604†	20473.6	19563.6	498.98 ug/L	498.98 ppb	14:33:45

2	P 214.914†	1191.8	937.8	465.54 ug/L	465.54 ppb	14:33:45
2	Pb 220.353†	4179.3	3949.3	490.15 ug/L	490.15 ppb	14:33:45
2	S 181.975 Axial†	3735.2	3548.4	5002.2 ug/L	5002.2 ppb	14:33:45
2	Sb 206.836†	1568.5	1466.1	535.30 ug/L	535.30 ppb	14:33:45
2	Se 196.026†	748.1	742.6	504.99 ug/L	504.99 ppb	14:33:45
2	Si 251.611†	156913.2	150008.3	4853.5 ug/L	4853.5 ppb	14:33:25
2	Sn 189.927†	2928.4	2800.7	505.70 ug/L	505.70 ppb	14:33:45
2	Ti 334.940†	334806.6	322688.3	508.31 ug/L	508.31 ppb	14:33:25
2	Tl 190.801†	1601.9	1564.6	506.83 ug/L	506.83 ppb	14:33:45
2	U 409.014†	15657.1	17926.3	498.90 ug/L	498.90 ppb	14:33:25
2	V 292.402†	72879.8	71403.7	505.47 ug/L	505.47 ppb	14:33:25
2	Zn 213.857†	51705.1	48876.5	488.82 ug/L	488.82 ppb	14:33:25
2	SiO2†	156106.1	149210.2	10346 ug/L	10346 ppb	14:34:23
3	Sc Radial	3902.2	3902.2	101 %		14:32:49
3	Y RADIAL	4382.6	4382.6	98.45 %		14:32:29
3	Al 396.153Radial†	5530.4	5581.3	5221.0 ug/L	5221.0 ppb	14:32:29
3	Ca 317.933Radial†	2452.1	2405.0	5244.6 ug/L	5244.6 ppb	14:32:49
3	Fe 238.204 Radial†	325.1	309.7	5019.0 ug/L	5019.0 ppb	14:32:49
3	K 766.490 Radial†	29518.0	26410.5	5055.4 ug/L	5055.4 ppb	14:32:29
3	Mg 279.077 IEC†	104.0	101.6	5361.6 ug/L	5361.6 ppb	14:32:49
3	Na 589.592 Radial†	15885.5	16602.9	5166.2 ug/L	5166.2 ppb	14:32:29
3	Sr 421.552†	74240.4	73370.3	510.37 ug/L	510.37 ppb	14:32:29
3	Sc 361.383	912740.0	912740.0	103.71 %		14:33:52
3	Y 371.029	758941.7	758941.7	99.777 %		14:33:52
3	Ag 328.068†	106856.7	102798.1	480.76 ug/L	480.76 ppb	14:33:52
3	As 188.979†	1127.4	1107.0	496.62 ug/L	496.62 ppb	14:34:12
3	B 249.677†	20218.9	19773.3	482.45 ug/L	482.45 ppb	14:33:52
3	Ba 233.527†	65631.0	63271.0	498.58 ug/L	498.58 ppb	14:33:52
3	Be 313.107†	1366302.6	1320960.9	494.71 ug/L	494.71 ppb	14:33:52
3	Cd 226.502†	42519.4	41173.9	478.37 ug/L	478.37 ppb	14:34:12
3	Co 228.616†	23610.3	22830.1	479.57 ug/L	479.57 ppb	14:34:12
3	Cr 267.716†	45779.6	44056.0	495.32 ug/L	495.32 ppb	14:33:52
3	Cu 324.752†	177941.6	165617.9	504.60 ug/L	504.60 ppb	14:33:52
3	Mn 257.610†	456429.3	439616.0	501.11 ug/L	501.11 ppb	14:33:52
3	Mo 202.031†	7036.7	6780.2	499.85 ug/L	499.85 ppb	14:34:12
3	Ni 231.604†	20506.1	19689.4	502.19 ug/L	502.19 ppb	14:34:12
3	P 214.914†	1191.1	942.6	468.68 ug/L	468.68 ppb	14:34:12
3	Pb 220.353†	4163.0	3952.8	490.58 ug/L	490.58 ppb	14:34:12
3	S 181.975 Axial†	3740.1	3570.4	5033.3 ug/L	5033.3 ppb	14:34:12
3	Sb 206.836†	1575.4	1480.0	540.25 ug/L	540.25 ppb	14:34:12
3	Se 196.026†	735.0	733.4	499.09 ug/L	499.09 ppb	14:34:12
3	Si 251.611†	155786.5	149646.1	4841.7 ug/L	4841.7 ppb	14:33:52
3	Sn 189.927†	2921.0	2807.0	506.84 ug/L	506.84 ppb	14:34:12
3	Ti 334.940†	332452.6	321964.0	507.16 ug/L	507.16 ppb	14:33:52
3	Tl 190.801†	1600.5	1570.7	508.75 ug/L	508.75 ppb	14:34:12
3	U 409.014†	15685.7	18026.2	501.69 ug/L	501.69 ppb	14:33:52
3	V 292.402†	72464.2	71339.4	505.05 ug/L	505.05 ppb	14:33:52
3	Zn 213.857†	51279.7	48705.0	487.07 ug/L	487.07 ppb	14:33:52
3	SiO2†	156206.2	150027.4	10402 ug/L	10402 ppb	14:34:28

Mean Data: 1202031026|948088|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	914229.6	103.88 %	0.286			0.27%
Sc Radial	3902.6	101 %	0.2			0.22%
Y 371.029	759815.2	99.892 %	0.2084			0.21%
Y RADIAL	4373.8	98.25 %	0.324			0.33%
Ag 328.068†	102986.8	481.64 ug/L	0.785	481.64 ppb	0.785	0.16%
Al 396.153Radial†	5575.6	5215.7 ug/L	31.56	5215.7 ppb	31.56	0.61%
As 188.979†	1113.1	499.32 ug/L	2.808	499.32 ppb	2.808	0.56%
B 249.677†	19749.7	481.88 ug/L	0.505	481.88 ppb	0.505	0.10%
Ba 233.527†	63270.2	498.57 ug/L	0.146	498.57 ppb	0.146	0.03%
Be 313.107†	1322229.9	495.19 ug/L	0.500	495.19 ppb	0.500	0.10%
Ca 317.933Radial†	2418.1	5273.2 ug/L	25.36	5273.2 ppb	25.36	0.48%
Cd 226.502†	41191.2	478.58 ug/L	2.235	478.58 ppb	2.235	0.47%
Co 228.616†	22846.5	479.92 ug/L	2.019	479.92 ppb	2.019	0.42%
Cr 267.716†	44078.9	495.58 ug/L	0.224	495.58 ppb	0.224	0.05%
Cu 324.752†	165938.9	505.58 ug/L	0.847	505.58 ppb	0.847	0.17%
Fe 238.204 Radial†	308.6	5000.8 ug/L	25.51	5000.8 ppb	25.51	0.51%
K 766.490 Radial†	26402.5	5053.9 ug/L	31.43	5053.9 ppb	31.43	0.62%

Mg 279.077 IEC†	101.1	5334.2 ug/L	29.93	5334.2 ppb	29.93	0.56%
Mn 257.610†	440357.0	501.96 ug/L	0.749	501.96 ppb	0.749	0.15%
Mo 202.031†	6780.4	499.86 ug/L	1.956	499.86 ppb	1.956	0.39%
Na 589.592 Radial†	16635.7	5176.4 ug/L	15.96	5176.4 ppb	15.96	0.31%
Ni 231.604†	19670.5	501.71 ug/L	2.520	501.71 ppb	2.520	0.50%
P 214.914†	941.3	467.71 ug/L	1.888	467.71 ppb	1.888	0.40%
Pb 220.353†	3963.4	491.88 ug/L	2.645	491.88 ppb	2.645	0.54%
S 181.975 Axial†	3569.9	5032.5 ug/L	30.02	5032.5 ppb	30.02	0.60%
Sb 206.836†	1478.9	539.88 ug/L	4.417	539.88 ppb	4.417	0.82%
Se 196.026†	740.7	503.78 ug/L	4.221	503.78 ppb	4.221	0.84%
Si 251.611†	149972.3	4852.3 ug/L	10.02	4852.3 ppb	10.02	0.21%
Sn 189.927†	2816.3	508.51 ug/L	3.926	508.51 ppb	3.926	0.77%
Sr 421.552†	73193.9	509.14 ug/L	3.065	509.14 ppb	3.065	0.60%
Ti 334.940†	322381.1	507.83 ug/L	0.595	507.83 ppb	0.595	0.12%
Tl 190.801†	1565.7	507.16 ug/L	1.451	507.16 ppb	1.451	0.29%
U 409.014†	17941.6	499.33 ug/L	2.180	499.33 ppb	2.180	0.44%
V 292.402†	71334.1	505.01 ug/L	0.483	505.01 ppb	0.483	0.10%
Zn 213.857†	48852.1	488.56 ug/L	1.376	488.56 ppb	1.376	0.28%
SiO2†	150611.9	10443 ug/L	122.7	10443 ppb	122.7	1.17%

Sequence No.: 8

Sample ID: 1202031022|948088|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 41

Date Collected: 2/25/2010 14:43:29

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202031022|948088|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3941.6	3941.6	102 %		14:45:41
1	Y RADIAL	4329.1	4329.1	97.25 %		14:45:21
1	Al 396.153Radial†	-95.7	21.4	20.134 ug/L	20.134 ppb	14:45:21
1	Ca 317.933Radial†	12389.5	12104.7	26397 ug/L	26397 ppb	14:45:21
1	Fe 238.204 Radial†	11.5	-0.4	-7.0724 ug/L	-7.0724 ppb	14:45:41
1	K 766.490 Radial†	6275.6	3375.7	630.31 ug/L	630.31 ppb	14:45:21
1	Mg 279.077 IEC†	83.3	80.4	4241.9 ug/L	4241.9 ppb	14:45:41
1	Na 589.592 Radial†	63271.7	62814.4	19546 ug/L	19546 ppb	14:45:21
1	Sr 421.552†	18392.9	17989.1	124.95 ug/L	124.95 ppb	14:45:21
1	Sc 361.383	904902.6	904902.6	102.82 %		14:46:38
1	Y 371.029	751073.6	751073.6	98.743 %		14:46:38
1	Ag 328.068†	304.8	62.3	-0.0686 ug/L	-0.0686 ppb	14:46:38
1	As 188.979†	-21.5	-1.0	-0.4544 ug/L	-0.4544 ppb	14:46:59
1	B 249.677†	537.5	800.7	19.627 ug/L	19.627 ppb	14:46:59
1	Ba 233.527†	1492.7	1440.7	11.327 ug/L	11.327 ppb	14:46:59
1	Be 313.107†	-3624.8	32.9	0.0055 ug/L	0.0055 ppb	14:46:38
1	Cd 226.502†	-152.6	27.8	0.3259 ug/L	0.3259 ppb	14:46:59
1	Co 228.616†	-66.7	0.0	0.0090 ug/L	0.0090 ppb	14:46:59
1	Cr 267.716†	513.9	414.7	4.6530 ug/L	4.6530 ppb	14:46:59
1	Cu 324.752†	7543.4	1381.3	4.2071 ug/L	4.2071 ppb	14:46:38
1	Mn 257.610†	1565.3	1044.7	1.0161 ug/L	1.0161 ppb	14:46:59
1	Mo 202.031†	-1.9	-6.5	-0.1671 ug/L	-0.1671 ppb	14:46:59
1	Ni 231.604†	200.7	112.4	2.8684 ug/L	2.8684 ppb	14:46:59
1	P 214.914†	302.3	88.2	51.927 ug/L	51.927 ppb	14:46:59
1	Pb 220.353†	-8.6	-69.6	-8.2374 ug/L	-8.2374 ppb	14:46:59
1	S 181.975 Axial†	5525.2	5337.8	7526.1 ug/L	7526.1 ppb	14:46:59
1	Sb 206.836†	27.7	-12.0	-4.7314 ug/L	-4.7314 ppb	14:46:59
1	Se 196.026†	-27.8	-2.3	-1.5617 ug/L	-1.5617 ppb	14:46:59
1	Si 251.611†	974457.3	947154.4	30684 ug/L	30684 ppb	14:46:38
1	Sn 189.927†	-170.7	-175.4	-26.947 ug/L	-26.947 ppb	14:46:59
1	Ti 334.940†	-3388.4	-1885.5	0.2205 ug/L	0.2205 ppb	14:46:38
1	Tl 190.801†	-38.7	-10.2	-3.2996 ug/L	-3.2996 ppb	14:46:59
1	U 409.014†	-2901.2	80.3	2.2330 ug/L	2.2330 ppb	14:46:38
1	V 292.402†	-1328.3	176.9	1.3175 ug/L	1.3175 ppb	14:46:59
1	Zn 213.857†	3329.7	2498.9	25.205 ug/L	25.205 ppb	14:46:59
1	SiO2†	976663.4	949276.5	65906 ug/L	65906 ppb	14:47:56
2	Sc Radial	3928.6	3928.6	102 %		14:46:06
2	Y RADIAL	4467.9	4467.9	100.4 %		14:45:46
2	Al 396.153Radial†	-105.3	11.7	11.009 ug/L	11.009 ppb	14:45:46
2	Ca 317.933Radial†	12650.8	12401.5	27044 ug/L	27044 ppb	14:45:46
2	Fe 238.204 Radial†	12.4	0.5	7.6709 ug/L	7.6709 ppb	14:46:06
2	K 766.490 Radial†	6497.2	3613.7	675.47 ug/L	675.47 ppb	14:45:46
2	Mg 279.077 IEC†	85.0	82.3	4342.8 ug/L	4342.8 ppb	14:46:06
2	Na 589.592 Radial†	64760.3	64481.3	20064 ug/L	20064 ppb	14:45:46
2	Sr 421.552†	18878.6	18525.7	128.67 ug/L	128.67 ppb	14:45:46
2	Sc 361.383	896913.8	896913.8	101.91 %		14:47:04
2	Y 371.029	744545.6	744545.6	97.885 %		14:47:04
2	Ag 328.068†	208.4	-29.7	-0.5007 ug/L	-0.5007 ppb	14:47:04
2	As 188.979†	-17.9	2.4	1.0439 ug/L	1.0439 ppb	14:47:24
2	B 249.677†	563.0	830.5	20.354 ug/L	20.354 ppb	14:47:24
2	Ba 233.527†	1485.0	1446.1	11.370 ug/L	11.370 ppb	14:47:24
2	Be 313.107†	-3562.6	62.5	0.0165 ug/L	0.0165 ppb	14:47:04
2	Cd 226.502†	-154.4	24.7	0.2889 ug/L	0.2889 ppb	14:47:24
2	Co 228.616†	-72.1	-5.9	-0.1140 ug/L	-0.1140 ppb	14:47:24
2	Cr 267.716†	483.2	389.0	4.3663 ug/L	4.3663 ppb	14:47:24
2	Cu 324.752†	7436.6	1341.9	4.0872 ug/L	4.0872 ppb	14:47:04
2	Mn 257.610†	1549.1	1042.4	1.0107 ug/L	1.0107 ppb	14:47:24
2	Mo 202.031†	7.7	2.8	0.5313 ug/L	0.5313 ppb	14:47:24
2	Ni 231.604†	200.9	114.3	2.9173 ug/L	2.9173 ppb	14:47:24

2	P 214.914†	295.2	83.8	49.283 ug/L	49.283 ppb	14:47:24
2	Pb 220.353†	16.8	-44.7	-5.1569 ug/L	-5.1569 ppb	14:47:24
2	S 181.975 Axial†	5508.6	5369.3	7570.6 ug/L	7570.6 ppb	14:47:24
2	Sb 206.836†	38.7	-1.0	-0.8610 ug/L	-0.8610 ppb	14:47:24
2	Se 196.026†	-19.8	5.3	3.4872 ug/L	3.4872 ppb	14:47:24
2	Si 251.611†	966536.5	947823.6	30705 ug/L	30705 ppb	14:47:04
2	Sn 189.927†	-181.2	-187.2	-28.962 ug/L	-28.962 ppb	14:47:24
2	Ti 334.940†	-3379.9	-1906.6	0.2656 ug/L	0.2656 ppb	14:47:04
2	Tl 190.801†	-46.2	-17.9	-5.7798 ug/L	-5.7798 ppb	14:47:24
2	U 409.014†	-2844.3	111.0	3.0878 ug/L	3.0878 ppb	14:47:04
2	V 292.402†	-1309.4	183.9	1.3777 ug/L	1.3777 ppb	14:47:24
2	Zn 213.857†	3311.6	2509.9	25.314 ug/L	25.314 ppb	14:47:24
2	SiO2†	988811.0	969656.4	67321 ug/L	67321 ppb	14:48:02
3	Sc Radial	3942.0	3942.0	102 %		14:46:32
3	Y RADIAL	4354.0	4354.0	97.81 %		14:46:12
3	Al 396.153Radial†	-80.3	36.5	34.266 ug/L	34.266 ppb	14:46:12
3	Ca 317.933Radial†	12431.1	12144.2	26483 ug/L	26483 ppb	14:46:12
3	Fe 238.204 Radial†	11.0	-0.9	-15.322 ug/L	-15.322 ppb	14:46:32
3	K 766.490 Radial†	6437.1	3533.1	660.45 ug/L	660.45 ppb	14:46:12
3	Mg 279.077 IEC†	86.2	83.1	4387.5 ug/L	4387.5 ppb	14:46:32
3	Na 589.592 Radial†	63184.3	62722.7	19517 ug/L	19517 ppb	14:46:12
3	Sr 421.552†	18517.5	18109.2	125.78 ug/L	125.78 ppb	14:46:12
3	Sc 361.383	898167.2	898167.2	102.06 %		14:47:30
3	Y 371.029	745798.1	745798.1	98.049 %		14:47:30
3	Ag 328.068†	297.1	57.0	-0.1014 ug/L	-0.1014 ppb	14:47:30
3	As 188.979†	-9.2	10.9	4.8388 ug/L	4.8388 ppb	14:47:50
3	B 249.677†	545.0	812.1	19.905 ug/L	19.905 ppb	14:47:50
3	Ba 233.527†	1490.8	1449.7	11.397 ug/L	11.397 ppb	14:47:50
3	Be 313.107†	-3553.3	76.5	0.0220 ug/L	0.0220 ppb	14:47:30
3	Cd 226.502†	-159.8	19.6	0.2329 ug/L	0.2329 ppb	14:47:50
3	Co 228.616†	-55.3	10.6	0.2336 ug/L	0.2336 ppb	14:47:50
3	Cr 267.716†	507.6	412.3	4.6235 ug/L	4.6235 ppb	14:47:50
3	Cu 324.752†	7552.4	1445.1	4.3984 ug/L	4.3984 ppb	14:47:30
3	Mn 257.610†	1562.2	1053.0	1.0187 ug/L	1.0187 ppb	14:47:50
3	Mo 202.031†	9.2	4.3	0.6305 ug/L	0.6305 ppb	14:47:50
3	Ni 231.604†	191.5	104.9	2.6768 ug/L	2.6768 ppb	14:47:50
3	P 214.914†	309.2	97.1	57.254 ug/L	57.254 ppb	14:47:50
3	Pb 220.353†	6.5	-54.8	-6.4017 ug/L	-6.4017 ppb	14:47:50
3	S 181.975 Axial†	5550.7	5403.0	7618.2 ug/L	7618.2 ppb	14:47:50
3	Sb 206.836†	33.7	-6.0	-2.5843 ug/L	-2.5843 ppb	14:47:50
3	Se 196.026†	-28.9	-3.6	-2.3967 ug/L	-2.3967 ppb	14:47:50
3	Si 251.611†	965948.9	945924.4	30644 ug/L	30644 ppb	14:47:30
3	Sn 189.927†	-172.9	-178.8	-27.543 ug/L	-27.543 ppb	14:47:50
3	Ti 334.940†	-3318.0	-1841.2	0.2878 ug/L	0.2878 ppb	14:47:30
3	Tl 190.801†	-34.1	-6.0	-1.9519 ug/L	-1.9519 ppb	14:47:50
3	U 409.014†	-2704.3	252.1	7.0301 ug/L	7.0301 ppb	14:47:30
3	V 292.402†	-1336.5	159.1	1.2180 ug/L	1.2180 ppb	14:47:50
3	Zn 213.857†	3333.3	2526.7	25.488 ug/L	25.488 ppb	14:47:50
3	SiO2†	976871.9	956603.9	66414 ug/L	66414 ppb	14:48:08

Mean Data: 1202031022|948088|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Sc 361.383	899994.6	102.26 %		0.488			0.48%
Sc Radial	3937.4	102 %		0.2			0.19%
Y 371.029	747139.1	98.226 %		0.4555			0.46%
Y RADIAL	4383.7	98.47 %		1.661			1.69%
Ag 328.068†	29.8	-0.2235 ug/L		0.24056	-0.2235 ppb	0.24056	107.61%
Al 396.153Radial†	23.2	21.803 ug/L		11.7184	21.803 ppb	11.7184	53.75%
As 188.979†	4.1	1.8094 ug/L		2.72834	1.8094 ppb	2.72834	150.78%
B 249.677†	814.4	19.962 ug/L		0.3668	19.962 ppb	0.3668	1.84%
Ba 233.527†	1445.5	11.365 ug/L		0.0353	11.365 ppb	0.0353	0.31%
Be 313.107†	57.3	0.0147 ug/L		0.00839	0.0147 ppb	0.00839	57.11%
Ca 317.933Radial†	12216.8	26642 ug/L		351.4	26642 ppb	351.4	1.32%
Cd 226.502†	24.0	0.2826 ug/L		0.04681	0.2826 ppb	0.04681	16.57%
Co 228.616†	1.6	0.0429 ug/L		0.17629	0.0429 ppb	0.17629	411.16%
Cr 267.716†	405.3	4.5476 ug/L		0.15771	4.5476 ppb	0.15771	3.47%
Cu 324.752†	1389.4	4.2309 ug/L		0.15696	4.2309 ppb	0.15696	3.71%
Fe 238.204 Radial†	-0.3	-4.9079 ug/L		11.64838	-4.9079 ppb	11.64838	237.34%
K 766.490 Radial†	3507.5	655.41 ug/L		22.999	655.41 ppb	22.999	3.51%

Mg 279.077 IEC†	81.9	4324.1 ug/L	74.60	4324.1 ppb	74.60	1.73%
Mn 257.610†	1046.7	1.0152 ug/L	0.00409	1.0152 ppb	0.00409	0.40%
Mo 202.031†	0.2	0.3316 ug/L	0.43472	0.3316 ppb	0.43472	131.11%
Na 589.592 Radial†	63339.5	19709 ug/L	308.0	19709 ppb	308.0	1.56%
Ni 231.604†	110.5	2.8208 ug/L	0.12709	2.8208 ppb	0.12709	4.51%
P 214.914†	89.7	52.822 ug/L	4.0599	52.822 ppb	4.0599	7.69%
Pb 220.353†	-56.4	-6.5987 ug/L	1.54969	-6.5987 ppb	1.54969	23.48%
S 181.975 Axial†	5370.0	7571.6 ug/L	46.02	7571.6 ppb	46.02	0.61%
Sb 206.836†	-6.3	-2.7256 ug/L	1.93906	-2.7256 ppb	1.93906	71.14%
Se 196.026†	-0.2	-0.1571 ug/L	3.18351	-0.1571 ppb	3.18351	>999.9%
Si 251.611†	946967.5	30678 ug/L	31.2	30678 ppb	31.2	0.10%
Sn 189.927†	-180.5	-27.817 ug/L	1.0354	-27.817 ppb	1.0354	3.72%
Sr 421.552†	18208.0	126.47 ug/L	1.956	126.47 ppb	1.956	1.55%
Ti 334.940†	-1877.8	0.2580 ug/L	0.03431	0.2580 ppb	0.03431	13.30%
Tl 190.801†	-11.4	-3.6771 ug/L	1.94166	-3.6771 ppb	1.94166	52.80%
U 409.014†	147.8	4.1170 ug/L	2.55877	4.1170 ppb	2.55877	62.15%
V 292.402†	173.3	1.3044 ug/L	0.08062	1.3044 ppb	0.08062	6.18%
Zn 213.857†	2511.8	25.335 ug/L	0.1427	25.335 ppb	0.1427	0.56%
SiO2†	958512.3	66547 ug/L	716.7	66547 ppb	716.7	1.08%

Sequence No.: 9

Sample ID: 1202031024|948088|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 42

Date Collected: 2/25/2010 14:50:20

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202031024|948088|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3884.9	3884.9	101 %		14:52:32
1	Y RADIAL	4456.5	4456.5	100.1 %		14:52:12
1	Al 396.153Radial†	5577.5	5652.5	5288.2 ug/L	5288.2 ppb	14:52:12
1	Ca 317.933Radial†	15641.6	15510.6	33824 ug/L	33824 ppb	14:52:12
1	Fe 238.204 Radial†	344.2	330.1	5347.9 ug/L	5347.9 ppb	14:52:32
1	K 766.490 Radial†	33940.1	30931.3	5903.6 ug/L	5903.6 ppb	14:52:12
1	Mg 279.077 IEC†	186.1	183.6	9688.2 ug/L	9688.2 ppb	14:52:32
1	Na 589.592 Radial†	85433.9	85721.9	26674 ug/L	26674 ppb	14:52:12
1	Sr 421.552†	96237.4	95537.3	664.37 ug/L	664.37 ppb	14:52:12
1	Sc 361.383	894858.9	894858.9	101.68 %		14:53:31
1	Y 371.029	739833.6	739833.6	97.265 %		14:53:31
1	Ag 328.068†	105954.0	103969.1	485.94 ug/L	485.94 ppb	14:53:31
1	As 188.979†	1127.9	1129.2	506.55 ug/L	506.55 ppb	14:53:51
1	B 249.677†	20806.7	20740.9	506.14 ug/L	506.14 ppb	14:53:31
1	Ba 233.527†	65592.9	64498.0	508.24 ug/L	508.24 ppb	14:53:31
1	Be 313.107†	1361672.4	1342731.5	502.84 ug/L	502.84 ppb	14:53:31
1	Cd 226.502†	41336.9	40830.1	474.33 ug/L	474.33 ppb	14:53:51
1	Co 228.616†	22718.5	22408.0	470.70 ug/L	470.70 ppb	14:53:51
1	Cr 267.716†	44467.2	43647.4	490.78 ug/L	490.78 ppb	14:53:31
1	Cu 324.752†	177859.0	168965.1	514.83 ug/L	514.83 ppb	14:53:31
1	Mn 257.610†	444505.3	436683.0	497.63 ug/L	497.63 ppb	14:53:31
1	Mo 202.031†	6837.4	6719.7	495.76 ug/L	495.76 ppb	14:53:51
1	Ni 231.604†	19296.1	18894.5	481.91 ug/L	481.91 ppb	14:53:51
1	P 214.914†	1266.5	1039.8	524.66 ug/L	524.66 ppb	14:53:51
1	Pb 220.353†	4019.4	3891.8	483.39 ug/L	483.39 ppb	14:53:51
1	S 181.975 Axial†	9345.5	9155.3	12908 ug/L	12908 ppb	14:53:51
1	Sb 206.836†	1533.9	1469.5	536.12 ug/L	536.12 ppb	14:53:51
1	Se 196.026†	720.9	733.7	500.27 ug/L	500.27 ppb	14:53:51
1	Si 251.611†	1155508.6	1135851.2	36790 ug/L	36790 ppb	14:53:31
1	Sn 189.927†	2747.1	2692.3	491.21 ug/L	491.21 ppb	14:53:51
1	Ti 334.940†	324271.4	320323.3	508.07 ug/L	508.07 ppb	14:53:31
1	Tl 190.801†	1508.1	1510.6	489.44 ug/L	489.44 ppb	14:53:51
1	U 409.014†	14631.0	17291.1	481.13 ug/L	481.13 ppb	14:53:31
1	V 292.402†	71087.8	71381.9	505.28 ug/L	505.28 ppb	14:53:31
1	Zn 213.857†	52759.9	51148.7	511.80 ug/L	511.80 ppb	14:53:31
1	SiO2†	1177838.6	1157788.8	80369 ug/L	80369 ppb	14:54:52
2	Sc Radial	3865.0	3865.0	100 %		14:52:57
2	Y RADIAL	4353.7	4353.7	97.80 %		14:52:37
2	Al 396.153Radial†	5512.9	5616.5	5254.5 ug/L	5254.5 ppb	14:52:37
2	Ca 317.933Radial†	15435.7	15384.9	33550 ug/L	33550 ppb	14:52:37
2	Fe 238.204 Radial†	347.7	335.3	5432.9 ug/L	5432.9 ppb	14:52:57
2	K 766.490 Radial†	33435.4	30600.6	5840.5 ug/L	5840.5 ppb	14:52:37
2	Mg 279.077 IEC†	189.9	188.3	9938.1 ug/L	9938.1 ppb	14:52:57
2	Na 589.592 Radial†	83906.3	84632.9	26335 ug/L	26335 ppb	14:52:37
2	Sr 421.552†	94808.2	94601.7	657.86 ug/L	657.86 ppb	14:52:37
2	Sc 361.383	905105.5	905105.5	102.84 %		14:53:58
2	Y 371.029	746481.9	746481.9	98.139 %		14:53:58
2	Ag 328.068†	107340.2	104137.4	486.75 ug/L	486.75 ppb	14:53:58
2	As 188.979†	1126.1	1114.8	500.22 ug/L	500.22 ppb	14:54:18
2	B 249.677†	21260.5	20950.5	511.27 ug/L	511.27 ppb	14:53:58
2	Ba 233.527†	66748.9	64891.8	511.34 ug/L	511.34 ppb	14:53:58
2	Be 313.107†	1382718.0	1348034.3	504.82 ug/L	504.82 ppb	14:53:58
2	Cd 226.502†	41665.0	40688.9	472.68 ug/L	472.68 ppb	14:54:18
2	Co 228.616†	22877.6	22309.7	468.63 ug/L	468.63 ppb	14:54:18
2	Cr 267.716†	45171.3	43836.9	492.91 ug/L	492.91 ppb	14:53:58
2	Cu 324.752†	180733.3	169779.6	517.31 ug/L	517.31 ppb	14:53:58
2	Mn 257.610†	451317.3	438357.6	499.53 ug/L	499.53 ppb	14:53:58
2	Mo 202.031†	6877.3	6682.4	493.01 ug/L	493.01 ppb	14:54:18
2	Ni 231.604†	19440.2	18819.8	480.00 ug/L	480.00 ppb	14:54:18



2	P 214.914†	1272.5	1031.5	519.09 ug/L	519.09 ppb	14:54:18
2	Pb 220.353†	4061.1	3887.6	482.85 ug/L	482.85 ppb	14:54:18
2	S 181.975 Axial†	9410.3	9114.2	12850 ug/L	12850 ppb	14:54:18
2	Sb 206.836†	1529.1	1447.8	528.36 ug/L	528.36 ppb	14:54:18
2	Se 196.026†	733.3	737.7	503.19 ug/L	503.19 ppb	14:54:18
2	Si 251.611†	1174353.4	1141309.6	36967 ug/L	36967 ppb	14:53:58
2	Sn 189.927†	2764.6	2678.7	488.69 ug/L	488.69 ppb	14:54:18
2	Ti 334.940†	329279.9	321582.9	509.99 ug/L	509.99 ppb	14:53:58
2	Tl 190.801†	1524.8	1510.1	489.29 ug/L	489.29 ppb	14:54:18
2	U 409.014†	15148.6	17631.5	490.62 ug/L	490.62 ppb	14:53:58
2	V 292.402†	72076.7	71552.0	506.44 ug/L	506.44 ppb	14:53:58
2	Zn 213.857†	53449.0	51231.3	512.63 ug/L	512.63 ppb	14:53:58
2	SiO2†	1174791.1	1141711.6	79253 ug/L	79253 ppb	14:54:58
3	Sc Radial	3863.5	3863.5	100 %		14:53:22
3	Y RADIAL	4411.9	4411.9	99.11 %		14:53:02
3	Al 396.153Radial†	5525.9	5631.6	5268.9 ug/L	5268.9 ppb	14:53:02
3	Ca 317.933Radial†	15491.4	15446.4	33685 ug/L	33685 ppb	14:53:02
3	Fe 238.204 Radial†	343.7	331.4	5369.5 ug/L	5369.5 ppb	14:53:22
3	K 766.490 Radial†	33498.4	30676.5	5855.0 ug/L	5855.0 ppb	14:53:02
3	Mg 279.077 IEC†	186.3	184.8	9750.5 ug/L	9750.5 ppb	14:53:22
3	Na 589.592 Radial†	84374.4	85133.0	26490 ug/L	26490 ppb	14:53:02
3	Sr 421.552†	95376.4	95205.8	662.06 ug/L	662.06 ppb	14:53:02
3	Sc 361.383	909538.1	909538.1	103.35 %		14:54:26
3	Y 371.029	750811.0	750811.0	98.708 %		14:54:26
3	Ag 328.068†	107625.8	103905.0	485.64 ug/L	485.64 ppb	14:54:26
3	As 188.979†	1121.3	1104.9	495.78 ug/L	495.78 ppb	14:54:46
3	B 249.677†	21333.4	20920.3	510.56 ug/L	510.56 ppb	14:54:26
3	Ba 233.527†	66779.5	64605.1	509.08 ug/L	509.08 ppb	14:54:26
3	Be 313.107†	1383972.5	1342695.9	502.83 ug/L	502.83 ppb	14:54:26
3	Cd 226.502†	41291.6	40130.1	466.19 ug/L	466.19 ppb	14:54:46
3	Co 228.616†	22676.6	22006.8	462.26 ug/L	462.26 ppb	14:54:46
3	Cr 267.716†	45193.4	43644.2	490.74 ug/L	490.74 ppb	14:54:26
3	Cu 324.752†	181210.4	169384.8	516.10 ug/L	516.10 ppb	14:54:26
3	Mn 257.610†	451578.0	436471.1	497.38 ug/L	497.38 ppb	14:54:26
3	Mo 202.031†	6837.2	6611.1	487.76 ug/L	487.76 ppb	14:54:46
3	Ni 231.604†	19305.2	18597.0	474.32 ug/L	474.32 ppb	14:54:46
3	P 214.914†	1249.9	1003.6	502.52 ug/L	502.52 ppb	14:54:46
3	Pb 220.353†	3989.1	3798.7	471.84 ug/L	471.84 ppb	14:54:46
3	S 181.975 Axial†	9323.0	8985.2	12668 ug/L	12668 ppb	14:54:46
3	Sb 206.836†	1521.5	1433.2	522.98 ug/L	522.98 ppb	14:54:46
3	Se 196.026†	709.5	711.3	485.59 ug/L	485.59 ppb	14:54:46
3	Si 251.611†	1175919.3	1137259.8	36836 ug/L	36836 ppb	14:54:26
3	Sn 189.927†	2736.6	2638.5	481.48 ug/L	481.48 ppb	14:54:46
3	Ti 334.940†	329572.0	320305.1	508.01 ug/L	508.01 ppb	14:54:26
3	Tl 190.801†	1507.7	1486.3	481.65 ug/L	481.65 ppb	14:54:46
3	U 409.014†	15099.1	17511.9	487.30 ug/L	487.30 ppb	14:54:26
3	V 292.402†	72187.0	71317.1	504.72 ug/L	504.72 ppb	14:54:26
3	Zn 213.857†	53583.7	51108.4	511.44 ug/L	511.44 ppb	14:54:26
3	SiO2†	1172613.0	1134037.1	78720 ug/L	78720 ppb	14:55:04

Mean Data: 1202031024|948088|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	903167.5	102.62 %	0.856			0.83%
Sc Radial	3871.1	100 %	0.3			0.31%
Y 371.029	745708.9	98.038 %	0.7269			0.74%
Y RADIAL	4407.4	99.00 %	1.158			1.17%
Ag 328.068†	104003.8	486.11 ug/L	0.572	486.11 ppb	0.572	0.12%
Al 396.153Radial†	5633.5	5270.5 ug/L	16.90	5270.5 ppb	16.90	0.32%
As 188.979†	1116.3	500.85 ug/L	5.412	500.85 ppb	5.412	1.08%
B 249.677†	20870.6	509.32 ug/L	2.778	509.32 ppb	2.778	0.55%
Ba 233.527†	64665.0	509.55 ug/L	1.603	509.55 ppb	1.603	0.31%
Be 313.107†	1344487.2	503.50 ug/L	1.150	503.50 ppb	1.150	0.23%
Ca 317.933Radial†	15447.3	33686 ug/L	137.1	33686 ppb	137.1	0.41%
Cd 226.502†	40549.7	471.07 ug/L	4.304	471.07 ppb	4.304	0.91%
Co 228.616†	22241.5	467.20 ug/L	4.401	467.20 ppb	4.401	0.94%
Cr 267.716†	43709.5	491.47 ug/L	1.242	491.47 ppb	1.242	0.25%
Cu 324.752†	169376.5	516.08 ug/L	1.241	516.08 ppb	1.241	0.24%
Fe 238.204 Radial†	332.3	5383.4 ug/L	44.16	5383.4 ppb	44.16	0.82%
K 766.490 Radial†	30736.1	5866.4 ug/L	33.07	5866.4 ppb	33.07	0.56%

Mg 279.077 IEC†	185.6	9792.3 ug/L	130.06	9792.3 ppb	130.06	1.33%
Mn 257.610†	437170.6	498.18 ug/L	1.176	498.18 ppb	1.176	0.24%
Mo 202.031†	6671.1	492.18 ug/L	4.066	492.18 ppb	4.066	0.83%
Na 589.592 Radial†	85162.6	26500 ug/L	169.6	26500 ppb	169.6	0.64%
Ni 231.604†	18770.4	478.74 ug/L	3.947	478.74 ppb	3.947	0.82%
P 214.914†	1025.0	515.42 ug/L	11.516	515.42 ppb	11.516	2.23%
Pb 220.353†	3859.4	479.36 ug/L	6.515	479.36 ppb	6.515	1.36%
S 181.975 Axial†	9084.9	12808 ug/L	125.2	12808 ppb	125.2	0.98%
Sb 206.836†	1450.2	529.15 ug/L	6.607	529.15 ppb	6.607	1.25%
Se 196.026†	727.6	496.35 ug/L	9.434	496.35 ppb	9.434	1.90%
Si 251.611†	1138140.2	36865 ug/L	91.8	36865 ppb	91.8	0.25%
Sn 189.927†	2669.8	487.13 ug/L	5.049	487.13 ppb	5.049	1.04%
Sr 421.552†	95115.0	661.43 ug/L	3.299	661.43 ppb	3.299	0.50%
Ti 334.940†	320737.1	508.69 ug/L	1.126	508.69 ppb	1.126	0.22%
Tl 190.801†	1502.3	486.79 ug/L	4.457	486.79 ppb	4.457	0.92%
U 409.014†	17478.1	486.35 ug/L	4.816	486.35 ppb	4.816	0.99%
V 292.402†	71417.0	505.48 ug/L	0.874	505.48 ppb	0.874	0.17%
Zn 213.857†	51162.8	511.96 ug/L	0.612	511.96 ppb	0.612	0.12%
SiO2†	1144512.5	79447 ug/L	841.4	79447 ppb	841.4	1.06%

Sequence No.: 10

Sample ID: 1202031023|948088|5

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 43

Date Collected: 2/25/2010 14:57:15

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202031023|948088|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3923.5	3923.5	102 %		14:59:07
1	Y RADIAL	4314.4	4314.4	96.92 %		14:59:07
1	Al 396.153Radial†	-107.9	9.0	8.4622 ug/L	8.4622 ppb	14:59:07
1	Ca 317.933Radial†	2652.9	2589.2	5646.5 ug/L	5646.5 ppb	14:59:27
1	Fe 238.204 Radial†	13.1	1.2	18.921 ug/L	18.921 ppb	14:59:27
1	K 766.490 Radial†	3642.9	816.1	152.87 ug/L	152.87 ppb	14:59:07
1	Mg 279.077 IEC†	21.8	20.2	1066.7 ug/L	1066.7 ppb	14:59:27
1	Na 589.592 Radial†	12450.4	13141.0	4089.0 ug/L	4089.0 ppb	14:59:07
1	Sr 421.552†	3904.4	3829.4	26.598 ug/L	26.598 ppb	14:59:07
1	Sc 361.383	903019.5	903019.5	102.61 %		15:00:24
1	Y 371.029	756449.5	756449.5	99.450 %		15:00:24
1	Ag 328.068†	245.0	4.6	-0.0464 ug/L	-0.0464 ppb	15:00:24
1	As 188.979†	-25.3	-4.8	-2.1149 ug/L	-2.1149 ppb	15:00:44
1	B 249.677†	-110.2	170.6	4.1778 ug/L	4.1778 ppb	15:00:44
1	Ba 233.527†	341.3	321.6	2.5288 ug/L	2.5288 ppb	15:00:44
1	Be 313.107†	-3612.9	37.1	0.0125 ug/L	0.0125 ppb	15:00:24
1	Cd 226.502†	-173.6	7.0	0.0791 ug/L	0.0791 ppb	15:00:44
1	Co 228.616†	-64.5	2.0	0.0448 ug/L	0.0448 ppb	15:00:44
1	Cr 267.716†	174.0	84.4	0.9506 ug/L	0.9506 ppb	15:00:44
1	Cu 324.752†	6336.5	220.4	0.6743 ug/L	0.6743 ppb	15:00:24
1	Mn 257.610†	753.8	257.0	0.2510 ug/L	0.2510 ppb	15:00:44
1	Mo 202.031†	9.4	4.5	0.3991 ug/L	0.3991 ppb	15:00:44
1	Ni 231.604†	99.8	14.5	0.3700 ug/L	0.3700 ppb	15:00:44
1	P 214.914†	235.7	23.9	14.126 ug/L	14.126 ppb	15:00:44
1	Pb 220.353†	-10.7	-71.6	-8.7774 ug/L	-8.7774 ppb	15:00:44
1	S 181.975 Axial†	1232.3	1165.1	1642.8 ug/L	1642.8 ppb	15:00:44
1	Sb 206.836†	37.5	-2.5	-1.0062 ug/L	-1.0062 ppb	15:00:44
1	Se 196.026†	-23.9	1.4	0.9867 ug/L	0.9867 ppb	15:00:44
1	Si 251.611†	212563.4	206597.2	6692.8 ug/L	6692.8 ppb	15:00:24
1	Sn 189.927†	-45.1	-53.4	-8.6225 ug/L	-8.6225 ppb	15:00:44
1	Ti 334.940†	-1843.9	-387.2	0.0612 ug/L	0.0612 ppb	15:00:24
1	Tl 190.801†	-31.3	-3.1	-0.9861 ug/L	-0.9861 ppb	15:00:44
1	U 409.014†	-3089.9	-109.5	-3.0620 ug/L	-3.0620 ppb	15:00:24
1	V 292.402†	-1481.5	24.8	0.1902 ug/L	0.1902 ppb	15:00:24
1	Zn 213.857†	1489.5	712.3	7.1844 ug/L	7.1844 ppb	15:00:44
1	SiO2†	209612.0	203697.3	14142 ug/L	14142 ppb	15:01:41
2	Sc Radial	3931.8	3931.8	102 %		14:59:32
2	Y RADIAL	4375.8	4375.8	98.29 %		14:59:32
2	Al 396.153Radial†	-130.8	-13.2	-12.466 ug/L	-12.466 ppb	14:59:32
2	Ca 317.933Radial†	2660.5	2591.2	5650.6 ug/L	5650.6 ppb	14:59:53
2	Fe 238.204 Radial†	10.4	-1.5	-24.254 ug/L	-24.254 ppb	14:59:53
2	K 766.490 Radial†	3634.1	799.9	149.78 ug/L	149.78 ppb	14:59:32
2	Mg 279.077 IEC†	19.2	17.7	934.05 ug/L	934.05 ppb	14:59:53
2	Na 589.592 Radial†	12327.0	12993.9	4043.2 ug/L	4043.2 ppb	14:59:32
2	Sr 421.552†	3904.7	3821.6	26.543 ug/L	26.543 ppb	14:59:32
2	Sc 361.383	885868.6	885868.6	100.66 %		15:00:50
2	Y 371.029	742203.8	742203.8	97.577 %		15:00:50
2	Ag 328.068†	264.5	28.6	0.0510 ug/L	0.0510 ppb	15:00:50
2	As 188.979†	-13.7	6.3	2.7883 ug/L	2.7883 ppb	15:01:10
2	B 249.677†	-90.3	188.3	4.6187 ug/L	4.6187 ppb	15:01:10
2	Ba 233.527†	321.8	308.6	2.4253 ug/L	2.4253 ppb	15:01:10
2	Be 313.107†	-3547.5	33.9	0.0110 ug/L	0.0110 ppb	15:00:50
2	Cd 226.502†	-154.0	23.2	0.2724 ug/L	0.2724 ppb	15:01:10
2	Co 228.616†	-63.3	2.0	0.0455 ug/L	0.0455 ppb	15:01:10
2	Cr 267.716†	159.4	73.3	0.8209 ug/L	0.8209 ppb	15:01:10
2	Cu 324.752†	6247.4	251.4	0.7663 ug/L	0.7663 ppb	15:00:50
2	Mn 257.610†	694.3	212.1	0.2010 ug/L	0.2010 ppb	15:01:10
2	Mo 202.031†	14.1	9.3	0.7510 ug/L	0.7510 ppb	15:01:10
2	Ni 231.604†	103.2	19.7	0.5026 ug/L	0.5026 ppb	15:01:10

2	P 214.914†	240.5	33.1	19.684 ug/L	19.684 ppb	15:01:10
2	Pb 220.353†	-18.6	-79.6	-9.7691 ug/L	-9.7691 ppb	15:01:10
2	S 181.975 Axial†	1237.8	1193.9	1683.3 ug/L	1683.3 ppb	15:01:10
2	Sb 206.836†	30.0	-9.2	-3.4090 ug/L	-3.4090 ppb	15:01:10
2	Se 196.026†	-15.9	8.9	5.7863 ug/L	5.7863 ppb	15:01:10
2	Si 251.611†	208291.5	206364.1	6685.3 ug/L	6685.3 ppb	15:00:50
2	Sn 189.927†	-50.4	-59.5	-9.7198 ug/L	-9.7198 ppb	15:01:10
2	Ti 334.940†	-1899.1	-476.8	-0.0687 ug/L	-0.0687 ppb	15:00:50
2	Tl 190.801†	-24.4	3.2	1.0137 ug/L	1.0137 ppb	15:01:10
2	U 409.014†	-3026.0	-104.3	-2.9129 ug/L	-2.9129 ppb	15:00:50
2	V 292.402†	-1483.9	-5.5	-0.0123 ug/L	-0.0123 ppb	15:00:50
2	Zn 213.857†	1507.5	758.2	7.6537 ug/L	7.6537 ppb	15:01:10
2	SiO2†	212355.2	210377.7	14606 ug/L	14606 ppb	15:01:46
3	Sc Radial	3957.3	3957.3	103 %		14:59:58
3	Y RADIAL	4354.6	4354.6	97.82 %		14:59:58
3	Al 396.153Radial†	-108.3	9.5	8.9446 ug/L	8.9446 ppb	14:59:58
3	Ca 317.933Radial†	2677.5	2590.9	5650.1 ug/L	5650.1 ppb	15:00:18
3	Fe 238.204 Radial†	13.0	1.0	15.927 ug/L	15.927 ppb	15:00:18
3	K 766.490 Radial†	3654.9	797.2	149.27 ug/L	149.27 ppb	14:59:58
3	Mg 279.077 IEC†	20.9	19.2	1012.6 ug/L	1012.6 ppb	15:00:18
3	Na 589.592 Radial†	12333.9	12922.9	4021.1 ug/L	4021.1 ppb	14:59:58
3	Sr 421.552†	3938.6	3830.1	26.602 ug/L	26.602 ppb	14:59:58
3	Sc 361.383	901549.9	901549.9	102.44 %		15:01:15
3	Y 371.029	755217.9	755217.9	99.288 %		15:01:15
3	Ag 328.068†	276.3	35.5	0.0907 ug/L	0.0907 ppb	15:01:15
3	As 188.979†	-13.2	7.0	3.1243 ug/L	3.1243 ppb	15:01:35
3	B 249.677†	-99.5	180.9	4.4304 ug/L	4.4304 ppb	15:01:35
3	Ba 233.527†	320.8	302.1	2.3751 ug/L	2.3751 ppb	15:01:35
3	Be 313.107†	-3591.5	52.3	0.0182 ug/L	0.0182 ppb	15:01:15
3	Cd 226.502†	-163.9	16.2	0.1878 ug/L	0.1878 ppb	15:01:35
3	Co 228.616†	-58.4	7.9	0.1685 ug/L	0.1685 ppb	15:01:35
3	Cr 267.716†	160.2	71.3	0.8004 ug/L	0.8004 ppb	15:01:35
3	Cu 324.752†	6373.1	266.2	0.8107 ug/L	0.8107 ppb	15:01:15
3	Mn 257.610†	728.9	233.8	0.2266 ug/L	0.2266 ppb	15:01:35
3	Mo 202.031†	13.0	8.0	0.6582 ug/L	0.6582 ppb	15:01:35
3	Ni 231.604†	118.6	33.0	0.8416 ug/L	0.8416 ppb	15:01:35
3	P 214.914†	221.2	10.1	5.8309 ug/L	5.8309 ppb	15:01:35
3	Pb 220.353†	-16.6	-77.4	-9.4900 ug/L	-9.4900 ppb	15:01:35
3	S 181.975 Axial†	1217.9	1153.1	1625.8 ug/L	1625.8 ppb	15:01:35
3	Sb 206.836†	31.4	-8.4	-3.0903 ug/L	-3.0903 ppb	15:01:35
3	Se 196.026†	-24.0	1.3	0.8979 ug/L	0.8979 ppb	15:01:35
3	Si 251.611†	212246.4	206625.5	6693.7 ug/L	6693.7 ppb	15:01:15
3	Sn 189.927†	-47.9	-56.1	-9.1205 ug/L	-9.1205 ppb	15:01:35
3	Ti 334.940†	-1837.9	-384.3	0.0685 ug/L	0.0685 ppb	15:01:15
3	Tl 190.801†	-32.4	-4.2	-1.3540 ug/L	-1.3540 ppb	15:01:35
3	U 409.014†	-2897.3	73.6	2.0503 ug/L	2.0503 ppb	15:01:15
3	V 292.402†	-1529.5	-24.4	-0.1403 ug/L	-0.1403 ppb	15:01:15
3	Zn 213.857†	1496.2	721.1	7.2709 ug/L	7.2709 ppb	15:01:35
3	SiO2†	211418.9	205794.3	14288 ug/L	14288 ppb	15:01:51

Mean Data: 1202031023|948088|5

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	896812.7	101.90 %	1.080			1.06%
Sc Radial	3937.5	102 %	0.5			0.45%
Y 371.029	751290.4	98.771 %	1.0377			1.05%
Y RADIAL	4348.3	97.68 %	0.700			0.72%
Ag 328.068†	22.9	0.0318 ug/L	0.07055	0.0318 ppb	0.07055	222.07%
Al 396.153Radial†	1.8	1.6469 ug/L	12.22450	1.6469 ppb	12.22450	742.25%
As 188.979†	2.9	1.2659 ug/L	2.93268	1.2659 ppb	2.93268	231.67%
B 249.677†	179.9	4.4090 ug/L	0.22126	4.4090 ppb	0.22126	5.02%
Ba 233.527†	310.8	2.4430 ug/L	0.07837	2.4430 ppb	0.07837	3.21%
Be 313.107†	41.1	0.0139 ug/L	0.00379	0.0139 ppb	0.00379	27.31%
Ca 317.933Radial†	2590.4	5649.1 ug/L	2.28	5649.1 ppb	2.28	0.04%
Cd 226.502†	15.5	0.1797 ug/L	0.09693	0.1797 ppb	0.09693	53.92%
Co 228.616†	3.9	0.0863 ug/L	0.07121	0.0863 ppb	0.07121	82.53%
Cr 267.716†	76.3	0.8573 ug/L	0.08144	0.8573 ppb	0.08144	9.50%
Cu 324.752†	246.0	0.7504 ug/L	0.06959	0.7504 ppb	0.06959	9.27%
Fe 238.204 Radial†	0.2	3.5310 ug/L	24.10935	3.5310 ppb	24.10935	682.80%
K 766.490 Radial†	804.4	150.64 ug/L	1.950	150.64 ppb	1.950	1.29%

Mg 279.077 IEC†	19.0	1004.4 ug/L	66.68	1004.4 ppb	66.68	6.64%
Mn 257.610†	234.3	0.2262 ug/L	0.02500	0.2262 ppb	0.02500	11.05%
Mo 202.031†	7.3	0.6028 ug/L	0.18239	0.6028 ppb	0.18239	30.26%
Na 589.592 Radial†	13019.3	4051.1 ug/L	34.61	4051.1 ppb	34.61	0.85%
Ni 231.604†	22.4	0.5714 ug/L	0.24320	0.5714 ppb	0.24320	42.57%
P 214.914†	22.4	13.214 ug/L	6.9713	13.214 ppb	6.9713	52.76%
Pb 220.353†	-76.2	-9.3455 ug/L	0.51138	-9.3455 ppb	0.51138	5.47%
S 181.975 Axial†	1170.7	1650.6 ug/L	29.54	1650.6 ppb	29.54	1.79%
Sb 206.836†	-6.7	-2.5018 ug/L	1.30503	-2.5018 ppb	1.30503	52.16%
Se 196.026†	3.9	2.5570 ug/L	2.79703	2.5570 ppb	2.79703	109.39%
Si 251.611†	206528.9	6690.6 ug/L	4.65	6690.6 ppb	4.65	0.07%
Sn 189.927†	-56.3	-9.1543 ug/L	0.54945	-9.1543 ppb	0.54945	6.00%
Sr 421.552†	3827.0	26.581 ug/L	0.0329	26.581 ppb	0.0329	0.12%
Ti 334.940†	-416.1	0.0203 ug/L	0.07716	0.0203 ppb	0.07716	379.71%
Tl 190.801†	-1.4	-0.4422 ug/L	1.27414	-0.4422 ppb	1.27414	288.16%
U 409.014†	-46.8	-1.3082 ug/L	2.90947	-1.3082 ppb	2.90947	222.40%
V 292.402†	-1.7	0.0125 ug/L	0.16666	0.0125 ppb	0.16666	>999.9%
Zn 213.857†	730.5	7.3697 ug/L	0.24974	7.3697 ppb	0.24974	3.39%
SiO2†	206623.1	14345 ug/L	237.2	14345 ppb	237.2	1.65%

Sequence No.: 15  
 Sample ID: CCV  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 7  
 Date Collected: 2/25/2010 15:31:25  
 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	3822.3	3822.3	99.1 %		15:33:38
1	Y RADIAL	4351.8	4351.8	97.75 %		15:33:18
1	Al 396.153Radial†	5337.8	5501.3	5146.9 ug/L	5146.9 ppb	15:33:18
1	Ca 317.933Radial†	2364.4	2367.1	5162.1 ug/L	5162.1 ppb	15:33:38
1	Fe 238.204 Radial†	318.4	309.7	5018.7 ug/L	5018.7 ppb	15:33:38
1	K 766.490 Radial†	28887.8	26384.9	5048.6 ug/L	5048.6 ppb	15:33:18
1	Mg 279.077 IEC†	97.7	97.4	5140.8 ug/L	5140.8 ppb	15:33:38
1	Na 589.592 Radial†	32248.3	33442.7	10406 ug/L	10406 ppb	15:33:18
1	Sr 421.552†	72101.0	72746.6	506.03 ug/L	506.03 ppb	15:33:18
1	Sc 361.383	915184.9	915184.9	103.99 %		15:34:35
1	Y 371.029	756963.9	756963.9	99.517 %		15:34:35
1	Ag 328.068†	107515.4	103156.3	482.37 ug/L	482.37 ppb	15:34:41
1	As 188.979†	1098.9	1076.6	482.94 ug/L	482.94 ppb	15:35:01
1	B 249.677†	19719.4	19240.9	469.39 ug/L	469.39 ppb	15:34:41
1	Ba 233.527†	63882.9	61421.0	483.99 ug/L	483.99 ppb	15:34:41
1	Be 313.107†	1339358.4	1291530.9	483.65 ug/L	483.65 ppb	15:34:35
1	Cd 226.502†	43218.4	41736.5	484.90 ug/L	484.90 ppb	15:34:41
1	Co 228.616†	23905.6	23053.3	484.27 ug/L	484.27 ppb	15:34:41
1	Cr 267.716†	44626.2	42829.0	481.54 ug/L	481.54 ppb	15:34:41
1	Cu 324.752†	168851.2	156418.0	476.59 ug/L	476.59 ppb	15:34:41
1	Mn 257.610†	444457.5	426927.7	486.67 ug/L	486.67 ppb	15:34:35
1	Mo 202.031†	6761.0	6496.9	478.98 ug/L	478.98 ppb	15:35:01
1	Ni 231.604†	19841.0	18997.0	484.51 ug/L	484.51 ppb	15:34:41
1	P 214.914†	4371.4	3997.9	2311.4 ug/L	2311.4 ppb	15:35:01
1	Pb 220.353†	4017.0	3801.7	471.83 ug/L	471.83 ppb	15:35:01
1	S 181.975 Axial†	763.9	698.7	984.24 ug/L	984.24 ppb	15:35:01
1	Sb 206.836†	1451.8	1357.1	496.10 ug/L	496.10 ppb	15:35:01
1	Se 196.026†	739.0	735.4	500.33 ug/L	500.33 ppb	15:35:01
1	Si 251.611†	77977.2	74420.9	2405.0 ug/L	2405.0 ppb	15:34:41
1	Sn 189.927†	2785.6	2669.3	481.98 ug/L	481.98 ppb	15:35:01
1	Ti 334.940†	314897.8	304226.3	479.24 ug/L	479.24 ppb	15:34:41
1	Tl 190.801†	1530.4	1499.1	485.46 ug/L	485.46 ppb	15:35:01
1	U 409.014†	14549.7	16893.3	470.08 ug/L	470.08 ppb	15:34:41
1	V 292.402†	69573.1	68372.5	483.99 ug/L	483.99 ppb	15:34:41
1	Zn 213.857†	50505.0	47827.9	478.36 ug/L	478.36 ppb	15:34:41
1	SiO2†	77661.6	74093.9	5131.1 ug/L	5131.1 ppb	15:36:08
2	Sc Radial	3837.0	3837.0	99.5 %		15:34:03
2	Y RADIAL	4298.4	4298.4	96.56 %		15:33:43
2	Al 396.153Radial†	5301.6	5444.2	5093.0 ug/L	5093.0 ppb	15:33:43
2	Ca 317.933Radial†	2379.2	2372.9	5174.6 ug/L	5174.6 ppb	15:34:03
2	Fe 238.204 Radial†	320.0	310.0	5024.7 ug/L	5024.7 ppb	15:34:03
2	K 766.490 Radial†	28576.1	25959.7	4967.2 ug/L	4967.2 ppb	15:33:43
2	Mg 279.077 IEC†	100.7	100.0	5277.9 ug/L	5277.9 ppb	15:34:03
2	Na 589.592 Radial†	31729.4	32796.1	10205 ug/L	10205 ppb	15:33:43
2	Sr 421.552†	71294.3	71656.4	498.45 ug/L	498.45 ppb	15:33:43
2	Sc 361.383	901218.9	901218.9	102.40 %		15:35:06
2	Y 371.029	745740.2	745740.2	98.042 %		15:35:06
2	Ag 328.068†	107564.6	104806.5	490.06 ug/L	490.06 ppb	15:35:12
2	As 188.979†	1098.6	1092.7	490.12 ug/L	490.12 ppb	15:35:32
2	B 249.677†	19777.2	19591.2	477.95 ug/L	477.95 ppb	15:35:12
2	Ba 233.527†	63697.6	62192.0	490.07 ug/L	490.07 ppb	15:35:12
2	Be 313.107†	1320165.1	1292747.4	484.12 ug/L	484.12 ppb	15:35:06
2	Cd 226.502†	43218.3	42380.4	492.38 ug/L	492.38 ppb	15:35:12
2	Co 228.616†	23909.6	23413.4	491.84 ug/L	491.84 ppb	15:35:12
2	Cr 267.716†	44553.3	43422.8	488.20 ug/L	488.20 ppb	15:35:12
2	Cu 324.752†	168849.9	158933.0	484.24 ug/L	484.24 ppb	15:35:12
2	Mn 257.610†	438621.3	427851.9	487.71 ug/L	487.71 ppb	15:35:06
2	Mo 202.031†	6738.8	6576.1	484.81 ug/L	484.81 ppb	15:35:32
2	Ni 231.604†	19797.6	19250.3	490.97 ug/L	490.97 ppb	15:35:12

2	P 214.914†	4356.9	4048.8	2340.6 ug/L	2340.6 ppb	15:35:32
2	Pb 220.353†	4044.6	3888.5	482.57 ug/L	482.57 ppb	15:35:32
2	S 181.975 Axial†	746.1	692.8	975.87 ug/L	975.87 ppb	15:35:32
2	Sb 206.836†	1464.2	1390.8	508.23 ug/L	508.23 ppb	15:35:32
2	Se 196.026†	730.5	738.1	502.12 ug/L	502.12 ppb	15:35:32
2	Si 251.611†	77874.9	75482.9	2439.3 ug/L	2439.3 ppb	15:35:12
2	Sn 189.927†	2789.9	2715.0	490.23 ug/L	490.23 ppb	15:35:32
2	Ti 334.940†	314150.0	308188.8	485.47 ug/L	485.47 ppb	15:35:12
2	Tl 190.801†	1521.0	1512.8	489.86 ug/L	489.86 ppb	15:35:32
2	U 409.014†	14669.1	17226.8	479.38 ug/L	479.38 ppb	15:35:12
2	V 292.402†	69478.7	69317.2	490.69 ug/L	490.69 ppb	15:35:12
2	Zn 213.857†	50465.8	48542.2	485.52 ug/L	485.52 ppb	15:35:12
2	SiO2†	77722.7	75310.9	5215.4 ug/L	5215.4 ppb	15:36:13
3	Sc Radial	3813.7	3813.7	98.9 %		15:34:28
3	Y RADIAL	4348.2	4348.2	97.68 %		15:34:08
3	Al 396.153Radial†	5356.1	5531.9	5175.5 ug/L	5175.5 ppb	15:34:08
3	Ca 317.933Radial†	2369.4	2377.6	5184.9 ug/L	5184.9 ppb	15:34:28
3	Fe 238.204 Radial†	322.8	314.8	5101.2 ug/L	5101.2 ppb	15:34:28
3	K 766.490 Radial†	29032.7	26596.7	5089.2 ug/L	5089.2 ppb	15:34:08
3	Mg 279.077 IEC†	100.0	99.9	5273.6 ug/L	5273.6 ppb	15:34:28
3	Na 589.592 Radial†	31923.5	33187.0	10327 ug/L	10327 ppb	15:34:08
3	Sr 421.552†	72090.5	72898.6	507.09 ug/L	507.09 ppb	15:34:08
3	Sc 361.383	909996.9	909996.9	103.40 %		15:35:37
3	Y 371.029	754076.8	754076.8	99.138 %		15:35:37
3	Ag 328.068†	107489.9	103721.1	485.03 ug/L	485.03 ppb	15:35:43
3	As 188.979†	1111.9	1095.2	491.23 ug/L	491.23 ppb	15:36:03
3	B 249.677†	19788.0	19415.3	473.64 ug/L	473.64 ppb	15:35:43
3	Ba 233.527†	63758.5	61650.8	485.81 ug/L	485.81 ppb	15:35:43
3	Be 313.107†	1331413.0	1291189.7	483.53 ug/L	483.53 ppb	15:35:37
3	Cd 226.502†	43208.3	41963.6	487.53 ug/L	487.53 ppb	15:35:43
3	Co 228.616†	23890.1	23169.3	486.71 ug/L	486.71 ppb	15:35:43
3	Cr 267.716†	44633.7	43080.9	484.37 ug/L	484.37 ppb	15:35:43
3	Cu 324.752†	168445.2	156951.0	478.21 ug/L	478.21 ppb	15:35:43
3	Mn 257.610†	440858.9	425884.2	485.48 ug/L	485.48 ppb	15:35:37
3	Mo 202.031†	6771.0	6543.7	482.43 ug/L	482.43 ppb	15:36:03
3	Ni 231.604†	19806.7	19072.6	486.44 ug/L	486.44 ppb	15:35:43
3	P 214.914†	4374.0	4024.3	2327.0 ug/L	2327.0 ppb	15:36:03
3	Pb 220.353†	4028.7	3835.0	475.96 ug/L	475.96 ppb	15:36:03
3	S 181.975 Axial†	763.3	702.4	989.35 ug/L	989.35 ppb	15:36:03
3	Sb 206.836†	1471.0	1383.6	505.61 ug/L	505.61 ppb	15:36:03
3	Se 196.026†	742.7	743.0	505.58 ug/L	505.58 ppb	15:36:03
3	Si 251.611†	77755.0	74633.5	2411.9 ug/L	2411.9 ppb	15:35:43
3	Sn 189.927†	2808.5	2706.7	488.73 ug/L	488.73 ppb	15:36:03
3	Ti 334.940†	314432.7	305502.9	481.24 ug/L	481.24 ppb	15:35:43
3	Tl 190.801†	1536.3	1513.2	489.97 ug/L	489.97 ppb	15:36:03
3	U 409.014†	14666.7	17086.3	475.46 ug/L	475.46 ppb	15:35:43
3	V 292.402†	69728.2	68904.0	487.75 ug/L	487.75 ppb	15:35:43
3	Zn 213.857†	50484.2	48084.7	480.93 ug/L	480.93 ppb	15:35:43
3	SiO2†	76951.4	73832.7	5112.9 ug/L	5112.9 ppb	15:36:18

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	908800.2	103.26 %	0.802			0.78%
Sc Radial	3824.3	99.2 %	0.31			0.31%
Y 371.029	752260.3	98.899 %	0.7662			0.77%
Y RADIAL	4332.8	97.33 %	0.670			0.69%
Ag 328.068†	103894.6	485.82 ug/L	3.905	485.82 ppb	3.905	0.80%
QC value within limits for Ag 328.068 Recovery = 97.16%						
Al 396.153Radial†	5492.5	5138.4 ug/L	41.89	5138.4 ppb	41.89	0.82%
QC value within limits for Al 396.153Radial Recovery = 102.77%						
As 188.979†	1088.2	488.10 ug/L	4.502	488.10 ppb	4.502	0.92%
QC value within limits for As 188.979 Recovery = 97.62%						
B 249.677†	19415.8	473.66 ug/L	4.282	473.66 ppb	4.282	0.90%
QC value within limits for B 249.677 Recovery = 94.73%						
Ba 233.527†	61754.6	486.62 ug/L	3.118	486.62 ppb	3.118	0.64%
QC value within limits for Ba 233.527 Recovery = 97.32%						
Be 313.107†	1291822.7	483.77 ug/L	0.312	483.77 ppb	0.312	0.06%
QC value within limits for Be 313.107 Recovery = 96.75%						
Ca 317.933Radial†	2372.5	5173.9 ug/L	11.42	5173.9 ppb	11.42	0.22%

QC value within limits for Ca 317.933 Radial Recovery = 103.48%

Cd 226.502†	42026.8	488.27 ug/L	3.799	488.27 ppb	3.799	0.78%
QC value within limits for Cd 226.502 Recovery = 97.65%						
Co 228.616†	23212.0	487.61 ug/L	3.861	487.61 ppb	3.861	0.79%
QC value within limits for Co 228.616 Recovery = 97.52%						
Cr 267.716†	43110.9	484.70 ug/L	3.347	484.70 ppb	3.347	0.69%
QC value within limits for Cr 267.716 Recovery = 96.94%						
Cu 324.752†	157434.0	479.68 ug/L	4.035	479.68 ppb	4.035	0.84%
QC value within limits for Cu 324.752 Recovery = 95.94%						
Fe 238.204 Radial†	311.5	5048.2 ug/L	45.97	5048.2 ppb	45.97	0.91%
QC value within limits for Fe 238.204 Radial Recovery = 100.96%						
K 766.490 Radial†	26313.8	5035.0 ug/L	62.13	5035.0 ppb	62.13	1.23%
QC value within limits for K 766.490 Radial Recovery = 100.70%						
Mg 279.077 IEC†	99.1	5230.8 ug/L	77.95	5230.8 ppb	77.95	1.49%
QC value within limits for Mg 279.077 IEC Recovery = 104.62%						
Mn 257.610†	426888.0	486.62 ug/L	1.118	486.62 ppb	1.118	0.23%
QC value within limits for Mn 257.610 Recovery = 97.32%						
Mo 202.031†	6538.9	482.08 ug/L	2.930	482.08 ppb	2.930	0.61%
QC value within limits for Mo 202.031 Recovery = 96.42%						
Na 589.592 Radial†	33141.9	10313 ug/L	101.3	10313 ppb	101.3	0.98%
QC value within limits for Na 589.592 Radial Recovery = 103.13%						
Ni 231.604†	19106.6	487.31 ug/L	3.316	487.31 ppb	3.316	0.68%
QC value within limits for Ni 231.604 Recovery = 97.46%						
P 214.914†	4023.7	2326.3 ug/L	14.61	2326.3 ppb	14.61	0.63%
QC value within limits for P 214.914 Recovery = 93.05%						
Pb 220.353†	3841.7	476.78 ug/L	5.416	476.78 ppb	5.416	1.14%
QC value within limits for Pb 220.353 Recovery = 95.36%						
S 181.975 Axial†	698.0	983.15 ug/L	6.806	983.15 ppb	6.806	0.69%
QC value within limits for S 181.975 Axial Recovery = 98.32%						
Sb 206.836†	1377.2	503.31 ug/L	6.383	503.31 ppb	6.383	1.27%
QC value within limits for Sb 206.836 Recovery = 100.66%						
Se 196.026†	738.8	502.68 ug/L	2.673	502.68 ppb	2.673	0.53%
QC value within limits for Se 196.026 Recovery = 100.54%						
Si 251.611†	74845.7	2418.7 ug/L	18.17	2418.7 ppb	18.17	0.75%
QC value within limits for Si 251.611 Recovery = 96.75%						
Sn 189.927†	2697.0	486.98 ug/L	4.394	486.98 ppb	4.394	0.90%
QC value within limits for Sn 189.927 Recovery = 97.40%						
Sr 421.552†	72433.9	503.86 ug/L	4.714	503.86 ppb	4.714	0.94%
QC value within limits for Sr 421.552 Recovery = 100.77%						
Ti 334.940†	305972.7	481.98 ug/L	3.179	481.98 ppb	3.179	0.66%
QC value within limits for Ti 334.940 Recovery = 96.40%						
Tl 190.801†	1508.4	488.43 ug/L	2.574	488.43 ppb	2.574	0.53%
QC value within limits for Tl 190.801 Recovery = 97.69%						
U 409.014†	17068.8	474.97 ug/L	4.667	474.97 ppb	4.667	0.98%
QC value within limits for U 409.014 Recovery = 94.99%						
V 292.402†	68864.6	487.48 ug/L	3.355	487.48 ppb	3.355	0.69%
QC value within limits for V 292.402 Recovery = 97.50%						
Zn 213.857†	48151.6	481.60 ug/L	3.627	481.60 ppb	3.627	0.75%
QC value within limits for Zn 213.857 Recovery = 96.32%						
SiO2†	74412.5	5153.1 ug/L	54.71	5153.1 ppb	54.71	1.06%
QC value within limits for SiO2 Recovery = 96.37%						

All analyte(s) passed QC.



Sequence No.: 16

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/25/2010 15:38:29

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	3830.8	3830.8	99.3 %		15:40:41
1	Y RADIAL	4328.3	4328.3	97.23 %		15:40:21
1	Al 396.153Radial†	-130.5	-16.3	-15.417 ug/L	-15.417 ppb	15:40:21
1	Ca 317.933Radial†	23.2	4.6	10.136 ug/L	10.136 ppb	15:40:41
1	Fe 238.204 Radial†	11.3	-0.3	-4.7671 ug/L	-4.7671 ppb	15:40:41
1	K 766.490 Radial†	2839.5	93.9	17.973 ug/L	17.973 ppb	15:40:21
1	Mg 279.077 IEC†	2.3	1.1	59.322 ug/L	59.322 ppb	15:40:41
1	Na 589.592 Radial†	-854.8	41.0	12.757 ug/L	12.757 ppb	15:40:21
1	Sr 421.552†	26.8	18.3	0.1270 ug/L	0.1270 ppb	15:40:21
1	Sc 361.383	916923.8	916923.8	104.19 %		15:41:38
1	Y 371.029	768910.2	768910.2	101.09 %		15:41:38
1	Ag 328.068†	303.6	57.2	0.2629 ug/L	0.2629 ppb	15:41:43
1	As 188.979†	-13.3	7.1	3.1672 ug/L	3.1672 ppb	15:42:03
1	B 249.677†	-382.0	-88.6	-2.1729 ug/L	-2.1729 ppb	15:42:03
1	Ba 233.527†	3.4	-7.8	-0.0607 ug/L	-0.0607 ppb	15:42:03
1	Be 313.107†	-3778.9	-68.8	-0.0258 ug/L	-0.0258 ppb	15:41:43
1	Cd 226.502†	-176.1	7.2	0.0842 ug/L	0.0842 ppb	15:42:03
1	Co 228.616†	-49.9	17.0	0.3601 ug/L	0.3601 ppb	15:42:03
1	Cr 267.716†	79.2	-9.1	-0.1030 ug/L	-0.1030 ppb	15:42:03
1	Cu 324.752†	5999.9	-196.4	-0.6001 ug/L	-0.6001 ppb	15:41:43
1	Mn 257.610†	484.3	-12.9	-0.0176 ug/L	-0.0176 ppb	15:42:03
1	Mo 202.031†	24.5	18.9	1.3905 ug/L	1.3905 ppb	15:42:03
1	Ni 231.604†	77.4	-8.5	-0.2177 ug/L	-0.2177 ppb	15:42:03
1	P 214.914†	206.6	-7.5	-4.4024 ug/L	-4.4024 ppb	15:42:03
1	Pb 220.353†	-44.3	-103.7	-12.826 ug/L	-12.826 ppb	15:42:03
1	S 181.975 Axial†	50.7	12.9	18.146 ug/L	18.146 ppb	15:42:03
1	Sb 206.836†	43.7	2.9	1.0542 ug/L	1.0542 ppb	15:42:03
1	Se 196.026†	-21.3	4.3	2.8369 ug/L	2.8369 ppb	15:42:03
1	Si 251.611†	614.1	24.7	0.7824 ug/L	0.7824 ppb	15:42:03
1	Sn 189.927†	11.8	1.9	0.3413 ug/L	0.3413 ppb	15:42:03
1	Ti 334.940†	-1487.5	-17.8	-0.0328 ug/L	-0.0328 ppb	15:41:43
1	Tl 190.801†	-34.8	-6.0	-1.9212 ug/L	-1.9212 ppb	15:42:03
1	U 409.014†	-2916.7	102.4	2.8609 ug/L	2.8609 ppb	15:41:38
1	V 292.402†	-1496.8	32.1	0.2511 ug/L	0.2511 ppb	15:41:43
1	Zn 213.857†	796.0	24.5	0.2507 ug/L	0.2507 ppb	15:42:03
1	SiO2†	616.4	3.4	0.1984 ug/L	0.1984 ppb	15:43:09
2	Sc Radial	3830.3	3830.3	99.3 %		15:41:06
2	Y RADIAL	4387.9	4387.9	98.57 %		15:40:46
2	Al 396.153Radial†	-131.5	-17.4	-16.354 ug/L	-16.354 ppb	15:40:46
2	Ca 317.933Radial†	22.1	3.6	7.8009 ug/L	7.8009 ppb	15:41:06
2	Fe 238.204 Radial†	9.9	-1.7	-26.953 ug/L	-26.953 ppb	15:41:06
2	K 766.490 Radial†	2812.0	66.5	12.744 ug/L	12.744 ppb	15:40:46
2	Mg 279.077 IEC†	4.3	3.2	168.69 ug/L	168.69 ppb	15:41:06
2	Na 589.592 Radial†	-902.9	-7.5	-2.3304 ug/L	-2.3304 ppb	15:40:46
2	Sr 421.552†	45.0	36.6	0.2547 ug/L	0.2547 ppb	15:40:46
2	Sc 361.383	922108.3	922108.3	104.78 %		15:42:08
2	Y 371.029	773456.1	773456.1	101.69 %		15:42:08
2	Ag 328.068†	242.4	-2.8	-0.0221 ug/L	-0.0221 ppb	15:42:13
2	As 188.979†	-25.7	-4.6	-2.0610 ug/L	-2.0610 ppb	15:42:33
2	B 249.677†	-419.8	-122.7	-3.0022 ug/L	-3.0022 ppb	15:42:33
2	Ba 233.527†	21.0	9.0	0.0703 ug/L	0.0703 ppb	15:42:33
2	Be 313.107†	-3663.2	62.1	0.0231 ug/L	0.0231 ppb	15:42:13
2	Cd 226.502†	-189.6	-4.8	-0.0529 ug/L	-0.0529 ppb	15:42:33
2	Co 228.616†	-60.9	6.7	0.1440 ug/L	0.1440 ppb	15:42:33
2	Cr 267.716†	82.0	-6.9	-0.0799 ug/L	-0.0799 ppb	15:42:33
2	Cu 324.752†	6015.6	-213.7	-0.6533 ug/L	-0.6533 ppb	15:42:13
2	Mn 257.610†	465.3	-33.6	-0.0479 ug/L	-0.0479 ppb	15:42:33
2	Mo 202.031†	18.9	13.3	0.9798 ug/L	0.9798 ppb	15:42:33
2	Ni 231.604†	78.3	-8.1	-0.2058 ug/L	-0.2058 ppb	15:42:33

2	P 214.914†	218.4	2.6	1.7338 ug/L	1.7338 ppb	15:42:33
2	Pb 220.353†	-27.8	-87.7	-10.846 ug/L	-10.846 ppb	15:42:33
2	S 181.975 Axial†	51.5	13.3	18.761 ug/L	18.761 ppb	15:42:33
2	Sb 206.836†	27.9	-12.4	-4.3566 ug/L	-4.3566 ppb	15:42:33
2	Se 196.026†	-27.5	-1.5	-1.0994 ug/L	-1.0994 ppb	15:42:33
2	Si 251.611†	604.0	11.7	0.3669 ug/L	0.3669 ppb	15:42:33
2	Sn 189.927†	7.1	-2.6	-0.4728 ug/L	-0.4728 ppb	15:42:33
2	Ti 334.940†	-1509.9	-31.2	-0.0624 ug/L	-0.0624 ppb	15:42:13
2	Tl 190.801†	-29.2	-0.5	-0.1490 ug/L	-0.1490 ppb	15:42:33
2	U 409.014†	-2987.7	50.3	1.4084 ug/L	1.4084 ppb	15:42:08
2	V 292.402†	-1523.1	15.0	0.1286 ug/L	0.1286 ppb	15:42:13
2	Zn 213.857†	793.0	17.4	0.1817 ug/L	0.1817 ppb	15:42:33
2	SiO2†	580.4	-34.2	-2.4032 ug/L	-2.4032 ppb	15:43:14
3	Sc Radial	3858.4	3858.4	100 %		15:41:31
3	Y RADIAL	4398.9	4398.9	98.81 %		15:41:11
3	Al 396.153Radial†	-123.5	-8.4	-7.8996 ug/L	-7.8996 ppb	15:41:11
3	Ca 317.933Radial†	16.6	-2.0	-4.4358 ug/L	-4.4358 ppb	15:41:31
3	Fe 238.204 Radial†	10.3	-1.4	-22.360 ug/L	-22.360 ppb	15:41:31
3	K 766.490 Radial†	2802.3	36.2	6.9312 ug/L	6.9312 ppb	15:41:11
3	Mg 279.077 IEC†	3.2	2.1	109.54 ug/L	109.54 ppb	15:41:31
3	Na 589.592 Radial†	-899.3	2.7	0.8554 ug/L	0.8554 ppb	15:41:11
3	Sr 421.552†	15.9	7.1	0.0496 ug/L	0.0496 ppb	15:41:11
3	Sc 361.383	936425.3	936425.3	106.40 %		15:42:39
3	Y 371.029	786015.7	786015.7	103.34 %		15:42:39
3	Ag 328.068†	228.6	-19.3	-0.0998 ug/L	-0.0998 ppb	15:42:44
3	As 188.979†	-18.1	3.0	1.3085 ug/L	1.3085 ppb	15:43:04
3	B 249.677†	-383.2	-82.2	-2.0109 ug/L	-2.0109 ppb	15:43:04
3	Ba 233.527†	10.5	-1.2	-0.0091 ug/L	-0.0091 ppb	15:43:04
3	Be 313.107†	-3640.8	136.6	0.0510 ug/L	0.0510 ppb	15:42:44
3	Cd 226.502†	-182.6	4.5	0.0561 ug/L	0.0561 ppb	15:43:04
3	Co 228.616†	-52.3	15.7	0.3316 ug/L	0.3316 ppb	15:43:04
3	Cr 267.716†	61.0	-27.8	-0.3157 ug/L	-0.3157 ppb	15:43:04
3	Cu 324.752†	5969.5	-344.9	-1.0551 ug/L	-1.0551 ppb	15:42:44
3	Mn 257.610†	473.9	-32.3	-0.0435 ug/L	-0.0435 ppb	15:43:04
3	Mo 202.031†	17.4	11.7	0.8585 ug/L	0.8585 ppb	15:43:04
3	Ni 231.604†	77.3	-10.2	-0.2601 ug/L	-0.2601 ppb	15:43:04
3	P 214.914†	216.0	-2.9	-1.4951 ug/L	-1.4951 ppb	15:43:04
3	Pb 220.353†	-25.2	-84.9	-10.497 ug/L	-10.497 ppb	15:43:04
3	S 181.975 Axial†	42.2	3.8	5.3594 ug/L	5.3594 ppb	15:43:04
3	Sb 206.836†	42.7	1.1	0.4039 ug/L	0.4039 ppb	15:43:04
3	Se 196.026†	-29.9	-3.4	-2.2779 ug/L	-2.2779 ppb	15:43:04
3	Si 251.611†	614.5	12.8	0.4035 ug/L	0.4035 ppb	15:43:04
3	Sn 189.927†	8.1	-1.8	-0.3300 ug/L	-0.3300 ppb	15:43:04
3	Ti 334.940†	-1491.8	7.9	0.0005 ug/L	0.0005 ppb	15:42:44
3	Tl 190.801†	-22.9	5.9	1.8994 ug/L	1.8994 ppb	15:43:04
3	U 409.014†	-2867.8	206.6	5.7731 ug/L	5.7731 ppb	15:42:39
3	V 292.402†	-1510.7	48.9	0.3701 ug/L	0.3701 ppb	15:42:44
3	Zn 213.857†	792.6	5.5	0.0619 ug/L	0.0619 ppb	15:43:04
3	SiO2†	561.4	-60.6	-4.2275 ug/L	-4.2275 ppb	15:43:19

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	925152.5	105.12 %	1.148			1.09%
Sc Radial	3839.8	99.6 %	0.42			0.42%
Y 371.029	776127.3	102.04 %	1.165			1.14%
Y RADIAL	4371.7	98.20 %	0.853			0.87%
Ag 328.068†	11.7	0.0470 ug/L	0.19095	0.0470 ppb	0.19095	406.53%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-14.0	-13.224 ug/L	4.6344	-13.224 ppb	4.6344	35.05%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	1.8	0.8049 ug/L	2.65022	0.8049 ppb	2.65022	329.26%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-97.8	-2.3953 ug/L	0.53177	-2.3953 ppb	0.53177	22.20%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	0.0	0.0002 ug/L	0.06598	0.0002 ppb	0.06598	>999.9%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	43.3	0.0161 ug/L	0.03887	0.0161 ppb	0.03887	241.12%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	2.1	4.5002 ug/L	7.82640	4.5002 ppb	7.82640	173.91%

QC value within limits for Ca 317.933 Radial	Recovery = Not calculated		
Cd 226.502†	2.3 0.0291 ug/L 0.07239 0.0291 ppb	0.07239	248.51%
QC value within limits for Cd 226.502	Recovery = Not calculated		
Co 228.616†	13.1 0.2786 ug/L 0.11739 0.2786 ppb	0.11739	42.14%
QC value within limits for Co 228.616	Recovery = Not calculated		
Cr 267.716†	-14.6 -0.1662 ug/L 0.12998 -0.1662 ppb	0.12998	78.20%
QC value within limits for Cr 267.716	Recovery = Not calculated		
Cu 324.752†	-251.6 -0.7695 ug/L 0.24877 -0.7695 ppb	0.24877	32.33%
QC value within limits for Cu 324.752	Recovery = Not calculated		
Fe 238.204 Radial†	-1.1 -18.027 ug/L 11.7105 -18.027 ppb	11.7105	64.96%
QC value within limits for Fe 238.204 Radial	Recovery = Not calculated		
K 766.490 Radial†	65.5 12.549 ug/L 5.5235 12.549 ppb	5.5235	44.01%
QC value within limits for K 766.490 Radial	Recovery = Not calculated		
Mg 279.077 IEC†	2.1 112.52 ug/L 54.744 112.52 ppb	54.744	48.65%
QC value within limits for Mg 279.077 IEC	Recovery = Not calculated		
Mn 257.610†	-26.3 -0.0363 ug/L 0.01638 -0.0363 ppb	0.01638	45.10%
QC value within limits for Mn 257.610	Recovery = Not calculated		
Mo 202.031†	14.6 1.0763 ug/L 0.27881 1.0763 ppb	0.27881	25.91%
QC value within limits for Mo 202.031	Recovery = Not calculated		
Na 589.592 Radial†	12.1 3.7608 ug/L 7.95233 3.7608 ppb	7.95233	211.46%
QC value within limits for Na 589.592 Radial	Recovery = Not calculated		
Ni 231.604†	-8.9 -0.2279 ug/L 0.02852 -0.2279 ppb	0.02852	12.52%
QC value within limits for Ni 231.604	Recovery = Not calculated		
P 214.914†	-2.6 -1.3879 ug/L 3.06951 -1.3879 ppb	3.06951	221.16%
QC value within limits for P 214.914	Recovery = Not calculated		
Pb 220.353†	-92.1 -11.389 ug/L 1.2563 -11.389 ppb	1.2563	11.03%
QC value less than the lower limit for Pb 220.353	Recovery = Not calculated		
S 181.975 Axial†	10.0 14.089 ug/L 7.5662 14.089 ppb	7.5662	53.70%
QC value within limits for S 181.975 Axial	Recovery = Not calculated		
Sb 206.836†	-2.8 -0.9662 ug/L 2.95413 -0.9662 ppb	2.95413	305.76%
QC value within limits for Sb 206.836	Recovery = Not calculated		
Se 196.026†	-0.2 -0.1801 ug/L 2.67843 -0.1801 ppb	2.67843	>999.9%
QC value within limits for Se 196.026	Recovery = Not calculated		
Si 251.611†	16.4 0.5176 ug/L 0.23004 0.5176 ppb	0.23004	44.44%
QC value within limits for Si 251.611	Recovery = Not calculated		
Sn 189.927†	-0.9 -0.1538 ug/L 0.43468 -0.1538 ppb	0.43468	282.54%
QC value within limits for Sn 189.927	Recovery = Not calculated		
Sr 421.552†	20.7 0.1437 ug/L 0.10357 0.1437 ppb	0.10357	72.06%
QC value within limits for Sr 421.552	Recovery = Not calculated		
Ti 334.940†	-13.7 -0.0316 ug/L 0.03147 -0.0316 ppb	0.03147	99.71%
QC value within limits for Ti 334.940	Recovery = Not calculated		
Tl 190.801†	-0.2 -0.0569 ug/L 1.91195 -0.0569 ppb	1.91195	>999.9%
QC value within limits for Tl 190.801	Recovery = Not calculated		
U 409.014†	119.8 3.3475 ug/L 2.22267 3.3475 ppb	2.22267	66.40%
QC value within limits for U 409.014	Recovery = Not calculated		
V 292.402†	32.0 0.2499 ug/L 0.12073 0.2499 ppb	0.12073	48.30%
QC value within limits for V 292.402	Recovery = Not calculated		
Zn 213.857†	15.8 0.1647 ug/L 0.09556 0.1647 ppb	0.09556	58.01%
QC value within limits for Zn 213.857	Recovery = Not calculated		
SiO2†	-30.5 -2.1441 ug/L 2.22429 -2.1441 ppb	2.22429	103.74%
QC value within limits for SiO2	Recovery = Not calculated		

QC Failed. Continue with analysis.

Sequence No.: 24

Sample ID: 245807001|948088|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 55

Date Collected: 2/25/2010 16:33:11

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 245807001|948088|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3925.9	3925.9	102 %		16:35:24
1	Y RADIAL	4491.3	4491.3	100.9 %		16:35:04
1	Al 396.153Radial†	-127.3	-10.0	-9.4306 ug/L	-9.4306 ppb	16:35:04
1	Ca 317.933Radial†	36.0	16.7	36.497 ug/L	36.497 ppb	16:35:24
1	Fe 238.204 Radial†	11.2	-0.7	-11.149 ug/L	-11.149 ppb	16:35:24
1	K 766.490 Radial†	3784.0	952.5	182.42 ug/L	182.42 ppb	16:35:04
1	Mg 279.077 IEC†	2.9	1.7	89.221 ug/L	89.221 ppb	16:35:24
1	Na 589.592 Radial†	-399.7	509.0	158.39 ug/L	158.39 ppb	16:35:04
1	Sr 421.552†	99.9	89.4	0.6220 ug/L	0.6220 ppb	16:35:04
1	Sc 361.383	904982.4	904982.4	102.83 %		16:36:21
1	Y 371.029	760262.0	760262.0	99.951 %		16:36:21
1	Ag 328.068†	149.9	-88.4	-0.4114 ug/L	-0.4114 ppb	16:36:21
1	As 188.979†	-22.9	-2.3	-1.0376 ug/L	-1.0376 ppb	16:36:41
1	B 249.677†	58.2	334.6	8.2028 ug/L	8.2028 ppb	16:36:41
1	Ba 233.527†	43.2	30.9	0.2436 ug/L	0.2436 ppb	16:36:41
1	Be 313.107†	-3757.2	-95.5	-0.0351 ug/L	-0.0351 ppb	16:36:21
1	Cd 226.502†	-206.5	-24.6	-0.2852 ug/L	-0.2852 ppb	16:36:41
1	Co 228.616†	-62.1	4.4	0.0953 ug/L	0.0953 ppb	16:36:41
1	Cr 267.716†	85.2	-2.3	-0.0254 ug/L	-0.0254 ppb	16:36:41
1	Cu 324.752†	6296.5	168.1	0.5125 ug/L	0.5125 ppb	16:36:21
1	Mn 257.610†	951.9	448.0	0.5056 ug/L	0.5056 ppb	16:36:41
1	Mo 202.031†	19.0	13.8	1.0177 ug/L	1.0177 ppb	16:36:41
1	Ni 231.604†	86.0	0.9	0.0223 ug/L	0.0223 ppb	16:36:41
1	P 214.914†	229.5	17.4	10.348 ug/L	10.348 ppb	16:36:41
1	Pb 220.353†	-20.7	-81.3	-10.061 ug/L	-10.061 ppb	16:36:41
1	S 181.975 Axial†	77.8	39.8	56.089 ug/L	56.089 ppb	16:36:41
1	Sb 206.836†	42.7	2.5	0.9205 ug/L	0.9205 ppb	16:36:41
1	Se 196.026†	-29.8	-4.3	-2.8480 ug/L	-2.8480 ppb	16:36:41
1	Si 251.611†	41278.8	39577.9	1282.1 ug/L	1282.1 ppb	16:36:21
1	Sn 189.927†	12.7	2.9	0.5376 ug/L	0.5376 ppb	16:36:41
1	Ti 334.940†	-1268.2	176.6	0.2768 ug/L	0.2768 ppb	16:36:21
1	Tl 190.801†	-36.8	-8.3	-2.6693 ug/L	-2.6693 ppb	16:36:41
1	U 409.014†	-3056.3	-70.3	-1.9621 ug/L	-1.9621 ppb	16:36:21
1	V 292.402†	-1448.6	59.9	0.4324 ug/L	0.4324 ppb	16:36:21
1	Zn 213.857†	805.1	43.5	0.4400 ug/L	0.4400 ppb	16:36:41
1	SiO2†	42158.9	40410.3	2805.6 ug/L	2805.6 ppb	16:37:37
2	Sc Radial	3928.3	3928.3	102 %		16:35:49
2	Y RADIAL	4443.9	4443.9	99.83 %		16:35:29
2	Al 396.153Radial†	-115.3	1.9	1.7647 ug/L	1.7647 ppb	16:35:29
2	Ca 317.933Radial†	31.5	12.3	26.806 ug/L	26.806 ppb	16:35:49
2	Fe 238.204 Radial†	11.6	-0.3	-4.7320 ug/L	-4.7320 ppb	16:35:49
2	K 766.490 Radial†	3799.7	965.6	184.93 ug/L	184.93 ppb	16:35:29
2	Mg 279.077 IEC†	1.1	-0.1	-6.7766 ug/L	-6.7766 ppb	16:35:49
2	Na 589.592 Radial†	-409.9	499.2	155.34 ug/L	155.34 ppb	16:35:29
2	Sr 421.552†	28.2	18.9	0.1313 ug/L	0.1313 ppb	16:35:29
2	Sc 361.383	916638.5	916638.5	104.15 %		16:36:46
2	Y 371.029	770227.5	770227.5	101.26 %		16:36:46
2	Ag 328.068†	184.5	-57.1	-0.2699 ug/L	-0.2699 ppb	16:36:46
2	As 188.979†	-19.1	1.6	0.7023 ug/L	0.7023 ppb	16:37:06
2	B 249.677†	79.5	354.4	8.6859 ug/L	8.6859 ppb	16:37:06
2	Ba 233.527†	47.7	34.7	0.2723 ug/L	0.2723 ppb	16:37:06
2	Be 313.107†	-3739.3	-31.9	-0.0114 ug/L	-0.0114 ppb	16:36:46
2	Cd 226.502†	-201.2	-17.0	-0.1966 ug/L	-0.1966 ppb	16:37:06
2	Co 228.616†	-68.0	-0.4	-0.0091 ug/L	-0.0091 ppb	16:37:06
2	Cr 267.716†	79.6	-8.7	-0.0993 ug/L	-0.0993 ppb	16:37:06
2	Cu 324.752†	6256.1	51.4	0.1552 ug/L	0.1552 ppb	16:36:46
2	Mn 257.610†	909.2	395.3	0.4501 ug/L	0.4501 ppb	16:37:06
2	Mo 202.031†	6.0	1.1	0.0786 ug/L	0.0786 ppb	16:37:06
2	Ni 231.604†	68.3	-17.2	-0.4386 ug/L	-0.4386 ppb	16:37:06

2	P 214.914†	221.0	6.4	3.8227 ug/L	3.8227 ppb	16:37:06
2	Pb 220.353†	-2.8	-63.8	-7.8958 ug/L	-7.8958 ppb	16:37:06
2	S 181.975 Axial†	77.5	38.5	54.322 ug/L	54.322 ppb	16:37:06
2	Sb 206.836†	38.0	-2.6	-0.8609 ug/L	-0.8609 ppb	16:37:06
2	Se 196.026†	-23.7	2.0	1.3170 ug/L	1.3170 ppb	16:37:06
2	Si 251.611†	41886.1	39650.5	1284.5 ug/L	1284.5 ppb	16:36:46
2	Sn 189.927†	25.7	15.2	2.7529 ug/L	2.7529 ppb	16:37:06
2	Ti 334.940†	-1327.9	134.9	0.2158 ug/L	0.2158 ppb	16:36:46
2	Tl 190.801†	-46.2	-16.9	-5.4445 ug/L	-5.4445 ppb	16:37:06
2	U 409.014†	-2941.6	77.6	2.1671 ug/L	2.1671 ppb	16:36:46
2	V 292.402†	-1572.4	-40.9	-0.2804 ug/L	-0.2804 ppb	16:36:46
2	Zn 213.857†	814.4	42.4	0.4317 ug/L	0.4317 ppb	16:37:06
2	SiO2†	41240.6	39007.3	2708.2 ug/L	2708.2 ppb	16:37:42
3	Sc Radial	3913.5	3913.5	101 %		16:36:14
3	Y RADIAL	4502.7	4502.7	101.1 %		16:35:54
3	Al 396.153Radial†	-116.3	0.4	0.3522 ug/L	0.3522 ppb	16:35:54
3	Ca 317.933Radial†	32.0	12.9	28.106 ug/L	28.106 ppb	16:36:14
3	Fe 238.204 Radial†	10.4	-1.5	-23.730 ug/L	-23.730 ppb	16:36:14
3	K 766.490 Radial†	3727.9	909.0	174.07 ug/L	174.07 ppb	16:35:54
3	Mg 279.077 IEC†	3.1	1.9	98.141 ug/L	98.141 ppb	16:36:14
3	Na 589.592 Radial†	-374.9	532.2	165.59 ug/L	165.59 ppb	16:35:54
3	Sr 421.552†	71.7	61.9	0.4306 ug/L	0.4306 ppb	16:35:54
3	Sc 361.383	914102.9	914102.9	103.87 %		16:37:11
3	Y 371.029	768408.6	768408.6	101.02 %		16:37:11
3	Ag 328.068†	224.8	-17.8	-0.0878 ug/L	-0.0878 ppb	16:37:11
3	As 188.979†	-29.1	-8.1	-3.6013 ug/L	-3.6013 ppb	16:37:31
3	B 249.677†	60.1	335.8	8.2356 ug/L	8.2356 ppb	16:37:31
3	Ba 233.527†	49.8	36.9	0.2889 ug/L	0.2889 ppb	16:37:31
3	Be 313.107†	-3681.7	13.6	0.0055 ug/L	0.0055 ppb	16:37:11
3	Cd 226.502†	-187.7	-4.5	-0.0511 ug/L	-0.0511 ppb	16:37:31
3	Co 228.616†	-79.5	-11.7	-0.2434 ug/L	-0.2434 ppb	16:37:31
3	Cr 267.716†	105.6	16.5	0.1846 ug/L	0.1846 ppb	16:37:31
3	Cu 324.752†	6311.4	121.3	0.3703 ug/L	0.3703 ppb	16:37:11
3	Mn 257.610†	957.7	444.4	0.4999 ug/L	0.4999 ppb	16:37:31
3	Mo 202.031†	17.2	11.9	0.8752 ug/L	0.8752 ppb	16:37:31
3	Ni 231.604†	69.0	-16.3	-0.4171 ug/L	-0.4171 ppb	16:37:31
3	P 214.914†	225.0	10.8	6.4460 ug/L	6.4460 ppb	16:37:31
3	Pb 220.353†	-19.8	-80.3	-9.9229 ug/L	-9.9229 ppb	16:37:31
3	S 181.975 Axial†	71.3	32.9	46.320 ug/L	46.320 ppb	16:37:31
3	Sb 206.836†	37.8	-2.7	-0.8876 ug/L	-0.8876 ppb	16:37:31
3	Se 196.026†	-23.4	2.2	1.3726 ug/L	1.3726 ppb	16:37:31
3	Si 251.611†	41906.7	39781.9	1288.7 ug/L	1288.7 ppb	16:37:11
3	Sn 189.927†	22.7	12.4	2.2470 ug/L	2.2470 ppb	16:37:31
3	Ti 334.940†	-1355.1	105.3	0.1631 ug/L	0.1631 ppb	16:37:11
3	Tl 190.801†	-39.4	-10.5	-3.3817 ug/L	-3.3817 ppb	16:37:31
3	U 409.014†	-3143.5	-124.6	-3.4781 ug/L	-3.4781 ppb	16:37:11
3	V 292.402†	-1539.8	-13.7	-0.0852 ug/L	-0.0852 ppb	16:37:11
3	Zn 213.857†	806.1	36.7	0.3760 ug/L	0.3760 ppb	16:37:31
3	SiO2†	41290.0	39164.7	2719.1 ug/L	2719.1 ppb	16:37:47

Mean Data: 245807001|948088|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	911907.9	103.62 %		0.697				0.67%
Sc Radial	3922.6	102 %		0.2				0.20%
Y 371.029	766299.4	100.74 %		0.698				0.69%
Y RADIAL	4479.3	100.6 %		0.70				0.70%
Ag 328.068†	-54.4	-0.2564 ug/L		0.16221	-0.2564 ppb		0.16221	63.27%
Al 396.153Radial†	-2.6	-2.4379 ug/L		6.09689	-2.4379 ppb		6.09689	250.09%
As 188.979†	-2.9	-1.3122 ug/L		2.16486	-1.3122 ppb		2.16486	164.98%
B 249.677†	341.6	8.3748 ug/L		0.26993	8.3748 ppb		0.26993	3.22%
Ba 233.527†	34.2	0.2683 ug/L		0.02290	0.2683 ppb		0.02290	8.54%
Be 313.107†	-37.9	-0.0137 ug/L		0.02036	-0.0137 ppb		0.02036	148.83%
Ca 317.933Radial†	14.0	30.469 ug/L		5.2601	30.469 ppb		5.2601	17.26%
Cd 226.502†	-15.4	-0.1776 ug/L		0.11816	-0.1776 ppb		0.11816	66.52%
Co 228.616†	-2.6	-0.0524 ug/L		0.17350	-0.0524 ppb		0.17350	331.18%
Cr 267.716†	1.8	0.0199 ug/L		0.14729	0.0199 ppb		0.14729	738.44%
Cu 324.752†	113.6	0.3460 ug/L		0.17989	0.3460 ppb		0.17989	51.99%
Fe 238.204 Radial†	-0.8	-13.204 ug/L		9.6640	-13.204 ppb		9.6640	73.19%
K 766.490 Radial†	942.4	180.48 ug/L		5.686	180.48 ppb		5.686	3.15%

Mg 279.077 IEC†	1.1	60.195 ug/L	58.1706	60.195 ppb	58.1706	96.64%
Mn 257.610†	429.2	0.4852 ug/L	0.03052	0.4852 ppb	0.03052	6.29%
Mo 202.031†	8.9	0.6572 ug/L	0.50610	0.6572 ppb	0.50610	77.01%
Na 589.592 Radial†	513.5	159.77 ug/L	5.262	159.77 ppb	5.262	3.29%
Ni 231.604†	-10.9	-0.2778 ug/L	0.26009	-0.2778 ppb	0.26009	93.62%
P 214.914†	11.5	6.8723 ug/L	3.28363	6.8723 ppb	3.28363	47.78%
Pb 220.353†	-75.1	-9.2931 ug/L	1.21204	-9.2931 ppb	1.21204	13.04%
S 181.975 Axial†	37.1	52.244 ug/L	5.2060	52.244 ppb	5.2060	9.96%
Sb 206.836†	-0.9	-0.2760 ug/L	1.03629	-0.2760 ppb	1.03629	375.51%
Se 196.026†	-0.0	-0.0528 ug/L	2.42085	-0.0528 ppb	2.42085	>999.9%
Si 251.611†	39670.1	1285.1 ug/L	3.35	1285.1 ppb	3.35	0.26%
Sn 189.927†	10.2	1.8458 ug/L	1.16087	1.8458 ppb	1.16087	62.89%
Sr 421.552†	56.8	0.3946 ug/L	0.24731	0.3946 ppb	0.24731	62.67%
Ti 334.940†	138.9	0.2186 ug/L	0.05689	0.2186 ppb	0.05689	26.03%
Tl 190.801†	-11.9	-3.8318 ug/L	1.44132	-3.8318 ppb	1.44132	37.61%
U 409.014†	-39.1	-1.0910 ug/L	2.92170	-1.0910 ppb	2.92170	267.79%
V 292.402†	1.7	0.0223 ug/L	0.36834	0.0223 ppb	0.36834	>999.9%
Zn 213.857†	40.9	0.4159 ug/L	0.03483	0.4159 ppb	0.03483	8.37%
SiO2†	39527.4	2744.3 ug/L	53.36	2744.3 ppb	53.36	1.94%

Sequence No.: 25

Sample ID: 245807002|948088|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 56

Date Collected: 2/25/2010 16:39:57

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 245807002|948088|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3973.7	3973.7	103 %		16:41:50
1	Y RADIAL	4425.0	4425.0	99.40 %		16:41:50
1	Al 396.153Radial†	-115.3	3.1	2.8751 ug/L	2.8751 ppb	16:41:50
1	Ca 317.933Radial†	34.9	15.2	33.179 ug/L	33.179 ppb	16:42:10
1	Fe 238.204 Radial†	10.9	-1.1	-18.293 ug/L	-18.293 ppb	16:42:10
1	K 766.490 Radial†	3367.3	503.4	96.370 ug/L	96.370 ppb	16:41:50
1	Mg 279.077 IEC†	0.7	-0.5	-25.592 ug/L	-25.592 ppb	16:42:10
1	Na 589.592 Radial†	-436.1	478.4	148.87 ug/L	148.87 ppb	16:41:50
1	Sr 421.552†	91.6	80.1	0.5571 ug/L	0.5571 ppb	16:41:50
1	Sc 361.383	915062.4	915062.4	103.98 %		16:43:07
1	Y 371.029	768853.2	768853.2	101.08 %		16:43:07
1	Ag 328.068†	260.4	16.3	0.0681 ug/L	0.0681 ppb	16:43:07
1	As 188.979†	-23.5	-2.7	-1.1957 ug/L	-1.1957 ppb	16:43:27
1	B 249.677†	119.5	392.9	9.6339 ug/L	9.6339 ppb	16:43:27
1	Ba 233.527†	50.0	37.0	0.2902 ug/L	0.2902 ppb	16:43:27
1	Be 313.107†	-3589.2	106.3	0.0404 ug/L	0.0404 ppb	16:43:07
1	Cd 226.502†	-193.6	-10.0	-0.1147 ug/L	-0.1147 ppb	16:43:27
1	Co 228.616†	-66.9	0.5	0.0121 ug/L	0.0121 ppb	16:43:27
1	Cr 267.716†	89.0	0.5	0.0030 ug/L	0.0030 ppb	16:43:27
1	Cu 324.752†	6245.4	51.5	0.1554 ug/L	0.1554 ppb	16:43:07
1	Mn 257.610†	1032.1	514.9	0.5859 ug/L	0.5859 ppb	16:43:27
1	Mo 202.031†	18.7	13.3	0.9771 ug/L	0.9771 ppb	16:43:27
1	Ni 231.604†	75.6	-10.0	-0.2563 ug/L	-0.2563 ppb	16:43:27
1	P 214.914†	222.8	8.5	5.0972 ug/L	5.0972 ppb	16:43:27
1	Pb 220.353†	-24.3	-84.5	-10.453 ug/L	-10.453 ppb	16:43:27
1	S 181.975 Axial†	77.4	38.6	54.479 ug/L	54.479 ppb	16:43:27
1	Sb 206.836†	33.6	-6.7	-2.3410 ug/L	-2.3410 ppb	16:43:27
1	Se 196.026†	-29.5	-3.6	-2.4394 ug/L	-2.4394 ppb	16:43:27
1	Si 251.611†	45738.8	43425.1	1406.8 ug/L	1406.8 ppb	16:43:07
1	Sn 189.927†	9.1	-0.7	-0.1176 ug/L	-0.1176 ppb	16:43:27
1	Ti 334.940†	-1253.5	204.3	0.3281 ug/L	0.3281 ppb	16:43:07
1	Tl 190.801†	-46.8	-17.5	-5.6330 ug/L	-5.6330 ppb	16:43:27
1	U 409.014†	-2978.1	37.7	1.0539 ug/L	1.0539 ppb	16:43:07
1	V 292.402†	-1550.3	-22.4	-0.1385 ug/L	-0.1385 ppb	16:43:07
1	Zn 213.857†	892.5	119.0	1.2052 ug/L	1.2052 ppb	16:43:27
1	SiO2†	45620.8	43288.1	3005.4 ug/L	3005.4 ppb	16:44:23
2	Sc Radial	4033.9	4033.9	105 %		16:42:15
2	Y RADIAL	4478.2	4478.2	100.6 %		16:42:15
2	Al 396.153Radial†	-105.8	13.9	13.065 ug/L	13.065 ppb	16:42:15
2	Ca 317.933Radial†	34.6	14.4	31.492 ug/L	31.492 ppb	16:42:35
2	Fe 238.204 Radial†	10.6	-1.5	-24.363 ug/L	-24.363 ppb	16:42:35
2	K 766.490 Radial†	3367.2	454.5	87.001 ug/L	87.001 ppb	16:42:15
2	Mg 279.077 IEC†	2.3	1.0	54.501 ug/L	54.501 ppb	16:42:35
2	Na 589.592 Radial†	-455.9	465.8	144.94 ug/L	144.94 ppb	16:42:15
2	Sr 421.552†	18.9	9.4	0.0649 ug/L	0.0649 ppb	16:42:15
2	Sc 361.383	898432.7	898432.7	102.09 %		16:43:32
2	Y 371.029	753783.4	753783.4	99.099 %		16:43:32
2	Ag 328.068†	214.9	-23.6	-0.1125 ug/L	-0.1125 ppb	16:43:32
2	As 188.979†	-34.5	-13.9	-6.1807 ug/L	-6.1807 ppb	16:43:52
2	B 249.677†	108.6	384.4	9.4240 ug/L	9.4240 ppb	16:43:52
2	Ba 233.527†	32.2	20.5	0.1602 ug/L	0.1602 ppb	16:43:52
2	Be 313.107†	-3745.4	-110.6	-0.0404 ug/L	-0.0404 ppb	16:43:32
2	Cd 226.502†	-194.3	-14.1	-0.1627 ug/L	-0.1627 ppb	16:43:52
2	Co 228.616†	-62.2	3.9	0.0821 ug/L	0.0821 ppb	16:43:52
2	Cr 267.716†	109.1	21.8	0.2444 ug/L	0.2444 ppb	16:43:52
2	Cu 324.752†	6285.6	202.0	0.6178 ug/L	0.6178 ppb	16:43:32
2	Mn 257.610†	1026.6	527.9	0.5968 ug/L	0.5968 ppb	16:43:52
2	Mo 202.031†	8.8	4.0	0.2914 ug/L	0.2914 ppb	16:43:52
2	Ni 231.604†	81.1	-3.4	-0.0859 ug/L	-0.0859 ppb	16:43:52

2	P 214.914†	218.7	8.4	4.9828 ug/L	4.9828 ppb	16:43:52
2	Pb 220.353†	-25.9	-86.6	-10.704 ug/L	-10.704 ppb	16:43:52
2	S 181.975 Axial†	75.9	38.5	54.249 ug/L	54.249 ppb	16:43:52
2	Sb 206.836†	48.0	8.0	2.8266 ug/L	2.8266 ppb	16:43:52
2	Se 196.026†	-24.3	1.0	0.5493 ug/L	0.5493 ppb	16:43:52
2	Si 251.611†	46186.8	44678.2	1447.4 ug/L	1447.4 ppb	16:43:32
2	Sn 189.927†	10.7	1.0	0.1950 ug/L	0.1950 ppb	16:43:52
2	Ti 334.940†	-1172.2	261.6	0.4147 ug/L	0.4147 ppb	16:43:32
2	Tl 190.801†	-28.5	-0.5	-0.1548 ug/L	-0.1548 ppb	16:43:52
2	U 409.014†	-3193.2	-226.1	-6.3124 ug/L	-6.3124 ppb	16:43:32
2	V 292.402†	-1496.2	3.0	0.0173 ug/L	0.0173 ppb	16:43:32
2	Zn 213.857†	901.2	143.4	1.4506 ug/L	1.4506 ppb	16:43:52
2	SiO2†	45792.0	44268.0	3073.4 ug/L	3073.4 ppb	16:44:28
3	Sc Radial	4098.4	4098.4	106 %		16:42:40
3	Y RADIAL	4547.3	4547.3	102.1 %		16:42:40
3	Al 396.153Radial†	-108.2	13.2	12.425 ug/L	12.425 ppb	16:42:40
3	Ca 317.933Radial†	34.8	14.0	30.627 ug/L	30.627 ppb	16:43:00
3	Fe 238.204 Radial†	11.1	-1.2	-19.244 ug/L	-19.244 ppb	16:43:00
3	K 766.490 Radial†	3297.0	337.6	64.615 ug/L	64.615 ppb	16:42:40
3	Mg 279.077 IEC†	0.9	-0.3	-16.340 ug/L	-16.340 ppb	16:43:00
3	Na 589.592 Radial†	-386.8	537.6	167.29 ug/L	167.29 ppb	16:42:40
3	Sr 421.552†	32.6	21.9	0.1523 ug/L	0.1523 ppb	16:42:40
3	Sc 361.383	915312.2	915312.2	104.00 %		16:43:57
3	Y 371.029	769351.7	769351.7	101.15 %		16:43:57
3	Ag 328.068†	228.5	-14.4	-0.0714 ug/L	-0.0714 ppb	16:43:57
3	As 188.979†	-19.9	0.8	0.3398 ug/L	0.3398 ppb	16:44:17
3	B 249.677†	135.5	408.3	10.010 ug/L	10.010 ppb	16:44:17
3	Ba 233.527†	38.8	26.2	0.2056 ug/L	0.2056 ppb	16:44:17
3	Be 313.107†	-3743.9	-41.5	-0.0146 ug/L	-0.0146 ppb	16:43:57
3	Cd 226.502†	-187.9	-4.5	-0.0504 ug/L	-0.0504 ppb	16:44:17
3	Co 228.616†	-68.3	-0.8	-0.0182 ug/L	-0.0182 ppb	16:44:17
3	Cr 267.716†	116.7	27.1	0.3032 ug/L	0.3032 ppb	16:44:17
3	Cu 324.752†	6349.9	150.3	0.4581 ug/L	0.4581 ppb	16:43:57
3	Mn 257.610†	1011.6	495.0	0.5627 ug/L	0.5627 ppb	16:44:17
3	Mo 202.031†	-1.4	-6.0	-0.4466 ug/L	-0.4466 ppb	16:44:17
3	Ni 231.604†	87.5	1.3	0.0335 ug/L	0.0335 ppb	16:44:17
3	P 214.914†	232.4	17.6	10.529 ug/L	10.529 ppb	16:44:17
3	Pb 220.353†	-10.2	-71.0	-8.7785 ug/L	-8.7785 ppb	16:44:17
3	S 181.975 Axial†	75.9	37.1	52.370 ug/L	52.370 ppb	16:44:17
3	Sb 206.836†	40.6	0.1	-0.0082 ug/L	-0.0082 ppb	16:44:17
3	Se 196.026†	-14.7	10.6	6.9101 ug/L	6.9101 ppb	16:44:17
3	Si 251.611†	45903.9	43571.9	1411.5 ug/L	1411.5 ppb	16:43:57
3	Sn 189.927†	2.2	-7.3	-1.3141 ug/L	-1.3141 ppb	16:44:17
3	Ti 334.940†	-1207.5	248.9	0.3984 ug/L	0.3984 ppb	16:43:57
3	Tl 190.801†	-29.3	-0.8	-0.2426 ug/L	-0.2426 ppb	16:44:17
3	U 409.014†	-3098.9	-77.7	-2.1686 ug/L	-2.1686 ppb	16:43:57
3	V 292.402†	-1523.6	3.7	0.0175 ug/L	0.0175 ppb	16:43:57
3	Zn 213.857†	866.3	93.5	0.9460 ug/L	0.9460 ppb	16:44:17
3	SiO2†	45687.2	43340.0	3009.0 ug/L	3009.0 ppb	16:44:33

Mean Data: 245807002|948088|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	909602.4	103.36 %		1.099			1.06%
Sc Radial	4035.3	105 %		1.6			1.55%
Y 371.029	763996.1	100.44 %		1.163			1.16%
Y RADIAL	4483.5	100.7 %		1.38			1.37%
Ag 328.068†	-7.3	-0.0386 ug/L		0.09469	-0.0386 ppb	0.09469	245.19%
Al 396.153Radial†	10.1	9.4551 ug/L		5.70740	9.4551 ppb	5.70740	60.36%
As 188.979†	-5.3	-2.3455 ug/L		3.40895	-2.3455 ppb	3.40895	145.34%
B 249.677†	395.2	9.6892 ug/L		0.29668	9.6892 ppb	0.29668	3.06%
Ba 233.527†	27.9	0.2187 ug/L		0.06597	0.2187 ppb	0.06597	30.17%
Be 313.107†	-15.3	-0.0049 ug/L		0.04129	-0.0049 ppb	0.04129	849.34%
Ca 317.933Radial†	14.6	31.766 ug/L		1.2983	31.766 ppb	1.2983	4.09%
Cd 226.502†	-9.5	-0.1093 ug/L		0.05632	-0.1093 ppb	0.05632	51.54%
Co 228.616†	1.2	0.0253 ug/L		0.05146	0.0253 ppb	0.05146	203.01%
Cr 267.716†	16.4	0.1835 ug/L		0.15906	0.1835 ppb	0.15906	86.67%
Cu 324.752†	134.6	0.4105 ug/L		0.23484	0.4105 ppb	0.23484	57.21%
Fe 238.204 Radial†	-1.3	-20.633 ug/L		3.2651	-20.633 ppb	3.2651	15.82%
K 766.490 Radial†	431.8	82.662 ug/L		16.3161	82.662 ppb	16.3161	19.74%



Mg 279.077 IEC†	0.1	4.1897 ug/L	43.81617	4.1897 ppb	43.81617 >999.9%
Mn 257.610†	512.6	0.5818 ug/L	0.01743	0.5818 ppb	0.01743 3.00%
Mo 202.031†	3.7	0.2740 ug/L	0.71200	0.2740 ppb	0.71200 259.89%
Na 589.592 Radial†	494.0	153.70 ug/L	11.934	153.70 ppb	11.934 7.76%
Ni 231.604†	-4.0	-0.1029 ug/L	0.14565	-0.1029 ppb	0.14565 141.57%
P 214.914†	11.5	6.8696 ug/L	3.16943	6.8696 ppb	3.16943 46.14%
Pb 220.353†	-80.7	-9.9786 ug/L	1.04680	-9.9786 ppb	1.04680 10.49%
S 181.975 Axial†	38.1	53.699 ug/L	1.1566	53.699 ppb	1.1566 2.15%
Sb 206.836†	0.5	0.1591 ug/L	2.58786	0.1591 ppb	2.58786 >999.9%
Se 196.026†	2.6	1.6733 ug/L	4.77503	1.6733 ppb	4.77503 285.36%
Si 251.611†	43891.7	1421.9 ug/L	22.19	1421.9 ppb	22.19 1.56%
Sn 189.927†	-2.3	-0.4122 ug/L	0.79654	-0.4122 ppb	0.79654 193.22%
Sr 421.552†	37.1	0.2581 ug/L	0.26261	0.2581 ppb	0.26261 101.74%
Ti 334.940†	238.3	0.3804 ug/L	0.04603	0.3804 ppb	0.04603 12.10%
Tl 190.801†	-6.3	-2.0101 ug/L	3.13780	-2.0101 ppb	3.13780 156.10%
U 409.014†	-88.7	-2.4757 ug/L	3.69274	-2.4757 ppb	3.69274 149.16%
V 292.402†	-5.2	-0.0346 ug/L	0.09003	-0.0346 ppb	0.09003 260.35%
Zn 213.857†	118.6	1.2006 ug/L	0.25230	1.2006 ppb	0.25230 21.01%
SiO2†	43632.1	3029.3 ug/L	38.28	3029.3 ppb	38.28 1.26%

Sequence No.: 26

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/25/2010 16:46:44

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	3853.1	3853.1	99.9 %		16:48:37
1	Y RADIAL	4262.5	4262.5	95.75 %		16:48:37
1	Al 396.153Radial†	5279.2	5399.5	5050.8 ug/L	5050.8 ppb	16:48:37
1	Ca 317.933Radial†	2359.8	2343.4	5110.4 ug/L	5110.4 ppb	16:48:57
1	Fe 238.204 Radial†	317.2	305.8	4957.4 ug/L	4957.4 ppb	16:48:57
1	K 766.490 Radial†	28601.3	25864.8	4949.2 ug/L	4949.2 ppb	16:48:37
1	Mg 279.077 IEC†	98.7	97.6	5151.2 ug/L	5151.2 ppb	16:48:57
1	Na 589.592 Radial†	30236.2	31168.1	9698.4 ug/L	9698.4 ppb	16:48:37
1	Sr 421.552†	69411.4	69472.0	483.25 ug/L	483.25 ppb	16:48:37
1	Sc 361.383	905210.8	905210.8	102.86 %		16:49:54
1	Y 371.029	750007.9	750007.9	98.603 %		16:49:54
1	Ag 328.068†	108672.9	105420.9	492.91 ug/L	492.91 ppb	16:49:59
1	As 188.979†	1120.4	1109.2	497.47 ug/L	497.47 ppb	16:50:19
1	B 249.677†	19881.3	19607.2	478.35 ug/L	478.35 ppb	16:49:59
1	Ba 233.527†	64433.8	62633.4	493.54 ug/L	493.54 ppb	16:49:59
1	Be 313.107†	1343973.2	1310209.2	490.65 ug/L	490.65 ppb	16:49:54
1	Cd 226.502†	43760.4	42721.4	496.36 ug/L	496.36 ppb	16:49:59
1	Co 228.616†	24180.2	23573.6	495.20 ug/L	495.20 ppb	16:49:59
1	Cr 267.716†	45123.2	43785.0	492.27 ug/L	492.27 ppb	16:49:59
1	Cu 324.752†	170453.3	159764.7	486.77 ug/L	486.77 ppb	16:49:59
1	Mn 257.610†	444674.7	431848.3	492.27 ug/L	492.27 ppb	16:49:54
1	Mo 202.031†	6805.2	6611.5	487.42 ug/L	487.42 ppb	16:50:19
1	Ni 231.604†	20098.8	19457.9	496.27 ug/L	496.27 ppb	16:49:59
1	P 214.914†	4413.8	4085.4	2362.2 ug/L	2362.2 ppb	16:50:19
1	Pb 220.353†	4071.4	3897.2	483.64 ug/L	483.64 ppb	16:50:19
1	S 181.975 Axial†	762.9	705.9	994.32 ug/L	994.32 ppb	16:50:19
1	Sb 206.836†	1469.1	1389.3	507.81 ug/L	507.81 ppb	16:50:19
1	Se 196.026†	739.8	744.0	505.79 ug/L	505.79 ppb	16:50:19
1	Si 251.611†	78661.6	75912.5	2453.2 ug/L	2453.2 ppb	16:49:59
1	Sn 189.927†	2821.7	2733.9	493.63 ug/L	493.63 ppb	16:50:19
1	Ti 334.940†	317401.0	309996.6	488.32 ug/L	488.32 ppb	16:49:59
1	Tl 190.801†	1512.1	1497.6	485.00 ug/L	485.00 ppb	16:50:19
1	U 409.014†	14779.0	17270.4	480.60 ug/L	480.60 ppb	16:49:59
1	V 292.402†	70354.6	69869.5	494.59 ug/L	494.59 ppb	16:49:59
1	Zn 213.857†	51065.2	48907.7	489.18 ug/L	489.18 ppb	16:49:59
1	SiO2†	77599.5	74856.4	5183.8 ug/L	5183.8 ppb	16:51:27
2	Sc Radial	3946.8	3946.8	102 %		16:49:02
2	Y RADIAL	4312.7	4312.7	96.88 %		16:49:02
2	Al 396.153Radial†	5385.6	5378.0	5030.5 ug/L	5030.5 ppb	16:49:02
2	Ca 317.933Radial†	2371.6	2298.9	5013.3 ug/L	5013.3 ppb	16:49:22
2	Fe 238.204 Radial†	312.8	294.0	4766.2 ug/L	4766.2 ppb	16:49:22
2	K 766.490 Radial†	28820.3	25399.1	4860.0 ug/L	4860.0 ppb	16:49:02
2	Mg 279.077 IEC†	98.7	95.3	5030.2 ug/L	5030.2 ppb	16:49:22
2	Na 589.592 Radial†	30812.9	31013.0	9650.1 ug/L	9650.1 ppb	16:49:02
2	Sr 421.552†	70878.0	69255.6	481.75 ug/L	481.75 ppb	16:49:02
2	Sc 361.383	899258.0	899258.0	102.18 %		16:50:25
2	Y 371.029	744528.8	744528.8	97.882 %		16:50:25
2	Ag 328.068†	107458.4	104931.7	490.57 ug/L	490.57 ppb	16:50:30
2	As 188.979†	1106.3	1102.6	494.46 ug/L	494.46 ppb	16:50:50
2	B 249.677†	19490.3	19352.5	472.14 ug/L	472.14 ppb	16:50:30
2	Ba 233.527†	63694.7	62324.8	491.11 ug/L	491.11 ppb	16:50:30
2	Be 313.107†	1333663.7	1308769.2	490.11 ug/L	490.11 ppb	16:50:25
2	Cd 226.502†	43252.3	42505.8	493.87 ug/L	493.87 ppb	16:50:30
2	Co 228.616†	23884.6	23439.8	492.41 ug/L	492.41 ppb	16:50:30
2	Cr 267.716†	44576.0	43539.9	489.50 ug/L	489.50 ppb	16:50:30
2	Cu 324.752†	168055.0	158514.6	482.95 ug/L	482.95 ppb	16:50:30
2	Mn 257.610†	442291.4	432377.8	492.85 ug/L	492.85 ppb	16:50:25
2	Mo 202.031†	6796.1	6646.5	489.97 ug/L	489.97 ppb	16:50:50
2	Ni 231.604†	19914.9	19407.3	494.98 ug/L	494.98 ppb	16:50:30

2	P 214.914†	4376.0	4076.8	2357.9 ug/L	2357.9 ppb	16:50:50
2	Pb 220.353†	4061.8	3914.0	485.75 ug/L	485.75 ppb	16:50:50
2	S 181.975 Axial†	752.4	700.5	986.76 ug/L	986.76 ppb	16:50:50
2	Sb 206.836†	1472.3	1401.9	512.31 ug/L	512.31 ppb	16:50:50
2	Se 196.026†	734.6	743.7	505.00 ug/L	505.00 ppb	16:50:50
2	Si 251.611†	77540.8	75321.8	2434.1 ug/L	2434.1 ppb	16:50:30
2	Sn 189.927†	2800.8	2731.7	493.22 ug/L	493.22 ppb	16:50:50
2	Ti 334.940†	313396.9	308120.7	485.36 ug/L	485.36 ppb	16:50:30
2	Tl 190.801†	1517.5	1512.6	489.83 ug/L	489.83 ppb	16:50:50
2	U 409.014†	14624.4	17214.3	479.06 ug/L	479.06 ppb	16:50:30
2	V 292.402†	69521.4	69506.9	492.12 ug/L	492.12 ppb	16:50:30
2	Zn 213.857†	50397.9	48583.3	485.95 ug/L	485.95 ppb	16:50:30
2	SiO2†	77164.0	74929.5	5188.8 ug/L	5188.8 ppb	16:51:32
3	Sc Radial	3866.7	3866.7	100 %		16:49:27
3	Y RADIAL	4272.7	4272.7	95.98 %		16:49:27
3	Al 396.153Radial†	5350.4	5451.9	5100.1 ug/L	5100.1 ppb	16:49:27
3	Ca 317.933Radial†	2379.2	2354.6	5134.7 ug/L	5134.7 ppb	16:49:47
3	Fe 238.204 Radial†	315.9	303.4	4918.2 ug/L	4918.2 ppb	16:49:47
3	K 766.490 Radial†	28866.9	26029.0	4980.6 ug/L	4980.6 ppb	16:49:27
3	Mg 279.077 IEC†	98.4	97.0	5117.2 ug/L	5117.2 ppb	16:49:47
3	Na 589.592 Radial†	30432.2	31257.1	9726.1 ug/L	9726.1 ppb	16:49:27
3	Sr 421.552†	70254.6	70068.6	487.40 ug/L	487.40 ppb	16:49:27
3	Sc 361.383	905125.5	905125.5	102.85 %		16:50:56
3	Y 371.029	750418.5	750418.5	98.657 %		16:50:56
3	Ag 328.068†	107818.8	104600.4	489.08 ug/L	489.08 ppb	16:51:01
3	As 188.979†	1097.2	1086.7	487.43 ug/L	487.43 ppb	16:51:21
3	B 249.677†	19693.2	19426.1	473.93 ug/L	473.93 ppb	16:51:01
3	Ba 233.527†	63993.3	62211.0	490.22 ug/L	490.22 ppb	16:51:01
3	Be 313.107†	1343247.2	1309626.4	490.42 ug/L	490.42 ppb	16:50:56
3	Cd 226.502†	43462.5	42435.7	493.04 ug/L	493.04 ppb	16:51:01
3	Co 228.616†	23986.8	23387.8	491.30 ug/L	491.30 ppb	16:51:01
3	Cr 267.716†	44869.0	43542.0	489.54 ug/L	489.54 ppb	16:51:01
3	Cu 324.752†	168790.2	158163.2	481.89 ug/L	481.89 ppb	16:51:01
3	Mn 257.610†	443560.8	430806.0	491.08 ug/L	491.08 ppb	16:50:56
3	Mo 202.031†	6797.4	6604.6	486.90 ug/L	486.90 ppb	16:51:21
3	Ni 231.604†	19956.1	19320.9	492.78 ug/L	492.78 ppb	16:51:01
3	P 214.914†	4400.1	4072.5	2355.4 ug/L	2355.4 ppb	16:51:21
3	Pb 220.353†	4067.4	3893.7	483.23 ug/L	483.23 ppb	16:51:21
3	S 181.975 Axial†	754.8	698.0	983.25 ug/L	983.25 ppb	16:51:21
3	Sb 206.836†	1481.4	1401.4	512.06 ug/L	512.06 ppb	16:51:21
3	Se 196.026†	738.3	742.6	504.74 ug/L	504.74 ppb	16:51:21
3	Si 251.611†	77927.3	75205.7	2430.3 ug/L	2430.3 ppb	16:51:01
3	Sn 189.927†	2813.1	2725.9	492.18 ug/L	492.18 ppb	16:51:21
3	Ti 334.940†	315096.6	307785.1	484.84 ug/L	484.84 ppb	16:51:01
3	Tl 190.801†	1517.7	1503.1	486.77 ug/L	486.77 ppb	16:51:21
3	U 409.014†	14583.5	17081.7	475.34 ug/L	475.34 ppb	16:51:01
3	V 292.402†	70069.7	69599.0	492.69 ug/L	492.69 ppb	16:51:01
3	Zn 213.857†	50641.2	48500.1	485.10 ug/L	485.10 ppb	16:51:01
3	SiO2†	76011.8	73319.7	5077.1 ug/L	5077.1 ppb	16:51:37

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	903198.1	102.63 %	0.388			0.38%
Sc Radial	3888.9	101 %	1.3			1.30%
Y 371.029	748318.4	98.381 %	0.4323			0.44%
Y RADIAL	4282.6	96.20 %	0.597			0.62%
Ag 328.068†	104984.3	490.85 ug/L	1.930	490.85 ppb	1.930	0.39%
QC value within limits for Ag 328.068 Recovery = 98.17%						
Al 396.153Radial†	5409.8	5060.5 ug/L	35.79	5060.5 ppb	35.79	0.71%
QC value within limits for Al 396.153Radial Recovery = 101.21%						
As 188.979†	1099.5	493.12 ug/L	5.150	493.12 ppb	5.150	1.04%
QC value within limits for As 188.979 Recovery = 98.62%						
B 249.677†	19462.0	474.81 ug/L	3.194	474.81 ppb	3.194	0.67%
QC value within limits for B 249.677 Recovery = 94.96%						
Ba 233.527†	62389.7	491.62 ug/L	1.722	491.62 ppb	1.722	0.35%
QC value within limits for Ba 233.527 Recovery = 98.32%						
Be 313.107†	1309534.9	490.39 ug/L	0.274	490.39 ppb	0.274	0.06%
QC value within limits for Be 313.107 Recovery = 98.08%						
Ca 317.933Radial†	2332.3	5086.1 ug/L	64.26	5086.1 ppb	64.26	1.26%

QC value within limits for Ca 317.933 Radial Recovery = 101.72%							
Cd	226.502†	42554.3	494.42 ug/L	1.727	494.42 ppb	1.727	0.35%
QC value within limits for Cd 226.502 Recovery = 98.88%							
Co	228.616†	23467.1	492.97 ug/L	2.008	492.97 ppb	2.008	0.41%
QC value within limits for Co 228.616 Recovery = 98.59%							
Cr	267.716†	43622.3	490.43 ug/L	1.588	490.43 ppb	1.588	0.32%
QC value within limits for Cr 267.716 Recovery = 98.09%							
Cu	324.752†	158814.2	483.87 ug/L	2.566	483.87 ppb	2.566	0.53%
QC value within limits for Cu 324.752 Recovery = 96.77%							
Fe	238.204 Radial†	301.1	4880.6 ug/L	100.98	4880.6 ppb	100.98	2.07%
QC value within limits for Fe 238.204 Radial Recovery = 97.61%							
K	766.490 Radial†	25764.3	4930.0 ug/L	62.57	4930.0 ppb	62.57	1.27%
QC value within limits for K 766.490 Radial Recovery = 98.60%							
Mg	279.077 IEC†	96.6	5099.5 ug/L	62.40	5099.5 ppb	62.40	1.22%
QC value within limits for Mg 279.077 IEC Recovery = 101.99%							
Mn	257.610†	431677.4	492.06 ug/L	0.906	492.06 ppb	0.906	0.18%
QC value within limits for Mn 257.610 Recovery = 98.41%							
Mo	202.031†	6620.8	488.10 ug/L	1.646	488.10 ppb	1.646	0.34%
QC value within limits for Mo 202.031 Recovery = 97.62%							
Na	589.592 Radial†	31146.1	9691.5 ug/L	38.44	9691.5 ppb	38.44	0.40%
QC value within limits for Na 589.592 Radial Recovery = 96.92%							
Ni	231.604†	19395.4	494.68 ug/L	1.766	494.68 ppb	1.766	0.36%
QC value within limits for Ni 231.604 Recovery = 98.94%							
P	214.914†	4078.2	2358.5 ug/L	3.41	2358.5 ppb	3.41	0.14%
QC value within limits for P 214.914 Recovery = 94.34%							
Pb	220.353†	3901.6	484.21 ug/L	1.351	484.21 ppb	1.351	0.28%
QC value within limits for Pb 220.353 Recovery = 96.84%							
S	181.975 Axial†	701.5	988.11 ug/L	5.655	988.11 ppb	5.655	0.57%
QC value within limits for S 181.975 Axial Recovery = 98.81%							
Sb	206.836†	1397.5	510.73 ug/L	2.530	510.73 ppb	2.530	0.50%
QC value within limits for Sb 206.836 Recovery = 102.15%							
Se	196.026†	743.4	505.18 ug/L	0.544	505.18 ppb	0.544	0.11%
QC value within limits for Se 196.026 Recovery = 101.04%							
Si	251.611†	75480.0	2439.2 ug/L	12.28	2439.2 ppb	12.28	0.50%
QC value within limits for Si 251.611 Recovery = 97.57%							
Sn	189.927†	2730.5	493.01 ug/L	0.744	493.01 ppb	0.744	0.15%
QC value within limits for Sn 189.927 Recovery = 98.60%							
Sr	421.552†	69598.7	484.13 ug/L	2.929	484.13 ppb	2.929	0.60%
QC value within limits for Sr 421.552 Recovery = 96.83%							
Ti	334.940†	308634.1	486.17 ug/L	1.875	486.17 ppb	1.875	0.39%
QC value within limits for Ti 334.940 Recovery = 97.23%							
Tl	190.801†	1504.4	487.20 ug/L	2.442	487.20 ppb	2.442	0.50%
QC value within limits for Tl 190.801 Recovery = 97.44%							
U	409.014†	17188.8	478.33 ug/L	2.704	478.33 ppb	2.704	0.57%
QC value within limits for U 409.014 Recovery = 95.67%							
V	292.402†	69658.5	493.13 ug/L	1.293	493.13 ppb	1.293	0.26%
QC value within limits for V 292.402 Recovery = 98.63%							
Zn	213.857†	48663.7	486.75 ug/L	2.153	486.75 ppb	2.153	0.44%
QC value within limits for Zn 213.857 Recovery = 97.35%							
SiO2†		74368.5	5149.9 ug/L	63.08	5149.9 ppb	63.08	1.22%
QC value within limits for SiO2 Recovery = 96.31%							

All analyte(s) passed QC.

Sequence No.: 27

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/25/2010 16:53:47

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	3747.2	3747.2	97.2 %		16:56:00
1	Y RADIAL	4313.4	4313.4	96.89 %		16:55:40
1	Al 396.153Radial†	-102.3	9.7	9.1086 ug/L	9.1086 ppb	16:55:40
1	Ca 317.933Radial†	24.4	6.4	14.053 ug/L	14.053 ppb	16:56:00
1	Fe 238.204 Radial†	9.8	-1.6	-25.339 ug/L	-25.339 ppb	16:56:00
1	K 766.490 Radial†	2782.1	98.5	18.863 ug/L	18.863 ppb	16:55:40
1	Mg 279.077 IEC†	2.8	1.7	89.185 ug/L	89.185 ppb	16:56:00
1	Na 589.592 Radial†	-895.0	-19.6	-6.0896 ug/L	-6.0896 ppb	16:55:40
1	Sr 421.552†	55.7	48.6	0.3380 ug/L	0.3380 ppb	16:55:40
1	Sc 361.383	919369.4	919369.4	104.47 %		16:56:57
1	Y 371.029	771783.1	771783.1	101.47 %		16:56:57
1	Ag 328.068†	263.4	17.9	0.0712 ug/L	0.0712 ppb	16:57:02
1	As 188.979†	-20.7	0.1	0.0238 ug/L	0.0238 ppb	16:57:22
1	B 249.677†	-499.7	-200.3	-4.9059 ug/L	-4.9059 ppb	16:57:22
1	Ba 233.527†	10.6	-0.9	-0.0091 ug/L	-0.0091 ppb	16:57:22
1	Be 313.107†	-3592.0	119.8	0.0446 ug/L	0.0446 ppb	16:57:02
1	Cd 226.502†	-192.0	-7.6	-0.0851 ug/L	-0.0851 ppb	16:57:22
1	Co 228.616†	-60.2	7.2	0.1549 ug/L	0.1549 ppb	16:57:22
1	Cr 267.716†	76.7	-11.7	-0.1358 ug/L	-0.1358 ppb	16:57:22
1	Cu 324.752†	6084.7	-130.4	-0.4004 ug/L	-0.4004 ppb	16:57:02
1	Mn 257.610†	519.1	19.2	0.0157 ug/L	0.0157 ppb	16:57:22
1	Mo 202.031†	20.7	15.1	1.1112 ug/L	1.1112 ppb	16:57:22
1	Ni 231.604†	73.3	-12.7	-0.3232 ug/L	-0.3232 ppb	16:57:22
1	P 214.914†	217.7	2.5	1.6228 ug/L	1.6228 ppb	16:57:22
1	Pb 220.353†	-27.2	-87.2	-10.777 ug/L	-10.777 ppb	16:57:22
1	S 181.975 Axial†	46.1	8.3	11.641 ug/L	11.641 ppb	16:57:22
1	Sb 206.836†	47.0	6.0	2.1289 ug/L	2.1289 ppb	16:57:22
1	Se 196.026†	-27.2	-1.3	-0.9618 ug/L	-0.9618 ppb	16:57:22
1	Si 251.611†	594.8	4.7	0.1382 ug/L	0.1382 ppb	16:57:22
1	Sn 189.927†	7.3	-2.4	-0.4324 ug/L	-0.4324 ppb	16:57:22
1	Ti 334.940†	-1528.4	-53.2	-0.0904 ug/L	-0.0904 ppb	16:57:02
1	Tl 190.801†	-27.8	0.9	0.2755 ug/L	0.2755 ppb	16:57:22
1	U 409.014†	-2924.9	101.9	2.8495 ug/L	2.8495 ppb	16:56:57
1	V 292.402†	-1601.7	-64.5	-0.4239 ug/L	-0.4239 ppb	16:57:02
1	Zn 213.857†	757.7	-14.2	-0.1365 ug/L	-0.1365 ppb	16:57:22
1	SiO2†	604.5	-9.6	-0.6935 ug/L	-0.6935 ppb	16:58:28
2	Sc Radial	3755.2	3755.2	97.4 %		16:56:25
2	Y RADIAL	4279.1	4279.1	96.12 %		16:56:05
2	Al 396.153Radial†	-122.6	-10.9	-10.288 ug/L	-10.288 ppb	16:56:05
2	Ca 317.933Radial†	22.6	4.5	9.8277 ug/L	9.8277 ppb	16:56:25
2	Fe 238.204 Radial†	10.7	-0.7	-11.497 ug/L	-11.497 ppb	16:56:25
2	K 766.490 Radial†	2877.2	190.1	36.414 ug/L	36.414 ppb	16:56:05
2	Mg 279.077 IEC†	1.5	0.4	21.323 ug/L	21.323 ppb	16:56:25
2	Na 589.592 Radial†	-860.1	18.3	5.6924 ug/L	5.6924 ppb	16:56:05
2	Sr 421.552†	5.8	-2.8	-0.0195 ug/L	-0.0195 ppb	16:56:05
2	Sc 361.383	918565.8	918565.8	104.37 %		16:57:27
2	Y 371.029	771672.6	771672.6	101.45 %		16:57:27
2	Ag 328.068†	297.0	50.4	0.2246 ug/L	0.2246 ppb	16:57:32
2	As 188.979†	-21.0	-0.2	-0.0799 ug/L	-0.0799 ppb	16:57:52
2	B 249.677†	-491.5	-192.9	-4.7256 ug/L	-4.7256 ppb	16:57:52
2	Ba 233.527†	11.0	-0.5	-0.0057 ug/L	-0.0057 ppb	16:57:52
2	Be 313.107†	-3623.7	86.4	0.0321 ug/L	0.0321 ppb	16:57:32
2	Cd 226.502†	-177.5	6.1	0.0727 ug/L	0.0727 ppb	16:57:52
2	Co 228.616†	-72.1	-4.2	-0.0858 ug/L	-0.0858 ppb	16:57:52
2	Cr 267.716†	89.5	0.7	0.0037 ug/L	0.0037 ppb	16:57:52
2	Cu 324.752†	5941.8	-262.3	-0.8023 ug/L	-0.8023 ppb	16:57:32
2	Mn 257.610†	479.9	-17.9	-0.0224 ug/L	-0.0224 ppb	16:57:52
2	Mo 202.031†	16.5	11.1	0.8166 ug/L	0.8166 ppb	16:57:52
2	Ni 231.604†	74.7	-11.2	-0.2868 ug/L	-0.2868 ppb	16:57:52

2	P 214.914†	222.9	7.8	4.8500 ug/L	4.8500 ppb	16:57:52
2	Pb 220.353†	-20.2	-80.5	-9.9607 ug/L	-9.9607 ppb	16:57:52
2	S 181.975 Axial†	37.2	-0.2	-0.3407 ug/L	-0.3407 ppb	16:57:52
2	Sb 206.836†	41.7	0.9	0.3314 ug/L	0.3314 ppb	16:57:52
2	Se 196.026†	-31.2	-5.2	-3.4409 ug/L	-3.4409 ppb	16:57:52
2	Si 251.611†	593.3	3.7	0.1095 ug/L	0.1095 ppb	16:57:52
2	Sn 189.927†	9.2	-0.6	-0.1002 ug/L	-0.1002 ppb	16:57:52
2	Ti 334.940†	-1511.5	-38.3	-0.0626 ug/L	-0.0626 ppb	16:57:32
2	Tl 190.801†	-23.6	4.8	1.5420 ug/L	1.5420 ppb	16:57:52
2	U 409.014†	-2871.2	151.0	4.2173 ug/L	4.2173 ppb	16:57:27
2	V 292.402†	-1626.5	-89.6	-0.6042 ug/L	-0.6042 ppb	16:57:32
2	Zn 213.857†	758.6	-12.6	-0.1225 ug/L	-0.1225 ppb	16:57:52
2	SiO2†	598.7	-14.6	-1.0368 ug/L	-1.0368 ppb	16:58:33
3	Sc Radial	3770.8	3770.8	97.8 %		16:56:50
3	Y RADIAL	4230.5	4230.5	95.03 %		16:56:30
3	Al 396.153Radial†	-130.4	-18.3	-17.241 ug/L	-17.241 ppb	16:56:30
3	Ca 317.933Radial†	17.8	-0.5	-1.1191 ug/L	-1.1191 ppb	16:56:50
3	Fe 238.204 Radial†	8.3	-3.2	-51.849 ug/L	-51.849 ppb	16:56:50
3	K 766.490 Radial†	2775.6	73.9	14.170 ug/L	14.170 ppb	16:56:30
3	Mg 279.077 IEC†	1.9	0.8	40.777 ug/L	40.777 ppb	16:56:50
3	Na 589.592 Radial†	-908.9	-28.0	-8.7045 ug/L	-8.7045 ppb	16:56:30
3	Sr 421.552†	33.5	25.5	0.1776 ug/L	0.1776 ppb	16:56:30
3	Sc 361.383	924614.4	924614.4	105.06 %		16:57:57
3	Y 371.029	776500.8	776500.8	102.09 %		16:57:57
3	Ag 328.068†	233.0	-12.4	-0.0743 ug/L	-0.0743 ppb	16:58:03
3	As 188.979†	-25.7	-4.6	-2.0498 ug/L	-2.0498 ppb	16:58:23
3	B 249.677†	-488.0	-186.5	-4.5612 ug/L	-4.5612 ppb	16:58:23
3	Ba 233.527†	3.8	-7.4	-0.0595 ug/L	-0.0595 ppb	16:58:23
3	Be 313.107†	-3509.3	218.0	0.0814 ug/L	0.0814 ppb	16:58:03
3	Cd 226.502†	-197.0	-11.3	-0.1261 ug/L	-0.1261 ppb	16:58:23
3	Co 228.616†	-75.9	-7.4	-0.1540 ug/L	-0.1540 ppb	16:58:23
3	Cr 267.716†	70.5	-18.0	-0.2072 ug/L	-0.2072 ppb	16:58:23
3	Cu 324.752†	5982.6	-260.7	-0.7984 ug/L	-0.7984 ppb	16:58:03
3	Mn 257.610†	510.5	8.3	0.0026 ug/L	0.0026 ppb	16:58:23
3	Mo 202.031†	10.0	4.8	0.3502 ug/L	0.3502 ppb	16:58:23
3	Ni 231.604†	76.3	-10.2	-0.2604 ug/L	-0.2604 ppb	16:58:23
3	P 214.914†	213.3	-2.8	-1.4635 ug/L	-1.4635 ppb	16:58:23
3	Pb 220.353†	-38.8	-98.1	-12.133 ug/L	-12.133 ppb	16:58:23
3	S 181.975 Axial†	44.9	6.9	9.7132 ug/L	9.7132 ppb	16:58:23
3	Sb 206.836†	33.4	-7.3	-2.5585 ug/L	-2.5585 ppb	16:58:23
3	Se 196.026†	-20.8	5.0	3.1038 ug/L	3.1038 ppb	16:58:23
3	Si 251.611†	591.1	-2.1	-0.0737 ug/L	-0.0737 ppb	16:58:23
3	Sn 189.927†	8.8	-1.0	-0.1839 ug/L	-0.1839 ppb	16:58:23
3	Ti 334.940†	-1500.4	-18.2	-0.0331 ug/L	-0.0331 ppb	16:58:03
3	Tl 190.801†	-35.8	-6.6	-2.1210 ug/L	-2.1210 ppb	16:58:23
3	U 409.014†	-2963.4	81.2	2.2748 ug/L	2.2748 ppb	16:57:57
3	V 292.402†	-1502.8	38.3	0.2855 ug/L	0.2855 ppb	16:58:03
3	Zn 213.857†	749.4	-26.1	-0.2531 ug/L	-0.2531 ppb	16:58:23
3	SiO2†	614.7	-3.1	-0.2244 ug/L	-0.2244 ppb	16:58:38

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Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	920849.9	104.63 %	0.373			0.36%
Sc Radial	3757.8	97.4 %	0.31			0.32%
Y 371.029	773318.8	101.67 %	0.362			0.36%
Y RADIAL	4274.3	96.02 %	0.935			0.97%
Ag 328.068†	18.7	0.0739 ug/L	0.14949	0.0739 ppb	0.14949	202.41%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-6.5	-6.1402 ug/L	13.65593	-6.1402 ppb	13.65593	222.40%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-1.6	-0.7020 ug/L	1.16843	-0.7020 ppb	1.16843	166.45%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-193.2	-4.7309 ug/L	0.17237	-4.7309 ppb	0.17237	3.64%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	-3.0	-0.0248 ug/L	0.03012	-0.0248 ppb	0.03012	121.45%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	141.4	0.0527 ug/L	0.02561	0.0527 ppb	0.02561	48.60%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	3.5	7.5872 ug/L	7.83026	7.5872 ppb	7.83026	103.20%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated						
Cd 226.502†	-4.3	-0.0462 ug/L	0.10495	-0.0462 ppb	0.10495	227.30%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-1.5	-0.0283 ug/L	0.16229	-0.0283 ppb	0.16229	574.13%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-9.7	-0.1131 ug/L	0.10724	-0.1131 ppb	0.10724	94.82%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-217.8	-0.6670 ug/L	0.23091	-0.6670 ppb	0.23091	34.62%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	-1.8	-29.562 ug/L	20.5045	-29.562 ppb	20.5045	69.36%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	120.8	23.149 ug/L	11.7246	23.149 ppb	11.7246	50.65%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	1.0	50.428 ug/L	34.9452	50.428 ppb	34.9452	69.30%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	3.2	-0.0013 ug/L	0.01936	-0.0013 ppb	0.01936	>999.9%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	10.3	0.7593 ug/L	0.38374	0.7593 ppb	0.38374	50.54%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	-9.8	-3.0339 ug/L	7.66948	-3.0339 ppb	7.66948	252.79%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	-11.4	-0.2902 ug/L	0.03154	-0.2902 ppb	0.03154	10.87%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	2.5	1.6698 ug/L	3.15700	1.6698 ppb	3.15700	189.07%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	-88.6	-10.957 ug/L	1.0975	-10.957 ppb	1.0975	10.02%
QC value less than the lower limit for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	5.0	7.0044 ug/L	6.43371	7.0044 ppb	6.43371	91.85%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	-0.1	-0.0328 ug/L	2.36482	-0.0328 ppb	2.36482	>999.9%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-0.5	-0.4330 ug/L	3.30421	-0.4330 ppb	3.30421	763.18%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	2.1	0.0580 ug/L	0.11496	0.0580 ppb	0.11496	198.20%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	-1.3	-0.2388 ug/L	0.17280	-0.2388 ppb	0.17280	72.35%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	23.8	0.1654 ug/L	0.17909	0.1654 ppb	0.17909	108.30%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	-36.6	-0.0620 ug/L	0.02863	-0.0620 ppb	0.02863	46.15%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	-0.3	-0.1012 ug/L	1.86029	-0.1012 ppb	1.86029	>999.9%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	111.4	3.1139 ug/L	0.99786	3.1139 ppb	0.99786	32.05%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	-38.6	-0.2475 ug/L	0.47034	-0.2475 ppb	0.47034	190.01%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	-17.6	-0.1707 ug/L	0.07172	-0.1707 ppb	0.07172	42.01%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	-9.1	-0.6516 ug/L	0.40781	-0.6516 ppb	0.40781	62.59%
QC value within limits for SiO2 Recovery = Not calculated						
QC Failed. Continue with analysis.						

## ICPMS #5 Daily Performance Report

### Sample ID: Sample

Sample Date/Time: Saturday, February 20, 2010 16:07:39

### Sample Description:

Method File: c:\elandata\Method\Daily2.mth

Dataset File: c:\elandata\Dataset\default\Sample.554

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	4591.9	4591.938	57.696	1.3
Mg	24.0	33007.3	33007.292	368.932	1.1
Co	58.9	104259.1	104259.120	1398.049	1.3
Rh	102.9	219366.5	219366.513	1785.593	0.8
In	114.9	300656.4	300656.403	2344.252	0.8
Pb	208.0	241741.5	241741.500	1886.659	0.8
[> Ba	137.9	268936.6	268936.638	1503.430	0.6
[ Ba++	69.0	4410.8	0.016	0.000	1.8
[> Ce	139.9	330534.9	330534.935	2716.455	0.8
[ CeO	155.9	7621.2	0.023	0.000	1.7
Bkgd	220.0	26.2	26.200	4.368	16.7

### Current Optimization File Data

Current Value	Description
0.87	Nebulizer Gas Flow
5.75	Lens Voltage
1450.00	ICP RF Power
-1750.00	Analog Stage Voltage
1250.00	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	13	5.5	4528.7
Co	59	13	6.0	106814.5
In	115	13	6.3	294109.3

Sample ID: Sample

Report Date/Time: Saturday, February 20, 2010 16:08:58

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## 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	594	2072	0.613
Be	9.0	9.0	2051	2088	0.619
Mg	24.0	24.0	5689	2100	0.590
Mg	25.0	25.0	5941	2100	0.614
Mg	26.0	26.0	6166	2100	0.609
Co	58.9	58.9	14183	2125	0.602
Rh	102.9	102.9	24869	2180	0.587
In	114.9	114.9	27795	2200	0.581
Ce	139.9	139.9	33867	2220	0.593
Pb	206.0	206.0	49948	2305	0.592
Pb	207.0	206.9	50147	2240	0.635
Pb	208.0	208.0	50451	2265	0.710
U	238.1	238.1	57728	2275	0.740

## ICPMS#5 - Summary Report

Sample ID: Blank

Sample Date/Time: Saturday, February 20, 2010 16:22:53

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100220\Blank.096

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7		ug/L		34	
Be	9		ug/L		19	
B	11		ug/L		181	
Na	23		ug/L		30701	
Mg	24		ug/L		0	
Al	27		ug/L		2334	
P	31		ug/L		7846	
K	39		ug/L		652306	
Ca	43		ug/L		561	
> Sc	45		ug/L		840010	
Ti	47		ug/L		826	
V	51		ug/L		-1033	
Cr	52		ug/L		-771	
Cr	53		ug/L		121930	
Mn	55		ug/L		1473	
Fe	57		ug/L		7144	
Co	59		ug/L		119	
Ni	60		ug/L		194	
Cu	63		ug/L		326	
Cu	65		ug/L		212	
Zn	66		ug/L		2747	
Zn	67		ug/L		14577	
Zn	68		ug/L		3327	
> Ge	74		ug/L		623930	
As	75		ug/L		-192	
Se	77		ug/L		8093	
Se	82		ug/L		-3	
Kr	83		ug/L		221	
Sr	88		ug/L		164	
Y	89		ug/L		101	
Mo	98		ug/L		55	
Ag	107		ug/L		35	
Cd	111		ug/L		12	
Cd	114		ug/L		54	
> In	115		ug/L		397371	
Sn	120		ug/L		877	
Sb	121		ug/L		179	
Sb	123		ug/L		132	
Ba	135		ug/L		48	
Ba	137		ug/L		66	
Ho	165		ug/L		30	
> Lu	175		ug/L		534424	
Tl	205		ug/L		342	
Pb	208		ug/L		362	
Bi	209		ug/L		1131	
Th	232		ug/L		228	
U	238		ug/L		99	

Sample ID: Blank

Report Date/Time: Saturday, February 20, 2010 16:25:37

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## Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Simple Linear	
Be	9Simple Linear	
B	11Simple Linear	
Na	23Simple Linear	
Mg	24Simple Linear	
Al	27Simple Linear	
P	31Simple Linear	
K	39Simple Linear	
Ca	43Simple Linear	
Sc	45Simple Linear	
Ti	47Simple Linear	
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	
Mo	98Simple 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	175Simple Linear	
Tl	205Simple Linear	
Pb	208Simple Linear	
Bi	209Simple Linear	
Th	232Simple Linear	
U	238Simple Linear	

Sample ID: Blank

Report Date/Time: Saturday, February 20, 2010 16:25:37

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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					
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 1

Sample Date/Time: Saturday, February 20, 2010 16:29:00

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100220\Standard 1.097

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	10.000	ug/L	1.090	18124	0.022
Be	9	10.000	ug/L	3.610	4460	0.005
B	11	20.000	ug/L	3.749	8743	0.010
Na	23	1000.000	ug/L	10.479	3753442	4.526
Mg	24	1000.000	ug/L	9.681	2460727	2.991
Al	27	1000.000	ug/L	18.311	3728229	4.530
P	31	1000.000	ug/L	2.961	272661	0.322
K	39	1000.000	ug/L	4.359	6327674	6.903
Ca	43	1000.000	ug/L	1.149	15787	0.019
> Sc	45		ug/L		823593	823592.854
Ti	47	10.000	ug/L	2.897	8864	0.010
V	51	10.000	ug/L	4.070	100289	0.123
Cr	52	10.000	ug/L	1.813	77677	0.095
Cr	53		ug/L		120397	0.001
Mn	55	10.000	ug/L	3.602	134634	0.162
Fe	57	1000.000	ug/L	2.829	270453	0.320
Co	59	10.000	ug/L	0.789	101630	0.123
Ni	60	10.000	ug/L	2.199	22299	0.027
Cu	63		ug/L		54787	0.066
Cu	65	10.000	ug/L	4.064	27729	0.033
Zn	66	10.000	ug/L	3.256	23432	0.033
Zn	67		ug/L		16712	0.003
Zn	68		ug/L		18484	0.024
> Ge	74		ug/L		624081	624081.176
As	75	10.000	ug/L	3.919	19178	0.031
Se	77		ug/L		8532	0.001
Se	82	10.000	ug/L	2.493	2026	0.003
Kr	83		ug/L		203	-0.000
Sr	88	10.000	ug/L	1.730	239121	0.588
Y	89		ug/L		123	0.000
Mo	98	10.000	ug/L	1.658	54772	0.135
Ag	107	10.000	ug/L	2.321	97598	0.240
Cd	111	10.000	ug/L	1.109	23877	0.059
Cd	114		ug/L		57647	0.142
> In	115		ug/L		406471	406471.166
Sn	120	10.000	ug/L	0.202	99112	0.242
Sb	121	10.000	ug/L	2.183	82621	0.203
Sb	123		ug/L		63743	0.157
Ba	135		ug/L		23452	0.044
Ba	137	10.000	ug/L	1.705	41028	0.076
Ho	165		ug/L		26	-0.000
> Lu	175		ug/L		537572	537571.772
Tl	205	10.000	ug/L	1.369	230931	0.429
Pb	208	10.000	ug/L	0.809	418717	0.778
Bi	209		ug/L		913	-0.000
Th	232	10.000	ug/L	1.375	499473	0.929
U	238	10.000	ug/L	1.404	509313	0.947

Sample ID: Standard 1

Report Date/Time: Saturday, February 20, 2010 16:31:41

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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	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

Sample ID: Standard 1

Report Date/Time: Saturday, February 20, 2010 16:31:41

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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					
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: Saturday, February 20, 2010 16:35:04

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100220\Standard 2.098

## Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	100.024	ug/L	2.429	178636	0.225
Be	9	100.020	ug/L	2.442	43713	0.055
B	11	200.046	ug/L	6.797	84579	0.107
Na	23	9999.462	ug/L	7.166	35747985	45.017
Mg	24	10010.231	ug/L	3.953	26474033	33.356
Al	27	10006.528	ug/L	10.999	38467789	48.497
P	31	9998.169	ug/L	3.637	2512696	3.160
K	39	10008.531	ug/L	3.940	60596507	75.534
Ca	43	9999.687	ug/L	5.226	146718	0.184
> Sc	45		ug/L		793510	793510.032
Ti	47	99.999	ug/L	3.812	78274	0.098
V	51	99.959	ug/L	4.707	934951	1.181
Cr	52	99.964	ug/L	2.892	728188	0.919
Cr	53		ug/L		196030	0.102
Mn	55	99.919	ug/L	3.416	1187330	1.496
Fe	57	9997.892	ug/L	5.011	2490233	3.133
Co	59	99.956	ug/L	4.027	935380	1.180
Ni	60	99.981	ug/L	3.389	209029	0.263
Cu	63		ug/L		499231	0.629
Cu	65	99.967	ug/L	1.545	256755	0.323
Zn	66	99.859	ug/L	2.659	178863	0.290
Zn	67		ug/L		42870	0.047
Zn	68		ug/L		135789	0.218
> Ge	74		ug/L		607536	607536.323
As	75	99.994	ug/L	1.033	187213	0.308
Se	77		ug/L		21390	0.022
Se	82	99.971	ug/L	2.206	19192	0.032
Kr	83		ug/L		213	-0.000
Sr	88	99.878	ug/L	1.388	2034454	5.234
Y	89		ug/L		279	0.000
Mo	98	100.004	ug/L	1.767	525264	1.351
Ag	107	99.926	ug/L	1.704	868429	2.234
Cd	111	99.993	ug/L	2.460	226672	0.583
Cd	114		ug/L		527739	1.358
> In	115		ug/L		388739	388739.020
Sn	120	99.954	ug/L	1.108	898465	2.309
Sb	121	99.984	ug/L	1.682	776017	1.996
Sb	123		ug/L		603176	1.552
Ba	135		ug/L		225683	0.426
Ba	137	99.958	ug/L	1.623	387179	0.731
Ho	165		ug/L		40	0.000
> Lu	175		ug/L		529618	529617.924
Tl	205	99.828	ug/L	1.940	1934898	3.653
Pb	208	99.861	ug/L	1.487	3614953	6.826
Bi	209		ug/L		1216	0.000
Th	232	99.842	ug/L	0.885	4240695	8.007
U	238	99.821	ug/L	2.057	4246164	8.019

Sample ID: Standard 2

Report Date/Time: Saturday, February 20, 2010 16:37:45

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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	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	0.9999
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	0.9999
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	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9998

Sample ID: Standard 2

Report Date/Time: Saturday, February 20, 2010 16:37:45

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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					
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

Sample ID: Standard 2

Report Date/Time: Saturday, February 20, 2010 16:37:45

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## ICPMS#5 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Saturday, February 20, 2010 16:41:08

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100220\QC Std 1.099

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	51.009	ug/L	5.030	90579	0.115
Be	9	51.077	ug/L	6.384	22199	0.028
B	11	108.707	ug/L	4.396	45821	0.058
Na	23	5142.677	ug/L	17.632	18336251	23.152
Mg	24	4993.622	ug/L	9.309	13112389	16.640
Al	27	4732.206	ug/L	12.585	18062244	22.935
P	31	4756.694	ug/L	7.603	1192055	1.503
K	39	4879.700	ug/L	9.884	29721422	36.827
Ca	43	4875.303	ug/L	7.271	71396	0.090
> Sc	45		ug/L		789161	789161.475
Ti	47	48.720	ug/L	4.684	38323	0.048
V	51	49.106	ug/L	5.560	456553	0.580
Cr	52	50.553	ug/L	4.809	365861	0.465
Cr	53		ug/L		141763	0.035
Mn	55	51.900	ug/L	2.461	614142	0.777
Fe	57	4613.637	ug/L	2.214	1147280	1.446
Co	59	49.335	ug/L	4.336	459226	0.582
Ni	60	49.917	ug/L	3.474	103903	0.132
Cu	63		ug/L		251414	0.318
Cu	65	49.898	ug/L	3.442	127510	0.161
Zn	66	51.261	ug/L	3.169	94673	0.149
Zn	67		ug/L		27449	0.021
Zn	68		ug/L		73042	0.113
> Ge	74		ug/L		617633	617632.534
As	75	47.877	ug/L	1.432	91032	0.148
Se	77		ug/L		13681	0.009
Se	82	50.379	ug/L	1.632	9832	0.016
Kr	83		ug/L		217	-0.000
Sr	88	53.708	ug/L	1.310	1098189	2.814
Y	89		ug/L		154	0.000
Mo	98	48.967	ug/L	0.413	258229	0.662
Ag	107	52.398	ug/L	0.874	457116	1.172
Cd	111	50.581	ug/L	0.712	115118	0.295
Cd	114		ug/L		270023	0.692
> In	115		ug/L		390169	390169.185
Sn	120	51.271	ug/L	0.708	463065	1.185
Sb	121	51.215	ug/L	1.078	399080	1.022
Sb	123		ug/L		305129	0.782
Ba	135		ug/L		112556	0.211
Ba	137	50.622	ug/L	1.680	197222	0.370
Ho	165		ug/L		61	0.000
> Lu	175		ug/L		532590	532590.461
Tl	205	52.287	ug/L	0.612	1019415	1.914
Pb	208	53.244	ug/L	1.190	1938463	3.639
Bi	209		ug/L		1198	0.000
Th	232	50.579	ug/L	1.451	2160426	4.056
U	238	52.433	ug/L	0.150	2243358	4.212

Sample ID: QC Std 1

Report Date/Time: Saturday, February 20, 2010 16:43:50

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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	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	0.9999
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	0.9999
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	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
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	102.018				
Be	9	102.155				
B	11	108.707				
Na	23	102.854				
Mg	24	99.872				
Al	27	93.707				
P	31	95.134				
K	39	97.594				
Ca	43	97.506				
> Sc	45		93.9			
Ti	47	97.439				
V	51	98.213				
Cr	52	101.105				
Cr	53					
Mn	55	103.799				
Fe	57	92.273				
Co	59	98.671				
Ni	60	99.834				
Cu	63					
Cu	65	99.797				
Zn	66	102.522				
Zn	67					
Zn	68					
> Ge	74		99.0			
As	75	95.755				
Se	77					
Se	82	100.757				
Kr	83					
Sr	88	107.417				
Y	89					
Mo	98	97.935				
Ag	107	104.795				
Cd	111	101.161				
Cd	114					
> In	115		98.2			
Sn	120	102.543				
Sb	121	102.430				
Sb	123					
Ba	135					
Ba	137	101.245				
Ho	165					
> Lu	175		99.7			
Tl	205	104.574				
Pb	208	106.487				
Bi	209					
Th	232	101.158				
U	238	104.867				

## 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: Saturday, February 20, 2010 16:47:15

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100220\QC Std 2.100

## Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.017	ug/L	25.783	66	0.000
Be	9	0.003	ug/L	337.670	20	0.000
B	11	5.905	ug/L	9.487	2802	0.003
Na	23	-2.399	ug/L	38.233	21349	-0.011
Mg	24	0.597	ug/L	122.251	1667	0.002
Al	27	0.836	ug/L	73.832	5668	0.004
P	31	-1.050	ug/L	18.261	7495	-0.000
K	39	1.608	ug/L	473.814	654673	0.012
Ca	43	-4.011	ug/L	63.828	493	-0.000
> Sc	45		ug/L		831853	831852.893
Ti	47	-0.108	ug/L	46.345	729	-0.000
V	51	0.713	ug/L	35.710	5978	0.008
Cr	52	0.106	ug/L	62.841	34	0.001
Cr	53		ug/L		129896	0.011
Mn	55	0.008	ug/L	106.007	1556	0.000
Fe	57	1.891	ug/L	107.366	7553	0.001
Co	59	0.004	ug/L	9.218	154	0.000
Ni	60	0.007	ug/L	126.816	206	0.000
Cu	63		ug/L		365	0.000
Cu	65	-0.002	ug/L	366.484	205	-0.000
Zn	66	-0.006	ug/L	768.103	2670	-0.000
Zn	67		ug/L		15619	0.002
Zn	68		ug/L		3357	0.000
> Ge	74		ug/L		609009	609009.296
As	75	0.357	ug/L	21.815	483	0.001
Se	77		ug/L		8925	0.002
Se	82	-0.012	ug/L	1047.471	-5	-0.000
Kr	83		ug/L		205	-0.000
Sr	88	0.003	ug/L	44.365	214	0.000
Y	89		ug/L		66	-0.000
Mo	98	0.050	ug/L	22.685	316	0.001
Ag	107	0.005	ug/L	25.123	76	0.000
Cd	111	0.013	ug/L	36.797	40	0.000
Cd	114		ug/L		65	0.000
> In	115		ug/L		385964	385964.165
Sn	120	0.021	ug/L	47.955	1041	0.000
Sb	121	0.394	ug/L	15.905	3203	0.008
Sb	123		ug/L		2431	0.006
Ba	135		ug/L		59	0.000
Ba	137	0.001	ug/L	126.158	70	0.000
Ho	165		ug/L		29	-0.000
> Lu	175		ug/L		524452	524451.714
Tl	205	0.192	ug/L	18.971	4020	0.007
Pb	208	0.003	ug/L	11.276	453	0.000
Bi	209		ug/L		829	-0.001
Th	232	0.042	ug/L	19.232	1982	0.003
U	238	0.006	ug/L	21.084	354	0.000

Sample ID: QC Std 2

Report Date/Time: Saturday, February 20, 2010 16:49:59

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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	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	0.9999
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	0.9999
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	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
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		99.0			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		97.6			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		97.1			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		98.1			
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

## QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

## QC Action

QC Action Line: No QC out of limits detected



## ICPMS#5 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Saturday, February 20, 2010 16:53:23

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100220\QC Std 3.101

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	11.036	ug/L	3.189	20643	0.025
Be	9	0.560	ug/L	5.826	275	0.000
B	11	18.577	ug/L	3.073	8383	0.010
Na	23	255.851	ug/L	9.559	987602	1.152
Mg	24	21.066	ug/L	24.143	58122	0.070
Al	27	42.690	ug/L	20.948	174086	0.207
P	31	48.905	ug/L	4.745	20566	0.015
K	39	306.515	ug/L	12.267	2560785	2.313
Ca	43	212.389	ug/L	4.331	3803	0.004
> Sc	45		ug/L		829854	829854.209
Ti	47	8.807	ug/L	3.404	7954	0.009
V	51	11.321	ug/L	2.888	109897	0.134
Cr	52	11.010	ug/L	2.904	83216	0.101
Cr	53		ug/L		121957	0.002
Mn	55	5.961	ug/L	2.804	75471	0.089
Fe	57	112.040	ug/L	4.182	36177	0.035
Co	59	1.125	ug/L	1.127	11136	0.013
Ni	60	2.199	ug/L	4.467	4996	0.006
Cu	63		ug/L		6463	0.007
Cu	65	1.148	ug/L	6.439	3290	0.004
Zn	66	12.181	ug/L	1.506	24902	0.035
Zn	67		ug/L		16942	0.004
Zn	68		ug/L		19664	0.026
> Ge	74		ug/L		625895	625895.405
As	75	5.617	ug/L	3.312	10653	0.017
Se	77		ug/L		8287	0.000
Se	82	5.747	ug/L	6.517	1134	0.002
Kr	83		ug/L		187	-0.000
Sr	88	12.451	ug/L	0.757	261147	0.652
Y	89		ug/L		84	-0.000
Mo	98	0.556	ug/L	4.188	3058	0.008
Ag	107	1.092	ug/L	1.052	9806	0.024
Cd	111	1.134	ug/L	1.069	2658	0.007
Cd	114		ug/L		6091	0.015
> In	115		ug/L		400025	400024.979
Sn	120	5.574	ug/L	1.257	52398	0.129
Sb	121	3.318	ug/L	2.159	26671	0.066
Sb	123		ug/L		20420	0.051
Ba	135		ug/L		4908	0.009
Ba	137	2.195	ug/L	2.251	8702	0.016
Ho	165		ug/L		32	0.000
> Lu	175		ug/L		538059	538058.671
Tl	205	1.276	ug/L	2.543	25466	0.047
Pb	208	2.454	ug/L	1.436	90616	0.168
Bi	209		ug/L		820	-0.001
Th	232	1.294	ug/L	2.816	56041	0.104
U	238	0.284	ug/L	1.415	12370	0.023

Sample ID: QC Std 3

Report Date/Time: Saturday, February 20, 2010 16:56:05

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	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	0.9999
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	0.9999
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	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
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	110.360				
Be	9	112.016				
B	11	123.845				
Na	23	102.340				
Mg	24	140.441				
Al	27	142.299				
P	31	97.810				
K	39	102.172				
Ca	43	106.194				
> Sc	45		98.8			
Ti	47	88.067				
V	51	113.213				
Cr	52	110.100				
Cr	53					
Mn	55	119.229				
Fe	57	112.040				
Co	59	112.526				
Ni	60	109.958				
Cu	63					
Cu	65	114.838				
Zn	66	121.806				
Zn	67					
Zn	68					
> Ge	74		100.3			
As	75	112.349				
Se	77					
Se	82	114.934				
Kr	83					
Sr	88	124.505				
Y	89					
Mo	98	111.134				
Ag	107	109.245				
Cd	111	113.444				
Cd	114					
> In	115		100.7			
Sn	120	111.486				
Sb	121	110.587				
Sb	123					
Ba	135					
Ba	137	109.757				
Ho	165					
> Lu	175		100.7			
Tl	205	127.608				
Pb	208	122.718				
Bi	209					
Th	232	129.382				
U	238	141.962				

## 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	Al	27	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: Saturday, February 20, 2010 16:56:05  
 Page 3

QC Action Line: Continue

# ICPMS#5 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Saturday, February 20, 2010 16:59:29

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100220\QC Std 4.102

## Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.063	ug/L	9.285	132	0.000
Be	9	0.104	ug/L	16.876	58	0.000
B	11	2.611	ug/L	5.734	1156	0.001
Na	23	91373.326	ug/L	11.697	296153562	411.362
Mg	24	87188.285	ug/L	5.163	209246681	290.529
Al	27	95194.380	ug/L	8.866	332205696	461.359
P	31	97338.262	ug/L	3.876	22162910	30.761
K	39	93977.730	ug/L	7.923	511248072	709.248
Ca	43	96170.167	ug/L	5.835	1278040	1.774
> Sc	45		ug/L		720406	720406.024
Ti	47	1763.749	ug/L	2.801	1242308	1.724
V	51	0.879	ug/L	16.798	6589	0.010
Cr	52	3.375	ug/L	2.405	21695	0.031
Cr	53		ug/L		95429	-0.013
Mn	55	6.330	ug/L	1.611	69509	0.095
Fe	57	98483.428	ug/L	2.077	22238279	30.864
Co	59	0.277	ug/L	5.717	2457	0.003
Ni	60	3.223	ug/L	5.843	6281	0.008
Cu	63		ug/L		11652	0.016
Cu	65	3.445	ug/L	1.073	8211	0.011
Zn	66	4.698	ug/L	2.577	9828	0.014
Zn	67		ug/L		14159	0.003
Zn	68		ug/L		5041	0.004
> Ge	74		ug/L		544496	544496.038
As	75	0.349	ug/L	45.256	418	0.001
Se	77		ug/L		8784	0.003
Se	82	-1.044	ug/L	9.113	-183	-0.000
Kr	83		ug/L		444	0.000
Sr	88	3.402	ug/L	0.467	61355	0.178
Y	89		ug/L		633	0.002
Mo	98	1958.588	ug/L	1.677	9088642	26.466
Ag	107	0.124	ug/L	6.293	981	0.003
Cd	111	0.650	ug/L	23.457	1314	0.004
Cd	114		ug/L		15626	0.045
> In	115		ug/L		343422	343422.352
Sn	120	0.288	ug/L	7.061	3045	0.007
Sb	121	0.132	ug/L	15.201	1063	0.003
Sb	123		ug/L		815	0.002
Ba	135		ug/L		1588	0.003
Ba	137	0.740	ug/L	1.012	2728	0.005
Ho	165		ug/L		11480	0.023
> Lu	175		ug/L		492875	492874.669
Tl	205	0.064	ug/L	5.578	1463	0.002
Pb	208	0.245	ug/L	0.521	8575	0.017
Bi	209		ug/L		6815	0.012
Th	232	0.034	ug/L	28.977	1556	0.003
U	238	0.003	ug/L	6.217	202	0.000

Sample ID: QC Std 4

Report Date/Time: Saturday, February 20, 2010 17:02:11

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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	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	0.9999
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	0.9999
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	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
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	91.373				
Mg	24	87.188				
Al	27	95.194				
P	31	97.338				
K	39	93.978				
Ca	43	96.170				
> Sc	45		85.8			
Ti	47	88.187				
V	51					
Cr	52	102.279				
Cr	53					
Mn	55	109.133				
Fe	57	98.483				
Co	59	117.881				
Ni	60	97.369				
Cu	63					
Cu	65	103.151				
Zn	66	124.949				
Zn	67					
Zn	68					
> Ge	74		87.3			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88	114.918				
Y	89					
Mo	98	97.929				
Ag	107					
Cd	111	146.402				
Cd	114					
> In	115		86.4			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137	92.706				
Ho	165					
> Lu	175		92.2			
Tl	205					
Pb	208	129.429				
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: QC Std 5

Sample Date/Time: Saturday, February 20, 2010 17:05:35

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100220\QC Std 5.103

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	20.458	ug/L	2.240	31582	0.046
Be	9	19.721	ug/L	2.891	7458	0.011
B	11	20.414	ug/L	2.364	7593	0.011
Na	23	87437.731	ug/L	4.004	269804832	393.644
Mg	24	94925.454	ug/L	3.328	216713716	316.311
Al	27	86769.448	ug/L	9.592	287887967	420.528
P	31	90907.570	ug/L	2.250	19690071	28.728
K	39	94851.105	ug/L	3.513	490924936	715.840
Ca	43	92413.962	ug/L	1.396	1168344	1.705
Sc	45		ug/L		685252	685251.922
Ti	47	1804.688	ug/L	4.713	1209045	1.764
V	51	22.421	ug/L	4.228	180538	0.265
Cr	52	24.575	ug/L	4.155	154144	0.226
Cr	53		ug/L		101196	0.003
Mn	55	28.349	ug/L	3.580	291881	0.424
Fe	57	97964.780	ug/L	1.844	21039740	30.702
Co	59	21.034	ug/L	2.713	170151	0.248
Ni	60	22.964	ug/L	3.456	41596	0.060
Cu	63		ug/L		93923	0.137
Cu	65	21.933	ug/L	3.938	48779	0.071
Zn	66	22.864	ug/L	0.699	37558	0.066
Zn	67		ug/L		17303	0.009
Zn	68		ug/L		26114	0.044
Ge	74		ug/L		530322	530321.636
As	75	20.889	ug/L	4.827	34014	0.064
Se	77		ug/L		10651	0.007
Se	82	19.210	ug/L	1.042	3218	0.006
Kr	83		ug/L		449	0.000
Sr	88	26.083	ug/L	0.891	477099	1.367
Y	89		ug/L		627	0.002
Mo	98	1888.936	ug/L	1.086	8907030	25.525
Ag	107	20.047	ug/L	1.570	156440	0.448
Cd	111	20.127	ug/L	1.456	40974	0.117
Cd	114		ug/L		109662	0.314
In	115		ug/L		348957	348957.039
Sn	120	21.719	ug/L	0.985	175872	0.502
Sb	121	21.586	ug/L	0.586	150539	0.431
Sb	123		ug/L		115727	0.331
Ba	135		ug/L		42873	0.085
Ba	137	20.294	ug/L	2.019	75160	0.148
Ho	165		ug/L		11501	0.023
Lu	175		ug/L		506049	506049.209
Tl	205	21.876	ug/L	1.855	405396	0.801
Pb	208	22.014	ug/L	0.920	761747	1.505
Bi	209		ug/L		7580	0.013
Th	232	23.474	ug/L	1.732	952722	1.883
U	238	24.960	ug/L	1.744	1014583	2.005

Sample ID: QC Std 5

Report Date/Time: Saturday, February 20, 2010 17:08:18

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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	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	0.9999
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	0.9999
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	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
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	102.288				
Be	9	98.605				
B	11	102.072				
Na	23	87.438				
Mg	24	94.925				
Al	27	86.769				
P	31	90.908				
K	39	94.851				
Ca	43	92.414				
> Sc	45		81.6			
Ti	47	90.234				
V	51	112.104				
Cr	52	105.471				
Cr	53					
Mn	55	109.880				
Fe	57	97.965				
Co	59	103.947				
Ni	60	98.514				
Cu	63					
Cu	65	93.972				
Zn	66	96.229				
Zn	67					
Zn	68					
> Ge	74		85.0			
As	75	104.447				
Se	77					
Se	82	96.048				
Kr	83					
Sr	88	113.603				
Y	89					
Mo	98	94.447				
Ag	107	100.236				
Cd	111	98.447				
Cd	114					
> In	115		87.8			
Sn	120	108.596				
Sb	121	107.932				
Sb	123					
Ba	135					
Ba	137	97.576				
Ho	165					
> Lu	175		94.7			
Tl	205	109.379				
Pb	208	109.040				
Bi	209					
Th	232	117.372				
U	238	124.798				

## QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message  
 QC Std 5 U 238 ICSAB is out of limits

## QC Action

QC Action Line: Continue

# ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Saturday, February 20, 2010 17:11:42

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100220\QC Std 6.104

## Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	55.258	ug/L	1.843	90037	0.124
Be	9	54.515	ug/L	1.274	21744	0.030
B	11	103.354	ug/L	4.966	39938	0.055
Na	23	4637.922	ug/L	10.916	15102849	20.880
Mg	24	4951.636	ug/L	4.536	11945665	16.500
Al	27	4973.524	ug/L	5.815	17425177	24.104
P	31	4723.461	ug/L	4.089	1086175	1.493
K	39	5057.587	ug/L	7.187	28154070	38.170
Ca	43	4863.761	ug/L	1.253	65393	0.090
> Sc	45		ug/L		723705	723704.623
Ti	47	49.070	ug/L	2.709	35403	0.048
V	51	50.157	ug/L	3.290	427611	0.592
Cr	52	51.076	ug/L	3.527	338975	0.470
Cr	53		ug/L		133639	0.040
Mn	55	53.397	ug/L	2.973	579317	0.799
Fe	57	4795.682	ug/L	2.333	1093324	1.503
Co	59	51.041	ug/L	4.324	435689	0.602
Ni	60	51.887	ug/L	4.099	99016	0.137
Cu	63		ug/L		236865	0.327
Cu	65	51.704	ug/L	2.497	121185	0.167
Zn	66	53.159	ug/L	2.623	90464	0.154
Zn	67		ug/L		25426	0.021
Zn	68		ug/L		68227	0.114
> Ge	74		ug/L		569851	569850.788
As	75	48.200	ug/L	2.220	84532	0.149
Se	77		ug/L		13494	0.011
Se	82	51.847	ug/L	2.434	9332	0.016
Kr	83		ug/L		174	-0.000
Sr	88	53.545	ug/L	0.624	1036626	2.806
Y	89		ug/L		117	0.000
Mo	98	49.378	ug/L	1.178	246526	0.667
Ag	107	51.934	ug/L	0.836	428973	1.161
Cd	111	51.437	ug/L	1.393	110831	0.300
Cd	114		ug/L		261158	0.707
> In	115		ug/L		369392	369391.812
Sn	120	52.310	ug/L	0.587	447249	1.209
Sb	121	51.460	ug/L	2.496	379633	1.027
Sb	123		ug/L		289484	0.783
Ba	135		ug/L		108140	0.200
Ba	137	48.580	ug/L	0.290	192394	0.355
Ho	165		ug/L		68	0.000
> Lu	175		ug/L		541330	541330.313
Tl	205	53.289	ug/L	1.405	1055983	1.950
Pb	208	54.369	ug/L	0.633	2012023	3.716
Bi	209		ug/L		1183	0.000
Th	232	53.017	ug/L	1.714	2301631	4.252
U	238	55.104	ug/L	1.444	2396100	4.426

Sample ID: QC Std 6

Report Date/Time: Saturday, February 20, 2010 17:14:25

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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	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	0.9999
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	0.9999
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	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
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	110.517				
Be	9	109.030				
B	11	103.354				
Na	23	92.758				
Mg	24	99.033				
Al	27	98.486				
P	31	94.469				
K	39	101.152				
Ca	43	97.275				
> Sc	45		86.2			
Ti	47	98.141				
V	51	100.313				
Cr	52	102.152				
Cr	53					
Mn	55	106.795				
Fe	57	95.914				
Co	59	102.082				
Ni	60	103.775				
Cu	63					
Cu	65	103.408				
Zn	66	106.317				
Zn	67					
Zn	68					
> Ge	74		91.3			
As	75	96.399				
Se	77					
Se	82	103.695				
Kr	83					
Sr	88	107.090				
Y	89					
Mo	98	98.756				
Ag	107	103.868				
Cd	111	102.875				
Cd	114					
> In	115		93.0			
Sn	120	104.619				
Sb	121	102.921				
Sb	123					
Ba	135					
Ba	137	97.160				
Ho	165					
> Lu	175		101.3			
Tl	205	106.579				
Pb	208	108.738				
Bi	209					
Th	232	106.034				
U	238	110.207				

### 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	U	238	238CCV is out of limits (+/- 10%)

### QC Action

QC Action Line: Continue

## ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Saturday, February 20, 2010 17:17:50

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100220\QC Std 7.105

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.017	ug/L	11.359	60	0.000
Be	9	0.001	ug/L	510.448	18	0.000
B	11	3.763	ug/L	9.928	1686	0.002
Na	23	-0.127	ug/L	1727.802	27361	-0.001
Mg	24	0.529	ug/L	114.663	1333	0.002
Al	27	1.689	ug/L	33.012	8336	0.008
P	31	-5.522	ug/L	12.407	5770	-0.002
K	39	-2.836	ug/L	120.934	573629	-0.021
Ca	43	-3.962	ug/L	113.429	451	-0.000
> Sc	45		ug/L		759739	759739.455
Ti	47	-0.187	ug/L	13.561	608	-0.000
V	51	-0.608	ug/L	47.660	-6393	-0.007
Cr	52	-0.016	ug/L	326.781	-808	-0.000
Cr	53		ug/L		124988	0.019
Mn	55	0.006	ug/L	22.201	1400	0.000
Fe	57	2.783	ug/L	23.545	7124	0.001
Co	59	0.000	ug/L	429.275	112	0.000
Ni	60	-0.003	ug/L	192.700	170	-0.000
Cu	63		ug/L		321	0.000
Cu	65	0.008	ug/L	122.821	210	0.000
Zn	66	-0.036	ug/L	98.522	2431	-0.000
Zn	67		ug/L		14224	0.002
Zn	68		ug/L		2948	-0.000
> Ge	74		ug/L		565521	565520.874
As	75	-0.028	ug/L	849.867	-224	-0.000
Se	77		ug/L		9332	0.004
Se	82	-0.032	ug/L	303.967	-9	-0.000
Kr	83		ug/L		194	-0.000
Sr	88	0.003	ug/L	77.385	218	0.000
Y	89		ug/L		69	-0.000
Mo	98	0.080	ug/L	5.323	449	0.001
Ag	107	0.005	ug/L	31.906	71	0.000
Cd	111	0.007	ug/L	93.035	26	0.000
Cd	114		ug/L		68	0.000
> In	115		ug/L		369257	369257.357
Sn	120	0.009	ug/L	92.304	888	0.000
Sb	121	0.231	ug/L	16.430	1868	0.005
Sb	123		ug/L		1447	0.004
Ba	135		ug/L		51	0.000
Ba	137	-0.001	ug/L	156.280	61	-0.000
Ho	165		ug/L		21	-0.000
> Lu	175		ug/L		539429	539429.182
Tl	205	0.167	ug/L	19.379	3647	0.006
Pb	208	0.004	ug/L	36.566	504	0.000
Bi	209		ug/L		757	-0.001
Th	232	0.045	ug/L	13.405	2199	0.004
U	238	0.007	ug/L	14.264	391	0.001

Sample ID: QC Std 7

Report Date/Time: Saturday, February 20, 2010 17:20:34

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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	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	0.9999
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	0.9999
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	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9998

## 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		90.4			
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		90.6			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		92.9			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		100.9			
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 10

Sample Date/Time: Saturday, February 20, 2010 17:23:57

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100220\QC Std 10.106

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	964.530	ug/L	1.495	1451209	2.172
Be	9	974.948	ug/L	2.155	358849	0.537
B	11	2.462	ug/L	4.330	1020	0.001
Na	23	43333.719	ug/L	5.949	130510961	195.088
Mg	24	44355.396	ug/L	4.920	98768506	147.801
Al	27	43989.439	ug/L	7.431	142348545	213.195
P	31	22767.876	ug/L	3.544	4812819	7.195
K	39	49940.802	ug/L	5.544	252267922	376.902
Ca	43	47197.496	ug/L	2.386	582110	0.871
> Sc	45		ug/L		668361	668360.564
Ti	47	40.012	ug/L	1.778	26789	0.039
V	51	845.020	ug/L	4.280	6666070	9.981
Cr	52	857.039	ug/L	4.644	5263249	7.881
Cr	53		ug/L		781759	1.025
Mn	55	933.517	ug/L	1.438	9338332	13.973
Fe	57	48201.410	ug/L	2.377	10098749	15.106
Co	59	827.708	ug/L	4.169	6525358	9.769
Ni	60	829.818	ug/L	1.643	1460989	2.186
Cu	63		ug/L		3519134	5.267
Cu	65	791.000	ug/L	1.491	1710264	2.559
Zn	66	2183.567	ug/L	1.380	3307146	6.343
Zn	67		ug/L		538964	1.011
Zn	68		ug/L		1548516	2.966
> Ge	74		ug/L		521099	521098.715
As	75	818.797	ug/L	1.457	1315949	2.526
Se	77		ug/L		63161	0.108
Se	82	466.499	ug/L	2.831	76819	0.147
Kr	83		ug/L		276	0.000
Sr	88	956.175	ug/L	0.852	17140715	50.106
Y	89		ug/L		616	0.002
Mo	98	924.088	ug/L	0.667	4271767	12.487
Ag	107	214.151	ug/L	1.241	1637984	4.788
Cd	111	832.251	ug/L	1.436	1660512	4.854
Cd	114		ug/L		4149547	12.130
> In	115		ug/L		342100	342100.156
Sn	120	876.996	ug/L	1.110	6932537	20.262
Sb	121	225.037	ug/L	1.071	1537069	4.493
Sb	123		ug/L		1226199	3.584
Ba	135		ug/L		1718204	3.300
Ba	137	837.564	ug/L	0.752	3188957	6.125
Ho	165		ug/L		160	0.000
> Lu	175		ug/L		520600	520599.709
Tl	205	455.416	ug/L	0.628	8676875	16.667
Pb	208	4639.172	ug/L	0.486	165079517	317.097
Bi	209		ug/L		5474	0.008
Th	232	2456.883	ug/L	1.253	102568692	197.028
U	238	5206.887	ug/L	1.427	217740319	418.266

Sample ID: QC Std 10

Report Date/Time: Saturday, February 20, 2010 17:26:39

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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	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	0.9999
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	0.9999
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	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
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	96.453				
Be	9	97.495				
B	11					
Na	23	86.667				
Mg	24	88.711				
Al	27	87.979				
P	31	91.072				
K	39	99.882				
Ca	43	94.395				
> Sc	45		79.6			
Ti	47					
V	51	84.502				
Cr	52	85.704				
Cr	53					
Mn	55	93.352				
Fe	57	96.403				
Co	59	82.771				
Ni	60	82.982				
Cu	63					
Cu	65	79.100				
Zn	66	87.343				
Zn	67					
Zn	68					
> Ge	74		83.5			
As	75	81.880				
Se	77					
Se	82	93.300				
Kr	83					
Sr	88	95.618				
Y	89					
Mo	98	92.409				
Ag	107	85.661				
Cd	111	83.225				
Cd	114					
> In	115		86.1			
Sn	120	87.700				
Sb	121	90.015				
Sb	123					
Ba	135					
Ba	137	83.756				
Ho	165					
> Lu	175		97.4			
Tl	205	91.083				
Pb	208	92.783				
Bi	209					
Th	232	98.275				
U	238	104.138				

### QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 10	Na	23	LRS is out of limits (+/- 10%)
QC Std 10	Mg	24	LRS is out of limits (+/- 10%)
QC Std 10	Al	27	LRS is out of limits (+/- 10%)
Sc 45 Int Std for QC Sc		45	
QC Std 10	V	51	LRS is out of limits (+/- 10%)
QC Std 10	Cr	52	LRS is out of limits (+/- 10%)
QC Std 10	Co	59	LRS 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	Zn	66LRS is out of limits (+/- 10%)
QC Std 10	As	75LRS is out of limits (+/- 10%)
QC Std 10	Ag	107LRS is out of limits (+/- 10%)
QC Std 10	Cd	111LRS is out of limits (+/- 10%)
QC Std 10	Sn	120LRS is out of limits (+/- 10%)
QC Std 10	Ba	137LRS is out of limits (+/- 10%)

## QC Action

QC Action Line: Continue

# ICPMS#5 - Summary Report

Sample ID: QC Std 11

Sample Date/Time: Saturday, February 20, 2010 17:30:02

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100220\QC Std 11.107

## Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	53.906	ug/L	1.110	90043	0.121
Be	9	53.030	ug/L	2.002	21679	0.029
B	11	100.639	ug/L	3.162	39894	0.054
Na	23	4391.687	ug/L	0.756	14691150	19.771
Mg	24	4760.342	ug/L	6.872	11762701	15.862
Al	27	4562.569	ug/L	5.033	16405869	22.112
P	31	4687.380	ug/L	1.067	1105581	1.481
K	39	4826.804	ug/L	2.712	27594717	36.428
Ca	43	4819.223	ug/L	2.170	66419	0.089
> Sc	45		ug/L		741674	741674.026
Ti	47	49.109	ug/L	2.564	36321	0.048
V	51	49.093	ug/L	1.868	429129	0.580
Cr	52	50.445	ug/L	2.070	343298	0.464
Cr	53		ug/L		135762	0.038
Mn	55	52.609	ug/L	0.972	585279	0.787
Fe	57	4722.084	ug/L	1.616	1103831	1.480
Co	59	49.240	ug/L	0.818	431100	0.581
Ni	60	50.223	ug/L	2.209	98284	0.132
Cu	63		ug/L		236959	0.319
Cu	65	50.049	ug/L	2.660	120290	0.162
Zn	66	53.732	ug/L	1.292	90770	0.156
Zn	67		ug/L		26220	0.023
Zn	68		ug/L		69079	0.117
> Ge	74		ug/L		565608	565608.058
As	75	49.514	ug/L	1.568	86212	0.153
Se	77		ug/L		13100	0.010
Se	82	52.253	ug/L	3.638	9336	0.017
Kr	83		ug/L		186	-0.000
Sr	88	54.071	ug/L	1.025	1044896	2.833
Y	89		ug/L		120	0.000
Mo	98	49.410	ug/L	0.641	246239	0.668
Ag	107	52.274	ug/L	0.577	431001	1.169
Cd	111	51.373	ug/L	0.888	110497	0.300
Cd	114		ug/L		261011	0.708
> In	115		ug/L		368747	368747.288
Sn	120	52.295	ug/L	1.064	446306	1.208
Sb	121	52.425	ug/L	1.975	386038	1.047
Sb	123		ug/L		296700	0.804
Ba	135		ug/L		108882	0.207
Ba	137	49.585	ug/L	1.124	190893	0.363
Ho	165		ug/L		53	0.000
> Lu	175		ug/L		526274	526273.585
Tl	205	53.761	ug/L	2.863	1035488	1.967
Pb	208	55.253	ug/L	1.561	1987616	3.777
Bi	209		ug/L		1125	0.000
Th	232	54.185	ug/L	2.652	2286454	4.345
U	238	56.694	ug/L	0.526	2396768	4.554

Sample ID: QC Std 11

Report Date/Time: Saturday, February 20, 2010 17:32:44

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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	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	0.9999
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	0.9999
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	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9998

Sample ID: QC Std 11

Report Date/Time: Saturday, February 20, 2010 17:32:44

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## QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Li	7	107.813				
Be	9	106.060				
B	11	100.639				
Na	23	87.834				
Mg	24	95.207				
Al	27	90.348				
P	31	93.748				
K	39	96.536				
Ca	43	96.384				
> Sc	45		88.3			
Ti	47	98.217				
V	51	98.186				
Cr	52	100.890				
Cr	53					
Mn	55	105.218				
Fe	57	94.442				
Co	59	98.480				
Ni	60	100.446				
Cu	63					
Cu	65	100.097				
Zn	66	107.464				
Zn	67					
Zn	68					
> Ge	74		90.7			
As	75	99.028				
Se	77					
Se	82	104.505				
Kr	83					
Sr	88	108.143				
Y	89					
Mo	98	98.821				
Ag	107	104.548				
Cd	111	102.746				
Cd	114					
> In	115		92.8			
Sn	120	104.591				
Sb	121	104.851				
Sb	123					
Ba	135					
Ba	137	99.170				
Ho	165					
> Lu	175		98.5			
Tl	205	107.522				
Pb	208	110.507				
Bi	209					
Th	232	108.369				
U	238	113.388				

## QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 11	Na	23	CCV is out of limits (+/- 10%)
QC Std 11	Pb	208	CCV is out of limits (+/- 10%)
QC Std 11	U	238	CCV is out of limits (+/- 10%)

## QC Action

Sample ID: QC Std 11  
 Report Date/Time: Saturday, February 20, 2010 17:32:44  
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QC Action Line: Continue



# ICPMS#5 - Summary Report

Sample ID: QC Std 12

Sample Date/Time: Saturday, February 20, 2010 17:36:09

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100220\QC Std 12.108

## Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.093	ug/L	7.051	186	0.000
Be	9	0.018	ug/L	110.189	25	0.000
B	11	3.966	ug/L	17.087	1733	0.002
Na	23	-0.386	ug/L	167.768	26024	-0.002
Mg	24	0.544	ug/L	173.205	1334	0.002
Al	27	0.632	ug/L	71.528	4334	0.003
P	31	-5.085	ug/L	48.355	5765	-0.002
K	39	0.706	ug/L	817.719	583704	0.005
Ca	43	-6.152	ug/L	37.934	413	-0.000
> Sc	45		ug/L		746945	746945.286
Ti	47	-0.291	ug/L	16.504	522	-0.000
V	51	0.518	ug/L	112.457	3548	0.006
Cr	52	0.042	ug/L	96.460	-402	0.000
Cr	53		ug/L		122855	0.019
Mn	55	0.012	ug/L	30.131	1446	0.000
Fe	57	1.361	ug/L	61.062	6668	0.000
Co	59	0.014	ug/L	10.513	229	0.000
Ni	60	0.017	ug/L	53.887	206	0.000
Cu	63		ug/L		400	0.000
Cu	65	0.034	ug/L	20.840	269	0.000
Zn	66	-0.058	ug/L	56.236	2439	-0.000
Zn	67		ug/L		15037	0.003
Zn	68		ug/L		3125	0.000
> Ge	74		ug/L		575829	575828.640
As	75	-0.028	ug/L	520.187	-227	-0.000
Se	77		ug/L		8598	0.002
Se	82	0.138	ug/L	91.990	22	0.000
Kr	83		ug/L		183	-0.000
Sr	88	0.005	ug/L	6.531	245	0.000
Y	89		ug/L		77	-0.000
Mo	98	0.120	ug/L	10.656	651	0.002
Ag	107	0.005	ug/L	22.549	74	0.000
Cd	111	0.006	ug/L	93.920	24	0.000
Cd	114		ug/L		66	0.000
> In	115		ug/L		369771	369770.533
Sn	120	0.101	ug/L	10.087	1676	0.002
Sb	121	0.783	ug/L	13.242	5947	0.016
Sb	123		ug/L		4619	0.012
Ba	135		ug/L		61	0.000
Ba	137	0.001	ug/L	162.875	70	0.000
Ho	165		ug/L		28	-0.000
> Lu	175		ug/L		528533	528532.662
Tl	205	0.279	ug/L	13.166	5744	0.010
Pb	208	0.014	ug/L	11.216	856	0.001
Bi	209		ug/L		704	-0.001
Th	232	0.111	ug/L	12.337	4939	0.009
U	238	0.041	ug/L	10.249	1844	0.003

Sample ID: QC Std 12

Report Date/Time: Saturday, February 20, 2010 17:38:53

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	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	0.9999
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	0.9999
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	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
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		88.9			
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		92.3			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		93.1			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		98.9			
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

## QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

## QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 12

Report Date/Time: Saturday, February 20, 2010 17:38:53

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# ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Saturday, February 20, 2010 18:19:59

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100220\QC Std 6.115

## Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	52.493	ug/L	4.013	92543	0.118
Be	9	51.586	ug/L	6.542	22245	0.028
B	11	101.904	ug/L	5.117	42623	0.054
Na	23	4893.504	ug/L	9.712	17245610	22.031
Mg	24	4959.243	ug/L	2.701	12958594	16.525
Al	27	4614.803	ug/L	0.770	17527662	22.366
P	31	4806.542	ug/L	2.497	1196868	1.519
K	39	5039.639	ug/L	5.954	30391479	38.034
Ca	43	4879.835	ug/L	1.351	71029	0.090
> Sc	45		ug/L		783620	783619.885
Ti	47	49.030	ug/L	4.635	38267	0.048
V	51	47.321	ug/L	2.626	436705	0.559
Cr	52	49.127	ug/L	2.870	352998	0.452
Cr	53		ug/L		161336	0.061
Mn	55	52.006	ug/L	4.449	610566	0.778
Fe	57	4577.297	ug/L	3.452	1129666	1.434
Co	59	47.632	ug/L	4.570	440230	0.562
Ni	60	48.080	ug/L	3.653	99334	0.127
Cu	63		ug/L		242971	0.310
Cu	65	48.073	ug/L	5.440	121897	0.156
Zn	66	53.350	ug/L	1.733	92233	0.155
Zn	67		ug/L		27353	0.024
Zn	68		ug/L		69608	0.115
> Ge	74		ug/L		578833	578832.598
As	75	48.091	ug/L	3.435	85660	0.148
Se	77		ug/L		16763	0.016
Se	82	51.052	ug/L	2.873	9335	0.016
Kr	83		ug/L		175	-0.000
Sr	88	53.718	ug/L	0.896	1025329	2.815
Y	89		ug/L		140	0.000
Mo	98	48.970	ug/L	1.806	241002	0.662
Ag	107	51.426	ug/L	2.022	418704	1.150
Cd	111	50.624	ug/L	1.954	107532	0.295
Cd	114		ug/L		255111	0.701
> In	115		ug/L		364195	364195.204
Sn	120	51.519	ug/L	2.586	434277	1.190
Sb	121	50.715	ug/L	2.292	368807	1.012
Sb	123		ug/L		283860	0.779
Ba	135		ug/L		106774	0.200
Ba	137	48.126	ug/L	2.377	187991	0.352
Ho	165		ug/L		60	0.000
> Lu	175		ug/L		533993	533992.714
Tl	205	53.352	ug/L	1.255	1042891	1.952
Pb	208	53.775	ug/L	1.272	1963003	3.676
Bi	209		ug/L		946	-0.000
Th	232	52.618	ug/L	0.252	2253509	4.220
U	238	54.593	ug/L	1.185	2341906	4.385

Sample ID: QC Std 6

Report Date/Time: Saturday, February 20, 2010 18:22:42

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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	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	0.9999
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	0.9999
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	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
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	104.985					
Be	9	103.172					
B	11	101.904					
Na	23	97.870					
Mg	24	99.185					
Al	27	91.382					
P	31	96.131					
K	39	100.793					
Ca	43	97.597					
> Sc	45		93.3				
Ti	47	98.060					
V	51	94.642					
Cr	52	98.255					
Cr	53						
Mn	55	104.011					
Fe	57	91.546					
Co	59	95.264					
Ni	60	96.161					
Cu	63						
Cu	65	96.145					
Zn	66	106.700					
Zn	67						
Zn	68						
> Ge	74		92.8				
As	75	96.182					
Se	77						
Se	82	102.105					
Kr	83						
Sr	88	107.437					
Y	89						
Mo	98	97.941					
Ag	107	102.852					
Cd	111	101.248					
Cd	114						
> In	115		91.7				
Sn	120	103.037					
Sb	121	101.429					
Sb	123						
Ba	135						
Ba	137	96.252					
Ho	165						
> Lu	175		99.9				
Tl	205	106.704					
Pb	208	107.550					
Bi	209						
Th	232	105.236					
U	238	109.186					

### 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: Saturday, February 20, 2010 18:26:08

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100220\QC Std 7.116

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.041	ug/L	5.584	107	0.000
Be	9	0.011	ug/L	64.200	23	0.000
B	11	4.558	ug/L	13.595	2115	0.002
Na	23	-2.101	ug/L	65.607	21684	-0.009
Mg	24	0.256	ug/L	173.205	667	0.001
Al	27	0.118	ug/L	342.189	2667	0.001
P	31	-3.252	ug/L	3.103	6654	-0.001
K	39	-5.234	ug/L	37.420	589937	-0.040
Ca	43	-8.702	ug/L	11.165	406	-0.000
> Sc	45		ug/L		800532	800531.611
Ti	47	-0.340	ug/L	12.557	521	-0.000
V	51	0.261	ug/L	257.712	1400	0.003
Cr	52	0.394	ug/L	16.496	2166	0.004
Cr	53		ug/L		146483	0.038
Mn	55	0.029	ug/L	5.759	1752	0.000
Fe	57	1.018	ug/L	37.497	7063	0.000
Co	59	0.004	ug/L	39.333	147	0.000
Ni	60	0.002	ug/L	465.533	188	0.000
Cu	63		ug/L		338	0.000
Cu	65	-0.003	ug/L	106.060	193	-0.000
Zn	66	-0.032	ug/L	113.844	2444	-0.000
Zn	67		ug/L		15546	0.004
Zn	68		ug/L		3246	0.000
> Ge	74		ug/L		566992	566992.374
As	75	-0.104	ug/L	144.559	-355	-0.000
Se	77		ug/L		12467	0.009
Se	82	-0.087	ug/L	162.499	-19	-0.000
Kr	83		ug/L		217	0.000
Sr	88	0.003	ug/L	67.406	204	0.000
Y	89		ug/L		67	-0.000
Mo	98	0.049	ug/L	8.232	286	0.001
Ag	107	0.004	ug/L	18.007	61	0.000
Cd	111	0.011	ug/L	64.229	32	0.000
Cd	114		ug/L		63	0.000
> In	115		ug/L		356092	356092.477
Sn	120	0.018	ug/L	24.956	931	0.000
Sb	121	0.260	ug/L	15.826	2005	0.005
Sb	123		ug/L		1479	0.004
Ba	135		ug/L		38	-0.000
Ba	137	0.000	ug/L	889.374	66	0.000
Ho	165		ug/L		18	-0.000
> Lu	175		ug/L		519576	519575.835
Tl	205	0.332	ug/L	13.141	6645	0.012
Pb	208	0.003	ug/L	72.248	470	0.000
Bi	209		ug/L		624	-0.001
Th	232	0.048	ug/L	16.887	2210	0.004
U	238	0.008	ug/L	24.071	425	0.001

Sample ID: QC Std 7

Report Date/Time: Saturday, February 20, 2010 18:28:52

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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	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	0.9999
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	0.9999
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	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9998

Sample ID: QC Std 7

Report Date/Time: Saturday, February 20, 2010 18:28:52

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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		95.3			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		90.9			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		89.6			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		97.2			
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Saturday, February 20, 2010 18:28:52

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# ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Saturday, February 20, 2010 18:44:37

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100220\QC Std 8.119

## Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	55.279	ug/L	3.631	94736	0.124
Be	9	53.776	ug/L	3.621	22558	0.030
B	11	106.717	ug/L	5.293	43372	0.057
Na	23	4492.198	ug/L	6.391	15406206	20.224
Mg	24	4941.247	ug/L	7.365	12513117	16.465
Al	27	4817.108	ug/L	7.458	17801878	23.346
P	31	4980.419	ug/L	3.826	1204716	1.574
K	39	4941.053	ug/L	8.501	28926092	37.290
Ca	43	5183.699	ug/L	5.995	73203	0.096
> Sc	45		ug/L		761728	761727.912
Ti	47	51.077	ug/L	4.361	38728	0.050
V	51	51.335	ug/L	3.216	460482	0.606
Cr	52	52.527	ug/L	2.870	366881	0.483
Cr	53		ug/L		172979	0.082
Mn	55	53.985	ug/L	3.370	616352	0.808
Fe	57	4867.635	ug/L	3.043	1167384	1.525
Co	59	50.239	ug/L	2.452	451413	0.593
Ni	60	50.964	ug/L	4.536	102311	0.134
Cu	63		ug/L		247359	0.325
Cu	65	50.324	ug/L	3.699	124084	0.163
Zn	66	54.949	ug/L	0.719	94987	0.160
Zn	67		ug/L		28866	0.026
Zn	68		ug/L		71921	0.119
> Ge	74		ug/L		579137	579137.224
As	75	48.537	ug/L	1.063	86538	0.150
Se	77		ug/L		18300	0.019
Se	82	51.801	ug/L	3.315	9477	0.016
Kr	83		ug/L		186	-0.000
Sr	88	56.413	ug/L	1.557	1051558	2.956
Y	89		ug/L		138	0.000
Mo	98	51.117	ug/L	1.693	245712	0.691
Ag	107	54.251	ug/L	0.694	431507	1.213
Cd	111	52.934	ug/L	1.992	109812	0.309
Cd	114		ug/L		260910	0.734
> In	115		ug/L		355752	355752.259
Sn	120	53.658	ug/L	2.896	441611	1.240
Sb	121	52.902	ug/L	2.917	375699	1.056
Sb	123		ug/L		289383	0.814
Ba	135		ug/L		110300	0.209
Ba	137	49.255	ug/L	0.921	189963	0.360
Ho	165		ug/L		65	0.000
> Lu	175		ug/L		527198	527197.534
Tl	205	54.166	ug/L	1.534	1045312	1.982
Pb	208	55.398	ug/L	1.535	1996342	3.787
Bi	209		ug/L		872	-0.000
Th	232	53.552	ug/L	0.321	2264255	4.295
U	238	56.444	ug/L	2.032	2390074	4.534

Sample ID: QC Std 8

Report Date/Time: Saturday, February 20, 2010 18:47:20

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	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	0.9999
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	0.9999
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	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
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	110.559				
Be	9	107.552				
B	11	106.717				
Na	23	89.844				
Mg	24	98.825				
Al	27	95.388				
P	31	99.608				
K	39	98.821				
Ca	43	103.674				
> Sc	45		90.7			
Ti	47	102.154				
V	51	102.670				
Cr	52	105.054				
Cr	53					
Mn	55	107.970				
Fe	57	97.353				
Co	59	100.478				
Ni	60	101.929				
Cu	63					
Cu	65	100.647				
Zn	66	109.898				
Zn	67					
Zn	68					
> Ge	74		92.8			
As	75	97.075				
Se	77					
Se	82	103.601				
Kr	83					
Sr	88	112.827				
Y	89					
Mo	98	102.234				
Ag	107	108.501				
Cd	111	105.868				
Cd	114					
> In	115		89.5			
Sn	120	107.315				
Sb	121	105.804				
Sb	123					
Ba	135					
Ba	137	98.510				
Ho	165					
> Lu	175		98.6			
Tl	205	108.332				
Pb	208	110.795				
Bi	209					
Th	232	107.104				
U	238	112.888				

### QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 8	Li	7	7CCV is out of limits (+/- 10%)
QC Std 8	Na	23	23CCV is out of limits (+/- 10%)
QC Std 8	Sr	88	88CCV is out of limits (+/- 10%)
QC Std 8	Pb	208	208CCV is out of limits (+/- 10%)
QC Std 8	U	238	238CCV is out of limits (+/- 10%)

Sample ID: QC Std 8

Report Date/Time: Saturday, February 20, 2010 18:47:20

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## QC Action

QC Action Line: Continue

## ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Saturday, February 20, 2010 18:50:45

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100220\QC Std 9.120

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.041	ug/L	17.546	103	0.000
Be	9	-0.003	ug/L	148.672	17	-0.000
B	11	4.652	ug/L	17.729	2104	0.002
Na	23	-1.391	ug/L	150.263	23688	-0.006
Mg	24	0.387	ug/L	99.267	1000	0.001
Al	27	0.214	ug/L	321.867	3000	0.001
P	31	-2.240	ug/L	58.293	6764	-0.001
K	39	1.952	ug/L	184.051	619486	0.015
Ca	43	-8.544	ug/L	32.733	399	-0.000
> Sc	45		ug/L		783209	783208.627
Ti	47	-0.282	ug/L	15.313	553	-0.000
V	51	-0.012	ug/L	3374.775	-1007	-0.000
Cr	52	0.406	ug/L	10.383	2209	0.004
Cr	53		ug/L		151948	0.049
Mn	55	0.033	ug/L	18.183	1755	0.000
Fe	57	1.880	ug/L	29.225	7120	0.001
Co	59	0.002	ug/L	72.901	126	0.000
Ni	60	0.001	ug/L	1062.533	183	0.000
Cu	63		ug/L		313	0.000
Cu	65	-0.010	ug/L	63.017	173	-0.000
Zn	66	-0.017	ug/L	405.042	2473	-0.000
Zn	67		ug/L		16145	0.005
Zn	68		ug/L		3211	0.000
> Ge	74		ug/L		568211	568210.955
As	75	0.149	ug/L	194.407	86	0.000
Se	77		ug/L		13466	0.011
Se	82	0.022	ug/L	369.110	1	0.000
Kr	83		ug/L		192	-0.000
Sr	88	0.004	ug/L	37.296	222	0.000
Y	89		ug/L		72	-0.000
Mo	98	0.038	ug/L	16.299	231	0.001
Ag	107	0.004	ug/L	40.721	65	0.000
Cd	111	0.009	ug/L	49.404	28	0.000
Cd	114		ug/L		65	0.000
> In	115		ug/L		351028	351028.451
Sn	120	0.010	ug/L	70.211	853	0.000
Sb	121	0.236	ug/L	19.234	1815	0.005
Sb	123		ug/L		1419	0.004
Ba	135		ug/L		46	-0.000
Ba	137	-0.000	ug/L	848.129	63	-0.000
Ho	165		ug/L		31	0.000
> Lu	175		ug/L		518661	518660.701
Tl	205	0.228	ug/L	16.044	4661	0.008
Pb	208	0.003	ug/L	29.379	464	0.000
Bi	209		ug/L		607	-0.001
Th	232	0.043	ug/L	14.057	2029	0.003
U	238	0.007	ug/L	11.280	386	0.001

Sample ID: QC Std 9

Report Date/Time: Saturday, February 20, 2010 18:53:29

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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	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	0.9999
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	0.9999
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	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
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		93.2			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		91.1			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		88.3			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		97.1			
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

## QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

## QC Action

QC Action Line: No QC out of limits detected



# ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Saturday, February 20, 2010 19:21:24

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100220\QC Std 8.125

## Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	48.891	ug/L	3.081	97416	0.110
Be	9	47.520	ug/L	4.144	23169	0.026
B	11	97.780	ug/L	5.033	46230	0.052
Na	23	5328.270	ug/L	3.121	21263887	23.988
Mg	24	4799.783	ug/L	5.778	14157137	15.994
Al	27	5225.126	ug/L	8.076	22477398	25.324
P	31	4975.117	ug/L	6.337	1397815	1.572
K	39	4618.239	ug/L	8.383	31510184	34.854
Ca	43	4923.122	ug/L	4.016	80910	0.091
Sc	45		ug/L		885541	885541.120
Ti	47	47.207	ug/L	5.014	41656	0.046
V	51	47.309	ug/L	6.493	492699	0.559
Cr	52	48.068	ug/L	4.185	390060	0.442
Cr	53		ug/L		177406	0.055
Mn	55	49.960	ug/L	6.253	662417	0.748
Fe	57	4371.200	ug/L	3.735	1219214	1.370
Co	59	44.670	ug/L	4.447	466312	0.527
Ni	60	44.758	ug/L	5.410	104436	0.118
Cu	63		ug/L		253192	0.286
Cu	65	44.989	ug/L	5.583	128886	0.146
Zn	66	51.734	ug/L	0.811	96859	0.150
Zn	67		ug/L		30238	0.025
Zn	68		ug/L		75553	0.115
Ge	74		ug/L		626177	626176.728
As	75	47.165	ug/L	1.180	90917	0.146
Se	77		ug/L		16976	0.014
Se	82	50.137	ug/L	1.148	9921	0.016
Kr	83		ug/L		191	-0.000
Sr	88	54.156	ug/L	1.485	1097772	2.838
Y	89		ug/L		143	0.000
Mo	98	48.690	ug/L	1.653	254524	0.658
Ag	107	50.623	ug/L	1.780	437827	1.132
Cd	111	49.606	ug/L	1.503	111924	0.289
Cd	114		ug/L		265452	0.686
In	115		ug/L		386793	386793.285
Sn	120	51.071	ug/L	0.682	457230	1.180
Sb	121	50.423	ug/L	1.561	389506	1.007
Sb	123		ug/L		300948	0.778
Ba	135		ug/L		112798	0.208
Ba	137	50.040	ug/L	1.218	198245	0.366
Ho	165		ug/L		62	0.000
Lu	175		ug/L		541586	541586.379
Tl	205	51.745	ug/L	1.238	1025833	1.894
Pb	208	52.681	ug/L	0.794	1950381	3.601
Bi	209		ug/L		865	-0.001
Th	232	50.534	ug/L	1.935	2194605	4.053
U	238	52.563	ug/L	1.847	2286413	4.222

Sample ID: QC Std 8

Report Date/Time: Saturday, February 20, 2010 19:24:08

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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	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	0.9999
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	0.9999
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	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
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	97.782				
Be	9	95.040				
B	11	97.780				
Na	23	106.565				
Mg	24	95.996				
Al	27	103.468				
P	31	99.502				
K	39	92.365				
Ca	43	98.462				
> Sc	45		105.4			
Ti	47	94.413				
V	51	94.618				
Cr	52	96.135				
Cr	53					
Mn	55	99.920				
Fe	57	87.424				
Co	59	89.341				
Ni	60	89.517				
Cu	63					
Cu	65	89.979				
Zn	66	103.469				
Zn	67					
Zn	68					
> Ge	74		100.4			
As	75	94.331				
Se	77					
Se	82	100.275				
Kr	83					
Sr	88	108.312				
Y	89					
Mo	98	97.380				
Ag	107	101.246				
Cd	111	99.212				
Cd	114					
> In	115		97.3			
Sn	120	102.142				
Sb	121	100.846				
Sb	123					
Ba	135					
Ba	137	100.081				
Ho	165					
> Lu	175		101.3			
Tl	205	103.491				
Pb	208	105.362				
Bi	209					
Th	232	101.069				
U	238	105.125				

## QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 8	Fe	57	CCV is out of limits (+/- 10%)
QC Std 8	Co	59	CCV is out of limits (+/- 10%)
QC Std 8	Ni	60	CCV is out of limits (+/- 10%)
QC Std 8	Cu	65	CCV is out of limits (+/- 10%)

## QC Action

QC Action Line: Continue

## ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Saturday, February 20, 2010 19:27:33

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100220\QC Std 9.126

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	0.039	ug/L	1.912	111	0.000
	Be	9	-0.010	ug/L	26.066	15	-0.000
	B	11	3.963	ug/L	10.906	2009	0.002
	Na	23	0.225	ug/L	1532.931	32374	0.001
	Mg	24	0.350	ug/L	101.207	1000	0.001
	Al	27	0.303	ug/L	182.410	3667	0.001
	P	31	-3.293	ug/L	21.832	7171	-0.001
	K	39	-0.073	ug/L	1410.995	670722	-0.001
	Ca	43	-8.283	ug/L	30.116	445	-0.000
>	Sc	45		ug/L		864329	864329.071
	Ti	47	-0.265	ug/L	12.422	626	-0.000
	V	51	0.317	ug/L	137.281	2172	0.004
	Cr	52	0.330	ug/L	2.577	1831	0.003
	Cr	53		ug/L		157777	0.037
	Mn	55	0.025	ug/L	12.605	1845	0.000
	Fe	57	-0.566	ug/L	77.734	7198	-0.000
	Co	59	0.001	ug/L	54.267	127	0.000
	Ni	60	-0.008	ug/L	13.926	182	-0.000
	Cu	63		ug/L		376	0.000
	Cu	65	-0.009	ug/L	37.813	192	-0.000
	Zn	66	-0.097	ug/L	50.356	2433	-0.000
	Zn	67		ug/L		16769	0.005
	Zn	68		ug/L		3285	0.000
>	Ge	74		ug/L		590252	590252.213
	As	75	0.372	ug/L	51.295	495	0.001
	Se	77		ug/L		12328	0.008
	Se	82	0.025	ug/L	330.523	2	0.000
	Kr	83		ug/L		194	-0.000
	Sr	88	0.005	ug/L	12.554	236	0.000
	Y	89		ug/L		91	-0.000
	Mo	98	0.040	ug/L	11.791	246	0.001
	Ag	107	0.004	ug/L	28.298	67	0.000
	Cd	111	0.010	ug/L	60.738	31	0.000
	Cd	114		ug/L		45	-0.000
>	In	115		ug/L		358182	358182.019
	Sn	120	0.016	ug/L	41.268	925	0.000
	Sb	121	0.246	ug/L	18.304	1919	0.005
	Sb	123		ug/L		1490	0.004
	Ba	135		ug/L		46	0.000
	Ba	137	0.000	ug/L	423.517	64	0.000
	Ho	165		ug/L		34	0.000
>	Lu	175		ug/L		506097	506097.030
	Tl	205	0.215	ug/L	21.574	4307	0.008
	Pb	208	0.004	ug/L	22.393	481	0.000
	Bi	209		ug/L		588	-0.001
	Th	232	0.045	ug/L	21.626	2052	0.004
	U	238	0.007	ug/L	3.280	368	0.001

Sample ID: QC Std 9

Report Date/Time: Saturday, February 20, 2010 19:30:17

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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	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	0.9999
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	0.9999
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	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
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		102.9			
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		94.6			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		90.1			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		94.7			
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

Sample ID: QC Std 9

Report Date/Time: Saturday, February 20, 2010 19:30:17

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## ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Saturday, February 20, 2010 20:04:22

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100220\QC Std 8.132

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	49.513	ug/L	4.040	91239	0.111
Be	9	47.456	ug/L	1.200	21419	0.026
B	11	102.440	ug/L	2.809	44809	0.055
Na	23	5551.617	ug/L	5.161	20512717	24.993
Mg	24	5444.525	ug/L	2.829	14846565	18.142
Al	27	5122.594	ug/L	9.487	20319679	24.827
P	31	5368.442	ug/L	3.886	1395733	1.697
K	39	4690.749	ug/L	10.359	29645676	35.401
Ca	43	5066.349	ug/L	3.715	77019	0.093
> Sc	45		ug/L		818781	818781.298
Ti	47	48.015	ug/L	2.409	39206	0.047
V	51	48.803	ug/L	1.501	470830	0.576
Cr	52	48.987	ug/L	3.191	367854	0.450
Cr	53		ug/L		175392	0.069
Mn	55	50.702	ug/L	2.375	622520	0.759
Fe	57	4487.561	ug/L	0.784	1158431	1.406
Co	59	45.403	ug/L	2.494	438660	0.536
Ni	60	44.956	ug/L	2.449	97116	0.118
Cu	63		ug/L		233936	0.286
Cu	65	44.292	ug/L	2.225	117488	0.143
Zn	66	50.522	ug/L	3.455	89678	0.147
Zn	67		ug/L		28840	0.025
Zn	68		ug/L		70365	0.113
> Ge	74		ug/L		593333	593333.349
As	75	47.635	ug/L	1.619	87009	0.147
Se	77		ug/L		15773	0.014
Se	82	49.069	ug/L	1.577	9200	0.016
Kr	83		ug/L		199	-0.000
Sr	88	54.899	ug/L	0.555	1044383	2.877
Y	89		ug/L		148	0.000
Mo	98	49.620	ug/L	1.661	243411	0.671
Ag	107	50.287	ug/L	0.703	408149	1.124
Cd	111	49.421	ug/L	1.968	104631	0.288
Cd	114		ug/L		250019	0.689
> In	115		ug/L		362989	362989.240
Sn	120	52.256	ug/L	0.899	439035	1.207
Sb	121	51.043	ug/L	0.864	370036	1.019
Sb	123		ug/L		286486	0.789
Ba	135		ug/L		109176	0.217
Ba	137	51.557	ug/L	1.547	189544	0.377
Ho	165		ug/L		54	0.000
> Lu	175		ug/L		502590	502590.023
Tl	205	52.530	ug/L	1.677	966385	1.922
Pb	208	53.148	ug/L	1.844	1825901	3.633
Bi	209		ug/L		796	-0.001
Th	232	50.205	ug/L	1.188	2023552	4.026
U	238	51.480	ug/L	0.620	2078397	4.135

Sample ID: QC Std 8

Report Date/Time: Saturday, February 20, 2010 20:07:06

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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	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	0.9999
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	0.9999
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	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
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	99.027				
Be	9	94.913				
B	11	102.440				
Na	23	111.032				
Mg	24	108.891				
Al	27	101.437				
P	31	107.369				
K	39	93.815				
Ca	43	101.327				
> Sc	45		97.5			
Ti	47	96.030				
V	51	97.606				
Cr	52	97.975				
Cr	53					
Mn	55	101.404				
Fe	57	89.751				
Co	59	90.806				
Ni	60	89.912				
Cu	63					
Cu	65	88.583				
Zn	66	101.043				
Zn	67					
Zn	68					
> Ge	74		95.1			
As	75	95.271				
Se	77					
Se	82	98.138				
Kr	83					
Sr	88	109.798				
Y	89					
Mo	98	99.240				
Ag	107	100.574				
Cd	111	98.842				
Cd	114					
> In	115		91.3			
Sn	120	104.513				
Sb	121	102.086				
Sb	123					
Ba	135					
Ba	137	103.113				
Ho	165					
> Lu	175		94.0			
Tl	205	105.059				
Pb	208	106.295				
Bi	209					
Th	232	100.410				
U	238	102.960				

## QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 8	Na	23	CCV is out of limits (+/- 10%)
QC Std 8	Fe	57	CCV is out of limits (+/- 10%)
QC Std 8	Ni	60	CCV is out of limits (+/- 10%)
QC Std 8	Cu	65	CCV is out of limits (+/- 10%)

## QC Action

QC Action Line: Continue

## ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Saturday, February 20, 2010 20:10:31

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100220\QC Std 9.133

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.036	ug/L	8.735	99	0.000
Be	9	0.002	ug/L	768.349	20	0.000
B	11	3.932	ug/L	17.059	1874	0.002
Na	23	0.228	ug/L	1092.153	30702	0.001
Mg	24	0.243	ug/L	173.205	667	0.001
Al	27	0.437	ug/L	53.614	4001	0.002
P	31	-1.513	ug/L	21.642	7215	-0.000
K	39	2.966	ug/L	237.297	650165	0.022
Ca	43	-5.645	ug/L	43.265	458	-0.000
> Sc	45		ug/L		814292	814291.715
Ti	47	-0.241	ug/L	24.354	608	-0.000
V	51	0.202	ug/L	273.427	926	0.002
Cr	52	0.098	ug/L	45.852	-17	0.001
Cr	53		ug/L		152217	0.042
Mn	55	0.023	ug/L	24.454	1706	0.000
Fe	57	-1.087	ug/L	65.370	6646	-0.000
Co	59	0.001	ug/L	79.958	124	0.000
Ni	60	-0.006	ug/L	18.112	176	-0.000
Cu	63		ug/L		343	0.000
Cu	65	-0.011	ug/L	55.396	176	-0.000
Zn	66	-0.137	ug/L	23.856	2269	-0.000
Zn	67		ug/L		16424	0.006
Zn	68		ug/L		3169	0.000
> Ge	74		ug/L		566693	566693.488
As	75	0.653	ug/L	34.253	965	0.002
Se	77		ug/L		10790	0.006
Se	82	0.003	ug/L	5918.427	-2	0.000
Kr	83		ug/L		234	0.000
Sr	88	0.004	ug/L	19.885	219	0.000
Y	89		ug/L		84	-0.000
Mo	98	0.034	ug/L	29.593	207	0.000
Ag	107	0.002	ug/L	50.313	47	0.000
Cd	111	0.011	ug/L	81.803	32	0.000
Cd	114		ug/L		46	-0.000
> In	115		ug/L		347556	347556.215
Sn	120	0.010	ug/L	68.791	847	0.000
Sb	121	0.242	ug/L	22.016	1837	0.005
Sb	123		ug/L		1426	0.004
Ba	135		ug/L		45	0.000
Ba	137	-0.000	ug/L	926.286	58	-0.000
Ho	165		ug/L		26	-0.000
> Lu	175		ug/L		475890	475889.695
Tl	205	0.182	ug/L	24.764	3460	0.007
Pb	208	0.004	ug/L	13.162	449	0.000
Bi	209		ug/L		590	-0.001
Th	232	0.039	ug/L	18.930	1681	0.003
U	238	0.006	ug/L	17.613	308	0.000

Sample ID: QC Std 9

Report Date/Time: Saturday, February 20, 2010 20:13:15

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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	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	0.9999
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	0.9999
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	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
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		96.9			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		90.8			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		87.5			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		89.0			
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 9

Report Date/Time: Saturday, February 20, 2010 20:13:15

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## ICPMS#5 - Summary Report

Sample ID: 1202031027

Sample Date/Time: Saturday, February 20, 2010 20:16:40

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 948090|1|ba|

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100220\1202031027.134

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.034	ug/L	14.028	109	0.000
Be	9	0.000	ug/L	3279.705	21	0.000
B	11	1.955	ug/L	14.543	1157	0.001
Na	23	-0.561	ug/L	94.928	31368	-0.003
Mg	24	3.044	ug/L	31.591	9337	0.010
Al	27	4.937	ug/L	17.850	24688	0.024
P	31	-0.043	ug/L	2304.609	8595	-0.000
K	39	12.871	ug/L	39.817	805072	0.097
Ca	43	21.992	ug/L	13.094	989	0.000
> Sc	45		ug/L		922063	922062.537
Ti	47	0.115	ug/L	15.607	1010	0.000
V	51	-3.839	ug/L	36.093	-42870	-0.045
Cr	52	0.742	ug/L	17.142	5437	0.007
Cr	53		ug/L		465984	0.360
Mn	55	0.278	ug/L	4.159	5453	0.004
Fe	57	10.469	ug/L	8.409	10863	0.003
Co	59	0.001	ug/L	275.442	137	0.000
Ni	60	0.087	ug/L	6.900	423	0.000
Cu	63		ug/L		573	0.000
Cu	65	0.023	ug/L	37.484	302	0.000
Zn	66	0.047	ug/L	150.265	2594	0.000
Zn	67		ug/L		79526	0.116
Zn	68		ug/L		6631	0.006
> Ge	74		ug/L		571710	571710.182
As	75	0.815	ug/L	159.898	1270	0.003
Se	77		ug/L		34879	0.048
Se	82	0.141	ug/L	71.310	22	0.000
Kr	83		ug/L		178	-0.000
Sr	88	0.105	ug/L	0.357	1970	0.005
Y	89		ug/L		107	0.000
Mo	98	0.036	ug/L	7.024	211	0.000
Ag	107	0.004	ug/L	4.693	60	0.000
Cd	111	0.010	ug/L	82.205	30	0.000
Cd	114		ug/L		39	-0.000
> In	115		ug/L		334457	334457.312
Sn	120	0.022	ug/L	23.724	911	0.001
Sb	121	0.124	ug/L	23.890	976	0.002
Sb	123		ug/L		740	0.002
Ba	135		ug/L		92	0.000
Ba	137	0.027	ug/L	14.220	150	0.000
Ho	165		ug/L		33	0.000
> Lu	175		ug/L		463760	463760.009
Tl	205	0.071	ug/L	3.927	1502	0.003
Pb	208	0.013	ug/L	3.073	718	0.001
Bi	209		ug/L		391	-0.001
Th	232	0.025	ug/L	18.129	1125	0.002
U	238	0.001	ug/L	17.659	122	0.000

Sample ID: 1202031027

Report Date/Time: Saturday, February 20, 2010 20:19:23

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	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	0.9999
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	0.9999
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	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
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		109.8			
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		91.6			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		84.2			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		86.8			
Tl	205					
Pb	208					
Bi	209					
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: 1202031027

Report Date/Time: Saturday, February 20, 2010 20:19:23

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# ICPMS#5 - Summary Report

Sample ID: 1202031028

Sample Date/Time: Saturday, February 20, 2010 20:22:48

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 948090|1|ba|

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100220\1202031028.135

## Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	50.395	ug/L	4.013	101055	0.113
Be	9	50.439	ug/L	4.686	24755	0.028
B	11	120.055	ug/L	3.914	57139	0.064
Na	23	2607.899	ug/L	6.221	10485080	11.741
Mg	24	2656.236	ug/L	11.785	7872737	8.851
Al	27	2651.733	ug/L	4.872	11453363	12.852
P	31	2614.169	ug/L	4.299	743780	0.826
K	39	2294.612	ug/L	7.669	16093034	17.317
Ca	43	2357.146	ug/L	7.520	39263	0.043
> Sc	45		ug/L		891456	891456.401
Ti	47	49.860	ug/L	4.115	44258	0.049
V	51	43.843	ug/L	6.993	459539	0.518
Cr	52	52.311	ug/L	4.281	427423	0.481
Cr	53		ug/L		511632	0.429
Mn	55	53.869	ug/L	4.911	719281	0.806
Fe	57	2003.212	ug/L	5.204	566322	0.628
Co	59	46.866	ug/L	4.514	492571	0.553
Ni	60	46.244	ug/L	4.946	108636	0.122
Cu	63		ug/L		263400	0.296
Cu	65	46.191	ug/L	3.767	133288	0.149
Zn	66	52.060	ug/L	0.936	91878	0.151
Zn	67		ug/L		95843	0.139
Zn	68		ug/L		74945	0.122
> Ge	74		ug/L		590361	590361.280
As	75	50.708	ug/L	1.992	92176	0.156
Se	77		ug/L		41069	0.057
Se	82	50.054	ug/L	2.738	9338	0.016
Kr	83		ug/L		235	0.000
Sr	88	61.301	ug/L	0.615	1096200	3.212
Y	89		ug/L		180	0.000
Mo	98	55.204	ug/L	1.564	254558	0.746
Ag	107	56.577	ug/L	1.126	431658	1.265
Cd	111	53.354	ug/L	0.718	106188	0.311
Cd	114		ug/L		254158	0.745
> In	115		ug/L		341201	341200.773
Sn	120	56.864	ug/L	0.995	449011	1.314
Sb	121	57.992	ug/L	0.872	395173	1.158
Sb	123		ug/L		308307	0.903
Ba	135		ug/L		108598	0.227
Ba	137	54.335	ug/L	2.310	190337	0.397
Ho	165		ug/L		57	0.000
> Lu	175		ug/L		478849	478849.148
Tl	205	54.681	ug/L	2.265	958521	2.001
Pb	208	57.202	ug/L	1.167	1872576	3.910
Bi	209		ug/L		1557752	3.251
Th	232	53.409	ug/L	0.936	2051178	4.283
U	238	55.128	ug/L	0.809	2120611	4.428

Sample ID: 1202031028

Report Date/Time: Saturday, February 20, 2010 20:25:33

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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	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	0.9999
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	0.9999
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	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
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		106.1			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		94.6			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		85.9			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		89.6			
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: 1202031028

Report Date/Time: Saturday, February 20, 2010 20:25:33

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## ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Saturday, February 20, 2010 20:28:57

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100220\QC Std 8.136

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	47.552	ug/L	3.689	90256	0.107
Be	9	45.173	ug/L	4.658	20982	0.025
B	11	99.380	ug/L	6.464	44735	0.053
Na	23	4936.727	ug/L	3.881	18798509	22.225
Mg	24	4800.513	ug/L	8.841	13470361	15.996
Al	27	5271.771	ug/L	5.816	21519027	25.550
P	31	5201.483	ug/L	4.768	1392617	1.644
K	39	5121.084	ug/L	7.360	33188241	38.649
Ca	43	4965.173	ug/L	4.701	77719	0.092
> Sc	45		ug/L		843631	843630.518
Ti	47	46.406	ug/L	4.978	39033	0.045
V	51	46.858	ug/L	2.020	465595	0.553
Cr	52	47.594	ug/L	3.647	368113	0.438
Cr	53		ug/L		181975	0.071
Mn	55	49.326	ug/L	4.022	623607	0.738
Fe	57	4308.096	ug/L	3.469	1145017	1.350
Co	59	43.771	ug/L	3.410	435502	0.517
Ni	60	44.180	ug/L	3.561	98278	0.116
Cu	63		ug/L		235895	0.280
Cu	65	43.676	ug/L	3.895	119302	0.141
Zn	66	50.521	ug/L	2.208	90433	0.147
Zn	67		ug/L		29204	0.025
Zn	68		ug/L		70838	0.113
> Ge	74		ug/L		598278	598277.557
As	75	46.764	ug/L	2.477	86117	0.144
Se	77		ug/L		16258	0.014
Se	82	48.877	ug/L	3.279	9240	0.015
Kr	83		ug/L		212	-0.000
Sr	88	54.566	ug/L	0.708	1070601	2.859
Y	89		ug/L		152	0.000
Mo	98	48.205	ug/L	0.833	243901	0.651
Ag	107	49.398	ug/L	2.156	413490	1.104
Cd	111	49.168	ug/L	0.712	107370	0.287
Cd	114		ug/L		256084	0.684
> In	115		ug/L		374356	374355.544
Sn	120	51.007	ug/L	1.519	441973	1.178
Sb	121	50.619	ug/L	0.875	378474	1.011
Sb	123		ug/L		290584	0.776
Ba	135		ug/L		110050	0.215
Ba	137	51.379	ug/L	1.749	192427	0.376
Ho	165		ug/L		58	0.000
> Lu	175		ug/L		512024	512024.461
Tl	205	52.417	ug/L	2.604	982192	1.918
Pb	208	52.947	ug/L	1.054	1853136	3.619
Bi	209		ug/L		994	-0.000
Th	232	49.714	ug/L	2.920	2040878	3.987
U	238	50.839	ug/L	2.547	2090461	4.084

Sample ID: QC Std 8

Report Date/Time: Saturday, February 20, 2010 20:31:40

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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	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	0.9999
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	0.9999
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	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
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	95.103				
Be	9	90.345				
B	11	99.380				
Na	23	98.735				
Mg	24	96.010				
Al	27	104.391				
P	31	104.030				
K	39	102.422				
Ca	43	99.303				
> Sc	45		100.4			
Ti	47	92.811				
V	51	93.716				
Cr	52	95.188				
Cr	53					
Mn	55	98.652				
Fe	57	86.162				
Co	59	87.542				
Ni	60	88.361				
Cu	63					
Cu	65	87.353				
Zn	66	101.042				
Zn	67					
Zn	68					
> Ge	74		95.9			
As	75	93.527				
Se	77					
Se	82	97.754				
Kr	83					
Sr	88	109.133				
Y	89					
Mo	98	96.410				
Ag	107	98.795				
Cd	111	98.337				
Cd	114					
> In	115		94.2			
Sn	120	102.013				
Sb	121	101.237				
Sb	123					
Ba	135					
Ba	137	102.758				
Ho	165					
> Lu	175		95.8			
Tl	205	104.834				
Pb	208	105.894				
Bi	209					
Th	232	99.428				
U	238	101.679				

### QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 8	Fe	57	CCV is out of limits (+/- 10%)
QC Std 8	Co	59	CCV is out of limits (+/- 10%)
QC Std 8	Ni	60	CCV is out of limits (+/- 10%)
QC Std 8	Cu	65	CCV is out of limits (+/- 10%)

## QC Action

QC Action Line: Continue



## ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Saturday, February 20, 2010 20:35:05

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100220\QC Std 9.137

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.030	ug/L	3.952	88	0.000
Be	9	0.005	ug/L	53.140	21	0.000
B	11	4.996	ug/L	15.515	2344	0.003
Na	23	0.507	ug/L	294.624	31703	0.002
Mg	24	0.492	ug/L	44.389	1333	0.002
Al	27	-0.064	ug/L	793.299	2000	-0.000
P	31	-1.088	ug/L	84.117	7340	-0.000
K	39	-0.318	ug/L	1688.224	631331	-0.002
Ca	43	-6.278	ug/L	7.137	450	-0.000
> Sc	45		ug/L		815784	815783.589
Ti	47	-0.238	ug/L	19.900	612	-0.000
V	51	0.077	ug/L	733.195	-282	0.001
Cr	52	0.130	ug/L	64.259	232	0.001
Cr	53		ug/L		153755	0.043
Mn	55	0.022	ug/L	16.167	1699	0.000
Fe	57	0.122	ug/L	268.649	6969	0.000
Co	59	0.004	ug/L	35.367	150	0.000
Ni	60	-0.006	ug/L	71.048	175	-0.000
Cu	63		ug/L		334	0.000
Cu	65	-0.010	ug/L	21.994	180	-0.000
Zn	66	-0.139	ug/L	31.574	2242	-0.000
Zn	67		ug/L		16329	0.006
Zn	68		ug/L		3166	0.000
> Ge	74		ug/L		560562	560561.945
As	75	0.550	ug/L	60.149	777	0.002
Se	77		ug/L		10910	0.006
Se	82	-0.069	ug/L	271.887	-15	-0.000
Kr	83		ug/L		203	0.000
Sr	88	0.005	ug/L	28.112	230	0.000
Y	89		ug/L		92	0.000
Mo	98	0.038	ug/L	9.605	224	0.001
Ag	107	0.004	ug/L	57.498	62	0.000
Cd	111	0.008	ug/L	19.766	27	0.000
Cd	114		ug/L		46	-0.000
> In	115		ug/L		343792	343792.210
Sn	120	0.018	ug/L	30.911	906	0.000
Sb	121	0.246	ug/L	19.297	1839	0.005
Sb	123		ug/L		1456	0.004
Ba	135		ug/L		51	0.000
Ba	137	-0.000	ug/L	4229.108	59	-0.000
Ho	165		ug/L		34	0.000
> Lu	175		ug/L		476330	476329.620
Tl	205	0.330	ug/L	13.852	6054	0.012
Pb	208	0.005	ug/L	14.519	486	0.000
Bi	209		ug/L		590	-0.001
Th	232	0.040	ug/L	19.494	1723	0.003
U	238	0.007	ug/L	25.197	349	0.001

Sample ID: QC Std 9

Report Date/Time: Saturday, February 20, 2010 20:37:49

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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	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	0.9999
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	0.9999
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	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
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		97.1			
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		89.8			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		86.5			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		89.1			
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

## QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

## QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Saturday, February 20, 2010 21:05:49

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100220\QC Std 8.142

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	48.908	ug/L	2.848	88038	0.110
Be	9	46.737	ug/L	3.578	20590	0.026
B	11	101.933	ug/L	5.732	43515	0.054
Na	23	6074.910	ug/L	0.691	21899493	27.349
Mg	24	6030.561	ug/L	6.660	16068974	20.095
Al	27	5463.079	ug/L	2.339	21189414	26.477
P	31	5628.520	ug/L	3.834	1428690	1.779
K	39	5610.318	ug/L	14.370	34493397	42.341
Ca	43	5212.095	ug/L	3.849	77358	0.096
> Sc	45		ug/L		799811	799811.141
Ti	47	49.720	ug/L	5.427	39594	0.049
V	51	48.734	ug/L	4.276	459025	0.576
Cr	52	50.146	ug/L	5.291	367555	0.461
Cr	53		ug/L		197156	0.102
Mn	55	50.943	ug/L	3.397	610727	0.763
Fe	57	4480.298	ug/L	6.188	1128334	1.404
Co	59	45.355	ug/L	4.541	427781	0.535
Ni	60	45.594	ug/L	5.514	96115	0.120
Cu	63		ug/L		229720	0.287
L Cu	65	44.461	ug/L	4.147	115140	0.144
Zn	66	51.735	ug/L	1.469	87935	0.150
Zn	67		ug/L		29440	0.028
Zn	68		ug/L		69291	0.117
> Ge	74		ug/L		568458	568457.808
As	75	47.976	ug/L	0.164	83962	0.148
Se	77		ug/L		18115	0.019
Se	82	50.087	ug/L	2.590	8997	0.016
L Kr	83		ug/L		187	-0.000
Sr	88	55.212	ug/L	1.092	1025481	2.893
Y	89		ug/L		135	0.000
Mo	98	49.265	ug/L	2.964	235926	0.666
Ag	107	50.154	ug/L	1.288	397426	1.121
Cd	111	49.936	ug/L	3.463	103209	0.291
Cd	114		ug/L		248651	0.702
> In	115		ug/L		354411	354411.034
Sn	120	52.754	ug/L	0.564	432732	1.219
Sb	121	51.671	ug/L	2.449	365693	1.032
L Sb	123		ug/L		283789	0.801
Ba	135		ug/L		108776	0.223
Ba	137	53.124	ug/L	0.653	189372	0.389
Ho	165		ug/L		60	0.000
> Lu	175		ug/L		487280	487279.567
Tl	205	53.589	ug/L	1.639	955879	1.961
Pb	208	54.008	ug/L	0.448	1799138	3.692
Bi	209		ug/L		839	-0.000
Th	232	51.181	ug/L	1.563	2000050	4.104
L U	238	51.237	ug/L	0.659	2005575	4.116

Sample ID: QC Std 8

Report Date/Time: Saturday, February 20, 2010 21:08:32

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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	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	0.9999
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	0.9999
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	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9998

Sample ID: QC Std 8

Report Date/Time: Saturday, February 20, 2010 21:08:32

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## QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Li	7	97.815				
Be	9	93.475				
B	11	101.933				
Na	23	121.498				
Mg	24	120.611				
Al	27	108.180				
P	31	112.570				
K	39	112.206				
Ca	43	104.242				
> Sc	45		95.2			
Ti	47	99.440				
V	51	97.467				
Cr	52	100.292				
Cr	53					
Mn	55	101.887				
Fe	57	89.606				
Co	59	90.710				
Ni	60	91.188				
Cu	63					
Cu	65	88.921				
Zn	66	103.471				
Zn	67					
Zn	68					
> Ge	74		91.1			
As	75	95.952				
Se	77					
Se	82	100.173				
Kr	83					
Sr	88	110.425				
Y	89					
Mo	98	98.530				
Ag	107	100.308				
Cd	111	99.871				
Cd	114					
> In	115		89.2			
Sn	120	105.509				
Sb	121	103.342				
Sb	123					
Ba	135					
Ba	137	106.247				
Ho	165					
> Lu	175		91.2			
Tl	205	107.179				
Pb	208	108.016				
Bi	209					
Th	232	102.362				
U	238	102.474				

## QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 8	Na	23	CCV is out of limits (+/- 10%)
QC Std 8	Mg	24	CCV is out of limits (+/- 10%)
QC Std 8	P	31	CCV is out of limits (+/- 10%)
QC Std 8	K	39	CCV is out of limits (+/- 10%)
QC Std 8	Fe	57	CCV is out of limits (+/- 10%)
QC Std 8	Cu	65	CCV is out of limits (+/- 10%)
QC Std 8	Sr	88	CCV is out of limits (+/- 10%)

Sample ID: QC Std 8

Report Date/Time: Saturday, February 20, 2010 21:08:32

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## QC Action

QC Action Line: Continue

## ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Saturday, February 20, 2010 21:11:57

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100220\QC Std 9.143

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.033	ug/L	8.295	93	0.000
Be	9	-0.004	ug/L	274.304	17	-0.000
B	11	4.359	ug/L	16.510	2044	0.002
Na	23	0.251	ug/L	1017.876	30368	0.001
Mg	24	0.496	ug/L	86.605	1333	0.002
Al	27	0.281	ug/L	106.220	3334	0.001
P	31	-0.839	ug/L	422.592	7314	-0.000
K	39	15.486	ug/L	61.340	719756	0.117
Ca	43	-4.732	ug/L	59.652	467	-0.000
> Sc	45		ug/L		805670	805669.719
Ti	47	-0.265	ug/L	3.480	583	-0.000
V	51	0.075	ug/L	1065.195	-268	0.001
Cr	52	0.071	ug/L	72.938	-212	0.001
Cr	53		ug/L		177379	0.075
Mn	55	0.035	ug/L	14.997	1838	0.001
Fe	57	2.804	ug/L	17.154	7560	0.001
Co	59	0.001	ug/L	167.113	122	0.000
Ni	60	-0.009	ug/L	87.772	168	-0.000
Cu	63		ug/L		326	0.000
Cu	65	-0.007	ug/L	168.291	184	-0.000
Zn	66	-0.171	ug/L	20.104	2104	-0.000
Zn	67		ug/L		17598	0.009
Zn	68		ug/L		3339	0.001
> Ge	74		ug/L		538742	538741.596
As	75	0.740	ug/L	16.016	1064	0.002
Se	77		ug/L		13295	0.012
Se	82	0.022	ug/L	581.762	1	0.000
Kr	83		ug/L		193	0.000
Sr	88	0.005	ug/L	33.528	232	0.000
Y	89		ug/L		88	0.000
Mo	98	0.039	ug/L	25.694	224	0.001
Ag	107	0.006	ug/L	16.610	72	0.000
Cd	111	0.015	ug/L	17.701	38	0.000
Cd	114		ug/L		53	0.000
> In	115		ug/L		335953	335953.388
Sn	120	0.026	ug/L	121.192	941	0.001
Sb	121	0.245	ug/L	17.657	1792	0.005
Sb	123		ug/L		1461	0.004
Ba	135		ug/L		45	0.000
Ba	137	0.001	ug/L	199.608	62	0.000
Ho	165		ug/L		29	0.000
> Lu	175		ug/L		462005	462004.692
Tl	205	0.222	ug/L	20.198	4054	0.008
Pb	208	0.005	ug/L	33.542	460	0.000
Bi	209		ug/L		584	-0.001
Th	232	0.041	ug/L	20.705	1702	0.003
U	238	0.007	ug/L	19.785	342	0.001

Sample ID: QC Std 9

Report Date/Time: Saturday, February 20, 2010 21:14:41

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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	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	0.9999
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	0.9999
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	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
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		95.9			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		86.3			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		84.5			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		86.4			
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: 1202031029  
 Sample Date/Time: Saturday, February 20, 2010 21:36:35  
 Sample Type:  
 Sample Description: LANL 6020 DUP  
 Number of Replicates: 3  
 Batch ID: 948090|1|ba|  
 Method File: c:\elandata\Method\6020 2.mth  
 Dataset File: c:\elandata\Dataset\100220\1202031029.147

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	16.377	ug/L	3.615	36094	0.037
Be	9	0.046	ug/L	36.108	47	0.000
B	11	37.252	ug/L	2.968	19607	0.020
Na	23	25260.234	ug/L	5.400	111250193	113.721
Mg	24	7877.537	ug/L	10.648	25646719	26.250
Al	27	745.110	ug/L	11.575	3537109	3.611
P	31	49.775	ug/L	10.491	24510	0.016
K	39	2862.947	ug/L	4.667	21907968	21.607
Ca	43	34897.849	ug/L	1.990	630189	0.644
> Sc	45		ug/L		978280	978279.700
Ti	47	13.221	ug/L	0.683	13603	0.013
V	51	-4.304	ug/L	18.231	-51065	-0.051
Cr	52	2.012	ug/L	8.379	17184	0.019
Cr	53		ug/L		638628	0.508
Mn	55	39.319	ug/L	1.254	577390	0.589
Fe	57	514.237	ug/L	3.398	165902	0.161
Co	59	0.280	ug/L	4.505	3374	0.003
Ni	60	1.392	ug/L	3.609	3812	0.004
Cu	63		ug/L		9883	0.010
Cu	65	1.413	ug/L	3.054	4719	0.005
Zn	66	3.347	ug/L	3.572	8406	0.010
Zn	67		ug/L		86673	0.122
Zn	68		ug/L		13590	0.018
> Ge	74		ug/L		595173	595173.179
As	75	3.902	ug/L	34.213	6977	0.012
Se	77		ug/L		67356	0.100
Se	82	0.214	ug/L	72.722	37	0.000
Kr	83		ug/L		261	0.000
Sr	88	289.605	ug/L	1.077	5149960	15.176
Y	89		ug/L		11224	0.033
Mo	98	5.799	ug/L	1.698	26638	0.078
Ag	107	0.010	ug/L	13.444	106	0.000
Cd	111	0.031	ug/L	29.515	71	0.000
Cd	114		ug/L		227	0.001
> In	115		ug/L		339329	339328.642
Sn	120	0.075	ug/L	4.053	1340	0.002
Sb	121	0.106	ug/L	0.777	871	0.002
Sb	123		ug/L		991	0.003
Ba	135		ug/L		113087	0.242
Ba	137	57.668	ug/L	1.521	197360	0.422
Ho	165		ug/L		650	0.001
> Lu	175		ug/L		467862	467861.885
Tl	205	0.041	ug/L	7.265	997	0.001
Pb	208	0.652	ug/L	1.173	21172	0.045
Bi	209		ug/L		556	-0.001
Th	232	0.209	ug/L	2.343	8033	0.017
U	238	3.429	ug/L	0.196	128964	0.275

## 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	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	0.9999
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	0.9999
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	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
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		116.5			
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		95.4			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		85.4			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		87.5			
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: 1202031029

Report Date/Time: Saturday, February 20, 2010 21:39:20

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## ICPMS#5 - Summary Report

Sample ID: 1202031030

Sample Date/Time: Saturday, February 20, 2010 21:42:46

Sample Type:

Sample Description: LANL 6020 MS

Number of Replicates: 3

Batch ID: 948090|1|ba|

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100220\1202031030.148

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	59.099	ug/L	2.581	130411	0.133
Be	9	43.363	ug/L	4.032	23419	0.024
B	11	139.666	ug/L	4.526	73036	0.074
Na	23	26676.961	ug/L	2.167	117721811	120.099
Mg	24	9777.728	ug/L	6.998	31904603	32.581
Al	27	3382.726	ug/L	1.628	16067947	16.394
P	31	2543.486	ug/L	2.464	796745	0.804
K	39	5093.061	ug/L	5.219	38408863	38.437
Ca	43	36044.504	ug/L	2.996	651980	0.665
> Sc	45		ug/L		980236	980235.525
Ti	47	60.331	ug/L	2.516	58730	0.059
V	51	49.644	ug/L	2.408	573390	0.586
Cr	52	50.187	ug/L	2.731	451266	0.461
Cr	53		ug/L		633323	0.501
Mn	55	84.212	ug/L	2.591	1236676	1.260
Fe	57	2292.281	ug/L	3.407	712061	0.718
Co	59	42.434	ug/L	2.869	490790	0.501
Ni	60	42.632	ug/L	4.386	110221	0.112
Cu	63		ug/L		269371	0.275
Cu	65	42.144	ug/L	2.953	133832	0.136
Zn	66	54.943	ug/L	1.129	97147	0.160
Zn	67		ug/L		99340	0.144
Zn	68		ug/L		81216	0.132
> Ge	74		ug/L		592339	592338.505
As	75	82.395	ug/L	3.481	150381	0.254
Se	77		ug/L		62274	0.092
Se	82	19.809	ug/L	1.183	3706	0.006
Kr	83		ug/L		298	0.000
Sr	88	344.702	ug/L	3.204	6125209	18.063
Y	89		ug/L		11412	0.033
Mo	98	61.424	ug/L	0.788	281556	0.830
Ag	107	54.982	ug/L	1.763	416921	1.229
Cd	111	11.074	ug/L	0.715	21916	0.065
Cd	114		ug/L		50838	0.150
> In	115		ug/L		339150	339150.372
Sn	120	57.424	ug/L	0.625	450683	1.327
Sb	121	216.840	ug/L	0.341	1468306	4.329
Sb	123		ug/L		1167117	3.441
Ba	135		ug/L		221884	0.473
Ba	137	112.515	ug/L	0.310	385982	0.823
Ho	165		ug/L		902	0.002
> Lu	175		ug/L		468998	468998.397
Tl	205	99.993	ug/L	1.713	1716353	3.659
Pb	208	46.774	ug/L	1.187	1499629	3.197
Bi	209		ug/L		1130	0.000
Th	232	53.966	ug/L	2.481	2029624	4.328
U	238	57.993	ug/L	1.592	2184693	4.659

Sample ID: 1202031030

Report Date/Time: Saturday, February 20, 2010 21:45:31

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	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	0.9999
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	0.9999
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	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9998

### 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		116.7			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		94.9			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		85.3			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		87.8			
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected



## ICPMS#5 - Summary Report

Sample ID: 1202031031  
 Sample Date/Time: Saturday, February 20, 2010 21:48:55  
 Sample Type:  
 Sample Description: LANL 6020 SDILT  
 Number of Replicates: 3  
 Batch ID: 948090|5|ba|  
 Method File: c:\elandata\Method\6020 2.mth  
 Dataset File: c:\elandata\Dataset\100220\1202031031.149

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	3.543	ug/L	3.789	6852	0.008
Be	9	0.016	ug/L	49.889	27	0.000
B	11	12.242	ug/L	2.662	5756	0.007
Na	23	4365.258	ug/L	3.870	16831503	19.652
Mg	24	1853.901	ug/L	14.464	5287382	6.178
Al	27	176.553	ug/L	8.837	734528	0.856
P	31	12.324	ug/L	21.459	11306	0.004
K	39	581.061	ug/L	13.653	4410727	4.385
Ca	43	7427.696	ug/L	5.661	117639	0.137
> Sc	45		ug/L		855311	855311.142
Ti	47	2.934	ug/L	4.656	3291	0.003
V	51	-0.360	ug/L	285.923	-4891	-0.004
Cr	52	0.234	ug/L	59.802	1032	0.002
Cr	53		ug/L		317272	0.226
Mn	55	8.718	ug/L	3.111	113037	0.130
Fe	57	118.408	ug/L	5.305	38981	0.037
Co	59	0.059	ug/L	9.175	714	0.001
Ni	60	0.332	ug/L	6.734	944	0.001
Cu	63		ug/L		2223	0.002
Cu	65	0.327	ug/L	5.459	1120	0.001
Zn	66	0.785	ug/L	2.070	3805	0.002
Zn	67		ug/L		29479	0.028
Zn	68		ug/L		5873	0.005
> Ge	74		ug/L		569209	569209.365
As	75	1.487	ug/L	11.995	2435	0.005
Se	77		ug/L		28962	0.038
Se	82	0.208	ug/L	22.905	34	0.000
Kr	83		ug/L		177	-0.000
Sr	88	60.804	ug/L	0.829	1106242	3.186
Y	89		ug/L		2375	0.007
Mo	98	1.116	ug/L	2.173	5283	0.015
Ag	107	0.004	ug/L	7.984	63	0.000
Cd	111	0.013	ug/L	25.152	36	0.000
Cd	114		ug/L		74	0.000
> In	115		ug/L		347161	347161.448
Sn	120	0.014	ug/L	26.210	875	0.000
Sb	121	0.041	ug/L	12.683	443	0.001
Sb	123		ug/L		391	0.001
Ba	135		ug/L		23823	0.050
Ba	137	11.759	ug/L	0.757	41162	0.086
Ho	165		ug/L		152	0.000
> Lu	175		ug/L		477959	477958.859
Tl	205	1.296	ug/L	20.534	22964	0.047
Pb	208	0.156	ug/L	1.944	5428	0.011
Bi	209		ug/L		446	-0.001
Th	232	0.048	ug/L	7.092	2045	0.004
U	238	0.678	ug/L	0.506	26133	0.054

## 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	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	0.9999
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	0.9999
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	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
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		101.8			
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		91.2			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		87.4			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		89.4			
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

Sample ID: 1202031031

Report Date/Time: Saturday, February 20, 2010 21:51:39

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## ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Saturday, February 20, 2010 21:55:03

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100220\QC Std 8.150

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	46.095	ug/L	0.302	85623	0.104
Be	9	45.473	ug/L	3.948	20677	0.025
B	11	99.780	ug/L	4.455	43987	0.053
Na	23	5771.407	ug/L	12.979	21458903	25.983
Mg	24	5438.233	ug/L	6.921	14944676	18.121
Al	27	5865.276	ug/L	6.051	23444079	28.426
P	31	5586.406	ug/L	0.985	1463656	1.765
K	39	4779.846	ug/L	3.772	30391479	36.073
Ca	43	5055.131	ug/L	1.200	77449	0.093
> Sc	45		ug/L		824707	824707.167
Ti	47	48.260	ug/L	2.387	39705	0.047
V	51	47.403	ug/L	2.319	460732	0.560
Cr	52	47.709	ug/L	2.341	361033	0.439
Cr	53		ug/L		205486	0.104
Mn	55	48.853	ug/L	1.083	604484	0.731
Fe	57	4307.578	ug/L	1.632	1120360	1.350
Co	59	43.814	ug/L	0.825	426571	0.517
Ni	60	44.136	ug/L	2.395	96082	0.116
Cu	63		ug/L		226799	0.275
Cu	65	43.055	ug/L	1.078	115088	0.139
Zn	66	50.702	ug/L	0.986	84985	0.147
Zn	67		ug/L		29069	0.029
Zn	68		ug/L		68303	0.117
> Ge	74		ug/L		560279	560278.807
As	75	48.443	ug/L	1.906	83562	0.149
Se	77		ug/L		19259	0.021
Se	82	49.671	ug/L	2.595	8793	0.016
Kr	83		ug/L		203	0.000
Sr	88	55.002	ug/L	2.290	1015961	2.882
Y	89		ug/L		138	0.000
Mo	98	49.033	ug/L	1.586	233572	0.663
Ag	107	50.347	ug/L	2.529	396764	1.126
Cd	111	49.736	ug/L	0.869	102256	0.290
Cd	114		ug/L		246104	0.698
> In	115		ug/L		352474	352474.349
Sn	120	53.308	ug/L	0.812	434870	1.232
Sb	121	52.464	ug/L	1.018	369316	1.047
Sb	123		ug/L		287275	0.815
Ba	135		ug/L		109547	0.227
Ba	137	54.101	ug/L	1.016	190533	0.396
Ho	165		ug/L		59	0.000
> Lu	175		ug/L		481439	481439.473
Tl	205	54.527	ug/L	0.683	961061	1.996
Pb	208	54.686	ug/L	0.669	1799834	3.738
Bi	209		ug/L		943	-0.000
Th	232	51.236	ug/L	0.689	1978311	4.109
U	238	51.652	ug/L	1.302	1997549	4.149

Sample ID: QC Std 8

Report Date/Time: Saturday, February 20, 2010 21:57:46

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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	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	0.9999
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	0.9999
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	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
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	92.190				
Be	9	90.948				
B	11	99.780				
Na	23	115.428				
Mg	24	108.765				
Al	27	116.144				
P	31	111.728				
K	39	95.597				
Ca	43	101.103				
> Sc	45		98.2			
Ti	47	96.519				
V	51	94.807				
Cr	52	95.418				
Cr	53					
Mn	55	97.706				
Fe	57	86.152				
Co	59	87.629				
Ni	60	88.272				
Cu	63					
Cu	65	86.109				
Zn	66	101.405				
Zn	67					
Zn	68					
> Ge	74		89.8			
As	75	96.886				
Se	77					
Se	82	99.343				
Kr	83					
Sr	88	110.004				
Y	89					
Mo	98	98.066				
Ag	107	100.693				
Cd	111	99.472				
Cd	114					
> In	115		88.7			
Sn	120	106.615				
Sb	121	104.927				
Sb	123					
Ba	135					
Ba	137	108.201				
Ho	165					
> Lu	175		90.1			
Tl	205	109.055				
Pb	208	109.372				
Bi	209					
Th	232	102.473				
U	238	103.303				

## QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 8	Na	23	CCV is out of limits (+/- 10%)
QC Std 8	Al	27	CCV is out of limits (+/- 10%)
QC Std 8	P	31	CCV is out of limits (+/- 10%)
QC Std 8	Fe	57	CCV is out of limits (+/- 10%)
QC Std 8	Co	59	CCV is out of limits (+/- 10%)
QC Std 8	Ni	60	CCV is out of limits (+/- 10%)
QC Std 8	Cu	65	CCV is out of limits (+/- 10%)

Sample ID: QC Std 8

Report Date/Time: Saturday, February 20, 2010 21:57:46

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QC Std 8

Sr

88CCV is out of limits (+/- 10%)

## QC Action

QC Action Line: Continue

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Sample ID: QC Std 8

Report Date/Time: Saturday, February 20, 2010 21:57:46

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## ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Saturday, February 20, 2010 22:01:11

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100220\QC Std 9.151

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.028	ug/L	27.827	85	0.000
Be	9	0.006	ug/L	82.965	21	0.000
B	11	4.485	ug/L	13.291	2111	0.002
Na	23	0.943	ug/L	227.492	33039	0.004
Mg	24	0.370	ug/L	98.801	1000	0.001
Al	27	0.444	ug/L	113.662	4001	0.002
P	31	-0.491	ug/L	385.203	7455	-0.000
K	39	12.922	ug/L	120.417	708615	0.098
Ca	43	-5.595	ug/L	82.463	457	-0.000
Sc	45		ug/L		812353	812352.916
Ti	47	-0.327	ug/L	12.390	538	-0.000
V	51	0.558	ug/L	11.510	4351	0.007
Cr	52	0.008	ug/L	1157.302	-691	0.000
Cr	53		ug/L		189322	0.088
Mn	55	0.033	ug/L	24.330	1822	0.000
Fe	57	0.628	ug/L	138.968	7066	0.000
Co	59	-0.000	ug/L	2143.965	114	-0.000
Ni	60	-0.001	ug/L	642.311	186	-0.000
Cu	63		ug/L		354	0.000
Cu	65	-0.010	ug/L	117.438	179	-0.000
Zn	66	-0.167	ug/L	13.606	2161	-0.000
Zn	67		ug/L		17320	0.008
Zn	68		ug/L		3215	0.000
Ge	74		ug/L		551622	551622.275
As	75	0.914	ug/L	47.367	1380	0.003
Se	77		ug/L		15452	0.015
Se	82	0.003	ug/L	7455.274	-3	0.000
Kr	83		ug/L		189	-0.000
Sr	88	0.006	ug/L	2.428	244	0.000
Y	89		ug/L		93	0.000
Mo	98	0.043	ug/L	22.894	248	0.001
Ag	107	0.004	ug/L	24.578	58	0.000
Cd	111	0.011	ug/L	25.490	31	0.000
Cd	114		ug/L		60	0.000
In	115		ug/L		344854	344853.788
Sn	120	0.009	ug/L	26.624	831	0.000
Sb	121	0.255	ug/L	15.407	1912	0.005
Sb	123		ug/L		1444	0.004
Ba	135		ug/L		47	0.000
Ba	137	0.001	ug/L	243.696	62	0.000
Ho	165		ug/L		29	0.000
Lu	175		ug/L		468675	468674.901
Tl	205	0.426	ug/L	13.407	7610	0.016
Pb	208	0.005	ug/L	16.644	462	0.000
Bi	209		ug/L		588	-0.001
Th	232	0.044	ug/L	17.664	1839	0.004
U	238	0.006	ug/L	6.676	302	0.000

Sample ID: QC Std 9

Report Date/Time: Saturday, February 20, 2010 22:03:55

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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	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	0.9999
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	0.9999
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	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
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		96.7			
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		88.4			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		86.8			
Sn	120					
Sb	121					
L Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		87.7			
Tl	205					
Pb	208					
Bi	209					
Th	232					
L 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 9

Report Date/Time: Saturday, February 20, 2010 22:03:55

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## ICPMS#5 - Summary Report

Sample ID: 245807001

Sample Date/Time: Saturday, February 20, 2010 22:38:11

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 948090|1|ba|

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100220\245807001.157

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.126	ug/L	2.739	315	0.000
Be	9	-0.004	ug/L	159.246	20	-0.000
B	11	21.628	ug/L	6.235	11366	0.012
Na	23	228.858	ug/L	4.634	1035683	1.030
Mg	24	6.700	ug/L	6.745	21683	0.022
Al	27	12.424	ug/L	3.129	61131	0.060
P	31	3.580	ug/L	26.471	10160	0.001
K	39	194.195	ug/L	5.937	2173317	1.466
Ca	43	45.552	ug/L	6.755	1461	0.001
> Sc	45		ug/L		969973	969972.703
Ti	47	0.435	ug/L	6.130	1366	0.000
V	51	-7.792	ug/L	32.568	-90499	-0.092
Cr	52	0.810	ug/L	22.095	6312	0.007
Cr	53		ug/L		672277	0.548
Mn	55	0.633	ug/L	3.080	10887	0.009
Fe	57	14.011	ug/L	6.152	12505	0.004
Co	59	0.003	ug/L	66.217	171	0.000
Ni	60	0.057	ug/L	8.250	368	0.000
Cu	63		ug/L		4881	0.005
Cu	65	0.696	ug/L	6.865	2427	0.002
Zn	66	0.569	ug/L	8.839	3718	0.002
Zn	67		ug/L		86188	0.117
Zn	68		ug/L		8625	0.009
> Ge	74		ug/L		613945	613944.510
As	75	1.689	ug/L	51.177	3019	0.005
Se	77		ug/L		65806	0.094
Se	82	0.220	ug/L	119.249	40	0.000
Kr	83		ug/L		192	-0.000
Sr	88	0.187	ug/L	2.346	3600	0.010
Y	89		ug/L		234	0.000
Mo	98	0.018	ug/L	20.146	136	0.000
Ag	107	0.009	ug/L	3.760	103	0.000
Cd	111	0.021	ug/L	26.496	53	0.000
Cd	114		ug/L		64	0.000
> In	115		ug/L		353239	353238.721
Sn	120	0.227	ug/L	2.213	2631	0.005
Sb	121	0.021	ug/L	12.867	304	0.000
Sb	123		ug/L		244	0.000
Ba	135		ug/L		699	0.001
Ba	137	0.310	ug/L	8.507	1164	0.002
Ho	165		ug/L		42	0.000
> Lu	175		ug/L		487811	487810.726
Tl	205	0.035	ug/L	2.252	940	0.001
Pb	208	0.068	ug/L	2.736	2594	0.005
Bi	209		ug/L		391	-0.001
Th	232	0.005	ug/L	3.134	399	0.000
U	238	0.024	ug/L	4.234	1022	0.002

Sample ID: 245807001

Report Date/Time: Saturday, February 20, 2010 22:40:56

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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	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	0.9999
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	0.9999
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	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
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		115.5			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		98.4			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		88.9			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		91.3			
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

Sample ID: 245807001

Report Date/Time: Saturday, February 20, 2010 22:40:56

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## ICPMS#5 - Summary Report

Sample ID: 245807002

Sample Date/Time: Saturday, February 20, 2010 22:44:21

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 948090|1|baj

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100220\245807002.158

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.099	ug/L	10.331	266	0.000
Be	9	-0.008	ug/L	120.868	19	-0.000
B	11	21.487	ug/L	3.148	11733	0.011
Na	23	175.188	ug/L	3.178	830814	0.789
Mg	24	6.843	ug/L	13.330	23019	0.023
Al	27	12.832	ug/L	7.930	65484	0.062
P	31	2.933	ug/L	60.825	10333	0.001
K	39	114.670	ug/L	5.622	1654357	0.865
Ca	43	49.357	ug/L	6.918	1588	0.001
> Sc	45		ug/L		1007205	1007205.497
Ti	47	0.416	ug/L	14.474	1400	0.000
V	51	-7.574	ug/L	19.691	-91564	-0.089
Cr	52	0.944	ug/L	11.527	7797	0.009
Cr	53		ug/L		674330	0.525
Mn	55	0.643	ug/L	1.903	11462	0.010
Fe	57	16.819	ug/L	11.185	13865	0.005
Co	59	0.003	ug/L	40.115	172	0.000
Ni	60	0.068	ug/L	4.869	412	0.000
Cu	63		ug/L		4699	0.004
Cu	65	0.639	ug/L	1.926	2337	0.002
Zn	66	0.909	ug/L	4.727	4405	0.003
Zn	67		ug/L		88193	0.118
Zn	68		ug/L		8989	0.009
> Ge	74		ug/L		625432	625432.072
As	75	1.935	ug/L	36.253	3538	0.006
Se	77		ug/L		66080	0.093
Se	82	0.162	ug/L	79.748	29	0.000
Kr	83		ug/L		181	-0.000
Sr	88	0.209	ug/L	1.689	4140	0.011
Y	89		ug/L		333	0.001
Mo	98	0.017	ug/L	12.397	134	0.000
Ag	107	0.007	ug/L	17.713	93	0.000
Cd	111	0.011	ug/L	9.866	35	0.000
Cd	114		ug/L		59	0.000
> In	115		ug/L		364781	364781.436
Sn	120	0.031	ug/L	11.416	1068	0.001
Sb	121	0.032	ug/L	13.845	397	0.001
Sb	123		ug/L		317	0.001
Ba	135		ug/L		576	0.001
Ba	137	0.253	ug/L	2.545	973	0.002
Ho	165		ug/L		37	0.000
> Lu	175		ug/L		492311	492311.013
Tl	205	0.033	ug/L	10.690	910	0.001
Pb	208	0.588	ug/L	1.880	20119	0.040
Bi	209		ug/L		319	-0.001
Th	232	0.007	ug/L	13.617	493	0.001
U	238	0.085	ug/L	1.731	3464	0.007

Sample ID: 245807002

Report Date/Time: Saturday, February 20, 2010 22:47:05

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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	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	0.9999
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	0.9999
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	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
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		119.9			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		100.2			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		91.8			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		92.1			
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

## QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

## QC Action

QC Action Line: No QC out of limits detected

Sample ID: 245807002

Report Date/Time: Saturday, February 20, 2010 22:47:05

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# ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Saturday, February 20, 2010 22:50:29

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100220\QC Std 6.159

## Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	46.237	ug/L	1.951	88606	0.104
Be	9	44.625	ug/L	1.396	20936	0.025
B	11	101.101	ug/L	0.733	45982	0.054
Na	23	6031.051	ug/L	17.317	23132182	27.152
Mg	24	5545.854	ug/L	4.617	15721609	18.480
Al	27	5508.983	ug/L	5.992	22715606	26.699
P	31	5513.993	ug/L	1.000	1490617	1.743
K	39	5470.056	ug/L	8.999	35798552	41.282
Ca	43	4900.679	ug/L	1.168	77485	0.090
> Sc	45		ug/L		850880	850879.779
Ti	47	48.278	ug/L	0.994	40978	0.047
V	51	45.991	ug/L	3.324	461210	0.543
Cr	52	46.993	ug/L	1.577	366883	0.432
Cr	53		ug/L		227833	0.123
Mn	55	47.538	ug/L	0.493	606915	0.712
Fe	57	4262.817	ug/L	1.438	1144023	1.336
Co	59	42.727	ug/L	0.902	429181	0.504
Ni	60	43.365	ug/L	1.408	97399	0.114
Cu	63		ug/L		231192	0.271
Cu	65	42.168	ug/L	0.927	116298	0.136
Zn	66	51.398	ug/L	2.741	87315	0.149
Zn	67		ug/L		31381	0.032
Zn	68		ug/L		69245	0.117
> Ge	74		ug/L		568158	568158.205
As	75	47.902	ug/L	0.387	83786	0.148
Se	77		ug/L		21231	0.024
Se	82	50.288	ug/L	2.053	9027	0.016
Kr	83		ug/L		202	0.000
Sr	88	54.187	ug/L	2.228	1030936	2.840
Y	89		ug/L		142	0.000
Mo	98	49.016	ug/L	1.380	240509	0.662
Ag	107	50.016	ug/L	1.324	406014	1.118
Cd	111	50.035	ug/L	1.264	105958	0.292
Cd	114		ug/L		254140	0.700
> In	115		ug/L		363060	363060.111
Sn	120	52.551	ug/L	2.400	441541	1.214
Sb	121	51.319	ug/L	0.626	372145	1.025
Sb	123		ug/L		293624	0.808
Ba	135		ug/L		112800	0.228
Ba	137	54.036	ug/L	2.693	195283	0.395
Ho	165		ug/L		63	0.000
> Lu	175		ug/L		494117	494116.820
Tl	205	48.214	ug/L	1.581	872214	1.764
Pb	208	54.043	ug/L	1.487	1825330	3.694
Bi	209		ug/L		807	-0.000
Th	232	49.965	ug/L	1.054	1979930	4.007
U	238	50.801	ug/L	2.588	2016051	4.081

Sample ID: QC Std 6

Report Date/Time: Saturday, February 20, 2010 22:53:12

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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	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	0.9999
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	0.9999
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	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
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	92.473				
Be	9	89.250				
B	11	101.101				
Na	23	120.621				
Mg	24	110.917				
Al	27	109.089				
P	31	110.280				
K	39	109.401				
Ca	43	98.014				
> Sc	45		101.3			
Ti	47	96.555				
V	51	91.983				
Cr	52	93.986				
Cr	53					
Mn	55	95.077				
Fe	57	85.256				
Co	59	85.454				
Ni	60	86.729				
Cu	63					
Cu	65	84.336				
Zn	66	102.795				
Zn	67					
Zn	68					
> Ge	74		91.1			
As	75	95.804				
Se	77					
Se	82	100.575				
Kr	83					
Sr	88	108.373				
Y	89					
Mo	98	98.032				
Ag	107	100.032				
Cd	111	100.070				
Cd	114					
> In	115		91.4			
Sn	120	105.102				
Sb	121	102.639				
Sb	123					
Ba	135					
Ba	137	108.073				
Ho	165					
> Lu	175		92.5			
Tl	205	96.427				
Pb	208	108.085				
Bi	209					
Th	232	99.930				
U	238	101.603				

## QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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	P	31	31CCV is out of limits (+/- 10%)
QC Std 6	Fe	57	57CCV is out of limits (+/- 10%)
QC Std 6	Co	59	59CCV is out of limits (+/- 10%)
QC Std 6	Ni	60	60CCV is out of limits (+/- 10%)

Sample ID: QC Std 6

Report Date/Time: Saturday, February 20, 2010 22:53:12

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QC Std 6

Cu

65CCV is out of limits (+/- 10%)

## QC Action

QC Action Line: Continue

---

Sample ID: QC Std 6

Report Date/Time: Saturday, February 20, 2010 22:53:12

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## ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Saturday, February 20, 2010 22:56:37

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: c:\elandata\Dataset\100220\QC Std 7.160

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.019	ug/L	22.884	68	0.000
Be	9	-0.001	ug/L	220.383	18	-0.000
B	11	4.030	ug/L	16.362	1927	0.002
Na	23	-0.348	ug/L	644.409	28363	-0.002
Mg	24	0.736	ug/L	5.893	2000	0.002
Al	27	0.658	ug/L	146.767	5001	0.003
P	31	-0.230	ug/L	1072.937	7549	-0.000
K	39	7.744	ug/L	60.536	681199	0.058
Ca	43	-4.034	ug/L	98.244	483	-0.000
> Sc	45		ug/L		817125	817124.940
Ti	47	-0.268	ug/L	28.463	587	-0.000
V	51	-0.222	ug/L	85.175	-3146	-0.003
Cr	52	-0.252	ug/L	31.422	-2641	-0.002
Cr	53		ug/L		206334	0.108
Mn	55	0.031	ug/L	49.691	1809	0.000
Fe	57	-0.643	ug/L	143.514	6776	-0.000
Co	59	0.001	ug/L	111.832	121	0.000
Ni	60	-0.006	ug/L	95.371	176	-0.000
Cu	63		ug/L		307	-0.000
Cu	65	-0.012	ug/L	49.674	174	-0.000
Zn	66	-0.177	ug/L	31.066	2157	-0.001
Zn	67		ug/L		18552	0.010
Zn	68		ug/L		3466	0.001
> Ge	74		ug/L		555007	555007.346
As	75	0.953	ug/L	38.515	1452	0.003
Se	77		ug/L		16889	0.017
Se	82	-0.061	ug/L	93.738	-14	-0.000
Kr	83		ug/L		189	-0.000
Sr	88	0.006	ug/L	18.870	257	0.000
Y	89		ug/L		80	-0.000
Mo	98	0.043	ug/L	24.779	255	0.001
Ag	107	0.006	ug/L	28.160	78	0.000
Cd	111	0.013	ug/L	23.498	37	0.000
Cd	114		ug/L		62	0.000
> In	115		ug/L		352258	352258.083
Sn	120	0.011	ug/L	70.186	866	0.000
Sb	121	0.251	ug/L	18.241	1924	0.005
Sb	123		ug/L		1535	0.004
Ba	135		ug/L		47	0.000
Ba	137	0.003	ug/L	78.351	71	0.000
Ho	165		ug/L		33	0.000
> Lu	175		ug/L		487394	487394.048
Tl	205	0.983	ug/L	12.613	17832	0.036
Pb	208	0.005	ug/L	26.951	497	0.000
Bi	209		ug/L		532	-0.001
Th	232	0.043	ug/L	15.450	1890	0.003
U	238	0.008	ug/L	8.465	391	0.001

Sample ID: QC Std 7

Report Date/Time: Saturday, February 20, 2010 22:59:22

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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	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	0.9999
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	0.9999
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	0.9999
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
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		97.3			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		89.0			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		88.6			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		91.2			
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: QC Std 7

Report Date/Time: Saturday, February 20, 2010 22:59:22

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## ICPMS #5 Daily Performance Report

### Sample ID: Sample

Sample Date/Time: Sunday, February 21, 2010 10:25:37

Sample Description:

Method File: c:\elandata\Method\Daily2.mth

Dataset File: c:\elandata\Dataset\default\Sample.559

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	6159.5	6159.528	67.321	1.1
Mg	24.0	45969.4	45969.447	372.671	0.8
Co	58.9	130006.7	130006.738	1424.099	1.1
Rh	102.9	272097.6	272097.601	2330.936	0.9
In	114.9	357150.0	357150.024	1687.204	0.5
Pb	208.0	297749.3	297749.262	2376.144	0.8
[> Ba	137.9	321676.2	321676.199	2950.879	0.9
[ Ba++	69.0	6095.1	0.019	0.000	1.2
[> Ce	139.9	395641.1	395641.061	1671.282	0.4
[ CeO	155.9	10091.2	0.026	0.001	2.5
Bkgd	220.0	26.2	26.200	2.797	10.7

### Current Optimization File Data

Current Value	Description
0.87	Nebulizer Gas Flow
5.75	Lens Voltage
1450.00	ICP RF Power
-1750.00	Analog Stage Voltage
1250.00	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	13	5.8	6148.0
Co	59	13	6.0	132832.7
In	115	13	6.5	354458.2



## 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	588	2072	0.628
Be	9.0	9.0	2057	2088	0.614
Mg	24.0	24.0	5685	2100	0.599
Mg	25.0	25.0	5937	2100	0.577
Mg	26.0	26.0	6175	2100	0.613
Co	58.9	59.0	14191	2125	0.607
Rh	102.9	102.9	24879	2180	0.587
In	114.9	114.9	27793	2200	0.589
Ce	139.9	139.9	33865	2220	0.588
Pb	206.0	206.0	49948	2305	0.605
Pb	207.0	206.9	50147	2240	0.644
Pb	208.0	208.0	50451	2265	0.717
U	238.1	238.1	57727	2275	0.749

## ICPMS#5 - Summary Report

Sample ID: Blank

Sample Date/Time: Sunday, February 21, 2010 10:33:28

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\MethodVan1 0220.mth

Dataset File: C:\elandata\Dataset\100221\Blank.001

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9		ug/L		12	
> Sc	45		ug/L		778356	
Cr	52		ug/L		3389	
Cr	53		ug/L		230042	
Mn	55		ug/L		2670	
Ni	60		ug/L		242	
> Lu	175		ug/L		600278	
Pb	208		ug/L		398	
U	238		ug/L		148	

### Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Simple Linear	
Sc	45	Simple Linear	
Cr	52	Simple Linear	
Cr	53	Simple Linear	
Mn	55	Simple Linear	
Ni	60	Simple Linear	
Lu	175	Simple Linear	
Pb	208	Simple Linear	
U	238	Simple Linear	

### QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
Be	9						
> Sc	45						
Cr	52						
Cr	53						
Mn	55						
Ni	60						
> Lu	175						
Pb	208						
U	238						

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: Blank

Report Date/Time: Sunday, February 21, 2010 10:34:08

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## ICPMS#5 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Sunday, February 21, 2010 10:35:35

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\VanI 0220.mth

Dataset File: C:\elandata\Dataset\100221\Standard 1.002

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	10.000	ug/L	3.103	6068	0.008
[>	Sc	45		ug/L		790482	790482.492
	Cr	52	10.000	ug/L	4.709	99618	0.122
	Cr	53		ug/L		176974	-0.071
	Mn	55	10.000	ug/L	4.223	161796	0.201
[	Ni	60	10.000	ug/L	4.332	27041	0.034
[>	Lu	175		ug/L		660776	660776.007
	Pb	208	10.000	ug/L	1.597	501165	0.758
[	U	238	10.000	ug/L	2.479	608735	0.921

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Lu	175Linear Thru Zero	
Pb	208Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[	Be	9						
[>	Sc	45						
	Cr	52						
	Cr	53						
	Mn	55						
[	Ni	60						
[>	Lu	175						
	Pb	208						
[	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: Standard 1

Report Date/Time: Sunday, February 21, 2010 10:36:12

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## ICPMS#5 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Sunday, February 21, 2010 10:37:40

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl 0220.mth

Dataset File: C:\elandata\Dataset\100221\Standard 2.003

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	99.993	ug/L	5.736	58618	0.076
>	Sc 45		ug/L		771536	771535.665
	Cr 52	99.959	ug/L	4.949	904239	1.170
	Cr 53		ug/L		272089	0.058
	Mn 55	99.916	ug/L	5.938	1432484	1.857
[	Ni 60	99.964	ug/L	5.701	252228	0.327
>	Lu 175		ug/L		642790	642789.932
	Pb 208	99.890	ug/L	1.544	4385051	6.822
[	U 238	99.871	ug/L	3.031	5236377	8.148

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Lu	175Linear Thru Zero	
Pb	208Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

### QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[ Be 9					
> Sc 45					
Cr 52					
Cr 53					
Mn 55					
[ Ni 60					
> Lu 175					
Pb 208					
[ 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: Standard 2

Report Date/Time: Sunday, February 21, 2010 10:38:17

Page 1

## ICPMS#5 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Sunday, February 21, 2010 10:39:45

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl 0220.mth

Dataset File: C:\elandata\Dataset\100221\QC Std 1.004

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	51.779	ug/L	3.789	30091	0.039
>	Sc	45		ug/L		763801	763800.879
	Cr	52	52.685	ug/L	4.101	473834	0.617
	Cr	53		ug/L		207409	-0.024
	Mn	55	54.730	ug/L	4.236	778828	1.017
	Ni	60	52.712	ug/L	3.165	131968	0.173
>	Lu	175		ug/L		658340	658340.032
	Pb	208	51.604	ug/L	1.155	2320548	3.524
	U	238	51.214	ug/L	1.200	2750857	4.178

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Lu	175Linear Thru Zero	
Pb	208Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
	Be	9	103.559					
>	Sc	45		98.1				
	Cr	52	105.371					
	Cr	53						
	Mn	55	109.461					
	Ni	60	105.424					
>	Lu	175		109.7				
	Pb	208	103.209					
	U	238	102.428					

### 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 1

Report Date/Time: Sunday, February 21, 2010 10:40:23

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## ICPMS#5 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Sunday, February 21, 2010 10:41:53

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl 0220.mth

Dataset File: C:\elandata\Dataset\100221\QC Std 2.005

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.012	ug/L	82.302	19	0.000
>	Sc	45		ug/L		768885	768885.259
	Cr	52	-0.168	ug/L	14.165	1840	-0.002
	Cr	53		ug/L		242755	0.020
	Mn	55	-0.006	ug/L	34.546	2545	-0.000
[	Ni	60	-0.001	ug/L	840.320	237	-0.000
>	Lu	175		ug/L		606652	606652.412
	Pb	208	0.004	ug/L	12.255	554	0.000
[	U	238	0.016	ug/L	1.893	941	0.001

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Lu	175Linear Thru Zero	
Pb	208Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[	Be	9						
>	Sc	45		98.8				
	Cr	52						
	Cr	53						
	Mn	55						
[	Ni	60						
>	Lu	175		101.1				
	Pb	208						
[	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 2

Report Date/Time: Sunday, February 21, 2010 10:42:33

Page 1

## ICPMS#5 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Sunday, February 21, 2010 10:44:01

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl 0220.mth

Dataset File: C:\elandata\Dataset\100221\QC Std 3.006

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.541	ug/L	2.958	334	0.000
> Sc	45		ug/L		781214	781214.098
Cr	52	10.908	ug/L	1.406	103116	0.128
Cr	53		ug/L		204994	-0.033
Mn	55	6.066	ug/L	1.280	90763	0.113
Ni	60	2.212	ug/L	2.736	5899	0.007
> Lu	175		ug/L		637826	637826.374
Pb	208	2.450	ug/L	1.386	107139	0.167
U	238	0.287	ug/L	2.086	15085	0.023

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Lu	175Linear Thru Zero	
Pb	208Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

### QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Be	9	108.174				
> Sc	45		100.4			
Cr	52	109.076				
Cr	53					
Mn	55	121.319				
Ni	60	110.591				
> Lu	175		106.3			
Pb	208	122.503				
U	238	143.447				

### QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 3	U	238CRDL is out of limits

### QC Action

QC Action Line: Continue

Sample ID: QC Std 3

Report Date/Time: Sunday, February 21, 2010 10:44:39

Page 1

## ICPMS#5 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Sunday, February 21, 2010 10:46:07

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl 0220.mth

Dataset File: C:\elandata\Dataset\100221\QC Std 4.007

### Concentration Results

	Analyte	Mass	Conc.	Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9		0.106	ug/L	27.388	63	0.000
>	Sc	45			ug/L		664771	664770.993
	Cr	52		2.204	ug/L	2.837	20030	0.026
	Cr	53			ug/L		140053	-0.085
	Mn	55		6.838	ug/L	5.258	86662	0.127
	Ni	60		3.602	ug/L	4.531	8038	0.012
>	Lu	175			ug/L		580018	580017.696
	Pb	208		0.257	ug/L	1.127	10554	0.018
	U	238		0.004	ug/L	10.732	342	0.000

### Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Pb	208	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9999

### QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
Sc	45		85.4			
Cr	52	66.800				
Cr	53					
Mn	55	117.904				
Ni	60	108.828				
Lu	175		96.6			
Pb	208	135.833				
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 4

Report Date/Time: Sunday, February 21, 2010 10:46:46

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## ICPMS#5 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Sunday, February 21, 2010 10:48:14

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl 0220.mth

Dataset File: C:\elandata\Dataset\100221\QC Std 5.008

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	20.149	ug/L	3.460	9970	0.015
> Sc	45		ug/L		649869	649868.633
Cr	52	24.402	ug/L	5.264	188159	0.286
Cr	53		ug/L		149871	-0.065
Mn	55	29.886	ug/L	3.656	362968	0.556
Ni	60	24.298	ug/L	4.441	51843	0.080
> Lu	175		ug/L		592672	592672.052
Pb	208	22.088	ug/L	1.531	894404	1.509
U	238	24.112	ug/L	0.647	1166058	1.967

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Lu	175Linear Thru Zero	
Pb	208Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

### QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
Be	9	100.743					
> Sc	45		83.5				
Cr	52	104.729					
Cr	53						
Mn	55	115.838					
Ni	60	104.238					
> Lu	175		98.7				
Pb	208	109.406					
U	238	120.558					

### QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 5	U	238IC SAB is out of limits

### QC Action

QC Action Line: Continue

Sample ID: QC Std 5

Report Date/Time: Sunday, February 21, 2010 10:48:53

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## ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Sunday, February 21, 2010 10:50:22

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl 0220.mth

Dataset File: C:\elandata\Dataset\100221\QC Std 6.009

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	51.767	ug/L	3.928	29609	0.039
Sc	45		ug/L		751800	751800.433
Cr	52	50.172	ug/L	4.186	444196	0.587
Cr	53		ug/L		195140	-0.036
Mn	55	51.695	ug/L	5.552	723952	0.961
Ni	60	50.548	ug/L	4.403	124516	0.165
Lu	175		ug/L		667413	667412.956
Pb	208	51.034	ug/L	1.879	2326368	3.485
U	238	51.311	ug/L	1.769	2793869	4.186

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Lu	175Linear Thru Zero	
Pb	208Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

### QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
Be	9	103.535					
Sc	45		96.6				
Cr	52	100.344					
Cr	53						
Mn	55	103.390					
Ni	60	101.096					
Lu	175		111.2				
Pb	208	102.069					
U	238	102.622					

### 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 6

Report Date/Time: Sunday, February 21, 2010 10:51:01

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## ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Sunday, February 21, 2010 10:52:31

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl 0220.mth

Dataset File: C:\elandata\Dataset\100221\QC Std 7.010

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.016	ug/L	9.348	21	0.000
> Sc	45		ug/L		754928	754927.738
Cr	52	-0.292	ug/L	21.315	707	-0.003
Cr	53		ug/L		244580	0.028
Mn	55	0.003	ug/L	106.053	2636	0.000
Ni	60	-0.013	ug/L	51.934	203	-0.000
> Lu	175		ug/L		612882	612882.233
Pb	208	0.003	ug/L	8.492	534	0.000
U	238	0.013	ug/L	1.792	796	0.001

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Lu	175Linear Thru Zero	
Pb	208Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

### QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
Be	9						
> Sc	45		97.0				
Cr	52						
Cr	53						
Mn	55						
Ni	60						
> Lu	175		102.1				
Pb	208						
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: Sunday, February 21, 2010 10:53:11

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## ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Sunday, February 21, 2010 11:03:19

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl 0220.mth

Dataset File: C:\elandata\Dataset\100221\QC Std 6.015

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	54.022	ug/L	5.035	31363	0.041
>	Sc	45		ug/L		763414	763414.365
	Cr	52	48.946	ug/L	4.002	440091	0.573
	Cr	53		ug/L		233016	0.010
	Mn	55	50.437	ug/L	5.377	717178	0.938
[	Ni	60	48.783	ug/L	4.413	122021	0.160
>	Lu	175		ug/L		673390	673389.540
	Pb	208	50.337	ug/L	1.947	2314998	3.438
[	U	238	51.406	ug/L	2.134	2823923	4.194

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Lu	175Linear Thru Zero	
Pb	208Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[	Be	9	108.044					
>	Sc	45		98.1				
	Cr	52	97.892					
	Cr	53						
	Mn	55	100.873					
[	Ni	60	97.566					
>	Lu	175		112.2				
	Pb	208	100.674					
[	U	238	102.813					

### 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 6

Report Date/Time: Sunday, February 21, 2010 11:03:58

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## ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Sunday, February 21, 2010 11:05:28

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl 0220.mth

Dataset File: C:\elandata\Dataset\100221\QC Std 7.016

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.019	ug/L	58.042	23	0.000
> Sc	45		ug/L		774806	774806.022
Cr	52	0.483	ug/L	5.985	7756	0.006
Cr	53		ug/L		282176	0.069
Mn	55	0.024	ug/L	25.375	3007	0.000
Ni	60	-0.023	ug/L	23.007	183	-0.000
> Lu	175		ug/L		621093	621093.098
Pb	208	0.003	ug/L	8.377	540	0.000
U	238	0.015	ug/L	4.719	897	0.001

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Lu	175Linear Thru Zero	
Pb	208Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

### QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
Be	9						
> Sc	45		99.5				
Cr	52						
Cr	53						
Mn	55						
Ni	60						
> Lu	175		103.5				
Pb	208						
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: Sunday, February 21, 2010 11:06:08

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## ICPMS#5 - Summary Report

Sample ID: 1202031027

Sample Date/Time: Sunday, February 21, 2010 11:08:04

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 948090|1|ba|

Method File: c:\elandata\Method\lanl 0220.mth

Dataset File: C:\elandata\Dataset\100221\1202031027.017

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.016	ug/L	45.921	22	0.000
> Sc	45		ug/L		788658	788658.444
Cr	52	2.686	ug/L	3.695	28208	0.031
Cr	53		ug/L		568916	0.426
Mn	55	0.289	ug/L	7.277	6940	0.005
Ni	60	0.102	ug/L	14.531	507	0.000
> Lu	175		ug/L		611109	611109.143
Pb	208	0.011	ug/L	4.563	865	0.001
U	238	0.001	ug/L	21.438	209	0.000

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Lu	175Linear Thru Zero	
Pb	208Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

### QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Be	9					
> Sc	45		101.3			
Cr	52					
Cr	53					
Mn	55					
Ni	60					
> Lu	175		101.8			
Pb	208					
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: 1202031027

Report Date/Time: Sunday, February 21, 2010 11:08:43

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## ICPMS#5 - Summary Report

Sample ID: 1202031028

Sample Date/Time: Sunday, February 21, 2010 11:10:13

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 948090|1|ba|

Method File: c:\elandata\Method\lanl 0220.mth

Dataset File: C:\elandata\Dataset\100221\1202031028.018

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	59.403	ug/L	3.421	35170	0.045
> Sc	45		ug/L		778088	778088.129
Cr	52	56.235	ug/L	2.671	515173	0.658
Cr	53		ug/L		604973	0.483
Mn	55	54.883	ug/L	5.130	795465	1.020
Ni	60	53.211	ug/L	2.526	135722	0.174
> Lu	175		ug/L		603249	603249.134
Pb	208	58.168	ug/L	0.429	2396881	3.973
U	238	59.666	ug/L	1.264	2936854	4.868

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Lu	175Linear Thru Zero	
Pb	208Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

### QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
Be	9						
> Sc	45		100.0				
Cr	52						
Cr	53						
Mn	55						
Ni	60						
> Lu	175		100.5				
Pb	208						
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: 1202031028

Report Date/Time: Sunday, February 21, 2010 11:10:53

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## ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Sunday, February 21, 2010 11:25:20

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl 0220.mth

Dataset File: C:\elandata\Dataset\100221\QC Std 6.025

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	51.347	ug/L	4.973	29922	0.039
> Sc	45		ug/L		766159	766159.384
Cr	52	50.438	ug/L	3.223	455216	0.590
Cr	53		ug/L		279780	0.070
Mn	55	52.469	ug/L	4.404	749029	0.975
Ni	60	48.775	ug/L	3.337	122483	0.160
> Lu	175		ug/L		659389	659389.402
Pb	208	50.664	ug/L	1.113	2281961	3.460
U	238	50.213	ug/L	1.482	2701482	4.097

### Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Pb	208	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9999

### QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution %	Duplicate Rel. % Difference
Be	9	102.695				
> Sc	45		98.4			
Cr	52	100.876				
Cr	53					
Mn	55	104.938				
Ni	60	97.550				
> Lu	175		109.8			
Pb	208	101.327				
U	238	100.425				

### 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: Sunday, February 21, 2010 11:25:59

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## ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Sunday, February 21, 2010 11:27:29

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl 0220.mth

Dataset File: C:\elandata\Dataset\100221\QC Std 7.026

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	0.031	ug/L	38.381	28	0.000
>	Sc 45		ug/L		720218	720217.685
	Cr 52	0.574	ug/L	26.610	7951	0.007
	Cr 53		ug/L		318083	0.147
	Mn 55	0.063	ug/L	20.048	3307	0.001
	Ni 60	-0.011	ug/L	34.431	198	-0.000
>	Lu 175		ug/L		601050	601049.961
	Pb 208	0.004	ug/L	33.499	567	0.000
	U 238	0.014	ug/L	5.661	825	0.001

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Lu	175Linear Thru Zero	
Pb	208Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

### QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[	Be 9						
>	Sc 45		92.5				
	Cr 52						
	Cr 53						
	Mn 55						
	Ni 60						
>	Lu 175		100.1				
	Pb 208						
	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: Sunday, February 21, 2010 11:28:08

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## ICPMS#5 - Summary Report

Sample ID: 1202031029 30 EAQ 2/21/10  
Sample Date/Time: Sunday, February 21, 2010 11:32:18  
Sample Type:  
Sample Description: LANL 6020 DUP MS  
Number of Replicates: 3  
Batch ID: 9480901|ba|  
Method File: c:\elandata\Method\lanl 0220.mth  
Dataset File: C:\elandata\Dataset\100221\1202031029.028

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	54.378	ug/L	3.588	32583	0.041
> Sc	45		ug/L		787532	787532.447
Cr	52	55.225	ug/L	4.001	511854	0.646
Cr	53		ug/L		666537	0.552
Mn	55	88.118	ug/L	3.573	1291412	1.638
Ni	60	50.253	ug/L	3.921	129688	0.165
> Lu	175		ug/L		583181	583181.357
Pb	208	48.054	ug/L	1.000	1914279	3.282
U	238	63.886	ug/L	0.262	3039864	5.212

### Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Pb	208	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9999

### QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % DI	Duplicate Rel. % Difference
Be	9					
> Sc	45		101.2			
Cr	52					
Cr	53					
Mn	55					
Ni	60					
> Lu	175		97.2			
Pb	208					
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: 1202031029 30 EAQ 2/21/10  
Report Date/Time: Sunday, February 21, 2010 11:32:59  
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## ICPMS#5 - Summary Report

Sample ID: 1202031030 29

Sample Date/Time: Sunday, February 21, 2010 11:34:30

Sample Type:

Sample Description: LANL 6020 M& DUP

Number of Replicates: 3

Batch ID: 9480901|ba|

Method File: c:\elandata\MethodVani 0220.mth

Dataset File: C:\elandata\Dataset\100221\1202031030.029

EAG 2/21/10



### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.059	ug/L	15.466	47	0.000
> Sc	45		ug/L		778996	778995.842
Cr	52	2.772	ug/L	2.920	28652	0.032
Cr	53		ug/L		647126	0.536
Mn	55	41.436	ug/L	2.985	602364	0.770
Ni	60	1.687	ug/L	1.292	4544	0.006
> Lu	175		ug/L		576016	576016.446
Pb	208	0.689	ug/L	1.389	27506	0.047
U	238	3.824	ug/L	1.267	179854	0.312

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Lu	175Linear Thru Zero	
Pb	208Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

### QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
> Sc	45		100.1			
Cr	52					
Cr	53					
Mn	55					
Ni	60					
> Lu	175		96.0			
Pb	208					
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: 1202031030

Report Date/Time: Sunday, February 21, 2010 11:35:10

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## ICPMS#5 - Summary Report

Sample ID: 1202031031

Sample Date/Time: Sunday, February 21, 2010 11:36:40

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 948090|5|baj

Method File: c:\elandata\Method\lanl 0220.mth

Dataset File: C:\elandata\Dataset\100221\1202031031.030

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.029	ug/L	35.604	28	0.000
>	Sc	45		ug/L		735421	735421.479
	Cr	52	0.193	ug/L	34.738	4842	0.002
	Cr	53		ug/L		410120	0.263
	Mn	55	9.418	ug/L	5.058	131012	0.175
	Ni	60	0.375	ug/L	7.710	1131	0.001
>	Lu	175		ug/L		616575	616575.210
	Pb	208	0.153	ug/L	0.931	6871	0.010
	U	238	0.700	ug/L	1.239	35384	0.057

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Lu	175Linear Thru Zero	
Pb	208Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

### QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[	Be	9					
>	Sc	45		94.5			
	Cr	52					
	Cr	53					
	Mn	55					
	Ni	60					
>	Lu	175		102.7			
	Pb	208					
	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: 1202031031

Report Date/Time: Sunday, February 21, 2010 11:37:19

Page 1

## ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Sunday, February 21, 2010 11:43:08

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\NanI 0220.mth

Dataset File: C:\elandata\Dataset\100221\QC Std 6.033

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	51.320	ug/L	4.604	29347	0.039
>	Sc	45		ug/L		751937	751936.827
	Cr	52	50.438	ug/L	4.678	446444	0.590
	Cr	53		ug/L		267939	0.061
	Mn	55	51.559	ug/L	4.948	722128	0.958
	Ni	60	49.030	ug/L	5.135	120764	0.161
>	Lu	175		ug/L		656627	656627.249
	Pb	208	49.853	ug/L	0.899	2235990	3.405
	U	238	49.851	ug/L	1.563	2670593	4.067

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Lu	175Linear Thru Zero	
Pb	208Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[	Be	9	102.639					
>	Sc	45		96.6				
	Cr	52	100.875					
	Cr	53						
	Mn	55	103.118					
	Ni	60	98.060					
>	Lu	175		109.4				
	Pb	208	99.705					
	U	238	99.702					

### 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 6

Report Date/Time: Sunday, February 21, 2010 11:43:46

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## ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Sunday, February 21, 2010 11:45:16

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl 0220.mth

Dataset File: C:\elandata\Dataset\100221\QC Std 7.034

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	0.019	ug/L	49.855	21	0.000
>	Sc 45		ug/L		709068	709067.961
	Cr 52	0.485	ug/L	6.365	7107	0.006
	Cr 53		ug/L		310876	0.143
	Mn 55	0.057	ug/L	23.751	3185	0.001
[	Ni 60	-0.008	ug/L	84.602	200	-0.000
>	Lu 175		ug/L		604968	604967.644
	Pb 208	0.004	ug/L	10.635	564	0.000
[	U 238	0.015	ug/L	4.513	914	0.001

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Lu	175Linear Thru Zero	
Pb	208Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

### QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[	Be 9						
>	Sc 45		91.1				
	Cr 52						
	Cr 53						
	Mn 55						
[	Ni 60						
>	Lu 175		100.8				
	Pb 208						
[	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: Sunday, February 21, 2010 11:45:56

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## ICPMS#5 - Summary Report

Sample ID: 245807001

Sample Date/Time: Sunday, February 21, 2010 11:54:00

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 9480901|baj

Method File: c:\elandata\Method\lanl 0220.mth

Dataset File: C:\elandata\Dataset\100221\245807001.038

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.022	ug/L	18.512	26	0.000
> Sc	45		ug/L		803305	803305.063
Cr	52	1.440	ug/L	2.544	17042	0.017
Cr	53		ug/L		745689	0.633
Mn	55	0.648	ug/L	0.317	12434	0.012
Ni	60	0.054	ug/L	3.215	392	0.000
> Lu	175		ug/L		622341	622341.291
Pb	208	0.069	ug/L	3.489	3352	0.005
U	238	0.027	ug/L	2.926	1505	0.002

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Lu	175Linear Thru Zero	
Pb	208Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

### QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
Be	9						
> Sc	45		103.2				
Cr	52						
Cr	53						
Mn	55						
Ni	60						
> Lu	175		103.7				
Pb	208						
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: 245807001

Report Date/Time: Sunday, February 21, 2010 11:54:41

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## ICPMS#5 - Summary Report

Sample ID: 245807002

Sample Date/Time: Sunday, February 21, 2010 11:56:11

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 948090|1|baj

Method File: c:\elandata\Method\lanl 0220.mth

Dataset File: C:\elandata\Dataset\100221\245807002.039

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.017	ug/L	94.177	23	0.000
>	Sc	45		ug/L		820143	820142.906
	Cr	52	1.679	ug/L	4.403	19691	0.020
	Cr	53		ug/L		717429	0.579
	Mn	55	0.648	ug/L	1.926	12691	0.012
[	Ni	60	0.077	ug/L	9.966	460	0.000
>	Lu	175		ug/L		633035	633035.252
	Pb	208	0.604	ug/L	1.808	26531	0.041
[	U	238	0.093	ug/L	2.867	4955	0.008

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Lu	175Linear Thru Zero	
Pb	208Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[	Be	9					
>	Sc	45		105.4			
	Cr	52					
	Cr	53					
	Mn	55					
[	Ni	60					
>	Lu	175		105.5			
	Pb	208					
[	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: 245807002

Report Date/Time: Sunday, February 21, 2010 11:56:51

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## ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Sunday, February 21, 2010 11:58:20

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl 0220.mth

Dataset File: C:\elandata\Dataset\100221\QC Std 6.040

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	49.854	ug/L	0.707	29834	0.038
>	Sc	45		ug/L		785777	785777.407
	Cr	52	49.182	ug/L	0.627	455648	0.576
	Cr	53		ug/L		269246	0.047
	Mn	55	50.794	ug/L	2.014	744494	0.944
L	Ni	60	48.447	ug/L	1.631	124872	0.159
>	Lu	175		ug/L		675152	675151.688
	Pb	208	50.500	ug/L	3.227	2328124	3.449
L	U	238	50.003	ug/L	3.298	2753491	4.080

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Lu	175Linear Thru Zero	
Pb	208Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[	Be	9	99.709					
>	Sc	45		101.0				
	Cr	52	98.364					
	Cr	53						
	Mn	55	101.588					
L	Ni	60	96.894					
>	Lu	175		112.5				
	Pb	208	101.001					
L	U	238	100.005					

### 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 6

Report Date/Time: Sunday, February 21, 2010 11:58:59

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## ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Sunday, February 21, 2010 12:00:29

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\anl 0220.mth

Dataset File: C:\elandata\Dataset\100221\QC Std 7.041

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.016	ug/L	95.165	20	0.000
> Sc	45		ug/L		743646	743646.228
Cr	52	0.571	ug/L	14.614	8212	0.007
Cr	53		ug/L		313055	0.126
Mn	55	0.047	ug/L	31.117	3187	0.001
Ni	60	-0.013	ug/L	26.877	198	-0.000
> Lu	175		ug/L		633366	633366.379
Pb	208	0.005	ug/L	22.266	615	0.000
U	238	0.015	ug/L	2.393	921	0.001

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Lu	175Linear Thru Zero	
Pb	208Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

### QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
Be	9						
> Sc	45		95.5				
Cr	52						
Cr	53						
Mn	55						
Ni	60						
> Lu	175		105.5				
Pb	208						
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: Sunday, February 21, 2010 12:01:09

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## ICPMS#5 - Summary Report

Sample ID: Blank

Sample Date/Time: Sunday, February 21, 2010 12:04:10

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only.mth

Dataset File: C:\elandata\Dataset\100221\Blank.042

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		617752	
[ U	238		ug/L		374	

### 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 % 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: Blank

Report Date/Time: Sunday, February 21, 2010 12:04:22

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## ICPMS#5 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Sunday, February 21, 2010 12:05:49

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only.mth

Dataset File: C:\elandata\Dataset\100221\Standard 1.043

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		664172	664172.319
[	U	238	10.000 ug/L	2.543	659083	0.992

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear 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
[>	Lu	175				
[	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

Sample ID: Standard 1

Report Date/Time: Sunday, February 21, 2010 12:05:58

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## ICPMS#5 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Sunday, February 21, 2010 12:07:26

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: C:\elandata\Dataset\100221\Standard 2.044

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		652973	652972.788
[ U	238	99.825	ug/L	0.646	5504050	8.429

### 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						
[ 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: Sunday, February 21, 2010 12:07:36

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## ICPMS#5 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Sunday, February 21, 2010 12:09:03

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: C:\elandata\Dataset\100221\QC Std 1.045

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		659537	659536.785
[	U	238	51.177 ug/L	2.467	2849484	4.321

### 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		106.8			
[	U	238	102.354				

### 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: QC Std 1

Report Date/Time: Sunday, February 21, 2010 12:09:13

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## ICPMS#5 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Sunday, February 21, 2010 12:10:43

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: C:\elandata\Dataset\100221\QC Std 2.046

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		633323	633323.380
[	U	238	0.013	ug/L	1.969	1077	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 % Recov	Dilution % Di	Duplicate Rel. % Difference
[>	Lu	175		102.5			
[	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: Sunday, February 21, 2010 12:10:55

Page 1

## ICPMS#5 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Sunday, February 21, 2010 12:12:23

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only.mth

Dataset File: C:\elandata\Dataset\100221\QC Std 3.047

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		646467	646466.570
[	U	238	0.250	ug/L	2.827	14049	0.021

### 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			104.6			
[	U	238	125.110					

### 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: QC Std 3

Report Date/Time: Sunday, February 21, 2010 12:12:34

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## ICPMS#5 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Sunday, February 21, 2010 12:14:02

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only.mth

Dataset File: C:\elandata\Dataset\100221\QC Std 4.048

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		583428	583427.977
[	U	238	-0.000	ug/L	2363.642	351	-0.000

### 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		94.4				
[	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

## ICPMS#5 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Sunday, February 21, 2010 12:15:41

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only.mth

Dataset File: C:\elandata\Dataset\100221\QC Std 5.049

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		595331	595331.116
[	U	238	ug/L	1.086	1189143	1.997

### 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 % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175		96.4		
[	U	238	118.250			

### 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 6

Sample Date/Time: Sunday, February 21, 2010 12:17:21

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only.mth

Dataset File: C:\elandata\Dataset\100221\QC Std 6.050

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		670507	670507.287
[	U	238	49.111	ug/L	1.733	2780637	4.147

### 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		108.5			
[	U	238	98.222				

### 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: Sunday, February 21, 2010 12:17:32

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## ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Sunday, February 21, 2010 12:19:02

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: C:\elandata\Dataset\100221\QC Std 7.051

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		606909	606909.258
[	U	238	0.012 ug/L	4.367	1002	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		98.2		
[	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

Sample ID: QC Std 7

Report Date/Time: Sunday, February 21, 2010 12:19:14

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## ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Sunday, February 21, 2010 12:35:44

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only.mth

Dataset File: C:\elandata\Dataset\100221\QC Std 6.061

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		657594	657593.889
[	U	238	47.680	ug/L	1.141	2647696	4.026

### 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			106.4			
[	U	238	95.361					

### 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: Sunday, February 21, 2010 12:35:55

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## ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Sunday, February 21, 2010 12:37:25

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: C:\elandata\Dataset\100221\QC Std 7.062

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		613255	613255.402
[	U	238	0.010 ug/L	4.739	886	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		99.3		
[	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

Sample ID: QC Std 7

Report Date/Time: Sunday, February 21, 2010 12:37:37

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## ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Sunday, February 21, 2010 12:52:33

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only.mth

Dataset File: C:\elandata\Dataset\100221\QC Std 6.071

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		659502	659501.648
[	U	238	46.905	ug/L	0.926	2612293	3.960

### 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			106.8		
[	U	238	93.810				

### 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: Sunday, February 21, 2010 12:52:44

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## ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Sunday, February 21, 2010 12:54:14

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only.mth

Dataset File: C:\elandata\Dataset\100221\QC Std 7.072

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		571853	571853.062
[	U	238	0.011	ug/L	4.596	860	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			92.6		
[	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

Sample ID: QC Std 7

Report Date/Time: Sunday, February 21, 2010 12:54:26

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## ICPMS#5 - Summary Report

Sample ID: 1202031027

Sample Date/Time: Sunday, February 21, 2010 12:59:33

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 948090|1|ba|

Method File: c:\elandata\Method\only.mth

Dataset File: C:\elandata\Dataset\100221\1202031027.073

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		564550	564550.144
[	U	238	-0.004	ug/L	7.890	147	-0.000

### 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			91.4		
[	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: 1202031027

Report Date/Time: Sunday, February 21, 2010 12:59:45

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## ICPMS#5 - Summary Report

Sample ID: 1202031028

Sample Date/Time: Sunday, February 21, 2010 13:01:15

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 948090|1|ba|

Method File: c:\elandata\Method\only.mth

Dataset File: C:\elandata\Dataset\100221\1202031028.074

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		574994	574994.347
[	U	238	ug/L	1.009	2754483	4.790

### 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		93.1			
[	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

Sample ID: 1202031028

Report Date/Time: Sunday, February 21, 2010 13:01:27

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## ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Sunday, February 21, 2010 13:13:06

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only.mth

Dataset File: C:\elandata\Dataset\100221\QC Std 6.081

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		642234	642234.343
[	U	238	46.208	ug/L	0.746	2506027	3.902

### 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		104.0				
[	U	238	92.415					

### 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: Sunday, February 21, 2010 13:13:17

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## ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Sunday, February 21, 2010 13:14:47

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only.mth

Dataset File: C:\elandata\Dataset\100221\QC Std 7.082

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		564447	564446.757
[	U	238	0.014	ug/L	15.112	1004	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		91.4			
[	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: QC Std 7

Report Date/Time: Sunday, February 21, 2010 13:14:59

Page 1

## ICPMS#5 - Summary Report

Sample ID: 1202031029

Sample Date/Time: Sunday, February 21, 2010 13:22:33

Sample Type:

Sample Description: LANL 6020 DUP

Number of Replicates: 3

Batch ID: 9480901|ba|

Method File: c:\elandata\Method\only.mth

Dataset File: C:\elandata\Dataset\100221\1202031029.086

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		551899	551899.197
[ U	238	3.591	ug/L	1.281	167638	0.303

### 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		89.3			
[ 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

Sample ID: 1202031029

Report Date/Time: Sunday, February 21, 2010 13:22:46

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## ICPMS#5 - Summary Report

Sample ID: 1202031030

Sample Date/Time: Sunday, February 21, 2010 13:24:17

Sample Type:

Sample Description: LANL 6020 MS

Number of Replicates: 3

Batch ID: 948090|1|ba|

Method File: c:\elandata\Method\w only.mth

Dataset File: C:\elandata\Dataset\100221\1202031030.087

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		548798	548797.541
[	U	238	60.067	ug/L	1.187	2783713	5.072

### 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		88.8			
[	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: 1202031030

Report Date/Time: Sunday, February 21, 2010 13:24:30

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## ICPMS#5 - Summary Report

Sample ID: 1202031031

Sample Date/Time: Sunday, February 21, 2010 13:25:59

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 948090[5]ba]

Method File: c:\elandata\Method\w only.mth

Dataset File: C:\elandata\Dataset\100221\1202031031.088

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		589161	589161.330
[	U	238	0.681	ug/L	0.311	34232	0.057

### 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		95.4			
[	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: 1202031031

Report Date/Time: Sunday, February 21, 2010 13:26:11

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## ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Sunday, February 21, 2010 13:27:40

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only.mth

Dataset File: C:\elandata\Dataset\100221\QC Std 6.089

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		647357	647356.844
[	U	238	46.422	ug/L	0.412	2537723	3.920

### 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		104.8				
[	U	238	92.844					

### 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: Sunday, February 21, 2010 13:27:51

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## ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Sunday, February 21, 2010 13:29:21

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only.mth

Dataset File: C:\elandata\Dataset\100221\QC Std 7.090

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		608393	608392.911
[ U	238	0.012	ug/L	6.214	978	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 % 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 7

Report Date/Time: Sunday, February 21, 2010 13:29:33

Page 1

## ICPMS#5 - Summary Report

Sample ID: 245807001

Sample Date/Time: Sunday, February 21, 2010 13:39:37

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 948090[1]ba]

Method File: c:\elandata\Method\only.mth

Dataset File: C:\elandata\Dataset\100221\245807001.096

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		567764	567763.625
[	U	238	0.022	ug/L	3.044	1421	0.002

### 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		91.9			
[	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: 245807001

Report Date/Time: Sunday, February 21, 2010 13:39:50

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## ICPMS#5 - Summary Report

Sample ID: 245807002

Sample Date/Time: Sunday, February 21, 2010 13:41:20

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 948090|1|ba|

Method File: c:\elandata\Method\w only.mth

Dataset File: C:\elandata\Dataset\100221\245807002.097

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		569873	569873.134
[	U	238	0.088	ug/L	1.634	4575	0.007

### 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		92.2			
[	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: 245807002

Report Date/Time: Sunday, February 21, 2010 13:41:31

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## ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Sunday, February 21, 2010 13:43:00

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only.mth

Dataset File: C:\elandata\Dataset\100221\QC Std 6.098

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		647094	647094.033
[	U	238	46.309	ug/L	1.445	2530499	3.910

### 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			104.7			
[	U	238	92.618					

### 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: Sunday, February 21, 2010 13:44:41

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only.mth

Dataset File: C:\elandata\Dataset\100221\QC Std 7.099

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		576307	576306.908
[	U	238	0.012	ug/L	4.241	942	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		93.3			
[	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

Sample ID: QC Std 7

Report Date/Time: Sunday, February 21, 2010 13:44:53

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Method Name: WATER  
 Method Description: 7470A, 245.2, ILM04 ANALYST JXL  
 Element: Hg

Date: 02/15/2010  
 Technique: FI-MHS  
 Calibration Type:  
 Hg, Calc. Intercept : Linear  
 Wavelength: 253.7 nm  
 Sample Info Name: 021510W1.SIF Results Data Set Name: 021510W1

Element: Hg Seq. No.: 1 AS Loc.: 1 Date: 02/15/2010  
 Sample ID: Calib Blank

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1			0.0024	0.0024	09:21:41	No
2			0.0024	0.0024	09:22:16	No
Mean:			0.0024			
SD :			0.0000			
%RSD:			0.5205			

Auto-zero performed.

Element: Hg Seq. No.: 2 AS Loc.: 2 Date: 02/15/2010  
 Sample ID: S0.2

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1			0.0018	0.0042	09:23:38	No
2			0.0018	0.0042	09:24:13	No
Mean:			0.0018			
SD :			0.0000			
%RSD:						

[Hg] Standard number 1 applied. [0.200]  
 Correlation Coefficient: 1.00000 Slope: 0.00889  
 Intercept : 0.00000

Element: Hg Seq. No.: 3 AS Loc.: 3 Date: 02/15/2010  
 Sample ID: S0.5

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1			0.0042	0.0067	09:25:37	No
2			0.0041	0.0065	09:26:12	No
Mean:			0.0042			
SD :			0.0001			
%RSD:			1.7287			

[Hg] Standard number 2 applied. [0.500]  
 Correlation Coefficient: 0.99956 Slope: 0.00831  
 Intercept : 0.00004

Element: Hg Seq. No.: 4 AS Loc.: 4 Date: 02/15/2010  
 Sample ID: S2.0

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1			0.0182	0.0206	09:27:37	No
2			0.0179	0.0203	09:28:11	No
Mean:			0.0180			
SD :			0.0002			
%RSD:			1.1683			

[Hg] Standard number 3 applied. [2.000]

Correlation Coefficient: 0.99980  
Intercept : -0.00011

Slope: 0.00905

=====  
Element: Hg Seq. No.: 5 AS Loc.: 5 Date: 02/15/2010  
Sample ID: S5.0

Repl #	SampleConc µg/L	StndConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1			0.0452	0.0477	09:29:36	No
2			0.0450	0.0474	09:30:11	No
Mean:			0.0451			
SD :			0.0002			
%RSD:			0.4113			

[Hg] Standard number 4 applied. [5.000]  
Correlation Coefficient: 0.99997  
Intercept : -0.00011

Slope: 0.00905

=====  
Element: Hg Seq. No.: 6 AS Loc.: 6 Date: 02/15/2010  
Sample ID: S10

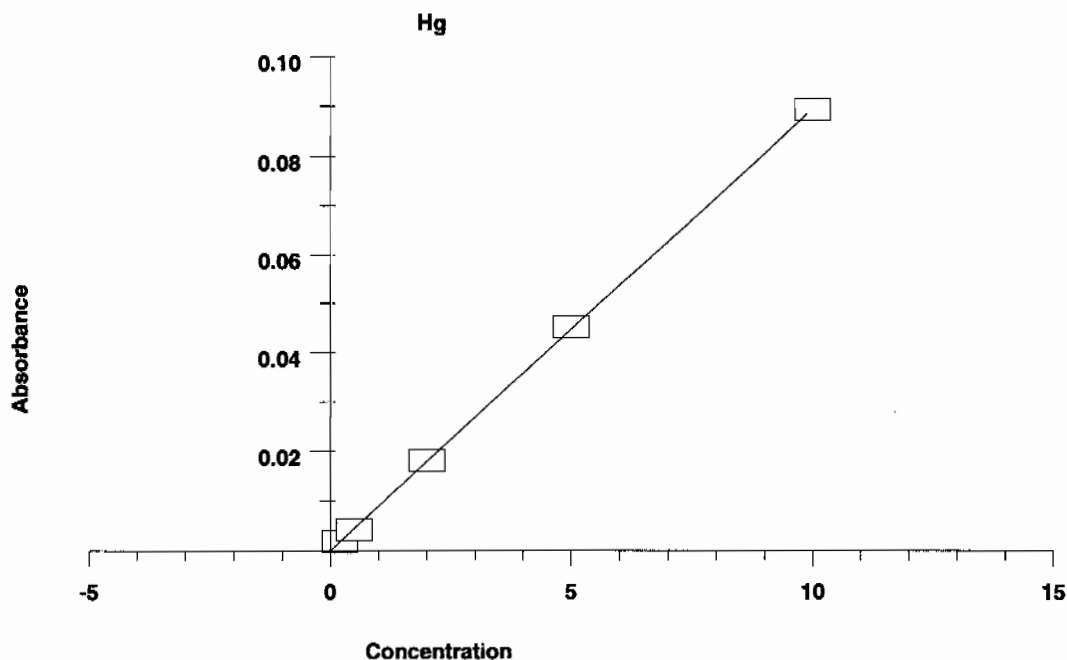
Repl #	SampleConc µg/L	StndConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1			0.0897	0.0921	09:31:37	No
2			0.0887	0.0911	09:32:12	No
Mean:			0.0892			
SD :			0.0007			
%RSD:			0.8016			

[Hg] Standard number 5 applied. [10.00]  
Correlation Coefficient: 0.99997  
Intercept : 0.00001

Slope: 0.00894

#### Calibration data for Hg

Standard ID	Mean Signal (Pk Height)	Entered Concentration (µg/L)	Calculated Concentration (µg/L)	Standard Deviation	%RSD
Calib Blank	0.0024	---	----	----	----
S0.2	0.0018	0.200	0.198	0.0000	----
S0.5	0.0042	0.500	0.465	0.0001	1.7
S2.0	0.0180	2.000	2.017	0.0002	1.2
S5.0	0.0451	5.000	5.046	0.0002	0.4
S10	0.0892	10.000	9.975	0.0007	0.8
Correlation Coefficient: 0.99997		Slope:	0.00894	Intercept:	0.0000



=====  
 Element: Hg Seq. No.: 7 AS Loc.: 9 Date: 02/15/2010  
 Sample ID: ICV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.048	5.048	0.0451	0.0476	09:33:41	No
2	4.991	4.991	0.0446	0.0471	09:34:16	No
Mean:	5.020	5.020	0.0449			
SD :	0.0405	0.0405	0.0004			
%RSD:	0.8	0.8	0.8076			

QC value within specified limits.

=====  
 Element: Hg Seq. No.: 8 AS Loc.: 10 Date: 02/15/2010  
 Sample ID: ICB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.028	-0.028	-0.0002	0.0022	09:35:38	No
2	-0.055	-0.055	-0.0005	0.0019	09:36:13	No
Mean:	-0.042	-0.042	-0.0004			
SD :	0.0195	0.0195	0.0002			
%RSD:	47.1	47.1	48.4306			

QC value within specified limits.

=====  
 Element: Hg Seq. No.: 9 AS Loc.: 11 Date: 02/15/2010  
 Sample ID: CRDL

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.200	0.200	0.0018	0.0042	09:37:35	No
2	0.193	0.193	0.0017	0.0042	09:38:10	No
Mean:	0.197	0.197	0.0018			
SD :	0.0048	0.0048	0.0000			
%RSD:	2.4	2.4	2.4178			



QC value within specified limits.

=====

Element: Hg Seq. No.: 10 AS Loc.: 7 Date: 02/15/2010

Sample ID: CCV

-----

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	5.071	5.071	0.0453	0.0478	09:39:35	No
2	5.003	5.003	0.0447	0.0472	09:40:10	No
Mean:	5.037	5.037	0.0450			
SD :	0.0480	0.0480	0.0004			
%RSD:	1.0	1.0	0.9530			

QC value within specified limits.

=====

Element: Hg Seq. No.: 11 AS Loc.: 8 Date: 02/15/2010

Sample ID: CCB

-----

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	-0.034	-0.034	-0.0003	0.0021	09:41:39	No
2	-0.033	-0.033	-0.0003	0.0021	09:42:13	No
Mean:	-0.034	-0.034	-0.0003			
SD :	0.0001	0.0001	0.0000			
%RSD:	0.3	0.3	0.3404			

QC value within specified limits.

=====

Element: Hg Seq. No.: 12 AS Loc.: 12 Date: 02/15/2010

Sample ID: 1202030001|i||947659|MB

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Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	-0.032	-0.032	-0.0003	0.0021	09:43:40	No
2	-0.041	-0.041	-0.0004	0.0021	09:44:15	No
Mean:	-0.037	-0.037	-0.0003			
SD :	0.0063	0.0063	0.0001			
%RSD:	17.1	17.1	17.6447			

=====

Element: Hg Seq. No.: 13 AS Loc.: 13 Date: 02/15/2010

Sample ID: 1202030002|i||LCS

-----

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	2.137	2.137	0.0191	0.0215	09:45:39	No
2	2.109	2.109	0.0189	0.0213	09:46:14	No
Mean:	2.123	2.123	0.0190			
SD :	0.0200	0.0200	0.0002			
%RSD:	0.9	0.9	0.9436			

=====

Element: Hg Seq. No.: 14 AS Loc.: 14 Date: 02/15/2010

Sample ID: 245605002|i|||

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Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	-0.001	-0.001	0.0000	0.0024	09:47:39	No
2	0.002	0.002	0.0000	0.0025	09:48:14	No
Mean:	0.000	0.000	0.0000			
SD :	0.0015	0.0015	0.0000			
%RSD:	336.1	336.1	93.9525			

=====

Element: Hg Seq. No.: 15 AS Loc.: 15 Date: 02/15/2010

Sample ID: 245605003|i|||

%RSD: 0.7 0.7 0.6795

=====  
 Element: Hg Seq. No.: 21 AS Loc.: 21 Date: 02/15/2010  
 Sample ID: 1202030005|i|5|SDILT

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Height	Time	Peak Stored
1	-0.099	-0.099	-0.0009	0.0016	10:01:28	No
2	-0.104	-0.104	-0.0009	0.0015	10:02:03	No
Mean:	-0.102	-0.102	-0.0009			
SD :	0.0037	0.0037	0.0000			
%RSD:	3.7	3.7	3.7087			

=====  
 Element: Hg Seq. No.: 22 AS Loc.: 7 Date: 02/15/2010  
 Sample ID: CCV

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Height	Time	Peak Stored
1	5.145	5.145	0.0460	0.0484	10:03:28	No
2	5.088	5.088	0.0455	0.0479	10:04:03	No
Mean:	5.117	5.117	0.0457			
SD :	0.0403	0.0403	0.0004			
%RSD:	0.8	0.8	0.7877			

QC value within specified limits.

=====  
 Element: Hg Seq. No.: 23 AS Loc.: 8 Date: 02/15/2010  
 Sample ID: CCB

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Height	Time	Peak Stored
1	-0.043	-0.043	-0.0004	0.0021	10:05:31	No
2	-0.037	-0.037	-0.0003	0.0021	10:06:06	No
Mean:	-0.040	-0.040	-0.0003			
SD :	0.0038	0.0038	0.0000			
%RSD:	9.4	9.4	9.6735			

QC value within specified limits.

=====  
 Element: Hg Seq. No.: 24 AS Loc.: 22 Date: 02/15/2010  
 Sample ID: 245673002|i|||

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Height	Time	Peak Stored
1	-0.031	-0.031	-0.0003	0.0022	10:07:31	No
2	-0.051	-0.051	-0.0004	0.0020	10:08:06	No
Mean:	-0.041	-0.041	-0.0004			
SD :	0.0135	0.0135	0.0001			
%RSD:	33.0	33.0	33.9271			

=====  
 Element: Hg Seq. No.: 25 AS Loc.: 23 Date: 02/15/2010  
 Sample ID: 245673003|i|||

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Height	Time	Peak Stored
1	-0.047	-0.047	-0.0004	0.0020	10:09:30	No
2	-0.053	-0.053	-0.0005	0.0020	10:10:04	No
Mean:	-0.050	-0.050	-0.0004			
SD :	0.0044	0.0044	0.0000			
%RSD:	8.7	8.7	8.9549			

=====  
 Element: Hg Seq. No.: 26 AS Loc.: 24 Date: 02/15/2010  
 Sample ID: 245673004|i|||

%RSD:

=====

Element: Hg Seq. No.: 32 AS Loc.: 30 Date: 02/15/2010  
 Sample ID: 1202041608|i|||DUP

-----

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Height	Time	Peak Stored
1	-0.052	-0.052	-0.0005	0.0020	10:23:29	No
2	-0.055	-0.055	-0.0005	0.0019	10:24:04	No
Mean:	-0.054	-0.054	-0.0005			
SD :	0.0019	0.0019	0.0000			
%RSD:	3.6	3.6	3.6715			

=====

Element: Hg Seq. No.: 33 AS Loc.: 31 Date: 02/15/2010  
 Sample ID: 1202041609|i|||MS

-----

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Height	Time	Peak Stored
1	2.104	2.104	0.0188	0.0212	10:25:32	No
2	2.113	2.113	0.0189	0.0213	10:26:07	No
Mean:	2.108	2.108	0.0189			
SD :	0.0059	0.0059	0.0001			
%RSD:	0.3	0.3	0.2779			

=====

Element: Hg Seq. No.: 34 AS Loc.: 7 Date: 02/15/2010  
 Sample ID: CCV

-----

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Height	Time	Peak Stored
1	5.147	5.147	0.0460	0.0484	10:27:34	No
2	5.128	5.128	0.0459	0.0483	10:28:09	No
Mean:	5.137	5.137	0.0459			
SD :	0.0129	0.0129	0.0001			
%RSD:	0.3	0.3	0.2516			

QC value within specified limits.

=====

Element: Hg Seq. No.: 35 AS Loc.: 8 Date: 02/15/2010  
 Sample ID: CCB

-----

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Height	Time	Peak Stored
1	-0.046	-0.046	-0.0004	0.0020	10:29:38	No
2	-0.049	-0.049	-0.0004	0.0020	10:30:12	No
Mean:	-0.048	-0.048	-0.0004			
SD :	0.0018	0.0018	0.0000			
%RSD:	3.7	3.7	3.8110			

QC value within specified limits.

=====

Element: Hg Seq. No.: 36 AS Loc.: 32 Date: 02/15/2010  
 Sample ID: 1202041610|i|5||SDILT

-----

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Height	Time	Peak Stored
1	-0.092	-0.092	-0.0008	0.0016	10:31:36	No
2	-0.100	-0.100	-0.0009	0.0015	10:32:11	No
Mean:	-0.096	-0.096	-0.0008			
SD :	0.0063	0.0063	0.0001			
%RSD:	6.6	6.6	6.6348			

=====

Element: Hg Seq. No.: 37 AS Loc.: 33 Date: 02/15/2010  
 Sample ID: 246789002|i|||

=====

%RSD: 5.9 5.9 5.9632

=====  
 Element: Hg Seq. No.: 43 AS Loc.: 39 Date: 02/15/2010  
 Sample ID: 1202041424|i||MS  
 =====

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Height	Time	Peak Stored
1	2.068	2.068	0.0185	0.0209	10:45:09	No
2	2.071	2.071	0.0185	0.0209	10:45:44	No
Mean:	2.070	2.070	0.0185			
SD :	0.0017	0.0017	0.0000			
%RSD:						

=====  
 Element: Hg Seq. No.: 44 AS Loc.: 40 Date: 02/15/2010  
 Sample ID: 1202041425|i||MSD  
 =====

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Height	Time	Peak Stored
1	2.101	2.101	0.0188	0.0212	10:47:08	No
2	2.106	2.106	0.0188	0.0213	10:47:43	No
Mean:	2.103	2.103	0.0188			
SD :	0.0033	0.0033	0.0000			
%RSD:	0.2	0.2	0.1587			

=====  
 Element: Hg Seq. No.: 45 AS Loc.: 41 Date: 02/15/2010  
 Sample ID: 1202041435|i|5||SDILT  
 =====

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Height	Time	Peak Stored
1	-0.119	-0.119	-0.0010	0.0014	10:49:07	No
2	-0.125	-0.125	-0.0011	0.0013	10:49:42	No
Mean:	-0.122	-0.122	-0.0011			
SD :	0.0046	0.0046	0.0000			
%RSD:	3.7	3.7	3.7805			

=====  
 Element: Hg Seq. No.: 46 AS Loc.: 7 Date: 02/15/2010  
 Sample ID: CCV  
 =====

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Height	Time	Peak Stored
1	5.101	5.101	0.0456	0.0480	10:51:08	No
2	5.106	5.106	0.0456	0.0481	10:51:43	No
Mean:	5.103	5.103	0.0456			
SD :	0.0035	0.0035	0.0000			
%RSD:						

QC value within specified limits.

=====  
 Element: Hg Seq. No.: 47 AS Loc.: 8 Date: 02/15/2010  
 Sample ID: CCB  
 =====

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Height	Time	Peak Stored
1	-0.095	-0.095	-0.0008	0.0016	10:53:11	No
2	-0.099	-0.099	-0.0009	0.0016	10:53:46	No
Mean:	-0.097	-0.097	-0.0009			
SD :	0.0026	0.0026	0.0000			
%RSD:	2.7	2.7	2.7104			

QC value within specified limits.

=====  
 Element: Hg Seq. No.: 48 AS Loc.: 42 Date: 02/15/2010  
 Sample ID: 246914003|i|||  
 =====

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Height	Time	Peak Stored
1	-0.083	-0.083	-0.0007	0.0017	10:55:12	No
2	-0.092	-0.092	-0.0008	0.0016	10:55:47	No
Mean:	-0.087	-0.087	-0.0008			
SD :	0.0064	0.0064	0.0001			
%RSD:	7.3	7.3	7.3722			

=====  
 Element: Hg Seq. No.: 49 AS Loc.: 43 Date: 02/15/2010  
 Sample ID: 246914004|i|||

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Height	Time	Peak Stored
1	-0.109	-0.109	-0.0010	0.0015	10:57:12	No
2	-0.113	-0.113	-0.0010	0.0014	10:57:47	No
Mean:	-0.111	-0.111	-0.0010			
SD :	0.0031	0.0031	0.0000			
%RSD:	2.8	2.8	2.7827			

=====  
 Element: Hg Seq. No.: 50 AS Loc.: 44 Date: 02/15/2010  
 Sample ID: 246914005|i|||

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Height	Time	Peak Stored
1	-0.092	-0.092	-0.0008	0.0016	10:59:13	No
2	-0.098	-0.098	-0.0009	0.0016	10:59:48	No
Mean:	-0.095	-0.095	-0.0008			
SD :	0.0039	0.0039	0.0000			
%RSD:	4.1	4.1	4.1164			

=====  
 Element: Hg Seq. No.: 51 AS Loc.: 45 Date: 02/15/2010  
 Sample ID: 1202029965|i||947646|MB

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Height	Time	Peak Stored
1	-0.118	-0.118	-0.0010	0.0014	11:01:14	No
2	-0.112	-0.112	-0.0010	0.0014	11:01:48	No
Mean:	-0.115	-0.115	-0.0010			
SD :	0.0040	0.0040	0.0000			
%RSD:	3.4	3.4	3.4701			

=====  
 Element: Hg Seq. No.: 52 AS Loc.: 46 Date: 02/15/2010  
 Sample ID: 1202029966|i||LCS

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Height	Time	Peak Stored
1	2.047	2.047	0.0183	0.0207	11:03:14	No
2	2.027	2.027	0.0181	0.0206	11:03:49	No
Mean:	2.037	2.037	0.0182			
SD :	0.0137	0.0137	0.0001			
%RSD:	0.7	0.7	0.6701			

=====  
 Element: Hg Seq. No.: 53 AS Loc.: 47 Date: 02/15/2010  
 Sample ID: 245681001|i|||

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Height	Time	Peak Stored
1	-0.114	-0.114	-0.0010	0.0014	11:05:16	No
2	-0.107	-0.107	-0.0009	0.0015	11:05:51	No
Mean:	-0.111	-0.111	-0.0010			
SD :	0.0051	0.0051	0.0000			

%RSD: 4.6 4.6 4.6202

=====  
 Element: Hg Seq. No.: 54 AS Loc.: 48 Date: 02/15/2010  
 Sample ID: 245681002|i|||

Repl #	SampleConc µg/L	StdndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.113	-0.113	-0.0010	0.0014	11:07:15	No
2	-0.118	-0.118	-0.0010	0.0014	11:07:50	No
Mean:	-0.115	-0.115	-0.0010			
SD :	0.0038	0.0038	0.0000			
%RSD:	3.3	3.3	3.3203			

=====  
 Element: Hg Seq. No.: 55 AS Loc.: 49 Date: 02/15/2010  
 Sample ID: 245690001|i|||

Repl #	SampleConc µg/L	StdndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.102	-0.102	-0.0009	0.0015	11:09:10	No
2	-0.107	-0.107	-0.0009	0.0015	11:09:45	No
Mean:	-0.105	-0.105	-0.0009			
SD :	0.0036	0.0036	0.0000			
%RSD:	3.4	3.4	3.4771			

=====  
 Element: Hg Seq. No.: 56 AS Loc.: 50 Date: 02/15/2010  
 Sample ID: 245690002|i|||

Repl #	SampleConc µg/L	StdndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.099	-0.099	-0.0009	0.0016	11:11:06	No
2	-0.109	-0.109	-0.0010	0.0015	11:11:41	No
Mean:	-0.104	-0.104	-0.0009			
SD :	0.0072	0.0072	0.0001			
%RSD:	6.9	6.9	6.9975			

=====  
 Element: Hg Seq. No.: 57 AS Loc.: 51 Date: 02/15/2010  
 Sample ID: 245807001|i|||

Repl #	SampleConc µg/L	StdndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.110	-0.110	-0.0010	0.0015	11:13:02	No
2	-0.115	-0.115	-0.0010	0.0014	11:13:36	No
Mean:	-0.112	-0.112	-0.0010			
SD :	0.0033	0.0033	0.0000			
%RSD:	3.0	3.0	2.9987			

=====  
 Element: Hg Seq. No.: 58 AS Loc.: 7 Date: 02/15/2010  
 Sample ID: CCV

Repl #	SampleConc µg/L	StdndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.081	5.081	0.0454	0.0479	11:15:01	No
2	5.124	5.124	0.0458	0.0482	11:15:36	No
Mean:	5.102	5.102	0.0456			
SD :	0.0304	0.0304	0.0003			
%RSD:	0.6	0.6	0.5954			

QC value within specified limits.

=====  
 Element: Hg Seq. No.: 59 AS Loc.: 8 Date: 02/15/2010  
 Sample ID: CCB

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	-0.104	-0.104	-0.0009	0.0015	11:17:04	No
2	-0.111	-0.111	-0.0010	0.0014	11:17:39	No
Mean:	-0.108	-0.108	-0.0010			
SD :	0.0046	0.0046	0.0000			
%RSD:	4.2	4.2	4.2806			

QC value within specified limits.

=====  
 Element: Hg Seq. No.: 60 AS Loc.: 52 Date: 02/15/2010  
 Sample ID: 1202029967|i|||DUP  
 =====

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	-0.107	-0.107	-0.0009	0.0015	11:19:04	No
2	-0.116	-0.116	-0.0010	0.0014	11:19:39	No
Mean:	-0.111	-0.111	-0.0010			
SD :	0.0065	0.0065	0.0001			
%RSD:	5.8	5.8	5.8805			

=====  
 Element: Hg Seq. No.: 61 AS Loc.: 53 Date: 02/15/2010  
 Sample ID: 1202029968|i|||MS  
 =====

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	2.104	2.104	0.0188	0.0212	11:21:01	No
2	2.120	2.120	0.0190	0.0214	11:21:36	No
Mean:	2.112	2.112	0.0189			
SD :	0.0117	0.0117	0.0001			
%RSD:	0.6	0.6	0.5520			

=====  
 Element: Hg Seq. No.: 62 AS Loc.: 54 Date: 02/15/2010  
 Sample ID: 1202029969|i|5|SDILT  
 =====

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	-0.149	-0.149	-0.0013	0.0011	11:22:58	No
2	-0.148	-0.148	-0.0013	0.0011	11:23:33	No
Mean:	-0.148	-0.148	-0.0013			
SD :	0.0006	0.0006	0.0000			
%RSD:	0.4	0.4	0.3912			

=====  
 Element: Hg Seq. No.: 63 AS Loc.: 55 Date: 02/15/2010  
 Sample ID: 245807002|i|||  
 =====

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	-0.112	-0.112	-0.0010	0.0014	11:24:56	No
2	-0.117	-0.117	-0.0010	0.0014	11:25:30	No
Mean:	-0.115	-0.115	-0.0010			
SD :	0.0031	0.0031	0.0000			
%RSD:	2.7	2.7	2.7422			

=====  
 Element: Hg Seq. No.: 64 AS Loc.: 56 Date: 02/15/2010  
 Sample ID: 1202039059|i||951455|MB  
 =====

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	-0.094	-0.094	-0.0008	0.0016	11:26:55	No
2	-0.105	-0.105	-0.0009	0.0015	11:27:29	No
Mean:	-0.099	-0.099	-0.0009			
SD :	0.0076	0.0076	0.0001			

%RSD: 7.6 7.6 7.7159

=====  
 Element: Hg Seq. No.: 65 AS Loc.: 57 Date: 02/15/2010  
 Sample ID: 1202039060|i|||LCS

Repl #	SampleConc µg/L	StdndConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	2.267	2.267	0.0203	0.0227	11:28:54	No
2	2.265	2.265	0.0203	0.0227	11:29:28	No
Mean:	2.266	2.266	0.0203			
SD :	0.0011	0.0011	0.0000			
%RSD:						

=====  
 Element: Hg Seq. No.: 66 AS Loc.: 58 Date: 02/15/2010  
 Sample ID: 246264001|i|||

Repl #	SampleConc µg/L	StdndConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	-0.097	-0.097	-0.0009	0.0016	11:30:52	No
2	-0.104	-0.104	-0.0009	0.0015	11:31:26	No
Mean:	-0.101	-0.101	-0.0009			
SD :	0.0048	0.0048	0.0000			
%RSD:	4.7	4.7	4.7837			

=====  
 Element: Hg Seq. No.: 67 AS Loc.: 59 Date: 02/15/2010  
 Sample ID: 246269001|i|||

Repl #	SampleConc µg/L	StdndConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	-0.098	-0.098	-0.0009	0.0016	11:32:50	No
2	-0.108	-0.108	-0.0010	0.0015	11:33:24	No
Mean:	-0.103	-0.103	-0.0009			
SD :	0.0072	0.0072	0.0001			
%RSD:	7.0	7.0	7.0414			

=====  
 Element: Hg Seq. No.: 68 AS Loc.: 60 Date: 02/15/2010  
 Sample ID: 246278001|i|||

Repl #	SampleConc µg/L	StdndConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	-0.110	-0.110	-0.0010	0.0015	11:34:49	No
2	-0.110	-0.110	-0.0010	0.0015	11:35:24	No
Mean:	-0.110	-0.110	-0.0010			
SD :	0.0002	0.0002	0.0000			
%RSD:	0.2	0.2	0.1960			

=====  
 Element: Hg Seq. No.: 69 AS Loc.: 61 Date: 02/15/2010  
 Sample ID: 246282001|i|||

Repl #	SampleConc µg/L	StdndConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	-0.094	-0.094	-0.0008	0.0016	11:36:50	No
2	-0.113	-0.113	-0.0010	0.0014	11:37:25	No
Mean:	-0.104	-0.104	-0.0009			
SD :	0.0134	0.0134	0.0001			
%RSD:	12.9	12.9	13.0431			

=====  
 Element: Hg Seq. No.: 70 AS Loc.: 7 Date: 02/15/2010  
 Sample ID: CCV

Repl	SampleConc	StdndConc	BlkCorr	Peak	Time	Peak
------	------------	-----------	---------	------	------	------



#	µg/L	µg/L	Signal	Height		Stored
1	5.193	5.193	0.0464	0.0489	11:38:52	No
2	5.202	5.202	0.0465	0.0489	11:39:27	No
Mean:	5.197	5.197	0.0465			
SD :	0.0063	0.0063	0.0001			
%RSD:	0.1	0.1	0.1218			

QC value within specified limits.

=====  
 Element: Hg Seq. No.: 71 AS Loc.: 8 Date: 02/15/2010  
 Sample ID: CCB

Repl #	SampleConc µg/L	StdndConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	-0.094	-0.094	-0.0008	0.0016	11:40:54	No
2	-0.097	-0.097	-0.0009	0.0016	11:41:29	No
Mean:	-0.096	-0.096	-0.0008			
SD :	0.0024	0.0024	0.0000			
%RSD:	2.5	2.5	2.5414			

QC value within specified limits.

=====  
 Element: Hg Seq. No.: 72 AS Loc.: 62 Date: 02/15/2010  
 Sample ID: 246292001|i|||

Repl #	SampleConc µg/L	StdndConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	-0.097	-0.097	-0.0009	0.0016	11:42:56	No
2	-0.091	-0.091	-0.0008	0.0016	11:43:31	No
Mean:	-0.094	-0.094	-0.0008			
SD :	0.0042	0.0042	0.0000			
%RSD:	4.5	4.5	4.5299			

=====  
 Element: Hg Seq. No.: 73 AS Loc.: 63 Date: 02/15/2010  
 Sample ID: 246292002|i|||

Repl #	SampleConc µg/L	StdndConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	-0.126	-0.126	-0.0011	0.0013	11:44:53	No
2	-0.128	-0.128	-0.0011	0.0013	11:45:28	No
Mean:	-0.127	-0.127	-0.0011			
SD :	0.0011	0.0011	0.0000			
%RSD:	0.9	0.9	0.8800			

=====  
 Element: Hg Seq. No.: 74 AS Loc.: 64 Date: 02/15/2010  
 Sample ID: 246299001|i|||

Repl #	SampleConc µg/L	StdndConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	-0.113	-0.113	-0.0010	0.0014	11:46:48	No
2	-0.116	-0.116	-0.0010	0.0014	11:47:23	No
Mean:	-0.115	-0.115	-0.0010			
SD :	0.0022	0.0022	0.0000			
%RSD:	1.9	1.9	1.9110			

=====  
 Element: Hg Seq. No.: 75 AS Loc.: 65 Date: 02/15/2010  
 Sample ID: 246306001|i|||

Repl #	SampleConc µg/L	StdndConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	-0.096	-0.096	-0.0008	0.0016	11:48:44	No
2	-0.096	-0.096	-0.0008	0.0016	11:49:18	No
Mean:	-0.096	-0.096	-0.0008			
SD :	0.0002	0.0002	0.0000			

# Miscellaneous

# Prep LogBook

Analyst: LYHI Verified by: \_\_\_\_\_

Batch: 948089

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	1202031027		SW846 3005A	03-FEB-2010 08:35	<2	50 mL	50 mL	1		
LCS	1202031028		SW846 3005A	03-FEB-2010 08:35	<2	50 mL	50 mL	1	.5	mL
SAMPLE	245673001		SW846 3005A	03-FEB-2010 08:35	<2	50 mL	50 mL	1	.5	mL
SAMPLE	245673002		SW846 3005A	03-FEB-2010 08:35	<2	50 mL	50 mL	1	.5	mL
SAMPLE	245673003		SW846 3005A	03-FEB-2010 08:35	<2	50 mL	50 mL	1	.5	mL
SAMPLE	245673004		SW846 3005A	03-FEB-2010 08:35	<2	50 mL	50 mL	1	.5	mL
SAMPLE	245673005		SW846 3005A	03-FEB-2010 08:35	<2	50 mL	50 mL	1		
SAMPLE	245673006		SW846 3005A	03-FEB-2010 08:35	<2	50 mL	50 mL	1		
SAMPLE	245676001		SW846 3005A	03-FEB-2010 08:35	<2	50 mL	50 mL	1		
DUP	1202031029	245676001	SW846 3005A	03-FEB-2010 08:35	<2	50 mL	50 mL	1		
MS	1202031030	245676001	SW846 3005A	03-FEB-2010 08:35	<2	50 mL	50 mL	1		
SDILT	1202031031	245676001	SW846 3005A	03-FEB-2010 08:35	<2	50 mL	50 mL	1		
SAMPLE	245676002		SW846 3005A	03-FEB-2010 08:35	<2	50 mL	50 mL	1		
SAMPLE	245676003		SW846 3005A	03-FEB-2010 08:35	<2	50 mL	50 mL	1		
SAMPLE	245676004		SW846 3005A	03-FEB-2010 08:35	<2	50 mL	50 mL	1		
SAMPLE	245676005		SW846 3005A	03-FEB-2010 08:35	<2	50 mL	50 mL	1		
SAMPLE	245676006		SW846 3005A	03-FEB-2010 08:35	<2	50 mL	50 mL	1		
SAMPLE	245807001		SW846 3005A	03-FEB-2010 08:35	<2	50 mL	50 mL	1		
SAMPLE	245807002		SW846 3005A	03-FEB-2010 08:35	<2	50 mL	50 mL	1		

Reagent/Solvent Lot ID	Amount	Description	Comments
100202	2.5 mL	HYDROCHLORIC ACID	
1234886	1 mL	Nitric Acid CONC.	

Prep Data Logbook Version 1:1

GEL Laboratories LLC

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# Prep LogBook

Analyst: TXB3  
Batch: 947645  
Lab SOP: GL-MA-E-010 REV# 23

Verified by: \_\_\_\_\_

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix	Spike Amount	Spike Units
MB	1202029965		SW846 7470A Prep	12-FEB-2010 14:10	<2	20 mL	20 mL	1	WATER		
LCS	1202029966		SW846 7470A Prep	12-FEB-2010 14:10	<2	20 mL	20 mL	1	WATER	2	mL
SAMPLE	245681001		SW846 7470A Prep	12-FEB-2010 14:10	<2	20 mL	20 mL	1	WATER		
SAMPLE	245681002		SW846 7470A Prep	12-FEB-2010 14:10	<2	20 mL	20 mL	1	WATER		
SAMPLE	245690001		SW846 7470A Prep	12-FEB-2010 14:10	<2	20 mL	20 mL	1	WATER		
SAMPLE	245690002		SW846 7470A Prep	12-FEB-2010 14:10	<2	20 mL	20 mL	1	WATER		
SAMPLE	245807001		SW846 7470A Prep	12-FEB-2010 14:10	<2	20 mL	20 mL	1	WATER		
DUP	1202029967	245807001	SW846 7470A Prep	12-FEB-2010 14:10	<2	20 mL	20 mL	1	WATER		
MS	1202029968	245807001	SW846 7470A Prep	12-FEB-2010 14:10	<2	20 mL	20 mL	1	WATER		
SDILT	1202029969	245807001	SW846 7470A Prep	12-FEB-2010 14:10	<2	20 mL	20 mL	1	WATER		
SAMPLE	245807002		SW846 7470A Prep	12-FEB-2010 14:10	<2	20 mL	20 mL	1	WATER		

Reagent/Solvent Lot ID	Amount	Description
1176183	1 mL	Sulfuric Acid, Concentrated
1257474-1	.5 mL	NITRIC ACID
1261483-C	1.5 mL	5% Potassium Persulfate
1264984-C	3 mL	5% KMnO4 solution
1255532-C	1 mL	Hg reducing agent
WHG100212-06	500 uL	Mercury Working 2nd Source 5.0/ICV
WHG100212-01a	20 uL	Mercury Working 1st Source CAL 0.2/CRA
WHG100212-02	50 uL	Mercury Working 1st Source CAL 0.5
WHG100212-05	1 mL	Mercury Working 1st Source CAL 10.0
WHG100212-03	200 uL	Mercury Working 1st Source CAL 2.0
WHG100212-04	500 uL	Mercury Working 1st Source CAL 5.0/CCV

Comments Digestion Start Date: 12-FEB-10 14:10  
Digestion End Date: 12-FEB-10 16:10

# Prep LogBook

Analyst: AXG2  
 Batch: 948085  
 Lab SOP: GL-MA-E-006 REV# 9

Verified by: \_\_\_\_\_

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt	Final Volume	Prep Factor	Spike Amount	Spike Units
MB	1202031021		SW846 3005A	25-FEB-2010 08:00	<2	25 mL	25 mL	1	.125	mL
LCS	1202031026		SW846 3005A	25-FEB-2010 08:00	<2	25 mL	25 mL	1	.125	mL
SAMPLE	245673001		SW846 3005A	25-FEB-2010 08:00	<2	25 mL	25 mL	1	.125	mL
DUP	1202031022	245673001	SW846 3005A	25-FEB-2010 08:00	<2	25 mL	25 mL	1	.125	mL
SDILT	1202031023	245673001	SW846 3005A	25-FEB-2010 08:00	<2	25 mL	25 mL	1	.125	mL
MS	1202031024	245673001	SW846 3005A	25-FEB-2010 08:00	<2	25 mL	25 mL	1	.125	mL
SAMPLE	245673002		SW846 3005A	25-FEB-2010 08:00	<2	25 mL	25 mL	1	.125	mL
SAMPLE	245673003		SW846 3005A	25-FEB-2010 08:00	<2	25 mL	25 mL	1	.125	mL
SAMPLE	245673004		SW846 3005A	25-FEB-2010 08:00	<2	25 mL	25 mL	1	.125	mL
SAMPLE	245673005		SW846 3005A	25-FEB-2010 08:00	<2	25 mL	25 mL	1	.125	mL
SAMPLE	245673006		SW846 3005A	25-FEB-2010 08:00	<2	25 mL	25 mL	1	.125	mL
SAMPLE	245676001		SW846 3005A	25-FEB-2010 08:00	<2	25 mL	25 mL	1	.125	mL
SAMPLE	245676002		SW846 3005A	25-FEB-2010 08:00	<2	25 mL	25 mL	1	.125	mL
SAMPLE	245676003		SW846 3005A	25-FEB-2010 08:00	<2	25 mL	25 mL	1	.125	mL
SAMPLE	245676004		SW846 3005A	25-FEB-2010 08:00	<2	25 mL	25 mL	1	.125	mL
SAMPLE	245676005		SW846 3005A	25-FEB-2010 08:00	<2	25 mL	25 mL	1	.125	mL
SAMPLE	245676006		SW846 3005A	25-FEB-2010 08:00	<2	25 mL	25 mL	1	.125	mL
SAMPLE	245807001		SW846 3005A	25-FEB-2010 08:00	<2	25 mL	25 mL	1	.125	mL
SAMPLE	245807002		SW846 3005A	25-FEB-2010 08:00	<2	25 mL	25 mL	1	.125	mL

Comments:

Reagent/Solvent Lot ID	Amount	Description
1265209	1.25 mL	HYDROCHLORIC ACID
1274969	.5 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 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% IN 5% 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:** Heleen Camello      **Solvent :** +/-0.5%in2%HNO3+TrHF  
**Supplier:** 02si  
**Description:** TRACE ICP Stock PQL Standard  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
---------	---------------	---------	---------------

# 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:** UI091015-42      **Opened:** 28-OCT-09      **Amount :** 500 mL  
**Name:** SI 1000mg/L      **Received:** 15-OCT-09      **Catalog Number :** 060014-02-03  
**Type:** Source Material      **Expires:** 28-OCT-10      **Lot Number :** 1017581  
**Employee:** Helen Camello      **Solvent :** 0.3%H2O(NH4)2SiF6  
**Supplier:** o2si  
**Description:** Silicon 1000mg/L+/-0.3%in H2O(NH4)2SiF6  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

**Serial ID:** UI091102-40      **Opened:** 16-NOV-09      **Amount :** 500 mL  
**Name:** TRACE CALSTD#1A SOUF      **Received:** 02-NOV-09      **Catalog Number :** HP2270-1-500  
**Type:** Source Material      **Expires:** 31-OCT-10      **Lot Number :** 0930215  
**Employee:** Helen Camello      **Solvent :** HNO3  
**Supplier:** Environmental Express  
**Description:** Trace Calibration Std #1A  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Aluminum	2000 mg/L	Arsenic	200 mg/L
Barium	200 mg/L	Beryllium	200 mg/L
Boron	200 mg/L	Cadmium	200 mg/L
Calcium	2000 mg/L	Chromium	200 mg/L
Cobalt	200 mg/L	Copper	200 mg/L
Iron	2000 mg/L	Lead	200 mg/L
Magnesium	2000 mg/L	Manganese	200 mg/L
Nickel	200 mg/L	Phosphorous	1000 mg/L
Potassium	2000 mg/L	Selenium	200 mg/L
Sodium	2000 mg/L	Strontium	200 mg/L
Thallium	200 mg/L	Uranium	200 mg/L
Vanadium	200 mg/L	Zinc	200 mg/L

# Standard Logbook

**Serial ID:** UI091102-41      **Opened:** 16-NOV-09      **Amount :** 500 mL  
**Name:** TRACE CALSTD#1B SOUF      **Received:** 02-NOV-09      **Catalog Number :** HP2270-2-500  
**Type:** Source Material      **Expires:** 31-OCT-10      **Lot Number :** 0930216  
**Employee:** Helen Camello      **Solvent :** HNO3  
**Supplier:** Environmental Express  
**Description:** Trace Calibration Standard #1B  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Antimony	200 mg/L	Molybdenum	200 mg/L
Silver	200 mg/L	Sulfur	400 mg/L
Tin	200 mg/L	Titanium	200 mg/L

**Serial ID:** UI091102-42      **Opened:** 17-NOV-09      **Amount :** 200 mL  
**Name:** SILICON      **Received:** 02-NOV-09      **Catalog Number :** HP100050-4F  
**Type:** Source Material      **Expires:** 17-NOV-10      **Lot Number :** 0921924  
**Employee:** Helen Camello      **Solvent :** H2O/tr HF  
**Supplier:** ENVIRNMENTAL EXPRESS  
**Description:** SILICON 1000mg/L H2O/tr HF  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

**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:** Q2SI  
**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:** Q2SI  
**Description:** ICPMS ICV/CCV Soln B - 10ppm  
**Comments:** None

# Standard Logbook

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 IGV/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 IGV/CCV Soln C - 10ppm  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	20 mg/L
Silver	20 mg/L	Tin	20 mg/L
Titanium	20 mg/L	Tungsten	20 mg/L
Zirconium	20 mg/L		

**Serial ID:** UI091217-12      **Opened:** 17-DEC-09      **Amount :** 250 mL  
**Name:** ICP-MS ICSAB Master B      **Received:** 17-DEC-09      **Catalog Number :** 160033-02  
**Type:** Source Material      **Expires:** 17-DEC-10      **Lot Number :** 1018212  
**Employee:** Paul Boyd      **Solvent :** +/- 0.5% in 2% HNO3  
**Supplier:** 02SI  
**Description:** ICPMS ICSAB Master B  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Arsenic	2 mg/L	Barium	2 mg/L
Beryllium	2 mg/L	Boron	2 mg/L
Cadmium	2 mg/L	Chromium	2 mg/L
Cobalt	2 mg/L	Copper	2 mg/L
Lead	2 mg/L	Lithium	2 mg/L
Manganese	2 mg/L	Nickel	2 mg/L
Selenium	2 mg/L	Strontium	2 mg/L
Thallium	2 mg/L	Thorium	2 mg/L
Uranium	2 mg/L	Vanadium	2 mg/L
Zinc	2 mg/L		

# Standard Logbook

**Serial ID:** UI091217-13      **Opened:** 17-DEC-09      **Amount :** 250 mL  
**Name:** ICP-MS ICSAB Master C      **Received:** 17-DEC-09      **Catalog Number :** 160033-03  
**Type:** Source Material      **Expires:** 17-DEC-10      **Lot Number :** 1016926  
**Employee:** Paul Boyd      **Solvent :** +/- 0.5% in 2% HNO3  
**Supplier:** O2SI  
**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:** UI100120-A      **Opened:** 20-JAN-10      **Catalog Number :** 160067-05  
**Name:** ICP-MS ALL OTHER SPIKE      **Received:** 20-JAN-10      **Lot Number :** 1018097  
**Type:** Source Material      **Expires:** 20-JAN-11  
**Employee:** Bryan Davis  
**Supplier:** O2si  
**Description:** ICP-MS SPIKE FOR ALL CLIENTS EXCEPT DOE CLIENTS (Solution A).  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Aluminum	200 mg/L	Arsenic	5 mg/L
Barium	5 mg/L	Beryllium	5 mg/L
Bismuth	5 mg/L	Boron	10 mg/L
Cadmium	5 mg/L	Calcium	200 mg/L
Cesium	5 mg/L	Chromium	5 mg/L
Cobalt	5 mg/L	Copper	5 mg/L
Iron	200 mg/L	Lead	5 mg/L
Lithium	5 mg/L	Magnesium	200 mg/L
Manganese	5 mg/L	Nickel	5 mg/L
Phosphorous	200 mg/L	Potassium	200 mg/L
Selenium	5 mg/L	Sodium	200 mg/L
Strontium	5 mg/L	Thallium	5 mg/L
Thorium	5 mg/L	Uranium	5 mg/L
Uranium-235	.036 mg/L	Uranium-238	4.964 mg/L
Vanadium	5 mg/L	Zinc	5 mg/L

**Serial ID:** UI100120-B      **Opened:** 20-JAN-10      **Catalog Number :** 160067-05  
**Name:** ICP-MS ALL OTHER SPIKE      **Received:** 20-JAN-10      **Lot Number :** 1017644  
**Type:** Source Material      **Expires:** 20-JAN-11  
**Employee:** Bryan Davis  
**Supplier:** O2si  
**Description:** MS SPIKE FOR ALL CLIENTS EXCEPT DOE CLIENTS (Solution B).  
**Comments:** None

# Standard Logbook

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:** UI100205-01      **Opened:** 05-FEB-10      **Lot Number :** 1018514  
**Name:** METALSPIKE-1      **Received:** 05-FEB-10  
**Type:** Source Material      **Expires:** 05-FEB-11  
**Employee:** Francena Armstrong  
**Supplier:** QS2I  
**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:** UI100205-06      **Opened:** 05-FEB-10      **Lot Number :** 1018515  
**Name:** METALSPIKE-2      **Received:** 05-FEB-10  
**Type:** Source Material      **Expires:** 05-FEB-11  
**Employee:** Francena Armstrong  
**Supplier:** QS2I  
**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
Uranium-235	.72 ug/mL	Uranium-238	99.28 ug/mL
Vanadium	100 ug/mL	Zinc	100 ug/mL

# Standard Logbook

**Serial ID:** UI100210-48      **Opened:** 11-FEB-10      **Amount :** 1000 mL  
**Name:** Trace ICP ICSA      **Received:** 10-FEB-10      **Catalog Number :** 160005-02  
**Type:** Source Material      **Expires:** 11-FEB-11      **Lot Number :** 1018807  
**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:** UI100211-40      **Opened:** 11-FEB-10      **Amount :** 500 mL  
**Name:** ICP HIGH RANGE STD-A      **Received:** 10-FEB-10      **Catalog Number :** 160211-05-03  
**Type:** Source Material      **Expires:** 11-FEB-11      **Lot Number :** 1018409  
**Employee:** Helen Camello      **Solvent :** +/-0.5%in2%HNO3  
**Supplier:** 02SI  
**Description:** ICP HIGH RANGE STD SOLUTION A  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Antimony	10000 ug/L	Arsenic	10000 ug/L
Barium	15000 ug/L	Beryllium	3000 ug/L
Boron	5000 ug/L	Cadmium	10000 ug/L
Chromium	25000 ug/L	Cobalt	10000 ug/L
Copper	20000 ug/L	Lead	25000 ug/L
Manganese	10000 ug/L	Molybdenum	10000 ug/L
Nickel	10000 ug/L	Phosphorous	15000 ug/L
Potassium	300000 ug/L	Selenium	10000 ug/L
Silica	107000 ug/L	Silicon	50000 ug/L
Silver	1000 ug/L	Strontium	10000 ug/L
Sulfur	50000 ug/L	Thallium	10000 ug/L
Tin	10000 ug/L	Titanium	10000 ug/L
Vanadium	10000 ug/L	Zinc	15000 ug/L

**Serial ID:** UI100211-41      **Opened:** 11-FEB-10      **Amount :** 500 mL  
**Name:** ICP HIGH RANGE STD B      **Received:** 10-FEB-10      **Catalog Number :** 160211-05-03  
**Type:** Source Material      **Expires:** 11-FEB-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

# Standard Logbook

<b>Analyte</b>	<b>Concentration</b>	<b>Analyte</b>	<b>Concentration</b>
Sodium	500000 ug/L	Uranium	15000 ug/L

**Serial ID:** UI100219-11      **Opened:** 19-FEB-10      **Amount :** 1000 mL  
**Name:** ICP-MS ICSA Master A      **Received:** 19-FEB-10      **Catalog Number :** 160013-01-01L  
**Type:** Source Material      **Expires:** 19-FEB-11      **Lot Number :** 1018321  
**Employee:** Paul Boyd      **Solvent :** 2% HNO3  
**Supplier:** O2SI  
**Description:** ICP-MS ICSA Master A  
**Comments:** None

<b>Analyte</b>	<b>Concentration</b>	<b>Analyte</b>	<b>Concentration</b>
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:** UI100219-60      **Opened:** 19-FEB-10      **Amount :** 5 mL  
**Name:** ICPMS High Range Standard      **Received:** 19-FEB-10      **Catalog Number :** 160212-02-01  
**Type:** Source Material      **Expires:** 19-FEB-11      **Lot Number :** 1018890  
**Employee:** Paul Boyd      **Solvent :** 2% HNO3 + Tr HF  
**Supplier:** O2SI  
**Description:** Linear Range Standard A  
**Comments:** None

<b>Analyte</b>	<b>Concentration</b>	<b>Analyte</b>	<b>Concentration</b>
Aluminum	5000 mg/L	Arsenic	100 mg/L
Barium	250 mg/L	Beryllium	100 mg/L
Cadmium	100 mg/L	Calcium	5000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	5000 mg/L
Lead	500 mg/L	Lithium	100 mg/L
Magnesium	5000 mg/L	Manganese	100 mg/L
Nickel	100 mg/L	Phosphorous	2500 mg/L
Potassium	5000 mg/L	Selenium	50 mg/L
Sodium	5000 mg/L	Strontium	100 mg/L
Thallium	50 mg/L	Thorium	250 mg/L
Uranium	500 mg/L	Vanadium	100 mg/L
Zinc	250 mg/L		



# Standard Logbook

**Serial ID:** UI100219-61      **Opened:** 19-FEB-10      **Amount :** .5 mL  
**Name:** ICPMS High Range Standard      **Received:** 19-FEB-10      **Catalog Number :** 160212-02-01  
**Type:** Source Material      **Expires:** 19-FEB-11      **Lot Number :** 1018890  
**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:** UMS090303-01      **Opened:** 03-MAR-09      **Amount :** 250 mL  
**Name:** ICPMS Cal SPIKE B      **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:** ICPMS Cal SPIKE A      **Received:** 03-MAR-09      **Lot Number :** 14-83JB  
**Type:** Source Material      **Expires:** 28-FEB-10  
**Employee:** Paul Boyd  
**Supplier:** SPEX  
**Description:** ICPMS Calibration Standard Solution A  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Phosphorous	1000 mg/L	Potassium	1000 mg/L
Sodium	1000 mg/L		

# Standard Logbook

**Serial ID:** UMS090303-03      **Opened:** 03-MAR-09      **Amount :** 250 ml  
**Name:** ICPMSCalSPIKEC      **Received:** 03-MAR-09      **Catalog Number :** ZGEL-101-250  
**Type:** Source Material      **Expires:** 28-FEB-10      **Lot Number :** 15-199JB  
**Employee:** Paul Boyd  
**Supplier:** SPEX  
**Description:** ICPMS Calibration Standard Solution C  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Antimony	10 mg/L	Molybdenum	10 mg/L
Tin	10 mg/L	Titanium	10 mg/L
Zirconium	10 mg/L		

**Serial ID:** IHG100212-01      **Opened:** 12-FEB-10      **Instrument Id :** Mercury  
**Name:** MHGINTER1      **Received:** 12-FEB-10      **Pipet Id :** Minou1  
**Type:** Intermediate      **Expires:** 13-FEB-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:** IHG100212-02      **Opened:** 12-FEB-10      **Pipet Id :** Minou1  
**Name:** MHGINTER2      **Received:** 12-FEB-10      **Solvent :** 2% HNO3-1257474  
**Type:** Intermediate      **Expires:** 13-FEB-10  
**Employee:** Tara Griffin  
**Supplier:** GEL  
**Description:** Mercury Intermediate 2nd Source 200 ug/L  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167641-02	Mercury	999.7 mg/L	.05 mL	250 mL	200 ug/L

**Serial ID:** WHG100212-01a      **Opened:** 12-FEB-10      **Pipet Id :** Hg1289245  
**Name:** MHGWORKCAL0.2CRA      **Received:** 12-FEB-10      **Solvent :** 2% HNO3-1257474  
**Type:** Working      **Expires:** 19-FEB-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.
IHG100212-01	Mercury	200 ug/L	20 uL	20 mL	.2 ug/L

# Standard Logbook

**Serial ID:** WHG100212-02      **Opened:** 12-FEB-10      **Pipet Id :** Hg1289245  
**Name:** MHGWORKCAL0.5      **Received:** 12-FEB-10      **Solvent :** 2% HNO3-1257474  
**Type:** Working      **Expires:** 19-FEB-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.
IHG100212-01	Mercury	200 ug/L	50 uL	20 mL	.5 ug/L

**Serial ID:** WHG100212-03      **Opened:** 12-FEB-10      **Pipet Id :** Hg1289245  
**Name:** MHGWORKCAL2.0      **Received:** 12-FEB-10      **Solvent :** 2% HNO3-1257474  
**Type:** Working      **Expires:** 19-FEB-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.
IHG100212-01	Mercury	200 ug/L	200 uL	20 mL	2 ug/L

**Serial ID:** WHG100212-04      **Opened:** 12-FEB-10      **Pipet Id :** Hg1289245  
**Name:** MHGWORKCAL5.0CCV      **Received:** 12-FEB-10      **Solvent :** 2% HNO3-1257474  
**Type:** Working      **Expires:** 19-FEB-10  
**Employee:** Tara Griffin      **Verified:** 20-JUL-07  
**Supplier:** GEL  
**Description:** Mercury Working 1st Source CAL 5.0/CCV  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100212-01	Mercury	200 ug/L	500 uL	20 mL	5 ug/L

**Serial ID:** WHG100212-05      **Opened:** 12-FEB-10      **Pipet Id :** Hg1289245  
**Name:** MHGWORKCAL10.0      **Received:** 12-FEB-10      **Solvent :** 2% HNO3-1257474  
**Type:** Working      **Expires:** 19-FEB-10  
**Employee:** Tara Griffin      **Verified:** 20-JUL-07  
**Supplier:** GEL  
**Description:** Mercury Working 1st Source CAL 10.0  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100212-01	Mercury	200 ug/L	1 mL	20 mL	10 ug/L

# Standard Logbook

**Serial ID:** WHG100212-06      **Opened:** 12-FEB-10      **Pipet Id :** Hg1289245  
**Name:** MHGWORK5.0ICV      **Received:** 12-FEB-10      **Solvent :** 2% HNO3-1257474  
**Type:** Working      **Expires:** 19-FEB-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.
IHG100212-02	Mercury	200 ug/L	500 uL	20 mL	5 ug/L

**Serial ID:** WHG100212-13      **Opened:** 12-FEB-10      **Pipet Id :** Hg1289245  
**Name:** MHGLJQLCSMSSPIKE      **Received:** 12-FEB-10      **Solvent :** 2% HNO3-1257474  
**Type:** Working      **Expires:** 19-FEB-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:** WI100225-42      **Opened:** 25-FEB-10      **Balance Id :** 216  
**Name:** TRACE ICP 0.1 PPM STD.      **Received:** 02-NOV-09      **Pipet Id :** 3581809  
**Type:** Working      **Expires:** 26-FEB-10      **Solvent :** 3%HCL and 1%HNO3 -1272839  
**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.
WI100225-44	Aluminum	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100225-44	Antimony	1000 ug/L	10 mL	100 mL	100 ug/L
WI100225-44	Arsenic	1000 ug/L	10 mL	100 mL	100 ug/L
WI100225-44	Barium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100225-44	Beryllium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100225-44	Boron	1000 ug/L	10 mL	100 mL	100 ug/L
WI100225-44	Cadmium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100225-44	Calcium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100225-44	Chromium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100225-44	Cobalt	1000 ug/L	10 mL	100 mL	100 ug/L
WI100225-44	Copper	1000 ug/L	10 mL	100 mL	100 ug/L
WI100225-44	Iron	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100225-44	Lead	1000 ug/L	10 mL	100 mL	100 ug/L
WI100225-44	Magnesium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100225-44	Manganese	1000 ug/L	10 mL	100 mL	100 ug/L

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI100225-44	Molybdenum	1000 ug/L	10 mL	100 mL	100 ug/L
WI100225-44	Nickel	1000 ug/L	10 mL	100 mL	100 ug/L
WI100225-44	Phosphorous	5000 ug/L	10 mL	100 mL	500 ug/L
WI100225-44	Potassium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100225-44	Selenium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100225-44	Silica	10698 ug/L	10 mL	100 mL	1069 ug/L
WI100225-44	Silicon	5000 ug/L	10 mL	100 mL	500 ug/L
WI100225-44	Silver	1000 ug/L	10 mL	100 mL	100 ug/L
WI100225-44	Sodium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100225-44	Strontium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100225-44	Sulfur	2000 ug/L	10 mL	100 mL	200 ug/L
WI100225-44	Thallium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100225-44	Tin	1000 ug/L	10 mL	100 mL	100 ug/L
WI100225-44	Titanium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100225-44	Uranium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100225-44	Vanadium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100225-44	Zinc	1000 ug/L	10 mL	100 mL	100 ug/L

**Serial ID:** WI100225-43      **Opened:** 25-FEB-10      **Balance Id :** 216  
**Name:** TRACE ICP 0.5/CCV STD.      **Received:** 02-NOV-09      **Pipet Id :** 3581809  
**Type:** Working      **Expires:** 26-FEB-10      **Solvent :** 3%HCL and 1%HNO3 -1272839  
**Employee:** Helen Camello  
**Supplier:** GEL  
**Description:** TRACE ICP 0.5/CCV CALIBRATION STD.  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090828-42	Sodium	1000 ug/mL	5 mL	1000 mL	5000 UG/L
UI091015-42	Silica	2139 mg/L	2.5 mL	1000 mL	5348.25 UG/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Barium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Boron	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Chromium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Copper	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Iron	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Lead	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Manganese	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Nickel	200 mg/L	2.5 mL	1000 mL	500 UG/L

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Selenium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Strontium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Thallium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Uranium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Zinc	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Antimony	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Silver	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	1000 mL	1000 UG/L
UI091102-41	Tin	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Titanium	200 mg/L	2.5 mL	1000 mL	500 UG/L

**Serial ID:** WI100225-44      **Opened:** 25-FEB-10      **Balance Id :** 216  
**Name:** TRACE ICP SCAL 1.0      **Received:** 02-NOV-09      **Pipet Id :** 3581809  
**Type:** Working      **Expires:** 26-FEB-10      **Solvent :** 3%HCL and 1 %HNO3-1272839  
**Employee:** Helen Camello  
**Supplier:** o2si  
**Description:** Trace ICP Calibration Standard 1.0ppm  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091015-42	Silica	2139 mg/L	2.5 mL	500 mL	10698 ug/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Barium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Boron	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Chromium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Copper	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Iron	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Lead	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Manganese	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Nickel	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Selenium	200 mg/L	2.5 mL	500 mL	1000 ug/L

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Allquot	Final Vol.	Final Conc.
UI091102-40	Sodium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Strontium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Thallium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Uranium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Zinc	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Antimony	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Silver	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	500 mL	2000 ug/L
UI091102-41	Tin	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Titanium	200 mg/L	2.5 mL	500 mL	1000 ug/L

**Serial ID:** WI100225-45      **Opened:** 25-FEB-10      **Balance Id :** 216  
**Name:** TRACE ICP S-10 STD      **Received:** 22-APR-09      **Pipet Id :** 3581809  
**Type:** Working      **Expires:** 26-FEB-10      **Solvent :** 3%HCL and 1%HNO3 -1272839  
**Employee:** Helen Camello  
**Supplier:** GEL  
**Description:** TRACE ICP S-10 CALIBRATION STD.  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Allquot	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:** WI100225-46      **Opened:** 25-FEB-10      **Balance Id :** 216  
**Name:** ICP TRACE ICV      **Received:** 25-SEP-09      **Pipet Id :** 3581809  
**Type:** Working      **Expires:** 26-FEB-10      **Solvent :** 3%HCL AND 1%HNO3-1272839  
**Employee:** Helen Camello  
**Supplier:** GEL  
**Description:** Initial Calibration Verification ICP Trace Metals  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Allquot	Final Vol.	Final Conc.
UI090925-40	Aluminum	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Arsenic	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Barium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Boron	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cadmium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Calcium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Chromium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cobalt	100 mg/L	2.5 mL	500 mL	500 ug/L

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-40	Copper	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Iron	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Lead	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Phosphorous	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Potassium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Selenium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Sodium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Strontium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Antimony	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Beryllium	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Magnesium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-41	Manganese	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Molybdenum	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Nickel	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Silver	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Sulfur	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-41	Thallium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Tin	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Titanium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Uranium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Vanadium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Zinc	100 mg/L	2.5 mL	500 mL	500 ug/L
UI091102-42	Silica	2139 mg/L	2.5 mL	500 mL	10695 ug/L
UI091102-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L

**Serial ID:** WI100225-47      **Opened:** 25-FEB-10      **Balance Id :** 216  
**Name:** PQL Working Standard      **Received:** 30-JUN-09      **Pipet Id :** 3581809  
**Type:** Working      **Expres:** 26-FEB-10      **Solvent :** 3%HCL & 1%HNO3-1272839  
**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



# Standard Logbook

Parent Material	Analyte	Parent Conc.	Allquot	Final Vol.	Final Conc.
UI090701-40	Iron	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Lead	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Magnesium	150 mg/L	2 mL	1000 mL	300 ug/L
UI090701-40	Manganese	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Molybdenum	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Nickel	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Phosphorous	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Potassium	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Selenium	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Silicon	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Silver	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sodium	150 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Strontium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sulfur	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Thallium	10 mg/L	2 mL	1000 mL	20 ug/L
UI090701-40	Tin	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Titanium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Uranium	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Vanadium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Zinc	5 mg/L	2 mL	1000 mL	10 ug/L

**Serial ID:** WMS100220-04      **Opened:** 20-FEB-10      **Amount :** 50 mL  
**Name:** ICPMS Cal Standard 100      **Received:** 20-FEB-10      **Balance Id :** 4025216  
**Type:** Working      **Expires:** 21-FEB-10      **Pipet Id :** 3541598  
**Employee:** Paul Boyd      **Solvent :** 2%HNO3/1%HCl-1269792  
**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 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

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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:** WMS100220-04A      **Opened:** 20-FEB-10      **Balance Id :** 4025216  
**Name:** ICPMS Cal Standard 10      **Received:** 20-FEB-10      **Pipet Id :** 3541598  
**Type:** Working      **Expires:** 21-FEB-10      **Solvent :** 2%HNO3/1%HCl - 1269792  
**Employee:** Paul Boyd  
**Supplier:** GEL  
**Description:** ICPMS Calibration Standard (10 ppb)  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100220-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100220-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS100220-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS100220-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100220-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100220-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS100220-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100220-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100220-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100220-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS100220-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS100220-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100220-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS100220-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100220-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100220-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS100220-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100220-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS100220-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100220-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100220-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100220-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS100220-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100220-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100220-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100220-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100220-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS100220-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100220-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS100220-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100220-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100220-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS100220-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

**Serial ID:** WMS100220-05      **Opened:** 20-FEB-10      **Balance Id :** 40245216  
**Name:** ICPMS ICV      **Received:** 20-FEB-10      **Pipet Id :** 3541598  
**Type:** Working      **Expires:** 21-FEB-10      **Solvent :** 2%HNO3/1%HCl - 1269792  
**Employee:** Paul Boyd  
**Supplier:** GEL  
**Description:** ICPMS ICV  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI091217-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI091217-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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:** WMS100220-06      **Opened:** 20-FEB-10      **Balance Id :** 40245216  
**Name:** ICPMS CRDL      **Received:** 20-FEB-10      **Pipet Id :** 3820544  
**Type:** Working      **Expires:** 21-FEB-10      **Solvent :** 2%HNO3/1%HCl - 1269792  
**Employee:** Paul Boyd  
**Supplier:** GEL  
**Description:** ICPMS CRDL  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Allquot	Final Vol.	Final Conc.
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:** WMS100220-07      **Opened:** 20-FEB-10      **Balance Id :** 40245216  
**Name:** ICPMS ICSA      **Received:** 20-FEB-10      **Lot Number :** 1010773  
**Type:** Working      **Expires:** 21-FEB-10      **Pipet Id :** 3541598  
**Employee:** Paul Boyd      **Solvent :** 2%HNO3/1%HCl - 1269792  
**Supplier:** GEL  
**Description:** ICPMS ICSA  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Allquot	Final Vol.	Final Conc.
UI100219-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100219-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100219-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

**Serial ID:** WMS100220-08      **Opened:** 20-FEB-10      **Balance Id :** 40245216  
**Name:** ICPMS ICSAB      **Received:** 20-FEB-10      **Pipet Id :** 1758088  
**Type:** Working      **Expires:** 21-FEB-10      **Solvent :** 2%HNO3/1%HCl - 1269792  
**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

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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
UI100219-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100219-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100219-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS100220-70      Opened: 20-FEB-10      Balance Id : 40245216  
 Name: ICPMS LINEAR RANGE ST      Received: 20-FEB-10      Pipet Id : 1758088  
 Type: Working      Expires: 21-FEB-10      Solvent : 2%HNO3/1%HCl - 1269792  
 Employee: Paul Boyd  
 Supplier: 02SI  
 Description: ICPMS LINEAR RANGE STANDARD  
 Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100219-60	Aluminum	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI100219-60	Arsenic	100 mg/L	.5 mL	50 mL	1000 ug/L

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100219-60	Barium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI100219-60	Beryllium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-60	Cadmium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-60	Calcium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI100219-60	Chromium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-60	Cobalt	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-60	Copper	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-60	Iron	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI100219-60	Lead	500 mg/L	.5 mL	50 mL	5000 ug/L
UI100219-60	Lithium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-60	Magnesium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI100219-60	Manganese	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-60	Nickel	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-60	Phosphorous	2500 mg/L	.5 mL	50 mL	25000 ug/L
UI100219-60	Potassium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI100219-60	Selenium	50 mg/L	.5 mL	50 mL	500 ug/L
UI100219-60	Sodium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI100219-60	Strontium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-60	Thallium	50 mg/L	.5 mL	50 mL	500 ug/L
UI100219-60	Thorium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI100219-60	Uranium	500 mg/L	.5 mL	50 mL	5000 ug/L
UI100219-60	Vanadium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-60	Zinc	250 mg/L	.5 mL	50 mL	2500 ug/L
UI100219-61	Antimony	25 mg/L	.5 mL	50 mL	250 ug/L
UI100219-61	Molybdenum	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-61	Silver	25 mg/L	.5 mL	50 mL	250 ug/L
UI100219-61	Tin	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-61	Tungsten	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-61	Zirconium	50 mg/L	.5 mL	50 mL	500 ug/L

**Serial ID:** WMS100221-04      **Opened:** 21-FEB-10      **Amount :** 50 mL  
**Name:** ICPMS Cal Standard 100      **Received:** 21-FEB-10      **Balance Id :** 4025216  
**Type:** Working      **Expires:** 22-FEB-10      **Pipet Id :** 3541598  
**Employee:** Elizabeth Janssen      **Solvent :** 2%HNO3/1%HCl-1269792  
**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

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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:** WMS100221-04A      **Opened:** 21-FEB-10      **Balance Id :** 4025216  
**Name:** ICPMS Cal Standard 10      **Received:** 21-FEB-10      **Pipet Id :** 3541598  
**Type:** Working      **Expires:** 22-FEB-10      **Solvent :** 2%HNO3/1%HCl - 1269792  
**Employee:** Elizabeth Janssen  
**Supplier:** GEL  
**Description:** ICPMS Calibration Standard (10 ppb)  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100221-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100221-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS100221-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS100221-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100221-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100221-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS100221-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100221-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l



# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100221-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100221-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS100221-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS100221-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100221-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS100221-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100221-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100221-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS100221-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS100221-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS100221-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100221-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100221-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100221-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS100221-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100221-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100221-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100221-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100221-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS100221-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100221-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS100221-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100221-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100221-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS100221-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

**Serial ID:** WMS100221-05      **Opened:** 21-FEB-10      **Balance Id :** 40245216  
**Name:** ICPMS ICV      **Received:** 21-FEB-10      **Pipet Id :** 3541598  
**Type:** Working      **Expires:** 22-FEB-10      **Solvent :** 2%HNO3/1%HCl - 1269792  
**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

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Allquot	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:** WMS100221-06      **Opened:** 21-FEB-10      **Balance Id :** 40245216  
**Name:** ICPMS CRDL      **Received:** 21-FEB-10      **Pipet Id :** 3820544  
**Type:** Working      **Expires:** 22-FEB-10      **Solvent :** 2%HNO3/1%HCl - 1269792  
**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
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:** WMS100221-07      **Opened:** 21-FEB-10      **Balance Id :** 40245216  
**Name:** ICPMS ICSA      **Received:** 21-FEB-10      **Lot Number :** 1010773  
**Type:** Working      **Expires:** 22-FEB-10      **Pipet Id :** 3541598  
**Employee:** Elizabeth Janssen      **Solvent :** 2%HNO3/1%HCl - 1269792  
**Supplier:** GEL  
**Description:** ICPMS ICSA  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100219-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100219-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100219-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

# Standard Logbook

**Serial ID:** WMS100221-08      **Opened:** 21-FEB-10      **Balance Id :** 40245216  
**Name:** ICPMS ICSAB      **Received:** 21-FEB-10      **Pipet Id :** 1758088  
**Type:** Working      **Expires:** 22-FEB-10      **Solvent :** 2%HNO3/1%HCl - 1269792  
**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
UI100219-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100219-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100219-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

# Standard Logbook

Serial ID: 100202      Opened: 02-FEB-10      Lot Number : 200930201  
Name: I-HCL      Received: 02-FEB-10  
Type: Reagent/Solvent      Expires: 02-FEB-11  
Employee: Francena Armstrong  
Supplier: J.T. BAKER  
Description: HYDROCHLORIC ACID  
Comments: None

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Serial ID: 1100721TCLP      Opened: 16-APR-09      Lot Number : H02026 L  
Name: I-HNO3      Received: 02-APR-09  
Type: Reagent/Solvent      Expires: 02-APR-10  
Employee: Clifford Postell  
Supplier: BAKER  
Description: Nitric Acid CONC.  
Comments: None

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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

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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

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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

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# Standard Logbook

**Serial ID:** 1228372-A      **Opened:** 12-NOV-09      **Lot Number :** 49215936  
**Name:** B-NH2OH.HCI-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:** 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:** 1255532-C      **Opened:** 15-JAN-10      **Balance Id :** BAL-002  
**Name:** B-NaCl.NH2OH.HCI-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.HCI-MER	N/A	120 g	1000 mL	N/A

**Serial ID:** 1257474-1      **Opened:** 20-JAN-10      **Instrument Id :** MERCURY  
**Name:** B-HNO3-MER      **Received:** 20-JAN-10      **Lot Number :** H20053  
**Type:** Reagent/Solvent      **Expires:** 20-JAN-11  
**Employee:** Tara Griffin  
**Supplier:** Mallinckrodt Chemicals  
**Description:** NITRIC ACID  
**Comments:** None

**Serial ID:** 1261483-C      **Opened:** 28-JAN-10      **Balance Id :** BAL-002  
**Name:** B-K2S2O8-MER      **Received:** 28-JAN-10  
**Type:** Reagent/Solvent      **Expires:** 28-JUL-10  
**Employee:** Tara Griffin  
**Supplier:** GEL  
**Description:** 5% Potassium Persulfate  
**Comments:** None

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1215906	B-K2S2O8S-MER	N/A	50 g	1000 mL	N/A

Serial ID: 1264984-C      Opened: 04-FEB-10      Balance Id : BAL-002  
 Name: B-KMnO4-MER      Received: 04-FEB-10  
 Type: Reagent/Solvent      Expires: 20-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: 1265209      Opened: 04-FEB-10      Lot Number : J02039  
 Name: I-HCL      Received: 04-FEB-10      Preservative\_Id : 5 none  
 Type: Reagent/Solvent      Expires: 04-FEB-11  
 Employee: Bryan Davis  
 Supplier: J.T. BAKER  
 Description: HYDROCHLORIC ACID  
 Comments: None

Serial ID: 1269792      Opened: 15-FEB-10      Solvent : Type I Water  
 Name: B-2%HNO3/1%HCl-ICPMS      Received: 15-FEB-10  
 Type: Reagent/Solvent      Expires: 22-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.
100202	I-HCL	36.5-38.0	90 mL	9 l	N/A
1100721TCLP	I-HNO3	69.0-70.0	180 mL	9 l	N/A

Serial ID: 1272839      Opened: 22-FEB-10      Amount : 20 L  
 Name: B-ICP-RINSE SOLN      Received: 12-FEB-10      Lot Number : H04040+G34050  
 Type: Reagent/Solvent      Expires: 28-FEB-10      Solvent : 3%HCL+1%HNO3  
 Employee: Helen Camello  
 Supplier: GEL  
 Description: 3%HCL+1%HNO3 RINSE SOLN.  
 Comments: None

# Standard Logbook

Serial ID: 1274969      Opened: 24-FEB-10      Lot Number : J 04043 L  
Name: I-HNO3      Received: 24-FEB-10  
Type: Reagent/Solvent      Expires: 24-FEB-11  
Employee: Francena Armstrong  
Supplier: BAKER  
Description: Nitric Acid CONC.  
Comments: None

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# **General Chemistry**

## **Analysis**

# Case Narrative

**General Chemistry Narrative  
Los Alamos National Laboratory (LANL)  
SDG 10-1474**

**Method/Analysis Information**

**Product:** Cyanide, Total

**Analytical Batch:** 947318 and 947321 **Method:** SW9012A Cyanide and Total

**Prep Batch :** 947317 and 947319 **Method:** SSW846 9010B Prep

**Sample Analysis**

The following samples were analyzed using the analytical protocol as established in SW846 9012A:

<b>Sample ID</b>	<b>Client ID</b>
245806001	RE15-10-7954
245806002	RE15-10-7956
245806003	RE15-10-7955
245806004	RE15-10-7953
245806005	RE15-10-7952
245806006	RE15-10-8060
245806007	RE15-10-8058
245806008	RE15-10-8059
1202029252	Method Blank (MB)
1202029253	245797007(RE15-10-7887) Sample Duplicate (DUP)
1202029254	245797008(RE15-10-7881) Sample Duplicate (DUP)
1202029255	245797007(RE15-10-7887) Matrix Spike (MS)
1202029256	245797008(RE15-10-7881) Matrix Spike (MS)
1202029257	245797007(RE15-10-7887) Matrix Spike Duplicate (MSD)
1202029258	245797008(RE15-10-7881) Matrix Spike Duplicate (MSD)
1202029259	Laboratory Control Sample (LCS)
1202029260	Method Blank (MB)
1202029261	245806008(RE15-10-8059) Sample Duplicate (DUP)
1202029262	245783001(RE46-10-11797) Sample Duplicate (DUP)
1202029263	245806008(RE15-10-8059) Matrix Spike (MS)
1202029264	245783001(RE46-10-11797) Matrix Spike (MS)
1202029265	245806008(RE15-10-8059) Matrix Spike Duplicate (MSD)
1202029266	245783001(RE46-10-11797) Matrix Spike Duplicate (MSD)
1202029267	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: 245797007 (RE15-10-7887), 245797008 (RE15-10-7881)- Batch 947318, 245783001 (RE46-10-11797) and 245806008 (RE15-10-8059)- Batch 947321.

#### **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 spike duplicate recovery falls outside of the client specified acceptance limits. Since both the spike recovery and the RPD between the spike and spike duplicate fall within acceptance limits, the data is reported. 1202029258 (RE15-10-7881)- Batch 947318.

#### **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. 1202029254 (RE15-10-7881)- Batch 947318, 1202029261 (RE15-10-8059), 1202029262 (RE46-10-11797) and 245806008 (RE15-10-8059)- Batch 947321.

### **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: 1202029259 (LCS)- Batch 947318 and 1202029267 (LCS)- Batch 947321.

#### **Sample Re-analysis**

The samples in this SDG did not require re-analysis.

### **Miscellaneous Information**

#### **Data Exception (DER) Documentation**

The following DER was generated for this SDG: 788675 1202029258 (RE15-10-7881)- Batch 947318.

#### **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.

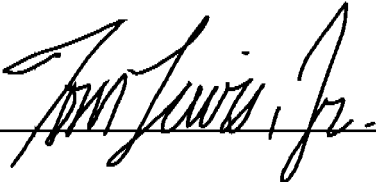
**Certification Statement**

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: 22Feb10

# **Sample Data Summary**

## **GEL LABORATORIES LLC**

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - [www.gel.com](http://www.gel.com)

### **Certificate of Analysis Report for**

LANL010 Los Alamos National Laboratory (72733-001-09)

Client SDG: 10-1474 GEL Work Order: 245806

**The Qualifiers in this report are defined as follows:**

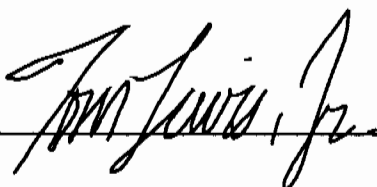
- \* Indicates that a quality control analyte recovery is outside of specified acceptance criteria.
- \*\* Indicates the analyte is a surrogate compound.

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](http://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 17, 2010

Client SDG: 10-1474

Client Sample ID: RE15-10-7954  
Sample ID: 245806001  
Matrix: R  
Collect Date: 26-JAN-10 12:00  
Receive Date: 29-JAN-10  
Collector: Client  
Moisture: 5.84%

Project: LANL01004  
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Flow Injection Analysis</b>											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	70.8	260	ug/kg	1	AXC2	02/08/10	1541	947318	1

### The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/05/10	1402	947317

### 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 17, 2010

Client SDG: 10-1474

Client Sample ID: RE15-10-7956  
Sample ID: 245806002  
Matrix: R  
Collect Date: 26-JAN-10 12:00  
Receive Date: 29-JAN-10  
Collector: Client  
Moisture: 6.14%

Project: LANL01004  
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Flow Injection Analysis</b>											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	63.5	234	ug/kg	1	AXC2	02/08/10	1545	947318	1

### **The following Prep Methods were performed**

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/05/10	1402	947317

### **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 17, 2010

Client SDG: 10-1474

Client Sample ID: RE15-10-7955  
Sample ID: 245806003  
Matrix: R  
Collect Date: 26-JAN-10 12:00  
Receive Date: 29-JAN-10  
Collector: Client  
Moisture: 18%

Project: LANL01004  
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Flow Injection Analysis</b>											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	71.5	263	ug/kg	1	AXC2	02/08/10	1546	947318	1

### The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/05/10	1402	947317

### 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 17, 2010

Client SDG: 10-1474

Client Sample ID: RE15-10-7953  
Sample ID: 245806004  
Matrix: R  
Collect Date: 26-JAN-10 12:00  
Receive Date: 29-JAN-10  
Collector: Client  
Moisture: 14.1%

Project: LANL01004  
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Flow Injection Analysis</b>											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	76.1	280	ug/kg	1	AXC2	02/08/10	1547	947318	1

### The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/05/10	1402	947317

### 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 17, 2010

Client SDG: 10-1474

Client Sample ID: RE15-10-7952  
Sample ID: 245806005  
Matrix: R  
Collect Date: 26-JAN-10 12:00  
Receive Date: 29-JAN-10  
Collector: Client  
Moisture: 6.69%

Project: LANL01004  
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Flow Injection Analysis</b>											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	72.9	268	ug/kg	1	AXC2	02/08/10	1548	947318	1

### The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/05/10	1402	947317

### 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 17, 2010

Client SDG: 10-1474

Client Sample ID: RE15-10-8060  
Sample ID: 245806006  
Matrix: R  
Collect Date: 26-JAN-10 12:00  
Receive Date: 29-JAN-10  
Collector: Client  
Moisture: 14.6%

Project: LANL01004  
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Flow Injection Analysis</b>											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	75.1	276	ug/kg	1	AXC2	02/08/10	1549	947318	1

### The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/05/10	1402	947317

### 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 17, 2010

Client SDG: 10-1474

Client Sample ID: RE15-10-8058  
Sample ID: 245806007  
Matrix: R  
Collect Date: 26-JAN-10 12:00  
Receive Date: 29-JAN-10  
Collector: Client  
Moisture: 35.9%

Project: LANL01004  
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Flow Injection Analysis</b>											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	104	382	ug/kg	1	AXC2	02/08/10	1550	947318	1

### The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/05/10	1402	947317

### The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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## Certificate of Analysis

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Los Alamos, New Mexico 87545  
Contact: Ms. Joylene Valdez  
Project: LANL ER Project

Report Date: February 17, 2010

Client SDG: 10-1474

Client Sample ID: RE15-10-8059  
Sample ID: 245806008  
Matrix: R  
Collect Date: 26-JAN-10 12:00  
Receive Date: 29-JAN-10  
Collector: Client  
Moisture: 7.28%

Project: LANL01004  
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Flow Injection Analysis</b>											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	70.5	259	ug/kg	1	AXC2	02/09/10	1318	947321	1

### The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/08/10	1427	947319

### The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	



# **Quality Control Summary**

# GEL LABORATORIES LLC

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## QC Summary

Report Date: February 17, 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: 245806

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Flow Injection Analysis</b>											
Batch	947318										
QC1202029253	245797007	DUP									
Cyanide, Total		U	ND	U	ND	ug/kg	N/A		AXC2	02/08/10	15:21
QC1202029254	245797008	DUP									
Cyanide, Total		J	298	U	ND	ug/kg	200 ^			02/08/10	15:25
QC1202029259	LCS										
Cyanide, Total	67900				72500	ug/kg	107	(32%-157%)		02/08/10	15:16
QC1202029252	MB										
Cyanide, Total				U	250	ug/kg				02/08/10	15:15
QC1202029255	245797007	MS									
Cyanide, Total	7470	U	ND		6230	ug/kg	83.5	(26%-158%)		02/08/10	15:22
QC1202029256	245797008	MS									
Cyanide, Total	7640	J	298		6810	ug/kg	85.2	(26%-158%)		02/08/10	15:25
QC1202029257	245797007	MSD									
Cyanide, Total	7180	U	ND		6060	ug/kg	2.85	84.4	(0%-30%)	02/08/10	15:23
QC1202029258	245797008	MSD									
Cyanide, Total	7360	J	298		5790	ug/kg	16.2	74.7	(0%-30%)	02/08/10	15:26
Batch	947321										
QC1202029261	245806008	DUP									
Cyanide, Total		U	ND	U	ND	ug/kg	N/A		AXC2	02/09/10	13:19
QC1202029262	245783001	DUP									
Cyanide, Total		U	ND	U	ND	ug/kg	N/A			02/09/10	12:50
QC1202029267	LCS										
Cyanide, Total	67900				77800	ug/kg	115	(32%-157%)		02/09/10	12:45
QC1202029260	MB										
Cyanide, Total				U	250	ug/kg				02/09/10	12:44
QC1202029263	245806008	MS									
Cyanide, Total	4650	U	ND		3980	ug/kg	84.7	(26%-158%)		02/09/10	13:20
QC1202029264	245783001	MS									
Cyanide, Total	5730	U	ND		5960	ug/kg	104	(26%-158%)		02/09/10	12:51
QC1202029265	245806008	MSD									
Cyanide, Total	5290	U	ND		4380	ug/kg	9.41	82	(0%-30%)	02/09/10	13:20
QC1202029266	245783001	MSD									
Cyanide, Total	4940	U	ND		4990	ug/kg	17.7	101	(0%-30%)	02/09/10	12:52

### Notes:

RER is calculated at the 95% confidence level (2-sigma).

The Qualifiers in this report are defined as follows:

- \*\* Analyte is a surrogate compound
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product

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### QC Summary

Workorder: 245806

Page 2 of 2

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
B	For General Chemistry and Organic analysis the target analyte was detected in the associated blank.										
BD	Results are either below the MDC or tracer recovery is low										
C	Analyte has been confirmed by GC/MS analysis										
D	Results are reported from a diluted aliquot of the sample										
E	General Chemistry--Concentration of the target analyte exceeds the instrument calibration range										
E	Metals--%difference of sample and SD is >10%. Sample concentration must meet flagging criteria										
E	Organics--Concentration of the target analyte exceeds the instrument calibration range										
F	Estimated Value										
H	Analytical holding time was exceeded										
J	Value is estimated										
M	M if above MDC and less than LLD										
M	Matrix Related Failure										
N	Organics--Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor										
N/A	RPD or %Recovery limits do not apply.										
ND	Analyte concentration is not detected above the detection limit										
NJ	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier										
P	Organics--The concentrations between the primary and confirmation columns/detectors is >40% different. For HPLC, difference is also <70%										
R	Sample results are rejected										
U	Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.										
UI	Gamma Spectroscopy--Uncertain identification										
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier										
Y	QC Samples were not spiked with this compound										
Z	Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.										
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.										
d	5-day BOD--The 2:1 depletion requirement was not met for this sample										
h	Preparation or preservation holding time was exceeded										

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.

^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.

\* Indicates that a Quality Control parameter was not within specifications.

For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

# **Instrument QC Data Summary**

# INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 17-FEB-2010 11:12

GEL Laboratories LLC

Contract: LANL01004

SDG #: 10-1474

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	08-FEB-2010 13:22:34	OM_2-8-2010_13-14-40	151	150	101	(90%-110%)	Yes
CCV	08-FEB-2010 15:04:19	OM_2-8-2010_13-14-40	104	100	104	(90%-110%)	Yes
CCV	08-FEB-2010 15:16:55	OM_2-8-2010_13-14-40	104	100	104	(90%-110%)	Yes
CCV	08-FEB-2010 15:29:29	OM_2-8-2010_13-14-40	105	100	105	(90%-110%)	Yes
CCV	08-FEB-2010 15:41:58	OM_2-8-2010_13-14-40	105	100	105	(90%-110%)	Yes
CCV	08-FEB-2010 15:54:33	OM_2-8-2010_13-14-40	105	100	105	(90%-110%)	Yes
ICV	09-FEB-2010 11:00:58	OM_2-9-2010_10-50-31	154	150	103	(90%-110%)	Yes
CCV	09-FEB-2010 12:33:26	OM_2-9-2010_12-19-29	97.1	100	97.1	(90%-110%)	Yes
CCV	09-FEB-2010 12:45:51	OM_2-9-2010_12-19-29	99.6	100	99.6	(90%-110%)	Yes
CCV	09-FEB-2010 12:58:27	OM_2-9-2010_12-19-29	99.3	100	99.3	(90%-110%)	Yes
CCV	09-FEB-2010 13:10:58	OM_2-9-2010_12-19-29	101	100	101	(90%-110%)	Yes
CCV	09-FEB-2010 13:23:31	OM_2-9-2010_12-19-29	102	100	102	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	08-FEB-2010 13:24:24	OM_2-8-2010_13-14-40	-1.45	10	Yes
CCB	08-FEB-2010 15:06:09	OM_2-8-2010_13-14-40	-1.82	10	Yes
CCB	08-FEB-2010 15:18:45	OM_2-8-2010_13-14-40	-1.49	10	Yes
CCB	08-FEB-2010 15:31:18	OM_2-8-2010_13-14-40	-1.86	10	Yes
CCB	08-FEB-2010 15:43:48	OM_2-8-2010_13-14-40	-1.82	10	Yes
CCB	08-FEB-2010 15:56:23	OM_2-8-2010_13-14-40	-1.93	10	Yes
ICB	09-FEB-2010 11:02:49	OM_2-9-2010_10-50-31	-1.37	10	Yes
CCB	09-FEB-2010 12:35:19	OM_2-9-2010_12-19-29	-1.82	10	Yes
CCB	09-FEB-2010 12:47:43	OM_2-9-2010_12-19-29	-1.49	10	Yes
CCB	09-FEB-2010 13:00:17	OM_2-9-2010_12-19-29	-1.36	10	Yes
CCB	09-FEB-2010 13:12:49	OM_2-9-2010_12-19-29	-2.21	10	Yes
CCB	09-FEB-2010 13:25:21	OM_2-9-2010_12-19-29	-1.86	10	Yes

# **Cyanide, Total**

# Prep LogBook

Analyst: AXS5  
 Batch: 947317  
 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	Spike Amount	Spike Units
MB	1202029252		SW846 9010B Prep	05-FEB-2010 14:02	>12	0.5 g	25 mL	50	25	g
LCS	1202029259		SW846 9010B Prep	05-FEB-2010 14:02	>12	0.25 g	25 mL	100	.025	mL
SAMPLE	245797007		SW846 9010B Prep	05-FEB-2010 14:02	>12	0.58 g	25 mL	43.10345	.025	mL
DUP	1202029253	245797007	SW846 9010B Prep	05-FEB-2010 14:02	>12	0.5 g	25 mL	50	.025	mL
MS	1202029255	245797007	SW846 9010B Prep	05-FEB-2010 14:02	>12	0.5 g	25 mL	50	.025	mL
MSD	1202029257	245797007	SW846 9010B Prep	05-FEB-2010 14:02	>12	0.52 g	25 mL	48.07692	.025	mL
SAMPLE	245797008		SW846 9010B Prep	05-FEB-2010 14:02	>12	0.51 g	25 mL	49.01961	.025	mL
DUP	1202029254	245797008	SW846 9010B Prep	05-FEB-2010 14:02	>12	0.53 g	25 mL	47.16981	.025	mL
MS	1202029256	245797008	SW846 9010B Prep	05-FEB-2010 14:02	>12	0.52 g	25 mL	48.07692	.025	mL
MSD	1202029258	245797008	SW846 9010B Prep	05-FEB-2010 14:02	>12	0.54 g	25 mL	46.2963	.025	mL
SAMPLE	245797009		SW846 9010B Prep	05-FEB-2010 14:02	>12	0.54 g	25 mL	46.2963	.025	mL
SAMPLE	245797010		SW846 9010B Prep	05-FEB-2010 14:02	>12	0.54 g	25 mL	46.2963	.025	mL
SAMPLE	245797011		SW846 9010B Prep	05-FEB-2010 14:02	>12	0.51 g	25 mL	49.01961	.025	mL
SAMPLE	245797012		SW846 9010B Prep	05-FEB-2010 14:02	>12	0.5 g	25 mL	50	.025	mL
SAMPLE	245797013		SW846 9010B Prep	05-FEB-2010 14:02	>12	0.52 g	25 mL	48.07692	.025	mL
SAMPLE	245797014		SW846 9010B Prep	05-FEB-2010 14:02	>12	0.54 g	25 mL	46.2963	.025	mL
SAMPLE	245797015		SW846 9010B Prep	05-FEB-2010 14:02	>12	0.5 g	25 mL	50	.025	mL
SAMPLE	245797016		SW846 9010B Prep	05-FEB-2010 14:02	>12	0.52 g	25 mL	48.07692	.025	mL
SAMPLE	245797017		SW846 9010B Prep	05-FEB-2010 14:02	>12	0.54 g	25 mL	46.2963	.025	mL
SAMPLE	245797018		SW846 9010B Prep	05-FEB-2010 14:02	>12	0.54 g	25 mL	46.2963	.025	mL
SAMPLE	245797019		SW846 9010B Prep	05-FEB-2010 14:02	>12	0.56 g	25 mL	44.64286	.025	mL
SAMPLE	245806001		SW846 9010B Prep	05-FEB-2010 14:02	>12	0.51 g	25 mL	49.01961	.025	mL
SAMPLE	245806002		SW846 9010B Prep	05-FEB-2010 14:02	>12	0.57 g	25 mL	43.85965	.025	mL
SAMPLE	245806003		SW846 9010B Prep	05-FEB-2010 14:02	>12	0.58 g	25 mL	43.10345	.025	mL
SAMPLE	245806004		SW846 9010B Prep	05-FEB-2010 14:02	>12	0.52 g	25 mL	48.07692	.025	mL
SAMPLE	245806005		SW846 9010B Prep	05-FEB-2010 14:02	>12	0.5 g	25 mL	50	.025	mL
SAMPLE	245806006		SW846 9010B Prep	05-FEB-2010 14:02	>12	0.53 g	25 mL	47.16981	.025	mL
SAMPLE	245806007		SW846 9010B Prep	05-FEB-2010 14:02	>12	0.51 g	25 mL	49.01961	.025	mL

## Prep LogBook

Reagent/Solvent Lot ID	Amount	Description	Comments
091211-C	25 mL	0.25N Sodium Hydroxide Solution	
WCN100205-07	.0375 mL	150 ppb CN Distilled ICV Standard	
1176724-C	1.25 mL	0.8N H3NO3S	
1260189-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: AXSS  
Batch: 947319  
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	Spike Amount	Spike Units
MB	1202029260		SW846 9010B Prep	08-FEB-2010 14:27	>12	0.5 g	25 mL	50	.25	g
LCS	1202029267		SW846 9010B Prep	08-FEB-2010 14:27	>12	0.25 g	25 mL	100	.025	mL
SAMPLE	245783001		SW846 9010B Prep	08-FEB-2010 14:27	>12	0.5 g	25 mL	50	.025	mL
DUP	1202029262	245783001	SW846 9010B Prep	08-FEB-2010 14:27	>12	0.55 g	25 mL	45.45455	.025	mL
MS	1202029264	245783001	SW846 9010B Prep	08-FEB-2010 14:27	>12	0.5 g	25 mL	50	.025	mL
MSD	1202029266	245783001	SW846 9010B Prep	08-FEB-2010 14:27	>12	0.58 g	25 mL	43.10345	.025	mL
SAMPLE	245783002		SW846 9010B Prep	08-FEB-2010 14:27	>12	0.54 g	25 mL	46.2963	.025	mL
SAMPLE	245783003		SW846 9010B Prep	08-FEB-2010 14:27	>12	0.58 g	25 mL	43.10345	.025	mL
SAMPLE	245783004		SW846 9010B Prep	08-FEB-2010 14:27	>12	0.55 g	25 mL	45.45455	.025	mL
SAMPLE	245783005		SW846 9010B Prep	08-FEB-2010 14:27	>12	0.55 g	25 mL	45.45455	.025	mL
SAMPLE	245783006		SW846 9010B Prep	08-FEB-2010 14:27	>12	0.51 g	25 mL	49.01961	.025	mL
SAMPLE	245783007		SW846 9010B Prep	08-FEB-2010 14:27	>12	0.54 g	25 mL	46.2963	.025	mL
SAMPLE	245783008		SW846 9010B Prep	08-FEB-2010 14:27	>12	0.54 g	25 mL	46.2963	.025	mL
SAMPLE	245783009		SW846 9010B Prep	08-FEB-2010 14:27	>12	0.53 g	25 mL	47.16981	.025	mL
SAMPLE	245783010		SW846 9010B Prep	08-FEB-2010 14:27	>12	0.54 g	25 mL	46.2963	.025	mL
SAMPLE	245783011		SW846 9010B Prep	08-FEB-2010 14:27	>12	0.5 g	25 mL	50	.025	mL
SAMPLE	245783012		SW846 9010B Prep	08-FEB-2010 14:27	>12	0.53 g	25 mL	47.16981	.025	mL
SAMPLE	245783013		SW846 9010B Prep	08-FEB-2010 14:27	>12	0.5 g	25 mL	50	.025	mL
SAMPLE	245783014		SW846 9010B Prep	08-FEB-2010 14:27	>12	0.54 g	25 mL	46.2963	.025	mL
SAMPLE	245783015		SW846 9010B Prep	08-FEB-2010 14:27	>12	0.58 g	25 mL	43.10345	.025	mL
SAMPLE	245783016		SW846 9010B Prep	08-FEB-2010 14:27	>12	0.53 g	25 mL	47.16981	.025	mL
SAMPLE	245786001		SW846 9010B Prep	08-FEB-2010 14:27	>12	0.53 g	25 mL	47.16981	.025	mL
SAMPLE	245806008		SW846 9010B Prep	08-FEB-2010 14:27	>12	0.52 g	25 mL	48.07692	.025	mL
DUP	1202029261	245806008	SW846 9010B Prep	08-FEB-2010 14:27	>12	0.51 g	25 mL	49.01961	.025	mL
MS	1202029263	245806008	SW846 9010B Prep	08-FEB-2010 14:27	>12	0.58 g	25 mL	43.10345	.025	mL
MSD	1202029265	245806008	SW846 9010B Prep	08-FEB-2010 14:27	>12	0.51 g	25 mL	49.01961	.025	mL

Reagent/Solvent Lot ID Amount Description

Prep Data Logbook Version 1:1

GEL Laboratories LLC

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Prep LogBook

			Comments
091211-C	25 mL	0.25N Sodium Hydroxide Solution	
WCN100208-07	.0375 mL	150 ppb CN Distilled ICV Standard	
1176724-C	1.25 mL	0.8N H3NO3S	
1260189-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	2/8/2010 13:15:25	OM_2-8-2010_13-14-40
150 ppb		1	axc2	2/8/2010 13:16:17	OM_2-8-2010_13-14-40
100 ppb		1	axc2	2/8/2010 13:17:10	OM_2-8-2010_13-14-40
50 ppb		1	axc2	2/8/2010 13:18:03	OM_2-8-2010_13-14-40
10 ppb		1	axc2	2/8/2010 13:18:56	OM_2-8-2010_13-14-40
CRDL 5.0 ppb		1	axc2	2/8/2010 13:19:50	OM_2-8-2010_13-14-40
ICAL-00		1	axc2	2/8/2010 13:20:43	OM_2-8-2010_13-14-40
ICV		1	axc2	2/8/2010 13:22:34	OM_2-8-2010_13-14-40
ICB		1	axc2	2/8/2010 13:24:24	OM_2-8-2010_13-14-40
CRDL		1	axc2	2/8/2010 13:26:14	OM_2-8-2010_13-14-40
1202029242*	947315	1	axc2	2/8/2010 13:28:03	OM_2-8-2010_13-14-40
1202029249	947315	25	axc2	2/8/2010 13:28:57	OM_2-8-2010_13-14-40
245682001	947315	1	axc2	2/8/2010 13:29:50	OM_2-8-2010_13-14-40
245682002	947315	1	axc2	2/8/2010 13:30:43	OM_2-8-2010_13-14-40
245682003	947315	1	axc2	2/8/2010 13:31:36	OM_2-8-2010_13-14-40
245682004	947315	1	axc2	2/8/2010 13:32:29	OM_2-8-2010_13-14-40
245682005	947315	1	axc2	2/8/2010 13:33:21	OM_2-8-2010_13-14-40
245682006	947315	1	axc2	2/8/2010 13:34:14	OM_2-8-2010_13-14-40
245682007	947315	1	axc2	2/8/2010 13:35:07	OM_2-8-2010_13-14-40
245682008	947315	1	axc2	2/8/2010 13:35:58	OM_2-8-2010_13-14-40
CCV		1	axc2	2/8/2010 13:36:51	OM_2-8-2010_13-14-40
CCB		1	axc2	2/8/2010 13:38:42	OM_2-8-2010_13-14-40
1202029242	947315	1	axc2	2/8/2010 13:40:30	OM_2-8-2010_13-14-40
245682009	947315	1	axc2	2/8/2010 13:41:23	OM_2-8-2010_13-14-40
245682010	947315	1	axc2	2/8/2010 13:42:15	OM_2-8-2010_13-14-40
245688011	947315	1	axc2	2/8/2010 13:43:06	OM_2-8-2010_13-14-40
1202029243	947315	1	axc2	2/8/2010 13:43:58	OM_2-8-2010_13-14-40
1202029245	947315	1	axc2	2/8/2010 13:44:50	OM_2-8-2010_13-14-40
1202029247	947315	1	axc2	2/8/2010 13:45:44	OM_2-8-2010_13-14-40
245688012	947315	1	axc2	2/8/2010 13:46:37	OM_2-8-2010_13-14-40
1202029244	947315	1	axc2	2/8/2010 13:47:31	OM_2-8-2010_13-14-40
1202029246	947315	1	axc2	2/8/2010 13:48:24	OM_2-8-2010_13-14-40
CCV		1	axc2	2/8/2010 13:49:17	OM_2-8-2010_13-14-40
CCB		1	axc2	2/8/2010 13:51:07	OM_2-8-2010_13-14-40
1202029248	947315	1	axc2	2/8/2010 13:52:56	OM_2-8-2010_13-14-40
245688013	947315	1	axc2	2/8/2010 13:53:50	OM_2-8-2010_13-14-40
245688014	947315	1	axc2	2/8/2010 13:54:42	OM_2-8-2010_13-14-40
245797001	947315	1	axc2	2/8/2010 13:55:35	OM_2-8-2010_13-14-40
245797002	947315	1	axc2	2/8/2010 13:56:27	OM_2-8-2010_13-14-40
245797003	947315	1	axc2	2/8/2010 13:57:20	OM_2-8-2010_13-14-40
245797004	947315	1	axc2	2/8/2010 13:58:12	OM_2-8-2010_13-14-40
245797005	947315	1	axc2	2/8/2010 13:59:04	OM_2-8-2010_13-14-40
245797006	947315	1	axc2	2/8/2010 13:59:57	OM_2-8-2010_13-14-40
1202029230	947312	1	axc2	2/8/2010 14:00:48	OM_2-8-2010_13-14-40
CCV		1	axc2	2/8/2010 14:01:41	OM_2-8-2010_13-14-40
CCB		1	axc2	2/8/2010 14:03:31	OM_2-8-2010_13-14-40
1202029237	947312	25	axc2	2/8/2010 14:05:20	OM_2-8-2010_13-14-40
245612007	947312	1	axc2	2/8/2010 14:06:13	OM_2-8-2010_13-14-40
1202029231	947312	1	axc2	2/8/2010 14:07:07	OM_2-8-2010_13-14-40
1202029233	947312	1	axc2	2/8/2010 14:08:01	OM_2-8-2010_13-14-40
1202029235	947312	1	axc2	2/8/2010 14:08:54	OM_2-8-2010_13-14-40
245612008	947312	1	axc2	2/8/2010 14:09:48	OM_2-8-2010_13-14-40
1202029232	947312	1	axc2	2/8/2010 14:10:41	OM_2-8-2010_13-14-40
1202029234	947312	1	axc2	2/8/2010 14:11:33	OM_2-8-2010_13-14-40
1202029236	947312	1	axc2	2/8/2010 14:12:26	OM_2-8-2010_13-14-40
245612009	947312	1	axc2	2/8/2010 14:13:19	OM_2-8-2010_13-14-40
CCV		1	axc2	2/8/2010 14:14:12	OM_2-8-2010_13-14-40
CCB		1	axc2	2/8/2010 14:16:04	OM_2-8-2010_13-14-40

245612010	947312	1	axc2	2/8/2010	14:17:52	OM_2-8-2010_13-14-40
245612011	947312	1	axc2	2/8/2010	14:18:45	OM_2-8-2010_13-14-40
245612012	947312	1	axc2	2/8/2010	14:19:37	OM_2-8-2010_13-14-40
245612013	947312	1	axc2	2/8/2010	14:20:29	OM_2-8-2010_13-14-40
245612014	947312	1	axc2	2/8/2010	14:21:22	OM_2-8-2010_13-14-40
245612015	947312	1	axc2	2/8/2010	14:22:13	OM_2-8-2010_13-14-40
245612016	947312	1	axc2	2/8/2010	14:23:07	OM_2-8-2010_13-14-40
245688001	947312	1	axc2	2/8/2010	14:24:02	OM_2-8-2010_13-14-40
245688002	947312	1	axc2	2/8/2010	14:24:55	OM_2-8-2010_13-14-40
245688003	947312	1	axc2	2/8/2010	14:25:50	OM_2-8-2010_13-14-40
CCV		1	axc2	2/8/2010	14:26:41	OM_2-8-2010_13-14-40
CCB		1	axc2	2/8/2010	14:28:32	OM_2-8-2010_13-14-40
245688004	947312	1	axc2	2/8/2010	14:30:23	OM_2-8-2010_13-14-40
245688005	947312	1	axc2	2/8/2010	14:31:15	OM_2-8-2010_13-14-40
245688006	947312	1	axc2	2/8/2010	14:32:08	OM_2-8-2010_13-14-40
245688007	947312	1	axc2	2/8/2010	14:33:01	OM_2-8-2010_13-14-40
245688008	947312	1	axc2	2/8/2010	14:33:55	OM_2-8-2010_13-14-40
245688009	947312	1	axc2	2/8/2010	14:34:47	OM_2-8-2010_13-14-40
245688010	947312	1	axc2	2/8/2010	14:35:40	OM_2-8-2010_13-14-40
1202033006	948940	1	axc2	2/8/2010	14:36:34	OM_2-8-2010_13-14-40
1202033013	948940	1	axc2	2/8/2010	14:37:26	OM_2-8-2010_13-14-40
245926001	948940	1	axc2	2/8/2010	14:38:19	OM_2-8-2010_13-14-40
CCV		1	axc2	2/8/2010	14:39:11	OM_2-8-2010_13-14-40
CCB		1	axc2	2/8/2010	14:41:01	OM_2-8-2010_13-14-40
245926002	948940	1	axc2	2/8/2010	14:42:50	OM_2-8-2010_13-14-40
245926003	948940	1	axc2	2/8/2010	14:43:43	OM_2-8-2010_13-14-40
1202033008	948940	1	axc2	2/8/2010	14:44:35	OM_2-8-2010_13-14-40
1202033010	948940	1	axc2	2/8/2010	14:45:29	OM_2-8-2010_13-14-40
1202033012	948940	1	axc2	2/8/2010	14:46:24	OM_2-8-2010_13-14-40
245926004	948940	1	axc2	2/8/2010	14:47:19	OM_2-8-2010_13-14-40
245926005	948940	1	axc2	2/8/2010	14:48:12	OM_2-8-2010_13-14-40
245926006	948940	1	axc2	2/8/2010	14:49:06	OM_2-8-2010_13-14-40
245926007	948940	1	axc2	2/8/2010	14:50:01	OM_2-8-2010_13-14-40
245939001	948940	1	axc2	2/8/2010	14:50:54	OM_2-8-2010_13-14-40
CCV		1	axc2	2/8/2010	14:51:47	OM_2-8-2010_13-14-40
CCB		1	axc2	2/8/2010	14:53:37	OM_2-8-2010_13-14-40
245939002*	948940	1	axc2	2/8/2010	14:55:27	OM_2-8-2010_13-14-40
245953001*	948940	1	axc2	2/8/2010	14:56:21	OM_2-8-2010_13-14-40
245965001*	948940	1	axc2	2/8/2010	14:57:14	OM_2-8-2010_13-14-40
245975001	948940	1	axc2	2/8/2010	14:58:06	OM_2-8-2010_13-14-40
245981001	948940	1	axc2	2/8/2010	14:59:00	OM_2-8-2010_13-14-40
246000001	948940	1	axc2	2/8/2010	14:59:52	OM_2-8-2010_13-14-40
246004001	948940	1	axc2	2/8/2010	15:00:45	OM_2-8-2010_13-14-40
1202033007	948940	1	axc2	2/8/2010	15:01:38	OM_2-8-2010_13-14-40
1202033009	948940	1	axc2	2/8/2010	15:02:32	OM_2-8-2010_13-14-40
1202033011	948940	1	axc2	2/8/2010	15:03:27	OM_2-8-2010_13-14-40
CCV		1	axc2	2/8/2010	15:04:19	OM_2-8-2010_13-14-40
CCB		1	axc2	2/8/2010	15:06:09	OM_2-8-2010_13-14-40
245939002	948940	1	axc2	2/8/2010	15:07:59	OM_2-8-2010_13-14-40
245953001	948940	1	axc2	2/8/2010	15:08:53	OM_2-8-2010_13-14-40
245965001	948940	1	axc2	2/8/2010	15:09:46	OM_2-8-2010_13-14-40
246056001	948940	1	axc2	2/8/2010	15:10:41	OM_2-8-2010_13-14-40
246056002	948940	1	axc2	2/8/2010	15:11:35	OM_2-8-2010_13-14-40
246056003	948940	1	axc2	2/8/2010	15:12:29	OM_2-8-2010_13-14-40
246056004	948940	1	axc2	2/8/2010	15:13:23	OM_2-8-2010_13-14-40
246080001	948940	1	axc2	2/8/2010	15:14:17	OM_2-8-2010_13-14-40
1202029252	947318	1	axc2	2/8/2010	15:15:10	OM_2-8-2010_13-14-40
1202029259	947318	25	axc2	2/8/2010	15:16:03	OM_2-8-2010_13-14-40
CCV		1	axc2	2/8/2010	15:16:55	OM_2-8-2010_13-14-40
CCB		1	axc2	2/8/2010	15:18:45	OM_2-8-2010_13-14-40

245797007	947318	1	axc2	2/8/2010	15:20:34	OM_2-8-2010_13-14-40
1202029253	947318	1	axc2	2/8/2010	15:21:26	OM_2-8-2010_13-14-40
1202029255	947318	1	axc2	2/8/2010	15:22:20	OM_2-8-2010_13-14-40
1202029257	947318	1	axc2	2/8/2010	15:23:14	OM_2-8-2010_13-14-40
245797008	947318	1	axc2	2/8/2010	15:24:08	OM_2-8-2010_13-14-40
1202029254	947318	1	axc2	2/8/2010	15:25:02	OM_2-8-2010_13-14-40
1202029256	947318	1	axc2	2/8/2010	15:25:56	OM_2-8-2010_13-14-40
1202029258	947318	1	axc2	2/8/2010	15:26:50	OM_2-8-2010_13-14-40
245797009	947318	1	axc2	2/8/2010	15:27:43	OM_2-8-2010_13-14-40
245797010	947318	1	axc2	2/8/2010	15:28:36	OM_2-8-2010_13-14-40
CCV		1	axc2	2/8/2010	15:29:29	OM_2-8-2010_13-14-40
CCB		1	axc2	2/8/2010	15:31:18	OM_2-8-2010_13-14-40
245797011	947318	1	axc2	2/8/2010	15:33:08	OM_2-8-2010_13-14-40
245797012	947318	1	axc2	2/8/2010	15:34:00	OM_2-8-2010_13-14-40
245797013	947318	1	axc2	2/8/2010	15:34:53	OM_2-8-2010_13-14-40
245797014	947318	1	axc2	2/8/2010	15:35:46	OM_2-8-2010_13-14-40
245797015	947318	1	axc2	2/8/2010	15:36:38	OM_2-8-2010_13-14-40
245797016	947318	1	axc2	2/8/2010	15:37:31	OM_2-8-2010_13-14-40
245797017	947318	1	axc2	2/8/2010	15:38:23	OM_2-8-2010_13-14-40
245797018	947318	1	axc2	2/8/2010	15:39:17	OM_2-8-2010_13-14-40
245797019	947318	1	axc2	2/8/2010	15:40:11	OM_2-8-2010_13-14-40
245806001	947318	1	axc2	2/8/2010	15:41:06	OM_2-8-2010_13-14-40
CCV		1	axc2	2/8/2010	15:41:58	OM_2-8-2010_13-14-40
CCB		1	axc2	2/8/2010	15:43:48	OM_2-8-2010_13-14-40
245806002	947318	1	axc2	2/8/2010	15:45:38	OM_2-8-2010_13-14-40
245806003	947318	1	axc2	2/8/2010	15:46:33	OM_2-8-2010_13-14-40
245806004	947318	1	axc2	2/8/2010	15:47:26	OM_2-8-2010_13-14-40
245806005	947318	1	axc2	2/8/2010	15:48:19	OM_2-8-2010_13-14-40
245806006	947318	1	axc2	2/8/2010	15:49:13	OM_2-8-2010_13-14-40
245806007	947318	1	axc2	2/8/2010	15:50:06	OM_2-8-2010_13-14-40
1202034313	949504	1	axc2	2/8/2010	15:51:00	OM_2-8-2010_13-14-40
1202034315	949504	250	axc2	2/8/2010	15:51:53	OM_2-8-2010_13-14-40
246078001	949504	1	axc2	2/8/2010	15:52:47	OM_2-8-2010_13-14-40
1202034314	949504	1	axc2	2/8/2010	15:53:40	OM_2-8-2010_13-14-40
CCV		1	axc2	2/8/2010	15:54:33	OM_2-8-2010_13-14-40
CCB		1	axc2	2/8/2010	15:56:23	OM_2-8-2010_13-14-40
246078002	949504	1	axc2	2/8/2010	15:58:12	OM_2-8-2010_13-14-40
246078003	949504	1	axc2	2/8/2010	15:59:05	OM_2-8-2010_13-14-40
246078004	949504	1	axc2	2/8/2010	15:59:58	OM_2-8-2010_13-14-40
CCV		1	axc2	2/8/2010	16:00:51	OM_2-8-2010_13-14-40
CCB		1	axc2	2/8/2010	16:02:41	OM_2-8-2010_13-14-40

Original Run Filename: OM\_2-8-2010\_13-14-40.OMN created 2/8/2010 13:14:40  
 Original Run Author's Signature: [axc2]  
 Current Run Filename: OM\_2-8-2010\_13-14-40.OMN last modified 2/8/2010 16:03:46  
 Current Run Author's Signature: [axc2]  
 Description: GL-GC-E-095 EPA 335.1, 335.3, 335.4, 9012A, CLP335.2-M  
 Liquid LCS nominal 50 ug/L

Sample	Rep.	Cup No.	Channel 1 TCYANIDE		Detection Time	ADF	MDF	Description
			Conc. (ug/L)	Area (Vs)				
WCN100208-01	1	S1	200	8.74	2/8/2010@13:15:25			200 ppb
WCN100208-02	1	S2	150	6.63	2/8/2010@13:16:17			150 ppb
WCN100208-03	1	S3	100	4.52	2/8/2010@13:17:10			100 ppb
WCN100208-04	1	S4	50.0	2.28	2/8/2010@13:18:03			50 ppb
WCN100208-05	1	S5	10.0	0.511	2/8/2010@13:18:56			10 ppb
WCN100208-06	1	S6	5.00	0.321	2/8/2010@13:19:50			CRDL 5.0 ppb
WCN100208-08	1	S7	0.00	0.00906	2/8/2010@13:20:43			0.0 ppb
DQM Test: Minimum Correlation Coefficient								
Result:			0.99989 > 0.99500					
Message			Pass					
Action			Continue					
WCN100208-07	1	S8	151	6.65	2/8/2010@13:22:34			ICV
Known Conc:			150					
DQM Test: > + Percent Relative Difference								
Result:			0.6 < 10.0					
Message			ICV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			0.6 < 10.0					
Message			ICV Passed					
Action			Continue					
Calibration:			Table/Fig. 1					
WCN100208-08	1	S7	-1.45	0.0181	2/8/2010@13:24:24			ICB/CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-1.45 < 5.01					
Message			ICB/CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-1.45 > -5.01					
Message			ICB/CCB Passed					
Action			Continue					
WCN100208-06	1	S6	5.53	0.322	2/8/2010@13:26:14			CRDL
Known Conc:			5.00					
DQM Test: > + Concentration Limit								
Result:			5.53 < 7.50					
Message			CRDL Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			5.53 > 2.50					
Message			CRDL Passed					
Action			Continue					
1202029242 947315 MB	1	1	441	19.3	2/8/2010@13:28:03			
1202029249 LCS	1	2	26.6	1.24	2/8/2010@13:28:57		25.00	
245682001	1	3	-0.713	0.0500	2/8/2010@13:29:50			
245682002	1	4	-0.651	0.0528	2/8/2010@13:30:43			
245682003	1	5	0.833	0.117	2/8/2010@13:31:36			
245682004	1	6	-1.86	-1.22e-4	2/8/2010@13:32:29			
245682005	1	7	-0.452	0.0614	2/8/2010@13:33:21			
245682006	1	8	-0.944	0.0400	2/8/2010@13:34:14			
245682007	1	9	-1.19	0.0293	2/8/2010@13:35:07			
245682008	1	10	6.00	0.343	2/8/2010@13:35:58			
WCN100208-03	1	S3	105	4.68	2/8/2010@13:36:51			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			5.4 < 10.0					

Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			5.4 < 10.0					
Message			CCV Passed					
Action			Continue					
WCN100208-08	1	S7	-1.40	0.0203	2/8/2010@13:38:42			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-1.40 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-1.40 > -5.00					
Message			CCB Passed					
Action			Continue					
1202029242 947315 MB	1	1	-1.06	0.0348	2/8/2010@13:40:30			
245682009	1	11	-0.822	0.0453	2/8/2010@13:41:23			
245682010	1	12	1.86	0.162	2/8/2010@13:42:15			
245688011	1	13	-0.777	0.0473	2/8/2010@13:43:06			
1202029243  DUP	1	14	-2.01	-0.00640	2/8/2010@13:43:58			
1202029245  MS	1	15	86.6	3.85	2/8/2010@13:44:50			
1202029247  MSD	1	16	78.4	3.50	2/8/2010@13:45:44			
245688012	1	17	0.261	0.0925	2/8/2010@13:46:37			
1202029244  DUP	1	18	0.738	0.113	2/8/2010@13:47:31			
1202029246  MS	1	19	69.2	3.10	2/8/2010@13:48:24			
WCN100208-03	1	S3	105	4.67	2/8/2010@13:49:17			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			5.2 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			5.2 < 10.0					
Message			CCV Passed					
Action			Continue					
WCN100208-08	1	S7	-1.92	-0.00263	2/8/2010@13:51:07			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-1.92 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-1.92 > -5.00					
Message			CCB Passed					
Action			Continue					
1202029248  MSD	1	20	71.4	3.19	2/8/2010@13:52:56			
245688013	1	21	-1.01	0.0373	2/8/2010@13:53:50			
245688014	1	22	0.338	0.0958	2/8/2010@13:54:42			
245797001	1	23	-0.979	0.0385	2/8/2010@13:55:35			
245797002	1	24	-0.863	0.0435	2/8/2010@13:56:27			
245797003	1	25	-0.309	0.0676	2/8/2010@13:57:20			
245797004	1	26	0.938	0.122	2/8/2010@13:58:12			
245797005	1	27	2.23	0.178	2/8/2010@13:59:04			
245797006	1	28	-0.105	0.0766	2/8/2010@13:59:57			
1202029230 947312 MB	1	29	-1.23	0.0277	2/8/2010@14:00:48			
WCN100208-03	1	S3	105	4.66	2/8/2010@14:01:41			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			5.1 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			5.1 < 10.0					
Message			CCV Passed					
Action			Continue					
WCN100208-08	1	S7	-1.86	0.00	2/8/2010@14:03:31			CCB
Known Conc:			0.00					

DQM Test: > + Concentration Limit							
Result:		-1.86 < 5.00					
Message		CCB Passed					
Action		Continue					
DQM Test: < - Concentration Limit							
Result:		-1.86 > -5.00					
Message		CCB Passed					
Action		Continue					
1202029237  LCS	1	30	28.0	1.30	2/8/2010@14:05:20	25.00	
245612007	1	31	-0.913	0.0414	2/8/2010@14:06:13		
1202029231  DUP	1	32	-1.27	0.0256	2/8/2010@14:07:07		
1202029233  MS	1	33	89.8	3.99	2/8/2010@14:08:01		
1202029235  MSD	1	34	85.3	3.80	2/8/2010@14:08:54		
245612008	1	35	-0.535	0.0578	2/8/2010@14:09:48		
1202029232  DUP	1	36	-1.07	0.0347	2/8/2010@14:10:41		
1202029234  MS	1	37	86.4	3.85	2/8/2010@14:11:33		
1202029236  MSD	1	38	84.8	3.78	2/8/2010@14:12:26		
245612009	1	39	-0.656	0.0526	2/8/2010@14:13:19		
WCN100208-03	1	S3	105	4.65	2/8/2010@14:14:12		CCV
Known Conc:		100					
DQM Test: > + Percent Relative Difference							
Result:		4.9 < 10.0					
Message		CCV Passed					
Action		Continue					
DQM Test: < - Percent Relative Difference							
Result:		4.9 < 10.0					
Message		CCV Passed					
Action		Continue					
WCN100208-08	1	S7	-1.95	-0.00373	2/8/2010@14:16:04		CCB
Known Conc:		0.00					
DQM Test: > + Concentration Limit							
Result:		-1.95 < 5.00					
Message		CCB Passed					
Action		Continue					
DQM Test: < - Concentration Limit							
Result:		-1.95 > -5.00					
Message		CCB Passed					
Action		Continue					
245612010	1	40	-0.280	0.0689	2/8/2010@14:17:52		
245612011	1	41	-1.09	0.0336	2/8/2010@14:18:45		
245612012	1	42	-1.19	0.0295	2/8/2010@14:19:37		
245612013	1	43	1.77	0.158	2/8/2010@14:20:29		
245612014	1	44	-0.868	0.0433	2/8/2010@14:21:22		
245612015	1	45	-0.814	0.0457	2/8/2010@14:22:13		
245612016	1	46	-1.07	0.0344	2/8/2010@14:23:07		
245688001	1	47	0.570	0.106	2/8/2010@14:24:02		
245688002	1	48	-0.480	0.0602	2/8/2010@14:24:55		
245688003	1	49	-0.404	0.0635	2/8/2010@14:25:50		
WCN100208-03	1	S3	105	4.64	2/8/2010@14:26:41		CCV
Known Conc:		100					
DQM Test: > + Percent Relative Difference							
Result:		4.6 < 10.0					
Message		CCV Passed					
Action		Continue					
DQM Test: < - Percent Relative Difference							
Result:		4.6 < 10.0					
Message		CCV Passed					
Action		Continue					
WCN100208-08	1	S7	-1.47	0.0172	2/8/2010@14:28:32		CCB
Known Conc:		0.00					
DQM Test: > + Concentration Limit							
Result:		-1.47 < 5.00					
Message		CCB Passed					
Action		Continue					
DQM Test: < - Concentration Limit							
Result:		-1.47 > -5.00					
Message		CCB Passed					
Action		Continue					



245688004	1	50	-0.636	0.0534	2/8/2010@14:30:23		
245688005	1	51	-0.336	0.0665	2/8/2010@14:31:15		
245688006	1	52	1.16	0.131	2/8/2010@14:32:08		
245688007	1	53	-0.543	0.0575	2/8/2010@14:33:01		
245688008	1	54	-1.27	0.0259	2/8/2010@14:33:55		
245688009	1	55	-0.570	0.0563	2/8/2010@14:34:47		
245688010	1	56	-0.384	0.0644	2/8/2010@14:35:40		
1202033006 948940 MB	1	85	-1.45	0.0179	2/8/2010@14:36:34		
1202033013 LCS	1	86	51.4	2.32	2/8/2010@14:37:26		
245926001	1	87	14.3	0.704	2/8/2010@14:38:19		
WCN100208-03	1	S3	105	4.67	2/8/2010@14:39:11		CCV
Known Conc:			100				
DQM Test: > + Percent Relative Difference							
Result:			5.4 < 10.0				
Message			CCV Passed				
Action			Continue				
DQM Test: < - Percent Relative Difference							
Result:			5.4 < 10.0				
Message			CCV Passed				
Action			Continue				
WCN100208-08	1	S7	-1.57	0.0127	2/8/2010@14:41:01		CCB
Known Conc:			0.00				
DQM Test: > + Concentration Limit							
Result:			-1.57 < 5.00				
Message			CCB Passed				
Action			Continue				
DQM Test: < - Concentration Limit							
Result:			-1.57 > -5.00				
Message			CCB Passed				
Action			Continue				
245926002	1	88	13.4	0.665	2/8/2010@14:42:50		
245926003	1	89	1.37	0.141	2/8/2010@14:43:43		
1202033008 DUP	1	90	-1.19	0.0293	2/8/2010@14:44:35		
1202033010 MS	1	91	93.6	4.16	2/8/2010@14:45:29		
1202033012 MSD	1	92	94.0	4.18	2/8/2010@14:46:24		
245926004	1	93	-1.04	0.0356	2/8/2010@14:47:19		
245926005	1	94	-1.86	-1.28e-4	2/8/2010@14:48:12		
245926006	1	95	-1.99	-0.00557	2/8/2010@14:49:06		
245926007	1	96	-1.18	0.0298	2/8/2010@14:50:01		
245939001	1	97	-1.20	0.0290	2/8/2010@14:50:54		
WCN100208-03	1	S3	105	4.66	2/8/2010@14:51:47		CCV
Known Conc:			100				
DQM Test: > + Percent Relative Difference							
Result:			5.0 < 10.0				
Message			CCV Passed				
Action			Continue				
DQM Test: < - Percent Relative Difference							
Result:			5.0 < 10.0				
Message			CCV Passed				
Action			Continue				
WCN100208-08	1	S7	-1.83	0.00132	2/8/2010@14:53:37		CCB
Known Conc:			0.00				
DQM Test: > + Concentration Limit							
Result:			-1.83 < 5.00				
Message			CCB Passed				
Action			Continue				
DQM Test: < - Concentration Limit							
Result:			-1.83 > -5.00				
Message			CCB Passed				
Action			Continue				
245939002	1	98	81.1	3.62	2/8/2010@14:55:27		
245953001	1	99	-11.0	-0.399	2/8/2010@14:56:21		
245965001	1	100	257	11.3	2/8/2010@14:57:14		
245975001	1	101	-1.84	9.46e-4	2/8/2010@14:58:06		
245981001	1	102	-1.72	0.00598	2/8/2010@14:59:00		
246000001	1	103	-1.86	2.83e-4	2/8/2010@14:59:52		
246004001	1	104	-2.03	-0.00731	2/8/2010@15:00:45		
1202033007 DUP	1	105	-1.87	-2.30e-4	2/8/2010@15:01:38		

1202033009	MS	1	106	96.2	4.27	2/8/2010@15:02:32			
1202033011	MSD	1	107	94.3	4.19	2/8/2010@15:03:27			
WCN100208-03		1	S3	104	4.63	2/8/2010@15:04:19			CCV
			Known Conc:	100					
DQM Test: > + Percent Relative Difference									
			Result:	4.5 < 10.0					
			Message	CCV Passed					
			Action	Continue					
DQM Test: < - Percent Relative Difference									
			Result:	4.5 < 10.0					
			Message	CCV Passed					
			Action	Continue					
WCN100208-08		1	S7	-1.82	0.00202	2/8/2010@15:06:09			CCB
			Known Conc:	0.00					
DQM Test: > + Concentration Limit									
			Result:	-1.82 < 5.00					
			Message	CCB Passed					
			Action	Continue					
DQM Test: < - Concentration Limit									
			Result:	-1.82 > -5.00					
			Message	CCB Passed					
			Action	Continue					
245939002		1	98	-1.86	1.33e-4	2/8/2010@15:07:59			
245953001		1	99	-1.90	-0.00162	2/8/2010@15:08:53			
245965001		1	100	-1.86	-1.03e-4	2/8/2010@15:09:46			
246056001		1	108	-1.29	0.0251	2/8/2010@15:10:41			
246056002		1	109	-2.00	-0.00595	2/8/2010@15:11:35			
246056003		1	110	-1.42	0.0194	2/8/2010@15:12:29			
246056004		1	111	-2.00	-0.00588	2/8/2010@15:13:23			
246080001		1	112	-1.45	0.0179	2/8/2010@15:14:17			
1202029252	947318 MB	1	57	-1.86	-1.18e-4	2/8/2010@15:15:10			
1202029259	LCS	1	58	29.0	1.35	2/8/2010@15:16:03		25.00	
WCN100208-03		1	S3	104	4.62	2/8/2010@15:16:55			CCV
			Known Conc:	100					
DQM Test: > + Percent Relative Difference									
			Result:	4.1 < 10.0					
			Message	CCV Passed					
			Action	Continue					
DQM Test: < - Percent Relative Difference									
			Result:	4.1 < 10.0					
			Message	CCV Passed					
			Action	Continue					
WCN100208-08		1	S7	-1.49	0.0161	2/8/2010@15:18:45			CCB
			Known Conc:	0.00					
DQM Test: > + Concentration Limit									
			Result:	-1.49 < 5.00					
			Message	CCB Passed					
			Action	Continue					
DQM Test: < - Concentration Limit									
			Result:	-1.49 > -5.00					
			Message	CCB Passed					
			Action	Continue					
245797007		1	59	-0.787	0.0468	2/8/2010@15:20:34			
1202029253	DUP	1	60	-0.616	0.0543	2/8/2010@15:21:26			
1202029255	MS	1	61	83.5	3.72	2/8/2010@15:22:20			
1202029257	MSD	1	62	84.4	3.76	2/8/2010@15:23:14			
245797008		1	63	3.82	0.248	2/8/2010@15:24:08			
1202029254	DUP	1	64	1.23	0.135	2/8/2010@15:25:02			
1202029256	MS	1	65	89.1	3.96	2/8/2010@15:25:56			
1202029258	MSD	1	66	78.7	3.51	2/8/2010@15:26:50			
245797009		1	67	-0.647	0.0529	2/8/2010@15:27:43			
245797010		1	68	-0.409	0.0633	2/8/2010@15:28:36			
WCN100208-03		1	S3	105	4.66	2/8/2010@15:29:29			CCV
			Known Conc:	100					
DQM Test: > + Percent Relative Difference									
			Result:	5.1 < 10.0					
			Message	CCV Passed					
			Action	Continue					

DQM Test: < - Percent Relative Difference							
Result:		5.1 < 10.0					
Message		CCV Passed					
Action		Continue					
WCN100208-08	1	S7	-1.86	2.47e-4	2/8/2010@15:31:18		CCB
Known Conc:		0.00					
DQM Test: > + Concentration Limit							
Result:		-1.86 < 5.00					
Message		CCB Passed					
Action		Continue					
DQM Test: < - Concentration Limit							
Result:		-1.86 > -5.00					
Message		CCB Passed					
Action		Continue					
245797011	1	69	1.59	0.150	2/8/2010@15:33:08		
245797012	1	70	-0.296	0.0682	2/8/2010@15:34:00		
245797013	1	71	-0.166	0.0739	2/8/2010@15:34:53		
245797014	1	72	5.34	0.314	2/8/2010@15:35:46		
245797015	1	73	0.400	0.0985	2/8/2010@15:36:38		
245797016	1	74	0.789	0.115	2/8/2010@15:37:31		
245797017	1	75	0.157	0.0880	2/8/2010@15:38:23		
245797018	1	76	3.07	0.215	2/8/2010@15:39:17		
245797019	1	77	-0.779	0.0472	2/8/2010@15:40:11		
245806001	1	78	-1.11	0.0326	2/8/2010@15:41:06		
WCN100208-03	1	S3	105	4.65	2/8/2010@15:41:58		CCV
Known Conc:		100					
DQM Test: > + Percent Relative Difference							
Result:		4.9 < 10.0					
Message		CCV Passed					
Action		Continue					
DQM Test: < - Percent Relative Difference							
Result:		4.9 < 10.0					
Message		CCV Passed					
Action		Continue					
WCN100208-08	1	S7	-1.82	0.00186	2/8/2010@15:43:48		CCB
Known Conc:		0.00					
DQM Test: > + Concentration Limit							
Result:		-1.82 < 5.00					
Message		CCB Passed					
Action		Continue					
DQM Test: < - Concentration Limit							
Result:		-1.82 > -5.00					
Message		CCB Passed					
Action		Continue					
245806002	1	79	0.0705	0.0842	2/8/2010@15:45:38		
245806003	1	80	-0.264	0.0696	2/8/2010@15:46:33		
245806004	1	81	-0.767	0.0477	2/8/2010@15:47:26		
245806005	1	82	-0.805	0.0461	2/8/2010@15:48:19		
245806006	1	83	-0.580	0.0559	2/8/2010@15:49:13		
245806007	1	84	0.973	0.124	2/8/2010@15:50:06		
1202034313 949504 MB	1	113	-1.24	0.0270	2/8/2010@15:51:00		
1202034315 LCS	1	114	107	4.74	2/8/2010@15:51:53	250.00	
246078001	1	115	-1.01	0.0370	2/8/2010@15:52:47		
1202034314 DUP	1	116	-1.86	1.40e-4	2/8/2010@15:53:40		
WCN100208-03	1	S3	105	4.67	2/8/2010@15:54:33		CCV
Known Conc:		100					
DQM Test: > + Percent Relative Difference							
Result:		5.3 < 10.0					
Message		CCV Passed					
Action		Continue					
DQM Test: < - Percent Relative Difference							
Result:		5.3 < 10.0					
Message		CCV Passed					
Action		Continue					
WCN100208-08	1	S7	-1.93	-0.00287	2/8/2010@15:56:23		CCB
Known Conc:		0.00					
DQM Test: > + Concentration Limit							
Result:		-1.93 < 5.00					

Message			CCB Passed				
Action			Continue				
DQM Test: < - Concentration Limit							
Result:			-1.93 > -5.00				
Message			CCB Passed				
Action			Continue				
246078002	1	117	-0.783	0.0470	2/8/2010@15:58:12		
246078003	1	118	-1.88	-6.47e-4	2/8/2010@15:59:05		
246078004	1	119	17.8	0.856	2/8/2010@15:59:58		
WCN100208-03	1	S3	105	4.64	2/8/2010@16:00:51		CCV
Known Conc:			100				
DQM Test: > + Percent Relative Difference							
Result:			4.6 < 10.0				
Message			CCV Passed				
Action			Continue				
DQM Test: < - Percent Relative Difference							
Result:			4.6 < 10.0				
Message			CCV Passed				
Action			Continue				
WCN100208-08	1	S7	-1.52	0.0147	2/8/2010@16:02:41		CCB
Known Conc:			0.00				
DQM Test: > + Concentration Limit							
Result:			-1.52 < 5.00				
Message			CCB Passed				
Action			Continue				
DQM Test: < - Concentration Limit							
Result:			-1.52 > -5.00				
Message			CCB Passed				
Action			Continue				

Analyte Properties Table for OM\_2-8-2010\_13-14-40.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

[illegible]

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	8.74	0.574	0.7	2/8/2010	13:16:28
2	150	1	6.63	0.438	-0.3	2/8/2010	13:17:20
3	100	1	4.52	0.298	-1.8	2/8/2010	13:18:12
4	50.0	1	2.28	0.149	-0.9	2/8/2010	13:19:05
5	10.0	1	0.511	0.0326	1.3	2/8/2010	13:19:59
6	5.00	1	0.321	0.0198	-7.0	2/8/2010	13:20:52
7	0.00	1	0.00906	0.00212		2/8/2010	13:21:47

Peak Area(V.s)

8.74

0.00

TCYANIDE concentration, ug/L

200

Area = 0.0436 \* Conc + 0.0819  
 Conc = 23.0 \* Area - 1.86  
 Correlation Coefficient (r) = 0.99989

No Weighting

This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
200 ppb		1	axc2	2/9/2010 10:53:49	OM_2-9-2010_10-50-31
150 ppb		1	axc2	2/9/2010 10:54:41	OM_2-9-2010_10-50-31
100 ppb		1	axc2	2/9/2010 10:55:34	OM_2-9-2010_10-50-31
50 ppb		1	axc2	2/9/2010 10:56:26	OM_2-9-2010_10-50-31
10 ppb		1	axc2	2/9/2010 10:57:20	OM_2-9-2010_10-50-31
CRDL 5.0 ppb		1	axc2	2/9/2010 10:58:13	OM_2-9-2010_10-50-31
ICAL-00		1	axc2	2/9/2010 10:59:07	OM_2-9-2010_10-50-31
ICV		1	axc2	2/9/2010 11:00:58	OM_2-9-2010_10-50-31
ICB		1	axc2	2/9/2010 11:02:49	OM_2-9-2010_10-50-31
CRDL		1	axc2	2/9/2010 11:04:39	OM_2-9-2010_10-50-31
1202034331	949513	1	axc2	2/9/2010 11:06:29	OM_2-9-2010_10-50-31
1202034335	949513	25	axc2	2/9/2010 11:07:22	OM_2-9-2010_10-50-31
246070014	949513	1	axc2	2/9/2010 11:08:15	OM_2-9-2010_10-50-31
1202034332	949513	1	axc2	2/9/2010 11:09:08	OM_2-9-2010_10-50-31
1202034333	949513	1	axc2	2/9/2010 11:10:01	OM_2-9-2010_10-50-31
1202034334	949513	1	axc2	2/9/2010 11:10:54	OM_2-9-2010_10-50-31
246070015	949513	1	axc2	2/9/2010 11:11:46	OM_2-9-2010_10-50-31
246070016	949513	1	axc2	2/9/2010 11:12:39	OM_2-9-2010_10-50-31
246070017	949513	1	axc2	2/9/2010 11:13:31	OM_2-9-2010_10-50-31
246070018	949513	1	axc2	2/9/2010 11:14:24	OM_2-9-2010_10-50-31
CCV		1	axc2	2/9/2010 11:15:16	OM_2-9-2010_10-50-31
CCB		1	axc2	2/9/2010 11:17:06	OM_2-9-2010_10-50-31
246070019*	949513	1	axc2	2/9/2010 11:18:54	OM_2-9-2010_10-50-31
246070020*	949513	1	axc2	2/9/2010 11:19:47	OM_2-9-2010_10-50-31
246268001*	949513	1	axc2	2/9/2010 11:20:38	OM_2-9-2010_10-50-31
1202036005*	949513	1	axc2	2/9/2010 11:21:30	OM_2-9-2010_10-50-31
1202036006*	949513	1	axc2	2/9/2010 11:22:22	OM_2-9-2010_10-50-31
1202036007*	949513	1	axc2	2/9/2010 11:23:15	OM_2-9-2010_10-50-31
246268002*	949513	1	axc2	2/9/2010 11:24:09	OM_2-9-2010_10-50-31
246268003*	949513	1	axc2	2/9/2010 11:25:02	OM_2-9-2010_10-50-31
246268004*	949513	1	axc2	2/9/2010 11:25:56	OM_2-9-2010_10-50-31
246268005*	949513	1	axc2	2/9/2010 11:26:49	OM_2-9-2010_10-50-31
CCV		1	axc2	2/9/2010 11:27:42	OM_2-9-2010_10-50-31

Original Run Filename: OM\_2-9-2010\_10-50-31.OMN created 2/9/2010 10:50:31  
 Original Run Author's Signature: [axc2]  
 Current Run Filename: OM\_2-9-2010\_10-50-31.OMN last modified 2/9/2010 11:28:46  
 Current Run Author's Signature: [axc2]  
 Description: GL-GC-E-095 EPA 335.1, 335.3, 335.4, 9012A, CLP335.2-M  
 Liquid LCS nominal 50 ug/L

Sample	Rep.	Cup No.	Channel 1 TCYANIDE		Detection Time	ADF	MDF	Description
			Conc. (ug/L)	Area (Vs)				
WCN100209-01	1	S1	200	8.26	2/9/2010@10:53:49			200 ppb
WCN100209-02	1	S2	150	6.28	2/9/2010@10:54:41			150 ppb
WCN100209-03	1	S3	100	4.33	2/9/2010@10:55:34			100 ppb
WCN100209-04	1	S4	50.0	2.10	2/9/2010@10:56:26			50 ppb
WCN100209-05	1	S5	10.0	0.504	2/9/2010@10:57:20			10 ppb
WCN100209-06	1	S6	5.00	0.320	2/9/2010@10:58:13			CRDL 5.0 ppb
WCN100209-08	1	S7	0.00	-0.00404	2/9/2010@10:59:07			0.0 ppb
DQM Test: Minimum Correlation Coefficient								
Result:			0.99976 > 0.99500					
Message			Pass					
Action			Continue					
WCN100209-07	1	S8	154	6.43	2/9/2010@11:00:58			ICV
Known Conc:			150					
DQM Test: > + Percent Relative Difference								
Result:			2.7 < 10.0					
Message			ICV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			2.7 < 10.0					
Message			ICV Passed					
Action			Continue					
Calibration:			Table/Fig. 1					
WCN100209-08	1	S7	-1.37	0.0203	2/9/2010@11:02:49			ICB/CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-1.37 < 5.01					
Message			ICB/CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-1.37 > -5.01					
Message			ICB/CCB Passed					
Action			Continue					
WCN100209-06	1	S6	5.96	0.322	2/9/2010@11:04:39			CRDL
Known Conc:			5.00					
DQM Test: > + Concentration Limit								
Result:			5.96 < 7.50					
Message			CRDL Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			5.96 > 2.50					
Message			CRDL Passed					
Action			Continue					
1202034331 949513 MB	1	1	-1.23	0.0261	2/9/2010@11:06:29			
1202034335  LCS	1	2	30.6	1.34	2/9/2010@11:07:22		25.00	
246070014	1	3	-0.400	0.0601	2/9/2010@11:08:15			
1202034332  DUP	1	4	-0.376	0.0611	2/9/2010@11:09:08			
1202034333  MS	1	5	96.8	4.07	2/9/2010@11:10:01			
1202034334  MSD	1	6	97.3	4.09	2/9/2010@11:10:54			
246070015	1	7	-0.290	0.0647	2/9/2010@11:11:46			
246070016	1	8	0.790	0.109	2/9/2010@11:12:39			
246070017	1	9	-0.535	0.0546	2/9/2010@11:13:31			
246070018	1	10	-0.0214	0.0758	2/9/2010@11:14:24			
WCN100209-03	1	S3	109	4.58	2/9/2010@11:15:16			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			9.2 < 10.0					

		Message	CCV Passed				
		Action	Continue				
DQM Test: < - Percent Relative Difference							
		Result:	9.2 < 10.0				
		Message	CCV Passed				
		Action	Continue				
WCN100209-08	1	S7	-1.86	-1.07e-4	2/9/2010@11:17:06		CCB
		Known Conc:	0.00				
DQM Test: > + Concentration Limit							
		Result:	-1.86 < 5.00				
		Message	CCB Passed				
		Action	Continue				
DQM Test: < - Concentration Limit							
		Result:	-1.86 > -5.00				
		Message	CCB Passed				
		Action	Continue				
246070019	1	11	-0.737	0.0463	2/9/2010@11:18:54		
246070020	1	12	-0.581	0.0527	2/9/2010@11:19:47		
246268001	1	13	-1.07	0.0324	2/9/2010@11:20:38		
1202036005	DUP	14	-0.998	0.0355	2/9/2010@11:21:30		
1202036006	MS	15	90.0	3.79	2/9/2010@11:22:22		
1202036007	MSD	16	91.5	3.85	2/9/2010@11:23:15		
246268002	1	17	0.467	0.0959	2/9/2010@11:24:09		
246268003	1	18	-0.989	0.0359	2/9/2010@11:25:02		
246268004	1	19	-0.595	0.0521	2/9/2010@11:25:56		
246268005	1	20	-0.856	0.0414	2/9/2010@11:26:49		
WCN100209-03	1	S3	110	4.63	2/9/2010@11:27:42		CCV
		Known Conc:	100				
DQM Test: > + Percent Relative Difference							
		Result:	10.4 > 10.0				
		Message	CCV Failed				
		Action	Stop Run				
DQM Test: < - Percent Relative Difference							
		Result:	10.4 > 10.0				
		Message	CCV Passed				
		Action	Continue				

Analyte Properties Table for OM\_2-9-2010\_10-50-31.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

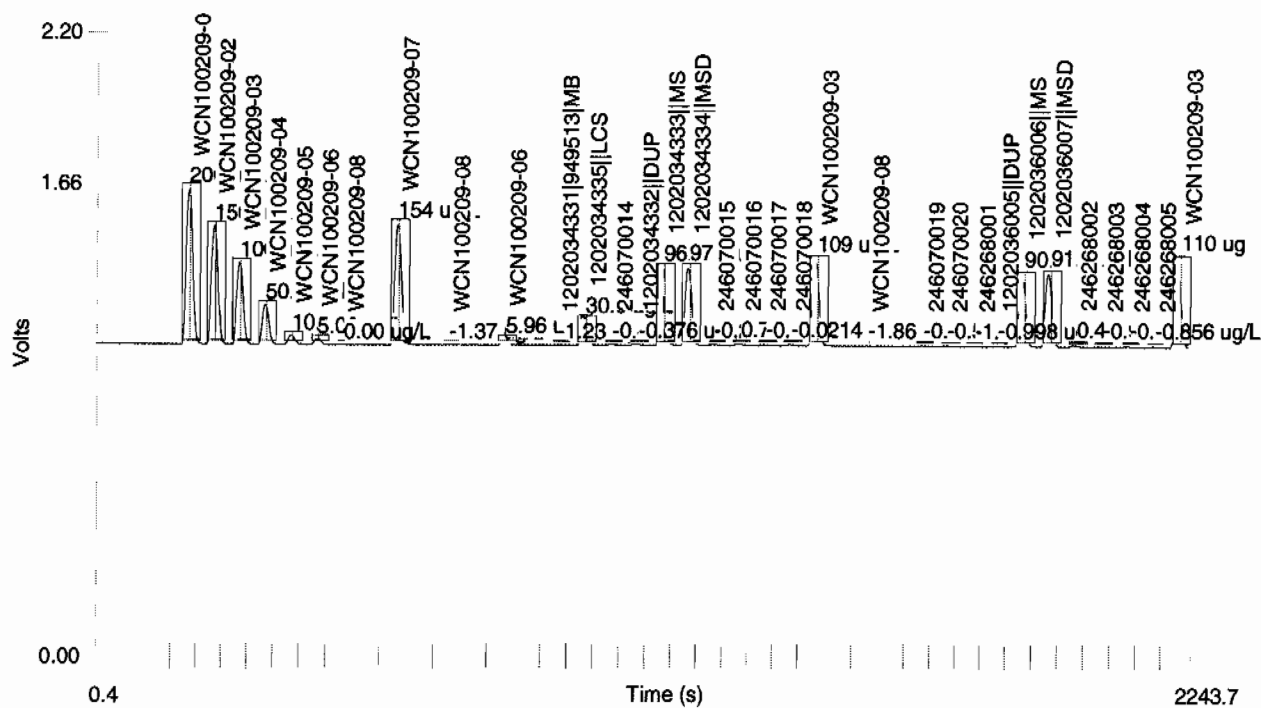
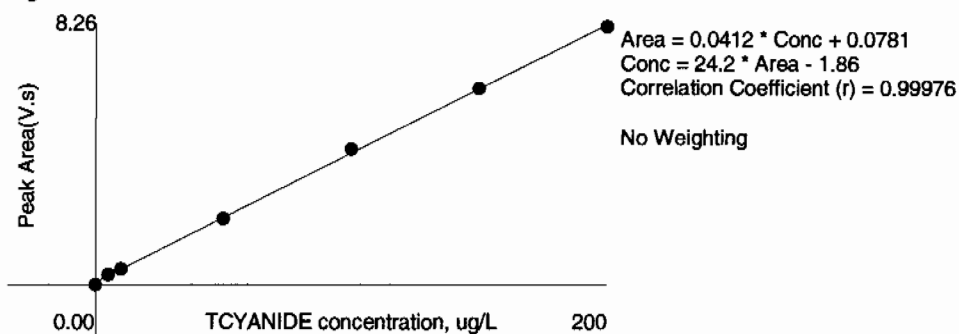


Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	8.26	0.543	0.8	2/9/2010	10:54:52
2	150	1	6.28	0.411	-0.2	2/9/2010	10:55:44
3	100	1	4.33	0.283	-3.0	2/9/2010	10:56:37
4	50.0	1	2.10	0.137	2.0	2/9/2010	10:57:29
5	10.0	1	0.504	0.0318	-2.7	2/9/2010	10:58:23
6	5.00	1	0.320	0.0200	-12.6	2/9/2010	10:59:17
7	0.00	1	-0.00404	-9.71e-4		2/9/2010	11:00:11

Figure 1: TCYANIDE



This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
CCV		1	axc2	2/9/2010 12:21:01	OM_2-9-2010_12-19-29
CCB		1	axc2	2/9/2010 12:22:51	OM_2-9-2010_12-19-29
246070019	949513	1	axc2	2/9/2010 12:24:39	OM_2-9-2010_12-19-29
246070020	949513	1	axc2	2/9/2010 12:25:31	OM_2-9-2010_12-19-29
246268001	949513	1	axc2	2/9/2010 12:26:23	OM_2-9-2010_12-19-29
1202036005	949513	1	axc2	2/9/2010 12:27:15	OM_2-9-2010_12-19-29
1202036006	949513	1	axc2	2/9/2010 12:28:07	OM_2-9-2010_12-19-29
1202036007	949513	1	axc2	2/9/2010 12:29:00	OM_2-9-2010_12-19-29
246268002	949513	1	axc2	2/9/2010 12:29:54	OM_2-9-2010_12-19-29
246268003	949513	1	axc2	2/9/2010 12:30:47	OM_2-9-2010_12-19-29
246268004	949513	1	axc2	2/9/2010 12:31:40	OM_2-9-2010_12-19-29
246268005	949513	1	axc2	2/9/2010 12:32:33	OM_2-9-2010_12-19-29
CCV		1	axc2	2/9/2010 12:33:26	OM_2-9-2010_12-19-29
CCB		1	axc2	2/9/2010 12:35:19	OM_2-9-2010_12-19-29
246268006	949513	1	axc2	2/9/2010 12:37:09	OM_2-9-2010_12-19-29
246280001	949513	1	axc2	2/9/2010 12:38:01	OM_2-9-2010_12-19-29
246280002	949513	1	axc2	2/9/2010 12:38:54	OM_2-9-2010_12-19-29
246280003	949513	1	axc2	2/9/2010 12:39:46	OM_2-9-2010_12-19-29
246280004	949513	1	axc2	2/9/2010 12:40:40	OM_2-9-2010_12-19-29
246333001	949513	1	axc2	2/9/2010 12:41:32	OM_2-9-2010_12-19-29
246333002	949513	1	axc2	2/9/2010 12:42:24	OM_2-9-2010_12-19-29
246415001	949513	1	axc2	2/9/2010 12:43:15	OM_2-9-2010_12-19-29
1202029260	947321	1	axc2	2/9/2010 12:44:08	OM_2-9-2010_12-19-29
1202029267	947321	25	axc2	2/9/2010 12:45:00	OM_2-9-2010_12-19-29
CCV		1	axc2	2/9/2010 12:45:51	OM_2-9-2010_12-19-29
CCB		1	axc2	2/9/2010 12:47:43	OM_2-9-2010_12-19-29
245783001	947321	1	axc2	2/9/2010 12:49:34	OM_2-9-2010_12-19-29
1202029262	947321	1	axc2	2/9/2010 12:50:28	OM_2-9-2010_12-19-29
1202029264	947321	1	axc2	2/9/2010 12:51:22	OM_2-9-2010_12-19-29
1202029266	947321	1	axc2	2/9/2010 12:52:15	OM_2-9-2010_12-19-29
245783002	947321	1	axc2	2/9/2010 12:53:08	OM_2-9-2010_12-19-29
245783003	947321	1	axc2	2/9/2010 12:54:01	OM_2-9-2010_12-19-29
245783004	947321	1	axc2	2/9/2010 12:54:55	OM_2-9-2010_12-19-29
245783005	947321	1	axc2	2/9/2010 12:55:48	OM_2-9-2010_12-19-29
245783006	947321	1	axc2	2/9/2010 12:56:42	OM_2-9-2010_12-19-29
245783007	947321	1	axc2	2/9/2010 12:57:34	OM_2-9-2010_12-19-29
CCV		1	axc2	2/9/2010 12:58:27	OM_2-9-2010_12-19-29
CCB		1	axc2	2/9/2010 13:00:17	OM_2-9-2010_12-19-29
245783008	947321	1	axc2	2/9/2010 13:02:08	OM_2-9-2010_12-19-29
245783009	947321	1	axc2	2/9/2010 13:03:00	OM_2-9-2010_12-19-29
245783010	947321	1	axc2	2/9/2010 13:03:53	OM_2-9-2010_12-19-29
245783011	947321	1	axc2	2/9/2010 13:04:44	OM_2-9-2010_12-19-29
245783012*	947321	1	axc2	2/9/2010 13:05:36	OM_2-9-2010_12-19-29
245783013*	947321	1	axc2	2/9/2010 13:06:31	OM_2-9-2010_12-19-29
245783014*	947321	1	axc2	2/9/2010 13:07:25	OM_2-9-2010_12-19-29
245783015*	947321	1	axc2	2/9/2010 13:08:19	OM_2-9-2010_12-19-29
245783016	947321	1	axc2	2/9/2010 13:09:12	OM_2-9-2010_12-19-29
245786001	947321	1	axc2	2/9/2010 13:10:06	OM_2-9-2010_12-19-29
CCV		1	axc2	2/9/2010 13:10:58	OM_2-9-2010_12-19-29
CCB		1	axc2	2/9/2010 13:12:49	OM_2-9-2010_12-19-29
245783012	947321	1	axc2	2/9/2010 13:14:39	OM_2-9-2010_12-19-29
245783013	947321	1	axc2	2/9/2010 13:15:33	OM_2-9-2010_12-19-29
245783014	947321	1	axc2	2/9/2010 13:16:26	OM_2-9-2010_12-19-29
245783015	947321	1	axc2	2/9/2010 13:17:20	OM_2-9-2010_12-19-29
245806008	947321	1	axc2	2/9/2010 13:18:13	OM_2-9-2010_12-19-29
1202029261	947321	1	axc2	2/9/2010 13:19:07	OM_2-9-2010_12-19-29
1202029263	947321	1	axc2	2/9/2010 13:20:00	OM_2-9-2010_12-19-29
1202029265	947321	1	axc2	2/9/2010 13:20:53	OM_2-9-2010_12-19-29

1202036002	950190	1	axc2	2/9/2010	13:21:46	OM_2-9-2010_12-19-29
246415001	950190	1	axc2	2/9/2010	13:22:37	OM_2-9-2010_12-19-29
CCV		1	axc2	2/9/2010	13:23:31	OM_2-9-2010_12-19-29
CCB		1	axc2	2/9/2010	13:25:21	OM_2-9-2010_12-19-29
1202036003	950190	1	axc2	2/9/2010	13:27:11	OM_2-9-2010_12-19-29
1202036004	950190	1	axc2	2/9/2010	13:28:04	OM_2-9-2010_12-19-29
246415001	950190	10	axc2	2/9/2010	13:28:55	OM_2-9-2010_12-19-29
246415001	949513	10	axc2	2/9/2010	13:29:48	OM_2-9-2010_12-19-29
CCV		1	axc2	2/9/2010	13:30:41	OM_2-9-2010_12-19-29
CCB		1	axc2	2/9/2010	13:32:31	OM_2-9-2010_12-19-29

Original Run Filename: OM\_2-9-2010\_12-19-29.OMN created 2/9/2010 12:19:29  
 Original Run Author's Signature: [axc2]  
 Current Run Filename: OM\_2-9-2010\_12-19-29.OMN last modified 2/9/2010 13:33:37  
 Current Run Author's Signature: [axc2]  
 Description: GL-GC-E-095 EPA 335.1, 335.3, 335.4, 9012A, CLP335.2-M  
 Liquid LCS nominal 50 ug/L

Sample	Rep.	Cup No.	Channel 1 TCYANIDE		Detection Time	ADF	MDF	Description
			Conc. (ug/L)	Area (Vs)				
WCN100209-03	1	S3	97.2	4.09	2/9/2010@12:21:01			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			-2.8 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			-2.8 < 10.0					
Message			CCV Passed					
Action			Continue					
WCN100209-08	1	S7	-1.03	0.0341	2/9/2010@12:22:51			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-1.03 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-1.03 > -5.00					
Message			CCB Passed					
Action			Continue					
Calibration:			Table/Fig. 1					
246070019 949513	1	11	-0.492	0.0563	2/9/2010@12:24:39			
246070020	1	12	-1.92	-0.00255	2/9/2010@12:25:31			
246268001	1	13	-1.46	0.0165	2/9/2010@12:26:23			
1202036005 DUP	1	14	-0.928	0.0384	2/9/2010@12:27:15			
1202036006 MS	1	15	91.3	3.84	2/9/2010@12:28:07			
1202036007 MSD	1	16	89.5	3.77	2/9/2010@12:29:00			
246268002	1	17	0.633	0.103	2/9/2010@12:29:54			
246268003	1	18	-1.64	0.00906	2/9/2010@12:30:47			
246268004	1	19	-0.611	0.0514	2/9/2010@12:31:40			
246268005	1	20	-0.546	0.0541	2/9/2010@12:32:33			
WCN100209-03	1	S3	97.1	4.08	2/9/2010@12:33:26			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			-2.9 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			-2.9 < 10.0					
Message			CCV Passed					
Action			Continue					
WCN100209-08	1	S7	-1.82	0.00154	2/9/2010@12:35:19			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-1.82 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-1.82 > -5.00					
Message			CCB Passed					
Action			Continue					
246268006	1	21	-1.09	0.0318	2/9/2010@12:37:09			
246280001	1	22	-1.04	0.0336	2/9/2010@12:38:01			
246280002	1	23	-0.224	0.0674	2/9/2010@12:38:54			
246280003	1	24	-0.529	0.0548	2/9/2010@12:39:46			
246280004	1	25	-1.19	0.0277	2/9/2010@12:40:40			

246333001	1	26	-0.821	0.0428	2/9/2010@12:41:32			
246333002	1	27	-1.06	0.0328	2/9/2010@12:42:24			
246415001	1	28	421	17.4	2/9/2010@12:43:15			
1202029260 947321 MB	1	29	-0.194	0.0686	2/9/2010@12:44:08			
1202029267  LCS	1	30	31.1	1.36	2/9/2010@12:45:00	25.00		
WCN100209-03	1	S3	99.6	4.19	2/9/2010@12:45:51			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					
WCN100209-08	1	S7	-1.49	0.0152	2/9/2010@12:47:43			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-1.49 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-1.49 > -5.00					
Message			CCB Passed					
Action			Continue					
245783001	1	31	-1.21	0.0266	2/9/2010@12:49:34			
1202029262  DUP	1	32	-0.595	0.0521	2/9/2010@12:50:28			
1202029264  MS	1	33	104	4.35	2/9/2010@12:51:22			
1202029266  MSD	1	34	101	4.25	2/9/2010@12:52:15			
245783002	1	35	-0.122	0.0716	2/9/2010@12:53:08			
245783003	1	36	-0.870	0.0408	2/9/2010@12:54:01			
245783004	1	37	-0.551	0.0539	2/9/2010@12:54:55			
245783005	1	38	-1.12	0.0304	2/9/2010@12:55:48			
245783006	1	39	1.45	0.136	2/9/2010@12:56:42			
245783007	1	40	-0.793	0.0439	2/9/2010@12:57:34			
WCN100209-03	1	S3	99.3	4.17	2/9/2010@12:58:27			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			-0.7 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			-0.7 < 10.0					
Message			CCV Passed					
Action			Continue					
WCN100209-08	1	S7	-1.36	0.0206	2/9/2010@13:00:17			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-1.36 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-1.36 > -5.00					
Message			CCB Passed					
Action			Continue					
245783008	1	41	-1.05	0.0332	2/9/2010@13:02:08			
245783009	1	42	-0.271	0.0655	2/9/2010@13:03:00			
245783010	1	43	-0.884	0.0402	2/9/2010@13:03:53			
245783011	1	44	-1.39	0.0191	2/9/2010@13:04:44			
245783012	1	45	17.9	0.817	2/9/2010@13:05:36			
245783013	1	46	-526	-21.6	2/9/2010@13:06:31			
245783014	1	47	-550	-22.6	2/9/2010@13:07:25			
245783015	1	48	9.69	0.476	2/9/2010@13:08:19			
245783016	1	49	-0.372	0.0613	2/9/2010@13:09:12			
245786001	1	50	-1.14	0.0298	2/9/2010@13:10:06			
WCN100209-03	1	S3	101	4.23	2/9/2010@13:10:58			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								

		Result:	0.6 < 10.0				
		Message	CCV Passed				
		Action	Continue				
DQM Test: < - Percent Relative Difference							
		Result:	0.6 < 10.0				
		Message	CCV Passed				
		Action	Continue				
WCN100209-08	1	S7	-2.21	-0.0143	2/9/2010@13:12:49		CCB
		Known Conc:	0.00				
DQM Test: > + Concentration Limit							
		Result:	-2.21 < 5.00				
		Message	CCB Passed				
		Action	Continue				
DQM Test: < - Concentration Limit							
		Result:	-2.21 > -5.00				
		Message	CCB Passed				
		Action	Continue				
245783012	1	45	-0.912	0.0390	2/9/2010@13:14:39		
245783013	1	46	-0.469	0.0573	2/9/2010@13:15:33		
245783014	1	47	0.111	0.0812	2/9/2010@13:16:26		
245783015	1	48	-0.872	0.0407	2/9/2010@13:17:20		
245806008	1	51	0.862	0.112	2/9/2010@13:18:13		
1202029261  DUP	1	52	-0.0633	0.0740	2/9/2010@13:19:07		
1202029263  MS	1	53	85.7	3.61	2/9/2010@13:20:00		
1202029265  MSD	1	54	82.8	3.49	2/9/2010@13:20:53		
1202036002 950190 MB	1	55	-1.09	0.0318	2/9/2010@13:21:46		
246415001	1	58	312	13.0	2/9/2010@13:22:37		
WCN100209-03	1	S3	102	4.27	2/9/2010@13:23:31		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				
WCN100209-08	1	S7	-1.86	-6.73e-5	2/9/2010@13:25:21		CCB
		Known Conc:	0.00				
DQM Test: > + Concentration Limit							
		Result:	-1.86 < 5.00				
		Message	CCB Passed				
		Action	Continue				
DQM Test: < - Concentration Limit							
		Result:	-1.86 > -5.00				
		Message	CCB Passed				
		Action	Continue				
1202036003  LCS	1	56	-0.177	0.0694	2/9/2010@13:27:11		
1202036004  LCSD	1	57	-0.890	0.0399	2/9/2010@13:28:04		
246415001	1	58	32.2	1.41	2/9/2010@13:28:55	10.00	
246415001 949513	1	28	61.7	2.62	2/9/2010@13:29:48	10.00	
WCN100209-03	1	S3	100	4.22	2/9/2010@13:30:41		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				
WCN100209-08	1	S7	-1.93	-0.00315	2/9/2010@13:32:31		CCB
		Known Conc:	0.00				
DQM Test: > + Concentration Limit							
		Result:	-1.93 < 5.00				
		Message	CCB Passed				
		Action	Continue				
DQM Test: < - Concentration Limit							

Result:	-1.93 > -5.00				
Message	CCB Passed				
Action	Continue				

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

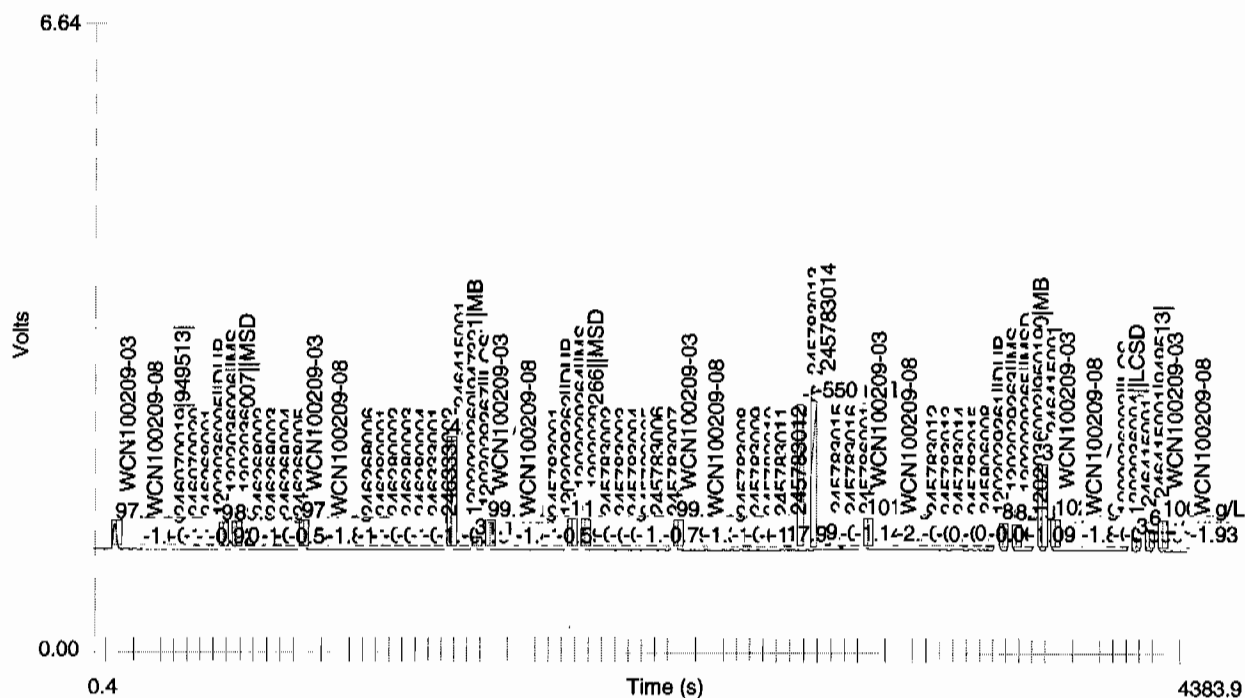
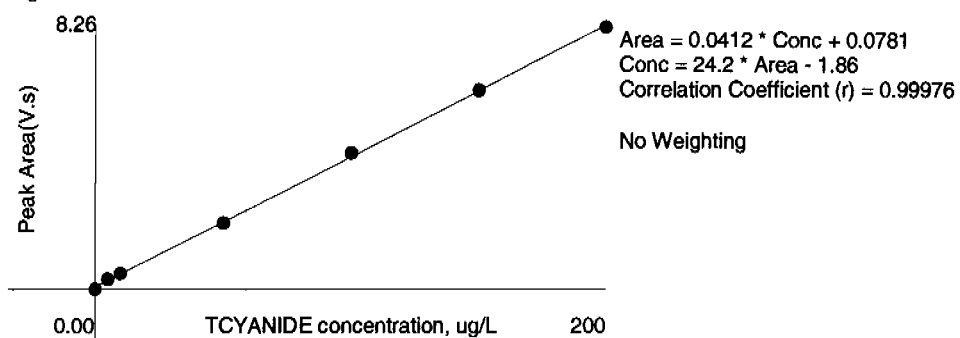


Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	8.26	0.543	0.8	2/9/2010	10:54:52
2	150	1	6.28	0.411	-0.2	2/9/2010	10:55:44
3	100	1	4.33	0.283	-3.0	2/9/2010	10:56:37
4	50.0	1	2.10	0.137	2.0	2/9/2010	10:57:29
5	10.0	1	0.504	0.0318	-2.7	2/9/2010	10:58:23
6	5.00	1	0.320	0.0200	-12.6	2/9/2010	10:59:17
7	0.00	1	-0.00404	-9.71e-4		2/9/2010	11:00:11

Figure 1: TCYANIDE





# Miscellaneous

### DATA EXCEPTION REPORT

<b>Mo.Day Yr.</b> 09-FEB-10	<b>Division:</b>	<b>Quality Criteria:</b>	<b>Type:</b>
<b>Instrument Type:</b>	<b>Test / Method:</b> SW846 9012A	<b>Matrix Type:</b> Solid	<b>Client Code:</b> LANL
<b>Batch ID:</b> 947318	<b>Sample Numbers:</b> See Below		
<b>Potentially affected work order(s)(SDG):</b> 245797(10-1471),245806(10-1474) <b>Application Issues:</b> Failed Recovery for MSD/PSD			
<b>Specification and Requirements Exception Description:</b>		<b>DER Disposition:</b>	
1. Failed Recovery for MSD:  QC 1202029258MSD		1. The spike duplicate recovery falls outside of the client specified acceptance limits. Since both the spike recovery and the RPD between the spike and spike duplicate fall within acceptance limits, the data is reported(soil sample).	

**Originator's Name:**

Ashley Earl 09-FEB-10

**Data Validator/Group Leader:**

Elzbieta Szulc 16-FEB-10

# **General Chemistry Analysis**

# **Case Narrative**

**General Chemistry Narrative  
Los Alamos National Laboratory (LANL)  
SDG 10-1474-1**

**Method/Analysis Information**

**Product:** Cyanide, Total

**Analytical Batch:** 947324      **Method:** SW9012A Cyanide and Total

**Prep Batch :** 947322      **Method:** SSW846 9010B Prep

**Sample Analysis**

The following samples were analyzed using the analytical protocol as established in SW846 9012A:

<b>Sample ID</b>	<b>Client ID</b>
245807001	RE15-10-8081
245807002	RE15-10-8082
1202029270	Method Blank (MB)
1202029271	245619001(GW51-10-11855) Sample Duplicate (DUP)
1202029272	245605002(CAMO-10-9315) Sample Duplicate (DUP)
1202029273	245676001(CAWR-10-11786) Sample Duplicate (DUP)
1202029274	245619001(GW51-10-11855) Matrix Spike (MS)
1202029275	245605002(CAMO-10-9315) Matrix Spike (MS)
1202029276	245676001(CAWR-10-11786) Matrix Spike (MS)
1202029277	245619001(GW51-10-11855) Matrix Spike Duplicate (MSD)
1202029278	245605002(CAMO-10-9315) Matrix Spike Duplicate (MSD)
1202029279	245676001(CAWR-10-11786) Matrix Spike Duplicate (MSD)
1202029280	Laboratory Control Sample (LCS)

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

**SOP Reference**

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-095 REV# 12.

**Preparation/Analytical Method Verification**

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

**Calibration Information**

The Flow Injection analysis was performed on a Lachat QuickChem FIA+ 8000 Series.

**Initial Calibration**

All initial calibration requirements have been met for this SDG.

**Continuing Calibration Blanks**

All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

**Calibration Verification Information (CCV)**

All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

**Y Intercept Rule**

The absolute value of the intercept is less than 3 times the MDL.

**Quality Control (QC) Information****Method Blank (MB) Statement**

The MB analyzed with this SDG met the acceptance criteria.

**Laboratory Control Sample (LCS) Recovery**

The LCS spike recovery met the acceptance limits.

**Quality Control (QC) Designation**

The following samples were selected for QC analysis: 245605002 (CAMO-10-9315), 245619001 (GW51-10-11855) and 245676001 (CAWR-10-11786).

**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. 1202029271 (GW51-10-11855).

**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: 22Feb10



# 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: 10-1474-1 GEL Work Order: 245807

**The Qualifiers in this report are defined as follows:**

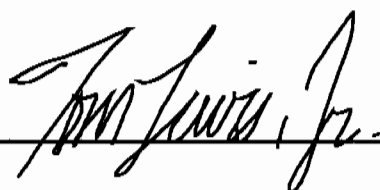
- \* Indicates that a quality control analyte recovery is outside of specified acceptance criteria.
- \*\* Indicates the analyte is a surrogate compound.

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 9, 2010

Client SDG: 10-1474-1

Client Sample ID: RE15-10-8081  
Sample ID: 245807001  
Matrix: W  
Collect Date: 26-JAN-10 12:00  
Receive Date: 29-JAN-10  
Collector: Client

Project: LANL01004  
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Flow Injection Analysis</b>											
<i>SW9012A Cyanide, Total "As Received"</i>											
Cyanide, Total	J	2.82	1.66	5.00	ug/L	1	AXC2	02/05/10	1112	947324	1

### The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/03/10	1524	947322

### The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

# GEL LABORATORIES LLC

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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 9, 2010

Client SDG: 10-1474-1

Client Sample ID: RE15-10-8082  
Sample ID: 245807002  
Matrix: W  
Collect Date: 26-JAN-10 12:00  
Receive Date: 29-JAN-10  
Collector: Client

Project: LANL01004  
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Flow Injection Analysis</b>											
<i>SW9012A Cyanide, Total "As Received"</i>											
Cyanide, Total	J	2.67	1.66	5.00	ug/L	1	AXC2	02/05/10	1113	947324	1

### The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/03/10	1524	947322

### 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 9, 2010

Page 1 of 2

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

Contact:

Workorder: 245807

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Flow Injection Analysis</b>											
Batch	947324										
QC1202029271	245619001	DUP									
Cyanide, Total	J	2.69	J	3.37	ug/L	22.4	^	(+/-5.00)	AXC2	02/05/10	10:48
QC1202029272	245605002	DUP									
Cyanide, Total	J	3.11	J	2.62	ug/L	17.1	^	(+/-5.00)		02/05/10	10:40
QC1202029273	245676001	DUP									
Cyanide, Total	J	3.12	J	2.85	ug/L	9.05	^	(+/-5.00)		02/05/10	10:53
QC1202029280	LCS										
Cyanide, Total	50.0			46.7	ug/L			93.4	(90%-110%)	02/05/10	10:37
QC1202029270	MB										
Cyanide, Total			J	2.49	ug/L					02/05/10	10:36
QC1202029274	245619001	MS									
Cyanide, Total	100	J	2.69	102	ug/L			99.3	(60%-144%)	02/05/10	10:48
QC1202029275	245605002	MS									
Cyanide, Total	100	J	3.11	102	ug/L			98.9	(60%-144%)	02/05/10	10:40
QC1202029276	245676001	MS									
Cyanide, Total	100	J	3.12	101	ug/L			97.9	(60%-144%)	02/05/10	10:54
QC1202029277	245619001	MSD									
Cyanide, Total	100	J	2.69	91.7	ug/L	10.6		89	(0%-20%)	02/05/10	10:49
QC1202029278	245605002	MSD									
Cyanide, Total	100	J	3.11	101	ug/L	0.985		97.9	(0%-20%)	02/05/10	10:41
QC1202029279	245676001	MSD									
Cyanide, Total	100	J	3.12	99.3	ug/L	1.70		96.2	(0%-20%)	02/05/10	10:55

### 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

## GEL LABORATORIES LLC

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### QC Summary

Workorder: 245807

Page 2 of 2

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
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.										
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: 09-FEB-2010 14:36

GEL Laboratories LLC

Contract: LANL01004

SDG #: 10-1474-1

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	05-FEB-2010 10:04:21	OM_2-5-2010_09-56-27	137	150	91	(90%-110%)	Yes
CCV	05-FEB-2010 10:31:03	OM_2-5-2010_09-56-27	96.7	100	97	(90%-110%)	Yes
CCV	05-FEB-2010 10:43:30	OM_2-5-2010_09-56-27	96.8	100	97	(90%-110%)	Yes
CCV	05-FEB-2010 10:55:59	OM_2-5-2010_09-56-27	96.2	100	96	(90%-110%)	Yes
CCV	05-FEB-2010 11:08:28	OM_2-5-2010_09-56-27	95.3	100	95	(90%-110%)	Yes
CCV	05-FEB-2010 11:20:57	OM_2-5-2010_09-56-27	95.7	100	96	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	05-FEB-2010 10:06:11	OM_2-5-2010_09-56-27	0.293	10	Yes
CCB	05-FEB-2010 10:32:54	OM_2-5-2010_09-56-27	0.125	10	Yes
CCB	05-FEB-2010 10:45:20	OM_2-5-2010_09-56-27	0.121	10	Yes
CCB	05-FEB-2010 10:57:50	OM_2-5-2010_09-56-27	1.57	10	Yes
CCB	05-FEB-2010 11:10:18	OM_2-5-2010_09-56-27	1.88	10	Yes
CCB	05-FEB-2010 11:22:48	OM_2-5-2010_09-56-27	1.88	10	Yes

# **Cyanide, Total**

# Prep Logbook

## Cyanide Sample Distillation

Batch ID: 947322.0		Verified by:	
Analyst:	Alan Stanley		
Method:	SW846 9010B Prep EPA 335.3 EPA 335.4		
Lab SOP:	GL-GC-E-067 REV# 13		
Instrument:	Sartorius Balance B-007		

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
LCS	1202029280	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1184831-02	.0125	mL
MS	1202029274	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1184831-02	.025	mL
MS	1202029275	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1184831-02	.025	mL
MS	1202029276	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1184831-02	.025	mL
MSD	1202029277	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1184831-02	.025	mL
MSD	1202029278	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1184831-02	.025	mL
MSD	1202029279	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1184831-02	.025	mL

Sample ID	Run Date	Matrix	Initial Volume (mL)	Final Volume (mL)	Prep Factor (mL/mL)	pH Check
1202029270 MB	03-FEB-2010 15:24:00	Water	25	25	1	>12
1202029280 LCS	03-FEB-2010 15:24:00	Water	25	25	1	>12
245427008	03-FEB-2010 15:24:00	Water	25	25	1	>12
245605002	03-FEB-2010 15:24:00	Ground Water	25	25	1	>12
1202029272 DUP (245605002)	03-FEB-2010 15:24:00	Ground Water	25	25	1	>12
1202029275 MS (245605002)	03-FEB-2010 15:24:00	Ground Water	25	25	1	>12
1202029278 MSD (245605002)	03-FEB-2010 15:24:00	Ground Water	25	25	1	>12
245619001	03-FEB-2010 15:24:00	Water	25	25	1	>12
1202029271 DUP (245619001)	03-FEB-2010 15:24:00	Water	25	25	1	>12
1202029274 MS (245619001)	03-FEB-2010 15:24:00	Water	25	25	1	>12
1202029277 MSD (245619001)	03-FEB-2010 15:24:00	Water	25	25	1	>12
245673004	03-FEB-2010 15:24:00	Ground Water	25	25	1	>12
245673005	03-FEB-2010 15:24:00	Ground Water	25	25	1	>12
245676001	03-FEB-2010 15:24:00	Surface Water	25	25	1	>12
1202029273 DUP (245676001)	03-FEB-2010 15:24:00	Surface Water	25	25	1	>12
1202029276 MS (245676001)	03-FEB-2010 15:24:00	Surface Water	25	25	1	>12

Analytical Logbook version 1 11-04-2002

GEL Laboratories LLC

# Prep Logbook

**Batch ID:** 947322.0  
**Analyst:** Alan Stanley  
**Method:** SW846 9010B Prep EPA 335.3 EPA 335.4  
**Lab SOP:** GL-GC-E-067 REV# I3  
**Instrument:** Sartorius Balance B-007

Verified by:

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
LCS	1202029280	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1184831-02	.0125	mL
MS	1202029274	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1184831-02	.025	mL
MS	1202029275	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1184831-02	.025	mL
MS	1202029276	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1184831-02	.025	mL
MSD	1202029277	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1184831-02	.025	mL
MSD	1202029278	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1184831-02	.025	mL
MSD	1202029279	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1184831-02	.025	mL

Sample ID	Run Date	Matrix	Initial Volume (mL)	Final Volume (mL)	Prep Factor (mL/mL)	pH Check
1202029279 MSD (245676001)	03-FEB-2010 15:24:00	Surface Water	25	25	1	>12
245676002	03-FEB-2010 15:24:00	Surface Water	25	25	1	>12
245676005	03-FEB-2010 15:24:00	Surface Water	25	25	1	>12
245681001	03-FEB-2010 15:24:00	Water	25	25	1	>12
245681002	03-FEB-2010 15:24:00	Water	25	25	1	>12
245690001	03-FEB-2010 15:24:00	Water	25	25	1	>12
245690002	03-FEB-2010 15:24:00	Water	25	25	1	>12
245777003	03-FEB-2010 15:24:00	Water	25	25	1	>12
245777006	03-FEB-2010 15:24:00	Water	25	25	1	>12
245791002	03-FEB-2010 15:24:00	Ground Water	25	25	1	>12
245791004	03-FEB-2010 15:24:00	Ground Water	25	25	1	>12
245807001	03-FEB-2010 15:24:00	Water	25	25	1	>12
245807002	03-FEB-2010 15:24:00	Water	25	25	1	>12
245818012	03-FEB-2010 15:24:00	Waste Water	25	25	1	>12
245841001	03-FEB-2010 15:24:00	Surface Water	25	25	1	>12

Comments:

Reagent/Solvent Lot ID	Description	Amount
091211-C	0.25N Sodium Hydroxide Solution	25 mL
1176724-C	0.8N HNO3S	1.25 mL

Analytical Logbook version 1 11-04-2002

GEL Laboratories LLC

This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
200 ppb		1	axc2	2/5/2010 9:57:12	OM_2-5-2010_09-56-27
150 ppb		1	axc2	2/5/2010 9:58:04	OM_2-5-2010_09-56-27
100 ppb		1	axc2	2/5/2010 9:58:57	OM_2-5-2010_09-56-27
50 ppb		1	axc2	2/5/2010 9:59:49	OM_2-5-2010_09-56-27
10 ppb		1	axc2	2/5/2010 10:00:43	OM_2-5-2010_09-56-27
CRDL 5.0 ppb		1	axc2	2/5/2010 10:01:37	OM_2-5-2010_09-56-27
ICAL-00		1	axc2	2/5/2010 10:02:31	OM_2-5-2010_09-56-27
ICV		1	axc2	2/5/2010 10:04:21	OM_2-5-2010_09-56-27
ICB		1	axc2	2/5/2010 10:06:11	OM_2-5-2010_09-56-27
CRDL		1	axc2	2/5/2010 10:08:01	OM_2-5-2010_09-56-27
1202024505	945278	1	axc2	2/5/2010 10:09:51	OM_2-5-2010_09-56-27
1202024507	945278	250	axc2	2/5/2010 10:10:44	OM_2-5-2010_09-56-27
245307001	945278	1	axc2	2/5/2010 10:11:37	OM_2-5-2010_09-56-27
1202024506	945278	1	axc2	2/5/2010 10:12:30	OM_2-5-2010_09-56-27
245307002	945278	1	axc2	2/5/2010 10:13:23	OM_2-5-2010_09-56-27
245706001	945278	1	axc2	2/5/2010 10:14:16	OM_2-5-2010_09-56-27
1202030431*	947859	1	axc2	2/5/2010 10:15:09	OM_2-5-2010_09-56-27
1202030435	947859	1	axc2	2/5/2010 10:16:02	OM_2-5-2010_09-56-27
245791005	947859	1	axc2	2/5/2010 10:16:54	OM_2-5-2010_09-56-27
1202030432	947859	1	axc2	2/5/2010 10:17:46	OM_2-5-2010_09-56-27
CCV		1	axc2	2/5/2010 10:18:39	OM_2-5-2010_09-56-27
CCB		1	axc2	2/5/2010 10:20:29	OM_2-5-2010_09-56-27
245706001	945278	10	axc2	2/5/2010 10:22:18	OM_2-5-2010_09-56-27
1202030431	947859	1	axc2	2/5/2010 10:23:11	OM_2-5-2010_09-56-27
1202030433	947859	1	axc2	2/5/2010 10:24:03	OM_2-5-2010_09-56-27
1202030434	947859	1	axc2	2/5/2010 10:24:55	OM_2-5-2010_09-56-27
245791007	947859	1	axc2	2/5/2010 10:25:46	OM_2-5-2010_09-56-27
245818013	947859	1	axc2	2/5/2010 10:26:38	OM_2-5-2010_09-56-27
245893001	947859	1	axc2	2/5/2010 10:27:30	OM_2-5-2010_09-56-27
245900002	947859	1	axc2	2/5/2010 10:28:24	OM_2-5-2010_09-56-27
246007001	947859	1	axc2	2/5/2010 10:29:17	OM_2-5-2010_09-56-27
1202031533	947859	1	axc2	2/5/2010 10:30:10	OM_2-5-2010_09-56-27
CCV		1	axc2	2/5/2010 10:31:03	OM_2-5-2010_09-56-27
CCB		1	axc2	2/5/2010 10:32:54	OM_2-5-2010_09-56-27
1202031534	947859	1	axc2	2/5/2010 10:34:43	OM_2-5-2010_09-56-27
1202031535	947859	1	axc2	2/5/2010 10:35:37	OM_2-5-2010_09-56-27
1202029270	947324	1	axc2	2/5/2010 10:36:30	OM_2-5-2010_09-56-27
1202029280	947324	1	axc2	2/5/2010 10:37:23	OM_2-5-2010_09-56-27
245427008	947324	1	axc2	2/5/2010 10:38:15	OM_2-5-2010_09-56-27
245605002	947324	1	axc2	2/5/2010 10:39:08	OM_2-5-2010_09-56-27
1202029272	947324	1	axc2	2/5/2010 10:40:01	OM_2-5-2010_09-56-27
1202029275	947324	1	axc2	2/5/2010 10:40:53	OM_2-5-2010_09-56-27
1202029278	947324	1	axc2	2/5/2010 10:41:45	OM_2-5-2010_09-56-27
245619001	947324	1	axc2	2/5/2010 10:42:37	OM_2-5-2010_09-56-27
CCV		1	axc2	2/5/2010 10:43:30	OM_2-5-2010_09-56-27
CCB		1	axc2	2/5/2010 10:45:20	OM_2-5-2010_09-56-27
245427008	947324	10	axc2	2/5/2010 10:47:09	OM_2-5-2010_09-56-27
1202029271	947324	1	axc2	2/5/2010 10:48:00	OM_2-5-2010_09-56-27
1202029274	947324	1	axc2	2/5/2010 10:48:53	OM_2-5-2010_09-56-27
1202029277	947324	1	axc2	2/5/2010 10:49:47	OM_2-5-2010_09-56-27
245673004	947324	1	axc2	2/5/2010 10:50:40	OM_2-5-2010_09-56-27
245673005	947324	1	axc2	2/5/2010 10:51:34	OM_2-5-2010_09-56-27
245676001	947324	1	axc2	2/5/2010 10:52:28	OM_2-5-2010_09-56-27
1202029273	947324	1	axc2	2/5/2010 10:53:21	OM_2-5-2010_09-56-27
1202029276	947324	1	axc2	2/5/2010 10:54:14	OM_2-5-2010_09-56-27
1202029279	947324	1	axc2	2/5/2010 10:55:07	OM_2-5-2010_09-56-27
CCV		1	axc2	2/5/2010 10:55:59	OM_2-5-2010_09-56-27
CCB		1	axc2	2/5/2010 10:57:50	OM_2-5-2010_09-56-27

245676002	947324	1	axc2	2/5/2010	10:59:40	OM_2-5-2010_09-56-27
245676005	947324	1	axc2	2/5/2010	11:00:33	OM_2-5-2010_09-56-27
245681001	947324	1	axc2	2/5/2010	11:01:25	OM_2-5-2010_09-56-27
245681002	947324	1	axc2	2/5/2010	11:02:18	OM_2-5-2010_09-56-27
245690001*	947324	1	axc2	2/5/2010	11:03:11	OM_2-5-2010_09-56-27
245690002	947324	1	axc2	2/5/2010	11:04:02	OM_2-5-2010_09-56-27
245777003	947324	1	axc2	2/5/2010	11:04:55	OM_2-5-2010_09-56-27
245777006	947324	1	axc2	2/5/2010	11:05:46	OM_2-5-2010_09-56-27
245791002	947324	1	axc2	2/5/2010	11:06:41	OM_2-5-2010_09-56-27
245791004	947324	1	axc2	2/5/2010	11:07:35	OM_2-5-2010_09-56-27
CCV		1	axc2	2/5/2010	11:08:28	OM_2-5-2010_09-56-27
CCB		1	axc2	2/5/2010	11:10:18	OM_2-5-2010_09-56-27
245690001	947324	1	axc2	2/5/2010	11:12:06	OM_2-5-2010_09-56-27
245807001	947324	1	axc2	2/5/2010	11:12:59	OM_2-5-2010_09-56-27
245807002	947324	1	axc2	2/5/2010	11:13:53	OM_2-5-2010_09-56-27
245818012	947324	1	axc2	2/5/2010	11:14:46	OM_2-5-2010_09-56-27
245841001	947324	1	axc2	2/5/2010	11:15:40	OM_2-5-2010_09-56-27
1202025750	945817	1	axc2	2/5/2010	11:16:34	OM_2-5-2010_09-56-27
1202025757	945817	25	axc2	2/5/2010	11:17:26	OM_2-5-2010_09-56-27
245420011	945817	1	axc2	2/5/2010	11:18:19	OM_2-5-2010_09-56-27
245514013*	945817	1	axc2	2/5/2010	11:19:12	OM_2-5-2010_09-56-27
1202025751	945817	1	axc2	2/5/2010	11:20:04	OM_2-5-2010_09-56-27
CCV		1	axc2	2/5/2010	11:20:57	OM_2-5-2010_09-56-27
CCB		1	axc2	2/5/2010	11:22:48	OM_2-5-2010_09-56-27
245514013	945817	1	axc2	2/5/2010	11:24:36	OM_2-5-2010_09-56-27
1202025753	945817	1	axc2	2/5/2010	11:25:28	OM_2-5-2010_09-56-27
1202025755	945817	1	axc2	2/5/2010	11:26:22	OM_2-5-2010_09-56-27
245514014	945817	1	axc2	2/5/2010	11:27:13	OM_2-5-2010_09-56-27
245514015	945817	1	axc2	2/5/2010	11:28:05	OM_2-5-2010_09-56-27
245514016	945817	1	axc2	2/5/2010	11:28:59	OM_2-5-2010_09-56-27
245514017	945817	1	axc2	2/5/2010	11:29:53	OM_2-5-2010_09-56-27
245514018	945817	1	axc2	2/5/2010	11:30:47	OM_2-5-2010_09-56-27
245514019	945817	1	axc2	2/5/2010	11:31:41	OM_2-5-2010_09-56-27
245514020	945817	1	axc2	2/5/2010	11:32:35	OM_2-5-2010_09-56-27
CCV		1	axc2	2/5/2010	11:33:28	OM_2-5-2010_09-56-27
CCB		1	axc2	2/5/2010	11:35:18	OM_2-5-2010_09-56-27
245515001	945817	1	axc2	2/5/2010	11:37:07	OM_2-5-2010_09-56-27
245515002	945817	1	axc2	2/5/2010	11:38:01	OM_2-5-2010_09-56-27
245521001	945817	1	axc2	2/5/2010	11:38:54	OM_2-5-2010_09-56-27
245612001	945817	1	axc2	2/5/2010	11:39:47	OM_2-5-2010_09-56-27
1202025752*	945817	1	axc2	2/5/2010	11:40:40	OM_2-5-2010_09-56-27
1202025754	945817	1	axc2	2/5/2010	11:41:33	OM_2-5-2010_09-56-27
1202025756	945817	1	axc2	2/5/2010	11:42:25	OM_2-5-2010_09-56-27
245612002	945817	1	axc2	2/5/2010	11:43:18	OM_2-5-2010_09-56-27
245612003	945817	1	axc2	2/5/2010	11:44:10	OM_2-5-2010_09-56-27
245612004	945817	1	axc2	2/5/2010	11:45:03	OM_2-5-2010_09-56-27
CCV		1	axc2	2/5/2010	11:45:55	OM_2-5-2010_09-56-27
CCB		1	axc2	2/5/2010	11:47:46	OM_2-5-2010_09-56-27
1202025752	945817	1	axc2	2/5/2010	11:49:35	OM_2-5-2010_09-56-27
245612005	945817	1	axc2	2/5/2010	11:50:30	OM_2-5-2010_09-56-27
245612006	945817	1	axc2	2/5/2010	11:51:24	OM_2-5-2010_09-56-27
245740001	945817	1	axc2	2/5/2010	11:52:18	OM_2-5-2010_09-56-27
245741001	945817	1	axc2	2/5/2010	11:53:12	OM_2-5-2010_09-56-27
245420011	945817	10	axc2	2/5/2010	11:54:05	OM_2-5-2010_09-56-27
CCV		1	axc2	2/5/2010	11:54:57	OM_2-5-2010_09-56-27
CCB		1	axc2	2/5/2010	11:56:49	OM_2-5-2010_09-56-27

Original Run Filename: OM\_2-5-2010\_09-56-27.OMN created 2/5/2010 09:56:27  
 Original Run Author's Signature: [axc2]  
 Current Run Filename: OM\_2-5-2010\_09-56-27.OMN last modified 2/5/2010 11:57:54  
 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)				
WCN100205-01	1	S1	200	9.56	2/5/2010@09:57:12			200 ppb
WCN100205-02	1	S2	150	7.18	2/5/2010@09:58:04			150 ppb
WCN100205-03	1	S3	100	4.47	2/5/2010@09:58:57			100 ppb
WCN100205-04	1	S4	50.0	2.22	2/5/2010@09:59:49			50 ppb
WCN100205-05	1	S5	10.0	0.464	2/5/2010@10:00:43			10 ppb
WCN100205-06	1	S6	5.00	0.275	2/5/2010@10:01:37			CRDL 5.0 ppb
WCN100205-08	1	S7	0.00	-0.0584	2/5/2010@10:02:31			0.0 ppb
DQM Test: Minimum Correlation Coefficient								
Result:			0.99944 > 0.99500					
Message			Pass					
Action			Continue					
WCN100205-07	1	S8	137	6.46	2/5/2010@10:04:21			ICV
Known Conc:			150					
DQM Test: > + Percent Relative Difference								
Result:			-8.9 < 10.0					
Message			ICV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			-8.9 < 10.0					
Message			ICV Passed					
Action			Continue					
Calibration:			Table/Fig. 1					
WCN100205-08	1	S7	0.293	-0.0613	2/5/2010@10:06:11			ICB/CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			0.293 < 5.01					
Message			ICB/CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			0.293 > -5.01					
Message			ICB/CCB Passed					
Action			Continue					
WCN100205-06	1	S6	7.24	0.271	2/5/2010@10:08:01			CRDL
Known Conc:			5.00					
DQM Test: > + Concentration Limit								
Result:			7.24 < 7.50					
Message			CRDL Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			7.24 > 2.50					
Message			Pass					
Action			None					
1202024505 945278 MB	1	1	2.51	0.0446	2/5/2010@10:09:51			
1202024507 LCS	1	2	172	8.13	2/5/2010@10:10:44		250.00	
245307001	1	3	1.97	0.0188	2/5/2010@10:11:37			
1202024506 DUP	1	4	1.58	3.83e-4	2/5/2010@10:12:30			
245307002	1	5	0.859	-0.0342	2/5/2010@10:13:23			
245706001	1	6	418	19.9	2/5/2010@10:14:16			
1202030431 947859 MB	1	7	42.8	1.97	2/5/2010@10:15:09			
1202030435 LCS	1	8	46.0	2.12	2/5/2010@10:16:02			
245791005	1	9	1.63	0.00275	2/5/2010@10:16:54			
1202030432 DUP	1	10	1.58	2.94e-4	2/5/2010@10:17:46			
WCN100205-03	1	S3	96.0	4.52	2/5/2010@10:18:39			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			-4.0 < 10.0					
Message			CCV Passed					

		Action	Continue				
DQM Test: < - Percent Relative Difference							
		Result:	-4.0 < 10.0				
		Message	CCV Passed				
		Action	Continue				
WCN100205-08	1	S7	0.291	-0.0614	2/5/2010@10:20:29		CCB
		Known Conc:	0.00				
DQM Test: > + Concentration Limit							
		Result:	0.291 < 5.00				
		Message	CCB Passed				
		Action	Continue				
DQM Test: < - Concentration Limit							
		Result:	0.291 > -5.00				
		Message	CCB Passed				
		Action	Continue				
245706001 945278	1	6	39.5	1.81	2/5/2010@10:22:18	10.00	
1202030431 947859 MB	1	7	2.52	0.0452	2/5/2010@10:23:11		
1202030433 MS	1	11	99.9	4.70	2/5/2010@10:24:03		
1202030434 MSD	1	12	78.6	3.68	2/5/2010@10:24:55		
245791007	1	13	1.68	0.00490	2/5/2010@10:25:46		
245818013	1	14	3.49	0.0915	2/5/2010@10:26:38		
245893001	1	15	5.80	0.202	2/5/2010@10:27:30		
245900002	1	16	3.33	0.0842	2/5/2010@10:28:24		
246007001	1	17	1.74	0.00781	2/5/2010@10:29:17		
1202031533 DUP	1	18	1.78	0.00994	2/5/2010@10:30:10		
WCN100205-03	1	S3	96.7	4.55	2/5/2010@10:31:03		CCV
		Known Conc:	100				
DQM Test: > + Percent Relative Difference							
		Result:	-3.3 < 10.0				
		Message	CCV Passed				
		Action	Continue				
DQM Test: < - Percent Relative Difference							
		Result:	-3.3 < 10.0				
		Message	CCV Passed				
		Action	Continue				
WCN100205-08	1	S7	0.125	-0.0693	2/5/2010@10:32:54		CCB
		Known Conc:	0.00				
DQM Test: > + Concentration Limit							
		Result:	0.125 < 5.00				
		Message	CCB Passed				
		Action	Continue				
DQM Test: < - Concentration Limit							
		Result:	0.125 > -5.00				
		Message	CCB Passed				
		Action	Continue				
1202031534 MS	1	19	86.8	4.07	2/5/2010@10:34:43		
1202031535 MSD	1	20	97.2	4.57	2/5/2010@10:35:37		
1202029270 947324 MB	1	21	2.49	0.0436	2/5/2010@10:36:30		
1202029280 LCS	1	22	46.7	2.16	2/5/2010@10:37:23		
245427008	1	23	339	16.1	2/5/2010@10:38:15		
245605002	1	24	3.11	0.0735	2/5/2010@10:39:08		
1202029272 DUP	1	25	2.62	0.0502	2/5/2010@10:40:01		
1202029275 MS	1	26	102	4.78	2/5/2010@10:40:53		
1202029278 947324 MSD	1	27	101	4.75	2/5/2010@10:41:45		
245619001	1	28	2.69	0.0533	2/5/2010@10:42:37		
WCN100205-03	1	S3	96.8	4.55	2/5/2010@10:43:30		CCV
		Known Conc:	100				
DQM Test: > + Percent Relative Difference							
		Result:	-3.2 < 10.0				
		Message	CCV Passed				
		Action	Continue				
DQM Test: < - Percent Relative Difference							
		Result:	-3.2 < 10.0				
		Message	CCV Passed				
		Action	Continue				
WCN100205-08	1	S7	0.121	-0.0695	2/5/2010@10:45:20		CCB
		Known Conc:	0.00				
DQM Test: > + Concentration Limit							



		Result:	0.121 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.121 > -5.00					
		Message	CCB Passed					
		Action	Continue					
245427008	1	23	28.0	1.26	2/5/2010@10:47:09		10.00	
1202029271  DUP	1	29	3.37	0.0860	2/5/2010@10:48:00			
1202029274  MS	1	30	102	4.80	2/5/2010@10:48:53			
1202029277  MSD	1	31	91.7	4.31	2/5/2010@10:49:47			
245673004	1	32	5.30	0.178	2/5/2010@10:50:40			
245673005	1	33	4.74	0.152	2/5/2010@10:51:34			
245676001	1	34	3.12	0.0738	2/5/2010@10:52:28			
1202029273  DUP	1	35	2.85	0.0609	2/5/2010@10:53:21			
1202029276  MS	1	36	101	4.76	2/5/2010@10:54:14			
1202029279  MSD	1	37	99.3	4.67	2/5/2010@10:55:07			
WCN100205-03	1	S3	96.2	4.52	2/5/2010@10:55:59			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					
WCN100205-08	1	S7	1.57	-1.31e-4	2/5/2010@10:57:50			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	1.57 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	1.57 > -5.00					
		Message	CCB Passed					
		Action	Continue					
245676002	1	38	2.93	0.0649	2/5/2010@10:59:40			
245676005	1	39	3.03	0.0698	2/5/2010@11:00:33			
245681001	1	40	2.89	0.0628	2/5/2010@11:01:25			
245681002	1	41	2.79	0.0582	2/5/2010@11:02:18			
245690001	1	42	5.08	0.167	2/5/2010@11:03:11			
245690002	1	43	2.65	0.0517	2/5/2010@11:04:02			
245777003	1	44	3.52	0.0929	2/5/2010@11:04:55			
245777006	1	45	4.92	0.160	2/5/2010@11:05:46			
245791002	1	46	2.86	0.0613	2/5/2010@11:06:41			
245791004	1	47	2.60	0.0491	2/5/2010@11:07:35			
WCN100205-03	1	S3	95.3	4.48	2/5/2010@11:08:28			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	-4.7 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	-4.7 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100205-08	1	S7	1.88	0.0145	2/5/2010@11:10:18			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	1.88 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	1.88 > -5.00					
		Message	CCB Passed					
		Action	Continue					
245690001	1	42	2.79	0.0582	2/5/2010@11:12:06			

245807001	1	48	2.82	0.0594	2/5/2010@11:12:59			
245807002	1	49	2.67	0.0526	2/5/2010@11:13:53			
245818012	1	50	7.63	0.290	2/5/2010@11:14:46			
245841001	1	51	3.12	0.0740	2/5/2010@11:15:40			
1202025750 945817 MB	1	52	3.14	0.0749	2/5/2010@11:16:34			
1202025757  LCS	1	53	26.7	1.20	2/5/2010@11:17:26		25.00	
245420011	1	54	624	29.7	2/5/2010@11:18:19			
245514013	1	55	14.7	0.628	2/5/2010@11:19:12			
1202025751  DUP	1	56	4.56	0.143	2/5/2010@11:20:04			
WCN100205-03	1	S3	95.7	4.50	2/5/2010@11:20:57			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			-4.3 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			-4.3 < 10.0					
Message			CCV Passed					
Action			Continue					
WCN100205-08	1	S7	1.88	0.0145	2/5/2010@11:22:48			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			1.88 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			1.88 > -5.00					
Message			CCB Passed					
Action			Continue					
245514013	1	55	4.67	0.148	2/5/2010@11:24:36			
1202025753  MS	1	57	85.5	4.01	2/5/2010@11:25:28			
1202025755  MSD	1	58	87.1	4.09	2/5/2010@11:26:22			
245514014	1	59	5.67	0.196	2/5/2010@11:27:13			
245514015	1	60	4.79	0.154	2/5/2010@11:28:05			
245514016	1	61	34.5	1.58	2/5/2010@11:28:59			
245514017	1	62	91.0	4.28	2/5/2010@11:29:53			
245514018	1	63	8.35	0.324	2/5/2010@11:30:47			
245514019	1	64	27.5	1.24	2/5/2010@11:31:41			
245514020	1	65	157	7.41	2/5/2010@11:32:35			
WCN100205-03	1	S3	96.1	4.52	2/5/2010@11:33:28			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					
WCN100205-08	1	S7	1.93	0.0169	2/5/2010@11:35:18			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			1.93 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			1.93 > -5.00					
Message			CCB Passed					
Action			Continue					
245515001	1	66	29.3	1.33	2/5/2010@11:37:07			
245515002	1	67	20.7	0.917	2/5/2010@11:38:01			
245521001	1	68	3.85	0.109	2/5/2010@11:38:54			
245612001	1	69	3.79	0.106	2/5/2010@11:39:47			
1202025752  DUP	1	70	8.08	0.311	2/5/2010@11:40:40			
1202025754  MS	1	71	96.6	4.54	2/5/2010@11:41:33			
1202025756  MSD	1	72	96.1	4.52	2/5/2010@11:42:25			
245612002	1	73	3.95	0.113	2/5/2010@11:43:18			
245612003	1	74	3.75	0.104	2/5/2010@11:44:10			

245612004	1	75	3.52	0.0928	2/5/2010@11:45:03			
WCN100205-03	1	S3	95.8	4.51	2/5/2010@11:45:55			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					
WCN100205-08	1	S7	1.58	3.12e-4	2/5/2010@11:47:46			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			1.58 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			1.58 > -5.00					
Message			CCB Passed					
Action			Continue					
1202025752  DUP	1	70	4.24	0.127	2/5/2010@11:49:35			
245612005	1	76	4.19	0.125	2/5/2010@11:50:30			
245612006	1	77	3.44	0.0890	2/5/2010@11:51:24			
245740001	1	78	3.91	0.112	2/5/2010@11:52:18			
245741001	1	79	4.26	0.128	2/5/2010@11:53:12			
245420011	1	54	59.7	2.78	2/5/2010@11:54:05		10.00	
WCN100205-03	1	S3	96.1	4.52	2/5/2010@11:54:57			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					
WCN100205-08	1	S7	1.58	3.24e-4	2/5/2010@11:56:49			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			1.58 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			1.58 > -5.00					
Message			CCB Passed					
Action			Continue					

Analyte Properties Table for OM\_2-5-2010\_09-56-27.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

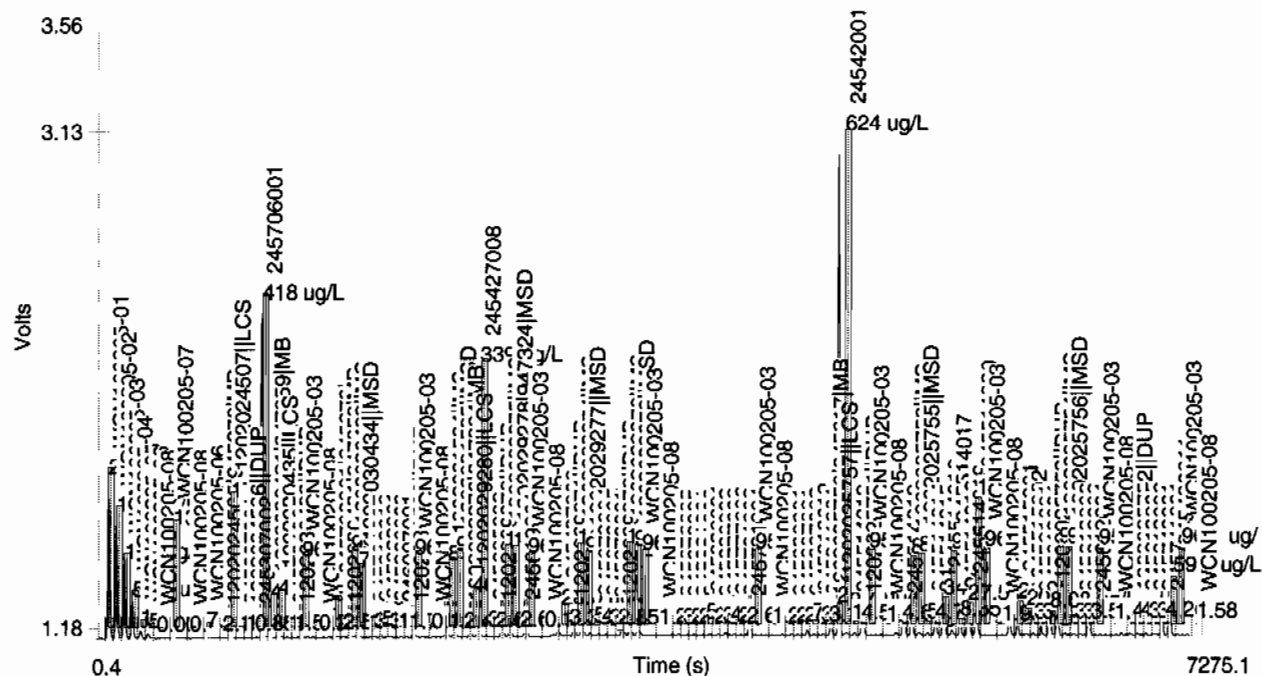


Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	9.56	0.625	-0.8	2/5/2010	09:58:15
2	150	1	7.18	0.475	-1.2	2/5/2010	09:59:07
3	100	1	4.47	0.290	5.1	2/5/2010	09:59:59
4	50.0	1	2.22	0.141	4.3	2/5/2010	10:00:52
5	10.0	1	0.464	0.0293	-14.2	2/5/2010	10:01:46
6	5.00	1	0.275	0.0163	-64.2	2/5/2010	10:02:39
7	0.00	1	-0.0584	-0.00104		2/5/2010	10:03:34

Figure 1: TCYANIDE

