



**REQUEST NUMBER: 10-1621**

**REQUEST NUMBER: 10-1621**

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	EPA.300.0	1	RE15-10-8355	R	2/2/2010	
		1	RE15-10-8356	R	2/2/2010	
		1	RE15-10-8357	R	2/2/2010	
		1	RE15-10-8374	R	2/2/2010	
		1	RE15-10-8375	R	2/2/2010	
	SW-846:6010B	1	RE15-10-8336	R	2/2/2010	
		1	RE15-10-8337	R	2/2/2010	
		1	RE15-10-8338	R	2/2/2010	
		1	RE15-10-8339	R	2/2/2010	
		1	RE15-10-8350	R	2/2/2010	
		1	RE15-10-8351	R	2/2/2010	
		1	RE15-10-8352	R	2/2/2010	
		1	RE15-10-8353	R	2/2/2010	
		1	RE15-10-8354	R	2/2/2010	
		1	RE15-10-8355	R	2/2/2010	
		1	RE15-10-8356	R	2/2/2010	
		1	RE15-10-8357	R	2/2/2010	
		1	RE15-10-8374	R	2/2/2010	
		1	RE15-10-8375	R	2/2/2010	
	SW-846:6020	1	RE15-10-8336	R	2/2/2010	
		1	RE15-10-8337	R	2/2/2010	
		1	RE15-10-8338	R	2/2/2010	
		1	RE15-10-8339	R	2/2/2010	
		1	RE15-10-8350	R	2/2/2010	
		1	RE15-10-8351	R	2/2/2010	
		1	RE15-10-8352	R	2/2/2010	
		1	RE15-10-8353	R	2/2/2010	

Friday, February 05, 2010

Page 3 of 5  
REQUEST NUMBER: 10-1621

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
SW-846:6020						
1		1	RE15-10-8355	R	2/2/2010	
1		1	RE15-10-8356	R	2/2/2010	
1		1	RE15-10-8357	R	2/2/2010	
1		1	RE15-10-8374	R	2/2/2010	
1		1	RE15-10-8375	R	2/2/2010	
1		1	RE15-10-8378	W	2/2/2010	
1		1	RE15-10-8336	R	2/2/2010	
1		1	RE15-10-8337	R	2/2/2010	
1		1	RE15-10-8338	R	2/2/2010	
1		1	RE15-10-8339	R	2/2/2010	
1		1	RE15-10-8350	R	2/2/2010	
SW-846:6850						
1		1	RE15-10-8336	R	2/2/2010	
1		1	RE15-10-8337	R	2/2/2010	
1		1	RE15-10-8338	R	2/2/2010	
1		1	RE15-10-8339	R	2/2/2010	
1		1	RE15-10-8350	R	2/2/2010	
1		1	RE15-10-8351	R	2/2/2010	
1		1	RE15-10-8352	R	2/2/2010	
1		1	RE15-10-8353	R	2/2/2010	
1		1	RE15-10-8354	R	2/2/2010	
1		1	RE15-10-8355	R	2/2/2010	
1		1	RE15-10-8356	R	2/2/2010	
1		1	RE15-10-8357	R	2/2/2010	
1		1	RE15-10-8374	R	2/2/2010	
1		1	RE15-10-8375	R	2/2/2010	
1		1	RE15-10-8378	W	2/2/2010	
1		1	RE15-10-8378	W	2/2/2010	
1		1	RE15-10-8378	W	2/2/2010	
1		1	RE15-10-8336	R	2/2/2010	
1		1	RE15-10-8337	R	2/2/2010	
1		1	RE15-10-8338	R	2/2/2010	
1		1	RE15-10-8339	R	2/2/2010	
1		1	RE15-10-8350	R	2/2/2010	
1		1	RE15-10-8350	R	2/2/2010	
SW-846:7470A						
1		1	RE15-10-8378	W	2/2/2010	
1		1	RE15-10-8336	R	2/2/2010	
1		1	RE15-10-8337	R	2/2/2010	
1		1	RE15-10-8338	R	2/2/2010	
1		1	RE15-10-8339	R	2/2/2010	
1		1	RE15-10-8350	R	2/2/2010	
1		1	RE15-10-8350	R	2/2/2010	

**REQUEST NUMBER: 10-1621**

**REQUEST NUMBER: 10-1621**

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
SW-846:7471A		1	RE15-10-8352	R	2/2/2010	
		1	RE15-10-8353	R	2/2/2010	
		1	RE15-10-8354	R	2/2/2010	
		1	RE15-10-8355	R	2/2/2010	
		1	RE15-10-8356	R	2/2/2010	
		1	RE15-10-8357	R	2/2/2010	
		1	RE15-10-8374	R	2/2/2010	
		1	RE15-10-8375	R	2/2/2010	
		1	RE15-10-8378	W	2/2/2010	
		1	RE15-10-8336	R	2/2/2010	
SW-846:9045C		1	RE15-10-8337	R	2/2/2010	
		1	RE15-10-8338	R	2/2/2010	
		1	RE15-10-8339	R	2/2/2010	
		1	RE15-10-8336	R	2/2/2010	
		1	RE15-10-8337	R	2/2/2010	
		1	RE15-10-8338	R	2/2/2010	
		1	RE15-10-8339	R	2/2/2010	
		1	RE15-10-8355	R	2/2/2010	
		1	RE15-10-8356	R	2/2/2010	
		1	RE15-10-8357	R	2/2/2010	
SW-846:9012A		1	RE15-10-8352	R	2/2/2010	
		1	RE15-10-8353	R	2/2/2010	
		1	RE15-10-8354	R	2/2/2010	
		1	RE15-10-8355	R	2/2/2010	
		1	RE15-10-8356	R	2/2/2010	
		1	RE15-10-8357	R	2/2/2010	
		1	RE15-10-8374	R	2/2/2010	
		1	RE15-10-8375	R	2/2/2010	
		1	RE15-10-8378	W	2/2/2010	
		1	RE15-10-8336	R	2/2/2010	



Friday, February 05, 2010

Page 5 of 5

REQUEST NUMBER: 10-1621

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
SW-846:9045C						
		1	RE15-10-8351	R	2/2/2010	
		1	RE15-10-8352	R	2/2/2010	
		1	RE15-10-8353	R	2/2/2010	
		1	RE15-10-8354	R	2/2/2010	
		1	RE15-10-8355	R	2/2/2010	
		1	RE15-10-8356	R	2/2/2010	
		1	RE15-10-8357	R	2/2/2010	
		1	RE15-10-8374	R	2/2/2010	
		1	RE15-10-8375	R	2/2/2010	

Final Page of REQUEST NUMBER 10-1621

Friday, February 05, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1621

LOS ALAMOS

REQUEST NUMBER: 10-1621

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 3/7/2010

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
RE15-10-8378	1	POLY	METALS+U-GEL	Nitric Acid	W
RE15-10-8378	1	POLY	SW-846:6850	Ice	W
RE15-10-8378	1	POLY	TCN	Sodium Hydroxide	W
RE15-10-8354	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8354	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8356	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8356	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8353	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8353	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8352	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8352	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8355	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8355	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8351	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8351	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8350	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8350	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8357	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8357	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8338	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8338	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8336	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8336	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8339	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8339	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8337	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8337	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8375	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8375	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8374	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8374	1	POLY	Perchlorate+CN+N03+pH	Ice	R

*Joseph Way* 2/5/10 1400

10-1621

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: 2507

EVENT NAME: 4th Qtr. FY09 - SWMU 15-009(c) - Threemile Canyon

SAMPLE ID: RE15-10-8336

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/02/2010	MEDIA:	OBT3		SEP	
TIME COLLECTED (HH:MM)		0950	SUB-MEDIA:	TUFF 1		NA	
PRS ID:	15-009(c)	ok	SAMPLE TECH CODE:	HA		ok	
LOCATION ID:	15-610838	↓	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	SED	EXCAVATED: YES/NO/NA				
COMPOSITE TYPE:	NA	COMPOSITE TIME INTERVAL:	NA	WATER FLOWING: YES/NO/NA			
BOREHOLE: YES/NO/NA	NO/NA	BOREHOLE DECLINATION:	NA	BOREHOLE DIRECTION:	NA		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8082+8270+NME D-EXP	500 ML AMBER GLASS	Ice	Y	
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1		H3	500 ML POLY	Ice	Y	
1		METALS+U-GEL	125 ML POLY	Ice	Y	
1		Perchlorate+CN+N03+pH	500 ML POLY	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC:

Light brown sand and tuff fragments, frozen

FTB: RE15-10-8382

SAMPLE COMMENTS:

NA

LOCATION DESC:

9C-5, drainage below septic tanks

FIELD SCREENING/MEASUREMENT RESULTS:

HE negative

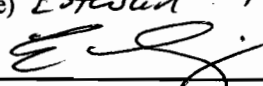

Alpha  $\leq$  33 dpmBeta/Gamma  $\leq$  1976 dpmPID  $\frac{\text{Ambient Reading}}{0.0} = 0.0$  ppm

COLLECTED BY (PRINT)

TL McFarland

REVIEWED BY (PRINT)

Riley E

RELINQUISHED BY (Printed Name) Estevan Lujan (Signature) 	Date/Time 2/3/10 08:10	RECEIVED BY (Printed Name)  (Signature)	Date/Time 2/3/10 8:10
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2507

EVENT NAME: 4th Qtr. FY09 - SWMU 15-009(c) - Threemile Canyon

SAMPLE ID: RE15-10-8337

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/02/2010		MEDIA:	QBT3		OK
TIME COLLECTED (HH:MM)		1006		SUB-MEDIA:	TUFF 1		↓
PRS ID:	15-009(c)			SAMPLE TECH CODE:	HA		OK
LOCATION ID:	15-610838			FIELD QC TYPE:	NA		↓
LOCATION TYPE:	GENERIC			FIELD PREP:	NA		↓
TOP DEPTH:	0		1.0	SAMPLE USAGE:	INV		↓
BOTTOM DEPTH:	0		1.5	SCREEN/PORT DESC:			NA
FIELD MATRIX:	R		R	EXCAVATED: YES/NO/NA			
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
BOREHOLE: YES/NO/NA				BOREHOLE DECLINATION:	NA		
				BOREHOLE DIRECTION:	NA		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8082+8270+NME D-EXP	500 ML AMBER GLASS	Ice	Y	
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1		H3	500 ML POLY	Ice	Y	
1		METALS+U-GEL	125 ML POLY	Ice	Y	
1		Perchlorate+CN+ N03+pH	500 ML POLY	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC:

Brownish gray tuff

SAMPLE COMMENTS:

NA

LOCATION DESC:

9c-5 drainage below septic tank

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha  $\leq$  11 dpm  
Beta/Gamma  $\leq$  2010 dpm

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

COLLECTED BY (PRINT)

T. McFarlane

REVIEWED BY (PRINT)

R. Key E.

RELINQUISHED BY (Printed Name) Estevan Lujan (Signature)	Date/Time 2/3/10 8:09 AM	RECEIVED BY (Printed Name) (Signature)	Date/Time 2/3/10 8:09
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2507

EVENT NAME: 4th Qtr. FY09 - SWMU 15-009(c) - Threemile Canyon

SAMPLE ID: RE15-10-8338

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/02/2010	MEDIA:	QBT3		ok	
TIME COLLECTED (HH:MM)		1353	SUB-MEDIA:	TUFF 1		↓	
PRS ID:	15-009(c)	ok	SAMPLE TECH CODE:	HA		ok	
LOCATION ID:	15-610839	↓	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	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	8082+8270+NME D-EXP	500 ML AMBER GLASS	Ice	Y	
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1		H3	500 ML POLY	Ice	Y	
1		METALS+U-GEL	125 ML POLY	Ice	Y	
1		Perchlorate+CN+ N03+pH	500 ML POLY	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC:

Gray tuff

SAMPLE COMMENTS:

NA

LOCATION DESC:

9c-9

~~Area where drainage ceases to be defined~~ 17m 2/2/10

FIELD SCREENING/MEASUREMENT RESULTS:

HE negative

Alpha  $\leq$  11 dpm  
 Beta/Gamma  $\leq$  2100 dpm

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

COLLECTED BY (PRINT)

TLMCFarland

REVIEWED BY (PRINT)

Riley G

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Estevan Lujan	2/3/10	(Printed Name)	2/3/10
(Signature) E-Lujan	8:14/10	(Signature)	8:14
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2507

EVENT NAME: 4th Qtr. FY09 - SWMU 15-009(c) - Threemile Canyon

SAMPLE ID: RE15-10-8339

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/02/2010		MEDIA:		OBT3	
TIME COLLECTED (HH:MM)		1405		SUB-MEDIA:		TUFF 1	
PRS ID: 15-009(c)		ok		SAMPLE TECH CODE:		HA	
LOCATION ID: 15-610839		↓		FIELD QC TYPE:		NA	
LOCATION TYPE: GENERIC		↓		FIELD PREP:		NA	
TOP DEPTH: 0		1.0		SAMPLE USAGE:		INV	
BOTTOM DEPTH: 0		2.5		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	8082+8270+NME D-EXP	500 ML AMBER GLASS	Ice	Y	
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1		H3	500 ML POLY	Ice	Y	
1		METALS+U-GEL	125 ML POLY	Ice	Y	
1		Perchlorate+CN+N03+pH	500 ML POLY	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC:

Gray and white tuff, roots

FO: RE 15-10-8374

SAMPLE COMMENTS:

NA

LOCATION DESC:

qc-9

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 11 dpm

Beta/Gamma = 2140 dpm

PID  $\frac{\text{Ambient Reading}}{4.1} = 0.0$  ppm

COLLECTED BY (PRINT)

TL McFarland

REVIEWED BY (PRINT)

Rory G.

RELINQUISHED BY (Printed Name) Estevan Lujan (Signature)	Date/Time 2/3/10 08:14 AM	RECEIVED BY (Printed Name) (Signature)	Date/Time 2/3/10 8:14
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2507

EVENT NAME: 4th Qtr. FY09 - SWMU 15-009(c) - Threemile Canyon

SAMPLE ID: RE15-10-8350

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/02/2010		MEDIA:	QBT3		ok
TIME COLLECTED (HH:MM)		1040		SUB-MEDIA:	TUFF 1		↓
PRS ID:	15-009(c)	ok		SAMPLE TECH CODE:	HA		ok
LOCATION ID:	15-610845	↓		FIELD QC TYPE:	NA		↓
LOCATION TYPE:	GENERIC	↓		FIELD PREP:	NA		↓
TOP DEPTH:	0	0.0		SAMPLE USAGE:	INV		↓
BOTTOM DEPTH:	0	0.7		SCREEN/PORT DESC:			NA
FIELD MATRIX:	R	R		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE:	UA			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	8260B	125 ML SEPTUM AMBER GLASS	Ice	y	
1		8270C+NMED Exp	500 ML AMBER GLASS	Ice	y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None	y	
1		H3	500 ML POLY	Ice	y	
1		METALS+U-GEL	125 ML POLY	Ice	y	
1		Perchlorate+CN+N03+pH	500 ML POLY	Ice	y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	y	

SAMPLE DESC:

whitish gray, tuff and brown sand

SAMPLE COMMENTS:

NA

LOCATION DESC:

9c-6 drainage

FIELD SCREENING/MEASUREMENT RESULTS:

HE negative

Alpha  $\leq$  0 dpm  
 Beta/Gamma  $\leq$  1811 dpm

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

COLLECTED BY (PRINT)

REVIEWED BY (PRINT)

Th McFarlane

Riley E

RELINQUISHED BY (Printed Name) Estevan Lujan (Signature)	Date/Time 2/3/10 8:11 AM	RECEIVED BY (Printed Name) (Signature)	Date/Time 2/3/10 8:11
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time



## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2507

EVENT NAME: 4th Qtr. FY09 - SWMU 15-009(c) - Threemile Canyon

SAMPLE ID: RE15-10-8351

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/02/2010		MEDIA:	QBT3		OK
TIME COLLECTED (HH:MM)		1051		SUB-MEDIA:	TUFF 1		↓
PRS ID:	15-009(c)	OK		SAMPLE TECH CODE:	HA		NA
LOCATION ID:	15-610845	↓		FIELD QC TYPE:	NA		↓
LOCATION TYPE:	GENERIC	↓		FIELD PREP:	NA		↓
TOP DEPTH:	0	1.0		SAMPLE USAGE:	INV		↓
BOTTOM DEPTH:	0	1.2		SCREEN/PORT DESC:			NA
FIELD MATRIX:	R	OK		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		WATER FLOWING: YES/NO/NA
BOREHOLE: YES/NO/NA				BOREHOLE DECLINATION:	NA		BOREHOLE DIRECTION:
					NA		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+NMED Exp	500 ML AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1		H3	500 ML POLY	Ice	Y	
1		METALS+U-GEL	125 ML POLY	Ice	Y	
1		Perchlorate+CN+N03+pH	500 ML POLY	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC:

Brownish gray, tuff

SAMPLE COMMENTS:

NA

LOCATION DESC:

9c-6 drainage

FIELD SCREENING/MEASUREMENT RESULTS:

HE negative

Alpha  $\leq$  22 dpm  
 Beta/Gamma  $\leq$  2080 dpm

PID Ambient Reading  $\frac{0.0}{1.3}$  ppm T3m 2/2/10  
 R. Ray

COLLECTED BY (PRINT)

T. McFarland

REVIEWED BY (PRINT)

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Estevan Luis	2/3/10	(Printed Name)	2/3/10
(Signature)	8:10 AM	(Signature)	8:10
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2507

EVENT NAME: 4th Qtr. FY09 - SWMU 15-009(c) - Threemile Canyon

SAMPLE ID: RE15-10-8352

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/02/2010		MEDIA:		QBT3	
TIME COLLECTED(HH:MM)		1127		SUB-MEDIA:		TUFF 1	
PRS ID: 15-009(c)		OK		SAMPLE TECH CODE:		HA	
LOCATION ID: 15-610846		↓		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		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	8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+NMED Exp	500 ML AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1		H3	500 ML POLY	Ice	Y	
1		METALS+U-GEL	125 ML POLY	Ice	Y	
1		Perchlorate+CN+N03+pH	500 ML POLY	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC:

moist pinkish gray tuff

SAMPLE COMMENTS:

NA

LOCATION DESC:

9c-7 drainage

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 16 dpm  
Beta/Gamma = 2036 dpm

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

COLLECTED BY (PRINT)

ThMcFarland

REVIEWED BY (PRINT)

RMy 9.

RELINQUISHED BY (Printed Name) Estevan Luján	Date/Time 2/3/10	RECEIVED BY (Printed Name)	Date/Time 2/3/10
(Signature)	08:11	(Signature)	8:11
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2507

EVENT NAME: 4th Qtr. FY09 - SWMU 15-009(c) - Threemile Canyon

SAMPLE ID: RE15-10-8353

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/02/2010		MEDIA:	QBT3		OK
TIME COLLECTED (HH:MM)		1137		SUB-MEDIA:	TUFF 1		L
PRS ID:	15-009(c)	OK		SAMPLE TECH CODE:	HA		OK
LOCATION ID:	15-610846			FIELD QC TYPE:	NA		
LOCATION TYPE:	GENERIC			FIELD PREP:	NA		
TOP DEPTH:	0	1.0		SAMPLE USAGE:	INV		
BOTTOM DEPTH:	0	2.0		SCREEN/PORT DESC:			NA
FIELD MATRIX:	R	R		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
				WATER FLOWING: YES/NO/NA			
BOREHOLE: YES/NO/NA				BOREHOLE DECLINATION:	NA		
				BOREHOLE DIRECTION:	NA		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+NMED Exp	500 ML AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1		H3	500 ML POLY	Ice	Y	
1		METALS+U-GEL	125 ML POLY	Ice	Y	
1		Perchlorate+CN+N03+pH	500 ML POLY	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC:

Gray tuff

SAMPLE COMMENTS:

NA

LOCATION DESC:

qc-7 drainage

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha  $\leq$  0 dpm  
Beta/Gamma  $\leq$  2380 dpmPID  $\frac{\text{Ambient Reading}}{0.0}$  ppm

COLLECTED BY (PRINT)

TL McFarlane

REVIEWED BY (PRINT)

Riley E.

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Estevan Lujan	2/3/10	(Printed Name)	2/3/10
(Signature) E. Lujan	8:12 AM	(Signature)	8:12
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2507

EVENT NAME: 4th Qtr. FY09 - SWMU 15-009(c) - Threemile Canyon

SAMPLE ID: RE15-10-8354

WORK ORDER:

AS PLANNED		AS COLLECTED	AS PLANNED		AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/02/2010	MEDIA:		OBT3
TIME COLLECTED (HH:MM)		1309	SUB-MEDIA:		TUFF 1
PRS ID:	15-009(c)	ok	SAMPLE TECH CODE:		HA
LOCATION ID:	15-610847	↓	FIELD QC TYPE:		NA
LOCATION TYPE:	GENERIC	↓	FIELD PREP:		NA
TOP DEPTH:	0	0.0	SAMPLE USAGE:		INV
BOTTOM DEPTH:	0	0.7	SCREEN/PORT DESC:		NA
FIELD MATRIX:	R	SED	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	8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1	↓	8270C+NMED Exp	500 ML AMBER GLASS	Ice	Y	
1	↓	AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1	↓	H3	500 ML POLY	Ice	Y	
1	↓	METALS+U-GEL	125 ML POLY	Ice	Y	
1	↓	Perchlorate+CN+ N03+pH	500 ML POLY	Ice	Y	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC:

moist brown sand and tuff fragments

SAMPLE COMMENTS:

NA

LOCATION DESC:

9c-8 drainage

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha  $\leq$  11 dpm  
Beta/Gamma  $\leq$  2100 dpm

14E negative

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

COLLECTED BY (PRINT)

T. McFarlane

REVIEWED BY (PRINT)

R. M. G.

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Estevan Lujan	2/3/10	(Printed Name)	2/3/10
(Signature) E. Lujan	8:13 pm	(Signature)	8:13
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2507

EVENT NAME: 4th Qtr. FY09 - SWMU 15-009(c) - Threemile Canyon

SAMPLE ID: RE15-10-8355

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/02/2010		MEDIA:		OBT3	
TIME COLLECTED (HH:MM)		1317		SUB-MEDIA:		TUFF 1	
PRS ID:	15-009(c)	OK		SAMPLE TECH CODE:		HA	
LOCATION ID:	15-610847	↓		FIELD QC TYPE:		NA	
LOCATION TYPE:	GENERIC	↓		FIELD PREP:		NA	
TOP DEPTH:	0	1.0		SAMPLE USAGE:		INV	
BOTTOM DEPTH:	0	2.0		SCREEN/PORT DESC:		NA	
FIELD MATRIX:	R	R		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE: NA		COMPOSITE TIME INTERVAL: NA		WATER FLOWING: YES/NO/NA			
BOREHOLE: YES/NO/NA		BOREHOLE DECLINATION: NA		BOREHOLE DIRECTION: NA			

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+NMED Exp	500 ML AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1		H3	500 ML POLY	Ice	Y	
1		METALS+U-GEL	125 ML POLY	Ice	Y	
1		Perchlorate+CN+N03+pH	500 ML POLY	Ice	Y	
1	✓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC:

Gray sandy stuff

SAMPLE COMMENTS:

NA

LOCATION DESC:

9c-8 drainage

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha  $\leq$  33 dpm  
Beta/Gamma  $\leq$  2280 dpm

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

COLLECTED BY (PRINT)

REVIEWED BY (PRINT)

RELINQUISHED BY

(Printed Name) Estevan Lujan

(Signature)

Date/Time

2/3/10

8:13 AM

RECEIVED BY

(Printed Name)

(Signature)

Date/Time

2/3/10

8:13

RELINQUISHED BY

Date/Time

RECEIVED BY

Date/Time

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2507

EVENT NAME: 4th Qtr. FY09 - SWMU 15-009(c) - Threemile Canyon

SAMPLE ID: RE15-10-8356

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/02/2010	MEDIA:	QBT3		Allh	
TIME COLLECTED (HH:MM)		1427	SUB-MEDIA:	TUFF 1		NA	
PRS ID:	15-009(c)	ok	SAMPLE TECH CODE:	HA		ok	
LOCATION ID:	15-610848	↓	FIELD QC TYPE:	NA			
LOCATION TYPE:	GENERIC		FIELD PREP:	NA			
TOP DEPTH:	0	0.0	SAMPLE USAGE:	INV			
BOTTOM DEPTH:	0	0.8	SCREEN/PORT DESC:			NA	
FIELD MATRIX:	R	S	EXCAVATED: YES/NO/NA				
COMPOSITE TYPE:	NA		COMPOSITE TIME INTERVAL:	NA		WATER FLOWING: YES/NO/NA	
BOREHOLE: YES/NO/NA			BOREHOLE DECLINATION:	NA		BOREHOLE DIRECTION:	NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+NMED Exp	500 ML AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1		H3	500 ML POLY	Ice	Y	
1		METALS+U-GEL	125 ML POLY	Ice	Y	
1		Perchlorate+CN+N03+pH	500 ML POLY	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC:

Brown silty sand, moist, tuff fragments  
FD: RE 15-10-8375

SAMPLE COMMENTS:

NA

LOCATION DESC:

qc-10

Area where drainage ceases to be defined  
HE neg

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha  $\leq$  11 dpm  
Beta/Gamma  $\leq$  2220 dpm

PID  $\frac{\text{Ambient Reading}}{20} = 0.0$  ppm

COLLECTED BY (PRINT)

Th McFarlane

REVIEWED BY (PRINT)

P. H. G.

RELINQUISHED BY (Printed Name) <i>Estevan Lujan</i>	Date/Time 2/3/10	RECEIVED BY (Printed Name)	Date/Time 2/3/10
(Signature) <i>[Signature]</i>	08:15 AM	(Signature) <i>[Signature]</i>	8:15
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2507

EVENT NAME: 4th Qtr. FY09 - SWMU 15-009(c) - Threemile Canyon

SAMPLE ID: RE15-10-8357

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/02/2010		MEDIA:		QBT3	
TIME COLLECTED (HH:MM)		1440		SUB-MEDIA:		TUFF 1	
PRS ID:	15-009(c)	ok		SAMPLE TECH CODE:		HA	
LOCATION ID:	15-610848	↓		FIELD QC TYPE:		NA	
LOCATION TYPE:	GENERIC	↓		FIELD PREP:		NA	
TOP DEPTH:	0	1.0		SAMPLE USAGE:		INV	
BOTTOM DEPTH:	0	2.0		SCREEN/PORT DESC:		NA	
FIELD MATRIX:	R	R		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE: NA		COMPOSITE TIME INTERVAL: NA		WATER FLOWING: YES/NO/NA			
BOREHOLE: YES/NO/NA		BOREHOLE DECLINATION: NA		BOREHOLE DIRECTION: NA			

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+NMED Exp	500 ML AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1		H3	500 ML POLY	Ice	Y	
1		METALS+U-GEL	125 ML POLY	Ice	Y	
1		Perchlorate+CN+N03+pH	500 ML POLY	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC:

Gray tuff

FR: RE15-10-8378

SAMPLE COMMENTS:

Tuff at 9 inches

LOCATION DESC:

9c-10

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha  $\leq 27$  dpm  
Beta/Gamma  $\leq 2210$  dpm

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

COLLECTED BY (PRINT)

ThMcFarland

REVIEWED BY (PRINT)

Riley L

RELINQUISHED BY (Printed Name) Estevan Lujan (Signature)	Date/Time 2/3/10 08:15 AM	RECEIVED BY (Printed Name) (Signature)	Date/Time 2/3/10 8:15
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2507

EVENT NAME: 4th Qtr. FY09 - SWMU 15-009(c) - Threemile Canyon

SAMPLE ID: RE15-10-8374

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/02/2010		MEDIA:	OBT3		ok
TIME COLLECTED(HH:MM)		1405		SUB-MEDIA:	TUFF 1		↓
PRS ID:	15-009(c)	ok		SAMPLE TECH CODE:	HA		ok
LOCATION ID:	UNK	15-610839		FIELD QC TYPE:	FD		↓
LOCATION TYPE:	GENERIC	ok		FIELD PREP:	NA		↓
TOP DEPTH:	0	1.0		SAMPLE USAGE:	QC		↓
BOTTOM DEPTH:	0	2.5		SCREEN/PORT DESC:			NA
FIELD MATRIX:	R	R		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
BOREHOLE: YES/NO/NA				BOREHOLE DECLINATION:	NA		
				BOREHOLE DIRECTION:	NA		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8082+8270+NME D-EXP	500 ML AMBER GLASS	Ice	Y	
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1		H3	500 ML POLY	Ice	Y	
1		METALS+U-GEL	125 ML POLY	Ice	Y	
1		Perchlorate+CN+N03+pH	500 ML POLY	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: QC Sample of RE 15-10-8339

Gray, and white tuff, roots

SAMPLE COMMENTS:

NA

LOCATION DESC:

9c-9

FIELD SCREENING/MEASUREMENT RESULTS:

PID  $\frac{\text{Ambient}}{\text{Reading}} = \frac{0.0}{4.1}$  ppmAlpha  $\leq 11$  dpm  
Beta/Gamma  $\leq 2140$  dpm

COLLECTED BY (PRINT)

TLMcFarland

REVIEWED BY (PRINT)

R. May 9.

RELINQUISHED BY (Printed Name) Estevan Lujan (Signature)	Date/Time 2/3/10 08:15A	RECEIVED BY (Printed Name) (Signature)	Date/Time 2/3/10 8:15
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time



## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2507

EVENT NAME: 4th Qtr. FY09 - SWMU 15-009(c) - Threemile Canyon

SAMPLE ID: RE15-10-8375

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/02/2010		MEDIA:	QBT3		AMh
TIME COLLECTED (HH:MM)		1427		SUB-MEDIA:	TUFF 1		NA
PRS ID:	15-009(c)	OK		SAMPLE TECH CODE:	HA		OK
LOCATION ID:	UNK	15-610848		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			
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		WATER FLOWING: YES/NO/NA
BOREHOLE: YES/NO/NA	NO			BOREHOLE DECLINATION:	NA		BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER 12m 2/2/10	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8082+8270+NME D-EXP	500 ML AMBER GLASS	Ice	Y	
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1		H3	500 ML POLY	Ice	Y	
1		METALS+U- GEL	125 ML POLY	Ice	Y	
1		Perchlorate+CN+ N03+pH	500 ML POLY	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: QC Sample of

RE15-10-8356

Brown silty sand, moist, tuff fragments

SAMPLE COMMENTS:

NA

LOCATION DESC:

9c-10

FIELD SCREENING/MEASUREMENT RESULTS:

HE negative

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

Alpha  $\leq 11$  dpm  
Beta/Gamma  $\leq 2220$  dpm

COLLECTED BY (PRINT)

TL McFarland

REVIEWED BY (PRINT)

Ray G.

RELINQUISHED BY (Printed Name) Estevan Lujan (Signature)	Date/Time 2/3/10 08:15 AM	RECEIVED BY (Printed Name) (Signature)	Date/Time 2/3/10 8115
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2507

EVENT NAME: 4th Qtr. FY09 - SWMU 15-009(c) - Threemile Canyon

SAMPLE ID: RE15-10-8378

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/02/2010		MEDIA:		NA	
TIME COLLECTED (HH:MM)		15 37		SUB-MEDIA:		OTHER	
PRS ID: 15-009(c)		OK		SAMPLE TECH CODE:		DC	
LOCATION ID: UNK		15-610848		FIELD QC TYPE:		FR	
LOCATION TYPE: GENERIC		OK		FIELD PREP:		UF	
TOP DEPTH: 0				SAMPLE USAGE:		QC	
BOTTOM DEPTH: 0				SCREEN/PORT DESC:		NA	
FIELD MATRIX: W				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		NO3NO2	250 ML POLY	Sulfuric Acid (Hydrogen Sulfate)	N	
1	Normal	SW-846:6850	250 ML POLY	Ice	Y	
1	↓	TCN	500 ML POLY	Sodium Hydroxide	Y	

SAMPLE DESC: QC Sample of RE 15-10-8357

## SAMPLE COMMENTS:

Rinsate

## LOCATION DESC:

## FIELD SCREENING/MEASUREMENT RESULTS:

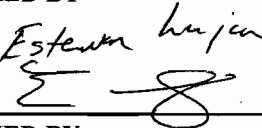


NA

COLLECTED BY (PRINT)

TLMcfarlane

REVIEWED BY (PRINT)

Riley E

RELINQUISHED BY (Printed Name) Esten Lujan (Signature) 	Date/Time 2/3/10 0821 Am	RECEIVED BY (Printed Name)  (Signature) 	Date/Time 2/3/10 8:21
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2507

EVENT NAME: 4th Qtr. FY09 - SWMU 15-009(c) - Threemile Canyon

SAMPLE ID: RE15-10-8382

WORK ORDER:

AS PLANNED		AS COLLECTED	AS PLANNED		AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/02/2010	MEDIA:	FILL	ok
TIME COLLECTED (HH:MM)		0945	SUB-MEDIA:	SOIL	
PRS ID:	15-009(c)	ok	SAMPLE TECH CODE:	DC	
LOCATION ID:	UNK	15-610 838	FIELD QC TYPE:	FTB	
LOCATION TYPE:	GENERIC	ok	FIELD PREP:	NA	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:	NA	
FIELD MATRIX:	S		EXCAVATED: YES/NO/NA		
COMPOSITE TYPE:	NA		COMPOSITE TIME INTERVAL:	NA	
			WATER FLOWING: YES/NO/NA		
BOREHOLE: YES/NO/NA			BOREHOLE DECLINATION:	NA	
			BOREHOLE DIRECTION:	NA	

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8260B Trip Blank	40 ML SEPTUM AMBER GLASS	Ice	Y	

SAMPLE DESC: QC Sample of RE15-10-8336

SAMPLE COMMENTS: NA

LOCATION DESC: NA

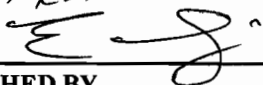


FIELD SCREENING/MEASUREMENT RESULTS: NA

COLLECTED BY (PRINT)

TL McFarland

REVIEWED BY (PRINT)

Riley E.

RELINQUISHED BY (Printed Name) Estevan Luria (Signature) 	Date/Time 2/3/10 8:21 AM	RECEIVED BY (Printed Name)  (Signature) 	Date/Time 2/3/10 8:21
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):

RE15-10-8337	RE15-10-8338
" "8336	" "8339
" "8350	" "8374
" "8351	" "8375
" "8352	" "8356
" "8353	8357
" "8354	
" "8355	

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):

RE15-10-8378  
RE15-10-~~8378~~ 8382

Reason:

.....

Print Last Name

Lujan

Signature



Date

2/3/10

**DATA VALIDATION COVER SHEET****5121-1****Data Validation Cover Sheet**

Records Use only

**Section I.**REQUEST NUMBER: 10-1621 VALIDATION DATE: 03/25/10 LAB CODE: GELCONTRACT LABORATORY NAME: GEL Laboratories LLCVALIDATOR: Kevin A. Lambert ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- |  |  |   |   |
|--|--|---|---|
| <input type="checkbox"/> TPH-GRO                 | <input type="checkbox"/> HIGH EXPLOSIVES | <input type="checkbox"/> DIOXIN FURANS          | <input checked="" type="checkbox"/> LCMSMS PERCHLORATES |
| <input type="checkbox"/> TPH-DRO                 | <input type="checkbox"/> METALS          | <input type="checkbox"/> PCB CONGENERS          | <input type="checkbox"/> ORGANOCHLORINE                 |
| <input type="checkbox"/> GENERAL CHEMISTRY       | <input type="checkbox"/> RADIOCHEMISTRY  | <input type="checkbox"/> LCMSMS HIGH EXPLOSIVES | PESTICIDES/POLYCHLORINATED BIPHENYLS                    |
| <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. Samples RE15-10-8350, -8357, -8338, -8336, -8339, -8337, -8375, and -8374 were analyzed within an hour past the method -specified HT. The analysis was part of a continuous sequence including other samples from this RN that was initiated before midnight and within HT. All samples were prepared on the same date. Thus, no sample results were qualified, based on professional judgment.
2. It should be noted that the water MS/MSD analyses were performed on a LANL sample from another RN, and the parent sample raw data was not included in the data package. No sample data were qualified.


Reviewed by: Mary DonovanLevel: IDate: 03/25/10

VALIDATOR'S SIGNATURE: \_\_\_\_\_


Kevin A. LambertDATE: 03/25/10

Form 5121-1, 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 (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 Internal Standard (IS) relative retention time has shifted by more than 0.98 to 1.02 seconds.	R, PERC0	J, PERC0
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2. Required IS retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, PERC0b	R, PERC0b
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3. The IS are count is <25% of the expected value.	UJ, PERC1a	J, PERC1a
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	4. The IS area count is <70% but >25% of the average of that obtained from the calibration standards.	UJ, PERC1b	J, PERC1b
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	5. The IS area count is >130% of the average of that obtained from the calibration standards.	UJ, PERC1c	J, PERC1c
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	6. Required IS information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, PERC1d	R, PERC1d
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7. The sample result is $\leq 5X$ the concentration of the related analyte in the method blank.	U, PERC4	N/A
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5X.	N/A	J+, PERC4a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9. The sample result is $\leq 5X$ the concentration of the related analyte in the trip blank, rinsate blank, and/or equipment blank.	U, PERC4d	N/A
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, PERC4e	R, PERC4e
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	11. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, PERC7	J, PERC7
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	12. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.99.	UJ, R, PERC7a	J, PERC7a

LC/MS/MS PERCHLORATE ANALYTICAL DATA VALIDATION CHECKLIST		
5121-2		Records Use only
LC/MS/MS Perchlorate Analytical Data Validation Checklist		 <b>Los Alamos</b> <small>NATIONAL LABORATORY</small> <small>EST. 1947</small>

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

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: WATER

Extraction Batch ID: 250041

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.

RE15-10-8378

Date Received: 06-FEB-10

GEL Job No (SDG): 10-1621

GEL Sample ID: 246436001

Date Filtered: 12-FEB-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	17-FEB-10 06:40	per0216098a
	Perchlorate Isotope Ratio						1	17-FEB-10 06:40	per0216098a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	17-FEB-10 06:40	per0216098a
	Perchlorate-O(18)			0.483	ug/L		1	17-FEB-10 06:40	per0216098a

<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: 952819

Extraction Type: Solid Prep

Client Sample No.

RE15-10-8354

Date Received: 06-FEB-10

GEL Job No (SDG): 10-1621-1

GEL Sample ID: 246437001

Date Filtered: 19-FEB-10

Injection Volume (uL): 20

%Solids: 78

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	.641	2.56	0.641	ug/kg	U	1	02-MAR-10 22:27	per0302024a
	Perchlorate Isotope Ratio						1	02-MAR-10 22:27	per0302024a
14797-73-0	Perchlorate-101	.641	2.56	0.641	ug/kg	U	1	02-MAR-10 22:27	per0302024a
	Perchlorate-O(18)			6.33	ug/kg		1	02-MAR-10 22:27	per0302024a

<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: 952819

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8356

Date Received: 06-FEB-10

GEL Job No (SDG): 10-1621-1

GEL Sample ID: 246437002

Date Filtered: 19-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	.586	2.34	0.642	ug/kg	J	1	02-MAR-10 22:52	per0302027a
	Perchlorate Isotope Ratio			3.22			1	02-MAR-10 22:52	per0302027a
14797-73-0	Perchlorate-101	.586	2.34	0.629	ug/kg	J	1	02-MAR-10 22:52	per0302027a
	Perchlorate-O(18)			5.88	ug/kg		1	02-MAR-10 22:52	per0302027a

<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 1 Concentrated Extract Volume X 1 %Solids  
Aliquot

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 952819

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8353

Date Received: 06-FEB-10

GEL Job No (SDG): 10-1621-1

GEL Sample ID: 246437003

Date Filtered: 19-FEB-10

Injection Volume (uL): 20

%Solids: 87

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.575	2.3	0.575	ug/kg	U	1	02-MAR-10 23:01	per0302028a
	Perchlorate Isotope Ratio						1	02-MAR-10 23:01	per0302028a
14797-73-0	Perchlorate-101	.575	2.3	0.575	ug/kg	U	1	02-MAR-10 23:01	per0302028a
	Perchlorate-O(18)			5.73	ug/kg		1	02-MAR-10 23:01	per0302028a

<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

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: 952819  
 Extraction Type: Solid Prep  
 Sample Volume/Weight: 2.00 g  
 Concentrated Extract Volume: 20.0  
 Client Sample No. RE15-10-8352  
 Date Received: 06-FEB-10  
 GEL Job No (SDG): 10-1621-1  
 GEL Sample ID: 246437004  
 Date Filtered: 19-FEB-10  
 Injection Volume (uL): 20  
 %Solids: 77

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.65	2.6	0.650	ug/kg	U	1	02-MAR-10 23:10	per0302029a
	Perchlorate Isotope Ratio						1	02-MAR-10 23:10	per0302029a
14797-73-0	Perchlorate-101	.65	2.6	0.650	ug/kg	U	1	02-MAR-10 23:10	per0302029a
	Perchlorate-O(18)			6.35	ug/kg		1	02-MAR-10 23:10	per0302029a

<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

P perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC  
 Lab Code: GEL  
 Instrument: LCMSMS  
 Method: SW846 6850 Modified  
 Matrix: SOIL  
 Extraction Batch ID: 952819  
 Extraction Type: Solid Prep  
 Sample Volume/Weight: 2.00 g  
 Concentrated Extract Volume: 20.0  
 Client Sample No. RE15-10-8355  
 Date Received: 06-FEB-10  
 GEL Job No (SDG): 10-1621-1  
 GEL Sample ID: 246437005  
 Date Filtered: 19-FEB-10  
 Injection Volume (uL): 20  
 %Solids: 87

CAS No.	Analyte <sup>a</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.573	2.29	0.573	ug/kg	U	1	02-MAR-10 23:18	per0302030a
	Perchlorate Isotope Ratio						1	02-MAR-10 23:18	per0302030a
14797-73-0	Perchlorate-101	.573	2.29	0.573	ug/kg	U	1	02-MAR-10 23:18	per0302030a
	Perchlorate-O(18)			5.60	ug/kg		1	02-MAR-10 23:18	per0302030a

<sup>a</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: 952819

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8351

Date Received: 06-FEB-10

GEL Job No (SDG): 10-1621-1

GEL Sample ID: 246437006

Date Filtered: 19-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	.589	2.36	0.589	ug/kg	U	1	02-MAR-10 23:27	per0302031a
	Perchlorate Isotope Ratio						1	02-MAR-10 23:27	per0302031a
14797-73-0	Perchlorate-101	.589	2.36	0.589	ug/kg	U	1	02-MAR-10 23:27	per0302031a
	Perchlorate-O(18)			5.96	ug/kg		1	02-MAR-10 23:27	per0302031a

<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: 952819  
 Extraction Type: Solid Prep  
 Sample Volume/Weight: 2.00 g  
 Concentrated Extract Volume: 20.0  
 Client Sample No. RE15-10-8350  
 Date Received: 06-FEB-10  
 GEL Job No (SDG): 10-1621-1  
 GEL Sample ID: 246437007  
 Date Filtered: 19-FEB-10  
 Injection Volume (uL): 20  
 %Solids: 77

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.65	2.6	0.650	ug/kg	HU	1	03-MAR-10 00:01	per0302035a
	Perchlorate Isotope Ratio						1	03-MAR-10 00:01	per0302035a
14797-73-0	Perchlorate-101	.65	2.6	0.650	ug/kg	HU	1	03-MAR-10 00:01	per0302035a
	Perchlorate-O(18)			6.49	ug/kg		1	03-MAR-10 00:01	per0302035a

<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: 952819

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8357

Date Received: 06-FEB-10

GEL Job No (SDG): 10-1621-1

GEL Sample ID: 246437008

Date Filtered: 19-FEB-10

Injection Volume (uL): 20

%Solids: 94

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.532	2.13	0.532	ug/kg	HU	1	03-MAR-10 00:09	per0302036a
	Perchlorate Isotope Ratio						1	03-MAR-10 00:09	per0302036a
14797-73-0	Perchlorate-101	.532	2.13	0.547	ug/kg	HJ	1	03-MAR-10 00:09	per0302036a
	Perchlorate-O(18)			5.30	ug/kg		1	03-MAR-10 00:09	per0302036a

<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: 952819

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8338

Date Received: 06-FEB-10

GEL Job No (SDG): 10-1621-1

GEL Sample ID: 246437009

Date Filtered: 19-FEB-10

Injection Volume (uL): 20

%Solids: 78

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.644	2.58	0.644	ug/kg	HU	1	03-MAR-10 00:18	per0302037a
	Perchlorate Isotope Ratio						1	03-MAR-10 00:18	per0302037a
14797-73-0	Perchlorate-101	.644	2.58	0.644	ug/kg	HU	1	03-MAR-10 00:18	per0302037a
	Perchlorate-O(18)			6.49	ug/kg		1	03-MAR-10 00:18	per0302037a

<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: 252819  
 Extraction Type: Solid Prep  
 Sample Volume/Weight: 2.00 g  
 Concentrated Extract Volume: 20.0  
 Client Sample No. RE15-10-8336  
 Date Received: 06-FEB-10  
 GEL Job No (SDG): 10-1621-1  
 GEL Sample ID: 246437010  
 Date Filtered: 19-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	.606	2.43	0.606	ug/kg	HU	1	03-MAR-10 00:27	per0302038a
	Perchlorate Isotope Ratio						1	03-MAR-10 00:27	per0302038a
14797-73-0	Perchlorate-101	.606	2.43	0.606	ug/kg	HU	1	03-MAR-10 00:27	per0302038a
	Perchlorate-O(18)			6.21	ug/kg		1	03-MAR-10 00:27	per0302038a

<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

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 952819

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8339

Date Received: 06-FEB-10

GEL Job No (SDG): 10-1621-1

GEL Sample ID: 246437011

Date Filtered: 19-FEB-10

Injection Volume (uL): 20

%Solids: 24

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.532	2.13	0.532	ug/kg	HU	1	03-MAR-10 00:35	per0302039a
	Perchlorate Isotope Ratio						1	03-MAR-10 00:35	per0302039a
14797-73-0	Perchlorate-101	.532	2.13	0.532	ug/kg	HU	1	03-MAR-10 00:35	per0302039a
	Perchlorate-O(18)			5.41	ug/kg		1	03-MAR-10 00:35	per0302039a

<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: 952819

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8337

Date Received: 06-FEB-10

GEL Job No (SDG): 10-1621-1

GEL Sample ID: 246437012

Date Filtered: 19-FEB-10

Injection Volume (uL): 20

%Solids: 89

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.564	2.26	0.564	ug/kg	HU	1	03-MAR-10 00:44	per0302040a
	Perchlorate Isotope Ratio						1	03-MAR-10 00:44	per0302040a
14797-73-0	Perchlorate-101	.564	2.26	0.564	ug/kg	HU	1	03-MAR-10 00:44	per0302040a
	Perchlorate-O(18)			5.96	ug/kg		1	03-MAR-10 00:44	per0302040a

<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: 952819  
 Extraction Type: Solid Prep  
 Sample Volume/Weight: 2.00 g  
 Concentrated Extract Volume: 20.0  
 Client Sample No. RE15-10-8375  
 Date Received: 06-FEB-10  
 GEL Job No (SDG): 10-1621-1  
 GEL Sample ID: 246437013  
 Date Filtered: 19-FEB-10  
 Injection Volume (uL): 20  
 %Solids: 80

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.623	2.49	1.19	ug/kg	HJ	1	03-MAR-10 00:52	per0302041a
	Perchlorate Isotope Ratio			3.24			1	03-MAR-10 00:52	per0302041a
14797-73-0	Perchlorate-101	.623	2.49	1.16	ug/kg	HJ	1	03-MAR-10 00:52	per0302041a
	Perchlorate-O(18)			6.26	ug/kg		1	03-MAR-10 00:52	per0302041a

<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  
 Aliquot %Solids

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 952819

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8374

Date Received: 06-FEB-10

GEL Job No (SDG): 10-1621-1

GEL Sample ID: 246437014

Date Filtered: 19-FEB-10

Injection Volume (uL): 20

%Solids: 93.7

CAS No.	Analyte <sup>a</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.534	2.13	0.534	ug/kg	HU	1	03-MAR-10 01:01	per0302042a
	Perchlorate Isotope Ratio						1	03-MAR-10 01:01	per0302042a
14797-73-0	Perchlorate-101	.534	2.13	0.534	ug/kg	HU	1	03-MAR-10 01:01	per0302042a
	Perchlorate-O(18)			5.55	ug/kg		1	03-MAR-10 01:01	per0302042a

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

**DATA VALIDATION COVER SHEET**

5118-1

**Data Validation Cover Sheet**

Records Use only

**Section I.**REQUEST NUMBER: 10-1621 VALIDATION DATE: 03/25/10 LAB CODE: GELCONTRACT LABORATORY NAME: GEL Laboratories LLCVALIDATOR: Kevin A. Lambert ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

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


- In the soil MB, Sb was detected. The Sb result for sample RE15-10-8350 was a ND and, thus, was not qualified. The other associated sample results were detects  $\leq 5X$  the MB concentration and, thus, were qualified U,I4.
- In the water ICB/CCB, Mg and K were detected. The K result was a detect  $\leq 5X$  the greatest ICB/CCB concentration and, thus, was qualified U,I4b. The Mg result was a ND and, thus, was not qualified.  
In the soil ICB/CCB, Sb was detected. The Sb result for sample -8350 was a ND and, thus, was not qualified. The other associated sample results were detects  $\leq 5X$  the greatest ICB/CCB concentration and, thus, were qualified U,I4b.
- In the FR blank, sample -8378, associated with all field samples, Cd, Ca, Mn, and Na were detected. The Na results for all field samples except -8350 were detects  $\leq 5X$  the FR blank concentration and, thus, were qualified U,I4d. All other associated sample results were either NDs or detects  $> 5X$  the FR blank concentrations and, thus, were not qualified.
- The soil MS %R for Ca was  $<$  the laboratory LAL but  $\geq 10\%$ , and the soil MS %Rs for Al, Fe, Mg, and Mn were  $>$  the laboratory UAL. However, the associated parent sample concentration for Fe was  $> 4X$  the spike concentration. Thus, no sample data were qualified as result, based on professional judgment. The Ca results were detects and, thus, were qualified J-,I6a. All Al, Mg, and, Mn results were detects and, thus, were qualified J+,I6b.
- The soil duplicate RPD values for Ca, Co, Cu, Mn, and Zn were  $> 35\%$ , and both the parent sample and duplicate results were  $\geq 5X$  the PQL. All associated sample results were detects and, thus, were qualified J,I10a.




DATA VALIDATION COVER SHEET	
5118-1	Records Use only
<b>Data Validation Cover Sheet</b>	
<p>6. It should be noted that the parent samples for the water matrix QC analyses and the soil CVAA matrix QC analyses were performed on LANL samples from other RNs, and the parent sample raw data were not included in the data package. No sample data were qualified.</p> <p>Reviewed by: <u>Marv Donovan</u> Level: <u>I</u> Date: <u>03/25/10</u></p>	
<p>VALIDATOR'S SIGNATURE: <u>Kevin A. Lambert</u> DATE: <u>03/25/10</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 (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 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	
<b>5118-2</b>  <b>Metals 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"/>	13. Metals interference check sample percent recovery value is $\geq 50\%$ and $< 80\%$	UJ, I2a	J-, I2a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	14. Metals interference check sample percent recovery value is $> 120\%$ .	N/A	J+, I2b
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	15. Metals interference check sample was not analyzed with the samples.	R, I2c	R, I2c
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	16. The sample result is $\leq 5X$ the concentration of the related analyte in the method blank.	U, I4	N/A
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	17. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was $> 5X$ .	N/A	J, I4a
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	18. The sample result is $\leq 5X$ the concentration of the related analyte in the instrument blank and continuing calibration blank.	U, I4b	N/A
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	19. Continuing calibration blanks were not analyzed at the appropriate method frequency.	UJ, I4c	J, I4c
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	20. The sample result is $\leq 5X$ the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	U, I4d	N/A
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	21. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, I4e	R, I4e
<input 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 checked="" type="checkbox"/>	<input 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 (Check One)				Assign Qualifier Listed Below If Criterion = Yes	
				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	25. Required matrix spike information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. If the LCS information is present, do not Reject. Qualify data based on the LCS information.	R, I6c	R, I6c
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	26. The sample and the duplicate sample results were $\geq 5X$ the RL and the duplicate RPD was $>20\%$ for water samples and $>35\%$ for soil samples.	UJ, I10a	J, I10a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	27. The duplicate sample was not prepared and/or analyzed with the samples for unspecified reasons. The duplicate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	UJ, I10d	J, I10d
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	28. The LCS percent recovery was $<10\%$ . Follow the external laboratory limits located within the associated data package.	R, I12	R, I12
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	29. The LCS percent recover was $<$ the LAL but $>10\%$ . Follow the external laboratory limits located within the associated data package.	UJ, I12a	J-, I12a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	30. The LCS percent recovery was $>$ the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, I12b
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	31. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. Do not Reject if MS/MSD information is present. Qualify according to MS/MSD criteria.	R, I12c	R, I12c
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	32. The quantitating IS area count is $<10\%$ for metals window in relation to the initial calibration blank. Follow the method-specific windows.	R, I1a	J, I1a

METALS ANALYTICAL DATA VALIDATION CHECKLIST	
<b>5118-2</b>  <b>Metals 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 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: 10-1621

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 246436001

BASIS: As Received

DATE COLLECTED 02-FEB-10

CLIENT ID: RE15-10-8378

LEVEL: Low

DATE RECEIVED 06-FEB-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	02/26/10 01:31	022510-1	950392
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	BAJ	03/04/10 23:20	100304-3	950397
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	02/26/10 01:31	022510-1	950392
7440-39-3	Barium	5	ug/L	U	1	5	5	1	P	HSC	02/26/10 01:31	022510-1	950392
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	BAJ	03/05/10 13:16	100305-9	950397
7440-43-9	Cadmium	0.527	ug/L	J	0.11	1	1	1	MS	BAJ	03/04/10 23:20	100304-3	950397
7440-70-2	Calcium	96.5	ug/L	J	50	200	200	1	P	HSC	02/26/10 01:31	022510-1	950392
7440-47-3	Chromium	5	ug/L	U	1	5	5	1	P	HSC	02/26/10 01:31	022510-1	950392
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	02/26/10 01:31	022510-1	950392
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	02/26/10 01:31	022510-1	950392
7439-89-6	Iron	100	ug/L	U	30	100	100	1	P	HSC	02/26/10 01:31	022510-1	950392
7439-92-1	Lead	2	ug/L	U	0.5	2	2	1	MS	BAJ	03/04/10 23:20	100304-3	950397
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	02/26/10 01:31	022510-1	950392
7439-96-5	Manganese	5.11	ug/L		1	5	5	1	MS	BAJ	03/05/10 13:16	100305-9	950397
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JXL1	02/17/10 11:14	021710W2-10	951593
7440-02-0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	02/26/10 01:31	022510-1	950392
7440-09-7	Potassium	158	ug/L		50	150	150	1	P	HSC	02/26/10 01:31	022510-1	950392
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	02/26/10 01:31	022510-1	950392
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	02/26/10 01:31	022510-1	950392
7440-23-5	Sodium	140	ug/L	J	100	300	300	1	P	HSC	02/26/10 01:31	022510-1	950392
7440-28-0	Thallium	1	ug/L	U	0.3	1	1	1	MS	PRB	03/05/10 15:27	100305-2	950397
7440-61-1	Uranium	0.20	ug/L	U	0.05	0.2	0.2	1	MS	BAJ	03/05/10 07:50	100304-8	950397
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	02/26/10 01:31	022510-1	950392
7440-66-6	Zinc	10	ug/L	U	3.3	10	10	1	P	HSC	02/26/10 01:31	022510-1	950392

**Prep Information:**

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
950392	950390	SW846 3005A	50	mL	50	mL	02/16/10	LYH1
950397	950395	SW846 3005A	50	mL	50	mL	02/16/10	LYH1
951593	951592	SW846 7470A Prep	20	mL	20	mL	02/16/10	TXB3

KAL  
03/25/10

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

SDG No: 10-1621-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 246437001

BASIS: Dry Weight

DATE COLLECTED 02-FEB-10

CLIENT ID: RE15-10-8354

LEVEL: Low

DATE RECEIVED 06-FEB-10

MATRIX: SOIL

%SOLIDS: 78

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum J+,I6b	1770000	ug/Kg	N	7900	23200	23200	1	P	JWJ	02/23/10 00:56	022210-1	950491
7440-36-0	Antimony U,I4	827	ug/Kg	J	383	1160	1160	1	P	JWJ	02/23/10 00:56	022210-1	950491
7440-38-2	Arsenic	1.07	mg/kg	J	0.237	1.19	1.19	2	MS	BAJ	03/05/10 02:30	100304-4	950493
7440-39-3	Barium	28000	ug/Kg		116	581	581	1	P	JWJ	02/23/10 00:56	022210-1	950491
7440-41-7	Beryllium	0.501	mg/kg		0.0237	0.119	0.119	2	MS	BAJ	03/05/10 02:30	100304-4	950493
7440-43-9	Cadmium	581	ug/Kg	U	116	581	581	1	P	JWJ	02/23/10 00:56	022210-1	950491
7440-70-2	Calcium J-,I6a	869000	ug/Kg	*N	9790	30600	30600	1	P	HSC	03/03/10 22:52	030310-2	958097
7440-47-3	Chromium	3690	ug/Kg		174	581	581	1	P	JWJ	02/23/10 00:56	022210-1	950491
7440-48-4	Cobalt J,I10a	1350	ug/Kg	*	184	612	612	1	P	HSC	03/03/10 22:52	030310-2	958097
7440-50-8	Copper J,I10a	4520	ug/Kg	*	367	1220	1220	1	P	HSC	03/03/10 22:52	030310-2	958097
7439-89-6	Iron	5820000	ug/Kg	*	9290	29000	29000	1	P	JWJ	02/23/10 00:56	022210-1	950491
7439-92-1	Lead	7200	ug/Kg	*	290	1160	1160	1	P	JWJ	02/23/10 00:56	022210-1	950491
7439-95-4	Magnesium J+,I6b	360000	ug/Kg	*N	9870	34800	34800	1	P	JWJ	02/23/10 00:56	022210-1	950491
7439-96-5	Manganese J+,I6b	169000	ug/Kg	*N	232	1160	1160	1	P	JWJ	02/23/10 00:56	022210-1	950491
7439-97-6	Mercury	13.4	ug/kg	U	4.56	13.4	13.4	1	AV	JXL1	02/22/10 10:19	022210S1-9	951617
7440-02-0	Nickel	2.91	mg/kg		0.119	0.474	0.474	2	MS	BAJ	03/05/10 02:30	100304-4	950493
7440-09-7	Potassium	335000	ug/Kg	*N	7430	29000	29000	1	P	JWJ	02/23/10 00:56	022210-1	950491
7782-49-2	Selenium	1.19	mg/kg	U	0.593	1.19	1.19	2	MS	BAJ	03/05/10 09:57	100304-8	950493
7440-22-4	Silver	581	ug/Kg	U	116	581	581	1	P	JWJ	02/23/10 00:56	022210-1	950491
7440-23-5	Sodium U,I4d	34900	ug/Kg		8130	29000	29000	1	P	JWJ	02/23/10 00:56	022210-1	950491
7440-28-0	Thallium	0.237	mg/kg	U	0.0711	0.237	0.237	2	MS	PRB	03/05/10 13:56	100305-3	950493
7440-61-1	Uranium	2.82	mg/kg	N	0.0156	0.0474	0.0474	2	MS	BAJ	03/05/10 08:38	100304-7	950493
7440-62-2	Vanadium	6420	ug/Kg	*	122	612	612	1	P	HSC	03/03/10 22:52	030310-2	958097
7440-66-6	Zinc J,I10a	25800	ug/Kg	*	383	1160	1160	1	P	JWJ	02/23/10 00:56	022210-1	950491

**Prep Information:**

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
950491	950490	SW846 3050B	0.552	g	50	mL	02/20/10	BCD1
950493	950492	SW846 3050B	0.541	g	50	mL	02/20/10	BCD1
951617	951616	SW846 7471A Prep	0.574	g	30	mL	02/19/10	TXB3
958097	958096	SW846 3050B	0.524	g	50	mL	02/27/10	FGA

KAL  
03/25/10

METALS  
-1-  
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1621-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 246437002

BASIS: Dry Weight

DATE COLLECTED 02-FEB-10

CLIENT ID: RE15-10-8356

LEVEL: Low

DATE RECEIVED 06-FEB-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 J+,I6b	2370000	ug/Kg	N	7810	23000	23000	1	P	JWJ	02/23/10 01:15	022210-1	950491
7440-36-0	Antimony U,I4	534	ug/Kg	J	379	1150	1150	1	P	JWJ	02/23/10 01:15	022210-1	950491
7440-38-2	Arsenic	1.07	mg/kg		0.21	1.05	1.05	2	MS	BAJ	03/05/10 02:55	100304-4	950493
7440-39-3	Barium	35300	ug/Kg		115	574	574	1	P	JWJ	02/23/10 01:15	022210-1	950491
7440-41-7	Beryllium	0.465	mg/kg		0.021	0.105	0.105	2	MS	BAJ	03/05/10 02:55	100304-4	950493
7440-43-9	Cadmium	574	ug/Kg	U	115	574	574	1	P	JWJ	02/23/10 01:15	022210-1	950491
7440-70-2	Calcium J-,I6a	753000	ug/Kg	*N	9030	28200	28200	1	P	HSC	03/03/10 23:41	030310-2	958097
7440-47-3	Chromium	5640	ug/Kg		172	574	574	1	P	JWJ	02/23/10 01:15	022210-1	950491
7440-48-4	Cobalt J,I10a	2580	ug/Kg	*	169	565	565	1	P	HSC	03/03/10 23:41	030310-2	958097
7440-50-8	Copper J,I10a	2830	ug/Kg	*	339	1130	1130	1	P	HSC	03/03/10 23:41	030310-2	958097
7439-89-6	Iron	9570000	ug/Kg	*	9190	28700	28700	1	P	JWJ	02/23/10 01:15	022210-1	950491
7439-92-1	Lead	6700	ug/Kg	*	287	1150	1150	1	P	JWJ	02/23/10 01:15	022210-1	950491
7439-95-4	Magnesium J+,I6b	495000	ug/Kg	*N	9770	34500	34500	1	P	JWJ	02/23/10 01:15	022210-1	950491
7439-96-5	Manganese J+,I6b	259000	ug/Kg	*N	230	1150	1150	1	P	JWJ	02/23/10 01:15	022210-1	950491
7439-97-6	Mercury	13.4	ug/kg	U	4.55	13.4	13.4	1	AV	JXL1	02/22/10 10:21	022210S1-9	951617
7440-02-0	Nickel	2.94	mg/kg		0.105	0.421	0.421	2	MS	BAJ	03/05/10 02:55	100304-4	950493
7440-09-7	Potassium	443000	ug/Kg	*N	7350	28700	28700	1	P	JWJ	02/23/10 01:15	022210-1	950491
7782-49-2	Selenium	1.05	mg/kg	U	0.526	1.05	1.05	2	MS	BAJ	03/05/10 10:08	100304-8	950493
7440-22-4	Silver	574	ug/Kg	U	115	574	574	1	P	JWJ	02/23/10 01:15	022210-1	950491
7440-23-5	Sodium U,I4d	43200	ug/Kg		8040	28700	28700	1	P	JWJ	02/23/10 01:15	022210-1	950491
7440-28-0	Thallium	0.210	mg/kg	U	0.0631	0.21	0.21	2	MS	PRB	03/05/10 14:11	100305-3	950493
7440-61-1	Uranium	3.62	mg/kg	N	0.0139	0.0421	0.0421	2	MS	BAJ	03/05/10 08:50	100304-7	950493
7440-62-2	Vanadium	8190	ug/Kg	*	113	565	565	1	P	HSC	03/03/10 23:41	030310-2	958097
7440-66-6	Zinc J,I10a	40900	ug/Kg	*	379	1150	1150	1	P	JWJ	02/23/10 01:15	022210-1	950491

## Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
950491	950490	SW846 3050B	0.51	g	50	mL	02/20/10	BCD1
950493	950492	SW846 3050B	0.557	g	50	mL	02/20/10	BCD1
951617	951616	SW846 7471A Prep	0.526	g	30	mL	02/19/10	TXB3
958097	958096	SW846 3050B	0.519	g	50	mL	02/27/10	FGA

KAL  
03/25/10



METALS  
-1-  
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1621-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 246437003

BASIS: Dry Weight

DATE COLLECTED 02-FEB-10

CLIENT ID: RE15-10-8353

LEVEL: Low

DATE RECEIVED 06-FEB-10

MATRIX: SOIL

%SOLIDS: 87

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum J+,I6b	2740000	ug/Kg	N	7390	21700	21700	1	P	JWJ	02/23/10 01:18	022210-1	950491
7440-36-0	Antimony U,I4	577	ug/Kg	J	359	1090	1090	1	P	JWJ	02/23/10 01:18	022210-1	950491
7440-38-2	Arsenic	1.3	mg/kg		0.221	1.11	1.11	2	MS	BAJ	03/05/10 02:59	100304-4	950493
7440-39-3	Barium	39200	ug/Kg		109	543	543	1	P	JWJ	02/23/10 01:18	022210-1	950491
7440-41-7	Beryllium	0.633	mg/kg		0.0221	0.111	0.111	2	MS	BAJ	03/05/10 02:59	100304-4	950493
7440-43-9	Cadmium	543	ug/Kg	U	109	543	543	1	P	JWJ	02/23/10 01:18	022210-1	950491
7440-70-2	Calcium J-,I6a	933000	ug/Kg	*N	8630	27000	27000	1	P	HSC	03/03/10 23:48	030310-2	958097
7440-47-3	Chromium	7300	ug/Kg		163	543	543	1	P	JWJ	02/23/10 01:18	022210-1	950491
7440-48-4	Cobalt J,I10a	1530	ug/Kg	*	162	539	539	1	P	HSC	03/03/10 23:48	030310-2	958097
7440-50-8	Copper J,I10a	3070	ug/Kg	*	323	1080	1080	1	P	HSC	03/03/10 23:48	030310-2	958097
7439-89-6	Iron	8010000	ug/Kg	*	8690	27200	27200	1	P	JWJ	02/23/10 01:18	022210-1	950491
7439-92-1	Lead	6660	ug/Kg	*	272	1090	1090	1	P	JWJ	02/23/10 01:18	022210-1	950491
7439-95-4	Magnesium J+,I6b	509000	ug/Kg	*N	9230	32600	32600	1	P	JWJ	02/23/10 01:18	022210-1	950491
7439-96-5	Manganese J+,I6b	243000	ug/Kg	*N	217	1090	1090	1	P	JWJ	02/23/10 01:18	022210-1	950491
7439-97-6	Mercury	7.06	ug/kg	J	4.16	12.2	12.2	1	AV	JXL1	02/22/10 10:23	022210S1-9	951617
7440-02-0	Nickel	4.04	mg/kg		0.111	0.442	0.442	2	MS	BAJ	03/05/10 02:59	100304-4	950493
7440-09-7	Potassium	391000	ug/Kg	*N	6950	27200	27200	1	P	JWJ	02/23/10 01:18	022210-1	950491
7782-49-2	Selenium	1.11	mg/kg	U	0.553	1.11	1.11	2	MS	BAJ	03/05/10 10:14	100304-8	950493
7440-22-4	Silver	543	ug/Kg	U	109	543	543	1	P	JWJ	02/23/10 01:18	022210-1	950491
7440-23-5	Sodium U,I4d	57900	ug/Kg		7600	27200	27200	1	P	JWJ	02/23/10 01:18	022210-1	950491
7440-28-0	Thallium	0.221	mg/kg	U	0.0663	0.221	0.221	2	MS	PRB	03/05/10 14:13	100305-3	950493
7440-61-1	Uranium	3.53	mg/kg	N	0.0146	0.0442	0.0442	2	MS	BAJ	03/05/10 08:51	100304-7	950493
7440-62-2	Vanadium	7860	ug/Kg	*	108	539	539	1	P	HSC	03/03/10 23:48	030310-2	958097
7440-66-6	Zinc J,I10a	34600	ug/Kg	*	359	1090	1090	1	P	JWJ	02/23/10 01:18	022210-1	950491

## Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
950491	950490	SW846 3050B	0.529	g	50	mL	02/20/10	BCD1
950493	950492	SW846 3050B	0.52	g	50	mL	02/20/10	BCD1
951617	951616	SW846 7471A Prep	0.563	g	30	mL	02/19/10	TXB3
958097	958096	SW846 3050B	0.533	g	50	mL	02/27/10	FGA

KAL  
03/25/10

METALS  
-1-  
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1621-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 246437004

BASIS: Dry Weight

DATE COLLECTED 02-FEB-10

CLIENT ID: RE15-10-8352

LEVEL: Low

DATE RECEIVED 06-FEB-10

MATRIX: SOIL

%SOLIDS: 77

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum J+,I6b	1350000	ug/Kg	N	8120	23900	23900	1	P	JWJ	02/23/10 01:22	022210-1	950491
7440-36-0	Antimony U,I4	1060	ug/Kg	J	394	1190	1190	1	P	JWJ	02/23/10 01:22	022210-1	950491
7440-38-2	Arsenic	0.679	mg/kg	J	0.246	1.23	1.23	2	MS	BAJ	03/05/10 03:03	100304-4	950493
7440-39-3	Barium	18800	ug/Kg		119	597	597	1	P	JWJ	02/23/10 01:22	022210-1	950491
7440-41-7	Beryllium	0.309	mg/kg		0.0246	0.123	0.123	2	MS	BAJ	03/05/10 03:03	100304-4	950493
7440-43-9	Cadmium	597	ug/Kg	U	119	597	597	1	P	JWJ	02/23/10 01:22	022210-1	950491
7440-70-2	Calcium J-,I6a	507000	ug/Kg	*N	10200	31800	31800	1	P	HSC	03/03/10 23:55	030310-2	958097
7440-47-3	Chromium	13600	ug/Kg		179	597	597	1	P	JWJ	02/23/10 01:22	022210-1	950491
7440-48-4	Cobalt J,I10a	950	ug/Kg	*	191	636	636	1	P	HSC	03/03/10 23:55	030310-2	958097
7440-50-8	Copper J,I10a	2850	ug/Kg	*	381	1270	1270	1	P	HSC	03/03/10 23:55	030310-2	958097
7439-89-6	Iron	7230000	ug/Kg	*	9550	29800	29800	1	P	JWJ	02/23/10 01:22	022210-1	950491
7439-92-1	Lead	3840	ug/Kg	*	298	1190	1190	1	P	JWJ	02/23/10 01:22	022210-1	950491
7439-95-4	Magnesium J+,I6b	263000	ug/Kg	*N	10100	35800	35800	1	P	JWJ	02/23/10 01:22	022210-1	950491
7439-96-5	Manganese J+,I6b	189000	ug/Kg	*N	239	1190	1190	1	P	JWJ	02/23/10 01:22	022210-1	950491
7439-97-6	Mercury	14.1	ug/kg	U	4.81	14.1	14.1	1	AV	JXL1	02/22/10 10:25	022210S1-9	951617
7440-02-0	Nickel	2.02	mg/kg		0.123	0.491	0.491	2	MS	BAJ	03/05/10 03:03	100304-4	950493
7440-09-7	Potassium	250000	ug/Kg	*N	7640	29800	29800	1	P	JWJ	02/23/10 01:22	022210-1	950491
7782-49-2	Selenium	1.23	mg/kg	U	0.614	1.23	1.23	2	MS	BAJ	03/05/10 10:16	100304-8	950493
7440-22-4	Silver	597	ug/Kg	U	119	597	597	1	P	JWJ	02/23/10 01:22	022210-1	950491
7440-23-5	Sodium U,I4d	54800	ug/Kg		8360	29800	29800	1	P	JWJ	02/23/10 01:22	022210-1	950491
7440-28-0	Thallium	0.246	mg/kg	U	0.0737	0.246	0.246	2	MS	PRB	03/05/10 14:15	100305-3	950493
7440-61-1	Uranium	1.33	mg/kg	N	0.0162	0.0491	0.0491	2	MS	BAJ	03/05/10 08:53	100304-7	950493
7440-62-2	Vanadium	5050	ug/Kg	*	127	636	636	1	P	HSC	03/03/10 23:55	030310-2	958097
7440-66-6	Zinc J,I10a	35200	ug/Kg	*	394	1190	1190	1	P	JWJ	02/23/10 01:22	022210-1	950491

## Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
950491	950490	SW846 3050B	0.544	g	50	mL	02/20/10	BCD1
950493	950492	SW846 3050B	0.529	g	50	mL	02/20/10	BCD1
951617	951616	SW846 7471A Prep	0.551	g	30	mL	02/19/10	TXB3
958097	958096	SW846 3050B	0.511	g	50	mL	02/27/10	FGA

KAL  
03/25/10

METALS  
-1-  
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1621-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 246437005

BASIS: Dry Weight

DATE COLLECTED 02-FEB-10

CLIENT ID: RE15-10-8355

LEVEL: Low

DATE RECEIVED 06-FEB-10

MATRIX: SOIL

%SOLIDS: 87

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum J+,I6b	2060000	ug/Kg	N	7080	20800	20800	1	P	JWJ	02/23/10 01:33	022210-1	950491
7440-36-0	Antimony U,I4	852	ug/Kg	J	344	1040	1040	1	P	JWJ	02/23/10 01:33	022210-1	950491
7440-38-2	Arsenic	0.978	mg/kg	J	0.223	1.11	1.11	2	MS	BAJ	03/05/10 03:06	100304-4	950493
7440-39-3	Barium	30000	ug/Kg		104	521	521	1	P	JWJ	02/23/10 01:33	022210-1	950491
7440-41-7	Beryllium	0.533	mg/kg		0.0223	0.111	0.111	2	MS	BAJ	03/05/10 03:06	100304-4	950493
7440-43-9	Cadmium	521	ug/Kg	U	104	521	521	1	P	JWJ	02/23/10 01:33	022210-1	950491
7440-70-2	Calcium J-,I6a	421000	ug/Kg	*N	8380	26200	26200	1	P	HSC	03/04/10 00:02	030310-2	958097
7440-47-3	Chromium	6660	ug/Kg		156	521	521	1	P	JWJ	02/23/10 01:33	022210-1	950491
7440-48-4	Cobalt J,I10a	755	ug/Kg	*	157	523	523	1	P	HSC	03/04/10 00:02	030310-2	958097
7440-50-8	Copper J,I10a	1580	ug/Kg	*	314	1050	1050	1	P	HSC	03/04/10 00:02	030310-2	958097
7439-89-6	Iron	9260000	ug/Kg	*	8330	26000	26000	1	P	JWJ	02/23/10 01:33	022210-1	950491
7439-92-1	Lead	7970	ug/Kg	*	260	1040	1040	1	P	JWJ	02/23/10 01:33	022210-1	950491
7439-95-4	Magnesium J+,I6b	432000	ug/Kg	*N	8850	31200	31200	1	P	JWJ	02/23/10 01:33	022210-1	950491
7439-96-5	Manganese J+,I6b	289000	ug/Kg	*N	208	1040	1040	1	P	JWJ	02/23/10 01:33	022210-1	950491
7439-97-6	Mercury	5.06	ug/kg	J	4.37	12.8	12.8	1	AV	JXL1	02/22/10 10:27	022210S1-9	951617
7440-02-0	Nickel	3.13	mg/kg		0.111	0.446	0.446	2	MS	BAJ	03/05/10 03:06	100304-4	950493
7440-09-7	Potassium	366000	ug/Kg	*N	6660	26000	26000	1	P	JWJ	02/23/10 01:33	022210-1	950491
7782-49-2	Selenium	1.11	mg/kg	U	0.557	1.11	1.11	2	MS	BAJ	03/05/10 10:18	100304-8	950493
7440-22-4	Silver	521	ug/Kg	U	104	521	521	1	P	JWJ	02/23/10 01:33	022210-1	950491
7440-23-5	Sodium U,I4d	50700	ug/Kg		7290	26000	26000	1	P	JWJ	02/23/10 01:33	022210-1	950491
7440-28-0	Thallium	0.223	mg/kg	U	0.0669	0.223	0.223	2	MS	PRB	03/05/10 14:18	100305-3	950493
7440-61-1	Uranium	1.8	mg/kg	N	0.0147	0.0446	0.0446	2	MS	BAJ	03/05/10 08:55	100304-7	950493
7440-62-2	Vanadium	4410	ug/Kg	*	105	523	523	1	P	HSC	03/04/10 00:02	030310-2	958097
7440-66-6	Zinc J,I10a	45600	ug/Kg	*	344	1040	1040	1	P	JWJ	02/23/10 01:33	022210-1	950491

## Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
950491	950490	SW846 3050B	0.55	g	50	mL	02/20/10	BCD1
950493	950492	SW846 3050B	0.514	g	50	mL	02/20/10	BCD1
951617	951616	SW846 7471A Prep	0.535	g	30	mL	02/19/10	TXB3
958097	958096	SW846 3050B	0.547	g	50	mL	02/27/10	FGA

KAL  
03/25/10

METALS  
-1-  
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1621-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 246437006

BASIS: Dry Weight

DATE COLLECTED 02-FEB-10

CLIENT ID: RE15-10-8351

LEVEL: Low

DATE RECEIVED 06-FEB-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 J+,16b	2880000	ug/Kg	N	7470	22000	22000	1	P	JWJ	02/23/10 01:37	022210-1	950491
7440-36-0	Antimony U,14	677	ug/Kg	J	363	1100	1100	1	P	JWJ	02/23/10 01:37	022210-1	950491
7440-38-2	Arsenic	1.39	mg/kg		0.22	1.1	1.1	2	MS	BAJ	03/05/10 03:10	100304-4	950493
7440-39-3	Barium	45800	ug/Kg		110	550	550	1	P	JWJ	02/23/10 01:37	022210-1	950491
7440-41-7	Beryllium	0.723	mg/kg		0.022	0.11	0.11	2	MS	BAJ	03/05/10 03:10	100304-4	950493
7440-43-9	Cadmium	550	ug/Kg	U	110	550	550	1	P	JWJ	02/23/10 01:37	022210-1	950491
7440-70-2	Calcium J-,16a	785000	ug/Kg	*N	8330	26000	26000	1	P	HSC	03/04/10 00:09	030310-2	958097
7440-47-3	Chromium	13800	ug/Kg		165	550	550	1	P	JWJ	02/23/10 01:37	022210-1	950491
7440-48-4	Cobalt J,110a	1590	ug/Kg	*	156	520	520	1	P	HSC	03/04/10 00:09	030310-2	958097
7440-50-8	Copper J,110a	3470	ug/Kg	*	312	1040	1040	1	P	HSC	03/04/10 00:09	030310-2	958097
7439-89-6	Iron	7720000	ug/Kg	*	8790	27500	27500	1	P	JWJ	02/23/10 01:37	022210-1	950491
7439-92-1	Lead	7090	ug/Kg	*	275	1100	1100	1	P	JWJ	02/23/10 01:37	022210-1	950491
7439-95-4	Magnesium J+,16b	551000	ug/Kg	*N	9340	33000	33000	1	P	JWJ	02/23/10 01:37	022210-1	950491
7439-96-5	Manganese J+,16b	277000	ug/Kg	*N	220	1100	1100	1	P	JWJ	02/23/10 01:37	022210-1	950491
7439-97-6	Mercury	5.81	ug/kg	J	4.61	13.6	13.6	1	AV	JXL1	02/22/10 10:29	022210S1-9	951617
7440-02-0	Nickel	4.07	mg/kg		0.11	0.44	0.44	2	MS	BAJ	03/05/10 03:10	100304-4	950493
7440-09-7	Potassium	472000	ug/Kg	*N	7030	27500	27500	1	P	JWJ	02/23/10 01:37	022210-1	950491
7782-49-2	Selenium	1.1	mg/kg	U	0.55	1.1	1.1	2	MS	BAJ	03/05/10 10:21	100304-8	950493
7440-22-4	Silver	550	ug/Kg	U	110	550	550	1	P	JWJ	02/23/10 01:37	022210-1	950491
7440-23-5	Sodium U,14d	54200	ug/Kg		7690	27500	27500	1	P	JWJ	02/23/10 01:37	022210-1	950491
7440-28-0	Thallium	0.093	mg/kg	J	0.0659	0.22	0.22	2	MS	PRB	03/05/10 14:20	100305-3	950493
7440-61-1	Uranium	3.22	mg/kg	N	0.0145	0.044	0.044	2	MS	BAJ	03/05/10 08:56	100304-7	950493
7440-62-2	Vanadium	7670	ug/Kg	*	104	520	520	1	P	HSC	03/04/10 00:09	030310-2	958097
7440-66-6	Zinc J,110a	31800	ug/Kg	*	363	1100	1100	1	P	JWJ	02/23/10 01:37	022210-1	950491

## Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
950491	950490	SW846 3050B	0.536	g	50	mL	02/20/10	BCD1
950493	950492	SW846 3050B	0.536	g	50	mL	02/20/10	BCD1
951617	951616	SW846 7471A Prep	0.521	g	30	mL	02/19/10	TXB3
958097	958096	SW846 3050B	0.566	g	50	mL	02/27/10	FGA

KAL  
03/25/10

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

SDG No: 10-1621-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 246437007

BASIS: Dry Weight

DATE COLLECTED 02-FEB-10

CLIENT ID: RE15-10-8350

LEVEL: Low

DATE RECEIVED 06-FEB-10

MATRIX: SOIL

%SOLIDS: 77

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum J+,I6b	1800000	ug/Kg	N	8140	23900	23900	1	P	JWJ	02/23/10 01:40	022210-1	950491
7440-36-0	Antimony	1200	ug/Kg	U	395	1200	1200	1	P	JWJ	02/23/10 01:40	022210-1	950491
7440-38-2	Arsenic	1.21	mg/kg	J	0.251	1.25	1.25	2	MS	BAJ	03/05/10 03:14	100304-4	950493
7440-39-3	Barium	36900	ug/Kg		120	599	599	1	P	JWJ	02/23/10 01:40	022210-1	950491
7440-41-7	Beryllium	0.731	mg/kg		0.0251	0.125	0.125	2	MS	BAJ	03/05/10 03:14	100304-4	950493
7440-43-9	Cadmium	599	ug/Kg	U	120	599	599	1	P	JWJ	02/23/10 01:40	022210-1	950491
7440-70-2	Calcium J-,I6a	897000	ug/Kg	*N	10200	31900	31900	1	P	HSC	03/04/10 00:16	030310-2	958097
7440-47-3	Chromium	12800	ug/Kg		180	599	599	1	P	JWJ	02/23/10 01:40	022210-1	950491
7440-48-4	Cobalt J,I10a	1550	ug/Kg	*	192	639	639	1	P	HSC	03/04/10 00:16	030310-2	958097
7440-50-8	Copper J,I10a	3450	ug/Kg	*	383	1280	1280	1	P	HSC	03/04/10 00:16	030310-2	958097
7439-89-6	Iron	6040000	ug/Kg	*	9580	29900	29900	1	P	JWJ	02/23/10 01:40	022210-1	950491
7439-92-1	Lead	4760	ug/Kg	*	299	1200	1200	1	P	JWJ	02/23/10 01:40	022210-1	950491
7439-95-4	Magnesium J+,I6b	380000	ug/Kg	*N	10200	35900	35900	1	P	JWJ	02/23/10 01:40	022210-1	950491
7439-96-5	Mangancsc J+,I6b	277000	ug/Kg	*N	239	1200	1200	1	P	JWJ	02/23/10 01:40	022210-1	950491
7439-97-6	Mercury	7.33	ug/kg	J	5.07	14.9	14.9	1	AV	JXL1	02/22/10 10:31	022210S1-9	951617
7440-02-0	Nickel	2.84	mg/kg		0.125	0.501	0.501	2	MS	BAJ	03/05/10 03:14	100304-4	950493
7440-09-7	Potassium	386000	ug/Kg	*N	7660	29900	29900	1	P	JWJ	02/23/10 01:40	022210-1	950491
7782-49-2	Selenium	1.25	mg/kg	U	0.626	1.25	1.25	2	MS	BAJ	03/05/10 10:23	100304-8	950493
7440-22-4	Silver	599	ug/Kg	U	120	599	599	1	P	JWJ	02/23/10 01:40	022210-1	950491
7440-23-5	Sodium	81900	ug/Kg		8380	29900	29900	1	P	JWJ	02/23/10 01:40	022210-1	950491
7440-28-0	Thallium	0.251	mg/kg	U	0.0752	0.251	0.251	2	MS	PRB	03/05/10 14:27	100305-3	950493
7440-61-1	Uranium	1.33	mg/kg	N	0.0165	0.0501	0.0501	2	MS	BAJ	03/05/10 08:58	100304-7	950493
7440-62-2	Vanadium	5430	ug/Kg	*	128	639	639	1	P	HSC	03/04/10 00:16	030310-2	958097
7440-66-6	Zinc J,I10a	28400	ug/Kg	*	395	1200	1200	1	P	JWJ	02/23/10 01:40	022210-1	950491

**Prep Information:**

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
950491	950490	SW846 3050B	0.543	g	50	mL	02/20/10	BCD1
950493	950492	SW846 3050B	0.519	g	50	mL	02/20/10	BCD1
951617	951616	SW846 7471A Prep	0.523	g	30	mL	02/19/10	TXB3
958097	958096	SW846 3050B	0.509	g	50	mL	02/27/10	FGA

KAL  
03/25/10

METALS  
-1-  
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1621-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 246437008

BASIS: Dry Weight

DATE COLLECTED 02-FEB-10

CLIENT ID: RE15-10-8357

LEVEL: Low

DATE RECEIVED 06-FEB-10

MATRIX: SOIL

%SOLIDS: 94

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum J+,I6b	2450000	ug/Kg	N	7090	20800	20800	1	P	JWJ	02/23/10 01:44	022210-1	950491
7440-36-0	Antimony U,I4	763	ug/Kg	J	344	1040	1040	1	P	JWJ	02/23/10 01:44	022210-1	950491
7440-38-2	Arsenic	0.972	mg/kg		0.194	0.97	0.97	2	MS	BAJ	03/05/10 03:17	100304-4	950493
7440-39-3	Barium	38000	ug/Kg		104	521	521	1	P	JWJ	02/23/10 01:44	022210-1	950491
7440-41-7	Beryllium	0.477	mg/kg		0.0194	0.097	0.097	2	MS	BAJ	03/05/10 03:17	100304-4	950493
7440-43-9	Cadmium	521	ug/Kg	U	104	521	521	1	P	JWJ	02/23/10 01:44	022210-1	950491
7440-70-2	Calcium J-,I6a	877000	ug/Kg	*N	8130	25400	25400	1	P	HSC	03/04/10 00:23	030310-2	958097
7440-47-3	Chromium	10500	ug/Kg		156	521	521	1	P	JWJ	02/23/10 01:44	022210-1	950491
7440-48-4	Cobalt J,I10a	1600	ug/Kg	*	152	508	508	1	P	HSC	03/04/10 00:23	030310-2	958097
7440-50-8	Copper J,I10a	3230	ug/Kg	*	305	1020	1020	1	P	HSC	03/04/10 00:23	030310-2	958097
7439-89-6	Iron	8780000	ug/Kg	*	8340	26100	26100	1	P	JWJ	02/23/10 01:44	022210-1	950491
7439-92-1	Lead	6200	ug/Kg	*	261	1040	1040	1	P	JWJ	02/23/10 01:44	022210-1	950491
7439-95-4	Magnesium J+,I6b	499000	ug/Kg	*N	8860	31300	31300	1	P	JWJ	02/23/10 01:44	022210-1	950491
7439-96-5	Manganese J+,I6b	291000	ug/Kg	*N	208	1040	1040	1	P	JWJ	02/23/10 01:44	022210-1	950491
7439-97-6	Mercury	12.2	ug/kg	U	4.16	12.2	12.2	1	AV	JXL1	02/22/10 10:33	022210S1-9	951617
7440-02-0	Nickel	3.09	mg/kg		0.097	0.388	0.388	2	MS	BAJ	03/05/10 03:17	100304-4	950493
7440-09-7	Potassium	497000	ug/Kg	*N	6670	26100	26100	1	P	JWJ	02/23/10 01:44	022210-1	950491
7782-49-2	Selenium	0.970	mg/kg	U	0.485	0.97	0.97	2	MS	BAJ	03/05/10 10:25	100304-8	950493
7440-22-4	Silver	521	ug/Kg	U	104	521	521	1	P	JWJ	02/23/10 01:44	022210-1	950491
7440-23-5	Sodium U,I4d	61900	ug/Kg		7300	26100	26100	1	P	JWJ	02/23/10 01:44	022210-1	950491
7440-28-0	Thallium	0.194	mg/kg	U	0.0582	0.194	0.194	2	MS	PRB	03/05/10 14:29	100305-3	950493
7440-61-1	Uranium	1.91	mg/kg	N	0.0128	0.0388	0.0388	2	MS	BAJ	03/05/10 09:00	100304-7	950493
7440-62-2	Vanadium	6500	ug/Kg	*	102	508	508	1	P	HSC	03/04/10 00:23	030310-2	958097
7440-66-6	Zinc J,I10a	41900	ug/Kg	*	344	1040	1040	1	P	JWJ	02/23/10 01:44	022210-1	950491

## Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
950491	950490	SW846 3050B	0.51	g	50	mL	02/20/10	BCD1
950493	950492	SW846 3050B	0.548	g	50	mL	02/20/10	BCD1
951617	951616	SW846 7471A Prep	0.522	g	30	mL	02/19/10	TXB3
958097	958096	SW846 3050B	0.523	g	50	mL	02/27/10	FGA

KAL  
03/25/10

METALS  
-1-  
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1621-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 246437009

BASIS: Dry Weight

DATE COLLECTED 02-FEB-10

CLIENT ID: RE15-10-8338

LEVEL: Low

DATE RECEIVED 06-FEB-10

MATRIX: SOIL

%SOLIDS: 78

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum J+,I6b	2500000	ug/Kg	N	8040	23600	23600	1	P	JWJ	02/23/10 01:48	022210-1	950491
7440-36-0	Antimony U,I4	690	ug/Kg	J	390	1180	1180	1	P	JWJ	02/23/10 01:48	022210-1	950491
7440-38-2	Arsenic	1.22	mg/kg		0.244	1.22	1.22	2	MS	BAJ	03/05/10 03:28	100304-4	950493
7440-39-3	Barium	41600	ug/Kg		118	591	591	1	P	JWJ	02/23/10 01:48	022210-1	950491
7440-41-7	Beryllium	0.520	mg/kg		0.0244	0.122	0.122	2	MS	BAJ	03/05/10 03:28	100304-4	950493
7440-43-9	Cadmium	591	ug/Kg	U	118	591	591	1	P	JWJ	02/23/10 01:48	022210-1	950491
7440-70-2	Calcium J-,I6a	608000	ug/Kg	*N	10200	32000	32000	1	P	HSC	03/04/10 00:44	030310-2	958097
7440-47-3	Chromium	14500	ug/Kg		177	591	591	1	P	JWJ	02/23/10 01:48	022210-1	950491
7440-48-4	Cobalt J,I10a	1570	ug/Kg	*	192	639	639	1	P	HSC	03/04/10 00:44	030310-2	958097
7440-50-8	Copper J,I10a	2340	ug/Kg	*	383	1280	1280	1	P	HSC	03/04/10 00:44	030310-2	958097
7439-89-6	Iron	8820000	ug/Kg	*	9460	29500	29500	1	P	JWJ	02/23/10 01:48	022210-1	950491
7439-92-1	Lead	7320	ug/Kg	*	295	1180	1180	1	P	JWJ	02/23/10 01:48	022210-1	950491
7439-95-4	Magnesium J+,I6b	472000	ug/Kg	*N	10000	35500	35500	1	P	JWJ	02/23/10 01:48	022210-1	950491
7439-96-5	Manganese J+,I6b	282000	ug/Kg	*N	236	1180	1180	1	P	JWJ	02/23/10 01:48	022210-1	950491
7439-97-6	Mercury	14.6	ug/kg	U	4.98	14.6	14.6	1	AV	JXL1	02/22/10 10:39	022210S1-9	951617
7440-02-0	Nickel	3.1	mg/kg		0.122	0.488	0.488	2	MS	BAJ	03/05/10 03:28	100304-4	950493
7440-09-7	Potassium	429000	ug/Kg	*N	7560	29500	29500	1	P	JWJ	02/23/10 01:48	022210-1	950491
7782-49-2	Selenium	1.22	mg/kg	U	0.61	1.22	1.22	2	MS	BAJ	03/05/10 10:27	100304-8	950493
7440-22-4	Silver	591	ug/Kg	U	118	591	591	1	P	JWJ	02/23/10 01:48	022210-1	950491
7440-23-5	Sodium U,I4d	57400	ug/Kg		8270	29500	29500	1	P	JWJ	02/23/10 01:48	022210-1	950491
7440-28-0	Thallium	0.244	mg/kg	U	0.0732	0.244	0.244	2	MS	PRB	03/05/10 14:31	100305-3	950493
7440-61-1	Uranium	4	mg/kg	N	0.0161	0.0488	0.0488	2	MS	BAJ	03/05/10 09:05	100304-7	950493
7440-62-2	Vanadium	5900	ug/Kg	*	128	639	639	1	P	HSC	03/04/10 00:44	030310-2	958097
7440-66-6	Zinc J,I10a	38000	ug/Kg	*	390	1180	1180	1	P	JWJ	02/23/10 01:48	022210-1	950491

## Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
950491	950490	SW846 3050B	0.545	g	50	mL	02/20/10	BCD1
950493	950492	SW846 3050B	0.528	g	50	mL	02/20/10	BCD1
951617	951616	SW846 7471A Prep	0.528	g	30	mL	02/19/10	TXB3
958097	958096	SW846 3050B	0.504	g	50	mL	02/27/10	FGA

KAL  
03/25/10

METALS  
-1-  
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1621-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 246437010

BASIS: Dry Weight

DATE COLLECTED 02-FEB-10

CLIENT ID: RE15-10-8336

LEVEL: Low

DATE RECEIVED 06-FEB-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 J+,I6b	2260000	ug/Kg	N	7690	22600	22600	1	P	JWJ	02/23/10 01:51	022210-1	950491
7440-36-0	Antimony U,I4	637	ug/Kg	J	373	1130	1130	1	P	JWJ	02/23/10 01:51	022210-1	950491
7440-38-2	Arsenic	0.787	mg/kg	J	0.227	1.13	1.13	2	MS	BAJ	03/05/10 03:32	100304-4	950493
7440-39-3	Barium	30900	ug/Kg		113	566	566	1	P	JWJ	02/23/10 01:51	022210-1	950491
7440-41-7	Beryllium	0.366	mg/kg		0.0227	0.113	0.113	2	MS	BAJ	03/05/10 03:32	100304-4	950493
7440-43-9	Cadmium	566	ug/Kg	U	113	566	566	1	P	JWJ	02/23/10 01:51	022210-1	950491
7440-70-2	Calcium J-,I6a	587000	ug/Kg	*N	9370	29300	29300	1	P	HSC	03/04/10 00:52	030310-2	958097
7440-47-3	Chromium	7440	ug/Kg		170	566	566	1	P	JWJ	02/23/10 01:51	022210-1	950491
7440-48-4	Cobalt J,I10a	1090	ug/Kg	*	176	585	585	1	P	HSC	03/04/10 00:52	030310-2	958097
7440-50-8	Copper J,I10a	1630	ug/Kg	*	351	1170	1170	1	P	HSC	03/04/10 00:52	030310-2	958097
7439-89-6	Iron	6070000	ug/Kg	*	9050	28300	28300	1	P	JWJ	02/23/10 01:51	022210-1	950491
7439-92-1	Lead	8570	ug/Kg	*	283	1130	1130	1	P	JWJ	02/23/10 01:51	022210-1	950491
7439-95-4	Magnesium J+,I6b	443000	ug/Kg	*N	9620	33900	33900	1	P	JWJ	02/23/10 01:51	022210-1	950491
7439-96-5	Manganese J+,I6b	180000	ug/Kg	*N	226	1130	1130	1	P	JWJ	02/23/10 01:51	022210-1	950491
7439-97-6	Mercury	14.2	ug/kg	U	4.81	14.2	14.2	1	AV	JXL1	02/22/10 10:41	022210S1-9	951617
7440-02-0	Nickel	2.41	mg/kg		0.113	0.453	0.453	2	MS	BAJ	03/05/10 03:32	100304-4	950493
7440-09-7	Potassium	391000	ug/Kg	*N	7240	28300	28300	1	P	JWJ	02/23/10 01:51	022210-1	950491
7782-49-2	Selenium	1.13	mg/kg	U	0.567	1.13	1.13	2	MS	BAJ	03/05/10 10:34	100304-8	950493
7440-22-4	Silver	566	ug/Kg	U	113	566	566	1	P	JWJ	02/23/10 01:51	022210-1	950491
7440-23-5	Sodium U,I4d	48800	ug/Kg		7920	28300	28300	1	P	JWJ	02/23/10 01:51	022210-1	950491
7440-28-0	Thallium	0.227	mg/kg	U	0.068	0.227	0.227	2	MS	PRB	03/05/10 14:33	100305-3	950493
7440-61-1	Uranium	1.52	mg/kg	N	0.015	0.0453	0.0453	2	MS	BAJ	03/05/10 09:07	100304-7	950493
7440-62-2	Vanadium	4830	ug/Kg	*	117	585	585	1	P	HSC	03/04/10 00:52	030310-2	958097
7440-66-6	Zinc J,I10a	25400	ug/Kg	*	373	1130	1130	1	P	JWJ	02/23/10 01:51	022210-1	950491

## Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
950491	950490	SW846 3050B	0.536	g	50	mL	02/20/10	BCD1
950493	950492	SW846 3050B	0.535	g	50	mL	02/20/10	BCD1
951617	951616	SW846 7471A Prep	0.514	g	30	mL	02/19/10	TXB3
958097	958096	SW846 3050B	0.518	g	50	mL	02/27/10	FGA

KAL  
03/25/10



METALS  
-1-  
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1621-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 246437011

BASIS: Dry Weight

DATE COLLECTED 02-FEB-10

CLIENT ID: RE15-10-8339

LEVEL: Low

DATE RECEIVED 06-FEB-10

MATRIX: SOIL

%SOLIDS: 94

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum J+,I6b	1980000	ug/Kg	N	6680	19700	19700	1	P	JWJ	02/23/10 01:55	022210-1	950491
7440-36-0	Antimony U,I4	430	ug/Kg	J	324	983	983	1	P	JWJ	02/23/10 01:55	022210-1	950491
7440-38-2	Arsenic	0.853	mg/kg	J	0.202	1.01	1.01	2	MS	BAJ	03/05/10 03:36	100304-4	950493
7440-39-3	Barium	29600	ug/Kg		98.3	492	492	1	P	JWJ	02/23/10 01:55	022210-1	950491
7440-41-7	Beryllium	0.435	mg/kg		0.0202	0.101	0.101	2	MS	BAJ	03/05/10 03:36	100304-4	950493
7440-43-9	Cadmium	492	ug/Kg	U	98.3	492	492	1	P	JWJ	02/23/10 01:55	022210-1	950491
7440-70-2	Calcium J-,I6a	558000	ug/Kg	*N	8460	26400	26400	1	P	HSC	03/04/10 00:59	030310-2	958097
7440-47-3	Chromium	9120	ug/Kg		147	492	492	1	P	JWJ	02/23/10 01:55	022210-1	950491
7440-48-4	Cobalt J,I10a	1340	ug/Kg	*	159	529	529	1	P	HSC	03/04/10 00:59	030310-2	958097
7440-50-8	Copper J,I10a	2180	ug/Kg	*	317	1060	1060	1	P	HSC	03/04/10 00:59	030310-2	958097
7439-89-6	Iron	6760000	ug/Kg	*	7860	24600	24600	1	P	JWJ	02/23/10 01:55	022210-1	950491
7439-92-1	Lead	5730	ug/Kg	*	246	983	983	1	P	JWJ	02/23/10 01:55	022210-1	950491
7439-95-4	Magnesium J+,I6b	369000	ug/Kg	*N	8360	29500	29500	1	P	JWJ	02/23/10 01:55	022210-1	950491
7439-96-5	Manganese J+,I6b	200000	ug/Kg	*N	197	983	983	1	P	JWJ	02/23/10 01:55	022210-1	950491
7439-97-6	Mercury	12.4	ug/kg	U	4.21	12.4	12.4	1	AV	JXL1	02/22/10 10:43	022210S1-9	951617
7440-02-0	Nickel	2.33	mg/kg		0.101	0.404	0.404	2	MS	BAJ	03/05/10 03:36	100304-4	950493
7440-09-7	Potassium	308000	ug/Kg	*N	6290	24600	24600	1	P	JWJ	02/23/10 01:55	022210-1	950491
7782-49-2	Selenium	1.01	mg/kg	U	0.506	1.01	1.01	2	MS	BAJ	03/05/10 10:36	100304-8	950493
7440-22-4	Silver	492	ug/Kg	U	98.3	492	492	1	P	JWJ	02/23/10 01:55	022210-1	950491
7440-23-5	Sodium U,I4d	50900	ug/Kg		6880	24600	24600	1	P	JWJ	02/23/10 01:55	022210-1	950491
7440-28-0	Thallium	0.202	mg/kg	U	0.0607	0.202	0.202	2	MS	PRB	03/05/10 14:35	100305-3	950493
7440-61-1	Uranium	2.12	mg/kg	N	0.0133	0.0404	0.0404	2	MS	BAJ	03/05/10 09:08	100304-7	950493
7440-62-2	Vanadium	4660	ug/Kg	*	106	529	529	1	P	HSC	03/04/10 00:59	030310-2	958097
7440-66-6	Zinc J,I10a	29900	ug/Kg	*	324	983	983	1	P	JWJ	02/23/10 01:55	022210-1	950491

## Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
950491	950490	SW846 3050B	0.541	g	50	mL	02/20/10	BCD1
950493	950492	SW846 3050B	0.526	g	50	mL	02/20/10	BCD1
951617	951616	SW846 7471A Prep	0.516	g	30	mL	02/19/10	TXB3
958097	958096	SW846 3050B	0.503	g	50	mL	02/27/10	FGA

KAL  
03/25/10

METALS  
-1-  
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1621-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 246437012

BASIS: Dry Weight

DATE COLLECTED 02-FEB-10

CLIENT ID: RE15-10-8337

LEVEL: Low

DATE RECEIVED 06-FEB-10

MATRIX: SOIL

%SOLIDS: 89

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum J+,I6b	2470000	ug/Kg	N	7350	21600	21600	1	P	JWJ	02/23/10 01:58	022210-1	950491
7440-36-0	Antimony U,I4	751	ug/Kg	J	357	1080	1080	1	P	JWJ	02/23/10 01:58	022210-1	950491
7440-38-2	Arsenic	1.45	mg/kg		0.206	1.03	1.03	2	MS	BAJ	03/05/10 03:39	100304-4	950493
7440-39-3	Barium	39700	ug/Kg		108	541	541	1	P	JWJ	02/23/10 01:58	022210-1	950491
7440-41-7	Beryllium	0.456	mg/kg		0.0206	0.103	0.103	2	MS	BAJ	03/05/10 03:39	100304-4	950493
7440-43-9	Cadmium	541	ug/Kg	U	108	541	541	1	P	JWJ	02/23/10 01:58	022210-1	950491
7440-70-2	Calcium J-,I6a	561000	ug/Kg	*N	8600	26900	26900	1	P	HSC	03/04/10 01:06	030310-2	958097
7440-47-3	Chromium	23600	ug/Kg		162	541	541	1	P	JWJ	02/23/10 01:58	022210-1	950491
7440-48-4	Cobalt J,I10a	1070	ug/Kg	*	161	538	538	1	P	HSC	03/04/10 01:06	030310-2	958097
7440-50-8	Copper J,I10a	1760	ug/Kg	*	323	1080	1080	1	P	HSC	03/04/10 01:06	030310-2	958097
7439-89-6	Iron	6740000	ug/Kg	*	8650	27000	27000	1	P	JWJ	02/23/10 01:58	022210-1	950491
7439-92-1	Lead	7260	ug/Kg	*	270	1080	1080	1	P	JWJ	02/23/10 01:58	022210-1	950491
7439-95-4	Magnesium J+,I6b	519000	ug/Kg	*N	9190	32400	32400	1	P	JWJ	02/23/10 01:58	022210-1	950491
7439-96-5	Manganese J+,I6b	260000	ug/Kg	*N	216	1080	1080	1	P	JWJ	02/23/10 01:58	022210-1	950491
7439-97-6	Mercury	12.4	ug/kg	U	4.21	12.4	12.4	1	AV	JXL1	02/22/10 10:45	022210S1-9	951617
7440-02-0	Nickel	3.59	mg/kg		0.103	0.411	0.411	2	MS	BAJ	03/05/10 03:39	100304-4	950493
7440-09-7	Potassium	441000	ug/Kg	*N	6920	27000	27000	1	P	JWJ	02/23/10 01:58	022210-1	950491
7782-49-2	Selenium	1.03	mg/kg	U	0.514	1.03	1.03	2	MS	BAJ	03/05/10 10:38	100304-8	950493
7440-22-4	Silver	541	ug/Kg	U	108	541	541	1	P	JWJ	02/23/10 01:58	022210-1	950491
7440-23-5	Sodium U,I4d	66900	ug/Kg		7570	27000	27000	1	P	JWJ	02/23/10 01:58	022210-1	950491
7440-28-0	Thallium	0.206	mg/kg	U	0.0617	0.206	0.206	2	MS	PRB	03/05/10 14:38	100305-3	950493
7440-61-1	Uranium	3.3	mg/kg	N	0.0136	0.0411	0.0411	2	MS	BAJ	03/05/10 09:10	100304-7	950493
7440-62-2	Vanadium	4170	ug/Kg	*	108	538	538	1	P	HSC	03/04/10 01:06	030310-2	958097
7440-66-6	Zinc J,I10a	28000	ug/Kg	*	357	1080	1080	1	P	JWJ	02/23/10 01:58	022210-1	950491

## Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
950491	950490	SW846 3050B	0.522	g	50	mL	02/20/10	BCD1
950493	950492	SW846 3050B	0.549	g	50	mL	02/20/10	BCD1
951617	951616	SW846 7471A Prep	0.547	g	30	mL	02/19/10	TXB3
958097	958096	SW846 3050B	0.525	g	50	mL	02/27/10	FGA

KAL  
03/25/10

METALS  
-1-  
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1621-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 246437013

BASIS: Dry Weight

DATE COLLECTED 02-FEB-10

CLIENT ID: RE15-10-8375

LEVEL: Low

DATE RECEIVED 06-FEB-10

MATRIX: SOIL

%SOLIDS: 80

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum J+,I6b	2240000	ug/Kg	N	8050	23700	23700	1	P	JWJ	02/23/10 02:02	022210-1	950491
7440-36-0	Antimony U,I4	568	ug/Kg	J	391	1180	1180	1	P	JWJ	02/23/10 02:02	022210-1	950491
7440-38-2	Arsenic	0.939	mg/kg	J	0.24	1.2	1.2	2	MS	BAJ	03/05/10 03:43	100304-4	950493
7440-39-3	Barium	34000	ug/Kg		118	592	592	1	P	JWJ	02/23/10 02:02	022210-1	950491
7440-41-7	Beryllium	0.457	mg/kg		0.024	0.12	0.12	2	MS	BAJ	03/05/10 03:43	100304-4	950493
7440-43-9	Cadmium	592	ug/Kg	U	118	592	592	1	P	JWJ	02/23/10 02:02	022210-1	950491
7440-70-2	Calcium J-,I6a	832000	ug/Kg	*N	9400	29400	29400	1	P	HSC	03/04/10 01:13	030310-2	958097
7440-47-3	Chromium	7860	ug/Kg		178	592	592	1	P	JWJ	02/23/10 02:02	022210-1	950491
7440-48-4	Cobalt J,I10a	1680	ug/Kg	*	176	588	588	1	P	HSC	03/04/10 01:13	030310-2	958097
7440-50-8	Copper J,I10a	2930	ug/Kg	*	353	1180	1180	1	P	HSC	03/04/10 01:13	030310-2	958097
7439-89-6	Iron	7180000	ug/Kg	*	9470	29600	29600	1	P	JWJ	02/23/10 02:02	022210-1	950491
7439-92-1	Lead	5540	ug/Kg	*	296	1180	1180	1	P	JWJ	02/23/10 02:02	022210-1	950491
7439-95-4	Magnesium J+,I6b	469000	ug/Kg	*N	10100	35500	35500	1	P	JWJ	02/23/10 02:02	022210-1	950491
7439-96-5	Manganese J+,I6b	205000	ug/Kg	*N	237	1180	1180	1	P	JWJ	02/23/10 02:02	022210-1	950491
7439-97-6	Mercury	14.1	ug/kg	U	4.8	14.1	14.1	1	AV	JXL1	02/22/10 10:47	022210S1-9	951617
7440-02-0	Nickel	2.97	mg/kg		0.12	0.479	0.479	2	MS	BAJ	03/05/10 03:43	100304-4	950493
7440-09-7	Potassium	444000	ug/Kg	*N	7580	29600	29600	1	P	JWJ	02/23/10 02:02	022210-1	950491
7782-49-2	Selenium	1.2	mg/kg	U	0.599	1.2	1.2	2	MS	BAJ	03/05/10 10:40	100304-8	950493
7440-22-4	Silver	592	ug/Kg	U	118	592	592	1	P	JWJ	02/23/10 02:02	022210-1	950491
7440-23-5	Sodium U,I4d	36100	ug/Kg		8290	29600	29600	1	P	JWJ	02/23/10 02:02	022210-1	950491
7440-28-0	Thallium	0.240	mg/kg	U	0.0719	0.24	0.24	2	MS	PRB	03/05/10 14:40	100305-3	950493
7440-61-1	Uranium	3.44	mg/kg	N	0.0158	0.0479	0.0479	2	MS	BAJ	03/05/10 09:12	100304-7	950493
7440-62-2	Vanadium	7950	ug/Kg	*	118	588	588	1	P	HSC	03/04/10 01:13	030310-2	958097
7440-66-6	Zinc J,I10a	30300	ug/Kg	*	391	1180	1180	1	P	JWJ	02/23/10 02:02	022210-1	950491

## Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
950491	950490	SW846 3050B	0.526	g	50	mL	02/20/10	BCD1
950493	950492	SW846 3050B	0.52	g	50	mL	02/20/10	BCD1
951617	951616	SW846 7471A Prep	0.53	g	30	mL	02/19/10	TXB3
958097	958096	SW846 3050B	0.53	g	50	mL	02/27/10	FGA

KAL  
03/25/10

METALS  
-1-  
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1621-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 246437014

BASIS: Dry Weight

DATE COLLECTED 02-FEB-10

CLIENT ID: RE15-10-8374

LEVEL: Low

DATE RECEIVED 06-FEB-10

MATRIX: SOIL

%SOLIDS: 93.7

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum J+,I6b	2150000	ug/Kg	N	6540	19200	19200	1	P	JWJ	02/23/10 02:06	022210-1	950491
7440-36-0	Antimony U,I4	558	ug/Kg	J	317	962	962	1	P	JWJ	02/23/10 02:06	022210-1	950491
7440-38-2	Arsenic	1.05	mg/kg		0.197	0.983	0.983	2	MS	BAJ	03/05/10 03:47	100304-4	950493
7440-39-3	Barium	32000	ug/Kg		96.2	481	481	1	P	JWJ	02/23/10 02:06	022210-1	950491
7440-41-7	Beryllium	0.578	mg/kg		0.0197	0.0983	0.0983	2	MS	BAJ	03/05/10 03:47	100304-4	950493
7440-43-9	Cadmium	481	ug/Kg	U	96.2	481	481	1	P	JWJ	02/23/10 02:06	022210-1	950491
7440-70-2	Calcium J-,I6a	538000	ug/Kg	*N	8400	26300	26300	1	P	HSC	03/04/10 01:20	030310-2	958097
7440-47-3	Chromium	10400	ug/Kg		144	481	481	1	P	JWJ	02/23/10 02:06	022210-1	950491
7440-48-4	Cobalt J,I10a	1150	ug/Kg	*	158	525	525	1	P	HSC	03/04/10 01:20	030310-2	958097
7440-50-8	Copper J,I10a	2120	ug/Kg	*	315	1050	1050	1	P	HSC	03/04/10 01:20	030310-2	958097
7439-89-6	Iron	7870000	ug/Kg	*	7690	24000	24000	1	P	JWJ	02/23/10 02:06	022210-1	950491
7439-92-1	Lead	5940	ug/Kg	*	240	962	962	1	P	JWJ	02/23/10 02:06	022210-1	950491
7439-95-4	Magnesium J+,I6b	402000	ug/Kg	*N	8170	28800	28800	1	P	JWJ	02/23/10 02:06	022210-1	950491
7439-96-5	Manganese J+,I6b	266000	ug/Kg	*N	192	962	962	1	P	JWJ	02/23/10 02:06	022210-1	950491
7439-97-6	Mercury	5.14	ug/kg	J	3.99	11.7	11.7	1	AV	JXL1	02/22/10 10:49	022210S1-9	951617
7440-02-0	Nickel	3.4	mg/kg		0.0983	0.393	0.393	2	MS	BAJ	03/05/10 03:47	100304-4	950493
7440-09-7	Potassium	337000	ug/Kg	*N	6150	24000	24000	1	P	JWJ	02/23/10 02:06	022210-1	950491
7782-49-2	Selenium	0.983	mg/kg	U	0.491	0.983	0.983	2	MS	BAJ	03/05/10 10:42	100304-8	950493
7440-22-4	Silver	481	ug/Kg	U	96.2	481	481	1	P	JWJ	02/23/10 02:06	022210-1	950491
7440-23-5	Sodium U,I4d	64900	ug/Kg		6730	24000	24000	1	P	JWJ	02/23/10 02:06	022210-1	950491
7440-28-0	Thallium	0.197	mg/kg	U	0.059	0.197	0.197	2	MS	PRB	03/05/10 14:42	100305-3	950493
7440-61-1	Uranium	1.79	mg/kg	N	0.013	0.0393	0.0393	2	MS	BAJ	03/05/10 09:13	100304-7	950493
7440-62-2	Vanadium	5630	ug/Kg	*	105	525	525	1	P	HSC	03/04/10 01:20	030310-2	958097
7440-66-6	Zinc J,I10a	36200	ug/Kg	*	317	962	962	1	P	JWJ	02/23/10 02:06	022210-1	950491

## Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
950491	950490	SW846 3050B	0.555	g	50	mL	02/20/10	BCD1
950493	950492	SW846 3050B	0.543	g	50	mL	02/20/10	BCD1
951617	951616	SW846 7471A Prep	0.546	g	30	mL	02/19/10	TXB3
958097	958096	SW846 3050B	0.508	g	50	mL	02/27/10	FGA

KAL  
03/25/10

**DATA VALIDATION COVER SHEET****5120-1****Data Validation Cover Sheet**

Records Use only

**Section I.**REQUEST NUMBER: 10-1621 VALIDATION DATE: 03/25/10 LAB CODE: GELCONTRACT LABORATORY NAME: GEL Laboratories LLCVALIDATOR: Kevin A. Lambert ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- |   |  |   |  |
|---|--|---|--|
| <input type="checkbox"/> TPH-GRO                      | <input type="checkbox"/> HIGH EXPLOSIVES | <input type="checkbox"/> DIOXIN FURANS          | <input type="checkbox"/> LCMSMS PERCHLORATES |
| <input type="checkbox"/> TPH-DRO                      | <input type="checkbox"/> METALS          | <input type="checkbox"/> PCB CONGENERS          | <input type="checkbox"/> ORGANOCHLORINE      |
| <input checked="" type="checkbox"/> GENERAL CHEMISTRY | <input type="checkbox"/> RADIOCHEMISTRY  | <input type="checkbox"/> LCMSMS HIGH EXPLOSIVES | PESTICIDES/POLYCHLORINATED BIPHENYLS         |
| <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 checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | 4. SAMPLE CHROMATOGRAMS     | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 9. TICS FORMS            |
| <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 5. STANDARD CHROMATOGRAMS   | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 10. TICS MASS SPECTRA    |


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

1. It should be noted that the parent samples for water matrix QC analyses and soil matrix QC analyses except pH analysis for batch 950208 were LANL samples from other RNs. No sample data were qualified as a result.


Reviewed by: Mary DonovanLevel: IDate: 03/25/10VALIDATOR'S SIGNATURE: Kevin A. Lambert DATE: 03/25/10

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 (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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	13. The sample result is ≤5X the concentration of the related analyte in the method blank.	U, I4	N/A

GENERAL CHEMISTRY ANALYTICAL DATA VALIDATION CHECKLIST	
<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"/>	14. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5X.	N/A	J, I4a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	15. The sample result is ≤5X the concentration of the related analyte in the instrument blank and continuing calibration blank.	U, I4b	N/A
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	16. Continuing calibration blanks were not analyzed at the appropriate method frequency.	UJ, I4c	J, I4c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	17. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	U, I4d	N/A
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	18. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, I4e	R, I4e
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	19. The associate matrix spike recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, I6	R, I6
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	20. The associated matrix spike recovery was below the Lower Acceptance Limit (LAL) but >10%. Follow the external laboratory limits located within the associated data package.	UJ, I6a	J-, I6a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	21. The associated matrix spike recovery was above the Upper Acceptance Limit (UAL). Follow the external laboratory limits located within the associated data package.	UJ, I6b	J+, I6b
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	22. Required matrix spike information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. If LCS information is present, do not reject. Qualify data based on LCS information.	R, I6c	R, I6c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	23. The sample and/or the duplicate sample results RPD is not within the acceptance limits. Follow the external laboratory limits located within the associated data package.	UJ, I10b	J, I10b

GENERAL CHEMISTRY ANALYTICAL DATA VALIDATION CHECKLIST	
<b>5120-2</b>  <b>General Chemistry 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"/>	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 19, 2010

Client SDG: 10-1621

Client Sample ID: RE15-10-8378  
Sample ID: 246436001  
Matrix: W  
Collect Date: 02-FEB-10 12:00  
Receive Date: 06-FEB-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	U	ND	1.66	5.00	ug/L	1	AXC2	02/11/10	1034	949511	1

### The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/11/10	0838	949509

### 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: March 2, 2010

Client SDG: 10-1621-1

Client Sample ID: RE15-10-8354  
Sample ID: 246437001  
Matrix: R  
Collect Date: 02-FEB-10 12:00  
Receive Date: 06-FEB-10  
Collector: Client  
Moisture: 22%

Project: LANL01004  
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Electrode Analysis</b>											
<i>SW9045C pH "As Received"</i>											
pH at Temp 20.3C	H	6.81	0.010	0.100	SU	1	EXF1	02/08/10	1342	950202	1
<b>Flow Injection Analysis</b>											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	85.5	314	ug/kg	1	AXC2	02/16/10	1315	950200	2
<b>Ion Chromatography</b>											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N	U	ND	0.380	1.27	mg/kg	1	GXM	02/19/10	2029	955298	3

**The following Prep Methods were performed**

Method	Description	Analyst	Date	Time	Prep Batch
EPA 300.0 PREP	EPA 300.0 Total Anions in Soil	GXM3	02/19/10	1125	955296
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/15/10	1536	950199

**The following Analytical Methods were performed**

Method	Description	Analyst Comments
1	SW846 9045C/9045D	
2	SW846 9012A	
3	EPA 300.0	

## 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: March 2, 2010

Client SDG: 10-1621-1

Client Sample ID: RE15-10-8356  
Sample ID: 246437002  
Matrix: R  
Collect Date: 02-FEB-10 12:00  
Receive Date: 06-FEB-10  
Collector: Client  
Moisture: 14.7%

Project: LANL01004  
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Electrode Analysis</b>											
<i>SW9045C pH "As Received"</i>											
pH at Temp 20.3C	H	7.04	0.010	0.100	SU	1	EXF1	02/08/10	1344	950202	1
<b>Flow Injection Analysis</b>											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	79.7	293	ug/kg	1	AXC2	02/16/10	1316	950200	2
<b>Ion Chromatography</b>											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N	U	ND	0.347	1.16	mg/kg	1	GXM	02/19/10	2214	955298	3

**The following Prep Methods were performed**

Method	Description	Analyst	Date	Time	Prep Batch
EPA 300.0 PREP	EPA 300.0 Total Anions in Soil	GXM3	02/19/10	1125	955296
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/15/10	1536	950199

**The following Analytical Methods were performed**

Method	Description	Analyst Comments
1	SW846 9045C/9045D	
2	SW846 9012A	
3	EPA 300.0	

## 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: March 2, 2010

Client SDG: 10-1621-1

Client Sample ID: RE15-10-8353  
Sample ID: 246437003  
Matrix: R  
Collect Date: 02-FEB-10 12:00  
Receive Date: 06-FEB-10  
Collector: Client  
Moisture: 13%

Project: LANL01004  
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Electrode Analysis</b>											
<i>SW9045C pH "As Received"</i>											
pH at Temp 20.1C	H	6.76	0.010	0.100	SU	1	EXF1	02/08/10	1345	950202	1
<b>Flow Injection Analysis</b>											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	75.2	276	ug/kg	1	AXC2	02/16/10	1320	950200	2
<b>Ion Chromatography</b>											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N	U	ND	0.342	1.14	mg/kg	1	GXM	02/19/10	2240	955298	3

**The following Prep Methods were performed**

Method	Description	Analyst	Date	Time	Prep Batch
EPA 300.0 PREP	EPA 300.0 Total Anions in Soil	GXM3	02/19/10	1125	955296
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/15/10	1536	950199

**The following Analytical Methods were performed**

Method	Description	Analyst Comments
1	SW846 9045C/9045D	
2	SW846 9012A	
3	EPA 300.0	

## 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: March 2, 2010

Client SDG: 10-1621-1

Client Sample ID: RE15-10-8352  
Sample ID: 246437004  
Matrix: R  
Collect Date: 02-FEB-10 12:00  
Receive Date: 06-FEB-10  
Collector: Client  
Moisture: 23%

Project: LANL01004  
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Electrode Analysis</b>											
<i>SW9045C pH "As Received"</i>											
pH at Temp 20.3C	H	7.12	0.010	0.100	SU	1	EXF1	02/08/10	1349	950202	1
<b>Flow Injection Analysis</b>											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	78.9	290	ug/kg	1	AXC2	02/16/10	1321	950200	2
<b>Ion Chromatography</b>											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N	U	ND	0.385	1.28	mg/kg	1	GXM	02/19/10	2306	955298	3

**The following Prep Methods were performed**

Method	Description	Analyst	Date	Time	Prep Batch
EPA 300.0 PREP	EPA 300.0 Total Anions in Soil	GXM3	02/19/10	1125	955296
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/15/10	1536	950199

**The following Analytical Methods were performed**

Method	Description	Analyst Comments
1	SW846 9045C/9045D	
2	SW846 9012A	
3	EPA 300.0	

## 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: March 2, 2010

Client SDG: 10-1621-1

Client Sample ID: RE15-10-8355  
Sample ID: 246437005  
Matrix: R  
Collect Date: 02-FEB-10 12:00  
Receive Date: 06-FEB-10  
Collector: Client  
Moisture: 12.7%

Project: LANL01004  
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Electrode Analysis</b>											
<i>SW9045C pH "As Received"</i>											
pH at Temp 20.2C	H	7.21	0.010	0.100	SU	1	EXF1	02/08/10	1351	950202	1
<b>Flow Injection Analysis</b>											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	70.8	260	ug/kg	1	AXC2	02/16/10	1322	950200	2
<b>Ion Chromatography</b>											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N	U	ND	0.340	1.13	mg/kg	1	GXM	02/19/10	2332	955298	3

**The following Prep Methods were performed**

Method	Description	Analyst	Date	Time	Prep Batch
EPA 300.0 PREP	EPA 300.0 Total Anions in Soil	GXM3	02/19/10	1125	955296
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/15/10	1536	950199

**The following Analytical Methods were performed**

Method	Description	Analyst Comments
1	SW846 9045C/9045D	
2	SW846 9012A	
3	EPA 300.0	

## 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: March 2, 2010

Client SDG: 10-1621-1

Client Sample ID: RE15-10-8351  
Sample ID: 246437006  
Matrix: R  
Collect Date: 02-FEB-10 12:00  
Receive Date: 06-FEB-10  
Collector: Client  
Moisture: 15.1%

Project: LANL01004  
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Electrode Analysis</b>											
<i>SW9045C pH "As Received"</i>											
pH at Temp 20.5C	H	7.24	0.010	0.100	SU	1	EXF1	02/08/10	1353	950202	1
<b>Flow Injection Analysis</b>											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	77.0	283	ug/kg	1	AXC2	02/16/10	1323	950200	2
<b>Ion Chromatography</b>											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N	U	ND	0.347	1.16	mg/kg	1	GXM	02/20/10	0835	955298	3

**The following Prep Methods were performed**

Method	Description	Analyst	Date	Time	Prep Batch
EPA 300.0 PREP	EPA 300.0 Total Anions in Soil	GXM3	02/19/10	1125	955296
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/15/10	1536	950199

**The following Analytical Methods were performed**

Method	Description	Analyst Comments
1	SW846 9045C/9045D	
2	SW846 9012A	
3	EPA 300.0	

## 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: March 2, 2010

Client SDG: 10-1621-1

Client Sample ID: RE15-10-8350  
Sample ID: 246437007  
Matrix: R  
Collect Date: 02-FEB-10 12:00  
Receive Date: 06-FEB-10  
Collector: Client  
Moisture: 23.1%

Project: LANL01004  
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Electrode Analysis</b>											
<i>SW9045C pH "As Received"</i>											
pH at Temp 20.4C	H	7.25	0.010	0.100	SU	1	EXF1	02/08/10	1355	950202	1
<b>Flow Injection Analysis</b>											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	80.4	295	ug/kg	1	AXC2	02/16/10	1324	950200	2
<b>Ion Chromatography</b>											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N	U	ND	0.390	1.30	mg/kg	1	GXM	02/20/10	0901	955298	3

**The following Prep Methods were performed**

Method	Description	Analyst	Date	Time	Prep Batch
EPA 300.0 PREP	EPA 300.0 Total Anions in Soil	GXM3	02/19/10	1125	955296
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/15/10	1536	950199

**The following Analytical Methods were performed**

Method	Description	Analyst Comments
1	SW846 9045C/9045D	
2	SW846 9012A	
3	EPA 300.0	



## 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: March 2, 2010

Client SDG: 10-1621-1

Client Sample ID: RE15-10-8357  
Sample ID: 246437008  
Matrix: R  
Collect Date: 02-FEB-10 12:00  
Receive Date: 06-FEB-10  
Collector: Client  
Moisture: 5.95%

Project: LANL01004  
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Electrode Analysis</b>											
<i>SW9045C pH "As Received"</i>											
pH at Temp 20.2C	H	7.41	0.010	0.100	SU	1	EXF1	02/08/10	1357	950202	1
<b>Flow Injection Analysis</b>											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	69.5	256	ug/kg	1	AXC2	02/16/10	1325	950200	2
<b>Ion Chromatography</b>											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N	U	ND	0.312	1.04	mg/kg	1	GXM	02/20/10	0927	955298	3

**The following Prep Methods were performed**

Method	Description	Analyst	Date	Time	Prep Batch
EPA 300.0 PREP	EPA 300.0 Total Anions in Soil	GXM3	02/19/10	1125	955296
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/15/10	1536	950199

**The following Analytical Methods were performed**

Method	Description	Analyst Comments
1	SW846 9045C/9045D	
2	SW846 9012A	
3	EPA 300.0	

## 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: March 2, 2010

Client SDG: 10-1621-1

Client Sample ID: RE15-10-8338  
Sample ID: 246437009  
Matrix: R  
Collect Date: 02-FEB-10 12:00  
Receive Date: 06-FEB-10  
Collector: Client  
Moisture: 22.4%

Project: LANL01004  
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Electrode Analysis</b>											
<i>SW9045C pH "As Received"</i>											
pH at Temp 20.2C	H	6.60	0.010	0.100	SU	1	EXF1	02/08/10	1400	950202	1
<b>Flow Injection Analysis</b>											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	78.2	288	ug/kg	1	AXC2	02/16/10	1326	950200	2
<b>Ion Chromatography</b>											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N	U	ND	0.386	1.29	mg/kg	1	GXM	02/20/10	0953	955298	3

**The following Prep Methods were performed**

Method	Description	Analyst	Date	Time	Prep Batch
EPA 300.0 PREP	EPA 300.0 Total Anions in Soil	GXM3	02/19/10	1125	955296
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/15/10	1536	950199

**The following Analytical Methods were performed**

Method	Description	Analyst Comments
1	SW846 9045C/9045D	
2	SW846 9012A	
3	EPA 300.0	

## 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: March 2, 2010

Client SDG: 10-1621-1

Client Sample ID: RE15-10-8336  
Sample ID: 246437010  
Matrix: R  
Collect Date: 02-FEB-10 12:00  
Receive Date: 06-FEB-10  
Collector: Client  
Moisture: 17.6%

Project: LANL01004  
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Electrode Analysis</b>											
<i>SW9045C pH "As Received"</i>											
pH at Temp 20.2C	H	7.29	0.010	0.100	SU	1	EXF1	02/08/10	1403	950202	1
<b>Flow Injection Analysis</b>											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	77.8	286	ug/kg	1	AXC2	02/16/10	1327	950200	2
<b>Ion Chromatography</b>											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N	U	ND	0.358	1.19	mg/kg	1	GXM	02/20/10	1019	955298	3

**The following Prep Methods were performed**

Method	Description	Analyst	Date	Time	Prep Batch
EPA 300.0 PREP	EPA 300.0 Total Anions in Soil	GXM3	02/19/10	1125	955296
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/15/10	1536	950199

**The following Analytical Methods were performed**

Method	Description	Analyst Comments
1	SW846 9045C/9045D	
2	SW846 9012A	
3	EPA 300.0	

## 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: March 2, 2010

Client SDG: 10-1621-1

Client Sample ID: RE15-10-8339  
Sample ID: 246437011  
Matrix: R  
Collect Date: 02-FEB-10 12:00  
Receive Date: 06-FEB-10  
Collector: Client  
Moisture: 5.98%

Project: LANL01004  
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Electrode Analysis</b>											
<i>SW9045C pH "As Received"</i>											
pH at Temp 20.0C	H	6.88	0.010	0.100	SU	1	EXF1	02/08/10	1405	950202	1
<b>Flow Injection Analysis</b>											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	64.6	237	ug/kg	1	AXC2	02/16/10	1328	950200	2
<b>Ion Chromatography</b>											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N	U	ND	0.319	1.06	mg/kg	1	GXM	02/20/10	1045	955298	3

**The following Prep Methods were performed**

Method	Description	Analyst	Date	Time	Prep Batch
EPA 300.0 PREP	EPA 300.0 Total Anions in Soil	GXM3	02/19/10	1125	955296
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/15/10	1536	950199

**The following Analytical Methods were performed**

Method	Description	Analyst Comments
1	SW846 9045C/9045D	
2	SW846 9012A	
3	EPA 300.0	

## 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: March 2, 2010

Client SDG: 10-1621-1

Client Sample ID: RE15-10-8337  
Sample ID: 246437012  
Matrix: R  
Collect Date: 02-FEB-10 12:00  
Receive Date: 06-FEB-10  
Collector: Client  
Moisture: 11.4%

Project: LANL01004  
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Electrode Analysis</b>											
<i>SW9045C pH "As Received"</i>											
pH at Temp 20.3C	H	7.94	0.010	0.100	SU	1	EXF1	02/08/10	1131	950208	1
<b>Flow Injection Analysis</b>											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	68.5	252	ug/kg	1	AXC2	02/16/10	1328	950200	2
<b>Ion Chromatography</b>											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N		1.30	0.336	1.12	mg/kg	1	GXM	02/20/10	1111	955298	3

**The following Prep Methods were performed**

Method	Description	Analyst	Date	Time	Prep Batch
EPA 300.0 PREP	EPA 300.0 Total Anions in Soil	GXM3	02/19/10	1125	955296
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/15/10	1536	950199

**The following Analytical Methods were performed**

Method	Description	Analyst Comments
1	SW846 9045C/9045D	
2	SW846 9012A	
3	EPA 300.0	

## 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: March 2, 2010

Client SDG: 10-1621-1

Client Sample ID: RE15-10-8375  
Sample ID: 246437013  
Matrix: R  
Collect Date: 02-FEB-10 12:00  
Receive Date: 06-FEB-10  
Collector: Client  
Moisture: 19.7%

Project: LANL01004  
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Electrode Analysis</b>											
<i>SW9045C pH "As Received"</i>											
pH at Temp 20.4C	H	6.98	0.010	0.100	SU	1	EXF1	02/08/10	1141	950208	1
<b>Flow Injection Analysis</b>											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	78.4	288	ug/kg	1	AXC2	02/16/10	1333	950200	2
<b>Ion Chromatography</b>											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N	U	ND	0.369	1.23	mg/kg	1	GXM	02/20/10	1137	955298	3

**The following Prep Methods were performed**

Method	Description	Analyst	Date	Time	Prep Batch
EPA 300.0 PREP	EPA 300.0 Total Anions in Soil	GXM3	02/19/10	1125	955296
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/15/10	1536	950199

**The following Analytical Methods were performed**

Method	Description	Analyst Comments
1	SW846 9045C/9045D	
2	SW846 9012A	
3	EPA 300.0	

# 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: March 2, 2010

Client SDG: 10-1621-1

Client Sample ID: RE15-10-8374  
Sample ID: 246437014  
Matrix: R  
Collect Date: 02-FEB-10 12:00  
Receive Date: 06-FEB-10  
Collector: Client  
Moisture: 6.31%

Project: LANL01004  
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Electrode Analysis</b>											
<i>SW9045C pH "As Received"</i>											
pH at Temp 20.3C	H	7.05	0.010	0.100	SU	1	EXF1	02/08/10	1142	950208	1
<b>Flow Injection Analysis</b>											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	64.8	238	ug/kg	1	AXC2	02/16/10	1334	950200	2
<b>Ion Chromatography</b>											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N	U	ND	0.314	1.05	mg/kg	1	GXM	02/20/10	1255	955298	3

### The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 300.0 PREP	EPA 300.0 Total Anions in Soil	GXM3	02/19/10	1125	955296
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/15/10	1536	950199

### The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9045C/9045D	
2	SW846 9012A	
3	EPA 300.0	

Friday, February 05, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1621

LOS ALAMOS

REQUEST NUMBER: 10-1621

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 3/7/2010

General Engineering Laboratories, Inc.,  
Charleston, SC.

TURNAROUND REQ'D: 30

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS:

2464367, 2464377

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE15-10-8378	1	POLY	METALS+U-GEL	Nitric Acid	W
RE15-10-8378	1	POLY	SW-848:6850	Ice	W
RE15-10-8378	1	POLY	TCN	Sodium Hydroxide	W
RE15-10-8354	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8354	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8356	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8356	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8353	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8353	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8352	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8352	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8355	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8355	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8351	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8351	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8350	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8350	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8357	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8357	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8338	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8338	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8336	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8336	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8339	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8339	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8337	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8337	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8375	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8375	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8374	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8374	1	POLY	Perchlorate+CN+N03+pH	Ice	R



Printed Name: Joe Way Signature: 2/5/10 1400 Printed Name: Greg Tyler Signature: 10-1621  
 Printed Name: Greg Tyler Signature: 2/6/10 0915

Printed Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Printed Name: \_\_\_\_\_ Signature: \_\_\_\_\_

Printed Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Printed Name: \_\_\_\_\_ Signature: \_\_\_\_\_

Received for DISPOSAL By: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Remarks: \_\_\_\_\_

Printed Name: \_\_\_\_\_ Signature: \_\_\_\_\_

Friday, February 05, 2010

**LOS ALAMOS  
NATIONAL LABORATORY**

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd.

Charleston, SC 29407

These Samples are on:

LANL Request Number: 10-1621

Per Agreement Number: 126310011

Project Cost Code: MR3A05529E00

Please analyse the enclosed samples  
according to the schedule indicated:

SHIP DATE: 2/5/2010

TURNAROUND/REPORT DUE: 3/7/2010

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Yes, Below Background

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:



PRIORITY	METHOD CODE	CNTR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	EPA300.0					
		1	RE15-10-8336	R	2/2/2010	
		1	RE15-10-8337	R	2/2/2010	
		1	RE15-10-8338	R	2/2/2010	
		1	RE15-10-8339	R	2/2/2010	
		1	RE15-10-8350	R	2/2/2010	
		1	RE15-10-8351	R	2/2/2010	
		1	RE15-10-8352	R	2/2/2010	
		1	RE15-10-8353	R	2/2/2010	
		1	RE15-10-8354	R	2/2/2010	

REQUEST NUMBER: 10-1621

Friday, February 05, 2010

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	EPA-300.0	1	RE15-10-8355	R	2/2/2010	
		1	RE15-10-8356	R	2/2/2010	
		1	RE15-10-8357	R	2/2/2010	
		1	RE15-10-8374	R	2/2/2010	
		1	RE15-10-8375	R	2/2/2010	
	SW-846-60108	1	RE15-10-8336	R	2/2/2010	
		1	RE15-10-8337	R	2/2/2010	
		1	RE15-10-8338	R	2/2/2010	
		1	RE15-10-8339	R	2/2/2010	
		1	RE15-10-8350	R	2/2/2010	
		1	RE15-10-8351	R	2/2/2010	
		1	RE15-10-8352	R	2/2/2010	
		1	RE15-10-8353	R	2/2/2010	
		1	RE15-10-8354	R	2/2/2010	
		1	RE15-10-8355	R	2/2/2010	
		1	RE15-10-8356	R	2/2/2010	
		1	RE15-10-8357	R	2/2/2010	
		1	RE15-10-8374	R	2/2/2010	
		1	RE15-10-8375	R	2/2/2010	
	SW-846-6020	1	RE15-10-8336	R	2/2/2010	
		1	RE15-10-8337	R	2/2/2010	
		1	RE15-10-8339	R	2/2/2010	
		1	RE15-10-8339	R	2/2/2010	
		1	RE15-10-8350	R	2/2/2010	
		1	RE15-10-8351	R	2/2/2010	
		1	RE15-10-8352	R	2/2/2010	
		1	RE15-10-8353	R	2/2/2010	
		1	RE15-10-8354	R	2/2/2010	

REQUEST NUMBER: 10-1621

Friday, February 05, 2010

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846-8020	1	RE15-10-8355	R	2/2/2010	
		1	RE15-10-8356	R	2/2/2010	
		1	RE15-10-8357	R	2/2/2010	
		1	RE15-10-8374	R	2/2/2010	
		1	RE15-10-8375	R	2/2/2010	
		1	RE15-10-8378	W	2/2/2010	
	SW-846-8850	1	RE15-10-8336	R	2/2/2010	
		1	RE15-10-8337	R	2/2/2010	
		1	RE15-10-8338	R	2/2/2010	
		1	RE15-10-8339	R	2/2/2010	
		1	RE15-10-8350	R	2/2/2010	
		1	RE15-10-8351	R	2/2/2010	
		1	RE15-10-8352	R	2/2/2010	
		1	RE15-10-8353	R	2/2/2010	
		1	RE15-10-8354	R	2/2/2010	
		1	RE15-10-8355	R	2/2/2010	
		1	RE15-10-8356	R	2/2/2010	
		1	RE15-10-8357	R	2/2/2010	
		1	RE15-10-8374	R	2/2/2010	
		1	RE15-10-8375	R	2/2/2010	
		1	RE15-10-8378	W	2/2/2010	
	SW-846-7470A	1	RE15-10-8378	W	2/2/2010	
	SW-846-7471A	1	RE15-10-8336	R	2/2/2010	
		1	RE15-10-8337	R	2/2/2010	
		1	RE15-10-8338	R	2/2/2010	
		1	RE15-10-8339	R	2/2/2010	
		1	RE15-10-8350	R	2/2/2010	
		1	RE15-10-8354	R	2/2/2010	

PRIORITY	METHOD CODE	CNTR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846-7471A	1	RE15-10-8352	R	2/2/2010	
		1	RE15-10-8353	R	2/2/2010	
		1	RE15-10-8354	R	2/2/2010	
		1	RE15-10-8355	R	2/2/2010	
		1	RE15-10-8356	R	2/2/2010	
		1	RE15-10-8357	R	2/2/2010	
		1	RE15-10-8374	R	2/2/2010	
		1	RE15-10-8375	R	2/2/2010	
		1	RE15-10-8336	R	2/2/2010	
	SW-846-9012A	1	RE15-10-8337	R	2/2/2010	
		1	RE15-10-8338	R	2/2/2010	
		1	RE15-10-8339	R	2/2/2010	
		1	RE15-10-8351	R	2/2/2010	
		1	RE15-10-8352	R	2/2/2010	
		1	RE15-10-8353	R	2/2/2010	
		1	RE15-10-8354	R	2/2/2010	
		1	RE15-10-8355	R	2/2/2010	
		1	RE15-10-8356	R	2/2/2010	
		1	RE15-10-8357	R	2/2/2010	
		1	RE15-10-8374	R	2/2/2010	
		1	RE15-10-8375	R	2/2/2010	
		1	RE15-10-8378	W	2/2/2010	
	SW-846-8045C	1	RE15-10-8336	R	2/2/2010	
		1	RE15-10-8337	R	2/2/2010	
		1	RE15-10-8338	R	2/2/2010	
		1	RE15-10-8339	R	2/2/2010	
		1	RE15-10-8352	R	2/2/2010	

REQUEST NUMBER: 10-1621

Friday, February 05, 2010

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-346:8045C	1	RE15-10-8351	R	2/2/2010	
		1	RE15-10-8352	R	2/2/2010	
		1	RE15-10-8353	R	2/2/2010	
		1	RE15-10-8354	R	2/2/2010	
		1	RE15-10-8355	R	2/2/2010	
		1	RE15-10-8356	R	2/2/2010	
		1	RE15-10-8357	R	2/2/2010	
		1	RE15-10-8374	R	2/2/2010	
		1	RE15-10-8375	R	2/2/2010	

Final Page of REQUEST NUMBER 10-1621



February 12, 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: 246436 246437  
SDG: 10-1621

Dear Ms. Valdez:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the following analytical results for the sample(s) we received on February 06, 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: 10-1621  
Enclosures

**Los Alamos National Laboratory (72733-001-09)**  
**LANL ER Project**  
**Work Order #: 246436 and 246437**  
**SDG: 10-1621**



## Table of Contents

<b>Case Narrative.....</b>	<b>1</b>
<b>Chain of Custody and Documentation .....</b>	<b>5</b>
<b>Data Review Qualifier Flag Definition Sheet .....</b>	<b>19</b>
<b>LC/MS/MS Perchlorate Analysis.....</b>	<b>21</b>
Sample Data Summary .....	26
Quality Control Summary.....	28
Sample Data .....	58
Standards Data.....	61
Quality Control .....	90
Miscellaneous Data .....	95
<b>LC/MS/MS Perchlorate Analysis.....</b>	<b>104</b>
Sample Data Summary .....	109
Quality Control Summary.....	124
Sample Data .....	149
Standards Data.....	178
Quality Control Data .....	196
Miscellaneous Data .....	205
<b>Metals Analysis.....</b>	<b>213</b>
Case Narrative.....	214
Sample Data Summary .....	220
Quality Control Summary.....	222
Standards .....	278
Raw Data.....	291
Miscellaneous .....	627
<b>Metals Analysis.....</b>	<b>666</b>
Case Narrative.....	667
Sample Data Summary .....	674
Quality Control Summary.....	689
Standards .....	761
Raw Data.....	781
Miscellaneous .....	1402
<b>General Chemistry Analysis .....</b>	<b>1449</b>
Case Narrative.....	1450
Sample Data Summary .....	1455

Quality Control Summary.....	1458
Instrument QC Data Summary .....	1461
Cyanide, Total .....	1463
<b>General Chemistry Analysis .....</b>	<b>1471</b>
Case Narrative.....	1472
Sample Data Summary .....	1483
Quality Control Summary.....	1499
Instrument QC Data Summary .....	1503
Cyanide, Total .....	1506
Ion Chromatography .....	1516
pH .....	1569

# Case Narrative

**Case Narrative for  
Los Alamos National Laboratory (72733-001-09)  
LANL ER Project  
Workorder #: 246436 and 246437  
SDG # : 10-1621**

**February 12, 2010**

**Laboratory Identification:**

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

**Summary**

**Sample receipt** The samples arrived at GEL Laboratories LLC, Charleston, South Carolina on February 06, 2010 for analysis. The sample was prepared/analyzed within the required holding time. Shipping container temperature was checked, documented, and within specifications. The samples were screened according to GEL Standard Operating Procedure. The sample was 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:

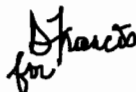
<b><u>Laboratory ID</u></b>	<b><u>Client ID</u></b>
246436001	RE15-10-8378
246437001	RE15-10-8354
246437002	RE15-10-8356
246437003	RE15-10-8353
246437004	RE15-10-8352
246437005	RE15-10-8355
246437006	RE15-10-8351
246437007	RE15-10-8350
246437008	RE15-10-8357
246437009	RE15-10-8338
246437010	RE15-10-8336
246437011	RE15-10-8339
246437012	RE15-10-8337
246437013	RE15-10-8375
246437014	RE15-10-8374

**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.

A handwritten signature in black ink, appearing to read "for Shanto" or similar, written over the printed name Valerie Davis.

Valerie Davis

Project Manager

**List of current GEL Certifications as of 12 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**

Friday, February 05, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1621

LOS ALAMOS

REQUEST NUMBER: 10-1621

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 3/7/2010

General Engineering Laboratories, Inc.,  
Charleston, SC.

TURNAROUND REQ'D: 30

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS:

2464367, 2464377

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE15-10-8378	1	POLY	METALS+U-GEL	Nitric Acid	W
RE15-10-8378	1	POLY	SW-846:6850	Ice	W
RE15-10-8378	1	POLY	TCN	Sodium Hydroxide	W
RE15-10-8354	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8354	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8356	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8356	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8353	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8353	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8352	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8352	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8355	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8355	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8351	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8351	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8350	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8350	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8357	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8357	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8338	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8338	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8336	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8336	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8339	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8339	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8337	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8337	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8375	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8375	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8374	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8374	1	POLY	Perchlorate+CN+N03+pH	Ice	R



Printed Name: Jeffrey Way Signature: 2/5/10 1400 Printed Name: Greg Tyler Signature: 10-1621 Greg Tyler 2/6/10 0915

Printed Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Printed Name: \_\_\_\_\_ Signature: \_\_\_\_\_

Printed Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Printed Name: \_\_\_\_\_ Signature: \_\_\_\_\_

Received for DISPOSAL By: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Remarks: \_\_\_\_\_

Printed Name: \_\_\_\_\_ Signature: \_\_\_\_\_

Friday, February 05, 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: 2/5/2010**

**TURNAROUND/REPORT DUE: 3/7/2010**

**TURNAROUND REQ'D: 30 Days**

**RAD SCREENING: Yes, Below Background**

**LAB REQUEST COMMENTS:**

LANL ER SMO CONTACT:

Signature:



PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	EPA-300.0	1	RE15-10-8336	R	2/2/2010	
		1	RE15-10-8337	R	2/2/2010	
		1	RE15-10-8338	R	2/2/2010	
		1	RE15-10-8339	R	2/2/2010	
		1	RE15-10-8350	R	2/2/2010	
		1	RE15-10-8351	R	2/2/2010	
		1	RE15-10-8352	R	2/2/2010	
		1	RE15-10-8353	R	2/2/2010	
		1	RE15-10-8354	R	2/2/2010	

REQUEST NUMBER: 10-1621

These Samples are on:

LANL Request Number: 10-1621  
Per Agreement Number: 126310011  
Project Cost Code: MR3A05529E00

Friday, February 05, 2010

Page 2 of 5

REQUEST NUMBER: 10-1621

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	EPA:300.0	1	RE15-10-8355	R	2/2/2010	
		1	RE15-10-8356	R	2/2/2010	
		1	RE15-10-8357	R	2/2/2010	
		1	RE15-10-8374	R	2/2/2010	
		1	RE15-10-8375	R	2/2/2010	
	SW-846:6010B	1	RE15-10-8336	R	2/2/2010	
		1	RE15-10-8337	R	2/2/2010	
		1	RE15-10-8338	R	2/2/2010	
		1	RE15-10-8339	R	2/2/2010	
		1	RE15-10-8350	R	2/2/2010	
		1	RE15-10-8351	R	2/2/2010	
		1	RE15-10-8352	R	2/2/2010	
		1	RE15-10-8353	R	2/2/2010	
		1	RE15-10-8354	R	2/2/2010	
		1	RE15-10-8355	R	2/2/2010	
		1	RE15-10-8356	R	2/2/2010	
		1	RE15-10-8357	R	2/2/2010	
		1	RE15-10-8374	R	2/2/2010	
		1	RE15-10-8375	R	2/2/2010	
	SW-846:6020	1	RE15-10-8336	R	2/2/2010	
		1	RE15-10-8337	R	2/2/2010	
		1	RE15-10-8338	R	2/2/2010	
		1	RE15-10-8339	R	2/2/2010	
		1	RE15-10-8350	R	2/2/2010	
		1	RE15-10-8351	R	2/2/2010	
		1	RE15-10-8352	R	2/2/2010	
		1	RE15-10-8353	R	2/2/2010	
		1	RE15-10-8354	R	2/2/2010	

Friday, February 05, 2010

REQUEST NUMBER: 10-1621

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6020	1	RE15-10-8355	R	2/2/2010	
		1	RE15-10-8356	R	2/2/2010	
		1	RE15-10-8357	R	2/2/2010	
		1	RE15-10-8374	R	2/2/2010	
		1	RE15-10-8375	R	2/2/2010	
		1	RE15-10-8378	W	2/2/2010	
	SW-846:6850	1	RE15-10-8336	R	2/2/2010	
		1	RE15-10-8337	R	2/2/2010	
		1	RE15-10-8338	R	2/2/2010	
		1	RE15-10-8339	R	2/2/2010	
		1	RE15-10-8350	R	2/2/2010	
		1	RE15-10-8351	R	2/2/2010	
		1	RE15-10-8352	R	2/2/2010	
		1	RE15-10-8353	R	2/2/2010	
		1	RE15-10-8354	R	2/2/2010	
		1	RE15-10-8355	R	2/2/2010	
		1	RE15-10-8356	R	2/2/2010	
		1	RE15-10-8357	R	2/2/2010	
		1	RE15-10-8374	R	2/2/2010	
		1	RE15-10-8375	R	2/2/2010	
		1	RE15-10-8378	W	2/2/2010	
	SW-846:7470A	1	RE15-10-8378	W	2/2/2010	
	SW-846:7471A	1	RE15-10-8336	R	2/2/2010	
		1	RE15-10-8337	R	2/2/2010	
		1	RE15-10-8338	R	2/2/2010	
		1	RE15-10-8339	R	2/2/2010	
		1	RE15-10-8350	R	2/2/2010	
		1	RE15-10-8354	R	2/2/2010	

Friday, February 05, 2010

Page 4 of 5

REQUEST NUMBER: 10-1621

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:7471A	1	RE15-10-8352	R	2/2/2010	
		1	RE15-10-8353	R	2/2/2010	
		1	RE15-10-8354	R	2/2/2010	
		1	RE15-10-8355	R	2/2/2010	
		1	RE15-10-8356	R	2/2/2010	
		1	RE15-10-8357	R	2/2/2010	
		1	RE15-10-8374	R	2/2/2010	
		1	RE15-10-8375	R	2/2/2010	
	SW-846:9012A	1	RE15-10-8336	R	2/2/2010	
		1	RE15-10-8337	R	2/2/2010	
		1	RE15-10-8338	R	2/2/2010	
		1	RE15-10-8339	R	2/2/2010	
		1	RE15-10-8350	R	2/2/2010	
		1	RE15-10-8351	R	2/2/2010	
		1	RE15-10-8352	R	2/2/2010	
		1	RE15-10-8353	R	2/2/2010	
		1	RE15-10-8354	R	2/2/2010	
		1	RE15-10-8355	R	2/2/2010	
		1	RE15-10-8356	R	2/2/2010	
		1	RE15-10-8357	R	2/2/2010	
		1	RE15-10-8374	R	2/2/2010	
		1	RE15-10-8375	R	2/2/2010	
		1	RE15-10-8378	W	2/2/2010	
	SW-846:9045C	1	RE15-10-8336	R	2/2/2010	
		1	RE15-10-8337	R	2/2/2010	
		1	RE15-10-8338	R	2/2/2010	
		1	RE15-10-8339	R	2/2/2010	
		1	RE15-10-8339	R	2/2/2010	

Friday, February 05, 2010

Page 5 of 5

REQUEST NUMBER: 10-1621

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:9045C	1	RE15-10-8351	R	2/2/2010	
		1	RE15-10-8352	R	2/2/2010	
		1	RE15-10-8353	R	2/2/2010	
		1	RE15-10-8354	R	2/2/2010	
		1	RE15-10-8355	R	2/2/2010	
		1	RE15-10-8356	R	2/2/2010	
		1	RE15-10-8357	R	2/2/2010	
		1	RE15-10-8374	R	2/2/2010	
		1	RE15-10-8375	R	2/2/2010	

Final Page of REQUEST NUMBER 10-1621

## SAMPLE RECEIPT &amp; REVIEW FORM

Client: LANL			SDG/ARCO/Work Order: 10-1621		
Received By: Greg Tyler			Date Received: 2/06/10		
Suspected Hazard Information	Yes	No	*If Counts > x2 area background on samples not marked "radioactive", contact the Radiation Safety Group of further investigation.		
COC/Samples marked as radioactive?		X	Maximum Counts Observed*: 80cpm		
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 2- 6C    12,15C
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: <b>No time on Chain of Custody.</b>
11	Number of containers received match number indicated on COC?	X			Sample ID's affected:
12	COC form is properly signed in relinquished/received sections?	X			

## Comments:

## Fed Ex Tracking Numbers:

7209 7849 9293 2C    7209 7849 9282 4C    7209 7849 9179 15C  
 7209 7849 9271 3C    7209 7849 9180 5C    7209 7849 9227 15C  
 7209 7849 9308 3C    7209 7849 9216 5C  
 7209 7849 9319 3C    7209 7849 9205 5C  
 7209 7849 9260 3C    7209 7849 9190 6C  
 7209 7849 9250 3C    7209 7849 9238 6C  
 7209 7849 9249 4C    7209 7849 9157 12C  
 7209 7849 9341 4C    7209 7849 9146 12C

PM (or PMA) review: Initials

VSD

Date

2/8/10

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

LOS ALAMOS, NM 87545  
UNITED STATES US

SHIP DATE: 05FEB10  
ACTWGT: 55.0 LB MAN  
CAD: 0014176/CAFE2449

BILL SENDER

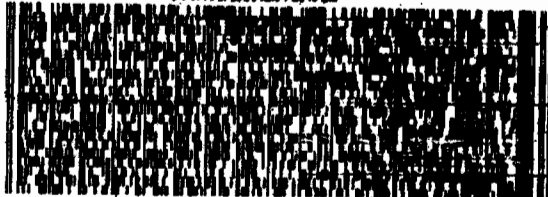
VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

REF: 68010AMR2005158YD0

10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 00



FedEx  
Express



2 of 2  
PSR 7209 7849 9293  
Strn 7209 7849 8282 (8201)

### SATURDAY ### A1  
PRIORITY OVERNIGHT

X0 CHSA

29407  
SC-US  
CHS



LOS ALAMOS NATL LAB  
TAGO BLDG 1237 DPU 03

LOS ALAMOS, NM 87545  
UNITED STATES US

CAD: 0014176/CAFE2449

BILL SENDER

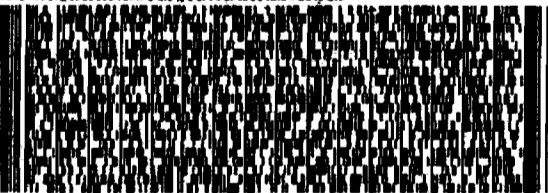
VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

REF: 68010AMR1A015AGWLO

10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 00



FedEx  
Express



1 of 2  
TRKH 7209 7849 9308  
NN MASTER NN

### SATURDAY ### A1  
PRIORITY OVERNIGHT

X0 CHSA

29407  
SC-US  
CHS

Page 14 of 1574

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

LOS ALAMOS, NM 87545  
UNITED STATES US

SHIP DATE: 05FEB10  
ACTWGT: 55.0 LB MAN  
CAD: 0014176/CAFE2449

BILL SENDER

VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

REF: 68010AMR3A05529E00

10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 00



FedEx  
Express



2 of 2  
PSR 7209 7849 9271  
Matrn 7209 7849 8260 (8201)

### SATURDAY ### A1  
PRIORITY OVERNIGHT

X0 CHSA

29407  
SC-US  
CHS



JOYLENE VALDEZ (505) 665-9968  
LOS ALAMOS NATL LAB  
TAGO BLDG 1237 DPU 03

LOS ALAMOS, NM 87545  
UNITED STATES US

SHIP DATE: 05FEB10  
ACTWGT: 55.0 LB MAN  
CAD: 0014176/CAFE2449

BILL SENDER

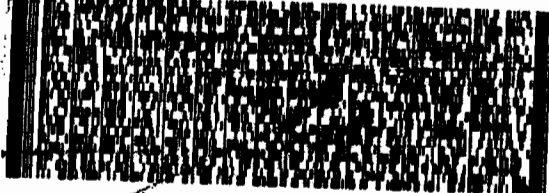
VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

REF: 68010AMR1A015AGWLO

10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 00



FedEx  
Express



2 of 2  
PSR 7209 7849 9319  
Matrn 7209 7849 9308 (8201)

### SATURDAY ### A1  
PRIORITY OVERNIGHT

X0 CHSA

29407  
SC-US  
CHS

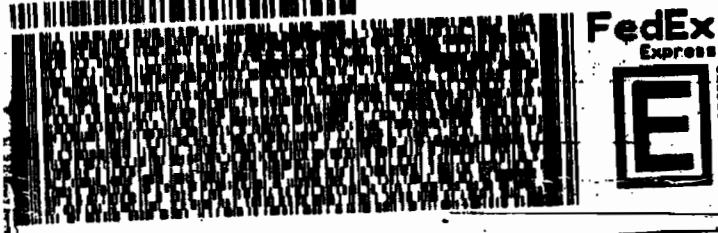
Page 14 of 1574



ORIGIN ID: 0014176/CAFE2449  
JOYLENE VALDEZ  
LOS ALAMOS NATL LAB  
TAGS BLDG 1237 DPU 83  
LOS ALAMOS, NM 87545  
UNITED STATES US  
ACTNGT: 01.0 LB MAN  
CAD: 0014176/CAFE2449  
BILL SENDER

VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

CHARLESTON SC 29407  
(843) 556-8171  
REF: 68010AMR3A05529E00

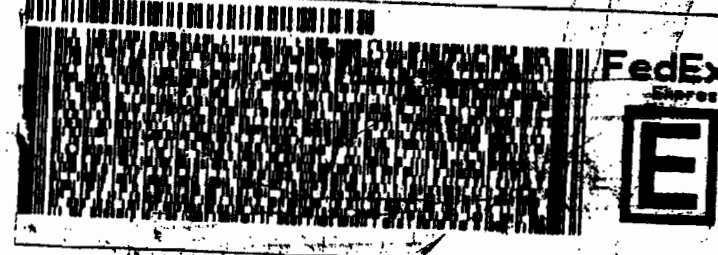


1 of 2  
TRK# 7209 7849 9260  
0201  
NN MASTER NN  
### SATURDAY ### A1  
PRIORITY OVERNIGHT  
29407  
SC-US  
CHS  
X0 CHSA  
Per 156148-434 NRIT V3 08-09

JOYLENE VALDEZ (805) 656-8968  
LOS ALAMOS NATL LAB  
TAGS BLDG 1237 DPU 83  
LOS ALAMOS, NM 87545  
UNITED STATES US  
SHIP DATE: 05FEB10  
ACTNGT: 48.9 LB MAN  
CAD: 0014176/CAFE2449  
BILL SENDER

VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

CHARLESTON SC 29407  
(843) 556-8171  
REF: 68010AMR3A05529E00



2 of 3  
MPS# 0263 7209 7849 9249  
Matr# 7209 7849 9238 0201  
### SATURDAY ### A1  
PRIORITY OVERNIGHT  
29407  
SC-US  
CHS  
X0 CHSA

Page 10 of 10

ORIGIN ID: 0014176/CAFE2449  
JOYLENE VALDEZ  
LOS ALAMOS NATL LAB  
TAGS BLDG 1237 DPU 83  
LOS ALAMOS, NM 87545  
UNITED STATES US  
SHIP DATE: 05FEB10  
ACTNGT: 48.9 LB MAN  
CAD: 0014176/CAFE2449  
BILL SENDER

VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

CHARLESTON SC 29407  
(843) 556-8171  
REF: 68010AMR3A05529E00

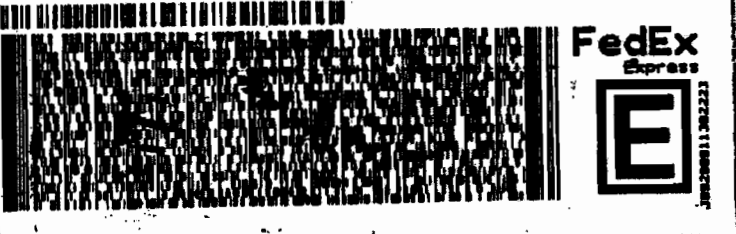


3 of 3  
MPS# 0263 7209 7849 9250  
Matr# 7209 7849 9238 0201  
### SATURDAY ### A1  
PRIORITY OVERNIGHT  
29407  
SC-US  
CHS  
X0 CHSA  
Per 156148-434 NRIT V3 08-09

ORIGIN ID: 0014176/CAFE2449  
JOYLENE VALDEZ  
LOS ALAMOS NATL LAB  
TAGS BLDG 1237 DPU 83  
LOS ALAMOS, NM 87545  
UNITED STATES US  
SHIP DATE: 05FEB10  
ACTNGT: 53.9 LB MAN  
CAD: 0014176/CAFE2449  
BILL SENDER

VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

CHARLESTON SC 29407  
(843) 556-8171  
REF: 68010MR1A015AGMK0



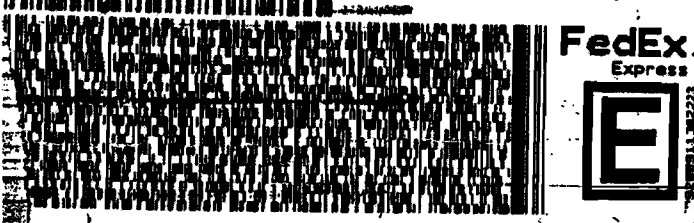
### SATURDAY ### A1  
PRIORITY OVERNIGHT  
29407  
SC-US  
CHS  
X0 CHSA

Page 10 of 10

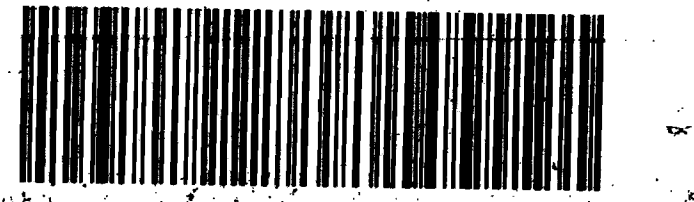
ORIGIN ID: SAFA (505) 665-9968  
JOYLENE VALDEZ  
LOS ALAMOS NATL LAB  
TAGO BLDG 1237 DPU 63  
LOS ALAMOS, NM 87545  
UNITED STATES US  
SHIP DATE: 05FEB10  
ACTNGT: 53.8 LB MAN  
CAD: 0014176/CAFE2449  
BILL SENDER

VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

CHARLESTON SC 29407  
(843) 666-8171  
REF: 6B010AMR2A0515BYD0



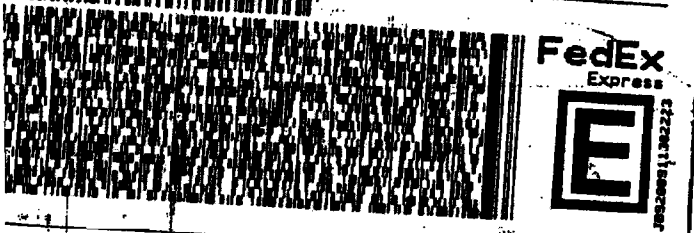
2 of 3  
201 7209 7849 9282  
MASTER NN  
### SATURDAY ### A1  
PRIORITY OVERNIGHT  
X0 CHSA  
29407  
SC-US  
CHS



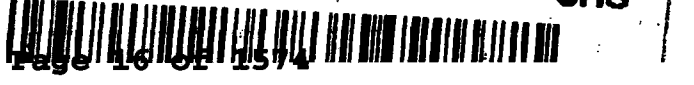
LOS ALAMOS, NM 87545  
UNITED STATES US  
BILL SENDER

VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

CHARLESTON SC 29407  
(843) 666-8171  
REF: 6B010AMR3A0532VA00



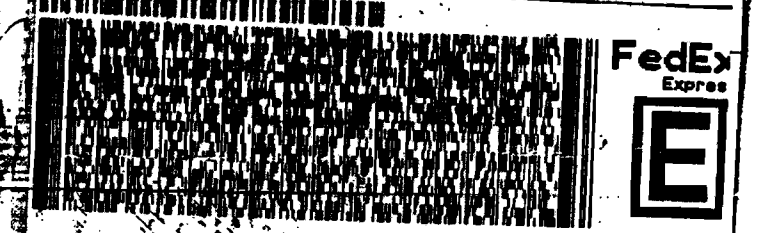
2 of 3  
201 7209 7849 9216  
MASTER NN  
### SATURDAY ### A1  
PRIORITY OVERNIGHT  
X0 CHSA  
29407  
SC-US  
CHS



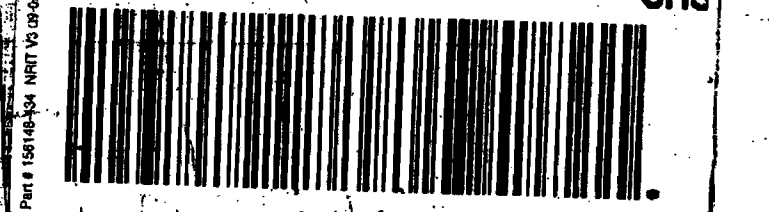
ORIGIN ID: SAFA (505) 665-9968  
JOYLENE VALDEZ  
LOS ALAMOS NATL LAB  
TAGO BLDG 1237 DPU 63  
LOS ALAMOS, NM 87545  
UNITED STATES US  
SHIP DATE: 05FEB10  
ACTNGT: 53.8 LB MAN  
CAD: 0014176/CAFE2449  
BILL SENDER

VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

CHARLESTON SC 29407  
(843) 666-8171  
REF: 6B010AMR3A0532VA00



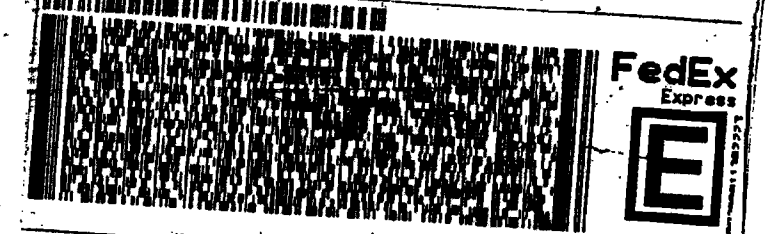
2 of 3  
201 7209 7849 9180  
MASTER NN  
### SATURDAY ### A1  
PRIORITY OVERNIGHT  
X0 CHSA  
29407  
SC-US  
CHS



LOS ALAMOS, NM 87545  
UNITED STATES US  
BILL SENDER

VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

CHARLESTON SC 29407  
(843) 666-8171  
REF: 6B010AMR3A0532VA00



1 of 3  
201 7209 7849 9205  
MASTER NN  
### SATURDAY ### A1  
PRIORITY OVERNIGHT  
X0 CHSA  
29407  
SC-US  
CHS



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

SHIP DATE: 05FEB10  
ACTWGT: 62.0 LB MAN  
CAD: 0014176/CAFE2449  
BILL SENDER

VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

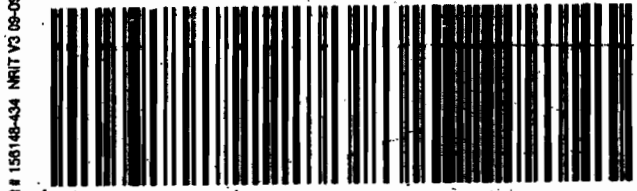
CHARLESTON SC 29407  
(843) 556-8171  
REF: 68010AMR3A0532VA00



3 of 3  
RPS# 7209 7849 9190  
Matr# 7209 7849 9179 0201  
### SATURDAY ### A1  
PRIORITY OVERNIGHT

X0 CHSA

29407  
SC-US  
CHS

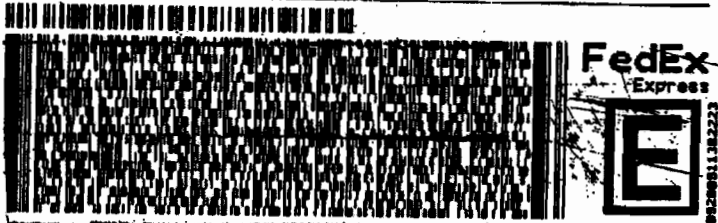


JOYLENE VALDEZ  
LOS ALAMOS NATL LAB  
TAGS BLDG 1237 DPU 03  
LOS ALAMOS, NM 87545  
UNITED STATES US

SHIP DATE: 05FEB10  
ACTWGT: 61.0 LB MAN  
CAD: 0014176/CAFE2449  
BILL SENDER

VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

CHARLESTON SC 29407  
(843) 556-8171  
REF: 68010AAREW0140T500



3 of 3  
RPS# 7209 7849 9157  
Matr# 7209 7849 9135 0201  
### SATURDAY ### A1  
PRIORITY OVERNIGHT

X0 CHSA

29407  
SC-US  
CHS

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

ACTWGT: 61.0 LB MAN  
CAD: 0014176/CAFE2449  
BILL SENDER

VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

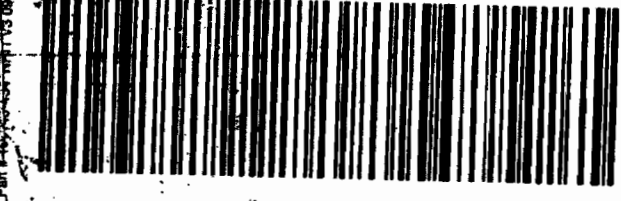
CHARLESTON SC 29407  
(843) 556-8171  
REF: 68010AMR3A05529E00



1 of 3  
TRK# 7209 7849 9238  
Matr# MASTER NN  
### SATURDAY ### A1  
PRIORITY OVERNIGHT

X0 CHSA

29407  
SC-US  
CHS



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

SHIP DATE: 05FEB10  
ACTWGT: 60.0 LB MAN  
CAD: 0014176/CAFE2449  
BILL SENDER

VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

CHARLESTON SC 29407  
(843) 556-8171  
REF: 68010AAREW0140T500



2 of 3  
RPS# 7209 7849 9146  
Matr# 7209 7849 9135 0201  
### SATURDAY ### A1  
PRIORITY OVERNIGHT

X0 CHSA

29407  
SC-US  
CHS

ORIGIN ID: SAFA (505) 665-8958 T  
JOYLENE VALDEZ  
LOS ALAMOS NATL LAB  
1700 BLDG 1237 CPU 03  
LOS ALAMOS, NM 87545  
UNITED STATES US

SHIP DATE: 05FEB10  
ACTWGT: 45.0 LB MAN  
CRD: 00141707 CAFE2448

BILL SENDER

VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171  
REF: 00010AMR3A0532VA00

15°



FedEx  
Express

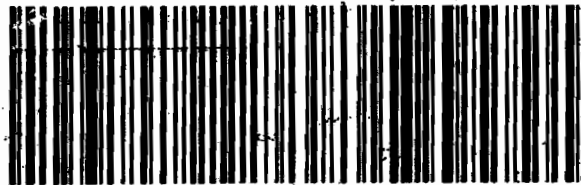


1 of 3  
TRK 7209 7849 9179  
0201  
NN MASTER NN

### SATURDAY ### A1  
PRIORITY OVERNIGHT

29407  
SC-US  
CHS

X0 CHSA

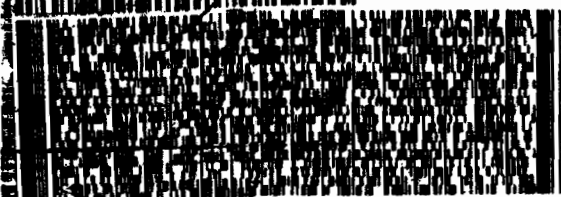


US, NM 87545  
UNITED STATES US  
VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171  
REF: 00010AMR3A0532VA00

15°



FedEx  
Express



3 of 3  
TRK 7209 7849 9227  
0201  
Master 7209 7849 9205 0201

### SATURDAY ### A1  
PRIORITY OVERNIGHT

29407  
SC-US  
CHS

X0 CHSA



# **Data Review Qualifier Flag Definition Sheet**

## Data Review Qualifier Definitions

Qualifier      Explanation

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

# LC/MS/MS PERCHLORATE ANALYSIS

**Perchlorate by LC/MSMS  
Los Alamos National Laboratory (LANL)  
SDG 10-1621**

**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:** 950042

**Prep Batch Number:** 950041

**Sample Analysis**

<b>Sample ID</b>	<b>Client ID</b>
246436001	RE15-10-8378
1202035613	Interference Check Sample (ICS)
1202035609	Method Blank (MB)
1202035610	Laboratory Control Sample (LCS)
1202035611	246292001(RE16-10-1495) Matrix Spike (MS)
1202035612	246292001(RE16-10-1495) 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.

10-1621-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 246292001 (RE16-10-1495) from SDG 10-1554-1 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.

10-1621-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**

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 sample in this SDG was not originally analyzed using EPA Method 314.0.

### **Additional Comments**

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

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

### **Perchlorate Isotope Ratio**

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

### System Configuration

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

### Chromatographic Columns

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

Dionex: IonPac AG-16 2 x 50 mm.

### Certification Statement

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

### Review Validation:

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

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

Reviewer: Heather M. Mauer Date: 02/26/10

# SAMPLE DATA SUMMARY

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: WATER

Extraction Batch ID: 950041

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.

RE15-10-8378

Date Received: 06-FEB-10

GEL Job No (SDG): 10-1621

GEL Sample ID: 246436001

Date Filtered: 12-FEB-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	17-FEB-10 06:40	per0216098a
	Perchlorate Isotope Ratio						1	17-FEB-10 06:40	per0216098a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	17-FEB-10 06:40	per0216098a
	Perchlorate-O(18)			0.483	ug/L		1	17-FEB-10 06:40	per0216098a

<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

# QUALITY CONTROL SUMMARY

Perchlorate Laboratory Control Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No. (SDG): 10-1621

Extract Batch Code: 950041

Date Filtered: 12-FEB-10

Matrix: WATER

Sample ID: 1202035610

Analyte^	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	0.200	.211	ug/L	105		85 - 115
Perchlorate Isotope Ratio		3.3				-
Perchlorate-101	0.200	.206	ug/L	103		85 - 115
Perchlorate-O(18)		.505	ug/L			-

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

Perchlorate Interference Check Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No. (SDG): 10-1621

Extract Batch Code: 950041

Date Filtered: 12-FEB-10

Matrix: WATER

Sample ID: 1202035613

Analyte <sup>^</sup>	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	0.200	.194	ug/L	97		70 - 130
Perchlorate Isotope Ratio		3.15				
Perchlorate-101	0.200	.198	ug/L	98.8		70 - 130
Perchlorate-O(18)		.481	ug/L			

<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.



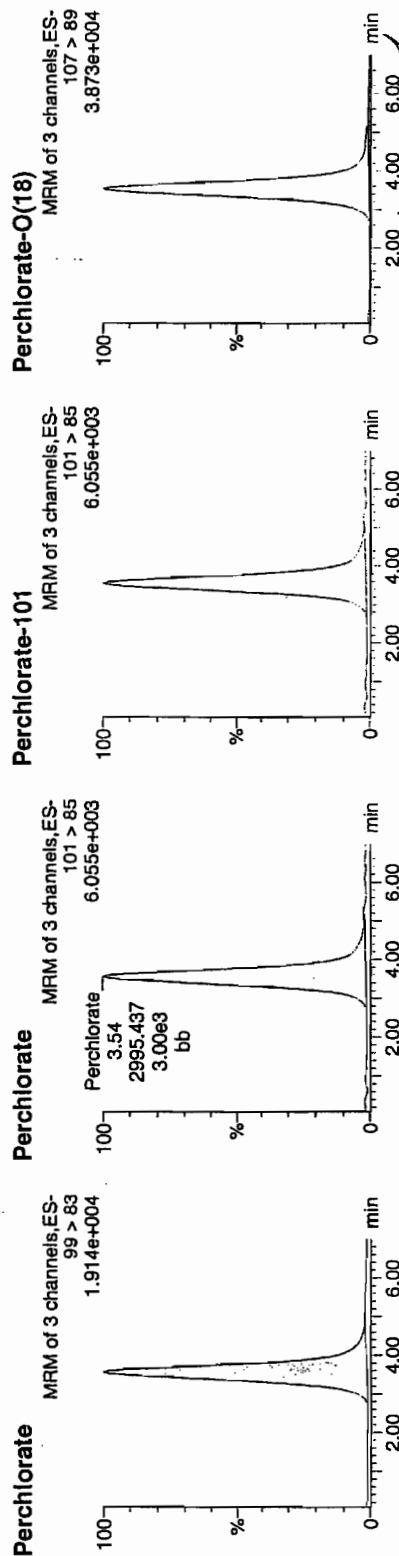
**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per021610a.qld

Last Altered: Wednesday, February 17, 2010 11:09:37 AM Eastern Standard Time  
Printed: Wednesday, February 17, 2010 11:11:37 AM Eastern Standard Time

Name: per0216076a  
Date: 17-Feb-2010  
Time: 02:57:35  
ID: 1202035613  
Vial: 3:1,C

167100 | 950012 | 1510 | 1.1 | 02.17.10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202035613	Perchlorate	99 > 83	3.54	9448.229	9448.229	bb			0.1940	97.02	-2.98	1471.0...	3.15
1202035613	Perchlorate-101	101 > 85	3.54	2995.437	2995.437	bb			0.1976	98.82	-1.18	488.094	
1202035613	Perchlorate-O(18)	107 > 89	3.53	19419.713	19419.713	bb			0.4814	96.29	-3.71	1659.2...	

Perchlorate Spike/Spike Duplicate Summary

Lab Name: General Engineering Laboratories

Lab Code: GEL

Extract Batch Code: 950041

GEL MS/PS ID: 1202035611

GEL MSD/PSD ID: 1202035612

GEL Job No (SDG): 10-1621

Date Extracted: 12-FEB-10

Client ID: RE16-10-1495

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	0.200	0.00193	ug/L	0.212	105		.214	106		1.25		30	75 - 125
Perchlorate Isotope Ratio	0	0.00		3.39			3.41			0			-
Perchlorate-101	0.200	0.00	ug/L	0.201	100		.202	101		.507		30	75 - 125
Perchlorate-O(18)	0	0.487	ug/L	0.505			.498			1.32			-

<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): 10-1621

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	16-FEB-10	per0216001a	IPB001
Perchlorate-101	0.00	0	NA	16-FEB-10	per0216001a	IPB001
Perchlorate	0.00	0	NA	16-FEB-10	per0216002a	IPB001
Perchlorate-101	0.00	0	NA	16-FEB-10	per0216002a	IPB001

Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charles W. Wilson

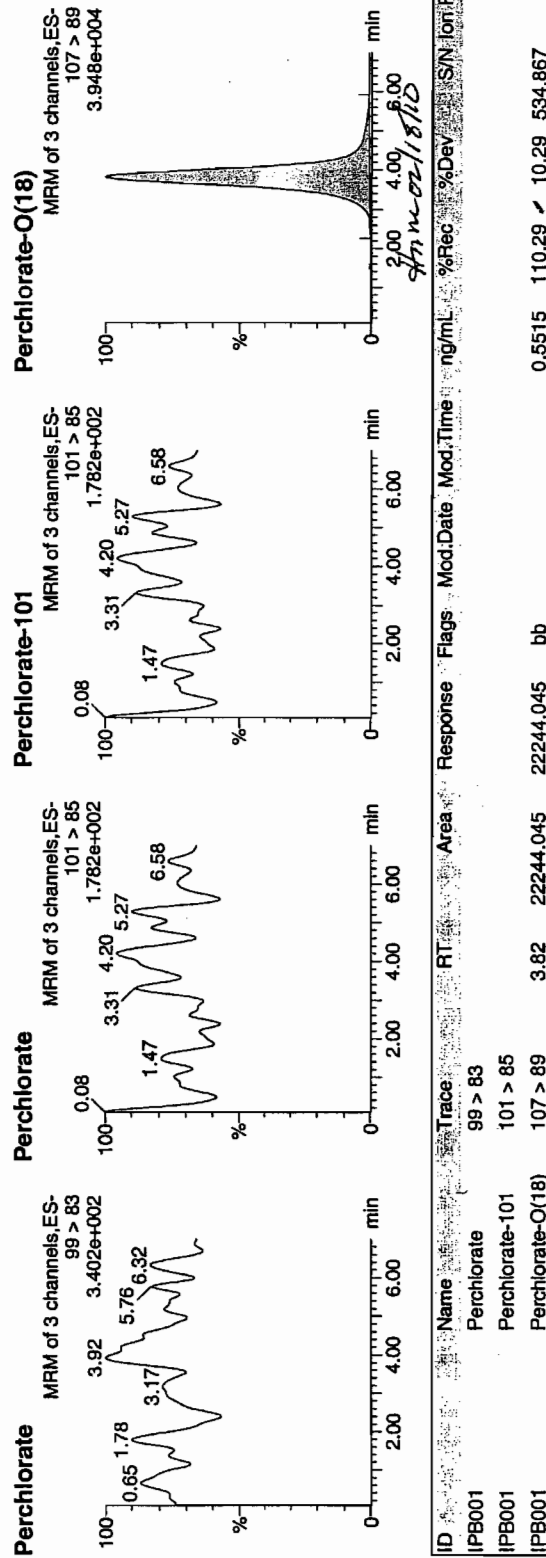
Dataset: C:\MassLynx\Perchlorate.PRO\per021610a.qld

Last Altered: Wednesday, February 17, 2010 11:09:37 AM Eastern Standard Time  
Printed: Wednesday, February 17, 2010 11:11:37 AM Eastern Standard Time

Method: C:\MassLynx\Perchlorate.PRO\MethDB\per021610a.mdb 17 Feb 2010 09:42:10  
Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per021610a.cdb 17 Feb 2010 11:03:29

Name: per0216001a  
Date: 16-Feb-2010  
Time: 14:21:05  
ID: IPB001  
Vial: 1:1,A

02-17-10



**Quantify Sample Report MassLynx 4.0 SP4**

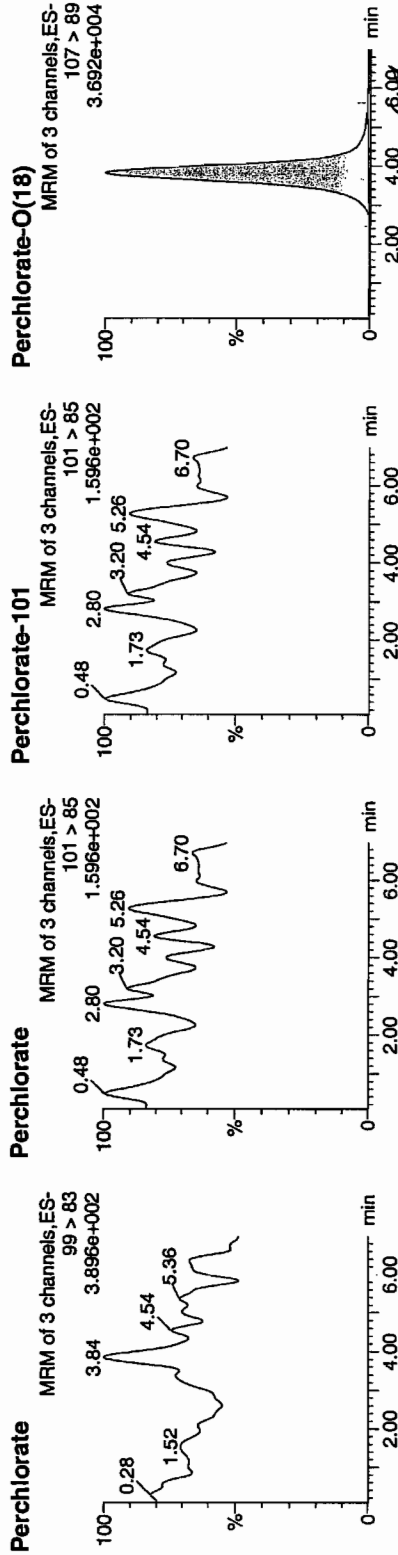
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per021610a.qld

Last Altered: Wednesday, February 17, 2010 11:09:37 AM Eastern Standard Time  
Printed: Wednesday, February 17, 2010 11:11:37 AM Eastern Standard Time

Name: per0216002a  
Date: 16-Feb-2010  
Time: 14:31:15  
ID: IPB001  
Vial: 1:1,A

02-17-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	SN	Ion Ratio
IPB001	Perchlorate	99 > 83											
IPB001	Perchlorate-101	101 > 85											
IPB001	Perchlorate-O(18)	107 > 89	3.81	20630.770	20630.770	bb			0.5115	102.29	2.29	947.702	0.00

Perchlorate Continuing Calibration Blank

GEL Job No.(SDG): 10-1621

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	16-FEB-10	per0216008a	IPB002
Perchlorate-101	0.00	0	NA	16-FEB-10	per0216008a	IPB002
Perchlorate	0.00	0	NA	16-FEB-10	per0216010a	IPB003
Perchlorate-101	0.00	0	NA	16-FEB-10	per0216010a	IPB003
Perchlorate	0.00	0	NA	16-FEB-10	per0216023a	IPB004
Perchlorate-101	0.00	0	NA	16-FEB-10	per0216023a	IPB004
Perchlorate	0.00	0	NA	16-FEB-10	per0216036a	IPB005
Perchlorate-101	0.00	0	NA	16-FEB-10	per0216036a	IPB005
Perchlorate	0.00	0	NA	16-FEB-10	per0216039a	IPB006
Perchlorate-101	0.00	0	NA	16-FEB-10	per0216039a	IPB006
Perchlorate	0.00	0	NA	16-FEB-10	per0216049a	IPB007
Perchlorate-101	0.00	0	NA	16-FEB-10	per0216049a	IPB007
Perchlorate	0.00	0	NA	17-FEB-10	per0216061a	IPB008

Perchlorate Continuing Calibration Blank

GEL Job No.(SDG): 10-1621

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	17-FEB-10	per0216061a	IPB008
Perchlorate	0.00	0	NA	17-FEB-10	per0216072a	IPB009
Perchlorate-101	0.00	0	NA	17-FEB-10	per0216072a	IPB009
Perchlorate	0.00	0	NA	17-FEB-10	per0216082a	IPB010
Perchlorate-101	0.00	0	NA	17-FEB-10	per0216082a	IPB010
Perchlorate	0.00	0	NA	17-FEB-10	per0216093a	IPB011
Perchlorate-101	0.00	0	NA	17-FEB-10	per0216093a	IPB011
Perchlorate	0.00	0	NA	17-FEB-10	per0216104a	IPB012
Perchlorate-101	0.00	0	NA	17-FEB-10	per0216104a	IPB012

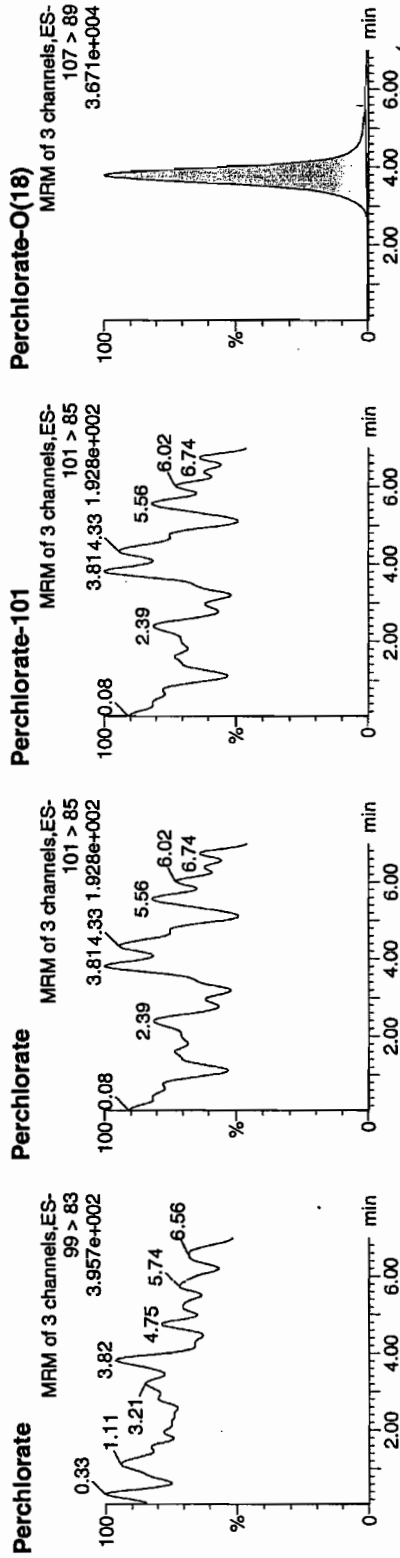
Quantify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per021610a.qld

Last Altered: Wednesday, February 17, 2010 11:09:37 AM Eastern Standard Time  
Printed: Wednesday, February 17, 2010 11:11:37 AM Eastern Standard Time

Name: per0216008a  
Date: 16-Feb-2010  
Time: 15:31:21  
ID: IPB002  
Vial: 1:1,A

02-17-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.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	3.78	20323.039	20323.039	bb			0.5038	100.77	-0.77	1746.4...	



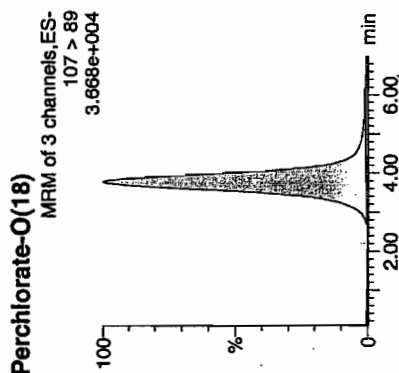
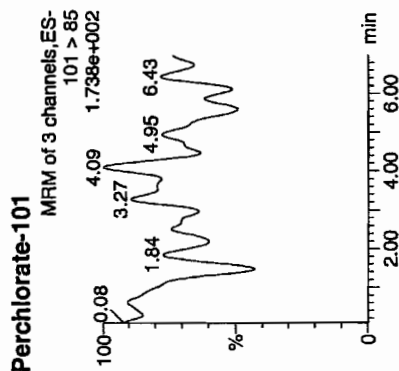
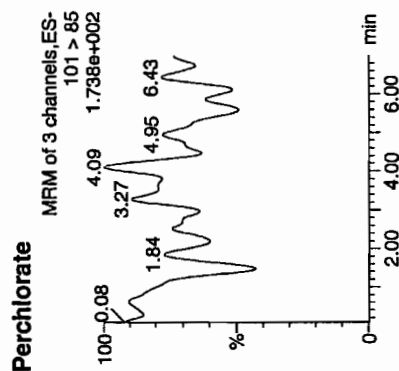
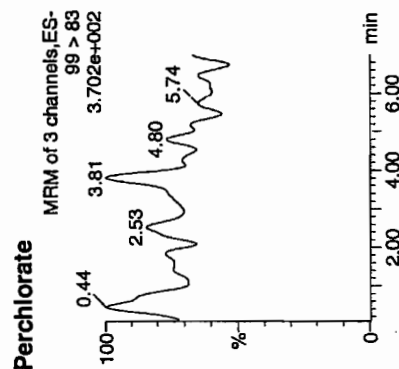
**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per021610a.qld

Last Altered: Wednesday, February 17, 2010 11:09:37 AM Eastern Standard Time  
Printed: Wednesday, February 17, 2010 11:11:37 AM Eastern Standard Time

Name: per02161010a  
Date: 16-Feb-2010  
Time: 15:51:26  
ID: IPB003  
Vial: 1:1,A

02-17-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB003	Perchlorate	99 > 83											0.00
IPB003	Perchlorate-101	101 > 85	3.77	20745.725	20745.725	bb			0.5143	102.86	✓	2.86	1900.2...
IPB003	Perchlorate-O(18)	107 > 89											

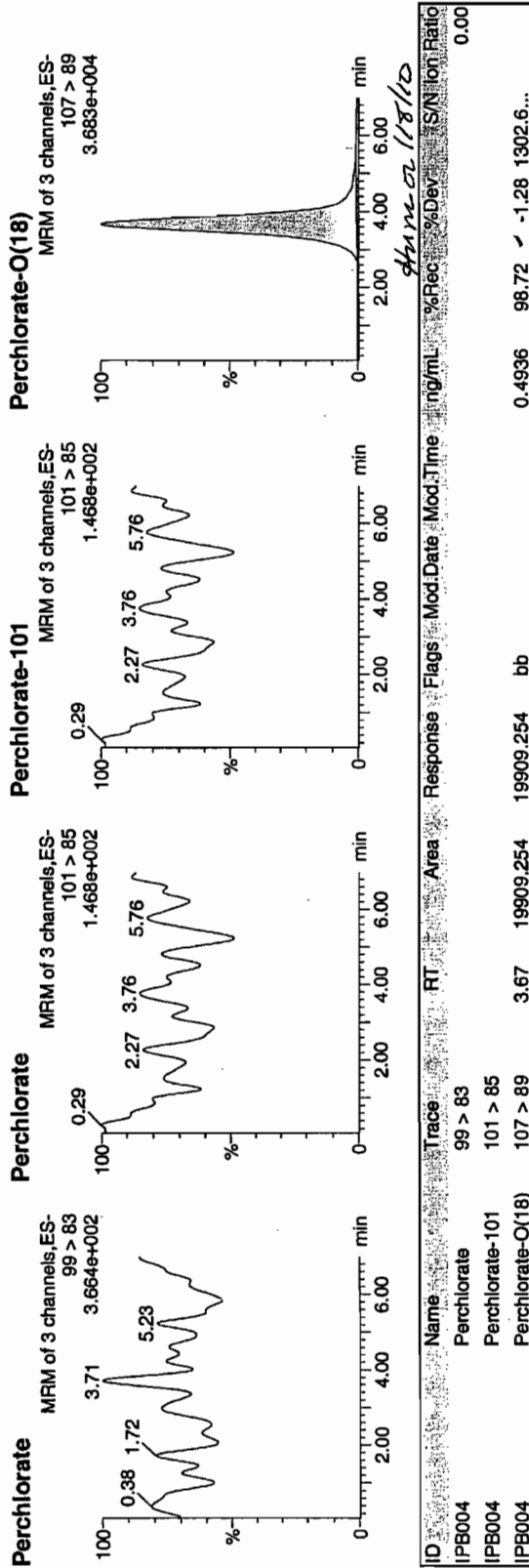
**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per021610a.qld

Last Altered: Wednesday, February 17, 2010 11:09:37 AM Eastern Standard Time  
Printed: Wednesday, February 17, 2010 11:11:37 AM Eastern Standard Time

Name: per0216023a  
Date: 16-Feb-2010  
Time: 18:01:56  
ID: IPB004  
Vial: 1:1,A

22-17-10



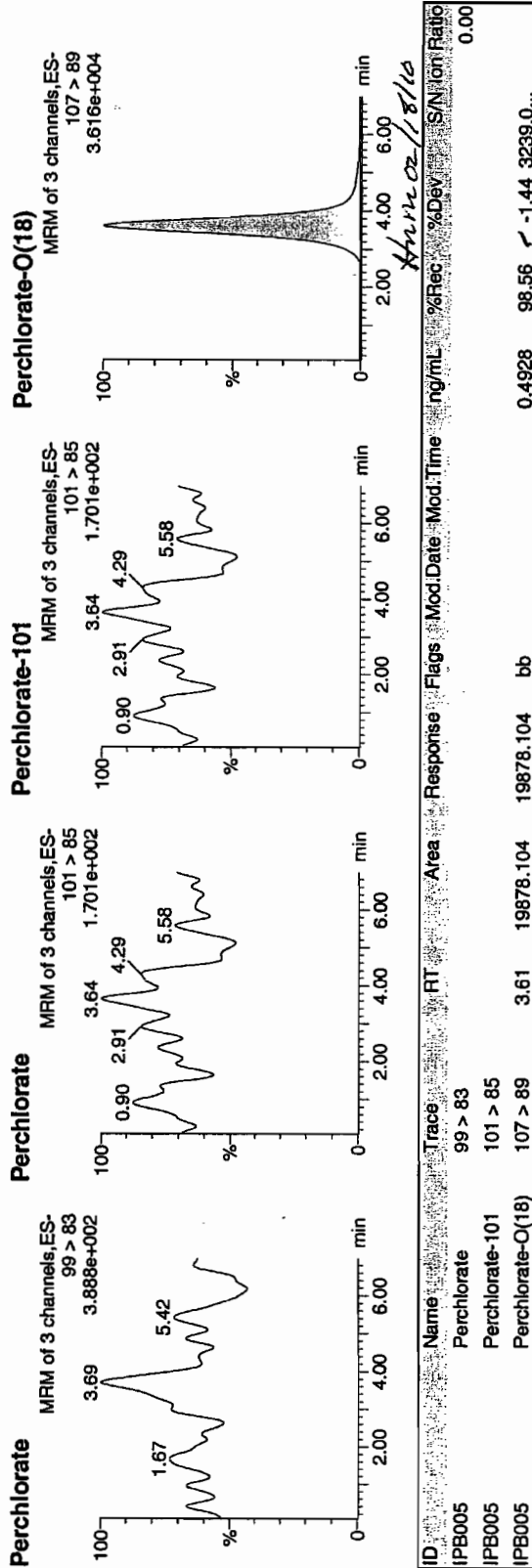
**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per021610a.qld

Last Altered: Wednesday, February 17, 2010 11:09:37 AM Eastern Standard Time  
Printed: Wednesday, February 17, 2010 11:11:37 AM Eastern Standard Time

Name: per0216036a  
Date: 16-Feb-2010  
Time: 20:12:53  
ID: IPB005  
Vial: 1:1,A

02-17-10



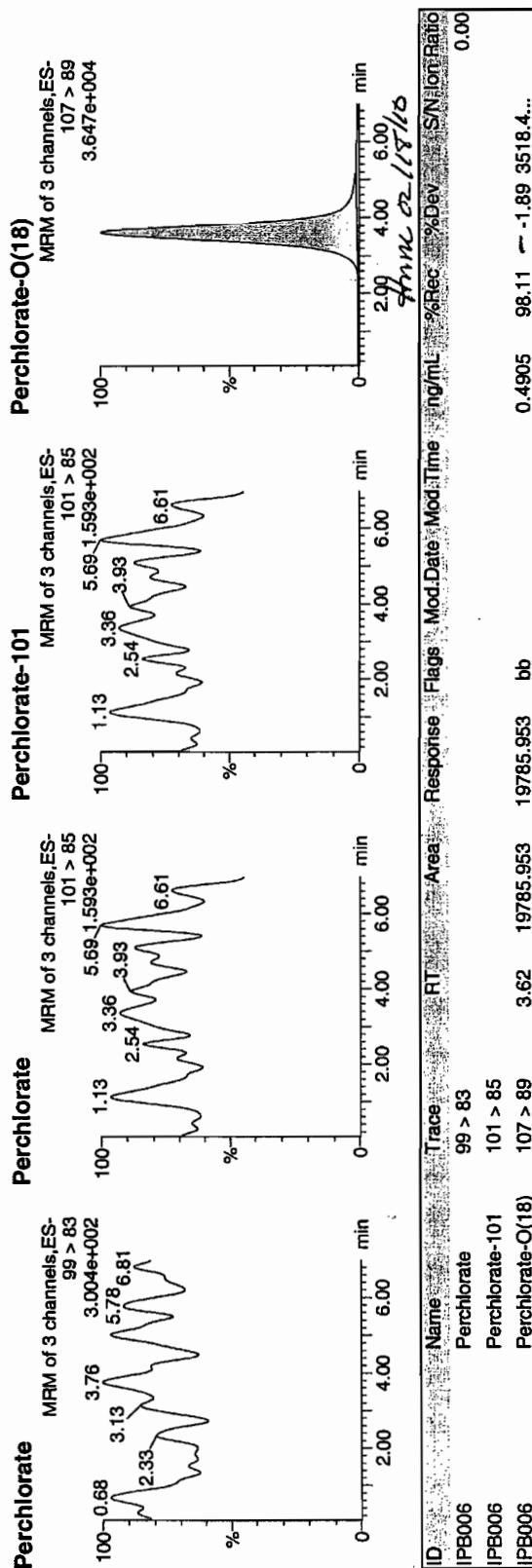
**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per021610a.qld

Last Altered: Wednesday, February 17, 2010 11:09:37 AM Eastern Standard Time  
Printed: Wednesday, February 17, 2010 11:11:37 AM Eastern Standard Time

Name: per0216039a  
Date: 16-Feb-2010  
Time: 20:43:11  
ID: IPB006  
Vial: 1:1,A

02-17-10



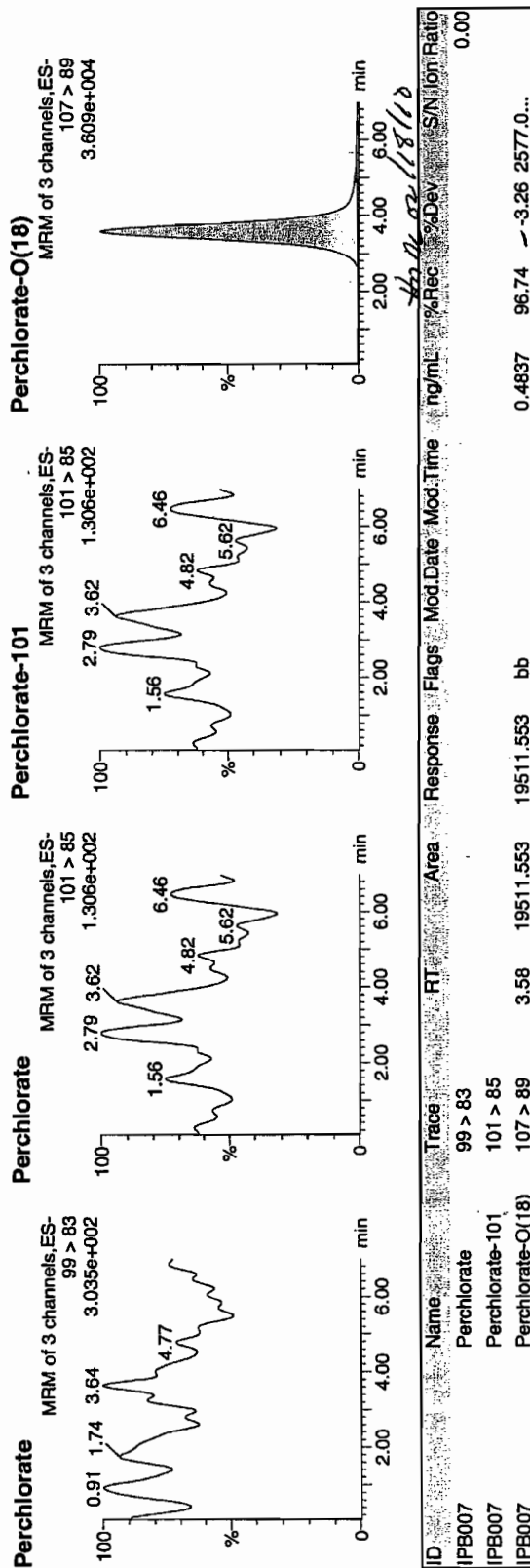
**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per021610a.qld

Last Altered: Wednesday, February 17, 2010 11:09:37 AM Eastern Standard Time  
Printed: Wednesday, February 17, 2010 11:11:37 AM Eastern Standard Time

Name: per0216049a  
Date: 16-Feb-2010  
Time: 22:24:49  
ID: IPB007  
Vial: 1:1,A

02-17-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB007	Perchlorate	99 > 83											0.00
IPB007	Perchlorate-101	101 > 85	3.58	19511.553	19511.553	bb			0.4837	96.74	-3.26	2577.0...	
IPB007	Perchlorate-O(18)	107 > 89											

Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per021610a.qld

Last Altered: Wednesday, February 17, 2010 11:09:37 AM Eastern Standard Time  
Printed: Wednesday, February 17, 2010 11:11:37 AM Eastern Standard Time

Name: per0216061a

Date: 17-Feb-2010

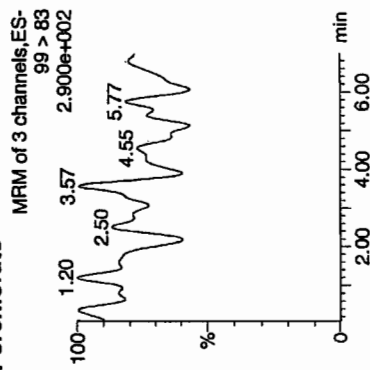
Time: 00:25:47

ID: IPB008

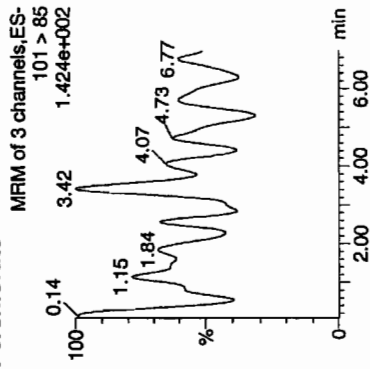
Vial: 1:1,A

02-17-10

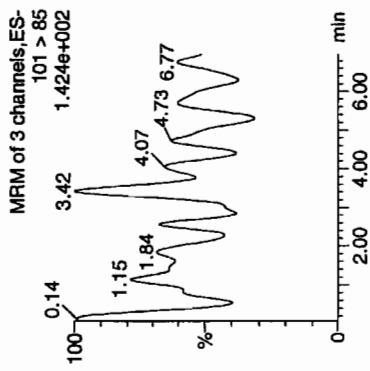
Perchlorate



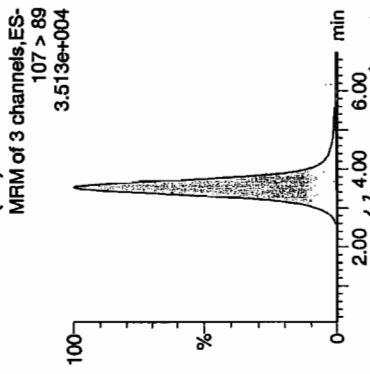
Perchlorate



Perchlorate-101



Perchlorate-O(18)



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	ISN	Ion Ratio
IPB008	Perchlorate	99 > 83											
IPB008	Perchlorate-101	101 > 85											
IPB008	Perchlorate-O(18)	107 > 89	3.53	19011.539	19011.539	bb			0.4713	94.27	-5.73	450.995	0.00

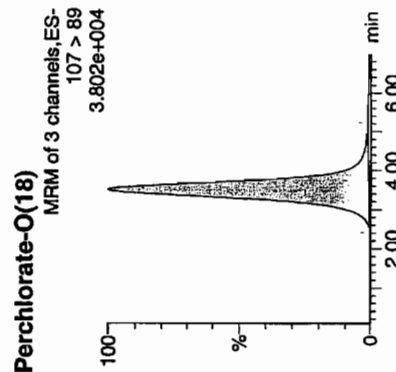
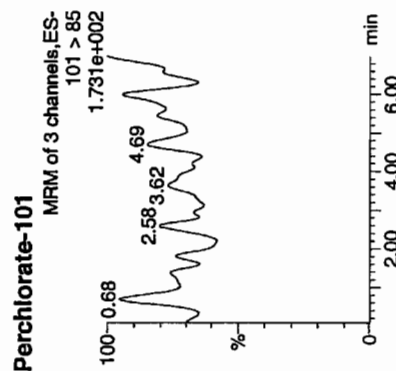
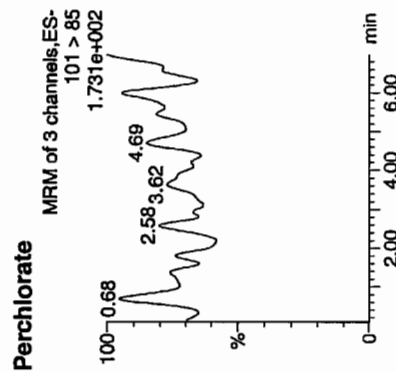
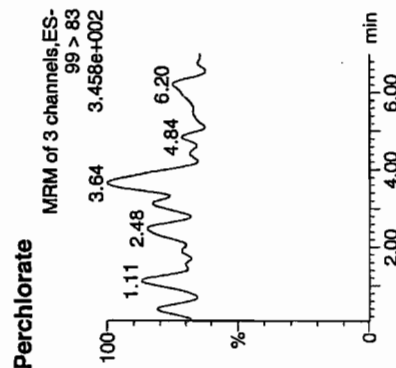
Quantify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per021610a.qld

Last Altered: Wednesday, February 17, 2010 11:09:37 AM Eastern Standard Time  
Printed: Wednesday, February 17, 2010 11:11:37 AM Eastern Standard Time

Name: per0216072a  
Date: 17-Feb-2010  
Time: 02:16:48  
ID: IPB009  
Vial: 1:1,A

02-17-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB009	Perchlorate	99 > 83											0.00
IPB009	Perchlorate-101	101 > 85											
IPB009	Perchlorate-O(18)	107 > 89	3.51	20058.123	20058.123	bb			0.4973	99.46	-0.54	966.944	

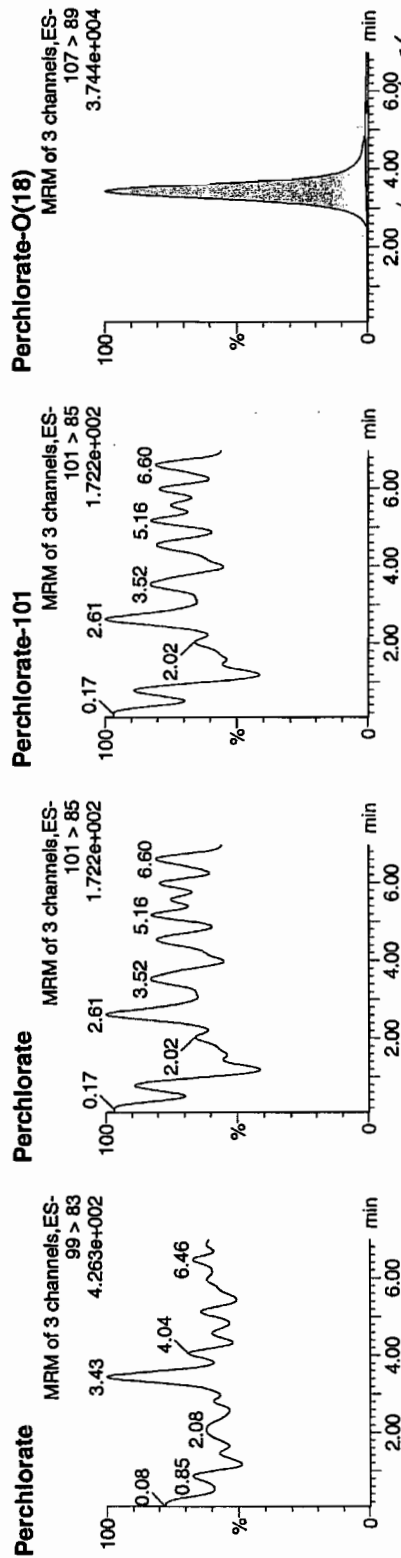
Quantify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per021610a.qld

Last Altered: Wednesday, February 17, 2010 11:09:37 AM Eastern Standard Time  
Printed: Wednesday, February 17, 2010 11:11:37 AM Eastern Standard Time

Name: per0216082a  
Date: 17-Feb-2010  
Time: 03:58:11  
ID: IPB010  
Vial: 1:1,A

02-17-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB010	Perchlorate	99 > 83											0.00
IPB010	Perchlorate-101	101 > 85											
IPB010	Perchlorate-O(18)	107 > 89	3.43	19410.971	19410.971	bb			0.4812	96.25	-3.75	1629.3...	



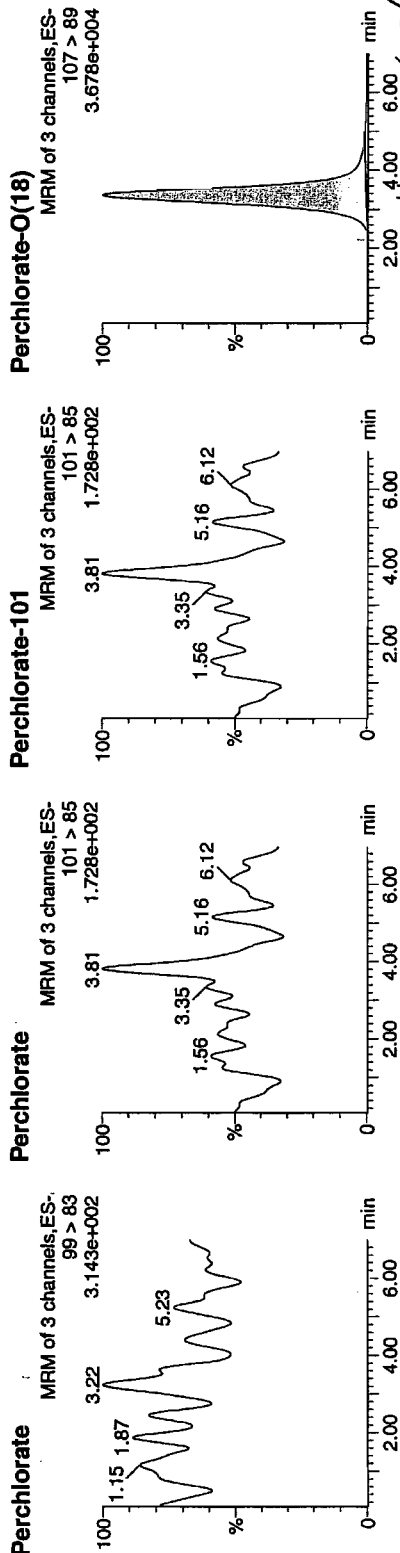
**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per021610a.qld

Last Altered: Wednesday, February 17, 2010 11:09:37 AM Eastern Standard Time  
Printed: Wednesday, February 17, 2010 11:11:37 AM Eastern Standard Time

Name: per0216093a  
Date: 17-Feb-2010  
Time: 05:49:29  
ID: IPB011  
Vial: 1:1,A

02-17-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB011	Perchlorate	99 > 83											
IPB011	Perchlorate-101	101 > 85	3.36	19009.533	19009.533	bb			0.4713	94.26	-5.74	1035.7...	0.00
IPB011	Perchlorate-O(18)	107 > 89											

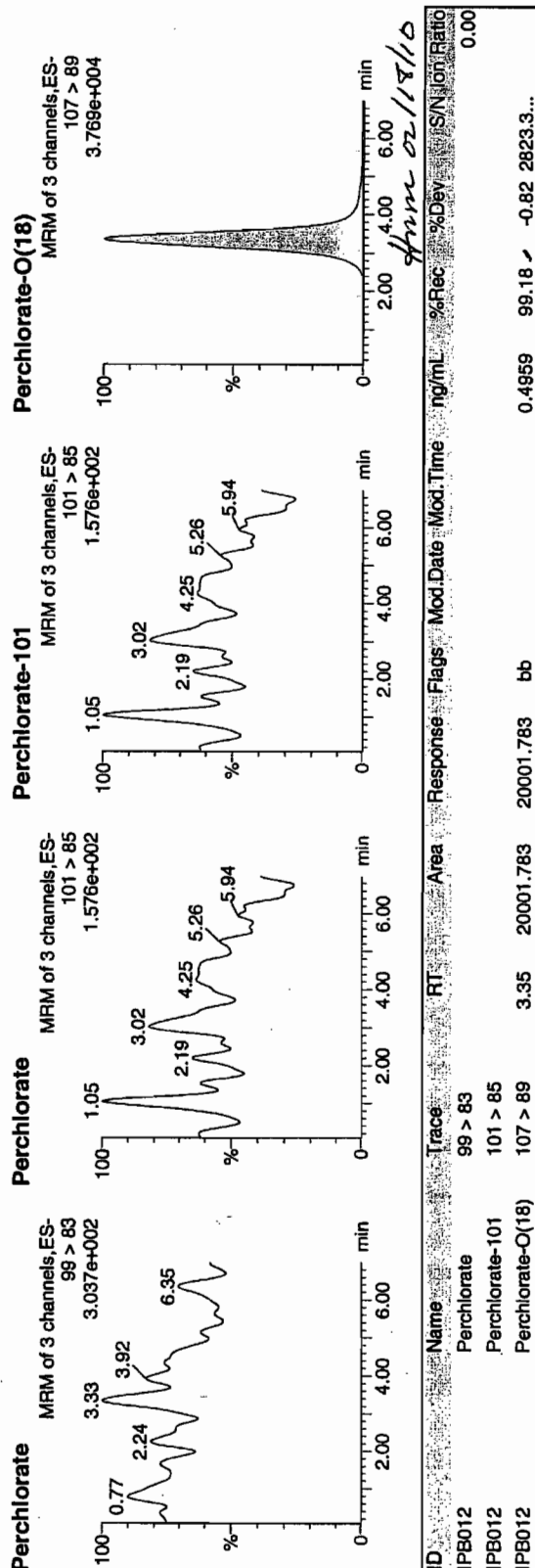
Quantify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per021610a.qld

Last Altered: Wednesday, February 17, 2010 11:09:37 AM Eastern Standard Time  
Printed: Wednesday, February 17, 2010 11:11:37 AM Eastern Standard Time

Name: per0216104a  
Date: 17-Feb-2010  
Time: 07:40:42  
ID: IPB012  
Vial: 1:1,A

02-17-10



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

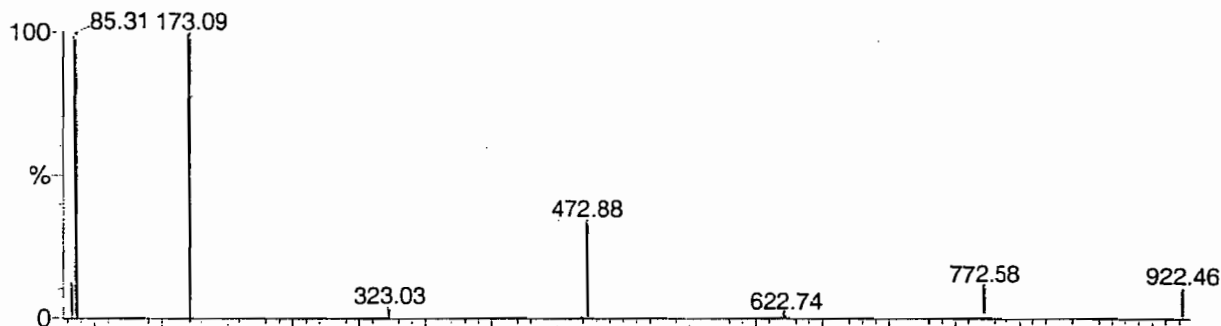
Page 1 of 1

Printed: Tue Jan 08 12:19:12 2008

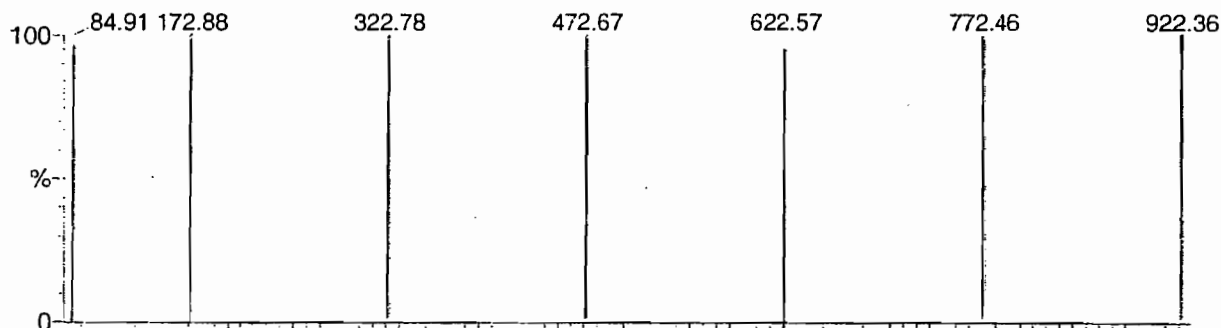
POINTS HIGHLIGHTED BY CURV 01-01-08

Data file: STATMS1 - Uncalibrated

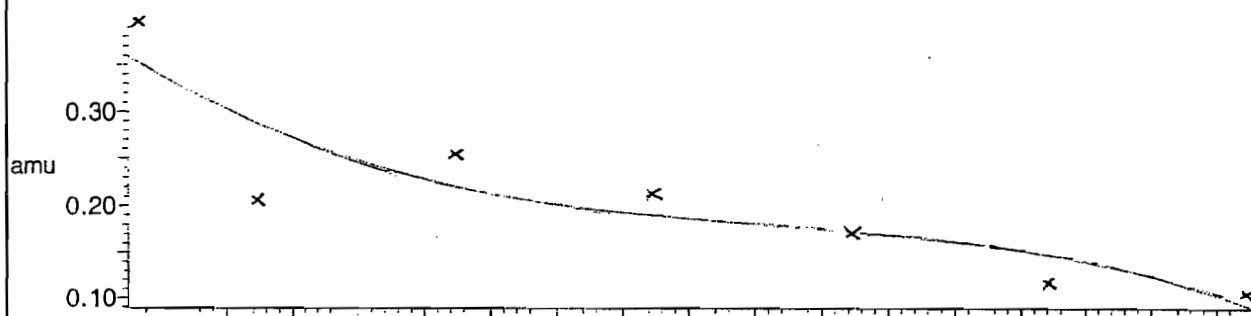
7 matches of 7 tested references



Reference file: Nairb

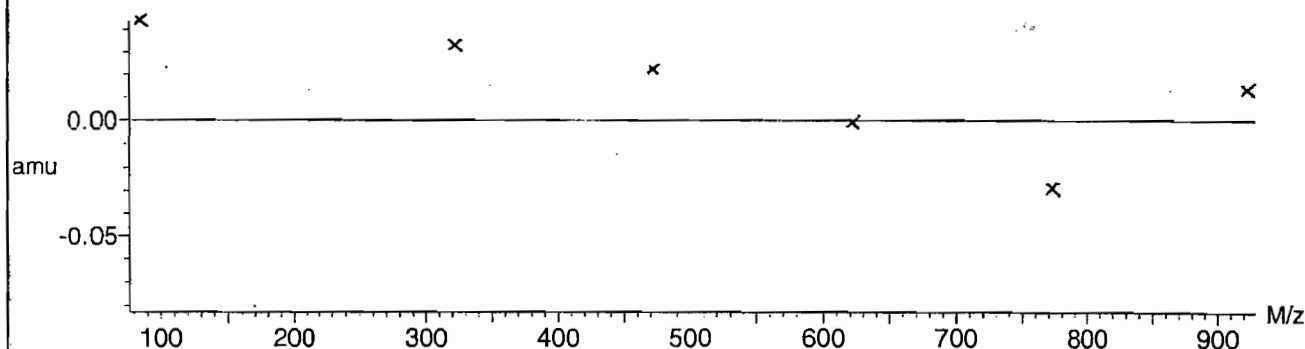


Mass difference (Raw - Ref mass)



Residuals

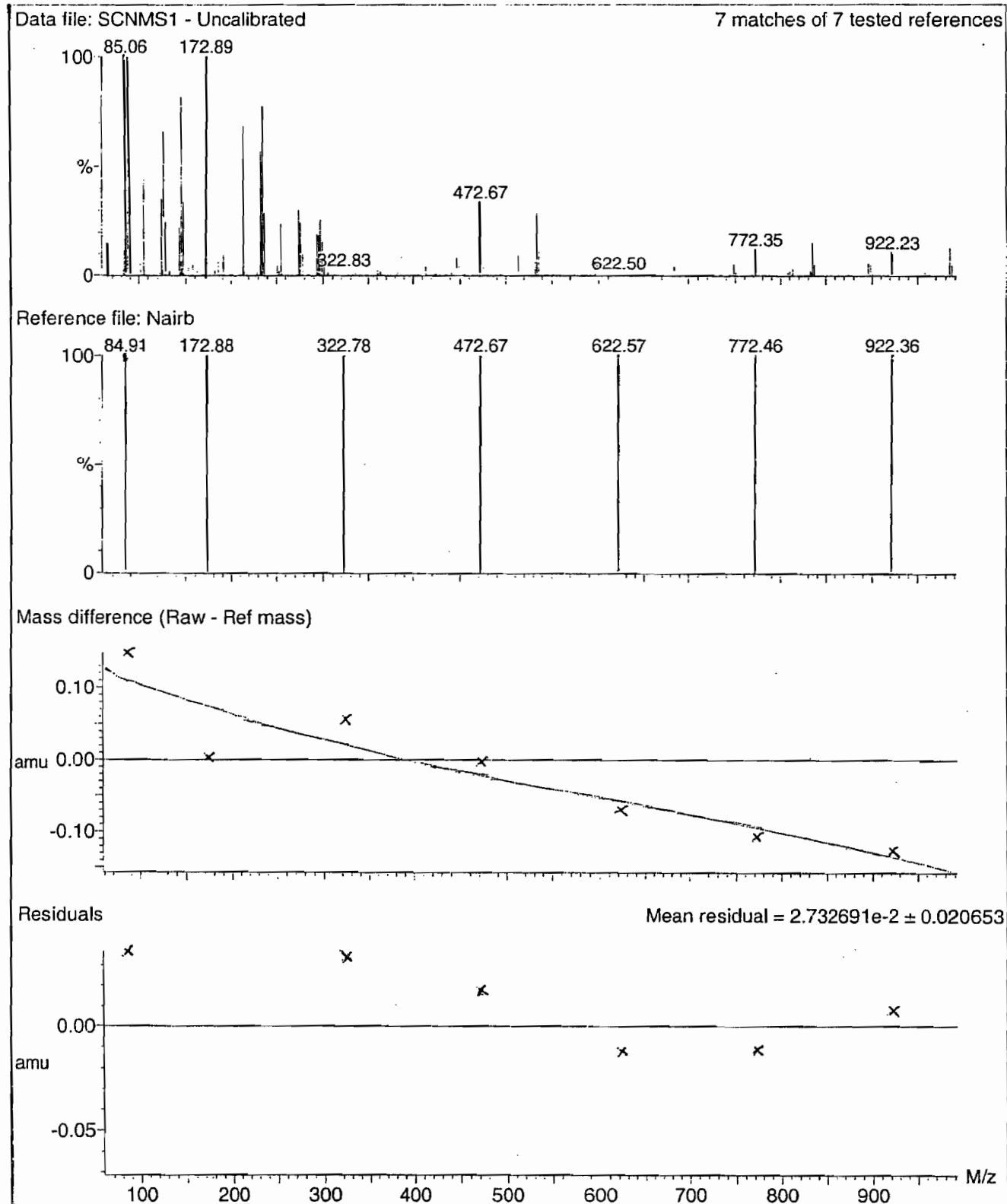
Mean residual =  $3.212012 \times 10^{-2} \pm 0.024108$



Calibration Report - MS1 Scanning

Page 1 of 1

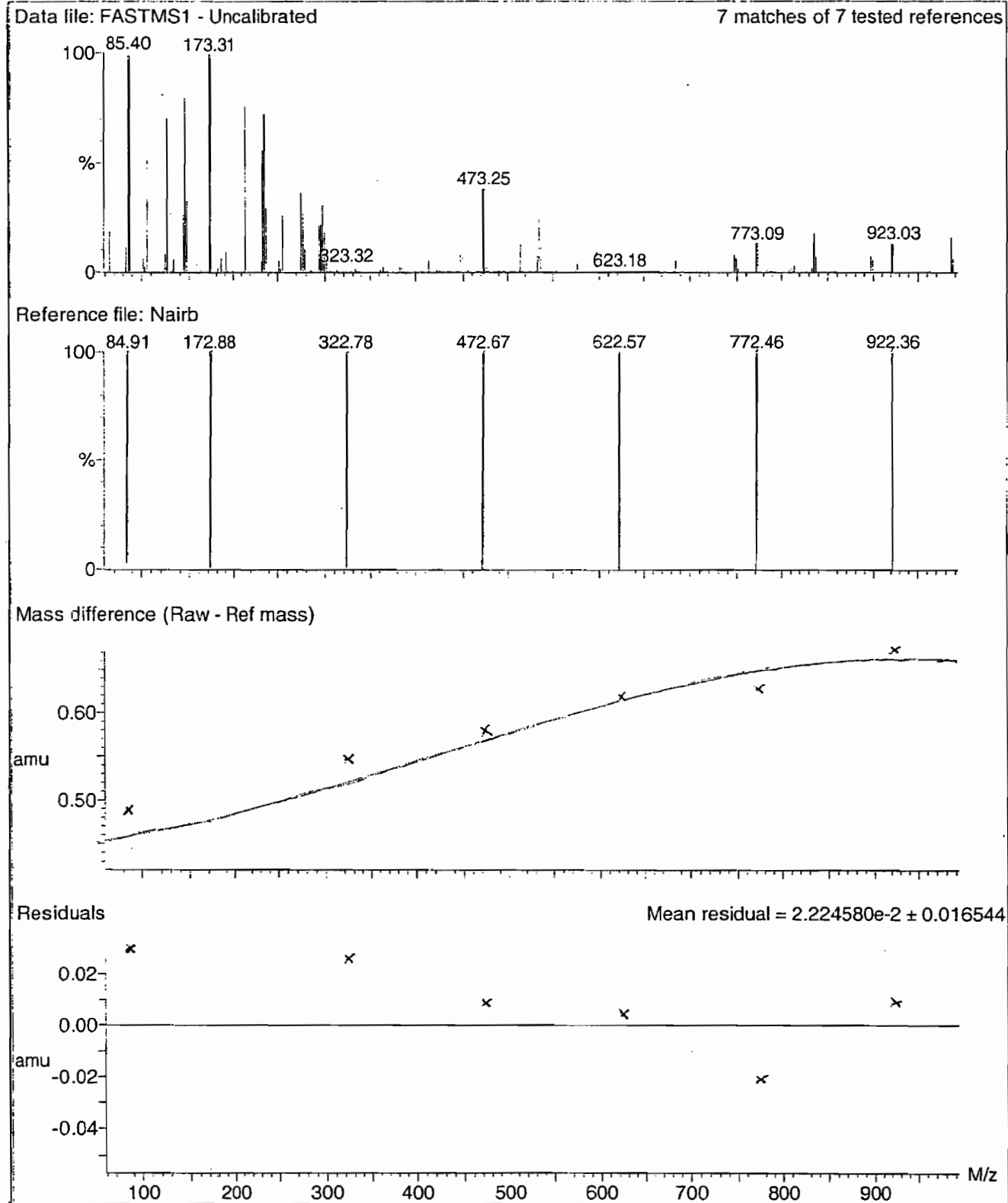
Printed: Tue Jan 08 12:20:09 2008



Calibration Report - MS1 Scan Speed Compensation

Page 1 of 1

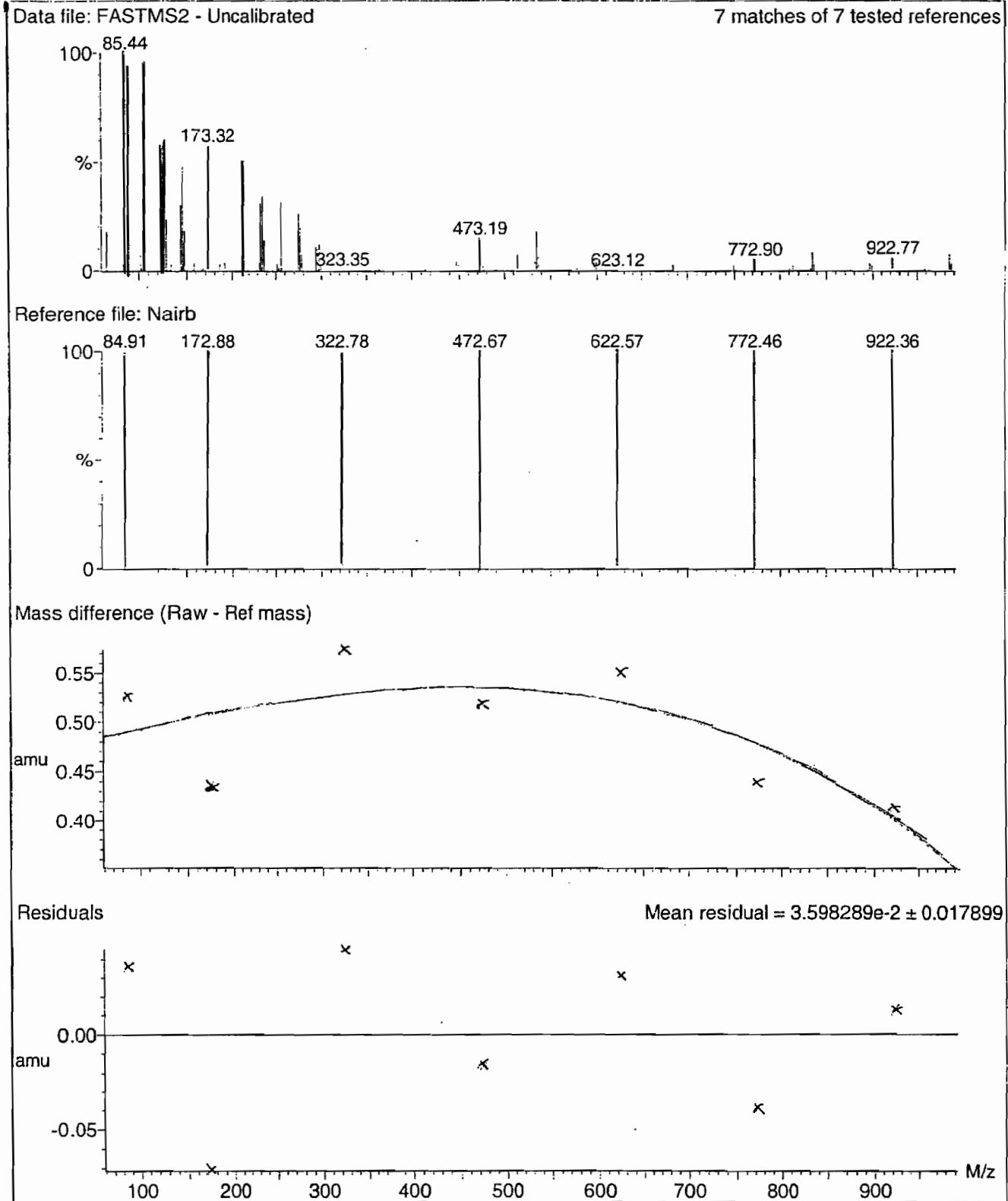
Printed: Tue Jan 08 12:21:04 2008



Calibration Report - MS2 Scan Speed Compensation

Page 1 of 1

Printed: Tue Jan 08 12:23:51 2008



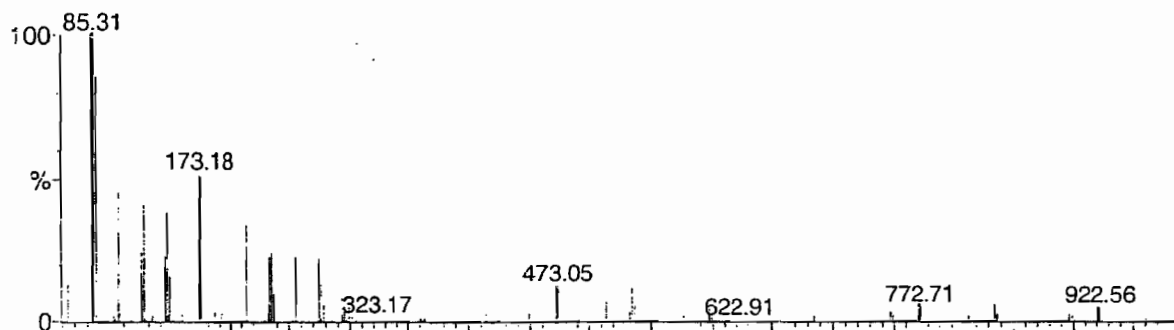
Calibration Report - MS2 Scanning

Page 1 of 1

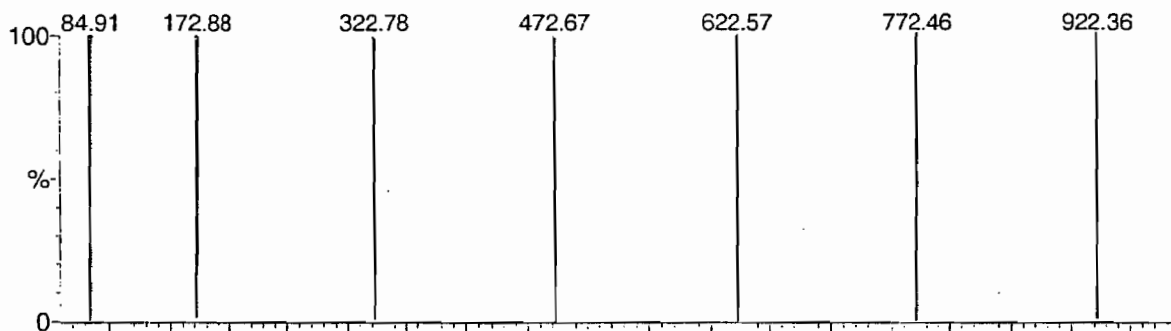
Printed: Tue Jan 08 12:22:56 2008

Data file: SCNMS2 - Uncalibrated

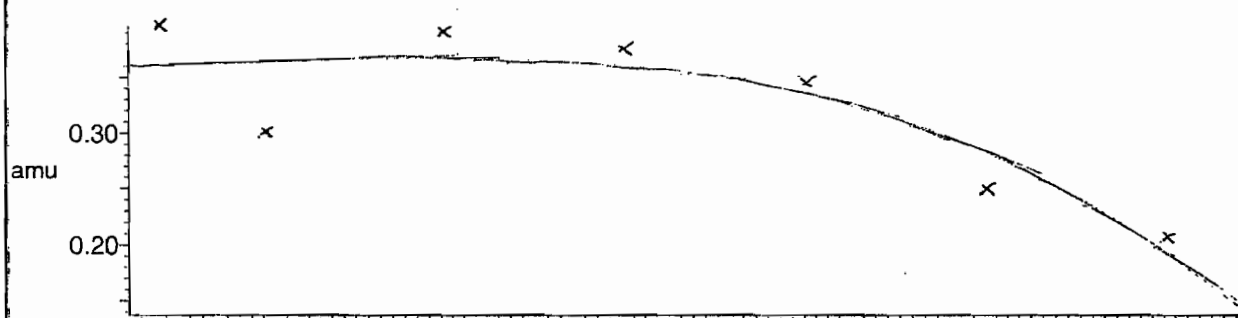
7 matches of 7 tested references



Reference file: Nairb

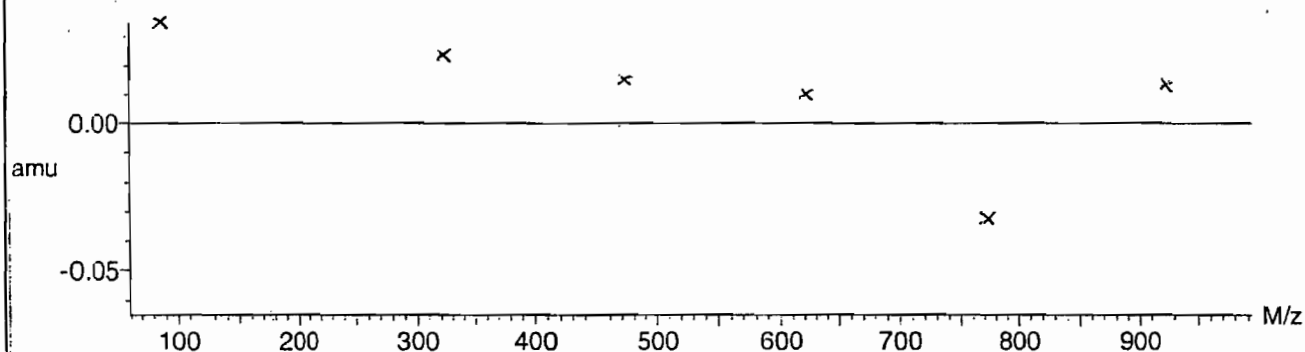


Mass difference (Raw - Ref mass)



Residuals

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





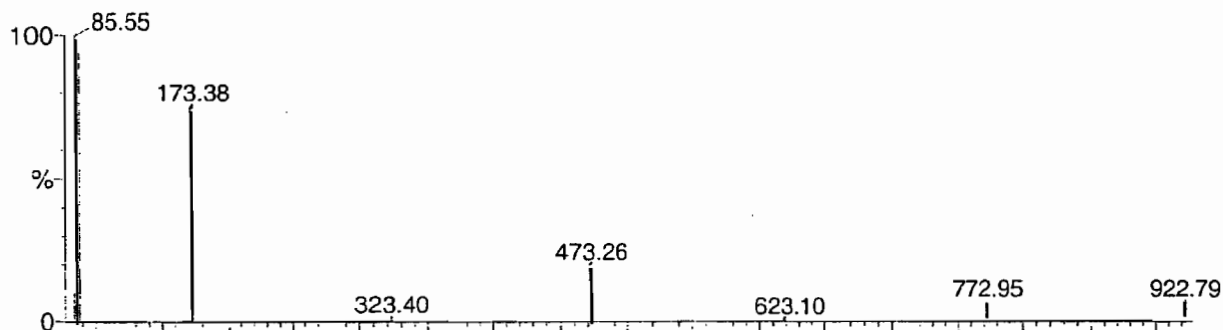
Calibration Report - MS2 Static

Page 1 of 1

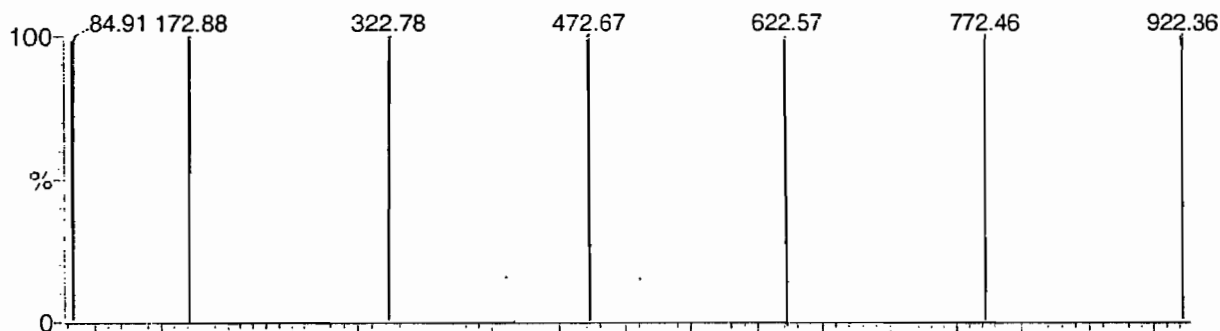
Printed: Tue Jan 08 12:21:59 2008

Data file: STATMS2 - Uncalibrated

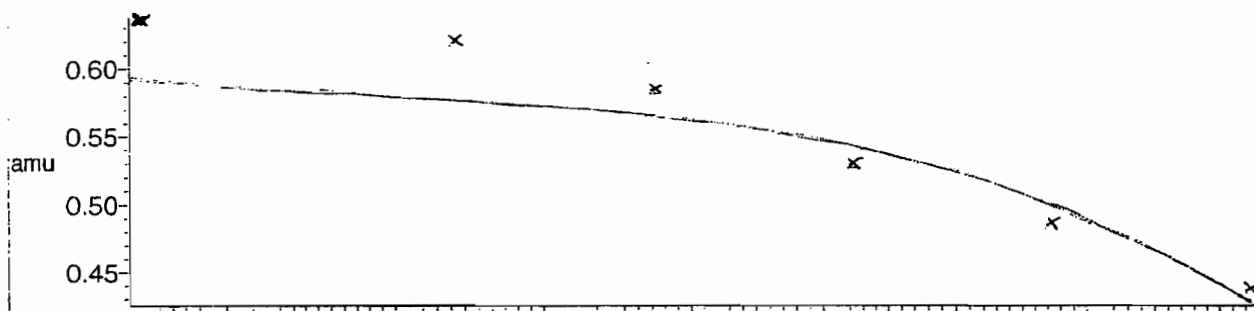
7 matches of 7 tested references



Reference file: Nairb

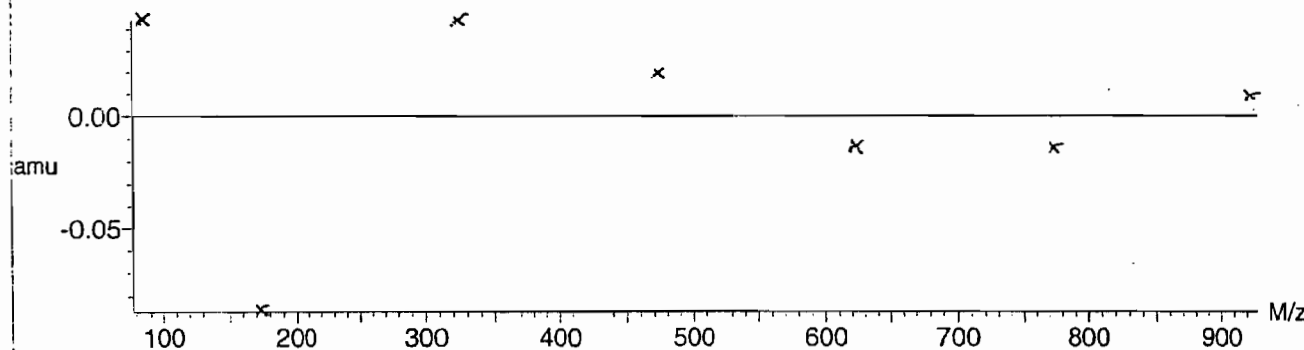


Mass difference (Raw - Ref mass)



Residuals

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



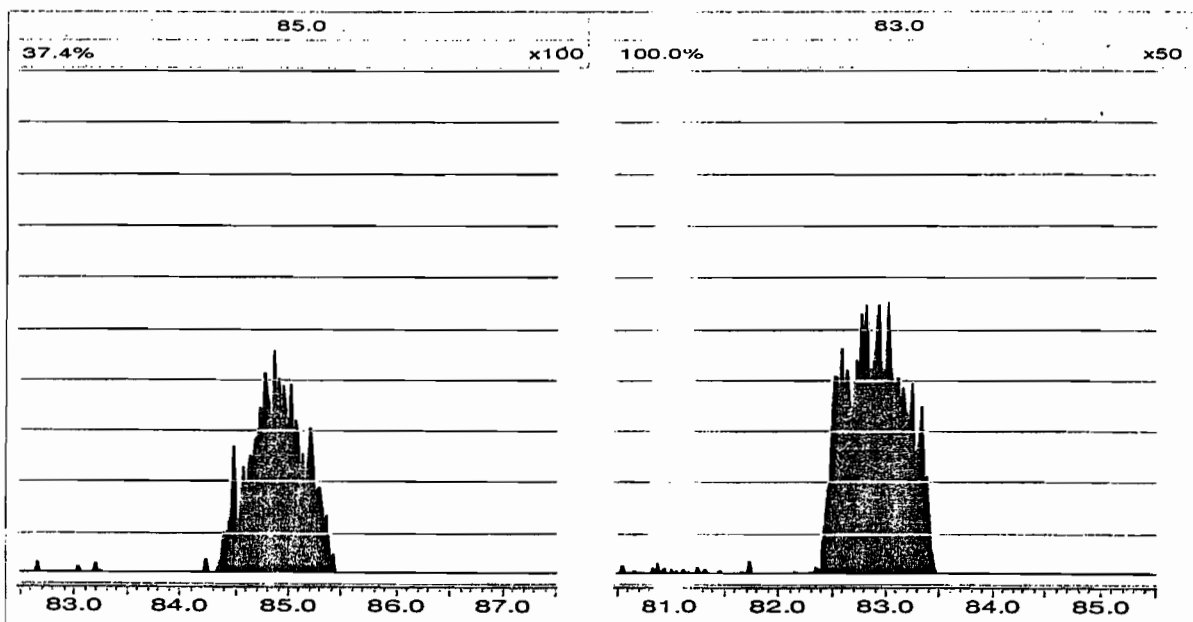
Tune Parameters

MassLynx 4.0 SP4

Page 1 of 1

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

Printed: Tuesday, February 16, 2010 10:54:24 Eastern Standard Time



Perchlorate RT And Area Summary

Lab Name: General Engineering Laboratories GEL Job No.(SDG): 10-1621

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	per0216006a	16-FEB-10	19812.8				
Lower Area Limit			9906.4				
Upper Area Limit			39625.6				
1202035609	per0216074a	17-FEB-10 02:37	19327.1	3.51			
1202035610	per0216075a	17-FEB-10 02:47	20369.2	3.5	3.50767	1.002	
1202035613	per0216076a	17-FEB-10 02:57	19419.7	3.53	3.54495	1.004	
246436001	per0216098a	17-FEB-10 06:40	19477.4	3.33			

# SAMPLE DATA

# P perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC Client Sample No. RE15-10-8378

Lab Code: GEL

Instrument: LCMSMS Date Received: 06-FEB-10

Method: SW846 6850 Modified GEL Job No (SDG): 10-1621

Matrix: WATER GEL Sample ID: 246436001

Extraction Batch ID: 950041 Date Filtered: 12-FEB-10

Extraction Type: Filter/DAI Injection Volume (uL): 20

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

%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	17-FEB-10 06:40	per0216098a
	Perchlorate Isotope Ratio						1	17-FEB-10 06:40	per0216098a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	17-FEB-10 06:40	per0216098a
	Perchlorate-O(18)			0.483	ug/L		1	17-FEB-10 06:40	per0216098a

<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

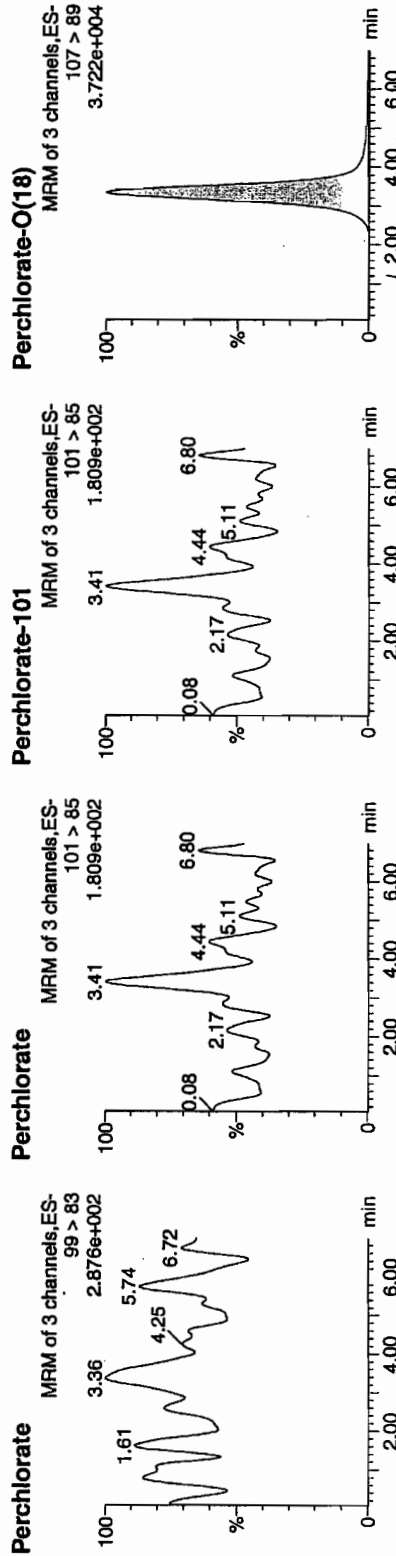
Dataset: C:\MassLynx\Perchlorate.PRO\per021610a.qld

Last Altered: Wednesday, February 17, 2010 11:09:37 AM Eastern Standard Time  
 Printed: Wednesday, February 17, 2010 11:11:37 AM Eastern Standard Time

Name: per0216098a  
 Date: 17-Feb-2010  
 Time: 06:40:06  
 ID: 246436001  
 Vial: 3:4,A

622  
 02-17-10

12222 | 950012 | 12222 | 11



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
246436001	Perchlorate	99 > 83											0.00
246436001	Perchlorate-101	101 > 85	3.33	19477.436	19477.436	bb			0.4829	96.58	-3.42	1774.2...	
246436001	Perchlorate-O(18)	107 > 89											

# STANDARDS DATA

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories GEL Job No.(SDG): 10-1621

Lab Code: GEL

Instrument ID: LCMSMS Date Analyzed: 16-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

Coefficient of Determination:

Calibration Curve: 48694.12

Response Type: External Standard

Curve Type: RF



Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories

Lab Code: GEL

Instrument ID: LCMSMS Date Analyzed: 16-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: 15156.32

Response Type: External Standard

Curve Type: RF

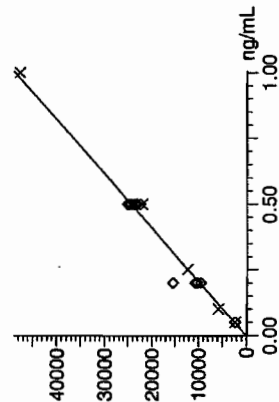
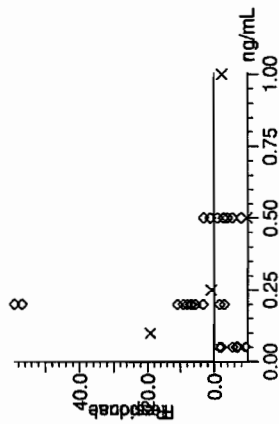
**Quantify Calibration Report MassLynx 4.0 SP4**  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per021610a.qld

Last Altered: Wednesday, February 17, 2010 11:09:37 AM Eastern Standard Time  
Printed: Wednesday, February 17, 2010 11:11:37 AM Eastern Standard Time

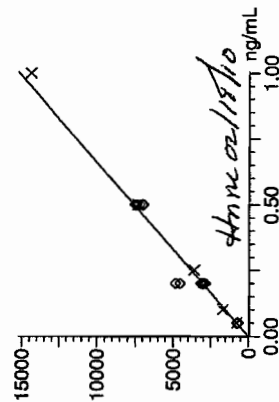
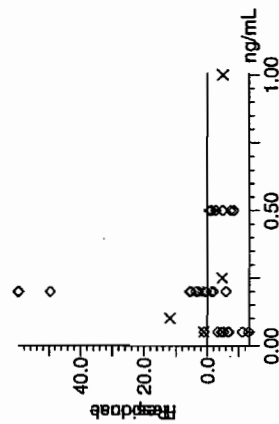
Method: C:\MassLynx\Perchlorate.PRO\MethDB\per021610a.mdb 17 Feb 2010 09:42:10  
Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per021610a.cdb 17 Feb 2010 11:03:29

Compound name: Perchlorate  
Response Factor: 48694.1  
R<sup>2</sup> SD: 5598.16, % Relative SD: 11.4966  
Response type: External Std, Area  
Curve type: RF



02-17-10

Compound name: Perchlorate-101  
Response Factor: 15156.3  
R<sup>2</sup> SD: 1083.64, % Relative SD: 7.14976  
Response type: External Std, Area  
Curve type: RF



02-17-10

**Quantify Calibration Report** MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per021610a.qld

Last Altered: Wednesday, February 17, 2010 11:09:37 AM Eastern Standard Time

Printed: Wednesday, February 17, 2010 11:11:37 AM Eastern Standard Time

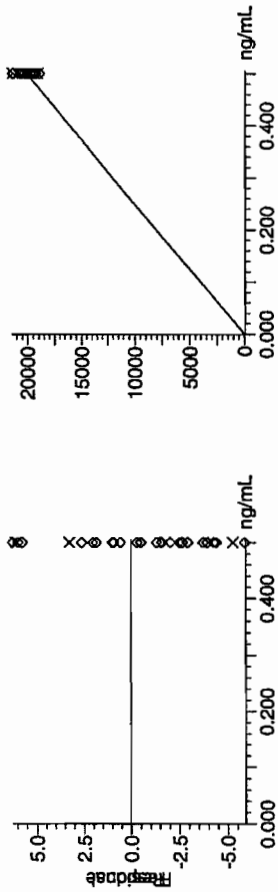
Compound name: Perchlorate-O(18)

Response Factor: 40336

RRF SD: 1845.58, % Relative SD: 4.57552

Response type: External Std, Area

Curve type: RIF ✓



Perchlorate Initial Calibration Verification

GEL Job No.(SDG): 10-1621

Lab Name: General Engineering Laboratories

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.52	103	16-FEB-10 15:41	per0216009a
Perchlorate Isotope Ratio		3.32		16-FEB-10 15:41	per0216009a
Perchlorate-101	.5	.5	99.57	16-FEB-10 15:41	per0216009a

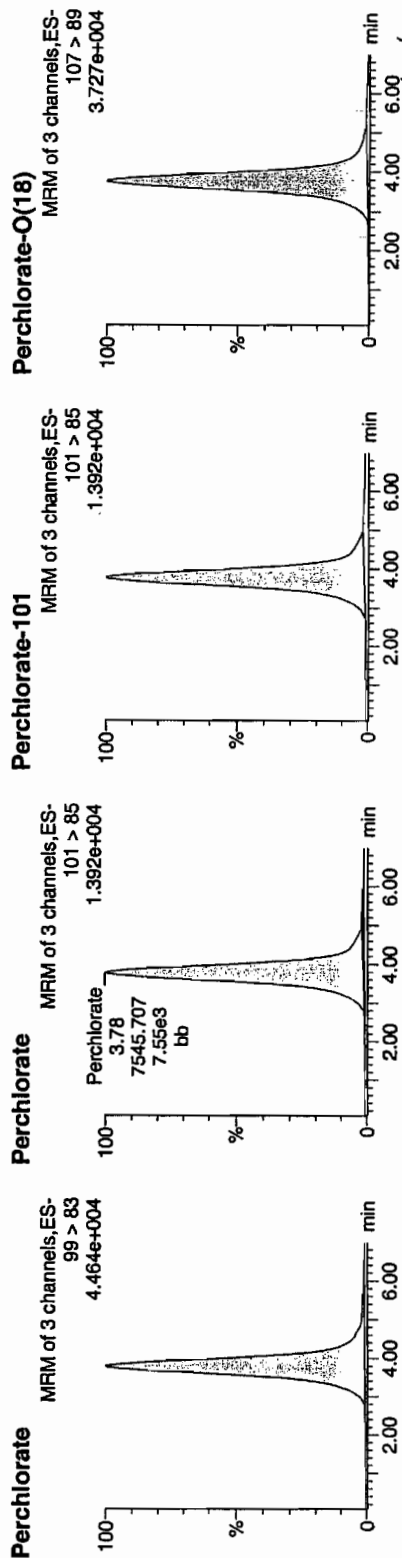
Quantify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charliers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per021610a.qld

Last Altered: Wednesday, February 17, 2010 11:09:37 AM Eastern Standard Time  
Printed: Wednesday, February 17, 2010 11:11:37 AM Eastern Standard Time

Name: per0216009a  
Date: 16-Feb-2010  
Time: 15:41:24  
ID: WCL100211-06ICV  
Vial: 1:2,A

Pure  
02-17-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	IS/N	Ion Ratio
WCL100211-06ICV	Perchlorate	99 > 83	3.78	25078.299	25078.299	bb			0.5150	103.00	3.00	2940.9...	3.32
WCL100211-06ICV	Perchlorate-101	101 > 85	3.78	7545.707	7545.707	bb			0.4979	99.57	-0.43	1165.8...	
WCL100211-06ICV	Perchlorate-O(18)	107 > 89	3.77	20536.309	20536.309	bb			0.5091	101.83	1.83	2332.3...	

Perchlorate Continuing Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1621

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.49	98.95	16-FEB-10 17:51	per0216022a
Perchlorate Isotope Ratio		3.26		16-FEB-10 17:51	per0216022a
Perchlorate-101	.5	.49	97.38	16-FEB-10 17:51	per0216022a
Perchlorate	.5	.49	97.01	16-FEB-10 20:02	per0216035a
Perchlorate Isotope Ratio		3.21		16-FEB-10 20:02	per0216035a
Perchlorate-101	.5	.49	97.09	16-FEB-10 20:02	per0216035a
Perchlorate	.5	.47	94.55	16-FEB-10 22:14	per0216048a
Perchlorate Isotope Ratio		3.2		16-FEB-10 22:14	per0216048a
Perchlorate-101	.5	.47	94.94	16-FEB-10 22:14	per0216048a
Perchlorate	.5	.46	92.07	17-FEB-10 00:15	per0216060a
Perchlorate Isotope Ratio		3.23		17-FEB-10 00:15	per0216060a
Perchlorate-101	.5	.46	91.51	17-FEB-10 00:15	per0216060a
Perchlorate	.5	.51	101.24	17-FEB-10 02:06	per0216071a

Perchlorate Continuing Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1621

Lab Code: GEL

Reporting Units: ug/L

Perchlorate Isotope Ratio		3.28		17-FEB-10 02:06	per0216071a
Perchlorate-101	.5	.5	99.06	17-FEB-10 02:06	per0216071a
Perchlorate	.5	.48	95.96	17-FEB-10 03:47	per0216081a
Perchlorate Isotope Ratio		3.24		17-FEB-10 03:47	per0216081a
Perchlorate-101	.5	.48	95.04	17-FEB-10 03:47	per0216081a
Perchlorate	.5	.49	97.28	17-FEB-10 05:39	per0216092a
Perchlorate Isotope Ratio		3.38		17-FEB-10 05:39	per0216092a
Perchlorate-101	.5	.46	92.42	17-FEB-10 05:39	per0216092a
Perchlorate	.5	.5	100.94	17-FEB-10 07:30	per0216103a
Perchlorate Isotope Ratio		3.29		17-FEB-10 07:30	per0216103a
Perchlorate-101	.5	.49	98.51	17-FEB-10 07:30	per0216103a

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

Dataset: C:\MassLynx\Perchlorate.PRO\per021610a.qld

Last Altered: Wednesday, February 17, 2010 11:09:37 AM Eastern Standard Time  
Printed: Wednesday, February 17, 2010 11:11:37 AM Eastern Standard Time

Name: per0216022a

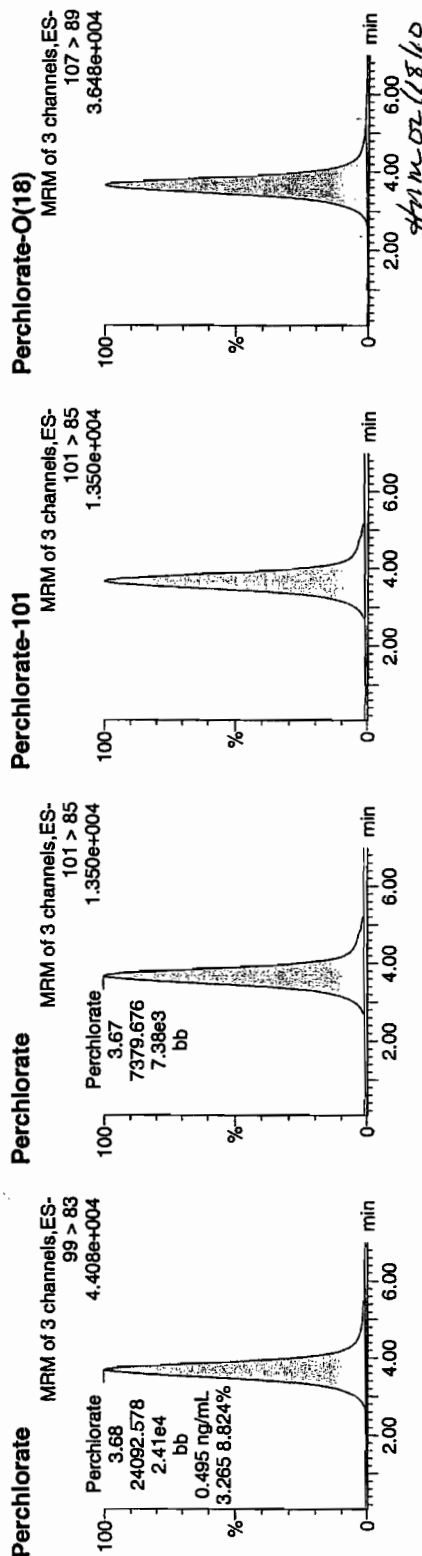
Date: 16-Feb-2010

Time: 17:51:54

ID: WCL100211-06CCV

Vial: 1:2,A

Pure  
and  
02-17-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	SN	Ion Ratio
WCL100211-06CCV	Perchlorate	99 > 83	3.68	24092.578	24092.578	bb			0.4948	98.95	-1.05	3788.8...	3.26
WCL100211-06CCV	Perchlorate-101	101 > 85	3.67	7379.676	7379.676	bb			0.4869	97.38	-2.62	718.968	
WCL100211-06CCV	Perchlorate-O(18)	107 > 89	3.66	19578.602	19578.602	bb			0.4854	97.08	-2.92	1969.2...	



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

Dataset: C:\MassLynx\Perchlorate.PRO\per021610a.qld

Last Altered: Wednesday, February 17, 2010 11:09:37 AM Eastern Standard Time  
Printed: Wednesday, February 17, 2010 11:11:37 AM Eastern Standard Time

Name: per0216035a

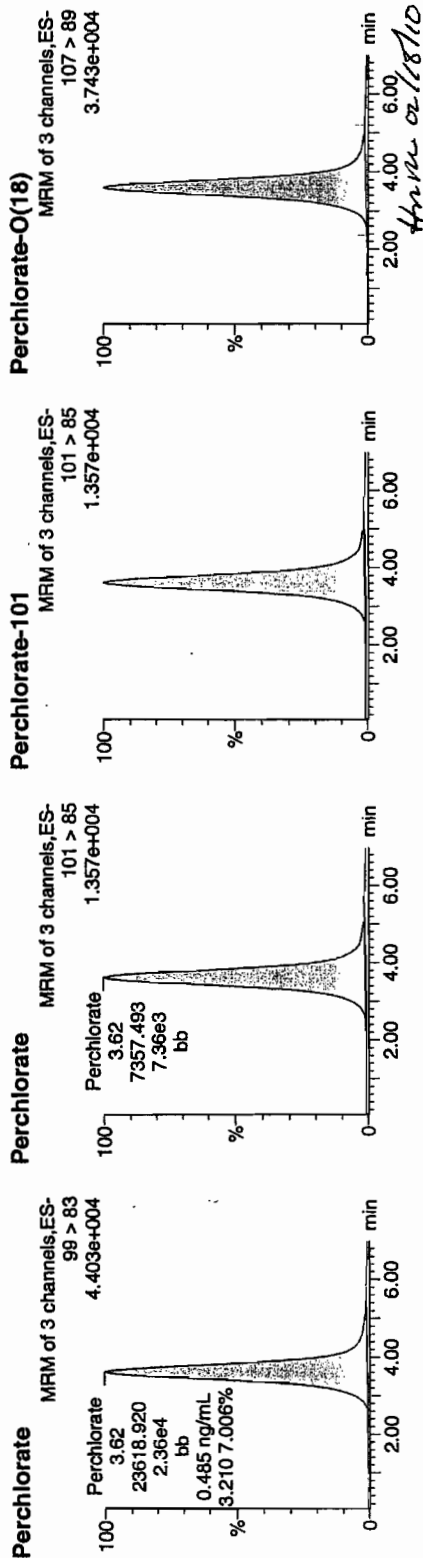
Date: 16-Feb-2010

Time: 20:02:43

ID: WCL100211-06CCV

Vial: 1:2,A

*Per  
an  
02-17-10*



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100211-06CCV	Perchlorate	99 > 83	3.62	23618.920	23618.920	bb			0.4850	97.01	-2.99	958.546	3.21
WCL100211-06CCV	Perchlorate-101	101 > 85	3.62	7357.493	7357.493	bb			0.4854	97.09	-2.91	253.594	
WCL100211-06CCV	Perchlorate-O(18)	107 > 89	3.59	20062.182	20062.182	bb			0.4974	99.48	-0.52	3370.6...	

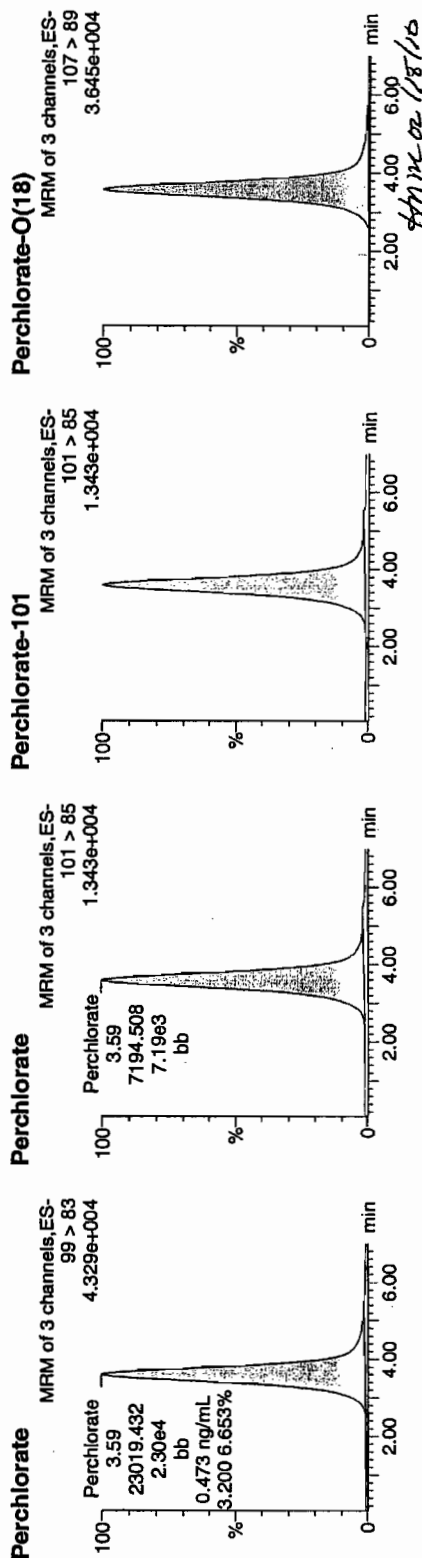
**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per021610a.qld

Last Altered: Wednesday, February 17, 2010 11:09:37 AM Eastern Standard Time  
Printed: Wednesday, February 17, 2010 11:11:37 AM Eastern Standard Time

Name: per0216048a  
Date: 16-Feb-2010  
Time: 22:14:33  
ID: WCL100211-06CCV  
Vial: 1:2,A

Pers  
and  
02-17-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100211-06CCV	Perchlorate	99 > 83	3.59	23019.432	23019.432	bb			0.4727	94.55	-5.45	1319.1...	3.20
WCL100211-06CCV	Perchlorate-101	101 > 85	3.59	7194.508	7194.508	bb			0.4747	94.94	-5.06	264.715	
WCL100211-06CCV	Perchlorate-O(18)	107 > 89	3.58	19580.137	19580.137	bb			0.4854	97.09	-2.91	2127.0...	

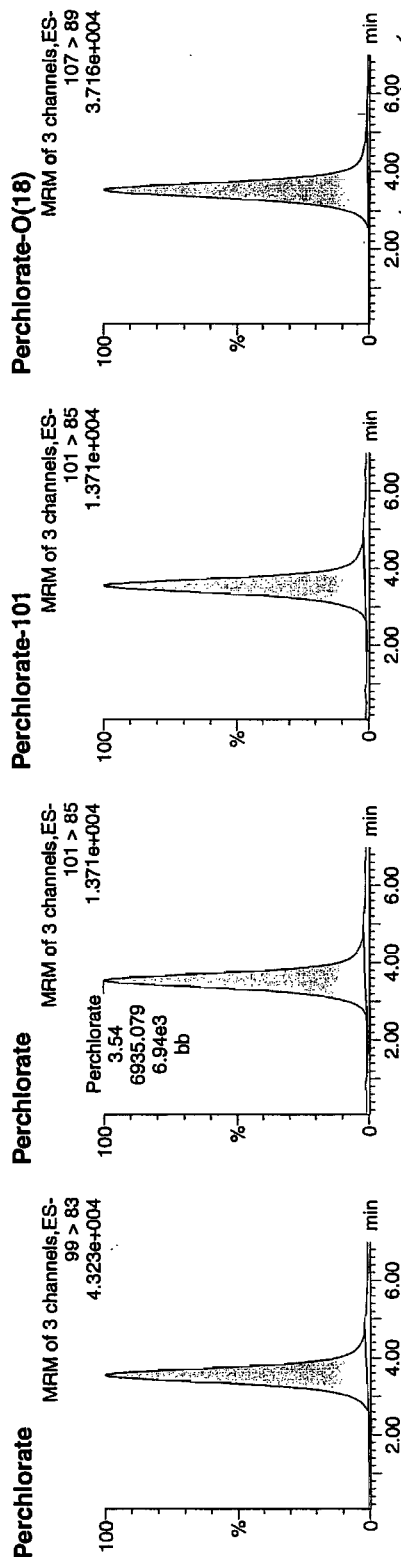
**Quantify Sample Report MassLynx 4.0 SP4**  
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per021610a.qld

Last Altered: Wednesday, February 17, 2010 11:09:37 AM Eastern Standard Time  
Printed: Wednesday, February 17, 2010 11:11:37 AM Eastern Standard Time

Name: per0216060a  
Date: 17-Feb-2010  
Time: 00:15:22  
ID: WCL100211-06CCV  
Vial: 1:2,A

*Pure and*  
*02-17-10*



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100211-06CCV	Perchlorate	99 > 83	3.53	22417.438	22417.438	bb			0.4604	92.07	-7.93	1571.5...	3.23
WCL100211-06CCV	Perchlorate-101	101 > 85	3.54	6935.079	6935.079	bb			0.4576	91.51	-8.49	311.468	
WCL100211-06CCV	Perchlorate-Q(18)	107 > 89	3.52	19667.754	19667.754	bb			0.4876	97.52	-2.48	2349.4...	

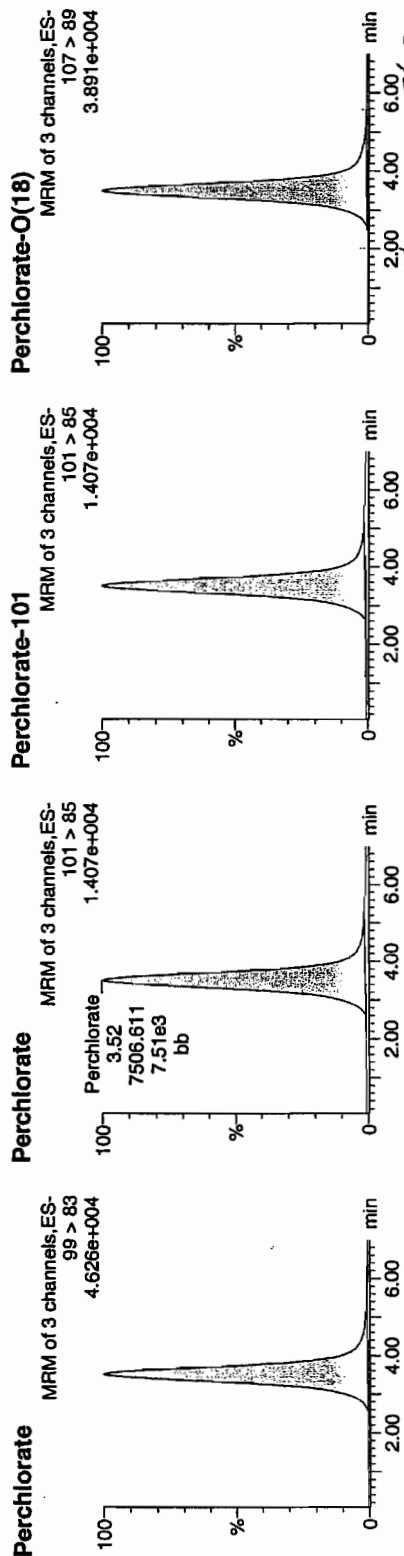
**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per021610a.qld

Last Altered: Wednesday, February 17, 2010 11:09:37 AM Eastern Standard Time  
Printed: Wednesday, February 17, 2010 11:11:37 AM Eastern Standard Time

Name: per0216071a  
Date: 17-Feb-2010  
Time: 02:06:24  
ID: WCL100211-06CCV  
Vial: 1:2,A

*Run*  
*02-17-10*



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100211-06CCV	Perchlorate	99 > 83	3.52	24649.779	24649.779	bb			0.5062	101.24	1.24	2662.3...	3.28
WCL100211-06CCV	Perchlorate-101	101 > 85	3.52	7506.611	7506.611	bb			0.4953	99.06	-0.94	475.783	
WCL100211-06CCV	Perchlorate-O(18)	107 > 89	3.50	20576.664	20576.664	bb			0.5101	102.03	2.03	2075.3...	

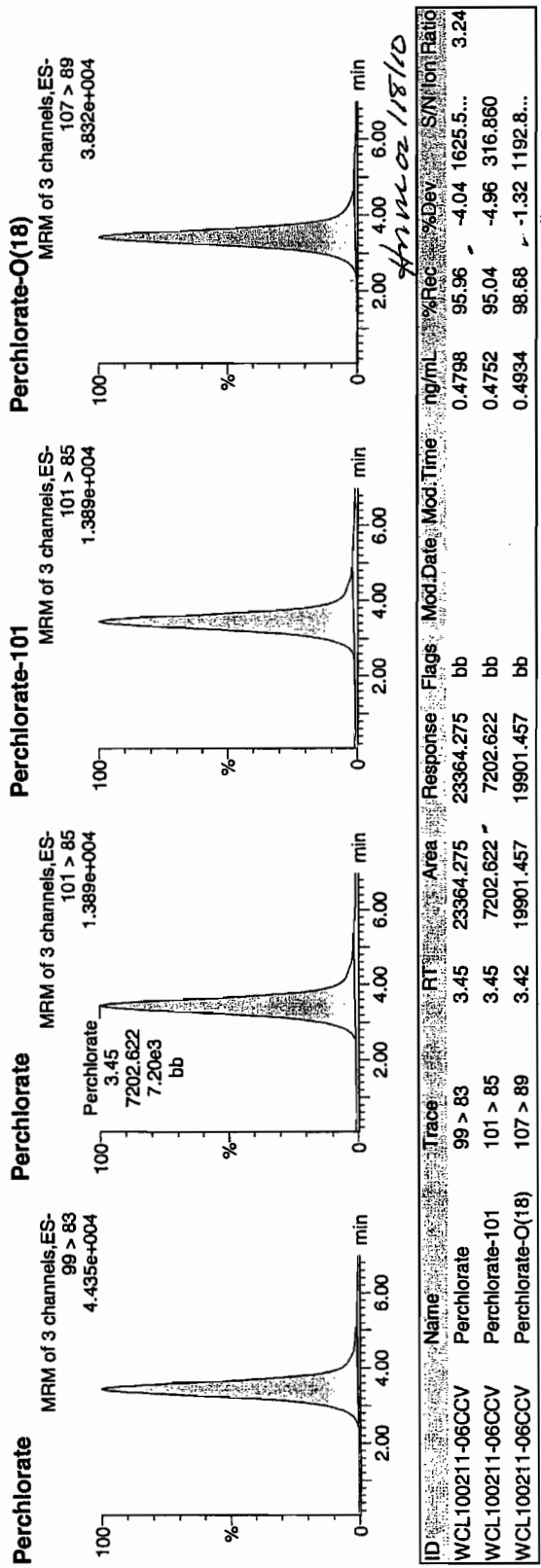
Quantify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per021610a.qld

Last Altered: Wednesday, February 17, 2010 11:09:37 AM Eastern Standard Time  
Printed: Wednesday, February 17, 2010 11:11:37 AM Eastern Standard Time

Name: per0216081a  
Date: 17-Feb-2010  
Time: 03:47:49  
ID: WCL100211-06CCV  
Vial: 1:2,A

Run  
02-17-10



# Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charfers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per021610a.qld

Last Altered: Wednesday, February 17, 2010 11:09:37 AM Eastern Standard Time

Printed: Wednesday, February 17, 2010 11:11:37 AM Eastern Standard Time

Name: per0216092a

Date: 17-Feb-2010

Time: 05:39:14

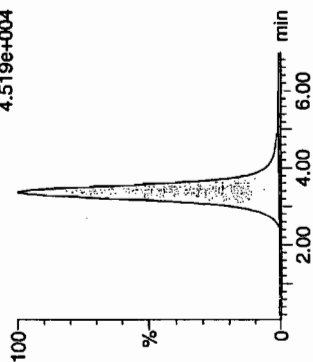
ID: WCL100211-06CCV

Vial: 1:2,A

*per*  
*02-17-10*

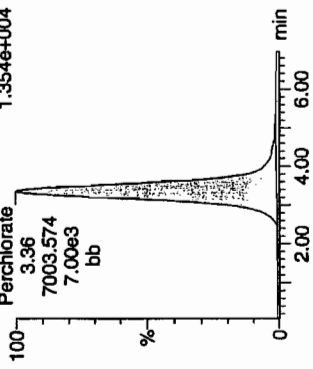
## Perchlorate

MRM of 3 channels, ES-  
99 > 83  
4.519e+004



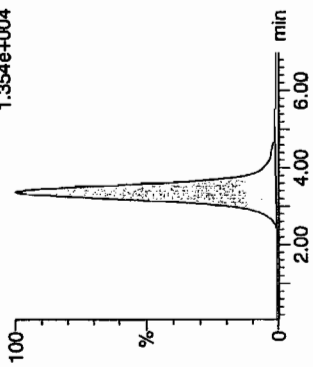
## Perchlorate

MRM of 3 channels, ES-  
101 > 85  
1.354e+004



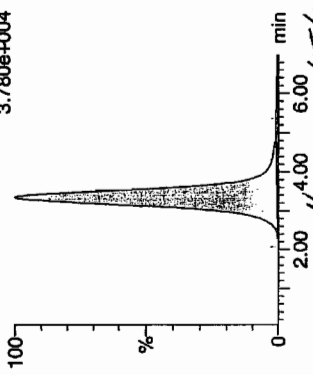
## Perchlorate-101

MRM of 3 channels, ES-  
101 > 85  
1.354e+004



## Perchlorate-O(18)

MRM of 3 channels, ES-  
107 > 89  
3.780e+004



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	SN	Ion Ratio
WCL100211-06CCV	Perchlorate	99 > 83	3.37	23684.766	23684.766	bb			0.4864	97.28	-2.72	1909.4...	3.38
WCL100211-06CCV	Perchlorate-101	101 > 85	3.36	7003.574	7003.574	bb			0.4621	92.42	-7.58	1194.8...	
WCL100211-06CCV	Perchlorate-O(18)	107 > 89	3.35	19846.270	19846.270	bb			0.4920	98.40	-1.60	3367.0...	

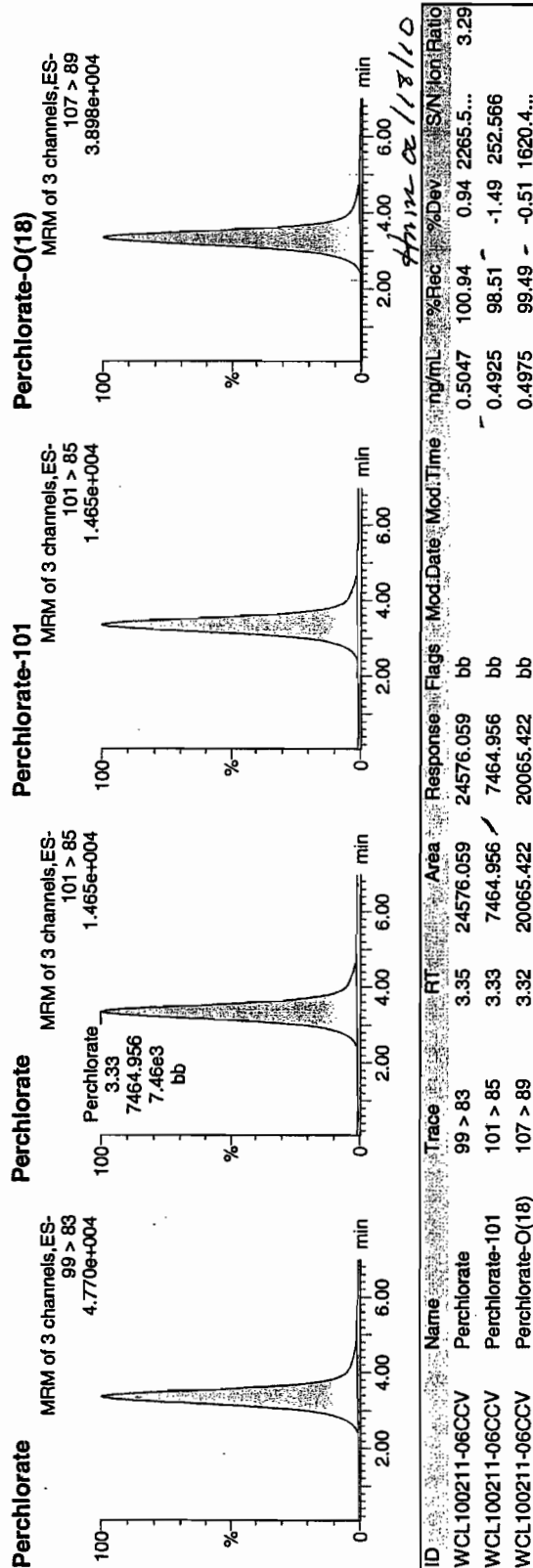
**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per021610a.qld

Last Altered: Wednesday, February 17, 2010 11:09:37 AM Eastern Standard Time  
Printed: Wednesday, February 17, 2010 11:11:37 AM Eastern Standard Time

Name: per0216103a  
Date: 17-Feb-2010  
Time: 07:30:18  
ID: WCL100211-06CCV  
Vial: 1:2,A

*Per*  
*02-17-10*



Perchlorate MDL Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1621

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.05	.05	97.89	16-FEB-10 16:01	per0216011a
Perchlorate Isotope Ratio		3.38		16-FEB-10 16:01	per0216011a
Perchlorate-101	.05	.05	93.02	16-FEB-10 16:01	per0216011a
Perchlorate	.05	.05	93.36	16-FEB-10 18:11	per0216024a
Perchlorate Isotope Ratio		3.38		16-FEB-10 18:11	per0216024a
Perchlorate-101	.05	.04	88.83	16-FEB-10 18:11	per0216024a
Perchlorate	.05	.05	92.94	16-FEB-10 20:23	per0216037a
Perchlorate Isotope Ratio		3.09		16-FEB-10 20:23	per0216037a
Perchlorate-101	.05	.05	96.65	16-FEB-10 20:23	per0216037a
Perchlorate	.05	.05	98.66	16-FEB-10 22:34	per0216050a
Perchlorate Isotope Ratio		3.65		16-FEB-10 22:34	per0216050a



Perchlorate MDL Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1621

Lab Code: GEL

Reporting Units: ug/L

Perchlorate-101	.05	.04	86.88	16-FEB-10 22:34	per0216050a
Perchlorate	.05	.05	93.1	17-FEB-10 00:35	per0216062a
Perchlorate Isotope Ratio		3.16		17-FEB-10 00:35	per0216062a
Perchlorate-101	.05	.05	94.68	17-FEB-10 00:35	per0216062a
Perchlorate	.05	.05	93.57	17-FEB-10 02:26	per0216073a
Perchlorate Isotope Ratio		3.17		17-FEB-10 02:26	per0216073a
Perchlorate-101	.05	.05	94.79	17-FEB-10 02:26	per0216073a
Perchlorate	.05	.05	94.54	17-FEB-10 04:08	per0216083a
Perchlorate Isotope Ratio		3.25		17-FEB-10 04:08	per0216083a
Perchlorate-101	.05	.05	93.57	17-FEB-10 04:08	per0216083a
Perchlorate	.05	.05	93.28	17-FEB-10 05:59	per0216094a

Perchlorate MDL Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1621

Lab Code: GEL

Reporting Units: ug/L

Perchlorate Isotope Ratio		3.14		17-FEB-10 05:59	per0216094a
Perchlorate-101	.05	.05	95.5	17-FEB-10 05:59	per0216094a
Perchlorate	.05	.05	90.98	17-FEB-10 07:50	per0216105a
Perchlorate Isotope Ratio		2.89		17-FEB-10 07:50	per0216105a
Perchlorate-101	.05	.05	101.14	17-FEB-10 07:50	per0216105a

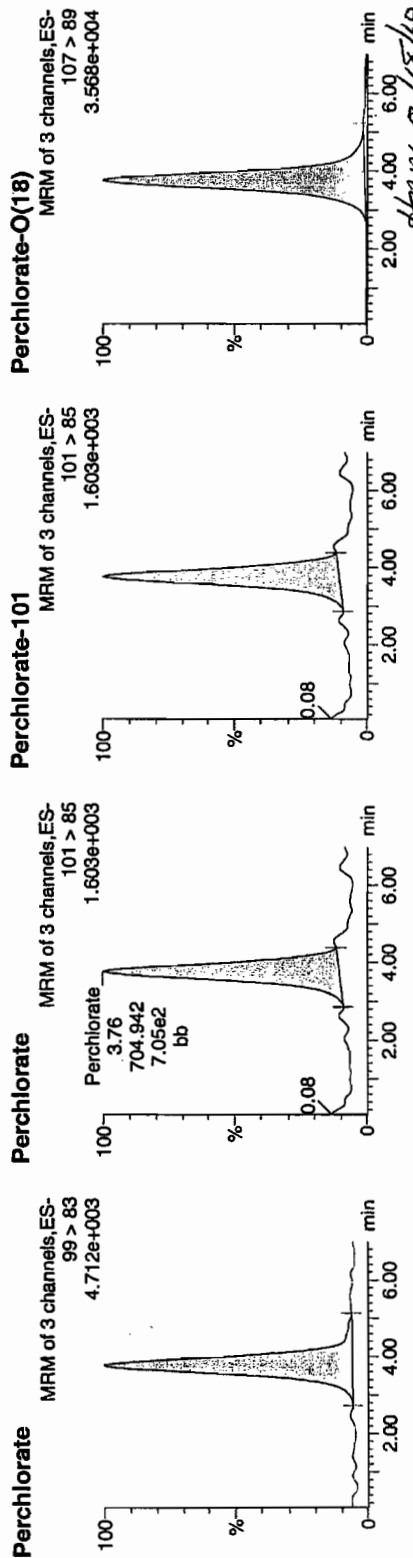
Quantify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per021610a.qld

Last Altered: Wednesday, February 17, 2010 11:09:37 AM Eastern Standard Time  
Printed: Wednesday, February 17, 2010 11:11:37 AM Eastern Standard Time

Name: per0216011a  
Date: 16-Feb-2010  
Time: 16:01:28  
ID: WCL100211-07CRI  
Vial: 1:2,B

Per  
02/17-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	SN	Ion Ratio
WCL100211-07CRI	Perchlorate	99 > 83	3.77	2383.393	2383.393	bb			0.0489	97.89	-2.11	187.352	3.38
WCL100211-07CRI	Perchlorate-101	101 > 85	3.76	704.942	704.942	bb			0.0465	93.02	-6.98	30.019	
WCL100211-07CRI	Perchlorate-O(18)	107 > 89	3.76	19370.289	19370.289	bb			0.4802	96.04	-3.96	849.260	

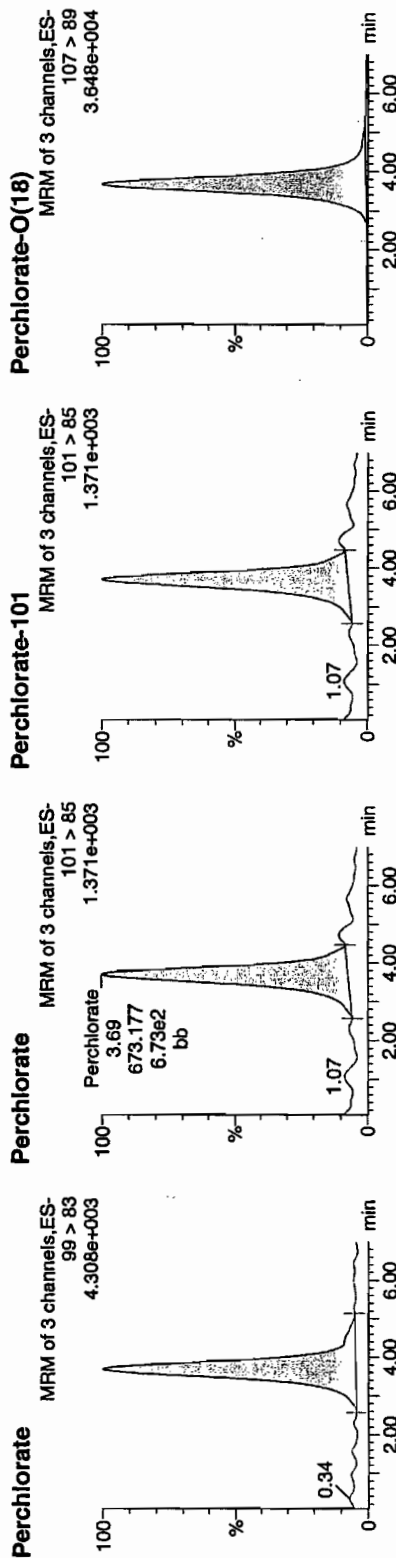
**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charfers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per021610a.qld

Last Altered: Wednesday, February 17, 2010 11:09:37 AM Eastern Standard Time  
Printed: Wednesday, February 17, 2010 11:11:37 AM Eastern Standard Time

Name: per0216024a  
Date: 16-Feb-2010  
Time: 18:11:59  
ID: WCL100211-07CRI  
Vial: 1:2,B

*Pass*  
*02-17-10*



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100211-07CRI	Perchlorate	99 > 83	3.68	2272.925	2272.925	bb			0.0467	93.36	-6.64	241.554	3.38
WCL100211-07CRI	Perchlorate-101	101 > 85	3.69	673.177	673.177	bb			0.0444	88.83	-11.17	256.925	
WCL100211-07CRI	Perchlorate-O(18)	107 > 89	3.67	19278.473	19278.473	bb			0.4779	95.59	-4.41	2546.5...	

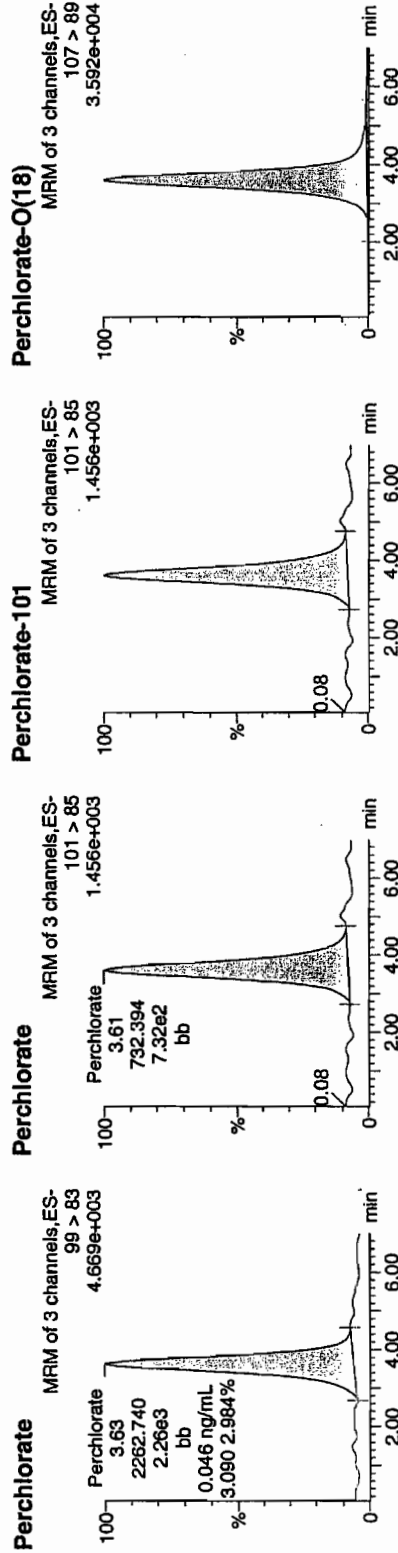
**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per021610a.qld

Last Altered: Wednesday, February 17, 2010 11:09:37 AM Eastern Standard Time  
Printed: Wednesday, February 17, 2010 11:11:37 AM Eastern Standard Time

Name: per0216037a  
Date: 16-Feb-2010  
Time: 20:23:04  
ID: WCL100211-07CRI  
Vial: 1:2,B

Pass  
02-17-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100211-07CRI	Perchlorate	99 > 83	3.63	2262.740	2262.740	bb			0.0465	92.94	-7.06	178.571	3.09
WCL100211-07CRI	Perchlorate-101	101 > 85	3.61	732.394	732.394	bb			0.0483	96.65	-3.35	252.373	
WCL100211-07CRI	Perchlorate-O(18)	107 > 89	3.61	19380.582	19380.582	bb			0.4805	96.10	-3.90	1524.6...	

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

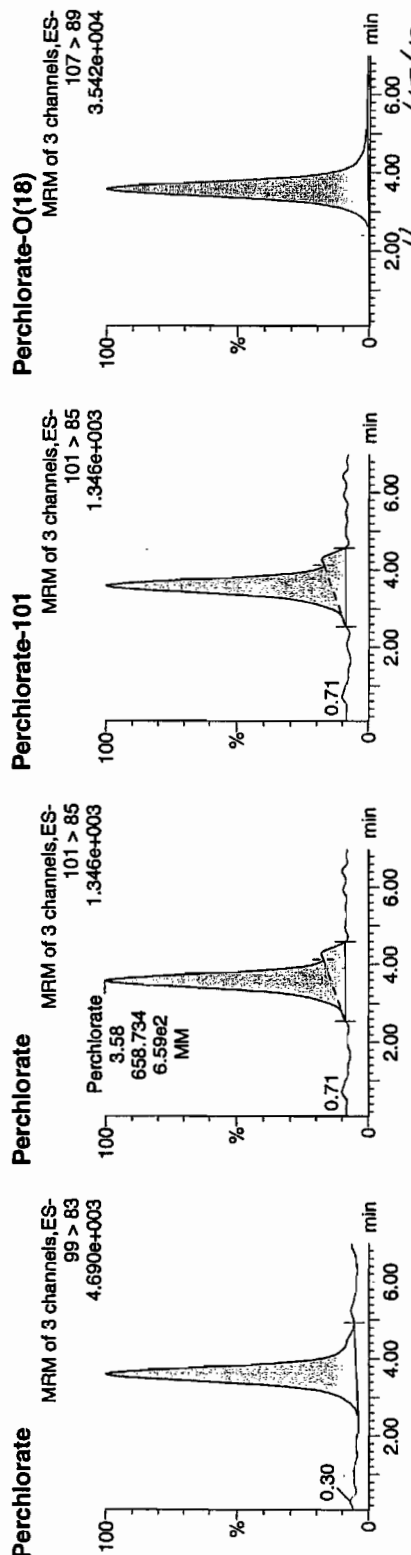
Dataset: C:\MassLynx\Perchlorate.PRO\per021610a.qld

Last Altered: Wednesday, February 17, 2010 11:09:37 AM Eastern Standard Time  
Printed: Wednesday, February 17, 2010 11:11:37 AM Eastern Standard Time

Name: per0216050a  
Date: 16-Feb-2010  
Time: 22:34:52  
ID: WCL100211-07CRI  
Vial: 1:2,B

MANUAL

Para  
GWS  
02-17-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100211-07CRI	Perchlorate	99 > 83	3.58	2402.146	2402.146	bb	17-Feb-10	11:08:35	0.0493	98.66	-1.34	198.764	3.65
WCL100211-07CRI	Perchlorate-101	101 > 85	3.58	658.410	658.410	MM	17-Feb-10	11:09:37	0.0434	86.88	-13.12	11.199	
WCL100211-07CRI	Perchlorate-O(18)	107 > 89	3.58	18982.666	18982.666	bb			0.4706	94.12	-5.88	2154.2...	

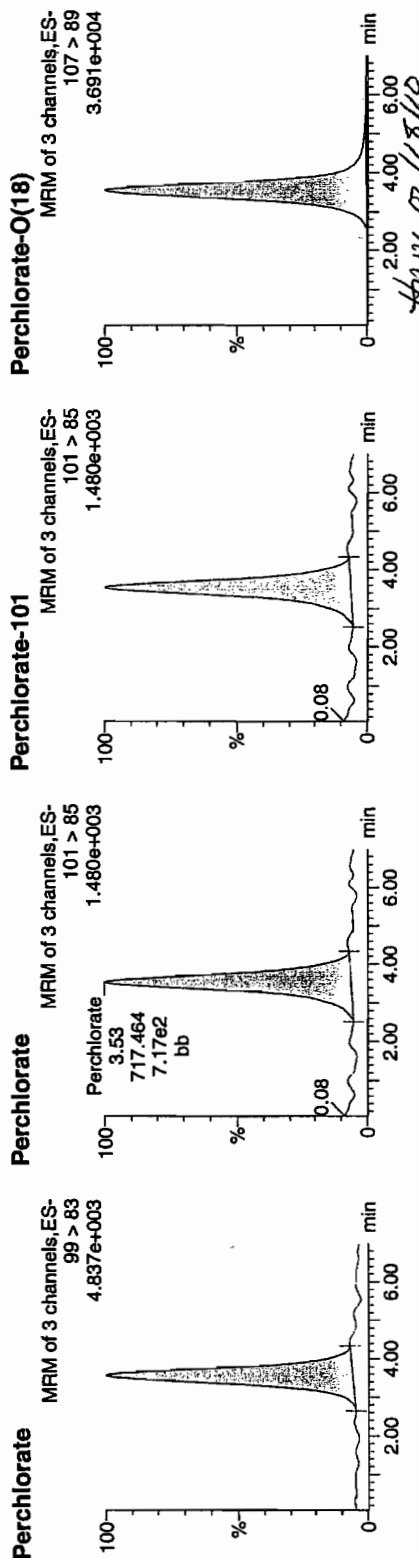
**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charters W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per021610a.qld

Last Altered: Wednesday, February 17, 2010 11:09:37 AM Eastern Standard Time  
Printed: Wednesday, February 17, 2010 11:11:37 AM Eastern Standard Time

Name: per0216062a  
Date: 17-Feb-2010  
Time: 00:35:50  
ID: WCL100211-07CRI  
Vial: 1:2,B

*Pure*  
*600*  
*02-17-10*



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100211-07CRI	Perchlorate	99 > 83	3.56	2266.666	2266.666	bb			0.0465	93.10	-6.90	332.053	3.16
WCL100211-07CRI	Perchlorate-101	101 > 85	3.53	717.464	717.464	bb			0.0473	94.68	-5.32	154.139	
WCL100211-07CRI	Perchlorate-O(18)	107 > 89	3.54	19631.152	19631.152	bb			0.4867	97.34	-2.66	3049.6...	

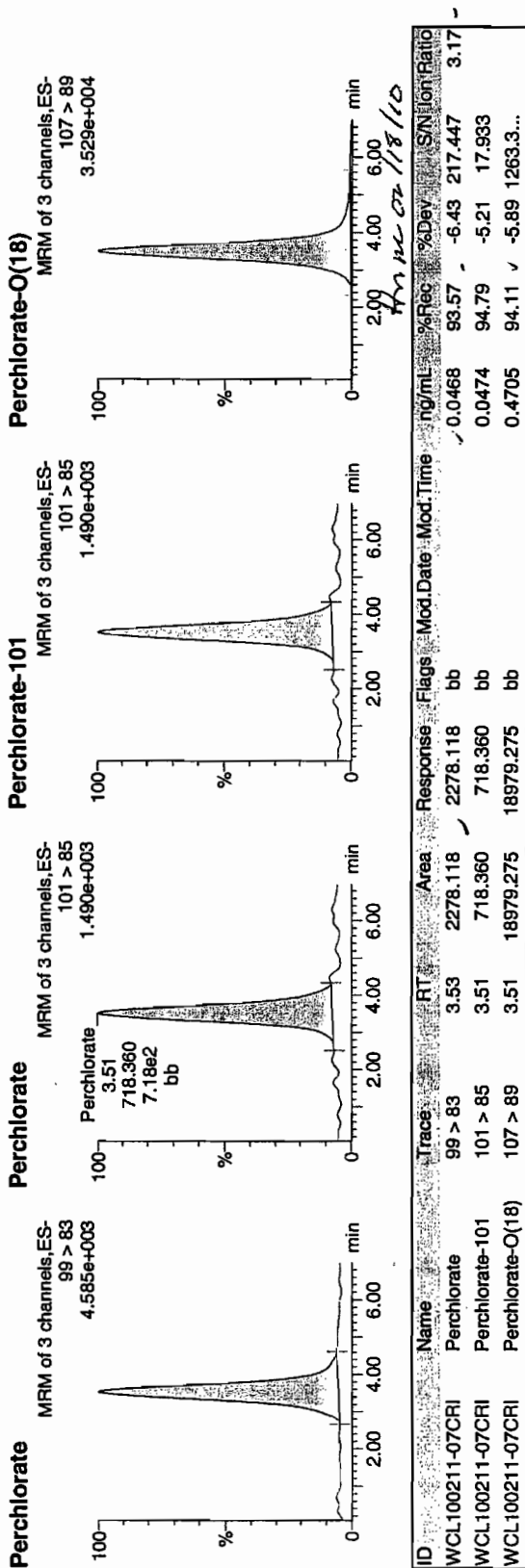
**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charfers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per021610a.qld

Last Altered: Wednesday, February 17, 2010 11:09:37 AM Eastern Standard Time  
Printed: Wednesday, February 17, 2010 11:11:37 AM Eastern Standard Time

Name: per0216073a  
Date: 17-Feb-2010  
Time: 02:26:59  
ID: WCL100211-07CRI  
Vial: 1:2,B

*Per02*  
*023*  
*02-17-10*





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

Dataset: C:\MassLynx\Perchlorate.PRO\per021610a.qld

Last Altered: Wednesday, February 17, 2010 11:09:37 AM Eastern Standard Time  
Printed: Wednesday, February 17, 2010 11:11:37 AM Eastern Standard Time

Name: per0216083a

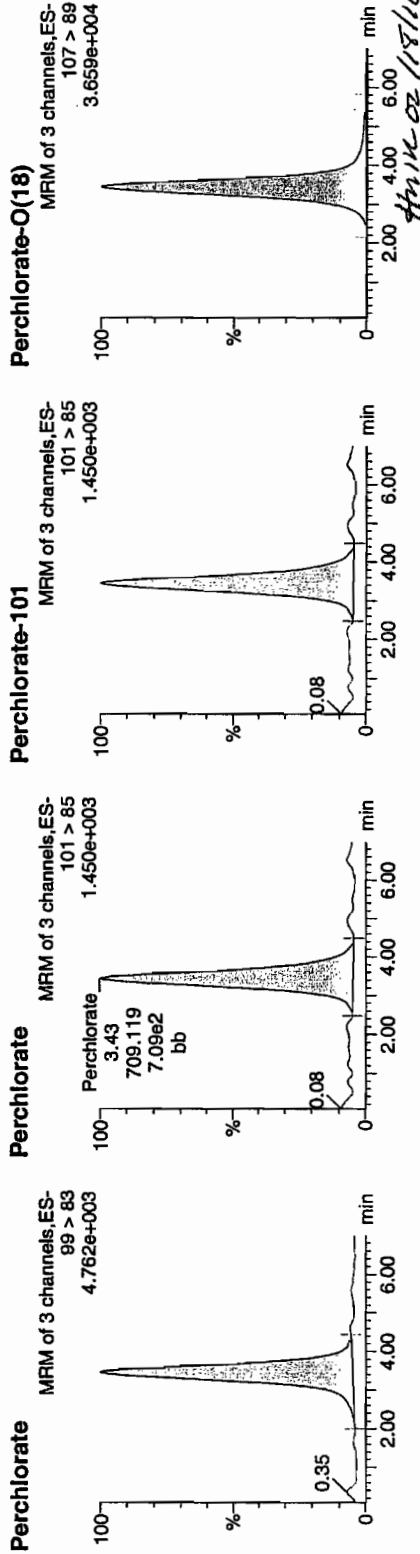
Date: 17-Feb-2010

Time: 04:08:21

ID: WCL100211-07CRI

Vial: 1:2,B

Pers  
02-17-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100211-07CRI	Perchlorate	99 > 83	3.45	2301.800	2301.800	bb			0.0473	94.54	-5.46	271.167	3.25
WCL100211-07CRI	Perchlorate-101	101 > 85	3.43	709.119	709.119	bb			0.0468	93.57	-6.43	100.791	
WCL100211-07CRI	Perchlorate-O(18)	107 > 89	3.43	19309.088	19309.088	bb			0.4787	95.74	-4.26	3564.2...	

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

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

**Dataset:** C:\MassLynx\Perchlorate.PRO\per021610a.qld

**Last Altered:** Wednesday, February 17, 2010 11:09:37 AM Eastern Standard Time  
**Printed:** Wednesday, February 17, 2010 11:11:37 AM Eastern Standard Time

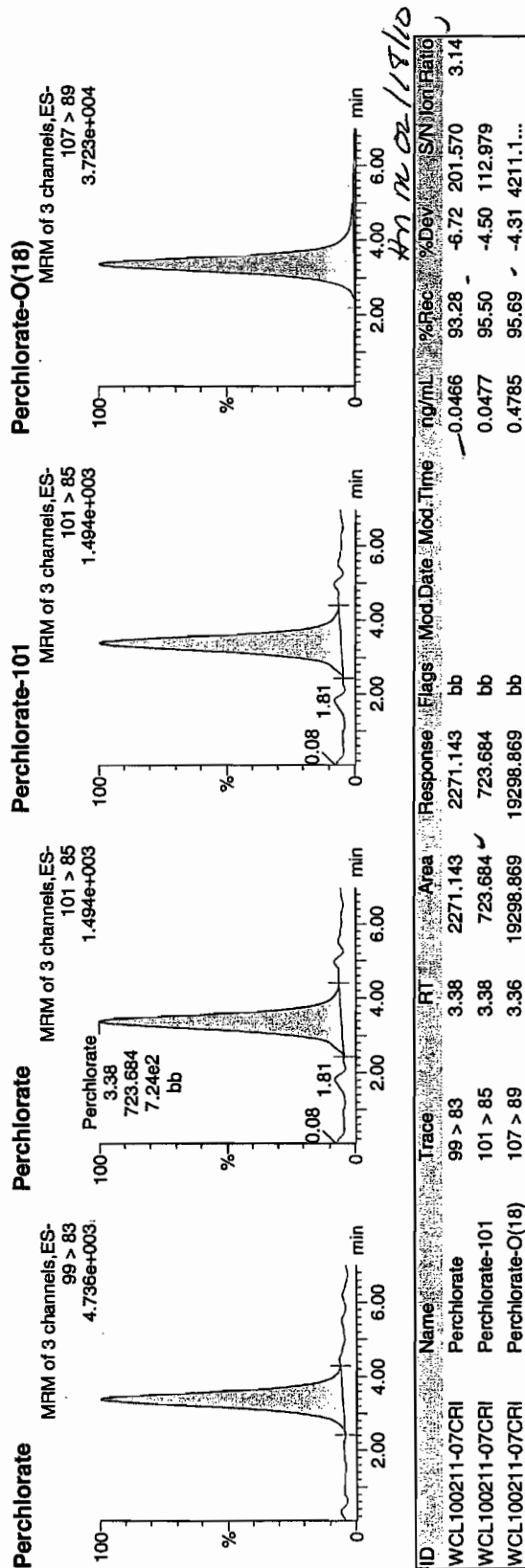
**Name:** per0216094a

**Date:** 17-Feb-2010

**Time:** 05:59:39

**ID:** WCL100211-07CRI

**Vial:** 1:2,B



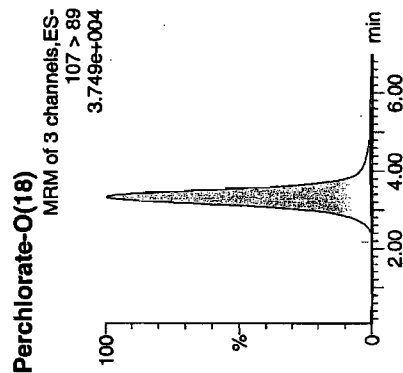
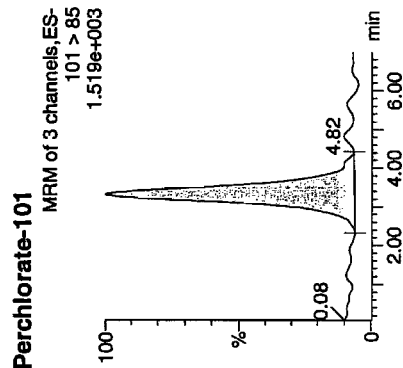
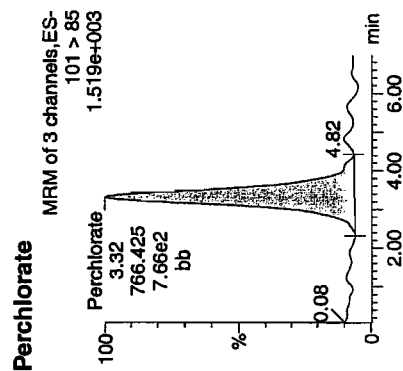
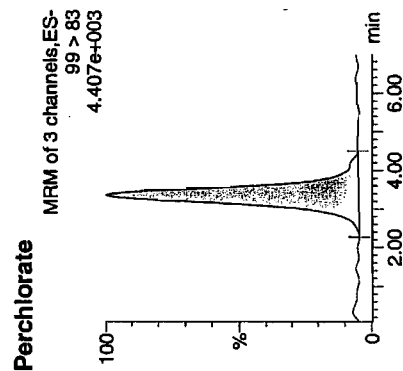
**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charliers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per021610a.qld

Last Altered: Wednesday, February 17, 2010 11:09:37 AM Eastern Standard Time  
Printed: Wednesday, February 17, 2010 11:11:37 AM Eastern Standard Time

Name: per0216105a  
Date: 17-Feb-2010  
Time: 07:50:44  
ID: WCL100211-07CRI  
Vial: 1:2,B

Per  
W  
02-17-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Int Ratio
WCL100211-07CRI	Perchlorate	99 > 83	3.35	2215.006	2215.006	bb			0.0455	90.98	-9.02	285.998	2.89
WCL100211-07CRI	Perchlorate-101	101 > 85	3.32	766.425	766.425	bb			0.0506	101.14	1.14	158.219	
WCL100211-07CRI	Perchlorate-O(18)	107 > 89	3.32	19636.211	19636.211	bb			0.4868	97.36	-2.64	742.835	

# QUALITY CONTROL

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC Client Sample No. MB

Lab Code: GEL Date Received: 12-FEB-10

Instrument: LCMSMS GEL Job No (SDG): 10-1621

Method: EPA 6850 Modified GEL Sample ID: 1202035609

Matrix: WATER Date Filtered: 12-FEB-10

Extraction Batch ID: 950041 Injection Volume (uL): 20

Extraction Type: Filter/DAI

%Solids:

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

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	17-FEB-10 02:37	per0216074a
	Perchlorate Isotope Ratio						1	17-FEB-10 02:37	per0216074a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	17-FEB-10 02:37	per0216074a
	Perchlorate-O(18)			0.479	ug/L		1	17-FEB-10 02:37	per0216074a

<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: Charfers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per021610a.qld

Last Altered: Wednesday, February 17, 2010 11:09:37 AM Eastern Standard Time  
Printed: Wednesday, February 17, 2010 11:11:37 AM Eastern Standard Time

Name: per0216074a

Date: 17-Feb-2010

Time: 02:37:03

ID: 1202035609

Vial: 3:1,A

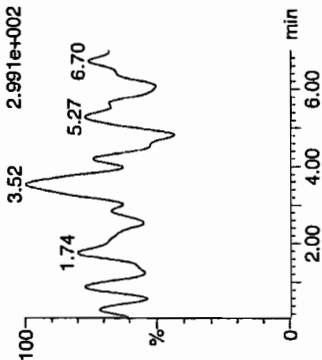
32-17-10

LT2 MS 111

32-17-10

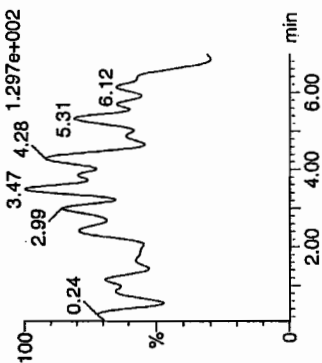
**Perchlorate**

MRM of 3 channels, ES-  
99 > 83



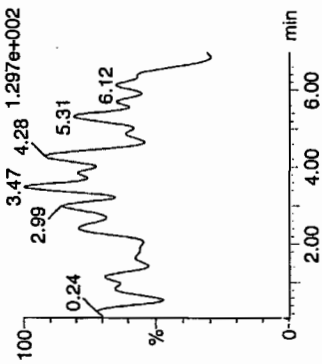
**Perchlorate**

MRM of 3 channels, ES-  
101 > 85



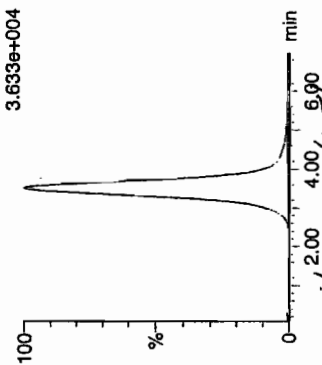
**Perchlorate-101**

MRM of 3 channels, ES-  
101 > 85



**Perchlorate-O(18)**

MRM of 3 channels, ES-  
107 > 89



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202035609	Perchlorate	99 > 83											0.00
1202035609	Perchlorate-101	101 > 85											
1202035609	Perchlorate-O(18)	107 > 89	3.51	19327.055	19327.055	bb			0.4792	95.83	-4.17	371.723	

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: EPA 6850 Modified

Matrix: WATER

Extraction Batch ID: 950041

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.

LCS

Date Received: 12-FEB-10

GEL Job No (SDG): 10-1621

GEL Sample ID: 1202035610

Date Filtered: 12-FEB-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	0.211	ug/L		1	17-FEB-10 02:47	per0216075a
	Perchlorate Isotope Ratio			3.3			1	17-FEB-10 02:47	per0216075a
14797-73-0	Perchlorate-101	.05	.2	0.206	ug/L		1	17-FEB-10 02:47	per0216075a
	Perchlorate-O(18)			0.505	ug/L		1	17-FEB-10 02:47	per0216075a

<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: Charles W. Wilson

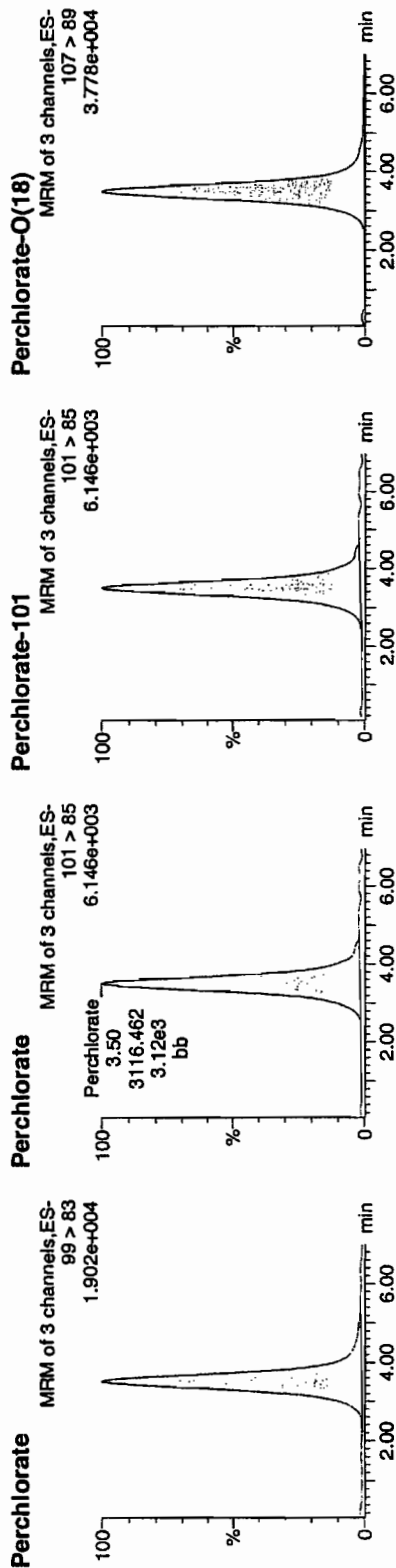
Dataset: C:\MassLynx\Perchlorate.PRO\per021610a.qld

Last Altered: Wednesday, February 17, 2010 11:09:37 AM Eastern Standard Time  
Printed: Wednesday, February 17, 2010 11:11:37 AM Eastern Standard Time

Name: per0216075a  
Date: 17-Feb-2010  
Time: 02:47:26  
ID: 1202035610  
Vial: 3:1,B

02-17-10

1202035610 | 1202035610 | 11



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202035610	Perchlorate	99 > 83	3.51	10271.044	10271.044	bb			0.2109	105.46	5.46	624.785	3.30
1202035610	Perchlorate-101	101 > 85	3.50	3116.462	3116.462	bb			0.2056	102.81	2.81	125.506	
1202035610	Perchlorate-O(18)	107 > 89	3.50	20369.182	20369.182	bb			0.5050	101.00	1.00	649.757	

10271.044  
48694.1 = 0.2109  
HWC 02 1/8/10



# 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: 950041  
 Analyst: Jareth Shirley  
 Method: SW846 6850 Modified  
 Verified by:  
 Lab SOP: GL-OA-E-067 REV# 6  
 Instrument: MicroMass Quatro Ultima

Sample ID	Run Date	Initial Volume (mL)	Final Volume (mL)	Prepped Factor (mL/mL)
1202035609 MB	12-FEB-2010 14:48:00	10	10	1
1202035610 LCS	12-FEB-2010 14:48:00	10	10	1
246264001	12-FEB-2010 14:48:00	10	10	1
246269001	12-FEB-2010 14:48:00	10	10	1
246278001	12-FEB-2010 14:48:00	10	10	1
246282001	12-FEB-2010 14:48:00	10	10	1
246292001	12-FEB-2010 14:48:00	10	10	1
1202035611 MS (246292001)	12-FEB-2010 14:48:00	10	10	1
1202035612 MSD (246292001)	12-FEB-2010 14:48:00	10	10	1
246292002	12-FEB-2010 14:48:00	10	10	1
246293002	12-FEB-2010 14:48:00	10	10	1
246293004	12-FEB-2010 14:48:00	10	10	1
246299001	12-FEB-2010 14:48:00	10	10	1
246306001	12-FEB-2010 14:48:00	10	10	1
246313001	12-FEB-2010 14:48:00	10	10	1
246323001	12-FEB-2010 14:48:00	10	10	1
246334001	12-FEB-2010 14:48:00	10	10	1
246336001	12-FEB-2010 14:48:00	10	10	1
246448001	12-FEB-2010 14:48:00	10	10	1
246451001	12-FEB-2010 14:48:00	10	10	1
246455001	12-FEB-2010 14:48:00	10	10	1
246459001	12-FEB-2010 14:48:00	10	10	1
1202035613 LCS	12-FEB-2010 14:48:00	10	10	1

Comments:

Type	Sample Id	Description	Serial Number	Spike Amt	Units	Comments:
ICS	1202035613	10 ug/L ICV/CCV Second Source	UCL100210-02.2	.2	mL	Desalting cartridges used: B101/0211609 & B1000311609
LCS	1202035610	10 ug/L ICV/CCV Second Source	UCL100210-02.2	.2	mL	
MS	1202035611	10 ug/L ICV/CCV Second Source	UCL100210-02.2	.2	mL	
MSD	1202035612	10 ug/L ICV/CCV Second Source	UCL100210-02.2	.2	mL	
RGNT	ALL	Q251 HPLC Grade Water	1261217	10	mL	
RGNT	ALL	500 ppm Carbonate, Bicarbonate, Chloride, Sulfate	1262643	10	mL	

GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS#2

Date: 02/16/10  
 Extr. Injection Volume: 20uL  
 Sequence Number: per021610a  
 Initial Calibration Date: 02/16/10

Method: EPA 6850-Modified  
 Int. Std.: UCL100122-01  
 Mobile Phase Lot#: 1269535, 1261217  
 Standard-Samp Reagent Lot#: 1261217

Reviewed BY *BY*  
 Date: 02/18/10  
 SOP: GL-OA-E-067 Rev.6  
 Alt Check Std. ID: WCL100211-06

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC_Flag
per0216001a	IPB001	CWW	2/16/2010 14:21			1		USE	B
per0216002a	IPB001	CWW	2/16/2010 14:31			1		USE	B
per0216003a	WCLICAL-01	CWW	2/16/2010 14:41			1		USE	I
per0216004a	WCLICAL-02	CWW	2/16/2010 14:51			1		USE	I
per0216005a	WCLICAL-03	CWW	2/16/2010 15:01			1		USE	I
per0216006a	WCLICAL-04	CWW	2/16/2010 15:11			1		USE	I
per0216007a	WCLICAL-05	CWW	2/16/2010 15:21			1		USE	I
per0216008a	IPB002	CWW	2/16/2010 15:31			1		USE	B
per0216009a	WCLICV	CWW	2/16/2010 15:41			1		USE	C
per0216010a	IPB003	CWW	2/16/2010 15:51			1		USE	B
per0216011a	WCLCRI	CWW	2/16/2010 16:01			1		USE	C
per0216012a	1202029072	CWW	2/16/2010 16:11	947243	10-1460	1	LANL	USE	S
per0216013a	1202029073	CWW	2/16/2010 16:21	947243	10-1460	1	LANL	USE	S
per0216014a	1202029076	CWW	2/16/2010 16:31	947243	10-1460	1	LANL	USE	S
per0216015a	245783001	CWW	2/16/2010 16:41	947243	10-1460	1	LANL	USE	S
per0216016a	1202029074	CWW	2/16/2010 16:51	947243	10-1460	1	LANL	USE	S
per0216017a	1202029075	CWW	2/16/2010 17:01	947243	10-1460	1	LANL	USE	S
per0216018a	245783002	CWW	2/16/2010 17:11	947243	10-1460	1	LANL	USE	S
per0216019a	245783003	CWW	2/16/2010 17:21	947243	10-1460	1	LANL	USE	S
per0216020a	245783004	CWW	2/16/2010 17:31	947243	10-1460	1	LANL	USE	S
per0216021a	245783005	CWW	2/16/2010 17:41	947243	10-1460	1	LANL	USE	S
per0216022a	WCLCCV	CWW	2/16/2010 17:51			1		USE	C
per0216023a	IPB004	CWW	2/16/2010 18:01			1		USE	B
per0216024a	WCLCRI	CWW	2/16/2010 18:11			1		USE	C
per0216025a	245783006	CWW	2/16/2010 18:22	947243	10-1460	1	LANL	USE	S
per0216026a	245783007	CWW	2/16/2010 18:32	947243	10-1460	1	LANL	USE	S
per0216027a	245783008	CWW	2/16/2010 18:42	947243	10-1460	1	LANL	USE	S
per0216028a	245783009	CWW	2/16/2010 18:52	947243	10-1460	1	LANL	USE	S
per0216029a	245783010	CWW	2/16/2010 19:02	947243	10-1460	1	LANL	USE	S

per0216030a	245783011	CWW	2/16/2010 19:12	947243	10-1460	1	LANL	USE	S
per0216031a	245783012	CWW	2/16/2010 19:22	947243	10-1460	1	LANL	USE	S
per0216032a	245783013	CWW	2/16/2010 19:32	947243	10-1460	1	LANL	USE	S
per0216033a	245783014	CWW	2/16/2010 19:42	947243	10-1460	1	LANL	USE	S
per0216034a	245783015	CWW	2/16/2010 19:52	947243	10-1460	1	LANL	USE	S
per0216035a	WCLCCV	CWW	2/16/2010 20:02			1		USE	C
per0216036a	IPB005	CWW	2/16/2010 20:12			1		USE	B
per0216037a	WCLCRI	CWW	2/16/2010 20:23			1		USE	C
per0216038a	245783016	CWW	2/16/2010 20:33	947243	10-1460	1	LANL	USE	S
per0216039a	IPB006	CWW	2/16/2010 20:43			1		USE	B
per0216040a	1202029077	CWW	2/16/2010 20:53	947246	VARIOUS	1	LANL	USE	S
per0216041a	1202029078	CWW	2/16/2010 21:03	947246	VARIOUS	1	LANL	USE	S
per0216042a	1202029081	CWW	2/16/2010 21:13	947246	VARIOUS	1	LANL	USE	S
per0216043a	245786001	CWW	2/16/2010 21:23	947246	10-1462	1	LANL	USE	S
per0216044a	245797001	CWW	2/16/2010 21:34	947246	10-1471	1	LANL	USE	S
per0216045a	1202029079	CWW	2/16/2010 21:44	947246	10-1471	1	LANL	USE	S
per0216046a	1202029080	CWW	2/16/2010 21:54	947246	10-1471	1	LANL	USE	S
per0216047a	245797002	CWW	2/16/2010 22:04	947246	10-1471	1	LANL	USE	S
per0216048a	WCLCCV	CWW	2/16/2010 22:14			1		USE	C
per0216049a	IPB007	CWW	2/16/2010 22:24			1		USE	B
per0216050a	WCLCRI	CWW	2/16/2010 22:34			1		USE	C
per0216051a	245797003	CWW	2/16/2010 22:44	947246	10-1471	1	LANL	USE	S
per0216052a	245797004	CWW	2/16/2010 22:55	947246	10-1471	1	LANL	USE	S
per0216053a	245797005	CWW	2/16/2010 23:05	947246	10-1471	1	LANL	USE	S
per0216054a	245797006	CWW	2/16/2010 23:15	947246	10-1471	1	LANL	USE	S
per0216055a	245797007	CWW	2/16/2010 23:25	947246	10-1471	1	LANL	USE	S
per0216056a	245797008	CWW	2/16/2010 23:35	947246	10-1471	1	LANL	USE	S
per0216057a	245797009	CWW	2/16/2010 23:45	947246	10-1471	1	LANL	USE	S
per0216058a	245797010	CWW	2/16/2010 23:55	947246	10-1471	1	LANL	USE	S
per0216059a	245797011	CWW	2/17/2010 0:05	947246	10-1471	1	LANL	USE	S
per0216060a	WCLCCV	CWW	2/17/2010 0:15			1		USE	C
per0216061a	IPB008	CWW	2/17/2010 0:25			1		USE	B
per0216062a	WCLCRI	CWW	2/17/2010 0:35			1		USE	C
per0216063a	245797012	CWW	2/17/2010 0:45	947246	10-1471	1	LANL	USE	S
per0216064a	245797013	CWW	2/17/2010 0:56	947246	10-1471	1	LANL	USE	S
per0216065a	245797014	CWW	2/17/2010 1:06	947246	10-1471	1	LANL	USE	S
per0216066a	245797015	CWW	2/17/2010 1:16	947246	10-1471	1	LANL	USE	S

per0216067a	245797016	CWW	2/17/2010 1:26	947246	10-1471	1	LANL	USE	S
per0216068a	245797017	CWW	2/17/2010 1:36	947246	10-1471	1	LANL	USE	S
per0216069a	245797018	CWW	2/17/2010 1:46	947246	10-1471	1	LANL	USE	S
per0216070a	245797019	CWW	2/17/2010 1:56	947246	10-1471	1	LANL	USE	S
per0216071a	WCLCCV	CWW	2/17/2010 2:06			1		USE	C
per0216072a	IPB009	CWW	2/17/2010 2:16			1		USE	B
per0216073a	WCLCRI	CWW	2/17/2010 2:26			1		USE	C
per0216074a	1202035609	CWW	2/17/2010 2:37	950042	VARIOUS	1	LANL	USE	S
per0216075a	1202035610	CWW	2/17/2010 2:47	950042	VARIOUS	1	LANL	USE	S
per0216076a	1202035613	CWW	2/17/2010 2:57	950042	VARIOUS	1	LANL	USE	S
per0216077a	246264001	CWW	2/17/2010 3:07	950042	10-1573-1	1	LANL	USE	S
per0216078a	246269001	CWW	2/17/2010 3:17	950042	10-1548-1	1	LANL	USE	S
per0216079a	246278001	CWW	2/17/2010 3:27	950042	10-1551	1	LANL	USE	S
per0216080a	246282001	CWW	2/17/2010 3:37	950042	10-1576	1	LANL	USE	S
per0216081a	WCLCCV	CWW	2/17/2010 3:47			1		USE	C
per0216082a	IPB010	CWW	2/17/2010 3:58			1		USE	B
per0216083a	WCLCRI	CWW	2/17/2010 4:08			1		USE	C
per0216084a	246292001	CWW	2/17/2010 4:18	950042	10-1554-1	1	LANL	USE	S
per0216085a	1202035611	CWW	2/17/2010 4:28	950042	10-1554-1	1	LANL	USE	S
per0216086a	1202035612	CWW	2/17/2010 4:38	950042	10-1554-1	1	LANL	USE	S
per0216087a	246292002	CWW	2/17/2010 4:49	950042	10-1554-1	1	LANL	USE	S
per0216088a	246293002	CWW	2/17/2010 4:59	950042	10-1591	1	LANL	USE	S
per0216089a	246293004	CWW	2/17/2010 5:09	950042	10-1591	1	LANL	USE	S
per0216090a	246299001	CWW	2/17/2010 5:19	950042	10-1557	1	LANL	USE	S
per0216091a	246306001	CWW	2/17/2010 5:29	950042	10-1559-1	1	LANL	USE	S
per0216092a	WCLCCV	CWW	2/17/2010 5:39			1		USE	C
per0216093a	IPB011	CWW	2/17/2010 5:49			1		USE	B
per0216094a	WCLCRI	CWW	2/17/2010 5:59			1		USE	C
per0216095a	246313001	CWW	2/17/2010 6:09	950042	10-1561-1	1	LANL	USE	S
per0216096a	246323001	CWW	2/17/2010 6:20	950042	10-1565-1	1	LANL	USE	S
per0216097a	246334001	CWW	2/17/2010 6:30	950042	10-1568	1	LANL	USE	S
per0216098a	246436001	CWW	2/17/2010 6:40	950042	10-1621	1	LANL	USE	S
per0216099a	246448001	CWW	2/17/2010 6:50	950042	10-1627-1	1	LANL	USE	S
per0216100a	246451001	CWW	2/17/2010 7:00	950042	10-1629	1	LANL	USE	S
per0216101a	246455001	CWW	2/17/2010 7:10	950042	10-1631	1	LANL	USE	S
per0216102a	246459001	CWW	2/17/2010 7:20	950042	10-1633	1	LANL	USE	S
per0216103a	WCLCCV	CWW	2/17/2010 7:30			1		USE	C

B C S S S S S

USE  
USE

GEL  
GEL  
GEL  
GEL

1  
1  
1  
1  
1  
1

SCREEN  
SCREEN  
SCREEN  
SCREEN

2/17/2010 7:40  
2/17/2010 7:50  
2/17/2010 8:00  
2/17/2010 8:11  
2/17/2010 8:21  
2/17/2010 8:31

CWW  
CWW  
CWW  
CWW  
CWW  
CWW

IPB012  
WCLCRI  
1267890 Supp  
1261217 H2O  
UCL100210-01  
UCL100210-02.1

per0216104a  
per0216105a  
per0216106a  
per0216107a  
per0216108a  
per0216109a

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

Dataset: C:\MassLynx\Perchlorate.PRO\per021610a.qld

Last Altered: Wednesday, February 17, 2010 11:09:37 AM Eastern Standard Time  
Printed: Wednesday, February 17, 2010 11:11:37 AM Eastern Standard Time

Name: per0216085a

Date: 17-Feb-2010

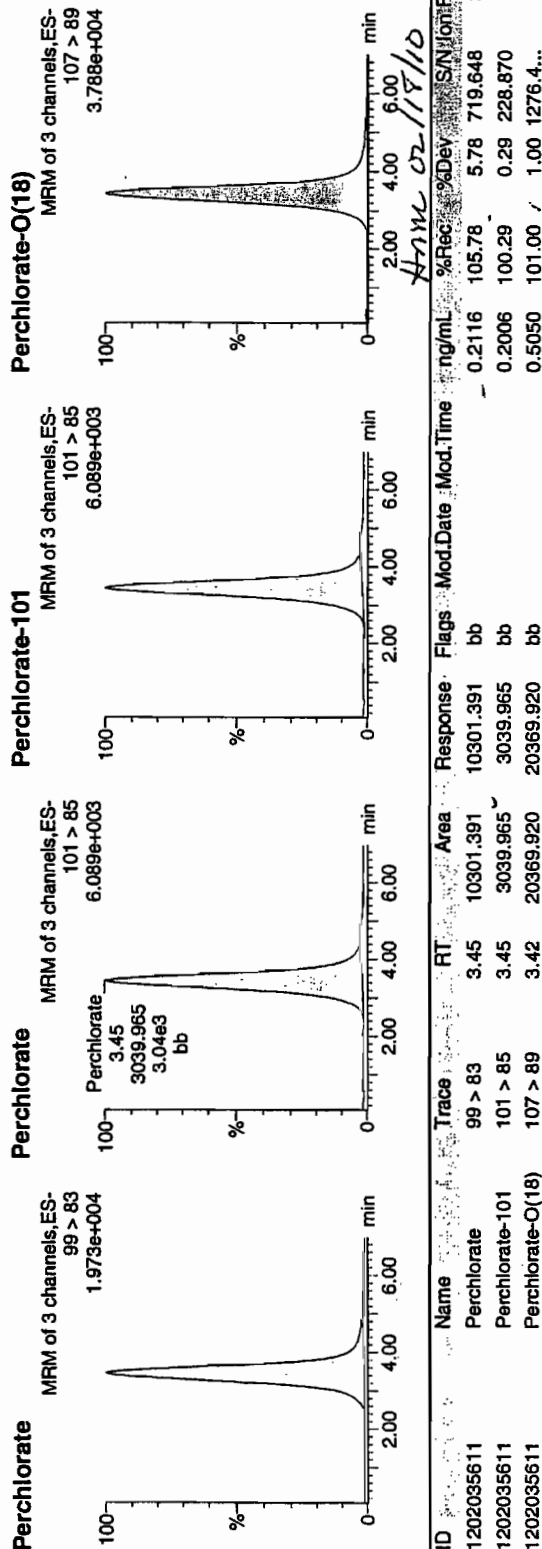
Time: 04:28:45

ID: 1202035611

Vial: 3:2,C

633  
02-17-10

1572-1950042 | 1220 | 05 | 11



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	IS/N	Ion Ratio
1202035611	Perchlorate	99 > 83	3.45	10301.391	10301.391	bb			0.2116	105.78	5.78	719.648	3.39
1202035611	Perchlorate-101	101 > 85	3.45	3039.965	3039.965	bb			0.2006	100.29	0.29	228.870	
1202035611	Perchlorate-O(18)	107 > 89	3.42	20369.920	20369.920	bb			0.5050	101.00	1.00	1276.4...	

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

Dataset: C:\MassLynx\Perchlorate.PRO\per021610a.qld

Last Altered: Wednesday, February 17, 2010 11:09:37 AM Eastern Standard Time  
Printed: Wednesday, February 17, 2010 11:11:37 AM Eastern Standard Time

Name: per0216086a

Date: 17-Feb-2010

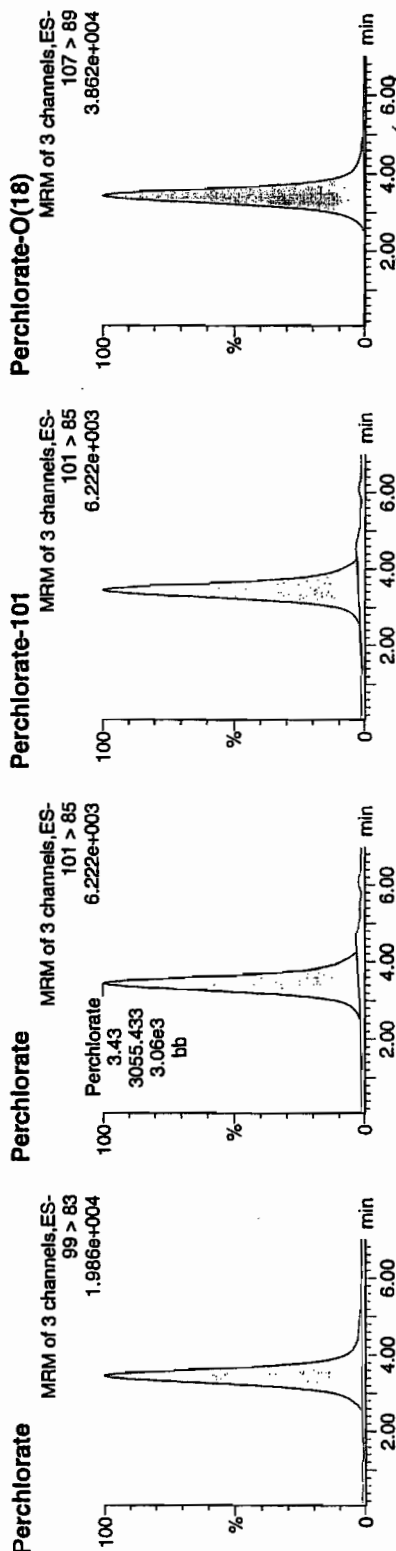
Time: 04:38:54

ID: 1202035612

Vial: 3:2,D

CWS  
02-17-10

1202035612 | 1202035612 | 1202035612



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202035612	Perchlorate	99 > 83	3.45	10430.546	10430.546	bb			0.2142	107.10	7.10	684.770	3.41
1202035612	Perchlorate-101	101 > 85	3.43	3055.433	3055.433	bb			0.2016	100.80	0.80	424.148	
1202035612	Perchlorate-O(18)	107 > 89	3.42	20102.609	20102.609	bb			0.4984	99.68	-0.32	6190.7...	



## 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 10-1621-1**

**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: 952820

Prep Batch Number: 952819

**Sample Analysis**

Sample ID	Client ID
246437001	RE15-10-8354
246437002	RE15-10-8356
246437003	RE15-10-8353
246437004	RE15-10-8352
246437005	RE15-10-8355
246437006	RE15-10-8351
246437007	RE15-10-8350
246437008	RE15-10-8357
246437009	RE15-10-8338
246437010	RE15-10-8336
246437011	RE15-10-8339
246437012	RE15-10-8337
246437013	RE15-10-8375
246437014	RE15-10-8374
1202042229	Interference Check Sample (ICS)
1202042225	Method Blank (MB)
1202042226	Laboratory Control Sample (LCS)
1202042227	246437001(RE15-10-8354) Matrix Spike (MS)
1202042228	246437001(RE15-10-8354) Matrix Spike Duplicate (MSD)

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

**Preparation/Analytical Method Verification**

**SOP Reference**

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

10-1621-1-PERLCMS

## **Calibration Information**

### **Initial Calibration**

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

### **CCV Requirements**

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

### **CCB Requirements**

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

### **CCV Requirements**

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

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

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

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

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

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

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

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

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

The LCS spike recoveries met the acceptance limits.

### **QC Sample Designation**

Sample 246437001 (RE15-10-8354) was chosen for matrix spike and matrix spike duplicate analysis.

### **Matrix Spike (MS) Recovery Statement**

The MS recoveries were within the established acceptance limits.

### **Matrix Spike Duplicate (MSD) Recovery Statement**

The MSD recoveries were within the established acceptance limits.

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

The RPD(s) between the MS and MSD met the acceptance limits.

### **Retention Time Standard Area Acceptance**

The retention time standard areas were within the required acceptance criteria for all samples and QC.

### **Retention Time**

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

## **Technical Information**

### **Holding Time Specifications**

Samples 246437007 (RE15-10-8350), 246437008 (RE15-10-8357), 246437009 (RE15-10-8338), 246437010 (RE15-10-8336), 246437011 (RE15-10-8339), 246437012 (RE15-10-8337), 246437013 (RE15-10-8375) and 246437014 (RE15-10-8374) were analyzed just outside the 28 day hold time for Perchlorate analysis. The client allows for analysis within twice the hold. The data are reported. Please see data exception report 798645. 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 report 798645 246437007 was generated for this SDG.

Samples 246437007 (RE15-10-8350), 246437008 (RE15-10-8357), 246437009 (RE15-10-8338), 246437010 (RE15-10-8336), 246437011 (RE15-10-8339), 246437012 (RE15-10-8337), 246437013 (RE15-10-8375) and 246437014 (RE15-10-8374) were analyzed just outside the 28 day hold time for Perchlorate analysis. The client allows for analysis within twice the hold. The data are reported.

### **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: Herbert K. Mauer Date: 07/05/10

# SAMPLE DATA SUMMARY

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 952819

Extraction Type: Solid Prep

Client Sample No.

RE15-10-8354

Date Received: 06-FEB-10

GEL Job No (SDG): 10-1621-1

GEL Sample ID: 246437001

Date Filtered: 19-FEB-10

Injection Volume (uL): 20

%Solids: 78

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	.641	2.56	0.641	ug/kg	U	1	02-MAR-10 22:27	per0302024a
	Perchlorate Isotope Ratio						1	02-MAR-10 22:27	per0302024a
14797-73-0	Perchlorate-101	.641	2.56	0.641	ug/kg	U	1	02-MAR-10 22:27	per0302024a
	Perchlorate-O(18)			6.33	ug/kg		1	02-MAR-10 22:27	per0302024a

<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: 952819  
 Extraction Type: Solid Prep  
 Client Sample No. RE15-10-8356  
 Date Received: 06-FEB-10  
 GEL Job No (SDG): 10-1621-1  
 GEL Sample ID: 246437002  
 Date Filtered: 19-FEB-10  
 Injection Volume (uL): 20  
 %Solids: 85

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	.586	2.34	0.642	ug/kg	J	1	02-MAR-10 22:52	per0302027a
	Perchlorate Isotope Ratio			3.22			1	02-MAR-10 22:52	per0302027a
14797-73-0	Perchlorate-101	.586	2.34	0.629	ug/kg	J	1	02-MAR-10 22:52	per0302027a
	Perchlorate-O(18)			5.88	ug/kg		1	02-MAR-10 22:52	per0302027a

<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

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC  
 Lab Code: GEL  
 Instrument: LCMSMS  
 Method: SW846 6850 Modified  
 Matrix: SOIL  
 Extraction Batch ID: 952819  
 Extraction Type: Solid Prep  
 Client Sample No. RE15-10-8353  
 Date Received: 06-FEB-10  
 GEL Job No (SDG): 10-1621-1  
 GEL Sample ID: 246437003  
 Date Filtered: 19-FEB-10  
 Injection Volume (uL): 20  
 %Solids: 87

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	.575	2.3	0.575	ug/kg	U	1	02-MAR-10 23:01	per0302028a
	Perchlorate Isotope Ratio						1	02-MAR-10 23:01	per0302028a
14797-73-0	Perchlorate-101	.575	2.3	0.575	ug/kg	U	1	02-MAR-10 23:01	per0302028a
	Perchlorate-O(18)			5.73	ug/kg		1	02-MAR-10 23:01	per0302028a

<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

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 952819

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8352

Date Received: 06-FEB-10

GEL Job No (SDG): 10-1621-1

GEL Sample ID: 246437004

Date Filtered: 19-FEB-10

Injection Volume (uL): 20

%Solids: 77

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.65	2.6	0.650	ug/kg	U	1	02-MAR-10 23:10	per0302029a
	Perchlorate Isotope Ratio						1	02-MAR-10 23:10	per0302029a
14797-73-0	Perchlorate-101	.65	2.6	0.650	ug/kg	U	1	02-MAR-10 23:10	per0302029a
	Perchlorate-O(18)			6.35	ug/kg		1	02-MAR-10 23:10	per0302029a

<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

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC Client Sample No. RE15-10-8355

Lab Code: GEL Date Received: 06-FEB-10

Instrument: LCMSMS GEL Job No (SDG): 10-1621-1

Method: SW846 6850 Modified GEL Sample ID: 246437005

Matrix: SOIL Date Filtered: 19-FEB-10

Extraction Batch ID: 952819 Injection Volume (uL): 20

Extraction Type: Solid Prep %Solids: 87

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	.573	2.29	0.573	ug/kg	U	1	02-MAR-10 23:18	per0302030a
	Perchlorate Isotope Ratio						1	02-MAR-10 23:18	per0302030a
14797-73-0	Perchlorate-101	.573	2.29	0.573	ug/kg	U	1	02-MAR-10 23:18	per0302030a
	Perchlorate-O(18)			5.60	ug/kg		1	02-MAR-10 23:18	per0302030a

<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 Aliquot

1  
X %Solids

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC  
 Lab Code: GEL  
 Instrument: LCMSMS  
 Method: SW846 6850 Modified  
 Matrix: SOIL  
 Extraction Batch ID: 252819  
 Extraction Type: Solid Prep  
 Sample Volume/Weight: 2.00 g  
 Concentrated Extract Volume: 20.0  
 Client Sample No. RE15-10-8351  
 Date Received: 06-FEB-10  
 GEL Job No (SDG): 10-1621-1  
 GEL Sample ID: 246437006  
 Date Filtered: 19-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	.589	2.36	0.589	ug/kg	U	1	02-MAR-10 23:27	per0302031a
	Perchlorate Isotope Ratio						1	02-MAR-10 23:27	per0302031a
14797-73-0	Perchlorate-101	.589	2.36	0.589	ug/kg	U	1	02-MAR-10 23:27	per0302031a
	Perchlorate-O(18)			5.96	ug/kg		1	02-MAR-10 23:27	per0302031a

<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

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 952819

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8350

Date Received: 06-FEB-10

GEL Job No (SDG): 10-1621-1

GEL Sample ID: 246437007

Date Filtered: 19-FEB-10

Injection Volume (uL): 20

%Solids: 77

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.65	2.6	0.650	ug/kg	HU	1	03-MAR-10 00:01	per0302035a
	Perchlorate Isotope Ratio						1	03-MAR-10 00:01	per0302035a
14797-73-0	Perchlorate-101	.65	2.6	0.650	ug/kg	HU	1	03-MAR-10 00:01	per0302035a
	Perchlorate-O(18)			6.49	ug/kg		1	03-MAR-10 00:01	per0302035a

<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: SOIL  
 Extraction Batch ID: 952819  
 Extraction Type: Solid Prep  
 Sample Volume/Weight: 2.00 g  
 Concentrated Extract Volume: 20.0  
 Client Sample No. RE15-10-8357  
 Date Received: 06-FEB-10  
 GEL Job No (SDG): 10-1621-1  
 GEL Sample ID: 246437008  
 Date Filtered: 19-FEB-10  
 Injection Volume (uL): 20  
 %Solids: 94

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.532	2.13	0.532	ug/kg	HU	1	03-MAR-10 00:09	per0302036a
	Perchlorate Isotope Ratio						1	03-MAR-10 00:09	per0302036a
14797-73-0	Perchlorate-101	.532	2.13	0.547	ug/kg	HJ	1	03-MAR-10 00:09	per0302036a
	Perchlorate-O(18)			5.30	ug/kg		1	03-MAR-10 00:09	per0302036a

<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 %Solids

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 952819

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8338

Date Received: 06-FEB-10

GEL Job No (SDG): 10-1621-1

GEL Sample ID: 246437009

Date Filtered: 19-FEB-10

Injection Volume (uL): 20

%Solids: 78

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.644	2.58	0.644	ug/kg	HU	1	03-MAR-10 00:18	per0302037a
	Perchlorate Isotope Ratio						1	03-MAR-10 00:18	per0302037a
14797-73-0	Perchlorate-101	.644	2.58	0.644	ug/kg	HU	1	03-MAR-10 00:18	per0302037a
	Perchlorate-O(18)			6.49	ug/kg		1	03-MAR-10 00:18	per0302037a

<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: 952819

Extraction Type: Solid Prep

Client Sample No.

RE15-10-8336

Date Received: 06-FEB-10

GEL Job No (SDG): 10-1621-1

GEL Sample ID: 246437010

Date Filtered: 19-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	.606	2.43	0.606	ug/kg	HU	1	03-MAR-10 00:27	per0302038a
	Perchlorate Isotope Ratio						1	03-MAR-10 00:27	per0302038a
14797-73-0	Perchlorate-101	.606	2.43	0.606	ug/kg	HU	1	03-MAR-10 00:27	per0302038a
	Perchlorate-O(18)			6.21	ug/kg		1	03-MAR-10 00:27	per0302038a

<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: 952819

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8339

Date Received: 06-FEB-10

GEL Job No (SDG): 10-1621-1

GEL Sample ID: 246437011

Date Filtered: 19-FEB-10

Injection Volume (uL): 20

%Solids: 24

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.532	2.13	0.532	ug/kg	HU	1	03-MAR-10 00:35	per0302039a
	Perchlorate Isotope Ratio						1	03-MAR-10 00:35	per0302039a
14797-73-0	Perchlorate-101	.532	2.13	0.532	ug/kg	HU	1	03-MAR-10 00:35	per0302039a
	Perchlorate-O(18)			5.41	ug/kg		1	03-MAR-10 00:35	per0302039a

<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

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC  
 Lab Code: GEL  
 Instrument: LCMSMS  
 Method: SW846 6850 Modified  
 Matrix: SOIL  
 Extraction Batch ID: 952819  
 Extraction Type: Solid Prep  
 Client Sample No. RE15-10-8337  
 Date Received: 06-FEB-10  
 GEL Job No (SDG): 10-1621-1  
 GEL Sample ID: 246437012  
 Date Filtered: 19-FEB-10  
 Injection Volume (uL): 20  
 %Solids: 89

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	.564	2.26	0.564	ug/kg	HU	1	03-MAR-10 00:44	per0302040a
	Perchlorate Isotope Ratio						1	03-MAR-10 00:44	per0302040a
14797-73-0	Perchlorate-101	.564	2.26	0.564	ug/kg	HU	1	03-MAR-10 00:44	per0302040a
	Perchlorate-O(18)			5.96	ug/kg		1	03-MAR-10 00:44	per0302040a

<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  
 Aliquot %Solids

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 952819

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8375

Date Received: 06-FEB-10

GEL Job No (SDG): 10-1621-1

GEL Sample ID: 246437013

Date Filtered: 19-FEB-10

Injection Volume (uL): 20

%Solids: 80

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.623	2.49	1.19	ug/kg	HJ	1	03-MAR-10 00:52	per0302041a
	Perchlorate Isotope Ratio			3.24			1	03-MAR-10 00:52	per0302041a
14797-73-0	Perchlorate-101	.623	2.49	1.16	ug/kg	HJ	1	03-MAR-10 00:52	per0302041a
	Perchlorate-Q(18)			6.26	ug/kg		1	03-MAR-10 00:52	per0302041a

<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: 952819

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8374

Date Received: 06-FEB-10

GEL Job No (SDG): 10-1621-1

GEL Sample ID: 246437014

Date Filtered: 19-FEB-10

Injection Volume (uL): 20

%Solids: 93.7

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.534	2.13	0.534	ug/kg	HU	1	03-MAR-10 01:01	per0302042a
	Perchlorate Isotope Ratio						1	03-MAR-10 01:01	per0302042a
14797-73-0	Perchlorate-101	.534	2.13	0.534	ug/kg	HU	1	03-MAR-10 01:01	per0302042a
	Perchlorate-O(18)			5.55	ug/kg		1	03-MAR-10 01:01	per0302042a

<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): 10-1621-1

Extract Batch Code: 952819

Date Filtered: 19-FEB-10

Matrix: SOIL

Sample ID: 1202042226

Analyte^	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	2.00	2.05	ug/kg	103		70 - 130
Perchlorate Isotope Ratio		3.08				-
Perchlorate-101	2.00	2.1	ug/kg	105		70 - 130
Perchlorate-O(18)		4.83	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): 10-1621-1

Extract Batch Code: 952819

Date Filtered: 19-FEB-10

Matrix: SOIL

Sample ID: 1202042229

Analyte <sup>^</sup>	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	2.00	2.24	ug/kg	112		70 - 130
Perchlorate Isotope Ratio		3.19				
Perchlorate-101	2.00	2.22	ug/kg	111		70 - 130
Perchlorate-O(18)		5.18	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

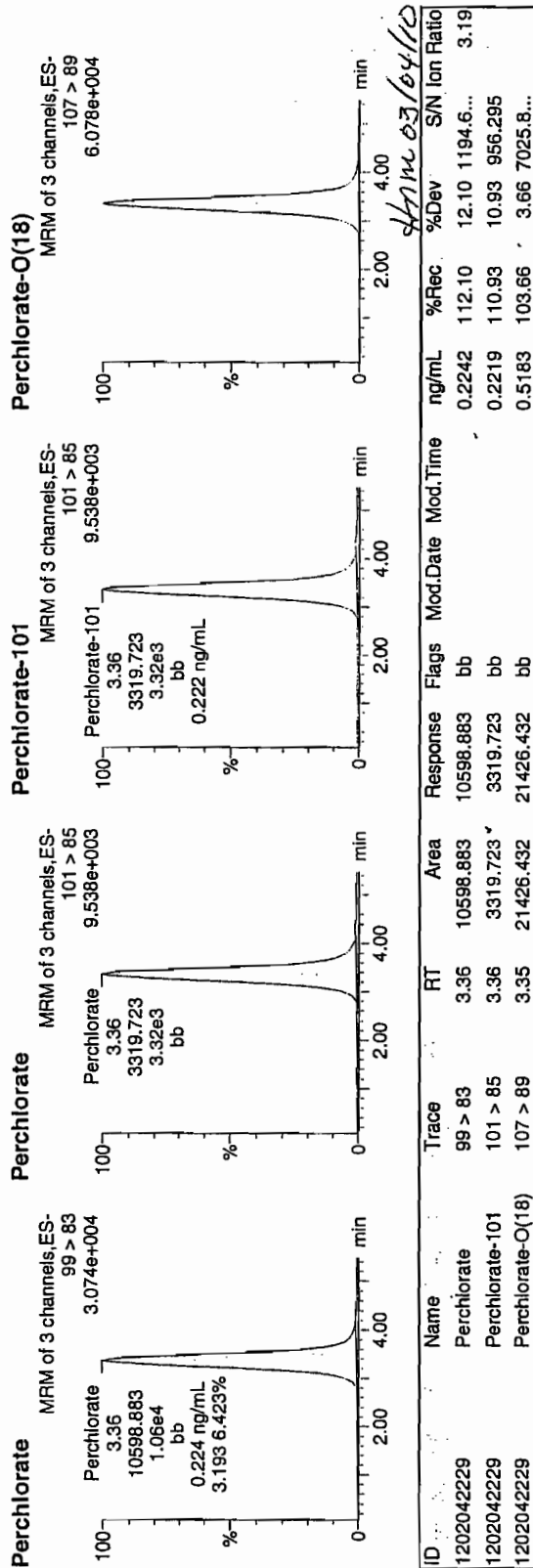
Dataset: C:\MassLynx\Perchlorate.PRO\per030210a.qld

Last Altered: Wednesday, March 03, 2010 11:30:21 AM Eastern Standard Time  
Printed: Wednesday, March 03, 2010 11:43:13 AM Eastern Standard Time

Name: per0302014a  
Date: 02-Mar-2010  
Time: 21:01:18  
ID: 1202042229  
Vial: 1:3,C

6.078e+004  
03-03-10

LAN-952820 | 5030 | 1.5 | 11



Perchlorate Spike/Spike Duplicate Summary

Lab Name: General Engineering Laboratories

Lab Code: GEL

Extract Batch Code: 952819

GEL Job No (SDG): 10-1621-1

Date Extracted: 19-FEB-10

GEL MS/PS ID: 1202042227

Client ID: RE15-10-8354

GEL MSD/PSD ID: 1202042228

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	2.56	0.190	ug/kg	2.87	105		3.02	110		4.93		30	75 - 125
Perchlorate Isotope Ratio	0	0.00		3.09			3.09			0			-
Perchlorate-101	2.56	0.211	ug/kg	2.94	106		3.09	112		5.04		30	75 - 125
Perchlorate-O(18)	0	6.33	ug/kg	6.51			6.51			.107			-

<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

GEL Job No.(SDG): 10-1621-1

Lab Name: General Engineering Laboratories

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	02-MAR-10	per0302001a	IPB001
Perchlorate-101	0.00	0	NA	02-MAR-10	per0302001a	IPB001
Perchlorate	0.00	0	NA	02-MAR-10	per0302002a	IPB001
Perchlorate-101	0.00	0	NA	02-MAR-10	per0302002a	IPB001

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

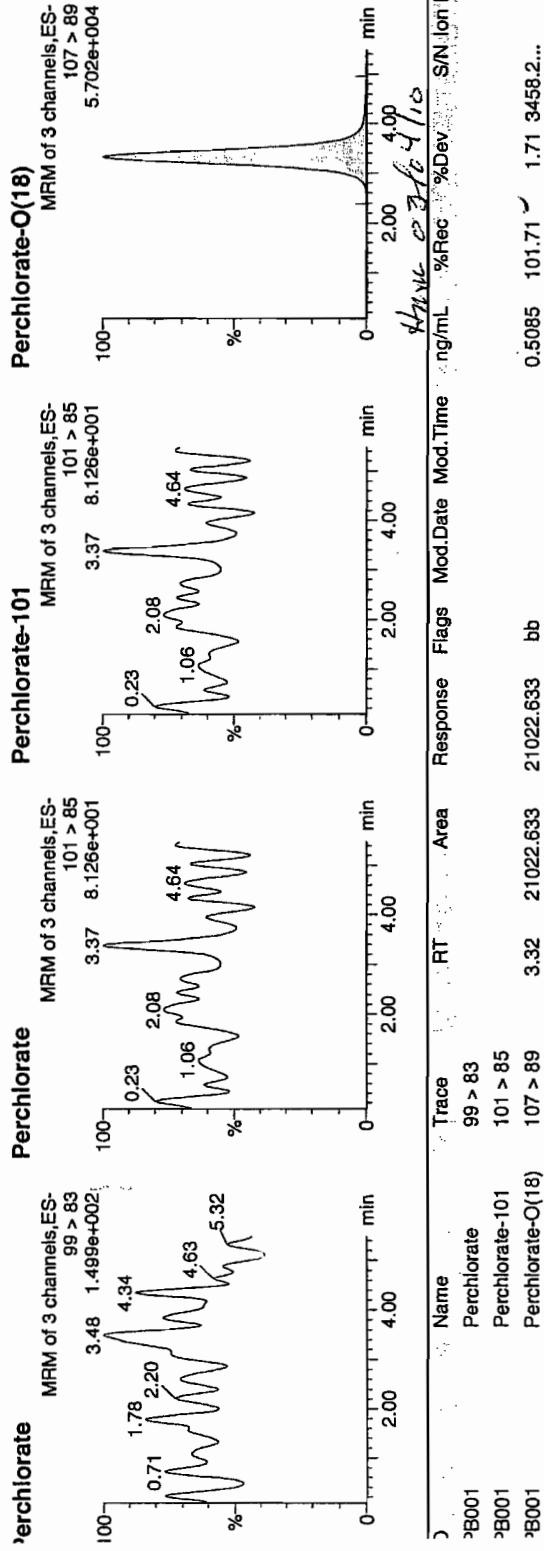
Dataset: C:\MassLynx\Perchlorate.PRO\per030210a.qld

Last Altered: Wednesday, March 03, 2010 11:30:21 AM Eastern Standard Time  
Printed: Wednesday, March 03, 2010 11:43:13 AM Eastern Standard Time

Method: C:\MassLynx\Perchlorate.PRO\MethDB\per030310a.mdb 03 Mar 2010 08:37:44  
Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per030210a.cdb 03 Mar 2010 11:30:20

Name: per0302001a  
Date: 02-Mar-2010  
Time: 19:10:22  
D: IPB001  
Ial: 1:1,A

03-03-10



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

Dataset: C:\MassLynx\Perchlorate.PRO\per030210a.qld

Last Altered: Wednesday, March 03, 2010 11:30:21 AM Eastern Standard Time  
Printed: Wednesday, March 03, 2010 11:43:13 AM Eastern Standard Time

Name: per0302002a

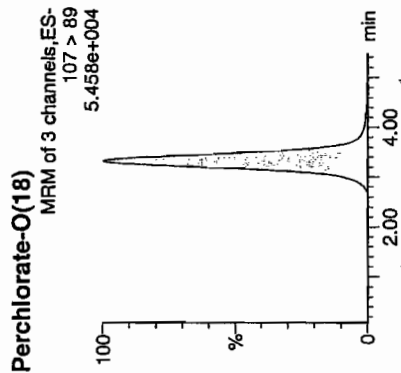
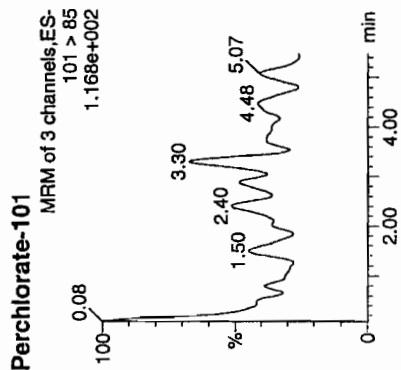
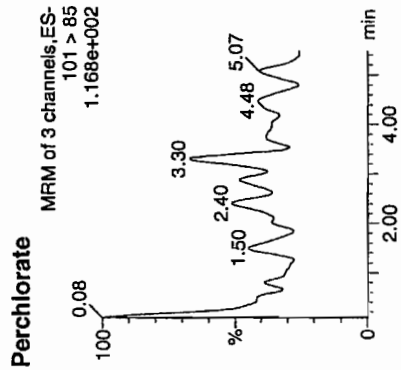
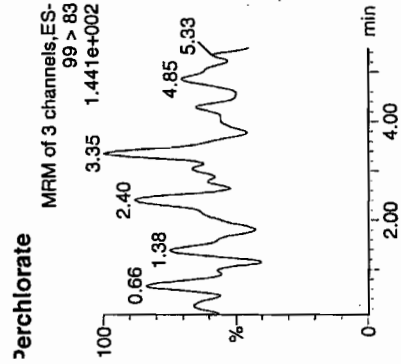
Date: 02-Mar-2010

Time: 19:18:55

D: IPB001

Vial: 1:1,A

03-03-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
Perchlorate	99 > 83											0.00
Perchlorate-101	101 > 85											
Perchlorate-O(18)	107 > 89	3.32	20020.992	20020.992	bb			0.4843	96.86	-3.14	3492.9...	

Perchlorate Continuing Calibration Blank

GEL Job No.(SDG): 10-1621-1

Lab Name: General Engineering Laboratories

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	02-MAR-10	per0302008a	IPB002
Perchlorate-101	0.00	0	NA	02-MAR-10	per0302008a	IPB002
Perchlorate	0.00	0	NA	02-MAR-10	per0302010a	IPB003
Perchlorate-101	0.00	0	NA	02-MAR-10	per0302010a	IPB003
Perchlorate	0.00	0	NA	02-MAR-10	per0302022a	IPB004
Perchlorate-101	0.00	0	NA	02-MAR-10	per0302022a	IPB004
Perchlorate	0.00	0	NA	02-MAR-10	per0302033a	IPB005
Perchlorate-101	0.00	0	NA	02-MAR-10	per0302033a	IPB005
Perchlorate	0.00	0	NA	03-MAR-10	per0302044a	IPB006
Perchlorate-101	0.00	0	NA	03-MAR-10	per0302044a	IPB006

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

Dataset: C:\MassLynx\Perchlorate.PRO\per030210a.qld

Last Altered: Wednesday, March 03, 2010 11:30:21 AM Eastern Standard Time  
Printed: Wednesday, March 03, 2010 11:43:13 AM Eastern Standard Time

Name: per0302008a

Date: 02-Mar-2010

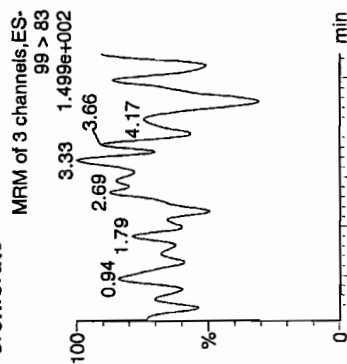
Time: 20:10:03

ID: IPB002

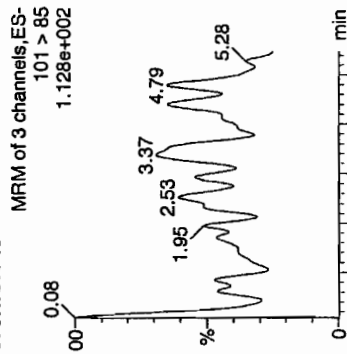
Vial: 1:1,A

03-03-10

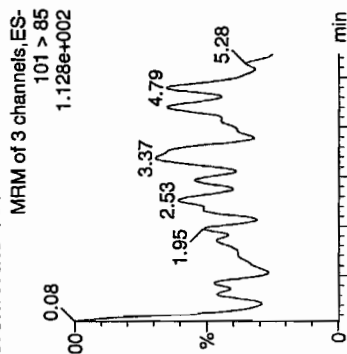
**Perchlorate**



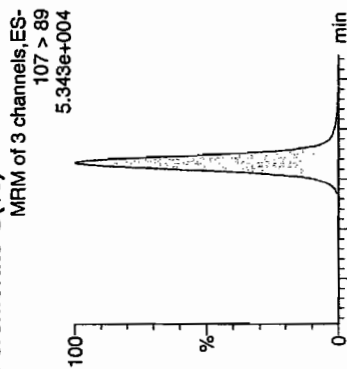
**Perchlorate**



**Perchlorate-101**



**Perchlorate-O(18)**



D	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
PB002	Perchlorate	99 > 83											
PB002	Perchlorate-101	101 > 85											
PB002	Perchlorate-O(18)	107 > 89	3.32	19540.750	19540.750	bb			0.4727	94.54	-5.46	3325.7...	0.00

# Quantify Sample Report MassLynx 4.0 SP4

the GEL Group, LLC Analyst: Charliers W. Wilson

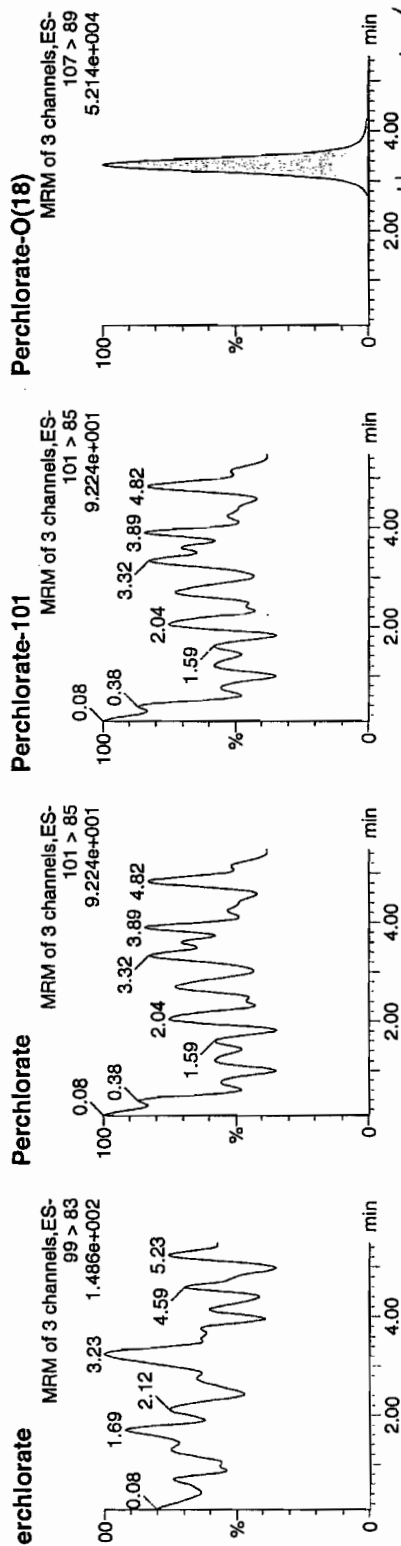
Page 10 of 113

Dataset: C:\MassLynx\Perchlorate.PRO\per030210a.qld

Last Altered: Wednesday, March 03, 2010 11:30:21 AM Eastern Standard Time  
Printed: Wednesday, March 03, 2010 11:43:13 AM Eastern Standard Time

Sample Name: per030210a  
Date: 02-Mar-2010  
Time: 20:27:08  
ID: IPB003  
Label: 1:1,A

03-03-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
B003	Perchlorate	99 > 83										0.00
B003	Perchlorate-101	101 > 85										
B003	Perchlorate-O(18)	107 > 89	3.31	19196.836	19196.836	bb		0.4644	92.87	-7.13	3700.2...	



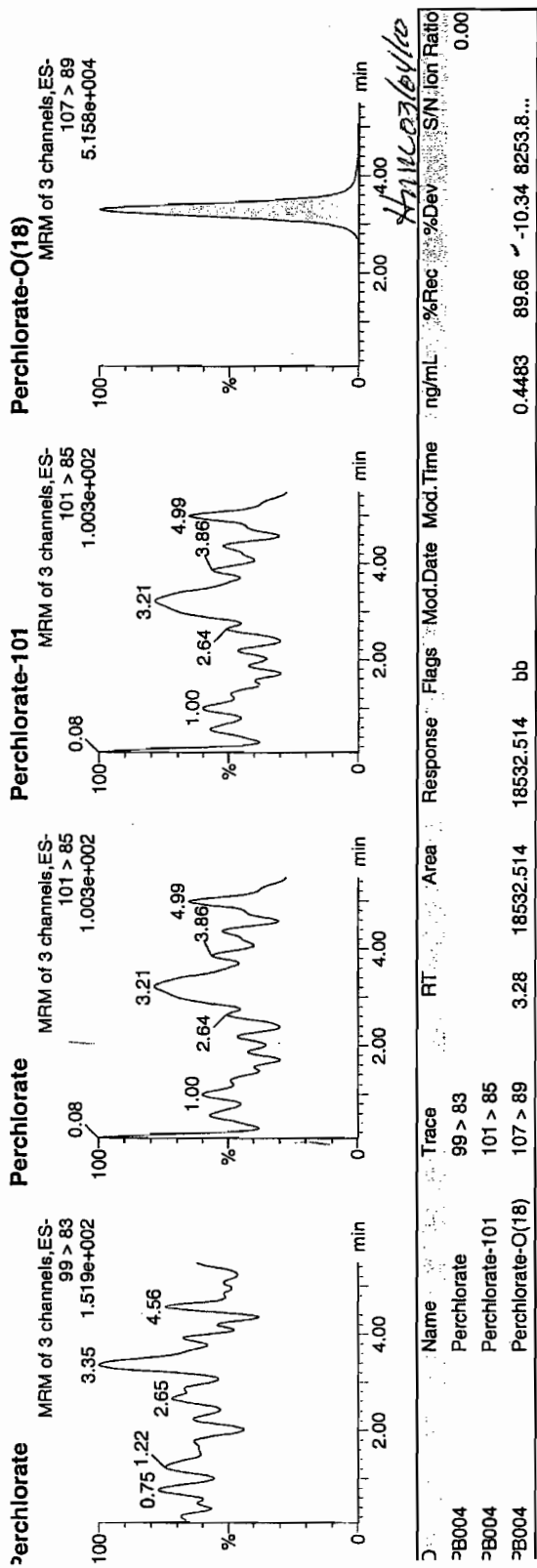
**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030210a.qld

Last Altered: Wednesday, March 03, 2010 11:30:21 AM Eastern Standard Time  
Printed: Wednesday, March 03, 2010 11:43:13 AM Eastern Standard Time

Name: per0302022a  
Date: 02-Mar-2010  
Time: 22:09:53  
D: IPB004  
Vial: 1:1,A

03-03-10



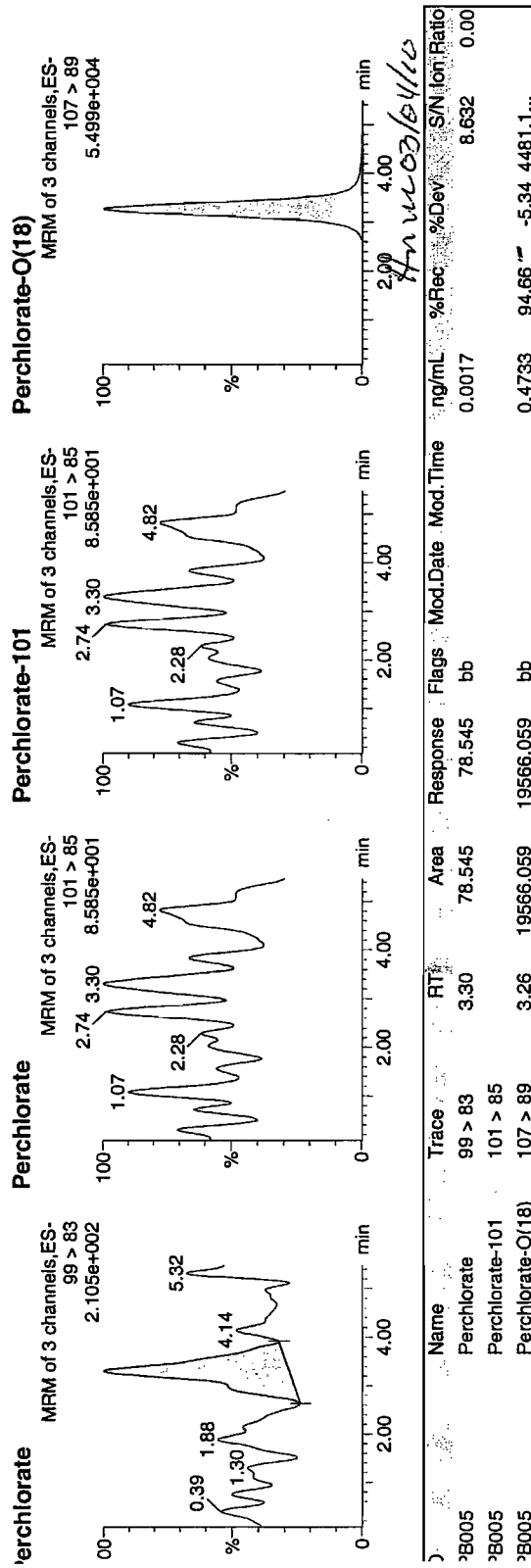
Quantify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charliers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030210a.qld

Last Altered: Wednesday, March 03, 2010 11:30:21 AM Eastern Standard Time  
Printed: Wednesday, March 03, 2010 11:43:13 AM Eastern Standard Time

Sample Name: per0302033a  
Date: 02-Mar-2010  
Time: 23:44:14  
C: IPB005  
File: 1:1,A

03-03-10



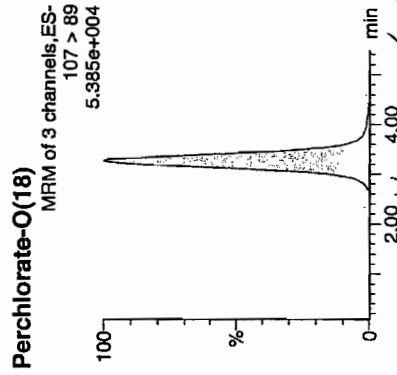
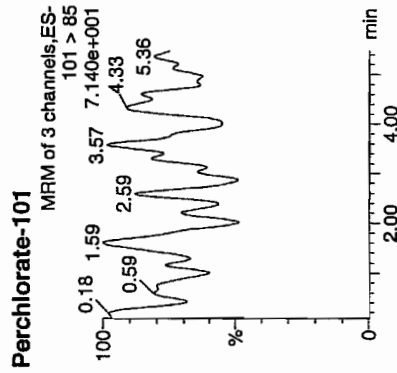
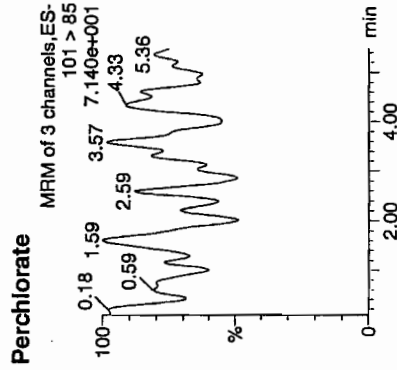
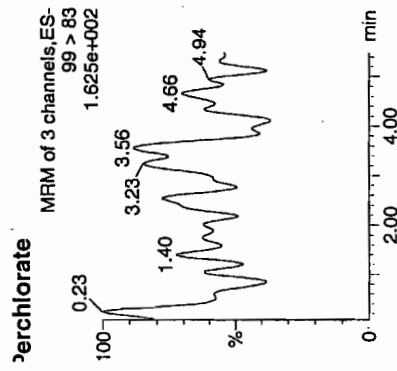
**Quantify Sample Report** MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030210a.qld

Last Altered: Wednesday, March 03, 2010 11:30:21 AM Eastern Standard Time  
Printed: Wednesday, March 03, 2010 11:43:13 AM Eastern Standard Time

Name: per0302044a  
Date: 03-Mar-2010  
Time: 01:18:39  
D: IPB006  
/ial: 1:1,A

*03-03-10*



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion.Ratio
Perchlorate	99 > 83											0.00
Perchlorate-101	101 > 85											
Perchlorate-O(18)	107 > 89	3.26	19169.957	19169.957	bb			0.4637	92.74	-7.26	719.401	

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

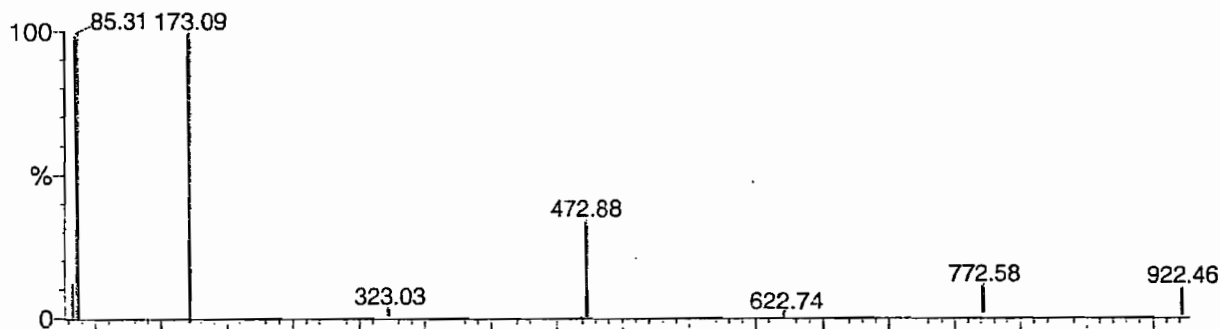
Calibration Report - MS1 Static

Page 1 of 1

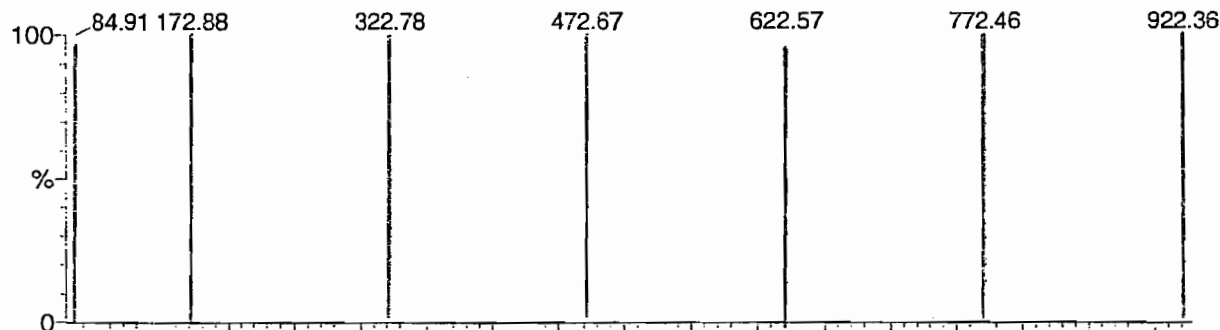
Printed: Tue Jan 08 12:19:12 2008

POINTS HIGHLIGHTED BY CURV 01-07-03

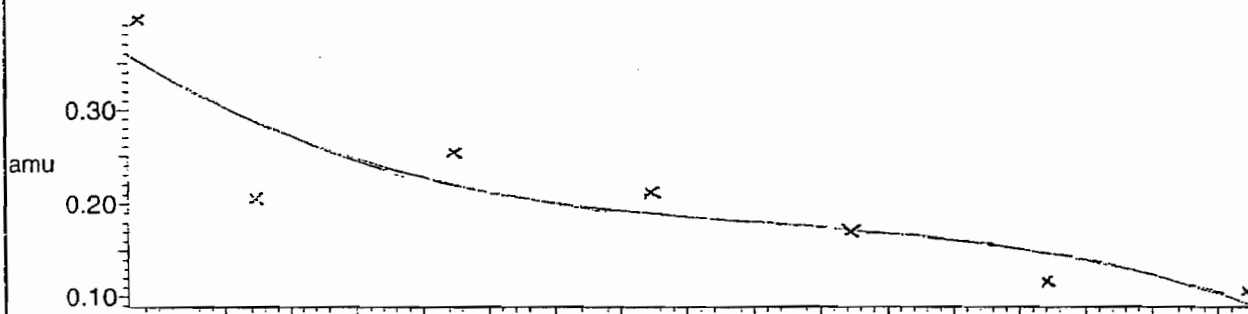
Data file: STATMS1 - Uncalibrated 7 matches of 7 tested references



Reference file: Nairb

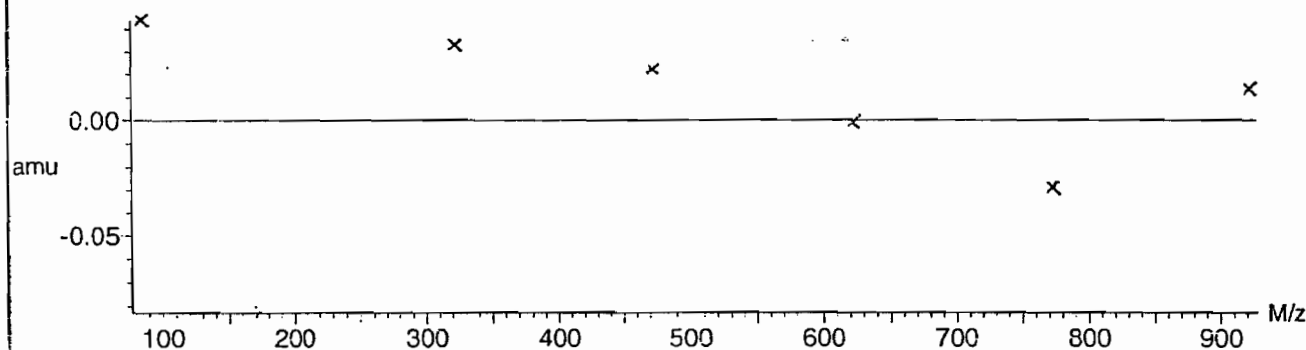


Mass difference (Raw - Ref mass)



Residuals

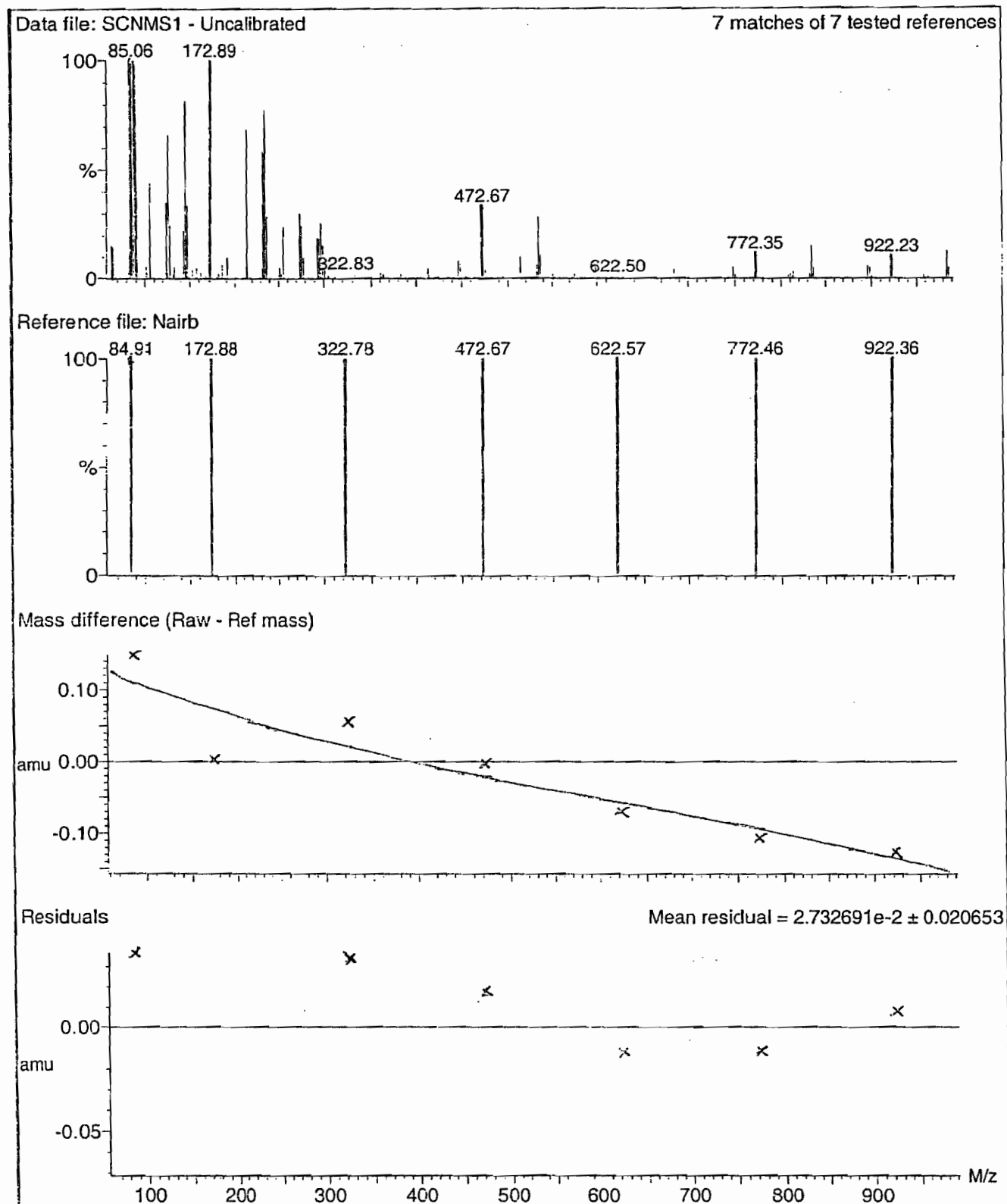
Mean residual =  $3.212012 \times 10^{-2} \pm 0.024108$



Calibration Report - MS1 Scanning

Page 1 of 1

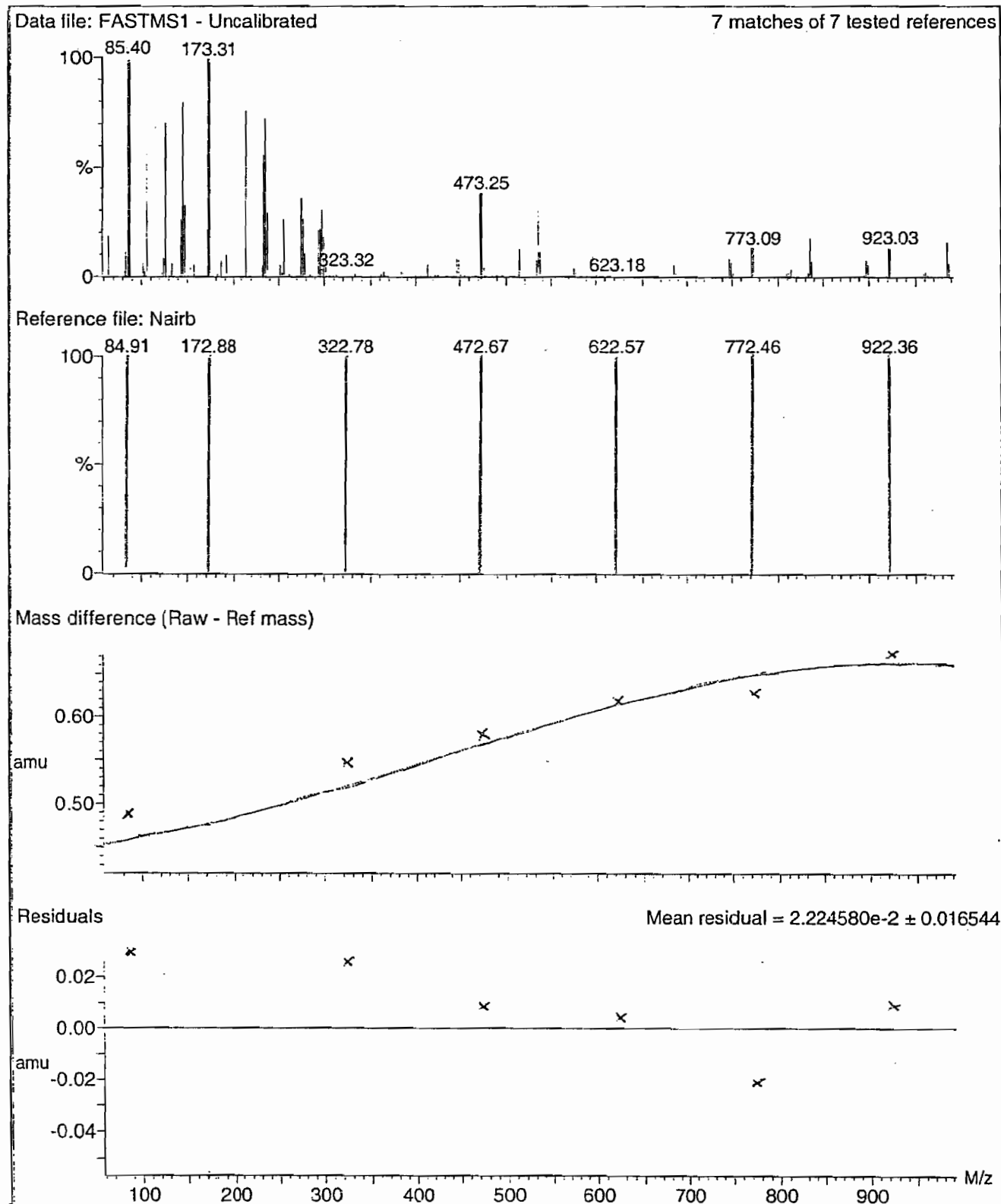
Printed: Tue Jan 08 12:20:09 2008



Calibration Report - MS1 Scan Speed Compensation

Page 1 of 1

Printed: Tue Jan 08 12:21:04 2008



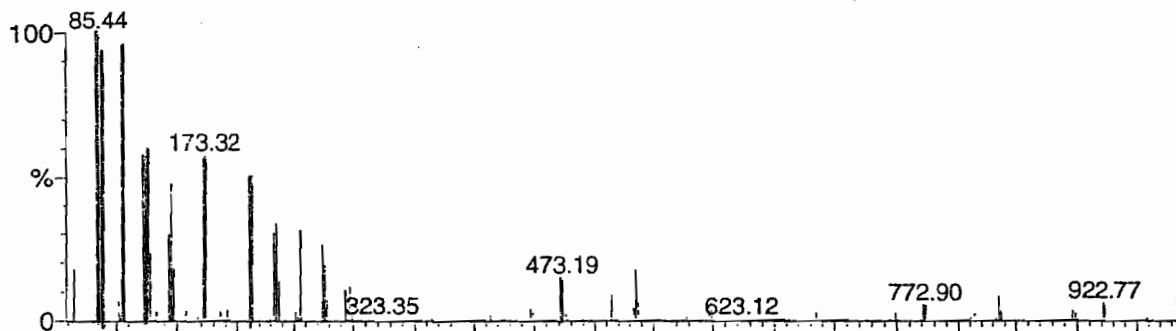
Calibration Report - MS2 Scan Speed Compensation

Page 1 of 1

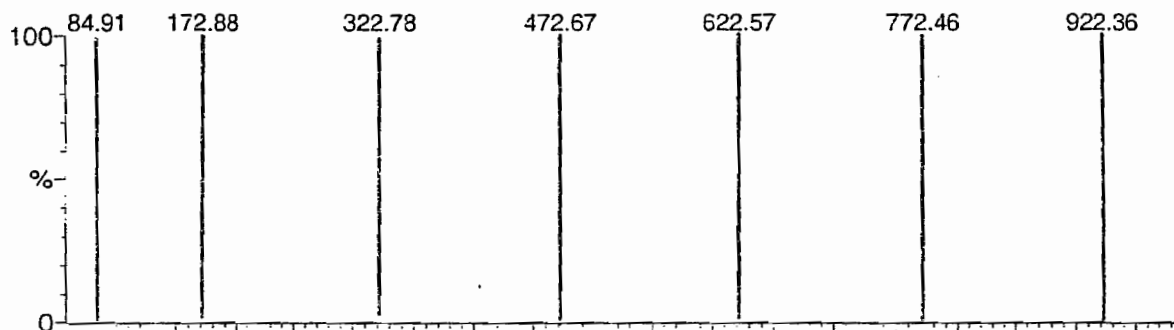
Printed: Tue Jan 08 12:23:51 2008

Data file: FASTMS2 - Uncalibrated

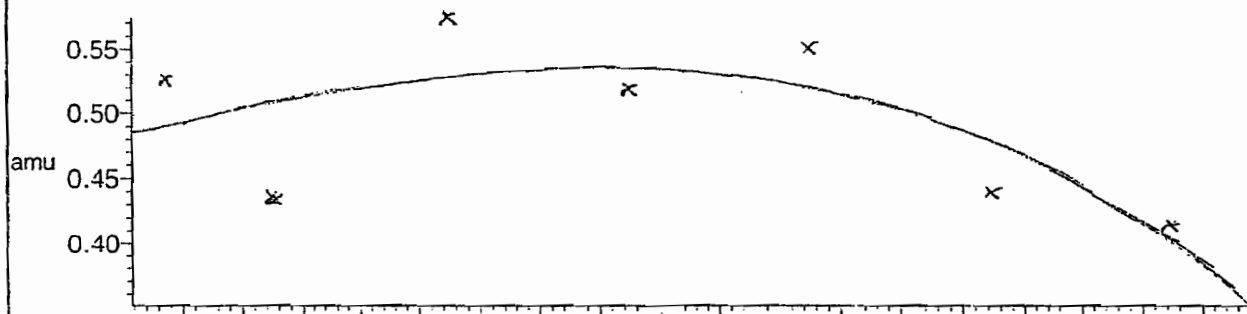
7 matches of 7 tested references



Reference file: Nairb

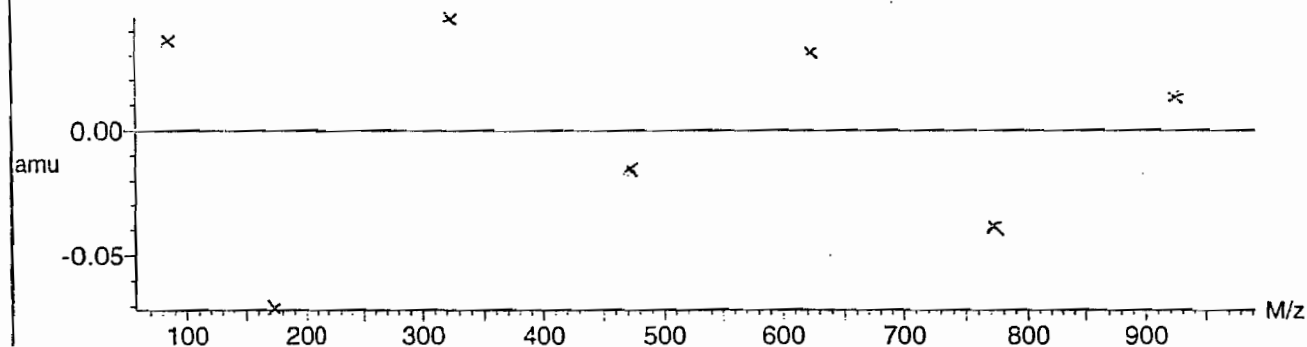


Mass difference (Raw - Ref mass)



Residuals

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

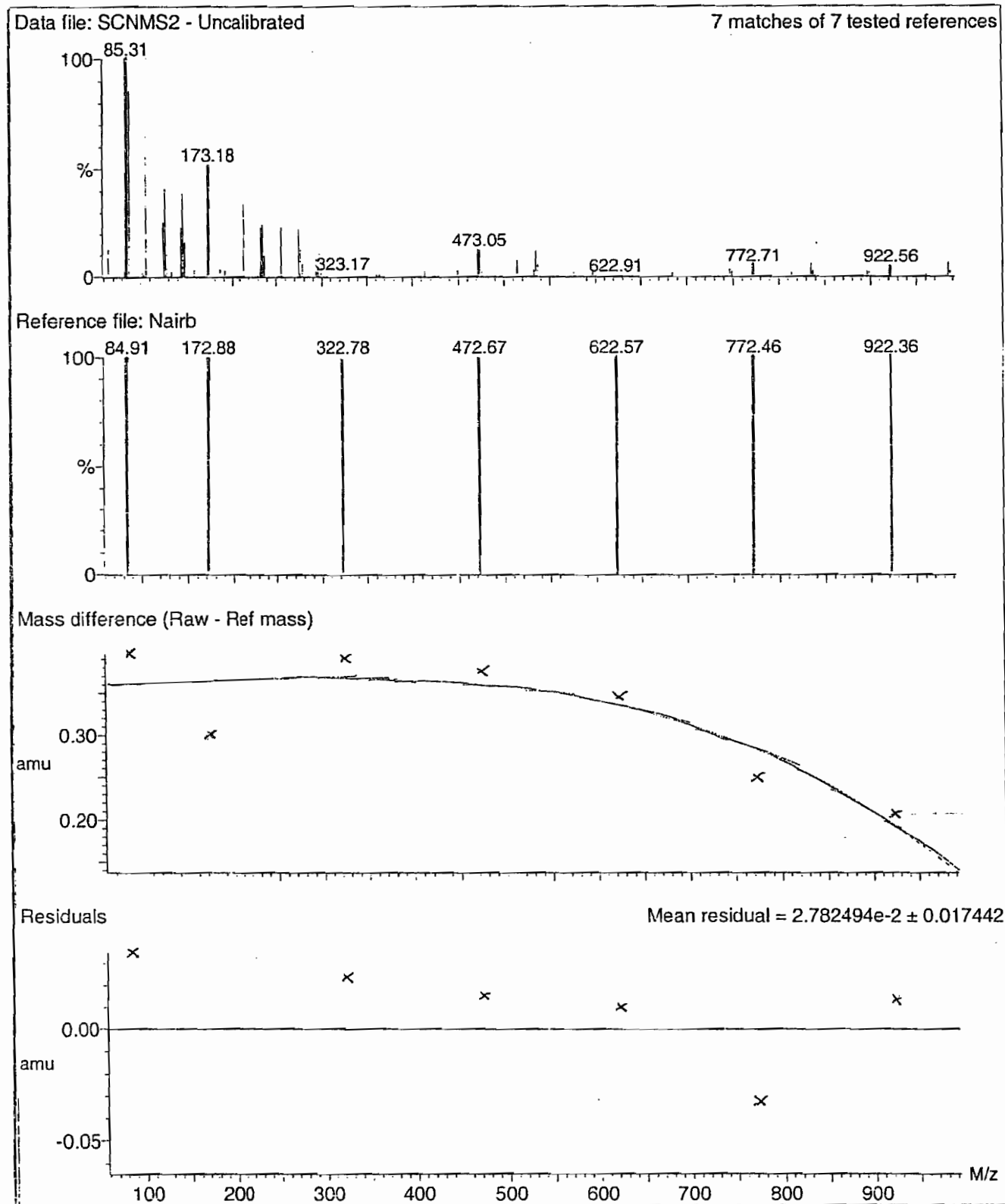




Calibration Report - MS2 Scanning

Page 1 of 1

Printed: Tue Jan 08 12:22:56 2008



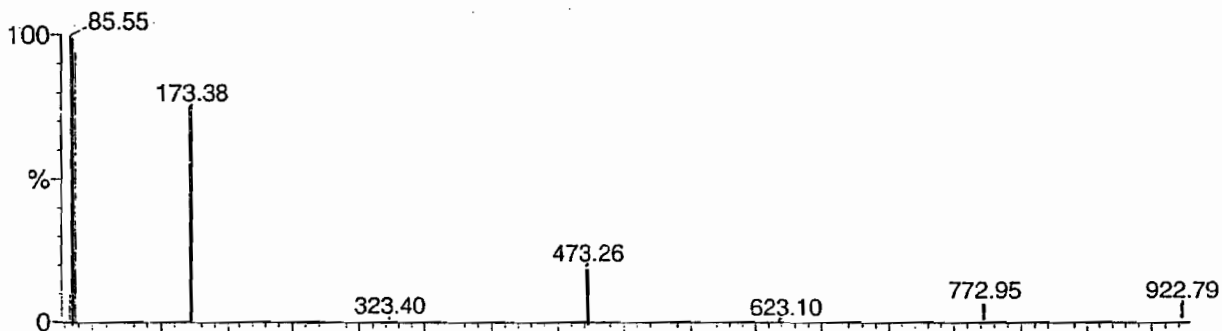
Calibration Report - MS2 Static

Page 1 of 1

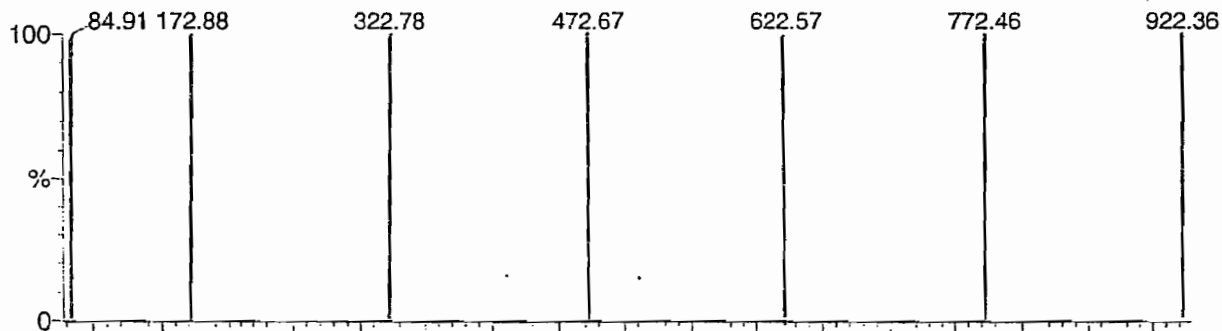
Printed: Tue Jan 08 12:21:59 2008

Data file: STATMS2 - Uncalibrated

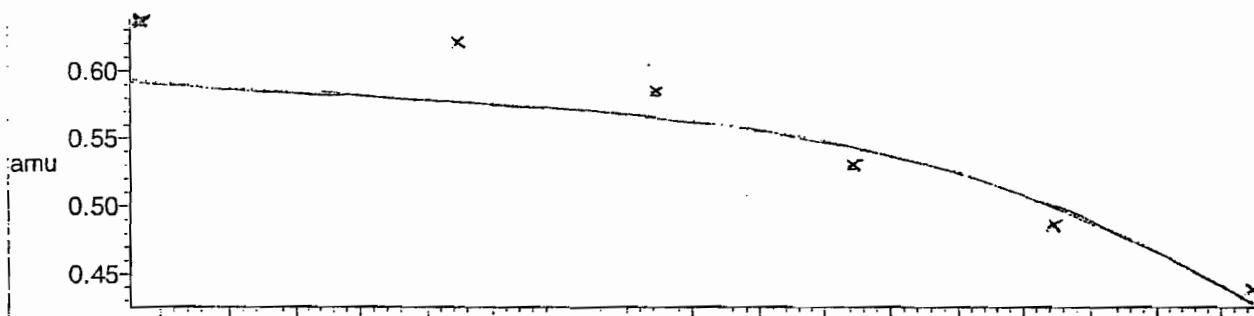
7 matches of 7 tested references



Reference file: Nairb

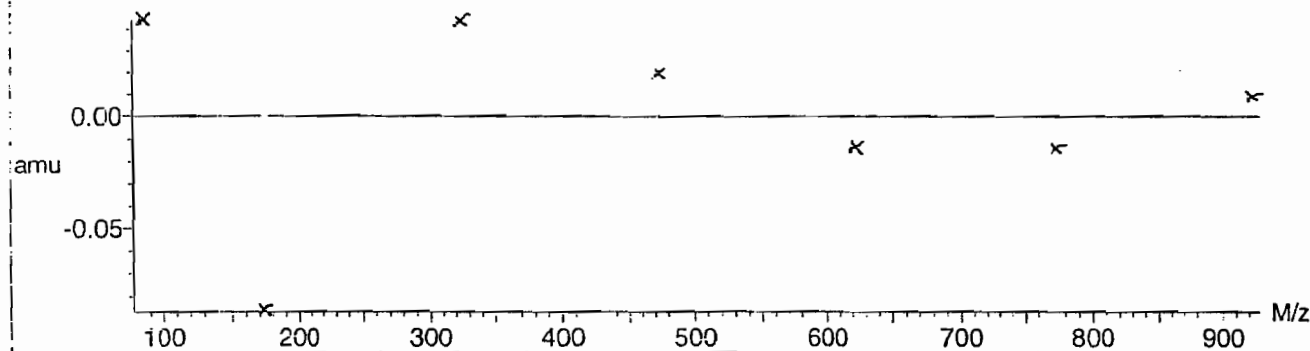


Mass difference (Raw - Ref mass)



Residuals

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



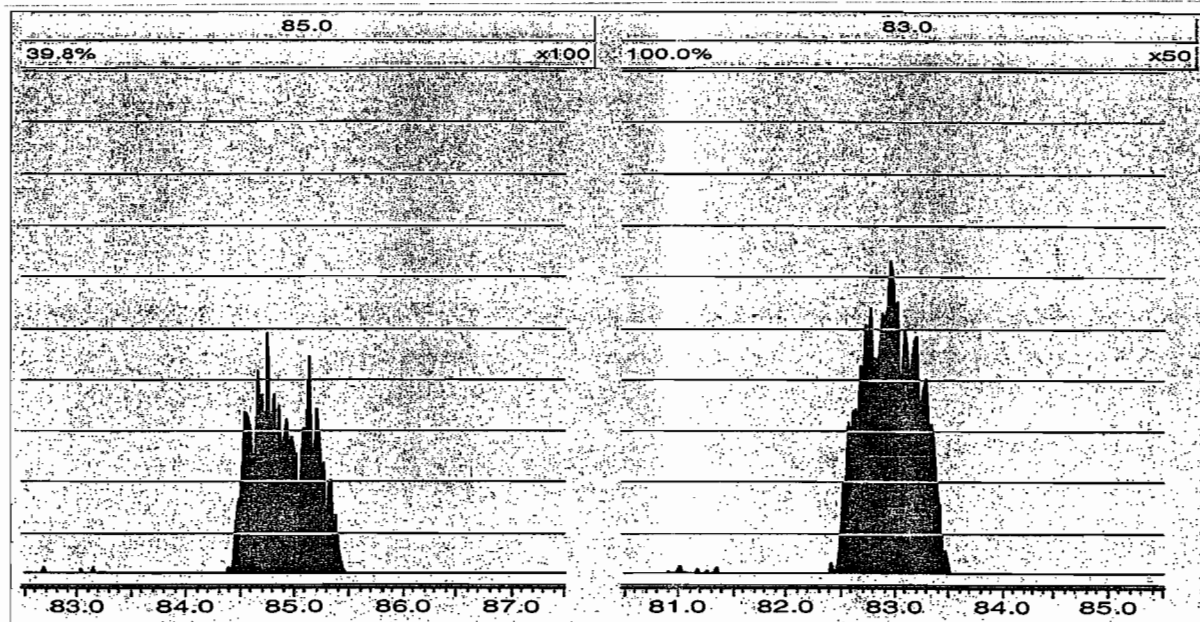
Tune Parameters

MassLynx 4.0 SP4

Page 1 of 1

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

Printed: Tuesday, March 02, 2010 10:10:11 Eastern Standard Time



Perchlorate RT And Area Summary

GEL Job No.(SDG): 10-1621-1

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
MidLevel Standard Area	per0302006a	02-MAR-10	20869.1				0.98-1.02
Lower Area Limit			10434.55				
Upper Area Limit			41738.2				
1202042225	per0302012a	02-MAR-10 20:44	18945.6	3.31	3.33367	1.007	
1202042226	per0302013a	02-MAR-10 20:52	19952.7	3.31	3.32133	1.003	
1202042229	per0302014a	02-MAR-10 21:01	21426.4	3.35	3.35863	1.003	
246437001	per0302024a	02-MAR-10 22:27	20402.3	3.28	3.27165	.997	
1202042227	per0302025a	02-MAR-10 22:35	20976.7	3.27	3.29642	1.008	
1202042228	per0302026a	02-MAR-10 22:44	20999.2	3.28	3.2964	1.005	
246437002	per0302027a	02-MAR-10 22:52	20730.6	3.28	3.30888	1.009	
246437003	per0302028a	02-MAR-10 23:01	20617.8	3.28	3.2964	1.005	

Perchlorate RT And Area Summary

GEL Job No.(SDG): 10-1621-1

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	per0302006a	02-MAR-10	20869.1				
Lower Area Limit			10434.55				
Upper Area Limit			41738.2				
246437004	per0302029a	02-MAR-10 23:10	20193.6	3.28	3.2964	1.005	
246437005	per0302030a	02-MAR-10 23:18	20223.4	3.27	3.28407	1.004	
246437006	per0302031a	02-MAR-10 23:27	20908.1	3.27	3.28408	1.004	
246437007	per0302035a	03-MAR-10 00:01	20648.1	3.27	3.30888	1.012	
246437008	per0302036a	03-MAR-10 00:09	20600.4	3.27	3.28408	1.004	
246437009	per0302037a	03-MAR-10 00:18	20817.2	3.27	3.27162	1	
246437010	per0302038a	03-MAR-10 00:27	21180.5	3.27	3.2841	1.004	
246437011	per0302039a	03-MAR-10 00:35	21022.4	3.26	3.28407	1.007	

Perchlorate RT And Area Summary

GEL Job No.(SDG): 10-1621-1

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	per0302006a	02-MAR-10	20869.1				
Lower Area Limit			10434.55				
Upper Area Limit			41738.2				
246437012	per0302040a	03-MAR-10 00:44	21816.8	3.26	3.2964	1.011	
246437013	per0302041a	03-MAR-10 00:52	20784.8	3.26	3.2841	1.007	
246437014	per0302042a	03-MAR-10 01:01	21478.1	3.26	3.29643	1.011	

# 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: 952819

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8354

Date Received: 06-FEB-10

GEL Job No (SDG): 10-1621-1

GEL Sample ID: 246437001

Date Filtered: 19-FEB-10

Injection Volume (uL): 20

%Solids: 78

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.641	2.56	0.641	ug/kg	U	1	02-MAR-10 22:27	per0302024a
	Perchlorate Isotope Ratio						1	02-MAR-10 22:27	per0302024a
14797-73-0	Perchlorate-101	.641	2.56	0.641	ug/kg	U	1	02-MAR-10 22:27	per0302024a
	Perchlorate-O(18)			6.33	ug/kg		1	02-MAR-10 22:27	per0302024a

<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

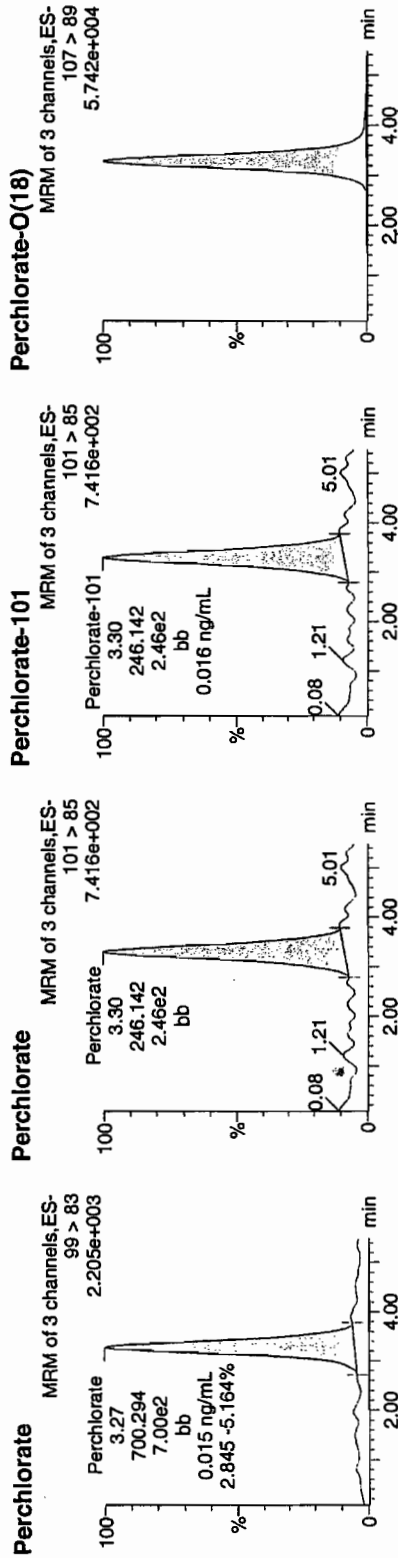
Dataset: C:\MassLynx\Perchlorate.PRO\per030210a.qld

Last Altered: Wednesday, March 03, 2010 11:30:21 AM Eastern Standard Time  
Printed: Wednesday, March 03, 2010 11:43:13 AM Eastern Standard Time

Name: per0302024a  
Date: 02-Mar-2010  
Time: 22:27:14  
ID: 246437001  
Vial: 1:4,D

03-03-10

LANC | 952820 | 5070 | 11



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion.Ratio
246437001	Perchlorate	99 > 83	3.27	700.294	700.294	bb			0.0148			297.916	2.85
246437001	Perchlorate-101	101 > 85	3.30	246.142	246.142	bb			0.0165			55.900	
246437001	Perchlorate-O(18)	107 > 89	3.28	20402.338	20402.338	bb			0.4935	98.71	-1.29	3123.8...	

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

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 952819

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8356

Date Received: 06-FEB-10

GEL Job No (SDG): 10-1621-1

GEL Sample ID: 246437002

Date Filtered: 19-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	.586	2.34	0.642	ug/kg	J	1	02-MAR-10 22:52	per0302027a
	Perchlorate Isotope Ratio			3.22			1	02-MAR-10 22:52	per0302027a
14797-73-0	Perchlorate-101	.586	2.34	0.629	ug/kg	J	1	02-MAR-10 22:52	per0302027a
	Perchlorate-O(18)			5.88	ug/kg		1	02-MAR-10 22:52	per0302027a

<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: Charliers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030210a.qld

Last Altered: Wednesday, March 03, 2010 11:30:21 AM Eastern Standard Time  
Printed: Wednesday, March 03, 2010 11:43:13 AM Eastern Standard Time

Name: per0302027a

Date: 02-Mar-2010

Time: 22:52:50

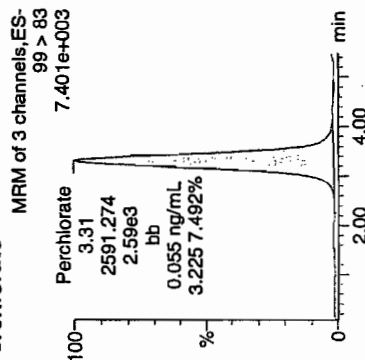
ID: 246437002

Vial: 1:5,A

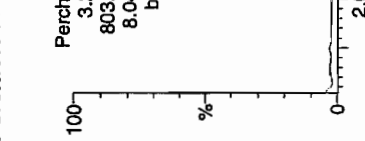
03-03-10

107-03-10

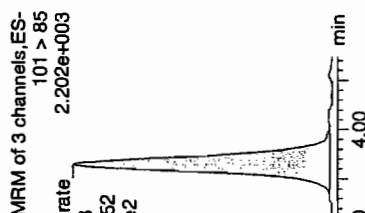
### Perchlorate



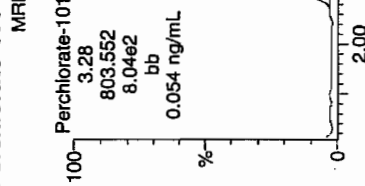
### Perchlorate



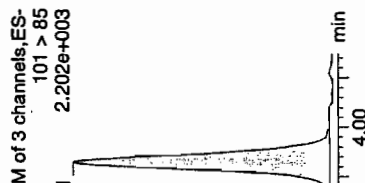
### Perchlorate-101



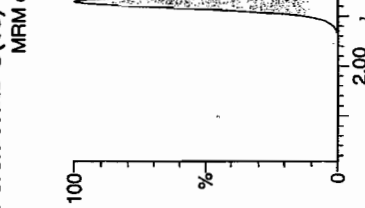
### Perchlorate-101



### Perchlorate-101



### Perchlorate-O(18)



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
246437002	Perchlorate	99 > 83	3.31	2591.274	2591.274	bb			0.0548			449.704	3.22
246437002	Perchlorate-101	101 > 85	3.28	803.552	803.552	bb			0.0537			388.169	
246437002	Perchlorate-O(18)	107 > 89	3.28	20730.598	20730.598	bb			0.5015	100.29	0.29	321.018	

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 952819

Extraction Type: Solid Prep

Client Sample No.

RE15-10-8353

Date Received: 06-FEB-10

GEL Job No (SDG): 10-1621-1

GEL Sample ID: 246437003

Date Filtered: 19-FEB-10

Injection Volume (uL): 20

%Solids: 87

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	.575	2.3	0.575	ug/kg	U	1	02-MAR-10 23:01	per0302028a
	Perchlorate Isotope Ratio						1	02-MAR-10 23:01	per0302028a
14797-73-0	Perchlorate-101	.575	2.3	0.575	ug/kg	U	1	02-MAR-10 23:01	per0302028a
	Perchlorate-O(18)			5.73	ug/kg		1	02-MAR-10 23:01	per0302028a

<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: Charliers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030210a.qld

Last Altered: Wednesday, March 03, 2010 11:30:21 AM Eastern Standard Time  
Printed: Wednesday, March 03, 2010 11:43:13 AM Eastern Standard Time

Name: per0302028a

Date: 02-Mar-2010

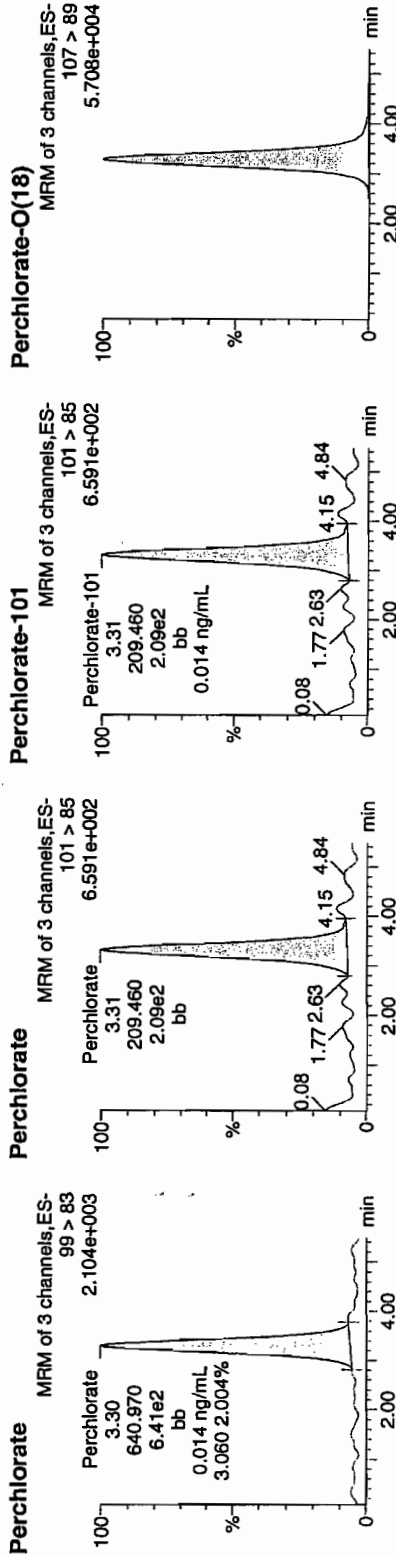
Time: 23:01:32

ID: 246437003

Vial: 1:5,B

03-03-10

1522 | 952820 | 3000 | 11



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
246437003	Perchlorate	99 > 83	3.30	640.970	640.970	bb			0.0136			131.516	3.06
246437003	Perchlorate-101	101 > 85	3.31	209.460	209.460	bb			0.0140			71.834	
246437003	Perchlorate-O(18)	107 > 89	3.28	20617.795	20617.795	bb			0.4987	99.75	-0.25	3683.2...	

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 952819

Extraction Type: Solid Prep

Client Sample No.

RE15-10-8352

Date Received: 06-FEB-10

GEL Job No (SDG): 10-1621-1

GEL Sample ID: 246437004

Date Filtered: 19-FEB-10

Injection Volume (uL): 20

%Solids: 77

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	.65	2.6	0.650	ug/kg	U	1	02-MAR-10 23:10	per0302029a
	Perchlorate Isotope Ratio						1	02-MAR-10 23:10	per0302029a
14797-73-0	Perchlorate-101	.65	2.6	0.650	ug/kg	U	1	02-MAR-10 23:10	per0302029a
	Perchlorate-O(18)			6.35	ug/kg		1	02-MAR-10 23:10	per0302029a

<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: Charters W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030210a.qld

Last Altered: Wednesday, March 03, 2010 11:30:21 AM Eastern Standard Time  
Printed: Wednesday, March 03, 2010 11:43:13 AM Eastern Standard Time

Name: per0302029a

Date: 02-Mar-2010

Time: 23:10:05

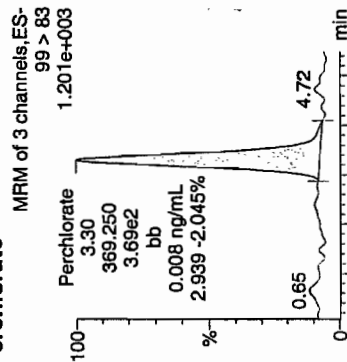
ID: 246437004

Vial: 1:5,C

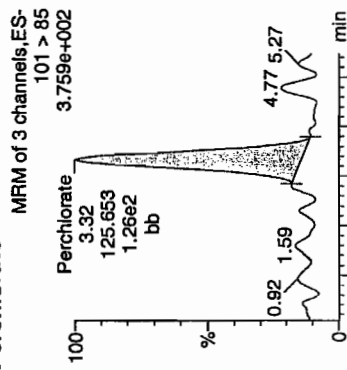
03-03-10

192219528220 | 30020 | 11

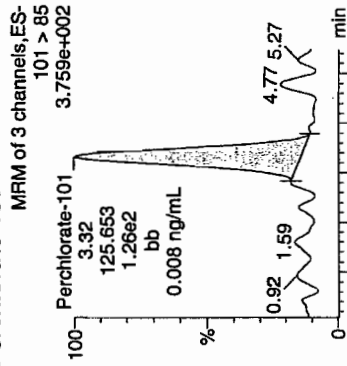
**Perchlorate**



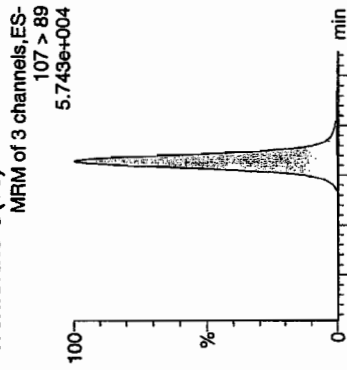
**Perchlorate**



**Perchlorate-101**



**Perchlorate-O(18)**



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
246437004	Perchlorate	99 > 83	3.30	369.250	369.250	bb			0.0078	-		96.239	2.94
246437004	Perchlorate-101	101 > 85	3.32	125.653	125.653	bb			0.0084			34.139	
246437004	Perchlorate-O(18)	107 > 89	3.28	20193.604	20193.604	bb			0.4885	97.70	-2.30	1363.2...	

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 952819

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8355

Date Received: 06-FEB-10

GEL Job No (SDG): 10-1621-1

GEL Sample ID: 246437005

Date Filtered: 19-FEB-10

Injection Volume (uL): 20

%Solids: 87

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.573	2.29	0.573	ug/kg	U	1	02-MAR-10 23:18	per0302030a
	Perchlorate Isotope Ratio						1	02-MAR-10 23:18	per0302030a
14797-73-0	Perchlorate-101	.573	2.29	0.573	ug/kg	U	1	02-MAR-10 23:18	per0302030a
	Perchlorate-O(18)			5.60	ug/kg		1	02-MAR-10 23:18	per0302030a

<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\per030210a.qld

Last Altered: Wednesday, March 03, 2010 11:30:21 AM Eastern Standard Time  
Printed: Wednesday, March 03, 2010 11:43:13 AM Eastern Standard Time

Name: per0302030a

Date: 02-Mar-2010

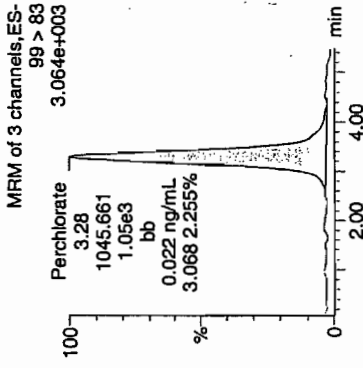
Time: 23:18:38

ID: 246437005

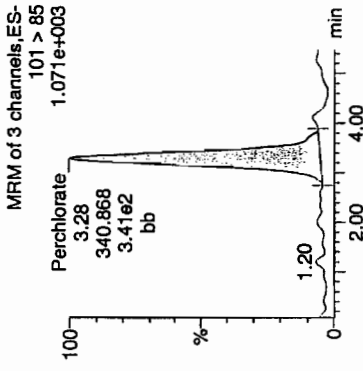
Vial: 1:5,D

15720 | 952320 | 2000 | 11 | 03-03-10

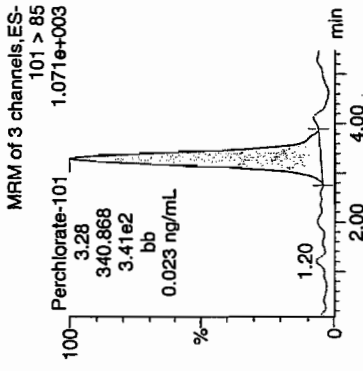
Perchlorate



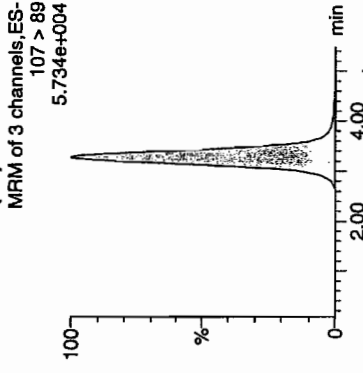
Perchlorate



Perchlorate-101



Perchlorate-O(18)



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
246437005	Perchlorate	99 > 83	3.28	1045.661	1045.661	bb			0.0221			329.771	3.07
246437005	Perchlorate-101	101 > 85	3.28	340.868	340.868	bb			0.0228			14.124	
246437005	Perchlorate-O(18)	107 > 89	3.27	20223.381	20223.381	bb			0.4892	97.84	-2.16	6829.6...	

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 952819

Extraction Type: Solid Prep

Client Sample No.

RE15-10-8351

Date Received: 06-FEB-10

GEL Job No (SDG): 10-1621-1

GEL Sample ID: 246437006

Date Filtered: 19-FEB-10

Injection Volume (uL): 20

%Solids: 85

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	.589	2.36	0.589	ug/kg	U	1	02-MAR-10 23:27	per0302031a
	Perchlorate Isotope Ratio						1	02-MAR-10 23:27	per0302031a
14797-73-0	Perchlorate-101	.589	2.36	0.589	ug/kg	U	1	02-MAR-10 23:27	per0302031a
	Perchlorate-O(18)			5.96	ug/kg		1	02-MAR-10 23:27	per0302031a

<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: Charfers W. Wilson

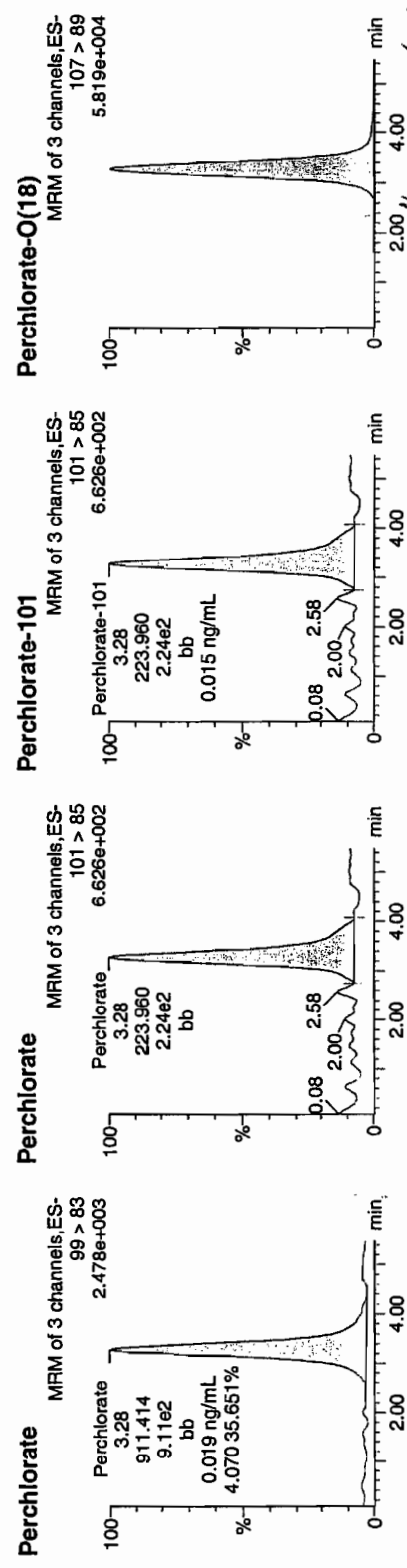
Dataset: C:\MassLynx\Perchlorate.PRO\per030210a.qld

Last Altered: Wednesday, March 03, 2010 11:30:21 AM Eastern Standard Time  
Printed: Wednesday, March 03, 2010 11:43:13 AM Eastern Standard Time

Name: per0302031a  
Date: 02-Mar-2010  
Time: 23:27:10  
ID: 246437006  
Vial: 1:5,E

03-03-10

1952820 | 3020 | 11



ID	Name	Trace	RT	Area	Response	Flags	Mod. Date	Mod. Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
246437006	Perchlorate	99 > 83	3.28	911.414	911.414	bb			0.0193			124.666	4.07
246437006	Perchlorate-101	101 > 85	3.28	223.960	223.960	bb			0.0150			91.683	
246437006	Perchlorate-O(18)	107 > 89	3.27	20908.057	20908.057	bb			0.5058	101.15	1.15	2331.9...	

Handwritten notes: 4.07, 124.666, 91.683, 0.5058, 101.15, 1.15, 2331.9...

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC  
 Lab Code: GEL  
 Instrument: LCMSMS  
 Method: SW846 6850 Modified  
 Matrix: SOIL  
 Extraction Batch ID: 952819  
 Extraction Type: Solid Prep  
 Sample Volume/Weight: 2.00 g  
 Concentrated Extract Volume: 20.0  
 Client Sample No.: RE15-10-8350  
 Date Received: 06-FEB-10  
 GEL Job No (SDG): 10-1621-1  
 GEL Sample ID: 246437007  
 Date Filtered: 19-FEB-10  
 Injection Volume (uL): 20  
 %Solids: 77

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.65	2.6	0.650	ug/kg	HU	1	03-MAR-10 00:01	per0302035a
	Perchlorate Isotope Ratio						1	03-MAR-10 00:01	per0302035a
14797-73-0	Perchlorate-101	.65	2.6	0.650	ug/kg	HU	1	03-MAR-10 00:01	per0302035a
	Perchlorate-O(18)			6.49	ug/kg		1	03-MAR-10 00:01	per0302035a

<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\per030210a.qld

Last Altered: Wednesday, March 03, 2010 11:30:21 AM Eastern Standard Time  
Printed: Wednesday, March 03, 2010 11:43:13 AM Eastern Standard Time

Name: per0302035a

Date: 03-Mar-2010

Time: 00:01:19

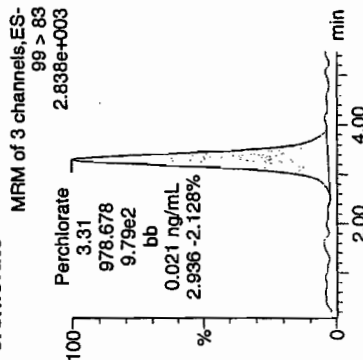
ID: 246437007

Vial: 1:5,F

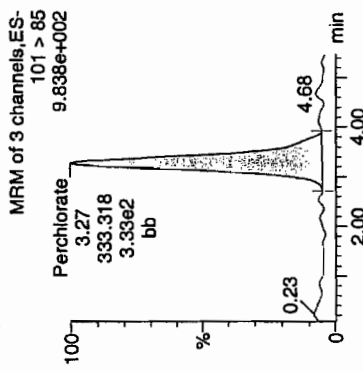
03-03-10

152220 | 5025 | 11

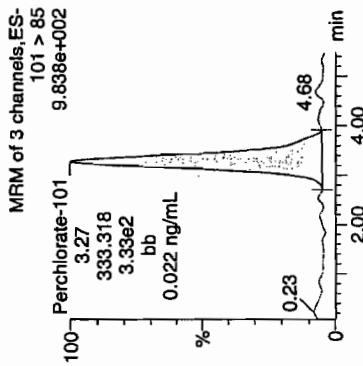
Perchlorate



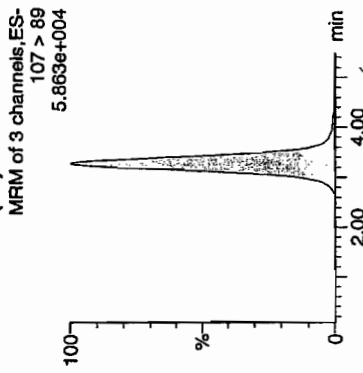
Perchlorate



Perchlorate-101



Perchlorate-O(18)



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	SN	Ion Ratio
246437007	Perchlorate	99 > 83	3.31	978.678	978.678	bb			0.0207			93.282	2.94
246437007	Perchlorate-101	101 > 85	3.27	333.318	333.318	bb			0.0223			163.341	
246437007	Perchlorate-O(18)	107 > 89	3.27	20648.076	20648.076	bb			0.4995	99.89	-0.11	4012.2...	

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

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 952819

Extraction Type: Solid Prep

Client Sample No.

RE15-10-8357

Date Received: 06-FEB-10

GEL Job No (SDG): 10-1621-1

GEL Sample ID: 246437008

Date Filtered: 19-FEB-10

Injection Volume (uL): 20

%Solids: 94

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	.532	2.13	0.532	ug/kg	HU	1	03-MAR-10 00:09	per0302036a
	Perchlorate Isotope Ratio						1	03-MAR-10 00:09	per0302036a
14797-73-0	Perchlorate-101	.532	2.13	0.547	ug/kg	HJ	1	03-MAR-10 00:09	per0302036a
	Perchlorate-O(18)			5.30	ug/kg		1	03-MAR-10 00:09	per0302036a

<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  $\frac{1}{\% \text{Solids}}$

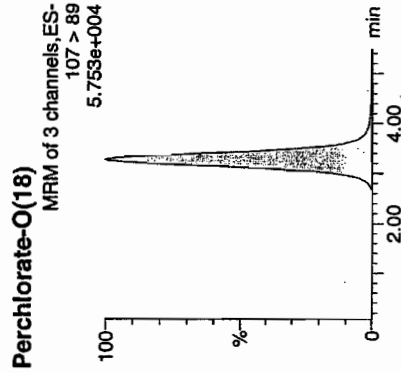
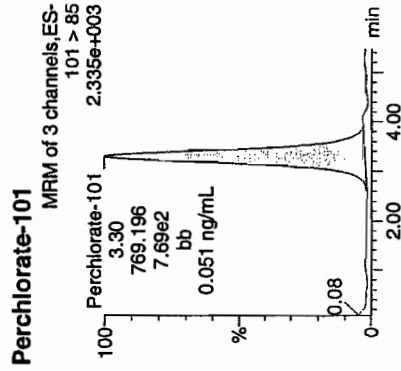
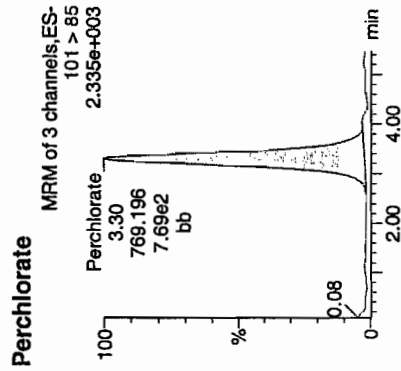
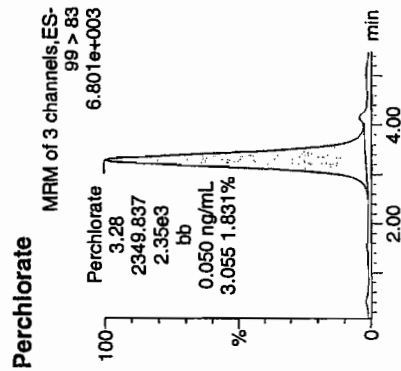
Quantify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030210a.qld

Last Altered: Wednesday, March 03, 2010 11:30:21 AM Eastern Standard Time  
Printed: Wednesday, March 03, 2010 11:43:13 AM Eastern Standard Time

Name: per0302036a  
Date: 03-Mar-2010  
Time: 00:09:51  
ID: 246437008  
Vial: 1:6,A

LTW-1952820 | 3070 | 1.1  
03-03-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
246437008	Perchlorate	99 > 83	3.28	2349.837	2349.837	bb			0.0497			179.318	3.05
246437008	Perchlorate-101	101 > 85	3.30	769.196	769.196	bb			0.0514			135.968	
246437008	Perchlorate-O(18)	107 > 89	3.27	20600.396	20600.396	bb			0.4983	99.66	-0.34	3202.1...	

P perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 952819

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8338

Date Received: 06-FEB-10

GEL Job No (SDG): 10-1621-1

GEL Sample ID: 246437002

Date Filtered: 19-FEB-10

Injection Volume (uL): 20

%Solids: 78

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.644	2.58	0.644	ug/kg	HU	1	03-MAR-10 00:18	per0302037a
	Perchlorate Isotope Ratio						1	03-MAR-10 00:18	per0302037a
14797-73-0	Perchlorate-101	.644	2.58	0.644	ug/kg	HU	1	03-MAR-10 00:18	per0302037a
	Perchlorate-O(18)			6.49	ug/kg		1	03-MAR-10 00:18	per0302037a

<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\per0302010a.qld

Last Altered: Wednesday, March 03, 2010 11:30:21 AM Eastern Standard Time  
Printed: Wednesday, March 03, 2010 11:43:13 AM Eastern Standard Time

Name: per0302037a

Date: 03-Mar-2010

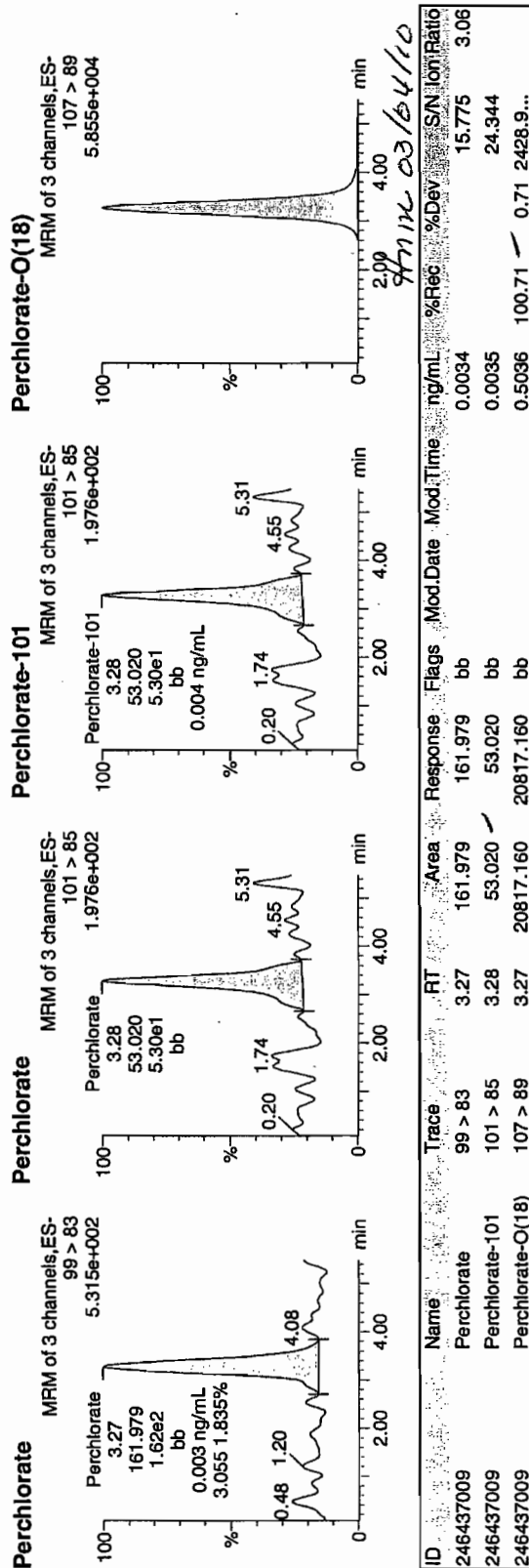
Time: 00:18:25

ID: 246437009

Vial: 1:6,B

03-03-10

1246437009 | 952820 | 302011



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

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 952819

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8336

Date Received: 06-FEB-10

GEL Job No (SDG): 10-1621-1

GEL Sample ID: 246437010

Date Filtered: 19-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	.606	2.43	0.606	ug/kg	HU	1	03-MAR-10 00:27	per0302038a
	Perchlorate Isotope Ratio						1	03-MAR-10 00:27	per0302038a
14797-73-0	Perchlorate-101	.606	2.43	0.606	ug/kg	HU	1	03-MAR-10 00:27	per0302038a
	Perchlorate-O(18)			6.21	ug/kg		1	03-MAR-10 00:27	per0302038a

<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\per030210a.qld

Last Altered: Wednesday, March 03, 2010 11:30:21 AM Eastern Standard Time  
Printed: Wednesday, March 03, 2010 11:43:13 AM Eastern Standard Time

Name: per0302038a

Date: 03-Mar-2010

Time: 00:27:14

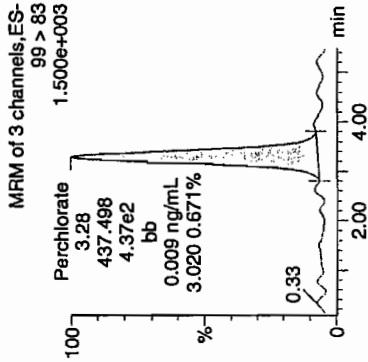
ID: 246437010

Vial: 1:6,C

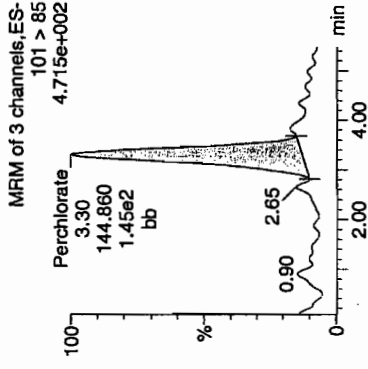
LAN-1952820 | 3020 | 11

03-03-10

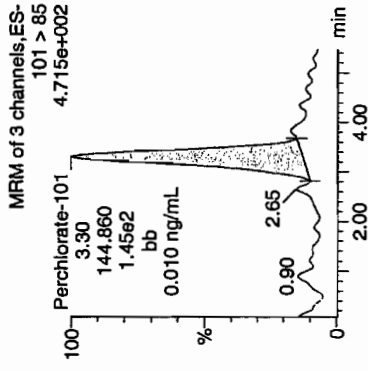
Perchlorate



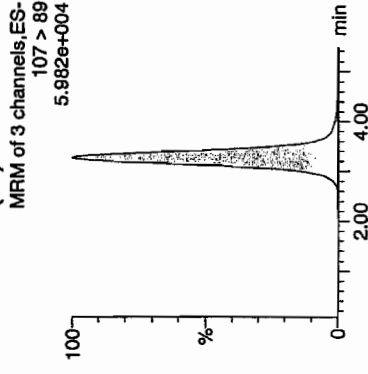
Perchlorate



Perchlorate-101



Perchlorate-O(18)



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
246437010	Perchlorate	99 > 83	3.28	437.498	437.498	bb			0.0093			89.971	3.02
246437010	Perchlorate-101	101 > 85	3.30	144.860	144.860	bb			0.0097			18.474	
246437010	Perchlorate-O(18)	107 > 89	3.27	21180.537	21180.537	bb			0.5124	102.47	2.47	447.308	

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC  
 Lab Code: GEL  
 Instrument: LCMSMS  
 Method: SW846 6850 Modified  
 Matrix: SOIL  
 Extraction Batch ID: 952819  
 Extraction Type: Solid Prep  
 Sample Volume/Weight: 2.00 g  
 Concentrated Extract Volume: 20.0  
 Client Sample No. RE15-10-8339  
 Date Received: 06-FEB-10  
 GEL Job No (SDG): 10-1621-1  
 GEL Sample ID: 246437011  
 Date Filtered: 19-FEB-10  
 Injection Volume (uL): 20  
 %Solids: 94

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.532	2.13	0.532	ug/kg	HU	1	03-MAR-10 00:35	per0302039a
	Perchlorate Isotope Ratio						1	03-MAR-10 00:35	per0302039a
14797-73-0	Perchlorate-101	.532	2.13	0.532	ug/kg	HU	1	03-MAR-10 00:35	per0302039a
	Perchlorate-O(18)			5.41	ug/kg		1	03-MAR-10 00:35	per0302039a

<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

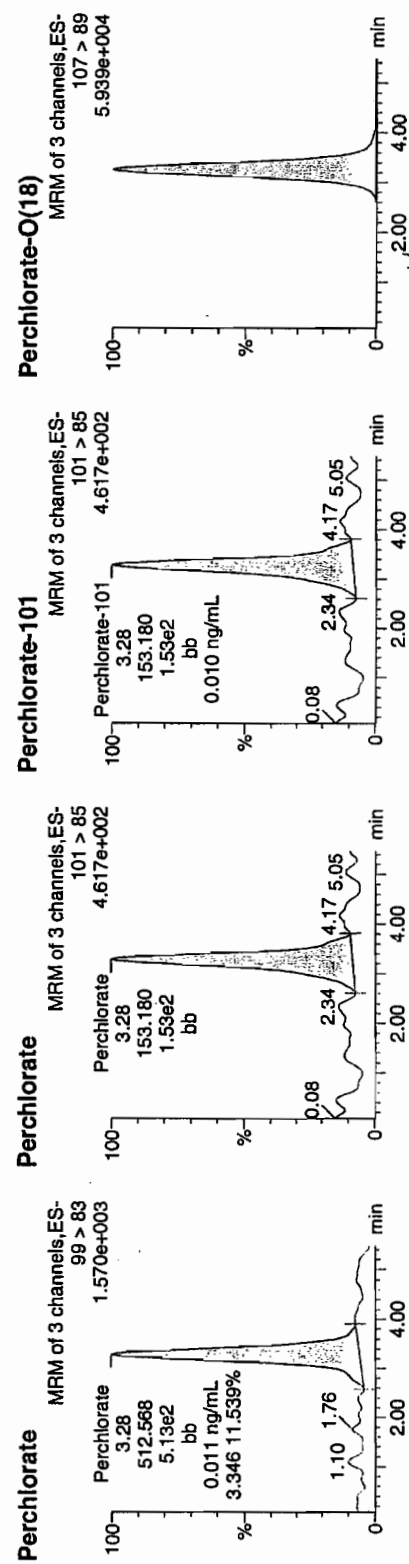
Dataset: C:\MassLynx\Perchlorate.PRO\per030210a.qld

Last Altered: Wednesday, March 03, 2010 11:30:21 AM Eastern Standard Time  
Printed: Wednesday, March 03, 2010 11:43:13 AM Eastern Standard Time

Name: per0302039a  
Date: 03-Mar-2010  
Time: 00:35:47  
ID: 246437011  
Vial: 1:6,D

03-03-10

152220 | 5020 | 1.1



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
246437011	Perchlorate	99 > 83	3.28	512.568	512.568	bb			0.0108			78.485	3.35
246437011	Perchlorate-101	101 > 85	3.28	153.180	153.180	bb			0.0102			52.144	
246437011	Perchlorate-O(18)	107 > 89	3.26	21022.404	21022.404	bb			0.5085	101.71	1.71	5570.1...	

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 952819

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8337

Date Received: 06-FEB-10

GEL Job No (SDG): 10-1621-1

GEL Sample ID: 246437012

Date Filtered: 19-FEB-10

Injection Volume (uL): 20

%Solids: 89

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.564	2.26	0.564	ug/kg	HU	1	03-MAR-10 00:44	per0302040a
	Perchlorate Isotope Ratio						1	03-MAR-10 00:44	per0302040a
14797-73-0	Perchlorate-101	.564	2.26	0.564	ug/kg	HU	1	03-MAR-10 00:44	per0302040a
	Perchlorate-O(18)			5.96	ug/kg		1	03-MAR-10 00:44	per0302040a

<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

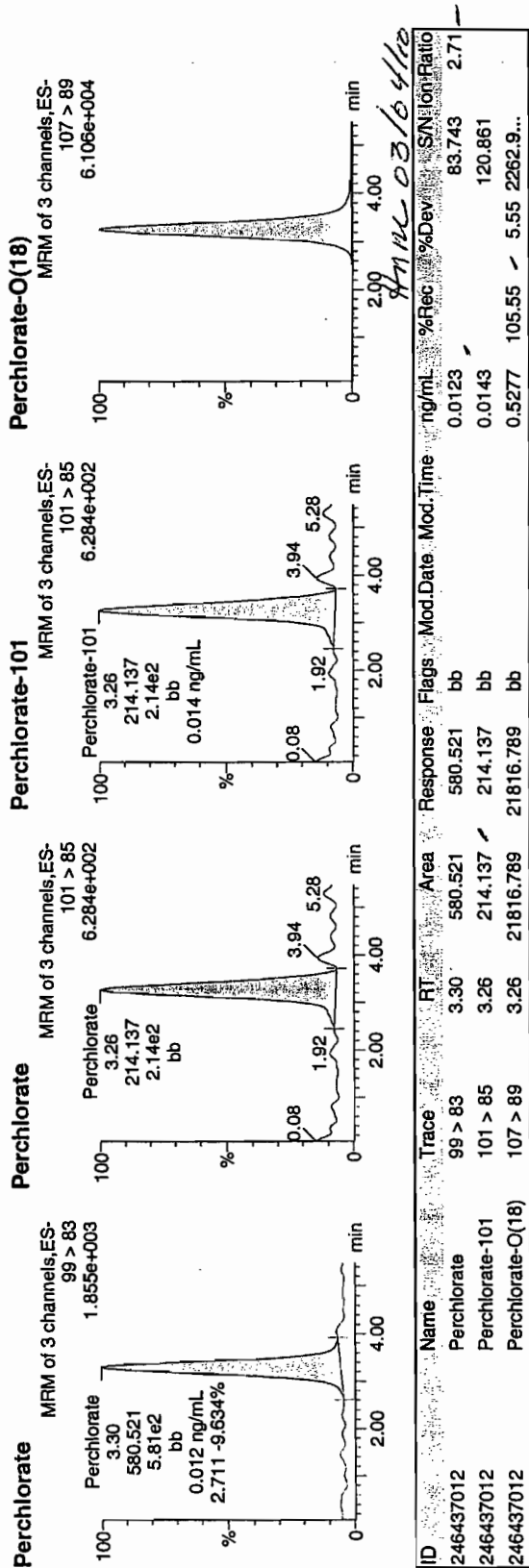
Dataset: C:\MassLynx\Perchlorate.PRO\per030210a.qld

Last Altered: Wednesday, March 03, 2010 11:30:21 AM Eastern Standard Time  
Printed: Wednesday, March 03, 2010 11:43:13 AM Eastern Standard Time

Name: per0302040a  
Date: 03-Mar-2010  
Time: 00:44:20  
ID: 246437012  
Vial: 1:6,E

03-03-10

152220 | 5020 | 11



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

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC  
 Lab Code: GEL  
 Instrument: LCMSMS  
 Method: SW846 6850 Modified  
 Matrix: SOIL  
 Extraction Batch ID: 252812  
 Extraction Type: Solid Prep  
 Client Sample No. RE15-10-8375  
 Date Received: 06-FEB-10  
 GEL Job No (SDG): 10-1621-1  
 GEL Sample ID: 246437013  
 Date Filtered: 19-FEB-10  
 Injection Volume (uL): 20  
 % Solids: 80

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	.623	2.49	1.19	ug/kg	HJ	1	03-MAR-10 00:52	per0302041a
	Perchlorate Isotope Ratio			3.24			1	03-MAR-10 00:52	per0302041a
14797-73-0	Perchlorate-101	.623	2.49	1.16	ug/kg	HJ	1	03-MAR-10 00:52	per0302041a
	Perchlorate-O(18)			6.26	ug/kg		1	03-MAR-10 00:52	per0302041a

<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



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

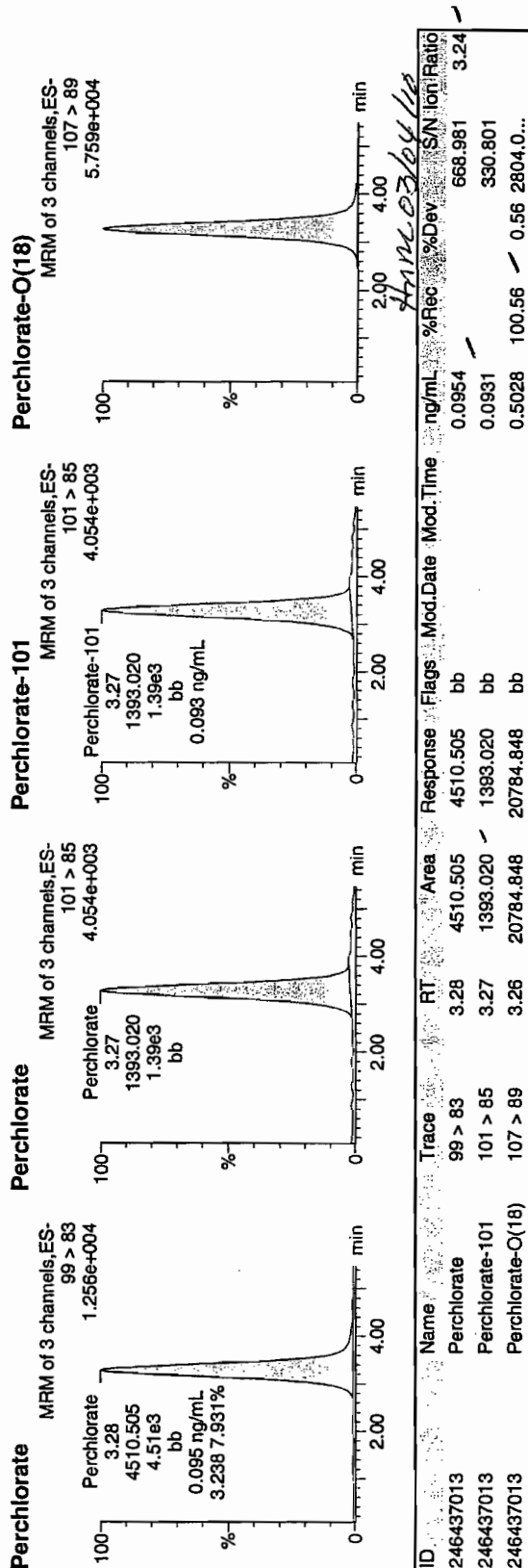
Dataset: C:\MassLynx\Perchlorate.PRO\per030210a.qld

Last Altered: Wednesday, March 03, 2010 11:30:21 AM Eastern Standard Time  
Printed: Wednesday, March 03, 2010 11:43:13 AM Eastern Standard Time

Name: per0302041a  
Date: 03-Mar-2010  
Time: 00:52:52  
ID: 246437013  
Vial: 1:6,F

03-03-10

1952820 | 5050 | 11



Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 952819

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8374

Date Received: 06-FEB-10

GEL Job No (SDG): 10-1621-1

GEL Sample ID: 246437014

Date Filtered: 19-FEB-10

Injection Volume (uL): 20

%Solids: 93.7

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.534	2.13	0.534	ug/kg	HU	1	03-MAR-10 01:01	per0302042a
	Perchlorate Isotope Ratio						1	03-MAR-10 01:01	per0302042a
14797-73-0	Perchlorate-101	.534	2.13	0.534	ug/kg	HU	1	03-MAR-10 01:01	per0302042a
	Perchlorate-O(18)			5.55	ug/kg		1	03-MAR-10 01:01	per0302042a

<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  $\frac{1}{\% \text{Solids}}$

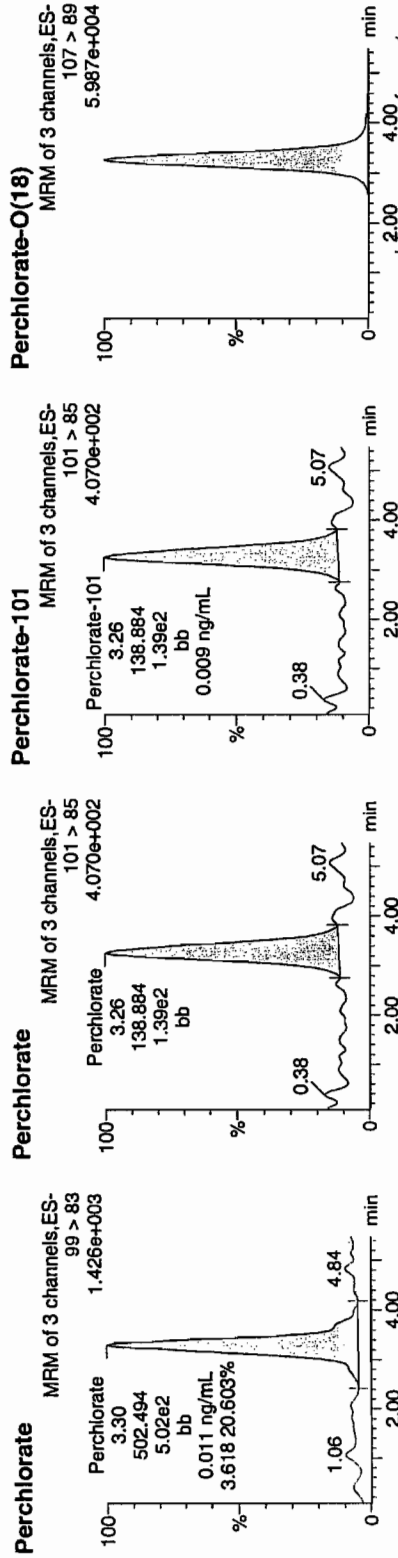
Quantify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030210a.qld

Last Altered: Wednesday, March 03, 2010 11:30:21 AM Eastern Standard Time  
Printed: Wednesday, March 03, 2010 11:43:13 AM Eastern Standard Time

Name: per0302042a  
Date: 03-Mar-2010  
Time: 01:01:25  
ID: 246437014  
Vial: 1:7,A

623 03-03-10  
152220 | 5050 | 11



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
246437014	Perchlorate	99 > 83	3.30	502.494	502.494	bb			0.0106			109.105	3.62
246437014	Perchlorate-101	101 > 85	3.26	138.884	138.884	bb			0.0093			34.916	
246437014	Perchlorate-O(18)	107 > 89	3.26	21478.074	21478.074	bb			0.5195	103.91	3.91	6263.7	

# STANDARDS DATA

**SW846 8321A Modified-Explosives  
Calibration Standard Concentration Levels**

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	CCV
3,4-Dinitrotoluene (Surrogate)	12.5	25	100	200	400	500		300
<b>Primary Analytes</b>								
HMX	25	50	200	400	800	1000	na	600
RDX	25	50	200	400	800	1000	na	600
DNX	25	50	200	400	800	1000	na	600
MXN	25	50	200	400	800	1000	na	600
TNX	25	50	200	400	800	1000	na	600
1,3,5-Trinitrobenzene	25	50	200	400	800	1000	na	600
1,3-Dinitrobenzene	25	50	200	400	800	1000	na	600
Nitrobenzene	25	50	200	400	800	1000	na	600
Tetryl	25	50	200	400	800	1000	na	600
Nitroglycerin	50	100	200	400	800	1000	na	600
2,4,6-Trinitrotoluene	25	50	200	400	800	1000	na	600
2-Amino-4,6-dinitrotoluene	25	50	200	400	800	1000	na	600
4-Amino-2,6-dinitrotoluene	25	50	200	400	800	1000	na	600
2,4-Dinitrotoluene	25	50	200	400	800	1000	na	600
2,6-Dinitrotoluene	25	50	200	400	800	1000	na	600
2-Nitrotoluene	25	50	200	400	800	1000	na	600
4-Nitrotoluene	25	50	200	400	800	1000	an	600
3-Nitrotoluene	25	50	200	400	800	1000	na	600
PETN	25	50	200	400	800	1000	na	600
Picric Acid	200	400	1600	3200	6400	8000	na	4800
3,4-Dinitrotoluene (Surrogate)	25	50	125	250	375	500	1000	250
<b>Secondary Analytes</b>								
2,4-Diamino-6-nitrotoluene	50	100	250	500	750	1000	2000	500
2,6-Diamino-4-nitrotoluene	50	100	250	500	750	1000	2000	500
3,5-Dinitroaniline	50	100	250	500	750	1000	2000	500
TATB	50	100	250	500	750	1000	2000	500
tris(o-Cresyl)phosphate	50	100	250	500	750	1000	2000	500

All values are ug/L without the prep factor

Calibration Levels 8321A-Modified-EXPL.xls (08/09A)

Calibration Levels 8321A-Modified-EXPL.xls

Perchlorate Initial Calibration

GEL Job No.(SDG): 10-1621-1

Lab Name: General Engineering Laboratories

Lab Code: GEL

Instrument ID: LCMSMS Date Analyzed: 02-MAR-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

Coefficient of Determination:

Calibration Curve: 47275.02

Response Type: External Standard

Curve Type: RF

Perchlorate Initial Calibration

GEL Job No.(SDG): 10-1621-1

Lab Name: General Engineering Laboratories

Lab Code: GEL

Instrument ID: LCMSMS Date Analyzed: 02-MAR-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: 14962.94

Response Type: External Standard

Curve Type: RF

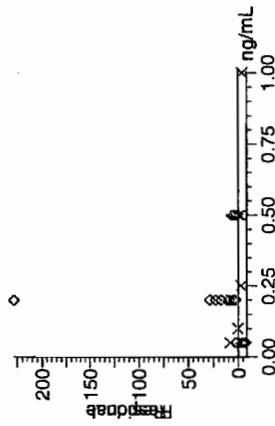
uantify Calibration Report MassLynx 4.0 SP4  
he GEL Group, LLC Analyst: Charlers W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per030210a.qld

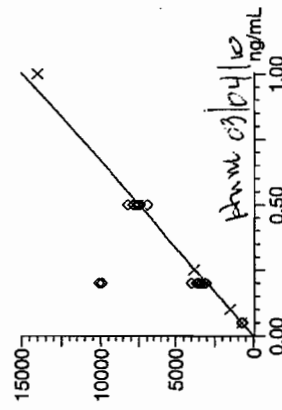
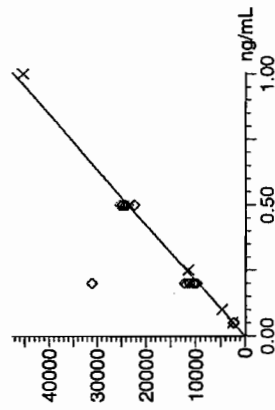
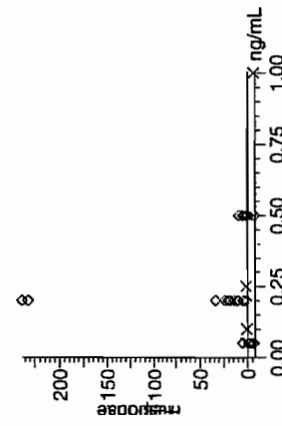
3st Altered: Wednesday, March 03, 2010 11:30:21 AM Eastern Standard Time  
rinted: Wednesday, March 03, 2010 11:43:13 AM Eastern Standard Time

ethod: C:\MassLynx\Perchlorate.PRO\MethDB\per030310a.mdb 03 Mar 2010 08:37:44  
alibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per030210a.cdb 03 Mar 2010 11:30:20

ompound name: Perchlorate  
esponse Factor: 47275  
RF SD: 2481.24, % Relative SD: 5.24853  
esponse type: External Std, Area  
urve type: RF ✓



ompound name: Perchlorate-101  
esponse Factor: 14962.9  
RF SD: 535.272, % Relative SD: 3.57732 ✓  
esponse type: External Std, Area  
urve type: RF ✓



03-03-10



Quantify Calibration Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030210a.qld

Last Altered: Wednesday, March 03, 2010 11:30:21 AM Eastern Standard Time  
 Printed: Wednesday, March 03, 2010 11:43:13 AM Eastern Standard Time

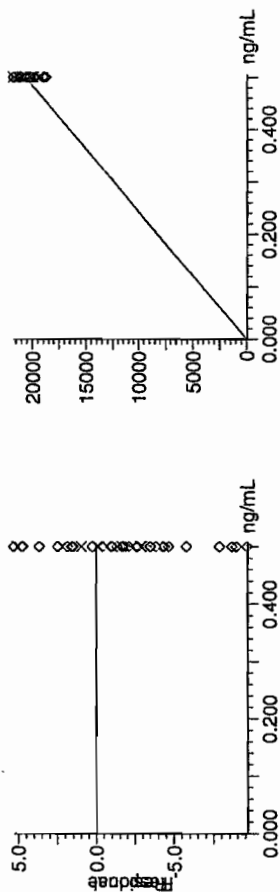
Compound name: Perchlorate-O(18)

Response Factor: 41339.9

RF SD: 1355.58, % Relative SD: 3.2791

Response type: External Std, Area

Curve type: RF



Perchlorate Initial Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1621-1

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.53	105.07	02-MAR-10 20:18	per0302009a
Perchlorate Isotope Ratio		3.28		02-MAR-10 20:18	per0302009a
Perchlorate-101	.5	.51	101.23	02-MAR-10 20:18	per0302009a

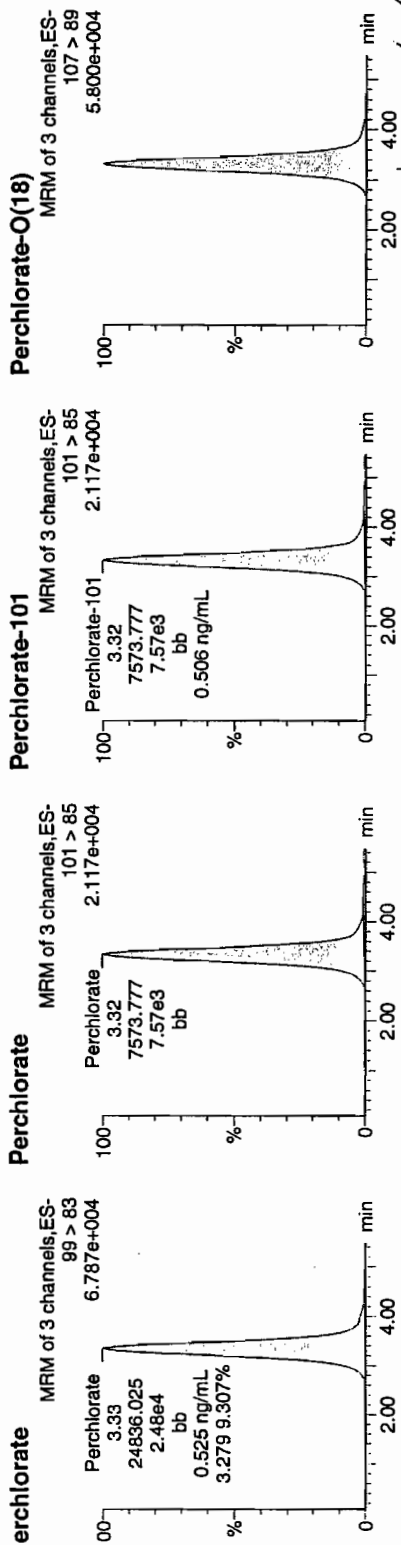
Quantify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charfers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030210a.qld

Acquired: Wednesday, March 03, 2010 11:30:21 AM Eastern Standard Time  
Printed: Wednesday, March 03, 2010 11:43:13 AM Eastern Standard Time

Sample Name: per0302009a  
Date: 02-Mar-2010  
Time: 20:18:36  
File: WCL100227-06ICV  
Label: 1:2,A

Per  
03-03-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
'CL100227-06ICV	99 > 83	3.33	24836.025	24836.025	bb			0.5254	105.07	5.07	6944.7...	3.28
'CL100227-06ICV	101 > 85	3.32	7573.777	7573.777	bb			0.5062	101.23	1.23	493.887	
'CL100227-06ICV	107 > 89	3.32	20722.873	20722.873	bb			0.5013	100.26	0.26	1599.5...	

Perchlorate Continuing Calibration Verification

GEL Job No.(SDG): 10-1621-1

Lab Name: General Engineering Laboratories

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.51	101.48	02-MAR-10 22:01	per0302021a
Perchlorate Isotope Ratio		3.08		02-MAR-10 22:01	per0302021a
Perchlorate-101	.5	.52	104.12	02-MAR-10 22:01	per0302021a
Perchlorate	.5	.51	102.33	02-MAR-10 23:35	per0302032a
Perchlorate Isotope Ratio		3.17		02-MAR-10 23:35	per0302032a
Perchlorate-101	.5	.51	102	02-MAR-10 23:35	per0302032a
Perchlorate	.5	.53	106.95	03-MAR-10 01:09	per0302043a
Perchlorate Isotope Ratio		3.08		03-MAR-10 01:09	per0302043a
Perchlorate-101	.5	.55	109.69	03-MAR-10 01:09	per0302043a

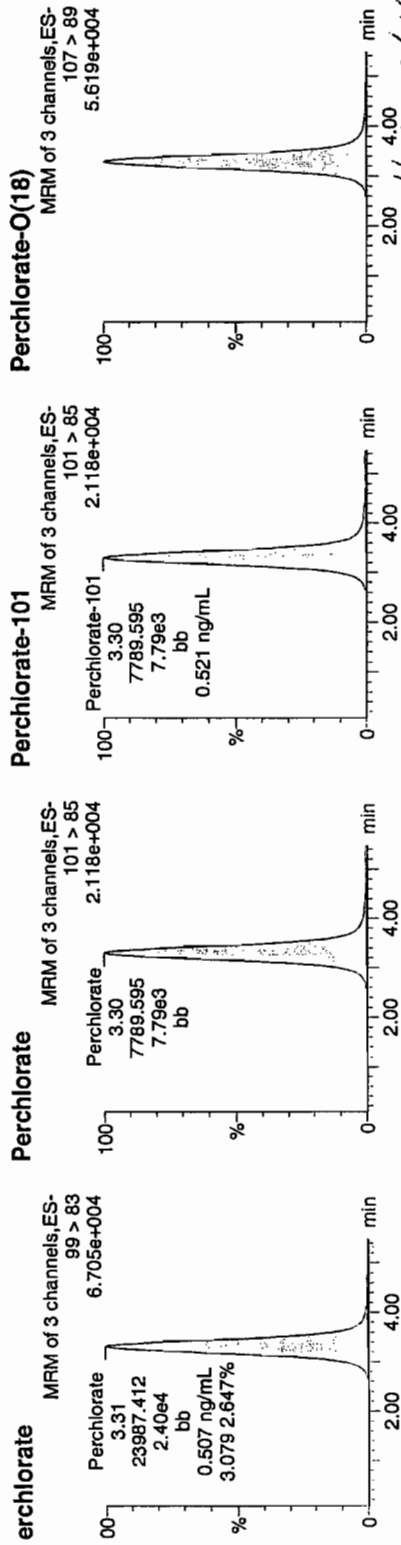
Quantify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030210a.qld

Last Altered: Wednesday, March 03, 2010 11:30:21 AM Eastern Standard Time  
Printed: Wednesday, March 03, 2010 11:43:13 AM Eastern Standard Time

Sample Name: per0302021a  
Date: 02-Mar-2010  
Time: 22:01:21  
File: WCL100227-06CCV  
Label: 1:2,A

*Per  
0303-10*



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
'CL100227-06CCV	Perchlorate	99 > 83	3.31	23987.412	23987.412	bb		0.5074	101.48	1.48	3092.6...	3.08
'CL100227-06CCV	Perchlorate-101	101 > 85	3.30	7789.595	7789.595	bb		0.5206	104.12	4.12	2628.2...	
'CL100227-06CCV	Perchlorate-O(18)	107 > 89	3.30	20111.354	20111.354	bb		0.4865	97.30	-2.70	2211.9...	

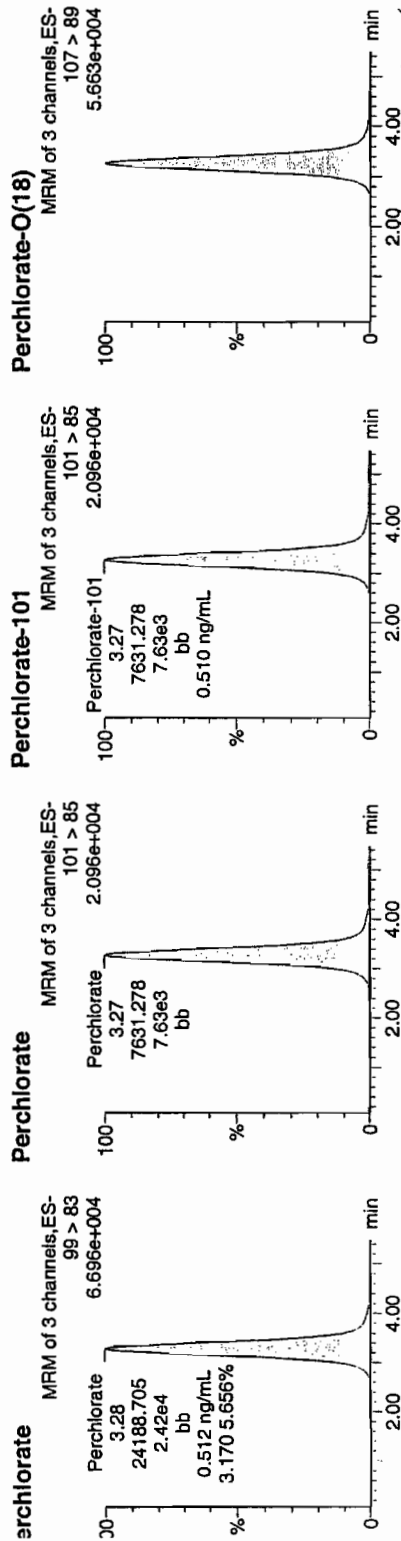
uantify Sample Report MassLynx 4.0 SP4  
ne GEL Group, LLC Analyst: Charlers W. Wilson

atset: C:\MassLynx\Perchlorate.PRO\per030210a.qld

ast Altered: Wednesday, March 03, 2010 11:30:21 AM Eastern Standard Time  
rinted: Wednesday, March 03, 2010 11:43:13 AM Eastern Standard Time

ame: per0302032a  
ate: 02-Mar-2010  
ime: 23:35:42  
i: WCL100227-06CCV  
ial: 1:2,A

*Perchlorate-101*  
*03-03-10*



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
CL100227-06CCV	Perchlorate	99 > 83	3.28	24188.705	24188.705	bb		0.5117	102.33	2.33	2081.0...	3.17
CL100227-06CCV	Perchlorate-101	101 > 85	3.27	7631.278	7631.278	bb		0.5100	102.00	2.00	1556.0...	
CL100227-06CCV	Perchlorate-O(18)	107 > 89	3.26	20318.123	20318.123	bb		0.4915	98.30	-1.70	3259.1...	

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

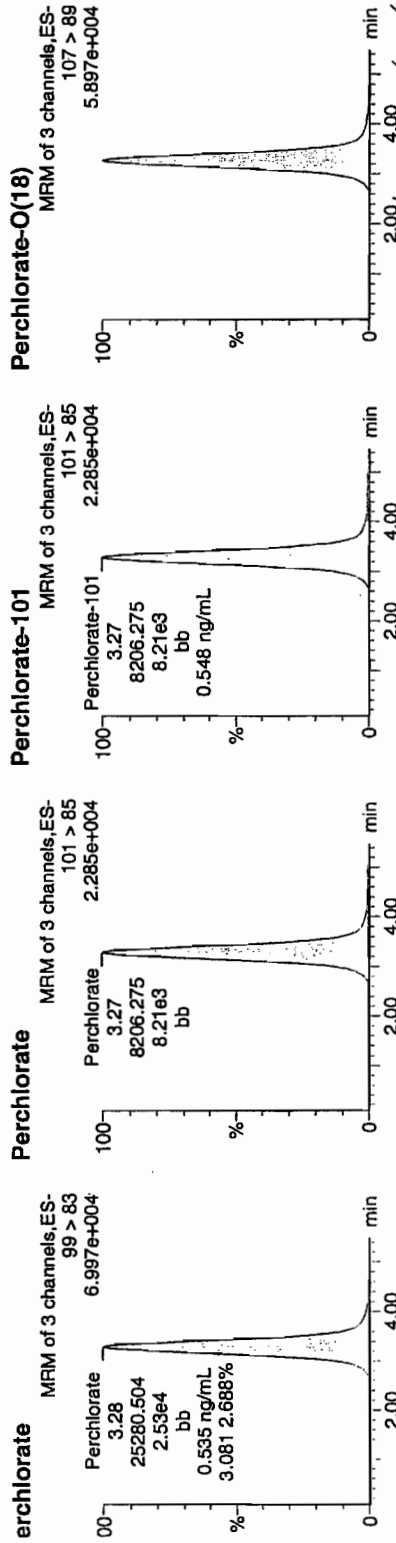
Identify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030210a.qld

Acquired: Wednesday, March 03, 2010 11:30:21 AM Eastern Standard Time  
Printed: Wednesday, March 03, 2010 11:43:13 AM Eastern Standard Time

Sample Name: per0302043a  
Date: 03-Mar-2010  
Time: 01:09:59  
File: WCL100227-06CCV  
Label: 1:2,A

Perchlorate  
03-03-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
CL100227-06CCV	Perchlorate	99 > 83	3.28	25280.504	25280.504	bb		0.5348	106.95	6.95	6291.7...	3.08
CL100227-06CCV	Perchlorate-101	101 > 85	3.27	8206.275	8206.275	bb		0.5484	109.69	9.69	619.329	
CL100227-06CCV	Perchlorate-O(18)	107 > 89	3.26	21172.732	21172.732	bb		0.5122	102.43	2.43	2143.8...	

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

Perchlorate MDL Verification

GEL Job No.(SDG): 10-1621-1

Lab Name: General Engineering Laboratories

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.05	.05	101.22	02-MAR-10 20:35	per0302011a
Perchlorate Isotope Ratio		3.24		02-MAR-10 20:35	per0302011a
Perchlorate-101	.05	.05	98.76	02-MAR-10 20:35	per0302011a
Perchlorate	.05	.05	92.01	02-MAR-10 22:18	per0302023a
Perchlorate Isotope Ratio		2.9		02-MAR-10 22:18	per0302023a
Perchlorate-101	.05	.05	100.13	02-MAR-10 22:18	per0302023a
Perchlorate	.05	.05	103.15	02-MAR-10 23:52	per0302034a
Perchlorate Isotope Ratio		3.34		02-MAR-10 23:52	per0302034a
Perchlorate-101	.05	.05	97.56	02-MAR-10 23:52	per0302034a
Perchlorate	.05	.05	96.56	03-MAR-10 01:27	per0302045a
Perchlorate Isotope Ratio		2.88		03-MAR-10 01:27	per0302045a



Form 3

Perchlorate MDL Verification

GEL Job No.(SDG): 10-1621-1

Lab Name: General Engineering Laboratories

Lab Code: GEL

Reporting Units: ug/kg

Perchlorate-101	.05	.05	105.83	03-MAR-10 01:27	per0302045a
-----------------	-----	-----	--------	-----------------	-------------

Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charlers W. Wilson

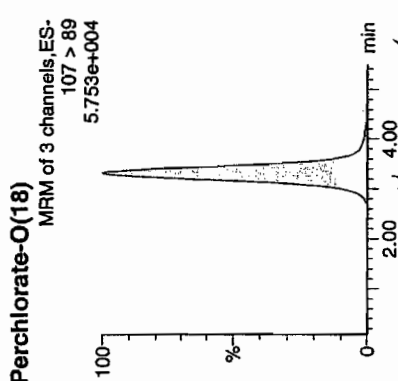
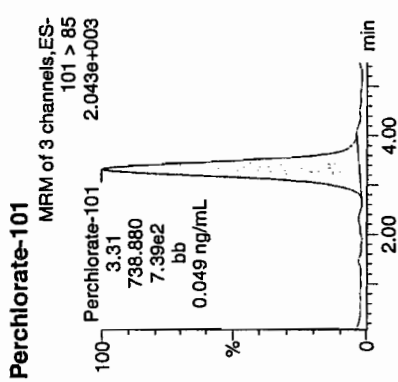
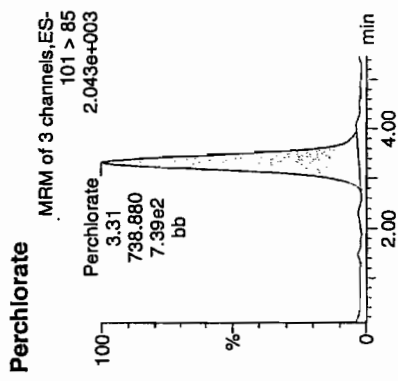
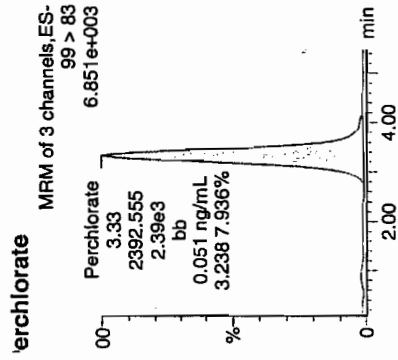
Page 11 of 113

Dataset: C:\MassLynx\Perchlorate.PRO\per030210a.qld

Last Altered: Wednesday, March 03, 2010 11:30:21 AM Eastern Standard Time  
Printed: Wednesday, March 03, 2010 11:43:13 AM Eastern Standard Time

Sample Name: per0302011a  
Date: 02-Mar-2010  
Time: 20:35:41  
File: WCL100227-07CRI  
File: 1;2,B

03-03-10



Handwritten: 03/04/10

Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
CL100227-07CRI	Perchlorate	99 > 83	3.33	2392.555	bb			0.0506	101.22	1.22	360.943	3.24
CL100227-07CRI	Perchlorate-101	101 > 85	3.31	738.880	bb			0.0494	98.76	-1.24	58.109	
CL100227-07CRI	Perchlorate-O(18)	107 > 89	3.31	20475.990	bb			0.4953	99.06	-0.94	6968.6...	

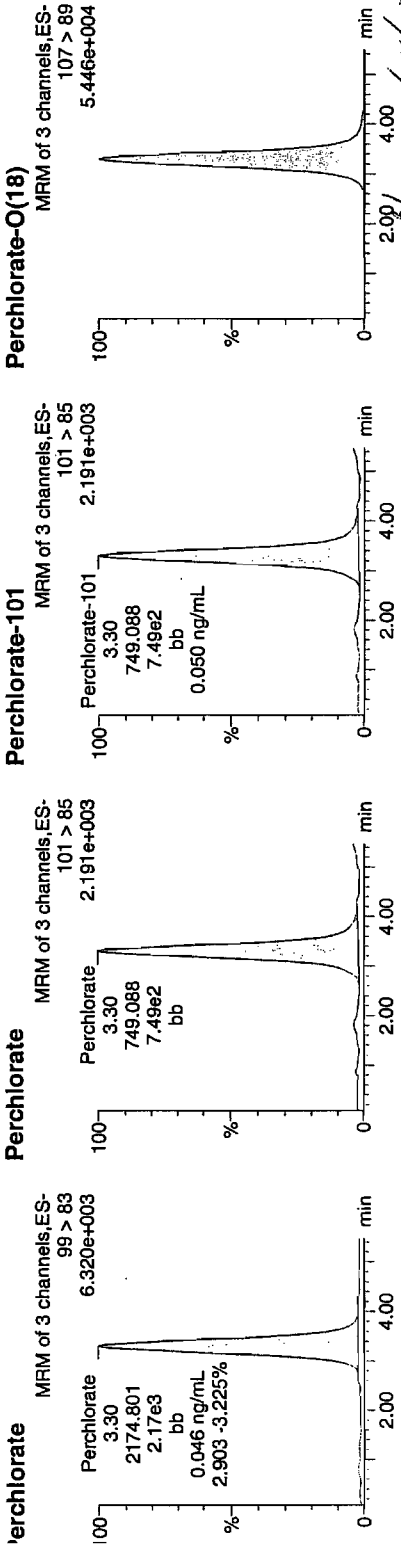
Quantify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030210a.qld

Last Altered: Wednesday, March 03, 2010 11:30:21 AM Eastern Standard Time  
Printed: Wednesday, March 03, 2010 11:43:13 AM Eastern Standard Time

Sample Name: per0302023a  
Date: 02-Mar-2010  
Time: 22:18:34  
D: WCL100227-07CRI  
File: 1:2,B

Pure  
and  
0.033-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
/CL100227-07CRI	Perchlorate	3.30	2174.801	2174.801	bb			0.0460	92.01	-7.99	131.967	2.90
/CL100227-07CRI	Perchlorate-101	3.30	749.088	749.088	bb			0.0501	100.13	0.13	422.280	
/CL100227-07CRI	Perchlorate-O(18)	3.28	19759.566	19759.566	bb			0.4780	95.60	-4.40	1176.9...	

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

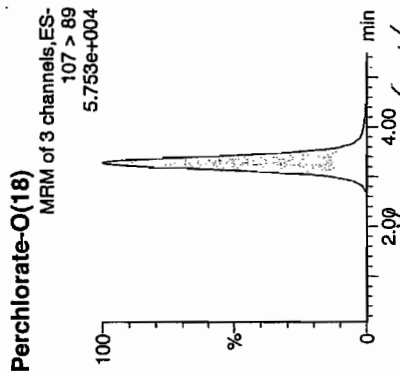
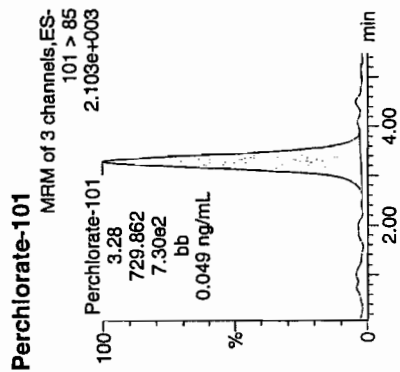
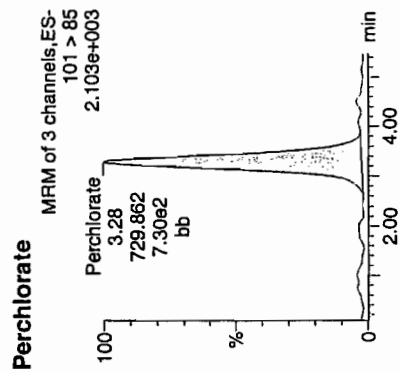
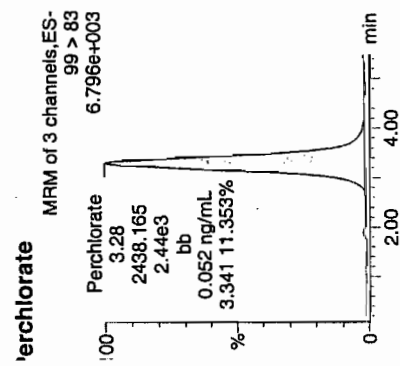
Quantify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030210a.qld

Last Altered: Wednesday, March 03, 2010 11:30:21 AM Eastern Standard Time  
Printed: Wednesday, March 03, 2010 11:43:13 AM Eastern Standard Time

Sample Name: per0302034a  
Date: 02-Mar-2010  
Time: 23:52:47  
D: WCL100227-07CRI  
File: 1:2,B

*Per*  
*WCL*  
*03-03-10*



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
/CL100227-07CRI	Perchlorate	99 > 83	3.28	2438.165	bb			0.0516	103.15	3.15	340.964	3.34
/CL100227-07CRI	Perchlorate-101	101 > 85	3.28	729.862	bb			0.0488	97.56	-2.44	191.841	
/CL100227-07CRI	Perchlorate-O(18)	107 > 89	3.27	20457.936	bb			0.4949	98.97	-1.03	5383.4...	

*Amc 03/04/10*

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

Dataset: C:\MassLynx\Perchlorate.PRO\per030210a.qld

Last Altered: Wednesday, March 03, 2010 11:30:21 AM Eastern Standard Time  
Printed: Wednesday, March 03, 2010 11:43:13 AM Eastern Standard Time

Name: per0302045a

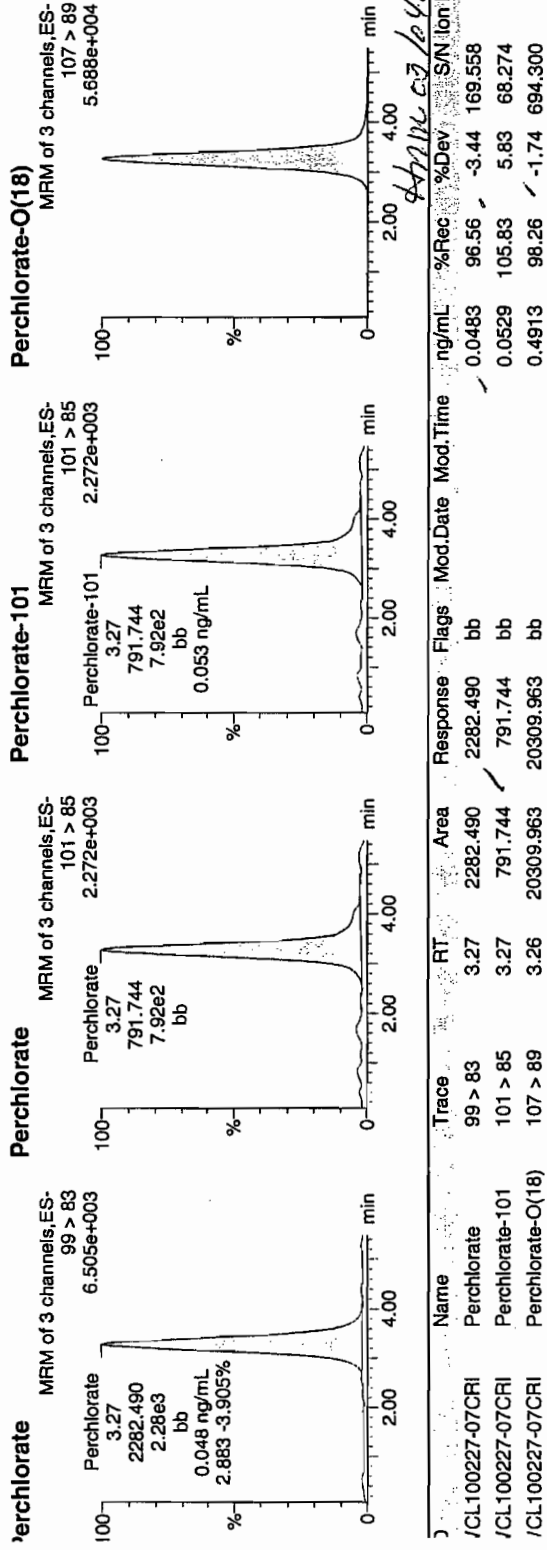
Date: 03-Mar-2010

Time: 01:27:19

D: WCL100227-07CRI

Vial: 1:2,B

*Pass*  
*622*  
*03-03-10*



# QUALITY CONTROL DATA

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC  
 Lab Code: GEL  
 Instrument: LCMSMS  
 Method: EPA 6850 Modified  
 Matrix: SOIL  
 Extraction Batch ID: 952819  
 Extraction Type: Solid Prep  
 Sample Volume/Weight: 2.00 g  
 Concentrated Extract Volume: 20.0

Client Sample No. MB  
 Date Received: 19-FEB-10  
 GEL Job No (SDG): 10-1621-1  
 GEL Sample ID: 1202042225  
 Date Filtered: 19-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	02-MAR-10 20:44	per0302012a
	Perchlorate Isotope Ratio						1	02-MAR-10 20:44	per0302012a
14797-73-0	Perchlorate-101	.5	2	0.500	ug/kg	U	1	02-MAR-10 20:44	per0302012a
	Perchlorate-O(18)			4.58	ug/kg		1	02-MAR-10 20:44	per0302012a

<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

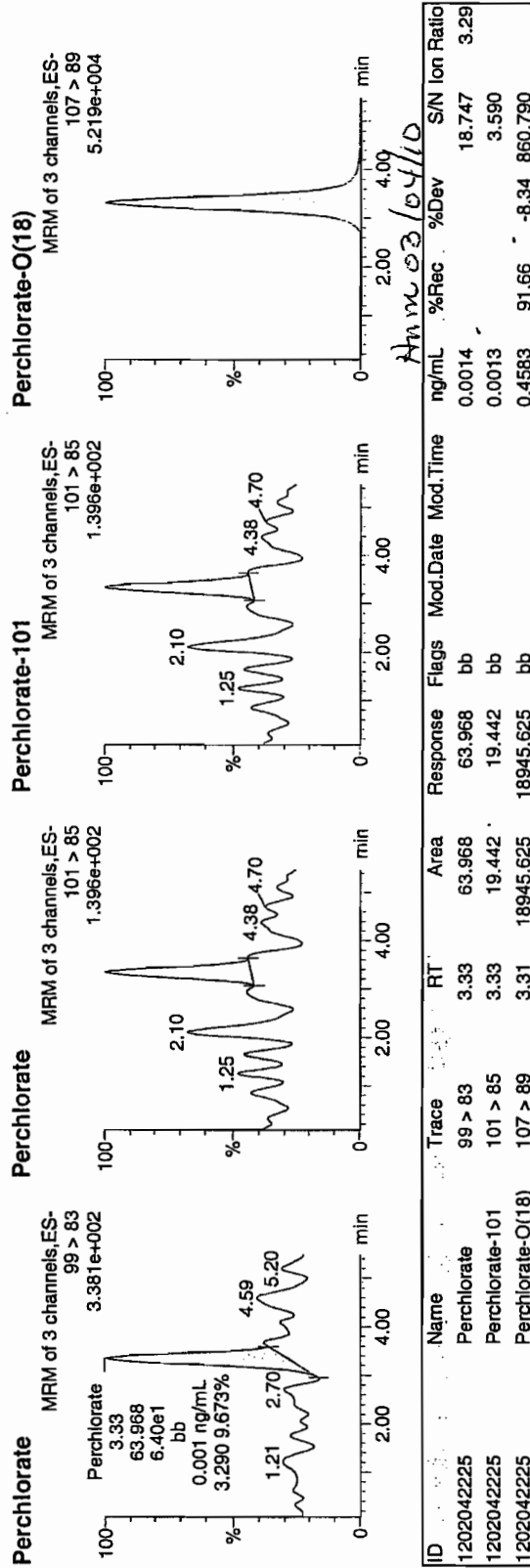
Quantify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charliers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030210a.qld

Last Altered: Wednesday, March 03, 2010 11:30:21 AM Eastern Standard Time  
Printed: Wednesday, March 03, 2010 11:43:13 AM Eastern Standard Time

Name: per0302012a  
Date: 02-Mar-2010  
Time: 20:44:13  
ID: 1202042225  
Vial: 1:3,A

1202042225 | 952820 | 3020 | MB | 11





Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC  
 Lab Code: GEL  
 Instrument: LCMSMS  
 Method: EPA 6850 Modified  
 Matrix: SOIL  
 Extraction Batch ID: 952819  
 Extraction Type: Solid Prep  
 Sample Volume/Weight: 2.00 g  
 Concentrated Extract Volume: 20.0  
 Client Sample No. LCS  
 Date Received: 19-FEB-10  
 GEL Job No (SDG): 10-1621-1  
 GEL Sample ID: 1202042226  
 Date Filtered: 19-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	2.05	ug/kg		1	02-MAR-10 20:52	per0302013a
	Perchlorate Isotope Ratio			3.08			1	02-MAR-10 20:52	per0302013a
14797-73-0	Perchlorate-101	.5	2	2.10	ug/kg		1	02-MAR-10 20:52	per0302013a
	Perchlorate-O(18)			4.83	ug/kg		1	02-MAR-10 20:52	per0302013a

<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

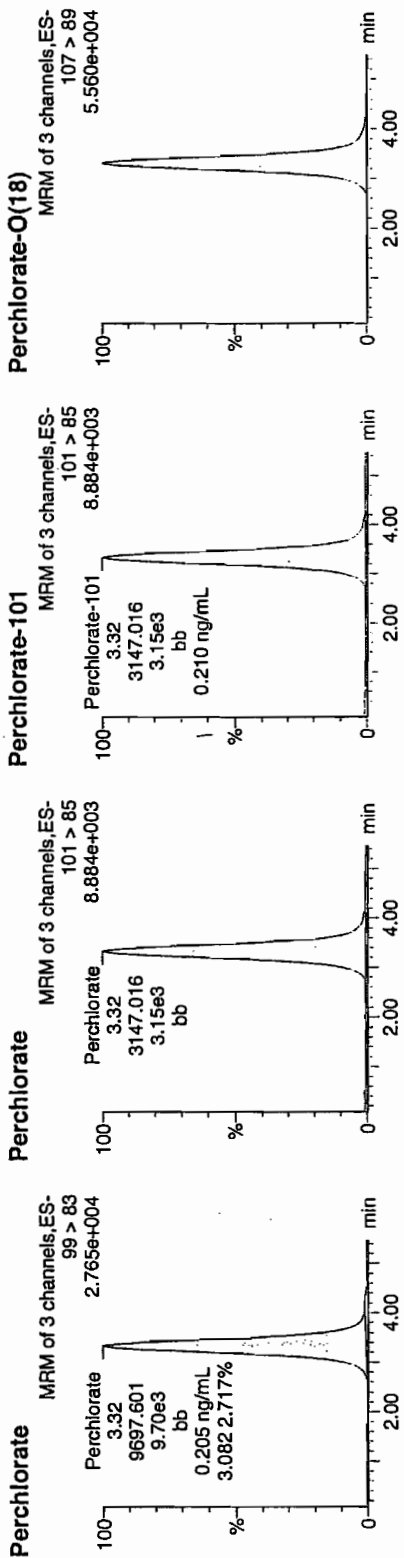
Quantify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charfers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030210a.qld  
Last Altered: Wednesday, March 03, 2010 11:30:21 AM Eastern Standard Time  
Printed: Wednesday, March 03, 2010 11:43:13 AM Eastern Standard Time

Name: per0302013a  
Date: 02-Mar-2010  
Time: 20:52:45  
ID: 1202042226  
Vial: 1:3,B

03-03-10

1202042226 | 5020 | LS | 11



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N Ion Ratio
1202042226	Perchlorate	99 > 83	3.32	9697.601	9697.601	bb			0.2051	102.57	2.57	1587.6...
1202042226	Perchlorate-101	101 > 85	3.32	3147.016	3147.016	bb			0.2103	105.16	5.16	1149.9...
1202042226	Perchlorate-O(18)	107 > 89	3.31	19952.744	19952.744	bb			0.4827	96.53	-3.47	2177.6...

$$\frac{9697.601}{47275} = 0.2051$$

Handwritten: 03/04/10

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC  
 Lab Code: GEL  
 Instrument: LCMSMS  
 Method: SW846 6850 Modified  
 Matrix: SOIL  
 Extraction Batch ID: 252819  
 Extraction Type: Solid Prep  
 Client Sample No. RE15-10-8354MS  
 Date Received: 06-FEB-10  
 GEL Job No (SDG): 10-1621-1  
 GEL Sample ID: 1202042227  
 Date Filtered: 19-FEB-10  
 Injection Volume (uL): 20  
 Sample Volume/Weight: 2.00 g  
 %Solids: 78

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	.641	2.56	2.87	ug/kg		1	02-MAR-10 22:35	per0302025a
	Perchlorate Isotope Ratio			3.09			1	02-MAR-10 22:35	per0302025a
14797-73-0	Perchlorate-101	.641	2.56	2.94	ug/kg		1	02-MAR-10 22:35	per0302025a
	Perchlorate-O(18)			6.51	ug/kg		1	02-MAR-10 22:35	per0302025a

<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

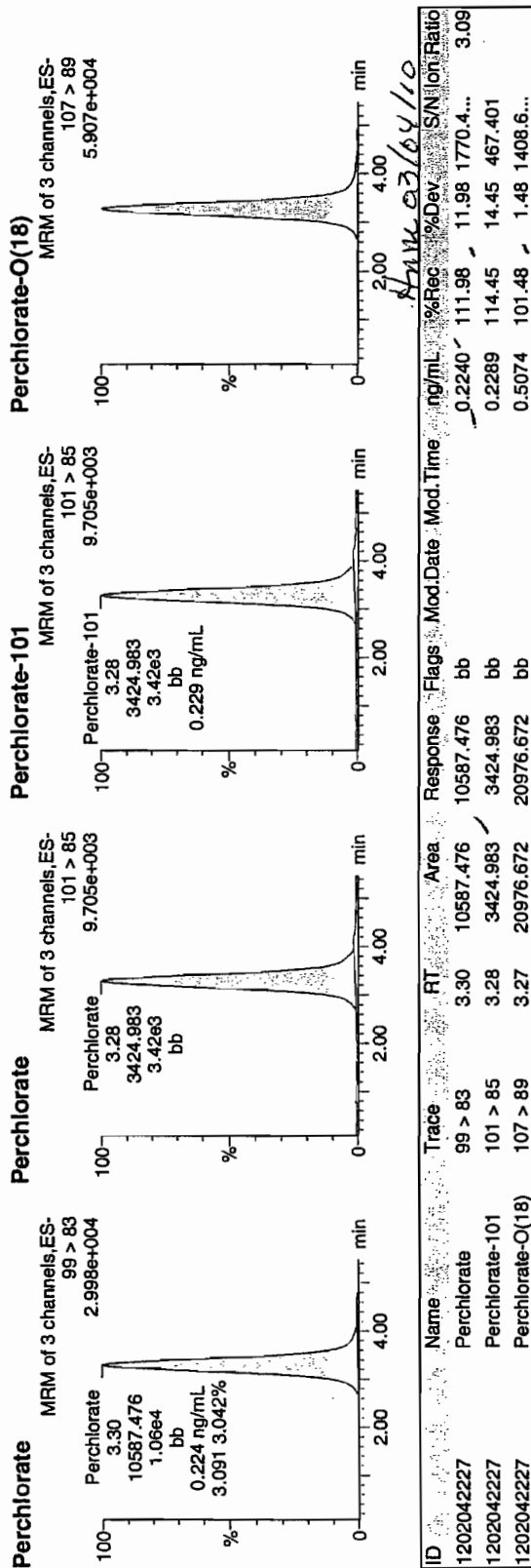
Quantify Sample Report MassLynx 4.0 SP4  
The GEL Group, LLC Analyst: Charfers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030210a.qld

Last Altered: Wednesday, March 03, 2010 11:30:21 AM Eastern Standard Time  
Printed: Wednesday, March 03, 2010 11:43:13 AM Eastern Standard Time

Name: per0302025a  
Date: 02-Mar-2010  
Time: 22:35:46  
ID: 1202042227  
Vial: 1:4,E

LAWL 952820 | 5020 | MS | 11 |  
03-03-10



10587.476 | 10 | 100 = 2.87  
47275 | 78

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 952819

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8354MSD

Date Received: 06-FEB-10

GEL Job No (SDG): 10-1621-1

GEL Sample ID: 1202042228

Date Filtered: 19-FEB-10

Injection Volume (uL): 20

% Solids: 78

CAS No.	Analyte <sup>^</sup>	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.641	2.56	3.02	ug/kg		1	02-MAR-10 22:44	per0302026a
	Perchlorate Isotope Ratio			3.09			1	02-MAR-10 22:44	per0302026a
14797-73-0	Perchlorate-101	.641	2.56	3.09	ug/kg		1	02-MAR-10 22:44	per0302026a
	Perchlorate-O(18)			6.51	ug/kg		1	02-MAR-10 22:44	per0302026a

<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

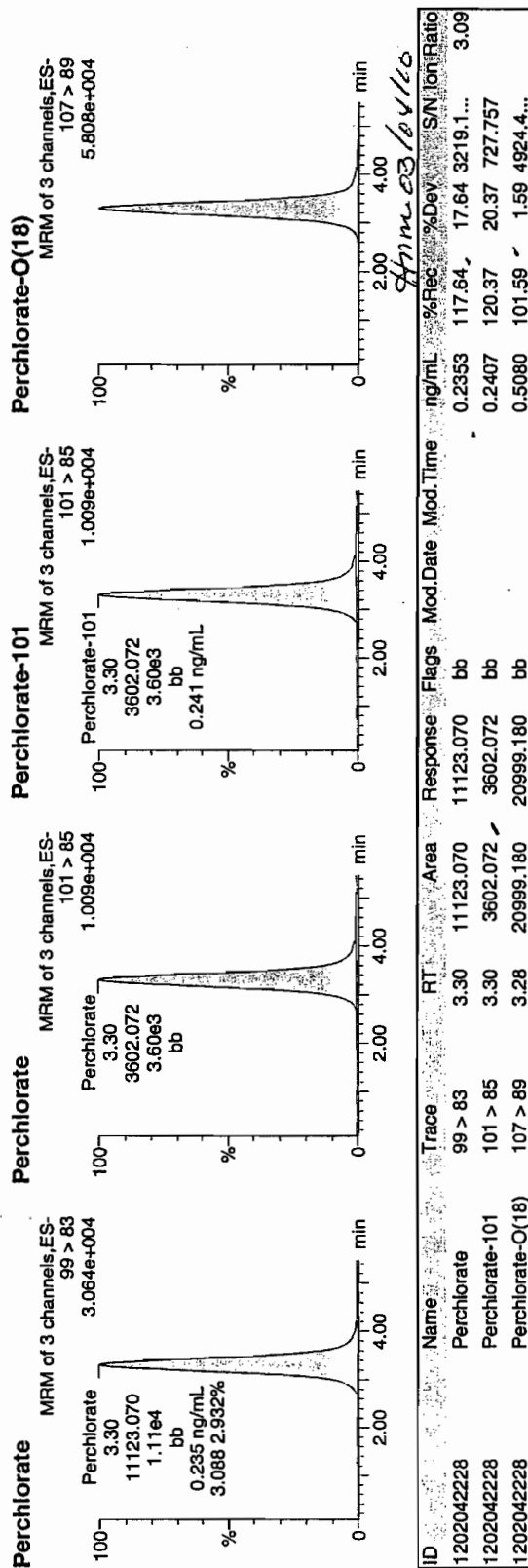
Dataset: C:\MassLynx\Perchlorate.PRO\per030210a.qld

Last Altered: Wednesday, March 03, 2010 11:30:21 AM Eastern Standard Time  
Printed: Wednesday, March 03, 2010 11:43:13 AM Eastern Standard Time

Name: per0302026a  
Date: 02-Mar-2010  
Time: 22:44:19  
ID: 1202042228  
Vial: 1:4,F

03-03-10

LANC | 952820 | 5070 | MSD | 11



# 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: 952819 Verified by: Lab SOP: GL-OA-E-067 REV# 6  
 Analyst: Jareth Shirley Instrument: MicroMass Quattro Ultima  
 Method: SW846 6850 Modified

Sample ID	Run Date	Aliquot (g)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1202042225 MB	19-FEB-2010 16:05:00	2	20	10
1202042226 LCS	19-FEB-2010 16:05:00	2	20	10
246325001	19-FEB-2010 16:05:00	2	20	10
246325002	19-FEB-2010 16:05:00	2	20	10
246325003	19-FEB-2010 16:05:00	2	20	10
246325004	19-FEB-2010 16:05:00	2	20	10
246325005	19-FEB-2010 16:05:00	2	20	10
246325006	19-FEB-2010 16:05:00	2	20	10
246437001	19-FEB-2010 16:05:00	2	20	10
1202042227 MS (246437001)	19-FEB-2010 16:05:00	2	20	10
1202042228 MSD (246437001)	19-FEB-2010 16:05:00	2	20	10
246437002	19-FEB-2010 16:05:00	2	20	10
246437003	19-FEB-2010 16:05:00	2	20	10
246437004	19-FEB-2010 16:05:00	2	20	10
246437005	19-FEB-2010 16:05:00	2	20	10
246437006	19-FEB-2010 16:05:00	2	20	10
246437007	19-FEB-2010 16:05:00	2	20	10
246437008	19-FEB-2010 16:05:00	2	20	10
246437009	19-FEB-2010 16:05:00	2	20	10
246437010	19-FEB-2010 16:05:00	2	20	10
246437011	19-FEB-2010 16:05:00	2	20	10
246437012	19-FEB-2010 16:05:00	2	20	10
246437013	19-FEB-2010 16:05:00	2	20	10
246437014	19-FEB-2010 16:05:00	2	20	10
1202042229 ICS	19-FEB-2010 16:05:00	2	20	10

Comments:

Type	Sample Id	Description	Serial Number	Spike Amt	Units
ICS	1202042229	10 ug/L ICV/CVV Second Source	UCL100210-02.1	.4	mL
ICS	1202042226	10 ug/L ICV/CVV Second Source	UCL100210-02.1	.4	mL
MS	1202042227	10 ug/L ICV/CVV Second Source	UCL100210-02.1	.4	mL
MSD	1202042228	10 ug/L ICV/CVV Second Source	UCL100210-02.1	.4	mL

Desulting cartridges used: 090810-1-Ba & 100112-1-H



GEL ORGANIC RUN LOG

INSTRUMENT ID: LCM SMS#2

Date: 03/02/10  
 Extr. Injection Volume: 20uL  
 Sequence Number: per030210a  
 Initial Calibration Date: 03/02/10

Method: EPA 6850-Modified  
 Int. Std.: UCL100126-01  
 Mobile Phase Lot#: 1269535, 1271949  
 Standard-Samp Reagent Lot#: 1271949

Reviewed BY: *Handwritten signature*  
 Date: *23/04/10*  
 SOP: GL-OA-E-067 Rev.6  
 Alt Check Std. ID: WCL100227-06

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC_Flag
per0302001a	IPB001	CWW	3/2/2010 19:10			1		USE	B
per0302002a	IPB001	CWW	3/2/2010 19:18			1		USE	B
per0302003a	WCLICAL-01	CWW	3/2/2010 19:27			1		USE	I
per0302004a	WCLICAL-02	CWW	3/2/2010 19:35			1		USE	I
per0302005a	WCLICAL-03	CWW	3/2/2010 19:44			1		USE	I
per0302006a	WCLICAL-04	CWW	3/2/2010 19:53			1		USE	I
per0302007a	WCLICAL-05	CWW	3/2/2010 20:01			1		USE	I
per0302008a	IPB002	CWW	3/2/2010 20:10			1		USE	B
per0302009a	WCLICV	CWW	3/2/2010 20:18			1		USE	C
per0302010a	IPB003	CWW	3/2/2010 20:27			1		USE	B
per0302011a	WCLCRI	CWW	3/2/2010 20:35			1		USE	C
per0302012a	1202042225	CWW	3/2/2010 20:44	952820	VARIOUS	1	LANL	USE	S
per0302013a	1202042226	CWW	3/2/2010 20:52	952820	VARIOUS	1	LANL	USE	S
per0302014a	1202042229	CWW	3/2/2010 21:01	952820	VARIOUS	1	LANL	USE	S
per0302015a	246325001	CWW	3/2/2010 21:10	952820	10-1603	1	LANL	USE	S
per0302016a	246325002	CWW	3/2/2010 21:18	952820	10-1603	1	LANL	USE	S
per0302017a	246325003	CWW	3/2/2010 21:27	952820	10-1603	1	LANL	USE	S
per0302018a	246325004	CWW	3/2/2010 21:35	952820	10-1603	1	LANL	USE	S
per0302019a	246325005	CWW	3/2/2010 21:44	952820	10-1603	1	LANL	USE	S
per0302020a	246325006	CWW	3/2/2010 21:52	952820	10-1603	1	LANL	USE	S
per0302021a	WCLCCV	CWW	3/2/2010 22:01			1		USE	C
per0302022a	IPB004	CWW	3/2/2010 22:09			1		USE	B
per0302023a	WCLCRI	CWW	3/2/2010 22:18			1		USE	C
per0302024a	246437001	CWW	3/2/2010 22:27	952820	10-1621-1	1	LANL	USE	S
per0302025a	1202042227	CWW	3/2/2010 22:35	952820	10-1621-1	1	LANL	USE	S
per0302026a	1202042228	CWW	3/2/2010 22:44	952820	10-1621-1	1	LANL	USE	S
per0302027a	246437002	CWW	3/2/2010 22:52	952820	10-1621-1	1	LANL	USE	S
per0302028a	246437003	CWW	3/2/2010 23:01	952820	10-1621-1	1	LANL	USE	S
per0302029a	246437004	CWW	3/2/2010 23:10	952820	10-1621-1	1	LANL	USE	S

per0302030a	246437005	CWW	3/2/2010 23:18	952820	10-1621-1	1	LANL	USE	S
per0302031a	246437006	CWW	3/2/2010 23:27	952820	10-1621-1	1	LANL	USE	S
per0302032a	WCLCCV	CWW	3/2/2010 23:35			1		USE	C
per0302033a	IPB005	CWW	3/2/2010 23:44			1		USE	B
per0302034a	WCLCRI	CWW	3/2/2010 23:52			1		USE	C
per0302035a	246437007	CWW	3/3/2010 0:01	952820	10-1621-1	1	LANL	USE	S
per0302036a	246437008	CWW	3/3/2010 0:09	952820	10-1621-1	1	LANL	USE	S
per0302037a	246437009	CWW	3/3/2010 0:18	952820	10-1621-1	1	LANL	USE	S
per0302038a	246437010	CWW	3/3/2010 0:27	952820	10-1621-1	1	LANL	USE	S
per0302039a	246437011	CWW	3/3/2010 0:35	952820	10-1621-1	1	LANL	USE	S
per0302040a	246437012	CWW	3/3/2010 0:44	952820	10-1621-1	1	LANL	USE	S
per0302041a	246437013	CWW	3/3/2010 0:52	952820	10-1621-1	1	LANL	USE	S
per0302042a	246437014	CWW	3/3/2010 1:01	952820	10-1621-1	1	LANL	USE	S
per0302043a	WCLCCV	CWW	3/3/2010 1:09			1		USE	C
per0302044a	IPB006	CWW	3/3/2010 1:18			1		USE	B
per0302045a	WCLCRI	CWW	3/3/2010 1:27			1		USE	C
per0302046a	1202058256	CWW	3/3/2010 1:35	959704	VARIOUS	1	LANL	USE	S
per0302047a	1202058257	CWW	3/3/2010 1:44	959704	VARIOUS	1	LANL	USE	S
per0302048a	1202058262	CWW	3/3/2010 1:53	959704	VARIOUS	1	LANL	USE	S
per0302049a	246574002	CWW	3/3/2010 2:01	959704	10-1679	2	LANL	USE	S
per0302050a	246598002	CWW	3/3/2010 2:10	959704	10-1696	2	LANL	USE	S
per0302051a	246690002	CWW	3/3/2010 2:18	959704	10-1722	1	LANL	USE	S
per0302052a	1202058258	CWW	3/3/2010 2:27	959704	10-1722	1	LANL	USE	S
per0302053a	1202058259	CWW	3/3/2010 2:36	959704	10-1722	1	LANL	USE	S
per0302054a	246690003	CWW	3/3/2010 2:44	959704	10-1722	1	LANL	USE	S
per0302055a	WCLCCV	CWW	3/3/2010 2:53			1		USE	C
per0302056a	IPB007	CWW	3/3/2010 3:01			1		USE	B
per0302057a	WCLCRI	CWW	3/3/2010 3:10			1		USE	C
per0302058a	246853001	CWW	3/3/2010 3:19	959704	10-1753	1	LANL	USE	S
per0302059a	246860001	CWW	3/3/2010 3:27	959704	10-1756	1	LANL	USE	S
per0302060a	246862001	CWW	3/3/2010 3:36	959704	10-1780	1	LANL	USE	S
per0302061a	246871001	CWW	3/3/2010 3:44	959704	10-1759	1	LANL	USE	S
per0302062a	246877001	CWW	3/3/2010 3:53	959704	10-1774	1	LANL	USE	S
per0302063a	246877004	CWW	3/3/2010 4:01	959704	10-1774	2	LANL	USE	S
per0302064a	246882001	CWW	3/3/2010 4:10	959704	10-1770	1	LANL	USE	S
per0302065a	246882002	CWW	3/3/2010 4:19	959704	10-1770	1	LANL	USE	S
per0302066a	WCLCCV	CWW	3/3/2010 4:27			1		USE	C

per0302067a	IPB008	CWW	3/3/2010 4:36			1		USE	B
per0302068a	WCLCRI	CWW	3/3/2010 4:45			1		USE	C
per0302069a	246883001	CWW	3/3/2010 4:53	959704	10-1767-1	1	LANL	USE	S
per0302070a	1202058260	CWW	3/3/2010 5:02	959704	10-1767-1	1	LANL	USE	S
per0302071a	1202058261	CWW	3/3/2010 5:10	959704	10-1767-1	1	LANL	USE	S
per0302072a	246883002	CWW	3/3/2010 5:19	959704	10-1767-1	1	LANL	USE	S
per0302073a	246883003	CWW	3/3/2010 5:28	959704	10-1767-1	1	LANL	USE	S
per0302074a	246883004	CWW	3/3/2010 5:36	959704	10-1767-1	1	LANL	USE	S
per0302075a	246886002	CWW	3/3/2010 5:45	959704	10-1777	1	LANL	USE	S
per0302076a	246886004	CWW	3/3/2010 5:53	959704	10-1777	1	LANL	USE	S
per0302077a	WCLCCV	CWW	3/3/2010 6:02			1		USE	C
per0302078a	IPB009	CWW	3/3/2010 6:11			1		USE	B
per0302079a	WCLCRI	CWW	3/3/2010 6:19			1		USE	C
per0302080a	1202054199	CWW	3/3/2010 6:28	957929	VARIOUS	1	LANL	USE	S
per0302081a	1202054200	CWW	3/3/2010 6:37	957929	VARIOUS	1	LANL	USE	S
per0302082a	1202054203	CWW	3/3/2010 6:45	957929	VARIOUS	1	LANL	USE	S
per0302083a	247347001	CWW	3/3/2010 6:54	957929	10-1912	1	LANL	USE	S
per0302084a	247347002	CWW	3/3/2010 7:02	957929	10-1912	1	LANL	USE	S
per0302085a	1202054201	CWW	3/3/2010 7:11	957929	10-1912	1	LANL	USE	S
per0302086a	1202054202	CWW	3/3/2010 7:19	957929	10-1912	1	LANL	USE	S
per0302087a	247347003	CWW	3/3/2010 7:28	957929	10-1912	1	LANL	USE	S
per0302088a	247347004	CWW	3/3/2010 7:37	957929	10-1912	1	LANL	USE	S
per0302089a	WCLCCV	CWW	3/3/2010 7:45			1		USE	C
per0302090a	IPB010	CWW	3/3/2010 7:54			1		USE	B
per0302091a	WCLCRI	CWW	3/3/2010 8:02			1		USE	C
per0302092a	247347005	CWW	3/3/2010 8:11	957929	10-1912	1	LANL	USE	S
per0302093a	247347006	CWW	3/3/2010 8:20	957929	10-1912	1	LANL	USE	S
per0302094a	247347007	CWW	3/3/2010 8:28	957929	10-1912	1	LANL	USE	S
per0302095a	247347008	CWW	3/3/2010 8:37	957929	10-1912	1	LANL	USE	S
per0302096a	247359001	CWW	3/3/2010 8:45	957929	10-1915	1	LANL	USE	S
per0302097a	247359002	CWW	3/3/2010 8:54	957929	10-1915	1	LANL	USE	S
per0302098a	247359003	CWW	3/3/2010 9:03	957929	10-1915	1	LANL	USE	S
per0302099a	247359004	CWW	3/3/2010 9:11	957929	10-1915	1	LANL	USE	S
per0302100a	WCLCCV	CWW	3/3/2010 9:20			1		USE	C
per0302101a	IPB011	CWW	3/3/2010 9:29			1		USE	B
per0302102a	WCLCRI	CWW	3/3/2010 9:37			1		USE	C
per0302103a	247463001	CWW	3/3/2010 9:46	957929	10-1941	1	LANL	USE	S

per0302104a	247463002	CWW	3/3/2010 9:55	957929	10-1941	1	LANL	USE	S
per0302105a	247463003	CWW	3/3/2010 10:03	957929	10-1941	1	LANL	USE	S
per0302106a	247463004	CWW	3/3/2010 10:12	957929	10-1941	1	LANL	USE	S
per0302107a	247463005	CWW	3/3/2010 10:20	957929	10-1941	1	LANL	USE	S
per0302108a	247463006	CWW	3/3/2010 10:29	957929	10-1941	1	LANL	USE	S
per0302109a	247784002	CWW	3/3/2010 10:37	957929	10-1979	1	LANL	USE	S
per0302110a	247855002	CWW	3/3/2010 10:46	957929	10-1978	1	LANL	USE	S
per0302111a	WCLCCV	CWW	3/3/2010 10:54			1		USE	C
per0302112a	IPB012	CWW	3/3/2010 11:03			1		USE	B
per0302113a	WCLCRI	CWW	3/3/2010 11:12			1		USE	C

GEL Laboratories LLC  
Form GEL-DER

DER Report No.: 798645  
Revision No.: 2

### DATA EXCEPTION REPORT

<b>Mo. Day Yr.</b> 03-MAR-10	<b>Division:</b> Industrial	<b>Quality Criteria:</b> Specifications	<b>Type:</b> Process
<b>Instrument Type:</b> LC-MS/MS	<b>Test / Method:</b> SW846 6850 Modified	<b>Matrix Type:</b> Solid	<b>Client Code:</b> LANL
<b>Batch ID:</b> 952820	<b>Sample Numbers:</b> See Below		
<b>Potentially affected work order(s)(SDG):</b> 246325(10-1603), 246437(10-1621-1) <b>Application Issues:</b> Sample Analyzed out of Holding			
<b>Specification and Requirements</b> <b>Exception Description:</b>		<b>DER Disposition:</b>	
This DER is only associated with SDG 10-1621-1 (246437)  1. Samples 246437007, 246437008, 246437009, 246437010, 246437011, 246437012, 246437013 and 246437014 were analyzed out of holding.		1. Samples were analyzed just outside the 28 day hold time for Perchlorate analysis. Since the client allows for samples to be analyzed within twice the hold, the data will be reported with this DER.	

**Originator's Name:**

Charles Wilson

03-MAR-10

**Data Validator/Group Leader:**

Herbert Maier

04-MAR-10

### 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 10-1621**

**Sample Analysis**

<b>Sample ID</b>	<b>Client ID</b>
246436001	RE15-10-8378
1202036684	Method Blank (MB) ICP
1202036685	Laboratory Control Sample (LCS)
1202036688	246431001(RE46-10-11893L) Serial Dilution (SD)
1202036686	246431001(RE46-10-11893D) Sample Duplicate (DUP)
1202036687	246431001(RE46-10-11893S) Matrix Spike (MS)
1202036698	Method Blank (MB) ICP-MS
1202036703	Laboratory Control Sample (LCS)
1202036700	246293001(CAMO-10-9108L) Serial Dilution (SD)
1202036699	246293001(CAMO-10-9108D) Sample Duplicate (DUP)
1202036701	246293001(CAMO-10-9108S) Matrix Spike (MS)
1202036702	246293001(CAMO-10-9108SD) Matrix Spike Duplicate (MSD)
1202039378	Method Blank (MB) CVAA
1202039379	Laboratory Control Sample (LCS)
1202039382	246431001(RE46-10-11893L) Serial Dilution (SD)
1202039380	246431001(RE46-10-11893D) Sample Duplicate (DUP)
1202039381	246431001(RE46-10-11893S) Matrix Spike (MS)

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

### **Method/Analysis Information**

**Analytical Batch:** 950392, 950397 and 951593

**Prep Batch :** 950390, 950395 and 951592

**Standard Operating Procedures:** GL-MA-E-013 REV# 20, GL-MA-E-006 REV# 9, GL-MA-E-014 REV# 21 and GL-MA-E-010 REV# 23

**Analytical Method:** SW846 3005/6010B, SW846 3005/6020 and SW846 7470A

**Prep Method :** SW846 3005A and SW846 7470A Prep

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

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

### **System Configuration**

The Metals analysis-ICP was performed on a P E 5300 Optima radial/axial-viewing inductively coupled plasma atomic emission spectrometer. The instrument is equipped with a Burgener nebulizer, cyclonic spray chamber, and yttrium or scandium internal standard. Operating conditions for the ICP are set at a power level of 1500 watts. The instrument has a peristaltic pump flow rate of 1.4L/min, argon gas flows of 15 L/min and 0.2 L/min for the torch and auxiliary gases, and a flow setting of 0.65L/min for the nebulizer.

The Metals analysis - ICPMS was performed on a Perkin Elmer ELAN 6100E inductively coupled plasma mass spectrometer (ICP-MS). The instrument is equipped with a cross-flow nebulizer, quadrupole mass spectrometer, and dual mode electron multiplier detector. Internal standards of scandium, germanium, indium, tantalum, and/or lutetium were utilized to cover the mass spectrum. Operating conditions are set at 1400W power and combined argon pressures of 360+/-7 kPa for the plasma and auxiliary gases, and 0.85 L/min carrier gas flow, and an initial lens voltage of 5.2.

The Metals analysis - ICPMS was performed on a Perkin Elmer ELAN 9000 inductively coupled plasma mass spectrometer (ICP-MS). The instrument is equipped with a cross-flow nebulizer, quadrupole mass spectrometer, and dual mode electron multiplier detector. Internal standards of scandium, germanium, indium, tantalum, and/or lutetium were utilized to cover the mass spectrum. Operating conditions are set at 1400W power and combined argon pressures of 360+/-7 kPa for the plasma and auxiliary gases, and 0.85 L/min carrier gas flow, and an initial lens voltage of 5.2.

The Metals analysis-Mercury was performed on a Perkin-Elmer Flow Injection Mercury System (FIMS-100) automated mercury analyzer. The instrument consists of a cold vapor atomic absorption spectrometer set to detect mercury at a wavelength of 253.7 nm. Sample introduction through the flow injection system is performed via a peristaltic pump at 9 mL/min and nitrogen

carrier gas rate of 80 mL/min.

### **Calibration Information**

#### **Instrument Calibration**

All initial calibration requirements have been met for this sample delivery group (SDG).

#### **CRDL Requirements**

All CRDL standard(s) met the referenced advisory control limits.

#### **ICSA/ICSAB Statement**

All interference check samples (ICSA and ICSAB) associated with this SDG met the established acceptance criteria.

#### **Continuing Calibration Blank (CCB) Requirements**

All continuing calibration blanks (CCB) bracketing this batch met the established acceptance criteria.

#### **Continuing Calibration Verification (CCV) Requirements**

All continuing calibration verifications (CCV) bracketing this SDG met the acceptance criteria.

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

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

The MBs analyzed with this SDG met the acceptance criteria.

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

The LCS spike recoveries met the acceptance limits.

#### **Quality Control (QC) Sample Statement**

The following samples were selected as the quality control (QC) samples for this SDG: 246431001 (RE46-10-11893) and 246293001 (CAMO-10-9108).

#### **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 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 established criteria of less than 10% difference (%D) with the exception of manganese, as indicated by the "E" qualifier.

**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 time (4X) the spike concentration added. All applicable elements met the acceptance criteria.

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

The RPD(s) between the MS and MSD met the acceptance limits.

**Technical Information****Holding Time Specifications**

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

**Sample Dilutions**

Dilutions are performed to minimize matrix interferences resulting from elevated mineral element concentrations present in solid samples and/or to bring over range target analyte concentrations into the linear calibration range of the instrument. The samples in this SDG did not require dilutions.

**Preparation Information**

The samples in this SDG were prepared exactly according to the cited SOP.

**Miscellaneous Information****Electronic Packaging Comment**

This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

**Data Exception (DER) Documentation**

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

**Additional Comments**

Additional comments were not required for this SDG.

**Certification Statement**

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

**Review Validation:**

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

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

Reviewer: Kristen Hanson Date: 3/6/10

# Sample Data Summary

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

SDG No: 10-1621

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 246436001

BASIS: As Received

DATE COLLECTED 02-FEB-10

CLIENT ID: RE15-10-8378

LEVEL: Low

DATE RECEIVED 06-FEB-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	02/26/10 01:31	022510-1	950392
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	BAJ	03/04/10 23:20	100304-3	950397
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	02/26/10 01:31	022510-1	950392
7440-39-3	Barium	5	ug/L	U	1	5	5	1	P	HSC	02/26/10 01:31	022510-1	950392
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	BAJ	03/05/10 13:16	100305-9	950397
7440-43-9	Cadmium	0.527	ug/L	J	0.11	1	1	1	MS	BAJ	03/04/10 23:20	100304-3	950397
7440-70-2	Calcium	96.5	ug/L	J	50	200	200	1	P	HSC	02/26/10 01:31	022510-1	950392
7440-47-3	Chromium	5	ug/L	U	1	5	5	1	P	HSC	02/26/10 01:31	022510-1	950392
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	02/26/10 01:31	022510-1	950392
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	02/26/10 01:31	022510-1	950392
7439-89-6	Iron	100	ug/L	U	30	100	100	1	P	HSC	02/26/10 01:31	022510-1	950392
7439-92-1	Lead	2	ug/L	U	0.5	2	2	1	MS	BAJ	03/04/10 23:20	100304-3	950397
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	02/26/10 01:31	022510-1	950392
7439-96-5	Manganese	5.11	ug/L		1	5	5	1	MS	BAJ	03/05/10 13:16	100305-9	950397
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JXLI	02/17/10 11:14	021710W2-10	951593
7440-02-0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	02/26/10 01:31	022510-1	950392
7440-09-7	Potassium	158	ug/L		50	150	150	1	P	HSC	02/26/10 01:31	022510-1	950392
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	02/26/10 01:31	022510-1	950392
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	02/26/10 01:31	022510-1	950392
7440-23-5	Sodium	140	ug/L	J	100	300	300	1	P	HSC	02/26/10 01:31	022510-1	950392
7440-28-0	Thallium	1	ug/L	U	0.3	1	1	1	MS	PRB	03/05/10 15:27	100305-2	950397
7440-61-1	Uranium	0.20	ug/L	U	0.05	0.2	0.2	1	MS	BAJ	03/05/10 07:50	100304-8	950397
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	02/26/10 01:31	022510-1	950392
7440-66-6	Zinc	10	ug/L	U	3.3	10	10	1	P	HSC	02/26/10 01:31	022510-1	950392

**Prep Information:**

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
950392	950390	SW846 3005A	50	mL	50	mL	02/16/10	LYH1
950397	950395	SW846 3005A	50	mL	50	mL	02/16/10	LYH1
951593	951592	SW846 7470A Prep	20	mL	20	mL	02/16/10	TXB3

# **Quality Control Summary**



**METALS**  
**-2a-**  
**Initial and Continuing Calibration Verification**

SDG No: 10-1621

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS5,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICV01										
	Mercury	5.23	ug/L	5	ug/L	104.6	90.0 – 110.0	AV	17-FEB-10 09:48	021710W2-10
	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
	Antimony	51	ug/L	50	ug/L	101.9	90.0 – 110.0	MS	04-MAR-10 21:34	100304-3
	Cadmium	51.6	ug/L	50	ug/L	103.1	90.0 – 110.0	MS	04-MAR-10 21:34	100304-3
	Lead	53.1	ug/L	50	ug/L	106.3	90.0 – 110.0	MS	04-MAR-10 21:34	100304-3
	Uranium	54.7	ug/L	50	ug/L	109.4	90.0 – 110.0	MS	05-MAR-10 07:12	100304-8
	Beryllium	52.4	ug/L	50	ug/L	104.7	90.0 – 110.0	MS	05-MAR-10 12:28	100305-9
	Manganese	54.1	ug/L	50	ug/L	108.3	90.0 – 110.0	MS	05-MAR-10 12:28	100305-9
	Thallium	50.2	ug/L	50	ug/L	100.4	90.0 – 110.0	MS	05-MAR-10 12:34	100305-2
CCV01										
	Mercury	5.12	ug/L	5	ug/L	102.3	80.0 – 120.0	AV	17-FEB-10 09:54	021710W2-10
	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

**METALS**  
**-2a-**  
**Initial and Continuing Calibration Verification**

SDG No: 10-1621

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS5,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	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
	Antimony	52.9	ug/L	50	ug/L	105.9	90.0 – 110.0	MS	04-MAR-10 21:57	100304-3
	Cadmium	51.1	ug/L	50	ug/L	102.2	90.0 – 110.0	MS	04-MAR-10 21:57	100304-3
	Lead	52.6	ug/L	50	ug/L	105.2	90.0 – 110.0	MS	04-MAR-10 21:57	100304-3
	Uranium	54.1	ug/L	50	ug/L	108.2	90.0 – 110.0	MS	05-MAR-10 07:20	100304-8
	Beryllium	52.8	ug/L	50	ug/L	105.6	90.0 – 110.0	MS	05-MAR-10 12:38	100305-9
	Manganese	55.2	ug/L	50	ug/L	110.4	90.0 – 110.0	MS	05-MAR-10 12:38	100305-9
	Thallium	50.1	ug/L	50	ug/L	100.3	90.0 – 110.0	MS	05-MAR-10 12:45	100305-2
CCV02	Mercury	5.09	ug/L	5	ug/L	101.7	80.0 – 120.0	AV	17-FEB-10 10:17	021710W2-10
	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
	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

**METALS**  
**-2a-**  
**Initial and Continuing Calibration Verification**

SDG No: 10-1621

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS5,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	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
	Antimony	53.8	ug/L	50	ug/L	107.6	90.0 – 110.0	MS	04-MAR-10 22:43	100304-3
	Cadmium	50.6	ug/L	50	ug/L	101.1	90.0 – 110.0	MS	04-MAR-10 22:43	100304-3
	Lead	53	ug/L	50	ug/L	105.9	90.0 – 110.0	MS	04-MAR-10 22:43	100304-3
	Uranium	53.2	ug/L	50	ug/L	106.4	90.0 – 110.0	MS	05-MAR-10 07:37	100304-8
	Beryllium	52.3	ug/L	50	ug/L	104.6	90.0 – 110.0	MS	05-MAR-10 12:43	100305-9
	Manganese	54.6	ug/L	50	ug/L	109.2	90.0 – 110.0	MS	05-MAR-10 12:43	100305-9
	Thallium	50.3	ug/L	50	ug/L	100.5	90.0 – 110.0	MS	05-MAR-10 13:13	100305-2
CCV03										
	Mercury	4.91	ug/L	5	ug/L	98.2	80.0 – 120.0	AV	17-FEB-10 10:40	021710W2-10
	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
	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

**METALS**  
**-2a-**  
**Initial and Continuing Calibration Verification**

SDG No: 10-1621

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS5,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	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
	Antimony	51.5	ug/L	50	ug/L	103	90.0 – 110.0	MS	04-MAR-10 23:25	100304-3
	Cadmium	49.6	ug/L	50	ug/L	99.2	90.0 – 110.0	MS	04-MAR-10 23:25	100304-3
	Lead	51.8	ug/L	50	ug/L	103.6	90.0 – 110.0	MS	04-MAR-10 23:25	100304-3
	Uranium	52.5	ug/L	50	ug/L	105	90.0 – 110.0	MS	05-MAR-10 07:52	100304-8
	Beryllium	54.7	ug/L	50	ug/L	109.3	90.0 – 110.0	MS	05-MAR-10 13:01	100305-9
	Manganese	53.5	ug/L	50	ug/L	107	90.0 – 110.0	MS	05-MAR-10 13:01	100305-9
	Thallium	50.1	ug/L	50	ug/L	100.1	90.0 – 110.0	MS	05-MAR-10 13:33	100305-2
CCV04										
	Mercury	4.9	ug/L	5	ug/L	98.1	80.0 – 120.0	AV	17-FEB-10 11:03	021710W2-10
	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
	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
	Beryllium	53.7	ug/L	50	ug/L	107.3	90.0 – 110.0	MS	05-MAR-10 13:17	100305-9
	Manganese	54	ug/L	50	ug/L	108	90.0 – 110.0	MS	05-MAR-10 13:17	100305-9
	Thallium	49.7	ug/L	50	ug/L	99.4	90.0 – 110.0	MS	05-MAR-10 13:42	100305-2

**METALS**  
**-2a-**  
**Initial and Continuing Calibration Verification**

SDG No: 10-1621

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS5,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
CCV05										
	Mercury	4.91	ug/L	5	ug/L	98.2	80.0 – 120.0	AV	17-FEB-10 11:26	021710W2-10
	Aluminum	5090	ug/L	5000	ug/L	101.7	90.0 – 110.0	P	25-FEB-10 17:18	022510-1
	Arsenic	489	ug/L	500	ug/L	97.7	90.0 – 110.0	P	25-FEB-10 17:18	022510-1
	Barium	480	ug/L	500	ug/L	96	90.0 – 110.0	P	25-FEB-10 17:18	022510-1
	Calcium	5190	ug/L	5000	ug/L	103.8	90.0 – 110.0	P	25-FEB-10 17:18	022510-1
	Chromium	480	ug/L	500	ug/L	96	90.0 – 110.0	P	25-FEB-10 17:18	022510-1
	Cobalt	482	ug/L	500	ug/L	96.5	90.0 – 110.0	P	25-FEB-10 17:18	022510-1
	Copper	471	ug/L	500	ug/L	94.3	90.0 – 110.0	P	25-FEB-10 17:18	022510-1
	Iron	5000	ug/L	5000	ug/L	100	90.0 – 110.0	P	25-FEB-10 17:18	022510-1
	Magnesium	5290	ug/L	5000	ug/L	105.8	90.0 – 110.0	P	25-FEB-10 17:18	022510-1
	Nickel	483	ug/L	500	ug/L	96.7	90.0 – 110.0	P	25-FEB-10 17:18	022510-1
	Potassium	4980	ug/L	5000	ug/L	99.7	90.0 – 110.0	P	25-FEB-10 17:18	022510-1
	Selenium	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	25-FEB-10 17:18	022510-1
	Silver	481	ug/L	500	ug/L	96.1	90.0 – 110.0	P	25-FEB-10 17:18	022510-1
	Sodium	9830	ug/L	10000	ug/L	98.3	90.0 – 110.0	P	25-FEB-10 17:18	022510-1
	Vanadium	482	ug/L	500	ug/L	96.3	90.0 – 110.0	P	25-FEB-10 17:18	022510-1
	Zinc	480	ug/L	500	ug/L	96.1	90.0 – 110.0	P	25-FEB-10 17:18	022510-1
	Thallium	50	ug/L	50	ug/L	99.9	90.0 – 110.0	MS	05-MAR-10 14:07	100305-2
CCV06										
	Aluminum	5170	ug/L	5000	ug/L	103.4	90.0 – 110.0	P	25-FEB-10 18:28	022510-1
	Arsenic	485	ug/L	500	ug/L	97	90.0 – 110.0	P	25-FEB-10 18:28	022510-1
	Barium	481	ug/L	500	ug/L	96.2	90.0 – 110.0	P	25-FEB-10 18:28	022510-1
	Calcium	5180	ug/L	5000	ug/L	103.7	90.0 – 110.0	P	25-FEB-10 18:28	022510-1
	Chromium	481	ug/L	500	ug/L	96.3	90.0 – 110.0	P	25-FEB-10 18:28	022510-1
	Cobalt	482	ug/L	500	ug/L	96.5	90.0 – 110.0	P	25-FEB-10 18:28	022510-1
	Copper	474	ug/L	500	ug/L	94.7	90.0 – 110.0	P	25-FEB-10 18:28	022510-1
	Iron	5020	ug/L	5000	ug/L	100.4	90.0 – 110.0	P	25-FEB-10 18:28	022510-1
	Magnesium	5300	ug/L	5000	ug/L	106.1	90.0 – 110.0	P	25-FEB-10 18:28	022510-1
	Nickel	485	ug/L	500	ug/L	97	90.0 – 110.0	P	25-FEB-10 18:28	022510-1
	Potassium	5040	ug/L	5000	ug/L	100.9	90.0 – 110.0	P	25-FEB-10 18:28	022510-1

**METALS**  
**-2a-**  
**Initial and Continuing Calibration Verification**

SDG No: 10-1621

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS5,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Selenium	500	ug/L	500	ug/L	100	90.0 – 110.0	P	25-FEB-10 18:28	022510-1
	Silver	483	ug/L	500	ug/L	96.5	90.0 – 110.0	P	25-FEB-10 18:28	022510-1
	Sodium	10100	ug/L	10000	ug/L	101	90.0 – 110.0	P	25-FEB-10 18:28	022510-1
	Vanadium	483	ug/L	500	ug/L	96.7	90.0 – 110.0	P	25-FEB-10 18:28	022510-1
	Zinc	481	ug/L	500	ug/L	96.2	90.0 – 110.0	P	25-FEB-10 18:28	022510-1
	Thallium	49.6	ug/L	50	ug/L	99.2	90.0 – 110.0	MS	05-MAR-10 14:22	100305-2
CCV07										
	Aluminum	5150	ug/L	5000	ug/L	102.9	90.0 – 110.0	P	25-FEB-10 19:29	022510-1
	Arsenic	489	ug/L	500	ug/L	97.8	90.0 – 110.0	P	25-FEB-10 19:29	022510-1
	Barium	483	ug/L	500	ug/L	96.6	90.0 – 110.0	P	25-FEB-10 19:29	022510-1
	Calcium	5220	ug/L	5000	ug/L	104.4	90.0 – 110.0	P	25-FEB-10 19:29	022510-1
	Chromium	483	ug/L	500	ug/L	96.6	90.0 – 110.0	P	25-FEB-10 19:29	022510-1
	Cobalt	484	ug/L	500	ug/L	96.9	90.0 – 110.0	P	25-FEB-10 19:29	022510-1
	Copper	476	ug/L	500	ug/L	95.2	90.0 – 110.0	P	25-FEB-10 19:29	022510-1
	Iron	5040	ug/L	5000	ug/L	100.8	90.0 – 110.0	P	25-FEB-10 19:29	022510-1
	Magnesium	5410	ug/L	5000	ug/L	108.2	90.0 – 110.0	P	25-FEB-10 19:29	022510-1
	Nickel	486	ug/L	500	ug/L	97.2	90.0 – 110.0	P	25-FEB-10 19:29	022510-1
	Potassium	5000	ug/L	5000	ug/L	99.9	90.0 – 110.0	P	25-FEB-10 19:29	022510-1
	Selenium	497	ug/L	500	ug/L	99.5	90.0 – 110.0	P	25-FEB-10 19:29	022510-1
	Silver	485	ug/L	500	ug/L	96.9	90.0 – 110.0	P	25-FEB-10 19:29	022510-1
	Sodium	9930	ug/L	10000	ug/L	99.3	90.0 – 110.0	P	25-FEB-10 19:29	022510-1
	Vanadium	486	ug/L	500	ug/L	97.1	90.0 – 110.0	P	25-FEB-10 19:29	022510-1
	Zinc	483	ug/L	500	ug/L	96.7	90.0 – 110.0	P	25-FEB-10 19:29	022510-1
	Thallium	49.3	ug/L	50	ug/L	98.6	90.0 – 110.0	MS	05-MAR-10 14:44	100305-2
CCV08										
	Aluminum	5120	ug/L	5000	ug/L	102.5	90.0 – 110.0	P	25-FEB-10 20:12	022510-1
	Arsenic	493	ug/L	500	ug/L	98.5	90.0 – 110.0	P	25-FEB-10 20:12	022510-1
	Barium	487	ug/L	500	ug/L	97.5	90.0 – 110.0	P	25-FEB-10 20:12	022510-1
	Calcium	5280	ug/L	5000	ug/L	105.6	90.0 – 110.0	P	25-FEB-10 20:12	022510-1
	Chromium	487	ug/L	500	ug/L	97.4	90.0 – 110.0	P	25-FEB-10 20:12	022510-1

**METALS**  
**-2a-**  
**Initial and Continuing Calibration Verification**

SDG No: 10-1621

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS5,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Cobalt	489	ug/L	500	ug/L	97.8	90.0 – 110.0	P	25-FEB-10 20:12	022510-1
	Copper	474	ug/L	500	ug/L	94.8	90.0 – 110.0	P	25-FEB-10 20:12	022510-1
	Iron	5100	ug/L	5000	ug/L	102.1	90.0 – 110.0	P	25-FEB-10 20:12	022510-1
	Magnesium	5410	ug/L	5000	ug/L	108.3	90.0 – 110.0	P	25-FEB-10 20:12	022510-1
	Nickel	492	ug/L	500	ug/L	98.4	90.0 – 110.0	P	25-FEB-10 20:12	022510-1
	Potassium	5030	ug/L	5000	ug/L	100.7	90.0 – 110.0	P	25-FEB-10 20:12	022510-1
	Selenium	504	ug/L	500	ug/L	100.8	90.0 – 110.0	P	25-FEB-10 20:12	022510-1
	Silver	485	ug/L	500	ug/L	96.9	90.0 – 110.0	P	25-FEB-10 20:12	022510-1
	Sodium	10300	ug/L	10000	ug/L	102.7	90.0 – 110.0	P	25-FEB-10 20:12	022510-1
	Vanadium	488	ug/L	500	ug/L	97.6	90.0 – 110.0	P	25-FEB-10 20:12	022510-1
	Zinc	488	ug/L	500	ug/L	97.6	90.0 – 110.0	P	25-FEB-10 20:12	022510-1
	Thallium	51	ug/L	50	ug/L	101.9	90.0 – 110.0	MS	05-MAR-10 15:07	100305-2
CCV09	Aluminum	5280	ug/L	5000	ug/L	105.6	90.0 – 110.0	P	25-FEB-10 21:27	022510-1
	Arsenic	494	ug/L	500	ug/L	98.7	90.0 – 110.0	P	25-FEB-10 21:27	022510-1
	Barium	487	ug/L	500	ug/L	97.5	90.0 – 110.0	P	25-FEB-10 21:27	022510-1
	Calcium	5230	ug/L	5000	ug/L	104.7	90.0 – 110.0	P	25-FEB-10 21:27	022510-1
	Chromium	488	ug/L	500	ug/L	97.5	90.0 – 110.0	P	25-FEB-10 21:27	022510-1
	Cobalt	489	ug/L	500	ug/L	97.8	90.0 – 110.0	P	25-FEB-10 21:27	022510-1
	Copper	476	ug/L	500	ug/L	95.2	90.0 – 110.0	P	25-FEB-10 21:27	022510-1
	Iron	4850	ug/L	5000	ug/L	96.9	90.0 – 110.0	P	25-FEB-10 21:27	022510-1
	Magnesium	5270	ug/L	5000	ug/L	105.5	90.0 – 110.0	P	25-FEB-10 21:27	022510-1
	Nickel	492	ug/L	500	ug/L	98.4	90.0 – 110.0	P	25-FEB-10 21:27	022510-1
	Potassium	5070	ug/L	5000	ug/L	101.5	90.0 – 110.0	P	25-FEB-10 21:27	022510-1
	Selenium	506	ug/L	500	ug/L	101.3	90.0 – 110.0	P	25-FEB-10 21:27	022510-1
	Silver	485	ug/L	500	ug/L	97.1	90.0 – 110.0	P	25-FEB-10 21:27	022510-1
	Sodium	8800	ug/L	10000	ug/L	88	90.0 – 110.0	P	25-FEB-10 21:27	022510-1
	Vanadium	488	ug/L	500	ug/L	97.7	90.0 – 110.0	P	25-FEB-10 21:27	022510-1
	Zinc	489	ug/L	500	ug/L	97.8	90.0 – 110.0	P	25-FEB-10 21:27	022510-1
	Thallium	49.9	ug/L	50	ug/L	99.8	90.0 – 110.0	MS	05-MAR-10 15:29	100305-2

**METALS**  
**-2a-**  
**Initial and Continuing Calibration Verification**

SDG No: 10-1621

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS5,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
CCV10										
	Aluminum	5270	ug/L	5000	ug/L	105.4	90.0 – 110.0	P	25-FEB-10 22:30	022510-1
	Arsenic	502	ug/L	500	ug/L	100.3	90.0 – 110.0	P	25-FEB-10 22:30	022510-1
	Barium	490	ug/L	500	ug/L	97.9	90.0 – 110.0	P	25-FEB-10 22:30	022510-1
	Calcium	5280	ug/L	5000	ug/L	105.6	90.0 – 110.0	P	25-FEB-10 22:30	022510-1
	Chromium	493	ug/L	500	ug/L	98.5	90.0 – 110.0	P	25-FEB-10 22:30	022510-1
	Cobalt	491	ug/L	500	ug/L	98.2	90.0 – 110.0	P	25-FEB-10 22:30	022510-1
	Copper	480	ug/L	500	ug/L	96	90.0 – 110.0	P	25-FEB-10 22:30	022510-1
	Iron	5000	ug/L	5000	ug/L	100.1	90.0 – 110.0	P	25-FEB-10 22:30	022510-1
	Magnesium	5480	ug/L	5000	ug/L	109.7	90.0 – 110.0	P	25-FEB-10 22:30	022510-1
	Nickel	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	25-FEB-10 22:30	022510-1
	Potassium	5060	ug/L	5000	ug/L	101.2	90.0 – 110.0	P	25-FEB-10 22:30	022510-1
	Selenium	513	ug/L	500	ug/L	102.6	90.0 – 110.0	P	25-FEB-10 22:30	022510-1
	Silver	490	ug/L	500	ug/L	97.9	90.0 – 110.0	P	25-FEB-10 22:30	022510-1
	Sodium	9690	ug/L	10000	ug/L	96.9	90.0 – 110.0	P	25-FEB-10 22:30	022510-1
	Vanadium	493	ug/L	500	ug/L	98.5	90.0 – 110.0	P	25-FEB-10 22:30	022510-1
	Zinc	493	ug/L	500	ug/L	98.5	90.0 – 110.0	P	25-FEB-10 22:30	022510-1
CCV11										
	Aluminum	5290	ug/L	5000	ug/L	105.8	90.0 – 110.0	P	25-FEB-10 23:32	022510-1
	Arsenic	504	ug/L	500	ug/L	100.8	90.0 – 110.0	P	25-FEB-10 23:32	022510-1
	Barium	488	ug/L	500	ug/L	97.6	90.0 – 110.0	P	25-FEB-10 23:32	022510-1
	Calcium	5270	ug/L	5000	ug/L	105.4	90.0 – 110.0	P	25-FEB-10 23:32	022510-1
	Chromium	490	ug/L	500	ug/L	98	90.0 – 110.0	P	25-FEB-10 23:32	022510-1
	Cobalt	489	ug/L	500	ug/L	97.9	90.0 – 110.0	P	25-FEB-10 23:32	022510-1
	Copper	479	ug/L	500	ug/L	95.9	90.0 – 110.0	P	25-FEB-10 23:32	022510-1
	Iron	4940	ug/L	5000	ug/L	98.7	90.0 – 110.0	P	25-FEB-10 23:32	022510-1
	Magnesium	5380	ug/L	5000	ug/L	107.7	90.0 – 110.0	P	25-FEB-10 23:32	022510-1
	Nickel	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	25-FEB-10 23:32	022510-1
	Potassium	5050	ug/L	5000	ug/L	101.1	90.0 – 110.0	P	25-FEB-10 23:32	022510-1
	Selenium	512	ug/L	500	ug/L	102.4	90.0 – 110.0	P	25-FEB-10 23:32	022510-1
	Silver	488	ug/L	500	ug/L	97.6	90.0 – 110.0	P	25-FEB-10 23:32	022510-1



**METALS**  
**-2a-**  
**Initial and Continuing Calibration Verification**

SDG No: 10-1621

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS5,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
CCV12	Sodium	9330	ug/L	10000	ug/L	93.3	90.0 – 110.0	P	25-FEB-10 23:32	022510-1
	Vanadium	491	ug/L	500	ug/L	98.2	90.0 – 110.0	P	25-FEB-10 23:32	022510-1
	Zinc	491	ug/L	500	ug/L	98.2	90.0 – 110.0	P	25-FEB-10 23:32	022510-1
	Aluminum	5400	ug/L	5000	ug/L	108.1	90.0 – 110.0	P	26-FEB-10 00:35	022510-1
	Arsenic	507	ug/L	500	ug/L	101.3	90.0 – 110.0	P	26-FEB-10 00:35	022510-1
	Barium	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	26-FEB-10 00:35	022510-1
	Calcium	5340	ug/L	5000	ug/L	106.7	90.0 – 110.0	P	26-FEB-10 00:35	022510-1
	Chromium	500	ug/L	500	ug/L	99.9	90.0 – 110.0	P	26-FEB-10 00:35	022510-1
	Cobalt	499	ug/L	500	ug/L	99.8	90.0 – 110.0	P	26-FEB-10 00:35	022510-1
	Copper	490	ug/L	500	ug/L	98	90.0 – 110.0	P	26-FEB-10 00:35	022510-1
	Iron	4970	ug/L	5000	ug/L	99.3	90.0 – 110.0	P	26-FEB-10 00:35	022510-1
	Magnesium	5370	ug/L	5000	ug/L	107.4	90.0 – 110.0	P	26-FEB-10 00:35	022510-1
	Nickel	504	ug/L	500	ug/L	100.8	90.0 – 110.0	P	26-FEB-10 00:35	022510-1
	Potassium	5200	ug/L	5000	ug/L	103.9	90.0 – 110.0	P	26-FEB-10 00:35	022510-1
	Selenium	517	ug/L	500	ug/L	103.5	90.0 – 110.0	P	26-FEB-10 00:35	022510-1
	Silver	499	ug/L	500	ug/L	99.8	90.0 – 110.0	P	26-FEB-10 00:35	022510-1
	Sodium	9580	ug/L	10000	ug/L	95.8	90.0 – 110.0	P	26-FEB-10 00:35	022510-1
	Vanadium	502	ug/L	500	ug/L	100.3	90.0 – 110.0	P	26-FEB-10 00:35	022510-1
	Zinc	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	26-FEB-10 00:35	022510-1
CCV13	Aluminum	5390	ug/L	5000	ug/L	107.8	90.0 – 110.0	P	26-FEB-10 01:38	022510-1
	Arsenic	511	ug/L	500	ug/L	102.3	90.0 – 110.0	P	26-FEB-10 01:38	022510-1
	Barium	504	ug/L	500	ug/L	100.9	90.0 – 110.0	P	26-FEB-10 01:38	022510-1
	Calcium	5380	ug/L	5000	ug/L	107.6	90.0 – 110.0	P	26-FEB-10 01:38	022510-1
	Chromium	507	ug/L	500	ug/L	101.3	90.0 – 110.0	P	26-FEB-10 01:38	022510-1
	Cobalt	505	ug/L	500	ug/L	101.1	90.0 – 110.0	P	26-FEB-10 01:38	022510-1
	Copper	497	ug/L	500	ug/L	99.3	90.0 – 110.0	P	26-FEB-10 01:38	022510-1
	Iron	5130	ug/L	5000	ug/L	102.5	90.0 – 110.0	P	26-FEB-10 01:38	022510-1
	Magnesium	5450	ug/L	5000	ug/L	109	90.0 – 110.0	P	26-FEB-10 01:38	022510-1

---

**METALS**  
**-2a-**  
**Initial and Continuing Calibration Verification**

SDG No: 10-1621

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS3,ICPMS5,OPTIMA3

---

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Nickel	510	ug/L	500	ug/L	102	90.0 – 110.0	P	26-FEB-10 01:38	022510-1
	Potassium	5180	ug/L	5000	ug/L	103.7	90.0 – 110.0	P	26-FEB-10 01:38	022510-1
	Selenium	520	ug/L	500	ug/L	103.9	90.0 – 110.0	P	26-FEB-10 01:38	022510-1
	Silver	506	ug/L	500	ug/L	101.3	90.0 – 110.0	P	26-FEB-10 01:38	022510-1
	Sodium	10000	ug/L	10000	ug/L	100.1	90.0 – 110.0	P	26-FEB-10 01:38	022510-1
	Vanadium	509	ug/L	500	ug/L	101.8	90.0 – 110.0	P	26-FEB-10 01:38	022510-1
	Zinc	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	26-FEB-10 01:38	022510-1

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

SDG No: 10-1621

Contract: LANL01004

Lab Code: GEL

AA CRDL Standard Source: SPEX

ICP CRDL Standard Source Solutions Plus

Instrument ID: HG3,ICPMS3,ICPMS5,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Advisory Limits (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
CRDL01										
	Mercury	.176	ug/L	.2	ug/L	88	70.0 – 130.0	AV	17-FEB-10 09:52	021710W2-10
	Lead	2.48	ug/L	2	ug/L	124.1	70.0 – 130.0	MS	04-MAR-10 21:43	100304-3
	Antimony	3.05	ug/L	3	ug/L	101.7	70.0 – 130.0	MS	04-MAR-10 21:43	100304-3
	Cadmium	1.11	ug/L	1	ug/L	110.9	70.0 – 130.0	MS	04-MAR-10 21:43	100304-3
	Uranium	.23	ug/L	.2	ug/L	115	70.0 – 130.0	MS	05-MAR-10 07:15	100304-8
	Manganese	6.12	ug/L	5	ug/L	122.5	70.0 – 130.0	MS	05-MAR-10 12:32	100305-9
	Beryllium	.58	ug/L	.5	ug/L	116	70.0 – 130.0	MS	05-MAR-10 12:32	100305-9
	Thallium	1.1	ug/L	1	ug/L	109.6	70.0 – 130.0	MS	05-MAR-10 12:38	100305-2
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.: 10-1621

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	17-FEB-10 09:50	021710W2-10
	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
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	04-MAR-10 21:39	100304-3
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	04-MAR-10 21:39	100304-3
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	04-MAR-10 21:39	100304-3
	Uranium	0.05	+/- .2	U	0.05	0.2	LIQ	MS	05-MAR-10 07:14	100304-8
	Beryllium	0.1	+/- .5	U	0.1	0.5	LIQ	MS	05-MAR-10 12:30	100305-9
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	05-MAR-10 12:30	100305-9
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	05-MAR-10 12:36	100305-2
<b>CCB01</b>										
	Mercury	0.066	+/- .2	U	0.066	0.2	LIQ	AV	17-FEB-10 09:56	021710W2-10
	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

SW846

Metals  
-3a-  
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1621

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ng/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	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
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	04-MAR-10 22:02	100304-3
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	04-MAR-10 22:02	100304-3
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	04-MAR-10 22:02	100304-3
	Uranium	0.05	+/-2	U	0.05	0.2	LIQ	MS	05-MAR-10 07:22	100304-8
	Beryllium	0.1	+/-5	U	0.1	0.5	LIQ	MS	05-MAR-10 12:39	100305-9
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	05-MAR-10 12:39	100305-9
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	05-MAR-10 12:47	100305-2
<b>CCB02</b>	Mercury	0.066	+/-2	U	0.066	0.2	LIQ	AV	17-FEB-10 10:19	021710W2-10
	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
	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

SW846

**Metals**  
**-3a-**  
**Initial and Continuing Calibration Blank Summary**

SDG No.: 10-1621

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>
	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
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	04-MAR-10 22:48	100304-3
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	04-MAR-10 22:48	100304-3
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	04-MAR-10 22:48	100304-3
	Uranium	0.05	+/-2	U	0.05	0.2	LIQ	MS	05-MAR-10 07:39	100304-8
	Beryllium	0.1	+/-5	U	0.1	0.5	LIQ	MS	05-MAR-10 12:45	100305-9
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	05-MAR-10 12:45	100305-9
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	05-MAR-10 13:16	100305-2
<b>CCB03</b>	Mercury	0.066	+/-2	U	0.066	0.2	LIQ	AV	17-FEB-10 10:42	021710W2-10
	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
	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
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	04-MAR-10 23:29	100304-3

SW846

**Metals**  
**-3a-**  
**Initial and Continuing Calibration Blank Summary**

SDG No.: 10-1621

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	04-MAR-10 23:29	100304-3
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	04-MAR-10 23:29	100304-3
	Uranium	0.05	+/-2	U	0.05	0.2	LIQ	MS	05-MAR-10 07:54	100304-8
	Beryllium	0.1	+/-5	U	0.1	0.5	LIQ	MS	05-MAR-10 13:03	100305-9
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	05-MAR-10 13:03	100305-9
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	05-MAR-10 13:36	100305-2
<b>CCB04</b>	Mercury	0.066	+/-2	U	0.066	0.2	LIQ	AV	17-FEB-10 11:05	021710W2-10
	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
	Beryllium	0.1	+/-5	U	0.1	0.5	LIQ	MS	05-MAR-10 13:19	100305-9
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	05-MAR-10 13:19	100305-9
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	05-MAR-10 13:44	100305-2
<b>CCB05</b>	Mercury	0.066	+/-2	U	0.066	0.2	LIQ	AV	17-FEB-10 11:28	021710W2-10
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	25-FEB-10 17:25	022510-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	25-FEB-10 17:25	022510-1

**Metals**  
**-3a-**  
**Initial and Continuing Calibration Blank Summary**

SDG No.: 10-1621

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ng/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 17:25	022510-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	25-FEB-10 17:25	022510-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 17:25	022510-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 17:25	022510-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	25-FEB-10 17:25	022510-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	25-FEB-10 17:25	022510-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	25-FEB-10 17:25	022510-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	25-FEB-10 17:25	022510-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	25-FEB-10 17:25	022510-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	25-FEB-10 17:25	022510-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 17:25	022510-1
	Sodium	100	+/-300	U	100	300	LIQ	P	25-FEB-10 17:25	022510-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 17:25	022510-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	25-FEB-10 17:25	022510-1
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	05-MAR-10 14:09	100305-2
CCB06	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	25-FEB-10 18:35	022510-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	25-FEB-10 18:35	022510-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 18:35	022510-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	25-FEB-10 18:35	022510-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 18:35	022510-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 18:35	022510-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	25-FEB-10 18:35	022510-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	25-FEB-10 18:35	022510-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	25-FEB-10 18:35	022510-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	25-FEB-10 18:35	022510-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	25-FEB-10 18:35	022510-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	25-FEB-10 18:35	022510-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 18:35	022510-1
	Sodium	100	+/-300	U	100	300	LIQ	P	25-FEB-10 18:35	022510-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 18:35	022510-1



**Metals**  
**-3a-**  
**Initial and Continuing Calibration Blank Summary**

SDG No.: 10-1621

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>
CCB07	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	25-FEB-10 18:35	022510-1
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	05-MAR-10 14:24	100305-2
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	25-FEB-10 19:36	022510-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	25-FEB-10 19:36	022510-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 19:36	022510-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	25-FEB-10 19:36	022510-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 19:36	022510-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 19:36	022510-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	25-FEB-10 19:36	022510-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	25-FEB-10 19:36	022510-1
	Magnesium	117.05	+/-300	J	85.0	300	LIQ	P	25-FEB-10 19:36	022510-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	25-FEB-10 19:36	022510-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	25-FEB-10 19:36	022510-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	25-FEB-10 19:36	022510-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 19:36	022510-1
	Sodium	100	+/-300	U	100	300	LIQ	P	25-FEB-10 19:36	022510-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 19:36	022510-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	25-FEB-10 19:36	022510-1
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	05-MAR-10 14:47	100305-2
CCB08	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	25-FEB-10 20:19	022510-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	25-FEB-10 20:19	022510-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 20:19	022510-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	25-FEB-10 20:19	022510-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 20:19	022510-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 20:19	022510-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	25-FEB-10 20:19	022510-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	25-FEB-10 20:19	022510-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	25-FEB-10 20:19	022510-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	25-FEB-10 20:19	022510-1

SW846

**Metals**  
**-3a-**  
**Initial and Continuing Calibration Blank Summary**

SDG No.: 10-1621

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>
CCB09	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	25-FEB-10 20:19	022510-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	25-FEB-10 20:19	022510-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 20:19	022510-1
	Sodium	100	+/-300	U	100	300	LIQ	P	25-FEB-10 20:19	022510-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 20:19	022510-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	25-FEB-10 20:19	022510-1
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	05-MAR-10 15:09	100305-2
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	25-FEB-10 21:34	022510-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	25-FEB-10 21:34	022510-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 21:34	022510-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	25-FEB-10 21:34	022510-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 21:34	022510-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 21:34	022510-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	25-FEB-10 21:34	022510-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	25-FEB-10 21:34	022510-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	25-FEB-10 21:34	022510-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	25-FEB-10 21:34	022510-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	25-FEB-10 21:34	022510-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	25-FEB-10 21:34	022510-1
CCB10	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 21:34	022510-1
	Sodium	100	+/-300	U	100	300	LIQ	P	25-FEB-10 21:34	022510-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 21:34	022510-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	25-FEB-10 21:34	022510-1
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	05-MAR-10 15:31	100305-2
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	25-FEB-10 22:37	022510-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	25-FEB-10 22:37	022510-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 22:37	022510-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	25-FEB-10 22:37	022510-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 22:37	022510-1

**Metals**  
**-3a-**  
**Initial and Continuing Calibration Blank Summary**

SDG No.: 10-1621

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>
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 22:37	022510-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	25-FEB-10 22:37	022510-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	25-FEB-10 22:37	022510-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	25-FEB-10 22:37	022510-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	25-FEB-10 22:37	022510-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	25-FEB-10 22:37	022510-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	25-FEB-10 22:37	022510-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 22:37	022510-1
	Sodium	100	+/-300	U	100	300	LIQ	P	25-FEB-10 22:37	022510-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 22:37	022510-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	25-FEB-10 22:37	022510-1
<b>CCB11</b>	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	25-FEB-10 23:39	022510-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	25-FEB-10 23:39	022510-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 23:39	022510-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	25-FEB-10 23:39	022510-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 23:39	022510-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 23:39	022510-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	25-FEB-10 23:39	022510-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	25-FEB-10 23:39	022510-1
	Magnesium	100.89	+/-300	J	85.0	300	LIQ	P	25-FEB-10 23:39	022510-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	25-FEB-10 23:39	022510-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	25-FEB-10 23:39	022510-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	25-FEB-10 23:39	022510-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 23:39	022510-1
	Sodium	100	+/-300	U	100	300	LIQ	P	25-FEB-10 23:39	022510-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	25-FEB-10 23:39	022510-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	25-FEB-10 23:39	022510-1
<b>CCB12</b>	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	26-FEB-10 00:42	022510-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	26-FEB-10 00:42	022510-1

**Metals**  
**-3a-**  
**Initial and Continuing Calibration Blank Summary**

SDG No.: 10-1621

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>
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	26-FEB-10 00:42	022510-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	26-FEB-10 00:42	022510-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	26-FEB-10 00:42	022510-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	26-FEB-10 00:42	022510-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	26-FEB-10 00:42	022510-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	26-FEB-10 00:42	022510-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	26-FEB-10 00:42	022510-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	26-FEB-10 00:42	022510-1
	Potassium	56.05	+/-150	J	50.0	150	LIQ	P	26-FEB-10 00:42	022510-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	26-FEB-10 00:42	022510-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	26-FEB-10 00:42	022510-1
	Sodium	100	+/-300	U	100	300	LIQ	P	26-FEB-10 00:42	022510-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	26-FEB-10 00:42	022510-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	26-FEB-10 00:42	022510-1
<b>CCB13</b>	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	26-FEB-10 01:45	022510-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	26-FEB-10 01:45	022510-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	26-FEB-10 01:45	022510-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	26-FEB-10 01:45	022510-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	26-FEB-10 01:45	022510-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	26-FEB-10 01:45	022510-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	26-FEB-10 01:45	022510-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	26-FEB-10 01:45	022510-1
	Magnesium	101.5	+/-300	J	85.0	300	LIQ	P	26-FEB-10 01:45	022510-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	26-FEB-10 01:45	022510-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	26-FEB-10 01:45	022510-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	26-FEB-10 01:45	022510-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	26-FEB-10 01:45	022510-1
	Sodium	100	+/-300	U	100	300	LIQ	P	26-FEB-10 01:45	022510-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	26-FEB-10 01:45	022510-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	26-FEB-10 01:45	022510-1

SW846

**METALS**  
**-3b-**  
**PREPARATION BLANK SUMMARY**

**SDG NO.** 10-1621  
**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>
1202036684	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
	Cobalt	1	ug/L	+/-5	U	P	1	5
	Chromium	1	ug/L	+/-5	U	P	1	5
	Calcium	50	ug/L	+/-200	U	P	50	200
	Copper	3	ug/L	+/-10	U	P	3	10
	Magnesium	85	ug/L	+/-300	U	P	85	300
	Potassium	50	ug/L	+/-150	U	P	50	150
	Zinc	3.3	ug/L	+/-10	U	P	3.3	10
	Vanadium	1	ug/L	+/-5	U	P	1	5
	Sodium	100	ug/L	+/-300	U	P	100	300
	Silver	1	ug/L	+/-5	U	P	1	5
	Selenium	5	ug/L	+/-30	U	P	5	30
	Nickel	1.5	ug/L	+/-5	U	P	1.5	5
	Iron	30	ug/L	+/-100	U	P	30	100
1202036698	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
	Antimony	0.5	ug/L	+/-3	U	MS	0.5	3
	Cadmium	0.11	ug/L	+/-1	U	MS	0.11	1
	Beryllium	0.1	ug/L	+/-0.5	U	MS	0.1	0.5
	Uranium	0.05	ug/L	+/-0.2	U	MS	0.05	0.2
1202039378	Mercury	0.066	ug/L	+/-0.2	U	AV	0.066	0.2

**METALS**  
**-4-**  
**Interference Check Sample**

SDG No: 10-1621

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

METALS  
-4-  
Interference Check Sample

SDG No: 10-1621

Contract: LANL01004

Lab Code: GEL

ICS:

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Silver	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**  
**-4-**  
**Interference Check Sample**

SDG No: 10-1621

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: ICPMS3

---

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICSA01	Thallium	-0.021	ug/L					05-MAR-10 12:41	100305-2
ICSAB01	Thallium	19.3	ug/L	20	ug/L	96.7	80.0 - 120.0	05-MAR-10 12:43	100305-2



**METALS**  
**-4-**  
**Interference Check Sample**

SDG No: 10-1621

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>
<b>ICSA01</b>									
	Antimony	0.137	ug/L					04-MAR-10 21:48	100304-3
	Cadmium	0.743	ug/L					04-MAR-10 21:48	100304-3
	Lead	0.23	ug/L					04-MAR-10 21:48	100304-3
<b>ICSAB01</b>									
	Antimony	21.7	ug/L	20	ug/L	108	80.0 – 120.0	04-MAR-10 21:53	100304-3
	Cadmium	20.5	ug/L	20.44	ug/L	100	80.0 – 120.0	04-MAR-10 21:53	100304-3
	Lead	21.9	ug/L	20.19	ug/L	109	80.0 – 120.0	04-MAR-10 21:53	100304-3

---

**METALS**  
**-4-**  
**Interference Check Sample**

**SDG No:** 10-1621

**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	-0.012	ug/L					05-MAR-10 07:17	100304-8
ICSAB01	Uranium	22.9	ug/L	20	ug/L	115	80.0 - 120.0	05-MAR-10 07:19	100304-8

---

**METALS**  
**-4-**  
**Interference Check Sample**

---

**SDG No:** 10-1621

**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>
<b>ICSA01</b>									
	Beryllium	0.105	ug/L					05-MAR-10 12:34	100305-9
	Manganese	6.1	ug/L					05-MAR-10 12:34	100305-9
<b>ICSAB01</b>									
	Beryllium	20.0	ug/L	20	ug/L	99.9	80.0 – 120.0	05-MAR-10 12:36	100305-9
	Manganese	28.2	ug/L	25.8	ug/L	109	80.0 – 120.0	05-MAR-10 12:36	100305-9

## METALS

-5a-

## Matrix Spike Summary

SDG NO. 10-1621

Client ID RE46-10-11893S

Contract: LANL01004

Level: Low

Matrix: WATER

% Solids:

Sample ID: 246431001

Spike ID: 1202036687

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/L	75-125	5630		73.5	J	5000	111		P
Arsenic	ug/L	75-125	514		5	U	500	103		P
Barium	ug/L	75-125	512		1	U	500	102		P
Calcium	ug/L	75-125	5450		50.1	J	5000	108		P
Chromium	ug/L	75-125	504		2.33	J	500	100		P
Cobalt	ug/L	75-125	492		1	U	500	98.4		P
Copper	ug/L	75-125	502		3	U	500	100		P
Iron	ug/L	75-125	5190		34.7	J	5000	103		P
Magnesium	ug/L	75-125	5460		85	U	5000	109		P
Nickel	ug/L	75-125	505		1.5	U	500	101		P
Potassium	ug/L	75-125	5310		76.5	J	5000	105		P
Selenium	ug/L	75-125	507		5	U	500	101		P
Silver	ug/L	75-125	495		1	U	500	99		P
Sodium	ug/L	75-125	5320		290	J	5000	101		P
Vanadium	ug/L	75-125	508		1	U	500	101		P
Zinc	ug/L	75-125	491		3.3	U	500	98		P

## METALS

-5a-

## Matrix Spike Summary

SDG NO. 10-1621 Client ID: CAMO-10-9108S

Contract: ESHL01000 Level: Low

Matrix: WATER % Solids:

Sample ID: 246293001 Spike ID: 1202036701

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Beryllium	ug/L	75-125	52.9		3.54		50	98.6		MS
Cadmium	ug/L	75-125	11.1		0.727	J	10	104		MS
Lead	ug/L	75-125	67		28.8		40	95.6		MS
Manganese	ug/L		316		261		50	109	N/A	MS
Thallium	ug/L	75-125	93.5		0.634	J	100	92.9		MS
Uranium	ug/L	75-125	55.9		2.83		50	106		MS
Antimony	ug/L	75-125	178		1.05	J	200	88.3		MS

## METALS

-5a-

## Matrix Spike Duplicate Summary

SDG NO. 10-1621 Client ID CAMO-10-9108SD

Contract: ESHL01000 Level: Low

Matrix: WATER % Solids:

Sample ID: 246293001 Spike ID: 1202036702

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Antimony	ug/L	75-125	177		1.05	J	200	87.8		MS
Beryllium	ug/L	75-125	53.1		3.54		50	99.2		MS
Cadmium	ug/L	75-125	11.1		0.727	J	10	104		MS
Lead	ug/L	75-125	67.9		28.8		40	97.7		MS
Manganese	ug/L		321		261		50	120	N/A	MS
Thallium	ug/L	75-125	93.6		0.634	J	100	93		MS
Uranium	ug/L	75-125	55.1		2.83		50	104		MS

## METALS

-5a-

## Matrix Spike Summary

SDG NO. 10-1621

Client ID: RE46-10-11893S

Contract: LANL01004

Level: Low

Matrix: WATER

% Solids:

Sample ID: 246431001

Spike ID: 1202039381

<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	1.93		0.066	U	2	96.7		AV

**Metals**  
**-6-**  
**Duplicate Sample Summary**

SDG No.: 10-1621

Contract: LANL01004

Lab Code: GEL

Matrix: LIQUID

Level: Low

Client ID: RE46-10-11893D

Sample ID: 246431001

Duplicate ID: 1202036686

Percent Solids for Dup: N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/L	+/-200	73.5 J		72.2 J		1.79		P
Arsenic	ug/L		5 U		5 U				P
Barium	ug/L		1 U		1 U				P
Calcium	ug/L		50.1 J		50 U		200		P
Chromium	ug/L	+/-5	2.33 J		2.55 J		9.31		P
Cobalt	ug/L		1 U		1 U				P
Copper	ug/L		3 U		3 U				P
Iron	ug/L	+/-100	34.7 J		56.4 J		47.6		P
Magnesium	ug/L		85 U		85 U				P
Nickel	ug/L		1.5 U		1.5 U				P
Potassium	ug/L	+/-150	76.5 J		86.5 J		12.4		P
Selenium	ug/L		5 U		5 U				P
Silver	ug/L		1 U		1 U				P
Sodium	ug/L	+/-300	290 J		279 J		3.92		P
Vanadium	ug/L		1 U		1 U				P
Zinc	ug/L		3.3 U		3.3 U				P



---

**Metals**  
**-6-**  
**Duplicate Sample Summary**

---

**SDG No.:** 10-1621

**Contract:** LANL01004

**Lab Code:** GEL

**Matrix:** LIQUID

**Level:** Low

**Client ID:** CAMO-10-9108D

**Sample ID:** 246293001

**Duplicate ID:** 1202036699

**Percent Solids for Dup:** N/A

---

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Antimony	ug/L	+/-3	1.05 J		1.06 J		1.04		MS
Beryllium	ug/L	+/-20%	3.54		3.59		1.37		MS
Cadmium	ug/L	+/-1	0.727 J		0.732 J		.685		MS
Lead	ug/L	+/-20%	28.8		30.7		6.55		MS
Manganese	ug/L	+/-20%	261		274		4.77		MS
Thallium	ug/L	+/-1	0.634 J		0.584 J		8.21		MS
Uranium	ug/L	+/-20%	2.83		2.97		4.69		MS

---

---

Metals  
-6-  
Duplicate Sample Summary

SDG No.: 10-1621

Contract: LANL01004

Lab Code: GEL

Matrix: LIQUID

Level: Low

Client ID: CAMO-10-9108SD

Sample ID: 1202036701

Duplicate ID: 1202036702

Percent Solids for Dup: N/A

---

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Antimony	ug/L	+/-20	178		177		.52		MS
Beryllium	ug/L	+/-20	52.9		53.1		.515		MS
Cadmium	ug/L	+/-20	11.1		11.1		.234		MS
Lead	ug/L	+/-20	67		67.9		1.24		MS
Manganese	ug/L	+/-20	316		321		1.71		MS
Thallium	ug/L	+/-20	93.5		93.6		.0502		MS
Uranium	ug/L	+/-20	55.9		55.1		1.4		MS

---

---

**Metals**  
**-6-**  
**Duplicate Sample Summary**

**SDG No.:** 10-1621

**Contract:** LANL01004

**Lab Code:** GEL

**Matrix:** LIQUID

**Level:** Low

**Client ID:** RE46-10-11893D

**Sample ID:** 246431001

**Duplicate ID:** 1202039380

**Percent Solids for Dup:** N/A

---

<b>Analyte</b>	<b>Units</b>	<b>Acceptance Limit</b>	<b>Sample Result</b>	<b>C</b>	<b>Duplicate Result</b>	<b>C</b>	<b>RPD</b>	<b>Qual</b>	<b>M</b>
Mercury	ug/L		0.066 U		0.066 U				AV

---

## METALS

-7-

## Laboratory Control Sample Summary

SDG NO. 10-1621

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>
1202036685								
	Aluminum	ug/L	5000	5180		104	80-120	P
	Arsenic	ug/L	500	496		99.2	80-120	P
	Barium	ug/L	500	492		98.4	80-120	P
	Calcium	ug/L	5000	5210		104	80-120	P
	Chromium	ug/L	500	482		96.4	80-120	P
	Cobalt	ug/L	500	472		94.3	80-120	P
	Copper	ug/L	500	482		96.4	80-120	P
	Iron	ug/L	5000	4890		97.8	80-120	P
	Magnesium	ug/L	5000	5260		105	80-120	P
	Nickel	ug/L	500	483		96.6	80-120	P
	Potassium	ug/L	5000	4940		98.8	80-120	P
	Selenium	ug/L	500	485		97	80-120	P
	Silver	ug/L	500	477		95.3	80-120	P
	Sodium	ug/L	5000	4660		93.2	80-120	P
	Vanadium	ug/L	500	487		97.5	80-120	P
	Zinc	ug/L	500	473		94.6	80-120	P

## METALS

-7-

## Laboratory Control Sample Summary

SDG NO. 10-1621

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>
1202036703								
	Beryllium	ug/L	50	59		118	80-120	MS
	Cadmium	ug/L	50	54.9		110	80-120	MS
	Lead	ug/L	50	56.2		112	80-120	MS
	Manganese	ug/L	50	58		116	80-120	MS
	Thallium	ug/L	50	52.2		104	80-120	MS
	Uranium	ug/L	50	57.1		114	80-120	MS
	Antimony	ug/L	50	57.8		116	80-120	MS

## METALS

-7-

## Laboratory Control Sample Summary

SDG NO. 10-1621

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>
1202039379	Mercury	ug/L	2	1.96		98.2	80-120	AV

## METALS

-9-

## Serial Dilution Sample Summary

SDG NO. 10-1621

Client ID: RE46-10-11893L

Contract: LANL01004

Matrix: LIQUID

Level: Low

Sample ID: 246431001

Serial Dilution ID: 1202036688

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Aluminum	73.5	J	340	U	100			P
Arsenic	5	U	25	U				P
Barium	1	U	5	U				P
Calcium	50.1	J	250	U	100			P
Chromium	2.33	J	5	U	100			P
Cobalt	1	U	5	U				P
Copper	3	U	15	U				P
Iron	34.7	J	150	U	100			P
Magnesium	85	U	505	J				P
Nickel	1.5	U	7.5	U				P
Potassium	76.5	J	250	U	100			P
Selenium	5	U	25	U				P
Silver	1	U	5	U				P
Sodium	290	J	500	U	100			P
Vanadium	1	U	5	U				P
Zinc	3.3	U	16.5	U				P

## METALS

-9-

## Serial Dilution Sample Summary

SDG NO. 10-1621 Client ID: CAMO-10-9108L

Contract: LANL01004

Matrix: LIQUID Level: Low

Sample ID: 246293001 Serial Dilution ID: 1202036700

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Antimony	1.05	J	2.5	U	100			MS
Beryllium	3.54		3.97		12.1			MS
Cadmium	.727	J	.645	J	11.3			MS
Lead	28.8		29.8		3.47			MS
Manganese	261		345		32	E	10	MS
Thallium	.634	J	4.68	J	638			MS
Uranium	2.83		2.77		2.3			MS



## METALS

-9-

## Serial Dilution Sample Summary

SDG NO. 10-1621 Client ID RE46-10-11893L

Contract: LANL01004

Matrix: LIQUID Level: Low

Sample ID: 246431001 Serial Dilution ID: 1202039382

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Mercury	.066	U	.33	U				AV

---

METALS  
-13-  
SAMPLE PREPARATION SUMMARY

SDG No: 10-1621

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	950390						
1202036684	MB for batch 950390	MB	W	16-FEB-10	50mL	50mL	
1202036685	LCS for batch 950390	LCS	W	16-FEB-10	50mL	50mL	
1202036687	RE46-10-11893S	MS	W	16-FEB-10	50mL	50mL	
1202036686	RE46-10-11893D	DUP	W	16-FEB-10	50mL	50mL	
246436001	RE15-10-8378	SAMPLE	W	16-FEB-10	50mL	50mL	

---

SW846

METALS  
-13-  
SAMPLE PREPARATION SUMMARY

SDG No: 10-1621

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	950395						
1202036698	MB for batch 950395	MB	W	16-FEB-10	50mL	50mL	
1202036703	LCS for batch 950395	LCS	W	16-FEB-10	50mL	50mL	
1202036701	CAMO-10-9108S	MS	W	16-FEB-10	50mL	50mL	
1202036702	CAMO-10-9108SD	MSD	W	16-FEB-10	50mL	50mL	
1202036699	CAMO-10-9108D	DUP	W	16-FEB-10	50mL	50mL	
246436001	RE15-10-8378	SAMPLE	W	16-FEB-10	50mL	50mL	

SW846

---

**METALS**  
**-13-**  
**SAMPLE PREPARATION SUMMARY**

SDG No: 10-1621

Method Type: AV

Contract: LANL01004

Lab Code: GEL

---

<u>Sample ID</u>	<u>Client ID</u>	<u>Sample Type</u>	<u>Matrix</u>	<u>Prep Date</u>	<u>Initial Sample Size</u>	<u>Final Sample Volume</u>	<u>Percent Solids</u>
Batch Number	951592						
1202039378	MB for batch 951592	MB	W	16-FEB-10	20mL	20mL	
1202039379	LCS for batch 951592	LCS	W	16-FEB-10	20mL	20mL	
1202039381	RE46-10-11893S	MS	W	16-FEB-10	20mL	20mL	
1202039380	RE46-10-11893D	DUP	W	16-FEB-10	20mL	20mL	
246436001	RE15-10-8378	SAMPLE	W	16-FEB-10	20mL	20mL	

---

SW846

**Metals**  
**-14-**  
**Analysis Run Log**

**Contract:** LANL01004**Lab Code:** GEL**Inst Name:** ICPMS5**Start Date:** 04-MAR-10**Client Sdg:** 10-1621**Method:** MS**Data File:** 100304-3**End Date:** 05-MAR-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	21:20		X				X						X												
S10	1	21:25		X				X						X												
S100	1	21:30		X				X						X												
ICV01	1	21:34		X				X						X												
ICB01	1	21:39		X				X						X												
CRDL01	1	21:43		X				X						X												
ICSA01	1	21:48		X				X						X												
ICSAB01	1	21:53		X				X						X												
CCV01	1	21:57		X				X						X												
CCB01	1	22:02		X				X						X												
1202036698	1	22:06		X				X						X												
1202036703	1	22:11		X				X						X												
ZZZZZZ	1	22:16																								
1202036699	1	22:20		X				X						X												
1202036701	1	22:25		X				X						X												
1202036702	1	22:29		X				X						X												
1202036700	5	22:34		X				X						X												
ZZZZZZ	1	22:39																								
CCV02	1	22:43		X				X						X												
CCB02	1	22:48		X				X						X												
ZZZZZZ	1	22:52																								
ZZZZZZ	1	22:57																								
ZZZZZZ	1	23:02																								
ZZZZZZ	1	23:06																								
ZZZZZZ	1	23:11																								
ZZZZZZ	1	23:15																								
246436001	1	23:20		X				X						X												
CCV03	1	23:25		X				X						X												
CCB03	1	23:29		X				X						X												

**Metals**  
**-14-**  
**Analysis Run Log**

**Contract:** LANL01004**Lab Code:** GEL**Inst Name:** ICPMS5**Start Date:** 04-MAR-10**Client Sdg:** 10-1621**Method:** MS**Data File:** 100304-8**End Date:** 05-MAR-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	07:07																						X		
S10	1	07:09																						X		
S100	1	07:10																						X		
ICV01	1	07:12																						X		
ICB01	1	07:14																						X		
CRDL01	1	07:15																						X		
ICSA01	1	07:17																						X		
ICSAB01	1	07:19																						X		
CCV01	1	07:20																						X		
CCB01	1	07:22																						X		
1202036698	1	07:24																						X		
1202036703	1	07:25																						X		
ZZZZZZ	1	07:27																								
1202036699	1	07:29																						X		
1202036701	1	07:30																						X		
1202036702	1	07:32																						X		
1202036700	5	07:34																						X		
ZZZZZZ	1	07:35																								
CCV02	1	07:37																						X		
CCB02	1	07:39																						X		
ZZZZZZ	1	07:40																								
ZZZZZZ	1	07:42																								
ZZZZZZ	1	07:44																								
ZZZZZZ	1	07:45																								
ZZZZZZ	1	07:47																								
ZZZZZZ	1	07:49																								
246436001	1	07:50																						X		
CCV03	1	07:52																						X		
CCB03	1	07:54																						X		

**Metals**  
**-14-**  
**Analysis Run Log**

**Contract:** LANL01004**Lab Code:** GEL**Inst Name:** ICPMS5**Start Date:** 05-MAR-10**Client Sdg:** 10-1621**Method:** MS**Data File:** 100305-9**End Date:** 05-MAR-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	12:23					X									X										
S10	1	12:25					X									X										
S100	1	12:27					X									X										
ICV01	1	12:28					X									X										
ICB01	1	12:30					X									X										
CRDL01	1	12:32					X									X										
ICSA01	1	12:34					X									X										
ICSAB01	1	12:36					X									X										
CCV01	1	12:38					X									X										
CCB01	1	12:39					X									X										
LR01	1	12:41					X									X										
CCV02	1	12:43					X									X										
CCB02	1	12:45					X									X										
1202036698	1	12:47					X									X										
1202036703	1	12:48					X									X										
ZZZZZZ	1	12:50																								
1202036699	1	12:52					X									X										
1202036701	1	12:54					X									X										
1202036702	1	12:56					X									X										
1202036700	5	12:57					X									X										
ZZZZZZ	1	12:59																								
CCV03	1	13:01					X									X										
CCB03	1	13:03					X									X										
ZZZZZZ	1	13:05																								
ZZZZZZ	1	13:07																								
ZZZZZZ	1	13:08																								
ZZZZZZ	1	13:10																								
ZZZZZZ	1	13:12																								
ZZZZZZ	1	13:14																								
246436001	1	13:16					X									X										
CCV04	1	13:17					X									X										
CCB04	1	13:19					X									X										

**Metals**  
**-14-**  
**Analysis Run Log**

Contract: LANL01004

Lab Code: GEL

Inst Name: OPTIMA3

Start Date: 25-FEB-10

Client Sdg: 10-1621

Method P

Data File: 022510-1

End Date: 26-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	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
ZZZZZ	1	14:23																								
ZZZZZ	1	14:29																								
ZZZZZ	1	14:36																								
ZZZZZ	1	14:43																								
ZZZZZ	1	14:50																								
ZZZZZ	5	14:57																								
ZZZZZ	1	15:04																								
ZZZZZ	1	15:10																								
ZZZZZ	1	15:17																								
ZZZZZ	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
ZZZZZ	1	15:45																								
ZZZZZ	1	15:52																								
ZZZZZ	1	15:59																								
ZZZZZ	1	16:06																								
ZZZZZ	1	16:12																								
ZZZZZ	1	16:19																								
ZZZZZ	1	16:26																								
ZZZZZ	1	16:33																								
ZZZZZ	1	16:39																								
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	X	X	X					X	X		
CCV05	1	17:18	X		X	X			X	X	X	X	X		X			X	X	X	X	X					X	X		
CCB05	1	17:25	X		X	X			X	X	X	X	X		X			X	X	X	X	X					X	X		
ZZZZZZ	10	17:33																												
ZZZZZZ	10	17:40																												
ZZZZZZ	10	17:47																												
ZZZZZZ	50	17:54																												
ZZZZZZ	10	18:00																												
ZZZZZZ	10	18:07																												
ZZZZZZ	10	18:14																												
ZZZZZZ	10	18:21																												
CCV06	1	18:28	X		X	X			X	X	X	X	X		X			X	X	X	X	X					X	X		
CCB06	1	18:35	X		X	X			X	X	X	X	X		X			X	X	X	X	X					X	X		
ZZZZZZ	10	18:41																												
ZZZZZZ	10	18:48																												
ZZZZZZ	10	18:55																												
ZZZZZZ	10	19:02																												
ZZZZZZ	10	19:09																												
ZZZZZZ	10	19:16																												
ZZZZZZ	10	19:23																												
CCV07	1	19:29	X		X	X			X	X	X	X	X		X			X	X	X	X	X					X	X		
CCB07	1	19:36	X		X	X			X	X	X	X	X		X			X	X	X	X	X					X	X		
ZZZZZZ	100	19:43																												
ZZZZZZ	100	19:50																												
ZZZZZZ	100	19:58																												
ZZZZZZ	500	20:05																												
CCV08	1	20:12	X		X	X			X	X	X	X	X		X			X	X	X	X	X					X	X		
CCB08	1	20:19	X		X	X			X	X	X	X	X		X			X	X	X	X	X					X	X		
ZZZZZZ	1	20:25																												
ZZZZZZ	1	20:32																												
ZZZZZZ	100	20:39																												
ZZZZZZ	100	20:46																												
ZZZZZZ	100	20:53																												
ZZZZZZ	500	21:00																												
ZZZZZZ	100	21:07																												
ZZZZZZ	10	21:13																												
ZZZZZZ	10	21:20																												
CCV09	1	21:27	X		X	X			X	X	X	X	X		X			X	X	X	X	X					X	X		
CCB09	1	21:34	X		X	X			X	X	X	X	X		X			X	X	X	X	X					X	X		
ZZZZZZ	1	21:41																												

**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	21:48																								
ZZZZZZ	1	21:55																								
ZZZZZZ	1	22:02																								
ZZZZZZ	1	22:09																								
ZZZZZZ	1	22:16																								
ZZZZZZ	5	22:23																								
CCV10	1	22:30	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCB10	1	22:37	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ZZZZZZ	1	22:44																								
ZZZZZZ	1	22:51																								
ZZZZZZ	1	22:57																								
ZZZZZZ	1	23:04																								
ZZZZZZ	1	23:11																								
ZZZZZZ	5	23:18																								
ZZZZZZ	1	23:25																								
CCV11	1	23:32	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCB11	1	23:39	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
1202036684	1	23:46	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
1202036685	1	23:53	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ZZZZZZ	1	00:00																								
ZZZZZZ	1	00:07																								
ZZZZZZ	1	00:14																								
ZZZZZZ	1	00:21																								
ZZZZZZ	1	00:28																								
CCV12	1	00:35	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCB12	1	00:42	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
1202036686	1	00:49	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
1202036687	1	00:56	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
1202036688	5	01:03	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ZZZZZZ	1	01:10																								
ZZZZZZ	1	01:17																								
ZZZZZZ	1	01:24																								
246436001	1	01:31	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCV13	1	01:38	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCB13	1	01:45	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X

Metals  
-14-  
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: HG3

Start Date: 17-FEB-10

End Date: 17-FEB-10

Client Sdg: 10-1621

Method AV

Data File: 021710W2-10

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	09:36															X									
S0.2	1	09:38															X									
S0.5	1	09:40															X									
S2.0	1	09:42															X									
S5.0	1	09:44															X									
S10.0	1	09:46															X									
ICV01	1	09:48															X									
ICB01	1	09:50															X									
CRDL01	1	09:52															X									
CCV01	1	09:54															X									
CCB01	1	09:56															X									
ZZZZZZ	1	09:57																								
ZZZZZZ	1	09:59																								
ZZZZZZ	1	10:01																								
ZZZZZZ	1	10:03																								
ZZZZZZ	1	10:05																								
ZZZZZZ	1	10:07																								
ZZZZZZ	1	10:09																								
ZZZZZZ	1	10:11																								
ZZZZZZ	1	10:13																								
ZZZZZZ	5	10:15																								
CCV02	1	10:17															X									
CCB02	1	10:19															X									
ZZZZZZ	1	10:20																								
ZZZZZZ	1	10:22																								
ZZZZZZ	1	10:24																								
ZZZZZZ	1	10:26																								
ZZZZZZ	1	10:28																								
ZZZZZZ	1	10:30																								
ZZZZZZ	1	10:32																								
ZZZZZZ	1	10:34																								
ZZZZZZ	1	10:36																								
ZZZZZZ	1	10:38																								
CCV03	1	10:40															X									
CCB03	1	10:42															X									
ZZZZZZ	1	10:44																								
ZZZZZZ	1	10:45																								
ZZZZZZ	5	10:47																								
1202039378	1	10:49															X									
1202039379	1	10:51															X									

**Metals**  
**-14-**  
**Analysis Run Log**

Samp No.	D/F	Run Time
ZZZZZZ	1	10:53
ZZZZZZ	1	10:55
ZZZZZZ	1	10:57
1202039380	1	10:59
1202039381	1	11:01
CCV04	1	11:03
CCB04	1	11:05
1202039382	5	11:07
ZZZZZZ	1	11:09
ZZZZZZ	1	11:11
ZZZZZZ	1	11:12
246436001	1	11:14
ZZZZZZ	1	11:16
ZZZZZZ	1	11:18
ZZZZZZ	1	11:20
ZZZZZZ	1	11:22
ZZZZZZ	1	11:24
CCV05	1	11:26
CCB05	1	11:28

Metals  
-14-  
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: ICPMS3

Start Date: 05-MAR-10

Client Sdg: 10-1621

Method MS

Data File: 100305-2

End Date: 05-MAR-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	12:28																					X			
S10	1	12:30																					X			
S100	1	12:32																					X			
ICV01	1	12:34																					X			
ICB01	1	12:36																					X			
CRDL01	1	12:38																					X			
ICSA01	1	12:41																					X			
ICSAB01	1	12:43																					X			
CCV01	1	12:45																					X			
CCB01	1	12:47																					X			
ZZZZZZ	2	12:50																								
ZZZZZZ	40	12:53																								
ZZZZZZ	2	12:56																								
ZZZZZZ	2	12:58																								
ZZZZZZ	2	13:00																								
ZZZZZZ	2	13:02																								
ZZZZZZ	2	13:05																								
ZZZZZZ	2	13:07																								
ZZZZZZ	2	13:09																								
ZZZZZZ	10	13:11																								
CCV02	1	13:13																					X			
CCB02	1	13:16																					X			
ZZZZZZ	2	13:18																								
ZZZZZZ	2	13:20																								
ZZZZZZ	2	13:22																								
ZZZZZZ	2	13:24																								
ZZZZZZ	2	13:27																								
ZZZZZZ	2	13:29																								
ZZZZZZ	2	13:31																								
CCV03	1	13:33																					X			
CCB03	1	13:36																					X			
ZZZZZZ	2	13:40																								
CCV04	1	13:42																					X			
CCB04	1	13:44																					X			
ZZZZZZ	2	13:46																								
ZZZZZZ	40	13:48																								
ZZZZZZ	2	13:51																								
ZZZZZZ	2	13:53																								
ZZZZZZ	2	13:56																								
ZZZZZZ	2	13:58																								

4

**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
CCV09	1	15:29																					X			
CCB09	1	15:31																					X			

# Standards



---

**METALS**  
**-10-**  
**Instrument Detection Limits**

---

**SDG NO.** 10-1621

**Contract:** LANL01004

**Lab Code:** GEL

**MDL Effective Date:** 01-JUL-09

---

ICP/MS	<u>Analyte</u>	<u>Wavelength</u>	<u>MDL</u>	<u>RDL</u>
		<u>(nm)</u>	<u>ug/L</u>	<u>ug/L</u>
LIQUID	Aluminum		15.0	30
	Antimony		1.0	3
	Arsenic		1.6	5
	Barium		0.6	2
	Beryllium		0.1	.5
	Cadmium		0.11	1
	Calcium		65.0	200
	Chromium		2.0	10
	Cobalt		0.1	1
	Copper		0.33	1
	Iron		33.0	100
	Lead		0.5	2
	Magnesium		5.2	15
	Manganese		1.0	5
	Nickel		0.5	2
	Potassium		80.0	300
	Selenium		1.0	5
	Silver		0.2	1
	Sodium		80.0	250
	Thallium		0.3	1
	Uranium		0.05	.2
	Vanadium		3.0	10
	Zinc		3.0	10

**METALS**  
**-10-**  
**Instrument Detection Limits**

**SDG NO.** 10-1621

**Contract:** LANL01004

**Lab Code:** GEL

**MDL Effective Date:** 01-JUL-09

---

	<u>Analyte</u>	<u>Wavelength</u> <u>(nm)</u>	<u>MDL</u> <u>ug/L</u>	<u>RDL</u> <u>ug/L</u>
MERCURY				
LIQUID	Mercury		0.066	.2

**METALS**  
**-10-**  
**Instrument Detection Limits**

SDG NO. 10-1621

Contract: LANL01004

Lab Code: GEL

MDL Effective Date: 01-JUL-09

ICP	<u>Analyte</u>	<u>Wavelength</u>	<u>MDL</u>	<u>RDL</u>
		<u>(nm)</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-**  
**Interement Correction Factors**

Lab Code: GELGEL Job No: **10-1621**

Contract: LANL01004

Instrument: OPTIMA3

Effective Dates: **01-FEB-10**

Interement 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: 10-1621

Contract: LANL01004

Instrument: OPTIMA3

Effective Dates: 01-FEB-10

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

		Boron	Cadmium	Chromium	Cobalt	Copper
Parmname	Wavelength					
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: GELGEL Job No: **10-1621**

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: GELGEL Job No: **10-1621**

Contract: LANL01004

Instrument: OPTIMA3

Effective Dates: **01-FEB-10**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

		Nickel	Phosphorous	Potassium	Selenium	Silica
<b>Parmname</b>	<b>Wavelength</b>					
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: GELGEL Job No: **10-1621**Contract: LANL01004Instrument: OPTIMA3Effective 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: **10-1621**

Contract: LANL01004

Instrument: OPTIMA3

Effective Dates: **01-FEB-10**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Tin	Titanium	Uranium	Vanadium	Zinc
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. 10-1621

Contract: LANL01004

Lab Code: GEL

Instrument IDICPMS5

---

<u>Analyte</u>	<u>Integration Time (msec)</u>	<u>LDR</u>	<u>Units</u>	<u>Effective Date</u>
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
Aluminum	1	50000	ug/L	01-FEB-10

METALS  
-12-  
Linear Ranges

SDG NO. 10-1621

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>
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
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

---

**METALS**  
**-12-**  
**Linear Ranges**

---

SDG NO. 10-1621

Contract: LANL01004

Lab Code: GEL

Instrument ID ICPMS3

---

<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

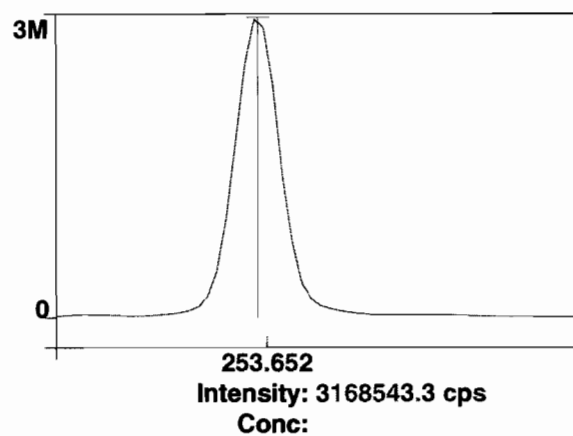
# Raw Data

Method: Hg\_ReAlign  
Result: 030510

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 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

=====  
Sequence No.: 1

Autosampler Location: 8

Sample ID: S0

Date Collected: 2/25/2010 12:17:29

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

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

-----  
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			Calib	
	Intensity	Std.Dev.	RSD	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	Conc. Units	Calib.	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	Calib Conc. 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	Conc. Units	Calib.	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

Rep1#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Units	Conc. Units	Sample 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	Conc. Units	Calib.	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 406.014†	-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: ICSA

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	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	Conc.	Calib. Units	Std.Dev.	Conc.	Sample 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:

-----  
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: LRL

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample 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	Conc. Units	Calib.	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	Conc. Units	Calib.	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	Conc. Units	Calib. Units	Conc. Units	Sample 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	Conc. Units	Calib.	Std.Dev.	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.: 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	Conc. Units	Calib. 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.: 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

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample	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.						

=====  
Analysis Begun

Start Time: 2/25/2010 17:18:17

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\022510A.sif

Batch ID:

Results Data Set: 022510

Results Library: C:\pe\Optima3\Results\Results.mdb

=====  
Sequence No.: 1

Autosampler Location: 1

Sample ID: CCV

Date Collected: 2/25/2010 17:18:18

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	3759.9	3759.9	97.5 %		17:20:30
1	Y RADIAL	4167.7	4167.7	93.62 %		17:20:10
1	Al 396.153Radial†	5281.2	5532.6	5176.2 ug/L	5176.2 ppb	17:20:10
1	Ca 317.933Radial†	2351.6	2393.6	5219.9 ug/L	5219.9 ppb	17:20:30
1	Fe 238.204 Radial†	311.4	307.7	4987.7 ug/L	4987.7 ppb	17:20:30
1	K 766.490 Radial†	28550.6	26522.5	5075.1 ug/L	5075.1 ppb	17:20:10
1	Mg 279.077 IEC†	100.7	102.1	5387.5 ug/L	5387.5 ppb	17:20:30
1	Na 589.592 Radial†	30388.3	32074.4	9980.4 ug/L	9980.4 ppb	17:20:10
1	Sr 421.552†	69841.4	71635.5	498.30 ug/L	498.30 ppb	17:20:10
1	Sc 361.383	914458.0	914458.0	103.91 %		17:21:27
1	Y 371.029	757770.0	757770.0	99.623 %		17:21:27
1	Ag 328.068†	107233.7	102967.3	481.48 ug/L	481.48 ppb	17:21:32
1	As 188.979†	1094.3	1073.1	481.33 ug/L	481.33 ppb	17:21:52
1	B 249.677†	19503.0	19047.7	464.66 ug/L	464.66 ppb	17:21:32
1	Ba 233.527†	63282.1	60891.6	479.83 ug/L	479.83 ppb	17:21:32
1	Be 313.107†	1337680.4	1290939.9	483.42 ug/L	483.42 ppb	17:21:27
1	Cd 226.502†	43119.1	41673.9	484.17 ug/L	484.17 ppb	17:21:32
1	Co 228.616†	23812.2	22981.6	482.77 ug/L	482.77 ppb	17:21:32
1	Cr 267.716†	44414.7	42659.5	479.63 ug/L	479.63 ppb	17:21:32
1	Cu 324.752†	167479.3	155226.7	472.96 ug/L	472.96 ppb	17:21:32
1	Mn 257.610†	442670.2	425547.5	485.08 ug/L	485.08 ppb	17:21:27
1	Mo 202.031†	6776.4	6516.9	480.45 ug/L	480.45 ppb	17:21:52
1	Ni 231.604†	19771.8	18945.6	483.20 ug/L	483.20 ppb	17:21:32
1	P 214.914†	4368.7	3998.6	2312.6 ug/L	2312.6 ppb	17:21:52
1	Pb 220.353†	4040.9	3827.8	475.07 ug/L	475.07 ppb	17:21:52
1	S 181.975 Axial†	761.0	696.6	981.19 ug/L	981.19 ppb	17:21:52
1	Sb 206.836†	1443.9	1350.5	493.86 ug/L	493.86 ppb	17:21:52
1	Se 196.026†	738.1	735.1	500.05 ug/L	500.05 ppb	17:21:52
1	Si 251.611†	78050.8	74551.2	2409.2 ug/L	2409.2 ppb	17:21:32
1	Sn 189.927†	2799.4	2684.7	484.78 ug/L	484.78 ppb	17:21:52
1	Ti 334.940†	312777.2	302426.2	476.39 ug/L	476.39 ppb	17:21:32
1	Tl 190.801†	1511.3	1481.9	479.90 ug/L	479.90 ppb	17:21:52
1	U 409.014†	14350.5	16712.7	465.05 ug/L	465.05 ppb	17:21:32
1	V 292.402†	69341.2	68202.6	482.83 ug/L	482.83 ppb	17:21:32
1	Zn 213.857†	50721.0	48074.3	480.87 ug/L	480.87 ppb	17:21:32
1	SiO2†	78865.2	75311.5	5215.6 ug/L	5215.6 ppb	17:23:00
2	Sc Radial	3803.1	3803.1	98.6 %		17:20:55
2	Y RADIAL	4078.3	4078.3	91.61 %		17:20:35
2	Al 396.153Radial†	5075.3	5262.3	4921.9 ug/L	4921.9 ppb	17:20:35
2	Ca 317.933Radial†	2363.7	2378.6	5187.0 ug/L	5187.0 ppb	17:20:55
2	Fe 238.204 Radial†	318.7	311.5	5048.7 ug/L	5048.7 ppb	17:20:55
2	K 766.490 Radial†	27589.7	25215.5	4824.9 ug/L	4824.9 ppb	17:20:35
2	Mg 279.077 IEC†	100.2	100.5	5302.0 ug/L	5302.0 ppb	17:20:55
2	Na 589.592 Radial†	29174.5	30489.5	9487.2 ug/L	9487.2 ppb	17:20:35
2	Sr 421.552†	67143.1	68085.4	473.61 ug/L	473.61 ppb	17:20:35
2	Sc 361.383	904863.7	904863.7	102.82 %		17:21:58
2	Y 371.029	749364.8	749364.8	98.518 %		17:21:58



2	Ag 328.068†	106066.9	102926.8	481.31 ug/L	481.31 ppb	17:22:03
2	As 188.979†	1108.8	1098.3	492.53 ug/L	492.53 ppb	17:22:23
2	B 249.677†	19277.0	19026.8	464.14 ug/L	464.14 ppb	17:22:03
2	Ba 233.527†	62857.0	61123.9	481.65 ug/L	481.65 ppb	17:22:03
2	Be 313.107†	1323255.3	1290560.1	483.28 ug/L	483.28 ppb	17:21:58
2	Cd 226.502†	42837.6	41840.2	486.10 ug/L	486.10 ppb	17:22:03
2	Co 228.616†	23599.2	23017.5	483.54 ug/L	483.54 ppb	17:22:03
2	Cr 267.716†	44171.1	42875.9	482.06 ug/L	482.06 ppb	17:22:03
2	Cu 324.752†	165127.0	154647.9	471.20 ug/L	471.20 ppb	17:22:03
2	Mn 257.610†	438992.1	426487.3	486.16 ug/L	486.16 ppb	17:21:58
2	Mo 202.031†	6806.3	6615.2	487.70 ug/L	487.70 ppb	17:22:23
2	Ni 231.604†	19638.1	19017.3	485.03 ug/L	485.03 ppb	17:22:03
2	P 214.914†	4414.7	4087.9	2366.7 ug/L	2366.7 ppb	17:22:23
2	Pb 220.353†	4059.6	3887.2	482.38 ug/L	482.38 ppb	17:22:23
2	S 181.975 Axial†	759.2	702.6	989.73 ug/L	989.73 ppb	17:22:23
2	Sb 206.836†	1456.0	1377.1	503.54 ug/L	503.54 ppb	17:22:23
2	Se 196.026†	743.1	747.5	508.37 ug/L	508.37 ppb	17:22:23
2	Si 251.611†	77250.4	74569.2	2409.7 ug/L	2409.7 ppb	17:22:03
2	Sn 189.927†	2826.0	2739.2	494.59 ug/L	494.59 ppb	17:22:23
2	Ti 334.940†	309305.5	302241.3	476.11 ug/L	476.11 ppb	17:22:03
2	Tl 190.801†	1527.0	1512.6	489.77 ug/L	489.77 ppb	17:22:23
2	U 409.014†	14028.5	16546.0	460.38 ug/L	460.38 ppb	17:22:03
2	V 292.402†	68392.5	67987.5	481.41 ug/L	481.41 ppb	17:22:03
2	Zn 213.857†	50271.0	48154.2	481.66 ug/L	481.66 ppb	17:22:03
2	SiO2†	78197.8	75467.2	5226.2 ug/L	5226.2 ppb	17:23:05
3	Sc Radial	3784.4	3784.4	98.1 %		17:21:20
3	Y RADIAL	4304.8	4304.8	96.70 %		17:21:00
3	Al 396.153Radial†	5301.4	5518.1	5162.5 ug/L	5162.5 ppb	17:21:00
3	Ca 317.933Radial†	2342.4	2368.6	5165.3 ug/L	5165.3 ppb	17:21:20
3	Fe 238.204 Radial†	312.2	306.5	4967.2 ug/L	4967.2 ppb	17:21:20
3	K 766.490 Radial†	28619.1	26402.5	5052.1 ug/L	5052.1 ppb	17:21:00
3	Mg 279.077 IEC†	97.4	98.1	5174.1 ug/L	5174.1 ppb	17:21:20
3	Na 589.592 Radial†	30738.2	32228.9	10028 ug/L	10028 ppb	17:21:00
3	Sr 421.552†	70709.5	72055.9	501.23 ug/L	501.23 ppb	17:21:00
3	Sc 361.383	910747.9	910747.9	103.49 %		17:22:29
3	Y 371.029	753330.4	753330.4	99.040 %		17:22:29
3	Ag 328.068†	106252.3	102439.4	479.02 ug/L	479.02 ppb	17:22:34
3	As 188.979†	1114.5	1096.8	491.85 ug/L	491.85 ppb	17:22:55
3	B 249.677†	19363.0	18988.9	463.23 ug/L	463.23 ppb	17:22:34
3	Ba 233.527†	62843.9	60716.2	478.44 ug/L	478.44 ppb	17:22:34
3	Be 313.107†	1329133.4	1287925.0	482.29 ug/L	482.29 ppb	17:22:29
3	Cd 226.502†	42815.2	41549.3	482.72 ug/L	482.72 ppb	17:22:34
3	Co 228.616†	23597.9	22868.0	480.40 ug/L	480.40 ppb	17:22:34
3	Cr 267.716†	44054.6	42485.7	477.68 ug/L	477.68 ppb	17:22:34
3	Cu 324.752†	165677.2	154141.9	469.65 ug/L	469.65 ppb	17:22:34
3	Mn 257.610†	440896.7	425569.2	485.11 ug/L	485.11 ppb	17:22:29
3	Mo 202.031†	6788.9	6555.6	483.30 ug/L	483.30 ppb	17:22:55
3	Ni 231.604†	19644.5	18900.0	482.04 ug/L	482.04 ppb	17:22:34
3	P 214.914†	4391.1	4037.4	2336.7 ug/L	2336.7 ppb	17:22:55
3	Pb 220.353†	4043.1	3845.8	477.31 ug/L	477.31 ppb	17:22:55
3	S 181.975 Axial†	764.2	702.6	989.67 ug/L	989.67 ppb	17:22:55
3	Sb 206.836†	1460.5	1372.3	501.66 ug/L	501.66 ppb	17:22:55
3	Se 196.026†	734.8	734.8	499.78 ug/L	499.78 ppb	17:22:55
3	Si 251.611†	77357.7	74187.5	2397.4 ug/L	2397.4 ppb	17:22:34
3	Sn 189.927†	2809.1	2705.1	488.44 ug/L	488.44 ppb	17:22:55
3	Ti 334.940†	309902.2	300874.3	473.96 ug/L	473.96 ppb	17:22:34
3	Tl 190.801†	1525.2	1501.3	486.13 ug/L	486.13 ppb	17:22:55
3	U 409.014†	14282.1	16703.0	464.78 ug/L	464.78 ppb	17:22:34
3	V 292.402†	68712.9	67867.2	480.53 ug/L	480.53 ppb	17:22:34
3	Zn 213.857†	50258.8	47826.5	478.38 ug/L	478.38 ppb	17:22:34
3	SiO2†	78510.1	75277.6	5213.2 ug/L	5213.2 ppb	17:23:10

-----  
Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	910023.2	103.40 %	0.550			0.53%
Sc Radial	3782.5	98.1 %	0.56			0.57%
Y 371.029	753488.4	99.060 %	0.5528			0.56%
Y RADIAL	4183.6	93.98 %	2.563			2.73%
Ag 328.068†	102777.9	480.60 ug/L	1.378	480.60 ppb	1.378	0.29%

QC value within limits for Ag 328.068 Recovery = 96.12%							
Al	396.153Radial†	5437.7	5086.8 ug/L	143.05	5086.8 ppb	143.05	2.81%
QC value within limits for Al 396.153Radial Recovery = 101.74%							
As	188.979†	1089.4	488.57 ug/L	6.280	488.57 ppb	6.280	1.29%
QC value within limits for As 188.979 Recovery = 97.71%							
B	249.677†	19021.1	464.01 ug/L	0.725	464.01 ppb	0.725	0.16%
QC value within limits for B 249.677 Recovery = 92.80%							
Ba	233.527†	60910.5	479.97 ug/L	1.610	479.97 ppb	1.610	0.34%
QC value within limits for Ba 233.527 Recovery = 95.99%							
Be	313.107†	1289808.3	483.00 ug/L	0.617	483.00 ppb	0.617	0.13%
QC value within limits for Be 313.107 Recovery = 96.60%							
Ca	317.933Radial†	2380.3	5190.7 ug/L	27.45	5190.7 ppb	27.45	0.53%
QC value within limits for Ca 317.933Radial Recovery = 103.81%							
Cd	226.502†	41687.8	484.33 ug/L	1.692	484.33 ppb	1.692	0.35%
QC value within limits for Cd 226.502 Recovery = 96.87%							
Co	228.616†	22955.7	482.24 ug/L	1.639	482.24 ppb	1.639	0.34%
QC value within limits for Co 228.616 Recovery = 96.45%							
Cr	267.716†	42673.7	479.79 ug/L	2.199	479.79 ppb	2.199	0.46%
QC value within limits for Cr 267.716 Recovery = 95.96%							
Cu	324.752†	154672.2	471.27 ug/L	1.654	471.27 ppb	1.654	0.35%
QC value within limits for Cu 324.752 Recovery = 94.25%							
Fe	238.204 Radial†	308.6	5001.2 ug/L	42.43	5001.2 ppb	42.43	0.85%
QC value within limits for Fe 238.204 Radial Recovery = 100.02%							
K	766.490 Radial†	26046.8	4984.0 ug/L	138.31	4984.0 ppb	138.31	2.78%
QC value within limits for K 766.490 Radial Recovery = 99.68%							
Mg	279.077 IEC†	100.2	5287.9 ug/L	107.42	5287.9 ppb	107.42	2.03%
QC value within limits for Mg 279.077 IEC Recovery = 105.76%							
Mn	257.610†	425868.0	485.45 ug/L	0.615	485.45 ppb	0.615	0.13%
QC value within limits for Mn 257.610 Recovery = 97.09%							
Mo	202.031†	6562.6	483.81 ug/L	3.649	483.81 ppb	3.649	0.75%
QC value within limits for Mo 202.031 Recovery = 96.76%							
Na	589.592 Radial†	31597.6	9832.0 ug/L	299.58	9832.0 ppb	299.58	3.05%
QC value within limits for Na 589.592 Radial Recovery = 98.32%							
Ni	231.604†	18954.3	483.43 ug/L	1.508	483.43 ppb	1.508	0.31%
QC value within limits for Ni 231.604 Recovery = 96.69%							
P	214.914†	4041.3	2338.7 ug/L	27.08	2338.7 ppb	27.08	1.16%
QC value within limits for P 214.914 Recovery = 93.55%							
Pb	220.353†	3853.6	478.25 ug/L	3.744	478.25 ppb	3.744	0.78%
QC value within limits for Pb 220.353 Recovery = 95.65%							
S	181.975 Axial†	700.6	986.86 ug/L	4.915	986.86 ppb	4.915	0.50%
QC value within limits for S 181.975 Axial Recovery = 98.69%							
Sb	206.836†	1366.7	499.69 ug/L	5.136	499.69 ppb	5.136	1.03%
QC value within limits for Sb 206.836 Recovery = 99.94%							
Se	196.026†	739.1	502.73 ug/L	4.883	502.73 ppb	4.883	0.97%
QC value within limits for Se 196.026 Recovery = 100.55%							
Si	251.611†	74436.0	2405.4 ug/L	6.97	2405.4 ppb	6.97	0.29%
QC value within limits for Si 251.611 Recovery = 96.22%							
Sn	189.927†	2709.7	489.27 ug/L	4.958	489.27 ppb	4.958	1.01%
QC value within limits for Sn 189.927 Recovery = 97.85%							
Sr	421.552†	70592.3	491.05 ug/L	15.174	491.05 ppb	15.174	3.09%
QC value within limits for Sr 421.552 Recovery = 98.21%							
Ti	334.940†	301847.3	475.49 ug/L	1.330	475.49 ppb	1.330	0.28%
QC value within limits for Ti 334.940 Recovery = 95.10%							
Tl	190.801†	1498.6	485.26 ug/L	4.991	485.26 ppb	4.991	1.03%
QC value within limits for Tl 190.801 Recovery = 97.05%							
U	409.014†	16653.9	463.40 ug/L	2.622	463.40 ppb	2.622	0.57%
QC value within limits for U 409.014 Recovery = 92.68%							
V	292.402†	68019.1	481.59 ug/L	1.161	481.59 ppb	1.161	0.24%
QC value within limits for V 292.402 Recovery = 96.32%							
Zn	213.857†	48018.4	480.30 ug/L	1.709	480.30 ppb	1.709	0.36%
QC value within limits for Zn 213.857 Recovery = 96.06%							
SiO2†		75352.1	5218.3 ug/L	6.94	5218.3 ppb	6.94	0.13%
QC value within limits for SiO2 Recovery = 97.58%							
All analyte(s) passed QC.							

Sequence No.: 2

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 2/25/2010 17:25:20

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	3750.3	3750.3	97.2 %		17:27:32
1	Y RADIAL	4212.8	4212.8	94.63 %		17:27:12
1	Al 396.153Radial†	-138.8	-27.7	-26.055 ug/L	-26.055 ppb	17:27:12
1	Ca 317.933Radial†	16.8	-1.4	-3.0199 ug/L	-3.0199 ppb	17:27:32
1	Fe 238.204 Radial†	12.4	1.1	18.076 ug/L	18.076 ppb	17:27:32
1	K 766.490 Radial†	2863.2	179.5	34.396 ug/L	34.396 ppb	17:27:12
1	Mg 279.077 IEC†	1.7	0.6	29.971 ug/L	29.971 ppb	17:27:32
1	Na 589.592 Radial†	-917.6	-42.0	-13.057 ug/L	-13.057 ppb	17:27:12
1	Sr 421.552†	-24.4	-33.8	-0.2352 ug/L	-0.2352 ppb	17:27:12
1	Sc 361.383	912422.9	912422.9	103.68 %		17:28:29
1	Y 371.029	767919.6	767919.6	100.96 %		17:28:29
1	Ag 328.068†	222.4	-19.7	-0.0856 ug/L	-0.0856 ppb	17:28:34
1	As 188.979†	-19.0	1.6	0.7337 ug/L	0.7337 ppb	17:28:54
1	B 249.677†	-429.1	-135.9	-3.3334 ug/L	-3.3334 ppb	17:28:54
1	Ba 233.527†	6.7	-4.6	-0.0354 ug/L	-0.0354 ppb	17:28:54
1	Be 313.107†	-3543.0	140.9	0.0525 ug/L	0.0525 ppb	17:28:34
1	Cd 226.502†	-177.8	4.7	0.0519 ug/L	0.0519 ppb	17:28:54
1	Co 228.616†	-65.9	1.3	0.0296 ug/L	0.0296 ppb	17:28:54
1	Cr 267.716†	74.5	-13.2	-0.1468 ug/L	-0.1468 ppb	17:28:54
1	Cu 324.752†	5918.7	-246.3	-0.7493 ug/L	-0.7493 ppb	17:28:34
1	Mn 257.610†	466.4	-27.8	-0.0311 ug/L	-0.0311 ppb	17:28:54
1	Mo 202.031†	17.2	12.0	0.8816 ug/L	0.8816 ppb	17:28:54
1	Ni 231.604†	65.7	-19.4	-0.4948 ug/L	-0.4948 ppb	17:28:54
1	P 214.914†	221.6	8.0	4.9258 ug/L	4.9258 ppb	17:28:54
1	Pb 220.353†	-28.3	-88.5	-10.951 ug/L	-10.951 ppb	17:28:54
1	S 181.975 Axial†	36.4	-0.7	-0.9719 ug/L	-0.9719 ppb	17:28:54
1	Sb 206.836†	44.0	3.4	1.2561 ug/L	1.2561 ppb	17:28:54
1	Se 196.026†	-25.7	-0.1	0.0127 ug/L	0.0127 ppb	17:28:54
1	Si 251.611†	587.3	1.7	0.0454 ug/L	0.0454 ppb	17:28:54
1	Sn 189.927†	19.5	9.4	1.6966 ug/L	1.6966 ppb	17:28:54
1	Ti 334.940†	-1494.5	-31.7	-0.0526 ug/L	-0.0526 ppb	17:28:34
1	Tl 190.801†	-34.1	-5.4	-1.7467 ug/L	-1.7467 ppb	17:28:54
1	U 409.014†	-3015.3	-6.5	-0.1846 ug/L	-0.1846 ppb	17:28:29
1	V 292.402†	-1520.9	1.7	0.0222 ug/L	0.0222 ppb	17:28:34
1	Zn 213.857†	692.1	-71.9	-0.7246 ug/L	-0.7246 ppb	17:28:54
1	SiO2†	573.2	-35.4	-2.4794 ug/L	-2.4794 ppb	17:30:00
2	Sc Radial	3840.8	3840.8	99.6 %		17:27:57
2	Y RADIAL	4294.5	4294.5	96.47 %		17:27:37
2	Al 396.153Radial†	-133.9	-19.4	-18.198 ug/L	-18.198 ppb	17:27:37
2	Ca 317.933Radial†	16.8	-1.8	-3.9098 ug/L	-3.9098 ppb	17:27:57
2	Fe 238.204 Radial†	9.6	-2.0	-32.093 ug/L	-32.093 ppb	17:27:57
2	K 766.490 Radial†	2868.2	115.3	22.091 ug/L	22.091 ppb	17:27:37
2	Mg 279.077 IEC†	5.0	3.8	200.78 ug/L	200.78 ppb	17:27:57
2	Na 589.592 Radial†	-965.3	-67.6	-21.050 ug/L	-21.050 ppb	17:27:37
2	Sr 421.552†	65.4	56.9	0.3959 ug/L	0.3959 ppb	17:27:37
2	Sc 361.383	924671.0	924671.0	105.07 %		17:28:59
2	Y 371.029	777041.0	777041.0	102.16 %		17:28:59
2	Ag 328.068†	281.6	33.8	0.1469 ug/L	0.1469 ppb	17:29:04
2	As 188.979†	-29.2	-7.9	-3.5234 ug/L	-3.5234 ppb	17:29:24
2	B 249.677†	-467.4	-166.8	-4.0851 ug/L	-4.0851 ppb	17:29:24
2	Ba 233.527†	-10.8	-21.3	-0.1669 ug/L	-0.1669 ppb	17:29:24
2	Be 313.107†	-3680.3	55.4	0.0202 ug/L	0.0202 ppb	17:29:04
2	Cd 226.502†	-175.8	8.9	0.1065 ug/L	0.1065 ppb	17:29:24
2	Co 228.616†	-52.5	14.9	0.3138 ug/L	0.3138 ppb	17:29:24
2	Cr 267.716†	76.7	-12.1	-0.1393 ug/L	-0.1393 ppb	17:29:24
2	Cu 324.752†	6062.7	-184.9	-0.5669 ug/L	-0.5669 ppb	17:29:04
2	Mn 257.610†	483.0	-18.0	-0.0318 ug/L	-0.0318 ppb	17:29:24
2	Mo 202.031†	1.8	-3.0	-0.2232 ug/L	-0.2232 ppb	17:29:24
2	Ni 231.604†	57.3	-28.3	-0.7213 ug/L	-0.7213 ppb	17:29:24

2	P 214.914†	207.4	-8.4	-4.9271 ug/L	-4.9271 ppb	17:29:24
2	Pb 220.353†	-37.1	-96.5	-11.937 ug/L	-11.937 ppb	17:29:24
2	S 181.975 Axial†	48.5	10.3	14.578 ug/L	14.578 ppb	17:29:24
2	Sb 206.836†	34.7	-5.9	-2.0922 ug/L	-2.0922 ppb	17:29:24
2	Se 196.026†	-31.3	-5.1	-3.4326 ug/L	-3.4326 ppb	17:29:24
2	Si 251.611†	553.8	-37.7	-1.2172 ug/L	-1.2172 ppb	17:29:24
2	Sn 189.927†	13.0	3.0	0.5353 ug/L	0.5353 ppb	17:29:24
2	Ti 334.940†	-1642.8	-153.7	-0.2605 ug/L	-0.2605 ppb	17:29:04
2	Tl 190.801†	-30.8	-1.8	-0.5949 ug/L	-0.5949 ppb	17:29:24
2	U 409.014†	-2915.6	126.9	3.5481 ug/L	3.5481 ppb	17:28:59
2	V 292.402†	-1454.1	84.8	0.6047 ug/L	0.6047 ppb	17:29:04
2	Zn 213.857†	701.3	-72.0	-0.7169 ug/L	-0.7169 ppb	17:29:24
2	SiO2†	588.9	-27.7	-1.9167 ug/L	-1.9167 ppb	17:30:05
3	Sc Radial	3835.1	3835.1	99.4 %		17:28:22
3	Y RADIAL	4312.0	4312.0	96.86 %		17:28:02
3	Al 396.153Radial†	-134.1	-19.8	-18.604 ug/L	-18.604 ppb	17:28:02
3	Ca 317.933Radial†	19.2	0.7	1.4863 ug/L	1.4863 ppb	17:28:22
3	Fe 238.204 Radial†	10.4	-1.2	-19.730 ug/L	-19.730 ppb	17:28:22
3	K 766.490 Radial†	2828.6	79.6	15.267 ug/L	15.267 ppb	17:28:02
3	Mg 279.077 IEC†	0.7	-0.4	-22.271 ug/L	-22.271 ppb	17:28:22
3	Na 589.592 Radial†	-969.5	-73.3	-22.819 ug/L	-22.819 ppb	17:28:02
3	Sr 421.552†	-0.4	-9.1	-0.0636 ug/L	-0.0636 ppb	17:28:02
3	Sc 361.383	913095.5	913095.5	103.75 %		17:29:29
3	Y 371.029	766831.1	766831.1	100.81 %		17:29:29
3	Ag 328.068†	287.4	42.9	0.1888 ug/L	0.1888 ppb	17:29:34
3	As 188.979†	-15.6	4.9	2.1781 ug/L	2.1781 ppb	17:29:54
3	B 249.677†	-452.7	-158.4	-3.8780 ug/L	-3.8780 ppb	17:29:54
3	Ba 233.527†	-6.2	-17.0	-0.1346 ug/L	-0.1346 ppb	17:29:54
3	Be 313.107†	-3590.0	98.1	0.0368 ug/L	0.0368 ppb	17:29:34
3	Cd 226.502†	-173.5	9.0	0.1070 ug/L	0.1070 ppb	17:29:54
3	Co 228.616†	-66.4	0.8	0.0185 ug/L	0.0185 ppb	17:29:54
3	Cr 267.716†	68.0	-19.6	-0.2235 ug/L	-0.2235 ppb	17:29:54
3	Cu 324.752†	5891.0	-277.2	-0.8480 ug/L	-0.8480 ppb	17:29:34
3	Mn 257.610†	468.7	-25.9	-0.0306 ug/L	-0.0306 ppb	17:29:54
3	Mo 202.031†	8.4	3.4	0.2499 ug/L	0.2499 ppb	17:29:54
3	Ni 231.604†	82.3	-3.5	-0.0882 ug/L	-0.0882 ppb	17:29:54
3	P 214.914†	200.2	-12.8	-7.5278 ug/L	-7.5278 ppb	17:29:54
3	Pb 220.353†	-39.8	-99.5	-12.316 ug/L	-12.316 ppb	17:29:54
3	S 181.975 Axial†	39.5	2.2	3.1674 ug/L	3.1674 ppb	17:29:54
3	Sb 206.836†	35.8	-4.5	-1.5817 ug/L	-1.5817 ppb	17:29:54
3	Se 196.026†	-24.9	0.8	0.4430 ug/L	0.4430 ppb	17:29:54
3	Si 251.611†	563.4	-21.7	-0.7061 ug/L	-0.7061 ppb	17:29:54
3	Sn 189.927†	14.9	5.0	0.8982 ug/L	0.8982 ppb	17:29:54
3	Ti 334.940†	-1425.2	36.2	0.0572 ug/L	0.0572 ppb	17:29:34
3	Tl 190.801†	-32.6	-4.0	-1.2699 ug/L	-1.2699 ppb	17:29:54
3	U 409.014†	-2848.0	156.9	4.3831 ug/L	4.3831 ppb	17:29:29
3	V 292.402†	-1556.3	-31.4	-0.2046 ug/L	-0.2046 ppb	17:29:34
3	Zn 213.857†	695.3	-69.2	-0.6944 ug/L	-0.6944 ppb	17:29:54
3	SiO2†	586.1	-23.3	-1.6263 ug/L	-1.6263 ppb	17:30:10

-----  
Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	916729.8	104.17 %	0.782			0.75%
Sc Radial	3808.7	98.7 %	1.31			1.33%
Y 371.029	770597.2	101.31 %	0.737			0.73%
Y RADIAL	4273.1	95.99 %	1.190			1.24%
Ag 328.068†	19.0	0.0834 ug/L	0.14783	0.0834 ppb	0.14783	177.35%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-22.3	-20.952 ug/L	4.4234	-20.952 ppb	4.4234	21.11%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-0.4	-0.2039 ug/L	2.96411	-0.2039 ppb	2.96411	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-153.7	-3.7655 ug/L	0.38826	-3.7655 ppb	0.38826	10.31%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	-14.3	-0.1123 ug/L	0.06855	-0.1123 ppb	0.06855	61.03%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	98.2	0.0365 ug/L	0.01618	0.0365 ppb	0.01618	44.34%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-0.8	-1.8145 ug/L	2.89295	-1.8145 ppb	2.89295	159.44%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated

Cd 226.502†	7.5	0.0884 ug/L	0.03168	0.0884 ppb	0.03168	35.82%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	5.7	0.1206 ug/L	0.16738	0.1206 ppb	0.16738	138.77%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-15.0	-0.1699 ug/L	0.04659	-0.1699 ppb	0.04659	27.43%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-236.1	-0.7214 ug/L	0.14262	-0.7214 ppb	0.14262	19.77%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	-0.7	-11.249 ug/L	26.1379	-11.249 ppb	26.1379	232.36%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	124.8	23.918 ug/L	9.6942	23.918 ppb	9.6942	40.53%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	1.3	69.492 ug/L	116.6578	69.492 ppb	116.6578	167.87%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	-23.9	-0.0312 ug/L	0.00063	-0.0312 ppb	0.00063	2.02%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	4.1	0.3028 ug/L	0.55429	0.3028 ppb	0.55429	183.08%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	-61.0	-18.975 ug/L	5.2010	-18.975 ppb	5.2010	27.41%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	-17.0	-0.4348 ug/L	0.32077	-0.4348 ppb	0.32077	73.78%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	-4.4	-2.5097 ug/L	6.56930	-2.5097 ppb	6.56930	261.76%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	-94.8	-11.734 ug/L	0.7045	-11.734 ppb	0.7045	6.00%
QC value less than the lower limit for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	4.0	5.5911 ug/L	8.05329	5.5911 ppb	8.05329	144.04%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	-2.4	-0.8059 ug/L	1.80390	-0.8059 ppb	1.80390	223.83%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-1.5	-0.9923 ug/L	2.12430	-0.9923 ppb	2.12430	214.08%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	-19.2	-0.6260 ug/L	0.63515	-0.6260 ppb	0.63515	101.47%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	5.8	1.0434 ug/L	0.59409	1.0434 ppb	0.59409	56.94%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	4.6	0.0323 ug/L	0.32630	0.0323 ppb	0.32630	>999.9%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	-49.7	-0.0853 ug/L	0.16139	-0.0853 ppb	0.16139	189.18%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	-3.7	-1.2038 ug/L	0.57873	-1.2038 ppb	0.57873	48.07%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	92.4	2.5822 ug/L	2.43222	2.5822 ppb	2.43222	94.19%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	18.4	0.1408 ug/L	0.41750	0.1408 ppb	0.41750	296.57%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	-71.1	-0.7120 ug/L	0.01567	-0.7120 ppb	0.01567	2.20%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	-28.8	-2.0075 ug/L	0.43377	-2.0075 ppb	0.43377	21.61%
QC value within limits for SiO2 Recovery = Not calculated						

QC Failed. Continue with analysis.

Sequence No.: 9

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 2/25/2010 18:28:04

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	3778.1	3778.1	98.0 %		18:30:16
1	Y RADIAL	4206.8	4206.8	94.50 %		18:29:56
1	Al 396.153Radial†	5397.5	5625.2	5263.4 ug/L	5263.4 ppb	18:29:56
1	Ca 317.933Radial†	2379.1	2410.1	5255.7 ug/L	5255.7 ppb	18:30:16
1	Fe 238.204 Radial†	318.4	313.3	5078.1 ug/L	5078.1 ppb	18:30:16
1	K 766.490 Radial†	28870.4	26707.6	5110.4 ug/L	5110.4 ppb	18:29:56
1	Mg 279.077 IEC†	100.3	101.3	5343.2 ug/L	5343.2 ppb	18:30:16
1	Na 589.592 Radial†	31659.1	33221.2	10337 ug/L	10337 ppb	18:29:56
1	Sr 421.552†	72072.4	73567.2	511.74 ug/L	511.74 ppb	18:29:56
1	Sc 361.383	916641.6	916641.6	104.16 %		18:31:13
1	Y 371.029	759235.4	759235.4	99.816 %		18:31:13
1	Ag 328.068†	106847.1	102350.3	478.63 ug/L	478.63 ppb	18:31:19
1	As 188.979†	1101.6	1077.6	483.31 ug/L	483.31 ppb	18:31:39
1	B 249.677†	19355.3	18861.1	460.09 ug/L	460.09 ppb	18:31:19
1	Ba 233.527†	63062.1	60535.3	477.02 ug/L	477.02 ppb	18:31:19
1	Be 313.107†	1334948.5	1285250.1	481.29 ug/L	481.29 ppb	18:31:13
1	Cd 226.502†	42850.2	41316.9	480.01 ug/L	480.01 ppb	18:31:19
1	Co 228.616†	23596.9	22720.3	477.29 ug/L	477.29 ppb	18:31:19
1	Cr 267.716†	44305.4	42452.8	477.32 ug/L	477.32 ppb	18:31:19
1	Cu 324.752†	166549.2	153949.8	469.07 ug/L	469.07 ppb	18:31:19
1	Mn 257.610†	441402.3	423315.3	482.55 ug/L	482.55 ppb	18:31:13
1	Mo 202.031†	6749.4	6475.5	477.41 ug/L	477.41 ppb	18:31:39
1	Ni 231.604†	19710.9	18841.8	480.56 ug/L	480.56 ppb	18:31:19
1	P 214.914†	4341.1	3962.1	2291.4 ug/L	2291.4 ppb	18:31:39
1	Pb 220.353†	4021.5	3799.9	471.62 ug/L	471.62 ppb	18:31:39
1	S 181.975 Axial†	746.8	681.2	959.43 ug/L	959.43 ppb	18:31:39
1	Sb 206.836†	1438.3	1341.9	490.72 ug/L	490.72 ppb	18:31:39
1	Se 196.026†	735.7	731.1	497.68 ug/L	497.68 ppb	18:31:39
1	Si 251.611†	77486.6	73830.6	2385.9 ug/L	2385.9 ppb	18:31:19
1	Sn 189.927†	2793.7	2672.8	482.64 ug/L	482.64 ppb	18:31:39
1	Ti 334.940†	310922.3	299928.3	472.47 ug/L	472.47 ppb	18:31:19
1	Tl 190.801†	1522.9	1489.6	482.36 ug/L	482.36 ppb	18:31:39
1	U 409.014†	14237.5	16571.4	461.10 ug/L	461.10 ppb	18:31:19
1	V 292.402†	68899.5	67619.5	478.70 ug/L	478.70 ppb	18:31:19
1	Zn 213.857†	50402.3	47652.1	476.61 ug/L	476.61 ppb	18:31:19
1	SiO2†	78407.2	74691.0	5172.6 ug/L	5172.6 ppb	18:32:46
2	Sc Radial	3845.3	3845.3	99.7 %		18:30:41
2	Y RADIAL	4225.8	4225.8	94.93 %		18:30:21
2	Al 396.153Radial†	5236.5	5367.4	5021.1 ug/L	5021.1 ppb	18:30:21
2	Ca 317.933Radial†	2360.1	2348.6	5121.7 ug/L	5121.7 ppb	18:30:41
2	Fe 238.204 Radial†	314.2	303.5	4919.4 ug/L	4919.4 ppb	18:30:41
2	K 766.490 Radial†	28313.9	25634.9	4905.1 ug/L	4905.1 ppb	18:30:21
2	Mg 279.077 IEC†	98.6	97.8	5158.7 ug/L	5158.7 ppb	18:30:41
2	Na 589.592 Radial†	30402.1	31396.1	9769.3 ug/L	9769.3 ppb	18:30:21
2	Sr 421.552†	69795.6	69998.9	486.92 ug/L	486.92 ppb	18:30:21
2	Sc 361.383	912662.5	912662.5	103.70 %		18:31:44
2	Y 371.029	756660.4	756660.4	99.477 %		18:31:44
2	Ag 328.068†	107347.1	103279.7	482.92 ug/L	482.92 ppb	18:31:50
2	As 188.979†	1089.0	1070.0	479.93 ug/L	479.93 ppb	18:32:10
2	B 249.677†	19570.5	19149.7	467.18 ug/L	467.18 ppb	18:31:50
2	Ba 233.527†	63261.3	60991.3	480.61 ug/L	480.61 ppb	18:31:50
2	Be 313.107†	1341954.8	1297594.3	485.91 ug/L	485.91 ppb	18:31:44
2	Cd 226.502†	42975.2	41616.9	483.52 ug/L	483.52 ppb	18:31:50
2	Co 228.616†	23772.9	22988.8	482.92 ug/L	482.92 ppb	18:31:50
2	Cr 267.716†	44507.8	42833.4	481.58 ug/L	481.58 ppb	18:31:50
2	Cu 324.752†	167404.3	155471.5	473.70 ug/L	473.70 ppb	18:31:50
2	Mn 257.610†	442229.7	425960.8	485.55 ug/L	485.55 ppb	18:31:44
2	Mo 202.031†	6743.6	6498.1	479.06 ug/L	479.06 ppb	18:32:10
2	Ni 231.604†	19814.9	19024.6	485.22 ug/L	485.22 ppb	18:31:50

2	P 214.914†	4336.8	3976.1	2299.0 ug/L	2299.0 ppb	18:32:10
2	Pb 220.353†	3998.6	3794.6	470.94 ug/L	470.94 ppb	18:32:10
2	S 181.975 Axial†	759.6	696.7	981.34 ug/L	981.34 ppb	18:32:10
2	Sb 206.836†	1433.5	1343.3	491.27 ug/L	491.27 ppb	18:32:10
2	Se 196.026†	726.9	725.7	493.64 ug/L	493.64 ppb	18:32:10
2	Si 251.611†	77885.5	74539.7	2408.9 ug/L	2408.9 ppb	18:31:50
2	Sn 189.927†	2793.7	2684.5	484.73 ug/L	484.73 ppb	18:32:10
2	Ti 334.940†	312399.8	302654.5	476.76 ug/L	476.76 ppb	18:31:50
2	Tl 190.801†	1515.7	1489.0	482.18 ug/L	482.18 ppb	18:32:10
2	U 409.014†	14409.5	16796.8	467.40 ug/L	467.40 ppb	18:31:50
2	V 292.402†	69350.0	68342.4	483.80 ug/L	483.80 ppb	18:31:50
2	Zn 213.857†	50536.4	47992.4	480.04 ug/L	480.04 ppb	18:31:50
2	SiO2†	76934.7	73599.3	5096.8 ug/L	5096.8 ppb	18:32:51
3	Sc Radial	3791.5	3791.5	98.3 %		18:31:06
3	Y RADIAL	4386.1	4386.1	98.53 %		18:30:46
3	Al 396.153Radial†	5374.6	5582.5	5222.9 ug/L	5222.9 ppb	18:30:46
3	Ca 317.933Radial†	2349.1	2371.0	5170.6 ug/L	5170.6 ppb	18:31:06
3	Fe 238.204 Radial†	318.1	311.9	5055.2 ug/L	5055.2 ppb	18:31:06
3	K 766.490 Radial†	28980.6	26716.1	5112.1 ug/L	5112.1 ppb	18:30:46
3	Mg 279.077 IEC†	101.9	102.5	5408.0 ug/L	5408.0 ppb	18:31:06
3	Na 589.592 Radial†	31328.9	32771.7	10197 ug/L	10197 ppb	18:30:46
3	Sr 421.552†	71710.7	72940.5	507.38 ug/L	507.38 ppb	18:30:46
3	Sc 361.383	908768.9	908768.9	103.26 %		18:32:15
3	Y 371.029	752900.6	752900.6	98.983 %		18:32:15
3	Ag 328.068†	107603.5	103971.6	486.18 ug/L	486.18 ppb	18:32:21
3	As 188.979†	1112.6	1097.4	492.17 ug/L	492.17 ppb	18:32:41
3	B 249.677†	19633.3	19291.4	470.61 ug/L	470.61 ppb	18:32:21
3	Ba 233.527†	63602.3	61582.9	485.27 ug/L	485.27 ppb	18:32:21
3	Be 313.107†	1338902.0	1300182.2	486.89 ug/L	486.89 ppb	18:32:15
3	Cd 226.502†	43278.3	42087.9	488.98 ug/L	488.98 ppb	18:32:21
3	Co 228.616†	23853.4	23165.0	486.63 ug/L	486.63 ppb	18:32:21
3	Cr 267.716†	44626.3	43132.0	484.94 ug/L	484.94 ppb	18:32:21
3	Cu 324.752†	168143.5	156879.0	477.99 ug/L	477.99 ppb	18:32:21
3	Mn 257.610†	442730.1	428272.5	488.19 ug/L	488.19 ppb	18:32:15
3	Mo 202.031†	6802.8	6583.3	485.35 ug/L	485.35 ppb	18:32:41
3	Ni 231.604†	19876.0	19165.5	488.82 ug/L	488.82 ppb	18:32:21
3	P 214.914†	4391.5	4047.0	2340.8 ug/L	2340.8 ppb	18:32:41
3	Pb 220.353†	4046.6	3857.6	478.78 ug/L	478.78 ppb	18:32:41
3	S 181.975 Axial†	758.4	698.6	983.98 ug/L	983.98 ppb	18:32:41
3	Sb 206.836†	1441.1	1356.6	496.16 ug/L	496.16 ppb	18:32:41
3	Se 196.026†	746.6	747.8	508.58 ug/L	508.58 ppb	18:32:41
3	Si 251.611†	78358.9	75319.9	2434.1 ug/L	2434.1 ppb	18:32:21
3	Sn 189.927†	2812.2	2713.9	490.04 ug/L	490.04 ppb	18:32:41
3	Ti 334.940†	313631.0	305137.4	480.65 ug/L	480.65 ppb	18:32:21
3	Tl 190.801†	1544.3	1523.0	493.15 ug/L	493.15 ppb	18:32:41
3	U 409.014†	14417.5	16864.1	469.26 ug/L	469.26 ppb	18:32:21
3	V 292.402†	69547.7	68820.4	487.21 ug/L	487.21 ppb	18:32:21
3	Zn 213.857†	51009.0	48658.8	486.72 ug/L	486.72 ppb	18:32:21
3	SiO2†	77139.1	74115.0	5132.4 ug/L	5132.4 ppb	18:32:56

-----  
Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	912691.0	103.71 %	0.447			0.43%
Sc Radial	3805.0	98.7 %	0.92			0.93%
Y 371.029	756265.5	99.426 %	0.4188			0.42%
Y RADIAL	4272.9	95.98 %	2.212			2.30%
Ag 328.068†	103200.6	482.58 ug/L	3.789	482.58 ppb	3.789	0.79%
QC value within limits for Ag 328.068 Recovery = 96.52%						
Al 396.153Radial†	5525.0	5169.1 ug/L	129.79	5169.1 ppb	129.79	2.51%
QC value within limits for Al 396.153Radial Recovery = 103.38%						
As 188.979†	1081.7	485.14 ug/L	6.322	485.14 ppb	6.322	1.30%
QC value within limits for As 188.979 Recovery = 97.03%						
B 249.677†	19100.7	465.96 ug/L	5.365	465.96 ppb	5.365	1.15%
QC value within limits for B 249.677 Recovery = 93.19%						
Ba 233.527†	61036.5	480.97 ug/L	4.138	480.97 ppb	4.138	0.86%
QC value within limits for Ba 233.527 Recovery = 96.19%						
Be 313.107†	1294342.2	484.69 ug/L	2.990	484.69 ppb	2.990	0.62%
QC value within limits for Be 313.107 Recovery = 96.94%						
Ca 317.933Radial†	2376.6	5182.6 ug/L	67.83	5182.6 ppb	67.83	1.31%

QC value within limits for Ca 317.933 Radial Recovery = 103.65%							
Cd 226.502†	41673.9	484.17 ug/L	4.520	484.17 ppb	4.520	0.93%	
QC value within limits for Cd 226.502 Recovery = 96.83%							
Co 228.616†	22958.1	482.28 ug/L	4.704	482.28 ppb	4.704	0.98%	
QC value within limits for Co 228.616 Recovery = 96.46%							
Cr 267.716†	42806.1	481.28 ug/L	3.823	481.28 ppb	3.823	0.79%	
QC value within limits for Cr 267.716 Recovery = 96.26%							
Cu 324.752†	155433.4	473.59 ug/L	4.461	473.59 ppb	4.461	0.94%	
QC value within limits for Cu 324.752 Recovery = 94.72%							
Fe 238.204 Radial†	309.6	5017.6 ug/L	85.77	5017.6 ppb	85.77	1.71%	
QC value within limits for Fe 238.204 Radial Recovery = 100.35%							
K 766.490 Radial†	26352.9	5042.5 ug/L	119.00	5042.5 ppb	119.00	2.36%	
QC value within limits for K 766.490 Radial Recovery = 100.85%							
Mg 279.077 IEC†	100.5	5303.3 ug/L	129.32	5303.3 ppb	129.32	2.44%	
QC value within limits for Mg 279.077 IEC Recovery = 106.07%							
Mn 257.610†	425849.5	485.43 ug/L	2.823	485.43 ppb	2.823	0.58%	
QC value within limits for Mn 257.610 Recovery = 97.09%							
Mo 202.031†	6519.0	480.61 ug/L	4.190	480.61 ppb	4.190	0.87%	
QC value within limits for Mo 202.031 Recovery = 96.12%							
Na 589.592 Radial†	32463.0	10101 ug/L	295.9	10101 ppb	295.9	2.93%	
QC value within limits for Na 589.592 Radial Recovery = 101.01%							
Ni 231.604†	19010.7	484.87 ug/L	4.140	484.87 ppb	4.140	0.85%	
QC value within limits for Ni 231.604 Recovery = 96.97%							
P 214.914†	3995.1	2310.4 ug/L	26.56	2310.4 ppb	26.56	1.15%	
QC value within limits for P 214.914 Recovery = 92.42%							
Pb 220.353†	3817.4	473.78 ug/L	4.342	473.78 ppb	4.342	0.92%	
QC value within limits for Pb 220.353 Recovery = 94.76%							
S 181.975 Axial†	692.1	974.91 ug/L	13.478	974.91 ppb	13.478	1.38%	
QC value within limits for S 181.975 Axial Recovery = 97.49%							
Sb 206.836†	1347.3	492.72 ug/L	2.996	492.72 ppb	2.996	0.61%	
QC value within limits for Sb 206.836 Recovery = 98.54%							
Se 196.026†	734.9	499.97 ug/L	7.726	499.97 ppb	7.726	1.55%	
QC value within limits for Se 196.026 Recovery = 99.99%							
Si 251.611†	74563.4	2409.6 ug/L	24.08	2409.6 ppb	24.08	1.00%	
QC value within limits for Si 251.611 Recovery = 96.38%							
Sn 189.927†	2690.4	485.80 ug/L	3.814	485.80 ppb	3.814	0.79%	
QC value within limits for Sn 189.927 Recovery = 97.16%							
Sr 421.552†	72168.9	502.01 ug/L	13.253	502.01 ppb	13.253	2.64%	
QC value within limits for Sr 421.552 Recovery = 100.40%							
Ti 334.940†	302573.4	476.63 ug/L	4.094	476.63 ppb	4.094	0.86%	
QC value within limits for Ti 334.940 Recovery = 95.33%							
Tl 190.801†	1500.5	485.89 ug/L	6.281	485.89 ppb	6.281	1.29%	
QC value within limits for Tl 190.801 Recovery = 97.18%							
U 409.014†	16744.1	465.92 ug/L	4.277	465.92 ppb	4.277	0.92%	
QC value within limits for U 409.014 Recovery = 93.18%							
V 292.402†	68260.7	483.23 ug/L	4.283	483.23 ppb	4.283	0.89%	
QC value within limits for V 292.402 Recovery = 96.65%							
Zn 213.857†	48101.1	481.12 ug/L	5.138	481.12 ppb	5.138	1.07%	
QC value within limits for Zn 213.857 Recovery = 96.22%							
SiO2†	74135.1	5133.9 ug/L	37.94	5133.9 ppb	37.94	0.74%	
QC value within limits for SiO2 Recovery = 96.01%							
All analyte(s) passed QC.							



Sequence No.: 10

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 2/25/2010 18:35:06

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	3898.4	3898.4	101 %		18:37:18
1	Y RADIAL	4466.5	4466.5	100.3 %		18:36:58
1	Al 396.153Radial†	-135.7	-19.2	-18.088 ug/L	-18.088 ppb	18:36:58
1	Ca 317.933Radial†	15.5	-3.3	-7.2136 ug/L	-7.2136 ppb	18:37:18
1	Fe 238.204 Radial†	10.9	-0.9	-14.366 ug/L	-14.366 ppb	18:37:18
1	K 766.490 Radial†	2872.5	76.9	14.759 ug/L	14.759 ppb	18:36:58
1	Mg 279.077 IEC†	-0.5	-1.6	-86.911 ug/L	-86.911 ppb	18:37:18
1	Na 589.592 Radial†	-1029.1	-116.5	-36.248 ug/L	-36.248 ppb	18:36:58
1	Sr 421.552†	-7.4	-16.0	-0.1115 ug/L	-0.1115 ppb	18:36:58
1	Sc 361.383	831176.7	831176.7	94.444 %		18:38:15
1	Y 371.029	700343.2	700343.2	92.073 %		18:38:15
1	Ag 328.068†	299.5	82.9	0.3948 ug/L	0.3948 ppb	18:38:15
1	As 188.979†	-19.9	-1.2	-0.5332 ug/L	-0.5332 ppb	18:38:35
1	B 249.677†	-490.8	-241.7	-5.9205 ug/L	-5.9205 ppb	18:38:35
1	Ba 233.527†	16.1	6.0	0.0448 ug/L	0.0448 ppb	18:38:35
1	Be 313.107†	-3464.1	-109.7	-0.0418 ug/L	-0.0418 ppb	18:38:15
1	Cd 226.502†	-190.1	-25.0	-0.2937 ug/L	-0.2937 ppb	18:38:35
1	Co 228.616†	-65.4	-4.4	-0.0909 ug/L	-0.0909 ppb	18:38:35
1	Cr 267.716†	72.9	-7.9	-0.0826 ug/L	-0.0826 ppb	18:38:35
1	Cu 324.752†	5901.8	293.9	0.9063 ug/L	0.9063 ppb	18:38:15
1	Mn 257.610†	488.3	39.3	0.0469 ug/L	0.0469 ppb	18:38:35
1	Mo 202.031†	6.8	2.5	0.1836 ug/L	0.1836 ppb	18:38:35
1	Ni 231.604†	74.7	-3.7	-0.0956 ug/L	-0.0956 ppb	18:38:35
1	P 214.914†	197.8	3.6	2.0004 ug/L	2.0004 ppb	18:38:35
1	Pb 220.353†	-39.6	-103.1	-12.759 ug/L	-12.759 ppb	18:38:35
1	S 181.975 Axial†	38.1	4.5	6.2925 ug/L	6.2925 ppb	18:38:35
1	Sb 206.836†	40.7	4.1	1.4603 ug/L	1.4603 ppb	18:38:35
1	Se 196.026†	-26.4	-3.2	-2.1305 ug/L	-2.1305 ppb	18:38:35
1	Si 251.611†	574.3	43.4	1.4037 ug/L	1.4037 ppb	18:38:35
1	Sn 189.927†	14.9	6.3	1.1404 ug/L	1.1404 ppb	18:38:35
1	Ti 334.940†	-1537.5	-218.0	-0.3281 ug/L	-0.3281 ppb	18:38:15
1	Tl 190.801†	-28.6	-2.8	-0.9168 ug/L	-0.9168 ppb	18:38:35
1	U 409.014†	-3452.7	-754.0	-21.052 ug/L	-21.052 ppb	18:38:15
1	V 292.402†	-1501.2	-120.8	-0.8810 ug/L	-0.8810 ppb	18:38:15
1	Zn 213.857†	693.2	-5.5	-0.0535 ug/L	-0.0535 ppb	18:38:35
1	SiO2†	588.8	35.3	2.4430 ug/L	2.4430 ppb	18:39:31
2	Sc Radial	3847.1	3847.1	99.7 %		18:37:43
2	Y RADIAL	4457.8	4457.8	100.1 %		18:37:23
2	Al 396.153Radial†	-97.8	17.1	16.011 ug/L	16.011 ppb	18:37:23
2	Ca 317.933Radial†	15.9	-2.7	-5.9532 ug/L	-5.9532 ppb	18:37:43
2	Fe 238.204 Radial†	8.0	-3.6	-58.816 ug/L	-58.816 ppb	18:37:43
2	K 766.490 Radial†	2892.8	135.2	25.909 ug/L	25.909 ppb	18:37:23
2	Mg 279.077 IEC†	0.7	-0.5	-26.689 ug/L	-26.689 ppb	18:37:43
2	Na 589.592 Radial†	-984.1	-84.9	-26.418 ug/L	-26.418 ppb	18:37:23
2	Sr 421.552†	-10.4	-19.1	-0.1330 ug/L	-0.1330 ppb	18:37:23
2	Sc 361.383	912177.4	912177.4	103.65 %		18:38:40
2	Y 371.029	769834.7	769834.7	101.21 %		18:38:40
2	Ag 328.068†	289.0	44.7	0.1904 ug/L	0.1904 ppb	18:38:40
2	As 188.979†	-19.5	1.2	0.5000 ug/L	0.5000 ppb	18:39:00
2	B 249.677†	-503.0	-207.3	-5.0726 ug/L	-5.0726 ppb	18:39:00
2	Ba 233.527†	-7.9	-18.7	-0.1482 ug/L	-0.1482 ppb	18:39:00
2	Be 313.107†	-3560.5	123.1	0.0458 ug/L	0.0458 ppb	18:38:40
2	Cd 226.502†	-183.7	-1.0	-0.0058 ug/L	-0.0058 ppb	18:39:00
2	Co 228.616†	-55.6	11.2	0.2369 ug/L	0.2369 ppb	18:39:00
2	Cr 267.716†	49.4	-37.5	-0.4259 ug/L	-0.4259 ppb	18:39:00
2	Cu 324.752†	6038.5	-129.1	-0.3967 ug/L	-0.3967 ppb	18:38:40
2	Mn 257.610†	462.9	-31.0	-0.0401 ug/L	-0.0401 ppb	18:39:00
2	Mo 202.031†	11.3	6.2	0.4555 ug/L	0.4555 ppb	18:39:00
2	Ni 231.604†	68.8	-16.4	-0.4196 ug/L	-0.4196 ppb	18:39:00

2	P 214.914†	204.7	-8.3	-4.8524 ug/L	-4.8524 ppb	18:39:00
2	Pb 220.353†	-26.4	-86.7	-10.712 ug/L	-10.712 ppb	18:39:00
2	S 181.975 Axial†	44.5	7.1	9.9883 ug/L	9.9883 ppb	18:39:00
2	Sb 206.836†	39.4	-1.0	-0.3331 ug/L	-0.3331 ppb	18:39:00
2	Se 196.026†	-28.4	-2.7	-1.9540 ug/L	-1.9540 ppb	18:39:00
2	Si 251.611†	555.4	-28.9	-0.9414 ug/L	-0.9414 ppb	18:39:00
2	Sn 189.927†	8.4	-1.3	-0.2383 ug/L	-0.2383 ppb	18:39:00
2	Ti 334.940†	-1515.2	-52.0	-0.0805 ug/L	-0.0805 ppb	18:38:40
2	Tl 190.801†	-30.4	-1.9	-0.6055 ug/L	-0.6055 ppb	18:39:00
2	U 409.014†	-2997.6	9.8	0.2813 ug/L	0.2813 ppb	18:38:40
2	V 292.402†	-1482.2	38.7	0.2854 ug/L	0.2854 ppb	18:38:40
2	Zn 213.857†	686.8	-76.8	-0.7633 ug/L	-0.7633 ppb	18:39:00
2	SiO2†	613.2	3.4	0.2230 ug/L	0.2230 ppb	18:39:36
3	Sc Radial	3756.5	3756.5	97.4 %		18:38:08
3	Y RADIAL	4331.9	4331.9	97.31 %		18:37:48
3	Al 396.153Radial†	-139.4	-28.1	-26.435 ug/L	-26.435 ppb	18:37:48
3	Ca 317.933Radial†	18.4	0.2	0.4720 ug/L	0.4720 ppb	18:38:08
3	Fe 238.204 Radial†	10.4	-1.0	-15.976 ug/L	-15.976 ppb	18:38:08
3	K 766.490 Radial†	2922.9	236.0	45.234 ug/L	45.234 ppb	18:37:48
3	Mg 279.077 IEC†	-0.2	-1.4	-74.069 ug/L	-74.069 ppb	18:38:08
3	Na 589.592 Radial†	-1102.9	-230.7	-71.788 ug/L	-71.788 ppb	18:37:48
3	Sr 421.552†	11.6	3.1	0.0218 ug/L	0.0218 ppb	18:37:48
3	Sc 361.383	893997.1	893997.1	101.58 %		18:39:05
3	Y 371.029	754116.7	754116.7	99.143 %		18:39:05
3	Ag 328.068†	280.6	42.1	0.1931 ug/L	0.1931 ppb	18:39:05
3	As 188.979†	-32.5	-12.1	-5.3755 ug/L	-5.3755 ppb	18:39:25
3	B 249.677†	-484.2	-198.6	-4.8659 ug/L	-4.8659 ppb	18:39:25
3	Ba 233.527†	18.0	6.6	0.0509 ug/L	0.0509 ppb	18:39:25
3	Be 313.107†	-3501.3	111.5	0.0411 ug/L	0.0411 ppb	18:39:05
3	Cd 226.502†	-204.1	-24.7	-0.2864 ug/L	-0.2864 ppb	18:39:25
3	Co 228.616†	-62.5	3.4	0.0730 ug/L	0.0730 ppb	18:39:25
3	Cr 267.716†	58.3	-27.8	-0.3117 ug/L	-0.3117 ppb	18:39:25
3	Cu 324.752†	5819.6	-226.1	-0.6874 ug/L	-0.6874 ppb	18:39:05
3	Mn 257.610†	453.4	-31.3	-0.0342 ug/L	-0.0342 ppb	18:39:25
3	Mo 202.031†	14.3	9.4	0.6891 ug/L	0.6891 ppb	18:39:25
3	Ni 231.604†	86.2	2.1	0.0530 ug/L	0.0530 ppb	18:39:25
3	P 214.914†	201.4	-7.5	-4.3934 ug/L	-4.3934 ppb	18:39:25
3	Pb 220.353†	-21.5	-82.4	-10.193 ug/L	-10.193 ppb	18:39:25
3	S 181.975 Axial†	37.2	0.8	1.0692 ug/L	1.0692 ppb	18:39:25
3	Sb 206.836†	39.3	-0.3	-0.0973 ug/L	-0.0973 ppb	18:39:25
3	Se 196.026†	-25.0	0.1	0.0126 ug/L	0.0126 ppb	18:39:25
3	Si 251.611†	576.7	3.0	0.0875 ug/L	0.0875 ppb	18:39:25
3	Sn 189.927†	9.6	0.0	0.0029 ug/L	0.0029 ppb	18:39:25
3	Ti 334.940†	-1593.9	-159.1	-0.2425 ug/L	-0.2425 ppb	18:39:05
3	Tl 190.801†	-26.6	1.3	0.4120 ug/L	0.4120 ppb	18:39:25
3	U 409.014†	-3112.2	-161.9	-4.5186 ug/L	-4.5186 ppb	18:39:05
3	V 292.402†	-1538.3	-45.7	-0.3166 ug/L	-0.3166 ppb	18:39:05
3	Zn 213.857†	692.0	-58.2	-0.5849 ug/L	-0.5849 ppb	18:39:25
3	SiO2†	585.2	-12.1	-0.8619 ug/L	-0.8619 ppb	18:39:41

-----  
Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	879117.1	99.891 %	4.8293			4.83%
Sc Radial	3834.0	99.4 %	1.86			1.87%
Y 371.029	741431.5	97.475 %	4.7909			4.91%
Y RADIAL	4418.7	99.26 %	1.692			1.70%
Ag 328.068†	56.6	0.2594 ug/L	0.11722	0.2594 ppb	0.11722	45.19%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-10.1	-9.5039 ug/L	22.48761	-9.5039 ppb	22.48761	236.62%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-4.0	-1.8029 ug/L	3.13683	-1.8029 ppb	3.13683	173.99%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-215.9	-5.2863 ug/L	0.55884	-5.2863 ppb	0.55884	10.57%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	-2.0	-0.0175 ug/L	0.11320	-0.0175 ppb	0.11320	647.44%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	41.6	0.0150 ug/L	0.04924	0.0150 ppb	0.04924	327.40%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-1.9	-4.2316 ug/L	4.12189	-4.2316 ppb	4.12189	97.41%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd 226.502†	-16.9	-0.1953 ug/L	0.16413	-0.1953 ppb	0.16413	84.04%	
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	3.4	0.0730 ug/L	0.16391	0.0730 ppb	0.16391	224.57%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	-24.4	-0.2734 ug/L	0.17479	-0.2734 ppb	0.17479	63.93%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	-20.5	-0.0592 ug/L	0.84873	-0.0592 ppb	0.84873	>999.9%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	-1.8	-29.719 ug/L	25.2111	-29.719 ppb	25.2111	84.83%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	149.4	28.634 ug/L	15.4191	28.634 ppb	15.4191	53.85%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	-1.2	-62.557 ug/L	31.7186	-62.557 ppb	31.7186	50.70%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	-7.7	-0.0091 ug/L	0.04862	-0.0091 ppb	0.04862	533.14%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	6.0	0.4428 ug/L	0.25299	0.4428 ppb	0.25299	57.14%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	-144.0	-44.818 ug/L	23.8683	-44.818 ppb	23.8683	53.26%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	-6.0	-0.1541 ug/L	0.24165	-0.1541 ppb	0.24165	156.83%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	-4.1	-2.4152 ug/L	3.83087	-2.4152 ppb	3.83087	158.62%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	-90.7	-11.221 ug/L	1.3566	-11.221 ppb	1.3566	12.09%	
QC value less than the lower limit for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	4.1	5.7833 ug/L	4.48131	5.7833 ppb	4.48131	77.49%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	0.9	0.3433 ug/L	0.97451	0.3433 ppb	0.97451	283.83%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	-1.9	-1.3573 ug/L	1.18967	-1.3573 ppb	1.18967	87.65%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	5.8	0.1833 ug/L	1.17549	0.1833 ppb	1.17549	641.33%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	1.7	0.3016 ug/L	0.73631	0.3016 ppb	0.73631	244.10%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	-10.7	-0.0742 ug/L	0.08386	-0.0742 ppb	0.08386	112.94%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	-143.1	-0.2171 ug/L	0.12576	-0.2171 ppb	0.12576	57.94%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	-1.1	-0.3701 ug/L	0.69495	-0.3701 ppb	0.69495	187.77%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	-302.0	-8.4297 ug/L	11.19148	-8.4297 ppb	11.19148	132.76%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	-42.6	-0.3041 ug/L	0.58329	-0.3041 ppb	0.58329	191.82%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	-46.8	-0.4672 ug/L	0.36927	-0.4672 ppb	0.36927	79.03%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†	8.8	0.6013 ug/L	1.68464	0.6013 ppb	1.68464	280.15%	
QC value within limits for SiO2 Recovery = Not calculated							
QC Failed. Continue with analysis.							

Sequence No.: 18

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 2/25/2010 19:29:54

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	3802.8	3802.8	98.6 %		19:32:06
1	Y RADIAL	4201.4	4201.4	94.38 %		19:31:46
1	Al 396.153Radial†	5290.7	5481.2	5127.8 ug/L	5127.8 ppb	19:31:46
1	Ca 317.933Radial†	2371.6	2386.7	5204.8 ug/L	5204.8 ppb	19:32:06
1	Fe 238.204 Radial†	320.9	313.8	5085.6 ug/L	5085.6 ppb	19:32:06
1	K 766.490 Radial†	28379.1	26018.6	4978.5 ug/L	4978.5 ppb	19:31:46
1	Mg 279.077 IEC†	101.6	101.9	5377.6 ug/L	5377.6 ppb	19:32:06
1	Na 589.592 Radial†	30511.1	31847.7	9909.9 ug/L	9909.9 ppb	19:31:46
1	Sr 421.552†	70390.7	71385.3	496.56 ug/L	496.56 ppb	19:31:46
1	Sc 361.383	909417.0	909417.0	103.33 %		19:33:03
1	Y 371.029	754060.2	754060.2	99.136 %		19:33:03
1	Ag 328.068†	108068.2	104347.0	487.94 ug/L	487.94 ppb	19:33:08
1	As 188.979†	1101.2	1085.6	486.95 ug/L	486.95 ppb	19:33:28
1	B 249.677†	19612.5	19257.7	469.78 ug/L	469.78 ppb	19:33:08
1	Ba 233.527†	63749.4	61681.4	486.05 ug/L	486.05 ppb	19:33:08
1	Be 313.107†	1344715.0	1304883.4	488.65 ug/L	488.65 ppb	19:33:03
1	Cd 226.502†	43190.4	41973.0	487.64 ug/L	487.64 ppb	19:33:08
1	Co 228.616†	23903.1	23196.6	487.28 ug/L	487.28 ppb	19:33:08
1	Cr 267.716†	44754.4	43225.2	485.99 ug/L	485.99 ppb	19:33:08
1	Cu 324.752†	169288.0	157870.5	481.01 ug/L	481.01 ppb	19:33:08
1	Mn 257.610†	442664.6	427903.5	487.77 ug/L	487.77 ppb	19:33:03
1	Mo 202.031†	6788.6	6564.9	483.99 ug/L	483.99 ppb	19:33:28
1	Ni 231.604†	19894.4	19169.7	488.92 ug/L	488.92 ppb	19:33:08
1	P 214.914†	4358.3	4011.9	2319.0 ug/L	2319.0 ppb	19:33:28
1	Pb 220.353†	4034.7	3843.3	476.98 ug/L	476.98 ppb	19:33:28
1	S 181.975 Axial†	751.6	691.5	974.06 ug/L	974.06 ppb	19:33:28
1	Sb 206.836†	1458.0	1372.0	501.55 ug/L	501.55 ppb	19:33:28
1	Se 196.026†	732.9	734.0	499.62 ug/L	499.62 ppb	19:33:28
1	Si 251.611†	78397.3	75303.0	2433.5 ug/L	2433.5 ppb	19:33:08
1	Sn 189.927†	2805.0	2705.0	488.43 ug/L	488.43 ppb	19:33:28
1	Ti 334.940†	315061.3	306305.1	482.50 ug/L	482.50 ppb	19:33:08
1	Tl 190.801†	1536.8	1514.6	490.45 ug/L	490.45 ppb	19:33:28
1	U 409.014†	14480.0	16914.6	470.66 ug/L	470.66 ppb	19:33:08
1	V 292.402†	69802.9	69019.2	488.57 ug/L	488.57 ppb	19:33:08
1	Zn 213.857†	51023.2	48637.4	486.49 ug/L	486.49 ppb	19:33:08
1	SiO2†	77982.0	74877.6	5185.4 ug/L	5185.4 ppb	19:34:36
2	Sc Radial	3773.8	3773.8	97.8 %		19:32:31
2	Y RADIAL	4258.8	4258.8	95.67 %		19:32:11
2	Al 396.153Radial†	5293.9	5525.6	5169.3 ug/L	5169.3 ppb	19:32:11
2	Ca 317.933Radial†	2357.0	2390.2	5212.5 ug/L	5212.5 ppb	19:32:31
2	Fe 238.204 Radial†	311.5	306.7	4971.0 ug/L	4971.0 ppb	19:32:31
2	K 766.490 Radial†	28254.7	26112.2	4996.4 ug/L	4996.4 ppb	19:32:11
2	Mg 279.077 IEC†	101.8	102.8	5425.9 ug/L	5425.9 ppb	19:32:31
2	Na 589.592 Radial†	30575.8	32151.2	10004 ug/L	10004 ppb	19:32:11
2	Sr 421.552†	70438.3	71981.5	500.71 ug/L	500.71 ppb	19:32:11
2	Sc 361.383	904914.2	904914.2	102.82 %		19:33:34
2	Y 371.029	750313.6	750313.6	98.643 %		19:33:34
2	Ag 328.068†	106598.5	103438.0	483.68 ug/L	483.68 ppb	19:33:39
2	As 188.979†	1105.9	1095.5	491.25 ug/L	491.25 ppb	19:33:59
2	B 249.677†	19302.1	19050.2	464.73 ug/L	464.73 ppb	19:33:39
2	Ba 233.527†	62915.2	61177.0	482.08 ug/L	482.08 ppb	19:33:39
2	Be 313.107†	1332072.3	1299063.2	486.46 ug/L	486.46 ppb	19:33:34
2	Cd 226.502†	42702.7	41706.6	484.55 ug/L	484.55 ppb	19:33:39
2	Co 228.616†	23603.2	23020.1	483.59 ug/L	483.59 ppb	19:33:39
2	Cr 267.716†	44183.5	42885.5	482.17 ug/L	482.17 ppb	19:33:39
2	Cu 324.752†	166157.0	155640.7	474.22 ug/L	474.22 ppb	19:33:39
2	Mn 257.610†	438788.2	426265.1	485.89 ug/L	485.89 ppb	19:33:34
2	Mo 202.031†	6788.7	6597.7	486.40 ug/L	486.40 ppb	19:33:59
2	Ni 231.604†	19636.2	19014.4	484.96 ug/L	484.96 ppb	19:33:39

2	P 214.914†	4371.8	4045.9	2340.9 ug/L	2340.9 ppb	19:33:59
2	Pb 220.353†	4055.8	3883.3	481.96 ug/L	481.96 ppb	19:33:59
2	S 181.975 Axial†	754.3	697.7	982.80 ug/L	982.80 ppb	19:33:59
2	Sb 206.836†	1456.7	1377.7	503.68 ug/L	503.68 ppb	19:33:59
2	Se 196.026†	726.8	731.6	497.68 ug/L	497.68 ppb	19:33:59
2	Si 251.611†	77277.1	74591.0	2410.4 ug/L	2410.4 ppb	19:33:39
2	Sn 189.927†	2811.4	2724.8	492.00 ug/L	492.00 ppb	19:33:59
2	Ti 334.940†	309943.2	302844.7	477.05 ug/L	477.05 ppb	19:33:39
2	Tl 190.801†	1542.8	1527.9	494.69 ug/L	494.69 ppb	19:33:59
2	U 409.014†	14282.6	16792.4	467.27 ug/L	467.27 ppb	19:33:39
2	V 292.402†	69042.1	68615.5	485.81 ug/L	485.81 ppb	19:33:39
2	Zn 213.857†	50325.0	48204.1	482.17 ug/L	482.17 ppb	19:33:39
2	SiO2†	78766.1	76015.6	5264.3 ug/L	5264.3 ppb	19:34:41
3	Sc Radial	3760.2	3760.2	97.5 %		19:32:56
3	Y RADIAL	4220.7	4220.7	94.81 %		19:32:36
3	Al 396.153Radial†	5243.4	5493.3	5139.4 ug/L	5139.4 ppb	19:32:36
3	Ca 317.933Radial†	2360.5	2402.5	5239.2 ug/L	5239.2 ppb	19:32:56
3	Fe 238.204 Radial†	315.6	312.0	5056.8 ug/L	5056.8 ppb	19:32:56
3	K 766.490 Radial†	28235.1	26196.3	5012.6 ug/L	5012.6 ppb	19:32:36
3	Mg 279.077 IEC†	101.3	102.8	5422.0 ug/L	5422.0 ppb	19:32:56
3	Na 589.592 Radial†	30047.5	31722.0	9870.8 ug/L	9870.8 ppb	19:32:36
3	Sr 421.552†	69590.7	71371.9	496.47 ug/L	496.47 ppb	19:32:36
3	Sc 361.383	919450.8	919450.8	104.47 %		19:34:05
3	Y 371.029	761515.3	761515.3	100.12 %		19:34:05
3	Ag 328.068†	107919.4	103063.3	481.95 ug/L	481.95 ppb	19:34:10
3	As 188.979†	1116.3	1088.5	488.17 ug/L	488.17 ppb	19:34:30
3	B 249.677†	19726.9	19160.0	467.41 ug/L	467.41 ppb	19:34:10
3	Ba 233.527†	63803.4	61059.8	481.15 ug/L	481.15 ppb	19:34:10
3	Be 313.107†	1353304.9	1298904.5	486.40 ug/L	486.40 ppb	19:34:05
3	Cd 226.502†	43303.0	41624.6	483.59 ug/L	483.59 ppb	19:34:10
3	Co 228.616†	23913.3	22954.0	482.19 ug/L	482.19 ppb	19:34:10
3	Cr 267.716†	44791.8	42788.4	481.08 ug/L	481.08 ppb	19:34:10
3	Cu 324.752†	168430.1	155261.6	473.07 ug/L	473.07 ppb	19:34:10
3	Mn 257.610†	446017.2	426437.7	486.10 ug/L	486.10 ppb	19:34:05
3	Mo 202.031†	6783.6	6488.4	478.35 ug/L	478.35 ppb	19:34:30
3	Ni 231.604†	19918.9	18983.1	484.16 ug/L	484.16 ppb	19:34:10
3	P 214.914†	4351.3	3959.1	2288.8 ug/L	2288.8 ppb	19:34:30
3	Pb 220.353†	4029.3	3795.5	471.06 ug/L	471.06 ppb	19:34:30
3	S 181.975 Axial†	754.8	686.6	967.17 ug/L	967.17 ppb	19:34:30
3	Sb 206.836†	1451.3	1350.1	493.63 ug/L	493.63 ppb	19:34:30
3	Se 196.026†	733.0	726.3	494.49 ug/L	494.49 ppb	19:34:30
3	Si 251.611†	78444.4	74520.1	2408.2 ug/L	2408.2 ppb	19:34:10
3	Sn 189.927†	2805.6	2676.0	483.20 ug/L	483.20 ppb	19:34:30
3	Ti 334.940†	314013.0	301974.5	475.68 ug/L	475.68 ppb	19:34:10
3	Tl 190.801†	1531.3	1493.1	483.51 ug/L	483.51 ppb	19:34:30
3	U 409.014†	14492.6	16773.8	466.74 ug/L	466.74 ppb	19:34:10
3	V 292.402†	69629.7	68116.3	482.19 ug/L	482.19 ppb	19:34:10
3	Zn 213.857†	51087.0	48159.6	481.71 ug/L	481.71 ppb	19:34:10
3	SiO2†	77777.3	73858.1	5114.8 ug/L	5114.8 ppb	19:34:46

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	911260.7	103.54 %	0.846			0.82%
Sc Radial	3778.9	98.0 %	0.56			0.57%
Y 371.029	755296.4	99.298 %	0.7497			0.75%
Y RADIAL	4226.9	94.95 %	0.657			0.69%
Ag 328.068†	103616.1	484.52 ug/L	3.087	484.52 ppb	3.087	0.64%
QC value within limits for Ag 328.068 Recovery = 96.90%						
Al 396.153Radial†	5500.0	5145.5 ug/L	21.43	5145.5 ppb	21.43	0.42%
QC value within limits for Al 396.153Radial Recovery = 102.91%						
As 188.979†	1089.8	488.79 ug/L	2.218	488.79 ppb	2.218	0.45%
QC value within limits for As 188.979 Recovery = 97.76%						
B 249.677†	19156.0	467.31 ug/L	2.529	467.31 ppb	2.529	0.54%
QC value within limits for B 249.677 Recovery = 93.46%						
Ba 233.527†	61306.1	483.09 ug/L	2.603	483.09 ppb	2.603	0.54%
QC value within limits for Ba 233.527 Recovery = 96.62%						
Be 313.107†	1300950.4	487.17 ug/L	1.281	487.17 ppb	1.281	0.26%
QC value within limits for Be 313.107 Recovery = 97.43%						
Ca 317.933Radial†	2393.2	5218.8 ug/L	18.08	5218.8 ppb	18.08	0.35%

QC value within limits for Ca 317.933 Radial Recovery = 104.38%

Cd 226.502†	41768.1	485.26 ug/L	2.115	485.26 ppb	2.115	0.44%
QC value within limits for Cd 226.502 Recovery = 97.05%						
Co 228.616†	23056.9	484.36 ug/L	2.632	484.36 ppb	2.632	0.54%
QC value within limits for Co 228.616 Recovery = 96.87%						
Cr 267.716†	42966.3	483.08 ug/L	2.580	483.08 ppb	2.580	0.53%
QC value within limits for Cr 267.716 Recovery = 96.62%						
Cu 324.752†	156257.6	476.10 ug/L	4.296	476.10 ppb	4.296	0.90%
QC value within limits for Cu 324.752 Recovery = 95.22%						
Fe 238.204 Radial†	310.8	5037.8 ug/L	59.61	5037.8 ppb	59.61	1.18%
QC value within limits for Fe 238.204 Radial Recovery = 100.76%						
K 766.490 Radial†	26109.0	4995.9 ug/L	17.04	4995.9 ppb	17.04	0.34%
QC value within limits for K 766.490 Radial Recovery = 99.92%						
Mg 279.077 IEC†	102.5	5408.5 ug/L	26.83	5408.5 ppb	26.83	0.50%
QC value within limits for Mg 279.077 IEC Recovery = 108.17%						
Mn 257.610†	426868.8	486.59 ug/L	1.031	486.59 ppb	1.031	0.21%
QC value within limits for Mn 257.610 Recovery = 97.32%						
Mo 202.031†	6550.3	482.92 ug/L	4.130	482.92 ppb	4.130	0.86%
QC value within limits for Mo 202.031 Recovery = 96.58%						
Na 589.592 Radial†	31907.0	9928.3 ug/L	68.66	9928.3 ppb	68.66	0.69%
QC value within limits for Na 589.592 Radial Recovery = 99.28%						
Ni 231.604†	19055.7	486.01 ug/L	2.548	486.01 ppb	2.548	0.52%
QC value within limits for Ni 231.604 Recovery = 97.20%						
P 214.914†	4005.6	2316.2 ug/L	26.17	2316.2 ppb	26.17	1.13%
QC value within limits for P 214.914 Recovery = 92.65%						
Pb 220.353†	3840.7	476.67 ug/L	5.455	476.67 ppb	5.455	1.14%
QC value within limits for Pb 220.353 Recovery = 95.33%						
S 181.975 Axial†	692.0	974.68 ug/L	7.830	974.68 ppb	7.830	0.80%
QC value within limits for S 181.975 Axial Recovery = 97.47%						
Sb 206.836†	1366.6	499.62 ug/L	5.295	499.62 ppb	5.295	1.06%
QC value within limits for Sb 206.836 Recovery = 99.92%						
Se 196.026†	730.6	497.26 ug/L	2.590	497.26 ppb	2.590	0.52%
QC value within limits for Se 196.026 Recovery = 99.45%						
Si 251.611†	74804.7	2417.4 ug/L	14.01	2417.4 ppb	14.01	0.58%
QC value within limits for Si 251.611 Recovery = 96.70%						
Sn 189.927†	2701.9	487.88 ug/L	4.425	487.88 ppb	4.425	0.91%
QC value within limits for Sn 189.927 Recovery = 97.58%						
Sr 421.552†	71579.5	497.91 ug/L	2.422	497.91 ppb	2.422	0.49%
QC value within limits for Sr 421.552 Recovery = 99.58%						
Ti 334.940†	303708.1	478.41 ug/L	3.608	478.41 ppb	3.608	0.75%
QC value within limits for Ti 334.940 Recovery = 95.68%						
Tl 190.801†	1511.9	489.55 ug/L	5.644	489.55 ppb	5.644	1.15%
QC value within limits for Tl 190.801 Recovery = 97.91%						
U 409.014†	16826.9	468.22 ug/L	2.126	468.22 ppb	2.126	0.45%
QC value within limits for U 409.014 Recovery = 93.64%						
V 292.402†	68583.7	485.52 ug/L	3.200	485.52 ppb	3.200	0.66%
QC value within limits for V 292.402 Recovery = 97.10%						
Zn 213.857†	48333.7	483.46 ug/L	2.637	483.46 ppb	2.637	0.55%
QC value within limits for Zn 213.857 Recovery = 96.69%						
SiO2†	74917.1	5188.2 ug/L	74.82	5188.2 ppb	74.82	1.44%
QC value within limits for SiO2 Recovery = 97.02%						

All analyte(s) passed QC.

Sequence No.: 19

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 2/25/2010 19:36:57

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	3878.7	3878.7	101 %		19:39:08
1	Y RADIAL	4405.2	4405.2	98.95 %		19:38:48
1	Al 396.153Radial†	-122.1	-6.4	-6.0090 ug/L	-6.0090 ppb	19:38:48
1	Ca 317.933Radial†	16.0	-2.7	-5.9692 ug/L	-5.9692 ppb	19:39:08
1	Fe 238.204 Radial†	14.4	2.7	43.454 ug/L	43.454 ppb	19:39:08
1	K 766.490 Radial†	2779.4	-1.2	-0.1979 ug/L	-0.1979 ppb	19:38:48
1	Mg 279.077 IEC†	4.6	3.4	180.98 ug/L	180.98 ppb	19:39:08
1	Na 589.592 Radial†	-1134.8	-226.8	-70.560 ug/L	-70.560 ppb	19:38:48
1	Sr 421.552†	26.3	17.4	0.1210 ug/L	0.1210 ppb	19:38:48
1	Sc 361.383	901502.4	901502.4	102.43 %		19:40:05
1	Y 371.029	758893.5	758893.5	99.771 %		19:40:05
1	Ag 328.068†	361.5	118.8	0.5630 ug/L	0.5630 ppb	19:40:10
1	As 188.979†	-23.1	-2.6	-1.1664 ug/L	-1.1664 ppb	19:40:30
1	B 249.677†	-501.9	-212.0	-5.2032 ug/L	-5.2032 ppb	19:40:30
1	Ba 233.527†	10.2	-1.1	-0.0078 ug/L	-0.0078 ppb	19:40:30
1	Be 313.107†	-3523.3	118.7	0.0442 ug/L	0.0442 ppb	19:40:10
1	Cd 226.502†	-187.5	-6.9	-0.0841 ug/L	-0.0841 ppb	19:40:30
1	Co 228.616†	-61.0	5.3	0.1131 ug/L	0.1131 ppb	19:40:30
1	Cr 267.716†	85.4	-1.7	-0.0164 ug/L	-0.0164 ppb	19:40:30
1	Cu 324.752†	5951.1	-145.5	-0.4420 ug/L	-0.4420 ppb	19:40:10
1	Mn 257.610†	449.9	-38.4	-0.0469 ug/L	-0.0469 ppb	19:40:30
1	Mo 202.031†	16.2	11.2	0.8246 ug/L	0.8246 ppb	19:40:30
1	Ni 231.604†	82.5	-2.3	-0.0584 ug/L	-0.0584 ppb	19:40:30
1	P 214.914†	199.4	-11.1	-6.6333 ug/L	-6.6333 ppb	19:40:30
1	Pb 220.353†	-29.8	-90.3	-11.173 ug/L	-11.173 ppb	19:40:30
1	S 181.975 Axial†	40.3	3.5	4.8925 ug/L	4.8925 ppb	19:40:30
1	Sb 206.836†	40.9	1.0	0.3553 ug/L	0.3553 ppb	19:40:30
1	Se 196.026†	-22.6	2.7	1.8986 ug/L	1.8986 ppb	19:40:30
1	Si 251.611†	581.5	3.0	0.0870 ug/L	0.0870 ppb	19:40:30
1	Sn 189.927†	10.8	1.1	0.1957 ug/L	0.1957 ppb	19:40:30
1	Ti 334.940†	-1500.8	-55.2	-0.1035 ug/L	-0.1035 ppb	19:40:10
1	Tl 190.801†	-28.2	-0.1	-0.0204 ug/L	-0.0204 ppb	19:40:30
1	U 409.014†	-2896.3	74.4	2.0729 ug/L	2.0729 ppb	19:40:05
1	V 292.402†	-1526.9	-21.9	-0.1402 ug/L	-0.1402 ppb	19:40:10
1	Zn 213.857†	686.1	-69.6	-0.7083 ug/L	-0.7083 ppb	19:40:30
1	SiO2†	549.0	-52.3	-3.6509 ug/L	-3.6509 ppb	19:41:36
2	Sc Radial	3880.7	3880.7	101 %		19:39:33
2	Y RADIAL	4438.6	4438.6	99.70 %		19:39:13
2	Al 396.153Radial†	-130.3	-14.5	-13.647 ug/L	-13.647 ppb	19:39:13
2	Ca 317.933Radial†	18.1	-0.7	-1.5386 ug/L	-1.5386 ppb	19:39:33
2	Fe 238.204 Radial†	11.1	-0.6	-10.357 ug/L	-10.357 ppb	19:39:33
2	K 766.490 Radial†	2795.7	13.5	2.6079 ug/L	2.6079 ppb	19:39:13
2	Mg 279.077 IEC†	3.3	2.1	113.01 ug/L	113.01 ppb	19:39:33
2	Na 589.592 Radial†	-1024.8	-116.8	-36.351 ug/L	-36.351 ppb	19:39:13
2	Sr 421.552†	7.2	-1.6	-0.0109 ug/L	-0.0109 ppb	19:39:13
2	Sc 361.383	933036.7	933036.7	106.02 %		19:40:35
2	Y 371.029	784592.9	784592.9	103.15 %		19:40:35
2	Ag 328.068†	262.1	13.1	0.0560 ug/L	0.0560 ppb	19:40:40
2	As 188.979†	-25.4	-4.0	-1.7775 ug/L	-1.7775 ppb	19:41:00
2	B 249.677†	-513.7	-206.5	-5.0600 ug/L	-5.0600 ppb	19:41:00
2	Ba 233.527†	10.3	-1.3	-0.0095 ug/L	-0.0095 ppb	19:41:00
2	Be 313.107†	-3592.4	169.8	0.0632 ug/L	0.0632 ppb	19:40:40
2	Cd 226.502†	-190.0	-3.0	-0.0327 ug/L	-0.0327 ppb	19:41:00
2	Co 228.616†	-75.1	-6.0	-0.1235 ug/L	-0.1235 ppb	19:41:00
2	Cr 267.716†	72.8	-16.4	-0.1863 ug/L	-0.1863 ppb	19:41:00
2	Cu 324.752†	5990.2	-305.0	-0.9321 ug/L	-0.9321 ppb	19:40:40
2	Mn 257.610†	459.7	-44.1	-0.0559 ug/L	-0.0559 ppb	19:41:00
2	Mo 202.031†	15.7	10.2	0.7473 ug/L	0.7473 ppb	19:41:00
2	Ni 231.604†	98.6	10.2	0.2605 ug/L	0.2605 ppb	19:41:00

2	P 214.914†	207.7	-9.9	-5.7600 ug/L	-5.7600 ppb	19:41:00
2	Pb 220.353†	-35.5	-94.7	-11.712 ug/L	-11.712 ppb	19:41:00
2	S 181.975 Axial†	46.9	8.4	11.904 ug/L	11.904 ppb	19:41:00
2	Sb 206.836†	50.0	8.1	2.8735 ug/L	2.8735 ppb	19:41:00
2	Se 196.026†	-27.8	-1.5	-0.9871 ug/L	-0.9871 ppb	19:41:00
2	Si 251.611†	583.7	-14.2	-0.4683 ug/L	-0.4683 ppb	19:41:00
2	Sn 189.927†	5.2	-4.5	-0.8165 ug/L	-0.8165 ppb	19:41:00
2	Ti 334.940†	-1562.4	-63.8	-0.1118 ug/L	-0.1118 ppb	19:40:40
2	Tl 190.801†	-26.4	2.5	0.8144 ug/L	0.8144 ppb	19:41:00
2	U 409.014†	-2915.0	152.4	4.2561 ug/L	4.2561 ppb	19:40:35
2	V 292.402†	-1490.5	62.8	0.4611 ug/L	0.4611 ppb	19:40:40
2	Zn 213.857†	705.2	-74.3	-0.7486 ug/L	-0.7486 ppb	19:41:00
2	SiO2†	555.8	-63.9	-4.4595 ug/L	-4.4595 ppb	19:41:41
3	Sc Radial	3859.0	3859.0	100 %		19:39:58
3	Y RADIAL	4431.4	4431.4	99.54 %		19:39:38
3	Al 396.153Radial†	-171.9	-56.7	-53.303 ug/L	-53.303 ppb	19:39:38
3	Ca 317.933Radial†	13.3	-5.3	-11.652 ug/L	-11.652 ppb	19:39:58
3	Fe 238.204 Radial†	11.3	-0.3	-5.5633 ug/L	-5.5633 ppb	19:39:58
3	K 766.490 Radial†	2827.0	60.5	11.613 ug/L	11.613 ppb	19:39:38
3	Mg 279.077 IEC†	2.3	1.1	57.156 ug/L	57.156 ppb	19:39:58
3	Na 589.592 Radial†	-1083.1	-180.8	-56.273 ug/L	-56.273 ppb	19:39:38
3	Sr 421.552†	40.2	31.4	0.2186 ug/L	0.2186 ppb	19:39:38
3	Sc 361.383	920166.0	920166.0	104.56 %		19:41:06
3	Y 371.029	773019.8	773019.8	101.63 %		19:41:06
3	Ag 328.068†	342.1	93.0	0.4305 ug/L	0.4305 ppb	19:41:11
3	As 188.979†	-22.8	-1.9	-0.8331 ug/L	-0.8331 ppb	19:41:31
3	B 249.677†	-480.4	-181.4	-4.4469 ug/L	-4.4469 ppb	19:41:31
3	Ba 233.527†	3.0	-8.1	-0.0638 ug/L	-0.0638 ppb	19:41:31
3	Be 313.107†	-3645.9	71.2	0.0262 ug/L	0.0262 ppb	19:41:11
3	Cd 226.502†	-189.8	-5.3	-0.0610 ug/L	-0.0610 ppb	19:41:31
3	Co 228.616†	-54.5	12.7	0.2677 ug/L	0.2677 ppb	19:41:31
3	Cr 267.716†	76.4	-12.0	-0.1357 ug/L	-0.1357 ppb	19:41:31
3	Cu 324.752†	6016.6	-200.7	-0.6122 ug/L	-0.6122 ppb	19:41:11
3	Mn 257.610†	439.5	-57.3	-0.0682 ug/L	-0.0682 ppb	19:41:31
3	Mo 202.031†	7.1	2.1	0.1549 ug/L	0.1549 ppb	19:41:31
3	Ni 231.604†	78.0	-8.2	-0.2092 ug/L	-0.2092 ppb	19:41:31
3	P 214.914†	195.7	-18.6	-11.099 ug/L	-11.099 ppb	19:41:31
3	Pb 220.353†	-36.9	-96.5	-11.948 ug/L	-11.948 ppb	19:41:31
3	S 181.975 Axial†	35.6	-1.8	-2.5061 ug/L	-2.5061 ppb	19:41:31
3	Sb 206.836†	42.0	1.2	0.3919 ug/L	0.3919 ppb	19:41:31
3	Se 196.026†	-22.2	3.5	2.2963 ug/L	2.2963 ppb	19:41:31
3	Si 251.611†	570.4	-19.2	-0.6242 ug/L	-0.6242 ppb	19:41:31
3	Sn 189.927†	2.1	-7.4	-1.3447 ug/L	-1.3447 ppb	19:41:31
3	Ti 334.940†	-1573.8	-95.4	-0.1568 ug/L	-0.1568 ppb	19:41:11
3	Tl 190.801†	-26.6	2.0	0.6376 ug/L	0.6376 ppb	19:41:31
3	U 409.014†	-3001.7	30.9	0.8647 ug/L	0.8647 ppb	19:41:06
3	V 292.402†	-1516.4	18.4	0.1342 ug/L	0.1342 ppb	19:41:11
3	Zn 213.857†	684.9	-84.4	-0.8493 ug/L	-0.8493 ppb	19:41:31
3	SiO2†	537.9	-73.8	-5.1252 ug/L	-5.1252 ppb	19:41:46

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Sc 361.383	918235.0	104.34 %		1.802			1.73%
Sc Radial	3872.8	100 %		0.3			0.31%
Y 371.029	772168.7	101.52 %		1.692			1.67%
Y RADIAL	4425.1	99.40 %		0.395			0.40%
Ag 328.068†	75.0	0.3498 ug/L		0.26295	0.3498 ppb	0.26295	75.16%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	-25.8	-24.320 ug/L		25.3890	-24.320 ppb	25.3890	104.40%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	-2.8	-1.2590 ug/L		0.47897	-1.2590 ppb	0.47897	38.04%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	-200.0	-4.9034 ug/L		0.40176	-4.9034 ppb	0.40176	8.19%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	-3.5	-0.0270 ug/L		0.03190	-0.0270 ppb	0.03190	118.02%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	119.9	0.0445 ug/L		0.01849	0.0445 ppb	0.01849	41.51%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	-2.9	-6.3864 ug/L		5.06940	-6.3864 ppb	5.06940	79.38%



QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd 226.502†	-5.1	-0.0592 ug/L	0.02574	-0.0592 ppb	0.02574	43.45%	
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	4.0	0.0858 ug/L	0.19706	0.0858 ppb	0.19706	229.74%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	-10.1	-0.1128 ug/L	0.08721	-0.1128 ppb	0.08721	77.30%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	-217.0	-0.6621 ug/L	0.24884	-0.6621 ppb	0.24884	37.58%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	0.6	9.1778 ug/L	29.78058	9.1778 ppb	29.78058	324.49%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	24.3	4.6742 ug/L	6.17052	4.6742 ppb	6.17052	132.01%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	2.2	117.05 ug/L	62.012	117.05 ppb	62.012	52.98%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	-46.6	-0.0570 ug/L	0.01070	-0.0570 ppb	0.01070	18.77%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	7.8	0.5756 ug/L	0.36638	0.5756 ppb	0.36638	63.65%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	-174.8	-54.395 ug/L	17.1816	-54.395 ppb	17.1816	31.59%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	-0.1	-0.0024 ug/L	0.23984	-0.0024 ppb	0.23984	>999.9%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	-13.2	-7.8308 ug/L	2.86385	-7.8308 ppb	2.86385	36.57%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	-93.8	-11.611 ug/L	0.3975	-11.611 ppb	0.3975	3.42%	
QC value less than the lower limit for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	3.4	4.7634 ug/L	7.20586	4.7634 ppb	7.20586	151.28%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	3.4	1.2069 ug/L	1.44343	1.2069 ppb	1.44343	119.60%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	1.6	1.0693 ug/L	1.79192	1.0693 ppb	1.79192	167.58%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	-10.1	-0.3351 ug/L	0.37383	-0.3351 ppb	0.37383	111.54%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	-3.6	-0.6551 ug/L	0.78278	-0.6551 ppb	0.78278	119.48%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	15.7	0.1096 ug/L	0.11518	0.1096 ppb	0.11518	105.10%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	-71.5	-0.1240 ug/L	0.02868	-0.1240 ppb	0.02868	23.12%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	1.5	0.4772 ug/L	0.43988	0.4772 ppb	0.43988	92.18%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	85.9	2.3979 ug/L	1.71890	2.3979 ppb	1.71890	71.68%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	19.7	0.1517 ug/L	0.30101	0.1517 ppb	0.30101	198.42%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	-76.1	-0.7687 ug/L	0.07263	-0.7687 ppb	0.07263	9.45%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†	-63.3	-4.4119 ug/L	0.73831	-4.4119 ppb	0.73831	16.73%	
QC value within limits for SiO2 Recovery = Not calculated							
QC Failed. Continue with analysis.							

Sequence No.: 24

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 2/25/2010 20:12:07

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	3825.6	3825.6	99.2 %		20:14:19
1	Y RADIAL	4330.6	4330.6	97.28 %		20:13:59
1	Al 396.153Radial†	5348.8	5507.7	5152.5 ug/L	5152.5 ppb	20:13:59
1	Ca 317.933Radial†	2415.5	2416.6	5270.1 ug/L	5270.1 ppb	20:14:19
1	Fe 238.204 Radial†	323.0	314.0	5089.3 ug/L	5089.3 ppb	20:14:19
1	K 766.490 Radial†	28923.3	26395.3	5050.5 ug/L	5050.5 ppb	20:13:59
1	Mg 279.077 IEC†	102.9	102.6	5411.8 ug/L	5411.8 ppb	20:14:19
1	Na 589.592 Radial†	31989.8	33153.7	10316 ug/L	10316 ppb	20:13:59
1	Sr 421.552†	71504.7	72082.0	501.41 ug/L	501.41 ppb	20:13:59
1	Sc 361.383	917650.0	917650.0	104.27 %		20:15:16
1	Y 371.029	759416.7	759416.7	99.840 %		20:15:16
1	Ag 328.068†	108269.9	103602.2	484.49 ug/L	484.49 ppb	20:15:22
1	As 188.979†	1139.0	1112.3	498.79 ug/L	498.79 ppb	20:15:42
1	B 249.677†	19723.8	19194.2	468.22 ug/L	468.22 ppb	20:15:22
1	Ba 233.527†	64524.0	61870.7	487.54 ug/L	487.54 ppb	20:15:22
1	Be 313.107†	1359187.9	1307088.5	489.46 ug/L	489.46 ppb	20:15:16
1	Cd 226.502†	44047.9	42420.4	492.84 ug/L	492.84 ppb	20:15:22
1	Co 228.616†	24244.7	23316.8	489.82 ug/L	489.82 ppb	20:15:22
1	Cr 267.716†	45252.3	43314.2	487.00 ug/L	487.00 ppb	20:15:22
1	Cu 324.752†	168163.3	155322.1	473.26 ug/L	473.26 ppb	20:15:22
1	Mn 257.610†	448851.5	429993.7	490.15 ug/L	490.15 ppb	20:15:16
1	Mo 202.031†	6900.8	6613.6	487.58 ug/L	487.58 ppb	20:15:42
1	Ni 231.604†	20168.8	19260.1	491.23 ug/L	491.23 ppb	20:15:22
1	P 214.914†	4476.4	4087.2	2366.0 ug/L	2366.0 ppb	20:15:42
1	Pb 220.353†	4156.3	3924.9	487.09 ug/L	487.09 ppb	20:15:42
1	S 181.975 Axial†	769.0	701.7	988.36 ug/L	988.36 ppb	20:15:42
1	Sb 206.836†	1477.7	1378.2	504.00 ug/L	504.00 ppb	20:15:42
1	Se 196.026†	762.4	755.9	514.05 ug/L	514.05 ppb	20:15:42
1	Si 251.611†	78934.0	75137.0	2428.1 ug/L	2428.1 ppb	20:15:22
1	Sn 189.927†	2894.4	2766.5	499.52 ug/L	499.52 ppb	20:15:42
1	Ti 334.940†	315522.9	304012.4	478.90 ug/L	478.90 ppb	20:15:22
1	Tl 190.801†	1542.4	1506.7	487.88 ug/L	487.88 ppb	20:15:42
1	U 409.014†	14193.1	16513.8	459.47 ug/L	459.47 ppb	20:15:22
1	V 292.402†	70242.5	68834.8	487.32 ug/L	487.32 ppb	20:15:22
1	Zn 213.857†	51690.0	48833.9	488.47 ug/L	488.47 ppb	20:15:22
1	SiO2†	79211.6	75379.8	5220.1 ug/L	5220.1 ppb	20:16:49
2	Sc Radial	3841.0	3841.0	99.6 %		20:14:44
2	Y RADIAL	4289.4	4289.4	96.35 %		20:14:24
2	Al 396.153Radial†	5256.1	5393.0	5045.0 ug/L	5045.0 ppb	20:14:24
2	Ca 317.933Radial†	2434.0	2425.4	5289.1 ug/L	5289.1 ppb	20:14:44
2	Fe 238.204 Radial†	326.3	316.0	5120.8 ug/L	5120.8 ppb	20:14:44
2	K 766.490 Radial†	28628.5	25982.4	4971.5 ug/L	4971.5 ppb	20:14:24
2	Mg 279.077 IEC†	102.7	101.9	5379.2 ug/L	5379.2 ppb	20:14:44
2	Na 589.592 Radial†	31728.0	32761.5	10194 ug/L	10194 ppb	20:14:24
2	Sr 421.552†	70784.6	71070.0	494.37 ug/L	494.37 ppb	20:14:24
2	Sc 361.383	919370.5	919370.5	104.47 %		20:15:47
2	Y 371.029	762469.1	762469.1	100.24 %		20:15:47
2	Ag 328.068†	109000.3	104107.0	486.85 ug/L	486.85 ppb	20:15:53
2	As 188.979†	1116.9	1089.0	488.49 ug/L	488.49 ppb	20:16:13
2	B 249.677†	20007.4	19430.2	473.99 ug/L	473.99 ppb	20:15:53
2	Ba 233.527†	64903.4	62118.1	489.49 ug/L	489.49 ppb	20:15:53
2	Be 313.107†	1363112.1	1308405.5	489.96 ug/L	489.96 ppb	20:15:47
2	Cd 226.502†	44283.9	42567.2	494.54 ug/L	494.54 ppb	20:15:53
2	Co 228.616†	24352.4	23376.3	491.05 ug/L	491.05 ppb	20:15:53
2	Cr 267.716†	45578.2	43544.9	489.59 ug/L	489.59 ppb	20:15:53
2	Cu 324.752†	169574.6	156371.2	476.45 ug/L	476.45 ppb	20:15:53
2	Mn 257.610†	448188.3	428553.2	488.52 ug/L	488.52 ppb	20:15:47
2	Mo 202.031†	6828.7	6532.2	481.59 ug/L	481.59 ppb	20:16:13
2	Ni 231.604†	20360.2	19407.1	494.98 ug/L	494.98 ppb	20:15:53

2	P 214.914†	4413.0	4018.5	2323.8 ug/L	2323.8 ppb	20:16:13
2	Pb 220.353†	4100.8	3864.4	479.56 ug/L	479.56 ppb	20:16:13
2	S 181.975 Axial†	767.3	698.7	984.15 ug/L	984.15 ppb	20:16:13
2	Sb 206.836†	1461.2	1359.8	497.21 ug/L	497.21 ppb	20:16:13
2	Se 196.026†	739.2	732.3	498.61 ug/L	498.61 ppb	20:16:13
2	Si 251.611†	79458.7	75497.6	2439.9 ug/L	2439.9 ppb	20:15:53
2	Sn 189.927†	2837.2	2706.5	488.71 ug/L	488.71 ppb	20:16:13
2	Ti 334.940†	317791.3	305617.6	481.43 ug/L	481.43 ppb	20:15:53
2	Tl 190.801†	1524.8	1487.0	481.55 ug/L	481.55 ppb	20:16:13
2	U 409.014†	14317.8	16607.7	462.08 ug/L	462.08 ppb	20:15:53
2	V 292.402†	70733.3	69178.5	489.63 ug/L	489.63 ppb	20:15:53
2	Zn 213.857†	51932.5	48973.3	489.84 ug/L	489.84 ppb	20:15:53
2	SiO2†	78632.4	74683.1	5171.9 ug/L	5171.9 ppb	20:16:54
3	Sc Radial	3837.5	3837.5	99.5 %		20:15:09
3	Y RADIAL	4321.3	4321.3	97.07 %		20:14:49
3	Al 396.153Radial†	5389.7	5532.0	5175.6 ug/L	5175.6 ppb	20:14:49
3	Ca 317.933Radial†	2425.3	2418.9	5274.9 ug/L	5274.9 ppb	20:15:09
3	Fe 238.204 Radial†	325.0	315.0	5104.5 ug/L	5104.5 ppb	20:15:09
3	K 766.490 Radial†	29151.6	26534.2	5077.2 ug/L	5077.2 ppb	20:14:49
3	Mg 279.077 IEC†	104.0	103.3	5451.8 ug/L	5451.8 ppb	20:15:09
3	Na 589.592 Radial†	32061.5	33125.5	10307 ug/L	10307 ppb	20:14:49
3	Sr 421.552†	71961.4	72317.2	503.04 ug/L	503.04 ppb	20:14:49
3	Sc 361.383	925454.1	925454.1	105.16 %		20:16:19
3	Y 371.029	766455.3	766455.3	100.77 %		20:16:19
3	Ag 328.068†	108729.0	103163.2	482.44 ug/L	482.44 ppb	20:16:24
3	As 188.979†	1129.8	1094.3	490.78 ug/L	490.78 ppb	20:16:44
3	B 249.677†	19904.1	19206.1	468.52 ug/L	468.52 ppb	20:16:24
3	Ba 233.527†	64747.1	61561.1	485.10 ug/L	485.10 ppb	20:16:24
3	Be 313.107†	1375757.6	1311853.4	491.24 ug/L	491.24 ppb	20:16:19
3	Cd 226.502†	44202.3	42211.0	490.40 ug/L	490.40 ppb	20:16:24
3	Co 228.616†	24270.1	23144.8	486.20 ug/L	486.20 ppb	20:16:24
3	Cr 267.716†	45435.1	43122.0	484.84 ug/L	484.84 ppb	20:16:24
3	Cu 324.752†	169205.4	154953.1	472.13 ug/L	472.13 ppb	20:16:24
3	Mn 257.610†	452710.0	430033.0	490.20 ug/L	490.20 ppb	20:16:19
3	Mo 202.031†	6876.3	6534.5	481.76 ug/L	481.76 ppb	20:16:44
3	Ni 231.604†	20284.1	19206.7	489.87 ug/L	489.87 ppb	20:16:24
3	P 214.914†	4467.6	4042.7	2339.3 ug/L	2339.3 ppb	20:16:44
3	Pb 220.353†	4145.7	3881.2	481.67 ug/L	481.67 ppb	20:16:44
3	S 181.975 Axial†	765.6	692.2	975.08 ug/L	975.08 ppb	20:16:44
3	Sb 206.836†	1471.6	1360.5	497.47 ug/L	497.47 ppb	20:16:44
3	Se 196.026†	745.1	733.3	499.22 ug/L	499.22 ppb	20:16:44
3	Si 251.611†	79202.4	74753.9	2415.8 ug/L	2415.8 ppb	20:16:24
3	Sn 189.927†	2864.2	2714.3	490.12 ug/L	490.12 ppb	20:16:44
3	Ti 334.940†	316872.6	302744.2	476.90 ug/L	476.90 ppb	20:16:24
3	Tl 190.801†	1558.7	1509.7	488.84 ug/L	488.84 ppb	20:16:44
3	U 409.014†	14443.6	16637.2	462.91 ug/L	462.91 ppb	20:16:24
3	V 292.402†	70712.6	68713.8	486.40 ug/L	486.40 ppb	20:16:24
3	Zn 213.857†	51818.5	48538.0	485.49 ug/L	485.49 ppb	20:16:24
3	SiO2†	79163.8	74693.7	5172.7 ug/L	5172.7 ppb	20:16:59

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	920824.9	104.63 %	0.466			0.45%
Sc Radial	3834.7	99.4 %	0.21			0.21%
Y 371.029	762780.4	100.28 %	0.464			0.46%
Y RADIAL	4313.8	96.90 %	0.485			0.50%
Ag 328.068†	103624.1	484.59 ug/L	2.204	484.59 ppb	2.204	0.45%
QC value within limits for Ag 328.068 Recovery = 96.92%						
Al 396.153Radial†	5477.6	5124.4 ug/L	69.69	5124.4 ppb	69.69	1.36%
QC value within limits for Al 396.153Radial Recovery = 102.49%						
As 188.979†	1098.6	492.69 ug/L	5.408	492.69 ppb	5.408	1.10%
QC value within limits for As 188.979 Recovery = 98.54%						
B 249.677†	19276.8	470.24 ug/L	3.252	470.24 ppb	3.252	0.69%
QC value within limits for B 249.677 Recovery = 94.05%						
Ba 233.527†	61850.0	487.38 ug/L	2.197	487.38 ppb	2.197	0.45%
QC value within limits for Ba 233.527 Recovery = 97.48%						
Be 313.107†	1309115.8	490.22 ug/L	0.916	490.22 ppb	0.916	0.19%
QC value within limits for Be 313.107 Recovery = 98.04%						
Ca 317.933Radial†	2420.3	5278.0 ug/L	9.91	5278.0 ppb	9.91	0.19%

QC value within limits for Ca 317.933 Radial Recovery = 105.56%

Cd 226.502†	42399.5	492.59 ug/L	2.081	492.59 ppb	2.081	0.42%
QC value within limits for Cd 226.502 Recovery = 98.52%						
Co 228.616†	23279.3	489.03 ug/L	2.522	489.03 ppb	2.522	0.52%
QC value within limits for Co 228.616 Recovery = 97.81%						
Cr 267.716†	43327.0	487.14 ug/L	2.379	487.14 ppb	2.379	0.49%
QC value within limits for Cr 267.716 Recovery = 97.43%						
Cu 324.752†	155548.8	473.95 ug/L	2.242	473.95 ppb	2.242	0.47%
QC value within limits for Cu 324.752 Recovery = 94.79%						
Fe 238.204 Radial†	315.0	5104.9 ug/L	15.77	5104.9 ppb	15.77	0.31%
QC value within limits for Fe 238.204 Radial Recovery = 102.10%						
K 766.490 Radial†	26304.0	5033.1 ug/L	54.96	5033.1 ppb	54.96	1.09%
QC value within limits for K 766.490 Radial Recovery = 100.66%						
Mg 279.077 IEC†	102.6	5414.3 ug/L	36.35	5414.3 ppb	36.35	0.67%
QC value within limits for Mg 279.077 IEC Recovery = 108.29%						
Mn 257.610†	429526.6	489.62 ug/L	0.958	489.62 ppb	0.958	0.20%
QC value within limits for Mn 257.610 Recovery = 97.92%						
Mo 202.031†	6560.1	483.64 ug/L	3.412	483.64 ppb	3.412	0.71%
QC value within limits for Mo 202.031 Recovery = 96.73%						
Na 589.592 Radial†	33013.6	10273 ug/L	68.1	10273 ppb	68.1	0.66%
QC value within limits for Na 589.592 Radial Recovery = 102.73%						
Ni 231.604†	19291.3	492.02 ug/L	2.647	492.02 ppb	2.647	0.54%
QC value within limits for Ni 231.604 Recovery = 98.40%						
P 214.914†	4049.5	2343.0 ug/L	21.30	2343.0 ppb	21.30	0.91%
QC value within limits for P 214.914 Recovery = 93.72%						
Pb 220.353†	3890.2	482.78 ug/L	3.883	482.78 ppb	3.883	0.80%
QC value within limits for Pb 220.353 Recovery = 96.56%						
S 181.975 Axial†	697.5	982.53 ug/L	6.789	982.53 ppb	6.789	0.69%
QC value within limits for S 181.975 Axial Recovery = 98.25%						
Sb 206.836†	1366.1	499.56 ug/L	3.850	499.56 ppb	3.850	0.77%
QC value within limits for Sb 206.836 Recovery = 99.91%						
Se 196.026†	740.5	503.96 ug/L	8.744	503.96 ppb	8.744	1.73%
QC value within limits for Se 196.026 Recovery = 100.79%						
Si 251.611†	75129.5	2427.9 ug/L	12.05	2427.9 ppb	12.05	0.50%
QC value within limits for Si 251.611 Recovery = 97.12%						
Sn 189.927†	2729.1	492.78 ug/L	5.882	492.78 ppb	5.882	1.19%
QC value within limits for Sn 189.927 Recovery = 98.56%						
Sr 421.552†	71823.1	499.61 ug/L	4.610	499.61 ppb	4.610	0.92%
QC value within limits for Sr 421.552 Recovery = 99.92%						
Ti 334.940†	304124.7	479.08 ug/L	2.272	479.08 ppb	2.272	0.47%
QC value within limits for Ti 334.940 Recovery = 95.82%						
Tl 190.801†	1501.1	486.09 ug/L	3.959	486.09 ppb	3.959	0.81%
QC value within limits for Tl 190.801 Recovery = 97.22%						
U 409.014†	16586.2	461.49 ug/L	1.799	461.49 ppb	1.799	0.39%
QC value within limits for U 409.014 Recovery = 92.30%						
V 292.402†	68909.1	487.78 ug/L	1.665	487.78 ppb	1.665	0.34%
QC value within limits for V 292.402 Recovery = 97.56%						
Zn 213.857†	48781.7	487.93 ug/L	2.226	487.93 ppb	2.226	0.46%
QC value within limits for Zn 213.857 Recovery = 97.59%						
SiO2†	74918.9	5188.3 ug/L	27.62	5188.3 ppb	27.62	0.53%
QC value within limits for SiO2 Recovery = 97.02%						

All analyte(s) passed QC.

Sequence No.: 25

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 2/25/2010 20:19:09

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3895.3	3895.3	101 %		20:21:21
1	Y RADIAL	4448.0	4448.0	99.92 %		20:21:01
1	Al 396.153Radial†	-143.7	-27.2	-25.586 ug/L	-25.586 ppb	20:21:01
1	Ca 317.933Radial†	14.6	-4.2	-9.1851 ug/L	-9.1851 ppb	20:21:21
1	Fe 238.204 Radial†	10.3	-1.5	-24.559 ug/L	-24.559 ppb	20:21:21
1	K 766.490 Radial†	2977.0	182.6	34.993 ug/L	34.993 ppb	20:21:01
1	Mg 279.077 IEC†	-0.2	-1.3	-70.451 ug/L	-70.451 ppb	20:21:21
1	Na 589.592 Radial†	-890.5	19.9	6.2034 ug/L	6.2034 ppb	20:21:01
1	Sr 421.552†	26.8	17.8	0.1236 ug/L	0.1236 ppb	20:21:01
1	Sc 361.383	908132.9	908132.9	103.19 %		20:22:18
1	Y 371.029	765943.2	765943.2	100.70 %		20:22:18
1	Ag 328.068†	345.2	100.4	0.4628 ug/L	0.4628 ppb	20:22:18
1	As 188.979†	-24.7	-4.0	-1.8091 ug/L	-1.8091 ppb	20:22:38
1	B 249.677†	-497.4	-204.0	-4.9956 ug/L	-4.9956 ppb	20:22:38
1	Ba 233.527†	19.5	7.8	0.0600 ug/L	0.0600 ppb	20:22:38
1	Be 313.107†	-3569.4	99.1	0.0365 ug/L	0.0365 ppb	20:22:18
1	Cd 226.502†	-181.1	0.7	0.0095 ug/L	0.0095 ppb	20:22:38
1	Co 228.616†	-78.1	-10.9	-0.2253 ug/L	-0.2253 ppb	20:22:38
1	Cr 267.716†	69.5	-17.7	-0.1993 ug/L	-0.1993 ppb	20:22:38
1	Cu 324.752†	5967.4	-172.1	-0.5223 ug/L	-0.5223 ppb	20:22:18
1	Mn 257.610†	464.3	-27.7	-0.0311 ug/L	-0.0311 ppb	20:22:38
1	Mo 202.031†	16.8	11.6	0.8546 ug/L	0.8546 ppb	20:22:38
1	Ni 231.604†	88.6	3.1	0.0793 ug/L	0.0793 ppb	20:22:38
1	P 214.914†	224.6	11.9	7.2764 ug/L	7.2764 ppb	20:22:38
1	Pb 220.353†	-21.8	-82.3	-10.187 ug/L	-10.187 ppb	20:22:38
1	S 181.975 Axial†	32.9	-4.0	-5.5874 ug/L	-5.5874 ppb	20:22:38
1	Sb 206.836†	44.0	3.6	1.2996 ug/L	1.2996 ppb	20:22:38
1	Se 196.026†	-27.9	-2.3	-1.5879 ug/L	-1.5879 ppb	20:22:38
1	Si 251.611†	585.7	2.9	0.0822 ug/L	0.0822 ppb	20:22:38
1	Sn 189.927†	13.2	3.4	0.6072 ug/L	0.6072 ppb	20:22:38
1	Ti 334.940†	-1609.1	-149.5	-0.2284 ug/L	-0.2284 ppb	20:22:18
1	Tl 190.801†	-24.5	3.7	1.1828 ug/L	1.1828 ppb	20:22:38
1	U 409.014†	-3214.3	-213.1	-5.9482 ug/L	-5.9482 ppb	20:22:18
1	V 292.402†	-1558.9	-42.0	-0.2901 ug/L	-0.2901 ppb	20:22:18
1	Zn 213.857†	696.2	-64.8	-0.6503 ug/L	-0.6503 ppb	20:22:38
1	SiO2†	573.0	-32.9	-2.3078 ug/L	-2.3078 ppb	20:23:34
2	Sc Radial	3833.8	3833.8	99.4 %		20:21:46
2	Y RADIAL	4364.2	4364.2	98.03 %		20:21:26
2	Al 396.153Radial†	-143.1	-28.9	-27.162 ug/L	-27.162 ppb	20:21:26
2	Ca 317.933Radial†	15.5	-3.1	-6.7397 ug/L	-6.7397 ppb	20:21:46
2	Fe 238.204 Radial†	13.0	1.4	23.202 ug/L	23.202 ppb	20:21:46
2	K 766.490 Radial†	2998.9	252.0	48.276 ug/L	48.276 ppb	20:21:26
2	Mg 279.077 IEC†	1.6	0.5	25.238 ug/L	25.238 ppb	20:21:46
2	Na 589.592 Radial†	-903.3	-7.1	-2.2145 ug/L	-2.2145 ppb	20:21:26
2	Sr 421.552†	27.1	18.5	0.1290 ug/L	0.1290 ppb	20:21:26
2	Sc 361.383	902723.7	902723.7	102.57 %		20:22:43
2	Y 371.029	762370.1	762370.1	100.23 %		20:22:43
2	Ag 328.068†	278.0	36.9	0.1791 ug/L	0.1791 ppb	20:22:43
2	As 188.979†	-13.4	6.8	3.0469 ug/L	3.0469 ppb	20:23:03
2	B 249.677†	-454.8	-165.3	-4.0558 ug/L	-4.0558 ppb	20:23:03
2	Ba 233.527†	26.4	14.7	0.1153 ug/L	0.1153 ppb	20:23:03
2	Be 313.107†	-3503.2	142.9	0.0531 ug/L	0.0531 ppb	20:22:43
2	Cd 226.502†	-194.3	-13.2	-0.1562 ug/L	-0.1562 ppb	20:23:03
2	Co 228.616†	-72.2	-5.5	-0.1179 ug/L	-0.1179 ppb	20:23:03
2	Cr 267.716†	66.1	-20.6	-0.2289 ug/L	-0.2289 ppb	20:23:03
2	Cu 324.752†	5860.7	-241.4	-0.7330 ug/L	-0.7330 ppb	20:22:43
2	Mn 257.610†	492.3	2.3	0.0039 ug/L	0.0039 ppb	20:23:03
2	Mo 202.031†	-5.4	-9.9	-0.7304 ug/L	-0.7304 ppb	20:23:03
2	Ni 231.604†	98.1	12.9	0.3288 ug/L	0.3288 ppb	20:23:03

2	P 214.914†	196.3	-14.4	-8.5403 ug/L	-8.5403 ppb	20:23:03
2	Pb 220.353†	-31.2	-91.6	-11.345 ug/L	-11.345 ppb	20:23:03
2	S 181.975 Axial†	44.9	7.9	11.185 ug/L	11.185 ppb	20:23:03
2	Sb 206.836†	36.0	-3.9	-1.3852 ug/L	-1.3852 ppb	20:23:03
2	Se 196.026†	-32.9	-7.4	-4.7801 ug/L	-4.7801 ppb	20:23:03
2	Si 251.611†	575.7	-3.4	-0.1022 ug/L	-0.1022 ppb	20:23:03
2	Sn 189.927†	15.7	5.8	1.0518 ug/L	1.0518 ppb	20:23:03
2	Ti 334.940†	-1537.9	-89.4	-0.1427 ug/L	-0.1427 ppb	20:22:43
2	Tl 190.801†	-36.7	-8.4	-2.6904 ug/L	-2.6904 ppb	20:23:03
2	U 409.014†	-3072.8	-93.8	-2.6227 ug/L	-2.6227 ppb	20:22:43
2	V 292.402†	-1563.9	-55.9	-0.4087 ug/L	-0.4087 ppb	20:22:43
2	Zn 213.857†	694.6	-62.3	-0.6336 ug/L	-0.6336 ppb	20:23:03
2	SiO2†	588.8	-14.2	-0.9630 ug/L	-0.9630 ppb	20:23:39
3	Sc Radial	3877.6	3877.6	101 %		20:22:11
3	Y RADIAL	4386.3	4386.3	98.53 %		20:21:51
3	Al 396.153Radial†	-122.4	-6.7	-6.3320 ug/L	-6.3320 ppb	20:21:51
3	Ca 317.933Radial†	22.7	3.9	8.4957 ug/L	8.4957 ppb	20:22:11
3	Fe 238.204 Radial†	13.0	1.3	20.480 ug/L	20.480 ppb	20:22:11
3	K 766.490 Radial†	3011.5	230.4	44.145 ug/L	44.145 ppb	20:21:51
3	Mg 279.077 IEC†	0.6	-0.6	-31.699 ug/L	-31.699 ppb	20:22:11
3	Na 589.592 Radial†	-904.7	1.8	0.5641 ug/L	0.5641 ppb	20:21:51
3	Sr 421.552†	8.5	-0.2	-0.0018 ug/L	-0.0018 ppb	20:21:51
3	Sc 361.383	914908.7	914908.7	103.96 %		20:23:08
3	Y 371.029	772315.1	772315.1	101.54 %		20:23:08
3	Ag 328.068†	334.8	87.9	0.4158 ug/L	0.4158 ppb	20:23:08
3	As 188.979†	-21.3	-0.6	-0.2673 ug/L	-0.2673 ppb	20:23:28
3	B 249.677†	-499.4	-202.4	-4.9635 ug/L	-4.9635 ppb	20:23:28
3	Ba 233.527†	21.2	9.4	0.0743 ug/L	0.0743 ppb	20:23:28
3	Be 313.107†	-3574.7	119.7	0.0446 ug/L	0.0446 ppb	20:23:08
3	Cd 226.502†	-191.8	-8.3	-0.0992 ug/L	-0.0992 ppb	20:23:28
3	Co 228.616†	-69.0	-1.5	-0.0298 ug/L	-0.0298 ppb	20:23:28
3	Cr 267.716†	69.3	-18.5	-0.2045 ug/L	-0.2045 ppb	20:23:28
3	Cu 324.752†	6008.6	-175.3	-0.5322 ug/L	-0.5322 ppb	20:23:08
3	Mn 257.610†	488.1	-8.1	-0.0060 ug/L	-0.0060 ppb	20:23:28
3	Mo 202.031†	14.7	9.5	0.6999 ug/L	0.6999 ppb	20:23:28
3	Ni 231.604†	71.1	-14.4	-0.3679 ug/L	-0.3679 ppb	20:23:28
3	P 214.914†	203.1	-10.4	-6.1578 ug/L	-6.1578 ppb	20:23:28
3	Pb 220.353†	-40.6	-100.3	-12.407 ug/L	-12.407 ppb	20:23:28
3	S 181.975 Axial†	28.8	-8.1	-11.465 ug/L	-11.465 ppb	20:23:28
3	Sb 206.836†	46.1	5.3	1.9088 ug/L	1.9088 ppb	20:23:28
3	Se 196.026†	-27.6	-1.9	-1.1563 ug/L	-1.1563 ppb	20:23:28
3	Si 251.611†	566.8	-19.5	-0.6416 ug/L	-0.6416 ppb	20:23:28
3	Sn 189.927†	17.2	7.1	1.2878 ug/L	1.2878 ppb	20:23:28
3	Ti 334.940†	-1486.2	-19.7	-0.0266 ug/L	-0.0266 ppb	20:23:08
3	Tl 190.801†	-31.2	-2.6	-0.8304 ug/L	-0.8304 ppb	20:23:28
3	U 409.014†	-3074.7	-55.8	-1.5602 ug/L	-1.5602 ppb	20:23:08
3	V 292.402†	-1525.7	1.1	0.0112 ug/L	0.0112 ppb	20:23:08
3	Zn 213.857†	706.1	-60.2	-0.6080 ug/L	-0.6080 ppb	20:23:28
3	SiO2†	576.2	-33.9	-2.3752 ug/L	-2.3752 ppb	20:23:44

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	908588.5	103.24 %	0.694			0.67%
Sc Radial	3868.9	100 %	0.8			0.82%
Y 371.029	766876.1	100.82 %	0.662			0.66%
Y RADIAL	4399.5	98.83 %	0.975			0.99%
Ag 328.068†	75.0	0.3526 ug/L	0.15208	0.3526 ppb	0.15208	43.13%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-20.9	-19.693 ug/L	11.5979	-19.693 ppb	11.5979	58.89%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	0.7	0.3235 ug/L	2.48131	0.3235 ppb	2.48131	767.04%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-190.6	-4.6716 ug/L	0.53356	-4.6716 ppb	0.53356	11.42%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	10.6	0.0832 ug/L	0.02866	0.0832 ppb	0.02866	34.45%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	120.6	0.0447 ug/L	0.00829	0.0447 ppb	0.00829	18.52%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-1.1	-2.4764 ug/L	9.58041	-2.4764 ppb	9.58041	386.87%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated						
Cd 226.502†	-6.9	-0.0820 ug/L	0.08418	-0.0820 ppb	0.08418	102.67%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-6.0	-0.1244 ug/L	0.09790	-0.1244 ppb	0.09790	78.73%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-18.9	-0.2109 ug/L	0.01579	-0.2109 ppb	0.01579	7.49%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-196.3	-0.5958 ug/L	0.11888	-0.5958 ppb	0.11888	19.95%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	0.4	6.3741 ug/L	26.82379	6.3741 ppb	26.82379	420.82%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	221.7	42.471 ug/L	6.7980	42.471 ppb	6.7980	16.01%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	-0.5	-25.637 ug/L	48.1318	-25.637 ppb	48.1318	187.74%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	-11.2	-0.0111 ug/L	0.01806	-0.0111 ppb	0.01806	163.26%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	3.7	0.2747 ug/L	0.87390	0.2747 ppb	0.87390	318.15%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	4.9	1.5177 ug/L	4.28922	1.5177 ppb	4.28922	282.62%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	0.5	0.0134 ug/L	0.35302	0.0134 ppb	0.35302	>999.9%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	-4.3	-2.4739 ug/L	8.52761	-2.4739 ppb	8.52761	344.71%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	-91.4	-11.313 ug/L	1.1102	-11.313 ppb	1.1102	9.81%
QC value less than the lower limit for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	-1.4	-1.9556 ug/L	11.75374	-1.9556 ppb	11.75374	601.03%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	1.7	0.6077 ug/L	1.75258	0.6077 ppb	1.75258	288.37%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-3.8	-2.5081 ug/L	1.97942	-2.5081 ppb	1.97942	78.92%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	-6.7	-0.2205 ug/L	0.37610	-0.2205 ppb	0.37610	170.54%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	5.5	0.9822 ug/L	0.34560	0.9822 ppb	0.34560	35.18%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	12.0	0.0836 ug/L	0.07399	0.0836 ppb	0.07399	88.51%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	-86.2	-0.1326 ug/L	0.10128	-0.1326 ppb	0.10128	76.41%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	-2.4	-0.7793 ug/L	1.93709	-0.7793 ppb	1.93709	248.56%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	-120.9	-3.3770 ug/L	2.28919	-3.3770 ppb	2.28919	67.79%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	-32.3	-0.2292 ug/L	0.21648	-0.2292 ppb	0.21648	94.45%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	-62.4	-0.6306 ug/L	0.02130	-0.6306 ppb	0.02130	3.38%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	-27.0	-1.8820 ug/L	0.79661	-1.8820 ppb	0.79661	42.33%
QC value within limits for SiO2 Recovery = Not calculated						
QC Failed. Continue with analysis.						

Sequence No.: 35

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 2/25/2010 21:27:24

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	3731.6	3731.6	96.8 %		21:29:36
1	Y RADIAL	4254.5	4254.5	95.57 %		21:29:16
1	Al 396.153Radial†	5411.6	5708.4	5341.5 ug/L	5341.5 ppb	21:29:16
1	Ca 317.933Radial†	2335.7	2395.5	5223.9 ug/L	5223.9 ppb	21:29:36
1	Fe 238.204 Radial†	300.8	299.2	4849.6 ug/L	4849.6 ppb	21:29:36
1	K 766.490 Radial†	28575.3	26770.0	5122.9 ug/L	5122.9 ppb	21:29:16
1	Mg 279.077 IEC†	99.0	101.2	5338.8 ug/L	5338.8 ppb	21:29:36
1	Na 589.592 Radial†	26789.2	28590.7	8896.4 ug/L	8896.4 ppb	21:29:16
1	Sr 421.552†	66970.6	69211.3	481.44 ug/L	481.44 ppb	21:29:16
1	Sc 361.383	933487.5	933487.5	106.07 %		21:30:33
1	Y 371.029	771625.9	771625.9	101.44 %		21:30:33
1	Ag 328.068†	109563.0	103059.6	481.88 ug/L	481.88 ppb	21:30:39
1	As 188.979†	1141.1	1095.7	491.35 ug/L	491.35 ppb	21:30:59
1	B 249.677†	20133.4	19259.3	469.87 ug/L	469.87 ppb	21:30:39
1	Ba 233.527†	65008.4	61277.5	482.86 ug/L	482.86 ppb	21:30:39
1	Be 313.107†	1390190.0	1314201.0	492.11 ug/L	492.11 ppb	21:30:33
1	Cd 226.502†	44400.8	42036.4	488.40 ug/L	488.40 ppb	21:30:39
1	Co 228.616†	24405.3	23073.6	484.71 ug/L	484.71 ppb	21:30:39
1	Cr 267.716†	45703.0	43002.7	483.47 ug/L	483.47 ppb	21:30:39
1	Cu 324.752†	171098.9	155353.4	473.34 ug/L	473.34 ppb	21:30:39
1	Mn 257.610†	457550.0	430891.1	491.16 ug/L	491.16 ppb	21:30:33
1	Mo 202.031†	6912.6	6512.4	480.11 ug/L	480.11 ppb	21:30:59
1	Ni 231.604†	20371.7	19123.3	487.74 ug/L	487.74 ppb	21:30:39
1	P 214.914†	4459.8	3998.8	2312.9 ug/L	2312.9 ppb	21:30:59
1	Pb 220.353†	4134.1	3836.3	476.18 ug/L	476.18 ppb	21:30:59
1	S 181.975 Axial†	771.6	691.6	974.10 ug/L	974.10 ppb	21:30:59
1	Sb 206.836†	1467.1	1344.2	491.67 ug/L	491.67 ppb	21:30:59
1	Se 196.026†	758.9	740.2	502.94 ug/L	502.94 ppb	21:30:59
1	Si 251.611†	80068.6	74922.3	2421.2 ug/L	2421.2 ppb	21:30:39
1	Sn 189.927†	2883.7	2709.3	489.21 ug/L	489.21 ppb	21:30:59
1	Ti 334.940†	319284.1	302424.5	476.40 ug/L	476.40 ppb	21:30:39
1	Tl 190.801†	1569.1	1506.8	487.91 ug/L	487.91 ppb	21:30:59
1	U 409.014†	14498.6	16570.9	461.09 ug/L	461.09 ppb	21:30:39
1	V 292.402†	71017.1	68422.2	484.37 ug/L	484.37 ppb	21:30:39
1	Zn 213.857†	52213.1	48486.0	485.02 ug/L	485.02 ppb	21:30:39
1	SiO2†	80208.9	75031.1	5196.1 ug/L	5196.1 ppb	21:32:06
2	Sc Radial	3771.0	3771.0	97.8 %		21:30:01
2	Y RADIAL	4275.1	4275.1	96.03 %		21:29:41
2	Al 396.153Radial†	5416.4	5654.9	5291.1 ug/L	5291.1 ppb	21:29:41
2	Ca 317.933Radial†	2364.0	2399.2	5232.0 ug/L	5232.0 ppb	21:30:01
2	Fe 238.204 Radial†	305.5	300.8	4874.9 ug/L	4874.9 ppb	21:30:01
2	K 766.490 Radial†	28742.2	26632.4	5096.6 ug/L	5096.6 ppb	21:29:41
2	Mg 279.077 IEC†	98.4	99.4	5247.4 ug/L	5247.4 ppb	21:30:01
2	Na 589.592 Radial†	26815.1	28328.2	8814.7 ug/L	8814.7 ppb	21:29:41
2	Sr 421.552†	67231.8	68755.9	478.27 ug/L	478.27 ppb	21:29:41
2	Sc 361.383	929164.8	929164.8	105.58 %		21:31:04
2	Y 371.029	769162.0	769162.0	101.12 %		21:31:04
2	Ag 328.068†	108785.0	102803.2	480.70 ug/L	480.70 ppb	21:31:10
2	As 188.979†	1130.1	1090.3	488.93 ug/L	488.93 ppb	21:31:30
2	B 249.677†	19875.5	19103.4	466.04 ug/L	466.04 ppb	21:31:10
2	Ba 233.527†	64807.6	61372.5	483.61 ug/L	483.61 ppb	21:31:10
2	Be 313.107†	1385662.5	1316010.1	492.79 ug/L	492.79 ppb	21:31:04
2	Cd 226.502†	44187.0	42028.6	488.30 ug/L	488.30 ppb	21:31:10
2	Co 228.616†	24291.3	23072.8	484.70 ug/L	484.70 ppb	21:31:10
2	Cr 267.716†	45445.2	42959.0	482.99 ug/L	482.99 ppb	21:31:10
2	Cu 324.752†	169338.8	154436.8	470.55 ug/L	470.55 ppb	21:31:10
2	Mn 257.610†	455158.7	430633.0	490.87 ug/L	490.87 ppb	21:31:04
2	Mo 202.031†	6907.6	6537.9	481.99 ug/L	481.99 ppb	21:31:30
2	Ni 231.604†	20266.9	19113.4	487.48 ug/L	487.48 ppb	21:31:10



2	P 214.914†	4471.1	4029.1	2331.6 ug/L	2331.6 ppb	21:31:30
2	Pb 220.353†	4139.9	3860.0	479.10 ug/L	479.10 ppb	21:31:30
2	S 181.975 Axial†	765.2	689.0	970.43 ug/L	970.43 ppb	21:31:30
2	Sb 206.836†	1469.9	1353.2	494.91 ug/L	494.91 ppb	21:31:30
2	Se 196.026†	746.4	731.7	497.47 ug/L	497.47 ppb	21:31:30
2	Si 251.611†	79354.7	74597.3	2410.7 ug/L	2410.7 ppb	21:31:10
2	Sn 189.927†	2871.5	2710.3	489.40 ug/L	489.40 ppb	21:31:30
2	Ti 334.940†	316896.4	301563.3	475.05 ug/L	475.05 ppb	21:31:10
2	Tl 190.801†	1567.9	1512.5	489.75 ug/L	489.75 ppb	21:31:30
2	U 409.014†	14145.0	16299.5	453.51 ug/L	453.51 ppb	21:31:10
2	V 292.402†	70686.9	68420.9	484.37 ug/L	484.37 ppb	21:31:10
2	Zn 213.857†	51910.4	48428.3	484.43 ug/L	484.43 ppb	21:31:10
2	SiO2†	79453.6	74667.5	5170.9 ug/L	5170.9 ppb	21:32:11
3	Sc Radial	3722.4	3722.4	96.5 %		21:30:26
3	Y RADIAL	4135.7	4135.7	92.90 %		21:30:06
3	Al 396.153Radial†	5253.2	5558.2	5199.8 ug/L	5199.8 ppb	21:30:06
3	Ca 317.933Radial†	2337.8	2403.7	5241.8 ug/L	5241.8 ppb	21:30:26
3	Fe 238.204 Radial†	297.8	296.9	4812.2 ug/L	4812.2 ppb	21:30:26
3	K 766.490 Radial†	27881.2	26124.2	4999.2 ug/L	4999.2 ppb	21:30:06
3	Mg 279.077 IEC†	96.8	99.1	5231.7 ug/L	5231.7 ppb	21:30:26
3	Na 589.592 Radial†	26093.2	27938.3	8693.4 ug/L	8693.4 ppb	21:30:06
3	Sr 421.552†	65106.6	67451.8	469.20 ug/L	469.20 ppb	21:30:06
3	Sc 361.383	917108.8	917108.8	104.21 %		21:31:35
3	Y 371.029	759601.7	759601.7	99.864 %		21:31:35
3	Ag 328.068†	110214.9	105529.9	493.38 ug/L	493.38 ppb	21:31:41
3	As 188.979†	1142.6	1116.4	500.60 ug/L	500.60 ppb	21:32:01
3	B 249.677†	20284.7	19743.5	481.71 ug/L	481.71 ppb	21:31:41
3	Ba 233.527†	65559.6	62901.0	495.65 ug/L	495.65 ppb	21:31:41
3	Be 313.107†	1366871.0	1315230.6	492.52 ug/L	492.52 ppb	21:31:35
3	Cd 226.502†	44834.5	43200.1	501.94 ug/L	501.94 ppb	21:31:41
3	Co 228.616†	24593.8	23665.5	497.14 ug/L	497.14 ppb	21:31:41
3	Cr 267.716†	46107.6	44160.5	496.47 ug/L	496.47 ppb	21:31:41
3	Cu 324.752†	171674.1	158786.2	483.79 ug/L	483.79 ppb	21:31:41
3	Mn 257.610†	448961.6	430353.4	490.54 ug/L	490.54 ppb	21:31:35
3	Mo 202.031†	6940.4	6655.4	490.64 ug/L	490.64 ppb	21:32:01
3	Ni 231.604†	20556.0	19643.1	501.00 ug/L	501.00 ppb	21:31:41
3	P 214.914†	4502.3	4114.6	2380.6 ug/L	2380.6 ppb	21:32:01
3	Pb 220.353†	4157.7	3928.7	487.60 ug/L	487.60 ppb	21:32:01
3	S 181.975 Axial†	776.4	709.2	998.98 ug/L	998.98 ppb	21:32:01
3	Sb 206.836†	1493.4	1394.0	509.69 ug/L	509.69 ppb	21:32:01
3	Se 196.026†	770.5	764.1	518.58 ug/L	518.58 ppb	21:32:01
3	Si 251.611†	80628.4	76807.6	2482.2 ug/L	2482.2 ppb	21:31:41
3	Sn 189.927†	2906.6	2779.8	501.94 ug/L	501.94 ppb	21:32:01
3	Ti 334.940†	320888.2	309339.6	487.29 ug/L	487.29 ppb	21:31:41
3	Tl 190.801†	1555.2	1519.8	492.13 ug/L	492.13 ppb	21:32:01
3	U 409.014†	14604.2	16916.3	470.71 ug/L	470.71 ppb	21:31:41
3	V 292.402†	71490.9	70072.6	496.05 ug/L	496.05 ppb	21:31:41
3	Zn 213.857†	52659.8	49793.8	498.12 ug/L	498.12 ppb	21:31:41
3	SiO2†	79087.9	75305.8	5214.9 ug/L	5214.9 ppb	21:32:16

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	926587.0	105.29 %	0.964			0.92%
Sc Radial	3741.7	97.0 %	0.67			0.69%
Y 371.029	766796.5	100.81 %	0.835			0.83%
Y RADIAL	4221.8	94.84 %	1.690			1.78%
Ag 328.068†	103797.6	485.32 ug/L	7.008	485.32 ppb	7.008	1.44%
QC value within limits for Ag 328.068 Recovery = 97.06%						
Al 396.153Radial†	5640.5	5277.4 ug/L	71.84	5277.4 ppb	71.84	1.36%
QC value within limits for Al 396.153Radial Recovery = 105.55%						
As 188.979†	1100.8	493.62 ug/L	6.160	493.62 ppb	6.160	1.25%
QC value within limits for As 188.979 Recovery = 98.72%						
B 249.677†	19368.8	472.54 ug/L	8.167	472.54 ppb	8.167	1.73%
QC value within limits for B 249.677 Recovery = 94.51%						
Ba 233.527†	61850.4	487.37 ug/L	7.176	487.37 ppb	7.176	1.47%
QC value within limits for Ba 233.527 Recovery = 97.47%						
Be 313.107†	1315147.2	492.48 ug/L	0.339	492.48 ppb	0.339	0.07%
QC value within limits for Be 313.107 Recovery = 98.50%						
Ca 317.933Radial†	2399.4	5232.5 ug/L	8.96	5232.5 ppb	8.96	0.17%

QC value within limits for Ca 317.933Radial Recovery = 104.65%							
Cd 226.502†	42421.7	492.88 ug/L	7.844	492.88 ppb	7.844	1.59%	
QC value within limits for Cd 226.502 Recovery = 98.58%							
Co 228.616†	23270.6	488.85 ug/L	7.182	488.85 ppb	7.182	1.47%	
QC value within limits for Co 228.616 Recovery = 97.77%							
Cr 267.716†	43374.1	487.65 ug/L	7.650	487.65 ppb	7.650	1.57%	
QC value within limits for Cr 267.716 Recovery = 97.53%							
Cu 324.752†	156192.1	475.89 ug/L	6.980	475.89 ppb	6.980	1.47%	
QC value within limits for Cu 324.752 Recovery = 95.18%							
Fe 238.204 Radial†	298.9	4845.5 ug/L	31.56	4845.5 ppb	31.56	0.65%	
QC value within limits for Fe 238.204 Radial Recovery = 96.91%							
K 766.490 Radial†	26508.9	5072.9 ug/L	65.15	5072.9 ppb	65.15	1.28%	
QC value within limits for K 766.490 Radial Recovery = 101.46%							
Mg 279.077 IEC†	99.9	5272.6 ug/L	57.82	5272.6 ppb	57.82	1.10%	
QC value within limits for Mg 279.077 IEC Recovery = 105.45%							
Mn 257.610†	430625.9	490.86 ug/L	0.306	490.86 ppb	0.306	0.06%	
QC value within limits for Mn 257.610 Recovery = 98.17%							
Mo 202.031†	6568.6	484.25 ug/L	5.617	484.25 ppb	5.617	1.16%	
QC value within limits for Mo 202.031 Recovery = 96.85%							
Na 589.592 Radial†	28285.7	8801.5 ug/L	102.14	8801.5 ppb	102.14	1.16%	
QC value less than the lower limit for Na 589.592 Radial Recovery = 88.02%							
Ni 231.604†	19293.2	492.07 ug/L	7.728	492.07 ppb	7.728	1.57%	
QC value within limits for Ni 231.604 Recovery = 98.41%							
P 214.914†	4047.5	2341.7 ug/L	34.97	2341.7 ppb	34.97	1.49%	
QC value within limits for P 214.914 Recovery = 93.67%							
Pb 220.353†	3875.0	480.96 ug/L	5.932	480.96 ppb	5.932	1.23%	
QC value within limits for Pb 220.353 Recovery = 96.19%							
S 181.975 Axial†	696.6	981.17 ug/L	15.531	981.17 ppb	15.531	1.58%	
QC value within limits for S 181.975 Axial Recovery = 98.12%							
Sb 206.836†	1363.8	498.76 ug/L	9.607	498.76 ppb	9.607	1.93%	
QC value within limits for Sb 206.836 Recovery = 99.75%							
Se 196.026†	745.3	506.33 ug/L	10.955	506.33 ppb	10.955	2.16%	
QC value within limits for Se 196.026 Recovery = 101.27%							
Si 251.611†	75442.4	2438.0 ug/L	38.60	2438.0 ppb	38.60	1.58%	
QC value within limits for Si 251.611 Recovery = 97.52%							
Sn 189.927†	2733.1	493.52 ug/L	7.294	493.52 ppb	7.294	1.48%	
QC value within limits for Sn 189.927 Recovery = 98.70%							
Sr 421.552†	68473.0	476.30 ug/L	6.353	476.30 ppb	6.353	1.33%	
QC value within limits for Sr 421.552 Recovery = 95.26%							
Ti 334.940†	304442.4	479.58 ug/L	6.714	479.58 ppb	6.714	1.40%	
QC value within limits for Ti 334.940 Recovery = 95.92%							
Tl 190.801†	1513.0	489.93 ug/L	2.112	489.93 ppb	2.112	0.43%	
QC value within limits for Tl 190.801 Recovery = 97.99%							
U 409.014†	16595.5	461.77 ug/L	8.620	461.77 ppb	8.620	1.87%	
QC value within limits for U 409.014 Recovery = 92.35%							
V 292.402†	68971.9	488.27 ug/L	6.746	488.27 ppb	6.746	1.38%	
QC value within limits for V 292.402 Recovery = 97.65%							
Zn 213.857†	48902.7	489.19 ug/L	7.742	489.19 ppb	7.742	1.58%	
QC value within limits for Zn 213.857 Recovery = 97.84%							
SiO2†	75001.5	5194.0 ug/L	22.12	5194.0 ppb	22.12	0.43%	
QC value within limits for SiO2 Recovery = 97.13%							
QC Failed. Continue with analysis.							

Sequence No.: 36

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 2/25/2010 21:34:26

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3887.2	3887.2	101 %		21:36:38
1	Y RADIAL	4394.7	4394.7	98.72 %		21:36:18
1	Al 396.153Radial†	-115.4	0.6	0.5308 ug/L	0.5308 ppb	21:36:18
1	Ca 317.933Radial†	15.3	-3.5	-7.5784 ug/L	-7.5784 ppb	21:36:38
1	Fe 238.204 Radial†	9.7	-2.1	-33.244 ug/L	-33.244 ppb	21:36:38
1	K 766.490 Radial†	2826.7	39.7	7.6355 ug/L	7.6355 ppb	21:36:18
1	Mg 279.077 IEC†	0.8	-0.3	-18.102 ug/L	-18.102 ppb	21:36:38
1	Na 589.592 Radial†	-1151.2	-240.6	-74.857 ug/L	-74.857 ppb	21:36:18
1	Sr 421.552†	41.1	32.0	0.2227 ug/L	0.2227 ppb	21:36:18
1	Sc 361.383	905557.6	905557.6	102.90 %		21:37:35
1	Y 371.029	764697.5	764697.5	100.53 %		21:37:35
1	Ag 328.068†	185.8	-53.6	-0.2537 ug/L	-0.2537 ppb	21:37:35
1	As 188.979†	-25.8	-5.1	-2.2969 ug/L	-2.2969 ppb	21:37:55
1	B 249.677†	-470.7	-179.5	-4.3938 ug/L	-4.3938 ppb	21:37:55
1	Ba 233.527†	-0.0	-11.0	-0.0879 ug/L	-0.0879 ppb	21:37:55
1	Be 313.107†	-3592.7	66.7	0.0246 ug/L	0.0246 ppb	21:37:35
1	Cd 226.502†	-176.0	5.1	0.0612 ug/L	0.0612 ppb	21:37:55
1	Co 228.616†	-63.4	3.2	0.0695 ug/L	0.0695 ppb	21:37:55
1	Cr 267.716†	66.5	-20.5	-0.2303 ug/L	-0.2303 ppb	21:37:55
1	Cu 324.752†	5957.3	-165.5	-0.5021 ug/L	-0.5021 ppb	21:37:35
1	Mn 257.610†	481.0	-10.2	-0.0142 ug/L	-0.0142 ppb	21:37:55
1	Mo 202.031†	11.2	6.2	0.4550 ug/L	0.4550 ppb	21:37:55
1	Ni 231.604†	80.1	-4.9	-0.1250 ug/L	-0.1250 ppb	21:37:55
1	P 214.914†	182.9	-28.0	-16.727 ug/L	-16.727 ppb	21:37:55
1	Pb 220.353†	-46.2	-106.1	-13.123 ug/L	-13.123 ppb	21:37:55
1	S 181.975 Axial†	39.5	2.6	3.6143 ug/L	3.6143 ppb	21:37:55
1	Sb 206.836†	33.1	-6.9	-2.4179 ug/L	-2.4179 ppb	21:37:55
1	Se 196.026†	-32.2	-6.6	-4.4303 ug/L	-4.4303 ppb	21:37:55
1	Si 251.611†	582.0	0.9	0.0239 ug/L	0.0239 ppb	21:37:55
1	Sn 189.927†	6.5	-3.2	-0.5678 ug/L	-0.5678 ppb	21:37:55
1	Ti 334.940†	-1533.6	-80.5	-0.1232 ug/L	-0.1232 ppb	21:37:35
1	Tl 190.801†	-28.5	-0.3	-0.0969 ug/L	-0.0969 ppb	21:37:55
1	U 409.014†	-3244.0	-250.9	-7.0012 ug/L	-7.0012 ppb	21:37:35
1	V 292.402†	-1518.3	-6.9	-0.0502 ug/L	-0.0502 ppb	21:37:35
1	Zn 213.857†	717.5	-42.2	-0.4193 ug/L	-0.4193 ppb	21:37:55
1	SiO2†	596.4	-8.6	-0.6122 ug/L	-0.6122 ppb	21:38:51
2	Sc Radial	3840.1	3840.1	99.6 %		21:37:03
2	Y RADIAL	4356.7	4356.7	97.87 %		21:36:43
2	Al 396.153Radial†	-107.3	7.3	6.8209 ug/L	6.8209 ppb	21:36:43
2	Ca 317.933Radial†	14.9	-3.7	-8.0241 ug/L	-8.0241 ppb	21:37:03
2	Fe 238.204 Radial†	9.5	-2.1	-34.627 ug/L	-34.627 ppb	21:37:03
2	K 766.490 Radial†	2989.2	237.3	45.486 ug/L	45.486 ppb	21:36:43
2	Mg 279.077 IEC†	-1.6	-2.8	-148.16 ug/L	-148.16 ppb	21:37:03
2	Na 589.592 Radial†	-1103.1	-206.3	-64.193 ug/L	-64.193 ppb	21:36:43
2	Sr 421.552†	30.3	21.7	0.1507 ug/L	0.1507 ppb	21:36:43
2	Sc 361.383	913468.7	913468.7	103.79 %		21:38:00
2	Y 371.029	772655.7	772655.7	101.58 %		21:38:00
2	Ag 328.068†	368.8	121.2	0.5555 ug/L	0.5555 ppb	21:38:00
2	As 188.979†	-24.5	-3.7	-1.6524 ug/L	-1.6524 ppb	21:38:20
2	B 249.677†	-484.9	-189.1	-4.6295 ug/L	-4.6295 ppb	21:38:20
2	Ba 233.527†	1.5	-9.6	-0.0773 ug/L	-0.0773 ppb	21:38:20
2	Be 313.107†	-3486.3	199.4	0.0742 ug/L	0.0742 ppb	21:38:00
2	Cd 226.502†	-186.5	-3.5	-0.0381 ug/L	-0.0381 ppb	21:38:20
2	Co 228.616†	-67.2	0.1	0.0052 ug/L	0.0052 ppb	21:38:20
2	Cr 267.716†	68.8	-18.8	-0.2126 ug/L	-0.2126 ppb	21:38:20
2	Cu 324.752†	6016.1	-158.9	-0.4831 ug/L	-0.4831 ppb	21:38:00
2	Mn 257.610†	485.0	-10.4	-0.0092 ug/L	-0.0092 ppb	21:38:20
2	Mo 202.031†	13.5	8.4	0.6134 ug/L	0.6134 ppb	21:38:20
2	Ni 231.604†	71.3	-14.1	-0.3592 ug/L	-0.3592 ppb	21:38:20

2	P 214.914†	205.5	-7.8	-4.5476 ug/L	-4.5476 ppb	21:38:20
2	Pb 220.353†	-54.5	-113.7	-14.061 ug/L	-14.061 ppb	21:38:20
2	S 181.975 Axial†	43.6	6.2	8.6742 ug/L	8.6742 ppb	21:38:20
2	Sb 206.836†	40.5	0.0	0.0256 ug/L	0.0256 ppb	21:38:20
2	Se 196.026†	-36.5	-10.4	-6.9547 ug/L	-6.9547 ppb	21:38:20
2	Si 251.611†	594.2	7.8	0.2443 ug/L	0.2443 ppb	21:38:20
2	Sn 189.927†	12.7	2.8	0.5106 ug/L	0.5106 ppb	21:38:20
2	Ti 334.940†	-1537.0	-70.9	-0.0983 ug/L	-0.0983 ppb	21:38:00
2	Tl 190.801†	-24.1	4.2	1.3508 ug/L	1.3508 ppb	21:38:20
2	U 409.014†	-3204.8	-185.8	-5.1832 ug/L	-5.1832 ppb	21:38:00
2	V 292.402†	-1573.4	-47.2	-0.3285 ug/L	-0.3285 ppb	21:38:00
2	Zn 213.857†	701.4	-63.6	-0.6344 ug/L	-0.6344 ppb	21:38:20
2	SiO2†	616.1	5.4	0.3578 ug/L	0.3578 ppb	21:38:56
3	Sc Radial	3836.2	3836.2	99.5 %		21:37:28
3	Y RADIAL	4334.3	4334.3	97.36 %		21:37:08
3	Al 396.153Radial†	-139.2	-24.9	-23.435 ug/L	-23.435 ppb	21:37:08
3	Ca 317.933Radial†	16.3	-2.3	-5.0728 ug/L	-5.0728 ppb	21:37:28
3	Fe 238.204 Radial†	11.0	-0.7	-10.517 ug/L	-10.517 ppb	21:37:28
3	K 766.490 Radial†	2874.0	124.5	23.868 ug/L	23.868 ppb	21:37:08
3	Mg 279.077 IEC†	2.3	1.1	60.132 ug/L	60.132 ppb	21:37:28
3	Na 589.592 Radial†	-1077.2	-181.4	-56.436 ug/L	-56.436 ppb	21:37:08
3	Sr 421.552†	47.6	39.1	0.2718 ug/L	0.2718 ppb	21:37:08
3	Sc 361.383	909046.8	909046.8	103.29 %		21:38:25
3	Y 371.029	767432.0	767432.0	100.89 %		21:38:25
3	Ag 328.068†	278.8	35.8	0.1675 ug/L	0.1675 ppb	21:38:25
3	As 188.979†	-24.9	-4.2	-1.8595 ug/L	-1.8595 ppb	21:38:46
3	B 249.677†	-484.5	-191.1	-4.6818 ug/L	-4.6818 ppb	21:38:46
3	Ba 233.527†	-1.9	-12.9	-0.1018 ug/L	-0.1018 ppb	21:38:46
3	Be 313.107†	-3605.8	67.4	0.0248 ug/L	0.0248 ppb	21:38:25
3	Cd 226.502†	-189.4	-7.2	-0.0836 ug/L	-0.0836 ppb	21:38:46
3	Co 228.616†	-53.9	12.7	0.2695 ug/L	0.2695 ppb	21:38:46
3	Cr 267.716†	78.2	-9.4	-0.1041 ug/L	-0.1041 ppb	21:38:46
3	Cu 324.752†	5876.9	-265.5	-0.8060 ug/L	-0.8060 ppb	21:38:25
3	Mn 257.610†	467.7	-24.9	-0.0318 ug/L	-0.0318 ppb	21:38:46
3	Mo 202.031†	20.0	14.7	1.0803 ug/L	1.0803 ppb	21:38:46
3	Ni 231.604†	74.1	-11.0	-0.2814 ug/L	-0.2814 ppb	21:38:46
3	P 214.914†	209.4	-3.1	-1.6752 ug/L	-1.6752 ppb	21:38:46
3	Pb 220.353†	-36.3	-96.3	-11.912 ug/L	-11.912 ppb	21:38:46
3	S 181.975 Axial†	42.4	5.2	7.3154 ug/L	7.3154 ppb	21:38:46
3	Sb 206.836†	39.8	-0.5	-0.1384 ug/L	-0.1384 ppb	21:38:46
3	Se 196.026†	-26.1	-0.6	-0.4096 ug/L	-0.4096 ppb	21:38:46
3	Si 251.611†	586.6	3.2	0.0908 ug/L	0.0908 ppb	21:38:46
3	Sn 189.927†	15.0	5.1	0.9186 ug/L	0.9186 ppb	21:38:46
3	Ti 334.940†	-1581.2	-120.9	-0.1932 ug/L	-0.1932 ppb	21:38:25
3	Tl 190.801†	-37.9	-9.3	-2.9926 ug/L	-2.9926 ppb	21:38:46
3	U 409.014†	-3236.8	-231.8	-6.4715 ug/L	-6.4715 ppb	21:38:25
3	V 292.402†	-1549.4	-31.3	-0.2127 ug/L	-0.2127 ppb	21:38:25
3	Zn 213.857†	690.2	-71.2	-0.7148 ug/L	-0.7148 ppb	21:38:46
3	SiO2†	627.9	19.7	1.3390 ug/L	1.3390 ppb	21:39:01

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	909357.7	103.33 %	0.450			0.44%
Sc Radial	3854.5	99.9 %	0.74			0.74%
Y 371.029	768261.8	101.00 %	0.532			0.53%
Y RADIAL	4361.9	97.98 %	0.686			0.70%
Ag 328.068†	34.5	0.1564 ug/L	0.40472	0.1564 ppb	0.40472	258.69%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-5.7	-5.3610 ug/L	15.96516	-5.3610 ppb	15.96516	297.80%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-4.3	-1.9363 ug/L	0.32904	-1.9363 ppb	0.32904	16.99%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-186.6	-4.5684 ug/L	0.15343	-4.5684 ppb	0.15343	3.36%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	-11.2	-0.0890 ug/L	0.01228	-0.0890 ppb	0.01228	13.79%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	111.1	0.0412 ug/L	0.02861	0.0412 ppb	0.02861	69.44%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-3.2	-6.8917 ug/L	1.59095	-6.8917 ppb	1.59095	23.08%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated						
Cd 226.502†	-1.8	-0.0202 ug/L	0.07409	-0.0202 ppb	0.07409	367.46%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	5.3	0.1147 ug/L	0.13788	0.1147 ppb	0.13788	120.19%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-16.2	-0.1824 ug/L	0.06833	-0.1824 ppb	0.06833	37.47%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-196.6	-0.5971 ug/L	0.18119	-0.5971 ppb	0.18119	30.35%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	-1.6	-26.129 ug/L	13.5384	-26.129 ppb	13.5384	51.81%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	133.8	25.663 ug/L	18.9891	25.663 ppb	18.9891	73.99%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	-0.7	-35.378 ug/L	105.2172	-35.378 ppb	105.2172	297.41%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	-15.2	-0.0184 ug/L	0.01187	-0.0184 ppb	0.01187	64.43%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	9.8	0.7162 ug/L	0.32511	0.7162 ppb	0.32511	45.39%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	-209.4	-65.162 ug/L	9.2488	-65.162 ppb	9.2488	14.19%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	-10.0	-0.2552 ug/L	0.11930	-0.2552 ppb	0.11930	46.75%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	-13.0	-7.6498 ug/L	7.99091	-7.6498 ppb	7.99091	104.46%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	-105.4	-13.032 ug/L	1.0772	-13.032 ppb	1.0772	8.27%
QC value less than the lower limit for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	4.6	6.5347 ug/L	2.61874	6.5347 ppb	2.61874	40.07%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	-2.4	-0.8436 ug/L	1.36588	-0.8436 ppb	1.36588	161.91%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-5.9	-3.9316 ug/L	3.30090	-3.9316 ppb	3.30090	83.96%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	4.0	0.1197 ug/L	0.11300	0.1197 ppb	0.11300	94.42%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	1.6	0.2871 ug/L	0.76803	0.2871 ppb	0.76803	267.47%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	30.9	0.2151 ug/L	0.06092	0.2151 ppb	0.06092	28.33%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	-90.8	-0.1382 ug/L	0.04917	-0.1382 ppb	0.04917	35.57%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	-1.8	-0.5796 ug/L	2.21158	-0.5796 ppb	2.21158	381.60%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	-222.8	-6.2186 ug/L	0.93504	-6.2186 ppb	0.93504	15.04%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	-28.4	-0.1971 ug/L	0.13982	-0.1971 ppb	0.13982	70.93%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	-59.0	-0.5895 ug/L	0.15281	-0.5895 ppb	0.15281	25.92%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	5.5	0.3615 ug/L	0.97561	0.3615 ppb	0.97561	269.84%
QC value within limits for SiO2 Recovery = Not calculated						
QC Failed. Continue with analysis.						

Sequence No.: 44

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 2/25/2010 22:30:11

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	3798.5	3798.5	98.5 %		22:32:23
1	Y RADIAL	4326.8	4326.8	97.19 %		22:32:03
1	Al 396.153Radial†	5456.2	5655.3	5290.9 ug/L	5290.9 ppb	22:32:03
1	Ca 317.933Radial†	2400.9	2419.2	5275.6 ug/L	5275.6 ppb	22:32:23
1	Fe 238.204 Radial†	316.2	309.4	5014.2 ug/L	5014.2 ppb	22:32:23
1	K 766.490 Radial†	29028.8	26710.7	5111.2 ug/L	5111.2 ppb	22:32:03
1	Mg 279.077 IEC†	105.9	106.4	5614.4 ug/L	5614.4 ppb	22:32:23
1	Na 589.592 Radial†	29933.4	31296.1	9738.2 ug/L	9738.2 ppb	22:32:03
1	Sr 421.552†	70722.8	71803.2	499.47 ug/L	499.47 ppb	22:32:03
1	Sc 361.383	923827.9	923827.9	104.97 %		22:33:20
1	Y 371.029	767174.5	767174.5	100.86 %		22:33:20
1	Ag 328.068†	109931.0	104490.2	488.60 ug/L	488.60 ppb	22:33:25
1	As 188.979†	1151.2	1116.6	500.69 ug/L	500.69 ppb	22:33:45
1	B 249.677†	20269.7	19587.7	477.87 ug/L	477.87 ppb	22:33:25
1	Ba 233.527†	65078.3	61985.0	488.44 ug/L	488.44 ppb	22:33:25
1	Be 313.107†	1382512.7	1320591.6	494.51 ug/L	494.51 ppb	22:33:20
1	Cd 226.502†	44556.1	42622.0	495.19 ug/L	495.19 ppb	22:33:25
1	Co 228.616†	24417.9	23326.3	490.03 ug/L	490.03 ppb	22:33:25
1	Cr 267.716†	46002.0	43738.2	491.75 ug/L	491.75 ppb	22:33:25
1	Cu 324.752†	171128.9	157068.7	478.57 ug/L	478.57 ppb	22:33:25
1	Mn 257.610†	452094.6	430204.6	490.38 ug/L	490.38 ppb	22:33:20
1	Mo 202.031†	7016.9	6679.9	492.46 ug/L	492.46 ppb	22:33:45
1	Ni 231.604†	20483.0	19430.1	495.56 ug/L	495.56 ppb	22:33:25
1	P 214.914†	4517.5	4097.7	2371.3 ug/L	2371.3 ppb	22:33:45
1	Pb 220.353†	4184.8	3925.4	487.20 ug/L	487.20 ppb	22:33:45
1	S 181.975 Axial†	781.9	709.0	998.70 ug/L	998.70 ppb	22:33:45
1	Sb 206.836†	1503.2	1392.9	509.32 ug/L	509.32 ppb	22:33:45
1	Se 196.026†	756.7	745.6	507.06 ug/L	507.06 ppb	22:33:45
1	Si 251.611†	79905.5	75556.2	2441.6 ug/L	2441.6 ppb	22:33:25
1	Sn 189.927†	2920.7	2773.0	500.70 ug/L	500.70 ppb	22:33:45
1	Ti 334.940†	319752.1	306017.7	482.04 ug/L	482.04 ppb	22:33:25
1	Tl 190.801†	1572.6	1525.6	493.97 ug/L	493.97 ppb	22:33:45
1	U 409.014†	14557.4	16769.8	466.61 ug/L	466.61 ppb	22:33:25
1	V 292.402†	71449.3	69534.0	492.30 ug/L	492.30 ppb	22:33:25
1	Zn 213.857†	52383.7	49163.2	491.77 ug/L	491.77 ppb	22:33:25
1	SiO2†	80567.1	76163.0	5274.4 ug/L	5274.4 ppb	22:34:53
2	Sc Radial	3833.0	3833.0	99.4 %		22:32:48
2	Y RADIAL	4353.2	4353.2	97.79 %		22:32:28
2	Al 396.153Radial†	5471.2	5620.5	5258.4 ug/L	5258.4 ppb	22:32:28
2	Ca 317.933Radial†	2418.6	2415.1	5266.6 ug/L	5266.6 ppb	22:32:48
2	Fe 238.204 Radial†	315.2	305.5	4951.3 ug/L	4951.3 ppb	22:32:48
2	K 766.490 Radial†	28926.6	26342.5	5040.7 ug/L	5040.7 ppb	22:32:28
2	Mg 279.077 IEC†	104.2	103.7	5470.3 ug/L	5470.3 ppb	22:32:48
2	Na 589.592 Radial†	30127.8	31218.0	9713.9 ug/L	9713.9 ppb	22:32:28
2	Sr 421.552†	70893.1	71328.1	496.16 ug/L	496.16 ppb	22:32:28
2	Sc 361.383	921618.0	921618.0	104.72 %		22:33:51
2	Y 371.029	764505.5	764505.5	100.51 %		22:33:51
2	Ag 328.068†	110009.3	104816.1	490.10 ug/L	490.10 ppb	22:33:56
2	As 188.979†	1147.3	1115.5	500.22 ug/L	500.22 ppb	22:34:16
2	B 249.677†	20324.2	19686.1	480.29 ug/L	480.29 ppb	22:33:56
2	Ba 233.527†	65164.7	62216.2	490.26 ug/L	490.26 ppb	22:33:56
2	Be 313.107†	1381450.0	1322734.8	495.32 ug/L	495.32 ppb	22:33:51
2	Cd 226.502†	44445.3	42618.0	495.15 ug/L	495.15 ppb	22:33:56
2	Co 228.616†	24471.6	23433.3	492.27 ug/L	492.27 ppb	22:33:56
2	Cr 267.716†	45985.0	43826.9	492.74 ug/L	492.74 ppb	22:33:56
2	Cu 324.752†	171683.3	157989.0	481.37 ug/L	481.37 ppb	22:33:56
2	Mn 257.610†	452525.3	431648.6	492.02 ug/L	492.02 ppb	22:33:51
2	Mo 202.031†	6959.0	6640.6	489.56 ug/L	489.56 ppb	22:34:16
2	Ni 231.604†	20491.9	19485.3	496.97 ug/L	496.97 ppb	22:33:56

2	P 214.914†	4487.4	4079.4	2359.7 ug/L	2359.7 ppb	22:34:16
2	Pb 220.353†	4164.8	3915.9	486.01 ug/L	486.01 ppb	22:34:16
2	S 181.975 Axial†	781.4	710.4	1000.6 ug/L	1000.6 ppb	22:34:16
2	Sb 206.836†	1480.4	1374.6	502.78 ug/L	502.78 ppb	22:34:16
2	Se 196.026†	764.7	755.0	512.99 ug/L	512.99 ppb	22:34:16
2	Si 251.611†	80081.9	75907.2	2453.0 ug/L	2453.0 ppb	22:33:56
2	Sn 189.927†	2902.8	2762.5	498.81 ug/L	498.81 ppb	22:34:16
2	Ti 334.940†	320428.1	307393.6	484.21 ug/L	484.21 ppb	22:33:56
2	Tl 190.801†	1573.8	1530.3	495.52 ug/L	495.52 ppb	22:34:16
2	U 409.014†	14655.3	16896.5	470.15 ug/L	470.15 ppb	22:33:56
2	V 292.402†	71389.4	69640.0	493.01 ug/L	493.01 ppb	22:33:56
2	Zn 213.857†	52414.8	49312.6	493.27 ug/L	493.27 ppb	22:33:56
2	SiO2†	79384.1	75217.4	5208.8 ug/L	5208.8 ppb	22:34:58
3	Sc Radial	3798.6	3798.6	98.5 %		22:33:13
3	Y RADIAL	4273.4	4273.4	95.99 %		22:32:53
3	Al 396.153Radial†	5427.2	5625.6	5262.9 ug/L	5262.9 ppb	22:32:53
3	Ca 317.933Radial†	2411.2	2429.6	5298.3 ug/L	5298.3 ppb	22:33:13
3	Fe 238.204 Radial†	317.9	311.1	5042.6 ug/L	5042.6 ppb	22:33:13
3	K 766.490 Radial†	28616.2	26290.7	5030.8 ug/L	5030.8 ppb	22:32:53
3	Mg 279.077 IEC†	101.3	101.7	5364.9 ug/L	5364.9 ppb	22:33:13
3	Na 589.592 Radial†	29554.7	30910.4	9618.2 ug/L	9618.2 ppb	22:32:53
3	Sr 421.552†	69822.1	70885.9	493.09 ug/L	493.09 ppb	22:32:53
3	Sc 361.383	914471.6	914471.6	103.91 %		22:34:22
3	Y 371.029	759375.7	759375.7	99.834 %		22:34:22
3	Ag 328.068†	109087.6	104750.0	489.82 ug/L	489.82 ppb	22:34:27
3	As 188.979†	1146.3	1123.1	503.59 ug/L	503.59 ppb	22:34:47
3	B 249.677†	20108.9	19630.5	478.92 ug/L	478.92 ppb	22:34:27
3	Ba 233.527†	64629.2	62187.1	490.03 ug/L	490.03 ppb	22:34:27
3	Be 313.107†	1365049.8	1317260.5	493.27 ug/L	493.27 ppb	22:34:22
3	Cd 226.502†	44076.5	42594.7	494.87 ug/L	494.87 ppb	22:34:27
3	Co 228.616†	24174.3	23329.8	490.10 ug/L	490.10 ppb	22:34:27
3	Cr 267.716†	45667.2	43864.3	493.17 ug/L	493.17 ppb	22:34:27
3	Cu 324.752†	169891.1	157545.4	480.03 ug/L	480.03 ppb	22:34:27
3	Mn 257.610†	447008.8	429716.5	489.84 ug/L	489.84 ppb	22:34:22
3	Mo 202.031†	6974.6	6707.5	494.50 ug/L	494.50 ppb	22:34:47
3	Ni 231.604†	20278.8	19433.2	495.64 ug/L	495.64 ppb	22:34:27
3	P 214.914†	4504.3	4129.0	2389.8 ug/L	2389.8 ppb	22:34:47
3	Pb 220.353†	4177.1	3958.8	491.33 ug/L	491.33 ppb	22:34:47
3	S 181.975 Axial†	789.0	723.5	1019.1 ug/L	1019.1 ppb	22:34:47
3	Sb 206.836†	1487.6	1392.6	509.28 ug/L	509.28 ppb	22:34:47
3	Se 196.026†	766.5	762.4	518.16 ug/L	518.16 ppb	22:34:47
3	Si 251.611†	79284.5	75737.4	2447.5 ug/L	2447.5 ppb	22:34:27
3	Sn 189.927†	2904.4	2785.8	503.01 ug/L	503.01 ppb	22:34:47
3	Ti 334.940†	317484.4	306951.8	483.53 ug/L	483.53 ppb	22:34:27
3	Tl 190.801†	1578.1	1546.2	500.61 ug/L	500.61 ppb	22:34:47
3	U 409.014†	14250.6	16616.4	462.32 ug/L	462.32 ppb	22:34:27
3	V 292.402†	70808.7	69613.9	492.86 ug/L	492.86 ppb	22:34:27
3	Zn 213.857†	51930.3	49237.4	492.51 ug/L	492.51 ppb	22:34:27
3	SiO2†	79768.2	76179.4	5275.5 ug/L	5275.5 ppb	22:35:03

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	919972.5	104.53 %	0.556			0.53%
Sc Radial	3810.0	98.8 %	0.52			0.52%
Y 371.029	763685.2	100.40 %	0.521			0.52%
Y RADIAL	4317.8	96.99 %	0.913			0.94%
Ag 328.068†	104685.5	489.51 ug/L	0.796	489.51 ppb	0.796	0.16%
QC value within limits for Ag 328.068 Recovery = 97.90%						
Al 396.153Radial†	5633.8	5270.7 ug/L	17.62	5270.7 ppb	17.62	0.33%
QC value within limits for Al 396.153Radial Recovery = 105.41%						
As 188.979†	1118.4	501.50 ug/L	1.824	501.50 ppb	1.824	0.36%
QC value within limits for As 188.979 Recovery = 100.30%						
B 249.677†	19634.8	479.03 ug/L	1.211	479.03 ppb	1.211	0.25%
QC value within limits for B 249.677 Recovery = 95.81%						
Ba 233.527†	62129.4	489.58 ug/L	0.990	489.58 ppb	0.990	0.20%
QC value within limits for Ba 233.527 Recovery = 97.92%						
Be 313.107†	1320195.6	494.37 ug/L	1.031	494.37 ppb	1.031	0.21%
QC value within limits for Be 313.107 Recovery = 98.87%						
Ca 317.933Radial†	2421.3	5280.2 ug/L	16.36	5280.2 ppb	16.36	0.31%

QC value within limits for Ca 317.933 Radial Recovery = 105.60%							
Cd 226.502†	42611.6	495.07 ug/L	0.175	495.07 ppb	0.175	0.04%	
QC value within limits for Cd 226.502 Recovery = 99.01%							
Co 228.616†	23363.1	490.80 ug/L	1.271	490.80 ppb	1.271	0.26%	
QC value within limits for Co 228.616 Recovery = 98.16%							
Cr 267.716†	43809.8	492.55 ug/L	0.728	492.55 ppb	0.728	0.15%	
QC value within limits for Cr 267.716 Recovery = 98.51%							
Cu 324.752†	157534.4	479.99 ug/L	1.400	479.99 ppb	1.400	0.29%	
QC value within limits for Cu 324.752 Recovery = 96.00%							
Fe 238.204 Radial†	308.7	5002.7 ug/L	46.70	5002.7 ppb	46.70	0.93%	
QC value within limits for Fe 238.204 Radial Recovery = 100.05%							
K 766.490 Radial†	26448.0	5060.9 ug/L	43.86	5060.9 ppb	43.86	0.87%	
QC value within limits for K 766.490 Radial Recovery = 101.22%							
Mg 279.077 IEC†	103.9	5483.2 ug/L	125.23	5483.2 ppb	125.23	2.28%	
QC value within limits for Mg 279.077 IEC Recovery = 109.66%							
Mn 257.610†	430523.2	490.75 ug/L	1.139	490.75 ppb	1.139	0.23%	
QC value within limits for Mn 257.610 Recovery = 98.15%							
Mo 202.031†	6676.0	492.17 ug/L	2.480	492.17 ppb	2.480	0.50%	
QC value within limits for Mo 202.031 Recovery = 98.43%							
Na 589.592 Radial†	31141.5	9690.1 ug/L	63.45	9690.1 ppb	63.45	0.65%	
QC value within limits for Na 589.592 Radial Recovery = 96.90%							
Ni 231.604†	19449.5	496.06 ug/L	0.791	496.06 ppb	0.791	0.16%	
QC value within limits for Ni 231.604 Recovery = 99.21%							
P 214.914†	4102.0	2373.6 ug/L	15.19	2373.6 ppb	15.19	0.64%	
QC value within limits for P 214.914 Recovery = 94.94%							
Pb 220.353†	3933.4	488.18 ug/L	2.788	488.18 ppb	2.788	0.57%	
QC value within limits for Pb 220.353 Recovery = 97.64%							
S 181.975 Axial†	714.3	1006.2 ug/L	11.29	1006.2 ppb	11.29	1.12%	
QC value within limits for S 181.975 Axial Recovery = 100.62%							
Sb 206.836†	1386.7	507.13 ug/L	3.768	507.13 ppb	3.768	0.74%	
QC value within limits for Sb 206.836 Recovery = 101.43%							
Se 196.026†	754.3	512.74 ug/L	5.550	512.74 ppb	5.550	1.08%	
QC value within limits for Se 196.026 Recovery = 102.55%							
Si 251.611†	75733.6	2447.4 ug/L	5.70	2447.4 ppb	5.70	0.23%	
QC value within limits for Si 251.611 Recovery = 97.90%							
Sn 189.927†	2773.7	500.84 ug/L	2.102	500.84 ppb	2.102	0.42%	
QC value within limits for Sn 189.927 Recovery = 100.17%							
Sr 421.552†	71339.0	496.24 ug/L	3.192	496.24 ppb	3.192	0.64%	
QC value within limits for Sr 421.552 Recovery = 99.25%							
Ti 334.940†	306787.7	483.26 ug/L	1.114	483.26 ppb	1.114	0.23%	
QC value within limits for Ti 334.940 Recovery = 96.65%							
Tl 190.801†	1534.0	496.70 ug/L	3.477	496.70 ppb	3.477	0.70%	
QC value within limits for Tl 190.801 Recovery = 99.34%							
U 409.014†	16760.9	466.36 ug/L	3.923	466.36 ppb	3.923	0.84%	
QC value within limits for U 409.014 Recovery = 93.27%							
V 292.402†	69596.0	492.72 ug/L	0.376	492.72 ppb	0.376	0.08%	
QC value within limits for V 292.402 Recovery = 98.54%							
Zn 213.857†	49237.7	492.52 ug/L	0.752	492.52 ppb	0.752	0.15%	
QC value within limits for Zn 213.857 Recovery = 98.50%							
SiO2†	75853.3	5252.9 ug/L	38.17	5252.9 ppb	38.17	0.73%	
QC value within limits for SiO2 Recovery = 98.23%							
All analyte(s) passed QC.							



Sequence No.: 45

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 2/25/2010 22:37:13

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	3844.5	3844.5	99.7 %		22:39:25
1	Y RADIAL	4418.7	4418.7	99.26 %		22:39:05
1	Al 396.153Radial†	-118.0	-3.3	-3.1194 ug/L	-3.1194 ppb	22:39:05
1	Ca 317.933Radial†	12.9	-5.7	-12.508 ug/L	-12.508 ppb	22:39:25
1	Fe 238.204 Radial†	12.5	0.9	14.008 ug/L	14.008 ppb	22:39:25
1	K 766.490 Radial†	2866.8	111.0	21.301 ug/L	21.301 ppb	22:39:05
1	Mg 279.077 IEC†	3.7	2.6	135.51 ug/L	135.51 ppb	22:39:25
1	Na 589.592 Radial†	-1097.5	-199.4	-62.039 ug/L	-62.039 ppb	22:39:05
1	Sr 421.552†	34.8	26.2	0.1824 ug/L	0.1824 ppb	22:39:05
1	Sc 361.383	922955.6	922955.6	104.87 %		22:40:22
1	Y 371.029	775741.2	775741.2	101.99 %		22:40:22
1	Ag 328.068†	396.0	143.5	0.6743 ug/L	0.6743 ppb	22:40:27
1	As 188.979†	-14.3	6.3	2.8047 ug/L	2.8047 ppb	22:40:47
1	B 249.677†	-378.6	-83.0	-2.0358 ug/L	-2.0358 ppb	22:40:47
1	Ba 233.527†	30.4	17.9	0.1402 ug/L	0.1402 ppb	22:40:47
1	Be 313.107†	-3481.4	238.6	0.0892 ug/L	0.0892 ppb	22:40:27
1	Cd 226.502†	-198.9	-13.4	-0.1586 ug/L	-0.1586 ppb	22:40:47
1	Co 228.616†	-62.6	5.2	0.1103 ug/L	0.1103 ppb	22:40:47
1	Cr 267.716†	64.9	-23.2	-0.2574 ug/L	-0.2574 ppb	22:40:47
1	Cu 324.752†	6075.0	-162.4	-0.4905 ug/L	-0.4905 ppb	22:40:27
1	Mn 257.610†	484.5	-15.7	-0.0221 ug/L	-0.0221 ppb	22:40:47
1	Mo 202.031†	14.0	8.6	0.6366 ug/L	0.6366 ppb	22:40:47
1	Ni 231.604†	94.1	7.0	0.1779 ug/L	0.1779 ppb	22:40:47
1	P 214.914†	199.5	-15.6	-9.2618 ug/L	-9.2618 ppb	22:40:47
1	Pb 220.353†	-30.9	-90.6	-11.213 ug/L	-11.213 ppb	22:40:47
1	S 181.975 Axial†	44.5	6.6	9.2586 ug/L	9.2586 ppb	22:40:47
1	Sb 206.836†	35.8	-4.9	-1.7082 ug/L	-1.7082 ppb	22:40:47
1	Se 196.026†	-23.4	2.4	1.6361 ug/L	1.6361 ppb	22:40:47
1	Si 251.611†	595.8	3.4	0.1009 ug/L	0.1009 ppb	22:40:47
1	Sn 189.927†	13.2	3.2	0.5687 ug/L	0.5687 ppb	22:40:47
1	Ti 334.940†	-1467.3	10.8	0.0072 ug/L	0.0072 ppb	22:40:27
1	Tl 190.801†	-29.3	-0.5	-0.1476 ug/L	-0.1476 ppb	22:40:47
1	U 409.014†	-3285.8	-231.2	-6.4584 ug/L	-6.4584 ppb	22:40:22
1	V 292.402†	-1620.6	-76.6	-0.5380 ug/L	-0.5380 ppb	22:40:27
1	Zn 213.857†	705.2	-67.0	-0.6791 ug/L	-0.6791 ppb	22:40:47
1	SiO2†	634.1	16.5	1.1254 ug/L	1.1254 ppb	22:41:53
2	Sc Radial	3819.9	3819.9	99.0 %		22:39:50
2	Y RADIAL	4322.4	4322.4	97.10 %		22:39:30
2	Al 396.153Radial†	-133.1	-19.4	-18.205 ug/L	-18.205 ppb	22:39:30
2	Ca 317.933Radial†	16.1	-2.4	-5.2388 ug/L	-5.2388 ppb	22:39:50
2	Fe 238.204 Radial†	14.4	2.8	45.627 ug/L	45.627 ppb	22:39:50
2	K 766.490 Radial†	2961.1	224.7	43.084 ug/L	43.084 ppb	22:39:30
2	Mg 279.077 IEC†	3.0	1.8	95.795 ug/L	95.795 ppb	22:39:50
2	Na 589.592 Radial†	-1111.1	-220.1	-68.502 ug/L	-68.502 ppb	22:39:30
2	Sr 421.552†	36.2	27.8	0.1933 ug/L	0.1933 ppb	22:39:30
2	Sc 361.383	927821.9	927821.9	105.43 %		22:40:52
2	Y 371.029	781566.9	781566.9	102.75 %		22:40:52
2	Ag 328.068†	226.5	-19.4	-0.0788 ug/L	-0.0788 ppb	22:40:57
2	As 188.979†	-21.8	-0.8	-0.3256 ug/L	-0.3256 ppb	22:41:18
2	B 249.677†	-389.9	-91.9	-2.2599 ug/L	-2.2599 ppb	22:41:18
2	Ba 233.527†	20.3	8.3	0.0670 ug/L	0.0670 ppb	22:41:18
2	Be 313.107†	-3555.5	185.8	0.0692 ug/L	0.0692 ppb	22:40:57
2	Cd 226.502†	-199.0	-12.6	-0.1500 ug/L	-0.1500 ppb	22:41:18
2	Co 228.616†	-48.5	18.9	0.3963 ug/L	0.3963 ppb	22:41:18
2	Cr 267.716†	66.8	-21.7	-0.2413 ug/L	-0.2413 ppb	22:41:18
2	Cu 324.752†	6027.1	-238.2	-0.7263 ug/L	-0.7263 ppb	22:40:57
2	Mn 257.610†	491.5	-11.5	-0.0125 ug/L	-0.0125 ppb	22:41:18
2	Mo 202.031†	9.4	4.3	0.3182 ug/L	0.3182 ppb	22:41:18
2	Ni 231.604†	96.1	8.4	0.2133 ug/L	0.2133 ppb	22:41:18

2	P 214.914†	188.2	-27.3	-16.297 ug/L	-16.297 ppb	22:41:18
2	Pb 220.353†	-51.1	-109.7	-13.573 ug/L	-13.573 ppb	22:41:18
2	S 181.975 Axial†	31.8	-5.7	-8.0218 ug/L	-8.0218 ppb	22:41:18
2	Sb 206.836†	20.3	-19.7	-6.9488 ug/L	-6.9488 ppb	22:41:18
2	Se 196.026†	-31.5	-5.1	-3.2295 ug/L	-3.2295 ppb	22:41:18
2	Si 251.611†	604.1	8.3	0.2642 ug/L	0.2642 ppb	22:41:18
2	Sn 189.927†	11.0	1.0	0.1797 ug/L	0.1797 ppb	22:41:18
2	Ti 334.940†	-1535.9	-47.0	-0.0847 ug/L	-0.0847 ppb	22:40:57
2	Tl 190.801†	-40.5	-11.0	-3.5380 ug/L	-3.5380 ppb	22:41:18
2	U 409.014†	-2865.0	184.3	5.1407 ug/L	5.1407 ppb	22:40:52
2	V 292.402†	-1501.5	44.5	0.3202 ug/L	0.3202 ppb	22:40:57
2	Zn 213.857†	719.8	-56.7	-0.5798 ug/L	-0.5798 ppb	22:41:18
2	SiO2†	632.8	12.0	0.8270 ug/L	0.8270 ppb	22:41:58
3	Sc Radial	3771.9	3771.9	97.8 %		22:40:16
3	Y RADIAL	4401.1	4401.1	98.86 %		22:39:56
3	Al 396.153Radial†	-147.0	-35.2	-33.109 ug/L	-33.109 ppb	22:39:56
3	Ca 317.933Radial†	14.7	-3.6	-7.9433 ug/L	-7.9433 ppb	22:40:16
3	Fe 238.204 Radial†	9.7	-1.8	-28.445 ug/L	-28.445 ppb	22:40:16
3	K 766.490 Radial†	2861.1	160.6	30.796 ug/L	30.796 ppb	22:39:56
3	Mg 279.077 IEC†	0.3	-0.8	-43.519 ug/L	-43.519 ppb	22:40:16
3	Na 589.592 Radial†	-1092.3	-215.3	-66.995 ug/L	-66.995 ppb	22:39:56
3	Sr 421.552†	32.4	24.4	0.1696 ug/L	0.1696 ppb	22:39:56
3	Sc 361.383	933434.1	933434.1	106.06 %		22:41:23
3	Y 371.029	785762.3	785762.3	103.30 %		22:41:23
3	Ag 328.068†	327.1	74.2	0.3394 ug/L	0.3394 ppb	22:41:28
3	As 188.979†	-25.3	-3.9	-1.7402 ug/L	-1.7402 ppb	22:41:48
3	B 249.677†	-417.5	-115.6	-2.8296 ug/L	-2.8296 ppb	22:41:48
3	Ba 233.527†	25.7	13.2	0.1028 ug/L	0.1028 ppb	22:41:48
3	Be 313.107†	-3611.2	153.4	0.0569 ug/L	0.0569 ppb	22:41:28
3	Cd 226.502†	-191.3	-4.2	-0.0466 ug/L	-0.0466 ppb	22:41:48
3	Co 228.616†	-58.8	9.4	0.1994 ug/L	0.1994 ppb	22:41:48
3	Cr 267.716†	59.0	-29.5	-0.3320 ug/L	-0.3320 ppb	22:41:48
3	Cu 324.752†	5958.8	-336.9	-1.0255 ug/L	-1.0255 ppb	22:41:28
3	Mn 257.610†	501.3	-5.0	-0.0067 ug/L	-0.0067 ppb	22:41:48
3	Mo 202.031†	10.0	4.8	0.3484 ug/L	0.3484 ppb	22:41:48
3	Ni 231.604†	76.3	-10.8	-0.2763 ug/L	-0.2763 ppb	22:41:48
3	P 214.914†	196.8	-20.3	-11.971 ug/L	-11.971 ppb	22:41:48
3	Pb 220.353†	-54.2	-112.3	-13.895 ug/L	-13.895 ppb	22:41:48
3	S 181.975 Axial†	48.5	9.9	13.905 ug/L	13.905 ppb	22:41:48
3	Sb 206.836†	43.2	1.7	0.6274 ug/L	0.6274 ppb	22:41:48
3	Se 196.026†	-25.1	1.1	0.6420 ug/L	0.6420 ppb	22:41:48
3	Si 251.611†	580.6	-17.3	-0.5650 ug/L	-0.5650 ppb	22:41:48
3	Sn 189.927†	16.6	6.2	1.1223 ug/L	1.1223 ppb	22:41:48
3	Ti 334.940†	-1625.7	-122.9	-0.1890 ug/L	-0.1890 ppb	22:41:28
3	Tl 190.801†	-17.0	11.4	3.6784 ug/L	3.6784 ppb	22:41:48
3	U 409.014†	-3251.7	-164.0	-4.5752 ug/L	-4.5752 ppb	22:41:23
3	V 292.402†	-1583.8	-24.6	-0.1718 ug/L	-0.1718 ppb	22:41:28
3	Zn 213.857†	705.7	-74.1	-0.7402 ug/L	-0.7402 ppb	22:41:48
3	SiO2†	676.4	49.5	3.4265 ug/L	3.4265 ppb	22:42:03

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	928070.5	105.45 %	0.596			0.57%
Sc Radial	3812.1	98.8 %	0.96			0.97%
Y 371.029	781023.4	102.68 %	0.662			0.64%
Y RADIAL	4380.7	98.41 %	1.152			1.17%
Ag 328.068†	66.1	0.3116 ug/L	0.37733	0.3116 ppb	0.37733	121.09%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-19.3	-18.145 ug/L	14.9951	-18.145 ppb	14.9951	82.64%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	0.6	0.2463 ug/L	2.32582	0.2463 ppb	2.32582	944.34%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-96.8	-2.3751 ug/L	0.40927	-2.3751 ppb	0.40927	17.23%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	13.1	0.1033 ug/L	0.03660	0.1033 ppb	0.03660	35.42%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	192.6	0.0718 ug/L	0.01629	0.0718 ppb	0.01629	22.70%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-3.9	-8.5632 ug/L	3.67378	-8.5632 ppb	3.67378	42.90%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated

Cd 226.502†	-10.1	-0.1184 ug/L	0.06233	-0.1184 ppb	0.06233	52.66%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	11.1	0.2353 ug/L	0.14638	0.2353 ppb	0.14638	62.21%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-24.8	-0.2769 ug/L	0.04838	-0.2769 ppb	0.04838	17.47%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-245.9	-0.7474 ug/L	0.26814	-0.7474 ppb	0.26814	35.87%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	0.6	10.397 ug/L	37.1681	10.397 ppb	37.1681	357.50%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	165.5	31.727 ug/L	10.9214	31.727 ppb	10.9214	34.42%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	1.2	62.594 ug/L	94.0175	62.594 ppb	94.0175	150.20%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	-10.7	-0.0138 ug/L	0.00776	-0.0138 ppb	0.00776	56.41%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	5.9	0.4344 ug/L	0.17576	0.4344 ppb	0.17576	40.46%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	-211.6	-65.845 ug/L	3.3814	-65.845 ppb	3.3814	5.14%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	1.5	0.0383 ug/L	0.27304	0.0383 ppb	0.27304	713.18%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	-21.0	-12.510 ug/L	3.5486	-12.510 ppb	3.5486	28.37%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	-104.2	-12.894 ug/L	1.4643	-12.894 ppb	1.4643	11.36%
QC value less than the lower limit for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	3.6	5.0471 ug/L	11.55394	5.0471 ppb	11.55394	228.92%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	-7.6	-2.6765 ug/L	3.87984	-2.6765 ppb	3.87984	144.96%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-0.5	-0.3171 ug/L	2.57072	-0.3171 ppb	2.57072	810.61%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	-1.9	-0.0666 ug/L	0.43923	-0.0666 ppb	0.43923	659.15%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	3.5	0.6236 ug/L	0.47369	0.6236 ppb	0.47369	75.96%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	26.1	0.1818 ug/L	0.01190	0.1818 ppb	0.01190	6.55%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	-53.0	-0.0889 ug/L	0.09817	-0.0889 ppb	0.09817	110.46%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	-0.0	-0.0024 ug/L	3.61036	-0.0024 ppb	3.61036	>999.9%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	-70.3	-1.9643 ug/L	6.22476	-1.9643 ppb	6.22476	316.90%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	-18.9	-0.1299 ug/L	0.43066	-0.1299 ppb	0.43066	331.59%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	-65.9	-0.6664 ug/L	0.08095	-0.6664 ppb	0.08095	12.15%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	26.0	1.7930 ug/L	1.42253	1.7930 ppb	1.42253	79.34%
QC value within limits for SiO2 Recovery = Not calculated						

QC Failed. Continue with analysis.

Sequence No.: 53

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 2/25/2010 23:32:57

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	3798.8	3798.8	98.5 %		23:35:09
1	Y RADIAL	4279.4	4279.4	96.13 %		23:34:49
1	Al 396.153Radial†	5485.9	5684.9	5318.9 ug/L	5318.9 ppb	23:34:49
1	Ca 317.933Radial†	2400.9	2419.0	5275.1 ug/L	5275.1 ppb	23:35:09
1	Fe 238.204 Radial†	309.9	302.9	4910.1 ug/L	4910.1 ppb	23:35:09
1	K 766.490 Radial†	28823.1	26499.2	5070.8 ug/L	5070.8 ppb	23:34:49
1	Mg 279.077 IEC†	100.4	100.8	5317.9 ug/L	5317.9 ppb	23:35:09
1	Na 589.592 Radial†	28827.6	30170.5	9388.0 ug/L	9388.0 ppb	23:34:49
1	Sr 421.552†	69318.0	70370.1	489.50 ug/L	489.50 ppb	23:34:49
1	Sc 361.383	925430.7	925430.7	105.15 %		23:36:07
1	Y 371.029	767480.3	767480.3	100.90 %		23:36:07
1	Ag 328.068†	111076.5	105398.2	492.80 ug/L	492.80 ppb	23:36:12
1	As 188.979†	1157.8	1120.9	502.65 ug/L	502.65 ppb	23:36:32
1	B 249.677†	20578.9	19848.3	484.26 ug/L	484.26 ppb	23:36:12
1	Ba 233.527†	65972.6	62728.1	494.29 ug/L	494.29 ppb	23:36:12
1	Be 313.107†	1391278.5	1326646.6	496.79 ug/L	496.79 ppb	23:36:07
1	Cd 226.502†	44969.3	42941.4	498.92 ug/L	498.92 ppb	23:36:12
1	Co 228.616†	24724.6	23577.6	495.29 ug/L	495.29 ppb	23:36:12
1	Cr 267.716†	46303.7	43949.1	494.11 ug/L	494.11 ppb	23:36:12
1	Cu 324.752†	173777.0	159304.7	485.37 ug/L	485.37 ppb	23:36:12
1	Mn 257.610†	455440.8	432640.9	493.16 ug/L	493.16 ppb	23:36:07
1	Mo 202.031†	6991.5	6644.2	489.82 ug/L	489.82 ppb	23:36:32
1	Ni 231.604†	20649.7	19554.8	498.75 ug/L	498.75 ppb	23:36:12
1	P 214.914†	4530.9	4103.0	2373.3 ug/L	2373.3 ppb	23:36:32
1	Pb 220.353†	4201.2	3934.1	488.29 ug/L	488.29 ppb	23:36:32
1	S 181.975 Axial†	777.0	703.1	990.36 ug/L	990.36 ppb	23:36:32
1	Sb 206.836†	1491.1	1379.0	504.39 ug/L	504.39 ppb	23:36:32
1	Se 196.026†	762.7	750.1	509.67 ug/L	509.67 ppb	23:36:32
1	Si 251.611†	81088.5	76549.4	2473.8 ug/L	2473.8 ppb	23:36:12
1	Sn 189.927†	2935.0	2781.7	502.28 ug/L	502.28 ppb	23:36:32
1	Ti 334.940†	323703.5	309247.9	487.15 ug/L	487.15 ppb	23:36:12
1	Tl 190.801†	1552.6	1503.9	487.04 ug/L	487.04 ppb	23:36:32
1	U 409.014†	14871.6	17044.6	474.29 ug/L	474.29 ppb	23:36:12
1	V 292.402†	72133.4	70066.7	496.00 ug/L	496.00 ppb	23:36:12
1	Zn 213.857†	52976.9	49641.0	496.58 ug/L	496.58 ppb	23:36:12
1	SiO2†	80173.0	75655.3	5239.2 ug/L	5239.2 ppb	23:37:39
2	Sc Radial	3799.0	3799.0	98.5 %		23:35:34
2	Y RADIAL	4252.6	4252.6	95.53 %		23:35:14
2	Al 396.153Radial†	5434.9	5632.9	5269.6 ug/L	5269.6 ppb	23:35:14
2	Ca 317.933Radial†	2402.3	2420.3	5278.1 ug/L	5278.1 ppb	23:35:34
2	Fe 238.204 Radial†	310.7	303.8	4923.6 ug/L	4923.6 ppb	23:35:34
2	K 766.490 Radial†	28579.5	26250.7	5023.2 ug/L	5023.2 ppb	23:35:14
2	Mg 279.077 IEC†	102.7	103.1	5442.9 ug/L	5442.9 ppb	23:35:34
2	Na 589.592 Radial†	28516.0	29853.0	9289.2 ug/L	9289.2 ppb	23:35:14
2	Sr 421.552†	68839.4	69881.5	486.10 ug/L	486.10 ppb	23:35:14
2	Sc 361.383	915670.2	915670.2	104.04 %		23:36:38
2	Y 371.029	759352.8	759352.8	99.831 %		23:36:38
2	Ag 328.068†	109734.6	105234.5	492.04 ug/L	492.04 ppb	23:36:43
2	As 188.979†	1166.2	1140.8	511.45 ug/L	511.45 ppb	23:37:03
2	B 249.677†	20202.7	19695.4	480.52 ug/L	480.52 ppb	23:36:43
2	Ba 233.527†	64963.9	62427.3	491.92 ug/L	491.92 ppb	23:36:43
2	Be 313.107†	1374995.7	1325100.2	496.21 ug/L	496.21 ppb	23:36:38
2	Cd 226.502†	44313.0	42766.5	496.88 ug/L	496.88 ppb	23:36:43
2	Co 228.616†	24338.3	24577.0	492.79 ug/L	492.79 ppb	23:36:43
2	Cr 267.716†	45796.2	43930.8	493.90 ug/L	493.90 ppb	23:36:43
2	Cu 324.752†	171109.8	158502.7	482.93 ug/L	482.93 ppb	23:36:43
2	Mn 257.610†	451271.9	433250.8	493.85 ug/L	493.85 ppb	23:36:38
2	Mo 202.031†	7056.1	6777.1	499.61 ug/L	499.61 ppb	23:37:03
2	Ni 231.604†	20365.6	19491.1	497.12 ug/L	497.12 ppb	23:36:43

2	P 214.914†	4566.2	4182.8	2421.8 ug/L	2421.8 ppb	23:37:03
2	Pb 220.353†	4225.8	4000.4	496.50 ug/L	496.50 ppb	23:37:03
2	S 181.975 Axial†	791.2	724.6	1020.7 ug/L	1020.7 ppb	23:37:03
2	Sb 206.836†	1509.8	1412.1	516.37 ug/L	516.37 ppb	23:37:03
2	Se 196.026†	762.1	757.2	514.42 ug/L	514.42 ppb	23:37:03
2	Si 251.611†	79836.8	76168.4	2461.4 ug/L	2461.4 ppb	23:36:43
2	Sn 189.927†	2945.0	2821.1	509.38 ug/L	509.38 ppb	23:37:03
2	Ti 334.940†	318740.5	307759.2	484.79 ug/L	484.79 ppb	23:36:43
2	Tl 190.801†	1568.2	1534.7	496.92 ug/L	496.92 ppb	23:37:03
2	U 409.014†	14773.0	17100.6	475.85 ug/L	475.85 ppb	23:36:43
2	V 292.402†	71151.3	69853.9	494.66 ug/L	494.66 ppb	23:36:43
2	Zn 213.857†	52219.5	49450.0	494.66 ug/L	494.66 ppb	23:36:43
2	SiO2†	80313.9	76603.4	5304.8 ug/L	5304.8 ppb	23:37:44
3	Sc Radial	3791.9	3791.9	98.3 %		23:35:59
3	Y RADIAL	4263.4	4263.4	95.77 %		23:35:39
3	Al 396.153Radial†	5433.2	5641.6	5278.4 ug/L	5278.4 ppb	23:35:39
3	Ca 317.933Radial†	2387.7	2410.0	5255.6 ug/L	5255.6 ppb	23:35:59
3	Fe 238.204 Radial†	313.3	307.0	4975.9 ug/L	4975.9 ppb	23:35:59
3	K 766.490 Radial†	28758.8	26487.4	5068.6 ug/L	5068.6 ppb	23:35:39
3	Mg 279.077 IEC†	101.6	102.2	5391.0 ug/L	5391.0 ppb	23:35:59
3	Na 589.592 Radial†	28508.8	29899.9	9303.8 ug/L	9303.8 ppb	23:35:39
3	Sr 421.552†	69087.5	70264.7	488.77 ug/L	488.77 ppb	23:35:39
3	Sc 361.383	935730.9	935730.9	106.32 %		23:37:09
3	Y 371.029	776974.5	776974.5	102.15 %		23:37:09
3	Ag 328.068†	109272.5	102538.8	479.49 ug/L	479.49 ppb	23:37:14
3	As 188.979†	1159.4	1110.4	497.86 ug/L	497.86 ppb	23:37:34
3	B 249.677†	20096.1	19178.7	467.89 ug/L	467.89 ppb	23:37:14
3	Ba 233.527†	64491.4	60644.3	477.88 ug/L	477.88 ppb	23:37:14
3	Be 313.107†	1406984.2	1326854.0	496.83 ug/L	496.83 ppb	23:37:09
3	Cd 226.502†	44051.1	41607.1	483.39 ug/L	483.39 ppb	23:37:14
3	Co 228.616†	24235.0	22858.3	480.21 ug/L	480.21 ppb	23:37:14
3	Cr 267.716†	45644.4	42844.4	481.71 ug/L	481.71 ppb	23:37:14
3	Cu 324.752†	170238.4	154157.4	469.70 ug/L	469.70 ppb	23:37:14
3	Mn 257.610†	458741.1	430977.2	491.26 ug/L	491.26 ppb	23:37:09
3	Mo 202.031†	7018.1	6596.0	486.28 ug/L	486.28 ppb	23:37:34
3	Ni 231.604†	20224.8	18939.0	483.04 ug/L	483.04 ppb	23:37:14
3	P 214.914†	4524.7	4049.8	2344.2 ug/L	2344.2 ppb	23:37:34
3	Pb 220.353†	4183.1	3873.1	480.72 ug/L	480.72 ppb	23:37:34
3	S 181.975 Axial†	779.4	697.2	982.01 ug/L	982.01 ppb	23:37:34
3	Sb 206.836†	1492.5	1364.7	499.10 ug/L	499.10 ppb	23:37:34
3	Se 196.026†	773.3	752.0	511.13 ug/L	511.13 ppb	23:37:34
3	Si 251.611†	79396.1	74108.9	2394.8 ug/L	2394.8 ppb	23:37:14
3	Sn 189.927†	2912.3	2729.7	492.89 ug/L	492.89 ppb	23:37:34
3	Ti 334.940†	317161.3	299706.2	472.12 ug/L	472.12 ppb	23:37:14
3	Tl 190.801†	1566.3	1500.6	485.91 ug/L	485.91 ppb	23:37:34
3	U 409.014†	14394.4	16440.0	457.43 ug/L	457.43 ppb	23:37:14
3	V 292.402†	70908.4	68159.4	482.60 ug/L	482.60 ppb	23:37:14
3	Zn 213.857†	52039.6	48204.8	482.19 ug/L	482.19 ppb	23:37:14
3	SiO2†	80855.5	75457.9	5225.6 ug/L	5225.6 ppb	23:37:50

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	925610.6	105.17 %	1.140			1.08%
Sc Radial	3796.6	98.4 %	0.11			0.11%
Y 371.029	767935.9	100.96 %	1.160			1.15%
Y RADIAL	4265.1	95.81 %	0.302			0.32%
Ag 328.068†	104390.5	488.11 ug/L	7.472	488.11 ppb	7.472	1.53%
QC value within limits for Ag 328.068 Recovery = 97.62%						
Al 396.153Radial†	5653.1	5288.9 ug/L	26.32	5288.9 ppb	26.32	0.50%
QC value within limits for Al 396.153Radial Recovery = 105.78%						
As 188.979†	1124.1	503.99 ug/L	6.894	503.99 ppb	6.894	1.37%
QC value within limits for As 188.979 Recovery = 100.80%						
B 249.677†	19574.1	477.56 ug/L	8.581	477.56 ppb	8.581	1.80%
QC value within limits for B 249.677 Recovery = 95.51%						
Ba 233.527†	61933.2	488.03 ug/L	8.868	488.03 ppb	8.868	1.82%
QC value within limits for Ba 233.527 Recovery = 97.61%						
Be 313.107†	1326200.3	496.61 ug/L	0.350	496.61 ppb	0.350	0.07%
QC value within limits for Be 313.107 Recovery = 99.32%						
Ca 317.933Radial†	2416.4	5269.6 ug/L	12.22	5269.6 ppb	12.22	0.23%

QC value within limits for Ca 317.933 Radial Recovery = 105.39%

Cd 226.502†	42438.4	493.07 ug/L	8.438	493.07 ppb	8.438	1.71%
QC value within limits for Cd 226.502 Recovery = 98.61%						
Co 228.616†	23297.6	489.43 ug/L	8.085	489.43 ppb	8.085	1.65%
QC value within limits for Co 228.616 Recovery = 97.89%						
Cr 267.716†	43574.8	489.91 ug/L	7.101	489.91 ppb	7.101	1.45%
QC value within limits for Cr 267.716 Recovery = 97.98%						
Cu 324.752†	157321.6	479.33 ug/L	8.431	479.33 ppb	8.431	1.76%
QC value within limits for Cu 324.752 Recovery = 95.87%						
Fe 238.204 Radial†	304.6	4936.6 ug/L	34.72	4936.6 ppb	34.72	0.70%
QC value within limits for Fe 238.204 Radial Recovery = 98.73%						
K 766.490 Radial†	26412.4	5054.2 ug/L	26.85	5054.2 ppb	26.85	0.53%
QC value within limits for K 766.490 Radial Recovery = 101.08%						
Mg 279.077 IEC†	102.0	5383.9 ug/L	62.84	5383.9 ppb	62.84	1.17%
QC value within limits for Mg 279.077 IEC Recovery = 107.68%						
Mn 257.610†	432289.6	492.76 ug/L	1.337	492.76 ppb	1.337	0.27%
QC value within limits for Mn 257.610 Recovery = 98.55%						
Mo 202.031†	6672.4	491.90 ug/L	6.908	491.90 ppb	6.908	1.40%
QC value within limits for Mo 202.031 Recovery = 98.38%						
Na 589.592 Radial†	29974.5	9327.0 ug/L	53.32	9327.0 ppb	53.32	0.57%
QC value within limits for Na 589.592 Radial Recovery = 93.27%						
Ni 231.604†	19328.3	492.97 ug/L	8.638	492.97 ppb	8.638	1.75%
QC value within limits for Ni 231.604 Recovery = 98.59%						
P 214.914†	4111.9	2379.7 ug/L	39.20	2379.7 ppb	39.20	1.65%
QC value within limits for P 214.914 Recovery = 95.19%						
Pb 220.353†	3935.9	488.50 ug/L	7.891	488.50 ppb	7.891	1.62%
QC value within limits for Pb 220.353 Recovery = 97.70%						
S 181.975 Axial†	708.3	997.69 ug/L	20.362	997.69 ppb	20.362	2.04%
QC value within limits for S 181.975 Axial Recovery = 99.77%						
Sb 206.836†	1385.3	506.62 ug/L	8.850	506.62 ppb	8.850	1.75%
QC value within limits for Sb 206.836 Recovery = 101.32%						
Se 196.026†	753.1	511.74 ug/L	2.435	511.74 ppb	2.435	0.48%
QC value within limits for Se 196.026 Recovery = 102.35%						
Si 251.611†	75608.9	2443.3 ug/L	42.48	2443.3 ppb	42.48	1.74%
QC value within limits for Si 251.611 Recovery = 97.73%						
Sn 189.927†	2777.5	501.52 ug/L	8.269	501.52 ppb	8.269	1.65%
QC value within limits for Sn 189.927 Recovery = 100.30%						
Sr 421.552†	70172.1	488.12 ug/L	1.789	488.12 ppb	1.789	0.37%
QC value within limits for Sr 421.552 Recovery = 97.62%						
Ti 334.940†	305571.1	481.35 ug/L	8.084	481.35 ppb	8.084	1.68%
QC value within limits for Ti 334.940 Recovery = 96.27%						
Tl 190.801†	1513.1	489.96 ug/L	6.056	489.96 ppb	6.056	1.24%
QC value within limits for Tl 190.801 Recovery = 97.99%						
U 409.014†	16861.7	469.19 ug/L	10.216	469.19 ppb	10.216	2.18%
QC value within limits for U 409.014 Recovery = 93.84%						
V 292.402†	69360.0	491.09 ug/L	7.376	491.09 ppb	7.376	1.50%
QC value within limits for V 292.402 Recovery = 98.22%						
Zn 213.857†	49098.6	491.15 ug/L	7.812	491.15 ppb	7.812	1.59%
QC value within limits for Zn 213.857 Recovery = 98.23%						
SiO2†	75905.6	5256.5 ug/L	42.33	5256.5 ppb	42.33	0.81%
QC value within limits for SiO2 Recovery = 98.30%						

All analyte(s) passed QC.

Sequence No.: 54

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 2/25/2010 23:39:59

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	3847.0	3847.0	99.7 %		23:42:11
1	Y RADIAL	4477.2	4477.2	100.6 %		23:41:51
1	Al 396.153Radial†	-102.2	12.6	11.806 ug/L	11.806 ppb	23:41:51
1	Ca 317.933Radial†	16.4	-2.3	-4.9479 ug/L	-4.9479 ppb	23:42:11
1	Fe 238.204 Radial†	9.0	-2.7	-43.536 ug/L	-43.536 ppb	23:42:11
1	K 766.490 Radial†	2926.2	168.8	32.364 ug/L	32.364 ppb	23:41:51
1	Mg 279.077 IEC†	4.9	3.8	198.35 ug/L	198.35 ppb	23:42:11
1	Na 589.592 Radial†	-1135.1	-236.4	-73.555 ug/L	-73.555 ppb	23:41:51
1	Sr 421.552†	37.9	29.3	0.2039 ug/L	0.2039 ppb	23:41:51
1	Sc 361.383	904261.3	904261.3	102.75 %		23:43:08
1	Y 371.029	765539.2	765539.2	100.64 %		23:43:08
1	Ag 328.068†	360.0	116.2	0.5293 ug/L	0.5293 ppb	23:43:08
1	As 188.979†	-20.6	-0.2	-0.0826 ug/L	-0.0826 ppb	23:43:28
1	B 249.677†	-391.7	-103.2	-2.5222 ug/L	-2.5222 ppb	23:43:28
1	Ba 233.527†	23.4	11.7	0.0892 ug/L	0.0892 ppb	23:43:28
1	Be 313.107†	-3493.0	158.7	0.0590 ug/L	0.0590 ppb	23:43:08
1	Cd 226.502†	-178.4	2.6	0.0331 ug/L	0.0331 ppb	23:43:28
1	Co 228.616†	-57.6	8.8	0.1872 ug/L	0.1872 ppb	23:43:28
1	Cr 267.716†	61.4	-25.3	-0.2865 ug/L	-0.2865 ppb	23:43:28
1	Cu 324.752†	5918.5	-194.9	-0.5924 ug/L	-0.5924 ppb	23:43:08
1	Mn 257.610†	500.0	9.0	-0.0022 ug/L	-0.0022 ppb	23:43:28
1	Mo 202.031†	10.8	5.8	0.4234 ug/L	0.4234 ppb	23:43:28
1	Ni 231.604†	84.4	-0.7	-0.0174 ug/L	-0.0174 ppb	23:43:28
1	P 214.914†	199.5	-11.6	-6.8329 ug/L	-6.8329 ppb	23:43:28
1	Pb 220.353†	-46.0	-105.9	-13.097 ug/L	-13.097 ppb	23:43:28
1	S 181.975 Axial†	41.0	4.1	5.7106 ug/L	5.7106 ppb	23:43:28
1	Sb 206.836†	41.1	1.0	0.3667 ug/L	0.3667 ppb	23:43:28
1	Se 196.026†	-29.0	-3.5	-2.4414 ug/L	-2.4414 ppb	23:43:28
1	Si 251.611†	601.9	21.1	0.6773 ug/L	0.6773 ppb	23:43:28
1	Sn 189.927†	17.8	7.9	1.4264 ug/L	1.4264 ppb	23:43:28
1	Ti 334.940†	-1545.1	-93.9	-0.1618 ug/L	-0.1618 ppb	23:43:08
1	Tl 190.801†	-24.6	3.5	1.1152 ug/L	1.1152 ppb	23:43:28
1	U 409.014†	-3224.2	-236.1	-6.5869 ug/L	-6.5869 ppb	23:43:08
1	V 292.402†	-1605.0	-93.4	-0.6486 ug/L	-0.6486 ppb	23:43:08
1	Zn 213.857†	707.6	-50.8	-0.5054 ug/L	-0.5054 ppb	23:43:28
1	SiO2†	658.4	52.5	3.6353 ug/L	3.6353 ppb	23:44:24
2	Sc Radial	3823.2	3823.2	99.1 %		23:42:36
2	Y RADIAL	4350.1	4350.1	97.72 %		23:42:16
2	Al 396.153Radial†	-133.6	-19.7	-18.535 ug/L	-18.535 ppb	23:42:16
2	Ca 317.933Radial†	12.3	-6.3	-13.637 ug/L	-13.637 ppb	23:42:36
2	Fe 238.204 Radial†	14.6	3.0	48.792 ug/L	48.792 ppb	23:42:36
2	K 766.490 Radial†	3036.9	298.7	57.255 ug/L	57.255 ppb	23:42:16
2	Mg 279.077 IEC†	4.6	3.5	184.15 ug/L	184.15 ppb	23:42:36
2	Na 589.592 Radial†	-1126.6	-234.9	-73.096 ug/L	-73.096 ppb	23:42:16
2	Sr 421.552†	45.8	37.5	0.2607 ug/L	0.2607 ppb	23:42:16
2	Sc 361.383	898593.2	898593.2	102.10 %		23:43:33
2	Y 371.029	761101.9	761101.9	100.06 %		23:43:33
2	Ag 328.068†	313.2	72.5	0.3601 ug/L	0.3601 ppb	23:43:33
2	As 188.979†	-29.2	-8.7	-3.8394 ug/L	-3.8394 ppb	23:43:53
2	B 249.677†	-361.3	-75.8	-1.8670 ug/L	-1.8670 ppb	23:43:53
2	Ba 233.527†	13.8	2.4	0.0204 ug/L	0.0204 ppb	23:43:53
2	Be 313.107†	-3512.6	118.0	0.0438 ug/L	0.0438 ppb	23:43:33
2	Cd 226.502†	-192.0	-11.8	-0.1442 ug/L	-0.1442 ppb	23:43:53
2	Co 228.616†	-47.1	18.7	0.3952 ug/L	0.3952 ppb	23:43:53
2	Cr 267.716†	64.9	-21.5	-0.2331 ug/L	-0.2331 ppb	23:43:53
2	Cu 324.752†	5914.0	-163.0	-0.4885 ug/L	-0.4885 ppb	23:43:33
2	Mn 257.610†	490.4	2.6	0.0002 ug/L	0.0002 ppb	23:43:53
2	Mo 202.031†	16.9	11.9	0.8780 ug/L	0.8780 ppb	23:43:53
2	Ni 231.604†	90.4	5.8	0.1474 ug/L	0.1474 ppb	23:43:53

2	P 214.914†	199.3	-10.7	-6.3421 ug/L	-6.3421 ppb	23:43:53
2	Pb 220.353†	-27.1	-87.8	-10.865 ug/L	-10.865 ppb	23:43:53
2	S 181.975 Axial†	36.4	-0.2	-0.3182 ug/L	-0.3182 ppb	23:43:53
2	Sb 206.836†	34.3	-5.4	-1.8667 ug/L	-1.8667 ppb	23:43:53
2	Se 196.026†	-23.1	2.1	1.5133 ug/L	1.5133 ppb	23:43:53
2	Si 251.611†	611.2	33.9	1.0879 ug/L	1.0879 ppb	23:43:53
2	Sn 189.927†	17.3	7.5	1.3445 ug/L	1.3445 ppb	23:43:53
2	Ti 334.940†	-1521.3	-80.1	-0.1386 ug/L	-0.1386 ppb	23:43:33
2	Tl 190.801†	-23.8	4.1	1.3150 ug/L	1.3150 ppb	23:43:53
2	U 409.014†	-3327.8	-357.3	-9.9829 ug/L	-9.9829 ppb	23:43:33
2	V 292.402†	-1513.1	-13.2	-0.1024 ug/L	-0.1024 ppb	23:43:33
2	Zn 213.857†	731.5	-23.1	-0.2403 ug/L	-0.2403 ppb	23:43:53
2	SiO2†	638.8	37.4	2.5756 ug/L	2.5756 ppb	23:44:29
3	Sc Radial	3805.7	3805.7	98.7 %		23:43:01
3	Y RADIAL	4295.9	4295.9	96.50 %		23:42:41
3	Al 396.153Radial†	-125.6	-12.2	-11.533 ug/L	-11.533 ppb	23:42:41
3	Ca 317.933Radial†	18.4	-0.0	-0.0771 ug/L	-0.0771 ppb	23:43:01
3	Fe 238.204 Radial†	11.3	-0.2	-3.0830 ug/L	-3.0830 ppb	23:43:01
3	K 766.490 Radial†	2888.5	162.4	31.136 ug/L	31.136 ppb	23:42:41
3	Mg 279.077 IEC†	-0.3	-1.5	-79.825 ug/L	-79.825 ppb	23:43:01
3	Na 589.592 Radial†	-1137.7	-251.4	-78.212 ug/L	-78.212 ppb	23:42:41
3	Sr 421.552†	33.7	25.4	0.1770 ug/L	0.1770 ppb	23:42:41
3	Sc 361.383	900286.5	900286.5	102.30 %		23:43:58
3	Y 371.029	762594.9	762594.9	100.26 %		23:43:58
3	Ag 328.068†	420.7	177.1	0.8294 ug/L	0.8294 ppb	23:43:58
3	As 188.979†	-25.0	-4.5	-2.0016 ug/L	-2.0016 ppb	23:44:18
3	B 249.677†	-385.4	-98.7	-2.4181 ug/L	-2.4181 ppb	23:44:18
3	Ba 233.527†	35.6	23.8	0.1857 ug/L	0.1857 ppb	23:44:18
3	Be 313.107†	-3468.2	167.9	0.0624 ug/L	0.0624 ppb	23:43:58
3	Cd 226.502†	-178.7	1.5	0.0159 ug/L	0.0159 ppb	23:44:18
3	Co 228.616†	-73.2	-6.7	-0.1387 ug/L	-0.1387 ppb	23:44:18
3	Cr 267.716†	67.9	-18.7	-0.2064 ug/L	-0.2064 ppb	23:44:18
3	Cu 324.752†	5946.0	-142.6	-0.4279 ug/L	-0.4279 ppb	23:43:58
3	Mn 257.610†	498.3	9.4	0.0137 ug/L	0.0137 ppb	23:44:18
3	Mo 202.031†	11.9	6.9	0.5094 ug/L	0.5094 ppb	23:44:18
3	Ni 231.604†	94.8	9.9	0.2526 ug/L	0.2526 ppb	23:44:18
3	P 214.914†	204.2	-6.2	-3.6153 ug/L	-3.6153 ppb	23:44:18
3	Pb 220.353†	-45.8	-105.9	-13.107 ug/L	-13.107 ppb	23:44:18
3	S 181.975 Axial†	39.1	2.4	3.4145 ug/L	3.4145 ppb	23:44:18
3	Sb 206.836†	43.0	3.1	1.0875 ug/L	1.0875 ppb	23:44:18
3	Se 196.026†	-31.4	-6.0	-3.9395 ug/L	-3.9395 ppb	23:44:18
3	Si 251.611†	623.1	44.4	1.4328 ug/L	1.4328 ppb	23:44:18
3	Sn 189.927†	8.8	-0.8	-0.1514 ug/L	-0.1514 ppb	23:44:18
3	Ti 334.940†	-1539.0	-94.6	-0.1372 ug/L	-0.1372 ppb	23:43:58
3	Tl 190.801†	-29.0	-0.9	-0.2790 ug/L	-0.2790 ppb	23:44:18
3	U 409.014†	-3406.7	-428.4	-11.961 ug/L	-11.961 ppb	23:43:58
3	V 292.402†	-1588.1	-83.7	-0.6016 ug/L	-0.6016 ppb	23:43:58
3	Zn 213.857†	708.5	-46.9	-0.4740 ug/L	-0.4740 ppb	23:44:18
3	SiO2†	641.8	39.1	2.7028 ug/L	2.7028 ppb	23:44:34

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	901047.0	102.38 %	0.331			0.32%
Sc Radial	3825.3	99.2 %	0.54			0.54%
Y 371.029	763078.7	100.32 %	0.297			0.30%
Y RADIAL	4374.4	98.26 %	2.090			2.13%
Ag 328.068†	121.9	0.5729 ug/L	0.23768	0.5729 ppb	0.23768	41.49%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-6.4	-6.0875 ug/L	15.88639	-6.0875 ppb	15.88639	260.97%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-4.4	-1.9745 ug/L	1.87855	-1.9745 ppb	1.87855	95.14%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-92.6	-2.2691 ug/L	0.35206	-2.2691 ppb	0.35206	15.52%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	12.6	0.0985 ug/L	0.08300	0.0985 ppb	0.08300	84.31%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	148.2	0.0551 ug/L	0.00988	0.0551 ppb	0.00988	17.95%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-2.9	-6.2207 ug/L	6.86906	-6.2207 ppb	6.86906	110.42%



QC value within limits for Ca 317.933 Radial Recovery = Not calculated

Cd 226.502† -2.6 -0.0317 ug/L 0.09780 -0.0317 ppb 0.09780 308.16%

QC value within limits for Cd 226.502 Recovery = Not calculated

Co 228.616† 7.0 0.1479 ug/L 0.26910 0.1479 ppb 0.26910 181.98%

QC value within limits for Co 228.616 Recovery = Not calculated

Cr 267.716† -21.9 -0.2420 ug/L 0.04080 -0.2420 ppb 0.04080 16.86%

QC value within limits for Cr 267.716 Recovery = Not calculated

Cu 324.752† -166.8 -0.5030 ug/L 0.08320 -0.5030 ppb 0.08320 16.54%

QC value within limits for Cu 324.752 Recovery = Not calculated

Fe 238.204 Radial† 0.0 0.7242 ug/L 46.28173 0.7242 ppb 46.28173 >999.9%

QC value within limits for Fe 238.204 Radial Recovery = Not calculated

K 766.490 Radial† 209.9 40.252 ug/L 14.7382 40.252 ppb 14.7382 36.62%

QC value within limits for K 766.490 Radial Recovery = Not calculated

Mg 279.077 IEC† 1.9 100.89 ug/L 156.665 100.89 ppb 156.665 155.28%

QC value within limits for Mg 279.077 IEC Recovery = Not calculated

Mn 257.610† 7.0 0.0039 ug/L 0.00856 0.0039 ppb 0.00856 218.97%

QC value within limits for Mn 257.610 Recovery = Not calculated

Mo 202.031† 8.2 0.6036 ug/L 0.24150 0.6036 ppb 0.24150 40.01%

QC value within limits for Mo 202.031 Recovery = Not calculated

Na 589.592 Radial† -240.9 -74.955 ug/L 2.8306 -74.955 ppb 2.8306 3.78%

QC value within limits for Na 589.592 Radial Recovery = Not calculated

Ni 231.604† 5.0 0.1275 ug/L 0.13610 0.1275 ppb 0.13610 106.71%

QC value within limits for Ni 231.604 Recovery = Not calculated

P 214.914† -9.5 -5.5968 ug/L 1.73347 -5.5968 ppb 1.73347 30.97%

QC value within limits for P 214.914 Recovery = Not calculated

Pb 220.353† -99.9 -12.356 ug/L 1.2913 -12.356 ppb 1.2913 10.45%

QC value less than the lower limit for Pb 220.353 Recovery = Not calculated

S 181.975 Axial† 2.1 2.9357 ug/L 3.04281 2.9357 ppb 3.04281 103.65%

QC value within limits for S 181.975 Axial Recovery = Not calculated

Sb 206.836† -0.5 -0.1375 ug/L 1.54031 -0.1375 ppb 1.54031 >999.9%

QC value within limits for Sb 206.836 Recovery = Not calculated

Se 196.026† -2.5 -1.6225 ug/L 2.81710 -1.6225 ppb 2.81710 173.63%

QC value within limits for Se 196.026 Recovery = Not calculated

Si 251.611† 33.1 1.0660 ug/L 0.37826 1.0660 ppb 0.37826 35.48%

QC value within limits for Si 251.611 Recovery = Not calculated

Sn 189.927† 4.8 0.8731 ug/L 0.88823 0.8731 ppb 0.88823 101.73%

QC value within limits for Sn 189.927 Recovery = Not calculated

Sr 421.552† 30.7 0.2138 ug/L 0.04270 0.2138 ppb 0.04270 19.97%

QC value within limits for Sr 421.552 Recovery = Not calculated

Ti 334.940† -89.5 -0.1459 ug/L 0.01386 -0.1459 ppb 0.01386 9.50%

QC value within limits for Ti 334.940 Recovery = Not calculated

Tl 190.801† 2.2 0.7170 ug/L 0.86839 0.7170 ppb 0.86839 121.11%

QC value within limits for Tl 190.801 Recovery = Not calculated

U 409.014† -340.6 -9.5102 ug/L 2.71787 -9.5102 ppb 2.71787 28.58%

QC value within limits for U 409.014 Recovery = Not calculated

V 292.402† -63.5 -0.4509 ug/L 0.30267 -0.4509 ppb 0.30267 67.13%

QC value within limits for V 292.402 Recovery = Not calculated

Zn 213.857† -40.2 -0.4066 ug/L 0.14487 -0.4066 ppb 0.14487 35.63%

QC value within limits for Zn 213.857 Recovery = Not calculated

SiO2† 43.0 2.9712 ug/L 0.57857 2.9712 ppb 0.57857 19.47%

QC value within limits for SiO2 Recovery = Not calculated

QC Failed. Continue with analysis.

Sequence No.: 55

Sample ID: 1202036684|950392|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 80

Date Collected: 2/25/2010 23:46:44

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202036684|950392|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4063.6	4063.6	105 %		23:48:37
1	Y RADIAL	4531.6	4531.6	101.8 %		23:48:37
1	Al 396.153Radial†	-113.1	7.7	7.2508 ug/L	7.2508 ppb	23:48:37
1	Ca 317.933Radial†	19.0	-0.6	-1.3259 ug/L	-1.3259 ppb	23:48:57
1	Fe 238.204 Radial†	14.1	1.7	27.818 ug/L	27.818 ppb	23:48:57
1	K 766.490 Radial†	2953.5	38.3	7.3468 ug/L	7.3468 ppb	23:48:37
1	Mg 279.077 IEC†	1.6	0.4	18.493 ug/L	18.493 ppb	23:48:57
1	Na 589.592 Radial†	-1073.5	-117.2	-36.467 ug/L	-36.467 ppb	23:48:37
1	Sr 421.552†	-0.1	-8.9	-0.0616 ug/L	-0.0616 ppb	23:48:37
1	Sc 361.383	918544.5	918544.5	104.37 %		23:49:54
1	Y 371.029	775796.3	775796.3	101.99 %		23:49:54
1	Ag 328.068†	349.0	100.2	0.4780 ug/L	0.4780 ppb	23:49:54
1	As 188.979†	-19.3	1.4	0.6375 ug/L	0.6375 ppb	23:50:14
1	B 249.677†	-433.1	-136.9	-3.3609 ug/L	-3.3609 ppb	23:50:14
1	Ba 233.527†	11.8	0.2	0.0028 ug/L	0.0028 ppb	23:50:14
1	Be 313.107†	-3685.3	27.3	0.0101 ug/L	0.0101 ppb	23:49:54
1	Cd 226.502†	-196.1	-11.7	-0.1397 ug/L	-0.1397 ppb	23:50:14
1	Co 228.616†	-56.9	10.3	0.2171 ug/L	0.2171 ppb	23:50:14
1	Cr 267.716†	93.4	4.4	0.0533 ug/L	0.0533 ppb	23:50:14
1	Cu 324.752†	5977.7	-227.8	-0.6901 ug/L	-0.6901 ppb	23:49:54
1	Mn 257.610†	579.9	77.9	0.0907 ug/L	0.0907 ppb	23:50:14
1	Mo 202.031†	10.1	5.0	0.3701 ug/L	0.3701 ppb	23:50:14
1	Ni 231.604†	101.5	14.5	0.3687 ug/L	0.3687 ppb	23:50:14
1	P 214.914†	211.4	-3.3	-1.8527 ug/L	-1.8527 ppb	23:50:14
1	Pb 220.353†	-42.2	-101.6	-12.573 ug/L	-12.573 ppb	23:50:14
1	S 181.975 Axial†	37.9	0.5	0.6458 ug/L	0.6458 ppb	23:50:14
1	Sb 206.836†	25.6	-14.5	-5.1076 ug/L	-5.1076 ppb	23:50:14
1	Se 196.026†	-22.8	2.9	1.9873 ug/L	1.9873 ppb	23:50:14
1	Si 251.611†	919.7	316.4	10.246 ug/L	10.246 ppb	23:50:14
1	Sn 189.927†	10.8	0.9	0.1596 ug/L	0.1596 ppb	23:50:14
1	Ti 334.940†	-1490.6	-18.3	-0.0287 ug/L	-0.0287 ppb	23:49:54
1	Tl 190.801†	-31.9	-3.2	-1.0142 ug/L	-1.0142 ppb	23:50:14
1	U 409.014†	-3189.3	-153.8	-4.2986 ug/L	-4.2986 ppb	23:49:54
1	V 292.402†	-1530.5	2.3	0.0091 ug/L	0.0091 ppb	23:49:54
1	Zn 213.857†	716.2	-53.3	-0.5432 ug/L	-0.5432 ppb	23:50:14
1	SiO2†	960.2	331.8	23.027 ug/L	23.027 ppb	23:51:10
2	Sc Radial	4043.6	4043.6	105 %		23:49:02
2	Y RADIAL	4468.9	4468.9	100.4 %		23:49:02
2	Al 396.153Radial†	-142.1	-20.5	-19.285 ug/L	-19.285 ppb	23:49:02
2	Ca 317.933Radial†	12.2	-7.0	-15.285 ug/L	-15.285 ppb	23:49:22
2	Fe 238.204 Radial†	8.9	-3.2	-51.388 ug/L	-51.388 ppb	23:49:22
2	K 766.490 Radial†	2912.7	13.2	2.5575 ug/L	2.5575 ppb	23:49:02
2	Mg 279.077 IEC†	0.1	-1.1	-58.392 ug/L	-58.392 ppb	23:49:22
2	Na 589.592 Radial†	-1132.5	-178.5	-55.544 ug/L	-55.544 ppb	23:49:02
2	Sr 421.552†	24.7	14.8	0.1031 ug/L	0.1031 ppb	23:49:02
2	Sc 361.383	916512.8	916512.8	104.14 %		23:50:19
2	Y 371.029	774621.4	774621.4	101.84 %		23:50:19
2	Ag 328.068†	290.2	44.5	0.1924 ug/L	0.1924 ppb	23:50:19
2	As 188.979†	-21.5	-0.8	-0.3484 ug/L	-0.3484 ppb	23:50:40
2	B 249.677†	-435.7	-140.4	-3.4315 ug/L	-3.4315 ppb	23:50:40
2	Ba 233.527†	5.9	-5.3	-0.0439 ug/L	-0.0439 ppb	23:50:40
2	Be 313.107†	-3703.7	1.8	0.0006 ug/L	0.0006 ppb	23:50:19
2	Cd 226.502†	-190.3	-6.5	-0.0710 ug/L	-0.0710 ppb	23:50:40
2	Co 228.616†	-82.0	-13.9	-0.2891 ug/L	-0.2891 ppb	23:50:40
2	Cr 267.716†	79.6	-8.7	-0.1014 ug/L	-0.1014 ppb	23:50:40
2	Cu 324.752†	6104.3	-93.6	-0.2866 ug/L	-0.2866 ppb	23:50:19
2	Mn 257.610†	548.0	48.6	0.0527 ug/L	0.0527 ppb	23:50:40
2	Mo 202.031†	13.8	8.5	0.6247 ug/L	0.6247 ppb	23:50:40
2	Ni 231.604†	81.3	-4.7	-0.1206 ug/L	-0.1206 ppb	23:50:40

2	P 214.914†	216.4	2.0	1.3154 ug/L	1.3154 ppb	23:50:40
2	Pb 220.353†	-35.9	-95.6	-11.825 ug/L	-11.825 ppb	23:50:40
2	S 181.975 Axial†	50.9	13.1	18.444 ug/L	18.444 ppb	23:50:40
2	Sb 206.836†	40.7	0.1	0.0708 ug/L	0.0708 ppb	23:50:40
2	Se 196.026†	-26.6	-0.8	-0.6945 ug/L	-0.6945 ppb	23:50:40
2	Si 251.611†	924.5	323.1	10.458 ug/L	10.458 ppb	23:50:40
2	Sn 189.927†	17.3	7.2	1.2915 ug/L	1.2915 ppb	23:50:40
2	Ti 334.940†	-1486.3	-17.3	-0.0236 ug/L	-0.0236 ppb	23:50:19
2	Tl 190.801†	-25.8	2.7	0.8615 ug/L	0.8615 ppb	23:50:40
2	U 409.014†	-3100.1	-75.0	-2.0886 ug/L	-2.0886 ppb	23:50:19
2	V 292.402†	-1553.0	-22.5	-0.1460 ug/L	-0.1460 ppb	23:50:19
2	Zn 213.857†	706.3	-61.2	-0.6093 ug/L	-0.6093 ppb	23:50:40
2	SiO2†	965.1	338.6	23.488 ug/L	23.488 ppb	23:51:15
3	Sc Radial	4110.0	4110.0	107 %		23:49:27
3	Y RADIAL	4551.8	4551.8	102.2 %		23:49:27
3	Al 396.153Radial†	-115.8	6.4	5.9722 ug/L	5.9722 ppb	23:49:27
3	Ca 317.933Radial†	18.2	-1.6	-3.5642 ug/L	-3.5642 ppb	23:49:48
3	Fe 238.204 Radial†	11.5	-0.9	-14.055 ug/L	-14.055 ppb	23:49:48
3	K 766.490 Radial†	2802.7	-134.9	-25.825 ug/L	-25.825 ppb	23:49:27
3	Mg 279.077 IEC†	1.5	0.2	10.308 ug/L	10.308 ppb	23:49:48
3	Na 589.592 Radial†	-1090.9	-122.1	-37.987 ug/L	-37.987 ppb	23:49:27
3	Sr 421.552†	57.2	44.9	0.3127 ug/L	0.3127 ppb	23:49:27
3	Sc 361.383	911007.5	911007.5	103.51 %		23:50:45
3	Y 371.029	770965.3	770965.3	101.36 %		23:50:45
3	Ag 328.068†	299.8	55.5	0.2553 ug/L	0.2553 ppb	23:50:45
3	As 188.979†	-23.1	-2.4	-1.0738 ug/L	-1.0738 ppb	23:51:05
3	B 249.677†	-462.2	-168.5	-4.1283 ug/L	-4.1283 ppb	23:51:05
3	Ba 233.527†	13.7	2.2	0.0162 ug/L	0.0162 ppb	23:51:05
3	Be 313.107†	-3544.9	133.7	0.0498 ug/L	0.0498 ppb	23:50:45
3	Cd 226.502†	-196.1	-13.3	-0.1535 ug/L	-0.1535 ppb	23:51:05
3	Co 228.616†	-54.1	12.5	0.2646 ug/L	0.2646 ppb	23:51:05
3	Cr 267.716†	94.3	6.0	0.0674 ug/L	0.0674 ppb	23:51:05
3	Cu 324.752†	5974.8	-183.2	-0.5568 ug/L	-0.5568 ppb	23:50:45
3	Mn 257.610†	565.9	69.0	0.0768 ug/L	0.0768 ppb	23:51:05
3	Mo 202.031†	10.2	5.2	0.3812 ug/L	0.3812 ppb	23:51:05
3	Ni 231.604†	92.5	6.6	0.1686 ug/L	0.1686 ppb	23:51:05
3	P 214.914†	202.8	-9.9	-5.8181 ug/L	-5.8181 ppb	23:51:05
3	Pb 220.353†	-38.1	-98.0	-12.124 ug/L	-12.124 ppb	23:51:05
3	S 181.975 Axial†	39.1	1.9	2.6742 ug/L	2.6742 ppb	23:51:05
3	Sb 206.836†	65.1	23.9	8.4523 ug/L	8.4523 ppb	23:51:05
3	Se 196.026†	-24.4	1.2	0.7198 ug/L	0.7198 ppb	23:51:05
3	Si 251.611†	917.1	321.2	10.402 ug/L	10.402 ppb	23:51:05
3	Sn 189.927†	12.8	2.9	0.5301 ug/L	0.5301 ppb	23:51:05
3	Ti 334.940†	-1493.8	-33.2	-0.0520 ug/L	-0.0520 ppb	23:50:45
3	Tl 190.801†	-22.9	5.3	1.7063 ug/L	1.7063 ppb	23:51:05
3	U 409.014†	-3144.1	-135.5	-3.7815 ug/L	-3.7815 ppb	23:50:45
3	V 292.402†	-1564.4	-42.5	-0.2968 ug/L	-0.2968 ppb	23:50:45
3	Zn 213.857†	704.7	-58.7	-0.5909 ug/L	-0.5909 ppb	23:51:05
3	SiO2†	933.9	314.0	21.789 ug/L	21.789 ppb	23:51:20

Mean Data: 1202036684|950392|1

Analyte	Mean Corrected	Conc.	Calib.	Std.Dev.	Sample	Std.Dev.	RSD
	Intensity		Units		Conc. Units		
Sc 361.383	915354.9	104.01	%	0.443			0.43%
Sc Radial	4072.4	106	%	0.9			0.84%
Y 371.029	773794.4	101.73	%	0.331			0.33%
Y RADIAL	4517.5	101.5	%	0.97			0.96%
Ag 328.068†	66.7	0.3085	ug/L	0.15007	0.3085 ppb	0.15007	48.64%
Al 396.153Radial†	-2.1	-2.0207	ug/L	14.96501	-2.0207 ppb	14.96501	740.60%
As 188.979†	-0.6	-0.2616	ug/L	0.85894	-0.2616 ppb	0.85894	328.38%
B 249.677†	-148.6	-3.6402	ug/L	0.42415	-3.6402 ppb	0.42415	11.65%
Ba 233.527†	-1.0	-0.0083	ug/L	0.03155	-0.0083 ppb	0.03155	379.43%
Be 313.107†	54.3	0.0202	ug/L	0.02610	0.0202 ppb	0.02610	129.29%
Ca 317.933Radial†	-3.1	-6.7251	ug/L	7.49730	-6.7251 ppb	7.49730	111.48%
Cd 226.502†	-10.5	-0.1214	ug/L	0.04420	-0.1214 ppb	0.04420	36.41%
Co 228.616†	3.0	0.0642	ug/L	0.30690	0.0642 ppb	0.30690	478.02%
Cr 267.716†	0.6	0.0064	ug/L	0.09365	0.0064 ppb	0.09365	>999.9%
Cu 324.752†	-168.2	-0.5112	ug/L	0.20558	-0.5112 ppb	0.20558	40.22%
Fe 238.204 Radial†	-0.8	-12.542	ug/L	39.6246	-12.542 ppb	39.6246	315.94%
K 766.490 Radial†	-27.8	-5.3070	ug/L	17.92997	-5.3070 ppb	17.92997	337.86%

Mg 279.077 IEC†	-0.2	-9.8639 ug/L	42.22537	-9.8639 ppb	42.22537	428.08%
Mn 257.610†	65.2	0.0734 ug/L	0.01927	0.0734 ppb	0.01927	26.25%
Mo 202.031†	6.2	0.4587 ug/L	0.14391	0.4587 ppb	0.14391	31.38%
Na 589.592 Radial†	-139.3	-43.332 ug/L	10.6027	-43.332 ppb	10.6027	24.47%
Ni 231.604†	5.4	0.1389 ug/L	0.24597	0.1389 ppb	0.24597	177.07%
P 214.914†	-3.7	-2.1185 ug/L	3.57417	-2.1185 ppb	3.57417	168.71%
Pb 220.353†	-98.4	-12.174 ug/L	0.3763	-12.174 ppb	0.3763	3.09%
S 181.975 Axial†	5.1	7.2548 ug/L	9.74346	7.2548 ppb	9.74346	134.30%
Sb 206.836†	3.2	1.1385 ug/L	6.84273	1.1385 ppb	6.84273	601.03%
Se 196.026†	1.1	0.6709 ug/L	1.34156	0.6709 ppb	1.34156	199.98%
Si 251.611†	320.2	10.369 ug/L	0.1097	10.369 ppb	0.1097	1.06%
Sn 189.927†	3.7	0.6604 ug/L	0.57712	0.6604 ppb	0.57712	87.39%
Sr 421.552†	17.0	0.1181 ug/L	0.18760	0.1181 ppb	0.18760	158.87%
Ti 334.940†	-22.9	-0.0348 ug/L	0.01519	-0.0348 ppb	0.01519	43.69%
Tl 190.801†	1.6	0.5179 ug/L	1.39243	0.5179 ppb	1.39243	268.87%
U 409.014†	-121.4	-3.3896 ug/L	1.15594	-3.3896 ppb	1.15594	34.10%
V 292.402†	-20.9	-0.1446 ug/L	0.15291	-0.1446 ppb	0.15291	105.77%
Zn 213.857†	-57.7	-0.5811 ug/L	0.03412	-0.5811 ppb	0.03412	5.87%
SiO2†	328.1	22.768 ug/L	0.8784	22.768 ppb	0.8784	3.86%

Sequence No.: 56

Sample ID: 1202036685|950392|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 81

Date Collected: 2/25/2010 23:53:31

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202036685|950392|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3860.8	3860.8	100 %		23:55:44
1	Y RADIAL	4221.2	4221.2	94.82 %		23:55:24
1	Al 396.153Radial†	5328.1	5437.9	5087.2 ug/L	5087.2 ppb	23:55:24
1	Ca 317.933Radial†	2406.2	2385.1	5201.4 ug/L	5201.4 ppb	23:55:44
1	Fe 238.204 Radial†	310.3	298.4	4835.9 ug/L	4835.9 ppb	23:55:44
1	K 766.490 Radial†	28282.1	25488.7	4879.1 ug/L	4879.1 ppb	23:55:24
1	Mg 279.077 IEC†	98.3	97.0	5118.8 ug/L	5118.8 ppb	23:55:44
1	Na 589.592 Radial†	13977.3	14865.0	4625.4 ug/L	4625.4 ppb	23:55:24
1	Sr 421.552†	68486.1	68408.8	475.86 ug/L	475.86 ppb	23:55:24
1	Sc 361.383	928537.7	928537.7	105.51 %		23:56:43
1	Y 371.029	769493.6	769493.6	101.16 %		23:56:43
1	Ag 328.068†	107839.6	101976.7	476.85 ug/L	476.85 ppb	23:56:43
1	As 188.979†	1145.2	1105.3	495.71 ug/L	495.71 ppb	23:57:03
1	B 249.677†	20073.0	19303.3	470.97 ug/L	470.97 ppb	23:56:43
1	Ba 233.527†	65962.9	62509.0	492.55 ug/L	492.55 ppb	23:56:43
1	Be 313.107†	1380363.6	1311874.2	491.27 ug/L	491.27 ppb	23:56:43
1	Cd 226.502†	43022.6	40953.2	475.81 ug/L	475.81 ppb	23:57:03
1	Co 228.616†	23830.2	22651.2	475.82 ug/L	475.82 ppb	23:57:03
1	Cr 267.716†	45463.7	43005.7	483.51 ug/L	483.51 ppb	23:56:43
1	Cu 324.752†	173101.1	158111.0	481.74 ug/L	481.74 ppb	23:56:43
1	Mn 257.610†	451440.2	427399.7	487.19 ug/L	487.19 ppb	23:56:43
1	Mo 202.031†	6882.6	6518.7	480.57 ug/L	480.57 ppb	23:57:03
1	Ni 231.604†	20232.7	19093.9	486.99 ug/L	486.99 ppb	23:57:03
1	P 214.914†	1195.6	927.4	464.24 ug/L	464.24 ppb	23:57:03
1	Pb 220.353†	4219.7	3938.2	488.73 ug/L	488.73 ppb	23:57:03
1	S 181.975 Axial†	3726.1	3495.8	4928.0 ug/L	4928.0 ppb	23:57:03
1	Sb 206.836†	1547.4	1427.6	521.47 ug/L	521.47 ppb	23:57:03
1	Se 196.026†	730.6	717.2	487.77 ug/L	487.77 ppb	23:57:03
1	Si 251.611†	154399.8	145776.3	4716.6 ug/L	4716.6 ppb	23:56:43
1	Sn 189.927†	3005.4	2839.1	512.63 ug/L	512.63 ppb	23:57:03
1	Ti 334.940†	324933.1	309383.2	487.38 ug/L	487.38 ppb	23:56:43
1	Tl 190.801†	1542.7	1489.6	482.51 ug/L	482.51 ppb	23:57:03
1	U 409.014†	14483.9	16629.8	462.74 ug/L	462.74 ppb	23:56:43
1	V 292.402†	71131.7	68887.7	487.62 ug/L	487.62 ppb	23:56:43
1	Zn 213.857†	50748.0	47359.8	473.64 ug/L	473.64 ppb	23:56:43
1	SiO2†	153491.1	144891.5	10046 ug/L	10046 ppb	23:58:04
2	Sc Radial	3867.8	3867.8	100 %		23:56:10
2	Y RADIAL	4275.2	4275.2	96.04 %		23:55:49
2	Al 396.153Radial†	5425.8	5525.6	5169.7 ug/L	5169.7 ppb	23:55:49
2	Ca 317.933Radial†	2412.6	2387.1	5205.7 ug/L	5205.7 ppb	23:56:10
2	Fe 238.204 Radial†	315.1	302.6	4903.9 ug/L	4903.9 ppb	23:56:10
2	K 766.490 Radial†	28480.6	25635.4	4907.2 ug/L	4907.2 ppb	23:55:49
2	Mg 279.077 IEC†	103.3	101.8	5374.3 ug/L	5374.3 ppb	23:56:10
2	Na 589.592 Radial†	14032.1	14894.3	4634.6 ug/L	4634.6 ppb	23:55:49
2	Sr 421.552†	69556.6	69352.2	482.42 ug/L	482.42 ppb	23:55:49
2	Sc 361.383	942323.1	942323.1	107.07 %		23:57:11
2	Y 371.029	781038.1	781038.1	102.68 %		23:57:11
2	Ag 328.068†	109381.8	101921.8	476.61 ug/L	476.61 ppb	23:57:11
2	As 188.979†	1172.1	1114.6	499.84 ug/L	499.84 ppb	23:57:31
2	B 249.677†	20439.1	19366.9	472.53 ug/L	472.53 ppb	23:57:11
2	Ba 233.527†	66871.8	62443.2	492.03 ug/L	492.03 ppb	23:57:11
2	Be 313.107†	1402499.7	1313408.4	491.84 ug/L	491.84 ppb	23:57:11
2	Cd 226.502†	43388.9	40698.8	472.85 ug/L	472.85 ppb	23:57:31
2	Co 228.616†	24043.9	22520.4	473.06 ug/L	473.06 ppb	23:57:31
2	Cr 267.716†	45915.5	42797.2	481.17 ug/L	481.17 ppb	23:57:11
2	Cu 324.752†	175616.3	158059.9	481.58 ug/L	481.58 ppb	23:57:11
2	Mn 257.610†	456716.1	426067.6	485.67 ug/L	485.67 ppb	23:57:11
2	Mo 202.031†	6945.1	6481.7	477.85 ug/L	477.85 ppb	23:57:31
2	Ni 231.604†	20447.1	19013.6	484.95 ug/L	484.95 ppb	23:57:31

2	P 214.914†	1188.3	904.0	450.10 ug/L	450.10 ppb	23:57:31
2	Pb 220.353†	4260.1	3917.4	486.16 ug/L	486.16 ppb	23:57:31
2	S 181.975 Axial†	3765.7	3481.1	4907.2 ug/L	4907.2 ppb	23:57:31
2	Sb 206.836†	1543.8	1402.8	512.56 ug/L	512.56 ppb	23:57:31
2	Se 196.026†	742.3	718.0	488.51 ug/L	488.51 ppb	23:57:31
2	Si 251.611†	156490.3	145587.8	4710.5 ug/L	4710.5 ppb	23:57:11
2	Sn 189.927†	3017.4	2808.6	507.12 ug/L	507.12 ppb	23:57:31
2	Ti 334.940†	329499.8	309142.8	486.97 ug/L	486.97 ppb	23:57:11
2	Tl 190.801†	1566.9	1490.8	482.90 ug/L	482.90 ppb	23:57:31
2	U 409.014†	14998.5	16909.5	470.55 ug/L	470.55 ppb	23:57:11
2	V 292.402†	72103.5	68809.1	487.04 ug/L	487.04 ppb	23:57:11
2	Zn 213.857†	51355.9	47223.8	472.27 ug/L	472.27 ppb	23:57:11
2	SiO2†	156235.2	145326.0	10077 ug/L	10077 ppb	23:58:09
3	Sc Radial	3859.6	3859.6	100 %		23:56:35
3	Y RADIAL	4351.6	4351.6	97.75 %		23:56:15
3	Al 396.153Radial†	5521.8	5633.1	5271.2 ug/L	5271.2 ppb	23:56:15
3	Ca 317.933Radial†	2414.8	2394.5	5221.7 ug/L	5221.7 ppb	23:56:35
3	Fe 238.204 Radial†	315.9	304.0	4927.0 ug/L	4927.0 ppb	23:56:35
3	K 766.490 Radial†	29056.7	26271.8	5029.1 ug/L	5029.1 ppb	23:56:15
3	Mg 279.077 IEC†	101.6	100.4	5297.4 ug/L	5297.4 ppb	23:56:35
3	Na 589.592 Radial†	14278.6	15170.5	4720.5 ug/L	4720.5 ppb	23:56:15
3	Sr 421.552†	70437.7	70380.9	489.57 ug/L	489.57 ppb	23:56:15
3	Sc 361.383	950854.4	950854.4	108.04 %		23:57:38
3	Y 371.029	789285.4	789285.4	103.77 %		23:57:38
3	Ag 328.068†	110391.9	101940.2	476.71 ug/L	476.71 ppb	23:57:38
3	As 188.979†	1164.6	1097.8	492.43 ug/L	492.43 ppb	23:57:58
3	B 249.677†	20699.1	19436.3	474.25 ug/L	474.25 ppb	23:57:38
3	Ba 233.527†	67351.7	62327.0	491.12 ug/L	491.12 ppb	23:57:38
3	Be 313.107†	1419363.6	1317264.7	493.28 ug/L	493.28 ppb	23:57:38
3	Cd 226.502†	43168.9	40131.6	466.25 ug/L	466.25 ppb	23:57:58
3	Co 228.616†	23911.7	22196.5	466.24 ug/L	466.24 ppb	23:57:58
3	Cr 267.716†	46366.6	42830.0	481.55 ug/L	481.55 ppb	23:57:38
3	Cu 324.752†	177586.8	158412.2	482.66 ug/L	482.66 ppb	23:57:38
3	Mn 257.610†	460800.5	426020.9	485.62 ug/L	485.62 ppb	23:57:38
3	Mo 202.031†	6894.5	6376.6	470.11 ug/L	470.11 ppb	23:57:58
3	Ni 231.604†	20319.9	18724.5	477.57 ug/L	477.57 ppb	23:57:58
3	P 214.914†	1178.8	885.2	438.56 ug/L	438.56 ppb	23:57:58
3	Pb 220.353†	4218.1	3842.9	476.94 ug/L	476.94 ppb	23:57:58
3	S 181.975 Axial†	3757.6	3442.0	4852.1 ug/L	4852.1 ppb	23:57:58
3	Sb 206.836†	1544.0	1390.0	507.83 ug/L	507.83 ppb	23:57:58
3	Se 196.026†	732.6	702.8	478.56 ug/L	478.56 ppb	23:57:58
3	Si 251.611†	157900.9	145582.1	4710.4 ug/L	4710.4 ppb	23:57:38
3	Sn 189.927†	3018.1	2784.0	502.68 ug/L	502.68 ppb	23:57:58
3	Ti 334.940†	332583.7	309236.1	487.13 ug/L	487.13 ppb	23:57:38
3	Tl 190.801†	1563.4	1474.5	477.67 ug/L	477.67 ppb	23:57:58
3	U 409.014†	14817.9	16616.7	462.37 ug/L	462.37 ppb	23:57:38
3	V 292.402†	72859.4	68904.4	487.58 ug/L	487.58 ppb	23:57:38
3	Zn 213.857†	51876.7	47275.6	472.84 ug/L	472.84 ppb	23:57:38
3	SiO2†	154652.6	142552.0	9884.2 ug/L	9884.2 ppb	23:58:14

Mean Data: 1202036685|950392|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	940571.7	106.87 %	1.280			1.20%
Sc Radial	3862.8	100 %	0.1			0.12%
Y 371.029	779939.0	102.54 %	1.307			1.27%
Y RADIAL	4282.7	96.20 %	1.472			1.53%
Ag 328.068†	101946.3	476.73 ug/L	0.122	476.73 ppb	0.122	0.03%
Al 396.153Radial†	5532.2	5176.0 ug/L	92.15	5176.0 ppb	92.15	1.78%
As 188.979†	1105.9	495.99 ug/L	3.713	495.99 ppb	3.713	0.75%
B 249.677†	19368.8	472.58 ug/L	1.637	472.58 ppb	1.637	0.35%
Ba 233.527†	62426.4	491.90 ug/L	0.723	491.90 ppb	0.723	0.15%
Be 313.107†	1314182.4	492.13 ug/L	1.038	492.13 ppb	1.038	0.21%
Ca 317.933Radial†	2388.9	5209.6 ug/L	10.74	5209.6 ppb	10.74	0.21%
Cd 226.502†	40594.6	471.64 ug/L	4.895	471.64 ppb	4.895	1.04%
Co 228.616†	22456.0	471.71 ug/L	4.929	471.71 ppb	4.929	1.04%
Cr 267.716†	42877.6	482.08 ug/L	1.255	482.08 ppb	1.255	0.26%
Cu 324.752†	158194.3	481.99 ug/L	0.583	481.99 ppb	0.583	0.12%
Fe 238.204 Radial†	301.7	4888.9 ug/L	47.34	4888.9 ppb	47.34	0.97%
K 766.490 Radial†	25798.6	4938.5 ug/L	79.74	4938.5 ppb	79.74	1.61%

Mg 279.077 IEC†	99.7	5263.5 ug/L	131.07	5263.5 ppb	131.07	2.49%
Mn 257.610†	426496.1	486.16 ug/L	0.892	486.16 ppb	0.892	0.18%
Mo 202.031†	6459.0	476.18 ug/L	5.427	476.18 ppb	5.427	1.14%
Na 589.592 Radial†	14976.6	4660.2 ug/L	52.47	4660.2 ppb	52.47	1.13%
Ni 231.604†	18944.0	483.17 ug/L	4.955	483.17 ppb	4.955	1.03%
P 214.914†	905.5	450.96 ug/L	12.860	450.96 ppb	12.860	2.85%
Pb 220.353†	3899.5	483.95 ug/L	6.200	483.95 ppb	6.200	1.28%
S 181.975 Axial†	3473.0	4895.8 ug/L	39.22	4895.8 ppb	39.22	0.80%
Sb 206.836†	1406.8	513.95 ug/L	6.925	513.95 ppb	6.925	1.35%
Se 196.026†	712.6	484.95 ug/L	5.545	484.95 ppb	5.545	1.14%
Si 251.611†	145648.7	4712.5 ug/L	3.53	4712.5 ppb	3.53	0.07%
Sn 189.927†	2810.6	507.48 ug/L	4.985	507.48 ppb	4.985	0.98%
Sr 421.552†	69380.6	482.62 ug/L	6.862	482.62 ppb	6.862	1.42%
Ti 334.940†	309254.0	487.16 ug/L	0.202	487.16 ppb	0.202	0.04%
Tl 190.801†	1485.0	481.03 ug/L	2.910	481.03 ppb	2.910	0.60%
U 409.014†	16718.7	465.22 ug/L	4.619	465.22 ppb	4.619	0.99%
V 292.402†	68867.1	487.41 ug/L	0.322	487.41 ppb	0.322	0.07%
Zn 213.857†	47286.4	472.92 ug/L	0.688	472.92 ppb	0.688	0.15%
SiO2†	144256.5	10002 ug/L	103.5	10002 ppb	103.5	1.03%

Sequence No.: 62

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/26/2010 00:35:41

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3797.5	3797.5	98.5 %		00:37:53
1	Y RADIAL	4192.3	4192.3	94.17 %		00:37:33
1	Al 396.153Radial†	5625.5	5828.6	5453.7 ug/L	5453.7 ppb	00:37:33
1	Ca 317.933Radial†	2403.1	2422.0	5281.8 ug/L	5281.8 ppb	00:37:53
1	Fe 238.204 Radial†	309.8	303.0	4911.5 ug/L	4911.5 ppb	00:37:53
1	K 766.490 Radial†	29605.5	27303.8	5224.8 ug/L	5224.8 ppb	00:37:33
1	Mg 279.077 IEC†	99.7	100.0	5279.4 ug/L	5279.4 ppb	00:37:53
1	Na 589.592 Radial†	29730.4	31097.3	9676.4 ug/L	9676.4 ppb	00:37:33
1	Sr 421.552†	71321.2	72428.7	503.82 ug/L	503.82 ppb	00:37:33
1	Sc 361.383	930563.7	930563.7	105.74 %		00:38:50
1	Y 371.029	771515.6	771515.6	101.43 %		00:38:50
1	Ag 328.068†	113049.6	106681.5	498.78 ug/L	498.78 ppb	00:38:55
1	As 188.979†	1162.6	1119.4	502.00 ug/L	502.00 ppb	00:39:15
1	B 249.677†	20705.6	19860.1	484.55 ug/L	484.55 ppb	00:38:55
1	Ba 233.527†	66749.6	63116.8	497.36 ug/L	497.36 ppb	00:38:55
1	Be 313.107†	1420675.1	1347150.0	504.46 ug/L	504.46 ppb	00:38:50
1	Cd 226.502†	45515.5	43222.1	502.18 ug/L	502.18 ppb	00:38:55
1	Co 228.616†	25015.6	23723.1	498.35 ug/L	498.35 ppb	00:38:55
1	Cr 267.716†	46913.2	44282.7	497.86 ug/L	497.86 ppb	00:38:55
1	Cu 324.752†	176684.0	161142.4	490.97 ug/L	490.97 ppb	00:38:55
1	Mn 257.610†	465564.6	439826.2	501.34 ug/L	501.34 ppb	00:38:50
1	Mo 202.031†	7089.6	6700.2	493.95 ug/L	493.95 ppb	00:39:15
1	Ni 231.604†	20900.8	19684.0	502.04 ug/L	502.04 ppb	00:38:55
1	P 214.914†	4552.8	4099.9	2370.3 ug/L	2370.3 ppb	00:39:15
1	Pb 220.353†	4207.6	3918.1	486.34 ug/L	486.34 ppb	00:39:15
1	S 181.975 Axial†	789.4	710.7	1001.1 ug/L	1001.1 ppb	00:39:15
1	Sb 206.836†	1509.0	1388.1	507.65 ug/L	507.65 ppb	00:39:15
1	Se 196.026†	777.5	760.1	516.23 ug/L	516.23 ppb	00:39:15
1	Si 251.611†	82468.2	77428.9	2502.3 ug/L	2502.3 ppb	00:38:55
1	Sn 189.927†	2945.3	2776.1	501.27 ug/L	501.27 ppb	00:39:15
1	Ti 334.940†	328399.1	311990.6	491.47 ug/L	491.47 ppb	00:38:55
1	Tl 190.801†	1590.7	1531.8	496.05 ug/L	496.05 ppb	00:39:15
1	U 409.014†	15265.0	17338.6	482.49 ug/L	482.49 ppb	00:38:55
1	V 292.402†	73226.7	70722.3	500.64 ug/L	500.64 ppb	00:38:55
1	Zn 213.857†	53693.8	50041.0	500.59 ug/L	500.59 ppb	00:38:55
1	SiO2†	82824.2	77742.1	5384.0 ug/L	5384.0 ppb	00:40:23
2	Sc Radial	3787.4	3787.4	98.2 %		00:38:18
2	Y RADIAL	4248.7	4248.7	95.44 %		00:37:58
2	Al 396.153Radial†	5425.7	5640.4	5276.6 ug/L	5276.6 ppb	00:37:58
2	Ca 317.933Radial†	2426.8	2452.7	5348.6 ug/L	5348.6 ppb	00:38:18
2	Fe 238.204 Radial†	311.8	305.8	4957.0 ug/L	4957.0 ppb	00:38:18
2	K 766.490 Radial†	28871.3	26636.6	5097.1 ug/L	5097.1 ppb	00:37:58
2	Mg 279.077 IEC†	99.2	99.8	5268.6 ug/L	5268.6 ppb	00:38:18
2	Na 589.592 Radial†	28702.5	30131.5	9375.8 ug/L	9375.8 ppb	00:37:58
2	Sr 421.552†	69124.0	70385.1	489.60 ug/L	489.60 ppb	00:37:58
2	Sc 361.383	922222.1	922222.1	104.79 %		00:39:21
2	Y 371.029	764854.8	764854.8	100.55 %		00:39:21
2	Ag 328.068†	110491.2	105207.1	491.92 ug/L	491.92 ppb	00:39:26
2	As 188.979†	1160.8	1127.7	505.60 ug/L	505.60 ppb	00:39:46
2	B 249.677†	20130.3	19488.3	475.44 ug/L	475.44 ppb	00:39:26
2	Ba 233.527†	65276.1	62281.7	490.78 ug/L	490.78 ppb	00:39:26
2	Be 313.107†	1406865.9	1346124.9	504.06 ug/L	504.06 ppb	00:39:21
2	Cd 226.502†	44532.4	42673.3	495.80 ug/L	495.80 ppb	00:39:26
2	Co 228.616†	24437.5	23385.4	491.28 ug/L	491.28 ppb	00:39:26
2	Cr 267.716†	46037.1	43847.9	492.98 ug/L	492.98 ppb	00:39:26
2	Cu 324.752†	171696.8	157894.5	481.08 ug/L	481.08 ppb	00:39:26
2	Mn 257.610†	461194.9	439638.9	501.14 ug/L	501.14 ppb	00:39:21
2	Mo 202.031†	7114.3	6784.5	500.16 ug/L	500.16 ppb	00:39:46
2	Ni 231.604†	20565.8	19543.0	498.45 ug/L	498.45 ppb	00:39:26



2	P 214.914†	4578.1	4163.0	2410.2 ug/L	2410.2 ppb	00:39:46
2	Pb 220.353†	4232.9	3978.2	493.76 ug/L	493.76 ppb	00:39:46
2	S 181.975 Axial†	789.4	717.5	1010.6 ug/L	1010.6 ppb	00:39:46
2	Sb 206.836†	1525.5	1416.8	518.03 ug/L	518.03 ppb	00:39:46
2	Se 196.026†	769.2	758.8	515.56 ug/L	515.56 ppb	00:39:46
2	Si 251.611†	80452.8	76211.1	2462.8 ug/L	2462.8 ppb	00:39:26
2	Sn 189.927†	2968.3	2823.2	509.78 ug/L	509.78 ppb	00:39:46
2	Ti 334.940†	320915.3	307658.1	484.66 ug/L	484.66 ppb	00:39:26
2	Tl 190.801†	1606.6	1560.6	505.29 ug/L	505.29 ppb	00:39:46
2	U 409.014†	14751.4	16979.0	472.46 ug/L	472.46 ppb	00:39:26
2	V 292.402†	71640.9	69835.4	494.52 ug/L	494.52 ppb	00:39:26
2	Zn 213.857†	52417.0	49281.9	492.96 ug/L	492.96 ppb	00:39:26
2	SiO2†	81183.7	76885.1	5324.3 ug/L	5324.3 ppb	00:40:28
3	Sc Radial	3760.4	3760.4	97.5 %		00:38:43
3	Y RADIAL	4306.8	4306.8	96.75 %		00:38:23
3	Al 396.153Radial†	5595.6	5854.4	5477.6 ug/L	5477.6 ppb	00:38:23
3	Ca 317.933Radial†	2423.3	2466.8	5379.5 ug/L	5379.5 ppb	00:38:43
3	Fe 238.204 Radial†	314.0	310.4	5031.7 ug/L	5031.7 ppb	00:38:43
3	K 766.490 Radial†	29520.7	27513.6	5265.0 ug/L	5265.0 ppb	00:38:23
3	Mg 279.077 IEC†	103.8	105.3	5558.5 ug/L	5558.5 ppb	00:38:43
3	Na 589.592 Radial†	29492.9	31151.8	9693.3 ug/L	9693.3 ppb	00:38:23
3	Sr 421.552†	70879.1	72690.3	505.64 ug/L	505.64 ppb	00:38:23
3	Sc 361.383	926357.4	926357.4	105.26 %		00:39:52
3	Y 371.029	769201.3	769201.3	101.13 %		00:39:52
3	Ag 328.068†	114202.9	108262.8	506.19 ug/L	506.19 ppb	00:39:57
3	As 188.979†	1181.7	1142.6	512.37 ug/L	512.37 ppb	00:40:17
3	B 249.677†	21167.7	20388.1	497.44 ug/L	497.44 ppb	00:39:57
3	Ba 233.527†	67605.7	64216.8	506.03 ug/L	506.03 ppb	00:39:57
3	Be 313.107†	1415658.9	1348485.3	504.98 ug/L	504.98 ppb	00:39:52
3	Cd 226.502†	46145.1	44015.7	511.40 ug/L	511.40 ppb	00:39:57
3	Co 228.616†	25328.3	24127.6	506.85 ug/L	506.85 ppb	00:39:57
3	Cr 267.716†	47621.9	45157.5	507.69 ug/L	507.69 ppb	00:39:57
3	Cu 324.752†	178268.2	163406.1	497.87 ug/L	497.87 ppb	00:39:57
3	Mn 257.610†	462566.2	438976.9	500.38 ug/L	500.38 ppb	00:39:52
3	Mo 202.031†	7174.7	6811.6	502.16 ug/L	502.16 ppb	00:40:17
3	Ni 231.604†	21213.2	20070.5	511.90 ug/L	511.90 ppb	00:39:57
3	P 214.914†	4622.3	4185.5	2420.4 ug/L	2420.4 ppb	00:40:17
3	Pb 220.353†	4285.7	4010.4	497.77 ug/L	497.77 ppb	00:40:17
3	S 181.975 Axial†	798.7	722.9	1018.3 ug/L	1018.3 ppb	00:40:17
3	Sb 206.836†	1526.6	1411.3	516.16 ug/L	516.16 ppb	00:40:17
3	Se 196.026†	780.3	766.1	520.58 ug/L	520.58 ppb	00:40:17
3	Si 251.611†	83211.0	78488.7	2536.5 ug/L	2536.5 ppb	00:39:57
3	Sn 189.927†	2985.5	2826.9	510.45 ug/L	510.45 ppb	00:40:17
3	Ti 334.940†	332267.4	317075.9	499.47 ug/L	499.47 ppb	00:39:57
3	Tl 190.801†	1628.2	1574.3	509.72 ug/L	509.72 ppb	00:40:17
3	U 409.014†	15311.5	17448.4	485.52 ug/L	485.52 ppb	00:39:57
3	V 292.402†	74290.6	72047.4	510.00 ug/L	510.00 ppb	00:39:57
3	Zn 213.857†	54397.1	50939.7	509.57 ug/L	509.57 ppb	00:39:57
3	SiO2†	82128.7	77437.0	5362.6 ug/L	5362.6 ppb	00:40:33

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	926381.1	105.26 %	0.474			0.45%
Sc Radial	3781.8	98.1 %	0.50			0.51%
Y 371.029	768523.9	101.04 %	0.445			0.44%
Y RADIAL	4249.3	95.45 %	1.286			1.35%
Ag 328.068†	106717.1	498.96 ug/L	7.139	498.96 ppb	7.139	1.43%
QC value within limits for Ag 328.068 Recovery = 99.79%						
Al 396.153Radial†	5774.5	5402.6 ug/L	109.80	5402.6 ppb	109.80	2.03%
QC value within limits for Al 396.153Radial Recovery = 108.05%						
As 188.979†	1129.9	506.66 ug/L	5.264	506.66 ppb	5.264	1.04%
QC value within limits for As 188.979 Recovery = 101.33%						
B 249.677†	19912.2	485.81 ug/L	11.054	485.81 ppb	11.054	2.28%
QC value within limits for B 249.677 Recovery = 97.16%						
Ba 233.527†	63205.1	498.05 ug/L	7.648	498.05 ppb	7.648	1.54%
QC value within limits for Ba 233.527 Recovery = 99.61%						
Be 313.107†	1347253.4	504.50 ug/L	0.459	504.50 ppb	0.459	0.09%
QC value within limits for Be 313.107 Recovery = 100.90%						
Ca 317.933Radial†	2447.2	5336.6 ug/L	49.93	5336.6 ppb	49.93	0.94%

QC value within limits for Ca 317.933 Radial Recovery = 106.73%

Cd 226.502†	43303.7	503.13 ug/L	7.844	503.13 ppb	7.844	1.56%
QC value within limits for Cd 226.502 Recovery = 100.63%						
Co 228.616†	23745.4	498.83 ug/L	7.792	498.83 ppb	7.792	1.56%
QC value within limits for Co 228.616 Recovery = 99.77%						
Cr 267.716†	44429.3	499.51 ug/L	7.497	499.51 ppb	7.497	1.50%
QC value within limits for Cr 267.716 Recovery = 99.90%						
Cu 324.752†	160814.3	489.97 ug/L	8.439	489.97 ppb	8.439	1.72%
QC value within limits for Cu 324.752 Recovery = 97.99%						
Fe 238.204 Radial†	306.4	4966.7 ug/L	60.73	4966.7 ppb	60.73	1.22%
QC value within limits for Fe 238.204 Radial Recovery = 99.33%						
K 766.490 Radial†	27151.4	5195.6 ug/L	87.67	5195.6 ppb	87.67	1.69%
QC value within limits for K 766.490 Radial Recovery = 103.91%						
Mg 279.077 IEC†	101.7	5368.8 ug/L	164.34	5368.8 ppb	164.34	3.06%
QC value within limits for Mg 279.077 IEC Recovery = 107.38%						
Mn 257.610†	439480.6	500.95 ug/L	0.509	500.95 ppb	0.509	0.10%
QC value within limits for Mn 257.610 Recovery = 100.19%						
Mo 202.031†	6765.4	498.76 ug/L	4.282	498.76 ppb	4.282	0.86%
QC value within limits for Mo 202.031 Recovery = 99.75%						
Na 589.592 Radial†	30793.5	9581.8 ug/L	178.62	9581.8 ppb	178.62	1.86%
QC value within limits for Na 589.592 Radial Recovery = 95.82%						
Ni 231.604†	19765.8	504.13 ug/L	6.965	504.13 ppb	6.965	1.38%
QC value within limits for Ni 231.604 Recovery = 100.83%						
P 214.914†	4149.5	2400.3 ug/L	26.49	2400.3 ppb	26.49	1.10%
QC value within limits for P 214.914 Recovery = 96.01%						
Pb 220.353†	3968.9	492.62 ug/L	5.801	492.62 ppb	5.801	1.18%
QC value within limits for Pb 220.353 Recovery = 98.52%						
S 181.975 Axial†	717.0	1010.0 ug/L	8.63	1010.0 ppb	8.63	0.85%
QC value within limits for S 181.975 Axial Recovery = 101.00%						
Sb 206.836†	1405.4	513.95 ug/L	5.535	513.95 ppb	5.535	1.08%
QC value within limits for Sb 206.836 Recovery = 102.79%						
Se 196.026†	761.6	517.46 ug/L	2.728	517.46 ppb	2.728	0.53%
QC value within limits for Se 196.026 Recovery = 103.49%						
Si 251.611†	77376.2	2500.5 ug/L	36.91	2500.5 ppb	36.91	1.48%
QC value within limits for Si 251.611 Recovery = 100.02%						
Sn 189.927†	2808.8	507.17 ug/L	5.115	507.17 ppb	5.115	1.01%
QC value within limits for Sn 189.927 Recovery = 101.43%						
Sr 421.552†	71834.7	499.69 ug/L	8.781	499.69 ppb	8.781	1.76%
QC value within limits for Sr 421.552 Recovery = 99.94%						
Ti 334.940†	312241.6	491.86 ug/L	7.412	491.86 ppb	7.412	1.51%
QC value within limits for Ti 334.940 Recovery = 98.37%						
Tl 190.801†	1555.6	503.69 ug/L	6.977	503.69 ppb	6.977	1.39%
QC value within limits for Tl 190.801 Recovery = 100.74%						
U 409.014†	17255.3	480.16 ug/L	6.838	480.16 ppb	6.838	1.42%
QC value within limits for U 409.014 Recovery = 96.03%						
V 292.402†	70868.3	501.72 ug/L	7.796	501.72 ppb	7.796	1.55%
QC value within limits for V 292.402 Recovery = 100.34%						
Zn 213.857†	50087.5	501.04 ug/L	8.318	501.04 ppb	8.318	1.66%
QC value within limits for Zn 213.857 Recovery = 100.21%						
SiO2†	77354.7	5357.0 ug/L	30.23	5357.0 ppb	30.23	0.56%
QC value within limits for SiO2 Recovery = 100.18%						

All analyte(s) passed QC.

Sequence No.: 63

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/26/2010 00:42:43

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	3779.3	3779.3	98.0 %		00:44:56
1	Y RADIAL	4326.4	4326.4	97.19 %		00:44:36
1	Al 396.153Radial†	-116.6	-3.9	-3.7317 ug/L	-3.7317 ppb	00:44:36
1	Ca 317.933Radial†	24.1	5.9	12.931 ug/L	12.931 ppb	00:44:56
1	Fe 238.204 Radial†	12.1	0.7	11.407 ug/L	11.407 ppb	00:44:56
1	K 766.490 Radial†	3107.4	406.2	77.831 ug/L	77.831 ppb	00:44:36
1	Mg 279.077 IEC†	-0.9	-2.1	-108.49 ug/L	-108.49 ppb	00:44:56
1	Na 589.592 Radial†	-1008.3	-127.3	-39.617 ug/L	-39.617 ppb	00:44:36
1	Sr 421.552†	68.6	61.2	0.4260 ug/L	0.4260 ppb	00:44:36
1	Sc 361.383	948215.8	948215.8	107.74 %		00:45:53
1	Y 371.029	796239.1	796239.1	104.68 %		00:45:53
1	Ag 328.068†	310.5	54.1	0.2495 ug/L	0.2495 ppb	00:45:58
1	As 188.979†	-27.8	-5.9	-2.6247 ug/L	-2.6247 ppb	00:46:18
1	B 249.677†	-434.7	-125.5	-3.0785 ug/L	-3.0785 ppb	00:46:18
1	Ba 233.527†	9.1	-2.6	-0.0202 ug/L	-0.0202 ppb	00:46:18
1	Be 313.107†	-3623.8	194.9	0.0733 ug/L	0.0733 ppb	00:45:58
1	Cd 226.502†	-184.4	5.0	0.0585 ug/L	0.0585 ppb	00:46:18
1	Co 228.616†	-52.0	16.6	0.3507 ug/L	0.3507 ppb	00:46:18
1	Cr 267.716†	93.4	1.6	0.0163 ug/L	0.0163 ppb	00:46:18
1	Cu 324.752†	6078.6	-313.4	-0.9577 ug/L	-0.9577 ppb	00:45:58
1	Mn 257.610†	490.8	-22.2	-0.0197 ug/L	-0.0197 ppb	00:46:18
1	Mo 202.031†	20.3	14.2	1.0471 ug/L	1.0471 ppb	00:46:18
1	Ni 231.604†	86.1	-2.9	-0.0738 ug/L	-0.0738 ppb	00:46:18
1	P 214.914†	199.1	-21.0	-12.457 ug/L	-12.457 ppb	00:46:18
1	Pb 220.353†	-35.9	-94.5	-11.688 ug/L	-11.688 ppb	00:46:18
1	S 181.975 Axial†	38.5	-0.1	-0.1496 ug/L	-0.1496 ppb	00:46:18
1	Sb 206.836†	48.3	5.8	2.0734 ug/L	2.0734 ppb	00:46:18
1	Se 196.026†	-22.5	3.9	2.5819 ug/L	2.5819 ppb	00:46:18
1	Si 251.611†	842.2	217.0	7.0163 ug/L	7.0163 ppb	00:46:18
1	Sn 189.927†	13.1	2.8	0.5005 ug/L	0.5005 ppb	00:46:18
1	Ti 334.940†	-1369.4	138.9	0.2267 ug/L	0.2267 ppb	00:45:58
1	Tl 190.801†	-25.2	4.1	1.3181 ug/L	1.3181 ppb	00:46:18
1	U 409.014†	-2881.1	227.8	6.3611 ug/L	6.3611 ppb	00:45:53
1	V 292.402†	-1575.8	6.2	0.0660 ug/L	0.0660 ppb	00:45:58
1	Zn 213.857†	782.6	-13.0	-0.1316 ug/L	-0.1316 ppb	00:46:18
1	SiO2†	761.4	118.5	8.1961 ug/L	8.1961 ppb	00:47:24
2	Sc Radial	3740.8	3740.8	97.0 %		00:45:21
2	Y RADIAL	4315.8	4315.8	96.95 %		00:45:01
2	Al 396.153Radial†	-126.4	-15.3	-14.365 ug/L	-14.365 ppb	00:45:01
2	Ca 317.933Radial†	24.5	6.6	14.339 ug/L	14.339 ppb	00:45:21
2	Fe 238.204 Radial†	9.3	-2.0	-33.030 ug/L	-33.030 ppb	00:45:21
2	K 766.490 Radial†	2966.9	294.0	56.347 ug/L	56.347 ppb	00:45:01
2	Mg 279.077 IEC†	2.6	1.5	78.296 ug/L	78.296 ppb	00:45:21
2	Na 589.592 Radial†	-1088.1	-220.2	-68.523 ug/L	-68.523 ppb	00:45:01
2	Sr 421.552†	-13.9	-23.1	-0.1608 ug/L	-0.1608 ppb	00:45:01
2	Sc 361.383	915570.7	915570.7	104.03 %		00:46:23
2	Y 371.029	771114.7	771114.7	101.38 %		00:46:23
2	Ag 328.068†	340.2	92.8	0.4169 ug/L	0.4169 ppb	00:46:28
2	As 188.979†	-16.5	4.1	1.8129 ug/L	1.8129 ppb	00:46:48
2	B 249.677†	-433.5	-138.7	-3.3941 ug/L	-3.3941 ppb	00:46:48
2	Ba 233.527†	13.1	1.5	0.0103 ug/L	0.0103 ppb	00:46:48
2	Be 313.107†	-3700.8	0.9	0.0004 ug/L	0.0004 ppb	00:46:28
2	Cd 226.502†	-177.9	5.2	0.0639 ug/L	0.0639 ppb	00:46:48
2	Co 228.616†	-69.6	-2.1	-0.0424 ug/L	-0.0424 ppb	00:46:48
2	Cr 267.716†	83.8	-4.5	-0.0556 ug/L	-0.0556 ppb	00:46:48
2	Cu 324.752†	6177.4	-17.2	-0.0558 ug/L	-0.0558 ppb	00:46:28
2	Mn 257.610†	510.0	12.5	0.0078 ug/L	0.0078 ppb	00:46:48
2	Mo 202.031†	11.7	6.6	0.4851 ug/L	0.4851 ppb	00:46:48
2	Ni 231.604†	87.0	0.9	0.0220 ug/L	0.0220 ppb	00:46:48

2	P 214.914†	199.1	-14.4	-8.6622 ug/L	-8.6622 ppb	00:46:48
2	Pb 220.353†	-43.3	-102.8	-12.714 ug/L	-12.714 ppb	00:46:48
2	S 181.975 Axial†	40.7	3.3	4.6732 ug/L	4.6732 ppb	00:46:48
2	Sb 206.836†	37.7	-2.8	-0.9835 ug/L	-0.9835 ppb	00:46:48
2	Se 196.026†	-20.2	5.4	3.4233 ug/L	3.4233 ppb	00:46:48
2	Si 251.611†	758.3	164.2	5.3118 ug/L	5.3118 ppb	00:46:48
2	Sn 189.927†	3.8	-5.7	-1.0275 ug/L	-1.0275 ppb	00:46:48
2	Ti 334.940†	-1461.0	5.5	0.0029 ug/L	0.0029 ppb	00:46:28
2	Tl 190.801†	-37.3	-8.4	-2.7113 ug/L	-2.7113 ppb	00:46:48
2	U 409.014†	-2905.3	109.2	3.0533 ug/L	3.0533 ppb	00:46:23
2	V 292.402†	-1585.4	-55.2	-0.3667 ug/L	-0.3667 ppb	00:46:28
2	Zn 213.857†	774.5	5.1	0.0560 ug/L	0.0560 ppb	00:46:48
2	SiO2†	788.0	169.2	11.735 ug/L	11.735 ppb	00:47:29
3	Sc Radial	3875.6	3875.6	100 %		00:45:46
3	Y RADIAL	4313.8	4313.8	96.90 %		00:45:26
3	Al 396.153Radial†	-111.2	4.4	4.1549 ug/L	4.1549 ppb	00:45:26
3	Ca 317.933Radial†	25.4	6.6	14.371 ug/L	14.371 ppb	00:45:46
3	Fe 238.204 Radial†	9.6	-2.1	-34.599 ug/L	-34.599 ppb	00:45:46
3	K 766.490 Radial†	2956.6	177.3	33.982 ug/L	33.982 ppb	00:45:26
3	Mg 279.077 IEC†	2.8	1.6	86.469 ug/L	86.469 ppb	00:45:46
3	Na 589.592 Radial†	-1017.6	-111.1	-34.559 ug/L	-34.559 ppb	00:45:26
3	Sr 421.552†	48.5	39.5	0.2747 ug/L	0.2747 ppb	00:45:26
3	Sc 361.383	916011.1	916011.1	104.08 %		00:46:54
3	Y 371.029	770857.6	770857.6	101.34 %		00:46:54
3	Ag 328.068†	340.2	92.7	0.4195 ug/L	0.4195 ppb	00:46:59
3	As 188.979†	-20.3	0.4	0.1604 ug/L	0.1604 ppb	00:47:19
3	B 249.677†	-463.0	-166.8	-4.0838 ug/L	-4.0838 ppb	00:47:19
3	Ba 233.527†	13.2	1.6	0.0117 ug/L	0.0117 ppb	00:47:19
3	Be 313.107†	-3590.7	108.5	0.0402 ug/L	0.0402 ppb	00:46:59
3	Cd 226.502†	-179.9	3.4	0.0427 ug/L	0.0427 ppb	00:47:19
3	Co 228.616†	-62.2	5.1	0.1087 ug/L	0.1087 ppb	00:47:19
3	Cr 267.716†	89.0	0.4	0.0008 ug/L	0.0008 ppb	00:47:19
3	Cu 324.752†	6020.4	-170.9	-0.5231 ug/L	-0.5231 ppb	00:46:59
3	Mn 257.610†	528.5	30.1	0.0273 ug/L	0.0273 ppb	00:47:19
3	Mo 202.031†	10.5	5.4	0.3933 ug/L	0.3933 ppb	00:47:19
3	Ni 231.604†	87.3	1.1	0.0270 ug/L	0.0270 ppb	00:47:19
3	P 214.914†	197.2	-16.3	-9.6638 ug/L	-9.6638 ppb	00:47:19
3	Pb 220.353†	-52.0	-111.2	-13.747 ug/L	-13.747 ppb	00:47:19
3	S 181.975 Axial†	44.9	7.3	10.239 ug/L	10.239 ppb	00:47:19
3	Sb 206.836†	52.5	11.4	4.0576 ug/L	4.0576 ppb	00:47:19
3	Se 196.026†	-31.0	-5.0	-3.4076 ug/L	-3.4076 ppb	00:47:19
3	Si 251.611†	747.5	153.5	4.9663 ug/L	4.9663 ppb	00:47:19
3	Sn 189.927†	18.2	8.1	1.4631 ug/L	1.4631 ppb	00:47:19
3	Ti 334.940†	-1574.8	-103.2	-0.1681 ug/L	-0.1681 ppb	00:46:59
3	Tl 190.801†	-27.0	1.5	0.4874 ug/L	0.4874 ppb	00:47:19
3	U 409.014†	-2985.2	33.8	0.9468 ug/L	0.9468 ppb	00:46:54
3	V 292.402†	-1516.6	11.6	0.0952 ug/L	0.0952 ppb	00:46:59
3	Zn 213.857†	765.2	-4.3	-0.0373 ug/L	-0.0373 ppb	00:47:19
3	SiO2†	782.5	163.6	11.348 ug/L	11.348 ppb	00:47:34

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	926599.2	105.29 %	2.127			2.02%
Sc Radial	3798.6	98.5 %	1.80			1.83%
Y 371.029	779403.8	102.47 %	1.917			1.87%
Y RADIAL	4318.7	97.01 %	0.153			0.16%
Ag 328.068†	79.9	0.3620 ug/L	0.09737	0.3620 ppb	0.09737	26.90%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-4.9	-4.6473 ug/L	9.29391	-4.6473 ppb	9.29391	199.98%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-0.5	-0.2171 ug/L	2.24272	-0.2171 ppb	2.24272	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-143.7	-3.5188 ug/L	0.51413	-3.5188 ppb	0.51413	14.61%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	0.2	0.0006 ug/L	0.01800	0.0006 ppb	0.01800	>999.9%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	101.4	0.0379 ug/L	0.03653	0.0379 ppb	0.03653	96.25%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	6.4	13.880 ug/L	0.8220	13.880 ppb	0.8220	5.92%

QC value within limits for Ca 317.933Radial Recovery = Not calculated							
Cd 226.502†	4.5	0.0550 ug/L	0.01102	0.0550 ppb	0.01102	20.01%	
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	6.5	0.1390 ug/L	0.19825	0.1390 ppb	0.19825	142.63%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	-0.9	-0.0128 ug/L	0.03781	-0.0128 ppb	0.03781	294.69%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	-167.2	-0.5122 ug/L	0.45106	-0.5122 ppb	0.45106	88.07%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	-1.2	-18.741 ug/L	26.1208	-18.741 ppb	26.1208	139.38%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	292.5	56.054 ug/L	21.9262	56.054 ppb	21.9262	39.12%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	0.4	18.760 ug/L	110.2732	18.760 ppb	110.2732	587.81%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	6.8	0.0051 ug/L	0.02362	0.0051 ppb	0.02362	460.27%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	8.7	0.6418 ug/L	0.35396	0.6418 ppb	0.35396	55.15%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	-152.9	-47.566 ug/L	18.3246	-47.566 ppb	18.3246	38.52%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	-0.3	-0.0082 ug/L	0.05679	-0.0082 ppb	0.05679	689.69%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	-17.3	-10.261 ug/L	1.9668	-10.261 ppb	1.9668	19.17%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	-102.8	-12.716 ug/L	1.0293	-12.716 ppb	1.0293	8.09%	
QC value less than the lower limit for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	3.5	4.9208 ug/L	5.19858	4.9208 ppb	5.19858	105.65%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	4.8	1.7158 ug/L	2.53954	1.7158 ppb	2.53954	148.01%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	1.4	0.8659 ug/L	3.72475	0.8659 ppb	3.72475	430.16%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	178.2	5.7648 ug/L	1.09755	5.7648 ppb	1.09755	19.04%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	1.7	0.3120 ug/L	1.25598	0.3120 ppb	1.25598	402.53%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	25.9	0.1800 ug/L	0.30465	0.1800 ppb	0.30465	169.30%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	13.7	0.0205 ug/L	0.19796	0.0205 ppb	0.19796	966.63%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	-0.9	-0.3019 ug/L	2.12748	-0.3019 ppb	2.12748	704.59%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	123.6	3.4537 ug/L	2.72924	3.4537 ppb	2.72924	79.02%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	-12.5	-0.0685 ug/L	0.25869	-0.0685 ppb	0.25869	377.70%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	-4.1	-0.0376 ug/L	0.09382	-0.0376 ppb	0.09382	249.28%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†	150.4	10.426 ug/L	1.9411	10.426 ppb	1.9411	18.62%	
QC value within limits for SiO2 Recovery = Not calculated							
QC Failed. Continue with analysis.							

Sequence No.: 64

Autosampler Location: 87

Sample ID: 1202036686|950392|1

Date Collected: 2/26/2010 00:49:45

Analyst: HSC

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Replicate Data: 1202036686|950392|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3585.5	3585.5	93.0 %		00:51:58
1	Y RADIAL	3917.0	3917.0	87.99 %		00:51:38
1	Al 396.153Radial†	-29.2	83.7	78.620 ug/L	78.620 ppb	00:51:38
1	Ca 317.933Radial†	38.2	22.4	48.872 ug/L	48.872 ppb	00:51:58
1	Fe 238.204 Radial†	15.6	5.1	81.984 ug/L	81.984 ppb	00:51:58
1	K 766.490 Radial†	3192.1	668.7	128.00 ug/L	128.00 ppb	00:51:38
1	Mg 279.077 IEC†	4.3	3.5	184.95 ug/L	184.95 ppb	00:51:58
1	Na 589.592 Radial†	-74.2	821.9	255.73 ug/L	255.73 ppb	00:51:38
1	Sr 421.552†	76.9	74.0	0.5145 ug/L	0.5145 ppb	00:51:38
1	Sc 361.383	943536.0	943536.0	107.21 %		00:52:55
1	Y 371.029	792539.8	792539.8	104.19 %		00:52:55
1	Ag 328.068†	332.4	75.9	0.3731 ug/L	0.3731 ppb	00:53:00
1	As 188.979†	-18.3	2.8	1.2796 ug/L	1.2796 ppb	00:53:20
1	B 249.677†	-503.5	-191.6	-4.7108 ug/L	-4.7108 ppb	00:53:20
1	Ba 233.527†	85.8	69.0	0.5462 ug/L	0.5462 ppb	00:53:20
1	Be 313.107†	-3535.4	260.6	0.1004 ug/L	0.1004 ppb	00:53:00
1	Cd 226.502†	-203.7	-13.8	-0.1664 ug/L	-0.1664 ppb	00:53:20
1	Co 228.616†	-57.2	11.5	0.2391 ug/L	0.2391 ppb	00:53:20
1	Cr 267.716†	352.9	244.1	2.7439 ug/L	2.7439 ppb	00:53:20
1	Cu 324.752†	5997.2	-361.2	-1.1010 ug/L	-1.1010 ppb	00:53:00
1	Mn 257.610†	3420.7	2712.9	3.0912 ug/L	3.0912 ppb	00:53:00
1	Mo 202.031†	17.2	11.4	0.8463 ug/L	0.8463 ppb	00:53:20
1	Ni 231.604†	141.6	49.3	1.2577 ug/L	1.2577 ppb	00:53:20
1	P 214.914†	215.6	-4.7	-2.6719 ug/L	-2.6719 ppb	00:53:20
1	Pb 220.353†	-45.2	-103.3	-12.774 ug/L	-12.774 ppb	00:53:20
1	S 181.975 Axial†	53.3	13.9	19.535 ug/L	19.535 ppb	00:53:20
1	Sb 206.836†	30.9	-10.2	-3.5886 ug/L	-3.5886 ppb	00:53:20
1	Se 196.026†	-29.2	-2.5	-1.3635 ug/L	-1.3635 ppb	00:53:20
1	Si 251.611†	6391.1	5396.5	174.81 ug/L	174.81 ppb	00:53:00
1	Sn 189.927†	10.5	0.4	0.0741 ug/L	0.0741 ppb	00:53:20
1	Ti 334.940†	-609.9	841.0	1.3119 ug/L	1.3119 ppb	00:53:00
1	Tl 190.801†	-39.8	-9.7	-3.0820 ug/L	-3.0820 ppb	00:53:20
1	U 409.014†	-2787.8	301.6	8.4051 ug/L	8.4051 ppb	00:52:55
1	V 292.402†	-1471.9	95.8	0.6865 ug/L	0.6865 ppb	00:53:00
1	Zn 213.857†	790.6	-2.0	-0.0394 ug/L	-0.0394 ppb	00:53:20
1	SiO2†	6447.0	5425.2	376.63 ug/L	376.63 ppb	00:54:26
2	Sc Radial	3870.2	3870.2	100 %		00:52:23
2	Y RADIAL	4422.1	4422.1	99.34 %		00:52:03
2	Al 396.153Radial†	-53.0	62.3	58.522 ug/L	58.522 ppb	00:52:03
2	Ca 317.933Radial†	33.4	14.6	31.817 ug/L	31.817 ppb	00:52:23
2	Fe 238.204 Radial†	13.8	2.1	33.240 ug/L	33.240 ppb	00:52:23
2	K 766.490 Radial†	3183.4	407.5	77.947 ug/L	77.947 ppb	00:52:03
2	Mg 279.077 IEC†	-0.2	-1.4	-73.165 ug/L	-73.165 ppb	00:52:23
2	Na 589.592 Radial†	22.8	924.4	287.64 ug/L	287.64 ppb	00:52:03
2	Sr 421.552†	50.2	41.3	0.2868 ug/L	0.2868 ppb	00:52:03
2	Sc 361.383	942260.5	942260.5	107.07 %		00:53:25
2	Y 371.029	792280.2	792280.2	104.16 %		00:53:25
2	Ag 328.068†	380.0	120.8	0.5686 ug/L	0.5686 ppb	00:53:30
2	As 188.979†	-24.4	-2.9	-1.2518 ug/L	-1.2518 ppb	00:53:50
2	B 249.677†	-494.8	-184.1	-4.5182 ug/L	-4.5182 ppb	00:53:50
2	Ba 233.527†	77.9	61.8	0.4868 ug/L	0.4868 ppb	00:53:50
2	Be 313.107†	-3651.2	148.0	0.0586 ug/L	0.0586 ppb	00:53:30
2	Cd 226.502†	-193.9	-4.9	-0.0589 ug/L	-0.0589 ppb	00:53:50
2	Co 228.616†	-55.1	13.4	0.2778 ug/L	0.2778 ppb	00:53:50
2	Cr 267.716†	317.8	211.7	2.3770 ug/L	2.3770 ppb	00:53:50
2	Cu 324.752†	6164.2	-197.7	-0.6026 ug/L	-0.6026 ppb	00:53:30
2	Mn 257.610†	3456.6	2750.8	3.1401 ug/L	3.1401 ppb	00:53:30
2	Mo 202.031†	10.8	5.4	0.4000 ug/L	0.4000 ppb	00:53:50
2	Ni 231.604†	142.4	50.3	1.2823 ug/L	1.2823 ppb	00:53:50

2	P 214.914†	236.5	15.1	9.2060 ug/L	9.2060 ppb	00:53:50
2	Pb 220.353†	-49.5	-107.4	-13.274 ug/L	-13.274 ppb	00:53:50
2	S 181.975 Axial†	52.4	13.1	18.512 ug/L	18.512 ppb	00:53:50
2	Sb 206.836†	40.1	-1.6	-0.5346 ug/L	-0.5346 ppb	00:53:50
2	Se 196.026†	-28.1	-1.5	-0.8637 ug/L	-0.8637 ppb	00:53:50
2	Si 251.611†	6569.1	5570.8	180.47 ug/L	180.47 ppb	00:53:30
2	Sn 189.927†	13.7	3.4	0.6189 ug/L	0.6189 ppb	00:53:50
2	Ti 334.940†	-525.4	919.2	1.4561 ug/L	1.4561 ppb	00:53:30
2	Tl 190.801†	-32.3	-2.7	-0.8588 ug/L	-0.8588 ppb	00:53:50
2	U 409.014†	-2965.5	132.1	3.6801 ug/L	3.6801 ppb	00:53:25
2	V 292.402†	-1549.2	21.7	0.1559 ug/L	0.1559 ppb	00:53:30
2	Zn 213.857†	805.6	12.9	0.1184 ug/L	0.1184 ppb	00:53:50
2	SiO2†	6481.7	5465.7	379.46 ug/L	379.46 ppb	00:54:31
3	Sc Radial	3889.2	3889.2	101 %		00:52:48
3	Y RADIAL	4365.2	4365.2	98.06 %		00:52:28
3	Al 396.153Radial†	-30.7	84.6	79.475 ug/L	79.475 ppb	00:52:28
3	Ca 317.933Radial†	37.3	18.3	39.999 ug/L	39.999 ppb	00:52:48
3	Fe 238.204 Radial†	15.1	3.3	53.825 ug/L	53.825 ppb	00:52:48
3	K 766.490 Radial†	3071.2	280.7	53.642 ug/L	53.642 ppb	00:52:28
3	Mg 279.077 IEC†	3.0	1.8	96.329 ug/L	96.329 ppb	00:52:48
3	Na 589.592 Radial†	42.4	943.7	293.65 ug/L	293.65 ppb	00:52:28
3	Sr 421.552†	52.9	43.7	0.3037 ug/L	0.3037 ppb	00:52:28
3	Sc 361.383	951277.0	951277.0	108.09 %		00:53:56
3	Y 371.029	797679.5	797679.5	104.87 %		00:53:56
3	Ag 328.068†	309.9	52.5	0.2532 ug/L	0.2532 ppb	00:54:01
3	As 188.979†	-28.0	-5.9	-2.6195 ug/L	-2.6195 ppb	00:54:21
3	B 249.677†	-495.2	-180.1	-4.4228 ug/L	-4.4228 ppb	00:54:21
3	Ba 233.527†	78.7	61.8	0.4878 ug/L	0.4878 ppb	00:54:21
3	Be 313.107†	-3724.6	112.4	0.0453 ug/L	0.0453 ppb	00:54:01
3	Cd 226.502†	-196.2	-5.3	-0.0649 ug/L	-0.0649 ppb	00:54:21
3	Co 228.616†	-62.2	7.3	0.1515 ug/L	0.1515 ppb	00:54:21
3	Cr 267.716†	336.2	225.9	2.5369 ug/L	2.5369 ppb	00:54:21
3	Cu 324.752†	6343.3	-86.6	-0.2665 ug/L	-0.2665 ppb	00:54:01
3	Mn 257.610†	3507.1	2766.9	3.1536 ug/L	3.1536 ppb	00:54:01
3	Mo 202.031†	17.3	11.3	0.8386 ug/L	0.8386 ppb	00:54:21
3	Ni 231.604†	126.2	33.9	0.8655 ug/L	0.8655 ppb	00:54:21
3	P 214.914†	211.6	-10.1	-6.0276 ug/L	-6.0276 ppb	00:54:21
3	Pb 220.353†	-49.4	-106.9	-13.207 ug/L	-13.207 ppb	00:54:21
3	S 181.975 Axial†	50.8	11.1	15.684 ug/L	15.684 ppb	00:54:21
3	Sb 206.836†	49.8	7.0	2.5003 ug/L	2.5003 ppb	00:54:21
3	Se 196.026†	-30.7	-3.6	-2.2133 ug/L	-2.2133 ppb	00:54:21
3	Si 251.611†	6564.0	5508.0	178.42 ug/L	178.42 ppb	00:54:01
3	Sn 189.927†	14.2	3.8	0.6809 ug/L	0.6809 ppb	00:54:21
3	Ti 334.940†	-545.7	905.0	1.4182 ug/L	1.4182 ppb	00:54:01
3	Tl 190.801†	-41.2	-10.7	-3.4000 ug/L	-3.4000 ppb	00:54:21
3	U 409.014†	-2752.2	355.7	9.9194 ug/L	9.9194 ppb	00:53:56
3	V 292.402†	-1544.1	40.2	0.3033 ug/L	0.3033 ppb	00:54:01
3	Zn 213.857†	805.1	5.4	0.0410 ug/L	0.0410 ppb	00:54:21
3	SiO2†	6566.6	5486.9	380.92 ug/L	380.92 ppb	00:54:36

Mean Data: 1202036686|950392|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	945691.2	107.46 %	0.554			0.52%
Sc Radial	3781.6	98.0 %	4.41			4.50%
Y 371.029	794166.5	104.41 %	0.400			0.38%
Y RADIAL	4234.8	95.13 %	6.215			6.53%
Ag 328.068†	83.1	0.3983 ug/L	0.15920	0.3983 ppb	0.15920	39.97%
Al 396.153Radial†	76.9	72.206 ug/L	11.8583	72.206 ppb	11.8583	16.42%
As 188.979†	-2.0	-0.8639 ug/L	1.97829	-0.8639 ppb	1.97829	228.99%
B 249.677†	-185.3	-4.5506 ug/L	0.14671	-4.5506 ppb	0.14671	3.22%
Ba 233.527†	64.2	0.5069 ug/L	0.03401	0.5069 ppb	0.03401	6.71%
Be 313.107†	173.7	0.0681 ug/L	0.02876	0.0681 ppb	0.02876	42.25%
Ca 317.933Radial†	18.4	40.229 ug/L	8.5302	40.229 ppb	8.5302	21.20%
Cd 226.502†	-8.0	-0.0967 ug/L	0.06042	-0.0967 ppb	0.06042	62.45%
Co 228.616†	10.8	0.2228 ug/L	0.06469	0.2228 ppb	0.06469	29.04%
Cr 267.716†	227.2	2.5526 ug/L	0.18392	2.5526 ppb	0.18392	7.21%
Cu 324.752†	-215.2	-0.6567 ug/L	0.41984	-0.6567 ppb	0.41984	63.93%
Fe 238.204 Radial†	3.5	56.350 ug/L	24.4698	56.350 ppb	24.4698	43.43%
K 766.490 Radial†	452.3	86.529 ug/L	37.9138	86.529 ppb	37.9138	43.82%

Mg 279.077 IEC†	1.3	69.371 ug/L	131.1517	69.371 ppb	131.1517	189.06%
Mn 257.610†	2743.5	3.1283 ug/L	0.03281	3.1283 ppb	0.03281	1.05%
Mo 202.031†	9.4	0.6950 ug/L	0.25552	0.6950 ppb	0.25552	36.77%
Na 589.592 Radial†	896.7	279.01 ug/L	20.382	279.01 ppb	20.382	7.31%
Ni 231.604†	44.5	1.1352 ug/L	0.23384	1.1352 ppb	0.23384	20.60%
P 214.914†	0.1	0.1688 ug/L	8.00426	0.1688 ppb	8.00426	>999.9%
Pb 220.353†	-105.9	-13.085 ug/L	0.2713	-13.085 ppb	0.2713	2.07%
S 181.975 Axial†	12.7	17.910 ug/L	1.9950	17.910 ppb	1.9950	11.14%
Sb 206.836†	-1.6	-0.5410 ug/L	3.04445	-0.5410 ppb	3.04445	562.76%
Se 196.026†	-2.5	-1.4802 ug/L	0.68231	-1.4802 ppb	0.68231	46.10%
Si 251.611†	5491.8	177.90 ug/L	2.863	177.90 ppb	2.863	1.61%
Sn 189.927†	2.5	0.4580 ug/L	0.33388	0.4580 ppb	0.33388	72.90%
Sr 421.552†	53.0	0.3683 ug/L	0.12687	0.3683 ppb	0.12687	34.45%
Ti 334.940†	888.4	1.3954 ug/L	0.07475	1.3954 ppb	0.07475	5.36%
Tl 190.801†	-7.7	-2.4469 ug/L	1.38452	-2.4469 ppb	1.38452	56.58%
U 409.014†	263.1	7.3349 ug/L	3.25446	7.3349 ppb	3.25446	44.37%
V 292.402†	52.6	0.3819 ug/L	0.27385	0.3819 ppb	0.27385	71.71%
Zn 213.857†	5.4	0.0400 ug/L	0.07887	0.0400 ppb	0.07887	197.25%
SiO2†	5459.2	379.00 ug/L	2.177	379.00 ppb	2.177	0.57%



Sequence No.: 65

Sample ID: 1202036687|950392|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 88

Date Collected: 2/26/2010 00:56:48

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202036687|950392|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3814.4	3814.4	98.9 %		00:59:01
1	Y RADIAL	4379.9	4379.9	98.39 %		00:58:41
1	Al 396.153Radial†	5943.5	6124.8	5732.0 ug/L	5732.0 ppb	00:58:41
1	Ca 317.933Radial†	2492.7	2501.8	5455.7 ug/L	5455.7 ppb	00:59:01
1	Fe 238.204 Radial†	324.9	316.9	5135.3 ug/L	5135.3 ppb	00:59:01
1	K 766.490 Radial†	30451.1	28025.5	5364.7 ug/L	5364.7 ppb	00:58:41
1	Mg 279.077 IEC†	102.5	102.5	5406.6 ug/L	5406.6 ppb	00:59:01
1	Na 589.592 Radial†	16211.8	17294.2	5381.3 ug/L	5381.3 ppb	00:58:41
1	Sr 421.552†	74218.6	75037.2	521.97 ug/L	521.97 ppb	00:58:41
1	Sc 361.383	928413.8	928413.8	105.49 %		01:00:00
1	Y 371.029	771451.2	771451.2	101.42 %		01:00:00
1	Ag 328.068†	111854.7	105796.5	494.75 ug/L	494.75 ppb	01:00:00
1	As 188.979†	1178.5	1137.0	510.02 ug/L	510.02 ppb	01:00:20
1	B 249.677†	20744.0	19941.9	486.53 ug/L	486.53 ppb	01:00:00
1	Ba 233.527†	68537.8	64958.1	511.85 ug/L	511.85 ppb	01:00:00
1	Be 313.107†	1434537.7	1363402.1	510.57 ug/L	510.57 ppb	01:00:00
1	Cd 226.502†	44344.3	42211.6	490.42 ug/L	490.42 ppb	01:00:20
1	Co 228.616†	24617.8	23400.8	491.56 ug/L	491.56 ppb	01:00:20
1	Cr 267.716†	47280.3	44733.4	502.94 ug/L	502.94 ppb	01:00:00
1	Cu 324.752†	180077.5	164746.0	501.96 ug/L	501.96 ppb	01:00:00
1	Mn 257.610†	469847.7	444905.9	507.15 ug/L	507.15 ppb	01:00:00
1	Mo 202.031†	7112.2	6737.2	496.69 ug/L	496.69 ppb	01:00:20
1	Ni 231.604†	20959.2	19785.1	504.62 ug/L	504.62 ppb	01:00:20
1	P 214.914†	1213.3	944.3	470.51 ug/L	470.51 ppb	01:00:20
1	Pb 220.353†	4350.7	4063.0	504.30 ug/L	504.30 ppb	01:00:20
1	S 181.975 Axial†	3834.3	3598.8	5073.2 ug/L	5073.2 ppb	01:00:20
1	Sb 206.836†	1576.2	1455.1	531.76 ug/L	531.76 ppb	01:00:20
1	Se 196.026†	762.4	747.4	508.63 ug/L	508.63 ppb	01:00:20
1	Si 251.611†	168691.3	159343.1	5155.9 ug/L	5155.9 ppb	01:00:00
1	Sn 189.927†	3113.5	2942.0	531.20 ug/L	531.20 ppb	01:00:20
1	Ti 334.940†	338164.9	321967.1	507.20 ug/L	507.20 ppb	01:00:00
1	Tl 190.801†	1610.6	1554.2	503.42 ug/L	503.42 ppb	01:00:20
1	U 409.014†	15400.5	17500.4	486.98 ug/L	486.98 ppb	01:00:00
1	V 292.402†	73969.1	71586.4	506.68 ug/L	506.68 ppb	01:00:00
1	Zn 213.857†	52437.9	48968.1	489.69 ug/L	489.69 ppb	01:00:00
1	SiO2†	168913.4	159530.2	11062 ug/L	11062 ppb	01:01:20
2	Sc Radial	3826.2	3826.2	99.2 %		00:59:26
2	Y RADIAL	4353.9	4353.9	97.80 %		00:59:06
2	Al 396.153Radial†	5836.0	5997.9	5612.6 ug/L	5612.6 ppb	00:59:06
2	Ca 317.933Radial†	2505.2	2506.6	5466.3 ug/L	5466.3 ppb	00:59:26
2	Fe 238.204 Radial†	334.0	325.0	5267.4 ug/L	5267.4 ppb	00:59:26
2	K 766.490 Radial†	30319.8	27798.3	5321.2 ug/L	5321.2 ppb	00:59:06
2	Mg 279.077 IEC†	104.9	104.5	5516.2 ug/L	5516.2 ppb	00:59:26
2	Na 589.592 Radial†	16087.9	17118.8	5326.8 ug/L	5326.8 ppb	00:59:06
2	Sr 421.552†	73838.2	74422.6	517.69 ug/L	517.69 ppb	00:59:06
2	Sc 361.383	928317.8	928317.8	105.48 %		01:00:27
2	Y 371.029	771299.2	771299.2	101.40 %		01:00:27
2	Ag 328.068†	111894.6	105845.3	495.03 ug/L	495.03 ppb	01:00:27
2	As 188.979†	1198.9	1156.5	518.70 ug/L	518.70 ppb	01:00:47
2	B 249.677†	20765.3	19964.1	487.05 ug/L	487.05 ppb	01:00:27
2	Ba 233.527†	68618.4	65041.3	512.51 ug/L	512.51 ppb	01:00:27
2	Be 313.107†	1435983.1	1364913.1	511.13 ug/L	511.13 ppb	01:00:27
2	Cd 226.502†	44608.7	42466.6	493.37 ug/L	493.37 ppb	01:00:47
2	Co 228.616†	24788.2	23564.8	495.00 ug/L	495.00 ppb	01:00:47
2	Cr 267.716†	47396.3	44848.0	504.24 ug/L	504.24 ppb	01:00:27
2	Cu 324.752†	179882.8	164579.2	501.46 ug/L	501.46 ppb	01:00:27
2	Mn 257.610†	470641.6	445704.6	508.07 ug/L	508.07 ppb	01:00:27
2	Mo 202.031†	7148.3	6772.1	499.27 ug/L	499.27 ppb	01:00:47
2	Ni 231.604†	21046.9	19870.3	506.80 ug/L	506.80 ppb	01:00:47

2	P 214.914†	1243.0	972.6	487.51 ug/L	487.51 ppb	01:00:47
2	Pb 220.353†	4376.9	4088.2	507.39 ug/L	507.39 ppb	01:00:47
2	S 181.975 Axial†	3865.9	3629.2	5116.0 ug/L	5116.0 ppb	01:00:47
2	Sb 206.836†	1593.2	1471.4	537.61 ug/L	537.61 ppb	01:00:47
2	Se 196.026†	763.1	748.2	509.54 ug/L	509.54 ppb	01:00:47
2	Si 251.611†	169144.6	159789.4	5170.3 ug/L	5170.3 ppb	01:00:27
2	Sn 189.927†	3124.9	2953.1	533.19 ug/L	533.19 ppb	01:00:47
2	Ti 334.940†	338561.2	322376.0	507.83 ug/L	507.83 ppb	01:00:27
2	Tl 190.801†	1623.6	1566.7	507.43 ug/L	507.43 ppb	01:00:47
2	U 409.014†	15245.3	17354.9	482.89 ug/L	482.89 ppb	01:00:27
2	V 292.402†	74187.6	71800.7	508.19 ug/L	508.19 ppb	01:00:27
2	Zn 213.857†	52619.0	49144.9	491.45 ug/L	491.45 ppb	01:00:27
2	SiO2†	169368.8	159978.5	11093 ug/L	11093 ppb	01:01:25
3	Sc Radial	3875.8	3875.8	100 %		00:59:51
3	Y RADIAL	4332.6	4332.6	97.33 %		00:59:31
3	Al 396.153Radial†	5850.9	5937.6	5556.2 ug/L	5556.2 ppb	00:59:31
3	Ca 317.933Radial†	2524.6	2493.7	5438.0 ug/L	5438.0 ppb	00:59:51
3	Fe 238.204 Radial†	331.7	318.4	5159.7 ug/L	5159.7 ppb	00:59:51
3	K 766.490 Radial†	30355.3	27443.0	5253.2 ug/L	5253.2 ppb	00:59:31
3	Mg 279.077 IEC†	105.1	103.4	5456.8 ug/L	5456.8 ppb	00:59:51
3	Na 589.592 Radial†	16090.4	16914.0	5263.0 ug/L	5263.0 ppb	00:59:31
3	Sr 421.552†	73584.0	73218.3	509.31 ug/L	509.31 ppb	00:59:31
3	Sc 361.383	933083.8	933083.8	106.02 %		01:00:55
3	Y 371.029	774753.6	774753.6	101.86 %		01:00:55
3	Ag 328.068†	112645.1	106011.3	495.76 ug/L	495.76 ppb	01:00:55
3	As 188.979†	1194.2	1146.3	514.14 ug/L	514.14 ppb	01:01:15
3	B 249.677†	20919.2	20008.8	488.17 ug/L	488.17 ppb	01:00:55
3	Ba 233.527†	68914.8	64988.6	512.09 ug/L	512.09 ppb	01:00:55
3	Be 313.107†	1442860.6	1364446.3	510.96 ug/L	510.96 ppb	01:00:55
3	Cd 226.502†	44361.4	42017.3	488.16 ug/L	488.16 ppb	01:01:15
3	Co 228.616†	24673.3	23336.3	490.19 ug/L	490.19 ppb	01:01:15
3	Cr 267.716†	47591.7	44802.8	503.72 ug/L	503.72 ppb	01:00:55
3	Cu 324.752†	180863.6	164633.2	501.61 ug/L	501.61 ppb	01:00:55
3	Mn 257.610†	473275.3	445909.6	508.29 ug/L	508.29 ppb	01:00:55
3	Mo 202.031†	7101.4	6693.2	493.46 ug/L	493.46 ppb	01:01:15
3	Ni 231.604†	20969.1	19695.0	502.33 ug/L	502.33 ppb	01:01:15
3	P 214.914†	1222.8	947.5	472.40 ug/L	472.40 ppb	01:01:15
3	Pb 220.353†	4346.7	4038.5	501.23 ug/L	501.23 ppb	01:01:15
3	S 181.975 Axial†	3846.3	3591.9	5063.5 ug/L	5063.5 ppb	01:01:15
3	Sb 206.836†	1589.4	1460.1	533.43 ug/L	533.43 ppb	01:01:15
3	Se 196.026†	758.5	740.1	503.92 ug/L	503.92 ppb	01:01:15
3	Si 251.611†	169823.2	159610.4	5164.6 ug/L	5164.6 ppb	01:00:55
3	Sn 189.927†	3116.6	2930.2	529.07 ug/L	529.07 ppb	01:01:15
3	Ti 334.940†	340216.7	322298.0	507.71 ug/L	507.71 ppb	01:00:55
3	Tl 190.801†	1606.9	1543.0	499.85 ug/L	499.85 ppb	01:01:15
3	U 409.014†	15476.2	17498.8	486.93 ug/L	486.93 ppb	01:00:55
3	V 292.402†	74527.3	71762.0	507.86 ug/L	507.86 ppb	01:00:55
3	Zn 213.857†	52819.2	49078.9	490.82 ug/L	490.82 ppb	01:00:55
3	SiO2†	168633.5	158464.8	10988 ug/L	10988 ppb	01:01:31

Mean Data: 1202036687|950392|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	929938.5	105.67 %	0.310			0.29%
Sc Radial	3838.8	99.5 %	0.84			0.85%
Y 371.029	772501.3	101.56 %	0.257			0.25%
Y RADIAL	4355.5	97.84 %	0.532			0.54%
Ag 328.068†	105884.3	495.18 ug/L	0.522	495.18 ppb	0.522	0.11%
Al 396.153Radial†	6020.1	5633.6 ug/L	89.75	5633.6 ppb	89.75	1.59%
As 188.979†	1146.6	514.29 ug/L	4.343	514.29 ppb	4.343	0.84%
B 249.677†	19971.6	487.25 ug/L	0.839	487.25 ppb	0.839	0.17%
Ba 233.527†	64996.0	512.15 ug/L	0.334	512.15 ppb	0.334	0.07%
Be 313.107†	1364253.8	510.89 ug/L	0.290	510.89 ppb	0.290	0.06%
Ca 317.933Radial†	2500.7	5453.3 ug/L	14.27	5453.3 ppb	14.27	0.26%
Cd 226.502†	42231.8	490.65 ug/L	2.613	490.65 ppb	2.613	0.53%
Co 228.616†	23434.0	492.25 ug/L	2.479	492.25 ppb	2.479	0.50%
Cr 267.716†	44794.8	503.64 ug/L	0.656	503.64 ppb	0.656	0.13%
Cu 324.752†	164652.8	501.68 ug/L	0.255	501.68 ppb	0.255	0.05%
Fe 238.204 Radial†	320.1	5187.5 ug/L	70.33	5187.5 ppb	70.33	1.36%
K 766.490 Radial†	27755.6	5313.0 ug/L	56.23	5313.0 ppb	56.23	1.06%

Mg 279.077 IEC†	103.5	5459.9 ug/L	54.83	5459.9 ppb	54.83	1.00%
Mn 257.610†	445506.7	507.84 ug/L	0.606	507.84 ppb	0.606	0.12%
Mo 202.031†	6734.2	496.47 ug/L	2.915	496.47 ppb	2.915	0.59%
Na 589.592 Radial†	17109.0	5323.7 ug/L	59.21	5323.7 ppb	59.21	1.11%
Ni 231.604†	19783.5	504.58 ug/L	2.235	504.58 ppb	2.235	0.44%
P 214.914†	954.8	476.80 ug/L	9.315	476.80 ppb	9.315	1.95%
Pb 220.353†	4063.3	504.31 ug/L	3.080	504.31 ppb	3.080	0.61%
S 181.975 Axial†	3606.6	5084.2 ug/L	27.92	5084.2 ppb	27.92	0.55%
Sb 206.836†	1462.2	534.27 ug/L	3.017	534.27 ppb	3.017	0.56%
Se 196.026†	745.2	507.36 ug/L	3.015	507.36 ppb	3.015	0.59%
Si 251.611†	159581.0	5163.6 ug/L	7.26	5163.6 ppb	7.26	0.14%
Sn 189.927†	2941.7	531.15 ug/L	2.065	531.15 ppb	2.065	0.39%
Sr 421.552†	74226.0	516.32 ug/L	6.437	516.32 ppb	6.437	1.25%
Ti 334.940†	322213.7	507.58 ug/L	0.338	507.58 ppb	0.338	0.07%
Tl 190.801†	1554.6	503.57 ug/L	3.795	503.57 ppb	3.795	0.75%
U 409.014†	17451.4	485.60 ug/L	2.343	485.60 ppb	2.343	0.48%
V 292.402†	71716.4	507.57 ug/L	0.792	507.57 ppb	0.792	0.16%
Zn 213.857†	49064.0	490.65 ug/L	0.889	490.65 ppb	0.889	0.18%
SiO2†	159324.5	11048 ug/L	53.9	11048 ppb	53.9	0.49%

Sequence No.: 66

Sample ID: 1202036688|950392|5

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 89

Date Collected: 2/26/2010 01:03:42

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202036688|950392|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3916.5	3916.5	102 %		01:05:56
1	Y RADIAL	4480.6	4480.6	100.6 %		01:05:36
1	Al 396.153Radial†	-100.0	16.6	15.523 ug/L	15.523 ppb	01:05:36
1	Ca 317.933Radial†	26.6	7.6	16.468 ug/L	16.468 ppb	01:05:56
1	Fe 238.204 Radial†	13.3	1.5	23.517 ug/L	23.517 ppb	01:05:56
1	K 766.490 Radial†	3059.8	248.3	47.566 ug/L	47.566 ppb	01:05:36
1	Mg 279.077 IEC†	2.5	1.3	68.362 ug/L	68.362 ppb	01:05:56
1	Na 589.592 Radial†	-915.0	0.6	0.1872 ug/L	0.1872 ppb	01:05:36
1	Sr 421.552†	76.0	66.1	0.4595 ug/L	0.4595 ppb	01:05:36
1	Sc 361.383	945167.5	945167.5	107.40 %		01:06:53
1	Y 371.029	794839.5	794839.5	104.50 %		01:06:53
1	Ag 328.068†	349.5	91.3	0.4279 ug/L	0.4279 ppb	01:06:58
1	As 188.979†	-21.5	-0.1	-0.0250 ug/L	-0.0250 ppb	01:07:18
1	B 249.677†	-428.9	-121.3	-2.9778 ug/L	-2.9778 ppb	01:07:18
1	Ba 233.527†	29.6	16.5	0.1304 ug/L	0.1304 ppb	01:07:18
1	Be 313.107†	-3633.5	175.0	0.0660 ug/L	0.0660 ppb	01:06:58
1	Cd 226.502†	-196.8	-7.1	-0.0841 ug/L	-0.0841 ppb	01:07:18
1	Co 228.616†	-64.7	4.6	0.0972 ug/L	0.0972 ppb	01:07:18
1	Cr 267.716†	122.6	29.1	0.3270 ug/L	0.3270 ppb	01:07:18
1	Cu 324.752†	6388.2	-6.9	-0.0216 ug/L	-0.0216 ppb	01:06:58
1	Mn 257.610†	1029.3	480.7	0.5472 ug/L	0.5472 ppb	01:07:18
1	Mo 202.031†	14.3	8.7	0.6394 ug/L	0.6394 ppb	01:07:18
1	Ni 231.604†	90.5	1.5	0.0377 ug/L	0.0377 ppb	01:07:18
1	P 214.914†	221.6	0.6	0.3233 ug/L	0.3233 ppb	01:07:18
1	Pb 220.353†	-36.6	-95.3	-11.788 ug/L	-11.788 ppb	01:07:18
1	S 181.975 Axial†	44.1	5.2	7.3966 ug/L	7.3966 ppb	01:07:18
1	Sb 206.836†	30.8	-10.4	-3.6456 ug/L	-3.6456 ppb	01:07:18
1	Se 196.026†	-24.4	2.1	1.4229 ug/L	1.4229 ppb	01:07:18
1	Si 251.611†	1710.5	1027.9	33.293 ug/L	33.293 ppb	01:07:18
1	Sn 189.927†	10.6	0.4	0.0781 ug/L	0.0781 ppb	01:07:18
1	Ti 334.940†	-1329.4	172.1	0.2662 ug/L	0.2662 ppb	01:06:58
1	Tl 190.801†	-33.5	-3.8	-1.2150 ug/L	-1.2150 ppb	01:07:18
1	U 409.014†	-2986.0	121.5	3.3893 ug/L	3.3893 ppb	01:06:53
1	V 292.402†	-1591.0	-12.7	-0.0760 ug/L	-0.0760 ppb	01:06:58
1	Zn 213.857†	878.3	78.4	0.7875 ug/L	0.7875 ppb	01:07:18
1	SiO2†	1752.4	1043.5	72.427 ug/L	72.427 ppb	01:08:24
2	Sc Radial	3916.4	3916.4	102 %		01:06:21
2	Y RADIAL	4376.8	4376.8	98.32 %		01:06:01
2	Al 396.153Radial†	-92.9	23.6	22.166 ug/L	22.166 ppb	01:06:01
2	Ca 317.933Radial†	17.7	-1.3	-2.7988 ug/L	-2.7988 ppb	01:06:21
2	Fe 238.204 Radial†	12.3	0.5	7.2785 ug/L	7.2785 ppb	01:06:21
2	K 766.490 Radial†	2941.2	131.5	25.191 ug/L	25.191 ppb	01:06:01
2	Mg 279.077 IEC†	2.2	1.0	51.544 ug/L	51.544 ppb	01:06:21
2	Na 589.592 Radial†	-840.5	73.9	23.001 ug/L	23.001 ppb	01:06:01
2	Sr 421.552†	67.1	57.3	0.3987 ug/L	0.3987 ppb	01:06:01
2	Sc 361.383	949834.9	949834.9	107.93 %		01:07:23
2	Y 371.029	797513.2	797513.2	104.85 %		01:07:23
2	Ag 328.068†	285.4	30.3	0.1365 ug/L	0.1365 ppb	01:07:28
2	As 188.979†	-25.2	-3.4	-1.5021 ug/L	-1.5021 ppb	01:07:48
2	B 249.677†	-433.4	-123.6	-3.0310 ug/L	-3.0310 ppb	01:07:48
2	Ba 233.527†	30.3	17.0	0.1344 ug/L	0.1344 ppb	01:07:48
2	Be 313.107†	-3583.1	238.3	0.0896 ug/L	0.0896 ppb	01:07:28
2	Cd 226.502†	-190.4	-0.3	-0.0017 ug/L	-0.0017 ppb	01:07:48
2	Co 228.616†	-60.1	9.1	0.1917 ug/L	0.1917 ppb	01:07:48
2	Cr 267.716†	123.2	29.0	0.3229 ug/L	0.3229 ppb	01:07:48
2	Cu 324.752†	6312.4	-106.3	-0.3286 ug/L	-0.3286 ppb	01:07:28
2	Mn 257.610†	1039.4	485.4	0.5516 ug/L	0.5516 ppb	01:07:48
2	Mo 202.031†	7.7	2.5	0.1836 ug/L	0.1836 ppb	01:07:48
2	Ni 231.604†	109.5	18.6	0.4754 ug/L	0.4754 ppb	01:07:48

2	P 214.914†	210.3	-11.0	-6.5439 ug/L	-6.5439 ppb	01:07:48
2	Pb 220.353†	-48.0	-105.7	-13.066 ug/L	-13.066 ppb	01:07:48
2	S 181.975 Axial†	43.4	4.4	6.1331 ug/L	6.1331 ppb	01:07:48
2	Sb 206.836†	38.5	-3.3	-1.1550 ug/L	-1.1550 ppb	01:07:48
2	Se 196.026†	-21.2	5.0	3.3392 ug/L	3.3392 ppb	01:07:48
2	Si 251.611†	1870.8	1168.7	37.858 ug/L	37.858 ppb	01:07:48
2	Sn 189.927†	12.8	2.4	0.4395 ug/L	0.4395 ppb	01:07:48
2	Ti 334.940†	-1351.5	157.6	0.2397 ug/L	0.2397 ppb	01:07:28
2	Tl 190.801†	-18.8	10.1	3.2403 ug/L	3.2403 ppb	01:07:48
2	U 409.014†	-2782.7	323.5	9.0319 ug/L	9.0319 ppb	01:07:23
2	V 292.402†	-1551.7	31.0	0.2360 ug/L	0.2360 ppb	01:07:28
2	Zn 213.857†	882.9	78.6	0.7896 ug/L	0.7896 ppb	01:07:48
2	SiO2†	1746.2	1029.7	71.487 ug/L	71.487 ppb	01:08:29
3	Sc Radial	3953.8	3953.8	103 %		01:06:46
3	Y RADIAL	4381.9	4381.9	98.43 %		01:06:26
3	Al 396.153Radial†	-102.8	14.8	13.917 ug/L	13.917 ppb	01:06:26
3	Ca 317.933Radial†	19.9	0.7	1.5116 ug/L	1.5116 ppb	01:06:46
3	Fe 238.204 Radial†	10.2	-1.7	-27.250 ug/L	-27.250 ppb	01:06:46
3	K 766.490 Radial†	2984.8	146.7	28.088 ug/L	28.088 ppb	01:06:26
3	Mg 279.077 IEC†	4.8	3.5	184.22 ug/L	184.22 ppb	01:06:46
3	Na 589.592 Radial†	-848.2	74.3	23.107 ug/L	23.107 ppb	01:06:26
3	Sr 421.552†	49.5	39.5	0.2749 ug/L	0.2749 ppb	01:06:26
3	Sc 361.383	946413.4	946413.4	107.54 %		01:07:53
3	Y 371.029	795253.8	795253.8	104.55 %		01:07:53
3	Ag 328.068†	303.3	47.9	0.2123 ug/L	0.2123 ppb	01:07:58
3	As 188.979†	-24.7	-3.1	-1.3658 ug/L	-1.3658 ppb	01:08:18
3	B 249.677†	-446.2	-136.9	-3.3513 ug/L	-3.3513 ppb	01:08:18
3	Ba 233.527†	24.9	12.1	0.0946 ug/L	0.0946 ppb	01:08:18
3	Be 313.107†	-3546.2	260.6	0.0978 ug/L	0.0978 ppb	01:07:58
3	Cd 226.502†	-185.8	3.4	0.0429 ug/L	0.0429 ppb	01:08:18
3	Co 228.616†	-59.9	9.1	0.1919 ug/L	0.1919 ppb	01:08:18
3	Cr 267.716†	130.3	36.0	0.4008 ug/L	0.4008 ppb	01:08:18
3	Cu 324.752†	6306.1	-91.1	-0.2801 ug/L	-0.2801 ppb	01:07:58
3	Mn 257.610†	1060.8	508.8	0.5694 ug/L	0.5694 ppb	01:08:18
3	Mo 202.031†	8.5	3.2	0.2357 ug/L	0.2357 ppb	01:08:18
3	Ni 231.604†	88.6	-0.4	-0.0095 ug/L	-0.0095 ppb	01:08:18
3	P 214.914†	198.3	-21.4	-12.768 ug/L	-12.768 ppb	01:08:18
3	Pb 220.353†	-47.2	-105.0	-12.988 ug/L	-12.988 ppb	01:08:18
3	S 181.975 Axial†	37.7	-0.8	-1.0985 ug/L	-1.0985 ppb	01:08:18
3	Sb 206.836†	36.0	-5.6	-1.9594 ug/L	-1.9594 ppb	01:08:18
3	Se 196.026†	-27.8	-1.1	-0.8239 ug/L	-0.8239 ppb	01:08:18
3	Si 251.611†	1699.7	1015.8	32.905 ug/L	32.905 ppb	01:08:18
3	Sn 189.927†	10.4	0.2	0.0422 ug/L	0.0422 ppb	01:08:18
3	Ti 334.940†	-1380.0	126.6	0.1835 ug/L	0.1835 ppb	01:07:58
3	Tl 190.801†	-24.2	4.9	1.5772 ug/L	1.5772 ppb	01:08:18
3	U 409.014†	-3037.5	77.3	2.1595 ug/L	2.1595 ppb	01:07:53
3	V 292.402†	-1581.0	-1.5	0.0041 ug/L	0.0041 ppb	01:07:58
3	Zn 213.857†	886.8	85.2	0.8643 ug/L	0.8643 ppb	01:08:18
3	SiO2†	1750.3	1039.4	72.157 ug/L	72.157 ppb	01:08:34

Mean Data: 1202036688|950392|5

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	947138.6	107.62 %		0.275				0.26%
Sc Radial	3928.9	102 %		0.6				0.55%
Y 371.029	795868.8	104.63 %		0.189				0.18%
Y RADIAL	4413.1	99.13 %		1.315				1.33%
Ag 328.068†	56.5	0.2589 ug/L		0.15119	0.2589 ppb		0.15119	58.40%
Al 396.153Radial†	18.3	17.202 ug/L		4.3735	17.202 ppb		4.3735	25.42%
As 188.979†	-2.2	-0.9643 ug/L		0.81631	-0.9643 ppb		0.81631	84.65%
B 249.677†	-127.3	-3.1200 ug/L		0.20204	-3.1200 ppb		0.20204	6.48%
Ba 233.527†	15.2	0.1198 ug/L		0.02193	0.1198 ppb		0.02193	18.31%
Be 313.107†	224.6	0.0845 ug/L		0.01653	0.0845 ppb		0.01653	19.57%
Ca 317.933Radial†	2.3	5.0603 ug/L		10.11185	5.0603 ppb		10.11185	199.83%
Cd 226.502†	-1.3	-0.0143 ug/L		0.06445	-0.0143 ppb		0.06445	450.61%
Co 228.616†	7.6	0.1603 ug/L		0.05464	0.1603 ppb		0.05464	34.10%
Cr 267.716†	31.4	0.3502 ug/L		0.04385	0.3502 ppb		0.04385	12.52%
Cu 324.752†	-68.1	-0.2101 ug/L		0.16503	-0.2101 ppb		0.16503	78.54%
Fe 238.204 Radial†	0.1	1.1819 ug/L		25.92678	1.1819 ppb		25.92678	>999.9%
K 766.490 Radial†	175.5	33.615 ug/L		12.1683	33.615 ppb		12.1683	36.20%

Mg 279.077 IEC†	1.9	101.37 ug/L	72.235	101.37 ppb	72.235	71.26%
Mn 257.610†	491.6	0.5561 ug/L	0.01178	0.5561 ppb	0.01178	2.12%
Mo 202.031†	4.8	0.3529 ug/L	0.24948	0.3529 ppb	0.24948	70.70%
Na 589.592 Radial†	49.6	15.432 ug/L	13.2023	15.432 ppb	13.2023	85.55%
Ni 231.604†	6.6	0.1679 ug/L	0.26737	0.1679 ppb	0.26737	159.25%
P 214.914†	-10.6	-6.3297 ug/L	6.54850	-6.3297 ppb	6.54850	103.46%
Pb 220.353†	-102.0	-12.614 ug/L	0.7167	-12.614 ppb	0.7167	5.68%
S 181.975 Axial†	2.9	4.1437 ug/L	4.58365	4.1437 ppb	4.58365	110.62%
Sb 206.836†	-6.4	-2.2533 ug/L	1.27105	-2.2533 ppb	1.27105	56.41%
Se 196.026†	2.0	1.3127 ug/L	2.08374	1.3127 ppb	2.08374	158.73%
Si 251.611†	1070.8	34.685 ug/L	2.7544	34.685 ppb	2.7544	7.94%
Sn 189.927†	1.0	0.1866 ug/L	0.21976	0.1866 ppb	0.21976	117.77%
Sr 421.552†	54.3	0.3777 ug/L	0.09412	0.3777 ppb	0.09412	24.92%
Ti 334.940†	152.1	0.2298 ug/L	0.04221	0.2298 ppb	0.04221	18.37%
Tl 190.801†	3.7	1.2009 ug/L	2.25135	1.2009 ppb	2.25135	187.48%
U 409.014†	174.1	4.8602 ug/L	3.66473	4.8602 ppb	3.66473	75.40%
V 292.402†	5.6	0.0547 ug/L	0.16203	0.0547 ppb	0.16203	296.28%
Zn 213.857†	80.7	0.8138 ug/L	0.04375	0.8138 ppb	0.04375	5.38%
SiO2†	1037.5	72.024 ug/L	0.4841	72.024 ppb	0.4841	0.67%

Sequence No.: 70  
 Sample ID: 246436001|950392|1  
 Analyst: HSC  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 93  
 Date Collected: 2/26/2010 01:31:36  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

## Replicate Data: 246436001|950392|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3924.3	3924.3	102 %		01:33:49
1	Y RADIAL	4465.6	4465.6	100.3 %		01:33:29
1	Al 396.153Radial†	-119.3	-2.2	-2.1006 ug/L	-2.1006 ppb	01:33:29
1	Ca 317.933Radial†	65.9	46.1	100.57 ug/L	100.57 ppb	01:33:49
1	Fe 238.204 Radial†	12.9	1.0	16.623 ug/L	16.623 ppb	01:33:49
1	K 766.490 Radial†	3574.5	748.1	143.24 ug/L	143.24 ppb	01:33:29
1	Mg 279.077 IEC†	1.9	0.7	34.771 ug/L	34.771 ppb	01:33:49
1	Na 589.592 Radial†	-491.6	418.5	130.23 ug/L	130.23 ppb	01:33:29
1	Sr 421.552†	214.7	202.3	1.4062 ug/L	1.4062 ppb	01:33:29
1	Sc 361.383	891952.7	891952.7	101.35 %		01:34:46
1	Y 371.029	779913.5	779913.5	102.53 %		01:34:46
1	Ag 328.068†	216.8	-20.2	-0.0862 ug/L	-0.0862 ppb	01:34:46
1	As 188.979†	-29.9	-9.5	-4.2298 ug/L	-4.2298 ppb	01:35:06
1	B 249.677†	402.7	675.3	16.549 ug/L	16.549 ppb	01:34:46
1	Ba 233.527†	115.0	102.4	0.8039 ug/L	0.8039 ppb	01:35:06
1	Be 313.107†	-3675.9	-68.7	-0.0244 ug/L	-0.0244 ppb	01:34:46
1	Cd 226.502†	-155.9	22.4	0.2571 ug/L	0.2571 ppb	01:35:06
1	Co 228.616†	-56.7	8.9	0.1884 ug/L	0.1884 ppb	01:35:06
1	Cr 267.716†	84.5	-1.8	-0.0161 ug/L	-0.0161 ppb	01:35:06
1	Cu 324.752†	6288.9	250.1	0.7674 ug/L	0.7674 ppb	01:34:46
1	Mn 257.610†	4750.8	4209.9	4.7963 ug/L	4.7963 ppb	01:34:46
1	Mo 202.031†	13.9	9.0	0.6669 ug/L	0.6669 ppb	01:35:06
1	Ni 231.604†	96.4	12.3	0.3148 ug/L	0.3148 ppb	01:35:06
1	P 214.914†	238.2	29.2	17.403 ug/L	17.403 ppb	01:35:06
1	Pb 220.353†	-55.2	-115.6	-14.306 ug/L	-14.306 ppb	01:35:06
1	S 181.975 Axial†	84.3	47.3	66.712 ug/L	66.712 ppb	01:35:06
1	Sb 206.836†	39.1	-0.4	-0.1577 ug/L	-0.1577 ppb	01:35:06
1	Se 196.026†	-25.9	-0.8	-0.4926 ug/L	-0.4926 ppb	01:35:06
1	Si 251.611†	50333.4	49098.3	1590.6 ug/L	1590.6 ppb	01:34:46
1	Sn 189.927†	5.3	-4.2	-0.7433 ug/L	-0.7433 ppb	01:35:06
1	Ti 334.940†	-1066.6	357.5	0.5776 ug/L	0.5776 ppb	01:34:46
1	Tl 190.801†	-29.9	-2.1	-0.6399 ug/L	-0.6399 ppb	01:35:06
1	U 409.014†	-3237.2	-292.2	-8.1613 ug/L	-8.1613 ppb	01:34:46
1	V 292.402†	-1586.2	-96.4	-0.6818 ug/L	-0.6818 ppb	01:34:46
1	Zn 213.857†	909.7	158.2	1.5911 ug/L	1.5911 ppb	01:35:06
1	SiO2†	50923.7	49657.2	3447.6 ug/L	3447.6 ppb	01:36:02
2	Sc Radial	3900.9	3900.9	101 %		01:34:14
2	Y RADIAL	4346.9	4346.9	97.65 %		01:33:54
2	Al 396.153Radial†	-79.9	36.0	33.887 ug/L	33.887 ppb	01:33:54
2	Ca 317.933Radial†	61.6	42.3	92.145 ug/L	92.145 ppb	01:34:14
2	Fe 238.204 Radial†	11.5	-0.3	-5.3807 ug/L	-5.3807 ppb	01:34:14
2	K 766.490 Radial†	3658.8	852.6	163.26 ug/L	163.26 ppb	01:33:54
2	Mg 279.077 IEC†	-0.8	-1.9	-102.90 ug/L	-102.90 ppb	01:34:14
2	Na 589.592 Radial†	-431.1	475.4	147.93 ug/L	147.93 ppb	01:33:54
2	Sr 421.552†	127.6	117.4	0.8163 ug/L	0.8163 ppb	01:33:54
2	Sc 361.383	887491.6	887491.6	100.84 %		01:35:11
2	Y 371.029	774788.0	774788.0	101.86 %		01:35:11
2	Ag 328.068†	216.0	-20.0	-0.0934 ug/L	-0.0934 ppb	01:35:11
2	As 188.979†	-25.3	-5.2	-2.2931 ug/L	-2.2931 ppb	01:35:31
2	B 249.677†	417.6	692.1	16.963 ug/L	16.963 ppb	01:35:11
2	Ba 233.527†	110.6	98.6	0.7733 ug/L	0.7733 ppb	01:35:31
2	Be 313.107†	-3565.7	22.4	0.0101 ug/L	0.0101 ppb	01:35:11
2	Cd 226.502†	-150.2	27.2	0.3157 ug/L	0.3157 ppb	01:35:31
2	Co 228.616†	-50.2	15.1	0.3149 ug/L	0.3149 ppb	01:35:31
2	Cr 267.716†	78.5	-7.2	-0.0801 ug/L	-0.0801 ppb	01:35:31
2	Cu 324.752†	6160.5	153.9	0.4725 ug/L	0.4725 ppb	01:35:11
2	Mn 257.610†	4676.0	4159.3	4.7422 ug/L	4.7422 ppb	01:35:11
2	Mo 202.031†	1.2	-3.5	-0.2566 ug/L	-0.2566 ppb	01:35:31
2	Ni 231.604†	107.1	23.4	0.5962 ug/L	0.5962 ppb	01:35:31

2	P 214.914†	223.5	15.9	9.4712 ug/L	9.4712 ppb	01:35:31
2	Pb 220.353†	-28.7	-89.7	-11.085 ug/L	-11.085 ppb	01:35:31
2	S 181.975 Axial†	83.6	47.1	66.394 ug/L	66.394 ppb	01:35:31
2	Sb 206.836†	30.1	-9.1	-3.2047 ug/L	-3.2047 ppb	01:35:31
2	Se 196.026†	-28.1	-3.2	-2.1014 ug/L	-2.1014 ppb	01:35:31
2	Si 251.611†	49894.4	48912.6	1584.6 ug/L	1584.6 ppb	01:35:11
2	Sn 189.927†	18.8	9.2	1.6705 ug/L	1.6705 ppb	01:35:31
2	Ti 334.940†	-928.3	489.3	0.7950 ug/L	0.7950 ppb	01:35:11
2	Tl 190.801†	-32.7	-5.0	-1.5695 ug/L	-1.5695 ppb	01:35:31
2	U 409.014†	-3185.1	-256.7	-7.1662 ug/L	-7.1662 ppb	01:35:11
2	V 292.402†	-1600.3	-118.2	-0.8453 ug/L	-0.8453 ppb	01:35:11
2	Zn 213.857†	901.7	154.7	1.5584 ug/L	1.5584 ppb	01:35:31
2	SiO2†	49703.5	48699.8	3381.1 ug/L	3381.1 ppb	01:36:07
3	Sc Radial	3926.7	3926.7	102 %		01:34:39
3	Y RADIAL	4459.1	4459.1	100.2 %		01:34:19
3	Al 396.153Radial†	-117.0	0.1	0.0800 ug/L	0.0800 ppb	01:34:19
3	Ca 317.933Radial†	64.2	44.4	96.853 ug/L	96.853 ppb	01:34:39
3	Fe 238.204 Radial†	12.0	0.1	1.2613 ug/L	1.2613 ppb	01:34:39
3	K 766.490 Radial†	3702.0	871.2	166.82 ug/L	166.82 ppb	01:34:19
3	Mg 279.077 IEC†	2.0	0.8	44.475 ug/L	44.475 ppb	01:34:39
3	Na 589.592 Radial†	-457.4	452.5	140.79 ug/L	140.79 ppb	01:34:19
3	Sr 421.552†	117.9	107.0	0.7437 ug/L	0.7437 ppb	01:34:19
3	Sc 361.383	891622.4	891622.4	101.31 %		01:35:37
3	Y 371.029	781520.2	781520.2	102.75 %		01:35:37
3	Ag 328.068†	273.8	36.1	0.1735 ug/L	0.1735 ppb	01:35:37
3	As 188.979†	-26.7	-6.4	-2.8599 ug/L	-2.8599 ppb	01:35:57
3	B 249.677†	470.8	742.7	18.203 ug/L	18.203 ppb	01:35:37
3	Ba 233.527†	120.7	108.0	0.8483 ug/L	0.8483 ppb	01:35:57
3	Be 313.107†	-3602.2	2.7	0.0025 ug/L	0.0025 ppb	01:35:37
3	Cd 226.502†	-155.2	23.0	0.2649 ug/L	0.2649 ppb	01:35:57
3	Co 228.616†	-52.3	13.2	0.2790 ug/L	0.2790 ppb	01:35:57
3	Cr 267.716†	103.1	16.6	0.1905 ug/L	0.1905 ppb	01:35:57
3	Cu 324.752†	6208.2	172.7	0.5321 ug/L	0.5321 ppb	01:35:37
3	Mn 257.610†	4713.6	4174.9	4.7546 ug/L	4.7546 ppb	01:35:37
3	Mo 202.031†	20.3	15.4	1.1351 ug/L	1.1351 ppb	01:35:57
3	Ni 231.604†	100.2	16.1	0.4106 ug/L	0.4106 ppb	01:35:57
3	P 214.914†	235.5	26.6	15.879 ug/L	15.879 ppb	01:35:57
3	Pb 220.353†	-51.1	-111.6	-13.802 ug/L	-13.802 ppb	01:35:57
3	S 181.975 Axial†	83.7	46.7	65.913 ug/L	65.913 ppb	01:35:57
3	Sb 206.836†	36.4	-3.0	-1.0779 ug/L	-1.0779 ppb	01:35:57
3	Se 196.026†	-31.5	-6.4	-4.1959 ug/L	-4.1959 ppb	01:35:57
3	Si 251.611†	50296.6	49080.4	1590.0 ug/L	1590.0 ppb	01:35:37
3	Sn 189.927†	1.6	-7.9	-1.4000 ug/L	-1.4000 ppb	01:35:57
3	Ti 334.940†	-998.3	424.5	0.6828 ug/L	0.6828 ppb	01:35:37
3	Tl 190.801†	-32.3	-4.5	-1.4042 ug/L	-1.4042 ppb	01:35:57
3	U 409.014†	-3329.2	-384.3	-10.731 ug/L	-10.731 ppb	01:35:37
3	V 292.402†	-1557.6	-68.8	-0.4849 ug/L	-0.4849 ppb	01:35:37
3	Zn 213.857†	891.7	140.7	1.4174 ug/L	1.4174 ppb	01:35:57
3	SiO2†	50852.5	49605.6	3444.0 ug/L	3444.0 ppb	01:36:12

Mean Data: 246436001|950392|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	890355.6	101.17 %	0.282			0.28%
Sc Radial	3917.3	102 %	0.4			0.36%
Y 371.029	778740.6	102.38 %	0.462			0.45%
Y RADIAL	4423.9	99.38 %	1.499			1.51%
Ag 328.068†	-1.4	-0.0020 ug/L	0.15208	-0.0020 ppb	0.15208	>999.9%
Al 396.153Radial†	11.3	10.622 ug/L	20.1773	10.622 ppb	20.1773	189.96%
As 188.979†	-7.0	-3.1276 ug/L	0.99571	-3.1276 ppb	0.99571	31.84%
B 249.677†	703.4	17.238 ug/L	0.8604	17.238 ppb	0.8604	4.99%
Ba 233.527†	103.0	0.8085 ug/L	0.03768	0.8085 ppb	0.03768	4.66%
Be 313.107†	-14.6	-0.0039 ug/L	0.01814	-0.0039 ppb	0.01814	461.90%
Ca 317.933Radial†	44.3	96.524 ug/L	4.2244	96.524 ppb	4.2244	4.38%
Cd 226.502†	24.2	0.2792 ug/L	0.03179	0.2792 ppb	0.03179	11.38%
Co 228.616†	12.4	0.2608 ug/L	0.06524	0.2608 ppb	0.06524	25.02%
Cr 267.716†	2.5	0.0314 ug/L	0.14139	0.0314 ppb	0.14139	449.73%
Cu 324.752†	192.2	0.5906 ug/L	0.15592	0.5906 ppb	0.15592	26.40%
Fe 238.204 Radial†	0.3	4.1679 ug/L	11.28619	4.1679 ppb	11.28619	270.79%
K 766.490 Radial†	824.0	157.78 ug/L	12.710	157.78 ppb	12.710	8.06%



Mg 279.077 IEC†	-0.1	-7.8844 ug/L	82.42811	-7.8844 ppb	82.42811	>999.9%
Mn 257.610†	4181.3	4.7644 ug/L	0.02838	4.7644 ppb	0.02838	0.60%
Mo 202.031†	7.0	0.5151 ug/L	0.70814	0.5151 ppb	0.70814	137.47%
Na 589.592 Radial†	448.8	139.65 ug/L	8.900	139.65 ppb	8.900	6.37%
Ni 231.604†	17.3	0.4406 ug/L	0.14307	0.4406 ppb	0.14307	32.47%
P 214.914†	23.9	14.251 ug/L	4.2092	14.251 ppb	4.2092	29.54%
Pb 220.353†	-105.6	-13.065 ug/L	1.7325	-13.065 ppb	1.7325	13.26%
S 181.975 Axial†	47.1	66.340 ug/L	0.4024	66.340 ppb	0.4024	0.61%
Sb 206.836†	-4.2	-1.4801 ug/L	1.56281	-1.4801 ppb	1.56281	105.59%
Se 196.026†	-3.5	-2.2633 ug/L	1.85697	-2.2633 ppb	1.85697	82.05%
Si 251.611†	49030.4	1588.4 ug/L	3.31	1588.4 ppb	3.31	0.21%
Sn 189.927†	-1.0	-0.1576 ug/L	1.61685	-0.1576 ppb	1.61685	>999.9%
Sr 421.552†	142.2	0.9887 ug/L	0.36337	0.9887 ppb	0.36337	36.75%
Ti 334.940†	423.8	0.6851 ug/L	0.10872	0.6851 ppb	0.10872	15.87%
Tl 190.801†	-3.8	-1.2045 ug/L	0.49591	-1.2045 ppb	0.49591	41.17%
U 409.014†	-311.0	-8.6861 ug/L	1.83932	-8.6861 ppb	1.83932	21.18%
V 292.402†	-94.5	-0.6707 ug/L	0.18044	-0.6707 ppb	0.18044	26.90%
Zn 213.857†	151.2	1.5223 ug/L	0.09233	1.5223 ppb	0.09233	6.07%
SiO2†	49320.9	3424.2 ug/L	37.37	3424.2 ppb	37.37	1.09%

Sequence No.: 71

Autosampler Location: 7

Sample ID: CCV

Date Collected: 2/26/2010 01:38:23

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	3785.2	3785.2	98.1 %		01:40:35
1	Y RADIAL	4333.7	4333.7	97.35 %		01:40:15
1	Al 396.153Radial†	5592.2	5813.3	5438.8 ug/L	5438.8 ppb	01:40:15
1	Ca 317.933Radial†	2445.0	2472.7	5392.3 ug/L	5392.3 ppb	01:40:35
1	Fe 238.204 Radial†	320.2	314.6	5099.9 ug/L	5099.9 ppb	01:40:35
1	K 766.490 Radial†	29477.6	27271.5	5218.4 ug/L	5218.4 ppb	01:40:15
1	Mg 279.077 IEC†	104.3	105.1	5548.6 ug/L	5548.6 ppb	01:40:35
1	Na 589.592 Radial†	31174.7	32667.5	10165 ug/L	10165 ppb	01:40:15
1	Sr 421.552†	72857.7	74230.6	516.35 ug/L	516.35 ppb	01:40:15
1	Sc 361.383	906121.3	906121.3	102.96 %		01:41:33
1	Y 371.029	751853.8	751853.8	98.846 %		01:41:33
1	Ag 328.068†	112025.1	108570.6	507.64 ug/L	507.64 ppb	01:41:38
1	As 188.979†	1163.4	1149.9	515.63 ug/L	515.63 ppb	01:41:58
1	B 249.677†	20431.2	20121.9	490.91 ug/L	490.91 ppb	01:41:38
1	Ba 233.527†	65936.8	64030.2	504.56 ug/L	504.56 ppb	01:41:38
1	Be 313.107†	1382153.7	1345979.0	504.04 ug/L	504.04 ppb	01:41:33
1	Cd 226.502†	45008.0	43890.4	509.94 ug/L	509.94 ppb	01:41:38
1	Co 228.616†	24785.0	24137.3	507.05 ug/L	507.05 ppb	01:41:38
1	Cr 267.716†	46582.8	45158.6	507.71 ug/L	507.71 ppb	01:41:38
1	Cu 324.752†	174489.6	163518.5	498.21 ug/L	498.21 ppb	01:41:38
1	Mn 257.610†	453715.4	440194.7	501.77 ug/L	501.77 ppb	01:41:33
1	Mo 202.031†	7067.0	6859.1	505.67 ug/L	505.67 ppb	01:41:58
1	Ni 231.604†	20723.2	20044.7	511.24 ug/L	511.24 ppb	01:41:38
1	P 214.914†	4535.4	4199.3	2428.5 ug/L	2428.5 ppb	01:41:58
1	Pb 220.353†	4246.2	4062.9	504.26 ug/L	504.26 ppb	01:41:58
1	S 181.975 Axial†	776.9	718.7	1012.4 ug/L	1012.4 ppb	01:41:58
1	Sb 206.836†	1517.5	1434.8	524.57 ug/L	524.57 ppb	01:41:58
1	Se 196.026†	767.2	769.9	523.34 ug/L	523.34 ppb	01:41:58
1	Si 251.611†	81271.9	78370.8	2532.6 ug/L	2532.6 ppb	01:41:38
1	Sn 189.927†	2936.9	2843.1	513.35 ug/L	513.35 ppb	01:41:58
1	Ti 334.940†	325436.8	317491.3	500.12 ug/L	500.12 ppb	01:41:38
1	Tl 190.801†	1578.9	1561.0	505.46 ug/L	505.46 ppb	01:41:58
1	U 409.014†	14995.7	17466.4	486.02 ug/L	486.02 ppb	01:41:38
1	V 292.402†	72681.2	72060.6	510.13 ug/L	510.13 ppb	01:41:38
1	Zn 213.857†	53142.5	50875.4	508.92 ug/L	508.92 ppb	01:41:38
1	SiO2†	82721.4	79755.2	5523.4 ug/L	5523.4 ppb	01:43:06
2	Sc Radial	3793.0	3793.0	98.3 %		01:41:01
2	Y RADIAL	4280.4	4280.4	96.15 %		01:40:41
2	Al 396.153Radial†	5520.0	5728.1	5358.8 ug/L	5358.8 ppb	01:40:41
2	Ca 317.933Radial†	2440.5	2462.9	5371.0 ug/L	5371.0 ppb	01:41:01
2	Fe 238.204 Radial†	322.0	315.8	5118.1 ug/L	5118.1 ppb	01:41:01
2	K 766.490 Radial†	29209.9	26937.1	5154.5 ug/L	5154.5 ppb	01:40:41
2	Mg 279.077 IEC†	101.5	102.0	5382.9 ug/L	5382.9 ppb	01:41:01
2	Na 589.592 Radial†	30323.2	31735.9	9875.1 ug/L	9875.1 ppb	01:40:41
2	Sr 421.552†	71500.1	72696.3	505.68 ug/L	505.68 ppb	01:40:41
2	Sc 361.383	908841.6	908841.6	103.27 %		01:42:04
2	Y 371.029	754417.1	754417.1	99.182 %		01:42:04
2	Ag 328.068†	112006.8	108227.2	506.05 ug/L	506.05 ppb	01:42:09
2	As 188.979†	1147.3	1130.9	507.20 ug/L	507.20 ppb	01:42:29
2	B 249.677†	20431.3	20062.6	489.46 ug/L	489.46 ppb	01:42:09
2	Ba 233.527†	66138.4	64033.8	504.59 ug/L	504.59 ppb	01:42:09
2	Be 313.107†	1384068.3	1343815.0	503.23 ug/L	503.23 ppb	01:42:04
2	Cd 226.502†	44970.1	43722.8	507.99 ug/L	507.99 ppb	01:42:09
2	Co 228.616†	24726.0	24008.2	504.34 ug/L	504.34 ppb	01:42:09
2	Cr 267.716†	46527.9	44970.0	505.60 ug/L	505.60 ppb	01:42:09
2	Cu 324.752†	174396.8	162921.3	496.40 ug/L	496.40 ppb	01:42:09
2	Mn 257.610†	453942.5	439095.7	500.53 ug/L	500.53 ppb	01:42:04
2	Mo 202.031†	7059.3	6831.2	503.61 ug/L	503.61 ppb	01:42:29
2	Ni 231.604†	20698.2	19960.2	509.08 ug/L	509.08 ppb	01:42:09

2	P 214.914†	4521.3	4172.4	2412.7 ug/L	2412.7 ppb	01:42:29
2	Pb 220.353†	4212.3	4017.8	498.65 ug/L	498.65 ppb	01:42:29
2	S 181.975 Axial†	776.1	715.7	1008.1 ug/L	1008.1 ppb	01:42:29
2	Sb 206.836†	1499.0	1412.5	516.58 ug/L	516.58 ppb	01:42:29
2	Se 196.026†	761.8	762.5	518.48 ug/L	518.48 ppb	01:42:29
2	Si 251.611†	81241.8	78105.4	2524.1 ug/L	2524.1 ppb	01:42:09
2	Sn 189.927†	2922.1	2820.2	509.23 ug/L	509.23 ppb	01:42:29
2	Ti 334.940†	325544.1	316649.2	498.81 ug/L	498.81 ppb	01:42:09
2	Tl 190.801†	1581.7	1559.1	504.85 ug/L	504.85 ppb	01:42:29
2	U 409.014†	15103.8	17527.6	487.73 ug/L	487.73 ppb	01:42:09
2	V 292.402†	72640.2	71809.5	508.35 ug/L	508.35 ppb	01:42:09
2	Zn 213.857†	53009.0	50591.6	506.06 ug/L	506.06 ppb	01:42:09
2	SiO2†	81770.6	78594.0	5442.9 ug/L	5442.9 ppb	01:43:11
3	Sc Radial	3768.3	3768.3	97.7 %		01:41:26
3	Y RADIAL	4293.3	4293.3	96.44 %		01:41:06
3	Al 396.153Radial†	5491.8	5736.1	5366.3 ug/L	5366.3 ppb	01:41:06
3	Ca 317.933Radial†	2424.5	2462.9	5370.9 ug/L	5370.9 ppb	01:41:26
3	Fe 238.204 Radial†	322.3	318.2	5158.0 ug/L	5158.0 ppb	01:41:26
3	K 766.490 Radial†	29149.4	27070.2	5179.9 ug/L	5179.9 ppb	01:41:06
3	Mg 279.077 IEC†	101.6	102.8	5424.6 ug/L	5424.6 ppb	01:41:26
3	Na 589.592 Radial†	30459.7	32078.0	9981.5 ug/L	9981.5 ppb	01:41:06
3	Sr 421.552†	71465.0	73137.7	508.75 ug/L	508.75 ppb	01:41:06
3	Sc 361.383	908166.0	908166.0	103.19 %		01:42:35
3	Y 371.029	755844.7	755844.7	99.370 %		01:42:35
3	Ag 328.068†	111734.9	108044.3	505.21 ug/L	505.21 ppb	01:42:40
3	As 188.979†	1156.5	1140.7	511.55 ug/L	511.55 ppb	01:43:00
3	B 249.677†	20413.0	20059.6	489.37 ug/L	489.37 ppb	01:42:40
3	Ba 233.527†	65984.1	63931.9	503.79 ug/L	503.79 ppb	01:42:40
3	Be 313.107†	1389807.3	1350373.6	505.68 ug/L	505.68 ppb	01:42:35
3	Cd 226.502†	44860.9	43649.3	507.13 ug/L	507.13 ppb	01:42:40
3	Co 228.616†	24732.2	24032.0	504.84 ug/L	504.84 ppb	01:42:40
3	Cr 267.716†	46588.0	45061.8	506.63 ug/L	506.63 ppb	01:42:40
3	Cu 324.752†	173956.7	162620.5	495.48 ug/L	495.48 ppb	01:42:40
3	Mn 257.610†	453995.3	439473.8	500.96 ug/L	500.96 ppb	01:42:35
3	Mo 202.031†	7056.5	6833.6	503.79 ug/L	503.79 ppb	01:43:00
3	Ni 231.604†	20688.8	19966.0	509.23 ug/L	509.23 ppb	01:42:40
3	P 214.914†	4526.9	4181.1	2418.0 ug/L	2418.0 ppb	01:43:00
3	Pb 220.353†	4190.1	3999.3	496.37 ug/L	496.37 ppb	01:43:00
3	S 181.975 Axial†	784.7	724.6	1020.7 ug/L	1020.7 ppb	01:43:00
3	Sb 206.836†	1503.8	1418.3	518.62 ug/L	518.62 ppb	01:43:00
3	Se 196.026†	759.1	760.3	517.21 ug/L	517.21 ppb	01:43:00
3	Si 251.611†	81200.1	78123.6	2524.7 ug/L	2524.7 ppb	01:42:40
3	Sn 189.927†	2919.9	2820.2	509.22 ug/L	509.22 ppb	01:43:00
3	Ti 334.940†	324688.9	316054.9	497.87 ug/L	497.87 ppb	01:42:40
3	Tl 190.801†	1597.0	1575.0	509.95 ug/L	509.95 ppb	01:43:00
3	U 409.014†	14897.1	17338.1	482.43 ug/L	482.43 ppb	01:42:40
3	V 292.402†	72521.9	71747.2	507.90 ug/L	507.90 ppb	01:42:40
3	Zn 213.857†	53033.3	50653.3	506.68 ug/L	506.68 ppb	01:42:40
3	SiO2†	80717.4	77632.3	5376.1 ug/L	5376.1 ppb	01:43:16

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	907709.6	103.14 %	0.161			0.16%
Sc Radial	3782.2	98.1 %	0.33			0.33%
Y 371.029	754038.5	99.133 %	0.2659			0.27%
Y RADIAL	4302.5	96.65 %	0.624			0.65%
Ag 328.068†	108280.7	506.30 ug/L	1.236	506.30 ppb	1.236	0.24%
QC value within limits for Ag 328.068 Recovery = 101.26%						
Al 396.153Radial†	5759.2	5388.0 ug/L	44.20	5388.0 ppb	44.20	0.82%
QC value within limits for Al 396.153Radial Recovery = 107.76%						
As 188.979†	1140.5	511.46 ug/L	4.212	511.46 ppb	4.212	0.82%
QC value within limits for As 188.979 Recovery = 102.29%						
B 249.677†	20081.3	489.91 ug/L	0.861	489.91 ppb	0.861	0.18%
QC value within limits for B 249.677 Recovery = 97.98%						
Ba 233.527†	63998.7	504.31 ug/L	0.455	504.31 ppb	0.455	0.09%
QC value within limits for Ba 233.527 Recovery = 100.86%						
Be 313.107†	1346722.5	504.32 ug/L	1.247	504.32 ppb	1.247	0.25%
QC value within limits for Be 313.107 Recovery = 100.86%						
Ca 317.933Radial†	2466.2	5378.1 ug/L	12.30	5378.1 ppb	12.30	0.23%

QC value within limits for Ca 317.933 Radial Recovery = 107.56%							
Cd 226.502†	43754.2	508.35 ug/L	1.440	508.35 ppb	1.440	0.28%	
QC value within limits for Cd 226.502 Recovery = 101.67%							
Co 228.616†	24059.2	505.41 ug/L	1.444	505.41 ppb	1.444	0.29%	
QC value within limits for Co 228.616 Recovery = 101.08%							
Cr 267.716†	45063.4	506.65 ug/L	1.059	506.65 ppb	1.059	0.21%	
QC value within limits for Cr 267.716 Recovery = 101.33%							
Cu 324.752†	163020.1	496.70 ug/L	1.390	496.70 ppb	1.390	0.28%	
QC value within limits for Cu 324.752 Recovery = 99.34%							
Fe 238.204 Radial†	316.2	5125.3 ug/L	29.74	5125.3 ppb	29.74	0.58%	
QC value within limits for Fe 238.204 Radial Recovery = 102.51%							
K 766.490 Radial†	27092.9	5184.3 ug/L	32.20	5184.3 ppb	32.20	0.62%	
QC value within limits for K 766.490 Radial Recovery = 103.69%							
Mg 279.077 IEC†	103.3	5452.1 ug/L	86.20	5452.1 ppb	86.20	1.58%	
QC value within limits for Mg 279.077 IEC Recovery = 109.04%							
Mn 257.610†	439588.1	501.09 ug/L	0.631	501.09 ppb	0.631	0.13%	
QC value within limits for Mn 257.610 Recovery = 100.22%							
Mo 202.031†	6841.3	504.36 ug/L	1.140	504.36 ppb	1.140	0.23%	
QC value within limits for Mo 202.031 Recovery = 100.87%							
Na 589.592 Radial†	32160.5	10007 ug/L	146.6	10007 ppb	146.6	1.47%	
QC value within limits for Na 589.592 Radial Recovery = 100.07%							
Ni 231.604†	19990.3	509.85 ug/L	1.203	509.85 ppb	1.203	0.24%	
QC value within limits for Ni 231.604 Recovery = 101.97%							
P 214.914†	4184.2	2419.8 ug/L	8.07	2419.8 ppb	8.07	0.33%	
QC value within limits for P 214.914 Recovery = 96.79%							
Pb 220.353†	4026.7	499.76 ug/L	4.061	499.76 ppb	4.061	0.81%	
QC value within limits for Pb 220.353 Recovery = 99.95%							
S 181.975 Axial†	719.7	1013.7 ug/L	6.39	1013.7 ppb	6.39	0.63%	
QC value within limits for S 181.975 Axial Recovery = 101.37%							
Sb 206.836†	1421.9	519.92 ug/L	4.154	519.92 ppb	4.154	0.80%	
QC value within limits for Sb 206.836 Recovery = 103.98%							
Se 196.026†	764.2	519.68 ug/L	3.233	519.68 ppb	3.233	0.62%	
QC value within limits for Se 196.026 Recovery = 103.94%							
Si 251.611†	78199.9	2527.1 ug/L	4.79	2527.1 ppb	4.79	0.19%	
QC value within limits for Si 251.611 Recovery = 101.09%							
Sn 189.927†	2827.8	510.60 ug/L	2.384	510.60 ppb	2.384	0.47%	
QC value within limits for Sn 189.927 Recovery = 102.12%							
Sr 421.552†	73354.8	510.26 ug/L	5.495	510.26 ppb	5.495	1.08%	
QC value within limits for Sr 421.552 Recovery = 102.05%							
Ti 334.940†	316731.8	498.93 ug/L	1.132	498.93 ppb	1.132	0.23%	
QC value within limits for Ti 334.940 Recovery = 99.79%							
Tl 190.801†	1565.0	506.75 ug/L	2.787	506.75 ppb	2.787	0.55%	
QC value within limits for Tl 190.801 Recovery = 101.35%							
U 409.014†	17444.1	485.39 ug/L	2.703	485.39 ppb	2.703	0.56%	
QC value within limits for U 409.014 Recovery = 97.08%							
V 292.402†	71872.4	508.79 ug/L	1.180	508.79 ppb	1.180	0.23%	
QC value within limits for V 292.402 Recovery = 101.76%							
Zn 213.857†	50706.8	507.22 ug/L	1.500	507.22 ppb	1.500	0.30%	
QC value within limits for Zn 213.857 Recovery = 101.44%							
SiO2†	78660.5	5447.5 ug/L	73.77	5447.5 ppb	73.77	1.35%	
QC value within limits for SiO2 Recovery = 101.87%							
All analyte(s) passed QC.							

Sequence No.: 72

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/26/2010 01:45:26

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3794.4	3794.4	98.4 %		01:47:39
1	Y RADIAL	4405.4	4405.4	98.96 %		01:47:19
1	Al 396.153Radial†	-136.1	-23.3	-21.915 ug/L	-21.915 ppb	01:47:19
1	Ca 317.933Radial†	21.2	2.9	6.2722 ug/L	6.2722 ppb	01:47:39
1	Fe 238.204 Radial†	10.3	-1.2	-19.942 ug/L	-19.942 ppb	01:47:39
1	K 766.490 Radial†	2836.3	118.0	22.621 ug/L	22.621 ppb	01:47:19
1	Mg 279.077 IEC†	1.9	0.7	37.767 ug/L	37.767 ppb	01:47:39
1	Na 589.592 Radial†	-1033.8	-149.1	-46.402 ug/L	-46.402 ppb	01:47:19
1	Sr 421.552†	33.7	25.5	0.1771 ug/L	0.1771 ppb	01:47:19
1	Sc 361.383	912537.1	912537.1	103.69 %		01:48:35
1	Y 371.029	767209.1	767209.1	100.86 %		01:48:35
1	Ag 328.068†	334.4	88.3	0.4042 ug/L	0.4042 ppb	01:48:40
1	As 188.979†	-17.9	2.7	1.1820 ug/L	1.1820 ppb	01:49:00
1	B 249.677†	-448.5	-154.6	-3.7849 ug/L	-3.7849 ppb	01:49:00
1	Ba 233.527†	25.1	13.2	0.1022 ug/L	0.1022 ppb	01:49:00
1	Be 313.107†	-3486.3	196.0	0.0733 ug/L	0.0733 ppb	01:48:40
1	Cd 226.502†	-189.1	-6.2	-0.0703 ug/L	-0.0703 ppb	01:49:00
1	Co 228.616†	-72.2	-4.8	-0.0991 ug/L	-0.0991 ppb	01:49:00
1	Cr 267.716†	86.0	-2.1	-0.0255 ug/L	-0.0255 ppb	01:49:00
1	Cu 324.752†	5839.9	-323.0	-0.9842 ug/L	-0.9842 ppb	01:48:40
1	Mn 257.610†	518.6	22.5	0.0221 ug/L	0.0221 ppb	01:49:00
1	Mo 202.031†	8.8	3.8	0.2802 ug/L	0.2802 ppb	01:49:00
1	Ni 231.604†	93.3	7.2	0.1837 ug/L	0.1837 ppb	01:49:00
1	P 214.914†	203.0	-10.0	-5.8216 ug/L	-5.8216 ppb	01:49:00
1	Pb 220.353†	-35.9	-95.8	-11.855 ug/L	-11.855 ppb	01:49:00
1	S 181.975 Axial†	40.7	3.4	4.8441 ug/L	4.8441 ppb	01:49:00
1	Sb 206.836†	32.8	-7.4	-2.6079 ug/L	-2.6079 ppb	01:49:00
1	Se 196.026†	-26.3	-0.6	-0.4463 ug/L	-0.4463 ppb	01:49:00
1	Si 251.611†	657.2	69.1	2.2355 ug/L	2.2355 ppb	01:49:00
1	Sn 189.927†	9.8	-0.0	0.0005 ug/L	0.0005 ppb	01:49:00
1	Ti 334.940†	-1453.8	7.8	0.0109 ug/L	0.0109 ppb	01:48:40
1	Tl 190.801†	-33.7	-5.0	-1.6168 ug/L	-1.6168 ppb	01:49:00
1	U 409.014†	-3074.6	-63.4	-1.7674 ug/L	-1.7674 ppb	01:48:35
1	V 292.402†	-1570.6	-46.0	-0.3174 ug/L	-0.3174 ppb	01:48:40
1	Zn 213.857†	771.1	4.2	0.0455 ug/L	0.0455 ppb	01:49:00
1	SiO2†	616.3	6.1	0.4189 ug/L	0.4189 ppb	01:50:06
2	Sc Radial	3761.9	3761.9	97.5 %		01:48:04
2	Y RADIAL	4312.7	4312.7	96.88 %		01:47:44
2	Al 396.153Radial†	-95.0	17.6	16.554 ug/L	16.554 ppb	01:47:44
2	Ca 317.933Radial†	27.5	9.5	20.826 ug/L	20.826 ppb	01:48:04
2	Fe 238.204 Radial†	12.2	0.8	13.558 ug/L	13.558 ppb	01:48:04
2	K 766.490 Radial†	2990.9	301.5	57.780 ug/L	57.780 ppb	01:47:44
2	Mg 279.077 IEC†	3.1	2.0	104.81 ug/L	104.81 ppb	01:48:04
2	Na 589.592 Radial†	-1109.5	-235.8	-73.387 ug/L	-73.387 ppb	01:47:44
2	Sr 421.552†	24.7	16.6	0.1150 ug/L	0.1150 ppb	01:47:44
2	Sc 361.383	919445.6	919445.6	104.47 %		01:49:06
2	Y 371.029	773969.5	773969.5	101.75 %		01:49:06
2	Ag 328.068†	341.6	92.8	0.4355 ug/L	0.4355 ppb	01:49:11
2	As 188.979†	-22.9	-2.0	-0.8828 ug/L	-0.8828 ppb	01:49:31
2	B 249.677†	-453.2	-155.7	-3.8195 ug/L	-3.8195 ppb	01:49:31
2	Ba 233.527†	27.2	15.0	0.1182 ug/L	0.1182 ppb	01:49:31
2	Be 313.107†	-3512.8	195.9	0.0731 ug/L	0.0731 ppb	01:49:11
2	Cd 226.502†	-195.6	-11.0	-0.1290 ug/L	-0.1290 ppb	01:49:31
2	Co 228.616†	-62.4	5.1	0.1080 ug/L	0.1080 ppb	01:49:31
2	Cr 267.716†	90.4	1.4	0.0176 ug/L	0.0176 ppb	01:49:31
2	Cu 324.752†	6041.1	-172.7	-0.5250 ug/L	-0.5250 ppb	01:49:11
2	Mn 257.610†	527.3	27.0	0.0278 ug/L	0.0278 ppb	01:49:31
2	Mo 202.031†	13.1	7.9	0.5817 ug/L	0.5817 ppb	01:49:31
2	Ni 231.604†	102.5	15.4	0.3920 ug/L	0.3920 ppb	01:49:31

2	P 214.914†	197.1	-17.1	-10.208 ug/L	-10.208 ppb	01:49:31
2	Pb 220.353†	-39.9	-99.4	-12.294 ug/L	-12.294 ppb	01:49:31
2	S 181.975 Axial†	39.2	1.7	2.4283 ug/L	2.4283 ppb	01:49:31
2	Sb 206.836†	34.2	-6.3	-2.1997 ug/L	-2.1997 ppb	01:49:31
2	Se 196.026†	-27.0	-1.1	-0.6796 ug/L	-0.6796 ppb	01:49:31
2	Si 251.611†	626.8	35.3	1.1356 ug/L	1.1356 ppb	01:49:31
2	Sn 189.927†	14.1	4.0	0.7332 ug/L	0.7332 ppb	01:49:31
2	Ti 334.940†	-1508.2	-33.8	-0.0587 ug/L	-0.0587 ppb	01:49:11
2	Tl 190.801†	-32.8	-4.0	-1.2828 ug/L	-1.2828 ppb	01:49:31
2	U 409.014†	-3056.8	-24.1	-0.6738 ug/L	-0.6738 ppb	01:49:06
2	V 292.402†	-1538.6	-4.0	-0.0209 ug/L	-0.0209 ppb	01:49:11
2	Zn 213.857†	774.2	1.6	0.0119 ug/L	0.0119 ppb	01:49:31
2	SiO2†	645.0	29.2	2.0084 ug/L	2.0084 ppb	01:50:12
3	Sc Radial	3761.7	3761.7	97.5 %		01:48:29
3	Y RADIAL	4371.8	4371.8	98.21 %		01:48:09
3	Al 396.153Radial†	-141.0	-29.5	-27.791 ug/L	-27.791 ppb	01:48:09
3	Ca 317.933Radial†	20.0	1.8	3.9291 ug/L	3.9291 ppb	01:48:29
3	Fe 238.204 Radial†	11.7	0.3	4.9785 ug/L	4.9785 ppb	01:48:29
3	K 766.490 Radial†	2972.8	283.0	54.243 ug/L	54.243 ppb	01:48:09
3	Mg 279.077 IEC†	4.1	3.1	161.93 ug/L	161.93 ppb	01:48:29
3	Na 589.592 Radial†	-1096.5	-222.6	-69.265 ug/L	-69.265 ppb	01:48:09
3	Sr 421.552†	28.6	20.6	0.1433 ug/L	0.1433 ppb	01:48:09
3	Sc 361.383	926815.5	926815.5	105.31 %		01:49:36
3	Y 371.029	780456.3	780456.3	102.61 %		01:49:36
3	Ag 328.068†	300.5	51.2	0.2338 ug/L	0.2338 ppb	01:49:41
3	As 188.979†	-20.4	0.6	0.2438 ug/L	0.2438 ppb	01:50:01
3	B 249.677†	-472.7	-170.9	-4.1890 ug/L	-4.1890 ppb	01:50:01
3	Ba 233.527†	17.9	5.9	0.0461 ug/L	0.0461 ppb	01:50:01
3	Be 313.107†	-3457.9	274.7	0.1021 ug/L	0.1021 ppb	01:49:41
3	Cd 226.502†	-206.0	-19.4	-0.2252 ug/L	-0.2252 ppb	01:50:01
3	Co 228.616†	-66.0	2.2	0.0490 ug/L	0.0490 ppb	01:50:01
3	Cr 267.716†	88.6	-1.0	-0.0134 ug/L	-0.0134 ppb	01:50:01
3	Cu 324.752†	6007.3	-250.7	-0.7666 ug/L	-0.7666 ppb	01:49:41
3	Mn 257.610†	513.2	9.6	0.0048 ug/L	0.0048 ppb	01:50:01
3	Mo 202.031†	17.7	12.1	0.8948 ug/L	0.8948 ppb	01:50:01
3	Ni 231.604†	76.1	-10.5	-0.2678 ug/L	-0.2678 ppb	01:50:01
3	P 214.914†	199.5	-16.4	-9.6935 ug/L	-9.6935 ppb	01:50:01
3	Pb 220.353†	-37.0	-96.3	-11.918 ug/L	-11.918 ppb	01:50:01
3	S 181.975 Axial†	38.7	0.9	1.2331 ug/L	1.2331 ppb	01:50:01
3	Sb 206.836†	35.2	-5.6	-1.9451 ug/L	-1.9451 ppb	01:50:01
3	Se 196.026†	-28.6	-2.4	-1.5906 ug/L	-1.5906 ppb	01:50:01
3	Si 251.611†	634.6	37.8	1.2151 ug/L	1.2151 ppb	01:50:01
3	Sn 189.927†	12.9	2.9	0.5183 ug/L	0.5183 ppb	01:50:01
3	Ti 334.940†	-1631.8	-139.6	-0.2351 ug/L	-0.2351 ppb	01:49:41
3	Tl 190.801†	-30.9	-1.9	-0.6139 ug/L	-0.6139 ppb	01:50:01
3	U 409.014†	-2854.6	191.2	5.3392 ug/L	5.3392 ppb	01:49:36
3	V 292.402†	-1591.4	-42.4	-0.2707 ug/L	-0.2707 ppb	01:49:41
3	Zn 213.857†	771.3	-7.0	-0.0688 ug/L	-0.0688 ppb	01:50:01
3	SiO2†	680.7	58.2	4.0156 ug/L	4.0156 ppb	01:50:17

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	919599.4	104.49 %		0.811			0.78%
Sc Radial	3772.7	97.8 %		0.49			0.50%
Y 371.029	773878.3	101.74 %		0.871			0.86%
Y RADIAL	4363.3	98.01 %		1.054			1.07%
Ag 328.068†	77.4	0.3578 ug/L		0.10852	0.3578 ppb	0.10852	30.33%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	-11.7	-11.050 ug/L		24.0864	-11.050 ppb	24.0864	217.97%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	0.4	0.1810 ug/L		1.03385	0.1810 ppb	1.03385	571.21%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	-160.4	-3.9312 ug/L		0.22400	-3.9312 ppb	0.22400	5.70%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	11.4	0.0888 ug/L		0.03787	0.0888 ppb	0.03787	42.63%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	222.2	0.0828 ug/L		0.01674	0.0828 ppb	0.01674	20.21%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	4.7	10.342 ug/L		9.1542	10.342 ppb	9.1542	88.51%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd	226.502†	-12.2	-0.1415 ug/L	0.07823	-0.1415 ppb	0.07823	55.29%
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co	228.616†	0.8	0.0193 ug/L	0.10672	0.0193 ppb	0.10672	552.58%
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr	267.716†	-0.6	-0.0071 ug/L	0.02228	-0.0071 ppb	0.02228	313.64%
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu	324.752†	-248.8	-0.7586 ug/L	0.22971	-0.7586 ppb	0.22971	30.28%
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe	238.204 Radial†	-0.0	-0.4687 ug/L	17.40163	-0.4687 ppb	17.40163	>999.9%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K	766.490 Radial†	234.2	44.882 ug/L	19.3589	44.882 ppb	19.3589	43.13%
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg	279.077 IEC†	1.9	101.50 ug/L	62.148	101.50 ppb	62.148	61.23%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn	257.610†	19.7	0.0182 ug/L	0.01199	0.0182 ppb	0.01199	65.73%
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo	202.031†	7.9	0.5856 ug/L	0.30735	0.5856 ppb	0.30735	52.49%
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na	589.592 Radial†	-202.5	-63.018 ug/L	14.5365	-63.018 ppb	14.5365	23.07%
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni	231.604†	4.0	0.1026 ug/L	0.33727	0.1026 ppb	0.33727	328.69%
QC value within limits for Ni 231.604 Recovery = Not calculated							
P	214.914†	-14.5	-8.5745 ug/L	2.39798	-8.5745 ppb	2.39798	27.97%
QC value within limits for P 214.914 Recovery = Not calculated							
Pb	220.353†	-97.2	-12.023 ug/L	0.2374	-12.023 ppb	0.2374	1.97%
QC value less than the lower limit for Pb 220.353 Recovery = Not calculated							
S	181.975 Axial†	2.0	2.8352 ug/L	1.83951	2.8352 ppb	1.83951	64.88%
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb	206.836†	-6.4	-2.2509 ug/L	0.33437	-2.2509 ppb	0.33437	14.86%
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se	196.026†	-1.4	-0.9055 ug/L	0.60467	-0.9055 ppb	0.60467	66.78%
QC value within limits for Se 196.026 Recovery = Not calculated							
Si	251.611†	47.4	1.5288 ug/L	0.61339	1.5288 ppb	0.61339	40.12%
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn	189.927†	2.3	0.4173 ug/L	0.37661	0.4173 ppb	0.37661	90.24%
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr	421.552†	20.9	0.1452 ug/L	0.03110	0.1452 ppb	0.03110	21.43%
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti	334.940†	-55.2	-0.0943 ug/L	0.12677	-0.0943 ppb	0.12677	134.45%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl	190.801†	-3.6	-1.1712 ug/L	0.51067	-1.1712 ppb	0.51067	43.60%
QC value within limits for Tl 190.801 Recovery = Not calculated							
U	409.014†	34.6	0.9660 ug/L	3.82655	0.9660 ppb	3.82655	396.13%
QC value within limits for U 409.014 Recovery = Not calculated							
V	292.402†	-30.8	-0.2030 ug/L	0.15941	-0.2030 ppb	0.15941	78.52%
QC value within limits for V 292.402 Recovery = Not calculated							
Zn	213.857†	-0.4	-0.0038 ug/L	0.05874	-0.0038 ppb	0.05874	>999.9%
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†		31.2	2.1476 ug/L	1.80239	2.1476 ppb	1.80239	83.92%
QC value within limits for SiO2 Recovery = Not calculated							
QC Failed. Continue with analysis.							

## ICPMS#3 Daily Performance Report

### Sample ID: Sample

Sample Date/Time: Friday, March 05, 2010 12:01:58

Sample Description:

Method File: c:\elandata\Method\daily2.mth

Dataset File: c:\elandata\Dataset\default\Sample.6371

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		350.8		350.804		7.260		2.1
Mg	24.0		4569.5		4569.531		137.006		3.0
Co	58.9		11603.5		11603.512		227.745		2.0
Rh	102.9		32899.0		32899.039		157.785		0.5
In	114.9		43053.6		43053.585		460.185		1.1
Pb	208.0		35947.0		35946.973		345.598		1.0
[> Ba	137.9		39294.3		39294.316		172.202		0.4
[ Ba++	69.0		1062.1		0.027		0.001		2.3
[> Ce	139.9		51981.2		51981.213		682.835		1.3
[ CeO	155.9		1179.6		0.023		0.000		2.1
Bkgd	220.0		1.2		1.200		0.908		75.7

### Current Optimization File Data

Current Value	Description
1.01	Nebulizer Gas Flow
7.20	Lens Voltage
1450.00	ICP RF Power
-1855.00	Analog Stage Voltage
1350.00	Pulse Stage Voltage
70.00	Discriminator Threshold
-7.00	AC Rod Offset
60.00	Service DAC 1
0.00	Quadrupole Rod Offset

### Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	21	7.0	460.7
Co	59	21	8.0	14339.2
In	115	21	9.0	66134.1

Sample ID: Sample

Report Date/Time: Friday, March 05, 2010 12:03:18

Page 1



## ICPMS#3 Instrument Tuning Report

File Name: 100305.tun  
File Path: C:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas Peak W
He	3.0	3.0	586	2060	0.636
Be	9.0	9.0	2074	2040	0.631
Mg	24.0	24.0	5722	2110	0.621
Mg	25.0	24.9	5888	2020	0.665
Mg	26.0	25.9	6211	2140	0.642
Co	58.9	58.9	14202	2115	0.651
Rh	102.9	102.9	24907	2165	0.662
In	114.9	114.9	27825	2180	0.661
Ce	139.9	139.8	33908	2220	0.627
Pb	206.0	206.0	49992	2280	0.646
Pb	207.0	207.0	50284	2310	0.644
Pb	208.0	208.0	50486	2300	0.656
U	238.1	238.1	57848	2340	0.681

Report Date/Time: Friday, March 05, 2010 12:01:31

Page 1

## ICPMS#3 - Summary Report

Sample ID: Blank

Sample Date/Time: Friday, March 05, 2010 12:28:04

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc2.mth

Dataset File: C:\elandata\Dataset\100305\Blank.006

### Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu 175		ug/L		114490	
[ TI 205		ug/L		686	

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
TI	205Linear Thru Zero	

### QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[> Lu 175					
[ TI 205					

### QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: Blank

Report Date/Time: Friday, March 05, 2010 12:28:17

Page 1

## ICPMS#3 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Friday, March 05, 2010 12:30:15

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc2.mth

Dataset File: C:\elandata\Dataset\100305\Standard 1.007

### Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu 175		ug/L		115437	115437.013
[ TI 205	10.000	ug/L	2.190	55575	0.475

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
TI	205Linear Thru Zero	1.0000

### QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[> Lu 175					
[ TI 205					

### QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: Standard 1

Report Date/Time: Friday, March 05, 2010 12:30:25

Page 1

## ICPMS#3 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Friday, March 05, 2010 12:32:24

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc2.mth

Dataset File: C:\elandata\Dataset\100305\Standard 2.008

### Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu 175		ug/L		116908	116907.950
[ TI 205	99.994	ug/L	0.297	552983	4.724

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
TI	205Linear Thru Zero	1.0000

### QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[> Lu 175					
[ TI 205					

### QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: Standard 2

Report Date/Time: Friday, March 05, 2010 12:32:34

Page 1

## ICPMS#3 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Friday, March 05, 2010 12:34:34

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc2.mth

Dataset File: C:\elandata\Dataset\100305\QC Std 1.009

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		120769	120769.131
[	TI	205	50.191 ug/L	0.650	287123	2.371

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
TI	205Linear Thru Zero	1.0000

### QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu	175		105.5		
[	TI	205	100.382			

### 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: Friday, March 05, 2010 12:34:44

Page 1

## ICPMS#3 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Friday, March 05, 2010 12:36:45

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc2.mth

Dataset File: C:\elandata\Dataset\100305\QC Std 2.010

### Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu 175		ug/L		114698	114698.220
[ TI 205	0.208	ug/L	2.953	1816	0.010

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
TI	205Linear Thru Zero	1.0000

### QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[> Lu 175		100.2			
[ TI 205					

### QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 2

Report Date/Time: Friday, March 05, 2010 12:36:58

Page 1

## ICPMS#3 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Friday, March 05, 2010 12:38:58

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc2.mth

Dataset File: C:\elandata\Dataset\100305\QC Std 3.011

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		115191	115190.666
[	TI	205	1.096 ug/L	2.721	6661	0.052

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
TI	205Linear Thru Zero	1.0000

### QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu	175		100.6		
[	TI	205	109.647			

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#3 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Friday, March 05, 2010 12:41:08

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc2.mth

Dataset File: C:\elandata\Dataset\100305\QC Std 4.012

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		102021	102021.488
[ TI	205	-0.021	ug/L	46.346	511	-0.001

### Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
TI	205	Linear Thru Zero	1.0000

### QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[> Lu	175			89.1		
[ TI	205					

### QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 4

Report Date/Time: Friday, March 05, 2010 12:41:19

Page 1



## ICPMS#3 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Friday, March 05, 2010 12:43:19

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc2.mth

Dataset File: C:\elandata\Dataset\100305\QC Std 5.013

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		101755	101755.219
[	TI	205	19.332 ug/L	0.289	93547	0.913

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
TI	205Linear Thru Zero	1.0000

### QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu	175		88.9		
[	TI	205	96.662			

### 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 5

Report Date/Time: Friday, March 05, 2010 12:43:31

Page 1

## ICPMS#3 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, March 05, 2010 12:45:31

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc2.mth

Dataset File: C:\elandata\Dataset\100305\QC Std 6.014

### Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu 175		ug/L		116691	116690.864
[ TI 205	50.140	ug/L	0.436	277076	2.369

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
TI	205Linear Thru Zero	1.0000

### QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[> Lu 175		101.9			
[ TI 205	100.280				

### 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, March 05, 2010 12:45:43

Page 1

## ICPMS#3 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, March 05, 2010 12:47:44

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc2.mth

Dataset File: C:\elandata\Dataset\100305\QC Std 7.015

### Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu 175		ug/L		116479	116478.968
[ TI 205	0.172	ug/L	4.071	1645	0.008

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
TI	205Linear Thru Zero	1.0000

### QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[> Lu 175		101.7			
[ TI 205					

### QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Friday, March 05, 2010 12:47:57

Page 1

## ICPMS#3 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, March 05, 2010 13:13:52

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc2.mth

Dataset File: C:\elandata\Dataset\100305\QC Std 6.026

### Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu 175		ug/L		118589	118589.372
[ TI 205	50.255	ug/L	0.239	282279	2.374

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
TI	205Linear Thru Zero	1.0000

### QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[> Lu 175			103.6		
[ TI 205	100.509				

### 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, March 05, 2010 13:14:03

Page 1

## ICPMS#3 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, March 05, 2010 13:16:05

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc2.mth

Dataset File: C:\elandata\Dataset\100305\QC Std 7.027

### Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu 175		ug/L		117759	117758.957
[ TI 205	0.146	ug/L	2.352	1518	0.007

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
TI	205Linear Thru Zero	1.0000

### QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[> Lu 175		102.9			
[ TI 205					

### QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#3 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, March 05, 2010 13:33:49

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc2.mth

Dataset File: C:\elandata\Dataset\100305\QC Std 6.035

### Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu 175		ug/L		120821	120820.572
[ TI 205	50.048	ug/L	0.498	286423	2.364

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
TI	205Linear Thru Zero	1.0000

### QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[> Lu 175			105.5		
[ TI 205	100.096				

### QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#3 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, March 05, 2010 13:36:02

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc2.mth

Dataset File: C:\elandata\Dataset\100305\QC Std 7.036

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		117674	117674.462
[	Tl	205	0.083 ug/L	6.082	1166	0.004

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000

### QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu	175		102.8		
[	Tl	205				

### 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, March 05, 2010 13:36:15

Page 1

## ICPMS#3 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, March 05, 2010 13:42:18

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc2.mth

Dataset File: C:\elandata\Dataset\100305\QC Std 6.038

### Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu 175		ug/L		119364	119363.575
[ TI 205	49.687	ug/L	0.858	280854	2,347

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
TI	205Linear Thru Zero	1.0000

### QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[> Lu 175		104.3			
[ TI 205	99.374				

### 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, March 05, 2010 13:42:30

Page 1



## ICPMS#3 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, March 05, 2010 13:44:31

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc2.mth

Dataset File: C:\elandata\Dataset\100305\QC Std 7.039

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		109020	109019.882
[ TI	205	0.081	ug/L	8.239	1072	0.004

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
TI	205Linear Thru Zero	1.0000

### QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[> Lu	175			95.2		
[ TI	205					

### QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Friday, March 05, 2010 13:44:44

Page 1

## ICPMS#3 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, March 05, 2010 14:07:07

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc2.mth

Dataset File: C:\elandata\Dataset\100305\QC Std 6.049

### Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu 175		ug/L		111438	111437.579
[ TI 205	49.964	ug/L	1.221	263649	2.360

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
TI	205Linear Thru Zero	1.0000

### QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[> Lu 175			97.3		
[ TI 205	99.929				

### 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, March 05, 2010 14:07:19

Page 1

## ICPMS#3 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, March 05, 2010 14:09:20

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc2.mth

Dataset File: C:\elandata\Dataset\100305\QC Std 7.050

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		109521	109521.487
[	Tl	205	0.165 ug/L	0.804	1511	0.008

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000

### QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu	175		95.7		
[	Tl	205				

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Friday, March 05, 2010 14:09:33

Page 1

## ICPMS#3 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, March 05, 2010 14:22:35

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc2.mth

Dataset File: C:\elandata\Dataset\100305\QC Std 6.056

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		112410	112410.387
[	TI	205	49.614 ug/L	2.187	264248	2.344

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
TI	205Linear Thru Zero	1.0000

### QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu	175		98.2		
[	TI	205	99.227			

### 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, March 05, 2010 14:22:46

Page 1

## ICPMS#3 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, March 05, 2010 14:24:48

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc2.mth

Dataset File: C:\elandata\Dataset\100305\QC Std 7.057

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		109428	109428.139
[	TI	205	0.077 ug/L	5.308	1053	0.004

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
TI	205Linear Thru Zero	1.0000

### QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu	175		95.6		
[	TI	205				

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Friday, March 05, 2010 14:25:01

Page 1

## ICPMS#3 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, March 05, 2010 14:44:48

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc2.mth

Dataset File: C:\elandata\Dataset\100305\QC Std 6.066

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		112618	112618.465
[	TI	205	49.279 ug/L	0.380	262864	2.328

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
TI	205Linear Thru Zero	1.0000

### QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu	175		98.4		
[	TI	205	98.557			

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#3 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, March 05, 2010 14:47:01

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc2.mth

Dataset File: C:\elandata\Dataset\100305\QC Std 7.067

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		109957	109956.894
[	TI	205	0.097 ug/L	8.278	1166	0.005

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
TI	205Linear Thru Zero	1.0000

### QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu	175		96.0		
[	TI	205				

### QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Friday, March 05, 2010 14:47:14

Page 1

## ICPMS#3 - Summary Report

Sample ID: 1202036698

Sample Date/Time: Friday, March 05, 2010 14:49:16

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 950397|1|prb

Method File: c:\elandata\Method\misc2.mth

Dataset File: C:\elandata\Dataset\100305\1202036698.068

### Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu 175		ug/L		108312	108311.581
[ TI 205	-0.040	ug/L	3.907	443	-0.002

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
TI	205Linear Thru Zero	1.0000

### QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[> Lu 175			94.6		
[ TI 205					

### QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

### QC Action

QC Action Line: No QC out of limits detected



## ICPMS#3 - Summary Report

Sample ID: 1202036703

Sample Date/Time: Friday, March 05, 2010 14:51:30

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 950397|1|prb

Method File: c:\elandata\Method\misc2.mth

Dataset File: C:\elandata\Dataset\100305\1202036703.069

### Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
> Lu 175		ug/L		109821	109821.356
[ TI 205	52.191	ug/L	0.483	271448	2.466

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
TI	205Linear Thru Zero	1.0000

### QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
> Lu 175			95.9		
[ TI 205					

### QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202036703

Report Date/Time: Friday, March 05, 2010 14:51:42

Page 1

## ICPMS#3 - Summary Report

Sample ID: 1202036699

Sample Date/Time: Friday, March 05, 2010 14:58:18

Sample Type:

Sample Description: LANL 6020 DUP

Number of Replicates: 3

Batch ID: 950397|1|prb

Method File: c:\elandata\Method\misc2.mth

Dataset File: C:\elandata\Dataset\100305\1202036699.072

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		105860	105860.185
[ TI	205	0.584	ug/L	0.773	3556	0.028

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
TI	205Linear Thru Zero	1.0000

### QC Calculated Values

Analyte	Mass	QC Std	% Recovery	Int Std	% Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[> Lu	175				92.5			
[ TI	205							

### QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202036699

Report Date/Time: Friday, March 05, 2010 14:58:30

Page 1

## ICPMS#3 - Summary Report

Sample ID: 1202036701

Sample Date/Time: Friday, March 05, 2010 15:00:31

Sample Type:

Sample Description: LANL 6020 MS

Number of Replicates: 3

Batch ID: 950397|1|prb

Method File: c:\elandata\Method\misc2.mth

Dataset File: C:\elandata\Dataset\100305\1202036701.073

### Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu 175		ug/L		106880	106879.865
[ TI 205	93.546	ug/L	0.899	472887	4.419

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
TI	205Linear Thru Zero	1.0000

### QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[> Lu 175			93.4		
[ TI 205					

### QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202036701

Report Date/Time: Friday, March 05, 2010 15:00:44

Page 1

## ICPMS#3 - Summary Report

Sample ID: 1202036702

Sample Date/Time: Friday, March 05, 2010 15:02:46

Sample Type:

Sample Description: LANL 6020 MSD

Number of Replicates: 3

Batch ID: 950397|1|prb

Method File: c:\elandata\Method\misc2.mth

Dataset File: C:\elandata\Dataset\100305\1202036702.074

### Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu 175		ug/L		108417	108416.800
[ TI 205	93.593	ug/L	0.235	480015	4.422

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
TI	205Linear Thru Zero	1.0000

### QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[> Lu 175		94.7			
[ TI 205					

### QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202036702

Report Date/Time: Friday, March 05, 2010 15:02:59

Page 1

## ICPMS#3 - Summary Report

Sample ID: 1202036700

Sample Date/Time: Friday, March 05, 2010 15:05:01

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 950397|5|prb

Method File: c:\elandata\Method\misc2.mth

Dataset File: C:\elandata\Dataset\100305\1202036700.075

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		109800	109800.235
[ TI	205	0.936	ug/L	2.756	5515	0.044

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
TI	205Linear Thru Zero	1.0000

### QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[> Lu	175			95.9		
[ TI	205					

### QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202036700

Report Date/Time: Friday, March 05, 2010 15:05:14

Page 1

## ICPMS#3 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, March 05, 2010 15:07:15

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc2.mth

Dataset File: C:\elandata\Dataset\100305\QC Std 6.076

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		108815	108814.786
[ TI	205	50.970	ug/L	1.294	262721	2.408

### Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
TI	205	Linear Thru Zero	1.0000

### QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[> Lu	175			95.0		
[ TI	205	101.940				

### 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: Friday, March 05, 2010 15:07:26

Page 1

## ICPMS#3 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, March 05, 2010 15:09:28

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc2.mth

Dataset File: C:\elandata\Dataset\100305\QC Std 7.077

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		107981	107981.392
[	Tl	205	0.260 ug/L	4.801	1974	0.012

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000

### QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu	175		94.3		
[	Tl	205				

### QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Friday, March 05, 2010 15:09:41

Page 1

## ICPMS#3 - Summary Report

Sample ID: 246436001

Sample Date/Time: Friday, March 05, 2010 15:27:27

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 950397|1|prb

Method File: c:\elandata\Method\misc2.mth

Dataset File: C:\elandata\Dataset\100305\246436001.085

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		104843	104842.536
[ TI	205	-0.073	ug/L	8.622	267	-0.003

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
TI	205Linear Thru Zero	1.0000

### QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[> Lu	175		91.6			
[ TI	205					

### QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: 246436001

Report Date/Time: Friday, March 05, 2010 15:27:41

Page 1



## ICPMS#3 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, March 05, 2010 15:29:42

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc2.mth

Dataset File: C:\elandata\Dataset\100305\QC Std 6.086

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		106883	106882.834
[ TI	205	49.922	ug/L	1.096	252669	2.358

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
TI	205Linear Thru Zero	1.0000

### QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[> Lu	175			93.4		
[ TI	205	99.844				

### 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, March 05, 2010 15:29:53

Page 1

## ICPMS#3 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, March 05, 2010 15:31:55

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc2.mth

Dataset File: C:\elandata\Dataset\100305\QC Std 7.087

### Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu 175		ug/L		106997	106996.728
[ TI 205	0.133	ug/L	1.998	1312	0.006

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
TI	205Linear Thru Zero	1.0000

### QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[> Lu 175		93.5			
[ TI 205					

### QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Friday, March 05, 2010 15:32:08

Page 1

## ICPMS #5 Daily Performance Report

### Sample ID: Sample

Sample Date/Time: Thursday, March 04, 2010 12:13:51

Sample Description:

Method File: c:\elandata\Method\Daily2.mth

Dataset File: c:\elandata\Dataset\default\Sample.644

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	4917.0	4917.046	76.152	1.5
Mg	24.0	49556.4	49556.410	421.182	0.8
Co	58.9	95296.0	95295.993	345.969	0.4
Rh	102.9	182253.3	182253.293	1838.164	1.0
In	114.9	271126.6	271126.619	2475.836	0.9
Pb	208.0	255677.7	255677.709	715.154	0.3
[> Ba	137.9	248095.1	248095.056	1759.513	0.7
[ Ba++	69.0	3224.4	0.013	0.000	1.4
[> Ce	139.9	304302.3	304302.268	1006.509	0.3
[ CeO	155.9	7653.1	0.025	0.000	1.9
Bkgd	220.0	21.3	21.300	2.225	10.4

### Current Optimization File Data

Current Value	Description
0.87	Nebulizer Gas Flow
6.00	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	5457.7
Co	59	13	6.0	98878.3
In	115	13	6.8	264010.6

## ICPMS #5 Instrument Tuning Report

File Name: default2.tun  
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	588	2050	0.665
Be	9.0	9.0	2056	2075	0.621
Mg	24.0	24.0	5695	2080	0.628
Mg	25.0	25.0	5923	2080	0.592
Mg	26.0	26.0	6178	2080	0.633
Co	58.9	58.9	14189	2110	0.620
Rh	102.9	102.9	24872	2160	0.621
In	114.9	114.9	27799	2180	0.636
Ce	139.9	139.9	33870	2200	0.640
Pb	206.0	206.0	49948	2295	0.605
Pb	207.0	207.0	50159	2240	0.631
Pb	208.0	208.0	50451	2265	0.694
U	238.1	238.0	57724	2275	0.708

## ICPMS#5 - Summary Report

Sample ID: Blank

Sample Date/Time: Thursday, March 04, 2010 21:20:54

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\Vanl 950397.mth

Dataset File: c:\elandata\Dataset\100304\Blank.232

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9		ug/L		19	
>	Sc	45		ug/L		1593237	
	Cr	52		ug/L		-3743	
	Cr	53		ug/L		94468	
	Mn	55		ug/L		1472	
	Ni	60		ug/L		125	
>	Ge	74		ug/L		440908	
	As	75		ug/L		151	
	Se	77		ug/L		3931	
	Se	82		ug/L		-6	
	Kr	83		ug/L		139	
	Mo	98		ug/L		151	
	Ag	107		ug/L		95	
	Cd	111		ug/L		35	
	Cd	114		ug/L		80	
>	In	115		ug/L		315911	
	Sb	121		ug/L		575	
	Sb	123		ug/L		437	
>	Lu	175		ug/L		523902	
	Tl	205		ug/L		1868	
	Pb	208		ug/L		687	
	U	238		ug/L		656	

Sample ID: Blank

Report Date/Time: Thursday, March 04, 2010 21:22:32

Page 1

## Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Cr	52Simple Linear	
Cr	53Simple Linear	
Mn	55Simple Linear	
Ni	60Simple Linear	
Ge	74Linear Thru Zero	
As	75Simple Linear	
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Mo	98Simple Linear	
Ag	107Simple Linear	
Cd	111Simple Linear	
Cd	114Simple Linear	
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Simple Linear	
Tl	205Simple Linear	
Pb	208Simple Linear	
U	238Simple Linear	

### 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					
[>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
[	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sb	121					
	Sb	123					
[>	Lu	175					
	Tl	205					
	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

## ICPMS#5 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Thursday, March 04, 2010 21:25:30

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl 950397.mth

Dataset File: c:\elandata\Dataset\100304\Standard 1.233

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	10.000	ug/L	1.230	4312	0.003
> Sc	45		ug/L		1626833	1626832.762
Cr	52	10.000	ug/L	1.051	52322	0.035
Cr	53		ug/L		105016	0.005
Mn	55	10.000	ug/L	2.941	99182	0.060
Ni	60	10.000	ug/L	0.452	15438	0.009
> Ge	74		ug/L		443373	443373.334
As	75	10.000	ug/L	1.249	12969	0.029
Se	77		ug/L		5125	0.003
Se	82	10.000	ug/L	4.050	1329	0.003
Kr	83		ug/L		121	-0.000
Mo	98	10.000	ug/L	1.053	36577	0.116
Ag	107	10.000	ug/L	0.340	67916	0.216
Cd	111	10.000	ug/L	2.048	17614	0.056
Cd	114		ug/L		42643	0.136
> In	115		ug/L		313971	313971.396
Sb	121	10.000	ug/L	1.979	60494	0.191
Sb	123		ug/L		47286	0.149
> Lu	175		ug/L		517923	517922.886
Tl	205	10.000	ug/L	0.818	218180	0.418
Pb	208	10.000	ug/L	1.365	368917	0.711
U	238	10.000	ug/L	1.294	479693	0.925

Sample ID: Standard 1

Report Date/Time: Thursday, March 04, 2010 21:27:05

Page 1



## 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
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear 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	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

---

Sample ID: Standard 1

Report Date/Time: Thursday, March 04, 2010 21:27:05

Page 2

### 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					
[>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
[	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sb	121					
	Sb	123					
[>	Lu	175					
	Tl	205					
	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

## ICPMS#5 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Thursday, March 04, 2010 21:30:03

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl 950397.mth

Dataset File: c:\elandata\Dataset\100304\Standard 2.234

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[ Be	9	100.002	ug/L	2.160	42804	0.026
[ > Sc	45		ug/L		1617960	1617959.596
Cr	52	99.994	ug/L	1.535	551283	0.343
Cr	53		ug/L		173235	0.048
Mn	55	99.952	ug/L	1.112	928630	0.573
[ Ni	60	100.000	ug/L	0.862	152469	0.094
[ > Ge	74		ug/L		448154	448154.136
As	75	99.965	ug/L	0.317	125333	0.279
Se	77		ug/L		14484	0.023
Se	82	99.949	ug/L	3.308	12820	0.029
Kr	83		ug/L		150	0.000
[ Mo	98	100.002	ug/L	1.860	363694	1.162
Ag	107	99.954	ug/L	1.586	645963	2.064
Cd	111	99.981	ug/L	1.461	171891	0.549
Cd	114		ug/L		413633	1.322
[ > In	115		ug/L		312889	312889.042
Sb	121	100.019	ug/L	1.793	609331	1.946
[ Sb	123		ug/L		475254	1.518
[ > Lu	175		ug/L		502805	502804.826
Tl	205	99.853	ug/L	0.945	1829590	3.635
Pb	208	99.900	ug/L	1.518	3246621	6.456
[ U	238	99.834	ug/L	0.520	3982228	7.919

Sample ID: Standard 2

Report Date/Time: Thursday, March 04, 2010 21:31:39

Page 1

## 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
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear 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	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
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					
	Cr	52					
	Cr	53					
	Mn	55					
[	Ni	60					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
[	Kr	83					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sb	121					
[	Sb	123					
>	Lu	175					
	Tl	205					
	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

## ICPMS#5 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Thursday, March 04, 2010 21:34:37

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\VanI 950397.mth

Dataset File: c:\elandata\Dataset\100304\QC Std 1.235

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	52.547	ug/L	1.630	23523	0.014
> Sc	45		ug/L		1691495	1691494.864
Cr	52	51.310	ug/L	0.969	293803	0.176
Cr	53		ug/L		144370	0.026
Mn	55	53.057	ug/L	1.577	516042	0.304
Ni	60	52.482	ug/L	1.089	83717	0.049
> Ge	74		ug/L		461354	461354.291
As	75	49.523	ug/L	1.448	64000	0.138
Se	77		ug/L		9968	0.013
Se	82	51.643	ug/L	2.107	6818	0.015
Kr	83		ug/L		146	0.000
Mo	98	49.414	ug/L	2.671	186094	0.574
Ag	107	51.243	ug/L	2.684	342795	1.058
Cd	111	51.552	ug/L	3.017	91742	0.283
Cd	114		ug/L		217326	0.671
> In	115		ug/L		323930	323929.908
Sb	121	50.971	ug/L	4.603	321608	0.992
Sb	123		ug/L		252987	0.780
> Lu	175		ug/L		518635	518634.718
Tl	205	53.117	ug/L	1.076	1004816	1.934
Pb	208	53.130	ug/L	0.945	1781462	3.434
U	238	52.705	ug/L	0.822	2168878	4.181

Sample ID: QC Std 1

Report Date/Time: Thursday, March 04, 2010 21:36:14

Page 1

## 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
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear 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	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
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 %	Duplicate Rel. % Difference
[	Be	9	105.094				
>	Sc	45		106.2			
	Cr	52	102.620				
	Cr	53					
	Mn	55	106.115				
	Ni	60	104.964				
>	Ge	74		104.6			
	As	75	99.045				
	Se	77					
	Se	82	103.285				
	Kr	83					
	Mo	98	98.828				
	Ag	107	102.485				
	Cd	111	103.105				
	Cd	114					
>	In	115		102.5			
	Sb	121	101.943				
	Sb	123					
>	Lu	175		99.0			
	Tl	205	106.233				
	Pb	208	106.261				
	U	238	105.410				

### 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 2

Sample Date/Time: Thursday, March 04, 2010 21:39:14

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\anal 950397.mth

Dataset File: c:\elandata\Dataset\100304\QC Std 2.236

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	0.007	ug/L	74.122	23	0.000
>	Sc 45		ug/L		1691548	1691547.875
	Cr 52	0.143	ug/L	42.768	-3148	0.000
	Cr 53		ug/L		100227	-0.000
	Mn 55	-0.018	ug/L	30.937	1389	-0.000
[	Ni 60	0.000	ug/L	1181.673	133	0.000
[>	Ge 74		ug/L		458621	458621.016
	As 75	0.010	ug/L	1362.564	171	0.000
	Se 77		ug/L		4422	0.001
	Se 82	0.101	ug/L	119.655	7	0.000
[	Kr 83		ug/L		136	-0.000
[	Mo 98	0.027	ug/L	13.365	254	0.000
	Ag 107	0.001	ug/L	71.491	106	0.000
	Cd 111	0.003	ug/L	374.983	40	0.000
	Cd 114		ug/L		90	0.000
>	In 115		ug/L		319656	319655.953
	Sb 121	0.284	ug/L	7.034	2349	0.006
[	Sb 123		ug/L		1873	0.004
[>	Lu 175		ug/L		521555	521555.488
	Tl 205	0.118	ug/L	9.288	4093	0.004
	Pb 208	0.002	ug/L	16.437	753	0.000
[	U 238	0.004	ug/L	43.191	814	0.000

Sample ID: QC Std 2

Report Date/Time: Thursday, March 04, 2010 21:40:52

Page 1

## 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
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear 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	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
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		106.2			
	Cr	52					
	Cr	53					
	Mn	55					
[	Ni	60					
>	Ge	74		104.0			
	As	75					
	Se	77					
	Se	82					
[	Kr	83					
[	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		101.2			
	Sb	121					
[	Sb	123					
>	Lu	175		99.6			
	Tl	205					
	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

## ICPMS#5 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Thursday, March 04, 2010 21:43:51

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl 950397.mth

Dataset File: c:\elandata\Dataset\100304\QC Std 3.237

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.555	ug/L	3.297	263	0.000
[>	Sc	45		ug/L		1659814	1659814.026
	Cr	52	11.189	ug/L	2.207	59810	0.038
	Cr	53		ug/L		107350	0.005
	Mn	55	6.035	ug/L	4.051	58951	0.035
	Ni	60	2.198	ug/L	2.710	3564	0.002
[>	Ge	74		ug/L		452012	452012.081
	As	75	5.806	ug/L	12.252	7489	0.016
	Se	77		ug/L		5005	0.002
	Se	82	6.058	ug/L	3.908	778	0.002
	Kr	83		ug/L		126	-0.000
[	Mo	98	0.520	ug/L	6.570	2117	0.006
	Ag	107	1.040	ug/L	0.564	7075	0.021
	Cd	111	1.109	ug/L	5.301	2015	0.006
	Cd	114		ug/L		4911	0.015
[>	In	115		ug/L		324759	324759.293
	Sb	121	3.051	ug/L	2.322	19869	0.059
	Sb	123		ug/L		15742	0.047
[>	Lu	175		ug/L		515428	515428.093
	Tl	205	1.244	ug/L	0.855	25177	0.045
	Pb	208	2.482	ug/L	1.512	83339	0.160
	U	238	0.288	ug/L	2.253	12420	0.023

Sample ID: QC Std 3

Report Date/Time: Thursday, March 04, 2010 21:45:27

Page 1

## 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
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear 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	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
Pb	208Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

---

Sample ID: QC Std 3

Report Date/Time: Thursday, March 04, 2010 21:45:27

Page 2

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9	110.995				
>	Sc	45		104.2			
	Cr	52	111.889				
	Cr	53					
	Mn	55	120.710				
	Ni	60	109.880				
>	Ge	74		102.5			
	As	75	116.127				
	Se	77					
	Se	82	121.169				
	Kr	83					
	Mo	98	103.982				
	Ag	107	104.012				
	Cd	111	110.930				
	Cd	114					
>	In	115		102.8			
	Sb	121	101.692				
	Sb	123					
>	Lu	175		98.4			
	Tl	205	124.368				
	Pb	208	124.088				
	U	238	144.025				

### QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 3	U	238	CRDL is out of limits

### QC Action

QC Action Line: Continue

## ICPMS#5 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Thursday, March 04, 2010 21:48:26

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl 950397.mth

Dataset File: c:\elandata\Dataset\100304\QC Std 4.238

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.095	ug/L	15.373	56	0.000
> Sc	45		ug/L		1515629	1515629.415
Cr	52	2.924	ug/L	1.443	11642	0.010
Cr	53		ug/L		90242	0.000
Mn	55	6.211	ug/L	0.286	55367	0.036
Ni	60	3.405	ug/L	1.019	4979	0.003
> Ge	74		ug/L		415060	415060.373
As	75	-0.243	ug/L	220.093	-142	-0.001
Se	77		ug/L		6566	0.007
Se	82	-0.939	ug/L	13.733	-117	-0.000
Kr	83		ug/L		316	0.000
Mo	98	1839.904	ug/L	2.155	6254030	21.381
Ag	107	0.107	ug/L	10.482	733	0.002
Cd	111	0.743	ug/L	12.313	1227	0.004
Cd	114		ug/L		12641	0.043
> In	115		ug/L		292532	292532.432
Sb	121	0.137	ug/L	13.043	1311	0.003
Sb	123		ug/L		1039	0.002
> Lu	175		ug/L		461834	461833.588
Tl	205	0.004	ug/L	21.788	1706	0.000
Pb	208	0.230	ug/L	1.934	7465	0.015
U	238	-0.010	ug/L	6.633	218	-0.001

Sample ID: QC Std 4

Report Date/Time: Thursday, March 04, 2010 21:50:03

Page 1

## 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
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear 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	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
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			95.1		
	Cr	52	88.597				
	Cr	53					
	Mn	55	107.084				
	Ni	60	102.874				
>	Ge	74			94.1		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Mo	98	91.995				
	Ag	107					
	Cd	111	167.308				
	Cd	114					
>	In	115			92.6		
	Sb	121					
	Sb	123					
>	Lu	175			88.2		
	Tl	205					
	Pb	208	121.591				
	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 5

Sample Date/Time: Thursday, March 04, 2010 21:53:02

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl 950397.mth

Dataset File: c:\elandata\Dataset\100304\QC Std 5.239

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[ Be	9	21.292	ug/L	1.282	8401	0.006
[ > Sc	45		ug/L		1488977	1488976.728
[ Cr	52	23.501	ug/L	0.903	116558	0.081
[ Cr	53		ug/L		105889	0.012
[ Mn	55	27.948	ug/L	2.488	239900	0.160
[ Ni	60	23.508	ug/L	1.548	33071	0.022
[ > Ge	74		ug/L		404962	404962.383
[ As	75	21.711	ug/L	2.039	24706	0.061
[ Se	77		ug/L		8925	0.013
[ Se	82	21.113	ug/L	3.871	2444	0.006
[ Kr	83		ug/L		332	0.001
[ Mo	98	1814.098	ug/L	0.899	6135881	21.081
[ Ag	107	19.957	ug/L	2.060	120055	0.412
[ Cd	111	20.481	ug/L	1.982	32780	0.113
[ Cd	114		ug/L		88709	0.305
[ > In	115		ug/L		291069	291068.507
[ Sb	121	21.677	ug/L	1.194	123282	0.422
[ Sb	123		ug/L		95843	0.328
[ > Lu	175		ug/L		464364	464363.883
[ Tl	205	21.797	ug/L	1.972	370191	0.794
[ Pb	208	21.916	ug/L	0.622	658305	1.416
[ U	238	24.757	ug/L	0.328	912495	1.964

Sample ID: QC Std 5

Report Date/Time: Thursday, March 04, 2010 21:54:39

Page 1

## 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
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear 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	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
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	106.460				
>	Sc	45		93.5			
	Cr	52	100.863				
	Cr	53					
	Mn	55	108.328				
	Ni	60	100.851				
>	Ge	74		91.8			
	As	75	108.555				
	Se	77					
	Se	82	105.565				
	Kr	83					
	Mo	98	90.705				
	Ag	107	99.787				
	Cd	111	100.181				
	Cd	114					
>	In	115		92.1			
	Sb	121	108.386				
	Sb	123					
>	Lu	175		88.6			
	Tl	205	108.987				
	Pb	208	108.553				
	U	238	123.787				

### 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: Thursday, March 04, 2010 21:57:38

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl 950397.mth

Dataset File: c:\elandata\Dataset\100304\QC Std 6.240

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	53.068	ug/L	0.569	23029	0.014
>	Sc	45		ug/L		1639629	1639629.249
	Cr	52	50.327	ug/L	1.914	279236	0.173
	Cr	53		ug/L		140143	0.026
	Mn	55	51.655	ug/L	1.847	487030	0.296
	Ni	60	50.117	ug/L	0.487	77501	0.047
>	Ge	74		ug/L		451372	451371.587
	As	75	49.772	ug/L	0.852	62928	0.139
	Se	77		ug/L		10549	0.014
	Se	82	51.202	ug/L	2.204	6614	0.015
	Kr	83		ug/L		136	-0.000
	Mo	98	49.616	ug/L	2.510	179944	0.577
	Ag	107	51.048	ug/L	0.370	328933	1.054
	Cd	111	51.096	ug/L	2.334	87567	0.281
	Cd	114		ug/L		209198	0.671
>	In	115		ug/L		311876	311875.943
	Sb	121	52.940	ug/L	3.205	321712	1.030
	Sb	123		ug/L		250298	0.801
>	Lu	175		ug/L		521224	521224.140
	Tl	205	51.631	ug/L	2.081	981396	1.880
	Pb	208	52.580	ug/L	3.100	1771257	3.398
	U	238	51.759	ug/L	1.467	2140238	4.106

Sample ID: QC Std 6

Report Date/Time: Thursday, March 04, 2010 21:59:16

Page 1

## 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
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear 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	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
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	106.135				
>	Sc	45		102.9			
	Cr	52	100.653				
	Cr	53					
	Mn	55	103.310				
	Ni	60	100.233				
>	Ge	74		102.4			
	As	75	99.545				
	Se	77					
	Se	82	102.405				
	Kr	83					
	Mo	98	99.231				
	Ag	107	102.096				
	Cd	111	102.192				
	Cd	114					
>	In	115		98.7			
	Sb	121	105.879				
	Sb	123					
>	Lu	175		99.5			
	Tl	205	103.261				
	Pb	208	105.160				
	U	238	103.519				

### 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: Thursday, March 04, 2010 22:02:16

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl 950397.mth

Dataset File: c:\elandata\Dataset\100304\QC Std 7.241

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	-0.002	ug/L	890.839	19	-0.000
> Sc	45		ug/L		1630290	1630290.144
Cr	52	0.256	ug/L	18.978	-2400	0.001
Cr	53		ug/L		106597	0.006
Mn	55	-0.026	ug/L	13.046	1260	-0.000
Ni	60	0.011	ug/L	37.983	144	0.000
> Ge	74		ug/L		459404	459404.217
As	75	0.076	ug/L	174.045	255	0.000
Se	77		ug/L		5713	0.004
Se	82	0.262	ug/L	108.493	28	0.000
Kr	83		ug/L		118	-0.000
Mo	98	0.052	ug/L	8.777	352	0.001
Ag	107	0.000	ug/L	707.187	100	0.000
Cd	111	0.002	ug/L	211.482	39	0.000
Cd	114		ug/L		88	0.000
> In	115		ug/L		326449	326449.469
Sb	121	0.073	ug/L	5.279	1056	0.001
Sb	123		ug/L		855	0.001
> Lu	175		ug/L		537625	537625.392
Tl	205	0.213	ug/L	10.350	6092	0.008
Pb	208	0.001	ug/L	163.402	738	0.000
U	238	0.003	ug/L	15.218	783	0.000

Sample ID: QC Std 7

Report Date/Time: Thursday, March 04, 2010 22:03:55

Page 1



## 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
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear 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	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
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					102.3
	Cr	52					
	Cr	53					
	Mn	55					
	Ni	60					
>	Ge	74					104.2
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					103.3
	Sb	121					
	Sb	123					
>	Lu	175					102.6
	Tl	205					
	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

## ICPMS#5 - Summary Report

Sample ID: 1202036698

Sample Date/Time: Thursday, March 04, 2010 22:06:53

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 950397|1|baj

Method File: c:\elandata\Method\lanl 950397.mth

Dataset File: c:\elandata\Dataset\100304\1202036698.242

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.009	ug/L	128.898	23	0.000
> Sc	45		ug/L		1626771	1626770.562
Cr	52	-0.235	ug/L	2.928	-5130	-0.001
Cr	53		ug/L		285969	0.117
Mn	55	0.224	ug/L	2.765	3592	0.001
Ni	60	0.032	ug/L	45.331	177	0.000
> Ge	74		ug/L		443814	443813.937
As	75	-0.331	ug/L	192.869	-260	-0.001
Se	77		ug/L		19377	0.035
Se	82	0.254	ug/L	59.352	26	0.000
Kr	83		ug/L		118	-0.000
Mo	98	0.017	ug/L	32.104	202	0.000
Ag	107	-0.003	ug/L	19.397	69	-0.000
Cd	111	-0.001	ug/L	944.178	31	-0.000
Cd	114		ug/L		30	-0.000
> In	115		ug/L		299098	299098.110
Sb	121	0.054	ug/L	16.483	857	0.001
Sb	123		ug/L		661	0.001
> Lu	175		ug/L		484337	484336.711
Tl	205	0.044	ug/L	11.522	2497	0.002
Pb	208	0.004	ug/L	37.097	770	0.000
U	238	-0.009	ug/L	8.991	265	-0.001

Sample ID: 1202036698

Report Date/Time: Thursday, March 04, 2010 22:08:29

Page 1

## 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
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear 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	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
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			102.1		
	Cr	52					
	Cr	53					
	Mn	55					
	Ni	60					
>	Ge	74			100.7		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			94.7		
	Sb	121					
	Sb	123					
>	Lu	175			92.4		
	Tl	205					
	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

## ICPMS#5 - Summary Report

Sample ID: 1202036703

Sample Date/Time: Thursday, March 04, 2010 22:11:27

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 950397|1|baj

Method File: c:\elandata\Method\lanl 950397.mth

Dataset File: c:\elandata\Dataset\100304\1202036703.243

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	59.833	ug/L	1.351	25525	0.016
> Sc	45		ug/L		1612063	1612063.284
Cr	52	52.858	ug/L	2.137	288515	0.181
Cr	53		ug/L		327856	0.144
Mn	55	56.210	ug/L	1.717	520962	0.322
Ni	60	55.883	ug/L	3.052	84923	0.053
> Ge	74		ug/L		445780	445779.617
As	75	53.997	ug/L	4.048	67409	0.151
Se	77		ug/L		24375	0.046
Se	82	57.171	ug/L	5.169	7292	0.016
Kr	83		ug/L		143	0.000
Mo	98	53.775	ug/L	3.828	187774	0.625
Ag	107	55.606	ug/L	2.768	344970	1.148
Cd	111	54.890	ug/L	3.084	90585	0.302
Cd	114		ug/L		217423	0.724
> In	115		ug/L		300406	300406.173
Sb	121	57.819	ug/L	3.944	338288	1.125
Sb	123		ug/L		263029	0.875
> Lu	175		ug/L		489033	489033.064
Tl	205	53.069	ug/L	2.415	946501	1.932
Pb	208	56.191	ug/L	0.793	1776440	3.632
U	238	55.643	ug/L	0.514	2158926	4.414

Sample ID: 1202036703

Report Date/Time: Thursday, March 04, 2010 22:13:04

Page 1

## 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
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear 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	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
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			101.2		
	Cr	52					
	Cr	53					
	Mn	55					
[	Ni	60					
>	Ge	74			101.1		
	As	75					
	Se	77					
	Se	82					
[	Kr	83					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			95.1		
	Sb	121					
[	Sb	123					
>	Lu	175			93.3		
	Tl	205					
	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



## ICPMS#5 - Summary Report

Sample ID: 1202036699

Sample Date/Time: Thursday, March 04, 2010 22:20:39

Sample Type:

Sample Description: LANL 6020 DUP

Number of Replicates: 3

Batch ID: 950397|1|ba|

Method File: c:\elandata\Method\Vanl 950397.mth

Dataset File: c:\elandata\Dataset\100304\1202036699.245

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	3.807	ug/L	2.619	1762	0.001
> Sc	45		ug/L		1730014	1730014.331
Cr	52	415.617	ug/L	1.312	2462770	1.426
Cr	53		ug/L		588012	0.281
Mn	55	266.523	ug/L	2.185	2644863	1.528
Ni	60	20.551	ug/L	1.000	33612	0.019
> Ge	74		ug/L		405649	405649.286
As	75	16.910	ug/L	1.102	19306	0.047
Se	77		ug/L		16676	0.032
Se	82	-0.301	ug/L	69.479	-41	-0.000
Kr	83		ug/L		346	0.001
Mo	98	43.432	ug/L	4.423	139932	0.505
Ag	107	0.376	ug/L	2.773	2233	0.008
Cd	111	0.732	ug/L	6.092	1145	0.004
Cd	114		ug/L		919	0.003
> In	115		ug/L		277089	277088.921
Sb	121	1.059	ug/L	2.985	6215	0.021
Sb	123		ug/L		4963	0.017
> Lu	175		ug/L		470400	470399.711
Tl	205	0.777	ug/L	2.780	14982	0.028
Pb	208	30.746	ug/L	1.307	935242	1.987
U	238	2.998	ug/L	1.748	112437	0.238

Sample ID: 1202036699

Report Date/Time: Thursday, March 04, 2010 22:22:16

Page 1

## 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
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear 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	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
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		108.6				
	Cr	52						
	Cr	53						
	Mn	55						
[	Ni	60						
>	Ge	74		92.0				
	As	75						
	Se	77						
	Se	82						
[	Kr	83						
	Mo	98						
	Ag	107						
	Cd	111						
	Cd	114						
>	In	115		87.7				
	Sb	121						
[	Sb	123						
>	Lu	175		89.8				
	Tl	205						
	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

## ICPMS#5 - Summary Report

Sample ID: 1202036701

Sample Date/Time: Thursday, March 04, 2010 22:25:15

Sample Type:

Sample Description: LANL 6020 MS

Number of Replicates: 3

Batch ID: 950397[1]baj

Method File: c:\elandata\Method\lanl 950397.mth

Dataset File: c:\elandata\Dataset\100304\1202036701.246

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	56.295	ug/L	0.782	25521	0.015
>	Sc	45		ug/L		1713028	1713027.746
	Cr	52	434.622	ug/L	1.104	2550252	1.491
	Cr	53		ug/L		593346	0.287
	Mn	55	296.648	ug/L	2.331	2914656	1.701
	Ni	60	62.196	ug/L	0.882	100457	0.059
>	Ge	74		ug/L		407728	407728.120
	As	75	92.210	ug/L	0.415	105193	0.258
	Se	77		ug/L		17486	0.034
	Se	82	20.429	ug/L	0.212	2380	0.006
	Kr	83		ug/L		377	0.001
	Mo	98	89.760	ug/L	0.954	290109	1.043
	Ag	107	50.337	ug/L	1.789	289098	1.040
	Cd	111	11.135	ug/L	2.388	17036	0.061
	Cd	114		ug/L		37630	0.135
>	In	115		ug/L		277998	277997.759
	Sb	121	177.609	ug/L	0.611	961141	3.456
	Sb	123		ug/L		760352	2.734
>	Lu	175		ug/L		476994	476994.355
	Tl	205	88.991	ug/L	1.166	1547184	3.240
	Pb	208	67.041	ug/L	1.519	2067113	4.333
	U	238	54.712	ug/L	1.820	2070500	4.340

Sample ID: 1202036701

Report Date/Time: Thursday, March 04, 2010 22:26:53

Page 1

## 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
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear 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	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
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		107.5			
	Cr	52					
	Cr	53					
	Mn	55					
L	Ni	60					
[>	Ge	74		92.5			
	As	75					
	Se	77					
	Se	82					
L	Kr	83					
[	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		88.0			
	Sb	121					
L	Sb	123					
[>	Lu	175		91.0			
	Tl	205					
	Pb	208					
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

## ICPMS#5 - Summary Report

Sample ID: 1202036702

Sample Date/Time: Thursday, March 04, 2010 22:29:52

Sample Type:

Sample Description: LANL 6020 MSD

Number of Replicates: 3

Batch ID: 950397|1|baj

Method File: c:\elandata\Method\lanl 950397.mth

Dataset File: c:\elandata\Dataset\100304\1202036702.247

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	55.405	ug/L	2.179	25165	0.015
> Sc	45		ug/L		1716227	1716226.679
Cr	52	441.783	ug/L	1.321	2597316	1.516
Cr	53		ug/L		596439	0.288
Mn	55	304.519	ug/L	0.374	2997758	1.746
Ni	60	63.194	ug/L	1.358	102252	0.060
> Ge	74		ug/L		411363	411363.094
As	75	92.742	ug/L	1.021	106755	0.259
Se	77		ug/L		16993	0.032
Se	82	20.215	ug/L	1.820	2376	0.006
Kr	83		ug/L		401	0.001
> Mo	98	91.382	ug/L	3.604	296914	1.062
Ag	107	50.636	ug/L	0.786	292463	1.046
Cd	111	11.109	ug/L	0.721	17094	0.061
Cd	114		ug/L		37473	0.134
> In	115		ug/L		279577	279576.719
Sb	121	176.688	ug/L	2.709	961353	3.438
Sb	123		ug/L		754575	2.698
> Lu	175		ug/L		475328	475328.117
Tl	205	90.352	ug/L	2.860	1564765	3.289
Pb	208	67.879	ug/L	1.643	2085407	4.387
U	238	54.633	ug/L	1.936	2060201	4.334

Sample ID: 1202036702

Report Date/Time: Thursday, March 04, 2010 22:31:30

Page 1

## 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
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear 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	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
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		107.7			
	Cr	52					
	Cr	53					
	Mn	55					
	Ni	60					
>	Ge	74		93.3			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		88.5			
	Sb	121					
	Sb	123					
>	Lu	175		90.7			
	Tl	205					
	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

## ICPMS#5 - Summary Report

Sample ID: 1202036700

Sample Date/Time: Thursday, March 04, 2010 22:34:28

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 950397[5]baj

Method File: c:\elandata\Method\lanl 950397.mth

Dataset File: c:\elandata\Dataset\100304\1202036700.248

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[ Be	9	0.838	ug/L	7.434	360	0.000
> Sc	45		ug/L		1542018	1542017.992
Cr	52	101.989	ug/L	1.773	535897	0.350
Cr	53		ug/L		198114	0.069
Mn	55	65.215	ug/L	0.902	577976	0.374
[ Ni	60	4.483	ug/L	1.300	6629	0.004
> Ge	74		ug/L		419126	419126.137
As	75	2.998	ug/L	5.455	3654	0.008
Se	77		ug/L		7405	0.009
Se	82	0.107	ug/L	90.619	7	0.000
[ Kr	83		ug/L		159	0.000
> Mo	98	8.088	ug/L	1.203	27793	0.094
Ag	107	0.055	ug/L	5.471	426	0.001
Cd	111	0.129	ug/L	8.864	242	0.001
Cd	114		ug/L		222	0.001
> In	115		ug/L		294224	294223.614
Sb	121	0.251	ug/L	1.751	1975	0.005
[ Sb	123		ug/L		1565	0.004
> Lu	175		ug/L		515041	515041.207
Tl	205	1.116	ug/L	6.343	22746	0.041
Pb	208	5.960	ug/L	0.675	199064	0.385
[ U	238	0.552	ug/L	1.115	23201	0.044

Sample ID: 1202036700

Report Date/Time: Thursday, March 04, 2010 22:36:05

Page 1

## 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
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear 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	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
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		96.8			
	Cr	52					
	Cr	53					
	Mn	55					
	Ni	60					
>	Ge	74		95.1			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
[	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		93.1			
	Sb	121					
	Sb	123					
>	Lu	175		98.3			
	Tl	205					
	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

## ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Thursday, March 04, 2010 22:43:39

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl 950397.mth

Dataset File: c:\elandata\Dataset\100304\QC Std 8.250

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	58.613	ug/L	1.022	23934	0.015
> Sc	45		ug/L		1542989	1542989.231
Cr	52	49.964	ug/L	1.638	260854	0.171
Cr	53		ug/L		141472	0.032
Mn	55	51.946	ug/L	1.629	460906	0.298
Ni	60	50.712	ug/L	1.307	73793	0.048
> Ge	74		ug/L		425185	425184.770
As	75	49.756	ug/L	3.226	59251	0.139
Se	77		ug/L		10697	0.016
Se	82	51.254	ug/L	0.187	6237	0.015
Kr	83		ug/L		140	0.000
Mo	98	49.388	ug/L	0.835	168520	0.574
Ag	107	49.963	ug/L	1.789	302791	1.032
Cd	111	50.567	ug/L	3.995	81563	0.278
Cd	114		ug/L		200368	0.683
> In	115		ug/L		293390	293389.726
Sb	121	53.807	ug/L	1.810	307639	1.047
Sb	123		ug/L		237354	0.808
> Lu	175		ug/L		504460	504460.030
Tl	205	52.365	ug/L	1.286	963412	1.906
Pb	208	52.951	ug/L	1.769	1726681	3.422
U	238	53.321	ug/L	0.955	2134057	4.229

Sample ID: QC Std 8

Report Date/Time: Thursday, March 04, 2010 22:45:17

Page 1

## 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
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear 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	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
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 %	Duplicate Rel. % Difference
[	Be	9	117.226				
>	Sc	45			96.8		
	Cr	52	99.927				
	Cr	53					
	Mn	55	103.892				
	Ni	60	101.423				
>	Ge	74			96.4		
	As	75	99.512				
	Se	77					
	Se	82	102.509				
	Kr	83					
	Mo	98	98.776				
	Ag	107	99.925				
	Cd	111	101.134				
	Cd	114					
>	In	115			92.9		
	Sb	121	107.614				
	Sb	123					
>	Lu	175			96.3		
	Tl	205	104.729				
	Pb	208	105.902				
	U	238	106.643				

### QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 8	Be		9CCV is out of limits (+/- 10%)

### QC Action

QC Action Line: Continue

## ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Thursday, March 04, 2010 22:48:17

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl 950397.mth

Dataset File: c:\elandata\Dataset\100304\QC Std 9.251

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.009	ug/L	86.345	22	0.000
> Sc	45		ug/L		1520131	1520130.647
Cr	52	0.352	ug/L	9.368	-1736	0.001
Cr	53		ug/L		98378	0.005
Mn	55	-0.013	ug/L	18.419	1292	-0.000
Ni	60	0.009	ug/L	45.995	132	0.000
> Ge	74		ug/L		421290	421290.264
As	75	-0.111	ug/L	306.351	15	-0.000
Se	77		ug/L		5233	0.004
Se	82	-0.000	ug/L	26434.986	-6	-0.000
Kr	83		ug/L		117	-0.000
Mo	98	0.023	ug/L	20.567	225	0.000
Ag	107	-0.001	ug/L	271.471	87	-0.000
Cd	111	0.000	ug/L	495593.244	33	0.000
Cd	114		ug/L		76	-0.000
> In	115		ug/L		302083	302082.999
Sb	121	0.086	ug/L	9.196	1056	0.002
Sb	123		ug/L		824	0.001
> Lu	175		ug/L		520458	520458.418
Ti	205	0.341	ug/L	6.250	8317	0.012
Pb	208	-0.001	ug/L	164.295	665	-0.000
U	238	0.003	ug/L	14.697	761	0.000

Sample ID: QC Std 9

Report Date/Time: Thursday, March 04, 2010 22:49:55

Page 1



## 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
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear 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	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
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			95.4		
	Cr	52					
	Cr	53					
	Mn	55					
[	Ni	60					
>	Ge	74			95.6		
	As	75					
	Se	77					
	Se	82					
[	Kr	83					
[	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			95.6		
	Sb	121					
[	Sb	123					
>	Lu	175			99.3		
	Tl	205					
	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

## ICPMS#5 - Summary Report

Sample ID: 246436001

Sample Date/Time: Thursday, March 04, 2010 23:20:33

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 950397[1]baj

Method File: c:\elandata\Method\lanl 950397.mth

Dataset File: c:\elandata\Dataset\100304\246436001.258

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	-0.012	ug/L	63.676	14	-0.000
>	Sc	45		ug/L		1549917	1549916.615
	Cr	52	1.019	ug/L	15.646	1776	0.003
	Cr	53		ug/L		301061	0.135
	Mn	55	4.941	ug/L	1.192	45340	0.028
[	Ni	60	0.214	ug/L	6.428	434	0.000
>	Ge	74		ug/L		413922	413922.175
	As	75	-0.218	ug/L	423.176	-111	-0.001
	Se	77		ug/L		23478	0.048
	Se	82	0.185	ug/L	27.963	16	0.000
[	Kr	83		ug/L		103	-0.000
[	Mo	98	0.036	ug/L	2.481	258	0.000
	Ag	107	-0.004	ug/L	42.494	61	-0.000
	Cd	111	0.527	ug/L	1.578	862	0.003
	Cd	114		ug/L		2126	0.007
>	In	115		ug/L		286888	286887.631
	Sb	121	-0.058	ug/L	5.458	199	-0.001
[	Sb	123		ug/L		162	-0.001
>	Lu	175		ug/L		487450	487449.791
	Tl	205	-0.024	ug/L	28.976	1313	-0.001
	Pb	208	0.047	ug/L	1.802	2135	0.003
[	U	238	0.004	ug/L	9.824	780	0.000

Sample ID: 246436001

Report Date/Time: Thursday, March 04, 2010 23:22:10

Page 1

## 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
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear 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	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
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			97.3			
	Cr	52						
	Cr	53						
	Mn	55						
	Ni	60						
[>	Ge	74			93.9			
	As	75						
	Se	77						
	Se	82						
	Kr	83						
[	Mo	98						
	Ag	107						
	Cd	111						
	Cd	114						
>	In	115			90.8			
	Sb	121						
	Sb	123						
[>	Lu	175			93.0			
	Tl	205						
	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

## ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, March 04, 2010 23:25:10

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl 950397.mth

Dataset File: c:\elandata\Dataset\100304\QC Std 6.259

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	55.761	ug/L	0.407	23143	0.015
>	Sc	45		ug/L		1568134	1568133.861
	Cr	52	49.891	ug/L	0.273	264736	0.171
	Cr	53		ug/L		149424	0.036
	Mn	55	51.630	ug/L	1.462	465557	0.296
	Ni	60	49.888	ug/L	1.322	73781	0.047
[>	Ge	74		ug/L		431195	431194.676
	As	75	48.432	ug/L	0.296	58503	0.135
	Se	77		ug/L		12453	0.020
	Se	82	51.384	ug/L	2.116	6341	0.015
	Kr	83		ug/L		121	-0.000
[	Mo	98	47.710	ug/L	0.926	167273	0.554
	Ag	107	48.736	ug/L	2.392	303467	1.007
	Cd	111	49.605	ug/L	1.417	82175	0.273
	Cd	114		ug/L		198673	0.659
>	In	115		ug/L		301432	301432.224
	Sb	121	51.481	ug/L	0.143	302465	1.002
	Sb	123		ug/L		234246	0.776
[>	Lu	175		ug/L		513307	513306.924
	Tl	205	49.855	ug/L	0.292	933536	1.815
	Pb	208	51.792	ug/L	1.673	1718596	3.347
	U	238	52.511	ug/L	0.709	2138531	4.165

Sample ID: QC Std 6

Report Date/Time: Thursday, March 04, 2010 23:26:47

Page 1

## 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
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear 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	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
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	111.522				
>	Sc	45			98.4		
	Cr	52	99.783				
	Cr	53					
	Mn	55	103.260				
	Ni	60	99.777				
>	Ge	74			97.8		
	As	75	96.865				
	Se	77					
	Se	82	102.768				
	Kr	83					
	Mo	98	95.419				
	Ag	107	97.472				
	Cd	111	99.211				
	Cd	114					
>	In	115			95.4		
	Sb	121	102.961				
	Sb	123					
>	Lu	175			98.0		
	Tl	205	99.710				
	Pb	208	103.584				
	U	238	105.021				

### QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Be		9CCV is out of limits (+/- 10%)

### QC Action

QC Action Line: Continue



## ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, March 04, 2010 23:29:47

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl 950397.mth

Dataset File: c:\elandata\Dataset\100304\QC Std 7.260

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	-0.000	ug/L	2234.388	18	-0.000
> Sc	45		ug/L		1550612	1550612.422
Cr	52	0.572	ug/L	6.802	-600	0.002
Cr	53		ug/L		107241	0.010
Mn	55	-0.019	ug/L	34.538	1267	-0.000
Ni	60	0.012	ug/L	76.828	139	0.000
> Ge	74		ug/L		431628	431627.629
As	75	-0.025	ug/L	1999.238	124	-0.000
Se	77		ug/L		6832	0.007
Se	82	0.091	ug/L	80.588	5	0.000
Kr	83		ug/L		135	-0.000
> Mo	98	0.020	ug/L	35.330	218	0.000
Ag	107	0.001	ug/L	353.907	96	0.000
Cd	111	0.002	ug/L	139.418	37	0.000
Cd	114		ug/L		81	0.000
> In	115		ug/L		305790	305790.107
Sb	121	0.077	ug/L	8.941	1013	0.001
Sb	123		ug/L		806	0.001
> Lu	175		ug/L		521279	521278.948
Ti	205	0.343	ug/L	11.132	8365	0.012
Pb	208	-0.000	ug/L	490.132	680	-0.000
U	238	0.004	ug/L	16.058	814	0.000

Sample ID: QC Std 7

Report Date/Time: Thursday, March 04, 2010 23:31:26

Page 1

## 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
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear 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	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999
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			97.3		
	Cr	52					
	Cr	53					
	Mn	55					
	Ni	60					
>	Ge	74			97.9		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			96.8		
	Sb	121					
	Sb	123					
>	Lu	175			99.5		
	Tl	205					
	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

## ICPMS#5 - Summary Report

Sample ID: Blank

Sample Date/Time: Friday, March 05, 2010 07:07:31

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: c:\elandata\Dataset\100304\Blank.376

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		483993	
[ U	238		ug/L		842	

### 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
------------------	---------	------	-----------------------

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: Blank

Report Date/Time: Friday, March 05, 2010 07:07:43

Page 1

## ICPMS#5 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Friday, March 05, 2010 07:09:10

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: c:\elandata\Dataset\100304\Standard 1.377

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		476537	476536.513
[ U	238	10.000	ug/L	2.555	456946	0.957

### Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

### QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[> Lu	175					
[ U	238					

### QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: Standard 1

Report Date/Time: Friday, March 05, 2010 07:09:20

Page 1

## ICPMS#5 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Friday, March 05, 2010 07:10:47

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: c:\elandata\Dataset\100304\Standard 2.378

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		467713	467713.462
[ U	238	99.803	ug/L	2.139	3733653	7.982

### 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					
[ 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 1

Sample Date/Time: Friday, March 05, 2010 07:12:25

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only.mth

Dataset File: c:\elandata\Dataset\100304\QC Std 1.379

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		474210	474209.627
[ U	238	54.721	ug/L	0.428	2076139	4.376

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	0.9998

### QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[> Lu	175			98.0			
[ U	238	109.442					

### 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: Friday, March 05, 2010 07:12:34

Page 1

## ICPMS#5 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Friday, March 05, 2010 07:14:04

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only.mth

Dataset File: c:\elandata\Dataset\100304\QC Std 2.380

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		478993	478993.195
[	U	238	0.010	ug/L	8.514	1235	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		99.0			
[	U	238					

### QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 2

Report Date/Time: Friday, March 05, 2010 07:14:16

Page 1



## ICPMS#5 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Friday, March 05, 2010 07:15:48

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only.mth

Dataset File: c:\elandata\Dataset\100304\QC Std 3.381

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		477035	477034.650
[ U	238	0.230	ug/L	1.869	9597	0.018

### 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			98.6		
[ U	238	114.914				

### 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 3

Report Date/Time: Friday, March 05, 2010 07:16:02

Page 1

## ICPMS#5 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Friday, March 05, 2010 07:17:30

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only.mth

Dataset File: c:\elandata\Dataset\100304\QC Std 4.382

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		424983	424983.304
[ U	238	-0.012	ug/L	3.887	318	-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 % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[> Lu	175		87.8			
[ 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 4

Report Date/Time: Friday, March 05, 2010 07:17:40

Page 1

## ICPMS#5 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Friday, March 05, 2010 07:19:13

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: c:\elandata\Dataset\100304\QC Std 5.383

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		477203	477202.971
[	U	238	22.926	ug/L	1.456	875794	1.834

### 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			98.6		
[	U	238	114.631				

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 5

Report Date/Time: Friday, March 05, 2010 07:19:27

Page 1

## ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, March 05, 2010 07:20:56

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: c:\elandata\Dataset\100304\QC Std 6.384

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		475737	475737.149
[ U	238	54.112	ug/L	1.214	2059540	4.328

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	0.9998

### QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution %	Dil Duplicate	Rel. % Difference
[> Lu	175		98.3				
[ U	238	108.224					

### 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, March 05, 2010 07:21:07

Page 1

## ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, March 05, 2010 07:22:37

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: c:\elandata\Dataset\100304\QC Std 7.385

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		483880	483880.276
[ U	238	0.010	ug/L	6.226	1217	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		100.0			
[ 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: Friday, March 05, 2010 07:22:49

Page 1

## ICPMS#5 - Summary Report

Sample ID: 1202036698

Sample Date/Time: Friday, March 05, 2010 07:24:17

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 950397|1|baj

Method File: c:\elandata\Method\lu only.mth

Dataset File: c:\elandata\Dataset\100304\1202036698.386

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		452892	452891.928
[ U	238	-0.013	ug/L	3.127	331	-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		93.6			
[ 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: 1202036698

Report Date/Time: Friday, March 05, 2010 07:24:27

Page 1

## ICPMS#5 - Summary Report

Sample ID: 1202036703

Sample Date/Time: Friday, March 05, 2010 07:25:55

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 950397|1|baj

Method File: c:\elandata\Method\only.mth

Dataset File: c:\elandata\Dataset\100304\1202036703.387

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		444473	444473.023
[ U	238	57.099	ug/L	2.160	2030179	4.567

### 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		91.8			
[ 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: 1202036703

Report Date/Time: Friday, March 05, 2010 07:26:05

Page 1

## ICPMS#5 - Summary Report

Sample ID: 1202036699

Sample Date/Time: Friday, March 05, 2010 07:29:13

Sample Type:

Sample Description: LANL 6020 DUP

Number of Replicates: 3

Batch ID: 950397[1]baj

Method File: c:\elandata\Method\only.mth

Dataset File: c:\elandata\Dataset\100304\1202036699.389

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		434310	434310.273
[	U	238	2.968 ug/L	1.527	103833	0.237

### 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 % Di	Duplicate Rel. % Difference
[>	Lu	175		89.7		
[	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: 1202036699

Report Date/Time: Friday, March 05, 2010 07:29:24

Page 1



## ICPMS#5 - Summary Report

Sample ID: 1202036701

Sample Date/Time: Friday, March 05, 2010 07:30:53

Sample Type:

Sample Description: LANL 6020 MS

Number of Replicates: 3

Batch ID: 950397[1]baj

Method File: c:\elandata\Method\only.mth

Dataset File: c:\elandata\Dataset\100304\1202036701.390

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		442194	442193.508
[ U	238	55.857	ug/L	0.602	1976212	4.467

### 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
------------------	---------	------	-----------------------

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202036701

Report Date/Time: Friday, March 05, 2010 07:31:04

Page 1

## ICPMS#5 - Summary Report

Sample ID: 1202036702

Sample Date/Time: Friday, March 05, 2010 07:32:33

Sample Type:

Sample Description: LANL 6020 MSD

Number of Replicates: 3

Batch ID: 950397|1|baj

Method File: c:\elandata\Method\only.mth

Dataset File: c:\elandata\Dataset\100304\1202036702.391

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		450088	450088.491
[ U	238	55.080	ug/L	1.497	1983417	4.405

### 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 % Diff	Duplicate Rel. % Difference
[> Lu	175		93.0			
[ 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: 1202036700

Sample Date/Time: Friday, March 05, 2010 07:34:13

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 950397[5]baj

Method File: c:\elandata\Method\only.mth

Dataset File: c:\elandata\Dataset\100304\1202036700.392

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		468207	468207.096
[ U	238	0.553	ug/L	1.919	21513	0.044

### 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			96.7		
[ 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: 1202036700

Report Date/Time: Friday, March 05, 2010 07:34:22

Page 1

## ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Friday, March 05, 2010 07:37:30

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: c:\elandata\Dataset\100304\QC Std 8.394

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		465448	465447.523
[ U	238	53.175	ug/L	0.258	1980263	4.253

### 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					96.2					
[ U	238		106.351								

### QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 8

Report Date/Time: Friday, March 05, 2010 07:37:41

Page 1

## ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Friday, March 05, 2010 07:39:11

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: c:\elandata\Dataset\100304\QC Std 9.395

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		473988	473987.853
[	U	238	0.012	ug/L	11.350	1284	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		97.9				
[	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: Friday, March 05, 2010 07:39:23

Page 1

## ICPMS#5 - Summary Report

Sample ID: 246436001

Sample Date/Time: Friday, March 05, 2010 07:50:50

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 95039711|baj

Method File: c:\elandata\Method\only.mth

Dataset File: c:\elandata\Dataset\100304\246436001.402

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		458921	458921.131
[ U	238	-0.002	ug/L	33.097	727	-0.000

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	0.9998

### QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[> Lu	175			94.8		
[ 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: 246436001

Report Date/Time: Friday, March 05, 2010 07:51:01

Page 1

## ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, March 05, 2010 07:52:30

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only.mth

Dataset File: c:\elandata\Dataset\100304\QC Std 6.403

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		472642	472642.361
[	U	238	52.477	ug/L	2.297	1983903	4.197

### 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			97.7		
[	U	238	104.953				

### 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: Friday, March 05, 2010 07:52:41

Page 1

## ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, March 05, 2010 07:54:11

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: c:\elandata\Dataset\100304\QC Std 7.404

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		473446	473445.702
[ U	238	0.014	ug/L	7.640	1363	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		97.8			
[ U	238					

### QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

### QC Action

QC Action Line: No QC out of limits detected



## ICPMS #5 Daily Performance Report

### Sample ID: Sample

Sample Date/Time: Friday, March 05, 2010 11:38:19

### Sample Description:

Method File: c:\elandata\Method\Daily2.mth

Dataset File: c:\elandata\Dataset\default\Sample.654

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	4773.2	4773.197	56.497	1.2
Mg	24.0	45226.5	45226.484	509.264	1.1
Co	58.9	86509.8	86509.772	944.916	1.1
Rh	102.9	171097.2	171097.213	2027.809	1.2
In	114.9	231937.5	231937.492	1018.801	0.4
Pb	208.0	242786.6	242786.580	1677.897	0.7
[> Ba	137.9	229922.6	229922.569	1213.395	0.5
[ Ba++	69.0	3468.0	0.015	0.000	2.0
[> Ce	139.9	283333.4	283333.401	1569.075	0.6
[ CeO	155.9	6244.1	0.022	0.000	2.3
Bkgd	220.0	17.7	17.700	3.546	20.0

### Current Optimization File Data

Current Value	Description
0.87	Nebulizer Gas Flow
6.50	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	17	6.5	5210.3
Co	59	17	7.0	84066.3
In	115	17	7.8	229040.1

## ICPMS #5 Instrument Tuning Report

File Name: default2.tun  
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	579	2050	0.667
Be	9.0	9.0	2059	2075	0.619
Mg	24.0	23.9	5681	2080	0.654
Mg	25.0	25.0	5921	2080	0.624
Mg	26.0	26.0	6177	2080	0.632
Co	58.9	58.9	14187	2110	0.620
Rh	102.9	102.9	24877	2160	0.633
In	114.9	114.9	27792	2180	0.645
Ce	139.9	139.9	33875	2200	0.632
Pb	206.0	206.0	49948	2295	0.606
Pb	207.0	207.0	50159	2240	0.635
Pb	208.0	208.0	50451	2265	0.700
U	238.1	238.1	57730	2275	0.727

## ICPMS#5 - Summary Report

Sample ID: Blank

Sample Date/Time: Friday, March 05, 2010 12:23:36

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be cr and mn.mth

Dataset File: C:\elandata\Dataset\100305\Blank.014

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9		ug/L		14	
>	Sc	45		ug/L		1394925	
	Cr	52		ug/L		706	
	Cr	53		ug/L		112865	
	Mn	55		ug/L		1275	

---

Sample ID: Blank

Report Date/Time: Friday, March 05, 2010 12:23:57

Page 1

## Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	
Sc	45Linear Thru Zero	
Cr	52Linear Thru Zero	
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	

### 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					

### QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Friday, March 05, 2010 12:25:24

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be cr and mn.mth

Dataset File: C:\elandata\Dataset\100305\Standard 1.015

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	10.000	ug/L	6.646	4946	0.004
>	Sc	45		ug/L		1397578	1397578.405
	Cr	52	10.000	ug/L	7.059	62631	0.044
	Cr	53		ug/L		116769	0.003
L	Mn	55	10.000	ug/L	11.580	102024	0.072

---

Sample ID: Standard 1

Report Date/Time: Friday, March 05, 2010 12:25:43

Page 1

## 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

### 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				

### QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

### QC Action

QC Action Line: No QC out of limits detected



## ICPMS#5 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Friday, March 05, 2010 12:27:10

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be cr and mn.mth

Dataset File: C:\elandata\Dataset\100305\Standard 2.016

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[ Be	9	100.013	ug/L	5.855	48257	0.036
> Sc	45		ug/L		1348480	1348480.007
Cr	52	99.965	ug/L	9.818	576493	0.428
Cr	53		ug/L		171155	0.047
[ Mn	55	99.959	ug/L	10.896	934523	0.695

---

Sample ID: Standard 2

Report Date/Time: Friday, March 05, 2010 12:27:29

Page 1

## 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

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution %	Duplicate Rel. % Difference
[	Be	9					
>	Sc	45					
	Cr	52					
	Cr	53					
L	Mn	55					

### 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 1

Sample Date/Time: Friday, March 05, 2010 12:28:57

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be cr and mn.mth

Dataset File: C:\elandata\Dataset\100305\QC Std 1.017

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	52.370	ug/L	4.670	25546	0.019
>	Sc	45		ug/L		1361344	1361344.149
	Cr	52	52.928	ug/L	7.984	308870	0.227
	Cr	53		ug/L		139054	0.021
[	Mn	55	54.123	ug/L	8.981	512100	0.376

---

Sample ID: QC Std 1

Report Date/Time: Friday, March 05, 2010 12:29:16

Page 1

## 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

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9	104.741				
>	Sc	45		97.6			
	Cr	52	105.856				
	Cr	53					
[	Mn	55	108.245				

### 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 2

Sample Date/Time: Friday, March 05, 2010 12:30:46

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be cr and mn.mth

Dataset File: C:\elandata\Dataset\100305\QC Std 2.018

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.016	ug/L	45.793	22	0.000
>	Sc	45		ug/L		1378891	1378890.715
	Cr	52	-0.128	ug/L	57.131	-51	-0.001
	Cr	53		ug/L		107087	-0.003
L	Mn	55	0.005	ug/L	118.906	1303	0.000

Sample ID: QC Std 2

Report Date/Time: Friday, March 05, 2010 12:31:08

Page 1

## 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



## QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution %	Duplicate Rel. % Difference
[	Be	9					
>	Sc	45		98.9			
	Cr	52					
	Cr	53					
[	Mn	55					

## QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

## QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Friday, March 05, 2010 12:32:36

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be cr and mn.mth

Dataset File: C:\elandata\Dataset\100305\QC Std 3.019

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.580	ug/L	13.502	302	0.000
>	Sc	45		ug/L		1390773	1390773.445
	Cr	52	11.660	ug/L	5.317	70139	0.050
	Cr	53		ug/L		118075	0.004
[	Mn	55	6.123	ug/L	12.339	60161	0.043

---

Sample ID: QC Std 3

Report Date/Time: Friday, March 05, 2010 12:32:55

Page 1

## 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

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[	Be	9	115.977				
>	Sc	45		99.7			
	Cr	52	116.600				
	Cr	53					
[	Mn	55	122.451				

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Friday, March 05, 2010 12:34:24

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be cr and mn.mth

Dataset File: C:\elandata\Dataset\100305\QC Std 4.020

### Concentration Results

	Analyte	Mass	Conc.	Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[ >     	Be	9	0.105	ug/L	26.046		58	0.000
	Sc	45		ug/L			1220214	1220214.308
	Cr	52	2.604	ug/L	5.218		14244	0.011
	Cr	53		ug/L			83227	-0.012
	Mn	55	6.101	ug/L	11.115		52662	0.042

---

Sample ID: QC Std 4

Report Date/Time: Friday, March 05, 2010 12:34:43

Page 1

## 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

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[	Be	9					
>	Sc	45			87.5		
	Cr	52	78.905				
	Cr	53					
	Mn	55	105.191				

### 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: Friday, March 05, 2010 12:36:12

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be cr and mn.mth

Dataset File: C:\elandata\Dataset\100305\QC Std 5.021

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	19.984	ug/L	4.285	8505	0.007
>	Sc	45		ug/L		1186642	1186641.638
	Cr	52	24.026	ug/L	5.732	122770	0.103
	Cr	53		ug/L		93123	-0.002
[	Mn	55	28.211	ug/L	8.895	233377	0.196

---

Sample ID: QC Std 5

Report Date/Time: Friday, March 05, 2010 12:36:32

Page 1



## 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

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[	Be	9	99.918					
>	Sc	45		85.1				
	Cr	52	103.118					
	Cr	53						
L	Mn	55	109.347					

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, March 05, 2010 12:38:01

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be cr and mn.mth

Dataset File: C:\elandata\Dataset\100305\QC Std 6.022

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	52.811	ug/L	3.656	24742	0.019
>	Sc	45		ug/L		1307992	1307992.091
	Cr	52	52.789	ug/L	7.501	296119	0.226
	Cr	53		ug/L		130364	0.019
L	Mn	55	55.210	ug/L	9.492	501546	0.384

Sample ID: QC Std 6

Report Date/Time: Friday, March 05, 2010 12:38:21

Page 1

## 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

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[	Be	9	105.623				
>	Sc	45		93.8			
	Cr	52	105.577				
	Cr	53					
L	Mn	55	110.421				

### QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Mn	55	CCV is out of limits (+/- 10%)

### QC Action

QC Action Line: Continue

## ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, March 05, 2010 12:39:52

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be cr and mn.mth

Dataset File: C:\elandata\Dataset\100305\QC Std 7.023

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.012	ug/L	35.109	20	0.000
>	Sc	45		ug/L		1341970	1341970.328
	Cr	52	-0.257	ug/L	57.550	-791	-0.001
	Cr	53		ug/L		101465	-0.005
[	Mn	55	0.003	ug/L	224.889	1250	0.000

---

Sample ID: QC Std 7

Report Date/Time: Friday, March 05, 2010 12:40:13

Page 1

## 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

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution %	Duplicate Rel. % Difference
[	Be	9					
>	Sc	45			96.2		
	Cr	52					
	Cr	53					
[	Mn	55					

### 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 10

Sample Date/Time: Friday, March 05, 2010 12:41:40

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be cr and mn.mth

Dataset File: C:\elandata\Dataset\100305\QC Std 10.024

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	955.903 ug/L	6.308	411568	0.342
>	Sc	45	ug/L		1202818	1202817.781
	Cr	52	918.094 ug/L	4.428	4729371	3.935
	Cr	53	ug/L		677221	0.483
	Mn	55	911.521 ug/L	8.536	7605356	6.337

---

Sample ID: QC Std 10

Report Date/Time: Friday, March 05, 2010 12:41:59

Page 1

## 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

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[	Be	9	95.590				
>	Sc	45		86.2			
	Cr	52	91.809				
	Cr	53					
L	Mn	55	91.152				

### 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 11

Sample Date/Time: Friday, March 05, 2010 12:43:27

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be cr and mn.mth

Dataset File: C:\elandata\Dataset\100305\QC Std 11.025

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	52.281	ug/L	6.093	24146	0.019
>	Sc	45		ug/L		1290455	1290455.136
	Cr	52	53.382	ug/L	9.576	294924	0.229
	Cr	53		ug/L		130206	0.020
[	Mn	55	54.576	ug/L	10.755	488868	0.379

---

Sample ID: QC Std 11

Report Date/Time: Friday, March 05, 2010 12:43:46

Page 1

## 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

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution %	Duplicate Rel. % Difference
[	Be	9	104.561				
>	Sc	45		92.5			
	Cr	52	106.764				
	Cr	53					
L	Mn	55	109.152				

### 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 12

Sample Date/Time: Friday, March 05, 2010 12:45:16

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be cr and mn.mth

Dataset File: C:\elandata\Dataset\100305\QC Std 12.026

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.032	ug/L	73.149	28	0.000
>	Sc	45		ug/L		1318288	1318287.967
	Cr	52	-0.138	ug/L	61.234	-104	-0.001
	Cr	53		ug/L		99089	-0.005
[	Mn	55	0.011	ug/L	91.343	1304	0.000

Sample ID: QC Std 12

Report Date/Time: Friday, March 05, 2010 12:45:38

Page 1

## 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



### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9					
>	Sc	45		94.5			
	Cr	52					
	Cr	53					
[	Mn	55					

### 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: 1202036698

Sample Date/Time: Friday, March 05, 2010 12:47:06

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 950397|1|baj

Method File: c:\elandata\Method\be cr and mn.mth

Dataset File: C:\elandata\Dataset\100305\1202036698.027

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.009	ug/L	99.513	18	0.000
>	Sc	45		ug/L		1365084	1365084.141
	Cr	52	0.162	ug/L	312.845	1757	0.001
	Cr	53		ug/L		284860	0.129
[	Mn	55	0.288	ug/L	15.122	3963	0.002

Sample ID: 1202036698

Report Date/Time: Friday, March 05, 2010 12:47:25

Page 1

## 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

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[	Be	9					
>	Sc	45		97.9			
	Cr	52					
	Cr	53					
[	Mn	55					

### 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: 1202036703

Sample Date/Time: Friday, March 05, 2010 12:48:53

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 950397|1|baj

Method File: c:\elandata\Method\be cr and mn.mth

Dataset File: C:\elandata\Dataset\100305\1202036703.028

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	58.966	ug/L	5.208	29113	0.021
>	Sc	45		ug/L		1377812	1377811.562
	Cr	52	57.121	ug/L	7.637	337647	0.245
	Cr	53		ug/L		340807	0.167
[	Mn	55	58.009	ug/L	9.799	555243	0.403

Sample ID: 1202036703

Report Date/Time: Friday, March 05, 2010 12:49:12

Page 1

## 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

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[	Be	9					
>	Sc	45		98.8			
	Cr	52					
	Cr	53					
L	Mn	55					

### 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: 1202036699

Sample Date/Time: Friday, March 05, 2010 12:52:30

Sample Type:

Sample Description: LANL 6020 DUP

Number of Replicates: 3

Batch ID: 950397|1|baj

Method File: c:\elandata\Method\be cr and mn.mth

Dataset File: C:\elandata\Dataset\100305\1202036699.030

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	3.590	ug/L	8.484	1878	0.001
	Sc	45		ug/L		1450850	1450849.709
	Cr	52	470.253	ug/L	5.419	2924986	2.015
	Cr	53		ug/L		587554	0.325
	Mn	55	273.768	ug/L	7.392	2757116	1.903

---

Sample ID: 1202036699

Report Date/Time: Friday, March 05, 2010 12:52:50

Page 1



## 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

---

Sample ID: 1202036699

Report Date/Time: Friday, March 05, 2010 12:52:50

Page 2

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9					
>	Sc	45		104.0			
	Cr	52					
	Cr	53					
[	Mn	55					

### 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: 1202036701

Sample Date/Time: Friday, March 05, 2010 12:54:19

Sample Type:

Sample Description: LANL 6020 MS

Number of Replicates: 3

Batch ID: 950397|1|baj

Method File: c:\elandata\Method\be cr and mn.mth

Dataset File: C:\elandata\Dataset\100305\1202036701.031

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	52.855	ug/L	6.126	26469	0.019
>	Sc	45		ug/L		1398645	1398645.477
	Cr	52	507.546	ug/L	5.405	3039262	2.175
	Cr	53		ug/L		594706	0.346
[	Mn	55	315.745	ug/L	10.605	3061583	2.195

Sample ID: 1202036701

Report Date/Time: Friday, March 05, 2010 12:54:39

Page 1

## 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

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9					
>	Sc	45		100.3			
	Cr	52					
	Cr	53					
	Mn	55					

### 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: 1202036702

Sample Date/Time: Friday, March 05, 2010 12:56:08

Sample Type:

Sample Description: LANL 6020 MSD

Number of Replicates: 3

Batch ID: 950397|1|baj

Method File: c:\elandata\Method\be cr and mn.mth

Dataset File: C:\elandata\Dataset\100305\1202036702.032

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	53.128	ug/L	8.358	26744	0.019
>	Sc	45		ug/L		1407360	1407359.753
	Cr	52	509.159	ug/L	4.947	3067976	2.182
	Cr	53		ug/L		601391	0.348
L	Mn	55	321.187	ug/L	9.343	3132352	2.233

---

Sample ID: 1202036702

Report Date/Time: Friday, March 05, 2010 12:56:29

Page 1

## 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

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[	Be	9						
>	Sc	45		100.9				
	Cr	52						
	Cr	53						
	Mn	55						

### 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: 1202036700

Sample Date/Time: Friday, March 05, 2010 12:57:57

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 950397|5|ba|

Method File: c:\elandata\Method\be cr and mn.mth

Dataset File: C:\elandata\Dataset\100305\1202036700.033

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.794	ug/L	4.338	377	0.000
	Sc	45		ug/L		1278789	1278788.910
>	Cr	52	109.666	ug/L	6.994	600627	0.470
	Cr	53		ug/L		194987	0.072
]	Mn	55	68.898	ug/L	11.055	611024	0.479

Sample ID: 1202036700

Report Date/Time: Friday, March 05, 2010 12:58:16

Page 1

## 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

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9					
>	Sc	45		91.7			
	Cr	52					
	Cr	53					
[	Mn	55					

### QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, March 05, 2010 13:01:33

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be cr and mn.mth

Dataset File: C:\elandata\Dataset\100305\QC Std 6.035

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	54.664	ug/L	7.110	24586	0.020
>	Sc	45		ug/L		1256447	1256446.709
	Cr	52	53.428	ug/L	5.490	288103	0.229
	Cr	53		ug/L		130391	0.023
L	Mn	55	53.519	ug/L	9.147	467326	0.372

### 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

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9	109.328				
>	Sc	45		90.1			
	Cr	52	106.856				
	Cr	53					
L	Mn	55	107.038				

### 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: Friday, March 05, 2010 13:01:53

Page 1

## ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, March 05, 2010 13:03:23

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be cr and mn.mth

Dataset File: C:\elandata\Dataset\100305\QC Std 7.036

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.024	ug/L	11.219	24	0.000
Sc	45		ug/L		1276744	1276743.855
Cr	52	-0.145	ug/L	78.613	-137	-0.001
Cr	53		ug/L		90808	-0.010
Mn	55	0.020	ug/L	51.209	1342	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

### QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
Sc	45		91.5			
Cr	52					
Cr	53					
Mn	55					

### 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: Friday, March 05, 2010 13:03:44

Page 1

## ICPMS#5 - Summary Report

Sample ID: 246436001

Sample Date/Time: Friday, March 05, 2010 13:16:07

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 9503971|baj

Method File: c:\elandata\Method\be cr and mn.mth

Dataset File: C:\elandata\Dataset\100305\246436001.043

### Concentration Results

	Analyte	Mass	Conc.	Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	0.010		ug/L	35.104	19	0.000
>	Sc	45			ug/L		1367623	1367622.871
	Cr	52	0.510		ug/L	106.273	3763	0.002
	Cr	53			ug/L		302315	0.141
	Mn	55	5.112		ug/L	8.888	49709	0.036

### 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

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		98.0			
	Cr	52					
	Cr	53					
	Mn	55					

### 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: 246436001

Report Date/Time: Friday, March 05, 2010 13:16:27

Page 1

## ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, March 05, 2010 13:17:56

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be cr and mn.mth

Dataset File: C:\elandata\Dataset\100305\QC Std 6.044

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	53.654	ug/L	5.757	25147	0.019
>	Sc	45		ug/L		1309268	1309268.205
	Cr	52	52.641	ug/L	7.850	295642	0.226
	Cr	53		ug/L		152308	0.036
L	Mn	55	54.010	ug/L	11.458	490926	0.375

### 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

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[	Be	9	107.307				
>	Sc	45		93.9			
	Cr	52	105.283				
	Cr	53					
L	Mn	55	108.021				

### 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: Friday, March 05, 2010 13:18:16

Page 1

## ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, March 05, 2010 13:19:46

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\be cr and mn.mth

Dataset File: C:\elandata\Dataset\100305\QC Std 7.045

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.013	ug/L	67.610	20	0.000
Sc	45		ug/L		1316383	1316382.829
Cr	52	0.082	ug/L	172.074	1163	0.000
Cr	53		ug/L		107538	0.001
Mn	55	0.013	ug/L	160.781	1314	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

### QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
Be	9						
Sc	45		94.4				
Cr	52						
Cr	53						
Mn	55						

### 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: Friday, March 05, 2010 13:20:08

Page 1



=====  
Analysis BegunLogged In Analyst: Administrator  
Spectrometer Model: FIMS-100, S/N B050-9550Technique: AA FIMS-MHS  
Autosampler Model: S10

Sample Information File: C:\data-AA\Administrator\Sample Information\021710W1.SIF

Batch ID:

Results Data Set: 021710W2

Results Library: C:\data-AA\Administrator\Results\Results.mdb

=====  
Method Loaded

Method Name: WATER

Method Last Saved: 2/8/2010 13:04:57

Method Description: 7470A, 245.2, ILM04 ANALYST JXL

Sequence No.: 1

Autosampler Location: 1

Sample ID: Calib Blank

Date Collected: 2/17/2010 09:35:12

Analyst:

Data Type: Original

-----  
Replicate Data: Calib Blank

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.00]	0.0006	0.0053	0.0006	09:36:12	Yes
2		[0.00]	0.0005	0.0028	0.0005	09:36:47	Yes
Mean:		[0.00]	0.0006				
SD:		0.00	0.0001				
%RSD:		0.00	17.93				

Auto-zero performed.

Sequence No.: 2

Autosampler Location: 2

Sample ID: S0.2

Date Collected: 2/17/2010 09:37:06

Analyst:

Data Type: Original

-----  
Replicate Data: S0.2

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.2]	0.0017	0.0110	0.0023	09:38:07	Yes
2		[0.2]	0.0018	0.0104	0.0023	09:38:42	Yes
Mean:		[0.2]	0.0018				
SD:		0.0	0.0001				
%RSD:		0.0	3.11				

Standard number 1 applied. [0.2]  
Correlation Coef.: 1.000000 Slope: 0.00877 Intercept: 0.00000

Sequence No.: 3

Autosampler Location: 3

Sample ID: S0.5

Date Collected: 2/17/2010 09:39:01

Analyst:

Data Type: Original

-----  
Replicate Data: S0.5

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.5]	0.0045	0.0220	0.0050	09:40:02	Yes
2		[0.5]	0.0044	0.0217	0.0050	09:40:37	Yes
Mean:		[0.5]	0.0045				
SD:		0.0	0.0000				
%RSD:		0.0	0.41				

Standard number 2 applied. [0.5]  
Correlation Coef.: 0.999971 Slope: 0.00893 Intercept: -0.00001

Sequence No.: 4

Autosampler Location: 4

Sample ID: S2.0

Date Collected: 2/17/2010 09:40:56

Analyst:

Data Type: Original

-----  
Replicate Data: S2.0

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1		[2.0]	0.0191	0.0895	0.0196	09:41:58	Yes
2		[2.0]	0.0191	0.0903	0.0197	09:42:32	Yes
Mean:		[2.0]	0.0191				
SD:		0.0	0.0000				
%RSD:		0.0	0.15				

Standard number 3 applied. [2.0]  
Correlation Coef.: 0.999863    Slope: 0.00961    Intercept: -0.00015

=====

Sequence No.: 5	Autosampler Location: 5
Sample ID: S5.0	Date Collected: 2/17/2010 09:42:52
Analyst:	Data Type: Original

-----  
Replicate Data: S5.0

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1		[5.0]	0.0484	0.2236	0.0490	09:43:54	Yes
2		[5.0]	0.0483	0.2221	0.0488	09:44:29	Yes
Mean:		[5.0]	0.0484				
SD:		0.0	0.0001				
%RSD:		0.0	0.21				

Standard number 4 applied. [5.0]  
Correlation Coef.: 0.999974    Slope: 0.00970    Intercept: -0.00020

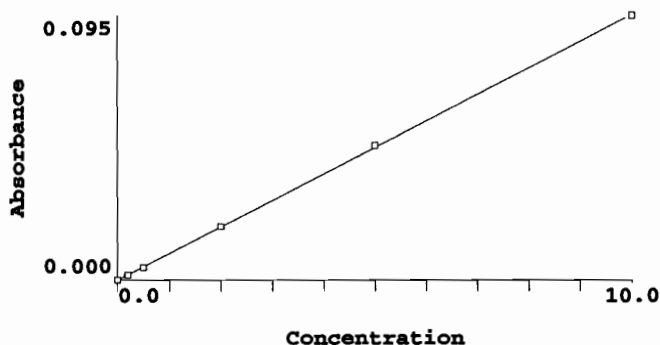
=====

Sequence No.: 6	Autosampler Location: 6
Sample ID: S10.0	Date Collected: 2/17/2010 09:44:49
Analyst:	Data Type: Original

-----  
Replicate Data: S10.0

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1		[10.0]	0.0954	0.4427	0.0960	09:45:49	Yes
2		[10.0]	0.0951	0.4391	0.0956	09:46:24	Yes
Mean:		[10.0]	0.0953				
SD:		0.0	0.0003				
%RSD:		0.0	0.27				

Standard number 5 applied. [10.0]  
Correlation Coef.: 0.999961    Slope: 0.00956    Intercept: -0.00004

-----  
Calibration data for Hg 253.7

Equation: Linear, Calculated Intercept

ID	Mean Signal	Entered	Calculated	Standard	%RSD
	(Abs)	Conc.	Conc.	Deviation	
		ug/L	ug/L		
Calib Blank	0.0000	0	0.004	0.00	17.9
S0.2	0.0018	0.2	0.188	0.00	3.1
S0.5	0.0045	0.5	0.471	0.00	0.4
S2.0	0.0191	2.0	2.004	0.00	0.1

S5.0	0.0484	5.0	5.063	0.00	0.2
S10.0	0.0953	10.0	9.969	0.00	0.3

Correlation Coef.: 0.999961    Slope: 0.00956    Intercept: -0.00004

Sequence No.: 7

Sample ID: ICV

Analyst:

Autosampler Location: 9

Date Collected: 2/17/2010 09:46:43

Data Type: Original

## Replicate Data: ICV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.252	5.252	0.0502	0.2331	0.0507	09:47:44	Yes
2	5.207	5.207	0.0497	0.2298	0.0503	09:48:19	Yes
Mean:	5.230	5.230	0.0500				
SD:	0.032	0.032	0.0003				
%RSD:	0.607	0.607	0.61				

QC value within limits for Hg 253.7    Recovery = 104.60%  
All analyte(s) passed QC.

Sequence No.: 8

Sample ID: ICB

Analyst:

Autosampler Location: 10

Date Collected: 2/17/2010 09:48:39

Data Type: Original

## Replicate Data: ICB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.015	-0.015	-0.0002	0.0016	0.0004	09:49:40	Yes
2	0.000	0.000	-0.0000	0.0027	0.0005	09:50:15	Yes
Mean:	-0.008	-0.008	-0.0001				
SD:	0.010	0.010	0.0001				
%RSD:	134.1	134.1	85.46				

QC value within limits for Hg 253.7    Recovery = Not calculated  
All analyte(s) passed QC.

Sequence No.: 9

Sample ID: CRDL

Analyst:

Autosampler Location: 11

Date Collected: 2/17/2010 09:50:35

Data Type: Original

## Replicate Data: CRDL

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.178	0.178	0.0017	0.0097	0.0022	09:51:36	Yes
2	0.175	0.175	0.0016	0.0087	0.0022	09:52:11	Yes
Mean:	0.176	0.176	0.0016				
SD:	0.002	0.002	0.0000				
%RSD:	1.236	1.236	1.27				

QC value within limits for Hg 253.7    Recovery = 88.19%  
All analyte(s) passed QC.

Sequence No.: 10

Sample ID: CCV

Analyst:

Autosampler Location: 7

Date Collected: 2/17/2010 09:52:31

Data Type: Original

## Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.111	5.111	0.0488	0.2267	0.0494	09:53:31	Yes
2	5.119	5.119	0.0489	0.2263	0.0494	09:54:06	Yes
Mean:	5.115	5.115	0.0489				
SD:	0.005	0.005	0.0001				
%RSD:	0.106	0.106	0.11				

QC value within limits for Hg 253.7    Recovery = 102.30%  
All analyte(s) passed QC.

Sequence No.: 11

Sample ID: CCB

Analyst:

Autosampler Location: 8

Date Collected: 2/17/2010 09:54:25

Data Type: Original

## Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.016	-0.016	-0.0002	0.0004	0.0004	09:55:26	Yes
2	-0.014	-0.014	-0.0002	0.0015	0.0004	09:56:01	Yes
Mean:	-0.015	-0.015	-0.0002				
SD:	0.002	0.002	0.0000				
%RSD:	12.15	12.15	9.35				

QC value within limits for Hg 253.7 Recovery = Not calculated  
All analyte(s) passed QC.

Sequence No.: 12

Sample ID: 1202039320|951563|1

Analyst: JXL

Autosampler Location: 12

Date Collected: 2/17/2010 09:56:20

Data Type: Original

## Replicate Data: 1202039320|951563|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.013	-0.013	-0.0002	0.0005	0.0004	09:57:22	Yes
2	0.006	0.006	0.0000	0.0018	0.0006	09:57:57	Yes
Mean:	-0.003	-0.003	-0.0001				
SD:	0.013	0.013	0.0001				
%RSD:	409.9	409.9	173.74				

Sequence No.: 13

Sample ID: 1202039321|951563|1

Analyst: JXL

Autosampler Location: 13

Date Collected: 2/17/2010 09:58:17

Data Type: Original

## Replicate Data: 1202039321|951563|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	2.018	2.018	0.0193	0.0913	0.0198	09:59:19	Yes
2	2.038	2.038	0.0194	0.0922	0.0200	09:59:54	Yes
Mean:	2.028	2.028	0.0193				
SD:	0.014	0.014	0.0001				
%RSD:	0.668	0.668	0.67				

Sequence No.: 14

Sample ID: 245934001|951563|1

Analyst: JXL

Autosampler Location: 14

Date Collected: 2/17/2010 10:00:14

Data Type: Original

## Replicate Data: 245934001|951563|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.016	0.016	0.0001	0.0036	0.0007	10:01:14	Yes
2	0.024	0.024	0.0002	0.0038	0.0007	10:01:50	Yes
Mean:	0.020	0.020	0.0001				
SD:	0.005	0.005	0.0001				
%RSD:	27.85	27.85	35.88				

Sequence No.: 15

Sample ID: 245934002|951563|1

Analyst: JXL

Autosampler Location: 15

Date Collected: 2/17/2010 10:02:09

Data Type: Original

## Replicate Data: 245934002|951563|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
------	------------	---------	---------	------	------	------	------

-----  
Replicate Data: 1202039323|951563|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	2.024	2.024	0.0193	0.0929	0.0199	10:12:43	Yes
2	1.985	1.985	0.0189	0.0898	0.0195	10:13:17	Yes
Mean:	2.005	2.005	0.0191				
SD:	0.027	0.027	0.0003				
%RSD:	1.354	1.354	1.36				

Sequence No.: 21

Sample ID: 1202039325|951563|5

Analyst: JXL

Autosampler Location: 21

Date Collected: 2/17/2010 10:13:37

Data Type: Original

-----  
Replicate Data: 1202039325|951563|5

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.005	-0.005	-0.0001	0.0021	0.0005	10:14:38	Yes
2	-0.005	-0.005	-0.0001	0.0015	0.0005	10:15:13	Yes
Mean:	-0.005	-0.005	-0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	8.610	8.610	4.54				

Sequence No.: 22

Sample ID: CCV

Analyst:

Autosampler Location: 7

Date Collected: 2/17/2010 10:15:32

Data Type: Original

-----  
Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.089	5.089	0.0486	0.2253	0.0492	10:16:33	Yes
2	5.081	5.081	0.0485	0.2275	0.0491	10:17:08	Yes
Mean:	5.085	5.085	0.0486				
SD:	0.006	0.006	0.0001				
%RSD:	0.112	0.112	0.11				

QC value within limits for Hg 253.7 Recovery = 101.71%  
All analyte(s) passed QC.

Sequence No.: 23

Sample ID: CCB

Analyst:

Autosampler Location: 8

Date Collected: 2/17/2010 10:17:26

Data Type: Original

-----  
Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.004	-0.004	-0.0001	0.0018	0.0005	10:18:27	Yes
2	-0.004	-0.004	-0.0001	0.0020	0.0005	10:19:02	Yes
Mean:	-0.004	-0.004	-0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	8.591	8.591	4.14				

QC value within limits for Hg 253.7 Recovery = Not calculated  
All analyte(s) passed QC.

Sequence No.: 24

Sample ID: 246293002|951563|1

Analyst: JXL

Autosampler Location: 22

Date Collected: 2/17/2010 10:19:21

Data Type: Original

-----  
Replicate Data: 246293002|951563|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.011	0.011	0.0001	0.0038	0.0006	10:20:23	Yes
2	0.002	0.002	-0.0000	0.0027	0.0005	10:20:58	Yes

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.019	-0.019	-0.0002	0.0005	0.0003	10:30:03	Yes
2	-0.002	-0.002	-0.0001	0.0020	0.0005	10:30:38	Yes
Mean:	-0.010	-0.010	-0.0001				
SD:	0.012	0.012	0.0001				
%RSD:	117.3	117.3	82.53				

Sequence No.: 30

Autosampler Location: 28

Sample ID: 246465001|951503|1

Date Collected: 2/17/2010 10:30:57

Analyst: JXL

Data Type: Original

Replicate Data: 246465001|951503|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.002	-0.002	-0.0001	0.0023	0.0005	10:31:58	Yes
2	0.004	0.004	-0.0000	0.0021	0.0005	10:32:33	Yes
Mean:	0.001	0.001	-0.0000				
SD:	0.004	0.004	0.0000				
%RSD:	354.6	354.6	104.60				

Sequence No.: 31

Autosampler Location: 29

Sample ID: 246590001|951503|1

Date Collected: 2/17/2010 10:32:53

Analyst: JXL

Data Type: Original

Replicate Data: 246590001|951503|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.003	-0.003	-0.0001	0.0020	0.0005	10:33:53	Yes
2	0.000	0.000	-0.0000	0.0020	0.0005	10:34:28	Yes
Mean:	-0.001	-0.001	-0.0001				
SD:	0.003	0.003	0.0000				
%RSD:	184.8	184.8	44.22				

Sequence No.: 32

Autosampler Location: 30

Sample ID: 246591001|951503|1

Date Collected: 2/17/2010 10:34:47

Analyst: JXL

Data Type: Original

Replicate Data: 246591001|951503|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.001	0.001	-0.0000	0.0022	0.0005	10:35:48	Yes
2	-0.007	-0.007	-0.0001	0.0024	0.0004	10:36:23	Yes
Mean:	-0.003	-0.003	-0.0001				
SD:	0.005	0.005	0.0001				
%RSD:	205.4	205.4	77.44				

Sequence No.: 33

Autosampler Location: 31

Sample ID: 246606001|951503|1

Date Collected: 2/17/2010 10:36:42

Analyst: JXL

Data Type: Original

Replicate Data: 246606001|951503|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.008	-0.008	-0.0001	0.0013	0.0004	10:37:43	Yes
2	0.001	0.001	-0.0000	0.0027	0.0005	10:38:18	Yes
Mean:	-0.003	-0.003	-0.0001				
SD:	0.007	0.007	0.0001				
%RSD:	201.4	201.4	87.27				

Sequence No.: 34

Autosampler Location: 7

Sample ID: CCV

Date Collected: 2/17/2010 10:38:37

Analyst:

Data Type: Original

-----  
Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	4.901	4.901	0.0468	0.2205	0.0474	10:39:37	Yes
2	4.918	4.918	0.0470	0.2207	0.0475	10:40:12	Yes
Mean:	4.910	4.910	0.0469				
SD:	0.012	0.012	0.0001				
%RSD:	0.244	0.244	0.24				

QC value within limits for Hg 253.7 Recovery = 98.19%  
All analyte(s) passed QC.

=====

Sequence No.: 35

Autosampler Location: 8

Sample ID: CCB

Date Collected: 2/17/2010 10:40:31

Analyst:

Data Type: Original

-----  
Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.000	0.000	-0.0000	0.0029	0.0005	10:41:32	Yes
2	0.009	0.009	0.0000	0.0036	0.0006	10:42:07	Yes
Mean:	0.004	0.004	0.0000				
SD:	0.006	0.006	0.0001				
%RSD:	131.4	131.4	>999.9%				

QC value within limits for Hg 253.7 Recovery = Not calculated  
All analyte(s) passed QC.

=====

Sequence No.: 36

Autosampler Location: 32

Sample ID: 1202039173|951503|1

Date Collected: 2/17/2010 10:42:27

Analyst: JXL

Data Type: Original

-----  
Replicate Data: 1202039173|951503|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.003	-0.003	-0.0001	0.0020	0.0005	10:43:27	Yes
2	-0.007	-0.007	-0.0001	0.0017	0.0004	10:44:02	Yes
Mean:	-0.005	-0.005	-0.0001				
SD:	0.003	0.003	0.0000				
%RSD:	62.16	62.16	31.63				

=====

Sequence No.: 37

Autosampler Location: 33

Sample ID: 1202039174|951503|1

Date Collected: 2/17/2010 10:44:22

Analyst: JXL

Data Type: Original

-----  
Replicate Data: 1202039174|951503|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	2.012	2.012	0.0192	0.0919	0.0197	10:45:23	Yes
2	1.950	1.950	0.0186	0.0891	0.0192	10:45:57	Yes
Mean:	1.981	1.981	0.0189				
SD:	0.044	0.044	0.0004				
%RSD:	2.199	2.199	2.20				

=====

Sequence No.: 38

Autosampler Location: 34

Sample ID: 1202039175|951503|5

Date Collected: 2/17/2010 10:46:17

Analyst: JXL

Data Type: Original

-----  
Replicate Data: 1202039175|951503|5

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.023	-0.023	-0.0003	0.0004	0.0003	10:47:18	Yes

2	-0.018	-0.018	-0.0002	0.0009	0.0003	10:47:53	Yes
Mean:	-0.020	-0.020	-0.0002				
SD:	0.003	0.003	0.0000				
%RSD:	16.22	16.22	13.32				

Sequence No.: 39

Autosampler Location: 35

Sample ID: 1202039378|951593|1

Date Collected: 2/17/2010 10:48:13

Analyst: JXL

Data Type: Original

Replicate Data: 1202039378|951593|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.015	-0.015	-0.0002	0.0012	0.0004	10:49:15	Yes
2	-0.007	-0.007	-0.0001	0.0016	0.0004	10:49:50	Yes
Mean:	-0.011	-0.011	-0.0001				
SD:	0.005	0.005	0.0001				
%RSD:	48.40	48.40	34.45				

Sequence No.: 40

Autosampler Location: 36

Sample ID: 1202039379|951593|1

Date Collected: 2/17/2010 10:50:10

Analyst: JXL

Data Type: Original

Replicate Data: 1202039379|951593|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	1.962	1.962	0.0187	0.0899	0.0193	10:51:12	Yes
2	1.964	1.964	0.0187	0.0892	0.0193	10:51:46	Yes
Mean:	1.963	1.963	0.0187				
SD:	0.001	0.001	0.0000				
%RSD:	0.069	0.069	0.07				

Sequence No.: 41

Autosampler Location: 37

Sample ID: 246323001|951593|1

Date Collected: 2/17/2010 10:52:07

Analyst: JXL

Data Type: Original

Replicate Data: 246323001|951593|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.003	0.003	-0.0000	0.0024	0.0005	10:53:08	Yes
2	0.003	0.003	-0.0000	0.0032	0.0005	10:53:44	Yes
Mean:	0.003	0.003	-0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	13.18	13.18	23.27				

Sequence No.: 42

Autosampler Location: 38

Sample ID: 246334001|951593|1

Date Collected: 2/17/2010 10:54:04

Analyst: JXL

Data Type: Original

Replicate Data: 246334001|951593|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.015	-0.015	-0.0002	0.0015	0.0004	10:55:05	Yes
2	-0.012	-0.012	-0.0002	0.0017	0.0004	10:55:40	Yes
Mean:	-0.014	-0.014	-0.0002				
SD:	0.002	0.002	0.0000				
%RSD:	15.38	15.38	11.62				

Sequence No.: 43

Autosampler Location: 39

Sample ID: 246431001|951593|1

Date Collected: 2/17/2010 10:55:59

Analyst: JXL

Data Type: Original



## Replicate Data: 246431001|951593|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.013	-0.013	-0.0002	0.0018	0.0004	10:57:00	Yes
2	-0.006	-0.006	-0.0001	0.0027	0.0005	10:57:36	Yes
Mean:	-0.009	-0.009	-0.0001				
SD:	0.005	0.005	0.0000				
%RSD:	54.51	54.51	36.73				

Sequence No.: 44

Autosampler Location: 40

Sample ID: 1202039380|951593|1

Date Collected: 2/17/2010 10:57:55

Analyst: JXL

Data Type: Original

## Replicate Data: 1202039380|951593|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.011	-0.011	-0.0002	0.0020	0.0004	10:58:57	Yes
2	-0.012	-0.012	-0.0002	0.0018	0.0004	10:59:32	Yes
Mean:	-0.012	-0.012	-0.0002				
SD:	0.001	0.001	0.0000				
%RSD:	5.997	5.997	4.37				

Sequence No.: 45

Autosampler Location: 41

Sample ID: 1202039381|951593|1

Date Collected: 2/17/2010 10:59:51

Analyst: JXL

Data Type: Original

## Replicate Data: 1202039381|951593|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	1.943	1.943	0.0185	0.0894	0.0191	11:00:52	Yes
2	1.923	1.923	0.0183	0.0878	0.0189	11:01:27	Yes
Mean:	1.933	1.933	0.0184				
SD:	0.014	0.014	0.0001				
%RSD:	0.700	0.700	0.70				

Sequence No.: 46

Autosampler Location: 7

Sample ID: CCV

Date Collected: 2/17/2010 11:01:46

Analyst:

Data Type: Original

## Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	4.917	4.917	0.0470	0.2196	0.0475	11:02:47	Yes
2	4.890	4.890	0.0467	0.2184	0.0473	11:03:22	Yes
Mean:	4.904	4.904	0.0468				
SD:	0.019	0.019	0.0002				
%RSD:	0.390	0.390	0.39				

QC value within limits for Hg 253.7 Recovery = 98.07%

All analyte(s) passed QC.

Sequence No.: 47

Autosampler Location: 8

Sample ID: CCB

Date Collected: 2/17/2010 11:03:41

Analyst:

Data Type: Original

## Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.005	-0.005	-0.0001	0.0026	0.0005	11:04:41	Yes
2	-0.016	-0.016	-0.0002	0.0012	0.0004	11:05:17	Yes
Mean:	-0.011	-0.011	-0.0001				
SD:	0.008	0.008	0.0001				
%RSD:	72.63	72.63	51.34				

QC value within limits for Hg 253.7 Recovery = Not calculated

All analyte(s) passed QC.

Sequence No.: 48

Sample ID: 1202039382|951593|5

Analyst: JXL

Autosampler Location: 42

Date Collected: 2/17/2010 11:05:36

Data Type: Original

Replicate Data: 1202039382|951593|5

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.013	-0.013	-0.0002	0.0015	0.0004	11:06:37	Yes
2	-0.018	-0.018	-0.0002	0.0014	0.0003	11:07:12	Yes
Mean:	-0.015	-0.015	-0.0002				
SD:	0.004	0.004	0.0000				
%RSD:	22.71	22.71	17.67				

Sequence No.: 49

Sample ID: 246431002|951593|1

Analyst: JXL

Autosampler Location: 43

Date Collected: 2/17/2010 11:07:31

Data Type: Original

Replicate Data: 246431002|951593|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.017	-0.017	-0.0002	0.0014	0.0004	11:08:32	Yes
2	-0.024	-0.024	-0.0003	0.0010	0.0003	11:09:07	Yes
Mean:	-0.021	-0.021	-0.0002				
SD:	0.005	0.005	0.0001				
%RSD:	25.92	25.92	21.33				

Sequence No.: 50

Sample ID: 246431003|951593|1

Analyst: JXL

Autosampler Location: 44

Date Collected: 2/17/2010 11:09:26

Data Type: Original

Replicate Data: 246431003|951593|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.011	-0.011	-0.0001	0.0025	0.0004	11:10:27	Yes
2	-0.012	-0.012	-0.0002	0.0021	0.0004	11:11:02	Yes
Mean:	-0.012	-0.012	-0.0002				
SD:	0.001	0.001	0.0000				
%RSD:	6.297	6.297	4.58				

Sequence No.: 51

Sample ID: 246431004|951593|1

Analyst: JXL

Autosampler Location: 45

Date Collected: 2/17/2010 11:11:22

Data Type: Original

Replicate Data: 246431004|951593|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.025	-0.025	-0.0003	0.0006	0.0003	11:12:23	Yes
2	-0.015	-0.015	-0.0002	0.0020	0.0004	11:12:58	Yes
Mean:	-0.020	-0.020	-0.0002				
SD:	0.007	0.007	0.0001				
%RSD:	34.12	34.12	27.98				

Sequence No.: 52

Sample ID: 246436001|951593|1

Analyst: JXL

Autosampler Location: 46

Date Collected: 2/17/2010 11:13:18

Data Type: Original

Replicate Data: 246436001|951593|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
--------	-----------------	--------------	----------------	-----------	-------------	------	-------------

1	-0.008	-0.008	-0.0001	0.0022	0.0004	11:14:19	Yes
2	-0.016	-0.016	-0.0002	0.0015	0.0004	11:14:54	Yes
Mean:	-0.012	-0.012	-0.0002				
SD:	0.006	0.006	0.0001				
%RSD:	48.82	48.82	35.35				

Sequence No.: 53

Autosampler Location: 47

Sample ID: 1202039439|951627|1

Date Collected: 2/17/2010 11:15:14

Analyst: JXL

Data Type: Original

Replicate Data: 1202039439|951627|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.020	-0.020	-0.0002	0.0013	0.0003	11:16:15	Yes
2	-0.018	-0.018	-0.0002	0.0013	0.0003	11:16:50	Yes
Mean:	-0.019	-0.019	-0.0002				
SD:	0.001	0.001	0.0000				
%RSD:	6.243	6.243	5.06				

Sequence No.: 54

Autosampler Location: 48

Sample ID: 1202039440|951627|1

Date Collected: 2/17/2010 11:17:10

Analyst: JXL

Data Type: Original

Replicate Data: 1202039440|951627|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	1.975	1.975	0.0188	0.0909	0.0194	11:18:12	Yes
2	1.988	1.988	0.0190	0.0907	0.0195	11:18:47	Yes
Mean:	1.982	1.982	0.0189				
SD:	0.009	0.009	0.0001				
%RSD:	0.452	0.452	0.45				

Sequence No.: 55

Autosampler Location: 49

Sample ID: 246555001|951627|1

Date Collected: 2/17/2010 11:19:07

Analyst: JXL

Data Type: Original

Replicate Data: 246555001|951627|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.022	-0.022	-0.0003	0.0008	0.0003	11:20:09	Yes
2	-0.020	-0.020	-0.0002	0.0018	0.0003	11:20:43	Yes
Mean:	-0.021	-0.021	-0.0002				
SD:	0.001	0.001	0.0000				
%RSD:	6.389	6.389	5.27				

Sequence No.: 56

Autosampler Location: 50

Sample ID: 246571001|951627|1

Date Collected: 2/17/2010 11:21:04

Analyst: JXL

Data Type: Original

Replicate Data: 246571001|951627|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.023	-0.023	-0.0003	0.0014	0.0003	11:22:05	Yes
2	-0.020	-0.020	-0.0002	0.0016	0.0003	11:22:40	Yes
Mean:	-0.022	-0.022	-0.0003				
SD:	0.002	0.002	0.0000				
%RSD:	9.432	9.432	7.84				

Sequence No.: 57

Autosampler Location: 51

Sample ID: 1202039441|951627|1

Date Collected: 2/17/2010 11:23:00

Analyst: JXL

Data Type: Original

-----  
Replicate Data: 1202039441|951627|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.021	-0.021	-0.0002	0.0013	0.0003	11:24:01	Yes
2	-0.020	-0.020	-0.0002	0.0011	0.0003	11:24:36	Yes
Mean:	-0.021	-0.021	-0.0002				
SD:	0.000	0.000	0.0000				
%RSD:	0.177	0.177	0.15				

Sequence No.: 58

Sample ID: CCV

Analyst:

Autosampler Location: 7

Date Collected: 2/17/2010 11:24:56

Data Type: Original  
-----

## Replicate Data: CCV

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	4.900	4.900	0.0468	0.2214	0.0474	11:25:56	Yes
2	4.923	4.923	0.0470	0.2210	0.0476	11:26:31	Yes
Mean:	4.912	4.912	0.0469				
SD:	0.016	0.016	0.0002				
%RSD:	0.329	0.329	0.33				

QC value within limits for Hg 253.7 Recovery = 98.24%  
All analyte(s) passed QC.  
-----

Sequence No.: 59

Sample ID: CCB

Analyst:

Autosampler Location: 8

Date Collected: 2/17/2010 11:26:50

Data Type: Original  
-----

## Replicate Data: CCB

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.020	-0.020	-0.0002	0.0009	0.0003	11:27:51	Yes
2	-0.014	-0.014	-0.0002	0.0014	0.0004	11:28:26	Yes
Mean:	-0.017	-0.017	-0.0002				
SD:	0.004	0.004	0.0000				
%RSD:	25.07	25.07	19.99				

QC value within limits for Hg 253.7 Recovery = Not calculated  
All analyte(s) passed QC.  
-----

Sequence No.: 60

Sample ID: 1202039442|951627|1

Analyst: JXL

Autosampler Location: 52

Date Collected: 2/17/2010 11:28:45

Data Type: Original  
-----

## Replicate Data: 1202039442|951627|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	1.956	1.956	0.0187	0.0901	0.0192	11:29:46	Yes
2	1.952	1.952	0.0186	0.0894	0.0192	11:30:21	Yes
Mean:	1.954	1.954	0.0186				
SD:	0.003	0.003	0.0000				
%RSD:	0.139	0.139	0.14				

Sequence No.: 61

Sample ID: 1202039443|951627|5

Analyst: JXL

Autosampler Location: 53

Date Collected: 2/17/2010 11:30:41

Data Type: Original  
-----

## Replicate Data: 1202039443|951627|5

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.021	-0.021	-0.0002	0.0013	0.0003	11:31:42	Yes
2	-0.014	-0.014	-0.0002	0.0024	0.0004	11:32:17	Yes
Mean:	-0.017	-0.017	-0.0002				

# Miscellaneous

# Prep LogBook

Analyst: TXB3  
 Batch: 951592  
 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	Spike Amount	Spike Units
MB	1202039378		SW846 7470A Prep	16-FEB-2010 11:55	<2	20 mL	20 mL	1		
LCS	1202039379		SW846 7470A Prep	16-FEB-2010 11:55	<2	20 mL	20 mL	1		
SAMPLE	246323001		SW846 7470A Prep	16-FEB-2010 11:55	<2	20 mL	20 mL	1		
SAMPLE	246334001		SW846 7470A Prep	16-FEB-2010 11:55	<2	20 mL	20 mL	1		
SAMPLE	246431001		SW846 7470A Prep	16-FEB-2010 11:55	<2	20 mL	20 mL	1		
DUP	1202039380	246431001	SW846 7470A Prep	16-FEB-2010 11:55	<2	20 mL	20 mL	1		
MS	1202039381	246431001	SW846 7470A Prep	16-FEB-2010 11:55	<2	20 mL	20 mL	1		
SDILT	1202039382	246431001	SW846 7470A Prep	16-FEB-2010 11:55	<2	20 mL	20 mL	1		
SAMPLE	246431002		SW846 7470A Prep	16-FEB-2010 11:55	<2	20 mL	20 mL	1		
SAMPLE	246431003		SW846 7470A Prep	16-FEB-2010 11:55	<2	20 mL	20 mL	1		
SAMPLE	246431004		SW846 7470A Prep	16-FEB-2010 11:55	<2	20 mL	20 mL	1		
SAMPLE	246436001		SW846 7470A Prep	16-FEB-2010 11:55	<2	20 mL	20 mL	1		

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
WHG100216-06		500 uL	Mercury Working 2nd Source 5.0/ICV
WHG100216-01a		20 uL	Mercury Working 1st Source CAL 0.2/CRA
WHG100216-02		50 uL	Mercury Working 1st Source CAL 0.5
WHG100216-05		1 mL	Mercury Working 1st Source CAL 10.0
WHG100216-03		200 uL	Mercury Working 1st Source CAL 2.0
WHG100216-04		500 uL	Mercury Working 1st Source CAL 5.0/CCV

Comments Digestion Start Date: 16-FEB-10 11:55  
 Digestion End Date: 16-FEB-10 13:55

# Prep LogBook

Analyst: LYH1  
 Batch: 950390  
 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	1202036684		SW846 3005A	16-FEB-2010 08:15	<2	50 mL	50 mL	1	.25	mL
LCS	1202036685		SW846 3005A	16-FEB-2010 08:15	<2	50 mL	50 mL	1	.25	mL
SAMPLE	246293001		SW846 3005A	16-FEB-2010 08:15	<2	50 mL	50 mL	1	.25	mL
SAMPLE	246293002		SW846 3005A	16-FEB-2010 08:15	<2	50 mL	50 mL	1	.25	mL
SAMPLE	246293003		SW846 3005A	16-FEB-2010 08:15	<2	50 mL	50 mL	1	.25	mL
SAMPLE	246293004		SW846 3005A	16-FEB-2010 08:15	<2	50 mL	50 mL	1	.25	mL
SAMPLE	246431001		SW846 3005A	16-FEB-2010 08:15	<2	50 mL	50 mL	1	.25	mL
DUP	1202036686	246431001	SW846 3005A	16-FEB-2010 08:15	<2	50 mL	50 mL	1	.25	mL
MS	1202036687	246431001	SW846 3005A	16-FEB-2010 08:15	<2	50 mL	50 mL	1	.25	mL
SDILT	1202036688	246431001	SW846 3005A	16-FEB-2010 08:15	<2	50 mL	50 mL	1	.25	mL
SAMPLE	246431002		SW846 3005A	16-FEB-2010 08:15	<2	50 mL	50 mL	1	.25	mL
SAMPLE	246431003		SW846 3005A	16-FEB-2010 08:15	<2	50 mL	50 mL	1	.25	mL
SAMPLE	246431004		SW846 3005A	16-FEB-2010 08:15	<2	50 mL	50 mL	1	.25	mL
SAMPLE	246436001		SW846 3005A	16-FEB-2010 08:15	<2	50 mL	50 mL	1	.25	mL

Reagent/Solvent Lot ID	Amount	Description	Comments
1265209	2.5 mL	HYDROCHLORIC ACID	
1234886	1 mL	Nitric Acid CONC.	

# Prep LogBook

Analyst: LYH1  
 Batch: 950395  
 Lab SOP: GL-MA-E-006 REV# 9

Verified by: \_\_\_\_\_

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1202036703	U1100120-A	.5	mL
LCS	1202036703	U1100120-B	.5	mL
MS	1202036701	U1090930-A	.5	mL
MS	1202036701	U1090930-B	.5	mL
MSD	1202036702	U1090930-A	.5	mL
MSD	1202036702	U1090930-B	.5	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1202036698		SW846 3005A	16-FEB-2010 08:15	<2	50 mL	50 mL	1	WATER
LCS	1202036703		SW846 3005A	16-FEB-2010 08:15	<2	50 mL	50 mL	1	WATER
SAMPLE	246293001		SW846 3005A	16-FEB-2010 08:15	<2	50 mL	50 mL	1	WATER
DUP	1202036699	246293001	SW846 3005A	16-FEB-2010 08:15	<2	50 mL	50 mL	1	WATER
SDILT	1202036700	246293001	SW846 3005A	16-FEB-2010 08:15	<2	50 mL	50 mL	1	WATER
MS	1202036701	246293001	SW846 3005A	16-FEB-2010 08:15	<2	50 mL	50 mL	1	WATER
MSD	1202036702	246293001	SW846 3005A	16-FEB-2010 08:15	<2	50 mL	50 mL	1	WATER
SAMPLE	246293002		SW846 3005A	16-FEB-2010 08:15	<2	50 mL	50 mL	1	WATER
SAMPLE	246293003		SW846 3005A	16-FEB-2010 08:15	<2	50 mL	50 mL	1	WATER
SAMPLE	246293004		SW846 3005A	16-FEB-2010 08:15	<2	50 mL	50 mL	1	WATER
SAMPLE	246431001		SW846 3005A	16-FEB-2010 08:15	<2	50 mL	50 mL	1	WATER
SAMPLE	246431002		SW846 3005A	16-FEB-2010 08:15	<2	50 mL	50 mL	1	WATER
SAMPLE	246431003		SW846 3005A	16-FEB-2010 08:15	<2	50 mL	50 mL	1	WATER
SAMPLE	246431004		SW846 3005A	16-FEB-2010 08:15	<2	50 mL	50 mL	1	WATER
SAMPLE	246436001		SW846 3005A	16-FEB-2010 08:15	<2	50 mL	50 mL	1	WATER

Comments:

Reagent/Solvent Lot ID	Amount	Description
1265209	2.5 mL	HYDROCHLORIC ACID
1234886	1 mL	Nitric Acid CONC.

Prep Data Logbook Version 1:1

GEL Laboratories LLC

Page#



# 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:** UI090612-02      **Opened:** 12-JUN-09      **Catalog Number :** 060074-06-01  
**Name:** ICPMS Tungsten - 10mg/L      **Received:** 12-JUN-09      **Lot Number :** 1016377  
**Type:** Source Material      **Expires:** 12-JUN-10      **Solvent :** 2% HNO3  
**Employee:** Paul Boyd  
**Supplier:** O2SI  
**Description:** ICPMS Tungsten standard SPIKE - 10mg/L  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Tungsten	10 mg/L		

# Standard Logbook

**Serial ID:** UI090701-09      **Opened:** 01-JUL-09      **Amount :** 250 mL  
**Name:** ICP-MS CRDL Master #1      **Received:** 01-JUL-09      **Catalog Number :** 160044-09-02  
**Type:** Source Material      **Expires:** 01-JUL-10      **Lot Number :** 1016477  
**Employee:** Paul Boyd      **Solvent :** +/- 0.5% IN 2% HNO3  
**Supplier:** 02SI  
**Description:** ICPMS CRDL Master Soln #1  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Aluminum	15 mg/L	Arsenic	5 mg/L
Barium	2 mg/L	Beryllium	.5 mg/L
Boron	15 mg/L	Cadmium	1 mg/L
Calcium	100 mg/L	Chromium	3 mg/L
Cobalt	1 mg/L	Copper	1 mg/L
Iron	25 mg/L	Lead	2 mg/L
Lithium	10 mg/L	Magnesium	15 mg/L
Manganese	5 mg/L	Nickel	2 mg/L
Phosphorous	50 mg/L	Potassium	300 mg/L
Selenium	5 mg/L	Sodium	250 mg/L
Strontium	10 mg/L	Thallium	1 mg/L
Thorium	1 mg/L	Uranium	.2 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

**Serial ID:** UI090701-10      **Opened:** 01-JUL-09      **Amount :** 250 mL  
**Name:** ICP-MS CRDL Master #2      **Received:** 01-JUL-09      **Catalog Number :** 160044-08-02  
**Type:** Source Material      **Expires:** 01-JUL-10      **Lot Number :** 1016476  
**Employee:** Paul Boyd      **Solvent :** +/- 0.5% IN 2% HNO3  
**Supplier:** 02SI  
**Description:** ICPMS CRDL Soln #2  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Molybdenum	.5 mg/L
Silver	1 mg/L	Tin	2 mg/L
Titanium	10 mg/L	Tungsten	5 mg/L
Zirconium	2 mg/L		

**Serial ID:** UI090701-40      **Opened:** 01-JUL-09      **Amount :** 500 mL  
**Name:** TRACE ICP Stock PQL St      **Received:** 30-JUN-09      **Catalog Number :** 160543-01-03  
**Type:** Source Material      **Expires:** 01-JUL-10      **Lot Number :** 1016475  
**Employee:** Helen Camello      **Solvent :** +/-0.5%in2%HNO3+TrHF  
**Supplier:** 02si  
**Description:** TRACE ICP Stock PQL Standard  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
---------	---------------	---------	---------------

# 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:** 01-MAR-10      **Lot Number :** 1017098  
**Employee:** Helen Camello      **Solvent :** 1%HNO3  
**Supplier:** 02SI  
**Description:** Sodium 1000 +/- 3 ug/mL in 1% HNO3  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Sodium	1000 ug/mL		

**Serial ID:** UI090925-40      **Opened:** 23-OCT-09      **Amount :** 500 mL  
**Name:** SECOND SOURCE STD -1      **Received:** 25-SEP-09      **Catalog Number :** SGELMX38-500N  
**Type:** Source Material      **Expires:** 30-SEP-10      **Lot Number :** 4909129  
**Employee:** Helen Camello      **Solvent :** 5%HNO3  
**Supplier:** SPECTRO PURE  
**Description:** SECOND SOURCE STD #1A 5%HNO3  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Arsenic	100 mg/L
Barium	100 mg/L	Boron	100 mg/L
Cadmium	100 mg/L	Calcium	1000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	1000 mg/L
Lead	100 mg/L	Phosphorous	500 mg/L
Potassium	500 mg/L	Selenium	500 mg/L
Sodium	500 mg/L	Strontium	100 mg/L

# Standard Logbook

**Serial ID:** UI090925-41      **Opened:** 23-OCT-09      **Amount :** 500 mL  
**Name:** SECOND SOURCE STD -1      **Received:** 25-SEP-09      **Catalog Number :** SGELMX39-500B  
**Type:** Source Material      **Expires:** 30-SEP-10      **Lot Number :** 4909130  
**Employee:** Helen Camello      **Solvent :** 5%HNO3,TR.HF  
**Supplier:** SPECTRO PURE  
**Description:** SECOND SOURCE STD #1B  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Antimony	100 mg/L	Beryllium	50 mg/L
Magnesium	1000 mg/L	Manganese	100 mg/L
Molybdenum	100 mg/L	Nickel	100 mg/L
Silver	50 mg/L	Sulfur	500 mg/L
Thallium	100 mg/L	Tin	100 mg/L
Titanium	100 mg/L	Uranium	100 mg/L
Vanadium	100 mg/L	Zinc	100 mg/L

**Serial ID:** UI090930-A      **Opened:** 30-SEP-09      **Catalog Number :** 160067-02  
**Name:** ICP-MS DOE Liquid SPIKE      **Received:** 28-SEP-09      **Lot Number :** 1017141  
**Type:** Source Material      **Expires:** 30-SEP-10  
**Employee:** Francena Armstrong      **Verified:** 21-NOV-08  
**Supplier:** O2Si  
**Description:** ICP-MS DOE liquid Spike Solution A  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Aluminum	200 mg/L	Arsenic	8 mg/L
Barium	5 mg/L	Beryllium	5 mg/L
Boron	10 mg/L	Cadmium	1 mg/L
Calcium	200 mg/L	Chromium	5 mg/L
Cobalt	5 mg/L	Copper	5 mg/L
Iron	200 mg/L	Lead	4 mg/L
Lithium	5 mg/L	Magnesium	200 mg/L
Manganese	5 mg/L	Nickel	5 mg/L
Phosphorus, Total as P	200 mg/L	Potassium	200 mg/L
Selenium	2 mg/L	Silicon	200 mg/L
Sodium	200 mg/L	Strontium	5 mg/L
Thallium	10 mg/L	Thorium	5 mg/L
Total Uranium	5 mg/L	Uranium	5 mg/L
Uranium-235	.0364 mg/L	Uranium-238	4.96 mg/L
Vanadium	5 mg/L	Zinc	5 mg/L

# Standard Logbook

**Serial ID:** UI090930-B      **Opened:** 30-SEP-09      **Catalog Number :** 160067-02  
**Name:** ICP-MS DOE Liquid SPIKE      **Received:** 28-SEP-09      **Lot Number :** 1017141  
**Type:** Source Material      **Expires:** 30-SEP-10  
**Employee:** Francena Armstrong      **Verified:** 21-NOV-08  
**Supplier:** O2Si  
**Description:** ICP-MS DOE Liquid Spike Solution B  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	5 mg/L
Silver	5 mg/L	Tin	5 mg/L
Titanium	5 mg/L	Zirconium	5 mg/L

**Serial ID:** UI091015-42      **Opened:** 28-OCT-09      **Amount :** 500 mL  
**Name:** SI 1000mg/L      **Received:** 15-OCT-09      **Catalog Number :** 060014-02-03  
**Type:** Source Material      **Expires:** 28-OCT-10      **Lot Number :** 1017581  
**Employee:** Helen Camello      **Solvent :** 0.3%H2O(NH4)2SiF6  
**Supplier:** o2si  
**Description:** Silicon 1000mg/L +/- 0.3% in H2O(NH4)2SiF6  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

**Serial ID:** UI091102-40      **Opened:** 16-NOV-09      **Amount :** 500 mL  
**Name:** TRACE CALSTD#1A SOUF      **Received:** 02-NOV-09      **Catalog Number :** HP2270-1-500  
**Type:** Source Material      **Expires:** 31-OCT-10      **Lot Number :** 0930215  
**Employee:** Helen Camello      **Solvent :** HNO3  
**Supplier:** Environmental Express  
**Description:** Trace Calibration Std #1A  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Aluminum	2000 mg/L	Arsenic	200 mg/L
Barium	200 mg/L	Beryllium	200 mg/L
Boron	200 mg/L	Cadmium	200 mg/L
Calcium	2000 mg/L	Chromium	200 mg/L
Cobalt	200 mg/L	Copper	200 mg/L
Iron	2000 mg/L	Lead	200 mg/L
Magnesium	2000 mg/L	Manganese	200 mg/L
Nickel	200 mg/L	Phosphorous	1000 mg/L
Potassium	2000 mg/L	Selenium	200 mg/L
Sodium	2000 mg/L	Strontium	200 mg/L
Thallium	200 mg/L	Uranium	200 mg/L
Vanadium	200 mg/L	Zinc	200 mg/L

# 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:** 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

# 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 ICV/CCV Master C      **Received:** 17-DEC-09      **Catalog Number :** 160054-03  
**Type:** Source Material      **Expires:** 17-DEC-10      **Lot Number :** 1018211  
**Employee:** Paul Boyd      **Solvent :** +/- 0.5% in 5% HNO3 100 cm2  
**Supplier:** 02SI  
**Description:** ICPMS ICV/CCV Soln C - 10ppm  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	20 mg/L
Silver	20 mg/L	Tin	20 mg/L
Titanium	20 mg/L	Tungsten	20 mg/L
Zirconium	20 mg/L		

**Serial ID:** UI091217-12      **Opened:** 17-DEC-09      **Amount :** 250 mL  
**Name:** ICP-MS ICSAB Master B      **Received:** 17-DEC-09      **Catalog Number :** 160033-02  
**Type:** Source Material      **Expires:** 17-DEC-10      **Lot Number :** 1018212  
**Employee:** Paul Boyd      **Solvent :** +/- 0.5% in 2% HNO3  
**Supplier:** 02SI  
**Description:** ICPMS ICSAB Master B  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Arsenic	2 mg/L	Barium	2 mg/L
Beryllium	2 mg/L	Boron	2 mg/L
Cadmium	2 mg/L	Chromium	2 mg/L
Cobalt	2 mg/L	Copper	2 mg/L
Lead	2 mg/L	Lithium	2 mg/L
Manganese	2 mg/L	Nickel	2 mg/L
Selenium	2 mg/L	Strontium	2 mg/L
Thallium	2 mg/L	Thorium	2 mg/L
Uranium	2 mg/L	Vanadium	2 mg/L
Zinc	2 mg/L		

# Standard Logbook

**Serial ID:** UI091217-13      **Opened:** 17-DEC-09      **Amount :** 250 mL  
**Name:** ICP-MS ICSAB Master C      **Received:** 17-DEC-09      **Catalog Number :** 160033-03  
**Type:** Source Material      **Expires:** 17-DEC-10      **Lot Number :** 1016926  
**Employee:** Paul Boyd      **Solvent :** +/- 0.5% in 2% HNO3  
**Supplier:** 02SI  
**Description:** ICPMS ICSAB Master C  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Silver	2 mg/L
Tin	2 mg/L	Tungsten	2 mg/L
Zirconium	2 mg/L		

**Serial ID:** 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  
**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



# Standard Logbook

Analyte	Concentration	Analyte	Concentration
Titanium	100 ug/mL	Uranium	100 ug/mL
Vanadium	100 ug/mL	Zinc	100 ug/mL

**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

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

# 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:** 04-MAR-10      **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:** UMS100226-01      **Opened:** 26-FEB-10      **Amount :** 250 mL  
**Name:** ICPMSCalSPIKEB      **Received:** 26-FEB-10      **Catalog Number :** ZGEL-100-250  
**Type:** Source Material      **Expires:** 26-FEB-11      **Lot Number :** 21-104JB  
**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:** UMS100226-02      **Opened:** 26-FEB-10      **Catalog Number :** ZGEL-102-250  
**Name:** ICPMSCalSPIKEA      **Received:** 26-FEB-10      **Lot Number :** 21-103JB  
**Type:** Source Material      **Expires:** 26-FEB-11  
**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:** UMS100226-03      **Opened:** 26-FEB-10      **Amount :** 250 ml  
**Name:** ICPMSCaSPIKEC      **Received:** 26-FEB-10      **Catalog Number :** ZGEL-101-250  
**Type:** Source Material      **Expires:** 26-FEB-11      **Lot Number :** 21-102JB  
**Employee:** Paul Boyd  
**Supplier:** SPEX  
**Description:** ICPMS Calibration Standard Solution C  
**Comments:** None

<b>Analyte</b>	<b>Concentration</b>	<b>Analyte</b>	<b>Concentration</b>
Antimony	10 mg/L	Molybdenum	10 mg/L
Tin	10 mg/L	Titanium	10 mg/L
Zirconium	10 mg/L		

**Serial ID:** IHG100216-01      **Opened:** 16-FEB-10      **Instrument Id :** Mercury  
**Name:** MHGINTER1      **Received:** 16-FEB-10      **Pipet Id :** Minou1  
**Type:** Intermediate      **Expires:** 17-FEB-10      **Solvent :** 1mL HNO3 + Typel H2O  
**Employee:** Tara Griffin  
**Supplier:** GEL  
**Description:** Mercury Intermediate 1st Source 200 ug/L  
**Comments:** Prepare fresh daily

<b>Parent Material</b>	<b>Analyte</b>	<b>Parent Conc.</b>	<b>Aliquot</b>	<b>Final Vol.</b>	<b>Final Conc.</b>
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

**Serial ID:** IHG100216-02      **Opened:** 16-FEB-10      **Pipet Id :** Minou1  
**Name:** MHGINTER2      **Received:** 16-FEB-10      **Solvent :** 2% HNO3-1257474  
**Type:** Intermediate      **Expires:** 17-FEB-10  
**Employee:** Tara Griffin  
**Supplier:** GEL  
**Description:** Mercury Intermediate 2nd Source 200 ug/L  
**Comments:** None

<b>Parent Material</b>	<b>Analyte</b>	<b>Parent Conc.</b>	<b>Aliquot</b>	<b>Final Vol.</b>	<b>Final Conc.</b>
UHG1167641-02	Mercury	999.7 mg/L	.05 mL	250 mL	200 ug/L

**Serial ID:** WHG100216-01a      **Opened:** 16-FEB-10      **Pipet Id :** Hg1289245  
**Name:** MHGWORKCAL0.2CRA      **Received:** 16-FEB-10      **Solvent :** 2% HNO3-1257474  
**Type:** Working      **Expires:** 23-FEB-10  
**Employee:** Tara Griffin  
**Supplier:** GEL  
**Description:** Mercury Working 1st Source CAL 0.2/CRA  
**Comments:** None

<b>Parent Material</b>	<b>Analyte</b>	<b>Parent Conc.</b>	<b>Aliquot</b>	<b>Final Vol.</b>	<b>Final Conc.</b>
IHG100216-01	Mercury	200 ug/L	20 uL	20 mL	.2 ug/L

# Standard Logbook

**Serial ID:** WHG100216-02      **Opened:** 16-FEB-10      **Pipet Id :** Hg1289245  
**Name:** MHGWORKCAL0.5      **Received:** 16-FEB-10      **Solvent :** 2% HNO3-1257474  
**Type:** Working      **Expires:** 23-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.
IHG100216-01	Mercury	200 ug/L	50 uL	20 mL	.5 ug/L

**Serial ID:** WHG100216-03      **Opened:** 16-FEB-10      **Pipet Id :** Hg1289245  
**Name:** MHGWORKCAL2.0      **Received:** 16-FEB-10      **Solvent :** 2% HNO3-1257474  
**Type:** Working      **Expires:** 23-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.
IHG100216-01	Mercury	200 ug/L	200 uL	20 mL	2 ug/L

**Serial ID:** WHG100216-04      **Opened:** 16-FEB-10      **Pipet Id :** Hg1289245  
**Name:** MHGWORKCAL5.0CCV      **Received:** 16-FEB-10      **Solvent :** 2% HNO3-1257474  
**Type:** Working      **Expires:** 23-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.
IHG100216-01	Mercury	200 ug/L	500 uL	20 mL	5 ug/L

**Serial ID:** WHG100216-05      **Opened:** 16-FEB-10      **Pipet Id :** Hg1289245  
**Name:** MHGWORKCAL10.0      **Received:** 16-FEB-10      **Solvent :** 2% HNO3-1257474  
**Type:** Working      **Expires:** 23-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.
IHG100216-01	Mercury	200 ug/L	1 mL	20 mL	10 ug/L

# Standard Logbook

**Serial ID:** WHG100216-06      **Opened:** 16-FEB-10      **Pipet Id :** Hg1289245  
**Name:** MHGWORK5.0ICV      **Received:** 16-FEB-10      **Solvent :** 2% HNO3-1257474  
**Type:** Working      **Expires:** 23-FEB-10  
**Employee:** Tara Griffin  
**Supplier:** GEL  
**Description:** Mercury Working 2nd Source 5.0/ICV  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100216-02	Mercury	200 ug/L	500 uL	20 mL	5 ug/L

**Serial ID:** WHG100216-13      **Opened:** 16-FEB-10      **Pipet Id :** Hg1289245  
**Name:** MHGLIQLCSMSSPIKE      **Received:** 16-FEB-10      **Solvent :** 2% HNO3-1257474  
**Type:** Working      **Expires:** 23-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.	Aliquot	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.	Aliquot	Final Vol.	Final Conc.
UI091102-40	Sodium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Strontium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Thallium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Uranium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Zinc	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Antimony	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Silver	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	500 mL	2000 ug/L
UI091102-41	Tin	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Titanium	200 mg/L	2.5 mL	500 mL	1000 ug/L

**Serial ID:** 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.	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:** 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.	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

Report run on: 05-MAR-10

GEL Laboratories LLC

Page: \_\_\_\_\_

# 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      **Expires:** 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.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Aluminum	100 mg/L	2 mL	1000 mL	200 ug/L
UI090701-40	Antimony	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Arsenic	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Barium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Beryllium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Boron	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Cadmium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Calcium	100 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Chromium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Cobalt	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Copper	5 mg/L	2 mL	1000 mL	10 ug/L

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Iron	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Lead	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Magnesium	150 mg/L	2 mL	1000 mL	300 ug/L
UI090701-40	Manganese	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Molybdenum	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Nickel	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Phosphorous	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Potassium	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Selenium	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Silicon	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Silver	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sodium	150 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Strontium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sulfur	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Thallium	10 mg/L	2 mL	1000 mL	20 ug/L
UI090701-40	Tin	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Titanium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Uranium	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Vanadium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Zinc	5 mg/L	2 mL	1000 mL	10 ug/L

**Serial ID:** WMS100303-04B      **Opened:** 03-MAR-10      **Amount :** 50 mL  
**Name:** ICPMS Cal Standard 100      **Received:** 03-MAR-10      **Balance Id :** 40245216  
**Type:** Working      **Expires:** 04-MAR-10      **Pipet Id :** 1758088  
**Employee:** Rose Jenkins      **Solvent :** 2%HNO3/1%HCl- 1276824  
**Supplier:** GEL  
**Description:** ICPMS Calibration Standard (100 ppb)  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090612-02	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS100226-01	Arsenic	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Barium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Beryllium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Boron	20 mg/L	.5	50 mL	200 ug/l
UMS100226-01	Cadmium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Chromium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Cobalt	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Copper	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Lead	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Lithium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Manganese	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Nickel	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Selenium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Silver	10 mg/L	.5	50 mL	100 ug/l

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS100226-01	Strontium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Thallium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Thorium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Uranium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Vanadium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Zinc	10 mg/L	.5	50 mL	100 ug/l
UMS100226-02	Aluminum	1000 mg/L	.5	50 mL	10000 ug/l
UMS100226-02	Calcium	1000 mg/L	.5	50 mL	10000 ug/l
UMS100226-02	Iron	1000 mg/L	.5	50 mL	10000 ug/l
UMS100226-02	Magnesium	1000 mg/L	.5	50 mL	10000 ug/l
UMS100226-02	Phosphorous	1000 mg/L	.5	50 mL	10000 ug/l
UMS100226-02	Potassium	1000 mg/L	.5	50 mL	10000 ug/l
UMS100226-02	Sodium	1000 mg/L	.5	50 mL	10000 ug/l
UMS100226-03	Antimony	10 mg/L	.5	50 mL	100 ug/l
UMS100226-03	Molybdenum	10 mg/L	.5	50 mL	100 ug/l
UMS100226-03	Tin	10 mg/L	.5	50 mL	100 ug/l
UMS100226-03	Titanium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-03	Zirconium	10 mg/L	.5	50 mL	100 ug/l

**Serial ID:** WMS100304-04      **Opened:** 04-MAR-10      **Amount :** 50 mL  
**Name:** ICPMS Cal Standard 100      **Received:** 04-MAR-10      **Balance Id :** 4025216  
**Type:** Working      **Expires:** 05-MAR-10      **Pipet Id :** 3541598  
**Employee:** Paul Boyd      **Solvent :** 2%HNO3/1%HCl-1276824  
**Supplier:** GEL  
**Description:** ICPMS Calibration Standard (100 ppb)  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090612-02	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS100226-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS100226-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS100226-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

**Serial ID:** WMS100304-04A      **Opened:** 04-MAR-10      **Balance Id :** 4025216  
**Name:** ICPMS Cal Standard 10      **Received:** 04-MAR-10      **Pipet Id :** 3541598  
**Type:** Working      **Expires:** 05-MAR-10      **Solvent :** 2%HNO3/1%HCl - 1276824  
**Employee:** Paul Boyd  
**Supplier:** GEL  
**Description:** ICPMS Calibration Standard (10 ppb)  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100303-04B	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100303-04B	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS100303-04B	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS100303-04B	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100303-04B	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100303-04B	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS100303-04B	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100303-04B	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100303-04B	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100303-04B	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS100303-04B	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS100303-04B	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100303-04B	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS100303-04B	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100303-04B	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100303-04B	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS100303-04B	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS100303-04B	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS100303-04B	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100303-04B	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100303-04B	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100303-04B	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS100303-04B	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100303-04B	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100303-04B	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100303-04B	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100303-04B	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS100303-04B	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100303-04B	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS100303-04B	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100303-04B	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100303-04B	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS100303-04B	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

**Serial ID:** WMS100304-05      **Opened:** 04-MAR-10      **Balance Id :** 40245216  
**Name:** ICPMS ICV      **Received:** 04-MAR-10      **Pipet Id :** 3541598  
**Type:** Working      **Expires:** 05-MAR-10      **Solvent :** 2%HNO3/1%HCl - 1276824  
**Employee:** Paul Boyd  
**Supplier:** GEL  
**Description:** ICPMS ICV  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI091217-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI091217-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

**Serial ID:** WMS100304-06      **Opened:** 04-MAR-10      **Balance Id :** 40245216  
**Name:** ICPMS CRDL      **Received:** 04-MAR-10      **Pipet Id :** 3820544  
**Type:** Working      **Expires:** 05-MAR-10      **Solvent :** 2%HNO3/1%HCl - 1276824  
**Employee:** Paul Boyd  
**Supplier:** GEL  
**Description:** ICPMS CRDL  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L



# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

**Serial ID:** WMS100304-07      **Opened:** 04-MAR-10      **Balance Id :** 40245216  
**Name:** ICPMS ICSA      **Received:** 04-MAR-10      **Lot Number :** 1010773  
**Type:** Working      **Expires:** 05-MAR-10      **Pipet Id :** 3541598  
**Employee:** Paul Boyd      **Solvent :** 2%HNO3/1%HCl - 1276824  
**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

**Serial ID:** WMS100304-08      **Opened:** 04-MAR-10      **Balance Id :** 40245216  
**Name:** ICPMS ICSAB      **Received:** 04-MAR-10      **Pipet Id :** 1758088  
**Type:** Working      **Expires:** 05-MAR-10      **Solvent :** 2%HNO3/1%HCl - 1276824  
**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

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI091217-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI091217-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI091217-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI091217-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI091217-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI091217-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI091217-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI091217-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L
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:** WMS100305-04      **Opened:** 05-MAR-10      **Amount :** 50 mL  
**Name:** ICPMS Cal Standard 100      **Received:** 05-MAR-10      **Balance Id :** 4025216  
**Type:** Working      **Expires:** 06-MAR-10      **Pipet Id :** 3541598  
**Employee:** Paul Boyd      **Solvent :** 2%HNO3/1%HCl-1276824  
**Supplier:** GEL  
**Description:** ICPMS Calibration Standard (100 ppb)  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090612-02	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS100226-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS100226-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS100226-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

**Serial ID:** WMS100305-04A      **Opened:** 05-MAR-10      **Balance Id :** 4025216  
**Name:** ICPMS Cal Standard 10      **Received:** 05-MAR-10      **Pipet Id :** 3541598  
**Type:** Working      **Expires:** 06-MAR-10      **Solvent :** 2%HNO3/1%HCl - 1276824  
**Employee:** Paul Boyd  
**Supplier:** GEL  
**Description:** ICPMS Calibration Standard (10 ppb)  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100305-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100305-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS100305-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS100305-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100305-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100305-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100305-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100305-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100305-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100305-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS100305-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS100305-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100305-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS100305-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100305-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100305-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS100305-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS100305-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS100305-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100305-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100305-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100305-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS100305-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100305-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100305-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100305-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100305-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS100305-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100305-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS100305-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100305-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100305-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS100305-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

**Serial ID:** WMS100305-05      **Opened:** 05-MAR-10      **Balance Id :** 40245216  
**Name:** ICPMS ICV      **Received:** 05-MAR-10      **Pipet Id :** 3541598  
**Type:** Working      **Expires:** 06-MAR-10      **Solvent :** 2%HNO3/1%HCl - 1276824  
**Employee:** Paul Boyd  
**Supplier:** GEL  
**Description:** ICPMS ICV  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI091217-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI091217-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

**Serial ID:** WMS100305-06      **Opened:** 05-MAR-10      **Balance Id :** 40245216  
**Name:** ICPMS CRDL      **Received:** 05-MAR-10      **Pipet Id :** 3820544  
**Type:** Working      **Expires:** 06-MAR-10      **Solvent :** 2%HNO3/1%HCl - 1276824  
**Employee:** Paul Boyd  
**Supplier:** GEL  
**Description:** ICPMS CRDL  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

**Serial ID:** WMS100305-07      **Opened:** 05-MAR-10      **Balance Id :** 40245216  
**Name:** ICPMS ICSA      **Received:** 05-MAR-10      **Lot Number :** 1010773  
**Type:** Working      **Expires:** 06-MAR-10      **Pipet Id :** 3541598  
**Employee:** Paul Boyd      **Solvent :** 2%HNO3/1%HCl - 1276824  
**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:** WMS100305-08      **Opened:** 05-MAR-10      **Balance Id :** 40245216  
**Name:** ICPMS ICSAB      **Received:** 05-MAR-10      **Pipet Id :** 1758088  
**Type:** Working      **Expires:** 06-MAR-10      **Solvent :** 2%HNO3/1%HCl - 1276824  
**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
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:** WMS100305-70      **Opened:** 05-MAR-10      **Balance Id :** 40245216  
**Name:** ICPMS LINEAR RANGE ST      **Received:** 05-MAR-10      **Pipet Id :** 1758088  
**Type:** Working      **Expires:** 06-MAR-10      **Solvent :** 2%HNO3/1%HCl - 1276824  
**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
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:** 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



# Standard Logbook

Description: HYDROCHLORIC ACID

Comments: None

---

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: 1176183      Opened: 24-AUG-09      Lot Number : H20001  
Name: B-H2SO4-MER      Received: 24-AUG-09  
Type: Reagent/Solvent      Expires: 24-AUG-10  
Employee: Tara Griffin  
Supplier: Mallinckrodt  
Description: Sulfuric Acid, Concentrated  
Comments: None

---

Serial ID: 1215906      Opened: 06-NOV-09      Lot Number : H44465  
Name: B-K2S2O8S-MER      Received: 06-NOV-09  
Type: Reagent/Solvent      Expires: 06-NOV-10  
Employee: Tara Griffin  
Supplier: J.T BAKER  
Description: Potassium Persulfate Concentrate.  
Comments: None

---

Serial ID: 1228372-A      Opened: 12-NOV-09      Lot Number : 49215936  
Name: B-NH2OH.HCl-MER      Received: 12-NOV-09  
Type: Reagent/Solvent      Expires: 12-NOV-10  
Employee: Tara Griffin  
Supplier: Fisher Scientific  
Description: Hydroxylamine Hydrochloride  
Comments: None

---

# Standard Logbook

**Serial ID:** 1234886      **Opened:** 27-NOV-09      **Lot Number :** H20053 L  
**Name:** I-HNO3      **Received:** 27-NOV-09  
**Type:** Reagent/Solvent      **Expires:** 27-NOV-10  
**Employee:** Bryan Davis  
**Supplier:** BAKER  
**Description:** Nitric Acid CONC.  
**Comments:** None

**Serial ID:** 1255532-C      **Opened:** 15-JAN-10      **Balance Id :** BAL-002  
**Name:** B-NaCl.NH2OH.HCl-MER      **Received:** 15-JAN-10  
**Type:** Reagent/Solvent      **Expires:** 15-JUL-10  
**Employee:** Tara Griffin  
**Supplier:** GEL  
**Description:** Hg reducing agent  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1228372-A	B-NH2OH.HCl-MER	N/A	120 g	1000 mL	N/A

**Serial ID:** 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

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

# Standard Logbook

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: 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

Serial ID: 1276824      Opened: 01-MAR-10      Solvent : Type I Water

Name: B-2%HNO3/1%HCl-ICPMS      Received: 01-MAR-10

Type: Reagent/Solvent      Expires: 08-MAR-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

# Metals Analysis

# Case Narrative

**Metals Fractional Narrative  
Los Alamos National Laboratory (LANL)  
SDG 10-1621-1**

**Sample Analysis**

<b>Sample ID</b>	<b>Client ID</b>
246437001	RE15-10-8354
246437002	RE15-10-8356
246437003	RE15-10-8353
246437004	RE15-10-8352
246437005	RE15-10-8355
246437006	RE15-10-8351
246437007	RE15-10-8350
246437008	RE15-10-8357
246437009	RE15-10-8338
246437010	RE15-10-8336
246437011	RE15-10-8339
246437012	RE15-10-8337
246437013	RE15-10-8375
246437014	RE15-10-8374
1202036880	Method Blank (MB) ICP
1202054615	Method Blank (MB) ICP
1202036885	Laboratory Control Sample (LCS)
1202054620	Laboratory Control Sample (LCS)
1202036882	246437001(RE15-10-8354L) Serial Dilution (SD)
1202054617	246437001(RE15-10-8354L) Serial Dilution (SD)

1202036881	246437001(RE15-10-8354D) Sample Duplicate (DUP)
1202054616	246437001(RE15-10-8354D) Sample Duplicate (DUP)
1202036883	246437001(RE15-10-8354S) Matrix Spike (MS)
1202054618	246437001(RE15-10-8354S) Matrix Spike (MS)
1202036884	246437001(RE15-10-8354SD) Matrix Spike Duplicate (MSD)
1202054619	246437001(RE15-10-8354SD) Matrix Spike Duplicate (MSD)
1202036886	Method Blank (MB) <b>ICP-MS</b>
1202036891	Laboratory Control Sample (LCS)
1202036888	246437001(RE15-10-8354L) Serial Dilution (SD)
1202036887	246437001(RE15-10-8354D) Sample Duplicate (DUP)
1202036889	246437001(RE15-10-8354S) Matrix Spike (MS)
1202036890	246437001(RE15-10-8354SD) Matrix Spike Duplicate (MSD)
1202039421	Method Blank (MB) <b>CVAA</b>
1202039422	Laboratory Control Sample (LCS)
1202039425	246554001(RE15-10-8175L) Serial Dilution (SD)
1202039423	246554001(RE15-10-8175D) Sample Duplicate (DUP)
1202039424	246554001(RE15-10-8175S) Matrix Spike (MS)
1202039426	246554001(RE15-10-8175SD) Matrix Spike Duplicate (MSD)

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

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

<b>Analytical Batch:</b>	950491, 958097, 950493 and 951617
<b>Prep Batch :</b>	950490, 958096, 950492 and 951616
<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 4300 Optima radial/axial-viewing inductively coupled plasma atomic emission spectrometer. The instrument is equipped with a Burgener nebulizer, cyclonic spray chamber, and yttrium or scandium internal standard. Operating conditions for the ICP are set at a power level of 1500 watts. The instrument has a peristaltic pump flow rate of 1.4L/min, argon gas flows of 15 L/min and 0.2 L/min for the torch and auxiliary gases, and a flow setting of 0.65L/min for the nebulizer.

The Metals analysis-ICP was performed on a P E 5300 Optima radial/axial-viewing inductively coupled plasma atomic emission spectrometer. The instrument is equipped with a Burgener nebulizer, cyclonic spray chamber, and yttrium or scandium internal standard. Operating conditions for the ICP are set at a power level of 1500 watts. The instrument has a peristaltic pump flow rate of 1.4L/min, argon gas flows of 15 L/min and 0.2 L/min for the torch and auxiliary gases, and a flow setting of 0.65L/min for the nebulizer.

The Metals analysis - ICPMS was performed on a Perkin Elmer ELAN 6100E inductively coupled plasma mass spectrometer (ICP-MS). The instrument is equipped with a cross-flow nebulizer, quadrupole mass spectrometer, and dual mode electron multiplier detector. Internal standards of scandium, germanium, indium, tantalum, and/or lutetium were utilized to cover the mass spectrum. Operating conditions are set at 1400W power and combined argon pressures of 360+/-7 kPa for the plasma and auxiliary gases, and 0.85 L/min carrier gas flow, and an initial lens voltage of 5.2.

The Metals analysis - ICPMS was performed on a Perkin Elmer ELAN 9000 inductively coupled plasma mass spectrometer (ICP-MS). The instrument is equipped with a cross-flow nebulizer, quadrupole mass spectrometer, and dual mode electron multiplier detector. Internal standards of scandium, germanium, indium, tantalum, and/or lutetium were utilized to cover the mass spectrum. Operating conditions are set at 1400W power and combined argon pressures of 360+/-7 kPa for the plasma and auxiliary gases, and 0.85 L/min carrier gas flow, and an initial lens voltage of 5.2.

The Metals analysis-Mercury was performed on a Perkin-Elmer Flow Injection Mercury System (FIMS-100) automated mercury analyzer. The instrument consists of a cold vapor atomic absorption spectrometer set to detect mercury at a wavelength of 253.7 nm. Sample introduction through the flow injection system is performed via a peristaltic pump at 9 mL/min and nitrogen carrier gas rate of 80 mL/min.



## **Calibration Information**

### **Instrument Calibration**

All initial calibration requirements have been met for this sample delivery group (SDG).

### **CRDL Requirements**

All CRDL standard(s) met the referenced advisory control limits.

### **ICSA/ICSAB Statement**

All interference check samples (ICSA and ICSAB) associated with this SDG met the established acceptance criteria.

### **Continuing Calibration Blank (CCB) Requirements**

All continuing calibration blanks (CCB) bracketing this batch met the established acceptance criteria.

### **Continuing Calibration Verification (CCV) Requirements**

All continuing calibration verifications (CCV) bracketing this SDG met the acceptance criteria.

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

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

The MBs analyzed with this SDG met the acceptance criteria.

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

The LCS spike recoveries met the acceptance limits.

### **Quality Control (QC) Sample Statement**

The following samples were selected as the quality control (QC) samples for this SDG: 246437001 (RE15-10-8354) and 246554001 (RE15-10-8175).

### **Matrix Spike (MS) Recovery Statement**

The percent recoveries (%R) obtained from the MS analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. The MS met the recommended quality control acceptance criteria for percent recoveries for all applicable analytes with the exceptions of aluminum, magnesium, manganese and calcium, as indicated by the "N" qualifiers.

### **Matrix Spike Duplicate (MSD) Recovery Statement**

The percent recovery (%R) obtained from the MSD analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. The MSD met the recommended quality control acceptance criteria for percent recoveries for all applicable analytes with the exceptions of aluminum, magnesium, potassium, uranium and calcium, 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%.

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

The relative percent difference (RPD) obtained from the designated sample duplicate (DUP) is evaluated based on acceptance criteria of 20% when the sample is 5X the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the contract required detection limit (RL), a control of +/-RL is used to evaluate the DUP results. All applicable analytes met these requirements with the exceptions of iron, lead, magnesium, manganese, potassium, zinc, calcium, cobalt, copper and vanadium, as indicated by the “\*” qualifiers.

**Serial Dilution % Difference Statement**

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

**Technical Information****Holding Time Specifications**

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

**Sample Dilutions**

Dilutions are performed to minimize matrix interferences resulting from elevated mineral element concentrations present in solid samples and/or to bring over range target analyte concentrations into the linear calibration range of the instrument. The samples in this SDG were diluted the standard 2x for solids on the ICPMS.

**Preparation Information**

The samples in this SDG were prepared exactly according to the cited SOP.

**Miscellaneous Information****Electronic Packaging Comment**

This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not

generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

**Data Exception (DER) Documentation**

Data exception reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. The following DERs were generated for this SDG: 794954, 799775 and 800028. 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: Kristen Fanson Date: 3/5/10

# Sample Data Summary

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

SDG No: 10-1621-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 246437001

BASIS: Dry Weight

DATE COLLECTED 02-FEB-10

CLIENT ID: RE15-10-8354

LEVEL: Low

DATE RECEIVED 06-FEB-10

MATRIX: SOIL

%SOLIDS: 78

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	1770000	ug/Kg	N	7900	23200	23200	1	P	JWJ	02/23/10 00:56	022210-1	950491
7440-36-0	Antimony	827	ug/Kg	J	383	1160	1160	1	P	JWJ	02/23/10 00:56	022210-1	950491
7440-38-2	Arsenic	1.07	mg/kg	J	0.237	1.19	1.19	2	MS	BAJ	03/05/10 02:30	100304-4	950493
7440-39-3	Barium	28000	ug/Kg		116	581	581	1	P	JWJ	02/23/10 00:56	022210-1	950491
7440-41-7	Beryllium	0.501	mg/kg		0.0237	0.119	0.119	2	MS	BAJ	03/05/10 02:30	100304-4	950493
7440-43-9	Cadmium	581	ug/Kg	U	116	581	581	1	P	JWJ	02/23/10 00:56	022210-1	950491
7440-70-2	Calcium	869000	ug/Kg	*N	9790	30600	30600	1	P	HSC	03/03/10 22:52	030310-2	958097
7440-47-3	Chromium	3690	ug/Kg		174	581	581	1	P	JWJ	02/23/10 00:56	022210-1	950491
7440-48-4	Cobalt	1350	ug/Kg	*	184	612	612	1	P	HSC	03/03/10 22:52	030310-2	958097
7440-50-8	Copper	4520	ug/Kg	*	367	1220	1220	1	P	HSC	03/03/10 22:52	030310-2	958097
7439-89-6	Iron	5820000	ug/Kg	*	9290	29000	29000	1	P	JWJ	02/23/10 00:56	022210-1	950491
7439-92-1	Lead	7200	ug/Kg	*	290	1160	1160	1	P	JWJ	02/23/10 00:56	022210-1	950491
7439-95-4	Magnesium	360000	ug/Kg	*N	9870	34800	34800	1	P	JWJ	02/23/10 00:56	022210-1	950491
7439-96-5	Manganese	169000	ug/Kg	*N	232	1160	1160	1	P	JWJ	02/23/10 00:56	022210-1	950491
7439-97-6	Mercury	13.4	ug/kg	U	4.56	13.4	13.4	1	AV	JXL1	02/22/10 10:19	022210S1-9	951617
7440-02-0	Nickel	2.91	mg/kg		0.119	0.474	0.474	2	MS	BAJ	03/05/10 02:30	100304-4	950493
7440-09-7	Potassium	335000	ug/Kg	*N	7430	29000	29000	1	P	JWJ	02/23/10 00:56	022210-1	950491
7782-49-2	Selenium	1.19	mg/kg	U	0.593	1.19	1.19	2	MS	BAJ	03/05/10 09:57	100304-8	950493
7440-22-4	Silver	581	ug/Kg	U	116	581	581	1	P	JWJ	02/23/10 00:56	022210-1	950491
7440-23-5	Sodium	34900	ug/Kg		8130	29000	29000	1	P	JWJ	02/23/10 00:56	022210-1	950491
7440-28-0	Thallium	0.237	mg/kg	U	0.0711	0.237	0.237	2	MS	PRB	03/05/10 13:56	100305-3	950493
7440-61-1	Uranium	2.82	mg/kg	N	0.0156	0.0474	0.0474	2	MS	BAJ	03/05/10 08:38	100304-7	950493
7440-62-2	Vanadium	6420	ug/Kg	*	122	612	612	1	P	HSC	03/03/10 22:52	030310-2	958097
7440-66-6	Zinc	25800	ug/Kg	*	383	1160	1160	1	P	JWJ	02/23/10 00:56	022210-1	950491

**Prep Information:**

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
950491	950490	SW846 3050B	0.552	g	50	mL	02/20/10	BCD1
950493	950492	SW846 3050B	0.541	g	50	mL	02/20/10	BCD1
951617	951616	SW846 7471A Prep	0.574	g	30	mL	02/19/10	TXB3
958097	958096	SW846 3050B	0.524	g	50	mL	02/27/10	FGA

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

SDG No: 10-1621-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 246437002

BASIS: Dry Weight

DATE COLLECTED 02-FEB-10

CLIENT ID: RE15-10-8356

LEVEL: Low

DATE RECEIVED 06-FEB-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	2370000	ug/Kg	N	7810	23000	23000	1	P	JWJ	02/23/10 01:15	022210-1	950491
7440-36-0	Antimony	534	ug/Kg	J	379	1150	1150	1	P	JWJ	02/23/10 01:15	022210-1	950491
7440-38-2	Arsenic	1.07	mg/kg		0.21	1.05	1.05	2	MS	BAJ	03/05/10 02:55	100304-4	950493
7440-39-3	Barium	35300	ug/Kg		115	574	574	1	P	JWJ	02/23/10 01:15	022210-1	950491
7440-41-7	Beryllium	0.465	mg/kg		0.021	0.105	0.105	2	MS	BAJ	03/05/10 02:55	100304-4	950493
7440-43-9	Cadmium	574	ug/Kg	U	115	574	574	1	P	JWJ	02/23/10 01:15	022210-1	950491
7440-70-2	Calcium	753000	ug/Kg	*N	9030	28200	28200	1	P	HSC	03/03/10 23:41	030310-2	958097
7440-47-3	Chromium	5640	ug/Kg		172	574	574	1	P	JWJ	02/23/10 01:15	022210-1	950491
7440-48-4	Cobalt	2580	ug/Kg	*	169	565	565	1	P	HSC	03/03/10 23:41	030310-2	958097
7440-50-8	Copper	2830	ug/Kg	*	339	1130	1130	1	P	HSC	03/03/10 23:41	030310-2	958097
7439-89-6	Iron	9570000	ug/Kg	*	9190	28700	28700	1	P	JWJ	02/23/10 01:15	022210-1	950491
7439-92-1	Lead	6700	ug/Kg	*	287	1150	1150	1	P	JWJ	02/23/10 01:15	022210-1	950491
7439-95-4	Magnesium	495000	ug/Kg	*N	9770	34500	34500	1	P	JWJ	02/23/10 01:15	022210-1	950491
7439-96-5	Manganese	259000	ug/Kg	*N	230	1150	1150	1	P	JWJ	02/23/10 01:15	022210-1	950491
7439-97-6	Mercury	13.4	ug/kg	U	4.55	13.4	13.4	1	AV	JXL1	02/22/10 10:21	022210S1-9	951617
7440-02-0	Nickel	2.94	mg/kg		0.105	0.421	0.421	2	MS	BAJ	03/05/10 02:55	100304-4	950493
7440-09-7	Potassium	443000	ug/Kg	*N	7350	28700	28700	1	P	JWJ	02/23/10 01:15	022210-1	950491
7782-49-2	Selenium	1.05	mg/kg	U	0.526	1.05	1.05	2	MS	BAJ	03/05/10 10:08	100304-8	950493
7440-22-4	Silver	574	ug/Kg	U	115	574	574	1	P	JWJ	02/23/10 01:15	022210-1	950491
7440-23-5	Sodium	43200	ug/Kg		8040	28700	28700	1	P	JWJ	02/23/10 01:15	022210-1	950491
7440-28-0	Thallium	0.210	mg/kg	U	0.0631	0.21	0.21	2	MS	PRB	03/05/10 14:11	100305-3	950493
7440-61-1	Uranium	3.62	mg/kg	N	0.0139	0.0421	0.0421	2	MS	BAJ	03/05/10 08:50	100304-7	950493
7440-62-2	Vanadium	8190	ug/Kg	*	113	565	565	1	P	HSC	03/03/10 23:41	030310-2	958097
7440-66-6	Zinc	40900	ug/Kg	*	379	1150	1150	1	P	JWJ	02/23/10 01:15	022210-1	950491

**Prep Information:**

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
950491	950490	SW846 3050B	0.51	g	50	mL	02/20/10	BCD1
950493	950492	SW846 3050B	0.557	g	50	mL	02/20/10	BCD1
951617	951616	SW846 7471A Prep	0.526	g	30	mL	02/19/10	TXB3
958097	958096	SW846 3050B	0.519	g	50	mL	02/27/10	FGA

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

SDG No: 10-1621-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 246437003

BASIS: Dry Weight

DATE COLLECTED 02-FEB-10

CLIENT ID: RE15-10-8353

LEVEL: Low

DATE RECEIVED 06-FEB-10

MATRIX: SOIL

%SOLIDS: 87

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	2740000	ug/Kg	N	7390	21700	21700	1	P	JWJ	02/23/10 01:18	022210-1	950491
7440-36-0	Antimony	577	ug/Kg	J	359	1090	1090	1	P	JWJ	02/23/10 01:18	022210-1	950491
7440-38-2	Arsenic	1.3	mg/kg		0.221	1.11	1.11	2	MS	BAJ	03/05/10 02:59	100304-4	950493
7440-39-3	Barium	39200	ug/Kg		109	543	543	1	P	JWJ	02/23/10 01:18	022210-1	950491
7440-41-7	Beryllium	0.633	mg/kg		0.0221	0.111	0.111	2	MS	BAJ	03/05/10 02:59	100304-4	950493
7440-43-9	Cadmium	543	ug/Kg	U	109	543	543	1	P	JWJ	02/23/10 01:18	022210-1	950491
7440-70-2	Calcium	933000	ug/Kg	*N	8630	27000	27000	1	P	HSC	03/03/10 23:48	030310-2	958097
7440-47-3	Chromium	7300	ug/Kg		163	543	543	1	P	JWJ	02/23/10 01:18	022210-1	950491
7440-48-4	Cobalt	1530	ug/Kg	*	162	539	539	1	P	HSC	03/03/10 23:48	030310-2	958097
7440-50-8	Copper	3070	ug/Kg	*	323	1080	1080	1	P	HSC	03/03/10 23:48	030310-2	958097
7439-89-6	Iron	8010000	ug/Kg	*	8690	27200	27200	1	P	JWJ	02/23/10 01:18	022210-1	950491
7439-92-1	Lead	6660	ug/Kg	*	272	1090	1090	1	P	JWJ	02/23/10 01:18	022210-1	950491
7439-95-4	Magnesium	509000	ug/Kg	*N	9230	32600	32600	1	P	JWJ	02/23/10 01:18	022210-1	950491
7439-96-5	Manganese	243000	ug/Kg	*N	217	1090	1090	1	P	JWJ	02/23/10 01:18	022210-1	950491
7439-97-6	Mercury	7.06	ug/kg	J	4.16	12.2	12.2	1	AV	JXL1	02/22/10 10:23	022210S1-9	951617
7440-02-0	Nickel	4.04	mg/kg		0.111	0.442	0.442	2	MS	BAJ	03/05/10 02:59	100304-4	950493
7440-09-7	Potassium	391000	ug/Kg	*N	6950	27200	27200	1	P	JWJ	02/23/10 01:18	022210-1	950491
7782-49-2	Selenium	1.11	mg/kg	U	0.553	1.11	1.11	2	MS	BAJ	03/05/10 10:14	100304-8	950493
7440-22-4	Silver	543	ug/Kg	U	109	543	543	1	P	JWJ	02/23/10 01:18	022210-1	950491
7440-23-5	Sodium	57900	ug/Kg		7600	27200	27200	1	P	JWJ	02/23/10 01:18	022210-1	950491
7440-28-0	Thallium	0.221	mg/kg	U	0.0663	0.221	0.221	2	MS	PRB	03/05/10 14:13	100305-3	950493
7440-61-1	Uranium	3.53	mg/kg	N	0.0146	0.0442	0.0442	2	MS	BAJ	03/05/10 08:51	100304-7	950493
7440-62-2	Vanadium	7860	ug/Kg	*	108	539	539	1	P	HSC	03/03/10 23:48	030310-2	958097
7440-66-6	Zinc	34600	ug/Kg	*	359	1090	1090	1	P	JWJ	02/23/10 01:18	022210-1	950491

**Prep Information:**

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
950491	950490	SW846 3050B	0.529	g	50	mL	02/20/10	BCD1
950493	950492	SW846 3050B	0.52	g	50	mL	02/20/10	BCD1
951617	951616	SW846 7471 A Prep	0.563	g	30	mL	02/19/10	TXB3
958097	958096	SW846 3050B	0.533	g	50	mL	02/27/10	FGA

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

SDG No: 10-1621-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 246437004

BASIS: Dry Weight

DATE COLLECTED 02-FEB-10

CLIENT ID: RE15-10-8352

LEVEL: Low

DATE RECEIVED 06-FEB-10

MATRIX: SOIL

%SOLIDS: 77

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	1350000	ug/Kg	N	8120	23900	23900	1	P	JWJ	02/23/10 01:22	022210-1	950491
7440-36-0	Antimony	1060	ug/Kg	J	394	1190	1190	1	P	JWJ	02/23/10 01:22	022210-1	950491
7440-38-2	Arsenic	0.679	mg/kg	J	0.246	1.23	1.23	2	MS	BAJ	03/05/10 03:03	100304-4	950493
7440-39-3	Barium	18800	ug/Kg		119	597	597	1	P	JWJ	02/23/10 01:22	022210-1	950491
7440-41-7	Beryllium	0.309	mg/kg		0.0246	0.123	0.123	2	MS	BAJ	03/05/10 03:03	100304-4	950493
7440-43-9	Cadmium	597	ug/Kg	U	119	597	597	1	P	JWJ	02/23/10 01:22	022210-1	950491
7440-70-2	Calcium	507000	ug/Kg	*N	10200	31800	31800	1	P	HSC	03/03/10 23:55	030310-2	958097
7440-47-3	Chromium	13600	ug/Kg		179	597	597	1	P	JWJ	02/23/10 01:22	022210-1	950491
7440-48-4	Cobalt	950	ug/Kg	*	191	636	636	1	P	HSC	03/03/10 23:55	030310-2	958097
7440-50-8	Copper	2850	ug/Kg	*	381	1270	1270	1	P	HSC	03/03/10 23:55	030310-2	958097
7439-89-6	Iron	7230000	ug/Kg	*	9550	29800	29800	1	P	JWJ	02/23/10 01:22	022210-1	950491
7439-92-1	Lead	3840	ug/Kg	*	298	1190	1190	1	P	JWJ	02/23/10 01:22	022210-1	950491
7439-95-4	Magnesium	263000	ug/Kg	*N	10100	35800	35800	1	P	JWJ	02/23/10 01:22	022210-1	950491
7439-96-5	Manganese	189000	ug/Kg	*N	239	1190	1190	1	P	JWJ	02/23/10 01:22	022210-1	950491
7439-97-6	Mercury	14.1	ug/kg	U	4.81	14.1	14.1	1	AV	JXLI	02/22/10 10:25	022210S1-9	951617
7440-02-0	Nickel	2.02	mg/kg		0.123	0.491	0.491	2	MS	BAJ	03/05/10 03:03	100304-4	950493
7440-09-7	Potassium	250000	ug/Kg	*N	7640	29800	29800	1	P	JWJ	02/23/10 01:22	022210-1	950491
7782-49-2	Selenium	1.23	mg/kg	U	0.614	1.23	1.23	2	MS	BAJ	03/05/10 10:16	100304-8	950493
7440-22-4	Silver	597	ug/Kg	U	119	597	597	1	P	JWJ	02/23/10 01:22	022210-1	950491
7440-23-5	Sodium	54800	ug/Kg		8360	29800	29800	1	P	JWJ	02/23/10 01:22	022210-1	950491
7440-28-0	Thallium	0.246	mg/kg	U	0.0737	0.246	0.246	2	MS	PRB	03/05/10 14:15	100305-3	950493
7440-61-1	Uranium	1.33	mg/kg	N	0.0162	0.0491	0.0491	2	MS	BAJ	03/05/10 08:53	100304-7	950493
7440-62-2	Vanadium	5050	ug/Kg	*	127	636	636	1	P	HSC	03/03/10 23:55	030310-2	958097
7440-66-6	Zinc	35200	ug/Kg	*	394	1190	1190	1	P	JWJ	02/23/10 01:22	022210-1	950491

**Prep Information:**

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
950491	950490	SW846 3050B	0.544	g	50	mL	02/20/10	BCD1
950493	950492	SW846 3050B	0.529	g	50	mL	02/20/10	BCD1
951617	951616	SW846 7471A Prep	0.551	g	30	mL	02/19/10	TXB3
958097	958096	SW846 3050B	0.511	g	50	mL	02/27/10	FGA



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

SDG No: 10-1621-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 246437005

BASIS: Dry Weight

DATE COLLECTED 02-FEB-10

CLIENT ID: RE15-10-8355

LEVEL: Low

DATE RECEIVED 06-FEB-10

MATRIX: SOIL

%SOLIDS: 87

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	2060000	ug/Kg	N	7080	20800	20800	1	P	JWJ	02/23/10 01:33	022210-1	950491
7440-36-0	Antimony	852	ug/Kg	J	344	1040	1040	1	P	JWJ	02/23/10 01:33	022210-1	950491
7440-38-2	Arsenic	0.978	mg/kg	J	0.223	1.11	1.11	2	MS	BAJ	03/05/10 03:06	100304-4	950493
7440-39-3	Barium	30000	ug/Kg		104	521	521	1	P	JWJ	02/23/10 01:33	022210-1	950491
7440-41-7	Beryllium	0.533	mg/kg		0.0223	0.111	0.111	2	MS	BAJ	03/05/10 03:06	100304-4	950493
7440-43-9	Cadmium	521	ug/Kg	U	104	521	521	1	P	JWJ	02/23/10 01:33	022210-1	950491
7440-70-2	Calcium	421000	ug/Kg	*N	8380	26200	26200	1	P	HSC	03/04/10 00:02	030310-2	958097
7440-47-3	Chromium	6660	ug/Kg		156	521	521	1	P	JWJ	02/23/10 01:33	022210-1	950491
7440-48-4	Cobalt	755	ug/Kg	*	157	523	523	1	P	HSC	03/04/10 00:02	030310-2	958097
7440-50-8	Copper	1580	ug/Kg	*	314	1050	1050	1	P	HSC	03/04/10 00:02	030310-2	958097
7439-89-6	Iron	9260000	ug/Kg	*	8330	26000	26000	1	P	JWJ	02/23/10 01:33	022210-1	950491
7439-92-1	Lead	7970	ug/Kg	*	260	1040	1040	1	P	JWJ	02/23/10 01:33	022210-1	950491
7439-95-4	Magnesium	432000	ug/Kg	*N	8850	31200	31200	1	P	JWJ	02/23/10 01:33	022210-1	950491
7439-96-5	Manganese	289000	ug/Kg	*N	208	1040	1040	1	P	JWJ	02/23/10 01:33	022210-1	950491
7439-97-6	Mercury	5.06	ug/kg	J	4.37	12.8	12.8	1	AV	JXL1	02/22/10 10:27	022210S1-9	951617
7440-02-0	Nickel	3.13	mg/kg		0.111	0.446	0.446	2	MS	BAJ	03/05/10 03:06	100304-4	950493
7440-09-7	Potassium	366000	ug/Kg	*N	6660	26000	26000	1	P	JWJ	02/23/10 01:33	022210-1	950491
7782-49-2	Selenium	1.11	mg/kg	U	0.557	1.11	1.11	2	MS	BAJ	03/05/10 10:18	100304-8	950493
7440-22-4	Silver	521	ug/Kg	U	104	521	521	1	P	JWJ	02/23/10 01:33	022210-1	950491
7440-23-5	Sodium	50700	ug/Kg		7290	26000	26000	1	P	JWJ	02/23/10 01:33	022210-1	950491
7440-28-0	Thallium	0.223	mg/kg	U	0.0669	0.223	0.223	2	MS	PRB	03/05/10 14:18	100305-3	950493
7440-61-1	Uranium	1.8	mg/kg	N	0.0147	0.0446	0.0446	2	MS	BAJ	03/05/10 08:55	100304-7	950493
7440-62-2	Vanadium	4410	ug/Kg	*	105	523	523	1	P	HSC	03/04/10 00:02	030310-2	958097
7440-66-6	Zinc	45600	ug/Kg	*	344	1040	1040	1	P	JWJ	02/23/10 01:33	022210-1	950491

**Prep Information:**

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
950491	950490	SW846 3050B	0.55	g	50	mL	02/20/10	BCD1
950493	950492	SW846 3050B	0.514	g	50	mL	02/20/10	BCD1
951617	951616	SW846 7471A Prep	0.535	g	30	mL	02/19/10	TXB3
958097	958096	SW846 3050B	0.547	g	50	mL	02/27/10	FGA

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

SDG No: 10-1621-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 246437006

BASIS: Dry Weight

DATE COLLECTED 02-FEB-10

CLIENT ID: RE15-10-8351

LEVEL: Low

DATE RECEIVED 06-FEB-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	2880000	ug/Kg	N	7470	22000	22000	1	P	JWJ	02/23/10 01:37	022210-1	950491
7440-36-0	Antimony	677	ug/Kg	J	363	1100	1100	1	P	JWJ	02/23/10 01:37	022210-1	950491
7440-38-2	Arsenic	1.39	mg/kg		0.22	1.1	1.1	2	MS	BAJ	03/05/10 03:10	100304-4	950493
7440-39-3	Barium	45800	ug/Kg		110	550	550	1	P	JWJ	02/23/10 01:37	022210-1	950491
7440-41-7	Beryllium	0.723	mg/kg		0.022	0.11	0.11	2	MS	BAJ	03/05/10 03:10	100304-4	950493
7440-43-9	Cadmium	550	ug/Kg	U	110	550	550	1	P	JWJ	02/23/10 01:37	022210-1	950491
7440-70-2	Calcium	785000	ug/Kg	*N	8330	26000	26000	1	P	HSC	03/04/10 00:09	030310-2	958097
7440-47-3	Chromium	13800	ug/Kg		165	550	550	1	P	JWJ	02/23/10 01:37	022210-1	950491
7440-48-4	Cobalt	1590	ug/Kg	*	156	520	520	1	P	HSC	03/04/10 00:09	030310-2	958097
7440-50-8	Copper	3470	ug/Kg	*	312	1040	1040	1	P	HSC	03/04/10 00:09	030310-2	958097
7439-89-6	Iron	7720000	ug/Kg	*	8790	27500	27500	1	P	JWJ	02/23/10 01:37	022210-1	950491
7439-92-1	Lead	7090	ug/Kg	*	275	1100	1100	1	P	JWJ	02/23/10 01:37	022210-1	950491
7439-95-4	Magnesium	551000	ug/Kg	*N	9340	33000	33000	1	P	JWJ	02/23/10 01:37	022210-1	950491
7439-96-5	Manganese	277000	ug/Kg	*N	220	1100	1100	1	P	JWJ	02/23/10 01:37	022210-1	950491
7439-97-6	Mercury	5.81	ug/kg	J	4.61	13.6	13.6	1	AV	JXL1	02/22/10 10:29	022210S1-9	951617
7440-02-0	Nickel	4.07	mg/kg		0.11	0.44	0.44	2	MS	BAJ	03/05/10 03:10	100304-4	950493
7440-09-7	Potassium	472000	ug/Kg	*N	7030	27500	27500	1	P	JWJ	02/23/10 01:37	022210-1	950491
7782-49-2	Selenium	1.1	mg/kg	U	0.55	1.1	1.1	2	MS	BAJ	03/05/10 10:21	100304-8	950493
7440-22-4	Silver	550	ug/Kg	U	110	550	550	1	P	JWJ	02/23/10 01:37	022210-1	950491
7440-23-5	Sodium	54200	ug/Kg		7690	27500	27500	1	P	JWJ	02/23/10 01:37	022210-1	950491
7440-28-0	Thallium	0.093	mg/kg	J	0.0659	0.22	0.22	2	MS	PRB	03/05/10 14:20	100305-3	950493
7440-61-1	Uranium	3.22	mg/kg	N	0.0145	0.044	0.044	2	MS	BAJ	03/05/10 08:56	100304-7	950493
7440-62-2	Vanadium	7670	ug/Kg	*	104	520	520	1	P	HSC	03/04/10 00:09	030310-2	958097
7440-66-6	Zinc	31800	ug/Kg	*	363	1100	1100	1	P	JWJ	02/23/10 01:37	022210-1	950491

**Prep Information:**

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
950491	950490	SW846 3050B	0.536	g	50	mL	02/20/10	BCD1
950493	950492	SW846 3050B	0.536	g	50	mL	02/20/10	BCD1
951617	951616	SW846 7471A Prep	0.521	g	30	mL	02/19/10	TXB3
958097	958096	SW846 3050B	0.566	g	50	mL	02/27/10	FGA

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

SDG No: 10-1621-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 246437007

BASIS: Dry Weight

DATE COLLECTED 02-FEB-10

CLIENT ID: RE15-10-8350

LEVEL: Low

DATE RECEIVED 06-FEB-10

MATRIX: SOIL

%SOLIDS: 77

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	1800000	ug/Kg	N	8140	23900	23900	1	P	JWJ	02/23/10 01:40	022210-1	950491
7440-36-0	Antimony	1200	ug/Kg	U	395	1200	1200	1	P	JWJ	02/23/10 01:40	022210-1	950491
7440-38-2	Arsenic	1.21	mg/kg	J	0.251	1.25	1.25	2	MS	BAJ	03/05/10 03:14	100304-4	950493
7440-39-3	Barium	36900	ug/Kg		120	599	599	1	P	JWJ	02/23/10 01:40	022210-1	950491
7440-41-7	Beryllium	0.731	mg/kg		0.0251	0.125	0.125	2	MS	BAJ	03/05/10 03:14	100304-4	950493
7440-43-9	Cadmium	599	ug/Kg	U	120	599	599	1	P	JWJ	02/23/10 01:40	022210-1	950491
7440-70-2	Calcium	897000	ug/Kg	*N	10200	31900	31900	1	P	HSC	03/04/10 00:16	030310-2	958097
7440-47-3	Chromium	12800	ug/Kg		180	599	599	1	P	JWJ	02/23/10 01:40	022210-1	950491
7440-48-4	Cobalt	1550	ug/Kg	*	192	639	639	1	P	HSC	03/04/10 00:16	030310-2	958097
7440-50-8	Copper	3450	ug/Kg	*	383	1280	1280	1	P	HSC	03/04/10 00:16	030310-2	958097
7439-89-6	Iron	6040000	ug/Kg	*	9580	29900	29900	1	P	JWJ	02/23/10 01:40	022210-1	950491
7439-92-1	Lead	4760	ug/Kg	*	299	1200	1200	1	P	JWJ	02/23/10 01:40	022210-1	950491
7439-95-4	Magnesium	380000	ug/Kg	*N	10200	35900	35900	1	P	JWJ	02/23/10 01:40	022210-1	950491
7439-96-5	Manganese	277000	ug/Kg	*N	239	1200	1200	1	P	JWJ	02/23/10 01:40	022210-1	950491
7439-97-6	Mercury	7.33	ug/kg	J	5.07	14.9	14.9	1	AV	JXL1	02/22/10 10:31	022210S1-9	951617
7440-02-0	Nickel	2.84	mg/kg		0.125	0.501	0.501	2	MS	BAJ	03/05/10 03:14	100304-4	950493
7440-09-7	Potassium	386000	ug/Kg	*N	7660	29900	29900	1	P	JWJ	02/23/10 01:40	022210-1	950491
7782-49-2	Selenium	1.25	mg/kg	U	0.626	1.25	1.25	2	MS	BAJ	03/05/10 10:23	100304-8	950493
7440-22-4	Silver	599	ug/Kg	U	120	599	599	1	P	JWJ	02/23/10 01:40	022210-1	950491
7440-23-5	Sodium	81900	ug/Kg		8380	29900	29900	1	P	JWJ	02/23/10 01:40	022210-1	950491
7440-28-0	Thallium	0.251	mg/kg	U	0.0752	0.251	0.251	2	MS	PRB	03/05/10 14:27	100305-3	950493
7440-61-1	Uranium	1.33	mg/kg	N	0.0165	0.0501	0.0501	2	MS	BAJ	03/05/10 08:58	100304-7	950493
7440-62-2	Vanadium	5430	ug/Kg	*	128	639	639	1	P	HSC	03/04/10 00:16	030310-2	958097
7440-66-6	Zinc	28400	ug/Kg	*	395	1200	1200	1	P	JWJ	02/23/10 01:40	022210-1	950491

**Prep Information:**

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
950491	950490	SW846 3050B	0.543	g	50	mL	02/20/10	BCD1
950493	950492	SW846 3050B	0.519	g	50	mL	02/20/10	BCD1
951617	951616	SW846 7471A Prep	0.523	g	30	mL	02/19/10	TXB3
958097	958096	SW846 3050B	0.509	g	50	mL	02/27/10	FGA

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

SDG No: 10-1621-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 246437008

BASIS: Dry Weight

DATE COLLECTED 02-FEB-10

CLIENT ID: RE15-10-8357

LEVEL: Low

DATE RECEIVED 06-FEB-10

MATRIX: SOIL

%SOLIDS: 94

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	2450000	ug/Kg	N	7090	20800	20800	1	P	JWJ	02/23/10 01:44	022210-1	950491
7440-36-0	Antimony	763	ug/Kg	J	344	1040	1040	1	P	JWJ	02/23/10 01:44	022210-1	950491
7440-38-2	Arsenic	0.972	mg/kg		0.194	0.97	0.97	2	MS	BAJ	03/05/10 03:17	100304-4	950493
7440-39-3	Barium	38000	ug/Kg		104	521	521	1	P	JWJ	02/23/10 01:44	022210-1	950491
7440-41-7	Beryllium	0.477	mg/kg		0.0194	0.097	0.097	2	MS	BAJ	03/05/10 03:17	100304-4	950493
7440-43-9	Cadmium	521	ug/Kg	U	104	521	521	1	P	JWJ	02/23/10 01:44	022210-1	950491
7440-70-2	Calcium	877000	ug/Kg	*N	8130	25400	25400	1	P	HSC	03/04/10 00:23	030310-2	958097
7440-47-3	Chromium	10500	ug/Kg		156	521	521	1	P	JWJ	02/23/10 01:44	022210-1	950491
7440-48-4	Cobalt	1600	ug/Kg	*	152	508	508	1	P	HSC	03/04/10 00:23	030310-2	958097
7440-50-8	Copper	3230	ug/Kg	*	305	1020	1020	1	P	HSC	03/04/10 00:23	030310-2	958097
7439-89-6	Iron	8780000	ug/Kg	*	8340	26100	26100	1	P	JWJ	02/23/10 01:44	022210-1	950491
7439-92-1	Lead	6200	ug/Kg	*	261	1040	1040	1	P	JWJ	02/23/10 01:44	022210-1	950491
7439-95-4	Magnesium	499000	ug/Kg	*N	8860	31300	31300	1	P	JWJ	02/23/10 01:44	022210-1	950491
7439-96-5	Manganese	291000	ug/Kg	*N	208	1040	1040	1	P	JWJ	02/23/10 01:44	022210-1	950491
7439-97-6	Mercury	12.2	ug/kg	U	4.16	12.2	12.2	1	AV	JXL1	02/22/10 10:33	022210S1-9	951617
7440-02-0	Nickel	3.09	mg/kg		0.097	0.388	0.388	2	MS	BAJ	03/05/10 03:17	100304-4	950493
7440-09-7	Potassium	497000	ug/Kg	*N	6670	26100	26100	1	P	JWJ	02/23/10 01:44	022210-1	950491
7782-49-2	Selenium	0.970	mg/kg	U	0.485	0.97	0.97	2	MS	BAJ	03/05/10 10:25	100304-8	950493
7440-22-4	Silver	521	ug/Kg	U	104	521	521	1	P	JWJ	02/23/10 01:44	022210-1	950491
7440-23-5	Sodium	61900	ug/Kg		7300	26100	26100	1	P	JWJ	02/23/10 01:44	022210-1	950491
7440-28-0	Thallium	0.194	mg/kg	U	0.0582	0.194	0.194	2	MS	PRB	03/05/10 14:29	100305-3	950493
7440-61-1	Uranium	1.91	mg/kg	N	0.0128	0.0388	0.0388	2	MS	BAJ	03/05/10 09:00	100304-7	950493
7440-62-2	Vanadium	6500	ug/Kg	*	102	508	508	1	P	HSC	03/04/10 00:23	030310-2	958097
7440-66-6	Zinc	41900	ug/Kg	*	344	1040	1040	1	P	JWJ	02/23/10 01:44	022210-1	950491

**Prep Information:**

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
950491	950490	SW846 3050B	0.51	g	50	mL	02/20/10	BCD1
950493	950492	SW846 3050B	0.548	g	50	mL	02/20/10	BCD1
951617	951616	SW846 7471A Prep	0.522	g	30	mL	02/19/10	TXB3
958097	958096	SW846 3050B	0.523	g	50	mL	02/27/10	FGA

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

SDG No: 10-1621-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 246437009

BASIS: Dry Weight

DATE COLLECTED 02-FEB-10

CLIENT ID: RE15-10-8338

LEVEL: Low

DATE RECEIVED 06-FEB-10

MATRIX: SOIL

%SOLIDS: 78

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Rnn	Analytical Batch
7429-90-5	Aluminum	2500000	ug/Kg	N	8040	23600	23600	1	P	JWJ	02/23/10 01:48	022210-1	950491
7440-36-0	Antimony	690	ug/Kg	J	390	1180	1180	1	P	JWJ	02/23/10 01:48	022210-1	950491
7440-38-2	Arsenic	1.22	mg/kg		0.244	1.22	1.22	2	MS	BAJ	03/05/10 03:28	100304-4	950493
7440-39-3	Barium	41600	ug/Kg		118	591	591	1	P	JWJ	02/23/10 01:48	022210-1	950491
7440-41-7	Beryllium	0.520	mg/kg		0.0244	0.122	0.122	2	MS	BAJ	03/05/10 03:28	100304-4	950493
7440-43-9	Cadmium	591	ug/Kg	U	118	591	591	1	P	JWJ	02/23/10 01:48	022210-1	950491
7440-70-2	Calcium	608000	ug/Kg	*N	10200	32000	32000	1	P	HSC	03/04/10 00:44	030310-2	958097
7440-47-3	Chromium	14500	ug/Kg		177	591	591	1	P	JWJ	02/23/10 01:48	022210-1	950491
7440-48-4	Cobalt	1570	ug/Kg	*	192	639	639	1	P	HSC	03/04/10 00:44	030310-2	958097
7440-50-8	Copper	2340	ug/Kg	*	383	1280	1280	1	P	HSC	03/04/10 00:44	030310-2	958097
7439-89-6	Iron	8820000	ug/Kg	*	9460	29500	29500	1	P	JWJ	02/23/10 01:48	022210-1	950491
7439-92-1	Lead	7320	ug/Kg	*	295	1180	1180	1	P	JWJ	02/23/10 01:48	022210-1	950491
7439-95-4	Magnesium	472000	ug/Kg	*N	10000	35500	35500	1	P	JWJ	02/23/10 01:48	022210-1	950491
7439-96-5	Manganese	282000	ug/Kg	*N	236	1180	1180	1	P	JWJ	02/23/10 01:48	022210-1	950491
7439-97-6	Mercury	14.6	ug/kg	U	4.98	14.6	14.6	1	AV	JXL1	02/22/10 10:39	022210S1-9	951617
7440-02-0	Nickel	3.1	mg/kg		0.122	0.488	0.488	2	MS	BAJ	03/05/10 03:28	100304-4	950493
7440-09-7	Potassium	429000	ug/Kg	*N	7560	29500	29500	1	P	JWJ	02/23/10 01:48	022210-1	950491
7782-49-2	Selenium	1.22	mg/kg	U	0.61	1.22	1.22	2	MS	BAJ	03/05/10 10:27	100304-8	950493
7440-22-4	Silver	591	ug/Kg	U	118	591	591	1	P	JWJ	02/23/10 01:48	022210-1	950491
7440-23-5	Sodium	57400	ug/Kg		8270	29500	29500	1	P	JWJ	02/23/10 01:48	022210-1	950491
7440-28-0	Thallium	0.244	mg/kg	U	0.0732	0.244	0.244	2	MS	PRB	03/05/10 14:31	100305-3	950493
7440-61-1	Uranium	4	mg/kg	N	0.0161	0.0488	0.0488	2	MS	BAJ	03/05/10 09:05	100304-7	950493
7440-62-2	Vanadium	5900	ug/Kg	*	128	639	639	1	P	HSC	03/04/10 00:44	030310-2	958097
7440-66-6	Zinc	38000	ug/Kg	*	390	1180	1180	1	P	JWJ	02/23/10 01:48	022210-1	950491

**Prep Information:**

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
950491	950490	SW846 3050B	0.545	g	50	mL	02/20/10	BCD1
950493	950492	SW846 3050B	0.528	g	50	mL	02/20/10	BCD1
951617	951616	SW846 7471A Prep	0.528	g	30	mL	02/19/10	TXB3
958097	958096	SW846 3050B	0.504	g	50	mL	02/27/10	FGA

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

SDG No: 10-1621-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 246437010

BASIS: Dry Weight

DATE COLLECTED 02-FEB-10

CLIENT ID: RE15-10-8336

LEVEL: Low

DATE RECEIVED 06-FEB-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	2260000	ug/Kg	N	7690	22600	22600	1	P	JWJ	02/23/10 01:51	022210-1	950491
7440-36-0	Antimony	637	ug/Kg	J	373	1130	1130	1	P	JWJ	02/23/10 01:51	022210-1	950491
7440-38-2	Arsenic	0.787	mg/kg	J	0.227	1.13	1.13	2	MS	BAJ	03/05/10 03:32	100304-4	950493
7440-39-3	Barium	30900	ug/Kg		113	566	566	1	P	JWJ	02/23/10 01:51	022210-1	950491
7440-41-7	Beryllium	0.366	mg/kg		0.0227	0.113	0.113	2	MS	BAJ	03/05/10 03:32	100304-4	950493
7440-43-9	Cadmium	566	ug/Kg	U	113	566	566	1	P	JWJ	02/23/10 01:51	022210-1	950491
7440-70-2	Calcium	587000	ug/Kg	*N	9370	29300	29300	1	P	HSC	03/04/10 00:52	030310-2	958097
7440-47-3	Chromium	7440	ug/Kg		170	566	566	1	P	JWJ	02/23/10 01:51	022210-1	950491
7440-48-4	Cobalt	1090	ug/Kg	*	176	585	585	1	P	HSC	03/04/10 00:52	030310-2	958097
7440-50-8	Copper	1630	ug/Kg	*	351	1170	1170	1	P	HSC	03/04/10 00:52	030310-2	958097
7439-89-6	Iron	6070000	ug/Kg	*	9050	28300	28300	1	P	JWJ	02/23/10 01:51	022210-1	950491
7439-92-1	Lead	8570	ug/Kg	*	283	1130	1130	1	P	JWJ	02/23/10 01:51	022210-1	950491
7439-95-4	Magnesium	443000	ug/Kg	*N	9620	33900	33900	1	P	JWJ	02/23/10 01:51	022210-1	950491
7439-96-5	Manganese	180000	ug/Kg	*N	226	1130	1130	1	P	JWJ	02/23/10 01:51	022210-1	950491
7439-97-6	Mercury	14.2	ug/kg	U	4.81	14.2	14.2	1	AV	JXL1	02/22/10 10:41	022210S1-9	951617
7440-02-0	Nickel	2.41	mg/kg		0.113	0.453	0.453	2	MS	BAJ	03/05/10 03:32	100304-4	950493
7440-09-7	Potassium	391000	ug/Kg	*N	7240	28300	28300	1	P	JWJ	02/23/10 01:51	022210-1	950491
7782-49-2	Selenium	1.13	mg/kg	U	0.567	1.13	1.13	2	MS	BAJ	03/05/10 10:34	100304-8	950493
7440-22-4	Silver	566	ug/Kg	U	113	566	566	1	P	JWJ	02/23/10 01:51	022210-1	950491
7440-23-5	Sodium	48800	ug/Kg		7920	28300	28300	1	P	JWJ	02/23/10 01:51	022210-1	950491
7440-28-0	Thallium	0.227	mg/kg	U	0.068	0.227	0.227	2	MS	PRB	03/05/10 14:33	100305-3	950493
7440-61-1	Uranium	1.52	mg/kg	N	0.015	0.0453	0.0453	2	MS	BAJ	03/05/10 09:07	100304-7	950493
7440-62-2	Vanadium	4830	ug/Kg	*	117	585	585	1	P	HSC	03/04/10 00:52	030310-2	958097
7440-66-6	Zinc	25400	ug/Kg	*	373	1130	1130	1	P	JWJ	02/23/10 01:51	022210-1	950491

**Prep Information:**

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
950491	950490	SW846 3050B	0.536	g	50	mL	02/20/10	BCD1
950493	950492	SW846 3050B	0.535	g	50	mL	02/20/10	BCD1
951617	951616	SW846 7471A Prep	0.514	g	30	mL	02/19/10	TXB3
958097	958096	SW846 3050B	0.518	g	50	mL	02/27/10	FGA

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

SDG No: 10-1621-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 246437011

BASIS: Dry Weight

DATE COLLECTED 02-FEB-10

CLIENT ID: RE15-10-8339

LEVEL: Low

DATE RECEIVED 06-FEB-10

MATRIX: SOIL

%SOLIDS: 94

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	1980000	ug/Kg	N	6680	19700	19700	1	P	JWJ	02/23/10 01:55	022210-1	950491
7440-36-0	Antimony	430	ug/Kg	J	324	983	983	1	P	JWJ	02/23/10 01:55	022210-1	950491
7440-38-2	Arsenic	0.853	mg/kg	J	0.202	1.01	1.01	2	MS	BAJ	03/05/10 03:36	100304-4	950493
7440-39-3	Barium	29600	ug/Kg		98.3	492	492	1	P	JWJ	02/23/10 01:55	022210-1	950491
7440-41-7	Beryllium	0.435	mg/kg		0.0202	0.101	0.101	2	MS	BAJ	03/05/10 03:36	100304-4	950493
7440-43-9	Cadmium	492	ug/Kg	U	98.3	492	492	1	P	JWJ	02/23/10 01:55	022210-1	950491
7440-70-2	Calcium	558000	ug/Kg	*N	8460	26400	26400	1	P	HSC	03/04/10 00:59	030310-2	958097
7440-47-3	Chromium	9120	ug/Kg		147	492	492	1	P	JWJ	02/23/10 01:55	022210-1	950491
7440-48-4	Cobalt	1340	ug/Kg	*	159	529	529	1	P	HSC	03/04/10 00:59	030310-2	958097
7440-50-8	Copper	2180	ug/Kg	*	317	1060	1060	1	P	HSC	03/04/10 00:59	030310-2	958097
7439-89-6	Iron	6760000	ug/Kg	*	7860	24600	24600	1	P	JWJ	02/23/10 01:55	022210-1	950491
7439-92-1	Lead	5730	ug/Kg	*	246	983	983	1	P	JWJ	02/23/10 01:55	022210-1	950491
7439-95-4	Magnesium	369000	ug/Kg	*N	8360	29500	29500	1	P	JWJ	02/23/10 01:55	022210-1	950491
7439-96-5	Manganese	200000	ug/Kg	*N	197	983	983	1	P	JWJ	02/23/10 01:55	022210-1	950491
7439-97-6	Mercury	12.4	ug/kg	U	4.21	12.4	12.4	1	AV	JXLI	02/22/10 10:43	022210S1-9	951617
7440-02-0	Nickel	2.33	mg/kg		0.101	0.404	0.404	2	MS	BAJ	03/05/10 03:36	100304-4	950493
7440-09-7	Potassium	308000	ug/Kg	*N	6290	24600	24600	1	P	JWJ	02/23/10 01:55	022210-1	950491
7782-49-2	Selenium	1.01	mg/kg	U	0.506	1.01	1.01	2	MS	BAJ	03/05/10 10:36	100304-8	950493
7440-22-4	Silver	492	ug/Kg	U	98.3	492	492	1	P	JWJ	02/23/10 01:55	022210-1	950491
7440-23-5	Sodium	50900	ug/Kg		6880	24600	24600	1	P	JWJ	02/23/10 01:55	022210-1	950491
7440-28-0	Thallium	0.202	mg/kg	U	0.0607	0.202	0.202	2	MS	PRB	03/05/10 14:35	100305-3	950493
7440-61-1	Uranium	2.12	mg/kg	N	0.0133	0.0404	0.0404	2	MS	BAJ	03/05/10 09:08	100304-7	950493
7440-62-2	Vanadium	4660	ug/Kg	*	106	529	529	1	P	HSC	03/04/10 00:59	030310-2	958097
7440-66-6	Zinc	29900	ug/Kg	*	324	983	983	1	P	JWJ	02/23/10 01:55	022210-1	950491

**Prep Information:**

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
950491	950490	SW846 3050B	0.541	g	50	mL	02/20/10	BCD1
950493	950492	SW846 3050B	0.526	g	50	mL	02/20/10	BCD1
951617	951616	SW846 7471A Prep	0.516	g	30	mL	02/19/10	TXB3
958097	958096	SW846 3050B	0.503	g	50	mL	02/27/10	FGA

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

SDG No: 10-1621-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 246437012

BASIS: Dry Weight

DATE COLLECTED 02-FEB-10

CLIENT ID: RE15-10-8337

LEVEL: Low

DATE RECEIVED 06-FEB-10

MATRIX: SOIL

%SOLIDS: 89

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	2470000	ug/Kg	N	7350	21600	21600	1	P	JWJ	02/23/10 01:58	022210-1	950491
7440-36-0	Antimony	751	ug/Kg	J	357	1080	1080	1	P	JWJ	02/23/10 01:58	022210-1	950491
7440-38-2	Arsenic	1.45	mg/kg		0.206	1.03	1.03	2	MS	BAJ	03/05/10 03:39	100304-4	950493
7440-39-3	Barium	39700	ug/Kg		108	541	541	1	P	JWJ	02/23/10 01:58	022210-1	950491
7440-41-7	Beryllium	0.456	mg/kg		0.0206	0.103	0.103	2	MS	BAJ	03/05/10 03:39	100304-4	950493
7440-43-9	Cadmium	541	ug/Kg	U	108	541	541	1	P	JWJ	02/23/10 01:58	022210-1	950491
7440-70-2	Calcium	561000	ug/Kg	*N	8600	26900	26900	1	P	HSC	03/04/10 01:06	030310-2	958097
7440-47-3	Chromium	23600	ug/Kg		162	541	541	1	P	JWJ	02/23/10 01:58	022210-1	950491
7440-48-4	Cobalt	1070	ug/Kg	*	161	538	538	1	P	HSC	03/04/10 01:06	030310-2	958097
7440-50-8	Copper	1760	ug/Kg	*	323	1080	1080	1	P	HSC	03/04/10 01:06	030310-2	958097
7439-89-6	Iron	6740000	ug/Kg	*	8650	27000	27000	1	P	JWJ	02/23/10 01:58	022210-1	950491
7439-92-1	Lead	7260	ug/Kg	*	270	1080	1080	1	P	JWJ	02/23/10 01:58	022210-1	950491
7439-95-4	Magnesium	519000	ug/Kg	*N	9190	32400	32400	1	P	JWJ	02/23/10 01:58	022210-1	950491
7439-96-5	Manganese	260000	ug/Kg	*N	216	1080	1080	1	P	JWJ	02/23/10 01:58	022210-1	950491
7439-97-6	Mercury	12.4	ug/kg	U	4.21	12.4	12.4	1	AV	JXL1	02/22/10 10:45	022210S1-9	951617
7440-02-0	Nickel	3.59	mg/kg		0.103	0.411	0.411	2	MS	BAJ	03/05/10 03:39	100304-4	950493
7440-09-7	Potassium	441000	ug/Kg	*N	6920	27000	27000	1	P	JWJ	02/23/10 01:58	022210-1	950491
7782-49-2	Selenium	1.03	mg/kg	U	0.514	1.03	1.03	2	MS	BAJ	03/05/10 10:38	100304-8	950493
7440-22-4	Silver	541	ug/Kg	U	108	541	541	1	P	JWJ	02/23/10 01:58	022210-1	950491
7440-23-5	Sodium	66900	ug/Kg		7570	27000	27000	1	P	JWJ	02/23/10 01:58	022210-1	950491
7440-28-0	Thallium	0.206	mg/kg	U	0.0617	0.206	0.206	2	MS	PRB	03/05/10 14:38	100305-3	950493
7440-61-1	Uranium	3.3	mg/kg	N	0.0136	0.0411	0.0411	2	MS	BAJ	03/05/10 09:10	100304-7	950493
7440-62-2	Vanadium	4170	ug/Kg	*	108	538	538	1	P	HSC	03/04/10 01:06	030310-2	958097
7440-66-6	Zinc	28000	ug/Kg	*	357	1080	1080	1	P	JWJ	02/23/10 01:58	022210-1	950491

**Prep Information:**

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
950491	950490	SW846 3050B	0.522	g	50	mL	02/20/10	BCD1
950493	950492	SW846 3050B	0.549	g	50	mL	02/20/10	BCD1
951617	951616	SW846 7471A Prep	0.547	g	30	mL	02/19/10	TXB3
958097	958096	SW846 3050B	0.525	g	50	mL	02/27/10	FGA



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

SDG No: 10-1621-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 246437013

BASIS: Dry Weight

DATE COLLECTED 02-FEB-10

CLIENT ID: RE15-10-8375

LEVEL: Low

DATE RECEIVED 06-FEB-10

MATRIX: SOIL

%SOLIDS: 80

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	2240000	ug/Kg	N	8050	23700	23700	1	P	JWJ	02/23/10 02:02	022210-1	950491
7440-36-0	Antimony	568	ug/Kg	J	391	1180	1180	1	P	JWJ	02/23/10 02:02	022210-1	950491
7440-38-2	Arsenic	0.939	mg/kg	J	0.24	1.2	1.2	2	MS	BAJ	03/05/10 03:43	100304-4	950493
7440-39-3	Barium	34000	ug/Kg		118	592	592	1	P	JWJ	02/23/10 02:02	022210-1	950491
7440-41-7	Beryllium	0.457	mg/kg		0.024	0.12	0.12	2	MS	BAJ	03/05/10 03:43	100304-4	950493
7440-43-9	Cadmium	592	ug/Kg	U	118	592	592	1	P	JWJ	02/23/10 02:02	022210-1	950491
7440-70-2	Calcium	832000	ug/Kg	*N	9400	29400	29400	1	P	HSC	03/04/10 01:13	030310-2	958097
7440-47-3	Chromium	7860	ug/Kg		178	592	592	1	P	JWJ	02/23/10 02:02	022210-1	950491
7440-48-4	Cobalt	1680	ug/Kg	*	176	588	588	1	P	HSC	03/04/10 01:13	030310-2	958097
7440-50-8	Copper	2930	ug/Kg	*	353	1180	1180	1	P	HSC	03/04/10 01:13	030310-2	958097
7439-89-6	Iron	7180000	ug/Kg	*	9470	29600	29600	1	P	JWJ	02/23/10 02:02	022210-1	950491
7439-92-1	Lead	5540	ug/Kg	*	296	1180	1180	1	P	JWJ	02/23/10 02:02	022210-1	950491
7439-95-4	Magnesium	469000	ug/Kg	*N	10100	35500	35500	1	P	JWJ	02/23/10 02:02	022210-1	950491
7439-96-5	Manganese	205000	ug/Kg	*N	237	1180	1180	1	P	JWJ	02/23/10 02:02	022210-1	950491
7439-97-6	Mercury	14.1	ug/kg	U	4.8	14.1	14.1	1	AV	JXL1	02/22/10 10:47	022210S1-9	951617
7440-02-0	Nickel	2.97	mg/kg		0.12	0.479	0.479	2	MS	BAJ	03/05/10 03:43	100304-4	950493
7440-09-7	Potassium	444000	ug/Kg	*N	7580	29600	29600	1	P	JWJ	02/23/10 02:02	022210-1	950491
7782-49-2	Selenium	1.2	mg/kg	U	0.599	1.2	1.2	2	MS	BAJ	03/05/10 10:40	100304-8	950493
7440-22-4	Silver	592	ug/Kg	U	118	592	592	1	P	JWJ	02/23/10 02:02	022210-1	950491
7440-23-5	Sodium	36100	ug/Kg		8290	29600	29600	1	P	JWJ	02/23/10 02:02	022210-1	950491
7440-28-0	Thallium	0.240	mg/kg	U	0.0719	0.24	0.24	2	MS	PRB	03/05/10 14:40	100305-3	950493
7440-61-1	Uranium	3.44	mg/kg	N	0.0158	0.0479	0.0479	2	MS	BAJ	03/05/10 09:12	100304-7	950493
7440-62-2	Vanadium	7950	ug/Kg	*	118	588	588	1	P	HSC	03/04/10 01:13	030310-2	958097
7440-66-6	Zinc	30300	ug/Kg	*	391	1180	1180	1	P	JWJ	02/23/10 02:02	022210-1	950491

**Prep Information:**

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
950491	950490	SW846 3050B	0.526	g	50	mL	02/20/10	BCD1
950493	950492	SW846 3050B	0.52	g	50	mL	02/20/10	BCD1
951617	951616	SW846 7471A Prep	0.53	g	30	mL	02/19/10	TXB3
958097	958096	SW846 3050B	0.53	g	50	mL	02/27/10	FGA

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

SDG No: 10-1621-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 246437014

BASIS: Dry Weight

DATE COLLECTED 02-FEB-10

CLIENT ID: RE15-10-8374

LEVEL: Low

DATE RECEIVED 06-FEB-10

MATRIX: SOIL

%SOLIDS: 93.7

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	2150000	ug/Kg	N	6540	19200	19200	1	P	JWJ	02/23/10 02:06	022210-1	950491
7440-36-0	Antimony	558	ug/Kg	J	317	962	962	1	P	JWJ	02/23/10 02:06	022210-1	950491
7440-38-2	Arsenic	1.05	mg/kg		0.197	0.983	0.983	2	MS	BAJ	03/05/10 03:47	100304-4	950493
7440-39-3	Barium	32000	ug/Kg		96.2	481	481	1	P	JWJ	02/23/10 02:06	022210-1	950491
7440-41-7	Beryllium	0.578	mg/kg		0.0197	0.0983	0.0983	2	MS	BAJ	03/05/10 03:47	100304-4	950493
7440-43-9	Cadmium	481	ug/Kg	U	96.2	481	481	1	P	JWJ	02/23/10 02:06	022210-1	950491
7440-70-2	Calcium	538000	ug/Kg	*N	8400	26300	26300	1	P	HSC	03/04/10 01:20	030310-2	958097
7440-47-3	Chromium	10400	ug/Kg		144	481	481	1	P	JWJ	02/23/10 02:06	022210-1	950491
7440-48-4	Cobalt	1150	ug/Kg	*	158	525	525	1	P	HSC	03/04/10 01:20	030310-2	958097
7440-50-8	Copper	2120	ug/Kg	*	315	1050	1050	1	P	HSC	03/04/10 01:20	030310-2	958097
7439-89-6	Iron	7870000	ug/Kg	*	7690	24000	24000	1	P	JWJ	02/23/10 02:06	022210-1	950491
7439-92-1	Lead	5940	ug/Kg	*	240	962	962	1	P	JWJ	02/23/10 02:06	022210-1	950491
7439-95-4	Magnesium	402000	ug/Kg	*N	8170	28800	28800	1	P	JWJ	02/23/10 02:06	022210-1	950491
7439-96-5	Manganese	266000	ug/Kg	*N	192	962	962	1	P	JWJ	02/23/10 02:06	022210-1	950491
7439-97-6	Mercury	5.14	ug/kg	J	3.99	11.7	11.7	1	AV	JXL1	02/22/10 10:49	022210S1-9	951617
7440-02-0	Nickel	3.4	mg/kg		0.0983	0.393	0.393	2	MS	BAJ	03/05/10 03:47	100304-4	950493
7440-09-7	Potassium	337000	ug/Kg	*N	6150	24000	24000	1	P	JWJ	02/23/10 02:06	022210-1	950491
7782-49-2	Selenium	0.983	mg/kg	U	0.491	0.983	0.983	2	MS	BAJ	03/05/10 10:42	100304-8	950493
7440-22-4	Silver	481	ug/Kg	U	96.2	481	481	1	P	JWJ	02/23/10 02:06	022210-1	950491
7440-23-5	Sodium	64900	ug/Kg		6730	24000	24000	1	P	JWJ	02/23/10 02:06	022210-1	950491
7440-28-0	Thallium	0.197	mg/kg	U	0.059	0.197	0.197	2	MS	PRB	03/05/10 14:42	100305-3	950493
7440-61-1	Uranium	1.79	mg/kg	N	0.013	0.0393	0.0393	2	MS	BAJ	03/05/10 09:13	100304-7	950493
7440-62-2	Vanadium	5630	ug/Kg	*	105	525	525	1	P	HSC	03/04/10 01:20	030310-2	958097
7440-66-6	Zinc	36200	ug/Kg	*	317	962	962	1	P	JWJ	02/23/10 02:06	022210-1	950491

**Prep Information:**

Analytical Batch	Prep Batch	Prep Method	Initial wt/vol.	Units	Final wt/vol.	Units	Date	Analyst
950491	950490	SW846 3050B	0.555	g	50	mL	02/20/10	BCD1
950493	950492	SW846 3050B	0.543	g	50	mL	02/20/10	BCD1
951617	951616	SW846 7471A Prep	0.546	g	30	mL	02/19/10	TXB3
958097	958096	SW846 3050B	0.508	g	50	mL	02/27/10	FGA

# **Quality Control Summary**

**METALS**  
**-2a-**  
**Initial and Continuing Calibration Verification**

SDG No: 10-1621-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS3,ICPMS5,MER536,OPTIMA1,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	5.22	ug/L	5	ug/L	104.4	90.0 – 110.0	AV	22-FEB-10 10:05	022210S1-9
	Aluminum	5200	ug/L	5000	ug/L	104	90.0 – 110.0	P	22-FEB-10 17:52	022210-1
	Antimony	513	ug/L	500	ug/L	102.6	90.0 – 110.0	P	22-FEB-10 17:52	022210-1
	Barium	518	ug/L	500	ug/L	103.7	90.0 – 110.0	P	22-FEB-10 17:52	022210-1
	Cadmium	513	ug/L	500	ug/L	102.6	90.0 – 110.0	P	22-FEB-10 17:52	022210-1
	Chromium	499	ug/L	500	ug/L	99.9	90.0 – 110.0	P	22-FEB-10 17:52	022210-1
	Iron	5230	ug/L	5000	ug/L	104.5	90.0 – 110.0	P	22-FEB-10 17:52	022210-1
	Lead	504	ug/L	500	ug/L	100.9	90.0 – 110.0	P	22-FEB-10 17:52	022210-1
	Magnesium	5350	ug/L	5000	ug/L	107	90.0 – 110.0	P	22-FEB-10 17:52	022210-1
	Manganese	535	ug/L	500	ug/L	107	90.0 – 110.0	P	22-FEB-10 17:52	022210-1
	Potassium	2590	ug/L	2500	ug/L	103.6	90.0 – 110.0	P	22-FEB-10 17:52	022210-1
	Silver	269	ug/L	250	ug/L	107.4	90.0 – 110.0	P	22-FEB-10 17:52	022210-1
	Sodium	2560	ug/L	2500	ug/L	102.6	90.0 – 110.0	P	22-FEB-10 17:52	022210-1
	Zinc	524	ug/L	500	ug/L	104.8	90.0 – 110.0	P	22-FEB-10 17:52	022210-1
	Calcium	5030	ug/L	5000	ug/L	100.7	90.0 – 110.0	P	03-MAR-10 15:05	030310-2
	Cobalt	505	ug/L	500	ug/L	101	90.0 – 110.0	P	03-MAR-10 15:05	030310-2
	Copper	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	03-MAR-10 15:05	030310-2
	Vanadium	514	ug/L	500	ug/L	102.7	90.0 – 110.0	P	03-MAR-10 15:05	030310-2
	Arsenic	50.5	ug/L	50	ug/L	101	90.0 – 110.0	MS	05-MAR-10 01:57	100304-4
	Beryllium	52.9	ug/L	50	ug/L	105.9	90.0 – 110.0	MS	05-MAR-10 01:57	100304-4
	Nickel	53.1	ug/L	50	ug/L	106.1	90.0 – 110.0	MS	05-MAR-10 01:57	100304-4
	Uranium	54.7	ug/L	50	ug/L	109.4	90.0 – 110.0	MS	05-MAR-10 07:12	100304-7
	Selenium	51.1	ug/L	50	ug/L	102.1	90.0 – 110.0	MS	05-MAR-10 09:28	100304-8
	Thallium	50.2	ug/L	50	ug/L	100.4	90.0 – 110.0	MS	05-MAR-10 12:34	100305-3
CCV01										
	Mercury	5.04	ug/L	5	ug/L	100.9	80.0 – 120.0	AV	22-FEB-10 10:11	022210S1-9
	Aluminum	5120	ug/L	5000	ug/L	102.3	90.0 – 110.0	P	22-FEB-10 18:15	022210-1
	Antimony	517	ug/L	500	ug/L	103.4	90.0 – 110.0	P	22-FEB-10 18:15	022210-1
	Barium	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	22-FEB-10 18:15	022210-1
	Cadmium	510	ug/L	500	ug/L	101.9	90.0 – 110.0	P	22-FEB-10 18:15	022210-1

**METALS**  
**-2a-**  
**Initial and Continuing Calibration Verification**

SDG No: 10-1621-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS3,ICPMS5,MER536,OPTIMA1,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Chromium	510	ug/L	500	ug/L	102.1	90.0 – 110.0	P	22-FEB-10 18:15	022210-1
	Iron	5120	ug/L	5000	ug/L	102.4	90.0 – 110.0	P	22-FEB-10 18:15	022210-1
	Lead	516	ug/L	500	ug/L	103.2	90.0 – 110.0	P	22-FEB-10 18:15	022210-1
	Magnesium	5230	ug/L	5000	ug/L	104.7	90.0 – 110.0	P	22-FEB-10 18:15	022210-1
	Manganese	517	ug/L	500	ug/L	103.4	90.0 – 110.0	P	22-FEB-10 18:15	022210-1
	Potassium	5300	ug/L	5000	ug/L	105.9	90.0 – 110.0	P	22-FEB-10 18:15	022210-1
	Silver	504	ug/L	500	ug/L	100.9	90.0 – 110.0	P	22-FEB-10 18:15	022210-1
	Sodium	10300	ug/L	10000	ug/L	102.6	90.0 – 110.0	P	22-FEB-10 18:15	022210-1
	Zinc	511	ug/L	500	ug/L	102.2	90.0 – 110.0	P	22-FEB-10 18:15	022210-1
	Calcium	5100	ug/L	5000	ug/L	102.1	90.0 – 110.0	P	03-MAR-10 16:06	030310-2
	Cobalt	486	ug/L	500	ug/L	97.2	90.0 – 110.0	P	03-MAR-10 16:06	030310-2
	Copper	482	ug/L	500	ug/L	96.5	90.0 – 110.0	P	03-MAR-10 16:06	030310-2
	Vanadium	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	03-MAR-10 16:06	030310-2
	Arsenic	49.5	ug/L	50	ug/L	99	90.0 – 110.0	MS	05-MAR-10 02:15	100304-4
	Beryllium	50	ug/L	50	ug/L	100	90.0 – 110.0	MS	05-MAR-10 02:15	100304-4
	Nickel	51.3	ug/L	50	ug/L	102.5	90.0 – 110.0	MS	05-MAR-10 02:15	100304-4
	Uranium	54.1	ug/L	50	ug/L	108.2	90.0 – 110.0	MS	05-MAR-10 07:20	100304-7
	Selenium	49	ug/L	50	ug/L	98	90.0 – 110.0	MS	05-MAR-10 09:39	100304-8
	Thallium	50.1	ug/L	50	ug/L	100.3	90.0 – 110.0	MS	05-MAR-10 12:45	100305-3
CCV02	Mercury	5.05	ug/L	5	ug/L	101	80.0 – 120.0	AV	22-FEB-10 10:35	022210S1-9
	Aluminum	4970	ug/L	5000	ug/L	99.4	90.0 – 110.0	P	22-FEB-10 19:05	022210-1
	Antimony	492	ug/L	500	ug/L	98.5	90.0 – 110.0	P	22-FEB-10 19:05	022210-1
	Barium	503	ug/L	500	ug/L	100.5	90.0 – 110.0	P	22-FEB-10 19:05	022210-1
	Cadmium	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	22-FEB-10 19:05	022210-1
	Chromium	500	ug/L	500	ug/L	100.1	90.0 – 110.0	P	22-FEB-10 19:05	022210-1
	Iron	5130	ug/L	5000	ug/L	102.5	90.0 – 110.0	P	22-FEB-10 19:05	022210-1
	Lead	497	ug/L	500	ug/L	99.5	90.0 – 110.0	P	22-FEB-10 19:05	022210-1
	Magnesium	5140	ug/L	5000	ug/L	102.7	90.0 – 110.0	P	22-FEB-10 19:05	022210-1
	Manganese	511	ug/L	500	ug/L	102.3	90.0 – 110.0	P	22-FEB-10 19:05	022210-1

**METALS**  
**-2a-**  
**Initial and Continuing Calibration Verification**

SDG No: 10-1621-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS3,ICPMS5,MER536,OPTIMA1,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Potassium	4970	ug/L	5000	ug/L	99.4	90.0 – 110.0	P	22-FEB-10 19:05	022210-1
	Silver	499	ug/L	500	ug/L	99.8	90.0 – 110.0	P	22-FEB-10 19:05	022210-1
	Sodium	9950	ug/L	10000	ug/L	99.6	90.0 – 110.0	P	22-FEB-10 19:05	022210-1
	Zinc	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	22-FEB-10 19:05	022210-1
	Calcium	5060	ug/L	5000	ug/L	101.2	90.0 – 110.0	P	03-MAR-10 17:34	030310-2
	Cobalt	493	ug/L	500	ug/L	98.5	90.0 – 110.0	P	03-MAR-10 17:34	030310-2
	Copper	491	ug/L	500	ug/L	98.2	90.0 – 110.0	P	03-MAR-10 17:34	030310-2
	Vanadium	502	ug/L	500	ug/L	100.5	90.0 – 110.0	P	03-MAR-10 17:34	030310-2
	Arsenic	49.4	ug/L	50	ug/L	98.9	90.0 – 110.0	MS	05-MAR-10 02:48	100304-4
	Beryllium	52.7	ug/L	50	ug/L	105.5	90.0 – 110.0	MS	05-MAR-10 02:48	100304-4
	Nickel	51.8	ug/L	50	ug/L	103.5	90.0 – 110.0	MS	05-MAR-10 02:48	100304-4
	Uranium	53.2	ug/L	50	ug/L	106.4	90.0 – 110.0	MS	05-MAR-10 07:37	100304-7
	Selenium	51.5	ug/L	50	ug/L	102.9	90.0 – 110.0	MS	05-MAR-10 09:45	100304-8
	Thallium	50.3	ug/L	50	ug/L	100.5	90.0 – 110.0	MS	05-MAR-10 13:13	100305-3
CCV03										
	Mercury	5	ug/L	5	ug/L	100.1	80.0 – 120.0	AV	22-FEB-10 10:59	022210S1-9
	Aluminum	5040	ug/L	5000	ug/L	100.8	90.0 – 110.0	P	22-FEB-10 19:42	022210-1
	Antimony	495	ug/L	500	ug/L	99	90.0 – 110.0	P	22-FEB-10 19:42	022210-1
	Barium	505	ug/L	500	ug/L	101.1	90.0 – 110.0	P	22-FEB-10 19:42	022210-1
	Cadmium	505	ug/L	500	ug/L	100.9	90.0 – 110.0	P	22-FEB-10 19:42	022210-1
	Chromium	499	ug/L	500	ug/L	99.7	90.0 – 110.0	P	22-FEB-10 19:42	022210-1
	Iron	5130	ug/L	5000	ug/L	102.6	90.0 – 110.0	P	22-FEB-10 19:42	022210-1
	Lead	498	ug/L	500	ug/L	99.7	90.0 – 110.0	P	22-FEB-10 19:42	022210-1
	Magnesium	5130	ug/L	5000	ug/L	102.7	90.0 – 110.0	P	22-FEB-10 19:42	022210-1
	Manganese	515	ug/L	500	ug/L	102.9	90.0 – 110.0	P	22-FEB-10 19:42	022210-1
	Potassium	5020	ug/L	5000	ug/L	100.5	90.0 – 110.0	P	22-FEB-10 19:42	022210-1
	Silver	499	ug/L	500	ug/L	99.7	90.0 – 110.0	P	22-FEB-10 19:42	022210-1
	Sodium	10000	ug/L	10000	ug/L	100.4	90.0 – 110.0	P	22-FEB-10 19:42	022210-1
	Zinc	501	ug/L	500	ug/L	100.1	90.0 – 110.0	P	22-FEB-10 19:42	022210-1
	Calcium	5100	ug/L	5000	ug/L	102.1	90.0 – 110.0	P	03-MAR-10 18:28	030310-2

**METALS**  
**-2a-**  
**Initial and Continuing Calibration Verification**

SDG No: 10-1621-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS3,ICPMS5,MER536,OPTIMA1,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Cobalt	490	ug/L	500	ug/L	97.9	90.0 – 110.0	P	03-MAR-10 18:28	030310-2
	Copper	485	ug/L	500	ug/L	97	90.0 – 110.0	P	03-MAR-10 18:28	030310-2
	Vanadium	498	ug/L	500	ug/L	99.7	90.0 – 110.0	P	03-MAR-10 18:28	030310-2
	Arsenic	49.5	ug/L	50	ug/L	99	90.0 – 110.0	MS	05-MAR-10 03:21	100304-4
	Beryllium	53	ug/L	50	ug/L	106	90.0 – 110.0	MS	05-MAR-10 03:21	100304-4
	Nickel	51.7	ug/L	50	ug/L	103.4	90.0 – 110.0	MS	05-MAR-10 03:21	100304-4
	Uranium	52.5	ug/L	50	ug/L	105	90.0 – 110.0	MS	05-MAR-10 07:52	100304-7
	Selenium	49.2	ug/L	50	ug/L	98.5	90.0 – 110.0	MS	05-MAR-10 10:10	100304-8
	Thallium	50.1	ug/L	50	ug/L	100.1	90.0 – 110.0	MS	05-MAR-10 13:33	100305-3
CCV04										
	Mercury	5.06	ug/L	5	ug/L	101.3	80.0 – 120.0	AV	22-FEB-10 11:23	022210S1-9
	Aluminum	5110	ug/L	5000	ug/L	102.2	90.0 – 110.0	P	22-FEB-10 20:13	022210-1
	Antimony	507	ug/L	500	ug/L	101.5	90.0 – 110.0	P	22-FEB-10 20:13	022210-1
	Barium	507	ug/L	500	ug/L	101.5	90.0 – 110.0	P	22-FEB-10 20:13	022210-1
	Cadmium	510	ug/L	500	ug/L	102	90.0 – 110.0	P	22-FEB-10 20:13	022210-1
	Chromium	504	ug/L	500	ug/L	100.9	90.0 – 110.0	P	22-FEB-10 20:13	022210-1
	Iron	5250	ug/L	5000	ug/L	105	90.0 – 110.0	P	22-FEB-10 20:13	022210-1
	Lead	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	22-FEB-10 20:13	022210-1
	Magnesium	5140	ug/L	5000	ug/L	102.8	90.0 – 110.0	P	22-FEB-10 20:13	022210-1
	Manganese	518	ug/L	500	ug/L	103.6	90.0 – 110.0	P	22-FEB-10 20:13	022210-1
	Potassium	5050	ug/L	5000	ug/L	100.9	90.0 – 110.0	P	22-FEB-10 20:13	022210-1
	Silver	503	ug/L	500	ug/L	100.5	90.0 – 110.0	P	22-FEB-10 20:13	022210-1
	Sodium	10000	ug/L	10000	ug/L	100.3	90.0 – 110.0	P	22-FEB-10 20:13	022210-1
	Zinc	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	22-FEB-10 20:13	022210-1
	Calcium	5070	ug/L	5000	ug/L	101.4	90.0 – 110.0	P	03-MAR-10 19:22	030310-2
	Cobalt	489	ug/L	500	ug/L	97.7	90.0 – 110.0	P	03-MAR-10 19:22	030310-2
	Copper	488	ug/L	500	ug/L	97.7	90.0 – 110.0	P	03-MAR-10 19:22	030310-2
	Vanadium	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	03-MAR-10 19:22	030310-2
	Arsenic	48.7	ug/L	50	ug/L	97.4	90.0 – 110.0	MS	05-MAR-10 03:50	100304-4
	Beryllium	53.3	ug/L	50	ug/L	106.5	90.0 – 110.0	MS	05-MAR-10 03:50	100304-4

**METALS**  
**-2a-**  
**Initial and Continuing Calibration Verification**

SDG No: 10-1621-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS3,ICPMS5,MER536,OPTIMA1,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>
	Nickel	51	ug/L	50	ug/L	102.1	90.0 – 110.0	MS	05-MAR-10 03:50	100304-4
	Uranium	52.4	ug/L	50	ug/L	104.7	90.0 – 110.0	MS	05-MAR-10 08:04	100304-7
	Selenium	49.5	ug/L	50	ug/L	99	90.0 – 110.0	MS	05-MAR-10 10:29	100304-8
	Thallium	49.7	ug/L	50	ug/L	99.4	90.0 – 110.0	MS	05-MAR-10 13:42	100305-3
CCV05										
	Aluminum	4870	ug/L	5000	ug/L	97.4	90.0 – 110.0	P	22-FEB-10 20:50	022210-1
	Antimony	485	ug/L	500	ug/L	96.9	90.0 – 110.0	P	22-FEB-10 20:50	022210-1
	Barium	493	ug/L	500	ug/L	98.7	90.0 – 110.0	P	22-FEB-10 20:50	022210-1
	Cadmium	499	ug/L	500	ug/L	99.7	90.0 – 110.0	P	22-FEB-10 20:50	022210-1
	Chromium	490	ug/L	500	ug/L	98	90.0 – 110.0	P	22-FEB-10 20:50	022210-1
	Iron	5040	ug/L	5000	ug/L	100.9	90.0 – 110.0	P	22-FEB-10 20:50	022210-1
	Lead	488	ug/L	500	ug/L	97.5	90.0 – 110.0	P	22-FEB-10 20:50	022210-1
	Magnesium	5010	ug/L	5000	ug/L	100.2	90.0 – 110.0	P	22-FEB-10 20:50	022210-1
	Manganese	504	ug/L	500	ug/L	100.7	90.0 – 110.0	P	22-FEB-10 20:50	022210-1
	Potassium	4880	ug/L	5000	ug/L	97.6	90.0 – 110.0	P	22-FEB-10 20:50	022210-1
	Silver	488	ug/L	500	ug/L	97.7	90.0 – 110.0	P	22-FEB-10 20:50	022210-1
	Sodium	9690	ug/L	10000	ug/L	96.9	90.0 – 110.0	P	22-FEB-10 20:50	022210-1
	Zinc	492	ug/L	500	ug/L	98.4	90.0 – 110.0	P	22-FEB-10 20:50	022210-1
	Calcium	5160	ug/L	5000	ug/L	103.3	90.0 – 110.0	P	03-MAR-10 20:04	030310-2
	Cobalt	506	ug/L	500	ug/L	101.2	90.0 – 110.0	P	03-MAR-10 20:04	030310-2
	Copper	488	ug/L	500	ug/L	97.6	90.0 – 110.0	P	03-MAR-10 20:04	030310-2
	Vanadium	501	ug/L	500	ug/L	100.3	90.0 – 110.0	P	03-MAR-10 20:04	030310-2
	Uranium	53.3	ug/L	50	ug/L	106.6	90.0 – 110.0	MS	05-MAR-10 08:17	100304-7
	Selenium	49.1	ug/L	50	ug/L	98.2	90.0 – 110.0	MS	05-MAR-10 10:44	100304-8
	Thallium	50	ug/L	50	ug/L	99.9	90.0 – 110.0	MS	05-MAR-10 14:07	100305-3
CCV06										
	Aluminum	4900	ug/L	5000	ug/L	98	90.0 – 110.0	P	22-FEB-10 21:19	022210-1
	Antimony	485	ug/L	500	ug/L	97	90.0 – 110.0	P	22-FEB-10 21:19	022210-1
	Barium	490	ug/L	500	ug/L	98.1	90.0 – 110.0	P	22-FEB-10 21:19	022210-1
	Cadmium	495	ug/L	500	ug/L	99	90.0 – 110.0	P	22-FEB-10 21:19	022210-1



**METALS**  
**-2a-**  
**Initial and Continuing Calibration Verification**

SDG No: 10-1621-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS3,ICPMS5,MER536,OPTIMA1,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Chromium	487	ug/L	500	ug/L	97.4	90.0 – 110.0	P	22-FEB-10 21:19	022210-1
	Iron	5040	ug/L	5000	ug/L	100.7	90.0 – 110.0	P	22-FEB-10 21:19	022210-1
	Lead	485	ug/L	500	ug/L	97	90.0 – 110.0	P	22-FEB-10 21:19	022210-1
	Magnesium	4980	ug/L	5000	ug/L	99.7	90.0 – 110.0	P	22-FEB-10 21:19	022210-1
	Manganese	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	22-FEB-10 21:19	022210-1
	Potassium	4890	ug/L	5000	ug/L	97.7	90.0 – 110.0	P	22-FEB-10 21:19	022210-1
	Silver	488	ug/L	500	ug/L	97.6	90.0 – 110.0	P	22-FEB-10 21:19	022210-1
	Sodium	9770	ug/L	10000	ug/L	97.7	90.0 – 110.0	P	22-FEB-10 21:19	022210-1
	Zinc	489	ug/L	500	ug/L	97.8	90.0 – 110.0	P	22-FEB-10 21:19	022210-1
	Calcium	5190	ug/L	5000	ug/L	103.9	90.0 – 110.0	P	03-MAR-10 21:13	030310-2
	Cobalt	514	ug/L	500	ug/L	102.9	90.0 – 110.0	P	03-MAR-10 21:13	030310-2
	Copper	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	03-MAR-10 21:13	030310-2
	Vanadium	511	ug/L	500	ug/L	102.2	90.0 – 110.0	P	03-MAR-10 21:13	030310-2
	Uranium	52.5	ug/L	50	ug/L	104.9	90.0 – 110.0	MS	05-MAR-10 08:31	100304-7
	Thallium	49.6	ug/L	50	ug/L	99.2	90.0 – 110.0	MS	05-MAR-10 14:22	100305-3
CCV07	Aluminum	5200	ug/L	5000	ug/L	104	90.0 – 110.0	P	22-FEB-10 22:13	022210-1
	Antimony	511	ug/L	500	ug/L	102.2	90.0 – 110.0	P	22-FEB-10 22:13	022210-1
	Barium	513	ug/L	500	ug/L	102.7	90.0 – 110.0	P	22-FEB-10 22:13	022210-1
	Cadmium	518	ug/L	500	ug/L	103.7	90.0 – 110.0	P	22-FEB-10 22:13	022210-1
	Chromium	511	ug/L	500	ug/L	102.1	90.0 – 110.0	P	22-FEB-10 22:13	022210-1
	Iron	5320	ug/L	5000	ug/L	106.4	90.0 – 110.0	P	22-FEB-10 22:13	022210-1
	Lead	509	ug/L	500	ug/L	101.7	90.0 – 110.0	P	22-FEB-10 22:13	022210-1
	Magnesium	5280	ug/L	5000	ug/L	105.6	90.0 – 110.0	P	22-FEB-10 22:13	022210-1
	Manganese	526	ug/L	500	ug/L	105.3	90.0 – 110.0	P	22-FEB-10 22:13	022210-1
	Potassium	5180	ug/L	5000	ug/L	103.7	90.0 – 110.0	P	22-FEB-10 22:13	022210-1
	Silver	512	ug/L	500	ug/L	102.4	90.0 – 110.0	P	22-FEB-10 22:13	022210-1
	Sodium	10300	ug/L	10000	ug/L	103.3	90.0 – 110.0	P	22-FEB-10 22:13	022210-1
	Zinc	514	ug/L	500	ug/L	102.8	90.0 – 110.0	P	22-FEB-10 22:13	022210-1
	Calcium	5130	ug/L	5000	ug/L	102.6	90.0 – 110.0	P	03-MAR-10 22:24	030310-2

**METALS**  
**-2a-**  
**Initial and Continuing Calibration Verification**

SDG No: 10-1621-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS3,ICPMS5,MER536,OPTIMA1,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>
CCV08	Cobalt	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	03-MAR-10 22:24	030310-2
	Copper	490	ug/L	500	ug/L	97.9	90.0 – 110.0	P	03-MAR-10 22:24	030310-2
	Vanadium	503	ug/L	500	ug/L	100.5	90.0 – 110.0	P	03-MAR-10 22:24	030310-2
	Uranium	52.9	ug/L	50	ug/L	105.8	90.0 – 110.0	MS	05-MAR-10 08:46	100304-7
	Thallium	49.3	ug/L	50	ug/L	98.6	90.0 – 110.0	MS	05-MAR-10 14:44	100305-3
CCV09	Aluminum	5060	ug/L	5000	ug/L	101.1	90.0 – 110.0	P	22-FEB-10 22:53	022210-1
	Antimony	506	ug/L	500	ug/L	101.1	90.0 – 110.0	P	22-FEB-10 22:53	022210-1
	Barium	507	ug/L	500	ug/L	101.5	90.0 – 110.0	P	22-FEB-10 22:53	022210-1
	Cadmium	510	ug/L	500	ug/L	102	90.0 – 110.0	P	22-FEB-10 22:53	022210-1
	Chromium	505	ug/L	500	ug/L	100.9	90.0 – 110.0	P	22-FEB-10 22:53	022210-1
	Iron	5160	ug/L	5000	ug/L	103.2	90.0 – 110.0	P	22-FEB-10 22:53	022210-1
	Lead	505	ug/L	500	ug/L	100.9	90.0 – 110.0	P	22-FEB-10 22:53	022210-1
	Magnesium	5130	ug/L	5000	ug/L	102.5	90.0 – 110.0	P	22-FEB-10 22:53	022210-1
	Manganese	519	ug/L	500	ug/L	103.7	90.0 – 110.0	P	22-FEB-10 22:53	022210-1
	Potassium	5020	ug/L	5000	ug/L	100.4	90.0 – 110.0	P	22-FEB-10 22:53	022210-1
	Silver	506	ug/L	500	ug/L	101.3	90.0 – 110.0	P	22-FEB-10 22:53	022210-1
	Sodium	10100	ug/L	10000	ug/L	100.5	90.0 – 110.0	P	22-FEB-10 22:53	022210-1
	Zinc	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	22-FEB-10 22:53	022210-1
	Calcium	5110	ug/L	5000	ug/L	102.3	90.0 – 110.0	P	03-MAR-10 23:27	030310-2
	Cobalt	510	ug/L	500	ug/L	102.1	90.0 – 110.0	P	03-MAR-10 23:27	030310-2
	Copper	493	ug/L	500	ug/L	98.5	90.0 – 110.0	P	03-MAR-10 23:27	030310-2
	Vanadium	506	ug/L	500	ug/L	101.3	90.0 – 110.0	P	03-MAR-10 23:27	030310-2
	Uranium	53.1	ug/L	50	ug/L	106.2	90.0 – 110.0	MS	05-MAR-10 09:02	100304-7
	Aluminum	5180	ug/L	5000	ug/L	103.6	90.0 – 110.0	P	22-FEB-10 23:33	022210-1
	Antimony	509	ug/L	500	ug/L	101.8	90.0 – 110.0	P	22-FEB-10 23:33	022210-1
	Barium	512	ug/L	500	ug/L	102.5	90.0 – 110.0	P	22-FEB-10 23:33	022210-1
	Cadmium	515	ug/L	500	ug/L	103	90.0 – 110.0	P	22-FEB-10 23:33	022210-1
	Chromium	509	ug/L	500	ug/L	101.7	90.0 – 110.0	P	22-FEB-10 23:33	022210-1

**METALS**  
**-2a-**  
**Initial and Continuing Calibration Verification**

SDG No: 10-1621-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS3,ICPMS5,MER536,OPTIMA1,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	5270	ug/L	5000	ug/L	105.5	90.0 – 110.0	P	22-FEB-10 23:33	022210-1
	Lead	505	ug/L	500	ug/L	100.9	90.0 – 110.0	P	22-FEB-10 23:33	022210-1
	Magnesium	5270	ug/L	5000	ug/L	105.4	90.0 – 110.0	P	22-FEB-10 23:33	022210-1
	Manganese	523	ug/L	500	ug/L	104.6	90.0 – 110.0	P	22-FEB-10 23:33	022210-1
	Potassium	5140	ug/L	5000	ug/L	102.9	90.0 – 110.0	P	22-FEB-10 23:33	022210-1
	Silver	509	ug/L	500	ug/L	101.8	90.0 – 110.0	P	22-FEB-10 23:33	022210-1
	Sodium	10300	ug/L	10000	ug/L	102.6	90.0 – 110.0	P	22-FEB-10 23:33	022210-1
	Zinc	510	ug/L	500	ug/L	102	90.0 – 110.0	P	22-FEB-10 23:33	022210-1
	Calcium	5470	ug/L	5000	ug/L	109.4	90.0 – 110.0	P	04-MAR-10 00:30	030310-2
	Cobalt	525	ug/L	500	ug/L	105.1	90.0 – 110.0	P	04-MAR-10 00:30	030310-2
	Copper	510	ug/L	500	ug/L	102	90.0 – 110.0	P	04-MAR-10 00:30	030310-2
	Vanadium	524	ug/L	500	ug/L	104.8	90.0 – 110.0	P	04-MAR-10 00:30	030310-2
	Uranium	53.2	ug/L	50	ug/L	106.5	90.0 – 110.0	MS	05-MAR-10 09:15	100304-7
CCV10	Aluminum	4820	ug/L	5000	ug/L	96.4	90.0 – 110.0	P	23-FEB-10 00:06	022210-1
	Antimony	487	ug/L	500	ug/L	97.4	90.0 – 110.0	P	23-FEB-10 00:06	022210-1
	Barium	486	ug/L	500	ug/L	97.3	90.0 – 110.0	P	23-FEB-10 00:06	022210-1
	Cadmium	490	ug/L	500	ug/L	98.1	90.0 – 110.0	P	23-FEB-10 00:06	022210-1
	Chromium	484	ug/L	500	ug/L	96.7	90.0 – 110.0	P	23-FEB-10 00:06	022210-1
	Iron	4960	ug/L	5000	ug/L	99.2	90.0 – 110.0	P	23-FEB-10 00:06	022210-1
	Lead	483	ug/L	500	ug/L	96.5	90.0 – 110.0	P	23-FEB-10 00:06	022210-1
	Magnesium	4900	ug/L	5000	ug/L	98.1	90.0 – 110.0	P	23-FEB-10 00:06	022210-1
	Manganese	499	ug/L	500	ug/L	99.7	90.0 – 110.0	P	23-FEB-10 00:06	022210-1
	Potassium	4830	ug/L	5000	ug/L	96.7	90.0 – 110.0	P	23-FEB-10 00:06	022210-1
	Silver	485	ug/L	500	ug/L	97	90.0 – 110.0	P	23-FEB-10 00:06	022210-1
	Sodium	9630	ug/L	10000	ug/L	96.3	90.0 – 110.0	P	23-FEB-10 00:06	022210-1
	Zinc	485	ug/L	500	ug/L	97.1	90.0 – 110.0	P	23-FEB-10 00:06	022210-1
	Calcium	5340	ug/L	5000	ug/L	106.9	90.0 – 110.0	P	04-MAR-10 01:27	030310-2
	Cobalt	517	ug/L	500	ug/L	103.5	90.0 – 110.0	P	04-MAR-10 01:27	030310-2
	Copper	501	ug/L	500	ug/L	100.1	90.0 – 110.0	P	04-MAR-10 01:27	030310-2

**METALS**  
**-2a-**  
**Initial and Continuing Calibration Verification**

SDG No: 10-1621-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS3,ICPMS5,MER536,OPTIMA1,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>
CCV11	Vanadium	517	ug/L	500	ug/L	103.3	90.0 – 110.0	P	04-MAR-10 01:27	030310-2
	Aluminum	5040	ug/L	5000	ug/L	100.9	90.0 – 110.0	P	23-FEB-10 00:39	022210-1
	Antimony	499	ug/L	500	ug/L	99.9	90.0 – 110.0	P	23-FEB-10 00:39	022210-1
	Barium	499	ug/L	500	ug/L	99.8	90.0 – 110.0	P	23-FEB-10 00:39	022210-1
	Cadmium	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	23-FEB-10 00:39	022210-1
	Chromium	497	ug/L	500	ug/L	99.3	90.0 – 110.0	P	23-FEB-10 00:39	022210-1
	Iron	5120	ug/L	5000	ug/L	102.4	90.0 – 110.0	P	23-FEB-10 00:39	022210-1
	Lead	495	ug/L	500	ug/L	98.9	90.0 – 110.0	P	23-FEB-10 00:39	022210-1
	Magnesium	5160	ug/L	5000	ug/L	103.2	90.0 – 110.0	P	23-FEB-10 00:39	022210-1
	Manganese	509	ug/L	500	ug/L	101.9	90.0 – 110.0	P	23-FEB-10 00:39	022210-1
	Potassium	5070	ug/L	5000	ug/L	101.5	90.0 – 110.0	P	23-FEB-10 00:39	022210-1
	Silver	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	23-FEB-10 00:39	022210-1
	Sodium	10100	ug/L	10000	ug/L	100.7	90.0 – 110.0	P	23-FEB-10 00:39	022210-1
	Zinc	498	ug/L	500	ug/L	99.7	90.0 – 110.0	P	23-FEB-10 00:39	022210-1
CCV12	Aluminum	5110	ug/L	5000	ug/L	102.3	90.0 – 110.0	P	23-FEB-10 01:26	022210-1
	Antimony	501	ug/L	500	ug/L	100.1	90.0 – 110.0	P	23-FEB-10 01:26	022210-1
	Barium	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	23-FEB-10 01:26	022210-1
	Cadmium	503	ug/L	500	ug/L	100.7	90.0 – 110.0	P	23-FEB-10 01:26	022210-1
	Chromium	499	ug/L	500	ug/L	99.9	90.0 – 110.0	P	23-FEB-10 01:26	022210-1
	Iron	5150	ug/L	5000	ug/L	103.1	90.0 – 110.0	P	23-FEB-10 01:26	022210-1
	Lead	495	ug/L	500	ug/L	99.1	90.0 – 110.0	P	23-FEB-10 01:26	022210-1
	Magnesium	5180	ug/L	5000	ug/L	103.5	90.0 – 110.0	P	23-FEB-10 01:26	022210-1
	Manganese	514	ug/L	500	ug/L	102.9	90.0 – 110.0	P	23-FEB-10 01:26	022210-1
	Potassium	5100	ug/L	5000	ug/L	102.1	90.0 – 110.0	P	23-FEB-10 01:26	022210-1
	Silver	504	ug/L	500	ug/L	100.8	90.0 – 110.0	P	23-FEB-10 01:26	022210-1
	Sodium	10200	ug/L	10000	ug/L	102.2	90.0 – 110.0	P	23-FEB-10 01:26	022210-1
	Zinc	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	23-FEB-10 01:26	022210-1

**METALS**  
**-2a-**  
**Initial and Continuing Calibration Verification**

SDG No: 10-1621-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS3,ICPMS5,MER536,OPTIMA1,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>
CCV13										
	Aluminum	5100	ug/L	5000	ug/L	102	90.0 - 110.0	P	23-FEB-10 02:09	022210-1
	Antimony	505	ug/L	500	ug/L	101	90.0 - 110.0	P	23-FEB-10 02:09	022210-1
	Barium	505	ug/L	500	ug/L	101.1	90.0 - 110.0	P	23-FEB-10 02:09	022210-1
	Cadmium	508	ug/L	500	ug/L	101.6	90.0 - 110.0	P	23-FEB-10 02:09	022210-1
	Chromium	503	ug/L	500	ug/L	100.7	90.0 - 110.0	P	23-FEB-10 02:09	022210-1
	Iron	5210	ug/L	5000	ug/L	104.3	90.0 - 110.0	P	23-FEB-10 02:09	022210-1
	Lead	500	ug/L	500	ug/L	100	90.0 - 110.0	P	23-FEB-10 02:09	022210-1
	Magnesium	5200	ug/L	5000	ug/L	104.1	90.0 - 110.0	P	23-FEB-10 02:09	022210-1
	Manganese	517	ug/L	500	ug/L	103.3	90.0 - 110.0	P	23-FEB-10 02:09	022210-1
	Potassium	5110	ug/L	5000	ug/L	102.3	90.0 - 110.0	P	23-FEB-10 02:09	022210-1
	Silver	505	ug/L	500	ug/L	101	90.0 - 110.0	P	23-FEB-10 02:09	022210-1
	Sodium	10200	ug/L	10000	ug/L	102.1	90.0 - 110.0	P	23-FEB-10 02:09	022210-1
	Zinc	504	ug/L	500	ug/L	100.8	90.0 - 110.0	P	23-FEB-10 02:09	022210-1

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

SDG No: 10-1621-1

Contract: LANL01004

Lab Code: GEL

AA CRDL Standard Source: SPEX

ICP CRDL Standard Source Solutions Plus

Instrument ID: ICPMS3,ICPMS5,MER536,OPTIMA1,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	.254	ug/L	.2	ug/L	127.2	70.0 – 130.0	AV	22-FEB-10 10:09	022210S1-9
	Nickel	2.6	ug/L	2	ug/L	129.9	70.0 – 130.0	MS	05-MAR-10 02:04	100304-4
	Arsenic	6.49	ug/L	5	ug/L	129.8	70.0 – 130.0	MS	05-MAR-10 02:04	100304-4
	Beryllium	.63	ug/L	.5	ug/L	126	70.0 – 130.0	MS	05-MAR-10 02:04	100304-4
	Uranium	.23	ug/L	.2	ug/L	115	70.0 – 130.0	MS	05-MAR-10 07:15	100304-7
	Selenium	5.97	ug/L	5	ug/L	119.3	70.0 – 130.0	MS	05-MAR-10 09:33	100304-8
	Thallium	1.1	ug/L	1	ug/L	109.6	70.0 – 130.0	MS	05-MAR-10 12:38	100305-3
PQL01										
	Aluminum	210	ug/L	200	ug/L	104.8	70.0 – 130.0	P	22-FEB-10 17:59	022210-1
	Antimony	10.1	ug/L	10	ug/L	101.1	70.0 – 130.0	P	22-FEB-10 17:59	022210-1
	Zinc	10.5	ug/L	10	ug/L	105.2	70.0 – 130.0	P	22-FEB-10 17:59	022210-1
	Chromium	5.24	ug/L	5	ug/L	104.8	70.0 – 130.0	P	22-FEB-10 17:59	022210-1
	Cadmium	5.1	ug/L	5	ug/L	102	70.0 – 130.0	P	22-FEB-10 17:59	022210-1
	Barium	5.42	ug/L	5	ug/L	108.4	70.0 – 130.0	P	22-FEB-10 17:59	022210-1
	Sodium	330	ug/L	300	ug/L	109.8	70.0 – 130.0	P	22-FEB-10 17:59	022210-1
	Lead	8.15	ug/L	10	ug/L	81.5	70.0 – 130.0	P	22-FEB-10 17:59	022210-1
	Manganese	10.7	ug/L	10	ug/L	107	70.0 – 130.0	P	22-FEB-10 17:59	022210-1
	Potassium	177	ug/L	150	ug/L	118.2	70.0 – 130.0	P	22-FEB-10 17:59	022210-1
	Silver	5.78	ug/L	5	ug/L	115.6	70.0 – 130.0	P	22-FEB-10 17:59	022210-1
	Magnesium	329	ug/L	300	ug/L	109.7	70.0 – 130.0	P	22-FEB-10 17:59	022210-1
	Iron	111	ug/L	100	ug/L	110.5	70.0 – 130.0	P	22-FEB-10 17:59	022210-1
	Cobalt	5	ug/L	5	ug/L	99.9	70.0 – 130.0	P	03-MAR-10 15:19	030310-2
	Copper	8.72	ug/L	10	ug/L	87.2	70.0 – 130.0	P	03-MAR-10 15:19	030310-2
	Calcium	221	ug/L	200	ug/L	110.3	70.0 – 130.0	P	03-MAR-10 15:19	030310-2
	Vanadium	5.09	ug/L	5	ug/L	101.9	70.0 – 130.0	P	03-MAR-10 15:19	030310-2
PQL02										
	Barium	5.31	ug/L	5	ug/L	106.1	70.0 – 130.0	P	23-FEB-10 00:42	022210-1
	Iron	104	ug/L	100	ug/L	104.5	70.0 – 130.0	P	23-FEB-10 00:42	022210-1
	Magnesium	344	ug/L	300	ug/L	114.7	70.0 – 130.0	P	23-FEB-10 00:42	022210-1
	Potassium	216	ug/L	150	ug/L	144.1	70.0 – 130.0	P	23-FEB-10 00:42	022210-1

---

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

---

SDG No: 10-1621-1

Contract: LANL01004

Lab Code: GEL

AA CRDL Standard Source:

ICP CRDL Standard Source

Instrument ID: ICPMS3,ICPMS5,MER536,OPTIMA1,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>
	Sodium	311	ug/L	300	ug/L	103.7	70.0 – 130.0	P	23-FEB-10 00:42	022210-1
	Antimony	11.3	ug/L	10	ug/L	113.2	70.0 – 130.0	P	23-FEB-10 00:42	022210-1
	Silver	5.92	ug/L	5	ug/L	118.4	70.0 – 130.0	P	23-FEB-10 00:42	022210-1
	Manganese	11.1	ug/L	10	ug/L	110.6	70.0 – 130.0	P	23-FEB-10 00:42	022210-1
	Lead	7.48	ug/L	10	ug/L	74.8	70.0 – 130.0	P	23-FEB-10 00:42	022210-1
	Aluminum	207	ug/L	200	ug/L	103.5	70.0 – 130.0	P	23-FEB-10 00:42	022210-1
	Cadmium	5.1	ug/L	5	ug/L	102.1	70.0 – 130.0	P	23-FEB-10 00:42	022210-1
	Chromium	5.13	ug/L	5	ug/L	102.7	70.0 – 130.0	P	23-FEB-10 00:42	022210-1
	Zinc	10.4	ug/L	10	ug/L	103.9	70.0 – 130.0	P	23-FEB-10 00:42	022210-1

**Metals**  
**-3a-**  
**Initial and Continuing Calibration Blank Summary**

SDG No.: 10-1621-1

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>
ICB01	Mercury	0.068	+/- .2	U	0.068	0.2	SOL	AV	22-FEB-10 10:07	022210S1-9
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	22-FEB-10 17:56	022210-1
	Antimony	5.1	+/-10	J	3.3	10.0	SOL	P	22-FEB-10 17:56	022210-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	22-FEB-10 17:56	022210-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	22-FEB-10 17:56	022210-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	22-FEB-10 17:56	022210-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	22-FEB-10 17:56	022210-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	22-FEB-10 17:56	022210-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	22-FEB-10 17:56	022210-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	22-FEB-10 17:56	022210-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	22-FEB-10 17:56	022210-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	22-FEB-10 17:56	022210-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	22-FEB-10 17:56	022210-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	22-FEB-10 17:56	022210-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	03-MAR-10 15:12	030310-2
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	03-MAR-10 15:12	030310-2
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	03-MAR-10 15:12	030310-2
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	03-MAR-10 15:12	030310-2
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	05-MAR-10 02:01	100304-4
	Beryllium	0.1	+/- .5	U	0.1	0.5	SOL	MS	05-MAR-10 02:01	100304-4
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	05-MAR-10 02:01	100304-4
	Uranium	0.066	+/- .2	U	0.066	0.2	SOL	MS	05-MAR-10 07:14	100304-7
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	05-MAR-10 09:30	100304-8
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	05-MAR-10 12:36	100305-3
CCB01	Mercury	0.068	+/- .2	U	0.068	0.2	SOL	AV	22-FEB-10 10:13	022210S1-9
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	22-FEB-10 18:19	022210-1
	Antimony	4.5	+/-10	J	3.3	10.0	SOL	P	22-FEB-10 18:19	022210-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	22-FEB-10 18:19	022210-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	22-FEB-10 18:19	022210-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	22-FEB-10 18:19	022210-1

SW846



**Metals**  
**-3a-**  
**Initial and Continuing Calibration Blank Summary**

SDG No.: 10-1621-1

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ng/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Iron	80.0	+/-250	U	80.0	250	SOL	P	22-FEB-10 18:19	022210-1
	Lead	4.98	+/-10	J	2.5	10.0	SOL	P	22-FEB-10 18:19	022210-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	22-FEB-10 18:19	022210-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	22-FEB-10 18:19	022210-1
	Potassium	104.71	+/-250	J	64.0	250	SOL	P	22-FEB-10 18:19	022210-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	22-FEB-10 18:19	022210-1
	Sodium	89.83	+/-250	J	70.0	250	SOL	P	22-FEB-10 18:19	022210-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	22-FEB-10 18:19	022210-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	03-MAR-10 16:13	030310-2
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	03-MAR-10 16:13	030310-2
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	03-MAR-10 16:13	030310-2
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	03-MAR-10 16:13	030310-2
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	05-MAR-10 02:19	100304-4
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	05-MAR-10 02:19	100304-4
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	05-MAR-10 02:19	100304-4
	Uranium	0.066	+/-2	U	0.066	0.2	SOL	MS	05-MAR-10 07:22	100304-7
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	05-MAR-10 09:41	100304-8
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	05-MAR-10 12:47	100305-3
<b>CCB02</b>										
	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	22-FEB-10 10:37	022210S1-9
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	22-FEB-10 19:09	022210-1
	Antimony	5.04	+/-10	J	3.3	10.0	SOL	P	22-FEB-10 19:09	022210-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	22-FEB-10 19:09	022210-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	22-FEB-10 19:09	022210-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	22-FEB-10 19:09	022210-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	22-FEB-10 19:09	022210-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	22-FEB-10 19:09	022210-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	22-FEB-10 19:09	022210-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	22-FEB-10 19:09	022210-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	22-FEB-10 19:09	022210-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	22-FEB-10 19:09	022210-1

**Metals**  
**-3a-**  
**Initial and Continuing Calibration Blank Summary**

SDG No.: 10-1621-1

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>
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	22-FEB-10 19:09	022210-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	22-FEB-10 19:09	022210-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	03-MAR-10 17:41	030310-2
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	03-MAR-10 17:41	030310-2
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	03-MAR-10 17:41	030310-2
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	03-MAR-10 17:41	030310-2
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	05-MAR-10 02:52	100304-4
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	05-MAR-10 02:52	100304-4
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	05-MAR-10 02:52	100304-4
	Uranium	0.066	+/-2	U	0.066	0.2	SOL	MS	05-MAR-10 07:39	100304-7
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	05-MAR-10 09:47	100304-8
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	05-MAR-10 13:16	100305-3
<b>CCB03</b>	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	22-FEB-10 11:01	022210S1-9
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	22-FEB-10 19:46	022210-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	22-FEB-10 19:46	022210-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	22-FEB-10 19:46	022210-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	22-FEB-10 19:46	022210-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	22-FEB-10 19:46	022210-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	22-FEB-10 19:46	022210-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	22-FEB-10 19:46	022210-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	22-FEB-10 19:46	022210-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	22-FEB-10 19:46	022210-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	22-FEB-10 19:46	022210-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	22-FEB-10 19:46	022210-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	22-FEB-10 19:46	022210-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	22-FEB-10 19:46	022210-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	03-MAR-10 18:35	030310-2
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	03-MAR-10 18:35	030310-2
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	03-MAR-10 18:35	030310-2
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	03-MAR-10 18:35	030310-2

**Metals**  
**-3a-**  
**Initial and Continuing Calibration Blank Summary**

SDG No.: 10-1621-1

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>
CCB04	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	05-MAR-10 03:25	100304-4
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	05-MAR-10 03:25	100304-4
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	05-MAR-10 03:25	100304-4
	Uranium	0.066	+/-2	U	0.066	0.2	SOL	MS	05-MAR-10 07:54	100304-7
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	05-MAR-10 10:12	100304-8
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	05-MAR-10 13:36	100305-3
	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	22-FEB-10 11:25	022210S1-9
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	22-FEB-10 20:17	022210-1
	Antimony	5.59	+/-10	J	3.3	10.0	SOL	P	22-FEB-10 20:17	022210-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	22-FEB-10 20:17	022210-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	22-FEB-10 20:17	022210-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	22-FEB-10 20:17	022210-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	22-FEB-10 20:17	022210-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	22-FEB-10 20:17	022210-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	22-FEB-10 20:17	022210-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	22-FEB-10 20:17	022210-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	22-FEB-10 20:17	022210-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	22-FEB-10 20:17	022210-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	22-FEB-10 20:17	022210-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	22-FEB-10 20:17	022210-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	03-MAR-10 19:29	030310-2
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	03-MAR-10 19:29	030310-2
	Copper	-3.1	+/-10	J	3.0	10.0	SOL	P	03-MAR-10 19:29	030310-2
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	03-MAR-10 19:29	030310-2
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	05-MAR-10 03:54	100304-4
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	05-MAR-10 03:54	100304-4
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	05-MAR-10 03:54	100304-4
	Uranium	0.066	+/-2	U	0.066	0.2	SOL	MS	05-MAR-10 08:06	100304-7
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	05-MAR-10 10:31	100304-8
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	05-MAR-10 13:44	100305-3

SW846

**Metals**  
**-3a-**  
**Initial and Continuing Calibration Blank Summary**

SDG No.: 10-1621-1

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>CCB05</b>										
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	22-FEB-10 20:54	022210-1
	Antimony	4.44	+/-10	J	3.3	10.0	SOL	P	22-FEB-10 20:54	022210-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	22-FEB-10 20:54	022210-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	22-FEB-10 20:54	022210-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	22-FEB-10 20:54	022210-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	22-FEB-10 20:54	022210-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	22-FEB-10 20:54	022210-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	22-FEB-10 20:54	022210-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	22-FEB-10 20:54	022210-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	22-FEB-10 20:54	022210-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	22-FEB-10 20:54	022210-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	22-FEB-10 20:54	022210-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	22-FEB-10 20:54	022210-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	03-MAR-10 20:11	030310-2
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	03-MAR-10 20:11	030310-2
	Copper	-3.32	+/-10	J	3.0	10.0	SOL	P	03-MAR-10 20:11	030310-2
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	03-MAR-10 20:11	030310-2
	Uranium	0.066	+/-2	U	0.066	0.2	SOL	MS	05-MAR-10 08:19	100304-7
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	05-MAR-10 10:47	100304-8
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	05-MAR-10 14:09	100305-3
<b>CCB06</b>										
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	22-FEB-10 21:23	022210-1
	Antimony	4.65	+/-10	J	3.3	10.0	SOL	P	22-FEB-10 21:23	022210-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	22-FEB-10 21:23	022210-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	22-FEB-10 21:23	022210-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	22-FEB-10 21:23	022210-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	22-FEB-10 21:23	022210-1
	Lead	-3.19	+/-10	J	2.5	10.0	SOL	P	22-FEB-10 21:23	022210-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	22-FEB-10 21:23	022210-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	22-FEB-10 21:23	022210-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	22-FEB-10 21:23	022210-1

SW846

**Metals**  
**-3a-**  
**Initial and Continuing Calibration Blank Summary**

SDG No.: 10-1621-1

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>
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	22-FEB-10 21:23	022210-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	22-FEB-10 21:23	022210-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	22-FEB-10 21:23	022210-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	03-MAR-10 21:20	030310-2
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	03-MAR-10 21:20	030310-2
	Copper	-4.31	+/-10	J	3.0	10.0	SOL	P	03-MAR-10 21:20	030310-2
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	03-MAR-10 21:20	030310-2
	Uranium	0.066	+/-2	U	0.066	0.2	SOL	MS	05-MAR-10 08:33	100304-7
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	05-MAR-10 14:24	100305-3
<b>CCB07</b>	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	22-FEB-10 22:17	022210-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	22-FEB-10 22:17	022210-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	22-FEB-10 22:17	022210-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	22-FEB-10 22:17	022210-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	22-FEB-10 22:17	022210-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	22-FEB-10 22:17	022210-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	22-FEB-10 22:17	022210-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	22-FEB-10 22:17	022210-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	22-FEB-10 22:17	022210-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	22-FEB-10 22:17	022210-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	22-FEB-10 22:17	022210-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	22-FEB-10 22:17	022210-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	22-FEB-10 22:17	022210-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	03-MAR-10 22:31	030310-2
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	03-MAR-10 22:31	030310-2
	Copper	-3.94	+/-10	J	3.0	10.0	SOL	P	03-MAR-10 22:31	030310-2
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	03-MAR-10 22:31	030310-2
	Uranium	0.066	+/-2	U	0.066	0.2	SOL	MS	05-MAR-10 08:48	100304-7
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	05-MAR-10 14:47	100305-3
<b>CCB08</b>	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	22-FEB-10 22:57	022210-1

**Metals**  
**-3a-**  
**Initial and Continuing Calibration Blank Summary**

SDG No.: 10-1621-1

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ng/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	22-FEB-10 22:57	022210-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	22-FEB-10 22:57	022210-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	22-FEB-10 22:57	022210-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	22-FEB-10 22:57	022210-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	22-FEB-10 22:57	022210-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	22-FEB-10 22:57	022210-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	22-FEB-10 22:57	022210-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	22-FEB-10 22:57	022210-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	22-FEB-10 22:57	022210-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	22-FEB-10 22:57	022210-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	22-FEB-10 22:57	022210-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	22-FEB-10 22:57	022210-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	03-MAR-10 23:34	030310-2
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	03-MAR-10 23:34	030310-2
	Copper	-4.58	+/-10	J	3.0	10.0	SOL	P	03-MAR-10 23:34	030310-2
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	03-MAR-10 23:34	030310-2
	Uranium	0.066	+/-2	U	0.066	0.2	SOL	MS	05-MAR-10 09:03	100304-7
<b>CCB09</b>	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	22-FEB-10 23:37	022210-1
	Antimony	3.82	+/-10	J	3.3	10.0	SOL	P	22-FEB-10 23:37	022210-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	22-FEB-10 23:37	022210-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	22-FEB-10 23:37	022210-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	22-FEB-10 23:37	022210-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	22-FEB-10 23:37	022210-1
	Lead	-3.04	+/-10	J	2.5	10.0	SOL	P	22-FEB-10 23:37	022210-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	22-FEB-10 23:37	022210-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	22-FEB-10 23:37	022210-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	22-FEB-10 23:37	022210-1
	Silver	1.02	+/-5	J	1.0	5.0	SOL	P	22-FEB-10 23:37	022210-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	22-FEB-10 23:37	022210-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	22-FEB-10 23:37	022210-1

SW846

**Metals**  
**-3a-**  
**Initial and Continuing Calibration Blank Summary**

SDG No.: 10-1621-1

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ng/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	04-MAR-10 00:37	030310-2
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	04-MAR-10 00:37	030310-2
	Copper	-4.68	+/-10	J	3.0	10.0	SOL	P	04-MAR-10 00:37	030310-2
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	04-MAR-10 00:37	030310-2
	Uranium	0.066	+/-2	U	0.066	0.2	SOL	MS	05-MAR-10 09:17	100304-7
<b>CCB10</b>	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	23-FEB-10 00:10	022210-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	23-FEB-10 00:10	022210-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	23-FEB-10 00:10	022210-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	23-FEB-10 00:10	022210-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	23-FEB-10 00:10	022210-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	23-FEB-10 00:10	022210-1
	Lead	-2.84	+/-10	J	2.5	10.0	SOL	P	23-FEB-10 00:10	022210-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	23-FEB-10 00:10	022210-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	23-FEB-10 00:10	022210-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	23-FEB-10 00:10	022210-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	23-FEB-10 00:10	022210-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	23-FEB-10 00:10	022210-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	23-FEB-10 00:10	022210-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	04-MAR-10 01:34	030310-2
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	04-MAR-10 01:34	030310-2
	Copper	-4.12	+/-10	J	3.0	10.0	SOL	P	04-MAR-10 01:34	030310-2
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	04-MAR-10 01:34	030310-2
<b>CCB11</b>	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	23-FEB-10 00:46	022210-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	23-FEB-10 00:46	022210-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	23-FEB-10 00:46	022210-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	23-FEB-10 00:46	022210-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	23-FEB-10 00:46	022210-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	23-FEB-10 00:46	022210-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	23-FEB-10 00:46	022210-1

SW846

**Metals**  
**-3a-**  
**Initial and Continuing Calibration Blank Summary**

SDG No.: 10-1621-1

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>
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	23-FEB-10 00:46	022210-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	23-FEB-10 00:46	022210-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	23-FEB-10 00:46	022210-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	23-FEB-10 00:46	022210-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	23-FEB-10 00:46	022210-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	23-FEB-10 00:46	022210-1
CCB12	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	23-FEB-10 01:29	022210-1
	Antimony	4.26	+/-10	J	3.3	10.0	SOL	P	23-FEB-10 01:29	022210-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	23-FEB-10 01:29	022210-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	23-FEB-10 01:29	022210-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	23-FEB-10 01:29	022210-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	23-FEB-10 01:29	022210-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	23-FEB-10 01:29	022210-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	23-FEB-10 01:29	022210-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	23-FEB-10 01:29	022210-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	23-FEB-10 01:29	022210-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	23-FEB-10 01:29	022210-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	23-FEB-10 01:29	022210-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	23-FEB-10 01:29	022210-1
CCB13	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	23-FEB-10 02:13	022210-1
	Antimony	6.27	+/-10	J	3.3	10.0	SOL	P	23-FEB-10 02:13	022210-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	23-FEB-10 02:13	022210-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	23-FEB-10 02:13	022210-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	23-FEB-10 02:13	022210-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	23-FEB-10 02:13	022210-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	23-FEB-10 02:13	022210-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	23-FEB-10 02:13	022210-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	23-FEB-10 02:13	022210-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	23-FEB-10 02:13	022210-1

SW846



---

**Metals**  
**-3a-**  
**Initial and Continuing Calibration Blank Summary**

SDG No.: 10-1621-1

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>
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	23-FEB-10 02:13	022210-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	23-FEB-10 02:13	022210-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	23-FEB-10 02:13	022210-1

**METALS**  
**-3b-**  
**PREPARATION BLANK SUMMARY**

**SDG NO.** 10-1621-1  
**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>
1202036880	Antimony	351	ug/Kg	+/-938	J	P	310	938
	Barium	93.8	ug/Kg	+/-469	U	P	93.8	469
	Cadmium	93.8	ug/Kg	+/-469	U	P	93.8	469
	Chromium	141	ug/Kg	+/-469	U	P	141	469
	Iron	7500	ug/Kg	+/-23500	U	P	7500	23500
	Lead	235	ug/Kg	+/-938	U	P	235	938
	Magnesium	7970	ug/Kg	+/-28100	U	P	7970	28100
	Manganese	188	ug/Kg	+/-938	U	P	188	938
	Potassium	6000	ug/Kg	+/-23500	U	P	6000	23500
	Aluminum	6380	ug/Kg	+/-18800	U	P	6380	18800
	Silver	93.8	ug/Kg	+/-469	U	P	93.8	469
	Sodium	6570	ug/Kg	+/-23500	U	P	6570	23500
	Zinc	310	ug/Kg	+/-938	U	P	310	938
1202036886	Arsenic	0.181	mg/kg	+/-0.903	U	MS	0.181	0.903
	Beryllium	0.0181	mg/kg	+/-0.0903	U	MS	0.0181	0.0903
	Nickel	0.0903	mg/kg	+/-0.361	U	MS	0.0903	0.361
	Selenium	0.451	mg/kg	+/-0.903	U	MS	0.451	0.903
	Thallium	0.0542	mg/kg	+/-0.181	U	MS	0.0542	0.181
	Uranium	0.0119	mg/kg	+/-0.0361	U	MS	0.0119	0.0361
1202039421	Mercury	3.62	ug/kg	+/-10.6	U	AV	3.62	10.6
1202054615	Calcium	7500	ug/Kg	+/-23500	U	P	7500	23500
	Cobalt	141	ug/Kg	+/-469	U	P	141	469
	Copper	-334	ug/Kg	+/-938	J	P	281	938
	Vanadium	93.8	ug/Kg	+/-469	U	P	93.8	469

**METALS**  
**-4-**  
**Interference Check Sample**

SDG No: 10-1621-1

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: OPTIMA1

<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	522000	ug/L	500000	ug/L	104	80.0 – 120.0	22-FEB-10 18:03	022210-1
	Antimony	-6.89	ug/L					22-FEB-10 18:03	022210-1
	Barium	8.53	ug/L					22-FEB-10 18:03	022210-1
	Cadmium	-6.36	ug/L					22-FEB-10 18:03	022210-1
	Chromium	-0.474	ug/L					22-FEB-10 18:03	022210-1
	Iron	193000	ug/L	200000	ug/L	96.7	80.0 – 120.0	22-FEB-10 18:03	022210-1
	Lead	9.37	ug/L					22-FEB-10 18:03	022210-1
	Magnesium	497000	ug/L	500000	ug/L	99.4	80.0 – 120.0	22-FEB-10 18:03	022210-1
	Manganese	6.93	ug/L					22-FEB-10 18:03	022210-1
	Potassium	-2.83	ug/L					22-FEB-10 18:03	022210-1
	Silver	-7.52	ug/L					22-FEB-10 18:03	022210-1
	Sodium	36.1	ug/L					22-FEB-10 18:03	022210-1
	Zinc	-8.59	ug/L					22-FEB-10 18:03	022210-1
<b>ICSAB01</b>									
	Aluminum	519000	ug/L	500000	ug/L	104	80.0 – 120.0	22-FEB-10 18:06	022210-1
	Antimony	520	ug/L	500	ug/L	104	80.0 – 120.0	22-FEB-10 18:06	022210-1
	Barium	512	ug/L	500	ug/L	102	80.0 – 120.0	22-FEB-10 18:06	022210-1
	Cadmium	467	ug/L	500	ug/L	93.4	80.0 – 120.0	22-FEB-10 18:06	022210-1
	Chromium	496	ug/L	500	ug/L	99.2	80.0 – 120.0	22-FEB-10 18:06	022210-1
	Iron	192000	ug/L	200000	ug/L	96.2	80.0 – 120.0	22-FEB-10 18:06	022210-1
	Lead	496	ug/L	500	ug/L	99.2	80.0 – 120.0	22-FEB-10 18:06	022210-1
	Magnesium	495000	ug/L	500000	ug/L	99.1	80.0 – 120.0	22-FEB-10 18:06	022210-1
	Manganese	495	ug/L	500	ug/L	98.9	80.0 – 120.0	22-FEB-10 18:06	022210-1
	Potassium	5140	ug/L	5000	ug/L	103	80.0 – 120.0	22-FEB-10 18:06	022210-1
	Silver	259	ug/L	250	ug/L	104	80.0 – 120.0	22-FEB-10 18:06	022210-1
	Sodium	5190	ug/L	5000	ug/L	104	80.0 – 120.0	22-FEB-10 18:06	022210-1
	Zinc	471	ug/L	500	ug/L	94.3	80.0 – 120.0	22-FEB-10 18:06	022210-1

---

METALS  
-4-  
Interference Check Sample

---

SDG No: 10-1621-1

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>
ICSA01									
	Calcium	493000	ug/L	500000	ug/L	98.5	80.0 – 120.0	03-MAR-10 15:26	030310-2
	Cobalt	-1.71	ug/L					03-MAR-10 15:26	030310-2
	Copper	6.07	ug/L					03-MAR-10 15:26	030310-2
	Vanadium	-3.59	ug/L					03-MAR-10 15:26	030310-2
ICSAB01									
	Calcium	498000	ug/L	500000	ug/L	99.5	80.0 – 120.0	03-MAR-10 15:32	030310-2
	Cobalt	477	ug/L	500	ug/L	95.3	80.0 – 120.0	03-MAR-10 15:32	030310-2
	Copper	598	ug/L	500	ug/L	120	80.0 – 120.0	03-MAR-10 15:32	030310-2
	Vanadium	508	ug/L	500	ug/L	102	80.0 – 120.0	03-MAR-10 15:32	030310-2

---

---

METALS  
-4-  
Interference Check Sample

---

SDG No: 10-1621-1

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: ICPMS3

---

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICSA01	Thallium	-0.021	ug/L					05-MAR-10 12:41	100305-3
ICSAB01	Thallium	19.3	ug/L	20	ug/L	96.7	80.0 - 120.0	05-MAR-10 12:43	100305-3

---

---

**METALS**  
**-4-**  
**Interference Check Sample**

---

**SDG No:** 10-1621-1

**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>
<b>ICSA01</b>									
	Arsenic	0.119	ug/L					05-MAR-10 02:08	100304-4
	Beryllium	0.057	ug/L					05-MAR-10 02:08	100304-4
	Nickel	3.37	ug/L					05-MAR-10 02:08	100304-4
<b>ICSAB01</b>									
	Arsenic	20.8	ug/L	20	ug/L	104	80.0 - 120.0	05-MAR-10 02:11	100304-4
	Beryllium	19.5	ug/L	20	ug/L	97.3	80.0 - 120.0	05-MAR-10 02:11	100304-4
	Nickel	23.1	ug/L	23.31	ug/L	99.2	80.0 - 120.0	05-MAR-10 02:11	100304-4

---

METALS  
-4-  
Interference Check Sample

---

SDG No: 10-1621-1

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	-0.012	ug/L					05-MAR-10 07:17	100304-7
ICSAB01	Uranium	22.9	ug/L	20	ug/L	115	80.0 - 120.0	05-MAR-10 07:19	100304-7

---

---

**METALS**  
**-4-**  
**Interference Check Sample**

**SDG No:** 10-1621-1

**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	Selenium	0.259	ug/L					05-MAR-10 09:35	100304-8
ICSAB01	Selenium	19.7	ug/L	20	ug/L	98.5	80.0 - 120.0	05-MAR-10 09:37	100304-8



## METALS

-5a-

## Matrix Spike Summary

SDG NO. 10-1621-1 Client ID RE15-10-8354S

Contract: LANL01004 Level: Low

Matrix: SOIL % Solids: 78

Sample ID: 246437001 Spike ID: 1202036883

<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>
Aluminum	ug/Kg	75-125	4400000		1770000		607000	433	N	P
Antimony	ug/Kg	75-125	62000		827	J	60700	101		P
Barium	ug/Kg	75-125	90300		28000		60700	103		P
Cadmium	ug/Kg	75-125	61800		116	U	60700	102		P
Chromium	ug/Kg	75-125	67900		3690		60700	106		P
Iron	ug/Kg		7370000		5820000		607000	255	N/A	P
Lead	ug/Kg	75-125	66800		7200		60700	98.2		P
Magnesium	ug/Kg	75-125	1140000		360000		607000	129	N	P
Manganese	ug/Kg	75-125	247000		169000		60700	129	N	P
Potassium	ug/Kg	75-125	1100000		335000		607000	125		P
Silver	ug/Kg	75-125	60700		116	U	60700	99.9		P
Sodium	ug/Kg	75-125	650000		34900		607000	101		P
Zinc	ug/Kg	75-125	92800		25800		60700	110		P

## METALS

-5a-

## Matrix Spike Duplicate Summary

SDG NO. 10-1621-1 Client ID RE15-10-8354SD

Contract: LANL01004 Level: Low

Matrix: SOIL % Solids: 78

Sample ID: 246437001 Spike ID: 1202036884

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/Kg	75-125	4940000		1770000		615000	514	N	P
Antimony	ug/Kg	75-125	61100		827	J	61500	97.9		P
Barium	ug/Kg	75-125	93200		28000		61500	106		P
Cadmium	ug/Kg	75-125	62900		116	U	61500	102		P
Chromium	ug/Kg	75-125	73500		3690		61500	113		P
Iron	ug/Kg		8090000		5820000		615000	369	N/A	P
Lead	ug/Kg	75-125	67300		7200		61500	97.7		P
Magnesium	ug/Kg	75-125	1190000		360000		615000	134	N	P
Manganese	ug/Kg	75-125	240000		169000		61500	115		P
Potassium	ug/Kg	75-125	1130000		335000		615000	129	N	P
Silver	ug/Kg	75-125	61900		116	U	61500	101		P
Sodium	ug/Kg	75-125	660000		34900		615000	102		P
Zinc	ug/Kg	75-125	94300		25800		61500	111		P

## METALS

-5a-

## Matrix Spike Summary

SDG NO. 10-1621-1 Client ID: RE15-10-8354S

Contract: LANL01004 Level: Low

Matrix: SOIL % Solids: 78

Sample ID: 246437001 Spike ID: 1202036889

<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	10.4		1.07	J	9.43	98.7		MS
Beryllium	mg/kg	75-125	6.78		0.501		5.89	107		MS
Nickel	mg/kg	75-125	8.78		2.91		5.89	99.8		MS
Selenium	mg/kg	75-125	2.41		0.593	U	2.36	98.8		MS
Thallium	mg/kg	75-125	11.5		0.0711	U	11.8	97.4		MS
Uranium	mg/kg	75-125	9.79		2.82		5.89	118		MS

## METALS

-5a-

## Matrix Spike Duplicate Summary

SDG NO. 10-1621-1 Client ID: RE15-10-8354SD

Contract: LANL01004 Level: Low

Matrix: SOIL % Solids: 78

Sample ID: 246437001 Spike ID: 1202036890

<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	10.4		1.07	J	9.73	95.9		MS
Beryllium	mg/kg	75-125	6.87		0.501		6.08	105		MS
Nickel	mg/kg	75-125	8.84		2.91		6.08	97.5		MS
Selenium	mg/kg	75-125	2.12		0.593	U	2.43	83.7		MS
Thallium	mg/kg	75-125	11.6		0.0711	U	12.2	94.7		MS
Uranium	mg/kg	75-125	11.7		2.82		6.08	145	N	MS

METALS										
-5a-										
Matrix Spike Summary										
SDG NO.	10-1621-1	Client ID	RE15-10-8175S							
Contract:	LANL01004	Level:	Low							
Matrix:	SOIL	% Solids:	99.15							
Sample ID:	246554001	Spike ID:	1202039424							
Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/kg	75-125	103		3.77	U	102	101		AV

## METALS

-5a-

## Matrix Spike Duplicate Summary

SDG NO. 10-1621-1 Client ID: RE15-10-8175SD

Contract: LANL01004 Level: Low

Matrix: SOIL % Solids: 99.15

Sample ID: 246554001 Spike ID: 1202039426

<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	116		3.77	U	116	99.5		AV

## METALS

-5a-

## Matrix Spike Summary

**SDG NO.** 10-1621-1 **Client ID** RE15-10-8354S**Contract:** LANL01004 **Level:** Low**Matrix:** SOIL **% Solids:** 78**Sample ID:** 246437001 **Spike ID:** 1202054618

<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>
Calcium	ug/Kg	75-125	1280000		869000		615000	66.2	N	P
Cobalt	ug/Kg	75-125	60500		1350		61500	96.1		P
Copper	ug/Kg	75-125	66800		4520		61500	101		P
Vanadium	ug/Kg	75-125	65100		6420		61500	95.4		P

## METALS

-5a-

## Matrix Spike Duplicate Summary

SDG NO. 10-1621-1 Client ID RE15-10-8354SD

Contract: LANL01004 Level: Low

Matrix: SOIL % Solids: 78

Sample ID: 246437001 Spike ID: 1202054619

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Calcium	ug/Kg	75-125	1260000		869000		593000	66.1	N	P
Cobalt	ug/Kg	75-125	58500		1350		59300	96.4		P
Copper	ug/Kg	75-125	64600		4520		59300	101		P
Vanadium	ug/Kg	75-125	63300		6420		59300	96.1		P



**Metals**  
**-6-**  
**Duplicate Sample Summary**

SDG No.: 10-1621-1

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE15-10-8354D

Sample ID: 246437001

Duplicate ID: 1202036881

Percent Solids for Dup: 78

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/Kg	+/-20%	1770000		1950000		9.52		P
Antimony	ug/Kg	+/-1190	827 J		452 J		58.6		P
Barium	ug/Kg	+/-20%	28000		31900		13.1		P
Cadmium	ug/Kg		116 U		119 U				P
Chromium	ug/Kg	+/-20%	3690		3140		16.2		P
Iron	ug/Kg	+/-20%	5820000		7320000		22.9	*	P
Lead	ug/Kg	+/-1190	7200		5060		34.8	*	P
Magnesium	ug/Kg	+/-20%	360000		480000		28.5	*	P
Manganese	ug/Kg	+/-20%	169000		253000		39.8	*	P
Potassium	ug/Kg	+/-20%	335000		410000		20.2	*	P
Silver	ug/Kg		116 U		119 U				P
Sodium	ug/Kg	+/-29700	34900		44200		23.7		P
Zinc	ug/Kg	+/-20%	25800		37400		36.7	*	P

Metals  
-6-  
Duplicate Sample Summary

SDG No.: 10-1621-1

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE15-10-8354SD

Sample ID: 1202036883

Duplicate ID: 1202036884

Percent Solids for Dup: 78

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/Kg	+/-20	4400000		4940000		11.5		P
Antimony	ug/Kg	+/-20	62000		61100		1.53		P
Barium	ug/Kg	+/-20	90300		93200		3.18		P
Cadmium	ug/Kg	+/-20	61800		62900		1.82		P
Chromium	ug/Kg	+/-20	67900		73500		7.94		P
Iron	ug/Kg	+/-20	7370000		8090000		9.36		P
Lead	ug/Kg	+/-20	66800		67300		.813		P
Magnesium	ug/Kg	+/-20	1140000		1190000		3.9		P
Manganese	ug/Kg	+/-20	247000		240000		3.03		P
Potassium	ug/Kg	+/-20	1100000		1130000		2.78		P
Silver	ug/Kg	+/-20	60700		61900		1.96		P
Sodium	ug/Kg	+/-20	650000		660000		1.61		P
Zinc	ug/Kg	+/-20	92800		94300		1.52		P

---

Metals  
-6-  
Duplicate Sample Summary

SDG No.: 10-1621-1

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE15-10-8354D

Sample ID: 246437001

Duplicate ID: 1202036887

Percent Solids for Dup: 78

---

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	mg/kg	+/-1.2	1.07 J		0.825 J		26.2		MS
Beryllium	mg/kg	+/-1.2	0.501		0.439		13.1		MS
Nickel	mg/kg	+/-20%	2.91		2.55		13		MS
Selenium	mg/kg		0.593 U		0.6 U				MS
Thallium	mg/kg		0.0711 U		0.072 U				MS
Uranium	mg/kg	+/-20%	2.82		2.73		3.13		MS

---

**Metals**  
**-6-**  
**Duplicate Sample Summary**

SDG No.: 10-1621-1

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE15-10-8354SD

Sample ID: 1202036889

Duplicate ID: 1202036890

Percent Solids for Dup: 78

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	mg/kg	+/-20	10.4		10.4		.299		MS
Beryllium	mg/kg	+/-20	6.78		6.87		1.38		MS
Nickel	mg/kg	+/-20	8.78		8.84		.62		MS
Selenium	mg/kg	+/-20	2.41		2.12		13		MS
Thallium	mg/kg	+/-20	11.5		11.6		.337		MS
Uranium	mg/kg	+/-20	9.79		11.7		17.6		MS

Metals  
-6-  
Duplicate Sample Summary

SDG No.: 10-1621-1

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE15-10-8175D

Sample ID: 246554001

Duplicate ID: 1202039423

Percent Solids for Dup: 99.15

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/kg		3.77 U		4.12 U				AV

Metals  
-6-  
Duplicate Sample Summary

SDG No.: 10-1621-1

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE15-10-8175SD

Sample ID: 1202039424

Duplicate ID: 1202039426

Percent Solids for Dup: 99.15

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/kg	+/-20	103		116		11.4		AV

---

Metals  
-6-  
Duplicate Sample Summary

SDG No.: 10-1621-1

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE15-10-8354D

Sample ID: 246437001

Duplicate ID: 1202054616

Percent Solids for Dup: 78

---

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Calcium	ug/Kg	+/-20%	869000		588000		38.6	*	P
Cobalt	ug/Kg	+/-611	1350		2470		58.5	*	P
Copper	ug/Kg	+/-1220	4520		3110		37	*	P
Vanadium	ug/Kg	+/-20%	6420		5190		21.2	*	P

---

---

**Metals**  
**-6-**  
**Duplicate Sample Summary**

**SDG No.:** 10-1621-1

**Contract:** LANL01004

**Lab Code:** GEL

**Matrix:** SOLID

**Level:** Low

**Client ID:** RE15-10-8354SD

**Sample ID:** 1202054618

**Duplicate ID:** 1202054619

**Percent Solids for Dup:** 78

---

<b>Analyte</b>	<b>Units</b>	<b>Acceptance Limit</b>	<b>Sample Result</b>	<b>C</b>	<b>Duplicate Result</b>	<b>C</b>	<b>RPD</b>	<b>Qual</b>	<b>M</b>
Calcium	ug/Kg	+/-20	1280000		1260000		1.22		P
Cobalt	ug/Kg	+/-20	60500		58500		3.44		P
Copper	ug/Kg	+/-20	66800		64600		3.37		P
Vanadium	ug/Kg	+/-20	65100		63300		2.72		P

---



## METALS

-7-

## Laboratory Control Sample Summary

SDG NO. 10-1621-1

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>
1202036885								
	Aluminum	ug/Kg	10500000	10300000		97.8	56-144	P
	Antimony	ug/Kg	173000	190000		110	71-130	P
	Barium	ug/Kg	198000	226000		114	80-120	P
	Cadmium	ug/Kg	60700	70500		116	81-120	P
	Chromium	ug/Kg	236000	282000		120	80-120	P
	Iron	ug/Kg	18000000	22200000		123	51-149	P
	Lead	ug/Kg	86000	97900		114	79-121	P
	Magnesium	ug/Kg	4000000	4450000		111	79-122	P
	Manganese	ug/Kg	558000	664000		119	81-119	P
	Potassium	ug/Kg	4300000	4650000		108	74-127	P
	Silver	ug/Kg	30100	35800		119	66-134	P
	Sodium	ug/Kg	1020000	1150000		113	74-127	P
	Zinc	ug/Kg	594000	682000		115	80-121	P

## METALS

-7-

## Laboratory Control Sample Summary

SDG NO. 10-1621-1

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>
1202036891								
	Arsenic	mg/kg	104	112		108	78-123	MS
	Beryllium	mg/kg	77.6	85.9		111	84-116	MS
	Nickel	mg/kg	134	153		114	78-123	MS
	Selenium	mg/kg	286	301		105	77-123	MS
	Thallium	mg/kg	121	132		109	78-122	MS
	Uranium	mg/kg	2.13	2.31		108	73-127	MS

## METALS

-7-

## Laboratory Control Sample Summary

SDG NO. 10-1621-1

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>
1202039422	Mercury	ug/kg	5150	5750		112	71.6-128.3	AV

## METALS

-7-

## Laboratory Control Sample Summary

SDG NO. 10-1621-1

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>
1202054620								
	Calcium	ug/Kg	9870000	9660000		97.9	83-117	P
	Cobalt	ug/Kg	91200	90500		99.3	81-120	P
	Copper	ug/Kg	174000	183000		105	81-118	P
	Vanadium	ug/Kg	115000	119000		104	79-121	P

## METALS

-9-

## Serial Dilution Sample Summary

SDG NO. 10-1621-1

Client ID: RE15-10-8354L

Contract: LANL01004

Matrix: SOLID

Level: Low

Sample ID: 246437001

Serial Dilution ID: 1202036882

<u>Analyte</u>	<u>Initial Value</u> ug/L	<u>C</u>	<u>Serial Value</u> ug/L	<u>C</u>	<u>% Difference</u>	<u>Qual</u>	<u>Acceptance Limit</u>	<u>M</u>
Aluminum	15300		15700		2.29		10	P
Antimony	7.12	J	16.5	U	100			P
Barium	241		236		2.07		10	P
Cadmium	1	U	5	U				P
Chromium	31.8		31.9		.314			P
Iron	50100		51500		2.79		10	P
Lead	61.9		51		17.6			P
Magnesium	3100		3210		3.55			P
Manganese	1450		1450		0		10	P
Potassium	2880		2900		.521			P
Silver	1	U	5	U				P
Sodium	300		385	J	28.3			P
Zinc	222		219		1.58		10	P

## METALS

-9-

## Serial Dilution Sample Summary

SDG NO. 10-1621-1 Client ID RE15-10-8354L

Contract: LANL01004

Matrix: SOLID Level: Low

Sample ID: 246437001 Serial Dilution ID: 1202036888

<u>Analyte</u>	<u>Initial Value ng/L</u>	<u>C</u>	<u>Serial Value ng/L</u>	<u>C</u>	<u>% Difference</u>	<u>Qual</u>	<u>Acceptance Limit</u>	<u>M</u>
Arsenic	4.53	J	6.8	J	50.1			MS
Beryllium	2.11		2.04	J	3.32			MS
Nickel	12.3		12		2.44			MS
Selenium	2.5	U	12.5	U				MS
Thallium	.3	U	1.91	J				MS
Uranium	11.9		11.7		2.1		10	MS

## METALS

-9-

## Serial Dilution Sample Summary

SDG NO. 10-1621-1 Client ID: RE15-10-8175L

Contract: LANL01004

Matrix: SOLID Level: Low

Sample ID: 246554001 Serial Dilution ID: 1202039425

<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	.068	U	.34	U				AV

## METALS

-9-

## Serial Dilution Sample Summary

SDG NO. 10-1621-1 Client ID RE15-10-8354L

Contract: LANL01004

Matrix: SOLID Level: Low

Sample ID: 246437001 Serial Dilution ID: 1202054617

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Calcium	7100		7400		4.23		10	P
Cobalt	11.1		11.9	J	6.76			P
Copper	37		18.4	J	50.4			P
Vanadium	52.5		54		2.86		10	P



**METALS**  
**-13-**  
**SAMPLE PREPARATION SUMMARY**

SDG No: 10-1621-1

Method Type: P

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Client ID</u>	<u>Sample Type</u>	<u>Matrix</u>	<u>Prep Date</u>	<u>Initial Sample Size</u>	<u>Final Sample Volume</u>	<u>Percent Solids</u>
<b>Batch Number</b> 950490							
1202036880	MB for batch 950490	MB	S	20-FEB-10	.533g	50mL	
1202036885	LCS for batch 950490	LCS	S	20-FEB-10	.512g	50mL	
1202036883	RE15-10-8354S	MS	S	20-FEB-10	.528g	50mL	
1202036884	RE15-10-8354SD	MSD	S	20-FEB-10	.521g	50mL	
1202036881	RE15-10-8354D	DUP	S	20-FEB-10	.54g	50mL	
246437001	RE15-10-8354	SAMPLE	S	20-FEB-10	.552g	50mL	
246437002	RE15-10-8356	SAMPLE	S	20-FEB-10	.51g	50mL	
246437003	RE15-10-8353	SAMPLE	S	20-FEB-10	.529g	50mL	
246437004	RE15-10-8352	SAMPLE	S	20-FEB-10	.544g	50mL	
246437005	RE15-10-8355	SAMPLE	S	20-FEB-10	.55g	50mL	
246437006	RE15-10-8351	SAMPLE	S	20-FEB-10	.536g	50mL	
246437007	RE15-10-8350	SAMPLE	S	20-FEB-10	.543g	50mL	
246437008	RE15-10-8357	SAMPLE	S	20-FEB-10	.51g	50mL	
246437009	RE15-10-8338	SAMPLE	S	20-FEB-10	.545g	50mL	
246437010	RE15-10-8336	SAMPLE	S	20-FEB-10	.536g	50mL	
246437011	RE15-10-8339	SAMPLE	S	20-FEB-10	.541g	50mL	
246437012	RE15-10-8337	SAMPLE	S	20-FEB-10	.522g	50mL	
246437013	RE15-10-8375	SAMPLE	S	20-FEB-10	.526g	50mL	
246437014	RE15-10-8374	SAMPLE	S	20-FEB-10	.555g	50mL	

SW846

**METALS**  
**-13-**  
**SAMPLE PREPARATION SUMMARY**

SDG No: 10-1621-1

Method Type: P

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Client ID</u>	<u>Sample Type</u>	<u>Matrix</u>	<u>Prep Date</u>	<u>Initial Sample Size</u>	<u>Final Sample Volume</u>	<u>Percent Solids</u>
Batch Number 958096							
1202054615	MB for batch 958096	MB	S	27-FEB-10	.533g	50mL	
1202054620	LCS for batch 958096	LCS	S	27-FEB-10	.501g	50mL	
1202054618	RE15-10-8354S	MS	S	27-FEB-10	.521g	50mL	
1202054619	RE15-10-8354SD	MSD	S	27-FEB-10	.541g	50mL	
1202054616	RE15-10-8354D	DUP	S	27-FEB-10	.525g	50mL	
246437001	RE15-10-8354	SAMPLE	S	27-FEB-10	.524g	50mL	
246437002	RE15-10-8356	SAMPLE	S	27-FEB-10	.519g	50mL	
246437003	RE15-10-8353	SAMPLE	S	27-FEB-10	.533g	50mL	
246437004	RE15-10-8352	SAMPLE	S	27-FEB-10	.511g	50mL	
246437005	RE15-10-8355	SAMPLE	S	27-FEB-10	.547g	50mL	
246437006	RE15-10-8351	SAMPLE	S	27-FEB-10	.566g	50mL	
246437007	RE15-10-8350	SAMPLE	S	27-FEB-10	.509g	50mL	
246437008	RE15-10-8357	SAMPLE	S	27-FEB-10	.523g	50mL	
246437009	RE15-10-8338	SAMPLE	S	27-FEB-10	.504g	50mL	
246437010	RE15-10-8336	SAMPLE	S	27-FEB-10	.518g	50mL	
246437011	RE15-10-8339	SAMPLE	S	27-FEB-10	.503g	50mL	
246437012	RE15-10-8337	SAMPLE	S	27-FEB-10	.525g	50mL	
246437013	RE15-10-8375	SAMPLE	S	27-FEB-10	.53g	50mL	
246437014	RE15-10-8374	SAMPLE	S	27-FEB-10	.508g	50mL	

SW846

**METALS**  
**-13-**  
**SAMPLE PREPARATION SUMMARY**

SDG No: 10-1621-1

Method Type: MS

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Client ID</u>	<u>Sample Type</u>	<u>Matrix</u>	<u>Prep Date</u>	<u>Initial Sample Size</u>	<u>Final Sample Volume</u>	<u>Percent Solids</u>
Batch Number 950492							
1202036886	MB for batch 950492	MB	S	20-FEB-10	.554g	50mL	
1202036891	LCS for batch 950492	LCS	S	20-FEB-10	.516g	50mL	
1202036889	RE15-10-8354S	MS	S	20-FEB-10	.544g	50mL	
1202036890	RE15-10-8354SD	MSD	S	20-FEB-10	.527g	50mL	
1202036887	RE15-10-8354D	DUP	S	20-FEB-10	.534g	50mL	
246437001	RE15-10-8354	SAMPLE	S	20-FEB-10	.541g	50mL	
246437002	RE15-10-8356	SAMPLE	S	20-FEB-10	.557g	50mL	
246437003	RE15-10-8353	SAMPLE	S	20-FEB-10	.52g	50mL	
246437004	RE15-10-8352	SAMPLE	S	20-FEB-10	.529g	50mL	
246437005	RE15-10-8355	SAMPLE	S	20-FEB-10	.514g	50mL	
246437006	RE15-10-8351	SAMPLE	S	20-FEB-10	.536g	50mL	
246437007	RE15-10-8350	SAMPLE	S	20-FEB-10	.519g	50mL	
246437008	RE15-10-8357	SAMPLE	S	20-FEB-10	.548g	50mL	
246437009	RE15-10-8338	SAMPLE	S	20-FEB-10	.528g	50mL	
246437010	RE15-10-8336	SAMPLE	S	20-FEB-10	.535g	50mL	
246437011	RE15-10-8339	SAMPLE	S	20-FEB-10	.526g	50mL	
246437012	RE15-10-8337	SAMPLE	S	20-FEB-10	.549g	50mL	
246437013	RE15-10-8375	SAMPLE	S	20-FEB-10	.52g	50mL	
246437014	RE15-10-8374	SAMPLE	S	20-FEB-10	.543g	50mL	

SW846

**METALS**  
**-13-**  
**SAMPLE PREPARATION SUMMARY**

SDG No: 10-1621-1

Method Type: AV

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Client ID</u>	<u>Sample Type</u>	<u>Matrix</u>	<u>Prep Date</u>	<u>Initial Sample Size</u>	<u>Final Sample Volume</u>	<u>Percent Solids</u>
Batch Number 951616							
1202039421	MB for batch 951616	MB	S	19-FEB-10	.564g	30mL	
1202039422	LCS for batch 951616	LCS	S	19-FEB-10	.209g	30mL	
1202039424	RE15-10-8175S	MS	S	19-FEB-10	.595g	30mL	
1202039426	RE15-10-8175SD	MSD	S	19-FEB-10	.521g	30mL	
1202039423	RE15-10-8175D	DUP	S	19-FEB-10	.5g	30mL	
246437001	RE15-10-8354	SAMPLE	S	19-FEB-10	.574g	30mL	
246437002	RE15-10-8356	SAMPLE	S	19-FEB-10	.526g	30mL	
246437003	RE15-10-8353	SAMPLE	S	19-FEB-10	.563g	30mL	
246437004	RE15-10-8352	SAMPLE	S	19-FEB-10	.551g	30mL	
246437005	RE15-10-8355	SAMPLE	S	19-FEB-10	.535g	30mL	
246437006	RE15-10-8351	SAMPLE	S	19-FEB-10	.521g	30mL	
246437007	RE15-10-8350	SAMPLE	S	19-FEB-10	.523g	30mL	
246437008	RE15-10-8357	SAMPLE	S	19-FEB-10	.522g	30mL	
246437009	RE15-10-8338	SAMPLE	S	19-FEB-10	.528g	30mL	
246437010	RE15-10-8336	SAMPLE	S	19-FEB-10	.514g	30mL	
246437011	RE15-10-8339	SAMPLE	S	19-FEB-10	.516g	30mL	
246437012	RE15-10-8337	SAMPLE	S	19-FEB-10	.547g	30mL	
246437013	RE15-10-8375	SAMPLE	S	19-FEB-10	.53g	30mL	
246437014	RE15-10-8374	SAMPLE	S	19-FEB-10	.546g	30mL	

SW846

**Metals**  
**-14-**  
**Analysis Run Log**

Contract: LANL01004

Lab Code: GEL

Inst Name: ICPMS5

Start Date: 05-MAR-10

End Date: 05-MAR-10

Client Sdg: 10-1621-1

Method MS

Data File: 100304-4

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
S0.0	1	01:46			X		X											X								
S10	1	01:50			X		X											X								
S100	1	01:53			X		X											X								
ICV01	1	01:57			X		X											X								
ICB01	1	02:01			X		X											X								
CRDL01	1	02:04			X		X											X								
ICSA01	1	02:08			X		X											X								
ICSAB01	1	02:11			X		X											X								
CCV01	1	02:15			X		X											X								
CCB01	1	02:19			X		X											X								
1202036886	2	02:22			X		X											X								
1202036891	40	02:26			X		X											X								
246437001	2	02:30			X		X											X								
1202036887	2	02:33			X		X											X								
1202036889	2	02:37			X		X											X								
1202036890	2	02:41			X		X											X								
1202036888	10	02:44			X		X											X								
CCV02	1	02:48			X		X											X								
CCB02	1	02:52			X		X											X								
246437002	2	02:55			X		X											X								
246437003	2	02:59			X		X											X								
246437004	2	03:03			X		X											X								
246437005	2	03:06			X		X											X								
246437006	2	03:10			X		X											X								
246437007	2	03:14			X		X											X								
246437008	2	03:17			X		X											X								
CCV03	1	03:21			X		X											X								
CCB03	1	03:25			X		X											X								
246437009	2	03:28			X		X											X								
246437010	2	03:32			X		X											X								
246437011	2	03:36			X		X											X								
246437012	2	03:39			X		X											X								
246437013	2	03:43			X		X											X								
246437014	2	03:47			X		X											X								
CCV04	1	03:50			X		X											X								
CCB04	1	03:54			X		X											X								

Metals  
-14-  
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: ICPMS5

Start Date: 05-MAR-10

Client Sdg: 10-1621-1

Method MS

Data File: 100304-7

End Date: 05-MAR-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	07:07																						X		
S10	1	07:09																						X		
S100	1	07:10																						X		
ICV01	1	07:12																						X		
ICB01	1	07:14																						X		
CRDL01	1	07:15																						X		
ICSA01	1	07:17																						X		
ICSAB01	1	07:19																						X		
CCV01	1	07:20																						X		
CCB01	1	07:22																						X		
ZZZZZZ	1	07:24																								
ZZZZZZ	1	07:25																								
ZZZZZZ	1	07:27																								
ZZZZZZ	1	07:29																								
ZZZZZZ	1	07:30																								
ZZZZZZ	1	07:32																								
ZZZZZZ	5	07:34																								
ZZZZZZ	1	07:35																								
CCV02	1	07:37																						X		
CCB02	1	07:39																						X		
ZZZZZZ	1	07:40																								
ZZZZZZ	1	07:42																								
ZZZZZZ	1	07:44																								
ZZZZZZ	1	07:45																								
ZZZZZZ	1	07:47																								
ZZZZZZ	1	07:49																								
ZZZZZZ	1	07:50																								
CCV03	1	07:52																						X		
CCB03	1	07:54																						X		
ZZZZZZ	2	07:56																								
ZZZZZZ	40	07:57																								
ZZZZZZ	2	07:59																								
ZZZZZZ	2	08:01																								
ZZZZZZ	2	08:02																								
CCV04	1	08:04																						X		
CCB04	1	08:06																						X		
ZZZZZZ	2	08:07																								
ZZZZZZ	2	08:09																								
ZZZZZZ	2	08:11																								
ZZZZZZ	2	08:12																								

Samp No.	D/F	Run Time
ZZZZZZ	10	08:14
ZZZZZZ	2	08:16
CCV05	1	08:17
CCB05	1	08:19
ZZZZZZ	2	08:21
ZZZZZZ	2	08:22
ZZZZZZ	2	08:24
ZZZZZZ	2	08:26
ZZZZZZ	2	08:27
ZZZZZZ	2	08:29
CCV06	1	08:31
CCB06	1	08:33
1202036886	2	08:34
1202036891	40	08:36
246437001	2	08:38
1202036887	2	08:39
1202036889	2	08:41
1202036890	2	08:43
1202036888	10	08:45
CCV07	1	08:46
CCB07	1	08:48
246437002	2	08:50
246437003	2	08:51
246437004	2	08:53
246437005	2	08:55
246437006	2	08:56
246437007	2	08:58
246437008	2	09:00
CCV08	1	09:02
CCB08	1	09:03
246437009	2	09:05
246437010	2	09:07
246437011	2	09:08
246437012	2	09:10
246437013	2	09:12
246437014	2	09:13
CCV09	1	09:15
CCB09	1	09:17

**Metals**  
**-14-**  
**Analysis Run Log**

**Contract:** LANL01004**Lab Code:** GEL**Inst Name:** ICPMS5**Start Date:** 05-MAR-10**End Date:** 05-MAR-10**Client Sdg:** 10-1621-1**Method:** MS**Data File:** 100304-8

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	Tl	U	V	Zn
S0.0	1	09:22																		X						
S10	1	09:24																		X						
S100	1	09:26																		X						
ICV01	1	09:28																		X						
ICB01	1	09:30																		X						
CRDL01	1	09:33																		X						
ICSA01	1	09:35																		X						
ICSAB01	1	09:37																		X						
CCV01	1	09:39																		X						
CCB01	1	09:41																		X						
LR01	1	09:43																		X						
CCV02	1	09:45																		X						
CCB02	1	09:47																		X						
ZZZZZZ	1	09:50																								
1202036886	2	09:52																		X						
1202036891	40	09:55																		X						
246437001	2	09:57																		X						
1202036887	2	09:59																		X						
1202036889	2	10:01																		X						
1202036890	2	10:03																		X						
1202036888	10	10:05																		X						
246437002	2	10:08																		X						
CCV03	1	10:10																		X						
CCB03	1	10:12																		X						
246437003	2	10:14																		X						
246437004	2	10:16																		X						
246437005	2	10:18																		X						
246437006	2	10:21																		X						
246437007	2	10:23																		X						
246437008	2	10:25																		X						
246437009	2	10:27																		X						
CCV04	1	10:29																		X						
CCB04	1	10:31																		X						
246437010	2	10:34																		X						
246437011	2	10:36																		X						
246437012	2	10:38																		X						
246437013	2	10:40																		X						
246437014	2	10:42																		X						
CCV05	1	10:44																		X						
CCB05	1	10:47																		X						



**Metals**  
**-14-**  
**Analysis Run Log**

Contract: LANL01004

Lab Code: GEL

Inst Name: OPTIMA3

Start Date: 03-MAR-10

End Date: 04-MAR-10

Client Sdg: 10-1621-1

Method P

Data File: 030310-2

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
S0.0	1	14:33							X		X	X													X	
S0.1	1	14:40									X	X													X	
S0.5	1	14:46							X		X	X													X	
SCAL	1	14:53							X		X	X													X	
S10	1	15:00							X																	
ICV01	1	15:05							X		X	X													X	
ICB01	1	15:12							X		X	X													X	
PQL01	1	15:19							X		X	X													X	
ICSA01	1	15:26							X		X	X													X	
ICSAB01	1	15:32							X		X	X													X	
LR01	1	15:38							X		X	X													X	
LR02	1	15:44							X		X	X													X	
ZZZZZZ	1	15:51																								
ZZZZZZ	1	15:58																								
CCV01	1	16:06							X		X	X													X	
CCB01	1	16:13							X		X	X													X	
248287702	10	16:20							X		X	X													X	
248287703	10	16:26							X		X	X													X	
ZZZZZZ	200	16:33																								
ZZZZZZ	200	16:40																								
ZZZZZZ	200	16:47																								
ZZZZZZ	200	16:54																								
ZZZZZZ	500	17:01																								
ZZZZZZ	500	17:08																								
ZZZZZZ	1	17:15																								
ZZZZZZ	1	17:22																								
CCV02	1	17:34							X		X	X													X	
CCB02	1	17:41							X		X	X													X	
CCV03	1	18:28							X		X	X													X	
CCB03	1	18:35							X		X	X													X	
ZZZZZZ	1	18:42																								
ZZZZZZ	1	18:48																								
ZZZZZZ	10	18:55																								
ZZZZZZ	10	19:02																								
ZZZZZZ	10	19:09																								
ZZZZZZ	50	19:16																								
CCV04	1	19:22							X		X	X													X	
CCB04	1	19:29							X		X	X													X	
ZZZZZZ	10	19:36																								
ZZZZZZ	10	19:43																								

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
CCV09	1	00:30							X		X	X													X	
CCB09	1	00:37							X		X	X													X	
246437009	1	00:44							X		X	X													X	
246437010	1	00:52							X		X	X													X	
246437011	1	00:59							X		X	X													X	
246437012	1	01:06							X		X	X													X	
246437013	1	01:13							X		X	X													X	
246437014	1	01:20							X		X	X													X	
CCV10	1	01:27							X		X	X													X	
CCB10	1	01:34							X		X	X													X	

**Metals**  
**-14-**  
**Analysis Run Log**

**Contract:** LANL01004**Lab Code:** GEL**Inst Name:** MER536**Start Date:** 22-FEB-10**End Date:** 22-FEB-10**Client Sdg:** 10-1621-1**Method:** AV**Data File:** 022210S1-9

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
S0.0	1	09:53															X									
S0.2	1	09:55															X									
S0.5	1	09:57															X									
S2.0	1	09:59															X									
S5.0	1	10:01															X									
S10	1	10:03															X									
ICV01	1	10:05															X									
ICB01	1	10:07															X									
CRDL01	1	10:09															X									
CCV01	1	10:11															X									
CCB01	1	10:13															X									
1202039421	1	10:15															X									
1202039422	10	10:17															X									
246437001	1	10:19															X									
246437002	1	10:21															X									
246437003	1	10:23															X									
246437004	1	10:25															X									
246437005	1	10:27															X									
246437006	1	10:29															X									
246437007	1	10:31															X									
246437008	1	10:33															X									
CCV02	1	10:35															X									
CCB02	1	10:37															X									
246437009	1	10:39															X									
246437010	1	10:41															X									
246437011	1	10:43															X									
246437012	1	10:45															X									
246437013	1	10:47															X									
246437014	1	10:49															X									
ZZZZZZ	1	10:51																								
1202039423	1	10:53															X									
1202039424	1	10:55															X									
1202039426	1	10:57															X									
CCV03	1	10:59															X									
CCB03	1	11:01															X									
1202039425	5	11:03															X									
ZZZZZZ	1	11:05																								
ZZZZZZ	1	11:07																								
ZZZZZZ	1	11:09																								
ZZZZZZ	1	11:11																								

**Metals**  
**-14-**  
**Analysis Run Log**

[illegible]

**Metals**  
**-14-**  
**Analysis Run Log**

Contract: LANL01004

Lab Code: GEL

Inst Name: ICPMS3

Start Date: 05-MAR-10

End Date: 05-MAR-10

Client Sdg: 10-1621-1

Method MS

Data File: 100305-3

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	12:28																					X			
S10	1	12:30																					X			
S100	1	12:32																					X			
ICV01	1	12:34																					X			
ICB01	1	12:36																					X			
CRDL01	1	12:38																					X			
ICSA01	1	12:41																					X			
ICSAB01	1	12:43																					X			
CCV01	1	12:45																					X			
CCB01	1	12:47																					X			
ZZZZZZ	2	12:50																								
ZZZZZZ	40	12:53																								
ZZZZZZ	2	12:56																								
ZZZZZZ	2	12:58																								
ZZZZZZ	2	13:00																								
ZZZZZZ	2	13:02																								
ZZZZZZ	2	13:05																								
ZZZZZZ	2	13:07																								
ZZZZZZ	2	13:09																								
ZZZZZZ	10	13:11																								
CCV02	1	13:13																					X			
CCB02	1	13:16																					X			
ZZZZZZ	2	13:18																								
ZZZZZZ	2	13:20																								
ZZZZZZ	2	13:22																								
ZZZZZZ	2	13:24																								
ZZZZZZ	2	13:27																								
ZZZZZZ	2	13:29																								
ZZZZZZ	2	13:31																								
CCV03	1	13:33																					X			
CCB03	1	13:36																					X			
ZZZZZZ	2	13:40																								
CCV04	1	13:42																					X			
CCB04	1	13:44																					X			
1202036886	2	13:46																					X			
1202036891	40	13:48																					X			
ZZZZZZ	2	13:51																								
ZZZZZZ	2	13:53																								
246437001	2	13:56																					X			
1202036887	2	13:58																					X			

**Metals**  
**-14-**  
**Analysis Run Log**

[illegible]

**Metals**  
**-14-**  
**Analysis Run Log**

Contract: LANL01004

Lab Code: GEL

Inst Name: OPTIMA1

Start Date: 22-FEB-10

End Date: 23-FEB-10

Client Sdg: 10-1621-1

Method P

Data File: 022210-1

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	17:36	X	X		X		X	X				X	X	X	X			X		X	X				X
S0.1	1	17:40		X		X		X	X					X		X			X		X					X
S0.5	1	17:42	X	X		X		X	X					X	X	X			X		X					X
SCAL	1	17:46	X	X		X		X	X				X	X	X	X			X		X	X				X
S10	1	17:50	X										X		X							X				
ICV01	1	17:52	X	X		X		X	X				X	X	X	X			X		X	X				X
ICB01	1	17:56	X	X		X		X	X				X	X	X	X			X		X	X				X
PQL01	1	17:59	X	X		X		X	X				X	X	X	X			X		X	X				X
ICSA01	1	18:03	X	X		X		X	X				X	X	X	X			X		X	X				X
ICSAB01	1	18:06	X	X		X		X	X				X	X	X	X			X		X	X				X
LR01	1	18:09	X	X		X		X	X				X	X	X	X			X		X	X				X
LR02	1	18:11	X	X		X		X	X				X	X	X	X			X		X	X				X
CCV01	1	18:15	X	X		X		X	X				X	X	X	X			X		X	X				X
CCB01	1	18:19	X	X		X		X	X				X	X	X	X			X		X	X				X
ZZZZZZ	1	18:37																								
ZZZZZZ	1	18:41																								
ZZZZZZ	1	18:43																								
ZZZZZZ	1	18:47																								
ZZZZZZ	1	18:51																								
ZZZZZZ	1	18:54																								
ZZZZZZ	5	18:58																								
ZZZZZZ	1	19:02																								
CCV02	1	19:05	X	X		X		X	X				X	X	X	X			X		X	X				X
CCB02	1	19:09	X	X		X		X	X				X	X	X	X			X		X	X				X
ZZZZZZ	1	19:13																								
ZZZZZZ	1	19:16																								
ZZZZZZ	1	19:20																								
ZZZZZZ	1	19:24																								
ZZZZZZ	1	19:27																								
ZZZZZZ	1	19:31																								
ZZZZZZ	1	19:35																								
ZZZZZZ	1	19:38																								
CCV03	1	19:42	X	X		X		X	X				X	X	X	X			X		X	X				X
CCB03	1	19:46	X	X		X		X	X				X	X	X	X			X		X	X				X
ZZZZZZ	1	19:58																								
ZZZZZZ	1	20:02																								
ZZZZZZ	1	20:06																								
CCV04	1	20:13	X	X		X		X	X				X	X	X	X			X		X	X				X
CCB04	1	20:17	X	X		X		X	X				X	X	X	X			X		X	X				X
ZZZZZZ	1	20:29																								



Metals  
-14-  
Analysis Run Log

Samp No.	D/F	Run Time																								
ZZZZZZ	1	20:32																								
ZZZZZZ	1	20:35																								
ZZZZZZ	1	20:39																								
ZZZZZZ	1	20:43																								
ZZZZZZ	1	20:46																								
CCV05	1	20:50	X	X	X	X	X			X	X	X	X			X		X	X						X	
CCB05	1	20:54	X	X	X	X	X			X	X	X	X			X		X	X						X	
ZZZZZZ	1	20:57																								
ZZZZZZ	1	21:01																								
ZZZZZZ	1	21:05																								
ZZZZZZ	5	21:08																								
ZZZZZZ	1	21:12																								
ZZZZZZ	1	21:15																								
CCV06	1	21:19	X	X	X	X	X			X	X	X	X			X		X	X						X	
CCB06	1	21:23	X	X	X	X	X			X	X	X	X			X		X	X						X	
CCV07	1	22:13	X	X	X	X	X			X	X	X	X			X		X	X						X	
CCB07	1	22:17	X	X	X	X	X			X	X	X	X			X		X	X						X	
ZZZZZZ	1	22:21																								
ZZZZZZ	1	22:24																								
ZZZZZZ	1	22:27																								
ZZZZZZ	1	22:31																								
ZZZZZZ	1	22:34																								
ZZZZZZ	1	22:38																								
ZZZZZZ	5	22:42																								
ZZZZZZ	1	22:45																								
ZZZZZZ	1	22:49																								
CCV08	1	22:53	X	X	X	X	X			X	X	X	X			X		X	X						X	
CCB08	1	22:57	X	X	X	X	X			X	X	X	X			X		X	X						X	
ZZZZZZ	1	23:00																								
ZZZZZZ	1	23:04																								
ZZZZZZ	1	23:08																								
ZZZZZZ	1	23:11																								
ZZZZZZ	1	23:15																								
ZZZZZZ	1	23:19																								
ZZZZZZ	1	23:22																								
ZZZZZZ	1	23:26																								
ZZZZZZ	1	23:30																								
CCV09	1	23:33	X	X	X	X	X			X	X	X	X			X		X	X						X	
CCB09	1	23:37	X	X	X	X	X			X	X	X	X			X		X	X						X	
ZZZZZZ	1	23:50																								

**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	23:54																								
ZZZZZZ	10	23:57																								
CCV10	1	00:06	X	X		X		X		X			X	X	X	X			X		X	X				X
CCB10	1	00:10	X	X		X		X		X			X	X	X	X			X		X	X				X
ZZZZZZ	1	00:13																								
ZZZZZZ	1	00:17																								
ZZZZZZ	10	00:21																								
ZZZZZZ	10	00:24																								
ZZZZZZ	10	00:28																								
ZZZZZZ	10	00:31																								
ZZZZZZ	50	00:35																								
CCV11	1	00:39	X	X		X		X		X			X	X	X	X			X		X	X				X
PQL02	1	00:42	X	X		X		X		X			X	X	X	X			X		X	X				X
CCB11	1	00:46	X	X		X		X		X			X	X	X	X			X		X	X				X
1202036880	1	00:50	X	X		X		X		X			X	X	X	X			X		X	X				X
1202036885	1	00:53	X	X		X		X		X			X	X	X	X			X		X	X				X
246437001	1	00:56	X	X		X		X		X			X	X	X	X			X		X	X				X
1202036881	1	01:00	X	X		X		X		X			X	X	X	X			X		X	X				X
1202036883	1	01:04	X	X		X		X		X			X	X	X	X			X		X	X				X
1202036884	1	01:07	X	X		X		X		X			X	X	X	X			X		X	X				X
1202036882	5	01:11	X	X		X		X		X			X	X	X	X			X		X	X				X
246437002	1	01:15	X	X		X		X		X			X	X	X	X			X		X	X				X
246437003	1	01:18	X	X		X		X		X			X	X	X	X			X		X	X				X
246437004	1	01:22	X	X		X		X		X			X	X	X	X			X		X	X				X
CCV12	1	01:26	X	X		X		X		X			X	X	X	X			X		X	X				X
CCB12	1	01:29	X	X		X		X		X			X	X	X	X			X		X	X				X
246437005	1	01:33	X	X		X		X		X			X	X	X	X			X		X	X				X
246437006	1	01:37	X	X		X		X		X			X	X	X	X			X		X	X				X
246437007	1	01:40	X	X		X		X		X			X	X	X	X			X		X	X				X
246437008	1	01:44	X	X		X		X		X			X	X	X	X			X		X	X				X
246437009	1	01:48	X	X		X		X		X			X	X	X	X			X		X	X				X
246437010	1	01:51	X	X		X		X		X			X	X	X	X			X		X	X				X
246437011	1	01:55	X	X		X		X		X			X	X	X	X			X		X	X				X
246437012	1	01:58	X	X		X		X		X			X	X	X	X			X		X	X				X
246437013	1	02:02	X	X		X		X		X			X	X	X	X			X		X	X				X
246437014	1	02:06	X	X		X		X		X			X	X	X	X			X		X	X				X
CCV13	1	02:09	X	X		X		X		X			X	X	X	X			X		X	X				X
CCB13	1	02:13	X	X		X		X		X			X	X	X	X			X		X	X				X

# Standards

---

**METALS**  
**-10-**  
**Instrument Detection Limits**

---

**SDG NO.** 10-1621-1

**Contract:** LANL01004

**Lab Code:** GEL

**MDL Effective Date:** 01-JUL-09

---

ICP/MS	<u>Analyte</u>	<u>Wavelength</u>	<u>MDL</u>	<u>RDL</u>
		<u>(nm)</u>	<u>ug/L</u>	<u>ug/L</u>
SOLID	Aluminum		15.0	50
	Antimony		0.5	3
	Arsenic		1.0	5
	Barium		0.5	2
	Beryllium		0.1	.5
	Cadmium		0.1	1
	Calcium		33.0	100
	Chromium		1.0	3
	Cobalt		0.3	1
	Copper		0.33	1
	Iron		25.0	100
	Lead		0.5	2
	Magnesium		7.5	25
	Manganese		1.0	5
	Nickel		0.5	2
	Potassium		80.0	300
	Selenium		2.5	5
	Silver		0.2	1
	Sodium		80.0	250
	Thallium		0.3	1
	Uranium		0.066	.2
	Vanadium		2.0	10
	Zinc		2.0	10

---

**METALS**  
**-10-**  
**Instrument Detection Limits**

**SDG NO.** 10-1621-1

**Contract:** LANL01004

**Lab Code:** GEL

**MDL Effective Date:** 15-JUN-09

---

		<u>Wavelength</u> <u>(nm)</u>	<u>MDL</u> <u>ug/L</u>	<u>RDL</u> <u>ug/L</u>
MERCURY	<u>Analyte</u>			
SOLID	Mercury		0.068	.2

**METALS**  
**-10-**  
**Instrument Detection Limits**

SDG NO. 10-1621-1

Contract: LANL01004

Lab Code: GEL

MDL Effective Date: 01-JUL-09

ICP	<u>Analyte</u>	<u>Wavelength</u>	<u>MDL</u>	<u>RDL</u>
		<u>(nm)</u>	<u>ug/L</u>	<u>ug/L</u>
SOLID	Aluminum	396.153	68.0	200
	Antimony	206.836	3.3	10
	Arsenic	188.979	5.0	30
	Barium	233.527	1.0	5
	Beryllium	313.107	1.0	5
	Cadmium	226.502	1.0	5
	Calcium	317.933	80.0	250
	Chromium	267.716	1.5	5
	Cobalt	228.616	1.5	5
	Copper	324.752	3.0	10
	Iron	238.204	80.0	250
	Lead	220.353	2.5	10
	Magnesium	279.077	85.0	300
	Manganese	257.61	2.0	10
	Nickel	231.604	1.5	5
	Potassium	766.49	64.0	250
	Selenium	196.026	5.0	30
	Silver	328.068	1.0	5
	Sodium	589.592	70.0	250
	Thallium	190.801	5.0	20
	Uranium	409.014	10.0	50
	Vanadium	292.402	1.0	5
	Zinc	213.857	3.3	10

**METALS**  
**-11-**  
**Interelement Correction Factors**

Lab Code: GEL

GEL Job No: 10-1621-1

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: 10-1621-1

Contract: LANL01004

Instrument: OPTIMA3

Effective Dates: 01-FEB-10

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

		Boron	Cadmium	Chromium	Cobalt	Copper
Parmname	Wavelength					
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: GELGEL Job No: **10-1621-1**

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: GELGEL Job No: **10-1621-1**

Contract: LANL01004

Instrument: OPTIMA3

Effective Dates: **01-FEB-10**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Nickel	Phosphorous	Potassium	Selenium	Silica
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: GELGEL Job No: **10-1621-1**

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: **10-1621-1**

Contract: LANL01004

Instrument: OPTIMA3

Effective Dates: **01-FEB-10**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Tin	Titanium	Uranium	Vanadium	Zinc
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**  
**-11-**  
**Interelement Correction Factors**

Lab Code: GELGEL Job No: **10-1621-1**

Contract: LANL01004

Instrument: OPTIMA1

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	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	-0.05500	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	-0.28800	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	-0.04600	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

**METALS**  
**-11-**  
**Interelement Correction Factors**

Lab Code: GEL

GEL Job No: 10-1621-1

Contract: LANL01004

Instrument: OPTIMA1

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	11.3250	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	-1.59900	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	-21.2250	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	1.68400
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	1.19100	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	105.59
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	3.36300	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	-2.30400	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	1.61100

**METALS**  
**-11-**  
**Interelement Correction Factors**

Lab Code: GEL

GEL Job No: 10-1621-1

Contract: LANL01004

Instrument: OPTIMA1

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	20.5430
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	-16.3320
Arsenic	188.979	-0.05800	0.00000	0.00000	0.00000	1.97700
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.13300	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	-0.90500
Copper	324.752	-0.13900	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.03800	-2.87600	0.00000	0.00000	0.00000
Magnesium	279.077	1.07300	0.00000	0.00000	0.00000	-16.8110
Manganese	257.61	-0.13900	0.00000	0.04000	0.00000	0.00000
Molybdenum	202.031	-0.03800	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	-0.01300	0.00000	0.00000	0.00000	0.00000
Phosphorus	214.914	0.81200	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	-0.88200	0.00000	0.28200	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	-0.06300	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	-0.03900	0.00000	0.00000	-4.11700	0.00000
Tin	189.927	-0.09200	0.00000	-0.19600	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.07900	0.00000	0.00000
Uranium	409.014	0.13900	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	-0.05300	0.00000	0.00000	0.00000	-7.71400
Zinc	213.857	0.14460	0.00000	0.02030	0.00000	0.00000

**METALS**  
**-11-**  
**Interelement Correction Factors**

Lab Code: GELGEL Job No: **10-1621-1**

Contract: LANL01004

Instrument: OPTIMA1

Effective Dates: **01-FEB-10**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Nickel	Phosphorous	Selenium	Silicon	Silver
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	-0.99900	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	4.41600	0.00000	0.00000	0.00000	0.00000



**METALS**  
**-11-**  
**Interelement Correction Factors**

Lab Code: GEL

GEL Job No: 10-1621-1

Contract: LANL01004

Instrument: OPTIMA1

Effective Dates: 01-FEB-10

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Sulfur	Thallium	Tin	Titanium	Uranium
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.38100	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	2.08700	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	1.04000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	-14.8110	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	-8.68900	-1.22400
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	-1.03900
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

**METALS**  
**-11-**  
**Interelement Correction Factors**

Lab Code: GEL

GEL Job No: 10-1621-1

Contract: LANL01004

Instrument: OPTIMA1

Effective Dates: 01-FEB-10

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Vanadium	Zinc
Aluminum	396.153	0.00000	0.00000
Antimony	206.836	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000
Barium	233.527	-1.80500	0.00000
Beryllium	313.107	0.00000	0.00000
Boron	249.677	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000
Chromium	267.716	-0.63000	0.00000
Cobalt	228.616	0.00000	0.00000
Copper	324.752	0.00000	0.00000
Iron	238.204	0.00000	0.00000
Lead	220.353	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000
Manganese	257.61	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000
Nickel	231.604	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000
Selenium	196.026	0.00000	0.00000
Silicon	251.611	0.00000	0.00000
Silver	328.068	-6.59800	0.00000
Sulfur	181.975	0.00000	0.00000
Thallium	190.801	0.00000	0.00000
Tin	189.927	0.00000	0.00000
Titanium	334.94	0.00000	0.00000
Uranium	409.014	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000
Zinc	213.857	0.00000	0.00000

**METALS**  
**-12-**  
**Linear Ranges**

SDG NO. 10-1621-1

Contract: LANL01004

Lab Code: GEL

Instrument ID ICPMS5

<u>Analyte</u>	<u>Integration Time (msec)</u>	<u>LDR</u>	<u>Units</u>	<u>Effective Date</u>
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
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

**METALS**  
**-12-**  
**Linear Ranges**

SDG NO. 10-1621-1

Contract: LANL01004

Lab Code: GEL

Instrument ID OPTIMA3

<u>Analyte</u>	<u>Integration Time (sec)</u>	<u>LDR</u>	<u>Units</u>	<u>Effective Date</u>
Aluminum	20	500000	ug/L	01-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. 10-1621-1

Contract: LANL01004

Lab Code: GEL

Instrument ID ICPMS3

<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

**METALS**  
**-12-**  
**Linear Ranges**

SDG NO. 10-1621-1

Contract: LANL01004

Lab Code: GEL

Instrument ID OPTIMA1

<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
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
Aluminum	20	500000	ug/L	01-FEB-10

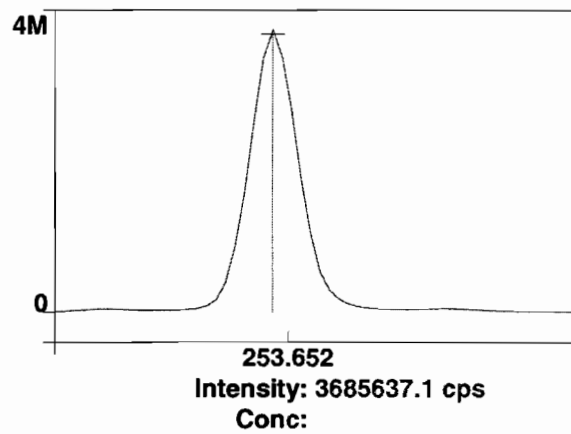
# Raw Data

Method: Hg\_ReAlign  
Result: 030510

Sample ID: Hg\_ReAlign

Hg 253.652

Rep: 1



1



2/22/2010 17:34:37 Hg ReAlign... Actual peak offset (nm): -0.000  
Drift (nm): -0.001 Slit adjustment: -4

## Analysis Begun

Start Time: 2/22/2010 17:36:57

Plasma On Time: 2/8/2010 03:37:33

Logged In Analyst: optima

Technique: ICP Continuous

Spectrometer Model: Optima 4300 DV, S/N 077N1030502 Autosampler Model: AS-93plus

Sample Information File: C:\pe\optimal\Sample Information\022210D.sif

Batch ID:

Results Data Set: 022210

Results Library: c:\pe\optimal\Results\Results.mdb

## Method Loaded

Method Name: Gen Eng fast\_new Si

Method Last Saved: 2/22/2010 00:24:28

IEC File: 011510.iec

MSF File:

Method Description:

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Ag 328.068	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Al 396.153Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	Yes
As 188.979	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
B 249.677	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ba 233.527	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Be 313.107	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ca 317.933Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	No
Cd 226.502	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Co 228.616	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cr 267.716	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cu 324.752	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Fe 238.204 Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	Yes
K 766.490 Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	No
Mg 279.077 IEC	Lin Thru 0	Peak Area	Radial	Sc RADIAL	Yes
Mn 257.610	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Mo 202.031	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Na 589.592 Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	No
Ni 231.604	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
P 214.914	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Pb 220.353	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
S 181.975 Axial	Lin Thru 0	Peak Area	Axial	Sc 361.383	No
Sb 206.836	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sc 361.383	Lin Thru 0	Peak Area	Axial	n/a	n/a
Sc RADIAL	Lin, Calc Int	Peak Area	Radial	n/a	n/a
Se 196.026	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
SiO2	Lin Thru 0	Peak Area	Axial	Sc 361.383	No
Si 251.611	Lin Thru 0	Peak Area	Axial	Sc 361.383	No
Sn 189.927	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	Sc RADIAL	No
Ti 334.940	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Tl 190.801	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
U 409.014	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
V 292.402	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y 371.029	Lin, Calc Int	Peak Area	Axial	n/a	n/a
Zn 213.857	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes

Sequence No.: 1

Autosampler Location: 8

Sample ID: S0

Date Collected: 2/22/2010 17:36:59

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Replicate Data: S0

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Analysis Time
-------	---------	---------------	---------------------	--------------------	---------------

1	Sc RADIAL	54703.4	54703.4	100 %	17:37:32
1	Al 396.153Radial†	1.1	1.1	[0.00] µg/L	17:37:32
1	Ca 317.933Radial†	176.6	176.1	[0.00] µg/L	17:37:52
1	Fe 238.204 Radial†	17.2	17.1	[0.00] µg/L	17:37:52
1	K 766.490 Radial†	186.8	186.2	[0.00] µg/L	17:37:32
1	Mg 279.077 IEC†	11.5	11.5	[0.00] µg/L	17:37:52
1	Na 589.592 Radial†	434.7	433.3	[0.00] µg/L	17:37:32
1	Sr 421.552†	72.9	72.7	[0.00] µg/L	17:37:32
1	Sc 361.383	1900338.0	1900338.0	99.749 %	17:38:51
1	Y 371.029	1305814.5	1305814.5	99.709 %	17:38:51
1	Ag 328.068†	-551.9	-553.3	[0.00] µg/L	17:38:56
1	As 188.979†	-0.1	-0.1	[0.00] µg/L	17:39:16
1	B 249.677†	269.9	270.6	[0.00] µg/L	17:39:16
1	Ba 233.527†	-25.9	-26.0	[0.00] µg/L	17:39:16
1	Be 313.107†	-3843.7	-3853.4	[0.00] µg/L	17:38:56
1	Cd 226.502†	-128.1	-128.4	[0.00] µg/L	17:39:16
1	Co 228.616†	-16.5	-16.5	[0.00] µg/L	17:39:16
1	Cr 267.716†	-32.7	-32.8	[0.00] µg/L	17:39:16
1	Cu 324.752†	3237.5	3245.7	[0.00] µg/L	17:38:56
1	Mn 257.610†	-223.4	-224.0	[0.00] µg/L	17:39:16
1	Mo 202.031†	-5.2	-5.2	[0.00] µg/L	17:39:16
1	Ni 231.604†	289.2	290.0	[0.00] µg/L	17:39:16
1	P 214.914†	21.3	21.3	[0.00] µg/L	17:39:16
1	Pb 220.353†	91.8	92.1	[0.00] µg/L	17:39:16
1	S 181.975 Axial†	11.6	11.6	[0.00] µg/L	17:39:16
1	Sb 206.836†	18.6	18.6	[0.00] µg/L	17:39:16
1	Se 196.026†	10.7	10.8	[0.00] µg/L	17:39:16
1	SiO2†	1521.8	1525.7	[0.00] µg/L	17:38:56
1	Si 251.611†	252.3	252.9	[0.00] µg/L	17:39:16
1	Sn 189.927†	-1.3	-1.3	[0.00] µg/L	17:39:16
1	Ti 334.940†	69.3	69.5	[0.00] µg/L	17:38:56
1	Tl 190.801†	-23.0	-23.1	[0.00] µg/L	17:39:16
1	U 409.014†	234.7	235.3	[0.00] µg/L	17:38:56
1	V 292.402†	-34.4	-34.5	[0.00] µg/L	17:38:56
1	Zn 213.857†	438.9	440.0	[0.00] µg/L	17:39:16
2	Sc RADIAL	54179.4	54179.4	99.3 %	17:37:57
2	Al 396.153Radial†	-19.7	-19.9	[0.00] µg/L	17:37:57
2	Ca 317.933Radial†	173.9	175.1	[0.00] µg/L	17:38:18
2	Fe 238.204 Radial†	16.3	16.4	[0.00] µg/L	17:38:18
2	K 766.490 Radial†	156.7	157.8	[0.00] µg/L	17:37:57
2	Mg 279.077 IEC†	7.9	8.0	[0.00] µg/L	17:38:18
2	Na 589.592 Radial†	395.6	398.2	[0.00] µg/L	17:37:57
2	Sr 421.552†	41.1	41.4	[0.00] µg/L	17:37:57
2	Sc 361.383	1900577.9	1900577.9	99.761 %	17:39:22
2	Y 371.029	1307110.4	1307110.4	99.808 %	17:39:22
2	Ag 328.068†	-561.2	-562.5	[0.00] µg/L	17:39:27
2	As 188.979†	-0.4	-0.4	[0.00] µg/L	17:39:47
2	B 249.677†	257.1	257.8	[0.00] µg/L	17:39:47
2	Ba 233.527†	-29.4	-29.5	[0.00] µg/L	17:39:47
2	Be 313.107†	-3742.8	-3751.8	[0.00] µg/L	17:39:27
2	Cd 226.502†	-120.8	-121.1	[0.00] µg/L	17:39:47
2	Co 228.616†	-15.4	-15.4	[0.00] µg/L	17:39:47
2	Cr 267.716†	-29.6	-29.6	[0.00] µg/L	17:39:47
2	Cu 324.752†	3267.0	3274.8	[0.00] µg/L	17:39:27
2	Mn 257.610†	-247.6	-248.2	[0.00] µg/L	17:39:47
2	Mo 202.031†	-9.1	-9.1	[0.00] µg/L	17:39:47
2	Ni 231.604†	279.3	280.0	[0.00] µg/L	17:39:47
2	P 214.914†	29.1	29.2	[0.00] µg/L	17:39:47
2	Pb 220.353†	91.3	91.5	[0.00] µg/L	17:39:47
2	S 181.975 Axial†	13.3	13.4	[0.00] µg/L	17:39:47
2	Sb 206.836†	19.7	19.7	[0.00] µg/L	17:39:47
2	Se 196.026†	13.6	13.6	[0.00] µg/L	17:39:47
2	SiO2†	1594.1	1597.9	[0.00] µg/L	17:39:27
2	Si 251.611†	261.9	262.5	[0.00] µg/L	17:39:47
2	Sn 189.927†	-2.4	-2.4	[0.00] µg/L	17:39:47
2	Ti 334.940†	42.4	42.5	[0.00] µg/L	17:39:27
2	Tl 190.801†	-23.4	-23.4	[0.00] µg/L	17:39:47
2	U 409.014†	118.3	118.6	[0.00] µg/L	17:39:27
2	V 292.402†	-27.6	-27.6	[0.00] µg/L	17:39:27
2	Zn 213.857†	439.2	440.2	[0.00] µg/L	17:39:47
3	Sc RADIAL	54721.9	54721.9	100 %	17:38:23

3	Al 396.153Radial†	-13.6	-13.6	[0.00]	µg/L	17:38:23
3	Ca 317.933Radial†	172.3	171.7	[0.00]	µg/L	17:38:43
3	Fe 238.204 Radial†	14.0	14.0	[0.00]	µg/L	17:38:43
3	K 766.490 Radial†	165.2	164.6	[0.00]	µg/L	17:38:23
3	Mg 279.077 IEC†	11.4	11.3	[0.00]	µg/L	17:38:43
3	Na 589.592 Radial†	337.6	336.4	[0.00]	µg/L	17:38:23
3	Sr 421.552†	64.0	63.8	[0.00]	µg/L	17:38:23
3	Sc 361.383	1914463.3	1914463.3	100.49	%	17:39:53
3	Y 371.029	1315945.6	1315945.6	100.48	%	17:39:53
3	Ag 328.068†	-617.6	-614.6	[0.00]	µg/L	17:39:58
3	As 188.979†	-0.4	-0.4	[0.00]	µg/L	17:40:19
3	B 249.677†	242.7	241.6	[0.00]	µg/L	17:40:19
3	Ba 233.527†	-30.5	-30.3	[0.00]	µg/L	17:40:19
3	Be 313.107†	-3830.5	-3811.8	[0.00]	µg/L	17:39:58
3	Cd 226.502†	-129.6	-129.0	[0.00]	µg/L	17:40:19
3	Co 228.616†	-12.1	-12.1	[0.00]	µg/L	17:40:19
3	Cr 267.716†	-34.7	-34.6	[0.00]	µg/L	17:40:19
3	Cu 324.752†	3217.6	3201.9	[0.00]	µg/L	17:39:58
3	Mn 257.610†	-215.3	-214.2	[0.00]	µg/L	17:40:19
3	Mo 202.031†	-4.6	-4.6	[0.00]	µg/L	17:40:19
3	Ni 231.604†	272.1	270.7	[0.00]	µg/L	17:40:19
3	P 214.914†	24.3	24.2	[0.00]	µg/L	17:40:19
3	Pb 220.353†	92.7	92.3	[0.00]	µg/L	17:40:19
3	S 181.975 Axial†	11.0	11.0	[0.00]	µg/L	17:40:19
3	Sb 206.836†	21.1	21.0	[0.00]	µg/L	17:40:19
3	Se 196.026†	12.8	12.7	[0.00]	µg/L	17:40:19
3	SiO2†	1545.9	1538.4	[0.00]	µg/L	17:39:58
3	Si 251.611†	243.1	241.9	[0.00]	µg/L	17:40:19
3	Sn 189.927†	-3.3	-3.2	[0.00]	µg/L	17:40:19
3	Ti 334.940†	104.6	104.0	[0.00]	µg/L	17:39:58
3	Tl 190.801†	-18.7	-18.6	[0.00]	µg/L	17:40:19
3	U 409.014†	182.1	181.2	[0.00]	µg/L	17:39:58
3	V 292.402†	-42.0	-41.8	[0.00]	µg/L	17:39:58
3	Zn 213.857†	437.1	435.0	[0.00]	µg/L	17:40:19

## Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	1905126.4	8086.90	0.42%	100.00 %
Sc RADIAL	54534.9	308.03	0.56%	100 %
Y 371.029	1309623.5	5513.29	0.42%	100.00 %
Ag 328.068†	-576.8	33.05	5.73%	[0.00] µg/L
Al 396.153Radial†	-10.8	10.75	99.59%	[0.00] µg/L
As 188.979†	-0.3	0.19	61.74%	[0.00] µg/L
B 249.677†	256.6	14.54	5.67%	[0.00] µg/L
Ba 233.527†	-28.6	2.28	7.99%	[0.00] µg/L
Be 313.107†	-3805.7	51.10	1.34%	[0.00] µg/L
Ca 317.933Radial†	174.3	2.26	1.30%	[0.00] µg/L
Cd 226.502†	-126.1	4.42	3.50%	[0.00] µg/L
Co 228.616†	-14.7	2.33	15.86%	[0.00] µg/L
Cr 267.716†	-32.3	2.49	7.71%	[0.00] µg/L
Cu 324.752†	3240.8	36.69	1.13%	[0.00] µg/L
Fe 238.204 Radial†	15.8	1.64	10.38%	[0.00] µg/L
K 766.490 Radial†	169.5	14.87	8.77%	[0.00] µg/L
Mg 279.077 IEC†	10.3	1.99	19.39%	[0.00] µg/L
Mn 257.610†	-228.8	17.48	7.64%	[0.00] µg/L
Mo 202.031†	-6.3	2.46	39.04%	[0.00] µg/L
Na 589.592 Radial†	389.3	49.06	12.60%	[0.00] µg/L
Ni 231.604†	280.2	9.61	3.43%	[0.00] µg/L
P 214.914†	24.9	3.97	15.96%	[0.00] µg/L
Pb 220.353†	91.9	0.38	0.41%	[0.00] µg/L
S 181.975 Axial†	12.0	1.24	10.30%	[0.00] µg/L
Sb 206.836†	19.8	1.18	5.95%	[0.00] µg/L
Se 196.026†	12.4	1.46	11.80%	[0.00] µg/L
SiO2†	1554.0	38.59	2.48%	[0.00] µg/L
Si 251.611†	252.5	10.30	4.08%	[0.00] µg/L
Sn 189.927†	-2.3	0.97	41.71%	[0.00] µg/L
Sr 421.552†	59.3	16.12	27.19%	[0.00] µg/L
Ti 334.940†	72.0	30.85	42.84%	[0.00] µg/L
Tl 190.801†	-21.7	2.71	12.48%	[0.00] µg/L

---

U 409.014†	178.4	58.42	32.75%	[0.00] µg/L
V 292.402†	-34.7	7.08	20.44%	[0.00] µg/L
Zn 213.857†	438.4	2.96	0.67%	[0.00] µg/L

Sequence No.: 2

Sample ID: S0.1

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 2

Date Collected: 2/22/2010 17:40:27

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib.	Analysis Time
1	Sc RADIAL	56045.3	56045.3	103 %		17:41:01
1	K 766.490 Radial†	1657.6	1443.4	[1000] µg/L		17:41:01
1	Sr 421.552†	10197.0	9862.9	[100] µg/L		17:41:01
1	Sc 361.383	1900702.3	1900702.3	99.768 %		17:41:20
1	Y 371.029	1305784.7	1305784.7	99.707 %		17:41:20
1	Ag 328.068†	12302.8	12908.2	[100] µg/L		17:41:25
1	As 188.979†	52.3	52.7	[100] µg/L		17:41:45
1	B 249.677†	2466.6	2215.7	[100] µg/L		17:41:25
1	Ba 233.527†	3810.3	3847.7	[100] µg/L		17:41:25
1	Be 313.107†	151114.4	155271.8	[100] µg/L		17:41:20
1	Cd 226.502†	3552.7	3687.1	[100] µg/L		17:41:25
1	Co 228.616†	2002.7	2022.0	[100] µg/L		17:41:45
1	Cr 267.716†	4628.1	4671.2	[100] µg/L		17:41:25
1	Cu 324.752†	18283.0	15084.7	[100] µg/L		17:41:25
1	Mn 257.610†	29172.0	29468.7	[100] µg/L		17:41:25
1	Mo 202.031†	954.3	962.8	[100] µg/L		17:41:45
1	Ni 231.604†	2125.3	1850.0	[100] µg/L		17:41:45
1	P 214.914†	264.3	240.0	[500] µg/L		17:41:45
1	Pb 220.353†	470.9	380.0	[100] µg/L		17:41:45
1	S 181.975 Axial†	55.3	43.4	[200] µg/L		17:41:45
1	Sb 206.836†	124.4	104.9	[100] µg/L		17:41:45
1	Se 196.026†	83.6	71.5	[100] µg/L		17:41:45
1	SiO2†	6501.8	4962.9	[1069.5] µg/L		17:41:25
1	Si 251.611†	6286.1	6048.2	[500] µg/L		17:41:25
1	Sn 189.927†	218.4	221.3	[100] µg/L		17:41:45
1	Ti 334.940†	41749.4	41774.6	[100] µg/L		17:41:25
1	Tl 190.801†	50.1	71.9	[100] µg/L		17:41:45
1	U 409.014†	1435.6	1260.6	[100] µg/L		17:41:25
1	V 292.402†	9584.5	9641.5	[100] µg/L		17:41:25
1	Zn 213.857†	4489.8	4061.8	[100] µg/L		17:41:25
2	Sc RADIAL	55594.8	55594.8	102 %		17:41:06
2	K 766.490 Radial†	1620.6	1420.2	[1000] µg/L		17:41:06
2	Sr 421.552†	10195.5	9941.9	[100] µg/L		17:41:06
2	Sc 361.383	1894468.6	1894468.6	99.441 %		17:41:51
2	Y 371.029	1301968.1	1301968.1	99.415 %		17:41:51
2	Ag 328.068†	12250.4	12896.1	[100] µg/L		17:41:57
2	As 188.979†	54.7	55.3	[100] µg/L		17:42:17
2	B 249.677†	2465.6	2222.8	[100] µg/L		17:41:57
2	Ba 233.527†	3798.9	3848.9	[100] µg/L		17:41:57
2	Be 313.107†	151238.1	155894.6	[100] µg/L		17:41:51
2	Cd 226.502†	3533.7	3679.7	[100] µg/L		17:41:57
2	Co 228.616†	2006.4	2032.3	[100] µg/L		17:42:17
2	Cr 267.716†	4583.7	4641.8	[100] µg/L		17:41:57
2	Cu 324.752†	18275.2	15137.2	[100] µg/L		17:41:57
2	Mn 257.610†	29106.9	29499.5	[100] µg/L		17:41:57
2	Mo 202.031†	960.7	972.4	[100] µg/L		17:42:17
2	Ni 231.604†	2136.6	1868.4	[100] µg/L		17:42:17
2	P 214.914†	258.9	235.5	[500] µg/L		17:42:17
2	Pb 220.353†	460.4	371.0	[100] µg/L		17:42:17
2	S 181.975 Axial†	57.4	45.7	[200] µg/L		17:42:17
2	Sb 206.836†	130.8	111.8	[100] µg/L		17:42:17
2	Se 196.026†	81.0	69.1	[100] µg/L		17:42:17
2	SiO2†	6548.0	5030.8	[1069.5] µg/L		17:41:57
2	Si 251.611†	6320.6	6103.6	[500] µg/L		17:41:57
2	Sn 189.927†	221.1	224.7	[100] µg/L		17:42:17
2	Ti 334.940†	41788.2	41951.3	[100] µg/L		17:41:57
2	Tl 190.801†	47.5	69.4	[100] µg/L		17:42:17
2	U 409.014†	1363.9	1193.2	[100] µg/L		17:41:57
2	V 292.402†	9633.0	9721.8	[100] µg/L		17:41:57

2	Zn 213.857†	4473.2	4060.0	[100] µg/L	17:41:57
3	Sc RADIAL	55743.7	55743.7	102 %	17:41:12
3	K 766.490 Radial†	1634.6	1429.6	[1000] µg/L	17:41:12
3	Sr 421.552†	10193.9	9913.6	[100] µg/L	17:41:12
3	Sc 361.383	1899194.1	1899194.1	99.689 %	17:42:23
3	Y 371.029	1304388.8	1304388.8	99.600 %	17:42:23
3	Ag 328.068†	12271.2	12886.3	[100] µg/L	17:42:28
3	As 188.979†	50.0	50.5	[100] µg/L	17:42:48
3	B 249.677†	2491.2	2242.3	[100] µg/L	17:42:28
3	Ba 233.527†	3789.2	3829.7	[100] µg/L	17:42:28
3	Be 313.107†	151520.6	155799.6	[100] µg/L	17:42:23
3	Cd 226.502†	3549.1	3686.3	[100] µg/L	17:42:28
3	Co 228.616†	2025.3	2046.3	[100] µg/L	17:42:48
3	Cr 267.716†	4648.4	4695.2	[100] µg/L	17:42:28
3	Cu 324.752†	18342.5	15159.0	[100] µg/L	17:42:28
3	Mn 257.610†	29107.9	29427.6	[100] µg/L	17:42:28
3	Mo 202.031†	961.9	971.2	[100] µg/L	17:42:48
3	Ni 231.604†	2151.1	1877.6	[100] µg/L	17:42:48
3	P 214.914†	264.3	240.2	[500] µg/L	17:42:48
3	Pb 220.353†	472.1	381.7	[100] µg/L	17:42:48
3	S 181.975 Axial†	65.7	53.9	[200] µg/L	17:42:48
3	Sb 206.836†	125.3	106.0	[100] µg/L	17:42:48
3	Se 196.026†	88.4	76.4	[100] µg/L	17:42:48
3	SiO2†	6568.0	5034.6	[1069.5] µg/L	17:42:28
3	Si 251.611†	6292.9	6060.1	[500] µg/L	17:42:28
3	Sn 189.927†	220.0	223.0	[100] µg/L	17:42:48
3	Ti 334.940†	41756.0	41814.4	[100] µg/L	17:42:28
3	Tl 190.801†	52.2	74.0	[100] µg/L	17:42:48
3	U 409.014†	1423.0	1249.1	[100] µg/L	17:42:28
3	V 292.402†	9677.5	9742.4	[100] µg/L	17:42:28
3	Zn 213.857†	4477.1	4052.7	[100] µg/L	17:42:28

-----  
Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	1898121.7	3252.28	0.17%	99.632 %
Sc RADIAL	55794.6	229.55	0.41%	102 %
Y 371.029	1304047.2	1931.07	0.15%	99.574 %
Ag 328.068†	12896.9	10.99	0.09%	[100] µg/L
As 188.979†	52.8	2.43	4.60%	[100] µg/L
B 249.677†	2226.9	13.77	0.62%	[100] µg/L
Ba 233.527†	3842.1	10.78	0.28%	[100] µg/L
Be 313.107†	155655.3	335.53	0.22%	[100] µg/L
Cd 226.502†	3684.4	4.04	0.11%	[100] µg/L
Co 228.616†	2033.5	12.20	0.60%	[100] µg/L
Cr 267.716†	4669.4	26.74	0.57%	[100] µg/L
Cu 324.752†	15127.0	38.19	0.25%	[100] µg/L
K 766.490 Radial†	1431.1	11.66	0.81%	[1000] µg/L
Mn 257.610†	29465.2	36.06	0.12%	[100] µg/L
Mo 202.031†	968.8	5.23	0.54%	[100] µg/L
Ni 231.604†	1865.3	14.03	0.75%	[100] µg/L
P 214.914†	238.6	2.69	1.13%	[500] µg/L
Pb 220.353†	377.6	5.74	1.52%	[100] µg/L
S 181.975 Axial†	47.7	5.52	11.57%	[200] µg/L
Sb 206.836†	107.5	3.70	3.44%	[100] µg/L
Se 196.026†	72.3	3.71	5.13%	[100] µg/L
SiO2†	5009.4	40.34	0.81%	[1069.5] µg/L
Si 251.611†	6070.6	29.18	0.48%	[500] µg/L
Sn 189.927†	223.0	1.70	0.76%	[100] µg/L
Sr 421.552†	9906.1	40.00	0.40%	[100] µg/L
Ti 334.940†	41846.8	92.71	0.22%	[100] µg/L
Tl 190.801†	71.8	2.32	3.23%	[100] µg/L
U 409.014†	1234.3	36.02	2.92%	[100] µg/L
V 292.402†	9701.9	53.32	0.55%	[100] µg/L
Zn 213.857†	4058.2	4.81	0.12%	[100] µg/L

Sequence No.: 3  
 Sample ID: S0.5  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 3  
 Date Collected: 2/22/2010 17:42:56  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

## Replicate Data: S0.5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib.	Analysis Time
1	Sc RADIAL	54906.1	54906.1	101 %		17:43:28
1	Al 396.153Radial†	6854.9	6819.3	[5000] µg/L		17:43:28
1	Ca 317.933Radial†	5466.7	5255.4	[5000] µg/L		17:43:48
1	K 766.490 Radial†	7575.6	7354.9	[5000] µg/L		17:43:28
1	Mg 279.077 IEC†	541.6	527.7	[5000] µg/L		17:43:48
1	Sr 421.552†	51391.9	50985.1	[500] µg/L		17:43:28
1	Sc 361.383	1894465.7	1894465.7	99.440 %		17:44:48
1	Y 371.029	1296452.5	1296452.5	98.994 %		17:44:48
1	Ag 328.068†	63818.8	64754.7	[500] µg/L		17:44:53
1	As 188.979†	264.1	265.9	[500] µg/L		17:45:13
1	B 249.677†	11617.8	11426.6	[500] µg/L		17:44:53
1	Ba 233.527†	19167.6	19304.1	[500] µg/L		17:44:53
1	Be 313.107†	784988.6	793211.6	[500] µg/L		17:44:48
1	Cd 226.502†	18061.1	18288.9	[500] µg/L		17:44:53
1	Co 228.616†	10253.9	10326.2	[500] µg/L		17:44:53
1	Cr 267.716†	23294.1	23457.6	[500] µg/L		17:44:53
1	Cu 324.752†	77999.4	75197.5	[500] µg/L		17:44:53
1	Mn 257.610†	147490.6	148549.4	[500] µg/L		17:44:48
1	Mo 202.031†	4861.8	4895.4	[500] µg/L		17:45:13
1	Ni 231.604†	9627.4	9401.3	[500] µg/L		17:44:53
1	P 214.914†	1219.3	1201.3	[2500] µg/L		17:45:13
1	Pb 220.353†	2007.0	1926.4	[500] µg/L		17:45:13
1	S 181.975 Axial†	240.7	230.1	[1000] µg/L		17:45:13
1	Sb 206.836†	548.7	532.0	[500] µg/L		17:45:13
1	Se 196.026†	346.6	336.2	[500] µg/L		17:45:13
1	SiO2†	26847.1	25444.2	[5347.5] µg/L		17:44:53
1	Si 251.611†	30918.9	30840.4	[2500] µg/L		17:44:53
1	Sn 189.927†	1121.6	1130.2	[500] µg/L		17:45:13
1	Ti 334.940†	215260.2	216399.5	[500] µg/L		17:44:48
1	Tl 190.801†	344.1	367.7	[500] µg/L		17:45:13
1	U 409.014†	6294.5	6151.6	[500] µg/L		17:44:53
1	V 292.402†	48586.0	48894.1	[500] µg/L		17:44:53
1	Zn 213.857†	20679.6	20357.6	[500] µg/L		17:44:53
2	Sc RADIAL	55655.6	55655.6	102 %		17:43:53
2	Al 396.153Radial†	6956.2	6826.9	[5000] µg/L		17:43:53
2	Ca 317.933Radial†	5437.1	5153.3	[5000] µg/L		17:44:13
2	K 766.490 Radial†	7623.5	7300.4	[5000] µg/L		17:43:53
2	Mg 279.077 IEC†	548.2	526.9	[5000] µg/L		17:44:13
2	Sr 421.552†	52178.0	51068.0	[500] µg/L		17:43:53
2	Sc 361.383	1882734.1	1882734.1	98.825 %		17:45:20
2	Y 371.029	1288561.4	1288561.4	98.392 %		17:45:20
2	Ag 328.068†	63482.1	64813.9	[500] µg/L		17:45:25
2	As 188.979†	262.8	266.2	[500] µg/L		17:45:46
2	B 249.677†	11619.3	11500.8	[500] µg/L		17:45:25
2	Ba 233.527†	19053.7	19308.9	[500] µg/L		17:45:25
2	Be 313.107†	776907.3	789953.1	[500] µg/L		17:45:20
2	Cd 226.502†	18009.5	18349.9	[500] µg/L		17:45:25
2	Co 228.616†	10211.2	10347.3	[500] µg/L		17:45:25
2	Cr 267.716†	23199.0	23507.3	[500] µg/L		17:45:25
2	Cu 324.752†	77356.6	75035.9	[500] µg/L		17:45:25
2	Mn 257.610†	146489.2	148460.3	[500] µg/L		17:45:20
2	Mo 202.031†	4809.7	4873.2	[500] µg/L		17:45:46
2	Ni 231.604†	9542.7	9376.0	[500] µg/L		17:45:25
2	P 214.914†	1200.0	1189.4	[2500] µg/L		17:45:46
2	Pb 220.353†	1985.8	1917.5	[500] µg/L		17:45:46
2	S 181.975 Axial†	238.6	229.4	[1000] µg/L		17:45:46
2	Sb 206.836†	537.6	524.2	[500] µg/L		17:45:46
2	Se 196.026†	345.9	337.7	[500] µg/L		17:45:46
2	SiO2†	26688.2	25451.6	[5347.5] µg/L		17:45:25

2	Si 251.611†	30736.4	30849.5	[2500]	µg/L	17:45:25
2	Sn 189.927†	1108.6	1124.1	[500]	µg/L	17:45:46
2	Ti 334.940†	212622.2	215079.0	[500]	µg/L	17:45:20
2	Tl 190.801†	326.3	351.9	[500]	µg/L	17:45:46
2	U 409.014†	6265.4	6161.6	[500]	µg/L	17:45:25
2	V 292.402†	48301.9	48911.0	[500]	µg/L	17:45:25
2	Zn 213.857†	20520.7	20326.4	[500]	µg/L	17:45:25
3	Sc RADIAL	54887.5	54887.5	101	%	17:44:19
3	Al 396.153Radial†	6925.3	6891.6	[5000]	µg/L	17:44:19
3	Ca 317.933Radial†	5478.7	5269.2	[5000]	µg/L	17:44:39
3	K 766.490 Radial†	7577.5	7359.3	[5000]	µg/L	17:44:19
3	Mg 279.077 IEC†	546.3	532.6	[5000]	µg/L	17:44:39
3	Sr 421.552†	51618.4	51227.5	[500]	µg/L	17:44:19
3	Sc 361.383	1889387.2	1889387.2	99.174	%	17:45:52
3	Y 371.029	1294715.9	1294715.9	98.862	%	17:45:52
3	Ag 328.068†	61806.6	62898.3	[500]	µg/L	17:45:58
3	As 188.979†	234.3	236.6	[500]	µg/L	17:46:18
3	B 249.677†	11262.9	11100.1	[500]	µg/L	17:45:58
3	Ba 233.527†	18216.7	18397.1	[500]	µg/L	17:45:58
3	Be 313.107†	759941.9	770078.1	[500]	µg/L	17:45:52
3	Cd 226.502†	17171.7	17440.9	[500]	µg/L	17:45:58
3	Co 228.616†	9678.2	9773.5	[500]	µg/L	17:45:58
3	Cr 267.716†	21676.8	21889.7	[500]	µg/L	17:45:58
3	Cu 324.752†	74111.1	71487.6	[500]	µg/L	17:45:58
3	Mn 257.610†	143274.9	144697.3	[500]	µg/L	17:45:52
3	Mo 202.031†	4261.0	4302.7	[500]	µg/L	17:46:18
3	Ni 231.604†	9133.4	8929.2	[500]	µg/L	17:45:58
3	P 214.914†	1077.6	1061.7	[2500]	µg/L	17:46:18
3	Pb 220.353†	1818.6	1741.8	[500]	µg/L	17:46:18
3	S 181.975 Axial†	218.3	208.2	[1000]	µg/L	17:46:18
3	Sb 206.836†	488.1	472.4	[500]	µg/L	17:46:18
3	Se 196.026†	329.4	319.8	[500]	µg/L	17:46:18
3	SiO2†	25768.5	24429.1	[5347.5]	µg/L	17:45:58
3	Si 251.611†	29659.8	29654.4	[2500]	µg/L	17:45:58
3	Sn 189.927†	965.7	976.1	[500]	µg/L	17:46:18
3	Ti 334.940†	207498.9	209155.4	[500]	µg/L	17:45:52
3	Tl 190.801†	311.2	335.5	[500]	µg/L	17:46:18
3	U 409.014†	5792.5	5662.4	[500]	µg/L	17:45:58
3	V 292.402†	45902.0	46319.0	[500]	µg/L	17:45:58
3	Zn 213.857†	19559.4	19283.9	[500]	µg/L	17:45:58

-----  
Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1888862.4	5883.39	0.31%	99.146	%
Sc RADIAL	55149.8	438.21	0.79%	101	%
Y 371.029	1293243.3	4146.53	0.32%	98.749	%
Ag 328.068†	64155.6	1089.29	1.70%	[500]	µg/L
Al 396.153Radial†	6845.9	39.73	0.58%	[5000]	µg/L
As 188.979†	256.2	17.02	6.64%	[500]	µg/L
B 249.677†	11342.5	213.22	1.88%	[500]	µg/L
Ba 233.527†	19003.4	525.06	2.76%	[500]	µg/L
Be 313.107†	784414.3	12521.93	1.60%	[500]	µg/L
Ca 317.933Radial†	5226.0	63.33	1.21%	[5000]	µg/L
Cd 226.502†	18026.6	508.09	2.82%	[500]	µg/L
Co 228.616†	10149.0	325.35	3.21%	[500]	µg/L
Cr 267.716†	22951.5	919.89	4.01%	[500]	µg/L
Cu 324.752†	73907.0	2096.81	2.84%	[500]	µg/L
K 766.490 Radial†	7338.2	32.77	0.45%	[5000]	µg/L
Mg 279.077 IEC†	529.1	3.07	0.58%	[5000]	µg/L
Mn 257.610†	147235.6	2198.74	1.49%	[500]	µg/L
Mo 202.031†	4690.5	335.96	7.16%	[500]	µg/L
Ni 231.604†	9235.5	265.55	2.88%	[500]	µg/L
P 214.914†	1150.8	77.37	6.72%	[2500]	µg/L
Pb 220.353†	1861.9	104.08	5.59%	[500]	µg/L
S 181.975 Axial†	222.6	12.47	5.60%	[1000]	µg/L
Sb 206.836†	509.5	32.44	6.37%	[500]	µg/L
Se 196.026†	331.2	9.91	2.99%	[500]	µg/L
SiO2†	25108.3	588.19	2.34%	[5347.5]	µg/L
Si 251.611†	30448.1	687.38	2.26%	[2500]	µg/L



Sn 189.927†	1076.8	87.30	8.11%	[500] µg/L
Sr 421.552†	51093.5	123.18	0.24%	[500] µg/L
Ti 334.940†	213544.6	3858.07	1.81%	[500] µg/L
Tl 190.801†	.351.7	16.12	4.58%	[500] µg/L
U 409.014†	5991.9	285.34	4.76%	[500] µg/L
V 292.402†	48041.4	1491.63	3.10%	[500] µg/L
Zn 213.857†	19989.3	611.06	3.06%	[500] µg/L

Sequence No.: 4

Sample ID: SCAL

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 4

Date Collected: 2/22/2010 17:46:26

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: SCAL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib.	Analysis Time
1	Sc RADIAL	55558.6	55558.6	102 %		17:46:58
1	Al 396.153Radial†	13922.7	13676.9	[10000] µg/L		17:46:58
1	Ca 317.933Radial†	10812.7	10439.1	[10000] µg/L		17:47:18
1	Fe 238.204 Radial†	1123.8	1087.3	[10000] µg/L		17:47:18
1	K 766.490 Radial†	15002.1	14556.2	[10000] µg/L		17:46:58
1	Mg 279.077 IEC†	1077.3	1047.2	[10000] µg/L		17:47:18
1	Na 589.592 Radial†	33165.6	32165.2	[10000] µg/L		17:46:58
1	Sr 421.552†	103764.6	101793.4	[1000] µg/L		17:46:58
1	Sc 361.383	1898466.2	1898466.2	99.650 %		17:48:22
1	Y 371.029	1299699.5	1299699.5	99.242 %		17:48:22
1	Ag 328.068†	126714.5	127735.8	[1000] µg/L		17:48:28
1	As 188.979†	514.9	517.0	[1000] µg/L		17:48:48
1	B 249.677†	22921.1	22744.9	[1000] µg/L		17:48:28
1	Ba 233.527†	37812.8	37974.1	[1000] µg/L		17:48:28
1	Be 313.107†	1554843.4	1564103.8	[1000] µg/L		17:48:22
1	Cd 226.502†	35602.3	35853.3	[1000] µg/L		17:48:28
1	Co 228.616†	20101.3	20186.5	[1000] µg/L		17:48:28
1	Cr 267.716†	46057.1	46251.0	[1000] µg/L		17:48:28
1	Cu 324.752†	150913.8	148202.4	[1000] µg/L		17:48:28
1	Mn 257.610†	287029.4	288265.1	[1000] µg/L		17:48:28
1	Mo 202.031†	9670.1	9710.3	[1000] µg/L		17:48:48
1	Ni 231.604†	18598.6	18383.6	[1000] µg/L		17:48:28
1	P 214.914†	2402.7	2386.3	[5000] µg/L		17:48:48
1	Pb 220.353†	3919.9	3841.7	[1000] µg/L		17:48:48
1	S 181.975 Axial†	462.9	452.6	[2000] µg/L		17:48:48
1	Sb 206.836†	1056.0	1040.0	[1000] µg/L		17:48:48
1	Se 196.026†	661.7	651.7	[1000] µg/L		17:48:48
1	SiO2†	51525.8	50152.5	[10695] µg/L		17:48:28
1	Si 251.611†	60757.4	60718.1	[5000] µg/L		17:48:28
1	Sn 189.927†	2228.8	2239.0	[1000] µg/L		17:48:48
1	Ti 334.940†	425685.7	427107.1	[1000] µg/L		17:48:22
1	Tl 190.801†	683.1	707.2	[1000] µg/L		17:48:48
1	U 409.014†	12366.5	12231.5	[1000] µg/L		17:48:28
1	V 292.402†	96491.7	96864.8	[1000] µg/L		17:48:28
1	Zn 213.857†	39707.0	39407.9	[1000] µg/L		17:48:28
2	Sc RADIAL	55314.6	55314.6	101 %		17:47:24
2	Al 396.153Radial†	13772.7	13589.4	[10000] µg/L		17:47:24
2	Ca 317.933Radial†	10720.7	10395.3	[10000] µg/L		17:47:44
2	Fe 238.204 Radial†	1122.9	1091.2	[10000] µg/L		17:47:44
2	K 766.490 Radial†	14810.9	14432.6	[10000] µg/L		17:47:24
2	Mg 279.077 IEC†	1069.4	1044.1	[10000] µg/L		17:47:44
2	Na 589.592 Radial†	32958.4	32104.6	[10000] µg/L		17:47:24
2	Sr 421.552†	102683.8	101177.1	[1000] µg/L		17:47:24
2	Sc 361.383	1880327.6	1880327.6	98.698 %		17:48:55
2	Y 371.029	1287907.0	1287907.0	98.342 %		17:48:55
2	Ag 328.068†	126476.1	128720.9	[1000] µg/L		17:49:01
2	As 188.979†	522.6	529.8	[1000] µg/L		17:49:21
2	B 249.677†	22966.2	23012.4	[1000] µg/L		17:49:01
2	Ba 233.527†	37830.6	38358.1	[1000] µg/L		17:49:01
2	Be 313.107†	1550794.4	1575052.8	[1000] µg/L		17:48:55
2	Cd 226.502†	35601.9	36197.6	[1000] µg/L		17:49:01
2	Co 228.616†	20128.2	20408.4	[1000] µg/L		17:49:01
2	Cr 267.716†	46120.6	46761.2	[1000] µg/L		17:49:01
2	Cu 324.752†	150777.8	149525.5	[1000] µg/L		17:49:01
2	Mn 257.610†	287219.4	291236.2	[1000] µg/L		17:49:01
2	Mo 202.031†	9653.8	9787.4	[1000] µg/L		17:49:21
2	Ni 231.604†	18536.4	18500.6	[1000] µg/L		17:49:01
2	P 214.914†	2392.0	2398.7	[5000] µg/L		17:49:21
2	Pb 220.353†	3913.6	3873.2	[1000] µg/L		17:49:21

2	S 181.975 Axial†	463.7	457.9	[2000]	µg/L	17:49:21
2	Sb 206.836†	1046.4	1040.4	[1000]	µg/L	17:49:21
2	Se 196.026†	678.4	675.0	[1000]	µg/L	17:49:21
2	SiO2†	51533.9	50659.6	[10695]	µg/L	17:49:01
2	Si 251.611†	60758.2	61307.1	[5000]	µg/L	17:49:01
2	Sn 189.927†	2217.8	2249.4	[1000]	µg/L	17:49:21
2	Ti 334.940†	424356.0	429880.6	[1000]	µg/L	17:48:55
2	Tl 190.801†	693.6	724.5	[1000]	µg/L	17:49:21
2	U 409.014†	12366.4	12351.1	[1000]	µg/L	17:49:01
2	V 292.402†	96443.0	97749.6	[1000]	µg/L	17:49:01
2	Zn 213.857†	39790.6	39877.0	[1000]	µg/L	17:49:01
3	Sc RADIAL	55549.0	55549.0	102	%	17:47:50
3	Al 396.153Radial†	13755.3	13515.0	[10000]	µg/L	17:47:50
3	Ca 317.933Radial†	10793.7	10422.3	[10000]	µg/L	17:48:10
3	Fe 238.204 Radial†	1128.4	1092.0	[10000]	µg/L	17:48:10
3	K 766.490 Radial†	14830.9	14390.6	[10000]	µg/L	17:47:50
3	Mg 279.077 IEC†	1079.2	1049.3	[10000]	µg/L	17:48:10
3	Na 589.592 Radial†	32926.6	31936.2	[10000]	µg/L	17:47:50
3	Sr 421.552†	102652.8	100719.3	[1000]	µg/L	17:47:50
3	Sc 361.383	1883467.4	1883467.4	98.863	%	17:49:28
3	Y 371.029	1290870.7	1290870.7	98.568	%	17:49:28
3	Ag 328.068†	120616.5	122580.3	[1000]	µg/L	17:49:34
3	As 188.979†	445.2	450.6	[1000]	µg/L	17:49:54
3	B 249.677†	21706.7	21699.6	[1000]	µg/L	17:49:34
3	Ba 233.527†	34985.5	35416.4	[1000]	µg/L	17:49:34
3	Be 313.107†	1457330.2	1477894.5	[1000]	µg/L	17:49:28
3	Cd 226.502†	32820.7	33324.2	[1000]	µg/L	17:49:34
3	Co 228.616†	18418.4	18644.8	[1000]	µg/L	17:49:34
3	Cr 267.716†	41066.7	41571.3	[1000]	µg/L	17:49:34
3	Cu 324.752†	138300.0	136649.6	[1000]	µg/L	17:49:34
3	Mn 257.610†	262115.1	265358.1	[1000]	µg/L	17:49:34
3	Mo 202.031†	8038.2	8136.9	[1000]	µg/L	17:49:54
3	Ni 231.604†	16978.2	16893.3	[1000]	µg/L	17:49:34
3	P 214.914†	2037.3	2035.9	[5000]	µg/L	17:49:54
3	Pb 220.353†	3399.7	3346.9	[1000]	µg/L	17:49:54
3	S 181.975 Axial†	407.9	400.6	[2000]	µg/L	17:49:54
3	Sb 206.836†	906.0	896.7	[1000]	µg/L	17:49:54
3	Se 196.026†	598.7	593.2	[1000]	µg/L	17:49:54
3	SiO2†	48296.1	47297.5	[10695]	µg/L	17:49:34
3	Si 251.611†	56782.3	57182.8	[5000]	µg/L	17:49:34
3	Sn 189.927†	1828.0	1851.3	[1000]	µg/L	17:49:54
3	Ti 334.940†	396651.2	401140.5	[1000]	µg/L	17:49:28
3	Tl 190.801†	618.6	647.4	[1000]	µg/L	17:49:54
3	U 409.014†	11220.7	11171.4	[1000]	µg/L	17:49:34
3	V 292.402†	87770.0	88814.0	[1000]	µg/L	17:49:34
3	Zn 213.857†	36439.5	36420.1	[1000]	µg/L	17:49:34

-----  
Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	1887420.4	9693.89	0.51%	99.071 %
Sc RADIAL	55474.1	138.21	0.25%	102 %
Y 371.029	1292825.7	6134.55	0.47%	98.717 %
Ag 328.068†	126345.6	3297.89	2.61%	[1000] µg/L
Al 396.153Radial†	13593.8	81.08	0.60%	[10000] µg/L
As 188.979†	499.1	42.52	8.52%	[1000] µg/L
B 249.677†	22485.7	693.72	3.09%	[1000] µg/L
Ba 233.527†	37249.5	1599.13	4.29%	[1000] µg/L
Be 313.107†	1539017.0	53216.01	3.46%	[1000] µg/L
Ca 317.933Radial†	10418.9	22.14	0.21%	[10000] µg/L
Cd 226.502†	35125.1	1569.03	4.47%	[1000] µg/L
Co 228.616†	19746.6	960.56	4.86%	[1000] µg/L
Cr 267.716†	44861.2	2860.50	6.38%	[1000] µg/L
Cu 324.752†	144792.5	7082.93	4.89%	[1000] µg/L
Fe 238.204 Radial†	1090.2	2.52	0.23%	[10000] µg/L
K 766.490 Radial†	14459.8	86.08	0.60%	[10000] µg/L
Mg 279.077 IEC†	1046.8	2.63	0.25%	[10000] µg/L
Mn 257.610†	281619.8	14161.15	5.03%	[1000] µg/L
Mo 202.031†	9211.5	931.45	10.11%	[1000] µg/L
Na 589.592 Radial†	32068.6	118.67	0.37%	[10000] µg/L

Ni 231.604†	17925.8	896.14	5.00%	[1000]	µg/L
P 214.914†	2273.6	205.96	9.06%	[5000]	µg/L
Pb 220.353†	3687.3	295.22	8.01%	[1000]	µg/L
S 181.975 Axial†	437.0	31.62	7.24%	[2000]	µg/L
Sb 206.836†	992.4	82.86	8.35%	[1000]	µg/L
Se 196.026†	640.0	42.13	6.58%	[1000]	µg/L
SiO2†	49369.8	1812.56	3.67%	[10695]	µg/L
Si 251.611†	59736.0	2230.63	3.73%	[5000]	µg/L
Sn 189.927†	2113.2	226.89	10.74%	[1000]	µg/L
Sr 421.552†	101229.9	538.96	0.53%	[1000]	µg/L
Ti 334.940†	419376.1	15853.22	3.78%	[1000]	µg/L
Tl 190.801†	693.0	40.46	5.84%	[1000]	µg/L
U 409.014†	11918.0	649.33	5.45%	[1000]	µg/L
V 292.402†	94476.1	4923.51	5.21%	[1000]	µg/L
Zn 213.857†	38568.3	1875.16	4.86%	[1000]	µg/L

Sequence No.: 5

Sample ID: S10

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 5

Date Collected: 2/22/2010 17:50:04

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: S10

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Units	Analysis Time
1	Sc RADIAL	55498.5	55498.5	102 %		17:50:37
1	Al 396.153Radial†	68597.7	67417.5	[50000] µg/L		17:50:37
1	Ca 317.933Radial†	53160.2	52062.9	[50000] µg/L		17:50:37
1	Fe 238.204 Radial†	2184.4	2130.6	[20000] µg/L		17:50:57
1	Mg 279.077 IEC†	5186.7	5086.3	[50000] µg/L		17:50:57
1	Na 589.592 Radial†	65035.4	63516.9	[20000] µg/L		17:50:37
1	Sc 361.383	1886440.8	1886440.8	99.019 %		17:52:01
1	Y 371.029	1286634.3	1286634.3	98.245 %		17:52:01
2	Sc RADIAL	55070.3	55070.3	101 %		17:51:03
2	Al 396.153Radial†	68935.3	68275.9	[50000] µg/L		17:51:03
2	Ca 317.933Radial†	53271.9	52579.6	[50000] µg/L		17:51:03
2	Fe 238.204 Radial†	2211.7	2174.3	[20000] µg/L		17:51:23
2	Mg 279.077 IEC†	5218.1	5157.1	[50000] µg/L		17:51:23
2	Na 589.592 Radial†	65107.8	64085.5	[20000] µg/L		17:51:03
2	Sc 361.383	1879703.3	1879703.3	98.666 %		17:52:09
2	Y 371.029	1282180.2	1282180.2	97.904 %		17:52:09
3	Sc RADIAL	54992.2	54992.2	101 %		17:51:29
3	Al 396.153Radial†	68022.1	67467.3	[50000] µg/L		17:51:29
3	Ca 317.933Radial†	52492.3	51881.5	[50000] µg/L		17:51:29
3	Fe 238.204 Radial†	2214.2	2179.9	[20000] µg/L		17:51:49
3	Mg 279.077 IEC†	5211.8	5158.2	[50000] µg/L		17:51:49
3	Na 589.592 Radial†	64628.1	63701.4	[20000] µg/L		17:51:29
3	Sc 361.383	1887970.7	1887970.7	99.099 %		17:52:16
3	Y 371.029	1287765.6	1287765.6	98.331 %		17:52:16

## Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc. Units	Calib. Units
Sc 361.383	1884704.9	4398.56	0.23%	98.928 %	
Sc RADIAL	55187.0	272.59	0.49%	101 %	
Y 371.029	1285526.7	2952.81	0.23%	98.160 %	
Al 396.153Radial†	67720.2	481.86	0.71%	[50000] µg/L	
Ca 317.933Radial†	52174.7	362.25	0.69%	[50000] µg/L	
Fe 238.204 Radial†	2161.6	27.00	1.25%	[20000] µg/L	
Mg 279.077 IEC†	5133.9	41.18	0.80%	[50000] µg/L	
Na 589.592 Radial†	63767.9	290.09	0.45%	[20000] µg/L	

## Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	126.8	0.00000	0.999980	
Al 396.153Radial	3	Lin Thru 0	0.0	1.355	0.00000	0.999999	
As 188.979	3	Lin Thru 0	0.0	0.5020	0.00000	0.999933	
B 249.677	3	Lin Thru 0	0.0	22.52	0.00000	0.999993	
Ba 233.527	3	Lin Thru 0	0.0	37.41	0.00000	0.999965	
Be 313.107	3	Lin Thru 0	0.0	1545	0.00000	0.999970	
Ca 317.933Radial	3	Lin Thru 0	0.0	1.043	0.00000	1.000000	
Cd 226.502	3	Lin Thru 0	0.0	35.32	0.00000	0.999938	
Co 228.616	3	Lin Thru 0	0.0	19.86	0.00000	0.999937	
Cr 267.716	3	Lin Thru 0	0.0	45.08	0.00000	0.999953	
Cu 324.752	3	Lin Thru 0	0.0	145.4	0.00000	0.999959	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.1083	0.00000	0.999994	
K 766.490 Radial	3	Lin Thru 0	0.0	1.450	0.00000	0.999982	
Mg 279.077 IEC	3	Lin Thru 0	0.0	0.1028	0.00000	0.999989	
Mn 257.610	3	Lin Thru 0	0.0	284.3	0.00000	0.999833	
Mo 202.031	3	Lin Thru 0	0.0	9.249	0.00000	0.999964	
Na 589.592 Radia	2	Lin Thru 0	0.0	3.192	0.00000	0.999997	

Ni 231.604	3	Lin Thru 0	0.0	18.04	0.00000	0.999923
P 214.914	3	Lin Thru 0	0.0	0.4560	0.00000	0.999979
Pb 220.353	3	Lin Thru 0	0.0	3.695	0.00000	0.999990
S 181.975 Axial	3	Lin Thru 0	0.0	0.2195	0.00000	0.999943
Sb 206.836	3	Lin Thru 0	0.0	0.9983	0.00000	0.999919
Se 196.026	3	Lin Thru 0	0.0	0.6451	0.00000	0.999845
SiO2	3	Lin Thru 0	0.0	4.632	0.00000	0.999976
Si 251.611	3	Lin Thru 0	0.0	11.99	0.00000	0.999970
Sn 189.927	3	Lin Thru 0	0.0	2.122	0.00000	0.999961
Sr 421.552	3	Lin Thru 0	0.0	101.4	0.00000	0.999991
Ti 334.940	3	Lin Thru 0	0.0	420.9	0.00000	0.999973
Tl 190.801	3	Lin Thru 0	0.0	0.6953	0.00000	0.999978
U 409.014	3	Lin Thru 0	0.0	11.93	0.00000	0.999993
V 292.402	3	Lin Thru 0	0.0	94.82	0.00000	0.999975
Zn 213.857	3	Lin Thru 0	0.0	38.86	0.00000	0.999888

Sequence No.: 6

Sample ID: ICV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 9

Date Collected: 2/22/2010 17:52:25

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: ICV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Units	Conc. Units	Sample Units	Analysis Time
1	Sc RADIAL	55375.4	55375.4	102 %				17:52:59
1	Al 396.153Radial†	7189.3	7091.0	5222.3 µg/L		5222.3 ppb		17:52:59
1	Ca 317.933Radial†	5473.8	5216.4	4999.2 µg/L		4999.2 ppb		17:53:19
1	Fe 238.204 Radial†	585.6	560.9	5192.1 µg/L		5192.1 ppb		17:53:19
1	K 766.490 Radial†	4001.1	3770.9	2600.3 µg/L		2600.3 ppb		17:52:59
1	Mg 279.077 IEC†	566.5	547.7	5332.7 µg/L		5332.7 ppb		17:53:19
1	Na 589.592 Radial†	8718.1	8196.4	2567.7 µg/L		2567.7 ppb		17:52:59
1	Sr 421.552†	55414.4	54514.1	537.60 µg/L		537.60 ppb		17:52:59
1	Sc 361.383	1888320.6	1888320.6	99.118 %				17:54:23
1	Y 371.029	1294064.9	1294064.9	98.812 %				17:54:23
1	Ag 328.068†	33596.4	34472.2	275.85 µg/L		275.85 ppb		17:54:28
1	As 188.979†	250.7	253.2	503.30 µg/L		503.30 ppb		17:54:49
1	B 249.677†	12476.5	12330.9	545.60 µg/L		545.60 ppb		17:54:28
1	Ba 233.527†	19854.4	20059.7	537.20 µg/L		537.20 ppb		17:54:28
1	Be 313.107†	414424.7	421918.7	272.88 µg/L		272.88 ppb		17:54:23
1	Cd 226.502†	18532.4	18823.4	532.85 µg/L		532.85 ppb		17:54:28
1	Co 228.616†	10659.9	10769.4	541.69 µg/L		541.69 ppb		17:54:28
1	Cr 267.716†	23307.1	23546.8	522.65 µg/L		522.65 ppb		17:54:28
1	Cu 324.752†	80406.0	77880.8	536.19 µg/L		536.19 ppb		17:54:28
1	Mn 257.610†	153560.3	155155.8	546.27 µg/L		546.27 ppb		17:54:23
1	Mo 202.031†	5293.2	5346.6	578.28 µg/L		578.28 ppb		17:54:49
1	Ni 231.604†	9889.3	9697.1	536.96 µg/L		536.96 ppb		17:54:28
1	P 214.914†	1241.8	1228.0	2642.2 µg/L		2642.2 ppb		17:54:49
1	Pb 220.353†	2025.4	1951.5	528.43 µg/L		528.43 ppb		17:54:49
1	S 181.975 Axial†	580.8	573.9	2615.0 µg/L		2615.0 ppb		17:54:49
1	Sb 206.836†	548.6	533.8	537.74 µg/L		537.74 ppb		17:54:49
1	Se 196.026†	1754.5	1757.7	2732.7 µg/L		2732.7 ppb		17:54:49
1	SiO2†	51240.2	50142.2	10824 µg/L		10824 ppb		17:54:28
1	Si 251.611†	60208.7	60492.0	5043.2 µg/L		5043.2 ppb		17:54:28
1	Sn 189.927†	1221.4	1234.6	581.79 µg/L		581.79 ppb		17:54:49
1	Ti 334.940†	216418.4	218272.5	518.25 µg/L		518.25 ppb		17:54:23
1	Tl 190.801†	359.7	384.6	559.41 µg/L		559.41 ppb		17:54:49
1	U 409.014†	6179.0	6055.7	506.39 µg/L		506.39 ppb		17:54:28
1	V 292.402†	50716.9	51202.9	546.83 µg/L		546.83 ppb		17:54:28
1	Zn 213.857†	21494.5	21247.4	542.93 µg/L		542.93 ppb		17:54:28
2	Sc RADIAL	55007.4	55007.4	101 %				17:53:25
2	Al 396.153Radial†	7035.1	6985.5	5144.7 µg/L		5144.7 ppb		17:53:25
2	Ca 317.933Radial†	5479.6	5258.3	5039.3 µg/L		5039.3 ppb		17:53:45
2	Fe 238.204 Radial†	581.7	560.9	5192.0 µg/L		5192.0 ppb		17:53:45
2	K 766.490 Radial†	3944.7	3741.3	2579.9 µg/L		2579.9 ppb		17:53:25
2	Mg 279.077 IEC†	562.3	547.2	5328.1 µg/L		5328.1 ppb		17:53:45
2	Na 589.592 Radial†	8605.7	8142.5	2550.8 µg/L		2550.8 ppb		17:53:25
2	Sr 421.552†	54227.0	53701.9	529.59 µg/L		529.59 ppb		17:53:25
2	Sc 361.383	1903070.3	1903070.3	99.892 %				17:54:56
2	Y 371.029	1306115.3	1306115.3	99.732 %				17:54:56
2	Ag 328.068†	33085.3	33697.9	269.65 µg/L		269.65 ppb		17:55:02
2	As 188.979†	256.7	257.3	511.35 µg/L		511.35 ppb		17:55:22
2	B 249.677†	12253.6	12010.3	531.34 µg/L		531.34 ppb		17:55:02
2	Ba 233.527†	19452.1	19501.7	522.26 µg/L		522.26 ppb		17:55:02
2	Be 313.107†	412198.2	416449.2	269.34 µg/L		269.34 ppb		17:54:56
2	Cd 226.502†	18145.2	18290.9	517.76 µg/L		517.76 ppb		17:55:02
2	Co 228.616†	10433.8	10459.7	526.10 µg/L		526.10 ppb		17:55:02
2	Cr 267.716†	22914.0	22971.1	509.87 µg/L		509.87 ppb		17:55:02
2	Cu 324.752†	79426.2	76271.2	525.13 µg/L		525.13 ppb		17:55:02
2	Mn 257.610†	152827.6	153221.5	539.47 µg/L		539.47 ppb		17:54:56
2	Mo 202.031†	5251.2	5263.2	569.26 µg/L		569.26 ppb		17:55:22
2	Ni 231.604†	9647.9	9378.1	519.30 µg/L		519.30 ppb		17:55:02
2	P 214.914†	1230.7	1207.1	2597.5 µg/L		2597.5 ppb		17:55:22
2	Pb 220.353†	2023.8	1934.1	523.71 µg/L		523.71 ppb		17:55:22

2	S 181.975 Axial†	585.4	574.0	2615.4 µg/L	2615.4 ppb	17:55:22
2	Sb 206.836†	546.5	527.3	531.28 µg/L	531.28 ppb	17:55:22
2	Se 196.026†	1736.6	1726.1	2683.7 µg/L	2683.7 ppb	17:55:22
2	SiO2†	50566.7	49067.4	10592 µg/L	10592 ppb	17:55:02
2	Si 251.611†	59310.4	59122.0	4929.0 µg/L	4929.0 ppb	17:55:02
2	Sn 189.927†	1212.4	1216.0	573.06 µg/L	573.06 ppb	17:55:22
2	Ti 334.940†	215142.8	215303.3	511.19 µg/L	511.19 ppb	17:54:56
2	Tl 190.801†	354.8	376.8	548.15 µg/L	548.15 ppb	17:55:22
2	U 409.014†	6175.8	6004.1	502.06 µg/L	502.06 ppb	17:55:02
2	V 292.402†	49905.5	49994.0	533.98 µg/L	533.98 ppb	17:55:02
2	Zn 213.857†	21211.5	20796.0	531.41 µg/L	531.41 ppb	17:55:02
3	Sc RADIAL	54574.0	54574.0	100 %		17:53:51
3	Al 396.153Radial†	7105.1	7110.8	5238.9 µg/L	5238.9 ppb	17:53:51
3	Ca 317.933Radial†	5526.5	5348.3	5125.6 µg/L	5125.6 ppb	17:54:11
3	Fe 238.204 Radial†	588.6	572.3	5296.7 µg/L	5296.7 ppb	17:54:11
3	K 766.490 Radial†	3926.3	3754.0	2588.7 µg/L	2588.7 ppb	17:53:51
3	Mg 279.077 IEC†	563.8	553.2	5384.5 µg/L	5384.5 ppb	17:54:11
3	Na 589.592 Radial†	8617.6	8222.2	2575.8 µg/L	2575.8 ppb	17:53:51
3	Sr 421.552†	54536.6	54438.2	536.85 µg/L	536.85 ppb	17:53:51
3	Sc 361.383	1881848.9	1881848.9	98.778 %		17:55:29
3	Y 371.029	1290089.0	1290089.0	98.508 %		17:55:29
3	Ag 328.068†	31542.4	32509.3	260.03 µg/L	260.03 ppb	17:55:35
3	As 188.979†	215.7	218.7	434.64 µg/L	434.64 ppb	17:55:55
3	B 249.677†	11717.6	11605.9	513.26 µg/L	513.26 ppb	17:55:35
3	Ba 233.527†	18250.6	18505.0	495.55 µg/L	495.55 ppb	17:55:35
3	Be 313.107†	392652.6	401315.2	259.55 µg/L	259.55 ppb	17:55:29
3	Cd 226.502†	16902.1	17237.4	487.89 µg/L	487.89 ppb	17:55:35
3	Co 228.616†	9671.7	9806.0	493.15 µg/L	493.15 ppb	17:55:35
3	Cr 267.716†	20679.7	20967.8	465.41 µg/L	465.41 ppb	17:55:35
3	Cu 324.752†	73799.4	71471.5	492.14 µg/L	492.14 ppb	17:55:35
3	Mn 257.610†	145592.3	147622.0	519.78 µg/L	519.78 ppb	17:55:29
3	Mo 202.031†	4416.4	4477.3	484.29 µg/L	484.29 ppb	17:55:55
3	Ni 231.604†	9015.4	8846.7	489.88 µg/L	489.88 ppb	17:55:35
3	P 214.914†	1055.1	1043.3	2240.3 µg/L	2240.3 ppb	17:55:55
3	Pb 220.353†	1771.7	1701.6	460.68 µg/L	460.68 ppb	17:55:55
3	S 181.975 Axial†	516.2	510.6	2326.6 µg/L	2326.6 ppb	17:55:55
3	Sb 206.836†	480.0	466.2	469.20 µg/L	469.20 ppb	17:55:55
3	Se 196.026†	1530.9	1537.4	2391.5 µg/L	2391.5 ppb	17:55:55
3	SiO2†	47660.7	46696.2	10080 µg/L	10080 ppb	17:55:35
3	Si 251.611†	55912.3	56351.4	4698.0 µg/L	4698.0 ppb	17:55:35
3	Sn 189.927†	1007.6	1022.4	481.83 µg/L	481.83 ppb	17:55:55
3	Ti 334.940†	204355.5	206811.3	491.01 µg/L	491.01 ppb	17:55:29
3	Tl 190.801†	323.1	348.8	507.63 µg/L	507.63 ppb	17:55:55
3	U 409.014†	5525.6	5415.6	452.73 µg/L	452.73 ppb	17:55:35
3	V 292.402†	45831.2	46432.8	495.62 µg/L	495.62 ppb	17:55:35
3	Zn 213.857†	19698.5	19503.7	498.33 µg/L	498.33 ppb	17:55:35

-----  
Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1891079.9	99.263 %	0.5709			0.58%
Sc RADIAL	54985.6	101 %	0.7			0.73%
Y 371.029	1296756.4	99.017 %	0.6372			0.64%
Ag 328.068†	33559.8	268.51 µg/L	7.967	268.51 ppb	7.967	2.97%
QC value within limits for Ag 328.068 Recovery = 107.40%						
Al 396.153Radial†	7062.4	5202.0 µg/L	50.31	5202.0 ppb	50.31	0.97%
QC value within limits for Al 396.153Radial Recovery = 104.04%						
As 188.979†	243.0	483.10 µg/L	42.158	483.10 ppb	42.158	8.73%
QC value within limits for As 188.979 Recovery = 96.62%						
B 249.677†	11982.4	530.07 µg/L	16.206	530.07 ppb	16.206	3.06%
QC value within limits for B 249.677 Recovery = 106.01%						
Ba 233.527†	19355.5	518.34 µg/L	21.101	518.34 ppb	21.101	4.07%
QC value within limits for Ba 233.527 Recovery = 103.67%						
Be 313.107†	413227.7	267.26 µg/L	6.902	267.26 ppb	6.902	2.58%
QC value within limits for Be 313.107 Recovery = 106.90%						
Ca 317.933Radial†	5274.3	5054.7 µg/L	64.57	5054.7 ppb	64.57	1.28%
QC value within limits for Ca 317.933Radial Recovery = 101.09%						
Cd 226.502†	18117.2	512.83 µg/L	22.882	512.83 ppb	22.882	4.46%
QC value within limits for Cd 226.502 Recovery = 102.57%						
Co 228.616†	10345.0	520.32 µg/L	24.780	520.32 ppb	24.780	4.76%



QC value within limits for Co 228.616 Recovery = 104.06%							
Cr 267.716†	22495.2	499.31 µg/L	30.045	499.31 ppb	30.045	6.02%	
QC value within limits for Cr 267.716 Recovery = 99.86%							
Cu 324.752†	75207.8	517.82 µg/L	22.917	517.82 ppb	22.917	4.43%	
QC value within limits for Cu 324.752 Recovery = 103.56%							
Fe 238.204 Radial†	564.7	5226.9 µg/L	60.41	5226.9 ppb	60.41	1.16%	
QC value within limits for Fe 238.204 Radial Recovery = 104.54%							
K 766.490 Radial†	3755.4	2589.6 µg/L	10.22	2589.6 ppb	10.22	0.39%	
QC value within limits for K 766.490 Radial Recovery = 103.59%							
Mg 279.077 IEC†	549.4	5348.4 µg/L	31.29	5348.4 ppb	31.29	0.59%	
QC value within limits for Mg 279.077 IEC Recovery = 106.97%							
Mn 257.610†	151999.8	535.18 µg/L	13.757	535.18 ppb	13.757	2.57%	
QC value within limits for Mn 257.610 Recovery = 107.04%							
Mo 202.031†	5029.1	543.94 µg/L	51.854	543.94 ppb	51.854	9.53%	
QC value within limits for Mo 202.031 Recovery = 108.79%							
Na 589.592 Radial†	8187.0	2564.8 µg/L	12.74	2564.8 ppb	12.74	0.50%	
QC value within limits for Na 589.592 Radial Recovery = 102.59%							
Ni 231.604†	9307.3	515.38 µg/L	23.785	515.38 ppb	23.785	4.61%	
QC value within limits for Ni 231.604 Recovery = 103.08%							
P 214.914†	1159.4	2493.3 µg/L	220.29	2493.3 ppb	220.29	8.84%	
QC value within limits for P 214.914 Recovery = 99.73%							
Pb 220.353†	1862.4	504.27 µg/L	37.827	504.27 ppb	37.827	7.50%	
QC value within limits for Pb 220.353 Recovery = 100.85%							
S 181.975 Axial†	552.9	2519.0 µg/L	166.62	2519.0 ppb	166.62	6.61%	
QC value within limits for S 181.975 Axial Recovery = 100.76%							
Sb 206.836†	509.1	512.74 µg/L	37.846	512.74 ppb	37.846	7.38%	
QC value within limits for Sb 206.836 Recovery = 102.55%							
Se 196.026†	1673.8	2602.6 µg/L	184.53	2602.6 ppb	184.53	7.09%	
QC value within limits for Se 196.026 Recovery = 104.11%							
SiO2†	48635.3	10499 µg/L	380.6	10499 ppb	380.6	3.63%	
QC value within limits for SiO2 Recovery = 98.17%							
Si 251.611†	58655.1	4890.1 µg/L	175.86	4890.1 ppb	175.86	3.60%	
QC value within limits for Si 251.611 Recovery = 97.80%							
Sn 189.927†	1157.7	545.56 µg/L	55.366	545.56 ppb	55.366	10.15%	
QC value within limits for Sn 189.927 Recovery = 109.11%							
Sr 421.552†	54218.1	534.68 µg/L	4.424	534.68 ppb	4.424	0.83%	
QC value within limits for Sr 421.552 Recovery = 106.94%							
Ti 334.940†	213462.3	506.82 µg/L	14.134	506.82 ppb	14.134	2.79%	
QC value within limits for Ti 334.940 Recovery = 101.36%							
Tl 190.801†	370.1	538.40 µg/L	27.232	538.40 ppb	27.232	5.06%	
QC value within limits for Tl 190.801 Recovery = 107.68%							
U 409.014†	5825.1	487.06 µg/L	29.809	487.06 ppb	29.809	6.12%	
QC value within limits for U 409.014 Recovery = 97.41%							
V 292.402†	49209.9	525.47 µg/L	26.642	525.47 ppb	26.642	5.07%	
QC value within limits for V 292.402 Recovery = 105.09%							
Zn 213.857†	20515.7	524.22 µg/L	23.150	524.22 ppb	23.150	4.42%	
QC value within limits for Zn 213.857 Recovery = 104.84%							
All analyte(s) passed QC.							

Sequence No.: 7

Sample ID: ICB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 10

Date Collected: 2/22/2010 17:56:05

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	54206.5	54206.5	99.4 %		17:56:38
1	Al 396.153Radial†	-11.4	-0.6	-0.4854 µg/L	-0.4854 ppb	17:56:38
1	Ca 317.933Radial†	183.0	9.8	9.4179 µg/L	9.4179 ppb	17:56:58
1	Fe 238.204 Radial†	13.5	-2.2	-20.612 µg/L	-20.612 ppb	17:56:58
1	K 766.490 Radial†	213.7	45.4	31.323 µg/L	31.323 ppb	17:56:38
1	Mg 279.077 IEC†	11.6	1.4	13.540 µg/L	13.540 ppb	17:56:58
1	Na 589.592 Radial†	439.1	52.4	16.425 µg/L	16.425 ppb	17:56:38
1	Sr 421.552†	41.2	-17.9	-0.1762 µg/L	-0.1762 ppb	17:56:38
1	Sc 361.383	1873484.9	1873484.9	98.339 %		17:58:00
1	Y 371.029	1287692.7	1287692.7	98.325 %		17:58:00
1	Ag 328.068†	-508.6	59.6	0.4688 µg/L	0.4688 ppb	17:58:06
1	As 188.979†	-0.2	0.1	0.2750 µg/L	0.2750 ppb	17:58:26
1	B 249.677†	337.8	86.9	3.8684 µg/L	3.8684 ppb	17:58:26
1	Ba 233.527†	-7.6	20.9	0.5575 µg/L	0.5575 ppb	17:58:26
1	Be 313.107†	-3489.8	256.9	0.1662 µg/L	0.1662 ppb	17:58:06
1	Cd 226.502†	-135.6	-11.8	-0.3310 µg/L	-0.3310 ppb	17:58:26
1	Co 228.616†	-11.7	2.8	0.1429 µg/L	0.1429 ppb	17:58:26
1	Cr 267.716†	-19.9	12.1	0.2687 µg/L	0.2687 ppb	17:58:26
1	Cu 324.752†	3242.8	56.7	0.3873 µg/L	0.3873 ppb	17:58:06
1	Mn 257.610†	-166.7	59.3	0.2054 µg/L	0.2054 ppb	17:58:26
1	Mo 202.031†	2.3	8.6	0.9330 µg/L	0.9330 ppb	17:58:26
1	Ni 231.604†	283.6	8.1	0.4498 µg/L	0.4498 ppb	17:58:26
1	P 214.914†	21.0	-3.5	-7.7013 µg/L	-7.7013 ppb	17:58:26
1	Pb 220.353†	80.1	-10.5	-2.8434 µg/L	-2.8434 ppb	17:58:26
1	S 181.975 Axial†	11.5	-0.3	-1.5542 µg/L	-1.5542 ppb	17:58:26
1	Sb 206.836†	28.3	9.1	9.0876 µg/L	9.0876 ppb	17:58:26
1	Se 196.026†	10.7	-1.5	-2.3983 µg/L	-2.3983 ppb	17:58:26
1	SiO2†	1521.1	-7.2	-1.5592 µg/L	-1.5592 ppb	17:58:06
1	Si 251.611†	292.5	45.0	3.7514 µg/L	3.7514 ppb	17:58:26
1	Sn 189.927†	1.6	3.9	1.8499 µg/L	1.8499 ppb	17:58:26
1	Ti 334.940†	112.7	42.6	0.1002 µg/L	0.1002 ppb	17:58:06
1	Tl 190.801†	-24.3	-3.0	-4.3033 µg/L	-4.3033 ppb	17:58:26
1	U 409.014†	179.3	4.0	0.3346 µg/L	0.3346 ppb	17:58:06
1	V 292.402†	-31.8	2.3	0.0298 µg/L	0.0298 ppb	17:58:06
1	Zn 213.857†	469.2	38.7	0.9944 µg/L	0.9944 ppb	17:58:26
2	Sc RADIAL	54024.3	54024.3	99.1 %		17:57:04
2	Al 396.153Radial†	-14.0	-3.3	-2.4790 µg/L	-2.4790 ppb	17:57:04
2	Ca 317.933Radial†	179.9	7.3	6.9613 µg/L	6.9613 ppb	17:57:24
2	Fe 238.204 Radial†	17.7	2.0	18.856 µg/L	18.856 ppb	17:57:24
2	K 766.490 Radial†	187.0	19.2	13.267 µg/L	13.267 ppb	17:57:04
2	Mg 279.077 IEC†	9.4	-0.8	-7.8567 µg/L	-7.8567 ppb	17:57:24
2	Na 589.592 Radial†	445.0	59.9	18.772 µg/L	18.772 ppb	17:57:04
2	Sr 421.552†	21.8	-37.3	-0.3676 µg/L	-0.3676 ppb	17:57:04
2	Sc 361.383	1868624.9	1868624.9	98.084 %		17:58:32
2	Y 371.029	1284648.0	1284648.0	98.093 %		17:58:32
2	Ag 328.068†	-492.0	75.2	0.5944 µg/L	0.5944 ppb	17:58:38
2	As 188.979†	1.1	1.5	2.8992 µg/L	2.8992 ppb	17:58:58
2	B 249.677†	347.5	97.7	4.3270 µg/L	4.3270 ppb	17:58:58
2	Ba 233.527†	-14.1	14.2	0.3806 µg/L	0.3806 ppb	17:58:58
2	Be 313.107†	-3405.8	333.3	0.2155 µg/L	0.2155 ppb	17:58:38
2	Cd 226.502†	-124.7	-1.0	-0.0301 µg/L	-0.0301 ppb	17:58:58
2	Co 228.616†	-2.4	12.2	0.6140 µg/L	0.6140 ppb	17:58:58
2	Cr 267.716†	-28.1	3.7	0.0811 µg/L	0.0811 ppb	17:58:58
2	Cu 324.752†	3309.8	133.7	0.9218 µg/L	0.9218 ppb	17:58:38
2	Mn 257.610†	-140.9	85.2	0.3025 µg/L	0.3025 ppb	17:58:58
2	Mo 202.031†	2.5	8.8	0.9573 µg/L	0.9573 ppb	17:58:58
2	Ni 231.604†	281.6	6.8	0.3782 µg/L	0.3782 ppb	17:58:58
2	P 214.914†	19.0	-5.5	-12.056 µg/L	-12.056 ppb	17:58:58
2	Pb 220.353†	95.1	5.1	1.3664 µg/L	1.3664 ppb	17:58:58

2	S 181.975 Axial†	13.2	1.4	6.5292 µg/L	6.5292 ppb	17:58:58
2	Sb 206.836†	20.1	0.7	0.7275 µg/L	0.7275 ppb	17:58:58
2	Se 196.026†	13.3	1.2	1.9130 µg/L	1.9130 ppb	17:58:58
2	SiO2†	1546.0	22.2	4.7859 µg/L	4.7859 ppb	17:58:38
2	Si 251.611†	298.0	51.3	4.2786 µg/L	4.2786 ppb	17:58:58
2	Sn 189.927†	2.5	4.9	2.2961 µg/L	2.2961 ppb	17:58:58
2	Ti 334.940†	254.0	187.0	0.4449 µg/L	0.4449 ppb	17:58:38
2	Tl 190.801†	-23.0	-1.7	-2.4702 µg/L	-2.4702 ppb	17:58:58
2	U 409.014†	216.4	42.2	3.5365 µg/L	3.5365 ppb	17:58:38
2	V 292.402†	-36.4	-2.4	-0.0119 µg/L	-0.0119 ppb	17:58:38
2	Zn 213.857†	465.4	36.0	0.9240 µg/L	0.9240 ppb	17:58:58
3	Sc RADIAL	54132.2	54132.2	99.3 %		17:57:30
3	Al 396.153Radial†	-26.3	-15.7	-11.616 µg/L	-11.616 ppb	17:57:30
3	Ca 317.933Radial†	175.5	2.5	2.4115 µg/L	2.4115 ppb	17:57:50
3	Fe 238.204 Radial†	17.1	1.4	13.282 µg/L	13.282 ppb	17:57:50
3	K 766.490 Radial†	173.0	4.7	3.2748 µg/L	3.2748 ppb	17:57:30
3	Mg 279.077 IEC†	10.6	0.5	4.5478 µg/L	4.5478 ppb	17:57:50
3	Na 589.592 Radial†	418.1	31.9	10.004 µg/L	10.004 ppb	17:57:30
3	Sr 421.552†	23.3	-35.8	-0.3530 µg/L	-0.3530 ppb	17:57:30
3	Sc 361.383	1878426.2	1878426.2	98.599 %		17:59:04
3	Y 371.029	1293742.7	1293742.7	98.787 %		17:59:04
3	Ag 328.068†	-472.6	97.4	0.7718 µg/L	0.7718 ppb	17:59:10
3	As 188.979†	2.0	2.3	4.6066 µg/L	4.6066 ppb	17:59:30
3	B 249.677†	340.1	88.3	3.9140 µg/L	3.9140 ppb	17:59:30
3	Ba 233.527†	-9.6	18.9	0.5057 µg/L	0.5057 ppb	17:59:30
3	Be 313.107†	-3283.3	475.7	0.3077 µg/L	0.3077 ppb	17:59:10
3	Cd 226.502†	-117.8	6.7	0.1885 µg/L	0.1885 ppb	17:59:30
3	Co 228.616†	2.8	17.5	0.8812 µg/L	0.8812 ppb	17:59:30
3	Cr 267.716†	-7.5	24.7	0.5489 µg/L	0.5489 ppb	17:59:30
3	Cu 324.752†	3281.1	87.0	0.5997 µg/L	0.5997 ppb	17:59:10
3	Mn 257.610†	-105.4	121.8	0.4302 µg/L	0.4302 ppb	17:59:30
3	Mo 202.031†	4.8	11.1	1.2038 µg/L	1.2038 ppb	17:59:30
3	Ni 231.604†	297.6	21.6	1.1970 µg/L	1.1970 ppb	17:59:30
3	P 214.914†	21.9	-2.6	-5.7979 µg/L	-5.7979 ppb	17:59:30
3	Pb 220.353†	87.1	-3.7	-0.9867 µg/L	-0.9867 ppb	17:59:30
3	S 181.975 Axial†	14.6	2.8	12.851 µg/L	12.851 ppb	17:59:30
3	Sb 206.836†	24.9	5.5	5.4852 µg/L	5.4852 ppb	17:59:30
3	Se 196.026†	17.7	5.6	8.6923 µg/L	8.6923 ppb	17:59:30
3	SiO2†	1534.4	2.2	0.4840 µg/L	0.4840 ppb	17:59:10
3	Si 251.611†	330.1	82.4	6.8667 µg/L	6.8667 ppb	17:59:30
3	Sn 189.927†	-0.5	1.8	0.8676 µg/L	0.8676 ppb	17:59:30
3	Ti 334.940†	322.1	254.6	0.6047 µg/L	0.6047 ppb	17:59:10
3	Tl 190.801†	-23.0	-1.6	-2.3460 µg/L	-2.3460 ppb	17:59:30
3	U 409.014†	153.2	-23.0	-1.9277 µg/L	-1.9277 ppb	17:59:10
3	V 292.402†	0.1	34.8	0.3770 µg/L	0.3770 ppb	17:59:10
3	Zn 213.857†	464.2	32.4	0.8255 µg/L	0.8255 ppb	17:59:30

-----  
Mean Data: ICB

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1873512.0	98.341 %	0.2572			0.26%
Sc RADIAL	54121.0	99.2 %	0.17			0.17%
Y 371.029	1288694.5	98.402 %	0.3535			0.36%
Ag 328.068†	77.4	0.6117 µg/L	0.15225	0.6117 ppb	0.15225	24.89%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-6.6	-4.8602 µg/L	5.93516	-4.8602 ppb	5.93516	122.12%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	1.3	2.5936 µg/L	2.18190	2.5936 ppb	2.18190	84.13%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	90.9	4.0365 µg/L	0.25265	4.0365 ppb	0.25265	6.26%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	18.0	0.4813 µg/L	0.09093	0.4813 ppb	0.09093	18.89%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	355.3	0.2298 µg/L	0.07178	0.2298 ppb	0.07178	31.23%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	6.5	6.2636 µg/L	3.55491	6.2636 ppb	3.55491	56.76%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	-2.0	-0.0576 µg/L	0.26084	-0.0576 ppb	0.26084	453.21%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	10.8	0.5460 µg/L	0.37382	0.5460 ppb	0.37382	68.46%

	QC value within limits for Co 228.616	Recovery = Not calculated		
Cr 267.716†	13.5	0.2996 µg/L	0.23543	0.2996 ppb 0.23543 78.58%
	QC value within limits for Cr 267.716	Recovery = Not calculated		
Cu 324.752†	92.5	0.6362 µg/L	0.26910	0.6362 ppb 0.26910 42.29%
	QC value within limits for Cu 324.752	Recovery = Not calculated		
Fe 238.204 Radial†	0.4	3.8422 µg/L	21.36012	3.8422 ppb 21.36012 555.94%
	QC value within limits for Fe 238.204 Radial	Recovery = Not calculated		
K 766.490 Radial†	23.1	15.955 µg/L	14.2162	15.955 ppb 14.2162 89.10%
	QC value within limits for K 766.490 Radial	Recovery = Not calculated		
Mg 279.077 IEC†	0.3	3.4104 µg/L	10.74362	3.4104 ppb 10.74362 315.03%
	QC value within limits for Mg 279.077 IEC	Recovery = Not calculated		
Mn 257.610†	88.8	0.3127 µg/L	0.11275	0.3127 ppb 0.11275 36.06%
	QC value within limits for Mn 257.610	Recovery = Not calculated		
Mo 202.031†	9.5	1.0313 µg/L	0.14981	1.0313 ppb 0.14981 14.53%
	QC value within limits for Mo 202.031	Recovery = Not calculated		
Na 589.592 Radial†	48.1	15.067 µg/L	4.5390	15.067 ppb 4.5390 30.12%
	QC value within limits for Na 589.592 Radial	Recovery = Not calculated		
Ni 231.604†	12.2	0.6750 µg/L	0.45351	0.6750 ppb 0.45351 67.19%
	QC value within limits for Ni 231.604	Recovery = Not calculated		
P 214.914†	-3.9	-8.5184 µg/L	3.20809	-8.5184 ppb 3.20809 37.66%
	QC value within limits for P 214.914	Recovery = Not calculated		
Pb 220.353†	-3.0	-0.8213 µg/L	2.10982	-0.8213 ppb 2.10982 256.90%
	QC value within limits for Pb 220.353	Recovery = Not calculated		
S 181.975 Axial†	1.3	5.9421 µg/L	7.22065	5.9421 ppb 7.22065 121.52%
	QC value within limits for S 181.975 Axial	Recovery = Not calculated		
Sb 206.836†	5.1	5.1001 µg/L	4.19330	5.1001 ppb 4.19330 82.22%
	QC value within limits for Sb 206.836	Recovery = Not calculated		
Se 196.026†	1.8	2.7356 µg/L	5.59088	2.7356 ppb 5.59088 204.37%
	QC value within limits for Se 196.026	Recovery = Not calculated		
SiO2†	5.7	1.2369 µg/L	3.23888	1.2369 ppb 3.23888 261.85%
	QC value within limits for SiO2	Recovery = Not calculated		
Si 251.611†	59.6	4.9656 µg/L	1.66736	4.9656 ppb 1.66736 33.58%
	QC value within limits for Si 251.611	Recovery = Not calculated		
Sn 189.927†	3.5	1.6712 µg/L	0.73083	1.6712 ppb 0.73083 43.73%
	QC value within limits for Sn 189.927	Recovery = Not calculated		
Sr 421.552†	-30.3	-0.2989 µg/L	0.10655	-0.2989 ppb 0.10655 35.64%
	QC value within limits for Sr 421.552	Recovery = Not calculated		
Ti 334.940†	161.4	0.3833 µg/L	0.25782	0.3833 ppb 0.25782 67.27%
	QC value within limits for Ti 334.940	Recovery = Not calculated		
Tl 190.801†	-2.1	-3.0398 µg/L	1.09597	-3.0398 ppb 1.09597 36.05%
	QC value within limits for Tl 190.801	Recovery = Not calculated		
U 409.014†	7.7	0.6478 µg/L	2.74553	0.6478 ppb 2.74553 423.80%
	QC value within limits for U 409.014	Recovery = Not calculated		
V 292.402†	11.6	0.1316 µg/L	0.21355	0.1316 ppb 0.21355 162.24%
	QC value within limits for V 292.402	Recovery = Not calculated		
Zn 213.857†	35.7	0.9146 µg/L	0.08486	0.9146 ppb 0.08486 9.28%
	QC value within limits for Zn 213.857	Recovery = Not calculated		

All analyte(s) passed QC.

Sequence No.: 8

Sample ID: PQL

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 101

Date Collected: 2/22/2010 17:59:40

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	53359.8	53359.8	97.8 %		18:00:13
1	Al 396.153Radial†	253.7	270.1	199.12 µg/L	199.12 ppb	18:00:13
1	Ca 317.933Radial†	390.7	225.0	215.67 µg/L	215.67 ppb	18:00:33
1	Fe 238.204 Radial†	26.2	11.0	101.54 µg/L	101.54 ppb	18:00:33
1	K 766.490 Radial†	426.9	266.8	184.00 µg/L	184.00 ppb	18:00:13
1	Mg 279.077 IEC†	45.3	36.0	350.23 µg/L	350.23 ppb	18:00:33
1	Na 589.592 Radial†	1463.5	1106.4	346.62 µg/L	346.62 ppb	18:00:13
1	Sr 421.552†	555.0	508.0	5.0094 µg/L	5.0094 ppb	18:00:13
1	Sc 361.383	1881624.5	1881624.5	98.766 %		18:01:35
1	Y 371.029	1294276.6	1294276.6	98.828 %		18:01:35
1	Ag 328.068†	203.0	782.3	6.2113 µg/L	6.2113 ppb	18:01:40
1	As 188.979†	14.1	14.6	29.016 µg/L	29.016 ppb	18:02:01
1	B 249.677†	1442.1	1203.4	53.386 µg/L	53.386 ppb	18:01:40
1	Ba 233.527†	172.6	203.4	5.4456 µg/L	5.4456 ppb	18:02:01
1	Be 313.107†	4346.3	8206.2	5.3092 µg/L	5.3092 ppb	18:01:40
1	Cd 226.502†	53.5	180.3	5.0988 µg/L	5.0988 ppb	18:02:01
1	Co 228.616†	92.4	108.2	5.4476 µg/L	5.4476 ppb	18:02:01
1	Cr 267.716†	215.1	250.2	5.5519 µg/L	5.5519 ppb	18:02:01
1	Cu 324.752†	4789.0	1608.0	11.070 µg/L	11.070 ppb	18:01:40
1	Mn 257.610†	2819.6	3083.7	10.847 µg/L	10.847 ppb	18:01:40
1	Mo 202.031†	91.4	98.8	10.689 µg/L	10.689 ppb	18:02:01
1	Ni 231.604†	375.6	100.1	5.5417 µg/L	5.5417 ppb	18:02:01
1	P 214.914†	96.4	72.7	158.45 µg/L	158.45 ppb	18:02:01
1	Pb 220.353†	118.6	28.1	7.5663 µg/L	7.5663 ppb	18:02:01
1	S 181.975 Axial†	37.2	25.7	117.16 µg/L	117.16 ppb	18:02:01
1	Sb 206.836†	28.7	9.3	9.3952 µg/L	9.3952 ppb	18:02:01
1	Se 196.026†	38.3	26.4	40.813 µg/L	40.813 ppb	18:02:01
1	SiO2†	2543.9	1021.7	220.56 µg/L	220.56 ppb	18:01:40
1	Si 251.611†	1481.0	1247.0	103.96 µg/L	103.96 ppb	18:02:01
1	Sn 189.927†	22.7	25.3	11.946 µg/L	11.946 ppb	18:02:01
1	Ti 334.940†	2294.0	2250.6	5.3230 µg/L	5.3230 ppb	18:01:40
1	Tl 190.801†	-6.9	14.7	21.248 µg/L	21.248 ppb	18:02:01
1	U 409.014†	947.6	781.1	65.420 µg/L	65.420 ppb	18:01:40
1	V 292.402†	432.1	472.1	5.1546 µg/L	5.1546 ppb	18:01:40
1	Zn 213.857†	844.9	417.0	10.663 µg/L	10.663 ppb	18:02:01
2	Sc RADIAL	53829.3	53829.3	98.7 %		18:00:39
2	Al 396.153Radial†	273.0	287.3	211.87 µg/L	211.87 ppb	18:00:39
2	Ca 317.933Radial†	390.7	221.5	212.27 µg/L	212.27 ppb	18:00:59
2	Fe 238.204 Radial†	28.4	13.0	120.15 µg/L	120.15 ppb	18:00:59
2	K 766.490 Radial†	436.9	273.1	188.31 µg/L	188.31 ppb	18:00:39
2	Mg 279.077 IEC†	42.5	32.8	319.49 µg/L	319.49 ppb	18:00:59
2	Na 589.592 Radial†	1422.3	1051.6	329.44 µg/L	329.44 ppb	18:00:39
2	Sr 421.552†	549.9	497.8	4.9093 µg/L	4.9093 ppb	18:00:39
2	Sc 361.383	1854884.1	1854884.1	97.363 %		18:02:07
2	Y 371.029	1276405.7	1276405.7	97.464 %		18:02:07
2	Ag 328.068†	106.2	685.8	5.4496 µg/L	5.4496 ppb	18:02:13
2	As 188.979†	16.7	17.5	34.796 µg/L	34.796 ppb	18:02:33
2	B 249.677†	1436.7	1218.9	54.065 µg/L	54.065 ppb	18:02:13
2	Ba 233.527†	181.6	215.1	5.7583 µg/L	5.7583 ppb	18:02:33
2	Be 313.107†	4245.3	8165.9	5.2832 µg/L	5.2832 ppb	18:02:13
2	Cd 226.502†	64.1	192.0	5.4280 µg/L	5.4280 ppb	18:02:33
2	Co 228.616†	93.6	110.9	5.5808 µg/L	5.5808 ppb	18:02:33
2	Cr 267.716†	210.2	248.3	5.5099 µg/L	5.5099 ppb	18:02:33
2	Cu 324.752†	4791.7	1680.7	11.573 µg/L	11.573 ppb	18:02:13
2	Mn 257.610†	2807.1	3112.0	10.950 µg/L	10.950 ppb	18:02:13
2	Mo 202.031†	90.6	99.4	10.751 µg/L	10.751 ppb	18:02:33
2	Ni 231.604†	372.4	102.3	5.6633 µg/L	5.6633 ppb	18:02:33
2	P 214.914†	96.3	74.0	161.23 µg/L	161.23 ppb	18:02:33
2	Pb 220.353†	119.2	30.5	8.2122 µg/L	8.2122 ppb	18:02:33

2	S 181.975 Axial†	35.0	24.0	109.19 µg/L	109.19 ppb	18:02:33
2	Sb 206.836†	31.7	12.8	12.954 µg/L	12.954 ppb	18:02:33
2	Se 196.026†	37.3	26.0	40.287 µg/L	40.287 ppb	18:02:33
2	SiO2†	2495.8	1009.4	217.89 µg/L	217.89 ppb	18:02:13
2	Si 251.611†	1466.1	1253.4	104.49 µg/L	104.49 ppb	18:02:33
2	Sn 189.927†	25.1	28.1	13.247 µg/L	13.247 ppb	18:02:33
2	Ti 334.940†	2157.3	2143.7	5.0714 µg/L	5.0714 ppb	18:02:13
2	Tl 190.801†	-1.1	20.5	29.687 µg/L	29.687 ppb	18:02:33
2	U 409.014†	923.7	770.4	64.525 µg/L	64.525 ppb	18:02:13
2	V 292.402†	407.4	453.1	4.9554 µg/L	4.9554 ppb	18:02:13
2	Zn 213.857†	850.0	434.6	11.116 µg/L	11.116 ppb	18:02:33
3	Sc RADIAL	53643.8	53643.8	98.4 %		18:01:04
3	Al 396.153Radial†	279.8	295.3	217.76 µg/L	217.76 ppb	18:01:04
3	Ca 317.933Radial†	389.7	221.9	212.65 µg/L	212.65 ppb	18:01:25
3	Fe 238.204 Radial†	27.2	11.9	109.81 µg/L	109.81 ppb	18:01:25
3	K 766.490 Radial†	394.5	231.5	159.63 µg/L	159.63 ppb	18:01:04
3	Mg 279.077 IEC†	42.2	32.6	317.29 µg/L	317.29 ppb	18:01:25
3	Na 589.592 Radial†	1364.1	997.5	312.48 µg/L	312.48 ppb	18:01:04
3	Sr 421.552†	567.4	517.5	5.1037 µg/L	5.1037 ppb	18:01:04
3	Sc 361.383	1861503.1	1861503.1	97.710 %		18:02:39
3	Y 371.029	1281751.4	1281751.4	97.872 %		18:02:39
3	Ag 328.068†	135.7	715.7	5.6811 µg/L	5.6811 ppb	18:02:45
3	As 188.979†	7.8	8.3	16.463 µg/L	16.463 ppb	18:03:05
3	B 249.677†	1376.5	1152.1	51.101 µg/L	51.101 ppb	18:02:45
3	Ba 233.527†	156.5	188.8	5.0535 µg/L	5.0535 ppb	18:03:05
3	Be 313.107†	3898.2	7795.2	5.0433 µg/L	5.0433 ppb	18:02:45
3	Cd 226.502†	41.9	169.1	4.7790 µg/L	4.7790 ppb	18:03:05
3	Co 228.616†	85.8	102.5	5.1597 µg/L	5.1597 ppb	18:03:05
3	Cr 267.716†	173.3	209.7	4.6533 µg/L	4.6533 ppb	18:03:05
3	Cu 324.752†	4628.5	1496.2	10.302 µg/L	10.302 ppb	18:02:45
3	Mn 257.610†	2639.5	2930.1	10.309 µg/L	10.309 ppb	18:02:45
3	Mo 202.031†	75.7	83.8	9.0637 µg/L	9.0637 ppb	18:03:05
3	Ni 231.604†	370.5	98.9	5.4782 µg/L	5.4782 ppb	18:03:05
3	P 214.914†	79.5	56.5	122.93 µg/L	122.93 ppb	18:03:05
3	Pb 220.353†	121.3	32.2	8.6691 µg/L	8.6691 ppb	18:03:05
3	S 181.975 Axial†	32.6	21.4	97.393 µg/L	97.393 ppb	18:03:05
3	Sb 206.836†	27.0	7.9	7.9805 µg/L	7.9805 ppb	18:03:05
3	Se 196.026†	34.9	23.4	36.244 µg/L	36.244 ppb	18:03:05
3	SiO2†	2493.3	997.7	215.38 µg/L	215.38 ppb	18:02:45
3	Si 251.611†	1329.6	1108.3	92.397 µg/L	92.397 ppb	18:03:05
3	Sn 189.927†	20.0	22.8	10.778 µg/L	10.778 ppb	18:03:05
3	Ti 334.940†	2158.6	2137.1	5.0559 µg/L	5.0559 ppb	18:02:45
3	Tl 190.801†	-10.2	11.3	16.375 µg/L	16.375 ppb	18:03:05
3	U 409.014†	877.4	719.6	60.270 µg/L	60.270 ppb	18:02:45
3	V 292.402†	361.4	404.5	4.4228 µg/L	4.4228 ppb	18:02:45
3	Zn 213.857†	802.2	382.5	9.7789 µg/L	9.7789 ppb	18:03:05

## Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1866003.9	97.946 %	0.7310			0.75%
Sc RADIAL	53611.0	98.3 %	0.43			0.44%
Y 371.029	1284144.6	98.054 %	0.7004			0.71%
Ag 328.068†	727.9	5.7807 µg/L	0.39050	5.7807 ppb	0.39050	6.76%
QC value within limits for Ag 328.068 Recovery = 115.61%						
Al 396.153Radial†	284.2	209.58 µg/L	9.528	209.58 ppb	9.528	4.55%
QC value within limits for Al 396.153Radial Recovery = 104.79%						
As 188.979†	13.4	26.758 µg/L	9.3728	26.758 ppb	9.3728	35.03%
QC value within limits for As 188.979 Recovery = 89.19%						
B 249.677†	1191.5	52.851 µg/L	1.5527	52.851 ppb	1.5527	2.94%
QC value within limits for B 249.677 Recovery = 105.70%						
Ba 233.527†	202.4	5.4191 µg/L	0.35316	5.4191 ppb	0.35316	6.52%
QC value within limits for Ba 233.527 Recovery = 108.38%						
Be 313.107†	8055.8	5.2119 µg/L	0.14659	5.2119 ppb	0.14659	2.81%
QC value within limits for Be 313.107 Recovery = 104.24%						
Ca 317.933Radial†	222.8	213.53 µg/L	1.862	213.53 ppb	1.862	0.87%
QC value within limits for Ca 317.933Radial Recovery = 106.77%						
Cd 226.502†	180.5	5.1020 µg/L	0.32451	5.1020 ppb	0.32451	6.36%
QC value within limits for Cd 226.502 Recovery = 102.04%						
Co 228.616†	107.2	5.3961 µg/L	0.21523	5.3961 ppb	0.21523	3.99%

QC value within limits for Co 228.616 Recovery = 107.92%							
Cr 267.716†	236.0	5.2383 µg/L	0.50714	5.2383 ppb	0.50714	9.68%	
QC value within limits for Cr 267.716 Recovery = 104.77%							
Cu 324.752†	1595.0	10.981 µg/L	0.6398	10.981 ppb	0.6398	5.83%	
QC value within limits for Cu 324.752 Recovery = 109.81%							
Fe 238.204 Radial†	12.0	110.50 µg/L	9.321	110.50 ppb	9.321	8.44%	
QC value within limits for Fe 238.204 Radial Recovery = 110.50%							
K 766.490 Radial†	257.1	177.31 µg/L	15.465	177.31 ppb	15.465	8.72%	
QC value within limits for K 766.490 Radial Recovery = 118.21%							
Mg 279.077 IEC†	33.8	329.00 µg/L	18.414	329.00 ppb	18.414	5.60%	
QC value within limits for Mg 279.077 IEC Recovery = 109.67%							
Mn 257.610†	3041.9	10.702 µg/L	0.3441	10.702 ppb	0.3441	3.22%	
QC value within limits for Mn 257.610 Recovery = 107.02%							
Mo 202.031†	94.0	10.168 µg/L	0.9567	10.168 ppb	0.9567	9.41%	
QC value within limits for Mo 202.031 Recovery = 101.68%							
Na 589.592 Radial†	1051.8	329.52 µg/L	17.069	329.52 ppb	17.069	5.18%	
QC value within limits for Na 589.592 Radial Recovery = 109.84%							
Ni 231.604†	100.4	5.5611 µg/L	0.09406	5.5611 ppb	0.09406	1.69%	
QC value within limits for Ni 231.604 Recovery = 111.22%							
P 214.914†	67.7	147.54 µg/L	21.355	147.54 ppb	21.355	14.47%	
QC value within limits for P 214.914 Recovery = 98.36%							
Pb 220.353†	30.3	8.1492 µg/L	0.55412	8.1492 ppb	0.55412	6.80%	
QC value within limits for Pb 220.353 Recovery = 81.49%							
S 181.975 Axial†	23.7	107.91 µg/L	9.945	107.91 ppb	9.945	9.22%	
QC value within limits for S 181.975 Axial Recovery = 107.91%							
Sb 206.836†	10.0	10.110 µg/L	2.5626	10.110 ppb	2.5626	25.35%	
QC value within limits for Sb 206.836 Recovery = 101.10%							
Se 196.026†	25.3	39.115 µg/L	2.5003	39.115 ppb	2.5003	6.39%	
QC value greater than the upper limit for Se 196.026 Recovery = 130.38%							
SiO2†	1009.6	217.94 µg/L	2.590	217.94 ppb	2.590	1.19%	
QC value within limits for SiO2 Recovery = 102.32%							
Si 251.611†	1202.9	100.28 µg/L	6.836	100.28 ppb	6.836	6.82%	
QC value within limits for Si 251.611 Recovery = 100.28%							
Sn 189.927†	25.4	11.991 µg/L	1.2352	11.991 ppb	1.2352	10.30%	
QC value within limits for Sn 189.927 Recovery = 119.91%							
Sr 421.552†	507.8	5.0075 µg/L	0.09724	5.0075 ppb	0.09724	1.94%	
QC value within limits for Sr 421.552 Recovery = 100.15%							
Ti 334.940†	2177.2	5.1501 µg/L	0.14992	5.1501 ppb	0.14992	2.91%	
QC value within limits for Ti 334.940 Recovery = 103.00%							
Tl 190.801†	15.5	22.437 µg/L	6.7352	22.437 ppb	6.7352	30.02%	
QC value within limits for Tl 190.801 Recovery = 112.18%							
U 409.014†	757.0	63.405 µg/L	2.7517	63.405 ppb	2.7517	4.34%	
QC value within limits for U 409.014 Recovery = 126.81%							
V 292.402†	443.3	4.8443 µg/L	0.37839	4.8443 ppb	0.37839	7.81%	
QC value within limits for V 292.402 Recovery = 96.89%							
Zn 213.857†	411.4	10.519 µg/L	0.6799	10.519 ppb	0.6799	6.46%	
QC value within limits for Zn 213.857 Recovery = 105.19%							
QC Failed. Continue with analysis.							

Sequence No.: 9

Sample ID: ICSA

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 103

Date Collected: 2/22/2010 18:03:14

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: ICSA

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Units	Conc. Units	Sample Units	Analysis Time
1	Sc RADIAL	52471.0	52471.0	96.2	%			18:03:55
1	Al 396.153Radial†	677700.1	704367.7	519930	µg/L	519930	ppb	18:03:50
1	Ca 317.933Radial†	497892.5	517302.5	495760	µg/L	495760	ppb	18:03:50
1	Fe 238.204 Radial†	20100.4	20875.2	192810	µg/L	192810	ppb	18:03:55
1	K 766.490 Radial†	173.2	10.5	7.2584	µg/L	7.2584	ppb	18:03:55
1	Mg 279.077 IEC†	49071.6	50991.6	495900	µg/L	495900	ppb	18:03:55
1	Na 589.592 Radial†	475.1	104.5	32.722	µg/L	32.722	ppb	18:03:55
1	Sr 421.552†	406.3	363.0	3.5797	µg/L	3.5797	ppb	18:03:55
1	Sc 361.383	1746605.9	1746605.9	91.679	%			18:04:28
1	Y 371.029	1194369.4	1194369.4	91.199	%			18:04:28
1	Ag 328.068†	-2762.0	-2435.9	-7.2245	µg/L	-7.2245	ppb	18:04:33
1	As 188.979†	-17.7	-19.0	-52.359	µg/L	-52.359	ppb	18:04:54
1	B 249.677†	785.6	600.3	-73.956	µg/L	-73.956	ppb	18:04:33
1	Ba 233.527†	253.8	305.5	8.1238	µg/L	8.1238	ppb	18:04:54
1	Be 313.107†	-4129.5	-698.6	-0.4632	µg/L	-0.4632	ppb	18:04:33
1	Cd 226.502†	374.7	534.8	-6.6538	µg/L	-6.6538	ppb	18:04:54
1	Co 228.616†	34.6	52.5	2.5700	µg/L	2.5700	ppb	18:04:54
1	Cr 267.716†	-46.7	-18.6	-0.4274	µg/L	-0.4274	ppb	18:04:54
1	Cu 324.752†	1343.3	-1775.6	14.592	µg/L	14.592	ppb	18:04:33
1	Mn 257.610†	96.3	333.8	6.9735	µg/L	6.9735	ppb	18:04:33
1	Mo 202.031†	-106.8	-110.2	-4.5895	µg/L	-4.5895	ppb	18:04:54
1	Ni 231.604†	132.5	-135.7	-5.0183	µg/L	-5.0183	ppb	18:04:54
1	P 214.914†	90.2	73.5	155.29	µg/L	155.29	ppb	18:04:54
1	Pb 220.353†	31.6	-57.4	5.5952	µg/L	5.5952	ppb	18:04:54
1	S 181.975 Axial†	31.1	21.9	99.728	µg/L	99.728	ppb	18:04:54
1	Sb 206.836†	43.0	27.1	-16.133	µg/L	-16.133	ppb	18:04:54
1	Se 196.026†	22.4	12.1	-33.919	µg/L	-33.919	ppb	18:04:54
1	SiO2†	1295.5	-140.9	-30.411	µg/L	-30.411	ppb	18:04:54
1	Si 251.611†	409.7	194.4	16.204	µg/L	16.204	ppb	18:04:54
1	Sn 189.927†	-52.8	-55.3	9.4261	µg/L	9.4261	ppb	18:04:54
1	Ti 334.940†	11266.5	12217.1	-2.2339	µg/L	-2.2339	ppb	18:04:33
1	Tl 190.801†	-26.9	-7.7	9.8665	µg/L	9.8665	ppb	18:04:54
1	U 409.014†	1380.9	1327.9	54.225	µg/L	54.225	ppb	18:04:33
1	V 292.402†	-2065.1	-2217.9	-0.6757	µg/L	-0.6757	ppb	18:04:33
1	Zn 213.857†	1438.9	1131.0	-8.1320	µg/L	-8.1320	ppb	18:04:54
2	Sc RADIAL	52295.9	52295.9	95.9	%			18:04:06
2	Al 396.153Radial†	679784.1	708898.3	523270	µg/L	523270	ppb	18:04:01
2	Ca 317.933Radial†	499382.9	520588.6	498910	µg/L	498910	ppb	18:04:01
2	Fe 238.204 Radial†	20078.3	20922.1	193240	µg/L	193240	ppb	18:04:06
2	K 766.490 Radial†	136.8	-26.9	-18.547	µg/L	-18.547	ppb	18:04:06
2	Mg 279.077 IEC†	49048.3	51137.9	497320	µg/L	497320	ppb	18:04:06
2	Na 589.592 Radial†	471.5	102.4	32.090	µg/L	32.090	ppb	18:04:06
2	Sr 421.552†	390.6	348.0	3.4320	µg/L	3.4320	ppb	18:04:06
2	Sc 361.383	1743247.5	1743247.5	91.503	%			18:05:00
2	Y 371.029	1191501.4	1191501.4	90.980	%			18:05:00
2	Ag 328.068†	-2784.5	-2466.3	-7.4339	µg/L	-7.4339	ppb	18:05:06
2	As 188.979†	-18.0	-19.4	-53.344	µg/L	-53.344	ppb	18:05:26
2	B 249.677†	782.7	598.7	-74.252	µg/L	-74.252	ppb	18:05:06
2	Ba 233.527†	271.1	324.8	8.6422	µg/L	8.6422	ppb	18:05:26
2	Be 313.107†	-4216.4	-802.2	-0.5302	µg/L	-0.5302	ppb	18:05:06
2	Cd 226.502†	400.9	564.2	-5.8697	µg/L	-5.8697	ppb	18:05:26
2	Co 228.616†	42.1	60.6	2.9820	µg/L	2.9820	ppb	18:05:26
2	Cr 267.716†	-48.6	-20.8	-0.4762	µg/L	-0.4762	ppb	18:05:26
2	Cu 324.752†	1248.1	-1876.8	13.956	µg/L	13.956	ppb	18:05:06
2	Mn 257.610†	75.7	311.6	6.8960	µg/L	6.8960	ppb	18:05:06
2	Mo 202.031†	-109.2	-113.1	-4.8833	µg/L	-4.8833	ppb	18:05:26
2	Ni 231.604†	131.9	-136.1	-5.0363	µg/L	-5.0363	ppb	18:05:26
2	P 214.914†	94.6	78.5	166.69	µg/L	166.69	ppb	18:05:26
2	Pb 220.353†	56.2	-30.5	13.023	µg/L	13.023	ppb	18:05:26



2	S 181.975 Axial†	34.5	25.7	117.26 µg/L	117.26 ppb	18:05:26
2	Sb 206.836†	54.6	39.9	-3.6586 µg/L	-3.6586 ppb	18:05:26
2	Se 196.026†	18.5	7.9	-41.383 µg/L	-41.383 ppb	18:05:26
2	SiO2†	1279.9	-155.3	-33.521 µg/L	-33.521 ppb	18:05:26
2	Si 251.611†	432.5	220.2	18.357 µg/L	18.357 ppb	18:05:26
2	Sn 189.927†	-72.8	-77.2	-0.7905 µg/L	-0.7905 ppb	18:05:26
2	Ti 334.940†	11184.3	12150.9	-2.4531 µg/L	-2.4531 ppb	18:05:06
2	Tl 190.801†	-31.0	-12.2	3.3911 µg/L	3.3911 ppb	18:05:26
2	U 409.014†	1563.3	1530.2	70.919 µg/L	70.919 ppb	18:05:06
2	V 292.402†	-2018.0	-2170.7	-0.1118 µg/L	-0.1118 ppb	18:05:06
2	Zn 213.857†	1431.4	1125.9	-8.3633 µg/L	-8.3633 ppb	18:05:26
3	Sc RADIAL	52335.3	52335.3	96.0 %		18:04:17
3	Al 396.153Radial†	677985.9	706491.2	521500 µg/L	521500 ppb	18:04:12
3	Ca 317.933Radial†	497235.0	517958.5	496390 µg/L	496390 ppb	18:04:12
3	Fe 238.204 Radial†	20154.4	20985.6	193830 µg/L	193830 ppb	18:04:17
3	K 766.490 Radial†	166.6	4.1	2.8040 µg/L	2.8040 ppb	18:04:17
3	Mg 279.077 IEC†	49185.7	51242.6	498340 µg/L	498340 ppb	18:04:17
3	Na 589.592 Radial†	507.2	139.2	43.620 µg/L	43.620 ppb	18:04:17
3	Sr 421.552†	388.9	345.9	3.4114 µg/L	3.4114 ppb	18:04:17
3	Sc 361.383	1765167.7	1765167.7	92.654 %		18:05:32
3	Y 371.029	1205740.6	1205740.6	92.068 %		18:05:32
3	Ag 328.068†	-2880.6	-2532.2	-7.9111 µg/L	-7.9111 ppb	18:05:38
3	As 188.979†	-13.0	-13.7	-41.821 µg/L	-41.821 ppb	18:05:59
3	B 249.677†	819.2	627.5	-73.280 µg/L	-73.280 ppb	18:05:38
3	Ba 233.527†	281.1	331.9	8.8335 µg/L	8.8335 ppb	18:05:59
3	Be 313.107†	-4185.9	-712.1	-0.4718 µg/L	-0.4718 ppb	18:05:38
3	Cd 226.502†	385.3	542.0	-6.5656 µg/L	-6.5656 ppb	18:05:59
3	Co 228.616†	41.8	59.8	2.9401 µg/L	2.9401 ppb	18:05:59
3	Cr 267.716†	-51.1	-22.8	-0.5190 µg/L	-0.5190 ppb	18:05:59
3	Cu 324.752†	1207.1	-1938.0	13.617 µg/L	13.617 ppb	18:05:38
3	Mn 257.610†	75.0	309.7	6.9270 µg/L	6.9270 ppb	18:05:38
3	Mo 202.031†	-102.9	-104.8	-3.9628 µg/L	-3.9628 ppb	18:05:59
3	Ni 231.604†	122.0	-148.5	-5.7156 µg/L	-5.7156 ppb	18:05:59
3	P 214.914†	106.4	90.0	191.10 µg/L	191.10 ppb	18:05:59
3	Pb 220.353†	45.2	-43.1	9.4960 µg/L	9.4960 ppb	18:05:59
3	S 181.975 Axial†	26.1	16.1	73.525 µg/L	73.525 ppb	18:05:59
3	Sb 206.836†	57.6	42.4	-0.8916 µg/L	-0.8916 ppb	18:05:59
3	Se 196.026†	29.1	19.0	-22.701 µg/L	-22.701 ppb	18:05:59
3	SiO2†	1276.3	-176.5	-38.109 µg/L	-38.109 ppb	18:05:59
3	Si 251.611†	441.4	224.0	18.672 µg/L	18.672 ppb	18:05:59
3	Sn 189.927†	-63.0	-65.7	4.6941 µg/L	4.6941 ppb	18:05:59
3	Ti 334.940†	11262.4	12083.4	-2.7345 µg/L	-2.7345 ppb	18:05:38
3	Tl 190.801†	-25.3	-5.6	13.080 µg/L	13.080 ppb	18:05:59
3	U 409.014†	1620.4	1570.5	74.375 µg/L	74.375 ppb	18:05:38
3	V 292.402†	-1968.3	-2089.7	0.8216 µg/L	0.8216 ppb	18:05:38
3	Zn 213.857†	1419.2	1093.3	-9.2845 µg/L	-9.2845 ppb	18:05:59

-----  
Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1751673.7	91.945 %	0.6197			0.67%
Sc RADIAL	52367.4	96.0 %	0.17			0.18%
Y 371.029	1197203.8	91.416 %	0.5750			0.63%
Ag 328.068†	-2478.1	-7.5231 µg/L	0.35190	-7.5231 ppb	0.35190	4.68%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	706585.7	521570 µg/L	1673.2	521570 ppb	1673.2	0.32%
QC value within limits for Al 396.153Radial Recovery = 104.31%						
As 188.979†	-17.4	-49.175 µg/L	6.3876	-49.175 ppb	6.3876	12.99%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	608.9	-73.829 µg/L	0.4984	-73.829 ppb	0.4984	0.68%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	320.8	8.5332 µg/L	0.36719	8.5332 ppb	0.36719	4.30%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	-737.6	-0.4884 µg/L	0.03647	-0.4884 ppb	0.03647	7.47%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	518616.5	497020 µg/L	1666.7	497020 ppb	1666.7	0.34%
QC value within limits for Ca 317.933Radial Recovery = 99.40%						
Cd 226.502†	547.0	-6.3630 µg/L	0.42948	-6.3630 ppb	0.42948	6.75%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	57.6	2.8307 µg/L	0.22674	2.8307 ppb	0.22674	8.01%

QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	-20.7	-0.4742 µg/L	0.04583	-0.4742 ppb	0.04583	9.66%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	-1863.5	14.055 µg/L	0.4949	14.055 ppb	0.4949	3.52%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	20927.6	193290 µg/L	512.0	193290 ppb	512.0	0.26%	
QC value within limits for Fe 238.204 Radial Recovery = 96.65%							
K 766.490 Radial†	-4.1	-2.8283 µg/L	13.79406	-2.8283 ppb	13.79406	487.71%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	51124.0	497190 µg/L	1226.2	497190 ppb	1226.2	0.25%	
QC value within limits for Mg 279.077 IEC Recovery = 99.44%							
Mn 257.610†	318.4	6.9322 µg/L	0.03904	6.9322 ppb	0.03904	0.56%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	-109.4	-4.4785 µg/L	0.47017	-4.4785 ppb	0.47017	10.50%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	115.4	36.144 µg/L	6.4818	36.144 ppb	6.4818	17.93%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	-140.1	-5.2567 µg/L	0.39748	-5.2567 ppb	0.39748	7.56%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	80.7	171.03 µg/L	18.296	171.03 ppb	18.296	10.70%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	-43.7	9.3713 µg/L	3.71536	9.3713 ppb	3.71536	39.65%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	21.3	96.837 µg/L	22.0099	96.837 ppb	22.0099	22.73%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	36.5	-6.8944 µg/L	8.11954	-6.8944 ppb	8.11954	117.77%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	13.0	-32.668 µg/L	9.4037	-32.668 ppb	9.4037	28.79%	
QC value within limits for Se 196.026 Recovery = Not calculated							
SiO2†	-157.6	-34.014 µg/L	3.8729	-34.014 ppb	3.8729	11.39%	
QC value within limits for SiO2 Recovery = Not calculated							
Si 251.611†	212.8	17.745 µg/L	1.3431	17.745 ppb	1.3431	7.57%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	-66.1	4.4432 µg/L	5.11294	4.4432 ppb	5.11294	115.07%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	352.3	3.4744 µg/L	0.09176	3.4744 ppb	0.09176	2.64%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	12150.5	-2.4738 µg/L	0.25094	-2.4738 ppb	0.25094	10.14%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	-8.5	8.7792 µg/L	4.93518	8.7792 ppb	4.93518	56.21%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	1476.2	66.506 µg/L	10.7753	66.506 ppb	10.7753	16.20%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	-2159.5	0.0114 µg/L	0.75624	0.0114 ppb	0.75624	>999.9%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	1116.8	-8.5932 µg/L	0.60966	-8.5932 ppb	0.60966	7.09%	
QC value within limits for Zn 213.857 Recovery = Not calculated							

All analyte(s) passed QC.

Sequence No.: 10

Sample ID: ICSAB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 104

Date Collected: 2/22/2010 18:06:08

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	53029.1	53029.1	97.2 %		18:06:47
1	Al 396.153Radial†	675701.3	694898.6	512930 µg/L	512930 ppb	18:06:42
1	Ca 317.933Radial†	495920.7	509828.1	488600 µg/L	488600 ppb	18:06:42
1	Fe 238.204 Radial†	20192.8	20750.3	191660 µg/L	191660 ppb	18:06:47
1	K 766.490 Radial†	7367.8	7407.5	5108.0 µg/L	5108.0 ppb	18:06:47
1	Mg 279.077 IEC†	49314.2	50704.2	493110 µg/L	493110 ppb	18:06:47
1	Na 589.592 Radial†	16424.4	16501.5	5169.5 µg/L	5169.5 ppb	18:06:47
1	Sr 421.552†	50232.5	51599.6	508.86 µg/L	508.86 ppb	18:06:47
1	Sc 361.383	1751937.5	1751937.5	91.959 %		18:07:21
1	Y 371.029	1199483.5	1199483.5	91.590 %		18:07:21
1	Ag 328.068†	27926.0	30944.6	259.50 µg/L	259.50 ppb	18:07:27
1	As 188.979†	222.0	241.7	466.16 µg/L	466.16 ppb	18:07:47
1	B 249.677†	11724.7	12493.2	455.46 µg/L	455.46 ppb	18:07:27
1	Ba 233.527†	17592.3	19159.2	513.06 µg/L	513.06 ppb	18:07:27
1	Be 313.107†	346123.5	380194.1	245.86 µg/L	245.86 ppb	18:07:21
1	Cd 226.502†	15763.1	17267.6	467.63 µg/L	467.63 ppb	18:07:27
1	Co 228.616†	8085.5	8807.2	442.78 µg/L	442.78 ppb	18:07:47
1	Cr 267.716†	20543.3	22371.9	496.56 µg/L	496.56 ppb	18:07:27
1	Cu 324.752†	74628.5	77913.1	562.33 µg/L	562.33 ppb	18:07:27
1	Mn 257.610†	127861.2	139270.2	495.67 µg/L	495.67 ppb	18:07:27
1	Mo 202.031†	4253.2	4631.4	508.04 µg/L	508.04 ppb	18:07:47
1	Ni 231.604†	7475.8	7849.3	437.07 µg/L	437.07 ppb	18:07:47
1	P 214.914†	1188.2	1267.2	2721.6 µg/L	2721.6 ppb	18:07:47
1	Pb 220.353†	1700.0	1756.7	496.23 µg/L	496.23 ppb	18:07:47
1	S 181.975 Axial†	571.3	609.3	2776.0 µg/L	2776.0 ppb	18:07:47
1	Sb 206.836†	530.7	557.4	518.35 µg/L	518.35 ppb	18:07:47
1	Se 196.026†	1438.0	1551.4	2353.6 µg/L	2353.6 ppb	18:07:47
1	SiO2†	49006.3	51737.4	11169 µg/L	11169 ppb	18:07:27
1	Si 251.611†	58207.9	63045.1	5256.0 µg/L	5256.0 ppb	18:07:27
1	Sn 189.927†	936.9	1021.1	516.48 µg/L	516.48 ppb	18:07:47
1	Ti 334.940†	207567.4	225645.1	504.95 µg/L	504.95 ppb	18:07:27
1	Tl 190.801†	261.7	306.3	467.01 µg/L	467.01 ppb	18:07:47
1	U 409.014†	6839.8	7259.6	551.84 µg/L	551.84 ppb	18:07:27
1	V 292.402†	43572.9	47417.6	528.30 µg/L	528.30 ppb	18:07:27
1	Zn 213.857†	18712.5	19910.3	472.45 µg/L	472.45 ppb	18:07:27
2	Sc RADIAL	52277.1	52277.1	95.9 %		18:06:59
2	Al 396.153Radial†	683720.8	713260.8	526480 µg/L	526480 ppb	18:06:53
2	Ca 317.933Radial†	503762.2	525345.0	503470 µg/L	503470 ppb	18:06:53
2	Fe 238.204 Radial†	20006.6	20854.8	192630 µg/L	192630 ppb	18:06:59
2	K 766.490 Radial†	7335.7	7483.0	5160.1 µg/L	5160.1 ppb	18:06:59
2	Mg 279.077 IEC†	48933.0	51036.1	496340 µg/L	496340 ppb	18:06:59
2	Na 589.592 Radial†	16331.4	16647.5	5215.2 µg/L	5215.2 ppb	18:06:59
2	Sr 421.552†	49659.5	51744.9	510.29 µg/L	510.29 ppb	18:06:59
2	Sc 361.383	1747102.0	1747102.0	91.705 %		18:07:53
2	Y 371.029	1195755.0	1195755.0	91.305 %		18:07:53
2	Ag 328.068†	27760.9	30848.6	258.79 µg/L	258.79 ppb	18:07:59
2	As 188.979†	237.4	259.2	500.32 µg/L	500.32 ppb	18:08:20
2	B 249.677†	11713.2	12516.0	455.97 µg/L	455.97 ppb	18:07:59
2	Ba 233.527†	17458.0	19065.7	510.55 µg/L	510.55 ppb	18:07:59
2	Be 313.107†	342693.7	377495.8	244.12 µg/L	244.12 ppb	18:07:53
2	Cd 226.502†	15702.2	17248.6	466.99 µg/L	466.99 ppb	18:07:59
2	Co 228.616†	8111.1	8859.4	445.42 µg/L	445.42 ppb	18:08:20
2	Cr 267.716†	20448.1	22330.0	495.63 µg/L	495.63 ppb	18:07:59
2	Cu 324.752†	74152.7	77618.9	560.45 µg/L	560.45 ppb	18:07:59
2	Mn 257.610†	127043.4	138763.2	493.89 µg/L	493.89 ppb	18:07:59
2	Mo 202.031†	4274.3	4667.2	511.94 µg/L	511.94 ppb	18:08:20
2	Ni 231.604†	7523.6	7923.9	441.22 µg/L	441.22 ppb	18:08:20
2	P 214.914†	1182.8	1264.9	2720.0 µg/L	2720.0 ppb	18:08:20
2	Pb 220.353†	1695.5	1756.9	497.03 µg/L	497.03 ppb	18:08:20

2	S 181.975 Axial†	573.0	612.9	2792.4 µg/L	2792.4 ppb	18:08:20
2	Sb 206.836†	530.0	558.1	517.91 µg/L	517.91 ppb	18:08:20
2	Se 196.026†	1437.5	1555.2	2355.0 µg/L	2355.0 ppb	18:08:20
2	SiO2†	48735.7	51589.8	11137 µg/L	11137 ppb	18:07:59
2	Si 251.611†	57842.6	62822.0	5237.4 µg/L	5237.4 ppb	18:07:59
2	Sn 189.927†	954.3	1042.9	526.94 µg/L	526.94 ppb	18:08:20
2	Ti 334.940†	205930.7	224485.0	502.18 µg/L	502.18 ppb	18:07:59
2	Tl 190.801†	265.3	311.0	473.51 µg/L	473.51 ppb	18:08:20
2	U 409.014†	6731.7	7162.3	542.65 µg/L	542.65 ppb	18:07:59
2	V 292.402†	43225.4	47169.8	525.82 µg/L	525.82 ppb	18:07:59
2	Zn 213.857†	18632.1	19879.0	471.40 µg/L	471.40 ppb	18:07:59
3	Sc RADIAL	52865.6	52865.6	96.9 %		18:07:10
3	Al 396.153Radial†	679402.5	700866.3	517340 µg/L	517340 ppb	18:07:04
3	Ca 317.933Radial†	498213.0	513770.3	492380 µg/L	492380 ppb	18:07:04
3	Fe 238.204 Radial†	20265.0	20889.0	192950 µg/L	192950 ppb	18:07:10
3	K 766.490 Radial†	7390.6	7454.5	5140.5 µg/L	5140.5 ppb	18:07:10
3	Mg 279.077 IEC†	49503.8	51056.7	496540 µg/L	496540 ppb	18:07:10
3	Na 589.592 Radial†	16432.0	16561.6	5188.3 µg/L	5188.3 ppb	18:07:10
3	Sr 421.552†	50346.2	51876.6	511.59 µg/L	511.59 ppb	18:07:10
3	Sc 361.383	1744810.0	1744810.0	91.585 %		18:08:26
3	Y 371.029	1193895.4	1193895.4	91.163 %		18:08:26
3	Ag 328.068†	27805.5	30937.1	259.51 µg/L	259.51 ppb	18:08:32
3	As 188.979†	224.0	244.9	472.44 µg/L	472.44 ppb	18:08:53
3	B 249.677†	11654.2	12468.4	453.69 µg/L	453.69 ppb	18:08:32
3	Ba 233.527†	17462.0	19095.0	511.34 µg/L	511.34 ppb	18:08:32
3	Be 313.107†	343557.7	378930.1	245.05 µg/L	245.05 ppb	18:08:26
3	Cd 226.502†	15647.1	17210.9	465.88 µg/L	465.88 ppb	18:08:32
3	Co 228.616†	8099.7	8858.6	445.38 µg/L	445.38 ppb	18:08:53
3	Cr 267.716†	20452.9	22364.5	496.39 µg/L	496.39 ppb	18:08:32
3	Cu 324.752†	74336.9	77926.3	562.60 µg/L	562.60 ppb	18:08:32
3	Mn 257.610†	126919.8	138810.2	494.09 µg/L	494.09 ppb	18:08:32
3	Mo 202.031†	4262.7	4660.7	511.25 µg/L	511.25 ppb	18:08:53
3	Ni 231.604†	7486.5	7894.1	439.57 µg/L	439.57 ppb	18:08:53
3	P 214.914†	1196.4	1281.5	2753.2 µg/L	2753.2 ppb	18:08:53
3	Pb 220.353†	1689.5	1752.8	495.37 µg/L	495.37 ppb	18:08:53
3	S 181.975 Axial†	557.5	596.8	2719.1 µg/L	2719.1 ppb	18:08:53
3	Sb 206.836†	533.6	562.9	523.57 µg/L	523.57 ppb	18:08:53
3	Se 196.026†	1440.9	1560.9	2367.7 µg/L	2367.7 ppb	18:08:53
3	SiO2†	48541.8	51447.9	11106 µg/L	11106 ppb	18:08:32
3	Si 251.611†	57821.6	62881.9	5242.4 µg/L	5242.4 ppb	18:08:32
3	Sn 189.927†	948.5	1038.0	524.70 µg/L	524.70 ppb	18:08:53
3	Ti 334.940†	205945.0	224795.6	502.72 µg/L	502.72 ppb	18:08:32
3	Tl 190.801†	268.7	315.0	479.69 µg/L	479.69 ppb	18:08:53
3	U 409.014†	6800.7	7247.2	550.40 µg/L	550.40 ppb	18:08:32
3	V 292.402†	43295.2	47307.9	527.32 µg/L	527.32 ppb	18:08:32
3	Zn 213.857†	18580.1	19848.9	470.60 µg/L	470.60 ppb	18:08:32

## Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1747949.8	91.750 %	0.1910			0.21%
Sc RADIAL	52723.9	96.7 %	0.73			0.75%
Y 371.029	1196378.0	91.353 %	0.2173			0.24%
Ag 328.068†	30910.1	259.27 µg/L	0.416	259.27 ppb	0.416	0.16%
QC value within limits for Ag 328.068 Recovery = 103.71%						
Al 396.153Radial†	703008.6	518920 µg/L	6914.0	518920 ppb	6914.0	1.33%
QC value within limits for Al 396.153Radial Recovery = 103.78%						
As 188.979†	248.6	479.64 µg/L	18.184	479.64 ppb	18.184	3.79%
QC value within limits for As 188.979 Recovery = 95.93%						
B 249.677†	12492.5	455.04 µg/L	1.197	455.04 ppb	1.197	0.26%
QC value within limits for B 249.677 Recovery = 91.01%						
Ba 233.527†	19106.6	511.65 µg/L	1.281	511.65 ppb	1.281	0.25%
QC value within limits for Ba 233.527 Recovery = 102.33%						
Be 313.107†	378873.3	245.01 µg/L	0.873	245.01 ppb	0.873	0.36%
QC value within limits for Be 313.107 Recovery = 98.00%						
Ca 317.933Radial†	516314.5	494820 µg/L	7729.4	494820 ppb	7729.4	1.56%
QC value within limits for Ca 317.933Radial Recovery = 98.96%						
Cd 226.502†	17242.4	466.83 µg/L	0.884	466.83 ppb	0.884	0.19%
QC value within limits for Cd 226.502 Recovery = 93.37%						
Co 228.616†	8841.7	444.53 µg/L	1.512	444.53 ppb	1.512	0.34%

QC value within limits for Co 228.616 Recovery = 88.91%							
Cr 267.716†	22355.5	496.19 µg/L	0.497	496.19 ppb	0.497	0.10%	
QC value within limits for Cr 267.716 Recovery = 99.24%							
Cu 324.752†	77819.5	561.79 µg/L	1.176	561.79 ppb	1.176	0.21%	
QC value within limits for Cu 324.752 Recovery = 112.36%							
Fe 238.204 Radial†	20831.4	192410 µg/L	667.5	192410 ppb	667.5	0.35%	
QC value within limits for Fe 238.204 Radial Recovery = 96.21%							
K 766.490 Radial†	7448.3	5136.2 µg/L	26.32	5136.2 ppb	26.32	0.51%	
QC value within limits for K 766.490 Radial Recovery = 102.72%							
Mg 279.077 IEC†	50932.3	495330 µg/L	1924.3	495330 ppb	1924.3	0.39%	
QC value within limits for Mg 279.077 IEC Recovery = 99.07%							
Mn 257.610†	138947.9	494.55 µg/L	0.978	494.55 ppb	0.978	0.20%	
QC value within limits for Mn 257.610 Recovery = 98.91%							
Mo 202.031†	4653.1	510.41 µg/L	2.084	510.41 ppb	2.084	0.41%	
QC value within limits for Mo 202.031 Recovery = 102.08%							
Na 589.592 Radial†	16570.2	5191.0 µg/L	22.98	5191.0 ppb	22.98	0.44%	
QC value within limits for Na 589.592 Radial Recovery = 103.82%							
Ni 231.604†	7889.1	439.29 µg/L	2.088	439.29 ppb	2.088	0.48%	
QC value within limits for Ni 231.604 Recovery = 87.86%							
P 214.914†	1271.2	2731.6 µg/L	18.75	2731.6 ppb	18.75	0.69%	
QC value within limits for P 214.914 Recovery = 109.26%							
Pb 220.353†	1755.5	496.21 µg/L	0.829	496.21 ppb	0.829	0.17%	
QC value within limits for Pb 220.353 Recovery = 99.24%							
S 181.975 Axial†	606.3	2762.5 µg/L	38.46	2762.5 ppb	38.46	1.39%	
QC value within limits for S 181.975 Axial Recovery = 110.50%							
Sb 206.836†	559.5	519.94 µg/L	3.151	519.94 ppb	3.151	0.61%	
QC value within limits for Sb 206.836 Recovery = 103.99%							
Se 196.026†	1555.8	2358.8 µg/L	7.74	2358.8 ppb	7.74	0.33%	
QC value within limits for Se 196.026 Recovery = 94.35%							
SiO2†	51591.7	11137 µg/L	31.2	11137 ppb	31.2	0.28%	
QC value within limits for SiO2 Recovery = 104.13%							
Si 251.611†	62916.3	5245.3 µg/L	9.63	5245.3 ppb	9.63	0.18%	
QC value within limits for Si 251.611 Recovery = 104.91%							
Sn 189.927†	1034.0	522.71 µg/L	5.510	522.71 ppb	5.510	1.05%	
QC value within limits for Sn 189.927 Recovery = 104.54%							
Sr 421.552†	51740.4	510.25 µg/L	1.367	510.25 ppb	1.367	0.27%	
QC value within limits for Sr 421.552 Recovery = 102.05%							
Ti 334.940†	224975.2	503.28 µg/L	1.469	503.28 ppb	1.469	0.29%	
QC value within limits for Ti 334.940 Recovery = 100.66%							
Tl 190.801†	310.8	473.40 µg/L	6.341	473.40 ppb	6.341	1.34%	
QC value within limits for Tl 190.801 Recovery = 94.68%							
U 409.014†	7223.0	548.30 µg/L	4.944	548.30 ppb	4.944	0.90%	
QC value within limits for U 409.014 Recovery = 109.66%							
V 292.402†	47298.4	527.15 µg/L	1.249	527.15 ppb	1.249	0.24%	
QC value within limits for V 292.402 Recovery = 105.43%							
Zn 213.857†	19879.4	471.48 µg/L	0.926	471.48 ppb	0.926	0.20%	
QC value within limits for Zn 213.857 Recovery = 94.30%							

All analyte(s) passed QC.

Sequence No.: 11

Sample ID: LR1

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 105

Date Collected: 2/22/2010 18:09:02

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	51852.1	51852.1	95.1 %		18:09:43
1	Al 396.153Radial†	675393.6	710348.6	524350 µg/L	524350 ppb	18:09:38
1	Ca 317.933Radial†	499437.3	525103.4	503240 µg/L	503240 ppb	18:09:38
1	Fe 238.204 Radial†	48553.7	51050.0	471510 µg/L	471510 ppb	18:09:43
1	K 766.490 Radial†	91.0	-73.9	-50.928 µg/L	-50.928 ppb	18:09:43
1	Mg 279.077 IEC†	48207.2	50691.1	492670 µg/L	492670 ppb	18:09:43
1	Na 589.592 Radial†	1532251.1	1611139.0	504730 µg/L	504730 ppb	18:09:38
1	Sr 421.552†	550.4	519.6	5.1242 µg/L	5.1242 ppb	18:09:43
1	Sc 361.383	1719272.1	1719272.1	90.245 %		18:10:20
1	Y 371.029	1165726.9	1165726.9	89.012 %		18:10:20
1	Ag 328.068†	-4929.8	-4885.9	-9.3039 µg/L	-9.3039 ppb	18:10:20
1	As 188.979†	-20.5	-22.5	-43.508 µg/L	-43.508 ppb	18:10:41
1	B 249.677†	1446.7	1346.4	-186.25 µg/L	-186.25 ppb	18:10:20
1	Ba 233.527†	577.1	668.1	17.733 µg/L	17.733 ppb	18:10:41
1	Be 313.107†	-11388.0	-8813.3	-5.7186 µg/L	-5.7186 ppb	18:10:20
1	Cd 226.502†	1089.5	1333.4	-15.545 µg/L	-15.545 ppb	18:10:20
1	Co 228.616†	179.4	213.4	10.647 µg/L	10.647 ppb	18:10:41
1	Cr 267.716†	111.5	155.9	3.4128 µg/L	3.4128 ppb	18:10:41
1	Cu 324.752†	-2363.6	-5860.0	25.250 µg/L	25.250 ppb	18:10:20
1	Mn 257.610†	-6670.2	-7162.4	17.788 µg/L	17.788 ppb	18:10:20
1	Mo 202.031†	-192.2	-206.7	-4.4262 µg/L	-4.4262 ppb	18:10:41
1	Ni 231.604†	58.6	-215.3	-5.8190 µg/L	-5.8190 ppb	18:10:41
1	P 214.914†	287.0	293.1	414.91 µg/L	414.91 ppb	18:10:41
1	Pb 220.353†	160.4	85.7	19.952 µg/L	19.952 ppb	18:10:41
1	S 181.975 Axial†	27.3	18.3	83.294 µg/L	83.294 ppb	18:10:41
1	Sb 206.836†	34.7	18.7	-25.503 µg/L	-25.503 ppb	18:10:41
1	Se 196.026†	-134.6	-161.5	459.38 µg/L	459.38 ppb	18:10:41
1	SiO2†	1229.8	-191.3	-41.286 µg/L	-41.286 ppb	18:10:41
1	Si 251.611†	-302.4	-587.6	-48.984 µg/L	-48.984 ppb	18:10:41
1	Sn 189.927†	-46.3	-49.0	-17.744 µg/L	-17.744 ppb	18:10:41
1	Ti 334.940†	14452.5	15942.8	6.9686 µg/L	6.9686 ppb	18:10:20
1	Tl 190.801†	-39.9	-22.6	43.927 µg/L	43.927 ppb	18:10:41
1	U 409.014†	146993.9	162705.6	13537 µg/L	13537 ppb	18:10:20
1	V 292.402†	-6041.3	-6659.7	-0.7418 µg/L	-0.7418 ppb	18:10:20
1	Zn 213.857†	2726.4	2582.7	16.211 µg/L	16.211 ppb	18:10:41
2	Sc RADIAL	52638.4	52638.4	96.5 %		18:09:56
2	Al 396.153Radial†	663051.2	686951.0	507070 µg/L	507070 ppb	18:09:51
2	Ca 317.933Radial†	489462.7	506923.2	485820 µg/L	485820 ppb	18:09:51
2	Fe 238.204 Radial†	48218.8	49940.3	461260 µg/L	461260 ppb	18:09:56
2	K 766.490 Radial†	110.4	-55.2	-38.046 µg/L	-38.046 ppb	18:09:56
2	Mg 279.077 IEC†	47935.8	49652.7	482580 µg/L	482580 ppb	18:09:56
2	Na 589.592 Radial†	1510676.1	1564714.7	490190 µg/L	490190 ppb	18:09:51
2	Sr 421.552†	562.9	523.9	5.1662 µg/L	5.1662 ppb	18:09:56
2	Sc 361.383	1714219.0	1714219.0	89.979 %		18:10:48
2	Y 371.029	1162413.2	1162413.2	88.759 %		18:10:48
2	Ag 328.068†	-5070.8	-5058.8	-11.317 µg/L	-11.317 ppb	18:10:48
2	As 188.979†	-16.5	-18.1	-34.466 µg/L	-34.466 ppb	18:11:09
2	B 249.677†	1370.2	1266.2	-184.47 µg/L	-184.47 ppb	18:10:48
2	Ba 233.527†	556.6	647.2	17.174 µg/L	17.174 ppb	18:11:09
2	Be 313.107†	-11368.3	-8828.7	-5.7282 µg/L	-5.7282 ppb	18:10:48
2	Cd 226.502†	1122.6	1373.7	-13.243 µg/L	-13.243 ppb	18:10:48
2	Co 228.616†	182.8	217.9	10.872 µg/L	10.872 ppb	18:11:09
2	Cr 267.716†	118.7	164.2	3.5985 µg/L	3.5985 ppb	18:11:09
2	Cu 324.752†	-2443.3	-5956.2	23.163 µg/L	23.163 ppb	18:10:48
2	Mn 257.610†	-6848.6	-7382.5	16.055 µg/L	16.055 ppb	18:10:48
2	Mo 202.031†	-194.0	-209.3	-5.1035 µg/L	-5.1035 ppb	18:11:09
2	Ni 231.604†	55.8	-218.2	-6.1142 µg/L	-6.1142 ppb	18:11:09
2	P 214.914†	286.9	294.0	420.16 µg/L	420.16 ppb	18:11:09
2	Pb 220.353†	160.5	86.5	19.456 µg/L	19.456 ppb	18:11:09

2	S 181.975 Axial†	34.0	25.8	117.69 µg/L	117.69 ppb	18:11:09
2	Sb 206.836†	42.9	27.9	-14.747 µg/L	-14.747 ppb	18:11:09
2	Se 196.026†	-123.5	-149.6	463.67 µg/L	463.67 ppb	18:11:09
2	SiO2†	1237.9	-178.3	-38.483 µg/L	-38.483 ppb	18:11:09
2	Si 251.611†	-310.8	-597.9	-49.843 µg/L	-49.843 ppb	18:11:09
2	Sn 189.927†	-41.1	-43.4	-15.099 µg/L	-15.099 ppb	18:11:09
2	Ti 334.940†	14065.9	15560.4	6.5793 µg/L	6.5793 ppb	18:10:48
2	Tl 190.801†	-41.3	-24.2	40.566 µg/L	40.566 ppb	18:11:09
2	U 409.014†	147929.9	164226.1	13667 µg/L	13667 ppb	18:10:48
2	V 292.402†	-6065.9	-6706.8	-2.3140 µg/L	-2.3140 ppb	18:10:48
2	Zn 213.857†	2742.2	2609.2	17.956 µg/L	17.956 ppb	18:11:09
3	Sc RADIAL	52795.7	52795.7	96.8 %		18:10:09
3	Al 396.153Radial†	661866.2	683680.5	504660 µg/L	504660 ppb	18:10:03
3	Ca 317.933Radial†	488510.9	504429.4	483430 µg/L	483430 ppb	18:10:03
3	Fe 238.204 Radial†	48758.6	50349.0	465040 µg/L	465040 ppb	18:10:09
3	K 766.490 Radial†	126.7	-38.7	-26.686 µg/L	-26.686 ppb	18:10:09
3	Mg 279.077 IEC†	48299.5	49880.3	484790 µg/L	484790 ppb	18:10:09
3	Na 589.592 Radial†	1507327.5	1556593.4	487640 µg/L	487640 ppb	18:10:03
3	Sr 421.552†	554.1	513.1	5.0597 µg/L	5.0597 ppb	18:10:09
3	Sc 361.383	1699148.5	1699148.5	89.188 %		18:11:16
3	Y 371.029	1151940.3	1151940.3	87.960 %		18:11:16
3	Ag 328.068†	-5094.6	-5135.4	-11.682 µg/L	-11.682 ppb	18:11:16
3	As 188.979†	-23.5	-26.1	-50.030 µg/L	-50.030 ppb	18:11:36
3	B 249.677†	1412.1	1326.7	-183.75 µg/L	-183.75 ppb	18:11:16
3	Ba 233.527†	569.5	667.1	17.705 µg/L	17.705 ppb	18:11:36
3	Be 313.107†	-11481.0	-9067.1	-5.8843 µg/L	-5.8843 ppb	18:11:16
3	Cd 226.502†	1106.8	1367.1	-13.858 µg/L	-13.858 ppb	18:11:16
3	Co 228.616†	184.3	221.3	11.036 µg/L	11.036 ppb	18:11:36
3	Cr 267.716†	123.4	170.7	3.7430 µg/L	3.7430 ppb	18:11:36
3	Cu 324.752†	-2453.9	-5992.2	23.441 µg/L	23.441 ppb	18:11:16
3	Mn 257.610†	-6916.8	-7526.5	15.962 µg/L	15.962 ppb	18:11:16
3	Mo 202.031†	-199.8	-217.7	-5.8655 µg/L	-5.8655 ppb	18:11:36
3	Ni 231.604†	58.2	-214.9	-5.8815 µg/L	-5.8815 ppb	18:11:36
3	P 214.914†	304.9	317.0	466.90 µg/L	466.90 ppb	18:11:36
3	Pb 220.353†	155.9	82.8	18.058 µg/L	18.058 ppb	18:11:36
3	S 181.975 Axial†	39.3	32.0	145.94 µg/L	145.94 ppb	18:11:36
3	Sb 206.836†	49.3	35.5	-6.9072 µg/L	-6.9072 ppb	18:11:36
3	Se 196.026†	-130.1	-158.3	459.23 µg/L	459.23 ppb	18:11:36
3	SiO2†	1205.4	-202.4	-43.696 µg/L	-43.696 ppb	18:11:36
3	Si 251.611†	-291.6	-579.4	-48.303 µg/L	-48.303 ppb	18:11:36
3	Sn 189.927†	-39.6	-42.1	-14.612 µg/L	-14.612 ppb	18:11:36
3	Ti 334.940†	15727.1	17561.6	11.121 µg/L	11.121 ppb	18:11:16
3	Tl 190.801†	-51.5	-36.0	24.335 µg/L	24.335 ppb	18:11:36
3	U 409.014†	147923.6	165677.2	13788 µg/L	13788 ppb	18:11:16
3	V 292.402†	-5994.2	-6686.2	-1.5324 µg/L	-1.5324 ppb	18:11:16
3	Zn 213.857†	2736.6	2629.9	18.182 µg/L	18.182 ppb	18:11:36

-----  
Mean Data: LRI

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1710879.9	89.804 %	0.5495			0.61%
Sc RADIAL	52428.7	96.1 %	0.93			0.96%
Y 371.029	1160026.8	88.577 %	0.5495			0.62%
Ag 328.068†	-5026.7	-10.767 µg/L	1.2806	-10.767 ppb	1.2806	11.89%
Al 396.153Radial†	693660.0	512030 µg/L	10736.4	512030 ppb	10736.4	2.10%
QC value within limits for Al 396.153Radial Recovery = 102.41%						
As 188.979†	-22.2	-42.668 µg/L	7.8161	-42.668 ppb	7.8161	18.32%
B 249.677†	1313.1	-184.82 µg/L	1.289	-184.82 ppb	1.289	0.70%
Ba 233.527†	660.8	17.537 µg/L	0.3153	17.537 ppb	0.3153	1.80%
Be 313.107†	-8903.0	-5.7770 µg/L	0.09301	-5.7770 ppb	0.09301	1.61%
Ca 317.933Radial†	512152.0	490830 µg/L	10815.4	490830 ppb	10815.4	2.20%
QC value within limits for Ca 317.933Radial Recovery = 98.17%						
Cd 226.502†	1358.1	-14.216 µg/L	1.1915	-14.216 ppb	1.1915	8.38%
Co 228.616†	217.5	10.852 µg/L	0.1955	10.852 ppb	0.1955	1.80%
Cr 267.716†	163.6	3.5848 µg/L	0.16550	3.5848 ppb	0.16550	4.62%
Cu 324.752†	-5936.1	23.951 µg/L	1.1331	23.951 ppb	1.1331	4.73%
Fe 238.204 Radial†	50446.5	465940 µg/L	5184.0	465940 ppb	5184.0	1.11%
QC value within limits for Fe 238.204 Radial Recovery = 93.19%						
K 766.490 Radial†	-55.9	-38.553 µg/L	12.1288	-38.553 ppb	12.1288	31.46%
Mg 279.077 IEC†	50074.7	486680 µg/L	5305.1	486680 ppb	5305.1	1.09%

QC value within limits for Mg 279.077 IEC Recovery = 97.34%							
Mn 257.610†	-7357.1	16.602 µg/L	1.0285	16.602 ppb	1.0285	6.20%	
Mo 202.031†	-211.2	-5.1318 µg/L	0.72007	-5.1318 ppb	0.72007	14.03%	
Na 589.592 Radial†	1577482.4	494180 µg/L	9219.3	494180 ppb	9219.3	1.87%	
QC value within limits for Na 589.592 Radial Recovery = 98.84%							
Ni 231.604†	-216.2	-5.9382 µg/L	0.15554	-5.9382 ppb	0.15554	2.62%	
P 214.914†	301.4	433.99 µg/L	28.619	433.99 ppb	28.619	6.59%	
Pb 220.353†	85.0	19.156 µg/L	0.9820	19.156 ppb	0.9820	5.13%	
S 181.975 Axial†	25.4	115.64 µg/L	31.373	115.64 ppb	31.373	27.13%	
Sb 206.836†	27.4	-15.719 µg/L	9.3360	-15.719 ppb	9.3360	59.39%	
Se 196.026†	-156.5	460.76 µg/L	2.520	460.76 ppb	2.520	0.55%	
SiO2†	-190.6	-41.155 µg/L	2.6089	-41.155 ppb	2.6089	6.34%	
Si 251.611†	-588.3	-49.044 µg/L	0.7718	-49.044 ppb	0.7718	1.57%	
Sn 189.927†	-44.9	-15.818 µg/L	1.6855	-15.818 ppb	1.6855	10.66%	
Sr 421.552†	518.8	5.1167 µg/L	0.05365	5.1167 ppb	0.05365	1.05%	
Ti 334.940†	16354.9	8.2229 µg/L	2.51711	8.2229 ppb	2.51711	30.61%	
Tl 190.801†	-27.6	36.276 µg/L	10.4769	36.276 ppb	10.4769	28.88%	
U 409.014†	164203.0	13664 µg/L	125.6	13664 ppb	125.6	0.92%	
QC value within limits for U 409.014 Recovery = 91.09%							
V 292.402†	-6684.2	-1.5294 µg/L	0.78611	-1.5294 ppb	0.78611	51.40%	
Zn 213.857†	2607.3	17.450 µg/L	1.0786	17.450 ppb	1.0786	6.18%	
All analyte(s) passed QC.							



Sequence No.: 12

Sample ID: LR2

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 108

Date Collected: 2/22/2010 18:11:45

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	53929.0	53929.0	98.9 %		18:12:28
1	Al 396.153Radial†	348.7	363.4	54.873 µg/L	54.873 ppb	18:12:28
1	Ca 317.933Radial†	283.5	112.4	107.69 µg/L	107.69 ppb	18:12:48
1	Fe 238.204 Radial†	20.1	4.5	250.86 µg/L	250.86 ppb	18:12:48
1	K 766.490 Radial†	439357.8	444124.0	306260 µg/L	306260 ppb	18:12:22
1	Mg 279.077 IEC†	-3.6	-13.9	39.211 µg/L	39.211 ppb	18:12:48
1	Na 589.592 Radial†	1232.1	856.6	268.35 µg/L	268.35 ppb	18:12:28
1	Sr 421.552†	1012361.1	1023674.6	10095 µg/L	10095 ppb	18:12:22
1	Sc 361.383	1847346.8	1847346.8	96.967 %		18:14:20
1	Y 371.029	1260177.7	1260177.7	96.224 %		18:14:20
1	Ag 328.068†	-7076.9	-6721.5	15.864 µg/L	15.864 ppb	18:14:25
1	As 188.979†	4852.0	5004.0	9947.4 µg/L	9947.4 ppb	18:14:25
1	B 249.677†	112097.9	115347.4	5161.6 µg/L	5161.6 ppb	18:14:20
1	Ba 233.527†	547810.6	564973.2	15121 µg/L	15121 ppb	18:14:20
1	Be 313.107†	4458659.9	4601919.5	2974.5 µg/L	2974.5 ppb	18:14:09
1	Cd 226.502†	342068.8	352893.9	10001 µg/L	10001 ppb	18:14:20
1	Co 228.616†	189493.2	195434.7	9828.3 µg/L	9828.3 ppb	18:14:20
1	Cr 267.716†	1103766.8	1138321.8	25256 µg/L	25256 ppb	18:14:20
1	Cu 324.752†	2959849.8	3049184.5	20965 µg/L	20965 ppb	18:14:20
1	Mn 257.610†	2758784.1	2845299.6	10009 µg/L	10009 ppb	18:14:20
1	Mo 202.031†	93146.9	96066.6	10387 µg/L	10387 ppb	18:14:20
1	Ni 231.604†	175738.1	180954.5	10019 µg/L	10019 ppb	18:14:20
1	P 214.914†	7027.6	7222.5	13785 µg/L	13785 ppb	18:14:25
1	Pb 220.353†	92906.6	95720.5	25899 µg/L	25899 ppb	18:14:20
1	S 181.975 Axial†	11494.2	11841.8	53955 µg/L	53955 ppb	18:14:25
1	Sb 206.836†	10579.2	10890.4	10792 µg/L	10792 ppb	18:14:25
1	Se 196.026†	6290.6	6475.0	10037 µg/L	10037 ppb	18:14:25
1	SiO2†	463415.1	476355.4	102830 µg/L	102830 ppb	18:14:20
1	Si 251.611†	557802.2	574996.2	47937 µg/L	47937 ppb	18:14:20
1	Sn 189.927†	22302.0	23001.9	10839 µg/L	10839 ppb	18:14:25
1	Ti 334.940†	4179437.9	4310086.5	10240 µg/L	10240 ppb	18:14:09
1	Tl 190.801†	6611.8	6840.3	9935.3 µg/L	9935.3 ppb	18:14:25
1	U 409.014†	-1229.5	-1446.3	-121.20 µg/L	-121.20 ppb	18:14:20
1	V 292.402†	959880.0	989936.9	10579 µg/L	10579 ppb	18:14:20
1	Zn 213.857†	566676.3	583961.9	14948 µg/L	14948 ppb	18:14:20
2	Sc RADIAL	54090.9	54090.9	99.2 %		18:13:00
2	Al 396.153Radial†	371.1	384.9	77.212 µg/L	77.212 ppb	18:13:00
2	Ca 317.933Radial†	289.8	117.9	112.98 µg/L	112.98 ppb	18:13:20
2	Fe 238.204 Radial†	21.1	5.4	252.80 µg/L	252.80 ppb	18:13:20
2	K 766.490 Radial†	440513.6	443959.7	306150 µg/L	306150 ppb	18:12:55
2	Mg 279.077 IEC†	-2.4	-12.7	45.761 µg/L	45.761 ppb	18:13:20
2	Na 589.592 Radial†	1104.6	724.3	226.91 µg/L	226.91 ppb	18:13:00
2	Sr 421.552†	1014161.0	1022425.7	10083 µg/L	10083 ppb	18:12:55
2	Sc 361.383	1866499.9	1866499.9	97.972 %		18:14:44
2	Y 371.029	1273169.4	1273169.4	97.216 %		18:14:44
2	Ag 328.068†	-6814.0	-6378.2	16.434 µg/L	16.434 ppb	18:14:50
2	As 188.979†	4721.3	4819.3	9580.1 µg/L	9580.1 ppb	18:14:50
2	B 249.677†	110862.3	112900.0	5051.5 µg/L	5051.5 ppb	18:14:44
2	Ba 233.527†	539039.8	550223.7	14727 µg/L	14727 ppb	18:14:44
2	Be 313.107†	4446253.3	4542072.5	2935.9 µg/L	2935.9 ppb	18:14:34
2	Cd 226.502†	335964.2	343043.0	9721.4 µg/L	9721.4 ppb	18:14:44
2	Co 228.616†	185741.9	189600.5	9534.6 µg/L	9534.6 ppb	18:14:44
2	Cr 267.716†	1075562.8	1097853.5	24359 µg/L	24359 ppb	18:14:44
2	Cu 324.752†	2893624.5	2950266.2	20285 µg/L	20285 ppb	18:14:44
2	Mn 257.610†	2705293.4	2761507.2	9714.3 µg/L	9714.3 ppb	18:14:44
2	Mo 202.031†	91265.3	93160.3	10073 µg/L	10073 ppb	18:14:44
2	Ni 231.604†	172224.1	175508.0	9717.6 µg/L	9717.6 ppb	18:14:44
2	P 214.914†	6756.3	6871.3	13078 µg/L	13078 ppb	18:14:50
2	Pb 220.353†	91645.1	93449.7	25284 µg/L	25284 ppb	18:14:44

2	S 181.975 Axial†	11224.2	11444.5	52145 µg/L	52145 ppb	18:14:50
2	Sb 206.836†	10281.0	10474.0	10380 µg/L	10380 ppb	18:14:50
2	Se 196.026†	6139.2	6253.9	9694.6 µg/L	9694.6 ppb	18:14:50
2	SiO2†	458211.8	466140.3	100630 µg/L	100630 ppb	18:14:44
2	Si 251.611†	551345.3	562502.7	46896 µg/L	46896 ppb	18:14:44
2	Sn 189.927†	21287.1	21730.0	10239 µg/L	10239 ppb	18:14:50
2	Ti 334.940†	4160473.2	4246500.6	10089 µg/L	10089 ppb	18:14:34
2	Tl 190.801†	6504.0	6660.2	9674.8 µg/L	9674.8 ppb	18:14:50
2	U 409.014†	-1011.6	-1210.9	-101.48 µg/L	-101.48 ppb	18:14:44
2	V 292.402†	939724.6	959206.5	10250 µg/L	10250 ppb	18:14:44
2	Zn 213.857†	556115.2	567185.4	14518 µg/L	14518 ppb	18:14:44
3	Sc RADIAL	55051.2	55051.2	101 %		18:13:32
3	Al 396.153Radial†	402.8	409.8	120.22 µg/L	120.22 ppb	18:13:32
3	Ca 317.933Radial†	350.9	173.3	166.13 µg/L	166.13 ppb	18:13:52
3	Fe 238.204 Radial†	29.9	13.8	305.52 µg/L	305.52 ppb	18:13:52
3	K 766.490 Radial†	437553.4	433280.1	298780 µg/L	298780 ppb	18:13:27
3	Mg 279.077 IEC†	5.5	-4.8	102.20 µg/L	102.20 ppb	18:13:52
3	Na 589.592 Radial†	1059.0	659.8	206.70 µg/L	206.70 ppb	18:13:32
3	Sr 421.552†	1005506.1	996016.2	9822.4 µg/L	9822.4 ppb	18:13:27
3	Sc 361.383	1879967.5	1879967.5	98.679 %		18:15:09
3	Y 371.029	1282284.4	1282284.4	97.912 %		18:15:09
3	Ag 328.068†	-5764.6	-5264.9	16.979 µg/L	16.979 ppb	18:15:14
3	As 188.979†	4118.5	4174.0	8296.9 µg/L	8296.9 ppb	18:15:14
3	B 249.677†	102576.3	103692.4	4637.0 µg/L	4637.0 ppb	18:15:09
3	Ba 233.527†	484292.1	490801.8	13136 µg/L	13136 ppb	18:15:09
3	Be 313.107†	4087405.9	4145911.8	2679.8 µg/L	2679.8 ppb	18:14:59
3	Cd 226.502†	300878.7	305031.4	8644.0 µg/L	8644.0 ppb	18:15:09
3	Co 228.616†	164409.0	166623.9	8378.4 µg/L	8378.4 ppb	18:15:09
3	Cr 267.716†	928113.6	940566.5	20869 µg/L	20869 ppb	18:15:09
3	Cu 324.752†	2565405.8	2596496.9	17852 µg/L	17852 ppb	18:15:09
3	Mn 257.610†	2390457.6	2422677.0	8522.4 µg/L	8522.4 ppb	18:15:09
3	Mo 202.031†	80975.0	82064.9	8872.9 µg/L	8872.9 ppb	18:15:09
3	Ni 231.604†	152321.6	154079.8	8531.1 µg/L	8531.1 ppb	18:15:09
3	P 214.914†	5749.9	5802.0	10965 µg/L	10965 ppb	18:15:14
3	Pb 220.353†	83434.0	84458.6	22852 µg/L	22852 ppb	18:15:09
3	S 181.975 Axial†	9828.8	9948.3	45328 µg/L	45328 ppb	18:15:14
3	Sb 206.836†	8867.7	8966.6	8890.3 µg/L	8890.3 ppb	18:15:14
3	Se 196.026†	5353.5	5412.8	8390.8 µg/L	8390.8 ppb	18:15:14
3	SiO2†	419686.2	423748.8	91475 µg/L	91475 ppb	18:15:09
3	Si 251.611†	504696.1	511197.8	42618 µg/L	42618 ppb	18:15:09
3	Sn 189.927†	17829.7	18070.6	8515.1 µg/L	8515.1 ppb	18:15:14
3	Ti 334.940†	3829834.5	3881015.8	9220.8 µg/L	9220.8 ppb	18:14:59
3	Tl 190.801†	5886.5	5987.0	8698.0 µg/L	8698.0 ppb	18:15:14
3	U 409.014†	-816.5	-1005.8	-84.306 µg/L	-84.306 ppb	18:15:09
3	V 292.402†	829625.7	840763.0	8983.8 µg/L	8983.8 ppb	18:15:09
3	Zn 213.857†	495162.9	501351.1	12834 µg/L	12834 ppb	18:15:09

-----  
Mean Data: LR2

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1864604.7	97.873 %		0.8605			0.88%
Sc RADIAL	54357.1	99.7 %		1.11			1.12%
Y 371.029	1271877.2	97.118 %		0.8483			0.87%
Ag 328.068†	-6121.5	16.426 µg/L		0.5578	16.426 ppb	0.5578	3.40%
Al 396.153Radial†	386.0	84.100 µg/L		33.2115	84.100 ppb	33.2115	39.49%
As 188.979†	4665.8	9274.8 µg/L		866.54	9274.8 ppb	866.54	9.34%
QC value within limits for As 188.979 Recovery = 92.75%							
B 249.677†	110646.6	4950.0 µg/L		276.58	4950.0 ppb	276.58	5.59%
QC value within limits for B 249.677 Recovery = 99.00%							
Ba 233.527†	535332.9	14328 µg/L		1051.1	14328 ppb	1051.1	7.34%
QC value within limits for Ba 233.527 Recovery = 95.52%							
Be 313.107†	4429967.9	2863.4 µg/L		160.18	2863.4 ppb	160.18	5.59%
QC value within limits for Be 313.107 Recovery = 95.45%							
Ca 317.933Radial†	134.5	128.93 µg/L		32.320	128.93 ppb	32.320	25.07%
Cd 226.502†	333656.1	9455.3 µg/L		716.32	9455.3 ppb	716.32	7.58%
QC value within limits for Cd 226.502 Recovery = 94.55%							
Co 228.616†	183886.4	9247.1 µg/L		766.50	9247.1 ppb	766.50	8.29%
QC value within limits for Co 228.616 Recovery = 92.47%							
Cr 267.716†	1058913.9	23495 µg/L		2317.8	23495 ppb	2317.8	9.87%
QC value within limits for Cr 267.716 Recovery = 93.98%							

Cu 324.752†	2865315.9	19701 µg/L	1636.4	19701 ppb	1636.4	8.31%
QC value within limits for Cu 324.752 Recovery = 98.50%						
Fe 238.204 Radial†	7.9	269.73 µg/L	31.012	269.73 ppb	31.012	11.50%
K 766.490 Radial†	440454.6	303730 µg/L	4285.0	303730 ppb	4285.0	1.41%
QC value within limits for K 766.490 Radial Recovery = 101.24%						
Mg 279.077 IEC†	-10.5	62.390 µg/L	34.6305	62.390 ppb	34.6305	55.51%
Mn 257.610†	2676494.6	9415.2 µg/L	787.16	9415.2 ppb	787.16	8.36%
QC value within limits for Mn 257.610 Recovery = 94.15%						
Mo 202.031†	90430.6	9777.4 µg/L	798.92	9777.4 ppb	798.92	8.17%
QC value within limits for Mo 202.031 Recovery = 97.77%						
Na 589.592 Radial†	746.9	233.99 µg/L	31.430	233.99 ppb	31.430	13.43%
Ni 231.604†	170180.8	9422.6 µg/L	786.64	9422.6 ppb	786.64	8.35%
QC value within limits for Ni 231.604 Recovery = 94.23%						
P 214.914†	6631.9	12609 µg/L	1467.7	12609 ppb	1467.7	11.64%
QC value less than the lower limit for P 214.914 Recovery = 84.06%						
Pb 220.353†	91209.6	24678 µg/L	1611.3	24678 ppb	1611.3	6.53%
QC value within limits for Pb 220.353 Recovery = 98.71%						
S 181.975 Axial†	11078.2	50476 µg/L	4549.4	50476 ppb	4549.4	9.01%
QC value within limits for S 181.975 Axial Recovery = 100.95%						
Sb 206.836†	10110.3	10021 µg/L	1000.6	10021 ppb	1000.6	9.99%
QC value within limits for Sb 206.836 Recovery = 100.21%						
Se 196.026†	6047.2	9374.2 µg/L	868.70	9374.2 ppb	868.70	9.27%
QC value within limits for Se 196.026 Recovery = 93.74%						
SiO2†	455414.8	98311 µg/L	6021.7	98311 ppb	6021.7	6.13%
QC value within limits for SiO2 Recovery = 91.88%						
Si 251.611†	549565.5	45817 µg/L	2818.7	45817 ppb	2818.7	6.15%
QC value within limits for Si 251.611 Recovery = 91.63%						
Sn 189.927†	20934.1	9864.5 µg/L	1206.38	9864.5 ppb	1206.38	12.23%
QC value within limits for Sn 189.927 Recovery = 98.64%						
Sr 421.552†	1014038.8	10000 µg/L	154.0	10000 ppb	154.0	1.54%
QC value within limits for Sr 421.552 Recovery = 100.00%						
Ti 334.940†	4145867.6	9850.0 µg/L	550.16	9850.0 ppb	550.16	5.59%
QC value within limits for Ti 334.940 Recovery = 98.50%						
Tl 190.801†	6495.9	9436.0 µg/L	652.33	9436.0 ppb	652.33	6.91%
QC value within limits for Tl 190.801 Recovery = 94.36%						
U 409.014†	-1221.0	-102.33 µg/L	18.462	-102.33 ppb	18.462	18.04%
V 292.402†	929968.8	9937.7 µg/L	842.23	9937.7 ppb	842.23	8.48%
QC value within limits for V 292.402 Recovery = 99.38%						
Zn 213.857†	550832.8	14100 µg/L	1117.4	14100 ppb	1117.4	7.93%
QC value within limits for Zn 213.857 Recovery = 94.00%						
QC Failed. Continue with analysis.						

Sequence No.: 13

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/22/2010 18:15:25

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	54906.4	54906.4	101 %		18:16:02
1	Al 396.153Radial†	7016.6	6979.9	5141.2 µg/L	5141.2 ppb	18:16:02
1	Ca 317.933Radial†	5534.7	5323.0	5101.3 µg/L	5101.3 ppb	18:16:23
1	Fe 238.204 Radial†	575.3	555.6	5142.3 µg/L	5142.3 ppb	18:16:23
1	K 766.490 Radial†	7983.6	7760.1	5351.2 µg/L	5351.2 ppb	18:16:02
1	Mg 279.077 IEC†	556.4	542.4	5280.2 µg/L	5280.2 ppb	18:16:23
1	Na 589.592 Radial†	33486.4	32870.5	10298 µg/L	10298 ppb	18:16:02
1	Sr 421.552†	51430.5	51023.2	503.17 µg/L	503.17 ppb	18:16:02
1	Sc 361.383	1904766.9	1904766.9	99.981 %		18:17:26
1	Y 371.029	1305691.7	1305691.7	99.700 %		18:17:26
1	Ag 328.068†	63525.3	64114.1	509.50 µg/L	509.50 ppb	18:17:32
1	As 188.979†	267.1	267.4	531.71 µg/L	531.71 ppb	18:17:52
1	B 249.677†	12004.1	11749.7	519.82 µg/L	519.82 ppb	18:17:32
1	Ba 233.527†	19173.6	19205.9	514.32 µg/L	514.32 ppb	18:17:32
1	Be 313.107†	782758.9	786712.3	508.98 µg/L	508.98 ppb	18:17:26
1	Cd 226.502†	18142.4	18271.9	517.22 µg/L	517.22 ppb	18:17:32
1	Co 228.616†	10237.4	10254.0	515.72 µg/L	515.72 ppb	18:17:32
1	Cr 267.716†	23404.2	23440.9	520.28 µg/L	520.28 ppb	18:17:32
1	Cu 324.752†	77995.6	74769.6	514.79 µg/L	514.79 ppb	18:17:32
1	Mn 257.610†	148203.6	148460.4	522.72 µg/L	522.72 ppb	18:17:26
1	Mo 202.031†	4966.4	4973.7	537.95 µg/L	537.95 ppb	18:17:52
1	Ni 231.604†	9622.9	9344.5	517.45 µg/L	517.45 ppb	18:17:32
1	P 214.914†	1203.6	1178.9	2536.3 µg/L	2536.3 ppb	18:17:52
1	Pb 220.353†	2079.2	1987.6	538.15 µg/L	538.15 ppb	18:17:52
1	S 181.975 Axial†	244.8	232.9	1061.1 µg/L	1061.1 ppb	18:17:52
1	Sb 206.836†	560.6	541.0	544.35 µg/L	544.35 ppb	18:17:52
1	Se 196.026†	348.9	336.6	529.64 µg/L	529.64 ppb	18:17:52
1	SiO2†	26992.1	25443.3	5492.4 µg/L	5492.4 ppb	18:17:32
1	Si 251.611†	31085.7	30839.0	2571.0 µg/L	2571.0 ppb	18:17:32
1	Sn 189.927†	1138.3	1140.9	537.64 µg/L	537.64 ppb	18:17:52
1	Ti 334.940†	214956.4	214925.0	510.30 µg/L	510.30 ppb	18:17:26
1	Tl 190.801†	343.2	365.0	531.02 µg/L	531.02 ppb	18:17:52
1	U 409.014†	6117.0	5939.8	496.68 µg/L	496.68 ppb	18:17:32
1	V 292.402†	48399.3	48443.1	517.39 µg/L	517.39 ppb	18:17:32
1	Zn 213.857†	20778.4	20343.9	519.80 µg/L	519.80 ppb	18:17:32
2	Sc RADIAL	55180.7	55180.7	101 %		18:16:28
2	Al 396.153Radial†	7116.3	7043.8	5188.5 µg/L	5188.5 ppb	18:16:28
2	Ca 317.933Radial†	5492.6	5254.0	5035.2 µg/L	5035.2 ppb	18:16:49
2	Fe 238.204 Radial†	571.8	549.3	5084.8 µg/L	5084.8 ppb	18:16:49
2	K 766.490 Radial†	7997.4	7734.3	5333.4 µg/L	5333.4 ppb	18:16:28
2	Mg 279.077 IEC†	553.6	536.8	5226.3 µg/L	5226.3 ppb	18:16:49
2	Na 589.592 Radial†	33929.4	33143.0	10383 µg/L	10383 ppb	18:16:28
2	Sr 421.552†	52352.4	51680.4	509.66 µg/L	509.66 ppb	18:16:28
2	Sc 361.383	1896612.8	1896612.8	99.553 %		18:17:59
2	Y 371.029	1299459.6	1299459.6	99.224 %		18:17:59
2	Ag 328.068†	63974.4	64838.3	515.26 µg/L	515.26 ppb	18:18:05
2	As 188.979†	259.3	260.8	518.41 µg/L	518.41 ppb	18:18:26
2	B 249.677†	12060.7	11858.2	524.68 µg/L	524.68 ppb	18:18:05
2	Ba 233.527†	19414.0	19529.7	523.00 µg/L	523.00 ppb	18:18:05
2	Be 313.107†	791128.2	798485.1	516.60 µg/L	516.60 ppb	18:17:59
2	Cd 226.502†	18379.9	18588.5	526.20 µg/L	526.20 ppb	18:18:05
2	Co 228.616†	10350.1	10411.3	523.61 µg/L	523.61 ppb	18:18:05
2	Cr 267.716†	23788.5	23927.7	531.08 µg/L	531.08 ppb	18:18:05
2	Cu 324.752†	78963.0	76076.7	523.77 µg/L	523.77 ppb	18:18:05
2	Mn 257.610†	150143.2	151045.9	531.81 µg/L	531.81 ppb	18:17:59
2	Mo 202.031†	4874.7	4902.9	530.30 µg/L	530.30 ppb	18:18:26
2	Ni 231.604†	9736.7	9500.2	526.07 µg/L	526.07 ppb	18:18:05
2	P 214.914†	1196.8	1177.3	2531.8 µg/L	2531.8 ppb	18:18:26
2	Pb 220.353†	2065.5	1982.8	536.79 µg/L	536.79 ppb	18:18:26

2	S 181.975 Axial†	241.0	230.1	1048.3 µg/L	1048.3 ppb	18:18:26
2	Sb 206.836†	549.7	532.4	535.49 µg/L	535.49 ppb	18:18:26
2	Se 196.026†	355.6	344.8	542.33 µg/L	542.33 ppb	18:18:26
2	SiO2†	27214.2	25782.4	5565.6 µg/L	5565.6 ppb	18:18:05
2	Si 251.611†	31391.1	31279.5	2607.8 µg/L	2607.8 ppb	18:18:05
2	Sn 189.927†	1128.0	1135.4	535.05 µg/L	535.05 ppb	18:18:26
2	Ti 334.940†	217962.6	218869.0	519.67 µg/L	519.67 ppb	18:17:59
2	Tl 190.801†	333.2	356.4	518.81 µg/L	518.81 ppb	18:18:26
2	U 409.014†	6339.2	6189.3	517.60 µg/L	517.60 ppb	18:18:05
2	V 292.402†	48969.8	49224.3	525.61 µg/L	525.61 ppb	18:18:05
2	Zn 213.857†	20968.7	20624.4	526.97 µg/L	526.97 ppb	18:18:05
3	Sc RADIAL	55480.6	55480.6	102 %		18:16:54
3	Al 396.153Radial†	6914.8	6807.7	5015.8 µg/L	5015.8 ppb	18:16:54
3	Ca 317.933Radial†	5549.1	5280.2	5060.3 µg/L	5060.3 ppb	18:17:14
3	Fe 238.204 Radial†	580.5	554.7	5133.9 µg/L	5133.9 ppb	18:17:14
3	K 766.490 Radial†	7847.9	7544.6	5202.6 µg/L	5202.6 ppb	18:16:54
3	Mg 279.077 IEC†	553.6	533.9	5196.4 µg/L	5196.4 ppb	18:17:14
3	Na 589.592 Radial†	33233.4	32277.6	10112 µg/L	10112 ppb	18:16:54
3	Sr 421.552†	51089.1	50159.0	494.65 µg/L	494.65 ppb	18:16:54
3	Sc 361.383	1896147.7	1896147.7	99.529 %		18:18:33
3	Y 371.029	1300434.9	1300434.9	99.298 %		18:18:33
3	Ag 328.068†	60631.6	61495.5	488.60 µg/L	488.60 ppb	18:18:39
3	As 188.979†	224.0	225.4	448.04 µg/L	448.04 ppb	18:18:59
3	B 249.677†	11421.4	11218.9	496.19 µg/L	496.19 ppb	18:18:39
3	Ba 233.527†	18050.8	18164.9	486.43 µg/L	486.43 ppb	18:18:39
3	Be 313.107†	735920.1	743210.5	480.84 µg/L	480.84 ppb	18:18:33
3	Cd 226.502†	16941.7	17148.1	485.37 µg/L	485.37 ppb	18:18:39
3	Co 228.616†	9464.7	9524.2	478.95 µg/L	478.95 ppb	18:18:39
3	Cr 267.716†	21471.3	21605.3	479.54 µg/L	479.54 ppb	18:18:39
3	Cu 324.752†	73344.5	70451.0	485.10 µg/L	485.10 ppb	18:18:39
3	Mn 257.610†	140126.1	141018.5	496.54 µg/L	496.54 ppb	18:18:33
3	Mo 202.031†	4175.7	4201.8	454.50 µg/L	454.50 ppb	18:18:59
3	Ni 231.604†	8879.9	8641.8	478.53 µg/L	478.53 ppb	18:18:39
3	P 214.914†	1041.6	1021.7	2193.3 µg/L	2193.3 ppb	18:18:59
3	Pb 220.353†	1829.8	1746.5	472.74 µg/L	472.74 ppb	18:18:59
3	S 181.975 Axial†	223.9	213.0	970.48 µg/L	970.48 ppb	18:18:59
3	Sb 206.836†	486.1	468.7	470.99 µg/L	470.99 ppb	18:18:59
3	Se 196.026†	316.4	305.6	481.62 µg/L	481.62 ppb	18:18:59
3	SiO2†	25614.9	24182.2	5220.2 µg/L	5220.2 ppb	18:18:39
3	Si 251.611†	29367.5	29254.1	2438.9 µg/L	2438.9 ppb	18:18:39
3	Sn 189.927†	940.1	946.9	446.22 µg/L	446.22 ppb	18:18:59
3	Ti 334.940†	202512.7	203399.7	482.92 µg/L	482.92 ppb	18:18:33
3	Tl 190.801†	301.9	325.0	473.22 µg/L	473.22 ppb	18:18:59
3	U 409.014†	5545.0	5393.0	450.86 µg/L	450.86 ppb	18:18:39
3	V 292.402†	44728.0	44974.5	480.02 µg/L	480.02 ppb	18:18:39
3	Zn 213.857†	19360.0	19013.3	485.79 µg/L	485.79 ppb	18:18:39

-----  
Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1899175.8	99.688 %	0.2545			0.26%
Sc RADIAL	55189.2	101 %	0.5			0.52%
Y 371.029	1301862.1	99.407 %	0.2560			0.26%
Ag 328.068†	63482.6	504.45 µg/L	14.030	504.45 ppb	14.030	2.78%
QC value within limits for Ag 328.068 Recovery = 100.89%						
Al 396.153Radial†	6943.8	5115.2 µg/L	89.23	5115.2 ppb	89.23	1.74%
QC value within limits for Al 396.153Radial Recovery = 102.30%						
As 188.979†	251.2	499.38 µg/L	44.963	499.38 ppb	44.963	9.00%
QC value within limits for As 188.979 Recovery = 99.88%						
B 249.677†	11608.9	513.56 µg/L	15.240	513.56 ppb	15.240	2.97%
QC value within limits for B 249.677 Recovery = 102.71%						
Ba 233.527†	18966.8	507.92 µg/L	19.106	507.92 ppb	19.106	3.76%
QC value within limits for Ba 233.527 Recovery = 101.58%						
Be 313.107†	776136.0	502.14 µg/L	18.837	502.14 ppb	18.837	3.75%
QC value within limits for Be 313.107 Recovery = 100.43%						
Ca 317.933Radial†	5285.7	5065.6 µg/L	33.37	5065.6 ppb	33.37	0.66%
QC value within limits for Ca 317.933Radial Recovery = 101.31%						
Cd 226.502†	18002.8	509.60 µg/L	21.458	509.60 ppb	21.458	4.21%
QC value within limits for Cd 226.502 Recovery = 101.92%						
Co 228.616†	10063.2	506.09 µg/L	23.833	506.09 ppb	23.833	4.71%

QC value within limits for Co 228.616 Recovery = 101.22%							
Cr 267.716†	22991.3	510.30 µg/L	27.181	510.30 ppb	27.181	5.33%	
QC value within limits for Cr 267.716 Recovery = 102.06%							
Cu 324.752†	73765.7	507.89 µg/L	20.240	507.89 ppb	20.240	3.99%	
QC value within limits for Cu 324.752 Recovery = 101.58%							
Fe 238.204 Radial†	553.2	5120.3 µg/L	31.05	5120.3 ppb	31.05	0.61%	
QC value within limits for Fe 238.204 Radial Recovery = 102.41%							
K 766.490 Radial†	7679.6	5295.7 µg/L	81.15	5295.7 ppb	81.15	1.53%	
QC value within limits for K 766.490 Radial Recovery = 105.91%							
Mg 279.077 IEC†	537.7	5234.3 µg/L	42.47	5234.3 ppb	42.47	0.81%	
QC value within limits for Mg 279.077 IEC Recovery = 104.69%							
Mn 257.610†	146841.6	517.02 µg/L	18.310	517.02 ppb	18.310	3.54%	
QC value within limits for Mn 257.610 Recovery = 103.40%							
Mo 202.031†	4692.8	507.58 µg/L	46.131	507.58 ppb	46.131	9.09%	
QC value within limits for Mo 202.031 Recovery = 101.52%							
Na 589.592 Radial†	32763.7	10264 µg/L	138.6	10264 ppb	138.6	1.35%	
QC value within limits for Na 589.592 Radial Recovery = 102.64%							
Ni 231.604†	9162.2	507.35 µg/L	25.324	507.35 ppb	25.324	4.99%	
QC value within limits for Ni 231.604 Recovery = 101.47%							
P 214.914†	1126.0	2420.5 µg/L	196.77	2420.5 ppb	196.77	8.13%	
QC value within limits for P 214.914 Recovery = 96.82%							
Pb 220.353†	1905.7	515.89 µg/L	37.381	515.89 ppb	37.381	7.25%	
QC value within limits for Pb 220.353 Recovery = 103.18%							
S 181.975 Axial†	225.3	1026.6 µg/L	49.04	1026.6 ppb	49.04	4.78%	
QC value within limits for S 181.975 Axial Recovery = 102.66%							
Sb 206.836†	514.0	516.94 µg/L	40.041	516.94 ppb	40.041	7.75%	
QC value within limits for Sb 206.836 Recovery = 103.39%							
Se 196.026†	329.0	517.87 µg/L	32.023	517.87 ppb	32.023	6.18%	
QC value within limits for Se 196.026 Recovery = 103.57%							
SiO2†	25135.9	5426.1 µg/L	182.02	5426.1 ppb	182.02	3.35%	
QC value within limits for SiO2 Recovery = 101.47%							
Si 251.611†	30457.6	2539.2 µg/L	88.81	2539.2 ppb	88.81	3.50%	
QC value within limits for Si 251.611 Recovery = 101.57%							
Sn 189.927†	1074.4	506.30 µg/L	52.050	506.30 ppb	52.050	10.28%	
QC value within limits for Sn 189.927 Recovery = 101.26%							
Sr 421.552†	50954.2	502.49 µg/L	7.525	502.49 ppb	7.525	1.50%	
QC value within limits for Sr 421.552 Recovery = 100.50%							
Ti 334.940†	212397.9	504.30 µg/L	19.096	504.30 ppb	19.096	3.79%	
QC value within limits for Ti 334.940 Recovery = 100.86%							
Tl 190.801†	348.8	507.69 µg/L	30.466	507.69 ppb	30.466	6.00%	
QC value within limits for Tl 190.801 Recovery = 101.54%							
U 409.014†	5840.7	488.38 µg/L	34.133	488.38 ppb	34.133	6.99%	
QC value within limits for U 409.014 Recovery = 97.68%							
V 292.402†	47547.3	507.67 µg/L	24.298	507.67 ppb	24.298	4.79%	
QC value within limits for V 292.402 Recovery = 101.53%							
Zn 213.857†	19993.8	510.86 µg/L	22.002	510.86 ppb	22.002	4.31%	
QC value within limits for Zn 213.857 Recovery = 102.17%							
All analyte(s) passed QC.							

Sequence No.: 14

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/22/2010 18:19:08

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	54364.5	54364.5	99.7 %		18:19:41
1	Al 396.153Radial†	88.3	99.4	73.307 µg/L	73.307 ppb	18:19:41
1	Ca 317.933Radial†	265.3	91.9	88.037 µg/L	88.037 ppb	18:20:02
1	Fe 238.204 Radial†	22.3	6.6	60.852 µg/L	60.852 ppb	18:20:02
1	K 766.490 Radial†	324.1	155.6	107.30 µg/L	107.30 ppb	18:19:41
1	Mg 279.077 IEC†	16.6	6.3	61.739 µg/L	61.739 ppb	18:20:02
1	Na 589.592 Radial†	706.7	319.6	100.14 µg/L	100.14 ppb	18:19:41
1	Sr 421.552†	133.5	74.6	0.7358 µg/L	0.7358 ppb	18:19:41
1	Sc 361.383	1909187.3	1909187.3	100.21 %		18:21:03
1	Y 371.029	1311394.7	1311394.7	100.14 %		18:21:03
1	Ag 328.068†	-515.0	62.9	0.5026 µg/L	0.5026 ppb	18:21:09
1	As 188.979†	-2.4	-2.1	-4.2040 µg/L	-4.2040 ppb	18:21:29
1	B 249.677†	487.8	230.2	10.189 µg/L	10.189 ppb	18:21:29
1	Ba 233.527†	-2.4	26.2	0.7007 µg/L	0.7007 ppb	18:21:29
1	Be 313.107†	-3386.9	426.0	0.2754 µg/L	0.2754 ppb	18:21:09
1	Cd 226.502†	-110.5	15.9	0.4445 µg/L	0.4445 ppb	18:21:29
1	Co 228.616†	0.0	14.7	0.7415 µg/L	0.7415 ppb	18:21:29
1	Cr 267.716†	28.7	61.0	1.3536 µg/L	1.3536 ppb	18:21:29
1	Cu 324.752†	3528.7	280.4	1.9361 µg/L	1.9361 ppb	18:21:09
1	Mn 257.610†	-85.0	144.0	0.5122 µg/L	0.5122 ppb	18:21:29
1	Mo 202.031†	15.5	21.8	2.3542 µg/L	2.3542 ppb	18:21:29
1	Ni 231.604†	299.6	18.7	1.0378 µg/L	1.0378 ppb	18:21:29
1	P 214.914†	32.3	7.4	15.984 µg/L	15.984 ppb	18:21:29
1	Pb 220.353†	109.4	17.2	4.6610 µg/L	4.6610 ppb	18:21:29
1	S 181.975 Axial†	11.4	-0.6	-2.7104 µg/L	-2.7104 ppb	18:21:29
1	Sb 206.836†	25.4	5.6	5.6511 µg/L	5.6511 ppb	18:21:29
1	Se 196.026†	17.3	4.9	7.7375 µg/L	7.7375 ppb	18:21:29
1	SiO2†	1593.0	35.6	7.6861 µg/L	7.6861 ppb	18:21:09
1	Si 251.611†	341.5	88.3	7.3607 µg/L	7.3607 ppb	18:21:29
1	Sn 189.927†	5.2	7.5	3.5474 µg/L	3.5474 ppb	18:21:29
1	Ti 334.940†	481.5	408.5	0.9670 µg/L	0.9670 ppb	18:21:09
1	Tl 190.801†	-14.6	7.1	10.204 µg/L	10.204 ppb	18:21:29
1	U 409.014†	285.4	106.4	8.9047 µg/L	8.9047 ppb	18:21:09
1	V 292.402†	5.2	39.8	0.4575 µg/L	0.4575 ppb	18:21:09
1	Zn 213.857†	515.7	76.2	1.9465 µg/L	1.9465 ppb	18:21:29
2	Sc RADIAL	54866.7	54866.7	101 %		18:20:07
2	Al 396.153Radial†	78.8	89.1	65.743 µg/L	65.743 ppb	18:20:07
2	Ca 317.933Radial†	214.1	38.5	36.912 µg/L	36.912 ppb	18:20:27
2	Fe 238.204 Radial†	18.0	2.1	18.981 µg/L	18.981 ppb	18:20:27
2	K 766.490 Radial†	303.4	132.0	91.040 µg/L	91.040 ppb	18:20:07
2	Mg 279.077 IEC†	16.9	6.5	63.201 µg/L	63.201 ppb	18:20:27
2	Na 589.592 Radial†	696.1	302.6	94.796 µg/L	94.796 ppb	18:20:07
2	Sr 421.552†	113.3	53.3	0.5258 µg/L	0.5258 ppb	18:20:07
2	Sc 361.383	1894132.2	1894132.2	99.423 %		18:21:35
2	Y 371.029	1302867.0	1302867.0	99.484 %		18:21:35
2	Ag 328.068†	-461.4	112.7	0.8920 µg/L	0.8920 ppb	18:21:41
2	As 188.979†	7.8	8.1	16.207 µg/L	16.207 ppb	18:22:02
2	B 249.677†	478.5	224.6	9.9638 µg/L	9.9638 ppb	18:22:02
2	Ba 233.527†	12.7	41.4	1.1079 µg/L	1.1079 ppb	18:22:02
2	Be 313.107†	-3257.0	529.7	0.3425 µg/L	0.3425 ppb	18:21:41
2	Cd 226.502†	-107.0	18.5	0.5235 µg/L	0.5235 ppb	18:22:02
2	Co 228.616†	10.2	24.9	1.2560 µg/L	1.2560 ppb	18:22:02
2	Cr 267.716†	12.4	44.8	0.9932 µg/L	0.9932 ppb	18:22:02
2	Cu 324.752†	3565.0	344.9	2.3739 µg/L	2.3739 ppb	18:21:41
2	Mn 257.610†	-98.3	129.9	0.4569 µg/L	0.4569 ppb	18:22:02
2	Mo 202.031†	14.6	20.9	2.2655 µg/L	2.2655 ppb	18:22:02
2	Ni 231.604†	288.0	9.4	0.5210 µg/L	0.5210 ppb	18:22:02
2	P 214.914†	20.3	-4.5	-10.006 µg/L	-10.006 ppb	18:22:02
2	Pb 220.353†	116.4	25.2	6.8029 µg/L	6.8029 ppb	18:22:02

2	S 181.975 Axial†	16.1	4.2	19.352 µg/L	19.352 ppb	18:22:02
2	Sb 206.836†	25.5	5.9	5.9133 µg/L	5.9133 ppb	18:22:02
2	Se 196.026†	13.8	1.5	2.2949 µg/L	2.2949 ppb	18:22:02
2	SiO2†	1611.5	66.9	14.431 µg/L	14.431 ppb	18:21:41
2	Si 251.611†	322.4	71.8	5.9831 µg/L	5.9831 ppb	18:22:02
2	Sn 189.927†	8.0	10.3	4.8699 µg/L	4.8699 ppb	18:22:02
2	Ti 334.940†	421.7	352.1	0.8321 µg/L	0.8321 ppb	18:21:41
2	Tl 190.801†	-12.7	8.9	12.788 µg/L	12.788 ppb	18:22:02
2	U 409.014†	327.9	151.5	12.689 µg/L	12.689 ppb	18:21:41
2	V 292.402†	-4.5	30.1	0.3525 µg/L	0.3525 ppb	18:21:41
2	Zn 213.857†	520.3	84.9	2.1738 µg/L	2.1738 ppb	18:22:02
3	Sc RADIAL	53964.9	53964.9	99.0 %		18:20:33
3	Al 396.153Radial†	52.0	63.3	46.693 µg/L	46.693 ppb	18:20:33
3	Ca 317.933Radial†	226.8	54.9	52.617 µg/L	52.617 ppb	18:20:53
3	Fe 238.204 Radial†	17.8	2.2	20.000 µg/L	20.000 ppb	18:20:53
3	K 766.490 Radial†	333.9	167.9	115.80 µg/L	115.80 ppb	18:20:33
3	Mg 279.077 IEC†	16.0	5.9	57.158 µg/L	57.158 ppb	18:20:53
3	Na 589.592 Radial†	620.7	238.0	74.550 µg/L	74.550 ppb	18:20:33
3	Sr 421.552†	99.0	40.7	0.4013 µg/L	0.4013 ppb	18:20:33
3	Sc 361.383	1908846.1	1908846.1	100.20 %		18:22:07
3	Y 371.029	1312051.1	1312051.1	100.19 %		18:22:07
3	Ag 328.068†	-438.0	139.7	1.1075 µg/L	1.1075 ppb	18:22:13
3	As 188.979†	4.2	4.6	9.0650 µg/L	9.0650 ppb	18:22:34
3	B 249.677†	467.6	210.0	9.3168 µg/L	9.3168 ppb	18:22:34
3	Ba 233.527†	8.5	37.1	0.9937 µg/L	0.9937 ppb	18:22:34
3	Be 313.107†	-3114.4	697.4	0.4510 µg/L	0.4510 ppb	18:22:13
3	Cd 226.502†	-96.3	30.0	0.8484 µg/L	0.8484 ppb	18:22:34
3	Co 228.616†	0.7	15.4	0.7743 µg/L	0.7743 ppb	18:22:34
3	Cr 267.716†	19.7	52.0	1.1540 µg/L	1.1540 ppb	18:22:34
3	Cu 324.752†	3481.7	234.1	1.6123 µg/L	1.6123 ppb	18:22:13
3	Mn 257.610†	-55.7	173.2	0.6096 µg/L	0.6096 ppb	18:22:34
3	Mo 202.031†	14.6	20.9	2.2608 µg/L	2.2608 ppb	18:22:34
3	Ni 231.604†	298.1	17.3	0.9603 µg/L	0.9603 ppb	18:22:34
3	P 214.914†	23.2	-1.7	-3.8574 µg/L	-3.8574 ppb	18:22:34
3	Pb 220.353†	105.0	12.8	3.4774 µg/L	3.4774 ppb	18:22:34
3	S 181.975 Axial†	15.2	3.2	14.566 µg/L	14.566 ppb	18:22:34
3	Sb 206.836†	21.7	1.9	1.9227 µg/L	1.9227 ppb	18:22:34
3	Se 196.026†	14.5	2.1	3.2244 µg/L	3.2244 ppb	18:22:34
3	SiO2†	1607.4	50.3	10.860 µg/L	10.860 ppb	18:22:13
3	Si 251.611†	346.4	93.3	7.7775 µg/L	7.7775 ppb	18:22:34
3	Sn 189.927†	2.3	4.6	2.1705 µg/L	2.1705 ppb	18:22:34
3	Ti 334.940†	421.3	348.5	0.8243 µg/L	0.8243 ppb	18:22:13
3	Tl 190.801†	-16.2	5.5	7.9194 µg/L	7.9194 ppb	18:22:34
3	U 409.014†	239.9	61.1	5.1140 µg/L	5.1140 ppb	18:22:13
3	V 292.402†	27.3	61.9	0.6804 µg/L	0.6804 ppb	18:22:13
3	Zn 213.857†	514.0	74.6	1.9075 µg/L	1.9075 ppb	18:22:34

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1904055.2	99.944 %	0.4512			0.45%
Sc RADIAL	54398.7	99.8 %	0.83			0.83%
Y 371.029	1308771.0	99.935 %	0.3912			0.39%
Ag 328.068†	105.1	0.8340 µg/L	0.30656	0.8340 ppb	0.30656	36.76%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	83.9	61.915 µg/L	13.7137	61.915 ppb	13.7137	22.15%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	3.5	7.0228 µg/L	10.35771	7.0228 ppb	10.35771	147.49%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	221.6	9.8231 µg/L	0.45270	9.8231 ppb	0.45270	4.61%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	34.9	0.9341 µg/L	0.21003	0.9341 ppb	0.21003	22.48%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	551.0	0.3563 µg/L	0.08865	0.3563 ppb	0.08865	24.88%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	61.8	59.189 µg/L	26.1886	59.189 ppb	26.1886	44.25%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	21.5	0.6055 µg/L	0.21405	0.6055 ppb	0.21405	35.35%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	18.3	0.9239 µg/L	0.28806	0.9239 ppb	0.28806	31.18%



QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	52.6	1.1670 µg/L	0.18054	1.1670 ppb	0.18054	15.47%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	286.5	1.9741 µg/L	0.38221	1.9741 ppb	0.38221	19.36%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	3.6	33.277 µg/L	23.8859	33.277 ppb	23.8859	71.78%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	151.9	104.71 µg/L	12.580	104.71 ppb	12.580	12.01%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	6.2	60.699 µg/L	3.1526	60.699 ppb	3.1526	5.19%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	149.0	0.5262 µg/L	0.07730	0.5262 ppb	0.07730	14.69%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	21.2	2.2935 µg/L	0.05260	2.2935 ppb	0.05260	2.29%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	286.7	89.828 µg/L	13.4981	89.828 ppb	13.4981	15.03%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	15.2	0.8397 µg/L	0.27874	0.8397 ppb	0.27874	33.20%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	0.4	0.7069 µg/L	13.58319	0.7069 ppb	13.58319	>999.9%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	18.4	4.9804 µg/L	1.68557	4.9804 ppb	1.68557	33.84%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	2.3	10.403 µg/L	11.6055	10.403 ppb	11.6055	111.56%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	4.5	4.4957 µg/L	2.23216	4.4957 ppb	2.23216	49.65%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	2.8	4.4189 µg/L	2.91130	4.4189 ppb	2.91130	65.88%	
QC value within limits for Se 196.026 Recovery = Not calculated							
SiO2†	50.9	10.992 µg/L	3.3744	10.992 ppb	3.3744	30.70%	
QC value within limits for SiO2 Recovery = Not calculated							
Si 251.611†	84.4	7.0404 µg/L	0.93906	7.0404 ppb	0.93906	13.34%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	7.5	3.5293 µg/L	1.34977	3.5293 ppb	1.34977	38.25%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	56.2	0.5543 µg/L	0.16904	0.5543 ppb	0.16904	30.50%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	369.7	0.8745 µg/L	0.08022	0.8745 ppb	0.08022	9.17%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	7.1	10.304 µg/L	2.4360	10.304 ppb	2.4360	23.64%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	106.3	8.9026 µg/L	3.78753	8.9026 ppb	3.78753	42.54%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	43.9	0.4968 µg/L	0.16742	0.4968 ppb	0.16742	33.70%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	78.5	2.0092 µg/L	0.14380	2.0092 ppb	0.14380	7.16%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
All analyte(s) passed QC.							

Sequence No.: 9

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/22/2010 19:05:44

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Units	Conc. Units	Sample Units	Analysis Time
1	Sc RADIAL	56315.2	56315.2	103	%			19:06:24
1	Al 396.153Radial†	6924.2	6716.1	4946.7	µg/L	4946.7	ppb	19:06:24
1	Ca 317.933Radial†	5562.5	5212.3	4995.3	µg/L	4995.3	ppb	19:06:44
1	Fe 238.204 Radial†	587.4	553.0	5118.4	µg/L	5118.4	ppb	19:06:44
1	K 766.490 Radial†	7577.2	7168.1	4943.0	µg/L	4943.0	ppb	19:06:24
1	Mg 279.077 IEC†	556.2	528.4	5143.8	µg/L	5143.8	ppb	19:06:44
1	Na 589.592 Radial†	33131.3	31694.7	9929.1	µg/L	9929.1	ppb	19:06:24
1	Sr 421.552†	51270.3	49590.2	489.04	µg/L	489.04	ppb	19:06:24
1	Sc 361.383	1939701.3	1939701.3	101.81	%			19:07:48
1	Y 371.029	1326806.3	1326806.3	101.31	%			19:07:48
1	Ag 328.068†	64348.8	63778.6	506.85	µg/L	506.85	ppb	19:07:54
1	As 188.979†	268.5	264.0	524.89	µg/L	524.89	ppb	19:08:14
1	B 249.677†	11928.1	11458.9	506.91	µg/L	506.91	ppb	19:07:54
1	Ba 233.527†	19546.5	19226.7	514.88	µg/L	514.88	ppb	19:07:54
1	Be 313.107†	800868.3	790398.6	511.37	µg/L	511.37	ppb	19:07:48
1	Cd 226.502†	18558.6	18353.9	519.55	µg/L	519.55	ppb	19:07:54
1	Co 228.616†	10534.5	10361.4	521.12	µg/L	521.12	ppb	19:07:54
1	Cr 267.716†	23716.5	23326.0	517.73	µg/L	517.73	ppb	19:07:54
1	Cu 324.752†	78672.4	74029.2	509.70	µg/L	509.70	ppb	19:07:54
1	Mn 257.610†	150860.3	148400.0	522.51	µg/L	522.51	ppb	19:07:48
1	Mo 202.031†	4949.3	4867.4	526.46	µg/L	526.46	ppb	19:08:14
1	Ni 231.604†	9853.4	9397.5	520.38	µg/L	520.38	ppb	19:07:54
1	P 214.914†	1250.3	1203.1	2589.9	µg/L	2589.9	ppb	19:08:14
1	Pb 220.353†	2048.8	1920.3	519.89	µg/L	519.89	ppb	19:08:14
1	S 181.975 Axial†	244.6	228.2	1039.9	µg/L	1039.9	ppb	19:08:14
1	Sb 206.836†	542.7	513.2	516.41	µg/L	516.41	ppb	19:08:14
1	Se 196.026†	355.0	336.3	529.37	µg/L	529.37	ppb	19:08:14
1	SiO2†	27305.3	25264.6	5453.9	µg/L	5453.9	ppb	19:07:54
1	Si 251.611†	31499.2	30685.2	2558.2	µg/L	2558.2	ppb	19:07:54
1	Sn 189.927†	1157.7	1139.4	536.93	µg/L	536.93	ppb	19:08:14
1	Ti 334.940†	218671.4	214701.6	509.78	µg/L	509.78	ppb	19:07:48
1	Tl 190.801†	339.9	355.5	517.36	µg/L	517.36	ppb	19:08:14
1	U 409.014†	6224.5	5935.2	496.30	µg/L	496.30	ppb	19:07:54
1	V 292.402†	49336.9	48492.2	517.81	µg/L	517.81	ppb	19:07:54
1	Zn 213.857†	20962.6	20150.5	514.83	µg/L	514.83	ppb	19:07:54
2	Sc RADIAL	55953.2	55953.2	103	%			19:06:50
2	Al 396.153Radial†	6845.5	6682.8	4922.2	µg/L	4922.2	ppb	19:06:50
2	Ca 317.933Radial†	5573.7	5258.1	5039.1	µg/L	5039.1	ppb	19:07:10
2	Fe 238.204 Radial†	586.7	556.0	5146.6	µg/L	5146.6	ppb	19:07:10
2	K 766.490 Radial†	7538.8	7178.2	4949.9	µg/L	4949.9	ppb	19:06:50
2	Mg 279.077 IEC†	550.5	526.3	5123.5	µg/L	5123.5	ppb	19:07:10
2	Na 589.592 Radial†	32733.0	31514.0	9872.5	µg/L	9872.5	ppb	19:06:50
2	Sr 421.552†	50459.4	49121.0	484.42	µg/L	484.42	ppb	19:06:50
2	Sc 361.383	1927149.4	1927149.4	101.16	%			19:08:21
2	Y 371.029	1319614.9	1319614.9	100.76	%			19:08:21
2	Ag 328.068†	64330.4	64172.1	509.98	µg/L	509.98	ppb	19:08:27
2	As 188.979†	268.3	265.5	527.89	µg/L	527.89	ppb	19:08:47
2	B 249.677†	11880.7	11488.3	508.21	µg/L	508.21	ppb	19:08:27
2	Ba 233.527†	19531.6	19337.0	517.83	µg/L	517.83	ppb	19:08:27
2	Be 313.107†	794673.2	789397.5	510.72	µg/L	510.72	ppb	19:08:21
2	Cd 226.502†	18569.0	18482.9	523.20	µg/L	523.20	ppb	19:08:27
2	Co 228.616†	10498.1	10392.8	522.69	µg/L	522.69	ppb	19:08:27
2	Cr 267.716†	23800.1	23560.4	522.93	µg/L	522.93	ppb	19:08:27
2	Cu 324.752†	78402.6	74265.8	511.33	µg/L	511.33	ppb	19:08:27
2	Mn 257.610†	149589.3	148108.7	521.49	µg/L	521.49	ppb	19:08:21
2	Mo 202.031†	4862.6	4813.3	520.62	µg/L	520.62	ppb	19:08:47
2	Ni 231.604†	9823.4	9430.9	522.23	µg/L	522.23	ppb	19:08:27
2	P 214.914†	1226.2	1187.4	2555.0	µg/L	2555.0	ppb	19:08:47
2	Pb 220.353†	2039.7	1924.5	521.00	µg/L	521.00	ppb	19:08:47

2	S 181.975 Axial†	242.5	227.7	1037.5 µg/L	1037.5 ppb	19:08:47
2	Sb 206.836†	534.6	508.8	511.76 µg/L	511.76 ppb	19:08:47
2	Se 196.026†	351.4	335.0	527.45 µg/L	527.45 ppb	19:08:47
2	SiO2†	27381.4	25514.5	5507.8 µg/L	5507.8 ppb	19:08:27
2	Si 251.611†	31463.7	30851.7	2572.1 µg/L	2572.1 ppb	19:08:27
2	Sn 189.927†	1131.7	1121.1	528.29 µg/L	528.29 ppb	19:08:47
2	Ti 334.940†	216664.4	214116.4	508.39 µg/L	508.39 ppb	19:08:21
2	Tl 190.801†	342.3	360.1	523.98 µg/L	523.98 ppb	19:08:47
2	U 409.014†	6113.1	5864.8	490.40 µg/L	490.40 ppb	19:08:27
2	V 292.402†	49240.3	48712.2	520.09 µg/L	520.09 ppb	19:08:27
2	Zn 213.857†	21004.9	20326.4	519.35 µg/L	519.35 ppb	19:08:27
3	Sc RADIAL	55665.5	55665.5	102 %		19:07:16
3	Al 396.153Radial†	6972.3	6841.5	5041.0 µg/L	5041.0 ppb	19:07:16
3	Ca 317.933Radial†	5501.8	5215.8	4998.6 µg/L	4998.6 ppb	19:07:36
3	Fe 238.204 Radial†	580.0	552.4	5112.1 µg/L	5112.1 ppb	19:07:36
3	K 766.490 Radial†	7600.8	7276.9	5018.0 µg/L	5018.0 ppb	19:07:16
3	Mg 279.077 IEC†	549.3	527.9	5138.1 µg/L	5138.1 ppb	19:07:36
3	Na 589.592 Radial†	33182.0	32118.7	10062 µg/L	10062 ppb	19:07:16
3	Sr 421.552†	51515.4	50409.8	497.12 µg/L	497.12 ppb	19:07:16
3	Sc 361.383	1943566.6	1943566.6	102.02 %		19:08:55
3	Y 371.029	1330476.8	1330476.8	101.59 %		19:08:55
3	Ag 328.068†	60978.8	60349.5	479.48 µg/L	479.48 ppb	19:09:00
3	As 188.979†	231.5	227.3	451.89 µg/L	451.89 ppb	19:09:21
3	B 249.677†	11232.4	10753.6	475.51 µg/L	475.51 ppb	19:09:00
3	Ba 233.527†	18077.7	17748.8	475.29 µg/L	475.29 ppb	19:09:00
3	Be 313.107†	747548.2	736568.8	476.54 µg/L	476.54 ppb	19:08:55
3	Cd 226.502†	17090.7	16878.8	477.74 µg/L	477.74 ppb	19:09:00
3	Co 228.616†	9555.7	9381.4	471.77 µg/L	471.77 ppb	19:09:00
3	Cr 267.716†	21119.6	20734.2	460.21 µg/L	460.21 ppb	19:09:00
3	Cu 324.752†	71965.1	67300.9	463.44 µg/L	463.44 ppb	19:09:00
3	Mn 257.610†	141798.9	139223.2	490.22 µg/L	490.22 ppb	19:08:55
3	Mo 202.031†	4141.2	4065.6	439.77 µg/L	439.77 ppb	19:09:21
3	Ni 231.604†	8993.4	8535.4	472.64 µg/L	472.64 ppb	19:09:00
3	P 214.914†	1062.5	1016.6	2184.3 µg/L	2184.3 ppb	19:09:21
3	Pb 220.353†	1794.3	1666.8	451.18 µg/L	451.18 ppb	19:09:21
3	S 181.975 Axial†	221.8	205.4	936.04 µg/L	936.04 ppb	19:09:21
3	Sb 206.836†	475.8	446.7	448.95 µg/L	448.95 ppb	19:09:21
3	Se 196.026†	317.7	299.1	471.56 µg/L	471.56 ppb	19:09:21
3	SiO2†	25675.4	23613.6	5097.5 µg/L	5097.5 ppb	19:09:00
3	Si 251.611†	29515.1	28678.8	2390.9 µg/L	2390.9 ppb	19:09:00
3	Sn 189.927†	939.5	923.3	435.10 µg/L	435.10 ppb	19:09:21
3	Ti 334.940†	203291.4	199198.7	472.94 µg/L	472.94 ppb	19:08:55
3	Tl 190.801†	304.2	319.9	465.81 µg/L	465.81 ppb	19:09:21
3	U 409.014†	5579.0	5290.3	442.26 µg/L	442.26 ppb	19:09:00
3	V 292.402†	44690.4	43841.2	467.90 µg/L	467.90 ppb	19:09:00
3	Zn 213.857†	19276.5	18456.9	471.54 µg/L	471.54 ppb	19:09:00

-----  
Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1936805.8	101.66 %	0.451			0.44%
Sc RADIAL	55978.0	103 %	0.6			0.58%
Y 371.029	1325632.6	101.22 %	0.422			0.42%
Ag 328.068†	62766.7	498.77 µg/L	16.780	498.77 ppb	16.780	3.36%
QC value within limits for Ag 328.068 Recovery = 99.75%						
Al 396.153Radial†	6746.8	4970.0 µg/L	62.73	4970.0 ppb	62.73	1.26%
QC value within limits for Al 396.153Radial Recovery = 99.40%						
As 188.979†	252.3	501.56 µg/L	43.038	501.56 ppb	43.038	8.58%
QC value within limits for As 188.979 Recovery = 100.31%						
B 249.677†	11233.6	496.88 µg/L	18.516	496.88 ppb	18.516	3.73%
QC value within limits for B 249.677 Recovery = 99.38%						
Ba 233.527†	18770.8	502.67 µg/L	23.759	502.67 ppb	23.759	4.73%
QC value within limits for Ba 233.527 Recovery = 100.53%						
Be 313.107†	772121.6	499.54 µg/L	19.922	499.54 ppb	19.922	3.99%
QC value within limits for Be 313.107 Recovery = 99.91%						
Ca 317.933Radial†	5228.7	5011.0 µg/L	24.42	5011.0 ppb	24.42	0.49%
QC value within limits for Ca 317.933Radial Recovery = 100.22%						
Cd 226.502†	17905.2	506.83 µg/L	25.257	506.83 ppb	25.257	4.98%
QC value within limits for Cd 226.502 Recovery = 101.37%						
Co 228.616†	10045.2	505.19 µg/L	28.956	505.19 ppb	28.956	5.73%

QC value within limits for Co 228.616	Recovery = 101.04%				
Cr 267.716†	22540.2	500.29 µg/L	34.809	500.29 ppb	34.809 6.96%
QC value within limits for Cr 267.716	Recovery = 100.06%				
Cu 324.752†	71865.3	494.82 µg/L	27.192	494.82 ppb	27.192 5.50%
QC value within limits for Cu 324.752	Recovery = 98.96%				
Fe 238.204 Radial†	553.8	5125.7 µg/L	18.33	5125.7 ppb	18.33 0.36%
QC value within limits for Fe 238.204 Radial	Recovery = 102.51%				
K 766.490 Radial†	7207.7	4970.3 µg/L	41.45	4970.3 ppb	41.45 0.83%
QC value within limits for K 766.490 Radial	Recovery = 99.41%				
Mg 279.077 IEC†	527.5	5135.1 µg/L	10.46	5135.1 ppb	10.46 0.20%
QC value within limits for Mg 279.077 IEC	Recovery = 102.70%				
Mn 257.610†	145244.0	511.41 µg/L	18.351	511.41 ppb	18.351 3.59%
QC value within limits for Mn 257.610	Recovery = 102.28%				
Mo 202.031†	4582.1	495.62 µg/L	48.451	495.62 ppb	48.451 9.78%
QC value within limits for Mo 202.031	Recovery = 99.12%				
Na 589.592 Radial†	31775.8	9954.5 µg/L	97.25	9954.5 ppb	97.25 0.98%
QC value within limits for Na 589.592 Radial	Recovery = 99.55%				
Ni 231.604†	9121.3	505.08 µg/L	28.109	505.08 ppb	28.109 5.57%
QC value within limits for Ni 231.604	Recovery = 101.02%				
P 214.914†	1135.7	2443.1 µg/L	224.74	2443.1 ppb	224.74 9.20%
QC value within limits for P 214.914	Recovery = 97.72%				
Pb 220.353†	1837.2	497.36 µg/L	39.992	497.36 ppb	39.992 8.04%
QC value within limits for Pb 220.353	Recovery = 99.47%				
S 181.975 Axial†	220.5	1004.5 µg/L	59.27	1004.5 ppb	59.27 5.90%
QC value within limits for S 181.975 Axial	Recovery = 100.45%				
Sb 206.836†	489.6	492.37 µg/L	37.677	492.37 ppb	37.677 7.65%
QC value within limits for Sb 206.836	Recovery = 98.47%				
Se 196.026†	323.5	509.46 µg/L	32.837	509.46 ppb	32.837 6.45%
QC value within limits for Se 196.026	Recovery = 101.89%				
SiO2†	24797.6	5353.1 µg/L	222.97	5353.1 ppb	222.97 4.17%
QC value within limits for SiO2	Recovery = 100.10%				
Si 251.611†	30071.9	2507.1 µg/L	100.82	2507.1 ppb	100.82 4.02%
QC value within limits for Si 251.611	Recovery = 100.28%				
Sn 189.927†	1061.2	500.11 µg/L	56.463	500.11 ppb	56.463 11.29%
QC value within limits for Sn 189.927	Recovery = 100.02%				
Sr 421.552†	49707.0	490.19 µg/L	6.433	490.19 ppb	6.433 1.31%
QC value within limits for Sr 421.552	Recovery = 98.04%				
Ti 334.940†	209338.9	497.04 µg/L	20.876	497.04 ppb	20.876 4.20%
QC value within limits for Ti 334.940	Recovery = 99.41%				
Tl 190.801†	345.2	502.38 µg/L	31.846	502.38 ppb	31.846 6.34%
QC value within limits for Tl 190.801	Recovery = 100.48%				
U 409.014†	5696.8	476.32 µg/L	29.641	476.32 ppb	29.641 6.22%
QC value within limits for U 409.014	Recovery = 95.26%				
V 292.402†	47015.2	501.93 µg/L	29.498	501.93 ppb	29.498 5.88%
QC value within limits for V 292.402	Recovery = 100.39%				
Zn 213.857†	19644.6	501.91 µg/L	26.395	501.91 ppb	26.395 5.26%
QC value within limits for Zn 213.857	Recovery = 100.38%				

All analyte(s) passed QC.

Sequence No.: 10

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/22/2010 19:09:30

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	54888.0	54888.0	101 %		19:10:03
1	Al 396.153Radial†	-20.0	-9.1	-6.7441 µg/L	-6.7441 ppb	19:10:03
1	Ca 317.933Radial†	183.4	7.9	7.6029 µg/L	7.6029 ppb	19:10:23
1	Fe 238.204 Radial†	16.7	0.8	7.4441 µg/L	7.4441 ppb	19:10:23
1	K 766.490 Radial†	188.6	17.9	12.341 µg/L	12.341 ppb	19:10:03
1	Mg 279.077 IEC†	6.7	-3.6	-35.175 µg/L	-35.175 ppb	19:10:23
1	Na 589.592 Radial†	479.6	87.2	27.321 µg/L	27.321 ppb	19:10:03
1	Sr 421.552†	41.4	-18.2	-0.1796 µg/L	-0.1796 ppb	19:10:03
1	Sc 361.383	1940683.7	1940683.7	101.87 %		19:11:26
1	Y 371.029	1332415.2	1332415.2	101.74 %		19:11:26
1	Ag 328.068†	-473.5	112.0	0.8841 µg/L	0.8841 ppb	19:11:31
1	As 188.979†	-4.1	-3.7	-7.4590 µg/L	-7.4590 ppb	19:11:52
1	B 249.677†	343.8	80.9	3.5889 µg/L	3.5889 ppb	19:11:52
1	Ba 233.527†	-3.4	25.3	0.6762 µg/L	0.6762 ppb	19:11:52
1	Be 313.107†	-3582.8	288.5	0.1865 µg/L	0.1865 ppb	19:11:31
1	Cd 226.502†	-124.4	4.1	0.1138 µg/L	0.1138 ppb	19:11:52
1	Co 228.616†	-0.2	14.5	0.7311 µg/L	0.7311 ppb	19:11:52
1	Cr 267.716†	-6.1	26.4	0.5847 µg/L	0.5847 ppb	19:11:52
1	Cu 324.752†	3306.0	4.6	0.0325 µg/L	0.0325 ppb	19:11:31
1	Mn 257.610†	38.6	266.7	0.9406 µg/L	0.9406 ppb	19:11:52
1	Mo 202.031†	3.0	9.3	1.0038 µg/L	1.0038 ppb	19:11:52
1	Ni 231.604†	278.9	-6.4	-0.3553 µg/L	-0.3553 ppb	19:11:52
1	P 214.914†	28.1	2.7	5.9098 µg/L	5.9098 ppb	19:11:52
1	Pb 220.353†	89.4	-4.2	-1.1345 µg/L	-1.1345 ppb	19:11:52
1	S 181.975 Axial†	10.6	-1.6	-7.0807 µg/L	-7.0807 ppb	19:11:52
1	Sb 206.836†	22.3	2.2	2.1948 µg/L	2.1948 ppb	19:11:52
1	Se 196.026†	11.8	-0.8	-1.1730 µg/L	-1.1730 ppb	19:11:52
1	SiO2†	1568.5	-14.2	-3.0725 µg/L	-3.0725 ppb	19:11:31
1	Si 251.611†	366.9	107.7	8.9803 µg/L	8.9803 ppb	19:11:52
1	Sn 189.927†	1.3	3.6	1.6891 µg/L	1.6891 ppb	19:11:52
1	Ti 334.940†	285.5	208.3	0.4978 µg/L	0.4978 ppb	19:11:31
1	Tl 190.801†	-22.1	-0.1	-0.0613 µg/L	-0.0613 ppb	19:11:52
1	U 409.014†	251.6	68.7	5.7508 µg/L	5.7508 ppb	19:11:31
1	V 292.402†	-30.4	4.8	0.0663 µg/L	0.0663 ppb	19:11:31
1	Zn 213.857†	469.2	22.2	0.5731 µg/L	0.5731 ppb	19:11:52
2	Sc RADIAL	56073.0	56073.0	103 %		19:10:29
2	Al 396.153Radial†	-30.6	-19.0	-14.037 µg/L	-14.037 ppb	19:10:29
2	Ca 317.933Radial†	179.8	0.6	0.5281 µg/L	0.5281 ppb	19:10:49
2	Fe 238.204 Radial†	17.5	1.2	11.367 µg/L	11.367 ppb	19:10:49
2	K 766.490 Radial†	208.8	33.6	23.151 µg/L	23.151 ppb	19:10:29
2	Mg 279.077 IEC†	10.3	-0.2	-1.9058 µg/L	-1.9058 ppb	19:10:49
2	Na 589.592 Radial†	468.7	66.5	20.837 µg/L	20.837 ppb	19:10:29
2	Sr 421.552†	18.3	-41.5	-0.4095 µg/L	-0.4095 ppb	19:10:29
2	Sc 361.383	1944740.9	1944740.9	102.08 %		19:11:58
2	Y 371.029	1336147.3	1336147.3	102.03 %		19:11:58
2	Ag 328.068†	-480.4	106.2	0.8389 µg/L	0.8389 ppb	19:12:04
2	As 188.979†	1.4	1.7	3.3911 µg/L	3.3911 ppb	19:12:24
2	B 249.677†	347.5	83.7	3.7133 µg/L	3.7133 ppb	19:12:24
2	Ba 233.527†	-4.6	24.1	0.6431 µg/L	0.6431 ppb	19:12:24
2	Be 313.107†	-3243.8	627.9	0.4060 µg/L	0.4060 ppb	19:12:04
2	Cd 226.502†	-118.8	9.8	0.2765 µg/L	0.2765 ppb	19:12:24
2	Co 228.616†	-2.7	12.1	0.6058 µg/L	0.6058 ppb	19:12:24
2	Cr 267.716†	-4.5	27.9	0.6191 µg/L	0.6191 ppb	19:12:24
2	Cu 324.752†	3381.4	71.8	0.4949 µg/L	0.4949 ppb	19:12:04
2	Mn 257.610†	6.8	235.4	0.8298 µg/L	0.8298 ppb	19:12:24
2	Mo 202.031†	0.7	7.0	0.7540 µg/L	0.7540 ppb	19:12:24
2	Ni 231.604†	286.6	0.5	0.0266 µg/L	0.0266 ppb	19:12:24
2	P 214.914†	24.2	-1.1	-2.4992 µg/L	-2.4992 ppb	19:12:24
2	Pb 220.353†	87.1	-6.7	-1.8006 µg/L	-1.8006 ppb	19:12:24

2	S 181.975 Axial†	13.9	1.7	7.5756 µg/L	7.5756 ppb	19:12:24
2	Sb 206.836†	28.7	8.3	8.3681 µg/L	8.3681 ppb	19:12:24
2	Se 196.026†	14.5	1.8	2.8713 µg/L	2.8713 ppb	19:12:24
2	SiO2†	1610.4	23.6	5.0871 µg/L	5.0871 ppb	19:12:04
2	Si 251.611†	347.3	87.8	7.3168 µg/L	7.3168 ppb	19:12:24
2	Sn 189.927†	5.3	7.5	3.5441 µg/L	3.5441 ppb	19:12:24
2	Ti 334.940†	569.2	485.6	1.1539 µg/L	1.1539 ppb	19:12:04
2	Tl 190.801†	-18.1	3.9	5.6698 µg/L	5.6698 ppb	19:12:24
2	U 409.014†	135.2	-45.9	-3.8449 µg/L	-3.8449 ppb	19:12:04
2	V 292.402†	-27.9	7.4	0.0823 µg/L	0.0823 ppb	19:12:04
2	Zn 213.857†	471.3	23.3	0.5986 µg/L	0.5986 ppb	19:12:24
3	Sc RADIAL	54930.5	54930.5	101 %		19:10:55
3	Al 396.153Radial†	-32.0	-20.9	-15.479 µg/L	-15.479 ppb	19:10:55
3	Ca 317.933Radial†	190.1	14.4	13.834 µg/L	13.834 ppb	19:11:16
3	Fe 238.204 Radial†	17.3	1.3	12.266 µg/L	12.266 ppb	19:11:16
3	K 766.490 Radial†	181.8	11.0	7.5658 µg/L	7.5658 ppb	19:10:55
3	Mg 279.077 IEC†	9.4	-0.9	-8.9791 µg/L	-8.9791 ppb	19:11:16
3	Na 589.592 Radial†	458.2	65.6	20.537 µg/L	20.537 ppb	19:10:55
3	Sr 421.552†	45.6	-14.0	-0.1382 µg/L	-0.1382 ppb	19:10:55
3	Sc 361.383	1944257.2	1944257.2	102.05 %		19:12:30
3	Y 371.029	1334664.8	1334664.8	101.91 %		19:12:30
3	Ag 328.068†	-503.9	83.0	0.6579 µg/L	0.6579 ppb	19:12:36
3	As 188.979†	3.5	3.8	7.5350 µg/L	7.5350 ppb	19:12:56
3	B 249.677†	327.1	63.9	2.8315 µg/L	2.8315 ppb	19:12:56
3	Ba 233.527†	-7.0	21.7	0.5808 µg/L	0.5808 ppb	19:12:56
3	Be 313.107†	-3354.1	519.1	0.3357 µg/L	0.3357 ppb	19:12:36
3	Cd 226.502†	-115.1	13.4	0.3762 µg/L	0.3762 ppb	19:12:56
3	Co 228.616†	0.2	14.9	0.7476 µg/L	0.7476 ppb	19:12:56
3	Cr 267.716†	-6.9	25.6	0.5680 µg/L	0.5680 ppb	19:12:56
3	Cu 324.752†	3389.9	80.9	0.5578 µg/L	0.5578 ppb	19:12:36
3	Mn 257.610†	-60.4	169.6	0.5985 µg/L	0.5985 ppb	19:12:56
3	Mo 202.031†	2.5	8.7	0.9459 µg/L	0.9459 ppb	19:12:56
3	Ni 231.604†	279.1	-6.7	-0.3749 µg/L	-0.3749 ppb	19:12:56
3	P 214.914†	27.1	1.7	3.5987 µg/L	3.5987 ppb	19:12:56
3	Pb 220.353†	79.5	-14.0	-3.8041 µg/L	-3.8041 ppb	19:12:56
3	S 181.975 Axial†	14.3	2.0	9.2924 µg/L	9.2924 ppb	19:12:56
3	Sb 206.836†	24.8	4.6	4.5719 µg/L	4.5719 ppb	19:12:56
3	Se 196.026†	8.7	-3.8	-5.9222 µg/L	-5.9222 ppb	19:12:56
3	SiO2†	1616.3	29.7	6.4180 µg/L	6.4180 ppb	19:12:36
3	Si 251.611†	343.0	83.6	6.9721 µg/L	6.9721 ppb	19:12:56
3	Sn 189.927†	0.6	2.9	1.3509 µg/L	1.3509 ppb	19:12:56
3	Ti 334.940†	418.4	338.0	0.8039 µg/L	0.8039 ppb	19:12:36
3	Tl 190.801†	-19.3	2.7	3.9387 µg/L	3.9387 ppb	19:12:56
3	U 409.014†	213.4	30.8	2.5772 µg/L	2.5772 ppb	19:12:36
3	V 292.402†	-0.2	34.5	0.3764 µg/L	0.3764 ppb	19:12:36
3	Zn 213.857†	467.0	19.2	0.4945 µg/L	0.4945 ppb	19:12:56

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1943227.3	102.00 %	0.116			0.11%
Sc RADIAL	55297.2	101 %	1.2			1.22%
Y 371.029	1334409.1	101.89 %	0.143			0.14%
Ag 328.068†	100.4	0.7937 µg/L	0.11971	0.7937 ppb	0.11971	15.08%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-16.3	-12.087 µg/L	4.6826	-12.087 ppb	4.6826	38.74%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	0.6	1.1557 µg/L	7.74290	1.1557 ppb	7.74290	669.97%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	76.2	3.3779 µg/L	0.47732	3.3779 ppb	0.47732	14.13%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	23.7	0.6334 µg/L	0.04840	0.6334 ppb	0.04840	7.64%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	478.5	0.3094 µg/L	0.11204	0.3094 ppb	0.11204	36.22%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	7.6	7.3216 µg/L	6.65739	7.3216 ppb	6.65739	90.93%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	9.1	0.2555 µg/L	0.13246	0.2555 ppb	0.13246	51.84%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	13.8	0.6948 µg/L	0.07756	0.6948 ppb	0.07756	11.16%

QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	26.6	0.5906 µg/L	0.02610	0.5906 ppb	0.02610	4.42%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	52.4	0.3617 µg/L	0.28685	0.3617 ppb	0.28685	79.30%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	1.1	10.359 µg/L	2.5642	10.359 ppb	2.5642	24.75%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	20.8	14.353 µg/L	7.9853	14.353 ppb	7.9853	55.64%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	-1.6	-15.353 µg/L	17.5264	-15.353 ppb	17.5264	114.16%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	223.9	0.7896 µg/L	0.17452	0.7896 ppb	0.17452	22.10%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	8.3	0.9012 µg/L	0.13072	0.9012 ppb	0.13072	14.50%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	73.1	22.898 µg/L	3.8332	22.898 ppb	3.8332	16.74%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	-4.2	-0.2345 µg/L	0.22633	-0.2345 ppb	0.22633	96.51%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	1.1	2.3364 µg/L	4.34430	2.3364 ppb	4.34430	185.94%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	-8.3	-2.2464 µg/L	1.38952	-2.2464 ppb	1.38952	61.86%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	0.7	3.2624 µg/L	8.99843	3.2624 ppb	8.99843	275.82%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	5.0	5.0449 µg/L	3.11370	5.0449 ppb	3.11370	61.72%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	-0.9	-1.4080 µg/L	4.40145	-1.4080 ppb	4.40145	312.61%	
QC value within limits for Se 196.026 Recovery = Not calculated							
SiO2†	13.0	2.8109 µg/L	5.13842	2.8109 ppb	5.13842	182.80%	
QC value within limits for SiO2 Recovery = Not calculated							
Si 251.611†	93.0	7.7564 µg/L	1.07387	7.7564 ppb	1.07387	13.85%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	4.7	2.1947 µg/L	1.18076	2.1947 ppb	1.18076	53.80%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	-24.6	-0.2424 µg/L	0.14618	-0.2424 ppb	0.14618	60.30%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	344.0	0.8185 µg/L	0.32830	0.8185 ppb	0.32830	40.11%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	2.2	3.1824 µg/L	2.93945	3.1824 ppb	2.93945	92.37%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	17.9	1.4943 µg/L	4.88866	1.4943 ppb	4.88866	327.14%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	15.5	0.1750 µg/L	0.17457	0.1750 ppb	0.17457	99.75%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	21.6	0.5554 µg/L	0.05428	0.5554 ppb	0.05428	9.77%	
QC value within limits for Zn 213.857 Recovery = Not calculated							

All analyte(s) passed QC.

Sequence No.: 19

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/22/2010 19:42:28

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	55612.1	55612.1	102 %		19:43:06
1	Al 396.153Radial†	6923.3	6800.0	5008.6 µg/L	5008.6 ppb	19:43:06
1	Ca 317.933Radial†	5473.6	5193.3	4977.0 µg/L	4977.0 ppb	19:43:27
1	Fe 238.204 Radial†	577.3	550.3	5093.8 µg/L	5093.8 ppb	19:43:27
1	K 766.490 Radial†	7540.6	7225.0	4982.2 µg/L	4982.2 ppb	19:43:06
1	Mg 279.077 IEC†	542.8	522.0	5082.1 µg/L	5082.1 ppb	19:43:27
1	Na 589.592 Radial†	32975.3	31947.2	10008 µg/L	10008 ppb	19:43:06
1	Sr 421.552†	50786.0	49742.9	490.55 µg/L	490.55 ppb	19:43:06
1	Sc 361.383	1908028.0	1908028.0	100.15 %		19:44:30
1	Y 371.029	1303197.4	1303197.4	99.509 %		19:44:30
1	Ag 328.068†	63627.0	64107.0	509.44 µg/L	509.44 ppb	19:44:36
1	As 188.979†	268.5	268.4	533.61 µg/L	533.61 ppb	19:44:56
1	B 249.677†	11691.5	11417.1	505.07 µg/L	505.07 ppb	19:44:36
1	Ba 233.527†	19328.5	19327.7	517.58 µg/L	517.58 ppb	19:44:36
1	Be 313.107†	793165.7	795765.2	514.84 µg/L	514.84 ppb	19:44:30
1	Cd 226.502†	18223.6	18322.0	518.65 µg/L	518.65 ppb	19:44:36
1	Co 228.616†	10311.2	10310.2	518.53 µg/L	518.53 ppb	19:44:36
1	Cr 267.716†	23298.1	23295.0	517.04 µg/L	517.04 ppb	19:44:36
1	Cu 324.752†	77279.9	73921.6	508.96 µg/L	508.96 ppb	19:44:36
1	Mn 257.610†	149848.2	149849.2	527.60 µg/L	527.60 ppb	19:44:30
1	Mo 202.031†	4900.5	4899.4	529.92 µg/L	529.92 ppb	19:44:56
1	Ni 231.604†	9642.7	9347.8	517.62 µg/L	517.62 ppb	19:44:36
1	P 214.914†	1232.2	1205.5	2595.2 µg/L	2595.2 ppb	19:44:56
1	Pb 220.353†	2036.2	1941.1	525.54 µg/L	525.54 ppb	19:44:56
1	S 181.975 Axial†	239.8	227.4	1036.2 µg/L	1036.2 ppb	19:44:56
1	Sb 206.836†	547.2	526.6	529.89 µg/L	529.89 ppb	19:44:56
1	Se 196.026†	361.6	348.7	548.58 µg/L	548.58 ppb	19:44:56
1	SiO2†	27033.0	25437.9	5491.3 µg/L	5491.3 ppb	19:44:36
1	Si 251.611†	31167.0	30867.2	2573.4 µg/L	2573.4 ppb	19:44:36
1	Sn 189.927†	1136.8	1137.4	535.98 µg/L	535.98 ppb	19:44:56
1	Ti 334.940†	216881.4	216479.6	514.00 µg/L	514.00 ppb	19:44:30
1	Tl 190.801†	341.8	362.9	528.15 µg/L	528.15 ppb	19:44:56
1	U 409.014†	6189.7	6001.9	501.90 µg/L	501.90 ppb	19:44:36
1	V 292.402†	48431.5	48392.5	516.79 µg/L	516.79 ppb	19:44:36
1	Zn 213.857†	20677.9	20208.1	516.33 µg/L	516.33 ppb	19:44:36
2	Sc RADIAL	55295.7	55295.7	101 %		19:43:32
2	Al 396.153Radial†	7038.4	6952.4	5121.2 µg/L	5121.2 ppb	19:43:32
2	Ca 317.933Radial†	5524.2	5273.9	5054.3 µg/L	5054.3 ppb	19:43:53
2	Fe 238.204 Radial†	583.3	559.4	5178.2 µg/L	5178.2 ppb	19:43:53
2	K 766.490 Radial†	7662.2	7387.2	5094.1 µg/L	5094.1 ppb	19:43:32
2	Mg 279.077 IEC†	550.5	532.7	5185.5 µg/L	5185.5 ppb	19:43:53
2	Na 589.592 Radial†	33164.3	32318.7	10125 µg/L	10125 ppb	19:43:32
2	Sr 421.552†	51510.3	50742.2	500.40 µg/L	500.40 ppb	19:43:32
2	Sc 361.383	1918725.2	1918725.2	100.71 %		19:45:03
2	Y 371.029	1310940.5	1310940.5	100.10 %		19:45:03
2	Ag 328.068†	64365.2	64485.8	512.47 µg/L	512.47 ppb	19:45:09
2	As 188.979†	262.2	260.6	518.13 µg/L	518.13 ppb	19:45:30
2	B 249.677†	11837.2	11496.6	508.57 µg/L	508.57 ppb	19:45:09
2	Ba 233.527†	19702.5	19591.5	524.64 µg/L	524.64 ppb	19:45:09
2	Be 313.107†	795267.2	793436.5	513.33 µg/L	513.33 ppb	19:45:03
2	Cd 226.502†	18553.6	18548.3	525.05 µg/L	525.05 ppb	19:45:09
2	Co 228.616†	10494.6	10434.9	524.81 µg/L	524.81 ppb	19:45:09
2	Cr 267.716†	23837.8	23701.2	526.06 µg/L	526.06 ppb	19:45:09
2	Cu 324.752†	78595.5	74797.6	514.99 µg/L	514.99 ppb	19:45:09
2	Mn 257.610†	150401.6	149564.5	526.61 µg/L	526.61 ppb	19:45:03
2	Mo 202.031†	4852.4	4824.3	521.81 µg/L	521.81 ppb	19:45:30
2	Ni 231.604†	9830.0	9480.1	524.95 µg/L	524.95 ppb	19:45:09
2	P 214.914†	1222.5	1188.9	2558.0 µg/L	2558.0 ppb	19:45:30
2	Pb 220.353†	2030.0	1923.7	520.79 µg/L	520.79 ppb	19:45:30



2	S 181.975 Axial†	242.2	228.5	1040.9 µg/L	1040.9 ppb	19:45:30
2	Sb 206.836†	536.8	513.3	516.26 µg/L	516.26 ppb	19:45:30
2	Se 196.026†	357.2	342.3	538.68 µg/L	538.68 ppb	19:45:30
2	SiO2†	27526.2	25777.1	5564.5 µg/L	5564.5 ppb	19:45:09
2	Si 251.611†	31720.2	31242.9	2604.7 µg/L	2604.7 ppb	19:45:09
2	Sn 189.927†	1127.8	1122.2	528.81 µg/L	528.81 ppb	19:45:30
2	Ti 334.940†	217458.2	215845.0	512.49 µg/L	512.49 ppb	19:45:03
2	Tl 190.801†	336.6	356.0	518.08 µg/L	518.08 ppb	19:45:30
2	U 409.014†	6277.8	6055.0	506.33 µg/L	506.33 ppb	19:45:09
2	V 292.402†	49339.0	49024.0	523.42 µg/L	523.42 ppb	19:45:09
2	Zn 213.857†	21028.1	20440.7	522.26 µg/L	522.26 ppb	19:45:09
3	Sc RADIAL	55735.4	55735.4	102 %		19:43:58
3	Al 396.153Radial†	6903.3	6765.4	4984.9 µg/L	4984.9 ppb	19:43:58
3	Ca 317.933Radial†	5527.1	5233.8	5015.8 µg/L	5015.8 ppb	19:44:19
3	Fe 238.204 Radial†	581.3	553.0	5117.1 µg/L	5117.1 ppb	19:44:19
3	K 766.490 Radial†	7578.2	7245.4	4996.3 µg/L	4996.3 ppb	19:43:58
3	Mg 279.077 IEC†	549.4	527.3	5132.0 µg/L	5132.0 ppb	19:44:19
3	Na 589.592 Radial†	32972.4	31872.9	9985.0 µg/L	9985.0 ppb	19:43:58
3	Sr 421.552†	50948.4	49791.7	491.03 µg/L	491.03 ppb	19:43:58
3	Sc 361.383	1939096.1	1939096.1	101.78 %		19:45:37
3	Y 371.029	1325164.4	1325164.4	101.19 %		19:45:37
3	Ag 328.068†	60141.6	59664.8	474.04 µg/L	474.04 ppb	19:45:43
3	As 188.979†	227.9	224.2	445.83 µg/L	445.83 ppb	19:46:03
3	B 249.677†	11063.6	10613.1	469.26 µg/L	469.26 ppb	19:45:43
3	Ba 233.527†	17990.0	17703.4	474.06 µg/L	474.06 ppb	19:45:43
3	Be 313.107†	742604.2	733400.7	474.49 µg/L	474.49 ppb	19:45:37
3	Cd 226.502†	16777.5	16609.8	470.11 µg/L	470.11 ppb	19:45:43
3	Co 228.616†	9382.7	9233.0	464.30 µg/L	464.30 ppb	19:45:43
3	Cr 267.716†	20736.6	20405.7	452.92 µg/L	452.92 ppb	19:45:43
3	Cu 324.752†	71127.7	66640.8	458.90 µg/L	458.90 ppb	19:45:43
3	Mn 257.610†	141328.0	139081.0	489.73 µg/L	489.73 ppb	19:45:37
3	Mo 202.031†	4100.3	4034.8	436.44 µg/L	436.44 ppb	19:46:03
3	Ni 231.604†	8814.4	8379.7	464.03 µg/L	464.03 ppb	19:45:43
3	P 214.914†	1057.6	1014.2	2179.5 µg/L	2179.5 ppb	19:46:03
3	Pb 220.353†	1780.2	1657.0	448.53 µg/L	448.53 ppb	19:46:03
3	S 181.975 Axial†	215.3	199.5	909.12 µg/L	909.12 ppb	19:46:03
3	Sb 206.836†	464.3	436.4	438.71 µg/L	438.71 ppb	19:46:03
3	Se 196.026†	311.3	293.5	462.90 µg/L	462.90 ppb	19:46:03
3	SiO2†	25312.5	23315.1	5033.0 µg/L	5033.0 ppb	19:45:43
3	Si 251.611†	29138.6	28375.7	2365.7 µg/L	2365.7 ppb	19:45:43
3	Sn 189.927†	935.3	921.2	434.13 µg/L	434.13 ppb	19:46:03
3	Ti 334.940†	202535.5	198915.4	472.27 µg/L	472.27 ppb	19:45:37
3	Tl 190.801†	302.6	319.0	464.52 µg/L	464.52 ppb	19:46:03
3	U 409.014†	5541.2	5265.8	440.21 µg/L	440.21 ppb	19:45:43
3	V 292.402†	43998.6	43262.5	461.75 µg/L	461.75 ppb	19:45:43
3	Zn 213.857†	18914.8	18145.1	463.56 µg/L	463.56 ppb	19:45:43

-----  
Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1921949.8	100.88 %	0.828			0.82%
Sc RADIAL	55547.7	102 %	0.4			0.41%
Y 371.029	1313100.8	100.27 %	0.851			0.85%
Ag 328.068†	62752.5	498.65 µg/L	21.370	498.65 ppb	21.370	4.29%
QC value within limits for Ag 328.068 Recovery = 99.73%						
Al 396.153Radial†	6839.3	5038.2 µg/L	72.81	5038.2 ppb	72.81	1.45%
QC value within limits for Al 396.153Radial Recovery = 100.76%						
As 188.979†	251.1	499.19 µg/L	46.855	499.19 ppb	46.855	9.39%
QC value within limits for As 188.979 Recovery = 99.84%						
B 249.677†	11175.6	494.30 µg/L	21.757	494.30 ppb	21.757	4.40%
QC value within limits for B 249.677 Recovery = 98.86%						
Ba 233.527†	18874.2	505.43 µg/L	27.393	505.43 ppb	27.393	5.42%
QC value within limits for Ba 233.527 Recovery = 101.09%						
Be 313.107†	774200.8	500.89 µg/L	22.872	500.89 ppb	22.872	4.57%
QC value within limits for Be 313.107 Recovery = 100.18%						
Ca 317.933Radial†	5233.7	5015.7 µg/L	38.66	5015.7 ppb	38.66	0.77%
QC value within limits for Ca 317.933Radial Recovery = 100.31%						
Cd 226.502†	17826.7	504.60 µg/L	30.039	504.60 ppb	30.039	5.95%
QC value within limits for Cd 226.502 Recovery = 100.92%						
Co 228.616†	9992.7	502.54 µg/L	33.273	502.54 ppb	33.273	6.62%

QC value within limits for Co 228.616 Recovery = 100.51%							
Cr 267.716†	22467.3	498.67 µg/L	39.880	498.67 ppb	39.880	8.00%	
QC value within limits for Cr 267.716 Recovery = 99.73%							
Cu 324.752†	71786.7	494.28 µg/L	30.790	494.28 ppb	30.790	6.23%	
QC value within limits for Cu 324.752 Recovery = 98.86%							
Fe 238.204 Radial†	554.2	5129.7 µg/L	43.62	5129.7 ppb	43.62	0.85%	
QC value within limits for Fe 238.204 Radial Recovery = 102.59%							
K 766.490 Radial†	7285.9	5024.2 µg/L	60.93	5024.2 ppb	60.93	1.21%	
QC value within limits for K 766.490 Radial Recovery = 100.48%							
Mg 279.077 IEC†	527.3	5133.2 µg/L	51.73	5133.2 ppb	51.73	1.01%	
QC value within limits for Mg 279.077 IEC Recovery = 102.66%							
Mn 257.610†	146164.9	514.65 µg/L	21.588	514.65 ppb	21.588	4.19%	
QC value within limits for Mn 257.610 Recovery = 102.93%							
Mo 202.031†	4586.2	496.05 µg/L	51.790	496.05 ppb	51.790	10.44%	
QC value within limits for Mo 202.031 Recovery = 99.21%							
Na 589.592 Radial†	32046.3	10039 µg/L	74.8	10039 ppb	74.8	0.75%	
QC value within limits for Na 589.592 Radial Recovery = 100.39%							
Ni 231.604†	9069.2	502.20 µg/L	33.262	502.20 ppb	33.262	6.62%	
QC value within limits for Ni 231.604 Recovery = 100.44%							
P 214.914†	1136.2	2444.2 µg/L	230.05	2444.2 ppb	230.05	9.41%	
QC value within limits for P 214.914 Recovery = 97.77%							
Pb 220.353†	1840.6	498.28 µg/L	43.155	498.28 ppb	43.155	8.66%	
QC value within limits for Pb 220.353 Recovery = 99.66%							
S 181.975 Axial†	218.5	995.42 µg/L	74.777	995.42 ppb	74.777	7.51%	
QC value within limits for S 181.975 Axial Recovery = 99.54%							
Sb 206.836†	492.1	494.96 µg/L	49.183	494.96 ppb	49.183	9.94%	
QC value within limits for Sb 206.836 Recovery = 98.99%							
Se 196.026†	328.2	516.72 µg/L	46.873	516.72 ppb	46.873	9.07%	
QC value within limits for Se 196.026 Recovery = 103.34%							
SiO2†	24843.4	5363.0 µg/L	288.06	5363.0 ppb	288.06	5.37%	
QC value within limits for SiO2 Recovery = 100.29%							
Si 251.611†	30161.9	2514.6 µg/L	129.91	2514.6 ppb	129.91	5.17%	
QC value within limits for Si 251.611 Recovery = 100.58%							
Sn 189.927†	1060.2	499.64 µg/L	56.850	499.64 ppb	56.850	11.38%	
QC value within limits for Sn 189.927 Recovery = 99.93%							
Sr 421.552†	50092.3	493.99 µg/L	5.556	493.99 ppb	5.556	1.12%	
QC value within limits for Sr 421.552 Recovery = 98.80%							
Ti 334.940†	210413.3	499.59 µg/L	23.670	499.59 ppb	23.670	4.74%	
QC value within limits for Ti 334.940 Recovery = 99.92%							
Tl 190.801†	346.0	503.59 µg/L	34.205	503.59 ppb	34.205	6.79%	
QC value within limits for Tl 190.801 Recovery = 100.72%							
U 409.014†	5774.2	482.81 µg/L	36.958	482.81 ppb	36.958	7.65%	
QC value within limits for U 409.014 Recovery = 96.56%							
V 292.402†	46893.0	500.65 µg/L	33.852	500.65 ppb	33.852	6.76%	
QC value within limits for V 292.402 Recovery = 100.13%							
Zn 213.857†	19597.9	500.72 µg/L	32.315	500.72 ppb	32.315	6.45%	
QC value within limits for Zn 213.857 Recovery = 100.14%							
All analyte(s) passed QC.							

Sequence No.: 20

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/22/2010 19:46:12

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	54298.7	54298.7	99.6 %		19:46:45
1	Al 396.153Radial†	-5.0	5.7	4.2299 µg/L	4.2299 ppb	19:46:45
1	Ca 317.933Radial†	186.5	13.1	12.516 µg/L	12.516 ppb	19:47:06
1	Fe 238.204 Radial†	19.2	3.5	32.090 µg/L	32.090 ppb	19:47:06
1	K 766.490 Radial†	136.5	-32.5	-22.388 µg/L	-22.388 ppb	19:46:45
1	Mg 279.077 IEC†	9.9	-0.3	-2.9473 µg/L	-2.9473 ppb	19:47:06
1	Na 589.592 Radial†	439.1	51.7	16.208 µg/L	16.208 ppb	19:46:45
1	Sr 421.552†	51.6	-7.4	-0.0733 µg/L	-0.0733 ppb	19:46:45
1	Sc 361.383	1906883.9	1906883.9	100.09 %		19:48:08
1	Y 371.029	1307566.1	1307566.1	99.843 %		19:48:08
1	Ag 328.068†	-480.9	96.3	0.7605 µg/L	0.7605 ppb	19:48:13
1	As 188.979†	5.6	5.9	11.791 µg/L	11.791 ppb	19:48:34
1	B 249.677†	318.4	61.5	2.7121 µg/L	2.7121 ppb	19:48:34
1	Ba 233.527†	-6.6	22.0	0.5886 µg/L	0.5886 ppb	19:48:34
1	Be 313.107†	-3706.1	103.0	0.0664 µg/L	0.0664 ppb	19:48:13
1	Cd 226.502†	-120.3	6.0	0.1662 µg/L	0.1662 ppb	19:48:34
1	Co 228.616†	3.7	18.4	0.9264 µg/L	0.9264 ppb	19:48:34
1	Cr 267.716†	-23.2	9.1	0.2021 µg/L	0.2021 ppb	19:48:34
1	Cu 324.752†	3315.4	71.6	0.4966 µg/L	0.4966 ppb	19:48:13
1	Mn 257.610†	-91.6	137.3	0.4874 µg/L	0.4874 ppb	19:48:34
1	Mo 202.031†	-1.3	5.0	0.5416 µg/L	0.5416 ppb	19:48:34
1	Ni 231.604†	277.4	-3.1	-0.1729 µg/L	-0.1729 ppb	19:48:34
1	P 214.914†	25.1	0.2	0.3967 µg/L	0.3967 ppb	19:48:34
1	Pb 220.353†	86.7	-5.3	-1.4436 µg/L	-1.4436 ppb	19:48:34
1	S 181.975 Axial†	14.2	2.2	9.8496 µg/L	9.8496 ppb	19:48:34
1	Sb 206.836†	15.7	-4.1	-4.0634 µg/L	-4.0634 ppb	19:48:34
1	Se 196.026†	15.4	3.0	4.7854 µg/L	4.7854 ppb	19:48:34
1	SiO2†	1607.2	51.7	11.168 µg/L	11.168 ppb	19:48:13
1	Si 251.611†	337.1	84.3	7.0268 µg/L	7.0268 ppb	19:48:34
1	Sn 189.927†	1.3	3.6	1.6983 µg/L	1.6983 ppb	19:48:34
1	Ti 334.940†	314.0	241.7	0.5747 µg/L	0.5747 ppb	19:48:13
1	Tl 190.801†	-22.3	-0.6	-0.8609 µg/L	-0.8609 ppb	19:48:34
1	U 409.014†	251.4	72.8	6.0945 µg/L	6.0945 ppb	19:48:13
1	V 292.402†	-54.4	-19.7	-0.1926 µg/L	-0.1926 ppb	19:48:13
1	Zn 213.857†	451.5	12.7	0.3248 µg/L	0.3248 ppb	19:48:34
2	Sc RADIAL	54977.3	54977.3	101 %		19:47:11
2	Al 396.153Radial†	18.7	29.3	21.627 µg/L	21.627 ppb	19:47:11
2	Ca 317.933Radial†	183.4	7.7	7.3456 µg/L	7.3456 ppb	19:47:32
2	Fe 238.204 Radial†	18.0	2.1	19.266 µg/L	19.266 ppb	19:47:32
2	K 766.490 Radial†	219.2	47.9	33.040 µg/L	33.040 ppb	19:47:11
2	Mg 279.077 IEC†	9.0	-1.3	-12.945 µg/L	-12.945 ppb	19:47:32
2	Na 589.592 Radial†	440.8	47.9	15.013 µg/L	15.013 ppb	19:47:11
2	Sr 421.552†	38.2	-21.4	-0.2115 µg/L	-0.2115 ppb	19:47:11
2	Sc 361.383	1896299.3	1896299.3	99.537 %		19:48:40
2	Y 371.029	1300205.9	1300205.9	99.281 %		19:48:40
2	Ag 328.068†	-512.1	62.3	0.4947 µg/L	0.4947 ppb	19:48:45
2	As 188.979†	1.3	1.6	3.1875 µg/L	3.1875 ppb	19:49:06
2	B 249.677†	303.7	48.5	2.1441 µg/L	2.1441 ppb	19:49:06
2	Ba 233.527†	1.2	29.9	0.7986 µg/L	0.7986 ppb	19:49:06
2	Be 313.107†	-3593.2	195.7	0.1264 µg/L	0.1264 ppb	19:48:45
2	Cd 226.502†	-110.2	15.5	0.4367 µg/L	0.4367 ppb	19:49:06
2	Co 228.616†	-6.4	8.2	0.4128 µg/L	0.4128 ppb	19:49:06
2	Cr 267.716†	-18.7	13.5	0.2996 µg/L	0.2996 ppb	19:49:06
2	Cu 324.752†	3335.6	110.3	0.7612 µg/L	0.7612 ppb	19:48:45
2	Mn 257.610†	-58.9	169.6	0.5997 µg/L	0.5997 ppb	19:49:06
2	Mo 202.031†	8.8	15.1	1.6323 µg/L	1.6323 ppb	19:49:06
2	Ni 231.604†	294.2	15.4	0.8509 µg/L	0.8509 ppb	19:49:06
2	P 214.914†	24.9	0.1	0.2293 µg/L	0.2293 ppb	19:49:06
2	Pb 220.353†	89.5	-2.0	-0.5435 µg/L	-0.5435 ppb	19:49:06

2	S 181.975 Axial†	15.5	3.6	16.186 µg/L	16.186 ppb	19:49:06
2	Sb 206.836†	24.9	5.3	5.3313 µg/L	5.3313 ppb	19:49:06
2	Se 196.026†	9.2	-3.1	-4.7255 µg/L	-4.7255 ppb	19:49:06
2	SiO2†	1628.5	82.1	17.721 µg/L	17.721 ppb	19:48:45
2	Si 251.611†	345.0	94.1	7.8440 µg/L	7.8440 ppb	19:49:06
2	Sn 189.927†	5.6	7.9	3.7206 µg/L	3.7206 ppb	19:49:06
2	Ti 334.940†	345.7	275.3	0.6552 µg/L	0.6552 ppb	19:48:45
2	Tl 190.801†	-25.4	-3.9	-5.5513 µg/L	-5.5513 ppb	19:49:06
2	U 409.014†	238.6	61.4	5.1393 µg/L	5.1393 ppb	19:48:45
2	V 292.402†	-8.3	26.3	0.2987 µg/L	0.2987 ppb	19:48:45
2	Zn 213.857†	457.6	21.4	0.5445 µg/L	0.5445 ppb	19:49:06
3	Sc RADIAL	54121.1	54121.1	99.2 %		19:47:37
3	Al 396.153Radial†	-9.6	1.1	0.8100 µg/L	0.8100 ppb	19:47:37
3	Ca 317.933Radial†	188.4	15.5	14.871 µg/L	14.871 ppb	19:47:57
3	Fe 238.204 Radial†	20.2	4.5	42.027 µg/L	42.027 ppb	19:47:57
3	K 766.490 Radial†	237.3	69.6	47.993 µg/L	47.993 ppb	19:47:37
3	Mg 279.077 IEC†	12.5	2.4	23.136 µg/L	23.136 ppb	19:47:57
3	Na 589.592 Radial†	427.5	41.4	12.979 µg/L	12.979 ppb	19:47:37
3	Sr 421.552†	53.5	-5.4	-0.0536 µg/L	-0.0536 ppb	19:47:37
3	Sc 361.383	1912045.8	1912045.8	100.36 %		19:49:12
3	Y 371.029	1311406.0	1311406.0	100.14 %		19:49:12
3	Ag 328.068†	-485.7	92.9	0.7366 µg/L	0.7366 ppb	19:49:18
3	As 188.979†	0.1	0.4	0.8254 µg/L	0.8254 ppb	19:49:38
3	B 249.677†	316.0	58.3	2.5664 µg/L	2.5664 ppb	19:49:38
3	Ba 233.527†	7.7	36.2	0.9693 µg/L	0.9693 ppb	19:49:38
3	Be 313.107†	-3359.7	458.1	0.2962 µg/L	0.2962 ppb	19:49:18
3	Cd 226.502†	-114.0	12.6	0.3508 µg/L	0.3508 ppb	19:49:38
3	Co 228.616†	-1.4	13.3	0.6695 µg/L	0.6695 ppb	19:49:38
3	Cr 267.716†	3.4	35.7	0.7925 µg/L	0.7925 ppb	19:49:38
3	Cu 324.752†	3303.4	50.7	0.3541 µg/L	0.3541 ppb	19:49:18
3	Mn 257.610†	-45.9	183.0	0.6485 µg/L	0.6485 ppb	19:49:38
3	Mo 202.031†	-1.2	5.1	0.5496 µg/L	0.5496 ppb	19:49:38
3	Ni 231.604†	282.5	1.3	0.0701 µg/L	0.0701 ppb	19:49:38
3	P 214.914†	21.2	-3.8	-8.3544 µg/L	-8.3544 ppb	19:49:38
3	Pb 220.353†	85.2	-7.1	-1.9147 µg/L	-1.9147 ppb	19:49:38
3	S 181.975 Axial†	16.4	4.4	19.987 µg/L	19.987 ppb	19:49:38
3	Sb 206.836†	23.6	3.7	3.7123 µg/L	3.7123 ppb	19:49:38
3	Se 196.026†	9.9	-2.5	-3.7941 µg/L	-3.7941 ppb	19:49:38
3	SiO2†	1577.2	17.5	3.7875 µg/L	3.7875 ppb	19:49:18
3	Si 251.611†	375.7	121.9	10.163 µg/L	10.163 ppb	19:49:38
3	Sn 189.927†	-0.9	1.4	0.6674 µg/L	0.6674 ppb	19:49:38
3	Ti 334.940†	388.1	314.7	0.7461 µg/L	0.7461 ppb	19:49:18
3	Tl 190.801†	-23.5	-1.7	-2.4669 µg/L	-2.4669 ppb	19:49:38
3	U 409.014†	234.6	55.4	4.6390 µg/L	4.6390 ppb	19:49:18
3	V 292.402†	-15.1	19.6	0.2227 µg/L	0.2227 ppb	19:49:18
3	Zn 213.857†	450.2	10.2	0.2583 µg/L	0.2583 ppb	19:49:38

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1905076.3	99.997 %	0.4214			0.42%
Sc RADIAL	54465.7	99.9 %	0.83			0.83%
Y 371.029	1306392.7	99.753 %	0.4346			0.44%
Ag 328.068†	83.8	0.6639 µg/L	0.14706	0.6639 ppb	0.14706	22.15%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	12.1	8.8891 µg/L	11.16347	8.8891 ppb	11.16347	125.59%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	2.6	5.2681 µg/L	5.77152	5.2681 ppb	5.77152	109.56%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	56.1	2.4742 µg/L	0.29503	2.4742 ppb	0.29503	11.92%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	29.4	0.7855 µg/L	0.19073	0.7855 ppb	0.19073	24.28%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	252.3	0.1630 µg/L	0.11918	0.1630 ppb	0.11918	73.11%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	12.1	11.578 µg/L	3.8494	11.578 ppb	3.8494	33.25%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	11.3	0.3179 µg/L	0.13825	0.3179 ppb	0.13825	43.49%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	13.3	0.6695 µg/L	0.25680	0.6695 ppb	0.25680	38.35%

Cr 267.716†	QC value within limits for Co 228.616	Recovery = Not calculated					
	19.4	0.4314 µg/L	0.31645	0.4314 ppb	0.31645	73.35%	
Cu 324.752†	QC value within limits for Cr 267.716	Recovery = Not calculated					
	77.5	0.5373 µg/L	0.20659	0.5373 ppb	0.20659	38.45%	
Fe 238.204 Radial†	QC value within limits for Cu 324.752	Recovery = Not calculated					
	3.4	31.128 µg/L	11.4110	31.128 ppb	11.4110	36.66%	
K 766.490 Radial†	QC value within limits for Fe 238.204 Radial	Recovery = Not calculated					
	28.3	19.549 µg/L	37.0793	19.549 ppb	37.0793	189.68%	
Mg 279.077 IEC†	QC value within limits for K 766.490 Radial	Recovery = Not calculated					
	0.3	2.4144 µg/L	18.62858	2.4144 ppb	18.62858	771.56%	
Mn 257.610†	QC value within limits for Mg 279.077 IEC	Recovery = Not calculated					
	163.3	0.5785 µg/L	0.08258	0.5785 ppb	0.08258	14.27%	
Mo 202.031†	QC value within limits for Mn 257.610	Recovery = Not calculated					
	8.4	0.9078 µg/L	0.62739	0.9078 ppb	0.62739	69.11%	
Na 589.592 Radial†	QC value within limits for Mo 202.031	Recovery = Not calculated					
	47.0	14.733 µg/L	1.6329	14.733 ppb	1.6329	11.08%	
Ni 231.604†	QC value within limits for Na 589.592 Radial	Recovery = Not calculated					
	4.5	0.2493 µg/L	0.53492	0.2493 ppb	0.53492	214.53%	
P 214.914†	QC value within limits for Ni 231.604	Recovery = Not calculated					
	-1.2	-2.5762 µg/L	5.00484	-2.5762 ppb	5.00484	194.27%	
Pb 220.353†	QC value within limits for P 214.914	Recovery = Not calculated					
	-4.8	-1.3006 µg/L	0.69667	-1.3006 ppb	0.69667	53.56%	
S 181.975 Axial†	QC value within limits for Pb 220.353	Recovery = Not calculated					
	3.4	15.341 µg/L	5.1213	15.341 ppb	5.1213	33.38%	
Sb 206.836†	QC value within limits for S 181.975 Axial	Recovery = Not calculated					
	1.6	1.6601 µg/L	5.02234	1.6601 ppb	5.02234	302.54%	
Se 196.026†	QC value within limits for Sb 206.836	Recovery = Not calculated					
	-0.9	-1.2447 µg/L	5.24299	-1.2447 ppb	5.24299	421.22%	
SiO2†	QC value within limits for Se 196.026	Recovery = Not calculated					
	50.5	10.892 µg/L	6.9710	10.892 ppb	6.9710	64.00%	
Si 251.611†	QC value within limits for SiO2	Recovery = Not calculated					
	100.1	8.3445 µg/L	1.62669	8.3445 ppb	1.62669	19.49%	
Sn 189.927†	QC value within limits for Si 251.611	Recovery = Not calculated					
	4.3	2.0288 µg/L	1.55320	2.0288 ppb	1.55320	76.56%	
Sr 421.552†	QC value within limits for Sn 189.927	Recovery = Not calculated					
	-11.4	-0.1128 µg/L	0.08601	-0.1128 ppb	0.08601	76.26%	
Ti 334.940†	QC value within limits for Sr 421.552	Recovery = Not calculated					
	277.2	0.6587 µg/L	0.08572	0.6587 ppb	0.08572	13.01%	
Tl 190.801†	QC value within limits for Ti 334.940	Recovery = Not calculated					
	-2.1	-2.9597 µg/L	2.38371	-2.9597 ppb	2.38371	80.54%	
U 409.014†	QC value within limits for Tl 190.801	Recovery = Not calculated					
	63.2	5.2909 µg/L	0.73947	5.2909 ppb	0.73947	13.98%	
V 292.402†	QC value within limits for U 409.014	Recovery = Not calculated					
	8.8	0.1096 µg/L	0.26445	0.1096 ppb	0.26445	241.23%	
Zn 213.857†	QC value within limits for V 292.402	Recovery = Not calculated					
	14.7	0.3759 µg/L	0.14979	0.3759 ppb	0.14979	39.85%	
	QC value within limits for Zn 213.857	Recovery = Not calculated					

All analyte(s) passed QC.

## =====

Analysis Begun

Start Time: 2/22/2010 20:13:43                      Plasma On Time: 2/8/2010 03:37:33  
 Logged In Analyst: optima                      Technique: ICP Continuous  
 Spectrometer Model: Optima 4300 DV, S/N 077N1030502 Autosampler Model: AS-93plus

Sample Information File: C:\pe\optimal\Sample Information\022210D.sif

Batch ID:

Results Data Set: 022210

Results Library: c:\pe\optimal\Results\Results.mdb

=====

Sequence No.: 1

Autosampler Location: 7

Sample ID: CCV

Date Collected: 2/22/2010 20:13:45

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	55948.0	55948.0	103 %		20:14:24
1	Al 396.153Radial†	7128.7	6959.4	5126.2 µg/L	5126.2 ppb	20:14:24
1	Ca 317.933Radial†	5610.7	5294.7	5074.2 µg/L	5074.2 ppb	20:14:44
1	Fe 238.204 Radial†	601.7	570.7	5282.4 µg/L	5282.4 ppb	20:14:44
1	K 766.490 Radial†	7616.3	7254.4	5002.5 µg/L	5002.5 ppb	20:14:24
1	Mg 279.077 IEC†	554.5	530.2	5161.6 µg/L	5161.6 ppb	20:14:44
1	Na 589.592 Radial†	33365.3	32133.2	10067 µg/L	10067 ppb	20:14:24
1	Sr 421.552†	51720.2	50354.6	496.58 µg/L	496.58 ppb	20:14:24
1	Sc 361.383	1934678.8	1934678.8	101.55 %		20:15:47
1	Y 371.029	1321682.5	1321682.5	100.92 %		20:15:47
1	Ag 328.068†	64684.8	64273.5	510.79 µg/L	510.79 ppb	20:15:53
1	As 188.979†	275.2	271.3	539.46 µg/L	539.46 ppb	20:16:14
1	B 249.677†	11965.0	11525.6	509.80 µg/L	509.80 ppb	20:15:53
1	Ba 233.527†	19663.9	19392.2	519.31 µg/L	519.31 ppb	20:15:53
1	Be 313.107†	796533.9	788172.4	509.93 µg/L	509.93 ppb	20:15:47
1	Cd 226.502†	18664.0	18505.1	523.81 µg/L	523.81 ppb	20:15:53
1	Co 228.616†	10508.6	10362.8	521.19 µg/L	521.19 ppb	20:15:53
1	Cr 267.716†	23942.7	23609.3	524.02 µg/L	524.02 ppb	20:15:53
1	Cu 324.752†	78665.1	74222.7	511.05 µg/L	511.05 ppb	20:15:53
1	Mn 257.610†	151042.5	148964.1	524.51 µg/L	524.51 ppb	20:15:47
1	Mo 202.031†	4985.0	4915.1	531.63 µg/L	531.63 ppb	20:16:14
1	Ni 231.604†	9899.0	9467.5	524.26 µg/L	524.26 ppb	20:15:53
1	P 214.914†	1250.9	1206.9	2598.1 µg/L	2598.1 ppb	20:16:14
1	Pb 220.353†	2068.8	1945.3	526.67 µg/L	526.67 ppb	20:16:14
1	S 181.975 Axial†	248.7	232.9	1061.4 µg/L	1061.4 ppb	20:16:14
1	Sb 206.836†	561.6	533.2	536.43 µg/L	536.43 ppb	20:16:14
1	Se 196.026†	362.8	344.9	542.99 µg/L	542.99 ppb	20:16:14
1	SiO2†	27621.7	25645.8	5536.2 µg/L	5536.2 ppb	20:15:53
1	Si 251.611†	31843.3	31104.4	2593.2 µg/L	2593.2 ppb	20:15:53
1	Sn 189.927†	1169.4	1153.9	543.75 µg/L	543.75 ppb	20:16:14
1	Ti 334.940†	218112.1	214708.4	509.79 µg/L	509.79 ppb	20:15:47
1	Tl 190.801†	345.0	361.4	525.95 µg/L	525.95 ppb	20:16:14
1	U 409.014†	6234.1	5960.5	498.39 µg/L	498.39 ppb	20:15:53
1	V 292.402†	49494.4	48773.0	520.85 µg/L	520.85 ppb	20:15:53
1	Zn 213.857†	21165.8	20404.1	521.33 µg/L	521.33 ppb	20:15:53
2	Sc RADIAL	56433.6	56433.6	103 %		20:14:50
2	Al 396.153Radial†	7127.1	6898.1	5081.1 µg/L	5081.1 ppb	20:14:50
2	Ca 317.933Radial†	5600.6	5237.9	5019.8 µg/L	5019.8 ppb	20:15:10
2	Fe 238.204 Radial†	594.3	558.5	5169.2 µg/L	5169.2 ppb	20:15:10
2	K 766.490 Radial†	7701.2	7272.6	5015.0 µg/L	5015.0 ppb	20:14:50
2	Mg 279.077 IEC†	552.3	523.4	5095.8 µg/L	5095.8 ppb	20:15:10
2	Na 589.592 Radial†	33272.9	31764.1	9950.9 µg/L	9950.9 ppb	20:14:50
2	Sr 421.552†	51775.5	49974.2	492.83 µg/L	492.83 ppb	20:14:50
2	Sc 361.383	1946265.3	1946265.3	102.16 %		20:16:21
2	Y 371.029	1329488.8	1329488.8	101.52 %		20:16:21
2	Ag 328.068†	64188.7	63408.7	503.91 µg/L	503.91 ppb	20:16:26
2	As 188.979†	268.9	263.5	523.87 µg/L	523.87 ppb	20:16:47

2	B 249.677†	11877.0	11369.3	502.91 µg/L	502.91 ppb	20:16:26
2	Ba 233.527†	19528.1	19144.0	512.66 µg/L	512.66 ppb	20:16:26
2	Be 313.107†	794781.7	781787.8	505.80 µg/L	505.80 ppb	20:16:21
2	Cd 226.502†	18480.0	18215.5	515.62 µg/L	515.62 ppb	20:16:26
2	Co 228.616†	10467.2	10260.6	516.05 µg/L	516.05 ppb	20:16:26
2	Cr 267.716†	23654.8	23187.1	514.65 µg/L	514.65 ppb	20:16:26
2	Cu 324.752†	78071.2	73180.2	503.87 µg/L	503.87 ppb	20:16:26
2	Mn 257.610†	150936.2	147974.6	521.02 µg/L	521.02 ppb	20:16:21
2	Mo 202.031†	4950.2	4851.8	524.78 µg/L	524.78 ppb	20:16:47
2	Ni 231.604†	9787.7	9300.6	515.01 µg/L	515.01 ppb	20:16:26
2	P 214.914†	1240.5	1189.4	2560.2 µg/L	2560.2 ppb	20:16:47
2	Pb 220.353†	2052.6	1917.3	519.10 µg/L	519.10 ppb	20:16:47
2	S 181.975 Axial†	247.4	230.1	1048.6 µg/L	1048.6 ppb	20:16:47
2	Sb 206.836†	549.9	518.5	521.70 µg/L	521.70 ppb	20:16:47
2	Se 196.026†	359.1	339.2	533.96 µg/L	533.96 ppb	20:16:47
2	SiO2†	27486.3	25351.3	5472.6 µg/L	5472.6 ppb	20:16:26
2	Si 251.611†	31599.4	30679.0	2557.7 µg/L	2557.7 ppb	20:16:26
2	Sn 189.927†	1151.0	1129.0	532.04 µg/L	532.04 ppb	20:16:47
2	Ti 334.940†	217533.3	212863.3	505.41 µg/L	505.41 ppb	20:16:21
2	Tl 190.801†	342.6	357.0	519.56 µg/L	519.56 ppb	20:16:47
2	U 409.014†	6172.3	5863.5	490.29 µg/L	490.29 ppb	20:16:26
2	V 292.402†	49049.2	48047.1	513.09 µg/L	513.09 ppb	20:16:26
2	Zn 213.857†	20967.9	20086.2	513.21 µg/L	513.21 ppb	20:16:26
3	Sc RADIAL	55357.0	55357.0	102 %		20:15:15
3	Al 396.153Radial†	7053.1	6959.1	5127.7 µg/L	5127.7 ppb	20:15:15
3	Ca 317.933Radial†	5595.2	5337.8	5115.5 µg/L	5115.5 ppb	20:15:36
3	Fe 238.204 Radial†	596.6	571.9	5292.9 µg/L	5292.9 ppb	20:15:36
3	K 766.490 Radial†	7711.3	7427.3	5121.7 µg/L	5121.7 ppb	20:15:15
3	Mg 279.077 IEC†	549.3	530.9	5167.1 µg/L	5167.1 ppb	20:15:36
3	Na 589.592 Radial†	33071.4	32190.9	10085 µg/L	10085 ppb	20:15:15
3	Sr 421.552†	51317.8	50496.4	497.98 µg/L	497.98 ppb	20:15:15
3	Sc 361.383	1908614.7	1908614.7	100.18 %		20:16:54
3	Y 371.029	1304933.8	1304933.8	99.642 %		20:16:54
3	Ag 328.068†	61590.1	62054.3	493.03 µg/L	493.03 ppb	20:17:00
3	As 188.979†	236.4	236.3	469.90 µg/L	469.90 ppb	20:17:20
3	B 249.677†	11343.5	11066.1	489.32 µg/L	489.32 ppb	20:17:00
3	Ba 233.527†	18299.4	18294.6	489.90 µg/L	489.90 ppb	20:17:00
3	Be 313.107†	759243.2	761661.2	492.77 µg/L	492.77 ppb	20:16:54
3	Cd 226.502†	17250.1	17344.7	490.92 µg/L	490.92 ppb	20:17:00
3	Co 228.616†	9685.6	9682.6	486.90 µg/L	486.90 ppb	20:17:00
3	Cr 267.716†	21366.7	21360.0	474.10 µg/L	474.10 ppb	20:17:00
3	Cu 324.752†	72758.3	69384.5	477.79 µg/L	477.79 ppb	20:17:00
3	Mn 257.610†	144571.6	144536.1	508.94 µg/L	508.94 ppb	20:16:54
3	Mo 202.031†	4146.3	4145.0	448.36 µg/L	448.36 ppb	20:17:20
3	Ni 231.604†	9098.6	8801.7	487.40 µg/L	487.40 ppb	20:17:00
3	P 214.914†	1075.0	1048.1	2252.0 µg/L	2252.0 ppb	20:17:20
3	Pb 220.353†	1806.0	1710.7	463.05 µg/L	463.05 ppb	20:17:20
3	S 181.975 Axial†	224.6	212.2	966.79 µg/L	966.79 ppb	20:17:20
3	Sb 206.836†	482.1	461.5	463.74 µg/L	463.74 ppb	20:17:20
3	Se 196.026†	323.3	310.3	489.43 µg/L	489.43 ppb	20:17:20
3	SiO2†	26096.8	24495.1	5287.8 µg/L	5287.8 ppb	20:17:00
3	Si 251.611†	29971.0	29663.7	2473.1 µg/L	2473.1 ppb	20:17:00
3	Sn 189.927†	948.6	949.2	447.28 µg/L	447.28 ppb	20:17:20
3	Ti 334.940†	207515.5	207064.2	491.63 µg/L	491.63 ppb	20:16:54
3	Tl 190.801†	307.1	328.2	478.02 µg/L	478.02 ppb	20:17:20
3	U 409.014†	5659.8	5471.1	457.39 µg/L	457.39 ppb	20:17:00
3	V 292.402†	45191.7	45143.8	481.77 µg/L	481.77 ppb	20:17:00
3	Zn 213.857†	19500.4	19026.3	486.09 µg/L	486.09 ppb	20:17:00

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1929852.9	101.30 %	1.012			1.00%
Sc RADIAL	55912.9	103 %	1.0			0.96%
Y 371.029	1318701.7	100.69 %	0.958			0.95%
Ag 328.068†	63245.5	502.58 µg/L	8.954	502.58 ppb	8.954	1.78%
QC value within limits for Ag 328.068 Recovery = 100.52%						
Al 396.153Radial†	6938.9	5111.7 µg/L	26.49	5111.7 ppb	26.49	0.52%
QC value within limits for Al 396.153Radial Recovery = 102.23%						
As 188.979†	257.0	511.08 µg/L	36.504	511.08 ppb	36.504	7.14%

QC value within limits for As 188.979 Recovery = 102.22%							
B 249.677†	11320.4	500.68 µg/L	10.423	500.68 ppb	10.423	2.08%	
QC value within limits for B 249.677 Recovery = 100.14%							
Ba 233.527†	18943.6	507.29 µg/L	15.423	507.29 ppb	15.423	3.04%	
QC value within limits for Ba 233.527 Recovery = 101.46%							
Be 313.107†	777207.2	502.83 µg/L	8.952	502.83 ppb	8.952	1.78%	
QC value within limits for Be 313.107 Recovery = 100.57%							
Ca 317.933Radial†	5290.1	5069.8 µg/L	48.03	5069.8 ppb	48.03	0.95%	
QC value within limits for Ca 317.933Radial Recovery = 101.40%							
Cd 226.502†	18021.7	510.12 µg/L	17.120	510.12 ppb	17.120	3.36%	
QC value within limits for Cd 226.502 Recovery = 102.02%							
Co 228.616†	10102.0	508.05 µg/L	18.491	508.05 ppb	18.491	3.64%	
QC value within limits for Co 228.616 Recovery = 101.61%							
Cr 267.716†	22718.8	504.25 µg/L	26.533	504.25 ppb	26.533	5.26%	
QC value within limits for Cr 267.716 Recovery = 100.85%							
Cu 324.752†	72262.5	497.57 µg/L	17.504	497.57 ppb	17.504	3.52%	
QC value within limits for Cu 324.752 Recovery = 99.51%							
Fe 238.204 Radial†	567.0	5248.2 µg/L	68.57	5248.2 ppb	68.57	1.31%	
QC value within limits for Fe 238.204 Radial Recovery = 104.96%							
K 766.490 Radial†	7318.1	5046.4 µg/L	65.51	5046.4 ppb	65.51	1.30%	
QC value within limits for K 766.490 Radial Recovery = 100.93%							
Mg 279.077 IEC†	528.2	5141.5 µg/L	39.66	5141.5 ppb	39.66	0.77%	
QC value within limits for Mg 279.077 IEC Recovery = 102.83%							
Mn 257.610†	147158.3	518.16 µg/L	8.173	518.16 ppb	8.173	1.58%	
QC value within limits for Mn 257.610 Recovery = 103.63%							
Mo 202.031†	4637.3	501.59 µg/L	46.223	501.59 ppb	46.223	9.22%	
QC value within limits for Mo 202.031 Recovery = 100.32%							
Na 589.592 Radial†	32029.4	10034 µg/L	72.5	10034 ppb	72.5	0.72%	
QC value within limits for Na 589.592 Radial Recovery = 100.34%							
Ni 231.604†	9189.9	508.89 µg/L	19.180	508.89 ppb	19.180	3.77%	
QC value within limits for Ni 231.604 Recovery = 101.78%							
P 214.914†	1148.1	2470.1 µg/L	189.85	2470.1 ppb	189.85	7.69%	
QC value within limits for P 214.914 Recovery = 98.80%							
Pb 220.353†	1857.8	502.94 µg/L	34.752	502.94 ppb	34.752	6.91%	
QC value within limits for Pb 220.353 Recovery = 100.59%							
S 181.975 Axial†	225.1	1025.6 µg/L	51.33	1025.6 ppb	51.33	5.00%	
QC value within limits for S 181.975 Axial Recovery = 102.56%							
Sb 206.836†	504.4	507.29 µg/L	38.431	507.29 ppb	38.431	7.58%	
QC value within limits for Sb 206.836 Recovery = 101.46%							
Se 196.026†	331.5	522.13 µg/L	28.673	522.13 ppb	28.673	5.49%	
QC value within limits for Se 196.026 Recovery = 104.43%							
SiO2†	25164.1	5432.2 µg/L	129.04	5432.2 ppb	129.04	2.38%	
QC value within limits for SiO2 Recovery = 101.58%							
Si 251.611†	30482.4	2541.3 µg/L	61.71	2541.3 ppb	61.71	2.43%	
QC value within limits for Si 251.611 Recovery = 101.65%							
Sn 189.927†	1077.4	507.69 µg/L	52.642	507.69 ppb	52.642	10.37%	
QC value within limits for Sn 189.927 Recovery = 101.54%							
Sr 421.552†	50275.1	495.80 µg/L	2.663	495.80 ppb	2.663	0.54%	
QC value within limits for Sr 421.552 Recovery = 99.16%							
Ti 334.940†	211545.3	502.28 µg/L	9.478	502.28 ppb	9.478	1.89%	
QC value within limits for Ti 334.940 Recovery = 100.46%							
Tl 190.801†	348.9	507.84 µg/L	26.024	507.84 ppb	26.024	5.12%	
QC value within limits for Tl 190.801 Recovery = 101.57%							
U 409.014†	5765.0	482.02 µg/L	21.717	482.02 ppb	21.717	4.51%	
QC value within limits for U 409.014 Recovery = 96.40%							
V 292.402†	47321.3	505.24 µg/L	20.689	505.24 ppb	20.689	4.09%	
QC value within limits for V 292.402 Recovery = 101.05%							
Zn 213.857†	19838.9	506.88 µg/L	18.452	506.88 ppb	18.452	3.64%	
QC value within limits for Zn 213.857 Recovery = 101.38%							
All analyte(s) passed QC.							



Sequence No.: 2

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/22/2010 20:17:30

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	54651.7	54651.7	100 %		20:18:03
1	Al 396.153Radial†	11.5	22.3	16.424 µg/L	16.424 ppb	20:18:03
1	Ca 317.933Radial†	188.5	13.8	13.269 µg/L	13.269 ppb	20:18:23
1	Fe 238.204 Radial†	19.4	3.5	32.800 µg/L	32.800 ppb	20:18:23
1	K 766.490 Radial†	170.7	0.8	0.5387 µg/L	0.5387 ppb	20:18:03
1	Mg 279.077 IEC†	7.5	-2.8	-27.083 µg/L	-27.083 ppb	20:18:23
1	Na 589.592 Radial†	424.7	34.5	10.816 µg/L	10.816 ppb	20:18:03
1	Sr 421.552†	81.8	22.3	0.2197 µg/L	0.2197 ppb	20:18:03
1	Sc 361.383	1938710.6	1938710.6	101.76 %		20:19:25
1	Y 371.029	1329728.9	1329728.9	101.54 %		20:19:25
1	Ag 328.068†	-546.3	40.0	0.3172 µg/L	0.3172 ppb	20:19:31
1	As 188.979†	-2.5	-2.1	-4.2356 µg/L	-4.2356 ppb	20:19:51
1	B 249.677†	350.0	87.3	3.8614 µg/L	3.8614 ppb	20:19:51
1	Ba 233.527†	-5.8	22.9	0.6109 µg/L	0.6109 ppb	20:19:51
1	Be 313.107†	-3598.8	269.2	0.1736 µg/L	0.1736 ppb	20:19:31
1	Cd 226.502†	-132.8	-4.3	-0.1263 µg/L	-0.1263 ppb	20:19:51
1	Co 228.616†	-2.0	12.7	0.6367 µg/L	0.6367 ppb	20:19:51
1	Cr 267.716†	-21.7	11.0	0.2444 µg/L	0.2444 ppb	20:19:51
1	Cu 324.752†	3337.0	38.4	0.2684 µg/L	0.2684 ppb	20:19:31
1	Mn 257.610†	-76.1	154.0	0.5471 µg/L	0.5471 ppb	20:19:51
1	Mo 202.031†	1.9	8.1	0.8822 µg/L	0.8822 ppb	20:19:51
1	Ni 231.604†	285.0	-0.2	-0.0088 µg/L	-0.0088 ppb	20:19:51
1	P 214.914†	21.7	-3.5	-7.6838 µg/L	-7.6838 ppb	20:19:51
1	Pb 220.353†	82.5	-10.9	-2.9402 µg/L	-2.9402 ppb	20:19:51
1	S 181.975 Axial†	13.8	1.6	7.1085 µg/L	7.1085 ppb	20:19:51
1	Sb 206.836†	29.5	9.3	9.3059 µg/L	9.3059 ppb	20:19:51
1	Se 196.026†	14.3	1.7	2.6952 µg/L	2.6952 ppb	20:19:51
1	SiO2†	1677.1	94.1	20.311 µg/L	20.311 ppb	20:19:31
1	Si 251.611†	355.0	96.4	8.0351 µg/L	8.0351 ppb	20:19:51
1	Sn 189.927†	6.6	8.8	4.1617 µg/L	4.1617 ppb	20:19:51
1	Ti 334.940†	831.4	744.9	1.7723 µg/L	1.7723 ppb	20:19:31
1	Tl 190.801†	-20.2	1.8	2.6541 µg/L	2.6541 ppb	20:19:51
1	U 409.014†	226.4	44.1	3.6921 µg/L	3.6921 ppb	20:19:31
1	V 292.402†	-39.0	-3.7	-0.0236 µg/L	-0.0236 ppb	20:19:31
1	Zn 213.857†	465.1	18.7	0.4801 µg/L	0.4801 ppb	20:19:51
2	Sc RADIAL	54463.3	54463.3	99.9 %		20:18:29
2	Al 396.153Radial†	25.0	35.9	26.453 µg/L	26.453 ppb	20:18:29
2	Ca 317.933Radial†	185.8	11.7	11.259 µg/L	11.259 ppb	20:18:49
2	Fe 238.204 Radial†	19.8	4.0	36.895 µg/L	36.895 ppb	20:18:49
2	K 766.490 Radial†	193.0	23.7	16.330 µg/L	16.330 ppb	20:18:29
2	Mg 279.077 IEC†	15.1	4.9	47.520 µg/L	47.520 ppb	20:18:49
2	Na 589.592 Radial†	410.2	21.4	6.7180 µg/L	6.7180 ppb	20:18:29
2	Sr 421.552†	55.3	-4.0	-0.0390 µg/L	-0.0390 ppb	20:18:29
2	Sc 361.383	1914441.1	1914441.1	100.49 %		20:19:57
2	Y 371.029	1313566.2	1313566.2	100.30 %		20:19:57
2	Ag 328.068†	-516.0	63.3	0.4997 µg/L	0.4997 ppb	20:20:03
2	As 188.979†	2.8	3.1	6.2152 µg/L	6.2152 ppb	20:20:23
2	B 249.677†	351.1	92.8	4.1009 µg/L	4.1009 ppb	20:20:23
2	Ba 233.527†	-4.2	24.5	0.6534 µg/L	0.6534 ppb	20:20:23
2	Be 313.107†	-3543.9	279.0	0.1802 µg/L	0.1802 ppb	20:20:03
2	Cd 226.502†	-124.1	2.7	0.0717 µg/L	0.0717 ppb	20:20:23
2	Co 228.616†	-2.8	11.9	0.6000 µg/L	0.6000 ppb	20:20:23
2	Cr 267.716†	-14.4	18.0	0.3989 µg/L	0.3989 ppb	20:20:23
2	Cu 324.752†	3377.5	120.3	0.8322 µg/L	0.8322 ppb	20:20:03
2	Mn 257.610†	-29.5	199.4	0.7044 µg/L	0.7044 ppb	20:20:23
2	Mo 202.031†	6.2	12.4	1.3461 µg/L	1.3461 ppb	20:20:23
2	Ni 231.604†	290.5	8.8	0.4893 µg/L	0.4893 ppb	20:20:23
2	P 214.914†	24.7	-0.3	-0.6681 µg/L	-0.6681 ppb	20:20:23
2	Pb 220.353†	92.2	-0.2	-0.0643 µg/L	-0.0643 ppb	20:20:23

2	S 181.975 Axial†	15.5	3.4	15.644 µg/L	15.644 ppb	20:20:23
2	Sb 206.836†	23.1	3.2	3.2418 µg/L	3.2418 ppb	20:20:23
2	Se 196.026†	11.2	-1.2	-1.8553 µg/L	-1.8553 ppb	20:20:23
2	SiO2†	1629.5	67.6	14.587 µg/L	14.587 ppb	20:20:03
2	Si 251.611†	355.2	101.0	8.4171 µg/L	8.4171 ppb	20:20:23
2	Sn 189.927†	0.4	2.7	1.2841 µg/L	1.2841 ppb	20:20:23
2	Ti 334.940†	416.6	342.5	0.8102 µg/L	0.8102 ppb	20:20:03
2	Tl 190.801†	-25.1	-3.3	-4.7750 µg/L	-4.7750 ppb	20:20:23
2	U 409.014†	260.4	80.8	6.7660 µg/L	6.7660 ppb	20:20:03
2	V 292.402†	-61.0	-26.0	-0.2519 µg/L	-0.2519 ppb	20:20:03
2	Zn 213.857†	474.9	34.1	0.8705 µg/L	0.8705 ppb	20:20:23
3	Sc RADIAL	54948.8	54948.8	101 %		20:18:55
3	Al 396.153Radial†	12.7	23.4	17.268 µg/L	17.268 ppb	20:18:55
3	Ca 317.933Radial†	180.6	5.0	4.7594 µg/L	4.7594 ppb	20:19:15
3	Fe 238.204 Radial†	18.4	2.5	22.766 µg/L	22.766 ppb	20:19:15
3	K 766.490 Radial†	205.4	34.3	23.671 µg/L	23.671 ppb	20:18:55
3	Mg 279.077 IEC†	10.6	0.2	2.2734 µg/L	2.2734 ppb	20:19:15
3	Na 589.592 Radial†	400.6	8.2	2.5821 µg/L	2.5821 ppb	20:18:55
3	Sr 421.552†	63.8	4.0	0.0399 µg/L	0.0399 ppb	20:18:55
3	Sc 361.383	1931517.1	1931517.1	101.39 %		20:20:29
3	Y 371.029	1324627.2	1324627.2	101.15 %		20:20:29
3	Ag 328.068†	-519.8	64.0	0.5086 µg/L	0.5086 ppb	20:20:35
3	As 188.979†	1.9	2.2	4.3042 µg/L	4.3042 ppb	20:20:56
3	B 249.677†	338.0	76.8	3.3982 µg/L	3.3982 ppb	20:20:56
3	Ba 233.527†	12.0	40.5	1.0825 µg/L	1.0825 ppb	20:20:56
3	Be 313.107†	-3385.1	466.8	0.3018 µg/L	0.3018 ppb	20:20:35
3	Cd 226.502†	-112.1	15.6	0.4391 µg/L	0.4391 ppb	20:20:56
3	Co 228.616†	9.1	23.7	1.1906 µg/L	1.1906 ppb	20:20:56
3	Cr 267.716†	10.2	42.4	0.9404 µg/L	0.9404 ppb	20:20:56
3	Cu 324.752†	3331.7	45.4	0.3154 µg/L	0.3154 ppb	20:20:35
3	Mn 257.610†	257.4	482.6	1.7008 µg/L	1.7008 ppb	20:20:56
3	Mo 202.031†	0.4	6.7	0.7235 µg/L	0.7235 ppb	20:20:56
3	Ni 231.604†	298.3	14.0	0.7758 µg/L	0.7758 ppb	20:20:56
3	P 214.914†	24.2	-1.0	-2.2359 µg/L	-2.2359 ppb	20:20:56
3	Pb 220.353†	83.2	-9.9	-2.6684 µg/L	-2.6684 ppb	20:20:56
3	S 181.975 Axial†	16.6	4.4	19.917 µg/L	19.917 ppb	20:20:56
3	Sb 206.836†	24.3	4.2	4.2082 µg/L	4.2082 ppb	20:20:56
3	Se 196.026†	11.5	-1.1	-1.5771 µg/L	-1.5771 ppb	20:20:56
3	SiO2†	1671.4	94.5	20.406 µg/L	20.406 ppb	20:20:35
3	Si 251.611†	445.0	186.5	15.546 µg/L	15.546 ppb	20:20:56
3	Sn 189.927†	2.9	5.2	2.4408 µg/L	2.4408 ppb	20:20:56
3	Ti 334.940†	480.7	402.2	0.9554 µg/L	0.9554 ppb	20:20:35
3	Tl 190.801†	-17.9	4.1	5.8592 µg/L	5.8592 ppb	20:20:56
3	U 409.014†	205.9	24.7	2.0657 µg/L	2.0657 ppb	20:20:35
3	V 292.402†	-7.4	27.3	0.3007 µg/L	0.3007 ppb	20:20:35
3	Zn 213.857†	487.5	42.4	1.0858 µg/L	1.0858 ppb	20:20:56

-----  
Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1928222.9	101.21 %		0.654			0.65%
Sc RADIAL	54687.9	100 %		0.4			0.45%
Y 371.029	1322640.8	100.99 %		0.631			0.62%
Ag 328.068†	55.8	0.4418 µg/L		0.10806	0.4418 ppb	0.10806	24.46%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	27.2	20.049 µg/L		5.5626	20.049 ppb	5.5626	27.75%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	1.1	2.0946 µg/L		5.56478	2.0946 ppb	5.56478	265.67%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	85.6	3.7868 µg/L		0.35726	3.7868 ppb	0.35726	9.43%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	29.3	0.7822 µg/L		0.26087	0.7822 ppb	0.26087	33.35%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	338.3	0.2185 µg/L		0.07218	0.2185 ppb	0.07218	33.03%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	10.2	9.7625 µg/L		4.44785	9.7625 ppb	4.44785	45.56%
QC value within limits for Ca 317.933Radial Recovery = Not calculated							
Cd 226.502†	4.6	0.1282 µg/L		0.28690	0.1282 ppb	0.28690	223.79%
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	16.1	0.8091 µg/L		0.33094	0.8091 ppb	0.33094	40.90%

QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	23.8	0.5279 µg/L	0.36549	0.5279 ppb	0.36549	69.24%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	68.0	0.4720 µg/L	0.31282	0.4720 ppb	0.31282	66.28%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	3.3	30.820 µg/L	7.2698	30.820 ppb	7.2698	23.59%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	19.6	13.513 µg/L	11.8205	13.513 ppb	11.8205	87.47%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	0.8	7.5703 µg/L	37.58249	7.5703 ppb	37.58249	496.45%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	278.7	0.9841 µg/L	0.62563	0.9841 ppb	0.62563	63.57%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	9.1	0.9839 µg/L	0.32354	0.9839 ppb	0.32354	32.88%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	21.4	6.7054 µg/L	4.11693	6.7054 ppb	4.11693	61.40%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	7.6	0.4187 µg/L	0.39703	0.4187 ppb	0.39703	94.82%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	-1.6	-3.5293 µg/L	3.68235	-3.5293 ppb	3.68235	104.34%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	-7.0	-1.8910 µg/L	1.58777	-1.8910 ppb	1.58777	83.97%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	3.1	14.223 µg/L	6.5212	14.223 ppb	6.5212	45.85%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	5.6	5.5853 µg/L	3.25816	5.5853 ppb	3.25816	58.33%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	-0.2	-0.2457 µg/L	2.55075	-0.2457 ppb	2.55075	>999.9%	
QC value within limits for Se 196.026 Recovery = Not calculated							
SiO2†	85.4	18.435 µg/L	3.3325	18.435 ppb	3.3325	18.08%	
QC value within limits for SiO2 Recovery = Not calculated							
Si 251.611†	127.9	10.666 µg/L	4.2303	10.666 ppb	4.2303	39.66%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	5.6	2.6289 µg/L	1.44800	2.6289 ppb	1.44800	55.08%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	7.5	0.0735 µg/L	0.13260	0.0735 ppb	0.13260	180.36%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	496.5	1.1793 µg/L	0.51863	1.1793 ppb	0.51863	43.98%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	0.9	1.2461 µg/L	5.45512	1.2461 ppb	5.45512	437.78%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	49.9	4.1746 µg/L	2.38703	4.1746 ppb	2.38703	57.18%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	-0.8	0.0084 µg/L	0.27769	0.0084 ppb	0.27769	>999.9%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	31.7	0.8121 µg/L	0.30707	0.8121 ppb	0.30707	37.81%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
All analyte(s) passed QC.							

Sequence No.: 7

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/22/2010 20:50:21

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	57078.7	57078.7	105 %		20:51:01
1	Al 396.153Radial†	6896.9	6600.3	4861.5 µg/L	4861.5 ppb	20:51:01
1	Ca 317.933Radial†	5617.5	5192.9	4976.7 µg/L	4976.7 ppb	20:51:21
1	Fe 238.204 Radial†	589.6	547.5	5067.4 µg/L	5067.4 ppb	20:51:21
1	K 766.490 Radial†	7603.3	7095.0	4892.5 µg/L	4892.5 ppb	20:51:01
1	Mg 279.077 IEC†	555.8	520.8	5070.2 µg/L	5070.2 ppb	20:51:21
1	Na 589.592 Radial†	32712.6	30865.4	9669.3 µg/L	9669.3 ppb	20:51:01
1	Sr 421.552†	50583.2	48269.5	476.02 µg/L	476.02 ppb	20:51:01
1	Sc 361.383	1975255.4	1975255.4	103.68 %		20:52:25
1	Y 371.029	1351032.4	1351032.4	103.16 %		20:52:25
1	Ag 328.068†	64268.7	62563.7	497.19 µg/L	497.19 ppb	20:52:30
1	As 188.979†	274.3	264.8	526.57 µg/L	526.57 ppb	20:52:51
1	B 249.677†	11862.6	11184.8	494.76 µg/L	494.76 ppb	20:52:30
1	Ba 233.527†	19541.5	18876.3	505.49 µg/L	505.49 ppb	20:52:30
1	Be 313.107†	791832.9	767525.5	496.57 µg/L	496.57 ppb	20:52:25
1	Cd 226.502†	18613.5	18078.8	511.76 µg/L	511.76 ppb	20:52:30
1	Co 228.616†	10507.8	10149.4	510.47 µg/L	510.47 ppb	20:52:30
1	Cr 267.716†	23763.7	22952.4	509.44 µg/L	509.44 ppb	20:52:30
1	Cu 324.752†	78148.7	72133.3	496.66 µg/L	496.66 ppb	20:52:30
1	Mn 257.610†	150039.4	144941.2	510.34 µg/L	510.34 ppb	20:52:25
1	Mo 202.031†	4919.9	4751.5	513.93 µg/L	513.93 ppb	20:52:51
1	Ni 231.604†	9849.7	9219.8	510.54 µg/L	510.54 ppb	20:52:30
1	P 214.914†	1235.6	1166.8	2511.4 µg/L	2511.4 ppb	20:52:51
1	Pb 220.353†	2049.1	1884.4	510.16 µg/L	510.16 ppb	20:52:51
1	S 181.975 Axial†	248.1	227.3	1035.9 µg/L	1035.9 ppb	20:52:51
1	Sb 206.836†	545.7	506.6	509.63 µg/L	509.63 ppb	20:52:51
1	Se 196.026†	361.8	336.6	529.64 µg/L	529.64 ppb	20:52:51
1	SiO2†	27422.7	24895.1	5374.1 µg/L	5374.1 ppb	20:52:30
1	Si 251.611†	31533.6	30161.6	2514.6 µg/L	2514.6 ppb	20:52:30
1	Sn 189.927†	1147.0	1108.6	522.40 µg/L	522.40 ppb	20:52:51
1	Ti 334.940†	215309.1	207592.8	492.89 µg/L	492.89 ppb	20:52:25
1	Tl 190.801†	337.0	346.7	504.55 µg/L	504.55 ppb	20:52:51
1	U 409.014†	6240.8	5840.8	488.40 µg/L	488.40 ppb	20:52:30
1	V 292.402†	49152.3	47441.9	506.60 µg/L	506.60 ppb	20:52:30
1	Zn 213.857†	20979.2	19796.0	505.78 µg/L	505.78 ppb	20:52:30
2	Sc RADIAL	57191.2	57191.2	105 %		20:51:27
2	Al 396.153Radial†	6955.4	6643.2	4893.3 µg/L	4893.3 ppb	20:51:27
2	Ca 317.933Radial†	5615.5	5180.4	4964.7 µg/L	4964.7 ppb	20:51:47
2	Fe 238.204 Radial†	588.7	545.6	5049.9 µg/L	5049.9 ppb	20:51:47
2	K 766.490 Radial†	7600.3	7077.7	4880.7 µg/L	4880.7 ppb	20:51:27
2	Mg 279.077 IEC†	547.9	512.1	4985.9 µg/L	4985.9 ppb	20:51:47
2	Na 589.592 Radial†	32945.7	31026.2	9719.7 µg/L	9719.7 ppb	20:51:27
2	Sr 421.552†	51091.9	48659.5	479.86 µg/L	479.86 ppb	20:51:27
2	Sc 361.383	1972775.5	1972775.5	103.55 %		20:52:58
2	Y 371.029	1350440.3	1350440.3	103.12 %		20:52:58
2	Ag 328.068†	63986.4	62369.0	495.65 µg/L	495.65 ppb	20:53:03
2	As 188.979†	267.7	258.8	514.55 µg/L	514.55 ppb	20:53:24
2	B 249.677†	11836.9	11174.4	494.30 µg/L	494.30 ppb	20:53:03
2	Ba 233.527†	19514.1	18873.5	505.42 µg/L	505.42 ppb	20:53:03
2	Be 313.107†	795257.6	771792.8	499.33 µg/L	499.33 ppb	20:52:58
2	Cd 226.502†	18575.8	18065.0	511.36 µg/L	511.36 ppb	20:53:03
2	Co 228.616†	10477.3	10132.7	509.61 µg/L	509.61 ppb	20:53:03
2	Cr 267.716†	23647.8	22869.3	507.59 µg/L	507.59 ppb	20:53:03
2	Cu 324.752†	77692.2	71787.2	494.28 µg/L	494.28 ppb	20:53:03
2	Mn 257.610†	150538.6	145605.2	512.67 µg/L	512.67 ppb	20:52:58
2	Mo 202.031†	4846.9	4687.0	506.95 µg/L	506.95 ppb	20:53:24
2	Ni 231.604†	9809.8	9193.2	509.07 µg/L	509.07 ppb	20:53:03
2	P 214.914†	1228.6	1161.6	2500.1 µg/L	2500.1 ppb	20:53:24
2	Pb 220.353†	2034.3	1872.6	506.97 µg/L	506.97 ppb	20:53:24

2	S 181.975 Axial†	247.2	226.7	1032.9 µg/L	1032.9 ppb	20:53:24
2	Sb 206.836†	536.9	498.7	501.65 µg/L	501.65 ppb	20:53:24
2	Se 196.026†	367.8	342.8	539.38 µg/L	539.38 ppb	20:53:24
2	SiO2†	27368.7	24876.2	5370.0 µg/L	5370.0 ppb	20:53:03
2	Si 251.611†	31491.4	30159.0	2514.3 µg/L	2514.3 ppb	20:53:03
2	Sn 189.927†	1129.6	1093.2	515.15 µg/L	515.15 ppb	20:53:24
2	Ti 334.940†	216014.3	208534.9	495.14 µg/L	495.14 ppb	20:52:58
2	Tl 190.801†	334.6	344.8	501.87 µg/L	501.87 ppb	20:53:24
2	U 409.014†	6150.0	5760.7	481.69 µg/L	481.69 ppb	20:53:03
2	V 292.402†	48993.5	47348.1	505.55 µg/L	505.55 ppb	20:53:03
2	Zn 213.857†	20934.7	19778.4	505.34 µg/L	505.34 ppb	20:53:03
3	Sc RADIAL	57311.4	57311.4	105 %		20:51:52
3	Al 396.153Radial†	6912.7	6588.6	4854.5 µg/L	4854.5 ppb	20:51:52
3	Ca 317.933Radial†	5602.1	5156.4	4941.7 µg/L	4941.7 ppb	20:52:13
3	Fe 238.204 Radial†	586.0	541.8	5014.0 µg/L	5014.0 ppb	20:52:13
3	K 766.490 Radial†	7588.6	7051.4	4862.5 µg/L	4862.5 ppb	20:51:52
3	Mg 279.077 IEC†	547.1	510.4	4967.4 µg/L	4967.4 ppb	20:52:13
3	Na 589.592 Radial†	32874.9	30892.9	9678.0 µg/L	9678.0 ppb	20:51:52
3	Sr 421.552†	50976.9	48448.0	477.78 µg/L	477.78 ppb	20:51:52
3	Sc 361.383	1963295.6	1963295.6	103.05 %		20:53:31
3	Y 371.029	1344375.1	1344375.1	102.65 %		20:53:31
3	Ag 328.068†	60682.4	59461.3	472.42 µg/L	472.42 ppb	20:53:37
3	As 188.979†	228.9	222.4	442.26 µg/L	442.26 ppb	20:53:57
3	B 249.677†	11208.4	10619.7	469.60 µg/L	469.60 ppb	20:53:37
3	Ba 233.527†	18024.2	17518.7	469.12 µg/L	469.12 ppb	20:53:37
3	Be 313.107†	750332.3	731906.9	473.53 µg/L	473.53 ppb	20:53:31
3	Cd 226.502†	17080.9	16701.0	472.71 µg/L	472.71 ppb	20:53:37
3	Co 228.616†	9567.3	9298.5	467.60 µg/L	467.60 ppb	20:53:37
3	Cr 267.716†	20980.0	20390.7	452.59 µg/L	452.59 ppb	20:53:37
3	Cu 324.752†	71561.6	66200.5	455.86 µg/L	455.86 ppb	20:53:37
3	Mn 257.610†	142622.4	138625.5	488.12 µg/L	488.12 ppb	20:53:31
3	Mo 202.031†	4119.0	4003.3	433.03 µg/L	433.03 ppb	20:53:57
3	Ni 231.604†	8972.1	8426.1	466.59 µg/L	466.59 ppb	20:53:37
3	P 214.914†	1071.1	1014.5	2180.4 µg/L	2180.4 ppb	20:53:57
3	Pb 220.353†	1791.3	1646.3	445.63 µg/L	445.63 ppb	20:53:57
3	S 181.975 Axial†	218.5	200.0	911.46 µg/L	911.46 ppb	20:53:57
3	Sb 206.836†	474.0	440.2	442.47 µg/L	442.47 ppb	20:53:57
3	Se 196.026†	320.1	298.2	470.18 µg/L	470.18 ppb	20:53:57
3	SiO2†	25669.5	23355.0	5041.6 µg/L	5041.6 ppb	20:53:37
3	Si 251.611†	29449.4	28324.4	2361.4 µg/L	2361.4 ppb	20:53:37
3	Sn 189.927†	943.8	918.2	432.70 µg/L	432.70 ppb	20:53:57
3	Ti 334.940†	203181.4	197089.5	467.94 µg/L	467.94 ppb	20:53:31
3	Tl 190.801†	309.1	321.7	468.29 µg/L	468.29 ppb	20:53:57
3	U 409.014†	5583.2	5239.4	438.02 µg/L	438.02 ppb	20:53:37
3	V 292.402†	44463.4	43180.7	460.85 µg/L	460.85 ppb	20:53:37
3	Zn 213.857†	19197.6	18190.4	464.74 µg/L	464.74 ppb	20:53:37

-----  
Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1970442.2	103.43 %	0.331			0.32%
Sc RADIAL	57193.8	105 %	0.2			0.20%
Y 371.029	1348615.9	102.98 %	0.281			0.27%
Ag 328.068†	61464.7	488.42 µg/L	13.880	488.42 ppb	13.880	2.84%
QC value within limits for Ag 328.068 Recovery = 97.68%						
Al 396.153Radial†	6610.7	4869.8 µg/L	20.66	4869.8 ppb	20.66	0.42%
QC value within limits for Al 396.153Radial Recovery = 97.40%						
As 188.979†	248.7	494.46 µg/L	45.604	494.46 ppb	45.604	9.22%
QC value within limits for As 188.979 Recovery = 98.89%						
B 249.677†	10992.9	486.22 µg/L	14.392	486.22 ppb	14.392	2.96%
QC value within limits for B 249.677 Recovery = 97.24%						
Ba 233.527†	18422.8	493.35 µg/L	20.977	493.35 ppb	20.977	4.25%
QC value within limits for Ba 233.527 Recovery = 98.67%						
Be 313.107†	757075.1	489.81 µg/L	14.169	489.81 ppb	14.169	2.89%
QC value within limits for Be 313.107 Recovery = 97.96%						
Ca 317.933Radial†	5176.5	4961.0 µg/L	17.79	4961.0 ppb	17.79	0.36%
QC value within limits for Ca 317.933Radial Recovery = 99.22%						
Cd 226.502†	17614.9	498.61 µg/L	22.431	498.61 ppb	22.431	4.50%
QC value within limits for Cd 226.502 Recovery = 99.72%						
Co 228.616†	9860.2	495.89 µg/L	24.505	495.89 ppb	24.505	4.94%

QC value within limits for Co 228.616 Recovery = 99.18%							
Cr 267.716†	22070.8	489.87 µg/L	32.303	489.87 ppb	32.303	6.59%	
QC value within limits for Cr 267.716 Recovery = 97.97%							
Cu 324.752†	70040.3	482.26 µg/L	22.898	482.26 ppb	22.898	4.75%	
QC value within limits for Cu 324.752 Recovery = 96.45%							
Fe 238.204 Radial†	544.9	5043.8 µg/L	27.22	5043.8 ppb	27.22	0.54%	
QC value within limits for Fe 238.204 Radial Recovery = 100.88%							
K 766.490 Radial†	7074.7	4878.6 µg/L	15.12	4878.6 ppb	15.12	0.31%	
QC value within limits for K 766.490 Radial Recovery = 97.57%							
Mg 279.077 IEC†	514.4	5007.8 µg/L	54.82	5007.8 ppb	54.82	1.09%	
QC value within limits for Mg 279.077 IEC Recovery = 100.16%							
Mn 257.610†	143057.3	503.71 µg/L	13.554	503.71 ppb	13.554	2.69%	
QC value within limits for Mn 257.610 Recovery = 100.74%							
Mo 202.031†	4480.6	484.64 µg/L	44.829	484.64 ppb	44.829	9.25%	
QC value within limits for Mo 202.031 Recovery = 96.93%							
Na 589.592 Radial†	30928.2	9689.0 µg/L	26.95	9689.0 ppb	26.95	0.28%	
QC value within limits for Na 589.592 Radial Recovery = 96.89%							
Ni 231.604†	8946.4	495.40 µg/L	24.959	495.40 ppb	24.959	5.04%	
QC value within limits for Ni 231.604 Recovery = 99.08%							
P 214.914†	1114.3	2397.3 µg/L	187.94	2397.3 ppb	187.94	7.84%	
QC value within limits for P 214.914 Recovery = 95.89%							
Pb 220.353†	1801.1	487.59 µg/L	36.372	487.59 ppb	36.372	7.46%	
QC value within limits for Pb 220.353 Recovery = 97.52%							
S 181.975 Axial†	218.0	993.42 µg/L	70.992	993.42 ppb	70.992	7.15%	
QC value within limits for S 181.975 Axial Recovery = 99.34%							
Sb 206.836†	481.8	484.58 µg/L	36.688	484.58 ppb	36.688	7.57%	
QC value within limits for Sb 206.836 Recovery = 96.92%							
Se 196.026†	325.9	513.07 µg/L	37.458	513.07 ppb	37.458	7.30%	
QC value within limits for Se 196.026 Recovery = 102.61%							
SiO2†	24375.4	5261.9 µg/L	190.78	5261.9 ppb	190.78	3.63%	
QC value within limits for SiO2 Recovery = 98.40%							
Si 251.611†	29548.3	2463.4 µg/L	88.37	2463.4 ppb	88.37	3.59%	
QC value within limits for Si 251.611 Recovery = 98.54%							
Sn 189.927†	1040.0	490.08 µg/L	49.829	490.08 ppb	49.829	10.17%	
QC value within limits for Sn 189.927 Recovery = 98.02%							
Sr 421.552†	48459.0	477.89 µg/L	1.925	477.89 ppb	1.925	0.40%	
QC value within limits for Sr 421.552 Recovery = 95.58%							
Ti 334.940†	204405.7	485.32 µg/L	15.093	485.32 ppb	15.093	3.11%	
QC value within limits for Ti 334.940 Recovery = 97.06%							
Tl 190.801†	337.7	491.57 µg/L	20.205	491.57 ppb	20.205	4.11%	
QC value within limits for Tl 190.801 Recovery = 98.31%							
U 409.014†	5613.7	469.37 µg/L	27.358	469.37 ppb	27.358	5.83%	
QC value within limits for U 409.014 Recovery = 93.87%							
V 292.402†	45990.2	491.00 µg/L	26.117	491.00 ppb	26.117	5.32%	
QC value within limits for V 292.402 Recovery = 98.20%							
Zn 213.857†	19254.9	491.95 µg/L	23.573	491.95 ppb	23.573	4.79%	
QC value within limits for Zn 213.857 Recovery = 98.39%							
All analyte(s) passed QC.							

Sequence No.: 8

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/22/2010 20:54:06

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	56035.6	56035.6	103 %		20:54:39
1	Al 396.153Radial†	-10.4	0.6	0.4631 µg/L	0.4631 ppb	20:54:39
1	Ca 317.933Radial†	200.1	20.4	19.598 µg/L	19.598 ppb	20:54:59
1	Fe 238.204 Radial†	22.3	5.9	54.724 µg/L	54.724 ppb	20:54:59
1	K 766.490 Radial†	196.8	22.0	15.156 µg/L	15.156 ppb	20:54:39
1	Mg 279.077 IEC†	11.1	0.5	5.1913 µg/L	5.1913 ppb	20:54:59
1	Na 589.592 Radial†	448.9	47.6	14.899 µg/L	14.899 ppb	20:54:39
1	Sr 421.552†	54.7	-6.0	-0.0595 µg/L	-0.0595 ppb	20:54:39
1	Sc 361.383	1957789.0	1957789.0	102.76 %		20:56:01
1	Y 371.029	1345870.7	1345870.7	102.77 %		20:56:01
1	Ag 328.068†	-457.5	131.6	1.0399 µg/L	1.0399 ppb	20:56:07
1	As 188.979†	-0.9	-0.6	-1.1435 µg/L	-1.1435 ppb	20:56:27
1	B 249.677†	335.6	69.9	3.0757 µg/L	3.0757 ppb	20:56:27
1	Ba 233.527†	-15.2	13.8	0.3685 µg/L	0.3685 ppb	20:56:27
1	Be 313.107†	-3546.8	354.2	0.2290 µg/L	0.2290 ppb	20:56:07
1	Cd 226.502†	-130.5	-0.9	-0.0310 µg/L	-0.0310 ppb	20:56:27
1	Co 228.616†	-11.5	3.5	0.1732 µg/L	0.1732 ppb	20:56:27
1	Cr 267.716†	-27.8	5.3	0.1177 µg/L	0.1177 ppb	20:56:27
1	Cu 324.752†	3390.1	58.1	0.4071 µg/L	0.4071 ppb	20:56:07
1	Mn 257.610†	-118.6	113.4	0.4060 µg/L	0.4060 ppb	20:56:27
1	Mo 202.031†	-1.3	5.0	0.5424 µg/L	0.5424 ppb	20:56:27
1	Ni 231.604†	283.5	-4.4	-0.2426 µg/L	-0.2426 ppb	20:56:27
1	P 214.914†	25.5	-0.1	-0.2873 µg/L	-0.2873 ppb	20:56:27
1	Pb 220.353†	82.6	-11.6	-3.1371 µg/L	-3.1371 ppb	20:56:27
1	S 181.975 Axial†	12.7	0.4	1.9107 µg/L	1.9107 ppb	20:56:27
1	Sb 206.836†	24.2	3.8	3.7639 µg/L	3.7639 ppb	20:56:27
1	Se 196.026†	18.7	5.9	9.2369 µg/L	9.2369 ppb	20:56:27
1	SiO2†	1675.2	76.2	16.444 µg/L	16.444 ppb	20:56:07
1	Si 251.611†	379.1	116.4	9.7062 µg/L	9.7062 ppb	20:56:27
1	Sn 189.927†	0.4	2.7	1.2744 µg/L	1.2744 ppb	20:56:27
1	Ti 334.940†	392.0	309.4	0.7351 µg/L	0.7351 ppb	20:56:07
1	Tl 190.801†	-23.0	-0.7	-1.0298 µg/L	-1.0298 ppb	20:56:27
1	U 409.014†	171.1	-11.9	-1.0031 µg/L	-1.0031 ppb	20:56:07
1	V 292.402†	-56.8	-20.7	-0.2080 µg/L	-0.2080 ppb	20:56:07
1	Zn 213.857†	460.1	9.3	0.2374 µg/L	0.2374 ppb	20:56:27
2	Sc RADIAL	56302.3	56302.3	103 %		20:55:05
2	Al 396.153Radial†	-1.9	8.9	6.5741 µg/L	6.5741 ppb	20:55:05
2	Ca 317.933Radial†	192.7	12.4	11.841 µg/L	11.841 ppb	20:55:25
2	Fe 238.204 Radial†	18.0	1.6	14.793 µg/L	14.793 ppb	20:55:25
2	K 766.490 Radial†	149.9	-24.4	-16.803 µg/L	-16.803 ppb	20:55:05
2	Mg 279.077 IEC†	13.3	2.6	25.065 µg/L	25.065 ppb	20:55:25
2	Na 589.592 Radial†	418.0	15.6	4.8856 µg/L	4.8856 ppb	20:55:05
2	Sr 421.552†	45.9	-14.8	-0.1461 µg/L	-0.1461 ppb	20:55:05
2	Sc 361.383	1972615.3	1972615.3	103.54 %		20:56:33
2	Y 371.029	1356699.2	1356699.2	103.59 %		20:56:33
2	Ag 328.068†	-448.4	143.7	1.1351 µg/L	1.1351 ppb	20:56:39
2	As 188.979†	2.6	2.8	5.5749 µg/L	5.5749 ppb	20:56:59
2	B 249.677†	333.8	65.7	2.9101 µg/L	2.9101 ppb	20:56:59
2	Ba 233.527†	-17.5	11.7	0.3119 µg/L	0.3119 ppb	20:56:59
2	Be 313.107†	-3484.6	440.3	0.2847 µg/L	0.2847 ppb	20:56:39
2	Cd 226.502†	-122.2	8.1	0.2284 µg/L	0.2284 ppb	20:56:59
2	Co 228.616†	-8.3	6.6	0.3323 µg/L	0.3323 ppb	20:56:59
2	Cr 267.716†	-22.4	10.7	0.2371 µg/L	0.2371 ppb	20:56:59
2	Cu 324.752†	3396.5	39.5	0.2734 µg/L	0.2734 ppb	20:56:39
2	Mn 257.610†	-109.8	122.7	0.4327 µg/L	0.4327 ppb	20:56:59
2	Mo 202.031†	4.1	10.3	1.1122 µg/L	1.1122 ppb	20:56:59
2	Ni 231.604†	286.4	-3.6	-0.1997 µg/L	-0.1997 ppb	20:56:59
2	P 214.914†	24.6	-1.1	-2.4288 µg/L	-2.4288 ppb	20:56:59
2	Pb 220.353†	98.3	3.0	0.8224 µg/L	0.8224 ppb	20:56:59

2	S 181.975 Axial†	12.5	0.1	0.3109 µg/L	0.3109 ppb	20:56:59
2	Sb 206.836†	22.9	2.4	2.3820 µg/L	2.3820 ppb	20:56:59
2	Se 196.026†	15.2	2.3	3.6184 µg/L	3.6184 ppb	20:56:59
2	SiO2†	1630.5	20.7	4.4697 µg/L	4.4697 ppb	20:56:39
2	Si 251.611†	364.8	99.8	8.3202 µg/L	8.3202 ppb	20:56:59
2	Sn 189.927†	2.5	4.7	2.2308 µg/L	2.2308 ppb	20:56:59
2	Ti 334.940†	423.7	337.2	0.7993 µg/L	0.7993 ppb	20:56:39
2	Tl 190.801†	-23.4	-0.9	-1.3345 µg/L	-1.3345 ppb	20:56:59
2	U 409.014†	118.7	-63.7	-5.3438 µg/L	-5.3438 ppb	20:56:39
2	V 292.402†	-30.3	5.4	0.0624 µg/L	0.0624 ppb	20:56:39
2	Zn 213.857†	476.2	21.5	0.5509 µg/L	0.5509 ppb	20:56:59
3	Sc RADIAL	55542.2	55542.2	102 %		20:55:31
3	Al 396.153Radial†	6.5	17.2	12.675 µg/L	12.675 ppb	20:55:31
3	Ca 317.933Radial†	198.7	20.8	19.960 µg/L	19.960 ppb	20:55:51
3	Fe 238.204 Radial†	18.0	1.9	17.551 µg/L	17.551 ppb	20:55:51
3	K 766.490 Radial†	206.5	33.2	22.900 µg/L	22.900 ppb	20:55:31
3	Mg 279.077 IEC†	11.2	0.7	6.8519 µg/L	6.8519 ppb	20:55:51
3	Na 589.592 Radial†	377.8	-18.4	-5.7495 µg/L	-5.7495 ppb	20:55:31
3	Sr 421.552†	93.5	32.5	0.3208 µg/L	0.3208 ppb	20:55:31
3	Sc 361.383	1961712.6	1961712.6	102.97 %		20:57:05
3	Y 371.029	1348236.5	1348236.5	102.95 %		20:57:05
3	Ag 328.068†	-514.0	77.6	0.6175 µg/L	0.6175 ppb	20:57:11
3	As 188.979†	-1.0	-0.7	-1.3036 µg/L	-1.3036 ppb	20:57:31
3	B 249.677†	344.2	77.6	3.4378 µg/L	3.4378 ppb	20:57:31
3	Ba 233.527†	-3.6	25.1	0.6725 µg/L	0.6725 ppb	20:57:31
3	Be 313.107†	-3392.1	511.4	0.3307 µg/L	0.3307 ppb	20:57:11
3	Cd 226.502†	-129.4	0.4	0.0104 µg/L	0.0104 ppb	20:57:31
3	Co 228.616†	-3.2	11.6	0.5834 µg/L	0.5834 ppb	20:57:31
3	Cr 267.716†	-18.3	14.6	0.3232 µg/L	0.3232 ppb	20:57:31
3	Cu 324.752†	3301.4	-34.7	-0.2359 µg/L	-0.2359 ppb	20:57:11
3	Mn 257.610†	-75.5	155.5	0.5489 µg/L	0.5489 ppb	20:57:31
3	Mo 202.031†	2.7	8.9	0.9600 µg/L	0.9600 ppb	20:57:31
3	Ni 231.604†	294.2	5.5	0.3042 µg/L	0.3042 ppb	20:57:31
3	P 214.914†	27.9	2.2	4.8488 µg/L	4.8488 ppb	20:57:31
3	Pb 220.353†	90.7	-3.8	-1.0391 µg/L	-1.0391 ppb	20:57:31
3	S 181.975 Axial†	16.3	3.9	17.576 µg/L	17.576 ppb	20:57:31
3	Sb 206.836†	27.7	7.1	7.1622 µg/L	7.1622 ppb	20:57:31
3	Se 196.026†	14.3	1.5	2.4352 µg/L	2.4352 ppb	20:57:31
3	SiO2†	1650.5	48.9	10.547 µg/L	10.547 ppb	20:57:11
3	Si 251.611†	386.2	122.6	10.218 µg/L	10.218 ppb	20:57:31
3	Sn 189.927†	6.8	8.9	4.2102 µg/L	4.2102 ppb	20:57:31
3	Ti 334.940†	345.3	263.4	0.6255 µg/L	0.6255 ppb	20:57:11
3	Tl 190.801†	-19.9	2.4	3.4157 µg/L	3.4157 ppb	20:57:31
3	U 409.014†	300.5	113.5	9.5061 µg/L	9.5061 ppb	20:57:11
3	V 292.402†	24.5	58.5	0.6368 µg/L	0.6368 ppb	20:57:11
3	Zn 213.857†	470.6	18.6	0.4776 µg/L	0.4776 ppb	20:57:31

-----  
Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1964039.0	103.09 %		0.403			0.39%
Sc RADIAL	55960.0	103 %		0.7			0.69%
Y 371.029	1350268.8	103.10 %		0.435			0.42%
Ag 328.068†	117.6	0.9308 µg/L		0.27549	0.9308 ppb	0.27549	29.60%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	8.9	6.5708 µg/L		6.10612	6.5708 ppb	6.10612	92.93%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	0.5	1.0426 µg/L		3.92589	1.0426 ppb	3.92589	376.56%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	71.1	3.1412 µg/L		0.26989	3.1412 ppb	0.26989	8.59%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	16.9	0.4510 µg/L		0.19390	0.4510 ppb	0.19390	43.00%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	435.3	0.2815 µg/L		0.05095	0.2815 ppb	0.05095	18.10%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	17.9	17.133 µg/L		4.5866	17.133 ppb	4.5866	26.77%
QC value within limits for Ca 317.933Radial Recovery = Not calculated							
Cd 226.502†	2.6	0.0693 µg/L		0.13932	0.0693 ppb	0.13932	201.13%
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	7.2	0.3630 µg/L		0.20681	0.3630 ppb	0.20681	56.98%



QC value within limits for Co 228.616	Recovery = Not calculated		
Cr 267.716†	10.2 0.2260 µg/L	0.10323 0.2260 ppb	0.10323 45.67%
QC value within limits for Cr 267.716	Recovery = Not calculated		
Cu 324.752†	21.0 0.1482 µg/L	0.33927 0.1482 ppb	0.33927 228.92%
QC value within limits for Cu 324.752	Recovery = Not calculated		
Fe 238.204 Radial†	3.1 29.023 µg/L	22.3007 29.023 ppb	22.3007 76.84%
QC value within limits for Fe 238.204 Radial	Recovery = Not calculated		
K 766.490 Radial†	10.3 7.0843 µg/L	21.04632 7.0843 ppb	21.04632 297.08%
QC value within limits for K 766.490 Radial	Recovery = Not calculated		
Mg 279.077 IEC†	1.3 12.369 µg/L	11.0259 12.369 ppb	11.0259 89.14%
QC value within limits for Mg 279.077 IEC	Recovery = Not calculated		
Mn 257.610†	130.5 0.4625 µg/L	0.07600 0.4625 ppb	0.07600 16.43%
QC value within limits for Mn 257.610	Recovery = Not calculated		
Mo 202.031†	8.1 0.8715 µg/L	0.29501 0.8715 ppb	0.29501 33.85%
QC value within limits for Mo 202.031	Recovery = Not calculated		
Na 589.592 Radial†	14.9 4.6785 µg/L	10.32607 4.6785 ppb	10.32607 220.71%
QC value within limits for Na 589.592 Radial	Recovery = Not calculated		
Ni 231.604†	-0.8 -0.0460 µg/L	0.30406 -0.0460 ppb	0.30406 660.40%
QC value within limits for Ni 231.604	Recovery = Not calculated		
P 214.914†	0.3 0.7109 µg/L	3.74003 0.7109 ppb	3.74003 526.09%
QC value within limits for P 214.914	Recovery = Not calculated		
Pb 220.353†	-4.1 -1.1179 µg/L	1.98094 -1.1179 ppb	1.98094 177.20%
QC value within limits for Pb 220.353	Recovery = Not calculated		
S 181.975 Axial†	1.4 6.5991 µg/L	9.53955 6.5991 ppb	9.53955 144.56%
QC value within limits for S 181.975 Axial	Recovery = Not calculated		
Sb 206.836†	4.4 4.4361 µg/L	2.45997 4.4361 ppb	2.45997 55.45%
QC value within limits for Sb 206.836	Recovery = Not calculated		
Se 196.026†	3.2 5.0968 µg/L	3.63389 5.0968 ppb	3.63389 71.30%
QC value within limits for Se 196.026	Recovery = Not calculated		
SiO2†	48.6 10.487 µg/L	5.9872 10.487 ppb	5.9872 57.09%
QC value within limits for SiO2	Recovery = Not calculated		
Si 251.611†	112.9 9.4146 µg/L	0.98171 9.4146 ppb	0.98171 10.43%
QC value within limits for Si 251.611	Recovery = Not calculated		
Sn 189.927†	5.5 2.5718 µg/L	1.49730 2.5718 ppb	1.49730 58.22%
QC value within limits for Sn 189.927	Recovery = Not calculated		
Sr 421.552†	3.9 0.0384 µg/L	0.24835 0.0384 ppb	0.24835 646.82%
QC value within limits for Sr 421.552	Recovery = Not calculated		
Ti 334.940†	303.3 0.7200 µg/L	0.08787 0.7200 ppb	0.08787 12.20%
QC value within limits for Ti 334.940	Recovery = Not calculated		
Tl 190.801†	0.2 0.3505 µg/L	2.65899 0.3505 ppb	2.65899 758.73%
QC value within limits for Tl 190.801	Recovery = Not calculated		
U 409.014†	12.6 1.0531 µg/L	7.63546 1.0531 ppb	7.63546 725.06%
QC value within limits for U 409.014	Recovery = Not calculated		
V 292.402†	14.4 0.1637 µg/L	0.43143 0.1637 ppb	0.43143 263.48%
QC value within limits for V 292.402	Recovery = Not calculated		
Zn 213.857†	16.5 0.4220 µg/L	0.16402 0.4220 ppb	0.16402 38.87%
QC value within limits for Zn 213.857	Recovery = Not calculated		

All analyte(s) passed QC.

Sequence No.: 15

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/22/2010 21:19:36

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	57084.1	57084.1	105 %		21:20:14
1	Al 396.153Radial†	6957.6	6657.7	4903.9 µg/L	4903.9 ppb	21:20:14
1	Ca 317.933Radial†	5529.1	5107.9	4895.2 µg/L	4895.2 ppb	21:20:34
1	Fe 238.204 Radial†	583.9	542.0	5017.0 µg/L	5017.0 ppb	21:20:34
1	K 766.490 Radial†	7590.4	7081.9	4883.5 µg/L	4883.5 ppb	21:20:14
1	Mg 279.077 IEC†	548.7	513.9	5003.3 µg/L	5003.3 ppb	21:20:34
1	Na 589.592 Radial†	32954.3	31093.3	9740.7 µg/L	9740.7 ppb	21:20:14
1	Sr 421.552†	50938.6	48604.5	479.32 µg/L	479.32 ppb	21:20:14
1	Sc 361.383	1979667.5	1979667.5	103.91 %		21:21:38
1	Y 371.029	1356114.5	1356114.5	103.55 %		21:21:38
1	Ag 328.068†	64207.1	62366.2	495.61 µg/L	495.61 ppb	21:21:43
1	As 188.979†	268.1	258.3	513.54 µg/L	513.54 ppb	21:22:04
1	B 249.677†	11869.0	11165.5	493.92 µg/L	493.92 ppb	21:21:43
1	Ba 233.527†	19443.4	18739.9	501.84 µg/L	501.84 ppb	21:21:43
1	Be 313.107†	791704.5	765699.9	495.39 µg/L	495.39 ppb	21:21:38
1	Cd 226.502†	18509.1	17938.3	507.78 µg/L	507.78 ppb	21:21:43
1	Co 228.616†	10426.7	10048.7	505.40 µg/L	505.40 ppb	21:21:43
1	Cr 267.716†	23578.6	22723.1	504.35 µg/L	504.35 ppb	21:21:43
1	Cu 324.752†	78060.1	71880.1	494.91 µg/L	494.91 ppb	21:21:43
1	Mn 257.610†	149920.4	144504.2	508.79 µg/L	508.79 ppb	21:21:38
1	Mo 202.031†	4905.9	4727.4	511.32 µg/L	511.32 ppb	21:22:04
1	Ni 231.604†	9738.2	9091.3	503.42 µg/L	503.42 ppb	21:21:43
1	P 214.914†	1229.1	1157.9	2492.1 µg/L	2492.1 ppb	21:22:04
1	Pb 220.353†	2043.5	1874.6	507.52 µg/L	507.52 ppb	21:22:04
1	S 181.975 Axial†	241.3	220.3	1003.7 µg/L	1003.7 ppb	21:22:04
1	Sb 206.836†	551.4	510.9	513.98 µg/L	513.98 ppb	21:22:04
1	Se 196.026†	356.9	331.1	521.19 µg/L	521.19 ppb	21:22:04
1	SiO2†	27315.9	24733.4	5339.2 µg/L	5339.2 ppb	21:21:43
1	Si 251.611†	31377.0	29943.1	2496.3 µg/L	2496.3 ppb	21:21:43
1	Sn 189.927†	1137.7	1097.2	517.03 µg/L	517.03 ppb	21:22:04
1	Ti 334.940†	215653.8	207461.7	492.58 µg/L	492.58 ppb	21:21:38
1	Tl 190.801†	344.6	353.4	514.12 µg/L	514.12 ppb	21:22:04
1	U 409.014†	6243.4	5829.9	487.50 µg/L	487.50 ppb	21:21:43
1	V 292.402†	48985.3	47175.5	503.75 µg/L	503.75 ppb	21:21:43
1	Zn 213.857†	20859.2	19635.4	501.69 µg/L	501.69 ppb	21:21:43
2	Sc RADIAL	56681.6	56681.6	104 %		21:20:40
2	Al 396.153Radial†	6915.7	6664.6	4909.2 µg/L	4909.2 ppb	21:20:40
2	Ca 317.933Radial†	5529.1	5145.4	4931.1 µg/L	4931.1 ppb	21:21:00
2	Fe 238.204 Radial†	584.3	546.4	5057.4 µg/L	5057.4 ppb	21:21:00
2	K 766.490 Radial†	7557.3	7101.5	4897.1 µg/L	4897.1 ppb	21:20:40
2	Mg 279.077 IEC†	546.8	515.9	5022.1 µg/L	5022.1 ppb	21:21:00
2	Na 589.592 Radial†	32868.7	31234.5	9785.0 µg/L	9785.0 ppb	21:20:40
2	Sr 421.552†	50735.6	48754.8	480.80 µg/L	480.80 ppb	21:20:40
2	Sc 361.383	1980875.5	1980875.5	103.98 %		21:22:11
2	Y 371.029	1356549.8	1356549.8	103.58 %		21:22:11
2	Ag 328.068†	64301.9	62419.8	496.04 µg/L	496.04 ppb	21:22:17
2	As 188.979†	261.2	251.6	500.16 µg/L	500.16 ppb	21:22:37
2	B 249.677†	11890.3	11178.9	494.50 µg/L	494.50 ppb	21:22:17
2	Ba 233.527†	19468.8	18752.9	502.19 µg/L	502.19 ppb	21:22:17
2	Be 313.107†	792114.1	765629.1	495.34 µg/L	495.34 ppb	21:22:11
2	Cd 226.502†	18521.2	17939.1	507.80 µg/L	507.80 ppb	21:22:17
2	Co 228.616†	10440.8	10056.2	505.76 µg/L	505.76 ppb	21:22:17
2	Cr 267.716†	23660.3	22787.8	505.78 µg/L	505.78 ppb	21:22:17
2	Cu 324.752†	78179.9	71949.5	495.39 µg/L	495.39 ppb	21:22:17
2	Mn 257.610†	150043.4	144534.5	508.91 µg/L	508.91 ppb	21:22:11
2	Mo 202.031†	4835.0	4656.4	503.64 µg/L	503.64 ppb	21:22:37
2	Ni 231.604†	9816.2	9160.6	507.26 µg/L	507.26 ppb	21:22:17
2	P 214.914†	1217.4	1145.9	2465.6 µg/L	2465.6 ppb	21:22:37
2	Pb 220.353†	2026.2	1856.8	502.66 µg/L	502.66 ppb	21:22:37

2	S 181.975 Axial†	247.5	226.1	1030.0 µg/L	1030.0 ppb	21:22:37
2	Sb 206.836†	537.9	497.6	500.49 µg/L	500.49 ppb	21:22:37
2	Se 196.026†	360.7	334.6	526.58 µg/L	526.58 ppb	21:22:37
2	SiO2†	27327.4	24728.4	5338.1 µg/L	5338.1 ppb	21:22:17
2	Si 251.611†	31555.7	30096.5	2509.1 µg/L	2509.1 ppb	21:22:17
2	Sn 189.927†	1125.7	1085.0	511.29 µg/L	511.29 ppb	21:22:37
2	Ti 334.940†	215886.7	207559.1	492.81 µg/L	492.81 ppb	21:22:11
2	Tl 190.801†	344.2	352.7	513.20 µg/L	513.20 ppb	21:22:37
2	U 409.014†	6278.5	5860.1	490.02 µg/L	490.02 ppb	21:22:17
2	V 292.402†	49048.9	47207.9	504.05 µg/L	504.05 ppb	21:22:17
2	Zn 213.857†	20927.8	19689.1	503.05 µg/L	503.05 ppb	21:22:17
3	Sc RADIAL	56952.1	56952.1	104 %		21:21:06
3	Al 396.153Radial†	6916.0	6633.3	4887.5 µg/L	4887.5 ppb	21:21:06
3	Ca 317.933Radial†	5490.5	5083.2	4871.5 µg/L	4871.5 ppb	21:21:26
3	Fe 238.204 Radial†	584.2	543.6	5030.7 µg/L	5030.7 ppb	21:21:26
3	K 766.490 Radial†	7560.8	7070.3	4875.6 µg/L	4875.6 ppb	21:21:06
3	Mg 279.077 IEC†	539.3	506.2	4926.4 µg/L	4926.4 ppb	21:21:26
3	Na 589.592 Radial†	32996.4	31206.6	9776.2 µg/L	9776.2 ppb	21:21:06
3	Sr 421.552†	50962.7	48740.4	480.66 µg/L	480.66 ppb	21:21:06
3	Sc 361.383	1978793.5	1978793.5	103.87 %		21:22:44
3	Y 371.029	1356101.9	1356101.9	103.55 %		21:22:44
3	Ag 328.068†	61217.5	59515.2	472.84 µg/L	472.84 ppb	21:22:50
3	As 188.979†	232.7	224.3	446.07 µg/L	446.07 ppb	21:23:10
3	B 249.677†	11267.0	10590.9	468.32 µg/L	468.32 ppb	21:22:50
3	Ba 233.527†	18078.5	17434.0	466.86 µg/L	466.86 ppb	21:22:50
3	Be 313.107†	751488.3	727317.3	470.56 µg/L	470.56 ppb	21:22:44
3	Cd 226.502†	17093.0	16582.8	469.36 µg/L	469.36 ppb	21:22:50
3	Co 228.616†	9572.4	9230.7	464.19 µg/L	464.19 ppb	21:22:50
3	Cr 267.716†	21057.8	20306.2	450.71 µg/L	450.71 ppb	21:22:50
3	Cu 324.752†	72107.4	66182.2	455.74 µg/L	455.74 ppb	21:22:50
3	Mn 257.610†	142809.5	137721.8	484.94 µg/L	484.94 ppb	21:22:44
3	Mo 202.031†	4126.0	3978.7	430.37 µg/L	430.37 ppb	21:23:10
3	Ni 231.604†	8978.9	8364.4	463.17 µg/L	463.17 ppb	21:22:50
3	P 214.914†	1065.1	1000.5	2149.7 µg/L	2149.7 ppb	21:23:10
3	Pb 220.353†	1804.0	1644.9	445.23 µg/L	445.23 ppb	21:23:10
3	S 181.975 Axial†	213.2	193.2	880.42 µg/L	880.42 ppb	21:23:10
3	Sb 206.836†	476.1	438.6	440.82 µg/L	440.82 ppb	21:23:10
3	Se 196.026†	312.0	288.1	454.52 µg/L	454.52 ppb	21:23:10
3	SiO2†	25753.2	23240.5	5016.9 µg/L	5016.9 ppb	21:22:50
3	Si 251.611†	29565.6	28212.5	2352.1 µg/L	2352.1 ppb	21:22:50
3	Sn 189.927†	940.1	907.4	427.61 µg/L	427.61 ppb	21:23:10
3	Ti 334.940†	204024.5	196357.0	466.21 µg/L	466.21 ppb	21:22:44
3	Tl 190.801†	307.5	317.7	462.59 µg/L	462.59 ppb	21:23:10
3	U 409.014†	5595.5	5208.8	435.46 µg/L	435.46 ppb	21:22:50
3	V 292.402†	44743.1	43112.0	460.10 µg/L	460.10 ppb	21:22:50
3	Zn 213.857†	19235.6	18081.1	461.94 µg/L	461.94 ppb	21:22:50

-----  
Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1979778.8	103.92 %	0.055			0.05%
Sc RADIAL	56905.9	104 %	0.4			0.36%
Y 371.029	1356255.4	103.56 %	0.019			0.02%
Ag 328.068†	61433.7	488.17 µg/L	13.274	488.17 ppb	13.274	2.72%
QC value within limits for Ag 328.068 Recovery = 97.63%						
Al 396.153Radial†	6651.9	4900.2 µg/L	11.29	4900.2 ppb	11.29	0.23%
QC value within limits for Al 396.153Radial Recovery = 98.00%						
As 188.979†	244.7	486.59 µg/L	35.723	486.59 ppb	35.723	7.34%
QC value within limits for As 188.979 Recovery = 97.32%						
B 249.677†	10978.4	485.58 µg/L	14.953	485.58 ppb	14.953	3.08%
QC value within limits for B 249.677 Recovery = 97.12%						
Ba 233.527†	18309.0	490.30 µg/L	20.300	490.30 ppb	20.300	4.14%
QC value within limits for Ba 233.527 Recovery = 98.06%						
Be 313.107†	752882.1	487.10 µg/L	14.323	487.10 ppb	14.323	2.94%
QC value within limits for Be 313.107 Recovery = 97.42%						
Ca 317.933Radial†	5112.2	4899.3 µg/L	30.00	4899.3 ppb	30.00	0.61%
QC value within limits for Ca 317.933Radial Recovery = 97.99%						
Cd 226.502†	17486.7	494.98 µg/L	22.187	494.98 ppb	22.187	4.48%
QC value within limits for Cd 226.502 Recovery = 99.00%						
Co 228.616†	9778.6	491.78 µg/L	23.897	491.78 ppb	23.897	4.86%

QC value within limits for Co 228.616 Recovery = 98.36%							
Cr 267.716†	21939.1	486.95 µg/L	31.390	486.95 ppb	31.390	6.45%	
QC value within limits for Cr 267.716 Recovery = 97.39%							
Cu 324.752†	70003.9	482.01 µg/L	22.758	482.01 ppb	22.758	4.72%	
QC value within limits for Cu 324.752 Recovery = 96.40%							
Fe 238.204 Radial†	544.0	5035.0 µg/L	20.53	5035.0 ppb	20.53	0.41%	
QC value within limits for Fe 238.204 Radial Recovery = 100.70%							
K 766.490 Radial†	7084.6	4885.4 µg/L	10.88	4885.4 ppb	10.88	0.22%	
QC value within limits for K 766.490 Radial Recovery = 97.71%							
Mg 279.077 IEC†	512.0	4983.9 µg/L	50.68	4983.9 ppb	50.68	1.02%	
QC value within limits for Mg 279.077 IEC Recovery = 99.68%							
Mn 257.610†	142253.5	500.88 µg/L	13.804	500.88 ppb	13.804	2.76%	
QC value within limits for Mn 257.610 Recovery = 100.18%							
Mo 202.031†	4454.2	481.78 µg/L	44.688	481.78 ppb	44.688	9.28%	
QC value within limits for Mo 202.031 Recovery = 96.36%							
Na 589.592 Radial†	31178.2	9767.3 µg/L	23.43	9767.3 ppb	23.43	0.24%	
QC value within limits for Na 589.592 Radial Recovery = 97.67%							
Ni 231.604†	8872.1	491.29 µg/L	24.421	491.29 ppb	24.421	4.97%	
QC value within limits for Ni 231.604 Recovery = 98.26%							
P 214.914†	1101.5	2369.2 µg/L	190.49	2369.2 ppb	190.49	8.04%	
QC value within limits for P 214.914 Recovery = 94.77%							
Pb 220.353†	1792.1	485.14 µg/L	34.642	485.14 ppb	34.642	7.14%	
QC value within limits for Pb 220.353 Recovery = 97.03%							
S 181.975 Axial†	213.2	971.36 µg/L	79.849	971.36 ppb	79.849	8.22%	
QC value within limits for S 181.975 Axial Recovery = 97.14%							
Sb 206.836†	482.4	485.10 µg/L	38.932	485.10 ppb	38.932	8.03%	
QC value within limits for Sb 206.836 Recovery = 97.02%							
Se 196.026†	317.9	500.77 µg/L	40.140	500.77 ppb	40.140	8.02%	
QC value within limits for Se 196.026 Recovery = 100.15%							
SiO2†	24234.1	5231.4 µg/L	185.76	5231.4 ppb	185.76	3.55%	
QC value within limits for SiO2 Recovery = 97.83%							
Si 251.611†	29417.4	2452.5 µg/L	87.23	2452.5 ppb	87.23	3.56%	
QC value within limits for Si 251.611 Recovery = 98.10%							
Sn 189.927†	1029.8	485.31 µg/L	50.053	485.31 ppb	50.053	10.31%	
QC value within limits for Sn 189.927 Recovery = 97.06%							
Sr 421.552†	48699.9	480.26 µg/L	0.818	480.26 ppb	0.818	0.17%	
QC value within limits for Sr 421.552 Recovery = 96.05%							
Ti 334.940†	203792.6	483.87 µg/L	15.296	483.87 ppb	15.296	3.16%	
QC value within limits for Ti 334.940 Recovery = 96.77%							
Tl 190.801†	341.3	496.64 µg/L	29.490	496.64 ppb	29.490	5.94%	
QC value within limits for Tl 190.801 Recovery = 99.33%							
U 409.014†	5633.0	470.99 µg/L	30.801	470.99 ppb	30.801	6.54%	
QC value within limits for U 409.014 Recovery = 94.20%							
V 292.402†	45831.8	489.30 µg/L	25.291	489.30 ppb	25.291	5.17%	
QC value within limits for V 292.402 Recovery = 97.86%							
Zn 213.857†	19135.2	488.89 µg/L	23.352	488.89 ppb	23.352	4.78%	
QC value within limits for Zn 213.857 Recovery = 97.78%							
All analyte(s) passed QC.							

Sequence No.: 16

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/22/2010 21:23:20

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	56055.9	56055.9	103 %		21:23:53
1	Al 396.153Radial†	9.7	20.3	14.949 µg/L	14.949 ppb	21:23:53
1	Ca 317.933Radial†	178.1	-1.1	-1.0189 µg/L	-1.0189 ppb	21:24:14
1	Fe 238.204 Radial†	18.2	1.9	17.692 µg/L	17.692 ppb	21:24:14
1	K 766.490 Radial†	190.7	16.0	11.014 µg/L	11.014 ppb	21:23:53
1	Mg 279.077 IEC†	5.1	-5.3	-51.218 µg/L	-51.218 ppb	21:24:14
1	Na 589.592 Radial†	408.4	8.1	2.5236 µg/L	2.5236 ppb	21:23:53
1	Sr 421.552†	36.2	-24.1	-0.2372 µg/L	-0.2372 ppb	21:23:53
1	Sc 361.383	1959968.4	1959968.4	102.88 %		21:25:16
1	Y 371.029	1346774.2	1346774.2	102.84 %		21:25:16
1	Ag 328.068†	-482.3	108.0	0.8532 µg/L	0.8532 ppb	21:25:21
1	As 188.979†	-1.4	-1.1	-2.1140 µg/L	-2.1140 ppb	21:25:42
1	B 249.677†	334.4	68.4	3.0261 µg/L	3.0261 ppb	21:25:42
1	Ba 233.527†	-13.0	16.0	0.4267 µg/L	0.4267 ppb	21:25:42
1	Be 313.107†	-3620.0	287.0	0.1855 µg/L	0.1855 ppb	21:25:21
1	Cd 226.502†	-127.0	2.7	0.0746 µg/L	0.0746 ppb	21:25:42
1	Co 228.616†	-0.8	13.9	0.6988 µg/L	0.6988 ppb	21:25:42
1	Cr 267.716†	-31.1	2.1	0.0474 µg/L	0.0474 ppb	21:25:42
1	Cu 324.752†	3292.6	-40.3	-0.2749 µg/L	-0.2749 ppb	21:25:21
1	Mn 257.610†	-140.1	92.6	0.3300 µg/L	0.3300 ppb	21:25:42
1	Mo 202.031†	1.9	8.1	0.8798 µg/L	0.8798 ppb	21:25:42
1	Ni 231.604†	286.3	-1.9	-0.1069 µg/L	-0.1069 ppb	21:25:42
1	P 214.914†	32.0	6.2	13.585 µg/L	13.585 ppb	21:25:42
1	Pb 220.353†	84.8	-9.5	-2.5722 µg/L	-2.5722 ppb	21:25:42
1	S 181.975 Axial†	11.6	-0.7	-3.3322 µg/L	-3.3322 ppb	21:25:42
1	Sb 206.836†	26.8	6.3	6.3046 µg/L	6.3046 ppb	21:25:42
1	Se 196.026†	7.1	-5.5	-8.4338 µg/L	-8.4338 ppb	21:25:42
1	SiO2†	1589.3	-9.2	-1.9843 µg/L	-1.9843 ppb	21:25:21
1	Si 251.611†	330.9	69.2	5.7693 µg/L	5.7693 ppb	21:25:42
1	Sn 189.927†	-0.9	1.5	0.6894 µg/L	0.6894 ppb	21:25:42
1	Ti 334.940†	281.8	201.9	0.4837 µg/L	0.4837 ppb	21:25:21
1	Tl 190.801†	-24.5	-2.1	-2.9850 µg/L	-2.9850 ppb	21:25:42
1	U 409.014†	183.0	-0.5	-0.0405 µg/L	-0.0405 ppb	21:25:21
1	V 292.402†	-35.9	-0.2	0.0064 µg/L	0.0064 ppb	21:25:21
1	Zn 213.857†	447.5	-3.5	-0.0866 µg/L	-0.0866 ppb	21:25:42
2	Sc RADIAL	56123.9	56123.9	103 %		21:24:19
2	Al 396.153Radial†	-28.6	-17.0	-12.574 µg/L	-12.574 ppb	21:24:19
2	Ca 317.933Radial†	193.5	13.7	13.145 µg/L	13.145 ppb	21:24:40
2	Fe 238.204 Radial†	20.0	3.6	33.720 µg/L	33.720 ppb	21:24:40
2	K 766.490 Radial†	166.7	-7.6	-5.2102 µg/L	-5.2102 ppb	21:24:19
2	Mg 279.077 IEC†	9.0	-1.5	-14.456 µg/L	-14.456 ppb	21:24:40
2	Na 589.592 Radial†	377.2	-22.7	-7.1238 µg/L	-7.1238 ppb	21:24:19
2	Sr 421.552†	35.5	-24.8	-0.2444 µg/L	-0.2444 ppb	21:24:19
2	Sc 361.383	1950726.8	1950726.8	102.39 %		21:25:48
2	Y 371.029	1340038.9	1340038.9	102.32 %		21:25:48
2	Ag 328.068†	-489.4	98.8	0.7784 µg/L	0.7784 ppb	21:25:53
2	As 188.979†	3.3	3.6	7.0867 µg/L	7.0867 ppb	21:26:14
2	B 249.677†	306.1	42.3	1.8598 µg/L	1.8598 ppb	21:26:14
2	Ba 233.527†	-6.4	22.3	0.5965 µg/L	0.5965 ppb	21:26:14
2	Be 313.107†	-3582.0	307.4	0.1988 µg/L	0.1988 ppb	21:25:53
2	Cd 226.502†	-122.9	6.1	0.1685 µg/L	0.1685 ppb	21:26:14
2	Co 228.616†	-1.5	13.2	0.6641 µg/L	0.6641 ppb	21:26:14
2	Cr 267.716†	-23.0	9.9	0.2191 µg/L	0.2191 ppb	21:26:14
2	Cu 324.752†	3310.2	-8.0	-0.0500 µg/L	-0.0500 ppb	21:25:53
2	Mn 257.610†	-62.8	167.4	0.5940 µg/L	0.5940 ppb	21:26:14
2	Mo 202.031†	-1.7	4.7	0.5074 µg/L	0.5074 ppb	21:26:14
2	Ni 231.604†	281.0	-5.8	-0.3232 µg/L	-0.3232 ppb	21:26:14
2	P 214.914†	27.4	1.9	4.1968 µg/L	4.1968 ppb	21:26:14
2	Pb 220.353†	79.0	-14.8	-4.0049 µg/L	-4.0049 ppb	21:26:14

2	S 181.975 Axial†	13.3	1.0	4.6641 µg/L	4.6641 ppb	21:26:14
2	Sb 206.836†	23.5	3.2	3.2302 µg/L	3.2302 ppb	21:26:14
2	Se 196.026†	16.8	4.1	6.4074 µg/L	6.4074 ppb	21:26:14
2	SiO2†	1589.3	-1.8	-0.3896 µg/L	-0.3896 ppb	21:25:53
2	Si 251.611†	369.8	108.7	9.0605 µg/L	9.0605 ppb	21:26:14
2	Sn 189.927†	4.0	6.2	2.9379 µg/L	2.9379 ppb	21:26:14
2	Ti 334.940†	301.8	222.7	0.5305 µg/L	0.5305 ppb	21:25:53
2	Tl 190.801†	-18.4	3.7	5.3669 µg/L	5.3669 ppb	21:26:14
2	U 409.014†	224.5	40.9	3.4184 µg/L	3.4184 ppb	21:25:53
2	V 292.402†	-86.7	-50.0	-0.5157 µg/L	-0.5157 ppb	21:25:53
2	Zn 213.857†	460.3	11.1	0.2875 µg/L	0.2875 ppb	21:26:14
3	Sc RADIAL	56016.1	56016.1	103 %		21:24:45
3	Al 396.153Radial†	-26.6	-15.1	-11.174 µg/L	-11.174 ppb	21:24:45
3	Ca 317.933Radial†	184.6	5.5	5.2249 µg/L	5.2249 ppb	21:25:05
3	Fe 238.204 Radial†	16.9	0.7	6.1962 µg/L	6.1962 ppb	21:25:05
3	K 766.490 Radial†	225.2	49.7	34.254 µg/L	34.254 ppb	21:24:45
3	Mg 279.077 IEC†	8.6	-1.9	-18.163 µg/L	-18.163 ppb	21:25:05
3	Na 589.592 Radial†	416.8	16.5	5.1746 µg/L	5.1746 ppb	21:24:45
3	Sr 421.552†	40.6	-19.8	-0.1951 µg/L	-0.1951 ppb	21:24:45
3	Sc 361.383	1952962.6	1952962.6	102.51 %		21:26:20
3	Y 371.029	1341060.3	1341060.3	102.40 %		21:26:20
3	Ag 328.068†	-517.2	72.2	0.5693 µg/L	0.5693 ppb	21:26:26
3	As 188.979†	1.5	1.8	3.5106 µg/L	3.5106 ppb	21:26:46
3	B 249.677†	314.2	49.8	2.2099 µg/L	2.2099 ppb	21:26:46
3	Ba 233.527†	-10.5	18.3	0.4901 µg/L	0.4901 ppb	21:26:46
3	Be 313.107†	-3342.7	544.8	0.3523 µg/L	0.3523 ppb	21:26:26
3	Cd 226.502†	-121.9	7.2	0.2036 µg/L	0.2036 ppb	21:26:46
3	Co 228.616†	-2.7	12.1	0.6076 µg/L	0.6076 ppb	21:26:46
3	Cr 267.716†	-15.9	16.8	0.3726 µg/L	0.3726 ppb	21:26:46
3	Cu 324.752†	3328.6	6.3	0.0439 µg/L	0.0439 ppb	21:26:26
3	Mn 257.610†	-116.9	114.7	0.4052 µg/L	0.4052 ppb	21:26:46
3	Mo 202.031†	1.9	8.1	0.8782 µg/L	0.8782 ppb	21:26:46
3	Ni 231.604†	290.4	3.0	0.1667 µg/L	0.1667 ppb	21:26:46
3	P 214.914†	19.9	-5.5	-12.067 µg/L	-12.067 ppb	21:26:46
3	Pb 220.353†	82.9	-11.1	-2.9973 µg/L	-2.9973 ppb	21:26:46
3	S 181.975 Axial†	15.9	3.5	16.068 µg/L	16.068 ppb	21:26:46
3	Sb 206.836†	24.8	4.4	4.4225 µg/L	4.4225 ppb	21:26:46
3	Se 196.026†	15.5	2.7	4.2727 µg/L	4.2727 ppb	21:26:46
3	SiO2†	1645.1	50.8	10.964 µg/L	10.964 ppb	21:26:26
3	Si 251.611†	348.8	87.7	7.3154 µg/L	7.3154 ppb	21:26:46
3	Sn 189.927†	2.0	4.3	2.0212 µg/L	2.0212 ppb	21:26:46
3	Ti 334.940†	423.9	341.5	0.8128 µg/L	0.8128 ppb	21:26:26
3	Tl 190.801†	-21.3	0.9	1.2533 µg/L	1.2533 ppb	21:26:46
3	U 409.014†	227.6	43.6	3.6546 µg/L	3.6546 ppb	21:26:26
3	V 292.402†	-48.9	-13.0	-0.1252 µg/L	-0.1252 ppb	21:26:26
3	Zn 213.857†	451.6	2.1	0.0534 µg/L	0.0534 ppb	21:26:46

-----  
Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1954552.6	102.59 %	0.253			0.25%
Sc RADIAL	56065.3	103 %	0.1			0.10%
Y 371.029	1342624.5	102.52 %	0.277			0.27%
Ag 328.068†	93.0	0.7336 µg/L	0.14715	0.7336 ppb	0.14715	20.06%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-4.0	-2.9329 µg/L	15.50234	-2.9329 ppb	15.50234	528.57%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	1.4	2.8278 µg/L	4.63819	2.8278 ppb	4.63819	164.02%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	53.5	2.3653 µg/L	0.59844	2.3653 ppb	0.59844	25.30%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	18.9	0.5044 µg/L	0.08579	0.5044 ppb	0.08579	17.01%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	379.7	0.2455 µg/L	0.09270	0.2455 ppb	0.09270	37.75%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	6.0	5.7838 µg/L	7.09861	5.7838 ppb	7.09861	122.73%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	5.3	0.1489 µg/L	0.06669	0.1489 ppb	0.06669	44.78%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	13.1	0.6569 µg/L	0.04601	0.6569 ppb	0.04601	7.00%

QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	9.6	0.2130 µg/L	0.16267	0.2130 ppb	0.16267	76.37%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	-14.0	-0.0936 µg/L	0.16383	-0.0936 ppb	0.16383	174.94%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	2.1	19.203 µg/L	13.8241	19.203 ppb	13.8241	71.99%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	19.4	13.353 µg/L	19.8358	13.353 ppb	19.8358	148.55%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	-2.9	-27.946 µg/L	20.2395	-27.946 ppb	20.2395	72.42%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	124.9	0.4431 µg/L	0.13601	0.4431 ppb	0.13601	30.70%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	7.0	0.7551 µg/L	0.21454	0.7551 ppb	0.21454	28.41%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	0.6	0.1915 µg/L	6.47238	0.1915 ppb	6.47238	>999.9%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	-1.6	-0.0878 µg/L	0.24553	-0.0878 ppb	0.24553	279.69%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	0.9	1.9050 µg/L	12.97888	1.9050 ppb	12.97888	681.31%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	-11.8	-3.1915 µg/L	0.73582	-3.1915 ppb	0.73582	23.06%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	1.3	5.7999 µg/L	9.74966	5.7999 ppb	9.74966	168.10%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	4.6	4.6524 µg/L	1.55001	4.6524 ppb	1.55001	33.32%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	0.4	0.7488 µg/L	8.02362	0.7488 ppb	8.02362	>999.9%	
QC value within limits for Se 196.026 Recovery = Not calculated							
SiO2†	13.3	2.8635 µg/L	7.06072	2.8635 ppb	7.06072	246.58%	
QC value within limits for SiO2 Recovery = Not calculated							
Si 251.611†	88.5	7.3817 µg/L	1.64663	7.3817 ppb	1.64663	22.31%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	4.0	1.8828 µg/L	1.13059	1.8828 ppb	1.13059	60.05%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	-22.9	-0.2256 µg/L	0.02664	-0.2256 ppb	0.02664	11.81%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	255.4	0.6090 µg/L	0.17805	0.6090 ppb	0.17805	29.24%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	0.8	1.2117 µg/L	4.17610	1.2117 ppb	4.17610	344.64%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	28.0	2.3442 µg/L	2.06855	2.3442 ppb	2.06855	88.24%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	-21.1	-0.2115 µg/L	0.27154	-0.2115 ppb	0.27154	128.39%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	3.2	0.0848 µg/L	0.18901	0.0848 ppb	0.18901	223.02%	
QC value within limits for Zn 213.857 Recovery = Not calculated							

All analyte(s) passed QC.

=====  
Analysis Begun

Start Time: 2/22/2010 22:13:46

Plasma On Time: 2/8/2010 03:37:33

Logged In Analyst: optima

Technique: ICP Continuous

Spectrometer Model: Optima 4300 DV, S/N 077N1030502 Autosampler Model: AS-93plus

Sample Information File: C:\pe\optima1\Sample Information\022210A.SIF

Batch ID:

Results Data Set: 022210

Results Library: c:\pe\optima1\Results\Results.mdb

=====  
Sequence No.: 1

Autosampler Location: 7

Sample ID: CCV

Date Collected: 2/22/2010 22:13:48

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	54269.1	54269.1	99.5 %		22:14:22
1	Al 396.153Radial†	7018.9	7064.0	5203.3 µg/L	5203.3 ppb	22:14:22
1	Ca 317.933Radial†	5554.3	5407.3	5182.1 µg/L	5182.1 ppb	22:14:43
1	Fe 238.204 Radial†	592.0	579.1	5360.2 µg/L	5360.2 ppb	22:14:43
1	K 766.490 Radial†	7637.4	7505.3	5175.5 µg/L	5175.5 ppb	22:14:22
1	Mg 279.077 IEC†	554.3	546.7	5322.4 µg/L	5322.4 ppb	22:14:43
1	Na 589.592 Radial†	33204.4	32977.7	10331 µg/L	10331 ppb	22:14:22
1	Sr 421.552†	51290.4	51482.3	507.70 µg/L	507.70 ppb	22:14:22
1	Sc 361.383	1903459.4	1903459.4	99.912 %		22:15:46
1	Y 371.029	1304881.0	1304881.0	99.638 %		22:15:46
1	Ag 328.068†	64721.3	65354.8	519.36 µg/L	519.36 ppb	22:15:52
1	As 188.979†	269.7	270.2	537.22 µg/L	537.22 ppb	22:16:13
1	B 249.677†	11879.6	11633.4	514.55 µg/L	514.55 ppb	22:15:52
1	Ba 233.527†	19506.9	19552.6	523.61 µg/L	523.61 ppb	22:15:52
1	Be 313.107†	799765.9	804272.0	520.34 µg/L	520.34 ppb	22:15:46
1	Cd 226.502†	18534.6	18677.0	528.67 µg/L	528.67 ppb	22:15:52
1	Co 228.616†	10448.8	10472.7	526.71 µg/L	526.71 ppb	22:15:52
1	Cr 267.716†	23693.7	23746.7	527.07 µg/L	527.07 ppb	22:15:52
1	Cu 324.752†	78604.4	75432.4	519.38 µg/L	519.38 ppb	22:15:52
1	Mn 257.610†	151726.1	152087.8	535.50 µg/L	535.50 ppb	22:15:46
1	Mo 202.031†	4970.3	4980.9	538.74 µg/L	538.74 ppb	22:16:13
1	Ni 231.604†	9799.1	9527.5	527.58 µg/L	527.58 ppb	22:15:52
1	P 214.914†	1234.1	1210.3	2604.5 µg/L	2604.5 ppb	22:16:13
1	Pb 220.353†	2050.5	1960.4	530.74 µg/L	530.74 ppb	22:16:13
1	S 181.975 Axial†	242.8	231.0	1052.6 µg/L	1052.6 ppb	22:16:13
1	Sb 206.836†	555.4	536.2	539.43 µg/L	539.43 ppb	22:16:13
1	Se 196.026†	364.6	352.6	555.02 µg/L	555.02 ppb	22:16:13
1	SiO2†	27313.3	25783.2	5565.8 µg/L	5565.8 ppb	22:15:52
1	Si 251.611†	31417.7	31192.8	2600.5 µg/L	2600.5 ppb	22:15:52
1	Sn 189.927†	1148.8	1152.1	542.93 µg/L	542.93 ppb	22:16:13
1	Ti 334.940†	217854.6	217973.4	517.54 µg/L	517.54 ppb	22:15:46
1	Tl 190.801†	342.2	364.1	529.97 µg/L	529.97 ppb	22:16:13
1	U 409.014†	6270.9	6098.1	509.91 µg/L	509.91 ppb	22:15:52
1	V 292.402†	49241.6	49319.4	526.69 µg/L	526.69 ppb	22:15:52
1	Zn 213.857†	21017.7	20597.7	526.27 µg/L	526.27 ppb	22:15:52
2	Sc RADIAL	54443.0	54443.0	99.8 %		22:14:48
2	Al 396.153Radial†	7009.7	7032.3	5180.0 µg/L	5180.0 ppb	22:14:48
2	Ca 317.933Radial†	5535.9	5371.0	5147.4 µg/L	5147.4 ppb	22:15:09
2	Fe 238.204 Radial†	586.2	571.4	5289.0 µg/L	5289.0 ppb	22:15:09
2	K 766.490 Radial†	7728.1	7571.6	5221.2 µg/L	5221.2 ppb	22:14:48
2	Mg 279.077 IEC†	545.3	536.0	5218.0 µg/L	5218.0 ppb	22:15:09
2	Na 589.592 Radial†	33231.0	32897.8	10306 µg/L	10306 ppb	22:14:48
2	Sr 421.552†	51368.1	51395.5	506.85 µg/L	506.85 ppb	22:14:48
2	Sc 361.383	1902533.0	1902533.0	99.864 %		22:16:20
2	Y 371.029	1304779.3	1304779.3	99.630 %		22:16:20
2	Ag 328.068†	65079.4	65744.9	522.46 µg/L	522.46 ppb	22:16:25
2	As 188.979†	271.2	271.9	540.58 µg/L	540.58 ppb	22:16:46



2	B 249.677†	12009.7	11769.4	520.64 µg/L	520.64 ppb	22:16:25
2	Ba 233.527†	19665.5	19720.9	528.12 µg/L	528.12 ppb	22:16:25
2	Be 313.107†	799614.4	804510.0	520.50 µg/L	520.50 ppb	22:16:20
2	Cd 226.502†	18754.8	18906.5	535.19 µg/L	535.19 ppb	22:16:25
2	Co 228.616†	10547.6	10576.6	531.94 µg/L	531.94 ppb	22:16:25
2	Cr 267.716†	23922.7	23987.7	532.42 µg/L	532.42 ppb	22:16:25
2	Cu 324.752†	79025.7	75892.6	522.54 µg/L	522.54 ppb	22:16:25
2	Mn 257.610†	151374.1	151809.2	534.52 µg/L	534.52 ppb	22:16:20
2	Mo 202.031†	4897.7	4910.7	531.15 µg/L	531.15 ppb	22:16:46
2	Ni 231.604†	9906.0	9639.3	533.77 µg/L	533.77 ppb	22:16:25
2	P 214.914†	1217.2	1194.0	2568.4 µg/L	2568.4 ppb	22:16:46
2	Pb 220.353†	2045.5	1956.3	529.63 µg/L	529.63 ppb	22:16:46
2	S 181.975 Axial†	244.3	232.7	1060.2 µg/L	1060.2 ppb	22:16:46
2	Sb 206.836†	544.9	525.9	528.96 µg/L	528.96 ppb	22:16:46
2	Se 196.026†	354.0	342.1	538.68 µg/L	538.68 ppb	22:16:46
2	SiO2†	27558.3	26041.9	5621.7 µg/L	5621.7 ppb	22:16:25
2	Si 251.611†	31701.0	31491.7	2625.5 µg/L	2625.5 ppb	22:16:25
2	Sn 189.927†	1132.3	1136.1	535.40 µg/L	535.40 ppb	22:16:46
2	Ti 334.940†	217492.6	217717.0	516.94 µg/L	516.94 ppb	22:16:20
2	Tl 190.801†	343.5	365.6	532.05 µg/L	532.05 ppb	22:16:46
2	U 409.014†	6305.5	6135.8	513.08 µg/L	513.08 ppb	22:16:25
2	V 292.402†	49639.4	49741.7	531.10 µg/L	531.10 ppb	22:16:25
2	Zn 213.857†	21184.1	20774.5	530.80 µg/L	530.80 ppb	22:16:25
3	Sc RADIAL	54139.6	54139.6	99.3 %		22:15:14
3	Al 396.153Radial†	7007.8	7069.7	5209.3 µg/L	5209.3 ppb	22:15:14
3	Ca 317.933Radial†	5505.9	5371.9	5148.2 µg/L	5148.2 ppb	22:15:35
3	Fe 238.204 Radial†	585.7	574.2	5313.7 µg/L	5313.7 ppb	22:15:35
3	K 766.490 Radial†	7585.4	7471.2	5152.0 µg/L	5152.0 ppb	22:15:14
3	Mg 279.077 IEC†	550.4	544.2	5296.1 µg/L	5296.1 ppb	22:15:35
3	Na 589.592 Radial†	33145.0	32997.7	10337 µg/L	10337 ppb	22:15:14
3	Sr 421.552†	51064.1	51377.6	506.67 µg/L	506.67 ppb	22:15:14
3	Sc 361.383	1900705.5	1900705.5	99.768 %		22:16:53
3	Y 371.029	1302339.6	1302339.6	99.444 %		22:16:53
3	Ag 328.068†	61496.5	62216.3	494.30 µg/L	494.30 ppb	22:16:59
3	As 188.979†	226.2	227.0	451.34 µg/L	451.34 ppb	22:17:19
3	B 249.677†	11288.2	11057.8	488.93 µg/L	488.93 ppb	22:16:59
3	Ba 233.527†	18163.8	18234.6	488.30 µg/L	488.30 ppb	22:16:59
3	Be 313.107†	757076.5	762643.1	493.41 µg/L	493.41 ppb	22:16:53
3	Cd 226.502†	17179.1	17345.2	490.94 µg/L	490.94 ppb	22:16:59
3	Co 228.616†	9613.5	9650.5	485.30 µg/L	485.30 ppb	22:16:59
3	Cr 267.716†	21190.1	21271.7	472.14 µg/L	472.14 ppb	22:16:59
3	Cu 324.752†	72620.1	69548.2	478.92 µg/L	478.92 ppb	22:16:59
3	Mn 257.610†	143938.8	144502.4	508.82 µg/L	508.82 ppb	22:16:53
3	Mo 202.031†	4149.2	4165.1	450.54 µg/L	450.54 ppb	22:17:19
3	Ni 231.604†	9040.3	8781.1	486.26 µg/L	486.26 ppb	22:16:59
3	P 214.914†	1065.8	1043.4	2241.4 µg/L	2241.4 ppb	22:17:19
3	Pb 220.353†	1806.8	1719.1	465.31 µg/L	465.31 ppb	22:17:19
3	S 181.975 Axial†	219.3	207.8	947.03 µg/L	947.03 ppb	22:17:19
3	Sb 206.836†	481.0	462.3	464.68 µg/L	464.68 ppb	22:17:19
3	Se 196.026†	318.7	307.1	484.39 µg/L	484.39 ppb	22:17:19
3	SiO2†	25833.4	24339.5	5254.2 µg/L	5254.2 ppb	22:16:59
3	Si 251.611†	29583.6	29400.0	2451.1 µg/L	2451.1 ppb	22:16:59
3	Sn 189.927†	934.1	938.6	442.33 µg/L	442.33 ppb	22:17:19
3	Ti 334.940†	205009.2	205414.1	487.70 µg/L	487.70 ppb	22:16:53
3	Tl 190.801†	303.8	326.2	475.16 µg/L	475.16 ppb	22:17:19
3	U 409.014†	5734.8	5569.8	465.65 µg/L	465.65 ppb	22:16:59
3	V 292.402†	44933.9	45073.0	481.05 µg/L	481.05 ppb	22:16:59
3	Zn 213.857†	19390.0	18996.7	485.33 µg/L	485.33 ppb	22:16:59

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1902232.6	99.848 %	0.0736			0.07%
Sc RADIAL	54283.9	99.5 %	0.28			0.28%
Y 371.029	1303999.9	99.571 %	0.1099			0.11%
Ag 328.068†	64438.7	512.04 µg/L	15.441	512.04 ppb	15.441	3.02%
QC value within limits for Ag 328.068 Recovery = 102.41%						
Al 396.153Radial†	7055.3	5197.5 µg/L	15.46	5197.5 ppb	15.46	0.30%
QC value within limits for Al 396.153Radial Recovery = 103.95%						
As 188.979†	256.4	509.71 µg/L	50.580	509.71 ppb	50.580	9.92%

QC value within limits for As 188.979 Recovery = 101.94%							
B 249.677†	11486.9	508.04 µg/L	16.824	508.04 ppb	16.824	3.31%	
QC value within limits for B 249.677 Recovery = 101.61%							
Ba 233.527†	19169.4	513.34 µg/L	21.806	513.34 ppb	21.806	4.25%	
QC value within limits for Ba 233.527 Recovery = 102.67%							
Be 313.107†	790475.0	511.42 µg/L	15.594	511.42 ppb	15.594	3.05%	
QC value within limits for Be 313.107 Recovery = 102.28%							
Ca 317.933Radial†	5383.4	5159.2 µg/L	19.83	5159.2 ppb	19.83	0.38%	
QC value within limits for Ca 317.933Radial Recovery = 103.18%							
Cd 226.502†	18309.6	518.27 µg/L	23.892	518.27 ppb	23.892	4.61%	
QC value within limits for Cd 226.502 Recovery = 103.65%							
Co 228.616†	10233.2	514.65 µg/L	25.554	514.65 ppb	25.554	4.97%	
QC value within limits for Co 228.616 Recovery = 102.93%							
Cr 267.716†	23002.0	510.54 µg/L	33.364	510.54 ppb	33.364	6.53%	
QC value within limits for Cr 267.716 Recovery = 102.11%							
Cu 324.752†	73624.4	506.94 µg/L	24.323	506.94 ppb	24.323	4.80%	
QC value within limits for Cu 324.752 Recovery = 101.39%							
Fe 238.204 Radial†	574.9	5321.0 µg/L	36.14	5321.0 ppb	36.14	0.68%	
QC value within limits for Fe 238.204 Radial Recovery = 106.42%							
K 766.490 Radial†	7516.1	5182.9 µg/L	35.21	5182.9 ppb	35.21	0.68%	
QC value within limits for K 766.490 Radial Recovery = 103.66%							
Mg 279.077 IEC†	542.3	5278.8 µg/L	54.30	5278.8 ppb	54.30	1.03%	
QC value within limits for Mg 279.077 IEC Recovery = 105.58%							
Mn 257.610†	149466.5	526.28 µg/L	15.132	526.28 ppb	15.132	2.88%	
QC value within limits for Mn 257.610 Recovery = 105.26%							
Mo 202.031†	4685.6	506.81 µg/L	48.879	506.81 ppb	48.879	9.64%	
QC value within limits for Mo 202.031 Recovery = 101.36%							
Na 589.592 Radial†	32957.7	10325 µg/L	16.6	10325 ppb	16.6	0.16%	
QC value within limits for Na 589.592 Radial Recovery = 103.25%							
Ni 231.604†	9316.0	515.87 µg/L	25.831	515.87 ppb	25.831	5.01%	
QC value within limits for Ni 231.604 Recovery = 103.17%							
P 214.914†	1149.2	2471.4 µg/L	200.03	2471.4 ppb	200.03	8.09%	
QC value within limits for P 214.914 Recovery = 98.86%							
Pb 220.353†	1878.6	508.56 µg/L	37.460	508.56 ppb	37.460	7.37%	
QC value within limits for Pb 220.353 Recovery = 101.71%							
S 181.975 Axial†	223.8	1019.9 µg/L	63.24	1019.9 ppb	63.24	6.20%	
QC value within limits for S 181.975 Axial Recovery = 101.99%							
Sb 206.836†	508.1	511.02 µg/L	40.476	511.02 ppb	40.476	7.92%	
QC value within limits for Sb 206.836 Recovery = 102.20%							
Se 196.026†	333.9	526.03 µg/L	36.972	526.03 ppb	36.972	7.03%	
QC value within limits for Se 196.026 Recovery = 105.21%							
SiO2†	25388.2	5480.6 µg/L	198.03	5480.6 ppb	198.03	3.61%	
QC value within limits for SiO2 Recovery = 102.49%							
Si 251.611†	30694.8	2559.0 µg/L	94.32	2559.0 ppb	94.32	3.69%	
QC value within limits for Si 251.611 Recovery = 102.36%							
Sn 189.927†	1075.6	506.88 µg/L	56.035	506.88 ppb	56.035	11.05%	
QC value within limits for Sn 189.927 Recovery = 101.38%							
Sr 421.552†	51418.4	507.07 µg/L	0.553	507.07 ppb	0.553	0.11%	
QC value within limits for Sr 421.552 Recovery = 101.41%							
Ti 334.940†	213701.5	507.39 µg/L	17.056	507.39 ppb	17.056	3.36%	
QC value within limits for Ti 334.940 Recovery = 101.48%							
Tl 190.801†	352.0	512.39 µg/L	32.264	512.39 ppb	32.264	6.30%	
QC value within limits for Tl 190.801 Recovery = 102.48%							
U 409.014†	5934.6	496.21 µg/L	26.513	496.21 ppb	26.513	5.34%	
QC value within limits for U 409.014 Recovery = 99.24%							
V 292.402†	48044.7	512.95 µg/L	27.711	512.95 ppb	27.711	5.40%	
QC value within limits for V 292.402 Recovery = 102.59%							
Zn 213.857†	20123.0	514.13 µg/L	25.048	514.13 ppb	25.048	4.87%	
QC value within limits for Zn 213.857 Recovery = 102.83%							
All analyte(s) passed QC.							

Sequence No.: 2

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/22/2010 22:17:28

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	54741.8	54741.8	100 %		22:18:01
1	Al 396.153Radial†	-19.6	-8.7	-6.4375 µg/L	-6.4375 ppb	22:18:01
1	Ca 317.933Radial†	174.8	-0.2	-0.1758 µg/L	-0.1758 ppb	22:18:21
1	Fe 238.204 Radial†	17.3	1.4	13.236 µg/L	13.236 ppb	22:18:21
1	K 766.490 Radial†	167.2	-3.0	-2.0547 µg/L	-2.0547 ppb	22:18:01
1	Mg 279.077 IEC†	8.0	-2.3	-22.417 µg/L	-22.417 ppb	22:18:21
1	Na 589.592 Radial†	421.9	31.0	9.7075 µg/L	9.7075 ppb	22:18:01
1	Sr 421.552†	57.3	-2.2	-0.0221 µg/L	-0.0221 ppb	22:18:01
1	Sc 361.383	1908368.6	1908368.6	100.17 %		22:19:22
1	Y 371.029	1314304.8	1314304.8	100.36 %		22:19:22
1	Ag 328.068†	-451.1	126.5	1.0011 µg/L	1.0011 ppb	22:19:28
1	As 188.979†	1.1	1.4	2.7739 µg/L	2.7739 ppb	22:19:48
1	B 249.677†	314.4	57.3	2.5351 µg/L	2.5351 ppb	22:19:48
1	Ba 233.527†	-17.2	11.5	0.3072 µg/L	0.3072 ppb	22:19:48
1	Be 313.107†	-3582.6	229.1	0.1481 µg/L	0.1481 ppb	22:19:28
1	Cd 226.502†	-117.3	9.1	0.2565 µg/L	0.2565 ppb	22:19:48
1	Co 228.616†	-3.5	11.2	0.5613 µg/L	0.5613 ppb	22:19:48
1	Cr 267.716†	-28.0	4.4	0.0974 µg/L	0.0974 ppb	22:19:48
1	Cu 324.752†	3292.5	46.1	0.3189 µg/L	0.3189 ppb	22:19:28
1	Mn 257.610†	-214.2	15.0	0.0554 µg/L	0.0554 ppb	22:19:48
1	Mo 202.031†	-0.3	6.0	0.6456 µg/L	0.6456 ppb	22:19:48
1	Ni 231.604†	292.5	11.8	0.6513 µg/L	0.6513 ppb	22:19:48
1	P 214.914†	20.9	-4.1	-8.9324 µg/L	-8.9324 ppb	22:19:48
1	Pb 220.353†	90.8	-1.3	-0.3612 µg/L	-0.3612 ppb	22:19:48
1	S 181.975 Axial†	10.7	-1.3	-6.1064 µg/L	-6.1064 ppb	22:19:48
1	Sb 206.836†	22.1	2.3	2.3307 µg/L	2.3307 ppb	22:19:48
1	Se 196.026†	13.3	0.9	1.5019 µg/L	1.5019 ppb	22:19:48
1	SiO2†	1581.9	25.2	5.4416 µg/L	5.4416 ppb	22:19:28
1	Si 251.611†	278.0	25.0	2.0846 µg/L	2.0846 ppb	22:19:48
1	Sn 189.927†	0.1	2.5	1.1538 µg/L	1.1538 ppb	22:19:48
1	Ti 334.940†	242.6	170.2	0.4061 µg/L	0.4061 ppb	22:19:28
1	Tl 190.801†	-19.5	2.2	3.2041 µg/L	3.2041 ppb	22:19:48
1	U 409.014†	234.8	56.1	4.6963 µg/L	4.6963 ppb	22:19:28
1	V 292.402†	0.6	35.3	0.3836 µg/L	0.3836 ppb	22:19:28
1	Zn 213.857†	451.5	12.3	0.3138 µg/L	0.3138 ppb	22:19:48
2	Sc RADIAL	53978.9	53978.9	99.0 %		22:18:26
2	Al 396.153Radial†	-16.2	-5.6	-4.1245 µg/L	-4.1245 ppb	22:18:26
2	Ca 317.933Radial†	178.8	6.4	6.1300 µg/L	6.1300 ppb	22:18:47
2	Fe 238.204 Radial†	16.3	0.7	6.4162 µg/L	6.4162 ppb	22:18:47
2	K 766.490 Radial†	174.5	6.8	4.6882 µg/L	4.6882 ppb	22:18:26
2	Mg 279.077 IEC†	8.0	-2.1	-20.691 µg/L	-20.691 ppb	22:18:47
2	Na 589.592 Radial†	403.6	18.5	5.7853 µg/L	5.7853 ppb	22:18:26
2	Sr 421.552†	65.6	7.0	0.0688 µg/L	0.0688 ppb	22:18:26
2	Sc 361.383	1902121.4	1902121.4	99.842 %		22:19:54
2	Y 371.029	1309080.3	1309080.3	99.959 %		22:19:54
2	Ag 328.068†	-535.2	40.7	0.3176 µg/L	0.3176 ppb	22:20:00
2	As 188.979†	-1.6	-1.3	-2.6196 µg/L	-2.6196 ppb	22:20:20
2	B 249.677†	307.9	51.8	2.2964 µg/L	2.2964 ppb	22:20:20
2	Ba 233.527†	-17.4	11.2	0.2973 µg/L	0.2973 ppb	22:20:20
2	Be 313.107†	-3461.7	338.5	0.2190 µg/L	0.2190 ppb	22:20:00
2	Cd 226.502†	-131.1	-5.1	-0.1459 µg/L	-0.1459 ppb	22:20:20
2	Co 228.616†	-1.5	13.1	0.6619 µg/L	0.6619 ppb	22:20:20
2	Cr 267.716†	-25.6	6.7	0.1472 µg/L	0.1472 ppb	22:20:20
2	Cu 324.752†	3354.5	119.0	0.8190 µg/L	0.8190 ppb	22:20:00
2	Mn 257.610†	-216.9	11.5	0.0422 µg/L	0.0422 ppb	22:20:20
2	Mo 202.031†	1.1	7.4	0.8045 µg/L	0.8045 ppb	22:20:20
2	Ni 231.604†	289.3	9.5	0.5286 µg/L	0.5286 ppb	22:20:20
2	P 214.914†	13.7	-11.2	-24.566 µg/L	-24.566 ppb	22:20:20
2	Pb 220.353†	86.8	-5.1	-1.3712 µg/L	-1.3712 ppb	22:20:20

2	S 181.975 Axial†	15.6	3.6	16.501 µg/L	16.501 ppb	22:20:20
2	Sb 206.836†	21.1	1.4	1.4206 µg/L	1.4206 ppb	22:20:20
2	Se 196.026†	18.4	6.1	9.4737 µg/L	9.4737 ppb	22:20:20
2	SiO2†	1586.0	34.5	7.4540 µg/L	7.4540 ppb	22:20:00
2	Si 251.611†	292.2	40.2	3.3478 µg/L	3.3478 ppb	22:20:20
2	Sn 189.927†	3.2	5.5	2.5772 µg/L	2.5772 ppb	22:20:20
2	Ti 334.940†	123.0	51.2	0.1234 µg/L	0.1234 ppb	22:20:00
2	Tl 190.801†	-25.0	-3.3	-4.7667 µg/L	-4.7667 ppb	22:20:20
2	U 409.014†	221.0	43.0	3.6046 µg/L	3.6046 ppb	22:20:00
2	V 292.402†	-89.6	-55.1	-0.5704 µg/L	-0.5704 ppb	22:20:00
2	Zn 213.857†	440.9	3.2	0.0801 µg/L	0.0801 ppb	22:20:20
3	Sc RADIAL	54653.5	54653.5	100 %		22:18:52
3	Al 396.153Radial†	-14.0	-3.2	-2.3566 µg/L	-2.3566 ppb	22:18:52
3	Ca 317.933Radial†	173.5	-1.1	-1.0934 µg/L	-1.0934 ppb	22:19:12
3	Fe 238.204 Radial†	12.8	-3.0	-27.795 µg/L	-27.795 ppb	22:19:12
3	K 766.490 Radial†	183.7	13.7	9.4678 µg/L	9.4678 ppb	22:18:52
3	Mg 279.077 IEC†	7.0	-3.3	-32.189 µg/L	-32.189 ppb	22:19:12
3	Na 589.592 Radial†	386.8	-3.3	-1.0446 µg/L	-1.0446 ppb	22:18:52
3	Sr 421.552†	6.7	-52.6	-0.5188 µg/L	-0.5188 ppb	22:18:52
3	Sc 361.383	1921240.2	1921240.2	100.85 %		22:20:26
3	Y 371.029	1322153.8	1322153.8	100.96 %		22:20:26
3	Ag 328.068†	-483.3	97.6	0.7670 µg/L	0.7670 ppb	22:20:32
3	As 188.979†	-0.2	0.2	0.2993 µg/L	0.2993 ppb	22:20:53
3	B 249.677†	313.0	53.7	2.4001 µg/L	2.4001 ppb	22:20:53
3	Ba 233.527†	-17.8	10.9	0.2913 µg/L	0.2913 ppb	22:20:53
3	Be 313.107†	-3417.8	416.6	0.2694 µg/L	0.2694 ppb	22:20:32
3	Cd 226.502†	-126.6	0.6	0.0217 µg/L	0.0217 ppb	22:20:53
3	Co 228.616†	4.5	19.1	0.9632 µg/L	0.9632 ppb	22:20:53
3	Cr 267.716†	-10.0	22.4	0.4964 µg/L	0.4964 ppb	22:20:53
3	Cu 324.752†	3375.7	106.6	0.7292 µg/L	0.7292 ppb	22:20:32
3	Mn 257.610†	-196.0	34.4	0.1187 µg/L	0.1187 ppb	22:20:53
3	Mo 202.031†	-0.8	5.5	0.5933 µg/L	0.5933 ppb	22:20:53
3	Ni 231.604†	290.3	7.6	0.4212 µg/L	0.4212 ppb	22:20:53
3	P 214.914†	17.2	-7.8	-17.109 µg/L	-17.109 ppb	22:20:53
3	Pb 220.353†	85.5	-7.1	-1.9324 µg/L	-1.9324 ppb	22:20:53
3	S 181.975 Axial†	15.4	3.3	14.905 µg/L	14.905 ppb	22:20:53
3	Sb 206.836†	21.5	1.5	1.5386 µg/L	1.5386 ppb	22:20:53
3	Se 196.026†	17.2	4.7	7.2057 µg/L	7.2057 ppb	22:20:53
3	SiO2†	1583.4	16.2	3.4868 µg/L	3.4868 ppb	22:20:32
3	Si 251.611†	288.8	34.0	2.8306 µg/L	2.8306 ppb	22:20:53
3	Sn 189.927†	-0.4	1.9	0.8993 µg/L	0.8993 ppb	22:20:53
3	Ti 334.940†	274.9	200.6	0.4792 µg/L	0.4792 ppb	22:20:32
3	Tl 190.801†	-22.8	-0.9	-1.3027 µg/L	-1.3027 ppb	22:20:53
3	U 409.014†	241.2	60.8	5.1015 µg/L	5.1015 ppb	22:20:32
3	V 292.402†	-46.9	-11.8	-0.1170 µg/L	-0.1170 ppb	22:20:32
3	Zn 213.857†	450.8	8.6	0.2205 µg/L	0.2205 ppb	22:20:53

-----  
Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1910576.7	100.29 %		0.512			0.51%
Sc RADIAL	54458.1	99.9 %		0.77			0.77%
Y 371.029	1315179.6	100.42 %		0.502			0.50%
Ag 328.068†	88.2	0.6953 µg/L		0.34737	0.6953 ppb	0.34737	49.96%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	-5.8	-4.3062 µg/L		2.04652	-4.3062 ppb	2.04652	47.52%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	0.1	0.1512 µg/L		2.69975	0.1512 ppb	2.69975	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	54.3	2.4105 µg/L		0.11971	2.4105 ppb	0.11971	4.97%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	11.2	0.2986 µg/L		0.00802	0.2986 ppb	0.00802	2.68%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	328.1	0.2122 µg/L		0.06093	0.2122 ppb	0.06093	28.71%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	1.7	1.6203 µg/L		3.93241	1.6203 ppb	3.93241	242.70%
QC value within limits for Ca 317.933Radial Recovery = Not calculated							
Cd 226.502†	1.5	0.0441 µg/L		0.20213	0.0441 ppb	0.20213	458.47%
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	14.5	0.7288 µg/L		0.20913	0.7288 ppb	0.20913	28.70%

QC value within limits for Co 228.616	Recovery = Not calculated		
Cr 267.716†	11.1 0.2470 µg/L	0.21746 0.2470 ppb	0.21746 88.04%
QC value within limits for Cr 267.716	Recovery = Not calculated		
Cu 324.752†	90.6 0.6224 µg/L	0.26662 0.6224 ppb	0.26662 42.84%
QC value within limits for Cu 324.752	Recovery = Not calculated		
Fe 238.204 Radial†	-0.3 -2.7140 µg/L	21.98648 -2.7140 ppb	21.98648 810.12%
QC value within limits for Fe 238.204 Radial	Recovery = Not calculated		
K 766.490 Radial†	5.8 4.0338 µg/L	5.78902 4.0338 ppb	5.78902 143.51%
QC value within limits for K 766.490 Radial	Recovery = Not calculated		
Mg 279.077 IEC†	-2.6 -25.099 µg/L	6.2003 -25.099 ppb	6.2003 24.70%
QC value within limits for Mg 279.077 IEC	Recovery = Not calculated		
Mn 257.610†	20.3 0.0721 µg/L	0.04089 0.0721 ppb	0.04089 56.73%
QC value within limits for Mn 257.610	Recovery = Not calculated		
Mo 202.031†	6.3 0.6811 µg/L	0.11002 0.6811 ppb	0.11002 16.15%
QC value within limits for Mo 202.031	Recovery = Not calculated		
Na 589.592 Radial†	15.4 4.8161 µg/L	5.44118 4.8161 ppb	5.44118 112.98%
QC value within limits for Na 589.592 Radial	Recovery = Not calculated		
Ni 231.604†	9.6 0.5337 µg/L	0.11514 0.5337 ppb	0.11514 21.58%
QC value within limits for Ni 231.604	Recovery = Not calculated		
P 214.914†	-7.7 -16.869 µg/L	7.8193 -16.869 ppb	7.8193 46.35%
QC value within limits for P 214.914	Recovery = Not calculated		
Pb 220.353†	-4.5 -1.2216 µg/L	0.79623 -1.2216 ppb	0.79623 65.18%
QC value within limits for Pb 220.353	Recovery = Not calculated		
S 181.975 Axial†	1.9 8.4330 µg/L	12.61675 8.4330 ppb	12.61675 149.61%
QC value within limits for S 181.975 Axial	Recovery = Not calculated		
Sb 206.836†	1.8 1.7633 µg/L	0.49492 1.7633 ppb	0.49492 28.07%
QC value within limits for Sb 206.836	Recovery = Not calculated		
Se 196.026†	3.9 6.0604 µg/L	4.10745 6.0604 ppb	4.10745 67.77%
QC value within limits for Se 196.026	Recovery = Not calculated		
SiO2†	25.3 5.4608 µg/L	1.98369 5.4608 ppb	1.98369 36.33%
QC value within limits for SiO2	Recovery = Not calculated		
Si 251.611†	33.0 2.7543 µg/L	0.63501 2.7543 ppb	0.63501 23.06%
QC value within limits for Si 251.611	Recovery = Not calculated		
Sn 189.927†	3.3 1.5434 µg/L	0.90430 1.5434 ppb	0.90430 58.59%
QC value within limits for Sn 189.927	Recovery = Not calculated		
Sr 421.552†	-16.0 -0.1574 µg/L	0.31632 -0.1574 ppb	0.31632 201.01%
QC value within limits for Sr 421.552	Recovery = Not calculated		
Ti 334.940†	140.7 0.3362 µg/L	0.18787 0.3362 ppb	0.18787 55.88%
QC value within limits for Ti 334.940	Recovery = Not calculated		
Tl 190.801†	-0.7 -0.9551 µg/L	3.99672 -0.9551 ppb	3.99672 418.46%
QC value within limits for Tl 190.801	Recovery = Not calculated		
U 409.014†	53.3 4.4675 µg/L	0.77425 4.4675 ppb	0.77425 17.33%
QC value within limits for U 409.014	Recovery = Not calculated		
V 292.402†	-10.6 -0.1013 µg/L	0.47719 -0.1013 ppb	0.47719 471.22%
QC value within limits for V 292.402	Recovery = Not calculated		
Zn 213.857†	8.0 0.2048 µg/L	0.11762 0.2048 ppb	0.11762 57.42%
QC value within limits for Zn 213.857	Recovery = Not calculated		

All analyte(s) passed QC.

Sequence No.: 12

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/22/2010 22:53:15

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	56455.2	56455.2	104 %		22:53:55
1	Al 396.153Radial†	7064.3	6834.8	5034.1 µg/L	5034.1 ppb	22:53:55
1	Ca 317.933Radial†	5544.2	5181.4	4965.6 µg/L	4965.6 ppb	22:54:16
1	Fe 238.204 Radial†	585.9	550.1	5092.4 µg/L	5092.4 ppb	22:54:16
1	K 766.490 Radial†	7655.9	7225.9	4982.8 µg/L	4982.8 ppb	22:53:55
1	Mg 279.077 IEC†	552.5	523.4	5096.2 µg/L	5096.2 ppb	22:54:16
1	Na 589.592 Radial†	33442.1	31915.3	9998.2 µg/L	9998.2 ppb	22:53:55
1	Sr 421.552†	51451.4	49642.0	489.55 µg/L	489.55 ppb	22:53:55
1	Sc 361.383	1918155.4	1918155.4	100.68 %		22:55:19
1	Y 371.029	1314108.7	1314108.7	100.34 %		22:55:19
1	Ag 328.068†	64663.2	64800.8	514.95 µg/L	514.95 ppb	22:55:25
1	As 188.979†	267.2	265.7	528.24 µg/L	528.24 ppb	22:55:45
1	B 249.677†	11907.1	11569.5	511.85 µg/L	511.85 ppb	22:55:25
1	Ba 233.527†	19501.7	19397.8	519.46 µg/L	519.46 ppb	22:55:25
1	Be 313.107†	793863.1	792276.5	512.58 µg/L	512.58 ppb	22:55:19
1	Cd 226.502†	18516.6	18516.9	524.17 µg/L	524.17 ppb	22:55:25
1	Co 228.616†	10446.7	10390.4	522.58 µg/L	522.58 ppb	22:55:25
1	Cr 267.716†	23731.0	23602.1	523.86 µg/L	523.86 ppb	22:55:25
1	Cu 324.752†	78606.6	74831.9	515.21 µg/L	515.21 ppb	22:55:25
1	Mn 257.610†	150711.0	149916.1	527.84 µg/L	527.84 ppb	22:55:19
1	Mo 202.031†	4975.7	4948.2	535.20 µg/L	535.20 ppb	22:55:45
1	Ni 231.604†	9837.3	9490.2	525.52 µg/L	525.52 ppb	22:55:25
1	P 214.914†	1236.8	1203.5	2590.2 µg/L	2590.2 ppb	22:55:45
1	Pb 220.353†	2064.7	1958.7	530.31 µg/L	530.31 ppb	22:55:45
1	S 181.975 Axial†	244.2	230.5	1050.3 µg/L	1050.3 ppb	22:55:45
1	Sb 206.836†	554.8	531.2	534.49 µg/L	534.49 ppb	22:55:45
1	Se 196.026†	360.5	345.7	543.88 µg/L	543.88 ppb	22:55:45
1	Si02†	27602.2	25860.7	5582.6 µg/L	5582.6 ppb	22:55:25
1	Si 251.611†	31765.9	31297.6	2609.3 µg/L	2609.3 ppb	22:55:25
1	Sn 189.927†	1142.2	1136.8	535.70 µg/L	535.70 ppb	22:55:45
1	Ti 334.940†	217293.9	215745.9	512.26 µg/L	512.26 ppb	22:55:19
1	Tl 190.801†	344.0	363.3	528.66 µg/L	528.66 ppb	22:55:45
1	U 409.014†	6241.1	6020.3	503.44 µg/L	503.44 ppb	22:55:25
1	V 292.402†	49220.4	48920.8	522.42 µg/L	522.42 ppb	22:55:25
1	Zn 213.857†	21015.1	20433.9	522.10 µg/L	522.10 ppb	22:55:25
2	Sc RADIAL	56585.0	56585.0	104 %		22:54:21
2	Al 396.153Radial†	7080.1	6834.3	5034.0 µg/L	5034.0 ppb	22:54:21
2	Ca 317.933Radial†	5576.8	5200.5	4983.9 µg/L	4983.9 ppb	22:54:42
2	Fe 238.204 Radial†	590.4	553.2	5120.8 µg/L	5120.8 ppb	22:54:42
2	K 766.490 Radial†	7740.0	7290.0	5027.1 µg/L	5027.1 ppb	22:54:21
2	Mg 279.077 IEC†	551.5	521.2	5074.6 µg/L	5074.6 ppb	22:54:42
2	Na 589.592 Radial†	33691.9	32081.9	10050 µg/L	10050 ppb	22:54:21
2	Sr 421.552†	51874.6	49935.8	492.45 µg/L	492.45 ppb	22:54:21
2	Sc 361.383	1921752.0	1921752.0	100.87 %		22:55:52
2	Y 371.029	1317153.5	1317153.5	100.57 %		22:55:52
2	Ag 328.068†	65140.0	65153.2	517.75 µg/L	517.75 ppb	22:55:58
2	As 188.979†	268.1	266.1	529.00 µg/L	529.00 ppb	22:56:19
2	B 249.677†	12040.1	11679.4	516.72 µg/L	516.72 ppb	22:55:58
2	Ba 233.527†	19677.5	19535.8	523.16 µg/L	523.16 ppb	22:55:58
2	Be 313.107†	795299.6	792225.0	512.55 µg/L	512.55 ppb	22:55:52
2	Cd 226.502†	18636.8	18601.8	526.57 µg/L	526.57 ppb	22:55:58
2	Co 228.616†	10506.8	10430.6	524.59 µg/L	524.59 ppb	22:55:58
2	Cr 267.716†	23881.1	23706.9	526.18 µg/L	526.18 ppb	22:55:58
2	Cu 324.752†	79248.1	75321.7	518.59 µg/L	518.59 ppb	22:55:58
2	Mn 257.610†	150949.4	149872.3	527.69 µg/L	527.69 ppb	22:55:52
2	Mo 202.031†	4904.8	4868.6	526.59 µg/L	526.59 ppb	22:56:19
2	Ni 231.604†	9846.3	9480.8	524.99 µg/L	524.99 ppb	22:55:58
2	P 214.914†	1225.6	1190.2	2560.5 µg/L	2560.5 ppb	22:56:19
2	Pb 220.353†	2046.9	1937.3	524.46 µg/L	524.46 ppb	22:56:19

2	S 181.975 Axial†	248.4	234.3	1067.4 µg/L	1067.4 ppb	22:56:19
2	Sb 206.836†	550.4	525.9	528.99 µg/L	528.99 ppb	22:56:19
2	Se 196.026†	362.2	346.7	545.48 µg/L	545.48 ppb	22:56:19
2	SiO2†	27844.1	26049.2	5623.3 µg/L	5623.3 ppb	22:55:58
2	Si 251.611†	32097.8	31567.6	2631.8 µg/L	2631.8 ppb	22:55:58
2	Sn 189.927†	1140.2	1132.6	533.75 µg/L	533.75 ppb	22:56:19
2	Ti 334.940†	217984.6	216026.8	512.93 µg/L	512.93 ppb	22:55:52
2	Tl 190.801†	342.3	361.1	525.44 µg/L	525.44 ppb	22:56:19
2	U 409.014†	6216.8	5984.7	500.45 µg/L	500.45 ppb	22:55:58
2	V 292.402†	49606.6	49212.1	525.43 µg/L	525.43 ppb	22:55:58
2	Zn 213.857†	21163.1	20541.6	524.86 µg/L	524.86 ppb	22:55:58
3	Sc RADIAL	55858.7	55858.7	102 %		22:54:47
3	Al 396.153Radial†	7075.8	6918.9	5098.1 µg/L	5098.1 ppb	22:54:47
3	Ca 317.933Radial†	5611.1	5303.8	5083.0 µg/L	5083.0 ppb	22:55:08
3	Fe 238.204 Radial†	598.6	568.6	5261.6 µg/L	5261.6 ppb	22:55:08
3	K 766.490 Radial†	7664.0	7312.9	5042.8 µg/L	5042.8 ppb	22:54:47
3	Mg 279.077 IEC†	558.4	534.9	5206.1 µg/L	5206.1 ppb	22:55:08
3	Na 589.592 Radial†	33465.3	32282.9	10113 µg/L	10113 ppb	22:54:47
3	Sr 421.552†	51694.9	50410.5	497.13 µg/L	497.13 ppb	22:54:47
3	Sc 361.383	1922239.0	1922239.0	100.90 %		22:56:26
3	Y 371.029	1317852.8	1317852.8	100.63 %		22:56:26
3	Ag 328.068†	61182.4	61214.5	486.33 µg/L	486.33 ppb	22:56:31
3	As 188.979†	233.9	232.2	461.62 µg/L	461.62 ppb	22:56:52
3	B 249.677†	11177.3	10821.2	478.44 µg/L	478.44 ppb	22:56:31
3	Ba 233.527†	18022.7	17890.9	479.09 µg/L	479.09 ppb	22:56:31
3	Be 313.107†	749261.9	746397.3	482.90 µg/L	482.90 ppb	22:56:26
3	Cd 226.502†	16934.4	16909.8	478.60 µg/L	478.60 ppb	22:56:31
3	Co 228.616†	9486.3	9416.5	473.52 µg/L	473.52 ppb	22:56:31
3	Cr 267.716†	21049.3	20894.2	463.76 µg/L	463.76 ppb	22:56:31
3	Cu 324.752†	72069.8	68187.4	469.55 µg/L	469.55 ppb	22:56:31
3	Mn 257.610†	143038.0	141993.4	499.99 µg/L	499.99 ppb	22:56:26
3	Mo 202.031†	4142.4	4111.8	444.77 µg/L	444.77 ppb	22:56:52
3	Ni 231.604†	8928.7	8569.0	474.51 µg/L	474.51 ppb	22:56:31
3	P 214.914†	1068.3	1033.9	2221.6 µg/L	2221.6 ppb	22:56:52
3	Pb 220.353†	1804.0	1696.0	459.07 µg/L	459.07 ppb	22:56:52
3	S 181.975 Axial†	218.6	204.6	932.43 µg/L	932.43 ppb	22:56:52
3	Sb 206.836†	475.1	451.1	453.39 µg/L	453.39 ppb	22:56:52
3	Se 196.026†	320.4	305.2	481.43 µg/L	481.43 ppb	22:56:52
3	SiO2†	26001.5	24216.1	5227.5 µg/L	5227.5 ppb	22:56:31
3	Si 251.611†	29784.5	29266.9	2440.0 µg/L	2440.0 ppb	22:56:31
3	Sn 189.927†	946.5	940.4	443.14 µg/L	443.14 ppb	22:56:52
3	Ti 334.940†	204933.4	203037.0	482.06 µg/L	482.06 ppb	22:56:26
3	Tl 190.801†	309.6	328.5	478.36 µg/L	478.36 ppb	22:56:52
3	U 409.014†	5719.2	5489.9	458.97 µg/L	458.97 ppb	22:56:31
3	V 292.402†	44477.1	44115.8	470.88 µg/L	470.88 ppb	22:56:31
3	Zn 213.857†	19176.1	18566.9	474.34 µg/L	474.34 ppb	22:56:31

-----  
Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1920715.5	100.82 %	0.117			0.12%
Sc RADIAL	56299.6	103 %	0.7			0.69%
Y 371.029	1316371.7	100.52 %	0.152			0.15%
Ag 328.068†	63722.8	506.34 µg/L	17.387	506.34 ppb	17.387	3.43%
QC value within limits for Ag 328.068 Recovery = 101.27%						
Al 396.153Radial†	6862.7	5055.4 µg/L	36.98	5055.4 ppb	36.98	0.73%
QC value within limits for Al 396.153Radial Recovery = 101.11%						
As 188.979†	254.6	506.29 µg/L	38.688	506.29 ppb	38.688	7.64%
QC value within limits for As 188.979 Recovery = 101.26%						
B 249.677†	11356.7	502.34 µg/L	20.836	502.34 ppb	20.836	4.15%
QC value within limits for B 249.677 Recovery = 100.47%						
Ba 233.527†	18941.5	507.24 µg/L	24.447	507.24 ppb	24.447	4.82%
QC value within limits for Ba 233.527 Recovery = 101.45%						
Be 313.107†	776966.3	502.68 µg/L	17.127	502.68 ppb	17.127	3.41%
QC value within limits for Be 313.107 Recovery = 100.54%						
Ca 317.933Radial†	5228.5	5010.8 µg/L	63.13	5010.8 ppb	63.13	1.26%
QC value within limits for Ca 317.933Radial Recovery = 100.22%						
Cd 226.502†	18009.5	509.78 µg/L	27.028	509.78 ppb	27.028	5.30%
QC value within limits for Cd 226.502 Recovery = 101.96%						
Co 228.616†	10079.2	506.90 µg/L	28.920	506.90 ppb	28.920	5.71%

Cr	267.716†	22734.4	504.60 µg/L	35.388	504.60 ppb	35.388	7.01%
Cu	324.752†	72780.3	501.12 µg/L	27.387	501.12 ppb	27.387	5.47%
Fe	238.204 Radial†	557.3	5158.2 µg/L	90.60	5158.2 ppb	90.60	1.76%
K	766.490 Radial†	7276.3	5017.6 µg/L	31.09	5017.6 ppb	31.09	0.62%
Mg	279.077 IEC†	526.5	5125.6 µg/L	70.55	5125.6 ppb	70.55	1.38%
Mn	257.610†	147260.6	518.50 µg/L	16.037	518.50 ppb	16.037	3.09%
Mo	202.031†	4642.9	502.19 µg/L	49.911	502.19 ppb	49.911	9.94%
Na	589.592 Radial†	32093.4	10054 µg/L	57.7	10054 ppb	57.7	0.57%
Ni	231.604†	9180.0	508.34 µg/L	29.299	508.34 ppb	29.299	5.76%
P	214.914†	1142.5	2457.4 µg/L	204.75	2457.4 ppb	204.75	8.33%
Pb	220.353†	1864.0	504.61 µg/L	39.551	504.61 ppb	39.551	7.84%
S	181.975 Axial†	223.1	1016.7 µg/L	73.48	1016.7 ppb	73.48	7.23%
Sb	206.836†	502.7	505.62 µg/L	45.317	505.62 ppb	45.317	8.96%
Se	196.026†	332.5	523.60 µg/L	36.529	523.60 ppb	36.529	6.98%
SiO2†		25375.3	5477.8 µg/L	217.68	5477.8 ppb	217.68	3.97%
Si	251.611†	30710.7	2560.3 µg/L	104.85	2560.3 ppb	104.85	4.10%
Sn	189.927†	1069.9	504.20 µg/L	52.883	504.20 ppb	52.883	10.49%
Sr	421.552†	49996.1	493.05 µg/L	3.824	493.05 ppb	3.824	0.78%
Ti	334.940†	211603.2	502.42 µg/L	17.633	502.42 ppb	17.633	3.51%
Tl	190.801†	351.0	510.82 µg/L	28.157	510.82 ppb	28.157	5.51%
U	409.014†	5831.6	487.62 µg/L	24.859	487.62 ppb	24.859	5.10%
V	292.402†	47416.2	506.24 µg/L	30.663	506.24 ppb	30.663	6.06%
Zn	213.857†	19847.5	507.10 µg/L	28.404	507.10 ppb	28.404	5.60%

QC value within limits for Co 228.616 Recovery = 101.38%

QC value within limits for Cr 267.716 Recovery = 100.92%

QC value within limits for Cu 324.752 Recovery = 100.22%

QC value within limits for Fe 238.204 Radial Recovery = 103.16%

QC value within limits for K 766.490 Radial Recovery = 100.35%

QC value within limits for Mg 279.077 IEC Recovery = 102.51%

QC value within limits for Mn 257.610 Recovery = 103.70%

QC value within limits for Mo 202.031 Recovery = 100.44%

QC value within limits for Na 589.592 Radial Recovery = 100.54%

QC value within limits for Ni 231.604 Recovery = 101.67%

QC value within limits for P 214.914 Recovery = 98.30%

QC value within limits for Pb 220.353 Recovery = 100.92%

QC value within limits for S 181.975 Axial Recovery = 101.67%

QC value within limits for Sb 206.836 Recovery = 101.12%

QC value within limits for Se 196.026 Recovery = 104.72%

QC value within limits for SiO2 Recovery = 102.44%

QC value within limits for Si 251.611 Recovery = 102.41%

QC value within limits for Sn 189.927 Recovery = 100.84%

QC value within limits for Sr 421.552 Recovery = 98.61%

QC value within limits for Ti 334.940 Recovery = 100.48%

QC value within limits for Tl 190.801 Recovery = 102.16%

QC value within limits for U 409.014 Recovery = 97.52%

QC value within limits for V 292.402 Recovery = 101.25%

QC value within limits for Zn 213.857 Recovery = 101.42%

All analyte(s) passed QC.



Sequence No.: 13  
 Sample ID: CCB  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 8  
 Date Collected: 2/22/2010 22:57:01  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

## Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Units	Conc. Units	Sample Units	Analysis Time
1	Sc RADIAL	54310.0	54310.0	99.6	%			22:57:34
1	Al 396.153Radial†	7.5	18.3	13.495	µg/L	13.495	ppb	22:57:34
1	Ca 317.933Radial†	184.7	11.1	10.683	µg/L	10.683	ppb	22:57:55
1	Fe 238.204 Radial†	19.7	4.0	36.623	µg/L	36.623	ppb	22:57:55
1	K 766.490 Radial†	195.9	27.2	18.724	µg/L	18.724	ppb	22:57:34
1	Mg 279.077 IEC†	9.6	-0.6	-6.0849	µg/L	-6.0849	ppb	22:57:55
1	Na 589.592 Radial†	436.9	49.4	15.482	µg/L	15.482	ppb	22:57:34
1	Sr 421.552†	75.0	16.1	0.1584	µg/L	0.1584	ppb	22:57:34
1	Sc 361.383	1919241.7	1919241.7	100.74	%			22:58:57
1	Y 371.029	1320942.9	1320942.9	100.86	%			22:58:57
1	Ag 328.068†	-488.1	92.2	0.7288	µg/L	0.7288	ppb	22:59:02
1	As 188.979†	-2.3	-2.0	-3.8995	µg/L	-3.8995	ppb	22:59:23
1	B 249.677†	336.4	77.3	3.4117	µg/L	3.4117	ppb	22:59:23
1	Ba 233.527†	-6.5	22.1	0.5912	µg/L	0.5912	ppb	22:59:23
1	Be 313.107†	-3366.3	464.1	0.3000	µg/L	0.3000	ppb	22:59:02
1	Cd 226.502†	-121.3	5.8	0.1599	µg/L	0.1599	ppb	22:59:23
1	Co 228.616†	2.1	16.7	0.8405	µg/L	0.8405	ppb	22:59:23
1	Cr 267.716†	-19.5	13.0	0.2881	µg/L	0.2881	ppb	22:59:23
1	Cu 324.752†	3336.6	71.3	0.4950	µg/L	0.4950	ppb	22:59:02
1	Mn 257.610†	-56.2	173.0	0.6136	µg/L	0.6136	ppb	22:59:23
1	Mo 202.031†	3.7	10.0	1.0799	µg/L	1.0799	ppb	22:59:23
1	Ni 231.604†	293.3	10.9	0.6045	µg/L	0.6045	ppb	22:59:23
1	P 214.914†	16.0	-9.0	-19.728	µg/L	-19.728	ppb	22:59:23
1	Pb 220.353†	94.9	2.3	0.6247	µg/L	0.6247	ppb	22:59:23
1	S 181.975 Axial†	12.1	-0.0	-0.0775	µg/L	-0.0775	ppb	22:59:23
1	Sb 206.836†	21.2	1.3	1.2916	µg/L	1.2916	ppb	22:59:23
1	Se 196.026†	14.2	1.7	2.8134	µg/L	2.8134	ppb	22:59:23
1	SiO2†	1651.8	85.6	18.485	µg/L	18.485	ppb	22:59:02
1	Si 251.611†	381.5	126.2	10.519	µg/L	10.519	ppb	22:59:23
1	Sn 189.927†	2.4	4.7	2.2049	µg/L	2.2049	ppb	22:59:23
1	Ti 334.940†	451.4	376.1	0.8942	µg/L	0.8942	ppb	22:59:02
1	Tl 190.801†	-20.5	1.3	1.9129	µg/L	1.9129	ppb	22:59:23
1	U 409.014†	188.7	9.0	0.7489	µg/L	0.7489	ppb	22:59:02
1	V 292.402†	-52.9	-17.8	-0.1738	µg/L	-0.1738	ppb	22:59:02
1	Zn 213.857†	479.6	37.6	0.9629	µg/L	0.9629	ppb	22:59:23
2	Sc RADIAL	54894.8	54894.8	101	%			22:58:00
2	Al 396.153Radial†	-7.9	2.9	2.1458	µg/L	2.1458	ppb	22:58:00
2	Ca 317.933Radial†	184.4	8.9	8.5606	µg/L	8.5606	ppb	22:58:20
2	Fe 238.204 Radial†	19.7	3.8	34.911	µg/L	34.911	ppb	22:58:20
2	K 766.490 Radial†	170.9	0.2	0.1562	µg/L	0.1562	ppb	22:58:00
2	Mg 279.077 IEC†	9.7	-0.6	-5.7066	µg/L	-5.7066	ppb	22:58:20
2	Na 589.592 Radial†	412.7	20.7	6.4879	µg/L	6.4879	ppb	22:58:00
2	Sr 421.552†	79.3	19.5	0.1921	µg/L	0.1921	ppb	22:58:00
2	Sc 361.383	1920908.4	1920908.4	100.83	%			22:59:29
2	Y 371.029	1322441.3	1322441.3	100.98	%			22:59:29
2	Ag 328.068†	-465.2	115.4	0.9126	µg/L	0.9126	ppb	22:59:34
2	As 188.979†	-3.0	-2.6	-5.2229	µg/L	-5.2229	ppb	22:59:55
2	B 249.677†	330.2	70.9	3.1285	µg/L	3.1285	ppb	22:59:55
2	Ba 233.527†	3.1	31.7	0.8479	µg/L	0.8479	ppb	22:59:55
2	Be 313.107†	-3206.1	625.9	0.4047	µg/L	0.4047	ppb	22:59:34
2	Cd 226.502†	-111.4	15.7	0.4391	µg/L	0.4391	ppb	22:59:55
2	Co 228.616†	4.6	19.3	0.9693	µg/L	0.9693	ppb	22:59:55
2	Cr 267.716†	-4.0	28.3	0.6284	µg/L	0.6284	ppb	22:59:55
2	Cu 324.752†	3335.4	67.2	0.4667	µg/L	0.4667	ppb	22:59:34
2	Mn 257.610†	-21.9	207.1	0.7334	µg/L	0.7334	ppb	22:59:55
2	Mo 202.031†	6.1	12.3	1.3356	µg/L	1.3356	ppb	22:59:55
2	Ni 231.604†	273.6	-8.9	-0.4918	µg/L	-0.4918	ppb	22:59:55
2	P 214.914†	21.5	-3.5	-7.7768	µg/L	-7.7768	ppb	22:59:55
2	Pb 220.353†	92.3	-0.4	-0.0987	µg/L	-0.0987	ppb	22:59:55

2	S 181.975 Axial†	15.8	3.7	16.664 µg/L	16.664 ppb	22:59:55
2	Sb 206.836†	26.6	6.6	6.6652 µg/L	6.6652 ppb	22:59:55
2	Se 196.026†	12.2	-0.2	-0.2726 µg/L	-0.2726 ppb	22:59:55
2	SiO2†	1657.0	89.4	19.305 µg/L	19.305 ppb	22:59:34
2	Si 251.611†	409.9	154.1	12.843 µg/L	12.843 ppb	22:59:55
2	Sn 189.927†	2.0	4.3	2.0106 µg/L	2.0106 ppb	22:59:55
2	Ti 334.940†	471.6	395.7	0.9408 µg/L	0.9408 ppb	22:59:34
2	Tl 190.801†	-23.1	-1.3	-1.7981 µg/L	-1.7981 ppb	22:59:55
2	U 409.014†	179.7	-0.1	-0.0168 µg/L	-0.0168 ppb	22:59:34
2	V 292.402†	-33.6	1.4	0.0303 µg/L	0.0303 ppb	22:59:34
2	Zn 213.857†	488.8	46.4	1.1929 µg/L	1.1929 ppb	22:59:55
3	Sc RADIAL	54720.3	54720.3	100 %		22:58:26
3	Al 396.153Radial†	-16.4	-5.6	-4.1450 µg/L	-4.1450 ppb	22:58:26
3	Ca 317.933Radial†	194.2	19.3	18.458 µg/L	18.458 ppb	22:58:46
3	Fe 238.204 Radial†	18.9	3.0	28.115 µg/L	28.115 ppb	22:58:46
3	K 766.490 Radial†	187.8	17.7	12.190 µg/L	12.190 ppb	22:58:26
3	Mg 279.077 IEC†	10.6	0.3	2.8319 µg/L	2.8319 ppb	22:58:46
3	Na 589.592 Radial†	428.6	37.9	11.858 µg/L	11.858 ppb	22:58:26
3	Sr 421.552†	38.5	-20.9	-0.2066 µg/L	-0.2066 ppb	22:58:26
3	Sc 361.383	1923353.0	1923353.0	100.96 %		23:00:01
3	Y 371.029	1324217.8	1324217.8	101.11 %		23:00:01
3	Ag 328.068†	-438.8	142.1	1.1263 µg/L	1.1263 ppb	23:00:06
3	As 188.979†	1.0	1.3	2.5936 µg/L	2.5936 ppb	23:00:27
3	B 249.677†	331.2	71.4	3.1586 µg/L	3.1586 ppb	23:00:27
3	Ba 233.527†	1.9	30.5	0.8155 µg/L	0.8155 ppb	23:00:27
3	Be 313.107†	-2771.3	1060.7	0.6860 µg/L	0.6860 ppb	23:00:06
3	Cd 226.502†	-99.7	27.4	0.7732 µg/L	0.7732 ppb	23:00:27
3	Co 228.616†	3.0	17.6	0.8859 µg/L	0.8859 ppb	23:00:27
3	Cr 267.716†	5.8	38.1	0.8445 µg/L	0.8445 ppb	23:00:27
3	Cu 324.752†	3341.5	69.0	0.4782 µg/L	0.4782 ppb	23:00:06
3	Mn 257.610†	75.2	303.3	1.0705 µg/L	1.0705 ppb	23:00:27
3	Mo 202.031†	4.6	10.9	1.1780 µg/L	1.1780 ppb	23:00:27
3	Ni 231.604†	296.8	13.8	0.7617 µg/L	0.7617 ppb	23:00:27
3	P 214.914†	19.2	-5.9	-12.863 µg/L	-12.863 ppb	23:00:27
3	Pb 220.353†	95.3	2.4	0.6483 µg/L	0.6483 ppb	23:00:27
3	S 181.975 Axial†	13.6	1.5	6.7404 µg/L	6.7404 ppb	23:00:27
3	Sb 206.836†	21.7	1.7	1.7602 µg/L	1.7602 ppb	23:00:27
3	Se 196.026†	10.6	-1.9	-2.8234 µg/L	-2.8234 ppb	23:00:27
3	SiO2†	1640.7	71.2	15.372 µg/L	15.372 ppb	23:00:06
3	Si 251.611†	414.9	158.5	13.217 µg/L	13.217 ppb	23:00:27
3	Sn 189.927†	4.2	6.5	3.0713 µg/L	3.0713 ppb	23:00:27
3	Ti 334.940†	584.7	507.2	1.2050 µg/L	1.2050 ppb	23:00:06
3	Tl 190.801†	-21.8	0.1	0.0900 µg/L	0.0900 ppb	23:00:27
3	U 409.014†	222.0	41.6	3.4781 µg/L	3.4781 ppb	23:00:06
3	V 292.402†	11.8	46.4	0.5070 µg/L	0.5070 ppb	23:00:06
3	Zn 213.857†	493.9	50.8	1.3028 µg/L	1.3028 ppb	23:00:27

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1921167.7	100.84 %	0.109			0.11%
Sc RADIAL	54641.7	100 %	0.6			0.55%
Y 371.029	1322534.0	100.99 %	0.125			0.12%
Ag 328.068†	116.6	0.9226 µg/L	0.19894	0.9226 ppb	0.19894	21.56%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	5.2	3.8318 µg/L	8.93990	3.8318 ppb	8.93990	233.31%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-1.1	-2.1763 µg/L	4.18345	-2.1763 ppb	4.18345	192.23%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	73.2	3.2329 µg/L	0.15553	3.2329 ppb	0.15553	4.81%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	28.1	0.7515 µg/L	0.13982	0.7515 ppb	0.13982	18.60%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	716.9	0.4636 µg/L	0.19962	0.4636 ppb	0.19962	43.06%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	13.1	12.567 µg/L	5.2107	12.567 ppb	5.2107	41.46%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	16.3	0.4574 µg/L	0.30706	0.4574 ppb	0.30706	67.13%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	17.9	0.8985 µg/L	0.06535	0.8985 ppb	0.06535	7.27%

QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	26.5	0.5870 µg/L	0.28052	0.5870 ppb	0.28052	47.79%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	69.1	0.4800 µg/L	0.01423	0.4800 ppb	0.01423	2.97%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	3.6	33.216 µg/L	4.5004	33.216 ppb	4.5004	13.55%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	15.0	10.357 µg/L	9.4186	10.357 ppb	9.4186	90.94%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	-0.3	-2.9865 µg/L	5.04246	-2.9865 ppb	5.04246	168.84%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	227.8	0.8058 µg/L	0.23693	0.8058 ppb	0.23693	29.40%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	11.1	1.1978 µg/L	0.12901	1.1978 ppb	0.12901	10.77%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	36.0	11.276 µg/L	4.5254	11.276 ppb	4.5254	40.13%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	5.3	0.2915 µg/L	0.68286	0.2915 ppb	0.68286	234.29%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	-6.1	-13.456 µg/L	5.9978	-13.456 ppb	5.9978	44.57%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	1.4	0.3914 µg/L	0.42462	0.3914 ppb	0.42462	108.47%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	1.7	7.7757 µg/L	8.41862	7.7757 ppb	8.41862	108.27%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	3.2	3.2390 µg/L	2.97639	3.2390 ppb	2.97639	91.89%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	-0.1	-0.0942 µg/L	2.82262	-0.0942 ppb	2.82262	>999.9%	
QC value within limits for Se 196.026 Recovery = Not calculated							
SiO2†	82.1	17.721 µg/L	2.0753	17.721 ppb	2.0753	11.71%	
QC value within limits for SiO2 Recovery = Not calculated							
Si 251.611†	146.3	12.193 µg/L	1.4616	12.193 ppb	1.4616	11.99%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	5.2	2.4289 µg/L	0.56470	2.4289 ppb	0.56470	23.25%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	4.9	0.0480 µg/L	0.22108	0.0480 ppb	0.22108	461.05%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	426.3	1.0133 µg/L	0.16763	1.0133 ppb	0.16763	16.54%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	0.0	0.0683 µg/L	1.85563	0.0683 ppb	1.85563	>999.9%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	16.8	1.4034 µg/L	1.83709	1.4034 ppb	1.83709	130.90%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	10.0	0.1212 µg/L	0.34936	0.1212 ppb	0.34936	288.33%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	44.9	1.1529 µg/L	0.17344	1.1529 ppb	0.17344	15.04%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
All analyte(s) passed QC.							

Sequence No.: 23

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/22/2010 23:33:43

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	55286.1	55286.1	101 %		23:34:22
1	Al 396.153Radial†	7128.1	7042.1	5187.1 µg/L	5187.1 ppb	23:34:22
1	Ca 317.933Radial†	5626.9	5376.2	5152.3 µg/L	5152.3 ppb	23:34:43
1	Fe 238.204 Radial†	591.8	568.0	5257.3 µg/L	5257.3 ppb	23:34:43
1	K 766.490 Radial†	7702.0	7427.8	5122.1 µg/L	5122.1 ppb	23:34:22
1	Mg 279.077 IEC†	558.4	540.5	5262.1 µg/L	5262.1 ppb	23:34:43
1	Na 589.592 Radial†	33538.2	32693.2	10242 µg/L	10242 ppb	23:34:22
1	Sr 421.552†	51894.4	51129.9	504.23 µg/L	504.23 ppb	23:34:22
1	Sc 361.383	1909397.2	1909397.2	100.22 %		23:35:46
1	Y 371.029	1308575.5	1308575.5	99.920 %		23:35:46
1	Ag 328.068†	65193.8	65624.8	521.51 µg/L	521.51 ppb	23:35:52
1	As 188.979†	268.5	268.2	533.22 µg/L	533.22 ppb	23:36:12
1	B 249.677†	11950.2	11666.9	516.10 µg/L	516.10 ppb	23:35:52
1	Ba 233.527†	19713.0	19697.5	527.49 µg/L	527.49 ppb	23:35:52
1	Be 313.107†	799272.0	801289.9	518.41 µg/L	518.41 ppb	23:35:46
1	Cd 226.502†	18673.2	18757.6	530.97 µg/L	530.97 ppb	23:35:52
1	Co 228.616†	10547.9	10539.0	530.05 µg/L	530.05 ppb	23:35:52
1	Cr 267.716†	23951.1	23929.8	531.13 µg/L	531.13 ppb	23:35:52
1	Cu 324.752†	79395.0	75976.6	523.11 µg/L	523.11 ppb	23:35:52
1	Mn 257.610†	151340.4	151230.6	532.48 µg/L	532.48 ppb	23:35:46
1	Mo 202.031†	4969.9	4965.0	537.02 µg/L	537.02 ppb	23:36:12
1	Ni 231.604†	9893.5	9591.2	531.11 µg/L	531.11 ppb	23:35:52
1	P 214.914†	1237.4	1209.8	2603.0 µg/L	2603.0 ppb	23:36:12
1	Pb 220.353†	2046.6	1950.1	527.96 µg/L	527.96 ppb	23:36:12
1	S 181.975 Axial†	242.7	230.1	1048.5 µg/L	1048.5 ppb	23:36:12
1	Sb 206.836†	553.6	532.6	535.85 µg/L	535.85 ppb	23:36:12
1	Se 196.026†	359.2	346.0	544.61 µg/L	544.61 ppb	23:36:12
1	SiO2†	27911.7	26295.3	5676.4 µg/L	5676.4 ppb	23:35:52
1	Si 251.611†	32165.9	31841.5	2654.6 µg/L	2654.6 ppb	23:35:52
1	Sn 189.927†	1143.1	1142.9	538.57 µg/L	538.57 ppb	23:36:12
1	Ti 334.940†	218616.2	218055.2	517.74 µg/L	517.74 ppb	23:35:46
1	Tl 190.801†	339.7	360.6	524.84 µg/L	524.84 ppb	23:36:12
1	U 409.014†	6348.7	6156.2	514.79 µg/L	514.79 ppb	23:35:52
1	V 292.402†	49732.3	49655.7	530.23 µg/L	530.23 ppb	23:35:52
1	Zn 213.857†	21140.8	20655.0	527.73 µg/L	527.73 ppb	23:35:52
2	Sc RADIAL	54809.8	54809.8	101 %		23:34:48
2	Al 396.153Radial†	7063.6	7039.0	5184.9 µg/L	5184.9 ppb	23:34:48
2	Ca 317.933Radial†	5638.7	5436.1	5209.8 µg/L	5209.8 ppb	23:35:09
2	Fe 238.204 Radial†	590.8	572.0	5294.2 µg/L	5294.2 ppb	23:35:09
2	K 766.490 Radial†	7682.7	7474.7	5154.4 µg/L	5154.4 ppb	23:34:48
2	Mg 279.077 IEC†	556.2	543.1	5287.5 µg/L	5287.5 ppb	23:35:09
2	Na 589.592 Radial†	33343.7	32787.1	10271 µg/L	10271 ppb	23:34:48
2	Sr 421.552†	51531.7	51213.9	505.06 µg/L	505.06 ppb	23:34:48
2	Sc 361.383	1920987.0	1920987.0	100.83 %		23:36:19
2	Y 371.029	1317144.1	1317144.1	100.57 %		23:36:19
2	Ag 328.068†	64596.0	64639.5	513.69 µg/L	513.69 ppb	23:36:25
2	As 188.979†	267.2	265.3	527.51 µg/L	527.51 ppb	23:36:46
2	B 249.677†	11825.7	11471.4	507.39 µg/L	507.39 ppb	23:36:25
2	Ba 233.527†	19577.8	19444.8	520.72 µg/L	520.72 ppb	23:36:25
2	Be 313.107†	802916.3	800092.7	517.64 µg/L	517.64 ppb	23:36:19
2	Cd 226.502†	18534.4	18507.5	523.88 µg/L	523.88 ppb	23:36:25
2	Co 228.616†	10440.9	10369.4	521.51 µg/L	521.51 ppb	23:36:25
2	Cr 267.716†	23771.1	23607.2	523.97 µg/L	523.97 ppb	23:36:25
2	Cu 324.752†	78412.3	74524.1	513.13 µg/L	513.13 ppb	23:36:25
2	Mn 257.610†	152229.6	151201.5	532.38 µg/L	532.38 ppb	23:36:19
2	Mo 202.031†	4931.3	4896.9	529.66 µg/L	529.66 ppb	23:36:46
2	Ni 231.604†	9793.9	9432.8	522.34 µg/L	522.34 ppb	23:36:25
2	P 214.914†	1236.4	1201.3	2585.3 µg/L	2585.3 ppb	23:36:46
2	Pb 220.353†	2064.3	1955.3	529.38 µg/L	529.38 ppb	23:36:46

2	S 181.975 Axial†	247.6	233.6	1064.2 µg/L	1064.2 ppb	23:36:46
2	Sb 206.836†	549.7	525.4	528.55 µg/L	528.55 ppb	23:36:46
2	Se 196.026†	361.2	345.8	544.35 µg/L	544.35 ppb	23:36:46
2	SiO2†	27741.4	25958.4	5603.6 µg/L	5603.6 ppb	23:36:25
2	Si 251.611†	31999.4	31482.7	2624.7 µg/L	2624.7 ppb	23:36:25
2	Sn 189.927†	1133.8	1126.8	530.99 µg/L	530.99 ppb	23:36:46
2	Ti 334.940†	219802.5	217915.7	517.40 µg/L	517.40 ppb	23:36:19
2	Tl 190.801†	340.1	358.9	522.46 µg/L	522.46 ppb	23:36:46
2	U 409.014†	6196.4	5966.9	498.92 µg/L	498.92 ppb	23:36:25
2	V 292.402†	49317.9	48945.4	522.65 µg/L	522.65 ppb	23:36:25
2	Zn 213.857†	20999.4	20387.6	520.90 µg/L	520.90 ppb	23:36:25
3	Sc RADIAL	54909.1	54909.1	101 %		23:35:14
3	Al 396.153Radial†	7049.8	7012.6	5167.2 µg/L	5167.2 ppb	23:35:14
3	Ca 317.933Radial†	5603.1	5390.6	5166.1 µg/L	5166.1 ppb	23:35:35
3	Fe 238.204 Radial†	589.6	569.7	5272.6 µg/L	5272.6 ppb	23:35:35
3	K 766.490 Radial†	7692.9	7470.9	5151.8 µg/L	5151.8 ppb	23:35:14
3	Mg 279.077 IEC†	554.6	540.5	5260.8 µg/L	5260.8 ppb	23:35:35
3	Na 589.592 Radial†	33366.0	32749.3	10260 µg/L	10260 ppb	23:35:14
3	Sr 421.552†	51527.8	51117.4	504.10 µg/L	504.10 ppb	23:35:14
3	Sc 361.383	1919502.3	1919502.3	100.75 %		23:36:53
3	Y 371.029	1315911.9	1315911.9	100.48 %		23:36:53
3	Ag 328.068†	61833.6	61947.3	492.17 µg/L	492.17 ppb	23:36:58
3	As 188.979†	227.8	226.4	450.08 µg/L	450.08 ppb	23:37:19
3	B 249.677†	11352.2	11010.5	486.85 µg/L	486.85 ppb	23:36:58
3	Ba 233.527†	18361.9	18253.0	488.78 µg/L	488.78 ppb	23:36:58
3	Be 313.107†	753873.1	752032.7	486.54 µg/L	486.54 ppb	23:36:53
3	Cd 226.502†	17314.2	17310.7	489.96 µg/L	489.96 ppb	23:36:58
3	Co 228.616†	9665.4	9607.7	483.14 µg/L	483.14 ppb	23:36:58
3	Cr 267.716†	21331.5	21204.0	470.64 µg/L	470.64 ppb	23:36:58
3	Cu 324.752†	72782.5	68996.6	475.12 µg/L	475.12 ppb	23:36:58
3	Mn 257.610†	143821.9	142973.6	503.43 µg/L	503.43 ppb	23:36:53
3	Mo 202.031†	4127.8	4103.2	443.84 µg/L	443.84 ppb	23:37:19
3	Ni 231.604†	9103.5	8755.1	484.82 µg/L	484.82 ppb	23:36:58
3	P 214.914†	1059.7	1026.9	2205.6 µg/L	2205.6 ppb	23:37:19
3	Pb 220.353†	1792.1	1686.7	456.53 µg/L	456.53 ppb	23:37:19
3	S 181.975 Axial†	218.4	204.7	932.82 µg/L	932.82 ppb	23:37:19
3	Sb 206.836†	484.3	460.9	463.14 µg/L	463.14 ppb	23:37:19
3	Se 196.026†	320.5	305.8	482.25 µg/L	482.25 ppb	23:37:19
3	SiO2†	26518.1	24765.5	5346.1 µg/L	5346.1 ppb	23:36:58
3	Si 251.611†	30520.3	30039.3	2504.4 µg/L	2504.4 ppb	23:36:58
3	Sn 189.927†	939.5	934.8	440.50 µg/L	440.50 ppb	23:37:19
3	Ti 334.940†	206285.3	204668.3	485.93 µg/L	485.93 ppb	23:36:53
3	Tl 190.801†	303.3	322.7	470.03 µg/L	470.03 ppb	23:37:19
3	U 409.014†	5809.5	5587.7	467.15 µg/L	467.15 ppb	23:36:58
3	V 292.402†	45211.9	44908.0	479.25 µg/L	479.25 ppb	23:36:58
3	Zn 213.857†	19439.2	18855.2	481.70 µg/L	481.70 ppb	23:36:58

-----  
Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1916628.8	100.60 %	0.331			0.33%
Sc RADIAL	55001.7	101 %	0.5			0.46%
Y 371.029	1313877.2	100.32 %	0.354			0.35%
Ag 328.068†	64070.5	509.12 µg/L	15.195	509.12 ppb	15.195	2.98%
QC value within limits for Ag 328.068 Recovery = 101.82%						
Al 396.153Radial†	7031.2	5179.8 µg/L	10.91	5179.8 ppb	10.91	0.21%
QC value within limits for Al 396.153Radial Recovery = 103.60%						
As 188.979†	253.3	503.60 µg/L	46.442	503.60 ppb	46.442	9.22%
QC value within limits for As 188.979 Recovery = 100.72%						
B 249.677†	11382.9	503.45 µg/L	15.017	503.45 ppb	15.017	2.98%
QC value within limits for B 249.677 Recovery = 100.69%						
Ba 233.527†	19131.8	512.33 µg/L	20.671	512.33 ppb	20.671	4.03%
QC value within limits for Ba 233.527 Recovery = 102.47%						
Be 313.107†	784471.8	507.53 µg/L	18.180	507.53 ppb	18.180	3.58%
QC value within limits for Be 313.107 Recovery = 101.51%						
Ca 317.933Radial†	5401.0	5176.1 µg/L	29.99	5176.1 ppb	29.99	0.58%
QC value within limits for Ca 317.933Radial Recovery = 103.52%						
Cd 226.502†	18191.9	514.94 µg/L	21.919	514.94 ppb	21.919	4.26%
QC value within limits for Cd 226.502 Recovery = 102.99%						
Co 228.616†	10172.0	511.57 µg/L	24.984	511.57 ppb	24.984	4.88%

QC value within limits for Co 228.616 Recovery = 102.31%							
Cr 267.716†	22913.7	508.58 µg/L	33.053	508.58 ppb	33.053	6.50%	
QC value within limits for Cr 267.716 Recovery = 101.72%							
Cu 324.752†	73165.8	503.78 µg/L	25.322	503.78 ppb	25.322	5.03%	
QC value within limits for Cu 324.752 Recovery = 100.76%							
Fe 238.204 Radial†	569.9	5274.7 µg/L	18.51	5274.7 ppb	18.51	0.35%	
QC value within limits for Fe 238.204 Radial Recovery = 105.49%							
K 766.490 Radial†	7457.8	5142.7 µg/L	17.96	5142.7 ppb	17.96	0.35%	
QC value within limits for K 766.490 Radial Recovery = 102.85%							
Mg 279.077 IEC†	541.4	5270.1 µg/L	15.07	5270.1 ppb	15.07	0.29%	
QC value within limits for Mg 279.077 IEC Recovery = 105.40%							
Mn 257.610†	148468.6	522.76 µg/L	16.740	522.76 ppb	16.740	3.20%	
QC value within limits for Mn 257.610 Recovery = 104.55%							
Mo 202.031†	4655.1	503.51 µg/L	51.803	503.51 ppb	51.803	10.29%	
QC value within limits for Mo 202.031 Recovery = 100.70%							
Na 589.592 Radial†	32743.2	10258 µg/L	14.8	10258 ppb	14.8	0.14%	
QC value within limits for Na 589.592 Radial Recovery = 102.58%							
Ni 231.604†	9259.7	512.75 µg/L	24.587	512.75 ppb	24.587	4.80%	
QC value within limits for Ni 231.604 Recovery = 102.55%							
P 214.914†	1146.0	2464.6 µg/L	224.51	2464.6 ppb	224.51	9.11%	
QC value within limits for P 214.914 Recovery = 98.59%							
Pb 220.353†	1864.1	504.62 µg/L	41.654	504.62 ppb	41.654	8.25%	
QC value within limits for Pb 220.353 Recovery = 100.92%							
S 181.975 Axial†	222.8	1015.2 µg/L	71.77	1015.2 ppb	71.77	7.07%	
QC value within limits for S 181.975 Axial Recovery = 101.52%							
Sb 206.836†	506.3	509.18 µg/L	40.036	509.18 ppb	40.036	7.86%	
QC value within limits for Sb 206.836 Recovery = 101.84%							
Se 196.026†	332.5	523.74 µg/L	35.929	523.74 ppb	35.929	6.86%	
QC value within limits for Se 196.026 Recovery = 104.75%							
SiO2†	25673.1	5542.1 µg/L	173.51	5542.1 ppb	173.51	3.13%	
QC value within limits for SiO2 Recovery = 103.64%							
Si 251.611†	31121.1	2594.6 µg/L	79.53	2594.6 ppb	79.53	3.07%	
QC value within limits for Si 251.611 Recovery = 103.78%							
Sn 189.927†	1068.1	503.36 µg/L	54.563	503.36 ppb	54.563	10.84%	
QC value within limits for Sn 189.927 Recovery = 100.67%							
Sr 421.552†	51153.7	504.46 µg/L	0.518	504.46 ppb	0.518	0.10%	
QC value within limits for Sr 421.552 Recovery = 100.89%							
Ti 334.940†	213546.4	507.02 µg/L	18.267	507.02 ppb	18.267	3.60%	
QC value within limits for Ti 334.940 Recovery = 101.40%							
Tl 190.801†	347.4	505.77 µg/L	30.982	505.77 ppb	30.982	6.13%	
QC value within limits for Tl 190.801 Recovery = 101.15%							
U 409.014†	5903.6	493.62 µg/L	24.259	493.62 ppb	24.259	4.91%	
QC value within limits for U 409.014 Recovery = 98.72%							
V 292.402†	47836.4	510.71 µg/L	27.508	510.71 ppb	27.508	5.39%	
QC value within limits for V 292.402 Recovery = 102.14%							
Zn 213.857†	19966.0	510.11 µg/L	24.839	510.11 ppb	24.839	4.87%	
QC value within limits for Zn 213.857 Recovery = 102.02%							
All analyte(s) passed QC.							

Sequence No.: 24  
 Sample ID: CCB  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 8  
 Date Collected: 2/22/2010 23:37:28  
 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	54560.8	54560.8	100 %		23:38:01
1	Al 396.153Radial†	-7.8	3.0	2.1670 µg/L	2.1670 ppb	23:38:01
1	Ca 317.933Radial†	182.3	7.9	7.6123 µg/L	7.6123 ppb	23:38:21
1	Fe 238.204 Radial†	20.9	5.1	47.339 µg/L	47.339 ppb	23:38:21
1	K 766.490 Radial†	187.1	17.4	12.028 µg/L	12.028 ppb	23:38:01
1	Mg 279.077 IEC†	12.4	2.2	20.940 µg/L	20.940 ppb	23:38:21
1	Na 589.592 Radial†	469.0	79.4	24.884 µg/L	24.884 ppb	23:38:01
1	Sr 421.552†	42.8	-16.5	-0.1630 µg/L	-0.1630 ppb	23:38:01
1	Sc 361.383	1928709.0	1928709.0	101.24 %		23:39:23
1	Y 371.029	1327747.9	1327747.9	101.38 %		23:39:23
1	Ag 328.068†	-481.3	101.4	0.8021 µg/L	0.8021 ppb	23:39:29
1	As 188.979†	1.3	1.6	3.1118 µg/L	3.1118 ppb	23:39:49
1	B 249.677†	316.6	56.1	2.4673 µg/L	2.4673 ppb	23:39:49
1	Ba 233.527†	-17.7	11.2	0.2982 µg/L	0.2982 ppb	23:39:49
1	Be 313.107†	-3421.2	426.3	0.2757 µg/L	0.2757 ppb	23:39:29
1	Cd 226.502†	-127.0	0.7	0.0134 µg/L	0.0134 ppb	23:39:49
1	Co 228.616†	-11.5	3.3	0.1647 µg/L	0.1647 ppb	23:39:49
1	Cr 267.716†	-5.2	27.1	0.6022 µg/L	0.6022 ppb	23:39:49
1	Cu 324.752†	3351.3	69.6	0.4848 µg/L	0.4848 ppb	23:39:29
1	Mn 257.610†	-58.8	170.7	0.6059 µg/L	0.6059 ppb	23:39:49
1	Mo 202.031†	5.4	11.6	1.2609 µg/L	1.2609 ppb	23:39:49
1	Ni 231.604†	285.5	1.8	0.0983 µg/L	0.0983 ppb	23:39:49
1	P 214.914†	20.9	-4.3	-9.4279 µg/L	-9.4279 ppb	23:39:49
1	Pb 220.353†	86.4	-6.6	-1.7808 µg/L	-1.7808 ppb	23:39:49
1	S 181.975 Axial†	14.7	2.5	11.421 µg/L	11.421 ppb	23:39:49
1	Sb 206.836†	19.9	-0.1	-0.0891 µg/L	-0.0891 ppb	23:39:49
1	Se 196.026†	19.6	7.0	11.001 µg/L	11.001 ppb	23:39:49
1	SiO2†	1671.7	97.2	20.989 µg/L	20.989 ppb	23:39:29
1	Si 251.611†	430.6	172.8	14.410 µg/L	14.410 ppb	23:39:49
1	Sn 189.927†	-3.5	-1.1	-0.5327 µg/L	-0.5327 ppb	23:39:49
1	Ti 334.940†	335.8	259.7	0.6154 µg/L	0.6154 ppb	23:39:29
1	Tl 190.801†	-20.1	1.9	2.7051 µg/L	2.7051 ppb	23:39:49
1	U 409.014†	232.2	51.0	4.2645 µg/L	4.2645 ppb	23:39:29
1	V 292.402†	-44.1	-8.9	-0.0726 µg/L	-0.0726 ppb	23:39:29
1	Zn 213.857†	458.6	14.6	0.3713 µg/L	0.3713 ppb	23:39:49
2	Sc RADIAL	54528.4	54528.4	100.0 %		23:38:27
2	Al 396.153Radial†	-1.2	9.6	7.0667 µg/L	7.0667 ppb	23:38:27
2	Ca 317.933Radial†	175.0	0.8	0.7244 µg/L	0.7244 ppb	23:38:47
2	Fe 238.204 Radial†	17.6	1.8	16.932 µg/L	16.932 ppb	23:38:47
2	K 766.490 Radial†	156.0	-13.5	-9.3400 µg/L	-9.3400 ppb	23:38:27
2	Mg 279.077 IEC†	10.4	0.2	1.8374 µg/L	1.8374 ppb	23:38:47
2	Na 589.592 Radial†	335.1	-54.1	-16.957 µg/L	-16.957 ppb	23:38:27
2	Sr 421.552†	61.0	1.7	0.0172 µg/L	0.0172 ppb	23:38:27
2	Sc 361.383	1930627.3	1930627.3	101.34 %		23:39:55
2	Y 371.029	1329058.5	1329058.5	101.48 %		23:39:55
2	Ag 328.068†	-487.6	95.7	0.7572 µg/L	0.7572 ppb	23:40:01
2	As 188.979†	3.9	4.2	8.3766 µg/L	8.3766 ppb	23:40:21
2	B 249.677†	328.2	67.2	2.9763 µg/L	2.9763 ppb	23:40:21
2	Ba 233.527†	-6.3	22.4	0.6000 µg/L	0.6000 ppb	23:40:21
2	Be 313.107†	-3217.9	630.3	0.4075 µg/L	0.4075 ppb	23:40:01
2	Cd 226.502†	-116.7	11.0	0.3083 µg/L	0.3083 ppb	23:40:21
2	Co 228.616†	-3.2	11.5	0.5781 µg/L	0.5781 ppb	23:40:21
2	Cr 267.716†	-4.9	27.5	0.6109 µg/L	0.6109 ppb	23:40:21
2	Cu 324.752†	3289.6	5.3	0.0391 µg/L	0.0391 ppb	23:40:01
2	Mn 257.610†	23.0	251.5	0.8870 µg/L	0.8870 ppb	23:40:21
2	Mo 202.031†	6.8	13.0	1.4053 µg/L	1.4053 ppb	23:40:21
2	Ni 231.604†	287.3	3.3	0.1831 µg/L	0.1831 ppb	23:40:21
2	P 214.914†	14.6	-10.5	-22.921 µg/L	-22.921 ppb	23:40:21
2	Pb 220.353†	76.6	-16.4	-4.4264 µg/L	-4.4264 ppb	23:40:21

2	S 181.975 Axial†	14.3	2.2	9.8051 µg/L	9.8051 ppb	23:40:21
2	Sb 206.836†	23.6	3.5	3.5565 µg/L	3.5565 ppb	23:40:21
2	Se 196.026†	8.3	-4.2	-6.3954 µg/L	-6.3954 ppb	23:40:21
2	SiO2†	1723.1	146.4	31.602 µg/L	31.602 ppb	23:40:01
2	Si 251.611†	462.4	203.8	16.989 µg/L	16.989 ppb	23:40:21
2	Sn 189.927†	2.8	5.1	2.4137 µg/L	2.4137 ppb	23:40:21
2	Ti 334.940†	589.8	510.0	1.2115 µg/L	1.2115 ppb	23:40:01
2	Tl 190.801†	-19.6	2.4	3.4388 µg/L	3.4388 ppb	23:40:21
2	U 409.014†	177.8	-2.9	-0.2489 µg/L	-0.2489 ppb	23:40:01
2	V 292.402†	-14.7	20.2	0.2269 µg/L	0.2269 ppb	23:40:01
2	Zn 213.857†	477.1	32.4	0.8323 µg/L	0.8323 ppb	23:40:21
3	Sc RADIAL	54617.3	54617.3	100 %		23:38:52
3	Al 396.153Radial†	7.7	18.5	13.593 µg/L	13.593 ppb	23:38:52
3	Ca 317.933Radial†	181.3	6.7	6.4447 µg/L	6.4447 ppb	23:39:13
3	Fe 238.204 Radial†	18.0	2.2	20.004 µg/L	20.004 ppb	23:39:13
3	K 766.490 Radial†	158.1	-11.6	-8.0137 µg/L	-8.0137 ppb	23:38:52
3	Mg 279.077 IEC†	13.9	3.6	35.252 µg/L	35.252 ppb	23:39:13
3	Na 589.592 Radial†	418.2	28.3	8.8508 µg/L	8.8508 ppb	23:38:52
3	Sr 421.552†	55.0	-4.4	-0.0434 µg/L	-0.0434 ppb	23:38:52
3	Sc 361.383	1918200.1	1918200.1	100.69 %		23:40:27
3	Y 371.029	1320318.0	1320318.0	100.82 %		23:40:27
3	Ag 328.068†	-390.3	189.1	1.5002 µg/L	1.5002 ppb	23:40:33
3	As 188.979†	3.6	3.9	7.7057 µg/L	7.7057 ppb	23:40:53
3	B 249.677†	320.8	62.0	2.7447 µg/L	2.7447 ppb	23:40:53
3	Ba 233.527†	11.5	40.1	1.0727 µg/L	1.0727 ppb	23:40:53
3	Be 313.107†	-2493.2	1329.4	0.8599 µg/L	0.8599 ppb	23:40:33
3	Cd 226.502†	-91.6	35.2	0.9952 µg/L	0.9952 ppb	23:40:53
3	Co 228.616†	21.5	36.0	1.8105 µg/L	1.8105 ppb	23:40:53
3	Cr 267.716†	15.1	47.3	1.0509 µg/L	1.0509 ppb	23:40:53
3	Cu 324.752†	3342.0	78.4	0.5418 µg/L	0.5418 ppb	23:40:33
3	Mn 257.610†	153.4	381.1	1.3419 µg/L	1.3419 ppb	23:40:53
3	Mo 202.031†	11.4	17.6	1.9024 µg/L	1.9024 ppb	23:40:53
3	Ni 231.604†	301.8	19.5	1.0784 µg/L	1.0784 ppb	23:40:53
3	P 214.914†	23.9	-1.1	-2.5659 µg/L	-2.5659 ppb	23:40:53
3	Pb 220.353†	81.8	-10.7	-2.9011 µg/L	-2.9011 ppb	23:40:53
3	S 181.975 Axial†	14.9	2.9	13.021 µg/L	13.021 ppb	23:40:53
3	Sb 206.836†	27.9	8.0	7.9914 µg/L	7.9914 ppb	23:40:53
3	Se 196.026†	13.7	1.3	1.9805 µg/L	1.9805 ppb	23:40:53
3	SiO2†	1735.6	169.8	36.651 µg/L	36.651 ppb	23:40:33
3	Si 251.611†	490.8	234.9	19.587 µg/L	19.587 ppb	23:40:53
3	Sn 189.927†	0.4	2.7	1.2725 µg/L	1.2725 ppb	23:40:53
3	Ti 334.940†	681.6	605.0	1.4346 µg/L	1.4346 ppb	23:40:33
3	Tl 190.801†	-23.8	-2.0	-2.8190 µg/L	-2.8190 ppb	23:40:53
3	U 409.014†	249.9	69.9	5.8519 µg/L	5.8519 ppb	23:40:33
3	V 292.402†	68.4	102.6	1.1073 µg/L	1.1073 ppb	23:40:33
3	Zn 213.857†	473.4	31.7	0.8081 µg/L	0.8081 ppb	23:40:53

-----  
Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1925845.5	101.09 %	0.351			0.35%
Sc RADIAL	54568.8	100 %	0.1			0.08%
Y 371.029	1325708.1	101.23 %	0.360			0.36%
Ag 328.068†	128.7	1.0198 µg/L	0.41662	1.0198 ppb	0.41662	40.85%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	10.4	7.6090 µg/L	5.73241	7.6090 ppb	5.73241	75.34%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	3.2	6.3980 µg/L	2.86563	6.3980 ppb	2.86563	44.79%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	61.8	2.7294 µg/L	0.25483	2.7294 ppb	0.25483	9.34%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	24.5	0.6570 µg/L	0.39034	0.6570 ppb	0.39034	59.42%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	795.3	0.5143 µg/L	0.30642	0.5143 ppb	0.30642	59.58%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	5.1	4.9271 µg/L	3.68619	4.9271 ppb	3.68619	74.81%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	15.6	0.4390 µg/L	0.50379	0.4390 ppb	0.50379	114.76%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	16.9	0.8511 µg/L	0.85619	0.8511 ppb	0.85619	100.59%



QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	34.0	0.7547 µg/L	0.25661	0.7547 ppb	0.25661	34.00%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	51.1	0.3552 µg/L	0.27525	0.3552 ppb	0.27525	77.48%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	3.0	28.092 µg/L	16.7390	28.092 ppb	16.7390	59.59%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	-2.6	-1.7751 µg/L	11.97258	-1.7751 ppb	11.97258	674.48%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	2.0	19.343 µg/L	16.7643	19.343 ppb	16.7643	86.67%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	267.8	0.9449 µg/L	0.37143	0.9449 ppb	0.37143	39.31%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	14.1	1.5229 µg/L	0.33648	1.5229 ppb	0.33648	22.10%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	17.9	5.5926 µg/L	21.11035	5.5926 ppb	21.11035	377.47%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	8.2	0.4533 µg/L	0.54307	0.4533 ppb	0.54307	119.81%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	-5.3	-11.638 µg/L	10.3559	-11.638 ppb	10.3559	88.98%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	-11.2	-3.0361 µg/L	1.32794	-3.0361 ppb	1.32794	43.74%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	2.5	11.416 µg/L	1.6080	11.416 ppb	1.6080	14.09%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	3.8	3.8196 µg/L	4.04663	3.8196 ppb	4.04663	105.94%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	1.4	2.1954 µg/L	8.70027	2.1954 ppb	8.70027	396.29%	
QC value within limits for Se 196.026 Recovery = Not calculated							
SiO2†	137.8	29.747 µg/L	7.9938	29.747 ppb	7.9938	26.87%	
QC value within limits for SiO2 Recovery = Not calculated							
Si 251.611†	203.9	16.995 µg/L	2.5886	16.995 ppb	2.5886	15.23%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	2.2	1.0512 µg/L	1.48561	1.0512 ppb	1.48561	141.33%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	-6.4	-0.0631 µg/L	0.09173	-0.0631 ppb	0.09173	145.43%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	458.2	1.0872 µg/L	0.42355	1.0872 ppb	0.42355	38.96%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	0.8	1.1083 µg/L	3.42086	1.1083 ppb	3.42086	308.65%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	39.3	3.2891 µg/L	3.16518	3.2891 ppb	3.16518	96.23%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	38.0	0.4205 µg/L	0.61329	0.4205 ppb	0.61329	145.83%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	26.3	0.6706 µg/L	0.25945	0.6706 ppb	0.25945	38.69%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
All analyte(s) passed QC.							

=====  
Analysis Begun

Start Time: 2/23/2010 00:06:28

Plasma On Time: 2/8/2010 03:37:33

Logged In Analyst: optima

Technique: ICP Continuous

Spectrometer Model: Optima 4300 DV, S/N 077N1030502 Autosampler Model: AS-93plus

Sample Information File: C:\pe\optimal\Sample Information\022210B.SIF

Batch ID:

Results Data Set: 022210

Results Library: c:\pe\optimal\Results\Results.mdb

=====  
Sequence No.: 1

Autosampler Location: 7

Sample ID: CCV

Date Collected: 2/23/2010 00:06:28

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	57647.1	57647.1	106 %		00:07:06
1	Al 396.153Radial†	6735.1	6382.3	4700.7 µg/L	4700.7 ppb	00:07:06
1	Ca 317.933Radial†	5471.7	5002.0	4793.7 µg/L	4793.7 ppb	00:07:27
1	Fe 238.204 Radial†	577.9	530.9	4914.1 µg/L	4914.1 ppb	00:07:27
1	K 766.490 Radial†	7451.4	6879.6	4744.0 µg/L	4744.0 ppb	00:07:06
1	Mg 279.077 IEC†	537.7	498.5	4852.8 µg/L	4852.8 ppb	00:07:27
1	Na 589.592 Radial†	32217.7	30089.1	9426.1 µg/L	9426.1 ppb	00:07:06
1	Sr 421.552†	49775.6	47029.1	463.79 µg/L	463.79 ppb	00:07:06
1	Sc 361.383	1978434.6	1978434.6	103.85 %		00:08:30
1	Y 371.029	1355123.8	1355123.8	103.47 %		00:08:30
1	Ag 328.068†	63866.3	62076.6	493.30 µg/L	493.30 ppb	00:08:36
1	As 188.979†	263.8	254.3	505.62 µg/L	505.62 ppb	00:08:56
1	B 249.677†	11799.6	11105.8	491.32 µg/L	491.32 ppb	00:08:36
1	Ba 233.527†	19304.1	18617.4	498.56 µg/L	498.56 ppb	00:08:36
1	Be 313.107†	788786.4	763364.6	493.88 µg/L	493.88 ppb	00:08:30
1	Cd 226.502†	18327.4	17774.4	503.15 µg/L	503.15 ppb	00:08:36
1	Co 228.616†	10378.3	10008.4	503.36 µg/L	503.36 ppb	00:08:36
1	Cr 267.716†	23434.9	22598.9	501.59 µg/L	501.59 ppb	00:08:36
1	Cu 324.752†	77626.4	71509.2	492.35 µg/L	492.35 ppb	00:08:36
1	Mn 257.610†	149233.9	143933.1	506.78 µg/L	506.78 ppb	00:08:30
1	Mo 202.031†	4856.2	4682.6	506.47 µg/L	506.47 ppb	00:08:56
1	Ni 231.604†	9679.6	9040.7	500.62 µg/L	500.62 ppb	00:08:36
1	P 214.914†	1228.9	1158.5	2493.6 µg/L	2493.6 ppb	00:08:56
1	Pb 220.353†	2028.5	1861.4	503.93 µg/L	503.93 ppb	00:08:56
1	S 181.975 Axial†	244.4	223.4	1017.7 µg/L	1017.7 ppb	00:08:56
1	Sb 206.836†	544.9	504.9	507.96 µg/L	507.96 ppb	00:08:56
1	Se 196.026†	352.3	326.9	514.50 µg/L	514.50 ppb	00:08:56
1	SiO2†	27146.0	24586.1	5307.4 µg/L	5307.4 ppb	00:08:36
1	Si 251.611†	31232.1	29822.4	2486.3 µg/L	2486.3 ppb	00:08:36
1	Sn 189.927†	1126.8	1087.3	512.39 µg/L	512.39 ppb	00:08:56
1	Ti 334.940†	215100.9	207058.6	491.64 µg/L	491.64 ppb	00:08:30
1	Tl 190.801†	335.0	344.3	501.00 µg/L	501.00 ppb	00:08:56
1	U 409.014†	6155.1	5748.7	480.72 µg/L	480.72 ppb	00:08:36
1	V 292.402†	48659.0	46890.7	500.69 µg/L	500.69 ppb	00:08:36
1	Zn 213.857†	20716.3	19510.2	498.50 µg/L	498.50 ppb	00:08:36
2	Sc RADIAL	57092.6	57092.6	105 %		00:07:32
2	Al 396.153Radial†	6893.8	6595.7	4858.2 µg/L	4858.2 ppb	00:07:32
2	Ca 317.933Radial†	5477.6	5057.9	4847.3 µg/L	4847.3 ppb	00:07:53
2	Fe 238.204 Radial†	579.9	538.1	4980.4 µg/L	4980.4 ppb	00:07:53
2	K 766.490 Radial†	7591.2	7081.6	4883.3 µg/L	4883.3 ppb	00:07:32
2	Mg 279.077 IEC†	541.9	507.3	4939.1 µg/L	4939.1 ppb	00:07:53
2	Na 589.592 Radial†	32784.6	30926.6	9688.5 µg/L	9688.5 ppb	00:07:32
2	Sr 421.552†	50780.5	48446.3	477.76 µg/L	477.76 ppb	00:07:32
2	Sc 361.383	1963339.7	1963339.7	103.06 %		00:09:03
2	Y 371.029	1346340.9	1346340.9	102.80 %		00:09:03
2	Ag 328.068†	63707.1	62395.0	495.84 µg/L	495.84 ppb	00:09:09
2	As 188.979†	267.6	259.9	516.81 µg/L	516.81 ppb	00:09:29

2	B 249.677†	11812.0	11205.2	495.70 µg/L	495.70 ppb	00:09:09
2	Ba 233.527†	19287.5	18744.3	501.96 µg/L	501.96 ppb	00:09:09
2	Be 313.107†	785605.2	766117.6	495.66 µg/L	495.66 ppb	00:09:03
2	Cd 226.502†	18362.5	17944.2	507.95 µg/L	507.95 ppb	00:09:09
2	Co 228.616†	10340.9	10048.9	505.40 µg/L	505.40 ppb	00:09:09
2	Cr 267.716†	23432.9	22770.5	505.40 µg/L	505.40 ppb	00:09:09
2	Cu 324.752†	77454.4	71917.1	495.16 µg/L	495.16 ppb	00:09:09
2	Mn 257.610†	148362.9	144192.7	507.70 µg/L	507.70 ppb	00:09:03
2	Mo 202.031†	4851.4	4713.9	509.85 µg/L	509.85 ppb	00:09:29
2	Ni 231.604†	9689.5	9122.0	505.12 µg/L	505.12 ppb	00:09:09
2	P 214.914†	1217.0	1156.0	2487.8 µg/L	2487.8 ppb	00:09:29
2	Pb 220.353†	2018.8	1867.0	505.46 µg/L	505.46 ppb	00:09:29
2	S 181.975 Axial†	244.2	225.0	1025.1 µg/L	1025.1 ppb	00:09:29
2	Sb 206.836†	543.8	507.9	510.91 µg/L	510.91 ppb	00:09:29
2	Se 196.026†	350.7	328.0	516.26 µg/L	516.26 ppb	00:09:29
2	SiO2†	27224.6	24863.4	5367.3 µg/L	5367.3 ppb	00:09:09
2	Si 251.611†	31294.3	30114.0	2510.6 µg/L	2510.6 ppb	00:09:09
2	Sn 189.927†	1117.1	1086.3	511.93 µg/L	511.93 ppb	00:09:29
2	Ti 334.940†	214077.6	207658.2	493.06 µg/L	493.06 ppb	00:09:03
2	Tl 190.801†	337.5	349.2	508.15 µg/L	508.15 ppb	00:09:29
2	U 409.014†	6111.4	5751.8	480.96 µg/L	480.96 ppb	00:09:09
2	V 292.402†	48665.7	47257.4	504.60 µg/L	504.60 ppb	00:09:09
2	Zn 213.857†	20761.1	19707.2	503.53 µg/L	503.53 ppb	00:09:09
3	Sc RADIAL	56741.7	56741.7	104 %		00:07:58
3	Al 396.153Radial†	6904.7	6647.0	4897.7 µg/L	4897.7 ppb	00:07:58
3	Ca 317.933Radial†	5481.2	5093.7	4881.6 µg/L	4881.6 ppb	00:08:18
3	Fe 238.204 Radial†	577.0	538.7	4985.4 µg/L	4985.4 ppb	00:08:18
3	K 766.490 Radial†	7529.7	7067.3	4873.5 µg/L	4873.5 ppb	00:07:58
3	Mg 279.077 IEC†	536.3	505.2	4916.6 µg/L	4916.6 ppb	00:08:18
3	Na 589.592 Radial†	32824.1	31158.2	9761.1 µg/L	9761.1 ppb	00:07:58
3	Sr 421.552†	50765.3	48731.6	480.58 µg/L	480.58 ppb	00:07:58
3	Sc 361.383	1986928.6	1986928.6	104.29 %		00:09:37
3	Y 371.029	1361353.2	1361353.2	103.95 %		00:09:37
3	Ag 328.068†	60454.7	58542.5	465.10 µg/L	465.10 ppb	00:09:42
3	As 188.979†	222.8	213.9	425.30 µg/L	425.30 ppb	00:10:03
3	B 249.677†	11126.3	10411.6	460.37 µg/L	460.37 ppb	00:09:42
3	Ba 233.527†	17834.4	17128.8	458.68 µg/L	458.68 ppb	00:09:42
3	Be 313.107†	749771.6	722709.0	467.57 µg/L	467.57 ppb	00:09:37
3	Cd 226.502†	16804.5	16238.8	459.62 µg/L	459.62 ppb	00:09:42
3	Co 228.616†	9414.2	9041.3	454.66 µg/L	454.66 ppb	00:09:42
3	Cr 267.716†	20811.2	19986.8	443.62 µg/L	443.62 ppb	00:09:42
3	Cu 324.752†	71324.9	65147.7	448.62 µg/L	448.62 ppb	00:09:42
3	Mn 257.610†	142302.6	136672.8	481.24 µg/L	481.24 ppb	00:09:37
3	Mo 202.031†	4111.7	3948.7	427.12 µg/L	427.12 ppb	00:10:03
3	Ni 231.604†	8908.7	8261.7	457.49 µg/L	457.49 ppb	00:09:42
3	P 214.914†	1060.0	991.5	2130.7 µg/L	2130.7 ppb	00:10:03
3	Pb 220.353†	1785.5	1620.0	438.52 µg/L	438.52 ppb	00:10:03
3	S 181.975 Axial†	218.1	197.1	898.15 µg/L	898.15 ppb	00:10:03
3	Sb 206.836†	479.3	439.8	442.08 µg/L	442.08 ppb	00:10:03
3	Se 196.026†	319.9	294.3	464.13 µg/L	464.13 ppb	00:10:03
3	SiO2†	25491.9	22888.4	4940.9 µg/L	4940.9 ppb	00:09:42
3	Si 251.611†	29215.4	27760.2	2314.4 µg/L	2314.4 ppb	00:09:42
3	Sn 189.927†	937.5	901.3	424.71 µg/L	424.71 ppb	00:10:03
3	Ti 334.940†	203359.2	194914.8	462.78 µg/L	462.78 ppb	00:09:37
3	Tl 190.801†	307.0	316.1	460.22 µg/L	460.22 ppb	00:10:03
3	U 409.014†	5590.9	5182.4	433.25 µg/L	433.25 ppb	00:09:42
3	V 292.402†	44030.0	42252.0	450.98 µg/L	450.98 ppb	00:09:42
3	Zn 213.857†	19003.7	17782.9	454.31 µg/L	454.31 ppb	00:09:42

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1976234.3	103.73 %	0.627			0.60%
Sc RADIAL	57160.5	105 %	0.8			0.80%
Y 371.029	1354272.6	103.41 %	0.576			0.56%
Ag 328.068†	61004.7	484.75 µg/L	17.062	484.75 ppb	17.062	3.52%
QC value within limits for Ag 328.068 Recovery = 96.95%						
Al 396.153Radial†	6541.7	4818.9 µg/L	104.23	4818.9 ppb	104.23	2.16%
QC value within limits for Al 396.153Radial Recovery = 96.38%						
As 188.979†	242.7	482.58 µg/L	49.916	482.58 ppb	49.916	10.34%

QC value within limits for As 188.979 Recovery = 96.52%						
B 249.677†	10907.5	482.46 µg/L	19.259	482.46 ppb	19.259	3.99%
QC value within limits for B 249.677 Recovery = 96.49%						
Ba 233.527†	18163.5	486.40 µg/L	24.067	486.40 ppb	24.067	4.95%
QC value within limits for Ba 233.527 Recovery = 97.28%						
Be 313.107†	750730.4	485.70 µg/L	15.725	485.70 ppb	15.725	3.24%
QC value within limits for Be 313.107 Recovery = 97.14%						
Ca 317.933Radial†	5051.2	4840.9 µg/L	44.32	4840.9 ppb	44.32	0.92%
QC value within limits for Ca 317.933Radial Recovery = 96.82%						
Cd 226.502†	17319.1	490.24 µg/L	26.625	490.24 ppb	26.625	5.43%
QC value within limits for Cd 226.502 Recovery = 98.05%						
Co 228.616†	9699.6	487.81 µg/L	28.729	487.81 ppb	28.729	5.89%
QC value within limits for Co 228.616 Recovery = 97.56%						
Cr 267.716†	21785.4	483.54 µg/L	34.622	483.54 ppb	34.622	7.16%
QC value within limits for Cr 267.716 Recovery = 96.71%						
Cu 324.752†	69524.6	478.71 µg/L	26.097	478.71 ppb	26.097	5.45%
QC value within limits for Cu 324.752 Recovery = 95.74%						
Fe 238.204 Radial†	535.9	4959.9 µg/L	39.80	4959.9 ppb	39.80	0.80%
QC value within limits for Fe 238.204 Radial Recovery = 99.20%						
K 766.490 Radial†	7009.5	4833.6 µg/L	77.74	4833.6 ppb	77.74	1.61%
QC value within limits for K 766.490 Radial Recovery = 96.67%						
Mg 279.077 IEC†	503.6	4902.8 µg/L	44.76	4902.8 ppb	44.76	0.91%
QC value within limits for Mg 279.077 IEC Recovery = 98.06%						
Mn 257.610†	141599.5	498.57 µg/L	15.014	498.57 ppb	15.014	3.01%
QC value within limits for Mn 257.610 Recovery = 99.71%						
Mo 202.031†	4448.4	481.15 µg/L	46.817	481.15 ppb	46.817	9.73%
QC value within limits for Mo 202.031 Recovery = 96.23%						
Na 589.592 Radial†	30724.6	9625.2 µg/L	176.20	9625.2 ppb	176.20	1.83%
QC value within limits for Na 589.592 Radial Recovery = 96.25%						
Ni 231.604†	8808.1	487.74 µg/L	26.296	487.74 ppb	26.296	5.39%
QC value within limits for Ni 231.604 Recovery = 97.55%						
P 214.914†	1102.0	2370.7 µg/L	207.85	2370.7 ppb	207.85	8.77%
QC value within limits for P 214.914 Recovery = 94.83%						
Pb 220.353†	1782.8	482.64 µg/L	38.214	482.64 ppb	38.214	7.92%
QC value within limits for Pb 220.353 Recovery = 96.53%						
S 181.975 Axial†	215.2	980.31 µg/L	71.248	980.31 ppb	71.248	7.27%
QC value within limits for S 181.975 Axial Recovery = 98.03%						
Sb 206.836†	484.2	486.98 µg/L	38.917	486.98 ppb	38.917	7.99%
QC value within limits for Sb 206.836 Recovery = 97.40%						
Se 196.026†	316.4	498.29 µg/L	29.604	498.29 ppb	29.604	5.94%
QC value within limits for Se 196.026 Recovery = 99.66%						
SiO2†	24112.6	5205.2 µg/L	230.82	5205.2 ppb	230.82	4.43%
QC value within limits for SiO2 Recovery = 97.34%						
Si 251.611†	29232.2	2437.1 µg/L	106.97	2437.1 ppb	106.97	4.39%
QC value within limits for Si 251.611 Recovery = 97.48%						
Sn 189.927†	1025.0	483.01 µg/L	50.490	483.01 ppb	50.490	10.45%
QC value within limits for Sn 189.927 Recovery = 96.60%						
Sr 421.552†	48069.0	474.04 µg/L	8.992	474.04 ppb	8.992	1.90%
QC value within limits for Sr 421.552 Recovery = 94.81%						
Ti 334.940†	203210.5	482.49 µg/L	17.084	482.49 ppb	17.084	3.54%
QC value within limits for Ti 334.940 Recovery = 96.50%						
Tl 190.801†	336.5	489.79 µg/L	25.857	489.79 ppb	25.857	5.28%
QC value within limits for Tl 190.801 Recovery = 97.96%						
U 409.014†	5561.0	464.98 µg/L	27.477	464.98 ppb	27.477	5.91%
QC value within limits for U 409.014 Recovery = 93.00%						
V 292.402†	45466.7	485.42 µg/L	29.893	485.42 ppb	29.893	6.16%
QC value within limits for V 292.402 Recovery = 97.08%						
Zn 213.857†	19000.1	485.45 µg/L	27.085	485.45 ppb	27.085	5.58%
QC value within limits for Zn 213.857 Recovery = 97.09%						
All analyte(s) passed QC.						

Sequence No.: 2

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/23/2010 00:10:12

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	54550.7	54550.7	100 %		00:10:45
1	Al 396.153Radial†	3.5	14.3	10.530 µg/L	10.530 ppb	00:10:45
1	Ca 317.933Radial†	185.0	10.7	10.229 µg/L	10.229 ppb	00:11:05
1	Fe 238.204 Radial†	16.4	0.5	4.9529 µg/L	4.9529 ppb	00:11:05
1	K 766.490 Radial†	193.4	23.8	16.402 µg/L	16.402 ppb	00:10:45
1	Mg 279.077 IEC†	10.1	-0.1	-1.0840 µg/L	-1.0840 ppb	00:11:05
1	Na 589.592 Radial†	401.1	11.7	3.6724 µg/L	3.6724 ppb	00:10:45
1	Sr 421.552†	22.3	-37.1	-0.3654 µg/L	-0.3654 ppb	00:10:45
1	Sc 361.383	1937537.8	1937537.8	101.70 %		00:12:07
1	Y 371.029	1332248.0	1332248.0	101.73 %		00:12:07
1	Ag 328.068†	-494.8	90.2	0.7139 µg/L	0.7139 ppb	00:12:13
1	As 188.979†	0.6	0.9	1.7244 µg/L	1.7244 ppb	00:12:33
1	B 249.677†	336.2	74.0	3.2827 µg/L	3.2827 ppb	00:12:33
1	Ba 233.527†	-16.2	12.7	0.3390 µg/L	0.3390 ppb	00:12:33
1	Be 313.107†	-3448.4	415.0	0.2682 µg/L	0.2682 ppb	00:12:13
1	Cd 226.502†	-127.3	0.9	0.0264 µg/L	0.0264 ppb	00:12:33
1	Co 228.616†	-6.7	8.1	0.4075 µg/L	0.4075 ppb	00:12:33
1	Cr 267.716†	-31.3	1.6	0.0349 µg/L	0.0349 ppb	00:12:33
1	Cu 324.752†	3319.8	23.5	0.1621 µg/L	0.1621 ppb	00:12:13
1	Mn 257.610†	-82.6	147.6	0.5198 µg/L	0.5198 ppb	00:12:33
1	Mo 202.031†	6.5	12.7	1.3774 µg/L	1.3774 ppb	00:12:33
1	Ni 231.604†	289.1	4.0	0.2230 µg/L	0.2230 ppb	00:12:33
1	P 214.914†	26.4	1.1	2.3930 µg/L	2.3930 ppb	00:12:33
1	Pb 220.353†	85.1	-8.3	-2.2417 µg/L	-2.2417 ppb	00:12:33
1	S 181.975 Axial†	12.9	0.7	3.1536 µg/L	3.1536 ppb	00:12:33
1	Sb 206.836†	22.7	2.6	2.6194 µg/L	2.6194 ppb	00:12:33
1	Se 196.026†	16.4	3.8	5.9219 µg/L	5.9219 ppb	00:12:33
1	SiO2†	1603.5	22.7	4.8991 µg/L	4.8991 ppb	00:12:13
1	Si 251.611†	348.5	90.2	7.5226 µg/L	7.5226 ppb	00:12:33
1	Sn 189.927†	-0.6	1.7	0.7994 µg/L	0.7994 ppb	00:12:33
1	Ti 334.940†	487.0	406.8	0.9669 µg/L	0.9669 ppb	00:12:13
1	Tl 190.801†	-28.7	-6.5	-9.3618 µg/L	-9.3618 ppb	00:12:33
1	U 409.014†	264.1	81.3	6.8111 µg/L	6.8111 ppb	00:12:13
1	V 292.402†	-11.6	23.2	0.2633 µg/L	0.2633 ppb	00:12:13
1	Zn 213.857†	486.4	39.8	1.0236 µg/L	1.0236 ppb	00:12:33
2	Sc RADIAL	55532.1	55532.1	102 %		00:11:11
2	Al 396.153Radial†	-20.9	-9.8	-7.2286 µg/L	-7.2286 ppb	00:11:11
2	Ca 317.933Radial†	188.1	10.5	10.028 µg/L	10.028 ppb	00:11:31
2	Fe 238.204 Radial†	17.0	0.9	8.4510 µg/L	8.4510 ppb	00:11:31
2	K 766.490 Radial†	205.5	32.3	22.261 µg/L	22.261 ppb	00:11:11
2	Mg 279.077 IEC†	10.5	0.0	0.3603 µg/L	0.3603 ppb	00:11:31
2	Na 589.592 Radial†	359.3	-36.4	-11.408 µg/L	-11.408 ppb	00:11:11
2	Sr 421.552†	53.5	-6.7	-0.0666 µg/L	-0.0666 ppb	00:11:11
2	Sc 361.383	1951542.5	1951542.5	102.44 %		00:12:39
2	Y 371.029	1342532.8	1342532.8	102.51 %		00:12:39
2	Ag 328.068†	-492.5	96.0	0.7592 µg/L	0.7592 ppb	00:12:45
2	As 188.979†	-3.8	-3.4	-6.7477 µg/L	-6.7477 ppb	00:13:05
2	B 249.677†	333.4	68.8	3.0508 µg/L	3.0508 ppb	00:13:05
2	Ba 233.527†	-4.3	24.4	0.6523 µg/L	0.6523 ppb	00:13:05
2	Be 313.107†	-3497.7	391.1	0.2529 µg/L	0.2529 ppb	00:12:45
2	Cd 226.502†	-131.7	-2.4	-0.0686 µg/L	-0.0686 ppb	00:13:05
2	Co 228.616†	4.4	19.0	0.9537 µg/L	0.9537 ppb	00:13:05
2	Cr 267.716†	-7.9	24.7	0.5471 µg/L	0.5471 ppb	00:13:05
2	Cu 324.752†	3274.1	-44.6	-0.3056 µg/L	-0.3056 ppb	00:12:45
2	Mn 257.610†	-79.0	151.7	0.5346 µg/L	0.5346 ppb	00:13:05
2	Mo 202.031†	1.0	7.2	0.7832 µg/L	0.7832 ppb	00:13:05
2	Ni 231.604†	284.5	-2.5	-0.1416 µg/L	-0.1416 ppb	00:13:05
2	P 214.914†	23.4	-2.0	-4.4097 µg/L	-4.4097 ppb	00:13:05
2	Pb 220.353†	86.2	-7.8	-2.1055 µg/L	-2.1055 ppb	00:13:05

2	S 181.975 Axial†	17.1	4.7	21.564 µg/L	21.564 ppb	00:13:05
2	Sb 206.836†	22.7	2.4	2.4412 µg/L	2.4412 ppb	00:13:05
2	Se 196.026†	12.4	-0.2	-0.3185 µg/L	-0.3185 ppb	00:13:05
2	SiO2†	1621.4	28.9	6.2292 µg/L	6.2292 ppb	00:12:45
2	Si 251.611†	375.9	114.5	9.5450 µg/L	9.5450 ppb	00:13:05
2	Sn 189.927†	3.2	5.4	2.5500 µg/L	2.5500 ppb	00:13:05
2	Ti 334.940†	327.2	247.4	0.5879 µg/L	0.5879 ppb	00:12:45
2	Tl 190.801†	-20.1	2.1	3.0381 µg/L	3.0381 ppb	00:13:05
2	U 409.014†	225.8	42.1	3.5231 µg/L	3.5231 ppb	00:12:45
2	V 292.402†	-21.0	14.2	0.1618 µg/L	0.1618 ppb	00:12:45
2	Zn 213.857†	487.5	37.5	0.9651 µg/L	0.9651 ppb	00:13:05
3	Sc RADIAL	54395.2	54395.2	99.7 %		00:11:36
3	Al 396.153Radial†	-22.5	-11.7	-8.6878 µg/L	-8.6878 ppb	00:11:36
3	Ca 317.933Radial†	182.7	8.9	8.4855 µg/L	8.4855 ppb	00:11:57
3	Fe 238.204 Radial†	18.9	3.1	28.827 µg/L	28.827 ppb	00:11:57
3	K 766.490 Radial†	118.7	-50.5	-34.827 µg/L	-34.827 ppb	00:11:36
3	Mg 279.077 IEC†	6.1	-4.2	-40.610 µg/L	-40.610 ppb	00:11:57
3	Na 589.592 Radial†	369.0	-19.3	-6.0526 µg/L	-6.0526 ppb	00:11:36
3	Sr 421.552†	58.0	-1.2	-0.0118 µg/L	-0.0118 ppb	00:11:36
3	Sc 361.383	1948839.0	1948839.0	102.29 %		00:13:11
3	Y 371.029	1339736.4	1339736.4	102.30 %		00:13:11
3	Ag 328.068†	-520.1	68.3	0.5385 µg/L	0.5385 ppb	00:13:17
3	As 188.979†	0.7	1.0	2.0263 µg/L	2.0263 ppb	00:13:38
3	B 249.677†	340.1	75.8	3.3514 µg/L	3.3514 ppb	00:13:38
3	Ba 233.527†	-3.6	25.1	0.6690 µg/L	0.6690 ppb	00:13:38
3	Be 313.107†	-3419.3	463.1	0.2994 µg/L	0.2994 ppb	00:13:17
3	Cd 226.502†	-115.2	13.5	0.3794 µg/L	0.3794 ppb	00:13:38
3	Co 228.616†	0.0	14.7	0.7404 µg/L	0.7404 ppb	00:13:38
3	Cr 267.716†	-5.7	26.8	0.5937 µg/L	0.5937 ppb	00:13:38
3	Cu 324.752†	3346.6	30.7	0.2150 µg/L	0.2150 ppb	00:13:17
3	Mn 257.610†	-94.0	136.9	0.4869 µg/L	0.4869 ppb	00:13:38
3	Mo 202.031†	2.0	8.3	0.8988 µg/L	0.8988 ppb	00:13:38
3	Ni 231.604†	289.2	2.5	0.1356 µg/L	0.1356 ppb	00:13:38
3	P 214.914†	13.3	-11.9	-26.052 µg/L	-26.052 ppb	00:13:38
3	Pb 220.353†	78.3	-15.4	-4.1808 µg/L	-4.1808 ppb	00:13:38
3	S 181.975 Axial†	10.1	-2.1	-9.6688 µg/L	-9.6688 ppb	00:13:38
3	Sb 206.836†	21.3	1.1	1.0743 µg/L	1.0743 ppb	00:13:38
3	Se 196.026†	10.4	-2.1	-3.2126 µg/L	-3.2126 ppb	00:13:38
3	SiO2†	1654.7	63.6	13.725 µg/L	13.725 ppb	00:13:17
3	Si 251.611†	361.3	100.7	8.3978 µg/L	8.3978 ppb	00:13:38
3	Sn 189.927†	4.6	6.8	3.1949 µg/L	3.1949 ppb	00:13:38
3	Ti 334.940†	410.6	329.4	0.7859 µg/L	0.7859 ppb	00:13:17
3	Tl 190.801†	-14.9	7.1	10.209 µg/L	10.209 ppb	00:13:38
3	U 409.014†	249.3	65.3	5.4698 µg/L	5.4698 ppb	00:13:17
3	V 292.402†	-66.3	-30.2	-0.3009 µg/L	-0.3009 ppb	00:13:17
3	Zn 213.857†	476.1	27.0	0.6937 µg/L	0.6937 ppb	00:13:38

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1945973.1	102.14 %		0.390			0.38%
Sc RADIAL	54826.0	101 %		1.1			1.12%
Y 371.029	1338172.4	102.18 %		0.406			0.40%
Ag 328.068†	84.9	0.6705 µg/L		0.11654	0.6705 ppb	0.11654	17.38%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	-2.4	-1.7954 µg/L		10.69917	-1.7954 ppb	10.69917	595.92%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	-0.5	-0.9990 µg/L		4.98080	-0.9990 ppb	4.98080	498.57%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	72.9	3.2283 µg/L		0.15754	3.2283 ppb	0.15754	4.88%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	20.7	0.5534 µg/L		0.18592	0.5534 ppb	0.18592	33.59%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	423.1	0.2735 µg/L		0.02370	0.2735 ppb	0.02370	8.66%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	10.0	9.5810 µg/L		0.95406	9.5810 ppb	0.95406	9.96%
QC value within limits for Ca 317.933Radial Recovery = Not calculated							
Cd 226.502†	4.0	0.1124 µg/L		0.23606	0.1124 ppb	0.23606	209.98%
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	13.9	0.7006 µg/L		0.27526	0.7006 ppb	0.27526	39.29%

QC value within limits for Co 228.616	Recovery = Not calculated		
Cr 267.716†	17.7 0.3919 µg/L	0.30999 0.3919 ppb	0.30999 79.10%
QC value within limits for Cr 267.716	Recovery = Not calculated		
Cu 324.752†	3.2 0.0238 µg/L	0.28651 0.0238 ppb	0.28651 >999.9%
QC value within limits for Cu 324.752	Recovery = Not calculated		
Fe 238.204 Radial†	1.5 14.077 µg/L	12.8932 14.077 ppb	12.8932 91.59%
QC value within limits for Fe 238.204 Radial	Recovery = Not calculated		
K 766.490 Radial†	1.9 1.2785 µg/L	31.40554 1.2785 ppb	31.40554 >999.9%
QC value within limits for K 766.490 Radial	Recovery = Not calculated		
Mg 279.077 IEC†	-1.4 -13.778 µg/L	23.2483 -13.778 ppb	23.2483 168.74%
QC value within limits for Mg 279.077 IEC	Recovery = Not calculated		
Mn 257.610†	145.4 0.5138 µg/L	0.02442 0.5138 ppb	0.02442 4.75%
QC value within limits for Mn 257.610	Recovery = Not calculated		
Mo 202.031†	9.4 1.0198 µg/L	0.31507 1.0198 ppb	0.31507 30.90%
QC value within limits for Mo 202.031	Recovery = Not calculated		
Na 589.592 Radial†	-14.7 -4.5961 µg/L	7.64498 -4.5961 ppb	7.64498 166.34%
QC value within limits for Na 589.592 Radial	Recovery = Not calculated		
Ni 231.604†	1.3 0.0723 µg/L	0.19033 0.0723 ppb	0.19033 263.08%
QC value within limits for Ni 231.604	Recovery = Not calculated		
P 214.914†	-4.3 -9.3563 µg/L	14.85367 -9.3563 ppb	14.85367 158.76%
QC value within limits for P 214.914	Recovery = Not calculated		
Pb 220.353†	-10.5 -2.8427 µg/L	1.16088 -2.8427 ppb	1.16088 40.84%
QC value within limits for Pb 220.353	Recovery = Not calculated		
S 181.975 Axial†	1.1 5.0162 µg/L	15.69932 5.0162 ppb	15.69932 312.97%
QC value within limits for S 181.975 Axial	Recovery = Not calculated		
Sb 206.836†	2.0 2.0450 µg/L	0.84537 2.0450 ppb	0.84537 41.34%
QC value within limits for Sb 206.836	Recovery = Not calculated		
Se 196.026†	0.5 0.7969 µg/L	4.66827 0.7969 ppb	4.66827 585.78%
QC value within limits for Se 196.026	Recovery = Not calculated		
SiO2†	38.4 8.2843 µg/L	4.75810 8.2843 ppb	4.75810 57.44%
QC value within limits for SiO2	Recovery = Not calculated		
Si 251.611†	101.8 8.4885 µg/L	1.01426 8.4885 ppb	1.01426 11.95%
QC value within limits for Si 251.611	Recovery = Not calculated		
Sn 189.927†	4.6 2.1814 µg/L	1.23954 2.1814 ppb	1.23954 56.82%
QC value within limits for Sn 189.927	Recovery = Not calculated		
Sr 421.552†	-15.0 -0.1479 µg/L	0.19035 -0.1479 ppb	0.19035 128.69%
QC value within limits for Sr 421.552	Recovery = Not calculated		
Ti 334.940†	327.9 0.7802 µg/L	0.18953 0.7802 ppb	0.18953 24.29%
QC value within limits for Ti 334.940	Recovery = Not calculated		
Tl 190.801†	0.9 1.2952 µg/L	9.90130 1.2952 ppb	9.90130 764.47%
QC value within limits for Tl 190.801	Recovery = Not calculated		
U 409.014†	62.9 5.2680 µg/L	1.65327 5.2680 ppb	1.65327 31.38%
QC value within limits for U 409.014	Recovery = Not calculated		
V 292.402†	2.4 0.0414 µg/L	0.30077 0.0414 ppb	0.30077 726.90%
QC value within limits for V 292.402	Recovery = Not calculated		
Zn 213.857†	34.8 0.8941 µg/L	0.17601 0.8941 ppb	0.17601 19.69%
QC value within limits for Zn 213.857	Recovery = Not calculated		

All analyte(s) passed QC.

Sequence No.: 10  
 Sample ID: CCV  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 7  
 Date Collected: 2/23/2010 00:39:10  
 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	55570.9	55570.9	102 %		00:39:49
1	Al 396.153Radial†	7027.5	6907.3	5087.9 µg/L	5087.9 ppb	00:39:49
1	Ca 317.933Radial†	5507.6	5230.6	5012.8 µg/L	5012.8 ppb	00:40:09
1	Fe 238.204 Radial†	585.6	558.9	5172.9 µg/L	5172.9 ppb	00:40:09
1	K 766.490 Radial†	7774.7	7460.2	5144.4 µg/L	5144.4 ppb	00:39:49
1	Mg 279.077 IEC†	551.5	531.0	5169.3 µg/L	5169.3 ppb	00:40:09
1	Na 589.592 Radial†	33414.3	32402.1	10151 µg/L	10151 ppb	00:39:49
1	Sr 421.552†	51560.7	50540.1	498.41 µg/L	498.41 ppb	00:39:49
1	Sc 361.383	1941292.7	1941292.7	101.90 %		00:41:13
1	Y 371.029	1332258.6	1332258.6	101.73 %		00:41:13
1	Ag 328.068†	64527.1	63901.8	507.82 µg/L	507.82 ppb	00:41:19
1	As 188.979†	262.6	258.0	512.94 µg/L	512.94 ppb	00:41:39
1	B 249.677†	11870.1	11392.3	503.93 µg/L	503.93 ppb	00:41:19
1	Ba 233.527†	19484.4	19150.0	512.83 µg/L	512.83 ppb	00:41:19
1	Be 313.107†	792140.9	781188.9	505.41 µg/L	505.41 ppb	00:41:13
1	Cd 226.502†	18482.5	18264.4	517.00 µg/L	517.00 ppb	00:41:19
1	Co 228.616†	10411.0	10231.7	514.60 µg/L	514.60 ppb	00:41:19
1	Cr 267.716†	23669.3	23260.7	516.28 µg/L	516.28 ppb	00:41:19
1	Cu 324.752†	78187.1	73489.7	506.00 µg/L	506.00 ppb	00:41:19
1	Mn 257.610†	150034.2	147467.8	519.23 µg/L	519.23 ppb	00:41:13
1	Mo 202.031†	4914.3	4829.0	522.32 µg/L	522.32 ppb	00:41:39
1	Ni 231.604†	9789.2	9326.6	516.45 µg/L	516.45 ppb	00:41:19
1	P 214.914†	1229.0	1181.3	2542.2 µg/L	2542.2 ppb	00:41:39
1	Pb 220.353†	2051.1	1920.9	520.06 µg/L	520.06 ppb	00:41:39
1	S 181.975 Axial†	245.9	229.3	1044.8 µg/L	1044.8 ppb	00:41:39
1	Sb 206.836†	556.6	526.5	529.62 µg/L	529.62 ppb	00:41:39
1	Se 196.026†	358.4	339.4	534.18 µg/L	534.18 ppb	00:41:39
1	SiO2†	27212.2	25151.2	5429.4 µg/L	5429.4 ppb	00:41:19
1	Si 251.611†	31303.6	30468.0	2540.1 µg/L	2540.1 ppb	00:41:19
1	Sn 189.927†	1139.1	1120.2	527.91 µg/L	527.91 ppb	00:41:39
1	Ti 334.940†	215794.9	211702.6	502.65 µg/L	502.65 ppb	00:41:13
1	Tl 190.801†	338.8	354.2	515.49 µg/L	515.49 ppb	00:41:39
1	U 409.014†	6170.7	5877.4	491.45 µg/L	491.45 ppb	00:41:19
1	V 292.402†	49193.3	48311.5	515.87 µg/L	515.87 ppb	00:41:19
1	Zn 213.857†	20919.4	20091.3	513.33 µg/L	513.33 ppb	00:41:19
2	Sc RADIAL	55841.5	55841.5	102 %		00:40:15
2	Al 396.153Radial†	6992.3	6839.5	5037.9 µg/L	5037.9 ppb	00:40:15
2	Ca 317.933Radial†	5492.9	5190.1	4974.0 µg/L	4974.0 ppb	00:40:35
2	Fe 238.204 Radial†	579.5	550.1	5091.8 µg/L	5091.8 ppb	00:40:35
2	K 766.490 Radial†	7668.1	7319.1	5047.1 µg/L	5047.1 ppb	00:40:15
2	Mg 279.077 IEC†	552.0	528.8	5148.2 µg/L	5148.2 ppb	00:40:35
2	Na 589.592 Radial†	33268.8	32101.0	10056 µg/L	10056 ppb	00:40:15
2	Sr 421.552†	51495.7	50231.4	495.37 µg/L	495.37 ppb	00:40:15
2	Sc 361.383	1930006.2	1930006.2	101.31 %		00:41:46
2	Y 371.029	1324208.3	1324208.3	101.11 %		00:41:46
2	Ag 328.068†	64407.3	64153.8	509.81 µg/L	509.81 ppb	00:41:52
2	As 188.979†	261.7	258.6	514.22 µg/L	514.22 ppb	00:42:12
2	B 249.677†	11850.6	11441.2	506.15 µg/L	506.15 ppb	00:41:52
2	Ba 233.527†	19467.3	19245.0	515.37 µg/L	515.37 ppb	00:41:52
2	Be 313.107†	793159.7	786740.7	509.00 µg/L	509.00 ppb	00:41:46
2	Cd 226.502†	18514.8	18402.3	520.92 µg/L	520.92 ppb	00:41:52
2	Co 228.616†	10397.1	10277.8	516.91 µg/L	516.91 ppb	00:41:52
2	Cr 267.716†	23676.9	23404.0	519.46 µg/L	519.46 ppb	00:41:52
2	Cu 324.752†	78096.9	73849.3	508.46 µg/L	508.46 ppb	00:41:52
2	Mn 257.610†	150351.7	148642.3	523.36 µg/L	523.36 ppb	00:41:46
2	Mo 202.031†	4854.5	4798.3	518.98 µg/L	518.98 ppb	00:42:12
2	Ni 231.604†	9781.8	9375.5	519.16 µg/L	519.16 ppb	00:41:52
2	P 214.914†	1213.0	1172.5	2522.6 µg/L	2522.6 ppb	00:42:12
2	Pb 220.353†	2031.2	1913.1	517.92 µg/L	517.92 ppb	00:42:12



2	S 181.975 Axial†	244.0	228.9	1042.9 µg/L	1042.9 ppb	00:42:12
2	Sb 206.836†	543.9	517.1	520.15 µg/L	520.15 ppb	00:42:12
2	Se 196.026†	353.0	336.1	528.97 µg/L	528.97 ppb	00:42:12
2	SiO2†	27218.5	25313.6	5464.5 µg/L	5464.5 ppb	00:41:52
2	Si 251.611†	31360.4	30703.7	2559.8 µg/L	2559.8 ppb	00:41:52
2	Sn 189.927†	1120.1	1108.0	522.13 µg/L	522.13 ppb	00:42:12
2	Ti 334.940†	216142.7	213284.4	506.41 µg/L	506.41 ppb	00:41:46
2	Tl 190.801†	342.2	359.5	523.16 µg/L	523.16 ppb	00:42:12
2	U 409.014†	6192.4	5934.3	496.23 µg/L	496.23 ppb	00:41:52
2	V 292.402†	49064.8	48467.0	517.49 µg/L	517.49 ppb	00:41:52
2	Zn 213.857†	20924.6	20216.5	516.54 µg/L	516.54 ppb	00:41:52
3	Sc RADIAL	56041.8	56041.8	103 %		00:40:41
3	Al 396.153Radial†	6965.9	6789.4	5002.7 µg/L	5002.7 ppb	00:40:41
3	Ca 317.933Radial†	5515.1	5192.6	4976.3 µg/L	4976.3 ppb	00:41:01
3	Fe 238.204 Radial†	581.8	550.3	5092.9 µg/L	5092.9 ppb	00:41:01
3	K 766.490 Radial†	7667.7	7292.0	5028.4 µg/L	5028.4 ppb	00:40:41
3	Mg 279.077 IEC†	556.0	530.8	5166.3 µg/L	5166.3 ppb	00:41:01
3	Na 589.592 Radial†	33240.9	31957.8	10012 µg/L	10012 ppb	00:40:41
3	Sr 421.552†	51258.6	49820.9	491.32 µg/L	491.32 ppb	00:40:41
3	Sc 361.383	1952657.8	1952657.8	102.49 %		00:42:19
3	Y 371.029	1341041.9	1341041.9	102.40 %		00:42:19
3	Ag 328.068†	60869.9	59965.0	476.41 µg/L	476.41 ppb	00:42:25
3	As 188.979†	229.0	223.7	444.80 µg/L	444.80 ppb	00:42:46
3	B 249.677†	11160.6	10632.3	470.13 µg/L	470.13 ppb	00:42:25
3	Ba 233.527†	17934.9	17526.9	469.35 µg/L	469.35 ppb	00:42:25
3	Be 313.107†	745070.2	730739.5	472.77 µg/L	472.77 ppb	00:42:19
3	Cd 226.502†	16919.1	16633.4	470.79 µg/L	470.79 ppb	00:42:25
3	Co 228.616†	9470.6	9254.7	465.40 µg/L	465.40 ppb	00:42:25
3	Cr 267.716†	20940.5	20463.1	454.19 µg/L	454.19 ppb	00:42:25
3	Cu 324.752†	71783.0	66794.8	459.96 µg/L	459.96 ppb	00:42:25
3	Mn 257.610†	141171.7	137964.1	485.79 µg/L	485.79 ppb	00:42:19
3	Mo 202.031†	4129.2	4034.9	436.45 µg/L	436.45 ppb	00:42:46
3	Ni 231.604†	8867.9	8371.9	463.59 µg/L	463.59 ppb	00:42:25
3	P 214.914†	1053.9	1003.4	2155.5 µg/L	2155.5 ppb	00:42:46
3	Pb 220.353†	1781.2	1645.9	445.52 µg/L	445.52 ppb	00:42:46
3	S 181.975 Axial†	220.8	203.5	926.99 µg/L	926.99 ppb	00:42:46
3	Sb 206.836†	477.3	445.9	448.23 µg/L	448.23 ppb	00:42:46
3	Se 196.026†	320.2	300.1	473.08 µg/L	473.08 ppb	00:42:46
3	SiO2†	25480.1	23305.9	5031.1 µg/L	5031.1 ppb	00:42:25
3	Si 251.611†	29221.3	28257.5	2355.8 µg/L	2355.8 ppb	00:42:25
3	Sn 189.927†	938.3	917.7	432.50 µg/L	432.50 ppb	00:42:46
3	Ti 334.940†	201940.0	196952.3	467.60 µg/L	467.60 ppb	00:42:19
3	Tl 190.801†	310.6	324.7	472.75 µg/L	472.75 ppb	00:42:46
3	U 409.014†	5590.4	5276.0	441.07 µg/L	441.07 ppb	00:42:25
3	V 292.402†	44391.1	43345.2	462.62 µg/L	462.62 ppb	00:42:25
3	Zn 213.857†	19106.4	18202.9	465.05 µg/L	465.05 ppb	00:42:25

-----  
Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1941318.9	101.90	%	0.594				0.58%
Sc RADIAL	55818.1	102	%	0.4				0.42%
Y 371.029	1332502.9	101.75	%	0.643				0.63%
Ag 328.068†	62673.5	498.01	µg/L	18.736	498.01	ppb	18.736	3.76%
QC value within limits for Ag 328.068 Recovery = 99.60%								
Al 396.153Radial†	6845.4	5042.8	µg/L	42.82	5042.8	ppb	42.82	0.85%
QC value within limits for Al 396.153Radial Recovery = 100.86%								
As 188.979†	246.8	490.65	µg/L	39.716	490.65	ppb	39.716	8.09%
QC value within limits for As 188.979 Recovery = 98.13%								
B 249.677†	11155.3	493.40	µg/L	20.185	493.40	ppb	20.185	4.09%
QC value within limits for B 249.677 Recovery = 98.68%								
Ba 233.527†	18640.6	499.18	µg/L	25.869	499.18	ppb	25.869	5.18%
QC value within limits for Ba 233.527 Recovery = 99.84%								
Be 313.107†	766223.0	495.73	µg/L	19.962	495.73	ppb	19.962	4.03%
QC value within limits for Be 313.107 Recovery = 99.15%								
Ca 317.933Radial†	5204.4	4987.7	µg/L	21.77	4987.7	ppb	21.77	0.44%
QC value within limits for Ca 317.933Radial Recovery = 99.75%								
Cd 226.502†	17766.7	502.90	µg/L	27.883	502.90	ppb	27.883	5.54%
QC value within limits for Cd 226.502 Recovery = 100.58%								
Co 228.616†	9921.4	498.97	µg/L	29.093	498.97	ppb	29.093	5.83%

QC value within limits for Co 228.616 Recovery = 99.79%							
Cr 267.716†	22375.9	496.64 µg/L	36.799	496.64 ppb	36.799	7.41%	
QC value within limits for Cr 267.716 Recovery = 99.33%							
Cu 324.752†	71377.9	491.47 µg/L	27.320	491.47 ppb	27.320	5.56%	
QC value within limits for Cu 324.752 Recovery = 98.29%							
Fe 238.204 Radial†	553.1	5119.2 µg/L	46.54	5119.2 ppb	46.54	0.91%	
QC value within limits for Fe 238.204 Radial Recovery = 102.38%							
K 766.490 Radial†	7357.1	5073.3 µg/L	62.27	5073.3 ppb	62.27	1.23%	
QC value within limits for K 766.490 Radial Recovery = 101.47%							
Mg 279.077 IEC†	530.2	5161.3 µg/L	11.41	5161.3 ppb	11.41	0.22%	
QC value within limits for Mg 279.077 IEC Recovery = 103.23%							
Mn 257.610†	144691.4	509.46 µg/L	20.601	509.46 ppb	20.601	4.04%	
QC value within limits for Mn 257.610 Recovery = 101.89%							
Mo 202.031†	4554.1	492.58 µg/L	48.639	492.58 ppb	48.639	9.87%	
QC value within limits for Mo 202.031 Recovery = 98.52%							
Na 589.592 Radial†	32153.6	10073 µg/L	71.0	10073 ppb	71.0	0.71%	
QC value within limits for Na 589.592 Radial Recovery = 100.73%							
Ni 231.604†	9024.6	499.73 µg/L	31.332	499.73 ppb	31.332	6.27%	
QC value within limits for Ni 231.604 Recovery = 99.95%							
P 214.914†	1119.0	2406.8 µg/L	217.80	2406.8 ppb	217.80	9.05%	
QC value within limits for P 214.914 Recovery = 96.27%							
Pb 220.353†	1826.6	494.50 µg/L	42.429	494.50 ppb	42.429	8.58%	
QC value within limits for Pb 220.353 Recovery = 98.90%							
S 181.975 Axial†	220.5	1004.9 µg/L	67.46	1004.9 ppb	67.46	6.71%	
QC value within limits for S 181.975 Axial Recovery = 100.49%							
Sb 206.836†	496.5	499.33 µg/L	44.505	499.33 ppb	44.505	8.91%	
QC value within limits for Sb 206.836 Recovery = 99.87%							
Se 196.026†	325.2	512.08 µg/L	33.869	512.08 ppb	33.869	6.61%	
QC value within limits for Se 196.026 Recovery = 102.42%							
SiO2†	24590.2	5308.3 µg/L	240.75	5308.3 ppb	240.75	4.54%	
QC value within limits for SiO2 Recovery = 99.27%							
Si 251.611†	29809.7	2485.2 µg/L	112.50	2485.2 ppb	112.50	4.53%	
QC value within limits for Si 251.611 Recovery = 99.41%							
Sn 189.927†	1048.6	494.18 µg/L	53.497	494.18 ppb	53.497	10.83%	
QC value within limits for Sn 189.927 Recovery = 98.84%							
Sr 421.552†	50197.5	495.03 µg/L	3.558	495.03 ppb	3.558	0.72%	
QC value within limits for Sr 421.552 Recovery = 99.01%							
Ti 334.940†	207313.1	492.22 µg/L	21.401	492.22 ppb	21.401	4.35%	
QC value within limits for Ti 334.940 Recovery = 98.44%							
Tl 190.801†	346.2	503.80 µg/L	27.164	503.80 ppb	27.164	5.39%	
QC value within limits for Tl 190.801 Recovery = 100.76%							
U 409.014†	5695.9	476.25 µg/L	30.560	476.25 ppb	30.560	6.42%	
QC value within limits for U 409.014 Recovery = 95.25%							
V 292.402†	46707.9	498.66 µg/L	31.219	498.66 ppb	31.219	6.26%	
QC value within limits for V 292.402 Recovery = 99.73%							
Zn 213.857†	19503.5	498.30 µg/L	28.845	498.30 ppb	28.845	5.79%	
QC value within limits for Zn 213.857 Recovery = 99.66%							

All analyte(s) passed QC.

Sequence No.: 11

Sample ID: PQL

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 109

Date Collected: 2/23/2010 00:42:56

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	54488.9	54488.9	99.9 %		00:43:33
1	Al 396.153Radial†	269.7	280.7	207.00 µg/L	207.00 ppb	00:43:33
1	Ca 317.933Radial†	397.0	223.0	213.72 µg/L	213.72 ppb	00:43:54
1	Fe 238.204 Radial†	27.6	11.8	108.97 µg/L	108.97 ppb	00:43:54
1	K 766.490 Radial†	482.0	312.9	215.77 µg/L	215.77 ppb	00:43:33
1	Mg 279.077 IEC†	39.5	29.2	284.41 µg/L	284.41 ppb	00:43:54
1	Na 589.592 Radial†	1370.3	982.2	307.70 µg/L	307.70 ppb	00:43:33
1	Sr 421.552†	555.4	496.6	4.8970 µg/L	4.8970 ppb	00:43:33
1	Sc 361.383	1946474.0	1946474.0	102.17 %		00:44:55
1	Y 371.029	1341208.6	1341208.6	102.41 %		00:44:55
1	Ag 328.068†	165.4	738.7	5.8673 µg/L	5.8673 ppb	00:45:01
1	As 188.979†	12.4	12.4	24.768 µg/L	24.768 ppb	00:45:22
1	B 249.677†	1488.9	1200.6	53.256 µg/L	53.256 ppb	00:45:01
1	Ba 233.527†	174.4	199.3	5.3368 µg/L	5.3368 ppb	00:45:22
1	Be 313.107†	4397.7	8109.9	5.2468 µg/L	5.2468 ppb	00:45:01
1	Cd 226.502†	58.8	183.7	5.1934 µg/L	5.1934 ppb	00:45:22
1	Co 228.616†	99.3	111.9	5.6319 µg/L	5.6319 ppb	00:45:22
1	Cr 267.716†	199.4	227.5	5.0495 µg/L	5.0495 ppb	00:45:22
1	Cu 324.752†	4892.8	1548.0	10.659 µg/L	10.659 ppb	00:45:01
1	Mn 257.610†	3025.5	3190.0	11.225 µg/L	11.225 ppb	00:45:01
1	Mo 202.031†	99.3	103.4	11.189 µg/L	11.189 ppb	00:45:22
1	Ni 231.604†	383.1	94.8	5.2485 µg/L	5.2485 ppb	00:45:22
1	P 214.914†	85.9	59.2	128.82 µg/L	128.82 ppb	00:45:22
1	Pb 220.353†	111.6	17.3	4.6515 µg/L	4.6515 ppb	00:45:22
1	S 181.975 Axial†	40.8	27.9	127.19 µg/L	127.19 ppb	00:45:22
1	Sb 206.836†	33.1	12.6	12.772 µg/L	12.772 ppb	00:45:22
1	Se 196.026†	28.6	15.6	24.169 µg/L	24.169 ppb	00:45:22
1	SiO2†	2594.0	984.9	212.61 µg/L	212.61 ppb	00:45:01
1	Si 251.611†	1518.4	1233.7	102.85 µg/L	102.85 ppb	00:45:22
1	Sn 189.927†	22.8	24.7	11.640 µg/L	11.640 ppb	00:45:22
1	Ti 334.940†	2406.0	2282.9	5.4048 µg/L	5.4048 ppb	00:45:01
1	Tl 190.801†	-7.5	14.4	20.832 µg/L	20.832 ppb	00:45:22
1	U 409.014†	827.1	631.2	52.862 µg/L	52.862 ppb	00:45:01
1	V 292.402†	450.1	475.2	5.1777 µg/L	5.1777 ppb	00:45:01
1	Zn 213.857†	884.7	427.4	10.937 µg/L	10.937 ppb	00:45:22
2	Sc RADIAL	54505.5	54505.5	99.9 %		00:43:59
2	Al 396.153Radial†	266.4	277.3	204.48 µg/L	204.48 ppb	00:43:59
2	Ca 317.933Radial†	387.4	213.4	204.48 µg/L	204.48 ppb	00:44:19
2	Fe 238.204 Radial†	26.0	10.2	94.534 µg/L	94.534 ppb	00:44:19
2	K 766.490 Radial†	518.2	349.0	240.65 µg/L	240.65 ppb	00:43:59
2	Mg 279.077 IEC†	46.2	36.0	350.02 µg/L	350.02 ppb	00:44:19
2	Na 589.592 Radial†	1404.4	1015.8	318.24 µg/L	318.24 ppb	00:43:59
2	Sr 421.552†	562.9	503.9	4.9690 µg/L	4.9690 ppb	00:43:59
2	Sc 361.383	1924813.0	1924813.0	101.03 %		00:45:28
2	Y 371.029	1326899.9	1326899.9	101.32 %		00:45:28
2	Ag 328.068†	167.8	742.9	5.9008 µg/L	5.9008 ppb	00:45:33
2	As 188.979†	17.8	17.9	35.601 µg/L	35.601 ppb	00:45:54
2	B 249.677†	1476.6	1204.9	53.454 µg/L	53.454 ppb	00:45:33
2	Ba 233.527†	182.4	209.1	5.5996 µg/L	5.5996 ppb	00:45:54
2	Be 313.107†	4427.4	8187.8	5.2973 µg/L	5.2973 ppb	00:45:33
2	Cd 226.502†	62.1	187.6	5.3045 µg/L	5.3045 ppb	00:45:54
2	Co 228.616†	94.0	107.7	5.4240 µg/L	5.4240 ppb	00:45:54
2	Cr 267.716†	223.4	253.4	5.6243 µg/L	5.6243 ppb	00:45:54
2	Cu 324.752†	4826.1	1536.0	10.574 µg/L	10.574 ppb	00:45:33
2	Mn 257.610†	2978.9	3177.2	11.175 µg/L	11.175 ppb	00:45:33
2	Mo 202.031†	96.8	102.1	11.047 µg/L	11.047 ppb	00:45:54
2	Ni 231.604†	378.9	94.8	5.2504 µg/L	5.2504 ppb	00:45:54
2	P 214.914†	94.5	68.6	149.53 µg/L	149.53 ppb	00:45:54
2	Pb 220.353†	135.6	42.2	11.384 µg/L	11.384 ppb	00:45:54

2	S 181.975 Axial†	43.0	30.6	139.50 µg/L	139.50 ppb	00:45:54
2	Sb 206.836†	28.9	8.8	8.9459 µg/L	8.9459 ppb	00:45:54
2	Se 196.026†	33.5	20.8	32.067 µg/L	32.067 ppb	00:45:54
2	SiO2†	2596.7	1016.1	219.35 µg/L	219.35 ppb	00:45:33
2	Si 251.611†	1525.5	1257.5	104.83 µg/L	104.83 ppb	00:45:54
2	Sn 189.927†	27.2	29.2	13.786 µg/L	13.786 ppb	00:45:54
2	Ti 334.940†	2302.4	2206.8	5.2188 µg/L	5.2188 ppb	00:45:33
2	Tl 190.801†	-10.1	11.7	16.997 µg/L	16.997 ppb	00:45:54
2	U 409.014†	934.9	747.0	62.566 µg/L	62.566 ppb	00:45:33
2	V 292.402†	457.5	487.4	5.3152 µg/L	5.3152 ppb	00:45:33
2	Zn 213.857†	866.9	419.6	10.732 µg/L	10.732 ppb	00:45:54
3	Sc RADIAL	55047.6	55047.6	101 %		00:44:25
3	Al 396.153Radial†	275.5	283.7	209.21 µg/L	209.21 ppb	00:44:25
3	Ca 317.933Radial†	388.6	210.7	201.96 µg/L	201.96 ppb	00:44:45
3	Fe 238.204 Radial†	28.0	11.9	109.97 µg/L	109.97 ppb	00:44:45
3	K 766.490 Radial†	451.9	278.2	191.81 µg/L	191.81 ppb	00:44:25
3	Mg 279.077 IEC†	51.6	40.9	397.58 µg/L	397.58 ppb	00:44:45
3	Na 589.592 Radial†	1384.3	982.1	307.66 µg/L	307.66 ppb	00:44:25
3	Sr 421.552†	558.8	494.3	4.8743 µg/L	4.8743 ppb	00:44:25
3	Sc 361.383	1931206.7	1931206.7	101.37 %		00:46:00
3	Y 371.029	1330550.5	1330550.5	101.60 %		00:46:00
3	Ag 328.068†	179.4	753.8	5.9855 µg/L	5.9855 ppb	00:46:05
3	As 188.979†	10.3	10.5	20.929 µg/L	20.929 ppb	00:46:26
3	B 249.677†	1450.9	1174.7	52.103 µg/L	52.103 ppb	00:46:05
3	Ba 233.527†	159.7	186.1	4.9847 µg/L	4.9847 ppb	00:46:26
3	Be 313.107†	4219.5	7968.1	5.1552 µg/L	5.1552 ppb	00:46:05
3	Cd 226.502†	44.7	170.2	4.8118 µg/L	4.8118 ppb	00:46:26
3	Co 228.616†	78.7	92.3	4.6441 µg/L	4.6441 ppb	00:46:26
3	Cr 267.716†	183.2	213.0	4.7281 µg/L	4.7281 ppb	00:46:26
3	Cu 324.752†	4719.2	1414.6	9.7417 µg/L	9.7417 ppb	00:46:05
3	Mn 257.610†	2875.7	3065.6	10.783 µg/L	10.783 ppb	00:46:05
3	Mo 202.031†	92.2	97.2	10.515 µg/L	10.515 ppb	00:46:26
3	Ni 231.604†	374.7	89.4	4.9507 µg/L	4.9507 ppb	00:46:26
3	P 214.914†	84.8	58.8	128.06 µg/L	128.06 ppb	00:46:26
3	Pb 220.353†	117.4	23.8	6.4135 µg/L	6.4135 ppb	00:46:26
3	S 181.975 Axial†	31.8	19.4	88.390 µg/L	88.390 ppb	00:46:26
3	Sb 206.836†	32.3	12.1	12.240 µg/L	12.240 ppb	00:46:26
3	Se 196.026†	36.7	23.8	36.858 µg/L	36.858 ppb	00:46:26
3	SiO2†	2540.7	952.4	205.59 µg/L	205.59 ppb	00:46:05
3	Si 251.611†	1410.4	1138.8	94.945 µg/L	94.945 ppb	00:46:26
3	Sn 189.927†	17.8	19.9	9.3957 µg/L	9.3957 ppb	00:46:26
3	Ti 334.940†	2289.3	2186.4	5.1663 µg/L	5.1663 ppb	00:46:05
3	Tl 190.801†	-4.4	17.4	25.173 µg/L	25.173 ppb	00:46:26
3	U 409.014†	815.7	626.3	52.450 µg/L	52.450 ppb	00:46:05
3	V 292.402†	433.1	461.9	5.0310 µg/L	5.0310 ppb	00:46:05
3	Zn 213.857†	821.6	372.1	9.5083 µg/L	9.5083 ppb	00:46:26

-----  
Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1934164.6	101.52 %	0.584			0.58%
Sc RADIAL	54680.7	100 %	0.6			0.58%
Y 371.029	1332886.3	101.78 %	0.568			0.56%
Ag 328.068†	745.1	5.9179 µg/L	0.06095	5.9179 ppb	0.06095	1.03%
QC value within limits for Ag 328.068 Recovery = 118.36%						
Al 396.153Radial†	280.6	206.90 µg/L	2.364	206.90 ppb	2.364	1.14%
QC value within limits for Al 396.153Radial Recovery = 103.45%						
As 188.979†	13.6	27.099 µg/L	7.6087	27.099 ppb	7.6087	28.08%
QC value within limits for As 188.979 Recovery = 90.33%						
B 249.677†	1193.4	52.938 µg/L	0.7295	52.938 ppb	0.7295	1.38%
QC value within limits for B 249.677 Recovery = 105.88%						
Ba 233.527†	198.2	5.3070 µg/L	0.30852	5.3070 ppb	0.30852	5.81%
QC value within limits for Ba 233.527 Recovery = 106.14%						
Be 313.107†	8088.6	5.2331 µg/L	0.07207	5.2331 ppb	0.07207	1.38%
QC value within limits for Be 313.107 Recovery = 104.66%						
Ca 317.933Radial†	215.7	206.72 µg/L	6.196	206.72 ppb	6.196	3.00%
QC value within limits for Ca 317.933Radial Recovery = 103.36%						
Cd 226.502†	180.5	5.1032 µg/L	0.25846	5.1032 ppb	0.25846	5.06%
QC value within limits for Cd 226.502 Recovery = 102.06%						
Co 228.616†	104.0	5.2333 µg/L	0.52074	5.2333 ppb	0.52074	9.95%

QC value within limits for Co 228.616 Recovery = 104.67%							
Cr 267.716†	231.3	5.1340 µg/L	0.45402	5.1340 ppb	0.45402	8.84%	
QC value within limits for Cr 267.716 Recovery = 102.68%							
Cu 324.752†	1499.5	10.325 µg/L	0.5067	10.325 ppb	0.5067	4.91%	
QC value within limits for Cu 324.752 Recovery = 103.25%							
Fe 238.204 Radial†	11.3	104.49 µg/L	8.639	104.49 ppb	8.639	8.27%	
QC value within limits for Fe 238.204 Radial Recovery = 104.49%							
K 766.490 Radial†	313.3	216.08 µg/L	24.425	216.08 ppb	24.425	11.30%	
QC value greater than the upper limit for K 766.490 Radial Recovery = 144.05%							
Mg 279.077 IEC†	35.4	344.00 µg/L	56.825	344.00 ppb	56.825	16.52%	
QC value within limits for Mg 279.077 IEC Recovery = 114.67%							
Mn 257.610†	3144.3	11.061 µg/L	0.2421	11.061 ppb	0.2421	2.19%	
QC value within limits for Mn 257.610 Recovery = 110.61%							
Mo 202.031†	100.9	10.917 µg/L	0.3550	10.917 ppb	0.3550	3.25%	
QC value within limits for Mo 202.031 Recovery = 109.17%							
Na 589.592 Radial†	993.4	311.20 µg/L	6.097	311.20 ppb	6.097	1.96%	
QC value within limits for Na 589.592 Radial Recovery = 103.73%							
Ni 231.604†	93.0	5.1499 µg/L	0.17246	5.1499 ppb	0.17246	3.35%	
QC value within limits for Ni 231.604 Recovery = 103.00%							
P 214.914†	62.2	135.47 µg/L	12.182	135.47 ppb	12.182	8.99%	
QC value within limits for P 214.914 Recovery = 90.31%							
Pb 220.353†	27.8	7.4829 µg/L	3.49119	7.4829 ppb	3.49119	46.66%	
QC value within limits for Pb 220.353 Recovery = 74.83%							
S 181.975 Axial†	26.0	118.36 µg/L	26.676	118.36 ppb	26.676	22.54%	
QC value within limits for S 181.975 Axial Recovery = 118.36%							
Sb 206.836†	11.2	11.319 µg/L	2.0726	11.319 ppb	2.0726	18.31%	
QC value within limits for Sb 206.836 Recovery = 113.19%							
Se 196.026†	20.1	31.031 µg/L	6.4079	31.031 ppb	6.4079	20.65%	
QC value within limits for Se 196.026 Recovery = 103.44%							
SiO2†	984.5	212.52 µg/L	6.882	212.52 ppb	6.882	3.24%	
QC value within limits for SiO2 Recovery = 99.77%							
Si 251.611†	1210.0	100.88 µg/L	5.232	100.88 ppb	5.232	5.19%	
QC value within limits for Si 251.611 Recovery = 100.88%							
Sn 189.927†	24.6	11.607 µg/L	2.1952	11.607 ppb	2.1952	18.91%	
QC value within limits for Sn 189.927 Recovery = 116.07%							
Sr 421.552†	498.2	4.9135 µg/L	0.04946	4.9135 ppb	0.04946	1.01%	
QC value within limits for Sr 421.552 Recovery = 98.27%							
Ti 334.940†	2225.4	5.2633 µg/L	0.12533	5.2633 ppb	0.12533	2.38%	
QC value within limits for Ti 334.940 Recovery = 105.27%							
Tl 190.801†	14.5	21.001 µg/L	4.0908	21.001 ppb	4.0908	19.48%	
QC value within limits for Tl 190.801 Recovery = 105.00%							
U 409.014†	668.2	55.959 µg/L	5.7253	55.959 ppb	5.7253	10.23%	
QC value within limits for U 409.014 Recovery = 111.92%							
V 292.402†	474.8	5.1746 µg/L	0.14210	5.1746 ppb	0.14210	2.75%	
QC value within limits for V 292.402 Recovery = 103.49%							
Zn 213.857†	406.4	10.392 µg/L	0.7724	10.392 ppb	0.7724	7.43%	
QC value within limits for Zn 213.857 Recovery = 103.92%							
QC Failed. Continue with analysis.							

Sequence No.: 12

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/23/2010 00:46:35

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	54886.0	54886.0	101 %		00:47:13
1	Al 396.153Radial†	3.5	14.3	10.572 µg/L	10.572 ppb	00:47:13
1	Ca 317.933Radial†	180.2	4.7	4.5238 µg/L	4.5238 ppb	00:47:34
1	Fe 238.204 Radial†	16.1	0.2	1.7438 µg/L	1.7438 ppb	00:47:34
1	K 766.490 Radial†	209.0	38.1	26.293 µg/L	26.293 ppb	00:47:13
1	Mg 279.077 IEC†	11.9	1.5	14.986 µg/L	14.986 ppb	00:47:34
1	Na 589.592 Radial†	415.6	23.6	7.3940 µg/L	7.3940 ppb	00:47:13
1	Sr 421.552†	97.5	37.5	0.3703 µg/L	0.3703 ppb	00:47:13
1	Sc 361.383	1934173.4	1934173.4	101.52 %		00:48:36
1	Y 371.029	1332210.0	1332210.0	101.72 %		00:48:36
1	Ag 328.068†	-533.9	50.9	0.4002 µg/L	0.4002 ppb	00:48:41
1	As 188.979†	-2.7	-2.4	-4.7314 µg/L	-4.7314 ppb	00:49:02
1	B 249.677†	314.9	53.5	2.3764 µg/L	2.3764 ppb	00:49:02
1	Ba 233.527†	-19.4	9.5	0.2536 µg/L	0.2536 ppb	00:49:02
1	Be 313.107†	-3567.4	291.9	0.1889 µg/L	0.1889 ppb	00:48:41
1	Cd 226.502†	-136.5	-8.3	-0.2355 µg/L	-0.2355 ppb	00:49:02
1	Co 228.616†	-3.9	10.9	0.5463 µg/L	0.5463 ppb	00:49:02
1	Cr 267.716†	-22.7	9.9	0.2203 µg/L	0.2203 ppb	00:49:02
1	Cu 324.752†	3265.4	-24.5	-0.1682 µg/L	-0.1682 ppb	00:48:41
1	Mn 257.610†	-97.7	132.6	0.4660 µg/L	0.4660 ppb	00:49:02
1	Mo 202.031†	-7.9	-1.5	-0.1576 µg/L	-0.1576 ppb	00:49:02
1	Ni 231.604†	300.7	16.0	0.8867 µg/L	0.8867 ppb	00:49:02
1	P 214.914†	25.7	0.5	1.0754 µg/L	1.0754 ppb	00:49:02
1	Pb 220.353†	99.2	5.8	1.5630 µg/L	1.5630 ppb	00:49:02
1	S 181.975 Axial†	13.8	1.6	7.4142 µg/L	7.4142 ppb	00:49:02
1	Sb 206.836†	21.9	1.8	1.8072 µg/L	1.8072 ppb	00:49:02
1	Se 196.026†	14.4	1.9	2.8671 µg/L	2.8671 ppb	00:49:02
1	SiO2†	1556.2	-21.1	-4.5647 µg/L	-4.5647 ppb	00:48:41
1	Si 251.611†	283.1	26.3	2.1967 µg/L	2.1967 ppb	00:49:02
1	Sn 189.927†	4.8	7.1	3.3272 µg/L	3.3272 ppb	00:49:02
1	Ti 334.940†	95.5	22.1	0.0514 µg/L	0.0514 ppb	00:48:41
1	Tl 190.801†	-21.7	0.4	0.5284 µg/L	0.5284 ppb	00:49:02
1	U 409.014†	251.2	69.1	5.7900 µg/L	5.7900 ppb	00:48:41
1	V 292.402†	-52.2	-16.8	-0.1715 µg/L	-0.1715 ppb	00:48:41
1	Zn 213.857†	465.8	20.4	0.5193 µg/L	0.5193 ppb	00:49:02
2	Sc RADIAL	54948.4	54948.4	101 %		00:47:39
2	Al 396.153Radial†	-7.5	3.4	2.4797 µg/L	2.4797 ppb	00:47:39
2	Ca 317.933Radial†	181.9	6.2	5.9670 µg/L	5.9670 ppb	00:48:00
2	Fe 238.204 Radial†	13.4	-2.5	-23.010 µg/L	-23.010 ppb	00:48:00
2	K 766.490 Radial†	185.9	15.0	10.333 µg/L	10.333 ppb	00:47:39
2	Mg 279.077 IEC†	13.0	2.6	25.385 µg/L	25.385 ppb	00:48:00
2	Na 589.592 Radial†	398.3	6.0	1.8694 µg/L	1.8694 ppb	00:47:39
2	Sr 421.552†	52.2	-7.5	-0.0744 µg/L	-0.0744 ppb	00:47:39
2	Sc 361.383	1939125.4	1939125.4	101.78 %		00:49:08
2	Y 371.029	1335405.0	1335405.0	101.97 %		00:49:08
2	Ag 328.068†	-543.3	43.0	0.3400 µg/L	0.3400 ppb	00:49:13
2	As 188.979†	2.8	3.0	6.0523 µg/L	6.0523 ppb	00:49:34
2	B 249.677†	319.3	57.0	2.5443 µg/L	2.5443 ppb	00:49:34
2	Ba 233.527†	-24.9	4.1	0.1103 µg/L	0.1103 ppb	00:49:34
2	Be 313.107†	-3493.1	373.8	0.2418 µg/L	0.2418 ppb	00:49:13
2	Cd 226.502†	-119.2	9.0	0.2588 µg/L	0.2588 ppb	00:49:34
2	Co 228.616†	-10.0	4.9	0.2451 µg/L	0.2451 ppb	00:49:34
2	Cr 267.716†	-18.2	14.5	0.3213 µg/L	0.3213 ppb	00:49:34
2	Cu 324.752†	3275.8	-22.5	-0.1578 µg/L	-0.1578 ppb	00:49:13
2	Mn 257.610†	-96.3	134.2	0.4681 µg/L	0.4681 ppb	00:49:34
2	Mo 202.031†	-3.3	3.0	0.3260 µg/L	0.3260 ppb	00:49:34
2	Ni 231.604†	290.5	5.1	0.2847 µg/L	0.2847 ppb	00:49:34
2	P 214.914†	21.3	-3.9	-8.5574 µg/L	-8.5574 ppb	00:49:34
2	Pb 220.353†	92.8	-0.8	-0.2204 µg/L	-0.2204 ppb	00:49:34

2	S 181.975 Axial†	13.4	1.1	5.1722 µg/L	5.1722 ppb	00:49:34
2	Sb 206.836†	20.9	0.7	0.7321 µg/L	0.7321 ppb	00:49:34
2	Se 196.026†	12.0	-0.5	-0.9071 µg/L	-0.9071 ppb	00:49:34
2	SiO2†	1574.5	-7.1	-1.5294 µg/L	-1.5294 ppb	00:49:13
2	Si 251.611†	300.1	42.4	3.5335 µg/L	3.5335 ppb	00:49:34
2	Sn 189.927†	6.2	8.4	3.9739 µg/L	3.9739 ppb	00:49:34
2	Ti 334.940†	163.4	88.5	0.2085 µg/L	0.2085 ppb	00:49:13
2	Tl 190.801†	-17.6	4.4	6.3633 µg/L	6.3633 ppb	00:49:34
2	U 409.014†	203.1	21.2	1.7822 µg/L	1.7822 ppb	00:49:13
2	V 292.402†	-1.3	33.4	0.3547 µg/L	0.3547 ppb	00:49:13
2	Zn 213.857†	456.8	10.4	0.2664 µg/L	0.2664 ppb	00:49:34
3	Sc RADIAL	54166.3	54166.3	99.3 %		00:48:05
3	Al 396.153Radial†	-5.9	4.8	3.5642 µg/L	3.5642 ppb	00:48:05
3	Ca 317.933Radial†	181.4	8.4	8.0325 µg/L	8.0325 ppb	00:48:25
3	Fe 238.204 Radial†	15.2	-0.5	-4.8388 µg/L	-4.8388 ppb	00:48:25
3	K 766.490 Radial†	230.0	62.0	42.761 µg/L	42.761 ppb	00:48:05
3	Mg 279.077 IEC†	14.7	4.5	43.816 µg/L	43.816 ppb	00:48:25
3	Na 589.592 Radial†	392.8	6.2	1.9413 µg/L	1.9413 ppb	00:48:05
3	Sr 421.552†	39.2	-19.8	-0.1957 µg/L	-0.1957 ppb	00:48:05
3	Sc 361.383	1937000.1	1937000.1	101.67 %		00:49:40
3	Y 371.029	1333867.0	1333867.0	101.85 %		00:49:40
3	Ag 328.068†	-452.0	132.3	1.0402 µg/L	1.0402 ppb	00:49:46
3	As 188.979†	1.3	1.6	3.1654 µg/L	3.1654 ppb	00:50:06
3	B 249.677†	310.0	48.3	2.1449 µg/L	2.1449 ppb	00:50:06
3	Ba 233.527†	-23.0	6.0	0.1584 µg/L	0.1584 ppb	00:50:06
3	Be 313.107†	-3501.8	361.5	0.2339 µg/L	0.2339 ppb	00:49:46
3	Cd 226.502†	-126.7	1.5	0.0430 µg/L	0.0430 ppb	00:50:06
3	Co 228.616†	-11.1	3.8	0.1903 µg/L	0.1903 ppb	00:50:06
3	Cr 267.716†	-36.7	-3.7	-0.0833 µg/L	-0.0833 ppb	00:50:06
3	Cu 324.752†	3321.6	26.1	0.1788 µg/L	0.1788 ppb	00:49:46
3	Mn 257.610†	-105.6	124.9	0.4370 µg/L	0.4370 ppb	00:50:06
3	Mo 202.031†	-7.6	-1.2	-0.1266 µg/L	-0.1266 ppb	00:50:06
3	Ni 231.604†	269.2	-15.4	-0.8547 µg/L	-0.8547 ppb	00:50:06
3	P 214.914†	16.9	-8.2	-18.012 µg/L	-18.012 ppb	00:50:06
3	Pb 220.353†	92.6	-0.8	-0.2279 µg/L	-0.2279 ppb	00:50:06
3	S 181.975 Axial†	17.6	5.4	24.437 µg/L	24.437 ppb	00:50:06
3	Sb 206.836†	25.9	5.7	5.7458 µg/L	5.7458 ppb	00:50:06
3	Se 196.026†	17.1	4.5	6.8831 µg/L	6.8831 ppb	00:50:06
3	SiO2†	1575.1	-4.8	-1.0444 µg/L	-1.0444 ppb	00:49:46
3	Si 251.611†	299.1	41.7	3.4748 µg/L	3.4748 ppb	00:50:06
3	Sn 189.927†	1.3	3.6	1.7094 µg/L	1.7094 ppb	00:50:06
3	Ti 334.940†	187.0	111.9	0.2625 µg/L	0.2625 ppb	00:49:46
3	Tl 190.801†	-23.5	-1.5	-2.0888 µg/L	-2.0888 ppb	00:50:06
3	U 409.014†	230.5	48.3	4.0504 µg/L	4.0504 ppb	00:49:46
3	V 292.402†	-76.9	-40.9	-0.4294 µg/L	-0.4294 ppb	00:49:46
3	Zn 213.857†	454.9	9.0	0.2329 µg/L	0.2329 ppb	00:50:06

-----  
Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1936766.3	101.66 %	0.130			0.13%
Sc RADIAL	54666.9	100 %	0.8			0.80%
Y 371.029	1333827.3	101.85 %	0.122			0.12%
Ag 328.068†	75.4	0.5935 µg/L	0.38807	0.5935 ppb	0.38807	65.39%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	7.5	5.5387 µg/L	4.39282	5.5387 ppb	4.39282	79.31%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	0.8	1.4955 µg/L	5.58243	1.4955 ppb	5.58243	373.29%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	52.9	2.3552 µg/L	0.20053	2.3552 ppb	0.20053	8.51%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	6.5	0.1741 µg/L	0.07293	0.1741 ppb	0.07293	41.89%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	342.4	0.2215 µg/L	0.02855	0.2215 ppb	0.02855	12.89%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	6.4	6.1744 µg/L	1.76350	6.1744 ppb	1.76350	28.56%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	0.7	0.0221 µg/L	0.24785	0.0221 ppb	0.24785	>999.9%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	6.5	0.3273 µg/L	0.19167	0.3273 ppb	0.19167	58.57%

QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	6.9	0.1528 µg/L	0.21057	0.1528 ppb	0.21057	137.84%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-7.0	-0.0491 µg/L	0.19738	-0.0491 ppb	0.19738	402.18%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	-0.9	-8.7017 µg/L	12.82104	-8.7017 ppb	12.82104	147.34%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	38.4	26.462 µg/L	16.2149	26.462 ppb	16.2149	61.28%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	2.9	28.063 µg/L	14.6005	28.063 ppb	14.6005	52.03%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	130.6	0.4570 µg/L	0.01741	0.4570 ppb	0.01741	3.81%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	0.1	0.0139 µg/L	0.27067	0.0139 ppb	0.27067	>999.9%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	11.9	3.7349 µg/L	3.16904	3.7349 ppb	3.16904	84.85%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	1.9	0.1055 µg/L	0.88439	0.1055 ppb	0.88439	837.90%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	-3.9	-8.4980 µg/L	9.54386	-8.4980 ppb	9.54386	112.31%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	1.4	0.3716 µg/L	1.03184	0.3716 ppb	1.03184	277.70%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	2.7	12.341 µg/L	10.5349	12.341 ppb	10.5349	85.37%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	2.8	2.7617 µg/L	2.63963	2.7617 ppb	2.63963	95.58%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	1.9	2.9477 µg/L	3.89571	2.9477 ppb	3.89571	132.16%
QC value within limits for Se 196.026 Recovery = Not calculated						
SiO2†	-11.0	-2.3795 µg/L	1.90790	-2.3795 ppb	1.90790	80.18%
QC value within limits for SiO2 Recovery = Not calculated						
Si 251.611†	36.8	3.0683 µg/L	0.75542	3.0683 ppb	0.75542	24.62%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	6.4	3.0035 µg/L	1.16646	3.0035 ppb	1.16646	38.84%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	3.4	0.0334 µg/L	0.29797	0.0334 ppb	0.29797	891.69%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	74.2	0.1741 µg/L	0.10967	0.1741 ppb	0.10967	62.98%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	1.1	1.6010 µg/L	4.32695	1.6010 ppb	4.32695	270.27%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	46.2	3.8742 µg/L	2.00971	3.8742 ppb	2.00971	51.87%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	-8.1	-0.0821 µg/L	0.39963	-0.0821 ppb	0.39963	487.02%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	13.3	0.3395 µg/L	0.15654	0.3395 ppb	0.15654	46.10%
QC value within limits for Zn 213.857 Recovery = Not calculated						
All analyte(s) passed QC.						



Sequence No.: 13  
 Sample ID: 1202036880|950491|1  
 Analyst: JWW  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 301  
 Date Collected: 2/23/2010 00:50:15  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Replicate Data: 1202036880|950491|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	54401.1	54401.1	99.8 %		00:50:51
1	Al 396.153Radial†	7.7	18.6	13.705 µg/L	13.705 ppb	00:50:51
1	Ca 317.933Radial†	202.8	29.0	27.766 µg/L	27.766 ppb	00:51:12
1	Fe 238.204 Radial†	20.2	4.4	40.805 µg/L	40.805 ppb	00:51:12
1	K 766.490 Radial†	204.0	34.9	24.097 µg/L	24.097 ppb	00:50:51
1	Mg 279.077 IEC†	14.3	4.1	39.791 µg/L	39.791 ppb	00:51:12
1	Na 589.592 Radial†	440.4	52.2	16.359 µg/L	16.359 ppb	00:50:51
1	Sr 421.552†	56.3	-2.8	-0.0281 µg/L	-0.0281 ppb	00:50:51
1	Sc 361.383	1909999.1	1909999.1	100.26 %		00:52:14
1	Y 371.029	1313957.4	1313957.4	100.33 %		00:52:14
1	Ag 328.068†	-469.7	108.3	0.8559 µg/L	0.8559 ppb	00:52:20
1	As 188.979†	-3.6	-3.3	-6.5761 µg/L	-6.5761 ppb	00:52:40
1	B 249.677†	316.0	58.6	2.5812 µg/L	2.5812 ppb	00:52:40
1	Ba 233.527†	-12.0	16.6	0.4433 µg/L	0.4433 ppb	00:52:40
1	Be 313.107†	-3485.6	328.9	0.2127 µg/L	0.2127 ppb	00:52:20
1	Cd 226.502†	-118.6	7.9	0.2187 µg/L	0.2187 ppb	00:52:40
1	Co 228.616†	-7.1	7.6	0.3817 µg/L	0.3817 ppb	00:52:40
1	Cr 267.716†	4.8	37.1	0.8236 µg/L	0.8236 ppb	00:52:40
1	Cu 324.752†	3370.7	121.3	0.8399 µg/L	0.8399 ppb	00:52:20
1	Mn 257.610†	260.4	488.6	1.7225 µg/L	1.7225 ppb	00:52:40
1	Mo 202.031†	-10.8	-4.5	-0.4856 µg/L	-0.4856 ppb	00:52:40
1	Ni 231.604†	293.3	12.4	0.6849 µg/L	0.6849 ppb	00:52:40
1	P 214.914†	28.7	3.7	8.1791 µg/L	8.1791 ppb	00:52:40
1	Pb 220.353†	92.2	-0.0	-0.0167 µg/L	-0.0167 ppb	00:52:40
1	S 181.975 Axial†	12.5	0.5	2.1502 µg/L	2.1502 ppb	00:52:40
1	Sb 206.836†	18.1	-1.7	-1.7304 µg/L	-1.7304 ppb	00:52:40
1	Se 196.026†	8.2	-4.2	-6.4580 µg/L	-6.4580 ppb	00:52:40
1	SiO2†	1798.1	239.5	51.709 µg/L	51.709 ppb	00:52:20
1	Si 251.611†	591.4	337.4	28.133 µg/L	28.133 ppb	00:52:40
1	Sn 189.927†	18.7	21.0	9.9019 µg/L	9.9019 ppb	00:52:40
1	Ti 334.940†	334.6	261.8	0.6192 µg/L	0.6192 ppb	00:52:20
1	Tl 190.801†	-22.7	-0.9	-1.3035 µg/L	-1.3035 ppb	00:52:40
1	U 409.014†	262.0	83.0	6.9476 µg/L	6.9476 ppb	00:52:20
1	V 292.402†	-50.0	-15.2	-0.1498 µg/L	-0.1498 ppb	00:52:20
1	Zn 213.857†	538.5	98.7	2.5322 µg/L	2.5322 ppb	00:52:40
2	Sc RADIAL	54413.7	54413.7	99.8 %		00:51:17
2	Al 396.153Radial†	-3.2	7.6	5.6207 µg/L	5.6207 ppb	00:51:17
2	Ca 317.933Radial†	197.4	23.5	22.534 µg/L	22.534 ppb	00:51:38
2	Fe 238.204 Radial†	18.7	2.9	26.753 µg/L	26.753 ppb	00:51:38
2	K 766.490 Radial†	253.3	84.3	58.156 µg/L	58.156 ppb	00:51:17
2	Mg 279.077 IEC†	12.2	2.0	19.193 µg/L	19.193 ppb	00:51:38
2	Na 589.592 Radial†	406.3	18.0	5.6237 µg/L	5.6237 ppb	00:51:17
2	Sr 421.552†	62.1	3.0	0.0294 µg/L	0.0294 ppb	00:51:17
2	Sc 361.383	1919361.4	1919361.4	100.75 %		00:52:46
2	Y 371.029	1321103.2	1321103.2	100.88 %		00:52:46
2	Ag 328.068†	-434.6	145.4	1.1471 µg/L	1.1471 ppb	00:52:52
2	As 188.979†	1.6	1.9	3.8506 µg/L	3.8506 ppb	00:53:12
2	B 249.677†	321.7	62.7	2.7698 µg/L	2.7698 ppb	00:53:12
2	Ba 233.527†	-6.8	21.9	0.5840 µg/L	0.5840 ppb	00:53:12
2	Be 313.107†	-3543.8	288.1	0.1862 µg/L	0.1862 ppb	00:52:52
2	Cd 226.502†	-127.2	-0.1	-0.0061 µg/L	-0.0061 ppb	00:53:12
2	Co 228.616†	-7.6	7.1	0.3561 µg/L	0.3561 ppb	00:53:12
2	Cr 267.716†	-20.4	12.1	0.2689 µg/L	0.2689 ppb	00:53:12
2	Cu 324.752†	3349.6	84.0	0.5810 µg/L	0.5810 ppb	00:52:52
2	Mn 257.610†	270.4	497.1	1.7516 µg/L	1.7516 ppb	00:53:12
2	Mo 202.031†	-6.7	-0.3	-0.0324 µg/L	-0.0324 ppb	00:53:12
2	Ni 231.604†	287.6	5.2	0.2900 µg/L	0.2900 ppb	00:53:12
2	P 214.914†	28.6	3.5	7.8794 µg/L	7.8794 ppb	00:53:12
2	Pb 220.353†	91.4	-1.2	-0.3305 µg/L	-0.3305 ppb	00:53:12

2	S	181.975 Axial†	13.5	1.5	6.6483 µg/L	6.6483 ppb	00:53:12
2	Sb	206.836†	28.4	8.4	8.4099 µg/L	8.4099 ppb	00:53:12
2	Se	196.026†	15.1	2.6	4.0944 µg/L	4.0944 ppb	00:53:12
2	SiO2†		1836.8	269.2	58.102 µg/L	58.102 ppb	00:52:52
2	Si	251.611†	600.3	343.3	28.624 µg/L	28.624 ppb	00:53:12
2	Sn	189.927†	31.3	33.4	15.728 µg/L	15.728 ppb	00:53:12
2	Ti	334.940†	335.7	261.2	0.6195 µg/L	0.6195 ppb	00:52:52
2	Tl	190.801†	-22.5	-0.6	-0.8995 µg/L	-0.8995 ppb	00:53:12
2	U	409.014†	224.0	44.0	3.6789 µg/L	3.6789 ppb	00:52:52
2	V	292.402†	-56.3	-21.2	-0.2164 µg/L	-0.2164 ppb	00:52:52
2	Zn	213.857†	526.3	84.0	2.1564 µg/L	2.1564 ppb	00:53:12
3	Sc	RADIAL	54337.4	54337.4	99.6 %		00:51:43
3	Al	396.153Radial†	-19.6	-8.9	-6.5557 µg/L	-6.5557 ppb	00:51:43
3	Ca	317.933Radial†	202.8	29.2	27.991 µg/L	27.991 ppb	00:52:04
3	Fe	238.204 Radial†	19.2	3.5	32.359 µg/L	32.359 ppb	00:52:04
3	K	766.490 Radial†	261.7	93.2	64.241 µg/L	64.241 ppb	00:51:43
3	Mg	279.077 IEC†	11.7	1.5	14.262 µg/L	14.262 ppb	00:52:04
3	Na	589.592 Radial†	442.6	54.9	17.205 µg/L	17.205 ppb	00:51:43
3	Sr	421.552†	81.2	22.2	0.2186 µg/L	0.2186 ppb	00:51:43
3	Sc	361.383	1908576.3	1908576.3	100.18 %		00:53:18
3	Y	371.029	1313498.9	1313498.9	100.30 %		00:53:18
3	Ag	328.068†	-457.9	119.7	0.9485 µg/L	0.9485 ppb	00:53:24
3	As	188.979†	-2.6	-2.3	-4.4823 µg/L	-4.4823 ppb	00:53:45
3	B	249.677†	322.4	65.2	2.8763 µg/L	2.8763 ppb	00:53:45
3	Ba	233.527†	-7.4	21.2	0.5664 µg/L	0.5664 ppb	00:53:45
3	Be	313.107†	-3426.4	385.5	0.2492 µg/L	0.2492 ppb	00:53:24
3	Cd	226.502†	-127.9	-1.5	-0.0465 µg/L	-0.0465 ppb	00:53:45
3	Co	228.616†	-8.7	6.0	0.2998 µg/L	0.2998 ppb	00:53:45
3	Cr	267.716†	-15.8	16.5	0.3670 µg/L	0.3670 ppb	00:53:45
3	Cu	324.752†	3353.6	106.7	0.7384 µg/L	0.7384 ppb	00:53:24
3	Mn	257.610†	222.1	450.5	1.5884 µg/L	1.5884 ppb	00:53:45
3	Mo	202.031†	-4.2	2.1	0.2271 µg/L	0.2271 ppb	00:53:45
3	Ni	231.604†	281.8	1.1	0.0602 µg/L	0.0602 ppb	00:53:45
3	P	214.914†	27.2	2.2	4.9578 µg/L	4.9578 ppb	00:53:45
3	Pb	220.353†	85.3	-6.8	-1.8605 µg/L	-1.8605 ppb	00:53:45
3	S	181.975 Axial†	13.6	1.6	7.2080 µg/L	7.2080 ppb	00:53:45
3	Sb	206.836†	24.4	4.5	4.5544 µg/L	4.5544 ppb	00:53:45
3	Se	196.026†	22.1	9.7	15.123 µg/L	15.123 ppb	00:53:45
3	SiO2†		1811.3	254.0	54.830 µg/L	54.830 ppb	00:53:24
3	Si	251.611†	604.7	351.1	29.273 µg/L	29.273 ppb	00:53:45
3	Sn	189.927†	19.8	22.1	10.412 µg/L	10.412 ppb	00:53:45
3	Ti	334.940†	361.3	288.7	0.6851 µg/L	0.6851 ppb	00:53:24
3	Tl	190.801†	-20.6	1.1	1.6423 µg/L	1.6423 ppb	00:53:45
3	U	409.014†	256.3	77.5	6.4891 µg/L	6.4891 ppb	00:53:24
3	V	292.402†	-3.4	31.3	0.3433 µg/L	0.3433 ppb	00:53:24
3	Zn	213.857†	524.0	84.6	2.1736 µg/L	2.1736 ppb	00:53:45

-----  
Mean Data: 1202036880|950491|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1912645.6	100.39 %	0.308			0.31%
Sc RADIAL	54384.1	99.7 %	0.08			0.08%
Y 371.029	1316186.5	100.50 %	0.326			0.32%
Ag 328.068†	124.5	0.9838 µg/L	0.14880	0.9838 ppb	0.14880	15.12%
Al 396.153Radial†	5.8	4.2568 µg/L	10.19922	4.2568 ppb	10.19922	239.60%
As 188.979†	-1.2	-2.4026 µg/L	5.51572	-2.4026 ppb	5.51572	229.57%
B 249.677†	62.1	2.7424 µg/L	0.14946	2.7424 ppb	0.14946	5.45%
Ba 233.527†	19.9	0.5312 µg/L	0.07665	0.5312 ppb	0.07665	14.43%
Be 313.107†	334.2	0.2160 µg/L	0.03164	0.2160 ppb	0.03164	14.65%
Ca 317.933Radial†	27.2	26.097 µg/L	3.0878	26.097 ppb	3.0878	11.83%
Cd 226.502†	2.1	0.0554 µg/L	0.14290	0.0554 ppb	0.14290	257.99%
Co 228.616†	6.9	0.3459 µg/L	0.04193	0.3459 ppb	0.04193	12.12%
Cr 267.716†	21.9	0.4865 µg/L	0.29605	0.4865 ppb	0.29605	60.85%
Cu 324.752†	104.0	0.7198 µg/L	0.13046	0.7198 ppb	0.13046	18.12%
Fe 238.204 Radial†	3.6	33.306 µg/L	7.0732	33.306 ppb	7.0732	21.24%
K 766.490 Radial†	70.8	48.831 µg/L	21.6358	48.831 ppb	21.6358	44.31%
Mg 279.077 IEC†	2.5	24.415 µg/L	13.5420	24.415 ppb	13.5420	55.46%
Mn 257.610†	478.7	1.6875 µg/L	0.08706	1.6875 ppb	0.08706	5.16%
Mo 202.031†	-0.9	-0.0970 µg/L	0.36072	-0.0970 ppb	0.36072	372.07%
Na 589.592 Radial†	41.7	13.062 µg/L	6.4560	13.062 ppb	6.4560	49.42%

Ni 231.604†	6.2	0.3450 µg/L	0.31595	0.3450 ppb	0.31595	91.58%
P 214.914†	3.2	7.0054 µg/L	1.77960	7.0054 ppb	1.77960	25.40%
Pb 220.353†	-2.7	-0.7359 µg/L	0.98646	-0.7359 ppb	0.98646	134.05%
S 181.975 Axial†	1.2	5.3355 µg/L	2.77272	5.3355 ppb	2.77272	51.97%
Sb 206.836†	3.7	3.7446 µg/L	5.11840	3.7446 ppb	5.11840	136.69%
Se 196.026†	2.7	4.2532 µg/L	10.79146	4.2532 ppb	10.79146	253.73%
SiO2†	254.2	54.880 µg/L	3.1972	54.880 ppb	3.1972	5.83%
Si 251.611†	344.0	28.677 µg/L	0.5720	28.677 ppb	0.5720	1.99%
Sn 189.927†	25.5	12.014 µg/L	3.2267	12.014 ppb	3.2267	26.86%
Sr 421.552†	7.4	0.0733 µg/L	0.12907	0.0733 ppb	0.12907	176.11%
Ti 334.940†	270.5	0.6413 µg/L	0.03798	0.6413 ppb	0.03798	5.92%
Tl 190.801†	-0.1	-0.1869 µg/L	1.59692	-0.1869 ppb	1.59692	854.46%
U 409.014†	68.2	5.7052 µg/L	1.76972	5.7052 ppb	1.76972	31.02%
V 292.402†	-1.7	-0.0076 µg/L	0.30571	-0.0076 ppb	0.30571	>999.9%
Zn 213.857†	89.1	2.2874 µg/L	0.21219	2.2874 ppb	0.21219	9.28%

Sequence No.: 14

Sample ID: 1202036885|950491|1

Analyst: JWW

Initial Sample Wt:

Dilution:

Autosampler Location: 302

Date Collected: 2/23/2010 00:53:54

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202036885|950491|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	55675.1	55675.1	102 %		00:54:34
1	Al 396.153Radial†	144999.2	142040.3	104830 µg/L	104830 ppb	00:54:28
1	Ca 317.933Radial†	125881.9	123129.5	118000 µg/L	118000 ppb	00:54:28
1	Fe 238.204 Radial†	25187.6	24656.0	227750 µg/L	227750 ppb	00:54:34
1	K 766.490 Radial†	70491.5	68878.2	47497 µg/L	47497 ppb	00:54:28
1	Mg 279.077 IEC†	4824.2	4715.1	45640 µg/L	45640 ppb	00:54:34
1	Na 589.592 Radial†	38828.9	37644.3	11793 µg/L	11793 ppb	00:54:28
1	Sr 421.552†	275923.5	270213.1	2664.8 µg/L	2664.8 ppb	00:54:28
1	Sc 361.383	1923102.2	1923102.2	100.94 %		00:55:08
1	Y 371.029	1358078.7	1358078.7	103.70 %		00:55:08
1	Ag 328.068†	43476.0	43646.4	368.21 µg/L	368.21 ppb	00:55:14
1	As 188.979†	651.5	645.8	1292.2 µg/L	1292.2 ppb	00:55:35
1	B 249.677†	41607.9	40962.4	1704.5 µg/L	1704.5 ppb	00:55:14
1	Ba 233.527†	87679.9	86888.9	2325.3 µg/L	2325.3 ppb	00:55:14
1	Be 313.107†	1472851.5	1462890.0	944.27 µg/L	944.27 ppb	00:55:08
1	Cd 226.502†	26559.7	26437.6	724.36 µg/L	724.36 ppb	00:55:14
1	Co 228.616†	22877.8	22678.7	1128.5 µg/L	1128.5 ppb	00:55:14
1	Cr 267.716†	131723.8	130524.8	2896.2 µg/L	2896.2 ppb	00:55:14
1	Cu 324.752†	323840.9	317573.0	2215.1 µg/L	2215.1 ppb	00:55:14
1	Mn 257.610†	1934624.5	1916769.8	6771.2 µg/L	6771.2 ppb	00:55:08
1	Mo 202.031†	5900.4	5851.6	641.33 µg/L	641.33 ppb	00:55:35
1	Ni 231.604†	30099.9	29538.4	1639.0 µg/L	1639.0 ppb	00:55:14
1	P 214.914†	4701.6	4632.8	9793.5 µg/L	9793.5 ppb	00:55:35
1	Pb 220.353†	3841.7	3713.9	1000.4 µg/L	1000.4 ppb	00:55:35
1	S 181.975 Axial†	1056.1	1034.3	4712.6 µg/L	4712.6 ppb	00:55:35
1	Sb 206.836†	2010.8	1972.3	1942.9 µg/L	1942.9 ppb	00:55:35
1	Se 196.026†	2189.8	2157.0	3892.5 µg/L	3892.5 ppb	00:55:35
1	SiO2†	185233.2	181947.8	39277 µg/L	39277 ppb	00:55:14
1	Si 251.611†	221384.2	219062.4	18263 µg/L	18263 ppb	00:55:14
1	Sn 189.927†	2801.7	2777.8	1289.4 µg/L	1289.4 ppb	00:55:35
1	Ti 334.940†	2838000.3	2811400.6	6677.8 µg/L	6677.8 ppb	00:55:08
1	Tl 190.801†	955.4	968.2	1503.3 µg/L	1503.3 ppb	00:55:35
1	U 409.014†	-1371.6	-1537.1	-167.65 µg/L	-167.65 ppb	00:55:14
1	V 292.402†	138280.1	137022.2	1483.4 µg/L	1483.4 ppb	00:55:14
1	Zn 213.857†	276249.5	273228.9	7006.2 µg/L	7006.2 ppb	00:55:14
2	Sc RADIAL	55669.5	55669.5	102 %		00:54:45
2	Al 396.153Radial†	145877.7	142915.2	105480 µg/L	105480 ppb	00:54:39
2	Ca 317.933Radial†	126505.6	123752.9	118600 µg/L	118600 ppb	00:54:39
2	Fe 238.204 Radial†	25077.8	24550.8	226780 µg/L	226780 ppb	00:54:45
2	K 766.490 Radial†	70892.2	69277.8	47773 µg/L	47773 ppb	00:54:39
2	Mg 279.077 IEC†	4819.4	4710.9	45600 µg/L	45600 ppb	00:54:45
2	Na 589.592 Radial†	39027.3	37842.5	11855 µg/L	11855 ppb	00:54:39
2	Sr 421.552†	277768.8	272048.0	2682.8 µg/L	2682.8 ppb	00:54:39
2	Sc 361.383	1923381.3	1923381.3	100.96 %		00:55:42
2	Y 371.029	1358177.7	1358177.7	103.71 %		00:55:42
2	Ag 328.068†	43097.7	43265.4	365.09 µg/L	365.09 ppb	00:55:48
2	As 188.979†	650.6	644.7	1290.0 µg/L	1290.0 ppb	00:56:08
2	B 249.677†	41388.4	40739.0	1695.0 µg/L	1695.0 ppb	00:55:48
2	Ba 233.527†	87392.7	86591.9	2317.3 µg/L	2317.3 ppb	00:55:48
2	Be 313.107†	1479300.0	1469065.5	948.25 µg/L	948.25 ppb	00:55:42
2	Cd 226.502†	26429.7	26305.0	720.71 µg/L	720.71 ppb	00:55:48
2	Co 228.616†	22803.0	22601.2	1124.6 µg/L	1124.6 ppb	00:55:48
2	Cr 267.716†	131158.3	129945.8	2883.3 µg/L	2883.3 ppb	00:55:48
2	Cu 324.752†	321479.1	315187.1	2198.6 µg/L	2198.6 ppb	00:55:48
2	Mn 257.610†	1948286.4	1930023.9	6817.7 µg/L	6817.7 ppb	00:55:42
2	Mo 202.031†	5874.0	5824.5	638.37 µg/L	638.37 ppb	00:56:08
2	Ni 231.604†	29995.5	29430.6	1633.0 µg/L	1633.0 ppb	00:55:48
2	P 214.914†	4684.5	4615.1	9757.5 µg/L	9757.5 ppb	00:56:08
2	Pb 220.353†	3852.4	3723.9	1003.2 µg/L	1003.2 ppb	00:56:08

2	S 181.975 Axial†	1071.6	1049.5	4781.8 µg/L	4781.8 ppb	00:56:08
2	Sb 206.836†	2021.9	1982.9	1953.6 µg/L	1953.6 ppb	00:56:08
2	Se 196.026†	2159.5	2126.7	3842.6 µg/L	3842.6 ppb	00:56:08
2	SiO2†	183914.0	180614.5	38989 µg/L	38989 ppb	00:55:48
2	Si 251.611†	219924.4	217584.6	18140 µg/L	18140 ppb	00:55:48
2	Sn 189.927†	2800.8	2776.6	1289.0 µg/L	1289.0 ppb	00:56:08
2	Ti 334.940†	2849412.7	2822296.7	6703.7 µg/L	6703.7 ppb	00:55:42
2	Tl 190.801†	967.7	980.2	1520.8 µg/L	1520.8 ppb	00:56:08
2	U 409.014†	-1384.7	-1550.0	-168.63 µg/L	-168.63 ppb	00:55:48
2	V 292.402†	137489.7	136219.4	1474.7 µg/L	1474.7 ppb	00:55:48
2	Zn 213.857†	274819.4	271772.7	6968.8 µg/L	6968.8 ppb	00:55:48
3	Sc RADIAL	56024.5	56024.5	103 %		00:54:56
3	Al 396.153Radial†	146176.3	142300.4	105030 µg/L	105030 ppb	00:54:50
3	Ca 317.933Radial†	126880.8	123332.8	118200 µg/L	118200 ppb	00:54:50
3	Fe 238.204 Radial†	25284.1	24596.0	227200 µg/L	227200 ppb	00:54:56
3	K 766.490 Radial†	71095.4	69035.5	47605 µg/L	47605 ppb	00:54:50
3	Mg 279.077 IEC†	4827.5	4688.8	45385 µg/L	45385 ppb	00:54:56
3	Na 589.592 Radial†	39081.6	37653.2	11796 µg/L	11796 ppb	00:54:50
3	Sr 421.552†	278651.6	271183.2	2674.3 µg/L	2674.3 ppb	00:54:50
3	Sc 361.383	1920567.9	1920567.9	100.81 %		00:56:15
3	Y 371.029	1357848.0	1357848.0	103.68 %		00:56:15
3	Ag 328.068†	43222.6	43451.9	366.61 µg/L	366.61 ppb	00:56:21
3	As 188.979†	645.3	640.4	1281.4 µg/L	1281.4 ppb	00:56:42
3	B 249.677†	41459.0	40869.0	1700.6 µg/L	1700.6 ppb	00:56:21
3	Ba 233.527†	87168.5	86496.2	2314.8 µg/L	2314.8 ppb	00:56:21
3	Be 313.107†	1478828.1	1470743.9	949.34 µg/L	949.34 ppb	00:56:15
3	Cd 226.502†	26403.2	26317.1	721.00 µg/L	721.00 ppb	00:56:21
3	Co 228.616†	22728.5	22560.4	1122.5 µg/L	1122.5 ppb	00:56:21
3	Cr 267.716†	131048.6	130027.3	2885.1 µg/L	2885.1 ppb	00:56:21
3	Cu 324.752†	322445.1	316611.8	2208.5 µg/L	2208.5 ppb	00:56:21
3	Mn 257.610†	1940804.2	1925428.7	6801.6 µg/L	6801.6 ppb	00:56:15
3	Mo 202.031†	5904.8	5863.6	642.61 µg/L	642.61 ppb	00:56:42
3	Ni 231.604†	29946.0	29425.0	1632.7 µg/L	1632.7 ppb	00:56:21
3	P 214.914†	4686.8	4624.3	9776.2 µg/L	9776.2 ppb	00:56:42
3	Pb 220.353†	3852.0	3729.0	1004.6 µg/L	1004.6 ppb	00:56:42
3	S 181.975 Axial†	1069.8	1049.2	4780.4 µg/L	4780.4 ppb	00:56:42
3	Sb 206.836†	2012.0	1976.1	1946.8 µg/L	1946.8 ppb	00:56:42
3	Se 196.026†	2184.3	2154.4	3887.1 µg/L	3887.1 ppb	00:56:42
3	SiO2†	183995.0	180961.6	39064 µg/L	39064 ppb	00:56:21
3	Si 251.611†	220235.5	218212.3	18192 µg/L	18192 ppb	00:56:21
3	Sn 189.927†	2821.8	2801.4	1300.6 µg/L	1300.6 ppb	00:56:42
3	Ti 334.940†	2847299.0	2824334.4	6708.5 µg/L	6708.5 ppb	00:56:15
3	Tl 190.801†	974.7	988.6	1532.9 µg/L	1532.9 ppb	00:56:42
3	U 409.014†	-1441.7	-1608.4	-173.56 µg/L	-173.56 ppb	00:56:21
3	V 292.402†	137526.9	136455.9	1477.3 µg/L	1477.3 ppb	00:56:21
3	Zn 213.857†	274902.3	272253.6	6981.2 µg/L	6981.2 ppb	00:56:21

-----  
Mean Data: 1202036885|950491|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1922350.5	100.90 %		0.081			0.08%
Sc RADIAL	55789.7	102 %		0.4			0.36%
Y 371.029	1358034.8	103.70 %		0.013			0.01%
Ag 328.068†	43454.6	366.64 µg/L		1.561	366.64 ppb	1.561	0.43%
Al 396.153Radial†	142418.6	105110 µg/L		331.6	105110 ppb	331.6	0.32%
As 188.979†	643.6	1287.9 µg/L		5.69	1287.9 ppb	5.69	0.44%
B 249.677†	40856.8	1700.0 µg/L		4.74	1700.0 ppb	4.74	0.28%
Ba 233.527†	86659.0	2319.1 µg/L		5.48	2319.1 ppb	5.48	0.24%
Be 313.107†	1467566.4	947.29 µg/L		2.671	947.29 ppb	2.671	0.28%
Ca 317.933Radial†	123405.1	118270 µg/L		304.7	118270 ppb	304.7	0.26%
Cd 226.502†	26353.2	722.02 µg/L		2.027	722.02 ppb	2.027	0.28%
Co 228.616†	22613.4	1125.2 µg/L		3.06	1125.2 ppb	3.06	0.27%
Cr 267.716†	130166.0	2888.2 µg/L		6.96	2888.2 ppb	6.96	0.24%
Cu 324.752†	316457.3	2207.4 µg/L		8.32	2207.4 ppb	8.32	0.38%
Fe 238.204 Radial†	24600.9	227240 µg/L		487.1	227240 ppb	487.1	0.21%
K 766.490 Radial†	69063.9	47625 µg/L		138.8	47625 ppb	138.8	0.29%
Mg 279.077 IEC†	4704.9	45542 µg/L		137.1	45542 ppb	137.1	0.30%
Mn 257.610†	1924074.1	6796.8 µg/L		23.61	6796.8 ppb	23.61	0.35%
Mo 202.031†	5846.6	640.77 µg/L		2.176	640.77 ppb	2.176	0.34%
Na 589.592 Radial†	37713.3	11815 µg/L		35.1	11815 ppb	35.1	0.30%

Ni 231.604†	29464.7	1634.9 µg/L	3.54	1634.9 ppb	3.54	0.22%
P 214.914†	4624.0	9775.8 µg/L	18.01	9775.8 ppb	18.01	0.18%
Pb 220.353†	3722.3	1002.8 µg/L	2.12	1002.8 ppb	2.12	0.21%
S 181.975 Axial†	1044.3	4758.3 µg/L	39.57	4758.3 ppb	39.57	0.83%
Sb 206.836†	1977.1	1947.8 µg/L	5.41	1947.8 ppb	5.41	0.28%
Se 196.026†	2146.0	3874.1 µg/L	27.36	3874.1 ppb	27.36	0.71%
SiO2†	181174.7	39110 µg/L	149.3	39110 ppb	149.3	0.38%
Si 251.611†	218286.4	18198 µg/L	61.8	18198 ppb	61.8	0.34%
Sn 189.927†	2785.3	1293.0 µg/L	6.58	1293.0 ppb	6.58	0.51%
Sr 421.552†	271148.1	2674.0 µg/L	9.05	2674.0 ppb	9.05	0.34%
Ti 334.940†	2819343.9	6696.7 µg/L	16.53	6696.7 ppb	16.53	0.25%
Tl 190.801†	979.0	1519.0 µg/L	14.90	1519.0 ppb	14.90	0.98%
U 409.014†	-1565.2	-169.94 µg/L	3.168	-169.94 ppb	3.168	1.86%
V 292.402†	136565.8	1478.5 µg/L	4.43	1478.5 ppb	4.43	0.30%
Zn 213.857†	272418.4	6985.4 µg/L	19.04	6985.4 ppb	19.04	0.27%

Sequence No.: 15  
 Sample ID: 246437001|950491|1  
 Analyst: JWW  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 303  
 Date Collected: 2/23/2010 00:56:51  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Replicate Data: 246437001|950491|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Units	Conc. Units	Sample Units	Analysis Time
1	Sc RADIAL	55409.8	55409.8	102 %				00:57:24
1	Al 396.153Radial†	20863.6	20545.0	15165 µg/L		15165 ppb		00:57:24
1	Ca 317.933Radial†	5657.1	5393.5	5168.9 µg/L		5168.9 ppb		00:57:44
1	Fe 238.204 Radial†	5473.9	5371.6	49614 µg/L		49614 ppb		00:57:44
1	K 766.490 Radial†	4382.6	4143.9	2857.5 µg/L		2857.5 ppb		00:57:24
1	Mg 279.077 IEC†	336.0	320.4	3063.9 µg/L		3063.9 ppb		00:57:44
1	Na 589.592 Radial†	1364.9	954.1	298.89 µg/L		298.89 ppb		00:57:24
1	Sr 421.552†	4313.2	4185.8	41.279 µg/L		41.279 ppb		00:57:24
1	Sc 361.383	1937470.5	1937470.5	101.70 %				00:58:48
1	Y 371.029	1376391.5	1376391.5	105.10 %				00:58:48
1	Ag 328.068†	-1061.7	-467.2	-0.3060 µg/L		-0.3060 ppb		00:58:53
1	As 188.979†	5.0	5.3	13.060 µg/L		13.060 ppb		00:59:14
1	B 249.677†	631.7	364.5	-9.6539 µg/L		-9.6539 ppb		00:58:53
1	Ba 233.527†	9259.6	9133.6	244.22 µg/L		244.22 ppb		00:58:53
1	Be 313.107†	3837.5	7579.1	4.4205 µg/L		4.4205 ppb		00:58:53
1	Cd 226.502†	42.4	167.9	-0.8297 µg/L		-0.8297 ppb		00:59:14
1	Co 228.616†	227.1	238.0	9.3316 µg/L		9.3316 ppb		00:59:14
1	Cr 267.716†	1439.6	1447.9	32.140 µg/L		32.140 ppb		00:58:53
1	Cu 324.752†	6464.5	3115.8	28.319 µg/L		28.319 ppb		00:58:53
1	Mn 257.610†	421034.2	414234.2	1463.6 µg/L		1463.6 ppb		00:58:48
1	Mo 202.031†	35.0	40.8	6.2915 µg/L		6.2915 ppb		00:59:14
1	Ni 231.604†	725.7	433.4	24.653 µg/L		24.653 ppb		00:59:14
1	P 214.914†	227.6	199.0	398.21 µg/L		398.21 ppb		00:59:14
1	Pb 220.353†	340.4	242.7	64.646 µg/L		64.646 ppb		00:59:14
1	S 181.975 Axial†	46.2	33.5	152.55 µg/L		152.55 ppb		00:59:14
1	Sb 206.836†	29.8	9.6	8.8321 µg/L		8.8321 ppb		00:59:14
1	Se 196.026†	-14.5	-26.6	90.218 µg/L		90.218 ppb		00:59:14
1	SiO2†	85632.5	82649.0	17841 µg/L		17841 ppb		00:58:53
1	Si 251.611†	101514.2	99567.0	8300.9 µg/L		8300.9 ppb		00:58:53
1	Sn 189.927†	9.7	11.8	0.6129 µg/L		0.6129 ppb		00:59:14
1	Ti 334.940†	544779.6	535613.0	1272.4 µg/L		1272.4 ppb		00:58:48
1	Tl 190.801†	-35.4	-13.1	5.8601 µg/L		5.8601 ppb		00:59:14
1	U 409.014†	-146.8	-322.7	-34.254 µg/L		-34.254 ppb		00:58:53
1	V 292.402†	3679.7	3653.0	44.447 µg/L		44.447 ppb		00:58:53
1	Zn 213.857†	9488.8	8892.0	226.12 µg/L		226.12 ppb		00:58:53
2	Sc RADIAL	55172.1	55172.1	101 %				00:57:50
2	Al 396.153Radial†	20940.8	20709.8	15287 µg/L		15287 ppb		00:57:50
2	Ca 317.933Radial†	5695.5	5455.4	5228.3 µg/L		5228.3 ppb		00:58:10
2	Fe 238.204 Radial†	5522.9	5443.3	50276 µg/L		50276 ppb		00:58:10
2	K 766.490 Radial†	4399.9	4179.6	2882.2 µg/L		2882.2 ppb		00:57:50
2	Mg 279.077 IEC†	342.9	328.6	3143.5 µg/L		3143.5 ppb		00:58:10
2	Na 589.592 Radial†	1331.8	927.1	290.44 µg/L		290.44 ppb		00:57:50
2	Sr 421.552†	4336.0	4226.6	41.681 µg/L		41.681 ppb		00:57:50
2	Sc 361.383	1936670.1	1936670.1	101.66 %				00:59:21
2	Y 371.029	1376170.0	1376170.0	105.08 %				00:59:21
2	Ag 328.068†	-1044.3	-450.5	-0.1334 µg/L		-0.1334 ppb		00:59:26
2	As 188.979†	2.0	2.3	7.1914 µg/L		7.1914 ppb		00:59:47
2	B 249.677†	661.5	394.1	-8.6879 µg/L		-8.6879 ppb		00:59:26
2	Ba 233.527†	9219.6	9098.0	243.27 µg/L		243.27 ppb		00:59:26
2	Be 313.107†	3803.8	7547.6	4.3995 µg/L		4.3995 ppb		00:59:26
2	Cd 226.502†	46.4	171.8	-0.7944 µg/L		-0.7944 ppb		00:59:47
2	Co 228.616†	220.1	231.2	8.9859 µg/L		8.9859 ppb		00:59:47
2	Cr 267.716†	1416.9	1426.2	31.659 µg/L		31.659 ppb		00:59:26
2	Cu 324.752†	6486.7	3140.3	28.579 µg/L		28.579 ppb		00:59:26
2	Mn 257.610†	420846.2	414220.4	1463.7 µg/L		1463.7 ppb		00:59:21
2	Mo 202.031†	28.5	34.4	5.6276 µg/L		5.6276 ppb		00:59:47
2	Ni 231.604†	727.0	434.9	24.749 µg/L		24.749 ppb		00:59:47
2	P 214.914†	226.7	198.1	395.77 µg/L		395.77 ppb		00:59:47
2	Pb 220.353†	336.6	239.2	63.665 µg/L		63.665 ppb		00:59:47

2	S 181.975 Axial†	50.3	37.5	171.02 µg/L	171.02 ppb	00:59:47
2	Sb 206.836†	25.5	5.3	4.5367 µg/L	4.5367 ppb	00:59:47
2	Se 196.026†	-14.0	-26.1	92.622 µg/L	92.622 ppb	00:59:47
2	SiO2†	85322.7	82379.0	17783 µg/L	17783 ppb	00:59:26
2	Si 251.611†	101042.7	99144.5	8265.6 µg/L	8265.6 ppb	00:59:26
2	Sn 189.927†	6.2	8.4	-1.0706 µg/L	-1.0706 ppb	00:59:47
2	Ti 334.940†	545242.2	536289.5	1274.0 µg/L	1274.0 ppb	00:59:21
2	Tl 190.801†	-33.9	-11.6	8.1378 µg/L	8.1378 ppb	00:59:47
2	U 409.014†	-261.2	-435.3	-43.778 µg/L	-43.778 ppb	00:59:26
2	V 292.402†	3669.0	3643.9	44.413 µg/L	44.413 ppb	00:59:26
2	Zn 213.857†	9446.0	8853.7	225.10 µg/L	225.10 ppb	00:59:26
3	Sc RADIAL	54998.2	54998.2	101 %		00:58:16
3	Al 396.153Radial†	20927.9	20762.3	15326 µg/L	15326 ppb	00:58:16
3	Ca 317.933Radial†	5690.2	5467.9	5240.3 µg/L	5240.3 ppb	00:58:36
3	Fe 238.204 Radial†	5513.9	5451.7	50353 µg/L	50353 ppb	00:58:36
3	K 766.490 Radial†	4419.9	4213.2	2905.3 µg/L	2905.3 ppb	00:58:16
3	Mg 279.077 IEC†	336.9	323.8	3096.7 µg/L	3096.7 ppb	00:58:36
3	Na 589.592 Radial†	1393.1	992.0	310.77 µg/L	310.77 ppb	00:58:16
3	Sr 421.552†	4257.9	4162.7	41.051 µg/L	41.051 ppb	00:58:16
3	Sc 361.383	1950893.6	1950893.6	102.40 %		00:59:54
3	Y 371.029	1385085.5	1385085.5	105.76 %		00:59:54
3	Ag 328.068†	-963.2	-363.8	0.5451 µg/L	0.5451 ppb	00:59:59
3	As 188.979†	4.8	5.0	12.686 µg/L	12.686 ppb	01:00:20
3	B 249.677†	624.7	353.5	-10.531 µg/L	-10.531 ppb	00:59:59
3	Ba 233.527†	8946.8	8765.5	234.38 µg/L	234.38 ppb	00:59:59
3	Be 313.107†	3790.0	7506.8	4.3866 µg/L	4.3866 ppb	00:59:59
3	Cd 226.502†	32.2	157.6	-1.2068 µg/L	-1.2068 ppb	01:00:20
3	Co 228.616†	211.9	221.6	8.5786 µg/L	8.5786 ppb	01:00:20
3	Cr 267.716†	1418.4	1417.4	31.464 µg/L	31.464 ppb	00:59:59
3	Cu 324.752†	6397.9	3007.0	27.674 µg/L	27.674 ppb	00:59:59
3	Mn 257.610†	415086.0	405577.1	1433.3 µg/L	1433.3 ppb	00:59:54
3	Mo 202.031†	33.2	38.7	6.1019 µg/L	6.1019 ppb	01:00:20
3	Ni 231.604†	701.0	404.4	23.057 µg/L	23.057 ppb	01:00:20
3	P 214.914†	210.5	180.7	357.59 µg/L	357.59 ppb	01:00:20
3	Pb 220.353†	315.8	216.5	57.519 µg/L	57.519 ppb	01:00:20
3	S 181.975 Axial†	47.3	34.2	155.84 µg/L	155.84 ppb	01:00:20
3	Sb 206.836†	29.2	8.7	7.9850 µg/L	7.9850 ppb	01:00:20
3	Se 196.026†	-8.6	-20.7	101.26 µg/L	101.26 ppb	01:00:20
3	SiO2†	82970.2	79469.7	17155 µg/L	17155 ppb	00:59:59
3	Si 251.611†	98379.5	95819.1	7988.4 µg/L	7988.4 ppb	00:59:59
3	Sn 189.927†	8.7	10.9	0.0893 µg/L	0.0893 ppb	01:00:20
3	Ti 334.940†	533901.3	521304.2	1238.4 µg/L	1238.4 ppb	00:59:54
3	Tl 190.801†	-35.1	-12.6	6.3118 µg/L	6.3118 ppb	01:00:20
3	U 409.014†	-113.9	-289.6	-31.581 µg/L	-31.581 ppb	00:59:59
3	V 292.402†	3542.7	3494.2	42.859 µg/L	42.859 ppb	00:59:59
3	Zn 213.857†	9157.1	8503.9	216.11 µg/L	216.11 ppb	00:59:59

-----  
Mean Data: 246437001|950491|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1941678.1	101.92 %		0.419			0.41%
Sc RADIAL	55193.4	101 %		0.4			0.37%
Y 371.029	1379215.7	105.31 %		0.388			0.37%
Ag 328.068†	-427.2	0.0353 µg/L		0.44990	0.0353 ppb	0.44990	>999.9%
Al 396.153Radial†	20672.4	15259 µg/L		83.7	15259 ppb	83.7	0.55%
As 188.979†	4.2	10.979 µg/L		3.2856	10.979 ppb	3.2856	29.93%
B 249.677†	370.7	-9.6243 µg/L		0.92197	-9.6243 ppb	0.92197	9.58%
Ba 233.527†	8999.1	240.63 µg/L		5.429	240.63 ppb	5.429	2.26%
Be 313.107†	7544.5	4.4022 µg/L		0.01709	4.4022 ppb	0.01709	0.39%
Ca 317.933Radial†	5439.0	5212.5 µg/L		38.19	5212.5 ppb	38.19	0.73%
Cd 226.502†	165.7	-0.9436 µg/L		0.22860	-0.9436 ppb	0.22860	24.23%
Co 228.616†	230.3	8.9654 µg/L		0.37693	8.9654 ppb	0.37693	4.20%
Cr 267.716†	1430.5	31.754 µg/L		0.3482	31.754 ppb	0.3482	1.10%
Cu 324.752†	3087.7	28.191 µg/L		0.4662	28.191 ppb	0.4662	1.65%
Fe 238.204 Radial†	5422.2	50081 µg/L		406.2	50081 ppb	406.2	0.81%
K 766.490 Radial†	4178.9	2881.7 µg/L		23.89	2881.7 ppb	23.89	0.83%
Mg 279.077 IEC†	324.3	3101.4 µg/L		40.00	3101.4 ppb	40.00	1.29%
Mn 257.610†	411343.9	1453.5 µg/L		17.54	1453.5 ppb	17.54	1.21%
Mo 202.031†	38.0	6.0070 µg/L		0.34198	6.0070 ppb	0.34198	5.69%
Na 589.592 Radial†	957.7	300.03 µg/L		10.215	300.03 ppb	10.215	3.40%



Ni 231.604†	424.2	24.153 µg/L	0.9502	24.153 ppb	0.9502	3.93%
P 214.914†	192.6	383.86 µg/L	22.783	383.86 ppb	22.783	5.94%
Pb 220.353†	232.8	61.943 µg/L	3.8629	61.943 ppb	3.8629	6.24%
S 181.975 Axial†	35.1	159.80 µg/L	9.851	159.80 ppb	9.851	6.16%
Sb 206.836†	7.9	7.1180 µg/L	2.27517	7.1180 ppb	2.27517	31.96%
Se 196.026†	-24.5	94.699 µg/L	5.8056	94.699 ppb	5.8056	6.13%
SiO2†	81499.2	17593 µg/L	380.5	17593 ppb	380.5	2.16%
Si 251.611†	98176.9	8185.0 µg/L	171.14	8185.0 ppb	171.14	2.09%
Sn 189.927†	10.3	-0.1228 µg/L	0.86156	-0.1228 ppb	0.86156	701.51%
Sr 421.552†	4191.7	41.337 µg/L	0.3191	41.337 ppb	0.3191	0.77%
Ti 334.940†	531068.9	1261.6 µg/L	20.11	1261.6 ppb	20.11	1.59%
Tl 190.801†	-12.4	6.7699 µg/L	1.20599	6.7699 ppb	1.20599	17.81%
U 409.014†	-349.2	-36.538 µg/L	6.4109	-36.538 ppb	6.4109	17.55%
V 292.402†	3597.0	43.906 µg/L	0.9069	43.906 ppb	0.9069	2.07%
Zn 213.857†	8749.9	222.44 µg/L	5.511	222.44 ppb	5.511	2.48%

Sequence No.: 16  
 Sample ID: 1202036881|950491|1  
 Analyst: JWJ  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 304  
 Date Collected: 2/23/2010 01:00:30  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Replicate Data: 1202036881|950491|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	54535.7	54535.7	100 %		01:01:02
1	Al 396.153Radial†	22144.9	22155.4	16354 µg/L	16354 ppb	01:01:02
1	Ca 317.933Radial†	4644.6	4470.2	4284.1 µg/L	4284.1 ppb	01:01:22
1	Fe 238.204 Radial†	6700.9	6685.0	61744 µg/L	61744 ppb	01:01:02
1	K 766.490 Radial†	5192.8	5023.2	3463.9 µg/L	3463.9 ppb	01:01:02
1	Mg 279.077 IEC†	432.0	421.7	4036.6 µg/L	4036.6 ppb	01:01:22
1	Na 589.592 Radial†	1573.5	1184.2	370.97 µg/L	370.97 ppb	01:01:02
1	Sr 421.552†	3410.7	3351.3	33.050 µg/L	33.050 ppb	01:01:02
1	Sc 361.383	1919891.8	1919891.8	100.78 %		01:02:26
1	Y 371.029	1377265.6	1377265.6	105.17 %		01:02:26
1	Ag 328.068†	-1213.0	-626.9	-0.7619 µg/L	-0.7619 ppb	01:02:31
1	As 188.979†	3.8	4.0	11.402 µg/L	11.402 ppb	01:02:52
1	B 249.677†	629.6	368.1	-15.832 µg/L	-15.832 ppb	01:02:31
1	Ba 233.527†	10325.3	10274.5	274.73 µg/L	274.73 ppb	01:02:31
1	Be 313.107†	4819.2	8587.8	4.9337 µg/L	4.9337 ppb	01:02:31
1	Cd 226.502†	92.2	217.6	-0.7909 µg/L	-0.7909 ppb	01:02:31
1	Co 228.616†	255.9	268.6	10.110 µg/L	10.110 ppb	01:02:52
1	Cr 267.716†	1192.7	1215.8	26.997 µg/L	26.997 ppb	01:02:31
1	Cu 324.752†	6250.4	2961.5	28.944 µg/L	28.944 ppb	01:02:31
1	Mn 257.610†	612228.5	607748.8	2146.0 µg/L	2146.0 ppb	01:02:26
1	Mo 202.031†	39.0	45.0	7.2126 µg/L	7.2126 ppb	01:02:52
1	Ni 231.604†	747.1	461.1	26.347 µg/L	26.347 ppb	01:02:52
1	P 214.914†	305.5	278.3	562.82 µg/L	562.82 ppb	01:02:52
1	Pb 220.353†	266.2	172.2	45.177 µg/L	45.177 ppb	01:02:52
1	S 181.975 Axial†	40.1	27.8	126.73 µg/L	126.73 ppb	01:02:52
1	Sb 206.836†	24.0	4.1	3.5103 µg/L	3.5103 ppb	01:02:52
1	Se 196.026†	-8.2	-20.5	132.09 µg/L	132.09 ppb	01:02:52
1	SiO2†	96775.5	94477.3	20395 µg/L	20395 ppb	01:02:31
1	Si 251.611†	115094.1	113956.4	9500.5 µg/L	9500.5 ppb	01:02:31
1	Sn 189.927†	16.8	19.0	2.8145 µg/L	2.8145 ppb	01:02:52
1	Ti 334.940†	695264.0	689844.9	1638.7 µg/L	1638.7 ppb	01:02:26
1	Tl 190.801†	-38.9	-16.9	8.3005 µg/L	8.3005 ppb	01:02:52
1	U 409.014†	-449.4	-624.3	-61.153 µg/L	-61.153 ppb	01:02:31
1	V 292.402†	4218.2	4220.4	51.825 µg/L	51.825 ppb	01:02:31
1	Zn 213.857†	13183.5	12643.7	322.02 µg/L	322.02 ppb	01:02:31
2	Sc RADIAL	54951.2	54951.2	101 %		01:01:28
2	Al 396.153Radial†	22447.6	22288.3	16452 µg/L	16452 ppb	01:01:28
2	Ca 317.933Radial†	4704.3	4494.3	4307.2 µg/L	4307.2 ppb	01:01:48
2	Fe 238.204 Radial†	6746.1	6679.2	61691 µg/L	61691 ppb	01:01:28
2	K 766.490 Radial†	5221.4	5012.3	3456.4 µg/L	3456.4 ppb	01:01:28
2	Mg 279.077 IEC†	433.8	420.3	4023.0 µg/L	4023.0 ppb	01:01:48
2	Na 589.592 Radial†	1573.8	1172.6	367.35 µg/L	367.35 ppb	01:01:28
2	Sr 421.552†	3433.2	3347.9	33.016 µg/L	33.016 ppb	01:01:28
2	Sc 361.383	1951611.2	1951611.2	102.44 %		01:02:59
2	Y 371.029	1401193.6	1401193.6	106.99 %		01:02:59
2	Ag 328.068†	-1206.1	-600.6	-0.5681 µg/L	-0.5681 ppb	01:03:04
2	As 188.979†	0.8	1.1	5.6031 µg/L	5.6031 ppb	01:03:25
2	B 249.677†	642.2	370.2	-15.710 µg/L	-15.710 ppb	01:03:04
2	Ba 233.527†	10229.1	10014.1	267.77 µg/L	267.77 ppb	01:03:04
2	Be 313.107†	4868.1	8557.8	4.9173 µg/L	4.9173 ppb	01:03:04
2	Cd 226.502†	64.7	189.3	-1.5883 µg/L	-1.5883 ppb	01:03:04
2	Co 228.616†	247.5	256.3	9.5027 µg/L	9.5027 ppb	01:03:25
2	Cr 267.716†	1193.6	1197.5	26.589 µg/L	26.589 ppb	01:03:04
2	Cu 324.752†	6249.7	2860.0	28.239 µg/L	28.239 ppb	01:03:04
2	Mn 257.610†	619778.8	605245.3	2137.1 µg/L	2137.1 ppb	01:02:59
2	Mo 202.031†	35.5	41.0	6.7751 µg/L	6.7751 ppb	01:03:25
2	Ni 231.604†	734.3	436.6	24.987 µg/L	24.987 ppb	01:03:25
2	P 214.914†	298.6	266.6	537.32 µg/L	537.32 ppb	01:03:25
2	Pb 220.353†	252.6	154.6	40.441 µg/L	40.441 ppb	01:03:25

2	S 181.975 Axial†	33.7	20.9	95.356 µg/L	95.356 ppb	01:03:25
2	Sb 206.836†	22.2	1.9	1.2849 µg/L	1.2849 ppb	01:03:25
2	Se 196.026†	-17.1	-29.1	118.72 µg/L	118.72 ppb	01:03:25
2	SiO2†	96281.3	92434.1	19954 µg/L	19954 ppb	01:03:04
2	Si 251.611†	114415.6	111437.9	9290.5 µg/L	9290.5 ppb	01:03:04
2	Sn 189.927†	17.8	19.7	3.1724 µg/L	3.1724 ppb	01:03:25
2	Ti 334.940†	703392.8	686566.9	1630.9 µg/L	1630.9 ppb	01:02:59
2	Tl 190.801†	-39.9	-17.2	7.7150 µg/L	7.7150 ppb	01:03:25
2	U 409.014†	-484.9	-651.7	-63.446 µg/L	-63.446 ppb	01:03:04
2	V 292.402†	4143.0	4079.0	50.320 µg/L	50.320 ppb	01:03:04
2	Zn 213.857†	13120.5	12369.6	314.98 µg/L	314.98 ppb	01:03:04
3	Sc RADIAL	54693.9	54693.9	100 %		01:01:54
3	Al 396.153Radial†	22344.2	22290.0	16453 µg/L	16453 ppb	01:01:54
3	Ca 317.933Radial†	4660.6	4472.8	4286.5 µg/L	4286.5 ppb	01:02:14
3	Fe 238.204 Radial†	6698.7	6663.4	61545 µg/L	61545 ppb	01:01:54
3	K 766.490 Radial†	5174.9	4990.3	3441.2 µg/L	3441.2 ppb	01:01:54
3	Mg 279.077 IEC†	436.2	424.6	4065.5 µg/L	4065.5 ppb	01:02:14
3	Na 589.592 Radial†	1604.8	1210.8	379.31 µg/L	379.31 ppb	01:01:54
3	Sr 421.552†	3424.3	3355.1	33.087 µg/L	33.087 ppb	01:01:54
3	Sc 361.383	1916150.9	1916150.9	100.58 %		01:03:32
3	Y 371.029	1373971.6	1373971.6	104.91 %		01:03:32
3	Ag 328.068†	-1203.0	-619.3	-0.7270 µg/L	-0.7270 ppb	01:03:37
3	As 188.979†	6.2	6.5	16.229 µg/L	16.229 ppb	01:03:58
3	B 249.677†	636.7	376.4	-15.362 µg/L	-15.362 ppb	01:03:37
3	Ba 233.527†	9864.7	9836.5	263.02 µg/L	263.02 ppb	01:03:37
3	Be 313.107†	4429.0	8209.2	4.7019 µg/L	4.7019 ppb	01:03:37
3	Cd 226.502†	88.0	213.6	-0.8841 µg/L	-0.8841 ppb	01:03:37
3	Co 228.616†	227.5	240.8	8.7821 µg/L	8.7821 ppb	01:03:58
3	Cr 267.716†	1130.3	1156.1	25.672 µg/L	25.672 ppb	01:03:37
3	Cu 324.752†	6106.1	2830.2	28.014 µg/L	28.014 ppb	01:03:37
3	Mn 257.610†	598654.3	595438.8	2102.6 µg/L	2102.6 ppb	01:03:32
3	Mo 202.031†	34.0	40.1	6.6746 µg/L	6.6746 ppb	01:03:58
3	Ni 231.604†	703.2	418.9	24.008 µg/L	24.008 ppb	01:03:58
3	P 214.914†	287.1	260.6	524.24 µg/L	524.24 ppb	01:03:58
3	Pb 220.353†	254.7	161.3	42.256 µg/L	42.256 ppb	01:03:58
3	S 181.975 Axial†	33.5	21.3	96.952 µg/L	96.952 ppb	01:03:58
3	Sb 206.836†	27.1	7.2	6.6243 µg/L	6.6243 ppb	01:03:58
3	Se 196.026†	-14.9	-27.2	121.25 µg/L	121.25 ppb	01:03:58
3	SiO2†	93127.9	91038.1	19652 µg/L	19652 ppb	01:03:37
3	Si 251.611†	110655.6	109766.5	9151.2 µg/L	9151.2 ppb	01:03:37
3	Sn 189.927†	15.5	17.7	2.2408 µg/L	2.2408 ppb	01:03:58
3	Ti 334.940†	679272.1	675291.9	1604.1 µg/L	1604.1 ppb	01:03:32
3	Tl 190.801†	-35.6	-13.7	12.396 µg/L	12.396 ppb	01:03:58
3	U 409.014†	-404.0	-580.0	-57.419 µg/L	-57.419 ppb	01:03:37
3	V 292.402†	4034.5	4045.9	49.957 µg/L	49.957 ppb	01:03:37
3	Zn 213.857†	12651.8	12140.6	309.10 µg/L	309.10 ppb	01:03:37

Mean Data: 1202036881|950491|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1929217.9	101.26 %		1.023			1.01%
Sc RADIAL	54726.9	100 %		0.4			0.38%
Y 371.029	1384143.6	105.69 %		1.134			1.07%
Ag 328.068†	-615.6	-0.6857 µg/L		0.10332	-0.6857 ppb	0.10332	15.07%
Al 396.153Radial†	22244.6	16420 µg/L		57.0	16420 ppb	57.0	0.35%
As 188.979†	3.9	11.078 µg/L		5.3203	11.078 ppb	5.3203	48.03%
B 249.677†	371.6	-15.635 µg/L		0.2441	-15.635 ppb	0.2441	1.56%
Ba 233.527†	10041.7	268.51 µg/L		5.890	268.51 ppb	5.890	2.19%
Be 313.107†	8451.6	4.8510 µg/L		0.12937	4.8510 ppb	0.12937	2.67%
Ca 317.933Radial†	4479.1	4292.6 µg/L		12.70	4292.6 ppb	12.70	0.30%
Cd 226.502†	206.8	-1.0878 µg/L		0.43594	-1.0878 ppb	0.43594	40.08%
Co 228.616†	255.2	9.4649 µg/L		0.66466	9.4649 ppb	0.66466	7.02%
Cr 267.716†	1189.8	26.420 µg/L		0.6789	26.420 ppb	0.6789	2.57%
Cu 324.752†	2883.9	28.399 µg/L		0.4853	28.399 ppb	0.4853	1.71%
Fe 238.204 Radial†	6675.9	61660 µg/L		103.3	61660 ppb	103.3	0.17%
K 766.490 Radial†	5008.6	3453.8 µg/L		11.55	3453.8 ppb	11.55	0.33%
Mg 279.077 IEC†	422.2	4041.7 µg/L		21.69	4041.7 ppb	21.69	0.54%
Mn 257.610†	602811.0	2128.6 µg/L		22.90	2128.6 ppb	22.90	1.08%
Mo 202.031†	42.0	6.8874 µg/L		0.28603	6.8874 ppb	0.28603	4.15%
Na 589.592 Radial†	1189.2	372.54 µg/L		6.135	372.54 ppb	6.135	1.65%

Ni 231.604†	438.9	25.114 µg/L	1.1748	25.114 ppb	1.1748	4.68%
P 214.914†	268.5	541.46 µg/L	19.620	541.46 ppb	19.620	3.62%
Pb 220.353†	162.7	42.625 µg/L	2.3897	42.625 ppb	2.3897	5.61%
S 181.975 Axial†	23.3	106.35 µg/L	17.670	106.35 ppb	17.670	16.62%
Sb 206.836†	4.4	3.8065 µg/L	2.68197	3.8065 ppb	2.68197	70.46%
Se 196.026†	-25.6	124.02 µg/L	7.102	124.02 ppb	7.102	5.73%
SiO2†	92649.8	20000 µg/L	373.4	20000 ppb	373.4	1.87%
Si 251.611†	111720.3	9314.1 µg/L	175.84	9314.1 ppb	175.84	1.89%
Sn 189.927†	18.8	2.7425 µg/L	0.46997	2.7425 ppb	0.46997	17.14%
Sr 421.552†	3351.4	33.051 µg/L	0.0353	33.051 ppb	0.0353	0.11%
Ti 334.940†	683901.3	1624.6 µg/L	18.14	1624.6 ppb	18.14	1.12%
Tl 190.801†	-15.9	9.4704 µg/L	2.55018	9.4704 ppb	2.55018	26.93%
U 409.014†	-618.7	-60.672 µg/L	3.0422	-60.672 ppb	3.0422	5.01%
V 292.402†	4115.1	50.701 µg/L	0.9901	50.701 ppb	0.9901	1.95%
Zn 213.857†	12384.6	315.36 µg/L	6.471	315.36 ppb	6.471	2.05%

Sequence No.: 17

Sample ID: 1202036883|950491|1

Analyst: JWJ

Initial Sample Wt:

Dilution:

Autosampler Location: 305

Date Collected: 2/23/2010 01:04:07

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202036883|950491|1

Rep#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	55052.9	55052.9	101 %		01:04:40
1	Al 396.153Radial†	49376.7	48922.8	36101 µg/L	36101 ppb	01:04:40
1	Ca 317.933Radial†	10097.7	9828.4	9419.2 µg/L	9419.2 ppb	01:05:00
1	Fe 238.204 Radial†	6614.1	6536.1	60380 µg/L	60380 ppb	01:05:00
1	K 766.490 Radial†	13311.1	13016.3	8975.8 µg/L	8975.8 ppb	01:04:40
1	Mg 279.077 IEC†	988.4	968.9	9370.4 µg/L	9370.4 ppb	01:05:00
1	Na 589.592 Radial†	17572.8	17018.1	5331.3 µg/L	5331.3 ppb	01:04:40
1	Sr 421.552†	54735.1	54160.8	534.12 µg/L	534.12 ppb	01:04:40
1	Sc 361.383	1915808.3	1915808.3	100.56 %		01:06:05
1	Y 371.029	1361213.9	1361213.9	103.94 %		01:06:05
1	Ag 328.068†	62756.6	62983.5	504.44 µg/L	504.44 ppb	01:06:10
1	As 188.979†	271.3	270.1	540.08 µg/L	540.08 ppb	01:06:31
1	B 249.677†	12309.7	11984.5	501.50 µg/L	501.50 ppb	01:06:10
1	Ba 233.527†	28448.4	28318.4	758.02 µg/L	758.02 ppb	01:06:10
1	Be 313.107†	813894.9	813162.5	525.42 µg/L	525.42 ppb	01:06:05
1	Cd 226.502†	18442.4	18465.7	516.51 µg/L	516.51 ppb	01:06:10
1	Co 228.616†	10454.6	10411.0	519.92 µg/L	519.92 ppb	01:06:10
1	Cr 267.716†	25860.8	25749.0	571.51 µg/L	571.51 ppb	01:06:10
1	Cu 324.752†	86652.9	82928.9	578.57 µg/L	578.57 ppb	01:06:10
1	Mn 257.610†	583978.2	580951.0	2051.3 µg/L	2051.3 ppb	01:06:05
1	Mo 202.031†	4978.7	4957.2	538.27 µg/L	538.27 ppb	01:06:31
1	Ni 231.604†	10528.9	10189.9	565.02 µg/L	565.02 ppb	01:06:10
1	P 214.914†	480.7	453.1	903.34 µg/L	903.34 ppb	01:06:31
1	Pb 220.353†	2189.1	2085.0	564.00 µg/L	564.00 ppb	01:06:31
1	S 181.975 Axial†	1243.8	1224.9	5581.1 µg/L	5581.1 ppb	01:06:31
1	Sb 206.836†	545.3	522.5	524.88 µg/L	524.88 ppb	01:06:31
1	Se 196.026†	341.1	326.8	660.60 µg/L	660.60 ppb	01:06:31
1	SiO2†	153143.6	150735.7	32539 µg/L	32539 ppb	01:06:10
1	Si 251.611†	184594.7	183313.0	15283 µg/L	15283 ppb	01:06:05
1	Sn 189.927†	1224.8	1220.3	569.64 µg/L	569.64 ppb	01:06:31
1	Ti 334.940†	966924.6	961461.4	2283.7 µg/L	2283.7 ppb	01:06:05
1	Tl 190.801†	337.6	357.4	551.77 µg/L	551.77 ppb	01:06:31
1	U 409.014†	6070.2	5858.0	481.89 µg/L	481.89 ppb	01:06:10
1	V 292.402†	54212.1	53944.5	582.01 µg/L	582.01 ppb	01:06:10
1	Zn 213.857†	31126.9	30514.9	778.35 µg/L	778.35 ppb	01:06:10
2	Sc RADIAL	54960.7	54960.7	101 %		01:05:06
2	Al 396.153Radial†	49652.6	49278.6	36364 µg/L	36364 ppb	01:05:06
2	Ca 317.933Radial†	10139.4	9886.5	9474.9 µg/L	9474.9 ppb	01:05:26
2	Fe 238.204 Radial†	6650.1	6582.7	60811 µg/L	60811 ppb	01:05:26
2	K 766.490 Radial†	13425.1	13151.6	9069.1 µg/L	9069.1 ppb	01:05:06
2	Mg 279.077 IEC†	995.8	977.8	9456.8 µg/L	9456.8 ppb	01:05:26
2	Na 589.592 Radial†	17676.5	17150.2	5372.7 µg/L	5372.7 ppb	01:05:06
2	Sr 421.552†	54914.3	54429.5	536.77 µg/L	536.77 ppb	01:05:06
2	Sc 361.383	1916748.7	1916748.7	100.61 %		01:06:38
2	Y 371.029	1361342.7	1361342.7	103.95 %		01:06:38
2	Ag 328.068†	62568.3	62765.7	502.74 µg/L	502.74 ppb	01:06:44
2	As 188.979†	264.2	262.9	525.69 µg/L	525.69 ppb	01:07:05
2	B 249.677†	12285.7	11954.5	499.94 µg/L	499.94 ppb	01:06:44
2	Ba 233.527†	28197.8	28055.4	750.99 µg/L	750.99 ppb	01:06:44
2	Be 313.107†	814052.1	812921.7	525.27 µg/L	525.27 ppb	01:06:38
2	Cd 226.502†	18313.1	18328.2	512.57 µg/L	512.57 ppb	01:06:44
2	Co 228.616†	10369.4	10321.2	515.39 µg/L	515.39 ppb	01:06:44
2	Cr 267.716†	25684.4	25561.0	567.34 µg/L	567.34 ppb	01:06:44
2	Cu 324.752†	86410.5	82645.7	576.68 µg/L	576.68 ppb	01:06:44
2	Mn 257.610†	584119.7	580806.7	2050.8 µg/L	2050.8 ppb	01:06:38
2	Mo 202.031†	4957.9	4934.2	535.80 µg/L	535.80 ppb	01:07:05
2	Ni 231.604†	10464.8	10121.2	561.22 µg/L	561.22 ppb	01:06:44
2	P 214.914†	483.8	455.9	909.40 µg/L	909.40 ppb	01:07:05
2	Pb 220.353†	2175.7	2070.5	560.09 µg/L	560.09 ppb	01:07:05

2	S 181.975 Axial†	1244.1	1224.5	5579.4 µg/L	5579.4 ppb	01:07:05
2	Sb 206.836†	543.0	520.0	522.30 µg/L	522.30 ppb	01:07:05
2	Se 196.026†	343.1	328.7	664.57 µg/L	664.57 ppb	01:07:05
2	SiO2†	151840.6	149365.9	32244 µg/L	32244 ppb	01:06:44
2	Si 251.611†	184137.4	182768.4	15237 µg/L	15237 ppb	01:06:38
2	Sn 189.927†	1213.3	1208.3	563.95 µg/L	563.95 ppb	01:07:05
2	Ti 334.940†	968008.4	962066.9	2285.1 µg/L	2285.1 ppb	01:06:38
2	Tl 190.801†	331.6	351.3	543.05 µg/L	543.05 ppb	01:07:05
2	U 409.014†	6064.0	5848.9	481.06 µg/L	481.06 ppb	01:06:44
2	V 292.402†	54050.9	53757.8	580.06 µg/L	580.06 ppb	01:06:44
2	Zn 213.857†	30872.1	30246.5	771.44 µg/L	771.44 ppb	01:06:44
3	Sc RADIAL	55410.8	55410.8	102 %		01:05:32
3	Al 396.153Radial†	49900.1	49122.1	36249 µg/L	36249 ppb	01:05:32
3	Ca 317.933Radial†	10202.7	9867.1	9456.2 µg/L	9456.2 ppb	01:05:52
3	Fe 238.204 Radial†	6698.8	6577.1	60758 µg/L	60758 ppb	01:05:52
3	K 766.490 Radial†	13505.2	13122.2	9048.8 µg/L	9048.8 ppb	01:05:32
3	Mg 279.077 IEC†	997.6	971.5	9395.3 µg/L	9395.3 ppb	01:05:52
3	Na 589.592 Radial†	17758.1	17088.1	5353.3 µg/L	5353.3 ppb	01:05:32
3	Sr 421.552†	55292.6	54359.2	536.07 µg/L	536.07 ppb	01:05:32
3	Sc 361.383	1929670.7	1929670.7	101.29 %		01:07:12
3	Y 371.029	1370136.5	1370136.5	104.62 %		01:07:12
3	Ag 328.068†	61622.0	61414.9	491.90 µg/L	491.90 ppb	01:07:18
3	As 188.979†	249.3	246.4	492.97 µg/L	492.97 ppb	01:07:38
3	B 249.677†	11964.6	11555.8	482.22 µg/L	482.22 ppb	01:07:18
3	Ba 233.527†	27259.4	26941.2	721.15 µg/L	721.15 ppb	01:07:18
3	Be 313.107†	801343.0	794956.1	513.66 µg/L	513.66 ppb	01:07:12
3	Cd 226.502†	17869.6	17768.4	496.70 µg/L	496.70 ppb	01:07:18
3	Co 228.616†	9968.7	9856.6	492.08 µg/L	492.08 ppb	01:07:18
3	Cr 267.716†	24543.6	24263.8	538.55 µg/L	538.55 ppb	01:07:18
3	Cu 324.752†	83449.9	79147.7	552.63 µg/L	552.63 ppb	01:07:18
3	Mn 257.610†	575295.7	568207.1	2006.5 µg/L	2006.5 ppb	01:07:12
3	Mo 202.031†	4610.0	4557.6	495.08 µg/L	495.08 ppb	01:07:38
3	Ni 231.604†	10032.4	9624.6	533.72 µg/L	533.72 ppb	01:07:18
3	P 214.914†	452.6	422.0	836.91 µg/L	836.91 ppb	01:07:38
3	Pb 220.353†	2062.9	1944.7	525.99 µg/L	525.99 ppb	01:07:38
3	S 181.975 Axial†	1182.7	1155.7	5265.8 µg/L	5265.8 ppb	01:07:38
3	Sb 206.836†	508.6	482.4	484.34 µg/L	484.34 ppb	01:07:38
3	Se 196.026†	325.3	308.9	633.77 µg/L	633.77 ppb	01:07:38
3	SiO2†	144555.3	141162.7	30473 µg/L	30473 ppb	01:07:18
3	Si 251.611†	180032.4	177490.0	14797 µg/L	14797 ppb	01:07:12
3	Sn 189.927†	1129.4	1117.4	521.12 µg/L	521.12 ppb	01:07:38
3	Ti 334.940†	950566.7	938404.1	2228.9 µg/L	2228.9 ppb	01:07:12
3	Tl 190.801†	308.6	326.4	506.59 µg/L	506.59 ppb	01:07:38
3	U 409.014†	5786.7	5534.7	454.74 µg/L	454.74 ppb	01:07:18
3	V 292.402†	51791.2	51167.1	552.32 µg/L	552.32 ppb	01:07:18
3	Zn 213.857†	29974.4	29154.8	743.52 µg/L	743.52 ppb	01:07:18

-----  
Mean Data: 1202036883|950491|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1920742.5	100.82 %	0.407			0.40%
Sc RADIAL	55141.5	101 %	0.4			0.43%
Y 371.029	1364231.0	104.17 %	0.391			0.37%
Ag 328.068†	62388.1	499.69 µg/L	6.804	499.69 ppb	6.804	1.36%
Al 396.153Radial†	49107.9	36238 µg/L	131.7	36238 ppb	131.7	0.36%
As 188.979†	259.8	519.58 µg/L	24.142	519.58 ppb	24.142	4.65%
B 249.677†	11831.6	494.55 µg/L	10.711	494.55 ppb	10.711	2.17%
Ba 233.527†	27771.7	743.39 µg/L	19.573	743.39 ppb	19.573	2.63%
Be 313.107†	807013.4	521.45 µg/L	6.746	521.45 ppb	6.746	1.29%
Ca 317.933Radial†	9860.7	9450.1 µg/L	28.35	9450.1 ppb	28.35	0.30%
Cd 226.502†	18187.5	508.59 µg/L	10.489	508.59 ppb	10.489	2.06%
Co 228.616†	10196.3	509.13 µg/L	14.941	509.13 ppb	14.941	2.93%
Cr 267.716†	25191.3	559.13 µg/L	17.948	559.13 ppb	17.948	3.21%
Cu 324.752†	81574.1	569.29 µg/L	14.466	569.29 ppb	14.466	2.54%
Fe 238.204 Radial†	6565.3	60650 µg/L	234.9	60650 ppb	234.9	0.39%
K 766.490 Radial†	13096.7	9031.2 µg/L	49.07	9031.2 ppb	49.07	0.54%
Mg 279.077 IEC†	972.7	9407.5 µg/L	44.47	9407.5 ppb	44.47	0.47%
Mn 257.610†	576654.9	2036.2 µg/L	25.72	2036.2 ppb	25.72	1.26%
Mo 202.031†	4816.3	523.05 µg/L	24.251	523.05 ppb	24.251	4.64%
Na 589.592 Radial†	17085.5	5352.4 µg/L	20.70	5352.4 ppb	20.70	0.39%

Ni 231.604†	9978.6	553.32 µg/L	17.080	553.32 ppb	17.080	3.09%
P 214.914†	443.7	883.22 µg/L	40.219	883.22 ppb	40.219	4.55%
Pb 220.353†	2033.4	550.02 µg/L	20.908	550.02 ppb	20.908	3.80%
S 181.975 Axial†	1201.7	5475.4 µg/L	181.54	5475.4 ppb	181.54	3.32%
Sb 206.836†	508.3	510.51 µg/L	22.695	510.51 ppb	22.695	4.45%
Se 196.026†	321.4	652.98 µg/L	16.752	652.98 ppb	16.752	2.57%
SiO2†	147088.1	31752 µg/L	1117.6	31752 ppb	1117.6	3.52%
Si 251.611†	181190.5	15106 µg/L	268.1	15106 ppb	268.1	1.78%
Sn 189.927†	1182.0	551.57 µg/L	26.522	551.57 ppb	26.522	4.81%
Sr 421.552†	54316.5	535.65 µg/L	1.374	535.65 ppb	1.374	0.26%
Ti 334.940†	953977.4	2265.9 µg/L	32.05	2265.9 ppb	32.05	1.41%
Tl 190.801†	345.0	533.80 µg/L	23.969	533.80 ppb	23.969	4.49%
U 409.014†	5747.2	472.56 µg/L	15.440	472.56 ppb	15.440	3.27%
V 292.402†	52956.5	571.47 µg/L	16.605	571.47 ppb	16.605	2.91%
Zn 213.857†	29972.1	764.44 µg/L	18.444	764.44 ppb	18.444	2.41%

Sequence No.: 18

Sample ID: 1202036884|950491|1

Analyst: JWJ

Initial Sample Wt:

Dilution:

Autosampler Location: 306

Date Collected: 2/23/2010 01:07:47

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202036884|950491|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	55215.0	55215.0	101 %			01:08:20
1	Al 396.153Radial†	54983.0	54316.6	40083 µg/L		40083 ppb	01:08:20
1	Ca 317.933Radial†	11451.8	11136.5	10673 µg/L		10673 ppb	01:08:40
1	Fe 238.204 Radial†	7193.9	7089.4	65491 µg/L		65491 ppb	01:08:40
1	K 766.490 Radial†	13662.3	13324.5	9188.3 µg/L		9188.3 ppb	01:08:20
1	Mg 279.077 IEC†	1019.3	996.5	9634.0 µg/L		9634.0 ppb	01:08:40
1	Na 589.592 Radial†	17709.5	17102.1	5357.6 µg/L		5357.6 ppb	01:08:20
1	Sr 421.552†	55325.9	54585.1	538.30 µg/L		538.30 ppb	01:08:20
1	Sc 361.383	1918805.3	1918805.3	100.72 %			01:09:45
1	Y 371.029	1357729.8	1357729.8	103.67 %			01:09:45
1	Ag 328.068†	62813.1	62942.1	504.58 µg/L		504.58 ppb	01:09:50
1	As 188.979†	262.9	261.3	522.71 µg/L		522.71 ppb	01:10:11
1	B 249.677†	12222.6	11878.9	494.20 µg/L		494.20 ppb	01:09:50
1	Ba 233.527†	28772.5	28595.9	765.48 µg/L		765.48 ppb	01:09:50
1	Be 313.107†	813259.8	811267.9	524.06 µg/L		524.06 ppb	01:09:45
1	Cd 226.502†	18453.1	18447.7	515.44 µg/L		515.44 ppb	01:09:50
1	Co 228.616†	10478.4	10418.4	519.53 µg/L		519.53 ppb	01:09:50
1	Cr 267.716†	27454.4	27291.0	605.73 µg/L		605.73 ppb	01:09:50
1	Cu 324.752†	88276.7	84406.6	589.44 µg/L		589.44 ppb	01:09:50
1	Mn 257.610†	560914.8	557144.9	1968.2 µg/L		1968.2 ppb	01:09:45
1	Mo 202.031†	4952.0	4923.0	534.76 µg/L		534.76 ppb	01:10:11
1	Ni 231.604†	10800.7	10443.5	579.14 µg/L		579.14 ppb	01:09:50
1	P 214.914†	702.2	672.4	1379.6 µg/L		1379.6 ppb	01:10:11
1	Pb 220.353†	2175.9	2068.4	559.51 µg/L		559.51 ppb	01:10:11
1	S 181.975 Axial†	1244.0	1223.2	5573.2 µg/L		5573.2 ppb	01:10:11
1	Sb 206.836†	532.5	508.9	510.67 µg/L		510.67 ppb	01:10:11
1	Se 196.026†	336.3	321.5	665.78 µg/L		665.78 ppb	01:10:11
1	SiO2†	140594.2	138038.0	29798 µg/L		29798 ppb	01:09:50
1	Si 251.611†	170202.7	168736.9	14068 µg/L		14068 ppb	01:09:45
1	Sn 189.927†	1155.8	1149.9	535.97 µg/L		535.97 ppb	01:10:11
1	Ti 334.940†	1122494.8	1114420.7	2647.1 µg/L		2647.1 ppb	01:09:45
1	Tl 190.801†	336.1	355.4	552.61 µg/L		552.61 ppb	01:10:11
1	U 409.014†	6156.3	5934.1	487.47 µg/L		487.47 ppb	01:09:50
1	V 292.402†	56362.6	55995.4	604.30 µg/L		604.30 ppb	01:09:50
1	Zn 213.857†	30960.4	30301.3	772.52 µg/L		772.52 ppb	01:09:50
2	Sc RADIAL	55206.2	55206.2	101 %			01:08:46
2	Al 396.153Radial†	55071.4	54412.4	40154 µg/L		40154 ppb	01:08:46
2	Ca 317.933Radial†	11550.0	11235.3	10767 µg/L		10767 ppb	01:09:06
2	Fe 238.204 Radial†	7228.3	7124.6	65815 µg/L		65815 ppb	01:09:06
2	K 766.490 Radial†	13578.5	13243.8	9132.7 µg/L		9132.7 ppb	01:08:46
2	Mg 279.077 IEC†	1027.0	1004.2	9708.6 µg/L		9708.6 ppb	01:09:06
2	Na 589.592 Radial†	17720.7	17115.9	5362.0 µg/L		5362.0 ppb	01:08:46
2	Sr 421.552†	55326.8	54594.7	538.39 µg/L		538.39 ppb	01:08:46
2	Sc 361.383	1918049.2	1918049.2	100.68 %			01:10:18
2	Y 371.029	1357939.5	1357939.5	103.69 %			01:10:18
2	Ag 328.068†	63324.0	63474.1	508.84 µg/L		508.84 ppb	01:10:24
2	As 188.979†	266.3	264.8	529.78 µg/L		529.78 ppb	01:10:44
2	B 249.677†	12363.6	12023.7	500.47 µg/L		500.47 ppb	01:10:24
2	Ba 233.527†	28977.1	28810.4	771.22 µg/L		771.22 ppb	01:10:24
2	Be 313.107†	812331.0	810663.6	523.67 µg/L		523.67 ppb	01:10:18
2	Cd 226.502†	18616.4	18617.1	520.20 µg/L		520.20 ppb	01:10:24
2	Co 228.616†	10586.8	10530.2	525.16 µg/L		525.16 ppb	01:10:24
2	Cr 267.716†	27667.9	27513.8	610.67 µg/L		610.67 ppb	01:10:24
2	Cu 324.752†	88947.6	85107.5	594.31 µg/L		594.31 ppb	01:10:24
2	Mn 257.610†	559276.3	555737.0	1963.3 µg/L		1963.3 ppb	01:10:18
2	Mo 202.031†	4913.8	4887.0	530.89 µg/L		530.89 ppb	01:10:44
2	Ni 231.604†	10899.8	10546.1	584.83 µg/L		584.83 ppb	01:10:24
2	P 214.914†	697.2	667.7	1368.5 µg/L		1368.5 ppb	01:10:44
2	Pb 220.353†	2169.1	2062.5	557.88 µg/L		557.88 ppb	01:10:44



2	S 181.975 Axial†	1232.8	1212.5	5524.6 µg/L	5524.6 ppb	01:10:44
2	Sb 206.836†	523.7	500.4	502.07 µg/L	502.07 ppb	01:10:44
2	Se 196.026†	322.8	308.2	646.01 µg/L	646.01 ppb	01:10:44
2	SiO2†	141258.7	138753.0	29953 µg/L	29953 ppb	01:10:24
2	Si 251.611†	169036.2	167644.8	13976 µg/L	13976 ppb	01:10:18
2	Sn 189.927†	1147.5	1142.1	532.24 µg/L	532.24 ppb	01:10:44
2	Ti 334.940†	1121130.3	1113504.8	2644.9 µg/L	2644.9 ppb	01:10:18
2	Tl 190.801†	326.0	345.5	538.30 µg/L	538.30 ppb	01:10:44
2	U 409.014†	6247.6	6027.1	495.22 µg/L	495.22 ppb	01:10:24
2	V 292.402†	56878.2	56529.7	609.96 µg/L	609.96 ppb	01:10:24
2	Zn 213.857†	31198.5	30549.9	778.87 µg/L	778.87 ppb	01:10:24
3	Sc RADIAL	55053.4	55053.4	101 %		01:09:12
3	Al 396.153Radial†	54806.4	54300.9	40072 µg/L	40072 ppb	01:09:12
3	Ca 317.933Radial†	11521.2	11238.4	10770 µg/L	10770 ppb	01:09:32
3	Fe 238.204 Radial†	7213.5	7129.7	65863 µg/L	65863 ppb	01:09:32
3	K 766.490 Radial†	13590.8	13293.3	9166.8 µg/L	9166.8 ppb	01:09:12
3	Mg 279.077 IEC†	1014.4	994.6	9613.9 µg/L	9613.9 ppb	01:09:32
3	Na 589.592 Radial†	17733.2	17176.9	5381.1 µg/L	5381.1 ppb	01:09:12
3	Sr 421.552†	55164.5	54585.6	538.31 µg/L	538.31 ppb	01:09:12
3	Sc 361.383	1927767.4	1927767.4	101.19 %		01:10:51
3	Y 371.029	1364842.8	1364842.8	104.22 %		01:10:51
3	Ag 328.068†	61912.9	61762.6	495.13 µg/L	495.13 ppb	01:10:57
3	As 188.979†	251.0	248.3	496.95 µg/L	496.95 ppb	01:11:17
3	B 249.677†	12043.6	11645.5	483.60 µg/L	483.60 ppb	01:10:57
3	Ba 233.527†	27750.9	27453.6	734.89 µg/L	734.89 ppb	01:10:57
3	Be 313.107†	796738.8	791187.0	511.09 µg/L	511.09 ppb	01:10:51
3	Cd 226.502†	17901.3	17817.2	497.52 µg/L	497.52 ppb	01:10:57
3	Co 228.616†	10117.2	10013.1	499.23 µg/L	499.23 ppb	01:10:57
3	Cr 267.716†	26211.5	25935.9	575.66 µg/L	575.66 ppb	01:10:57
3	Cu 324.752†	85348.4	81105.2	566.79 µg/L	566.79 ppb	01:10:57
3	Mn 257.610†	548599.8	542385.4	1916.3 µg/L	1916.3 ppb	01:10:51
3	Mo 202.031†	4564.0	4516.7	490.85 µg/L	490.85 ppb	01:11:17
3	Ni 231.604†	10388.9	9986.6	553.84 µg/L	553.84 ppb	01:10:57
3	P 214.914†	665.3	632.6	1293.8 µg/L	1293.8 ppb	01:11:17
3	Pb 220.353†	2053.9	1937.8	524.09 µg/L	524.09 ppb	01:11:17
3	S 181.975 Axial†	1181.4	1155.5	5265.0 µg/L	5265.0 ppb	01:11:17
3	Sb 206.836†	499.9	474.2	475.55 µg/L	475.55 ppb	01:11:17
3	Se 196.026†	309.4	293.4	623.27 µg/L	623.27 ppb	01:11:17
3	SiO2†	132915.5	129800.5	28020 µg/L	28020 ppb	01:10:57
3	Si 251.611†	164552.5	162367.4	13537 µg/L	13537 ppb	01:10:51
3	Sn 189.927†	1068.3	1058.0	492.62 µg/L	492.62 ppb	01:11:17
3	Ti 334.940†	1096922.0	1083967.0	2574.8 µg/L	2574.8 ppb	01:10:51
3	Tl 190.801†	313.4	331.4	517.36 µg/L	517.36 ppb	01:11:17
3	U 409.014†	5948.2	5700.0	467.80 µg/L	467.80 ppb	01:10:57
3	V 292.402†	54119.7	53518.7	577.79 µg/L	577.79 ppb	01:10:57
3	Zn 213.857†	30068.2	29276.7	746.29 µg/L	746.29 ppb	01:10:57

## Mean Data: 1202036884|950491|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1921540.6	100.86	%	0.284			0.28%
Sc RADIAL	55158.2	101	%	0.2			0.16%
Y 371.029	1360170.7	103.86	%	0.309			0.30%
Ag 328.068†	62726.2	502.85	µg/L	7.017	502.85 ppb	7.017	1.40%
Al 396.153Radial†	54343.3	40103	µg/L	44.3	40103 ppb	44.3	0.11%
As 188.979†	258.2	516.48	µg/L	17.280	516.48 ppb	17.280	3.35%
B 249.677†	11849.4	492.76	µg/L	8.528	492.76 ppb	8.528	1.73%
Ba 233.527†	28286.7	757.20	µg/L	19.528	757.20 ppb	19.528	2.58%
Be 313.107†	804372.8	519.61	µg/L	7.378	519.61 ppb	7.378	1.42%
Ca 317.933Radial†	11203.4	10737	µg/L	55.5	10737 ppb	55.5	0.52%
Cd 226.502†	18294.0	511.06	µg/L	11.959	511.06 ppb	11.959	2.34%
Co 228.616†	10320.6	514.64	µg/L	13.638	514.64 ppb	13.638	2.65%
Cr 267.716†	26913.6	597.35	µg/L	18.953	597.35 ppb	18.953	3.17%
Cu 324.752†	83539.7	583.51	µg/L	14.682	583.51 ppb	14.682	2.52%
Fe 238.204 Radial†	7114.6	65723	µg/L	202.4	65723 ppb	202.4	0.31%
K 766.490 Radial†	13287.2	9162.6	µg/L	28.06	9162.6 ppb	28.06	0.31%
Mg 279.077 IEC†	998.4	9652.2	µg/L	49.88	9652.2 ppb	49.88	0.52%
Mn 257.610†	551755.8	1949.3	µg/L	28.63	1949.3 ppb	28.63	1.47%
Mo 202.031†	4775.6	518.84	µg/L	24.312	518.84 ppb	24.312	4.69%
Na 589.592 Radial†	17131.6	5366.9	µg/L	12.47	5366.9 ppb	12.47	0.23%

Ni 231.604†	10325.4	572.60 µg/L	16.493	572.60 ppb	16.493	2.88%
P 214.914†	657.5	1347.3 µg/L	46.64	1347.3 ppb	46.64	3.46%
Pb 220.353†	2022.9	547.16 µg/L	19.995	547.16 ppb	19.995	3.65%
S 181.975 Axial†	1197.1	5454.3 µg/L	165.72	5454.3 ppb	165.72	3.04%
Sb 206.836†	494.5	496.10 µg/L	18.306	496.10 ppb	18.306	3.69%
Se 196.026†	307.7	645.02 µg/L	21.272	645.02 ppb	21.272	3.30%
SiO2†	135530.5	29257 µg/L	1074.0	29257 ppb	1074.0	3.67%
Si 251.611†	166249.7	13860 µg/L	284.0	13860 ppb	284.0	2.05%
Sn 189.927†	1116.7	520.27 µg/L	24.021	520.27 ppb	24.021	4.62%
Sr 421.552†	54588.5	538.33 µg/L	0.053	538.33 ppb	0.053	0.01%
Ti 334.940†	1103964.1	2622.3 µg/L	41.16	2622.3 ppb	41.16	1.57%
Tl 190.801†	344.1	536.09 µg/L	17.726	536.09 ppb	17.726	3.31%
U 409.014†	5887.1	483.49 µg/L	14.136	483.49 ppb	14.136	2.92%
V 292.402†	55347.9	597.35 µg/L	17.173	597.35 ppb	17.173	2.87%
Zn 213.857†	30042.6	765.89 µg/L	17.270	765.89 ppb	17.270	2.25%

Sequence No.: 19

Sample ID: 1202036882|950491|5

Analyst: JWW

Initial Sample Wt:

Dilution:

Autosampler Location: 307

Date Collected: 2/23/2010 01:11:27

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202036882|950491|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	54688.8	54688.8	100	%			01:11:59
1	Al 396.153Radial†	4240.3	4239.2	3129.1	µg/L	3129.1	ppb	01:11:59
1	Ca 317.933Radial†	1400.4	1222.1	1171.3	µg/L	1171.3	ppb	01:12:19
1	Fe 238.204 Radial†	1129.0	1110.0	10252	µg/L	10252	ppb	01:12:19
1	K 766.490 Radial†	996.1	823.8	568.08	µg/L	568.08	ppb	01:11:59
1	Mg 279.077 IEC†	77.8	67.3	643.54	µg/L	643.54	ppb	01:12:19
1	Na 589.592 Radial†	642.5	251.4	78.746	µg/L	78.746	ppb	01:11:59
1	Sr 421.552†	932.1	870.2	8.5818	µg/L	8.5818	ppb	01:11:59
1	Sc 361.383	1914801.1	1914801.1	100.51	%			01:13:22
1	Y 371.029	1324923.4	1324923.4	101.17	%			01:13:22
1	Ag 328.068†	-567.9	11.7	0.7864	µg/L	0.7864	ppb	01:13:27
1	As 188.979†	1.4	1.7	3.8455	µg/L	3.8455	ppb	01:13:48
1	B 249.677†	409.3	150.6	1.3459	µg/L	1.3459	ppb	01:13:27
1	Ba 233.527†	1834.1	1853.5	49.559	µg/L	49.559	ppb	01:13:48
1	Be 313.107†	-1877.8	1937.4	1.1574	µg/L	1.1574	ppb	01:13:27
1	Cd 226.502†	-94.0	32.6	-0.2295	µg/L	-0.2295	ppb	01:13:48
1	Co 228.616†	34.1	48.6	1.9181	µg/L	1.9181	ppb	01:13:48
1	Cr 267.716†	266.7	297.7	6.6077	µg/L	6.6077	ppb	01:13:48
1	Cu 324.752†	3918.1	657.5	5.9454	µg/L	5.9454	ppb	01:13:27
1	Mn 257.610†	83834.9	83640.1	295.56	µg/L	295.56	ppb	01:13:27
1	Mo 202.031†	4.2	10.5	1.5207	µg/L	1.5207	ppb	01:13:48
1	Ni 231.604†	372.4	90.3	5.1371	µg/L	5.1371	ppb	01:13:48
1	P 214.914†	74.6	49.4	100.36	µg/L	100.36	ppb	01:13:48
1	Pb 220.353†	130.6	38.0	10.069	µg/L	10.069	ppb	01:13:48
1	S 181.975 Axial†	19.9	7.8	35.478	µg/L	35.478	ppb	01:13:48
1	Sb 206.836†	19.5	-0.3	-0.4689	µg/L	-0.4689	ppb	01:13:48
1	Se 196.026†	3.7	-8.7	13.649	µg/L	13.649	ppb	01:13:48
1	SiO2†	18621.4	16973.3	3664.0	µg/L	3664.0	ppb	01:13:27
1	Si 251.611†	20863.2	20505.3	1709.5	µg/L	1709.5	ppb	01:13:27
1	Sn 189.927†	-1.2	1.1	-0.5104	µg/L	-0.5104	ppb	01:13:48
1	Ti 334.940†	107219.0	106605.3	253.25	µg/L	253.25	ppb	01:13:27
1	Tl 190.801†	-21.9	-0.1	4.8623	µg/L	4.8623	ppb	01:13:48
1	U 409.014†	145.1	-34.0	-4.3439	µg/L	-4.3439	ppb	01:13:27
1	V 292.402†	660.5	691.8	8.5245	µg/L	8.5245	ppb	01:13:27
1	Zn 213.857†	2263.0	1813.2	46.101	µg/L	46.101	ppb	01:13:48
2	Sc RADIAL	54226.1	54226.1	99.4	%			01:12:25
2	Al 396.153Radial†	4232.1	4267.0	3149.7	µg/L	3149.7	ppb	01:12:25
2	Ca 317.933Radial†	1393.9	1227.5	1176.4	µg/L	1176.4	ppb	01:12:45
2	Fe 238.204 Radial†	1120.1	1110.7	10258	µg/L	10258	ppb	01:12:45
2	K 766.490 Radial†	1009.0	845.2	582.84	µg/L	582.84	ppb	01:12:25
2	Mg 279.077 IEC†	74.2	64.4	615.27	µg/L	615.27	ppb	01:12:45
2	Na 589.592 Radial†	639.7	254.1	79.594	µg/L	79.594	ppb	01:12:25
2	Sr 421.552†	908.9	854.8	8.4295	µg/L	8.4295	ppb	01:12:25
2	Sc 361.383	1907922.2	1907922.2	100.15	%			01:13:54
2	Y 371.029	1319360.1	1319360.1	100.74	%			01:13:54
2	Ag 328.068†	-567.6	10.0	0.7788	µg/L	0.7788	ppb	01:13:59
2	As 188.979†	3.1	3.4	7.3684	µg/L	7.3684	ppb	01:14:20
2	B 249.677†	402.2	145.0	1.0937	µg/L	1.0937	ppb	01:13:59
2	Ba 233.527†	1807.2	1833.1	49.016	µg/L	49.016	ppb	01:14:20
2	Be 313.107†	-1985.8	1822.8	1.0817	µg/L	1.0817	ppb	01:13:59
2	Cd 226.502†	-87.1	39.2	-0.0448	µg/L	-0.0448	ppb	01:14:20
2	Co 228.616†	44.1	58.8	2.4225	µg/L	2.4225	ppb	01:14:20
2	Cr 267.716†	271.0	303.0	6.7252	µg/L	6.7252	ppb	01:14:20
2	Cu 324.752†	3926.9	680.3	6.1034	µg/L	6.1034	ppb	01:13:59
2	Mn 257.610†	84827.6	84932.1	300.11	µg/L	300.11	ppb	01:13:59
2	Mo 202.031†	7.5	13.8	1.8842	µg/L	1.8842	ppb	01:14:20
2	Ni 231.604†	370.7	89.9	5.1144	µg/L	5.1144	ppb	01:14:20
2	P 214.914†	64.1	39.1	77.847	µg/L	77.847	ppb	01:14:20
2	Pb 220.353†	135.3	43.2	11.475	µg/L	11.475	ppb	01:14:20

2	S 181.975 Axial†	21.3	9.3	42.247 µg/L	42.247 ppb	01:14:20
2	Sb 206.836†	20.3	0.5	0.3379 µg/L	0.3379 ppb	01:14:20
2	Se 196.026†	7.0	-5.3	18.889 µg/L	18.889 ppb	01:14:20
2	SiO2†	18898.2	17316.6	3738.1 µg/L	3738.1 ppb	01:13:59
2	Si 251.611†	21138.0	20854.5	1738.6 µg/L	1738.6 ppb	01:13:59
2	Sn 189.927†	2.7	5.0	1.3188 µg/L	1.3188 ppb	01:14:20
2	Ti 334.940†	108580.6	108349.5	257.39 µg/L	257.39 ppb	01:13:59
2	Tl 190.801†	-22.4	-0.7	4.0530 µg/L	4.0530 ppb	01:14:20
2	U 409.014†	131.1	-47.4	-5.4727 µg/L	-5.4727 ppb	01:13:59
2	V 292.402†	736.0	769.6	9.3473 µg/L	9.3473 ppb	01:13:59
2	Zn 213.857†	2251.8	1810.1	46.022 µg/L	46.022 ppb	01:14:20
3	Sc RADIAL	54631.0	54631.0	100 %		01:12:51
3	Al 396.153Radial†	4219.1	4222.5	3116.8 µg/L	3116.8 ppb	01:12:51
3	Ca 317.933Radial†	1404.5	1227.7	1176.6 µg/L	1176.6 ppb	01:13:11
3	Fe 238.204 Radial†	1131.8	1113.9	10289 µg/L	10289 ppb	01:13:11
3	K 766.490 Radial†	1020.0	848.7	585.22 µg/L	585.22 ppb	01:12:51
3	Mg 279.077 IEC†	80.0	69.6	666.59 µg/L	666.59 ppb	01:13:11
3	Na 589.592 Radial†	622.7	232.3	72.765 µg/L	72.765 ppb	01:12:51
3	Sr 421.552†	926.5	865.6	8.5363 µg/L	8.5363 ppb	01:12:51
3	Sc 361.383	1912001.8	1912001.8	100.36 %		01:14:26
3	Y 371.029	1322147.2	1322147.2	100.96 %		01:14:26
3	Ag 328.068†	-537.8	40.9	1.0193 µg/L	1.0193 ppb	01:14:31
3	As 188.979†	0.5	0.8	2.1881 µg/L	2.1881 ppb	01:14:52
3	B 249.677†	349.0	91.1	-1.3149 µg/L	-1.3149 ppb	01:14:31
3	Ba 233.527†	1582.3	1605.2	42.924 µg/L	42.924 ppb	01:14:52
3	Be 313.107†	-1979.3	1833.4	1.0981 µg/L	1.0981 ppb	01:14:31
3	Cd 226.502†	-90.4	36.1	-0.1369 µg/L	-0.1369 ppb	01:14:52
3	Co 228.616†	38.1	52.7	2.1685 µg/L	2.1685 ppb	01:14:52
3	Cr 267.716†	230.2	261.7	5.8099 µg/L	5.8099 ppb	01:14:52
3	Cu 324.752†	3855.5	600.8	5.5608 µg/L	5.5608 ppb	01:14:31
3	Mn 257.610†	77602.0	77551.8	274.15 µg/L	274.15 ppb	01:14:31
3	Mo 202.031†	7.0	13.3	1.8270 µg/L	1.8270 ppb	01:14:52
3	Ni 231.604†	355.6	74.1	4.2378 µg/L	4.2378 ppb	01:14:52
3	P 214.914†	60.8	35.7	70.488 µg/L	70.488 ppb	01:14:52
3	Pb 220.353†	126.6	34.2	9.0359 µg/L	9.0359 ppb	01:14:52
3	S 181.975 Axial†	19.1	7.1	32.270 µg/L	32.270 ppb	01:14:52
3	Sb 206.836†	25.9	6.0	5.8965 µg/L	5.8965 ppb	01:14:52
3	Se 196.026†	5.8	-6.6	16.976 µg/L	16.976 ppb	01:14:52
3	SiO2†	17607.8	15990.5	3451.9 µg/L	3451.9 ppb	01:14:31
3	Si 251.611†	19605.9	19283.0	1607.6 µg/L	1607.6 ppb	01:14:31
3	Sn 189.927†	0.3	2.6	0.1880 µg/L	0.1880 ppb	01:14:52
3	Ti 334.940†	98270.5	97845.1	232.43 µg/L	232.43 ppb	01:14:31
3	Tl 190.801†	-30.0	-8.2	-7.0728 µg/L	-7.0728 ppb	01:14:52
3	U 409.014†	151.0	-27.9	-3.8382 µg/L	-3.8382 ppb	01:14:31
3	V 292.402†	667.5	699.8	8.6134 µg/L	8.6134 ppb	01:14:31
3	Zn 213.857†	1987.3	1541.8	39.119 µg/L	39.119 ppb	01:14:52

Mean Data: 1202036882|950491|5

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1911575.0	100.34 %	0.182			0.18%
Sc RADIAL	54515.3	100.0 %	0.46			0.46%
Y 371.029	1322143.6	100.96 %	0.212			0.21%
Ag 328.068†	20.9	0.8615 µg/L	0.13676	0.8615 ppb	0.13676	15.87%
Al 396.153Radial†	4242.9	3131.9 µg/L	16.60	3131.9 ppb	16.60	0.53%
As 188.979†	2.0	4.4673 µg/L	2.64556	4.4673 ppb	2.64556	59.22%
B 249.677†	128.9	0.3749 µg/L	1.46882	0.3749 ppb	1.46882	391.78%
Ba 233.527†	1763.9	47.166 µg/L	3.6844	47.166 ppb	3.6844	7.81%
Be 313.107†	1864.5	1.1124 µg/L	0.03984	1.1124 ppb	0.03984	3.58%
Ca 317.933Radial†	1225.8	1174.7 µg/L	3.02	1174.7 ppb	3.02	0.26%
Cd 226.502†	36.0	-0.1371 µg/L	0.09237	-0.1371 ppb	0.09237	67.38%
Co 228.616†	53.3	2.1697 µg/L	0.25218	2.1697 ppb	0.25218	11.62%
Cr 267.716†	287.5	6.3810 µg/L	0.49799	6.3810 ppb	0.49799	7.80%
Cu 324.752†	646.2	5.8699 µg/L	0.27906	5.8699 ppb	0.27906	4.75%
Fe 238.204 Radial†	1111.5	10266 µg/L	19.6	10266 ppb	19.6	0.19%
K 766.490 Radial†	839.2	578.71 µg/L	9.285	578.71 ppb	9.285	1.60%
Mg 279.077 IEC†	67.1	641.80 µg/L	25.706	641.80 ppb	25.706	4.01%
Mn 257.610†	82041.3	289.94 µg/L	13.863	289.94 ppb	13.863	4.78%
Mo 202.031†	12.5	1.7440 µg/L	0.19547	1.7440 ppb	0.19547	11.21%
Na 589.592 Radial†	245.9	77.035 µg/L	3.7225	77.035 ppb	3.7225	4.83%

Ni 231.604†	84.8	4.8298 µg/L	0.51279	4.8298 ppb	0.51279	10.62%
P 214.914†	41.4	82.900 µg/L	15.5663	82.900 ppb	15.5663	18.78%
Pb 220.353†	38.5	10.193 µg/L	1.2242	10.193 ppb	1.2242	12.01%
S 181.975 Axial†	8.0	36.665 µg/L	5.0936	36.665 ppb	5.0936	13.89%
Sb 206.836†	2.1	1.9218 µg/L	3.46574	1.9218 ppb	3.46574	180.33%
Se 196.026†	-6.9	16.505 µg/L	2.6518	16.505 ppb	2.6518	16.07%
SiO2†	16760.1	3618.0 µg/L	148.57	3618.0 ppb	148.57	4.11%
Si 251.611†	20214.3	1685.3 µg/L	68.80	1685.3 ppb	68.80	4.08%
Sn 189.927†	2.9	0.3321 µg/L	0.92310	0.3321 ppb	0.92310	277.93%
Sr 421.552†	863.5	8.5159 µg/L	0.07816	8.5159 ppb	0.07816	0.92%
Ti 334.940†	104266.6	247.69 µg/L	13.376	247.69 ppb	13.376	5.40%
Tl 190.801†	-3.0	0.6142 µg/L	6.66936	0.6142 ppb	6.66936	>999.9%
U 409.014†	-36.4	-4.5516 µg/L	0.83679	-4.5516 ppb	0.83679	18.38%
V 292.402†	720.4	8.8284 µg/L	0.45162	8.8284 ppb	0.45162	5.12%
Zn 213.857†	1721.7	43.747 µg/L	4.0086	43.747 ppb	4.0086	9.16%

Sequence No.: 20

Sample ID: 246437002|950491|1

Analyst: JWJ

Initial Sample Wt:

Dilution:

Autosampler Location: 308

Date Collected: 2/23/2010 01:15:01

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 246437002|950491|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	54819.2	54819.2	101 %		01:15:34
1	Al 396.153Radial†	28082.9	27948.0	20630 µg/L	20630 ppb	01:15:34
1	Ca 317.933Radial†	6469.4	6261.5	6000.8 µg/L	6000.8 ppb	01:15:54
1	Fe 238.204 Radial†	9113.6	9050.5	83593 µg/L	83593 ppb	01:15:34
1	K 766.490 Radial†	5799.0	5599.4	3861.3 µg/L	3861.3 ppb	01:15:34
1	Mg 279.077 IEC†	460.1	447.5	4263.7 µg/L	4263.7 ppb	01:15:54
1	Na 589.592 Radial†	1607.4	1209.8	378.99 µg/L	378.99 ppb	01:15:34
1	Sr 421.552†	5106.5	5020.7	49.513 µg/L	49.513 ppb	01:15:34
1	Sc 361.383	1907060.5	1907060.5	100.10 %		01:16:58
1	Y 371.029	1369015.9	1369015.9	104.54 %		01:16:58
1	Ag 328.068†	-1422.8	-844.6	-0.9874 µg/L	-0.9874 ppb	01:17:04
1	As 188.979†	2.2	2.5	9.4855 µg/L	9.4855 ppb	01:17:24
1	B 249.677†	726.7	469.4	-22.699 µg/L	-22.699 ppb	01:17:04
1	Ba 233.527†	11617.4	11634.2	311.11 µg/L	311.11 ppb	01:17:04
1	Be 313.107†	5365.1	9165.4	5.1044 µg/L	5.1044 ppb	01:17:04
1	Cd 226.502†	150.6	276.6	-1.5791 µg/L	-1.5791 ppb	01:17:24
1	Co 228.616†	402.2	416.5	16.442 µg/L	16.442 ppb	01:17:24
1	Cr 267.716†	2264.3	2294.4	50.932 µg/L	50.932 ppb	01:17:24
1	Cu 324.752†	6447.2	3199.9	33.620 µg/L	33.620 ppb	01:17:04
1	Mn 257.610†	644915.4	644490.1	2278.1 µg/L	2278.1 ppb	01:16:58
1	Mo 202.031†	55.9	62.2	9.8979 µg/L	9.8979 ppb	01:17:24
1	Ni 231.604†	931.2	650.1	37.098 µg/L	37.098 ppb	01:17:24
1	P 214.914†	359.5	334.2	670.20 µg/L	670.20 ppb	01:17:24
1	Pb 220.353†	328.6	236.4	61.987 µg/L	61.987 ppb	01:17:24
1	S 181.975 Axial†	52.8	40.8	185.72 µg/L	185.72 ppb	01:17:24
1	Sb 206.836†	26.3	6.5	5.5262 µg/L	5.5262 ppb	01:17:24
1	Se 196.026†	-38.4	-50.7	144.37 µg/L	144.37 ppb	01:17:24
1	SiO2†	93149.9	91501.5	19752 µg/L	19752 ppb	01:17:04
1	Si 251.611†	110733.2	110368.4	9201.4 µg/L	9201.4 ppb	01:17:04
1	Sn 189.927†	212.9	215.0	92.878 µg/L	92.878 ppb	01:17:24
1	Ti 334.940†	915216.0	914215.8	2171.8 µg/L	2171.8 ppb	01:16:58
1	Tl 190.801†	-48.1	-26.4	3.0137 µg/L	3.0137 ppb	01:17:24
1	U 409.014†	-747.2	-924.8	-89.473 µg/L	-89.473 ppb	01:16:58
1	V 292.402†	5849.5	5878.3	71.924 µg/L	71.924 ppb	01:17:04
1	Zn 213.857†	14632.3	14179.1	360.42 µg/L	360.42 ppb	01:17:04
2	Sc RADIAL	54759.6	54759.6	100 %		01:16:00
2	Al 396.153Radial†	28092.9	27988.4	20660 µg/L	20660 ppb	01:16:00
2	Ca 317.933Radial†	6469.8	6268.9	6007.9 µg/L	6007.9 ppb	01:16:20
2	Fe 238.204 Radial†	9064.9	9011.8	83236 µg/L	83236 ppb	01:16:00
2	K 766.490 Radial†	5828.2	5634.8	3885.6 µg/L	3885.6 ppb	01:16:00
2	Mg 279.077 IEC†	464.4	452.3	4311.1 µg/L	4311.1 ppb	01:16:20
2	Na 589.592 Radial†	1578.0	1182.2	370.37 µg/L	370.37 ppb	01:16:00
2	Sr 421.552†	5074.0	4993.9	49.248 µg/L	49.248 ppb	01:16:00
2	Sc 361.383	1922254.8	1922254.8	100.90 %		01:17:32
2	Y 371.029	1381016.9	1381016.9	105.45 %		01:17:32
2	Ag 328.068†	-1385.9	-796.7	-0.6296 µg/L	-0.6296 ppb	01:17:37
2	As 188.979†	6.6	6.9	18.167 µg/L	18.167 ppb	01:17:58
2	B 249.677†	701.6	438.8	-23.871 µg/L	-23.871 ppb	01:17:37
2	Ba 233.527†	11703.3	11627.6	310.94 µg/L	310.94 ppb	01:17:37
2	Be 313.107†	5560.0	9316.1	5.2022 µg/L	5.2022 ppb	01:17:37
2	Cd 226.502†	150.3	275.1	-1.5820 µg/L	-1.5820 ppb	01:17:58
2	Co 228.616†	409.0	420.0	16.624 µg/L	16.624 ppb	01:17:58
2	Cr 267.716†	2273.1	2285.2	50.728 µg/L	50.728 ppb	01:17:58
2	Cu 324.752†	6429.1	3131.0	33.097 µg/L	33.097 ppb	01:17:37
2	Mn 257.610†	648537.2	642987.2	2272.8 µg/L	2272.8 ppb	01:17:32
2	Mo 202.031†	63.7	69.5	10.673 µg/L	10.673 ppb	01:17:58
2	Ni 231.604†	926.8	638.3	36.438 µg/L	36.438 ppb	01:17:58
2	P 214.914†	367.7	339.6	682.23 µg/L	682.23 ppb	01:17:58
2	Pb 220.353†	317.9	223.1	58.414 µg/L	58.414 ppb	01:17:58

2	S 181.975 Axial†	52.4	40.0	182.19 µg/L	182.19 ppb	01:17:58
2	Sb 206.836†	26.1	6.1	5.1138 µg/L	5.1138 ppb	01:17:58
2	Se 196.026†	-24.9	-37.1	164.50 µg/L	164.50 ppb	01:17:58
2	SiO2†	93634.7	91246.3	19697 µg/L	19697 ppb	01:17:37
2	Si 251.611†	111130.1	109887.4	9161.3 µg/L	9161.3 ppb	01:17:37
2	Sn 189.927†	210.4	210.8	90.956 µg/L	90.956 ppb	01:17:58
2	Ti 334.940†	922249.2	913959.4	2171.2 µg/L	2171.2 ppb	01:17:32
2	Tl 190.801†	-45.3	-23.2	7.5709 µg/L	7.5709 ppb	01:17:58
2	U 409.014†	-829.6	-1000.5	-95.771 µg/L	-95.771 ppb	01:17:32
2	V 292.402†	5940.5	5922.3	72.346 µg/L	72.346 ppb	01:17:37
2	Zn 213.857†	14707.7	14138.3	359.39 µg/L	359.39 ppb	01:17:37
3	Sc RADIAL	55047.7	55047.7	101 %		01:16:26
3	Al 396.153Radial†	28208.4	27956.4	20636 µg/L	20636 ppb	01:16:26
3	Ca 317.933Radial†	6518.0	6282.9	6021.3 µg/L	6021.3 ppb	01:16:46
3	Fe 238.204 Radial†	9083.7	8983.2	82972 µg/L	82972 ppb	01:16:26
3	K 766.490 Radial†	5749.4	5526.3	3810.8 µg/L	3810.8 ppb	01:16:26
3	Mg 279.077 IEC†	471.6	456.9	4356.8 µg/L	4356.8 ppb	01:16:46
3	Na 589.592 Radial†	1610.6	1206.3	377.91 µg/L	377.91 ppb	01:16:26
3	Sr 421.552†	5122.6	5015.6	49.462 µg/L	49.462 ppb	01:16:26
3	Sc 361.383	1914496.1	1914496.1	100.49 %		01:18:05
3	Y 371.029	1372746.6	1372746.6	104.82 %		01:18:05
3	Ag 328.068†	-1376.2	-792.7	-0.6306 µg/L	-0.6306 ppb	01:18:11
3	As 188.979†	6.6	6.9	18.178 µg/L	18.178 ppb	01:18:31
3	B 249.677†	687.4	427.4	-24.245 µg/L	-24.245 ppb	01:18:11
3	Ba 233.527†	11257.5	11231.0	300.33 µg/L	300.33 ppb	01:18:11
3	Be 313.107†	5088.6	8869.4	4.9358 µg/L	4.9358 ppb	01:18:11
3	Cd 226.502†	131.8	257.3	-2.0593 µg/L	-2.0593 ppb	01:18:31
3	Co 228.616†	363.5	376.4	14.552 µg/L	14.552 ppb	01:18:31
3	Cr 267.716†	2027.5	2049.9	45.507 µg/L	45.507 ppb	01:18:31
3	Cu 324.752†	6402.7	3130.6	33.057 µg/L	33.057 ppb	01:18:11
3	Mn 257.610†	630705.7	627847.7	2219.5 µg/L	2219.5 ppb	01:18:05
3	Mo 202.031†	55.1	61.2	9.7648 µg/L	9.7648 ppb	01:18:31
3	Ni 231.604†	875.4	590.8	33.808 µg/L	33.808 ppb	01:18:31
3	P 214.914†	346.2	319.6	638.55 µg/L	638.55 ppb	01:18:31
3	Pb 220.353†	302.6	209.2	54.644 µg/L	54.644 ppb	01:18:31
3	S 181.975 Axial†	45.5	33.3	151.79 µg/L	151.79 ppb	01:18:31
3	Sb 206.836†	24.1	4.2	3.3144 µg/L	3.3144 ppb	01:18:31
3	Se 196.026†	-28.8	-41.0	157.57 µg/L	157.57 ppb	01:18:31
3	SiO2†	91147.6	89147.5	19244 µg/L	19244 ppb	01:18:11
3	Si 251.611†	108307.4	107524.9	8964.3 µg/L	8964.3 ppb	01:18:11
3	Sn 189.927†	195.4	196.7	84.336 µg/L	84.336 ppb	01:18:31
3	Ti 334.940†	893345.9	888901.8	2111.7 µg/L	2111.7 ppb	01:18:05
3	Tl 190.801†	-42.6	-20.7	10.282 µg/L	10.282 ppb	01:18:31
3	U 409.014†	-691.2	-866.2	-84.476 µg/L	-84.476 ppb	01:18:05
3	V 292.402†	5678.3	5685.1	69.806 µg/L	69.806 ppb	01:18:11
3	Zn 213.857†	14171.6	13663.8	347.21 µg/L	347.21 ppb	01:18:11

Mean Data: 246437002|950491|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1914603.8	100.50 %	0.399			0.40%
Sc RADIAL	54875.5	101 %	0.3			0.28%
Y 371.029	1374259.8	104.94 %	0.469			0.45%
Ag 328.068†	-811.3	-0.7492 µg/L	0.20627	-0.7492 ppb	0.20627	27.53%
Al 396.153Radial†	27964.3	20642 µg/L	15.7	20642 ppb	15.7	0.08%
As 188.979†	5.4	15.277 µg/L	5.0156	15.277 ppb	5.0156	32.83%
B 249.677†	445.2	-23.605 µg/L	0.8070	-23.605 ppb	0.8070	3.42%
Ba 233.527†	11497.6	307.46 µg/L	6.175	307.46 ppb	6.175	2.01%
Be 313.107†	9116.9	5.0808 µg/L	0.13479	5.0808 ppb	0.13479	2.65%
Ca 317.933Radial†	6271.1	6010.0 µg/L	10.42	6010.0 ppb	10.42	0.17%
Cd 226.502†	269.7	-1.7402 µg/L	0.27640	-1.7402 ppb	0.27640	15.88%
Co 228.616†	404.3	15.872 µg/L	1.1476	15.872 ppb	1.1476	7.23%
Cr 267.716†	2209.8	49.056 µg/L	3.0750	49.056 ppb	3.0750	6.27%
Cu 324.752†	3153.8	33.258 µg/L	0.3141	33.258 ppb	0.3141	0.94%
Fe 238.204 Radial†	9015.2	83267 µg/L	311.9	83267 ppb	311.9	0.37%
K 766.490 Radial†	5586.8	3852.6 µg/L	38.14	3852.6 ppb	38.14	0.99%
Mg 279.077 IEC†	452.2	4310.5 µg/L	46.52	4310.5 ppb	46.52	1.08%
Mn 257.610†	638441.7	2256.8 µg/L	32.42	2256.8 ppb	32.42	1.44%
Mo 202.031†	64.3	10.112 µg/L	0.4907	10.112 ppb	0.4907	4.85%
Na 589.592 Radial†	1199.4	375.76 µg/L	4.698	375.76 ppb	4.698	1.25%

Ni 231.604†	626.4	35.781 µg/L	1.7402	35.781 ppb	1.7402	4.86%
P 214.914†	331.1	663.66 µg/L	22.559	663.66 ppb	22.559	3.40%
Pb 220.353†	222.9	58.348 µg/L	3.6717	58.348 ppb	3.6717	6.29%
S 181.975 Axial†	38.0	173.23 µg/L	18.656	173.23 ppb	18.656	10.77%
Sb 206.836†	5.6	4.6515 µg/L	1.17619	4.6515 ppb	1.17619	25.29%
Se 196.026†	-42.9	155.48 µg/L	10.228	155.48 ppb	10.228	6.58%
SiO2†	90631.8	19565 µg/L	278.8	19565 ppb	278.8	1.43%
Si 251.611†	109260.2	9109.0 µg/L	126.89	9109.0 ppb	126.89	1.39%
Sn 189.927†	207.5	89.390 µg/L	4.4811	89.390 ppb	4.4811	5.01%
Sr 421.552†	5010.1	49.408 µg/L	0.1403	49.408 ppb	0.1403	0.28%
Ti 334.940†	905692.3	2151.6 µg/L	34.55	2151.6 ppb	34.55	1.61%
Tl 190.801†	-23.4	6.9557 µg/L	3.67321	6.9557 ppb	3.67321	52.81%
U 409.014†	-930.5	-89.906 µg/L	5.6598	-89.906 ppb	5.6598	6.30%
V 292.402†	5828.5	71.359 µg/L	1.3608	71.359 ppb	1.3608	1.91%
Zn 213.857†	13993.7	355.68 µg/L	7.351	355.68 ppb	7.351	2.07%



Sequence No.: 21

Sample ID: 246437003|950491|1

Analyst: JWJ

Initial Sample Wt:

Dilution:

Autosampler Location: 309

Date Collected: 2/23/2010 01:18:41

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 246437003|950491|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	54210.3	54210.3	99.4 %		01:19:14
1	Al 396.153Radial†	33968.9	34183.1	25232 µg/L	25232 ppb	01:19:14
1	Ca 317.933Radial†	7074.4	6942.4	6653.4 µg/L	6653.4 ppb	01:19:14
1	Fe 238.204 Radial†	7975.2	8007.2	73957 µg/L	73957 ppb	01:19:14
1	K 766.490 Radial†	5350.0	5212.5	3594.4 µg/L	3594.4 ppb	01:19:14
1	Mg 279.077 IEC†	499.1	491.8	4705.3 µg/L	4705.3 ppb	01:19:34
1	Na 589.592 Radial†	2105.2	1728.5	541.48 µg/L	541.48 ppb	01:19:14
1	Sr 421.552†	5623.5	5597.9	55.204 µg/L	55.204 ppb	01:19:14
1	Sc 361.383	1905640.6	1905640.6	100.03 %		01:20:38
1	Y 371.029	1383384.7	1383384.7	105.63 %		01:20:38
1	Ag 328.068†	-1378.1	-800.9	-1.2517 µg/L	-1.2517 ppb	01:20:44
1	As 188.979†	7.6	7.9	19.753 µg/L	19.753 ppb	01:21:04
1	B 249.677†	650.5	393.7	-21.002 µg/L	-21.002 ppb	01:20:44
1	Ba 233.527†	13591.9	13616.8	364.11 µg/L	364.11 ppb	01:20:44
1	Be 313.107†	7088.9	10892.7	6.3293 µg/L	6.3293 ppb	01:20:44
1	Cd 226.502†	129.1	255.2	-1.0862 µg/L	-1.0862 ppb	01:20:44
1	Co 228.616†	314.0	328.6	12.603 µg/L	12.603 ppb	01:21:04
1	Cr 267.716†	3013.0	3044.5	67.571 µg/L	67.571 ppb	01:20:44
1	Cu 324.752†	7297.0	4054.3	38.155 µg/L	38.155 ppb	01:20:44
1	Mn 257.610†	635281.3	635338.6	2244.6 µg/L	2244.6 ppb	01:20:38
1	Mo 202.031†	44.8	51.0	8.3287 µg/L	8.3287 ppb	01:21:04
1	Ni 231.604†	1133.1	852.6	48.205 µg/L	48.205 ppb	01:21:04
1	P 214.914†	295.0	270.0	536.62 µg/L	536.62 ppb	01:21:04
1	Pb 220.353†	326.0	234.0	61.946 µg/L	61.946 ppb	01:21:04
1	S 181.975 Axial†	38.3	26.3	119.77 µg/L	119.77 ppb	01:21:04
1	Sb 206.836†	22.7	3.0	1.7253 µg/L	1.7253 ppb	01:21:04
1	Se 196.026†	-25.1	-37.4	138.05 µg/L	138.05 ppb	01:21:04
1	SiO2†	115838.1	114252.8	24664 µg/L	24664 ppb	01:20:44
1	Si 251.611†	139287.0	138996.9	11588 µg/L	11588 ppb	01:20:38
1	Sn 189.927†	19.6	21.9	2.9477 µg/L	2.9477 ppb	01:21:04
1	Ti 334.940†	796421.7	796134.8	1891.2 µg/L	1891.2 ppb	01:20:38
1	Tl 190.801†	-41.0	-19.3	9.5624 µg/L	9.5624 ppb	01:21:04
1	U 409.014†	-683.6	-861.8	-82.898 µg/L	-82.898 ppb	01:20:38
1	V 292.402†	5822.5	5855.6	70.586 µg/L	70.586 ppb	01:20:44
1	Zn 213.857†	13066.2	12624.2	320.79 µg/L	320.79 ppb	01:20:44
2	Sc RADIAL	54572.0	54572.0	100 %		01:19:39
2	Al 396.153Radial†	34285.1	34272.6	25298 µg/L	25298 ppb	01:19:39
2	Ca 317.933Radial†	7125.9	6946.7	6657.5 µg/L	6657.5 ppb	01:19:39
2	Fe 238.204 Radial†	8013.8	7992.6	73822 µg/L	73822 ppb	01:19:39
2	K 766.490 Radial†	5398.7	5225.5	3603.4 µg/L	3603.4 ppb	01:19:39
2	Mg 279.077 IEC†	501.8	491.2	4700.1 µg/L	4700.1 ppb	01:20:00
2	Na 589.592 Radial†	2104.1	1713.4	536.76 µg/L	536.76 ppb	01:19:39
2	Sr 421.552†	5692.8	5629.6	55.517 µg/L	55.517 ppb	01:19:39
2	Sc 361.383	1899294.4	1899294.4	99.694 %		01:21:12
2	Y 371.029	1378816.1	1378816.1	105.28 %		01:21:12
2	Ag 328.068†	-1304.0	-731.2	-0.7085 µg/L	-0.7085 ppb	01:21:18
2	As 188.979†	11.0	11.4	26.595 µg/L	26.595 ppb	01:21:38
2	B 249.677†	627.5	372.8	-21.860 µg/L	-21.860 ppb	01:21:18
2	Ba 233.527†	13681.4	13752.0	367.72 µg/L	367.72 ppb	01:21:18
2	Be 313.107†	7240.8	11068.7	6.4415 µg/L	6.4415 ppb	01:21:18
2	Cd 226.502†	157.5	284.2	-0.2500 µg/L	-0.2500 ppb	01:21:18
2	Co 228.616†	309.7	325.3	12.427 µg/L	12.427 ppb	01:21:38
2	Cr 267.716†	3065.2	3106.9	68.955 µg/L	68.955 ppb	01:21:18
2	Cu 324.752†	7335.4	4117.1	38.568 µg/L	38.568 ppb	01:21:18
2	Mn 257.610†	633455.2	635629.2	2245.6 µg/L	2245.6 ppb	01:21:12
2	Mo 202.031†	43.2	49.7	8.1756 µg/L	8.1756 ppb	01:21:38
2	Ni 231.604†	1133.3	856.5	48.421 µg/L	48.421 ppb	01:21:38
2	P 214.914†	297.2	273.3	543.75 µg/L	543.75 ppb	01:21:38
2	Pb 220.353†	329.0	238.1	63.050 µg/L	63.050 ppb	01:21:38

2	S 181.975 Axial†	33.6	21.8	99.146 µg/L	99.146 ppb	01:21:38
2	Sb 206.836†	30.3	10.6	9.3790 µg/L	9.3790 ppb	01:21:38
2	Se 196.026†	-28.6	-41.0	132.07 µg/L	132.07 ppb	01:21:38
2	SiO2†	116525.7	115329.6	24896 µg/L	24896 ppb	01:21:18
2	Si 251.611†	139226.0	139401.0	11622 µg/L	11622 ppb	01:21:12
2	Sn 189.927†	18.7	21.1	2.6010 µg/L	2.6010 ppb	01:21:38
2	Ti 334.940†	795630.0	798001.1	1895.7 µg/L	1895.7 ppb	01:21:12
2	Tl 190.801†	-34.5	-12.9	18.855 µg/L	18.855 ppb	01:21:38
2	U 409.014†	-672.2	-852.6	-82.111 µg/L	-82.111 ppb	01:21:12
2	V 292.402†	5832.9	5885.4	70.887 µg/L	70.887 ppb	01:21:18
2	Zn 213.857†	13130.2	12732.1	323.57 µg/L	323.57 ppb	01:21:18
3	Sc RADIAL	54915.3	54915.3	101 %		01:20:05
3	Al 396.153Radial†	34299.7	34072.9	25151 µg/L	25151 ppb	01:20:05
3	Ca 317.933Radial†	7135.8	6912.0	6624.2 µg/L	6624.2 ppb	01:20:05
3	Fe 238.204 Radial†	8031.4	7960.0	73520 µg/L	73520 ppb	01:20:05
3	K 766.490 Radial†	5423.9	5216.8	3597.4 µg/L	3597.4 ppb	01:20:05
3	Mg 279.077 IEC†	500.6	486.9	4658.0 µg/L	4658.0 ppb	01:20:26
3	Na 589.592 Radial†	2064.4	1660.8	520.30 µg/L	520.30 ppb	01:20:05
3	Sr 421.552†	5730.0	5631.0	55.531 µg/L	55.531 ppb	01:20:05
3	Sc 361.383	1922484.7	1922484.7	100.91 %		01:21:46
3	Y 371.029	1393039.9	1393039.9	106.37 %		01:21:46
3	Ag 328.068†	-1281.8	-693.5	-0.4489 µg/L	-0.4489 ppb	01:21:51
3	As 188.979†	7.9	8.1	20.103 µg/L	20.103 ppb	01:22:12
3	B 249.677†	670.1	407.4	-20.171 µg/L	-20.171 ppb	01:21:51
3	Ba 233.527†	13249.5	13158.5	351.85 µg/L	351.85 ppb	01:21:51
3	Be 313.107†	6778.7	10523.2	6.1051 µg/L	6.1051 ppb	01:21:51
3	Cd 226.502†	122.6	247.6	-1.2539 µg/L	-1.2539 ppb	01:21:51
3	Co 228.616†	297.7	309.7	11.731 µg/L	11.731 ppb	01:22:12
3	Cr 267.716†	2925.8	2931.7	65.068 µg/L	65.068 ppb	01:21:51
3	Cu 324.752†	7224.1	3918.1	37.158 µg/L	37.158 ppb	01:21:51
3	Mn 257.610†	630539.3	625074.9	2208.4 µg/L	2208.4 ppb	01:21:46
3	Mo 202.031†	31.5	37.6	6.8550 µg/L	6.8550 ppb	01:22:12
3	Ni 231.604†	1093.8	803.7	45.486 µg/L	45.486 ppb	01:22:12
3	P 214.914†	273.0	245.6	483.46 µg/L	483.46 ppb	01:22:12
3	Pb 220.353†	317.2	222.4	58.803 µg/L	58.803 ppb	01:22:12
3	S 181.975 Axial†	33.1	20.8	94.868 µg/L	94.868 ppb	01:22:12
3	Sb 206.836†	26.1	6.1	4.8285 µg/L	4.8285 ppb	01:22:12
3	Se 196.026†	-11.1	-23.3	158.77 µg/L	158.77 ppb	01:22:12
3	SiO2†	113831.4	111249.6	24016 µg/L	24016 ppb	01:21:51
3	Si 251.611†	138828.0	137322.1	11448 µg/L	11448 ppb	01:21:46
3	Sn 189.927†	18.2	20.3	2.2691 µg/L	2.2691 ppb	01:22:12
3	Ti 334.940†	786819.6	779643.3	1852.1 µg/L	1852.1 ppb	01:21:46
3	Tl 190.801†	-41.4	-19.3	9.0735 µg/L	9.0735 ppb	01:22:12
3	U 409.014†	-588.6	-761.6	-74.442 µg/L	-74.442 ppb	01:21:46
3	V 292.402†	5622.5	5606.4	67.898 µg/L	67.898 ppb	01:21:51
3	Zn 213.857†	12799.9	12245.9	311.09 µg/L	311.09 ppb	01:21:51

-----  
Mean Data: 246437003|950491|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1909139.9	100.21	%	0.629			0.63%
Sc RADIAL	54565.9	100	%	0.6			0.65%
Y 371.029	1385080.3	105.76	%	0.555			0.52%
Ag 328.068†	-741.9	-0.8031	µg/L	0.40968	-0.8031 ppb	0.40968	51.01%
Al 396.153Radial†	34176.2	25227	µg/L	73.8	25227 ppb	73.8	0.29%
As 188.979†	9.2	22.151	µg/L	3.8533	22.151 ppb	3.8533	17.40%
B 249.677†	391.3	-21.011	µg/L	0.8449	-21.011 ppb	0.8449	4.02%
Ba 233.527†	13509.1	361.23	µg/L	8.318	361.23 ppb	8.318	2.30%
Be 313.107†	10828.2	6.2920	µg/L	0.17131	6.2920 ppb	0.17131	2.72%
Ca 317.933Radial†	6933.7	6645.0	µg/L	18.13	6645.0 ppb	18.13	0.27%
Cd 226.502†	262.3	-0.8634	µg/L	0.53776	-0.8634 ppb	0.53776	62.29%
Co 228.616†	321.2	12.254	µg/L	0.4610	12.254 ppb	0.4610	3.76%
Cr 267.716†	3027.7	67.198	µg/L	1.9702	67.198 ppb	1.9702	2.93%
Cu 324.752†	4029.8	37.960	µg/L	0.7249	37.960 ppb	0.7249	1.91%
Fe 238.204 Radial†	7986.6	73766	µg/L	223.3	73766 ppb	223.3	0.30%
K 766.490 Radial†	5218.3	3598.4	µg/L	4.57	3598.4 ppb	4.57	0.13%
Mg 279.077 IEC†	490.0	4687.8	µg/L	25.93	4687.8 ppb	25.93	0.55%
Mn 257.610†	632014.2	2232.9	µg/L	21.17	2232.9 ppb	21.17	0.95%
Mo 202.031†	46.1	7.7864	µg/L	0.81023	7.7864 ppb	0.81023	10.41%
Na 589.592 Radial†	1700.9	532.85	µg/L	11.121	532.85 ppb	11.121	2.09%

Ni 231.604†	837.6	47.371 µg/L	1.6353	47.371 ppb	1.6353	3.45%
P 214.914†	263.0	521.28 µg/L	32.947	521.28 ppb	32.947	6.32%
Pb 220.353†	231.5	61.267 µg/L	2.2039	61.267 ppb	2.2039	3.60%
S 181.975 Axial†	23.0	104.60 µg/L	13.317	104.60 ppb	13.317	12.73%
Sb 206.836†	6.6	5.3109 µg/L	3.84957	5.3109 ppb	3.84957	72.48%
Se 196.026†	-33.9	142.96 µg/L	14.012	142.96 ppb	14.012	9.80%
SiO2†	113610.7	24525 µg/L	456.4	24525 ppb	456.4	1.86%
Si 251.611†	138573.3	11553 µg/L	91.9	11553 ppb	91.9	0.80%
Sn 189.927†	21.1	2.6059 µg/L	0.33937	2.6059 ppb	0.33937	13.02%
Sr 421.552†	5619.5	55.418 µg/L	0.1849	55.418 ppb	0.1849	0.33%
Ti 334.940†	791259.7	1879.7 µg/L	24.00	1879.7 ppb	24.00	1.28%
Tl 190.801†	-17.2	12.497 µg/L	5.5115	12.497 ppb	5.5115	44.10%
U 409.014†	-825.4	-79.817 µg/L	4.6714	-79.817 ppb	4.6714	5.85%
V 292.402†	5782.5	69.791 µg/L	1.6457	69.791 ppb	1.6457	2.36%
Zn 213.857†	12534.1	318.49 µg/L	6.551	318.49 ppb	6.551	2.06%

Sequence No.: 22

Sample ID: 246437004|950491|1

Analyst: JWJ

Initial Sample Wt:

Dilution:

Autosampler Location: 310

Date Collected: 2/23/2010 01:22:21

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 246437004|950491|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	54638.3	54638.3	100 %		01:22:54
1	Al 396.153Radial†	15321.0	15302.8	11296 µg/L	11296 ppb	01:22:54
1	Ca 317.933Radial†	3600.9	3419.8	3277.4 µg/L	3277.4 ppb	01:23:14
1	Fe 238.204 Radial†	6572.8	6544.5	60447 µg/L	60447 ppb	01:22:54
1	K 766.490 Radial†	3207.9	3032.3	2091.0 µg/L	2091.0 ppb	01:22:54
1	Mg 279.077 IEC†	245.2	234.5	2216.4 µg/L	2216.4 ppb	01:23:14
1	Na 589.592 Radial†	1853.0	1460.2	457.45 µg/L	457.45 ppb	01:22:54
1	Sr 421.552†	2537.2	2473.1	24.388 µg/L	24.388 ppb	01:22:54
1	Sc 361.383	1919709.5	1919709.5	100.77 %		01:24:18
1	Y 371.029	1369449.9	1369449.9	104.57 %		01:24:18
1	Ag 328.068†	-1184.3	-598.5	-0.6695 µg/L	-0.6695 ppb	01:24:24
1	As 188.979†	-0.4	-0.1	3.1464 µg/L	3.1464 ppb	01:24:44
1	B 249.677†	557.5	296.6	-18.185 µg/L	-18.185 ppb	01:24:24
1	Ba 233.527†	6018.7	6001.5	160.50 µg/L	160.50 ppb	01:24:24
1	Be 313.107†	3003.8	6786.6	3.7099 µg/L	3.7099 ppb	01:24:24
1	Cd 226.502†	66.8	192.4	-1.3206 µg/L	-1.3206 ppb	01:24:24
1	Co 228.616†	240.6	253.5	9.0286 µg/L	9.0286 ppb	01:24:44
1	Cr 267.716†	5283.4	5275.6	117.05 µg/L	117.05 ppb	01:24:24
1	Cu 324.752†	5662.5	2378.7	24.757 µg/L	24.757 ppb	01:24:24
1	Mn 257.610†	454462.0	451238.5	1595.3 µg/L	1595.3 ppb	01:24:18
1	Mo 202.031†	47.4	53.4	8.0671 µg/L	8.0671 ppb	01:24:44
1	Ni 231.604†	1408.1	1117.2	62.699 µg/L	62.699 ppb	01:24:44
1	P 214.914†	279.8	252.8	508.61 µg/L	508.61 ppb	01:24:44
1	Pb 220.353†	220.9	127.2	32.793 µg/L	32.793 ppb	01:24:44
1	S 181.975 Axial†	26.3	14.1	64.231 µg/L	64.231 ppb	01:24:44
1	Sb 206.836†	32.4	12.4	10.873 µg/L	10.873 ppb	01:24:44
1	Se 196.026†	-16.2	-28.5	118.18 µg/L	118.18 ppb	01:24:44
1	SiO2†	77763.9	75619.2	16324 µg/L	16324 ppb	01:24:24
1	Si 251.611†	92075.2	91123.2	7596.9 µg/L	7596.9 ppb	01:24:24
1	Sn 189.927†	241.2	241.7	107.70 µg/L	107.70 ppb	01:24:44
1	Ti 334.940†	759871.9	754027.5	1791.3 µg/L	1791.3 ppb	01:24:18
1	Tl 190.801†	-47.9	-25.8	-6.0183 µg/L	-6.0183 ppb	01:24:44
1	U 409.014†	-371.6	-547.2	-54.450 µg/L	-54.450 ppb	01:24:24
1	V 292.402†	3502.7	3510.8	44.409 µg/L	44.409 ppb	01:24:24
1	Zn 213.857†	12316.4	11784.4	299.92 µg/L	299.92 ppb	01:24:24
2	Sc RADIAL	54321.7	54321.7	99.6 %		01:23:20
2	Al 396.153Radial†	15301.8	15372.6	11347 µg/L	11347 ppb	01:23:20
2	Ca 317.933Radial†	3599.7	3439.6	3296.3 µg/L	3296.3 ppb	01:23:41
2	Fe 238.204 Radial†	6599.4	6609.5	61047 µg/L	61047 ppb	01:23:20
2	K 766.490 Radial†	3207.3	3050.3	2103.5 µg/L	2103.5 ppb	01:23:20
2	Mg 279.077 IEC†	242.6	233.2	2203.9 µg/L	2203.9 ppb	01:23:41
2	Na 589.592 Radial†	1855.1	1473.0	461.47 µg/L	461.47 ppb	01:23:20
2	Sr 421.552†	2537.9	2488.5	24.541 µg/L	24.541 ppb	01:23:20
2	Sc 361.383	1921414.9	1921414.9	100.85 %		01:24:51
2	Y 371.029	1371896.2	1371896.2	104.76 %		01:24:51
2	Ag 328.068†	-1122.8	-536.5	-0.1434 µg/L	-0.1434 ppb	01:24:57
2	As 188.979†	2.6	2.8	9.0244 µg/L	9.0244 ppb	01:25:17
2	B 249.677†	544.1	282.9	-19.111 µg/L	-19.111 ppb	01:24:57
2	Ba 233.527†	5943.9	5922.2	158.37 µg/L	158.37 ppb	01:24:57
2	Be 313.107†	2906.5	6687.5	3.6427 µg/L	3.6427 ppb	01:24:57
2	Cd 226.502†	66.3	191.9	-1.4033 µg/L	-1.4033 ppb	01:24:57
2	Co 228.616†	247.2	259.8	9.3296 µg/L	9.3296 ppb	01:25:17
2	Cr 267.716†	5183.5	5171.9	114.74 µg/L	114.74 ppb	01:24:57
2	Cu 324.752†	5690.2	2401.1	24.994 µg/L	24.994 ppb	01:24:57
2	Mn 257.610†	457334.0	453685.8	1604.0 µg/L	1604.0 ppb	01:24:51
2	Mo 202.031†	45.9	51.8	7.9236 µg/L	7.9236 ppb	01:25:17
2	Ni 231.604†	1419.6	1127.3	63.270 µg/L	63.270 ppb	01:25:17
2	P 214.914†	287.8	260.5	524.88 µg/L	524.88 ppb	01:25:17
2	Pb 220.353†	226.8	132.9	34.306 µg/L	34.306 ppb	01:25:17

2	S 181.975 Axial†	24.3	12.1	55.098 µg/L	55.098 ppb	01:25:17
2	Sb 206.836†	31.9	11.9	10.435 µg/L	10.435 ppb	01:25:17
2	Se 196.026†	-16.5	-28.7	119.44 µg/L	119.44 ppb	01:25:17
2	SiO2†	76587.0	74383.8	16057 µg/L	16057 ppb	01:24:57
2	Si 251.611†	90458.1	89438.7	7456.5 µg/L	7456.5 ppb	01:24:57
2	Sn 189.927†	241.9	242.2	107.86 µg/L	107.86 ppb	01:25:17
2	Ti 334.940†	763918.9	757370.9	1799.3 µg/L	1799.3 ppb	01:24:51
2	Tl 190.801†	-43.5	-21.4	0.5312 µg/L	0.5312 ppb	01:25:17
2	U 409.014†	-244.5	-420.8	-43.946 µg/L	-43.946 ppb	01:24:57
2	V 292.402†	3487.6	3492.7	44.294 µg/L	44.294 ppb	01:24:57
2	Zn 213.857†	12197.8	11656.0	296.58 µg/L	296.58 ppb	01:24:57
3	Sc RADIAL	54629.0	54629.0	100 %		01:23:46
3	Al 396.153Radial†	15268.0	15252.5	11259 µg/L	11259 ppb	01:23:46
3	Ca 317.933Radial†	3577.8	3397.4	3255.9 µg/L	3255.9 ppb	01:24:06
3	Fe 238.204 Radial†	6534.5	6507.4	60104 µg/L	60104 ppb	01:23:46
3	K 766.490 Radial†	3219.2	3044.2	2099.2 µg/L	2099.2 ppb	01:23:46
3	Mg 279.077 IEC†	243.1	232.4	2196.6 µg/L	2196.6 ppb	01:24:06
3	Na 589.592 Radial†	1851.7	1459.2	457.12 µg/L	457.12 ppb	01:23:46
3	Sr 421.552†	2534.5	2470.8	24.366 µg/L	24.366 ppb	01:23:46
3	Sc 361.383	1914750.4	1914750.4	100.51 %		01:25:24
3	Y 371.029	1364356.9	1364356.9	104.18 %		01:25:24
3	Ag 328.068†	-1139.3	-556.8	-0.3708 µg/L	-0.3708 ppb	01:25:30
3	As 188.979†	8.8	9.0	21.320 µg/L	21.320 ppb	01:25:50
3	B 249.677†	515.0	255.7	-19.832 µg/L	-19.832 ppb	01:25:30
3	Ba 233.527†	5746.5	5746.2	153.67 µg/L	153.67 ppb	01:25:30
3	Be 313.107†	2717.8	6509.8	3.5503 µg/L	3.5503 ppb	01:25:30
3	Cd 226.502†	61.8	187.7	-1.4217 µg/L	-1.4217 ppb	01:25:30
3	Co 228.616†	216.8	230.4	7.9731 µg/L	7.9731 ppb	01:25:50
3	Cr 267.716†	4956.8	4964.2	110.14 µg/L	110.14 ppb	01:25:30
3	Cu 324.752†	5559.9	2291.1	24.107 µg/L	24.107 ppb	01:25:30
3	Mn 257.610†	442160.7	440167.1	1556.3 µg/L	1556.3 ppb	01:25:24
3	Mo 202.031†	40.9	47.0	7.3659 µg/L	7.3659 ppb	01:25:50
3	Ni 231.604†	1319.9	1033.0	58.030 µg/L	58.030 ppb	01:25:50
3	P 214.914†	264.4	238.2	476.58 µg/L	476.58 ppb	01:25:50
3	Pb 220.353†	207.2	114.2	29.284 µg/L	29.284 ppb	01:25:50
3	S 181.975 Axial†	21.6	9.5	43.329 µg/L	43.329 ppb	01:25:50
3	Sb 206.836†	26.7	6.8	5.3893 µg/L	5.3893 ppb	01:25:50
3	Se 196.026†	-14.4	-26.7	119.95 µg/L	119.95 ppb	01:25:50
3	SiO2†	74394.1	72466.2	15643 µg/L	15643 ppb	01:25:30
3	Si 251.611†	88000.7	87305.9	7278.7 µg/L	7278.7 ppb	01:25:30
3	Sn 189.927†	219.9	221.1	98.008 µg/L	98.008 ppb	01:25:50
3	Ti 334.940†	736187.8	732415.5	1740.0 µg/L	1740.0 ppb	01:25:24
3	Tl 190.801†	-36.6	-14.7	9.2969 µg/L	9.2969 ppb	01:25:50
3	U 409.014†	-320.2	-497.0	-50.193 µg/L	-50.193 ppb	01:25:30
3	V 292.402†	3359.4	3377.2	42.942 µg/L	42.942 ppb	01:25:30
3	Zn 213.857†	11771.6	11274.0	286.83 µg/L	286.83 ppb	01:25:30

-----  
Mean Data: 246437004|950491|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1918624.9	100.71 %	0.182			0.18%
Sc RADIAL	54529.6	100.0 %	0.33			0.33%
Y 371.029	1368567.7	104.50 %	0.294			0.28%
Ag 328.068†	-563.9	-0.3946 µg/L	0.26384	-0.3946 ppb	0.26384	66.86%
Al 396.153Radial†	15309.3	11300 µg/L	44.5	11300 ppb	44.5	0.39%
As 188.979†	3.9	11.164 µg/L	9.2739	11.164 ppb	9.2739	83.07%
B 249.677†	278.4	-19.043 µg/L	0.8254	-19.043 ppb	0.8254	4.33%
Ba 233.527†	5890.0	157.51 µg/L	3.494	157.51 ppb	3.494	2.22%
Be 313.107†	6661.3	3.6343 µg/L	0.08013	3.6343 ppb	0.08013	2.20%
Ca 317.933Radial†	3418.9	3276.6 µg/L	20.22	3276.6 ppb	20.22	0.62%
Cd 226.502†	190.7	-1.3819 µg/L	0.05383	-1.3819 ppb	0.05383	3.90%
Co 228.616†	247.9	8.7771 µg/L	0.71235	8.7771 ppb	0.71235	8.12%
Cr 267.716†	5137.2	113.98 µg/L	3.518	113.98 ppb	3.518	3.09%
Cu 324.752†	2357.0	24.619 µg/L	0.4595	24.619 ppb	0.4595	1.87%
Fe 238.204 Radial†	6553.8	60533 µg/L	477.4	60533 ppb	477.4	0.79%
K 766.490 Radial†	3042.3	2097.9 µg/L	6.34	2097.9 ppb	6.34	0.30%
Mg 279.077 IEC†	233.4	2205.6 µg/L	10.01	2205.6 ppb	10.01	0.45%
Mn 257.610†	448363.8	1585.2 µg/L	25.39	1585.2 ppb	25.39	1.60%
Mo 202.031†	50.7	7.7855 µg/L	0.37044	7.7855 ppb	0.37044	4.76%
Na 589.592 Radial†	1464.1	458.68 µg/L	2.421	458.68 ppb	2.421	0.53%

Ni 231.604†	1092.5	61.333 µg/L	2.8747	61.333 ppb	2.8747	4.69%
P 214.914†	250.5	503.36 µg/L	24.577	503.36 ppb	24.577	4.88%
Pb 220.353†	124.8	32.128 µg/L	2.5760	32.128 ppb	2.5760	8.02%
S 181.975 Axial†	11.9	54.219 µg/L	10.4787	54.219 ppb	10.4787	19.33%
Sb 206.836†	10.4	8.8992 µg/L	3.04752	8.8992 ppb	3.04752	34.24%
Se 196.026†	-28.0	119.19 µg/L	0.909	119.19 ppb	0.909	0.76%
SiO2†	74156.4	16008 µg/L	343.0	16008 ppb	343.0	2.14%
Si 251.611†	89289.3	7444.0 µg/L	159.49	7444.0 ppb	159.49	2.14%
Sn 189.927†	235.0	104.52 µg/L	5.642	104.52 ppb	5.642	5.40%
Sr 421.552†	2477.5	24.432 µg/L	0.0951	24.432 ppb	0.0951	0.39%
Ti 334.940†	747938.0	1776.9 µg/L	32.18	1776.9 ppb	32.18	1.81%
Tl 190.801†	-20.7	1.2700 µg/L	7.68429	1.2700 ppb	7.68429	605.08%
U 409.014†	-488.3	-49.530 µg/L	5.2832	-49.530 ppb	5.2832	10.67%
V 292.402†	3460.2	43.882 µg/L	0.8155	43.882 ppb	0.8155	1.86%
Zn 213.857†	11571.5	294.44 µg/L	6.804	294.44 ppb	6.804	2.31%

Sequence No.: 23

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/23/2010 01:26:00

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	55543.7	55543.7	102 %		01:26:39
1	Al 396.153Radial†	7074.6	6956.9	5124.4 µg/L	5124.4 ppb	01:26:39
1	Ca 317.933Radial†	5484.0	5210.1	4993.1 µg/L	4993.1 ppb	01:26:59
1	Fe 238.204 Radial†	580.2	553.9	5126.5 µg/L	5126.5 ppb	01:26:59
1	K 766.490 Radial†	7725.7	7415.8	5113.8 µg/L	5113.8 ppb	01:26:39
1	Mg 279.077 IEC†	553.1	532.8	5187.4 µg/L	5187.4 ppb	01:26:59
1	Na 589.592 Radial†	33588.7	32589.4	10209 µg/L	10209 ppb	01:26:39
1	Sr 421.552†	51640.1	50642.9	499.42 µg/L	499.42 ppb	01:26:39
1	Sc 361.383	1919037.1	1919037.1	100.73 %		01:28:03
1	Y 371.029	1316449.4	1316449.4	100.52 %		01:28:03
1	Ag 328.068†	64595.9	64704.5	514.18 µg/L	514.18 ppb	01:28:08
1	As 188.979†	260.7	259.1	515.13 µg/L	515.13 ppb	01:28:29
1	B 249.677†	11856.5	11513.9	509.36 µg/L	509.36 ppb	01:28:08
1	Ba 233.527†	19383.0	19271.1	516.08 µg/L	516.08 ppb	01:28:08
1	Be 313.107†	791157.2	789227.9	510.61 µg/L	510.61 ppb	01:28:03
1	Cd 226.502†	18339.7	18332.9	518.95 µg/L	518.95 ppb	01:28:08
1	Co 228.616†	10351.5	10291.2	517.58 µg/L	517.58 ppb	01:28:08
1	Cr 267.716†	23639.4	23500.3	521.60 µg/L	521.60 ppb	01:28:08
1	Cu 324.752†	78546.3	74736.2	514.56 µg/L	514.56 ppb	01:28:08
1	Mn 257.610†	149290.1	148436.7	522.64 µg/L	522.64 ppb	01:28:03
1	Mo 202.031†	4906.6	4877.3	527.53 µg/L	527.53 ppb	01:28:29
1	Ni 231.604†	9762.2	9411.2	521.14 µg/L	521.14 ppb	01:28:08
1	P 214.914†	1219.6	1185.9	2551.6 µg/L	2551.6 ppb	01:28:29
1	Pb 220.353†	2023.9	1917.3	519.08 µg/L	519.08 ppb	01:28:29
1	S 181.975 Axial†	239.8	226.1	1030.1 µg/L	1030.1 ppb	01:28:29
1	Sb 206.836†	547.2	523.5	526.62 µg/L	526.62 ppb	01:28:29
1	Se 196.026†	352.4	337.5	531.08 µg/L	531.08 ppb	01:28:29
1	SiO2†	27275.8	25524.1	5509.9 µg/L	5509.9 ppb	01:28:08
1	Si 251.611†	31378.7	30898.8	2576.0 µg/L	2576.0 ppb	01:28:08
1	Sn 189.927†	1136.9	1130.9	532.96 µg/L	532.96 ppb	01:28:29
1	Ti 334.940†	216866.4	215222.4	511.01 µg/L	511.01 ppb	01:28:03
1	Tl 190.801†	343.4	362.6	527.57 µg/L	527.57 ppb	01:28:29
1	U 409.014†	6210.6	5987.2	500.66 µg/L	500.66 ppb	01:28:08
1	V 292.402†	49166.0	48844.3	521.55 µg/L	521.55 ppb	01:28:08
1	Zn 213.857†	20866.7	20277.0	518.07 µg/L	518.07 ppb	01:28:08
2	Sc RADIAL	54983.7	54983.7	101 %		01:27:04
2	Al 396.153Radial†	6979.3	6933.1	5107.0 µg/L	5107.0 ppb	01:27:04
2	Ca 317.933Radial†	5490.6	5271.5	5052.0 µg/L	5052.0 ppb	01:27:25
2	Fe 238.204 Radial†	580.3	559.7	5180.7 µg/L	5180.7 ppb	01:27:25
2	K 766.490 Radial†	7721.6	7489.0	5164.3 µg/L	5164.3 ppb	01:27:04
2	Mg 279.077 IEC†	552.1	537.3	5230.5 µg/L	5230.5 ppb	01:27:25
2	Na 589.592 Radial†	33407.7	32745.7	10258 µg/L	10258 ppb	01:27:04
2	Sr 421.552†	51152.2	50675.4	499.74 µg/L	499.74 ppb	01:27:04
2	Sc 361.383	1927231.9	1927231.9	101.16 %		01:28:36
2	Y 371.029	1322660.7	1322660.7	101.00 %		01:28:36
2	Ag 328.068†	64664.1	64499.1	512.54 µg/L	512.54 ppb	01:28:41
2	As 188.979†	267.2	264.5	525.86 µg/L	525.86 ppb	01:29:02
2	B 249.677†	11829.6	11437.3	505.92 µg/L	505.92 ppb	01:28:41
2	Ba 233.527†	19340.4	19147.1	512.75 µg/L	512.75 ppb	01:28:41
2	Be 313.107†	795085.6	789771.5	510.96 µg/L	510.96 ppb	01:28:36
2	Cd 226.502†	18315.8	18231.8	516.08 µg/L	516.08 ppb	01:28:41
2	Co 228.616†	10356.5	10252.4	515.62 µg/L	515.62 ppb	01:28:41
2	Cr 267.716†	23553.2	23315.3	517.49 µg/L	517.49 ppb	01:28:41
2	Cu 324.752†	78520.5	74379.1	512.11 µg/L	512.11 ppb	01:28:41
2	Mn 257.610†	150275.7	148780.9	523.85 µg/L	523.85 ppb	01:28:36
2	Mo 202.031†	4864.1	4814.6	520.76 µg/L	520.76 ppb	01:29:02
2	Ni 231.604†	9686.9	9295.6	514.74 µg/L	514.74 ppb	01:28:41
2	P 214.914†	1225.2	1186.3	2552.4 µg/L	2552.4 ppb	01:29:02
2	Pb 220.353†	2015.6	1900.6	514.52 µg/L	514.52 ppb	01:29:02

2	S 181.975 Axial†	241.7	226.9	1034.0 µg/L	1034.0 ppb	01:29:02
2	Sb 206.836†	542.0	516.1	519.12 µg/L	519.12 ppb	01:29:02
2	Se 196.026†	362.0	345.5	543.62 µg/L	543.62 ppb	01:29:02
2	SiO2†	27285.2	25418.3	5487.1 µg/L	5487.1 ppb	01:28:41
2	Si 251.611†	31481.6	30868.0	2573.5 µg/L	2573.5 ppb	01:28:41
2	Sn 189.927†	1114.0	1103.5	520.05 µg/L	520.05 ppb	01:29:02
2	Ti 334.940†	217680.1	215111.3	510.74 µg/L	510.74 ppb	01:28:36
2	Tl 190.801†	331.9	349.8	509.23 µg/L	509.23 ppb	01:29:02
2	U 409.014†	6274.3	6024.0	503.73 µg/L	503.73 ppb	01:28:41
2	V 292.402†	49026.8	48499.2	517.85 µg/L	517.85 ppb	01:28:41
2	Zn 213.857†	20776.2	20099.5	513.53 µg/L	513.53 ppb	01:28:41
3	Sc RADIAL	55503.6	55503.6	102 %		01:27:30
3	Al 396.153Radial†	7045.5	6933.3	5108.8 µg/L	5108.8 ppb	01:27:30
3	Ca 317.933Radial†	5510.5	5240.0	5021.9 µg/L	5021.9 ppb	01:27:51
3	Fe 238.204 Radial†	582.4	556.5	5149.6 µg/L	5149.6 ppb	01:27:51
3	K 766.490 Radial†	7602.9	7300.7	5034.4 µg/L	5034.4 ppb	01:27:30
3	Mg 279.077 IEC†	545.1	525.3	5112.8 µg/L	5112.8 ppb	01:27:51
3	Na 589.592 Radial†	33485.0	32511.3	10185 µg/L	10185 ppb	01:27:30
3	Sr 421.552†	51594.5	50634.6	499.34 µg/L	499.34 ppb	01:27:30
3	Sc 361.383	1918120.5	1918120.5	100.68 %		01:29:09
3	Y 371.029	1316376.6	1316376.6	100.52 %		01:29:09
3	Ag 328.068†	60908.4	61072.6	485.20 µg/L	485.20 ppb	01:29:15
3	As 188.979†	226.6	225.4	448.11 µg/L	448.11 ppb	01:29:35
3	B 249.677†	11132.3	10800.3	477.56 µg/L	477.56 ppb	01:29:15
3	Ba 233.527†	17820.9	17728.8	474.75 µg/L	474.75 ppb	01:29:15
3	Be 313.107†	746850.8	745597.1	482.38 µg/L	482.38 ppb	01:29:09
3	Cd 226.502†	16776.0	16788.5	475.18 µg/L	475.18 ppb	01:29:15
3	Co 228.616†	9404.2	9355.2	470.44 µg/L	470.44 ppb	01:29:15
3	Cr 267.716†	20792.8	20684.3	459.10 µg/L	459.10 ppb	01:29:15
3	Cu 324.752†	71924.5	68196.5	469.60 µg/L	469.60 ppb	01:29:15
3	Mn 257.610†	141809.7	141077.8	496.75 µg/L	496.75 ppb	01:29:09
3	Mo 202.031†	4110.6	4089.0	442.30 µg/L	442.30 ppb	01:29:35
3	Ni 231.604†	8836.8	8496.7	470.50 µg/L	470.50 ppb	01:29:15
3	P 214.914†	1061.7	1029.6	2212.2 µg/L	2212.2 ppb	01:29:35
3	Pb 220.353†	1775.7	1671.7	452.49 µg/L	452.49 ppb	01:29:35
3	S 181.975 Axial†	218.3	204.9	933.45 µg/L	933.45 ppb	01:29:35
3	Sb 206.836†	476.7	453.7	456.02 µg/L	456.02 ppb	01:29:35
3	Se 196.026†	317.9	303.4	478.44 µg/L	478.44 ppb	01:29:35
3	SiO2†	25512.3	23785.5	5134.6 µg/L	5134.6 ppb	01:29:15
3	Si 251.611†	29315.5	28864.4	2406.4 µg/L	2406.4 ppb	01:29:15
3	Sn 189.927†	933.8	929.8	438.17 µg/L	438.17 ppb	01:29:35
3	Ti 334.940†	203698.4	202246.5	480.19 µg/L	480.19 ppb	01:29:09
3	Tl 190.801†	300.6	320.3	466.48 µg/L	466.48 ppb	01:29:35
3	U 409.014†	5615.9	5399.6	451.41 µg/L	451.41 ppb	01:29:15
3	V 292.402†	44261.5	43996.4	469.57 µg/L	469.57 ppb	01:29:15
3	Zn 213.857†	18989.1	18422.0	470.64 µg/L	470.64 ppb	01:29:15

-----  
Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1921463.2	100.86 %	0.263			0.26%
Sc RADIAL	55343.7	101 %	0.6			0.56%
Y 371.029	1318495.6	100.68 %	0.275			0.27%
Ag 328.068†	63425.4	503.97 µg/L	16.283	503.97 ppb	16.283	3.23%
QC value within limits for Ag 328.068 Recovery = 100.79%						
Al 396.153Radial†	6941.1	5113.4 µg/L	9.61	5113.4 ppb	9.61	0.19%
QC value within limits for Al 396.153Radial Recovery = 102.27%						
As 188.979†	249.7	496.37 µg/L	42.134	496.37 ppb	42.134	8.49%
QC value within limits for As 188.979 Recovery = 99.27%						
B 249.677†	11250.5	497.62 µg/L	17.450	497.62 ppb	17.450	3.51%
QC value within limits for B 249.677 Recovery = 99.52%						
Ba 233.527†	18715.7	501.19 µg/L	22.959	501.19 ppb	22.959	4.58%
QC value within limits for Ba 233.527 Recovery = 100.24%						
Be 313.107†	774865.5	501.32 µg/L	16.399	501.32 ppb	16.399	3.27%
QC value within limits for Be 313.107 Recovery = 100.26%						
Ca 317.933Radial†	5240.6	5022.3 µg/L	29.45	5022.3 ppb	29.45	0.59%
QC value within limits for Ca 317.933Radial Recovery = 100.45%						
Cd 226.502†	17784.4	503.40 µg/L	24.486	503.40 ppb	24.486	4.86%
QC value within limits for Cd 226.502 Recovery = 100.68%						
Co 228.616†	9966.2	501.21 µg/L	26.670	501.21 ppb	26.670	5.32%



QC value within limits for Co 228.616 Recovery = 100.24%							
Cr 267.716†	22500.0	499.40 µg/L	34.958	499.40 ppb	34.958	7.00%	
QC value within limits for Cr 267.716 Recovery = 99.88%							
Cu 324.752†	72437.2	498.76 µg/L	25.281	498.76 ppb	25.281	5.07%	
QC value within limits for Cu 324.752 Recovery = 99.75%							
Fe 238.204 Radial†	556.7	5152.3 µg/L	27.21	5152.3 ppb	27.21	0.53%	
QC value within limits for Fe 238.204 Radial Recovery = 103.05%							
K 766.490 Radial†	7401.8	5104.2 µg/L	65.46	5104.2 ppb	65.46	1.28%	
QC value within limits for K 766.490 Radial Recovery = 102.08%							
Mg 279.077 IEC†	531.8	5176.9 µg/L	59.53	5176.9 ppb	59.53	1.15%	
QC value within limits for Mg 279.077 IEC Recovery = 103.54%							
Mn 257.610†	146098.5	514.41 µg/L	15.305	514.41 ppb	15.305	2.98%	
QC value within limits for Mn 257.610 Recovery = 102.88%							
Mo 202.031†	4593.6	496.86 µg/L	47.374	496.86 ppb	47.374	9.53%	
QC value within limits for Mo 202.031 Recovery = 99.37%							
Na 589.592 Radial†	32615.4	10218 µg/L	37.4	10218 ppb	37.4	0.37%	
QC value within limits for Na 589.592 Radial Recovery = 102.18%							
Ni 231.604†	9067.8	502.13 µg/L	27.572	502.13 ppb	27.572	5.49%	
QC value within limits for Ni 231.604 Recovery = 100.43%							
P 214.914†	1133.9	2438.7 µg/L	196.22	2438.7 ppb	196.22	8.05%	
QC value within limits for P 214.914 Recovery = 97.55%							
Pb 220.353†	1829.8	495.37 µg/L	37.200	495.37 ppb	37.200	7.51%	
QC value within limits for Pb 220.353 Recovery = 99.07%							
S 181.975 Axial†	219.3	999.18 µg/L	56.956	999.18 ppb	56.956	5.70%	
QC value within limits for S 181.975 Axial Recovery = 99.92%							
Sb 206.836†	497.7	500.59 µg/L	38.779	500.59 ppb	38.779	7.75%	
QC value within limits for Sb 206.836 Recovery = 100.12%							
Se 196.026†	328.8	517.71 µg/L	34.586	517.71 ppb	34.586	6.68%	
QC value within limits for Se 196.026 Recovery = 103.54%							
SiO2†	24909.3	5377.2 µg/L	210.41	5377.2 ppb	210.41	3.91%	
QC value within limits for SiO2 Recovery = 100.55%							
Si 251.611†	30210.4	2518.6 µg/L	97.19	2518.6 ppb	97.19	3.86%	
QC value within limits for Si 251.611 Recovery = 100.75%							
Sn 189.927†	1054.8	497.06 µg/L	51.407	497.06 ppb	51.407	10.34%	
QC value within limits for Sn 189.927 Recovery = 99.41%							
Sr 421.552†	50651.0	499.50 µg/L	0.213	499.50 ppb	0.213	0.04%	
QC value within limits for Sr 421.552 Recovery = 99.90%							
Ti 334.940†	210860.0	500.65 µg/L	17.719	500.65 ppb	17.719	3.54%	
QC value within limits for Ti 334.940 Recovery = 100.13%							
Tl 190.801†	344.2	501.09 µg/L	31.348	501.09 ppb	31.348	6.26%	
QC value within limits for Tl 190.801 Recovery = 100.22%							
U 409.014†	5803.6	485.27 µg/L	29.358	485.27 ppb	29.358	6.05%	
QC value within limits for U 409.014 Recovery = 97.05%							
V 292.402†	47113.3	502.99 µg/L	29.004	502.99 ppb	29.004	5.77%	
QC value within limits for V 292.402 Recovery = 100.60%							
Zn 213.857†	19599.5	500.75 µg/L	26.171	500.75 ppb	26.171	5.23%	
QC value within limits for Zn 213.857 Recovery = 100.15%							
All analyte(s) passed QC.							

Sequence No.: 24

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/23/2010 01:29:44

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	53134.6	53134.6	97.4 %		01:30:17
1	Al 396.153Radial†	-18.4	-8.1	-6.0209 µg/L	-6.0209 ppb	01:30:17
1	Ca 317.933Radial†	179.1	9.5	9.1201 µg/L	9.1201 ppb	01:30:37
1	Fe 238.204 Radial†	18.5	3.2	29.491 µg/L	29.491 ppb	01:30:37
1	K 766.490 Radial†	173.9	8.9	6.1531 µg/L	6.1531 ppb	01:30:17
1	Mg 279.077 IEC†	13.4	3.5	33.557 µg/L	33.557 ppb	01:30:37
1	Na 589.592 Radial†	416.8	38.5	12.049 µg/L	12.049 ppb	01:30:17
1	Sr 421.552†	21.4	-37.3	-0.3682 µg/L	-0.3682 ppb	01:30:17
1	Sc 361.383	1910723.6	1910723.6	100.29 %		01:31:40
1	Y 371.029	1315749.1	1315749.1	100.47 %		01:31:40
1	Ag 328.068†	-485.7	92.6	0.7324 µg/L	0.7324 ppb	01:31:45
1	As 188.979†	3.0	3.3	6.5436 µg/L	6.5436 ppb	01:32:06
1	B 249.677†	314.9	57.4	2.5327 µg/L	2.5327 ppb	01:32:06
1	Ba 233.527†	-7.0	21.6	0.5769 µg/L	0.5769 ppb	01:32:06
1	Be 313.107†	-3658.1	158.3	0.1022 µg/L	0.1022 ppb	01:31:45
1	Cd 226.502†	-126.0	0.6	0.0129 µg/L	0.0129 ppb	01:32:06
1	Co 228.616†	-13.7	1.0	0.0486 µg/L	0.0486 ppb	01:32:06
1	Cr 267.716†	-32.4	0.0	0.0003 µg/L	0.0003 ppb	01:32:06
1	Cu 324.752†	3257.9	7.6	0.0561 µg/L	0.0561 ppb	01:31:45
1	Mn 257.610†	-113.0	116.2	0.4112 µg/L	0.4112 ppb	01:32:06
1	Mo 202.031†	4.1	10.4	1.1260 µg/L	1.1260 ppb	01:32:06
1	Ni 231.604†	286.9	5.8	0.3211 µg/L	0.3211 ppb	01:32:06
1	P 214.914†	27.8	2.8	6.1403 µg/L	6.1403 ppb	01:32:06
1	Pb 220.353†	86.1	-6.1	-1.6418 µg/L	-1.6418 ppb	01:32:06
1	S 181.975 Axial†	14.5	2.5	11.173 µg/L	11.173 ppb	01:32:06
1	Sb 206.836†	28.5	8.6	8.6800 µg/L	8.6800 ppb	01:32:06
1	Se 196.026†	2.5	-9.9	-15.275 µg/L	-15.275 ppb	01:32:06
1	SiO2†	1544.5	-14.0	-3.0151 µg/L	-3.0151 ppb	01:31:45
1	Si 251.611†	329.0	75.6	6.2989 µg/L	6.2989 ppb	01:32:06
1	Sn 189.927†	1.1	3.4	1.6242 µg/L	1.6242 ppb	01:32:06
1	Ti 334.940†	330.9	257.9	0.6103 µg/L	0.6103 ppb	01:31:45
1	Tl 190.801†	-24.5	-2.7	-3.9321 µg/L	-3.9321 ppb	01:32:06
1	U 409.014†	220.4	41.4	3.4640 µg/L	3.4640 ppb	01:31:45
1	V 292.402†	-28.7	6.0	0.0794 µg/L	0.0794 ppb	01:31:45
1	Zn 213.857†	459.0	19.2	0.4895 µg/L	0.4895 ppb	01:32:06
2	Sc RADIAL	54293.5	54293.5	99.6 %		01:30:43
2	Al 396.153Radial†	7.6	18.4	13.556 µg/L	13.556 ppb	01:30:43
2	Ca 317.933Radial†	178.5	5.0	4.7530 µg/L	4.7530 ppb	01:31:03
2	Fe 238.204 Radial†	16.3	0.6	5.5884 µg/L	5.5884 ppb	01:31:03
2	K 766.490 Radial†	172.9	4.2	2.8883 µg/L	2.8883 ppb	01:30:43
2	Mg 279.077 IEC†	15.7	5.5	53.150 µg/L	53.150 ppb	01:31:03
2	Na 589.592 Radial†	395.7	8.2	2.5659 µg/L	2.5659 ppb	01:30:43
2	Sr 421.552†	8.2	-51.1	-0.5034 µg/L	-0.5034 ppb	01:30:43
2	Sc 361.383	1918188.5	1918188.5	100.69 %		01:32:12
2	Y 371.029	1321073.6	1321073.6	100.87 %		01:32:12
2	Ag 328.068†	-470.4	109.6	0.8624 µg/L	0.8624 ppb	01:32:17
2	As 188.979†	0.2	0.5	1.0755 µg/L	1.0755 ppb	01:32:38
2	B 249.677†	321.1	62.3	2.7628 µg/L	2.7628 ppb	01:32:38
2	Ba 233.527†	-13.6	15.1	0.4020 µg/L	0.4020 ppb	01:32:38
2	Be 313.107†	-3515.2	314.4	0.2033 µg/L	0.2033 ppb	01:32:17
2	Cd 226.502†	-113.1	13.8	0.3914 µg/L	0.3914 ppb	01:32:38
2	Co 228.616†	-9.9	4.8	0.2419 µg/L	0.2419 ppb	01:32:38
2	Cr 267.716†	-13.4	19.0	0.4222 µg/L	0.4222 ppb	01:32:38
2	Cu 324.752†	3253.3	-9.6	-0.0655 µg/L	-0.0655 ppb	01:32:17
2	Mn 257.610†	-67.3	161.9	0.5683 µg/L	0.5683 ppb	01:32:38
2	Mo 202.031†	5.2	11.5	1.2442 µg/L	1.2442 ppb	01:32:38
2	Ni 231.604†	284.5	2.3	0.1297 µg/L	0.1297 ppb	01:32:38
2	P 214.914†	17.5	-7.5	-16.389 µg/L	-16.389 ppb	01:32:38
2	Pb 220.353†	82.7	-9.8	-2.6413 µg/L	-2.6413 ppb	01:32:38

2	S 181.975 Axial†	10.2	-1.8	-8.3192 µg/L	-8.3192 ppb	01:32:38
2	Sb 206.836†	27.6	7.7	7.7094 µg/L	7.7094 ppb	01:32:38
2	Se 196.026†	14.6	2.1	3.2689 µg/L	3.2689 ppb	01:32:38
2	SiO2†	1588.9	24.0	5.1902 µg/L	5.1902 ppb	01:32:17
2	Si 251.611†	343.1	88.3	7.3647 µg/L	7.3647 ppb	01:32:38
2	Sn 189.927†	1.1	3.5	1.6346 µg/L	1.6346 ppb	01:32:38
2	Ti 334.940†	302.0	227.9	0.5375 µg/L	0.5375 ppb	01:32:17
2	Tl 190.801†	-21.2	0.6	0.8910 µg/L	0.8910 ppb	01:32:38
2	U 409.014†	193.2	13.5	1.1307 µg/L	1.1307 ppb	01:32:17
2	V 292.402†	-76.2	-41.0	-0.4202 µg/L	-0.4202 ppb	01:32:17
2	Zn 213.857†	457.5	16.0	0.4078 µg/L	0.4078 ppb	01:32:38
3	Sc RADIAL	54111.7	54111.7	99.2 %		01:31:09
3	Al 396.153Radial†	-15.6	-4.9	-3.6242 µg/L	-3.6242 ppb	01:31:09
3	Ca 317.933Radial†	175.5	2.6	2.4459 µg/L	2.4459 ppb	01:31:29
3	Fe 238.204 Radial†	18.0	2.3	21.463 µg/L	21.463 ppb	01:31:29
3	K 766.490 Radial†	200.3	32.4	22.313 µg/L	22.313 ppb	01:31:09
3	Mg 279.077 IEC†	10.6	0.4	4.1118 µg/L	4.1118 ppb	01:31:29
3	Na 589.592 Radial†	412.9	26.9	8.4188 µg/L	8.4188 ppb	01:31:09
3	Sr 421.552†	27.6	-31.5	-0.3102 µg/L	-0.3102 ppb	01:31:09
3	Sc 361.383	1908784.5	1908784.5	100.19 %		01:32:44
3	Y 371.029	1313912.9	1313912.9	100.33 %		01:32:44
3	Ag 328.068†	-465.6	112.1	0.8849 µg/L	0.8849 ppb	01:32:50
3	As 188.979†	-4.6	-4.3	-8.5437 µg/L	-8.5437 ppb	01:33:10
3	B 249.677†	314.4	57.1	2.5252 µg/L	2.5252 ppb	01:33:10
3	Ba 233.527†	-12.3	16.3	0.4357 µg/L	0.4357 ppb	01:33:10
3	Be 313.107†	-3489.0	323.4	0.2090 µg/L	0.2090 ppb	01:32:50
3	Cd 226.502†	-129.1	-2.7	-0.0789 µg/L	-0.0789 ppb	01:33:10
3	Co 228.616†	-12.0	2.7	0.1343 µg/L	0.1343 ppb	01:33:10
3	Cr 267.716†	-26.6	5.8	0.1280 µg/L	0.1280 ppb	01:33:10
3	Cu 324.752†	3250.2	3.2	0.0247 µg/L	0.0247 ppb	01:32:50
3	Mn 257.610†	-52.3	176.6	0.6238 µg/L	0.6238 ppb	01:33:10
3	Mo 202.031†	-0.3	6.0	0.6481 µg/L	0.6481 ppb	01:33:10
3	Ni 231.604†	282.7	1.9	0.1049 µg/L	0.1049 ppb	01:33:10
3	P 214.914†	24.3	-0.6	-1.3657 µg/L	-1.3657 ppb	01:33:10
3	Pb 220.353†	82.7	-9.4	-2.5362 µg/L	-2.5362 ppb	01:33:10
3	S 181.975 Axial†	14.0	2.0	9.0009 µg/L	9.0009 ppb	01:33:10
3	Sb 206.836†	16.2	-3.6	-3.6005 µg/L	-3.6005 ppb	01:33:10
3	Se 196.026†	14.7	2.3	3.6468 µg/L	3.6468 ppb	01:33:10
3	SiO2†	1606.0	48.9	10.566 µg/L	10.566 ppb	01:32:50
3	Si 251.611†	349.5	96.4	8.0343 µg/L	8.0343 ppb	01:33:10
3	Sn 189.927†	-2.3	0.0	0.0064 µg/L	0.0064 ppb	01:33:10
3	Ti 334.940†	393.9	321.1	0.7626 µg/L	0.7626 ppb	01:32:50
3	Tl 190.801†	-21.8	-0.1	-0.1285 µg/L	-0.1285 ppb	01:33:10
3	U 409.014†	178.6	-0.1	-0.0117 µg/L	-0.0117 ppb	01:32:50
3	V 292.402†	-47.9	-13.1	-0.1304 µg/L	-0.1304 ppb	01:32:50
3	Zn 213.857†	444.2	5.0	0.1259 µg/L	0.1259 ppb	01:33:10

-----  
Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1912565.5	100.39 %	0.261			0.26%
Sc RADIAL	53846.6	98.7 %	1.14			1.16%
Y 371.029	1316911.8	100.56 %	0.284			0.28%
Ag 328.068†	104.8	0.8266 µg/L	0.08232	0.8266 ppb	0.08232	9.96%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	1.8	1.3036 µg/L	10.67820	1.3036 ppb	10.67820	819.16%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-0.2	-0.3082 µg/L	7.63821	-0.3082 ppb	7.63821	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	58.9	2.6069 µg/L	0.13504	2.6069 ppb	0.13504	5.18%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	17.7	0.4715 µg/L	0.09279	0.4715 ppb	0.09279	19.68%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	265.3	0.1715 µg/L	0.06008	0.1715 ppb	0.06008	35.03%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	5.7	5.4397 µg/L	3.38964	5.4397 ppb	3.38964	62.31%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	3.9	0.1085 µg/L	0.24927	0.1085 ppb	0.24927	229.82%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	2.8	0.1416 µg/L	0.09686	0.1416 ppb	0.09686	68.40%

Cr	267.716†	QC value within limits for Co 228.616	Recovery = Not calculated			
		8.3	0.1835 µg/L	0.21634	0.1835 ppb	0.21634 117.90%
		QC value within limits for Cr 267.716	Recovery = Not calculated			
Cu	324.752†	0.4	0.0051 µg/L	0.06310	0.0051 ppb	0.06310 >999.9%
		QC value within limits for Cu 324.752	Recovery = Not calculated			
Fe	238.204 Radial†	2.0	18.848 µg/L	12.1641	18.848 ppb	12.1641 64.54%
		QC value within limits for Fe 238.204 Radial	Recovery = Not calculated			
K	766.490 Radial†	15.2	10.452 µg/L	10.4014	10.452 ppb	10.4014 99.52%
		QC value within limits for K 766.490 Radial	Recovery = Not calculated			
Mg	279.077 IEC†	3.1	30.273 µg/L	24.6837	30.273 ppb	24.6837 81.54%
		QC value within limits for Mg 279.077 IEC	Recovery = Not calculated			
Mn	257.610†	151.6	0.5344 µg/L	0.11029	0.5344 ppb	0.11029 20.64%
		QC value within limits for Mn 257.610	Recovery = Not calculated			
Mo	202.031†	9.3	1.0061 µg/L	0.31563	1.0061 ppb	0.31563 31.37%
		QC value within limits for Mo 202.031	Recovery = Not calculated			
Na	589.592 Radial†	24.5	7.6778 µg/L	4.78464	7.6778 ppb	4.78464 62.32%
		QC value within limits for Na 589.592 Radial	Recovery = Not calculated			
Ni	231.604†	3.3	0.1852 µg/L	0.11835	0.1852 ppb	0.11835 63.89%
		QC value within limits for Ni 231.604	Recovery = Not calculated			
P	214.914†	-1.8	-3.8716 µg/L	11.47198	-3.8716 ppb	11.47198 296.31%
		QC value within limits for P 214.914	Recovery = Not calculated			
Pb	220.353†	-8.4	-2.2731 µg/L	0.54926	-2.2731 ppb	0.54926 24.16%
		QC value within limits for Pb 220.353	Recovery = Not calculated			
S	181.975 Axial†	0.9	3.9514 µg/L	10.68200	3.9514 ppb	10.68200 270.33%
		QC value within limits for S 181.975 Axial	Recovery = Not calculated			
Sb	206.836†	4.2	4.2630 µg/L	6.82726	4.2630 ppb	6.82726 160.15%
		QC value within limits for Sb 206.836	Recovery = Not calculated			
Se	196.026†	-1.8	-2.7864 µg/L	10.81702	-2.7864 ppb	10.81702 388.21%
		QC value within limits for Se 196.026	Recovery = Not calculated			
SiO2†		19.7	4.2471 µg/L	6.83962	4.2471 ppb	6.83962 161.04%
		QC value within limits for SiO2	Recovery = Not calculated			
Si	251.611†	86.8	7.2327 µg/L	0.87520	7.2327 ppb	0.87520 12.10%
		QC value within limits for Si 251.611	Recovery = Not calculated			
Sn	189.927†	2.3	1.0884 µg/L	0.93708	1.0884 ppb	0.93708 86.10%
		QC value within limits for Sn 189.927	Recovery = Not calculated			
Sr	421.552†	-39.9	-0.3940 µg/L	0.09915	-0.3940 ppb	0.09915 25.17%
		QC value within limits for Sr 421.552	Recovery = Not calculated			
Ti	334.940†	269.0	0.6368 µg/L	0.11488	0.6368 ppb	0.11488 18.04%
		QC value within limits for Ti 334.940	Recovery = Not calculated			
Tl	190.801†	-0.7	-1.0565 µg/L	2.54195	-1.0565 ppb	2.54195 240.59%
		QC value within limits for Tl 190.801	Recovery = Not calculated			
U	409.014†	18.3	1.5277 µg/L	1.77157	1.5277 ppb	1.77157 115.97%
		QC value within limits for U 409.014	Recovery = Not calculated			
V	292.402†	-16.0	-0.1571 µg/L	0.25086	-0.1571 ppb	0.25086 159.72%
		QC value within limits for V 292.402	Recovery = Not calculated			
Zn	213.857†	13.4	0.3411 µg/L	0.19076	0.3411 ppb	0.19076 55.93%
		QC value within limits for Zn 213.857	Recovery = Not calculated			

All analyte(s) passed QC.

Sequence No.: 25

Sample ID: 246437005|950491|1

Analyst: JWJ

Initial Sample Wt:

Dilution:

Autosampler Location: 311

Date Collected: 2/23/2010 01:33:19

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 246437005|950491|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	54272.0	54272.0	99.5 %		01:33:58
1	Al 396.153Radial†	26618.6	26758.3	19752 µg/L	19752 ppb	01:33:58
1	Ca 317.933Radial†	5608.0	5460.9	5233.5 µg/L	5233.5 ppb	01:34:19
1	Fe 238.204 Radial†	9620.2	9650.9	89139 µg/L	89139 ppb	01:33:58
1	K 766.490 Radial†	5251.4	5107.3	3521.9 µg/L	3521.9 ppb	01:33:58
1	Mg 279.077 IEC†	443.9	435.8	4144.1 µg/L	4144.1 ppb	01:34:19
1	Na 589.592 Radial†	1918.8	1538.8	482.06 µg/L	482.06 ppb	01:33:58
1	Sr 421.552†	4040.9	4001.2	39.459 µg/L	39.459 ppb	01:33:58
1	Sc 361.383	1904342.0	1904342.0	99.959 %		01:35:23
1	Y 371.029	1375830.5	1375830.5	105.06 %		01:35:23
1	Ag 328.068†	-1481.4	-905.2	-1.0943 µg/L	-1.0943 ppb	01:35:28
1	As 188.979†	6.9	7.2	19.287 µg/L	19.287 ppb	01:35:49
1	B 249.677†	681.1	424.7	-27.553 µg/L	-27.553 ppb	01:35:28
1	Ba 233.527†	10842.9	10875.9	290.85 µg/L	290.85 ppb	01:35:28
1	Be 313.107†	6643.5	10451.9	5.8026 µg/L	5.8026 ppb	01:35:28
1	Cd 226.502†	161.8	288.0	-1.8777 µg/L	-1.8777 ppb	01:35:28
1	Co 228.616†	368.2	383.0	14.020 µg/L	14.020 ppb	01:35:49
1	Cr 267.716†	2870.2	2903.7	64.450 µg/L	64.450 ppb	01:35:28
1	Cu 324.752†	6127.5	2889.2	32.255 µg/L	32.255 ppb	01:35:28
1	Mn 257.610†	789457.9	790011.9	2790.7 µg/L	2790.7 ppb	01:35:23
1	Mo 202.031†	61.1	67.4	10.678 µg/L	10.678 ppb	01:35:49
1	Ni 231.604†	1027.3	747.5	42.573 µg/L	42.573 ppb	01:35:49
1	P 214.914†	366.8	342.1	681.53 µg/L	681.53 ppb	01:35:49
1	Pb 220.353†	381.3	289.5	76.121 µg/L	76.121 ppb	01:35:49
1	S 181.975 Axial†	34.7	22.7	103.45 µg/L	103.45 ppb	01:35:49
1	Sb 206.836†	23.9	4.1	3.0907 µg/L	3.0907 ppb	01:35:49
1	Se 196.026†	-33.7	-46.1	167.02 µg/L	167.02 ppb	01:35:49
1	SiO2†	99466.8	97953.8	21145 µg/L	21145 ppb	01:35:28
1	Si 251.611†	118397.0	118193.3	9853.7 µg/L	9853.7 ppb	01:35:28
1	Sn 189.927†	27.6	29.9	5.0701 µg/L	5.0701 ppb	01:35:49
1	Ti 334.940†	1062447.6	1062813.3	2524.8 µg/L	2524.8 ppb	01:35:23
1	Tl 190.801†	-49.7	-28.0	6.5697 µg/L	6.5697 ppb	01:35:49
1	U 409.014†	-962.6	-1141.4	-108.35 µg/L	-108.35 ppb	01:35:23
1	V 292.402†	6158.8	6196.0	75.945 µg/L	75.945 ppb	01:35:28
1	Zn 213.857†	17786.8	17355.8	441.89 µg/L	441.89 ppb	01:35:28
2	Sc RADIAL	54285.5	54285.5	99.5 %		01:34:24
2	Al 396.153Radial†	26753.1	26886.8	19846 µg/L	19846 ppb	01:34:24
2	Ca 317.933Radial†	5633.2	5484.7	5256.4 µg/L	5256.4 ppb	01:34:45
2	Fe 238.204 Radial†	9629.0	9657.4	89199 µg/L	89199 ppb	01:34:24
2	K 766.490 Radial†	5242.3	5096.8	3514.7 µg/L	3514.7 ppb	01:34:24
2	Mg 279.077 IEC†	445.8	437.6	4161.7 µg/L	4161.7 ppb	01:34:45
2	Na 589.592 Radial†	1918.5	1538.0	481.83 µg/L	481.83 ppb	01:34:24
2	Sr 421.552†	4090.6	4050.1	39.941 µg/L	39.941 ppb	01:34:24
2	Sc 361.383	1905335.5	1905335.5	100.01 %		01:35:56
2	Y 371.029	1375981.4	1375981.4	105.07 %		01:35:56
2	Ag 328.068†	-1436.2	-859.2	-0.7225 µg/L	-0.7225 ppb	01:36:02
2	As 188.979†	3.2	3.5	11.800 µg/L	11.800 ppb	01:36:22
2	B 249.677†	639.6	382.9	-29.439 µg/L	-29.439 ppb	01:36:02
2	Ba 233.527†	10983.2	11010.6	294.45 µg/L	294.45 ppb	01:36:02
2	Be 313.107†	6906.3	10711.2	5.9705 µg/L	5.9705 ppb	01:36:02
2	Cd 226.502†	182.2	308.3	-1.3095 µg/L	-1.3095 ppb	01:36:02
2	Co 228.616†	363.5	378.1	13.776 µg/L	13.776 ppb	01:36:22
2	Cr 267.716†	2903.5	2935.5	65.155 µg/L	65.155 ppb	01:36:02
2	Cu 324.752†	6158.5	2917.0	32.455 µg/L	32.455 ppb	01:36:02
2	Mn 257.610†	789289.8	789432.0	2788.7 µg/L	2788.7 ppb	01:35:56
2	Mo 202.031†	64.9	71.2	11.088 µg/L	11.088 ppb	01:36:22
2	Ni 231.604†	1036.1	755.8	43.031 µg/L	43.031 ppb	01:36:22
2	P 214.914†	357.6	332.7	660.99 µg/L	660.99 ppb	01:36:22
2	Pb 220.353†	392.9	300.9	79.217 µg/L	79.217 ppb	01:36:22

2	S 181.975 Axial†	35.9	23.9	109.11 µg/L	109.11 ppb	01:36:22
2	Sb 206.836†	33.2	13.5	12.416 µg/L	12.416 ppb	01:36:22
2	Se 196.026†	-30.0	-42.3	172.96 µg/L	172.96 ppb	01:36:22
2	SiO2†	100378.0	98813.0	21331 µg/L	21331 ppb	01:36:02
2	Si 251.611†	119416.7	119151.2	9933.6 µg/L	9933.6 ppb	01:36:02
2	Sn 189.927†	21.1	23.4	1.9822 µg/L	1.9822 ppb	01:36:22
2	Ti 334.940†	1062927.4	1062738.8	2524.7 µg/L	2524.7 ppb	01:35:56
2	Tl 190.801†	-49.2	-27.5	7.3021 µg/L	7.3021 ppb	01:36:22
2	U 409.014†	-914.5	-1092.8	-104.28 µg/L	-104.28 ppb	01:35:56
2	V 292.402†	6238.6	6272.6	76.769 µg/L	76.769 ppb	01:36:02
2	Zn 213.857†	17962.8	17522.4	446.17 µg/L	446.17 ppb	01:36:02
3	Sc RADIAL	54132.4	54132.4	99.3 %		01:34:50
3	Al 396.153Radial†	26555.0	26763.2	19755 µg/L	19755 ppb	01:34:50
3	Ca 317.933Radial†	5593.7	5461.0	5233.6 µg/L	5233.6 ppb	01:35:10
3	Fe 238.204 Radial†	9536.5	9591.6	88591 µg/L	88591 ppb	01:34:50
3	K 766.490 Radial†	5198.2	5067.3	3494.3 µg/L	3494.3 ppb	01:34:50
3	Mg 279.077 IEC†	441.6	434.6	4133.4 µg/L	4133.4 ppb	01:35:10
3	Na 589.592 Radial†	1959.5	1584.8	496.48 µg/L	496.48 ppb	01:34:50
3	Sr 421.552†	4030.5	4001.1	39.458 µg/L	39.458 ppb	01:34:50
3	Sc 361.383	1912823.2	1912823.2	100.40 %		01:36:29
3	Y 371.029	1381049.8	1381049.8	105.45 %		01:36:29
3	Ag 328.068†	-1430.0	-847.5	-0.6905 µg/L	-0.6905 ppb	01:36:35
3	As 188.979†	7.1	7.4	19.655 µg/L	19.655 ppb	01:36:55
3	B 249.677†	646.1	386.9	-28.949 µg/L	-28.949 ppb	01:36:35
3	Ba 233.527†	10487.2	10473.6	280.09 µg/L	280.09 ppb	01:36:35
3	Be 313.107†	6314.3	10094.6	5.5952 µg/L	5.5952 ppb	01:36:35
3	Cd 226.502†	157.8	283.3	-1.9528 µg/L	-1.9528 ppb	01:36:35
3	Co 228.616†	337.2	350.5	12.515 µg/L	12.515 ppb	01:36:55
3	Cr 267.716†	2779.1	2800.2	62.153 µg/L	62.153 ppb	01:36:35
3	Cu 324.752†	6066.1	2800.9	31.572 µg/L	31.572 ppb	01:36:35
3	Mn 257.610†	776878.5	773981.3	2734.3 µg/L	2734.3 ppb	01:36:29
3	Mo 202.031†	62.2	68.2	10.741 µg/L	10.741 ppb	01:36:55
3	Ni 231.604†	965.3	681.2	38.893 µg/L	38.893 ppb	01:36:55
3	P 214.914†	339.7	313.5	619.37 µg/L	619.37 ppb	01:36:55
3	Pb 220.353†	375.9	282.5	74.246 µg/L	74.246 ppb	01:36:55
3	S 181.975 Axial†	35.5	23.4	106.47 µg/L	106.47 ppb	01:36:55
3	Sb 206.836†	29.9	10.1	9.0411 µg/L	9.0411 ppb	01:36:55
3	Se 196.026†	-22.3	-34.5	183.42 µg/L	183.42 ppb	01:36:55
3	SiO2†	96881.9	94938.1	20494 µg/L	20494 ppb	01:36:35
3	Si 251.611†	115273.3	114557.0	9550.6 µg/L	9550.6 ppb	01:36:35
3	Sn 189.927†	25.4	27.6	4.0102 µg/L	4.0102 ppb	01:36:55
3	Ti 334.940†	1040743.1	1036483.3	2462.3 µg/L	2462.3 ppb	01:36:29
3	Tl 190.801†	-43.7	-21.8	14.684 µg/L	14.684 ppb	01:36:55
3	U 409.014†	-946.1	-1120.7	-106.54 µg/L	-106.54 ppb	01:36:29
3	V 292.402†	5938.7	5949.5	73.278 µg/L	73.278 ppb	01:36:35
3	Zn 213.857†	17256.4	16748.5	426.31 µg/L	426.31 ppb	01:36:35

-----  
Mean Data: 246437005|950491|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1907500.2	100.12 %	0.243			0.24%
Sc RADIAL	54230.0	99.4 %	0.16			0.16%
Y 371.029	1377620.6	105.19 %	0.227			0.22%
Ag 328.068†	-870.6	-0.8358 µg/L	0.22449	-0.8358 ppb	0.22449	26.86%
Al 396.153Radial†	26802.8	19784 µg/L	53.7	19784 ppb	53.7	0.27%
As 188.979†	6.0	16.914 µg/L	4.4323	16.914 ppb	4.4323	26.21%
B 249.677†	398.2	-28.647 µg/L	0.9786	-28.647 ppb	0.9786	3.42%
Ba 233.527†	10786.7	288.46 µg/L	7.472	288.46 ppb	7.472	2.59%
Be 313.107†	10419.2	5.7894 µg/L	0.18802	5.7894 ppb	0.18802	3.25%
Ca 317.933Radial†	5468.9	5241.1 µg/L	13.17	5241.1 ppb	13.17	0.25%
Cd 226.502†	293.2	-1.7133 µg/L	0.35177	-1.7133 ppb	0.35177	20.53%
Co 228.616†	370.5	13.437 µg/L	0.8076	13.437 ppb	0.8076	6.01%
Cr 267.716†	2879.8	63.919 µg/L	1.5698	63.919 ppb	1.5698	2.46%
Cu 324.752†	2869.1	32.094 µg/L	0.4630	32.094 ppb	0.4630	1.44%
Fe 238.204 Radial†	9633.3	88976 µg/L	335.2	88976 ppb	335.2	0.38%
K 766.490 Radial†	5090.5	3510.3 µg/L	14.30	3510.3 ppb	14.30	0.41%
Mg 279.077 IEC†	436.0	4146.4 µg/L	14.31	4146.4 ppb	14.31	0.35%
Mn 257.610†	784475.1	2771.2 µg/L	32.03	2771.2 ppb	32.03	1.16%
Mo 202.031†	68.9	10.836 µg/L	0.2211	10.836 ppb	0.2211	2.04%
Na 589.592 Radial†	1553.9	486.79 µg/L	8.393	486.79 ppb	8.393	1.72%

Ni 231.604†	728.2	41.499 µg/L	2.2684	41.499 ppb	2.2684	5.47%
P 214.914†	329.4	653.96 µg/L	31.670	653.96 ppb	31.670	4.84%
Pb 220.353†	290.9	76.528 µg/L	2.5102	76.528 ppb	2.5102	3.28%
S 181.975 Axial†	23.3	106.34 µg/L	2.832	106.34 ppb	2.832	2.66%
Sb 206.836†	9.2	8.1825 µg/L	4.72136	8.1825 ppb	4.72136	57.70%
Se 196.026†	-41.0	174.46 µg/L	8.304	174.46 ppb	8.304	4.76%
SiO2†	97235.0	20990 µg/L	439.3	20990 ppb	439.3	2.09%
Si 251.611†	117300.5	9779.3 µg/L	202.06	9779.3 ppb	202.06	2.07%
Sn 189.927†	27.0	3.6875 µg/L	1.56903	3.6875 ppb	1.56903	42.55%
Sr 421.552†	4017.5	39.619 µg/L	0.2786	39.619 ppb	0.2786	0.70%
Ti 334.940†	1054011.8	2503.9 µg/L	36.07	2503.9 ppb	36.07	1.44%
Tl 190.801†	-25.8	9.5186 µg/L	4.48841	9.5186 ppb	4.48841	47.15%
U 409.014†	-1118.3	-106.39 µg/L	2.036	-106.39 ppb	2.036	1.91%
V 292.402†	6139.4	75.331 µg/L	1.8250	75.331 ppb	1.8250	2.42%
Zn 213.857†	17208.9	438.12 µg/L	10.453	438.12 ppb	10.453	2.39%

Sequence No.: 26

Sample ID: 246437006|950491|1

Analyst: JWJ

Initial Sample Wt:

Dilution:

Autosampler Location: 312

Date Collected: 2/23/2010 01:37:04

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 246437006|950491|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	54865.0	54865.0	101 %		01:37:37
1	Al 396.153Radial†	35662.2	35458.4	26174 µg/L	26174 ppb	01:37:37
1	Ca 317.933Radial†	7956.8	7734.7	7412.6 µg/L	7412.6 ppb	01:37:37
1	Fe 238.204 Radial†	7665.8	7603.9	70232 µg/L	70232 ppb	01:37:37
1	K 766.490 Radial†	6406.0	6198.0	4274.0 µg/L	4274.0 ppb	01:37:37
1	Mg 279.077 IEC†	537.9	524.4	5026.4 µg/L	5026.4 ppb	01:37:57
1	Na 589.592 Radial†	1966.6	1565.4	490.41 µg/L	490.41 ppb	01:37:37
1	Sr 421.552†	6281.4	6184.3	60.987 µg/L	60.987 ppb	01:37:37
1	Sc 361.383	1919849.0	1919849.0	100.77 %		01:39:02
1	Y 371.029	1379303.7	1379303.7	105.32 %		01:39:02
1	Ag 328.068†	-1300.8	-714.0	-0.7829 µg/L	-0.7829 ppb	01:39:08
1	As 188.979†	6.3	6.6	16.807 µg/L	16.807 ppb	01:39:28
1	B 249.677†	649.0	387.4	-19.247 µg/L	-19.247 ppb	01:39:08
1	Ba 233.527†	15733.6	15641.6	418.24 µg/L	418.24 ppb	01:39:08
1	Be 313.107†	6452.9	10209.1	5.8899 µg/L	5.8899 ppb	01:39:08
1	Cd 226.502†	111.5	236.8	-1.1552 µg/L	-1.1552 ppb	01:39:08
1	Co 228.616†	465.3	476.4	20.062 µg/L	20.062 ppb	01:39:28
1	Cr 267.716†	5719.8	5708.3	126.66 µg/L	126.66 ppb	01:39:08
1	Cu 324.752†	8561.1	5254.7	45.891 µg/L	45.891 ppb	01:39:08
1	Mn 257.610†	725901.3	720563.4	2543.9 µg/L	2543.9 ppb	01:39:02
1	Mo 202.031†	31.3	37.4	6.7090 µg/L	6.7090 ppb	01:39:28
1	Ni 231.604†	1687.8	1394.6	78.193 µg/L	78.193 ppb	01:39:08
1	P 214.914†	317.0	289.7	582.15 µg/L	582.15 ppb	01:39:28
1	Pb 220.353†	340.0	245.4	65.224 µg/L	65.224 ppb	01:39:28
1	S 181.975 Axial†	55.4	43.0	195.92 µg/L	195.92 ppb	01:39:28
1	Sb 206.836†	26.3	6.3	4.3084 µg/L	4.3084 ppb	01:39:28
1	Se 196.026†	-17.9	-30.1	138.73 µg/L	138.73 ppb	01:39:28
1	SiO2†	115743.9	113302.3	24459 µg/L	24459 ppb	01:39:08
1	Si 251.611†	140842.1	139509.5	11631 µg/L	11631 ppb	01:39:02
1	Sn 189.927†	17.7	19.8	2.4221 µg/L	2.4221 ppb	01:39:28
1	Ti 334.940†	798971.2	792772.2	1883.2 µg/L	1883.2 ppb	01:39:02
1	Tl 190.801†	-45.6	-23.5	4.1166 µg/L	4.1166 ppb	01:39:28
1	U 409.014†	-880.7	-1052.3	-98.392 µg/L	-98.392 ppb	01:39:02
1	V 292.402†	6125.4	6113.1	72.971 µg/L	72.971 ppb	01:39:08
1	Zn 213.857†	11938.3	11408.3	289.52 µg/L	289.52 ppb	01:39:08
2	Sc RADIAL	54674.0	54674.0	100 %		01:38:03
2	Al 396.153Radial†	35694.3	35614.3	26289 µg/L	26289 ppb	01:38:03
2	Ca 317.933Radial†	7982.2	7787.6	7463.4 µg/L	7463.4 ppb	01:38:03
2	Fe 238.204 Radial†	7647.2	7612.0	70306 µg/L	70306 ppb	01:38:03
2	K 766.490 Radial†	6426.1	6240.2	4303.1 µg/L	4303.1 ppb	01:38:03
2	Mg 279.077 IEC†	536.5	524.9	5031.0 µg/L	5031.0 ppb	01:38:23
2	Na 589.592 Radial†	1978.5	1584.1	496.26 µg/L	496.26 ppb	01:38:03
2	Sr 421.552†	6298.6	6223.3	61.372 µg/L	61.372 ppb	01:38:03
2	Sc 361.383	1913434.3	1913434.3	100.44 %		01:39:36
2	Y 371.029	1374437.7	1374437.7	104.95 %		01:39:36
2	Ag 328.068†	-1286.6	-704.3	-0.6964 µg/L	-0.6964 ppb	01:39:41
2	As 188.979†	9.4	9.6	22.889 µg/L	22.889 ppb	01:40:02
2	B 249.677†	660.6	401.1	-18.675 µg/L	-18.675 ppb	01:39:41
2	Ba 233.527†	15849.3	15809.1	422.72 µg/L	422.72 ppb	01:39:41
2	Be 313.107†	6482.4	10259.9	5.9212 µg/L	5.9212 ppb	01:39:41
2	Cd 226.502†	94.6	220.4	-1.6284 µg/L	-1.6284 ppb	01:39:41
2	Co 228.616†	465.6	478.2	20.142 µg/L	20.142 ppb	01:40:02
2	Cr 267.716†	5727.5	5734.9	127.25 µg/L	127.25 ppb	01:39:41
2	Cu 324.752†	8588.1	5310.0	46.282 µg/L	46.282 ppb	01:39:41
2	Mn 257.610†	724425.1	721508.5	2547.2 µg/L	2547.2 ppb	01:39:36
2	Mo 202.031†	28.5	34.7	6.4186 µg/L	6.4186 ppb	01:40:02
2	Ni 231.604†	1689.4	1401.9	78.596 µg/L	78.596 ppb	01:39:41
2	P 214.914†	310.6	284.3	570.32 µg/L	570.32 ppb	01:40:02
2	Pb 220.353†	340.0	246.6	65.541 µg/L	65.541 ppb	01:40:02



2	S 181.975 Axial†	53.4	41.1	187.46 µg/L	187.46 ppb	01:40:02
2	Sb 206.836†	30.9	11.0	9.0197 µg/L	9.0197 ppb	01:40:02
2	Se 196.026†	-19.3	-31.6	136.60 µg/L	136.60 ppb	01:40:02
2	SiO2†	116750.3	114689.4	24758 µg/L	24758 ppb	01:39:41
2	Si 251.611†	140587.4	139724.5	11649 µg/L	11649 ppb	01:39:36
2	Sn 189.927†	18.8	21.0	2.9649 µg/L	2.9649 ppb	01:40:02
2	Ti 334.940†	798035.0	794498.1	1887.3 µg/L	1887.3 ppb	01:39:36
2	Tl 190.801†	-38.4	-16.6	14.173 µg/L	14.173 ppb	01:40:02
2	U 409.014†	-902.4	-1076.8	-100.45 µg/L	-100.45 ppb	01:39:36
2	V 292.402†	6175.4	6183.2	73.717 µg/L	73.717 ppb	01:39:41
2	Zn 213.857†	12058.6	11567.8	293.62 µg/L	293.62 ppb	01:39:41
3	Sc RADIAL	54623.9	54623.9	100 %		01:38:29
3	Al 396.153Radial†	35553.9	35506.7	26209 µg/L	26209 ppb	01:38:29
3	Ca 317.933Radial†	7894.2	7707.1	7386.1 µg/L	7386.1 ppb	01:38:29
3	Fe 238.204 Radial†	7614.6	7586.4	70070 µg/L	70070 ppb	01:38:29
3	K 766.490 Radial†	6419.3	6239.3	4302.5 µg/L	4302.5 ppb	01:38:29
3	Mg 279.077 IEC†	532.0	520.8	4992.2 µg/L	4992.2 ppb	01:38:49
3	Na 589.592 Radial†	1962.0	1569.5	491.70 µg/L	491.70 ppb	01:38:29
3	Sr 421.552†	6285.1	6215.5	61.295 µg/L	61.295 ppb	01:38:29
3	Sc 361.383	1897361.4	1897361.4	99.592 %		01:40:09
3	Y 371.029	1361126.8	1361126.8	103.93 %		01:40:09
3	Ag 328.068†	-1237.5	-665.7	-0.4237 µg/L	-0.4237 ppb	01:40:15
3	As 188.979†	7.8	8.2	19.967 µg/L	19.967 ppb	01:40:35
3	B 249.677†	655.0	401.0	-18.563 µg/L	-18.563 ppb	01:40:15
3	Ba 233.527†	15180.4	15271.1	408.33 µg/L	408.33 ppb	01:40:15
3	Be 313.107†	5978.8	9808.9	5.6509 µg/L	5.6509 ppb	01:40:15
3	Cd 226.502†	93.7	220.2	-1.6088 µg/L	-1.6088 ppb	01:40:15
3	Co 228.616†	436.6	453.1	18.995 µg/L	18.995 ppb	01:40:35
3	Cr 267.716†	5442.3	5496.9	121.97 µg/L	121.97 ppb	01:40:15
3	Cu 324.752†	8297.9	5091.1	44.744 µg/L	44.744 ppb	01:40:15
3	Mn 257.610†	699316.6	702407.4	2480.0 µg/L	2480.0 ppb	01:40:09
3	Mo 202.031†	29.3	35.7	6.5237 µg/L	6.5237 ppb	01:40:35
3	Ni 231.604†	1637.2	1363.6	76.474 µg/L	76.474 ppb	01:40:15
3	P 214.914†	285.1	261.4	520.42 µg/L	520.42 ppb	01:40:35
3	Pb 220.353†	327.2	236.6	62.853 µg/L	62.853 ppb	01:40:35
3	S 181.975 Axial†	53.8	42.0	191.53 µg/L	191.53 ppb	01:40:35
3	Sb 206.836†	26.7	7.1	5.1399 µg/L	5.1399 ppb	01:40:35
3	Se 196.026†	-21.7	-34.1	132.12 µg/L	132.12 ppb	01:40:35
3	SiO2†	112498.0	111404.4	24049 µg/L	24049 ppb	01:40:15
3	Si 251.611†	136568.4	136874.8	11411 µg/L	11411 ppb	01:40:09
3	Sn 189.927†	24.1	26.5	5.5868 µg/L	5.5868 ppb	01:40:35
3	Ti 334.940†	767541.2	770610.4	1830.6 µg/L	1830.6 ppb	01:40:09
3	Tl 190.801†	-39.6	-18.0	11.286 µg/L	11.286 ppb	01:40:35
3	U 409.014†	-828.4	-1010.1	-94.831 µg/L	-94.831 ppb	01:40:09
3	V 292.402†	5891.9	5950.6	71.230 µg/L	71.230 ppb	01:40:15
3	Zn 213.857†	11588.0	11197.0	284.10 µg/L	284.10 ppb	01:40:15

-----  
Mean Data: 246437006|950491|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1910214.9	100.27 %	0.608			0.61%
Sc RADIAL	54721.0	100 %	0.2			0.23%
Y 371.029	1371622.7	104.73 %	0.719			0.69%
Ag 328.068†	-694.7	-0.6343 µg/L	0.18749	-0.6343 ppb	0.18749	29.56%
Al 396.153Radial†	35526.5	26224 µg/L	58.9	26224 ppb	58.9	0.22%
As 188.979†	8.1	19.888 µg/L	3.0415	19.888 ppb	3.0415	15.29%
B 249.677†	396.5	-18.828 µg/L	0.3667	-18.828 ppb	0.3667	1.95%
Ba 233.527†	15573.9	416.43 µg/L	7.362	416.43 ppb	7.362	1.77%
Be 313.107†	10092.6	5.8207 µg/L	0.14784	5.8207 ppb	0.14784	2.54%
Ca 317.933Radial†	7743.1	7420.7 µg/L	39.24	7420.7 ppb	39.24	0.53%
Cd 226.502†	225.8	-1.4641 µg/L	0.26769	-1.4641 ppb	0.26769	18.28%
Co 228.616†	469.2	19.733 µg/L	0.6406	19.733 ppb	0.6406	3.25%
Cr 267.716†	5646.7	125.29 µg/L	2.894	125.29 ppb	2.894	2.31%
Cu 324.752†	5218.6	45.639 µg/L	0.7995	45.639 ppb	0.7995	1.75%
Fe 238.204 Radial†	7600.8	70203 µg/L	120.7	70203 ppb	120.7	0.17%
K 766.490 Radial†	6225.8	4293.2 µg/L	16.65	4293.2 ppb	16.65	0.39%
Mg 279.077 IEC†	523.4	5016.6 µg/L	21.19	5016.6 ppb	21.19	0.42%
Mn 257.610†	714826.4	2523.7 µg/L	37.89	2523.7 ppb	37.89	1.50%
Mo 202.031†	35.9	6.5504 µg/L	0.14703	6.5504 ppb	0.14703	2.24%
Na 589.592 Radial†	1573.0	492.79 µg/L	3.078	492.79 ppb	3.078	0.62%

Ni 231.604†	1386.7	77.754 µg/L	1.1270	77.754 ppb	1.1270	1.45%
P 214.914†	278.5	557.63 µg/L	32.765	557.63 ppb	32.765	5.88%
Pb 220.353†	242.9	64.539 µg/L	1.4690	64.539 ppb	1.4690	2.28%
S 181.975 Axial†	42.1	191.64 µg/L	4.230	191.64 ppb	4.230	2.21%
Sb 206.836†	8.1	6.1560 µg/L	2.51464	6.1560 ppb	2.51464	40.85%
Se 196.026†	-31.9	135.82 µg/L	3.375	135.82 ppb	3.375	2.49%
SiO2†	113132.1	24422 µg/L	356.0	24422 ppb	356.0	1.46%
Si 251.611†	138702.9	11564 µg/L	132.3	11564 ppb	132.3	1.14%
Sn 189.927†	22.5	3.6579 µg/L	1.69236	3.6579 ppb	1.69236	46.27%
Sr 421.552†	6207.7	61.218 µg/L	0.2037	61.218 ppb	0.2037	0.33%
Ti 334.940†	785960.2	1867.1 µg/L	31.65	1867.1 ppb	31.65	1.70%
Tl 190.801†	-19.4	9.8585 µg/L	5.17789	9.8585 ppb	5.17789	52.52%
U 409.014†	-1046.4	-97.892 µg/L	2.8444	-97.892 ppb	2.8444	2.91%
V 292.402†	6082.3	72.639 µg/L	1.2760	72.639 ppb	1.2760	1.76%
Zn 213.857†	11391.1	289.08 µg/L	4.773	289.08 ppb	4.773	1.65%

Sequence No.: 27

Sample ID: 246437007|950491|1

Analyst: JWJ

Initial Sample Wt:

Dilution:

Autosampler Location: 313

Date Collected: 2/23/2010 01:40:44

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 246437007|950491|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	54602.5	54602.5	100 %		01:41:17
1	Al 396.153Radial†	20386.6	20372.2	15038 µg/L	15038 ppb	01:41:17
1	Ca 317.933Radial†	6507.9	6325.6	6062.2 µg/L	6062.2 ppb	01:41:37
1	Fe 238.204 Radial†	5484.0	5461.4	50443 µg/L	50443 ppb	01:41:37
1	K 766.490 Radial†	4805.1	4629.6	3192.5 µg/L	3192.5 ppb	01:41:17
1	Mg 279.077 IEC†	338.8	328.1	3138.2 µg/L	3138.2 ppb	01:41:37
1	Na 589.592 Radial†	2579.9	2187.4	685.25 µg/L	685.25 ppb	01:41:17
1	Sr 421.552†	4647.3	4582.2	45.189 µg/L	45.189 ppb	01:41:17
1	Sc 361.383	1918625.3	1918625.3	100.71 %		01:42:41
1	Y 371.029	1390630.0	1390630.0	106.19 %		01:42:41
1	Ag 328.068†	-1126.6	-541.9	-0.8955 µg/L	-0.8955 ppb	01:42:47
1	As 188.979†	3.0	3.3	9.0807 µg/L	9.0807 ppb	01:43:07
1	B 249.677†	575.6	314.9	-12.167 µg/L	-12.167 ppb	01:42:47
1	Ba 233.527†	11704.7	11650.9	311.50 µg/L	311.50 ppb	01:42:47
1	Be 313.107†	5394.9	9162.6	5.4565 µg/L	5.4565 ppb	01:42:47
1	Cd 226.502†	38.1	164.0	-0.9927 µg/L	-0.9927 ppb	01:43:07
1	Co 228.616†	225.3	238.4	9.4099 µg/L	9.4099 ppb	01:43:07
1	Cr 267.716†	4924.6	4922.3	109.20 µg/L	109.20 ppb	01:42:47
1	Cu 324.752†	6338.1	3052.7	28.001 µg/L	28.001 ppb	01:42:47
1	Mn 257.610†	664959.5	660509.8	2330.1 µg/L	2330.1 ppb	01:42:41
1	Mo 202.031†	24.3	30.4	5.2082 µg/L	5.2082 ppb	01:43:07
1	Ni 231.604†	1477.0	1186.4	66.405 µg/L	66.405 ppb	01:43:07
1	P 214.914†	299.0	272.1	557.84 µg/L	557.84 ppb	01:43:07
1	Pb 220.353†	256.0	162.3	42.888 µg/L	42.888 ppb	01:43:07
1	S 181.975 Axial†	64.6	52.2	237.83 µg/L	237.83 ppb	01:43:07
1	Sb 206.836†	22.9	2.9	1.2368 µg/L	1.2368 ppb	01:43:07
1	Se 196.026†	-7.8	-20.1	102.18 µg/L	102.18 ppb	01:43:07
1	SiO2†	88182.4	86008.0	18567 µg/L	18567 ppb	01:42:47
1	Si 251.611†	104639.0	103650.4	8641.3 µg/L	8641.3 ppb	01:42:47
1	Sn 189.927†	9.4	11.7	0.4727 µg/L	0.4727 ppb	01:43:07
1	Ti 334.940†	527142.3	523361.5	1243.3 µg/L	1243.3 ppb	01:42:41
1	Tl 190.801†	-36.8	-14.8	6.6584 µg/L	6.6584 ppb	01:43:07
1	U 409.014†	-916.6	-1088.5	-98.587 µg/L	-98.587 ppb	01:42:41
1	V 292.402†	2878.1	2892.5	36.626 µg/L	36.626 ppb	01:42:47
1	Zn 213.857†	9956.4	9447.9	240.20 µg/L	240.20 ppb	01:42:47
2	Sc RADIAL	54465.0	54465.0	99.9 %		01:41:43
2	Al 396.153Radial†	20403.8	20440.7	15088 µg/L	15088 ppb	01:41:43
2	Ca 317.933Radial†	6528.4	6362.5	6097.5 µg/L	6097.5 ppb	01:42:03
2	Fe 238.204 Radial†	5483.8	5475.0	50569 µg/L	50569 ppb	01:42:03
2	K 766.490 Radial†	4855.8	4692.5	3235.9 µg/L	3235.9 ppb	01:41:43
2	Mg 279.077 IEC†	345.8	335.9	3214.3 µg/L	3214.3 ppb	01:42:03
2	Na 589.592 Radial†	2542.4	2156.4	675.53 µg/L	675.53 ppb	01:41:43
2	Sr 421.552†	4645.9	4592.5	45.290 µg/L	45.290 ppb	01:41:43
2	Sc 361.383	1916218.1	1916218.1	100.58 %		01:43:15
2	Y 371.029	1389215.5	1389215.5	106.08 %		01:43:15
2	Ag 328.068†	-1055.8	-473.0	-0.3454 µg/L	-0.3454 ppb	01:43:20
2	As 188.979†	5.3	5.6	13.688 µg/L	13.688 ppb	01:43:41
2	B 249.677†	564.6	304.7	-12.685 µg/L	-12.685 ppb	01:43:20
2	Ba 233.527†	11781.9	11742.3	313.94 µg/L	313.94 ppb	01:43:20
2	Be 313.107†	5384.6	9159.1	5.4548 µg/L	5.4548 ppb	01:43:20
2	Cd 226.502†	36.0	161.9	-1.0649 µg/L	-1.0649 ppb	01:43:41
2	Co 228.616†	224.2	237.5	9.3723 µg/L	9.3723 ppb	01:43:41
2	Cr 267.716†	4885.2	4889.3	108.47 µg/L	108.47 ppb	01:43:20
2	Cu 324.752†	6318.7	3041.3	27.940 µg/L	27.940 ppb	01:43:20
2	Mn 257.610†	665070.4	661449.5	2333.4 µg/L	2333.4 ppb	01:43:15
2	Mo 202.031†	28.2	34.4	5.6365 µg/L	5.6365 ppb	01:43:41
2	Ni 231.604†	1476.0	1187.2	66.456 µg/L	66.456 ppb	01:43:41
2	P 214.914†	296.3	269.8	552.71 µg/L	552.71 ppb	01:43:41
2	Pb 220.353†	235.4	142.1	37.422 µg/L	37.422 ppb	01:43:41

2	S 181.975 Axial†	61.2	48.8	222.49 µg/L	222.49 ppb	01:43:41
2	Sb 206.836†	21.2	1.3	-0.4079 µg/L	-0.4079 ppb	01:43:41
2	Se 196.026†	-13.0	-25.3	94.421 µg/L	94.421 ppb	01:43:41
2	SiO2†	88481.1	86415.0	18654 µg/L	18654 ppb	01:43:20
2	Si 251.611†	105127.1	104266.1	8692.6 µg/L	8692.6 ppb	01:43:20
2	Sn 189.927†	8.9	11.2	0.2318 µg/L	0.2318 ppb	01:43:41
2	Ti 334.940†	525828.3	522712.6	1241.7 µg/L	1241.7 ppb	01:43:15
2	Tl 190.801†	-35.9	-14.0	7.9330 µg/L	7.9330 ppb	01:43:41
2	U 409.014†	-929.6	-1102.6	-99.787 µg/L	-99.787 ppb	01:43:15
2	V 292.402†	2856.3	2874.4	36.450 µg/L	36.450 ppb	01:43:20
2	Zn 213.857†	9931.8	9435.9	239.88 µg/L	239.88 ppb	01:43:20
3	Sc RADIAL	54772.1	54772.1	100 %		01:42:08
3	Al 396.153Radial†	20462.1	20384.3	15047 µg/L	15047 ppb	01:42:08
3	Ca 317.933Radial†	6526.2	6323.6	6060.3 µg/L	6060.3 ppb	01:42:29
3	Fe 238.204 Radial†	5483.1	5443.5	50278 µg/L	50278 ppb	01:42:29
3	K 766.490 Radial†	4898.5	4707.8	3246.4 µg/L	3246.4 ppb	01:42:08
3	Mg 279.077 IEC†	342.4	330.7	3163.2 µg/L	3163.2 ppb	01:42:29
3	Na 589.592 Radial†	2606.7	2206.1	691.11 µg/L	691.11 ppb	01:42:08
3	Sr 421.552†	4646.4	4567.0	45.038 µg/L	45.038 ppb	01:42:08
3	Sc 361.383	1920600.1	1920600.1	100.81 %		01:43:48
3	Y 371.029	1390972.0	1390972.0	106.21 %		01:43:48
3	Ag 328.068†	-996.2	-411.4	0.1111 µg/L	0.1111 ppb	01:43:54
3	As 188.979†	7.1	7.3	17.215 µg/L	17.215 ppb	01:44:14
3	B 249.677†	548.8	287.8	-13.294 µg/L	-13.294 ppb	01:43:54
3	Ba 233.527†	11282.4	11220.1	299.98 µg/L	299.98 ppb	01:43:54
3	Be 313.107†	4907.2	8673.3	5.1532 µg/L	5.1532 ppb	01:43:54
3	Cd 226.502†	24.5	150.4	-1.3625 µg/L	-1.3625 ppb	01:44:14
3	Co 228.616†	203.4	216.4	8.3774 µg/L	8.3774 ppb	01:44:14
3	Cr 267.716†	4679.8	4674.4	103.70 µg/L	103.70 ppb	01:43:54
3	Cu 324.752†	6150.6	2860.2	26.654 µg/L	26.654 ppb	01:43:54
3	Mn 257.610†	650827.5	645812.8	2278.4 µg/L	2278.4 ppb	01:43:48
3	Mo 202.031†	19.4	25.6	4.6745 µg/L	4.6745 ppb	01:44:14
3	Ni 231.604†	1376.5	1085.2	60.796 µg/L	60.796 ppb	01:44:14
3	P 214.914†	281.5	254.3	519.23 µg/L	519.23 ppb	01:44:14
3	Pb 220.353†	241.3	147.4	38.869 µg/L	38.869 ppb	01:44:14
3	S 181.975 Axial†	62.8	50.3	229.36 µg/L	229.36 ppb	01:44:14
3	Sb 206.836†	25.7	5.7	4.0454 µg/L	4.0454 ppb	01:44:14
3	Se 196.026†	-8.6	-20.9	100.56 µg/L	100.56 ppb	01:44:14
3	SiO2†	85683.8	83439.4	18012 µg/L	18012 ppb	01:43:54
3	Si 251.611†	101541.2	100470.7	8376.2 µg/L	8376.2 ppb	01:43:54
3	Sn 189.927†	1.7	4.0	-3.1402 µg/L	-3.1402 ppb	01:44:14
3	Ti 334.940†	512693.8	508491.2	1207.9 µg/L	1207.9 ppb	01:43:48
3	Tl 190.801†	-34.5	-12.5	9.4747 µg/L	9.4747 ppb	01:44:14
3	U 409.014†	-899.2	-1070.3	-97.043 µg/L	-97.043 ppb	01:43:48
3	V 292.402†	2702.7	2715.6	34.726 µg/L	34.726 ppb	01:43:54
3	Zn 213.857†	9594.5	9078.8	230.74 µg/L	230.74 ppb	01:43:54

-----  
Mean Data: 246437007|950491|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1918481.1	100.70 %	0.115			0.11%
Sc RADIAL	54613.2	100 %	0.3			0.28%
Y 371.029	1390272.5	106.16 %	0.071			0.07%
Ag 328.068†	-475.4	-0.3766 µg/L	0.50406	-0.3766 ppb	0.50406	133.85%
Al 396.153Radial†	20399.1	15058 µg/L	27.0	15058 ppb	27.0	0.18%
As 188.979†	5.4	13.328 µg/L	4.0789	13.328 ppb	4.0789	30.60%
B 249.677†	302.4	-12.715 µg/L	0.5640	-12.715 ppb	0.5640	4.44%
Ba 233.527†	11537.8	308.48 µg/L	7.457	308.48 ppb	7.457	2.42%
Be 313.107†	8998.3	5.3548 µg/L	0.17459	5.3548 ppb	0.17459	3.26%
Ca 317.933Radial†	6337.2	6073.3 µg/L	20.98	6073.3 ppb	20.98	0.35%
Cd 226.502†	158.8	-1.1400 µg/L	0.19603	-1.1400 ppb	0.19603	17.19%
Co 228.616†	230.8	9.0532 µg/L	0.58555	9.0532 ppb	0.58555	6.47%
Cr 267.716†	4828.7	107.13 µg/L	2.987	107.13 ppb	2.987	2.79%
Cu 324.752†	2984.8	27.532 µg/L	0.7605	27.532 ppb	0.7605	2.76%
Fe 238.204 Radial†	5460.0	50430 µg/L	145.7	50430 ppb	145.7	0.29%
K 766.490 Radial†	4676.6	3224.9 µg/L	28.58	3224.9 ppb	28.58	0.89%
Mg 279.077 IEC†	331.6	3171.9 µg/L	38.80	3171.9 ppb	38.80	1.22%
Mn 257.610†	655924.0	2314.0 µg/L	30.87	2314.0 ppb	30.87	1.33%
Mo 202.031†	30.1	5.1731 µg/L	0.48196	5.1731 ppb	0.48196	9.32%
Na 589.592 Radial†	2183.3	683.97 µg/L	7.871	683.97 ppb	7.871	1.15%

Ni 231.604†	1152.9	64.553 µg/L	3.2530	64.553 ppb	3.2530	5.04%
P 214.914†	265.4	543.26 µg/L	20.971	543.26 ppb	20.971	3.86%
Pb 220.353†	150.6	39.726 µg/L	2.8321	39.726 ppb	2.8321	7.13%
S 181.975 Axial†	50.5	229.89 µg/L	7.682	229.89 ppb	7.682	3.34%
Sb 206.836†	3.3	1.6248 µg/L	2.25184	1.6248 ppb	2.25184	138.59%
Se 196.026†	-22.1	99.053 µg/L	4.0927	99.053 ppb	4.0927	4.13%
SiO2†	85287.5	18411 µg/L	348.3	18411 ppb	348.3	1.89%
Si 251.611†	102795.7	8570.0 µg/L	169.82	8570.0 ppb	169.82	1.98%
Sn 189.927†	9.0	-0.8119 µg/L	2.01996	-0.8119 ppb	2.01996	248.79%
Sr 421.552†	4580.6	45.172 µg/L	0.1267	45.172 ppb	0.1267	0.28%
Ti 334.940†	518188.4	1231.0 µg/L	19.97	1231.0 ppb	19.97	1.62%
Tl 190.801†	-13.8	8.0220 µg/L	1.41025	8.0220 ppb	1.41025	17.58%
U 409.014†	-1087.1	-98.472 µg/L	1.3754	-98.472 ppb	1.3754	1.40%
V 292.402†	2827.5	35.934 µg/L	1.0501	35.934 ppb	1.0501	2.92%
Zn 213.857†	9320.8	236.94 µg/L	5.374	236.94 ppb	5.374	2.27%

Sequence No.: 28

Sample ID: 246437008|950491|1

Analyst: JWJ

Initial Sample Wt:

Dilution:

Autosampler Location: 314

Date Collected: 2/23/2010 01:44:24

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 246437008|950491|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	54469.0	54469.0	99.9 %		01:44:56
1	Al 396.153Radial†	31653.7	31702.7	23401 µg/L	23401 ppb	01:44:56
1	Ca 317.933Radial†	8124.5	7960.1	7628.6 µg/L	7628.6 ppb	01:44:56
1	Fe 238.204 Radial†	9148.9	9144.1	84458 µg/L	84458 ppb	01:44:56
1	K 766.490 Radial†	7091.2	6930.2	4778.9 µg/L	4778.9 ppb	01:44:56
1	Mg 279.077 IEC†	506.9	497.3	4747.8 µg/L	4747.8 ppb	01:45:17
1	Na 589.592 Radial†	2283.9	1897.4	594.40 µg/L	594.40 ppb	01:44:56
1	Sr 421.552†	6334.3	6282.7	61.958 µg/L	61.958 ppb	01:44:56
1	Sc 361.383	1906219.1	1906219.1	100.06 %		01:46:21
1	Y 371.029	1393507.6	1393507.6	106.41 %		01:46:21
1	Ag 328.068†	-1412.8	-835.2	-0.8743 µg/L	-0.8743 ppb	01:46:27
1	As 188.979†	8.0	8.3	21.025 µg/L	21.025 ppb	01:46:47
1	B 249.677†	735.8	478.8	-22.649 µg/L	-22.649 ppb	01:46:27
1	Ba 233.527†	13906.3	13926.9	372.39 µg/L	372.39 ppb	01:46:27
1	Be 313.107†	7371.8	11173.2	6.3092 µg/L	6.3092 ppb	01:46:27
1	Cd 226.502†	165.3	291.4	-1.2368 µg/L	-1.2368 ppb	01:46:47
1	Co 228.616†	396.5	411.0	15.647 µg/L	15.647 ppb	01:46:47
1	Cr 267.716†	4640.6	4670.3	103.63 µg/L	103.63 ppb	01:46:27
1	Cu 324.752†	7169.0	3924.1	38.720 µg/L	38.720 ppb	01:46:27
1	Mn 257.610†	797288.5	797060.3	2814.9 µg/L	2814.9 ppb	01:46:21
1	Mo 202.031†	52.4	58.6	9.5495 µg/L	9.5495 ppb	01:46:47
1	Ni 231.604†	1317.2	1036.2	58.513 µg/L	58.513 ppb	01:46:47
1	P 214.914†	460.9	435.8	890.99 µg/L	890.99 ppb	01:46:47
1	Pb 220.353†	324.1	232.0	60.929 µg/L	60.929 ppb	01:46:47
1	S 181.975 Axial†	73.7	61.6	280.80 µg/L	280.80 ppb	01:46:47
1	Sb 206.836†	34.1	14.3	12.611 µg/L	12.611 ppb	01:46:47
1	Se 196.026†	-28.0	-40.3	161.91 µg/L	161.91 ppb	01:46:47
1	SiO2†	102644.5	101031.7	21810 µg/L	21810 ppb	01:46:27
1	Si 251.611†	122262.4	121939.8	10166 µg/L	10166 ppb	01:46:27
1	Sn 189.927†	9.4	11.7	-2.9573 µg/L	-2.9573 ppb	01:46:47
1	Ti 334.940†	1019598.7	1018942.2	2420.6 µg/L	2420.6 ppb	01:46:21
1	Tl 190.801†	-44.9	-23.2	12.128 µg/L	12.128 ppb	01:46:47
1	U 409.014†	-922.9	-1100.7	-104.43 µg/L	-104.43 ppb	01:46:21
1	V 292.402†	5627.6	5659.1	69.818 µg/L	69.818 ppb	01:46:27
1	Zn 213.857†	16599.3	16151.4	411.00 µg/L	411.00 ppb	01:46:27
2	Sc RADIAL	54407.0	54407.0	99.8 %		01:45:22
2	Al 396.153Radial†	31775.4	31860.9	23518 µg/L	23518 ppb	01:45:22
2	Ca 317.933Radial†	8137.4	7982.2	7649.8 µg/L	7649.8 ppb	01:45:22
2	Fe 238.204 Radial†	9117.9	9123.5	84268 µg/L	84268 ppb	01:45:22
2	K 766.490 Radial†	6998.9	6845.8	4720.7 µg/L	4720.7 ppb	01:45:22
2	Mg 279.077 IEC†	516.0	507.0	4842.3 µg/L	4842.3 ppb	01:45:43
2	Na 589.592 Radial†	2292.8	1908.9	598.02 µg/L	598.02 ppb	01:45:22
2	Sr 421.552†	6342.8	6298.4	62.113 µg/L	62.113 ppb	01:45:22
2	Sc 361.383	1917418.6	1917418.6	100.65 %		01:46:55
2	Y 371.029	1401252.1	1401252.1	107.00 %		01:46:55
2	Ag 328.068†	-1377.3	-791.7	-0.5438 µg/L	-0.5438 ppb	01:47:00
2	As 188.979†	13.1	13.3	31.013 µg/L	31.013 ppb	01:47:21
2	B 249.677†	688.1	427.1	-24.848 µg/L	-24.848 ppb	01:47:00
2	Ba 233.527†	13815.6	13755.6	367.82 µg/L	367.82 ppb	01:47:00
2	Be 313.107†	7390.2	11148.5	6.2922 µg/L	6.2922 ppb	01:47:00
2	Cd 226.502†	164.9	289.9	-1.2581 µg/L	-1.2581 ppb	01:47:21
2	Co 228.616†	389.9	402.1	15.193 µg/L	15.193 ppb	01:47:21
2	Cr 267.716†	4569.5	4572.6	101.46 µg/L	101.46 ppb	01:47:00
2	Cu 324.752†	7121.3	3834.8	38.079 µg/L	38.079 ppb	01:47:00
2	Mn 257.610†	804031.9	799106.2	2822.1 µg/L	2822.1 ppb	01:46:55
2	Mo 202.031†	47.2	53.2	8.9547 µg/L	8.9547 ppb	01:47:21
2	Ni 231.604†	1294.8	1006.3	56.852 µg/L	56.852 ppb	01:47:21
2	P 214.914†	464.1	436.2	892.29 µg/L	892.29 ppb	01:47:21
2	Pb 220.353†	321.7	227.7	59.769 µg/L	59.769 ppb	01:47:21

2	S 181.975 Axial†	65.9	53.5	243.69 µg/L	243.69 ppb	01:47:21
2	Sb 206.836†	29.2	9.2	7.5215 µg/L	7.5215 ppb	01:47:21
2	Se 196.026†	-33.4	-45.6	153.21 µg/L	153.21 ppb	01:47:21
2	SiO2†	102500.0	100288.9	21649 µg/L	21649 ppb	01:47:00
2	Si 251.611†	122050.1	121015.2	10089 µg/L	10089 ppb	01:47:00
2	Sn 189.927†	10.6	12.9	-2.3917 µg/L	-2.3917 ppb	01:47:21
2	Ti 334.940†	1026621.7	1019968.2	2423.0 µg/L	2423.0 ppb	01:46:55
2	Tl 190.801†	-47.1	-25.1	9.4036 µg/L	9.4036 ppb	01:47:21
2	U 409.014†	-906.8	-1079.3	-102.62 µg/L	-102.62 ppb	01:46:55
2	V 292.402†	5654.8	5653.2	69.726 µg/L	69.726 ppb	01:47:00
2	Zn 213.857†	16484.2	15940.1	405.58 µg/L	405.58 ppb	01:47:00
3	Sc RADIAL	54434.8	54434.8	99.8 %		01:45:48
3	Al 396.153Radial†	31740.1	31809.3	23480 µg/L	23480 ppb	01:45:48
3	Ca 317.933Radial†	8134.4	7975.1	7643.0 µg/L	7643.0 ppb	01:45:48
3	Fe 238.204 Radial†	9102.3	9103.2	84080 µg/L	84080 ppb	01:45:48
3	K 766.490 Radial†	7105.3	6948.8	4791.8 µg/L	4791.8 ppb	01:45:48
3	Mg 279.077 IEC†	510.4	501.1	4785.0 µg/L	4785.0 ppb	01:46:09
3	Na 589.592 Radial†	2264.0	1878.9	588.61 µg/L	588.61 ppb	01:45:48
3	Sr 421.552†	6311.0	6263.3	61.767 µg/L	61.767 ppb	01:45:48
3	Sc 361.383	1918787.5	1918787.5	100.72 %		01:47:28
3	Y 371.029	1399512.3	1399512.3	106.86 %		01:47:28
3	Ag 328.068†	-1367.9	-781.4	-0.4944 µg/L	-0.4944 ppb	01:47:34
3	As 188.979†	7.2	7.5	19.367 µg/L	19.367 ppb	01:47:54
3	B 249.677†	707.4	445.7	-23.929 µg/L	-23.929 ppb	01:47:34
3	Ba 233.527†	13228.8	13163.3	351.98 µg/L	351.98 ppb	01:47:34
3	Be 313.107†	6836.0	10593.0	5.9576 µg/L	5.9576 ppb	01:47:34
3	Cd 226.502†	126.8	252.0	-2.3143 µg/L	-2.3143 ppb	01:47:54
3	Co 228.616†	359.8	371.9	13.809 µg/L	13.809 ppb	01:47:54
3	Cr 267.716†	4330.0	4331.5	96.115 µg/L	96.115 ppb	01:47:34
3	Cu 324.752†	6952.8	3662.5	36.869 µg/L	36.869 ppb	01:47:34
3	Mn 257.610†	783416.9	778068.1	2748.0 µg/L	2748.0 ppb	01:47:28
3	Mo 202.031†	32.1	38.2	7.3271 µg/L	7.3271 ppb	01:47:54
3	Ni 231.604†	1214.7	925.9	52.395 µg/L	52.395 ppb	01:47:54
3	P 214.914†	425.4	397.5	807.65 µg/L	807.65 ppb	01:47:54
3	Pb 220.353†	313.9	219.8	57.631 µg/L	57.631 ppb	01:47:54
3	S 181.975 Axial†	63.0	50.6	230.44 µg/L	230.44 ppb	01:47:54
3	Sb 206.836†	23.4	3.5	1.8169 µg/L	1.8169 ppb	01:47:54
3	Se 196.026†	-25.2	-37.3	165.49 µg/L	165.49 ppb	01:47:54
3	SiO2†	98561.3	96305.6	20790 µg/L	20790 ppb	01:47:34
3	Si 251.611†	117383.0	116294.7	9695.4 µg/L	9695.4 ppb	01:47:34
3	Sn 189.927†	11.8	14.0	-1.8336 µg/L	-1.8336 ppb	01:47:54
3	Ti 334.940†	999702.2	992512.7	2357.8 µg/L	2357.8 ppb	01:47:28
3	Tl 190.801†	-43.5	-21.5	13.684 µg/L	13.684 ppb	01:47:54
3	U 409.014†	-918.5	-1090.3	-103.51 µg/L	-103.51 ppb	01:47:28
3	V 292.402†	5364.2	5360.7	66.593 µg/L	66.593 ppb	01:47:34
3	Zn 213.857†	15819.5	15268.4	388.33 µg/L	388.33 ppb	01:47:34

-----  
Mean Data: 246437008|950491|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1914141.7	100.47 %	0.362			0.36%
Sc RADIAL	54437.0	99.8 %	0.06			0.06%
Y 371.029	1398090.7	106.76 %	0.310			0.29%
Ag 328.068†	-802.8	-0.6375 µg/L	0.20657	-0.6375 ppb	0.20657	32.40%
Al 396.153Radial†	31791.0	23466 µg/L	59.5	23466 ppb	59.5	0.25%
As 188.979†	9.7	23.802 µg/L	6.2999	23.802 ppb	6.2999	26.47%
B 249.677†	450.5	-23.809 µg/L	1.1046	-23.809 ppb	1.1046	4.64%
Ba 233.527†	13615.3	364.06 µg/L	10.714	364.06 ppb	10.714	2.94%
Be 313.107†	10971.6	6.1863 µg/L	0.19831	6.1863 ppb	0.19831	3.21%
Ca 317.933Radial†	7972.4	7640.5 µg/L	10.83	7640.5 ppb	10.83	0.14%
Cd 226.502†	277.8	-1.6031 µg/L	0.61605	-1.6031 ppb	0.61605	38.43%
Co 228.616†	395.0	14.883 µg/L	0.9576	14.883 ppb	0.9576	6.43%
Cr 267.716†	4524.8	100.40 µg/L	3.869	100.40 ppb	3.869	3.85%
Cu 324.752†	3807.1	37.889 µg/L	0.9401	37.889 ppb	0.9401	2.48%
Fe 238.204 Radial†	9123.6	84268 µg/L	188.9	84268 ppb	188.9	0.22%
K 766.490 Radial†	6908.3	4763.8 µg/L	37.85	4763.8 ppb	37.85	0.79%
Mg 279.077 IEC†	501.8	4791.7 µg/L	47.59	4791.7 ppb	47.59	0.99%
Mn 257.610†	791411.5	2795.0 µg/L	40.83	2795.0 ppb	40.83	1.46%
Mo 202.031†	50.0	8.6105 µg/L	1.15050	8.6105 ppb	1.15050	13.36%
Na 589.592 Radial†	1895.1	593.68 µg/L	4.746	593.68 ppb	4.746	0.80%

Ni 231.604†	989.4	55.920 µg/L	3.1640	55.920 ppb	3.1640	5.66%
P 214.914†	423.2	863.64 µg/L	48.498	863.64 ppb	48.498	5.62%
Pb 220.353†	226.5	59.443 µg/L	1.6734	59.443 ppb	1.6734	2.82%
S 181.975 Axial†	55.2	251.64 µg/L	26.107	251.64 ppb	26.107	10.37%
Sb 206.836†	9.0	7.3165 µg/L	5.40001	7.3165 ppb	5.40001	73.81%
Se 196.026†	-41.1	160.20 µg/L	6.316	160.20 ppb	6.316	3.94%
SiO2†	99208.7	21416 µg/L	548.6	21416 ppb	548.6	2.56%
Si 251.611†	119749.9	9983.5 µg/L	252.42	9983.5 ppb	252.42	2.53%
Sn 189.927†	12.9	-2.3942 µg/L	0.56184	-2.3942 ppb	0.56184	23.47%
Sr 421.552†	6281.5	61.946 µg/L	0.1734	61.946 ppb	0.1734	0.28%
Ti 334.940†	1010474.4	2400.5 µg/L	36.98	2400.5 ppb	36.98	1.54%
Tl 190.801†	-23.3	11.739 µg/L	2.1666	11.739 ppb	2.1666	18.46%
U 409.014†	-1090.1	-103.52 µg/L	0.907	-103.52 ppb	0.907	0.88%
V 292.402†	5557.7	68.712 µg/L	1.8359	68.712 ppb	1.8359	2.67%
Zn 213.857†	15786.6	401.64 µg/L	11.839	401.64 ppb	11.839	2.95%



Sequence No.: 29

Sample ID: 246437009|950491|1

Analyst: JWJ

Initial Sample Wt:

Dilution:

Autosampler Location: 315

Date Collected: 2/23/2010 01:48:03

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 246437009|950491|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	54418.3	54418.3	99.8 %		01:48:36
1	Al 396.153Radial†	28600.5	28672.6	21165 µg/L	21165 ppb	01:48:36
1	Ca 317.933Radial†	6128.7	5967.5	5719.0 µg/L	5719.0 ppb	01:48:56
1	Fe 238.204 Radial†	8057.4	8058.8	74434 µg/L	74434 ppb	01:48:36
1	K 766.490 Radial†	5483.6	5325.8	3672.5 µg/L	3672.5 ppb	01:48:36
1	Mg 279.077 IEC†	431.8	422.5	4030.8 µg/L	4030.8 ppb	01:48:56
1	Na 589.592 Radial†	1924.4	1539.2	482.20 µg/L	482.20 ppb	01:48:36
1	Sr 421.552†	5028.2	4979.7	49.108 µg/L	49.108 ppb	01:48:36
1	Sc 361.383	1908334.8	1908334.8	100.17 %		01:50:00
1	Y 371.029	1377734.0	1377734.0	105.20 %		01:50:00
1	Ag 328.068†	-1290.7	-711.8	-0.5681 µg/L	-0.5681 ppb	01:50:06
1	As 188.979†	12.2	12.5	28.936 µg/L	28.936 ppb	01:50:26
1	B 249.677†	587.5	329.9	-23.992 µg/L	-23.992 ppb	01:50:06
1	Ba 233.527†	13280.6	13286.8	355.27 µg/L	355.27 ppb	01:50:06
1	Be 313.107†	6113.1	9908.5	5.6778 µg/L	5.6778 ppb	01:50:06
1	Cd 226.502†	113.8	239.7	-1.5523 µg/L	-1.5523 ppb	01:50:06
1	Co 228.616†	383.3	397.3	15.981 µg/L	15.981 ppb	01:50:26
1	Cr 267.716†	5595.2	5618.1	124.65 µg/L	124.65 ppb	01:50:06
1	Cu 324.752†	7156.0	3903.2	37.183 µg/L	37.183 ppb	01:50:06
1	Mn 257.610†	681252.4	680335.8	2403.0 µg/L	2403.0 ppb	01:50:00
1	Mo 202.031†	32.8	39.1	7.0508 µg/L	7.0508 ppb	01:50:26
1	Ni 231.604†	1585.7	1302.8	73.164 µg/L	73.164 ppb	01:50:26
1	P 214.914†	316.0	290.6	580.23 µg/L	580.23 ppb	01:50:26
1	Pb 220.353†	336.9	244.4	64.540 µg/L	64.540 ppb	01:50:26
1	S 181.975 Axial†	42.9	30.8	140.31 µg/L	140.31 ppb	01:50:26
1	Sb 206.836†	29.4	9.6	7.7299 µg/L	7.7299 ppb	01:50:26
1	Se 196.026†	-24.2	-36.6	141.54 µg/L	141.54 ppb	01:50:26
1	SiO2†	96858.7	95141.9	20538 µg/L	20538 ppb	01:50:06
1	Si 251.611†	115287.0	114840.7	9574.2 µg/L	9574.2 ppb	01:50:06
1	Sn 189.927†	16.5	18.8	1.3795 µg/L	1.3795 ppb	01:50:26
1	Ti 334.940†	813541.3	812101.5	1929.2 µg/L	1929.2 ppb	01:50:00
1	Tl 190.801†	-39.6	-17.8	12.557 µg/L	12.557 ppb	01:50:26
1	U 409.014†	-828.4	-1005.4	-94.935 µg/L	-94.935 ppb	01:50:00
1	V 292.402†	5115.5	5141.5	63.220 µg/L	63.220 ppb	01:50:06
1	Zn 213.857†	13237.2	12776.5	324.62 µg/L	324.62 ppb	01:50:06
2	Sc RADIAL	54606.8	54606.8	100 %		01:49:02
2	Al 396.153Radial†	28803.3	28776.2	21241 µg/L	21241 ppb	01:49:02
2	Ca 317.933Radial†	6126.6	5944.2	5696.7 µg/L	5696.7 ppb	01:49:22
2	Fe 238.204 Radial†	8116.0	8089.5	74717 µg/L	74717 ppb	01:49:02
2	K 766.490 Radial†	5458.8	5282.1	3642.5 µg/L	3642.5 ppb	01:49:02
2	Mg 279.077 IEC†	428.1	417.3	3980.0 µg/L	3980.0 ppb	01:49:22
2	Na 589.592 Radial†	1949.8	1557.9	488.06 µg/L	488.06 ppb	01:49:02
2	Sr 421.552†	5009.4	4943.5	48.752 µg/L	48.752 ppb	01:49:02
2	Sc 361.383	1899439.4	1899439.4	99.701 %		01:50:34
2	Y 371.029	1370624.4	1370624.4	104.66 %		01:50:34
2	Ag 328.068†	-1401.6	-829.0	-1.4665 µg/L	-1.4665 ppb	01:50:39
2	As 188.979†	8.5	8.8	21.569 µg/L	21.569 ppb	01:51:00
2	B 249.677†	601.2	346.3	-23.409 µg/L	-23.409 ppb	01:50:39
2	Ba 233.527†	13393.8	13462.5	359.97 µg/L	359.97 ppb	01:50:39
2	Be 313.107†	6224.9	10049.2	5.7676 µg/L	5.7676 ppb	01:50:39
2	Cd 226.502†	126.6	253.1	-1.2037 µg/L	-1.2037 ppb	01:50:39
2	Co 228.616†	394.6	410.4	16.636 µg/L	16.636 ppb	01:51:00
2	Cr 267.716†	5609.5	5658.7	125.55 µg/L	125.55 ppb	01:50:39
2	Cu 324.752†	7182.4	3963.1	37.634 µg/L	37.634 ppb	01:50:39
2	Mn 257.610†	678869.6	681131.0	2405.8 µg/L	2405.8 ppb	01:50:34
2	Mo 202.031†	38.1	44.5	7.6508 µg/L	7.6508 ppb	01:51:00
2	Ni 231.604†	1597.2	1321.7	74.214 µg/L	74.214 ppb	01:51:00
2	P 214.914†	304.1	280.1	556.99 µg/L	556.99 ppb	01:51:00
2	Pb 220.353†	326.2	235.3	62.053 µg/L	62.053 ppb	01:51:00

2	S 181.975 Axial†	41.3	29.4	134.06 µg/L	134.06 ppb	01:51:00
2	Sb 206.836†	25.1	5.4	3.5948 µg/L	3.5948 ppb	01:51:00
2	Se 196.026†	-20.1	-32.5	148.63 µg/L	148.63 ppb	01:51:00
2	SiO2†	97574.0	96312.2	20791 µg/L	20791 ppb	01:50:39
2	Si 251.611†	116144.2	116239.4	9690.8 µg/L	9690.8 ppb	01:50:39
2	Sn 189.927†	18.9	21.2	2.4805 µg/L	2.4805 ppb	01:51:00
2	Ti 334.940†	811195.5	813552.2	1932.7 µg/L	1932.7 ppb	01:50:34
2	Tl 190.801†	-44.1	-22.6	5.8034 µg/L	5.8034 ppb	01:51:00
2	U 409.014†	-834.2	-1015.0	-95.782 µg/L	-95.782 ppb	01:50:34
2	V 292.402†	5214.6	5264.9	64.560 µg/L	64.560 ppb	01:50:39
2	Zn 213.857†	13312.4	12913.9	328.14 µg/L	328.14 ppb	01:50:39
3	Sc RADIAL	54724.7	54724.7	100 %		01:49:28
3	Al 396.153Radial†	28759.5	28670.5	21163 µg/L	21163 ppb	01:49:28
3	Ca 317.933Radial†	6120.7	5925.2	5678.5 µg/L	5678.5 ppb	01:49:48
3	Fe 238.204 Radial†	8130.3	8086.3	74687 µg/L	74687 ppb	01:49:28
3	K 766.490 Radial†	5389.5	5201.2	3586.7 µg/L	3586.7 ppb	01:49:28
3	Mg 279.077 IEC†	429.1	417.3	3980.3 µg/L	3980.3 ppb	01:49:48
3	Na 589.592 Radial†	1947.3	1551.2	485.95 µg/L	485.95 ppb	01:49:28
3	Sr 421.552†	5031.1	4954.4	48.858 µg/L	48.858 ppb	01:49:28
3	Sc 361.383	1912571.9	1912571.9	100.39 %		01:51:07
3	Y 371.029	1379691.1	1379691.1	105.35 %		01:51:07
3	Ag 328.068†	-1347.9	-765.9	-0.9965 µg/L	-0.9965 ppb	01:51:13
3	As 188.979†	4.5	4.8	13.560 µg/L	13.560 ppb	01:51:33
3	B 249.677†	606.9	347.9	-23.339 µg/L	-23.339 ppb	01:51:13
3	Ba 233.527†	12786.1	12764.9	341.32 µg/L	341.32 ppb	01:51:13
3	Be 313.107†	5716.5	9499.9	5.4312 µg/L	5.4312 ppb	01:51:13
3	Cd 226.502†	118.4	244.1	-1.4646 µg/L	-1.4646 ppb	01:51:13
3	Co 228.616†	355.2	368.5	14.630 µg/L	14.630 ppb	01:51:33
3	Cr 267.716†	5296.1	5307.8	117.77 µg/L	117.77 ppb	01:51:13
3	Cu 324.752†	6936.7	3668.8	35.607 µg/L	35.607 ppb	01:51:13
3	Mn 257.610†	669432.7	667055.4	2356.3 µg/L	2356.3 ppb	01:51:07
3	Mo 202.031†	43.5	49.6	8.2056 µg/L	8.2056 ppb	01:51:33
3	Ni 231.604†	1471.2	1185.2	66.650 µg/L	66.650 ppb	01:51:33
3	P 214.914†	285.1	259.1	511.18 µg/L	511.18 ppb	01:51:33
3	Pb 220.353†	317.8	224.6	59.165 µg/L	59.165 ppb	01:51:33
3	S 181.975 Axial†	45.4	33.2	151.42 µg/L	151.42 ppb	01:51:33
3	Sb 206.836†	27.8	7.9	6.1811 µg/L	6.1811 ppb	01:51:33
3	Se 196.026†	-23.3	-35.5	143.86 µg/L	143.86 ppb	01:51:33
3	SiO2†	93546.9	91628.7	19780 µg/L	19780 ppb	01:51:13
3	Si 251.611†	111295.2	110609.4	9221.5 µg/L	9221.5 ppb	01:51:13
3	Sn 189.927†	19.3	21.6	2.6448 µg/L	2.6448 ppb	01:51:33
3	Ti 334.940†	795578.9	792409.7	1882.4 µg/L	1882.4 ppb	01:51:07
3	Tl 190.801†	-41.4	-19.5	9.4959 µg/L	9.4959 ppb	01:51:33
3	U 409.014†	-873.9	-1048.8	-98.610 µg/L	-98.610 ppb	01:51:07
3	V 292.402†	4878.7	4894.4	60.632 µg/L	60.632 ppb	01:51:13
3	Zn 213.857†	12747.4	12259.4	311.33 µg/L	311.33 ppb	01:51:13

-----  
Mean Data: 246437009|950491|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1906782.1	100.09 %		0.352			0.35%
Sc RADIAL	54583.3	100 %		0.3			0.28%
Y 371.029	1376016.5	105.07 %		0.364			0.35%
Ag 328.068†	-768.9	-1.0103 µg/L		0.44937	-1.0103 ppb	0.44937	44.48%
Al 396.153Radial†	28706.4	21190 µg/L		44.6	21190 ppb	44.6	0.21%
As 188.979†	8.7	21.355 µg/L		7.6902	21.355 ppb	7.6902	36.01%
B 249.677†	341.4	-23.580 µg/L		0.3583	-23.580 ppb	0.3583	1.52%
Ba 233.527†	13171.4	352.19 µg/L		9.703	352.19 ppb	9.703	2.76%
Be 313.107†	9819.2	5.6256 µg/L		0.17416	5.6256 ppb	0.17416	3.10%
Ca 317.933Radial†	5945.6	5698.1 µg/L		20.29	5698.1 ppb	20.29	0.36%
Cd 226.502†	245.6	-1.4069 µg/L		0.18135	-1.4069 ppb	0.18135	12.89%
Co 228.616†	392.1	15.749 µg/L		1.0227	15.749 ppb	1.0227	6.49%
Cr 267.716†	5528.2	122.66 µg/L		4.258	122.66 ppb	4.258	3.47%
Cu 324.752†	3845.0	36.808 µg/L		1.0644	36.808 ppb	1.0644	2.89%
Fe 238.204 Radial†	8078.2	74613 µg/L		155.7	74613 ppb	155.7	0.21%
K 766.490 Radial†	5269.7	3633.9 µg/L		43.58	3633.9 ppb	43.58	1.20%
Mg 279.077 IEC†	419.0	3997.0 µg/L		29.25	3997.0 ppb	29.25	0.73%
Mn 257.610†	676174.1	2388.4 µg/L		27.81	2388.4 ppb	27.81	1.16%
Mo 202.031†	44.4	7.6357 µg/L		0.57754	7.6357 ppb	0.57754	7.56%
Na 589.592 Radial†	1549.4	485.40 µg/L		2.968	485.40 ppb	2.968	0.61%

Ni 231.604†	1269.9	71.343 µg/L	4.0975	71.343 ppb	4.0975	5.74%
P 214.914†	276.6	549.47 µg/L	35.138	549.47 ppb	35.138	6.39%
Pb 220.353†	234.8	61.919 µg/L	2.6901	61.919 ppb	2.6901	4.34%
S 181.975 Axial†	31.2	141.93 µg/L	8.797	141.93 ppb	8.797	6.20%
Sb 206.836†	7.6	5.8352 µg/L	2.08913	5.8352 ppb	2.08913	35.80%
Se 196.026†	-34.9	144.68 µg/L	3.612	144.68 ppb	3.612	2.50%
SiO2†	94360.9	20370 µg/L	526.2	20370 ppb	526.2	2.58%
Si 251.611†	113896.5	9495.5 µg/L	244.39	9495.5 ppb	244.39	2.57%
Sn 189.927†	20.5	2.1682 µg/L	0.68800	2.1682 ppb	0.68800	31.73%
Sr 421.552†	4959.2	48.906 µg/L	0.1830	48.906 ppb	0.1830	0.37%
Ti 334.940†	806021.2	1914.8 µg/L	28.06	1914.8 ppb	28.06	1.47%
Tl 190.801†	-20.0	9.2853 µg/L	3.38154	9.2853 ppb	3.38154	36.42%
U 409.014†	-1023.1	-96.442 µg/L	1.9243	-96.442 ppb	1.9243	2.00%
V 292.402†	5100.3	62.804 µg/L	1.9967	62.804 ppb	1.9967	3.18%
Zn 213.857†	12649.9	321.36 µg/L	8.861	321.36 ppb	8.861	2.76%

Sequence No.: 30

Sample ID: 246437010|950491|1

Analyst: JWJ

Initial Sample Wt:

Dilution:

Autosampler Location: 316

Date Collected: 2/23/2010 01:51:42

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 246437010|950491|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	54319.4	54319.4	99.6	%		01:52:15
1	Al 396.153Radial†	26915.4	27033.0	19954	µg/L	19954 ppb	01:52:15
1	Ca 317.933Radial†	6293.0	6143.6	5887.8	µg/L	5887.8 ppb	01:52:35
1	Fe 238.204 Radial†	5824.9	5832.2	53868	µg/L	53868 ppb	01:52:35
1	K 766.490 Radial†	5157.1	5008.1	3453.4	µg/L	3453.4 ppb	01:52:15
1	Mg 279.077 IEC†	415.5	406.9	3901.3	µg/L	3901.3 ppb	01:52:35
1	Na 589.592 Radial†	1763.3	1381.0	432.62	µg/L	432.62 ppb	01:52:15
1	Sr 421.552†	4752.1	4711.7	46.465	µg/L	46.465 ppb	01:52:15
1	Sc 361.383	1913210.6	1913210.6	100.42	%		01:53:39
1	Y 371.029	1368157.0	1368157.0	104.47	%		01:53:39
1	Ag 328.068†	-1142.9	-561.2	-0.7544	µg/L	-0.7544 ppb	01:53:45
1	As 188.979†	4.9	5.2	13.094	µg/L	13.094 ppb	01:54:05
1	B 249.677†	537.4	278.5	-15.638	µg/L	-15.638 ppb	01:53:45
1	Ba 233.527†	10336.2	10321.1	275.97	µg/L	275.97 ppb	01:53:45
1	Be 313.107†	3788.4	7578.0	4.3947	µg/L	4.3947 ppb	01:53:45
1	Cd 226.502†	58.3	184.2	-0.8294	µg/L	-0.8294 ppb	01:54:05
1	Co 228.616†	268.1	281.7	11.393	µg/L	11.393 ppb	01:54:05
1	Cr 267.716†	2990.8	3010.5	66.805	µg/L	66.805 ppb	01:53:45
1	Cu 324.752†	5893.2	2627.5	25.553	µg/L	25.553 ppb	01:53:45
1	Mn 257.610†	454049.9	452360.2	1598.3	µg/L	1598.3 ppb	01:53:39
1	Mo 202.031†	30.2	36.3	5.9755	µg/L	5.9755 ppb	01:54:05
1	Ni 231.604†	1039.6	755.0	42.536	µg/L	42.536 ppb	01:54:05
1	P 214.914†	250.1	224.2	451.79	µg/L	451.79 ppb	01:54:05
1	Pb 220.353†	387.6	294.0	78.640	µg/L	78.640 ppb	01:54:05
1	S 181.975 Axial†	57.9	45.7	208.21	µg/L	208.21 ppb	01:54:05
1	Sb 206.836†	22.0	2.1	0.9442	µg/L	0.9442 ppb	01:54:05
1	Se 196.026†	-13.3	-25.6	102.39	µg/L	102.39 ppb	01:54:05
1	SiO2†	97623.0	95656.6	20649	µg/L	20649 ppb	01:53:45
1	Si 251.611†	116197.4	115453.9	9625.3	µg/L	9625.3 ppb	01:53:45
1	Sn 189.927†	17.7	19.9	4.0717	µg/L	4.0717 ppb	01:54:05
1	Ti 334.940†	565839.7	563376.7	1338.3	µg/L	1338.3 ppb	01:53:39
1	Tl 190.801†	-37.3	-15.5	4.5393	µg/L	4.5393 ppb	01:54:05
1	U 409.014†	-304.9	-481.9	-48.227	µg/L	-48.227 ppb	01:53:45
1	V 292.402†	4001.5	4019.2	48.873	µg/L	48.873 ppb	01:53:45
1	Zn 213.857†	9436.0	8957.7	227.49	µg/L	227.49 ppb	01:53:45
2	Sc RADIAL	54751.0	54751.0	100	%		01:52:41
2	Al 396.153Radial†	27071.0	26975.0	19912	µg/L	19912 ppb	01:52:41
2	Ca 317.933Radial†	6282.6	6083.6	5830.2	µg/L	5830.2 ppb	01:53:01
2	Fe 238.204 Radial†	5829.8	5791.0	53487	µg/L	53487 ppb	01:53:01
2	K 766.490 Radial†	5191.2	5001.2	3448.8	µg/L	3448.8 ppb	01:52:41
2	Mg 279.077 IEC†	423.5	411.6	3946.7	µg/L	3946.7 ppb	01:53:01
2	Na 589.592 Radial†	1768.2	1371.9	429.80	µg/L	429.80 ppb	01:52:41
2	Sr 421.552†	4791.6	4713.4	46.482	µg/L	46.482 ppb	01:52:41
2	Sc 361.383	1923871.6	1923871.6	100.98	%		01:54:12
2	Y 371.029	1375548.7	1375548.7	105.03	%		01:54:12
2	Ag 328.068†	-1114.2	-526.6	-0.5079	µg/L	-0.5079 ppb	01:54:17
2	As 188.979†	8.1	8.4	19.479	µg/L	19.479 ppb	01:54:38
2	B 249.677†	560.4	298.3	-14.561	µg/L	-14.561 ppb	01:54:17
2	Ba 233.527†	10316.8	10244.9	273.94	µg/L	273.94 ppb	01:54:17
2	Be 313.107†	3743.2	7512.4	4.3528	µg/L	4.3528 ppb	01:54:17
2	Cd 226.502†	56.8	182.4	-0.8385	µg/L	-0.8385 ppb	01:54:38
2	Co 228.616†	256.4	268.6	10.736	µg/L	10.736 ppb	01:54:38
2	Cr 267.716†	2982.5	2985.8	66.256	µg/L	66.256 ppb	01:54:17
2	Cu 324.752†	5882.7	2584.6	25.205	µg/L	25.205 ppb	01:54:17
2	Mn 257.610†	456728.0	452506.6	1598.8	µg/L	1598.8 ppb	01:54:12
2	Mo 202.031†	23.3	29.3	5.2055	µg/L	5.2055 ppb	01:54:38
2	Ni 231.604†	1041.9	751.5	42.337	µg/L	42.337 ppb	01:54:38
2	P 214.914†	249.2	221.9	447.20	µg/L	447.20 ppb	01:54:38
2	Pb 220.353†	383.1	287.5	76.880	µg/L	76.880 ppb	01:54:38

2	S 181.975 Axial†	55.8	43.2	196.95 µg/L	196.95 ppb	01:54:38
2	Sb 206.836†	29.3	9.3	8.0698 µg/L	8.0698 ppb	01:54:38
2	Se 196.026†	-14.0	-26.2	100.35 µg/L	100.35 ppb	01:54:38
2	SiO2†	97664.3	95158.7	20542 µg/L	20542 ppb	01:54:17
2	Si 251.611†	116138.2	114754.1	9567.0 µg/L	9567.0 ppb	01:54:17
2	Sn 189.927†	14.5	16.7	2.6123 µg/L	2.6123 ppb	01:54:38
2	Ti 334.940†	568292.6	562683.4	1336.6 µg/L	1336.6 ppb	01:54:12
2	Tl 190.801†	-35.9	-13.9	6.6996 µg/L	6.6996 ppb	01:54:38
2	U 409.014†	-371.8	-546.5	-53.582 µg/L	-53.582 ppb	01:54:17
2	V 292.402†	3980.7	3976.6	48.365 µg/L	48.365 ppb	01:54:17
2	Zn 213.857†	9422.7	8892.5	225.83 µg/L	225.83 ppb	01:54:17
3	Sc RADIAL	54626.3	54626.3	100 %		01:53:07
3	Al 396.153Radial†	27094.0	27059.5	19974 µg/L	19974 ppb	01:53:07
3	Ca 317.933Radial†	6338.5	6153.6	5897.4 µg/L	5897.4 ppb	01:53:27
3	Fe 238.204 Radial†	5838.6	5813.0	53690 µg/L	53690 ppb	01:53:27
3	K 766.490 Radial†	5203.0	5024.7	3464.9 µg/L	3464.9 ppb	01:53:07
3	Mg 279.077 IEC†	417.3	406.4	3895.9 µg/L	3895.9 ppb	01:53:27
3	Na 589.592 Radial†	1769.6	1377.3	431.48 µg/L	431.48 ppb	01:53:07
3	Sr 421.552†	4774.8	4707.5	46.424 µg/L	46.424 ppb	01:53:07
3	Sc 361.383	1921296.6	1921296.6	100.85 %		01:54:45
3	Y 371.029	1372113.2	1372113.2	104.77 %		01:54:45
3	Ag 328.068†	-1116.0	-529.8	-0.5304 µg/L	-0.5304 ppb	01:54:50
3	As 188.979†	5.5	5.8	14.350 µg/L	14.350 ppb	01:55:11
3	B 249.677†	549.5	288.3	-15.113 µg/L	-15.113 ppb	01:54:50
3	Ba 233.527†	10085.9	10029.6	268.18 µg/L	268.18 ppb	01:54:50
3	Be 313.107†	3506.2	7282.4	4.2165 µg/L	4.2165 ppb	01:54:50
3	Cd 226.502†	38.5	164.3	-1.3780 µg/L	-1.3780 ppb	01:55:11
3	Co 228.616†	231.6	244.4	9.5844 µg/L	9.5844 ppb	01:55:11
3	Cr 267.716†	2888.8	2896.9	64.282 µg/L	64.282 ppb	01:54:50
3	Cu 324.752†	5828.0	2538.2	24.914 µg/L	24.914 ppb	01:54:50
3	Mn 257.610†	446275.1	442747.9	1564.5 µg/L	1564.5 ppb	01:54:45
3	Mo 202.031†	20.3	26.4	4.8930 µg/L	4.8930 ppb	01:55:11
3	Ni 231.604†	972.4	684.0	38.599 µg/L	38.599 ppb	01:55:11
3	P 214.914†	239.0	212.1	425.62 µg/L	425.62 ppb	01:55:11
3	Pb 220.353†	363.8	268.8	71.821 µg/L	71.821 ppb	01:55:11
3	S 181.975 Axial†	56.9	44.5	202.66 µg/L	202.66 ppb	01:55:11
3	Sb 206.836†	29.0	9.0	7.8681 µg/L	7.8681 ppb	01:55:11
3	Se 196.026†	-9.1	-21.4	108.49 µg/L	108.49 ppb	01:55:11
3	SiO2†	95817.7	93457.3	20175 µg/L	20175 ppb	01:54:50
3	Si 251.611†	113977.7	112766.0	9401.3 µg/L	9401.3 ppb	01:54:50
3	Sn 189.927†	17.9	20.1	4.1598 µg/L	4.1598 ppb	01:55:11
3	Ti 334.940†	553573.8	548842.7	1303.8 µg/L	1303.8 ppb	01:54:45
3	Tl 190.801†	-32.9	-10.9	10.587 µg/L	10.587 ppb	01:55:11
3	U 409.014†	-306.1	-481.9	-48.203 µg/L	-48.203 ppb	01:54:50
3	V 292.402†	3829.2	3831.6	46.859 µg/L	46.859 ppb	01:54:50
3	Zn 213.857†	9232.6	8716.4	221.31 µg/L	221.31 ppb	01:54:50

-----  
Mean Data: 246437010|950491|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1919459.6	100.75 %	0.292			0.29%
Sc RADIAL	54565.5	100 %	0.4			0.41%
Y 371.029	1371939.6	104.76 %	0.282			0.27%
Ag 328.068†	-539.2	-0.5976 µg/L	0.13627	-0.5976 ppb	0.13627	22.80%
Al 396.153Radial†	27022.5	19947 µg/L	31.9	19947 ppb	31.9	0.16%
As 188.979†	6.4	15.641 µg/L	3.3822	15.641 ppb	3.3822	21.62%
B 249.677†	288.3	-15.104 µg/L	0.5385	-15.104 ppb	0.5385	3.57%
Ba 233.527†	10198.5	272.70 µg/L	4.043	272.70 ppb	4.043	1.48%
Be 313.107†	7457.6	4.3213 µg/L	0.09318	4.3213 ppb	0.09318	2.16%
Ca 317.933Radial†	6126.9	5871.8 µg/L	36.32	5871.8 ppb	36.32	0.62%
Cd 226.502†	177.0	-1.0153 µg/L	0.31411	-1.0153 ppb	0.31411	30.94%
Co 228.616†	264.9	10.571 µg/L	0.9154	10.571 ppb	0.9154	8.66%
Cr 267.716†	2964.4	65.781 µg/L	1.3267	65.781 ppb	1.3267	2.02%
Cu 324.752†	2583.4	25.224 µg/L	0.3198	25.224 ppb	0.3198	1.27%
Fe 238.204 Radial†	5812.1	53682 µg/L	190.8	53682 ppb	190.8	0.36%
K 766.490 Radial†	5011.3	3455.7 µg/L	8.33	3455.7 ppb	8.33	0.24%
Mg 279.077 IEC†	408.3	3914.6 µg/L	27.90	3914.6 ppb	27.90	0.71%
Mn 257.610†	449204.9	1587.2 µg/L	19.67	1587.2 ppb	19.67	1.24%
Mo 202.031†	30.7	5.3580 µg/L	0.55714	5.3580 ppb	0.55714	10.40%
Na 589.592 Radial†	1376.8	431.30 µg/L	1.423	431.30 ppb	1.423	0.33%

Ni 231.604†	730.2	41.157 µg/L	2.2178	41.157 ppb	2.2178	5.39%
P 214.914†	219.4	441.54 µg/L	13.973	441.54 ppb	13.973	3.16%
Pb 220.353†	283.4	75.780 µg/L	3.5400	75.780 ppb	3.5400	4.67%
S 181.975 Axial†	44.5	202.60 µg/L	5.629	202.60 ppb	5.629	2.78%
Sb 206.836†	6.8	5.6274 µg/L	4.05701	5.6274 ppb	4.05701	72.09%
Se 196.026†	-24.4	103.74 µg/L	4.234	103.74 ppb	4.234	4.08%
SiO2†	94757.5	20455 µg/L	248.9	20455 ppb	248.9	1.22%
Si 251.611†	114324.7	9531.2 µg/L	116.26	9531.2 ppb	116.26	1.22%
Sn 189.927†	18.9	3.6146 µg/L	0.86910	3.6146 ppb	0.86910	24.04%
Sr 421.552†	4710.9	46.457 µg/L	0.0298	46.457 ppb	0.0298	0.06%
Ti 334.940†	558301.0	1326.2 µg/L	19.48	1326.2 ppb	19.48	1.47%
Tl 190.801†	-13.4	7.2753 µg/L	3.06468	7.2753 ppb	3.06468	42.12%
U 409.014†	-503.4	-50.004 µg/L	3.0987	-50.004 ppb	3.0987	6.20%
V 292.402†	3942.5	48.032 µg/L	1.0473	48.032 ppb	1.0473	2.18%
Zn 213.857†	8855.5	224.88 µg/L	3.199	224.88 ppb	3.199	1.42%

Sequence No.: 31

Sample ID: 246437011|950491|1

Analyst: JWW

Initial Sample Wt:

Dilution:

Autosampler Location: 317

Date Collected: 2/23/2010 01:55:21

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 246437011|950491|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	54585.8	54585.8	100 %		01:55:53
1	Al 396.153Radial†	27200.0	27185.4	20067 µg/L	20067 ppb	01:55:53
1	Ca 317.933Radial†	6264.2	6084.0	5830.7 µg/L	5830.7 ppb	01:56:14
1	Fe 238.204 Radial†	7507.4	7484.5	69129 µg/L	69129 ppb	01:55:53
1	K 766.490 Radial†	4678.4	4504.5	3106.2 µg/L	3106.2 ppb	01:55:53
1	Mg 279.077 IEC†	397.8	387.2	3692.7 µg/L	3692.7 ppb	01:56:14
1	Na 589.592 Radial†	2051.1	1659.9	520.01 µg/L	520.01 ppb	01:55:53
1	Sr 421.552†	4632.3	4568.6	45.055 µg/L	45.055 ppb	01:55:53
1	Sc 361.383	1928794.0	1928794.0	101.24 %		01:57:17
1	Y 371.029	1396139.8	1396139.8	106.61 %		01:57:17
1	Ag 328.068†	-1326.7	-733.6	-1.1507 µg/L	-1.1507 ppb	01:57:23
1	As 188.979†	15.5	15.6	34.781 µg/L	34.781 ppb	01:57:43
1	B 249.677†	573.2	309.6	-22.176 µg/L	-22.176 ppb	01:57:23
1	Ba 233.527†	11449.4	11337.5	303.15 µg/L	303.15 ppb	01:57:23
1	Be 313.107†	6390.3	10117.5	5.9091 µg/L	5.9091 ppb	01:57:23
1	Cd 226.502†	97.5	222.4	-1.4618 µg/L	-1.4618 ppb	01:57:23
1	Co 228.616†	266.6	278.0	10.501 µg/L	10.501 ppb	01:57:43
1	Cr 267.716†	4273.6	4253.5	94.376 µg/L	94.376 ppb	01:57:23
1	Cu 324.752†	6297.7	2979.6	30.096 µg/L	30.096 ppb	01:57:23
1	Mn 257.610†	585969.9	579008.4	2045.8 µg/L	2045.8 ppb	01:57:17
1	Mo 202.031†	48.3	54.0	8.4638 µg/L	8.4638 ppb	01:57:43
1	Ni 231.604†	1262.2	966.5	54.457 µg/L	54.457 ppb	01:57:43
1	P 214.914†	355.3	326.0	662.47 µg/L	662.47 ppb	01:57:43
1	Pb 220.353†	319.3	223.4	59.016 µg/L	59.016 ppb	01:57:43
1	S 181.975 Axial†	33.9	21.5	97.967 µg/L	97.967 ppb	01:57:43
1	Sb 206.836†	28.5	8.4	6.9408 µg/L	6.9408 ppb	01:57:43
1	Se 196.026†	-19.0	-31.1	135.81 µg/L	135.81 ppb	01:57:43
1	SiO2†	99787.0	97008.5	20941 µg/L	20941 ppb	01:57:23
1	Si 251.611†	118886.6	117175.3	9768.9 µg/L	9768.9 ppb	01:57:23
1	Sn 189.927†	3.4	5.7	-4.2801 µg/L	-4.2801 ppb	01:57:43
1	Ti 334.940†	714999.5	706154.0	1677.5 µg/L	1677.5 ppb	01:57:17
1	Tl 190.801†	-36.9	-14.7	12.493 µg/L	12.493 ppb	01:57:43
1	U 409.014†	-998.4	-1164.5	-107.54 µg/L	-107.54 ppb	01:57:17
1	V 292.402†	4065.5	4050.2	51.015 µg/L	51.015 ppb	01:57:23
1	Zn 213.857†	12668.1	12074.3	306.91 µg/L	306.91 ppb	01:57:23
2	Sc RADIAL	54307.0	54307.0	99.6 %		01:56:19
2	Al 396.153Radial†	27122.3	27246.9	20112 µg/L	20112 ppb	01:56:19
2	Ca 317.933Radial†	6279.5	6131.5	5876.2 µg/L	5876.2 ppb	01:56:39
2	Fe 238.204 Radial†	7433.8	7449.1	68802 µg/L	68802 ppb	01:56:19
2	K 766.490 Radial†	4679.0	4529.1	3123.2 µg/L	3123.2 ppb	01:56:19
2	Mg 279.077 IEC†	405.5	396.9	3788.0 µg/L	3788.0 ppb	01:56:39
2	Na 589.592 Radial†	2037.6	1656.8	519.03 µg/L	519.03 ppb	01:56:19
2	Sr 421.552†	4605.9	4566.0	45.028 µg/L	45.028 ppb	01:56:19
2	Sc 361.383	1910608.0	1910608.0	100.29 %		01:57:51
2	Y 371.029	1384149.8	1384149.8	105.69 %		01:57:51
2	Ag 328.068†	-1265.2	-684.8	-0.7870 µg/L	-0.7870 ppb	01:57:56
2	As 188.979†	6.7	7.0	17.647 µg/L	17.647 ppb	01:58:17
2	B 249.677†	521.7	263.6	-24.049 µg/L	-24.049 ppb	01:57:56
2	Ba 233.527†	11398.5	11394.4	304.67 µg/L	304.67 ppb	01:57:56
2	Be 313.107†	6373.8	10161.1	5.9359 µg/L	5.9359 ppb	01:57:56
2	Cd 226.502†	111.4	237.2	-1.0052 µg/L	-1.0052 ppb	01:57:56
2	Co 228.616†	247.9	261.8	9.6810 µg/L	9.6810 ppb	01:58:17
2	Cr 267.716†	4201.2	4221.4	93.665 µg/L	93.665 ppb	01:57:56
2	Cu 324.752†	6306.7	3047.8	30.519 µg/L	30.519 ppb	01:57:56
2	Mn 257.610†	582637.0	581194.2	2053.5 µg/L	2053.5 ppb	01:57:51
2	Mo 202.031†	52.5	58.6	8.9557 µg/L	8.9557 ppb	01:58:17
2	Ni 231.604†	1246.9	963.1	54.264 µg/L	54.264 ppb	01:58:17
2	P 214.914†	355.1	329.2	669.76 µg/L	669.76 ppb	01:58:17
2	Pb 220.353†	316.3	223.5	59.046 µg/L	59.046 ppb	01:58:17

2	S 181.975 Axial†	32.3	20.2	92.266 µg/L	92.266 ppb	01:58:17
2	Sb 206.836†	25.5	5.7	4.1979 µg/L	4.1979 ppb	01:58:17
2	Se 196.026†	-21.7	-34.0	130.27 µg/L	130.27 ppb	01:58:17
2	SiO2†	99142.3	97303.9	21005 µg/L	21005 ppb	01:57:56
2	Si 251.611†	117911.3	117320.5	9781.0 µg/L	9781.0 ppb	01:57:56
2	Sn 189.927†	13.5	15.8	0.5066 µg/L	0.5066 ppb	01:58:17
2	Ti 334.940†	709778.2	707669.8	1681.1 µg/L	1681.1 ppb	01:57:51
2	Tl 190.801†	-39.8	-18.0	7.7701 µg/L	7.7701 ppb	01:58:17
2	U 409.014†	-973.2	-1148.8	-106.18 µg/L	-106.18 ppb	01:57:51
2	V 292.402†	4015.8	4039.0	50.861 µg/L	50.861 ppb	01:57:56
2	Zn 213.857†	12559.5	12085.0	307.20 µg/L	307.20 ppb	01:57:56
3	Sc RADIAL	54255.7	54255.7	99.5 %		01:56:45
3	Al 396.153Radial†	27096.1	27246.3	20112 µg/L	20112 ppb	01:56:45
3	Ca 317.933Radial†	6268.7	6126.7	5871.6 µg/L	5871.6 ppb	01:57:05
3	Fe 238.204 Radial†	7394.1	7416.3	68499 µg/L	68499 ppb	01:56:45
3	K 766.490 Radial†	4734.2	4589.0	3164.5 µg/L	3164.5 ppb	01:56:45
3	Mg 279.077 IEC†	403.3	395.1	3770.4 µg/L	3770.4 ppb	01:57:05
3	Na 589.592 Radial†	2023.3	1644.4	515.15 µg/L	515.15 ppb	01:56:45
3	Sr 421.552†	4577.4	4541.6	44.788 µg/L	44.788 ppb	01:56:45
3	Sc 361.383	1910495.4	1910495.4	100.28 %		01:58:24
3	Y 371.029	1380968.2	1380968.2	105.45 %		01:58:24
3	Ag 328.068†	-1264.6	-684.2	-0.8162 µg/L	-0.8162 ppb	01:58:30
3	As 188.979†	6.2	6.5	16.562 µg/L	16.562 ppb	01:58:50
3	B 249.677†	569.2	311.0	-21.790 µg/L	-21.790 ppb	01:58:30
3	Ba 233.527†	11038.4	11036.0	295.08 µg/L	295.08 ppb	01:58:30
3	Be 313.107†	6039.7	9828.3	5.7385 µg/L	5.7385 ppb	01:58:30
3	Cd 226.502†	96.1	221.9	-1.4078 µg/L	-1.4078 ppb	01:58:30
3	Co 228.616†	239.5	253.5	9.3560 µg/L	9.3560 ppb	01:58:50
3	Cr 267.716†	4049.6	4070.5	90.316 µg/L	90.316 ppb	01:58:30
3	Cu 324.752†	6198.5	2940.2	29.737 µg/L	29.737 ppb	01:58:30
3	Mn 257.610†	567893.4	566526.3	2001.9 µg/L	2001.9 ppb	01:58:24
3	Mo 202.031†	41.9	48.1	7.8045 µg/L	7.8045 ppb	01:58:50
3	Ni 231.604†	1177.1	893.6	50.408 µg/L	50.408 ppb	01:58:50
3	P 214.914†	333.9	308.1	623.63 µg/L	623.63 ppb	01:58:50
3	Pb 220.353†	308.1	215.3	56.852 µg/L	56.852 ppb	01:58:50
3	S 181.975 Axial†	31.9	19.8	90.425 µg/L	90.425 ppb	01:58:50
3	Sb 206.836†	23.2	3.4	1.9809 µg/L	1.9809 ppb	01:58:50
3	Se 196.026†	-11.3	-23.7	145.51 µg/L	145.51 ppb	01:58:50
3	SiO2†	96936.4	95110.0	20531 µg/L	20531 ppb	01:58:30
3	Si 251.611†	115320.3	114743.8	9566.1 µg/L	9566.1 ppb	01:58:30
3	Sn 189.927†	2.1	4.4	-4.8171 µg/L	-4.8171 ppb	01:58:50
3	Ti 334.940†	689814.9	687804.4	1633.9 µg/L	1633.9 ppb	01:58:24
3	Tl 190.801†	-35.0	-13.2	13.982 µg/L	13.982 ppb	01:58:50
3	U 409.014†	-1013.7	-1189.2	-109.53 µg/L	-109.53 ppb	01:58:24
3	V 292.402†	3803.8	3827.7	48.578 µg/L	48.578 ppb	01:58:30
3	Zn 213.857†	12232.3	11759.5	298.86 µg/L	298.86 ppb	01:58:30

-----  
Mean Data: 246437011|950491|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1916632.5	100.60 %		0.553			0.55%
Sc RADIAL	54382.9	99.7 %		0.33			0.33%
Y 371.029	1387085.9	105.91 %		0.611			0.58%
Ag 328.068†	-700.9	-0.9180 µg/L		0.20205	-0.9180 ppb	0.20205	22.01%
Al 396.153Radial†	27226.2	20097 µg/L		26.1	20097 ppb	26.1	0.13%
As 188.979†	9.7	22.997 µg/L		10.2198	22.997 ppb	10.2198	44.44%
B 249.677†	294.7	-22.672 µg/L		1.2080	-22.672 ppb	1.2080	5.33%
Ba 233.527†	11256.0	300.96 µg/L		5.151	300.96 ppb	5.151	1.71%
Be 313.107†	10035.7	5.8611 µg/L		0.10707	5.8611 ppb	0.10707	1.83%
Ca 317.933Radial†	6114.1	5859.5 µg/L		25.04	5859.5 ppb	25.04	0.43%
Cd 226.502†	227.2	-1.2916 µg/L		0.24952	-1.2916 ppb	0.24952	19.32%
Co 228.616†	264.4	9.8460 µg/L		0.59004	9.8460 ppb	0.59004	5.99%
Cr 267.716†	4181.8	92.786 µg/L		2.1679	92.786 ppb	2.1679	2.34%
Cu 324.752†	2989.2	30.117 µg/L		0.3913	30.117 ppb	0.3913	1.30%
Fe 238.204 Radial†	7450.0	68810 µg/L		315.3	68810 ppb	315.3	0.46%
K 766.490 Radial†	4540.9	3131.3 µg/L		29.97	3131.3 ppb	29.97	0.96%
Mg 279.077 IEC†	393.1	3750.4 µg/L		50.72	3750.4 ppb	50.72	1.35%
Mn 257.610†	575576.3	2033.7 µg/L		27.87	2033.7 ppb	27.87	1.37%
Mo 202.031†	53.6	8.4080 µg/L		0.57760	8.4080 ppb	0.57760	6.87%
Na 589.592 Radial†	1653.7	518.07 µg/L		2.569	518.07 ppb	2.569	0.50%



Ni 231.604†	941.0	53.043 µg/L	2.2839	53.043 ppb	2.2839	4.31%
P 214.914†	321.1	651.95 µg/L	24.795	651.95 ppb	24.795	3.80%
Pb 220.353†	220.7	58.305 µg/L	1.2583	58.305 ppb	1.2583	2.16%
S 181.975 Axial†	20.5	93.553 µg/L	3.9324	93.553 ppb	3.9324	4.20%
Sb 206.836†	5.8	4.3732 µg/L	2.48463	4.3732 ppb	2.48463	56.81%
Se 196.026†	-29.6	137.20 µg/L	7.716	137.20 ppb	7.716	5.62%
SiO2†	96474.1	20826 µg/L	257.0	20826 ppb	257.0	1.23%
Si 251.611†	116413.2	9705.3 µg/L	120.68	9705.3 ppb	120.68	1.24%
Sn 189.927†	8.6	-2.8635 µg/L	2.93093	-2.8635 ppb	2.93093	102.35%
Sr 421.552†	4558.7	44.957 µg/L	0.1468	44.957 ppb	0.1468	0.33%
Ti 334.940†	700542.7	1664.2 µg/L	26.27	1664.2 ppb	26.27	1.58%
Tl 190.801†	-15.3	11.415 µg/L	3.2431	11.415 ppb	3.2431	28.41%
U 409.014†	-1167.5	-107.75 µg/L	1.683	-107.75 ppb	1.683	1.56%
V 292.402†	3972.3	50.151 µg/L	1.3649	50.151 ppb	1.3649	2.72%
Zn 213.857†	11972.9	304.32 µg/L	4.735	304.32 ppb	4.735	1.56%

Sequence No.: 32

Sample ID: 246437012|950491|1

Analyst: JWW

Initial Sample Wt:

Dilution:

Autosampler Location: 318

Date Collected: 2/23/2010 01:58:59

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 246437012|950491|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	54639.2	54639.2	100 %		01:59:32
1	Al 396.153Radial†	30922.3	30874.0	22790 µg/L	22790 ppb	01:59:32
1	Ca 317.933Radial†	6698.2	6511.1	6240.0 µg/L	6240.0 ppb	01:59:52
1	Fe 238.204 Radial†	6805.6	6776.8	62593 µg/L	62593 ppb	01:59:32
1	K 766.490 Radial†	6122.3	5941.1	4096.8 µg/L	4096.8 ppb	01:59:32
1	Mg 279.077 IEC†	512.2	501.0	4807.2 µg/L	4807.2 ppb	01:59:52
1	Na 589.592 Radial†	2361.8	1968.0	616.51 µg/L	616.51 ppb	01:59:32
1	Sr 421.552†	5325.9	5256.5	51.838 µg/L	51.838 ppb	01:59:32
1	Sc 361.383	1903241.1	1903241.1	99.901 %		02:00:57
1	Y 371.029	1365023.5	1365023.5	104.23 %		02:00:57
1	Ag 328.068†	-1177.6	-602.0	-0.4444 µg/L	-0.4444 ppb	02:01:02
1	As 188.979†	6.1	6.4	16.132 µg/L	16.132 ppb	02:01:23
1	B 249.677†	568.3	312.2	-18.443 µg/L	-18.443 ppb	02:01:02
1	Ba 233.527†	13859.2	13901.5	371.71 µg/L	371.71 ppb	02:01:02
1	Be 313.107†	4952.8	8763.3	5.0559 µg/L	5.0559 ppb	02:01:02
1	Cd 226.502†	77.7	204.0	-1.1762 µg/L	-1.1762 ppb	02:01:23
1	Co 228.616†	379.2	394.3	16.481 µg/L	16.481 ppb	02:01:23
1	Cr 267.716†	9966.0	10008.2	222.03 µg/L	222.03 ppb	02:01:02
1	Cu 324.752†	6560.2	3325.9	31.568 µg/L	31.568 ppb	02:01:02
1	Mn 257.610†	684520.7	685427.6	2419.3 µg/L	2419.3 ppb	02:00:57
1	Mo 202.031†	32.1	38.4	6.5328 µg/L	6.5328 ppb	02:01:23
1	Ni 231.604†	2495.7	2218.0	123.74 µg/L	123.74 ppb	02:01:02
1	P 214.914†	335.9	311.3	636.08 µg/L	636.08 ppb	02:01:23
1	Pb 220.353†	349.2	257.6	68.638 µg/L	68.638 ppb	02:01:23
1	S 181.975 Axial†	38.1	26.1	118.97 µg/L	118.97 ppb	02:01:23
1	Sb 206.836†	25.4	5.7	2.6948 µg/L	2.6948 ppb	02:01:23
1	Se 196.026†	-18.6	-31.0	116.96 µg/L	116.96 ppb	02:01:23
1	SiO2†	109702.7	108257.4	23370 µg/L	23370 ppb	02:01:02
1	Si 251.611†	130884.6	130761.8	10902 µg/L	10902 ppb	02:01:02
1	Sn 189.927†	5.9	8.2	-2.2632 µg/L	-2.2632 ppb	02:01:23
1	Ti 334.940†	679809.1	680410.5	1616.3 µg/L	1616.3 ppb	02:00:57
1	Tl 190.801†	-39.6	-17.9	8.1017 µg/L	8.1017 ppb	02:01:23
1	U 409.014†	-853.5	-1032.7	-95.613 µg/L	-95.613 ppb	02:00:57
1	V 292.402†	5156.9	5196.6	62.629 µg/L	62.629 ppb	02:01:02
1	Zn 213.857†	10820.2	10392.5	263.58 µg/L	263.58 ppb	02:01:02
2	Sc RADIAL	54297.8	54297.8	99.6 %		01:59:58
2	Al 396.153Radial†	30875.0	31020.6	22898 µg/L	22898 ppb	01:59:58
2	Ca 317.933Radial†	6675.5	6530.4	6258.4 µg/L	6258.4 ppb	02:00:18
2	Fe 238.204 Radial†	6728.1	6741.7	62268 µg/L	62268 ppb	01:59:58
2	K 766.490 Radial†	6043.8	5900.7	4069.0 µg/L	4069.0 ppb	01:59:58
2	Mg 279.077 IEC†	508.0	499.9	4797.1 µg/L	4797.1 ppb	02:00:18
2	Na 589.592 Radial†	2332.8	1953.7	612.03 µg/L	612.03 ppb	01:59:58
2	Sr 421.552†	5300.2	5264.0	51.912 µg/L	51.912 ppb	01:59:58
2	Sc 361.383	1916721.1	1916721.1	100.61 %		02:01:30
2	Y 371.029	1374985.9	1374985.9	104.99 %		02:01:30
2	Ag 328.068†	-1217.9	-633.7	-0.7177 µg/L	-0.7177 ppb	02:01:36
2	As 188.979†	11.6	11.8	26.775 µg/L	26.775 ppb	02:01:56
2	B 249.677†	597.1	336.9	-17.182 µg/L	-17.182 ppb	02:01:36
2	Ba 233.527†	13970.0	13914.1	372.04 µg/L	372.04 ppb	02:01:36
2	Be 313.107†	5054.1	8829.1	5.0983 µg/L	5.0983 ppb	02:01:36
2	Cd 226.502†	66.0	191.7	-1.4844 µg/L	-1.4844 ppb	02:01:56
2	Co 228.616†	382.1	394.5	16.492 µg/L	16.492 ppb	02:01:56
2	Cr 267.716†	9996.9	9968.7	221.16 µg/L	221.16 ppb	02:01:36
2	Cu 324.752†	6555.2	3274.7	31.171 µg/L	31.171 ppb	02:01:36
2	Mn 257.610†	691254.7	687301.9	2425.8 µg/L	2425.8 ppb	02:01:30
2	Mo 202.031†	34.1	40.2	6.7102 µg/L	6.7102 ppb	02:01:56
2	Ni 231.604†	2545.8	2250.1	125.52 µg/L	125.52 ppb	02:01:36
2	P 214.914†	329.5	302.6	617.39 µg/L	617.39 ppb	02:01:56
2	Pb 220.353†	346.7	252.7	67.346 µg/L	67.346 ppb	02:01:56

2	S 181.975 Axial†	37.4	25.2	114.79 µg/L	114.79 ppb	02:01:56
2	Sb 206.836†	29.1	9.2	6.1940 µg/L	6.1940 ppb	02:01:56
2	Se 196.026†	-23.0	-35.2	109.54 µg/L	109.54 ppb	02:01:56
2	SiO2†	110269.8	108048.8	23325 µg/L	23325 ppb	02:01:36
2	Si 251.611†	131586.2	130537.8	10883 µg/L	10883 ppb	02:01:36
2	Sn 189.927†	4.2	6.5	-3.0542 µg/L	-3.0542 ppb	02:01:56
2	Ti 334.940†	684842.4	680627.6	1616.8 µg/L	1616.8 ppb	02:01:30
2	Tl 190.801†	-39.9	-18.0	8.0124 µg/L	8.0124 ppb	02:01:56
2	U 409.014†	-949.1	-1121.7	-103.03 µg/L	-103.03 ppb	02:01:30
2	V 292.402†	5153.1	5156.6	62.160 µg/L	62.160 ppb	02:01:36
2	Zn 213.857†	10850.5	10346.4	262.40 µg/L	262.40 ppb	02:01:36
3	Sc RADIAL	54494.8	54494.8	99.9 %		02:00:24
3	Al 396.153Radial†	30910.5	30944.0	22841 µg/L	22841 ppb	02:00:24
3	Ca 317.933Radial†	6715.7	6546.3	6273.7 µg/L	6273.7 ppb	02:00:44
3	Fe 238.204 Radial†	6744.0	6733.2	62190 µg/L	62190 ppb	02:00:24
3	K 766.490 Radial†	6084.7	5919.6	4082.1 µg/L	4082.1 ppb	02:00:24
3	Mg 279.077 IEC†	511.1	501.2	4809.4 µg/L	4809.4 ppb	02:00:44
3	Na 589.592 Radial†	2387.0	1999.4	626.37 µg/L	626.37 ppb	02:00:24
3	Sr 421.552†	5319.2	5263.8	51.910 µg/L	51.910 ppb	02:00:24
3	Sc 361.383	1910712.7	1910712.7	100.29 %		02:02:04
3	Y 371.029	1368033.0	1368033.0	104.46 %		02:02:04
3	Ag 328.068†	-1229.8	-649.4	-0.8604 µg/L	-0.8604 ppb	02:02:09
3	As 188.979†	3.3	3.6	10.364 µg/L	10.364 ppb	02:02:30
3	B 249.677†	545.9	287.7	-19.340 µg/L	-19.340 ppb	02:02:09
3	Ba 233.527†	13385.8	13375.3	357.64 µg/L	357.64 ppb	02:02:09
3	Be 313.107†	4626.1	8418.2	4.8474 µg/L	4.8474 ppb	02:02:09
3	Cd 226.502†	57.2	183.2	-1.7230 µg/L	-1.7230 ppb	02:02:30
3	Co 228.616†	354.3	367.9	15.236 µg/L	15.236 ppb	02:02:30
3	Cr 267.716†	9488.5	9493.1	210.60 µg/L	210.60 ppb	02:02:09
3	Cu 324.752†	6380.4	3121.0	30.103 µg/L	30.103 ppb	02:02:09
3	Mn 257.610†	673971.5	672229.8	2372.8 µg/L	2372.8 ppb	02:02:04
3	Mo 202.031†	25.7	31.9	5.8117 µg/L	5.8117 ppb	02:02:30
3	Ni 231.604†	2442.2	2154.8	120.23 µg/L	120.23 ppb	02:02:09
3	P 214.914†	312.3	286.5	582.19 µg/L	582.19 ppb	02:02:30
3	Pb 220.353†	338.5	245.6	65.413 µg/L	65.413 ppb	02:02:30
3	S 181.975 Axial†	38.9	26.8	122.33 µg/L	122.33 ppb	02:02:30
3	Sb 206.836†	34.6	14.8	11.940 µg/L	11.940 ppb	02:02:30
3	Se 196.026†	-13.0	-25.3	124.64 µg/L	124.64 ppb	02:02:30
3	SiO2†	106387.6	104522.6	22563 µg/L	22563 ppb	02:02:09
3	Si 251.611†	127019.1	126395.2	10538 µg/L	10538 ppb	02:02:09
3	Sn 189.927†	4.9	7.3	-2.6755 µg/L	-2.6755 ppb	02:02:30
3	Ti 334.940†	665965.0	663946.0	1577.2 µg/L	1577.2 ppb	02:02:04
3	Tl 190.801†	-36.5	-14.7	12.136 µg/L	12.136 ppb	02:02:30
3	U 409.014†	-798.4	-974.5	-90.678 µg/L	-90.678 ppb	02:02:04
3	V 292.402†	4934.2	4954.4	60.000 µg/L	60.000 ppb	02:02:09
3	Zn 213.857†	10411.5	9942.6	252.04 µg/L	252.04 ppb	02:02:09

-----  
Mean Data: 246437012|950491|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1910224.9	100.27 %		0.354			0.35%
Sc RADIAL	54477.3	99.9 %		0.31			0.31%
Y 371.029	1369347.5	104.56 %		0.390			0.37%
Ag 328.068†	-628.4	-0.6742 µg/L		0.21141	-0.6742 ppb	0.21141	31.36%
Al 396.153Radial†	30946.2	22843 µg/L		54.1	22843 ppb	54.1	0.24%
As 188.979†	7.3	17.757 µg/L		8.3251	17.757 ppb	8.3251	46.88%
B 249.677†	312.3	-18.322 µg/L		1.0840	-18.322 ppb	1.0840	5.92%
Ba 233.527†	13730.3	367.13 µg/L		8.223	367.13 ppb	8.223	2.24%
Be 313.107†	8670.2	5.0005 µg/L		0.13428	5.0005 ppb	0.13428	2.69%
Ca 317.933Radial†	6529.3	6257.4 µg/L		16.90	6257.4 ppb	16.90	0.27%
Cd 226.502†	192.9	-1.4612 µg/L		0.27417	-1.4612 ppb	0.27417	18.76%
Co 228.616†	385.6	16.069 µg/L		0.7221	16.069 ppb	0.7221	4.49%
Cr 267.716†	9823.3	217.93 µg/L		6.360	217.93 ppb	6.360	2.92%
Cu 324.752†	3240.5	30.947 µg/L		0.7577	30.947 ppb	0.7577	2.45%
Fe 238.204 Radial†	6750.6	62350 µg/L		213.7	62350 ppb	213.7	0.34%
K 766.490 Radial†	5920.5	4082.6 µg/L		13.94	4082.6 ppb	13.94	0.34%
Mg 279.077 IEC†	500.7	4804.5 µg/L		6.55	4804.5 ppb	6.55	0.14%
Mn 257.610†	681653.1	2406.0 µg/L		28.91	2406.0 ppb	28.91	1.20%
Mo 202.031†	36.8	6.3516 µg/L		0.47589	6.3516 ppb	0.47589	7.49%
Na 589.592 Radial†	1973.7	618.30 µg/L		7.331	618.30 ppb	7.331	1.19%

Ni 231.604†	2207.6	123.16 µg/L	2.689	123.16 ppb	2.689	2.18%
P 214.914†	300.2	611.89 µg/L	27.363	611.89 ppb	27.363	4.47%
Pb 220.353†	251.9	67.133 µg/L	1.6231	67.133 ppb	1.6231	2.42%
S 181.975 Axial†	26.1	118.70 µg/L	3.776	118.70 ppb	3.776	3.18%
Sb 206.836†	9.9	6.9430 µg/L	4.66796	6.9430 ppb	4.66796	67.23%
Se 196.026†	-30.5	117.05 µg/L	7.551	117.05 ppb	7.551	6.45%
SiO2†	106942.9	23086 µg/L	453.0	23086 ppb	453.0	1.96%
Si 251.611†	129231.6	10774 µg/L	205.0	10774 ppb	205.0	1.90%
Sn 189.927†	7.3	-2.6643 µg/L	0.39563	-2.6643 ppb	0.39563	14.85%
Sr 421.552†	5261.4	51.887 µg/L	0.0424	51.887 ppb	0.0424	0.08%
Ti 334.940†	674994.7	1603.4 µg/L	22.73	1603.4 ppb	22.73	1.42%
Tl 190.801†	-16.9	9.4167 µg/L	2.35525	9.4167 ppb	2.35525	25.01%
U 409.014†	-1043.0	-96.440 µg/L	6.2166	-96.440 ppb	6.2166	6.45%
V 292.402†	5102.5	61.596 µg/L	1.4020	61.596 ppb	1.4020	2.28%
Zn 213.857†	10227.2	259.34 µg/L	6.350	259.34 ppb	6.350	2.45%

Sequence No.: 33

Sample ID: 246437013|950491|1

Analyst: JWJ

Initial Sample Wt:

Dilution:

Autosampler Location: 319

Date Collected: 2/23/2010 02:02:39

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 246437013|950491|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	54531.6	54531.6	100.0 %		02:03:12
1	Al 396.153Radial†	25512.1	25524.5	18841 µg/L	18841 ppb	02:03:12
1	Ca 317.933Radial†	6718.0	6544.2	6271.7 µg/L	6271.7 ppb	02:03:32
1	Fe 238.204 Radial†	6547.8	6532.3	60335 µg/L	60335 ppb	02:03:12
1	K 766.490 Radial†	5618.3	5449.1	3757.6 µg/L	3757.6 ppb	02:03:12
1	Mg 279.077 IEC†	425.8	415.5	3978.1 µg/L	3978.1 ppb	02:03:32
1	Na 589.592 Radial†	1375.0	985.8	308.81 µg/L	308.81 ppb	02:03:12
1	Sr 421.552†	5144.4	5085.4	50.150 µg/L	50.150 ppb	02:03:12
1	Sc 361.383	1915680.2	1915680.2	100.55 %		02:04:36
1	Y 371.029	1353569.1	1353569.1	103.36 %		02:04:36
1	Ag 328.068†	-1188.8	-605.5	-0.6178 µg/L	-0.6178 ppb	02:04:41
1	As 188.979†	0.4	0.7	4.5747 µg/L	4.5747 ppb	02:05:02
1	B 249.677†	637.6	377.5	-14.614 µg/L	-14.614 ppb	02:04:41
1	Ba 233.527†	10904.1	10872.6	290.74 µg/L	290.74 ppb	02:04:41
1	Be 313.107†	3459.0	7245.6	4.0981 µg/L	4.0981 ppb	02:04:41
1	Cd 226.502†	85.4	211.1	-0.8008 µg/L	-0.8008 ppb	02:04:41
1	Co 228.616†	323.9	336.7	13.719 µg/L	13.719 ppb	02:05:02
1	Cr 267.716†	3033.7	3049.3	67.673 µg/L	67.673 ppb	02:04:41
1	Cu 324.752†	6819.6	3541.2	32.734 µg/L	32.734 ppb	02:04:41
1	Mn 257.610†	494088.0	491594.7	1737.2 µg/L	1737.2 ppb	02:04:36
1	Mo 202.031†	26.2	32.4	5.7933 µg/L	5.7933 ppb	02:05:02
1	Ni 231.604†	1025.1	739.2	41.741 µg/L	41.741 ppb	02:05:02
1	P 214.914†	315.2	288.6	587.22 µg/L	587.22 ppb	02:05:02
1	Pb 220.353†	276.8	183.3	48.344 µg/L	48.344 ppb	02:05:02
1	S 181.975 Axial†	58.3	46.0	209.70 µg/L	209.70 ppb	02:05:02
1	Sb 206.836†	26.2	6.3	5.0124 µg/L	5.0124 ppb	02:05:02
1	Se 196.026†	-19.1	-31.3	110.99 µg/L	110.99 ppb	02:05:02
1	SiO2†	97430.5	95339.7	20581 µg/L	20581 ppb	02:04:41
1	Si 251.611†	115982.4	115091.0	9595.1 µg/L	9595.1 ppb	02:04:41
1	Sn 189.927†	65.9	67.8	25.960 µg/L	25.960 ppb	02:05:02
1	Ti 334.940†	657067.1	653375.2	1552.1 µg/L	1552.1 ppb	02:04:36
1	Tl 190.801†	-38.8	-16.9	5.6709 µg/L	5.6709 ppb	02:05:02
1	U 409.014†	-187.1	-364.4	-39.307 µg/L	-39.307 ppb	02:04:41
1	V 292.402†	5134.9	5141.3	61.477 µg/L	61.477 ppb	02:04:41
1	Zn 213.857†	10685.2	10187.9	258.83 µg/L	258.83 ppb	02:04:41
2	Sc RADIAL	54501.7	54501.7	99.9 %		02:03:38
2	Al 396.153Radial†	25742.3	25768.8	19021 µg/L	19021 ppb	02:03:38
2	Ca 317.933Radial†	6740.0	6569.8	6296.2 µg/L	6296.2 ppb	02:03:58
2	Fe 238.204 Radial†	6605.4	6593.6	60901 µg/L	60901 ppb	02:03:38
2	K 766.490 Radial†	5623.9	5457.8	3763.6 µg/L	3763.6 ppb	02:03:38
2	Mg 279.077 IEC†	425.8	415.8	3980.5 µg/L	3980.5 ppb	02:03:58
2	Na 589.592 Radial†	1383.5	995.1	311.73 µg/L	311.73 ppb	02:03:38
2	Sr 421.552†	5164.6	5108.4	50.377 µg/L	50.377 ppb	02:03:38
2	Sc 361.383	1921481.2	1921481.2	100.86 %		02:05:08
2	Y 371.029	1359305.3	1359305.3	103.79 %		02:05:08
2	Ag 328.068†	-1183.1	-596.3	-0.5108 µg/L	-0.5108 ppb	02:05:14
2	As 188.979†	0.4	0.7	4.6438 µg/L	4.6438 ppb	02:05:35
2	B 249.677†	618.9	357.0	-15.820 µg/L	-15.820 ppb	02:05:14
2	Ba 233.527†	10871.9	10808.0	289.01 µg/L	289.01 ppb	02:05:14
2	Be 313.107†	3455.8	7232.1	4.0869 µg/L	4.0869 ppb	02:05:14
2	Cd 226.502†	83.4	208.8	-0.9302 µg/L	-0.9302 ppb	02:05:14
2	Co 228.616†	322.6	334.5	13.592 µg/L	13.592 ppb	02:05:35
2	Cr 267.716†	2984.8	2991.8	66.396 µg/L	66.396 ppb	02:05:14
2	Cu 324.752†	6785.9	3487.4	32.443 µg/L	32.443 ppb	02:05:14
2	Mn 257.610†	498525.2	494510.7	1747.5 µg/L	1747.5 ppb	02:05:08
2	Mo 202.031†	31.7	37.7	6.3948 µg/L	6.3948 ppb	02:05:35
2	Ni 231.604†	1024.5	735.5	41.544 µg/L	41.544 ppb	02:05:35
2	P 214.914†	304.9	277.5	562.43 µg/L	562.43 ppb	02:05:35
2	Pb 220.353†	279.7	185.4	48.896 µg/L	48.896 ppb	02:05:35

2	S 181.975 Axial†	61.4	48.9	222.84 µg/L	222.84 ppb	02:05:35
2	Sb 206.836†	22.9	3.0	1.7331 µg/L	1.7331 ppb	02:05:35
2	Se 196.026†	-20.4	-32.6	110.60 µg/L	110.60 ppb	02:05:35
2	SiO2†	97163.2	94782.2	20461 µg/L	20461 ppb	02:05:14
2	Si 251.611†	115479.3	114243.9	9524.5 µg/L	9524.5 ppb	02:05:14
2	Sn 189.927†	69.8	71.5	27.643 µg/L	27.643 ppb	02:05:35
2	Ti 334.940†	661710.5	656006.3	1558.4 µg/L	1558.4 ppb	02:05:08
2	Tl 190.801†	-37.5	-15.5	7.9110 µg/L	7.9110 ppb	02:05:35
2	U 409.014†	-104.4	-281.9	-32.466 µg/L	-32.466 ppb	02:05:14
2	V 292.402†	5133.7	5124.6	61.376 µg/L	61.376 ppb	02:05:14
2	Zn 213.857†	10649.5	10120.4	257.06 µg/L	257.06 ppb	02:05:14
3	Sc RADIAL	55127.1	55127.1	101 %		02:04:03
3	Al 396.153Radial†	25826.0	25559.4	18867 µg/L	18867 ppb	02:04:03
3	Ca 317.933Radial†	6708.2	6461.9	6192.8 µg/L	6192.8 ppb	02:04:24
3	Fe 238.204 Radial†	6658.5	6571.1	60693 µg/L	60693 ppb	02:04:03
3	K 766.490 Radial†	5650.8	5420.5	3737.9 µg/L	3737.9 ppb	02:04:03
3	Mg 279.077 IEC†	425.2	410.4	3927.6 µg/L	3927.6 ppb	02:04:24
3	Na 589.592 Radial†	1338.2	934.6	292.78 µg/L	292.78 ppb	02:04:03
3	Sr 421.552†	5206.0	5090.8	50.204 µg/L	50.204 ppb	02:04:03
3	Sc 361.383	1905742.1	1905742.1	100.03 %		02:05:41
3	Y 371.029	1346677.8	1346677.8	102.83 %		02:05:41
3	Ag 328.068†	-1155.5	-578.3	-0.3909 µg/L	-0.3909 ppb	02:05:47
3	As 188.979†	7.1	7.4	18.031 µg/L	18.031 ppb	02:06:07
3	B 249.677†	625.5	368.7	-15.198 µg/L	-15.198 ppb	02:05:47
3	Ba 233.527†	10509.6	10534.9	281.71 µg/L	281.71 ppb	02:05:47
3	Be 313.107†	3179.4	6984.1	3.9412 µg/L	3.9412 ppb	02:05:47
3	Cd 226.502†	90.6	216.7	-0.6845 µg/L	-0.6845 ppb	02:05:47
3	Co 228.616†	289.0	303.6	12.115 µg/L	12.115 ppb	02:06:07
3	Cr 267.716†	2896.4	2927.8	64.976 µg/L	64.976 ppb	02:05:47
3	Cu 324.752†	6707.5	3464.5	32.256 µg/L	32.256 ppb	02:05:47
3	Mn 257.610†	483622.0	483694.5	1709.4 µg/L	1709.4 ppb	02:05:41
3	Mo 202.031†	21.6	27.9	5.3201 µg/L	5.3201 ppb	02:06:07
3	Ni 231.604†	991.0	710.5	40.153 µg/L	40.153 ppb	02:06:07
3	P 214.914†	289.0	264.0	533.07 µg/L	533.07 ppb	02:06:07
3	Pb 220.353†	256.0	164.0	43.099 µg/L	43.099 ppb	02:06:07
3	S 181.975 Axial†	56.0	44.0	200.47 µg/L	200.47 ppb	02:06:07
3	Sb 206.836†	28.6	8.9	7.6425 µg/L	7.6425 ppb	02:06:07
3	Se 196.026†	-14.9	-27.3	118.37 µg/L	118.37 ppb	02:06:07
3	SiO2†	94701.1	93116.5	20101 µg/L	20101 ppb	02:05:47
3	Si 251.611†	112705.1	112416.2	9372.1 µg/L	9372.1 ppb	02:05:47
3	Sn 189.927†	54.2	56.5	20.580 µg/L	20.580 ppb	02:06:07
3	Ti 334.940†	639877.3	639598.6	1519.4 µg/L	1519.4 ppb	02:05:41
3	Tl 190.801†	-37.6	-15.9	6.7364 µg/L	6.7364 ppb	02:06:07
3	U 409.014†	-74.6	-252.9	-30.005 µg/L	-30.005 ppb	02:05:47
3	V 292.402†	4965.8	4998.9	60.016 µg/L	60.016 ppb	02:05:47
3	Zn 213.857†	10363.4	9921.7	251.97 µg/L	251.97 ppb	02:05:47

-----  
Mean Data: 246437013|950491|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1914301.2	100.48 %	0.418			0.42%
Sc RADIAL	54720.2	100 %	0.6			0.64%
Y 371.029	1353184.1	103.33 %	0.483			0.47%
Ag 328.068†	-593.4	-0.5065 µg/L	0.11352	-0.5065 ppb	0.11352	22.41%
Al 396.153Radial†	25617.5	18910 µg/L	97.5	18910 ppb	97.5	0.52%
As 188.979†	3.0	9.0832 µg/L	7.74923	9.0832 ppb	7.74923	85.31%
B 249.677†	367.7	-15.211 µg/L	0.6027	-15.211 ppb	0.6027	3.96%
Ba 233.527†	10738.5	287.15 µg/L	4.794	287.15 ppb	4.794	1.67%
Be 313.107†	7153.9	4.0421 µg/L	0.08750	4.0421 ppb	0.08750	2.16%
Ca 317.933Radial†	6525.3	6253.6 µg/L	54.03	6253.6 ppb	54.03	0.86%
Cd 226.502†	212.2	-0.8052 µg/L	0.12291	-0.8052 ppb	0.12291	15.26%
Co 228.616†	324.9	13.142 µg/L	0.8916	13.142 ppb	0.8916	6.78%
Cr 267.716†	2989.6	66.348 µg/L	1.3495	66.348 ppb	1.3495	2.03%
Cu 324.752†	3497.7	32.478 µg/L	0.2410	32.478 ppb	0.2410	0.74%
Fe 238.204 Radial†	6565.7	60643 µg/L	286.3	60643 ppb	286.3	0.47%
K 766.490 Radial†	5442.5	3753.0 µg/L	13.45	3753.0 ppb	13.45	0.36%
Mg 279.077 IEC†	413.9	3962.1 µg/L	29.90	3962.1 ppb	29.90	0.75%
Mn 257.610†	489933.3	1731.4 µg/L	19.69	1731.4 ppb	19.69	1.14%
Mo 202.031†	32.7	5.8360 µg/L	0.53864	5.8360 ppb	0.53864	9.23%
Na 589.592 Radial†	971.8	304.44 µg/L	10.206	304.44 ppb	10.206	3.35%

Ni 231.604†	728.4	41.146 µg/L	0.8654	41.146 ppb	0.8654	2.10%
P 214.914†	276.7	560.91 µg/L	27.107	560.91 ppb	27.107	4.83%
Pb 220.353†	177.5	46.780 µg/L	3.1996	46.780 ppb	3.1996	6.84%
S 181.975 Axial†	46.3	211.00 µg/L	11.238	211.00 ppb	11.238	5.33%
Sb 206.836†	6.0	4.7960 µg/L	2.96063	4.7960 ppb	2.96063	61.73%
Se 196.026†	-30.4	113.32 µg/L	4.378	113.32 ppb	4.378	3.86%
SiO2†	94412.8	20381 µg/L	249.7	20381 ppb	249.7	1.23%
Si 251.611†	113917.0	9497.2 µg/L	113.97	9497.2 ppb	113.97	1.20%
Sn 189.927†	65.3	24.728 µg/L	3.6889	24.728 ppb	3.6889	14.92%
Sr 421.552†	5094.9	50.244 µg/L	0.1187	50.244 ppb	0.1187	0.24%
Ti 334.940†	649660.0	1543.3 µg/L	20.94	1543.3 ppb	20.94	1.36%
Tl 190.801†	-16.1	6.7727 µg/L	1.12048	6.7727 ppb	1.12048	16.54%
U 409.014†	-299.7	-33.926 µg/L	4.8194	-33.926 ppb	4.8194	14.21%
V 292.402†	5088.3	60.957 µg/L	0.8157	60.957 ppb	0.8157	1.34%
Zn 213.857†	10076.7	255.95 µg/L	3.561	255.95 ppb	3.561	1.39%

Sequence No.: 34  
 Sample ID: 246437014|950491|1  
 Analyst: JWW  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 320  
 Date Collected: 2/23/2010 02:06:16  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Replicate Data: 246437014|950491|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Units	Conc. Units	Sample Units	Analysis Time
1	Sc RADIAL	54166.4	54166.4	99.3	%			02:06:49
1	Al 396.153Radial†	30047.6	30262.8	22338	µg/L	22338	ppb	02:06:49
1	Ca 317.933Radial†	6721.3	6592.8	6318.2	µg/L	6318.2	ppb	02:07:09
1	Fe 238.204 Radial†	8817.0	8861.2	81844	µg/L	81844	ppb	02:06:49
1	K 766.490 Radial†	5246.0	5112.2	3525.2	µg/L	3525.2	ppb	02:06:49
1	Mg 279.077 IEC†	448.6	441.3	4206.2	µg/L	4206.2	ppb	02:07:09
1	Na 589.592 Radial†	2528.0	2155.9	675.37	µg/L	675.37	ppb	02:06:49
1	Sr 421.552†	5076.5	5051.7	49.819	µg/L	49.819	ppb	02:06:49
1	Sc 361.383	1939825.7	1939825.7	101.82	%			02:08:13
1	Y 371.029	1426505.8	1426505.8	108.92	%			02:08:13
1	Ag 328.068†	-1512.0	-908.2	-1.6966	µg/L	-1.6966	ppb	02:08:19
1	As 188.979†	11.8	11.9	28.123	µg/L	28.123	ppb	02:08:39
1	B 249.677†	584.1	317.1	-28.453	µg/L	-28.453	ppb	02:08:19
1	Ba 233.527†	12833.8	12632.8	337.78	µg/L	337.78	ppb	02:08:19
1	Be 313.107†	8169.9	11829.5	6.9018	µg/L	6.9018	ppb	02:08:19
1	Cd 226.502†	168.4	291.5	-0.9286	µg/L	-0.9286	ppb	02:08:19
1	Co 228.616†	316.6	325.6	12.269	µg/L	12.269	ppb	02:08:39
1	Cr 267.716†	5023.1	4965.6	110.17	µg/L	110.17	ppb	02:08:19
1	Cu 324.752†	6535.7	3178.0	33.227	µg/L	33.227	ppb	02:08:19
1	Mn 257.610†	804089.1	789934.4	2789.5	µg/L	2789.5	ppb	02:08:13
1	Mo 202.031†	54.3	59.6	9.5525	µg/L	9.5525	ppb	02:08:39
1	Ni 231.604†	1500.3	1193.3	67.192	µg/L	67.192	ppb	02:08:39
1	P 214.914†	343.3	312.3	622.84	µg/L	622.84	ppb	02:08:39
1	Pb 220.353†	333.7	235.8	62.027	µg/L	62.027	ppb	02:08:39
1	S 181.975 Axial†	35.1	22.5	102.32	µg/L	102.32	ppb	02:08:39
1	Sb 206.836†	29.8	9.5	7.8411	µg/L	7.8411	ppb	02:08:39
1	Se 196.026†	-35.1	-46.8	145.62	µg/L	145.62	ppb	02:08:39
1	SiO2†	104344.6	100924.1	21787	µg/L	21787	ppb	02:08:19
1	Si 251.611†	124471.0	121992.0	10170	µg/L	10170	ppb	02:08:19
1	Sn 189.927†	49.7	51.1	15.825	µg/L	15.825	ppb	02:08:39
1	Ti 334.940†	848699.1	833445.7	1979.9	µg/L	1979.9	ppb	02:08:13
1	Tl 190.801†	-48.5	-25.9	3.9247	µg/L	3.9247	ppb	02:08:39
1	U 409.014†	-1249.9	-1405.9	-129.56	µg/L	-129.56	ppb	02:08:13
1	V 292.402†	4528.4	4482.0	57.086	µg/L	57.086	ppb	02:08:19
1	Zn 213.857†	15707.0	14987.6	381.18	µg/L	381.18	ppb	02:08:19
2	Sc RADIAL	54277.9	54277.9	99.5	%			02:07:15
2	Al 396.153Radial†	30242.5	30396.5	22437	µg/L	22437	ppb	02:07:15
2	Ca 317.933Radial†	6732.4	6590.0	6315.6	µg/L	6315.6	ppb	02:07:35
2	Fe 238.204 Radial†	8851.6	8877.7	81997	µg/L	81997	ppb	02:07:15
2	K 766.490 Radial†	5225.5	5080.7	3503.5	µg/L	3503.5	ppb	02:07:15
2	Mg 279.077 IEC†	448.9	440.8	4200.5	µg/L	4200.5	ppb	02:07:35
2	Na 589.592 Radial†	2532.4	2155.1	675.15	µg/L	675.15	ppb	02:07:15
2	Sr 421.552†	5167.4	5132.6	50.616	µg/L	50.616	ppb	02:07:15
2	Sc 361.383	1923983.9	1923983.9	100.99	%			02:08:47
2	Y 371.029	1414978.6	1414978.6	108.04	%			02:08:47
2	Ag 328.068†	-1464.3	-873.1	-1.4126	µg/L	-1.4126	ppb	02:08:52
2	As 188.979†	13.2	13.3	31.003	µg/L	31.003	ppb	02:09:13
2	B 249.677†	581.2	318.9	-28.454	µg/L	-28.454	ppb	02:08:52
2	Ba 233.527†	12638.2	12542.9	335.37	µg/L	335.37	ppb	02:08:52
2	Be 313.107†	7977.6	11705.1	6.8198	µg/L	6.8198	ppb	02:08:52
2	Cd 226.502†	142.7	267.4	-1.6284	µg/L	-1.6284	ppb	02:08:52
2	Co 228.616†	308.7	320.4	11.997	µg/L	11.997	ppb	02:09:13
2	Cr 267.716†	4947.0	4930.9	109.40	µg/L	109.40	ppb	02:08:52
2	Cu 324.752†	6505.8	3201.3	33.408	µg/L	33.408	ppb	02:08:52
2	Mn 257.610†	797630.8	790041.8	2789.9	µg/L	2789.9	ppb	02:08:47
2	Mo 202.031†	54.2	59.9	9.5949	µg/L	9.5949	ppb	02:09:13
2	Ni 231.604†	1488.6	1193.8	67.220	µg/L	67.220	ppb	02:09:13
2	P 214.914†	341.4	313.2	624.82	µg/L	624.82	ppb	02:09:13
2	Pb 220.353†	327.8	232.7	61.192	µg/L	61.192	ppb	02:09:13



2	S 181.975 Axial†	31.4	19.1	87.188 µg/L	87.188 ppb	02:09:13
2	Sb 206.836†	26.5	6.5	4.8481 µg/L	4.8481 ppb	02:09:13
2	Se 196.026†	-25.7	-37.8	160.00 µg/L	160.00 ppb	02:09:13
2	SiO2†	103450.6	100882.7	21778 µg/L	21778 ppb	02:08:52
2	Si 251.611†	123203.3	121743.2	10150 µg/L	10150 ppb	02:08:52
2	Sn 189.927†	60.5	62.2	21.035 µg/L	21.035 ppb	02:09:13
2	Ti 334.940†	843477.0	835137.8	1983.9 µg/L	1983.9 ppb	02:08:47
2	Tl 190.801†	-50.2	-28.1	0.9406 µg/L	0.9406 ppb	02:09:13
2	U 409.014†	-1294.0	-1459.7	-134.09 µg/L	-134.09 ppb	02:08:47
2	V 292.402†	4464.0	4454.9	56.812 µg/L	56.812 ppb	02:08:52
2	Zn 213.857†	15527.2	14936.6	379.86 µg/L	379.86 ppb	02:08:52
3	Sc RADIAL	55039.9	55039.9	101 %		02:07:41
3	Al 396.153Radial†	30531.2	30261.9	22338 µg/L	22338 ppb	02:07:41
3	Ca 317.933Radial†	6728.9	6492.9	6222.5 µg/L	6222.5 ppb	02:08:01
3	Fe 238.204 Radial†	8956.1	8858.1	81816 µg/L	81816 ppb	02:07:41
3	K 766.490 Radial†	5253.2	5035.4	3472.3 µg/L	3472.3 ppb	02:07:41
3	Mg 279.077 IEC†	449.7	435.4	4148.0 µg/L	4148.0 ppb	02:08:01
3	Na 589.592 Radial†	2563.9	2151.1	673.88 µg/L	673.88 ppb	02:07:41
3	Sr 421.552†	5254.2	5146.7	50.755 µg/L	50.755 ppb	02:07:41
3	Sc 361.383	1929032.6	1929032.6	101.25 %		02:09:20
3	Y 371.029	1417677.2	1417677.2	108.25 %		02:09:20
3	Ag 328.068†	-1432.8	-838.3	-1.1620 µg/L	-1.1620 ppb	02:09:26
3	As 188.979†	6.3	6.6	17.486 µg/L	17.486 ppb	02:09:46
3	B 249.677†	558.8	295.2	-29.417 µg/L	-29.417 ppb	02:09:26
3	Ba 233.527†	12262.2	12138.9	324.57 µg/L	324.57 ppb	02:09:26
3	Be 313.107†	7564.2	11276.1	6.5597 µg/L	6.5597 ppb	02:09:26
3	Cd 226.502†	133.7	258.1	-1.8759 µg/L	-1.8759 ppb	02:09:26
3	Co 228.616†	284.5	295.6	10.846 µg/L	10.846 ppb	02:09:46
3	Cr 267.716†	4735.0	4708.7	104.47 µg/L	104.47 ppb	02:09:26
3	Cu 324.752†	6361.2	3041.5	32.284 µg/L	32.284 ppb	02:09:26
3	Mn 257.610†	783301.4	773822.8	2732.8 µg/L	2732.8 ppb	02:09:20
3	Mo 202.031†	52.4	58.0	9.3817 µg/L	9.3817 ppb	02:09:46
3	Ni 231.604†	1404.2	1106.6	62.388 µg/L	62.388 ppb	02:09:46
3	P 214.914†	325.8	296.9	589.17 µg/L	589.17 ppb	02:09:46
3	Pb 220.353†	332.1	236.0	62.087 µg/L	62.087 ppb	02:09:46
3	S 181.975 Axial†	32.9	20.6	93.641 µg/L	93.641 ppb	02:09:46
3	Sb 206.836†	26.4	6.3	4.7194 µg/L	4.7194 ppb	02:09:46
3	Se 196.026†	-25.3	-37.4	160.19 µg/L	160.19 ppb	02:09:46
3	SiO2†	100513.6	97713.9	21094 µg/L	21094 ppb	02:09:26
3	Si 251.611†	119765.3	118028.6	9840.0 µg/L	9840.0 ppb	02:09:26
3	Sn 189.927†	48.7	50.4	15.491 µg/L	15.491 ppb	02:09:46
3	Ti 334.940†	826026.5	815717.7	1937.8 µg/L	1937.8 ppb	02:09:20
3	Tl 190.801†	-43.5	-21.3	10.032 µg/L	10.032 ppb	02:09:46
3	U 409.014†	-1194.5	-1358.1	-125.55 µg/L	-125.55 ppb	02:09:20
3	V 292.402†	4285.2	4266.7	54.801 µg/L	54.801 ppb	02:09:26
3	Zn 213.857†	15058.4	14433.4	366.95 µg/L	366.95 ppb	02:09:26

-----  
Mean Data: 246437014|950491|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1930947.4	101.36 %	0.425			0.42%
Sc RADIAL	54494.7	99.9 %	0.87			0.87%
Y 371.029	1419720.5	108.41 %	0.460			0.42%
Ag 328.068†	-873.2	-1.4237 µg/L	0.26745	-1.4237 ppb	0.26745	18.78%
Al 396.153Radial†	30307.0	22371 µg/L	57.2	22371 ppb	57.2	0.26%
As 188.979†	10.6	25.537 µg/L	7.1196	25.537 ppb	7.1196	27.88%
B 249.677†	310.4	-28.775 µg/L	0.5559	-28.775 ppb	0.5559	1.93%
Ba 233.527†	12438.2	332.58 µg/L	7.035	332.58 ppb	7.035	2.12%
Be 313.107†	11603.6	6.7604 µg/L	0.17859	6.7604 ppb	0.17859	2.64%
Ca 317.933Radial†	6558.6	6285.5 µg/L	54.51	6285.5 ppb	54.51	0.87%
Cd 226.502†	272.4	-1.4776 µg/L	0.49130	-1.4776 ppb	0.49130	33.25%
Co 228.616†	313.9	11.704 µg/L	0.7554	11.704 ppb	0.7554	6.45%
Cr 267.716†	4868.4	108.02 µg/L	3.093	108.02 ppb	3.093	2.86%
Cu 324.752†	3140.3	32.973 µg/L	0.6032	32.973 ppb	0.6032	1.83%
Fe 238.204 Radial†	8865.7	81886 µg/L	97.2	81886 ppb	97.2	0.12%
K 766.490 Radial†	5076.1	3500.4 µg/L	26.60	3500.4 ppb	26.60	0.76%
Mg 279.077 IEC†	439.2	4184.9 µg/L	32.06	4184.9 ppb	32.06	0.77%
Mn 257.610†	784599.7	2770.7 µg/L	32.84	2770.7 ppb	32.84	1.19%
Mo 202.031†	59.2	9.5097 µg/L	0.11286	9.5097 ppb	0.11286	1.19%
Na 589.592 Radial†	2154.0	674.80 µg/L	0.807	674.80 ppb	0.807	0.12%

Ni 231.604†	1164.5	65.600 µg/L	2.7818	65.600 ppb	2.7818	4.24%
P 214.914†	307.5	612.28 µg/L	20.032	612.28 ppb	20.032	3.27%
Pb 220.353†	234.8	61.769 µg/L	0.5007	61.769 ppb	0.5007	0.81%
S 181.975 Axial†	20.7	94.384 µg/L	7.5955	94.384 ppb	7.5955	8.05%
Sb 206.836†	7.5	5.8029 µg/L	1.76632	5.8029 ppb	1.76632	30.44%
Se 196.026†	-40.7	155.27 µg/L	8.354	155.27 ppb	8.354	5.38%
SiO2†	99840.2	21553 µg/L	397.5	21553 ppb	397.5	1.84%
Si 251.611†	120588.0	10053 µg/L	185.1	10053 ppb	185.1	1.84%
Sn 189.927†	54.6	17.450 µg/L	3.1087	17.450 ppb	3.1087	17.81%
Sr 421.552†	5110.3	50.397 µg/L	0.5053	50.397 ppb	0.5053	1.00%
Ti 334.940†	828100.4	1967.2 µg/L	25.56	1967.2 ppb	25.56	1.30%
Tl 190.801†	-25.1	4.9658 µg/L	4.63438	4.9658 ppb	4.63438	93.33%
U 409.014†	-1407.9	-129.73 µg/L	4.276	-129.73 ppb	4.276	3.30%
V 292.402†	4401.2	56.233 µg/L	1.2474	56.233 ppb	1.2474	2.22%
Zn 213.857†	14785.9	376.00 µg/L	7.864	376.00 ppb	7.864	2.09%

Sequence No.: 35

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/23/2010 02:09:56

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	55473.3	55473.3	102 %		02:10:34
1	Al 396.153Radial†	7033.7	6925.5	5101.2 µg/L	5101.2 ppb	02:10:54
1	Ca 317.933Radial†	5604.9	5335.8	5113.6 µg/L	5113.6 ppb	02:10:54
1	Fe 238.204 Radial†	586.6	560.9	5191.3 µg/L	5191.3 ppb	02:10:54
1	K 766.490 Radial†	7777.8	7476.7	5155.8 µg/L	5155.8 ppb	02:10:34
1	Mg 279.077 IEC†	555.8	536.2	5219.8 µg/L	5219.8 ppb	02:10:54
1	Na 589.592 Radial†	33665.4	32706.6	10246 µg/L	10246 ppb	02:10:34
1	Sr 421.552†	51706.8	50772.8	500.71 µg/L	500.71 ppb	02:10:34
1	Sc 361.383	1935557.4	1935557.4	101.60 %		02:11:58
1	Y 371.029	1327337.7	1327337.7	101.35 %		02:11:58
1	Ag 328.068†	65328.3	64878.0	515.57 µg/L	515.57 ppb	02:12:04
1	As 188.979†	270.8	266.9	530.61 µg/L	530.61 ppb	02:12:24
1	B 249.677†	11971.4	11526.5	509.89 µg/L	509.89 ppb	02:12:04
1	Ba 233.527†	19706.8	19425.6	520.21 µg/L	520.21 ppb	02:12:04
1	Be 313.107†	806976.5	798094.8	516.35 µg/L	516.35 ppb	02:11:58
1	Cd 226.502†	18710.3	18542.3	524.88 µg/L	524.88 ppb	02:12:04
1	Co 228.616†	10573.0	10421.5	524.13 µg/L	524.13 ppb	02:12:04
1	Cr 267.716†	24017.1	23671.8	525.40 µg/L	525.40 ppb	02:12:04
1	Cu 324.752†	79360.1	74871.6	515.50 µg/L	515.50 ppb	02:12:04
1	Mn 257.610†	152556.0	150386.3	529.50 µg/L	529.50 ppb	02:11:58
1	Mo 202.031†	4980.6	4908.5	530.91 µg/L	530.91 ppb	02:12:24
1	Ni 231.604†	9895.8	9460.0	523.84 µg/L	523.84 ppb	02:12:04
1	P 214.914†	1242.7	1198.3	2578.5 µg/L	2578.5 ppb	02:12:24
1	Pb 220.353†	2059.7	1935.4	523.98 µg/L	523.98 ppb	02:12:24
1	S 181.975 Axial†	239.8	224.1	1021.0 µg/L	1021.0 ppb	02:12:24
1	Sb 206.836†	559.4	530.9	534.04 µg/L	534.04 ppb	02:12:24
1	Se 196.026†	357.0	339.0	533.59 µg/L	533.59 ppb	02:12:24
1	SiO2†	27602.3	25614.3	5529.4 µg/L	5529.4 ppb	02:12:04
1	Si 251.611†	31825.3	31072.4	2590.5 µg/L	2590.5 ppb	02:12:04
1	Sn 189.927†	1146.3	1130.6	532.80 µg/L	532.80 ppb	02:12:24
1	Ti 334.940†	220333.7	216797.5	514.75 µg/L	514.75 ppb	02:11:58
1	Tl 190.801†	348.1	364.3	530.13 µg/L	530.13 ppb	02:12:24
1	U 409.014†	6321.4	6043.7	505.38 µg/L	505.38 ppb	02:12:04
1	V 292.402†	49820.5	49071.9	523.99 µg/L	523.99 ppb	02:12:04
1	Zn 213.857†	21193.4	20421.8	521.78 µg/L	521.78 ppb	02:12:04
2	Sc RADIAL	55459.6	55459.6	102 %		02:11:00
2	Al 396.153Radial†	7021.4	6915.1	5093.7 µg/L	5093.7 ppb	02:11:20
2	Ca 317.933Radial†	5586.4	5318.9	5097.5 µg/L	5097.5 ppb	02:11:20
2	Fe 238.204 Radial†	587.6	562.0	5201.5 µg/L	5201.5 ppb	02:11:20
2	K 766.490 Radial†	7730.3	7431.9	5124.9 µg/L	5124.9 ppb	02:11:00
2	Mg 279.077 IEC†	556.0	536.5	5222.8 µg/L	5222.8 ppb	02:11:20
2	Na 589.592 Radial†	33339.9	32394.6	10148 µg/L	10148 ppb	02:11:00
2	Sr 421.552†	51312.8	50397.9	497.01 µg/L	497.01 ppb	02:11:00
2	Sc 361.383	1944435.7	1944435.7	102.06 %		02:12:31
2	Y 371.029	1332731.7	1332731.7	101.76 %		02:12:31
2	Ag 328.068†	64882.8	64147.9	509.78 µg/L	509.78 ppb	02:12:37
2	As 188.979†	264.9	259.9	516.66 µg/L	516.66 ppb	02:12:58
2	B 249.677†	11905.4	11408.1	504.62 µg/L	504.62 ppb	02:12:37
2	Ba 233.527†	19580.8	19213.6	514.53 µg/L	514.53 ppb	02:12:37
2	Be 313.107†	800194.0	787822.7	509.70 µg/L	509.70 ppb	02:12:31
2	Cd 226.502†	18496.4	18248.6	516.55 µg/L	516.55 ppb	02:12:37
2	Co 228.616†	10482.7	10285.4	517.29 µg/L	517.29 ppb	02:12:37
2	Cr 267.716†	23804.1	23355.2	518.38 µg/L	518.38 ppb	02:12:37
2	Cu 324.752†	78786.2	73952.6	509.18 µg/L	509.18 ppb	02:12:37
2	Mn 257.610†	151073.0	148247.7	521.98 µg/L	521.98 ppb	02:12:31
2	Mo 202.031†	4920.3	4827.2	522.11 µg/L	522.11 ppb	02:12:58
2	Ni 231.604†	9823.4	9344.6	517.45 µg/L	517.45 ppb	02:12:37
2	P 214.914†	1231.1	1181.3	2541.8 µg/L	2541.8 ppb	02:12:58
2	Pb 220.353†	2051.8	1918.3	519.35 µg/L	519.35 ppb	02:12:58

2	S 181.975 Axial†	243.9	226.9	1034.0 µg/L	1034.0 ppb	02:12:58
2	Sb 206.836†	551.0	520.1	523.22 µg/L	523.22 ppb	02:12:58
2	Se 196.026†	358.9	339.3	534.04 µg/L	534.04 ppb	02:12:58
2	SiO2†	27500.5	25390.6	5481.1 µg/L	5481.1 ppb	02:12:37
2	Si 251.611†	31696.3	30803.1	2568.0 µg/L	2568.0 ppb	02:12:37
2	Sn 189.927†	1123.9	1103.5	520.02 µg/L	520.02 ppb	02:12:58
2	Ti 334.940†	218641.2	214149.0	508.46 µg/L	508.46 ppb	02:12:31
2	Tl 190.801†	342.1	356.8	519.32 µg/L	519.32 ppb	02:12:58
2	U 409.014†	6256.7	5951.8	497.68 µg/L	497.68 ppb	02:12:37
2	V 292.402†	49483.0	48517.3	518.05 µg/L	518.05 ppb	02:12:37
2	Zn 213.857†	20983.4	20120.8	514.07 µg/L	514.07 ppb	02:12:37
3	Sc RADIAL	55364.9	55364.9	102 %		02:11:26
3	Al 396.153Radial†	7017.5	6923.1	5101.2 µg/L	5101.2 ppb	02:11:46
3	Ca 317.933Radial†	5590.9	5332.8	5110.8 µg/L	5110.8 ppb	02:11:46
3	Fe 238.204 Radial†	592.2	567.5	5251.6 µg/L	5251.6 ppb	02:11:46
3	K 766.490 Radial†	7627.0	7343.1	5063.7 µg/L	5063.7 ppb	02:11:26
3	Mg 279.077 IEC†	549.3	530.8	5166.4 µg/L	5166.4 ppb	02:11:46
3	Na 589.592 Radial†	33570.1	32677.6	10237 µg/L	10237 ppb	02:11:26
3	Sr 421.552†	51700.6	50866.2	501.63 µg/L	501.63 ppb	02:11:26
3	Sc 361.383	1920004.1	1920004.1	100.78 %		02:13:05
3	Y 371.029	1316289.7	1316289.7	100.51 %		02:13:05
3	Ag 328.068†	61556.7	61656.5	489.84 µg/L	489.84 ppb	02:13:10
3	As 188.979†	226.2	224.7	446.79 µg/L	446.79 ppb	02:13:31
3	B 249.677†	11223.6	10880.0	481.06 µg/L	481.06 ppb	02:13:10
3	Ba 233.527†	18073.2	17961.8	480.99 µg/L	480.99 ppb	02:13:10
3	Be 313.107†	750854.0	748841.5	484.48 µg/L	484.48 ppb	02:13:05
3	Cd 226.502†	17051.8	17045.8	482.46 µg/L	482.46 ppb	02:13:10
3	Co 228.616†	9579.2	9519.7	478.72 µg/L	478.72 ppb	02:13:10
3	Cr 267.716†	21138.7	21007.2	466.27 µg/L	466.27 ppb	02:13:10
3	Cu 324.752†	72493.8	68691.2	473.02 µg/L	473.02 ppb	02:13:10
3	Mn 257.610†	142352.2	141477.9	498.17 µg/L	498.17 ppb	02:13:05
3	Mo 202.031†	4140.5	4114.7	445.09 µg/L	445.09 ppb	02:13:31
3	Ni 231.604†	8997.6	8647.6	478.86 µg/L	478.86 ppb	02:13:10
3	P 214.914†	1066.2	1033.1	2219.3 µg/L	2219.3 ppb	02:13:31
3	Pb 220.353†	1792.5	1686.7	456.55 µg/L	456.55 ppb	02:13:31
3	S 181.975 Axial†	220.1	206.4	940.55 µg/L	940.55 ppb	02:13:31
3	Sb 206.836†	478.4	454.9	457.25 µg/L	457.25 ppb	02:13:31
3	Se 196.026†	319.3	304.4	480.24 µg/L	480.24 ppb	02:13:31
3	SiO2†	25758.1	24004.5	5181.9 µg/L	5181.9 ppb	02:13:10
3	Si 251.611†	29666.9	29184.5	2433.1 µg/L	2433.1 ppb	02:13:10
3	Sn 189.927†	940.5	935.5	440.84 µg/L	440.84 ppb	02:13:31
3	Ti 334.940†	204538.6	202881.7	481.69 µg/L	481.69 ppb	02:13:05
3	Tl 190.801†	309.9	329.2	479.25 µg/L	479.25 ppb	02:13:31
3	U 409.014†	5607.2	5385.4	450.21 µg/L	450.21 ppb	02:13:10
3	V 292.402†	44800.6	44488.1	474.80 µg/L	474.80 ppb	02:13:10
3	Zn 213.857†	19213.4	18626.1	475.84 µg/L	475.84 ppb	02:13:10

-----  
Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1933332.4	101.48 %	0.649			0.64%
Sc RADIAL	55432.6	102 %	0.1			0.11%
Y 371.029	1325453.0	101.21 %	0.640			0.63%
Ag 328.068†	63560.8	505.06 µg/L	13.497	505.06 ppb	13.497	2.67%
QC value within limits for Ag 328.068 Recovery = 101.01%						
Al 396.153Radial†	6921.3	5098.7 µg/L	4.32	5098.7 ppb	4.32	0.08%
QC value within limits for Al 396.153Radial Recovery = 101.97%						
As 188.979†	250.5	498.02 µg/L	44.912	498.02 ppb	44.912	9.02%
QC value within limits for As 188.979 Recovery = 99.60%						
B 249.677†	11271.5	498.52 µg/L	15.352	498.52 ppb	15.352	3.08%
QC value within limits for B 249.677 Recovery = 99.70%						
Ba 233.527†	18867.0	505.24 µg/L	21.194	505.24 ppb	21.194	4.19%
QC value within limits for Ba 233.527 Recovery = 101.05%						
Be 313.107†	778253.0	503.51 µg/L	16.811	503.51 ppb	16.811	3.34%
QC value within limits for Be 313.107 Recovery = 100.70%						
Ca 317.933Radial†	5329.2	5107.3 µg/L	8.62	5107.3 ppb	8.62	0.17%
QC value within limits for Ca 317.933Radial Recovery = 102.15%						
Cd 226.502†	17945.6	507.96 µg/L	22.476	507.96 ppb	22.476	4.42%
QC value within limits for Cd 226.502 Recovery = 101.59%						
Co 228.616†	10075.5	506.71 µg/L	24.484	506.71 ppb	24.484	4.83%

QC value within limits for Co 228.616 Recovery = 101.34%							
Cr	267.716†	22678.1	503.35 µg/L	32.305	503.35 ppb	32.305	6.42%
QC value within limits for Cr 267.716 Recovery = 100.67%							
Cu	324.752†	72505.1	499.23 µg/L	22.924	499.23 ppb	22.924	4.59%
QC value within limits for Cu 324.752 Recovery = 99.85%							
Fe	238.204 Radial†	563.4	5214.8 µg/L	32.27	5214.8 ppb	32.27	0.62%
QC value within limits for Fe 238.204 Radial Recovery = 104.30%							
K	766.490 Radial†	7417.2	5114.8 µg/L	46.86	5114.8 ppb	46.86	0.92%
QC value within limits for K 766.490 Radial Recovery = 102.30%							
Mg	279.077 IEC†	534.5	5203.0 µg/L	31.73	5203.0 ppb	31.73	0.61%
QC value within limits for Mg 279.077 IEC Recovery = 104.06%							
Mn	257.610†	146704.0	516.55 µg/L	16.354	516.55 ppb	16.354	3.17%
QC value within limits for Mn 257.610 Recovery = 103.31%							
Mo	202.031†	4616.8	499.37 µg/L	47.216	499.37 ppb	47.216	9.46%
QC value within limits for Mo 202.031 Recovery = 99.87%							
Na	589.592 Radial†	32592.9	10211 µg/L	54.0	10211 ppb	54.0	0.53%
QC value within limits for Na 589.592 Radial Recovery = 102.11%							
Ni	231.604†	9150.7	506.72 µg/L	24.334	506.72 ppb	24.334	4.80%
QC value within limits for Ni 231.604 Recovery = 101.34%							
P	214.914†	1137.5	2446.6 µg/L	197.62	2446.6 ppb	197.62	8.08%
QC value within limits for P 214.914 Recovery = 97.86%							
Pb	220.353†	1846.8	499.96 µg/L	37.663	499.96 ppb	37.663	7.53%
QC value within limits for Pb 220.353 Recovery = 99.99%							
S	181.975 Axial†	219.2	998.54 µg/L	50.641	998.54 ppb	50.641	5.07%
QC value within limits for S 181.975 Axial Recovery = 99.85%							
Sb	206.836†	502.0	504.83 µg/L	41.561	504.83 ppb	41.561	8.23%
QC value within limits for Sb 206.836 Recovery = 100.97%							
Se	196.026†	327.6	515.95 µg/L	30.934	515.95 ppb	30.934	6.00%
QC value within limits for Se 196.026 Recovery = 103.19%							
SiO2†		25003.1	5397.4 µg/L	188.24	5397.4 ppb	188.24	3.49%
QC value within limits for SiO2 Recovery = 100.93%							
Si	251.611†	30353.3	2530.5 µg/L	85.13	2530.5 ppb	85.13	3.36%
QC value within limits for Si 251.611 Recovery = 101.22%							
Sn	189.927†	1056.5	497.89 µg/L	49.816	497.89 ppb	49.816	10.01%
QC value within limits for Sn 189.927 Recovery = 99.58%							
Sr	421.552†	50679.0	499.78 µg/L	2.444	499.78 ppb	2.444	0.49%
QC value within limits for Sr 421.552 Recovery = 99.96%							
Ti	334.940†	211276.1	501.63 µg/L	17.554	501.63 ppb	17.554	3.50%
QC value within limits for Ti 334.940 Recovery = 100.33%							
Tl	190.801†	350.1	509.57 µg/L	26.804	509.57 ppb	26.804	5.26%
QC value within limits for Tl 190.801 Recovery = 101.91%							
U	409.014†	5793.6	484.42 µg/L	29.880	484.42 ppb	29.880	6.17%
QC value within limits for U 409.014 Recovery = 96.88%							
V	292.402†	47359.1	505.62 µg/L	26.851	505.62 ppb	26.851	5.31%
QC value within limits for V 292.402 Recovery = 101.12%							
Zn	213.857†	19722.9	503.90 µg/L	24.600	503.90 ppb	24.600	4.88%
QC value within limits for Zn 213.857 Recovery = 100.78%							

All analyte(s) passed QC.

Sequence No.: 36

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/23/2010 02:13:40

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	54681.6	54681.6	100 %		02:14:13
1	Al 396.153Radial†	-12.5	-1.6	-1.2226 µg/L	-1.2226 ppb	02:14:13
1	Ca 317.933Radial†	172.3	-2.5	-2.3927 µg/L	-2.3927 ppb	02:14:33
1	Fe 238.204 Radial†	15.5	-0.4	-3.6031 µg/L	-3.6031 ppb	02:14:33
1	K 766.490 Radial†	153.7	-16.2	-11.196 µg/L	-11.196 ppb	02:14:13
1	Mg 279.077 IEC†	9.7	-0.5	-5.2746 µg/L	-5.2746 ppb	02:14:33
1	Na 589.592 Radial†	394.9	4.6	1.4313 µg/L	1.4313 ppb	02:14:13
1	Sr 421.552†	29.1	-30.3	-0.2989 µg/L	-0.2989 ppb	02:14:13
1	Sc 361.383	1937232.9	1937232.9	101.69 %		02:15:35
1	Y 371.029	1332804.4	1332804.4	101.77 %		02:15:35
1	Ag 328.068†	-529.7	55.9	0.4389 µg/L	0.4389 ppb	02:15:41
1	As 188.979†	-3.9	-3.5	-6.9749 µg/L	-6.9749 ppb	02:16:01
1	B 249.677†	324.2	62.2	2.7624 µg/L	2.7624 ppb	02:16:01
1	Ba 233.527†	-24.4	4.6	0.1220 µg/L	0.1220 ppb	02:16:01
1	Be 313.107†	-3530.7	333.5	0.2157 µg/L	0.2157 ppb	02:15:41
1	Cd 226.502†	-126.7	1.6	0.0449 µg/L	0.0449 ppb	02:16:01
1	Co 228.616†	-9.5	5.3	0.2665 µg/L	0.2665 ppb	02:16:01
1	Cr 267.716†	-12.7	19.9	0.4405 µg/L	0.4405 ppb	02:16:01
1	Cu 324.752†	3280.4	-14.7	-0.1018 µg/L	-0.1018 ppb	02:15:41
1	Mn 257.610†	-171.0	60.6	0.2129 µg/L	0.2129 ppb	02:16:01
1	Mo 202.031†	-1.7	4.6	0.4954 µg/L	0.4954 ppb	02:16:01
1	Ni 231.604†	282.4	-2.5	-0.1380 µg/L	-0.1380 ppb	02:16:01
1	P 214.914†	23.3	-1.9	-4.1628 µg/L	-4.1628 ppb	02:16:01
1	Pb 220.353†	83.2	-10.1	-2.7354 µg/L	-2.7354 ppb	02:16:01
1	S 181.975 Axial†	15.6	3.3	15.111 µg/L	15.111 ppb	02:16:01
1	Sb 206.836†	28.7	8.5	8.4735 µg/L	8.4735 ppb	02:16:01
1	Se 196.026†	12.3	-0.3	-0.4763 µg/L	-0.4763 ppb	02:16:01
1	SiO2†	1579.3	-0.9	-0.1912 µg/L	-0.1912 ppb	02:15:41
1	Si 251.611†	309.9	52.3	4.3612 µg/L	4.3612 ppb	02:16:01
1	Sn 189.927†	1.3	3.6	1.6766 µg/L	1.6766 ppb	02:16:01
1	Ti 334.940†	244.7	168.6	0.4011 µg/L	0.4011 ppb	02:15:41
1	Tl 190.801†	-19.7	2.3	3.3547 µg/L	3.3547 ppb	02:16:01
1	U 409.014†	249.6	67.1	5.6220 µg/L	5.6220 ppb	02:15:41
1	V 292.402†	-58.9	-23.3	-0.2350 µg/L	-0.2350 ppb	02:15:41
1	Zn 213.857†	452.7	6.8	0.1760 µg/L	0.1760 ppb	02:16:01
2	Sc RADIAL	54721.7	54721.7	100 %		02:14:39
2	Al 396.153Radial†	-8.8	2.0	1.4696 µg/L	1.4696 ppb	02:14:39
2	Ca 317.933Radial†	180.7	5.8	5.5352 µg/L	5.5352 ppb	02:14:59
2	Fe 238.204 Radial†	16.0	0.2	1.4255 µg/L	1.4255 ppb	02:14:59
2	K 766.490 Radial†	135.8	-34.2	-23.581 µg/L	-23.581 ppb	02:14:39
2	Mg 279.077 IEC†	10.7	0.4	3.7243 µg/L	3.7243 ppb	02:14:59
2	Na 589.592 Radial†	396.2	5.6	1.7524 µg/L	1.7524 ppb	02:14:39
2	Sr 421.552†	-9.4	-68.6	-0.6767 µg/L	-0.6767 ppb	02:14:39
2	Sc 361.383	1915978.8	1915978.8	100.57 %		02:16:07
2	Y 371.029	1318863.3	1318863.3	100.71 %		02:16:07
2	Ag 328.068†	-474.0	105.5	0.8309 µg/L	0.8309 ppb	02:16:13
2	As 188.979†	-1.3	-1.0	-2.0447 µg/L	-2.0447 ppb	02:16:33
2	B 249.677†	299.1	40.8	1.8100 µg/L	1.8100 ppb	02:16:33
2	Ba 233.527†	-10.0	18.7	0.4982 µg/L	0.4982 ppb	02:16:33
2	Be 313.107†	-3539.9	285.8	0.1849 µg/L	0.1849 ppb	02:16:13
2	Cd 226.502†	-123.1	3.7	0.1051 µg/L	0.1051 ppb	02:16:33
2	Co 228.616†	-12.5	2.2	0.1109 µg/L	0.1109 ppb	02:16:33
2	Cr 267.716†	-24.1	8.4	0.1857 µg/L	0.1857 ppb	02:16:33
2	Cu 324.752†	3271.1	11.8	0.0812 µg/L	0.0812 ppb	02:16:13
2	Mn 257.610†	-156.4	73.3	0.2579 µg/L	0.2579 ppb	02:16:33
2	Mo 202.031†	-2.5	3.8	0.4136 µg/L	0.4136 ppb	02:16:33
2	Ni 231.604†	284.0	2.2	0.1215 µg/L	0.1215 ppb	02:16:33
2	P 214.914†	22.2	-2.8	-6.0169 µg/L	-6.0169 ppb	02:16:33
2	Pb 220.353†	96.7	4.2	1.1236 µg/L	1.1236 ppb	02:16:33

2	S 181.975 Axial†	14.6	2.5	11.439 µg/L	11.439 ppb	02:16:33
2	Sb 206.836†	25.5	5.6	5.6435 µg/L	5.6435 ppb	02:16:33
2	Se 196.026†	19.2	6.7	10.410 µg/L	10.410 ppb	02:16:33
2	SiO2†	1571.1	8.3	1.7820 µg/L	1.7820 ppb	02:16:13
2	Si 251.611†	317.0	62.7	5.2277 µg/L	5.2277 ppb	02:16:33
2	Sn 189.927†	2.1	4.4	2.0682 µg/L	2.0682 ppb	02:16:33
2	Ti 334.940†	216.3	143.1	0.3398 µg/L	0.3398 ppb	02:16:13
2	Tl 190.801†	-22.5	-0.7	-0.9430 µg/L	-0.9430 ppb	02:16:33
2	U 409.014†	250.8	71.1	5.9537 µg/L	5.9537 ppb	02:16:13
2	V 292.402†	-56.8	-21.9	-0.2206 µg/L	-0.2206 ppb	02:16:13
2	Zn 213.857†	455.1	14.1	0.3627 µg/L	0.3627 ppb	02:16:33
3	Sc RADIAL	54848.2	54848.2	101 %		02:15:05
3	Al 396.153Radial†	-8.6	2.3	1.6618 µg/L	1.6618 ppb	02:15:05
3	Ca 317.933Radial†	177.2	1.9	1.8062 µg/L	1.8062 ppb	02:15:25
3	Fe 238.204 Radial†	16.0	0.1	0.7453 µg/L	0.7453 ppb	02:15:25
3	K 766.490 Radial†	210.9	40.2	27.713 µg/L	27.713 ppb	02:15:05
3	Mg 279.077 IEC†	9.1	-1.3	-12.222 µg/L	-12.222 ppb	02:15:25
3	Na 589.592 Radial†	360.2	-31.2	-9.7740 µg/L	-9.7740 ppb	02:15:05
3	Sr 421.552†	21.3	-38.1	-0.3760 µg/L	-0.3760 ppb	02:15:05
3	Sc 361.383	1899081.1	1899081.1	99.683 %		02:16:39
3	Y 371.029	1305745.1	1305745.1	99.704 %		02:16:39
3	Ag 328.068†	-524.5	50.6	0.3991 µg/L	0.3991 ppb	02:16:45
3	As 188.979†	4.6	5.0	9.8923 µg/L	9.8923 ppb	02:17:06
3	B 249.677†	301.0	45.4	2.0146 µg/L	2.0146 ppb	02:17:06
3	Ba 233.527†	-20.4	8.1	0.2175 µg/L	0.2175 ppb	02:17:06
3	Be 313.107†	-3590.3	203.9	0.1318 µg/L	0.1318 ppb	02:16:45
3	Cd 226.502†	-136.3	-10.5	-0.2991 µg/L	-0.2991 ppb	02:17:06
3	Co 228.616†	-9.6	5.0	0.2540 µg/L	0.2540 ppb	02:17:06
3	Cr 267.716†	-19.6	12.7	0.2809 µg/L	0.2809 ppb	02:17:06
3	Cu 324.752†	3262.3	31.9	0.2196 µg/L	0.2196 ppb	02:16:45
3	Mn 257.610†	-158.6	69.7	0.2459 µg/L	0.2459 ppb	02:17:06
3	Mo 202.031†	3.1	9.4	1.0215 µg/L	1.0215 ppb	02:17:06
3	Ni 231.604†	273.7	-5.7	-0.3152 µg/L	-0.3152 ppb	02:17:06
3	P 214.914†	30.0	5.2	11.445 µg/L	11.445 ppb	02:17:06
3	Pb 220.353†	80.9	-10.8	-2.9131 µg/L	-2.9131 ppb	02:17:06
3	S 181.975 Axial†	15.0	3.1	14.129 µg/L	14.129 ppb	02:17:06
3	Sb 206.836†	24.4	4.7	4.6964 µg/L	4.6964 ppb	02:17:06
3	Se 196.026†	14.8	2.5	3.8542 µg/L	3.8542 ppb	02:17:06
3	SiO2†	1570.8	21.8	4.7112 µg/L	4.7112 ppb	02:16:45
3	Si 251.611†	315.1	63.6	5.3010 µg/L	5.3010 ppb	02:17:06
3	Sn 189.927†	-0.7	1.6	0.7421 µg/L	0.7421 ppb	02:17:06
3	Ti 334.940†	241.1	169.9	0.4046 µg/L	0.4046 ppb	02:16:45
3	Tl 190.801†	-26.9	-5.3	-7.5769 µg/L	-7.5769 ppb	02:17:06
3	U 409.014†	168.2	-9.6	-0.8086 µg/L	-0.8086 ppb	02:16:45
3	V 292.402†	-32.3	2.2	0.0311 µg/L	0.0311 ppb	02:16:45
3	Zn 213.857†	458.3	21.3	0.5508 µg/L	0.5508 ppb	02:17:06

-----  
Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1917430.9	100.65 %	1.003			1.00%
Sc RADIAL	54750.5	100 %	0.2			0.16%
Y 371.029	1319137.6	100.73 %	1.033			1.03%
Ag 328.068†	70.6	0.5563 µg/L	0.23866	0.5563 ppb	0.23866	42.90%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	0.9	0.6363 µg/L	1.61266	0.6363 ppb	1.61266	253.46%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	0.1	0.2909 µg/L	8.67278	0.2909 ppb	8.67278	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	49.4	2.1957 µg/L	0.50135	2.1957 ppb	0.50135	22.83%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	10.5	0.2793 µg/L	0.19556	0.2793 ppb	0.19556	70.03%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	274.4	0.1774 µg/L	0.04242	0.1774 ppb	0.04242	23.90%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	1.7	1.6496 µg/L	3.96625	1.6496 ppb	3.96625	240.44%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	-1.8	-0.0497 µg/L	0.21806	-0.0497 ppb	0.21806	439.07%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	4.2	0.2105 µg/L	0.08644	0.2105 ppb	0.08644	41.06%

Cr	267.716†	QC value within limits for Co 228.616	Recovery = Not calculated				
		13.6	0.3024 µg/L	0.12878	0.3024 ppb	0.12878	42.59%
Cu	324.752†	QC value within limits for Cr 267.716	Recovery = Not calculated				
		9.7	0.0663 µg/L	0.16120	0.0663 ppb	0.16120	243.07%
Fe	238.204 Radial†	QC value within limits for Cu 324.752	Recovery = Not calculated				
		-0.1	-0.4774 µg/L	2.72818	-0.4774 ppb	2.72818	571.45%
K	766.490 Radial†	QC value within limits for Fe 238.204 Radial	Recovery = Not calculated				
		-3.4	-2.3549 µg/L	26.76577	-2.3549 ppb	26.76577	>999.9%
Mg	279.077 IEC†	QC value within limits for K 766.490 Radial	Recovery = Not calculated				
		-0.5	-4.5907 µg/L	7.99495	-4.5907 ppb	7.99495	174.16%
Mn	257.610†	QC value within limits for Mg 279.077 IEC	Recovery = Not calculated				
		67.9	0.2389 µg/L	0.02331	0.2389 ppb	0.02331	9.76%
Mo	202.031†	QC value within limits for Mn 257.610	Recovery = Not calculated				
		6.0	0.6435 µg/L	0.32991	0.6435 ppb	0.32991	51.27%
Na	589.592 Radial†	QC value within limits for Mo 202.031	Recovery = Not calculated				
		-7.0	-2.1968 µg/L	6.56403	-2.1968 ppb	6.56403	298.80%
Ni	231.604†	QC value within limits for Na 589.592 Radial	Recovery = Not calculated				
		-2.0	-0.1106 µg/L	0.21963	-0.1106 ppb	0.21963	198.67%
P	214.914†	QC value within limits for Ni 231.604	Recovery = Not calculated				
		0.2	0.4218 µg/L	9.59136	0.4218 ppb	9.59136	>999.9%
Pb	220.353†	QC value within limits for P 214.914	Recovery = Not calculated				
		-5.6	-1.5083 µg/L	2.28100	-1.5083 ppb	2.28100	151.23%
S	181.975 Axial†	QC value within limits for Pb 220.353	Recovery = Not calculated				
		3.0	13.560 µg/L	1.9015	13.560 ppb	1.9015	14.02%
Sb	206.836†	QC value within limits for S 181.975 Axial	Recovery = Not calculated				
		6.3	6.2711 µg/L	1.96518	6.2711 ppb	1.96518	31.34%
Se	196.026†	QC value within limits for Sb 206.836	Recovery = Not calculated				
		3.0	4.5960 µg/L	5.48090	4.5960 ppb	5.48090	119.25%
SiO2†		QC value within limits for Se 196.026	Recovery = Not calculated				
		9.7	2.1007 µg/L	2.46669	2.1007 ppb	2.46669	117.42%
Si	251.611†	QC value within limits for SiO2	Recovery = Not calculated				
		59.5	4.9633 µg/L	0.52272	4.9633 ppb	0.52272	10.53%
Sn	189.927†	QC value within limits for Si 251.611	Recovery = Not calculated				
		3.2	1.4956 µg/L	0.68131	1.4956 ppb	0.68131	45.55%
Sr	421.552†	QC value within limits for Sn 189.927	Recovery = Not calculated				
		-45.7	-0.4505 µg/L	0.19964	-0.4505 ppb	0.19964	44.31%
Ti	334.940†	QC value within limits for Sr 421.552	Recovery = Not calculated				
		160.5	0.3818 µg/L	0.03643	0.3818 ppb	0.03643	9.54%
Tl	190.801†	QC value within limits for Ti 334.940	Recovery = Not calculated				
		-1.2	-1.7218 µg/L	5.50725	-1.7218 ppb	5.50725	319.86%
U	409.014†	QC value within limits for Tl 190.801	Recovery = Not calculated				
		42.8	3.5890 µg/L	3.81211	3.5890 ppb	3.81211	106.22%
V	292.402†	QC value within limits for U 409.014	Recovery = Not calculated				
		-14.3	-0.1415 µg/L	0.14966	-0.1415 ppb	0.14966	105.78%
Zn	213.857†	QC value within limits for V 292.402	Recovery = Not calculated				
		14.1	0.3632 µg/L	0.18739	0.3632 ppb	0.18739	51.59%

QC value within limits for Zn 213.857 Recovery = Not calculated

All analyte(s) passed QC.

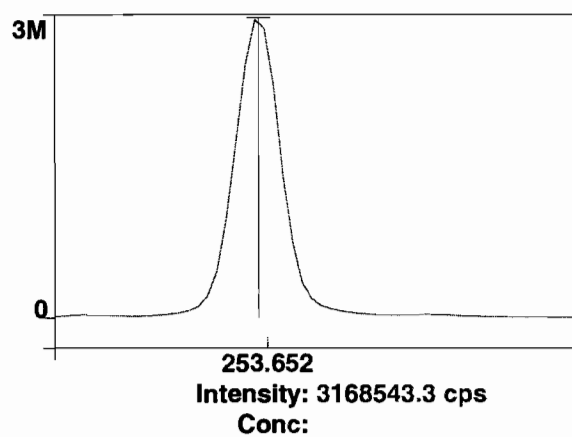


Method: Hg\_ReAlign  
Result: 030510

Sample ID: Hg\_ReAlign

Hg 253.652

Rep: 1



1

=====  
Analysis Begun

Start Time: 3/3/2010 14:33:12

Plasma On Time: 3/1/2010 06:57:40

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\030310.sif

Batch ID:

Results Data Set: 030310

Results Library: C:\pe\Optima3\Results\Results.mdb

=====  
Sequence No.: 1

Autosampler Location: 8

Sample ID: S0

Date Collected: 3/3/2010 14:33:13

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:  
-----

## Replicate Data: S0

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Analysis Time
1	Sc Radial	4816.8	4816.8	0.000 %	14:35:07
1	Y RADIAL	5121.7	5121.7	0.000 %	14:35:07
1	Al 396.153Radial†	-93.0	-93.1	[0.00] ug/L	14:35:27
1	Ca 317.933Radial†	22.6	22.6	[0.00] ug/L	14:35:27
1	Fe 238.204 Radial†	4.9	4.9	[0.00] ug/L	14:35:27
1	K 766.490 Radial†	2209.5	2211.5	[0.00] ug/L	14:35:07
1	Mg 279.077 IEC†	0.8	0.8	[0.00] ug/L	14:35:27
1	Na 589.592 Radial†	-526.2	-526.7	[0.00] ug/L	14:35:07
1	Sr 421.552†	5.7	5.7	[0.00] ug/L	14:35:07
1	Sc 361.383	789937.1	789937.1	0.0000 %	14:36:23
1	Y 371.029	704341.7	704341.7	0.0000 %	14:36:23
1	Ag 328.068†	228.1	227.2	[0.00] ug/L	14:36:23
1	As 188.979†	-28.8	-28.7	[0.00] ug/L	14:36:43
1	B 249.677†	-136.4	-135.9	[0.00] ug/L	14:36:43
1	Ba 233.527†	-9.4	-9.3	[0.00] ug/L	14:36:43
1	Be 313.107†	-9385.8	-9349.3	[0.00] ug/L	14:36:23
1	Cd 226.502†	-190.8	-190.1	[0.00] ug/L	14:36:43
1	Co 228.616†	-63.9	-63.6	[0.00] ug/L	14:36:43
1	Cr 267.716†	62.7	62.5	[0.00] ug/L	14:36:43
1	Cu 324.752†	9145.2	9109.7	[0.00] ug/L	14:36:23
1	Mn 257.610†	433.6	431.9	[0.00] ug/L	14:36:43
1	Mo 202.031†	10.5	10.5	[0.00] ug/L	14:36:43
1	Ni 231.604†	104.4	104.0	[0.00] ug/L	14:36:43
1	P 214.914†	206.7	205.9	[0.00] ug/L	14:36:43
1	Pb 220.353†	-28.1	-28.0	[0.00] ug/L	14:36:43
1	S 181.975 Axial†	49.2	49.0	[0.00] ug/L	14:36:43
1	Sb 206.836†	30.0	29.9	[0.00] ug/L	14:36:43
1	Se 196.026†	-13.2	-13.2	[0.00] ug/L	14:36:43
1	Si 251.611†	551.3	549.1	[0.00] ug/L	14:36:43
1	Sn 189.927†	29.1	28.9	[0.00] ug/L	14:36:43
1	Ti 334.940†	-1213.1	-1208.4	[0.00] ug/L	14:36:23
1	Tl 190.801†	-32.5	-32.3	[0.00] ug/L	14:36:43
1	U 409.014†	-2369.9	-2360.7	[0.00] ug/L	14:36:23
1	V 292.402†	-1670.0	-1663.5	[0.00] ug/L	14:36:23
1	Zn 213.857†	1149.5	1145.0	[0.00] ug/L	14:36:43
1	SiO2†	560.1	557.9	[0.00] ug/L	14:37:39
2	Sc Radial	4841.1	4841.1	0.000 %	14:35:32
2	Y RADIAL	5117.8	5117.8	0.000 %	14:35:32
2	Al 396.153Radial†	-77.7	-77.3	[0.00] ug/L	14:35:52
2	Ca 317.933Radial†	19.8	19.7	[0.00] ug/L	14:35:52
2	Fe 238.204 Radial†	8.1	8.1	[0.00] ug/L	14:35:52
2	K 766.490 Radial†	2273.7	2264.4	[0.00] ug/L	14:35:32
2	Mg 279.077 IEC†	2.1	2.0	[0.00] ug/L	14:35:52
2	Na 589.592 Radial†	-566.2	-563.9	[0.00] ug/L	14:35:32
2	Sr 421.552†	13.8	13.8	[0.00] ug/L	14:35:32
2	Sc 361.383	788975.0	788975.0	0.0000 %	14:36:49
2	Y 371.029	702949.4	702949.4	0.0000 %	14:36:49

2	Ag 328.068†	152.0	151.6	[0.00]	ug/L	14:36:49
2	As 188.979†	-32.7	-32.6	[0.00]	ug/L	14:37:09
2	B 249.677†	-141.5	-141.1	[0.00]	ug/L	14:37:09
2	Ba 233.527†	-2.6	-2.6	[0.00]	ug/L	14:37:09
2	Be 313.107†	-9493.9	-9468.5	[0.00]	ug/L	14:36:49
2	Cd 226.502†	-186.6	-186.1	[0.00]	ug/L	14:37:09
2	Co 228.616†	-57.2	-57.1	[0.00]	ug/L	14:37:09
2	Cr 267.716†	55.8	55.6	[0.00]	ug/L	14:37:09
2	Cu 324.752†	9116.7	9092.3	[0.00]	ug/L	14:36:49
2	Mn 257.610†	418.0	416.9	[0.00]	ug/L	14:37:09
2	Mo 202.031†	9.5	9.5	[0.00]	ug/L	14:37:09
2	Ni 231.604†	113.9	113.6	[0.00]	ug/L	14:37:09
2	P 214.914†	205.4	204.9	[0.00]	ug/L	14:37:09
2	Pb 220.353†	-26.2	-26.1	[0.00]	ug/L	14:37:09
2	S 181.975 Axial†	41.0	40.9	[0.00]	ug/L	14:37:09
2	Sb 206.836†	34.7	34.6	[0.00]	ug/L	14:37:09
2	Se 196.026†	-15.3	-15.3	[0.00]	ug/L	14:37:09
2	Si 251.611†	555.8	554.3	[0.00]	ug/L	14:37:09
2	Sn 189.927†	31.2	31.2	[0.00]	ug/L	14:37:09
2	Ti 334.940†	-1309.7	-1306.2	[0.00]	ug/L	14:36:49
2	Tl 190.801†	-33.3	-33.2	[0.00]	ug/L	14:37:09
2	U 409.014†	-2161.2	-2155.5	[0.00]	ug/L	14:36:49
2	V 292.402†	-1648.3	-1643.9	[0.00]	ug/L	14:36:49
2	Zn 213.857†	1157.8	1154.8	[0.00]	ug/L	14:37:09
2	SiO2†	573.8	572.3	[0.00]	ug/L	14:37:44
3	Sc Radial	4806.0	4806.0	0.000	%	14:35:57
3	Y RADIAL	5085.9	5085.9	0.000	%	14:35:57
3	Al 396.153Radial†	-79.3	-79.5	[0.00]	ug/L	14:36:17
3	Ca 317.933Radial†	20.8	20.9	[0.00]	ug/L	14:36:17
3	Fe 238.204 Radial†	8.2	8.3	[0.00]	ug/L	14:36:17
3	K 766.490 Radial†	2248.5	2255.7	[0.00]	ug/L	14:35:57
3	Mg 279.077 IEC†	0.2	0.2	[0.00]	ug/L	14:36:17
3	Na 589.592 Radial†	-572.6	-574.4	[0.00]	ug/L	14:35:57
3	Sr 421.552†	15.1	15.2	[0.00]	ug/L	14:35:57
3	Sc 361.383	781690.9	781690.9	0.0000	%	14:37:14
3	Y 371.029	697323.6	697323.6	0.0000	%	14:37:14
3	Ag 328.068†	244.4	246.0	[0.00]	ug/L	14:37:14
3	As 188.979†	-25.1	-25.2	[0.00]	ug/L	14:37:34
3	B 249.677†	-157.9	-159.0	[0.00]	ug/L	14:37:34
3	Ba 233.527†	14.0	14.1	[0.00]	ug/L	14:37:34
3	Be 313.107†	-9407.8	-9470.1	[0.00]	ug/L	14:37:14
3	Cd 226.502†	-205.2	-206.6	[0.00]	ug/L	14:37:34
3	Co 228.616†	-45.2	-45.5	[0.00]	ug/L	14:37:34
3	Cr 267.716†	78.3	78.8	[0.00]	ug/L	14:37:34
3	Cu 324.752†	9069.3	9129.4	[0.00]	ug/L	14:37:14
3	Mn 257.610†	429.5	432.4	[0.00]	ug/L	14:37:34
3	Mo 202.031†	25.4	25.6	[0.00]	ug/L	14:37:34
3	Ni 231.604†	85.8	86.4	[0.00]	ug/L	14:37:34
3	P 214.914†	198.3	199.6	[0.00]	ug/L	14:37:34
3	Pb 220.353†	-25.8	-25.9	[0.00]	ug/L	14:37:34
3	S 181.975 Axial†	32.6	32.8	[0.00]	ug/L	14:37:34
3	Sb 206.836†	28.5	28.7	[0.00]	ug/L	14:37:34
3	Se 196.026†	-22.2	-22.4	[0.00]	ug/L	14:37:34
3	Si 251.611†	543.8	547.4	[0.00]	ug/L	14:37:34
3	Sn 189.927†	25.7	25.9	[0.00]	ug/L	14:37:34
3	Ti 334.940†	-1256.0	-1264.3	[0.00]	ug/L	14:37:14
3	Tl 190.801†	-45.3	-45.6	[0.00]	ug/L	14:37:34
3	U 409.014†	-2187.2	-2201.7	[0.00]	ug/L	14:37:14
3	V 292.402†	-1666.0	-1677.0	[0.00]	ug/L	14:37:14
3	Zn 213.857†	1132.3	1139.8	[0.00]	ug/L	14:37:34
3	SiO2†	560.7	564.4	[0.00]	ug/L	14:37:50

-----  
Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	786867.7	4508.92	0.57%	0.0000 %
Sc Radial	4821.3	17.99	0.37%	0.000 %
Y 371.029	701538.2	3715.78	0.53%	0.0000 %
Y RADIAL	5108.4	19.66	0.38%	0.000 %
Ag 328.068†	208.3	49.99	24.00%	[0.00] ug/L

Al 396.153Radial†	-83.3	8.54	10.25%	[0.00]	ug/L
As 188.979†	-28.8	3.69	12.78%	[0.00]	ug/L
B 249.677†	-145.3	12.09	8.32%	[0.00]	ug/L
Ba 233.527†	0.7	12.08	>999.9%	[0.00]	ug/L
Be 313.107†	-9429.3	69.30	0.73%	[0.00]	ug/L
Ca 317.933Radial†	21.1	1.45	6.90%	[0.00]	ug/L
Cd 226.502†	-194.2	10.86	5.59%	[0.00]	ug/L
Co 228.616†	-55.4	9.20	16.61%	[0.00]	ug/L
Cr 267.716†	65.6	11.92	18.15%	[0.00]	ug/L
Cu 324.752†	9110.4	18.55	0.20%	[0.00]	ug/L
Fe 238.204 Radial†	7.1	1.90	26.85%	[0.00]	ug/L
K 766.490 Radial†	2243.9	28.33	1.26%	[0.00]	ug/L
Mg 279.077 IEC†	1.0	0.94	91.77%	[0.00]	ug/L
Mn 257.610†	427.0	8.81	2.06%	[0.00]	ug/L
Mo 202.031†	15.2	8.99	59.21%	[0.00]	ug/L
Na 589.592 Radial†	-555.0	25.09	4.52%	[0.00]	ug/L
Ni 231.604†	101.3	13.79	13.61%	[0.00]	ug/L
P 214.914†	203.5	3.34	1.64%	[0.00]	ug/L
Pb 220.353†	-26.7	1.15	4.32%	[0.00]	ug/L
S 181.975 Axial†	40.9	8.09	19.80%	[0.00]	ug/L
Sb 206.836†	31.1	3.11	10.02%	[0.00]	ug/L
Se 196.026†	-17.0	4.81	28.40%	[0.00]	ug/L
Si 251.611†	550.3	3.57	0.65%	[0.00]	ug/L
Sn 189.927†	28.6	2.66	9.30%	[0.00]	ug/L
Sr 421.552†	11.6	5.09	44.00%	[0.00]	ug/L
Ti 334.940†	-1259.6	49.07	3.90%	[0.00]	ug/L
Tl 190.801†	-37.0	7.40	19.99%	[0.00]	ug/L
U 409.014†	-2239.3	107.63	4.81%	[0.00]	ug/L
V 292.402†	-1661.5	16.68	1.00%	[0.00]	ug/L
Zn 213.857†	1146.5	7.58	0.66%	[0.00]	ug/L
SiO2†	564.9	7.18	1.27%	[0.00]	ug/L

Sequence No.: 2

Sample ID: S0.1

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 2

Date Collected: 3/3/2010 14:40:00

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib.	Analysis Time
1	Sc Radial	4859.3	4859.3	101 %		14:41:57
1	Y RADIAL	5143.6	5143.6	100.7 %		14:41:57
1	K 766.490 Radial†	7427.4	5125.6	[1000] ug/L		14:41:52
1	Sr 421.552†	13859.7	13739.9	[100] ug/L		14:41:57
1	Sc 361.383	783240.5	783240.5	99.539 %		14:42:24
1	Y 371.029	700582.2	700582.2	99.864 %		14:42:24
1	Ag 328.068†	19926.7	19810.7	[100] ug/L		14:42:24
1	As 188.979†	191.5	221.2	[100] ug/L		14:42:44
1	B 249.677†	3645.8	3808.0	[100] ug/L		14:42:24
1	Ba 233.527†	8573.6	8612.6	[100] ug/L		14:42:24
1	Be 313.107†	245956.5	256524.8	[100] ug/L		14:42:24
1	Cd 226.502†	6829.8	7055.7	[100] ug/L		14:42:44
1	Co 228.616†	3299.8	3370.5	[100] ug/L		14:42:44
1	Cr 267.716†	7566.0	7535.4	[100] ug/L		14:42:24
1	Cu 324.752†	35386.3	26439.7	[100] ug/L		14:42:24
1	Mn 257.610†	65069.3	64943.6	[100] ug/L		14:42:24
1	Mo 202.031†	1114.8	1104.8	[100] ug/L		14:42:44
1	Ni 231.604†	3258.0	3171.7	[100] ug/L		14:42:44
1	P 214.914†	1102.9	904.5	[500] ug/L		14:42:44
1	Pb 220.353†	587.6	617.0	[100] ug/L		14:42:44
1	S 181.975 Axial†	194.9	154.9	[200] ug/L		14:42:44
1	Sb 206.836†	277.5	247.7	[100] ug/L		14:42:44
1	Se 196.026†	139.3	156.9	[100] ug/L		14:42:44
1	Si 251.611†	14394.4	13910.8	[500] ug/L		14:42:24
1	Sn 189.927†	457.3	430.8	[100] ug/L		14:42:44
1	Ti 334.940†	49724.5	51214.4	[100] ug/L		14:42:24
1	Tl 190.801†	186.0	223.9	[100] ug/L		14:42:44
1	U 409.014†	608.4	2850.5	[100] ug/L		14:42:24
1	V 292.402†	11109.0	12821.9	[100] ug/L		14:42:24
1	Zn 213.857†	10484.4	9386.5	[100] ug/L		14:42:24
1	SiO2†	14658.7	14161.7	[1069.5] ug/L		14:43:41
2	Sc Radial	4912.4	4912.4	102 %		14:42:07
2	Y RADIAL	5194.0	5194.0	101.7 %		14:42:07
2	K 766.490 Radial†	7535.5	5152.0	[1000] ug/L		14:42:02
2	Sr 421.552†	13967.6	13697.1	[100] ug/L		14:42:07
2	Sc 361.383	788486.6	788486.6	100.21 %		14:42:50
2	Y 371.029	707278.1	707278.1	100.82 %		14:42:50
2	Ag 328.068†	20258.0	20008.1	[100] ug/L		14:42:50
2	As 188.979†	195.6	224.1	[100] ug/L		14:43:10
2	B 249.677†	3734.4	3872.1	[100] ug/L		14:42:50
2	Ba 233.527†	8679.5	8660.9	[100] ug/L		14:42:50
2	Be 313.107†	248356.5	257275.9	[100] ug/L		14:42:50
2	Cd 226.502†	6919.3	7099.3	[100] ug/L		14:43:10
2	Co 228.616†	3329.1	3377.6	[100] ug/L		14:43:10
2	Cr 267.716†	7614.3	7533.1	[100] ug/L		14:42:50
2	Cu 324.752†	35852.1	26668.1	[100] ug/L		14:42:50
2	Mn 257.610†	65583.7	65022.0	[100] ug/L		14:42:50
2	Mo 202.031†	1133.1	1115.6	[100] ug/L		14:43:10
2	Ni 231.604†	3291.7	3183.7	[100] ug/L		14:43:10
2	P 214.914†	1109.6	903.9	[500] ug/L		14:43:10
2	Pb 220.353†	582.2	607.7	[100] ug/L		14:43:10
2	S 181.975 Axial†	199.9	158.6	[200] ug/L		14:43:10
2	Sb 206.836†	280.8	249.2	[100] ug/L		14:43:10
2	Se 196.026†	144.3	161.0	[100] ug/L		14:43:10
2	Si 251.611†	14512.5	13932.5	[500] ug/L		14:42:50
2	Sn 189.927†	461.5	431.9	[100] ug/L		14:43:10
2	Ti 334.940†	50279.8	51436.2	[100] ug/L		14:42:50
2	Tl 190.801†	180.2	216.9	[100] ug/L		14:43:10
2	U 409.014†	888.6	3126.1	[100] ug/L		14:42:50

2	V 292.402†	11176.5	12815.0	[100]	ug/L	14:42:50
2	Zn 213.857†	10560.5	9392.3	[100]	ug/L	14:42:50
2	SiO2†	14412.1	13817.6	[1069.5]	ug/L	14:43:46
3	Sc Radial	4903.8	4903.8	102	%	14:42:17
3	Y RADIAL	5171.9	5171.9	101.2	%	14:42:17
3	K 766.490 Radial†	7405.5	5037.1	[1000]	ug/L	14:42:12
3	Sr 421.552†	13937.0	13691.1	[100]	ug/L	14:42:17
3	Sc 361.383	793381.5	793381.5	100.83	%	14:43:15
3	Y 371.029	711012.4	711012.4	101.35	%	14:43:15
3	Ag 328.068†	20276.3	19901.6	[100]	ug/L	14:43:15
3	As 188.979†	206.7	233.9	[100]	ug/L	14:43:35
3	B 249.677†	3777.8	3892.1	[100]	ug/L	14:43:15
3	Ba 233.527†	8700.2	8628.1	[100]	ug/L	14:43:15
3	Be 313.107†	249420.4	256801.9	[100]	ug/L	14:43:15
3	Cd 226.502†	6881.8	7019.6	[100]	ug/L	14:43:35
3	Co 228.616†	3313.5	3341.7	[100]	ug/L	14:43:35
3	Cr 267.716†	7645.9	7517.5	[100]	ug/L	14:43:15
3	Cu 324.752†	36079.6	26673.0	[100]	ug/L	14:43:15
3	Mn 257.610†	66118.8	65148.9	[100]	ug/L	14:43:15
3	Mo 202.031†	1124.0	1099.5	[100]	ug/L	14:43:35
3	Ni 231.604†	3257.2	3129.1	[100]	ug/L	14:43:35
3	P 214.914†	1107.6	895.0	[500]	ug/L	14:43:35
3	Pb 220.353†	583.3	605.2	[100]	ug/L	14:43:35
3	S 181.975 Axial†	194.7	152.2	[200]	ug/L	14:43:35
3	Sb 206.836†	285.2	251.8	[100]	ug/L	14:43:35
3	Se 196.026†	143.3	159.1	[100]	ug/L	14:43:35
3	Si 251.611†	14604.9	13934.7	[500]	ug/L	14:43:15
3	Sn 189.927†	452.8	420.5	[100]	ug/L	14:43:35
3	Ti 334.940†	50622.6	51466.6	[100]	ug/L	14:43:15
3	Tl 190.801†	194.4	229.8	[100]	ug/L	14:43:35
3	U 409.014†	709.2	2942.7	[100]	ug/L	14:43:15
3	V 292.402†	11215.2	12784.6	[100]	ug/L	14:43:15
3	Zn 213.857†	10653.9	9419.9	[100]	ug/L	14:43:15
3	SiO2†	14510.6	13826.6	[1069.5]	ug/L	14:43:51

## Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc.	Units
Sc 361.383	788369.6	5071.51	0.64%	100.19	%
Sc Radial	4891.8	28.51	0.58%	101	%
Y 371.029	706290.9	5284.69	0.75%	100.68	%
Y RADIAL	5169.8	25.23	0.49%	101.2	%
Ag 328.068†	19906.8	98.80	0.50%	[100]	ug/L
As 188.979†	226.4	6.65	2.94%	[100]	ug/L
B 249.677†	3857.4	43.95	1.14%	[100]	ug/L
Ba 233.527†	8633.9	24.69	0.29%	[100]	ug/L
Be 313.107†	256867.6	379.81	0.15%	[100]	ug/L
Cd 226.502†	7058.2	39.93	0.57%	[100]	ug/L
Co 228.616†	3363.3	19.02	0.57%	[100]	ug/L
Cr 267.716†	7528.6	9.74	0.13%	[100]	ug/L
Cu 324.752†	26593.6	133.26	0.50%	[100]	ug/L
K 766.490 Radial†	5104.9	60.16	1.18%	[1000]	ug/L
Mn 257.610†	65038.2	103.63	0.16%	[100]	ug/L
Mo 202.031†	1106.6	8.19	0.74%	[100]	ug/L
Ni 231.604†	3161.5	28.68	0.91%	[100]	ug/L
P 214.914†	901.1	5.29	0.59%	[500]	ug/L
Pb 220.353†	609.9	6.21	1.02%	[100]	ug/L
S 181.975 Axial†	155.3	3.19	2.06%	[200]	ug/L
Sb 206.836†	249.6	2.06	0.82%	[100]	ug/L
Se 196.026†	159.0	2.03	1.28%	[100]	ug/L
Si 251.611†	13926.0	13.21	0.09%	[500]	ug/L
Sn 189.927†	427.7	6.30	1.47%	[100]	ug/L
Sr 421.552†	13709.4	26.62	0.19%	[100]	ug/L
Ti 334.940†	51372.4	137.70	0.27%	[100]	ug/L
Tl 190.801†	223.5	6.46	2.89%	[100]	ug/L
U 409.014†	2973.1	140.27	4.72%	[100]	ug/L
V 292.402†	12807.2	19.82	0.15%	[100]	ug/L
Zn 213.857†	9399.5	17.86	0.19%	[100]	ug/L
SiO2†	13935.3	196.12	1.41%	[1069.5]	ug/L

Sequence No.: 3

Sample ID: S0.5

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 3

Date Collected: 3/3/2010 14:46:01

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: S0.5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib.	Analysis Time
1	Sc Radial	4980.0	4980.0	103	%	14:47:53
1	Y RADIAL	5250.5	5250.5	102.8	%	14:47:53
1	Al 396.153Radial†	5237.6	5154.1	[5000]	ug/L	14:47:53
1	Ca 317.933Radial†	2840.0	2728.4	[5000]	ug/L	14:48:13
1	K 766.490 Radial†	28256.0	25111.9	[5000]	ug/L	14:47:53
1	Mg 279.077 IEC†	133.3	128.0	[5000]	ug/L	14:48:13
1	Sr 421.552†	69845.2	67608.3	[500]	ug/L	14:47:53
1	Sc 361.383	817601.5	817601.5	103.91	%	14:49:10
1	Y 371.029	724249.0	724249.0	103.24	%	14:49:10
1	Ag 328.068†	99095.0	95161.7	[500]	ug/L	14:49:16
1	As 188.979†	1113.8	1100.8	[500]	ug/L	14:49:36
1	B 249.677†	19859.7	19258.5	[500]	ug/L	14:49:16
1	Ba 233.527†	43103.2	41482.3	[500]	ug/L	14:49:16
1	Be 313.107†	1267074.6	1228874.3	[500]	ug/L	14:49:10
1	Cd 226.502†	35956.9	34799.5	[500]	ug/L	14:49:16
1	Co 228.616†	16593.8	16025.4	[500]	ug/L	14:49:36
1	Cr 267.716†	37434.5	35961.7	[500]	ug/L	14:49:16
1	Cu 324.752†	145311.6	130738.9	[500]	ug/L	14:49:16
1	Mn 257.610†	318850.5	306437.7	[500]	ug/L	14:49:16
1	Mo 202.031†	5498.4	5276.5	[500]	ug/L	14:49:36
1	Ni 231.604†	16338.7	15623.2	[500]	ug/L	14:49:16
1	P 214.914†	4756.1	4373.9	[2500]	ug/L	14:49:36
1	Pb 220.353†	3084.9	2995.6	[500]	ug/L	14:49:36
1	S 181.975 Axial†	827.5	755.5	[1000]	ug/L	14:49:36
1	Sb 206.836†	1295.7	1216.0	[500]	ug/L	14:49:36
1	Se 196.026†	817.4	803.6	[500]	ug/L	14:49:36
1	Si 251.611†	70927.1	67710.6	[2500]	ug/L	14:49:16
1	Sn 189.927†	2145.5	2036.2	[500]	ug/L	14:49:36
1	Ti 334.940†	249958.9	241822.5	[500]	ug/L	14:49:16
1	Tl 190.801†	1084.9	1081.2	[500]	ug/L	14:49:36
1	U 409.014†	12880.1	14635.2	[500]	ug/L	14:49:16
1	V 292.402†	62664.8	61970.7	[500]	ug/L	14:49:16
1	Zn 213.857†	47500.6	44568.5	[500]	ug/L	14:49:16
1	SiO2†	71238.3	67995.5	[5347.5]	ug/L	14:50:43
2	Sc Radial	4994.1	4994.1	104	%	14:48:18
2	Y RADIAL	5288.5	5288.5	103.5	%	14:48:18
2	Al 396.153Radial†	5285.0	5185.5	[5000]	ug/L	14:48:18
2	Ca 317.933Radial†	2842.0	2722.6	[5000]	ug/L	14:48:38
2	K 766.490 Radial†	28402.1	25175.5	[5000]	ug/L	14:48:18
2	Mg 279.077 IEC†	130.6	125.1	[5000]	ug/L	14:48:38
2	Sr 421.552†	70336.6	67891.3	[500]	ug/L	14:48:18
2	Sc 361.383	808886.6	808886.6	102.80	%	14:49:41
2	Y 371.029	716523.4	716523.4	102.14	%	14:49:41
2	Ag 328.068†	99658.6	96737.5	[500]	ug/L	14:49:46
2	As 188.979†	1120.1	1118.5	[500]	ug/L	14:50:06
2	B 249.677†	20118.2	19715.9	[500]	ug/L	14:49:46
2	Ba 233.527†	43270.7	42092.1	[500]	ug/L	14:49:46
2	Be 313.107†	1252294.2	1227634.5	[500]	ug/L	14:49:41
2	Cd 226.502†	36085.7	35297.7	[500]	ug/L	14:49:46
2	Co 228.616†	16624.7	16227.5	[500]	ug/L	14:50:06
2	Cr 267.716†	37611.9	36522.5	[500]	ug/L	14:49:46
2	Cu 324.752†	146462.7	133365.4	[500]	ug/L	14:49:46
2	Mn 257.610†	320463.8	311313.3	[500]	ug/L	14:49:46
2	Mo 202.031†	5535.3	5369.4	[500]	ug/L	14:50:06
2	Ni 231.604†	16427.3	15878.8	[500]	ug/L	14:49:46
2	P 214.914†	4764.9	4431.8	[2500]	ug/L	14:50:06
2	Pb 220.353†	3102.7	3044.9	[500]	ug/L	14:50:06
2	S 181.975 Axial†	836.9	773.3	[1000]	ug/L	14:50:06
2	Sb 206.836†	1298.9	1232.5	[500]	ug/L	14:50:06

2	Se 196.026†	816.2	811.0	[500]	ug/L	14:50:06
2	Si 251.611†	71425.6	68931.0	[2500]	ug/L	14:49:46
2	Sn 189.927†	2167.7	2080.1	[500]	ug/L	14:50:06
2	Ti 334.940†	251541.5	245953.9	[500]	ug/L	14:49:46
2	Tl 190.801†	1064.7	1072.8	[500]	ug/L	14:50:06
2	U 409.014†	12958.5	14845.1	[500]	ug/L	14:49:46
2	V 292.402†	62944.5	62892.6	[500]	ug/L	14:49:46
2	Zn 213.857†	47729.1	45283.3	[500]	ug/L	14:49:46
2	SiO2†	71124.6	68623.7	[5347.5]	ug/L	14:50:48
3	Sc Radial	4975.9	4975.9	103	%	14:48:43
3	Y RADIAL	5217.2	5217.2	102.1	%	14:48:43
3	Al 396.153Radial†	5232.5	5153.2	[5000]	ug/L	14:48:43
3	Ca 317.933Radial†	2830.8	2721.8	[5000]	ug/L	14:49:03
3	K 766.490 Radial†	28070.2	24954.3	[5000]	ug/L	14:48:43
3	Mg 279.077 IEC†	131.7	126.6	[5000]	ug/L	14:49:03
3	Sr 421.552†	69750.4	67572.0	[500]	ug/L	14:48:43
3	Sc 361.383	824248.1	824248.1	104.75	%	14:50:12
3	Y 371.029	729752.9	729752.9	104.02	%	14:50:12
3	Ag 328.068†	99823.1	95087.8	[500]	ug/L	14:50:17
3	As 188.979†	1122.2	1100.2	[500]	ug/L	14:50:37
3	B 249.677†	20092.2	19326.4	[500]	ug/L	14:50:17
3	Ba 233.527†	43414.8	41445.2	[500]	ug/L	14:50:17
3	Be 313.107†	1274863.4	1226476.4	[500]	ug/L	14:50:12
3	Cd 226.502†	36162.2	34716.4	[500]	ug/L	14:50:17
3	Co 228.616†	16512.5	15819.0	[500]	ug/L	14:50:37
3	Cr 267.716†	37690.4	35915.5	[500]	ug/L	14:50:17
3	Cu 324.752†	145911.7	130184.0	[500]	ug/L	14:50:17
3	Mn 257.610†	320754.4	305780.9	[500]	ug/L	14:50:17
3	Mo 202.031†	5475.4	5211.9	[500]	ug/L	14:50:37
3	Ni 231.604†	16401.5	15556.4	[500]	ug/L	14:50:17
3	P 214.914†	4741.8	4323.3	[2500]	ug/L	14:50:37
3	Pb 220.353†	3098.1	2984.3	[500]	ug/L	14:50:37
3	S 181.975 Axial†	828.2	749.8	[1000]	ug/L	14:50:37
3	Sb 206.836†	1270.5	1181.9	[500]	ug/L	14:50:37
3	Se 196.026†	810.4	790.6	[500]	ug/L	14:50:37
3	Si 251.611†	71309.8	67525.6	[2500]	ug/L	14:50:17
3	Sn 189.927†	2144.4	2018.5	[500]	ug/L	14:50:37
3	Ti 334.940†	251090.1	240962.6	[500]	ug/L	14:50:17
3	Tl 190.801†	1064.6	1053.4	[500]	ug/L	14:50:37
3	U 409.014†	12943.2	14595.5	[500]	ug/L	14:50:17
3	V 292.402†	62902.5	61711.3	[500]	ug/L	14:50:17
3	Zn 213.857†	47828.0	44512.4	[500]	ug/L	14:50:17
3	SiO2†	71104.8	67315.3	[5347.5]	ug/L	14:50:53

## Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	816912.1	7703.96	0.94%	103.82	%
Sc Radial	4983.3	9.56	0.19%	103	%
Y 371.029	723508.5	6645.76	0.92%	103.13	%
Y RADIAL	5252.0	35.68	0.68%	102.8	%
Ag 328.068†	95662.3	931.83	0.97%	[500]	ug/L
Al 396.153Radial†	5164.3	18.38	0.36%	[5000]	ug/L
As 188.979†	1106.5	10.38	0.94%	[500]	ug/L
B 249.677†	19433.6	246.83	1.27%	[500]	ug/L
Ba 233.527†	41673.2	363.30	0.87%	[500]	ug/L
Be 313.107†	1227661.7	1199.19	0.10%	[500]	ug/L
Ca 317.933Radial†	2724.2	3.63	0.13%	[5000]	ug/L
Cd 226.502†	34937.9	314.35	0.90%	[500]	ug/L
Co 228.616†	16024.0	204.26	1.27%	[500]	ug/L
Cr 267.716†	36133.2	337.89	0.94%	[500]	ug/L
Cu 324.752†	131429.4	1699.39	1.29%	[500]	ug/L
K 766.490 Radial†	25080.6	113.86	0.45%	[5000]	ug/L
Mg 279.077 IEC†	126.6	1.47	1.16%	[5000]	ug/L
Mn 257.610†	307844.0	3022.44	0.98%	[500]	ug/L
Mo 202.031†	5285.9	79.20	1.50%	[500]	ug/L
Ni 231.604†	15686.1	170.19	1.08%	[500]	ug/L
P 214.914†	4376.3	54.29	1.24%	[2500]	ug/L
Pb 220.353†	3008.3	32.26	1.07%	[500]	ug/L
S 181.975 Axial†	759.5	12.23	1.61%	[1000]	ug/L



Sb 206.836†	1210.1	25.82	2.13%	[500] ug/L
Se 196.026†	801.7	10.33	1.29%	[500] ug/L
Si 251.611†	68055.7	763.62	1.12%	[2500] ug/L
Sn 189.927†	2044.9	31.69	1.55%	[500] ug/L
Sr 421.552†	67690.5	174.83	0.26%	[500] ug/L
Ti 334.940†	242913.0	2668.36	1.10%	[500] ug/L
Tl 190.801†	1069.1	14.25	1.33%	[500] ug/L
U 409.014†	14691.9	134.11	0.91%	[500] ug/L
V 292.402†	62191.5	620.82	1.00%	[500] ug/L
Zn 213.857†	44788.1	429.80	0.96%	[500] ug/L
SiO2†	67978.2	654.35	0.96%	[5347.5] ug/L

Sequence No.: 4

Sample ID: SCAL

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 4

Date Collected: 3/3/2010 14:53:04

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	4841.9	4841.9	100 %	14:54:57
1	Y RADIAL	5160.9	5160.9	101.0 %	14:54:57
1	Al 396.153Radial†	10452.3	10491.2	[10000] ug/L	14:54:57
1	Ca 317.933Radial†	5617.3	5572.4	[10000] ug/L	14:54:57
1	Fe 238.204 Radial†	932.7	921.6	[10000] ug/L	14:55:17
1	K 766.490 Radial†	53129.7	50660.1	[10000] ug/L	14:54:57
1	Mg 279.077 IEC†	255.5	253.4	[10000] ug/L	14:55:17
1	Na 589.592 Radial†	27522.0	27960.1	[10000] ug/L	14:54:57
1	Sr 421.552†	134237.9	133656.1	[1000] ug/L	14:54:57
1	Sc 361.383	792581.1	792581.1	100.73 %	14:56:20
1	Y 371.029	705455.3	705455.3	100.56 %	14:56:20
1	Ag 328.068†	197985.5	196350.1	[1000] ug/L	14:56:20
1	As 188.979†	2245.1	2257.7	[1000] ug/L	14:56:40
1	B 249.677†	39708.4	39567.5	[1000] ug/L	14:56:20
1	Ba 233.527†	85269.0	84653.6	[1000] ug/L	14:56:20
1	Be 313.107†	2509097.9	2500440.1	[1000] ug/L	14:56:15
1	Cd 226.502†	70804.1	70487.9	[1000] ug/L	14:56:20
1	Co 228.616†	33122.4	32939.0	[1000] ug/L	14:56:40
1	Cr 267.716†	73962.7	73363.9	[1000] ug/L	14:56:20
1	Cu 324.752†	280773.9	269639.5	[1000] ug/L	14:56:20
1	Mn 257.610†	629972.1	625003.9	[1000] ug/L	14:56:20
1	Mo 202.031†	10982.9	10888.5	[1000] ug/L	14:56:40
1	Ni 231.604†	31421.5	31093.7	[1000] ug/L	14:56:40
1	P 214.914†	9259.1	8988.9	[5000] ug/L	14:56:40
1	Pb 220.353†	6160.3	6142.6	[1000] ug/L	14:56:40
1	S 181.975 Axial†	1625.2	1572.6	[2000] ug/L	14:56:40
1	Sb 206.836†	2558.6	2509.1	[1000] ug/L	14:56:40
1	Se 196.026†	1634.3	1639.5	[1000] ug/L	14:56:40
1	Si 251.611†	139594.2	138037.7	[5000] ug/L	14:56:20
1	Sn 189.927†	4300.4	4240.8	[1000] ug/L	14:56:40
1	Ti 334.940†	502411.4	500049.3	[1000] ug/L	14:56:20
1	Tl 190.801†	2161.5	2183.0	[1000] ug/L	14:56:40
1	U 409.014†	27887.2	29925.5	[1000] ug/L	14:56:20
1	V 292.402†	125655.1	126410.7	[1000] ug/L	14:56:20
1	Zn 213.857†	92270.7	90459.0	[1000] ug/L	14:56:20
1	SiO2†	139246.1	137677.4	[10695] ug/L	14:57:48
2	Sc Radial	4904.9	4904.9	102 %	14:55:22
2	Y RADIAL	5202.2	5202.2	101.8 %	14:55:22
2	Al 396.153Radial†	10509.9	10414.2	[10000] ug/L	14:55:22
2	Ca 317.933Radial†	5676.5	5558.7	[10000] ug/L	14:55:22
2	Fe 238.204 Radial†	930.6	907.7	[10000] ug/L	14:55:42
2	K 766.490 Radial†	53488.9	50334.1	[10000] ug/L	14:55:22
2	Mg 279.077 IEC†	257.0	251.6	[10000] ug/L	14:55:42
2	Na 589.592 Radial†	27791.2	27872.9	[10000] ug/L	14:55:22
2	Sr 421.552†	135430.3	133112.3	[1000] ug/L	14:55:22
2	Sc 361.383	791913.3	791913.3	100.64 %	14:56:51
2	Y 371.029	704126.9	704126.9	100.37 %	14:56:51
2	Ag 328.068†	197806.3	196337.7	[1000] ug/L	14:56:51
2	As 188.979†	2243.6	2258.1	[1000] ug/L	14:57:11
2	B 249.677†	39881.3	39772.5	[1000] ug/L	14:56:51
2	Ba 233.527†	85272.8	84728.8	[1000] ug/L	14:56:51
2	Be 313.107†	2544645.4	2537861.6	[1000] ug/L	14:56:46
2	Cd 226.502†	70795.5	70538.7	[1000] ug/L	14:56:51
2	Co 228.616†	33287.0	33130.3	[1000] ug/L	14:57:11
2	Cr 267.716†	73909.1	73372.6	[1000] ug/L	14:56:51
2	Cu 324.752†	280450.8	269553.5	[1000] ug/L	14:56:51
2	Mn 257.610†	630280.9	625838.0	[1000] ug/L	14:56:51
2	Mo 202.031†	11043.1	10957.6	[1000] ug/L	14:57:11
2	Ni 231.604†	31571.4	31268.9	[1000] ug/L	14:57:11

2	P 214.914†	9308.0	9045.3	[5000]	ug/L	14:57:11
2	Pb 220.353†	6190.7	6177.9	[1000]	ug/L	14:57:11
2	S 181.975 Axial†	1627.4	1576.2	[2000]	ug/L	14:57:11
2	Sb 206.836†	2574.6	2527.1	[1000]	ug/L	14:57:11
2	Se 196.026†	1641.4	1647.9	[1000]	ug/L	14:57:11
2	Si 251.611†	139607.7	138167.9	[5000]	ug/L	14:56:51
2	Sn 189.927†	4334.1	4277.8	[1000]	ug/L	14:57:11
2	Ti 334.940†	501928.8	499990.4	[1000]	ug/L	14:56:51
2	Tl 190.801†	2177.4	2200.6	[1000]	ug/L	14:57:11
2	U 409.014†	27793.8	29856.0	[1000]	ug/L	14:56:51
2	V 292.402†	125696.1	126556.7	[1000]	ug/L	14:56:51
2	Zn 213.857†	92344.3	90609.4	[1000]	ug/L	14:56:51
2	SiO2†	140201.9	138743.7	[10695]	ug/L	14:57:53
3	Sc Radial	4809.4	4809.4	99.8	%	14:55:48
3	Y RADIAL	5067.2	5067.2	99.19	%	14:55:48
3	Al 396.153Radial†	10254.8	10363.6	[10000]	ug/L	14:55:48
3	Ca 317.933Radial†	5532.0	5524.7	[10000]	ug/L	14:55:48
3	Fe 238.204 Radial†	930.2	925.4	[10000]	ug/L	14:56:08
3	K 766.490 Radial†	52363.1	50249.2	[10000]	ug/L	14:55:48
3	Mg 279.077 IEC†	258.3	257.9	[10000]	ug/L	14:56:08
3	Na 589.592 Radial†	27014.2	27636.3	[10000]	ug/L	14:55:48
3	Sr 421.552†	131786.6	132102.2	[1000]	ug/L	14:55:48
3	Sc 361.383	793215.0	793215.0	100.81	%	14:57:22
3	Y 371.029	705072.3	705072.3	100.50	%	14:57:22
3	Ag 328.068†	197845.5	196054.1	[1000]	ug/L	14:57:22
3	As 188.979†	2260.8	2271.6	[1000]	ug/L	14:57:42
3	B 249.677†	39921.5	39747.4	[1000]	ug/L	14:57:22
3	Ba 233.527†	85461.7	84777.1	[1000]	ug/L	14:57:22
3	Be 313.107†	2544308.5	2533378.2	[1000]	ug/L	14:57:17
3	Cd 226.502†	71018.7	70644.7	[1000]	ug/L	14:57:22
3	Co 228.616†	33367.1	33155.5	[1000]	ug/L	14:57:42
3	Cr 267.716†	74045.9	73387.7	[1000]	ug/L	14:57:22
3	Cu 324.752†	280255.7	268902.6	[1000]	ug/L	14:57:22
3	Mn 257.610†	630866.4	625391.2	[1000]	ug/L	14:57:22
3	Mo 202.031†	11069.3	10965.5	[1000]	ug/L	14:57:42
3	Ni 231.604†	31593.5	31239.4	[1000]	ug/L	14:57:42
3	P 214.914†	9340.3	9062.1	[5000]	ug/L	14:57:42
3	Pb 220.353†	6192.3	6169.5	[1000]	ug/L	14:57:42
3	S 181.975 Axial†	1635.3	1581.3	[2000]	ug/L	14:57:42
3	Sb 206.836†	2580.1	2528.4	[1000]	ug/L	14:57:42
3	Se 196.026†	1658.2	1661.9	[1000]	ug/L	14:57:42
3	Si 251.611†	139537.8	137870.9	[5000]	ug/L	14:57:22
3	Sn 189.927†	4323.7	4260.4	[1000]	ug/L	14:57:42
3	Ti 334.940†	502213.3	499454.2	[1000]	ug/L	14:57:22
3	Tl 190.801†	2163.5	2183.3	[1000]	ug/L	14:57:42
3	U 409.014†	27826.8	29843.4	[1000]	ug/L	14:57:22
3	V 292.402†	125803.3	126458.0	[1000]	ug/L	14:57:22
3	Zn 213.857†	92413.4	90527.4	[1000]	ug/L	14:57:22
3	SiO2†	139071.6	137393.9	[10695]	ug/L	14:57:58

## Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	792569.8	650.91	0.08%	100.72 %
Sc Radial	4852.0	48.54	1.00%	101 %
Y 371.029	704884.8	683.76	0.10%	100.48 %
Y RADIAL	5143.4	69.17	1.34%	100.7 %
Ag 328.068†	196247.3	167.43	0.09%	[1000] ug/L
Al 396.153Radial†	10423.0	64.27	0.62%	[10000] ug/L
As 188.979†	2262.5	7.88	0.35%	[1000] ug/L
B 249.677†	39695.8	111.82	0.28%	[1000] ug/L
Ba 233.527†	84719.8	62.21	0.07%	[1000] ug/L
Be 313.107†	2523893.3	20434.41	0.81%	[1000] ug/L
Ca 317.933Radial†	5551.9	24.53	0.44%	[10000] ug/L
Cd 226.502†	70557.1	79.99	0.11%	[1000] ug/L
Co 228.616†	33074.9	118.35	0.36%	[1000] ug/L
Cr 267.716†	73374.7	12.05	0.02%	[1000] ug/L
Cu 324.752†	269365.2	402.91	0.15%	[1000] ug/L
Fe 238.204 Radial†	918.2	9.35	1.02%	[10000] ug/L
K 766.490 Radial†	50414.5	216.92	0.43%	[10000] ug/L

Mg 279.077 IEC†	254.3	3.27	1.29%	[10000]	ug/L
Mn 257.610†	625411.0	417.45	0.07%	[1000]	ug/L
Mo 202.031†	10937.2	42.34	0.39%	[1000]	ug/L
Na 589.592 Radial†	27823.1	167.55	0.60%	[10000]	ug/L
Ni 231.604†	31200.7	93.82	0.30%	[1000]	ug/L
P 214.914†	9032.1	38.31	0.42%	[5000]	ug/L
Pb 220.353†	6163.3	18.44	0.30%	[1000]	ug/L
S 181.975 Axial†	1576.7	4.38	0.28%	[2000]	ug/L
Sb 206.836†	2521.6	10.77	0.43%	[1000]	ug/L
Se 196.026†	1649.8	11.33	0.69%	[1000]	ug/L
Si 251.611†	138025.5	148.85	0.11%	[5000]	ug/L
Sn 189.927†	4259.7	18.54	0.44%	[1000]	ug/L
Sr 421.552†	132956.9	788.52	0.59%	[1000]	ug/L
Ti 334.940†	499831.3	327.93	0.07%	[1000]	ug/L
Tl 190.801†	2188.9	10.09	0.46%	[1000]	ug/L
U 409.014†	29874.9	44.20	0.15%	[1000]	ug/L
V 292.402†	126475.2	74.50	0.06%	[1000]	ug/L
Zn 213.857†	90531.9	75.28	0.08%	[1000]	ug/L
SiO2†	137938.3	711.75	0.52%	[10695]	ug/L

Sequence No.: 5

Sample ID: S10

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 5

Date Collected: 3/3/2010 15:00:09

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: S10

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib.	Analysis Time
1	Sc Radial	4837.0	4837.0	100 %		15:02:23
1	Y RADIAL	5081.1	5081.1	99.46 %		15:02:23
1	Al 396.153Radial†	52652.7	52565.0	[50000] ug/L		15:02:03
1	Ca 317.933Radial†	27130.9	27021.8	[50000] ug/L		15:02:03
1	Fe 238.204 Radial†	1797.8	1784.8	[20000] ug/L		15:02:23
1	Mg 279.077 IEC†	1207.8	1202.9	[50000] ug/L		15:02:23
1	Na 589.592 Radial†	56130.5	56503.3	[20000] ug/L		15:02:03
1	Sc 361.383	809557.9	809557.9	102.88 %		15:03:20
1	Y 371.029	711891.5	711891.5	101.48 %		15:03:20
2	Sc Radial	4808.2	4808.2	99.7 %		15:02:48
2	Y RADIAL	5047.9	5047.9	98.81 %		15:02:48
2	Al 396.153Radial†	51807.7	52032.8	[50000] ug/L		15:02:28
2	Ca 317.933Radial†	26704.9	26756.9	[50000] ug/L		15:02:28
2	Fe 238.204 Radial†	1783.4	1781.2	[20000] ug/L		15:02:48
2	Mg 279.077 IEC†	1200.9	1203.2	[50000] ug/L		15:02:48
2	Na 589.592 Radial†	55091.9	55797.7	[20000] ug/L		15:02:28
2	Sc 361.383	806561.8	806561.8	102.50 %		15:03:26
2	Y 371.029	709723.0	709723.0	101.17 %		15:03:26
3	Sc Radial	4845.6	4845.6	101 %		15:03:13
3	Y RADIAL	5090.2	5090.2	99.64 %		15:03:13
3	Al 396.153Radial†	52872.6	52691.0	[50000] ug/L		15:02:53
3	Ca 317.933Radial†	27316.8	27158.8	[50000] ug/L		15:02:53
3	Fe 238.204 Radial†	1793.6	1777.5	[20000] ug/L		15:03:13
3	Mg 279.077 IEC†	1214.0	1206.9	[50000] ug/L		15:03:13
3	Na 589.592 Radial†	56300.8	56573.6	[20000] ug/L		15:02:53
3	Sc 361.383	800926.2	800926.2	101.79 %		15:03:31
3	Y 371.029	705245.9	705245.9	100.53 %		15:03:31

## Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc. Units	Calib
Sc 361.383	805682.0	4382.61	0.54%	102.39 %	
Sc Radial	4830.3	19.62	0.41%	100 %	
Y 371.029	708953.5	3388.96	0.48%	101.06 %	
Y RADIAL	5073.1	22.26	0.44%	99.31 %	
Al 396.153Radial†	52429.6	349.36	0.67%	[50000] ug/L	
Ca 317.933Radial†	26979.2	204.30	0.76%	[50000] ug/L	
Fe 238.204 Radial†	1781.2	3.66	0.21%	[20000] ug/L	
Mg 279.077 IEC†	1204.3	2.25	0.19%	[50000] ug/L	
Na 589.592 Radial†	56291.5	429.09	0.76%	[20000] ug/L	

## Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	195.3	0.00000	0.999948	
Al 396.153Radial	3	Lin Thru 0	0.0	1.048	0.00000	0.999998	
As 188.979	3	Lin Thru 0	0.0	2.253	0.00000	0.999962	
B 249.677	3	Lin Thru 0	0.0	39.52	0.00000	0.999963	
Ba 233.527	3	Lin Thru 0	0.0	84.46	0.00000	0.999977	
Be 313.107	3	Lin Thru 0	0.0	2511	0.00000	0.999939	
Ca 317.933Radial	3	Lin Thru 0	0.0	0.5402	0.00000	0.999984	
Cd 226.502	3	Lin Thru 0	0.0	70.42	0.00000	0.999993	
Co 228.616	3	Lin Thru 0	0.0	32.88	0.00000	0.999920	
Cr 267.716	3	Lin Thru 0	0.0	73.17	0.00000	0.999978	
Cu 324.752	3	Lin Thru 0	0.0	268.0	0.00000	0.999953	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.0896	0.00000	0.999924	
K 766.490 Radial	3	Lin Thru 0	0.0	5.037	0.00000	0.999997	

Mg 279.077 IEC	3	Lin Thru 0	0.0	0.0241	0.00000	0.999932
Mn 257.610	3	Lin Thru 0	0.0	623.7	0.00000	0.999973
Mo 202.031	3	Lin Thru 0	0.0	10.87	0.00000	0.999909
Na 589.592 Radia	2	Lin Thru 0	0.0	2.808	0.00000	0.999989
Ni 231.604	3	Lin Thru 0	0.0	31.24	0.00000	0.999997
P 214.914	3	Lin Thru 0	0.0	1.795	0.00000	0.999923
Pb 220.353	3	Lin Thru 0	0.0	6.134	0.00000	0.999954
S 181.975 Axial	3	Lin Thru 0	0.0	0.7825	0.00000	0.999892
Sb 206.836	3	Lin Thru 0	0.0	2.501	0.00000	0.999870
Se 196.026	3	Lin Thru 0	0.0	1.640	0.00000	0.999933
Si 251.611	3	Lin Thru 0	0.0	27.53	0.00000	0.999984
Sn 189.927	3	Lin Thru 0	0.0	4.226	0.00000	0.999871
Sr 421.552	3	Lin Thru 0	0.0	133.5	0.00000	0.999971
Ti 334.940	3	Lin Thru 0	0.0	497.2	0.00000	0.999933
Tl 190.801	3	Lin Thru 0	0.0	2.179	0.00000	0.999954
U 409.014	3	Lin Thru 0	0.0	29.78	0.00000	0.999978
V 292.402	3	Lin Thru 0	0.0	126.1	0.00000	0.999977
Zn 213.857	3	Lin Thru 0	0.0	90.37	0.00000	0.999985
SiO2	3	Lin Thru 0	0.0	12.86	0.00000	0.999983

Sequence No.: 6

Sample ID: ICV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 9

Date Collected: 3/3/2010 15:05:43

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: ICV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Units	Conc. Units	Sample Units	Analysis Time
1	Sc Radial	4937.3	4937.3	102 %				15:07:35
1	Y RADIAL	5258.0	5258.0	102.9 %				15:07:35
1	Al 396.153Radial†	5354.3	5311.8	5041.9 ug/L		5041.9 ppb		15:07:35
1	Ca 317.933Radial†	2816.3	2729.0	5051.7 ug/L		5051.7 ppb		15:07:56
1	Fe 238.204 Radial†	482.4	464.0	5193.0 ug/L		5193.0 ppb		15:07:56
1	K 766.490 Radial†	15344.6	12740.2	2525.9 ug/L		2525.9 ppb		15:07:35
1	Mg 279.077 IEC†	135.8	131.6	5450.1 ug/L		5450.1 ppb		15:07:56
1	Na 589.592 Radial†	6521.0	6922.8	2465.3 ug/L		2465.3 ppb		15:07:35
1	Sr 421.552†	72017.3	70313.6	526.77 ug/L		526.77 ppb		15:07:35
1	Sc 361.383	818601.7	818601.7	104.03 %				15:08:53
1	Y 371.029	726714.7	726714.7	103.59 %				15:08:53
1	Ag 328.068†	52012.4	49787.8	258.12 ug/L		258.12 ppb		15:08:53
1	As 188.979†	1058.5	1046.3	468.73 ug/L		468.73 ppb		15:09:13
1	B 249.677†	20854.1	20191.0	508.59 ug/L		508.59 ppb		15:08:53
1	Ba 233.527†	44169.0	42456.0	503.95 ug/L		503.95 ppb		15:08:53
1	Be 313.107†	668320.8	651841.9	260.76 ug/L		260.76 ppb		15:08:53
1	Cd 226.502†	35328.7	34153.4	484.86 ug/L		484.86 ppb		15:09:13
1	Co 228.616†	17228.1	16615.6	505.55 ug/L		505.55 ppb		15:09:13
1	Cr 267.716†	36780.0	35288.5	482.91 ug/L		482.91 ppb		15:08:53
1	Cu 324.752†	148192.2	133336.9	497.45 ug/L		497.45 ppb		15:08:53
1	Mn 257.610†	335850.4	322403.8	517.23 ug/L		517.23 ppb		15:08:53
1	Mo 202.031†	5993.2	5745.6	529.25 ug/L		529.25 ppb		15:09:13
1	Ni 231.604†	16431.9	15693.6	502.08 ug/L		502.08 ppb		15:09:13
1	P 214.914†	4832.9	4442.1	2377.5 ug/L		2377.5 ppb		15:09:13
1	Pb 220.353†	3097.0	3003.7	491.62 ug/L		491.62 ppb		15:09:13
1	S 181.975 Axial†	2033.4	1913.7	2444.6 ug/L		2444.6 ppb		15:09:13
1	Sb 206.836†	1312.2	1230.3	510.91 ug/L		510.91 ppb		15:09:13
1	Se 196.026†	4239.4	4092.0	2508.7 ug/L		2508.7 ppb		15:09:13
1	Si 251.611†	136992.3	131131.4	4756.5 ug/L		4756.5 ppb		15:08:53
1	Sn 189.927†	2356.4	2236.4	529.78 ug/L		529.78 ppb		15:09:13
1	Ti 334.940†	256628.6	247939.7	498.56 ug/L		498.56 ppb		15:08:53
1	Tl 190.801†	1143.9	1136.6	525.00 ug/L		525.00 ppb		15:09:13
1	U 409.014†	12544.7	14297.7	478.50 ug/L		478.50 ppb		15:08:53
1	V 292.402†	64781.9	63932.0	514.14 ug/L		514.14 ppb		15:08:53
1	Zn 213.857†	48938.7	45895.0	503.21 ug/L		503.21 ppb		15:08:53
1	SiO2†	136430.4	130576.6	10138 ug/L		10138 ppb		15:10:11
2	Sc Radial	4939.3	4939.3	102 %				15:08:01
2	Y RADIAL	5263.6	5263.6	103.0 %				15:08:01
2	Al 396.153Radial†	5320.6	5276.8	5008.4 ug/L		5008.4 ppb		15:08:01
2	Ca 317.933Radial†	2807.8	2719.6	5034.2 ug/L		5034.2 ppb		15:08:21
2	Fe 238.204 Radial†	476.3	457.8	5123.7 ug/L		5123.7 ppb		15:08:21
2	K 766.490 Radial†	15092.5	12488.1	2475.8 ug/L		2475.8 ppb		15:08:01
2	Mg 279.077 IEC†	135.1	130.9	5419.2 ug/L		5419.2 ppb		15:08:21
2	Na 589.592 Radial†	6421.4	6823.0	2429.7 ug/L		2429.7 ppb		15:08:01
2	Sr 421.552†	71530.8	69810.1	523.00 ug/L		523.00 ppb		15:08:01
2	Sc 361.383	819171.9	819171.9	104.11 %				15:09:19
2	Y 371.029	726210.9	726210.9	103.52 %				15:09:19
2	Ag 328.068†	51941.4	49684.9	257.57 ug/L		257.57 ppb		15:09:19
2	As 188.979†	1060.6	1047.7	469.32 ug/L		469.32 ppb		15:09:39
2	B 249.677†	20920.3	20240.7	509.86 ug/L		509.86 ppb		15:09:19
2	Ba 233.527†	44087.2	42347.9	502.67 ug/L		502.67 ppb		15:09:19
2	Be 313.107†	668353.9	651426.5	260.60 ug/L		260.60 ppb		15:09:19
2	Cd 226.502†	35252.1	34056.2	483.49 ug/L		483.49 ppb		15:09:39
2	Co 228.616†	17241.6	16617.0	505.59 ug/L		505.59 ppb		15:09:39
2	Cr 267.716†	36886.8	35366.5	483.97 ug/L		483.97 ppb		15:09:19
2	Cu 324.752†	148341.1	133380.8	497.61 ug/L		497.61 ppb		15:09:19
2	Mn 257.610†	336557.8	322858.5	517.95 ug/L		517.95 ppb		15:09:19
2	Mo 202.031†	6003.7	5751.7	529.80 ug/L		529.80 ppb		15:09:39
2	Ni 231.604†	16425.0	15675.9	501.52 ug/L		501.52 ppb		15:09:39

2	P 214.914†	4821.2	4427.6	2369.5 ug/L	2369.5 ppb	15:09:39
2	Pb 220.353†	3096.5	3001.0	491.19 ug/L	491.19 ppb	15:09:39
2	S 181.975 Axial†	2026.3	1905.5	2434.1 ug/L	2434.1 ppb	15:09:39
2	Sb 206.836†	1308.7	1226.1	509.21 ug/L	509.21 ppb	15:09:39
2	Se 196.026†	4246.0	4095.5	2510.7 ug/L	2510.7 ppb	15:09:39
2	Si 251.611†	137189.0	131228.6	4760.0 ug/L	4760.0 ppb	15:09:19
2	Sn 189.927†	2349.1	2227.8	527.76 ug/L	527.76 ppb	15:09:39
2	Ti 334.940†	256935.4	248062.7	498.80 ug/L	498.80 ppb	15:09:19
2	Tl 190.801†	1132.1	1124.5	519.44 ug/L	519.44 ppb	15:09:39
2	U 409.014†	12578.3	14321.6	479.31 ug/L	479.31 ppb	15:09:19
2	V 292.402†	64775.3	63882.4	513.76 ug/L	513.76 ppb	15:09:19
2	Zn 213.857†	48967.0	45889.4	503.16 ug/L	503.16 ppb	15:09:19
2	SiO2†	138047.1	132038.3	10252 ug/L	10252 ppb	15:10:16
3	Sc Radial	4941.9	4941.9	103 %		15:08:26
3	Y RADIAL	5233.1	5233.1	102.4 %		15:08:26
3	Al 396.153Radial†	5307.1	5260.9	4993.4 ug/L	4993.4 ppb	15:08:26
3	Ca 317.933Radial†	2800.7	2711.3	5018.8 ug/L	5018.8 ppb	15:08:46
3	Fe 238.204 Radial†	479.7	460.9	5157.9 ug/L	5157.9 ppb	15:08:46
3	K 766.490 Radial†	15194.3	12579.6	2494.0 ug/L	2494.0 ppb	15:08:26
3	Mg 279.077 IEC†	138.1	133.7	5535.0 ug/L	5535.0 ppb	15:08:46
3	Na 589.592 Radial†	6413.8	6812.3	2425.9 ug/L	2425.9 ppb	15:08:26
3	Sr 421.552†	71302.2	69550.4	521.05 ug/L	521.05 ppb	15:08:26
3	Sc 361.383	822046.1	822046.1	104.47 %		15:09:45
3	Y 371.029	728884.3	728884.3	103.90 %		15:09:45
3	Ag 328.068†	52166.9	49726.2	257.79 ug/L	257.79 ppb	15:09:45
3	As 188.979†	1070.0	1053.1	471.72 ug/L	471.72 ppb	15:10:05
3	B 249.677†	20968.2	20216.2	509.24 ug/L	509.24 ppb	15:09:45
3	Ba 233.527†	44235.3	42341.6	502.59 ug/L	502.59 ppb	15:09:45
3	Be 313.107†	669889.5	650651.7	260.29 ug/L	260.29 ppb	15:09:45
3	Cd 226.502†	35302.0	33985.6	482.48 ug/L	482.48 ppb	15:10:05
3	Co 228.616†	17236.4	16554.1	503.68 ug/L	503.68 ppb	15:10:05
3	Cr 267.716†	36790.9	35150.8	481.02 ug/L	481.02 ppb	15:09:45
3	Cu 324.752†	148484.2	133019.5	496.26 ug/L	496.26 ppb	15:09:45
3	Mn 257.610†	336510.6	321683.0	516.06 ug/L	516.06 ppb	15:09:45
3	Mo 202.031†	6002.4	5730.3	527.83 ug/L	527.83 ppb	15:10:05
3	Ni 231.604†	16427.0	15622.7	499.81 ug/L	499.81 ppb	15:10:05
3	P 214.914†	4838.9	4428.3	2370.1 ug/L	2370.1 ppb	15:10:05
3	Pb 220.353†	3097.5	2991.7	489.65 ug/L	489.65 ppb	15:10:05
3	S 181.975 Axial†	2038.1	1910.0	2439.8 ug/L	2439.8 ppb	15:10:05
3	Sb 206.836†	1318.5	1231.0	511.12 ug/L	511.12 ppb	15:10:05
3	Se 196.026†	4257.1	4091.9	2508.5 ug/L	2508.5 ppb	15:10:05
3	Si 251.611†	137337.8	130910.3	4748.5 ug/L	4748.5 ppb	15:09:45
3	Sn 189.927†	2346.2	2217.2	525.23 ug/L	525.23 ppb	15:10:05
3	Ti 334.940†	257259.4	247509.9	497.68 ug/L	497.68 ppb	15:09:45
3	Tl 190.801†	1144.8	1132.8	523.27 ug/L	523.27 ppb	15:10:05
3	U 409.014†	12492.1	14196.8	475.12 ug/L	475.12 ppb	15:09:45
3	V 292.402†	64869.9	63755.3	512.72 ug/L	512.72 ppb	15:09:45
3	Zn 213.857†	48981.9	45739.3	501.51 ug/L	501.51 ppb	15:09:45
3	SiO2†	134668.6	128340.8	9964.1 ug/L	9964.1 ppb	15:10:21

-----  
Mean Data: ICV

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	819939.9	104.20 %		0.235			0.23%
Sc Radial	4939.5	102 %		0.0			0.05%
Y 371.029	727270.0	103.67 %		0.202			0.20%
Y RADIAL	5251.6	102.8 %		0.32			0.31%
Ag 328.068†	49733.0	257.83 ug/L		0.277	257.83 ppb	0.277	0.11%
QC value within limits for Ag 328.068 Recovery = 103.13%							
Al 396.153Radial†	5283.2	5014.6 ug/L		24.83	5014.6 ppb	24.83	0.50%
QC value within limits for Al 396.153Radial Recovery = 100.29%							
As 188.979†	1049.0	469.92 ug/L		1.588	469.92 ppb	1.588	0.34%
QC value within limits for As 188.979 Recovery = 93.98%							
B 249.677†	20216.0	509.23 ug/L		0.634	509.23 ppb	0.634	0.12%
QC value within limits for B 249.677 Recovery = 101.85%							
Ba 233.527†	42381.8	503.07 ug/L		0.763	503.07 ppb	0.763	0.15%
QC value within limits for Ba 233.527 Recovery = 100.61%							
Be 313.107†	651306.7	260.55 ug/L		0.242	260.55 ppb	0.242	0.09%
QC value within limits for Be 313.107 Recovery = 104.22%							
Ca 317.933Radial†	2720.0	5034.9 ug/L		16.46	5034.9 ppb	16.46	0.33%



QC value within limits for Ca 317.933 Radial Recovery = 100.70%							
Cd 226.502†	34065.1	483.61 ug/L	1.195	483.61 ppb	1.195	0.25%	
QC value within limits for Cd 226.502 Recovery = 96.72%							
Co 228.616†	16595.6	504.94 ug/L	1.093	504.94 ppb	1.093	0.22%	
QC value within limits for Co 228.616 Recovery = 100.99%							
Cr 267.716†	35268.6	482.63 ug/L	1.492	482.63 ppb	1.492	0.31%	
QC value within limits for Cr 267.716 Recovery = 96.53%							
Cu 324.752†	133245.8	497.11 ug/L	0.734	497.11 ppb	0.734	0.15%	
QC value within limits for Cu 324.752 Recovery = 99.42%							
Fe 238.204 Radial†	460.9	5158.2 ug/L	34.65	5158.2 ppb	34.65	0.67%	
QC value within limits for Fe 238.204 Radial Recovery = 103.16%							
K 766.490 Radial†	12602.6	2498.6 ug/L	25.33	2498.6 ppb	25.33	1.01%	
QC value within limits for K 766.490 Radial Recovery = 99.94%							
Mg 279.077 IEC†	132.0	5468.1 ug/L	59.98	5468.1 ppb	59.98	1.10%	
QC value within limits for Mg 279.077 IEC Recovery = 109.36%							
Mn 257.610†	322315.1	517.08 ug/L	0.952	517.08 ppb	0.952	0.18%	
QC value within limits for Mn 257.610 Recovery = 103.42%							
Mo 202.031†	5742.6	528.96 ug/L	1.015	528.96 ppb	1.015	0.19%	
QC value within limits for Mo 202.031 Recovery = 105.79%							
Na 589.592 Radial†	6852.7	2440.3 ug/L	21.70	2440.3 ppb	21.70	0.89%	
QC value within limits for Na 589.592 Radial Recovery = 97.61%							
Ni 231.604†	15664.1	501.14 ug/L	1.181	501.14 ppb	1.181	0.24%	
QC value within limits for Ni 231.604 Recovery = 100.23%							
P 214.914†	4432.7	2372.4 ug/L	4.48	2372.4 ppb	4.48	0.19%	
QC value within limits for P 214.914 Recovery = 94.89%							
Pb 220.353†	2998.8	490.82 ug/L	1.034	490.82 ppb	1.034	0.21%	
QC value within limits for Pb 220.353 Recovery = 98.16%							
S 181.975 Axial†	1909.7	2439.5 ug/L	5.25	2439.5 ppb	5.25	0.22%	
QC value within limits for S 181.975 Axial Recovery = 97.58%							
Sb 206.836†	1229.1	510.42 ug/L	1.047	510.42 ppb	1.047	0.21%	
QC value within limits for Sb 206.836 Recovery = 102.08%							
Se 196.026†	4093.1	2509.3 ug/L	1.20	2509.3 ppb	1.20	0.05%	
QC value within limits for Se 196.026 Recovery = 100.37%							
Si 251.611†	131090.1	4755.0 ug/L	5.91	4755.0 ppb	5.91	0.12%	
QC value within limits for Si 251.611 Recovery = 95.10%							
Sn 189.927†	2227.1	527.59 ug/L	2.279	527.59 ppb	2.279	0.43%	
QC value within limits for Sn 189.927 Recovery = 105.52%							
Sr 421.552†	69891.4	523.61 ug/L	2.907	523.61 ppb	2.907	0.56%	
QC value within limits for Sr 421.552 Recovery = 104.72%							
Ti 334.940†	247837.4	498.35 ug/L	0.589	498.35 ppb	0.589	0.12%	
QC value within limits for Ti 334.940 Recovery = 99.67%							
Tl 190.801†	1131.3	522.57 ug/L	2.843	522.57 ppb	2.843	0.54%	
QC value within limits for Tl 190.801 Recovery = 104.51%							
U 409.014†	14272.0	477.64 ug/L	2.221	477.64 ppb	2.221	0.47%	
QC value within limits for U 409.014 Recovery = 95.53%							
V 292.402†	63856.6	513.54 ug/L	0.736	513.54 ppb	0.736	0.14%	
QC value within limits for V 292.402 Recovery = 102.71%							
Zn 213.857†	45841.2	502.63 ug/L	0.969	502.63 ppb	0.969	0.19%	
QC value within limits for Zn 213.857 Recovery = 100.53%							
SiO2†	130318.6	10118 ug/L	144.8	10118 ppb	144.8	1.43%	
QC value within limits for SiO2 Recovery = 94.60%							
All analyte(s) passed QC.							

Sequence No.: 7

Sample ID: ICB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 10

Date Collected: 3/3/2010 15:12:32

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	4972.8	4972.8	103 %		15:14:25
1	Y RADIAL	5231.2	5231.2	102.4 %		15:14:25
1	Al 396.153Radial†	-87.9	-1.9	-1.8348 ug/L	-1.8348 ppb	15:14:45
1	Ca 317.933Radial†	28.0	6.1	11.254 ug/L	11.254 ppb	15:14:45
1	Fe 238.204 Radial†	7.3	0.0	0.0209 ug/L	0.0209 ppb	15:14:45
1	K 766.490 Radial†	2184.2	-126.2	-25.073 ug/L	-25.073 ppb	15:14:25
1	Mg 279.077 IEC†	3.2	2.1	85.584 ug/L	85.584 ppb	15:14:45
1	Na 589.592 Radial†	-543.9	27.7	9.8663 ug/L	9.8663 ppb	15:14:25
1	Sr 421.552†	23.1	10.9	0.0814 ug/L	0.0814 ppb	15:14:25
1	Sc 361.383	777498.2	777498.2	98.809 %		15:15:42
1	Y 371.029	694432.1	694432.1	98.987 %		15:15:42
1	Ag 328.068†	280.0	75.2	0.3874 ug/L	0.3874 ppb	15:15:42
1	As 188.979†	-28.5	0.0	0.0036 ug/L	0.0036 ppb	15:16:02
1	B 249.677†	-60.2	84.4	2.1340 ug/L	2.1340 ppb	15:16:02
1	Ba 233.527†	3.2	2.5	0.0294 ug/L	0.0294 ppb	15:16:02
1	Be 313.107†	-9285.7	31.7	0.0129 ug/L	0.0129 ppb	15:15:42
1	Cd 226.502†	-185.3	6.7	0.0951 ug/L	0.0951 ppb	15:16:02
1	Co 228.616†	-52.4	2.3	0.0714 ug/L	0.0714 ppb	15:16:02
1	Cr 267.716†	65.5	0.7	0.0104 ug/L	0.0104 ppb	15:16:02
1	Cu 324.752†	8676.5	-329.4	-1.2271 ug/L	-1.2271 ppb	15:15:42
1	Mn 257.610†	437.5	15.7	0.0216 ug/L	0.0216 ppb	15:16:02
1	Mo 202.031†	19.8	4.8	0.4449 ug/L	0.4449 ppb	15:16:02
1	Ni 231.604†	96.1	-4.0	-0.1294 ug/L	-0.1294 ppb	15:16:02
1	P 214.914†	193.5	-7.6	-4.0163 ug/L	-4.0163 ppb	15:16:02
1	Pb 220.353†	-33.9	-7.6	-1.2344 ug/L	-1.2344 ppb	15:16:02
1	S 181.975 Axial†	41.0	0.6	0.7597 ug/L	0.7597 ppb	15:16:02
1	Sb 206.836†	36.5	5.9	2.3377 ug/L	2.3377 ppb	15:16:02
1	Se 196.026†	-20.8	-4.1	-2.5209 ug/L	-2.5209 ppb	15:16:02
1	Si 251.611†	568.7	25.3	0.9126 ug/L	0.9126 ppb	15:16:02
1	Sn 189.927†	21.9	-6.5	-1.5394 ug/L	-1.5394 ppb	15:16:02
1	Ti 334.940†	-1189.0	56.3	0.1092 ug/L	0.1092 ppb	15:15:42
1	Tl 190.801†	-29.6	7.1	3.2613 ug/L	3.2613 ppb	15:16:02
1	U 409.014†	-2306.9	-95.5	-3.2061 ug/L	-3.2061 ppb	15:15:42
1	V 292.402†	-1640.1	1.6	0.0143 ug/L	0.0143 ppb	15:15:42
1	Zn 213.857†	1095.5	-37.8	-0.4163 ug/L	-0.4163 ppb	15:16:02
1	SiO2†	563.4	5.3	0.3977 ug/L	0.3977 ppb	15:16:58
2	Sc Radial	4935.3	4935.3	102 %		15:14:50
2	Y RADIAL	5190.2	5190.2	101.6 %		15:14:50
2	Al 396.153Radial†	-79.4	5.8	5.5156 ug/L	5.5156 ppb	15:15:10
2	Ca 317.933Radial†	34.0	12.1	22.421 ug/L	22.421 ppb	15:15:10
2	Fe 238.204 Radial†	8.3	1.0	11.270 ug/L	11.270 ppb	15:15:10
2	K 766.490 Radial†	2229.7	-65.7	-13.049 ug/L	-13.049 ppb	15:14:50
2	Mg 279.077 IEC†	1.4	0.4	16.370 ug/L	16.370 ppb	15:15:10
2	Na 589.592 Radial†	-534.5	32.8	11.681 ug/L	11.681 ppb	15:14:50
2	Sr 421.552†	13.1	1.3	0.0093 ug/L	0.0093 ppb	15:14:50
2	Sc 361.383	777451.9	777451.9	98.803 %		15:16:08
2	Y 371.029	694067.7	694067.7	98.935 %		15:16:08
2	Ag 328.068†	167.9	-38.3	-0.1887 ug/L	-0.1887 ppb	15:16:08
2	As 188.979†	-34.8	-6.4	-2.8530 ug/L	-2.8530 ppb	15:16:28
2	B 249.677†	-53.1	91.6	2.3145 ug/L	2.3145 ppb	15:16:28
2	Ba 233.527†	11.6	11.0	0.1309 ug/L	0.1309 ppb	15:16:28
2	Be 313.107†	-9302.0	14.7	0.0057 ug/L	0.0057 ppb	15:16:08
2	Cd 226.502†	-174.6	17.6	0.2474 ug/L	0.2474 ppb	15:16:28
2	Co 228.616†	-46.9	7.9	0.2416 ug/L	0.2416 ppb	15:16:28
2	Cr 267.716†	83.8	19.2	0.2643 ug/L	0.2643 ppb	15:16:28
2	Cu 324.752†	8753.9	-250.5	-0.9306 ug/L	-0.9306 ppb	15:16:08
2	Mn 257.610†	446.5	24.9	0.0403 ug/L	0.0403 ppb	15:16:28
2	Mo 202.031†	14.5	-0.5	-0.0488 ug/L	-0.0488 ppb	15:16:28
2	Ni 231.604†	108.0	8.0	0.2545 ug/L	0.2545 ppb	15:16:28

2	P 214.914†	195.2	-5.9	-3.1223 ug/L	-3.1223 ppb	15:16:28
2	Pb 220.353†	-38.9	-12.7	-2.0634 ug/L	-2.0634 ppb	15:16:28
2	S 181.975 Axial†	42.8	2.5	3.1687 ug/L	3.1687 ppb	15:16:28
2	Sb 206.836†	38.9	8.3	3.3217 ug/L	3.3217 ppb	15:16:28
2	Se 196.026†	-15.7	1.1	0.6687 ug/L	0.6687 ppb	15:16:28
2	Si 251.611†	582.5	39.3	1.4281 ug/L	1.4281 ppb	15:16:28
2	Sn 189.927†	24.1	-4.2	-0.9925 ug/L	-0.9925 ppb	15:16:28
2	Ti 334.940†	-1284.7	-40.7	-0.0776 ug/L	-0.0776 ppb	15:16:08
2	Tl 190.801†	-27.5	9.2	4.2311 ug/L	4.2311 ppb	15:16:28
2	U 409.014†	-2388.5	-178.2	-5.9848 ug/L	-5.9848 ppb	15:16:08
2	V 292.402†	-1654.0	-12.6	-0.1131 ug/L	-0.1131 ppb	15:16:08
2	Zn 213.857†	1105.4	-27.8	-0.3093 ug/L	-0.3093 ppb	15:16:28
2	SiO2†	612.9	55.4	4.3122 ug/L	4.3122 ppb	15:17:03
3	Sc Radial	4902.6	4902.6	102 %		15:15:15
3	Y RADIAL	5177.6	5177.6	101.4 %		15:15:15
3	Al 396.153Radial†	-77.2	7.4	7.0856 ug/L	7.0856 ppb	15:15:36
3	Ca 317.933Radial†	32.1	10.5	19.357 ug/L	19.357 ppb	15:15:36
3	Fe 238.204 Radial†	7.0	-0.2	-2.6451 ug/L	-2.6451 ppb	15:15:36
3	K 766.490 Radial†	2271.6	-10.0	-1.9852 ug/L	-1.9852 ppb	15:15:15
3	Mg 279.077 IEC†	2.9	1.8	76.464 ug/L	76.464 ppb	15:15:36
3	Na 589.592 Radial†	-558.4	5.9	2.0849 ug/L	2.0849 ppb	15:15:15
3	Sr 421.552†	32.0	19.9	0.1493 ug/L	0.1493 ppb	15:15:15
3	Sc 361.383	781734.8	781734.8	99.348 %		15:16:33
3	Y 371.029	697992.7	697992.7	99.495 %		15:16:33
3	Ag 328.068†	176.4	-30.7	-0.1575 ug/L	-0.1575 ppb	15:16:33
3	As 188.979†	-28.3	0.4	0.1737 ug/L	0.1737 ppb	15:16:53
3	B 249.677†	-86.7	58.1	1.4700 ug/L	1.4700 ppb	15:16:53
3	Ba 233.527†	-11.2	-12.0	-0.1428 ug/L	-0.1428 ppb	15:16:53
3	Be 313.107†	-9452.4	-85.1	-0.0343 ug/L	-0.0343 ppb	15:16:33
3	Cd 226.502†	-194.1	-1.1	-0.0158 ug/L	-0.0158 ppb	15:16:53
3	Co 228.616†	-59.7	-4.8	-0.1447 ug/L	-0.1447 ppb	15:16:53
3	Cr 267.716†	68.7	3.5	0.0478 ug/L	0.0478 ppb	15:16:53
3	Cu 324.752†	8853.6	-198.7	-0.7402 ug/L	-0.7402 ppb	15:16:33
3	Mn 257.610†	461.2	37.1	0.0561 ug/L	0.0561 ppb	15:16:53
3	Mo 202.031†	13.5	-1.6	-0.1491 ug/L	-0.1491 ppb	15:16:53
3	Ni 231.604†	96.3	-4.4	-0.1421 ug/L	-0.1421 ppb	15:16:53
3	P 214.914†	203.2	1.0	0.7296 ug/L	0.7296 ppb	15:16:53
3	Pb 220.353†	-41.3	-14.9	-2.4294 ug/L	-2.4294 ppb	15:16:53
3	S 181.975 Axial†	45.3	4.7	6.0546 ug/L	6.0546 ppb	15:16:53
3	Sb 206.836†	28.4	-2.5	-1.0010 ug/L	-1.0010 ppb	15:16:53
3	Se 196.026†	-15.1	1.7	1.0573 ug/L	1.0573 ppb	15:16:53
3	Si 251.611†	558.5	11.8	0.4318 ug/L	0.4318 ppb	15:16:53
3	Sn 189.927†	25.9	-2.6	-0.6144 ug/L	-0.6144 ppb	15:16:53
3	Ti 334.940†	-1326.7	-75.8	-0.1553 ug/L	-0.1553 ppb	15:16:33
3	Tl 190.801†	-26.9	10.0	4.5748 ug/L	4.5748 ppb	15:16:53
3	U 409.014†	-2286.1	-61.8	-2.0756 ug/L	-2.0756 ppb	15:16:33
3	V 292.402†	-1677.8	-27.3	-0.2210 ug/L	-0.2210 ppb	15:16:33
3	Zn 213.857†	1096.5	-42.8	-0.4712 ug/L	-0.4712 ppb	15:16:53
3	SiO2†	610.1	49.3	3.8336 ug/L	3.8336 ppb	15:17:08

## Mean Data: ICB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	778895.0	98.987 %		0.3126				0.32%
Sc Radial	4936.9	102 %		0.7				0.71%
Y 371.029	695497.5	99.139 %		0.3091				0.31%
Y RADIAL	5199.7	101.8 %		0.55				0.54%
Ag 328.068†	2.0	0.0137 ug/L		0.32396	0.0137 ppb		0.32396	>999.9%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	3.8	3.5888 ug/L		4.76213	3.5888 ppb		4.76213	132.69%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-2.0	-0.8919 ug/L		1.70046	-0.8919 ppb		1.70046	190.66%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	78.0	1.9728 ug/L		0.44476	1.9728 ppb		0.44476	22.54%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	0.5	0.0059 ug/L		0.13836	0.0059 ppb		0.13836	>999.9%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-12.9	-0.0052 ug/L		0.02539	-0.0052 ppb		0.02539	485.39%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	9.5	17.677 ug/L		5.7698	17.677 ppb		5.7698	32.64%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated

Cd 226.502†	7.7	0.1089 ug/L	0.13213	0.1089 ppb	0.13213	121.31%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	1.8	0.0561 ug/L	0.19362	0.0561 ppb	0.19362	344.96%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	7.8	0.1075 ug/L	0.13705	0.1075 ppb	0.13705	127.52%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-259.5	-0.9660 ug/L	0.24540	-0.9660 ppb	0.24540	25.40%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	0.3	2.8819 ug/L	7.38553	2.8819 ppb	7.38553	256.27%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	-67.3	-13.369 ug/L	11.5471	-13.369 ppb	11.5471	86.37%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	1.4	59.473 ug/L	37.6057	59.473 ppb	37.6057	63.23%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	25.9	0.0394 ug/L	0.01727	0.0394 ppb	0.01727	43.87%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	0.9	0.0824 ug/L	0.31800	0.0824 ppb	0.31800	386.15%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	22.1	7.8773 ug/L	5.09775	7.8773 ppb	5.09775	64.71%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	-0.2	-0.0057 ug/L	0.22540	-0.0057 ppb	0.22540	>999.9%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	-4.2	-2.1363 ug/L	2.52195	-2.1363 ppb	2.52195	118.05%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	-11.7	-1.9090 ug/L	0.61228	-1.9090 ppb	0.61228	32.07%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	2.6	3.3277 ug/L	2.65101	3.3277 ppb	2.65101	79.67%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	3.9	1.5528 ug/L	2.26574	1.5528 ppb	2.26574	145.91%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-0.4	-0.2650 ug/L	1.96332	-0.2650 ppb	1.96332	740.99%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	25.5	0.9242 ug/L	0.49822	0.9242 ppb	0.49822	53.91%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	-4.4	-1.0488 ug/L	0.46509	-1.0488 ppb	0.46509	44.35%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	10.7	0.0800 ug/L	0.06999	0.0800 ppb	0.06999	87.50%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	-20.1	-0.0412 ug/L	0.13593	-0.0412 ppb	0.13593	329.70%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	8.8	4.0224 ug/L	0.68116	4.0224 ppb	0.68116	16.93%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	-111.8	-3.7555 ug/L	2.01171	-3.7555 ppb	2.01171	53.57%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	-12.8	-0.1066 ug/L	0.11774	-0.1066 ppb	0.11774	110.46%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	-36.1	-0.3989 ug/L	0.08234	-0.3989 ppb	0.08234	20.64%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	36.7	2.8478 ug/L	2.13534	2.8478 ppb	2.13534	74.98%
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: 3/3/2010 15:19:20

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4787.9	4787.9	99.3 %		15:21:13
1	Y RADIAL	5074.6	5074.6	99.34 %		15:21:13
1	Al 396.153Radial†	138.5	222.8	212.03 ug/L	212.03 ppb	15:21:33
1	Ca 317.933Radial†	139.2	119.1	220.45 ug/L	220.45 ppb	15:21:33
1	Fe 238.204 Radial†	18.3	11.3	126.34 ug/L	126.34 ppb	15:21:33
1	K 766.490 Radial†	3044.1	821.5	162.88 ug/L	162.88 ppb	15:21:13
1	Mg 279.077 IEC†	8.6	7.6	315.78 ug/L	315.78 ppb	15:21:33
1	Na 589.592 Radial†	336.5	893.9	318.32 ug/L	318.32 ppb	15:21:13
1	Sr 421.552†	711.5	704.9	5.2794 ug/L	5.2794 ppb	15:21:13
1	Sc 361.383	793276.4	793276.4	100.81 %		15:22:30
1	Y 371.029	708322.6	708322.6	100.97 %		15:22:30
1	Ag 328.068†	1146.6	929.1	4.7683 ug/L	4.7683 ppb	15:22:30
1	As 188.979†	38.6	67.1	29.827 ug/L	29.827 ppb	15:22:50
1	B 249.677†	1830.8	1961.3	49.591 ug/L	49.591 ppb	15:22:30
1	Ba 233.527†	441.5	437.2	5.1908 ug/L	5.1908 ppb	15:22:50
1	Be 313.107†	3391.1	12793.1	5.1070 ug/L	5.1070 ppb	15:22:30
1	Cd 226.502†	164.2	357.1	5.0721 ug/L	5.0721 ppb	15:22:50
1	Co 228.616†	107.2	161.8	4.9321 ug/L	4.9321 ppb	15:22:50
1	Cr 267.716†	429.4	360.3	4.9114 ug/L	4.9114 ppb	15:22:50
1	Cu 324.752†	11581.4	2377.3	8.8463 ug/L	8.8463 ppb	15:22:30
1	Mn 257.610†	7040.5	6556.6	10.512 ug/L	10.512 ppb	15:22:30
1	Mo 202.031†	128.4	112.2	10.340 ug/L	10.340 ppb	15:22:50
1	Ni 231.604†	270.5	166.9	5.3410 ug/L	5.3410 ppb	15:22:50
1	P 214.914†	457.9	250.7	137.94 ug/L	137.94 ppb	15:22:50
1	Pb 220.353†	22.9	49.4	8.1212 ug/L	8.1212 ppb	15:22:50
1	S 181.975 Axial†	119.3	77.4	98.918 ug/L	98.918 ppb	15:22:50
1	Sb 206.836†	59.1	27.6	11.363 ug/L	11.363 ppb	15:22:50
1	Se 196.026†	40.9	57.6	35.436 ug/L	35.436 ppb	15:22:50
1	Si 251.611†	3245.2	2668.7	96.806 ug/L	96.806 ppb	15:22:50
1	Sn 189.927†	66.0	36.8	8.7373 ug/L	8.7373 ppb	15:22:50
1	Ti 334.940†	1264.9	2514.3	5.0359 ug/L	5.0359 ppb	15:22:30
1	Tl 190.801†	15.3	52.2	24.030 ug/L	24.030 ppb	15:22:50
1	U 409.014†	-659.8	1584.8	53.198 ug/L	53.198 ppb	15:22:30
1	V 292.402†	-1085.9	584.4	4.8636 ug/L	4.8636 ppb	15:22:30
1	Zn 213.857†	1953.5	791.2	8.6906 ug/L	8.6906 ppb	15:22:50
1	SiO2†	3378.5	2786.3	216.35 ug/L	216.35 ppb	15:23:46
2	Sc Radial	4883.1	4883.1	101 %		15:21:38
2	Y RADIAL	5156.7	5156.7	100.9 %		15:21:38
2	Al 396.153Radial†	135.5	217.1	206.70 ug/L	206.70 ppb	15:21:58
2	Ca 317.933Radial†	143.3	120.4	222.92 ug/L	222.92 ppb	15:21:58
2	Fe 238.204 Radial†	16.0	8.7	97.350 ug/L	97.350 ppb	15:21:58
2	K 766.490 Radial†	3162.7	878.8	174.27 ug/L	174.27 ppb	15:21:38
2	Mg 279.077 IEC†	8.0	6.9	286.73 ug/L	286.73 ppb	15:21:58
2	Na 589.592 Radial†	308.2	859.3	306.00 ug/L	306.00 ppb	15:21:38
2	Sr 421.552†	710.6	690.0	5.1680 ug/L	5.1680 ppb	15:21:38
2	Sc 361.383	791039.0	791039.0	100.53 %		15:22:55
2	Y 371.029	705763.9	705763.9	100.60 %		15:22:55
2	Ag 328.068†	1157.7	943.3	4.8364 ug/L	4.8364 ppb	15:22:55
2	As 188.979†	35.3	64.0	28.436 ug/L	28.436 ppb	15:23:15
2	B 249.677†	1823.9	1959.6	49.550 ug/L	49.550 ppb	15:22:55
2	Ba 233.527†	436.1	433.1	5.1414 ug/L	5.1414 ppb	15:23:15
2	Be 313.107†	3225.0	12637.3	5.0451 ug/L	5.0451 ppb	15:22:55
2	Cd 226.502†	168.5	361.9	5.1414 ug/L	5.1414 ppb	15:23:15
2	Co 228.616†	115.2	170.0	5.1789 ug/L	5.1789 ppb	15:23:15
2	Cr 267.716†	428.7	360.8	4.9196 ug/L	4.9196 ppb	15:23:15
2	Cu 324.752†	11541.3	2370.0	8.8197 ug/L	8.8197 ppb	15:22:55
2	Mn 257.610†	7031.5	6567.4	10.528 ug/L	10.528 ppb	15:22:55
2	Mo 202.031†	112.2	96.5	8.8871 ug/L	8.8871 ppb	15:23:15
2	Ni 231.604†	251.3	148.6	4.7553 ug/L	4.7553 ppb	15:23:15

2	P 214.914†	470.9	265.0	145.91 ug/L	145.91 ppb	15:23:15
2	Pb 220.353†	20.0	46.6	7.6529 ug/L	7.6529 ppb	15:23:15
2	S 181.975 Axial†	124.1	82.6	105.48 ug/L	105.48 ppb	15:23:15
2	Sb 206.836†	53.5	22.1	9.1550 ug/L	9.1550 ppb	15:23:15
2	Se 196.026†	35.4	52.2	32.062 ug/L	32.062 ppb	15:23:15
2	Si 251.611†	3249.0	2681.6	97.294 ug/L	97.294 ppb	15:23:15
2	Sn 189.927†	66.2	37.2	8.8360 ug/L	8.8360 ppb	15:23:15
2	Ti 334.940†	1288.1	2540.9	5.0939 ug/L	5.0939 ppb	15:22:55
2	Tl 190.801†	17.9	54.8	25.221 ug/L	25.221 ppb	15:23:15
2	U 409.014†	-777.1	1466.3	49.222 ug/L	49.222 ppb	15:22:55
2	V 292.402†	-1063.3	603.8	4.9930 ug/L	4.9930 ppb	15:22:55
2	Zn 213.857†	1945.3	788.5	8.6690 ug/L	8.6690 ppb	15:23:15
2	SiO2†	3396.2	2813.4	218.50 ug/L	218.50 ppb	15:23:51
3	Sc Radial	4885.3	4885.3	101 %		15:22:03
3	Y RADIAL	5134.6	5134.6	100.5 %		15:22:03
3	Al 396.153Radial†	148.0	229.3	218.32 ug/L	218.32 ppb	15:22:23
3	Ca 317.933Radial†	141.0	118.1	218.61 ug/L	218.61 ppb	15:22:23
3	Fe 238.204 Radial†	16.4	9.1	102.17 ug/L	102.17 ppb	15:22:23
3	K 766.490 Radial†	3023.1	739.7	146.64 ug/L	146.64 ppb	15:22:03
3	Mg 279.077 IEC†	13.8	12.6	522.10 ug/L	522.10 ppb	15:22:23
3	Na 589.592 Radial†	299.2	850.3	302.80 ug/L	302.80 ppb	15:22:03
3	Sr 421.552†	688.8	668.3	5.0051 ug/L	5.0051 ppb	15:22:03
3	Sc 361.383	785673.7	785673.7	99.848 %		15:23:20
3	Y 371.029	701679.3	701679.3	100.02 %		15:23:20
3	Ag 328.068†	1180.2	973.7	4.9934 ug/L	4.9934 ppb	15:23:20
3	As 188.979†	29.6	58.5	26.020 ug/L	26.020 ppb	15:23:41
3	B 249.677†	1739.4	1887.3	47.722 ug/L	47.722 ppb	15:23:20
3	Ba 233.527†	438.9	438.9	5.2108 ug/L	5.2108 ppb	15:23:41
3	Be 313.107†	3298.5	12732.8	5.0834 ug/L	5.0834 ppb	15:23:20
3	Cd 226.502†	168.6	363.1	5.1593 ug/L	5.1593 ppb	15:23:41
3	Co 228.616†	104.5	160.0	4.8784 ug/L	4.8784 ppb	15:23:41
3	Cr 267.716†	434.8	369.8	5.0433 ug/L	5.0433 ppb	15:23:41
3	Cu 324.752†	11373.7	2280.6	8.4851 ug/L	8.4851 ppb	15:23:20
3	Mn 257.610†	6947.7	6531.2	10.461 ug/L	10.461 ppb	15:23:20
3	Mo 202.031†	121.4	106.4	9.8057 ug/L	9.8057 ppb	15:23:41
3	Ni 231.604†	258.7	157.8	5.0484 ug/L	5.0484 ppb	15:23:41
3	P 214.914†	458.3	255.5	140.71 ug/L	140.71 ppb	15:23:41
3	Pb 220.353†	8.9	35.6	5.8667 ug/L	5.8667 ppb	15:23:41
3	S 181.975 Axial†	113.3	72.6	92.787 ug/L	92.787 ppb	15:23:41
3	Sb 206.836†	43.1	12.1	5.1839 ug/L	5.1839 ppb	15:23:41
3	Se 196.026†	36.0	53.1	32.629 ug/L	32.629 ppb	15:23:41
3	Si 251.611†	3239.6	2694.2	97.740 ug/L	97.740 ppb	15:23:41
3	Sn 189.927†	70.8	42.2	10.025 ug/L	10.025 ppb	15:23:41
3	Ti 334.940†	1331.8	2593.4	5.1787 ug/L	5.1787 ppb	15:23:20
3	Tl 190.801†	15.2	52.2	24.028 ug/L	24.028 ppb	15:23:41
3	U 409.014†	-708.0	1530.2	51.367 ug/L	51.367 ppb	15:23:20
3	V 292.402†	-1004.7	655.2	5.4215 ug/L	5.4215 ppb	15:23:20
3	Zn 213.857†	1938.0	794.4	8.7316 ug/L	8.7316 ppb	15:23:41
3	SiO2†	3346.4	2786.6	216.39 ug/L	216.39 ppb	15:23:56

## Mean Data: PQL

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	789996.4	100.40 %		0.497			0.49%
Sc Radial	4852.1	101 %		1.2			1.15%
Y 371.029	705255.2	100.53 %		0.478			0.48%
Y RADIAL	5122.0	100.3 %		0.83			0.83%
Ag 328.068†	948.7	4.8660 ug/L		0.11545	4.8660 ppb	0.11545	2.37%
QC value within limits for Ag 328.068 Recovery = 97.32%							
Al 396.153Radial†	223.1	212.35 ug/L		5.820	212.35 ppb	5.820	2.74%
QC value within limits for Al 396.153Radial Recovery = 106.18%							
As 188.979†	63.2	28.094 ug/L		1.9267	28.094 ppb	1.9267	6.86%
QC value within limits for As 188.979 Recovery = 93.65%							
B 249.677†	1936.1	48.955 ug/L		1.0673	48.955 ppb	1.0673	2.18%
QC value within limits for B 249.677 Recovery = 97.91%							
Ba 233.527†	436.4	5.1810 ug/L		0.03572	5.1810 ppb	0.03572	0.69%
QC value within limits for Ba 233.527 Recovery = 103.62%							
Be 313.107†	12721.1	5.0785 ug/L		0.03125	5.0785 ppb	0.03125	0.62%
QC value within limits for Be 313.107 Recovery = 101.57%							
Ca 317.933Radial†	119.2	220.66 ug/L		2.162	220.66 ppb	2.162	0.98%

QC value within limits for Ca 317.933 Radial Recovery = 110.33%

Cd 226.502†	360.7	5.1243 ug/L	0.04606	5.1243 ppb	0.04606	0.90%
QC value within limits for Cd 226.502 Recovery = 102.49%						
Co 228.616†	163.9	4.9965 ug/L	0.16027	4.9965 ppb	0.16027	3.21%
QC value within limits for Co 228.616 Recovery = 99.93%						
Cr 267.716†	363.6	4.9581 ug/L	0.07392	4.9581 ppb	0.07392	1.49%
QC value within limits for Cr 267.716 Recovery = 99.16%						
Cu 324.752†	2342.6	8.7170 ug/L	0.20131	8.7170 ppb	0.20131	2.31%
QC value within limits for Cu 324.752 Recovery = 87.17%						
Fe 238.204 Radial†	9.7	108.62 ug/L	15.532	108.62 ppb	15.532	14.30%
QC value within limits for Fe 238.204 Radial Recovery = 108.62%						
K 766.490 Radial†	813.3	161.26 ug/L	13.882	161.26 ppb	13.882	8.61%
QC value within limits for K 766.490 Radial Recovery = 107.51%						
Mg 279.077 IEC†	9.1	374.87 ug/L	128.332	374.87 ppb	128.332	34.23%
QC value within limits for Mg 279.077 IEC Recovery = 124.96%						
Mn 257.610†	6551.7	10.500 ug/L	0.0352	10.500 ppb	0.0352	0.33%
QC value within limits for Mn 257.610 Recovery = 105.00%						
Mo 202.031†	105.0	9.6777 ug/L	0.73497	9.6777 ppb	0.73497	7.59%
QC value within limits for Mo 202.031 Recovery = 96.78%						
Na 589.592 Radial†	867.8	309.04 ug/L	8.192	309.04 ppb	8.192	2.65%
QC value within limits for Na 589.592 Radial Recovery = 103.01%						
Ni 231.604†	157.8	5.0482 ug/L	0.29282	5.0482 ppb	0.29282	5.80%
QC value within limits for Ni 231.604 Recovery = 100.96%						
P 214.914†	257.1	141.52 ug/L	4.050	141.52 ppb	4.050	2.86%
QC value within limits for P 214.914 Recovery = 94.35%						
Pb 220.353†	43.8	7.2136 ug/L	1.18974	7.2136 ppb	1.18974	16.49%
QC value within limits for Pb 220.353 Recovery = 72.14%						
S 181.975 Axial†	77.6	99.063 ug/L	6.3490	99.063 ppb	6.3490	6.41%
QC value within limits for S 181.975 Axial Recovery = 99.06%						
Sb 206.836†	20.6	8.5672 ug/L	3.13106	8.5672 ppb	3.13106	36.55%
QC value within limits for Sb 206.836 Recovery = 85.67%						
Se 196.026†	54.3	33.376 ug/L	1.8070	33.376 ppb	1.8070	5.41%
QC value within limits for Se 196.026 Recovery = 111.25%						
Si 251.611†	2681.5	97.280 ug/L	0.4672	97.280 ppb	0.4672	0.48%
QC value within limits for Si 251.611 Recovery = 97.28%						
Sn 189.927†	38.7	9.1994 ug/L	0.71665	9.1994 ppb	0.71665	7.79%
QC value within limits for Sn 189.927 Recovery = 91.99%						
Sr 421.552†	687.7	5.1509 ug/L	0.13794	5.1509 ppb	0.13794	2.68%
QC value within limits for Sr 421.552 Recovery = 103.02%						
Ti 334.940†	2549.5	5.1028 ug/L	0.07186	5.1028 ppb	0.07186	1.41%
QC value within limits for Ti 334.940 Recovery = 102.06%						
Tl 190.801†	53.1	24.427 ug/L	0.6883	24.427 ppb	0.6883	2.82%
QC value within limits for Tl 190.801 Recovery = 122.13%						
U 409.014†	1527.1	51.262 ug/L	1.9903	51.262 ppb	1.9903	3.88%
QC value within limits for U 409.014 Recovery = 102.52%						
V 292.402†	614.5	5.0927 ug/L	0.29201	5.0927 ppb	0.29201	5.73%
QC value within limits for V 292.402 Recovery = 101.85%						
Zn 213.857†	791.4	8.6971 ug/L	0.03181	8.6971 ppb	0.03181	0.37%
QC value within limits for Zn 213.857 Recovery = 86.97%						
SiO2†	2795.4	217.08 ug/L	1.229	217.08 ppb	1.229	0.57%
QC value within limits for SiO2 Recovery = 101.92%						

All analyte(s) passed QC.

Sequence No.: 9

Sample ID: ICSA

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 13

Date Collected: 3/3/2010 15:26:08

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	4404.1	4404.1	91.3 %		15:28:07
1	Y RADIAL	4686.9	4686.9	91.75 %		15:28:07
1	Al 396.153Radial†	511054.2	559558.6	533830 ug/L	533830 ppb	15:28:02
1	Ca 317.933Radial†	243573.4	266630.3	493550 ug/L	493550 ppb	15:28:02
1	Fe 238.204 Radial†	15710.8	17192.2	191850 ug/L	191850 ppb	15:28:07
1	K 766.490 Radial†	2133.1	91.4	-146.95 ug/L	-146.95 ppb	15:28:07
1	Mg 279.077 IEC†	11206.6	12267.3	507770 ug/L	507770 ppb	15:28:07
1	Na 589.592 Radial†	-406.3	110.2	39.234 ug/L	39.234 ppb	15:28:07
1	Sr 421.552†	477.6	511.3	0.1453 ug/L	0.1453 ppb	15:28:07
1	Sc 361.383	723264.0	723264.0	91.917 %		15:28:34
1	Y 371.029	632331.2	632331.2	90.135 %		15:28:34
1	Ag 328.068†	-10182.9	-11286.7	-5.5140 ug/L	-5.5140 ppb	15:28:34
1	As 188.979†	-93.3	-72.6	12.528 ug/L	12.528 ppb	15:28:54
1	B 249.677†	449.2	634.0	-15.116 ug/L	-15.116 ppb	15:28:34
1	Ba 233.527†	-492.5	-536.5	-0.4823 ug/L	-0.4823 ppb	15:28:54
1	Be 313.107†	-9594.5	-1008.9	-0.4593 ug/L	-0.4593 ppb	15:28:34
1	Cd 226.502†	1144.1	1438.9	0.6277 ug/L	0.6277 ppb	15:28:54
1	Co 228.616†	-25.0	28.1	-1.9106 ug/L	-1.9106 ppb	15:28:54
1	Cr 267.716†	-66.4	-137.9	1.7953 ug/L	1.7953 ppb	15:28:54
1	Cu 324.752†	7556.2	-889.8	6.8078 ug/L	6.8078 ppb	15:28:34
1	Mn 257.610†	-1167.5	-1697.2	-4.5423 ug/L	-4.5423 ppb	15:28:34
1	Mo 202.031†	-185.8	-217.3	0.7643 ug/L	0.7643 ppb	15:28:54
1	Ni 231.604†	175.9	90.0	2.8814 ug/L	2.8814 ppb	15:28:54
1	P 214.914†	187.1	0.1	-21.461 ug/L	-21.461 ppb	15:28:54
1	Pb 220.353†	-661.3	-692.8	8.4686 ug/L	8.4686 ppb	15:28:54
1	S 181.975 Axial†	49.5	13.0	-83.390 ug/L	-83.390 ppb	15:28:54
1	Sb 206.836†	53.9	27.6	-7.0304 ug/L	-7.0304 ppb	15:28:54
1	Se 196.026†	-771.1	-822.0	-20.854 ug/L	-20.854 ppb	15:28:54
1	Si 251.611†	528.3	24.5	1.1359 ug/L	1.1359 ppb	15:28:54
1	Sn 189.927†	-285.5	-339.3	-3.6130 ug/L	-3.6130 ppb	15:28:54
1	Ti 334.940†	-12728.0	-12587.6	-0.6321 ug/L	-0.6321 ppb	15:28:34
1	Tl 190.801†	-57.8	-25.9	-12.117 ug/L	-12.117 ppb	15:28:54
1	U 409.014†	-702.8	1474.7	27.659 ug/L	27.659 ppb	15:28:34
1	V 292.402†	186.6	1864.5	-3.5030 ug/L	-3.5030 ppb	15:28:54
1	Zn 213.857†	3238.2	2376.4	-2.4280 ug/L	-2.4280 ppb	15:28:54
1	SiO2†	514.2	-5.4	0.1212 ug/L	0.1212 ppb	15:29:50
2	Sc Radial	4377.1	4377.1	90.8 %		15:28:17
2	Y RADIAL	4625.2	4625.2	90.54 %		15:28:17
2	Al 396.153Radial†	513016.9	565163.1	539170 ug/L	539170 ppb	15:28:12
2	Ca 317.933Radial†	244750.7	269567.9	498990 ug/L	498990 ppb	15:28:12
2	Fe 238.204 Radial†	15613.6	17191.0	191840 ug/L	191840 ppb	15:28:17
2	K 766.490 Radial†	2139.5	112.8	-144.51 ug/L	-144.51 ppb	15:28:17
2	Mg 279.077 IEC†	11107.5	12233.7	506380 ug/L	506380 ppb	15:28:17
2	Na 589.592 Radial†	-433.5	77.5	27.595 ug/L	27.595 ppb	15:28:17
2	Sr 421.552†	460.1	495.3	-0.0152 ug/L	-0.0152 ppb	15:28:17
2	Sc 361.383	712178.2	712178.2	90.508 %		15:28:59
2	Y 371.029	622983.6	622983.6	88.803 %		15:28:59
2	Ag 328.068†	-10123.9	-11393.9	-6.1419 ug/L	-6.1419 ppb	15:28:59
2	As 188.979†	-70.5	-49.1	22.976 ug/L	22.976 ppb	15:29:19
2	B 249.677†	329.4	509.2	-18.272 ug/L	-18.272 ppb	15:28:59
2	Ba 233.527†	-504.3	-558.0	-0.7376 ug/L	-0.7376 ppb	15:29:19
2	Be 313.107†	-9372.7	-926.4	-0.4257 ug/L	-0.4257 ppb	15:28:59
2	Cd 226.502†	1167.7	1484.5	1.2754 ug/L	1.2754 ppb	15:29:19
2	Co 228.616†	-19.8	33.5	-1.7451 ug/L	-1.7451 ppb	15:29:19
2	Cr 267.716†	-86.3	-161.0	1.4794 ug/L	1.4794 ppb	15:29:19
2	Cu 324.752†	7274.8	-1072.7	6.1253 ug/L	6.1253 ppb	15:28:59
2	Mn 257.610†	-1161.1	-1709.9	-4.5069 ug/L	-4.5069 ppb	15:28:59
2	Mo 202.031†	-173.5	-206.9	1.7878 ug/L	1.7878 ppb	15:29:19
2	Ni 231.604†	184.2	102.2	3.2716 ug/L	3.2716 ppb	15:29:19



2	P 214.914†	177.5	-7.3	-24.133 ug/L	-24.133 ppb	15:29:19
2	Pb 220.353†	-659.3	-701.7	8.3860 ug/L	8.3860 ppb	15:29:19
2	S 181.975 Axial†	44.3	8.1	-90.742 ug/L	-90.742 ppb	15:29:19
2	Sb 206.836†	65.4	41.3	-1.7382 ug/L	-1.7382 ppb	15:29:19
2	Se 196.026†	-801.1	-868.1	-48.483 ug/L	-48.483 ppb	15:29:19
2	Si 251.611†	517.2	21.2	1.0036 ug/L	1.0036 ppb	15:29:19
2	Sn 189.927†	-291.7	-351.0	-5.4173 ug/L	-5.4173 ppb	15:29:19
2	Ti 334.940†	-12389.2	-12428.9	0.5308 ug/L	0.5308 ppb	15:28:59
2	Tl 190.801†	-53.6	-22.2	-10.450 ug/L	-10.450 ppb	15:29:19
2	U 409.014†	-712.1	1452.4	26.913 ug/L	26.913 ppb	15:28:59
2	V 292.402†	145.2	1821.9	-3.8534 ug/L	-3.8534 ppb	15:29:19
2	Zn 213.857†	3274.2	2471.1	-1.3798 ug/L	-1.3798 ppb	15:29:19
2	SiO2†	574.9	70.3	5.9811 ug/L	5.9811 ppb	15:29:55
3	Sc Radial	4473.3	4473.3	92.8 %		15:28:27
3	Y RADIAL	4671.0	4671.0	91.44 %		15:28:27
3	Al 396.153Radial†	509515.1	549239.5	523980 ug/L	523980 ppb	15:28:22
3	Ca 317.933Radial†	243349.6	262261.5	485460 ug/L	485460 ppb	15:28:22
3	Fe 238.204 Radial†	15753.9	16972.4	189400 ug/L	189400 ppb	15:28:27
3	K 766.490 Radial†	2090.3	9.1	-160.59 ug/L	-160.59 ppb	15:28:27
3	Mg 279.077 IEC†	11172.9	12041.1	498410 ug/L	498410 ppb	15:28:27
3	Na 589.592 Radial†	-390.3	134.3	47.817 ug/L	47.817 ppb	15:28:27
3	Sr 421.552†	482.4	508.4	0.1840 ug/L	0.1840 ppb	15:28:27
3	Sc 361.383	720957.7	720957.7	91.624 %		15:29:25
3	Y 371.029	630992.3	630992.3	89.944 %		15:29:25
3	Ag 328.068†	-10224.2	-11367.2	-6.5750 ug/L	-6.5750 ppb	15:29:25
3	As 188.979†	-79.8	-58.3	18.325 ug/L	18.325 ppb	15:29:45
3	B 249.677†	415.5	598.8	-15.610 ug/L	-15.610 ppb	15:29:25
3	Ba 233.527†	-532.3	-581.7	-1.0924 ug/L	-1.0924 ppb	15:29:45
3	Be 313.107†	-9498.9	-938.0	-0.4309 ug/L	-0.4309 ppb	15:29:25
3	Cd 226.502†	1151.7	1451.3	1.0576 ug/L	1.0576 ppb	15:29:45
3	Co 228.616†	-12.7	41.5	-1.4671 ug/L	-1.4671 ppb	15:29:45
3	Cr 267.716†	-78.1	-150.9	1.5684 ug/L	1.5684 ppb	15:29:45
3	Cu 324.752†	7191.3	-1261.7	5.2874 ug/L	5.2874 ppb	15:29:25
3	Mn 257.610†	-1181.8	-1716.9	-4.4331 ug/L	-4.4331 ppb	15:29:25
3	Mo 202.031†	-180.0	-211.6	1.0038 ug/L	1.0038 ppb	15:29:45
3	Ni 231.604†	193.3	109.6	3.5093 ug/L	3.5093 ppb	15:29:45
3	P 214.914†	174.5	-13.0	-28.967 ug/L	-28.967 ppb	15:29:45
3	Pb 220.353†	-640.7	-672.6	9.4414 ug/L	9.4414 ppb	15:29:45
3	S 181.975 Axial†	60.6	25.2	-65.963 ug/L	-65.963 ppb	15:29:45
3	Sb 206.836†	51.7	25.3	-7.6656 ug/L	-7.6656 ppb	15:29:45
3	Se 196.026†	-796.1	-851.9	-45.499 ug/L	-45.499 ppb	15:29:45
3	Si 251.611†	513.9	10.6	0.6260 ug/L	0.6260 ppb	15:29:45
3	Sn 189.927†	-292.8	-348.2	-7.0288 ug/L	-7.0288 ppb	15:29:45
3	Ti 334.940†	-12659.1	-12556.8	-0.8920 ug/L	-0.8920 ppb	15:29:25
3	Tl 190.801†	-70.7	-40.1	-18.672 ug/L	-18.672 ppb	15:29:45
3	U 409.014†	-552.8	1635.9	33.353 ug/L	33.353 ppb	15:29:25
3	V 292.402†	173.8	1851.2	-3.4143 ug/L	-3.4143 ppb	15:29:45
3	Zn 213.857†	3286.9	2440.9	-1.3494 ug/L	-1.3494 ppb	15:29:45
3	SiO2†	506.0	-12.6	-0.4493 ug/L	-0.4493 ppb	15:30:00

## Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	718800.0	91.350 %	0.7434			0.81%
Sc Radial	4418.2	91.6 %	1.03			1.12%
Y 371.029	628769.0	89.627 %	0.7205			0.80%
Y RADIAL	4661.1	91.24 %	0.627			0.69%
Ag 328.068†	-11349.3	-6.0769 ug/L	0.53347	-6.0769 ppb	0.53347	8.78%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	557987.0	532330 ug/L	7705.8	532330 ppb	7705.8	1.45%
QC value within limits for Al 396.153Radial Recovery = 106.47%						
As 188.979†	-60.0	17.943 ug/L	5.2347	17.943 ppb	5.2347	29.17%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	580.7	-16.333 ug/L	1.6977	-16.333 ppb	1.6977	10.39%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	-558.7	-0.7708 ug/L	0.30637	-0.7708 ppb	0.30637	39.75%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	-957.8	-0.4387 ug/L	0.01808	-0.4387 ppb	0.01808	4.12%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	266153.2	492670 ug/L	6805.5	492670 ppb	6805.5	1.38%

QC value within limits for Ca 317.933 Radial Recovery = 98.53%

Cd 226.502†	1458.2	0.9869 ug/L	0.32962	0.9869 ppb	0.32962	33.40%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	34.4	-1.7076 ug/L	0.22410	-1.7076 ppb	0.22410	13.12%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-149.9	1.6144 ug/L	0.16289	1.6144 ppb	0.16289	10.09%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-1074.7	6.0735 ug/L	0.76154	6.0735 ppb	0.76154	12.54%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	17118.6	191030 ug/L	1412.2	191030 ppb	1412.2	0.74%
QC value within limits for Fe 238.204 Radial Recovery = 95.52%						
K 766.490 Radial†	71.1	-150.68 ug/L	8.663	-150.68 ppb	8.663	5.75%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	12180.7	504190 ug/L	5052.1	504190 ppb	5052.1	1.00%
QC value within limits for Mg 279.077 IEC Recovery = 100.84%						
Mn 257.610†	-1708.0	-4.4941 ug/L	0.05570	-4.4941 ppb	0.05570	1.24%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	-211.9	1.1853 ug/L	0.53532	1.1853 ppb	0.53532	45.16%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	107.3	38.216 ug/L	10.1495	38.216 ppb	10.1495	26.56%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	100.6	3.2208 ug/L	0.31706	3.2208 ppb	0.31706	9.84%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	-6.7	-24.854 ug/L	3.8048	-24.854 ppb	3.8048	15.31%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	-689.0	8.7653 ug/L	0.58693	8.7653 ppb	0.58693	6.70%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	15.4	-80.032 ug/L	12.7264	-80.032 ppb	12.7264	15.90%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	31.4	-5.4780 ug/L	3.25436	-5.4780 ppb	3.25436	59.41%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-847.3	-38.279 ug/L	15.1639	-38.279 ppb	15.1639	39.61%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	18.8	0.9218 ug/L	0.26464	0.9218 ppb	0.26464	28.71%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	-346.2	-5.3530 ug/L	1.70883	-5.3530 ppb	1.70883	31.92%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	505.0	0.1047 ug/L	0.10558	0.1047 ppb	0.10558	100.84%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	-12524.4	-0.3311 ug/L	0.75765	-0.3311 ppb	0.75765	228.82%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	-29.4	-13.746 ug/L	4.3462	-13.746 ppb	4.3462	31.62%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	1521.0	29.308 ug/L	3.5226	29.308 ppb	3.5226	12.02%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	1845.9	-3.5902 ug/L	0.23217	-3.5902 ppb	0.23217	6.47%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	2429.5	-1.7191 ug/L	0.61412	-1.7191 ppb	0.61412	35.72%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	17.4	1.8843 ug/L	3.55935	1.8843 ppb	3.55935	188.89%
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: 3/3/2010 15:32:12  
 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	4429.9	4429.9	91.9 %		15:34:10
1	Y RADIAL	4667.9	4667.9	91.38 %		15:34:10
1	Al 396.153Radial†	514175.3	559686.1	533930 ug/L	533930 ppb	15:34:05
1	Ca 317.933Radial†	245641.3	267322.7	494830 ug/L	494830 ppb	15:34:05
1	Fe 238.204 Radial†	16046.3	17456.9	194820 ug/L	194820 ppb	15:34:10
1	K 766.490 Radial†	28383.2	28647.0	5518.8 ug/L	5518.8 ppb	15:34:05
1	Mg 279.077 IEC†	11285.8	12281.9	508380 ug/L	508380 ppb	15:34:10
1	Na 589.592 Radial†	14961.7	16838.5	5996.4 ug/L	5996.4 ppb	15:34:10
1	Sr 421.552†	66034.8	71857.5	534.68 ug/L	534.68 ppb	15:34:05
1	Sc 361.383	738399.4	738399.4	93.840 %		15:34:38
1	Y 371.029	645093.3	645093.3	91.954 %		15:34:38
1	Ag 328.068†	40191.4	42621.3	273.04 ug/L	273.04 ppb	15:34:38
1	As 188.979†	1006.9	1101.8	537.93 ug/L	537.93 ppb	15:34:58
1	B 249.677†	19903.5	21355.3	507.34 ug/L	507.34 ppb	15:34:38
1	Ba 233.527†	39912.9	42532.1	510.65 ug/L	510.65 ppb	15:34:38
1	Be 313.107†	563271.8	609674.0	243.96 ug/L	243.96 ppb	15:34:38
1	Cd 226.502†	31562.5	33828.5	460.65 ug/L	460.65 ppb	15:34:58
1	Co 228.616†	14627.6	15643.1	473.09 ug/L	473.09 ppb	15:34:58
1	Cr 267.716†	33253.5	35370.6	487.65 ug/L	487.65 ppb	15:34:38
1	Cu 324.752†	156922.7	158112.6	599.87 ug/L	599.87 ppb	15:34:38
1	Mn 257.610†	297592.7	316699.5	506.24 ug/L	506.24 ppb	15:34:38
1	Mo 202.031†	4784.3	5083.1	488.82 ug/L	488.82 ppb	15:34:58
1	Ni 231.604†	13656.8	14451.9	462.35 ug/L	462.35 ppb	15:34:58
1	P 214.914†	4492.8	4584.3	2416.5 ug/L	2416.5 ppb	15:34:58
1	Pb 220.353†	2149.6	2317.4	499.91 ug/L	499.91 ppb	15:34:58
1	S 181.975 Axial†	1961.9	2049.8	2519.3 ug/L	2519.3 ppb	15:34:58
1	Sb 206.836†	1360.0	1418.2	566.76 ug/L	566.76 ppb	15:34:58
1	Se 196.026†	3215.6	3443.6	2588.1 ug/L	2588.1 ppb	15:34:58
1	Si 251.611†	140976.2	149679.5	5431.0 ug/L	5431.0 ppb	15:34:38
1	Sn 189.927†	1701.3	1784.3	498.93 ug/L	498.93 ppb	15:34:58
1	Ti 334.940†	230744.2	247149.8	521.53 ug/L	521.53 ppb	15:34:38
1	Tl 190.801†	975.6	1076.7	497.55 ug/L	497.55 ppb	15:34:58
1	U 409.014†	13595.9	16727.6	538.49 ug/L	538.49 ppb	15:34:38
1	V 292.402†	59900.9	65494.2	507.93 ug/L	507.93 ppb	15:34:38
1	Zn 213.857†	46491.9	48397.1	502.65 ug/L	502.65 ppb	15:34:38
1	SiO2†	138160.6	146664.5	11390 ug/L	11390 ppb	15:35:55
2	Sc Radial	4437.0	4437.0	92.0 %		15:34:20
2	Y RADIAL	4692.1	4692.1	91.85 %		15:34:20
2	Al 396.153Radial†	515449.2	560178.0	534390 ug/L	534390 ppb	15:34:15
2	Ca 317.933Radial†	246310.5	267623.6	495390 ug/L	495390 ppb	15:34:15
2	Fe 238.204 Radial†	16068.6	17453.2	194780 ug/L	194780 ppb	15:34:20
2	K 766.490 Radial†	28452.1	28672.6	5523.7 ug/L	5523.7 ppb	15:34:15
2	Mg 279.077 IEC†	11353.9	12336.3	510630 ug/L	510630 ppb	15:34:20
2	Na 589.592 Radial†	14972.4	16824.2	5991.3 ug/L	5991.3 ppb	15:34:20
2	Sr 421.552†	65981.1	71684.5	533.38 ug/L	533.38 ppb	15:34:15
2	Sc 361.383	722385.1	722385.1	91.805 %		15:35:04
2	Y 371.029	630306.2	630306.2	89.846 %		15:35:04
2	Ag 328.068†	39367.8	42673.6	273.28 ug/L	273.28 ppb	15:35:04
2	As 188.979†	994.8	1112.4	542.62 ug/L	542.62 ppb	15:35:24
2	B 249.677†	19523.9	21412.0	508.76 ug/L	508.76 ppb	15:35:04
2	Ba 233.527†	38958.0	42434.8	509.50 ug/L	509.50 ppb	15:35:04
2	Be 313.107†	551398.6	610047.7	244.11 ug/L	244.11 ppb	15:35:04
2	Cd 226.502†	31256.0	34240.2	466.50 ug/L	466.50 ppb	15:35:24
2	Co 228.616†	14469.1	15816.0	478.37 ug/L	478.37 ppb	15:35:24
2	Cr 267.716†	32550.4	35390.3	487.92 ug/L	487.92 ppb	15:35:04
2	Cu 324.752†	152881.7	157418.0	597.27 ug/L	597.27 ppb	15:35:04
2	Mn 257.610†	291183.9	316748.9	506.22 ug/L	506.22 ppb	15:35:04
2	Mo 202.031†	4765.5	5175.6	497.34 ug/L	497.34 ppb	15:35:24
2	Ni 231.604†	13533.5	14640.2	468.38 ug/L	468.38 ppb	15:35:24

2	P 214.914†	4449.3	4643.0	2449.9 ug/L	2449.9 ppb	15:35:24
2	Pb 220.353†	2116.3	2331.9	502.42 ug/L	502.42 ppb	15:35:24
2	S 181.975 Axial†	1939.3	2071.5	2547.0 ug/L	2547.0 ppb	15:35:24
2	Sb 206.836†	1333.3	1421.3	568.25 ug/L	568.25 ppb	15:35:24
2	Se 196.026†	3159.3	3458.2	2597.0 ug/L	2597.0 ppb	15:35:24
2	Si 251.611†	137766.5	149513.8	5424.9 ug/L	5424.9 ppb	15:35:04
2	Sn 189.927†	1683.9	1805.5	504.06 ug/L	504.06 ppb	15:35:24
2	Ti 334.940†	225881.2	247303.7	521.73 ug/L	521.73 ppb	15:35:04
2	Tl 190.801†	939.7	1060.6	490.15 ug/L	490.15 ppb	15:35:24
2	U 409.014†	13341.9	16772.1	539.98 ug/L	539.98 ppb	15:35:04
2	V 292.402†	58651.6	65548.5	508.53 ug/L	508.53 ppb	15:35:04
2	Zn 213.857†	45522.5	48439.4	503.09 ug/L	503.09 ppb	15:35:04
2	SiO2†	138320.1	150102.2	11657 ug/L	11657 ppb	15:36:01
3	Sc Radial	4376.1	4376.1	90.8 %		15:34:31
3	Y RADIAL	4674.6	4674.6	91.51 %		15:34:31
3	Al 396.153Radial†	517561.8	570305.2	544060 ug/L	544060 ppb	15:34:26
3	Ca 317.933Radial†	246556.2	271621.3	502790 ug/L	502790 ppb	15:34:26
3	Fe 238.204 Radial†	16020.8	17643.8	196910 ug/L	196910 ppb	15:34:31
3	K 766.490 Radial†	28388.0	29032.5	5592.6 ug/L	5592.6 ppb	15:34:26
3	Mg 279.077 IEC†	11234.9	12377.0	512310 ug/L	512310 ppb	15:34:31
3	Na 589.592 Radial†	14875.9	16944.5	6034.1 ug/L	6034.1 ppb	15:34:31
3	Sr 421.552†	66163.7	72884.1	542.31 ug/L	542.31 ppb	15:34:26
3	Sc 361.383	725240.8	725240.8	92.168 %		15:35:30
3	Y 371.029	633547.6	633547.6	90.308 %		15:35:30
3	Ag 328.068†	39565.8	42719.6	274.07 ug/L	274.07 ppb	15:35:30
3	As 188.979†	980.0	1092.1	534.08 ug/L	534.08 ppb	15:35:50
3	B 249.677†	19610.1	21421.8	508.67 ug/L	508.67 ppb	15:35:30
3	Ba 233.527†	39028.7	42344.4	508.49 ug/L	508.49 ppb	15:35:30
3	Be 313.107†	553696.3	610175.7	244.16 ug/L	244.16 ppb	15:35:30
3	Cd 226.502†	31360.2	34219.3	465.99 ug/L	465.99 ppb	15:35:50
3	Co 228.616†	14518.5	15807.6	478.09 ug/L	478.09 ppb	15:35:50
3	Cr 267.716†	32637.8	35345.5	487.35 ug/L	487.35 ppb	15:35:30
3	Cu 324.752†	153539.4	157475.9	597.60 ug/L	597.60 ppb	15:35:30
3	Mn 257.610†	291943.2	316323.8	505.68 ug/L	505.68 ppb	15:35:30
3	Mo 202.031†	4789.9	5181.7	498.15 ug/L	498.15 ppb	15:35:50
3	Ni 231.604†	13594.1	14648.0	468.62 ug/L	468.62 ppb	15:35:50
3	P 214.914†	4472.4	4649.0	2454.0 ug/L	2454.0 ppb	15:35:50
3	Pb 220.353†	2125.6	2332.9	504.87 ug/L	504.87 ppb	15:35:50
3	S 181.975 Axial†	1940.4	2064.4	2536.1 ug/L	2536.1 ppb	15:35:50
3	Sb 206.836†	1315.1	1395.8	557.79 ug/L	557.79 ppb	15:35:50
3	Se 196.026†	3172.4	3458.9	2603.1 ug/L	2603.1 ppb	15:35:50
3	Si 251.611†	138092.7	149276.7	5416.2 ug/L	5416.2 ppb	15:35:30
3	Sn 189.927†	1695.2	1810.6	506.45 ug/L	506.45 ppb	15:35:50
3	Ti 334.940†	226495.6	247001.6	521.98 ug/L	521.98 ppb	15:35:30
3	Tl 190.801†	966.8	1086.0	501.78 ug/L	501.78 ppb	15:35:50
3	U 409.014†	13350.4	16724.1	538.13 ug/L	538.13 ppb	15:35:30
3	V 292.402†	58797.0	65454.7	507.51 ug/L	507.51 ppb	15:35:30
3	Zn 213.857†	45657.1	48390.2	502.22 ug/L	502.22 ppb	15:35:30
3	SiO2†	136361.0	147383.3	11446 ug/L	11446 ppb	15:36:06

## Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	728675.1	92.605 %	1.0855			1.17%
Sc Radial	4414.3	91.6 %	0.69			0.76%
Y 371.029	636315.7	90.703 %	1.1079			1.22%
Y RADIAL	4678.2	91.58 %	0.244			0.27%
Ag 328.068†	42671.5	273.46 ug/L	0.540	273.46 ppb	0.540	0.20%
QC value within limits for Ag 328.068 Recovery = 109.39%						
Al 396.153Radial†	563389.8	537460 ug/L	5718.2	537460 ppb	5718.2	1.06%
QC value within limits for Al 396.153Radial Recovery = 107.49%						
As 188.979†	1102.1	538.21 ug/L	4.276	538.21 ppb	4.276	0.79%
QC value within limits for As 188.979 Recovery = 107.64%						
B 249.677†	21396.3	508.26 ug/L	0.796	508.26 ppb	0.796	0.16%
QC value within limits for B 249.677 Recovery = 101.65%						
Ba 233.527†	42437.1	509.54 ug/L	1.080	509.54 ppb	1.080	0.21%
QC value within limits for Ba 233.527 Recovery = 101.91%						
Be 313.107†	609965.8	244.08 ug/L	0.104	244.08 ppb	0.104	0.04%
QC value within limits for Be 313.107 Recovery = 97.63%						
Ca 317.933Radial†	268855.9	497670 ug/L	4442.0	497670 ppb	4442.0	0.89%

QC value within limits for Ca 317.933 Radial Recovery = 99.53%							
Cd 226.502†	34096.0	464.38 ug/L	3.241	464.38 ppb	3.241	0.70%	
QC value within limits for Cd 226.502 Recovery = 92.88%							
Co 228.616†	15755.6	476.52 ug/L	2.969	476.52 ppb	2.969	0.62%	
QC value within limits for Co 228.616 Recovery = 95.30%							
Cr 267.716†	35368.8	487.64 ug/L	0.286	487.64 ppb	0.286	0.06%	
QC value within limits for Cr 267.716 Recovery = 97.53%							
Cu 324.752†	157668.8	598.25 ug/L	1.412	598.25 ppb	1.412	0.24%	
QC value within limits for Cu 324.752 Recovery = 119.65%							
Fe 238.204 Radial†	17518.0	195500 ug/L	1215.9	195500 ppb	1215.9	0.62%	
QC value within limits for Fe 238.204 Radial Recovery = 97.75%							
K 766.490 Radial†	28784.0	5545.0 ug/L	41.30	5545.0 ppb	41.30	0.74%	
QC value within limits for K 766.490 Radial Recovery = 110.90%							
Mg 279.077 IEC†	12331.7	510440 ug/L	1974.3	510440 ppb	1974.3	0.39%	
QC value within limits for Mg 279.077 IEC Recovery = 102.09%							
Mn 257.610†	316590.8	506.05 ug/L	0.317	506.05 ppb	0.317	0.06%	
QC value within limits for Mn 257.610 Recovery = 101.21%							
Mo 202.031†	5146.8	494.77 ug/L	5.168	494.77 ppb	5.168	1.04%	
QC value within limits for Mo 202.031 Recovery = 98.95%							
Na 589.592 Radial†	16869.1	6007.2 ug/L	23.40	6007.2 ppb	23.40	0.39%	
QC value greater than the upper limit for Na 589.592 Radial Recovery = 120.14%							
Ni 231.604†	14580.0	466.45 ug/L	3.552	466.45 ppb	3.552	0.76%	
QC value within limits for Ni 231.604 Recovery = 93.29%							
P 214.914†	4625.4	2440.1 ug/L	20.55	2440.1 ppb	20.55	0.84%	
QC value within limits for P 214.914 Recovery = 97.61%							
Pb 220.353†	2327.4	502.40 ug/L	2.478	502.40 ppb	2.478	0.49%	
QC value within limits for Pb 220.353 Recovery = 100.48%							
S 181.975 Axial†	2061.9	2534.2 ug/L	13.96	2534.2 ppb	13.96	0.55%	
QC value within limits for S 181.975 Axial Recovery = 101.37%							
Sb 206.836†	1411.7	564.27 ug/L	5.657	564.27 ppb	5.657	1.00%	
QC value within limits for Sb 206.836 Recovery = 112.85%							
Se 196.026†	3453.6	2596.1 ug/L	7.52	2596.1 ppb	7.52	0.29%	
QC value within limits for Se 196.026 Recovery = 103.84%							
Si 251.611†	149490.0	5424.0 ug/L	7.41	5424.0 ppb	7.41	0.14%	
QC value within limits for Si 251.611 Recovery = 108.48%							
Sn 189.927†	1800.1	503.15 ug/L	3.843	503.15 ppb	3.843	0.76%	
QC value within limits for Sn 189.927 Recovery = 100.63%							
Sr 421.552†	72142.0	536.79 ug/L	4.826	536.79 ppb	4.826	0.90%	
QC value within limits for Sr 421.552 Recovery = 107.36%							
Ti 334.940†	247151.7	521.75 ug/L	0.224	521.75 ppb	0.224	0.04%	
QC value within limits for Ti 334.940 Recovery = 104.35%							
Tl 190.801†	1074.4	496.49 ug/L	5.890	496.49 ppb	5.890	1.19%	
QC value within limits for Tl 190.801 Recovery = 99.30%							
U 409.014†	16741.3	538.87 ug/L	0.983	538.87 ppb	0.983	0.18%	
QC value within limits for U 409.014 Recovery = 107.77%							
V 292.402†	65499.1	507.99 ug/L	0.511	507.99 ppb	0.511	0.10%	
QC value within limits for V 292.402 Recovery = 101.60%							
Zn 213.857†	48408.9	502.65 ug/L	0.432	502.65 ppb	0.432	0.09%	
QC value within limits for Zn 213.857 Recovery = 100.53%							
SiO2†	148050.0	11498 ug/L	140.9	11498 ppb	140.9	1.23%	
QC value within limits for SiO2 Recovery = 107.51%							
QC Failed. Continue with analysis.							

Sequence No.: 11

Sample ID: LR1

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 15

Date Collected: 3/3/2010 15:38:15

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	4396.8	4396.8	91.2 %		15:40:13
1	Y RADIAL	4667.0	4667.0	91.36 %		15:40:13
1	Al 396.153Radial†	497323.0	545426.2	520350 ug/L	520350 ppb	15:40:08
1	Ca 317.933Radial†	237564.3	260481.7	482170 ug/L	482170 ppb	15:40:08
1	Fe 238.204 Radial†	36812.7	40360.1	450390 ug/L	450390 ppb	15:40:13
1	K 766.490 Radial†	3622.4	1728.3	-29.897 ug/L	-29.897 ppb	15:40:13
1	Mg 279.077 IEC†	11180.0	12258.5	507130 ug/L	507130 ppb	15:40:13
1	Na 589.592 Radial†	1389879.0	1524636.3	542940 ug/L	542940 ppb	15:40:08
1	Sr 421.552†	1595.5	1738.0	9.4213 ug/L	9.4213 ppb	15:40:13
1	Sc 361.383	705947.0	705947.0	89.716 %		15:40:41
1	Y 371.029	617709.2	617709.2	88.051 %		15:40:41
1	Ag 328.068†	-21752.2	-24453.8	-6.0071 ug/L	-6.0071 ppb	15:40:41
1	As 188.979†	-180.0	-171.8	29.127 ug/L	29.127 ppb	15:41:01
1	B 249.677†	1063.8	1331.0	-39.482 ug/L	-39.482 ppb	15:40:41
1	Ba 233.527†	-1274.6	-1421.4	-3.0805 ug/L	-3.0805 ppb	15:41:01
1	Be 313.107†	-15212.6	-7527.0	-3.0483 ug/L	-3.0483 ppb	15:40:41
1	Cd 226.502†	3100.2	3649.8	8.3520 ug/L	8.3520 ppb	15:41:01
1	Co 228.616†	145.8	218.0	0.0709 ug/L	0.0709 ppb	15:41:01
1	Cr 267.716†	24.2	-38.7	1.9409 ug/L	1.9409 ppb	15:41:01
1	Cu 324.752†	5333.2	-3165.9	3.3768 ug/L	3.3768 ppb	15:40:41
1	Mn 257.610†	-20576.6	-23362.3	-13.730 ug/L	-13.730 ppb	15:40:41
1	Mo 202.031†	-371.6	-429.4	1.1850 ug/L	1.1850 ppb	15:41:01
1	Ni 231.604†	223.3	147.6	4.7212 ug/L	4.7212 ppb	15:41:01
1	P 214.914†	498.7	352.4	-35.242 ug/L	-35.242 ppb	15:41:01
1	Pb 220.353†	-455.0	-480.5	18.876 ug/L	18.876 ppb	15:41:01
1	S 181.975 Axial†	72.6	40.0	-46.346 ug/L	-46.346 ppb	15:41:01
1	Sb 206.836†	58.6	34.3	-7.4728 ug/L	-7.4728 ppb	15:41:01
1	Se 196.026†	-1904.8	-2106.2	-226.39 ug/L	-226.39 ppb	15:41:01
1	Si 251.611†	-307.2	-892.7	-31.940 ug/L	-31.940 ppb	15:41:01
1	Sn 189.927†	-329.4	-395.8	-33.847 ug/L	-33.847 ppb	15:41:01
1	Ti 334.940†	-10995.5	-10996.3	-5.7693 ug/L	-5.7693 ppb	15:40:41
1	Tl 190.801†	-89.3	-62.5	-29.109 ug/L	-29.109 ppb	15:41:01
1	U 409.014†	415467.7	465330.8	15576 ug/L	15576 ppb	15:40:41
1	V 292.402†	877.7	2639.7	-5.4806 ug/L	-5.4806 ppb	15:41:01
1	Zn 213.857†	5614.5	5111.6	-10.852 ug/L	-10.852 ppb	15:41:01
1	SiO2†	-297.0	-895.9	-68.580 ug/L	-68.580 ppb	15:41:58
2	Sc Radial	4371.6	4371.6	90.7 %		15:40:24
2	Y RADIAL	4615.1	4615.1	90.34 %		15:40:24
2	Al 396.153Radial†	500049.4	551574.8	526210 ug/L	526210 ppb	15:40:19
2	Ca 317.933Radial†	238270.0	262760.8	486390 ug/L	486390 ppb	15:40:19
2	Fe 238.204 Radial†	36529.0	40279.8	449490 ug/L	449490 ppb	15:40:24
2	K 766.490 Radial†	3610.7	1738.2	-31.180 ug/L	-31.180 ppb	15:40:24
2	Mg 279.077 IEC†	11035.0	12169.2	503440 ug/L	503440 ppb	15:40:24
2	Na 589.592 Radial†	1393997.0	1537958.1	547680 ug/L	547680 ppb	15:40:19
2	Sr 421.552†	1560.4	1709.4	9.1751 ug/L	9.1751 ppb	15:40:24
2	Sc 361.383	713260.3	713260.3	90.646 %		15:41:07
2	Y 371.029	624567.4	624567.4	89.028 %		15:41:07
2	Ag 328.068†	-21829.9	-24291.0	-5.5226 ug/L	-5.5226 ppb	15:41:07
2	As 188.979†	-161.3	-149.1	39.015 ug/L	39.015 ppb	15:41:27
2	B 249.677†	1048.1	1301.6	-40.082 ug/L	-40.082 ppb	15:41:07
2	Ba 233.527†	-1284.2	-1417.5	-3.0587 ug/L	-3.0587 ppb	15:41:27
2	Be 313.107†	-15472.8	-7640.3	-3.0921 ug/L	-3.0921 ppb	15:41:07
2	Cd 226.502†	3124.0	3640.6	8.3192 ug/L	8.3192 ppb	15:41:27
2	Co 228.616†	153.8	225.1	0.2965 ug/L	0.2965 ppb	15:41:27
2	Cr 267.716†	50.3	-10.1	2.3060 ug/L	2.3060 ppb	15:41:27
2	Cu 324.752†	5373.0	-3183.0	3.2518 ug/L	3.2518 ppb	15:41:07
2	Mn 257.610†	-21209.9	-23825.8	-14.411 ug/L	-14.411 ppb	15:41:07
2	Mo 202.031†	-389.0	-444.4	-0.2155 ug/L	-0.2155 ppb	15:41:27
2	Ni 231.604†	251.0	175.6	5.6176 ug/L	5.6176 ppb	15:41:27

2	P 214.914†	508.2	357.2	-30.349 ug/L	-30.349 ppb	15:41:27
2	Pb 220.353†	-452.1	-472.1	21.793 ug/L	21.793 ppb	15:41:27
2	S 181.975 Axial†	84.5	52.4	-31.717 ug/L	-31.717 ppb	15:41:27
2	Sb 206.836†	51.4	25.6	-11.029 ug/L	-11.029 ppb	15:41:27
2	Se 196.026†	-1927.0	-2108.9	-229.47 ug/L	-229.47 ppb	15:41:27
2	Si 251.611†	-345.5	-931.4	-33.329 ug/L	-33.329 ppb	15:41:27
2	Sn 189.927†	-315.6	-376.9	-28.569 ug/L	-28.569 ppb	15:41:27
2	Ti 334.940†	-10860.7	-10721.8	-4.3606 ug/L	-4.3606 ppb	15:41:07
2	Tl 190.801†	-58.4	-27.3	-12.978 ug/L	-12.978 ppb	15:41:27
2	U 409.014†	420446.4	466075.0	15601 ug/L	15601 ppb	15:41:07
2	V 292.402†	996.1	2760.4	-4.4371 ug/L	-4.4371 ppb	15:41:27
2	Zn 213.857†	5599.2	5030.5	-11.621 ug/L	-11.621 ppb	15:41:27
2	SiO2†	-461.7	-1074.3	-82.411 ug/L	-82.411 ppb	15:42:03
3	Sc Radial	4315.6	4315.6	89.5 %		15:40:34
3	Y RADIAL	4573.3	4573.3	89.52 %		15:40:34
3	Al 396.153Radial†	500610.3	559360.5	533640 ug/L	533640 ppb	15:40:29
3	Ca 317.933Radial†	238343.0	266253.6	492850 ug/L	492850 ppb	15:40:29
3	Fe 238.204 Radial†	36144.2	40372.9	450530 ug/L	450530 ppb	15:40:34
3	K 766.490 Radial†	3608.8	1787.8	-25.637 ug/L	-25.637 ppb	15:40:34
3	Mg 279.077 IEC†	10941.1	12222.2	505630 ug/L	505630 ppb	15:40:34
3	Na 589.592 Radial†	1389930.0	1553371.9	553170 ug/L	553170 ppb	15:40:29
3	Sr 421.552†	1534.5	1702.7	9.0771 ug/L	9.0771 ppb	15:40:34
3	Sc 361.383	711179.4	711179.4	90.381 %		15:41:33
3	Y 371.029	621822.6	621822.6	88.637 %		15:41:33
3	Ag 328.068†	-21833.6	-24365.5	-5.6643 ug/L	-5.6643 ppb	15:41:33
3	As 188.979†	-162.6	-151.0	38.393 ug/L	38.393 ppb	15:41:53
3	B 249.677†	1031.3	1286.4	-40.632 ug/L	-40.632 ppb	15:41:33
3	Ba 233.527†	-1366.2	-1512.3	-4.1489 ug/L	-4.1489 ppb	15:41:53
3	Be 313.107†	-15389.2	-7597.7	-3.0770 ug/L	-3.0770 ppb	15:41:33
3	Cd 226.502†	3114.3	3640.0	8.2008 ug/L	8.2008 ppb	15:41:53
3	Co 228.616†	130.8	200.1	-0.4840 ug/L	-0.4840 ppb	15:41:53
3	Cr 267.716†	85.7	29.2	2.8669 ug/L	2.8669 ppb	15:41:53
3	Cu 324.752†	5334.4	-3208.4	3.2159 ug/L	3.2159 ppb	15:41:33
3	Mn 257.610†	-20990.7	-23651.7	-14.119 ug/L	-14.119 ppb	15:41:33
3	Mo 202.031†	-408.9	-467.6	-2.1938 ug/L	-2.1938 ppb	15:41:53
3	Ni 231.604†	227.0	149.8	4.7922 ug/L	4.7922 ppb	15:41:53
3	P 214.914†	518.2	369.9	-22.208 ug/L	-22.208 ppb	15:41:53
3	Pb 220.353†	-476.8	-500.9	18.913 ug/L	18.913 ppb	15:41:53
3	S 181.975 Axial†	85.9	54.2	-30.734 ug/L	-30.734 ppb	15:41:53
3	Sb 206.836†	68.9	45.2	-3.4329 ug/L	-3.4329 ppb	15:41:53
3	Se 196.026†	-1905.1	-2090.9	-215.45 ug/L	-215.45 ppb	15:41:53
3	Si 251.611†	-329.4	-914.7	-32.694 ug/L	-32.694 ppb	15:41:53
3	Sn 189.927†	-309.2	-370.8	-26.038 ug/L	-26.038 ppb	15:41:53
3	Ti 334.940†	-11194.6	-11126.4	-4.4836 ug/L	-4.4836 ppb	15:41:33
3	Tl 190.801†	-91.3	-63.9	-29.775 ug/L	-29.775 ppb	15:41:53
3	U 409.014†	419030.8	465866.0	15594 ug/L	15594 ppb	15:41:33
3	V 292.402†	1076.2	2852.2	-3.8606 ug/L	-3.8606 ppb	15:41:53
3	Zn 213.857†	5641.5	5095.4	-11.052 ug/L	-11.052 ppb	15:41:53
3	SiO2†	-384.6	-990.4	-75.833 ug/L	-75.833 ppb	15:42:08

## Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	710128.9	90.248 %	0.4789			0.53%
Sc Radial	4361.3	90.5 %	0.86			0.95%
Y 371.029	621366.4	88.572 %	0.4920			0.56%
Y RADIAL	4618.4	90.41 %	0.919			1.02%
Ag 328.068†	-24370.1	-5.7313 ug/L	0.24909	-5.7313 ppb	0.24909	4.35%
Al 396.153Radial†	552120.5	526730 ug/L	6662.1	526730 ppb	6662.1	1.26%
QC value within limits for Al 396.153Radial Recovery = 105.35%						
As 188.979†	-157.3	35.512 ug/L	5.5381	35.512 ppb	5.5381	15.60%
B 249.677†	1306.3	-40.065 ug/L	0.5754	-40.065 ppb	0.5754	1.44%
Ba 233.527†	-1450.4	-3.4293 ug/L	0.62323	-3.4293 ppb	0.62323	18.17%
Be 313.107†	-7588.3	-3.0725 ug/L	0.02228	-3.0725 ppb	0.02228	0.73%
Ca 317.933Radial†	263165.3	487140 ug/L	5381.3	487140 ppb	5381.3	1.10%
QC value within limits for Ca 317.933Radial Recovery = 97.43%						
Cd 226.502†	3643.5	8.2907 ug/L	0.07953	8.2907 ppb	0.07953	0.96%
Co 228.616†	214.4	-0.0389 ug/L	0.40165	-0.0389 ppb	0.40165	>999.9%
Cr 267.716†	-6.5	2.3712 ug/L	0.46641	2.3712 ppb	0.46641	19.67%
Cu 324.752†	-3185.7	3.2815 ug/L	0.08447	3.2815 ppb	0.08447	2.57%

Fe 238.204 Radial†	40337.6	450140 ug/L	563.0	450140 ppb	563.0	0.13%
QC value within limits for Fe 238.204 Radial Recovery = 90.03%						
K 766.490 Radial†	1751.5	-28.905 ug/L	2.9018	-28.905 ppb	2.9018	10.04%
Mg 279.077 IEC†	12216.6	505400 ug/L	1858.7	505400 ppb	1858.7	0.37%
QC value within limits for Mg 279.077 IEC Recovery = 101.08%						
Mn 257.610†	-23613.3	-14.087 ug/L	0.3414	-14.087 ppb	0.3414	2.42%
Mo 202.031†	-447.1	-0.4081 ug/L	1.69763	-0.4081 ppb	1.69763	415.97%
Na 589.592 Radial†	1538655.4	547930 ug/L	5121.0	547930 ppb	5121.0	0.93%
QC value within limits for Na 589.592 Radial Recovery = 109.59%						
Ni 231.604†	157.7	5.0437 ug/L	0.49831	5.0437 ppb	0.49831	9.88%
P 214.914†	359.9	-29.267 ug/L	6.5841	-29.267 ppb	6.5841	22.50%
Pb 220.353†	-484.5	19.861 ug/L	1.6738	19.861 ppb	1.6738	8.43%
S 181.975 Axial†	48.9	-36.266 ug/L	8.7437	-36.266 ppb	8.7437	24.11%
Sb 206.836†	35.0	-7.3116 ug/L	3.80074	-7.3116 ppb	3.80074	51.98%
Se 196.026†	-2102.0	-223.77 ug/L	7.367	-223.77 ppb	7.367	3.29%
Si 251.611†	-913.0	-32.654 ug/L	0.6955	-32.654 ppb	0.6955	2.13%
Sn 189.927†	-381.1	-29.485 ug/L	3.9842	-29.485 ppb	3.9842	13.51%
Sr 421.552†	1716.7	9.2245 ug/L	0.17736	9.2245 ppb	0.17736	1.92%
Ti 334.940†	-10948.2	-4.8712 ug/L	0.78024	-4.8712 ppb	0.78024	16.02%
Tl 190.801†	-51.3	-23.954 ug/L	9.5115	-23.954 ppb	9.5115	39.71%
U 409.014†	465757.3	15591 ug/L	12.9	15591 ppb	12.9	0.08%
QC value within limits for U 409.014 Recovery = 103.94%						
V 292.402†	2750.8	-4.5928 ug/L	0.82116	-4.5928 ppb	0.82116	17.88%
Zn 213.857†	5079.2	-11.175 ug/L	0.3990	-11.175 ppb	0.3990	3.57%
SiO2†	-986.9	-75.608 ug/L	6.9185	-75.608 ppb	6.9185	9.15%

All analyte(s) passed QC.



Sequence No.: 12  
 Sample ID: LR2  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 16  
 Date Collected: 3/3/2010 15:44:19  
 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	4718.3	4718.3	97.9 %		15:46:17
1	Y RADIAL	5030.7	5030.7	98.48 %		15:46:17
1	Al 396.153Radial†	405.7	497.9	-0.1482 ug/L	-0.1482 ppb	15:46:17
1	Ca 317.933Radial†	39.4	19.2	35.605 ug/L	35.605 ppb	15:46:37
1	Fe 238.204 Radial†	-14.8	-22.2	47.871 ug/L	47.871 ppb	15:46:37
1	K 766.490 Radial†	1519133.8	1550075.9	307730 ug/L	307730 ppb	15:46:12
1	Mg 279.077 IEC†	-3.4	-4.5	-81.716 ug/L	-81.716 ppb	15:46:37
1	Na 589.592 Radial†	33.6	589.3	209.87 ug/L	209.87 ppb	15:46:17
1	Sr 421.552†	1275707.8	1303564.4	9766.7 ug/L	9766.7 ppb	15:46:12
1	Sc 361.383	788211.7	788211.7	100.17 %		15:47:54
1	Y 371.029	691541.2	691541.2	98.575 %		15:47:54
1	Ag 328.068†	-5978.8	-6176.9	8.6940 ug/L	8.6940 ppb	15:47:59
1	As 188.979†	21695.9	21687.8	9690.6 ug/L	9690.6 ppb	15:47:59
1	B 249.677†	198516.5	198323.3	4989.8 ug/L	4989.8 ppb	15:47:54
1	Ba 233.527†	1143130.0	1141180.0	13533 ug/L	13533 ppb	15:47:54
1	Be 313.107†	7170125.3	7167328.2	2877.5 ug/L	2877.5 ppb	15:47:48
1	Cd 226.502†	685193.2	684219.1	9722.3 ug/L	9722.3 ppb	15:47:54
1	Co 228.616†	325916.5	325416.1	9896.1 ug/L	9896.1 ppb	15:47:59
1	Cr 267.716†	1769981.1	1766897.3	24162 ug/L	24162 ppb	15:47:54
1	Cu 324.752†	5711895.3	5693044.9	21239 ug/L	21239 ppb	15:47:48
1	Mn 257.610†	6143153.8	6132251.5	9832.4 ug/L	9832.4 ppb	15:47:48
1	Mo 202.031†	106652.2	106455.1	9797.3 ug/L	9797.3 ppb	15:47:59
1	Ni 231.604†	312669.5	312035.0	9983.0 ug/L	9983.0 ppb	15:47:59
1	P 214.914†	30780.8	30524.8	12882 ug/L	12882 ppb	15:47:59
1	Pb 220.353†	153637.5	153402.2	25022 ug/L	25022 ppb	15:47:59
1	S 181.975 Axial†	39768.5	39659.8	50681 ug/L	50681 ppb	15:47:59
1	Sb 206.836†	26558.7	26482.3	10953 ug/L	10953 ppb	15:47:59
1	Se 196.026†	16594.9	16583.6	10141 ug/L	10141 ppb	15:47:59
1	Si 251.611†	1293034.3	1290279.2	46746 ug/L	46746 ppb	15:47:54
1	Sn 189.927†	43938.2	43834.6	10372 ug/L	10372 ppb	15:47:59
1	Ti 334.940†	4982948.3	4975711.0	9999.5 ug/L	9999.5 ppb	15:47:48
1	Tl 190.801†	22469.2	22468.0	10378 ug/L	10378 ppb	15:47:59
1	U 409.014†	-1231.5	1009.9	-20.095 ug/L	-20.095 ppb	15:47:59
1	V 292.402†	1260815.3	1260326.8	10116 ug/L	10116 ppb	15:47:54
1	Zn 213.857†	1262211.8	1258913.0	13838 ug/L	13838 ppb	15:47:54
1	SiO2†	1313839.3	1311034.1	101670 ug/L	101670 ppb	15:48:45
2	Sc Radial	4798.0	4798.0	99.5 %		15:46:47
2	Y RADIAL	5081.3	5081.3	99.47 %		15:46:47
2	Al 396.153Radial†	415.1	500.4	5.0093 ug/L	5.0093 ppb	15:46:47
2	Ca 317.933Radial†	31.5	10.6	19.559 ug/L	19.559 ppb	15:47:07
2	Fe 238.204 Radial†	-17.3	-24.5	21.191 ug/L	21.191 ppb	15:47:07
2	K 766.490 Radial†	1537761.9	1542980.7	306320 ug/L	306320 ppb	15:46:42
2	Mg 279.077 IEC†	-5.6	-6.7	-173.81 ug/L	-173.81 ppb	15:47:07
2	Na 589.592 Radial†	32.5	587.7	209.28 ug/L	209.28 ppb	15:46:47
2	Sr 421.552†	1291529.0	1297785.2	9723.4 ug/L	9723.4 ppb	15:46:42
2	Sc 361.383	803228.7	803228.7	102.08 %		15:48:14
2	Y 371.029	704292.4	704292.4	100.39 %		15:48:14
2	Ag 328.068†	-6085.5	-6169.8	8.7746 ug/L	8.7746 ppb	15:48:19
2	As 188.979†	22026.9	21607.1	9654.0 ug/L	9654.0 ppb	15:48:19
2	B 249.677†	203267.6	199272.5	5013.9 ug/L	5013.9 ppb	15:48:14
2	Ba 233.527†	1167929.4	1144139.0	13569 ug/L	13569 ppb	15:48:14
2	Be 313.107†	7233370.2	7095462.3	2848.6 ug/L	2848.6 ppb	15:48:07
2	Cd 226.502†	700273.4	686203.7	9750.5 ug/L	9750.5 ppb	15:48:14
2	Co 228.616†	330121.0	323452.2	9836.4 ug/L	9836.4 ppb	15:48:19
2	Cr 267.716†	1805494.3	1768652.4	24186 ug/L	24186 ppb	15:48:14
2	Cu 324.752†	5749704.3	5623477.6	20979 ug/L	20979 ppb	15:48:07
2	Mn 257.610†	6200743.1	6074012.6	9739.0 ug/L	9739.0 ppb	15:48:07
2	Mo 202.031†	108064.5	105848.2	9741.4 ug/L	9741.4 ppb	15:48:19
2	Ni 231.604†	316536.8	309987.9	9917.5 ug/L	9917.5 ppb	15:48:19

2	P 214.914†	31180.7	30342.1	12831 ug/L	12831 ppb	15:48:19
2	Pb 220.353†	155557.9	152416.1	24861 ug/L	24861 ppb	15:48:19
2	S 181.975 Axial†	40346.0	39483.3	50455 ug/L	50455 ppb	15:48:19
2	Sb 206.836†	26960.9	26380.7	10911 ug/L	10911 ppb	15:48:19
2	Se 196.026†	16827.0	16501.2	10091 ug/L	10091 ppb	15:48:19
2	Si 251.611†	1327490.6	1299900.6	47096 ug/L	47096 ppb	15:48:14
2	Sn 189.927†	44566.1	43629.7	10324 ug/L	10324 ppb	15:48:19
2	Ti 334.940†	5021664.0	4920636.9	9888.7 ug/L	9888.7 ppb	15:48:07
2	Tl 190.801†	22828.1	22400.1	10346 ug/L	10346 ppb	15:48:19
2	U 409.014†	-1212.8	1051.1	-18.760 ug/L	-18.760 ppb	15:48:19
2	V 292.402†	1286524.3	1261980.5	10128 ug/L	10128 ppb	15:48:14
2	Zn 213.857†	1286907.6	1259548.0	13846 ug/L	13846 ppb	15:48:14
2	SiO2†	1333761.8	1306029.4	101280 ug/L	101280 ppb	15:48:51
3	Sc Radial	4760.8	4760.8	98.7 %		15:47:18
3	Y RADIAL	5044.7	5044.7	98.75 %		15:47:18
3	Al 396.153Radial†	391.5	479.8	-13.946 ug/L	-13.946 ppb	15:47:18
3	Ca 317.933Radial†	35.2	14.6	27.054 ug/L	27.054 ppb	15:47:38
3	Fe 238.204 Radial†	-19.3	-26.7	-3.2213 ug/L	-3.2213 ppb	15:47:38
3	K 766.490 Radial†	1550217.4	1567683.3	311220 ug/L	311220 ppb	15:47:13
3	Mg 279.077 IEC†	-5.4	-6.5	-167.22 ug/L	-167.22 ppb	15:47:38
3	Na 589.592 Radial†	38.2	593.7	211.42 ug/L	211.42 ppb	15:47:18
3	Sr 421.552†	1303163.5	1319720.6	9887.7 ug/L	9887.7 ppb	15:47:13
3	Sc 361.383	804715.4	804715.4	102.27 %		15:48:34
3	Y 371.029	705075.0	705075.0	100.50 %		15:48:34
3	Ag 328.068†	-6170.6	-6242.0	8.3391 ug/L	8.3391 ppb	15:48:39
3	As 188.979†	22140.3	21678.1	9686.6 ug/L	9686.6 ppb	15:48:39
3	B 249.677†	203785.5	199411.1	5017.5 ug/L	5017.5 ppb	15:48:34
3	Ba 233.527†	1169096.2	1143166.2	13557 ug/L	13557 ppb	15:48:34
3	Be 313.107†	7319705.3	7166791.4	2877.3 ug/L	2877.3 ppb	15:48:27
3	Cd 226.502†	700153.2	684818.8	9730.8 ug/L	9730.8 ppb	15:48:34
3	Co 228.616†	330681.7	323402.9	9834.7 ug/L	9834.7 ppb	15:48:39
3	Cr 267.716†	1805765.0	1765649.4	24145 ug/L	24145 ppb	15:48:34
3	Cu 324.752†	5846797.7	5708011.6	21295 ug/L	21295 ppb	15:48:27
3	Mn 257.610†	6282814.3	6143041.1	9849.6 ug/L	9849.6 ppb	15:48:27
3	Mo 202.031†	108099.5	105686.8	9726.6 ug/L	9726.6 ppb	15:48:39
3	Ni 231.604†	317116.3	309981.7	9917.3 ug/L	9917.3 ppb	15:48:39
3	P 214.914†	31330.1	30431.8	12818 ug/L	12818 ppb	15:48:39
3	Pb 220.353†	155804.1	152375.2	24854 ug/L	24854 ppb	15:48:39
3	S 181.975 Axial†	40402.9	39465.9	50433 ug/L	50433 ppb	15:48:39
3	Sb 206.836†	26999.5	26369.6	10905 ug/L	10905 ppb	15:48:39
3	Se 196.026†	16900.9	16543.0	10116 ug/L	10116 ppb	15:48:39
3	Si 251.611†	1329803.7	1299759.8	47091 ug/L	47091 ppb	15:48:34
3	Sn 189.927†	44664.0	43644.7	10327 ug/L	10327 ppb	15:48:39
3	Ti 334.940†	5091000.0	4979346.7	10007 ug/L	10007 ppb	15:48:27
3	Tl 190.801†	22784.1	22315.8	10308 ug/L	10308 ppb	15:48:39
3	U 409.014†	-1065.9	1197.0	-13.768 ug/L	-13.768 ppb	15:48:39
3	V 292.402†	1287179.0	1260292.2	10115 ug/L	10115 ppb	15:48:34
3	Zn 213.857†	1287840.6	1258131.2	13830 ug/L	13830 ppb	15:48:34
3	SiO2†	1317902.8	1288108.3	99885 ug/L	99885 ppb	15:48:57

## Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	798718.6	101.51 %	1.160			1.14%
Sc Radial	4759.0	98.7 %	0.83			0.84%
Y 371.029	700302.9	99.824 %	1.0830			1.08%
Y RADIAL	5052.2	98.90 %	0.512			0.52%
Ag 328.068†	-6196.2	8.6026 ug/L	0.23173	8.6026 ppb	0.23173	2.69%
Al 396.153Radial†	492.7	-3.0284 ug/L	9.80050	-3.0284 ppb	9.80050	323.62%
As 188.979†	21657.7	9677.1 ug/L	20.08	9677.1 ppb	20.08	0.21%
QC value within limits for As 188.979 Recovery = 96.77%						
B 249.677†	199002.3	5007.1 ug/L	15.08	5007.1 ppb	15.08	0.30%
QC value within limits for B 249.677 Recovery = 100.14%						
Ba 233.527†	1142828.4	13553 ug/L	17.9	13553 ppb	17.9	0.13%
QC value within limits for Ba 233.527 Recovery = 90.35%						
Be 313.107†	7143194.0	2867.8 ug/L	16.61	2867.8 ppb	16.61	0.58%
QC value within limits for Be 313.107 Recovery = 95.59%						
Ca 317.933Radial†	14.8	27.406 ug/L	8.0289	27.406 ppb	8.0289	29.30%
Cd 226.502†	685080.5	9734.6 ug/L	14.44	9734.6 ppb	14.44	0.15%
QC value within limits for Cd 226.502 Recovery = 97.35%						

Co 228.616†	324090.4	9855.7 ug/L	34.95	9855.7 ppb	34.95	0.35%
QC value within limits for Co 228.616 Recovery = 98.56%						
Cr 267.716†	1767066.4	24164 ug/L	20.6	24164 ppb	20.6	0.09%
QC value within limits for Cr 267.716 Recovery = 96.66%						
Cu 324.752†	5674844.7	21171 ug/L	168.3	21171 ppb	168.3	0.79%
QC value within limits for Cu 324.752 Recovery = 105.86%						
Fe 238.204 Radial†	-24.5	21.947 ug/L	25.5543	21.947 ppb	25.5543	116.44%
K 766.490 Radial†	1553579.9	308420 ug/L	2525.1	308420 ppb	2525.1	0.82%
QC value within limits for K 766.490 Radial Recovery = 102.81%						
Mg 279.077 IEC†	-5.9	-140.92 ug/L	51.374	-140.92 ppb	51.374	36.46%
Mn 257.610†	6116435.1	9807.0 ug/L	59.54	9807.0 ppb	59.54	0.61%
QC value within limits for Mn 257.610 Recovery = 98.07%						
Mo 202.031†	105996.7	9755.1 ug/L	37.29	9755.1 ppb	37.29	0.38%
QC value within limits for Mo 202.031 Recovery = 97.55%						
Na 589.592 Radial†	590.2	210.19 ug/L	1.109	210.19 ppb	1.109	0.53%
Ni 231.604†	310668.2	9939.2 ug/L	37.87	9939.2 ppb	37.87	0.38%
QC value within limits for Ni 231.604 Recovery = 99.39%						
P 214.914†	30432.9	12844 ug/L	33.5	12844 ppb	33.5	0.26%
QC value less than the lower limit for P 214.914 Recovery = 85.62%						
Pb 220.353†	152731.1	24913 ug/L	94.9	24913 ppb	94.9	0.38%
QC value within limits for Pb 220.353 Recovery = 99.65%						
S 181.975 Axial†	39536.4	50523 ug/L	137.1	50523 ppb	137.1	0.27%
QC value within limits for S 181.975 Axial Recovery = 101.05%						
Sb 206.836†	26410.9	10923 ug/L	26.0	10923 ppb	26.0	0.24%
QC value within limits for Sb 206.836 Recovery = 109.23%						
Se 196.026†	16542.6	10116 ug/L	25.2	10116 ppb	25.2	0.25%
QC value within limits for Se 196.026 Recovery = 101.16%						
Si 251.611†	1296646.5	46977 ug/L	200.8	46977 ppb	200.8	0.43%
QC value within limits for Si 251.611 Recovery = 93.95%						
Sn 189.927†	43703.0	10341 ug/L	27.0	10341 ppb	27.0	0.26%
QC value within limits for Sn 189.927 Recovery = 103.41%						
Sr 421.552†	1307023.4	9792.6 ug/L	85.18	9792.6 ppb	85.18	0.87%
QC value within limits for Sr 421.552 Recovery = 97.93%						
Ti 334.940†	4958564.9	9965.0 ug/L	66.17	9965.0 ppb	66.17	0.66%
QC value within limits for Ti 334.940 Recovery = 99.65%						
Tl 190.801†	22394.6	10344 ug/L	34.7	10344 ppb	34.7	0.34%
QC value within limits for Tl 190.801 Recovery = 103.44%						
U 409.014†	1086.0	-17.541 ug/L	3.3349	-17.541 ppb	3.3349	19.01%
V 292.402†	1260866.5	10120 ug/L	7.6	10120 ppb	7.6	0.07%
QC value within limits for V 292.402 Recovery = 101.20%						
Zn 213.857†	1258864.0	13838 ug/L	8.1	13838 ppb	8.1	0.06%
QC value within limits for Zn 213.857 Recovery = 92.25%						
SiO2†	1301723.9	100940 ug/L	936.4	100940 ppb	936.4	0.93%
QC value within limits for SiO2 Recovery = 94.34%						

QC Failed. Continue with analysis.

=====  
Analysis Begun

Start Time: 3/3/2010 16:06:23

Plasma On Time: 3/1/2010 06:57:40

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\030310.sif

Batch ID:

Results Data Set: 030310

Results Library: C:\pe\Optima3\Results\Results.mdb  
=====

## Method Loaded

Method Name: General Eng.2AX

Method Last Saved: 3/3/2010 13:56:57

IEC File: 011110.iec

MSF File:

Method Description:

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Ag 328.068	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Al 396.153Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
As 188.979	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
B 249.677	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ba 233.527	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Be 313.107	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ca 317.933Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Cd 226.502	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Co 228.616	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cr 267.716	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cu 324.752	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Fe 238.204 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
K 766.490 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mg 279.077 IEC	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mn 257.610	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Mo 202.031	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Na 589.592 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Ni 231.604	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
P 214.914	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Pb 220.353	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
S 181.975 Axial	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sb 206.836	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sc 361.383	Lin Thru 0	Peak Area	Axial	n/a	n/a
Sc Radial	Lin, Calc Int	Peak Area	Radial	n/a	n/a
Se 196.026	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Si 251.611	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sn 189.927	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Ti 334.940	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Tl 190.801	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
U 409.014	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
V 292.402	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y 371.029	Lin, Calc Int	Peak Area	Axial	n/a	n/a
Zn 213.857	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y RADIAL	Lin, Calc Int	Peak Area	Radial	n/a	n/a
SiO2	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes

Sequence No.: 1

Autosampler Location: 7

Sample ID: CCV

Date Collected: 3/3/2010 16:06:24

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	4907.2	4907.2	102 %		16:08:16
1	Y RADIAL	5204.8	5204.8	101.9 %		16:08:16
1	Al 396.153Radial†	5260.1	5251.4	4986.4 ug/L	4986.4 ppb	16:08:16

1	Ca 317.933Radial†	2832.5	2761.9	5112.5 ug/L	5112.5 ppb	16:08:36
1	Fe 238.204 Radial†	470.5	455.2	5094.3 ug/L	5094.3 ppb	16:08:36
1	K 766.490 Radial†	28756.8	26009.8	5157.5 ug/L	5157.5 ppb	16:08:16
1	Mg 279.077 IEC†	129.7	126.4	5234.8 ug/L	5234.8 ppb	16:08:36
1	Na 589.592 Radial†	27549.1	27622.1	9836.5 ug/L	9836.5 ppb	16:08:16
1	Sr 421.552†	67667.6	66472.2	497.99 ug/L	497.99 ppb	16:08:16
1	Sc 361.383	830458.8	830458.8	105.54 %		16:09:33
1	Y 371.029	734710.6	734710.6	104.73 %		16:09:33
1	Ag 328.068†	99761.7	94317.0	486.01 ug/L	486.01 ppb	16:09:38
1	As 188.979†	1142.5	1111.4	497.56 ug/L	497.56 ppb	16:09:58
1	B 249.677†	20541.7	19608.8	493.93 ug/L	493.93 ppb	16:09:38
1	Ba 233.527†	43467.4	41185.1	488.85 ug/L	488.85 ppb	16:09:38
1	Be 313.107†	1295022.5	1236475.5	493.59 ug/L	493.59 ppb	16:09:33
1	Cd 226.502†	36288.2	34577.6	490.89 ug/L	490.89 ppb	16:09:38
1	Co 228.616†	16768.2	15943.4	485.03 ug/L	485.03 ppb	16:09:58
1	Cr 267.716†	37768.4	35720.2	488.77 ug/L	488.77 ppb	16:09:38
1	Cu 324.752†	145615.5	128861.6	480.74 ug/L	480.74 ppb	16:09:38
1	Mn 257.610†	321090.8	303809.6	487.41 ug/L	487.41 ppb	16:09:38
1	Mo 202.031†	5573.8	5266.1	485.10 ug/L	485.10 ppb	16:09:58
1	Ni 231.604†	16407.1	15444.6	494.12 ug/L	494.12 ppb	16:09:38
1	P 214.914†	4802.6	4347.1	2327.6 ug/L	2327.6 ppb	16:09:58
1	Pb 220.353†	3116.3	2979.4	487.55 ug/L	487.55 ppb	16:09:58
1	S 181.975 Axial†	841.2	756.1	965.33 ug/L	965.33 ppb	16:09:58
1	Sb 206.836†	1306.4	1206.7	499.87 ug/L	499.87 ppb	16:09:58
1	Se 196.026†	827.0	800.5	501.44 ug/L	501.44 ppb	16:09:58
1	Si 251.611†	71423.4	67124.1	2432.2 ug/L	2432.2 ppb	16:09:38
1	Sn 189.927†	2181.2	2038.1	482.87 ug/L	482.87 ppb	16:09:58
1	Ti 334.940†	251342.2	239408.8	481.42 ug/L	481.42 ppb	16:09:38
1	Tl 190.801†	1080.4	1060.7	490.03 ug/L	490.03 ppb	16:09:58
1	U 409.014†	12929.2	14489.8	484.95 ug/L	484.95 ppb	16:09:38
1	V 292.402†	63038.6	61391.1	493.40 ug/L	493.40 ppb	16:09:38
1	Zn 213.857†	47826.9	44170.0	484.21 ug/L	484.21 ppb	16:09:38
1	SiO2†	71240.0	66935.7	5191.0 ug/L	5191.0 ppb	16:11:05
2	Sc Radial	4925.1	4925.1	102 %		16:08:41
2	Y RADIAL	5186.0	5186.0	101.5 %		16:08:41
2	Al 396.153Radial†	5287.5	5259.5	4994.2 ug/L	4994.2 ppb	16:08:41
2	Ca 317.933Radial†	2833.8	2753.0	5096.1 ug/L	5096.1 ppb	16:09:01
2	Fe 238.204 Radial†	472.1	455.0	5092.4 ug/L	5092.4 ppb	16:09:01
2	K 766.490 Radial†	28880.7	26028.4	5161.2 ug/L	5161.2 ppb	16:08:41
2	Mg 279.077 IEC†	129.7	125.9	5213.0 ug/L	5213.0 ppb	16:09:01
2	Na 589.592 Radial†	27462.2	27438.6	9771.2 ug/L	9771.2 ppb	16:08:41
2	Sr 421.552†	67678.8	66241.3	496.26 ug/L	496.26 ppb	16:08:41
2	Sc 361.383	827441.7	827441.7	105.16 %		16:10:04
2	Y 371.029	733008.4	733008.4	104.49 %		16:10:04
2	Ag 328.068†	100069.9	94954.6	489.30 ug/L	489.30 ppb	16:10:09
2	As 188.979†	1142.5	1115.3	499.32 ug/L	499.32 ppb	16:10:29
2	B 249.677†	20764.6	19891.7	501.09 ug/L	501.09 ppb	16:10:09
2	Ba 233.527†	43622.2	41482.5	492.39 ug/L	492.39 ppb	16:10:09
2	Be 313.107†	1291196.9	1237311.7	493.93 ug/L	493.93 ppb	16:10:04
2	Cd 226.502†	36266.6	34682.5	492.38 ug/L	492.38 ppb	16:10:09
2	Co 228.616†	16704.1	15940.4	484.92 ug/L	484.92 ppb	16:10:29
2	Cr 267.716†	37917.4	35992.5	492.50 ug/L	492.50 ppb	16:10:09
2	Cu 324.752†	146304.3	130019.8	485.06 ug/L	485.06 ppb	16:10:09
2	Mn 257.610†	322268.3	306038.6	490.99 ug/L	490.99 ppb	16:10:09
2	Mo 202.031†	5533.0	5246.5	483.30 ug/L	483.30 ppb	16:10:29
2	Ni 231.604†	16496.3	15586.0	498.65 ug/L	498.65 ppb	16:10:09
2	P 214.914†	4777.5	4339.8	2322.7 ug/L	2322.7 ppb	16:10:29
2	Pb 220.353†	3129.5	3002.7	491.34 ug/L	491.34 ppb	16:10:29
2	S 181.975 Axial†	837.1	755.2	964.10 ug/L	964.10 ppb	16:10:29
2	Sb 206.836†	1311.2	1215.8	503.55 ug/L	503.55 ppb	16:10:29
2	Se 196.026†	817.2	794.1	497.53 ug/L	497.53 ppb	16:10:29
2	Si 251.611†	71581.2	67520.9	2446.6 ug/L	2446.6 ppb	16:10:09
2	Sn 189.927†	2197.5	2061.1	488.33 ug/L	488.33 ppb	16:10:29
2	Ti 334.940†	252460.1	241340.2	485.30 ug/L	485.30 ppb	16:10:09
2	Tl 190.801†	1077.3	1061.5	490.43 ug/L	490.43 ppb	16:10:29
2	U 409.014†	12923.8	14529.3	486.27 ug/L	486.27 ppb	16:10:09
2	V 292.402†	63383.8	61937.2	497.70 ug/L	497.70 ppb	16:10:09
2	Zn 213.857†	47922.9	44426.4	487.01 ug/L	487.01 ppb	16:10:09
2	SiO2†	72339.8	68227.7	5291.6 ug/L	5291.6 ppb	16:11:10
3	Sc Radial	4938.3	4938.3	102 %		16:09:06
3	Y RADIAL	5216.3	5216.3	102.1 %		16:09:06

3	Al 396.153Radial†	5362.7	5319.0	5050.8 ug/L	5050.8 ppb	16:09:06
3	Ca 317.933Radial†	2845.4	2756.9	5103.2 ug/L	5103.2 ppb	16:09:26
3	Fe 238.204 Radial†	476.7	458.4	5129.6 ug/L	5129.6 ppb	16:09:26
3	K 766.490 Radial†	29177.1	26242.1	5203.6 ug/L	5203.6 ppb	16:09:06
3	Mg 279.077 IEC†	130.1	126.0	5217.2 ug/L	5217.2 ppb	16:09:26
3	Na 589.592 Radial†	27740.5	27638.4	9842.3 ug/L	9842.3 ppb	16:09:06
3	Sr 421.552†	68352.6	66721.8	499.86 ug/L	499.86 ppb	16:09:06
3	Sc 361.383	825278.9	825278.9	104.88 %		16:10:35
3	Y 371.029	731017.0	731017.0	104.20 %		16:10:35
3	Ag 328.068†	99248.4	94420.8	486.57 ug/L	486.57 ppb	16:10:40
3	As 188.979†	1146.6	1122.0	502.31 ug/L	502.31 ppb	16:11:00
3	B 249.677†	20630.5	19815.6	499.15 ug/L	499.15 ppb	16:10:40
3	Ba 233.527†	43455.4	41432.1	491.79 ug/L	491.79 ppb	16:10:40
3	Be 313.107†	1287097.7	1236621.2	493.65 ug/L	493.65 ppb	16:10:35
3	Cd 226.502†	36279.9	34785.6	493.84 ug/L	493.84 ppb	16:10:40
3	Co 228.616†	16755.7	16031.2	487.70 ug/L	487.70 ppb	16:11:00
3	Cr 267.716†	37777.0	35953.1	491.96 ug/L	491.96 ppb	16:10:40
3	Cu 324.752†	144946.8	129090.0	481.60 ug/L	481.60 ppb	16:10:40
3	Mn 257.610†	320649.2	305298.1	489.80 ug/L	489.80 ppb	16:10:40
3	Mo 202.031†	5557.7	5283.9	486.75 ug/L	486.75 ppb	16:11:00
3	Ni 231.604†	16451.6	15584.5	498.60 ug/L	498.60 ppb	16:10:40
3	P 214.914†	4805.3	4378.2	2344.8 ug/L	2344.8 ppb	16:11:00
3	Pb 220.353†	3113.5	2995.3	490.17 ug/L	490.17 ppb	16:11:00
3	S 181.975 Axial†	832.1	752.5	960.68 ug/L	960.68 ppb	16:11:00
3	Sb 206.836†	1305.0	1213.2	502.57 ug/L	502.57 ppb	16:11:00
3	Se 196.026†	828.2	806.6	505.25 ug/L	505.25 ppb	16:11:00
3	Si 251.611†	71157.1	67295.0	2438.3 ug/L	2438.3 ppb	16:10:40
3	Sn 189.927†	2192.9	2062.2	488.58 ug/L	488.58 ppb	16:11:00
3	Ti 334.940†	250625.9	240220.5	483.05 ug/L	483.05 ppb	16:10:40
3	Tl 190.801†	1074.3	1061.3	490.30 ug/L	490.30 ppb	16:11:00
3	U 409.014†	12779.9	14424.4	482.74 ug/L	482.74 ppb	16:10:40
3	V 292.402†	63016.3	61744.8	496.22 ug/L	496.22 ppb	16:10:40
3	Zn 213.857†	47715.5	44348.2	486.15 ug/L	486.15 ppb	16:10:40
3	SiO2†	70997.4	67128.0	5206.0 ug/L	5206.0 ppb	16:11:15

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	827726.5	105.19 %	0.331			0.31%
Sc Radial	4923.5	102 %	0.3			0.32%
Y 371.029	732912.0	104.47 %	0.264			0.25%
Y RADIAL	5202.4	101.8 %	0.30			0.29%
Ag 328.068†	94564.1	487.29 ug/L	1.756	487.29 ppb	1.756	0.36%
QC value within limits for Ag 328.068 Recovery = 97.46%						
Al 396.153Radial†	5276.6	5010.5 ug/L	35.14	5010.5 ppb	35.14	0.70%
QC value within limits for Al 396.153Radial Recovery = 100.21%						
As 188.979†	1116.2	499.73 ug/L	2.403	499.73 ppb	2.403	0.48%
QC value within limits for As 188.979 Recovery = 99.95%						
B 249.677†	19772.0	498.06 ug/L	3.703	498.06 ppb	3.703	0.74%
QC value within limits for B 249.677 Recovery = 99.61%						
Ba 233.527†	41366.5	491.01 ug/L	1.890	491.01 ppb	1.890	0.38%
QC value within limits for Ba 233.527 Recovery = 98.20%						
Be 313.107†	1236802.8	493.72 ug/L	0.182	493.72 ppb	0.182	0.04%
QC value within limits for Be 313.107 Recovery = 98.74%						
Ca 317.933Radial†	2757.3	5103.9 ug/L	8.21	5103.9 ppb	8.21	0.16%
QC value within limits for Ca 317.933Radial Recovery = 102.08%						
Cd 226.502†	34681.9	492.37 ug/L	1.476	492.37 ppb	1.476	0.30%
QC value within limits for Cd 226.502 Recovery = 98.47%						
Co 228.616†	15971.7	485.88 ug/L	1.572	485.88 ppb	1.572	0.32%
QC value within limits for Co 228.616 Recovery = 97.18%						
Cr 267.716†	35888.6	491.08 ug/L	2.014	491.08 ppb	2.014	0.41%
QC value within limits for Cr 267.716 Recovery = 98.22%						
Cu 324.752†	129323.8	482.47 ug/L	2.288	482.47 ppb	2.288	0.47%
QC value within limits for Cu 324.752 Recovery = 96.49%						
Fe 238.204 Radial†	456.2	5105.5 ug/L	20.93	5105.5 ppb	20.93	0.41%
QC value within limits for Fe 238.204 Radial Recovery = 102.11%						
K 766.490 Radial†	26093.4	5174.1 ug/L	25.62	5174.1 ppb	25.62	0.50%
QC value within limits for K 766.490 Radial Recovery = 103.48%						
Mg 279.077 IEC†	126.1	5221.7 ug/L	11.53	5221.7 ppb	11.53	0.22%
QC value within limits for Mg 279.077 IEC Recovery = 104.43%						

Mn 257.610†	305048.8	489.40 ug/L	1.821	489.40 ppb	1.821	0.37%
QC value within limits for Mn 257.610 Recovery = 97.88%						
Mo 202.031†	5265.5	485.05 ug/L	1.723	485.05 ppb	1.723	0.36%
QC value within limits for Mo 202.031 Recovery = 97.01%						
Na 589.592 Radial†	27566.4	9816.7 ug/L	39.50	9816.7 ppb	39.50	0.40%
QC value within limits for Na 589.592 Radial Recovery = 98.17%						
Ni 231.604†	15538.4	497.13 ug/L	2.601	497.13 ppb	2.601	0.52%
QC value within limits for Ni 231.604 Recovery = 99.43%						
P 214.914†	4355.0	2331.7 ug/L	11.58	2331.7 ppb	11.58	0.50%
QC value within limits for P 214.914 Recovery = 93.27%						
Pb 220.353†	2992.5	489.69 ug/L	1.940	489.69 ppb	1.940	0.40%
QC value within limits for Pb 220.353 Recovery = 97.94%						
S 181.975 Axial†	754.6	963.37 ug/L	2.414	963.37 ppb	2.414	0.25%
QC value within limits for S 181.975 Axial Recovery = 96.34%						
Sb 206.836†	1211.9	502.00 ug/L	1.908	502.00 ppb	1.908	0.38%
QC value within limits for Sb 206.836 Recovery = 100.40%						
Se 196.026†	800.4	501.41 ug/L	3.862	501.41 ppb	3.862	0.77%
QC value within limits for Se 196.026 Recovery = 100.28%						
Si 251.611†	67313.3	2439.0 ug/L	7.24	2439.0 ppb	7.24	0.30%
QC value within limits for Si 251.611 Recovery = 97.56%						
Sn 189.927†	2053.8	486.59 ug/L	3.226	486.59 ppb	3.226	0.66%
QC value within limits for Sn 189.927 Recovery = 97.32%						
Sr 421.552†	66478.4	498.04 ug/L	1.800	498.04 ppb	1.800	0.36%
QC value within limits for Sr 421.552 Recovery = 99.61%						
Ti 334.940†	240323.2	483.26 ug/L	1.949	483.26 ppb	1.949	0.40%
QC value within limits for Ti 334.940 Recovery = 96.65%						
Tl 190.801†	1061.2	490.25 ug/L	0.207	490.25 ppb	0.207	0.04%
QC value within limits for Tl 190.801 Recovery = 98.05%						
U 409.014†	14481.2	484.65 ug/L	1.782	484.65 ppb	1.782	0.37%
QC value within limits for U 409.014 Recovery = 96.93%						
V 292.402†	61691.0	495.77 ug/L	2.186	495.77 ppb	2.186	0.44%
QC value within limits for V 292.402 Recovery = 99.15%						
Zn 213.857†	44314.8	485.79 ug/L	1.435	485.79 ppb	1.435	0.30%
QC value within limits for Zn 213.857 Recovery = 97.16%						
SiO2†	67430.5	5229.5 ug/L	54.24	5229.5 ppb	54.24	1.04%
QC value within limits for SiO2 Recovery = 97.79%						

All analyte(s) passed QC.

Sequence No.: 2

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/3/2010 16:13:26

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4866.4	4866.4	101 %		16:15:18
1	Y RADIAL	5212.6	5212.6	102.0 %		16:15:18
1	Al 396.153Radial†	-87.9	-3.7	-3.5599 ug/L	-3.5599 ppb	16:15:38
1	Ca 317.933Radial†	22.4	1.1	2.0307 ug/L	2.0307 ppb	16:15:38
1	Fe 238.204 Radial†	9.1	1.9	21.172 ug/L	21.172 ppb	16:15:38
1	K 766.490 Radial†	2524.3	257.0	51.023 ug/L	51.023 ppb	16:15:18
1	Mg 279.077 IEC†	0.5	-0.5	-22.110 ug/L	-22.110 ppb	16:15:38
1	Na 589.592 Radial†	-529.2	30.7	10.936 ug/L	10.936 ppb	16:15:18
1	Sr 421.552†	2.1	-9.5	-0.0714 ug/L	-0.0714 ppb	16:15:18
1	Sc 361.383	798870.5	798870.5	101.53 %		16:16:35
1	Y 371.029	712397.7	712397.7	101.55 %		16:16:35
1	Ag 328.068†	280.7	68.2	0.3561 ug/L	0.3561 ppb	16:16:35
1	As 188.979†	-30.4	-1.1	-0.5000 ug/L	-0.5000 ppb	16:16:55
1	B 249.677†	321.0	461.4	11.672 ug/L	11.672 ppb	16:16:55
1	Ba 233.527†	20.6	19.6	0.2313 ug/L	0.2313 ppb	16:16:55
1	Be 313.107†	-9427.2	143.7	0.0579 ug/L	0.0579 ppb	16:16:35
1	Cd 226.502†	-163.0	33.7	0.4765 ug/L	0.4765 ppb	16:16:55
1	Co 228.616†	-49.6	6.5	0.1968 ug/L	0.1968 ppb	16:16:55
1	Cr 267.716†	83.5	16.7	0.2284 ug/L	0.2284 ppb	16:16:55
1	Cu 324.752†	8798.9	-443.8	-1.6528 ug/L	-1.6528 ppb	16:16:35
1	Mn 257.610†	478.3	44.1	0.0736 ug/L	0.0736 ppb	16:16:55
1	Mo 202.031†	16.8	1.4	0.1271 ug/L	0.1271 ppb	16:16:55
1	Ni 231.604†	108.7	5.7	0.1830 ug/L	0.1830 ppb	16:16:55
1	P 214.914†	204.7	-1.8	-0.7146 ug/L	-0.7146 ppb	16:16:55
1	Pb 220.353†	-35.0	-7.8	-1.2782 ug/L	-1.2782 ppb	16:16:55
1	S 181.975 Axial†	42.8	1.3	1.6504 ug/L	1.6504 ppb	16:16:55
1	Sb 206.836†	42.0	10.3	4.1248 ug/L	4.1248 ppb	16:16:55
1	Se 196.026†	-24.5	-7.1	-4.3038 ug/L	-4.3038 ppb	16:16:55
1	Si 251.611†	611.8	52.3	1.8986 ug/L	1.8986 ppb	16:16:55
1	Sn 189.927†	29.4	0.3	0.0798 ug/L	0.0798 ppb	16:16:55
1	Ti 334.940†	-1132.1	144.6	0.2941 ug/L	0.2941 ppb	16:16:35
1	Tl 190.801†	-28.2	9.3	4.2665 ug/L	4.2665 ppb	16:16:55
1	U 409.014†	-2365.3	-90.5	-3.0416 ug/L	-3.0416 ppb	16:16:35
1	V 292.402†	-1757.1	-69.2	-0.5571 ug/L	-0.5571 ppb	16:16:35
1	Zn 213.857†	942.7	-218.0	-2.4147 ug/L	-2.4147 ppb	16:16:55
1	SiO2†	618.8	44.6	3.4671 ug/L	3.4671 ppb	16:17:51
2	Sc Radial	4810.8	4810.8	99.8 %		16:15:43
2	Y RADIAL	5124.8	5124.8	100.3 %		16:15:43
2	Al 396.153Radial†	-79.8	3.3	3.1231 ug/L	3.1231 ppb	16:16:03
2	Ca 317.933Radial†	18.1	-3.0	-5.4623 ug/L	-5.4623 ppb	16:16:03
2	Fe 238.204 Radial†	6.8	-0.2	-2.5859 ug/L	-2.5859 ppb	16:16:03
2	K 766.490 Radial†	2631.8	393.7	78.162 ug/L	78.162 ppb	16:15:43
2	Mg 279.077 IEC†	3.5	2.4	101.27 ug/L	101.27 ppb	16:16:03
2	Na 589.592 Radial†	-502.3	51.6	18.392 ug/L	18.392 ppb	16:15:43
2	Sr 421.552†	17.4	5.8	0.0439 ug/L	0.0439 ppb	16:15:43
2	Sc 361.383	788854.8	788854.8	100.25 %		16:17:01
2	Y 371.029	705066.5	705066.5	100.50 %		16:17:01
2	Ag 328.068†	248.5	39.6	0.2078 ug/L	0.2078 ppb	16:17:01
2	As 188.979†	-25.8	3.1	1.3777 ug/L	1.3777 ppb	16:17:21
2	B 249.677†	277.4	422.1	10.680 ug/L	10.680 ppb	16:17:21
2	Ba 233.527†	8.2	7.5	0.0890 ug/L	0.0890 ppb	16:17:21
2	Be 313.107†	-9230.8	221.8	0.0884 ug/L	0.0884 ppb	16:17:01
2	Cd 226.502†	-165.2	29.4	0.4170 ug/L	0.4170 ppb	16:17:21
2	Co 228.616†	-61.3	-5.8	-0.1735 ug/L	-0.1735 ppb	16:17:21
2	Cr 267.716†	66.5	0.7	0.0122 ug/L	0.0122 ppb	16:17:21
2	Cu 324.752†	8628.1	-504.1	-1.8769 ug/L	-1.8769 ppb	16:17:01
2	Mn 257.610†	471.3	43.0	0.0646 ug/L	0.0646 ppb	16:17:21
2	Mo 202.031†	22.5	7.2	0.6635 ug/L	0.6635 ppb	16:17:21
2	Ni 231.604†	96.7	-4.9	-0.1568 ug/L	-0.1568 ppb	16:17:21



2	P 214.914†	215.0	11.0	6.5252 ug/L	6.5252 ppb	16:17:21
2	Pb 220.353†	-34.8	-8.0	-1.3055 ug/L	-1.3055 ppb	16:17:21
2	S 181.975 Axial†	36.6	-4.3	-5.5382 ug/L	-5.5382 ppb	16:17:21
2	Sb 206.836†	41.2	10.0	4.0205 ug/L	4.0205 ppb	16:17:21
2	Se 196.026†	-12.3	4.7	2.8513 ug/L	2.8513 ppb	16:17:21
2	Si 251.611†	612.9	61.1	2.2112 ug/L	2.2112 ppb	16:17:21
2	Sn 189.927†	26.3	-2.4	-0.5666 ug/L	-0.5666 ppb	16:17:21
2	Ti 334.940†	-1250.8	11.9	0.0180 ug/L	0.0180 ppb	16:17:01
2	Tl 190.801†	-32.3	4.8	2.2035 ug/L	2.2035 ppb	16:17:21
2	U 409.014†	-2452.5	-207.0	-6.9516 ug/L	-6.9516 ppb	16:17:01
2	V 292.402†	-1657.5	8.2	0.0633 ug/L	0.0633 ppb	16:17:01
2	Zn 213.857†	939.0	-209.9	-2.3190 ug/L	-2.3190 ppb	16:17:21
2	SiO2†	614.6	48.2	3.7292 ug/L	3.7292 ppb	16:17:56
3	Sc Radial	4971.2	4971.2	103 %		16:16:08
3	Y RADIAL	5285.2	5285.2	103.5 %		16:16:08
3	Al 396.153Radial†	-87.2	-1.2	-1.1981 ug/L	-1.1981 ppb	16:16:28
3	Ca 317.933Radial†	17.9	-3.7	-6.8029 ug/L	-6.8029 ppb	16:16:28
3	Fe 238.204 Radial†	6.2	-1.0	-11.474 ug/L	-11.474 ppb	16:16:28
3	K 766.490 Radial†	2601.7	279.4	55.464 ug/L	55.464 ppb	16:16:08
3	Mg 279.077 IEC†	3.0	1.9	78.883 ug/L	78.883 ppb	16:16:28
3	Na 589.592 Radial†	-489.6	80.1	28.531 ug/L	28.531 ppb	16:16:08
3	Sr 421.552†	45.9	33.0	0.2472 ug/L	0.2472 ppb	16:16:08
3	Sc 361.383	789719.8	789719.8	100.36 %		16:17:26
3	Y 371.029	705915.0	705915.0	100.62 %		16:17:26
3	Ag 328.068†	279.6	70.4	0.3559 ug/L	0.3559 ppb	16:17:26
3	As 188.979†	-30.7	-1.7	-0.7632 ug/L	-0.7632 ppb	16:17:46
3	B 249.677†	234.8	379.3	9.5985 ug/L	9.5985 ppb	16:17:46
3	Ba 233.527†	3.1	2.4	0.0274 ug/L	0.0274 ppb	16:17:46
3	Be 313.107†	-9247.3	215.4	0.0861 ug/L	0.0861 ppb	16:17:26
3	Cd 226.502†	-184.7	10.3	0.1464 ug/L	0.1464 ppb	16:17:46
3	Co 228.616†	-61.7	-6.1	-0.1856 ug/L	-0.1856 ppb	16:17:46
3	Cr 267.716†	96.1	30.1	0.4110 ug/L	0.4110 ppb	16:17:46
3	Cu 324.752†	8673.3	-468.5	-1.7481 ug/L	-1.7481 ppb	16:17:26
3	Mn 257.610†	459.0	30.3	0.0442 ug/L	0.0442 ppb	16:17:46
3	Mo 202.031†	17.3	2.1	0.1887 ug/L	0.1887 ppb	16:17:46
3	Ni 231.604†	87.6	-14.1	-0.4507 ug/L	-0.4507 ppb	16:17:46
3	P 214.914†	199.7	-4.4	-2.0934 ug/L	-2.0934 ppb	16:17:46
3	Pb 220.353†	-26.6	0.2	0.0362 ug/L	0.0362 ppb	16:17:46
3	S 181.975 Axial†	46.5	5.5	6.9668 ug/L	6.9668 ppb	16:17:46
3	Sb 206.836†	46.7	15.5	6.2248 ug/L	6.2248 ppb	16:17:46
3	Se 196.026†	-20.0	-3.0	-1.8672 ug/L	-1.8672 ppb	16:17:46
3	Si 251.611†	599.8	47.4	1.7188 ug/L	1.7188 ppb	16:17:46
3	Sn 189.927†	38.1	9.3	2.2069 ug/L	2.2069 ppb	16:17:46
3	Ti 334.940†	-1198.1	65.8	0.1252 ug/L	0.1252 ppb	16:17:26
3	Tl 190.801†	-35.1	2.0	0.9377 ug/L	0.9377 ppb	16:17:46
3	U 409.014†	-2265.9	-18.5	-0.6195 ug/L	-0.6195 ppb	16:17:26
3	V 292.402†	-1713.2	-45.6	-0.3569 ug/L	-0.3569 ppb	16:17:26
3	Zn 213.857†	935.0	-214.9	-2.3706 ug/L	-2.3706 ppb	16:17:46
3	SiO2†	604.7	37.7	2.9246 ug/L	2.9246 ppb	16:18:01

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	792481.7	100.71 %	0.705			0.70%
Sc Radial	4882.8	101 %	1.7			1.67%
Y 371.029	707793.1	100.89 %	0.572			0.57%
Y RADIAL	5207.5	101.9 %	1.57			1.54%
Ag 328.068†	59.4	0.3066 ug/L	0.08555	0.3066 ppb	0.08555	27.90%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-0.6	-0.5450 ug/L	3.38904	-0.5450 ppb	3.38904	621.85%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	0.1	0.0382 ug/L	1.16750	0.0382 ppb	1.16750	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	420.9	10.650 ug/L	1.0369	10.650 ppb	1.0369	9.74%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	9.8	0.1159 ug/L	0.10457	0.1159 ppb	0.10457	90.21%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	193.6	0.0775 ug/L	0.01698	0.0775 ppb	0.01698	21.91%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-1.8	-3.4115 ug/L	4.76049	-3.4115 ppb	4.76049	139.54%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd 226.502†	24.5	0.3466 ug/L	0.17591	0.3466 ppb	0.17591	50.75%	
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	-1.8	-0.0541 ug/L	0.21735	-0.0541 ppb	0.21735	401.63%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	15.8	0.2172 ug/L	0.19963	0.2172 ppb	0.19963	91.90%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	-472.1	-1.7593 ug/L	0.11246	-1.7593 ppb	0.11246	6.39%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	0.2	2.3710 ug/L	16.87810	2.3710 ppb	16.87810	711.86%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	310.1	61.550 ug/L	14.5566	61.550 ppb	14.5566	23.65%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	1.3	52.680 ug/L	65.7306	52.680 ppb	65.7306	124.77%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	39.1	0.0608 ug/L	0.01506	0.0608 ppb	0.01506	24.76%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	3.5	0.3264 ug/L	0.29352	0.3264 ppb	0.29352	89.92%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	54.2	19.287 ug/L	8.8315	19.287 ppb	8.8315	45.79%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	-4.4	-0.1415 ug/L	0.31715	-0.1415 ppb	0.31715	224.10%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	1.6	1.2391 ug/L	4.62954	1.2391 ppb	4.62954	373.63%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	-5.2	-0.8492 ug/L	0.76685	-0.8492 ppb	0.76685	90.30%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	0.8	1.0263 ug/L	6.27584	1.0263 ppb	6.27584	611.49%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	11.9	4.7901 ug/L	1.24366	4.7901 ppb	1.24366	25.96%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	-1.8	-1.1066 ug/L	3.63767	-1.1066 ppb	3.63767	328.73%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	53.6	1.9429 ug/L	0.24920	1.9429 ppb	0.24920	12.83%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	2.4	0.5734 ug/L	1.45115	0.5734 ppb	1.45115	253.08%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	9.8	0.0732 ug/L	0.16135	0.0732 ppb	0.16135	220.36%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	74.1	0.1458 ug/L	0.13918	0.1458 ppb	0.13918	95.48%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	5.4	2.4692 ug/L	1.68022	2.4692 ppb	1.68022	68.05%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	-105.3	-3.5376 ug/L	3.19507	-3.5376 ppb	3.19507	90.32%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	-35.5	-0.2836 ug/L	0.31662	-0.2836 ppb	0.31662	111.66%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	-214.3	-2.3681 ug/L	0.04792	-2.3681 ppb	0.04792	2.02%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†	43.5	3.3736 ug/L	0.41033	3.3736 ppb	0.41033	12.16%	
QC value within limits for SiO2 Recovery = Not calculated							
All analyte(s) passed QC.							

## ===== Analysis Begun

Start Time: 3/3/2010 17:34:02

Plasma On Time: 3/1/2010 06:57:40

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\030310.sif

Batch ID:

Results Data Set: 030310

Results Library: C:\pe\Optima3\Results\Results.mdb
=====

Sequence No.: 1

Autosampler Location: 7

Sample ID: CCV

Date Collected: 3/3/2010 17:34:03

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	5007.7	5007.7	104 %		17:35:55
1	Y RADIAL	5336.6	5336.6	104.5 %		17:35:55
1	Al 396.153Radial†	5461.9	5341.9	5072.4 ug/L	5072.4 ppb	17:35:55
1	Ca 317.933Radial†	2842.7	2715.9	5027.3 ug/L	5027.3 ppb	17:36:15
1	Fe 238.204 Radial†	478.9	454.0	5081.2 ug/L	5081.2 ppb	17:36:15
1	K 766.490 Radial†	29257.3	25924.5	5140.5 ug/L	5140.5 ppb	17:35:55
1	Mg 279.077 IEC†	132.8	126.9	5252.7 ug/L	5252.7 ppb	17:36:15
1	Na 589.592 Radial†	28906.5	28385.6	10108 ug/L	10108 ppb	17:35:55
1	Sr 421.552†	70948.0	68295.7	511.65 ug/L	511.65 ppb	17:35:55
1	Sc 361.383	821405.6	821405.6	104.39 %		17:37:12
1	Y 371.029	726369.9	726369.9	103.54 %		17:37:12
1	Ag 328.068†	100117.2	95699.3	493.11 ug/L	493.11 ppb	17:37:17
1	As 188.979†	1144.7	1125.4	503.84 ug/L	503.84 ppb	17:37:37
1	B 249.677†	19962.2	19268.2	485.29 ug/L	485.29 ppb	17:37:17
1	Ba 233.527†	43736.1	41896.4	497.29 ug/L	497.29 ppb	17:37:17
1	Be 313.107†	1291995.0	1247099.4	497.84 ug/L	497.84 ppb	17:37:12
1	Cd 226.502†	36368.7	35033.7	497.37 ug/L	497.37 ppb	17:37:17
1	Co 228.616†	16901.9	16246.6	494.25 ug/L	494.25 ppb	17:37:37
1	Cr 267.716†	37898.2	36239.1	495.87 ug/L	495.87 ppb	17:37:17
1	Cu 324.752†	146468.7	131199.7	489.46 ug/L	489.46 ppb	17:37:17
1	Mn 257.610†	323121.5	309108.0	495.91 ug/L	495.91 ppb	17:37:17
1	Mo 202.031†	5595.6	5345.1	492.38 ug/L	492.38 ppb	17:37:37
1	Ni 231.604†	16475.8	15681.7	501.71 ug/L	501.71 ppb	17:37:17
1	P 214.914†	4846.9	4439.7	2377.7 ug/L	2377.7 ppb	17:37:37
1	Pb 220.353†	3180.2	3073.2	502.88 ug/L	502.88 ppb	17:37:37
1	S 181.975 Axial†	834.7	758.7	968.60 ug/L	968.60 ppb	17:37:37
1	Sb 206.836†	1302.0	1216.2	504.18 ug/L	504.18 ppb	17:37:37
1	Se 196.026†	831.3	813.3	509.21 ug/L	509.21 ppb	17:37:37
1	Si 251.611†	71772.5	68204.4	2471.3 ug/L	2471.3 ppb	17:37:17
1	Sn 189.927†	2260.1	2136.4	506.14 ug/L	506.14 ppb	17:37:37
1	Ti 334.940†	253065.8	243684.6	490.00 ug/L	490.00 ppb	17:37:17
1	Tl 190.801†	1090.8	1081.9	499.82 ug/L	499.82 ppb	17:37:37
1	U 409.014†	12982.3	14675.7	491.18 ug/L	491.18 ppb	17:37:17
1	V 292.402†	63287.5	62287.9	500.62 ug/L	500.62 ppb	17:37:17
1	Zn 213.857†	47911.5	44750.4	490.57 ug/L	490.57 ppb	17:37:17
1	SiO2†	72734.6	69111.5	5360.0 ug/L	5360.0 ppb	17:38:44
2	Sc Radial	4983.5	4983.5	103 %		17:36:20
2	Y RADIAL	5236.5	5236.5	102.5 %		17:36:20
2	Al 396.153Radial†	5395.6	5303.4	5035.6 ug/L	5035.6 ppb	17:36:20
2	Ca 317.933Radial†	2843.1	2729.5	5052.6 ug/L	5052.6 ppb	17:36:40
2	Fe 238.204 Radial†	480.0	457.3	5117.9 ug/L	5117.9 ppb	17:36:40
2	K 766.490 Radial†	29010.2	25822.5	5120.2 ug/L	5120.2 ppb	17:36:20
2	Mg 279.077 IEC†	134.1	128.7	5328.4 ug/L	5328.4 ppb	17:36:40
2	Na 589.592 Radial†	28688.8	28310.5	10082 ug/L	10082 ppb	17:36:20
2	Sr 421.552†	70042.3	67752.0	507.58 ug/L	507.58 ppb	17:36:20
2	Sc 361.383	822480.8	822480.8	104.53 %		17:37:43
2	Y 371.029	727522.9	727522.9	103.70 %		17:37:43

2	Ag 328.068†	100447.1	95889.5	494.10 ug/L	494.10 ppb	17:37:48
2	As 188.979†	1147.6	1126.8	504.45 ug/L	504.45 ppb	17:38:08
2	B 249.677†	20031.1	19309.1	486.32 ug/L	486.32 ppb	17:37:48
2	Ba 233.527†	43889.2	41988.1	498.38 ug/L	498.38 ppb	17:37:48
2	Be 313.107†	1291807.7	1245302.3	497.12 ug/L	497.12 ppb	17:37:43
2	Cd 226.502†	36482.2	35096.8	498.27 ug/L	498.27 ppb	17:37:48
2	Co 228.616†	16934.4	16256.5	494.55 ug/L	494.55 ppb	17:38:08
2	Cr 267.716†	38099.7	36384.3	497.86 ug/L	497.86 ppb	17:37:48
2	Cu 324.752†	146800.0	131333.1	489.96 ug/L	489.96 ppb	17:37:48
2	Mn 257.610†	324246.5	309779.7	496.98 ug/L	496.98 ppb	17:37:48
2	Mo 202.031†	5609.2	5351.1	492.93 ug/L	492.93 ppb	17:38:08
2	Ni 231.604†	16572.0	15753.1	503.99 ug/L	503.99 ppb	17:37:48
2	P 214.914†	4865.0	4450.9	2383.7 ug/L	2383.7 ppb	17:38:08
2	Pb 220.353†	3198.4	3086.6	505.05 ug/L	505.05 ppb	17:38:08
2	S 181.975 Axial†	837.6	760.4	970.81 ug/L	970.81 ppb	17:38:08
2	Sb 206.836†	1329.4	1240.7	513.96 ug/L	513.96 ppb	17:38:08
2	Se 196.026†	833.1	814.0	509.73 ug/L	509.73 ppb	17:38:08
2	Si 251.611†	71910.9	68246.9	2472.8 ug/L	2472.8 ppb	17:37:48
2	Sn 189.927†	2254.5	2128.2	504.19 ug/L	504.19 ppb	17:38:08
2	Ti 334.940†	253592.2	243871.3	490.37 ug/L	490.37 ppb	17:37:48
2	Tl 190.801†	1096.0	1085.6	501.50 ug/L	501.50 ppb	17:38:08
2	U 409.014†	13237.6	14903.7	498.83 ug/L	498.83 ppb	17:37:48
2	V 292.402†	63524.6	62435.5	501.81 ug/L	501.81 ppb	17:37:48
2	Zn 213.857†	48160.9	44929.0	492.53 ug/L	492.53 ppb	17:37:48
2	SiO2†	71064.5	67422.5	5228.7 ug/L	5228.7 ppb	17:38:49
3	Sc Radial	4940.4	4940.4	102 %		17:36:45
3	Y RADIAL	5242.0	5242.0	102.6 %		17:36:45
3	Al 396.153Radial†	5413.3	5366.1	5095.8 ug/L	5095.8 ppb	17:36:45
3	Ca 317.933Radial†	2848.2	2758.4	5106.1 ug/L	5106.1 ppb	17:37:05
3	Fe 238.204 Radial†	480.7	462.0	5170.4 ug/L	5170.4 ppb	17:37:05
3	K 766.490 Radial†	28958.7	26016.9	5158.8 ug/L	5158.8 ppb	17:36:45
3	Mg 279.077 IEC†	130.7	126.5	5239.1 ug/L	5239.1 ppb	17:37:05
3	Na 589.592 Radial†	28709.6	28572.6	10175 ug/L	10175 ppb	17:36:45
3	Sr 421.552†	70112.6	68411.1	512.52 ug/L	512.52 ppb	17:36:45
3	Sc 361.383	826692.5	826692.5	105.06 %		17:38:14
3	Y 371.029	730708.0	730708.0	104.16 %		17:38:14
3	Ag 328.068†	101664.3	96558.5	497.55 ug/L	497.55 ppb	17:38:19
3	As 188.979†	1139.1	1113.1	498.42 ug/L	498.42 ppb	17:38:39
3	B 249.677†	20327.2	19493.3	490.99 ug/L	490.99 ppb	17:38:19
3	Ba 233.527†	44329.7	42193.5	500.82 ug/L	500.82 ppb	17:38:19
3	Be 313.107†	1299235.9	1246076.2	497.44 ug/L	497.44 ppb	17:38:14
3	Cd 226.502†	36868.7	35286.8	500.96 ug/L	500.96 ppb	17:38:19
3	Co 228.616†	16837.9	16082.1	489.22 ug/L	489.22 ppb	17:38:39
3	Cr 267.716†	38428.4	36511.6	499.60 ug/L	499.60 ppb	17:38:19
3	Cu 324.752†	148647.5	132376.2	493.85 ug/L	493.85 ppb	17:38:19
3	Mn 257.610†	327251.7	311059.7	499.04 ug/L	499.04 ppb	17:38:19
3	Mo 202.031†	5555.2	5272.4	485.69 ug/L	485.69 ppb	17:38:39
3	Ni 231.604†	16720.8	15813.9	505.94 ug/L	505.94 ppb	17:38:19
3	P 214.914†	4808.7	4373.6	2339.8 ug/L	2339.8 ppb	17:38:39
3	Pb 220.353†	3193.7	3066.5	501.77 ug/L	501.77 ppb	17:38:39
3	S 181.975 Axial†	829.7	748.9	956.01 ug/L	956.01 ppb	17:38:39
3	Sb 206.836†	1314.0	1219.7	505.28 ug/L	505.28 ppb	17:38:39
3	Se 196.026†	832.0	808.8	506.69 ug/L	506.69 ppb	17:38:39
3	Si 251.611†	72668.4	68617.4	2486.4 ug/L	2486.4 ppb	17:38:19
3	Sn 189.927†	2238.5	2102.0	497.99 ug/L	497.99 ppb	17:38:39
3	Ti 334.940†	256227.0	245143.2	492.94 ug/L	492.94 ppb	17:38:19
3	Tl 190.801†	1087.5	1072.2	495.39 ug/L	495.39 ppb	17:38:39
3	U 409.014†	13301.0	14899.6	498.68 ug/L	498.68 ppb	17:38:19
3	V 292.402†	64271.1	62836.4	504.87 ug/L	504.87 ppb	17:38:19
3	Zn 213.857†	48665.2	45174.3	495.22 ug/L	495.22 ppb	17:38:19
3	SiO2†	71423.6	67417.9	5228.5 ug/L	5228.5 ppb	17:38:54

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	823526.3	104.66 %		0.355			0.34%
Sc Radial	4977.2	103 %		0.7			0.68%
Y 371.029	728200.3	103.80 %		0.320			0.31%
Y RADIAL	5271.7	103.2 %		1.10			1.07%
Ag 328.068†	96049.1	494.92 ug/L		2.331	494.92 ppb	2.331	0.47%

QC value within limits for Ag 328.068 Recovery = 98.98%							
Al	396.153Radial†	5337.1	5067.9 ug/L	30.35	5067.9 ppb	30.35	0.60%
QC value within limits for Al 396.153Radial Recovery = 101.36%							
As	188.979†	1121.8	502.24 ug/L	3.318	502.24 ppb	3.318	0.66%
QC value within limits for As 188.979 Recovery = 100.45%							
B	249.677†	19356.8	487.53 ug/L	3.035	487.53 ppb	3.035	0.62%
QC value within limits for B 249.677 Recovery = 97.51%							
Ba	233.527†	42026.0	498.83 ug/L	1.807	498.83 ppb	1.807	0.36%
QC value within limits for Ba 233.527 Recovery = 99.77%							
Be	313.107†	1246159.3	497.47 ug/L	0.358	497.47 ppb	0.358	0.07%
QC value within limits for Be 313.107 Recovery = 99.49%							
Ca	317.933Radial†	2734.6	5062.0 ug/L	40.23	5062.0 ppb	40.23	0.79%
QC value within limits for Ca 317.933Radial Recovery = 101.24%							
Cd	226.502†	35139.1	498.87 ug/L	1.868	498.87 ppb	1.868	0.37%
QC value within limits for Cd 226.502 Recovery = 99.77%							
Co	228.616†	16195.1	492.67 ug/L	2.993	492.67 ppb	2.993	0.61%
QC value within limits for Co 228.616 Recovery = 98.53%							
Cr	267.716†	36378.3	497.78 ug/L	1.866	497.78 ppb	1.866	0.37%
QC value within limits for Cr 267.716 Recovery = 99.56%							
Cu	324.752†	131636.3	491.09 ug/L	2.404	491.09 ppb	2.404	0.49%
QC value within limits for Cu 324.752 Recovery = 98.22%							
Fe	238.204 Radial†	457.8	5123.2 ug/L	44.81	5123.2 ppb	44.81	0.87%
QC value within limits for Fe 238.204 Radial Recovery = 102.46%							
K	766.490 Radial†	25921.3	5139.8 ug/L	19.28	5139.8 ppb	19.28	0.38%
QC value within limits for K 766.490 Radial Recovery = 102.80%							
Mg	279.077 IEC†	127.4	5273.4 ug/L	48.15	5273.4 ppb	48.15	0.91%
QC value within limits for Mg 279.077 IEC Recovery = 105.47%							
Mn	257.610†	309982.5	497.31 ug/L	1.595	497.31 ppb	1.595	0.32%
QC value within limits for Mn 257.610 Recovery = 99.46%							
Mo	202.031†	5322.9	490.33 ug/L	4.028	490.33 ppb	4.028	0.82%
QC value within limits for Mo 202.031 Recovery = 98.07%							
Na	589.592 Radial†	28422.9	10122 ug/L	48.1	10122 ppb	48.1	0.47%
QC value within limits for Na 589.592 Radial Recovery = 101.22%							
Ni	231.604†	15749.6	503.88 ug/L	2.121	503.88 ppb	2.121	0.42%
QC value within limits for Ni 231.604 Recovery = 100.78%							
P	214.914†	4421.4	2367.1 ug/L	23.79	2367.1 ppb	23.79	1.00%
QC value within limits for P 214.914 Recovery = 94.68%							
Pb	220.353†	3075.4	503.23 ug/L	1.669	503.23 ppb	1.669	0.33%
QC value within limits for Pb 220.353 Recovery = 100.65%							
S	181.975 Axial†	756.0	965.14 ug/L	7.982	965.14 ppb	7.982	0.83%
QC value within limits for S 181.975 Axial Recovery = 96.51%							
Sb	206.836†	1225.5	507.80 ug/L	5.356	507.80 ppb	5.356	1.05%
QC value within limits for Sb 206.836 Recovery = 101.56%							
Se	196.026†	812.0	508.55 ug/L	1.626	508.55 ppb	1.626	0.32%
QC value within limits for Se 196.026 Recovery = 101.71%							
Si	251.611†	68356.2	2476.8 ug/L	8.30	2476.8 ppb	8.30	0.34%
QC value within limits for Si 251.611 Recovery = 99.07%							
Sn	189.927†	2122.2	502.77 ug/L	4.252	502.77 ppb	4.252	0.85%
QC value within limits for Sn 189.927 Recovery = 100.55%							
Sr	421.552†	68153.0	510.58 ug/L	2.637	510.58 ppb	2.637	0.52%
QC value within limits for Sr 421.552 Recovery = 102.12%							
Ti	334.940†	244233.1	491.10 ug/L	1.602	491.10 ppb	1.602	0.33%
QC value within limits for Ti 334.940 Recovery = 98.22%							
Tl	190.801†	1079.9	498.90 ug/L	3.156	498.90 ppb	3.156	0.63%
QC value within limits for Tl 190.801 Recovery = 99.78%							
U	409.014†	14826.3	496.23 ug/L	4.374	496.23 ppb	4.374	0.88%
QC value within limits for U 409.014 Recovery = 99.25%							
V	292.402†	62519.9	502.43 ug/L	2.194	502.43 ppb	2.194	0.44%
QC value within limits for V 292.402 Recovery = 100.49%							
Zn	213.857†	44951.2	492.77 ug/L	2.331	492.77 ppb	2.331	0.47%
QC value within limits for Zn 213.857 Recovery = 98.55%							
SiO2†		67984.0	5272.4 ug/L	75.87	5272.4 ppb	75.87	1.44%
QC value within limits for SiO2 Recovery = 98.60%							
All analyte(s) passed QC.							

Sequence No.: 2

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/3/2010 17:41:05

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4923.1	4923.1	102.6	%		17:42:58
1	Y RADIAL	5239.9	5239.9	102.6	%		17:42:58
1	Al 396.153Radial†	-96.2	-10.9	-10.409	ug/L	-10.409 ppb	17:43:18
1	Ca 317.933Radial†	26.7	5.1	9.3653	ug/L	9.3653 ppb	17:43:18
1	Fe 238.204 Radial†	6.8	-0.4	-4.7680	ug/L	-4.7680 ppb	17:43:18
1	K 766.490 Radial†	2330.9	38.9	7.7232	ug/L	7.7232 ppb	17:42:58
1	Mg 279.077 IEC†	0.4	-0.7	-27.761	ug/L	-27.761 ppb	17:43:18
1	Na 589.592 Radial†	-634.6	-66.5	-23.687	ug/L	-23.687 ppb	17:42:58
1	Sr 421.552†	18.2	6.3	0.0469	ug/L	0.0469 ppb	17:42:58
1	Sc 361.383	782356.9	782356.9	99.427	%		17:44:14
1	Y 371.029	700928.3	700928.3	99.913	%		17:44:14
1	Ag 328.068†	146.0	-61.4	-0.3150	ug/L	-0.3150 ppb	17:44:14
1	As 188.979†	-26.2	2.5	1.1238	ug/L	1.1238 ppb	17:44:34
1	B 249.677†	-242.7	-98.7	-2.4972	ug/L	-2.4972 ppb	17:44:34
1	Ba 233.527†	9.5	8.9	0.1044	ug/L	0.1044 ppb	17:44:34
1	Be 313.107†	-9347.6	27.8	0.0110	ug/L	0.0110 ppb	17:44:14
1	Cd 226.502†	-197.4	-4.3	-0.0616	ug/L	-0.0616 ppb	17:44:34
1	Co 228.616†	-57.5	-2.5	-0.0754	ug/L	-0.0754 ppb	17:44:34
1	Cr 267.716†	70.0	4.7	0.0650	ug/L	0.0650 ppb	17:44:34
1	Cu 324.752†	8485.2	-576.3	-2.1488	ug/L	-2.1488 ppb	17:44:14
1	Mn 257.610†	429.1	4.5	0.0078	ug/L	0.0078 ppb	17:44:34
1	Mo 202.031†	11.3	-3.8	-0.3494	ug/L	-0.3494 ppb	17:44:34
1	Ni 231.604†	99.3	-1.4	-0.0461	ug/L	-0.0461 ppb	17:44:34
1	P 214.914†	208.6	6.4	4.1263	ug/L	4.1263 ppb	17:44:34
1	Pb 220.353†	-2.6	24.1	3.9269	ug/L	3.9269 ppb	17:44:34
1	S 181.975 Axial†	40.6	-0.1	-0.0776	ug/L	-0.0776 ppb	17:44:34
1	Sb 206.836†	33.1	2.3	1.1312	ug/L	1.1312 ppb	17:44:34
1	Se 196.026†	-12.9	3.9	2.3897	ug/L	2.3897 ppb	17:44:34
1	Si 251.611†	545.0	-2.2	-0.0743	ug/L	-0.0743 ppb	17:44:34
1	Sn 189.927†	91.2	63.0	14.916	ug/L	14.916 ppb	17:44:34
1	Ti 334.940†	-1278.7	-26.5	-0.0486	ug/L	-0.0486 ppb	17:44:14
1	Tl 190.801†	-43.4	-6.6	-3.0379	ug/L	-3.0379 ppb	17:44:34
1	U 409.014†	-2304.4	-78.5	-2.6345	ug/L	-2.6345 ppb	17:44:14
1	V 292.402†	-1683.4	-31.7	-0.2609	ug/L	-0.2609 ppb	17:44:14
1	Zn 213.857†	979.5	-161.4	-1.7821	ug/L	-1.7821 ppb	17:44:34
1	SiO2†	556.6	-5.1	-0.3844	ug/L	-0.3844 ppb	17:45:30
2	Sc Radial	4835.7	4835.7	100	%		17:43:23
2	Y RADIAL	5150.9	5150.9	100.8	%		17:43:23
2	Al 396.153Radial†	-91.9	-8.4	-7.9965	ug/L	-7.9965 ppb	17:43:43
2	Ca 317.933Radial†	24.5	3.4	6.2610	ug/L	6.2610 ppb	17:43:43
2	Fe 238.204 Radial†	9.0	1.9	20.739	ug/L	20.739 ppb	17:43:43
2	K 766.490 Radial†	2371.2	120.3	23.890	ug/L	23.890 ppb	17:43:23
2	Mg 279.077 IEC†	1.3	0.3	13.186	ug/L	13.186 ppb	17:43:43
2	Na 589.592 Radial†	-593.3	-36.5	-13.003	ug/L	-13.003 ppb	17:43:23
2	Sr 421.552†	42.7	31.0	0.2322	ug/L	0.2322 ppb	17:43:23
2	Sc 361.383	796415.0	796415.0	101.21	%		17:44:40
2	Y 371.029	715223.5	715223.5	101.95	%		17:44:40
2	Ag 328.068†	275.8	64.2	0.3354	ug/L	0.3354 ppb	17:44:40
2	As 188.979†	-27.5	1.7	0.7635	ug/L	0.7635 ppb	17:45:00
2	B 249.677†	-217.3	-69.4	-1.7588	ug/L	-1.7588 ppb	17:45:00
2	Ba 233.527†	9.2	8.4	0.1003	ug/L	0.1003 ppb	17:45:00
2	Be 313.107†	-9506.2	37.1	0.0149	ug/L	0.0149 ppb	17:44:40
2	Cd 226.502†	-193.2	3.4	0.0463	ug/L	0.0463 ppb	17:45:00
2	Co 228.616†	-50.3	5.7	0.1731	ug/L	0.1731 ppb	17:45:00
2	Cr 267.716†	93.4	26.7	0.3649	ug/L	0.3649 ppb	17:45:00
2	Cu 324.752†	8562.6	-650.5	-2.4258	ug/L	-2.4258 ppb	17:44:40
2	Mn 257.610†	440.9	8.6	0.0153	ug/L	0.0153 ppb	17:45:00
2	Mo 202.031†	22.1	6.6	0.6114	ug/L	0.6114 ppb	17:45:00
2	Ni 231.604†	104.0	1.4	0.0449	ug/L	0.0449 ppb	17:45:00

2	P 214.914†	205.9	-0.0	0.5724 ug/L	0.5724 ppb	17:45:00
2	Pb 220.353†	8.5	35.1	5.7234 ug/L	5.7234 ppb	17:45:00
2	S 181.975 Axial†	45.2	3.8	4.8006 ug/L	4.8006 ppb	17:45:00
2	Sb 206.836†	36.1	4.6	2.0299 ug/L	2.0299 ppb	17:45:00
2	Se 196.026†	-19.3	-2.2	-1.2662 ug/L	-1.2662 ppb	17:45:00
2	Si 251.611†	548.0	-8.8	-0.3285 ug/L	-0.3285 ppb	17:45:00
2	Sn 189.927†	79.6	50.0	11.836 ug/L	11.836 ppb	17:45:00
2	Ti 334.940†	-1250.2	24.4	0.0486 ug/L	0.0486 ppb	17:44:40
2	Tl 190.801†	-45.0	-7.4	-3.4178 ug/L	-3.4178 ppb	17:45:00
2	U 409.014†	-2255.1	11.2	0.3728 ug/L	0.3728 ppb	17:44:40
2	V 292.402†	-1658.9	22.4	0.1842 ug/L	0.1842 ppb	17:44:40
2	Zn 213.857†	957.4	-200.6	-2.2199 ug/L	-2.2199 ppb	17:45:00
2	SiO2†	543.8	-27.6	-2.1630 ug/L	-2.1630 ppb	17:45:35
3	Sc Radial	4864.5	4864.5	101 %		17:43:48
3	Y RADIAL	5168.5	5168.5	101.2 %		17:43:48
3	Al 396.153Radial†	-72.7	11.2	10.702 ug/L	10.702 ppb	17:44:08
3	Ca 317.933Radial†	23.3	2.0	3.7110 ug/L	3.7110 ppb	17:44:08
3	Fe 238.204 Radial†	7.0	-0.1	-1.1357 ug/L	-1.1357 ppb	17:44:08
3	K 766.490 Radial†	2352.8	88.0	17.474 ug/L	17.474 ppb	17:43:48
3	Mg 279.077 IEC†	-1.7	-2.7	-110.94 ug/L	-110.94 ppb	17:44:08
3	Na 589.592 Radial†	-567.0	-7.0	-2.4943 ug/L	-2.4943 ppb	17:43:48
3	Sr 421.552†	25.0	13.2	0.0992 ug/L	0.0992 ppb	17:43:48
3	Sc 361.383	789382.3	789382.3	100.32 %		17:45:05
3	Y 371.029	706481.7	706481.7	100.70 %		17:45:05
3	Ag 328.068†	187.9	-21.0	-0.1064 ug/L	-0.1064 ppb	17:45:05
3	As 188.979†	-33.2	-4.2	-1.8835 ug/L	-1.8835 ppb	17:45:25
3	B 249.677†	-254.4	-108.3	-2.7394 ug/L	-2.7394 ppb	17:45:25
3	Ba 233.527†	3.4	2.6	0.0303 ug/L	0.0303 ppb	17:45:25
3	Be 313.107†	-9494.7	-35.1	-0.0134 ug/L	-0.0134 ppb	17:45:05
3	Cd 226.502†	-188.4	6.4	0.0908 ug/L	0.0908 ppb	17:45:25
3	Co 228.616†	-64.3	-8.7	-0.2646 ug/L	-0.2646 ppb	17:45:25
3	Cr 267.716†	68.2	2.3	0.0327 ug/L	0.0327 ppb	17:45:25
3	Cu 324.752†	8437.2	-700.1	-2.6099 ug/L	-2.6099 ppb	17:45:05
3	Mn 257.610†	468.4	39.9	0.0683 ug/L	0.0683 ppb	17:45:25
3	Mo 202.031†	19.4	4.1	0.3808 ug/L	0.3808 ppb	17:45:25
3	Ni 231.604†	103.6	2.0	0.0634 ug/L	0.0634 ppb	17:45:25
3	P 214.914†	213.9	9.8	6.1034 ug/L	6.1034 ppb	17:45:25
3	Pb 220.353†	11.5	38.1	6.2173 ug/L	6.2173 ppb	17:45:25
3	S 181.975 Axial†	47.9	6.9	8.8145 ug/L	8.8145 ppb	17:45:25
3	Sb 206.836†	29.7	-1.4	-0.3385 ug/L	-0.3385 ppb	17:45:25
3	Se 196.026†	-28.6	-11.5	-7.0339 ug/L	-7.0339 ppb	17:45:25
3	Si 251.611†	561.4	9.3	0.3332 ug/L	0.3332 ppb	17:45:25
3	Sn 189.927†	90.8	61.9	14.637 ug/L	14.637 ppb	17:45:25
3	Ti 334.940†	-1125.0	138.1	0.2891 ug/L	0.2891 ppb	17:45:05
3	Tl 190.801†	-31.5	5.7	2.6076 ug/L	2.6076 ppb	17:45:25
3	U 409.014†	-2360.7	-113.9	-3.8257 ug/L	-3.8257 ppb	17:45:05
3	V 292.402†	-1716.3	-49.4	-0.3958 ug/L	-0.3958 ppb	17:45:05
3	Zn 213.857†	962.2	-187.4	-2.0699 ug/L	-2.0699 ppb	17:45:25
3	SiO2†	593.5	26.7	2.0693 ug/L	2.0693 ppb	17:45:41

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	789384.7	100.32 %		0.893			0.89%
Sc Radial	4874.5	101 %		0.9			0.91%
Y 371.029	707544.5	100.86 %		1.027			1.02%
Y RADIAL	5186.4	101.5 %		0.92			0.91%
Ag 328.068†	-6.1	-0.0287 ug/L		0.33210	-0.0287 ppb	0.33210	>999.9%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	-2.7	-2.5680 ug/L		11.55484	-2.5680 ppb	11.55484	449.96%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	-0.0	0.0013 ug/L		1.64217	0.0013 ppb	1.64217	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	-92.1	-2.3318 ug/L		0.51084	-2.3318 ppb	0.51084	21.91%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	6.6	0.0783 ug/L		0.04166	0.0783 ppb	0.04166	53.19%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	9.9	0.0042 ug/L		0.01531	0.0042 ppb	0.01531	367.09%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	3.5	6.4458 ug/L		2.83170	6.4458 ppb	2.83170	43.93%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated						
Cd 226.502†	1.8	0.0251 ug/L	0.07838	0.0251 ppb	0.07838	311.70%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-1.8	-0.0557 ug/L	0.21952	-0.0557 ppb	0.21952	394.44%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	11.2	0.1542 ug/L	0.18317	0.1542 ppb	0.18317	118.76%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-642.3	-2.3949 ug/L	0.23209	-2.3949 ppb	0.23209	9.69%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	0.4	4.9450 ug/L	13.79784	4.9450 ppb	13.79784	279.03%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	82.4	16.362 ug/L	8.1405	16.362 ppb	8.1405	49.75%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	-1.0	-41.837 ug/L	63.2471	-41.837 ppb	63.2471	151.18%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	17.6	0.0305 ug/L	0.03298	0.0305 ppb	0.03298	108.16%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	2.3	0.2143 ug/L	0.50155	0.2143 ppb	0.50155	234.08%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	-36.7	-13.062 ug/L	10.5967	-13.062 ppb	10.5967	81.13%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	0.6	0.0207 ug/L	0.05860	0.0207 ppb	0.05860	282.80%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	5.4	3.6007 ug/L	2.80271	3.6007 ppb	2.80271	77.84%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	32.4	5.2892 ug/L	1.20535	5.2892 ppb	1.20535	22.79%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	3.5	4.5125 ug/L	4.45305	4.5125 ppb	4.45305	98.68%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	1.8	0.9409 ug/L	1.19562	0.9409 ppb	1.19562	127.08%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-3.3	-1.9701 ug/L	4.75108	-1.9701 ppb	4.75108	241.15%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	-0.6	-0.0232 ug/L	0.33380	-0.0232 ppb	0.33380	>999.9%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	58.3	13.796 ug/L	1.7032	13.796 ppb	1.7032	12.35%
QC value greater than the upper limit for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	16.8	0.1261 ug/L	0.09552	0.1261 ppb	0.09552	75.76%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	45.4	0.0963 ug/L	0.17386	0.0963 ppb	0.17386	180.45%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	-2.8	-1.2827 ug/L	3.37443	-1.2827 ppb	3.37443	263.07%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	-60.4	-2.0291 ug/L	2.16374	-2.0291 ppb	2.16374	106.63%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	-19.5	-0.1575 ug/L	0.30347	-0.1575 ppb	0.30347	192.70%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	-183.1	-2.0240 ug/L	0.22246	-2.0240 ppb	0.22246	10.99%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	-2.0	-0.1594 ug/L	2.12513	-0.1594 ppb	2.12513	>999.9%
QC value within limits for SiO2 Recovery = Not calculated						
QC Failed. Continue with analysis.						



=====  
Analysis Begun

Start Time: 3/3/2010 18:28:14

Plasma On Time: 3/1/2010 06:57:40

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\030310.sif

Batch ID:

Results Data Set: 030310

Results Library: C:\pe\Optima3\Results\Results.mdb

=====  
Sequence No.: 1

Autosampler Location: 1

Sample ID: CCV

Date Collected: 3/3/2010 18:28:15

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	4952.7	4952.7	103 %		18:30:07
1	Y RADIAL	5246.3	5246.3	102.7 %		18:30:07
1	Al 396.153Radial†	5379.2	5319.8	5051.5 ug/L	5051.5 ppb	18:30:07
1	Ca 317.933Radial†	2869.6	2772.4	5131.9 ug/L	5131.9 ppb	18:30:27
1	Fe 238.204 Radial†	487.5	467.5	5231.2 ug/L	5231.2 ppb	18:30:27
1	K 766.490 Radial†	28611.2	25608.3	5077.6 ug/L	5077.6 ppb	18:30:07
1	Mg 279.077 IEC†	129.5	125.0	5177.3 ug/L	5177.3 ppb	18:30:27
1	Na 589.592 Radial†	29288.5	29066.4	10351 ug/L	10351 ppb	18:30:07
1	Sr 421.552†	70352.3	68474.2	512.99 ug/L	512.99 ppb	18:30:07
1	Sc 361.383	822133.5	822133.5	104.48 %		18:31:24
1	Y 371.029	726760.5	726760.5	103.60 %		18:31:24
1	Ag 328.068†	100388.5	95874.0	494.06 ug/L	494.06 ppb	18:31:30
1	As 188.979†	1125.9	1106.5	495.47 ug/L	495.47 ppb	18:31:50
1	B 249.677†	19967.9	19256.7	484.98 ug/L	484.98 ppb	18:31:30
1	Ba 233.527†	43996.0	42108.0	499.81 ug/L	499.81 ppb	18:31:30
1	Be 313.107†	1282874.5	1237274.4	493.93 ug/L	493.93 ppb	18:31:24
1	Cd 226.502†	36575.8	35201.1	499.74 ug/L	499.74 ppb	18:31:30
1	Co 228.616†	16850.5	16183.1	492.31 ug/L	492.31 ppb	18:31:50
1	Cr 267.716†	38042.7	36345.2	497.33 ug/L	497.33 ppb	18:31:30
1	Cu 324.752†	146584.8	131186.5	489.42 ug/L	489.42 ppb	18:31:30
1	Mn 257.610†	324578.3	310228.3	497.72 ug/L	497.72 ppb	18:31:30
1	Mo 202.031†	5571.3	5317.1	489.81 ug/L	489.81 ppb	18:31:50
1	Ni 231.604†	16552.4	15741.1	503.61 ug/L	503.61 ppb	18:31:30
1	P 214.914†	4825.9	4415.5	2363.9 ug/L	2363.9 ppb	18:31:50
1	Pb 220.353†	3149.3	3040.9	497.60 ug/L	497.60 ppb	18:31:50
1	S 181.975 Axial†	841.4	764.4	975.86 ug/L	975.86 ppb	18:31:50
1	Sb 206.836†	1300.0	1213.1	502.72 ug/L	502.72 ppb	18:31:50
1	Se 196.026†	830.8	812.1	508.82 ug/L	508.82 ppb	18:31:50
1	Si 251.611†	72089.3	68446.7	2480.1 ug/L	2480.1 ppb	18:31:30
1	Sn 189.927†	2213.2	2089.6	495.07 ug/L	495.07 ppb	18:31:50
1	Ti 334.940†	253519.5	243904.3	490.46 ug/L	490.46 ppb	18:31:30
1	Tl 190.801†	1081.1	1071.7	495.14 ug/L	495.14 ppb	18:31:50
1	U 409.014†	13156.9	14831.8	496.40 ug/L	496.40 ppb	18:31:30
1	V 292.402†	63565.2	62500.0	502.25 ug/L	502.25 ppb	18:31:30
1	Zn 213.857†	48070.9	44862.3	491.78 ug/L	491.78 ppb	18:31:30
1	SiO2†	72156.2	68496.2	5312.2 ug/L	5312.2 ppb	18:32:57
2	Sc Radial	4961.6	4961.6	103 %		18:30:32
2	Y RADIAL	5253.7	5253.7	102.8 %		18:30:32
2	Al 396.153Radial†	5333.8	5266.3	5000.5 ug/L	5000.5 ppb	18:30:32
2	Ca 317.933Radial†	2872.9	2770.6	5128.5 ug/L	5128.5 ppb	18:30:52
2	Fe 238.204 Radial†	490.5	469.6	5254.9 ug/L	5254.9 ppb	18:30:52
2	K 766.490 Radial†	28814.1	25755.5	5106.9 ug/L	5106.9 ppb	18:30:32
2	Mg 279.077 IEC†	133.4	128.6	5323.7 ug/L	5323.7 ppb	18:30:52
2	Na 589.592 Radial†	29050.6	28784.2	10250 ug/L	10250 ppb	18:30:32
2	Sr 421.552†	70243.0	68245.2	511.27 ug/L	511.27 ppb	18:30:32
2	Sc 361.383	826926.1	826926.1	105.09 %		18:31:55
2	Y 371.029	730492.9	730492.9	104.13 %		18:31:55

2	Ag 328.068†	99656.5	94620.6	487.63 ug/L	487.63 ppb	18:32:00
2	As 188.979†	1130.9	1104.9	494.75 ug/L	494.75 ppb	18:32:20
2	B 249.677†	19765.3	18953.2	477.30 ug/L	477.30 ppb	18:32:00
2	Ba 233.527†	43535.6	41425.9	491.72 ug/L	491.72 ppb	18:32:00
2	Be 313.107†	1286458.5	1233568.5	492.44 ug/L	492.44 ppb	18:31:55
2	Cd 226.502†	36312.7	34747.9	493.29 ug/L	493.29 ppb	18:32:00
2	Co 228.616†	16869.4	16107.6	490.02 ug/L	490.02 ppb	18:32:20
2	Cr 267.716†	37790.1	35893.8	491.15 ug/L	491.15 ppb	18:32:00
2	Cu 324.752†	145369.8	129217.3	482.08 ug/L	482.08 ppb	18:32:00
2	Mn 257.610†	322331.6	306290.0	491.40 ug/L	491.40 ppb	18:32:00
2	Mo 202.031†	5572.9	5287.8	487.11 ug/L	487.11 ppb	18:32:20
2	Ni 231.604†	16441.6	15543.8	497.30 ug/L	497.30 ppb	18:32:00
2	P 214.914†	4847.1	4408.9	2361.7 ug/L	2361.7 ppb	18:32:20
2	Pb 220.353†	3160.6	3034.2	496.48 ug/L	496.48 ppb	18:32:20
2	S 181.975 Axial†	840.9	759.3	969.40 ug/L	969.40 ppb	18:32:20
2	Sb 206.836†	1308.8	1214.3	503.12 ug/L	503.12 ppb	18:32:20
2	Se 196.026†	832.0	808.6	506.73 ug/L	506.73 ppb	18:32:20
2	Si 251.611†	71470.1	67457.6	2444.2 ug/L	2444.2 ppb	18:32:00
2	Sn 189.927†	2225.1	2088.6	494.83 ug/L	494.83 ppb	18:32:20
2	Ti 334.940†	252091.2	241138.9	484.89 ug/L	484.89 ppb	18:32:00
2	Tl 190.801†	1096.8	1080.7	499.20 ug/L	499.20 ppb	18:32:20
2	U 409.014†	12844.6	14461.6	483.98 ug/L	483.98 ppb	18:32:00
2	V 292.402†	63037.6	61645.4	495.42 ug/L	495.42 ppb	18:32:00
2	Zn 213.857†	47727.0	44268.4	485.25 ug/L	485.25 ppb	18:32:00
2	SiO2†	71631.2	67596.3	5242.4 ug/L	5242.4 ppb	18:33:02
3	Sc Radial	4998.8	4998.8	104 %		18:30:57
3	Y RADIAL	5257.8	5257.8	102.9 %		18:30:57
3	Al 396.153Radial†	5396.8	5288.6	5021.9 ug/L	5021.9 ppb	18:30:57
3	Ca 317.933Radial†	2848.8	2726.6	5047.1 ug/L	5047.1 ppb	18:31:17
3	Fe 238.204 Radial†	486.8	462.4	5174.9 ug/L	5174.9 ppb	18:31:17
3	K 766.490 Radial†	28798.4	25532.2	5062.6 ug/L	5062.6 ppb	18:30:57
3	Mg 279.077 IEC†	133.2	127.4	5275.6 ug/L	5275.6 ppb	18:31:17
3	Na 589.592 Radial†	29191.9	28710.6	10224 ug/L	10224 ppb	18:30:57
3	Sr 421.552†	70694.6	68173.4	510.74 ug/L	510.74 ppb	18:30:57
3	Sc 361.383	828959.9	828959.9	105.35 %		18:32:26
3	Y 371.029	733089.5	733089.5	104.50 %		18:32:26
3	Ag 328.068†	100118.3	94826.3	488.66 ug/L	488.66 ppb	18:32:31
3	As 188.979†	1137.5	1108.5	496.35 ug/L	496.35 ppb	18:32:51
3	B 249.677†	19930.5	19063.8	480.13 ug/L	480.13 ppb	18:32:31
3	Ba 233.527†	43760.4	41537.7	493.04 ug/L	493.04 ppb	18:32:31
3	Be 313.107†	1291587.1	1235433.3	493.18 ug/L	493.18 ppb	18:32:26
3	Cd 226.502†	36556.4	34894.5	495.38 ug/L	495.38 ppb	18:32:31
3	Co 228.616†	16784.2	15987.3	486.35 ug/L	486.35 ppb	18:32:51
3	Cr 267.716†	38079.1	36079.9	493.70 ug/L	493.70 ppb	18:32:31
3	Cu 324.752†	145999.2	129475.4	483.03 ug/L	483.03 ppb	18:32:31
3	Mn 257.610†	323626.2	306766.4	492.16 ug/L	492.16 ppb	18:32:31
3	Mo 202.031†	5553.5	5256.3	484.21 ug/L	484.21 ppb	18:32:51
3	Ni 231.604†	16597.1	15653.0	500.80 ug/L	500.80 ppb	18:32:31
3	P 214.914†	4801.3	4354.0	2331.0 ug/L	2331.0 ppb	18:32:51
3	Pb 220.353†	3133.8	3001.3	491.13 ug/L	491.13 ppb	18:32:51
3	S 181.975 Axial†	838.1	754.7	963.44 ug/L	963.44 ppb	18:32:51
3	Sb 206.836†	1301.9	1204.7	499.14 ug/L	499.14 ppb	18:32:51
3	Se 196.026†	824.5	799.6	501.07 ug/L	501.07 ppb	18:32:51
3	Si 251.611†	71942.0	67738.7	2454.5 ug/L	2454.5 ppb	18:32:31
3	Sn 189.927†	2201.5	2061.1	488.30 ug/L	488.30 ppb	18:32:51
3	Ti 334.940†	252827.0	241248.8	485.10 ug/L	485.10 ppb	18:32:31
3	Tl 190.801†	1082.9	1064.9	491.99 ug/L	491.99 ppb	18:32:51
3	U 409.014†	12979.3	14559.6	487.27 ug/L	487.27 ppb	18:32:31
3	V 292.402†	63499.4	61936.6	497.70 ug/L	497.70 ppb	18:32:31
3	Zn 213.857†	47912.9	44333.5	485.96 ug/L	485.96 ppb	18:32:31
3	SiO2†	73031.6	68758.4	5332.8 ug/L	5332.8 ppb	18:33:07

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	826006.5	104.97 %	0.445			0.42%
Sc Radial	4971.0	103 %	0.5			0.49%
Y 371.029	730114.3	104.07 %	0.453			0.44%
Y RADIAL	5252.6	102.8 %	0.11			0.11%
Ag 328.068†	95107.0	490.12 ug/L	3.451	490.12 ppb	3.451	0.70%

QC value within limits for Ag 328.068 Recovery = 98.02%

Al	396.153Radial†	5291.6	5024.6 ug/L	25.57	5024.6 ppb	25.57	0.51%
QC value within limits for Al 396.153Radial Recovery = 100.49%							
As	188.979†	1106.6	495.52 ug/L	0.803	495.52 ppb	0.803	0.16%
QC value within limits for As 188.979 Recovery = 99.10%							
B	249.677†	19091.2	480.80 ug/L	3.884	480.80 ppb	3.884	0.81%
QC value within limits for B 249.677 Recovery = 96.16%							
Ba	233.527†	41690.5	494.85 ug/L	4.339	494.85 ppb	4.339	0.88%
QC value within limits for Ba 233.527 Recovery = 98.97%							
Be	313.107†	1235425.4	493.18 ug/L	0.744	493.18 ppb	0.744	0.15%
QC value within limits for Be 313.107 Recovery = 98.64%							
Ca	317.933Radial†	2756.5	5102.5 ug/L	48.02	5102.5 ppb	48.02	0.94%
QC value within limits for Ca 317.933Radial Recovery = 102.05%							
Cd	226.502†	34947.8	496.14 ug/L	3.287	496.14 ppb	3.287	0.66%
QC value within limits for Cd 226.502 Recovery = 99.23%							
Co	228.616†	16092.7	489.56 ug/L	3.006	489.56 ppb	3.006	0.61%
QC value within limits for Co 228.616 Recovery = 97.91%							
Cr	267.716†	36106.3	494.06 ug/L	3.103	494.06 ppb	3.103	0.63%
QC value within limits for Cr 267.716 Recovery = 98.81%							
Cu	324.752†	129959.7	484.84 ug/L	3.989	484.84 ppb	3.989	0.82%
QC value within limits for Cu 324.752 Recovery = 96.97%							
Fe	238.204 Radial†	466.5	5220.3 ug/L	41.10	5220.3 ppb	41.10	0.79%
QC value within limits for Fe 238.204 Radial Recovery = 104.41%							
K	766.490 Radial†	25632.0	5082.3 ug/L	22.53	5082.3 ppb	22.53	0.44%
QC value within limits for K 766.490 Radial Recovery = 101.65%							
Mg	279.077 IEC†	127.0	5258.9 ug/L	74.60	5258.9 ppb	74.60	1.42%
QC value within limits for Mg 279.077 IEC Recovery = 105.18%							
Mn	257.610†	307761.6	493.76 ug/L	3.450	493.76 ppb	3.450	0.70%
QC value within limits for Mn 257.610 Recovery = 98.75%							
Mo	202.031†	5287.1	487.05 ug/L	2.802	487.05 ppb	2.802	0.58%
QC value within limits for Mo 202.031 Recovery = 97.41%							
Na	589.592 Radial†	28853.7	10275 ug/L	66.9	10275 ppb	66.9	0.65%
QC value within limits for Na 589.592 Radial Recovery = 102.75%							
Ni	231.604†	15646.0	500.57 ug/L	3.163	500.57 ppb	3.163	0.63%
QC value within limits for Ni 231.604 Recovery = 100.11%							
P	214.914†	4392.8	2352.2 ug/L	18.43	2352.2 ppb	18.43	0.78%
QC value within limits for P 214.914 Recovery = 94.09%							
Pb	220.353†	3025.5	495.07 ug/L	3.458	495.07 ppb	3.458	0.70%
QC value within limits for Pb 220.353 Recovery = 99.01%							
S	181.975 Axial†	759.5	969.57 ug/L	6.214	969.57 ppb	6.214	0.64%
QC value within limits for S 181.975 Axial Recovery = 96.96%							
Sb	206.836†	1210.7	501.66 ug/L	2.186	501.66 ppb	2.186	0.44%
QC value within limits for Sb 206.836 Recovery = 100.33%							
Se	196.026†	806.8	505.54 ug/L	4.010	505.54 ppb	4.010	0.79%
QC value within limits for Se 196.026 Recovery = 101.11%							
Si	251.611†	67881.0	2459.6 ug/L	18.49	2459.6 ppb	18.49	0.75%
QC value within limits for Si 251.611 Recovery = 98.38%							
Sn	189.927†	2079.8	492.73 ug/L	3.840	492.73 ppb	3.840	0.78%
QC value within limits for Sn 189.927 Recovery = 98.55%							
Sr	421.552†	68297.6	511.67 ug/L	1.177	511.67 ppb	1.177	0.23%
QC value within limits for Sr 421.552 Recovery = 102.33%							
Ti	334.940†	242097.3	486.82 ug/L	3.155	486.82 ppb	3.155	0.65%
QC value within limits for Ti 334.940 Recovery = 97.36%							
Tl	190.801†	1072.4	495.45 ug/L	3.615	495.45 ppb	3.615	0.73%
QC value within limits for Tl 190.801 Recovery = 99.09%							
U	409.014†	14617.7	489.22 ug/L	6.434	489.22 ppb	6.434	1.32%
QC value within limits for U 409.014 Recovery = 97.84%							
V	292.402†	62027.3	498.46 ug/L	3.478	498.46 ppb	3.478	0.70%
QC value within limits for V 292.402 Recovery = 99.69%							
Zn	213.857†	44488.1	487.66 ug/L	3.581	487.66 ppb	3.581	0.73%
QC value within limits for Zn 213.857 Recovery = 97.53%							
SiO2†		68283.6	5295.8 ug/L	47.41	5295.8 ppb	47.41	0.90%
QC value within limits for SiO2 Recovery = 99.03%							

All analyte(s) passed QC.

Sequence No.: 2

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 3/3/2010 18:35:16

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	4792.3	4792.3	99.4 %		18:37:08
1	Y RADIAL	5111.8	5111.8	100.1 %		18:37:08
1	Al 396.153Radial†	-74.4	8.5	8.1073 ug/L	8.1073 ppb	18:37:28
1	Ca 317.933Radial†	19.7	-1.3	-2.3514 ug/L	-2.3514 ppb	18:37:28
1	Fe 238.204 Radial†	7.6	0.5	5.7585 ug/L	5.7585 ppb	18:37:28
1	K 766.490 Radial†	2350.8	121.2	24.067 ug/L	24.067 ppb	18:37:08
1	Mg 279.077 IEC†	2.1	1.1	43.940 ug/L	43.940 ppb	18:37:28
1	Na 589.592 Radial†	-638.0	-86.9	-30.943 ug/L	-30.943 ppb	18:37:08
1	Sr 421.552†	24.8	13.4	0.1003 ug/L	0.1003 ppb	18:37:08
1	Sc 361.383	790973.9	790973.9	100.52 %		18:38:25
1	Y 371.029	708474.8	708474.8	100.99 %		18:38:25
1	Ag 328.068†	295.1	85.3	0.4391 ug/L	0.4391 ppb	18:38:25
1	As 188.979†	-31.6	-2.6	-1.1562 ug/L	-1.1562 ppb	18:38:45
1	B 249.677†	-295.6	-148.8	-3.7645 ug/L	-3.7645 ppb	18:38:45
1	Ba 233.527†	10.7	9.9	0.1172 ug/L	0.1172 ppb	18:38:45
1	Be 313.107†	-9549.7	-70.8	-0.0283 ug/L	-0.0283 ppb	18:38:25
1	Cd 226.502†	-206.3	-11.0	-0.1568 ug/L	-0.1568 ppb	18:38:45
1	Co 228.616†	-57.7	-2.1	-0.0631 ug/L	-0.0631 ppb	18:38:45
1	Cr 267.716†	70.9	4.9	0.0674 ug/L	0.0674 ppb	18:38:45
1	Cu 324.752†	8424.7	-729.5	-2.7210 ug/L	-2.7210 ppb	18:38:25
1	Mn 257.610†	444.8	15.5	0.0236 ug/L	0.0236 ppb	18:38:45
1	Mo 202.031†	12.6	-2.7	-0.2476 ug/L	-0.2476 ppb	18:38:45
1	Ni 231.604†	118.4	16.4	0.5264 ug/L	0.5264 ppb	18:38:45
1	P 214.914†	212.1	7.5	4.8105 ug/L	4.8105 ppb	18:38:45
1	Pb 220.353†	-4.4	22.3	3.6347 ug/L	3.6347 ppb	18:38:45
1	S 181.975 Axial†	46.8	5.7	7.3151 ug/L	7.3151 ppb	18:38:45
1	Sb 206.836†	38.8	7.5	3.1233 ug/L	3.1233 ppb	18:38:45
1	Se 196.026†	-17.8	-0.7	-0.4237 ug/L	-0.4237 ppb	18:38:45
1	Si 251.611†	580.2	26.9	0.9801 ug/L	0.9801 ppb	18:38:45
1	Sn 189.927†	63.9	34.9	8.2690 ug/L	8.2690 ppb	18:38:45
1	Ti 334.940†	-1291.3	-25.0	-0.0541 ug/L	-0.0541 ppb	18:38:25
1	Tl 190.801†	-37.2	0.0	0.0094 ug/L	0.0094 ppb	18:38:45
1	U 409.014†	-2261.9	-10.9	-0.3677 ug/L	-0.3677 ppb	18:38:25
1	V 292.402†	-1671.7	-1.6	-0.0167 ug/L	-0.0167 ppb	18:38:25
1	Zn 213.857†	810.2	-340.5	-3.7684 ug/L	-3.7684 ppb	18:38:45
1	SiO2†	560.2	-7.6	-0.5862 ug/L	-0.5862 ppb	18:39:41
2	Sc Radial	4818.7	4818.7	99.9 %		18:37:33
2	Y RADIAL	5135.9	5135.9	100.5 %		18:37:33
2	Al 396.153Radial†	-82.6	0.7	0.6645 ug/L	0.6645 ppb	18:37:53
2	Ca 317.933Radial†	19.1	-2.0	-3.6557 ug/L	-3.6557 ppb	18:37:53
2	Fe 238.204 Radial†	9.3	2.2	24.759 ug/L	24.759 ppb	18:37:53
2	K 766.490 Radial†	2239.8	-2.8	-0.5403 ug/L	-0.5403 ppb	18:37:33
2	Mg 279.077 IEC†	0.2	-0.8	-33.700 ug/L	-33.700 ppb	18:37:53
2	Na 589.592 Radial†	-653.8	-99.1	-35.299 ug/L	-35.299 ppb	18:37:33
2	Sr 421.552†	7.6	-4.0	-0.0298 ug/L	-0.0298 ppb	18:37:33
2	Sc 361.383	795199.2	795199.2	101.06 %		18:38:50
2	Y 371.029	713037.2	713037.2	101.64 %		18:38:50
2	Ag 328.068†	201.9	-8.5	-0.0417 ug/L	-0.0417 ppb	18:38:50
2	As 188.979†	-36.4	-7.1	-3.1642 ug/L	-3.1642 ppb	18:39:10
2	B 249.677†	-298.2	-149.7	-3.7933 ug/L	-3.7933 ppb	18:39:10
2	Ba 233.527†	13.3	12.4	0.1484 ug/L	0.1484 ppb	18:39:10
2	Be 313.107†	-9599.9	-70.0	-0.0274 ug/L	-0.0274 ppb	18:38:50
2	Cd 226.502†	-188.9	7.3	0.1030 ug/L	0.1030 ppb	18:39:10
2	Co 228.616†	-51.4	4.6	0.1379 ug/L	0.1379 ppb	18:39:10
2	Cr 267.716†	70.3	4.0	0.0518 ug/L	0.0518 ppb	18:39:10
2	Cu 324.752†	8503.4	-696.2	-2.6002 ug/L	-2.6002 ppb	18:38:50
2	Mn 257.610†	448.2	16.4	0.0302 ug/L	0.0302 ppb	18:39:10
2	Mo 202.031†	16.4	1.0	0.0980 ug/L	0.0980 ppb	18:39:10
2	Ni 231.604†	94.0	-8.3	-0.2659 ug/L	-0.2659 ppb	18:39:10

2	P 214.914†	207.7	2.1	1.7015 ug/L	1.7015 ppb	18:39:10
2	Pb 220.353†	-11.7	15.1	2.4628 ug/L	2.4628 ppb	18:39:10
2	S 181.975 Axial†	37.8	-3.5	-4.4322 ug/L	-4.4322 ppb	18:39:10
2	Sb 206.836†	38.5	7.0	2.9155 ug/L	2.9155 ppb	18:39:10
2	Se 196.026†	-26.6	-9.3	-5.6377 ug/L	-5.6377 ppb	18:39:10
2	Si 251.611†	577.2	20.9	0.7564 ug/L	0.7564 ppb	18:39:10
2	Sn 189.927†	57.5	28.2	6.6728 ug/L	6.6728 ppb	18:39:10
2	Ti 334.940†	-1164.9	107.0	0.2139 ug/L	0.2139 ppb	18:38:50
2	Tl 190.801†	-38.2	-0.8	-0.3502 ug/L	-0.3502 ppb	18:39:10
2	U 409.014†	-2024.2	236.3	7.9325 ug/L	7.9325 ppb	18:38:50
2	V 292.402†	-1655.4	23.4	0.1980 ug/L	0.1980 ppb	18:38:50
2	Zn 213.857†	797.1	-357.8	-3.9575 ug/L	-3.9575 ppb	18:39:10
2	SiO2†	533.9	-36.6	-2.8476 ug/L	-2.8476 ppb	18:39:46
3	Sc Radial	4894.5	4894.5	102 %		18:37:58
3	Y RADIAL	5206.6	5206.6	101.9 %		18:37:58
3	Al 396.153Radial†	-92.2	-7.5	-7.1073 ug/L	-7.1073 ppb	18:38:18
3	Ca 317.933Radial†	17.4	-4.0	-7.3412 ug/L	-7.3412 ppb	18:38:18
3	Fe 238.204 Radial†	8.8	1.6	18.052 ug/L	18.052 ppb	18:38:18
3	K 766.490 Radial†	2223.1	-54.0	-10.700 ug/L	-10.700 ppb	18:37:58
3	Mg 279.077 IEC†	4.3	3.2	134.54 ug/L	134.54 ppb	18:38:18
3	Na 589.592 Radial†	-680.6	-115.4	-41.096 ug/L	-41.096 ppb	18:37:58
3	Sr 421.552†	2.6	-9.0	-0.0675 ug/L	-0.0675 ppb	18:37:58
3	Sc 361.383	786615.4	786615.4	99.968 %		18:39:15
3	Y 371.029	705068.1	705068.1	100.50 %		18:39:15
3	Ag 328.068†	110.6	-97.7	-0.4953 ug/L	-0.4953 ppb	18:39:15
3	As 188.979†	-37.1	-8.3	-3.6682 ug/L	-3.6682 ppb	18:39:35
3	B 249.677†	-341.3	-196.1	-4.9636 ug/L	-4.9636 ppb	18:39:35
3	Ba 233.527†	5.2	4.5	0.0523 ug/L	0.0523 ppb	18:39:35
3	Be 313.107†	-9351.2	75.1	0.0303 ug/L	0.0303 ppb	18:39:15
3	Cd 226.502†	-184.4	9.8	0.1368 ug/L	0.1368 ppb	18:39:35
3	Co 228.616†	-59.5	-4.1	-0.1270 ug/L	-0.1270 ppb	18:39:35
3	Cr 267.716†	42.3	-23.3	-0.3185 ug/L	-0.3185 ppb	18:39:35
3	Cu 324.752†	8507.8	-599.9	-2.2358 ug/L	-2.2358 ppb	18:39:15
3	Mn 257.610†	452.9	26.0	0.0380 ug/L	0.0380 ppb	18:39:35
3	Mo 202.031†	8.0	-7.2	-0.6576 ug/L	-0.6576 ppb	18:39:35
3	Ni 231.604†	91.7	-9.6	-0.3085 ug/L	-0.3085 ppb	18:39:35
3	P 214.914†	210.4	7.0	4.3757 ug/L	4.3757 ppb	18:39:35
3	Pb 220.353†	-5.3	21.4	3.4812 ug/L	3.4812 ppb	18:39:35
3	S 181.975 Axial†	43.7	2.8	3.5849 ug/L	3.5849 ppb	18:39:35
3	Sb 206.836†	31.4	0.3	0.2146 ug/L	0.2146 ppb	18:39:35
3	Se 196.026†	-18.4	-1.5	-0.8505 ug/L	-0.8505 ppb	18:39:35
3	Si 251.611†	542.8	-7.3	-0.2575 ug/L	-0.2575 ppb	18:39:35
3	Sn 189.927†	56.4	27.8	6.5755 ug/L	6.5755 ppb	18:39:35
3	Ti 334.940†	-1166.8	92.4	0.1751 ug/L	0.1751 ppb	18:39:15
3	Tl 190.801†	-28.7	8.4	3.8432 ug/L	3.8432 ppb	18:39:35
3	U 409.014†	-2309.7	-71.2	-2.3911 ug/L	-2.3911 ppb	18:39:15
3	V 292.402†	-1748.2	-87.3	-0.7065 ug/L	-0.7065 ppb	18:39:15
3	Zn 213.857†	807.8	-338.4	-3.7428 ug/L	-3.7428 ppb	18:39:35
3	SiO2†	574.5	9.8	0.7771 ug/L	0.7771 ppb	18:39:51

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Std.Dev.	RSD
Sc 361.383	790929.5	100.52 %		0.545			0.54%
Sc Radial	4835.1	100 %		1.1			1.10%
Y 371.029	708860.1	101.04 %		0.570			0.56%
Y RADIAL	5151.4	100.8 %		0.97			0.96%
Ag 328.068†	-6.9	-0.0326 ug/L		0.46724	-0.0326 ppb	0.46724	>999.9%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	0.6	0.5549 ug/L		7.60791	0.5549 ppb	7.60791	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	-6.0	-2.6629 ug/L		1.32892	-2.6629 ppb	1.32892	49.91%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	-164.9	-4.1738 ug/L		0.68410	-4.1738 ppb	0.68410	16.39%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	8.9	0.1060 ug/L		0.04900	0.1060 ppb	0.04900	46.24%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	-21.9	-0.0085 ug/L		0.03361	-0.0085 ppb	0.03361	396.86%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	-2.4	-4.4494 ug/L		2.58787	-4.4494 ppb	2.58787	58.16%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd 226.502†	2.0	0.0277 ug/L	0.16065	0.0277 ppb	0.16065	579.95%	
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	-0.5	-0.0174 ug/L	0.13823	-0.0174 ppb	0.13823	794.73%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	-4.8	-0.0664 ug/L	0.21847	-0.0664 ppb	0.21847	328.89%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	-675.2	-2.5190 ug/L	0.25257	-2.5190 ppb	0.25257	10.03%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	1.5	16.190 ug/L	9.6362	16.190 ppb	9.6362	59.52%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	21.5	4.2755 ug/L	17.87706	4.2755 ppb	17.87706	418.12%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	1.2	48.259 ug/L	84.2014	48.259 ppb	84.2014	174.48%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	19.3	0.0306 ug/L	0.00723	0.0306 ppb	0.00723	23.62%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	-2.9	-0.2691 ug/L	0.37827	-0.2691 ppb	0.37827	140.58%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	-100.5	-35.779 ug/L	5.0933	-35.779 ppb	5.0933	14.24%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	-0.5	-0.0160 ug/L	0.47024	-0.0160 ppb	0.47024	>999.9%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	5.5	3.6292 ug/L	1.68357	3.6292 ppb	1.68357	46.39%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	19.6	3.1929 ug/L	0.63695	3.1929 ppb	0.63695	19.95%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	1.7	2.1559 ug/L	6.00260	2.1559 ppb	6.00260	278.42%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	5.0	2.0844 ug/L	1.62269	2.0844 ppb	1.62269	77.85%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	-3.8	-2.3040 ug/L	2.89497	-2.3040 ppb	2.89497	125.65%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	13.5	0.4930 ug/L	0.65949	0.4930 ppb	0.65949	133.78%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	30.3	7.1725 ug/L	0.95091	7.1725 ppb	0.95091	13.26%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	0.1	0.0010 ug/L	0.08803	0.0010 ppb	0.08803	>999.9%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	58.1	0.1116 ug/L	0.14480	0.1116 ppb	0.14480	129.70%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	2.5	1.1675 ug/L	2.32425	1.1675 ppb	2.32425	199.08%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	51.4	1.7246 ug/L	5.47062	1.7246 ppb	5.47062	317.21%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	-21.8	-0.1751 ug/L	0.47256	-0.1751 ppb	0.47256	269.90%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	-345.6	-3.8229 ug/L	0.11726	-3.8229 ppb	0.11726	3.07%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†	-11.5	-0.8856 ug/L	1.83078	-0.8856 ppb	1.83078	206.73%	
QC value within limits for SiO2 Recovery = Not calculated							
All analyte(s) passed QC.							

Sequence No.: 9

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 3/3/2010 19:22:47

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	4954.5	4954.5	103 %		19:24:39
1	Y RADIAL	5282.5	5282.5	103.4 %		19:24:39
1	Al 396.153Radial†	5362.0	5301.2	5033.7 ug/L	5033.7 ppb	19:24:39
1	Ca 317.933Radial†	2846.1	2748.5	5087.6 ug/L	5087.6 ppb	19:24:59
1	Fe 238.204 Radial†	479.9	459.9	5147.0 ug/L	5147.0 ppb	19:24:59
1	K 766.490 Radial†	28623.9	25610.4	5078.1 ug/L	5078.1 ppb	19:24:39
1	Mg 279.077 IEC†	131.8	127.2	5268.4 ug/L	5268.4 ppb	19:24:59
1	Na 589.592 Radial†	28414.1	28205.1	10044 ug/L	10044 ppb	19:24:39
1	Sr 421.552†	69650.5	67766.2	507.69 ug/L	507.69 ppb	19:24:39
1	Sc 361.383	822677.1	822677.1	104.55 %		19:25:56
1	Y 371.029	727624.8	727624.8	103.72 %		19:25:56
1	Ag 328.068†	99470.7	94932.7	489.20 ug/L	489.20 ppb	19:26:02
1	As 188.979†	1139.7	1118.9	500.95 ug/L	500.95 ppb	19:26:22
1	B 249.677†	19713.2	19000.5	478.52 ug/L	478.52 ppb	19:26:02
1	Ba 233.527†	43685.6	41783.3	495.95 ug/L	495.95 ppb	19:26:02
1	Be 313.107†	1290161.4	1243432.7	496.37 ug/L	496.37 ppb	19:25:56
1	Cd 226.502†	36302.8	34916.9	495.71 ug/L	495.71 ppb	19:26:02
1	Co 228.616†	16742.6	16069.2	488.85 ug/L	488.85 ppb	19:26:22
1	Cr 267.716†	37864.7	36150.9	494.67 ug/L	494.67 ppb	19:26:02
1	Cu 324.752†	145051.4	129627.2	483.60 ug/L	483.60 ppb	19:26:02
1	Mn 257.610†	322005.4	307562.2	493.43 ug/L	493.43 ppb	19:26:02
1	Mo 202.031†	5555.8	5298.8	488.12 ug/L	488.12 ppb	19:26:22
1	Ni 231.604†	16456.5	15638.9	500.34 ug/L	500.34 ppb	19:26:02
1	P 214.914†	4786.8	4375.0	2342.6 ug/L	2342.6 ppb	19:26:22
1	Pb 220.353†	3104.8	2996.4	490.33 ug/L	490.33 ppb	19:26:22
1	S 181.975 Axial†	831.2	754.1	962.75 ug/L	962.75 ppb	19:26:22
1	Sb 206.836†	1300.7	1213.0	502.54 ug/L	502.54 ppb	19:26:22
1	Se 196.026†	826.1	807.1	505.60 ug/L	505.60 ppb	19:26:22
1	Si 251.611†	71186.0	67537.1	2447.1 ug/L	2447.1 ppb	19:26:02
1	Sn 189.927†	2186.7	2062.9	488.73 ug/L	488.73 ppb	19:26:22
1	Ti 334.940†	251409.2	241725.5	486.07 ug/L	486.07 ppb	19:26:02
1	Tl 190.801†	1090.2	1079.8	498.81 ug/L	498.81 ppb	19:26:22
1	U 409.014†	12815.7	14497.2	485.18 ug/L	485.18 ppb	19:26:02
1	V 292.402†	63106.0	62020.6	498.42 ug/L	498.42 ppb	19:26:02
1	Zn 213.857†	47626.2	44406.6	486.78 ug/L	486.78 ppb	19:26:02
1	SiO2†	70842.0	67193.5	5211.0 ug/L	5211.0 ppb	19:27:29
2	Sc Radial	4961.0	4961.0	103 %		19:25:04
2	Y RADIAL	5252.5	5252.5	102.8 %		19:25:04
2	Al 396.153Radial†	5392.9	5324.4	5055.8 ug/L	5055.8 ppb	19:25:04
2	Ca 317.933Radial†	2837.7	2736.8	5066.0 ug/L	5066.0 ppb	19:25:24
2	Fe 238.204 Radial†	478.6	458.1	5126.4 ug/L	5126.4 ppb	19:25:24
2	K 766.490 Radial†	28671.4	25620.3	5080.1 ug/L	5080.1 ppb	19:25:04
2	Mg 279.077 IEC†	133.9	129.1	5345.8 ug/L	5345.8 ppb	19:25:24
2	Na 589.592 Radial†	28302.3	28060.4	9992.6 ug/L	9992.6 ppb	19:25:04
2	Sr 421.552†	69567.9	67597.6	506.42 ug/L	506.42 ppb	19:25:04
2	Sc 361.383	815494.4	815494.4	103.64 %		19:26:27
2	Y 371.029	721729.2	721729.2	102.88 %		19:26:27
2	Ag 328.068†	100112.0	96389.5	496.67 ug/L	496.67 ppb	19:26:32
2	As 188.979†	1109.7	1099.6	492.41 ug/L	492.41 ppb	19:26:52
2	B 249.677†	19918.5	19364.6	487.73 ug/L	487.73 ppb	19:26:32
2	Ba 233.527†	43583.9	42053.3	499.16 ug/L	499.16 ppb	19:26:32
2	Be 313.107†	1279202.0	1243726.8	496.50 ug/L	496.50 ppb	19:26:27
2	Cd 226.502†	36335.1	35253.9	500.50 ug/L	500.50 ppb	19:26:32
2	Co 228.616†	16687.1	16156.7	491.51 ug/L	491.51 ppb	19:26:52
2	Cr 267.716†	37852.8	36458.4	498.87 ug/L	498.87 ppb	19:26:32
2	Cu 324.752†	146228.3	131984.7	492.39 ug/L	492.39 ppb	19:26:32
2	Mn 257.610†	322436.0	310690.3	498.44 ug/L	498.44 ppb	19:26:32
2	Mo 202.031†	5537.1	5327.6	490.77 ug/L	490.77 ppb	19:26:52
2	Ni 231.604†	16490.5	15810.3	505.83 ug/L	505.83 ppb	19:26:32



2	P 214.914†	4787.0	4415.5	2363.4 ug/L	2363.4 ppb	19:26:52
2	Pb 220.353†	3108.6	3026.2	495.20 ug/L	495.20 ppb	19:26:52
2	S 181.975 Axial†	830.2	760.2	970.45 ug/L	970.45 ppb	19:26:52
2	Sb 206.836†	1305.6	1228.7	508.94 ug/L	508.94 ppb	19:26:52
2	Se 196.026†	817.0	805.3	504.45 ug/L	504.45 ppb	19:26:52
2	Si 251.611†	71665.9	68599.9	2485.7 ug/L	2485.7 ppb	19:26:32
2	Sn 189.927†	2187.2	2081.8	493.20 ug/L	493.20 ppb	19:26:52
2	Ti 334.940†	252428.4	244826.9	492.29 ug/L	492.29 ppb	19:26:32
2	Tl 190.801†	1079.9	1079.0	498.50 ug/L	498.50 ppb	19:26:52
2	U 409.014†	13042.8	14824.2	496.15 ug/L	496.15 ppb	19:26:32
2	V 292.402†	63313.1	62752.1	504.28 ug/L	504.28 ppb	19:26:32
2	Zn 213.857†	47849.7	45023.4	493.56 ug/L	493.56 ppb	19:26:32
2	SiO2†	71934.2	68844.2	5339.3 ug/L	5339.3 ppb	19:27:34
3	Sc Radial	4971.1	4971.1	103 %		19:25:29
3	Y RADIAL	5279.2	5279.2	103.3 %		19:25:29
3	Al 396.153Radial†	5450.8	5369.9	5099.4 ug/L	5099.4 ppb	19:25:29
3	Ca 317.933Radial†	2840.4	2733.7	5060.3 ug/L	5060.3 ppb	19:25:49
3	Fe 238.204 Radial†	471.1	449.8	5034.0 ug/L	5034.0 ppb	19:25:49
3	K 766.490 Radial†	28743.0	25632.9	5082.6 ug/L	5082.6 ppb	19:25:29
3	Mg 279.077 IEC†	133.4	128.3	5313.8 ug/L	5313.8 ppb	19:25:49
3	Na 589.592 Radial†	28425.0	28123.3	10015 ug/L	10015 ppb	19:25:29
3	Sr 421.552†	69828.9	67713.0	507.29 ug/L	507.29 ppb	19:25:29
3	Sc 361.383	828157.1	828157.1	105.25 %		19:26:58
3	Y 371.029	732360.7	732360.7	104.39 %		19:26:58
3	Ag 328.068†	100905.6	95666.5	492.93 ug/L	492.93 ppb	19:27:03
3	As 188.979†	1139.9	1111.9	497.86 ug/L	497.86 ppb	19:27:23
3	B 249.677†	20157.7	19298.0	486.08 ug/L	486.08 ppb	19:27:03
3	Ba 233.527†	44149.5	41947.6	497.90 ug/L	497.90 ppb	19:27:03
3	Be 313.107†	1294361.8	1239258.1	494.71 ug/L	494.71 ppb	19:26:58
3	Cd 226.502†	36701.6	35066.0	497.84 ug/L	497.84 ppb	19:27:03
3	Co 228.616†	16734.4	15955.5	485.38 ug/L	485.38 ppb	19:27:23
3	Cr 267.716†	38299.4	36324.2	497.03 ug/L	497.03 ppb	19:27:03
3	Cu 324.752†	147634.4	131163.3	489.32 ug/L	489.32 ppb	19:27:03
3	Mn 257.610†	325768.4	309099.5	495.88 ug/L	495.88 ppb	19:27:03
3	Mo 202.031†	5553.1	5261.1	484.64 ug/L	484.64 ppb	19:27:23
3	Ni 231.604†	16637.1	15706.3	502.50 ug/L	502.50 ppb	19:27:03
3	P 214.914†	4808.1	4364.9	2335.9 ug/L	2335.9 ppb	19:27:23
3	Pb 220.353†	3120.6	2991.7	489.58 ug/L	489.58 ppb	19:27:23
3	S 181.975 Axial†	832.1	749.8	957.15 ug/L	957.15 ppb	19:27:23
3	Sb 206.836†	1297.3	1201.5	497.86 ug/L	497.86 ppb	19:27:23
3	Se 196.026†	814.7	791.0	495.50 ug/L	495.50 ppb	19:27:23
3	Si 251.611†	72381.8	68222.8	2472.1 ug/L	2472.1 ppb	19:27:03
3	Sn 189.927†	2200.4	2062.0	488.54 ug/L	488.54 ppb	19:27:23
3	Ti 334.940†	255003.0	243548.9	489.73 ug/L	489.73 ppb	19:27:03
3	Tl 190.801†	1089.3	1072.1	495.32 ug/L	495.32 ppb	19:27:23
3	U 409.014†	13196.3	14777.6	494.60 ug/L	494.60 ppb	19:27:03
3	V 292.402†	63854.6	62332.5	500.88 ug/L	500.88 ppb	19:27:03
3	Zn 213.857†	48222.9	44672.1	489.71 ug/L	489.71 ppb	19:27:03
3	SiO2†	70602.3	66517.4	5158.5 ug/L	5158.5 ppb	19:27:39

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	822109.5	104.48 %	0.807			0.77%
Sc Radial	4962.2	103 %	0.2			0.17%
Y 371.029	727238.2	103.66 %	0.759			0.73%
Y RADIAL	5271.4	103.2 %	0.32			0.31%
Ag 328.068†	95662.9	492.94 ug/L	3.734	492.94 ppb	3.734	0.76%
QC value within limits for Ag 328.068 Recovery = 98.59%						
Al 396.153Radial†	5331.8	5063.0 ug/L	33.44	5063.0 ppb	33.44	0.66%
QC value within limits for Al 396.153Radial Recovery = 101.26%						
As 188.979†	1110.2	497.07 ug/L	4.323	497.07 ppb	4.323	0.87%
QC value within limits for As 188.979 Recovery = 99.41%						
B 249.677†	19221.0	484.11 ug/L	4.910	484.11 ppb	4.910	1.01%
QC value within limits for B 249.677 Recovery = 96.82%						
Ba 233.527†	41928.1	497.67 ug/L	1.616	497.67 ppb	1.616	0.32%
QC value within limits for Ba 233.527 Recovery = 99.53%						
Be 313.107†	1242139.2	495.86 ug/L	0.995	495.86 ppb	0.995	0.20%
QC value within limits for Be 313.107 Recovery = 99.17%						
Ca 317.933Radial†	2739.7	5071.3 ug/L	14.43	5071.3 ppb	14.43	0.28%



QC value within limits for Ca 317.933 Radial Recovery = 101.43%

Cd 226.502†	35078.9	498.01 ug/L	2.402	498.01 ppb	2.402	0.48%
QC value within limits for Cd 226.502 Recovery = 99.60%						
Co 228.616†	16060.5	488.58 ug/L	3.073	488.58 ppb	3.073	0.63%
QC value within limits for Co 228.616 Recovery = 97.72%						
Cr 267.716†	36311.2	496.86 ug/L	2.108	496.86 ppb	2.108	0.42%
QC value within limits for Cr 267.716 Recovery = 99.37%						
Cu 324.752†	130925.1	488.44 ug/L	4.460	488.44 ppb	4.460	0.91%
QC value within limits for Cu 324.752 Recovery = 97.69%						
Fe 238.204 Radial†	455.9	5102.5 ug/L	60.20	5102.5 ppb	60.20	1.18%
QC value within limits for Fe 238.204 Radial Recovery = 102.05%						
K 766.490 Radial†	25621.2	5080.3 ug/L	2.26	5080.3 ppb	2.26	0.04%
QC value within limits for K 766.490 Radial Recovery = 101.61%						
Mg 279.077 IEC†	128.2	5309.3 ug/L	38.91	5309.3 ppb	38.91	0.73%
QC value within limits for Mg 279.077 IEC Recovery = 106.19%						
Mn 257.610†	309117.3	495.92 ug/L	2.505	495.92 ppb	2.505	0.51%
QC value within limits for Mn 257.610 Recovery = 99.18%						
Mo 202.031†	5295.8	487.84 ug/L	3.071	487.84 ppb	3.071	0.63%
QC value within limits for Mo 202.031 Recovery = 97.57%						
Na 589.592 Radial†	28129.6	10017 ug/L	25.8	10017 ppb	25.8	0.26%
QC value within limits for Na 589.592 Radial Recovery = 100.17%						
Ni 231.604†	15718.5	502.89 ug/L	2.764	502.89 ppb	2.764	0.55%
QC value within limits for Ni 231.604 Recovery = 100.58%						
P 214.914†	4385.1	2347.3 ug/L	14.36	2347.3 ppb	14.36	0.61%
QC value within limits for P 214.914 Recovery = 93.89%						
Pb 220.353†	3004.7	491.71 ug/L	3.049	491.71 ppb	3.049	0.62%
QC value within limits for Pb 220.353 Recovery = 98.34%						
S 181.975 Axial†	754.7	963.45 ug/L	6.678	963.45 ppb	6.678	0.69%
QC value within limits for S 181.975 Axial Recovery = 96.35%						
Sb 206.836†	1214.4	503.12 ug/L	5.561	503.12 ppb	5.561	1.11%
QC value within limits for Sb 206.836 Recovery = 100.62%						
Se 196.026†	801.1	501.85 ug/L	5.528	501.85 ppb	5.528	1.10%
QC value within limits for Se 196.026 Recovery = 100.37%						
Si 251.611†	68119.9	2468.3 ug/L	19.56	2468.3 ppb	19.56	0.79%
QC value within limits for Si 251.611 Recovery = 98.73%						
Sn 189.927†	2068.9	490.16 ug/L	2.640	490.16 ppb	2.640	0.54%
QC value within limits for Sn 189.927 Recovery = 98.03%						
Sr 421.552†	67692.3	507.13 ug/L	0.646	507.13 ppb	0.646	0.13%
QC value within limits for Sr 421.552 Recovery = 101.43%						
Ti 334.940†	243367.1	489.36 ug/L	3.127	489.36 ppb	3.127	0.64%
QC value within limits for Ti 334.940 Recovery = 97.87%						
Tl 190.801†	1076.9	497.54 ug/L	1.927	497.54 ppb	1.927	0.39%
QC value within limits for Tl 190.801 Recovery = 99.51%						
U 409.014†	14699.7	491.98 ug/L	5.941	491.98 ppb	5.941	1.21%
QC value within limits for U 409.014 Recovery = 98.40%						
V 292.402†	62368.4	501.19 ug/L	2.941	501.19 ppb	2.941	0.59%
QC value within limits for V 292.402 Recovery = 100.24%						
Zn 213.857†	44700.7	490.01 ug/L	3.401	490.01 ppb	3.401	0.69%
QC value within limits for Zn 213.857 Recovery = 98.00%						
SiO2†	67518.4	5236.3 ug/L	92.98	5236.3 ppb	92.98	1.78%
QC value within limits for SiO2 Recovery = 97.92%						

All analyte(s) passed QC.

Sequence No.: 10

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 3/3/2010 19:29:48

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4842.7	4842.7	100 %		19:31:40
1	Y RADIAL	5150.0	5150.0	100.8 %		19:31:40
1	Al 396.153Radial†	-81.8	1.9	1.7700 ug/L	1.7700 ppb	19:32:00
1	Ca 317.933Radial†	19.7	-1.5	-2.6853 ug/L	-2.6853 ppb	19:32:00
1	Fe 238.204 Radial†	6.6	-0.5	-5.4940 ug/L	-5.4940 ppb	19:32:00
1	K 766.490 Radial†	2313.8	59.8	11.873 ug/L	11.873 ppb	19:31:40
1	Mg 279.077 IEC†	2.1	1.0	42.798 ug/L	42.798 ppb	19:32:00
1	Na 589.592 Radial†	-597.2	-39.5	-14.079 ug/L	-14.079 ppb	19:31:40
1	Sr 421.552†	9.5	-2.1	-0.0158 ug/L	-0.0158 ppb	19:31:40
1	Sc 361.383	804059.8	804059.8	102.18 %		19:32:57
1	Y 371.029	717286.9	717286.9	102.24 %		19:32:57
1	Ag 328.068†	239.4	26.0	0.1369 ug/L	0.1369 ppb	19:33:02
1	As 188.979†	-23.5	5.8	2.5920 ug/L	2.5920 ppb	19:33:22
1	B 249.677†	-304.1	-152.3	-3.8527 ug/L	-3.8527 ppb	19:33:22
1	Ba 233.527†	0.2	-0.5	-0.0070 ug/L	-0.0070 ppb	19:33:22
1	Be 313.107†	-9188.1	437.7	0.1747 ug/L	0.1747 ppb	19:33:02
1	Cd 226.502†	-184.7	13.5	0.1903 ug/L	0.1903 ppb	19:33:22
1	Co 228.616†	-51.7	4.8	0.1448 ug/L	0.1448 ppb	19:33:22
1	Cr 267.716†	71.2	4.1	0.0581 ug/L	0.0581 ppb	19:33:22
1	Cu 324.752†	8377.6	-912.0	-3.3984 ug/L	-3.3984 ppb	19:33:02
1	Mn 257.610†	467.5	30.5	0.0466 ug/L	0.0466 ppb	19:33:22
1	Mo 202.031†	17.3	1.7	0.1605 ug/L	0.1605 ppb	19:33:22
1	Ni 231.604†	106.6	3.0	0.0959 ug/L	0.0959 ppb	19:33:22
1	P 214.914†	207.5	-0.3	0.5393 ug/L	0.5393 ppb	19:33:22
1	Pb 220.353†	-24.9	2.3	0.3814 ug/L	0.3814 ppb	19:33:22
1	S 181.975 Axial†	47.6	5.8	7.3652 ug/L	7.3652 ppb	19:33:22
1	Sb 206.836†	17.7	-13.7	-5.4067 ug/L	-5.4067 ppb	19:33:22
1	Se 196.026†	-24.4	-7.0	-4.2556 ug/L	-4.2556 ppb	19:33:22
1	Si 251.611†	556.6	-5.6	-0.2050 ug/L	-0.2050 ppb	19:33:22
1	Sn 189.927†	51.9	22.2	5.2424 ug/L	5.2424 ppb	19:33:22
1	Ti 334.940†	-1207.4	78.0	0.1563 ug/L	0.1563 ppb	19:33:02
1	Tl 190.801†	-24.3	13.3	6.1075 ug/L	6.1075 ppb	19:33:22
1	U 409.014†	-2514.7	-221.6	-7.4423 ug/L	-7.4423 ppb	19:32:57
1	V 292.402†	-1727.3	-28.9	-0.2400 ug/L	-0.2400 ppb	19:33:02
1	Zn 213.857†	796.6	-366.9	-4.0555 ug/L	-4.0555 ppb	19:33:22
1	SiO2†	574.0	-3.2	-0.2523 ug/L	-0.2523 ppb	19:34:28
2	Sc Radial	4785.1	4785.1	99.2 %		19:32:05
2	Y RADIAL	5114.5	5114.5	100.1 %		19:32:05
2	Al 396.153Radial†	-87.6	-4.9	-4.6691 ug/L	-4.6691 ppb	19:32:25
2	Ca 317.933Radial†	16.7	-4.2	-7.8245 ug/L	-7.8245 ppb	19:32:25
2	Fe 238.204 Radial†	7.7	0.7	7.5720 ug/L	7.5720 ppb	19:32:25
2	K 766.490 Radial†	2373.5	147.6	29.333 ug/L	29.333 ppb	19:32:05
2	Mg 279.077 IEC†	0.2	-0.8	-32.662 ug/L	-32.662 ppb	19:32:25
2	Na 589.592 Radial†	-690.7	-140.9	-50.182 ug/L	-50.182 ppb	19:32:05
2	Sr 421.552†	30.0	18.7	0.1402 ug/L	0.1402 ppb	19:32:05
2	Sc 361.383	803863.3	803863.3	102.16 %		19:33:27
2	Y 371.029	716829.5	716829.5	102.18 %		19:33:27
2	Ag 328.068†	253.5	39.9	0.2086 ug/L	0.2086 ppb	19:33:32
2	As 188.979†	-31.3	-1.8	-0.7922 ug/L	-0.7922 ppb	19:33:52
2	B 249.677†	-288.8	-137.3	-3.4763 ug/L	-3.4763 ppb	19:33:52
2	Ba 233.527†	13.2	12.2	0.1442 ug/L	0.1442 ppb	19:33:52
2	Be 313.107†	-9419.2	209.2	0.0835 ug/L	0.0835 ppb	19:33:32
2	Cd 226.502†	-193.0	5.3	0.0733 ug/L	0.0733 ppb	19:33:52
2	Co 228.616†	-51.3	5.2	0.1577 ug/L	0.1577 ppb	19:33:52
2	Cr 267.716†	66.0	-1.0	-0.0128 ug/L	-0.0128 ppb	19:33:52
2	Cu 324.752†	8503.6	-786.7	-2.9325 ug/L	-2.9325 ppb	19:33:32
2	Mn 257.610†	441.0	4.6	0.0095 ug/L	0.0095 ppb	19:33:52
2	Mo 202.031†	14.3	-1.2	-0.1053 ug/L	-0.1053 ppb	19:33:52
2	Ni 231.604†	92.5	-10.8	-0.3458 ug/L	-0.3458 ppb	19:33:52

2	P 214.914†	203.1	-4.6	-1.9473 ug/L	-1.9473 ppb	19:33:52
2	Pb 220.353†	-35.0	-7.6	-1.2377 ug/L	-1.2377 ppb	19:33:52
2	S 181.975 Axial†	44.9	3.1	3.9666 ug/L	3.9666 ppb	19:33:52
2	Sb 206.836†	35.1	3.3	1.3793 ug/L	1.3793 ppb	19:33:52
2	Se 196.026†	-20.7	-3.4	-2.0302 ug/L	-2.0302 ppb	19:33:52
2	Si 251.611†	579.5	16.9	0.6158 ug/L	0.6158 ppb	19:33:52
2	Sn 189.927†	47.6	18.0	4.2481 ug/L	4.2481 ppb	19:33:52
2	Ti 334.940†	-1241.3	44.5	0.0927 ug/L	0.0927 ppb	19:33:32
2	Tl 190.801†	-34.8	2.9	1.3522 ug/L	1.3522 ppb	19:33:52
2	U 409.014†	-2391.2	-101.3	-3.4044 ug/L	-3.4044 ppb	19:33:27
2	V 292.402†	-1730.0	-32.0	-0.2634 ug/L	-0.2634 ppb	19:33:32
2	Zn 213.857†	788.4	-374.7	-4.1418 ug/L	-4.1418 ppb	19:33:52
2	SiO2†	584.7	7.5	0.5862 ug/L	0.5862 ppb	19:34:33
3	Sc Radial	4899.5	4899.5	102 %		19:32:30
3	Y RADIAL	5254.8	5254.8	102.9 %		19:32:30
3	Al 396.153Radial†	-84.6	0.1	0.0523 ug/L	0.0523 ppb	19:32:50
3	Ca 317.933Radial†	17.8	-3.6	-6.6188 ug/L	-6.6188 ppb	19:32:50
3	Fe 238.204 Radial†	5.9	-1.3	-14.588 ug/L	-14.588 ppb	19:32:50
3	K 766.490 Radial†	2277.4	-2.8	-0.5553 ug/L	-0.5553 ppb	19:32:30
3	Mg 279.077 IEC†	2.5	1.4	58.377 ug/L	58.377 ppb	19:32:50
3	Na 589.592 Radial†	-608.6	-43.9	-15.644 ug/L	-15.644 ppb	19:32:30
3	Sr 421.552†	26.4	14.5	0.1084 ug/L	0.1084 ppb	19:32:30
3	Sc 361.383	804130.6	804130.6	102.19 %		19:33:58
3	Y 371.029	716724.3	716724.3	102.16 %		19:33:58
3	Ag 328.068†	270.0	56.0	0.2875 ug/L	0.2875 ppb	19:34:03
3	As 188.979†	-27.9	1.6	0.6898 ug/L	0.6898 ppb	19:34:23
3	B 249.677†	-345.9	-193.1	-4.8853 ug/L	-4.8853 ppb	19:34:23
3	Ba 233.527†	0.7	0.0	0.0000 ug/L	0.0000 ppb	19:34:23
3	Be 313.107†	-9439.7	192.3	0.0768 ug/L	0.0768 ppb	19:34:03
3	Cd 226.502†	-200.4	-1.9	-0.0268 ug/L	-0.0268 ppb	19:34:23
3	Co 228.616†	-48.8	7.6	0.2341 ug/L	0.2341 ppb	19:34:23
3	Cr 267.716†	61.0	-5.9	-0.0787 ug/L	-0.0787 ppb	19:34:23
3	Cu 324.752†	8492.7	-800.1	-2.9823 ug/L	-2.9823 ppb	19:34:03
3	Mn 257.610†	442.0	5.5	0.0050 ug/L	0.0050 ppb	19:34:23
3	Mo 202.031†	24.3	8.6	0.7893 ug/L	0.7893 ppb	19:34:23
3	Ni 231.604†	89.3	-13.9	-0.4456 ug/L	-0.4456 ppb	19:34:23
3	P 214.914†	210.4	2.4	1.9807 ug/L	1.9807 ppb	19:34:23
3	Pb 220.353†	-14.5	12.5	2.0370 ug/L	2.0370 ppb	19:34:23
3	S 181.975 Axial†	39.0	-2.7	-3.4639 ug/L	-3.4639 ppb	19:34:23
3	Sb 206.836†	25.7	-5.9	-2.2781 ug/L	-2.2781 ppb	19:34:23
3	Se 196.026†	-23.7	-6.2	-3.8261 ug/L	-3.8261 ppb	19:34:23
3	Si 251.611†	582.6	19.9	0.7113 ug/L	0.7113 ppb	19:34:23
3	Sn 189.927†	50.1	20.4	4.8231 ug/L	4.8231 ppb	19:34:23
3	Ti 334.940†	-1239.3	46.9	0.0913 ug/L	0.0913 ppb	19:34:03
3	Tl 190.801†	-24.5	13.1	6.0003 ug/L	6.0003 ppb	19:34:23
3	U 409.014†	-2464.0	-171.8	-5.7678 ug/L	-5.7678 ppb	19:33:58
3	V 292.402†	-1677.7	19.8	0.1602 ug/L	0.1602 ppb	19:34:03
3	Zn 213.857†	791.9	-371.6	-4.1028 ug/L	-4.1028 ppb	19:34:23
3	SiO2†	554.5	-22.3	-1.7579 ug/L	-1.7579 ppb	19:34:38

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	804017.9	102.18 %	0.018			0.02%
Sc Radial	4842.4	100 %	1.2			1.18%
Y 371.029	716946.9	102.20 %	0.043			0.04%
Y RADIAL	5173.1	101.3 %	1.43			1.41%
Ag 328.068†	40.6	0.2110 ug/L	0.07533	0.2110 ppb	0.07533	35.71%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-1.0	-0.9489 ug/L	3.33430	-0.9489 ppb	3.33430	351.38%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	1.9	0.8299 ug/L	1.69644	0.8299 ppb	1.69644	204.42%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-160.9	-4.0714 ug/L	0.72953	-4.0714 ppb	0.72953	17.92%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	3.9	0.0458 ug/L	0.08536	0.0458 ppb	0.08536	186.51%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	279.7	0.1117 ug/L	0.05467	0.1117 ppb	0.05467	48.95%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-3.1	-5.7095 ug/L	2.68759	-5.7095 ppb	2.68759	47.07%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd 226.502†	5.6	0.0790 ug/L	0.10865	0.0790 ppb	0.10865	137.61%	
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	5.9	0.1789 ug/L	0.04824	0.1789 ppb	0.04824	26.97%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	-1.0	-0.0111 ug/L	0.06843	-0.0111 ppb	0.06843	615.07%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	-832.9	-3.1044 ug/L	0.25582	-3.1044 ppb	0.25582	8.24%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	-0.4	-4.1699 ug/L	11.13906	-4.1699 ppb	11.13906	267.13%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	68.2	13.550 ug/L	15.0147	13.550 ppb	15.0147	110.81%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	0.6	22.838 ug/L	48.6913	22.838 ppb	48.6913	213.21%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	13.5	0.0204 ug/L	0.02280	0.0204 ppb	0.02280	112.04%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	3.1	0.2815 ug/L	0.45944	0.2815 ppb	0.45944	163.22%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	-74.8	-26.635 ug/L	20.4073	-26.635 ppb	20.4073	76.62%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	-7.2	-0.2318 ug/L	0.28821	-0.2318 ppb	0.28821	124.32%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	-0.9	0.1909 ug/L	1.98701	0.1909 ppb	1.98701	>999.9%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	2.4	0.3935 ug/L	1.63739	0.3935 ppb	1.63739	416.07%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	2.1	2.6226 ug/L	5.53824	2.6226 ppb	5.53824	211.17%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	-5.5	-2.1018 ug/L	3.39643	-2.1018 ppb	3.39643	161.59%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	-5.5	-3.3706 ug/L	1.18056	-3.3706 ppb	1.18056	35.02%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	10.4	0.3740 ug/L	0.50370	0.3740 ppb	0.50370	134.66%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	20.2	4.7712 ug/L	0.49916	4.7712 ppb	0.49916	10.46%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	10.4	0.0776 ug/L	0.08244	0.0776 ppb	0.08244	106.23%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	56.5	0.1134 ug/L	0.03712	0.1134 ppb	0.03712	32.73%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	9.8	4.4867 ug/L	2.71503	4.4867 ppb	2.71503	60.51%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	-164.9	-5.5381 ug/L	2.02872	-5.5381 ppb	2.02872	36.63%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	-13.7	-0.1144 ug/L	0.23810	-0.1144 ppb	0.23810	208.10%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	-371.1	-4.1001 ug/L	0.04320	-4.1001 ppb	0.04320	1.05%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†	-6.0	-0.4747 ug/L	1.18779	-0.4747 ppb	1.18779	250.24%	
QC value within limits for SiO2 Recovery = Not calculated							

All analyte(s) passed QC.

Sequence No.: 15  
 Sample ID: CCV  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 1  
 Date Collected: 3/3/2010 20:04:15  
 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	4900.9	4900.9	102 %		20:06:07
1	Y RADIAL	5197.2	5197.2	101.7 %		20:06:07
1	Al 396.153Radial†	5390.1	5385.9	5114.8 ug/L	5114.8 ppb	20:06:07
1	Ca 317.933Radial†	2854.5	2787.1	5159.0 ug/L	5159.0 ppb	20:06:27
1	Fe 238.204 Radial†	477.1	462.2	5173.3 ug/L	5173.3 ppb	20:06:27
1	K 766.490 Radial†	28450.9	25744.9	5104.9 ug/L	5104.9 ppb	20:06:07
1	Mg 279.077 IEC†	132.6	129.4	5357.3 ug/L	5357.3 ppb	20:06:27
1	Na 589.592 Radial†	27162.1	27275.9	9713.2 ug/L	9713.2 ppb	20:06:07
1	Sr 421.552†	68024.6	66908.0	501.26 ug/L	501.26 ppb	20:06:07
1	Sc 361.383	830432.7	830432.7	105.54 %		20:07:24
1	Y 371.029	734889.4	734889.4	104.75 %		20:07:24
1	Ag 328.068†	101255.2	95735.0	493.33 ug/L	493.33 ppb	20:07:29
1	As 188.979†	1132.5	1101.9	493.45 ug/L	493.45 ppb	20:07:49
1	B 249.677†	20076.5	19168.6	482.72 ug/L	482.72 ppb	20:07:29
1	Ba 233.527†	44300.3	41975.5	498.24 ug/L	498.24 ppb	20:07:29
1	Be 313.107†	1310314.2	1251003.6	499.39 ug/L	499.39 ppb	20:07:24
1	Cd 226.502†	36904.8	35163.0	499.20 ug/L	499.20 ppb	20:07:29
1	Co 228.616†	17536.5	16671.9	507.16 ug/L	507.16 ppb	20:07:29
1	Cr 267.716†	38437.8	36355.7	497.47 ug/L	497.47 ppb	20:07:29
1	Cu 324.752†	148153.7	131271.0	489.73 ug/L	489.73 ppb	20:07:29
1	Mn 257.610†	327581.4	309969.3	497.29 ug/L	497.29 ppb	20:07:29
1	Mo 202.031†	5548.0	5241.8	482.88 ug/L	482.88 ppb	20:07:49
1	Ni 231.604†	16761.0	15780.4	504.86 ug/L	504.86 ppb	20:07:29
1	P 214.914†	4803.4	4347.9	2326.3 ug/L	2326.3 ppb	20:07:49
1	Pb 220.353†	3131.4	2993.8	489.92 ug/L	489.92 ppb	20:07:49
1	S 181.975 Axial†	841.4	756.4	965.59 ug/L	965.59 ppb	20:07:49
1	Sb 206.836†	1290.9	1192.1	494.06 ug/L	494.06 ppb	20:07:49
1	Se 196.026†	827.0	800.5	501.62 ug/L	501.62 ppb	20:07:49
1	Si 251.611†	72868.8	68495.8	2482.0 ug/L	2482.0 ppb	20:07:29
1	Sn 189.927†	2202.8	2058.6	487.73 ug/L	487.73 ppb	20:07:49
1	Ti 334.940†	256114.6	243938.3	490.52 ug/L	490.52 ppb	20:07:29
1	Tl 190.801†	1088.3	1068.2	493.47 ug/L	493.47 ppb	20:07:49
1	U 409.014†	13134.8	14685.0	491.48 ug/L	491.48 ppb	20:07:29
1	V 292.402†	64237.7	62529.2	502.39 ug/L	502.39 ppb	20:07:29
1	Zn 213.857†	48576.6	44881.7	491.99 ug/L	491.99 ppb	20:07:29
1	SiO2†	71462.9	67149.1	5207.7 ug/L	5207.7 ppb	20:08:56
2	Sc Radial	4850.6	4850.6	101 %		20:06:32
2	Y RADIAL	5119.1	5119.1	100.2 %		20:06:32
2	Al 396.153Radial†	5353.0	5403.9	5131.8 ug/L	5131.8 ppb	20:06:32
2	Ca 317.933Radial†	2835.5	2797.3	5177.9 ug/L	5177.9 ppb	20:06:52
2	Fe 238.204 Radial†	496.4	486.3	5442.0 ug/L	5442.0 ppb	20:06:52
2	K 766.490 Radial†	28317.9	25902.9	5136.3 ug/L	5136.3 ppb	20:06:32
2	Mg 279.077 IEC†	128.5	126.7	5244.8 ug/L	5244.8 ppb	20:06:52
2	Na 589.592 Radial†	26763.9	27157.1	9670.9 ug/L	9670.9 ppb	20:06:32
2	Sr 421.552†	67390.6	66971.8	501.73 ug/L	501.73 ppb	20:06:32
2	Sc 361.383	825040.0	825040.0	104.85 %		20:07:55
2	Y 371.029	729779.0	729779.0	104.03 %		20:07:55
2	Ag 328.068†	99896.0	95065.8	489.98 ug/L	489.98 ppb	20:08:00
2	As 188.979†	1139.6	1115.7	499.62 ug/L	499.62 ppb	20:08:20
2	B 249.677†	19841.8	19069.1	480.17 ug/L	480.17 ppb	20:08:00
2	Ba 233.527†	43841.7	41812.5	496.31 ug/L	496.31 ppb	20:08:00
2	Be 313.107†	1296695.9	1246130.6	497.44 ug/L	497.44 ppb	20:07:55
2	Cd 226.502†	36477.5	34984.0	496.63 ug/L	496.63 ppb	20:08:00
2	Co 228.616†	17318.2	16572.3	504.15 ug/L	504.15 ppb	20:08:00
2	Cr 267.716†	38057.2	36230.8	495.76 ug/L	495.76 ppb	20:08:00
2	Cu 324.752†	145717.0	129864.6	484.50 ug/L	484.50 ppb	20:08:00
2	Mn 257.610†	323382.5	307993.4	494.15 ug/L	494.15 ppb	20:08:00
2	Mo 202.031†	5561.2	5288.8	487.22 ug/L	487.22 ppb	20:08:20
2	Ni 231.604†	16509.6	15644.4	500.51 ug/L	500.51 ppb	20:08:00

2	P 214.914†	4791.3	4366.2	2337.3 ug/L	2337.3 ppb	20:08:20
2	Pb 220.353†	3121.4	3003.7	491.52 ug/L	491.52 ppb	20:08:20
2	S 181.975 Axial†	831.1	751.8	959.76 ug/L	959.76 ppb	20:08:20
2	Sb 206.836†	1301.4	1210.1	501.37 ug/L	501.37 ppb	20:08:20
2	Se 196.026†	816.5	795.7	499.28 ug/L	499.28 ppb	20:08:20
2	Si 251.611†	71835.9	67962.0	2462.6 ug/L	2462.6 ppb	20:08:00
2	Sn 189.927†	2197.7	2067.4	489.80 ug/L	489.80 ppb	20:08:20
2	Ti 334.940†	252498.6	242075.8	486.79 ug/L	486.79 ppb	20:08:00
2	Tl 190.801†	1078.6	1065.7	492.28 ug/L	492.28 ppb	20:08:20
2	U 409.014†	12931.2	14572.2	487.66 ug/L	487.66 ppb	20:08:00
2	V 292.402†	63363.3	62093.1	498.94 ug/L	498.94 ppb	20:08:00
2	Zn 213.857†	47957.6	44592.2	488.78 ug/L	488.78 ppb	20:08:00
2	SiO2†	72313.9	68403.3	5305.1 ug/L	5305.1 ppb	20:09:01
3	Sc Radial	4870.5	4870.5	101 %		20:06:57
3	Y RADIAL	5149.0	5149.0	100.8 %		20:06:57
3	Al 396.153Radial†	5354.1	5383.4	5112.2 ug/L	5112.2 ppb	20:06:57
3	Ca 317.933Radial†	2832.5	2782.8	5151.1 ug/L	5151.1 ppb	20:07:17
3	Fe 238.204 Radial†	479.0	467.0	5226.8 ug/L	5226.8 ppb	20:07:17
3	K 766.490 Radial†	28422.1	25891.1	5134.0 ug/L	5134.0 ppb	20:06:57
3	Mg 279.077 IEC†	131.9	129.6	5366.0 ug/L	5366.0 ppb	20:07:17
3	Na 589.592 Radial†	26763.4	27048.1	9632.1 ug/L	9632.1 ppb	20:06:57
3	Sr 421.552†	67517.0	66823.5	500.62 ug/L	500.62 ppb	20:06:57
3	Sc 361.383	824920.4	824920.4	104.84 %		20:08:25
3	Y 371.029	729447.1	729447.1	103.98 %		20:08:25
3	Ag 328.068†	100786.8	95929.4	494.34 ug/L	494.34 ppb	20:08:31
3	As 188.979†	1124.2	1101.1	493.12 ug/L	493.12 ppb	20:08:51
3	B 249.677†	20036.0	19257.0	484.95 ug/L	484.95 ppb	20:08:31
3	Ba 233.527†	43973.5	41944.3	497.87 ug/L	497.87 ppb	20:08:31
3	Be 313.107†	1300212.1	1249663.9	498.86 ug/L	498.86 ppb	20:08:25
3	Cd 226.502†	36511.8	35021.8	497.19 ug/L	497.19 ppb	20:08:31
3	Co 228.616†	17378.2	16632.0	505.96 ug/L	505.96 ppb	20:08:31
3	Cr 267.716†	38293.3	36461.3	498.91 ug/L	498.91 ppb	20:08:31
3	Cu 324.752†	147173.8	131274.4	489.75 ug/L	489.75 ppb	20:08:31
3	Mn 257.610†	325227.5	309798.1	497.02 ug/L	497.02 ppb	20:08:31
3	Mo 202.031†	5573.3	5301.0	488.33 ug/L	488.33 ppb	20:08:51
3	Ni 231.604†	16609.2	15741.7	503.62 ug/L	503.62 ppb	20:08:31
3	P 214.914†	4790.5	4366.1	2336.4 ug/L	2336.4 ppb	20:08:51
3	Pb 220.353†	3136.2	3018.2	493.91 ug/L	493.91 ppb	20:08:51
3	S 181.975 Axial†	838.4	758.9	968.81 ug/L	968.81 ppb	20:08:51
3	Sb 206.836†	1310.5	1219.0	505.00 ug/L	505.00 ppb	20:08:51
3	Se 196.026†	817.5	796.7	499.43 ug/L	499.43 ppb	20:08:51
3	Si 251.611†	72297.1	68411.8	2478.9 ug/L	2478.9 ppb	20:08:31
3	Sn 189.927†	2212.7	2082.0	493.26 ug/L	493.26 ppb	20:08:51
3	Ti 334.940†	254745.9	244254.3	491.15 ug/L	491.15 ppb	20:08:31
3	Tl 190.801†	1075.3	1062.8	490.98 ug/L	490.98 ppb	20:08:51
3	U 409.014†	13015.0	14653.9	490.42 ug/L	490.42 ppb	20:08:31
3	V 292.402†	63833.0	62549.9	502.62 ug/L	502.62 ppb	20:08:31
3	Zn 213.857†	48167.9	44799.4	491.08 ug/L	491.08 ppb	20:08:31
3	SiO2†	71681.8	67810.3	5259.0 ug/L	5259.0 ppb	20:09:06

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	826797.7	105.07 %	0.400			0.38%
Sc Radial	4874.0	101 %	0.5			0.52%
Y 371.029	731371.9	104.25 %	0.435			0.42%
Y RADIAL	5155.1	100.9 %	0.77			0.76%
Ag 328.068†	95576.7	492.55 ug/L	2.287	492.55 ppb	2.287	0.46%
QC value within limits for Ag 328.068 Recovery = 98.51%						
Al 396.153Radial†	5391.1	5119.6 ug/L	10.67	5119.6 ppb	10.67	0.21%
QC value within limits for Al 396.153Radial Recovery = 102.39%						
As 188.979†	1106.3	495.39 ug/L	3.660	495.39 ppb	3.660	0.74%
QC value within limits for As 188.979 Recovery = 99.08%						
B 249.677†	19164.9	482.61 ug/L	2.395	482.61 ppb	2.395	0.50%
QC value within limits for B 249.677 Recovery = 96.52%						
Ba 233.527†	41910.8	497.47 ug/L	1.024	497.47 ppb	1.024	0.21%
QC value within limits for Ba 233.527 Recovery = 99.49%						
Be 313.107†	1248932.7	498.57 ug/L	1.008	498.57 ppb	1.008	0.20%
QC value within limits for Be 313.107 Recovery = 99.71%						
Ca 317.933Radial†	2789.0	5162.7 ug/L	13.76	5162.7 ppb	13.76	0.27%

QC value within limits for Ca 317.933 Radial Recovery = 103.25%

Cd 226.502†	35056.3	497.67 ug/L	1.353	497.67 ppb	1.353	0.27%
QC value within limits for Cd 226.502 Recovery = 99.53%						
Co 228.616†	16625.4	505.75 ug/L	1.517	505.75 ppb	1.517	0.30%
QC value within limits for Co 228.616 Recovery = 101.15%						
Cr 267.716†	36349.3	497.38 ug/L	1.577	497.38 ppb	1.577	0.32%
QC value within limits for Cr 267.716 Recovery = 99.48%						
Cu 324.752†	130803.3	487.99 ug/L	3.024	487.99 ppb	3.024	0.62%
QC value within limits for Cu 324.752 Recovery = 97.60%						
Fe 238.204 Radial†	471.9	5280.7 ug/L	142.24	5280.7 ppb	142.24	2.69%
QC value within limits for Fe 238.204 Radial Recovery = 105.61%						
K 766.490 Radial†	25846.3	5125.1 ug/L	17.48	5125.1 ppb	17.48	0.34%
QC value within limits for K 766.490 Radial Recovery = 102.50%						
Mg 279.077 IEC†	128.6	5322.7 ug/L	67.62	5322.7 ppb	67.62	1.27%
QC value within limits for Mg 279.077 IEC Recovery = 106.45%						
Mn 257.610†	309253.6	496.16 ug/L	1.739	496.16 ppb	1.739	0.35%
QC value within limits for Mn 257.610 Recovery = 99.23%						
Mo 202.031†	5277.2	486.14 ug/L	2.882	486.14 ppb	2.882	0.59%
QC value within limits for Mo 202.031 Recovery = 97.23%						
Na 589.592 Radial†	27160.4	9672.1 ug/L	40.58	9672.1 ppb	40.58	0.42%
QC value within limits for Na 589.592 Radial Recovery = 96.72%						
Ni 231.604†	15722.2	503.00 ug/L	2.242	503.00 ppb	2.242	0.45%
QC value within limits for Ni 231.604 Recovery = 100.60%						
P 214.914†	4360.1	2333.3 ug/L	6.13	2333.3 ppb	6.13	0.26%
QC value within limits for P 214.914 Recovery = 93.33%						
Pb 220.353†	3005.2	491.78 ug/L	2.009	491.78 ppb	2.009	0.41%
QC value within limits for Pb 220.353 Recovery = 98.36%						
S 181.975 Axial†	755.7	964.72 ug/L	4.588	964.72 ppb	4.588	0.48%
QC value within limits for S 181.975 Axial Recovery = 96.47%						
Sb 206.836†	1207.1	500.14 ug/L	5.574	500.14 ppb	5.574	1.11%
QC value within limits for Sb 206.836 Recovery = 100.03%						
Se 196.026†	797.6	500.11 ug/L	1.308	500.11 ppb	1.308	0.26%
QC value within limits for Se 196.026 Recovery = 100.02%						
Si 251.611†	68289.9	2474.5 ug/L	10.44	2474.5 ppb	10.44	0.42%
QC value within limits for Si 251.611 Recovery = 98.98%						
Sn 189.927†	2069.3	490.26 ug/L	2.794	490.26 ppb	2.794	0.57%
QC value within limits for Sn 189.927 Recovery = 98.05%						
Sr 421.552†	66901.1	501.20 ug/L	0.557	501.20 ppb	0.557	0.11%
QC value within limits for Sr 421.552 Recovery = 100.24%						
Ti 334.940†	243422.8	489.49 ug/L	2.359	489.49 ppb	2.359	0.48%
QC value within limits for Ti 334.940 Recovery = 97.90%						
Tl 190.801†	1065.6	492.25 ug/L	1.244	492.25 ppb	1.244	0.25%
QC value within limits for Tl 190.801 Recovery = 98.45%						
U 409.014†	14637.0	489.85 ug/L	1.970	489.85 ppb	1.970	0.40%
QC value within limits for U 409.014 Recovery = 97.97%						
V 292.402†	62390.7	501.32 ug/L	2.057	501.32 ppb	2.057	0.41%
QC value within limits for V 292.402 Recovery = 100.26%						
Zn 213.857†	44757.8	490.62 ug/L	1.654	490.62 ppb	1.654	0.34%
QC value within limits for Zn 213.857 Recovery = 98.12%						
SiO2†	67787.5	5257.3 ug/L	48.72	5257.3 ppb	48.72	0.93%
QC value within limits for SiO2 Recovery = 98.31%						

All analyte(s) passed QC.

Sequence No.: 16

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 3/3/2010 20:11:17

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4881.5	4881.5	101 %		20:13:09
1	Y RADIAL	5188.1	5188.1	101.6 %		20:13:09
1	Al 396.153Radial†	-90.8	-6.3	-6.0451 ug/L	-6.0451 ppb	20:13:29
1	Ca 317.933Radial†	17.4	-3.9	-7.1436 ug/L	-7.1436 ppb	20:13:29
1	Fe 238.204 Radial†	9.2	2.0	22.387 ug/L	22.387 ppb	20:13:29
1	K 766.490 Radial†	2374.5	101.4	20.139 ug/L	20.139 ppb	20:13:09
1	Mg 279.077 IEC†	2.4	1.3	55.512 ug/L	55.512 ppb	20:13:29
1	Na 589.592 Radial†	-669.3	-106.0	-37.749 ug/L	-37.749 ppb	20:13:09
1	Sr 421.552†	31.8	19.9	0.1490 ug/L	0.1490 ppb	20:13:09
1	Sc 361.383	783473.0	783473.0	99.569 %		20:14:26
1	Y 371.029	702931.9	702931.9	100.20 %		20:14:26
1	Ag 328.068†	150.8	-56.8	-0.2787 ug/L	-0.2787 ppb	20:14:26
1	As 188.979†	-33.3	-4.6	-2.0572 ug/L	-2.0572 ppb	20:14:46
1	B 249.677†	-307.9	-164.0	-4.1516 ug/L	-4.1516 ppb	20:14:46
1	Ba 233.527†	-0.7	-1.4	-0.0165 ug/L	-0.0165 ppb	20:14:46
1	Be 313.107†	-9131.3	258.5	0.1031 ug/L	0.1031 ppb	20:14:26
1	Cd 226.502†	-194.0	-0.6	-0.0122 ug/L	-0.0122 ppb	20:14:46
1	Co 228.616†	-59.7	-4.6	-0.1399 ug/L	-0.1399 ppb	20:14:46
1	Cr 267.716†	75.7	10.4	0.1453 ug/L	0.1453 ppb	20:14:46
1	Cu 324.752†	8104.0	-971.4	-3.6189 ug/L	-3.6189 ppb	20:14:26
1	Mn 257.610†	452.7	27.7	0.0443 ug/L	0.0443 ppb	20:14:46
1	Mo 202.031†	19.3	4.2	0.3885 ug/L	0.3885 ppb	20:14:46
1	Ni 231.604†	94.4	-6.5	-0.2086 ug/L	-0.2086 ppb	20:14:46
1	P 214.914†	208.2	5.7	3.9194 ug/L	3.9194 ppb	20:14:46
1	Pb 220.353†	-44.7	-18.2	-2.9652 ug/L	-2.9652 ppb	20:14:46
1	S 181.975 Axial†	47.5	6.9	8.7994 ug/L	8.7994 ppb	20:14:46
1	Sb 206.836†	29.9	-1.0	-0.3050 ug/L	-0.3050 ppb	20:14:46
1	Se 196.026†	-22.7	-5.9	-3.5200 ug/L	-3.5200 ppb	20:14:46
1	Si 251.611†	609.8	62.1	2.2516 ug/L	2.2516 ppb	20:14:46
1	Sn 189.927†	50.1	21.7	5.1335 ug/L	5.1335 ppb	20:14:46
1	Ti 334.940†	-1219.3	35.1	0.0680 ug/L	0.0680 ppb	20:14:26
1	Tl 190.801†	-31.1	5.8	2.6442 ug/L	2.6442 ppb	20:14:46
1	U 409.014†	-2434.5	-205.7	-6.9118 ug/L	-6.9118 ppb	20:14:26
1	V 292.402†	-1676.0	-21.8	-0.1828 ug/L	-0.1828 ppb	20:14:26
1	Zn 213.857†	772.3	-370.8	-4.1008 ug/L	-4.1008 ppb	20:14:46
1	SiO2†	636.9	74.7	5.8006 ug/L	5.8006 ppb	20:15:42
2	Sc Radial	4818.1	4818.1	99.9 %		20:13:34
2	Y RADIAL	5134.6	5134.6	100.5 %		20:13:34
2	Al 396.153Radial†	-86.1	-2.8	-2.7505 ug/L	-2.7505 ppb	20:13:54
2	Ca 317.933Radial†	20.9	-0.2	-0.2918 ug/L	-0.2918 ppb	20:13:54
2	Fe 238.204 Radial†	6.1	-1.0	-11.463 ug/L	-11.463 ppb	20:13:54
2	K 766.490 Radial†	2285.4	43.0	8.5621 ug/L	8.5621 ppb	20:13:34
2	Mg 279.077 IEC†	3.2	2.2	90.646 ug/L	90.646 ppb	20:13:54
2	Na 589.592 Radial†	-671.3	-116.8	-41.582 ug/L	-41.582 ppb	20:13:34
2	Sr 421.552†	-12.7	-24.3	-0.1822 ug/L	-0.1822 ppb	20:13:34
2	Sc 361.383	785995.4	785995.4	99.889 %		20:14:51
2	Y 371.029	704962.3	704962.3	100.49 %		20:14:51
2	Ag 328.068†	194.5	-13.5	-0.0733 ug/L	-0.0733 ppb	20:14:51
2	As 188.979†	-39.4	-10.6	-4.6953 ug/L	-4.6953 ppb	20:15:11
2	B 249.677†	-314.5	-169.5	-4.2879 ug/L	-4.2879 ppb	20:15:11
2	Ba 233.527†	3.9	3.2	0.0373 ug/L	0.0373 ppb	20:15:11
2	Be 313.107†	-9345.9	73.0	0.0297 ug/L	0.0297 ppb	20:14:51
2	Cd 226.502†	-193.4	0.7	0.0107 ug/L	0.0107 ppb	20:15:11
2	Co 228.616†	-53.7	1.6	0.0499 ug/L	0.0499 ppb	20:15:11
2	Cr 267.716†	75.3	9.7	0.1322 ug/L	0.1322 ppb	20:15:11
2	Cu 324.752†	8222.2	-879.2	-3.2807 ug/L	-3.2807 ppb	20:14:51
2	Mn 257.610†	424.9	-1.7	-0.0076 ug/L	-0.0076 ppb	20:15:11
2	Mo 202.031†	22.9	7.7	0.7084 ug/L	0.7084 ppb	20:15:11
2	Ni 231.604†	98.0	-3.3	-0.1045 ug/L	-0.1045 ppb	20:15:11



2	P 214.914†	202.1	-1.1	0.0602 ug/L	0.0602 ppb	20:15:11
2	Pb 220.353†	-32.2	-5.5	-0.8945 ug/L	-0.8945 ppb	20:15:11
2	S 181.975 Axial†	50.9	10.1	12.891 ug/L	12.891 ppb	20:15:11
2	Sb 206.836†	27.7	-3.4	-1.2914 ug/L	-1.2914 ppb	20:15:11
2	Se 196.026†	-21.6	-4.7	-2.8741 ug/L	-2.8741 ppb	20:15:11
2	Si 251.611†	581.9	32.2	1.1625 ug/L	1.1625 ppb	20:15:11
2	Sn 189.927†	40.0	11.4	2.6982 ug/L	2.6982 ppb	20:15:11
2	Ti 334.940†	-1132.7	125.6	0.2450 ug/L	0.2450 ppb	20:14:51
2	Tl 190.801†	-33.8	3.2	1.4653 ug/L	1.4653 ppb	20:15:11
2	U 409.014†	-2225.8	11.0	0.3709 ug/L	0.3709 ppb	20:14:51
2	V 292.402†	-1670.1	-10.5	-0.0697 ug/L	-0.0697 ppb	20:14:51
2	Zn 213.857†	765.9	-379.8	-4.1954 ug/L	-4.1954 ppb	20:15:11
2	SiO2†	606.7	42.4	3.2808 ug/L	3.2808 ppb	20:15:47
3	Sc Radial	4742.3	4742.3	98.4 %		20:13:59
3	Y RADIAL	5067.4	5067.4	99.20 %		20:13:59
3	Al 396.153Radial†	-84.6	-2.7	-2.5674 ug/L	-2.5674 ppb	20:14:19
3	Ca 317.933Radial†	19.6	-1.2	-2.1906 ug/L	-2.1906 ppb	20:14:19
3	Fe 238.204 Radial†	6.4	-0.6	-6.7073 ug/L	-6.7073 ppb	20:14:19
3	K 766.490 Radial†	2284.8	79.0	15.703 ug/L	15.703 ppb	20:13:59
3	Mg 279.077 IEC†	2.7	1.7	71.206 ug/L	71.206 ppb	20:14:19
3	Na 589.592 Radial†	-690.8	-147.3	-52.468 ug/L	-52.468 ppb	20:13:59
3	Sr 421.552†	-5.0	-16.6	-0.1247 ug/L	-0.1247 ppb	20:13:59
3	Sc 361.383	789273.6	789273.6	100.31 %		20:15:16
3	Y 371.029	708600.8	708600.8	101.01 %		20:15:16
3	Ag 328.068†	270.9	61.9	0.3224 ug/L	0.3224 ppb	20:15:16
3	As 188.979†	-37.1	-8.2	-3.6325 ug/L	-3.6325 ppb	20:15:36
3	B 249.677†	-342.0	-195.6	-4.9482 ug/L	-4.9482 ppb	20:15:36
3	Ba 233.527†	-10.8	-11.4	-0.1354 ug/L	-0.1354 ppb	20:15:36
3	Be 313.107†	-9317.3	140.4	0.0558 ug/L	0.0558 ppb	20:15:16
3	Cd 226.502†	-211.1	-16.3	-0.2317 ug/L	-0.2317 ppb	20:15:36
3	Co 228.616†	-57.9	-2.3	-0.0708 ug/L	-0.0708 ppb	20:15:36
3	Cr 267.716†	68.6	2.8	0.0415 ug/L	0.0415 ppb	20:15:36
3	Cu 324.752†	8312.6	-823.2	-3.0665 ug/L	-3.0665 ppb	20:15:16
3	Mn 257.610†	433.9	5.5	0.0053 ug/L	0.0053 ppb	20:15:36
3	Mo 202.031†	12.9	-2.3	-0.2111 ug/L	-0.2111 ppb	20:15:36
3	Ni 231.604†	104.9	3.2	0.1036 ug/L	0.1036 ppb	20:15:36
3	P 214.914†	203.0	-1.1	0.0213 ug/L	0.0213 ppb	20:15:36
3	Pb 220.353†	-31.4	-4.6	-0.7494 ug/L	-0.7494 ppb	20:15:36
3	S 181.975 Axial†	43.5	2.5	3.2148 ug/L	3.2148 ppb	20:15:36
3	Sb 206.836†	46.2	15.0	6.0507 ug/L	6.0507 ppb	20:15:36
3	Se 196.026†	-28.6	-11.5	-7.0424 ug/L	-7.0424 ppb	20:15:36
3	Si 251.611†	603.4	51.3	1.8641 ug/L	1.8641 ppb	20:15:36
3	Sn 189.927†	41.7	12.9	3.0512 ug/L	3.0512 ppb	20:15:36
3	Ti 334.940†	-1286.5	-23.0	-0.0485 ug/L	-0.0485 ppb	20:15:16
3	Tl 190.801†	-20.9	16.2	7.4433 ug/L	7.4433 ppb	20:15:36
3	U 409.014†	-2508.3	-261.4	-8.7765 ug/L	-8.7765 ppb	20:15:16
3	V 292.402†	-1650.1	16.4	0.1127 ug/L	0.1127 ppb	20:15:16
3	Zn 213.857†	775.5	-373.4	-4.1275 ug/L	-4.1275 ppb	20:15:36
3	SiO2†	625.7	58.9	4.5827 ug/L	4.5827 ppb	20:15:52

-----  
Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	786247.3	99.921 %	0.3696			0.37%
Sc Radial	4814.0	99.8 %	1.45			1.45%
Y 371.029	705498.3	100.56 %	0.409			0.41%
Y RADIAL	5130.0	100.4 %	1.18			1.18%
Ag 328.068†	-2.8	-0.0099 ug/L	0.30556	-0.0099 ppb	0.30556	>999.9%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-4.0	-3.7877 ug/L	1.95710	-3.7877 ppb	1.95710	51.67%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-7.8	-3.4616 ug/L	1.32732	-3.4616 ppb	1.32732	38.34%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-176.4	-4.4626 ug/L	0.42607	-4.4626 ppb	0.42607	9.55%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	-3.2	-0.0382 ug/L	0.08838	-0.0382 ppb	0.08838	231.19%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	157.3	0.0629 ug/L	0.03724	0.0629 ppb	0.03724	59.23%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-1.7	-3.2087 ug/L	3.53755	-3.2087 ppb	3.53755	110.25%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated						
Cd 226.502†	-5.4	-0.0777 ug/L	0.13386	-0.0777 ppb	0.13386	172.20%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-1.8	-0.0536 ug/L	0.09606	-0.0536 ppb	0.09606	179.22%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	7.6	0.1063 ug/L	0.05652	0.1063 ppb	0.05652	53.16%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-891.2	-3.3220 ug/L	0.27850	-3.3220 ppb	0.27850	8.38%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	0.1	1.4055 ug/L	18.32508	1.4055 ppb	18.32508	>999.9%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	74.5	14.801 ug/L	5.8407	14.801 ppb	5.8407	39.46%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	1.7	72.455 ug/L	17.6005	72.455 ppb	17.6005	24.29%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	10.5	0.0140 ug/L	0.02699	0.0140 ppb	0.02699	192.65%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	3.2	0.2953 ug/L	0.46681	0.2953 ppb	0.46681	158.10%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	-123.4	-43.933 ug/L	7.6358	-43.933 ppb	7.6358	17.38%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	-2.2	-0.0698 ug/L	0.15894	-0.0698 ppb	0.15894	227.56%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	1.2	1.3336 ug/L	2.23939	1.3336 ppb	2.23939	167.91%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	-9.4	-1.5364 ug/L	1.23956	-1.5364 ppb	1.23956	80.68%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	6.5	8.3016 ug/L	4.85714	8.3016 ppb	4.85714	58.51%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	3.6	1.4848 ug/L	3.98485	1.4848 ppb	3.98485	268.38%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-7.4	-4.4788 ug/L	2.24349	-4.4788 ppb	2.24349	50.09%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	48.5	1.7594 ug/L	0.55203	1.7594 ppb	0.55203	31.38%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	15.3	3.6276 ug/L	1.31603	3.6276 ppb	1.31603	36.28%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	-7.0	-0.0526 ug/L	0.17696	-0.0526 ppb	0.17696	336.23%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	45.9	0.0882 ug/L	0.14781	0.0882 ppb	0.14781	167.67%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	8.4	3.8509 ug/L	3.16643	3.8509 ppb	3.16643	82.22%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	-152.0	-5.1058 ug/L	4.83372	-5.1058 ppb	4.83372	94.67%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	-5.3	-0.0466 ug/L	0.14908	-0.0466 ppb	0.14908	319.82%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	-374.7	-4.1412 ug/L	0.04876	-4.1412 ppb	0.04876	1.18%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	58.7	4.5547 ug/L	1.26011	4.5547 ppb	1.26011	27.67%
QC value within limits for SiO2 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 25

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 3/3/2010 21:13:49

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4952.6	4952.6	103 %		21:15:41
1	Y RADIAL	5264.4	5264.4	103.1 %		21:15:41
1	Al 396.153Radial†	5510.6	5447.9	5173.1 ug/L	5173.1 ppb	21:15:41
1	Ca 317.933Radial†	2864.1	2767.1	5122.1 ug/L	5122.1 ppb	21:16:01
1	Fe 238.204 Radial†	479.6	459.8	5145.9 ug/L	5145.9 ppb	21:16:01
1	K 766.490 Radial†	29147.6	26131.2	5181.5 ug/L	5181.5 ppb	21:15:41
1	Mg 279.077 IEC†	132.8	128.3	5310.6 ug/L	5310.6 ppb	21:16:01
1	Na 589.592 Radial†	28358.4	28161.7	10029 ug/L	10029 ppb	21:15:41
1	Sr 421.552†	70358.1	68481.6	513.05 ug/L	513.05 ppb	21:15:41
1	Sc 361.383	820528.3	820528.3	104.28 %		21:16:58
1	Y 371.029	726093.9	726093.9	103.50 %		21:16:58
1	Ag 328.068†	100943.3	96594.1	497.73 ug/L	497.73 ppb	21:17:04
1	As 188.979†	1153.4	1134.9	508.10 ug/L	508.10 ppb	21:17:24
1	B 249.677†	20105.5	19426.1	489.23 ug/L	489.23 ppb	21:17:04
1	Ba 233.527†	44303.1	42484.9	504.28 ug/L	504.28 ppb	21:17:04
1	Be 313.107†	1306671.4	1262497.0	503.98 ug/L	503.98 ppb	21:16:58
1	Cd 226.502†	36754.0	35440.5	503.15 ug/L	503.15 ppb	21:17:04
1	Co 228.616†	17403.5	16745.0	509.42 ug/L	509.42 ppb	21:17:04
1	Cr 267.716†	38426.3	36784.3	503.33 ug/L	503.33 ppb	21:17:04
1	Cu 324.752†	147721.7	132551.3	494.50 ug/L	494.50 ppb	21:17:04
1	Mn 257.610†	326605.0	312779.6	501.80 ug/L	501.80 ppb	21:17:04
1	Mo 202.031†	5685.6	5437.1	500.85 ug/L	500.85 ppb	21:17:24
1	Ni 231.604†	16641.1	15857.1	507.32 ug/L	507.32 ppb	21:17:04
1	P 214.914†	4890.0	4486.0	2402.3 ug/L	2402.3 ppb	21:17:24
1	Pb 220.353†	3168.9	3065.6	501.68 ug/L	501.68 ppb	21:17:24
1	S 181.975 Axial†	845.8	770.2	983.31 ug/L	983.31 ppb	21:17:24
1	Sb 206.836†	1325.3	1239.9	513.67 ug/L	513.67 ppb	21:17:24
1	Se 196.026†	836.8	819.4	513.16 ug/L	513.16 ppb	21:17:24
1	Si 251.611†	72671.9	69140.4	2505.2 ug/L	2505.2 ppb	21:17:04
1	Sn 189.927†	2218.2	2098.5	497.18 ug/L	497.18 ppb	21:17:24
1	Ti 334.940†	255776.7	246543.5	495.75 ug/L	495.75 ppb	21:17:04
1	Tl 190.801†	1108.1	1099.6	507.93 ug/L	507.93 ppb	21:17:24
1	U 409.014†	13191.6	14889.7	498.34 ug/L	498.34 ppb	21:17:04
1	V 292.402†	64083.0	63115.6	507.30 ug/L	507.30 ppb	21:17:04
1	Zn 213.857†	48196.0	45072.3	494.08 ug/L	494.08 ppb	21:17:04
1	SiO2†	73751.5	70161.1	5441.4 ug/L	5441.4 ppb	21:18:31
2	Sc Radial	4858.8	4858.8	101 %		21:16:06
2	Y RADIAL	5143.1	5143.1	100.7 %		21:16:06
2	Al 396.153Radial†	5473.1	5514.3	5236.4 ug/L	5236.4 ppb	21:16:06
2	Ca 317.933Radial†	2877.8	2834.6	5247.0 ug/L	5247.0 ppb	21:16:26
2	Fe 238.204 Radial†	485.1	474.3	5308.0 ug/L	5308.0 ppb	21:16:26
2	K 766.490 Radial†	28756.8	26291.3	5213.2 ug/L	5213.2 ppb	21:16:06
2	Mg 279.077 IEC†	136.5	134.5	5567.3 ug/L	5567.3 ppb	21:16:26
2	Na 589.592 Radial†	28060.7	28399.4	10113 ug/L	10113 ppb	21:16:06
2	Sr 421.552†	69541.9	68994.3	516.89 ug/L	516.89 ppb	21:16:06
2	Sc 361.383	816065.8	816065.8	103.71 %		21:17:29
2	Y 371.029	723088.4	723088.4	103.07 %		21:17:29
2	Ag 328.068†	102378.6	98507.4	507.61 ug/L	507.61 ppb	21:17:34
2	As 188.979†	1152.8	1140.4	510.67 ug/L	510.67 ppb	21:17:54
2	B 249.677†	20500.9	19912.7	501.49 ug/L	501.49 ppb	21:17:34
2	Ba 233.527†	44805.3	43201.5	512.79 ug/L	512.79 ppb	21:17:34
2	Be 313.107†	1299593.2	1262524.3	504.02 ug/L	504.02 ppb	21:17:29
2	Cd 226.502†	37213.6	36076.4	512.17 ug/L	512.17 ppb	21:17:34
2	Co 228.616†	17685.9	17108.5	520.45 ug/L	520.45 ppb	21:17:34
2	Cr 267.716†	38887.4	37430.4	512.17 ug/L	512.17 ppb	21:17:34
2	Cu 324.752†	149801.9	135331.7	504.88 ug/L	504.88 ppb	21:17:34
2	Mn 257.610†	331152.2	318876.9	511.58 ug/L	511.58 ppb	21:17:34
2	Mo 202.031†	5664.0	5446.1	501.69 ug/L	501.69 ppb	21:17:54
2	Ni 231.604†	16907.2	16200.9	518.31 ug/L	518.31 ppb	21:17:34

2	P 214.914†	4890.9	4512.5	2415.0 ug/L	2415.0 ppb	21:17:54
2	Pb 220.353†	3169.3	3082.6	504.45 ug/L	504.45 ppb	21:17:54
2	S 181.975 Axial†	853.9	782.5	998.95 ug/L	998.95 ppb	21:17:54
2	Sb 206.836†	1324.3	1245.9	516.12 ug/L	516.12 ppb	21:17:54
2	Se 196.026†	844.6	831.3	520.75 ug/L	520.75 ppb	21:17:54
2	Si 251.611†	73734.2	70545.8	2556.2 ug/L	2556.2 ppb	21:17:34
2	Sn 189.927†	2219.1	2111.1	500.16 ug/L	500.16 ppb	21:17:54
2	Ti 334.940†	259167.8	251154.7	505.02 ug/L	505.02 ppb	21:17:34
2	Tl 190.801†	1106.6	1104.0	510.00 ug/L	510.00 ppb	21:17:54
2	U 409.014†	13326.5	15088.9	504.99 ug/L	504.99 ppb	21:17:34
2	V 292.402†	64978.3	64314.9	516.81 ug/L	516.81 ppb	21:17:34
2	Zn 213.857†	48991.2	46091.8	505.26 ug/L	505.26 ppb	21:17:34
2	SiO2†	72181.6	69034.2	5353.8 ug/L	5353.8 ppb	21:18:36
3	Sc Radial	4880.7	4880.7	101 %		21:16:31
3	Y RADIAL	5146.9	5146.9	100.8 %		21:16:31
3	Al 396.153Radial†	5447.4	5464.5	5188.9 ug/L	5188.9 ppb	21:16:31
3	Ca 317.933Radial†	2871.3	2815.3	5211.3 ug/L	5211.3 ppb	21:16:51
3	Fe 238.204 Radial†	485.7	472.7	5290.0 ug/L	5290.0 ppb	21:16:51
3	K 766.490 Radial†	28797.0	26202.9	5195.7 ug/L	5195.7 ppb	21:16:31
3	Mg 279.077 IEC†	131.4	128.8	5333.8 ug/L	5333.8 ppb	21:16:51
3	Na 589.592 Radial†	28028.3	28242.4	10057 ug/L	10057 ppb	21:16:31
3	Sr 421.552†	69518.9	68661.8	514.39 ug/L	514.39 ppb	21:16:31
3	Sc 361.383	819131.0	819131.0	104.10 %		21:18:00
3	Y 371.029	724393.1	724393.1	103.26 %		21:18:00
3	Ag 328.068†	101015.8	96828.8	498.99 ug/L	498.99 ppb	21:18:05
3	As 188.979†	1154.8	1138.2	509.58 ug/L	509.58 ppb	21:18:25
3	B 249.677†	20155.0	19506.5	491.23 ug/L	491.23 ppb	21:18:05
3	Ba 233.527†	44451.4	42699.9	506.83 ug/L	506.83 ppb	21:18:05
3	Be 313.107†	1311742.7	1269506.0	506.78 ug/L	506.78 ppb	21:18:00
3	Cd 226.502†	36884.6	35626.1	505.77 ug/L	505.77 ppb	21:18:05
3	Co 228.616†	17500.9	16867.0	513.12 ug/L	513.12 ppb	21:18:05
3	Cr 267.716†	38485.3	36903.8	504.97 ug/L	504.97 ppb	21:18:05
3	Cu 324.752†	147342.2	132428.4	494.05 ug/L	494.05 ppb	21:18:05
3	Mn 257.610†	327579.0	314249.5	504.17 ug/L	504.17 ppb	21:18:05
3	Mo 202.031†	5674.7	5436.0	500.76 ug/L	500.76 ppb	21:18:25
3	Ni 231.604†	16758.6	15997.2	511.80 ug/L	511.80 ppb	21:18:05
3	P 214.914†	4886.5	4490.6	2404.9 ug/L	2404.9 ppb	21:18:25
3	Pb 220.353†	3190.9	3091.9	505.96 ug/L	505.96 ppb	21:18:25
3	S 181.975 Axial†	853.7	779.2	994.72 ug/L	994.72 ppb	21:18:25
3	Sb 206.836†	1323.2	1240.0	513.79 ug/L	513.79 ppb	21:18:25
3	Se 196.026†	838.4	822.4	515.26 ug/L	515.26 ppb	21:18:25
3	Si 251.611†	72786.3	69369.1	2513.5 ug/L	2513.5 ppb	21:18:05
3	Sn 189.927†	2236.0	2119.3	502.10 ug/L	502.10 ppb	21:18:25
3	Ti 334.940†	255754.6	246940.7	496.56 ug/L	496.56 ppb	21:18:05
3	Tl 190.801†	1118.0	1111.0	513.15 ug/L	513.15 ppb	21:18:25
3	U 409.014†	13033.2	14759.2	493.94 ug/L	493.94 ppb	21:18:05
3	V 292.402†	64273.4	63403.3	509.55 ug/L	509.55 ppb	21:18:05
3	Zn 213.857†	48471.1	45415.5	497.83 ug/L	497.83 ppb	21:18:05
3	SiO2†	72867.0	69432.1	5384.7 ug/L	5384.7 ppb	21:18:41

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	818575.0	104.03 %		0.290			0.28%
Sc Radial	4897.4	102 %		1.0			1.00%
Y 371.029	724525.2	103.28 %		0.215			0.21%
Y RADIAL	5184.8	101.5 %		1.35			1.33%
Ag 328.068†	97310.1	501.45 ug/L		5.377	501.45 ppb	5.377	1.07%
QC value within limits for Ag 328.068 Recovery = 100.29%							
Al 396.153Radial†	5475.5	5199.5 ug/L		32.95	5199.5 ppb	32.95	0.63%
QC value within limits for Al 396.153Radial Recovery = 103.99%							
As 188.979†	1137.8	509.45 ug/L		1.287	509.45 ppb	1.287	0.25%
QC value within limits for As 188.979 Recovery = 101.89%							
B 249.677†	19615.1	493.98 ug/L		6.574	493.98 ppb	6.574	1.33%
QC value within limits for B 249.677 Recovery = 98.80%							
Ba 233.527†	42795.4	507.96 ug/L		4.367	507.96 ppb	4.367	0.86%
QC value within limits for Ba 233.527 Recovery = 101.59%							
Be 313.107†	1264842.4	504.93 ug/L		1.604	504.93 ppb	1.604	0.32%
QC value within limits for Be 313.107 Recovery = 100.99%							
Ca 317.933Radial†	2805.7	5193.5 ug/L		64.37	5193.5 ppb	64.37	1.24%

QC value within limits for Ca 317.933 Radial Recovery = 103.87%

Cd 226.502†	35714.3	507.03 ug/L	4.640	507.03 ppb	4.640	0.92%
QC value within limits for Cd 226.502 Recovery = 101.41%						
Co 228.616†	16906.8	514.33 ug/L	5.617	514.33 ppb	5.617	1.09%
QC value within limits for Co 228.616 Recovery = 102.87%						
Cr 267.716†	37039.5	506.83 ug/L	4.704	506.83 ppb	4.704	0.93%
QC value within limits for Cr 267.716 Recovery = 101.37%						
Cu 324.752†	133437.1	497.81 ug/L	6.125	497.81 ppb	6.125	1.23%
QC value within limits for Cu 324.752 Recovery = 99.56%						
Fe 238.204 Radial†	468.9	5248.0 ug/L	88.86	5248.0 ppb	88.86	1.69%
QC value within limits for Fe 238.204 Radial Recovery = 104.96%						
K 766.490 Radial†	26208.5	5196.8 ug/L	15.88	5196.8 ppb	15.88	0.31%
QC value within limits for K 766.490 Radial Recovery = 103.94%						
Mg 279.077 IEC†	130.5	5403.9 ug/L	141.98	5403.9 ppb	141.98	2.63%
QC value within limits for Mg 279.077 IEC Recovery = 108.08%						
Mn 257.610†	315302.0	505.85 ug/L	5.103	505.85 ppb	5.103	1.01%
QC value within limits for Mn 257.610 Recovery = 101.17%						
Mo 202.031†	5439.7	501.10 ug/L	0.517	501.10 ppb	0.517	0.10%
QC value within limits for Mo 202.031 Recovery = 100.22%						
Na 589.592 Radial†	28267.8	10066 ug/L	43.0	10066 ppb	43.0	0.43%
QC value within limits for Na 589.592 Radial Recovery = 100.66%						
Ni 231.604†	16018.4	512.48 ug/L	5.531	512.48 ppb	5.531	1.08%
QC value within limits for Ni 231.604 Recovery = 102.50%						
P 214.914†	4496.3	2407.4 ug/L	6.66	2407.4 ppb	6.66	0.28%
QC value within limits for P 214.914 Recovery = 96.30%						
Pb 220.353†	3080.0	504.03 ug/L	2.167	504.03 ppb	2.167	0.43%
QC value within limits for Pb 220.353 Recovery = 100.81%						
S 181.975 Axial†	777.3	992.32 ug/L	8.090	992.32 ppb	8.090	0.82%
QC value within limits for S 181.975 Axial Recovery = 99.23%						
Sb 206.836†	1241.9	514.53 ug/L	1.382	514.53 ppb	1.382	0.27%
QC value within limits for Sb 206.836 Recovery = 102.91%						
Se 196.026†	824.4	516.39 ug/L	3.923	516.39 ppb	3.923	0.76%
QC value within limits for Se 196.026 Recovery = 103.28%						
Si 251.611†	69685.1	2525.0 ug/L	27.38	2525.0 ppb	27.38	1.08%
QC value within limits for Si 251.611 Recovery = 101.00%						
Sn 189.927†	2109.6	499.81 ug/L	2.480	499.81 ppb	2.480	0.50%
QC value within limits for Sn 189.927 Recovery = 99.96%						
Sr 421.552†	68712.6	514.78 ug/L	1.948	514.78 ppb	1.948	0.38%
QC value within limits for Sr 421.552 Recovery = 102.96%						
Ti 334.940†	248213.0	499.11 ug/L	5.131	499.11 ppb	5.131	1.03%
QC value within limits for Ti 334.940 Recovery = 99.82%						
Tl 190.801†	1104.9	510.36 ug/L	2.626	510.36 ppb	2.626	0.51%
QC value within limits for Tl 190.801 Recovery = 102.07%						
U 409.014†	14912.6	499.09 ug/L	5.566	499.09 ppb	5.566	1.12%
QC value within limits for U 409.014 Recovery = 99.82%						
V 292.402†	63611.3	511.22 ug/L	4.967	511.22 ppb	4.967	0.97%
QC value within limits for V 292.402 Recovery = 102.24%						
Zn 213.857†	45526.5	499.06 ug/L	5.686	499.06 ppb	5.686	1.14%
QC value within limits for Zn 213.857 Recovery = 99.81%						
SiO2†	69542.5	5393.3 ug/L	44.45	5393.3 ppb	44.45	0.82%
QC value within limits for SiO2 Recovery = 100.86%						

All analyte(s) passed QC.

Sequence No.: 26

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 3/3/2010 21:20:51

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	5003.7	5003.7	104 %		21:22:43
1	Y RADIAL	5326.2	5326.2	104.3 %		21:22:43
1	Al 396.153Radial†	-87.9	-1.4	-1.3182 ug/L	-1.3182 ppb	21:23:03
1	Ca 317.933Radial†	16.6	-5.0	-9.3474 ug/L	-9.3474 ppb	21:23:03
1	Fe 238.204 Radial†	8.3	0.9	10.400 ug/L	10.400 ppb	21:23:03
1	K 766.490 Radial†	2374.6	44.2	8.7869 ug/L	8.7869 ppb	21:22:43
1	Mg 279.077 IEC†	2.9	1.8	74.762 ug/L	74.762 ppb	21:23:03
1	Na 589.592 Radial†	-658.4	-79.4	-28.268 ug/L	-28.268 ppb	21:22:43
1	Sr 421.552†	22.1	9.7	0.0730 ug/L	0.0730 ppb	21:22:43
1	Sc 361.383	833206.1	833206.1	105.89 %		21:24:00
1	Y 371.029	744135.1	744135.1	106.07 %		21:24:00
1	Ag 328.068†	284.0	60.0	0.3096 ug/L	0.3096 ppb	21:24:05
1	As 188.979†	-37.4	-6.4	-2.8568 ug/L	-2.8568 ppb	21:24:25
1	B 249.677†	-225.0	-67.2	-1.7015 ug/L	-1.7015 ppb	21:24:25
1	Ba 233.527†	1.3	0.5	0.0059 ug/L	0.0059 ppb	21:24:25
1	Be 313.107†	-9279.4	666.0	0.2659 ug/L	0.2659 ppb	21:24:05
1	Cd 226.502†	-172.7	31.2	0.4413 ug/L	0.4413 ppb	21:24:25
1	Co 228.616†	-63.7	-4.8	-0.1454 ug/L	-0.1454 ppb	21:24:25
1	Cr 267.716†	68.5	-0.9	-0.0129 ug/L	-0.0129 ppb	21:24:25
1	Cu 324.752†	8515.7	-1068.4	-3.9857 ug/L	-3.9857 ppb	21:24:05
1	Mn 257.610†	457.4	5.0	0.0059 ug/L	0.0059 ppb	21:24:25
1	Mo 202.031†	16.8	0.7	0.0624 ug/L	0.0624 ppb	21:24:25
1	Ni 231.604†	92.2	-14.3	-0.4575 ug/L	-0.4575 ppb	21:24:25
1	P 214.914†	196.6	-17.8	-9.1046 ug/L	-9.1046 ppb	21:24:25
1	Pb 220.353†	-57.7	-27.8	-4.5379 ug/L	-4.5379 ppb	21:24:25
1	S 181.975 Axial†	43.0	-0.3	-0.3308 ug/L	-0.3308 ppb	21:24:25
1	Sb 206.836†	37.3	4.2	1.6852 ug/L	1.6852 ppb	21:24:25
1	Se 196.026†	-15.4	2.4	1.5144 ug/L	1.5144 ppb	21:24:25
1	Si 251.611†	643.3	57.2	2.0768 ug/L	2.0768 ppb	21:24:25
1	Sn 189.927†	34.8	4.3	1.0039 ug/L	1.0039 ppb	21:24:25
1	Ti 334.940†	-1193.0	133.0	0.2597 ug/L	0.2597 ppb	21:24:05
1	Tl 190.801†	-35.4	3.6	1.6672 ug/L	1.6672 ppb	21:24:25
1	U 409.014†	-2341.4	28.1	0.9423 ug/L	0.9423 ppb	21:24:00
1	V 292.402†	-1763.9	-4.3	-0.0321 ug/L	-0.0321 ppb	21:24:05
1	Zn 213.857†	780.0	-409.9	-4.5295 ug/L	-4.5295 ppb	21:24:25
1	SiO2†	643.6	42.9	3.3350 ug/L	3.3350 ppb	21:25:31
2	Sc Radial	4932.1	4932.1	102 %		21:23:08
2	Y RADIAL	5288.3	5288.3	103.5 %		21:23:08
2	Al 396.153Radial†	-89.9	-4.6	-4.3474 ug/L	-4.3474 ppb	21:23:28
2	Ca 317.933Radial†	18.4	-3.1	-5.6647 ug/L	-5.6647 ppb	21:23:28
2	Fe 238.204 Radial†	7.3	0.1	0.6260 ug/L	0.6260 ppb	21:23:28
2	K 766.490 Radial†	2402.7	104.9	20.849 ug/L	20.849 ppb	21:23:08
2	Mg 279.077 IEC†	2.3	1.2	50.476 ug/L	50.476 ppb	21:23:28
2	Na 589.592 Radial†	-702.9	-132.1	-47.044 ug/L	-47.044 ppb	21:23:08
2	Sr 421.552†	25.7	13.6	0.1018 ug/L	0.1018 ppb	21:23:08
2	Sc 361.383	820606.0	820606.0	104.29 %		21:24:30
2	Y 371.029	733061.7	733061.7	104.49 %		21:24:30
2	Ag 328.068†	218.6	1.4	0.0163 ug/L	0.0163 ppb	21:24:35
2	As 188.979†	-35.0	-4.7	-2.0968 ug/L	-2.0968 ppb	21:24:55
2	B 249.677†	-243.2	-87.9	-2.2252 ug/L	-2.2252 ppb	21:24:55
2	Ba 233.527†	4.5	3.6	0.0446 ug/L	0.0446 ppb	21:24:55
2	Be 313.107†	-9192.4	614.8	0.2452 ug/L	0.2452 ppb	21:24:35
2	Cd 226.502†	-210.9	-7.9	-0.1141 ug/L	-0.1141 ppb	21:24:55
2	Co 228.616†	-44.0	13.2	0.3996 ug/L	0.3996 ppb	21:24:55
2	Cr 267.716†	72.1	3.5	0.0522 ug/L	0.0522 ppb	21:24:55
2	Cu 324.752†	8219.1	-1229.3	-4.5818 ug/L	-4.5818 ppb	21:24:35
2	Mn 257.610†	471.6	25.1	0.0383 ug/L	0.0383 ppb	21:24:55
2	Mo 202.031†	13.4	-2.3	-0.2150 ug/L	-0.2150 ppb	21:24:55
2	Ni 231.604†	112.6	6.6	0.2121 ug/L	0.2121 ppb	21:24:55

2	P 214.914†	196.3	-15.3	-7.5938 ug/L	-7.5938 ppb	21:24:55
2	Pb 220.353†	-39.0	-10.8	-1.7524 ug/L	-1.7524 ppb	21:24:55
2	S 181.975 Axial†	37.9	-4.6	-5.8177 ug/L	-5.8177 ppb	21:24:55
2	Sb 206.836†	31.5	-0.8	-0.3364 ug/L	-0.3364 ppb	21:24:55
2	Se 196.026†	-14.1	3.4	2.0771 ug/L	2.0771 ppb	21:24:55
2	Si 251.611†	650.8	73.8	2.6835 ug/L	2.6835 ppb	21:24:55
2	Sn 189.927†	29.4	-0.4	-0.0982 ug/L	-0.0982 ppb	21:24:55
2	Ti 334.940†	-1236.4	74.1	0.1475 ug/L	0.1475 ppb	21:24:35
2	Tl 190.801†	-31.2	7.1	3.2523 ug/L	3.2523 ppb	21:24:55
2	U 409.014†	-2571.3	-226.3	-7.6015 ug/L	-7.6015 ppb	21:24:30
2	V 292.402†	-1641.0	88.0	0.6809 ug/L	0.6809 ppb	21:24:35
2	Zn 213.857†	777.8	-400.7	-4.4298 ug/L	-4.4298 ppb	21:24:55
2	SiO2†	670.5	78.1	6.0753 ug/L	6.0753 ppb	21:25:36
3	Sc Radial	5012.0	5012.0	104 %		21:23:33
3	Y RADIAL	5349.4	5349.4	104.7 %		21:23:33
3	Al 396.153Radial†	-81.3	5.1	4.8742 ug/L	4.8742 ppb	21:23:53
3	Ca 317.933Radial†	19.8	-2.1	-3.8054 ug/L	-3.8054 ppb	21:23:53
3	Fe 238.204 Radial†	5.4	-1.9	-20.909 ug/L	-20.909 ppb	21:23:53
3	K 766.490 Radial†	2360.1	26.4	5.2569 ug/L	5.2569 ppb	21:23:33
3	Mg 279.077 IEC†	0.5	-0.5	-22.130 ug/L	-22.130 ppb	21:23:53
3	Na 589.592 Radial†	-645.4	-65.9	-23.457 ug/L	-23.457 ppb	21:23:33
3	Sr 421.552†	29.5	16.8	0.1260 ug/L	0.1260 ppb	21:23:33
3	Sc 361.383	834236.5	834236.5	106.02 %		21:25:00
3	Y 371.029	745071.5	745071.5	106.21 %		21:25:00
3	Ag 328.068†	324.3	97.6	0.4958 ug/L	0.4958 ppb	21:25:06
3	As 188.979†	-32.8	-2.1	-0.9504 ug/L	-0.9504 ppb	21:25:26
3	B 249.677†	-234.1	-75.5	-1.9069 ug/L	-1.9069 ppb	21:25:26
3	Ba 233.527†	6.3	5.2	0.0619 ug/L	0.0619 ppb	21:25:26
3	Be 313.107†	-9467.0	499.8	0.1995 ug/L	0.1995 ppb	21:25:06
3	Cd 226.502†	-174.0	30.2	0.4302 ug/L	0.4302 ppb	21:25:26
3	Co 228.616†	-61.7	-2.8	-0.0843 ug/L	-0.0843 ppb	21:25:26
3	Cr 267.716†	78.7	8.6	0.1178 ug/L	0.1178 ppb	21:25:26
3	Cu 324.752†	8417.1	-1171.3	-4.3706 ug/L	-4.3706 ppb	21:25:06
3	Mn 257.610†	493.3	38.3	0.0602 ug/L	0.0602 ppb	21:25:26
3	Mo 202.031†	17.0	0.9	0.0783 ug/L	0.0783 ppb	21:25:26
3	Ni 231.604†	104.4	-2.8	-0.0903 ug/L	-0.0903 ppb	21:25:26
3	P 214.914†	201.0	-13.9	-6.8283 ug/L	-6.8283 ppb	21:25:26
3	Pb 220.353†	-62.0	-31.8	-5.1792 ug/L	-5.1792 ppb	21:25:26
3	S 181.975 Axial†	34.1	-8.7	-11.127 ug/L	-11.127 ppb	21:25:26
3	Sb 206.836†	27.6	-5.1	-1.9918 ug/L	-1.9918 ppb	21:25:26
3	Se 196.026†	-16.1	1.8	1.0289 ug/L	1.0289 ppb	21:25:26
3	Si 251.611†	632.0	45.8	1.6635 ug/L	1.6635 ppb	21:25:26
3	Sn 189.927†	39.5	8.6	2.0327 ug/L	2.0327 ppb	21:25:26
3	Ti 334.940†	-1246.5	83.9	0.1701 ug/L	0.1701 ppb	21:25:06
3	Tl 190.801†	-36.1	3.0	1.3749 ug/L	1.3749 ppb	21:25:26
3	U 409.014†	-2385.1	-10.4	-0.3479 ug/L	-0.3479 ppb	21:25:00
3	V 292.402†	-1698.8	59.1	0.4715 ug/L	0.4715 ppb	21:25:06
3	Zn 213.857†	757.2	-432.3	-4.7739 ug/L	-4.7739 ppb	21:25:26
3	SiO2†	632.3	31.5	2.4494 ug/L	2.4494 ppb	21:25:41

-----  
Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	829349.5	105.40 %	0.965			0.92%
Sc Radial	4982.6	103 %	0.9			0.88%
Y 371.029	740756.1	105.59 %	0.952			0.90%
Y RADIAL	5321.3	104.2 %	0.60			0.58%
Ag 328.068†	53.0	0.2739 ug/L	0.24174	0.2739 ppb	0.24174	88.26%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-0.3	-0.2638 ug/L	4.70034	-0.2638 ppb	4.70034	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-4.4	-1.9680 ug/L	0.95972	-1.9680 ppb	0.95972	48.77%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-76.9	-1.9445 ug/L	0.26387	-1.9445 ppb	0.26387	13.57%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	3.1	0.0375 ug/L	0.02870	0.0375 ppb	0.02870	76.59%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	593.6	0.2369 ug/L	0.03399	0.2369 ppb	0.03399	14.35%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-3.4	-6.2725 ug/L	2.82055	-6.2725 ppb	2.82055	44.97%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd 226.502†	17.8	0.2525 ug/L	0.31754	0.2525 ppb	0.31754	125.78%	
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	1.9	0.0566 ug/L	0.29857	0.0566 ppb	0.29857	527.32%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	3.7	0.0524 ug/L	0.06535	0.0524 ppb	0.06535	124.82%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	-1156.3	-4.3127 ug/L	0.30222	-4.3127 ppb	0.30222	7.01%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	-0.3	-3.2944 ug/L	16.01821	-3.2944 ppb	16.01821	486.23%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	58.5	11.631 ug/L	8.1756	11.631 ppb	8.1756	70.29%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	0.8	34.370 ug/L	50.4141	34.370 ppb	50.4141	146.68%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	22.8	0.0348 ug/L	0.02730	0.0348 ppb	0.02730	78.46%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	-0.3	-0.0248 ug/L	0.16490	-0.0248 ppb	0.16490	665.29%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	-92.5	-32.923 ug/L	12.4635	-32.923 ppb	12.4635	37.86%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	-3.5	-0.1119 ug/L	0.33532	-0.1119 ppb	0.33532	299.75%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	-15.6	-7.8422 ug/L	1.15834	-7.8422 ppb	1.15834	14.77%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	-23.5	-3.8232 ug/L	1.82177	-3.8232 ppb	1.82177	47.65%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	-4.5	-5.7584 ug/L	5.39822	-5.7584 ppb	5.39822	93.74%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	-0.6	-0.2143 ug/L	1.84151	-0.2143 ppb	1.84151	859.16%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	2.5	1.5402 ug/L	0.52457	1.5402 ppb	0.52457	34.06%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	58.9	2.1413 ug/L	0.51307	2.1413 ppb	0.51307	23.96%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	4.1	0.9795 ug/L	1.06567	0.9795 ppb	1.06567	108.80%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	13.4	0.1003 ug/L	0.02651	0.1003 ppb	0.02651	26.44%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	97.0	0.1924 ug/L	0.05933	0.1924 ppb	0.05933	30.84%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	4.6	2.0981 ug/L	1.01013	2.0981 ppb	1.01013	48.14%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	-69.6	-2.3357 ug/L	4.60572	-2.3357 ppb	4.60572	197.19%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	47.6	0.3734 ug/L	0.36651	0.3734 ppb	0.36651	98.14%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	-414.3	-4.5777 ug/L	0.17708	-4.5777 ppb	0.17708	3.87%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†	50.8	3.9532 ug/L	1.89033	3.9532 ppb	1.89033	47.82%	
QC value within limits for SiO2 Recovery = Not calculated							
All analyte(s) passed QC.							



Sequence No.: 35

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 3/3/2010 22:24:38

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	4949.5	4949.5	103 %		22:26:30
1	Y RADIAL	5233.4	5233.4	102.4 %		22:26:30
1	Al 396.153Radial†	5458.5	5400.5	5128.3 ug/L	5128.3 ppb	22:26:30
1	Ca 317.933Radial†	2857.5	2762.5	5113.5 ug/L	5113.5 ppb	22:26:50
1	Fe 238.204 Radial†	480.2	460.7	5156.1 ug/L	5156.1 ppb	22:26:50
1	K 766.490 Radial†	28883.2	25891.5	5133.9 ug/L	5133.9 ppb	22:26:30
1	Mg 279.077 IEC†	136.0	131.5	5444.0 ug/L	5444.0 ppb	22:26:50
1	Na 589.592 Radial†	28688.4	28500.6	10149 ug/L	10149 ppb	22:26:30
1	Sr 421.552†	70217.3	68387.7	512.34 ug/L	512.34 ppb	22:26:30
1	Sc 361.383	826244.7	826244.7	105.00 %		22:27:47
1	Y 371.029	731356.8	731356.8	104.25 %		22:27:47
1	Ag 328.068†	101511.5	96465.4	497.07 ug/L	497.07 ppb	22:27:53
1	As 188.979†	1152.0	1126.0	504.15 ug/L	504.15 ppb	22:28:13
1	B 249.677†	20119.0	19305.5	486.17 ug/L	486.17 ppb	22:27:53
1	Ba 233.527†	44418.5	42300.9	502.09 ug/L	502.09 ppb	22:27:53
1	Be 313.107†	1300092.9	1247562.6	498.03 ug/L	498.03 ppb	22:27:47
1	Cd 226.502†	36987.9	35419.4	502.85 ug/L	502.85 ppb	22:27:53
1	Co 228.616†	17609.2	16825.3	511.84 ug/L	511.84 ppb	22:27:53
1	Cr 267.716†	38513.0	36611.9	500.97 ug/L	500.97 ppb	22:27:53
1	Cu 324.752†	148278.7	132101.6	492.83 ug/L	492.83 ppb	22:27:53
1	Mn 257.610†	328214.0	312145.0	500.77 ug/L	500.77 ppb	22:27:53
1	Mo 202.031†	5620.0	5337.0	491.63 ug/L	491.63 ppb	22:28:13
1	Ni 231.604†	16749.3	15849.8	507.08 ug/L	507.08 ppb	22:27:53
1	P 214.914†	4876.6	4440.8	2377.4 ug/L	2377.4 ppb	22:28:13
1	Pb 220.353†	3151.8	3028.3	495.56 ug/L	495.56 ppb	22:28:13
1	S 181.975 Axial†	843.0	761.9	972.71 ug/L	972.71 ppb	22:28:13
1	Sb 206.836†	1322.2	1228.1	508.68 ug/L	508.68 ppb	22:28:13
1	Se 196.026†	842.3	819.1	512.96 ug/L	512.96 ppb	22:28:13
1	Si 251.611†	73303.3	69259.5	2509.6 ug/L	2509.6 ppb	22:27:53
1	Sn 189.927†	2208.5	2074.6	491.51 ug/L	491.51 ppb	22:28:13
1	Ti 334.940†	256789.4	245810.9	494.27 ug/L	494.27 ppb	22:27:53
1	Tl 190.801†	1084.0	1069.3	494.00 ug/L	494.00 ppb	22:28:13
1	U 409.014†	13233.5	14842.1	496.75 ug/L	496.75 ppb	22:27:53
1	V 292.402†	64322.2	62918.2	505.60 ug/L	505.60 ppb	22:27:53
1	Zn 213.857†	48584.1	45122.2	494.64 ug/L	494.64 ppb	22:27:53
1	SiO2†	72733.8	68702.6	5328.2 ug/L	5328.2 ppb	22:29:20
2	Sc Radial	4989.4	4989.4	103 %		22:26:55
2	Y RADIAL	5313.4	5313.4	104.0 %		22:26:55
2	Al 396.153Radial†	5485.6	5384.2	5112.7 ug/L	5112.7 ppb	22:26:55
2	Ca 317.933Radial†	2882.3	2764.1	5116.6 ug/L	5116.6 ppb	22:27:15
2	Fe 238.204 Radial†	490.0	466.4	5219.7 ug/L	5219.7 ppb	22:27:15
2	K 766.490 Radial†	29083.0	25859.6	5127.6 ug/L	5127.6 ppb	22:26:55
2	Mg 279.077 IEC†	131.3	125.8	5210.5 ug/L	5210.5 ppb	22:27:15
2	Na 589.592 Radial†	28834.5	28418.4	10120 ug/L	10120 ppb	22:26:55
2	Sr 421.552†	70870.8	68472.3	512.98 ug/L	512.98 ppb	22:26:55
2	Sc 361.383	823849.4	823849.4	104.70 %		22:28:18
2	Y 371.029	728532.2	728532.2	103.85 %		22:28:18
2	Ag 328.068†	100014.0	95316.2	491.19 ug/L	491.19 ppb	22:28:23
2	As 188.979†	1145.7	1123.2	502.85 ug/L	502.85 ppb	22:28:44
2	B 249.677†	19710.4	18971.0	477.72 ug/L	477.72 ppb	22:28:23
2	Ba 233.527†	43911.2	41939.4	497.80 ug/L	497.80 ppb	22:28:23
2	Be 313.107†	1294728.1	1246038.5	497.41 ug/L	497.41 ppb	22:28:18
2	Cd 226.502†	36547.8	35101.5	498.32 ug/L	498.32 ppb	22:28:23
2	Co 228.616†	17348.1	16624.7	505.76 ug/L	505.76 ppb	22:28:23
2	Cr 267.716†	38016.2	36244.1	495.94 ug/L	495.94 ppb	22:28:23
2	Cu 324.752†	145619.1	129972.0	484.89 ug/L	484.89 ppb	22:28:23
2	Mn 257.610†	323828.9	308865.5	495.53 ug/L	495.53 ppb	22:28:23
2	Mo 202.031†	5633.6	5365.5	494.27 ug/L	494.27 ppb	22:28:44
2	Ni 231.604†	16528.8	15685.5	501.82 ug/L	501.82 ppb	22:28:23

2	P 214.914†	4887.4	4464.6	2392.2 ug/L	2392.2 ppb	22:28:44
2	Pb 220.353†	3161.1	3045.9	498.43 ug/L	498.43 ppb	22:28:44
2	S 181.975 Axial†	860.8	781.3	997.40 ug/L	997.40 ppb	22:28:44
2	Sb 206.836†	1330.0	1239.3	513.23 ug/L	513.23 ppb	22:28:44
2	Se 196.026†	836.6	816.0	511.17 ug/L	511.17 ppb	22:28:44
2	Si 251.611†	72016.9	68233.8	2472.3 ug/L	2472.3 ppb	22:28:23
2	Sn 189.927†	2213.0	2085.0	493.98 ug/L	493.98 ppb	22:28:44
2	Ti 334.940†	252991.6	242894.7	488.43 ug/L	488.43 ppb	22:28:23
2	Tl 190.801†	1095.6	1083.4	500.44 ug/L	500.44 ppb	22:28:44
2	U 409.014†	12884.3	14545.2	486.78 ug/L	486.78 ppb	22:28:23
2	V 292.402†	63256.4	62078.4	498.96 ug/L	498.96 ppb	22:28:23
2	Zn 213.857†	47898.3	44601.7	488.91 ug/L	488.91 ppb	22:28:23
2	SiO2†	73291.1	69436.2	5385.2 ug/L	5385.2 ppb	22:29:25
3	Sc Radial	4931.5	4931.5	102 %		22:27:20
3	Y RADIAL	5269.0	5269.0	103.1 %		22:27:20
3	Al 396.153Radial†	5451.1	5412.5	5139.7 ug/L	5139.7 ppb	22:27:20
3	Ca 317.933Radial†	2870.4	2785.1	5155.5 ug/L	5155.5 ppb	22:27:40
3	Fe 238.204 Radial†	483.5	465.6	5211.4 ug/L	5211.4 ppb	22:27:40
3	K 766.490 Radial†	28817.6	25929.7	5141.5 ug/L	5141.5 ppb	22:27:20
3	Mg 279.077 IEC†	130.4	126.5	5236.5 ug/L	5236.5 ppb	22:27:40
3	Na 589.592 Radial†	28371.5	28292.4	10075 ug/L	10075 ppb	22:27:20
3	Sr 421.552†	70040.7	68463.8	512.91 ug/L	512.91 ppb	22:27:20
3	Sc 361.383	826142.2	826142.2	104.99 %		22:28:49
3	Y 371.029	730659.4	730659.4	104.15 %		22:28:49
3	Ag 328.068†	101358.7	96331.9	496.40 ug/L	496.40 ppb	22:28:54
3	As 188.979†	1156.0	1129.9	505.87 ug/L	505.87 ppb	22:29:14
3	B 249.677†	20063.3	19254.8	484.89 ug/L	484.89 ppb	22:28:54
3	Ba 233.527†	44181.7	42080.6	499.48 ug/L	499.48 ppb	22:28:54
3	Be 313.107†	1298880.2	1246561.2	497.63 ug/L	497.63 ppb	22:28:49
3	Cd 226.502†	36717.0	35165.8	499.24 ug/L	499.24 ppb	22:28:54
3	Co 228.616†	17440.5	16666.7	507.03 ug/L	507.03 ppb	22:28:54
3	Cr 267.716†	38322.3	36434.9	498.55 ug/L	498.55 ppb	22:28:54
3	Cu 324.752†	147803.5	131666.5	491.21 ug/L	491.21 ppb	22:28:54
3	Mn 257.610†	326339.0	310397.9	497.99 ug/L	497.99 ppb	22:28:54
3	Mo 202.031†	5652.7	5368.8	494.56 ug/L	494.56 ppb	22:29:14
3	Ni 231.604†	16657.0	15763.8	504.33 ug/L	504.33 ppb	22:28:54
3	P 214.914†	4878.0	4442.7	2378.7 ug/L	2378.7 ppb	22:29:14
3	Pb 220.353†	3151.3	3028.2	495.56 ug/L	495.56 ppb	22:29:14
3	S 181.975 Axial†	846.5	765.4	977.09 ug/L	977.09 ppb	22:29:14
3	Sb 206.836†	1323.8	1229.8	509.40 ug/L	509.40 ppb	22:29:14
3	Se 196.026†	840.7	817.7	512.19 ug/L	512.19 ppb	22:29:14
3	Si 251.611†	72619.4	68616.9	2486.3 ug/L	2486.3 ppb	22:28:54
3	Sn 189.927†	2200.5	2067.3	489.79 ug/L	489.79 ppb	22:29:14
3	Ti 334.940†	255652.9	244758.8	492.18 ug/L	492.18 ppb	22:28:54
3	Tl 190.801†	1113.2	1097.3	506.82 ug/L	506.82 ppb	22:29:14
3	U 409.014†	13072.8	14690.6	491.66 ug/L	491.66 ppb	22:28:54
3	V 292.402†	64043.7	62660.5	503.58 ug/L	503.58 ppb	22:28:54
3	Zn 213.857†	48348.9	44903.9	492.23 ug/L	492.23 ppb	22:28:54
3	SiO2†	72283.8	68282.6	5295.5 ug/L	5295.5 ppb	22:29:30

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	825412.1	104.90 %	0.172			0.16%
Sc Radial	4956.8	103 %	0.6			0.60%
Y 371.029	730182.8	104.08 %	0.210			0.20%
Y RADIAL	5271.9	103.2 %	0.78			0.76%
Ag 328.068†	96037.9	494.89 ug/L	3.221	494.89 ppb	3.221	0.65%
QC value within limits for Ag 328.068 Recovery = 98.98%						
Al 396.153Radial†	5399.1	5126.9 ug/L	13.57	5126.9 ppb	13.57	0.26%
QC value within limits for Al 396.153Radial Recovery = 102.54%						
As 188.979†	1126.3	504.29 ug/L	1.514	504.29 ppb	1.514	0.30%
QC value within limits for As 188.979 Recovery = 100.86%						
B 249.677†	19177.1	482.93 ug/L	4.558	482.93 ppb	4.558	0.94%
QC value within limits for B 249.677 Recovery = 96.59%						
Ba 233.527†	42107.0	499.79 ug/L	2.163	499.79 ppb	2.163	0.43%
QC value within limits for Ba 233.527 Recovery = 99.96%						
Be 313.107†	1246720.8	497.69 ug/L	0.315	497.69 ppb	0.315	0.06%
QC value within limits for Be 313.107 Recovery = 99.54%						
Ca 317.933Radial†	2770.6	5128.5 ug/L	23.41	5128.5 ppb	23.41	0.46%

QC value within limits for Ca 317.933 Radial Recovery = 102.57%							
Cd 226.502†	35228.9	500.13 ug/L	2.393	500.13 ppb	2.393	0.48%	
QC value within limits for Cd 226.502 Recovery = 100.03%							
Co 228.616†	16705.6	508.21 ug/L	3.210	508.21 ppb	3.210	0.63%	
QC value within limits for Co 228.616 Recovery = 101.64%							
Cr 267.716†	36430.3	498.49 ug/L	2.516	498.49 ppb	2.516	0.50%	
QC value within limits for Cr 267.716 Recovery = 99.70%							
Cu 324.752†	131246.7	489.64 ug/L	4.194	489.64 ppb	4.194	0.86%	
QC value within limits for Cu 324.752 Recovery = 97.93%							
Fe 238.204 Radial†	464.2	5195.7 ug/L	34.62	5195.7 ppb	34.62	0.67%	
QC value within limits for Fe 238.204 Radial Recovery = 103.91%							
K 766.490 Radial†	25893.6	5134.3 ug/L	6.97	5134.3 ppb	6.97	0.14%	
QC value within limits for K 766.490 Radial Recovery = 102.69%							
Mg 279.077 IEC†	127.9	5297.0 ug/L	127.98	5297.0 ppb	127.98	2.42%	
QC value within limits for Mg 279.077 IEC Recovery = 105.94%							
Mn 257.610†	310469.5	498.10 ug/L	2.623	498.10 ppb	2.623	0.53%	
QC value within limits for Mn 257.610 Recovery = 99.62%							
Mo 202.031†	5357.1	493.49 ug/L	1.614	493.49 ppb	1.614	0.33%	
QC value within limits for Mo 202.031 Recovery = 98.70%							
Na 589.592 Radial†	28403.8	10115 ug/L	37.3	10115 ppb	37.3	0.37%	
QC value within limits for Na 589.592 Radial Recovery = 101.15%							
Ni 231.604†	15766.4	504.41 ug/L	2.628	504.41 ppb	2.628	0.52%	
QC value within limits for Ni 231.604 Recovery = 100.88%							
P 214.914†	4449.3	2382.8 ug/L	8.21	2382.8 ppb	8.21	0.34%	
QC value within limits for P 214.914 Recovery = 95.31%							
Pb 220.353†	3034.1	496.52 ug/L	1.660	496.52 ppb	1.660	0.33%	
QC value within limits for Pb 220.353 Recovery = 99.30%							
S 181.975 Axial†	769.5	982.40 ug/L	13.172	982.40 ppb	13.172	1.34%	
QC value within limits for S 181.975 Axial Recovery = 98.24%							
Sb 206.836†	1232.4	510.43 ug/L	2.446	510.43 ppb	2.446	0.48%	
QC value within limits for Sb 206.836 Recovery = 102.09%							
Se 196.026†	817.6	512.11 ug/L	0.895	512.11 ppb	0.895	0.17%	
QC value within limits for Se 196.026 Recovery = 102.42%							
Si 251.611†	68703.4	2489.4 ug/L	18.84	2489.4 ppb	18.84	0.76%	
QC value within limits for Si 251.611 Recovery = 99.58%							
Sn 189.927†	2075.6	491.76 ug/L	2.111	491.76 ppb	2.111	0.43%	
QC value within limits for Sn 189.927 Recovery = 98.35%							
Sr 421.552†	68441.3	512.74 ug/L	0.349	512.74 ppb	0.349	0.07%	
QC value within limits for Sr 421.552 Recovery = 102.55%							
Ti 334.940†	244488.2	491.63 ug/L	2.959	491.63 ppb	2.959	0.60%	
QC value within limits for Ti 334.940 Recovery = 98.33%							
Tl 190.801†	1083.4	500.42 ug/L	6.408	500.42 ppb	6.408	1.28%	
QC value within limits for Tl 190.801 Recovery = 100.08%							
U 409.014†	14692.7	491.73 ug/L	4.984	491.73 ppb	4.984	1.01%	
QC value within limits for U 409.014 Recovery = 98.35%							
V 292.402†	62552.4	502.71 ug/L	3.408	502.71 ppb	3.408	0.68%	
QC value within limits for V 292.402 Recovery = 100.54%							
Zn 213.857†	44875.9	491.93 ug/L	2.875	491.93 ppb	2.875	0.58%	
QC value within limits for Zn 213.857 Recovery = 98.39%							
SiO2†	68807.1	5336.3 ug/L	45.39	5336.3 ppb	45.39	0.85%	
QC value within limits for SiO2 Recovery = 99.79%							
All analyte(s) passed QC.							

Sequence No.: 36

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 3/3/2010 22:31:40

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	4921.4	4921.4	102 %		22:33:32
1	Y RADIAL	5248.6	5248.6	102.7 %		22:33:32
1	Al 396.153Radial†	-84.6	0.4	0.4187 ug/L	0.4187 ppb	22:33:52
1	Ca 317.933Radial†	16.1	-5.3	-9.7597 ug/L	-9.7597 ppb	22:33:52
1	Fe 238.204 Radial†	6.4	-0.8	-8.9409 ug/L	-8.9409 ppb	22:33:52
1	K 766.490 Radial†	2235.7	-53.7	-10.636 ug/L	-10.636 ppb	22:33:32
1	Mg 279.077 IEC†	3.6	2.5	102.01 ug/L	102.01 ppb	22:33:52
1	Na 589.592 Radial†	-683.0	-114.2	-40.652 ug/L	-40.652 ppb	22:33:32
1	Sr 421.552†	-11.7	-23.1	-0.1728 ug/L	-0.1728 ppb	22:33:32
1	Sc 361.383	816720.4	816720.4	103.79 %		22:34:49
1	Y 371.029	727208.4	727208.4	103.66 %		22:34:49
1	Ag 328.068†	232.6	15.9	0.0826 ug/L	0.0826 ppb	22:34:49
1	As 188.979†	-27.6	2.2	0.9803 ug/L	0.9803 ppb	22:35:09
1	B 249.677†	-344.8	-186.9	-4.7276 ug/L	-4.7276 ppb	22:35:09
1	Ba 233.527†	6.0	5.0	0.0598 ug/L	0.0598 ppb	22:35:09
1	Be 313.107†	-9433.8	340.4	0.1359 ug/L	0.1359 ppb	22:34:49
1	Cd 226.502†	-197.0	4.5	0.0630 ug/L	0.0630 ppb	22:35:09
1	Co 228.616†	-45.2	11.9	0.3606 ug/L	0.3606 ppb	22:35:09
1	Cr 267.716†	58.5	-9.3	-0.1249 ug/L	-0.1249 ppb	22:35:09
1	Cu 324.752†	8401.8	-1015.7	-3.7876 ug/L	-3.7876 ppb	22:34:49
1	Mn 257.610†	479.7	35.2	0.0513 ug/L	0.0513 ppb	22:35:09
1	Mo 202.031†	16.3	0.5	0.0453 ug/L	0.0453 ppb	22:35:09
1	Ni 231.604†	86.4	-18.1	-0.5797 ug/L	-0.5797 ppb	22:35:09
1	P 214.914†	216.3	4.9	3.4926 ug/L	3.4926 ppb	22:35:09
1	Pb 220.353†	-51.6	-23.0	-3.7526 ug/L	-3.7526 ppb	22:35:09
1	S 181.975 Axial†	37.9	-4.3	-5.4985 ug/L	-5.4985 ppb	22:35:09
1	Sb 206.836†	40.8	8.2	3.2607 ug/L	3.2607 ppb	22:35:09
1	Se 196.026†	-20.0	-2.3	-1.4288 ug/L	-1.4288 ppb	22:35:09
1	Si 251.611†	607.6	35.1	1.2762 ug/L	1.2762 ppb	22:35:09
1	Sn 189.927†	20.0	-9.3	-2.2092 ug/L	-2.2092 ppb	22:35:09
1	Ti 334.940†	-1241.8	63.2	0.1192 ug/L	0.1192 ppb	22:34:49
1	Tl 190.801†	-34.6	3.7	1.6873 ug/L	1.6873 ppb	22:35:09
1	U 409.014†	-2448.7	-119.9	-4.0252 ug/L	-4.0252 ppb	22:34:49
1	V 292.402†	-1706.4	17.4	0.1342 ug/L	0.1342 ppb	22:34:49
1	Zn 213.857†	746.0	-427.8	-4.7239 ug/L	-4.7239 ppb	22:35:09
1	SiO2†	657.0	68.1	5.2932 ug/L	5.2932 ppb	22:36:05
2	Sc Radial	4845.6	4845.6	101 %		22:33:57
2	Y RADIAL	5174.5	5174.5	101.3 %		22:33:57
2	Al 396.153Radial†	-85.9	-2.2	-1.9916 ug/L	-1.9916 ppb	22:34:17
2	Ca 317.933Radial†	18.1	-3.1	-5.7186 ug/L	-5.7186 ppb	22:34:17
2	Fe 238.204 Radial†	8.2	1.0	11.433 ug/L	11.433 ppb	22:34:17
2	K 766.490 Radial†	2278.5	23.2	4.6379 ug/L	4.6379 ppb	22:33:57
2	Mg 279.077 IEC†	2.5	1.5	61.624 ug/L	61.624 ppb	22:34:17
2	Na 589.592 Radial†	-754.6	-195.8	-69.741 ug/L	-69.741 ppb	22:33:57
2	Sr 421.552†	37.0	25.2	0.1890 ug/L	0.1890 ppb	22:33:57
2	Sc 361.383	811497.8	811497.8	103.13 %		22:35:14
2	Y 371.029	723403.4	723403.4	103.12 %		22:35:14
2	Ag 328.068†	289.6	72.5	0.3791 ug/L	0.3791 ppb	22:35:14
2	As 188.979†	-30.5	-0.7	-0.3086 ug/L	-0.3086 ppb	22:35:34
2	B 249.677†	-342.1	-186.4	-4.7180 ug/L	-4.7180 ppb	22:35:34
2	Ba 233.527†	8.2	7.3	0.0877 ug/L	0.0877 ppb	22:35:34
2	Be 313.107†	-9403.6	311.1	0.1246 ug/L	0.1246 ppb	22:35:14
2	Cd 226.502†	-174.8	24.8	0.3505 ug/L	0.3505 ppb	22:35:34
2	Co 228.616†	-63.1	-5.8	-0.1808 ug/L	-0.1808 ppb	22:35:34
2	Cr 267.716†	79.8	11.8	0.1626 ug/L	0.1626 ppb	22:35:34
2	Cu 324.752†	8233.2	-1127.1	-4.2030 ug/L	-4.2030 ppb	22:35:14
2	Mn 257.610†	475.4	33.9	0.0530 ug/L	0.0530 ppb	22:35:34
2	Mo 202.031†	-0.3	-15.5	-1.4229 ug/L	-1.4229 ppb	22:35:34
2	Ni 231.604†	103.5	-1.0	-0.0315 ug/L	-0.0315 ppb	22:35:34

2	P 214.914†	198.3	-11.2	-5.4009 ug/L	-5.4009 ppb	22:35:34
2	Pb 220.353†	-71.5	-42.7	-6.9574 ug/L	-6.9574 ppb	22:35:34
2	S 181.975 Axial†	43.9	1.7	2.1933 ug/L	2.1933 ppb	22:35:34
2	Sb 206.836†	36.0	3.8	1.5320 ug/L	1.5320 ppb	22:35:34
2	Se 196.026†	-19.7	-2.1	-1.2881 ug/L	-1.2881 ppb	22:35:34
2	Si 251.611†	612.0	43.1	1.5843 ug/L	1.5843 ppb	22:35:34
2	Sn 189.927†	37.4	7.6	1.8044 ug/L	1.8044 ppb	22:35:34
2	Ti 334.940†	-1147.4	147.1	0.2910 ug/L	0.2910 ppb	22:35:14
2	Tl 190.801†	-38.3	-0.1	-0.0379 ug/L	-0.0379 ppb	22:35:34
2	U 409.014†	-2381.0	-69.5	-2.3344 ug/L	-2.3344 ppb	22:35:14
2	V 292.402†	-1639.0	72.2	0.5473 ug/L	0.5473 ppb	22:35:14
2	Zn 213.857†	739.9	-429.1	-4.7438 ug/L	-4.7438 ppb	22:35:34
2	SiO2†	635.1	50.9	3.9960 ug/L	3.9960 ppb	22:36:10
3	Sc Radial	4859.1	4859.1	101 %		22:34:22
3	Y RADIAL	5191.6	5191.6	101.6 %		22:34:22
3	Al 396.153Radial†	-83.9	0.0	0.0322 ug/L	0.0322 ppb	22:34:42
3	Ca 317.933Radial†	21.3	0.0	0.0784 ug/L	0.0784 ppb	22:34:42
3	Fe 238.204 Radial†	7.8	0.6	6.8328 ug/L	6.8328 ppb	22:34:42
3	K 766.490 Radial†	2438.6	175.8	34.917 ug/L	34.917 ppb	22:34:22
3	Mg 279.077 IEC†	2.8	1.8	73.802 ug/L	73.802 ppb	22:34:42
3	Na 589.592 Radial†	-684.1	-123.7	-44.066 ug/L	-44.066 ppb	22:34:22
3	Sr 421.552†	1.5	-10.1	-0.0755 ug/L	-0.0755 ppb	22:34:22
3	Sc 361.383	813961.2	813961.2	103.44 %		22:35:40
3	Y 371.029	725680.8	725680.8	103.44 %		22:35:40
3	Ag 328.068†	294.9	76.8	0.3971 ug/L	0.3971 ppb	22:35:40
3	As 188.979†	-29.8	0.0	0.0044 ug/L	0.0044 ppb	22:36:00
3	B 249.677†	-362.0	-204.6	-5.1790 ug/L	-5.1790 ppb	22:36:00
3	Ba 233.527†	11.8	10.7	0.1266 ug/L	0.1266 ppb	22:36:00
3	Be 313.107†	-9427.6	315.5	0.1261 ug/L	0.1261 ppb	22:35:40
3	Cd 226.502†	-198.2	2.6	0.0360 ug/L	0.0360 ppb	22:36:00
3	Co 228.616†	-46.6	10.3	0.3125 ug/L	0.3125 ppb	22:36:00
3	Cr 267.716†	53.7	-13.7	-0.1862 ug/L	-0.1862 ppb	22:36:00
3	Cu 324.752†	8360.0	-1028.7	-3.8365 ug/L	-3.8365 ppb	22:35:40
3	Mn 257.610†	495.3	51.8	0.0807 ug/L	0.0807 ppb	22:36:00
3	Mo 202.031†	13.8	-1.9	-0.1718 ug/L	-0.1718 ppb	22:36:00
3	Ni 231.604†	101.8	-2.9	-0.0933 ug/L	-0.0933 ppb	22:36:00
3	P 214.914†	194.2	-15.7	-7.9730 ug/L	-7.9730 ppb	22:36:00
3	Pb 220.353†	-57.8	-29.2	-4.7557 ug/L	-4.7557 ppb	22:36:00
3	S 181.975 Axial†	42.9	0.6	0.7677 ug/L	0.7677 ppb	22:36:00
3	Sb 206.836†	29.3	-2.7	-1.0810 ug/L	-1.0810 ppb	22:36:00
3	Se 196.026†	-19.7	-2.1	-1.2511 ug/L	-1.2511 ppb	22:36:00
3	Si 251.611†	625.0	53.9	1.9601 ug/L	1.9601 ppb	22:36:00
3	Sn 189.927†	29.8	0.1	0.0281 ug/L	0.0281 ppb	22:36:00
3	Ti 334.940†	-1206.6	93.2	0.1822 ug/L	0.1822 ppb	22:35:40
3	Tl 190.801†	-21.3	16.5	7.5654 ug/L	7.5654 ppb	22:36:00
3	U 409.014†	-2365.6	-47.6	-1.5995 ug/L	-1.5995 ppb	22:35:40
3	V 292.402†	-1709.0	9.4	0.0692 ug/L	0.0692 ppb	22:35:40
3	Zn 213.857†	739.8	-431.3	-4.7679 ug/L	-4.7679 ppb	22:36:00
3	SiO2†	661.4	74.5	5.7981 ug/L	5.7981 ppb	22:36:15

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	814059.8	103.46 %		0.332				0.32%
Sc Radial	4875.4	101 %		0.8				0.83%
Y 371.029	725430.9	103.41 %		0.273				0.26%
Y RADIAL	5204.9	101.9 %		0.76				0.75%
Ag 328.068†	55.1	0.2863 ug/L		0.17663	0.2863 ppb		0.17663	61.70%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-0.6	-0.5136 ug/L		1.29455	-0.5136 ppb		1.29455	252.07%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	0.5	0.2253 ug/L		0.67225	0.2253 ppb		0.67225	298.32%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-192.6	-4.8749 ug/L		0.26340	-4.8749 ppb		0.26340	5.40%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	7.7	0.0914 ug/L		0.03356	0.0914 ppb		0.03356	36.72%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	322.3	0.1288 ug/L		0.00612	0.1288 ppb		0.00612	4.75%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-2.8	-5.1333 ug/L		4.94507	-5.1333 ppb		4.94507	96.33%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated						
Cd 226.502†	10.6	0.1498 ug/L	0.17432	0.1498 ppb	0.17432	116.34%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	5.4	0.1641 ug/L	0.29967	0.1641 ppb	0.29967	182.59%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-3.7	-0.0495 ug/L	0.18620	-0.0495 ppb	0.18620	376.29%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-1057.2	-3.9424 ug/L	0.22707	-3.9424 ppb	0.22707	5.76%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	0.3	3.1082 ug/L	10.68536	3.1082 ppb	10.68536	343.78%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	48.4	9.6397 ug/L	23.18444	9.6397 ppb	23.18444	240.51%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	1.9	79.147 ug/L	20.7194	79.147 ppb	20.7194	26.18%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	40.3	0.0617 ug/L	0.01648	0.0617 ppb	0.01648	26.73%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	-5.6	-0.5165 ug/L	0.79247	-0.5165 ppb	0.79247	153.44%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	-144.6	-51.486 ug/L	15.9011	-51.486 ppb	15.9011	30.88%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	-7.3	-0.2348 ug/L	0.30027	-0.2348 ppb	0.30027	127.86%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	-7.3	-3.2938 ug/L	6.01622	-3.2938 ppb	6.01622	182.65%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	-31.6	-5.1552 ug/L	1.63933	-5.1552 ppb	1.63933	31.80%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	-0.7	-0.8458 ug/L	4.09189	-0.8458 ppb	4.09189	483.77%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	3.1	1.2372 ug/L	2.18582	1.2372 ppb	2.18582	176.67%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-2.2	-1.3227 ug/L	0.09378	-1.3227 ppb	0.09378	7.09%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	44.1	1.6069 ug/L	0.34252	1.6069 ppb	0.34252	21.32%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	-0.5	-0.1255 ug/L	2.01121	-0.1255 ppb	2.01121	>999.9%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	-2.6	-0.0198 ug/L	0.18723	-0.0198 ppb	0.18723	947.77%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	101.1	0.1975 ug/L	0.08689	0.1975 ppb	0.08689	44.00%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	6.7	3.0716 ug/L	3.98621	3.0716 ppb	3.98621	129.78%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	-79.0	-2.6530 ug/L	1.24385	-2.6530 ppb	1.24385	46.88%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	33.0	0.2502 ug/L	0.25930	0.2502 ppb	0.25930	103.62%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	-429.4	-4.7452 ug/L	0.02203	-4.7452 ppb	0.02203	0.46%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	64.5	5.0291 ug/L	0.92962	5.0291 ppb	0.92962	18.48%
QC value within limits for SiO2 Recovery = Not calculated						
All analyte(s) passed QC.						

Sequence No.: 37

Sample ID: 1202054615|958097|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 64

Date Collected: 3/3/2010 22:38:25

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202054615|958097|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4896.0	4896.0	102 %		22:40:18
1	Y RADIAL	5206.5	5206.5	101.9 %		22:40:18
1	Al 396.153Radial†	-72.4	12.1	11.492 ug/L	11.492 ppb	22:40:39
1	Ca 317.933Radial†	26.6	5.1	9.4946 ug/L	9.4946 ppb	22:40:39
1	Fe 238.204 Radial†	16.3	9.0	100.02 ug/L	100.02 ppb	22:40:39
1	K 766.490 Radial†	2374.4	94.3	18.736 ug/L	18.736 ppb	22:40:18
1	Mg 279.077 IEC†	-0.6	-1.6	-66.312 ug/L	-66.312 ppb	22:40:39
1	Na 589.592 Radial†	-622.5	-58.0	-20.658 ug/L	-20.658 ppb	22:40:18
1	Sr 421.552†	53.9	41.5	0.3111 ug/L	0.3111 ppb	22:40:18
1	Sc 361.383	825196.8	825196.8	104.87 %		22:41:35
1	Y 371.029	735758.0	735758.0	104.88 %		22:41:35
1	Ag 328.068†	238.1	18.8	0.1293 ug/L	0.1293 ppb	22:41:40
1	As 188.979†	-31.2	-0.9	-0.3795 ug/L	-0.3795 ppb	22:42:00
1	B 249.677†	-413.1	-248.6	-6.3075 ug/L	-6.3075 ppb	22:42:00
1	Ba 233.527†	30.0	27.9	0.3336 ug/L	0.3336 ppb	22:42:00
1	Be 313.107†	-9334.3	528.6	0.2122 ug/L	0.2122 ppb	22:41:40
1	Cd 226.502†	-182.6	20.2	0.2757 ug/L	0.2757 ppb	22:42:00
1	Co 228.616†	-49.3	8.4	0.2531 ug/L	0.2531 ppb	22:42:00
1	Cr 267.716†	111.6	40.8	0.5602 ug/L	0.5602 ppb	22:42:00
1	Cu 324.752†	8493.0	-1012.0	-3.7689 ug/L	-3.7689 ppb	22:41:40
1	Mn 257.610†	1106.0	627.5	1.0188 ug/L	1.0188 ppb	22:42:00
1	Mo 202.031†	17.1	1.2	0.1149 ug/L	0.1149 ppb	22:42:00
1	Ni 231.604†	115.4	8.7	0.2799 ug/L	0.2799 ppb	22:42:00
1	P 214.914†	196.2	-16.4	-8.4213 ug/L	-8.4213 ppb	22:42:00
1	Pb 220.353†	-41.7	-13.1	-2.1338 ug/L	-2.1338 ppb	22:42:00
1	S 181.975 Axial†	48.7	5.5	7.0891 ug/L	7.0891 ppb	22:42:00
1	Sb 206.836†	33.9	1.3	0.5741 ug/L	0.5741 ppb	22:42:00
1	Se 196.026†	-21.1	-3.2	-1.7261 ug/L	-1.7261 ppb	22:42:00
1	Si 251.611†	1348.0	735.1	26.698 ug/L	26.698 ppb	22:42:00
1	Sn 189.927†	45.1	14.3	3.3823 ug/L	3.3823 ppb	22:42:00
1	Ti 334.940†	-935.6	367.5	0.7465 ug/L	0.7465 ppb	22:41:40
1	Tl 190.801†	-26.8	11.5	5.2779 ug/L	5.2779 ppb	22:42:00
1	U 409.014†	-2412.2	-60.9	-2.0576 ug/L	-2.0576 ppb	22:41:35
1	V 292.402†	-1714.1	27.0	0.1950 ug/L	0.1950 ppb	22:41:40
1	Zn 213.857†	952.0	-238.7	-2.6530 ug/L	-2.6530 ppb	22:42:00
1	SiO2†	1370.7	742.2	57.701 ug/L	57.701 ppb	22:43:06
2	Sc Radial	4850.3	4850.3	101 %		22:40:44
2	Y RADIAL	5187.9	5187.9	101.6 %		22:40:44
2	Al 396.153Radial†	-72.7	11.1	10.574 ug/L	10.574 ppb	22:41:04
2	Ca 317.933Radial†	25.3	4.1	7.5747 ug/L	7.5747 ppb	22:41:04
2	Fe 238.204 Radial†	14.7	7.5	83.625 ug/L	83.625 ppb	22:41:04
2	K 766.490 Radial†	2366.8	108.8	21.603 ug/L	21.603 ppb	22:40:44
2	Mg 279.077 IEC†	2.5	1.4	59.635 ug/L	59.635 ppb	22:41:04
2	Na 589.592 Radial†	-628.6	-69.9	-24.881 ug/L	-24.881 ppb	22:40:44
2	Sr 421.552†	49.4	37.5	0.2809 ug/L	0.2809 ppb	22:40:44
2	Sc 361.383	810838.3	810838.3	103.05 %		22:42:06
2	Y 371.029	722969.9	722969.9	103.05 %		22:42:06
2	Ag 328.068†	304.8	87.6	0.4778 ug/L	0.4778 ppb	22:42:11
2	As 188.979†	-22.1	7.4	3.3058 ug/L	3.3058 ppb	22:42:31
2	B 249.677†	-352.8	-197.1	-5.0003 ug/L	-5.0003 ppb	22:42:31
2	Ba 233.527†	24.6	23.2	0.2778 ug/L	0.2778 ppb	22:42:31
2	Be 313.107†	-9374.1	332.3	0.1337 ug/L	0.1337 ppb	22:42:11
2	Cd 226.502†	-176.8	22.7	0.3130 ug/L	0.3130 ppb	22:42:31
2	Co 228.616†	-52.6	4.3	0.1281 ug/L	0.1281 ppb	22:42:31
2	Cr 267.716†	123.7	54.4	0.7473 ug/L	0.7473 ppb	22:42:31
2	Cu 324.752†	8422.6	-936.9	-3.4892 ug/L	-3.4892 ppb	22:42:11
2	Mn 257.610†	1086.1	626.9	1.0111 ug/L	1.0111 ppb	22:42:31
2	Mo 202.031†	15.7	0.1	0.0117 ug/L	0.0117 ppb	22:42:31
2	Ni 231.604†	107.8	3.3	0.1060 ug/L	0.1060 ppb	22:42:31

2	P 214.914†	197.3	-12.0	-6.0179 ug/L	-6.0179 ppb	22:42:31
2	Pb 220.353†	-45.3	-17.2	-2.8138 ug/L	-2.8138 ppb	22:42:31
2	S 181.975 Axial†	39.3	-2.7	-3.4758 ug/L	-3.4758 ppb	22:42:31
2	Sb 206.836†	35.8	3.7	1.5229 ug/L	1.5229 ppb	22:42:31
2	Se 196.026†	-18.8	-1.3	-0.5878 ug/L	-0.5878 ppb	22:42:31
2	Si 251.611†	1339.3	749.4	27.221 ug/L	27.221 ppb	22:42:31
2	Sn 189.927†	43.8	13.8	3.2728 ug/L	3.2728 ppb	22:42:31
2	Ti 334.940†	-1002.0	287.2	0.5749 ug/L	0.5749 ppb	22:42:11
2	Tl 190.801†	-29.4	8.5	3.8910 ug/L	3.8910 ppb	22:42:31
2	U 409.014†	-2395.6	-85.5	-2.8814 ug/L	-2.8814 ppb	22:42:06
2	V 292.402†	-1664.4	46.2	0.3495 ug/L	0.3495 ppb	22:42:11
2	Zn 213.857†	931.7	-242.4	-2.6902 ug/L	-2.6902 ppb	22:42:31
2	SiO2†	1422.6	815.7	63.418 ug/L	63.418 ppb	22:43:11
3	Sc Radial	4955.7	4955.7	103 %		22:41:09
3	Y RADIAL	5302.3	5302.3	103.8 %		22:41:09
3	Al 396.153Radial†	-65.9	19.2	18.340 ug/L	18.340 ppb	22:41:29
3	Ca 317.933Radial†	27.5	5.7	10.518 ug/L	10.518 ppb	22:41:29
3	Fe 238.204 Radial†	14.5	7.0	78.627 ug/L	78.627 ppb	22:41:29
3	K 766.490 Radial†	2324.8	17.9	3.5663 ug/L	3.5663 ppb	22:41:09
3	Mg 279.077 IEC†	3.0	1.9	76.996 ug/L	76.996 ppb	22:41:29
3	Na 589.592 Radial†	-656.2	-83.4	-29.697 ug/L	-29.697 ppb	22:41:09
3	Sr 421.552†	24.9	12.6	0.0944 ug/L	0.0944 ppb	22:41:09
3	Sc 361.383	809035.7	809035.7	102.82 %		22:42:36
3	Y 371.029	721460.3	721460.3	102.84 %		22:42:36
3	Ag 328.068†	199.5	-14.2	-0.0410 ug/L	-0.0410 ppb	22:42:41
3	As 188.979†	-28.9	0.7	0.3536 ug/L	0.3536 ppb	22:43:01
3	B 249.677†	-410.1	-253.6	-6.4285 ug/L	-6.4285 ppb	22:43:01
3	Ba 233.527†	22.6	21.3	0.2556 ug/L	0.2556 ppb	22:43:01
3	Be 313.107†	-9283.1	400.6	0.1614 ug/L	0.1614 ppb	22:42:41
3	Cd 226.502†	-183.0	16.3	0.2213 ug/L	0.2213 ppb	22:43:01
3	Co 228.616†	-52.3	4.5	0.1318 ug/L	0.1318 ppb	22:43:01
3	Cr 267.716†	100.7	32.3	0.4462 ug/L	0.4462 ppb	22:43:01
3	Cu 324.752†	8424.0	-917.3	-3.4140 ug/L	-3.4140 ppb	22:42:41
3	Mn 257.610†	1088.8	631.9	1.0178 ug/L	1.0178 ppb	22:43:01
3	Mo 202.031†	3.6	-11.7	-1.0706 ug/L	-1.0706 ppb	22:43:01
3	Ni 231.604†	102.2	-2.0	-0.0626 ug/L	-0.0626 ppb	22:43:01
3	P 214.914†	181.8	-26.7	-14.202 ug/L	-14.202 ppb	22:43:01
3	Pb 220.353†	-52.1	-24.0	-3.9174 ug/L	-3.9174 ppb	22:43:01
3	S 181.975 Axial†	46.4	4.2	5.4164 ug/L	5.4164 ppb	22:43:01
3	Sb 206.836†	39.0	6.9	2.7945 ug/L	2.7945 ppb	22:43:01
3	Se 196.026†	-14.5	2.9	1.9385 ug/L	1.9385 ppb	22:43:01
3	Si 251.611†	1345.2	758.1	27.549 ug/L	27.549 ppb	22:43:01
3	Sn 189.927†	44.7	14.8	3.5003 ug/L	3.5003 ppb	22:43:01
3	Ti 334.940†	-875.9	407.7	0.8183 ug/L	0.8183 ppb	22:42:41
3	Tl 190.801†	-28.6	9.2	4.2447 ug/L	4.2447 ppb	22:43:01
3	U 409.014†	-2524.5	-216.1	-7.2664 ug/L	-7.2664 ppb	22:42:36
3	V 292.402†	-1647.0	59.6	0.4329 ug/L	0.4329 ppb	22:42:41
3	Zn 213.857†	932.1	-240.0	-2.6626 ug/L	-2.6626 ppb	22:43:01
3	SiO2†	1375.3	772.7	60.111 ug/L	60.111 ppb	22:43:16

Mean Data: 1202054615|958097|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	815023.6	103.58 %		1.126				1.09%
Sc Radial	4900.7	102 %		1.1				1.08%
Y 371.029	726729.4	103.59 %		1.120				1.08%
Y RADIAL	5232.2	102.4 %		1.20				1.17%
Ag 328.068†	30.7	0.1887 ug/L		0.26446	0.1887 ppb		0.26446	140.18%
Al 396.153Radial†	14.1	13.469 ug/L		4.2435	13.469 ppb		4.2435	31.51%
As 188.979†	2.4	1.0933 ug/L		1.95080	1.0933 ppb		1.95080	178.43%
B 249.677†	-233.1	-5.9121 ug/L		0.79200	-5.9121 ppb		0.79200	13.40%
Ba 233.527†	24.1	0.2890 ug/L		0.04020	0.2890 ppb		0.04020	13.91%
Be 313.107†	420.5	0.1691 ug/L		0.03982	0.1691 ppb		0.03982	23.55%
Ca 317.933Radial†	5.0	9.1958 ug/L		1.49431	9.1958 ppb		1.49431	16.25%
Cd 226.502†	19.7	0.2700 ug/L		0.04615	0.2700 ppb		0.04615	17.09%
Co 228.616†	5.7	0.1710 ug/L		0.07115	0.1710 ppb		0.07115	41.62%
Cr 267.716†	42.5	0.5846 ug/L		0.15202	0.5846 ppb		0.15202	26.00%
Cu 324.752†	-955.4	-3.5574 ug/L		0.18698	-3.5574 ppb		0.18698	5.26%
Fe 238.204 Radial†	7.8	87.426 ug/L		11.1938	87.426 ppb		11.1938	12.80%
K 766.490 Radial†	73.7	14.635 ug/L		9.6922	14.635 ppb		9.6922	66.23%



Mg 279.077 IEC†	0.6	23.440 ug/L	78.2103	23.440 ppb	78.2103	333.66%
Mn 257.610†	628.8	1.0159 ug/L	0.00421	1.0159 ppb	0.00421	0.41%
Mo 202.031†	-3.5	-0.3147 ug/L	0.65668	-0.3147 ppb	0.65668	208.69%
Na 589.592 Radial†	-70.4	-25.079 ug/L	4.5230	-25.079 ppb	4.5230	18.04%
Ni 231.604†	3.4	0.1078 ug/L	0.17125	0.1078 ppb	0.17125	158.91%
P 214.914†	-18.3	-9.5471 ug/L	4.20661	-9.5471 ppb	4.20661	44.06%
Pb 220.353†	-18.1	-2.9550 ug/L	0.90015	-2.9550 ppb	0.90015	30.46%
S 181.975 Axial†	2.4	3.0099 ug/L	5.67872	3.0099 ppb	5.67872	188.67%
Sb 206.836†	4.0	1.6305 ug/L	1.11410	1.6305 ppb	1.11410	68.33%
Se 196.026†	-0.5	-0.1252 ug/L	1.87558	-0.1252 ppb	1.87558	>999.9%
Si 251.611†	747.5	27.156 ug/L	0.4293	27.156 ppb	0.4293	1.58%
Sn 189.927†	14.3	3.3851 ug/L	0.11378	3.3851 ppb	0.11378	3.36%
Sr 421.552†	30.5	0.2288 ug/L	0.11735	0.2288 ppb	0.11735	51.29%
Ti 334.940†	354.2	0.7132 ug/L	0.12507	0.7132 ppb	0.12507	17.54%
Tl 190.801†	9.7	4.4712 ug/L	0.72068	4.4712 ppb	0.72068	16.12%
U 409.014†	-120.8	-4.0685 ug/L	2.79993	-4.0685 ppb	2.79993	68.82%
V 292.402†	44.3	0.3258 ug/L	0.12070	0.3258 ppb	0.12070	37.05%
Zn 213.857†	-240.4	-2.6686 ug/L	0.01932	-2.6686 ppb	0.01932	0.72%
SiO2†	776.9	60.410 ug/L	2.8702	60.410 ppb	2.8702	4.75%

Sequence No.: 38

Sample ID: 1202054620|958097|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 65

Date Collected: 3/3/2010 22:45:28

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202054620|958097|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5077.3	5077.3	105 %		22:47:41
1	Y RADIAL	5870.5	5870.5	114.9 %		22:47:41
1	Al 396.153Radial†	98887.6	93984.6	89639 ug/L	89639 ppb	22:47:21
1	Ca 317.933Radial†	54182.7	51429.5	95200 ug/L	95200 ppb	22:47:21
1	Fe 238.204 Radial†	17501.9	16612.3	185410 ug/L	185410 ppb	22:47:21
1	K 766.490 Radial†	223757.6	210231.0	41700 ug/L	41700 ppb	22:47:21
1	Mg 279.077 IEC†	984.1	933.5	38465 ug/L	38465 ppb	22:47:41
1	Na 589.592 Radial†	28149.5	27285.1	9716.5 ug/L	9716.5 ppb	22:47:21
1	Sr 421.552†	312984.7	297191.2	2225.9 ug/L	2225.9 ppb	22:47:21
1	Sc 361.383	846338.3	846338.3	107.56 %		22:48:39
1	Y 371.029	792050.8	792050.8	112.90 %		22:48:45
1	Ag 328.068†	51924.9	48068.0	306.89 ug/L	306.89 ppb	22:48:45
1	As 188.979†	2360.4	2223.4	1078.9 ug/L	1078.9 ppb	22:49:05
1	B 249.677†	62006.4	57794.6	1429.6 ug/L	1429.6 ppb	22:48:45
1	Ba 233.527†	169549.7	157635.1	1874.7 ug/L	1874.7 ppb	22:48:45
1	Be 313.107†	2002823.1	1871517.7	758.45 ug/L	758.45 ppb	22:48:39
1	Cd 226.502†	44674.9	41730.0	574.23 ug/L	574.23 ppb	22:48:45
1	Co 228.616†	32310.0	30095.0	901.73 ug/L	901.73 ppb	22:49:05
1	Cr 267.716†	182460.0	169573.2	2322.9 ug/L	2322.9 ppb	22:48:45
1	Cu 324.752†	536396.3	489594.3	1836.4 ug/L	1836.4 ppb	22:48:45
1	Mn 257.610†	3597805.4	3344567.1	5379.4 ug/L	5379.4 ppb	22:48:39
1	Mo 202.031†	5646.0	5234.1	497.23 ug/L	497.23 ppb	22:49:05
1	Ni 231.604†	44712.0	41468.8	1327.0 ug/L	1327.0 ppb	22:48:45
1	P 214.914†	15682.2	14376.8	7527.6 ug/L	7527.6 ppb	22:49:05
1	Pb 220.353†	5247.6	4905.5	808.21 ug/L	808.21 ppb	22:49:05
1	S 181.975 Axial†	3279.0	3007.7	3826.7 ug/L	3826.7 ppb	22:49:05
1	Sb 206.836†	4826.8	4456.5	1788.2 ug/L	1788.2 ppb	22:49:05
1	Se 196.026†	4328.9	4041.7	2889.4 ug/L	2889.4 ppb	22:49:05
1	Si 251.611†	423099.4	392818.7	14262 ug/L	14262 ppb	22:48:45
1	Sn 189.927†	4556.9	4208.1	1002.0 ug/L	1002.0 ppb	22:49:05
1	Ti 334.940†	3063764.5	2849739.0	5740.8 ug/L	5740.8 ppb	22:48:39
1	Tl 190.801†	2634.7	2486.6	1207.9 ug/L	1207.9 ppb	22:49:05
1	U 409.014†	-7601.1	-4827.8	-188.45 ug/L	-188.45 ppb	22:48:45
1	V 292.402†	163933.0	154075.2	1195.4 ug/L	1195.4 ppb	22:48:45
1	Zn 213.857†	543508.5	504170.6	5540.3 ug/L	5540.3 ppb	22:48:45
1	SiO2†	421996.6	391778.8	30448 ug/L	30448 ppb	22:50:15
2	Sc Radial	5046.5	5046.5	105 %		22:48:06
2	Y RADIAL	5848.0	5848.0	114.5 %		22:48:06
2	Al 396.153Radial†	100989.3	96566.4	92102 ug/L	92102 ppb	22:47:46
2	Ca 317.933Radial†	55282.6	52794.8	97727 ug/L	97727 ppb	22:47:46
2	Fe 238.204 Radial†	17814.8	17012.8	189880 ug/L	189880 ppb	22:47:46
2	K 766.490 Radial†	228829.4	216375.1	42918 ug/L	42918 ppb	22:47:46
2	Mg 279.077 IEC†	977.6	933.0	38440 ug/L	38440 ppb	22:48:06
2	Na 589.592 Radial†	28704.2	27978.4	9963.4 ug/L	9963.4 ppb	22:47:46
2	Sr 421.552†	319568.8	305298.0	2286.6 ug/L	2286.6 ppb	22:47:46
2	Sc 361.383	838262.1	838262.1	106.53 %		22:49:11
2	Y 371.029	794365.0	794365.0	113.23 %		22:49:17
2	Ag 328.068†	52195.9	48787.5	311.98 ug/L	311.98 ppb	22:49:17
2	As 188.979†	2397.8	2279.6	1104.9 ug/L	1104.9 ppb	22:49:37
2	B 249.677†	62275.6	58602.8	1449.3 ug/L	1449.3 ppb	22:49:17
2	Ba 233.527†	169911.1	159493.0	1896.9 ug/L	1896.9 ppb	22:49:17
2	Be 313.107†	1983493.7	1871313.7	758.37 ug/L	758.37 ppb	22:49:11
2	Cd 226.502†	44671.3	42126.7	579.41 ug/L	579.41 ppb	22:49:17
2	Co 228.616†	32351.8	30423.7	911.66 ug/L	911.66 ppb	22:49:37
2	Cr 267.716†	182707.7	171440.1	2348.5 ug/L	2348.5 ppb	22:49:17
2	Cu 324.752†	540588.2	498333.9	1869.3 ug/L	1869.3 ppb	22:49:17
2	Mn 257.610†	3562254.8	3343423.5	5378.0 ug/L	5378.0 ppb	22:49:11
2	Mo 202.031†	5635.6	5274.9	501.36 ug/L	501.36 ppb	22:49:37
2	Ni 231.604†	44663.9	41824.2	1338.3 ug/L	1338.3 ppb	22:49:17

2	P 214.914†	15695.3	14529.6	7603.3 ug/L	7603.3 ppb	22:49:37
2	Pb 220.353†	5257.6	4962.0	817.68 ug/L	817.68 ppb	22:49:37
2	S 181.975 Axial†	3292.3	3049.6	3879.8 ug/L	3879.8 ppb	22:49:37
2	Sb 206.836†	4818.5	4492.0	1802.4 ug/L	1802.4 ppb	22:49:37
2	Se 196.026†	4338.4	4089.4	2928.7 ug/L	2928.7 ppb	22:49:37
2	Si 251.611†	423132.7	396639.9	14401 ug/L	14401 ppb	22:49:17
2	Sn 189.927†	4530.9	4224.5	1006.1 ug/L	1006.1 ppb	22:49:37
2	Ti 334.940†	3034934.7	2850120.5	5741.9 ug/L	5741.9 ppb	22:49:11
2	Tl 190.801†	2657.0	2531.2	1228.3 ug/L	1228.3 ppb	22:49:37
2	U 409.014†	-7256.5	-4572.4	-180.44 ug/L	-180.44 ppb	22:49:17
2	V 292.402†	164618.4	156187.0	1211.6 ug/L	1211.6 ppb	22:49:17
2	Zn 213.857†	544657.9	510118.0	5605.3 ug/L	5605.3 ppb	22:49:17
2	SiO2†	426846.5	400111.4	31095 ug/L	31095 ppb	22:50:20
3	Sc Radial	5040.7	5040.7	105 %		22:48:31
3	Y RADIAL	5828.5	5828.5	114.1 %		22:48:31
3	Al 396.153Radial†	100213.8	95936.5	91501 ug/L	91501 ppb	22:48:11
3	Ca 317.933Radial†	55061.4	52644.5	97449 ug/L	97449 ppb	22:48:11
3	Fe 238.204 Radial†	17718.3	16940.3	189070 ug/L	189070 ppb	22:48:11
3	K 766.490 Radial†	227098.6	214973.0	42640 ug/L	42640 ppb	22:48:11
3	Mg 279.077 IEC†	970.1	926.9	38188 ug/L	38188 ppb	22:48:31
3	Na 589.592 Radial†	28410.5	27729.3	9874.7 ug/L	9874.7 ppb	22:48:11
3	Sr 421.552†	316275.4	302501.7	2265.7 ug/L	2265.7 ppb	22:48:11
3	Sc 361.383	843235.0	843235.0	107.16 %		22:49:44
3	Y 371.029	779857.9	779857.9	111.16 %		22:49:49
3	Ag 328.068†	50923.9	47311.6	304.03 ug/L	304.03 ppb	22:49:49
3	As 188.979†	2355.5	2226.9	1081.3 ug/L	1081.3 ppb	22:50:09
3	B 249.677†	60511.3	56611.6	1399.1 ug/L	1399.1 ppb	22:49:49
3	Ba 233.527†	165829.1	154743.3	1840.5 ug/L	1840.5 ppb	22:49:49
3	Be 313.107†	1993642.5	1869803.8	757.76 ug/L	757.76 ppb	22:49:44
3	Cd 226.502†	43555.1	40837.9	561.17 ug/L	561.17 ppb	22:49:49
3	Co 228.616†	32406.4	30295.6	907.78 ug/L	907.78 ppb	22:50:09
3	Cr 267.716†	178918.6	166892.9	2286.3 ug/L	2286.3 ppb	22:49:49
3	Cu 324.752†	523890.3	479759.6	1799.9 ug/L	1799.9 ppb	22:49:49
3	Mn 257.610†	3576590.6	3337081.1	5367.7 ug/L	5367.7 ppb	22:49:44
3	Mo 202.031†	5654.3	5261.2	500.03 ug/L	500.03 ppb	22:50:09
3	Ni 231.604†	43607.1	40590.8	1298.8 ug/L	1298.8 ppb	22:49:49
3	P 214.914†	15712.8	14459.0	7578.2 ug/L	7578.2 ppb	22:50:09
3	Pb 220.353†	5230.4	4907.4	808.74 ug/L	808.74 ppb	22:50:09
3	S 181.975 Axial†	3302.1	3040.5	3868.3 ug/L	3868.3 ppb	22:50:09
3	Sb 206.836†	4819.8	4466.6	1792.1 ug/L	1792.1 ppb	22:50:09
3	Se 196.026†	4322.4	4050.4	2903.1 ug/L	2903.1 ppb	22:50:09
3	Si 251.611†	411236.8	383196.8	13913 ug/L	13913 ppb	22:49:49
3	Sn 189.927†	4543.3	4211.0	1002.9 ug/L	1002.9 ppb	22:50:09
3	Ti 334.940†	3051058.2	2848365.3	5738.4 ug/L	5738.4 ppb	22:49:44
3	Tl 190.801†	2632.9	2493.9	1211.2 ug/L	1211.2 ppb	22:50:09
3	U 409.014†	-7293.9	-4567.0	-180.03 ug/L	-180.03 ppb	22:49:49
3	V 292.402†	160603.9	151529.6	1174.8 ug/L	1174.8 ppb	22:49:49
3	Zn 213.857†	532237.7	495512.9	5444.2 ug/L	5444.2 ppb	22:49:49
3	SiO2†	429344.0	400079.0	31093 ug/L	31093 ppb	22:50:26

Mean Data: 1202054620|958097|1

Analyte	Mean Corrected	Calib.	Std.Dev.	Sample	Std.Dev.	RSD
	Intensity	Conc. Units		Conc. Units		
Sc 361.383	842611.8	107.08 %	0.518			0.48%
Sc Radial	5054.8	105 %	0.4			0.39%
Y 371.029	788757.9	112.43 %	1.111			0.99%
Y RADIAL	5849.0	114.5 %	0.41			0.36%
Ag 328.068†	48055.7	307.63 ug/L	4.027	307.63 ppb	4.027	1.31%
Al 396.153Radial†	95495.8	91081 ug/L	1284.1	91081 ppb	1284.1	1.41%
As 188.979†	2243.3	1088.4 ug/L	14.38	1088.4 ppb	14.38	1.32%
B 249.677†	57669.7	1426.0 ug/L	25.31	1426.0 ppb	25.31	1.78%
Ba 233.527†	157290.4	1870.7 ug/L	28.38	1870.7 ppb	28.38	1.52%
Be 313.107†	1870878.4	758.19 ug/L	0.377	758.19 ppb	0.377	0.05%
Ca 317.933Radial†	52289.6	96792 ug/L	1385.8	96792 ppb	1385.8	1.43%
Cd 226.502†	41564.8	571.61 ug/L	9.401	571.61 ppb	9.401	1.64%
Co 228.616†	30271.4	907.06 ug/L	5.009	907.06 ppb	5.009	0.55%
Cr 267.716†	169302.1	2319.2 ug/L	31.27	2319.2 ppb	31.27	1.35%
Cu 324.752†	489229.3	1835.2 ug/L	34.69	1835.2 ppb	34.69	1.89%
Fe 238.204 Radial†	16855.1	188120 ug/L	2381.7	188120 ppb	2381.7	1.27%
K 766.490 Radial†	213859.7	42419 ug/L	638.7	42419 ppb	638.7	1.51%

Mg 279.077 IEC†	931.1	38365 ug/L	153.2	38365 ppb	153.2	0.40%
Mn 257.610†	3341690.6	5375.0 ug/L	6.35	5375.0 ppb	6.35	0.12%
Mo 202.031†	5256.7	499.54 ug/L	2.109	499.54 ppb	2.109	0.42%
Na 589.592 Radial†	27664.2	9851.5 ug/L	125.07	9851.5 ppb	125.07	1.27%
Ni 231.604†	41294.6	1321.4 ug/L	20.32	1321.4 ppb	20.32	1.54%
P 214.914†	14455.1	7569.7 ug/L	38.56	7569.7 ppb	38.56	0.51%
Pb 220.353†	4925.0	811.54 ug/L	5.322	811.54 ppb	5.322	0.66%
S 181.975 Axial†	3032.6	3858.3 ug/L	27.92	3858.3 ppb	27.92	0.72%
Sb 206.836†	4471.7	1794.2 ug/L	7.37	1794.2 ppb	7.37	0.41%
Se 196.026†	4060.5	2907.1 ug/L	19.97	2907.1 ppb	19.97	0.69%
Si 251.611†	390885.1	14192 ug/L	251.6	14192 ppb	251.6	1.77%
Sn 189.927†	4214.5	1003.7 ug/L	2.14	1003.7 ppb	2.14	0.21%
Sr 421.552†	301663.6	2259.4 ug/L	30.84	2259.4 ppb	30.84	1.37%
Ti 334.940†	2849408.3	5740.4 ug/L	1.80	5740.4 ppb	1.80	0.03%
Tl 190.801†	2503.9	1215.8 ug/L	10.93	1215.8 ppb	10.93	0.90%
U 409.014†	-4655.7	-182.98 ug/L	4.748	-182.98 ppb	4.748	2.59%
V 292.402†	153930.6	1193.9 ug/L	18.46	1193.9 ppb	18.46	1.55%
Zn 213.857†	503267.2	5529.9 ug/L	81.07	5529.9 ppb	81.07	1.47%
SiO2†	397323.1	30879 ug/L	373.3	30879 ppb	373.3	1.21%

Sequence No.: 39  
 Sample ID: 246437001|958097|1  
 Analyst: HSC  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 66  
 Date Collected: 3/3/2010 22:52:37  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Replicate Data: 246437001|958097|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5065.1	5065.1	105 %		22:54:29
1	Y RADIAL	6323.8	6323.8	123.8 %		22:54:29
1	Al 396.153Radial†	22072.6	21093.6	20123 ug/L	20123 ppb	22:54:29
1	Ca 317.933Radial†	4138.0	3917.8	7252.1 ug/L	7252.1 ppb	22:54:29
1	Fe 238.204 Radial†	6208.8	5902.9	65872 ug/L	65872 ppb	22:54:29
1	K 766.490 Radial†	21336.4	18065.7	3583.2 ug/L	3583.2 ppb	22:54:29
1	Mg 279.077 IEC†	104.9	98.9	4025.0 ug/L	4025.0 ppb	22:54:49
1	Na 589.592 Radial†	356.1	893.9	318.33 ug/L	318.33 ppb	22:54:29
1	Sr 421.552†	7475.2	7103.8	53.170 ug/L	53.170 ppb	22:54:29
1	Sc 361.383	821877.7	821877.7	104.45 %		22:55:47
1	Y 371.029	850246.6	850246.6	121.20 %		22:55:47
1	Ag 328.068†	-3418.7	-3481.3	2.7183 ug/L	2.7183 ppb	22:55:47
1	As 188.979†	-39.2	-8.7	27.159 ug/L	27.159 ppb	22:56:07
1	B 249.677†	399.0	527.3	2.5998 ug/L	2.5998 ppb	22:55:47
1	Ba 233.527†	26478.3	25349.7	302.28 ug/L	302.28 ppb	22:55:47
1	Be 313.107†	-8992.3	820.1	4.4166 ug/L	4.4166 ppb	22:55:47
1	Cd 226.502†	341.6	521.3	0.5896 ug/L	0.5896 ppb	22:56:07
1	Co 228.616†	487.4	522.0	11.284 ug/L	11.284 ppb	22:56:07
1	Cr 267.716†	3077.8	2881.1	40.795 ug/L	40.795 ppb	22:56:07
1	Cu 324.752†	18858.2	8944.5	36.948 ug/L	36.948 ppb	22:55:47
1	Mn 257.610†	1429066.9	1367765.1	2199.4 ug/L	2199.4 ppb	22:55:47
1	Mo 202.031†	39.7	22.8	7.3015 ug/L	7.3015 ppb	22:56:07
1	Ni 231.604†	1343.0	1184.5	37.908 ug/L	37.908 ppb	22:56:07
1	P 214.914†	1332.7	1072.4	542.67 ug/L	542.67 ppb	22:56:07
1	Pb 220.353†	370.3	381.2	61.864 ug/L	61.864 ppb	22:56:07
1	S 181.975 Axial†	212.8	162.9	204.35 ug/L	204.35 ppb	22:56:07
1	Sb 206.836†	47.0	13.9	-1.4427 ug/L	-1.4427 ppb	22:56:07
1	Se 196.026†	-265.2	-237.0	4.9014 ug/L	4.9014 ppb	22:56:07
1	Si 251.611†	294039.7	280964.1	10205 ug/L	10205 ppb	22:55:47
1	Sn 189.927†	19.8	-9.7	-4.7843 ug/L	-4.7843 ppb	22:56:07
1	Ti 334.940†	934196.5	895661.6	1802.2 ug/L	1802.2 ppb	22:55:47
1	Tl 190.801†	-105.0	-63.5	-3.9116 ug/L	-3.9116 ppb	22:56:07
1	U 409.014†	-7501.1	-4942.3	-173.58 ug/L	-173.58 ppb	22:55:47
1	V 292.402†	6744.5	8118.7	52.671 ug/L	52.671 ppb	22:55:47
1	Zn 213.857†	28213.3	25865.0	276.07 ug/L	276.07 ppb	22:55:47
1	SiO2†	297023.0	283805.6	22066 ug/L	22066 ppb	22:57:04
2	Sc Radial	5118.8	5118.8	106 %		22:54:54
2	Y RADIAL	6373.9	6373.9	124.8 %		22:54:54
2	Al 396.153Radial†	21651.0	20476.1	19534 ug/L	19534 ppb	22:54:54
2	Ca 317.933Radial†	4045.5	3789.3	7014.3 ug/L	7014.3 ppb	22:54:54
2	Fe 238.204 Radial†	6096.9	5735.6	64005 ug/L	64005 ppb	22:54:54
2	K 766.490 Radial†	20880.7	17423.4	3455.8 ug/L	3455.8 ppb	22:54:54
2	Mg 279.077 IEC†	106.2	99.0	4031.4 ug/L	4031.4 ppb	22:55:15
2	Na 589.592 Radial†	375.8	909.0	323.69 ug/L	323.69 ppb	22:54:54
2	Sr 421.552†	7321.4	6884.3	51.527 ug/L	51.527 ppb	22:54:54
2	Sc 361.383	836818.0	836818.0	106.35 %		22:56:13
2	Y 371.029	866734.5	866734.5	123.55 %		22:56:13
2	Ag 328.068†	-3469.9	-3471.0	2.1972 ug/L	2.1972 ppb	22:56:13
2	As 188.979†	-28.9	1.6	31.294 ug/L	31.294 ppb	22:56:33
2	B 249.677†	461.1	578.9	4.2097 ug/L	4.2097 ppb	22:56:13
2	Ba 233.527†	26822.9	25221.1	300.70 ug/L	300.70 ppb	22:56:13
2	Be 313.107†	-9086.1	885.6	4.4365 ug/L	4.4365 ppb	22:56:13
2	Cd 226.502†	344.7	518.4	0.7421 ug/L	0.7421 ppb	22:56:33
2	Co 228.616†	486.9	513.2	11.050 ug/L	11.050 ppb	22:56:33
2	Cr 267.716†	3085.1	2835.4	40.133 ug/L	40.133 ppb	22:56:33
2	Cu 324.752†	19288.7	9026.9	37.156 ug/L	37.156 ppb	22:56:13
2	Mn 257.610†	1447411.6	1360587.5	2187.7 ug/L	2187.7 ppb	22:56:13
2	Mo 202.031†	36.7	19.3	6.8310 ug/L	6.8310 ppb	22:56:33
2	Ni 231.604†	1361.8	1179.2	37.740 ug/L	37.740 ppb	22:56:33

2	P 214.914†	1338.8	1055.5	534.51 ug/L	534.51 ppb	22:56:33
2	Pb 220.353†	379.7	383.7	62.272 ug/L	62.272 ppb	22:56:33
2	S 181.975 Axial†	208.9	155.5	195.10 ug/L	195.10 ppb	22:56:33
2	Sb 206.836†	45.3	11.5	-2.3509 ug/L	-2.3509 ppb	22:56:33
2	Se 196.026†	-275.5	-242.1	-2.4445 ug/L	-2.4445 ppb	22:56:33
2	Si 251.611†	298551.5	280180.4	10177 ug/L	10177 ppb	22:56:13
2	Sn 189.927†	22.8	-7.2	-4.1304 ug/L	-4.1304 ppb	22:56:33
2	Ti 334.940†	949729.3	894298.9	1799.5 ug/L	1799.5 ppb	22:56:13
2	Tl 190.801†	-91.2	-48.7	2.7947 ug/L	2.7947 ppb	22:56:33
2	U 409.014†	-7625.0	-4930.6	-172.97 ug/L	-172.97 ppb	22:56:13
2	V 292.402†	6768.1	8025.6	52.204 ug/L	52.204 ppb	22:56:13
2	Zn 213.857†	28549.3	25698.6	274.51 ug/L	274.51 ppb	22:56:13
2	SiO2†	298480.4	280099.0	21778 ug/L	21778 ppb	22:57:10
3	Sc Radial	5205.1	5205.1	108 %		22:55:20
3	Y RADIAL	6452.8	6452.8	126.3 %		22:55:20
3	Al 396.153Radial†	22155.3	20605.0	19657 ug/L	19657 ppb	22:55:20
3	Ca 317.933Radial†	4130.9	3805.3	7043.8 ug/L	7043.8 ppb	22:55:20
3	Fe 238.204 Radial†	6232.4	5765.7	64341 ug/L	64341 ppb	22:55:20
3	K 766.490 Radial†	21417.5	17594.3	3489.7 ug/L	3489.7 ppb	22:55:20
3	Mg 279.077 IEC†	102.1	93.5	3805.3 ug/L	3805.3 ppb	22:55:40
3	Na 589.592 Radial†	485.2	1004.5	357.70 ug/L	357.70 ppb	22:55:20
3	Sr 421.552†	7532.6	6965.6	52.136 ug/L	52.136 ppb	22:55:20
3	Sc 361.383	840717.6	840717.6	106.84 %		22:56:39
3	Y 371.029	870637.8	870637.8	124.10 %		22:56:39
3	Ag 328.068†	-3525.1	-3507.6	2.1147 ug/L	2.1147 ppb	22:56:39
3	As 188.979†	-23.9	6.5	33.561 ug/L	33.561 ppb	22:56:59
3	B 249.677†	404.4	523.8	2.7603 ug/L	2.7603 ppb	22:56:39
3	Ba 233.527†	26983.2	25254.2	301.11 ug/L	301.11 ppb	22:56:39
3	Be 313.107†	-9105.5	907.1	4.4546 ug/L	4.4546 ppb	22:56:39
3	Cd 226.502†	341.0	513.4	0.6364 ug/L	0.6364 ppb	22:56:59
3	Co 228.616†	483.2	507.6	10.867 ug/L	10.867 ppb	22:56:59
3	Cr 267.716†	3079.2	2816.3	39.880 ug/L	39.880 ppb	22:56:59
3	Cu 324.752†	19264.4	8920.0	36.775 ug/L	36.775 ppb	22:56:39
3	Mn 257.610†	1458576.1	1364723.8	2194.4 ug/L	2194.4 ppb	22:56:39
3	Mo 202.031†	47.4	29.1	7.7600 ug/L	7.7600 ppb	22:56:59
3	Ni 231.604†	1372.6	1183.3	37.871 ug/L	37.871 ppb	22:56:59
3	P 214.914†	1349.8	1059.9	536.82 ug/L	536.82 ppb	22:56:59
3	Pb 220.353†	374.5	377.2	61.217 ug/L	61.217 ppb	22:56:59
3	S 181.975 Axial†	202.7	148.8	186.50 ug/L	186.50 ppb	22:56:59
3	Sb 206.836†	32.8	-0.4	-7.0727 ug/L	-7.0727 ppb	22:56:59
3	Se 196.026†	-273.8	-239.3	0.0038 ug/L	0.0038 ppb	22:56:59
3	Si 251.611†	300650.2	280842.5	10201 ug/L	10201 ppb	22:56:39
3	Sn 189.927†	32.2	1.5	-2.0823 ug/L	-2.0823 ppb	22:56:59
3	Ti 334.940†	956380.0	896381.2	1803.7 ug/L	1803.7 ppb	22:56:39
3	Tl 190.801†	-96.9	-53.6	0.6128 ug/L	0.6128 ppb	22:56:59
3	U 409.014†	-7676.4	-4945.5	-173.51 ug/L	-173.51 ppb	22:56:39
3	V 292.402†	6844.7	8067.7	52.492 ug/L	52.492 ppb	22:56:39
3	Zn 213.857†	28703.9	25718.8	274.68 ug/L	274.68 ppb	22:56:39
3	SiO2†	299631.8	279874.7	21760 ug/L	21760 ppb	22:57:15

Mean Data: 246437001|958097|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	833137.8	105.88 %		1.264				1.19%
Sc Radial	5129.7	106 %		1.5				1.38%
Y 371.029	862539.7	122.95 %		1.543				1.25%
Y RADIAL	6383.5	125.0 %		1.27				1.02%
Ag 328.068†	-3486.6	2.3434 ug/L		0.32730	2.3434 ppb		0.32730	13.97%
Al 396.153Radial†	20724.9	19772 ug/L		310.7	19772 ppb		310.7	1.57%
As 188.979†	-0.2	30.671 ug/L		3.2464	30.671 ppb		3.2464	10.58%
B 249.677†	543.4	3.1899 ug/L		0.88678	3.1899 ppb		0.88678	27.80%
Ba 233.527†	25275.0	301.36 ug/L		0.821	301.36 ppb		0.821	0.27%
Be 313.107†	870.9	4.4359 ug/L		0.01897	4.4359 ppb		0.01897	0.43%
Ca 317.933Radial†	3837.4	7103.4 ug/L		129.61	7103.4 ppb		129.61	1.82%
Cd 226.502†	517.7	0.6560 ug/L		0.07815	0.6560 ppb		0.07815	11.91%
Co 228.616†	514.3	11.067 ug/L		0.2091	11.067 ppb		0.2091	1.89%
Cr 267.716†	2844.3	40.269 ug/L		0.4724	40.269 ppb		0.4724	1.17%
Cu 324.752†	8963.8	36.960 ug/L		0.1906	36.960 ppb		0.1906	0.52%
Fe 238.204 Radial†	5801.4	64739 ug/L		995.3	64739 ppb		995.3	1.54%
K 766.490 Radial†	17694.5	3509.6 ug/L		66.00	3509.6 ppb		66.00	1.88%

Mg 279.077 IEC†	97.1	3953.9 ug/L	128.72	3953.9 ppb	128.72	3.26%
Mn 257.610†	1364358.8	2193.8 ug/L	5.87	2193.8 ppb	5.87	0.27%
Mo 202.031†	23.8	7.2975 ug/L	0.46453	7.2975 ppb	0.46453	6.37%
Na 589.592 Radial†	935.8	333.24 ug/L	21.350	333.24 ppb	21.350	6.41%
Ni 231.604†	1182.3	37.840 ug/L	0.0886	37.840 ppb	0.0886	0.23%
P 214.914†	1062.6	538.00 ug/L	4.204	538.00 ppb	4.204	0.78%
Pb 220.353†	380.7	61.784 ug/L	0.5318	61.784 ppb	0.5318	0.86%
S 181.975 Axial†	155.7	195.32 ug/L	8.927	195.32 ppb	8.927	4.57%
Sb 206.836†	8.4	-3.6221 ug/L	3.02262	-3.6221 ppb	3.02262	83.45%
Se 196.026†	-239.5	0.8202 ug/L	3.74042	0.8202 ppb	3.74042	456.02%
Si 251.611†	280662.4	10194 ug/L	15.3	10194 ppb	15.3	0.15%
Sn 189.927†	-5.1	-3.6657 ug/L	1.40970	-3.6657 ppb	1.40970	38.46%
Sr 421.552†	6984.6	52.277 ug/L	0.8305	52.277 ppb	0.8305	1.59%
Ti 334.940†	895447.2	1801.8 ug/L	2.14	1801.8 ppb	2.14	0.12%
Tl 190.801†	-55.3	-0.1680 ug/L	3.42063	-0.1680 ppb	3.42063	>999.9%
U 409.014†	-4939.5	-173.35 ug/L	0.333	-173.35 ppb	0.333	0.19%
V 292.402†	8070.7	52.456 ug/L	0.2356	52.456 ppb	0.2356	0.45%
Zn 213.857†	25760.8	275.09 ug/L	0.856	275.09 ppb	0.856	0.31%
SiO2†	281259.8	21868 ug/L	171.6	21868 ppb	171.6	0.78%

Sequence No.: 40  
 Sample ID: 1202054616|958097|1  
 Analyst: HSC  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 67  
 Date Collected: 3/3/2010 22:59:25  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Replicate Data: 1202054616|958097|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5055.0	5055.0	105 %		23:01:18
1	Y RADIAL	6117.2	6117.2	119.7 %		23:01:18
1	Al 396.153Radial†	20550.7	19684.2	18779 ug/L	18779 ppb	23:01:18
1	Ca 317.933Radial†	2698.8	2553.0	4725.8 ug/L	4725.8 ppb	23:01:38
1	Fe 238.204 Radial†	5001.9	4763.7	53160 ug/L	53160 ppb	23:01:18
1	K 766.490 Radial†	20136.5	16961.9	3364.8 ug/L	3364.8 ppb	23:01:18
1	Mg 279.077 IEC†	91.7	86.4	3523.7 ug/L	3523.7 ppb	23:01:38
1	Na 589.592 Radial†	310.7	851.3	303.17 ug/L	303.17 ppb	23:01:18
1	Sr 421.552†	5546.5	5278.6	39.513 ug/L	39.513 ppb	23:01:18
1	Sc 361.383	849634.5	849634.5	107.98 %		23:02:36
1	Y 371.029	852607.4	852607.4	121.53 %		23:02:36
1	Ag 328.068†	-2655.2	-2667.3	2.9595 ug/L	2.9595 ppb	23:02:41
1	As 188.979†	-22.3	8.2	27.794 ug/L	27.794 ppb	23:03:01
1	B 249.677†	133.2	268.7	-1.9018 ug/L	-1.9018 ppb	23:02:41
1	Ba 233.527†	29180.1	27023.7	321.69 ug/L	321.69 ppb	23:02:41
1	Be 313.107†	-9713.2	433.7	3.2402 ug/L	3.2402 ppb	23:02:41
1	Cd 226.502†	239.9	416.4	0.4114 ug/L	0.4114 ppb	23:03:01
1	Co 228.616†	773.0	771.2	20.005 ug/L	20.005 ppb	23:03:01
1	Cr 267.716†	2487.6	2238.2	31.746 ug/L	31.746 ppb	23:03:01
1	Cu 324.752†	15851.4	5569.9	23.685 ug/L	23.685 ppb	23:02:41
1	Mn 257.610†	1816652.8	1682020.4	2702.0 ug/L	2702.0 ppb	23:02:36
1	Mo 202.031†	34.7	17.0	5.7442 ug/L	5.7442 ppb	23:03:01
1	Ni 231.604†	1264.3	1069.5	34.224 ug/L	34.224 ppb	23:03:01
1	P 214.914†	968.7	693.7	344.14 ug/L	344.14 ppb	23:03:01
1	Pb 220.353†	374.2	373.2	61.216 ug/L	61.216 ppb	23:03:01
1	S 181.975 Axial†	166.3	113.2	141.11 ug/L	141.11 ppb	23:03:01
1	Sb 206.836†	39.7	5.7	-3.0614 ug/L	-3.0614 ppb	23:03:01
1	Se 196.026†	-222.6	-189.2	5.4726 ug/L	5.4726 ppb	23:03:01
1	Si 251.611†	294678.9	272359.2	9892.8 ug/L	9892.8 ppb	23:02:41
1	Sn 189.927†	39.1	7.6	-0.4213 ug/L	-0.4213 ppb	23:03:01
1	Ti 334.940†	723968.2	671744.5	1351.6 ug/L	1351.6 ppb	23:02:36
1	Tl 190.801†	-102.6	-58.0	-2.7083 ug/L	-2.7083 ppb	23:03:01
1	U 409.014†	-7738.5	-4927.5	-171.61 ug/L	-171.61 ppb	23:02:41
1	V 292.402†	5175.7	6454.8	41.789 ug/L	41.789 ppb	23:02:41
1	Zn 213.857†	23030.0	20182.1	215.13 ug/L	215.13 ppb	23:02:41
1	SiO2†	300336.2	277583.9	21582 ug/L	21582 ppb	23:04:08
2	Sc Radial	4943.4	4943.4	103 %		23:01:43
2	Y RADIAL	6006.6	6006.6	117.6 %		23:01:43
2	Al 396.153Radial†	20570.5	20145.8	19219 ug/L	19219 ppb	23:01:43
2	Ca 317.933Radial†	2726.4	2638.0	4883.2 ug/L	4883.2 ppb	23:02:03
2	Fe 238.204 Radial†	4981.6	4851.5	54139 ug/L	54139 ppb	23:01:43
2	K 766.490 Radial†	20146.2	17404.7	3452.6 ug/L	3452.6 ppb	23:01:43
2	Mg 279.077 IEC†	95.1	91.7	3740.0 ug/L	3740.0 ppb	23:02:03
2	Na 589.592 Radial†	275.9	824.1	293.47 ug/L	293.47 ppb	23:01:43
2	Sr 421.552†	5565.1	5416.1	40.543 ug/L	40.543 ppb	23:01:43
2	Sc 361.383	843233.2	843233.2	107.16 %		23:03:07
2	Y 371.029	846746.5	846746.5	120.70 %		23:03:07
2	Ag 328.068†	-2666.7	-2696.7	3.1134 ug/L	3.1134 ppb	23:03:12
2	As 188.979†	-32.1	-1.1	23.992 ug/L	23.992 ppb	23:03:32
2	B 249.677†	179.6	312.9	-0.9418 ug/L	-0.9418 ppb	23:03:12
2	Ba 233.527†	29687.9	27702.7	329.76 ug/L	329.76 ppb	23:03:12
2	Be 313.107†	-9867.4	221.5	3.1790 ug/L	3.1790 ppb	23:03:12
2	Cd 226.502†	252.4	429.8	0.5000 ug/L	0.5000 ppb	23:03:32
2	Co 228.616†	779.0	782.3	20.310 ug/L	20.310 ppb	23:03:32
2	Cr 267.716†	2486.7	2254.8	31.994 ug/L	31.994 ppb	23:03:32
2	Cu 324.752†	16243.9	6047.7	25.521 ug/L	25.521 ppb	23:03:12
2	Mn 257.610†	1812513.2	1690929.5	2716.4 ug/L	2716.4 ppb	23:03:07
2	Mo 202.031†	37.5	19.8	6.0802 ug/L	6.0802 ppb	23:03:32
2	Ni 231.604†	1283.0	1095.9	35.067 ug/L	35.067 ppb	23:03:32



2	P 214.914†	979.8	710.9	352.67 ug/L	352.67 ppb	23:03:32
2	Pb 220.353†	361.5	364.0	59.752 ug/L	59.752 ppb	23:03:32
2	S 181.975 Axial†	161.7	110.0	136.95 ug/L	136.95 ppb	23:03:32
2	Sb 206.836†	29.4	-3.6	-6.8540 ug/L	-6.8540 ppb	23:03:32
2	Se 196.026†	-224.2	-192.2	5.8309 ug/L	5.8309 ppb	23:03:32
2	Si 251.611†	298550.5	278043.7	10099 ug/L	10099 ppb	23:03:12
2	Sn 189.927†	31.3	0.5	-2.1157 ug/L	-2.1157 ppb	23:03:32
2	Ti 334.940†	723979.8	676845.3	1361.8 ug/L	1361.8 ppb	23:03:07
2	Tl 190.801†	-98.9	-55.2	-1.2935 ug/L	-1.2935 ppb	23:03:32
2	U 409.014†	-7813.6	-5052.0	-175.91 ug/L	-175.91 ppb	23:03:12
2	V 292.402†	5191.1	6505.6	42.038 ug/L	42.038 ppb	23:03:12
2	Zn 213.857†	23224.0	20525.1	218.77 ug/L	218.77 ppb	23:03:12
2	SiO2†	299340.3	278766.2	21674 ug/L	21674 ppb	23:04:14
3	Sc Radial	4956.0	4956.0	103 %		23:02:08
3	Y RADIAL	5976.4	5976.4	117.0 %		23:02:08
3	Al 396.153Radial†	20310.1	19841.7	18929 ug/L	18929 ppb	23:02:08
3	Ca 317.933Radial†	2704.7	2610.2	4831.7 ug/L	4831.7 ppb	23:02:28
3	Fe 238.204 Radial†	4939.4	4798.2	53545 ug/L	53545 ppb	23:02:08
3	K 766.490 Radial†	19755.4	16974.9	3367.3 ug/L	3367.3 ppb	23:02:08
3	Mg 279.077 IEC†	92.8	89.3	3640.2 ug/L	3640.2 ppb	23:02:28
3	Na 589.592 Radial†	312.5	859.0	305.91 ug/L	305.91 ppb	23:02:08
3	Sr 421.552†	5513.7	5352.4	40.065 ug/L	40.065 ppb	23:02:08
3	Sc 361.383	822464.1	822464.1	104.52 %		23:03:37
3	Y 371.029	829667.9	829667.9	118.26 %		23:03:37
3	Ag 328.068†	-2711.1	-2802.0	2.4057 ug/L	2.4057 ppb	23:03:43
3	As 188.979†	-28.0	2.0	25.493 ug/L	25.493 ppb	23:04:03
3	B 249.677†	138.5	277.8	-1.7340 ug/L	-1.7340 ppb	23:03:43
3	Ba 233.527†	29733.6	28446.1	338.54 ug/L	338.54 ppb	23:03:43
3	Be 313.107†	-9817.3	36.9	3.1720 ug/L	3.1720 ppb	23:03:43
3	Cd 226.502†	233.2	417.3	0.3829 ug/L	0.3829 ppb	23:04:03
3	Co 228.616†	766.9	789.1	20.467 ug/L	20.467 ppb	23:04:03
3	Cr 267.716†	2498.5	2324.7	32.944 ug/L	32.944 ppb	23:04:03
3	Cu 324.752†	16332.0	6514.7	27.237 ug/L	27.237 ppb	23:03:43
3	Mn 257.610†	1809052.9	1730329.7	2779.5 ug/L	2779.5 ppb	23:03:37
3	Mo 202.031†	39.6	22.7	6.3003 ug/L	6.3003 ppb	23:04:03
3	Ni 231.604†	1262.7	1106.7	35.414 ug/L	35.414 ppb	23:04:03
3	P 214.914†	996.7	750.1	374.60 ug/L	374.60 ppb	23:04:03
3	Pb 220.353†	378.8	389.1	63.815 ug/L	63.815 ppb	23:04:03
3	S 181.975 Axial†	162.9	115.0	143.38 ug/L	143.38 ppb	23:04:03
3	Sb 206.836†	44.0	11.1	-1.0405 ug/L	-1.0405 ppb	23:04:03
3	Se 196.026†	-225.2	-198.5	0.6377 ug/L	0.6377 ppb	23:04:03
3	Si 251.611†	300364.9	286814.7	10418 ug/L	10418 ppb	23:03:43
3	Sn 189.927†	32.1	2.0	-1.7382 ug/L	-1.7382 ppb	23:04:03
3	Ti 334.940†	721382.3	691420.4	1391.1 ug/L	1391.1 ppb	23:03:37
3	Tl 190.801†	-98.6	-57.3	-1.6888 ug/L	-1.6888 ppb	23:04:03
3	U 409.014†	-7903.3	-5321.9	-184.91 ug/L	-184.91 ppb	23:03:43
3	V 292.402†	5269.7	6703.1	43.644 ug/L	43.644 ppb	23:03:43
3	Zn 213.857†	23408.5	21248.8	226.86 ug/L	226.86 ppb	23:03:43
3	SiO2†	296465.7	283069.8	22009 ug/L	22009 ppb	23:04:19

Mean Data: 1202054616|958097|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	838443.9	106.55 %	1.805			1.69%
Sc Radial	4984.8	103 %	1.3			1.23%
Y 371.029	843007.3	120.17 %	1.699			1.41%
Y RADIAL	6033.4	118.1 %	1.45			1.23%
Ag 328.068†	-2722.0	2.8262 ug/L	0.37218	2.8262 ppb	0.37218	13.17%
Al 396.153Radial†	19890.6	18976 ug/L	223.8	18976 ppb	223.8	1.18%
As 188.979†	3.1	25.760 ug/L	1.9150	25.760 ppb	1.9150	7.43%
B 249.677†	286.5	-1.5259 ug/L	0.51274	-1.5259 ppb	0.51274	33.60%
Ba 233.527†	27724.2	330.00 ug/L	8.431	330.00 ppb	8.431	2.55%
Be 313.107†	230.7	3.1971 ug/L	0.03754	3.1971 ppb	0.03754	1.17%
Ca 317.933Radial†	2600.4	4813.5 ug/L	80.25	4813.5 ppb	80.25	1.67%
Cd 226.502†	421.2	0.4314 ug/L	0.06105	0.4314 ppb	0.06105	14.15%
Co 228.616†	780.9	20.261 ug/L	0.2351	20.261 ppb	0.2351	1.16%
Cr 267.716†	2272.6	32.228 ug/L	0.6323	32.228 ppb	0.6323	1.96%
Cu 324.752†	6044.1	25.481 ug/L	1.7766	25.481 ppb	1.7766	6.97%
Fe 238.204 Radial†	4804.4	53615 ug/L	493.7	53615 ppb	493.7	0.92%
K 766.490 Radial†	17113.8	3394.9 ug/L	50.02	3394.9 ppb	50.02	1.47%

Mg 279.077 IEC†	89.1	3634.6 ug/L	108.26	3634.6 ppb	108.26	2.98%
Mn 257.610†	1701093.2	2732.7 ug/L	41.22	2732.7 ppb	41.22	1.51%
Mo 202.031†	19.8	6.0416 ug/L	0.28006	6.0416 ppb	0.28006	4.64%
Na 589.592 Radial†	844.8	300.85 ug/L	6.538	300.85 ppb	6.538	2.17%
Ni 231.604†	1090.7	34.902 ug/L	0.6122	34.902 ppb	0.6122	1.75%
P 214.914†	718.2	357.14 ug/L	15.715	357.14 ppb	15.715	4.40%
Pb 220.353†	375.5	61.594 ug/L	2.0580	61.594 ppb	2.0580	3.34%
S 181.975 Axial†	112.7	140.48 ug/L	3.263	140.48 ppb	3.263	2.32%
Sb 206.836†	4.4	-3.6520 ug/L	2.95139	-3.6520 ppb	2.95139	80.82%
Se 196.026†	-193.3	3.9804 ug/L	2.90042	3.9804 ppb	2.90042	72.87%
Si 251.611†	279072.6	10137 ug/L	264.5	10137 ppb	264.5	2.61%
Sn 189.927†	3.4	-1.4250 ug/L	0.88954	-1.4250 ppb	0.88954	62.42%
Sr 421.552†	5349.0	40.040 ug/L	0.5152	40.040 ppb	0.5152	1.29%
Ti 334.940†	680003.4	1368.2 ug/L	20.54	1368.2 ppb	20.54	1.50%
Tl 190.801†	-56.8	-1.8969 ug/L	0.73000	-1.8969 ppb	0.73000	38.48%
U 409.014†	-5100.5	-177.48 ug/L	6.783	-177.48 ppb	6.783	3.82%
V 292.402†	6554.5	42.490 ug/L	1.0069	42.490 ppb	1.0069	2.37%
Zn 213.857†	20652.0	220.25 ug/L	6.006	220.25 ppb	6.006	2.73%
Sio2†	279806.6	21755 ug/L	224.5	21755 ppb	224.5	1.03%

Sequence No.: 41  
 Sample ID: 1202054618|958097|1  
 Analyst: HSC  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 68  
 Date Collected: 3/3/2010 23:06:30  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Replicate Data: 1202054618|958097|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4974.2	4974.2	103 %		23:08:22
1	Y RADIAL	5956.9	5956.9	116.6 %		23:08:22
1	Al 396.153Radial†	42260.2	41044.4	39134 ug/L	39134 ppb	23:08:22
1	Ca 317.933Radial†	5806.3	5606.7	10378 ug/L	10378 ppb	23:08:22
1	Fe 238.204 Radial†	5517.6	5340.9	59615 ug/L	59615 ppb	23:08:22
1	K 766.490 Radial†	51484.3	47657.8	9454.8 ug/L	9454.8 ppb	23:08:22
1	Mg 279.077 IEC†	252.2	243.5	10024 ug/L	10024 ppb	23:08:42
1	Na 589.592 Radial†	15241.7	15328.2	5458.5 ug/L	5458.5 ppb	23:08:22
1	Sr 421.552†	76940.4	74563.6	558.57 ug/L	558.57 ppb	23:08:22
1	Sc 361.383	830030.6	830030.6	105.49 %		23:09:41
1	Y 371.029	825254.5	825254.5	117.64 %		23:09:41
1	Ag 328.068†	95385.9	90217.4	481.97 ug/L	481.97 ppb	23:09:41
1	As 188.979†	1097.9	1069.7	506.74 ug/L	506.74 ppb	23:10:01
1	B 249.677†	20286.0	19376.4	479.17 ug/L	479.17 ppb	23:09:41
1	Ba 233.527†	64455.3	61102.8	726.44 ug/L	726.44 ppb	23:09:41
1	Be 313.107†	1304341.6	1245943.0	501.26 ug/L	501.26 ppb	23:09:41
1	Cd 226.502†	35234.5	33596.5	471.32 ug/L	471.32 ppb	23:10:01
1	Co 228.616†	17128.5	16293.2	491.34 ug/L	491.34 ppb	23:10:01
1	Cr 267.716†	40498.2	38326.6	525.54 ug/L	525.54 ppb	23:09:41
1	Cu 324.752†	162354.7	144801.5	543.15 ug/L	543.15 ppb	23:09:41
1	Mn 257.610†	1188134.2	1125922.2	1810.8 ug/L	1810.8 ppb	23:09:41
1	Mo 202.031†	5420.1	5123.1	476.24 ug/L	476.24 ppb	23:10:01
1	Ni 231.604†	17090.7	16100.6	515.12 ug/L	515.12 ppb	23:10:01
1	P 214.914†	2145.4	1830.4	878.51 ug/L	878.51 ppb	23:10:01
1	Pb 220.353†	3374.7	3225.9	531.70 ug/L	531.70 ppb	23:10:01
1	S 181.975 Axial†	4156.1	3899.2	4975.3 ug/L	4975.3 ppb	23:10:01
1	Sb 206.836†	1293.9	1195.6	488.01 ug/L	488.01 ppb	23:10:01
1	Se 196.026†	608.3	593.7	500.58 ug/L	500.58 ppb	23:10:01
1	Si 251.611†	408025.5	386257.2	14024 ug/L	14024 ppb	23:09:41
1	Sn 189.927†	2160.7	2019.7	476.34 ug/L	476.34 ppb	23:10:01
1	Ti 334.940†	1153493.4	1094769.5	2202.2 ug/L	2202.2 ppb	23:09:41
1	Tl 190.801†	1021.5	1005.4	485.09 ug/L	485.09 ppb	23:10:01
1	U 409.014†	9914.6	11638.3	382.89 ug/L	382.89 ppb	23:09:41
1	V 292.402†	69095.9	67164.3	529.14 ug/L	529.14 ppb	23:09:41
1	Zn 213.857†	70053.3	65263.8	709.25 ug/L	709.25 ppb	23:09:41
1	SiO2†	413327.5	391268.9	30408 ug/L	30408 ppb	23:11:02
2	Sc Radial	5020.2	5020.2	104 %		23:08:47
2	Y RADIAL	5941.0	5941.0	116.3 %		23:08:47
2	Al 396.153Radial†	42446.3	40848.4	38947 ug/L	38947 ppb	23:08:47
2	Ca 317.933Radial†	5824.3	5572.5	10315 ug/L	10315 ppb	23:08:47
2	Fe 238.204 Radial†	5549.8	5322.9	59414 ug/L	59414 ppb	23:08:47
2	K 766.490 Radial†	51823.4	47526.9	9428.9 ug/L	9428.9 ppb	23:08:47
2	Mg 279.077 IEC†	251.2	240.2	9890.7 ug/L	9890.7 ppb	23:09:07
2	Na 589.592 Radial†	15290.2	15239.6	5427.0 ug/L	5427.0 ppb	23:08:47
2	Sr 421.552†	77131.6	74065.1	554.84 ug/L	554.84 ppb	23:08:47
2	Sc 361.383	827671.3	827671.3	105.19 %		23:10:09
2	Y 371.029	824050.5	824050.5	117.46 %		23:10:09
2	Ag 328.068†	95069.9	90174.7	481.70 ug/L	481.70 ppb	23:10:09
2	As 188.979†	1121.6	1095.2	518.02 ug/L	518.02 ppb	23:10:29
2	B 249.677†	20221.7	19370.1	479.04 ug/L	479.04 ppb	23:10:09
2	Ba 233.527†	64377.5	61203.0	727.62 ug/L	727.62 ppb	23:10:09
2	Be 313.107†	1303407.5	1248579.7	502.32 ug/L	502.32 ppb	23:10:09
2	Cd 226.502†	35246.6	33703.2	472.86 ug/L	472.86 ppb	23:10:29
2	Co 228.616†	17146.0	16356.1	493.26 ug/L	493.26 ppb	23:10:29
2	Cr 267.716†	40458.1	38397.9	526.52 ug/L	526.52 ppb	23:10:09
2	Cu 324.752†	161989.7	144893.3	543.48 ug/L	543.48 ppb	23:10:09
2	Mn 257.610†	1185572.2	1126697.2	1812.0 ug/L	1812.0 ppb	23:10:09
2	Mo 202.031†	5432.4	5149.4	478.64 ug/L	478.64 ppb	23:10:29
2	Ni 231.604†	17096.4	16152.2	516.77 ug/L	516.77 ppb	23:10:29

2	P 214.914†	2123.6	1815.4	870.22 ug/L	870.22 ppb	23:10:29
2	Pb 220.353†	3371.9	3232.3	532.72 ug/L	532.72 ppb	23:10:29
2	S 181.975 Axial†	4188.0	3940.7	5028.5 ug/L	5028.5 ppb	23:10:29
2	Sb 206.836†	1289.2	1194.6	487.69 ug/L	487.69 ppb	23:10:29
2	Se 196.026†	610.2	597.1	502.23 ug/L	502.23 ppb	23:10:29
2	Si 251.611†	407831.3	387175.2	14057 ug/L	14057 ppb	23:10:09
2	Sn 189.927†	2158.7	2023.6	477.26 ug/L	477.26 ppb	23:10:29
2	Ti 334.940†	1150821.0	1095345.9	2203.4 ug/L	2203.4 ppb	23:10:09
2	Tl 190.801†	1036.7	1022.6	492.98 ug/L	492.98 ppb	23:10:29
2	U 409.014†	9790.3	11546.9	379.84 ug/L	379.84 ppb	23:10:09
2	V 292.402†	68991.6	67251.8	529.89 ug/L	529.89 ppb	23:10:09
2	Zn 213.857†	69871.5	65280.4	709.46 ug/L	709.46 ppb	23:10:09
2	SiO2†	411396.7	390550.2	30352 ug/L	30352 ppb	23:11:07
3	Sc Radial	5041.0	5041.0	105 %		23:09:13
3	Y RADIAL	6013.7	6013.7	117.7 %		23:09:13
3	Al 396.153Radial†	42828.3	41045.7	39135 ug/L	39135 ppb	23:09:13
3	Ca 317.933Radial†	5910.2	5631.7	10425 ug/L	10425 ppb	23:09:13
3	Fe 238.204 Radial†	5584.3	5333.9	59537 ug/L	59537 ppb	23:09:13
3	K 766.490 Radial†	52119.4	47604.8	9444.3 ug/L	9444.3 ppb	23:09:13
3	Mg 279.077 IEC†	245.7	233.9	9630.2 ug/L	9630.2 ppb	23:09:33
3	Na 589.592 Radial†	15428.1	15310.9	5452.4 ug/L	5452.4 ppb	23:09:13
3	Sr 421.552†	77789.8	74389.0	557.27 ug/L	557.27 ppb	23:09:13
3	Sc 361.383	836640.1	836640.1	106.33 %		23:10:36
3	Y 371.029	832373.5	832373.5	118.65 %		23:10:36
3	Ag 328.068†	95910.0	89996.0	480.81 ug/L	480.81 ppb	23:10:36
3	As 188.979†	1117.0	1079.4	510.98 ug/L	510.98 ppb	23:10:56
3	B 249.677†	20368.1	19301.7	477.29 ug/L	477.29 ppb	23:10:36
3	Ba 233.527†	64913.6	61051.1	725.82 ug/L	725.82 ppb	23:10:36
3	Be 313.107†	1314059.0	1245313.9	501.00 ug/L	501.00 ppb	23:10:36
3	Cd 226.502†	35429.9	33516.4	470.19 ug/L	470.19 ppb	23:10:56
3	Co 228.616†	17236.0	16266.0	490.53 ug/L	490.53 ppb	23:10:56
3	Cr 267.716†	40762.9	38272.3	524.80 ug/L	524.80 ppb	23:10:36
3	Cu 324.752†	163289.3	144464.7	541.89 ug/L	541.89 ppb	23:10:36
3	Mn 257.610†	1194861.5	1123351.2	1806.6 ug/L	1806.6 ppb	23:10:36
3	Mo 202.031†	5445.7	5106.5	474.71 ug/L	474.71 ppb	23:10:56
3	Ni 231.604†	17205.7	16080.7	514.48 ug/L	514.48 ppb	23:10:56
3	P 214.914†	2167.3	1834.9	881.31 ug/L	881.31 ppb	23:10:56
3	Pb 220.353†	3409.5	3233.4	532.92 ug/L	532.92 ppb	23:10:56
3	S 181.975 Axial†	4194.7	3904.3	4981.9 ug/L	4981.9 ppb	23:10:56
3	Sb 206.836†	1294.8	1186.7	484.39 ug/L	484.39 ppb	23:10:56
3	Se 196.026†	611.8	592.3	499.60 ug/L	499.60 ppb	23:10:56
3	Si 251.611†	411267.8	386250.9	14024 ug/L	14024 ppb	23:10:36
3	Sn 189.927†	2162.1	2004.8	472.82 ug/L	472.82 ppb	23:10:56
3	Ti 334.940†	1159590.3	1091864.9	2196.4 ug/L	2196.4 ppb	23:10:36
3	Tl 190.801†	1030.5	1006.2	485.40 ug/L	485.40 ppb	23:10:56
3	U 409.014†	9960.4	11607.1	381.85 ug/L	381.85 ppb	23:10:36
3	V 292.402†	69478.3	67006.4	527.88 ug/L	527.88 ppb	23:10:36
3	Zn 213.857†	70472.3	65133.3	707.83 ug/L	707.83 ppb	23:10:36
3	SiO2†	404173.3	379563.8	29498 ug/L	29498 ppb	23:11:12

Mean Data: 1202054618|958097|1

Analyte	Mean Corrected	Conc.	Calib.	Std.Dev.	Conc.	Sample	Std.Dev.	RSD
Sc 361.383	831447.3	105.67	%	0.591				0.56%
Sc Radial	5011.8	104	%	0.7				0.68%
Y 371.029	827226.2	117.92	%	0.641				0.54%
Y RADIAL	5970.5	116.9	%	0.75				0.64%
Ag 328.068†	90129.4	481.49	ug/L	0.608	481.49	ppb	0.608	0.13%
Al 396.153Radial†	40979.5	39072	ug/L	108.4	39072	ppb	108.4	0.28%
As 188.979†	1081.4	511.92	ug/L	5.699	511.92	ppb	5.699	1.11%
B 249.677†	19349.4	478.50	ug/L	1.047	478.50	ppb	1.047	0.22%
Ba 233.527†	61119.0	726.63	ug/L	0.914	726.63	ppb	0.914	0.13%
Be 313.107†	1246612.2	501.53	ug/L	0.697	501.53	ppb	0.697	0.14%
Ca 317.933Radial†	5603.6	10373	ug/L	54.9	10373	ppb	54.9	0.53%
Cd 226.502†	33605.3	471.46	ug/L	1.339	471.46	ppb	1.339	0.28%
Co 228.616†	16305.1	491.71	ug/L	1.404	491.71	ppb	1.404	0.29%
Cr 267.716†	38332.3	525.62	ug/L	0.862	525.62	ppb	0.862	0.16%
Cu 324.752†	144719.8	542.84	ug/L	0.841	542.84	ppb	0.841	0.15%
Fe 238.204 Radial†	5332.6	59522	ug/L	101.7	59522	ppb	101.7	0.17%
K 766.490 Radial†	47596.5	9442.6	ug/L	13.05	9442.6	ppb	13.05	0.14%

Mg 279.077 IEC†	239.2	9848.3 ug/L	200.40	9848.3 ppb	200.40	2.03%
Mn 257.610†	1125323.5	1809.8 ug/L	2.80	1809.8 ppb	2.80	0.15%
Mo 202.031†	5126.3	476.53 ug/L	1.983	476.53 ppb	1.983	0.42%
Na 589.592 Radial†	15292.9	5445.9 ug/L	16.73	5445.9 ppb	16.73	0.31%
Ni 231.604†	16111.2	515.46 ug/L	1.180	515.46 ppb	1.180	0.23%
P 214.914†	1826.9	876.68 ug/L	5.768	876.68 ppb	5.768	0.66%
Pb 220.353†	3230.5	532.45 ug/L	0.654	532.45 ppb	0.654	0.12%
S 181.975 Axial†	3914.7	4995.2 ug/L	28.97	4995.2 ppb	28.97	0.58%
Sb 206.836†	1192.3	486.70 ug/L	2.003	486.70 ppb	2.003	0.41%
Se 196.026†	594.4	500.81 ug/L	1.329	500.81 ppb	1.329	0.27%
Si 251.611†	386561.1	14035 ug/L	19.3	14035 ppb	19.3	0.14%
Sn 189.927†	2016.1	475.47 ug/L	2.346	475.47 ppb	2.346	0.49%
Sr 421.552†	74339.2	556.89 ug/L	1.895	556.89 ppb	1.895	0.34%
Ti 334.940†	1093993.5	2200.7 ug/L	3.73	2200.7 ppb	3.73	0.17%
Tl 190.801†	1011.4	487.82 ug/L	4.467	487.82 ppb	4.467	0.92%
U 409.014†	11597.4	381.53 ug/L	1.550	381.53 ppb	1.550	0.41%
V 292.402†	67140.8	528.97 ug/L	1.018	528.97 ppb	1.018	0.19%
Zn 213.857†	65225.8	708.84 ug/L	0.888	708.84 ppb	0.888	0.13%
SiO2†	387127.6	30086 ug/L	510.0	30086 ppb	510.0	1.70%

Sequence No.: 42

Sample ID: 1202054619|958097|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 69

Date Collected: 3/3/2010 23:13:24

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202054619|958097|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4969.2	4969.2	103 %		23:15:17
1	Y RADIAL	6257.1	6257.1	122.5 %		23:15:17
1	Al 396.153Radial†	40937.7	39802.9	37950 ug/L	37950 ppb	23:15:17
1	Ca 317.933Radial†	5939.4	5741.6	10628 ug/L	10628 ppb	23:15:17
1	Fe 238.204 Radial†	6266.8	6073.2	67787 ug/L	67787 ppb	23:15:17
1	K 766.490 Radial†	50955.7	47195.7	9362.8 ug/L	9362.8 ppb	23:15:17
1	Mg 279.077 IEC†	247.4	239.1	9833.3 ug/L	9833.3 ppb	23:15:37
1	Na 589.592 Radial†	15069.8	15176.4	5404.5 ug/L	5404.5 ppb	23:15:17
1	Sr 421.552†	75615.3	73353.9	549.51 ug/L	549.51 ppb	23:15:17
1	Sc 361.383	830954.8	830954.8	105.60 %		23:16:36
1	Y 371.029	868241.9	868241.9	123.76 %		23:16:36
1	Ag 328.068†	94451.5	89232.0	479.52 ug/L	479.52 ppb	23:16:36
1	As 188.979†	1129.1	1098.1	523.76 ug/L	523.76 ppb	23:16:56
1	B 249.677†	20278.4	19347.8	477.10 ug/L	477.10 ppb	23:16:36
1	Ba 233.527†	67067.4	63508.3	755.18 ug/L	755.18 ppb	23:16:36
1	Be 313.107†	1292889.2	1233723.0	497.05 ug/L	497.05 ppb	23:16:36
1	Cd 226.502†	35433.5	33747.8	472.62 ug/L	472.62 ppb	23:16:56
1	Co 228.616†	17373.2	16506.8	497.14 ug/L	497.14 ppb	23:16:56
1	Cr 267.716†	40503.0	38288.4	525.21 ug/L	525.21 ppb	23:16:36
1	Cu 324.752†	162508.0	144775.5	543.52 ug/L	543.52 ppb	23:16:36
1	Mn 257.610†	1571408.6	1487609.0	2391.5 ug/L	2391.5 ppb	23:16:36
1	Mo 202.031†	5433.8	5130.4	477.55 ug/L	477.55 ppb	23:16:56
1	Ni 231.604†	17382.3	16358.7	523.38 ug/L	523.38 ppb	23:16:56
1	P 214.914†	2173.9	1855.1	885.48 ug/L	885.48 ppb	23:16:56
1	Pb 220.353†	3552.2	3390.4	557.58 ug/L	557.58 ppb	23:16:56
1	S 181.975 Axial†	4213.2	3948.8	5039.1 ug/L	5039.1 ppb	23:16:56
1	Sb 206.836†	1299.8	1199.8	488.90 ug/L	488.90 ppb	23:16:56
1	Se 196.026†	564.7	551.7	493.20 ug/L	493.20 ppb	23:16:56
1	Si 251.611†	402765.1	380845.7	13827 ug/L	13827 ppb	23:16:36
1	Sn 189.927†	2211.9	2065.9	486.85 ug/L	486.85 ppb	23:16:56
1	Ti 334.940†	1305526.3	1237520.0	2489.5 ug/L	2489.5 ppb	23:16:36
1	Tl 190.801†	1030.5	1012.9	493.62 ug/L	493.62 ppb	23:16:56
1	U 409.014†	7733.9	9562.9	312.26 ug/L	312.26 ppb	23:16:36
1	V 292.402†	70108.8	68050.6	534.55 ug/L	534.55 ppb	23:16:36
1	Zn 213.857†	76546.0	71338.3	775.20 ug/L	775.20 ppb	23:16:36
1	SiO2†	396740.3	375126.0	29153 ug/L	29153 ppb	23:17:56
2	Sc Radial	4924.8	4924.8	102 %		23:15:42
2	Y RADIAL	6205.0	6205.0	121.5 %		23:15:42
2	Al 396.153Radial†	40512.7	39744.9	37894 ug/L	37894 ppb	23:15:42
2	Ca 317.933Radial†	5899.4	5754.4	10652 ug/L	10652 ppb	23:15:42
2	Fe 238.204 Radial†	6231.3	6093.3	68011 ug/L	68011 ppb	23:15:42
2	K 766.490 Radial†	50544.7	47238.9	9371.4 ug/L	9371.4 ppb	23:15:42
2	Mg 279.077 IEC†	246.8	240.6	9897.1 ug/L	9897.1 ppb	23:16:02
2	Na 589.592 Radial†	14936.8	15178.0	5405.0 ug/L	5405.0 ppb	23:15:42
2	Sr 421.552†	74641.6	73061.9	547.32 ug/L	547.32 ppb	23:15:42
2	Sc 361.383	838687.9	838687.9	106.59 %		23:17:03
2	Y 371.029	877335.0	877335.0	125.06 %		23:17:03
2	Ag 328.068†	95270.0	89175.3	479.29 ug/L	479.29 ppb	23:17:03
2	As 188.979†	1136.8	1095.4	522.64 ug/L	522.64 ppb	23:17:23
2	B 249.677†	20483.8	19363.4	477.47 ug/L	477.47 ppb	23:17:03
2	Ba 233.527†	67556.9	63382.0	753.69 ug/L	753.69 ppb	23:17:03
2	Be 313.107†	1304994.4	1233791.7	497.08 ug/L	497.08 ppb	23:17:03
2	Cd 226.502†	35416.9	33422.8	467.98 ug/L	467.98 ppb	23:17:23
2	Co 228.616†	17341.4	16325.3	491.60 ug/L	491.60 ppb	23:17:23
2	Cr 267.716†	40632.2	38056.0	522.04 ug/L	522.04 ppb	23:17:03
2	Cu 324.752†	164813.6	145519.7	546.31 ug/L	546.31 ppb	23:17:03
2	Mn 257.610†	1583140.6	1484895.6	2387.2 ug/L	2387.2 ppb	23:17:03
2	Mo 202.031†	5440.1	5088.8	473.74 ug/L	473.74 ppb	23:17:23
2	Ni 231.604†	17355.5	16181.9	517.72 ug/L	517.72 ppb	23:17:23

2	P 214.914†	2156.2	1819.5	864.87 ug/L	864.87 ppb	23:17:23
2	Pb 220.353†	3576.1	3381.8	556.13 ug/L	556.13 ppb	23:17:23
2	S 181.975 Axial†	4208.5	3907.6	4986.3 ug/L	4986.3 ppb	23:17:23
2	Sb 206.836†	1297.6	1186.4	483.34 ug/L	483.34 ppb	23:17:23
2	Se 196.026†	578.8	560.0	498.70 ug/L	498.70 ppb	23:17:23
2	Si 251.611†	405490.9	379886.4	13793 ug/L	13793 ppb	23:17:03
2	Sn 189.927†	2202.6	2037.8	480.19 ug/L	480.19 ppb	23:17:23
2	Ti 334.940†	1318702.0	1238482.6	2491.4 ug/L	2491.4 ppb	23:17:03
2	Tl 190.801†	1013.6	988.0	482.25 ug/L	482.25 ppb	23:17:23
2	U 409.014†	7940.5	9689.2	316.48 ug/L	316.48 ppb	23:17:03
2	V 292.402†	70685.9	67979.9	533.91 ug/L	533.91 ppb	23:17:03
2	Zn 213.857†	77062.5	71154.5	773.16 ug/L	773.16 ppb	23:17:03
2	SiO2†	398980.2	373763.5	29047 ug/L	29047 ppb	23:18:01
3	Sc Radial	4944.2	4944.2	103 %		23:16:07
3	Y RADIAL	6205.4	6205.4	121.5 %		23:16:07
3	Al 396.153Radial†	40635.4	39708.6	37860 ug/L	37860 ppb	23:16:07
3	Ca 317.933Radial†	5917.6	5749.4	10643 ug/L	10643 ppb	23:16:07
3	Fe 238.204 Radial†	6264.9	6102.1	68110 ug/L	68110 ppb	23:16:07
3	K 766.490 Radial†	50638.0	47135.4	9350.8 ug/L	9350.8 ppb	23:16:07
3	Mg 279.077 IEC†	249.0	241.8	9944.8 ug/L	9944.8 ppb	23:16:27
3	Na 589.592 Radial†	14909.9	15094.3	5375.2 ug/L	5375.2 ppb	23:16:07
3	Sr 421.552†	74953.2	73078.4	547.44 ug/L	547.44 ppb	23:16:07
3	Sc 361.383	836503.9	836503.9	106.31 %		23:17:30
3	Y 371.029	874070.6	874070.6	124.59 %		23:17:30
3	Ag 328.068†	95141.6	89287.8	479.91 ug/L	479.91 ppb	23:17:30
3	As 188.979†	1113.5	1076.3	514.20 ug/L	514.20 ppb	23:17:51
3	B 249.677†	20445.4	19377.5	477.82 ug/L	477.82 ppb	23:17:30
3	Ba 233.527†	67577.2	63566.6	755.88 ug/L	755.88 ppb	23:17:30
3	Be 313.107†	1303139.5	1235243.5	497.66 ug/L	497.66 ppb	23:17:30
3	Cd 226.502†	35353.3	33449.8	468.35 ug/L	468.35 ppb	23:17:51
3	Co 228.616†	17282.8	16312.7	491.21 ug/L	491.21 ppb	23:17:51
3	Cr 267.716†	40653.4	38175.5	523.68 ug/L	523.68 ppb	23:17:30
3	Cu 324.752†	164031.8	145188.1	545.08 ug/L	545.08 ppb	23:17:30
3	Mn 257.610†	1582852.3	1488502.4	2393.0 ug/L	2393.0 ppb	23:17:30
3	Mo 202.031†	5440.4	5102.4	475.00 ug/L	475.00 ppb	23:17:51
3	Ni 231.604†	17312.5	16183.9	517.78 ug/L	517.78 ppb	23:17:51
3	P 214.914†	2173.5	1841.0	877.06 ug/L	877.06 ppb	23:17:51
3	Pb 220.353†	3552.8	3368.7	553.98 ug/L	553.98 ppb	23:17:51
3	S 181.975 Axial†	4193.0	3903.4	4980.9 ug/L	4980.9 ppb	23:17:51
3	Sb 206.836†	1281.9	1174.8	478.79 ug/L	478.79 ppb	23:17:51
3	Se 196.026†	564.8	548.3	491.79 ug/L	491.79 ppb	23:17:51
3	Si 251.611†	405864.7	381231.3	13842 ug/L	13842 ppb	23:17:30
3	Sn 189.927†	2218.1	2057.9	484.92 ug/L	484.92 ppb	23:17:51
3	Ti 334.940†	1316140.0	1239302.9	2493.0 ug/L	2493.0 ppb	23:17:30
3	Tl 190.801†	1017.8	994.4	485.23 ug/L	485.23 ppb	23:17:51
3	U 409.014†	7728.6	9509.3	310.43 ug/L	310.43 ppb	23:17:30
3	V 292.402†	70658.0	68126.7	535.07 ug/L	535.07 ppb	23:17:30
3	Zn 213.857†	77059.7	71340.6	775.21 ug/L	775.21 ppb	23:17:30
3	SiO2†	399260.1	375004.0	29144 ug/L	29144 ppb	23:18:07

-----  
Mean Data: 1202054619|958097|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	835382.2	106.17 %	0.507			0.48%
Sc Radial	4946.1	103 %	0.5			0.45%
Y 371.029	873215.8	124.47 %	0.657			0.53%
Y RADIAL	6222.5	121.8 %	0.59			0.48%
Ag 328.068†	89231.7	479.57 ug/L	0.312	479.57 ppb	0.312	0.06%
Al 396.153Radial†	39752.1	37901 ug/L	45.3	37901 ppb	45.3	0.12%
As 188.979†	1089.9	520.20 ug/L	5.226	520.20 ppb	5.226	1.00%
B 249.677†	19362.9	477.46 ug/L	0.359	477.46 ppb	0.359	0.08%
Ba 233.527†	63485.7	754.92 ug/L	1.119	754.92 ppb	1.119	0.15%
Be 313.107†	1234252.7	497.26 ug/L	0.346	497.26 ppb	0.346	0.07%
Ca 317.933Radial†	5748.5	10641 ug/L	11.9	10641 ppb	11.9	0.11%
Cd 226.502†	33540.1	469.65 ug/L	2.578	469.65 ppb	2.578	0.55%
Co 228.616†	16381.6	493.32 ug/L	3.314	493.32 ppb	3.314	0.67%
Cr 267.716†	38173.3	523.65 ug/L	1.587	523.65 ppb	1.587	0.30%
Cu 324.752†	145161.1	544.97 ug/L	1.396	544.97 ppb	1.396	0.26%
Fe 238.204 Radial†	6089.5	67969 ug/L	165.1	67969 ppb	165.1	0.24%
K 766.490 Radial†	47190.0	9361.6 ug/L	10.32	9361.6 ppb	10.32	0.11%

Mg 279.077 IEC†	240.5	9891.7 ug/L	55.94	9891.7 ppb	55.94	0.57%
Mn 257.610†	1487002.3	2390.5 ug/L	3.01	2390.5 ppb	3.01	0.13%
Mo 202.031†	5107.2	475.43 ug/L	1.941	475.43 ppb	1.941	0.41%
Na 589.592 Radial†	15149.6	5394.9 ug/L	17.05	5394.9 ppb	17.05	0.32%
Ni 231.604†	16241.5	519.63 ug/L	3.249	519.63 ppb	3.249	0.63%
P 214.914†	1838.5	875.81 ug/L	10.360	875.81 ppb	10.360	1.18%
Pb 220.353†	3380.3	555.90 ug/L	1.813	555.90 ppb	1.813	0.33%
S 181.975 Axial†	3919.9	5002.1 ug/L	32.10	5002.1 ppb	32.10	0.64%
Sb 206.836†	1187.0	483.68 ug/L	5.063	483.68 ppb	5.063	1.05%
Se 196.026†	553.3	494.56 ug/L	3.652	494.56 ppb	3.652	0.74%
Si 251.611†	380654.5	13821 ug/L	25.1	13821 ppb	25.1	0.18%
Sn 189.927†	2053.9	483.98 ug/L	3.427	483.98 ppb	3.427	0.71%
Sr 421.552†	73164.7	548.09 ug/L	1.229	548.09 ppb	1.229	0.22%
Ti 334.940†	1238435.2	2491.3 ug/L	1.79	2491.3 ppb	1.79	0.07%
Tl 190.801†	998.5	487.03 ug/L	5.895	487.03 ppb	5.895	1.21%
U 409.014†	9587.1	313.06 ug/L	3.105	313.06 ppb	3.105	0.99%
V 292.402†	68052.4	534.51 ug/L	0.579	534.51 ppb	0.579	0.11%
Zn 213.857†	71277.8	774.52 ug/L	1.178	774.52 ppb	1.178	0.15%
SiO2†	374631.2	29115 ug/L	58.6	29115 ppb	58.6	0.20%



Sequence No.: 43

Sample ID: 1202054617|958097|5

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 70

Date Collected: 3/3/2010 23:20:18

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202054617|958097|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4889.4	4889.4	101 %		23:22:10
1	Y RADIAL	5381.8	5381.8	105.4 %		23:22:10
1	Al 396.153Radial†	4227.2	4251.7	4056.2 ug/L	4056.2 ppb	23:22:10
1	Ca 317.933Radial†	843.1	810.3	1499.9 ug/L	1499.9 ppb	23:22:30
1	Fe 238.204 Radial†	1238.4	1214.1	13549 ug/L	13549 ppb	23:22:30
1	K 766.490 Radial†	5968.8	3641.9	722.35 ug/L	722.35 ppb	23:22:10
1	Mg 279.077 IEC†	22.2	20.9	850.86 ug/L	850.86 ppb	23:22:30
1	Na 589.592 Radial†	-460.2	101.2	36.022 ug/L	36.022 ppb	23:22:10
1	Sr 421.552†	1469.4	1437.4	10.758 ug/L	10.758 ppb	23:22:10
1	Sc 361.383	826426.1	826426.1	105.03 %		23:23:27
1	Y 371.029	759213.2	759213.2	108.22 %		23:23:27
1	Ag 328.068†	-441.5	-628.6	1.0035 ug/L	1.0035 ppb	23:23:33
1	As 188.979†	-26.7	3.4	7.8761 ug/L	7.8761 ppb	23:23:53
1	B 249.677†	-110.3	40.3	-1.1886 ug/L	-1.1886 ppb	23:23:33
1	Ba 233.527†	5347.1	5090.4	60.711 ug/L	60.711 ppb	23:23:33
1	Be 313.107†	-9446.8	434.7	1.0051 ug/L	1.0051 ppb	23:23:33
1	Cd 226.502†	-77.5	120.5	0.3103 ug/L	0.3103 ppb	23:23:53
1	Co 228.616†	51.2	104.1	2.2290 ug/L	2.2290 ppb	23:23:53
1	Cr 267.716†	658.5	561.4	7.9628 ug/L	7.9628 ppb	23:23:53
1	Cu 324.752†	10543.7	928.6	4.1985 ug/L	4.1985 ppb	23:23:33
1	Mn 257.610†	297094.2	282446.2	454.17 ug/L	454.17 ppb	23:23:27
1	Mo 202.031†	18.2	2.1	1.2632 ug/L	1.2632 ppb	23:23:53
1	Ni 231.604†	361.6	243.0	7.7773 ug/L	7.7773 ppb	23:23:53
1	P 214.914†	413.4	190.2	95.348 ug/L	95.348 ppb	23:23:53
1	Pb 220.353†	18.7	44.5	7.1741 ug/L	7.1741 ppb	23:23:53
1	S 181.975 Axial†	73.4	29.0	36.313 ug/L	36.313 ppb	23:23:53
1	Sb 206.836†	32.7	0.1	-1.4027 ug/L	-1.4027 ppb	23:23:53
1	Se 196.026†	-66.7	-46.5	2.3483 ug/L	2.3483 ppb	23:23:53
1	Si 251.611†	60246.1	56812.0	2063.6 ug/L	2063.6 ppb	23:23:33
1	Sn 189.927†	24.6	-5.2	-1.7414 ug/L	-1.7414 ppb	23:23:53
1	Ti 334.940†	190011.6	182176.0	366.57 ug/L	366.57 ppb	23:23:27
1	Tl 190.801†	-31.8	6.7	8.2489 ug/L	8.2489 ppb	23:23:53
1	U 409.014†	-3324.1	-925.7	-32.649 ug/L	-32.649 ppb	23:23:27
1	V 292.402†	-19.8	1642.7	10.625 ug/L	10.625 ppb	23:23:33
1	Zn 213.857†	6314.0	4865.3	51.756 ug/L	51.756 ppb	23:23:33
1	SiO2†	59612.1	56193.8	4369.1 ug/L	4369.1 ppb	23:24:59
2	Sc Radial	4921.9	4921.9	102 %		23:22:35
2	Y RADIAL	5405.3	5405.3	105.8 %		23:22:35
2	Al 396.153Radial†	4230.2	4227.1	4032.7 ug/L	4032.7 ppb	23:22:35
2	Ca 317.933Radial†	832.9	794.8	1471.2 ug/L	1471.2 ppb	23:22:56
2	Fe 238.204 Radial†	1222.4	1190.3	13283 ug/L	13283 ppb	23:22:56
2	K 766.490 Radial†	6095.7	3727.3	739.31 ug/L	739.31 ppb	23:22:35
2	Mg 279.077 IEC†	21.5	20.0	815.37 ug/L	815.37 ppb	23:22:56
2	Na 589.592 Radial†	-470.9	93.7	33.362 ug/L	33.362 ppb	23:22:35
2	Sr 421.552†	1445.6	1404.5	10.512 ug/L	10.512 ppb	23:22:35
2	Sc 361.383	818679.5	818679.5	104.04 %		23:23:58
2	Y 371.029	753220.1	753220.1	107.37 %		23:23:58
2	Ag 328.068†	-546.9	-733.9	0.3917 ug/L	0.3917 ppb	23:24:03
2	As 188.979†	-27.9	2.0	7.1790 ug/L	7.1790 ppb	23:24:23
2	B 249.677†	-66.0	81.9	-0.0942 ug/L	-0.0942 ppb	23:24:03
2	Ba 233.527†	5343.7	5135.4	61.236 ug/L	61.236 ppb	23:24:03
2	Be 313.107†	-9337.2	454.9	1.0116 ug/L	1.0116 ppb	23:24:03
2	Cd 226.502†	-80.2	117.2	0.2893 ug/L	0.2893 ppb	23:24:23
2	Co 228.616†	48.5	102.0	2.1701 ug/L	2.1701 ppb	23:24:23
2	Cr 267.716†	689.5	597.1	8.4499 ug/L	8.4499 ppb	23:24:23
2	Cu 324.752†	10334.6	822.5	3.7936 ug/L	3.7936 ppb	23:24:03
2	Mn 257.610†	293050.8	281236.6	452.21 ug/L	452.21 ppb	23:23:58
2	Mo 202.031†	14.9	-0.9	0.9699 ug/L	0.9699 ppb	23:24:23
2	Ni 231.604†	343.6	228.9	7.3254 ug/L	7.3254 ppb	23:24:23

2	P 214.914†	412.1	192.7	97.008 ug/L	97.008 ppb	23:24:23
2	Pb 220.353†	41.1	66.2	10.733 ug/L	10.733 ppb	23:24:23
2	S 181.975 Axial†	68.7	25.2	31.437 ug/L	31.437 ppb	23:24:23
2	Sb 206.836†	30.3	-1.9	-2.2123 ug/L	-2.2123 ppb	23:24:23
2	Se 196.026†	-70.9	-51.2	-1.0686 ug/L	-1.0686 ppb	23:24:23
2	Si 251.611†	59577.5	56712.2	2059.9 ug/L	2059.9 ppb	23:24:03
2	Sn 189.927†	22.4	-7.1	-2.1848 ug/L	-2.1848 ppb	23:24:23
2	Ti 334.940†	187893.3	181851.8	365.92 ug/L	365.92 ppb	23:23:58
2	Tl 190.801†	-38.0	0.5	5.4036 ug/L	5.4036 ppb	23:24:23
2	U 409.014†	-3554.7	-1177.3	-41.072 ug/L	-41.072 ppb	23:23:58
2	V 292.402†	33.5	1693.6	11.048 ug/L	11.048 ppb	23:24:03
2	Zn 213.857†	6262.6	4872.7	51.881 ug/L	51.881 ppb	23:24:03
2	SiO2†	58899.5	56045.9	4357.6 ug/L	4357.6 ppb	23:25:04
3	Sc Radial	4904.9	4904.9	102 %		23:23:01
3	Y RADIAL	5395.4	5395.4	105.6 %		23:23:01
3	Al 396.153Radial†	4229.3	4240.6	4045.5 ug/L	4045.5 ppb	23:23:01
3	Ca 317.933Radial†	827.3	792.2	1466.4 ug/L	1466.4 ppb	23:23:21
3	Fe 238.204 Radial†	1227.7	1199.7	13388 ug/L	13388 ppb	23:23:21
3	K 766.490 Radial†	6093.7	3746.0	743.03 ug/L	743.03 ppb	23:23:01
3	Mg 279.077 IEC†	23.3	21.9	891.59 ug/L	891.59 ppb	23:23:21
3	Na 589.592 Radial†	-494.7	68.7	24.477 ug/L	24.477 ppb	23:23:01
3	Sr 421.552†	1461.8	1425.3	10.668 ug/L	10.668 ppb	23:23:01
3	Sc 361.383	833147.0	833147.0	105.88 %		23:24:29
3	Y 371.029	765728.6	765728.6	109.15 %		23:24:29
3	Ag 328.068†	-463.2	-645.7	0.8706 ug/L	0.8706 ppb	23:24:34
3	As 188.979†	-29.0	1.5	6.9714 ug/L	6.9714 ppb	23:24:54
3	B 249.677†	-168.0	-13.3	-2.5214 ug/L	-2.5214 ppb	23:24:34
3	Ba 233.527†	5280.8	4986.8	59.479 ug/L	59.479 ppb	23:24:34
3	Be 313.107†	-9274.7	669.8	1.0980 ug/L	1.0980 ppb	23:24:34
3	Cd 226.502†	-81.1	117.7	0.2861 ug/L	0.2861 ppb	23:24:54
3	Co 228.616†	68.2	119.8	2.7106 ug/L	2.7106 ppb	23:24:54
3	Cr 267.716†	656.0	553.9	7.8592 ug/L	7.8592 ppb	23:24:54
3	Cu 324.752†	10297.3	614.9	3.0224 ug/L	3.0224 ppb	23:24:34
3	Mn 257.610†	298657.5	281640.7	452.86 ug/L	452.86 ppb	23:24:29
3	Mo 202.031†	21.8	5.4	1.5578 ug/L	1.5578 ppb	23:24:54
3	Ni 231.604†	349.4	228.6	7.3168 ug/L	7.3168 ppb	23:24:54
3	P 214.914†	422.3	195.4	98.588 ug/L	98.588 ppb	23:24:54
3	Pb 220.353†	21.6	47.0	7.6023 ug/L	7.6023 ppb	23:24:54
3	S 181.975 Axial†	68.7	24.1	29.983 ug/L	29.983 ppb	23:24:54
3	Sb 206.836†	26.0	-6.5	-4.0297 ug/L	-4.0297 ppb	23:24:54
3	Se 196.026†	-67.5	-46.8	1.8420 ug/L	1.8420 ppb	23:24:54
3	Si 251.611†	58710.0	54898.5	1994.0 ug/L	1994.0 ppb	23:24:34
3	Sn 189.927†	20.9	-8.9	-2.6091 ug/L	-2.6091 ppb	23:24:54
3	Ti 334.940†	191406.8	182034.2	366.28 ug/L	366.28 ppb	23:24:29
3	Tl 190.801†	-46.8	-7.2	1.8537 ug/L	1.8537 ppb	23:24:54
3	U 409.014†	-3498.6	-1065.0	-37.310 ug/L	-37.310 ppb	23:24:29
3	V 292.402†	-22.1	1640.6	10.629 ug/L	10.629 ppb	23:24:34
3	Zn 213.857†	6245.9	4752.4	50.535 ug/L	50.535 ppb	23:24:34
3	SiO2†	59107.1	55259.0	4296.4 ug/L	4296.4 ppb	23:25:09

Mean Data: 1202054617|958097|5

Analyte	Mean Corrected	Conc.	Calib.	Std.Dev.	Conc.	Sample	Std.Dev.	RSD
Sc 361.383	826084.2	104.98	%	0.920				0.88%
Sc Radial	4905.4	102	%	0.3				0.33%
Y 371.029	759387.3	108.25	%	0.892				0.82%
Y RADIAL	5394.1	105.6	%	0.23				0.22%
Ag 328.068†	-669.4	0.7553	ug/L	0.32180	0.7553	ppb	0.32180	42.61%
Al 396.153Radial†	4239.8	4044.8	ug/L	11.73	4044.8	ppb	11.73	0.29%
As 188.979†	2.3	7.3422	ug/L	0.47388	7.3422	ppb	0.47388	6.45%
B 249.677†	36.3	-1.2681	ug/L	1.21555	-1.2681	ppb	1.21555	95.86%
Ba 233.527†	5070.9	60.475	ug/L	0.9020	60.475	ppb	0.9020	1.49%
Be 313.107†	519.8	1.0382	ug/L	0.05189	1.0382	ppb	0.05189	5.00%
Ca 317.933Radial†	799.1	1479.2	ug/L	18.15	1479.2	ppb	18.15	1.23%
Cd 226.502†	118.5	0.2952	ug/L	0.01315	0.2952	ppb	0.01315	4.45%
Co 228.616†	108.6	2.3699	ug/L	0.29651	2.3699	ppb	0.29651	12.51%
Cr 267.716†	570.8	8.0906	ug/L	0.31538	8.0906	ppb	0.31538	3.90%
Cu 324.752†	788.7	3.6715	ug/L	0.59750	3.6715	ppb	0.59750	16.27%
Fe 238.204 Radial†	1201.4	13407	ug/L	133.6	13407	ppb	133.6	1.00%
K 766.490 Radial†	3705.1	734.90	ug/L	11.024	734.90	ppb	11.024	1.50%

Mg 279.077 IEC†	20.9	852.61 ug/L	38.138	852.61 ppb	38.138	4.47%
Mn 257.610†	281774.5	453.08 ug/L	1.000	453.08 ppb	1.000	0.22%
Mo 202.031†	2.2	1.2636 ug/L	0.29390	1.2636 ppb	0.29390	23.26%
Na 589.592 Radial†	87.9	31.287 ug/L	6.0454	31.287 ppb	6.0454	19.32%
Ni 231.604†	233.5	7.4731 ug/L	0.26343	7.4731 ppb	0.26343	3.53%
P 214.914†	192.8	96.981 ug/L	1.6204	96.981 ppb	1.6204	1.67%
Pb 220.353†	52.6	8.5031 ug/L	1.94296	8.5031 ppb	1.94296	22.85%
S 181.975 Axial†	26.1	32.578 ug/L	3.3158	32.578 ppb	3.3158	10.18%
Sb 206.836†	-2.8	-2.5482 ug/L	1.34533	-2.5482 ppb	1.34533	52.79%
Se 196.026†	-48.2	1.0406 ug/L	1.84406	1.0406 ppb	1.84406	177.21%
Si 251.611†	56140.9	2039.2 ug/L	39.13	2039.2 ppb	39.13	1.92%
Sn 189.927†	-7.1	-2.1785 ug/L	0.43390	-2.1785 ppb	0.43390	19.92%
Sr 421.552†	1422.4	10.646 ug/L	0.1244	10.646 ppb	0.1244	1.17%
Ti 334.940†	182020.7	366.26 ug/L	0.325	366.26 ppb	0.325	0.09%
Tl 190.801†	0.0	5.1687 ug/L	3.20408	5.1687 ppb	3.20408	61.99%
U 409.014†	-1056.0	-37.010 ug/L	4.2195	-37.010 ppb	4.2195	11.40%
V 292.402†	1659.0	10.767 ug/L	0.2431	10.767 ppb	0.2431	2.26%
Zn 213.857†	4830.1	51.391 ug/L	0.7434	51.391 ppb	0.7434	1.45%
SiO2†	55832.9	4341.0 ug/L	39.08	4341.0 ppb	39.08	0.90%

Sequence No.: 44

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 3/3/2010 23:27:20

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	5195.2	5195.2	108 %		23:29:12
1	Y RADIAL	5531.5	5531.5	108.3 %		23:29:12
1	Al 396.153Radial†	5318.0	5018.6	4763.5 ug/L	4763.5 ppb	23:29:12
1	Ca 317.933Radial†	2830.6	2605.8	4823.6 ug/L	4823.6 ppb	23:29:32
1	Fe 238.204 Radial†	482.9	441.1	4937.0 ug/L	4937.0 ppb	23:29:32
1	K 766.490 Radial†	28198.1	23925.1	4743.8 ug/L	4743.8 ppb	23:29:12
1	Mg 279.077 IEC†	132.8	122.2	5059.9 ug/L	5059.9 ppb	23:29:32
1	Na 589.592 Radial†	28456.8	26964.0	9602.2 ug/L	9602.2 ppb	23:29:12
1	Sr 421.552†	69083.9	64101.0	480.23 ug/L	480.23 ppb	23:29:12
1	Sc 361.383	817849.8	817849.8	103.94 %		23:30:29
1	Y 371.029	724000.4	724000.4	103.20 %		23:30:29
1	Ag 328.068†	100245.8	96240.0	495.85 ug/L	495.85 ppb	23:30:35
1	As 188.979†	1160.2	1145.1	512.57 ug/L	512.57 ppb	23:30:55
1	B 249.677†	19960.2	19349.4	487.33 ug/L	487.33 ppb	23:30:35
1	Ba 233.527†	43709.2	42052.7	499.15 ug/L	499.15 ppb	23:30:35
1	Be 313.107†	1305130.4	1265118.3	505.02 ug/L	505.02 ppb	23:30:29
1	Cd 226.502†	36313.1	35131.7	498.78 ug/L	498.78 ppb	23:30:35
1	Co 228.616†	17279.4	16680.2	507.45 ug/L	507.45 ppb	23:30:35
1	Cr 267.716†	38091.5	36582.9	500.57 ug/L	500.57 ppb	23:30:35
1	Cu 324.752†	146492.7	131832.8	491.81 ug/L	491.81 ppb	23:30:35
1	Mn 257.610†	323559.9	310875.7	498.73 ug/L	498.73 ppb	23:30:35
1	Mo 202.031†	5670.5	5440.5	501.15 ug/L	501.15 ppb	23:30:55
1	Ni 231.604†	16549.1	15820.9	506.16 ug/L	506.16 ppb	23:30:35
1	P 214.914†	4894.7	4505.9	2414.0 ug/L	2414.0 ppb	23:30:55
1	Pb 220.353†	3164.2	3071.0	502.48 ug/L	502.48 ppb	23:30:55
1	S 181.975 Axial†	851.1	778.0	993.27 ug/L	993.27 ppb	23:30:55
1	Sb 206.836†	1333.4	1251.8	518.50 ug/L	518.50 ppb	23:30:55
1	Se 196.026†	845.1	830.0	519.11 ug/L	519.11 ppb	23:30:55
1	Si 251.611†	72040.2	68760.8	2491.4 ug/L	2491.4 ppb	23:30:35
1	Sn 189.927†	2225.3	2112.4	500.41 ug/L	500.41 ppb	23:30:55
1	Ti 334.940†	253670.7	245320.7	493.28 ug/L	493.28 ppb	23:30:35
1	Tl 190.801†	1101.0	1096.4	506.41 ug/L	506.41 ppb	23:30:55
1	U 409.014†	12978.3	14725.9	492.87 ug/L	492.87 ppb	23:30:35
1	V 292.402†	63505.4	62761.1	504.51 ug/L	504.51 ppb	23:30:35
1	Zn 213.857†	47963.8	45000.3	493.33 ug/L	493.33 ppb	23:30:35
1	SiO2†	73098.6	69764.6	5410.6 ug/L	5410.6 ppb	23:32:02
2	Sc Radial	4864.4	4864.4	101 %		23:29:37
2	Y RADIAL	5159.1	5159.1	101.0 %		23:29:37
2	Al 396.153Radial†	5394.7	5430.3	5156.5 ug/L	5156.5 ppb	23:29:37
2	Ca 317.933Radial†	2900.7	2854.0	5283.0 ug/L	5283.0 ppb	23:29:57
2	Fe 238.204 Radial†	494.7	483.2	5407.8 ug/L	5407.8 ppb	23:29:57
2	K 766.490 Radial†	28709.9	26212.1	5197.4 ug/L	5197.4 ppb	23:29:37
2	Mg 279.077 IEC†	135.0	132.8	5498.0 ug/L	5498.0 ppb	23:29:57
2	Na 589.592 Radial†	29032.4	29330.6	10445 ug/L	10445 ppb	23:29:37
2	Sr 421.552†	70353.3	69719.4	522.32 ug/L	522.32 ppb	23:29:37
2	Sc 361.383	823847.9	823847.9	104.70 %		23:31:00
2	Y 371.029	729742.8	729742.8	104.02 %		23:31:00
2	Ag 328.068†	100353.5	95640.6	492.92 ug/L	492.92 ppb	23:31:05
2	As 188.979†	1148.6	1125.9	504.11 ug/L	504.11 ppb	23:31:25
2	B 249.677†	19982.5	19230.9	484.26 ug/L	484.26 ppb	23:31:05
2	Ba 233.527†	44056.7	42078.4	499.46 ug/L	499.46 ppb	23:31:05
2	Be 313.107†	1315686.7	1266058.5	505.39 ug/L	505.39 ppb	23:31:00
2	Cd 226.502†	36561.6	35114.7	498.49 ug/L	498.49 ppb	23:31:05
2	Co 228.616†	17388.4	16663.3	506.93 ug/L	506.93 ppb	23:31:05
2	Cr 267.716†	38256.5	36473.7	499.09 ug/L	499.09 ppb	23:31:05
2	Cu 324.752†	146212.3	130538.7	487.01 ug/L	487.01 ppb	23:31:05
2	Mn 257.610†	324989.7	309974.8	497.32 ug/L	497.32 ppb	23:31:05
2	Mo 202.031†	5664.6	5395.2	497.01 ug/L	497.01 ppb	23:31:25
2	Ni 231.604†	16611.6	15764.6	504.35 ug/L	504.35 ppb	23:31:05

2	P 214.914†	4896.4	4473.2	2396.4 ug/L	2396.4 ppb	23:31:25
2	Pb 220.353†	3138.3	3024.1	494.88 ug/L	494.88 ppb	23:31:25
2	S 181.975 Axial†	842.5	763.8	975.12 ug/L	975.12 ppb	23:31:25
2	Sb 206.836†	1318.3	1228.1	508.77 ug/L	508.77 ppb	23:31:25
2	Se 196.026†	839.6	818.8	513.36 ug/L	513.36 ppb	23:31:25
2	Si 251.611†	72292.9	68497.6	2481.9 ug/L	2481.9 ppb	23:31:05
2	Sn 189.927†	2202.0	2074.5	491.50 ug/L	491.50 ppb	23:31:25
2	Ti 334.940†	254236.3	244084.0	490.82 ug/L	490.82 ppb	23:31:05
2	Tl 190.801†	1107.3	1094.6	505.57 ug/L	505.57 ppb	23:31:25
2	U 409.014†	12948.0	14606.1	488.80 ug/L	488.80 ppb	23:31:05
2	V 292.402†	63779.6	62578.2	502.94 ug/L	502.94 ppb	23:31:05
2	Zn 213.857†	48133.6	44826.5	491.35 ug/L	491.35 ppb	23:31:05
2	SiO2†	73637.7	69767.4	5410.9 ug/L	5410.9 ppb	23:32:07
3	Sc Radial	4868.6	4868.6	101 %		23:30:02
3	Y RADIAL	5166.3	5166.3	101.1 %		23:30:02
3	Al 396.153Radial†	5480.6	5510.6	5232.9 ug/L	5232.9 ppb	23:30:02
3	Ca 317.933Radial†	2874.5	2825.5	5230.3 ug/L	5230.3 ppb	23:30:22
3	Fe 238.204 Radial†	490.0	478.1	5351.0 ug/L	5351.0 ppb	23:30:22
3	K 766.490 Radial†	28839.9	26315.8	5218.0 ug/L	5218.0 ppb	23:30:02
3	Mg 279.077 IEC†	130.9	128.6	5324.6 ug/L	5324.6 ppb	23:30:22
3	Na 589.592 Radial†	29019.5	29292.5	10431 ug/L	10431 ppb	23:30:02
3	Sr 421.552†	70601.6	69903.8	523.70 ug/L	523.70 ppb	23:30:02
3	Sc 361.383	816244.7	816244.7	103.73 %		23:31:31
3	Y 371.029	722654.5	722654.5	103.01 %		23:31:31
3	Ag 328.068†	101484.7	97624.0	503.09 ug/L	503.09 ppb	23:31:36
3	As 188.979†	1160.8	1147.8	513.92 ug/L	513.92 ppb	23:31:56
3	B 249.677†	20313.0	19727.2	496.80 ug/L	496.80 ppb	23:31:36
3	Ba 233.527†	44373.8	42776.1	507.74 ug/L	507.74 ppb	23:31:36
3	Be 313.107†	1309639.8	1271934.6	507.75 ug/L	507.75 ppb	23:31:31
3	Cd 226.502†	36890.3	35756.9	507.63 ug/L	507.63 ppb	23:31:36
3	Co 228.616†	17564.6	16987.8	516.79 ug/L	516.79 ppb	23:31:36
3	Cr 267.716†	38472.1	37021.9	506.59 ug/L	506.59 ppb	23:31:36
3	Cu 324.752†	148223.9	133778.8	499.09 ug/L	499.09 ppb	23:31:36
3	Mn 257.610†	327887.0	315659.2	506.43 ug/L	506.43 ppb	23:31:36
3	Mo 202.031†	5672.3	5452.9	502.32 ug/L	502.32 ppb	23:31:56
3	Ni 231.604†	16803.7	16097.6	515.01 ug/L	515.01 ppb	23:31:36
3	P 214.914†	4907.4	4527.4	2424.4 ug/L	2424.4 ppb	23:31:56
3	Pb 220.353†	3172.3	3084.8	504.81 ug/L	504.81 ppb	23:31:56
3	S 181.975 Axial†	855.2	783.6	1000.3 ug/L	1000.3 ppb	23:31:56
3	Sb 206.836†	1321.2	1242.6	514.85 ug/L	514.85 ppb	23:31:56
3	Se 196.026†	833.7	820.7	514.36 ug/L	514.36 ppb	23:31:56
3	Si 251.611†	73055.1	69875.6	2531.9 ug/L	2531.9 ppb	23:31:36
3	Sn 189.927†	2223.4	2114.8	501.02 ug/L	501.02 ppb	23:31:56
3	Ti 334.940†	256646.4	248669.2	500.04 ug/L	500.04 ppb	23:31:36
3	Tl 190.801†	1101.2	1098.6	507.48 ug/L	507.48 ppb	23:31:56
3	U 409.014†	13207.1	14971.1	501.04 ug/L	501.04 ppb	23:31:36
3	V 292.402†	64356.4	63701.6	511.94 ug/L	511.94 ppb	23:31:36
3	Zn 213.857†	48629.5	45732.8	501.31 ug/L	501.31 ppb	23:31:36
3	SiO2†	73371.2	70165.7	5441.7 ug/L	5441.7 ppb	23:32:12

-----  
Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	819314.1	104.12 %	0.509			0.49%
Sc Radial	4976.1	103 %	3.9			3.81%
Y 371.029	725465.9	103.41 %	0.537			0.52%
Y RADIAL	5285.7	103.5 %	4.17			4.03%
Ag 328.068†	96501.5	497.29 ug/L	5.232	497.29 ppb	5.232	1.05%
QC value within limits for Ag 328.068 Recovery = 99.46%						
Al 396.153Radial†	5319.8	5051.0 ug/L	251.83	5051.0 ppb	251.83	4.99%
QC value within limits for Al 396.153Radial Recovery = 101.02%						
As 188.979†	1139.6	510.20 ug/L	5.315	510.20 ppb	5.315	1.04%
QC value within limits for As 188.979 Recovery = 102.04%						
B 249.677†	19435.8	489.46 ug/L	6.535	489.46 ppb	6.535	1.34%
QC value within limits for B 249.677 Recovery = 97.89%						
Ba 233.527†	42302.4	502.12 ug/L	4.873	502.12 ppb	4.873	0.97%
QC value within limits for Ba 233.527 Recovery = 100.42%						
Be 313.107†	1267703.8	506.06 ug/L	1.481	506.06 ppb	1.481	0.29%
QC value within limits for Be 313.107 Recovery = 101.21%						
Ca 317.933Radial†	2761.8	5112.3 ug/L	251.39	5112.3 ppb	251.39	4.92%

QC value within limits for Ca 317.933 Radial Recovery = 102.25%							
Cd 226.502†	35334.4	501.63 ug/L	5.191	501.63 ppb	5.191	1.03%	
QC value within limits for Cd 226.502 Recovery = 100.33%							
Co 228.616†	16777.1	510.39 ug/L	5.551	510.39 ppb	5.551	1.09%	
QC value within limits for Co 228.616 Recovery = 102.08%							
Cr 267.716†	36692.8	502.08 ug/L	3.971	502.08 ppb	3.971	0.79%	
QC value within limits for Cr 267.716 Recovery = 100.42%							
Cu 324.752†	132050.1	492.64 ug/L	6.081	492.64 ppb	6.081	1.23%	
QC value within limits for Cu 324.752 Recovery = 98.53%							
Fe 238.204 Radial†	467.5	5231.9 ug/L	257.01	5231.9 ppb	257.01	4.91%	
QC value within limits for Fe 238.204 Radial Recovery = 104.64%							
K 766.490 Radial†	25484.3	5053.0 ug/L	268.01	5053.0 ppb	268.01	5.30%	
QC value within limits for K 766.490 Radial Recovery = 101.06%							
Mg 279.077 IEC†	127.9	5294.2 ug/L	220.65	5294.2 ppb	220.65	4.17%	
QC value within limits for Mg 279.077 IEC Recovery = 105.88%							
Mn 257.610†	312169.9	500.83 ug/L	4.906	500.83 ppb	4.906	0.98%	
QC value within limits for Mn 257.610 Recovery = 100.17%							
Mo 202.031†	5429.6	500.16 ug/L	2.789	500.16 ppb	2.789	0.56%	
QC value within limits for Mo 202.031 Recovery = 100.03%							
Na 589.592 Radial†	28529.0	10159 ug/L	482.7	10159 ppb	482.7	4.75%	
QC value within limits for Na 589.592 Radial Recovery = 101.59%							
Ni 231.604†	15894.4	508.51 ug/L	5.703	508.51 ppb	5.703	1.12%	
QC value within limits for Ni 231.604 Recovery = 101.70%							
P 214.914†	4502.1	2411.6 ug/L	14.13	2411.6 ppb	14.13	0.59%	
QC value within limits for P 214.914 Recovery = 96.46%							
Pb 220.353†	3060.0	500.72 ug/L	5.190	500.72 ppb	5.190	1.04%	
QC value within limits for Pb 220.353 Recovery = 100.14%							
S 181.975 Axial†	775.1	989.58 ug/L	13.004	989.58 ppb	13.004	1.31%	
QC value within limits for S 181.975 Axial Recovery = 98.96%							
Sb 206.836†	1240.8	514.04 ug/L	4.917	514.04 ppb	4.917	0.96%	
QC value within limits for Sb 206.836 Recovery = 102.81%							
Se 196.026†	823.2	515.61 ug/L	3.074	515.61 ppb	3.074	0.60%	
QC value within limits for Se 196.026 Recovery = 103.12%							
Si 251.611†	69044.7	2501.7 ug/L	26.54	2501.7 ppb	26.54	1.06%	
QC value within limits for Si 251.611 Recovery = 100.07%							
Sn 189.927†	2100.5	497.65 ug/L	5.329	497.65 ppb	5.329	1.07%	
QC value within limits for Sn 189.927 Recovery = 99.53%							
Sr 421.552†	67908.1	508.75 ug/L	24.710	508.75 ppb	24.710	4.86%	
QC value within limits for Sr 421.552 Recovery = 101.75%							
Ti 334.940†	246024.6	494.71 ug/L	4.775	494.71 ppb	4.775	0.97%	
QC value within limits for Ti 334.940 Recovery = 98.94%							
Tl 190.801†	1096.5	506.49 ug/L	0.953	506.49 ppb	0.953	0.19%	
QC value within limits for Tl 190.801 Recovery = 101.30%							
U 409.014†	14767.7	494.24 ug/L	6.237	494.24 ppb	6.237	1.26%	
QC value within limits for U 409.014 Recovery = 98.85%							
V 292.402†	63013.6	506.46 ug/L	4.808	506.46 ppb	4.808	0.95%	
QC value within limits for V 292.402 Recovery = 101.29%							
Zn 213.857†	45186.5	495.33 ug/L	5.269	495.33 ppb	5.269	1.06%	
QC value within limits for Zn 213.857 Recovery = 99.07%							
SiO2†	69899.2	5421.1 ug/L	17.89	5421.1 ppb	17.89	0.33%	
QC value within limits for SiO2 Recovery = 101.38%							
All analyte(s) passed QC.							

Sequence No.: 45

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 3/3/2010 23:34:22

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

## Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4928.8	4928.8	102 %			23:36:14
1	Y RADIAL	5259.8	5259.8	103.0 %			23:36:14
1	Al 396.153Radial†	-83.6	1.5	1.4495 ug/L	1.4495 ppb		23:36:34
1	Ca 317.933Radial†	17.1	-4.4	-8.0737 ug/L	-8.0737 ppb		23:36:34
1	Fe 238.204 Radial†	6.7	-0.6	-6.1688 ug/L	-6.1688 ppb		23:36:34
1	K 766.490 Radial†	2307.9	13.7	2.7396 ug/L	2.7396 ppb		23:36:14
1	Mg 279.077 IEC†	0.9	-0.1	-5.4345 ug/L	-5.4345 ppb		23:36:34
1	Na 589.592 Radial†	-703.4	-133.1	-47.400 ug/L	-47.400 ppb		23:36:14
1	Sr 421.552†	37.9	25.5	0.1913 ug/L	0.1913 ppb		23:36:14
1	Sc 361.383	824346.6	824346.6	104.76 %			23:37:31
1	Y 371.029	737546.6	737546.6	105.13 %			23:37:31
1	Ag 328.068†	343.9	120.0	0.6235 ug/L	0.6235 ppb		23:37:36
1	As 188.979†	-34.2	-3.8	-1.6869 ug/L	-1.6869 ppb		23:37:56
1	B 249.677†	-154.8	-2.5	-0.0618 ug/L	-0.0618 ppb		23:37:56
1	Ba 233.527†	5.5	4.5	0.0542 ug/L	0.0542 ppb		23:37:56
1	Be 313.107†	-9193.5	653.8	0.2613 ug/L	0.2613 ppb		23:37:36
1	Cd 226.502†	-190.1	12.8	0.1799 ug/L	0.1799 ppb		23:37:56
1	Co 228.616†	-58.8	-0.8	-0.0254 ug/L	-0.0254 ppb		23:37:56
1	Cr 267.716†	64.5	-4.0	-0.0503 ug/L	-0.0503 ppb		23:37:56
1	Cu 324.752†	8271.2	-1215.3	-4.5277 ug/L	-4.5277 ppb		23:37:36
1	Mn 257.610†	477.5	28.7	0.0457 ug/L	0.0457 ppb		23:37:56
1	Mo 202.031†	11.0	-4.7	-0.4349 ug/L	-0.4349 ppb		23:37:56
1	Ni 231.604†	122.6	15.7	0.5010 ug/L	0.5010 ppb		23:37:56
1	P 214.914†	191.6	-20.6	-10.558 ug/L	-10.558 ppb		23:37:56
1	Pb 220.353†	-49.1	-20.2	-3.2911 ug/L	-3.2911 ppb		23:37:56
1	S 181.975 Axial†	41.7	-1.1	-1.3799 ug/L	-1.3799 ppb		23:37:56
1	Sb 206.836†	37.1	4.4	1.7206 ug/L	1.7206 ppb		23:37:56
1	Se 196.026†	-27.5	-9.3	-5.6727 ug/L	-5.6727 ppb		23:37:56
1	Si 251.611†	704.2	121.9	4.4343 ug/L	4.4343 ppb		23:37:56
1	Sn 189.927†	25.5	-4.3	-1.0205 ug/L	-1.0205 ppb		23:37:56
1	Ti 334.940†	-1113.1	197.1	0.4010 ug/L	0.4010 ppb		23:37:36
1	Tl 190.801†	-35.2	3.5	1.5925 ug/L	1.5925 ppb		23:37:56
1	U 409.014†	-2714.4	-351.7	-11.810 ug/L	-11.810 ppb		23:37:36
1	V 292.402†	-1696.7	41.9	0.3042 ug/L	0.3042 ppb		23:37:36
1	Zn 213.857†	752.8	-427.9	-4.7315 ug/L	-4.7315 ppb		23:37:56
1	SiO2†	694.7	98.2	7.6477 ug/L	7.6477 ppb		23:39:02
2	Sc Radial	4859.5	4859.5	101 %			23:36:39
2	Y RADIAL	5220.0	5220.0	102.2 %			23:36:39
2	Al 396.153Radial†	-85.8	-1.9	-1.7816 ug/L	-1.7816 ppb		23:36:59
2	Ca 317.933Radial†	14.5	-6.7	-12.439 ug/L	-12.439 ppb		23:36:59
2	Fe 238.204 Radial†	6.9	-0.2	-2.7473 ug/L	-2.7473 ppb		23:36:59
2	K 766.490 Radial†	2399.9	137.2	27.266 ug/L	27.266 ppb		23:36:39
2	Mg 279.077 IEC†	2.0	1.0	40.462 ug/L	40.462 ppb		23:36:59
2	Na 589.592 Radial†	-671.5	-111.3	-39.620 ug/L	-39.620 ppb		23:36:39
2	Sr 421.552†	24.5	12.8	0.0958 ug/L	0.0958 ppb		23:36:39
2	Sc 361.383	815555.0	815555.0	103.65 %			23:38:01
2	Y 371.029	729145.4	729145.4	103.94 %			23:38:01
2	Ag 328.068†	203.1	-12.3	-0.0480 ug/L	-0.0480 ppb		23:38:06
2	As 188.979†	-25.0	4.8	2.1165 ug/L	2.1165 ppb		23:38:26
2	B 249.677†	-197.7	-45.4	-1.1488 ug/L	-1.1488 ppb		23:38:26
2	Ba 233.527†	11.1	10.0	0.1187 ug/L	0.1187 ppb		23:38:26
2	Be 313.107†	-9104.6	645.0	0.2574 ug/L	0.2574 ppb		23:38:06
2	Cd 226.502†	-201.9	-0.6	-0.0111 ug/L	-0.0111 ppb		23:38:26
2	Co 228.616†	-59.1	-1.7	-0.0504 ug/L	-0.0504 ppb		23:38:26
2	Cr 267.716†	79.9	11.5	0.1643 ug/L	0.1643 ppb		23:38:26
2	Cu 324.752†	8111.5	-1284.3	-4.7818 ug/L	-4.7818 ppb		23:38:06
2	Mn 257.610†	493.7	49.3	0.0771 ug/L	0.0771 ppb		23:38:26
2	Mo 202.031†	18.0	2.2	0.2018 ug/L	0.2018 ppb		23:38:26
2	Ni 231.604†	96.5	-8.2	-0.2633 ug/L	-0.2633 ppb		23:38:26

2	P 214.914†	191.2	-19.0	-9.6132 ug/L	-9.6132 ppb	23:38:26
2	Pb 220.353†	-55.7	-27.0	-4.4025 ug/L	-4.4025 ppb	23:38:26
2	S 181.975 Axial†	37.9	-4.3	-5.4924 ug/L	-5.4924 ppb	23:38:26
2	Sb 206.836†	22.2	-9.7	-3.8621 ug/L	-3.8621 ppb	23:38:26
2	Se 196.026†	-14.9	2.6	1.5880 ug/L	1.5880 ppb	23:38:26
2	Si 251.611†	683.2	108.9	3.9534 ug/L	3.9534 ppb	23:38:26
2	Sn 189.927†	29.4	-0.3	-0.0696 ug/L	-0.0696 ppb	23:38:26
2	Ti 334.940†	-1196.0	105.7	0.2152 ug/L	0.2152 ppb	23:38:06
2	Tl 190.801†	-38.8	-0.4	-0.1808 ug/L	-0.1808 ppb	23:38:26
2	U 409.014†	-2860.5	-520.6	-17.485 ug/L	-17.485 ppb	23:38:06
2	V 292.402†	-1672.4	47.9	0.3503 ug/L	0.3503 ppb	23:38:06
2	Zn 213.857†	766.0	-407.4	-4.5001 ug/L	-4.5001 ppb	23:38:26
2	SiO2†	735.1	144.3	11.217 ug/L	11.217 ppb	23:39:07
3	Sc Radial	4802.0	4802.0	99.6 %		23:37:04
3	Y RADIAL	5142.3	5142.3	100.7 %		23:37:04
3	Al 396.153Radial†	-83.1	-0.2	-0.1684 ug/L	-0.1684 ppb	23:37:24
3	Ca 317.933Radial†	24.2	3.2	5.9389 ug/L	5.9389 ppb	23:37:24
3	Fe 238.204 Radial†	5.7	-1.3	-14.832 ug/L	-14.832 ppb	23:37:24
3	K 766.490 Radial†	2366.7	132.3	26.285 ug/L	26.285 ppb	23:37:04
3	Mg 279.077 IEC†	5.3	4.3	176.46 ug/L	176.46 ppb	23:37:24
3	Na 589.592 Radial†	-663.1	-110.8	-39.444 ug/L	-39.444 ppb	23:37:04
3	Sr 421.552†	20.1	8.6	0.0645 ug/L	0.0645 ppb	23:37:04
3	Sc 361.383	830238.5	830238.5	105.51 %		23:38:31
3	Y 371.029	741543.0	741543.0	105.70 %		23:38:31
3	Ag 328.068†	220.3	0.5	0.0111 ug/L	0.0111 ppb	23:38:36
3	As 188.979†	-30.3	0.1	0.0615 ug/L	0.0615 ppb	23:38:56
3	B 249.677†	-179.3	-24.6	-0.6204 ug/L	-0.6204 ppb	23:38:56
3	Ba 233.527†	5.4	4.4	0.0530 ug/L	0.0530 ppb	23:38:56
3	Be 313.107†	-9265.0	648.3	0.2589 ug/L	0.2589 ppb	23:38:36
3	Cd 226.502†	-184.1	19.8	0.2798 ug/L	0.2798 ppb	23:38:56
3	Co 228.616†	-46.8	11.0	0.3355 ug/L	0.3355 ppb	23:38:56
3	Cr 267.716†	64.8	-4.2	-0.0517 ug/L	-0.0517 ppb	23:38:56
3	Cu 324.752†	8354.8	-1192.1	-4.4402 ug/L	-4.4402 ppb	23:38:36
3	Mn 257.610†	490.2	37.5	0.0515 ug/L	0.0515 ppb	23:38:56
3	Mo 202.031†	18.9	2.8	0.2531 ug/L	0.2531 ppb	23:38:56
3	Ni 231.604†	98.2	-8.3	-0.2645 ug/L	-0.2645 ppb	23:38:56
3	P 214.914†	201.3	-12.7	-6.1952 ug/L	-6.1952 ppb	23:38:56
3	Pb 220.353†	-58.6	-28.9	-4.7038 ug/L	-4.7038 ppb	23:38:56
3	S 181.975 Axial†	46.4	3.1	3.9967 ug/L	3.9967 ppb	23:38:56
3	Sb 206.836†	30.9	-1.7	-0.7176 ug/L	-0.7176 ppb	23:38:56
3	Se 196.026†	-20.4	-2.3	-1.4629 ug/L	-1.4629 ppb	23:38:56
3	Si 251.611†	697.0	110.4	4.0052 ug/L	4.0052 ppb	23:38:56
3	Sn 189.927†	21.2	-8.5	-2.0158 ug/L	-2.0158 ppb	23:38:56
3	Ti 334.940†	-1187.7	134.0	0.2621 ug/L	0.2621 ppb	23:38:36
3	Tl 190.801†	-35.2	3.7	1.7026 ug/L	1.7026 ppb	23:38:56
3	U 409.014†	-2807.6	-421.7	-14.160 ug/L	-14.160 ppb	23:38:36
3	V 292.402†	-1703.8	46.7	0.3521 ug/L	0.3521 ppb	23:38:36
3	Zn 213.857†	759.2	-427.0	-4.7152 ug/L	-4.7152 ppb	23:38:56
3	SiO2†	703.1	101.5	7.8854 ug/L	7.8854 ppb	23:39:12

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	823380.0	104.64 %	0.939			0.90%
Sc Radial	4863.4	101 %	1.3			1.31%
Y 371.029	736078.3	104.92 %	0.902			0.86%
Y RADIAL	5207.3	101.9 %	1.17			1.15%
Ag 328.068†	36.1	0.1955 ug/L	0.37182	0.1955 ppb	0.37182	190.15%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-0.2	-0.1668 ug/L	1.61558	-0.1668 ppb	1.61558	968.36%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	0.4	0.1637 ug/L	1.90376	0.1637 ppb	1.90376	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-24.2	-0.6103 ug/L	0.54357	-0.6103 ppb	0.54357	89.07%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	6.3	0.0753 ug/L	0.03759	0.0753 ppb	0.03759	49.94%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	649.1	0.2592 ug/L	0.00199	0.2592 ppb	0.00199	0.77%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-2.6	-4.8580 ug/L	9.60176	-4.8580 ppb	9.60176	197.65%



QC value within limits for Ca 317.933Radial Recovery = Not calculated							
Cd 226.502†	10.7	0.1495 ug/L	0.14782	0.1495 ppb	0.14782	98.85%	
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	2.9	0.0866 ug/L	0.21596	0.0866 ppb	0.21596	249.50%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	1.1	0.0208 ug/L	0.12433	0.0208 ppb	0.12433	598.79%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	-1230.6	-4.5832 ug/L	0.17740	-4.5832 ppb	0.17740	3.87%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	-0.7	-7.9160 ug/L	6.22887	-7.9160 ppb	6.22887	78.69%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	94.4	18.764 ug/L	13.8859	18.764 ppb	13.8859	74.00%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	1.7	70.495 ug/L	94.5929	70.495 ppb	94.5929	134.18%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	38.5	0.0581 ug/L	0.01671	0.0581 ppb	0.01671	28.78%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	0.1	0.0066 ug/L	0.38322	0.0066 ppb	0.38322	>999.9%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	-118.4	-42.155 ug/L	4.5435	-42.155 ppb	4.5435	10.78%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	-0.3	-0.0089 ug/L	0.44164	-0.0089 ppb	0.44164	>999.9%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	-17.4	-8.7890 ug/L	2.29544	-8.7890 ppb	2.29544	26.12%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	-25.4	-4.1325 ug/L	0.74409	-4.1325 ppb	0.74409	18.01%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	-0.8	-0.9585 ug/L	4.75860	-0.9585 ppb	4.75860	496.45%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	-2.3	-0.9530 ug/L	2.79878	-0.9530 ppb	2.79878	293.67%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	-3.0	-1.8492 ug/L	3.64574	-1.8492 ppb	3.64574	197.15%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	113.7	4.1310 ug/L	0.26397	4.1310 ppb	0.26397	6.39%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	-4.4	-1.0353 ug/L	0.97318	-1.0353 ppb	0.97318	94.00%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	15.6	0.1172 ug/L	0.06608	0.1172 ppb	0.06608	56.38%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	145.6	0.2928 ug/L	0.09665	0.2928 ppb	0.09665	33.01%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	2.3	1.0381 ug/L	1.05703	1.0381 ppb	1.05703	101.82%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	-431.3	-14.485 ug/L	2.8514	-14.485 ppb	2.8514	19.68%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	45.5	0.3355 ug/L	0.02713	0.3355 ppb	0.02713	8.09%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	-420.8	-4.6489 ug/L	0.12920	-4.6489 ppb	0.12920	2.78%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†	114.7	8.9168 ug/L	1.99579	8.9168 ppb	1.99579	22.38%	
QC value within limits for SiO2 Recovery = Not calculated							
All analyte(s) passed QC.							

Sequence No.: 46

Sample ID: 246437002|958097|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 71

Date Collected: 3/3/2010 23:41:22

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 246437002|958097|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4972.7	4972.7	103 %		23:43:15
1	Y RADIAL	6019.8	6019.8	117.8 %		23:43:15
1	Al 396.153Radial†	27140.3	26397.3	25183 ug/L	25183 ppb	23:43:15
1	Ca 317.933Radial†	3801.1	3664.3	6782.9 ug/L	6782.9 ppb	23:43:36
1	Fe 238.204 Radial†	7641.5	7401.7	82598 ug/L	82598 ppb	23:43:15
1	K 766.490 Radial†	25536.2	22514.8	4466.4 ug/L	4466.4 ppb	23:43:15
1	Mg 279.077 IEC†	126.3	121.4	4940.7 ug/L	4940.7 ppb	23:43:36
1	Na 589.592 Radial†	528.3	1067.2	380.05 ug/L	380.05 ppb	23:43:15
1	Sr 421.552†	7691.8	7446.1	55.737 ug/L	55.737 ppb	23:43:15
1	Sc 361.383	840274.5	840274.5	106.79 %		23:44:33
1	Y 371.029	846743.1	846743.1	120.70 %		23:44:33
1	Ag 328.068†	-4264.3	-4201.6	4.2791 ug/L	4.2791 ppb	23:44:38
1	As 188.979†	-40.0	-8.6	35.616 ug/L	35.616 ppb	23:44:58
1	B 249.677†	310.1	435.7	-2.4713 ug/L	-2.4713 ppb	23:44:38
1	Ba 233.527†	33807.9	31658.4	377.54 ug/L	377.54 ppb	23:44:38
1	Be 313.107†	-15889.4	-5450.2	3.0915 ug/L	3.0915 ppb	23:44:38
1	Cd 226.502†	489.1	652.2	0.7248 ug/L	0.7248 ppb	23:44:58
1	Co 228.616†	964.4	958.5	23.270 ug/L	23.270 ppb	23:44:58
1	Cr 267.716†	4077.2	3752.4	53.061 ug/L	53.061 ppb	23:44:58
1	Cu 324.752†	15645.3	5540.4	25.140 ug/L	25.140 ppb	23:44:38
1	Mn 257.610†	1899026.3	1777899.6	2858.6 ug/L	2858.6 ppb	23:44:33
1	Mo 202.031†	44.0	26.1	8.8911 ug/L	8.8911 ppb	23:44:58
1	Ni 231.604†	1637.8	1432.3	45.835 ug/L	45.835 ppb	23:44:58
1	P 214.914†	1530.5	1229.8	620.65 ug/L	620.65 ppb	23:44:58
1	Pb 220.353†	449.5	447.6	72.573 ug/L	72.573 ppb	23:44:58
1	S 181.975 Axial†	184.5	131.9	163.81 ug/L	163.81 ppb	23:44:58
1	Sb 206.836†	49.4	15.2	-2.8561 ug/L	-2.8561 ppb	23:44:58
1	Se 196.026†	-354.2	-314.7	-4.5526 ug/L	-4.5526 ppb	23:44:58
1	Si 251.611†	235841.0	220301.0	8001.9 ug/L	8001.9 ppb	23:44:38
1	Sn 189.927†	26.9	-3.4	-4.3479 ug/L	-4.3479 ppb	23:44:58
1	Ti 334.940†	1229251.9	1152381.8	2318.5 ug/L	2318.5 ppb	23:44:33
1	Tl 190.801†	-128.5	-83.3	-5.6568 ug/L	-5.6568 ppb	23:44:58
1	U 409.014†	-8022.8	-5273.6	-186.64 ug/L	-186.64 ppb	23:44:38
1	V 292.402†	9964.6	10992.7	72.481 ug/L	72.481 ppb	23:44:38
1	Zn 213.857†	35744.8	32326.4	345.03 ug/L	345.03 ppb	23:44:38
1	SiO2†	235563.5	220026.5	17107 ug/L	17107 ppb	23:46:06
2	Sc Radial	4996.5	4996.5	104 %		23:43:41
2	Y RADIAL	6035.1	6035.1	118.1 %		23:43:41
2	Al 396.153Radial†	27370.5	26494.2	25276 ug/L	25276 ppb	23:43:41
2	Ca 317.933Radial†	3766.8	3613.7	6689.2 ug/L	6689.2 ppb	23:44:01
2	Fe 238.204 Radial†	7708.6	7431.2	82928 ug/L	82928 ppb	23:43:41
2	K 766.490 Radial†	25747.0	22600.5	4483.5 ug/L	4483.5 ppb	23:43:41
2	Mg 279.077 IEC†	129.2	123.6	5033.2 ug/L	5033.2 ppb	23:44:01
2	Na 589.592 Radial†	522.5	1059.2	377.18 ug/L	377.18 ppb	23:43:41
2	Sr 421.552†	7713.4	7431.4	55.628 ug/L	55.628 ppb	23:43:41
2	Sc 361.383	842656.2	842656.2	107.09 %		23:45:04
2	Y 371.029	848512.8	848512.8	120.95 %		23:45:04
2	Ag 328.068†	-4430.0	-4345.0	3.6446 ug/L	3.6446 ppb	23:45:09
2	As 188.979†	-34.5	-3.4	37.988 ug/L	37.988 ppb	23:45:29
2	B 249.677†	265.4	393.1	-3.6013 ug/L	-3.6013 ppb	23:45:09
2	Ba 233.527†	33989.0	31738.0	378.49 ug/L	378.49 ppb	23:45:09
2	Be 313.107†	-15873.5	-5393.2	3.1124 ug/L	3.1124 ppb	23:45:09
2	Cd 226.502†	478.6	641.1	0.5334 ug/L	0.5334 ppb	23:45:29
2	Co 228.616†	939.2	932.4	22.471 ug/L	22.471 ppb	23:45:29
2	Cr 267.716†	4071.5	3736.3	52.846 ug/L	52.846 ppb	23:45:29
2	Cu 324.752†	15683.0	5534.3	25.132 ug/L	25.132 ppb	23:45:09
2	Mn 257.610†	1905513.1	1778930.5	2860.3 ug/L	2860.3 ppb	23:45:04
2	Mo 202.031†	27.8	10.8	7.5126 ug/L	7.5126 ppb	23:45:29
2	Ni 231.604†	1635.4	1425.8	45.625 ug/L	45.625 ppb	23:45:29

2	P 214.914†	1537.8	1232.5	621.92 ug/L	621.92 ppb	23:45:29
2	Pb 220.353†	462.6	458.7	74.368 ug/L	74.368 ppb	23:45:29
2	S 181.975 Axial†	176.4	123.9	153.59 ug/L	153.59 ppb	23:45:29
2	Sb 206.836†	44.6	10.6	-4.7137 ug/L	-4.7137 ppb	23:45:29
2	Se 196.026†	-343.7	-304.0	2.7282 ug/L	2.7282 ppb	23:45:29
2	Si 251.611†	236840.3	220609.8	8013.1 ug/L	8013.1 ppb	23:45:09
2	Sn 189.927†	29.7	-0.9	-3.7872 ug/L	-3.7872 ppb	23:45:29
2	Ti 334.940†	1232318.8	1151992.0	2317.7 ug/L	2317.7 ppb	23:45:04
2	Tl 190.801†	-115.5	-70.8	0.0674 ug/L	0.0674 ppb	23:45:29
2	U 409.014†	-7932.2	-5167.7	-183.12 ug/L	-183.12 ppb	23:45:09
2	V 292.402†	9996.3	10995.9	72.448 ug/L	72.448 ppb	23:45:09
2	Zn 213.857†	35889.2	32366.6	345.43 ug/L	345.43 ppb	23:45:09
2	SiO2†	238460.2	222107.9	17269 ug/L	17269 ppb	23:46:11
3	Sc Radial	5107.0	5107.0	106 %		23:44:06
3	Y RADIAL	6204.3	6204.3	121.5 %		23:44:06
3	Al 396.153Radial†	28055.5	26569.3	25347 ug/L	25347 ppb	23:44:06
3	Ca 317.933Radial†	3760.3	3528.9	6532.2 ug/L	6532.2 ppb	23:44:26
3	Fe 238.204 Radial†	7887.1	7438.8	83012 ug/L	83012 ppb	23:44:06
3	K 766.490 Radial†	26181.0	22472.6	4458.1 ug/L	4458.1 ppb	23:44:06
3	Mg 279.077 IBC†	126.0	118.0	4797.9 ug/L	4797.9 ppb	23:44:26
3	Na 589.592 Radial†	472.4	1001.0	356.47 ug/L	356.47 ppb	23:44:06
3	Sr 421.552†	7951.4	7495.0	56.106 ug/L	56.106 ppb	23:44:06
3	Sc 361.383	836143.7	836143.7	106.26 %		23:45:35
3	Y 371.029	841422.5	841422.5	119.94 %		23:45:35
3	Ag 328.068†	-4407.7	-4356.2	3.6217 ug/L	3.6217 ppb	23:45:40
3	As 188.979†	-39.1	-8.0	35.945 ug/L	35.945 ppb	23:46:00
3	B 249.677†	286.2	414.7	-3.0709 ug/L	-3.0709 ppb	23:45:40
3	Ba 233.527†	33993.5	31989.5	381.47 ug/L	381.47 ppb	23:45:40
3	Be 313.107†	-15870.1	-5505.5	3.0605 ug/L	3.0605 ppb	23:45:40
3	Cd 226.502†	447.3	615.1	0.1538 ug/L	0.1538 ppb	23:46:00
3	Co 228.616†	944.1	943.9	22.829 ug/L	22.829 ppb	23:46:00
3	Cr 267.716†	4048.8	3744.5	52.962 ug/L	52.962 ppb	23:46:00
3	Cu 324.752†	15532.3	5506.5	25.037 ug/L	25.037 ppb	23:45:40
3	Mn 257.610†	1887620.4	1775951.1	2855.5 ug/L	2855.5 ppb	23:45:35
3	Mo 202.031†	40.8	23.2	8.6605 ug/L	8.6605 ppb	23:46:00
3	Ni 231.604†	1586.1	1391.3	44.521 ug/L	44.521 ppb	23:46:00
3	P 214.914†	1515.3	1222.6	616.35 ug/L	616.35 ppb	23:46:00
3	Pb 220.353†	444.8	445.2	72.191 ug/L	72.191 ppb	23:46:00
3	S 181.975 Axial†	181.3	129.7	161.00 ug/L	161.00 ppb	23:46:00
3	Sb 206.836†	43.9	10.2	-4.8602 ug/L	-4.8602 ppb	23:46:00
3	Se 196.026†	-344.8	-307.6	0.7388 ug/L	0.7388 ppb	23:46:00
3	Si 251.611†	236565.6	222073.9	8066.3 ug/L	8066.3 ppb	23:45:40
3	Sn 189.927†	22.3	-7.7	-5.4278 ug/L	-5.4278 ppb	23:46:00
3	Ti 334.940†	1221133.2	1150428.4	2314.5 ug/L	2314.5 ppb	23:45:35
3	Tl 190.801†	-114.8	-71.0	-0.0486 ug/L	-0.0486 ppb	23:46:00
3	U 409.014†	-8081.3	-5365.8	-189.78 ug/L	-189.78 ppb	23:45:40
3	V 292.402†	9966.4	11040.5	72.792 ug/L	72.792 ppb	23:45:40
3	Zn 213.857†	35843.8	32585.0	347.84 ug/L	347.84 ppb	23:45:40
3	SiO2†	237566.4	223001.1	17338 ug/L	17338 ppb	23:46:16

Mean Data: 246437002|958097|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	839691.5	106.71 %	0.419			0.39%
Sc Radial	5025.4	104 %	1.5			1.43%
Y 371.029	845559.5	120.53 %	0.526			0.44%
Y RADIAL	6086.4	119.1 %	2.00			1.68%
Ag 328.068†	-4300.9	3.8485 ug/L	0.37309	3.8485 ppb	0.37309	9.69%
Al 396.153Radial†	26486.9	25269 ug/L	82.3	25269 ppb	82.3	0.33%
As 188.979†	-6.6	36.516 ug/L	1.2851	36.516 ppb	1.2851	3.52%
B 249.677†	414.5	-3.0478 ug/L	0.56534	-3.0478 ppb	0.56534	18.55%
Ba 233.527†	31795.3	379.17 ug/L	2.052	379.17 ppb	2.052	0.54%
Be 313.107†	-5449.6	3.0881 ug/L	0.02609	3.0881 ppb	0.02609	0.84%
Ca 317.933Radial†	3602.3	6668.1 ug/L	126.70	6668.1 ppb	126.70	1.90%
Cd 226.502†	636.2	0.4707 ug/L	0.29058	0.4707 ppb	0.29058	61.74%
Co 228.616†	944.9	22.857 ug/L	0.4001	22.857 ppb	0.4001	1.75%
Cr 267.716†	3744.4	52.956 ug/L	0.1077	52.956 ppb	0.1077	0.20%
Cu 324.752†	5527.1	25.103 ug/L	0.0574	25.103 ppb	0.0574	0.23%
Fe 238.204 Radial†	7423.9	82846 ug/L	218.8	82846 ppb	218.8	0.26%
K 766.490 Radial†	22529.3	4469.3 ug/L	12.92	4469.3 ppb	12.92	0.29%

Mg 279.077 IEC†	121.0	4924.0 ug/L	118.54	4924.0 ppb	118.54	2.41%
Mn 257.610†	1777593.7	2858.1 ug/L	2.41	2858.1 ppb	2.41	0.08%
Mo 202.031†	20.0	8.3548 ug/L	0.73836	8.3548 ppb	0.73836	8.84%
Na 589.592 Radial†	1042.5	371.23 ug/L	12.866	371.23 ppb	12.866	3.47%
Ni 231.604†	1416.5	45.327 ug/L	0.7056	45.327 ppb	0.7056	1.56%
P 214.914†	1228.3	619.64 ug/L	2.920	619.64 ppb	2.920	0.47%
Pb 220.353†	450.5	73.044 ug/L	1.1625	73.044 ppb	1.1625	1.59%
S 181.975 Axial†	128.5	159.47 ug/L	5.283	159.47 ppb	5.283	3.31%
Sb 206.836†	12.0	-4.1434 ug/L	1.11718	-4.1434 ppb	1.11718	26.96%
Se 196.026†	-308.7	-0.3619 ug/L	3.76312	-0.3619 ppb	3.76312	>999.9%
Si 251.611†	220994.9	8027.1 ug/L	34.40	8027.1 ppb	34.40	0.43%
Sn 189.927†	-4.0	-4.5210 ug/L	0.83384	-4.5210 ppb	0.83384	18.44%
Sr 421.552†	7457.5	55.824 ug/L	0.2504	55.824 ppb	0.2504	0.45%
Ti 334.940†	1151600.8	2316.9 ug/L	2.09	2316.9 ppb	2.09	0.09%
Tl 190.801†	-75.0	-1.8793 ug/L	3.27188	-1.8793 ppb	3.27188	174.10%
U 409.014†	-5269.0	-186.51 ug/L	3.332	-186.51 ppb	3.332	1.79%
V 292.402†	11009.7	72.574 ug/L	0.1898	72.574 ppb	0.1898	0.26%
Zn 213.857†	32426.0	346.10 ug/L	1.520	346.10 ppb	1.520	0.44%
SiO2†	221711.8	17238 ug/L	118.7	17238 ppb	118.7	0.69%

Sequence No.: 47

Sample ID: 246437003|958097|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 72

Date Collected: 3/3/2010 23:48:28

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 246437003|958097|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5094.7	5094.7	106 %		23:50:21
1	Y RADIAL	6675.3	6675.3	130.7 %		23:50:21
1	Al 396.153Radial†	39315.0	37288.9	35574 ug/L	35574 ppb	23:50:21
1	Ca 317.933Radial†	4947.1	4660.6	8627.1 ug/L	8627.1 ppb	23:50:21
1	Fe 238.204 Radial†	8197.6	7750.7	86492 ug/L	86492 ppb	23:50:21
1	K 766.490 Radial†	27170.3	23468.7	4655.2 ug/L	4655.2 ppb	23:50:21
1	Mg 279.077 IEC†	157.4	147.9	6034.5 ug/L	6034.5 ppb	23:50:41
1	Na 589.592 Radial†	1153.6	1646.7	586.42 ug/L	586.42 ppb	23:50:21
1	Sr 421.552†	10169.5	9612.3	71.954 ug/L	71.954 ppb	23:50:21
1	Sc 361.383	900099.9	900099.9	114.39 %		23:51:38
1	Y 371.029	971489.9	971489.9	138.48 %		23:51:38
1	Ag 328.068†	-4594.3	-4224.6	5.3724 ug/L	5.3724 ppb	23:51:43
1	As 188.979†	-9.9	20.2	45.800 ug/L	45.800 ppb	23:52:03
1	B 249.677†	148.0	274.7	-7.1502 ug/L	-7.1502 ppb	23:51:43
1	Ba 233.527†	40708.5	35586.7	424.16 ug/L	424.16 ppb	23:51:43
1	Be 313.107†	-9461.0	1158.5	4.8080 ug/L	4.8080 ppb	23:51:43
1	Cd 226.502†	481.6	615.3	-0.1917 ug/L	-0.1917 ppb	23:52:03
1	Co 228.616†	646.6	620.7	13.770 ug/L	13.770 ppb	23:52:03
1	Cr 267.716†	10755.7	9337.0	129.48 ug/L	129.48 ppb	23:51:43
1	Cu 324.752†	16770.2	5550.1	25.417 ug/L	25.417 ppb	23:51:43
1	Mn 257.610†	1755828.5	1534519.0	2468.7 ug/L	2468.7 ppb	23:51:38
1	Mo 202.031†	44.2	23.4	8.9729 ug/L	8.9729 ppb	23:52:03
1	Ni 231.604†	3049.8	2564.8	82.094 ug/L	82.094 ppb	23:52:03
1	P 214.914†	1321.1	951.5	465.06 ug/L	465.06 ppb	23:52:03
1	Pb 220.353†	442.5	413.5	69.261 ug/L	69.261 ppb	23:52:03
1	S 181.975 Axial†	173.4	110.7	134.78 ug/L	134.78 ppb	23:52:03
1	Sb 206.836†	65.4	26.1	2.5126 ug/L	2.5126 ppb	23:52:03
1	Se 196.026†	-367.5	-304.3	11.500 ug/L	11.500 ppb	23:52:03
1	Si 251.611†	261976.8	228469.9	8298.6 ug/L	8298.6 ppb	23:51:43
1	Sn 189.927†	24.3	-7.4	-5.1891 ug/L	-5.1891 ppb	23:52:03
1	Ti 334.940†	1087375.1	951843.4	1915.3 ug/L	1915.3 ppb	23:51:38
1	Tl 190.801†	-117.2	-65.5	-2.6317 ug/L	-2.6317 ppb	23:52:03
1	U 409.014†	-10743.1	-7152.3	-250.35 ug/L	-250.35 ppb	23:51:38
1	V 292.402†	10240.0	10613.3	69.200 ug/L	69.200 ppb	23:51:43
1	Zn 213.857†	34577.1	29080.8	308.30 ug/L	308.30 ppb	23:51:43
1	SiO2†	265527.2	231559.1	18004 ug/L	18004 ppb	23:53:11
2	Sc Radial	4948.3	4948.3	103 %		23:50:46
2	Y RADIAL	6549.9	6549.9	128.2 %		23:50:46
2	Al 396.153Radial†	39460.8	38531.8	36760 ug/L	36760 ppb	23:50:46
2	Ca 317.933Radial†	4935.4	4787.8	8862.5 ug/L	8862.5 ppb	23:50:46
2	Fe 238.204 Radial†	8199.8	7982.3	89077 ug/L	89077 ppb	23:50:46
2	K 766.490 Radial†	27192.1	24250.6	4810.3 ug/L	4810.3 ppb	23:50:46
2	Mg 279.077 IEC†	161.0	155.9	6361.5 ug/L	6361.5 ppb	23:51:06
2	Na 589.592 Radial†	1128.4	1654.5	589.18 ug/L	589.18 ppb	23:50:46
2	Sr 421.552†	10231.7	9957.6	74.539 ug/L	74.539 ppb	23:50:46
2	Sc 361.383	845314.2	845314.2	107.43 %		23:52:09
2	Y 371.029	924373.5	924373.5	131.76 %		23:52:09
2	Ag 328.068†	-4757.9	-4637.2	4.0912 ug/L	4.0912 ppb	23:52:14
2	As 188.979†	-24.0	6.5	41.404 ug/L	41.404 ppb	23:52:34
2	B 249.677†	289.7	415.0	-4.0208 ug/L	-4.0208 ppb	23:52:14
2	Ba 233.527†	41402.4	38539.0	459.21 ug/L	459.21 ppb	23:52:14
2	Be 313.107†	-9729.0	373.0	4.7738 ug/L	4.7738 ppb	23:52:14
2	Cd 226.502†	487.2	647.8	0.0024 ug/L	0.0024 ppb	23:52:34
2	Co 228.616†	630.7	642.5	14.150 ug/L	14.150 ppb	23:52:34
2	Cr 267.716†	10973.6	10149.2	140.65 ug/L	140.65 ppb	23:52:14
2	Cu 324.752†	17234.0	6932.0	30.718 ug/L	30.718 ppb	23:52:14
2	Mn 257.610†	1752240.3	1630660.3	2623.1 ug/L	2623.1 ppb	23:52:09
2	Mo 202.031†	31.8	14.4	8.3495 ug/L	8.3495 ppb	23:52:34
2	Ni 231.604†	3015.0	2705.2	86.589 ug/L	86.589 ppb	23:52:34

2	P 214.914†	1302.9	1009.3	494.48 ug/L	494.48 ppb	23:52:34
2	Pb 220.353†	440.6	436.9	73.146 ug/L	73.146 ppb	23:52:34
2	S 181.975 Axial†	167.3	114.9	139.94 ug/L	139.94 ppb	23:52:34
2	Sb 206.836†	49.0	14.6	-2.5561 ug/L	-2.5561 ppb	23:52:34
2	Se 196.026†	-370.1	-327.5	3.2334 ug/L	3.2334 ppb	23:52:34
2	Si 251.611†	266992.8	247982.2	9007.3 ug/L	9007.3 ppb	23:52:14
2	Sn 189.927†	22.7	-7.5	-5.3213 ug/L	-5.3213 ppb	23:52:34
2	Ti 334.940†	1086751.3	1012871.0	2038.0 ug/L	2038.0 ppb	23:52:09
2	Tl 190.801†	-113.3	-68.4	-2.2422 ug/L	-2.2422 ppb	23:52:34
2	U 409.014†	-10647.1	-7671.7	-268.11 ug/L	-268.11 ppb	23:52:09
2	V 292.402†	10480.2	11417.1	75.027 ug/L	75.027 ppb	23:52:14
2	Zn 213.857†	35166.5	31588.5	335.63 ug/L	335.63 ppb	23:52:14
2	SiO2†	268270.7	249157.1	19372 ug/L	19372 ppb	23:53:16
3	Sc Radial	5191.0	5191.0	108 %		23:51:11
3	Y RADIAL	6798.7	6798.7	133.1 %		23:51:11
3	Al 396.153Radial†	39307.7	36591.8	34909 ug/L	34909 ppb	23:51:11
3	Ca 317.933Radial†	4941.2	4568.3	8456.2 ug/L	8456.2 ppb	23:51:11
3	Fe 238.204 Radial†	8149.7	7562.2	84389 ug/L	84389 ppb	23:51:11
3	K 766.490 Radial†	27216.1	23034.1	4569.0 ug/L	4569.0 ppb	23:51:11
3	Mg 279.077 IEC†	160.0	147.6	6022.0 ug/L	6022.0 ppb	23:51:31
3	Na 589.592 Radial†	1128.9	1603.5	571.02 ug/L	571.02 ppb	23:51:11
3	Sr 421.552†	10220.0	9480.6	70.968 ug/L	70.968 ppb	23:51:11
3	Sc 361.383	850740.6	850740.6	108.12 %		23:52:40
3	Y 371.029	928003.6	928003.6	132.28 %		23:52:40
3	Ag 328.068†	-4707.5	-4562.3	3.0316 ug/L	3.0316 ppb	23:52:45
3	As 188.979†	-18.9	11.4	42.323 ug/L	42.323 ppb	23:53:05
3	B 249.677†	260.0	385.8	-4.0006 ug/L	-4.0006 ppb	23:52:45
3	Ba 233.527†	40868.6	37799.5	450.31 ug/L	450.31 ppb	23:52:45
3	Be 313.107†	-9440.4	697.7	4.8666 ug/L	4.8666 ppb	23:52:45
3	Cd 226.502†	489.0	646.5	0.4686 ug/L	0.4686 ppb	23:53:05
3	Co 228.616†	646.1	652.9	14.568 ug/L	14.568 ppb	23:53:05
3	Cr 267.716†	10867.0	9985.5	138.32 ug/L	138.32 ppb	23:52:45
3	Cu 324.752†	16994.9	6608.5	29.262 ug/L	29.262 ppb	23:52:45
3	Mn 257.610†	1750600.0	1618739.4	2603.5 ug/L	2603.5 ppb	23:52:40
3	Mo 202.031†	46.6	27.9	9.2176 ug/L	9.2176 ppb	23:53:05
3	Ni 231.604†	2996.9	2670.5	85.477 ug/L	85.477 ppb	23:53:05
3	P 214.914†	1294.2	993.6	489.30 ug/L	489.30 ppb	23:53:05
3	Pb 220.353†	437.2	431.0	72.120 ug/L	72.120 ppb	23:53:05
3	S 181.975 Axial†	168.9	115.4	140.87 ug/L	140.87 ppb	23:53:05
3	Sb 206.836†	54.5	19.4	-0.4390 ug/L	-0.4390 ppb	23:53:05
3	Se 196.026†	-364.7	-320.3	-3.0567 ug/L	-3.0567 ppb	23:53:05
3	Si 251.611†	263317.8	242997.9	8826.3 ug/L	8826.3 ppb	23:52:45
3	Sn 189.927†	32.6	1.5	-2.9945 ug/L	-2.9945 ppb	23:53:05
3	Ti 334.940†	1085079.5	1004872.2	2021.9 ug/L	2021.9 ppb	23:52:40
3	Tl 190.801†	-117.3	-71.4	-3.8490 ug/L	-3.8490 ppb	23:53:05
3	U 409.014†	-10632.7	-7595.1	-265.00 ug/L	-265.00 ppb	23:52:40
3	V 292.402†	10370.9	11253.7	74.448 ug/L	74.448 ppb	23:52:45
3	Zn 213.857†	34720.4	30967.1	329.46 ug/L	329.46 ppb	23:52:45
3	SiO2†	265564.3	245061.1	19053 ug/L	19053 ppb	23:53:22

Mean Data: 246437003|958097|1

	Mean Corrected	Calib.		Sample		
Analyte	Intensity	Conc. Units	Std.Dev.	Conc. Units	Std.Dev.	RSD
Sc 361.383	865384.9	109.98 %	3.836			3.49%
Sc Radial	5078.0	105 %	2.5			2.41%
Y 371.029	941289.0	134.18 %	3.737			2.79%
Y RADIAL	6674.6	130.7 %	2.44			1.86%
Ag 328.068†	-4474.7	4.1651 ug/L	1.17213	4.1651 ppb	1.17213	28.14%
Al 396.153Radial†	37470.8	35748 ug/L	937.6	35748 ppb	937.6	2.62%
As 188.979†	12.7	43.176 ug/L	2.3185	43.176 ppb	2.3185	5.37%
B 249.677†	358.5	-5.0572 ug/L	1.81266	-5.0572 ppb	1.81266	35.84%
Ba 233.527†	37308.4	444.56 ug/L	18.217	444.56 ppb	18.217	4.10%
Be 313.107†	743.0	4.8161 ug/L	0.04693	4.8161 ppb	0.04693	0.97%
Ca 317.933Radial†	4672.2	8648.6 ug/L	204.00	8648.6 ppb	204.00	2.36%
Cd 226.502†	636.5	0.0931 ug/L	0.33939	0.0931 ppb	0.33939	364.49%
Co 228.616†	638.7	14.163 ug/L	0.3994	14.163 ppb	0.3994	2.82%
Cr 267.716†	9823.9	136.15 ug/L	5.891	136.15 ppb	5.891	4.33%
Cu 324.752†	6363.5	28.466 ug/L	2.7392	28.466 ppb	2.7392	9.62%
Fe 238.204 Radial†	7765.1	86653 ug/L	2348.1	86653 ppb	2348.1	2.71%
K 766.490 Radial†	23584.5	4678.2 ug/L	122.31	4678.2 ppb	122.31	2.61%

Mg 279.077 IEC†	150.5	6139.3 ug/L	192.51	6139.3 ppb	192.51	3.14%
Mn 257.610†	1594639.5	2565.1 ug/L	84.06	2565.1 ppb	84.06	3.28%
Mo 202.031†	21.9	8.8467 ug/L	0.44757	8.8467 ppb	0.44757	5.06%
Na 589.592 Radial†	1634.9	582.21 ug/L	9.783	582.21 ppb	9.783	1.68%
Ni 231.604†	2646.9	84.720 ug/L	2.3410	84.720 ppb	2.3410	2.76%
P 214.914†	984.8	482.95 ug/L	15.702	482.95 ppb	15.702	3.25%
Pb 220.353†	427.1	71.509 ug/L	2.0134	71.509 ppb	2.0134	2.82%
S 181.975 Axial†	113.6	138.53 ug/L	3.279	138.53 ppb	3.279	2.37%
Sb 206.836†	20.0	-0.1608 ug/L	2.54581	-0.1608 ppb	2.54581	>999.9%
Se 196.026†	-317.4	3.8924 ug/L	7.30094	3.8924 ppb	7.30094	187.57%
Si 251.611†	239816.7	8710.7 ug/L	368.23	8710.7 ppb	368.23	4.23%
Sn 189.927†	-4.5	-4.5016 ug/L	1.30688	-4.5016 ppb	1.30688	29.03%
Sr 421.552†	9683.5	72.487 ug/L	1.8441	72.487 ppb	1.8441	2.54%
Ti 334.940†	989862.2	1991.7 ug/L	66.71	1991.7 ppb	66.71	3.35%
Tl 190.801†	-68.4	-2.9077 ug/L	0.83818	-2.9077 ppb	0.83818	28.83%
U 409.014†	-7473.0	-261.15 ug/L	9.484	-261.15 ppb	9.484	3.63%
V 292.402†	11094.7	72.892 ug/L	3.2098	72.892 ppb	3.2098	4.40%
Zn 213.857†	30545.5	324.47 ug/L	14.333	324.47 ppb	14.333	4.42%
Sio2†	241925.8	18810 ug/L	716.0	18810 ppb	716.0	3.81%

Sequence No.: 48

Sample ID: 246437004|958097|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 73

Date Collected: 3/3/2010 23:55:33

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 246437004|958097|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5249.1	5249.1	109 %		23:57:26
1	Y RADIAL	6592.1	6592.1	129.0 %		23:57:26
1	Al 396.153Radial†	12995.7	12019.9	11467 ug/L	11467 ppb	23:57:26
1	Ca 317.933Radial†	2321.4	2111.1	3907.8 ug/L	3907.8 ppb	23:57:46
1	Fe 238.204 Radial†	5727.7	5253.8	58629 ug/L	58629 ppb	23:57:26
1	K 766.490 Radial†	14744.4	11298.9	2240.9 ug/L	2240.9 ppb	23:57:26
1	Mg 279.077 IEC†	69.7	63.0	2548.6 ug/L	2548.6 ppb	23:57:46
1	Na 589.592 Radial†	1018.4	1490.4	530.74 ug/L	530.74 ppb	23:57:26
1	Sr 421.552†	4197.7	3844.1	28.772 ug/L	28.772 ppb	23:57:26
1	Sc 361.383	808470.8	808470.8	102.75 %		23:58:43
1	Y 371.029	858852.5	858852.5	122.42 %		23:58:43
1	Ag 328.068†	-3238.2	-3359.9	1.1548 ug/L	1.1548 ppb	23:58:48
1	As 188.979†	-24.1	5.4	29.371 ug/L	29.371 ppb	23:59:08
1	B 249.677†	-23.3	122.7	-6.4503 ug/L	-6.4503 ppb	23:58:48
1	Ba 233.527†	18703.1	18202.6	217.41 ug/L	217.41 ppb	23:58:48
1	Be 313.107†	-12619.7	-2853.1	2.3379 ug/L	2.3379 ppb	23:58:48
1	Cd 226.502†	262.0	449.3	0.3280 ug/L	0.3280 ppb	23:59:08
1	Co 228.616†	336.5	382.9	7.6405 ug/L	7.6405 ppb	23:59:08
1	Cr 267.716†	10602.4	10253.5	141.42 ug/L	141.42 ppb	23:58:48
1	Cu 324.752†	15034.3	5522.1	23.829 ug/L	23.829 ppb	23:58:48
1	Mn 257.610†	1310679.9	1275230.2	2050.4 ug/L	2050.4 ppb	23:58:43
1	Mo 202.031†	38.2	22.0	6.6226 ug/L	6.6226 ppb	23:59:08
1	Ni 231.604†	2539.1	2369.9	75.859 ug/L	75.859 ppb	23:59:08
1	P 214.914†	1462.3	1219.8	631.00 ug/L	631.00 ppb	23:59:08
1	Pb 220.353†	296.5	315.3	49.546 ug/L	49.546 ppb	23:59:08
1	S 181.975 Axial†	94.0	50.7	62.580 ug/L	62.580 ppb	23:59:08
1	Sb 206.836†	43.0	10.8	-1.4407 ug/L	-1.4407 ppb	23:59:08
1	Se 196.026†	-261.2	-237.3	-12.325 ug/L	-12.325 ppb	23:59:08
1	Si 251.611†	187336.8	181780.7	6602.7 ug/L	6602.7 ppb	23:58:43
1	Sn 189.927†	31.0	1.5	-2.3085 ug/L	-2.3085 ppb	23:59:08
1	Ti 334.940†	780423.2	760829.2	1530.7 ug/L	1530.7 ppb	23:58:43
1	Tl 190.801†	-94.4	-54.9	-2.8575 ug/L	-2.8575 ppb	23:59:08
1	U 409.014†	-9171.5	-6687.1	-231.58 ug/L	-231.58 ppb	23:58:43
1	V 292.402†	4957.8	6486.8	40.890 ug/L	40.890 ppb	23:58:48
1	Zn 213.857†	33288.9	31252.9	336.55 ug/L	336.55 ppb	23:58:48
1	SiO2†	185466.5	179945.8	13991 ug/L	13991 ppb	00:00:15
2	Sc Radial	5003.5	5003.5	104 %		23:57:51
2	Y RADIAL	6353.4	6353.4	124.4 %		23:57:51
2	Al 396.153Radial†	13038.3	12647.0	12065 ug/L	12065 ppb	23:57:51
2	Ca 317.933Radial†	2289.7	2185.3	4045.2 ug/L	4045.2 ppb	23:58:11
2	Fe 238.204 Radial†	5737.6	5521.7	61618 ug/L	61618 ppb	23:57:51
2	K 766.490 Radial†	14902.1	12115.8	2403.1 ug/L	2403.1 ppb	23:57:51
2	Mg 279.077 IEC†	71.4	67.7	2740.4 ug/L	2740.4 ppb	23:58:11
2	Na 589.592 Radial†	1013.5	1531.6	545.41 ug/L	545.41 ppb	23:57:51
2	Sr 421.552†	4246.8	4080.7	30.543 ug/L	30.543 ppb	23:57:51
2	Sc 361.383	842476.6	842476.6	107.07 %		23:59:14
2	Y 371.029	887204.8	887204.8	126.47 %		23:59:14
2	Ag 328.068†	-3143.3	-3144.0	3.1585 ug/L	3.1585 ppb	23:59:19
2	As 188.979†	-26.0	4.6	29.206 ug/L	29.206 ppb	23:59:39
2	B 249.677†	-86.4	64.7	-8.4037 ug/L	-8.4037 ppb	23:59:19
2	Ba 233.527†	18638.3	17407.3	208.09 ug/L	208.09 ppb	23:59:19
2	Be 313.107†	-12692.0	-2425.0	2.3722 ug/L	2.3722 ppb	23:59:19
2	Cd 226.502†	268.2	444.8	-0.0438 ug/L	-0.0438 ppb	23:59:39
2	Co 228.616†	349.5	381.8	7.6866 ug/L	7.6866 ppb	23:59:39
2	Cr 267.716†	10657.5	9888.4	136.48 ug/L	136.48 ppb	23:59:19
2	Cu 324.752†	14992.8	4892.7	21.631 ug/L	21.631 ppb	23:59:19
2	Mn 257.610†	1310532.4	1223601.7	1967.9 ug/L	1967.9 ppb	23:59:14
2	Mo 202.031†	37.5	19.8	6.6555 ug/L	6.6555 ppb	23:59:39
2	Ni 231.604†	2519.3	2251.7	72.074 ug/L	72.074 ppb	23:59:39



2	P 214.914†	1466.9	1166.6	599.56 ug/L	599.56 ppb	23:59:39
2	Pb 220.353†	287.9	295.5	46.232 ug/L	46.232 ppb	23:59:39
2	S 181.975 Axial†	98.8	51.4	63.449 ug/L	63.449 ppb	23:59:39
2	Sb 206.836†	44.6	10.6	-1.3749 ug/L	-1.3749 ppb	23:59:39
2	Se 196.026†	-264.8	-230.4	-1.3772 ug/L	-1.3772 ppb	23:59:39
2	Si 251.611†	187884.4	174932.5	6354.0 ug/L	6354.0 ppb	23:59:14
2	Sn 189.927†	32.3	1.5	-2.4640 ug/L	-2.4640 ppb	23:59:39
2	Ti 334.940†	781302.5	730991.1	1470.7 ug/L	1470.7 ppb	23:59:14
2	Tl 190.801†	-103.8	-59.9	-6.0370 ug/L	-6.0370 ppb	23:59:39
2	U 409.014†	-9099.2	-6259.3	-217.54 ug/L	-217.54 ppb	23:59:14
2	V 292.402†	4940.3	6275.7	38.874 ug/L	38.874 ppb	23:59:19
2	Zn 213.857†	33282.5	29939.1	321.59 ug/L	321.59 ppb	23:59:19
2	SiO2†	187499.7	174558.6	13572 ug/L	13572 ppb	00:00:20
3	Sc Radial	5024.2	5024.2	104 %		23:58:16
3	Y RADIAL	6385.9	6385.9	125.0 %		23:58:16
3	Al 396.153Radial†	13078.8	12633.9	12053 ug/L	12053 ppb	23:58:16
3	Ca 317.933Radial†	2285.5	2172.1	4020.7 ug/L	4020.7 ppb	23:58:36
3	Fe 238.204 Radial†	5752.6	5513.2	61524 ug/L	61524 ppb	23:58:16
3	K 766.490 Radial†	14916.9	12070.6	2394.1 ug/L	2394.1 ppb	23:58:16
3	Mg 279.077 IEC†	70.1	66.2	2677.7 ug/L	2677.7 ppb	23:58:36
3	Na 589.592 Radial†	973.1	1488.8	530.19 ug/L	530.19 ppb	23:58:16
3	Sr 421.552†	4205.3	4023.9	30.118 ug/L	30.118 ppb	23:58:16
3	Sc 361.383	831047.1	831047.1	105.61 %		23:59:44
3	Y 371.029	876490.0	876490.0	124.94 %		23:59:44
3	Ag 328.068†	-3121.7	-3164.0	3.0297 ug/L	3.0297 ppb	23:59:49
3	As 188.979†	-30.9	-0.4	26.914 ug/L	26.914 ppb	00:00:10
3	B 249.677†	-69.8	79.2	-8.0189 ug/L	-8.0189 ppb	23:59:49
3	Ba 233.527†	18526.6	17541.0	209.67 ug/L	209.67 ppb	23:59:49
3	Be 313.107†	-12631.5	-2530.7	2.3204 ug/L	2.3204 ppb	23:59:49
3	Cd 226.502†	264.3	444.5	-0.0371 ug/L	-0.0371 ppb	00:00:10
3	Co 228.616†	323.5	361.7	7.0853 ug/L	7.0853 ppb	00:00:10
3	Cr 267.716†	10558.4	9931.5	137.07 ug/L	137.07 ppb	23:59:49
3	Cu 324.752†	14862.2	4961.7	21.883 ug/L	21.883 ppb	23:59:49
3	Mn 257.610†	1288762.7	1219823.6	1961.8 ug/L	1961.8 ppb	23:59:44
3	Mo 202.031†	34.2	17.1	6.4021 ug/L	6.4021 ppb	00:00:10
3	Ni 231.604†	2563.2	2325.6	74.441 ug/L	74.441 ppb	00:00:10
3	P 214.914†	1467.9	1186.4	610.66 ug/L	610.66 ppb	00:00:10
3	Pb 220.353†	280.9	292.6	45.763 ug/L	45.763 ppb	00:00:10
3	S 181.975 Axial†	95.5	49.5	61.025 ug/L	61.025 ppb	00:00:10
3	Sb 206.836†	43.4	10.1	-1.5684 ug/L	-1.5684 ppb	00:00:10
3	Se 196.026†	-267.7	-236.5	-5.3109 ug/L	-5.3109 ppb	00:00:10
3	Si 251.611†	184580.9	174218.1	6328.0 ug/L	6328.0 ppb	23:59:44
3	Sn 189.927†	38.4	7.7	-0.9843 ug/L	-0.9843 ppb	00:00:10
3	Ti 334.940†	768466.9	728873.9	1466.4 ug/L	1466.4 ppb	23:59:44
3	Tl 190.801†	-101.5	-59.0	-5.7138 ug/L	-5.7138 ppb	00:00:10
3	U 409.014†	-8964.9	-6249.0	-217.18 ug/L	-217.18 ppb	23:59:44
3	V 292.402†	4950.1	6348.4	39.465 ug/L	39.465 ppb	23:59:49
3	Zn 213.857†	33190.3	30279.3	325.35 ug/L	325.35 ppb	23:59:49
3	SiO2†	187576.4	177039.7	13765 ug/L	13765 ppb	00:00:26

-----  
Mean Data: 246437004|958097|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	827331.5	105.14 %	2.199			2.09%
Sc Radial	5092.3	106 %	2.8			2.68%
Y 371.029	874182.5	124.61 %	2.041			1.64%
Y RADIAL	6443.8	126.1 %	2.53			2.01%
Ag 328.068†	-3222.6	2.4477 ug/L	1.12153	2.4477 ppb	1.12153	45.82%
Al 396.153Radial†	12433.6	11862 ug/L	341.9	11862 ppb	341.9	2.88%
As 188.979†	3.2	28.497 ug/L	1.3734	28.497 ppb	1.3734	4.82%
B 249.677†	88.8	-7.6243 ug/L	1.03477	-7.6243 ppb	1.03477	13.57%
Ba 233.527†	17717.0	211.72 ug/L	4.993	211.72 ppb	4.993	2.36%
Be 313.107†	-2602.9	2.3435 ug/L	0.02634	2.3435 ppb	0.02634	1.12%
Ca 317.933Radial†	2156.2	3991.3 ug/L	73.27	3991.3 ppb	73.27	1.84%
Cd 226.502†	446.2	0.0824 ug/L	0.21277	0.0824 ppb	0.21277	258.33%
Co 228.616†	375.5	7.4708 ug/L	0.33465	7.4708 ppb	0.33465	4.48%
Cr 267.716†	10024.5	138.32 ug/L	2.698	138.32 ppb	2.698	1.95%
Cu 324.752†	5125.5	22.448 ug/L	1.2027	22.448 ppb	1.2027	5.36%
Fe 238.204 Radial†	5429.6	60590 ug/L	1699.0	60590 ppb	1699.0	2.80%
K 766.490 Radial†	11828.4	2346.0 ug/L	91.15	2346.0 ppb	91.15	3.89%

Mg 279.077 IEC†	65.7	2655.5 ug/L	97.81	2655.5 ppb	97.81	3.68%
Mn 257.610†	1239551.8	1993.4 ug/L	49.47	1993.4 ppb	49.47	2.48%
Mo 202.031†	19.7	6.5601 ug/L	0.13776	6.5601 ppb	0.13776	2.10%
Na 589.592 Radial†	1503.6	535.44 ug/L	8.635	535.44 ppb	8.635	1.61%
Ni 231.604†	2315.7	74.125 ug/L	1.9125	74.125 ppb	1.9125	2.58%
P 214.914†	1190.9	613.74 ug/L	15.943	613.74 ppb	15.943	2.60%
Pb 220.353†	301.2	47.180 ug/L	2.0621	47.180 ppb	2.0621	4.37%
S 181.975 Axial†	50.5	62.351 ug/L	1.2279	62.351 ppb	1.2279	1.97%
Sb 206.836†	10.5	-1.4613 ug/L	0.09841	-1.4613 ppb	0.09841	6.73%
Se 196.026†	-234.7	-6.3376 ug/L	5.54561	-6.3376 ppb	5.54561	87.50%
Si 251.611†	176977.1	6428.2 ug/L	151.66	6428.2 ppb	151.66	2.36%
Sn 189.927†	3.6	-1.9189 ug/L	0.81314	-1.9189 ppb	0.81314	42.38%
Sr 421.552†	3982.9	29.811 ug/L	0.9249	29.811 ppb	0.9249	3.10%
Ti 334.940†	740231.4	1489.3 ug/L	35.94	1489.3 ppb	35.94	2.41%
Tl 190.801†	-57.9	-4.8694 ug/L	1.74988	-4.8694 ppb	1.74988	35.94%
U 409.014†	-6398.5	-222.10 ug/L	8.209	-222.10 ppb	8.209	3.70%
V 292.402†	6370.3	39.743 ug/L	1.0365	39.743 ppb	1.0365	2.61%
Zn 213.857†	30490.5	327.83 ug/L	7.780	327.83 ppb	7.780	2.37%
SiO2†	177181.4	13776 ug/L	209.6	13776 ppb	209.6	1.52%

Sequence No.: 49

Sample ID: 246437005|958097|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 74

Date Collected: 3/4/2010 00:02:37

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 246437005|958097|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4956.2	4956.2	103 %		00:04:30
1	Y RADIAL	5977.5	5977.5	117.0 %		00:04:30
1	Al 396.153Radial†	16675.8	16305.2	15555 ug/L	15555 ppb	00:04:30
1	Ca 317.933Radial†	2278.8	2195.7	4064.4 ug/L	4064.4 ppb	00:04:50
1	Fe 238.204 Radial†	5664.8	5503.5	61415 ug/L	61415 ppb	00:04:30
1	K 766.490 Radial†	15918.1	13241.0	2626.7 ug/L	2626.7 ppb	00:04:30
1	Mg 279.077 IEC†	76.6	73.5	2980.6 ug/L	2980.6 ppb	00:04:50
1	Na 589.592 Radial†	392.3	936.6	333.54 ug/L	333.54 ppb	00:04:30
1	Sr 421.552†	4268.5	4140.7	30.993 ug/L	30.993 ppb	00:04:30
1	Sc 361.383	839817.5	839817.5	106.73 %		00:05:47
1	Y 371.029	843492.3	843492.3	120.23 %		00:05:47
1	Ag 328.068†	-3208.5	-3214.4	2.7021 ug/L	2.7021 ppb	00:05:52
1	As 188.979†	-28.4	2.2	29.697 ug/L	29.697 ppb	00:06:12
1	B 249.677†	-57.6	91.3	-7.6953 ug/L	-7.6953 ppb	00:05:52
1	Ba 233.527†	17797.7	16674.9	199.41 ug/L	199.41 ppb	00:05:52
1	Be 313.107†	-13089.4	-2834.8	2.6306 ug/L	2.6306 ppb	00:05:52
1	Cd 226.502†	289.7	465.7	0.2550 ug/L	0.2550 ppb	00:06:12
1	Co 228.616†	346.3	379.9	7.2837 ug/L	7.2837 ppb	00:06:12
1	Cr 267.716†	2721.1	2483.9	35.261 ug/L	35.261 ppb	00:05:52
1	Cu 324.752†	12936.0	3009.9	14.566 ug/L	14.566 ppb	00:05:52
1	Mn 257.610†	1077728.9	1009352.0	1624.3 ug/L	1624.3 ppb	00:05:47
1	Mo 202.031†	43.0	25.1	7.1229 ug/L	7.1229 ppb	00:06:12
1	Ni 231.604†	967.5	805.1	25.767 ug/L	25.767 ppb	00:06:12
1	P 214.914†	1029.4	761.1	376.11 ug/L	376.11 ppb	00:06:12
1	Pb 220.353†	244.5	255.7	40.615 ug/L	40.615 ppb	00:06:12
1	S 181.975 Axial†	108.4	60.7	74.688 ug/L	74.688 ppb	00:06:12
1	Sb 206.836†	45.9	12.0	-1.5704 ug/L	-1.5704 ppb	00:06:12
1	Se 196.026†	-256.1	-223.0	3.0258 ug/L	3.0258 ppb	00:06:12
1	Si 251.611†	234466.4	219133.2	7959.5 ug/L	7959.5 ppb	00:05:47
1	Sn 189.927†	33.5	2.7	-2.1614 ug/L	-2.1614 ppb	00:06:12
1	Ti 334.940†	877394.3	823334.9	1656.4 ug/L	1656.4 ppb	00:05:47
1	Tl 190.801†	-91.8	-49.0	-1.1545 ug/L	-1.1545 ppb	00:06:12
1	U 409.014†	-7323.3	-4622.3	-162.31 ug/L	-162.31 ppb	00:05:47
1	V 292.402†	5309.7	6636.4	41.722 ug/L	41.722 ppb	00:05:52
1	Zn 213.857†	27250.6	24385.9	260.48 ug/L	260.48 ppb	00:05:52
1	SiO2†	233201.0	217933.0	16944 ug/L	16944 ppb	00:07:19
2	Sc Radial	5051.0	5051.0	105 %		00:04:55
2	Y RADIAL	6115.9	6115.9	119.7 %		00:04:55
2	Al 396.153Radial†	16943.8	16256.8	15509 ug/L	15509 ppb	00:04:55
2	Ca 317.933Radial†	2276.8	2152.2	3983.9 ug/L	3983.9 ppb	00:05:15
2	Fe 238.204 Radial†	5757.8	5488.9	61253 ug/L	61253 ppb	00:04:55
2	K 766.490 Radial†	16067.7	13093.3	2597.3 ug/L	2597.3 ppb	00:04:55
2	Mg 279.077 IEC†	76.5	72.0	2917.2 ug/L	2917.2 ppb	00:05:15
2	Na 589.592 Radial†	429.7	965.2	343.71 ug/L	343.71 ppb	00:04:55
2	Sr 421.552†	4359.9	4150.1	31.064 ug/L	31.064 ppb	00:04:55
2	Sc 361.383	837482.1	837482.1	106.43 %		00:06:18
2	Y 371.029	842905.4	842905.4	120.15 %		00:06:18
2	Ag 328.068†	-3254.8	-3266.4	2.3932 ug/L	2.3932 ppb	00:06:23
2	As 188.979†	-27.6	2.9	29.970 ug/L	29.970 ppb	00:06:43
2	B 249.677†	6.4	151.3	-6.1510 ug/L	-6.1510 ppb	00:06:23
2	Ba 233.527†	17951.8	16866.1	201.67 ug/L	201.67 ppb	00:06:23
2	Be 313.107†	-13300.6	-3067.4	2.5373 ug/L	2.5373 ppb	00:06:23
2	Cd 226.502†	290.7	467.4	0.2954 ug/L	0.2954 ppb	00:06:43
2	Co 228.616†	339.2	374.0	7.1108 ug/L	7.1108 ppb	00:06:43
2	Cr 267.716†	2726.9	2496.5	35.432 ug/L	35.432 ppb	00:06:23
2	Cu 324.752†	13154.7	3249.2	15.452 ug/L	15.452 ppb	00:06:23
2	Mn 257.610†	1073463.7	1008160.4	1622.4 ug/L	1622.4 ppb	00:06:18
2	Mo 202.031†	44.7	26.8	7.2668 ug/L	7.2668 ppb	00:06:43
2	Ni 231.604†	982.8	822.1	26.309 ug/L	26.309 ppb	00:06:43

2	P 214.914†	1051.4	784.4	389.04 ug/L	389.04 ppb	00:06:43
2	Pb 220.353†	225.7	238.7	37.840 ug/L	37.840 ppb	00:06:43
2	S 181.975 Axial†	119.0	71.0	87.807 ug/L	87.807 ppb	00:06:43
2	Sb 206.836†	43.1	9.5	-2.5427 ug/L	-2.5427 ppb	00:06:43
2	Se 196.026†	-273.3	-239.8	-7.6065 ug/L	-7.6065 ppb	00:06:43
2	Si 251.611†	233629.5	218959.5	7953.1 ug/L	7953.1 ppb	00:06:18
2	Sn 189.927†	37.9	6.9	-1.1700 ug/L	-1.1700 ppb	00:06:43
2	Ti 334.940†	874803.1	823192.8	1656.1 ug/L	1656.1 ppb	00:06:18
2	Tl 190.801†	-84.8	-42.7	1.7331 ug/L	1.7331 ppb	00:06:43
2	U 409.014†	-7405.4	-4718.6	-165.53 ug/L	-165.53 ppb	00:06:18
2	V 292.402†	5404.6	6739.4	42.558 ug/L	42.558 ppb	00:06:23
2	Zn 213.857†	27505.5	24696.6	263.93 ug/L	263.93 ppb	00:06:23
2	SiO2†	233648.1	218962.3	17024 ug/L	17024 ppb	00:07:24
3	Sc Radial	5045.5	5045.5	105 %		00:05:20
3	Y RADIAL	6104.6	6104.6	119.5 %		00:05:20
3	Al 396.153Radial†	16975.4	16304.4	15555 ug/L	15555 ppb	00:05:20
3	Ca 317.933Radial†	2285.0	2162.4	4002.7 ug/L	4002.7 ppb	00:05:40
3	Fe 238.204 Radial†	5758.1	5495.2	61322 ug/L	61322 ppb	00:05:20
3	K 766.490 Radial†	16174.0	13211.4	2620.8 ug/L	2620.8 ppb	00:05:20
3	Mg 279.077 IEC†	77.3	72.8	2951.3 ug/L	2951.3 ppb	00:05:40
3	Na 589.592 Radial†	451.8	986.7	351.36 ug/L	351.36 ppb	00:05:20
3	Sr 421.552†	4359.3	4154.0	31.093 ug/L	31.093 ppb	00:05:20
3	Sc 361.383	840232.5	840232.5	106.78 %		00:06:48
3	Y 371.029	845616.9	845616.9	120.54 %		00:06:48
3	Ag 328.068†	-3293.5	-3292.5	2.2770 ug/L	2.2770 ppb	00:06:53
3	As 188.979†	-25.6	4.8	30.868 ug/L	30.868 ppb	00:07:14
3	B 249.677†	17.6	161.8	-5.8979 ug/L	-5.8979 ppb	00:06:53
3	Ba 233.527†	17927.2	16787.9	200.75 ug/L	200.75 ppb	00:06:53
3	Be 313.107†	-13319.8	-3044.5	2.5507 ug/L	2.5507 ppb	00:06:53
3	Cd 226.502†	296.4	471.8	0.3513 ug/L	0.3513 ppb	00:07:14
3	Co 228.616†	345.4	378.8	7.2509 ug/L	7.2509 ppb	00:07:14
3	Cr 267.716†	2775.1	2533.2	35.933 ug/L	35.933 ppb	00:06:53
3	Cu 324.752†	13113.3	3170.0	15.159 ug/L	15.159 ppb	00:06:53
3	Mn 257.610†	1077811.0	1008930.0	1623.6 ug/L	1623.6 ppb	00:06:48
3	Mo 202.031†	42.9	24.9	7.1039 ug/L	7.1039 ppb	00:07:14
3	Ni 231.604†	984.1	820.3	26.252 ug/L	26.252 ppb	00:07:14
3	P 214.914†	1053.9	783.5	388.58 ug/L	388.58 ppb	00:07:14
3	Pb 220.353†	220.2	232.9	36.891 ug/L	36.891 ppb	00:07:14
3	S 181.975 Axial†	113.4	65.3	80.576 ug/L	80.576 ppb	00:07:14
3	Sb 206.836†	41.4	7.7	-3.2870 ug/L	-3.2870 ppb	00:07:14
3	Se 196.026†	-264.1	-230.3	-1.6670 ug/L	-1.6670 ppb	00:07:14
3	Si 251.611†	234295.7	218864.8	7949.7 ug/L	7949.7 ppb	00:06:48
3	Sn 189.927†	32.3	1.6	-2.4202 ug/L	-2.4202 ppb	00:07:14
3	Ti 334.940†	878668.7	824122.3	1658.0 ug/L	1658.0 ppb	00:06:48
3	Tl 190.801†	-89.9	-47.1	-0.2853 ug/L	-0.2853 ppb	00:07:14
3	U 409.014†	-7378.4	-4670.5	-163.92 ug/L	-163.92 ppb	00:06:48
3	V 292.402†	5353.3	6674.8	42.034 ug/L	42.034 ppb	00:06:53
3	Zn 213.857†	27602.1	24702.5	263.99 ug/L	263.99 ppb	00:06:53
3	SiO2†	232101.6	216795.5	16856 ug/L	16856 ppb	00:07:30

Mean Data: 246437005|958097|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Sc 361.383	839177.4	106.65 %	%	0.188			0.18%
Sc Radial	5017.6	104 %	%	1.1			1.06%
Y 371.029	844004.9	120.31 %	%	0.203			0.17%
Y RADIAL	6066.0	118.7 %	%	1.50			1.27%
Ag 328.068†	-3257.8	2.4574 ug/L	ug/L	0.21969	2.4574 ppb	0.21969	8.94%
Al 396.153Radial†	16288.8	15540 ug/L	ug/L	26.5	15540 ppb	26.5	0.17%
As 188.979†	3.3	30.179 ug/L	ug/L	0.6128	30.179 ppb	0.6128	2.03%
B 249.677†	134.8	-6.5814 ug/L	ug/L	0.97291	-6.5814 ppb	0.97291	14.78%
Ba 233.527†	16776.3	200.61 ug/L	ug/L	1.137	200.61 ppb	1.137	0.57%
Be 313.107†	-2982.2	2.5729 ug/L	ug/L	0.05045	2.5729 ppb	0.05045	1.96%
Ca 317.933Radial†	2170.1	4017.0 ug/L	ug/L	42.12	4017.0 ppb	42.12	1.05%
Cd 226.502†	468.3	0.3006 ug/L	ug/L	0.04833	0.3006 ppb	0.04833	16.08%
Co 228.616†	377.6	7.2151 ug/L	ug/L	0.09181	7.2151 ppb	0.09181	1.27%
Cr 267.716†	2504.5	35.542 ug/L	ug/L	0.3495	35.542 ppb	0.3495	0.98%
Cu 324.752†	3143.1	15.059 ug/L	ug/L	0.4514	15.059 ppb	0.4514	3.00%
Fe 238.204 Radial†	5495.9	61330 ug/L	ug/L	81.6	61330 ppb	81.6	0.13%
K 766.490 Radial†	13181.9	2614.9 ug/L	ug/L	15.51	2614.9 ppb	15.51	0.59%

Mg 279.077 IEC†	72.8	2949.7 ug/L	31.74	2949.7 ppb	31.74	1.08%
Mn 257.610†	1008814.1	1623.5 ug/L	0.98	1623.5 ppb	0.98	0.06%
Mo 202.031†	25.6	7.1645 ug/L	0.08905	7.1645 ppb	0.08905	1.24%
Na 589.592 Radial†	962.8	342.87 ug/L	8.941	342.87 ppb	8.941	2.61%
Ni 231.604†	815.8	26.109 ug/L	0.2977	26.109 ppb	0.2977	1.14%
P 214.914†	776.3	384.58 ug/L	7.335	384.58 ppb	7.335	1.91%
Pb 220.353†	242.4	38.449 ug/L	1.9349	38.449 ppb	1.9349	5.03%
S 181.975 Axial†	65.7	81.024 ug/L	6.5708	81.024 ppb	6.5708	8.11%
Sb 206.836†	9.7	-2.4667 ug/L	0.86085	-2.4667 ppb	0.86085	34.90%
Se 196.026†	-231.1	-2.0825 ug/L	5.32831	-2.0825 ppb	5.32831	255.86%
Si 251.611†	218985.9	7954.1 ug/L	4.94	7954.1 ppb	4.94	0.06%
Sn 189.927†	3.8	-1.9172 ug/L	0.65990	-1.9172 ppb	0.65990	34.42%
Sr 421.552†	4148.3	31.050 ug/L	0.0515	31.050 ppb	0.0515	0.17%
Ti 334.940†	823550.0	1656.8 ug/L	1.01	1656.8 ppb	1.01	0.06%
Tl 190.801†	-46.3	0.0978 ug/L	1.48145	0.0978 ppb	1.48145	>999.9%
U 409.014†	-4670.5	-163.92 ug/L	1.608	-163.92 ppb	1.608	0.98%
V 292.402†	6683.5	42.105 ug/L	0.4223	42.105 ppb	0.4223	1.00%
Zn 213.857†	24595.0	262.80 ug/L	2.013	262.80 ppb	2.013	0.77%
SiO2†	217896.9	16941 ug/L	84.3	16941 ppb	84.3	0.50%

Sequence No.: 50  
 Sample ID: 246437006|958097|1  
 Analyst: HSC  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 75  
 Date Collected: 3/4/2010 00:09:40  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Replicate Data: 246437006|958097|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5034.2	5034.2	104 %		00:11:33
1	Y RADIAL	6363.7	6363.7	124.6 %		00:11:33
1	Al 396.153Radial†	31115.1	29882.5	28508 ug/L	28508 ppb	00:11:33
1	Ca 317.933Radial†	4253.0	4052.1	7500.7 ug/L	7500.7 ppb	00:11:33
1	Fe 238.204 Radial†	7368.3	7049.6	78669 ug/L	78669 ppb	00:11:33
1	K 766.490 Radial†	25524.1	22200.9	4404.0 ug/L	4404.0 ppb	00:11:33
1	Mg 279.077 IEC†	136.0	129.2	5269.0 ug/L	5269.0 ppb	00:11:53
1	Na 589.592 Radial†	985.2	1498.5	533.65 ug/L	533.65 ppb	00:11:33
1	Sr 421.552†	8676.7	8298.2	62.117 ug/L	62.117 ppb	00:11:33
1	Sc 361.383	837842.3	837842.3	106.48 %		00:12:51
1	Y 371.029	881451.1	881451.1	125.65 %		00:12:51
1	Ag 328.068†	-4270.6	-4219.0	3.0128 ug/L	3.0128 ppb	00:12:56
1	As 188.979†	-29.4	1.3	37.179 ug/L	37.179 ppb	00:13:16
1	B 249.677†	174.1	308.8	-5.0204 ug/L	-5.0204 ppb	00:12:56
1	Ba 233.527†	33883.6	31821.4	379.35 ug/L	379.35 ppb	00:12:56
1	Be 313.107†	-12929.5	-2713.6	3.6867 ug/L	3.6867 ppb	00:12:56
1	Cd 226.502†	424.5	592.9	0.2953 ug/L	0.2953 ppb	00:13:16
1	Co 228.616†	663.2	678.2	15.222 ug/L	15.222 ppb	00:13:16
1	Cr 267.716†	10317.2	9623.9	133.25 ug/L	133.25 ppb	00:12:56
1	Cu 324.752†	18192.9	7975.6	34.040 ug/L	34.040 ppb	00:12:56
1	Mn 257.610†	1477914.7	1387570.7	2232.4 ug/L	2232.4 ppb	00:12:51
1	Mo 202.031†	43.2	25.4	8.5310 ug/L	8.5310 ppb	00:13:16
1	Ni 231.604†	2413.0	2164.9	69.290 ug/L	69.290 ppb	00:13:16
1	P 214.914†	1516.8	1221.1	617.97 ug/L	617.97 ppb	00:13:16
1	Pb 220.353†	402.2	404.4	66.669 ug/L	66.669 ppb	00:13:16
1	S 181.975 Axial†	201.2	148.1	183.90 ug/L	183.90 ppb	00:13:16
1	Sb 206.836†	43.8	10.0	-4.2353 ug/L	-4.2353 ppb	00:13:16
1	Se 196.026†	-326.8	-290.0	2.0414 ug/L	2.0414 ppb	00:13:16
1	Si 251.611†	270881.4	253850.6	9220.5 ug/L	9220.5 ppb	00:12:56
1	Sn 189.927†	24.6	-5.5	-4.4945 ug/L	-4.4945 ppb	00:13:16
1	Ti 334.940†	1110322.0	1044029.2	2100.6 ug/L	2100.6 ppb	00:12:51
1	Tl 190.801†	-117.7	-73.5	-5.9341 ug/L	-5.9341 ppb	00:13:16
1	U 409.014†	-9348.2	-6540.2	-228.91 ug/L	-228.91 ppb	00:12:51
1	V 292.402†	10127.6	11172.9	74.608 ug/L	74.608 ppb	00:12:56
1	Zn 213.857†	32239.7	29131.7	310.11 ug/L	310.11 ppb	00:12:56
1	SiO2†	267191.3	250370.4	19466 ug/L	19466 ppb	00:14:24
2	Sc Radial	5027.7	5027.7	104 %		00:11:58
2	Y RADIAL	6337.2	6337.2	124.1 %		00:11:58
2	Al 396.153Radial†	31096.1	29903.1	28528 ug/L	28528 ppb	00:11:58
2	Ca 317.933Radial†	4274.4	4077.9	7548.5 ug/L	7548.5 ppb	00:11:58
2	Fe 238.204 Radial†	7359.3	7050.1	78674 ug/L	78674 ppb	00:11:58
2	K 766.490 Radial†	25420.4	22133.2	4390.6 ug/L	4390.6 ppb	00:11:58
2	Mg 279.077 IEC†	133.1	126.6	5159.6 ug/L	5159.6 ppb	00:12:18
2	Na 589.592 Radial†	938.9	1455.3	518.26 ug/L	518.26 ppb	00:11:58
2	Sr 421.552†	8669.9	8302.5	62.148 ug/L	62.148 ppb	00:11:58
2	Sc 361.383	838911.9	838911.9	106.61 %		00:13:22
2	Y 371.029	883151.0	883151.0	125.89 %		00:13:22
2	Ag 328.068†	-4153.7	-4104.3	3.5965 ug/L	3.5965 ppb	00:13:27
2	As 188.979†	-19.6	10.5	41.251 ug/L	41.251 ppb	00:13:47
2	B 249.677†	114.7	252.9	-6.4353 ug/L	-6.4353 ppb	00:13:27
2	Ba 233.527†	33513.6	31433.7	374.76 ug/L	374.76 ppb	00:13:27
2	Be 313.107†	-12795.2	-2572.1	3.7406 ug/L	3.7406 ppb	00:13:27
2	Cd 226.502†	442.0	608.8	0.5201 ug/L	0.5201 ppb	00:13:47
2	Co 228.616†	659.8	674.3	15.105 ug/L	15.105 ppb	00:13:47
2	Cr 267.716†	10338.3	9631.3	133.35 ug/L	133.35 ppb	00:13:27
2	Cu 324.752†	17962.4	7737.6	33.152 ug/L	33.152 ppb	00:13:27
2	Mn 257.610†	1477639.7	1385543.2	2229.1 ug/L	2229.1 ppb	00:13:22
2	Mo 202.031†	51.4	33.0	9.2354 ug/L	9.2354 ppb	00:13:47
2	Ni 231.604†	2417.6	2166.3	69.336 ug/L	69.336 ppb	00:13:47

2	P 214.914†	1519.3	1221.6	618.43 ug/L	618.43 ppb	00:13:47
2	Pb 220.353†	392.9	395.2	65.172 ug/L	65.172 ppb	00:13:47
2	S 181.975 Axial†	214.6	160.4	199.64 ug/L	199.64 ppb	00:13:47
2	Sb 206.836†	41.7	8.1	-5.0446 ug/L	-5.0446 ppb	00:13:47
2	Se 196.026†	-349.1	-310.5	-10.454 ug/L	-10.454 ppb	00:13:47
2	Si 251.611†	267815.1	250650.1	9104.2 ug/L	9104.2 ppb	00:13:27
2	Sn 189.927†	15.7	-13.9	-6.4621 ug/L	-6.4621 ppb	00:13:47
2	Ti 334.940†	1111180.1	1043504.6	2099.6 ug/L	2099.6 ppb	00:13:22
2	Tl 190.801†	-108.5	-64.7	-1.9291 ug/L	-1.9291 ppb	00:13:47
2	U 409.014†	-9353.8	-6534.3	-228.71 ug/L	-228.71 ppb	00:13:22
2	V 292.402†	9986.3	11028.2	73.469 ug/L	73.469 ppb	00:13:27
2	Zn 213.857†	31935.1	28807.4	306.52 ug/L	306.52 ppb	00:13:27
2	SiO2†	272006.3	254566.7	19792 ug/L	19792 ppb	00:14:29
3	Sc Radial	5059.5	5059.5	105 %		00:12:24
3	Y RADIAL	6399.4	6399.4	125.3 %		00:12:24
3	Al 396.153Radial†	31561.7	30159.1	28772 ug/L	28772 ppb	00:12:24
3	Ca 317.933Radial†	4312.5	4088.4	7567.9 ug/L	7567.9 ppb	00:12:24
3	Fe 238.204 Radial†	7423.8	7067.2	78865 ug/L	78865 ppb	00:12:24
3	K 766.490 Radial†	25858.0	22396.8	4442.9 ug/L	4442.9 ppb	00:12:24
3	Mg 279.077 IEC†	134.9	127.5	5199.0 ug/L	5199.0 ppb	00:12:44
3	Na 589.592 Radial†	949.4	1459.7	519.80 ug/L	519.80 ppb	00:12:24
3	Sr 421.552†	8831.2	8403.8	62.907 ug/L	62.907 ppb	00:12:24
3	Sc 361.383	849258.3	849258.3	107.93 %		00:13:53
3	Y 371.029	893533.2	893533.2	127.37 %		00:13:53
3	Ag 328.068†	-4230.8	-4128.2	3.5273 ug/L	3.5273 ppb	00:13:58
3	As 188.979†	-21.8	8.6	40.468 ug/L	40.468 ppb	00:14:18
3	B 249.677†	133.1	268.7	-6.0686 ug/L	-6.0686 ppb	00:13:58
3	Ba 233.527†	33671.7	31197.3	371.96 ug/L	371.96 ppb	00:13:58
3	Be 313.107†	-12863.5	-2489.1	3.7713 ug/L	3.7713 ppb	00:13:58
3	Cd 226.502†	434.9	597.2	0.3360 ug/L	0.3360 ppb	00:14:18
3	Co 228.616†	680.2	685.6	15.448 ug/L	15.448 ppb	00:14:18
3	Cr 267.716†	10339.3	9514.1	131.75 ug/L	131.75 ppb	00:13:58
3	Cu 324.752†	18095.3	7655.5	32.854 ug/L	32.854 ppb	00:13:58
3	Mn 257.610†	1491896.9	1381867.8	2223.2 ug/L	2223.2 ppb	00:13:53
3	Mo 202.031†	54.8	35.6	9.4847 ug/L	9.4847 ppb	00:14:18
3	Ni 231.604†	2451.0	2169.6	69.440 ug/L	69.440 ppb	00:14:18
3	P 214.914†	1505.5	1191.5	601.61 ug/L	601.61 ppb	00:14:18
3	Pb 220.353†	394.4	392.1	64.705 ug/L	64.705 ppb	00:14:18
3	S 181.975 Axial†	209.8	153.5	190.79 ug/L	190.79 ppb	00:14:18
3	Sb 206.836†	61.5	25.9	2.0803 ug/L	2.0803 ppb	00:14:18
3	Se 196.026†	-329.0	-287.9	3.8072 ug/L	3.8072 ppb	00:14:18
3	Si 251.611†	269282.7	248949.6	9042.4 ug/L	9042.4 ppb	00:13:58
3	Sn 189.927†	15.5	-14.3	-6.5736 ug/L	-6.5736 ppb	00:14:18
3	Ti 334.940†	1124326.6	1042987.7	2098.5 ug/L	2098.5 ppb	00:13:53
3	Tl 190.801†	-112.5	-67.2	-3.0934 ug/L	-3.0934 ppb	00:14:18
3	U 409.014†	-9366.2	-6438.8	-225.52 ug/L	-225.52 ppb	00:13:53
3	V 292.402†	10029.3	10954.0	72.864 ug/L	72.864 ppb	00:13:58
3	Zn 213.857†	32062.2	28560.2	303.75 ug/L	303.75 ppb	00:13:58
3	SiO2†	268331.0	248053.2	19286 ug/L	19286 ppb	00:14:34

Mean Data: 246437006|958097|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	842004.2	107.01 %	0.801			0.75%
Sc Radial	5040.5	105 %	0.3			0.33%
Y 371.029	886045.1	126.30 %	0.932			0.74%
Y RADIAL	6366.8	124.6 %	0.61			0.49%
Ag 328.068†	-4150.5	3.3788 ug/L	0.31892	3.3788 ppb	0.31892	9.44%
Al 396.153Radial†	29981.6	28603 ug/L	147.0	28603 ppb	147.0	0.51%
As 188.979†	6.8	39.633 ug/L	2.1607	39.633 ppb	2.1607	5.45%
B 249.677†	276.8	-5.8414 ug/L	0.73428	-5.8414 ppb	0.73428	12.57%
Ba 233.527†	31484.1	375.36 ug/L	3.730	375.36 ppb	3.730	0.99%
Be 313.107†	-2591.6	3.7329 ug/L	0.04285	3.7329 ppb	0.04285	1.15%
Ca 317.933Radial†	4072.8	7539.0 ug/L	34.59	7539.0 ppb	34.59	0.46%
Cd 226.502†	599.6	0.3838 ug/L	0.11981	0.3838 ppb	0.11981	31.22%
Co 228.616†	679.4	15.258 ug/L	0.1744	15.258 ppb	0.1744	1.14%
Cr 267.716†	9589.7	132.78 ug/L	0.897	132.78 ppb	0.897	0.68%
Cu 324.752†	7789.5	33.349 ug/L	0.6168	33.349 ppb	0.6168	1.85%
Fe 238.204 Radial†	7055.6	78736 ug/L	111.7	78736 ppb	111.7	0.14%
K 766.490 Radial†	22243.6	4412.5 ug/L	27.17	4412.5 ppb	27.17	0.62%

Mg 279.077 IEC†	127.8	5209.2 ug/L	55.42	5209.2 ppb	55.42	1.06%
Mn 257.610†	1384993.9	2228.2 ug/L	4.62	2228.2 ppb	4.62	0.21%
Mo 202.031†	31.3	9.0837 ug/L	0.49462	9.0837 ppb	0.49462	5.45%
Na 589.592 Radial†	1471.2	523.90 ug/L	8.475	523.90 ppb	8.475	1.62%
Ni 231.604†	2166.9	69.355 ug/L	0.0772	69.355 ppb	0.0772	0.11%
P 214.914†	1211.4	612.67 ug/L	9.581	612.67 ppb	9.581	1.56%
Pb 220.353†	397.3	65.515 ug/L	1.0257	65.515 ppb	1.0257	1.57%
S 181.975 Axial†	154.0	191.44 ug/L	7.893	191.44 ppb	7.893	4.12%
Sb 206.836†	14.7	-2.3998 ug/L	3.90098	-2.3998 ppb	3.90098	162.55%
Se 196.026†	-296.1	-1.5351 ug/L	7.77428	-1.5351 ppb	7.77428	506.43%
Si 251.611†	251150.1	9122.4 ug/L	90.39	9122.4 ppb	90.39	0.99%
Sn 189.927†	-11.3	-5.8434 ug/L	1.16951	-5.8434 ppb	1.16951	20.01%
Sr 421.552†	8334.9	62.391 ug/L	0.4476	62.391 ppb	0.4476	0.72%
Ti 334.940†	1043507.2	2099.6 ug/L	1.04	2099.6 ppb	1.04	0.05%
Tl 190.801†	-68.5	-3.6522 ug/L	2.06011	-3.6522 ppb	2.06011	56.41%
U 409.014†	-6504.4	-227.71 ug/L	1.900	-227.71 ppb	1.900	0.83%
V 292.402†	11051.7	73.647 ug/L	0.8855	73.647 ppb	0.8855	1.20%
Zn 213.857†	28833.1	306.79 ug/L	3.185	306.79 ppb	3.185	1.04%
SiO2†	250996.8	19515 ug/L	256.7	19515 ppb	256.7	1.32%



Sequence No.: 51  
 Sample ID: 246437007|958097|1  
 Analyst: HSC  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 76  
 Date Collected: 3/4/2010 00:16:46  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Replicate Data: 246437007|958097|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	4748.0	4748.0	98.5	%			00:18:39
1	Y RADIAL	6413.8	6413.8	125.6	%			00:18:39
1	Al 396.153Radial†	23096.7	23536.8	22454	ug/L	22454	ppb	00:18:39
1	Ca 317.933Radial†	3732.2	3768.8	6976.3	ug/L	6976.3	ppb	00:18:39
1	Fe 238.204 Radial†	5493.9	5571.7	62176	ug/L	62176	ppb	00:18:39
1	K 766.490 Radial†	24965.4	23107.2	4584.1	ug/L	4584.1	ppb	00:18:39
1	Mg 279.077 IEC†	100.8	101.3	4130.0	ug/L	4130.0	ppb	00:18:59
1	Na 589.592 Radial†	1610.7	2190.5	780.07	ug/L	780.07	ppb	00:18:39
1	Sr 421.552†	7437.8	7541.1	56.448	ug/L	56.448	ppb	00:18:39
1	Sc 361.383	844093.8	844093.8	107.27	%			00:19:56
1	Y 371.029	946552.6	946552.6	134.93	%			00:19:56
1	Ag 328.068†	-3222.0	-3211.8	2.9912	ug/L	2.9912	ppb	00:20:01
1	As 188.979†	-15.8	14.2	32.668	ug/L	32.668	ppb	00:20:21
1	B 249.677†	25.0	168.6	-5.8765	ug/L	-5.8765	ppb	00:20:01
1	Ba 233.527†	31475.0	29340.4	349.40	ug/L	349.40	ppb	00:20:01
1	Be 313.107†	-6808.7	3082.2	4.3259	ug/L	4.3259	ppb	00:20:01
1	Cd 226.502†	291.5	465.9	0.2057	ug/L	0.2057	ppb	00:20:21
1	Co 228.616†	500.1	521.5	12.204	ug/L	12.204	ppb	00:20:21
1	Cr 267.716†	12870.8	11932.6	164.45	ug/L	164.45	ppb	00:20:01
1	Cu 324.752†	16487.4	6259.2	26.782	ug/L	26.782	ppb	00:20:01
1	Mn 257.610†	1473715.6	1373376.6	2208.0	ug/L	2208.0	ppb	00:19:56
1	Mo 202.031†	23.8	7.0	5.5561	ug/L	5.5561	ppb	00:20:21
1	Ni 231.604†	3312.2	2986.3	95.588	ug/L	95.588	ppb	00:20:21
1	P 214.914†	1166.1	883.6	443.02	ug/L	443.02	ppb	00:20:21
1	Pb 220.353†	343.1	346.5	57.060	ug/L	57.060	ppb	00:20:21
1	S 181.975 Axial†	216.4	160.9	201.35	ug/L	201.35	ppb	00:20:21
1	Sb 206.836†	47.2	12.9	-0.4355	ug/L	-0.4355	ppb	00:20:21
1	Se 196.026†	-276.0	-240.3	-5.1985	ug/L	-5.1985	ppb	00:20:21
1	Si 251.611†	218329.0	202976.9	7372.6	ug/L	7372.6	ppb	00:20:01
1	Sn 189.927†	21.2	-8.9	-4.4422	ug/L	-4.4422	ppb	00:20:21
1	Ti 334.940†	726465.6	678473.7	1365.3	ug/L	1365.3	ppb	00:19:56
1	Tl 190.801†	-104.9	-60.8	-6.2046	ug/L	-6.2046	ppb	00:20:21
1	U 409.014†	-10474.3	-7524.9	-260.17	ug/L	-260.17	ppb	00:19:56
1	V 292.402†	5402.9	6698.0	42.174	ug/L	42.174	ppb	00:20:01
1	Zn 213.857†	26079.3	23164.7	246.39	ug/L	246.39	ppb	00:20:01
1	SiO2†	221067.1	205514.7	15979	ug/L	15979	ppb	00:21:29
2	Sc Radial	4897.3	4897.3	102	%			00:19:04
2	Y RADIAL	6681.3	6681.3	130.8	%			00:19:04
2	Al 396.153Radial†	23985.9	23697.4	22608	ug/L	22608	ppb	00:19:04
2	Ca 317.933Radial†	3899.2	3817.7	7066.8	ug/L	7066.8	ppb	00:19:04
2	Fe 238.204 Radial†	5713.1	5617.5	62687	ug/L	62687	ppb	00:19:04
2	K 766.490 Radial†	25802.7	23158.8	4594.2	ug/L	4594.2	ppb	00:19:04
2	Mg 279.077 IEC†	107.7	105.1	4284.5	ug/L	4284.5	ppb	00:19:24
2	Na 589.592 Radial†	1767.8	2295.4	817.41	ug/L	817.41	ppb	00:19:04
2	Sr 421.552†	7654.3	7524.1	56.320	ug/L	56.320	ppb	00:19:04
2	Sc 361.383	842318.4	842318.4	107.05	%			00:20:27
2	Y 371.029	945140.7	945140.7	134.72	%			00:20:27
2	Ag 328.068†	-3212.9	-3209.6	3.1615	ug/L	3.1615	ppb	00:20:32
2	As 188.979†	-7.8	21.6	36.068	ug/L	36.068	ppb	00:20:52
2	B 249.677†	38.7	181.4	-5.6339	ug/L	-5.6339	ppb	00:20:32
2	Ba 233.527†	32101.5	29987.5	357.08	ug/L	357.08	ppb	00:20:32
2	Be 313.107†	-6985.3	2903.9	4.2490	ug/L	4.2490	ppb	00:20:32
2	Cd 226.502†	293.1	468.0	0.1830	ug/L	0.1830	ppb	00:20:52
2	Co 228.616†	490.4	513.5	11.959	ug/L	11.959	ppb	00:20:52
2	Cr 267.716†	13094.9	12167.2	167.66	ug/L	167.66	ppb	00:20:32
2	Cu 324.752†	16760.1	6546.3	27.879	ug/L	27.879	ppb	00:20:32
2	Mn 257.610†	1468146.1	1371069.4	2204.4	ug/L	2204.4	ppb	00:20:27
2	Mo 202.031†	25.3	8.4	5.7243	ug/L	5.7243	ppb	00:20:52
2	Ni 231.604†	3302.2	2983.5	95.499	ug/L	95.499	ppb	00:20:52

2	P 214.914†	1163.6	883.6	442.47 ug/L	442.47 ppb	00:20:52
2	Pb 220.353†	343.9	348.0	57.297 ug/L	57.297 ppb	00:20:52
2	S 181.975 Axial†	209.2	154.6	193.27 ug/L	193.27 ppb	00:20:52
2	Sb 206.836†	41.5	7.7	-2.4533 ug/L	-2.4533 ppb	00:20:52
2	Se 196.026†	-271.9	-237.0	-2.0069 ug/L	-2.0069 ppb	00:20:52
2	Si 251.611†	223300.7	208050.3	7556.9 ug/L	7556.9 ppb	00:20:32
2	Sn 189.927†	36.2	5.2	-1.1119 ug/L	-1.1119 ppb	00:20:52
2	Ti 334.940†	723574.0	677199.9	1362.8 ug/L	1362.8 ppb	00:20:27
2	Tl 190.801†	-96.0	-52.6	-2.5060 ug/L	-2.5060 ppb	00:20:52
2	U 409.014†	-10394.0	-7470.5	-258.41 ug/L	-258.41 ppb	00:20:27
2	V 292.402†	5548.6	6844.8	43.273 ug/L	43.273 ppb	00:20:32
2	Zn 213.857†	26646.0	23745.4	252.74 ug/L	252.74 ppb	00:20:32
2	SiO2†	218917.5	203941.1	15856 ug/L	15856 ppb	00:21:34
3	Sc Radial	4874.8	4874.8	101 %		00:19:29
3	Y RADIAL	6606.4	6606.4	129.3 %		00:19:29
3	Al 396.153Radial†	23755.0	23577.9	22494 ug/L	22494 ppb	00:19:29
3	Ca 317.933Radial†	3853.8	3790.4	7016.4 ug/L	7016.4 ppb	00:19:29
3	Fe 238.204 Radial†	5668.4	5599.2	62483 ug/L	62483 ppb	00:19:29
3	K 766.490 Radial†	25574.1	23049.8	4572.6 ug/L	4572.6 ppb	00:19:29
3	Mg 279.077 IEC†	104.7	102.5	4179.4 ug/L	4179.4 ppb	00:19:49
3	Na 589.592 Radial†	1706.1	2242.3	798.52 ug/L	798.52 ppb	00:19:29
3	Sr 421.552†	7575.0	7480.4	55.993 ug/L	55.993 ppb	00:19:29
3	Sc 361.383	847600.0	847600.0	107.72 %		00:20:58
3	Y 371.029	948770.7	948770.7	135.24 %		00:20:58
3	Ag 328.068†	-3125.9	-3110.2	3.6061 ug/L	3.6061 ppb	00:21:03
3	As 188.979†	-19.4	10.9	31.236 ug/L	31.236 ppb	00:21:23
3	B 249.677†	-21.0	125.8	-7.0088 ug/L	-7.0088 ppb	00:21:03
3	Ba 233.527†	31700.9	29428.7	350.45 ug/L	350.45 ppb	00:21:03
3	Be 313.107†	-6784.3	3131.1	4.3339 ug/L	4.3339 ppb	00:21:03
3	Cd 226.502†	309.9	482.0	0.4014 ug/L	0.4014 ppb	00:21:23
3	Co 228.616†	505.3	524.5	12.300 ug/L	12.300 ppb	00:21:23
3	Cr 267.716†	13034.0	12034.4	165.85 ug/L	165.85 ppb	00:21:03
3	Cu 324.752†	16463.0	6172.9	26.477 ug/L	26.477 ppb	00:21:03
3	Mn 257.610†	1474569.7	1368486.6	2200.2 ug/L	2200.2 ppb	00:20:58
3	Mo 202.031†	27.6	10.4	5.8955 ug/L	5.8955 ppb	00:21:23
3	Ni 231.604†	3314.6	2975.8	95.253 ug/L	95.253 ppb	00:21:23
3	P 214.914†	1155.5	869.3	434.91 ug/L	434.91 ppb	00:21:23
3	Pb 220.353†	366.3	366.7	60.342 ug/L	60.342 ppb	00:21:23
3	S 181.975 Axial†	203.6	148.1	185.09 ug/L	185.09 ppb	00:21:23
3	Sb 206.836†	53.6	18.7	1.9424 ug/L	1.9424 ppb	00:21:23
3	Se 196.026†	-265.4	-229.4	2.1429 ug/L	2.1429 ppb	00:21:23
3	Si 251.611†	219843.8	203541.3	7393.1 ug/L	7393.1 ppb	00:21:03
3	Sn 189.927†	31.1	0.2	-2.2942 ug/L	-2.2942 ppb	00:21:23
3	Ti 334.940†	726777.6	675962.1	1360.3 ug/L	1360.3 ppb	00:20:58
3	Tl 190.801†	-102.8	-58.4	-5.1913 ug/L	-5.1913 ppb	00:21:23
3	U 409.014†	-10549.2	-7554.0	-261.18 ug/L	-261.18 ppb	00:20:58
3	V 292.402†	5418.1	6691.3	42.084 ug/L	42.084 ppb	00:21:03
3	Zn 213.857†	26304.6	23273.3	247.55 ug/L	247.55 ppb	00:21:03
3	SiO2†	223225.0	206665.5	16068 ug/L	16068 ppb	00:21:40

Mean Data: 246437007|958097|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	844670.8	107.35 %	0.342			0.32%
Sc Radial	4840.0	100 %	1.7			1.66%
Y 371.029	946821.3	134.96 %	0.261			0.19%
Y RADIAL	6567.2	128.6 %	2.70			2.10%
Ag 328.068†	-3177.2	3.2529 ug/L	0.31749	3.2529 ppb	0.31749	9.76%
Al 396.153Radial†	23604.0	22519 ug/L	79.6	22519 ppb	79.6	0.35%
As 188.979†	15.5	33.324 ug/L	2.4817	33.324 ppb	2.4817	7.45%
B 249.677†	158.6	-6.1731 ug/L	0.73389	-6.1731 ppb	0.73389	11.89%
Ba 233.527†	29585.5	352.31 ug/L	4.163	352.31 ppb	4.163	1.18%
Be 313.107†	3039.1	4.3029 ug/L	0.04685	4.3029 ppb	0.04685	1.09%
Ca 317.933Radial†	3792.3	7019.8 ug/L	45.33	7019.8 ppb	45.33	0.65%
Cd 226.502†	472.0	0.2634 ug/L	0.12008	0.2634 ppb	0.12008	45.59%
Co 228.616†	519.8	12.154 ug/L	0.1759	12.154 ppb	0.1759	1.45%
Cr 267.716†	12044.7	165.99 ug/L	1.613	165.99 ppb	1.613	0.97%
Cu 324.752†	6326.1	27.046 ug/L	0.7375	27.046 ppb	0.7375	2.73%
Fe 238.204 Radial†	5596.1	62449 ug/L	257.0	62449 ppb	257.0	0.41%
K 766.490 Radial†	23105.3	4583.6 ug/L	10.81	4583.6 ppb	10.81	0.24%

Mg 279.077 IEC†	103.0	4198.0 ug/L	78.89	4198.0 ppb	78.89	1.88%
Mn 257.610†	1370977.5	2204.2 ug/L	3.91	2204.2 ppb	3.91	0.18%
Mo 202.031†	8.6	5.7253 ug/L	0.16970	5.7253 ppb	0.16970	2.96%
Na 589.592 Radial†	2242.8	798.67 ug/L	18.670	798.67 ppb	18.670	2.34%
Ni 231.604†	2981.9	95.447 ug/L	0.1735	95.447 ppb	0.1735	0.18%
P 214.914†	878.8	440.14 ug/L	4.531	440.14 ppb	4.531	1.03%
Pb 220.353†	353.7	58.233 ug/L	1.8300	58.233 ppb	1.8300	3.14%
S 181.975 Axial†	154.5	193.24 ug/L	8.129	193.24 ppb	8.129	4.21%
Sb 206.836†	13.1	-0.3154 ug/L	2.20027	-0.3154 ppb	2.20027	697.50%
Se 196.026†	-235.6	-1.6875 ug/L	3.68111	-1.6875 ppb	3.68111	218.14%
Si 251.611†	204856.2	7440.9 ug/L	101.00	7440.9 ppb	101.00	1.36%
Sn 189.927†	-1.2	-2.6161 ug/L	1.68834	-2.6161 ppb	1.68834	64.54%
Sr 421.552†	7515.2	56.254 ug/L	0.2348	56.254 ppb	0.2348	0.42%
Ti 334.940†	677211.9	1362.8 ug/L	2.53	1362.8 ppb	2.53	0.19%
Tl 190.801†	-57.3	-4.6340 ug/L	1.91123	-4.6340 ppb	1.91123	41.24%
U 409.014†	-7516.5	-259.92 ug/L	1.406	-259.92 ppb	1.406	0.54%
V 292.402†	6744.7	42.510 ug/L	0.6620	42.510 ppb	0.6620	1.56%
Zn 213.857†	23394.5	248.89 ug/L	3.381	248.89 ppb	3.381	1.36%
SiO2†	205373.8	15968 ug/L	106.3	15968 ppb	106.3	0.67%

Sequence No.: 52  
 Sample ID: 246437008|958097|1  
 Analyst: HSC  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 77  
 Date Collected: 3/4/2010 00:23:50  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Replicate Data: 246437008|958097|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Units	Conc. Units	Sample Units	Analysis Time
1	Sc Radial	5174.5	5174.5	107	%			00:25:44
1	Y RADIAL	6910.0	6910.0	135.3	%			00:25:44
1	Al 396.153Radial†	27142.1	25372.7	24206	ug/L	24206	ppb	00:25:44
1	Ca 317.933Radial†	5000.4	4638.0	8585.2	ug/L	8585.2	ppb	00:25:44
1	Fe 238.204 Radial†	8184.9	7619.1	85024	ug/L	85024	ppb	00:25:44
1	K 766.490 Radial†	29213.2	24975.3	4954.1	ug/L	4954.1	ppb	00:25:44
1	Mg 279.077 IEC†	133.1	123.0	5002.4	ug/L	5002.4	ppb	00:26:04
1	Na 589.592 Radial†	1222.1	1693.7	603.15	ug/L	603.15	ppb	00:25:44
1	Sr 421.552†	9880.8	9194.7	68.825	ug/L	68.825	ppb	00:25:44
1	Sc 361.383	849968.3	849968.3	108.02	%			00:27:01
1	Y 371.029	949142.7	949142.7	135.29	%			00:27:01
1	Ag 328.068†	-4450.2	-4328.1	4.3840	ug/L	4.3840	ppb	00:27:06
1	As 188.979†	-26.1	4.7	42.058	ug/L	42.058	ppb	00:27:26
1	B 249.677†	90.8	229.3	-8.0669	ug/L	-8.0669	ppb	00:27:06
1	Ba 233.527†	36879.9	34141.3	406.99	ug/L	406.99	ppb	00:27:06
1	Be 313.107†	-13084.6	-2683.9	4.1906	ug/L	4.1906	ppb	00:27:06
1	Cd 226.502†	488.8	646.8	0.4026	ug/L	0.4026	ppb	00:27:26
1	Co 228.616†	715.4	717.7	15.886	ug/L	15.886	ppb	00:27:26
1	Cr 267.716†	10930.0	10052.9	139.23	ug/L	139.23	ppb	00:27:06
1	Cu 324.752†	17673.6	7251.1	31.693	ug/L	31.693	ppb	00:27:06
1	Mn 257.610†	2026440.7	1875573.1	3015.5	ug/L	3015.5	ppb	00:27:01
1	Mo 202.031†	31.5	13.9	7.9864	ug/L	7.9864	ppb	00:27:26
1	Ni 231.604†	2794.2	2485.5	79.552	ug/L	79.552	ppb	00:27:26
1	P 214.914†	2019.5	1666.1	860.19	ug/L	860.19	ppb	00:27:26
1	Pb 220.353†	462.4	454.7	73.324	ug/L	73.324	ppb	00:27:26
1	S 181.975 Axial†	275.6	214.3	269.32	ug/L	269.32	ppb	00:27:26
1	Sb 206.836†	41.9	7.7	-5.9103	ug/L	-5.9103	ppb	00:27:26
1	Se 196.026†	-365.2	-321.2	-3.1535	ug/L	-3.1535	ppb	00:27:26
1	Si 251.611†	205726.0	189902.9	6897.7	ug/L	6897.7	ppb	00:27:06
1	Sn 189.927†	15.6	-14.2	-6.7102	ug/L	-6.7102	ppb	00:27:26
1	Ti 334.940†	1242804.4	1151799.7	2317.5	ug/L	2317.5	ppb	00:27:01
1	Tl 190.801†	-112.3	-66.9	2.6567	ug/L	2.6567	ppb	00:27:26
1	U 409.014†	-10635.7	-7606.9	-265.47	ug/L	-265.47	ppb	00:27:01
1	V 292.402†	8993.9	9987.6	63.961	ug/L	63.961	ppb	00:27:06
1	Zn 213.857†	38637.4	34622.4	369.85	ug/L	369.85	ppb	00:27:06
1	SiO2†	203681.3	187995.3	14617	ug/L	14617	ppb	00:28:34
2	Sc Radial	5078.3	5078.3	105	%			00:26:09
2	Y RADIAL	6815.1	6815.1	133.4	%			00:26:09
2	Al 396.153Radial†	26713.6	25444.9	24275	ug/L	24275	ppb	00:26:09
2	Ca 317.933Radial†	4949.4	4677.8	8658.9	ug/L	8658.9	ppb	00:26:09
2	Fe 238.204 Radial†	8101.9	7684.8	85757	ug/L	85757	ppb	00:26:09
2	K 766.490 Radial†	28888.3	25182.3	4995.2	ug/L	4995.2	ppb	00:26:09
2	Mg 279.077 IEC†	132.7	124.9	5084.3	ug/L	5084.3	ppb	00:26:29
2	Na 589.592 Radial†	1249.2	1741.0	619.97	ug/L	619.97	ppb	00:26:09
2	Sr 421.552†	9756.4	9251.1	69.247	ug/L	69.247	ppb	00:26:09
2	Sc 361.383	846841.8	846841.8	107.62	%			00:27:32
2	Y 371.029	945281.3	945281.3	134.74	%			00:27:32
2	Ag 328.068†	-4435.0	-4329.2	4.6049	ug/L	4.6049	ppb	00:27:37
2	As 188.979†	-27.6	3.2	41.604	ug/L	41.604	ppb	00:27:57
2	B 249.677†	96.6	235.1	-8.0404	ug/L	-8.0404	ppb	00:27:37
2	Ba 233.527†	36956.9	34338.8	409.35	ug/L	409.35	ppb	00:27:37
2	Be 313.107†	-13101.1	-2744.0	4.1697	ug/L	4.1697	ppb	00:27:37
2	Cd 226.502†	509.8	667.9	0.6277	ug/L	0.6277	ppb	00:27:57
2	Co 228.616†	703.1	708.6	15.599	ug/L	15.599	ppb	00:27:57
2	Cr 267.716†	10952.5	10111.2	140.05	ug/L	140.05	ppb	00:27:37
2	Cu 324.752†	17669.8	7308.0	31.946	ug/L	31.946	ppb	00:27:37
2	Mn 257.610†	2025561.5	1881682.2	3025.3	ug/L	3025.3	ppb	00:27:32
2	Mo 202.031†	36.0	18.3	8.4435	ug/L	8.4435	ppb	00:27:57
2	Ni 231.604†	2814.5	2513.8	80.461	ug/L	80.461	ppb	00:27:57

2	P 214.914†	2055.6	1706.6	882.14 ug/L	882.14 ppb	00:27:57
2	Pb 220.353†	442.5	437.9	70.538 ug/L	70.538 ppb	00:27:57
2	S 181.975 Axial†	277.2	216.7	272.34 ug/L	272.34 ppb	00:27:57
2	Sb 206.836†	48.7	14.2	-3.3031 ug/L	-3.3031 ppb	00:27:57
2	Se 196.026†	-367.3	-324.4	-3.4663 ug/L	-3.4663 ppb	00:27:57
2	Si 251.611†	206042.1	190899.7	6933.9 ug/L	6933.9 ppb	00:27:37
2	Sn 189.927†	16.0	-13.8	-6.6402 ug/L	-6.6402 ppb	00:27:57
2	Ti 334.940†	1238945.3	1152461.6	2318.9 ug/L	2318.9 ppb	00:27:32
2	Tl 190.801†	-125.2	-79.3	-2.9958 ug/L	-2.9958 ppb	00:27:57
2	U 409.014†	-10687.1	-7691.0	-268.38 ug/L	-268.38 ppb	00:27:32
2	V 292.402†	8951.8	9979.3	63.788 ug/L	63.788 ppb	00:27:37
2	Zn 213.857†	38691.2	34804.5	371.75 ug/L	371.75 ppb	00:27:37
2	SiO2†	208562.5	193227.0	15023 ug/L	15023 ppb	00:28:39
3	Sc Radial	5121.2	5121.2	106 %		00:26:34
3	Y RADIAL	6831.6	6831.6	133.7 %		00:26:34
3	Al 396.153Radial†	26888.3	25397.2	24229 ug/L	24229 ppb	00:26:34
3	Ca 317.933Radial†	4984.7	4671.7	8647.7 ug/L	8647.7 ppb	00:26:34
3	Fe 238.204 Radial†	8110.1	7628.1	85124 ug/L	85124 ppb	00:26:34
3	K 766.490 Radial†	28798.6	24868.5	4932.9 ug/L	4932.9 ppb	00:26:34
3	Mg 279.077 IEC†	131.1	122.4	4979.7 ug/L	4979.7 ppb	00:26:54
3	Na 589.592 Radial†	1208.2	1692.4	602.68 ug/L	602.68 ppb	00:26:34
3	Sr 421.552†	9769.4	9185.8	68.758 ug/L	68.758 ppb	00:26:34
3	Sc 361.383	840074.4	840074.4	106.76 %		00:28:03
3	Y 371.029	937792.3	937792.3	133.68 %		00:28:03
3	Ag 328.068†	-4414.6	-4343.3	4.3352 ug/L	4.3352 ppb	00:28:08
3	As 188.979†	-29.9	0.8	40.416 ug/L	40.416 ppb	00:28:28
3	B 249.677†	80.4	220.6	-8.3048 ug/L	-8.3048 ppb	00:28:08
3	Ba 233.527†	36711.6	34385.7	409.89 ug/L	409.89 ppb	00:28:08
3	Be 313.107†	-12938.5	-2689.7	4.1995 ug/L	4.1995 ppb	00:28:08
3	Cd 226.502†	503.2	665.6	0.6605 ug/L	0.6605 ppb	00:28:28
3	Co 228.616†	706.5	717.2	15.862 ug/L	15.862 ppb	00:28:28
3	Cr 267.716†	10852.8	10099.7	139.88 ug/L	139.88 ppb	00:28:08
3	Cu 324.752†	17451.7	7235.9	31.641 ug/L	31.641 ppb	00:28:08
3	Mn 257.610†	2010897.3	1883108.5	3027.6 ug/L	3027.6 ppb	00:28:03
3	Mo 202.031†	43.6	25.7	9.0721 ug/L	9.0721 ppb	00:28:28
3	Ni 231.604†	2779.8	2502.4	80.093 ug/L	80.093 ppb	00:28:28
3	P 214.914†	2046.2	1713.2	886.33 ug/L	886.33 ppb	00:28:28
3	Pb 220.353†	457.3	455.0	73.367 ug/L	73.367 ppb	00:28:28
3	S 181.975 Axial†	276.1	217.8	273.74 ug/L	273.74 ppb	00:28:28
3	Sb 206.836†	62.6	27.6	2.0498 ug/L	2.0498 ppb	00:28:28
3	Se 196.026†	-361.6	-321.8	-3.2972 ug/L	-3.2972 ppb	00:28:28
3	Si 251.611†	204234.9	190749.2	6928.5 ug/L	6928.5 ppb	00:28:08
3	Sn 189.927†	15.3	-14.3	-6.7456 ug/L	-6.7456 ppb	00:28:28
3	Ti 334.940†	1230948.8	1154245.3	2322.5 ug/L	2322.5 ppb	00:28:03
3	Tl 190.801†	-130.6	-85.3	-5.6843 ug/L	-5.6843 ppb	00:28:28
3	U 409.014†	-10451.3	-7550.1	-263.57 ug/L	-263.57 ppb	00:28:03
3	V 292.402†	8898.9	9996.8	64.032 ug/L	64.032 ppb	00:28:08
3	Zn 213.857†	38472.3	34889.1	372.78 ug/L	372.78 ppb	00:28:08
3	SiO2†	209165.4	195352.9	15189 ug/L	15189 ppb	00:28:44

-----  
Mean Data: 246437008|958097|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	845628.2	107.47 %	0.643			0.60%
Sc Radial	5124.7	106 %	1.0			0.94%
Y 371.029	944072.1	134.57 %	0.823			0.61%
Y RADIAL	6852.2	134.1 %	0.99			0.74%
Ag 328.068†	-4333.5	4.4414 ug/L	0.14372	4.4414 ppb	0.14372	3.24%
Al 396.153Radial†	25404.9	24237 ug/L	35.0	24237 ppb	35.0	0.14%
As 188.979†	2.9	41.359 ug/L	0.8484	41.359 ppb	0.8484	2.05%
B 249.677†	228.3	-8.1373 ug/L	0.14563	-8.1373 ppb	0.14563	1.79%
Ba 233.527†	34288.6	408.74 ug/L	1.541	408.74 ppb	1.541	0.38%
Be 313.107†	-2705.9	4.1866 ug/L	0.01528	4.1866 ppb	0.01528	0.36%
Ca 317.933Radial†	4662.5	8630.6 ug/L	39.71	8630.6 ppb	39.71	0.46%
Cd 226.502†	660.1	0.5636 ug/L	0.14038	0.5636 ppb	0.14038	24.91%
Co 228.616†	714.5	15.782 ug/L	0.1595	15.782 ppb	0.1595	1.01%
Cr 267.716†	10088.0	139.72 ug/L	0.428	139.72 ppb	0.428	0.31%
Cu 324.752†	7265.0	31.760 ug/L	0.1631	31.760 ppb	0.1631	0.51%
Fe 238.204 Radial†	7644.0	85302 ug/L	397.3	85302 ppb	397.3	0.47%
K 766.490 Radial†	25008.7	4960.8 ug/L	31.67	4960.8 ppb	31.67	0.64%

Mg 279.077 IEC†	123.4	5022.1 ug/L	55.01	5022.1 ppb	55.01	1.10%
Mn 257.610†	1880121.3	3022.8 ug/L	6.44	3022.8 ppb	6.44	0.21%
Mo 202.031†	19.3	8.5006 ug/L	0.54510	8.5006 ppb	0.54510	6.41%
Na 589.592 Radial†	1709.0	608.60 ug/L	9.850	608.60 ppb	9.850	1.62%
Ni 231.604†	2500.6	80.035 ug/L	0.4570	80.035 ppb	0.4570	0.57%
P 214.914†	1695.3	876.22 ug/L	14.038	876.22 ppb	14.038	1.60%
Pb 220.353†	449.2	72.409 ug/L	1.6211	72.409 ppb	1.6211	2.24%
S 181.975 Axial†	216.2	271.80 ug/L	2.258	271.80 ppb	2.258	0.83%
Sb 206.836†	16.5	-2.3879 ug/L	4.05820	-2.3879 ppb	4.05820	169.95%
Se 196.026†	-322.4	-3.3057 ug/L	0.15658	-3.3057 ppb	0.15658	4.74%
Si 251.611†	190517.3	6920.1 ug/L	19.51	6920.1 ppb	19.51	0.28%
Sn 189.927†	-14.1	-6.6987 ug/L	0.05364	-6.6987 ppb	0.05364	0.80%
Sr 421.552†	9210.5	68.944 ug/L	0.2651	68.944 ppb	0.2651	0.38%
Ti 334.940†	1152835.5	2319.6 ug/L	2.55	2319.6 ppb	2.55	0.11%
Tl 190.801†	-77.2	-2.0078 ug/L	4.25740	-2.0078 ppb	4.25740	212.04%
U 409.014†	-7616.0	-265.81 ug/L	2.420	-265.81 ppb	2.420	0.91%
V 292.402†	9987.9	63.927 ug/L	0.1254	63.927 ppb	0.1254	0.20%
Zn 213.857†	34772.0	371.46 ug/L	1.487	371.46 ppb	1.487	0.40%
SiO2†	192191.7	14943 ug/L	294.4	14943 ppb	294.4	1.97%

Sequence No.: 53

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/4/2010 00:30:55

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	4529.0	4529.0	93.9 %		00:32:48
1	Y RADIAL	4793.4	4793.4	93.83 %		00:32:48
1	Al 396.153Radial†	5686.4	6136.7	5829.9 ug/L	5829.9 ppb	00:32:48
1	Ca 317.933Radial†	2941.1	3109.9	5756.6 ug/L	5756.6 ppb	00:33:08
1	Fe 238.204 Radial†	497.3	522.4	5844.6 ug/L	5844.6 ppb	00:33:08
1	K 766.490 Radial†	29879.2	29563.6	5862.0 ug/L	5862.0 ppb	00:32:48
1	Mg 279.077 IEC†	136.2	143.9	5959.4 ug/L	5959.4 ppb	00:33:08
1	Na 589.592 Radial†	30657.7	33191.2	11820 ug/L	11820 ppb	00:32:48
1	Sr 421.552†	73930.4	78690.1	589.53 ug/L	589.53 ppb	00:32:48
1	Sc 361.383	820537.6	820537.6	104.28 %		00:34:05
1	Y 371.029	728955.5	728955.5	103.91 %		00:34:05
1	Ag 328.068†	103268.1	98822.3	509.40 ug/L	509.40 ppb	00:34:10
1	As 188.979†	1186.2	1166.4	522.30 ug/L	522.30 ppb	00:34:30
1	B 249.677†	20407.4	19715.3	496.41 ug/L	496.41 ppb	00:34:10
1	Ba 233.527†	45401.2	43537.5	516.79 ug/L	516.79 ppb	00:34:10
1	Be 313.107†	1347939.2	1302057.2	519.77 ug/L	519.77 ppb	00:34:05
1	Cd 226.502†	37597.4	36248.9	514.57 ug/L	514.57 ppb	00:34:10
1	Co 228.616†	17776.6	17102.5	520.28 ug/L	520.28 ppb	00:34:10
1	Cr 267.716†	39432.9	37749.1	516.55 ug/L	516.55 ppb	00:34:10
1	Cu 324.752†	150418.9	135136.1	504.18 ug/L	504.18 ppb	00:34:10
1	Mn 257.610†	334143.7	320005.4	513.42 ug/L	513.42 ppb	00:34:10
1	Mo 202.031†	5775.4	5523.2	508.84 ug/L	508.84 ppb	00:34:30
1	Ni 231.604†	17093.4	16290.7	521.19 ug/L	521.19 ppb	00:34:10
1	P 214.914†	4970.2	4562.8	2442.9 ug/L	2442.9 ppb	00:34:30
1	Pb 220.353†	3216.3	3111.0	509.21 ug/L	509.21 ppb	00:34:30
1	S 181.975 Axial†	867.8	791.3	1010.1 ug/L	1010.1 ppb	00:34:30
1	Sb 206.836†	1348.1	1261.7	522.67 ug/L	522.67 ppb	00:34:30
1	Se 196.026†	854.1	836.1	524.93 ug/L	524.93 ppb	00:34:30
1	Si 251.611†	74368.8	70766.9	2564.2 ug/L	2564.2 ppb	00:34:10
1	Sn 189.927†	2256.7	2135.5	505.99 ug/L	505.99 ppb	00:34:30
1	Ti 334.940†	261392.9	251926.5	506.60 ug/L	506.60 ppb	00:34:10
1	Tl 190.801†	1129.0	1119.7	517.23 ug/L	517.23 ppb	00:34:30
1	U 409.014†	13498.8	15184.1	508.12 ug/L	508.12 ppb	00:34:10
1	V 292.402†	65830.5	64790.7	520.61 ug/L	520.61 ppb	00:34:10
1	Zn 213.857†	49386.9	46213.8	506.51 ug/L	506.51 ppb	00:34:10
1	SiO2†	75157.0	71508.1	5545.9 ug/L	5545.9 ppb	00:35:37
2	Sc Radial	4953.0	4953.0	103 %		00:33:13
2	Y RADIAL	5245.7	5245.7	102.7 %		00:33:13
2	Al 396.153Radial†	5473.2	5411.0	5137.8 ug/L	5137.8 ppb	00:33:13
2	Ca 317.933Radial†	2919.1	2820.5	5220.9 ug/L	5220.9 ppb	00:33:33
2	Fe 238.204 Radial†	497.6	477.3	5341.6 ug/L	5341.6 ppb	00:33:33
2	K 766.490 Radial†	28937.1	25924.0	5140.1 ug/L	5140.1 ppb	00:33:13
2	Mg 279.077 IEC†	136.6	131.9	5463.5 ug/L	5463.5 ppb	00:33:33
2	Na 589.592 Radial†	29677.3	29443.3	10485 ug/L	10485 ppb	00:33:13
2	Sr 421.552†	71309.6	69402.3	519.94 ug/L	519.94 ppb	00:33:13
2	Sc 361.383	831255.0	831255.0	105.64 %		00:34:36
2	Y 371.029	736670.0	736670.0	105.01 %		00:34:36
2	Ag 328.068†	103848.5	98095.0	505.50 ug/L	505.50 ppb	00:34:41
2	As 188.979†	1184.4	1150.0	514.92 ug/L	514.92 ppb	00:35:01
2	B 249.677†	20606.0	19651.0	494.87 ug/L	494.87 ppb	00:34:41
2	Ba 233.527†	45602.8	43167.0	512.38 ug/L	512.38 ppb	00:34:41
2	Be 313.107†	1362813.9	1299471.7	518.73 ug/L	518.73 ppb	00:34:36
2	Cd 226.502†	37761.6	35939.5	510.22 ug/L	510.22 ppb	00:34:41
2	Co 228.616†	17908.8	17007.9	517.40 ug/L	517.40 ppb	00:34:41
2	Cr 267.716†	39591.8	37412.1	511.92 ug/L	511.92 ppb	00:34:41
2	Cu 324.752†	151680.1	134470.2	501.66 ug/L	501.66 ppb	00:34:41
2	Mn 257.610†	336172.9	317794.8	509.85 ug/L	509.85 ppb	00:34:41
2	Mo 202.031†	5786.2	5462.0	503.16 ug/L	503.16 ppb	00:35:01
2	Ni 231.604†	17248.0	16225.7	519.11 ug/L	519.11 ppb	00:34:41

2	P 214.914†	4975.0	4505.9	2411.9 ug/L	2411.9 ppb	00:35:01
2	Pb 220.353†	3220.8	3075.5	503.27 ug/L	503.27 ppb	00:35:01
2	S 181.975 Axial†	862.3	775.4	989.88 ug/L	989.88 ppb	00:35:01
2	Sb 206.836†	1347.2	1244.2	515.47 ug/L	515.47 ppb	00:35:01
2	Se 196.026†	858.1	829.2	519.57 ug/L	519.57 ppb	00:35:01
2	Si 251.611†	74956.8	70404.0	2551.1 ug/L	2551.1 ppb	00:34:41
2	Sn 189.927†	2257.6	2108.4	499.53 ug/L	499.53 ppb	00:35:01
2	Ti 334.940†	263002.0	250217.8	503.13 ug/L	503.13 ppb	00:34:41
2	Tl 190.801†	1130.7	1107.4	511.53 ug/L	511.53 ppb	00:35:01
2	U 409.014†	13857.9	15357.2	514.00 ug/L	514.00 ppb	00:34:41
2	V 292.402†	66043.7	64178.6	515.76 ug/L	515.76 ppb	00:34:41
2	Zn 213.857†	49678.2	45879.0	502.90 ug/L	502.90 ppb	00:34:41
2	SiO2†	74809.2	70249.7	5448.2 ug/L	5448.2 ppb	00:35:42
3	Sc Radial	4834.5	4834.5	100 %		00:33:38
3	Y RADIAL	5139.6	5139.6	100.6 %		00:33:38
3	Al 396.153Radial†	5536.2	5604.4	5321.6 ug/L	5321.6 ppb	00:33:38
3	Ca 317.933Radial†	2964.0	2934.8	5432.6 ug/L	5432.6 ppb	00:33:58
3	Fe 238.204 Radial†	500.3	491.9	5504.8 ug/L	5504.8 ppb	00:33:58
3	K 766.490 Radial†	29116.5	26793.2	5312.5 ug/L	5312.5 ppb	00:33:38
3	Mg 279.077 IEC†	137.2	135.8	5623.7 ug/L	5623.7 ppb	00:33:58
3	Na 589.592 Radial†	29656.9	30130.9	10730 ug/L	10730 ppb	00:33:38
3	Sr 421.552†	71731.1	71523.7	535.84 ug/L	535.84 ppb	00:33:38
3	Sc 361.383	804702.9	804702.9	102.27 %		00:35:07
3	Y 371.029	713039.0	713039.0	101.64 %		00:35:07
3	Ag 328.068†	104606.8	102080.0	526.02 ug/L	526.02 ppb	00:35:12
3	As 188.979†	1179.2	1181.9	529.25 ug/L	529.25 ppb	00:35:32
3	B 249.677†	20722.9	20408.9	513.96 ug/L	513.96 ppb	00:35:12
3	Ba 233.527†	45843.1	44826.4	532.07 ug/L	532.07 ppb	00:35:12
3	Be 313.107†	1321662.2	1301798.5	519.70 ug/L	519.70 ppb	00:35:07
3	Cd 226.502†	37967.7	37320.5	529.83 ug/L	529.83 ppb	00:35:12
3	Co 228.616†	18046.9	17702.3	538.52 ug/L	538.52 ppb	00:35:12
3	Cr 267.716†	39742.8	38796.3	530.86 ug/L	530.86 ppb	00:35:12
3	Cu 324.752†	153114.6	140610.5	524.57 ug/L	524.57 ppb	00:35:12
3	Mn 257.610†	338356.3	330430.0	530.12 ug/L	530.12 ppb	00:35:12
3	Mo 202.031†	5776.8	5633.6	518.96 ug/L	518.96 ppb	00:35:32
3	Ni 231.604†	17235.7	16752.4	535.96 ug/L	535.96 ppb	00:35:12
3	P 214.914†	4961.4	4648.0	2486.5 ug/L	2486.5 ppb	00:35:32
3	Pb 220.353†	3230.0	3185.0	521.19 ug/L	521.19 ppb	00:35:32
3	S 181.975 Axial†	856.9	797.1	1017.6 ug/L	1017.6 ppb	00:35:32
3	Sb 206.836†	1338.7	1278.0	529.52 ug/L	529.52 ppb	00:35:32
3	Se 196.026†	866.6	864.4	541.42 ug/L	541.42 ppb	00:35:32
3	Si 251.611†	75599.1	73373.3	2658.7 ug/L	2658.7 ppb	00:35:12
3	Sn 189.927†	2247.3	2168.9	513.86 ug/L	513.86 ppb	00:35:32
3	Ti 334.940†	265259.5	260640.0	524.10 ug/L	524.10 ppb	00:35:12
3	Tl 190.801†	1127.3	1139.3	526.34 ug/L	526.34 ppb	00:35:32
3	U 409.014†	13912.1	15843.1	530.26 ug/L	530.26 ppb	00:35:12
3	V 292.402†	66498.6	66686.2	535.85 ug/L	535.85 ppb	00:35:12
3	Zn 213.857†	49976.0	47721.8	523.13 ug/L	523.13 ppb	00:35:12
3	SiO2†	74240.0	72029.7	5586.2 ug/L	5586.2 ppb	00:35:48

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	818831.9	104.06 %	1.698			1.63%
Sc Radial	4772.2	99.0 %	4.54			4.58%
Y 371.029	726221.5	103.52 %	1.718			1.66%
Y RADIAL	5059.6	99.04 %	4.631			4.68%
Ag 328.068†	99665.8	513.64 ug/L	10.898	513.64 ppb	10.898	2.12%
QC value within limits for Ag 328.068 Recovery = 102.73%						
Al 396.153Radial†	5717.4	5429.7 ug/L	358.48	5429.7 ppb	358.48	6.60%
QC value within limits for Al 396.153Radial Recovery = 108.59%						
As 188.979†	1166.1	522.16 ug/L	7.166	522.16 ppb	7.166	1.37%
QC value within limits for As 188.979 Recovery = 104.43%						
B 249.677†	19925.1	501.74 ug/L	10.605	501.74 ppb	10.605	2.11%
QC value within limits for B 249.677 Recovery = 100.35%						
Ba 233.527†	43843.6	520.41 ug/L	10.336	520.41 ppb	10.336	1.99%
QC value within limits for Ba 233.527 Recovery = 104.08%						
Be 313.107†	1301109.1	519.40 ug/L	0.582	519.40 ppb	0.582	0.11%
QC value within limits for Be 313.107 Recovery = 103.88%						
Ca 317.933Radial†	2955.1	5470.0 ug/L	269.81	5470.0 ppb	269.81	4.93%



QC value within limits for Ca 317.933 Radial Recovery = 109.40%							
Cd 226.502†	36502.9	518.21 ug/L	10.298	518.21 ppb	10.298	1.99%	
QC value within limits for Cd 226.502 Recovery = 103.64%							
Co 228.616†	17270.9	525.40 ug/L	11.451	525.40 ppb	11.451	2.18%	
QC value within limits for Co 228.616 Recovery = 105.08%							
Cr 267.716†	37985.8	519.78 ug/L	9.876	519.78 ppb	9.876	1.90%	
QC value within limits for Cr 267.716 Recovery = 103.96%							
Cu 324.752†	136739.0	510.14 ug/L	12.563	510.14 ppb	12.563	2.46%	
QC value within limits for Cu 324.752 Recovery = 102.03%							
Fe 238.204 Radial†	497.2	5563.7 ug/L	256.65	5563.7 ppb	256.65	4.61%	
QC value greater than the upper limit for Fe 238.204 Radial Recovery = 111.27%							
K 766.490 Radial†	27426.9	5438.2 ug/L	377.00	5438.2 ppb	377.00	6.93%	
QC value within limits for K 766.490 Radial Recovery = 108.76%							
Mg 279.077 IEC†	137.2	5682.2 ug/L	253.04	5682.2 ppb	253.04	4.45%	
QC value greater than the upper limit for Mg 279.077 IEC Recovery = 113.64%							
Mn 257.610†	322743.4	517.80 ug/L	10.819	517.80 ppb	10.819	2.09%	
QC value within limits for Mn 257.610 Recovery = 103.56%							
Mo 202.031†	5539.6	510.32 ug/L	8.005	510.32 ppb	8.005	1.57%	
QC value within limits for Mo 202.031 Recovery = 102.06%							
Na 589.592 Radial†	30921.8	11012 ug/L	710.5	11012 ppb	710.5	6.45%	
QC value greater than the upper limit for Na 589.592 Radial Recovery = 110.12%							
Ni 231.604†	16422.9	525.42 ug/L	9.186	525.42 ppb	9.186	1.75%	
QC value within limits for Ni 231.604 Recovery = 105.08%							
P 214.914†	4572.2	2447.1 ug/L	37.50	2447.1 ppb	37.50	1.53%	
QC value within limits for P 214.914 Recovery = 97.88%							
Pb 220.353†	3123.8	511.23 ug/L	9.130	511.23 ppb	9.130	1.79%	
QC value within limits for Pb 220.353 Recovery = 102.25%							
S 181.975 Axial†	787.9	1005.9 ug/L	14.33	1005.9 ppb	14.33	1.42%	
QC value within limits for S 181.975 Axial Recovery = 100.59%							
Sb 206.836†	1261.3	522.55 ug/L	7.030	522.55 ppb	7.030	1.35%	
QC value within limits for Sb 206.836 Recovery = 104.51%							
Se 196.026†	843.2	528.64 ug/L	11.389	528.64 ppb	11.389	2.15%	
QC value within limits for Se 196.026 Recovery = 105.73%							
Si 251.611†	71514.7	2591.3 ug/L	58.74	2591.3 ppb	58.74	2.27%	
QC value within limits for Si 251.611 Recovery = 103.65%							
Sn 189.927†	2137.6	506.46 ug/L	7.177	506.46 ppb	7.177	1.42%	
QC value within limits for Sn 189.927 Recovery = 101.29%							
Sr 421.552†	73205.4	548.43 ug/L	36.462	548.43 ppb	36.462	6.65%	
QC value within limits for Sr 421.552 Recovery = 109.69%							
Ti 334.940†	254261.4	511.28 ug/L	11.237	511.28 ppb	11.237	2.20%	
QC value within limits for Ti 334.940 Recovery = 102.26%							
Tl 190.801†	1122.1	518.37 ug/L	7.474	518.37 ppb	7.474	1.44%	
QC value within limits for Tl 190.801 Recovery = 103.67%							
U 409.014†	15461.5	517.46 ug/L	11.466	517.46 ppb	11.466	2.22%	
QC value within limits for U 409.014 Recovery = 103.49%							
V 292.402†	65218.5	524.07 ug/L	10.485	524.07 ppb	10.485	2.00%	
QC value within limits for V 292.402 Recovery = 104.81%							
Zn 213.857†	46604.9	510.84 ug/L	10.789	510.84 ppb	10.789	2.11%	
QC value within limits for Zn 213.857 Recovery = 102.17%							
SiO2†	71262.5	5526.8 ug/L	70.95	5526.8 ppb	70.95	1.28%	
QC value within limits for SiO2 Recovery = 103.35%							
QC Failed. Continue with analysis.							

Sequence No.: 54

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/4/2010 00:37:58

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	4954.3	4954.3	103 %		00:39:50
1	Y RADIAL	5302.7	5302.7	103.8 %		00:39:50
1	Al 396.153Radial†	-75.6	9.8	9.3448 ug/L	9.3448 ppb	00:40:10
1	Ca 317.933Radial†	35.3	13.2	24.520 ug/L	24.520 ppb	00:40:10
1	Fe 238.204 Radial†	8.3	1.0	10.680 ug/L	10.680 ppb	00:40:10
1	K 766.490 Radial†	2377.9	70.2	13.934 ug/L	13.934 ppb	00:39:50
1	Mg 279.077 IEC†	5.1	4.0	164.20 ug/L	164.20 ppb	00:40:10
1	Na 589.592 Radial†	-661.2	-88.5	-31.499 ug/L	-31.499 ppb	00:39:50
1	Sr 421.552†	40.5	27.8	0.2082 ug/L	0.2082 ppb	00:39:50
1	Sc 361.383	839712.9	839712.9	106.72 %		00:41:07
1	Y 371.029	752550.7	752550.7	107.27 %		00:41:07
1	Ag 328.068†	309.3	81.6	0.4249 ug/L	0.4249 ppb	00:41:12
1	As 188.979†	-37.1	-6.0	-2.6417 ug/L	-2.6417 ppb	00:41:32
1	B 249.677†	-317.8	-152.5	-3.8614 ug/L	-3.8614 ppb	00:41:32
1	Ba 233.527†	10.3	9.0	0.1077 ug/L	0.1077 ppb	00:41:32
1	Be 313.107†	-9110.6	892.0	0.3559 ug/L	0.3559 ppb	00:41:12
1	Cd 226.502†	-186.9	19.1	0.2693 ug/L	0.2693 ppb	00:41:32
1	Co 228.616†	-47.7	10.7	0.3252 ug/L	0.3252 ppb	00:41:32
1	Cr 267.716†	61.2	-8.3	-0.1113 ug/L	-0.1113 ppb	00:41:32
1	Cu 324.752†	8359.1	-1277.4	-4.7639 ug/L	-4.7639 ppb	00:41:12
1	Mn 257.610†	626.8	160.3	0.2514 ug/L	0.2514 ppb	00:41:32
1	Mo 202.031†	14.3	-1.7	-0.1594 ug/L	-0.1594 ppb	00:41:32
1	Ni 231.604†	91.0	-16.0	-0.5136 ug/L	-0.5136 ppb	00:41:32
1	P 214.914†	197.6	-18.2	-9.2290 ug/L	-9.2290 ppb	00:41:32
1	Pb 220.353†	-53.4	-23.4	-3.8054 ug/L	-3.8054 ppb	00:41:32
1	S 181.975 Axial†	43.4	-0.2	-0.2202 ug/L	-0.2202 ppb	00:41:32
1	Sb 206.836†	29.4	-3.5	-1.4067 ug/L	-1.4067 ppb	00:41:32
1	Se 196.026†	-18.3	-0.2	-0.1147 ug/L	-0.1147 ppb	00:41:32
1	Si 251.611†	959.2	348.6	12.664 ug/L	12.664 ppb	00:41:32
1	Sn 189.927†	26.9	-3.4	-0.8026 ug/L	-0.8026 ppb	00:41:32
1	Ti 334.940†	-1202.2	133.1	0.2584 ug/L	0.2584 ppb	00:41:12
1	Tl 190.801†	-41.0	-1.4	-0.6315 ug/L	-0.6315 ppb	00:41:32
1	U 409.014†	-2449.9	-56.5	-1.8968 ug/L	-1.8968 ppb	00:41:07
1	V 292.402†	-1690.7	77.1	0.6072 ug/L	0.6072 ppb	00:41:12
1	Zn 213.857†	822.1	-376.2	-4.1547 ug/L	-4.1547 ppb	00:41:32
1	SiO2†	987.5	360.5	28.030 ug/L	28.030 ppb	00:42:38
2	Sc Radial	4963.4	4963.4	103 %		00:40:15
2	Y RADIAL	5293.4	5293.4	103.6 %		00:40:15
2	Al 396.153Radial†	-74.8	10.6	10.167 ug/L	10.167 ppb	00:40:35
2	Ca 317.933Radial†	29.1	7.2	13.347 ug/L	13.347 ppb	00:40:35
2	Fe 238.204 Radial†	6.5	-0.8	-8.5201 ug/L	-8.5201 ppb	00:40:35
2	K 766.490 Radial†	2315.8	5.6	1.1311 ug/L	1.1311 ppb	00:40:15
2	Mg 279.077 IEC†	0.5	-0.5	-21.684 ug/L	-21.684 ppb	00:40:35
2	Na 589.592 Radial†	-725.5	-149.7	-53.305 ug/L	-53.305 ppb	00:40:15
2	Sr 421.552†	41.2	28.4	0.2129 ug/L	0.2129 ppb	00:40:15
2	Sc 361.383	832697.5	832697.5	105.82 %		00:41:37
2	Y 371.029	744687.4	744687.4	106.15 %		00:41:37
2	Ag 328.068†	247.8	25.9	0.1296 ug/L	0.1296 ppb	00:41:42
2	As 188.979†	-30.7	-0.1	-0.0517 ug/L	-0.0517 ppb	00:42:02
2	B 249.677†	-301.5	-139.6	-3.5299 ug/L	-3.5299 ppb	00:42:02
2	Ba 233.527†	16.1	14.5	0.1722 ug/L	0.1722 ppb	00:42:02
2	Be 313.107†	-9284.9	655.5	0.2624 ug/L	0.2624 ppb	00:41:42
2	Cd 226.502†	-186.4	18.1	0.2584 ug/L	0.2584 ppb	00:42:02
2	Co 228.616†	-57.7	0.8	0.0220 ug/L	0.0220 ppb	00:42:02
2	Cr 267.716†	84.6	14.3	0.1944 ug/L	0.1944 ppb	00:42:02
2	Cu 324.752†	8383.7	-1188.2	-4.4352 ug/L	-4.4352 ppb	00:41:42
2	Mn 257.610†	608.9	148.4	0.2379 ug/L	0.2379 ppb	00:42:02
2	Mo 202.031†	7.4	-8.2	-0.7577 ug/L	-0.7577 ppb	00:42:02
2	Ni 231.604†	110.7	3.3	0.1052 ug/L	0.1052 ppb	00:42:02

2	P 214.914†	210.9	-4.1	-1.4099 ug/L	-1.4099 ppb	00:42:02
2	Pb 220.353†	-65.2	-35.0	-5.6976 ug/L	-5.6976 ppb	00:42:02
2	S 181.975 Axial†	49.7	6.1	7.8295 ug/L	7.8295 ppb	00:42:02
2	Sb 206.836†	33.4	0.5	0.1728 ug/L	0.1728 ppb	00:42:02
2	Se 196.026†	-22.7	-4.5	-2.7524 ug/L	-2.7524 ppb	00:42:02
2	Si 251.611†	949.2	346.6	12.600 ug/L	12.600 ppb	00:42:02
2	Sn 189.927†	28.3	-1.9	-0.4440 ug/L	-0.4440 ppb	00:42:02
2	Ti 334.940†	-1023.3	292.7	0.5907 ug/L	0.5907 ppb	00:41:42
2	Tl 190.801†	-35.2	3.8	1.7343 ug/L	1.7343 ppb	00:42:02
2	U 409.014†	-2262.7	101.1	3.3974 ug/L	3.3974 ppb	00:41:37
2	V 292.402†	-1678.0	75.8	0.5974 ug/L	0.5974 ppb	00:41:42
2	Zn 213.857†	827.7	-364.4	-4.0254 ug/L	-4.0254 ppb	00:42:02
2	SiO2†	975.6	357.0	27.781 ug/L	27.781 ppb	00:42:43
3	Sc Radial	4981.9	4981.9	103 %		00:40:40
3	Y RADIAL	5344.5	5344.5	104.6 %		00:40:40
3	Al 396.153Radial†	-75.3	10.4	9.9394 ug/L	9.9394 ppb	00:41:00
3	Ca 317.933Radial†	33.4	11.2	20.775 ug/L	20.775 ppb	00:41:00
3	Fe 238.204 Radial†	7.1	-0.2	-1.8772 ug/L	-1.8772 ppb	00:41:00
3	K 766.490 Radial†	2405.5	84.2	16.714 ug/L	16.714 ppb	00:40:40
3	Mg 279.077 IEC†	0.6	-0.5	-19.800 ug/L	-19.800 ppb	00:41:00
3	Na 589.592 Radial†	-657.7	-81.5	-29.017 ug/L	-29.017 ppb	00:40:40
3	Sr 421.552†	23.8	11.5	0.0856 ug/L	0.0856 ppb	00:40:40
3	Sc 361.383	825648.6	825648.6	104.93 %		00:42:08
3	Y 371.029	738714.5	738714.5	105.30 %		00:42:08
3	Ag 328.068†	294.7	72.6	0.3733 ug/L	0.3733 ppb	00:42:13
3	As 188.979†	-31.9	-1.5	-0.6694 ug/L	-0.6694 ppb	00:42:33
3	B 249.677†	-328.4	-167.7	-4.2419 ug/L	-4.2419 ppb	00:42:33
3	Ba 233.527†	13.4	12.1	0.1436 ug/L	0.1436 ppb	00:42:33
3	Be 313.107†	-9059.7	795.1	0.3175 ug/L	0.3175 ppb	00:42:13
3	Cd 226.502†	-181.6	21.2	0.3003 ug/L	0.3003 ppb	00:42:33
3	Co 228.616†	-56.8	1.2	0.0365 ug/L	0.0365 ppb	00:42:33
3	Cr 267.716†	67.9	-1.0	-0.0124 ug/L	-0.0124 ppb	00:42:33
3	Cu 324.752†	8196.0	-1299.4	-4.8467 ug/L	-4.8467 ppb	00:42:13
3	Mn 257.610†	608.1	152.5	0.2451 ug/L	0.2451 ppb	00:42:33
3	Mo 202.031†	15.2	-0.7	-0.0626 ug/L	-0.0626 ppb	00:42:33
3	Ni 231.604†	102.8	-3.3	-0.1061 ug/L	-0.1061 ppb	00:42:33
3	P 214.914†	190.4	-22.0	-11.302 ug/L	-11.302 ppb	00:42:33
3	Pb 220.353†	-66.8	-37.0	-6.0231 ug/L	-6.0231 ppb	00:42:33
3	S 181.975 Axial†	39.5	-3.3	-4.1732 ug/L	-4.1732 ppb	00:42:33
3	Sb 206.836†	20.0	-12.0	-4.8253 ug/L	-4.8253 ppb	00:42:33
3	Se 196.026†	-19.3	-1.4	-0.8564 ug/L	-0.8564 ppb	00:42:33
3	Si 251.611†	930.9	336.9	12.236 ug/L	12.236 ppb	00:42:33
3	Sn 189.927†	23.6	-6.2	-1.4629 ug/L	-1.4629 ppb	00:42:33
3	Ti 334.940†	-1128.8	183.8	0.3750 ug/L	0.3750 ppb	00:42:13
3	Tl 190.801†	-34.0	4.6	2.1121 ug/L	2.1121 ppb	00:42:33
3	U 409.014†	-2406.3	-54.0	-1.8133 ug/L	-1.8133 ppb	00:42:08
3	V 292.402†	-1720.0	22.2	0.1714 ug/L	0.1714 ppb	00:42:13
3	Zn 213.857†	830.7	-354.8	-3.9186 ug/L	-3.9186 ppb	00:42:33
3	SiO2†	947.1	337.7	26.258 ug/L	26.258 ppb	00:42:48

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	832686.3	105.82 %		0.894				0.84%
Sc Radial	4966.5	103 %		0.3				0.28%
Y 371.029	745317.5	106.24 %		0.989				0.93%
Y RADIAL	5313.5	104.0 %		0.53				0.51%
Ag 328.068†	60.1	0.3093 ug/L		0.15768	0.3093 ppb		0.15768	50.99%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	10.3	9.8170 ug/L		0.42445	9.8170 ppb		0.42445	4.32%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-2.5	-1.1209 ug/L		1.35275	-1.1209 ppb		1.35275	120.68%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-153.2	-3.8777 ug/L		0.35626	-3.8777 ppb		0.35626	9.19%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	11.8	0.1412 ug/L		0.03234	0.1412 ppb		0.03234	22.91%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	780.9	0.3120 ug/L		0.04700	0.3120 ppb		0.04700	15.07%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	10.6	19.548 ug/L		5.6866	19.548 ppb		5.6866	29.09%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd 226.502†	19.4	0.2760 ug/L	0.02171	0.2760 ppb	0.02171	7.87%	
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	4.3	0.1279 ug/L	0.17099	0.1279 ppb	0.17099	133.67%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	1.7	0.0235 ug/L	0.15598	0.0235 ppb	0.15598	662.56%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	-1255.0	-4.6819 ug/L	0.21766	-4.6819 ppb	0.21766	4.65%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	0.0	0.0943 ug/L	9.75092	0.0943 ppb	9.75092	>999.9%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	53.3	10.593 ug/L	8.3112	10.593 ppb	8.3112	78.46%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	1.0	40.906 ug/L	106.7807	40.906 ppb	106.7807	261.04%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	153.7	0.2448 ug/L	0.00674	0.2448 ppb	0.00674	2.75%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	-3.6	-0.3265 ug/L	0.37652	-0.3265 ppb	0.37652	115.31%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	-106.5	-37.940 ug/L	13.3642	-37.940 ppb	13.3642	35.22%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	-5.4	-0.1715 ug/L	0.31455	-0.1715 ppb	0.31455	183.38%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	-14.8	-7.3134 ug/L	5.21662	-7.3134 ppb	5.21662	71.33%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	-31.8	-5.1754 ug/L	1.19750	-5.1754 ppb	1.19750	23.14%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	0.9	1.1454 ug/L	6.11675	1.1454 ppb	6.11675	534.03%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	-5.0	-2.0197 ug/L	2.55481	-2.0197 ppb	2.55481	126.49%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	-2.0	-1.2412 ug/L	1.36029	-1.2412 ppb	1.36029	109.59%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	344.0	12.500 ug/L	0.2306	12.500 ppb	0.2306	1.84%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	-3.8	-0.9032 ug/L	0.51688	-0.9032 ppb	0.51688	57.23%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	22.6	0.1689 ug/L	0.07215	0.1689 ppb	0.07215	42.71%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	203.2	0.4080 ug/L	0.16858	0.4080 ppb	0.16858	41.32%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	2.3	1.0716 ug/L	1.48698	1.0716 ppb	1.48698	138.76%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	-3.1	-0.1042 ug/L	3.03278	-0.1042 ppb	3.03278	>999.9%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	58.4	0.4587 ug/L	0.24882	0.4587 ppb	0.24882	54.25%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	-365.1	-4.0329 ug/L	0.11822	-4.0329 ppb	0.11822	2.93%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†	351.7	27.356 ug/L	0.9593	27.356 ppb	0.9593	3.51%	
QC value within limits for SiO2 Recovery = Not calculated							
All analyte(s) passed QC.							

Sequence No.: 55

Sample ID: 246437009|958097|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 78

Date Collected: 3/4/2010 00:44:59

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 246437009|958097|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4950.7	4950.7	103 %		00:46:52
1	Y RADIAL	6103.5	6103.5	119.5 %		00:46:52
1	Al 396.153Radial†	17355.9	16985.8	16205 ug/L	16205 ppb	00:46:52
1	Ca 317.933Radial†	2717.4	2625.4	4859.7 ug/L	4859.7 ppb	00:47:12
1	Fe 238.204 Radial†	5410.1	5261.7	58717 ug/L	58717 ppb	00:46:52
1	K 766.490 Radial†	17801.1	15092.2	2993.7 ug/L	2993.7 ppb	00:46:52
1	Mg 279.077 IEC†	88.7	85.3	3471.5 ug/L	3471.5 ppb	00:47:12
1	Na 589.592 Radial†	592.0	1131.5	402.95 ug/L	402.95 ppb	00:46:52
1	Sr 421.552†	5699.1	5538.6	41.461 ug/L	41.461 ppb	00:46:52
1	Sc 361.383	838131.0	838131.0	106.51 %		00:48:09
1	Y 371.029	860725.8	860725.8	122.69 %		00:48:09
1	Ag 328.068†	-2785.9	-2823.8	3.2411 ug/L	3.2411 ppb	00:48:14
1	As 188.979†	-19.2	10.8	31.610 ug/L	31.610 ppb	00:48:34
1	B 249.677†	-30.2	117.0	-6.6213 ug/L	-6.6213 ppb	00:48:14
1	Ba 233.527†	25887.5	24303.4	289.66 ug/L	289.66 ppb	00:48:14
1	Be 313.107†	-12270.1	-2090.3	2.5893 ug/L	2.5893 ppb	00:48:14
1	Cd 226.502†	258.4	436.8	0.2901 ug/L	0.2901 ppb	00:48:34
1	Co 228.616†	513.5	537.5	12.452 ug/L	12.452 ppb	00:48:34
1	Cr 267.716†	6301.1	5850.0	80.910 ug/L	80.910 ppb	00:48:14
1	Cu 324.752†	13999.7	4033.0	17.812 ug/L	17.812 ppb	00:48:14
1	Mn 257.610†	1370051.5	1285826.8	2067.3 ug/L	2067.3 ppb	00:48:09
1	Mo 202.031†	41.6	23.9	6.8137 ug/L	6.8137 ppb	00:48:34
1	Ni 231.604†	1758.7	1549.8	49.602 ug/L	49.602 ppb	00:48:34
1	P 214.914†	1115.8	844.1	423.95 ug/L	423.95 ppb	00:48:34
1	Pb 220.353†	420.6	421.6	68.033 ug/L	68.033 ppb	00:48:34
1	S 181.975 Axial†	152.2	102.1	127.39 ug/L	127.39 ppb	00:48:34
1	Sb 206.836†	62.3	27.4	5.1210 ug/L	5.1210 ppb	00:48:34
1	Se 196.026†	-245.8	-213.9	2.6127 ug/L	2.6127 ppb	00:48:34
1	Si 251.611†	237817.4	222721.3	8089.8 ug/L	8089.8 ppb	00:48:09
1	Sn 189.927†	30.3	-0.2	-2.5551 ug/L	-2.5551 ppb	00:48:34
1	Ti 334.940†	796841.5	749363.2	1507.3 ug/L	1507.3 ppb	00:48:09
1	Tl 190.801†	-98.6	-55.5	-3.2875 ug/L	-3.2875 ppb	00:48:34
1	U 409.014†	17215.6	18401.9	611.13 ug/L	611.13 ppb	00:48:09
1	V 292.402†	5637.1	6953.7	46.261 ug/L	46.261 ppb	00:48:14
1	Zn 213.857†	25869.3	23140.6	246.94 ug/L	246.94 ppb	00:48:14
1	SiO2†	235563.7	220590.8	17151 ug/L	17151 ppb	00:49:41
2	Sc Radial	5133.2	5133.2	106 %		00:47:17
2	Y RADIAL	6315.0	6315.0	123.6 %		00:47:17
2	Al 396.153Radial†	17855.2	16853.8	16079 ug/L	16079 ppb	00:47:17
2	Ca 317.933Radial†	2709.4	2523.7	4671.5 ug/L	4671.5 ppb	00:47:37
2	Fe 238.204 Radial†	5536.3	5192.9	57949 ug/L	57949 ppb	00:47:17
2	K 766.490 Radial†	18359.5	15000.2	2975.5 ug/L	2975.5 ppb	00:47:17
2	Mg 279.077 IEC†	87.2	80.9	3289.3 ug/L	3289.3 ppb	00:47:37
2	Na 589.592 Radial†	606.1	1124.2	400.35 ug/L	400.35 ppb	00:47:17
2	Sr 421.552†	5889.2	5519.8	41.321 ug/L	41.321 ppb	00:47:17
2	Sc 361.383	840006.8	840006.8	106.75 %		00:48:40
2	Y 371.029	861802.9	861802.9	122.84 %		00:48:40
2	Ag 328.068†	-2904.8	-2929.3	2.4713 ug/L	2.4713 ppb	00:48:45
2	As 188.979†	-22.1	8.1	30.217 ug/L	30.217 ppb	00:49:05
2	B 249.677†	-86.3	64.5	-7.8240 ug/L	-7.8240 ppb	00:48:45
2	Ba 233.527†	26246.4	24585.3	292.97 ug/L	292.97 ppb	00:48:45
2	Be 313.107†	-12408.7	-2194.4	2.5408 ug/L	2.5408 ppb	00:48:45
2	Cd 226.502†	237.0	416.2	0.0755 ug/L	0.0755 ppb	00:49:05
2	Co 228.616†	505.9	529.3	12.219 ug/L	12.219 ppb	00:49:05
2	Cr 267.716†	6343.4	5876.5	81.258 ug/L	81.258 ppb	00:48:45
2	Cu 324.752†	14405.7	4384.0	19.082 ug/L	19.082 ppb	00:48:45
2	Mn 257.610†	1369999.9	1282906.2	2062.6 ug/L	2062.6 ppb	00:48:40
2	Mo 202.031†	37.8	20.2	6.4144 ug/L	6.4144 ppb	00:49:05
2	Ni 231.604†	1747.2	1535.4	49.141 ug/L	49.141 ppb	00:49:05

2	P 214.914†	1114.1	840.1	422.05 ug/L	422.05 ppb	00:49:05
2	Pb 220.353†	383.6	386.1	62.271 ug/L	62.271 ppb	00:49:05
2	S 181.975 Axial†	155.9	105.1	131.35 ug/L	131.35 ppb	00:49:05
2	Sb 206.836†	39.9	6.3	-3.3033 ug/L	-3.3033 ppb	00:49:05
2	Se 196.026†	-248.7	-216.0	-0.4512 ug/L	-0.4512 ppb	00:49:05
2	Si 251.611†	237076.4	221528.6	8046.5 ug/L	8046.5 ppb	00:48:40
2	Sn 189.927†	27.5	-2.8	-3.1710 ug/L	-3.1710 ppb	00:49:05
2	Ti 334.940†	796960.1	747803.7	1504.2 ug/L	1504.2 ppb	00:48:40
2	Tl 190.801†	-88.2	-45.6	1.2020 ug/L	1.2020 ppb	00:49:05
2	U 409.014†	17150.1	18304.5	607.95 ug/L	607.95 ppb	00:48:40
2	V 292.402†	5696.8	6997.8	46.711 ug/L	46.711 ppb	00:48:45
2	Zn 213.857†	26152.5	23351.5	249.39 ug/L	249.39 ppb	00:48:45
2	SiO2†	236805.2	221260.0	17203 ug/L	17203 ppb	00:49:46
3	Sc Radial	5067.7	5067.7	105 %		00:47:42
3	Y RADIAL	6268.9	6268.9	122.7 %		00:47:42
3	Al 396.153Radial†	17751.9	16972.1	16192 ug/L	16192 ppb	00:47:42
3	Ca 317.933Radial†	2717.4	2564.2	4746.6 ug/L	4746.6 ppb	00:48:02
3	Fe 238.204 Radial†	5474.4	5201.1	58041 ug/L	58041 ppb	00:47:42
3	K 766.490 Radial†	18133.9	15008.4	2977.1 ug/L	2977.1 ppb	00:47:42
3	Mg 279.077 IEC†	85.2	80.1	3254.7 ug/L	3254.7 ppb	00:48:02
3	Na 589.592 Radial†	591.6	1117.8	398.07 ug/L	398.07 ppb	00:47:42
3	Sr 421.552†	5866.6	5569.8	41.695 ug/L	41.695 ppb	00:47:42
3	Sc 361.383	844708.9	844708.9	107.35 %		00:49:10
3	Y 371.029	867419.3	867419.3	123.65 %		00:49:10
3	Ag 328.068†	-2844.4	-2857.9	2.8614 ug/L	2.8614 ppb	00:49:15
3	As 188.979†	-19.8	10.4	31.190 ug/L	31.190 ppb	00:49:35
3	B 249.677†	-18.4	128.2	-6.2273 ug/L	-6.2273 ppb	00:49:15
3	Ba 233.527†	25848.2	24077.6	286.96 ug/L	286.96 ppb	00:49:15
3	Be 313.107†	-12277.6	-2007.6	2.6066 ug/L	2.6066 ppb	00:49:15
3	Cd 226.502†	257.1	433.7	0.3141 ug/L	0.3141 ppb	00:49:35
3	Co 228.616†	505.7	526.5	12.141 ug/L	12.141 ppb	00:49:35
3	Cr 267.716†	6211.4	5720.5	79.127 ug/L	79.127 ppb	00:49:15
3	Cu 324.752†	14178.7	4097.4	18.019 ug/L	18.019 ppb	00:49:15
3	Mn 257.610†	1372389.6	1277988.6	2054.7 ug/L	2054.7 ppb	00:49:10
3	Mo 202.031†	46.4	28.0	7.1405 ug/L	7.1405 ppb	00:49:35
3	Ni 231.604†	1756.1	1534.6	49.115 ug/L	49.115 ppb	00:49:35
3	P 214.914†	1130.5	849.7	427.53 ug/L	427.53 ppb	00:49:35
3	Pb 220.353†	428.2	425.5	68.733 ug/L	68.733 ppb	00:49:35
3	S 181.975 Axial†	154.6	103.1	128.76 ug/L	128.76 ppb	00:49:35
3	Sb 206.836†	49.4	15.0	0.1880 ug/L	0.1880 ppb	00:49:35
3	Se 196.026†	-258.9	-224.2	-5.1986 ug/L	-5.1986 ppb	00:49:35
3	Si 251.611†	238426.0	221549.6	8047.2 ug/L	8047.2 ppb	00:49:10
3	Sn 189.927†	31.3	0.5	-2.3698 ug/L	-2.3698 ppb	00:49:35
3	Ti 334.940†	799411.5	745931.6	1500.4 ug/L	1500.4 ppb	00:49:10
3	Tl 190.801†	-92.2	-48.8	-0.3236 ug/L	-0.3236 ppb	00:49:35
3	U 409.014†	17182.0	18244.8	605.94 ug/L	605.94 ppb	00:49:10
3	V 292.402†	5578.5	6858.0	45.599 ug/L	45.599 ppb	00:49:15
3	Zn 213.857†	25782.1	22870.1	244.05 ug/L	244.05 ppb	00:49:15
3	SiO2†	237644.4	220806.9	17168 ug/L	17168 ppb	00:49:52

Mean Data: 246437009|958097|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Sc 361.383	840948.9	106.87 %		0.431			0.40%
Sc Radial	5050.5	105 %		1.9			1.83%
Y 371.029	863316.0	123.06 %		0.512			0.42%
Y RADIAL	6229.1	121.9 %		2.18			1.79%
Ag 328.068†	-2870.3	2.8580 ug/L		0.38489	2.8580 ppb	0.38489	13.47%
Al 396.153Radial†	16937.2	16158 ug/L		69.2	16158 ppb	69.2	0.43%
As 188.979†	9.8	31.006 ug/L		0.7145	31.006 ppb	0.7145	2.30%
B 249.677†	103.2	-6.8909 ug/L		0.83176	-6.8909 ppb	0.83176	12.07%
Ba 233.527†	24322.1	289.86 ug/L		3.011	289.86 ppb	3.011	1.04%
Be 313.107†	-2097.4	2.5789 ug/L		0.03415	2.5789 ppb	0.03415	1.32%
Ca 317.933Radial†	2571.1	4759.3 ug/L		94.75	4759.3 ppb	94.75	1.99%
Cd 226.502†	428.9	0.2266 ug/L		0.13137	0.2266 ppb	0.13137	57.98%
Co 228.616†	531.1	12.271 ug/L		0.1616	12.271 ppb	0.1616	1.32%
Cr 267.716†	5815.6	80.432 ug/L		1.1432	80.432 ppb	1.1432	1.42%
Cu 324.752†	4171.5	18.304 ug/L		0.6816	18.304 ppb	0.6816	3.72%
Fe 238.204 Radial†	5218.6	58236 ug/L		419.1	58236 ppb	419.1	0.72%
K 766.490 Radial†	15033.6	2982.1 ug/L		10.08	2982.1 ppb	10.08	0.34%

Mg 279.077 IEC†	82.1	3338.5 ug/L	116.48	3338.5 ppb	116.48	3.49%
Mn 257.610†	1282240.5	2061.5 ug/L	6.38	2061.5 ppb	6.38	0.31%
Mo 202.031†	24.0	6.7895 ug/L	0.36363	6.7895 ppb	0.36363	5.36%
Na 589.592 Radial†	1124.5	400.46 ug/L	2.446	400.46 ppb	2.446	0.61%
Ni 231.604†	1539.9	49.286 ug/L	0.2737	49.286 ppb	0.2737	0.56%
P 214.914†	844.6	424.51 ug/L	2.782	424.51 ppb	2.782	0.66%
Pb 220.353†	411.1	66.345 ug/L	3.5462	66.345 ppb	3.5462	5.34%
S 181.975 Axial†	103.4	129.17 ug/L	2.013	129.17 ppb	2.013	1.56%
Sb 206.836†	16.2	0.6686 ug/L	4.23266	0.6686 ppb	4.23266	633.10%
Se 196.026†	-218.0	-1.0124 ug/L	3.93576	-1.0124 ppb	3.93576	388.77%
Si 251.611†	221933.1	8061.2 ug/L	24.80	8061.2 ppb	24.80	0.31%
Sn 189.927†	-0.8	-2.6986 ug/L	0.41943	-2.6986 ppb	0.41943	15.54%
Sr 421.552†	5542.8	41.492 ug/L	0.1892	41.492 ppb	0.1892	0.46%
Ti 334.940†	747699.5	1504.0 ug/L	3.45	1504.0 ppb	3.45	0.23%
Tl 190.801†	-50.0	-0.8030 ug/L	2.28281	-0.8030 ppb	2.28281	284.28%
U 409.014†	18317.0	608.34 ug/L	2.620	608.34 ppb	2.620	0.43%
V 292.402†	6936.5	46.190 ug/L	0.5594	46.190 ppb	0.5594	1.21%
Zn 213.857†	23120.7	246.80 ug/L	2.673	246.80 ppb	2.673	1.08%
SiO2†	220885.9	17174 ug/L	26.6	17174 ppb	26.6	0.15%

Sequence No.: 56

Sample ID: 246437010|958097|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 79

Date Collected: 3/4/2010 00:52:02

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 246437010|958097|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5058.5	5058.5	105 %		00:53:56
1	Y RADIAL	6072.2	6072.2	118.9 %		00:53:56
1	Al 396.153Radial†	19581.7	18747.0	17885 ug/L	17885 ppb	00:53:56
1	Ca 317.933Radial†	2845.0	2690.6	4980.4 ug/L	4980.4 ppb	00:54:16
1	Fe 238.204 Radial†	4928.9	4690.7	52345 ug/L	52345 ppb	00:53:56
1	K 766.490 Radial†	18330.4	15227.3	3020.7 ug/L	3020.7 ppb	00:53:56
1	Mg 279.077 IEC†	91.1	85.8	3497.9 ug/L	3497.9 ppb	00:54:16
1	Na 589.592 Radial†	441.8	976.1	347.59 ug/L	347.59 ppb	00:53:56
1	Sr 421.552†	5810.7	5526.7	41.370 ug/L	41.370 ppb	00:53:56
1	Sc 361.383	828699.7	828699.7	105.32 %		00:55:13
1	Y 371.029	827275.8	827275.8	117.92 %		00:55:13
1	Ag 328.068†	-2616.3	-2692.5	2.5586 ug/L	2.5586 ppb	00:55:18
1	As 188.979†	-20.8	9.1	27.450 ug/L	27.450 ppb	00:55:38
1	B 249.677†	-143.6	9.0	-8.3084 ug/L	-8.3084 ppb	00:55:18
1	Ba 233.527†	22937.5	21779.0	259.56 ug/L	259.56 ppb	00:55:18
1	Be 313.107†	-10677.7	-709.4	2.6456 ug/L	2.6456 ppb	00:55:18
1	Cd 226.502†	211.0	394.6	0.1895 ug/L	0.1895 ppb	00:55:38
1	Co 228.616†	374.6	411.1	9.1541 ug/L	9.1541 ppb	00:55:38
1	Cr 267.716†	3826.7	3567.9	49.895 ug/L	49.895 ppb	00:55:18
1	Cu 324.752†	12696.8	2945.4	13.840 ug/L	13.840 ppb	00:55:18
1	Mn 257.610†	1081567.6	1026544.0	1651.0 ug/L	1651.0 ppb	00:55:13
1	Mo 202.031†	37.5	20.4	6.0022 ug/L	6.0022 ppb	00:55:38
1	Ni 231.604†	1214.5	1051.9	33.665 ug/L	33.665 ppb	00:55:38
1	P 214.914†	1079.7	821.8	417.84 ug/L	417.84 ppb	00:55:38
1	Pb 220.353†	226.2	241.5	39.595 ug/L	39.595 ppb	00:55:38
1	S 181.975 Axial†	123.7	76.6	94.571 ug/L	94.571 ppb	00:55:38
1	Sb 206.836†	56.4	22.5	3.8323 ug/L	3.8323 ppb	00:55:38
1	Se 196.026†	-224.0	-195.7	-0.4509 ug/L	-0.4509 ppb	00:55:38
1	Si 251.611†	298815.5	283181.2	10286 ug/L	10286 ppb	00:55:13
1	Sn 189.927†	17.3	-12.2	-5.0142 ug/L	-5.0142 ppb	00:55:38
1	Ti 334.940†	673984.3	641221.8	1290.2 ug/L	1290.2 ppb	00:55:13
1	Tl 190.801†	-79.8	-38.7	0.6451 ug/L	0.6451 ppb	00:55:38
1	U 409.014†	-6948.4	-4358.4	-152.45 ug/L	-152.45 ppb	00:55:13
1	V 292.402†	4951.6	6363.1	41.278 ug/L	41.278 ppb	00:55:18
1	Zn 213.857†	22109.9	19847.3	211.56 ug/L	211.56 ppb	00:55:18
1	SiO2†	302885.5	287031.2	22317 ug/L	22317 ppb	00:56:44
2	Sc Radial	5035.6	5035.6	104 %		00:54:21
2	Y RADIAL	6030.7	6030.7	118.1 %		00:54:21
2	Al 396.153Radial†	19523.4	18776.2	17913 ug/L	17913 ppb	00:54:21
2	Ca 317.933Radial†	2849.9	2707.6	5012.0 ug/L	5012.0 ppb	00:54:41
2	Fe 238.204 Radial†	4901.4	4685.8	52291 ug/L	52291 ppb	00:54:21
2	K 766.490 Radial†	18105.8	15091.7	2993.8 ug/L	2993.8 ppb	00:54:21
2	Mg 279.077 IEC†	94.5	89.5	3649.6 ug/L	3649.6 ppb	00:54:41
2	Na 589.592 Radial†	408.4	946.0	336.90 ug/L	336.90 ppb	00:54:21
2	Sr 421.552†	5749.5	5493.3	41.120 ug/L	41.120 ppb	00:54:21
2	Sc 361.383	827659.6	827659.6	105.18 %		00:55:43
2	Y 371.029	826286.7	826286.7	117.78 %		00:55:43
2	Ag 328.068†	-2659.8	-2737.0	2.3135 ug/L	2.3135 ppb	00:55:48
2	As 188.979†	-16.9	12.8	29.071 ug/L	29.071 ppb	00:56:08
2	B 249.677†	-125.9	25.6	-7.8795 ug/L	-7.8795 ppb	00:55:48
2	Ba 233.527†	22961.5	21829.1	260.16 ug/L	260.16 ppb	00:55:48
2	Be 313.107†	-10579.9	-629.2	2.6736 ug/L	2.6736 ppb	00:55:48
2	Cd 226.502†	225.9	409.0	0.4004 ug/L	0.4004 ppb	00:56:08
2	Co 228.616†	377.1	413.9	9.2446 ug/L	9.2446 ppb	00:56:08
2	Cr 267.716†	3805.5	3552.3	49.681 ug/L	49.681 ppb	00:55:48
2	Cu 324.752†	12750.5	3011.7	14.085 ug/L	14.085 ppb	00:55:48
2	Mn 257.610†	1074549.0	1021161.9	1642.3 ug/L	1642.3 ppb	00:55:43
2	Mo 202.031†	40.1	23.0	6.2324 ug/L	6.2324 ppb	00:56:08
2	Ni 231.604†	1229.0	1067.1	34.151 ug/L	34.151 ppb	00:56:08



2	P 214.914†	1088.2	831.2	423.08 ug/L	423.08 ppb	00:56:08
2	Pb 220.353†	230.4	245.7	40.299 ug/L	40.299 ppb	00:56:08
2	S 181.975 Axial†	118.5	71.7	88.327 ug/L	88.327 ppb	00:56:08
2	Sb 206.836†	38.2	5.3	-3.0231 ug/L	-3.0231 ppb	00:56:08
2	Se 196.026†	-220.5	-192.7	1.2859 ug/L	1.2859 ppb	00:56:08
2	Si 251.611†	297417.4	282208.7	10251 ug/L	10251 ppb	00:55:43
2	Sn 189.927†	25.3	-4.6	-3.1979 ug/L	-3.1979 ppb	00:56:08
2	Ti 334.940†	672237.8	640365.6	1288.5 ug/L	1288.5 ppb	00:55:43
2	Tl 190.801†	-94.0	-52.3	-5.6311 ug/L	-5.6311 ppb	00:56:08
2	U 409.014†	-6946.8	-4365.1	-152.67 ug/L	-152.67 ppb	00:55:43
2	V 292.402†	4947.7	6365.3	41.312 ug/L	41.312 ppb	00:55:48
2	Zn 213.857†	22142.2	19904.4	212.20 ug/L	212.20 ppb	00:55:48
2	SiO2†	300497.7	285122.6	22168 ug/L	22168 ppb	00:56:50
3	Sc Radial	5052.9	5052.9	105 %		00:54:46
3	Y RADIAL	6053.7	6053.7	118.5 %		00:54:46
3	Al 396.153Radial†	19622.8	18806.7	17942 ug/L	17942 ppb	00:54:46
3	Ca 317.933Radial†	2878.1	2725.1	5044.3 ug/L	5044.3 ppb	00:55:06
3	Fe 238.204 Radial†	4959.6	4725.2	52730 ug/L	52730 ppb	00:54:46
3	K 766.490 Radial†	18333.6	15249.4	3025.0 ug/L	3025.0 ppb	00:54:46
3	Mg 279.077 IEC†	95.2	89.8	3663.2 ug/L	3663.2 ppb	00:55:06
3	Na 589.592 Radial†	402.6	939.1	334.43 ug/L	334.43 ppb	00:54:46
3	Sr 421.552†	5807.8	5530.0	41.395 ug/L	41.395 ppb	00:54:46
3	Sc 361.383	840786.5	840786.5	106.85 %		00:56:14
3	Y 371.029	839642.3	839642.3	119.69 %		00:56:14
3	Ag 328.068†	-2606.8	-2647.9	2.9033 ug/L	2.9033 ppb	00:56:19
3	As 188.979†	-26.6	4.0	25.283 ug/L	25.283 ppb	00:56:39
3	B 249.677†	-135.4	18.6	-8.1280 ug/L	-8.1280 ppb	00:56:19
3	Ba 233.527†	22953.0	21480.3	256.04 ug/L	256.04 ppb	00:56:19
3	Be 313.107†	-10639.3	-527.7	2.7155 ug/L	2.7155 ppb	00:56:19
3	Cd 226.502†	221.4	401.5	0.2473 ug/L	0.2473 ppb	00:56:39
3	Co 228.616†	390.6	421.0	9.4484 ug/L	9.4484 ppb	00:56:39
3	Cr 267.716†	3793.4	3484.5	48.762 ug/L	48.762 ppb	00:56:19
3	Cu 324.752†	12851.2	2916.6	13.753 ug/L	13.753 ppb	00:56:19
3	Mn 257.610†	1091124.8	1020725.0	1641.7 ug/L	1641.7 ppb	00:56:14
3	Mo 202.031†	33.4	16.0	5.6302 ug/L	5.6302 ppb	00:56:39
3	Ni 231.604†	1217.7	1038.3	33.230 ug/L	33.230 ppb	00:56:39
3	P 214.914†	1072.4	800.2	405.53 ug/L	405.53 ppb	00:56:39
3	Pb 220.353†	223.8	236.1	38.706 ug/L	38.706 ppb	00:56:39
3	S 181.975 Axial†	125.8	76.9	94.844 ug/L	94.844 ppb	00:56:39
3	Sb 206.836†	29.3	-3.6	-6.6249 ug/L	-6.6249 ppb	00:56:39
3	Se 196.026†	-219.2	-188.2	5.0126 ug/L	5.0126 ppb	00:56:39
3	Si 251.611†	302935.7	282958.4	10278 ug/L	10278 ppb	00:56:14
3	Sn 189.927†	18.5	-11.4	-4.8204 ug/L	-4.8204 ppb	00:56:39
3	Ti 334.940†	683237.0	640681.3	1289.1 ug/L	1289.1 ppb	00:56:14
3	Tl 190.801†	-88.8	-46.1	-2.7725 ug/L	-2.7725 ppb	00:56:39
3	U 409.014†	-7042.2	-4351.3	-152.25 ug/L	-152.25 ppb	00:56:14
3	V 292.402†	5005.0	6345.5	41.082 ug/L	41.082 ppb	00:56:19
3	Zn 213.857†	22122.0	19556.8	208.29 ug/L	208.29 ppb	00:56:19
3	SiO2†	305651.1	285485.1	22196 ug/L	22196 ppb	00:56:55

Mean Data: 246437010|958097|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	832381.9	105.78 %		0.927			0.88%
Sc Radial	5049.0	105 %		0.2			0.24%
Y 371.029	831068.3	118.46 %		1.061			0.90%
Y RADIAL	6052.2	118.5 %		0.41			0.34%
Ag 328.068†	-2692.4	2.5918 ug/L		0.29629	2.5918 ppb	0.29629	11.43%
Al 396.153Radial†	18776.6	17913 ug/L		28.5	17913 ppb	28.5	0.16%
As 188.979†	8.6	27.268 ug/L		1.9008	27.268 ppb	1.9008	6.97%
B 249.677†	17.8	-8.1053 ug/L		0.21536	-8.1053 ppb	0.21536	2.66%
Ba 233.527†	21696.1	258.59 ug/L		2.226	258.59 ppb	2.226	0.86%
Be 313.107†	-622.1	2.6782 ug/L		0.03518	2.6782 ppb	0.03518	1.31%
Ca 317.933Radial†	2707.8	5012.3 ug/L		31.93	5012.3 ppb	31.93	0.64%
Cd 226.502†	401.7	0.2791 ug/L		0.10902	0.2791 ppb	0.10902	39.06%
Co 228.616†	415.3	9.2824 ug/L		0.15074	9.2824 ppb	0.15074	1.62%
Cr 267.716†	3534.9	49.446 ug/L		0.6017	49.446 ppb	0.6017	1.22%
Cu 324.752†	2957.9	13.892 ug/L		0.1719	13.892 ppb	0.1719	1.24%
Fe 238.204 Radial†	4700.6	52455 ug/L		239.1	52455 ppb	239.1	0.46%
K 766.490 Radial†	15189.4	3013.2 ug/L		16.95	3013.2 ppb	16.95	0.56%

Mg 279.077 IEC†	88.3	3603.6 ug/L	91.77	3603.6 ppb	91.77	2.55%
Mn 257.610†	1022810.3	1645.0 ug/L	5.19	1645.0 ppb	5.19	0.32%
Mo 202.031†	19.8	5.9549 ug/L	0.30386	5.9549 ppb	0.30386	5.10%
Na 589.592 Radial†	953.7	339.64 ug/L	6.999	339.64 ppb	6.999	2.06%
Ni 231.604†	1052.4	33.682 ug/L	0.4608	33.682 ppb	0.4608	1.37%
P 214.914†	817.7	415.48 ug/L	9.006	415.48 ppb	9.006	2.17%
Pb 220.353†	241.1	39.533 ug/L	0.7986	39.533 ppb	0.7986	2.02%
S 181.975 Axial†	75.1	92.581 ug/L	3.6860	92.581 ppb	3.6860	3.98%
Sb 206.836†	8.0	-1.9386 ug/L	5.31232	-1.9386 ppb	5.31232	274.03%
Se 196.026†	-192.2	1.9492 ug/L	2.79154	1.9492 ppb	2.79154	143.22%
Si 251.611†	282782.8	10271 ug/L	18.5	10271 ppb	18.5	0.18%
Sn 189.927†	-9.4	-4.3441 ug/L	0.99742	-4.3441 ppb	0.99742	22.96%
Sr 421.552†	5516.7	41.295 ug/L	0.1520	41.295 ppb	0.1520	0.37%
Ti 334.940†	640756.2	1289.2 ug/L	0.87	1289.2 ppb	0.87	0.07%
Tl 190.801†	-45.7	-2.5861 ug/L	3.14223	-2.5861 ppb	3.14223	121.50%
U 409.014†	-4358.3	-152.45 ug/L	0.209	-152.45 ppb	0.209	0.14%
V 292.402†	6357.9	41.224 ug/L	0.1240	41.224 ppb	0.1240	0.30%
Zn 213.857†	19769.5	210.68 ug/L	2.095	210.68 ppb	2.095	0.99%
SiO2†	285879.6	22227 ug/L	78.8	22227 ppb	78.8	0.35%

Sequence No.: 57

Sample ID: 246437011|958097|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 80

Date Collected: 3/4/2010 00:59:07

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 246437011|958097|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5039.6	5039.6	105 %		01:01:00
1	Y RADIAL	6255.5	6255.5	122.5 %		01:01:00
1	Al 396.153Radial†	18992.6	18253.4	17414 ug/L	17414 ppb	01:01:00
1	Ca 317.933Radial†	2949.9	2801.1	5185.1 ug/L	5185.1 ppb	01:01:20
1	Fe 238.204 Radial†	5934.9	5670.8	63282 ug/L	63282 ppb	01:01:00
1	K 766.490 Radial†	16790.6	13819.6	2740.8 ug/L	2740.8 ppb	01:01:00
1	Mg 279.077 IEC†	88.0	83.2	3379.5 ug/L	3379.5 ppb	01:01:20
1	Na 589.592 Radial†	743.4	1266.2	450.92 ug/L	450.92 ppb	01:01:00
1	Sr 421.552†	5691.6	5433.6	40.671 ug/L	40.671 ppb	01:01:00
1	Sc 361.383	826231.0	826231.0	105.00 %		01:02:17
1	Y 371.029	855360.2	855360.2	121.93 %		01:02:17
1	Ag 328.068†	-3230.7	-3285.1	2.9520 ug/L	2.9520 ppb	01:02:22
1	As 188.979†	-23.8	6.2	31.212 ug/L	31.212 ppb	01:02:42
1	B 249.677†	-80.2	69.0	-8.5795 ug/L	-8.5795 ppb	01:02:22
1	Ba 233.527†	26475.0	25213.0	300.57 ug/L	300.57 ppb	01:02:22
1	Be 313.107†	-10592.6	-658.7	3.3170 ug/L	3.3170 ppb	01:02:22
1	Cd 226.502†	276.0	457.1	-0.0485 ug/L	-0.0485 ppb	01:02:42
1	Co 228.616†	522.5	553.0	12.713 ug/L	12.713 ppb	01:02:42
1	Cr 267.716†	7648.5	7218.4	100.03 ug/L	100.03 ppb	01:02:22
1	Cu 324.752†	14502.2	4700.8	21.000 ug/L	21.000 ppb	01:02:22
1	Mn 257.610†	1574226.0	1498799.6	2409.3 ug/L	2409.3 ppb	01:02:17
1	Mo 202.031†	65.5	47.2	9.3169 ug/L	9.3169 ppb	01:02:42
1	Ni 231.604†	2030.7	1832.7	58.658 ug/L	58.658 ppb	01:02:42
1	P 214.914†	1241.6	979.0	495.23 ug/L	495.23 ppb	01:02:42
1	Pb 220.353†	363.7	373.1	60.063 ug/L	60.063 ppb	01:02:42
1	S 181.975 Axial†	116.5	70.1	86.354 ug/L	86.354 ppb	01:02:42
1	Sb 206.836†	39.2	6.3	-3.5841 ug/L	-3.5841 ppb	01:02:42
1	Se 196.026†	-260.1	-230.8	2.6331 ug/L	2.6331 ppb	01:02:42
1	Si 251.611†	257544.0	244723.8	8888.9 ug/L	8888.9 ppb	01:02:17
1	Sn 189.927†	31.7	1.5	-2.3557 ug/L	-2.3557 ppb	01:02:42
1	Ti 334.940†	821735.5	783845.9	1577.1 ug/L	1577.1 ppb	01:02:17
1	Tl 190.801†	-89.6	-48.3	2.2286 ug/L	2.2286 ppb	01:02:42
1	U 409.014†	-8776.5	-6119.1	-212.94 ug/L	-212.94 ppb	01:02:17
1	V 292.402†	5619.3	7013.0	44.438 ug/L	44.438 ppb	01:02:22
1	Zn 213.857†	26910.6	24482.0	261.04 ug/L	261.04 ppb	01:02:22
1	SiO2†	258254.7	245386.0	19079 ug/L	19079 ppb	01:03:50
2	Sc Radial	4959.1	4959.1	103 %		01:01:25
2	Y RADIAL	6154.1	6154.1	120.5 %		01:01:25
2	Al 396.153Radial†	18671.9	18236.6	17398 ug/L	17398 ppb	01:01:25
2	Ca 317.933Radial†	2982.9	2878.9	5329.1 ug/L	5329.1 ppb	01:01:45
2	Fe 238.204 Radial†	5808.8	5640.4	62943 ug/L	62943 ppb	01:01:25
2	K 766.490 Radial†	16620.6	13915.1	2759.7 ug/L	2759.7 ppb	01:01:25
2	Mg 279.077 IEC†	91.5	87.9	3576.0 ug/L	3576.0 ppb	01:01:45
2	Na 589.592 Radial†	677.0	1213.1	432.01 ug/L	432.01 ppb	01:01:25
2	Sr 421.552†	5575.4	5409.0	40.486 ug/L	40.486 ppb	01:01:25
2	Sc 361.383	825736.4	825736.4	104.94 %		01:02:48
2	Y 371.029	856308.5	856308.5	122.06 %		01:02:48
2	Ag 328.068†	-3149.4	-3209.4	3.2275 ug/L	3.2275 ppb	01:02:53
2	As 188.979†	-28.8	1.4	28.976 ug/L	28.976 ppb	01:03:14
2	B 249.677†	-86.0	63.3	-8.6671 ug/L	-8.6671 ppb	01:02:53
2	Ba 233.527†	25865.3	24647.1	293.86 ug/L	293.86 ppb	01:02:53
2	Be 313.107†	-10449.4	-528.2	3.3601 ug/L	3.3601 ppb	01:02:53
2	Cd 226.502†	278.4	459.6	0.0225 ug/L	0.0225 ppb	01:03:14
2	Co 228.616†	519.1	550.0	12.631 ug/L	12.631 ppb	01:03:14
2	Cr 267.716†	7496.0	7077.5	98.091 ug/L	98.091 ppb	01:02:53
2	Cu 324.752†	14309.1	4525.1	20.325 ug/L	20.325 ppb	01:02:53
2	Mn 257.610†	1564612.4	1490536.6	2396.0 ug/L	2396.0 ppb	01:02:48
2	Mo 202.031†	50.3	32.7	7.9630 ug/L	7.9630 ppb	01:03:14
2	Ni 231.604†	2036.3	1839.1	58.863 ug/L	58.863 ppb	01:03:14

2	P 214.914†	1233.3	971.8	491.59 ug/L	491.59 ppb	01:03:14
2	Pb 220.353†	374.4	383.5	61.786 ug/L	61.786 ppb	01:03:14
2	S 181.975 Axial†	118.3	71.8	88.552 ug/L	88.552 ppb	01:03:14
2	Sb 206.836†	47.2	13.9	-0.5380 ug/L	-0.5380 ppb	01:03:14
2	Se 196.026†	-263.3	-234.0	-0.0798 ug/L	-0.0798 ppb	01:03:14
2	Si 251.611†	256452.9	243831.0	8856.5 ug/L	8856.5 ppb	01:02:48
2	Sn 189.927†	27.2	-2.7	-3.3124 ug/L	-3.3124 ppb	01:03:14
2	Ti 334.940†	819198.7	781897.3	1573.2 ug/L	1573.2 ppb	01:02:48
2	Tl 190.801†	-113.3	-70.9	-8.2355 ug/L	-8.2355 ppb	01:03:14
2	U 409.014†	-8643.8	-5997.6	-208.82 ug/L	-208.82 ppb	01:02:48
2	V 292.402†	5528.4	6929.6	43.824 ug/L	43.824 ppb	01:02:53
2	Zn 213.857†	26521.0	24126.1	257.15 ug/L	257.15 ppb	01:02:53
2	SiO2†	263221.1	250266.0	19458 ug/L	19458 ppb	01:03:55
3	Sc Radial	4933.6	4933.6	102 %		01:01:50
3	Y RADIAL	6119.9	6119.9	119.8 %		01:01:50
3	Al 396.153Radial†	18689.1	18347.0	17503 ug/L	17503 ppb	01:01:50
3	Ca 317.933Radial†	2957.9	2869.5	5311.7 ug/L	5311.7 ppb	01:02:10
3	Fe 238.204 Radial†	5828.5	5688.8	63483 ug/L	63483 ppb	01:01:50
3	K 766.490 Radial†	16676.9	14053.4	2787.2 ug/L	2787.2 ppb	01:01:50
3	Mg 279.077 IEC†	85.3	82.4	3343.8 ug/L	3343.8 ppb	01:02:10
3	Na 589.592 Radial†	720.1	1258.7	448.25 ug/L	448.25 ppb	01:01:50
3	Sr 421.552†	5642.4	5502.4	41.186 ug/L	41.186 ppb	01:01:50
3	Sc 361.383	836030.2	836030.2	106.25 %		01:03:19
3	Y 371.029	866938.8	866938.8	123.58 %		01:03:19
3	Ag 328.068†	-3264.1	-3280.4	3.0354 ug/L	3.0354 ppb	01:03:24
3	As 188.979†	-23.1	7.1	31.638 ug/L	31.638 ppb	01:03:45
3	B 249.677†	-58.6	90.1	-8.0767 ug/L	-8.0767 ppb	01:03:24
3	Ba 233.527†	26283.1	24736.8	294.93 ug/L	294.93 ppb	01:03:24
3	Be 313.107†	-10558.2	-508.0	3.3686 ug/L	3.3686 ppb	01:03:24
3	Cd 226.502†	262.9	441.7	-0.2890 ug/L	-0.2890 ppb	01:03:45
3	Co 228.616†	524.6	549.1	12.596 ug/L	12.596 ppb	01:03:45
3	Cr 267.716†	7585.5	7073.8	98.054 ug/L	98.054 ppb	01:03:24
3	Cu 324.752†	14547.1	4581.2	20.566 ug/L	20.566 ppb	01:03:24
3	Mn 257.610†	1585569.2	1491903.2	2398.2 ug/L	2398.2 ppb	01:03:19
3	Mo 202.031†	46.8	28.9	7.6475 ug/L	7.6475 ppb	01:03:45
3	Ni 231.604†	2021.9	1801.7	57.665 ug/L	57.665 ppb	01:03:45
3	P 214.914†	1242.9	966.3	488.10 ug/L	488.10 ppb	01:03:45
3	Pb 220.353†	360.4	365.9	58.902 ug/L	58.902 ppb	01:03:45
3	S 181.975 Axial†	112.3	64.8	79.532 ug/L	79.532 ppb	01:03:45
3	Sb 206.836†	28.4	-4.3	-7.8417 ug/L	-7.8417 ppb	01:03:45
3	Se 196.026†	-261.7	-229.4	3.9468 ug/L	3.9468 ppb	01:03:45
3	Si 251.611†	259975.9	244137.8	8867.7 ug/L	8867.7 ppb	01:03:19
3	Sn 189.927†	32.3	1.7	-2.2922 ug/L	-2.2922 ppb	01:03:45
3	Ti 334.940†	829507.0	781987.6	1573.4 ug/L	1573.4 ppb	01:03:19
3	Tl 190.801†	-90.7	-48.3	2.1449 ug/L	2.1449 ppb	01:03:45
3	U 409.014†	-8927.4	-6163.1	-214.43 ug/L	-214.43 ppb	01:03:19
3	V 292.402†	5632.0	6962.3	43.984 ug/L	43.984 ppb	01:03:24
3	Zn 213.857†	26827.5	24103.4	256.83 ug/L	256.83 ppb	01:03:24
3	SiO2†	256103.0	240478.1	18697 ug/L	18697 ppb	01:04:01

Mean Data: 246437011|958097|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	829332.5	105.40 %	0.738			0.70%
Sc Radial	4977.4	103 %	1.1			1.11%
Y 371.029	859535.8	122.52 %	0.916			0.75%
Y RADIAL	6176.5	120.9 %	1.38			1.14%
Ag 328.068†	-3258.3	3.0716 ug/L	0.14126	3.0716 ppb	0.14126	4.60%
Al 396.153Radial†	18279.0	17438 ug/L	56.8	17438 ppb	56.8	0.33%
As 188.979†	4.9	30.609 ug/L	1.4298	30.609 ppb	1.4298	4.67%
B 249.677†	74.1	-8.4411 ug/L	0.31862	-8.4411 ppb	0.31862	3.77%
Ba 233.527†	24865.6	296.45 ug/L	3.604	296.45 ppb	3.604	1.22%
Be 313.107†	-565.0	3.3486 ug/L	0.02763	3.3486 ppb	0.02763	0.83%
Ca 317.933Radial†	2849.9	5275.3 ug/L	78.62	5275.3 ppb	78.62	1.49%
Cd 226.502†	452.8	-0.1050 ug/L	0.16329	-0.1050 ppb	0.16329	155.50%
Co 228.616†	550.7	12.647 ug/L	0.0604	12.647 ppb	0.0604	0.48%
Cr 267.716†	7123.2	98.724 ug/L	1.1284	98.724 ppb	1.1284	1.14%
Cu 324.752†	4602.4	20.630 ug/L	0.3424	20.630 ppb	0.3424	1.66%
Fe 238.204 Radial†	5666.6	63236 ug/L	272.9	63236 ppb	272.9	0.43%
K 766.490 Radial†	13929.4	2762.6 ug/L	23.32	2762.6 ppb	23.32	0.84%

Mg 279.077 IEC†	84.5	3433.1 ug/L	125.05	3433.1 ppb	125.05	3.64%
Mn 257.610†	1493746.4	2401.2 ug/L	7.11	2401.2 ppb	7.11	0.30%
Mo 202.031†	36.3	8.3091 ug/L	0.88687	8.3091 ppb	0.88687	10.67%
Na 589.592 Radial†	1246.0	443.73 ug/L	10.230	443.73 ppb	10.230	2.31%
Ni 231.604†	1824.5	58.395 ug/L	0.6404	58.395 ppb	0.6404	1.10%
P 214.914†	972.4	491.64 ug/L	3.564	491.64 ppb	3.564	0.72%
Pb 220.353†	374.2	60.250 ug/L	1.4510	60.250 ppb	1.4510	2.41%
S 181.975 Axial†	68.9	84.813 ug/L	4.7036	84.813 ppb	4.7036	5.55%
Sb 206.836†	5.3	-3.9879 ug/L	3.66858	-3.9879 ppb	3.66858	91.99%
Se 196.026†	-231.4	2.1667 ug/L	2.05345	2.1667 ppb	2.05345	94.77%
Si 251.611†	244230.9	8871.0 ug/L	16.47	8871.0 ppb	16.47	0.19%
Sn 189.927†	0.2	-2.6534 ug/L	0.57157	-2.6534 ppb	0.57157	21.54%
Sr 421.552†	5448.3	40.781 ug/L	0.3626	40.781 ppb	0.3626	0.89%
Ti 334.940†	782577.0	1574.6 ug/L	2.21	1574.6 ppb	2.21	0.14%
Tl 190.801†	-55.8	-1.2873 ug/L	6.01741	-1.2873 ppb	6.01741	467.43%
U 409.014†	-6093.3	-212.06 ug/L	2.910	-212.06 ppb	2.910	1.37%
V 292.402†	6968.3	44.082 ug/L	0.3188	44.082 ppb	0.3188	0.72%
Zn 213.857†	24237.2	258.34 ug/L	2.344	258.34 ppb	2.344	0.91%
SiO2†	245376.7	19078 ug/L	380.5	19078 ppb	380.5	1.99%

Sequence No.: 58

Sample ID: 246437012|958097|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 81

Date Collected: 3/4/2010 01:06:12

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 246437012|958097|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	5009.7	5009.7	104 %		01:08:05
1	Y RADIAL	6183.4	6183.4	121.0 %		01:08:05
1	Al 396.153Radial†	17743.0	17159.1	16370 ug/L	16370 ppb	01:08:05
1	Ca 317.933Radial†	2959.5	2827.1	5233.2 ug/L	5233.2 ppb	01:08:25
1	Fe 238.204 Radial†	5232.5	5028.7	56116 ug/L	56116 ppb	01:08:05
1	K 766.490 Radial†	17957.0	15037.8	2983.0 ug/L	2983.0 ppb	01:08:05
1	Mg 279.077 IEC†	86.6	82.4	3351.7 ug/L	3351.7 ppb	01:08:25
1	Na 589.592 Radial†	943.1	1462.6	520.86 ug/L	520.86 ppb	01:08:05
1	Sr 421.552†	5536.2	5316.5	39.793 ug/L	39.793 ppb	01:08:05
1	Sc 361.383	838963.8	838963.8	106.62 %		01:09:22
1	Y 371.029	860402.2	860402.2	122.65 %		01:09:22
1	Ag 328.068†	-2909.0	-2936.6	2.4794 ug/L	2.4794 ppb	01:09:27
1	As 188.979†	-22.3	7.9	28.277 ug/L	28.277 ppb	01:09:47
1	B 249.677†	-136.9	16.9	-8.7251 ug/L	-8.7251 ppb	01:09:27
1	Ba 233.527†	19156.3	17966.1	214.53 ug/L	214.53 ppb	01:09:27
1	Be 313.107†	-11658.3	-1505.1	2.4476 ug/L	2.4476 ppb	01:09:27
1	Cd 226.502†	220.3	400.8	-0.0564 ug/L	-0.0564 ppb	01:09:47
1	Co 228.616†	426.6	455.5	10.232 ug/L	10.232 ppb	01:09:47
1	Cr 267.716†	19283.3	18020.2	247.49 ug/L	247.49 ppb	01:09:27
1	Cu 324.752†	13221.3	3289.9	15.342 ug/L	15.342 ppb	01:09:27
1	Mn 257.610†	989381.3	927517.8	1492.6 ug/L	1492.6 ppb	01:09:22
1	Mo 202.031†	42.3	24.5	6.6729 ug/L	6.6729 ppb	01:09:47
1	Ni 231.604†	4443.7	4066.4	130.17 ug/L	130.17 ppb	01:09:27
1	P 214.914†	1192.9	915.4	466.29 ug/L	466.29 ppb	01:09:47
1	Pb 220.353†	225.2	237.9	38.339 ug/L	38.339 ppb	01:09:47
1	S 181.975 Axial†	120.9	72.5	89.602 ug/L	89.602 ppb	01:09:47
1	Sb 206.836†	54.4	19.9	2.7202 ug/L	2.7202 ppb	01:09:47
1	Se 196.026†	-230.8	-199.5	5.5741 ug/L	5.5741 ppb	01:09:47
1	Si 251.611†	232433.1	217449.7	7898.3 ug/L	7898.3 ppb	01:09:22
1	Sn 189.927†	20.7	-9.3	-4.4847 ug/L	-4.4847 ppb	01:09:47
1	Ti 334.940†	710107.9	667272.7	1342.6 ug/L	1342.6 ppb	01:09:22
1	Tl 190.801†	-77.7	-35.9	1.6419 ug/L	1.6419 ppb	01:09:47
1	U 409.014†	-8035.8	-5297.5	-184.86 ug/L	-184.86 ppb	01:09:22
1	V 292.402†	4663.0	6034.9	37.940 ug/L	37.940 ppb	01:09:27
1	Zn 213.857†	23827.6	21201.5	225.36 ug/L	225.36 ppb	01:09:27
1	SiO2†	230107.8	215254.2	16736 ug/L	16736 ppb	01:10:54
2	Sc Radial	5067.9	5067.9	105 %		01:08:30
2	Y RADIAL	6263.0	6263.0	122.6 %		01:08:30
2	Al 396.153Radial†	18022.2	17228.6	16436 ug/L	16436 ppb	01:08:30
2	Ca 317.933Radial†	2967.2	2801.8	5186.3 ug/L	5186.3 ppb	01:08:50
2	Fe 238.204 Radial†	5315.8	5050.1	56355 ug/L	56355 ppb	01:08:30
2	K 766.490 Radial†	18108.4	14983.5	2972.2 ug/L	2972.2 ppb	01:08:30
2	Mg 279.077 IEC†	87.8	82.5	3358.9 ug/L	3358.9 ppb	01:08:50
2	Na 589.592 Radial†	929.3	1439.1	512.47 ug/L	512.47 ppb	01:08:30
2	Sr 421.552†	5629.8	5344.4	40.003 ug/L	40.003 ppb	01:08:30
2	Sc 361.383	832071.3	832071.3	105.74 %		01:09:53
2	Y 371.029	855172.4	855172.4	121.90 %		01:09:53
2	Ag 328.068†	-2910.2	-2960.4	2.4326 ug/L	2.4326 ppb	01:09:58
2	As 188.979†	-26.4	3.9	26.532 ug/L	26.532 ppb	01:10:18
2	B 249.677†	-129.2	23.1	-8.6050 ug/L	-8.6050 ppb	01:09:58
2	Ba 233.527†	19566.1	18502.4	220.89 ug/L	220.89 ppb	01:09:58
2	Be 313.107†	-11829.0	-1757.1	2.3467 ug/L	2.3467 ppb	01:09:58
2	Cd 226.502†	232.3	413.9	0.1074 ug/L	0.1074 ppb	01:10:18
2	Co 228.616†	407.1	440.4	9.7684 ug/L	9.7684 ppb	01:10:18
2	Cr 267.716†	19627.3	18495.4	253.99 ug/L	253.99 ppb	01:09:58
2	Cu 324.752†	13522.1	3677.0	16.798 ug/L	16.798 ppb	01:09:58
2	Mn 257.610†	980521.1	926825.7	1491.5 ug/L	1491.5 ppb	01:09:53
2	Mo 202.031†	40.7	23.3	6.5784 ug/L	6.5784 ppb	01:10:18
2	Ni 231.604†	4513.2	4166.6	133.38 ug/L	133.38 ppb	01:09:58

2	P 214.914†	1207.2	938.2	478.55 ug/L	478.55 ppb	01:10:18
2	Pb 220.353†	223.1	237.7	38.305 ug/L	38.305 ppb	01:10:18
2	S 181.975 Axial†	124.4	76.8	95.073 ug/L	95.073 ppb	01:10:18
2	Sb 206.836†	44.2	10.7	-0.9755 ug/L	-0.9755 ppb	01:10:18
2	Se 196.026†	-242.3	-212.2	-1.6342 ug/L	-1.6342 ppb	01:10:18
2	Si 251.611†	230339.5	217275.7	7892.0 ug/L	7892.0 ppb	01:09:53
2	Sn 189.927†	18.6	-11.1	-4.9316 ug/L	-4.9316 ppb	01:10:18
2	Ti 334.940†	704154.1	667159.4	1342.3 ug/L	1342.3 ppb	01:09:53
2	Tl 190.801†	-78.3	-37.0	1.1178 ug/L	1.1178 ppb	01:10:18
2	U 409.014†	-7897.7	-5229.3	-182.61 ug/L	-182.61 ppb	01:09:53
2	V 292.402†	4717.4	6122.6	38.602 ug/L	38.602 ppb	01:09:58
2	Zn 213.857†	24274.1	21808.8	232.03 ug/L	232.03 ppb	01:09:58
2	SiO2†	231937.7	218772.5	17009 ug/L	17009 ppb	01:10:59
3	Sc Radial	5028.9	5028.9	104 %		01:08:55
3	Y RADIAL	6180.3	6180.3	121.0 %		01:08:55
3	Al 396.153Radial†	17848.0	17194.5	16404 ug/L	16404 ppb	01:08:55
3	Ca 317.933Radial†	2976.6	2832.7	5243.4 ug/L	5243.4 ppb	01:09:15
3	Fe 238.204 Radial†	5273.7	5048.9	56342 ug/L	56342 ppb	01:08:55
3	K 766.490 Radial†	18144.6	15151.7	3005.6 ug/L	3005.6 ppb	01:08:55
3	Mg 279.077 IEC†	88.3	83.6	3403.2 ug/L	3403.2 ppb	01:09:15
3	Na 589.592 Radial†	929.3	1445.9	514.91 ug/L	514.91 ppb	01:08:55
3	Sr 421.552†	5573.1	5331.5	39.906 ug/L	39.906 ppb	01:08:55
3	Sc 361.383	835172.9	835172.9	106.14 %		01:10:23
3	Y 371.029	856808.4	856808.4	122.13 %		01:10:23
3	Ag 328.068†	-2812.8	-2858.4	2.9555 ug/L	2.9555 ppb	01:10:28
3	As 188.979†	-27.9	2.5	25.953 ug/L	25.953 ppb	01:10:48
3	B 249.677†	-99.0	52.0	-7.8718 ug/L	-7.8718 ppb	01:10:28
3	Ba 233.527†	19602.4	18467.9	220.48 ug/L	220.48 ppb	01:10:28
3	Be 313.107†	-11904.7	-1786.9	2.3381 ug/L	2.3381 ppb	01:10:28
3	Cd 226.502†	224.7	406.0	-0.0044 ug/L	-0.0044 ppb	01:10:48
3	Co 228.616†	410.3	442.0	9.8150 ug/L	9.8150 ppb	01:10:48
3	Cr 267.716†	19670.8	18467.4	253.61 ug/L	253.61 ppb	01:10:28
3	Cu 324.752†	13614.5	3716.6	16.945 ug/L	16.945 ppb	01:10:28
3	Mn 257.610†	986210.5	928742.4	1494.6 ug/L	1494.6 ppb	01:10:23
3	Mo 202.031†	45.6	27.8	6.9921 ug/L	6.9921 ppb	01:10:48
3	Ni 231.604†	4518.5	4155.8	133.03 ug/L	133.03 ppb	01:10:28
3	P 214.914†	1177.9	906.4	460.78 ug/L	460.78 ppb	01:10:48
3	Pb 220.353†	221.8	235.7	37.976 ug/L	37.976 ppb	01:10:48
3	S 181.975 Axial†	118.0	70.3	86.812 ug/L	86.812 ppb	01:10:48
3	Sb 206.836†	41.2	7.8	-2.1314 ug/L	-2.1314 ppb	01:10:48
3	Se 196.026†	-231.4	-201.1	5.1135 ug/L	5.1135 ppb	01:10:48
3	Si 251.611†	231585.8	217641.0	7905.2 ug/L	7905.2 ppb	01:10:23
3	Sn 189.927†	16.3	-13.3	-5.4569 ug/L	-5.4569 ppb	01:10:48
3	Ti 334.940†	707550.7	667886.6	1343.8 ug/L	1343.8 ppb	01:10:23
3	Tl 190.801†	-80.4	-38.7	0.3407 ug/L	0.3407 ppb	01:10:48
3	U 409.014†	-7939.6	-5241.1	-183.00 ug/L	-183.00 ppb	01:10:23
3	V 292.402†	4906.0	6283.7	39.886 ug/L	39.886 ppb	01:10:28
3	Zn 213.857†	24261.7	21711.9	230.96 ug/L	230.96 ppb	01:10:28
3	SiO2†	227933.4	214185.2	16653 ug/L	16653 ppb	01:11:04

Mean Data: 246437012|958097|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	835402.7	106.17 %	0.439			0.41%
Sc Radial	5035.5	104 %	0.6			0.59%
Y 371.029	857461.0	122.23 %	0.381			0.31%
Y RADIAL	6208.9	121.5 %	0.92			0.76%
Ag 328.068†	-2918.4	2.6225 ug/L	0.28935	2.6225 ppb	0.28935	11.03%
Al 396.153Radial†	17194.1	16403 ug/L	33.2	16403 ppb	33.2	0.20%
As 188.979†	4.8	26.921 ug/L	1.2099	26.921 ppb	1.2099	4.49%
B 249.677†	30.7	-8.4006 ug/L	0.46187	-8.4006 ppb	0.46187	5.50%
Ba 233.527†	18312.1	218.63 ug/L	3.560	218.63 ppb	3.560	1.63%
Be 313.107†	-1683.0	2.3775 ug/L	0.06087	2.3775 ppb	0.06087	2.56%
Ca 317.933Radial†	2820.5	5221.0 ug/L	30.46	5221.0 ppb	30.46	0.58%
Cd 226.502†	406.9	0.0155 ug/L	0.08368	0.0155 ppb	0.08368	539.11%
Co 228.616†	446.0	9.9384 ug/L	0.25512	9.9384 ppb	0.25512	2.57%
Cr 267.716†	18327.7	251.70 ug/L	3.647	251.70 ppb	3.647	1.45%
Cu 324.752†	3561.2	16.362 ug/L	0.8860	16.362 ppb	0.8860	5.41%
Fe 238.204 Radial†	5042.5	56271 ug/L	134.2	56271 ppb	134.2	0.24%
K 766.490 Radial†	15057.7	2986.9 ug/L	17.03	2986.9 ppb	17.03	0.57%

Mg 279.077 IEC†	82.8	3371.3 ug/L	27.89	3371.3 ppb	27.89	0.83%
Mn 257.610†	927695.3	1492.9 ug/L	1.56	1492.9 ppb	1.56	0.10%
Mo 202.031†	25.2	6.7478 ug/L	0.21680	6.7478 ppb	0.21680	3.21%
Na 589.592 Radial†	1449.2	516.08 ug/L	4.314	516.08 ppb	4.314	0.84%
Ni 231.604†	4129.6	132.19 ug/L	1.761	132.19 ppb	1.761	1.33%
P 214.914†	920.0	468.54 ug/L	9.097	468.54 ppb	9.097	1.94%
Pb 220.353†	237.1	38.207 ug/L	0.2006	38.207 ppb	0.2006	0.53%
S 181.975 Axial†	73.2	90.496 ug/L	4.2024	90.496 ppb	4.2024	4.64%
Sb 206.836†	12.8	-0.1289 ug/L	2.53416	-0.1289 ppb	2.53416	>999.9%
Se 196.026†	-204.2	3.0178 ug/L	4.03535	3.0178 ppb	4.03535	133.72%
Si 251.611†	217455.5	7898.5 ug/L	6.63	7898.5 ppb	6.63	0.08%
Sn 189.927†	-11.2	-4.9577 ug/L	0.48662	-4.9577 ppb	0.48662	9.82%
Sr 421.552†	5330.8	39.901 ug/L	0.1048	39.901 ppb	0.1048	0.26%
Ti 334.940†	667439.6	1342.9 ug/L	0.79	1342.9 ppb	0.79	0.06%
Tl 190.801†	-37.2	1.0335 ug/L	0.65470	1.0335 ppb	0.65470	63.35%
U 409.014†	-5256.0	-183.49 ug/L	1.201	-183.49 ppb	1.201	0.65%
V 292.402†	6147.1	38.809 ug/L	0.9894	38.809 ppb	0.9894	2.55%
Zn 213.857†	21574.1	229.45 ug/L	3.578	229.45 ppb	3.578	1.56%
SiO2†	216070.6	16799 ug/L	186.6	16799 ppb	186.6	1.11%



Sequence No.: 59  
 Sample ID: 246437013|958097|1  
 Analyst: HSC  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 82  
 Date Collected: 3/4/2010 01:13:15  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Replicate Data: 246437013|958097|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4925.7	4925.7	102	%		01:15:09
1	Y RADIAL	5922.3	5922.3	115.9	%		01:15:09
1	Al 396.153Radial†	27366.7	26870.0	25634	ug/L	25634 ppb	01:15:09
1	Ca 317.933Radial†	4003.2	3897.3	7214.1	ug/L	7214.1 ppb	01:15:09
1	Fe 238.204 Radial†	6711.0	6561.7	73224	ug/L	73224 ppb	01:15:09
1	K 766.490 Radial†	27452.1	24626.4	4885.9	ug/L	4885.9 ppb	01:15:09
1	Mg 279.077 IEC†	130.3	126.5	5161.7	ug/L	5161.7 ppb	01:15:29
1	Na 589.592 Radial†	274.1	823.3	293.19	ug/L	293.19 ppb	01:15:09
1	Sr 421.552†	8230.1	8044.1	60.215	ug/L	60.215 ppb	01:15:09
1	Sc 361.383	842516.7	842516.7	107.07	%		01:16:26
1	Y 371.029	837956.9	837956.9	119.45	%		01:16:26
1	Ag 328.068†	-3844.9	-3799.2	3.3885	ug/L	3.3885 ppb	01:16:26
1	As 188.979†	-24.7	5.8	37.007	ug/L	37.007 ppb	01:16:46
1	B 249.677†	23.8	167.5	-7.7077	ug/L	-7.7077 ppb	01:16:26
1	Ba 233.527†	29411.7	27468.3	327.63	ug/L	327.63 ppb	01:16:26
1	Be 313.107†	-14332.3	-3956.3	2.9581	ug/L	2.9581 ppb	01:16:26
1	Cd 226.502†	367.6	537.5	0.0743	ug/L	0.0743 ppb	01:16:46
1	Co 228.616†	622.6	636.8	14.257	ug/L	14.257 ppb	01:16:46
1	Cr 267.716†	5734.3	5289.9	73.866	ug/L	73.866 ppb	01:16:46
1	Cu 324.752†	15757.5	5606.2	24.865	ug/L	24.865 ppb	01:16:26
1	Mn 257.610†	1234465.2	1152500.5	1854.9	ug/L	1854.9 ppb	01:16:26
1	Mo 202.031†	34.9	17.4	7.3725	ug/L	7.3725 ppb	01:16:46
1	Ni 231.604†	1719.7	1504.7	48.158	ug/L	48.158 ppb	01:16:46
1	P 214.914†	1317.2	1026.8	515.12	ug/L	515.12 ppb	01:16:46
1	Pb 220.353†	352.7	356.0	58.514	ug/L	58.514 ppb	01:16:46
1	S 181.975 Axial†	239.1	182.4	228.28	ug/L	228.28 ppb	01:16:46
1	Sb 206.836†	48.5	14.3	-2.2006	ug/L	-2.2006 ppb	01:16:46
1	Se 196.026†	-309.7	-272.3	0.3608	ug/L	0.3608 ppb	01:16:46
1	Si 251.611†	277034.6	258185.9	9378.0	ug/L	9378.0 ppb	01:16:26
1	Sn 189.927†	0.5	-28.2	-9.5852	ug/L	-9.5852 ppb	01:16:46
1	Ti 334.940†	1061761.0	992890.3	1997.7	ug/L	1997.7 ppb	01:16:26
1	Tl 190.801†	-98.4	-54.9	-0.0037	ug/L	-0.0037 ppb	01:16:46
1	U 409.014†	-6644.0	-3965.8	-141.70	ug/L	-141.70 ppb	01:16:26
1	V 292.402†	9055.8	10119.1	67.326	ug/L	67.326 ppb	01:16:26
1	Zn 213.857†	29577.8	26477.6	281.70	ug/L	281.70 ppb	01:16:26
1	SiO2†	274646.0	255940.5	19899	ug/L	19899 ppb	01:17:43
2	Sc Radial	4910.4	4910.4	102	%		01:15:34
2	Y RADIAL	5894.5	5894.5	115.4	%		01:15:34
2	Al 396.153Radial†	26490.7	26093.3	24893	ug/L	24893 ppb	01:15:34
2	Ca 317.933Radial†	3885.3	3793.8	7022.5	ug/L	7022.5 ppb	01:15:34
2	Fe 238.204 Radial†	6535.4	6409.7	71528	ug/L	71528 ppb	01:15:34
2	K 766.490 Radial†	26797.8	24067.7	4775.0	ug/L	4775.0 ppb	01:15:34
2	Mg 279.077 IEC†	127.0	123.7	5046.8	ug/L	5046.8 ppb	01:15:54
2	Na 589.592 Radial†	344.3	893.0	318.02	ug/L	318.02 ppb	01:15:34
2	Sr 421.552†	7973.4	7817.2	58.516	ug/L	58.516 ppb	01:15:34
2	Sc 361.383	838289.2	838289.2	106.53	%		01:16:52
2	Y 371.029	834223.9	834223.9	118.91	%		01:16:52
2	Ag 328.068†	-3865.3	-3836.4	2.6789	ug/L	2.6789 ppb	01:16:52
2	As 188.979†	-33.4	-2.5	32.981	ug/L	32.981 ppb	01:17:12
2	B 249.677†	4.0	149.1	-7.9003	ug/L	-7.9003 ppb	01:16:52
2	Ba 233.527†	29308.3	27509.8	328.07	ug/L	328.07 ppb	01:16:52
2	Be 313.107†	-14438.9	-4123.8	2.8978	ug/L	2.8978 ppb	01:16:52
2	Cd 226.502†	377.0	548.1	0.4001	ug/L	0.4001 ppb	01:17:12
2	Co 228.616†	634.3	650.8	14.703	ug/L	14.703 ppb	01:17:12
2	Cr 267.716†	5738.4	5320.8	74.256	ug/L	74.256 ppb	01:17:12
2	Cu 324.752†	15800.9	5721.2	25.203	ug/L	25.203 ppb	01:16:52
2	Mn 257.610†	1231262.6	1155308.7	1859.3	ug/L	1859.3 ppb	01:16:52
2	Mo 202.031†	39.6	22.0	7.6623	ug/L	7.6623 ppb	01:17:12
2	Ni 231.604†	1707.0	1501.0	48.038	ug/L	48.038 ppb	01:17:12

2	P 214.914†	1322.5	1037.9	522.45 ug/L	522.45 ppb	01:17:12
2	Pb 220.353†	331.0	337.4	55.419 ug/L	55.419 ppb	01:17:12
2	S 181.975 Axial†	242.9	187.1	234.44 ug/L	234.44 ppb	01:17:12
2	Sb 206.836†	45.0	11.2	-3.3624 ug/L	-3.3624 ppb	01:17:12
2	Se 196.026†	-309.7	-273.8	-4.4158 ug/L	-4.4158 ppb	01:17:12
2	Si 251.611†	275719.9	258256.7	9380.5 ug/L	9380.5 ppb	01:16:52
2	Sn 189.927†	8.4	-20.7	-7.7606 ug/L	-7.7606 ppb	01:17:12
2	Ti 334.940†	1057909.6	994275.9	2000.5 ug/L	2000.5 ppb	01:16:52
2	Tl 190.801†	-94.1	-51.3	1.6762 ug/L	1.6762 ppb	01:17:12
2	U 409.014†	-6593.1	-3949.4	-140.95 ug/L	-140.95 ppb	01:16:52
2	V 292.402†	9020.3	10128.5	67.649 ug/L	67.649 ppb	01:16:52
2	Zn 213.857†	29501.3	26545.1	282.70 ug/L	282.70 ppb	01:16:52
2	SiO2†	272164.7	254904.9	19819 ug/L	19819 ppb	01:17:49
3	Sc Radial	5008.5	5008.5	104 %		01:15:59
3	Y RADIAL	5996.9	5996.9	117.4 %		01:15:59
3	Al 396.153Radial†	26962.6	26038.3	24841 ug/L	24841 ppb	01:15:59
3	Ca 317.933Radial†	3954.7	3785.8	7007.9 ug/L	7007.9 ppb	01:15:59
3	Fe 238.204 Radial†	6644.0	6388.6	71292 ug/L	71292 ppb	01:15:59
3	K 766.490 Radial†	27166.3	23907.2	4743.2 ug/L	4743.2 ppb	01:15:59
3	Mg 279.077 IEC†	128.9	123.0	5020.4 ug/L	5020.4 ppb	01:16:19
3	Na 589.592 Radial†	356.9	898.5	319.97 ug/L	319.97 ppb	01:15:59
3	Sr 421.552†	8141.3	7825.5	58.579 ug/L	58.579 ppb	01:15:59
3	Sc 361.383	825724.8	825724.8	104.94 %		01:17:18
3	Y 371.029	821547.5	821547.5	117.11 %		01:17:18
3	Ag 328.068†	-3773.4	-3804.1	2.7794 ug/L	2.7794 ppb	01:17:18
3	As 188.979†	-36.6	-6.0	31.326 ug/L	31.326 ppb	01:17:38
3	B 249.677†	48.9	191.9	-6.7765 ug/L	-6.7765 ppb	01:17:18
3	Ba 233.527†	28820.1	27463.1	327.51 ug/L	327.51 ppb	01:17:18
3	Be 313.107†	-14051.8	-3961.2	2.9575 ug/L	2.9575 ppb	01:17:18
3	Cd 226.502†	373.1	549.8	0.4468 ug/L	0.4468 ppb	01:17:38
3	Co 228.616†	600.3	627.4	13.996 ug/L	13.996 ppb	01:17:38
3	Cr 267.716†	5695.8	5362.1	74.819 ug/L	74.819 ppb	01:17:38
3	Cu 324.752†	15446.6	5609.3	24.777 ug/L	24.777 ppb	01:17:18
3	Mn 257.610†	1213803.3	1156256.8	1860.8 ug/L	1860.8 ppb	01:17:18
3	Mo 202.031†	29.5	12.9	6.8056 ug/L	6.8056 ppb	01:17:38
3	Ni 231.604†	1696.5	1515.4	48.499 ug/L	48.499 ppb	01:17:38
3	P 214.914†	1312.8	1047.5	528.04 ug/L	528.04 ppb	01:17:38
3	Pb 220.353†	332.5	343.5	56.428 ug/L	56.428 ppb	01:17:38
3	S 181.975 Axial†	236.9	184.9	231.56 ug/L	231.56 ppb	01:17:38
3	Sb 206.836†	49.2	15.8	-1.5420 ug/L	-1.5420 ppb	01:17:38
3	Se 196.026†	-303.6	-272.3	-4.0667 ug/L	-4.0667 ppb	01:17:38
3	Si 251.611†	271238.5	257924.2	9368.5 ug/L	9368.5 ppb	01:17:18
3	Sn 189.927†	3.2	-25.6	-8.9146 ug/L	-8.9146 ppb	01:17:38
3	Ti 334.940†	1040895.9	993172.8	1998.2 ug/L	1998.2 ppb	01:17:18
3	Tl 190.801†	-99.6	-57.8	-1.3345 ug/L	-1.3345 ppb	01:17:38
3	U 409.014†	-6728.5	-4172.6	-148.42 ug/L	-148.42 ppb	01:17:18
3	V 292.402†	8922.2	10163.8	67.939 ug/L	67.939 ppb	01:17:18
3	Zn 213.857†	29141.4	26623.5	283.60 ug/L	283.60 ppb	01:17:18
3	SiO2†	271575.2	258230.5	20077 ug/L	20077 ppb	01:17:54

Mean Data: 246437013|958097|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	835510.2	106.18 %	%	1.110			1.05%
Sc Radial	4948.2	103 %	%	1.1			1.07%
Y 371.029	831242.8	118.49 %	%	1.226			1.03%
Y RADIAL	5937.9	116.2 %	%	1.04			0.89%
Ag 328.068†	-3813.2	2.9489 ug/L	ug/L	0.38396	2.9489 ppb	0.38396	13.02%
Al 396.153Radial†	26333.9	25123 ug/L	ug/L	443.8	25123 ppb	443.8	1.77%
As 188.979†	-0.9	33.771 ug/L	ug/L	2.9215	33.771 ppb	2.9215	8.65%
B 249.677†	169.5	-7.4615 ug/L	ug/L	0.60099	-7.4615 ppb	0.60099	8.05%
Ba 233.527†	27480.4	327.73 ug/L	ug/L	0.295	327.73 ppb	0.295	0.09%
Be 313.107†	-4013.8	2.9378 ug/L	ug/L	0.03468	2.9378 ppb	0.03468	1.18%
Ca 317.933Radial†	3825.6	7081.5 ug/L	ug/L	115.08	7081.5 ppb	115.08	1.63%
Cd 226.502†	545.2	0.3071 ug/L	ug/L	0.20289	0.3071 ppb	0.20289	66.07%
Co 228.616†	638.3	14.319 ug/L	ug/L	0.3575	14.319 ppb	0.3575	2.50%
Cr 267.716†	5324.3	74.314 ug/L	ug/L	0.4794	74.314 ppb	0.4794	0.65%
Cu 324.752†	5645.6	24.948 ug/L	ug/L	0.2250	24.948 ppb	0.2250	0.90%
Fe 238.204 Radial†	6453.3	72015 ug/L	ug/L	1053.9	72015 ppb	1053.9	1.46%
K 766.490 Radial†	24200.4	4801.4 ug/L	ug/L	74.92	4801.4 ppb	74.92	1.56%

Mg 279.077 IEC†	124.4	5076.3 ug/L	75.13	5076.3 ppb	75.13	1.48%
Mn 257.610†	1154688.7	1858.3 ug/L	3.03	1858.3 ppb	3.03	0.16%
Mo 202.031†	17.4	7.2801 ug/L	0.43577	7.2801 ppb	0.43577	5.99%
Na 589.592 Radial†	871.6	310.39 ug/L	14.930	310.39 ppb	14.930	4.81%
Ni 231.604†	1507.0	48.231 ug/L	0.2391	48.231 ppb	0.2391	0.50%
P 214.914†	1037.4	521.87 ug/L	6.479	521.87 ppb	6.479	1.24%
Pb 220.353†	345.6	56.787 ug/L	1.5782	56.787 ppb	1.5782	2.78%
S 181.975 Axial†	184.8	231.43 ug/L	3.082	231.43 ppb	3.082	1.33%
Sb 206.836†	13.8	-2.3683 ug/L	0.92173	-2.3683 ppb	0.92173	38.92%
Se 196.026†	-272.8	-2.7072 ug/L	2.66273	-2.7072 ppb	2.66273	98.36%
Si 251.611†	258122.3	9375.6 ug/L	6.36	9375.6 ppb	6.36	0.07%
Sn 189.927†	-24.8	-8.7535 ug/L	0.92294	-8.7535 ppb	0.92294	10.54%
Sr 421.552†	7895.6	59.103 ug/L	0.9634	59.103 ppb	0.9634	1.63%
Ti 334.940†	993446.3	1998.8 ug/L	1.47	1998.8 ppb	1.47	0.07%
Tl 190.801†	-54.7	0.1127 ug/L	1.50876	0.1127 ppb	1.50876	>999.9%
U 409.014†	-4029.3	-143.69 ug/L	4.115	-143.69 ppb	4.115	2.86%
V 292.402†	10137.1	67.638 ug/L	0.3066	67.638 ppb	0.3066	0.45%
Zn 213.857†	26548.8	282.67 ug/L	0.951	282.67 ppb	0.951	0.34%
SiO2†	256358.6	19932 ug/L	132.3	19932 ppb	132.3	0.66%

Sequence No.: 60

Sample ID: 246437014|958097|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 83

Date Collected: 3/4/2010 01:20:05

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 246437014|958097|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4927.8	4927.8	102 %		01:21:58
1	Y RADIAL	6299.8	6299.8	123.3 %		01:21:58
1	Al 396.153Radial†	20598.4	20236.5	19306 ug/L	19306 ppb	01:21:58
1	Ca 317.933Radial†	2889.0	2805.5	5193.1 ug/L	5193.1 ppb	01:22:18
1	Fe 238.204 Radial†	6679.9	6528.4	72852 ug/L	72852 ppb	01:21:58
1	K 766.490 Radial†	18001.0	15368.0	3048.2 ug/L	3048.2 ppb	01:21:58
1	Mg 279.077 IEC†	96.8	93.7	3803.6 ug/L	3803.6 ppb	01:22:18
1	Na 589.592 Radial†	852.9	1389.5	494.80 ug/L	494.80 ppb	01:21:58
1	Sr 421.552†	5900.9	5761.8	43.130 ug/L	43.130 ppb	01:21:58
1	Sc 361.383	841640.2	841640.2	106.96 %		01:23:16
1	Y 371.029	896686.9	896686.9	127.82 %		01:23:16
1	Ag 328.068†	-3689.5	-3657.6	4.0490 ug/L	4.0490 ppb	01:23:21
1	As 188.979†	-31.1	-0.2	32.713 ug/L	32.713 ppb	01:23:41
1	B 249.677†	-172.8	-16.2	-12.286 ug/L	-12.286 ppb	01:23:21
1	Ba 233.527†	27130.3	25364.0	302.67 ug/L	302.67 ppb	01:23:21
1	Be 313.107†	-11419.6	-1247.2	3.6341 ug/L	3.6341 ppb	01:23:21
1	Cd 226.502†	356.0	527.1	-0.0478 ug/L	-0.0478 ppb	01:23:41
1	Co 228.616†	499.9	522.8	11.144 ug/L	11.144 ppb	01:23:41
1	Cr 267.716†	8192.1	7593.3	105.36 ug/L	105.36 ppb	01:23:21
1	Cu 324.752†	14381.6	4335.2	20.157 ug/L	20.157 ppb	01:23:21
1	Mn 257.610†	1673381.1	1564053.1	2514.8 ug/L	2514.8 ppb	01:23:16
1	Mo 202.031†	51.6	33.1	8.7603 ug/L	8.7603 ppb	01:23:41
1	Ni 231.604†	2087.9	1850.7	59.236 ug/L	59.236 ppb	01:23:41
1	P 214.914†	1134.7	857.4	420.52 ug/L	420.52 ppb	01:23:41
1	Pb 220.353†	349.4	353.4	56.543 ug/L	56.543 ppb	01:23:41
1	S 181.975 Axial†	111.2	63.1	76.962 ug/L	76.962 ppb	01:23:41
1	Sb 206.836†	44.0	10.1	-2.9962 ug/L	-2.9962 ppb	01:23:41
1	Se 196.026†	-297.7	-261.3	5.6141 ug/L	5.6141 ppb	01:23:41
1	Si 251.611†	246980.0	230356.7	8367.1 ug/L	8367.1 ppb	01:23:16
1	Sn 189.927†	30.9	0.3	-3.1995 ug/L	-3.1995 ppb	01:23:41
1	Ti 334.940†	966235.6	904614.2	1820.0 ug/L	1820.0 ppb	01:23:16
1	Tl 190.801†	-109.0	-64.9	-2.8899 ug/L	-2.8899 ppb	01:23:41
1	U 409.014†	-9709.1	-6838.0	-238.18 ug/L	-238.18 ppb	01:23:16
1	V 292.402†	7166.1	8361.2	53.423 ug/L	53.423 ppb	01:23:21
1	Zn 213.857†	31184.9	28008.9	298.63 ug/L	298.63 ppb	01:23:21
1	SiO2†	244908.2	228405.1	17758 ug/L	17758 ppb	01:24:49
2	Sc Radial	5073.4	5073.4	105 %		01:22:24
2	Y RADIAL	6453.2	6453.2	126.3 %		01:22:24
2	Al 396.153Radial†	21032.6	20071.0	19148 ug/L	19148 ppb	01:22:24
2	Ca 317.933Radial†	2874.2	2710.3	5017.0 ug/L	5017.0 ppb	01:22:44
2	Fe 238.204 Radial†	6847.3	6500.0	72536 ug/L	72536 ppb	01:22:24
2	K 766.490 Radial†	18274.0	15122.2	2999.4 ug/L	2999.4 ppb	01:22:24
2	Mg 279.077 IEC†	96.6	90.7	3681.5 ug/L	3681.5 ppb	01:22:44
2	Na 589.592 Radial†	994.6	1500.2	534.23 ug/L	534.23 ppb	01:22:24
2	Sr 421.552†	6016.5	5706.1	42.714 ug/L	42.714 ppb	01:22:24
2	Sc 361.383	834325.5	834325.5	106.03 %		01:23:47
2	Y 371.029	888819.7	888819.7	126.70 %		01:23:47
2	Ag 328.068†	-3814.6	-3805.9	3.1982 ug/L	3.1982 ppb	01:23:52
2	As 188.979†	-15.6	14.1	38.976 ug/L	38.976 ppb	01:24:12
2	B 249.677†	-193.8	-37.4	-12.772 ug/L	-12.772 ppb	01:23:52
2	Ba 233.527†	27102.8	25560.5	304.99 ug/L	304.99 ppb	01:23:52
2	Be 313.107†	-11405.9	-1327.8	3.5944 ug/L	3.5944 ppb	01:23:52
2	Cd 226.502†	359.5	533.3	0.0738 ug/L	0.0738 ppb	01:24:12
2	Co 228.616†	493.7	521.0	11.100 ug/L	11.100 ppb	01:24:12
2	Cr 267.716†	8221.8	7688.5	106.65 ug/L	106.65 ppb	01:23:52
2	Cu 324.752†	14431.6	4500.3	20.756 ug/L	20.756 ppb	01:23:52
2	Mn 257.610†	1655523.0	1560927.1	2509.8 ug/L	2509.8 ppb	01:23:47
2	Mo 202.031†	46.3	28.5	8.3107 ug/L	8.3107 ppb	01:24:12
2	Ni 231.604†	2112.6	1891.1	60.529 ug/L	60.529 ppb	01:24:12

2	P 214.914†	1132.7	864.8	424.73 ug/L	424.73 ppb	01:24:12
2	Pb 220.353†	326.6	334.7	53.492 ug/L	53.492 ppb	01:24:12
2	S 181.975 Axial†	115.3	67.9	83.187 ug/L	83.187 ppb	01:24:12
2	Sb 206.836†	48.2	14.4	-1.2215 ug/L	-1.2215 ppb	01:24:12
2	Se 196.026†	-300.8	-266.8	1.5681 ug/L	1.5681 ppb	01:24:12
2	Si 251.611†	244429.8	229976.0	8353.3 ug/L	8353.3 ppb	01:23:47
2	Sn 189.927†	41.3	10.3	-0.8340 ug/L	-0.8340 ppb	01:24:12
2	Ti 334.940†	956073.8	902950.4	1816.6 ug/L	1816.6 ppb	01:23:47
2	Tl 190.801†	-112.0	-68.6	-4.6260 ug/L	-4.6260 ppb	01:24:12
2	U 409.014†	-9650.0	-6861.8	-238.95 ug/L	-238.95 ppb	01:23:47
2	V 292.402†	7197.1	8449.2	54.160 ug/L	54.160 ppb	01:23:52
2	Zn 213.857†	31241.6	28318.0	302.09 ug/L	302.09 ppb	01:23:52
2	SiO2†	247407.1	232769.3	18098 ug/L	18098 ppb	01:24:54
3	Sc Radial	4958.6	4958.6	103 %		01:22:49
3	Y RADIAL	6338.5	6338.5	124.1 %		01:22:49
3	Al 396.153Radial†	20618.2	20130.6	19205 ug/L	19205 ppb	01:22:49
3	Ca 317.933Radial†	2877.0	2776.3	5139.1 ug/L	5139.1 ppb	01:23:09
3	Fe 238.204 Radial†	6683.9	6491.8	72444 ug/L	72444 ppb	01:22:49
3	K 766.490 Radial†	18026.2	15283.2	3031.3 ug/L	3031.3 ppb	01:22:49
3	Mg 279.077 IEC†	100.1	96.3	3910.5 ug/L	3910.5 ppb	01:23:09
3	Na 589.592 Radial†	910.1	1439.9	512.75 ug/L	512.75 ppb	01:22:49
3	Sr 421.552†	5854.7	5681.0	42.525 ug/L	42.525 ppb	01:22:49
3	Sc 361.383	843454.9	843454.9	107.19 %		01:24:18
3	Y 371.029	898203.9	898203.9	128.03 %		01:24:18
3	Ag 328.068†	-3753.0	-3709.4	3.6556 ug/L	3.6556 ppb	01:24:23
3	As 188.979†	-27.6	3.1	34.096 ug/L	34.096 ppb	01:24:43
3	B 249.677†	-107.3	45.2	-10.664 ug/L	-10.664 ppb	01:24:23
3	Ba 233.527†	27048.3	25232.9	301.10 ug/L	301.10 ppb	01:24:23
3	Be 313.107†	-11396.1	-1202.2	3.6510 ug/L	3.6510 ppb	01:24:23
3	Cd 226.502†	358.1	528.3	0.0131 ug/L	0.0131 ppb	01:24:43
3	Co 228.616†	476.8	500.2	10.459 ug/L	10.459 ppb	01:24:43
3	Cr 267.716†	8218.9	7601.9	105.47 ug/L	105.47 ppb	01:24:23
3	Cu 324.752†	14256.7	4189.8	19.591 ug/L	19.591 ppb	01:24:23
3	Mn 257.610†	1676044.5	1563172.0	2513.4 ug/L	2513.4 ppb	01:24:18
3	Mo 202.031†	40.7	22.8	7.7849 ug/L	7.7849 ppb	01:24:43
3	Ni 231.604†	2116.4	1873.0	59.951 ug/L	59.951 ppb	01:24:43
3	P 214.914†	1128.3	849.1	416.31 ug/L	416.31 ppb	01:24:43
3	Pb 220.353†	347.1	350.5	56.080 ug/L	56.080 ppb	01:24:43
3	S 181.975 Axial†	117.2	68.5	83.956 ug/L	83.956 ppb	01:24:43
3	Sb 206.836†	50.9	16.4	-0.5057 ug/L	-0.5057 ppb	01:24:43
3	Se 196.026†	-296.1	-259.2	5.9559 ug/L	5.9559 ppb	01:24:43
3	Si 251.611†	247662.4	230496.5	8372.2 ug/L	8372.2 ppb	01:24:18
3	Sn 189.927†	30.3	-0.4	-3.3324 ug/L	-3.3324 ppb	01:24:43
3	Ti 334.940†	968081.5	904392.7	1819.5 ug/L	1819.5 ppb	01:24:18
3	Tl 190.801†	-117.6	-72.7	-6.4794 ug/L	-6.4794 ppb	01:24:43
3	U 409.014†	-9672.4	-6784.2	-236.33 ug/L	-236.33 ppb	01:24:18
3	V 292.402†	7125.8	8309.2	53.062 ug/L	53.062 ppb	01:24:23
3	Zn 213.857†	31140.8	27905.0	297.54 ug/L	297.54 ppb	01:24:23
3	SiO2†	246094.8	229019.5	17806 ug/L	17806 ppb	01:24:59

Mean Data: 246437014|958097|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	839806.9	106.73 %	0.614			0.58%
Sc Radial	4986.6	103 %	1.6			1.54%
Y 371.029	894570.2	127.52 %	0.718			0.56%
Y RADIAL	6363.9	124.6 %	1.56			1.25%
Ag 328.068†	-3724.3	3.6342 ug/L	0.42582	3.6342 ppb	0.42582	11.72%
Al 396.153Radial†	20146.0	19219 ug/L	79.9	19219 ppb	79.9	0.42%
As 188.979†	5.6	35.262 ug/L	3.2903	35.262 ppb	3.2903	9.33%
B 249.677†	-2.8	-11.907 ug/L	1.1041	-11.907 ppb	1.1041	9.27%
Ba 233.527†	25385.8	302.92 ug/L	1.954	302.92 ppb	1.954	0.64%
Be 313.107†	-1259.0	3.6265 ug/L	0.02907	3.6265 ppb	0.02907	0.80%
Ca 317.933Radial†	2764.0	5116.4 ug/L	90.21	5116.4 ppb	90.21	1.76%
Cd 226.502†	529.6	0.0131 ug/L	0.06077	0.0131 ppb	0.06077	465.44%
Co 228.616†	514.6	10.901 ug/L	0.3833	10.901 ppb	0.3833	3.52%
Cr 267.716†	7627.9	105.83 ug/L	0.719	105.83 ppb	0.719	0.68%
Cu 324.752†	4341.8	20.168 ug/L	0.5824	20.168 ppb	0.5824	2.89%
Fe 238.204 Radial†	6506.7	72611 ug/L	214.4	72611 ppb	214.4	0.30%
K 766.490 Radial†	15257.8	3026.3 ug/L	24.77	3026.3 ppb	24.77	0.82%

Mg 279.077 IEC†	93.6	3798.5 ug/L	114.61	3798.5 ppb	114.61	3.02%
Mn 257.610†	1562717.4	2512.7 ug/L	2.59	2512.7 ppb	2.59	0.10%
Mo 202.031†	28.1	8.2853 ug/L	0.48820	8.2853 ppb	0.48820	5.89%
Na 589.592 Radial†	1443.2	513.93 ug/L	19.740	513.93 ppb	19.740	3.84%
Ni 231.604†	1871.6	59.905 ug/L	0.6481	59.905 ppb	0.6481	1.08%
P 214.914†	857.1	420.52 ug/L	4.211	420.52 ppb	4.211	1.00%
Pb 220.353†	346.2	55.372 ug/L	1.6444	55.372 ppb	1.6444	2.97%
S 181.975 Axial†	66.5	81.368 ug/L	3.8358	81.368 ppb	3.8358	4.71%
Sb 206.836†	13.7	-1.5744 ug/L	1.28221	-1.5744 ppb	1.28221	81.44%
Se 196.026†	-262.5	4.3794 ug/L	2.44066	4.3794 ppb	2.44066	55.73%
Si 251.611†	230276.4	8364.2 ug/L	9.79	8364.2 ppb	9.79	0.12%
Sn 189.927†	3.4	-2.4553 ug/L	1.40564	-2.4553 ppb	1.40564	57.25%
Sr 421.552†	5716.3	42.790 ug/L	0.3095	42.790 ppb	0.3095	0.72%
Ti 334.940†	903985.8	1818.7 ug/L	1.82	1818.7 ppb	1.82	0.10%
Tl 190.801†	-68.7	-4.6651 ug/L	1.79505	-4.6651 ppb	1.79505	38.48%
U 409.014†	-6828.0	-237.82 ug/L	1.348	-237.82 ppb	1.348	0.57%
V 292.402†	8373.2	53.548 ug/L	0.5595	53.548 ppb	0.5595	1.04%
Zn 213.857†	28077.3	299.42 ug/L	2.376	299.42 ppb	2.376	0.79%
SiO2†	230064.6	17887 ug/L	183.7	17887 ppb	183.7	1.03%

Sequence No.: 61

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/4/2010 01:27:11

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	4795.9	4795.9	99.5 %		01:29:03
1	Y RADIAL	5079.8	5079.8	99.44 %		01:29:03
1	Al 396.153Radial†	5414.1	5526.1	5247.9 ug/L	5247.9 ppb	01:29:03
1	Ca 317.933Radial†	2946.0	2940.6	5443.2 ug/L	5443.2 ppb	01:29:23
1	Fe 238.204 Radial†	503.5	499.1	5585.3 ug/L	5585.3 ppb	01:29:23
1	K 766.490 Radial†	28750.8	26659.4	5285.9 ug/L	5285.9 ppb	01:29:03
1	Mg 279.077 IEC†	136.0	135.7	5617.0 ug/L	5617.0 ppb	01:29:23
1	Na 589.592 Radial†	30012.6	30726.8	10942 ug/L	10942 ppb	01:29:03
1	Sr 421.552†	71158.3	71524.3	535.84 ug/L	535.84 ppb	01:29:03
1	Sc 361.383	828267.1	828267.1	105.26 %		01:30:20
1	Y 371.029	734811.7	734811.7	104.74 %		01:30:20
1	Ag 328.068†	103307.9	97936.0	504.76 ug/L	504.76 ppb	01:30:25
1	As 188.979†	1160.2	1131.0	506.54 ug/L	506.54 ppb	01:30:46
1	B 249.677†	20426.0	19550.3	492.28 ug/L	492.28 ppb	01:30:25
1	Ba 233.527†	45275.4	43011.7	510.55 ug/L	510.55 ppb	01:30:25
1	Be 313.107†	1335974.1	1278627.1	510.42 ug/L	510.42 ppb	01:30:20
1	Cd 226.502†	37694.8	36004.9	511.13 ug/L	511.13 ppb	01:30:25
1	Co 228.616†	17813.9	16978.9	516.51 ug/L	516.51 ppb	01:30:25
1	Cr 267.716†	39285.6	37256.3	509.80 ug/L	509.80 ppb	01:30:25
1	Cu 324.752†	150545.6	133910.3	499.59 ug/L	499.59 ppb	01:30:25
1	Mn 257.610†	334259.2	317124.8	508.79 ug/L	508.79 ppb	01:30:25
1	Mo 202.031†	5709.5	5409.0	498.30 ug/L	498.30 ppb	01:30:46
1	Ni 231.604†	17163.2	16204.0	518.42 ug/L	518.42 ppb	01:30:25
1	P 214.914†	4887.7	4440.0	2375.3 ug/L	2375.3 ppb	01:30:46
1	Pb 220.353†	3198.0	3064.8	501.53 ug/L	501.53 ppb	01:30:46
1	S 181.975 Axial†	856.9	773.2	987.06 ug/L	987.06 ppb	01:30:46
1	Sb 206.836†	1325.1	1227.8	508.73 ug/L	508.73 ppb	01:30:46
1	Se 196.026†	841.5	816.4	512.28 ug/L	512.28 ppb	01:30:46
1	Si 251.611†	74513.2	70238.5	2545.1 ug/L	2545.1 ppb	01:30:25
1	Sn 189.927†	2222.9	2083.1	493.56 ug/L	493.56 ppb	01:30:46
1	Ti 334.940†	261602.3	249786.2	502.29 ug/L	502.29 ppb	01:30:25
1	Tl 190.801†	1112.7	1094.2	505.46 ug/L	505.46 ppb	01:30:46
1	U 409.014†	13646.4	15203.6	508.82 ug/L	508.82 ppb	01:30:25
1	V 292.402†	65788.1	64161.2	515.51 ug/L	515.51 ppb	01:30:25
1	Zn 213.857†	49392.0	45776.7	501.73 ug/L	501.73 ppb	01:30:25
1	SiO2†	72876.2	68668.7	5325.4 ug/L	5325.4 ppb	01:31:53
2	Sc Radial	4920.1	4920.1	102 %		01:29:28
2	Y RADIAL	5213.8	5213.8	102.1 %		01:29:28
2	Al 396.153Radial†	5563.0	5534.6	5255.6 ug/L	5255.6 ppb	01:29:28
2	Ca 317.933Radial†	2938.9	2858.8	5291.9 ug/L	5291.9 ppb	01:29:48
2	Fe 238.204 Radial†	500.8	483.7	5412.8 ug/L	5412.8 ppb	01:29:48
2	K 766.490 Radial†	29678.4	26838.7	5321.6 ug/L	5321.6 ppb	01:29:28
2	Mg 279.077 IEC†	134.1	130.4	5398.5 ug/L	5398.5 ppb	01:29:48
2	Na 589.592 Radial†	30835.8	30771.8	10958 ug/L	10958 ppb	01:29:28
2	Sr 421.552†	73248.4	71766.4	537.65 ug/L	537.65 ppb	01:29:28
2	Sc 361.383	821166.3	821166.3	104.36 %		01:30:51
2	Y 371.029	727107.2	727107.2	103.64 %		01:30:51
2	Ag 328.068†	102324.1	97841.9	504.23 ug/L	504.23 ppb	01:30:56
2	As 188.979†	1168.9	1148.9	514.42 ug/L	514.42 ppb	01:31:16
2	B 249.677†	20192.7	19494.6	490.91 ug/L	490.91 ppb	01:30:56
2	Ba 233.527†	44736.3	42867.0	508.82 ug/L	508.82 ppb	01:30:56
2	Be 313.107†	1322981.1	1277151.8	509.83 ug/L	509.83 ppb	01:30:51
2	Cd 226.502†	37271.9	35909.4	509.78 ug/L	509.78 ppb	01:30:56
2	Co 228.616†	17609.6	16929.4	515.02 ug/L	515.02 ppb	01:30:56
2	Cr 267.716†	38905.3	37214.6	509.23 ug/L	509.23 ppb	01:30:56
2	Cu 324.752†	148723.0	133400.7	497.68 ug/L	497.68 ppb	01:30:56
2	Mn 257.610†	330434.1	316205.4	507.31 ug/L	507.31 ppb	01:30:56
2	Mo 202.031†	5748.7	5493.4	506.05 ug/L	506.05 ppb	01:31:16
2	Ni 231.604†	16870.2	16064.2	513.94 ug/L	513.94 ppb	01:30:56

2	P 214.914†	4959.6	4549.0	2436.6 ug/L	2436.6 ppb	01:31:16
2	Pb 220.353†	3231.0	3122.7	511.00 ug/L	511.00 ppb	01:31:16
2	S 181.975 Axial†	861.0	784.2	1001.1 ug/L	1001.1 ppb	01:31:16
2	Sb 206.836†	1338.1	1251.1	518.35 ug/L	518.35 ppb	01:31:16
2	Se 196.026†	844.4	826.1	517.85 ug/L	517.85 ppb	01:31:16
2	Si 251.611†	73642.8	70016.6	2537.0 ug/L	2537.0 ppb	01:30:56
2	Sn 189.927†	2241.4	2119.2	502.08 ug/L	502.08 ppb	01:31:16
2	Ti 334.940†	258242.9	248716.2	500.13 ug/L	500.13 ppb	01:30:56
2	Tl 190.801†	1128.2	1118.1	516.45 ug/L	516.45 ppb	01:31:16
2	U 409.014†	13358.5	15039.8	503.34 ug/L	503.34 ppb	01:30:56
2	V 292.402†	65102.0	64044.3	514.71 ug/L	514.71 ppb	01:30:56
2	Zn 213.857†	48911.3	45721.8	501.18 ug/L	501.18 ppb	01:30:56
2	SiO2†	75052.1	71352.4	5533.9 ug/L	5533.9 ppb	01:31:58
3	Sc Radial	4888.0	4888.0	101 %		01:29:53
3	Y RADIAL	5159.3	5159.3	101.0 %		01:29:53
3	Al 396.153Radial†	5500.8	5509.1	5231.3 ug/L	5231.3 ppb	01:29:53
3	Ca 317.933Radial†	2922.1	2861.2	5296.2 ug/L	5296.2 ppb	01:30:13
3	Fe 238.204 Radial†	499.1	485.2	5430.0 ug/L	5430.0 ppb	01:30:13
3	K 766.490 Radial†	29235.4	26592.9	5272.8 ug/L	5272.8 ppb	01:29:53
3	Mg 279.077 IEC†	132.7	129.9	5376.7 ug/L	5376.7 ppb	01:30:13
3	Na 589.592 Radial†	30285.3	30427.3	10835 ug/L	10835 ppb	01:29:53
3	Sr 421.552†	72129.9	71134.8	532.92 ug/L	532.92 ppb	01:29:53
3	Sc 361.383	821593.3	821593.3	104.41 %		01:31:22
3	Y 371.029	727394.2	727394.2	103.69 %		01:31:22
3	Ag 328.068†	103665.9	99076.1	510.57 ug/L	510.57 ppb	01:31:27
3	As 188.979†	1168.6	1148.0	514.08 ug/L	514.08 ppb	01:31:47
3	B 249.677†	20394.4	19677.7	495.52 ug/L	495.52 ppb	01:31:27
3	Ba 233.527†	45403.2	43483.5	516.14 ug/L	516.14 ppb	01:31:27
3	Be 313.107†	1320074.1	1273708.9	508.47 ug/L	508.47 ppb	01:31:22
3	Cd 226.502†	37758.6	36356.9	516.14 ug/L	516.14 ppb	01:31:27
3	Co 228.616†	17822.2	17124.3	520.93 ug/L	520.93 ppb	01:31:27
3	Cr 267.716†	39375.9	37646.0	515.13 ug/L	515.13 ppb	01:31:27
3	Cu 324.752†	150657.6	135179.4	504.32 ug/L	504.32 ppb	01:31:27
3	Mn 257.610†	334752.1	320176.4	513.68 ug/L	513.68 ppb	01:31:27
3	Mo 202.031†	5730.0	5472.6	504.14 ug/L	504.14 ppb	01:31:47
3	Ni 231.604†	17122.5	16297.4	521.40 ug/L	521.40 ppb	01:31:27
3	P 214.914†	4927.2	4515.5	2416.6 ug/L	2416.6 ppb	01:31:47
3	Pb 220.353†	3202.6	3093.9	506.29 ug/L	506.29 ppb	01:31:47
3	S 181.975 Axial†	863.0	785.7	1003.1 ug/L	1003.1 ppb	01:31:47
3	Sb 206.836†	1327.8	1240.6	514.07 ug/L	514.07 ppb	01:31:47
3	Se 196.026†	848.6	829.6	520.02 ug/L	520.02 ppb	01:31:47
3	Si 251.611†	74686.9	70979.9	2572.0 ug/L	2572.0 ppb	01:31:27
3	Sn 189.927†	2231.1	2108.2	499.48 ug/L	499.48 ppb	01:31:47
3	Ti 334.940†	261929.7	252118.6	506.98 ug/L	506.98 ppb	01:31:27
3	Tl 190.801†	1130.4	1119.7	517.21 ug/L	517.21 ppb	01:31:47
3	U 409.014†	13528.8	15196.2	508.58 ug/L	508.58 ppb	01:31:27
3	V 292.402†	65788.2	64669.1	519.63 ug/L	519.63 ppb	01:31:27
3	Zn 213.857†	49466.6	46229.3	506.74 ug/L	506.74 ppb	01:31:27
3	SiO2†	74106.2	70409.2	5460.6 ug/L	5460.6 ppb	01:32:03

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	823675.6	104.68 %	0.506			0.48%
Sc Radial	4868.0	101 %	1.3			1.32%
Y 371.029	729771.0	104.02 %	0.623			0.60%
Y RADIAL	5150.9	100.8 %	1.32			1.31%
Ag 328.068†	98284.7	506.52 ug/L	3.517	506.52 ppb	3.517	0.69%
QC value within limits for Ag 328.068 Recovery = 101.30%						
Al 396.153Radial†	5523.3	5244.9 ug/L	12.40	5244.9 ppb	12.40	0.24%
QC value within limits for Al 396.153Radial Recovery = 104.90%						
As 188.979†	1142.7	511.68 ug/L	4.456	511.68 ppb	4.456	0.87%
QC value within limits for As 188.979 Recovery = 102.34%						
B 249.677†	19574.2	492.90 ug/L	2.368	492.90 ppb	2.368	0.48%
QC value within limits for B 249.677 Recovery = 98.58%						
Ba 233.527†	43120.7	511.83 ug/L	3.822	511.83 ppb	3.822	0.75%
QC value within limits for Ba 233.527 Recovery = 102.37%						
Be 313.107†	1276496.0	509.58 ug/L	0.999	509.58 ppb	0.999	0.20%
QC value within limits for Be 313.107 Recovery = 101.92%						
Ca 317.933Radial†	2886.8	5343.8 ug/L	86.15	5343.8 ppb	86.15	1.61%



QC value within limits for Ca 317.933 Radial Recovery = 106.88%							
Cd 226.502†	36090.4	512.35 ug/L	3.351	512.35 ppb	3.351	0.65%	
QC value within limits for Cd 226.502 Recovery = 102.47%							
Co 228.616†	17010.9	517.49 ug/L	3.075	517.49 ppb	3.075	0.59%	
QC value within limits for Co 228.616 Recovery = 103.50%							
Cr 267.716†	37372.3	511.38 ug/L	3.254	511.38 ppb	3.254	0.64%	
QC value within limits for Cr 267.716 Recovery = 102.28%							
Cu 324.752†	134163.5	500.53 ug/L	3.415	500.53 ppb	3.415	0.68%	
QC value within limits for Cu 324.752 Recovery = 100.11%							
Fe 238.204 Radial†	489.3	5476.0 ug/L	95.01	5476.0 ppb	95.01	1.74%	
QC value within limits for Fe 238.204 Radial Recovery = 109.52%							
K 766.490 Radial†	26697.0	5293.4 ug/L	25.23	5293.4 ppb	25.23	0.48%	
QC value within limits for K 766.490 Radial Recovery = 105.87%							
Mg 279.077 IEC†	132.0	5464.1 ug/L	132.86	5464.1 ppb	132.86	2.43%	
QC value within limits for Mg 279.077 IEC Recovery = 109.28%							
Mn 257.610†	317835.5	509.93 ug/L	3.333	509.93 ppb	3.333	0.65%	
QC value within limits for Mn 257.610 Recovery = 101.99%							
Mo 202.031†	5458.3	502.83 ug/L	4.039	502.83 ppb	4.039	0.80%	
QC value within limits for Mo 202.031 Recovery = 100.57%							
Na 589.592 Radial†	30642.0	10912 ug/L	66.7	10912 ppb	66.7	0.61%	
QC value within limits for Na 589.592 Radial Recovery = 109.12%							
Ni 231.604†	16188.6	517.92 ug/L	3.755	517.92 ppb	3.755	0.73%	
QC value within limits for Ni 231.604 Recovery = 103.58%							
P 214.914†	4501.5	2409.5 ug/L	31.26	2409.5 ppb	31.26	1.30%	
QC value within limits for P 214.914 Recovery = 96.38%							
Pb 220.353†	3093.8	506.27 ug/L	4.735	506.27 ppb	4.735	0.94%	
QC value within limits for Pb 220.353 Recovery = 101.25%							
S 181.975 Axial†	781.0	997.08 ug/L	8.727	997.08 ppb	8.727	0.88%	
QC value within limits for S 181.975 Axial Recovery = 99.71%							
Sb 206.836†	1239.9	513.72 ug/L	4.818	513.72 ppb	4.818	0.94%	
QC value within limits for Sb 206.836 Recovery = 102.74%							
Se 196.026†	824.1	516.72 ug/L	3.995	516.72 ppb	3.995	0.77%	
QC value within limits for Se 196.026 Recovery = 103.34%							
Si 251.611†	70411.7	2551.3 ug/L	18.32	2551.3 ppb	18.32	0.72%	
QC value within limits for Si 251.611 Recovery = 102.05%							
Sn 189.927†	2103.5	498.37 ug/L	4.365	498.37 ppb	4.365	0.88%	
QC value within limits for Sn 189.927 Recovery = 99.67%							
Sr 421.552†	71475.2	535.47 ug/L	2.388	535.47 ppb	2.388	0.45%	
QC value within limits for Sr 421.552 Recovery = 107.09%							
Ti 334.940†	250207.0	503.13 ug/L	3.498	503.13 ppb	3.498	0.70%	
QC value within limits for Ti 334.940 Recovery = 100.63%							
Tl 190.801†	1110.7	513.04 ug/L	6.577	513.04 ppb	6.577	1.28%	
QC value within limits for Tl 190.801 Recovery = 102.61%							
U 409.014†	15146.6	506.91 ug/L	3.096	506.91 ppb	3.096	0.61%	
QC value within limits for U 409.014 Recovery = 101.38%							
V 292.402†	64291.5	516.62 ug/L	2.643	516.62 ppb	2.643	0.51%	
QC value within limits for V 292.402 Recovery = 103.32%							
Zn 213.857†	45909.3	503.22 ug/L	3.062	503.22 ppb	3.062	0.61%	
QC value within limits for Zn 213.857 Recovery = 100.64%							
SiO2†	70143.4	5440.0 ug/L	105.74	5440.0 ppb	105.74	1.94%	
QC value within limits for SiO2 Recovery = 101.73%							
All analyte(s) passed QC.							

Sequence No.: 62

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/4/2010 01:34:13

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	5201.2	5201.2	108 %		01:36:05
1	Y RADIAL	5508.2	5508.2	107.8 %		01:36:05
1	Al 396.153Radial†	-70.9	17.6	16.796 ug/L	16.796 ppb	01:36:25
1	Ca 317.933Radial†	27.9	4.8	8.8100 ug/L	8.8100 ppb	01:36:25
1	Fe 238.204 Radial†	8.1	0.4	4.6885 ug/L	4.6885 ppb	01:36:25
1	K 766.490 Radial†	2399.6	-19.5	-3.8594 ug/L	-3.8594 ppb	01:36:05
1	Mg 279.077 IEC†	1.5	0.3	13.566 ug/L	13.566 ppb	01:36:25
1	Na 589.592 Radial†	-697.0	-91.1	-32.449 ug/L	-32.449 ppb	01:36:05
1	Sr 421.552†	57.1	41.4	0.3101 ug/L	0.3101 ppb	01:36:05
1	Sc 361.383	796648.1	796648.1	101.24 %		01:37:22
1	Y 371.029	720535.6	720535.6	102.71 %		01:37:22
1	Ag 328.068†	253.0	41.6	0.2117 ug/L	0.2117 ppb	01:37:22
1	As 188.979†	-30.2	-0.9	-0.4150 ug/L	-0.4150 ppb	01:37:42
1	B 249.677†	-345.8	-196.2	-4.9659 ug/L	-4.9659 ppb	01:37:42
1	Ba 233.527†	14.7	13.8	0.1636 ug/L	0.1636 ppb	01:37:42
1	Be 313.107†	-9109.0	432.2	0.1730 ug/L	0.1730 ppb	01:37:22
1	Cd 226.502†	-200.1	-3.4	-0.0492 ug/L	-0.0492 ppb	01:37:42
1	Co 228.616†	-58.6	-2.5	-0.0756 ug/L	-0.0756 ppb	01:37:42
1	Cr 267.716†	59.9	-6.5	-0.0902 ug/L	-0.0902 ppb	01:37:42
1	Cu 324.752†	8140.0	-1070.4	-3.9942 ug/L	-3.9942 ppb	01:37:22
1	Mn 257.610†	614.5	179.9	0.2883 ug/L	0.2883 ppb	01:37:42
1	Mo 202.031†	21.9	6.4	0.5938 ug/L	0.5938 ppb	01:37:42
1	Ni 231.604†	86.3	-16.0	-0.5135 ug/L	-0.5135 ppb	01:37:42
1	P 214.914†	202.4	-3.5	-1.1795 ug/L	-1.1795 ppb	01:37:42
1	Pb 220.353†	-70.0	-42.4	-6.9087 ug/L	-6.9087 ppb	01:37:42
1	S 181.975 Axial†	51.5	10.0	12.764 ug/L	12.764 ppb	01:37:42
1	Sb 206.836†	37.6	6.0	2.4143 ug/L	2.4143 ppb	01:37:42
1	Se 196.026†	-10.2	6.9	4.2311 ug/L	4.2311 ppb	01:37:42
1	Si 251.611†	949.2	387.2	14.057 ug/L	14.057 ppb	01:37:42
1	Sn 189.927†	26.2	-2.7	-0.6474 ug/L	-0.6474 ppb	01:37:42
1	Ti 334.940†	-1087.7	185.3	0.3719 ug/L	0.3719 ppb	01:37:22
1	Tl 190.801†	-39.1	-1.6	-0.7384 ug/L	-0.7384 ppb	01:37:42
1	U 409.014†	-2204.1	62.2	2.0900 ug/L	2.0900 ppb	01:37:22
1	V 292.402†	-1712.7	-30.2	-0.2278 ug/L	-0.2278 ppb	01:37:22
1	Zn 213.857†	829.9	-326.8	-3.6085 ug/L	-3.6085 ppb	01:37:42
1	SiO2†	995.0	417.9	32.478 ug/L	32.478 ppb	01:38:38
2	Sc Radial	5014.6	5014.6	104 %		01:36:30
2	Y RADIAL	5351.3	5351.3	104.8 %		01:36:30
2	Al 396.153Radial†	-73.6	12.6	12.017 ug/L	12.017 ppb	01:36:50
2	Ca 317.933Radial†	32.8	10.5	19.449 ug/L	19.449 ppb	01:36:50
2	Fe 238.204 Radial†	6.6	-0.8	-8.6336 ug/L	-8.6336 ppb	01:36:50
2	K 766.490 Radial†	2392.1	56.0	11.136 ug/L	11.136 ppb	01:36:30
2	Mg 279.077 IEC†	0.1	-1.0	-40.145 ug/L	-40.145 ppb	01:36:50
2	Na 589.592 Radial†	-704.0	-121.9	-43.413 ug/L	-43.413 ppb	01:36:30
2	Sr 421.552†	17.9	5.7	0.0425 ug/L	0.0425 ppb	01:36:30
2	Sc 361.383	802019.2	802019.2	101.93 %		01:37:47
2	Y 371.029	724614.3	724614.3	103.29 %		01:37:47
2	Ag 328.068†	280.2	66.7	0.3448 ug/L	0.3448 ppb	01:37:47
2	As 188.979†	-32.7	-3.2	-1.4358 ug/L	-1.4358 ppb	01:38:07
2	B 249.677†	-339.0	-187.2	-4.7360 ug/L	-4.7360 ppb	01:38:07
2	Ba 233.527†	23.6	22.4	0.2654 ug/L	0.2654 ppb	01:38:07
2	Be 313.107†	-9234.1	369.6	0.1482 ug/L	0.1482 ppb	01:37:47
2	Cd 226.502†	-200.7	-2.6	-0.0380 ug/L	-0.0380 ppb	01:38:07
2	Co 228.616†	-55.2	1.2	0.0363 ug/L	0.0363 ppb	01:38:07
2	Cr 267.716†	73.2	6.2	0.0871 ug/L	0.0871 ppb	01:38:07
2	Cu 324.752†	8114.5	-1149.3	-4.2841 ug/L	-4.2841 ppb	01:37:47
2	Mn 257.610†	598.3	160.0	0.2573 ug/L	0.2573 ppb	01:38:07
2	Mo 202.031†	13.8	-1.6	-0.1487 ug/L	-0.1487 ppb	01:38:07
2	Ni 231.604†	98.6	-4.6	-0.1461 ug/L	-0.1461 ppb	01:38:07

2	P 214.914†	201.3	-5.9	-2.4362 ug/L	-2.4362 ppb	01:38:07
2	Pb 220.353†	-49.5	-21.9	-3.5696 ug/L	-3.5696 ppb	01:38:07
2	S 181.975 Axial†	43.4	1.7	2.1656 ug/L	2.1656 ppb	01:38:07
2	Sb 206.836†	36.9	5.2	2.0689 ug/L	2.0689 ppb	01:38:07
2	Se 196.026†	-18.6	-1.3	-0.7841 ug/L	-0.7841 ppb	01:38:07
2	Si 251.611†	970.7	402.1	14.608 ug/L	14.608 ppb	01:38:07
2	Sn 189.927†	28.4	-0.8	-0.1910 ug/L	-0.1910 ppb	01:38:07
2	Ti 334.940†	-1073.2	206.7	0.4247 ug/L	0.4247 ppb	01:37:47
2	Tl 190.801†	-35.2	2.5	1.1594 ug/L	1.1594 ppb	01:38:07
2	U 409.014†	-2500.2	-213.7	-7.1763 ug/L	-7.1763 ppb	01:37:47
2	V 292.402†	-1682.8	10.5	0.0671 ug/L	0.0671 ppb	01:37:47
2	Zn 213.857†	823.7	-338.4	-3.7361 ug/L	-3.7361 ppb	01:38:07
2	SiO2†	1008.8	424.8	33.034 ug/L	33.034 ppb	01:38:43
3	Sc Radial	4970.8	4970.8	103 %		01:36:55
3	Y RADIAL	5323.5	5323.5	104.2 %		01:36:55
3	Al 396.153Radial†	-80.5	5.2	4.9994 ug/L	4.9994 ppb	01:37:15
3	Ca 317.933Radial†	31.1	9.1	16.878 ug/L	16.878 ppb	01:37:15
3	Fe 238.204 Radial†	7.7	0.4	4.4556 ug/L	4.4556 ppb	01:37:15
3	K 766.490 Radial†	2411.4	95.0	18.874 ug/L	18.874 ppb	01:36:55
3	Mg 279.077 IEC†	3.0	1.9	77.065 ug/L	77.065 ppb	01:37:15
3	Na 589.592 Radial†	-720.9	-144.2	-51.356 ug/L	-51.356 ppb	01:36:55
3	Sr 421.552†	8.4	-3.4	-0.0254 ug/L	-0.0254 ppb	01:36:55
3	Sc 361.383	802906.4	802906.4	102.04 %		01:38:12
3	Y 371.029	726130.2	726130.2	103.51 %		01:38:12
3	Ag 328.068†	201.9	-10.4	-0.0559 ug/L	-0.0559 ppb	01:38:12
3	As 188.979†	-33.3	-3.8	-1.6880 ug/L	-1.6880 ppb	01:38:32
3	B 249.677†	-376.4	-223.6	-5.6571 ug/L	-5.6571 ppb	01:38:32
3	Ba 233.527†	7.7	6.8	0.0806 ug/L	0.0806 ppb	01:38:32
3	Be 313.107†	-9259.1	355.1	0.1422 ug/L	0.1422 ppb	01:38:12
3	Cd 226.502†	-180.8	17.0	0.2419 ug/L	0.2419 ppb	01:38:32
3	Co 228.616†	-58.0	-1.5	-0.0447 ug/L	-0.0447 ppb	01:38:32
3	Cr 267.716†	78.5	11.3	0.1524 ug/L	0.1524 ppb	01:38:32
3	Cu 324.752†	8179.0	-1094.9	-4.0864 ug/L	-4.0864 ppb	01:38:12
3	Mn 257.610†	618.8	179.4	0.2850 ug/L	0.2850 ppb	01:38:32
3	Mo 202.031†	17.6	2.0	0.1874 ug/L	0.1874 ppb	01:38:32
3	Ni 231.604†	104.4	1.0	0.0325 ug/L	0.0325 ppb	01:38:32
3	P 214.914†	206.2	-1.4	0.0199 ug/L	0.0199 ppb	01:38:32
3	Pb 220.353†	-56.7	-28.9	-4.7108 ug/L	-4.7108 ppb	01:38:32
3	S 181.975 Axial†	38.8	-2.8	-3.6254 ug/L	-3.6254 ppb	01:38:32
3	Sb 206.836†	28.7	-3.0	-1.2089 ug/L	-1.2089 ppb	01:38:32
3	Se 196.026†	-15.8	1.5	0.8967 ug/L	0.8967 ppb	01:38:32
3	Si 251.611†	955.9	386.5	14.036 ug/L	14.036 ppb	01:38:32
3	Sn 189.927†	22.4	-6.7	-1.5862 ug/L	-1.5862 ppb	01:38:32
3	Ti 334.940†	-1129.6	152.6	0.3013 ug/L	0.3013 ppb	01:38:12
3	Tl 190.801†	-34.4	3.3	1.5263 ug/L	1.5263 ppb	01:38:32
3	U 409.014†	-2171.7	111.0	3.7267 ug/L	3.7267 ppb	01:38:12
3	V 292.402†	-1726.7	-30.8	-0.2338 ug/L	-0.2338 ppb	01:38:12
3	Zn 213.857†	829.4	-333.7	-3.6877 ug/L	-3.6877 ppb	01:38:32
3	SiO2†	984.9	400.3	31.122 ug/L	31.122 ppb	01:38:48

## Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	800524.5	101.74 %		0.430				0.42%
Sc Radial	5062.2	105 %		2.5				2.42%
Y 371.029	723760.0	103.17 %		0.412				0.40%
Y RADIAL	5394.3	105.6 %		1.95				1.85%
Ag 328.068†	32.6	0.1669 ug/L		0.20406	0.1669 ppb		0.20406	122.30%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	11.8	11.271 ug/L		5.9335	11.271 ppb		5.9335	52.65%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-2.7	-1.1796 ug/L		0.67407	-1.1796 ppb		0.67407	57.14%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-202.3	-5.1197 ug/L		0.47943	-5.1197 ppb		0.47943	9.36%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	14.4	0.1699 ug/L		0.09256	0.1699 ppb		0.09256	54.49%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	385.7	0.1544 ug/L		0.01634	0.1544 ppb		0.01634	10.58%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	8.1	15.045 ug/L		5.5510	15.045 ppb		5.5510	36.89%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd 226.502†	3.6	0.0516 ug/L	0.16490	0.0516 ppb	0.16490	319.77%	
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	-0.9	-0.0280 ug/L	0.05777	-0.0280 ppb	0.05777	206.32%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	3.6	0.0497 ug/L	0.12554	0.0497 ppb	0.12554	252.35%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	-1104.8	-4.1215 ug/L	0.14813	-4.1215 ppb	0.14813	3.59%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	0.0	0.1702 ug/L	7.62520	0.1702 ppb	7.62520	>999.9%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	43.8	8.7167 ug/L	11.55794	8.7167 ppb	11.55794	132.59%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	0.4	16.829 ug/L	58.6729	16.829 ppb	58.6729	348.64%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	173.1	0.2769 ug/L	0.01701	0.2769 ppb	0.01701	6.14%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	2.3	0.2108 ug/L	0.37181	0.2108 ppb	0.37181	176.38%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	-119.1	-42.406 ug/L	9.4937	-42.406 ppb	9.4937	22.39%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	-6.5	-0.2090 ug/L	0.27841	-0.2090 ppb	0.27841	133.18%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	-3.6	-1.1986 ug/L	1.22815	-1.1986 ppb	1.22815	102.46%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	-31.1	-5.0631 ug/L	1.69719	-5.0631 ppb	1.69719	33.52%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	3.0	3.7680 ug/L	8.31124	3.7680 ppb	8.31124	220.57%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	2.8	1.0915 ug/L	1.99960	1.0915 ppb	1.99960	183.21%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	2.4	1.4479 ug/L	2.55268	1.4479 ppb	2.55268	176.30%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	391.9	14.234 ug/L	0.3240	14.234 ppb	0.3240	2.28%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	-3.4	-0.8082 ug/L	0.71136	-0.8082 ppb	0.71136	88.02%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	14.6	0.1090 ug/L	0.17740	0.1090 ppb	0.17740	162.68%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	181.5	0.3660 ug/L	0.06193	0.3660 ppb	0.06193	16.92%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	1.4	0.6491 ug/L	1.21551	0.6491 ppb	1.21551	187.26%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	-13.5	-0.4532 ug/L	5.87959	-0.4532 ppb	5.87959	>999.9%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	-16.8	-0.1315 ug/L	0.17201	-0.1315 ppb	0.17201	130.83%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	-332.9	-3.6774 ug/L	0.06438	-3.6774 ppb	0.06438	1.75%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†	414.4	32.211 ug/L	0.9834	32.211 ppb	0.9834	3.05%	
QC value within limits for SiO2 Recovery = Not calculated							

All analyte(s) passed QC.

## ICPMS#3 Daily Performance Report

### Sample ID: Sample

Sample Date/Time: Friday, March 05, 2010 12:01:58

Sample Description:

Method File: c:\elandata\Method\daily2.mth

Dataset File: c:\elandata\Dataset\default\Sample.6371

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	350.8	350.804	7.260	2.1
Mg	24.0	4569.5	4569.531	137.006	3.0
Co	58.9	11603.5	11603.512	227.745	2.0
Rh	102.9	32899.0	32899.039	157.785	0.5
In	114.9	43053.6	43053.585	460.185	1.1
Pb	208.0	35947.0	35946.973	345.598	1.0
[> Ba	137.9	39294.3	39294.316	172.202	0.4
[ Ba++	69.0	1062.1	0.027	0.001	2.3
[> Ce	139.9	51981.2	51981.213	682.835	1.3
[ CeO	155.9	1179.6	0.023	0.000	2.1
Bkgd	220.0	1.2	1.200	0.908	75.7

### Current Optimization File Data

Current Value	Description
1.01	Nebulizer Gas Flow
7.20	Lens Voltage
1450.00	ICP RF Power
-1855.00	Analog Stage Voltage
1350.00	Pulse Stage Voltage
70.00	Discriminator Threshold
-7.00	AC Rod Offset
60.00	Service DAC 1
0.00	Quadrupole Rod Offset

### Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	21	7.0	460.7
Co	59	21	8.0	14339.2
In	115	21	9.0	66134.1

## ICPMS#3 Instrument Tuning Report

File Name: 100305.tun  
File Path: C:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas Peak W
He	3.0	3.0	586	2060	0.636
Be	9.0	9.0	2074	2040	0.631
Mg	24.0	24.0	5722	2110	0.621
Mg	25.0	24.9	5888	2020	0.665
Mg	26.0	25.9	6211	2140	0.642
Co	58.9	58.9	14202	2115	0.651
Rh	102.9	102.9	24907	2165	0.662
In	114.9	114.9	27825	2180	0.661
Ce	139.9	139.8	33908	2220	0.627
Pb	206.0	206.0	49992	2280	0.646
Pb	207.0	207.0	50284	2310	0.644
Pb	208.0	208.0	50486	2300	0.656
U	238.1	238.1	57848	2340	0.681

## ICPMS#3 - Summary Report

Sample ID: Blank  
Sample Date/Time: Friday, March 05, 2010 12:28:04  
Sample Type:  
Sample Description:  
Number of Replicates: 3  
Batch ID:  
Method File: c:\elandata\Method\misc2.mth  
Dataset File: C:\elandata\Dataset\100305\Blank.006

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		114490	
[	Tl	205	ug/L		686	

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	

### QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu	175				
[	Tl	205				

### QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#3 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Friday, March 05, 2010 12:30:15

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc2.mth

Dataset File: C:\elandata\Dataset\100305\Standard 1.007

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		115437	115437.013
[	TI	205	10.000 ug/L	2.190	55575	0.475

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
TI	205Linear Thru Zero	1.0000

### QC Calculated Values

	Analyte Mass	QC Std	% Recovery	Int Std	% Recovery	Spike	% Recovery	Dilution	% Diff	Dup. Rel.	% Diff
[>	Lu	175									
[	TI	205									

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected



## ICPMS#3 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Friday, March 05, 2010 12:32:24

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc2.mth

Dataset File: C:\elandata\Dataset\100305\Standard 2.008

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		116908	116907.950
[	TI	205	99.994 ug/L	0.297	552983	4.724

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
TI	205Linear Thru Zero	1.0000

### QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu	175				
[	TI	205				

### QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#3 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Friday, March 05, 2010 12:34:34

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc2.mth

Dataset File: C:\elandata\Dataset\100305\QC Std 1.009

### Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu 175		ug/L		120769	120769.131
[ TI 205	50.191	ug/L	0.650	287123	2.371

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
TI	205Linear Thru Zero	1.0000

### QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[> Lu 175		105.5			
[ TI 205	100.382				

### 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: Friday, March 05, 2010 12:34:44

Page 1

## ICPMS#3 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Friday, March 05, 2010 12:36:45

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc2.mth

Dataset File: C:\elandata\Dataset\100305\QC Std 2.010

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		114698	114698.220
[	TI	205	0.208 ug/L	2.953	1816	0.010

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
TI	205Linear Thru Zero	1.0000

### QC Calculated Values

	Analyte Mass	QC Std	% Recovery	Int Std	% Recovery	Spike	% Recovery	Dilution	% Diff	Dup. Rel. % Diff
[>	Lu	175			100.2					
[	TI	205								

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 2

Report Date/Time: Friday, March 05, 2010 12:36:58

Page 1

## ICPMS#3 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Friday, March 05, 2010 12:38:58

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc2.mth

Dataset File: C:\elandata\Dataset\100305\QC Std 3.011

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		115191	115190.666
[	TI	205	1.096 ug/L	2.721	6661	0.052

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
TI	205Linear Thru Zero	1.0000

### QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu	175		100.6		
[	TI	205	109.647			

### 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 3

Report Date/Time: Friday, March 05, 2010 12:39:09

Page 1

## ICPMS#3 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Friday, March 05, 2010 12:41:08

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc2.mth

Dataset File: C:\elandata\Dataset\100305\QC Std 4.012

### Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu 175		ug/L		102021	102021.488
[ TI 205	-0.021	ug/L	46.346	511	-0.001

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
TI	205Linear Thru Zero	1.0000

### QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[> Lu 175		89.1			
[ TI 205					

### QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#3 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Friday, March 05, 2010 12:43:19

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc2.mth

Dataset File: C:\elandata\Dataset\100305\QC Std 5.013

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		101755	101755.219
[	TI	205	19.332 ug/L	0.289	93547	0.913

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
TI	205Linear Thru Zero	1.0000

### QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu	175		88.9		
[	TI	205	96.662			

### 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 5

Report Date/Time: Friday, March 05, 2010 12:43:31

Page 1

## ICPMS#3 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, March 05, 2010 12:45:31

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc2.mth

Dataset File: C:\elandata\Dataset\100305\QC Std 6.014

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		116691	116690.864
[	TI	205	50.140 ug/L	0.436	277076	2.369

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
TI	205Linear Thru Zero	1.0000

### QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu	175		101.9		
[	TI	205	100.280			

### 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, March 05, 2010 12:45:43

Page 1

## ICPMS#3 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, March 05, 2010 12:47:44

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc2.mth

Dataset File: C:\elandata\Dataset\100305\QC Std 7.015

### Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu 175		ug/L		116479	116478.968
[ TI 205	0.172	ug/L	4.071	1645	0.008

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
TI	205Linear Thru Zero	1.0000

### QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[> Lu 175		101.7			
[ TI 205					

### QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Friday, March 05, 2010 12:47:57

Page 1



## ICPMS#3 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, March 05, 2010 13:13:52

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc2.mth

Dataset File: C:\elandata\Dataset\100305\QC Std 6.026

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		118589	118589.372
[ TI	205	50.255	ug/L	0.239	282279	2.374

### Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
TI	205	Linear Thru Zero	1.0000

### QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[> Lu	175			103.6		
[ TI	205	100.509				

### 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: Friday, March 05, 2010 13:14:03

Page 1

## ICPMS#3 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, March 05, 2010 13:16:05

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc2.mth

Dataset File: C:\elandata\Dataset\100305\QC Std 7.027

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		117759	117758.957
[ TI	205	0.146	ug/L	2.352	1518	0.007

### Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
TI	205	Linear Thru Zero	1.0000

### QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[> Lu	175			102.9		
[ TI	205					

### QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Friday, March 05, 2010 13:16:18

Page 1

## ICPMS#3 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, March 05, 2010 13:33:49

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc2.mth

Dataset File: C:\elandata\Dataset\100305\QC Std 6.035

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		120821	120820.572
[	TI	205	50.048 ug/L	0.498	286423	2.364

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
TI	205Linear Thru Zero	1.0000

### QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu	175		105.5		
[	TI	205	100.096			

### 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, March 05, 2010 13:34:01

Page 1

## ICPMS#3 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, March 05, 2010 13:36:02

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc2.mth

Dataset File: C:\elandata\Dataset\100305\QC Std 7.036

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		117674	117674.462
[ TI	205	0.083	ug/L	6.082	1166	0.004

### Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
TI	205	Linear Thru Zero	1.0000

### QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[> Lu	175			102.8		
[ TI	205					

### QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Friday, March 05, 2010 13:36:15

Page 1

## ICPMS#3 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, March 05, 2010 13:42:18

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc2.mth

Dataset File: C:\elandata\Dataset\100305\QC Std 6.038

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		119364	119363.575
[	TI	205	49.687 ug/L	0.858	280854	2.347

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
TI	205Linear Thru Zero	1.0000

### QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu	175		104.3		
[	TI	205	99.374			

### QC Out Of Limits

Measurement Type Analyte      MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#3 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, March 05, 2010 13:44:31

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc2.mth

Dataset File: C:\elandata\Dataset\100305\QC Std 7.039

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		109020	109019.882
[	Tl	205	ug/L	8.239	1072	0.004

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000

### QC Calculated Values

	Analyte Mass	QC Std	% Recovery	Int Std	% Recovery	Spike	% Recovery	Dilution	% Diff	Dup. Rel.	% Diff
[>	Lu	175				95.2					
[	Tl	205									

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#3 - Summary Report

Sample ID: 1202036886

Sample Date/Time: Friday, March 05, 2010 13:46:43

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 950493|2|prb

Method File: c:\elandata\Method\misc2.mth

Dataset File: C:\elandata\Dataset\100305\1202036886.040

### Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu 175		ug/L		110880	110879.773
[ TI 205	0.101	ug/L	12.814	1192	0.005

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
TI	205Linear Thru Zero	1.0000

### QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[> Lu 175			96.8		
[ TI 205					

### QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#3 - Summary Report

Sample ID: 1202036891

Sample Date/Time: Friday, March 05, 2010 13:48:54

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 950493|40|prb

Method File: c:\elandata\Method\misc2.mth

Dataset File: C:\elandata\Dataset\100305\1202036891.041

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		109282	109282.035
[	TI	205	34.081 ug/L	1.358	176568	1.610

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
TI	205Linear Thru Zero	1.0000

### QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu	175		95.5		
[	TI	205				

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202036891

Report Date/Time: Friday, March 05, 2010 13:49:06

Page 1



## ICPMS#3 - Summary Report

Sample ID: 246437001

Sample Date/Time: Friday, March 05, 2010 13:56:03

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 950493|2|prb

Method File: c:\elandata\Method\misc2.mth

Dataset File: C:\elandata\Dataset\100305\246437001.044

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		117739	117739.260
[	TI	205	0.198 ug/L	3.686	1809	0.009

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
TI	205Linear Thru Zero	1.0000

### QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu	175		102.8		
[	TI	205				

### QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: 246437001

Report Date/Time: Friday, March 05, 2010 13:56:14

Page 1

## ICPMS#3 - Summary Report

Sample ID: 1202036887

Sample Date/Time: Friday, March 05, 2010 13:58:15

Sample Type:

Sample Description: LANL 6020 DUP

Number of Replicates: 3

Batch ID: 950493|2|prb

Method File: c:\elandata\Method\misc2.mth

Dataset File: C:\elandata\Dataset\100305\1202036887.045

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu 175		ug/L		116643	116643.154
[	TI 205	0.203	ug/L	2.217	1817	0.010

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
TI	205Linear Thru Zero	1.0000

### QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu 175		101.9			
[	TI 205					

### QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202036887

Report Date/Time: Friday, March 05, 2010 13:58:27

Page 1

## ICPMS#3 - Summary Report

Sample ID: 1202036889

Sample Date/Time: Friday, March 05, 2010 14:00:27

Sample Type:

Sample Description: LANL 6020 MS

Number of Replicates: 3

Batch ID: 950493|2|prb

Method File: c:\elandata\Method\misc2.mth

Dataset File: C:\elandata\Dataset\100305\1202036889.046

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		120225	120224.944
[	TI	205	48.897 ug/L	1.300	278520	2.310

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
TI	205Linear Thru Zero	1.0000

### QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu	175		105.0		
[	TI	205				

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202036889

Report Date/Time: Friday, March 05, 2010 14:00:39

Page 1

## ICPMS#3 - Summary Report

Sample ID: 1202036890

Sample Date/Time: Friday, March 05, 2010 14:02:40

Sample Type:

Sample Description: LANL 6020 MSD

Number of Replicates: 3

Batch ID: 950493|2|prb

Method File: c:\elandata\Method\misc2.mth

Dataset File: C:\elandata\Dataset\100305\1202036890.047

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		120473	120472.542
[	TI	205	ug/L	1.225	271298	2.245

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
TI	205Linear Thru Zero	1.0000

### QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu	175		105.2		
[	TI	205				

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#3 - Summary Report

Sample ID: 1202036888

Sample Date/Time: Friday, March 05, 2010 14:04:54

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 950493|10|prb

Method File: c:\elandata\Method\misc2.mth

Dataset File: C:\elandata\Dataset\100305\1202036888.048

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		114703	114703.278
[	TI	205	0.382 ug/L	1.176	2756	0.018

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
TI	205Linear Thru Zero	1.0000

### QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu	175		100.2		
[	TI	205				

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#3 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, March 05, 2010 14:07:07

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc2.mth

Dataset File: C:\elandata\Dataset\100305\QC Std 6.049

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		111438	111437.579
[ TI	205	49.964	ug/L	1.221	263649	2.360

### Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
TI	205	Linear Thru Zero	1.0000

### QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[> Lu	175			97.3		
[ TI	205	99.929				

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#3 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, March 05, 2010 14:09:20

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc2.mth

Dataset File: C:\elandata\Dataset\100305\QC Std 7.050

### Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu 175		ug/L		109521	109521.487
[ TI 205	0.165	ug/L	0.804	1511	0.008

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
TI	205Linear Thru Zero	1.0000

### QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[> Lu 175			95.7		
[ TI 205					

### QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

### QC Action

QC Action Line: No QC out of limits detected

---

Sample ID: QC Std 7

Report Date/Time: Friday, March 05, 2010 14:09:33

Page 1

## ICPMS#3 - Summary Report

Sample ID: 246437002

Sample Date/Time: Friday, March 05, 2010 14:11:33

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 950493|2|prb

Method File: c:\elandata\Method\misc2.mth

Dataset File: C:\elandata\Dataset\100305\246437002.051

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		118047	118047.394
[	TI	205	ug/L	0.673	2360	0.014

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
TI	205Linear Thru Zero	1.0000

### QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu	175		103.1		
[	TI	205				

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: 246437002

Report Date/Time: Friday, March 05, 2010 14:11:44

Page 1



## ICPMS#3 - Summary Report

Sample ID: 246437003

Sample Date/Time: Friday, March 05, 2010 14:13:44

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 950493|2|prb

Method File: c:\elandata\Method\misc2.mth

Dataset File: C:\elandata\Dataset\100305\246437003.052

### Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu 175		ug/L		121641	121641.248
[ TI 205	0.289	ug/L	2.961	2389	0.014

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
TI	205Linear Thru Zero	1.0000

### QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[> Lu 175		106.2			
[ TI 205					

### QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: 246437003

Report Date/Time: Friday, March 05, 2010 14:13:56

Page 1

## ICPMS#3 - Summary Report

Sample ID: 246437004

Sample Date/Time: Friday, March 05, 2010 14:15:56

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 950493|2|prb

Method File: c:\elandata\Method\misc2.mth

Dataset File: C:\elandata\Dataset\100305\246437004.053

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		120981	120981.164
[ TI	205	0.099	ug/L	3.136	1292	0.005

### Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
TI	205	Linear Thru Zero	1.0000

### QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[> Lu	175			105.7		
[ TI	205					

### QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: 246437004

Report Date/Time: Friday, March 05, 2010 14:16:08

Page 1

## ICPMS#3 - Summary Report

Sample ID: 246437005

Sample Date/Time: Friday, March 05, 2010 14:18:09

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 950493|2|prb

Method File: c:\elandata\Method\misc2.mth

Dataset File: C:\elandata\Dataset\100305\246437005.054

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		119458	119458.318
[	TI	205	0.161 ug/L	4.054	1627	0.008

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
TI	205Linear Thru Zero	1.0000

### QC Calculated Values

	Analyte Mass	QC Std	% Recovery	Int Std	% Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu	175			104.3			
[	TI	205						

### QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: 246437005

Report Date/Time: Friday, March 05, 2010 14:18:21

Page 1

## ICPMS#3 - Summary Report

Sample ID: 246437006

Sample Date/Time: Friday, March 05, 2010 14:20:22

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 950493[2]prb

Method File: c:\elandata\Method\misc2.mth

Dataset File: C:\elandata\Dataset\100305\246437006.055

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		121460	121460.330
[	TI	205	0.423 ug/L	3.101	3158	0.020

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
TI	205Linear Thru Zero	1.0000

### QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu	175		106.1		
[	TI	205				

### QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: 246437006

Report Date/Time: Friday, March 05, 2010 14:20:34

Page 1

## ICPMS#3 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, March 05, 2010 14:22:35

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc2.mth

Dataset File: C:\elandata\Dataset\100305\QC Std 6.056

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		112410	112410.387
[	TI	205	49.614 ug/L	2.187	264248	2.344

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
TI	205Linear Thru Zero	1.0000

### QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu	175		98.2		
[	TI	205	99.227			

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#3 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, March 05, 2010 14:24:48

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc2.mth

Dataset File: C:\elandata\Dataset\100305\QC Std 7.057

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		109428	109428.139
[	TI	205	0.077 ug/L	5.308	1053	0.004

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
TI	205Linear Thru Zero	1.0000

### QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu	175		95.6		
[	TI	205				

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Friday, March 05, 2010 14:25:01

Page 1

## ICPMS#3 - Summary Report

Sample ID: 246437007

Sample Date/Time: Friday, March 05, 2010 14:27:02

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 950493|2|prb

Method File: c:\elandata\Method\misc2.mth

Dataset File: C:\elandata\Dataset\100305\246437007.058

### Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu 175		ug/L		123463	123462.503
[ TI 205	0.121	ug/L	4.224	1445	0.006

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
TI	205Linear Thru Zero	1.0000

### QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[> Lu 175		107.8			
[ TI 205					

### QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: 246437007

Report Date/Time: Friday, March 05, 2010 14:27:15

Page 1

## ICPMS#3 - Summary Report

Sample ID: 246437008

Sample Date/Time: Friday, March 05, 2010 14:29:16

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 950493|2|prb

Method File: c:\elandata\Method\misc2.mth

Dataset File: C:\elandata\Dataset\100305\246437008.059

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		122483	122482.527
[ TI	205	0.190	ug/L	1.590	1831	0.009

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
TI	205Linear Thru Zero	1.0000

### QC Calculated Values

Analyte	Mass	QC Std	% Recovery	Int Std	% Recovery	Spike	% Recovery	Dilution	% Diff	Dup. Rel.	% Diff
[> Lu	175				107.0						
[ TI	205										

### QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: 246437008

Report Date/Time: Friday, March 05, 2010 14:29:29

Page 1



## ICPMS#3 - Summary Report

Sample ID: 246437009

Sample Date/Time: Friday, March 05, 2010 14:31:29

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 950493|2|prb

Method File: c:\elandata\Method\misc2.mth

Dataset File: C:\elandata\Dataset\100305\246437009.060

### Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu 175		ug/L		119521	119520.881
[ TI 205	0.140	ug/L	4.501	1505	0.007

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
TI	205Linear Thru Zero	1.0000

### QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[> Lu 175		104.4			
[ TI 205					

### QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: 246437009

Report Date/Time: Friday, March 05, 2010 14:31:41

Page 1

## ICPMS#3 - Summary Report

Sample ID: 246437010

Sample Date/Time: Friday, March 05, 2010 14:33:41

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 950493|2|prb

Method File: c:\elandata\Method\misc2.mth

Dataset File: C:\elandata\Dataset\100305\246437010.061

### Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu 175		ug/L		118281	118281.004
[ TI 205	0.120	ug/L	3.320	1382	0.006

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
TI	205Linear Thru Zero	1.0000

### QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[> Lu 175		103.3			
[ TI 205					

### QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: 246437010

Report Date/Time: Friday, March 05, 2010 14:33:53

Page 1

## ICPMS#3 - Summary Report

Sample ID: 246437011

Sample Date/Time: Friday, March 05, 2010 14:35:54

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 950493[2]prb

Method File: c:\elandata\Method\misc2.mth

Dataset File: C:\elandata\Dataset\100305\246437011.062

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		120773	120772.623
[ TI	205	0.095	ug/L	1.652	1265	0.004

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
TI	205Linear Thru Zero	1.0000

### QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[> Lu	175		105.5			
[ TI	205					

### QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: 246437011

Report Date/Time: Friday, March 05, 2010 14:36:06

Page 1

## ICPMS#3 - Summary Report

Sample ID: 246437012

Sample Date/Time: Friday, March 05, 2010 14:38:07

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 950493|2|prb

Method File: c:\elandata\Method\misc2.mth

Dataset File: C:\elandata\Dataset\100305\246437012.063

### Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu 175		ug/L		119663	119662.817
[ TI 205	0.214	ug/L	5.598	1927	0.010

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
TI	205Linear Thru Zero	1.0000

### QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[> Lu 175		104.5			
[ TI 205					

### QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: 246437012

Report Date/Time: Friday, March 05, 2010 14:38:19

Page 1

## ICPMS#3 - Summary Report

Sample ID: 246437013

Sample Date/Time: Friday, March 05, 2010 14:40:21

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 950493[2]prb

Method File: c:\elandata\Method\misc2.mth

Dataset File: C:\elandata\Dataset\100305\246437013.064

### Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu 175		ug/L		118849	118848.618
[ TI 205	0.149	ug/L	0.201	1549	0.007

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
TI	205Linear Thru Zero	1.0000

### QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[> Lu 175		103.8			
[ TI 205					

### QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: 246437013

Report Date/Time: Friday, March 05, 2010 14:40:33

Page 1

## ICPMS#3 - Summary Report

Sample ID: 246437014

Sample Date/Time: Friday, March 05, 2010 14:42:35

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 950493|2|prb

Method File: c:\elandata\Method\misc2.mth

Dataset File: C:\elandata\Dataset\100305\246437014.065

### Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu 175		ug/L		123116	123115.887
[ TI 205	0.180	ug/L	3.480	1786	0.009

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
TI	205Linear Thru Zero	1.0000

### QC Calculated Values

Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[> Lu 175		107.5			
[ TI 205					

### QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: 246437014

Report Date/Time: Friday, March 05, 2010 14:42:48

Page 1

## ICPMS#3 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, March 05, 2010 14:44:48

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc2.mth

Dataset File: C:\elandata\Dataset\100305\QC Std 6.066

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		112618	112618.465
[	Tl	205	49.279 ug/L	0.380	262864	2.328

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000

### QC Calculated Values

	Analyte Mass	QC Std	% Recovery	Int Std	% Recovery	Spike	% Recovery	Dilution	% Diff	Dup. Rel. % Diff
[>	Lu	175			98.4					
[	Tl	205	98.557							

### 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, March 05, 2010 14:45:00

Page 1

## ICPMS#3 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, March 05, 2010 14:47:01

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\misc2.mth

Dataset File: C:\elandata\Dataset\100305\QC Std 7.067

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		109957	109956.894
[	Tl	205	0.097 ug/L	8.278	1166	0.005

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000

### QC Calculated Values

	Analyte Mass	QC Std	% Recovery	Int Std	% Recovery	Spike	% Recovery	Dilution	% Diff	Dup. Rel. % Diff
[>	Lu	175			96.0					
[	Tl	205								

### QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Friday, March 05, 2010 14:47:14

Page 1



## ICPMS #5 Daily Performance Report

### Sample ID: Sample

Sample Date/Time: Thursday, March 04, 2010 12:13:51

### Sample Description:

Method File: c:\elandata\Method\Daily2.mth

Dataset File: c:\elandata\Dataset\default\Sample.644

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	4917.0	4917.046	76.152	1.5
Mg	24.0	49556.4	49556.410	421.182	0.8
Co	58.9	95296.0	95295.993	345.969	0.4
Rh	102.9	182253.3	182253.293	1838.164	1.0
In	114.9	271126.6	271126.619	2475.836	0.9
Pb	208.0	255677.7	255677.709	715.154	0.3
[> Ba	137.9	248095.1	248095.056	1759.513	0.7
[ Ba++	69.0	3224.4	0.013	0.000	1.4
[> Ce	139.9	304302.3	304302.268	1006.509	0.3
[ CeO	155.9	7653.1	0.025	0.000	1.9
Bkgd	220.0	21.3	21.300	2.225	10.4

### Current Optimization File Data

Current Value	Description
0.87	Nebulizer Gas Flow
6.00	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	5457.7
Co	59	13	6.0	98878.3
In	115	13	6.8	264010.6

## ICPMS #5 Instrument Tuning Report

File Name: default2.tun  
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	588	2050	0.665
Be	9.0	9.0	2056	2075	0.621
Mg	24.0	24.0	5695	2080	0.628
Mg	25.0	25.0	5923	2080	0.592
Mg	26.0	26.0	6178	2080	0.633
Co	58.9	58.9	14189	2110	0.620
Rh	102.9	102.9	24872	2160	0.621
In	114.9	114.9	27799	2180	0.636
Ce	139.9	139.9	33870	2200	0.640
Pb	206.0	206.0	49948	2295	0.605
Pb	207.0	207.0	50159	2240	0.631
Pb	208.0	208.0	50451	2265	0.694
U	238.1	238.0	57724	2275	0.708

## ICPMS#5 - Summary Report

Sample ID: Blank

Sample Date/Time: Friday, March 05, 2010 01:46:38

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\anl soil.mth

Dataset File: c:\elandata\Dataset\100304\Blank.296

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9		ug/L		25	
>	Sc	45		ug/L		1393741	
[	Ni	60		ug/L		125	
[>	Ge	74		ug/L		400731	
	As	75		ug/L		-137	
	Se	77		ug/L		7496	
	Se	82		ug/L		19	
[	Kr	83		ug/L		111	
[>	Lu	175		ug/L		503059	
[	Tl	205		ug/L		1771	

---

Sample ID: Blank

Report Date/Time: Friday, March 05, 2010 01:47:17

Page 1

## Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Simple Linear	
Sc	45Linear Thru Zero	
Ni	60Simple Linear	
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	0.9998

---

Sample ID: Blank

Report Date/Time: Friday, March 05, 2010 01:47:17

Page 2

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate	Rel. % Difference
[	Be	9						
>	Sc	45						
[	Ni	60						
[>	Ge	74						
	As	75						
	Se	77						
	Se	82						
[	Kr	83						
[>	Lu	175						
[	Tl	205						

### QC Out Of Limits

Measurement Type    Analyte    Mass    Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Friday, March 05, 2010 01:50:15

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\Nani soil.mth

Dataset File: c:\elandata\Dataset\100304\Standard 1.297

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	10.000	ug/L	3.075	4012	0.003
>	Sc	45		ug/L		1412270	1412269.634
[	Ni	60	10.000	ug/L	3.082	13706	0.010
[>	Ge	74		ug/L		397284	397283.527
	As	75	10.000	ug/L	3.589	10234	0.026
	Se	77		ug/L		8561	0.003
	Se	82	10.000	ug/L	6.666	1190	0.003
[	Kr	83		ug/L		102	-0.000
[>	Lu	175		ug/L		495481	495481.023
[	Tl	205	10.000	ug/L	1.011	203809	0.408

Sample ID: Standard 1

Report Date/Time: Friday, March 05, 2010 01:50:52

Page 1

## 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

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[	Be	9					
[>	Sc	45					
[	Ni	60					
[>	Ge	74					
[	As	75					
[	Se	77					
[	Se	82					
[	Kr	83					
[>	Lu	175					
[	Tl	205					

### QC Out Of Limits

Measurement Type Analyte 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: Friday, March 05, 2010 01:53:49

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\anl soil.mth

Dataset File: c:\elandata\Dataset\100304\Standard 2.298

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	100.006	ug/L	0.715	40445	0.028
>	Sc	45		ug/L		1422796	1422795.505
[	Ni	60	99.990	ug/L	2.001	135551	0.095
>	Ge	74		ug/L		411375	411374.812
	As	75	100.063	ug/L	2.208	114446	0.279
	Se	77		ug/L		16634	0.022
	Se	82	99.962	ug/L	3.135	11694	0.028
[	Kr	83		ug/L		117	0.000
>	Lu	175		ug/L		491777	491776.520
[	Tl	205	99.853	ug/L	1.596	1747509	3.550

---

Sample ID: Standard 2

Report Date/Time: Friday, March 05, 2010 01:54:27

Page 1

## 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	0.9999

---

Sample ID: Standard 2

Report Date/Time: Friday, March 05, 2010 01:54:27

Page 2

## QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[	Be		9				
[>	Sc		45				
[	Ni		60				
[>	Ge		74				
[	As		75				
[	Se		77				
[	Se		82				
[	Kr		83				
[>	Lu		175				
[	Tl		205				

## QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

## QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Friday, March 05, 2010 01:57:25

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\Dataset\100304\QC Std 1.299

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	52.931	ug/L	1.755	21729	0.015
[>	Sc	45		ug/L		1443579	1443579.242
[	Ni	60	53.061	ug/L	3.292	73050	0.051
[>	Ge	74		ug/L		405006	405006.370
	As	75	50.492	ug/L	1.465	56803	0.141
	Se	77		ug/L		12552	0.012
	Se	82	53.559	ug/L	2.379	6179	0.015
[	Kr	83		ug/L		109	-0.000
[>	Lu	175		ug/L		492891	492890.771
[	Tl	205	54.763	ug/L	2.455	961070	1.947

---

Sample ID: QC Std 1

Report Date/Time: Friday, March 05, 2010 01:58:02

Page 1

## 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	0.9999

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9	105.862				
>	Sc	45		103.6			
[	Ni	60	106.123				
[>	Ge	74		101.1			
	As	75	100.984				
	Se	77					
	Se	82	107.117				
[	Kr	83					
[>	Lu	175		98.0			
[	Tl	205	109.525				

### 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 2

Sample Date/Time: Friday, March 05, 2010 02:01:03

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\Nani soil.mth

Dataset File: c:\elandata\Dataset\100304\QC Std 2.300

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	-0.014	ug/L	166.945	20	-0.000
[>	Sc	45		ug/L		1424430	1424429.571
[	Ni	60	0.002	ug/L	215.497	131	0.000
[>	Ge	74		ug/L		406614	406613.627
	As	75	0.283	ug/L	144.842	182	0.001
	Se	77		ug/L		7258	-0.001
	Se	82	-0.067	ug/L	79.835	12	-0.000
[	Kr	83		ug/L		123	0.000
[>	Lu	175		ug/L		499067	499066.546
[	Tl	205	0.176	ug/L	1.610	4877	0.006

Sample ID: QC Std 2

Report Date/Time: Friday, March 05, 2010 02:01:42

Page 1

## 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	0.9999



### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
[	Be	9					
[>	Sc	45		102.2			
[	Ni	60					
[>	Ge	74		101.5			
[	As	75					
[	Se	77					
[	Se	82					
[	Kr	83					
[>	Lu	175		99.2			
[	Tl	205					

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Friday, March 05, 2010 02:04:41

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\Dataset\100304\QC Std 3.301

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.630	ug/L	12.526	250	0.000
[>	Sc	45		ug/L		1279442	1279441.754
[	Ni	60	2.598	ug/L	12.101	3249	0.002
[>	Ge	74		ug/L		362350	362349.977
[	As	75	6.491	ug/L	9.545	6373	0.018
[	Se	77		ug/L		7735	0.003
[	Se	82	6.746	ug/L	13.126	704	0.002
[	Kr	83		ug/L		115	0.000
[>	Lu	175		ug/L		449147	449146.610
[	Tl	205	1.510	ug/L	11.849	25464	0.054

Sample ID: QC Std 3

Report Date/Time: Friday, March 05, 2010 02:05:19

Page 1

## 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	0.9999

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9	126.003				
>	Sc	45		91.8			
[	Ni	60	129.880				
[>	Ge	74		90.4			
	As	75	129.826				
	Se	77					
	Se	82	134.916				
[	Kr	83					
[>	Lu	175		89.3			
[	Tl	205	150.970				

### QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 3	Se	82	CRDL is out of limits
QC Std 3	Tl	205	CRDL is out of limits

### QC Action

QC Action Line: Continue

## ICPMS#5 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Friday, March 05, 2010 02:08:17

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\anal soil.mth

Dataset File: c:\elandata\Dataset\100304\QC Std 4.302

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.057	ug/L	17.177	47	0.000
[>	Sc	45		ug/L		1372521	1372521.298
[	Ni	60	3.372	ug/L	1.907	4528	0.003
[>	Ge	74		ug/L		384915	384915.455
	As	75	0.119	ug/L	406.145	-5	0.000
	Se	77		ug/L		7733	0.001
	Se	82	-1.195	ug/L	20.324	-112	-0.000
[	Kr	83		ug/L		283	0.000
[>	Lu	175		ug/L		438697	438696.942
[	Tl	205	0.013	ug/L	48.423	1740	0.000

---

Sample ID: QC Std 4

Report Date/Time: Friday, March 05, 2010 02:08:55

Page 1

## 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	0.9999

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate	Rel. % Difference
[	Be	9						
[>	Sc	45			98.5			
[	Ni	60	101.859					
[>	Ge	74			96.1			
	As	75						
	Se	77						
	Se	82						
[	Kr	83						
[>	Lu	175			87.2			
[	Tl	205						

### 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: Friday, March 05, 2010 02:11:54

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\ani soil.mth

Dataset File: c:\elandata\Dataset\100304\QC Std 5.303

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	19.465	ug/L	2.484	7546	0.006
[>	Sc	45		ug/L		1360624	1360623.696
[	Ni	60	23.114	ug/L	0.861	30064	0.022
[>	Ge	74		ug/L		378298	378298.043
	As	75	20.786	ug/L	3.546	21769	0.058
	Se	77		ug/L		9638	0.007
	Se	82	20.151	ug/L	3.250	2183	0.006
[	Kr	83		ug/L		285	0.000
[>	Lu	175		ug/L		438216	438215.696
[	Tl	205	21.764	ug/L	1.999	340537	0.774

---

Sample ID: QC Std 5

Report Date/Time: Friday, March 05, 2010 02:12:33

Page 1



# 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	0.9999

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[	Be	9	97.326				
>	Sc	45		97.6			
[	Ni	60	99.158				
[>	Ge	74		94.4			
	As	75	103.932				
	Se	77					
	Se	82	100.753				
[	Kr	83					
[>	Lu	175		87.1			
[	Tl	205	108.820				

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, March 05, 2010 02:15:32

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\Dataset\100304\QC Std 6.304

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	50.009	ug/L	1.017	20866	0.014
>	Sc	45		ug/L		1467012	1467012.283
[	Ni	60	51.260	ug/L	2.373	71728	0.049
[>	Ge	74		ug/L		407734	407734.375
	As	75	49.477	ug/L	0.752	56029	0.138
	Se	77		ug/L		11974	0.011
	Se	82	51.551	ug/L	0.908	5989	0.015
[	Kr	83		ug/L		121	0.000
[>	Lu	175		ug/L		492011	492011.322
[	Tl	205	52.192	ug/L	1.369	914643	1.856

---

Sample ID: QC Std 6

Report Date/Time: Friday, March 05, 2010 02:16:11

Page 1

## 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	0.9999

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9	100.019				
[>	Sc	45		105.3			
[	Ni	60	102.520				
[>	Ge	74		101.7			
	As	75	98.953				
	Se	77					
	Se	82	103.102				
[	Kr	83					
[>	Lu	175		97.8			
[	Tl	205	104.383				

### 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: Friday, March 05, 2010 02:19:11

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\VanI soil.mth

Dataset File: c:\elandata\Dataset\100304\QC Std 7.305

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	-0.013	ug/L	9.783	21	-0.000
>	Sc	45		ug/L		1472929	1472929.362
[	Ni	60	0.003	ug/L	409.919	137	0.000
[>	Ge	74		ug/L		412780	412779.587
	As	75	-0.329	ug/L	110.448	-520	-0.001
	Se	77		ug/L		7456	-0.001
	Se	82	0.012	ug/L	333.492	21	0.000
[	Kr	83		ug/L		110	-0.000
[>	Lu	175		ug/L		497712	497712.200
[	Tl	205	0.250	ug/L	3.585	6178	0.009

Sample ID: QC Std 7

Report Date/Time: Friday, March 05, 2010 02:19:50

Page 1

## 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	0.9999

Sample ID: QC Std 7

Report Date/Time: Friday, March 05, 2010 02:19:50

Page 2

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[	Be	9					
>	Sc	45		105.7			
[	Ni	60					
[>	Ge	74		103.0			
	As	75					
	Se	77					
	Se	82					
[	Kr	83					
[>	Lu	175		98.9			
[	Tl	205					

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected



## ICPMS#5 - Summary Report

Sample ID: 1202036886

Sample Date/Time: Friday, March 05, 2010 02:22:51

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 950493|2|baj

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\Dataset\100304\1202036886.306

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.042	ug/L	65.447	43	0.000
>	Sc	45		ug/L		1418763	1418762.762
[	Ni	60	0.265	ug/L	0.892	485	0.000
[>	Ge	74		ug/L		390366	390365.672
	As	75	0.020	ug/L	1642.492	-109	0.000
	Se	77		ug/L		6091	-0.003
	Se	82	0.332	ug/L	54.659	56	0.000
[	Kr	83		ug/L		103	-0.000
[>	Lu	175		ug/L		492206	492205.629
[	Tl	205	0.227	ug/L	5.132	5704	0.008

Sample ID: 1202036886

Report Date/Time: Friday, March 05, 2010 02:23:31

Page 1

## 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	0.9999

---

Sample ID: 1202036886

Report Date/Time: Friday, March 05, 2010 02:23:31

Page 2

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[	Be	9					
[>	Sc	45		101.8			
[	Ni	60					
[>	Ge	74		97.4			
	As	75					
	Se	77					
	Se	82					
[	Kr	83					
[>	Lu	175		97.8			
[	Tl	205					

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: 1202036891

Sample Date/Time: Friday, March 05, 2010 02:26:32

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 950493|40|baj

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\Dataset\100304\1202036891.307

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	22.163 ug/L	2.655	9211	0.006
[>	Sc	45	ug/L		1459177	1459177.357
[	Ni	60	39.406 ug/L	2.010	54866	0.038
[>	Ge	74	ug/L		413596	413595.713
[	As	75	28.907 ug/L	2.586	33149	0.080
[	Se	77	ug/L		14442	0.016
[	Se	82	80.480 ug/L	2.122	9472	0.023
[	Kr	83	ug/L		108	-0.000
[>	Lu	175	ug/L		505795	505794.547
[	Tl	205	35.190 ug/L	3.260	634337	1.251

Sample ID: 1202036891

Report Date/Time: Friday, March 05, 2010 02:27:12

Page 1

## 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	0.9999

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9					
[>	Sc	45		104.7			
[	Ni	60					
[>	Ge	74		103.2			
	As	75					
	Se	77					
	Se	82					
[	Kr	83					
[>	Lu	175		100.5			
[	Tl	205					

### 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: 246437001

Sample Date/Time: Friday, March 05, 2010 02:30:11

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 950493|2|baj

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\Dataset\100304\246437001.308

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	2.113	ug/L	1.668	859	0.001
[>	Sc	45		ug/L		1389027	1389026.602
[	Ni	60	12.260	ug/L	1.775	16338	0.012
[>	Ge	74		ug/L		379081	379080.909
	As	75	4.530	ug/L	6.274	4651	0.013
	Se	77		ug/L		5354	-0.005
	Se	82	0.581	ug/L	20.745	81	0.000
[	Kr	83		ug/L		176	0.000
[>	Lu	175		ug/L		496154	496153.878
[	Tl	205	0.562	ug/L	4.180	11660	0.020

Sample ID: 246437001

Report Date/Time: Friday, March 05, 2010 02:30:50

Page 1

## 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	0.9999



### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9					
[>	Sc	45			99.7		
[	Ni	60					
[>	Ge	74			94.6		
	As	75					
	Se	77					
	Se	82					
[	Kr	83					
[>	Lu	175			98.6		
[	Tl	205					

### 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: 1202036887

Sample Date/Time: Friday, March 05, 2010 02:33:50

Sample Type:

Sample Description: LANL 6020 DUP

Number of Replicates: 3

Batch ID: 950493|2|baj

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\Dataset\100304\1202036887.309

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	1.829	ug/L	5.675	730	0.001
>	Sc	45		ug/L		1355985	1355984.804
[	Ni	60	10.623	ug/L	3.717	13829	0.010
[>	Ge	74		ug/L		373387	373386.598
	As	75	3.437	ug/L	8.966	3448	0.010
	Se	77		ug/L		5026	-0.005
	Se	82	0.170	ug/L	69.856	36	0.000
[	Kr	83		ug/L		157	0.000
[>	Lu	175		ug/L		500490	500490.398
[	Tl	205	0.351	ug/L	1.821	8015	0.012

Sample ID: 1202036887

Report Date/Time: Friday, March 05, 2010 02:34:29

Page 1

## 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	0.9999

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[	Be	9					
[>	Sc	45		97.3			
[	Ni	60					
[>	Ge	74		93.2			
[	As	75					
[	Se	77					
[	Se	82					
[	Kr	83					
[>	Lu	175		99.5			
[	Tl	205					

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: 1202036889

Sample Date/Time: Friday, March 05, 2010 02:37:29

Sample Type:

Sample Description: LANL 6020 MS

Number of Replicates: 3

Batch ID: 950493|2|baj

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\Dataset\100304\1202036889.310

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	28.757	ug/L	1.225	10830	0.008
[>	Sc	45		ug/L		1323034	1323033.607
[	Ni	60	37.267	ug/L	4.111	47034	0.035
[>	Ge	74		ug/L		363767	363766.904
	As	75	44.025	ug/L	1.208	44468	0.123
	Se	77		ug/L		5484	-0.004
	Se	82	10.499	ug/L	6.679	1102	0.003
[	Kr	83		ug/L		175	0.000
[>	Lu	175		ug/L		505688	505687.950
[	Tl	205	53.693	ug/L	2.222	966963	1.909

Sample ID: 1202036889

Report Date/Time: Friday, March 05, 2010 02:38:08

Page 1

## 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	0.9999

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[	Be	9					
[>	Sc	45		94.9			
[	Ni	60					
[>	Ge	74		90.8			
[	As	75					
[	Se	77					
[	Se	82					
[	Kr	83					
[>	Lu	175		100.5			
[	Tl	205					

### 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: 1202036890

Sample Date/Time: Friday, March 05, 2010 02:41:09

Sample Type:

Sample Description: LANL 6020 MSD

Number of Replicates: 3

Batch ID: 950493|2|baj

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\Dataset\100304\1202036890.311

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	28.246	ug/L	3.928	10413	0.008
[>	Sc	45		ug/L		1295244	1295243.979
[	Ni	60	36.327	ug/L	1.973	44918	0.035
[>	Ge	74		ug/L		349108	349107.531
[	As	75	42.777	ug/L	2.018	41456	0.119
[	Se	77		ug/L		5227	-0.004
[	Se	82	9.785	ug/L	4.293	987	0.003
[	Kr	83		ug/L		165	0.000
[>	Lu	175		ug/L		491756	491756.115
[	Tl	205	51.862	ug/L	2.749	908205	1.844

Sample ID: 1202036890

Report Date/Time: Friday, March 05, 2010 02:41:48

Page 1



## 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	0.9999

---

Sample ID: 1202036890

Report Date/Time: Friday, March 05, 2010 02:41:48

Page 2

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9					
[>	Sc	45			92.9		
[	Ni	60					
[>	Ge	74			87.1		
	As	75					
	Se	77					
	Se	82					
[	Kr	83					
[>	Lu	175			97.8		
[	Tl	205					

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: 1202036888

Sample Date/Time: Friday, March 05, 2010 02:44:49

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 950493|10|baj

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\Dataset\100304\1202036888.312

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.408	ug/L	12.753	170	0.000
[>	Sc	45		ug/L		1269433	1269432.727
[	Ni	60	2.398	ug/L	1.484	3013	0.002
[>	Ge	74		ug/L		366465	366465.292
[	As	75	1.356	ug/L	29.857	1255	0.004
[	Se	77		ug/L		5894	-0.003
[	Se	82	0.343	ug/L	34.742	53	0.000
[	Kr	83		ug/L		99	-0.000
[>	Lu	175		ug/L		488086	488086.223
[	Tl	205	0.377	ug/L	1.155	8265	0.013

Sample ID: 1202036888

Report Date/Time: Friday, March 05, 2010 02:45:29

Page 1

## 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	0.9999

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9					
[>	Sc	45			91.1		
[	Ni	60					
[>	Ge	74			91.4		
[	As	75					
[	Se	77					
[	Se	82					
[	Kr	83					
[>	Lu	175			97.0		
[	Tl	205					

### QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Friday, March 05, 2010 02:48:28

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\Dataset\100304\QC Std 8.313

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	52.729	ug/L	2.672	19318	0.015
>	Sc	45		ug/L		1288270	1288269.955
[	Ni	60	51.751	ug/L	1.491	63594	0.049
>	Ge	74		ug/L		372050	372049.818
	As	75	49.436	ug/L	1.277	51086	0.138
	Se	77		ug/L		10772	0.010
	Se	82	51.613	ug/L	2.168	5471	0.015
[	Kr	83		ug/L		103	0.000
>	Lu	175		ug/L		482628	482627.677
[	Tl	205	51.637	ug/L	2.807	887577	1.836

Sample ID: QC Std 8

Report Date/Time: Friday, March 05, 2010 02:49:07

Page 1

## 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	0.9999

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[	Be	9	105.458				
>	Sc	45		92.4			
[	Ni	60	103.503				
>	Ge	74		92.8			
	As	75	98.873				
	Se	77					
	Se	82	103.225				
[	Kr	83					
>	Lu	175		95.9			
[	Tl	205	103.274				

### 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 9

Sample Date/Time: Friday, March 05, 2010 02:52:07

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\anl soil.mth

Dataset File: c:\elandata\Dataset\100304\QC Std 9.314

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	-0.013	ug/L	125.435	18	-0.000
[>	Sc	45		ug/L		1255831	1255831.491
[	Ni	60	-0.004	ug/L	147.512	109	-0.000
[>	Ge	74		ug/L		355157	355156.844
	As	75	0.113	ug/L	305.490	-8	0.000
	Se	77		ug/L		6565	-0.000
	Se	82	0.371	ug/L	48.058	54	0.000
[	Kr	83		ug/L		103	0.000
[>	Lu	175		ug/L		471804	471804.408
[	Tl	205	0.300	ug/L	5.487	6696	0.011

---

Sample ID: QC Std 9

Report Date/Time: Friday, March 05, 2010 02:52:47

Page 1

## 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	0.9999

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[	Be	9						
[>	Sc	45		90.1				
[	Ni	60						
[>	Ge	74		88.6				
[	As	75						
[	Se	77						
[	Se	82						
[	Kr	83						
[>	Lu	175		93.8				
[	Tl	205						

### 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: 246437002

Sample Date/Time: Friday, March 05, 2010 02:55:48

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 950493|2|baj

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\Dataset\100304\246437002.315

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	2.210	ug/L	5.911	821	0.001
>	Sc 45		ug/L		1271638	1271638.215
[	Ni 60	13.986	ug/L	3.693	17040	0.013
[>	Ge 74		ug/L		351060	351059.629
	As 75	5.067	ug/L	0.898	4833	0.014
	Se 77		ug/L		4885	-0.005
	Se 82	0.957	ug/L	10.231	112	0.000
[	Kr 83		ug/L		178	0.000
[>	Lu 175		ug/L		491277	491276.802
[	Tl 205	0.421	ug/L	2.885	9078	0.015

Sample ID: 246437002

Report Date/Time: Friday, March 05, 2010 02:56:28

Page 1

## 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	0.9999

---

Sample ID: 246437002

Report Date/Time: Friday, March 05, 2010 02:56:28

Page 2

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[	Be	9					
[>	Sc	45		91.2			
[	Ni	60					
[>	Ge	74		87.6			
[	As	75					
[	Se	77					
[	Se	82					
[	Kr	83					
[>	Lu	175		97.7			
[	Tl	205					

### 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: 246437003

Sample Date/Time: Friday, March 05, 2010 02:59:29

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 950493|2|baj

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\Dataset\100304\246437003.316

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	2.862	ug/L	1.976	1036	0.001
[>	Sc 45		ug/L		1247130	1247130.356
[	Ni 60	18.286	ug/L	1.283	21824	0.017
[>	Ge 74		ug/L		343386	343386.404
	As 75	5.895	ug/L	1.767	5520	0.016
	Se 77		ug/L		4326	-0.006
	Se 82	0.858	ug/L	20.832	100	0.000
[	Kr 83		ug/L		190	0.000
[>	Lu 175		ug/L		493747	493746.794
[	Tl 205	0.404	ug/L	1.559	8832	0.014

Sample ID: 246437003

Report Date/Time: Friday, March 05, 2010 03:00:10

Page 1

## 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	0.9999

---

Sample ID: 246437003

Report Date/Time: Friday, March 05, 2010 03:00:10

Page 2



### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9					
>	Sc	45			89.5		
[	Ni	60					
[>	Ge	74			85.7		
	As	75					
	Se	77					
	Se	82					
[	Kr	83					
[>	Lu	175			98.1		
[	Tl	205					

### 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: 246437004

Sample Date/Time: Friday, March 05, 2010 03:03:09

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 950493|2|baj

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\Dataset\100304\246437004.317

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	1.258	ug/L	5.545	464	0.000
[>	Sc	45		ug/L		1237096	1237096.045
[	Ni	60	8.223	ug/L	0.902	9796	0.008
[>	Ge	74		ug/L		348054	348054.023
[	As	75	2.765	ug/L	22.012	2555	0.008
[	Se	77		ug/L		4233	-0.007
[	Se	82	0.517	ug/L	36.055	68	0.000
[	Kr	83		ug/L		145	0.000
[>	Lu	175		ug/L		491063	491063.213
[	Tl	205	0.168	ug/L	7.118	4669	0.006

Sample ID: 246437004

Report Date/Time: Friday, March 05, 2010 03:03:49

Page 1

## 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	0.9999

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9					
>	Sc	45			88.8		
[	Ni	60					
[>	Ge	74			86.9		
	As	75					
	Se	77					
	Se	82					
[	Kr	83					
[>	Lu	175			97.6		
[	Tl	205					

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: 246437005

Sample Date/Time: Friday, March 05, 2010 03:06:48

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 950493|2|baj

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\Dataset\100304\246437005.318

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	2.391	ug/L	5.467	868	0.001
[>	Sc	45		ug/L		1245137	1245136.943
[	Ni	60	14.063	ug/L	2.266	16787	0.013
[>	Ge	74		ug/L		343992	343992.198
[	As	75	4.387	ug/L	3.364	4082	0.012
[	Se	77		ug/L		4087	-0.007
[	Se	82	0.380	ug/L	24.660	54	0.000
[	Kr	83		ug/L		156	0.000
[>	Lu	175		ug/L		487890	487889.601
[	Tl	205	0.236	ug/L	1.126	5820	0.008

Sample ID: 246437005

Report Date/Time: Friday, March 05, 2010 03:07:28

Page 1

## 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	0.9999

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9					
[>	Sc	45		89.3			
[	Ni	60					
[>	Ge	74		85.8			
[	As	75					
[	Se	77					
[	Se	82					
[	Kr	83					
[>	Lu	175		97.0			
[	Tl	205					

### 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: 246437006

Sample Date/Time: Friday, March 05, 2010 03:10:28

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 950493|2|ba|

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\Dataset\100304\246437006.319

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	3.287	ug/L	1.916	1192	0.001
>	Sc	45		ug/L		1252711	1252711.322
[	Ni	60	18.532	ug/L	1.314	22214	0.018
[>	Ge	74		ug/L		346335	346334.945
	As	75	6.326	ug/L	5.733	5979	0.018
	Se	77		ug/L		4060	-0.007
	Se	82	0.922	ug/L	55.864	107	0.000
[	Kr	83		ug/L		229	0.000
[>	Lu	175		ug/L		496960	496959.895
[	Tl	205	0.554	ug/L	1.264	11535	0.020

Sample ID: 246437006

Report Date/Time: Friday, March 05, 2010 03:11:08

Page 1



## 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	0.9999

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9					
>	Sc	45			89.9		
[	Ni	60					
[>	Ge	74			86.4		
	As	75					
	Se	77					
	Se	82					
[	Kr	83					
[>	Lu	175			98.8		
[	Tl	205					

### QC Out Of Limits

Measurement Type    Analyte    Mass    Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: 246437007

Sample Date/Time: Friday, March 05, 2010 03:14:08

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 950493|2|baj

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\Dataset\100304\246437007.320

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	2.919	ug/L	3.229	1046	0.001
>	Sc	45		ug/L		1235595	1235594.831
[	Ni	60	11.325	ug/L	1.732	13432	0.011
[>	Ge	74		ug/L		346092	346091.748
	As	75	4.827	ug/L	2.417	4533	0.013
	Se	77		ug/L		4073	-0.007
	Se	82	0.730	ug/L	19.181	89	0.000
[	Kr	83		ug/L		165	0.000
[>	Lu	175		ug/L		497553	497552.505
[	Tl	205	0.139	ug/L	5.932	4202	0.005

Sample ID: 246437007

Report Date/Time: Friday, March 05, 2010 03:14:49

Page 1

## 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	0.9999

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9					
>	Sc	45			88.7		
[	Ni	60					
[>	Ge	74			86.4		
	As	75					
	Se	77					
	Se	82					
[	Kr	83					
[>	Lu	175			98.9		
[	Tl	205					

### 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: 246437008

Sample Date/Time: Friday, March 05, 2010 03:17:49

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 950493|2|baj

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\Dataset\100304\246437008.321

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	2.457	ug/L	1.251	889	0.001
[>	Sc	45		ug/L		1241703	1241702.686
[	Ni	60	15.915	ug/L	0.223	18927	0.015
[>	Ge	74		ug/L		346963	346963.218
	As	75	5.009	ug/L	6.814	4722	0.014
	Se	77		ug/L		3962	-0.007
	Se	82	1.443	ug/L	3.845	159	0.000
[	Kr	83		ug/L		196	0.000
[>	Lu	175		ug/L		495009	495009.385
[	Tl	205	0.257	ug/L	1.716	6269	0.009

Sample ID: 246437008

Report Date/Time: Friday, March 05, 2010 03:18:30

Page 1

## 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	0.9999

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9					
[>	Sc	45			89.1		
[	Ni	60					
[>	Ge	74			86.6		
[	As	75					
[	Se	77					
[	Se	82					
[	Kr	83					
[>	Lu	175			98.4		
[	Tl	205					

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected



## ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Friday, March 05, 2010 03:21:29

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\Dataset\100304\QC Std 8.322

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	52.976	ug/L	2.777	19053	0.015
[>	Sc	45		ug/L		1264748	1264748.132
[	Ni	60	51.720	ug/L	0.486	62398	0.049
[>	Ge	74		ug/L		362905	362905.341
[	As	75	49.511	ug/L	2.557	49907	0.138
[	Se	77		ug/L		9771	0.008
[	Se	82	50.940	ug/L	1.341	5267	0.014
[	Kr	83		ug/L		109	0.000
[>	Lu	175		ug/L		478215	478214.799
[	Tl	205	50.971	ug/L	2.535	868302	1.812

Sample ID: QC Std 8

Report Date/Time: Friday, March 05, 2010 03:22:08

Page 1

## 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	0.9999

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution %	Duplicate Rel. % Difference
[	Be	9	105.951				
[>	Sc	45		90.7			
[	Ni	60	103.441				
[>	Ge	74		90.6			
	As	75	99.023				
	Se	77					
	Se	82	101.880				
[	Kr	83					
[>	Lu	175		95.1			
[	Tl	205	101.943				

### 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 9

Sample Date/Time: Friday, March 05, 2010 03:25:08

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\Dataset\100304\QC Std 9.323

### Concentration Results

	Analyte	Mass	Conc.	Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	-0.009		ug/L	84.961	20	-0.000
[>	Sc	45			ug/L		1277555	1277554.994
[	Ni	60	0.003		ug/L	415.762	119	0.000
[>	Ge	74			ug/L		363656	363656.049
[	As	75	-0.122		ug/L	430.204	-247	-0.000
[	Se	77			ug/L		5699	-0.003
[	Se	82	0.136		ug/L	84.716	32	0.000
[	Kr	83			ug/L		87	-0.000
[>	Lu	175			ug/L		479877	479876.717
[	Ti	205	0.180		ug/L	3.436	4768	0.006

Sample ID: QC Std 9

Report Date/Time: Friday, March 05, 2010 03:25:48

Page 1

## 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	0.9999

---

Sample ID: QC Std 9

Report Date/Time: Friday, March 05, 2010 03:25:48

Page 2

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9					
[>	Sc	45			91.7		
[	Ni	60					
[>	Ge	74			90.7		
	As	75					
	Se	77					
	Se	82					
[	Kr	83					
[>	Lu	175			95.4		
[	Tl	205					

### 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: 246437009

Sample Date/Time: Friday, March 05, 2010 03:28:49

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 950493|2|ba|

Method File: c:\elandata\Method\ani soil.mth

Dataset File: c:\elandata\Dataset\100304\246437009.324

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	2.131	ug/L	4.544	764	0.001
>	Sc	45		ug/L		1225373	1225372.513
[	Ni	60	12.713	ug/L	1.474	14941	0.012
>	Ge	74		ug/L		336641	336640.677
	As	75	5.001	ug/L	7.651	4570	0.014
	Se	77		ug/L		4160	-0.006
	Se	82	0.389	ug/L	46.931	54	0.000
[	Kr	83		ug/L		161	0.000
>	Lu	175		ug/L		479867	479867.340
[	Tl	205	0.283	ug/L	3.458	6510	0.010

Sample ID: 246437009

Report Date/Time: Friday, March 05, 2010 03:29:29

Page 1

## 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	0.9999



### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9					
[>	Sc	45			87.9		
[	Ni	60					
[>	Ge	74			84.0		
	As	75					
	Se	77					
	Se	82					
[	Kr	83					
[>	Lu	175			95.4		
[	Tl	205					

### 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: 246437010

Sample Date/Time: Friday, March 05, 2010 03:32:31

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 950493|2|ba|

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\Dataset\100304\246437010.325

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	1.615	ug/L	1.884	578	0.000
>	Sc	45		ug/L		1211963	1211962.531
[	Ni	60	10.632	ug/L	3.074	12374	0.010
[>	Ge	74		ug/L		338054	338054.263
	As	75	3.473	ug/L	3.124	3153	0.010
	Se	77		ug/L		3895	-0.007
	Se	82	0.369	ug/L	53.194	52	0.000
[	Kr	83		ug/L		138	0.000
[>	Lu	175		ug/L		476062	476061.728
[	Tl	205	0.230	ug/L	9.407	5570	0.008

---

Sample ID: 246437010

Report Date/Time: Friday, March 05, 2010 03:33:12

Page 1

## 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	0.9999

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution %	Dilution %	Duplicate	Rel. % Difference
[	Be	9							
[>	Sc	45			87.0				
[	Ni	60							
[>	Ge	74			84.4				
	As	75							
	Se	77							
	Se	82							
[	Kr	83							
[>	Lu	175			94.6				
[	Tl	205							

### QC Out Of Limits

Measurement Type   Analyte   Mass   Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: 246437011

Sample Date/Time: Friday, March 05, 2010 03:36:12

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 950493|2|ba|

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\Dataset\100304\246437011.326

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	2.149	ug/L	3.098	768	0.001
>	Sc	45		ug/L		1221813	1221812.921
[	Ni	60	11.507	ug/L	1.491	13497	0.011
[>	Ge	74		ug/L		338209	338208.850
	As	75	4.217	ug/L	7.201	3853	0.012
	Se	77		ug/L		3843	-0.007
	Se	82	0.387	ug/L	78.738	53	0.000
[	Kr	83		ug/L		162	0.000
[>	Lu	175		ug/L		489573	489573.109
[	Tl	205	0.189	ug/L	0.944	5006	0.007

Sample ID: 246437011

Report Date/Time: Friday, March 05, 2010 03:36:51

Page 1

## 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	0.9999

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9					
[>	Sc	45			87.7		
[	Ni	60					
[>	Ge	74			84.4		
	As	75					
	Se	77					
	Se	82					
[	Kr	83					
[>	Lu	175			97.3		
[	Tl	205					

### 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: 246437012

Sample Date/Time: Friday, March 05, 2010 03:39:51

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 950493|2|baj

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\Dataset\100304\246437012.327

### Concentration Results

	Analyte	Mass	Conc.	Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	2.219		ug/L	4.065	779	0.001
>	Sc	45			ug/L		1201836	1201835.515
[	Ni	60	17.463		ug/L	2.537	20090	0.017
[>	Ge	74			ug/L		339364	339364.335
	As	75	7.039		ug/L	4.756	6538	0.020
	Se	77			ug/L		3704	-0.008
	Se	82	0.418		ug/L	22.168	57	0.000
[	Kr	83			ug/L		183	0.000
[>	Lu	175			ug/L		481599	481599.413
[	Tl	205	0.303		ug/L	2.119	6878	0.011

Sample ID: 246437012

Report Date/Time: Friday, March 05, 2010 03:40:31

Page 1



## 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	0.9999

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9					
>	Sc	45		86.2			
[	Ni	60					
[>	Ge	74		84.7			
	As	75					
	Se	77					
	Se	82					
[	Kr	83					
[>	Lu	175		95.7			
[	Tl	205					

### QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: 246437013

Sample Date/Time: Friday, March 05, 2010 03:43:31

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 950493|2|baj

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\Dataset\100304\246437013.328

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	1.908	ug/L	4.607	680	0.001
[>	Sc	45		ug/L		1214688	1214687.704
[	Ni	60	12.399	ug/L	1.669	14450	0.012
[>	Ge	74		ug/L		334632	334632.075
[	As	75	3.921	ug/L	1.128	3539	0.011
[	Se	77		ug/L		3677	-0.008
[	Se	82	0.387	ug/L	119.623	53	0.000
[	Kr	83		ug/L		152	0.000
[>	Lu	175		ug/L		472279	472279.096
[	Tl	205	0.243	ug/L	1.747	5741	0.009

Sample ID: 246437013

Report Date/Time: Friday, March 05, 2010 03:44:12

Page 1

## 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	0.9999

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[	Be	9						
[>	Sc	45		87.2				
[	Ni	60						
[>	Ge	74		83.5				
	As	75						
	Se	77						
	Se	82						
[	Kr	83						
[>	Lu	175		93.9				
[	Tl	205						

### 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: 246437014

Sample Date/Time: Friday, March 05, 2010 03:47:12

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 950493|2|baj

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\Dataset\100304\246437014.329

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	2.940	ug/L	3.235	1039	0.001
[>	Sc	45		ug/L		1216886	1216886.103
[	Ni	60	17.294	ug/L	3.834	20142	0.016
[>	Ge	74		ug/L		334070	334070.291
[	As	75	5.360	ug/L	5.672	4871	0.015
[	Se	77		ug/L		3573	-0.008
[	Se	82	0.533	ug/L	33.833	67	0.000
[	Kr	83		ug/L		197	0.000
[>	Lu	175		ug/L		491957	491957.407
[	Tl	205	0.274	ug/L	5.660	6520	0.010

Sample ID: 246437014

Report Date/Time: Friday, March 05, 2010 03:47:53

Page 1

## 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	0.9999

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution %	Dil	Duplicate	Rel. % Difference
[	Be	9							
[>	Sc	45			87.3				
[	Ni	60							
[>	Ge	74			83.4				
[	As	75							
[	Se	77							
[	Se	82							
[	Kr	83							
[>	Lu	175			97.8				
[	Tl	205							

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected



## ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, March 05, 2010 03:50:52

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: c:\elandata\Dataset\100304\QC Std 6.330

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	53.248	ug/L	2.236	19052	0.015
>	Sc	45		ug/L		1258330	1258329.848
[	Ni	60	51.038	ug/L	1.676	61252	0.049
[>	Ge	74		ug/L		355006	355006.111
	As	75	48.679	ug/L	1.845	47994	0.136
	Se	77		ug/L		9240	0.007
	Se	82	49.982	ug/L	0.885	5057	0.014
[	Kr	83		ug/L		109	0.000
[>	Lu	175		ug/L		471239	471238.845
[	Tl	205	52.099	ug/L	1.214	874386	1.852

Sample ID: QC Std 6

Report Date/Time: Friday, March 05, 2010 03:51:31

Page 1

## 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	0.9999

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9	106.496				
[>	Sc	45		90.3			
[	Ni	60	102.076				
[>	Ge	74		88.6			
	As	75	97.357				
	Se	77					
	Se	82	99.964				
[	Kr	83					
[>	Lu	175		93.7			
[	Tl	205	104.197				

### 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: Friday, March 05, 2010 03:54:31

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\anl soil.mth

Dataset File: c:\elandata\Dataset\100304\QC Std 7.331

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	-0.008	ug/L	94.236	20	-0.000
[>	Sc	45		ug/L		1258289	1258288.715
[	Ni	60	0.004	ug/L	226.500	118	0.000
[>	Ge	74		ug/L		367146	367145.867
	As	75	0.512	ug/L	60.595	403	0.001
	Se	77		ug/L		5325	-0.004
	Se	82	0.042	ug/L	315.249	22	0.000
[	Kr	83		ug/L		100	-0.000
[>	Lu	175		ug/L		477995	477995.213
[	Tl	205	0.213	ug/L	2.430	5304	0.008

Sample ID: QC Std 7

Report Date/Time: Friday, March 05, 2010 03:55:10

Page 1

## 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	0.9999

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9					
>	Sc	45			90.3		
[	Ni	60					
[>	Ge	74			91.6		
	As	75					
	Se	77					
	Se	82					
[	Kr	83					
[>	Lu	175			95.0		
[	Tl	205					

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: Blank

Sample Date/Time: Friday, March 05, 2010 07:07:31

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only.mth

Dataset File: c:\elandata\Dataset\100304\Blank.376

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		483993	
[ U	238		ug/L		842	

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	

### QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
[> Lu	175					
[ 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: Blank

Report Date/Time: Friday, March 05, 2010 07:07:43

Page 1

## ICPMS#5 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Friday, March 05, 2010 07:09:10

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: c:\elandata\Dataset\100304\Standard 1.377

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		476537	476536.513
[	U	238	10.000	ug/L	2.555	456946	0.957

### Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[>	Lu	175					
[	U	238					

### QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

### QC Action

QC Action Line: No QC out of limits detected



## ICPMS#5 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Friday, March 05, 2010 07:10:47

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: c:\elandata\Dataset\100304\Standard 2.378

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		467713	467713.462
[	U	238	99.803	ug/L	2.139	3733653	7.982

### Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9998

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[>	Lu	175						
[	U	238						

### QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Friday, March 05, 2010 07:12:25

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only.mth

Dataset File: c:\elandata\Dataset\100304\QC Std 1.379

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		474210	474209.627
[	U	238	54.721	ug/L	0.428	2076139	4.376

### 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			98.0		
[	U	238	109.442				

### 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 1

Report Date/Time: Friday, March 05, 2010 07:12:34

Page 1

## ICPMS#5 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Friday, March 05, 2010 07:14:04

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only.mth

Dataset File: c:\elandata\Dataset\100304\QC Std 2.380

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		478993	478993.195
[	U	238	0.010	ug/L	8.514	1235	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		99.0			
[	U	238					

### QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 2

Report Date/Time: Friday, March 05, 2010 07:14:16

Page 1

## ICPMS#5 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Friday, March 05, 2010 07:15:48

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: c:\elandata\Dataset\100304\QC Std 3.381

### Concentration Results

	Analyte	Mass	Conc.	Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175			ug/L		477035	477034.650
[	U	238	0.230		ug/L	1.869	9597	0.018

### 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		98.6			
[	U	238	114.914				

### QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Friday, March 05, 2010 07:17:30

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only.mth

Dataset File: c:\elandata\Dataset\100304\QC Std 4.382

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		424983	424983.304
[ U	238	-0.012	ug/L	3.887	318	-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		87.8			
[ 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 4

Report Date/Time: Friday, March 05, 2010 07:17:40

Page 1

## ICPMS#5 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Friday, March 05, 2010 07:19:13

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: c:\elandata\Dataset\100304\QC Std 5.383

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		477203	477202.971
[ U	238	22.926	ug/L	1.456	875794	1.834

### 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		98.6			
[ U	238	114.631				

### 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 5

Report Date/Time: Friday, March 05, 2010 07:19:27

Page 1

## ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, March 05, 2010 07:20:56

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: c:\elandata\Dataset\100304\QC Std 6.384

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		475737	475737.149
[ U	238	54.112	ug/L	1.214	2059540	4.328

### 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		98.3			
[ U	238	108.224				

### QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, March 05, 2010 07:22:37

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only.mth

Dataset File: c:\elandata\Dataset\100304\QC Std 7.385

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		483880	483880.276
[ U	238	0.010	ug/L	6.226	1217	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 % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[> Lu	175		100.0			
[ U	238					

### QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Friday, March 05, 2010 07:22:49

Page 1



## ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Friday, March 05, 2010 07:37:30

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: c:\elandata\Dataset\100304\QC Std 8.394

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		465448	465447.523
[ U	238	53.175	ug/L	0.258	1980263	4.253

### 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			96.2		
[ U	238	106.351				

### QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 8

Report Date/Time: Friday, March 05, 2010 07:37:41

Page 1

## ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Friday, March 05, 2010 07:39:11

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: c:\elandata\Dataset\100304\QC Std 9.395

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		473988	473987.853
[ U	238	0.012	ug/L	11.350	1284	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			97.9			
[ 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: Friday, March 05, 2010 07:39:23

Page 1

## ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, March 05, 2010 07:52:30

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: c:\elandata\Dataset\100304\QC Std 6.403

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		472642	472642.361
[	U	238	52.477	ug/L	2.297	1983903	4.197

### 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			97.7		
[	U	238	104.953				

### 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: Friday, March 05, 2010 07:52:41

Page 1

## ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, March 05, 2010 07:54:11

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only.mth

Dataset File: c:\elandata\Dataset\100304\QC Std 7.404

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		473446	473445.702
[ U	238	0.014	ug/L	7.640	1363	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		97.8			
[ 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: Friday, March 05, 2010 07:54:23

Page 1

## ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Friday, March 05, 2010 08:04:27

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only.mth

Dataset File: c:\elandata\Dataset\100304\QC Std 8.410

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		470173	470172.844
[ U	238	52.356	ug/L	1.460	1969342	4.187

### 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			97.1		
[ U	238	104.712				

### QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 8

Report Date/Time: Friday, March 05, 2010 08:04:38

Page 1

## ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Friday, March 05, 2010 08:06:08

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only.mth

Dataset File: c:\elandata\Dataset\100304\QC Std 9.411

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		471845	471844.813
[	U	238	0.011	ug/L	2.831	1248	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		97.5			
[	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: Friday, March 05, 2010 08:17:52

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only.mth

Dataset File: c:\elandata\Dataset\100304\QC Std 8.418

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		471964	471964.115
[	U	238	53.296	ug/L	0.229	2012599	4.262

### 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		97.5			
[	U	238	106.591				

### QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 8

Report Date/Time: Friday, March 05, 2010 08:18:03

Page 1

## ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Friday, March 05, 2010 08:19:33

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only.mth

Dataset File: c:\elandata\Dataset\100304\QC Std 9.419

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		471811	471810.735
[ U	238	0.013	ug/L	4.657	1308	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		97.5			
[ 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: Friday, March 05, 2010 08:19:45

Page 1



## ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, March 05, 2010 08:31:20

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only.mth

Dataset File: c:\elandata\Dataset\100304\QC Std 6.426

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
> Lu	175		ug/L		466731	466730.506
[ U	238	52.451	ug/L	0.872	1958755	4.195

### 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	104.901				

### 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, March 05, 2010 08:31:31

Page 1

## ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, March 05, 2010 08:33:01

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only.mth

Dataset File: c:\elandata\Dataset\100304\QC Std 7.427

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		465694	465694.028
[	U	238	0.016 ug/L	12.818	1397	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		96.2		
[	U	238				

### QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Friday, March 05, 2010 08:33:13

Page 1

## ICPMS#5 - Summary Report

Sample ID: 1202036886

Sample Date/Time: Friday, March 05, 2010 08:34:49

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 950493|2|baj

Method File: c:\elandata\Method\only.mth

Dataset File: c:\elandata\Dataset\100304\1202036886.428

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		454138	454137.542
[ U	238	-0.009	ug/L	9.249	475	-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			93.8		
[ 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: 1202036886

Report Date/Time: Friday, March 05, 2010 08:35:02

Page 1

## ICPMS#5 - Summary Report

Sample ID: 1202036891

Sample Date/Time: Friday, March 05, 2010 08:36:32

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 950493|40|baj

Method File: c:\elandata\Method\lu only.mth

Dataset File: c:\elandata\Dataset\100304\1202036891.429

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		480379	480379.220
[ U	238	0.596	ug/L	3.005	23747	0.048

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	0.9998

### QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[> Lu	175		99.3			
[ 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: 1202036891

Report Date/Time: Friday, March 05, 2010 08:36:45

Page 1

## ICPMS#5 - Summary Report

Sample ID: 246437001

Sample Date/Time: Friday, March 05, 2010 08:38:14

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 950493|2|baj

Method File: c:\elandata\Method\only.mth

Dataset File: c:\elandata\Dataset\100304\246437001.430

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		469650	469649.795
[	U	238	11.886 ug/L	1.582	447204	0.951

### 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		97.0		
[	U	238				

### QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: 246437001

Report Date/Time: Friday, March 05, 2010 08:38:25

Page 1

## ICPMS#5 - Summary Report

Sample ID: 1202036887

Sample Date/Time: Friday, March 05, 2010 08:39:55

Sample Type:

Sample Description: LANL 6020 DUP

Number of Replicates: 3

Batch ID: 950493|2|baj

Method File: c:\elandata\Method\only.mth

Dataset File: c:\elandata\Dataset\100304\1202036887.431

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		466788	466788.026
[	U	238	11.371	ug/L	1.681	425344	0.909

### 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			96.4		
[	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: 1202036889

Sample Date/Time: Friday, March 05, 2010 08:41:36

Sample Type:

Sample Description: LANL 6020 MS

Number of Replicates: 3

Batch ID: 950493|2|baj

Method File: c:\elandata\Method\only.mth

Dataset File: c:\elandata\Dataset\100304\1202036889.432

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		471586	471586.117
[	U	238	41.511	ug/L	0.466	1566396	3.320

### 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			97.4		
[	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: 1202036889

Report Date/Time: Friday, March 05, 2010 08:41:48

Page 1

## ICPMS#5 - Summary Report

Sample ID: 1202036890

Sample Date/Time: Friday, March 05, 2010 08:43:18

Sample Type:

Sample Description: LANL 6020 MSD

Number of Replicates: 3

Batch ID: 950493|2|baj

Method File: c:\elandata\Method\only.mth

Dataset File: c:\elandata\Dataset\100304\1202036890.433

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		467172	467172.306
[	U	238	47.953	ug/L	1.533	1792383	3.835

### 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			96.5		
[	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: 1202036890

Report Date/Time: Friday, March 05, 2010 08:43:30

Page 1



## ICPMS#5 - Summary Report

Sample ID: 1202036888

Sample Date/Time: Friday, March 05, 2010 08:45:00

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 950493|10|baj

Method File: c:\elandata\Method\lu only.mth

Dataset File: c:\elandata\Dataset\100304\1202036888.434

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		469601	469600.525
[ U	238	2.332	ug/L	0.310	88388	0.186

### 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		97.0			
[ U	238					

### QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202036888

Report Date/Time: Friday, March 05, 2010 08:45:12

Page 1

## ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Friday, March 05, 2010 08:46:41

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: c:\elandata\Dataset\100304\QC Std 8.435

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		464870	464869.922
[	U	238	52.910	ug/L	1.990	1967727	4.232

### 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 % Dilution	Duplicate Rel. % Difference
[>	Lu	175			96.0		
[	U	238	105.820				

### QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
------------------	---------	------	-----------------------

### QC Action

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Friday, March 05, 2010 08:48:22

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: c:\elandata\Dataset\100304\QC Std 9.436

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		468022	468022.121
[	U	238	0.015	ug/L	5.887	1365	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		96.7			
[	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: Friday, March 05, 2010 08:48:34

Page 1

## ICPMS#5 - Summary Report

Sample ID: 246437002

Sample Date/Time: Friday, March 05, 2010 08:50:05

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 950493|2|baj

Method File: c:\elandata\Method\lu only.mth

Dataset File: c:\elandata\Dataset\100304\246437002.437

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		475246	475245.610
[	U	238	17.207 ug/L	0.751	654867	1.376

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	0.9998

### QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175		98.2		
[	U	238				

### QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: 246437002

Report Date/Time: Friday, March 05, 2010 08:50:18

Page 1

## ICPMS#5 - Summary Report

Sample ID: 246437003

Sample Date/Time: Friday, March 05, 2010 08:51:49

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 950493|2|ba|

Method File: c:\elandata\Method\only.mth.

Dataset File: c:\elandata\Dataset\100304\246437003.438

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		481567	481567.278
[ U	238	15.990	ug/L	2.068	616621	1.279

### 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		99.5			
[ 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: 246437003

Report Date/Time: Friday, March 05, 2010 08:52:01

Page 1

## ICPMS#5 - Summary Report

Sample ID: 246437004

Sample Date/Time: Friday, March 05, 2010 08:53:31

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 950493|2|ba|

Method File: c:\elandata\Method\lu only.mth

Dataset File: c:\elandata\Dataset\100304\246437004.439

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		469184	469184.126
[	U	238	5.413	ug/L	0.976	203930	0.433

### 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			96.9		
[	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: 246437004

Report Date/Time: Friday, March 05, 2010 08:53:42

Page 1

## ICPMS#5 - Summary Report

Sample ID: 246437005

Sample Date/Time: Friday, March 05, 2010 08:55:12

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 950493|2|baj

Method File: c:\elandata\Method\only.mth

Dataset File: c:\elandata\Dataset\100304\246437005.440

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		478185	478184.866
[	U	238	8.094 ug/L	0.112	310397	0.647

### 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		98.8		
[	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: 246437005

Report Date/Time: Friday, March 05, 2010 08:55:24

Page 1

## ICPMS#5 - Summary Report

Sample ID: 246437006

Sample Date/Time: Friday, March 05, 2010 08:56:54

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 950493|2|baj

Method File: c:\elandata\Method\lu only.mth

Dataset File: c:\elandata\Dataset\100304\246437006.441

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		489456	489455.973
[ U	238	14.648	ug/L	0.378	574255	1.171

### 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		101.1			
[ 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: 246437006

Report Date/Time: Friday, March 05, 2010 08:57:06

Page 1



## ICPMS#5 - Summary Report

Sample ID: 246437007

Sample Date/Time: Friday, March 05, 2010 08:58:36

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 950493|2|baj

Method File: c:\elandata\Method\lu only.mth

Dataset File: c:\elandata\Dataset\100304\246437007.442

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		499580	499579.893
[ U	238	5.296	ug/L	2.178	212478	0.424

### 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		103.2			
[ U	238					

### QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: 246437007

Report Date/Time: Friday, March 05, 2010 08:58:49

Page 1

## ICPMS#5 - Summary Report

Sample ID: 246437008

Sample Date/Time: Friday, March 05, 2010 09:00:19

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 950493|2|baj

Method File: c:\elandata\Method\lu only.mth

Dataset File: c:\elandata\Dataset\100304\246437008.443

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		494646	494646.097
[	U	238	9.866	ug/L	1.185	391146	0.789

### 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 % Dif	Duplicate Rel. % Difference
[>	Lu	175		102.2			
[	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: 246437008

Report Date/Time: Friday, March 05, 2010 09:00:32

Page 1

## ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Friday, March 05, 2010 09:02:01

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: c:\elandata\Dataset\100304\QC Std 8.444

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		464883	464882.564
[	U	238	53.078 ug/L	3.112	1973680	4.245

### 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		96.1			
[	U	238	106.157				

### QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
------------------	---------	---------------------------

### QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 8

Report Date/Time: Friday, March 05, 2010 09:02:12

Page 1

## ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Friday, March 05, 2010 09:03:42

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: c:\elandata\Dataset\100304\QC Std 9.445

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		469943	469943.416
[ U	238	0.016	ug/L	15.306	1419	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			97.1			
[ 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: Friday, March 05, 2010 09:03:54

Page 1

## ICPMS#5 - Summary Report

Sample ID: 246437009

Sample Date/Time: Friday, March 05, 2010 09:05:25

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 950493|2|ba|

Method File: c:\elandata\Method\lu only.mth

Dataset File: c:\elandata\Dataset\100304\246437009.446

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		476444	476444.076
[ U	238	16.395	ug/L	0.928	625576	1.311

### 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		98.4			
[ 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: 246437009

Report Date/Time: Friday, March 05, 2010 09:05:38

Page 1

## ICPMS#5 - Summary Report

Sample ID: 246437010

Sample Date/Time: Friday, March 05, 2010 09:07:09

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 950493|2|baj

Method File: c:\elandata\Method\only.mth

Dataset File: c:\elandata\Dataset\100304\246437010.447

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		467532	467532.133
[	U	238	6.688	ug/L	1.302	250921	0.535

### 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			96.6		
[	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: 246437011

Sample Date/Time: Friday, March 05, 2010 09:08:52

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 950493|2|baj

Method File: c:\elandata\Method\lu only.mth

Dataset File: c:\elandata\Dataset\100304\246437011.448

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		474316	474316.456
[ U	238	10.481	ug/L	0.658	398419	0.838

### 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			98.0		
[ 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: 246437011

Report Date/Time: Friday, March 05, 2010 09:09:04

Page 1

## ICPMS#5 - Summary Report

Sample ID: 246437012

Sample Date/Time: Friday, March 05, 2010 09:10:34

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 950493|2|ba|

Method File: c:\elandata\Method\lu only.mth

Dataset File: c:\elandata\Dataset\100304\246437012.449

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		476249	476248.577
[ U	238	16.055	ug/L	1.624	612224	1.284

### 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		98.4			
[ 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: 246437012

Report Date/Time: Friday, March 05, 2010 09:10:46

Page 1



## ICPMS#5 - Summary Report

Sample ID: 246437013

Sample Date/Time: Friday, March 05, 2010 09:12:16

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 950493|2|baj

Method File: c:\elandata\Method\only.mth

Dataset File: c:\elandata\Dataset\100304\246437013.450

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		469089	469088.541
[ U	238	14.345	ug/L	1.628	538854	1.147

### 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		96.9			
[ 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: 246437013

Report Date/Time: Friday, March 05, 2010 09:12:28

Page 1

## ICPMS#5 - Summary Report

Sample ID: 246437014

Sample Date/Time: Friday, March 05, 2010 09:13:59

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 950493|2|ba|

Method File: c:\elandata\Method\lu only.mth

Dataset File: c:\elandata\Dataset\100304\246437014.451

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		488625	488624.775
[	U	238	9.085	ug/L	1.323	355853	0.727

### 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			101.0		
[	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: 246437014

Report Date/Time: Friday, March 05, 2010 09:14:11

Page 1

## ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, March 05, 2010 09:15:40

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: c:\elandata\Dataset\100304\QC Std 6.452

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		460988	460987.633
[ U	238	53.234	ug/L	1.812	1963131	4.258

### 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		95.2			
[ U	238	106.468				

### 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: Friday, March 05, 2010 09:15:51

Page 1

## ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, March 05, 2010 09:17:21

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only.mth

Dataset File: c:\elandata\Dataset\100304\QC Std 7.453

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		466997	466997.084
[ U	238	0.014	ug/L	6.987	1321	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		96.5			
[ 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: Friday, March 05, 2010 09:17:33

Page 1

## ICPMS#5 - Summary Report

Sample ID: Blank

Sample Date/Time: Friday, March 05, 2010 09:22:30

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\anl 0304.mth

Dataset File: c:\elandata\Dataset\100304\Blank.455

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9		ug/L		19	
> Sc	45		ug/L		1181753	
Cr	52		ug/L		-515	
Cr	53		ug/L		70252	
Mn	55		ug/L		1238	
> Ge	74		ug/L		337591	
Se	77		ug/L		5117	
Se	82		ug/L		36	
Kr	83		ug/L		94	
> Lu	175		ug/L		462962	
Tl	205		ug/L		5282	

### Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	
Sc	45Linear Thru Zero	
Cr	52Linear Thru Zero	
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	
Ge	74Linear Thru Zero	
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	

### 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						
> Ge	74						
Se	77						
Se	82						
Kr	83						
> Lu	175						
Tl	205						

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

Sample ID: Blank

Report Date/Time: Friday, March 05, 2010 09:23:10

Page 1

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Friday, March 05, 2010 09:24:38

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl 0304.mth

Dataset File: c:\elandata\Dataset\100304\Standard 1.456

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	10.000	ug/L	1.915	3713	0.003
[>	Sc	45		ug/L		1164465	1164464.660
	Cr	52	10.000	ug/L	3.321	38867	0.034
	Cr	53		ug/L		77916	0.007
[	Mn	55	10.000	ug/L	0.931	74183	0.063
[>	Ge	74		ug/L		335617	335617.499
	Se	77		ug/L		6134	0.003
	Se	82	10.000	ug/L	1.348	984	0.003
[	Kr	83		ug/L		92	-0.000
[>	Lu	175		ug/L		458932	458931.993
[	Tl	205	10.000	ug/L	0.970	191196	0.405

### 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
Ge	74	Linear Thru Zero	
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

### QC Calculated Values

	Analyte	Mass	QC Std	% Recovery	Int Std	% Recovery	Spike %	Recovery	Dilution %	Dil	Duplicate	Rel. % Difference
[	Be	9										
[>	Sc	45										
	Cr	52										
	Cr	53										
[	Mn	55										
[>	Ge	74										
	Se	77										
	Se	82										
[	Kr	83										
[>	Lu	175										
[	Tl	205										

### QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

### QC Action

Sample ID: Standard 1

Report Date/Time: Friday, March 05, 2010 09:25:15

Page 1

QC Action Line: No QC out of limits detected



## ICPMS#5 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Friday, March 05, 2010 09:26:42

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl 0304.mth

Dataset File: c:\elandata\Dataset\100304\Standard 2.457

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	99.932	ug/L	1.615	36578	0.030
[>	Sc	45		ug/L		1231770	1231769.586
	Cr	52	99.962	ug/L	2.083	400331	0.326
	Cr	53		ug/L		129023	0.045
[	Mn	55	99.910	ug/L	2.235	708554	0.574
[>	Ge	74		ug/L		347213	347213.282
	Se	77		ug/L		13702	0.024
	Se	82	100.020	ug/L	2.847	10053	0.029
[	Kr	83		ug/L		117	0.000
[>	Lu	175		ug/L		447734	447734.455
[	Tl	205	99.870	ug/L	3.501	1608228	3.582

### 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
Ge	74	Linear Thru Zero	
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	0.9999

### 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					
[>	Ge	74					
	Se	77					
	Se	82					
[	Kr	83					
[>	Lu	175					
[	Tl	205					

### QC Out Of Limits

Measurement Type    Analyte    Mass    Out of Limits Message

### QC Action

Sample ID: Standard 2

Report Date/Time: Friday, March 05, 2010 09:27:20

Page 1

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Friday, March 05, 2010 09:28:48

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl 0304.mth

Dataset File: c:\elandata\Dataset\100304\QC Std 1.458

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[ Be	9	53.677	ug/L	1.537	20244	0.016
> Sc	45		ug/L		1268308	1268307.527
Cr	52	54.260	ug/L	2.235	223555	0.177
Cr	53		ug/L		111729	0.029
[ Mn	55	55.238	ug/L	3.251	404053	0.318
> Ge	74		ug/L		359129	359128.998
Se	77		ug/L		10688	0.015
Se	82	51.064	ug/L	1.668	5328	0.015
[ Kr	83		ug/L		96	-0.000
> Lu	175		ug/L		452094	452094.207
[ Tl	205	55.088	ug/L	0.510	898446	1.976

### 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
Ge	74	Linear Thru Zero	
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	0.9999

### QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel.	% Difference
[ Be	9	107.355					
> Sc	45		107.3				
Cr	52	108.520					
Cr	53						
[ Mn	55	110.477					
> Ge	74		106.4				
Se	77						
Se	82	102.129					
[ Kr	83						
> Lu	175		97.7				
[ Tl	205	110.176					

### QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 1	Mn	55	ICV is out of limits (+/- 10%)
QC Std 1	Tl	205	ICV is out of limits (+/- 10%)

Sample ID: QC Std 1

Report Date/Time: Friday, March 05, 2010 09:29:25

Page 1

## QC Action

QC Action Line: Continue

## ICPMS#5 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Friday, March 05, 2010 09:30:55

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\ani 0304.mth

Dataset File: c:\elandata\Dataset\100304\QC Std 2.459

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	-0.003	ug/L	458.218	19	-0.000
> Sc	45		ug/L		1261992	1261992.002
Cr	52	0.189	ug/L	24.158	227	0.001
Cr	53		ug/L		79194	0.003
Mn	55	-0.005	ug/L	95.760	1283	-0.000
> Ge	74		ug/L		359108	359107.937
Se	77		ug/L		6146	0.002
Se	82	0.055	ug/L	132.228	43	0.000
Kr	83		ug/L		98	-0.000
> Lu	175		ug/L		456472	456471.576
Tl	205	0.397	ug/L	18.037	11686	0.014

### 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
Ge	74Linear Thru Zero	
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear 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		106.8				
Cr	52						
Cr	53						
Mn	55						
> Ge	74		106.4				
Se	77						
Se	82						
Kr	83						
> Lu	175		98.6				
Tl	205						

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

Sample ID: QC Std 2

Report Date/Time: Friday, March 05, 2010 09:31:35

Page 1

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Friday, March 05, 2010 09:33:03

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\VanI 0304.mth

Dataset File: c:\elandata\Dataset\100304\QC Std 3.460

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.582	ug/L	8.788	234	0.000
> Sc	45		ug/L		1237001	1237001.127
Cr	52	11.906	ug/L	1.150	47425	0.039
Cr	53		ug/L		85645	0.010
Mn	55	6.308	ug/L	3.044	46153	0.036
> Ge	74		ug/L		352371	352371.467
Se	77		ug/L		6746	0.004
Se	82	5.966	ug/L	8.686	643	0.002
Kr	83		ug/L		91	-0.000
> Lu	175		ug/L		456638	456637.851
Tl	205	1.250	ug/L	2.564	25679	0.045

### 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
Ge	74Linear Thru Zero	
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999

### QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
Be	9	116.336					
> Sc	45		104.7				
Cr	52	119.063					
Cr	53						
Mn	55	126.156					
> Ge	74		104.4				
Se	77						
Se	82	119.328					
Kr	83						
> Lu	175		98.6				
Tl	205	124.999					

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

Sample ID: QC Std 3

Report Date/Time: Friday, March 05, 2010 09:33:41

Page 1

QC Action Line: No QC out of limits detected



## ICPMS#5 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Friday, March 05, 2010 09:35:10

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl 0304.mth

Dataset File: c:\elandata\Dataset\100304\QC Std 4.461

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.084	ug/L	26.230	52	0.000
Sc	45		ug/L		1277416	1277416.042
Cr	52	2.673	ug/L	3.266	10564	0.009
Cr	53		ug/L		68843	-0.006
Mn	55	5.875	ug/L	1.384	44481	0.034
Ge	74		ug/L		348235	348234.685
Se	77		ug/L		6983	0.005
Se	82	0.259	ug/L	24.074	63	0.000
Kr	83		ug/L		261	0.000
Lu	175		ug/L		406506	406506.178
Tl	205	-0.080	ug/L	9.527	3476	-0.003

### 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
Ge	74Linear Thru Zero	
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear 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		108.1				
Cr	52	81.005					
Cr	53						
Mn	55	101.291					
Ge	74		103.2				
Se	77						
Se	82						
Kr	83						
Lu	175		87.8				
Tl	205						

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

Sample ID: QC Std 4

Report Date/Time: Friday, March 05, 2010 09:35:48

Page 1

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Friday, March 05, 2010 09:37:17

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl 0304.mth

Dataset File: c:\elandata\Dataset\100304\QC Std 5.462

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[ Be	9	18.491	ug/L	2.499	6955	0.005
[> Sc	45		ug/L		1262388	1262388.351
Cr	52	23.716	ug/L	2.898	96935	0.077
Cr	53		ug/L		81897	0.005
[ Mn	55	27.228	ug/L	1.291	198924	0.157
[> Ge	74		ug/L		341684	341683.773
Se	77		ug/L		8616	0.010
Se	82	19.699	ug/L	3.441	1976	0.006
[ Kr	83		ug/L		260	0.000
[> Lu	175		ug/L		401390	401389.941
[ Tl	205	21.557	ug/L	1.073	314929	0.773

### 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
Ge	74Linear Thru Zero	
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999

### QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[ Be	9	92.455				
[> Sc	45		106.8			
Cr	52	101.788				
Cr	53					
[ Mn	55	105.535				
[> Ge	74		101.2			
Se	77					
Se	82	98.493				
[ Kr	83					
[> Lu	175		86.7			
[ Tl	205	107.787				

### QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

### QC Action

Sample ID: QC Std 5

Report Date/Time: Friday, March 05, 2010 09:37:55

Page 1

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, March 05, 2010 09:39:24

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl 0304.mth

Dataset File: c:\elandata\Dataset\100304\QC Std 6.463

### Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	47.714 ug/L	2.462	19249	0.014
>	Sc	45	ug/L		1356667	1356667.155
	Cr	52	51.102 ug/L	4.097	225104	0.166
	Cr	53	ug/L		111087	0.022
[	Mn	55	51.219 ug/L	2.733	400803	0.294
>	Ge	74	ug/L		372185	372185.378
	Se	77	ug/L		10534	0.013
	Se	82	48.974 ug/L	2.050	5296	0.014
[	Kr	83	ug/L		112	0.000
>	Lu	175	ug/L		448732	448731.692
[	Tl	205	50.782 ug/L	1.150	822401	1.821

### 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
Ge	74Linear Thru Zero	
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999

### QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[	Be	9	95.428				
>	Sc	45		114.8			
	Cr	52	102.205				
	Cr	53					
[	Mn	55	102.438				
>	Ge	74		110.2			
	Se	77					
	Se	82	97.947				
[	Kr	83					
>	Lu	175		96.9			
[	Tl	205	101.564				

### QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

### QC Action

Sample ID: QC Std 6

Report Date/Time: Friday, March 05, 2010 09:40:03

Page 1

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, March 05, 2010 09:41:33

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl 0304.mth

Dataset File: c:\elandata\Dataset\100304\QC Std 7.464

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.005	ug/L	278.128	24	0.000
>	Sc	45		ug/L		1363781	1363780.772
	Cr	52	0.055	ug/L	175.656	-346	0.000
	Cr	53		ug/L		85670	0.003
L	Mn	55	-0.029	ug/L	19.470	1201	-0.000
>	Ge	74		ug/L		379890	379890.007
	Se	77		ug/L		6597	0.002
	Se	82	-0.138	ug/L	54.092	25	-0.000
L	Kr	83		ug/L		96	-0.000
>	Lu	175		ug/L		454659	454658.884
L	Tl	205	0.736	ug/L	9.966	17203	0.026

### 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
Ge	74	Linear Thru Zero	
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	0.9999

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel.	% Difference
[	Be	9						
>	Sc	45		115.4				
	Cr	52						
	Cr	53						
L	Mn	55						
>	Ge	74		112.5				
	Se	77						
	Se	82						
L	Kr	83						
>	Lu	175		98.2				
L	Tl	205						

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

Sample ID: QC Std 7

Report Date/Time: Friday, March 05, 2010 09:42:13

Page 1

QC Action Line: No QC out of limits detected



## ICPMS#5 - Summary Report

Sample ID: QC Std 10

Sample Date/Time: Friday, March 05, 2010 09:43:41

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl 0304.mth

Dataset File: c:\elandata\Dataset\100304\QC Std 10.465

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	927.679	ug/L	1.946	349357	0.276
>	Sc	45		ug/L		1267762	1267761.558
	Cr	52	833.518	ug/L	0.558	3440675	2.714
	Cr	53		ug/L		567436	0.388
[	Mn	55	861.233	ug/L	3.812	6276059	4.951
>	Ge	74		ug/L		350583	350583.070
	Se	77		ug/L		41223	0.102
	Se	82	468.181	ug/L	2.323	47367	0.135
[	Kr	83		ug/L		147	0.000
>	Lu	175		ug/L		420590	420590.158
[	Tl	205	443.789	ug/L	1.179	6699611	15.918

### 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
Ge	74	Linear Thru Zero	
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	0.9999

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[	Be	9	92.768					
>	Sc	45		107.3				
	Cr	52	83.352					
	Cr	53						
[	Mn	55	86.123					
>	Ge	74		103.8				
	Se	77						
	Se	82	93.636					
[	Kr	83						
>	Lu	175		90.8				
[	Tl	205	88.758					

### QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 10	Cr	52	LRS is out of limits (+/- 10%)
QC Std 10	Mn	55	LRS is out of limits (+/- 10%)
QC Std 10	Tl	205	LRS is out of limits (+/- 10%)

Sample ID: QC Std 10

Report Date/Time: Friday, March 05, 2010 09:44:18

Page 1

## QC Action

QC Action Line: Continue

## ICPMS#5 - Summary Report

Sample ID: QC Std 11

Sample Date/Time: Friday, March 05, 2010 09:45:46

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl 0304.mth

Dataset File: c:\elandata\Dataset\100304\QC Std 11.466

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	51.275	ug/L	1.399	20413	0.015
> Sc	45		ug/L		1338706	1338706.004
Cr	52	54.880	ug/L	1.711	238688	0.179
Cr	53		ug/L		114892	0.026
Mn	55	55.751	ug/L	3.157	430437	0.321
> Ge	74		ug/L		372659	372659.252
Se	77		ug/L		10257	0.012
Se	82	51.463	ug/L	1.349	5571	0.015
Kr	83		ug/L		112	0.000
> Lu	175		ug/L		450584	450583.781
Ti	205	55.565	ug/L	3.280	902844	1.993

### 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
Ge	74Linear Thru Zero	
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Ti	205Linear Thru Zero	0.9999

### QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Be	9	102.550				
> Sc	45		113.3			
Cr	52	109.760				
Cr	53					
Mn	55	111.503				
> Ge	74		110.4			
Se	77					
Se	82	102.926				
Kr	83					
> Lu	175		97.3			
Ti	205	111.130				

### QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 11	Mn	55CCV is out of limits (+/- 10%)
QC Std 11	Ti	205CCV is out of limits (+/- 10%)

Sample ID: QC Std 11

Report Date/Time: Friday, March 05, 2010 09:46:24

Page 1

## QC Action

QC Action Line: Continue

## ICPMS#5 - Summary Report

Sample ID: QC Std 12

Sample Date/Time: Friday, March 05, 2010 09:47:54

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\anl 0304.mth

Dataset File: c:\elandata\Dataset\100304\QC Std 12.467

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[ Be	9	0.011	ug/L	128.941	26	0.000
[> Sc	45		ug/L		1369349	1369348.741
[ Cr	52	0.104	ug/L	74.294	-135	0.000
[ Cr	53		ug/L		84335	0.002
[ Mn	55	0.008	ug/L	82.337	1497	0.000
[> Ge	74		ug/L		377168	377167.555
[ Se	77		ug/L		6070	0.001
[ Se	82	-0.152	ug/L	40.010	23	-0.000
[ Kr	83		ug/L		105	-0.000
[> Lu	175		ug/L		457751	457751.401
[ Tl	205	0.758	ug/L	2.295	17675	0.027

### 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
Ge	74Linear Thru Zero	
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999

### QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dif	Duplicate Rel. % Difference
[ Be	9					
[> Sc	45		115.9			
[ Cr	52					
[ Cr	53					
[ Mn	55					
[> Ge	74		111.7			
[ Se	77					
[ Se	82					
[ Kr	83					
[> Lu	175		98.9			
[ Tl	205					

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

Sample ID: QC Std 12

Report Date/Time: Friday, March 05, 2010 09:48:34

Page 1

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: 1202036886

Sample Date/Time: Friday, March 05, 2010 09:52:56

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 950493|2|baj

Method File: c:\elandata\Method\Nani 0304.mth

Dataset File: c:\elandata\Dataset\100304\1202036886.469

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.048	ug/L	16.770	41	0.000
> Sc	45		ug/L		1335770	1335769.683
Cr	52	0.870	ug/L	6.194	3201	0.003
Cr	53		ug/L		89091	0.007
Mn	55	0.825	ug/L	0.880	7733	0.005
> Ge	74		ug/L		361590	361590.026
Se	77		ug/L		6210	0.002
Se	82	0.187	ug/L	97.580	58	0.000
Kr	83		ug/L		94	-0.000
> Lu	175		ug/L		450329	450329.020
Tl	205	0.189	ug/L	3.391	8191	0.007

### 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
Ge	74Linear Thru Zero	
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear 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		113.0			
Cr	52					
Cr	53					
Mn	55					
> Ge	74		107.1			
Se	77					
Se	82					
Kr	83					
> Lu	175		97.3			
Tl	205					

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

Sample ID: 1202036886

Report Date/Time: Friday, March 05, 2010 09:53:36

Page 1

QC Action Line: No QC out of limits detected



## ICPMS#5 - Summary Report

Sample ID: 1202036891

Sample Date/Time: Friday, March 05, 2010 09:55:07

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 950493|40|baj

Method File: c:\elandata\Method\lanl 0304.mth

Dataset File: c:\elandata\Dataset\100304\1202036891.470

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[ Be	9	20.736	ug/L	2.153	8506	0.006
> Sc	45		ug/L		1377330	1377329.864
Cr	52	66.644	ug/L	1.136	298336	0.217
Cr	53		ug/L		125106	0.031
[ Mn	55	146.019	ug/L	1.462	1157654	0.839
> Ge	74		ug/L		378296	378295.911
Se	77		ug/L		13079	0.019
Se	82	77.541	ug/L	3.742	8497	0.022
[ Kr	83		ug/L		115	0.000
> Lu	175		ug/L		460317	460316.732
[ Tl	205	34.476	ug/L	1.399	574497	1.237

### 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
Ge	74	Linear Thru Zero	
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	0.9999

### QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[ Be	9					
> Sc	45		116.5			
Cr	52					
Cr	53					
[ Mn	55					
> Ge	74		112.1			
Se	77					
Se	82					
[ Kr	83					
> Lu	175		99.4			
[ Tl	205					

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

Sample ID: 1202036891

Report Date/Time: Friday, March 05, 2010 09:55:47

Page 1

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: 246437001

Sample Date/Time: Friday, March 05, 2010 09:57:16

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 950493|2|ba|

Method File: c:\elandata\Method\lanl 0304.mth

Dataset File: c:\elandata\Dataset\100304\246437001.471

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[ Be	9	1.981	ug/L	4.863	782	0.001
> Sc	45		ug/L		1293656	1293656.279
Cr	52	9.653	ug/L	2.431	40096	0.031
Cr	53		ug/L		73376	-0.003
[ Mn	55	746.810	ug/L	3.248	5553695	4.293
> Ge	74		ug/L		346966	346966.374
Se	77		ug/L		4849	-0.001
Se	82	0.356	ug/L	37.942	72	0.000
[ Kr	83		ug/L		151	0.000
> Lu	175		ug/L		468604	468604.065
[ Tl	205	1.064	ug/L	11.726	23221	0.038

### 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
Ge	74	Linear Thru Zero	
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	0.9999

### QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[ Be	9					
> Sc	45		109.5			
Cr	52					
Cr	53					
[ Mn	55					
> Ge	74		102.8			
Se	77					
Se	82					
[ Kr	83					
> Lu	175		101.2			
[ Tl	205					

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

Sample ID: 246437001

Report Date/Time: Friday, March 05, 2010 09:57:55

Page 1

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: 1202036887

Sample Date/Time: Friday, March 05, 2010 09:59:25

Sample Type:

Sample Description: LANL 6020 DUP

Number of Replicates: 3

Batch ID: 950493|2|baj

Method File: c:\elandata\Method\lanl 0304.mth

Dataset File: c:\elandata\Dataset\100304\1202036887.472

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	1.731	ug/L	6.854	669	0.001
[>	Sc	45		ug/L		1261774	1261773.829
	Cr	52	8.793	ug/L	1.655	35575	0.029
	Cr	53		ug/L		65198	-0.008
[	Mn	55	627.650	ug/L	4.281	4553262	3.608
[>	Ge	74		ug/L		340467	340466.778
	Se	77		ug/L		4189	-0.003
	Se	82	0.110	ug/L	347.773	46	0.000
[	Kr	83		ug/L		146	0.000
[>	Lu	175		ug/L		464265	464264.985
[	Tl	205	0.358	ug/L	2.115	11248	0.013

### 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
Ge	74	Linear Thru Zero	
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	0.9999

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[	Be	9						
[>	Sc	45		106.8				
	Cr	52						
	Cr	53						
[	Mn	55						
[>	Ge	74		100.9				
	Se	77						
	Se	82						
[	Kr	83						
[>	Lu	175		100.3				
[	Tl	205						

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

Sample ID: 1202036887

Report Date/Time: Friday, March 05, 2010 10:00:04

Page 1

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: 1202036889

Sample Date/Time: Friday, March 05, 2010 10:01:34

Sample Type:

Sample Description: LANL 6020 MS

Number of Replicates: 3

Batch ID: 950493|2|baj

Method File: c:\elandata\Method\lanl 0304.mth

Dataset File: c:\elandata\Dataset\100304\1202036889.473

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	27.562	ug/L	3.469	10118	0.008
>	Sc	45		ug/L		1233600	1233600.233
	Cr	52	38.238	ug/L	1.595	153089	0.125
	Cr	53		ug/L		73470	0.000
[	Mn	55	585.745	ug/L	2.139	4154735	3.367
>	Ge	74		ug/L		334739	334739.492
	Se	77		ug/L		4560	-0.002
	Se	82	10.239	ug/L	1.381	1024	0.003
[	Kr	83		ug/L		157	0.000
>	Lu	175		ug/L		468839	468838.877
[	Tl	205	53.113	ug/L	1.145	898318	1.905

### 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
Ge	74	Linear Thru Zero	
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	0.9999

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9					
>	Sc	45		104.4			
	Cr	52					
	Cr	53					
[	Mn	55					
>	Ge	74		99.2			
	Se	77					
	Se	82					
[	Kr	83					
>	Lu	175		101.3			
[	Tl	205					

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

Sample ID: 1202036889

Report Date/Time: Friday, March 05, 2010 10:02:13

Page 1

QC Action Line: No QC out of limits detected



## ICPMS#5 - Summary Report

Sample ID: 1202036890

Sample Date/Time: Friday, March 05, 2010 10:03:44

Sample Type:

Sample Description: LANL 6020 MSD

Number of Replicates: 3

Batch ID: 950493|2|baj

Method File: c:\elandata\Method\Nanl 0304.mth

Dataset File: c:\elandata\Dataset\100304\1202036890.474

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	27.189	ug/L	1.481	9667	0.008
Sc	45		ug/L		1194402	1194402.295
Cr	52	38.618	ug/L	2.118	149688	0.126
Cr	53		ug/L		72925	0.002
Mn	55	601.339	ug/L	1.259	4130213	3.457
Ge	74		ug/L		326159	326159.201
Se	77		ug/L		4399	-0.002
Se	82	8.712	ug/L	7.615	853	0.003
Kr	83		ug/L		166	0.000
Lu	175		ug/L		460816	460816.372
Tl	205	51.015	ug/L	1.961	848392	1.830

### 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
Ge	74Linear Thru Zero	
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999

### QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Be	9					
Sc	45		101.1			
Cr	52					
Cr	53					
Mn	55					
Ge	74		96.6			
Se	77					
Se	82					
Kr	83					
Lu	175		99.5			
Tl	205					

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

Sample ID: 1202036890

Report Date/Time: Friday, March 05, 2010 10:04:23

Page 1

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: 1202036888

Sample Date/Time: Friday, March 05, 2010 10:05:54

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 950493|10|baj

Method File: c:\elandata\Method\lanl 0304.mth

Dataset File: c:\elandata\Dataset\100304\1202036888.475

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.398	ug/L	10.711	160	0.000
> Sc	45		ug/L		1192857	1192857.018
Cr	52	2.071	ug/L	3.044	7525	0.007
Cr	53		ug/L		66265	-0.004
Mn	55	156.505	ug/L	1.630	1074325	0.900
> Ge	74		ug/L		334584	334584.172
Se	77		ug/L		4831	-0.001
Se	82	-0.182	ug/L	59.266	18	-0.000
Kr	83		ug/L		110	0.000
> Lu	175		ug/L		462214	462213.648
Tl	205	0.779	ug/L	10.873	18187	0.028

### 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
Ge	74	Linear Thru Zero	
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	0.9999

### QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
Be	9						
> Sc	45		100.9				
Cr	52						
Cr	53						
Mn	55						
> Ge	74		99.1				
Se	77						
Se	82						
Kr	83						
> Lu	175		99.8				
Tl	205						

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

Sample ID: 1202036888

Report Date/Time: Friday, March 05, 2010 10:06:34

Page 1

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: 246437002

Sample Date/Time: Friday, March 05, 2010 10:08:05

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 950493|2|baj

Method File: c:\elandata\Method\lanl 0304.mth

Dataset File: c:\elandata\Dataset\100304\246437002.476

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	2.187	ug/L	4.491	783	0.001
>	Sc	45		ug/L		1176512	1176512.062
	Cr	52	14.586	ug/L	1.891	55360	0.048
	Cr	53		ug/L		62404	-0.006
[	Mn	55	759.266	ug/L	2.193	5135160	4.365
>	Ge	74		ug/L		324775	324775.491
	Se	77		ug/L		3917	-0.003
	Se	82	0.975	ug/L	14.738	126	0.000
[	Kr	83		ug/L		156	0.000
>	Lu	175		ug/L		464714	464714.336
[	Tl	205	0.486	ug/L	3.998	13406	0.017

### 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
Ge	74	Linear Thru Zero	
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	0.9999

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9					
>	Sc	45		99.6			
	Cr	52					
	Cr	53					
[	Mn	55					
>	Ge	74		96.2			
	Se	77					
	Se	82					
[	Kr	83					
>	Lu	175		100.4			
[	Tl	205					

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

Sample ID: 246437002

Report Date/Time: Friday, March 05, 2010 10:08:45

Page 1

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, March 05, 2010 10:10:14

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl 0304.mth

Dataset File: c:\elandata\Dataset\100304\QC Std 6.477

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	49.612	ug/L	1.622	17883	0.015
> Sc	45		ug/L		1211985	1211984.646
Cr	52	50.658	ug/L	1.960	199422	0.165
Cr	53		ug/L		94861	0.019
Mn	55	52.951	ug/L	1.093	370220	0.304
> Ge	74		ug/L		345043	345043.367
Se	77		ug/L		9016	0.011
Se	82	49.224	ug/L	6.145	4930	0.014
Kr	83		ug/L		97	0.000
> Lu	175		ug/L		453350	453350.277
Tl	205	50.230	ug/L	1.762	821974	1.802

### 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
Ge	74Linear Thru Zero	
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999

### QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Be	9	99.224				
> Sc	45		102.6			
Cr	52	101.317				
Cr	53					
Mn	55	105.902				
> Ge	74		102.2			
Se	77					
Se	82	98.448				
Kr	83					
> Lu	175		97.9			
Tl	205	100.459				

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

Sample ID: QC Std 6

Report Date/Time: Friday, March 05, 2010 10:10:53

Page 1

QC Action Line: No QC out of limits detected



## ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, March 05, 2010 10:12:23

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl 0304.mth

Dataset File: c:\elandata\Dataset\100304\QC Std 7.478

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.015	ug/L	54.150	25	0.000
[>	Sc	45		ug/L		1224363	1224363.142
	Cr	52	0.234	ug/L	10.450	401	0.001
	Cr	53		ug/L		72088	-0.001
[	Mn	55	0.035	ug/L	31.632	1529	0.000
[>	Ge	74		ug/L		348483	348483.392
	Se	77		ug/L		5440	0.000
	Se	82	0.183	ug/L	63.327	55	0.000
[	Kr	83		ug/L		89	-0.000
[>	Lu	175		ug/L		457088	457087.769
[	Tl	205	0.744	ug/L	10.338	17411	0.027

### 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
Ge	74	Linear Thru Zero	
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	0.9999

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel.	% Difference
[	Be	9						
[>	Sc	45		103.6				
	Cr	52						
	Cr	53						
[	Mn	55						
[>	Ge	74		103.2				
	Se	77						
	Se	82						
[	Kr	83						
[>	Lu	175		98.7				
[	Tl	205						

### QC Out Of Limits

Measurement Type Analyte

Mass Out of Limits Message

### QC Action

Sample ID: QC Std 7

Report Date/Time: Friday, March 05, 2010 10:13:03

Page 1

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: 246437003

Sample Date/Time: Friday, March 05, 2010 10:14:33

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 950493|2|baj

Method File: c:\elandata\Method\lanl 0304.mth

Dataset File: c:\elandata\Dataset\100304\246437003.479

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	2.651	ug/L	2.673	954	0.001
>	Sc	45		ug/L		1187742	1187741.858
	Cr	52	17.203	ug/L	0.481	66027	0.056
	Cr	53		ug/L		66359	-0.004
[	Mn	55	857.786	ug/L	2.230	5858980	4.931
>	Ge	74		ug/L		325787	325786.752
	Se	77		ug/L		4199	-0.002
	Se	82	0.733	ug/L	24.602	103	0.000
[	Kr	83		ug/L		183	0.000
>	Lu	175		ug/L		463308	463307.623
[	Tl	205	0.640	ug/L	9.095	15922	0.023

### 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
Ge	74	Linear Thru Zero	
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	0.9999

### QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9				
>	Sc	45	100.5			
	Cr	52				
	Cr	53				
[	Mn	55				
>	Ge	74	96.5			
	Se	77				
	Se	82				
[	Kr	83				
>	Lu	175	100.1			
[	Tl	205				

### QC Out Of Limits

Measurement Type Analyte

Mass Out of Limits Message

### QC Action

Sample ID: 246437003

Report Date/Time: Friday, March 05, 2010 10:15:14

Page 1

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: 246437004

Sample Date/Time: Friday, March 05, 2010 10:16:44

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 950493|2|baj

Method File: c:\elandata\Method\lanl 0304.mth

Dataset File: c:\elandata\Dataset\100304\246437004.480

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	1.254	ug/L	7.473	449	0.000
>	Sc	45		ug/L		1154325	1154324.627
	Cr	52	8.300	ug/L	1.521	30699	0.027
	Cr	53		ug/L		59076	-0.008
[	Mn	55	482.549	ug/L	2.442	3203355	2.774
>	Ge	74		ug/L		319817	319817.383
	Se	77		ug/L		3747	-0.003
	Se	82	0.195	ug/L	69.455	52	0.000
[	Kr	83		ug/L		133	0.000
>	Lu	175		ug/L		468816	468816.479
[	Tl	205	0.121	ug/L	21.443	7377	0.004

### 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
Ge	74	Linear Thru Zero	
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	0.9999

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9					
>	Sc	45		97.7			
	Cr	52					
	Cr	53					
[	Mn	55					
>	Ge	74		94.7			
	Se	77					
	Se	82					
[	Kr	83					
>	Lu	175		101.3			
[	Tl	205					

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

Sample ID: 246437004

Report Date/Time: Friday, March 05, 2010 10:17:23

Page 1

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: 246437005

Sample Date/Time: Friday, March 05, 2010 10:18:53

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 950493|2|ba|

Method File: c:\elandata\Method\lanl 0304.mth

Dataset File: c:\elandata\Dataset\100304\246437005.481

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	2.309	ug/L	3.295	807	0.001
>	Sc	45		ug/L		1149492	1149491.706
	Cr	52	11.987	ug/L	1.628	44364	0.039
	Cr	53		ug/L		57943	-0.009
[	Mn	55	736.146	ug/L	3.965	4863890	4.232
>	Ge	74		ug/L		319587	319586.978
	Se	77		ug/L		3638	-0.004
	Se	82	0.323	ug/L	29.404	63	0.000
[	Kr	83		ug/L		144	0.000
>	Lu	175		ug/L		464886	464886.042
[	Tl	205	0.150	ug/L	3.739	7805	0.005

### 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
Ge	74	Linear Thru Zero	
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	0.9999

### QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[	Be	9					
>	Sc	45		97.3			
	Cr	52					
	Cr	53					
[	Mn	55					
>	Ge	74		94.7			
	Se	77					
	Se	82					
[	Kr	83					
>	Lu	175		100.4			
[	Tl	205					

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

Sample ID: 246437005

Report Date/Time: Friday, March 05, 2010 10:19:32

Page 1

QC Action Line: No QC out of limits detected



## ICPMS#5 - Summary Report

Sample ID: 246437006

Sample Date/Time: Friday, March 05, 2010 10:21:02

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 950493|2|ba|

Method File: c:\elandata\Method\lanl 0304.mth

Dataset File: c:\elandata\Dataset\100304\246437006.482

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	3.258	ug/L	3.230	1169	0.001
>	Sc	45		ug/L		1188301	1188300.666
	Cr	52	23.383	ug/L	1.064	89967	0.076
	Cr	53		ug/L		60866	-0.008
	Mn	55	1196.549	ug/L	1.774	8175172	6.879
[>	Ge	74		ug/L		319098	319098.042
	Se	77		ug/L		3602	-0.004
	Se	82	0.885	ug/L	45.166	115	0.000
	Kr	83		ug/L		204	0.000
[>	Lu	175		ug/L		471514	471514.132
	Tl	205	0.439	ug/L	3.584	12795	0.016

### 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
Ge	74	Linear Thru Zero	
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	0.9999

### QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[	Be	9					
>	Sc	45	100.6				
	Cr	52					
	Cr	53					
	Mn	55					
[>	Ge	74	94.5				
	Se	77					
	Se	82					
	Kr	83					
[>	Lu	175	101.8				
	Tl	205					

### QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EE	Mn	55	Sample is out of limits (over linear range)

Sample ID: 246437006

Report Date/Time: Friday, March 05, 2010 10:21:42

Page 1

## QC Action

QC Action Line: Continue

## ICPMS#5 - Summary Report

Sample ID: 246437007

Sample Date/Time: Friday, March 05, 2010 10:23:13

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 950493|2|ba|

Method File: c:\elandata\Method\lanl 0304.mth

Dataset File: c:\elandata\Dataset\100304\246437007.483

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	2.791	ug/L	3.580	984	0.001
>	Sc	45		ug/L		1164687	1164686.625
	Cr	52	8.960	ug/L	1.852	33474	0.029
	Cr	53		ug/L		54517	-0.013
[	Mn	55	808.213	ug/L	2.708	5411957	4.646
>	Ge	74		ug/L		320278	320277.693
	Se	77		ug/L		3526	-0.004
	Se	82	0.029	ug/L	1148.535	36	0.000
[	Kr	83		ug/L		173	0.000
>	Lu	175		ug/L		478737	478736.783
[	Tl	205	0.016	ug/L	25.669	5731	0.001

### 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
Ge	74	Linear Thru Zero	
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	0.9999

### QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[	Be	9				
>	Sc	45		98.6		
	Cr	52				
	Cr	53				
[	Mn	55				
>	Ge	74		94.9		
	Se	77				
	Se	82				
[	Kr	83				
>	Lu	175		103.4		
[	Tl	205				

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

Sample ID: 246437007

Report Date/Time: Friday, March 05, 2010 10:23:53

Page 1

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: 246437008

Sample Date/Time: Friday, March 05, 2010 10:25:23

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 950493|2|ba|

Method File: c:\elandata\Method\lanl 0304.mth

Dataset File: c:\elandata\Dataset\100304\246437008.484

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	2.388	ug/L	1.588	846	0.001
> Sc	45		ug/L		1165477	1165476.625
Cr	52	15.695	ug/L	3.273	59052	0.051
Cr	53		ug/L		56233	-0.011
Mn	55	1140.214	ug/L	1.487	7640687	6.555
> Ge	74		ug/L		321436	321435.531
Se	77		ug/L		3474	-0.004
Se	82	1.176	ug/L	6.511	143	0.000
Kr	83		ug/L		166	0.000
> Lu	175		ug/L		481716	481716.390
Tl	205	0.112	ug/L	2.874	7431	0.004

### 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
Ge	74	Linear Thru Zero	
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	0.9999

### QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
Be	9						
> Sc	45		98.6				
Cr	52						
Cr	53						
Mn	55						
> Ge	74		95.2				
Se	77						
Se	82						
Kr	83						
> Lu	175		104.1				
Tl	205						

### QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EE	Mn	55	Sample is out of limits (over linear range)

Sample ID: 246437008

Report Date/Time: Friday, March 05, 2010 10:26:04

Page 1

## QC Action

QC Action Line: Continue

## ICPMS#5 - Summary Report

Sample ID: 246437009

Sample Date/Time: Friday, March 05, 2010 10:27:35

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 950493|2|baj

Method File: c:\elandata\Method\lanl 0304.mth

Dataset File: c:\elandata\Dataset\100304\246437009.485

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	2.077	ug/L	2.071	721	0.001
>	Sc	45		ug/L		1139499	1139499.438
	Cr	52	13.024	ug/L	3.117	47820	0.042
	Cr	53		ug/L		54024	-0.012
L	Mn	55	730.571	ug/L	2.133	4786281	4.200
>	Ge	74		ug/L		315825	315824.638
	Se	77		ug/L		3239	-0.005
	Se	82	0.141	ug/L	164.245	46	0.000
L	Kr	83		ug/L		149	0.000
>	Lu	175		ug/L		473571	473571.379
L	Tl	205	0.076	ug/L	16.408	6695	0.003

### 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
Ge	74	Linear Thru Zero	
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	0.9999

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[	Be	9					
>	Sc	45		96.4			
	Cr	52					
	Cr	53					
L	Mn	55					
>	Ge	74		93.6			
	Se	77					
	Se	82					
L	Kr	83					
>	Lu	175		102.3			
L	Tl	205					

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

Sample ID: 246437009

Report Date/Time: Friday, March 05, 2010 10:28:16

Page 1

QC Action Line: No QC out of limits detected



## ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, March 05, 2010 10:29:45

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl 0304.mth

Dataset File: c:\elandata\Dataset\100304\QC Std 6.486

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	51.032	ug/L	2.046	17575	0.015
> Sc	45		ug/L		1158319	1158318.812
Cr	52	51.505	ug/L	1.235	193754	0.168
Cr	53		ug/L		88756	0.017
Mn	55	53.378	ug/L	3.819	356592	0.307
> Ge	74		ug/L		332849	332849.330
Se	77		ug/L		8306	0.010
Se	82	49.488	ug/L	1.589	4786	0.014
Kr	83		ug/L		90	-0.000
> Lu	175		ug/L		458905	458905.236
Tl	205	49.825	ug/L	1.445	825367	1.787

### 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
Ge	74Linear Thru Zero	
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9999

### QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
Be	9	102.063					
> Sc	45		98.0				
Cr	52	103.009					
Cr	53						
Mn	55	106.756					
> Ge	74		98.6				
Se	77						
Se	82	98.976					
Kr	83						
> Lu	175		99.1				
Tl	205	99.650					

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

Sample ID: QC Std 6

Report Date/Time: Friday, March 05, 2010 10:30:24

Page 1

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, March 05, 2010 10:31:54

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl 0304.mth

Dataset File: c:\elandata\Dataset\100304\QC Std 7.487

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.013	ug/L	32.086	24	0.000
>	Sc	45		ug/L		1183379	1183379.030
	Cr	52	0.097	ug/L	86.685	-141	0.000
	Cr	53		ug/L		67179	-0.003
	Mn	55	0.049	ug/L	18.318	1576	0.000
>	Ge	74		ug/L		339150	339149.544
	Se	77		ug/L		4975	-0.000
	Se	82	-0.045	ug/L	333.913	31	-0.000
	Kr	83		ug/L		96	0.000
>	Lu	175		ug/L		460390	460389.739
	Tl	205	0.607	ug/L	13.905	15264	0.022

### 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
Ge	74Linear Thru Zero	
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear 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	100.1				
	Cr	52					
	Cr	53					
	Mn	55					
>	Ge	74	100.5				
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175	99.4				
	Tl	205					

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

Sample ID: QC Std 7

Report Date/Time: Friday, March 05, 2010 10:32:33

Page 1

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: 246437010

Sample Date/Time: Friday, March 05, 2010 10:34:04

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 950493[2]baj

Method File: c:\elandata\Method\lanl 0304.mth

Dataset File: c:\elandata\Dataset\100304\246437010.488

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[ Be	9	1.464	ug/L	2.123	519	0.000
> Sc	45		ug/L		1151957	1151956.821
Cr	52	10.711	ug/L	1.498	39683	0.035
Cr	53		ug/L		59334	-0.008
[ Mn	55	488.660	ug/L	2.525	3237186	2.809
> Ge	74		ug/L		313791	313791.118
Se	77		ug/L		3856	-0.003
Se	82	-0.035	ug/L	419.120	30	-0.000
[ Kr	83		ug/L		142	0.000
> Lu	175		ug/L		464563	464562.913
[ Tl	205	0.327	ug/L	5.561	10740	0.012

### 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
Ge	74Linear Thru Zero	
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear 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		97.5			
Cr	52					
Cr	53					
[ Mn	55					
> Ge	74		93.0			
Se	77					
Se	82					
[ Kr	83					
> Lu	175		100.3			
[ Tl	205					

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

Sample ID: 246437010

Report Date/Time: Friday, March 05, 2010 10:34:45

Page 1

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: 246437011

Sample Date/Time: Friday, March 05, 2010 10:36:15

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 950493|2|ba|

Method File: c:\elandata\Method\lanl 0304.mth

Dataset File: c:\elandata\Dataset\100304\246437011.489

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	2.158	ug/L	2.031	750	0.001
> Sc	45		ug/L		1141058	1141057.889
Cr	52	13.196	ug/L	0.490	48539	0.043
Cr	53		ug/L		58666	-0.008
Mn	55	580.569	ug/L	1.042	3809611	3.338
> Ge	74		ug/L		317803	317803.437
Se	77		ug/L		3606	-0.004
Se	82	0.209	ug/L	51.328	52	0.000
Kr	83		ug/L		147	0.000
> Lu	175		ug/L		474018	474017.694
Tl	205	0.148	ug/L	8.489	7922	0.005

### 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
Ge	74Linear Thru Zero	
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear 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		96.6			
Cr	52					
Cr	53					
Mn	55					
> Ge	74		94.1			
Se	77					
Se	82					
Kr	83					
> Lu	175		102.4			
Tl	205					

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

Sample ID: 246437011

Report Date/Time: Friday, March 05, 2010 10:36:55

Page 1

QC Action Line: No QC out of limits detected



## ICPMS#5 - Summary Report

Sample ID: 246437012

Sample Date/Time: Friday, March 05, 2010 10:38:25

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 950493|2|baj

Method File: c:\elandata\Method\lanl 0304.mth

Dataset File: c:\elandata\Dataset\100304\246437012.490

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[ Be	9	2.186	ug/L	4.302	766	0.001
[> Sc	45		ug/L		1150960	1150960.203
Cr	52	18.894	ug/L	4.133	70307	0.062
Cr	53		ug/L		58875	-0.008
[ Mn	55	650.248	ug/L	1.743	4304118	3.738
[> Ge	74		ug/L		316825	316825.155
Se	77		ug/L		3442	-0.004
Se	82	0.297	ug/L	71.744	61	0.000
[ Kr	83		ug/L		159	0.000
[> Lu	175		ug/L		461890	461889.941
[ Tl	205	0.203	ug/L	7.382	8634	0.007

### 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
Ge	74Linear Thru Zero	
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear 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		97.4			
Cr	52					
Cr	53					
[ Mn	55					
[> Ge	74		93.8			
Se	77					
Se	82					
[ Kr	83					
[> Lu	175		99.8			
[ Tl	205					

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

Sample ID: 246437012

Report Date/Time: Friday, March 05, 2010 10:39:05

Page 1

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: 246437013

Sample Date/Time: Friday, March 05, 2010 10:40:35

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 950493|2|ba|

Method File: c:\elandata\Method\lanl 0304.mth

Dataset File: c:\elandata\Dataset\100304\246437013.491

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	1.836	ug/L	5.204	639	0.001
>	Sc	45		ug/L		1138213	1138212.953
	Cr	52	12.920	ug/L	4.158	47373	0.042
	Cr	53		ug/L		54742	-0.011
L	Mn	55	611.160	ug/L	2.958	3998158	3.514
[>	Ge	74		ug/L		317320	317319.997
	Se	77		ug/L		3374	-0.005
	Se	82	0.362	ug/L	20.585	66	0.000
L	Kr	83		ug/L		137	0.000
[>	Lu	175		ug/L		458509	458509.225
L	Tl	205	0.116	ug/L	8.128	7131	0.004

### 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
Ge	74Linear Thru Zero	
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear 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	96.3			
	Cr	52				
	Cr	53				
L	Mn	55				
[>	Ge	74	94.0			
	Se	77				
	Se	82				
L	Kr	83				
[>	Lu	175	99.0			
L	Tl	205				

### QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

### QC Action

Sample ID: 246437013

Report Date/Time: Friday, March 05, 2010 10:41:15

Page 1

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: 246437014

Sample Date/Time: Friday, March 05, 2010 10:42:46

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 950493[2]baj

Method File: c:\elandata\Method\lanl 0304.mth

Dataset File: c:\elandata\Dataset\100304\246437014.492

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	2.718	ug/L	7.369	940	0.001
[>	Sc	45		ug/L		1141327	1141326.950
	Cr	52	16.795	ug/L	2.206	61900	0.055
	Cr	53		ug/L		54660	-0.011
[	Mn	55	961.280	ug/L	4.366	6302548	5.526
[>	Ge	74		ug/L		310072	310071.847
	Se	77		ug/L		3244	-0.005
	Se	82	0.601	ug/L	25.224	87	0.000
[	Kr	83		ug/L		163	0.000
[>	Lu	175		ug/L		473878	473878.405
[	Tl	205	0.128	ug/L	4.036	7586	0.005

### 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
Ge	74	Linear Thru Zero	
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	0.9999

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9					
[>	Sc	45		96.6			
	Cr	52					
	Cr	53					
[	Mn	55					
[>	Ge	74		91.8			
	Se	77					
	Se	82					
[	Kr	83					
[>	Lu	175		102.4			
[	Tl	205					

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

Sample ID: 246437014

Report Date/Time: Friday, March 05, 2010 10:43:26

Page 1

QC Action Line: No QC out of limits detected

## ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, March 05, 2010 10:44:55

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl 0304.mth

Dataset File: c:\elandata\Dataset\100304\QC Std 6.493

### Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	50.278	ug/L	1.466	17341	0.015
>	Sc	45		ug/L		1159735	1159734.558
	Cr	52	51.877	ug/L	0.559	195424	0.169
	Cr	53		ug/L		88781	0.017
[	Mn	55	52.934	ug/L	3.403	354113	0.304
>	Ge	74		ug/L		332267	332267.019
	Se	77		ug/L		8241	0.010
	Se	82	49.096	ug/L	2.089	4740	0.014
[	Kr	83		ug/L		105	0.000
>	Lu	175		ug/L		448232	448231.877
[	Tl	205	49.935	ug/L	2.224	807672	1.791

### 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
Ge	74	Linear Thru Zero	
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	0.9999

### QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[	Be	9	100.557					
>	Sc	45		98.1				
	Cr	52	103.753					
	Cr	53						
[	Mn	55	105.868					
>	Ge	74		98.4				
	Se	77						
	Se	82	98.192					
[	Kr	83						
>	Lu	175		96.8				
[	Tl	205	99.870					

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

Sample ID: QC Std 6

Report Date/Time: Friday, March 05, 2010 10:45:34

Page 1

QC Action Line: No QC out of limits detected



## ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, March 05, 2010 10:47:04

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl 0304.mth

Dataset File: c:\elandata\Dataset\100304\QC Std 7.494

### Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[ Be	9	0.008	ug/L	155.234	22	0.000
> Sc	45		ug/L		1192174	1192173.742
Cr	52	0.150	ug/L	29.402	63	0.000
Cr	53		ug/L		66235	-0.004
[ Mn	55	0.043	ug/L	20.412	1547	0.000
> Ge	74		ug/L		339327	339326.534
Se	77		ug/L		4873	-0.001
Se	82	0.028	ug/L	996.204	38	0.000
[ Kr	83		ug/L		97	0.000
> Lu	175		ug/L		459038	459038.003
[ Tl	205	0.574	ug/L	14.123	14691	0.021

### 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
Ge	74	Linear Thru Zero	
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	0.9999

### QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[ Be	9					
> Sc	45		100.9			
Cr	52					
Cr	53					
[ Mn	55					
> Ge	74		100.5			
Se	77					
Se	82					
[ Kr	83					
> Lu	175		99.2			
[ Tl	205					

### QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

### QC Action

Sample ID: QC Std 7

Report Date/Time: Friday, March 05, 2010 10:47:44

Page 1

QC Action Line: No QC out of limits detected

Method Name: SOIL  
 Method Description: 7471A, ILM04 ANALYST JXL1  
 Element: Hg

Date: 02/22/2010  
 Technique: FI-MHS  
 Calibration Type:  
 Hg, Calc. Intercept : Linear  
 Wavelength: 253.7 nm  
 Sample Info Name: 022210S1.SIF

Results Data Set Name: 022210S1

Element: Hg Seq. No.: 1 AS Loc.: 1 Date: 02/22/2010  
 Sample ID: Calib Blank

Repl #	SampleConc µg/L	StndConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1			0.0042	0.0042	09:53:13	No
2			0.0041	0.0041	09:53:49	No
Mean:			0.0042			
SD :			0.0001			
%RSD:			1.8219			

Auto-zero performed.

Element: Hg Seq. No.: 2 AS Loc.: 2 Date: 02/22/2010  
 Sample ID: S0.2

Repl #	SampleConc µg/L	StndConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1			0.0021	0.0063	09:55:11	No
2			0.0021	0.0063	09:55:46	No
Mean:			0.0021			
SD :			0.0000			
%RSD:			0.4391			

[Hg] Standard number 1 applied. [0.200]  
 Correlation Coefficient: 1.00000 Slope: 0.01061  
 Intercept : 0.00000

Element: Hg Seq. No.: 3 AS Loc.: 3 Date: 02/22/2010  
 Sample ID: S0.5

Repl #	SampleConc µg/L	StndConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1			0.0047	0.0089	09:57:09	No
2			0.0047	0.0089	09:57:44	No
Mean:			0.0047			
SD :			0.0000			
%RSD:			0.7879			

[Hg] Standard number 2 applied. [0.500]  
 Correlation Coefficient: 0.99831 Slope: 0.00935  
 Intercept : 0.00009

Element: Hg Seq. No.: 4 AS Loc.: 4 Date: 02/22/2010  
 Sample ID: S2.0

Repl #	SampleConc µg/L	StndConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1			0.0185	0.0227	09:59:09	No
2			0.0184	0.0226	09:59:44	No
Mean:			0.0185			
SD :			0.0000			
%RSD:			0.2349			

[Hg] Standard number 3 applied. [2.000]

Correlation Coefficient: 0.99990  
Intercept : 0.00013

Slope: 0.00918

=====

Element: Hg Seq. No.: 5 AS Loc.: 5 Date: 02/22/2010  
Sample ID: S5.0

-----

Repl #	SampleConc µg/L	StndConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1			0.0463	0.0505	10:01:09	No
2			0.0451	0.0492	10:01:44	No
Mean:			0.0457			
SD :			0.0009			
%RSD:			1.8939			

[Hg] Standard number 4 applied. [5.000]  
Correlation Coefficient: 0.99998  
Intercept : 0.00017

Slope: 0.00911

=====

Element: Hg Seq. No.: 6 AS Loc.: 6 Date: 02/22/2010  
Sample ID: S10

-----

Repl #	SampleConc µg/L	StndConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1			0.0879	0.0921	10:03:10	No
2			0.0870	0.0912	10:03:45	No
Mean:			0.0874			
SD :			0.0006			
%RSD:			0.7154			

[Hg] Standard number 5 applied. [10.00]  
Correlation Coefficient: 0.99977  
Intercept : 0.00056

Slope: 0.00876

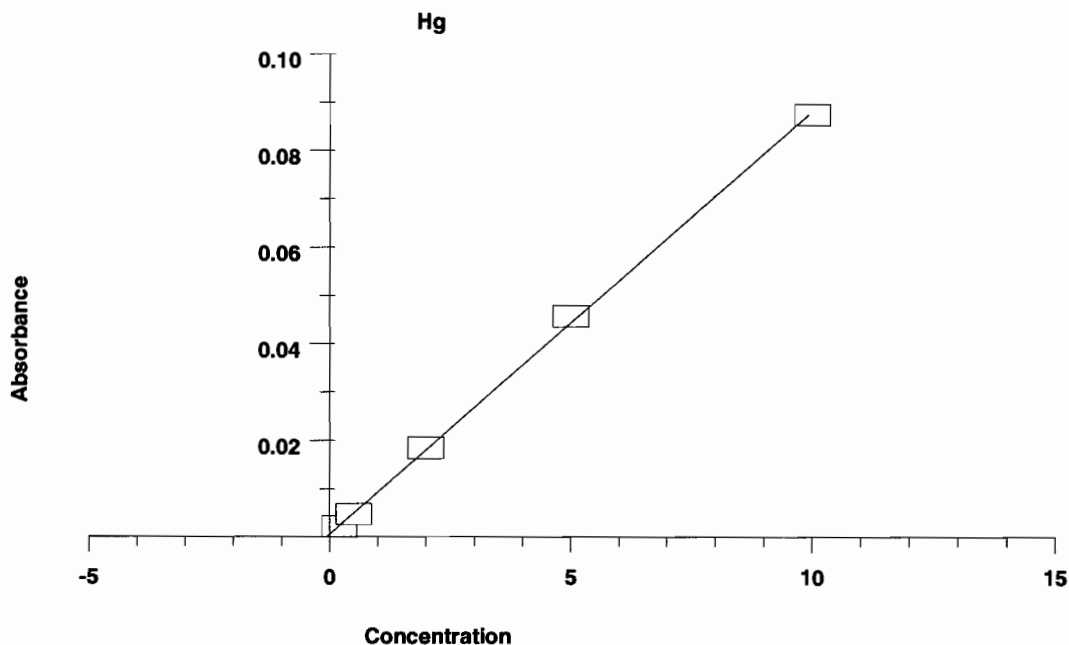
-----

#### Calibration data for Hg

Standard ID	Mean Signal (Pk Height)	Entered Concentration (µg/L)	Calculated Concentration (µg/L)	Standard Deviation	%RSD
Calib Blank	0.0042	---	----	----	----
S0.2	0.0021	0.200	0.178	0.0000	0.4
S0.5	0.0047	0.500	0.473	0.0000	0.8
S2.0	0.0185	2.000	2.045	0.0000	0.2
S5.0	0.0457	5.000	5.149	0.0009	1.9
S10	0.0874	10.000	9.918	0.0006	0.7
Calib Blank	0.0042	---	----	----	----

Correlation Coefficient: 0.99977 Slope: 0.00876 Intercept: 0.0006

-----



=====  
 Element: Hg Seq. No.: 7 AS Loc.: 9 Date: 02/22/2010  
 Sample ID: ICV

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	5.210	5.210	0.0462	0.0504	10:05:13	No
2	5.225	5.225	0.0463	0.0505	10:05:48	No
Mean:	5.217	5.217	0.0463			
SD :	0.0103	0.0103	0.0001			
%RSD:	0.2	0.2	0.1948			

QC value within specified limits.

=====  
 Element: Hg Seq. No.: 8 AS Loc.: 10 Date: 02/22/2010  
 Sample ID: ICB

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	-0.014	-0.014	0.0004	0.0046	10:07:11	No
2	-0.019	-0.019	0.0004	0.0046	10:07:46	No
Mean:	-0.017	-0.017	0.0004			
SD :	0.0036	0.0036	0.0000			
%RSD:	21.9	21.9	7.6552			

QC value within specified limits.

=====  
 Element: Hg Seq. No.: 9 AS Loc.: 11 Date: 02/22/2010  
 Sample ID: CRDL

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	0.263	0.263	0.0029	0.0071	10:09:09	No
2	0.245	0.245	0.0027	0.0069	10:09:44	No
Mean:	0.254	0.254	0.0028			
SD :	0.0128	0.0128	0.0001			
%RSD:	5.0	5.0	4.0289			

QC value within specified limits.

=====

Element: Hg Seq. No.: 10 AS Loc.: 7 Date: 02/22/2010

Sample ID: CCV

-----

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	5.088	5.088	0.0451	0.0493	10:11:09	No
2	4.998	4.998	0.0443	0.0485	10:11:43	No
Mean:	5.043	5.043	0.0447			
SD :	0.0639	0.0639	0.0006			
%RSD:	1.3	1.3	1.2504			

QC value within specified limits.

=====

Element: Hg Seq. No.: 11 AS Loc.: 8 Date: 02/22/2010

Sample ID: CCB

-----

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	0.021	0.021	0.0007	0.0049	10:13:11	No
2	0.016	0.016	0.0007	0.0049	10:13:46	No
Mean:	0.019	0.019	0.0007			
SD :	0.0032	0.0032	0.0000			
%RSD:	17.0	17.0	3.8413			

QC value within specified limits.

=====

Element: Hg Seq. No.: 12 AS Loc.: 12 Date: 02/22/2010

Sample ID: 1202039421|i||951617|MB

-----

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	-0.058	-0.058	0.0001	0.0042	10:15:12	No
2	-0.069	-0.069	0.0000	0.0041	10:15:47	No
Mean:	-0.063	-0.063	0.0000			
SD :	0.0079	0.0079	0.0001			
%RSD:	12.5	12.5	1951.9436			

=====

Element: Hg Seq. No.: 13 AS Loc.: 13 Date: 02/22/2010

Sample ID: 1202039422|i|10||LCS

-----

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	4.031	4.031	0.0359	0.0401	10:17:11	No
2	3.979	3.979	0.0354	0.0396	10:17:47	No
Mean:	4.005	4.005	0.0356			
SD :	0.0363	0.0363	0.0003			
%RSD:	0.9	0.9	0.8915			

=====

Element: Hg Seq. No.: 14 AS Loc.: 14 Date: 02/22/2010

Sample ID: 246437001|i|||

-----

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	0.006	0.006	0.0006	0.0048	10:19:12	No
2	0.006	0.006	0.0006	0.0048	10:19:48	No
Mean:	0.006	0.006	0.0006			
SD :	0.0003	0.0003	0.0000			
%RSD:	4.7	4.7	0.3954			

=====

Element: Hg Seq. No.: 15 AS Loc.: 15 Date: 02/22/2010

Sample ID: 246437002|i|||

Repl #	SampleConc µg/L	StdConc µg/L	BlncCorr Signal	Peak Height	Time	Peak Stored
1	0.005	0.005	0.0006	0.0048	10:21:14	No
2	0.002	0.002	0.0006	0.0048	10:21:49	No
Mean:	0.003	0.003	0.0006			
SD :	0.0025	0.0025	0.0000			
%RSD:	71.1	71.1	3.6741			

=====  
 Element: Hg Seq. No.: 16 AS Loc.: 16 Date: 02/22/2010  
 Sample ID: 246437003|i|||

Repl #	SampleConc µg/L	StdConc µg/L	BlncCorr Signal	Peak Height	Time	Peak Stored
1	0.119	0.119	0.0016	0.0058	10:23:16	No
2	0.112	0.112	0.0015	0.0057	10:23:51	No
Mean:	0.115	0.115	0.0016			
SD :	0.0047	0.0047	0.0000			
%RSD:	4.1	4.1	2.6224			

=====  
 Element: Hg Seq. No.: 17 AS Loc.: 17 Date: 02/22/2010  
 Sample ID: 246437004|i|||

Repl #	SampleConc µg/L	StdConc µg/L	BlncCorr Signal	Peak Height	Time	Peak Stored
1	0.002	0.002	0.0006	0.0048	10:25:15	No
2	-0.005	-0.005	0.0005	0.0047	10:25:50	No
Mean:	-0.002	-0.002	0.0005			
SD :	0.0050	0.0050	0.0000			
%RSD:	328.9	328.9	7.9979			

=====  
 Element: Hg Seq. No.: 18 AS Loc.: 18 Date: 02/22/2010  
 Sample ID: 246437005|i|||

Repl #	SampleConc µg/L	StdConc µg/L	BlncCorr Signal	Peak Height	Time	Peak Stored
1	0.085	0.085	0.0013	0.0055	10:27:10	No
2	0.073	0.073	0.0012	0.0054	10:27:45	No
Mean:	0.079	0.079	0.0013			
SD :	0.0083	0.0083	0.0001			
%RSD:	10.6	10.6	5.8376			

=====  
 Element: Hg Seq. No.: 19 AS Loc.: 19 Date: 02/22/2010  
 Sample ID: 246437006|i|||

Repl #	SampleConc µg/L	StdConc µg/L	BlncCorr Signal	Peak Height	Time	Peak Stored
1	0.099	0.099	0.0014	0.0056	10:29:07	No
2	0.072	0.072	0.0012	0.0054	10:29:43	No
Mean:	0.086	0.086	0.0013			
SD :	0.0190	0.0190	0.0002			
%RSD:	22.2	22.2	12.6902			

=====  
 Element: Hg Seq. No.: 20 AS Loc.: 20 Date: 02/22/2010  
 Sample ID: 246437007|i|||

Repl #	SampleConc µg/L	StdConc µg/L	BlncCorr Signal	Peak Height	Time	Peak Stored
1	0.102	0.102	0.0015	0.0056	10:31:04	No
2	0.095	0.095	0.0014	0.0056	10:31:39	No
Mean:	0.098	0.098	0.0014			
SD :	0.0049	0.0049	0.0000			

%RSD: 5.0 5.0 3.0182

=====

Element: Hg Seq. No.: 21 AS Loc.: 21 Date: 02/22/2010  
 Sample ID: 246437008|i|||

-----

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	0.078	0.078	0.0012	0.0054	10:33:01	No
2	0.047	0.047	0.0010	0.0052	10:33:36	No
Mean:	0.062	0.062	0.0011			
SD :	0.0224	0.0224	0.0002			
%RSD:	35.9	35.9	17.7130			

=====

Element: Hg Seq. No.: 22 AS Loc.: 7 Date: 02/22/2010  
 Sample ID: CCV

-----

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	5.083	5.083	0.0451	0.0493	10:35:01	No
2	5.012	5.012	0.0445	0.0486	10:35:36	No
Mean:	5.048	5.048	0.0448			
SD :	0.0506	0.0506	0.0004			
%RSD:	1.0	1.0	0.9905			

QC value within specified limits.

=====

Element: Hg Seq. No.: 23 AS Loc.: 8 Date: 02/22/2010  
 Sample ID: CCB

-----

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	-0.014	-0.014	0.0004	0.0046	10:37:04	No
2	-0.023	-0.023	0.0004	0.0045	10:37:39	No
Mean:	-0.018	-0.018	0.0004			
SD :	0.0063	0.0063	0.0001			
%RSD:	34.9	34.9	13.7523			

QC value within specified limits.

=====

Element: Hg Seq. No.: 24 AS Loc.: 22 Date: 02/22/2010  
 Sample ID: 246437009|i|||

-----

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	-0.011	-0.011	0.0005	0.0046	10:39:04	No
2	-0.034	-0.034	0.0003	0.0044	10:39:39	No
Mean:	-0.023	-0.023	0.0004			
SD :	0.0165	0.0165	0.0001			
%RSD:	72.9	72.9	39.8679			

=====

Element: Hg Seq. No.: 25 AS Loc.: 23 Date: 02/22/2010  
 Sample ID: 246437010|i|||

-----

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	0.039	0.039	0.0009	0.0051	10:41:02	No
2	0.028	0.028	0.0008	0.0050	10:41:38	No
Mean:	0.034	0.034	0.0009			
SD :	0.0074	0.0074	0.0001			
%RSD:	22.1	22.1	7.5957			

=====

Element: Hg Seq. No.: 26 AS Loc.: 24 Date: 02/22/2010  
 Sample ID: 246437011|i|||



Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	0.058	0.058	0.0011	0.0052	10:43:02	No
2	0.057	0.057	0.0011	0.0052	10:43:37	No
Mean:	0.057	0.057	0.0011			
SD :	0.0008	0.0008	0.0000			
%RSD:	1.3	1.3	0.6303			

=====  
 Element: Hg Seq. No.: 27 AS Loc.: 25 Date: 02/22/2010  
 Sample ID: 246437012|i|||

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	0.043	0.043	0.0009	0.0051	10:45:00	No
2	0.032	0.032	0.0008	0.0050	10:45:35	No
Mean:	0.037	0.037	0.0009			
SD :	0.0084	0.0084	0.0001			
%RSD:	22.3	22.3	8.2448			

=====  
 Element: Hg Seq. No.: 28 AS Loc.: 26 Date: 02/22/2010  
 Sample ID: 246437013|i|||

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	0.070	0.070	0.0012	0.0054	10:46:59	No
2	0.054	0.054	0.0010	0.0052	10:47:34	No
Mean:	0.062	0.062	0.0011			
SD :	0.0112	0.0112	0.0001			
%RSD:	18.0	18.0	8.8715			

=====  
 Element: Hg Seq. No.: 29 AS Loc.: 27 Date: 02/22/2010  
 Sample ID: 246437014|i|||

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	0.104	0.104	0.0015	0.0057	10:48:59	No
2	0.072	0.072	0.0012	0.0054	10:49:34	No
Mean:	0.088	0.088	0.0013			
SD :	0.0228	0.0228	0.0002			
%RSD:	26.0	26.0	15.0339			

=====  
 Element: Hg Seq. No.: 30 AS Loc.: 28 Date: 02/22/2010  
 Sample ID: 246554001|i|||

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	-0.136	-0.136	-0.0006	0.0036	10:51:00	No
2	-0.144	-0.144	-0.0007	0.0035	10:51:35	No
Mean:	-0.140	-0.140	-0.0007			
SD :	0.0052	0.0052	0.0000			
%RSD:	3.7	3.7	6.8103			

=====  
 Element: Hg Seq. No.: 31 AS Loc.: 29 Date: 02/22/2010  
 Sample ID: 1202039423|i|||DUP

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	-0.070	-0.070	-0.0001	0.0041	10:53:01	No
2	-0.075	-0.075	-0.0001	0.0041	10:53:37	No
Mean:	-0.073	-0.073	-0.0001			
SD :	0.0033	0.0033	0.0000			

%RSD: 4.6 4.6 37.4717

=====

Element: Hg Seq. No.: 32 AS Loc.: 30 Date: 02/22/2010  
 Sample ID: 1202039424|i||MS

-----

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	2.039	2.039	0.0184	0.0226	10:55:03	No
2	2.016	2.016	0.0182	0.0224	10:55:38	No
Mean:	2.028	2.028	0.0183			
SD :	0.0164	0.0164	0.0001			
%RSD:	0.8	0.8	0.7820			

-----

=====

Element: Hg Seq. No.: 33 AS Loc.: 31 Date: 02/22/2010  
 Sample ID: 1202039426|i||MSD

-----

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	1.977	1.977	0.0179	0.0221	10:57:05	No
2	2.002	2.002	0.0181	0.0223	10:57:39	No
Mean:	1.990	1.990	0.0180			
SD :	0.0174	0.0174	0.0002			
%RSD:	0.9	0.9	0.8454			

-----

=====

Element: Hg Seq. No.: 34 AS Loc.: 7 Date: 02/22/2010  
 Sample ID: CCV

-----

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	4.952	4.952	0.0439	0.0481	10:59:06	No
2	5.054	5.054	0.0448	0.0490	10:59:40	No
Mean:	5.003	5.003	0.0444			
SD :	0.0723	0.0723	0.0006			
%RSD:	1.4	1.4	1.4261			

QC value within specified limits.

-----

=====

Element: Hg Seq. No.: 35 AS Loc.: 8 Date: 02/22/2010  
 Sample ID: CCB

-----

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	-0.050	-0.050	0.0001	0.0043	11:01:07	No
2	-0.060	-0.060	0.0000	0.0042	11:01:42	No
Mean:	-0.055	-0.055	0.0001			
SD :	0.0073	0.0073	0.0001			
%RSD:	13.3	13.3	79.7483			

QC value within specified limits.

-----

=====

Element: Hg Seq. No.: 36 AS Loc.: 32 Date: 02/22/2010  
 Sample ID: 1202039425|i|5||SDILT

-----

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	-0.203	-0.203	-0.0012	0.0030	11:03:06	No
2	-0.226	-0.226	-0.0014	0.0028	11:03:40	No
Mean:	-0.214	-0.214	-0.0013			
SD :	0.0163	0.0163	0.0001			
%RSD:	7.6	7.6	10.8425			

-----

=====

Element: Hg Seq. No.: 37 AS Loc.: 33 Date: 02/22/2010  
 Sample ID: 246554002|i|||

-----

%RSD: 3.4 3.4 8.3826

=====

Element: Hg Seq. No.: 43 AS Loc.: 39 Date: 02/22/2010  
 Sample ID: 1202047297|i|10||LCS

-----

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	3.329	3.329	0.0297	0.0339	11:16:40	No
2	3.217	3.217	0.0287	0.0329	11:17:15	No
Mean:	3.273	3.273	0.0292			
SD :	0.0792	0.0792	0.0007			
%RSD:	2.4	2.4	2.3734			

=====

Element: Hg Seq. No.: 44 AS Loc.: 40 Date: 02/22/2010  
 Sample ID: 246735001|i|||

-----

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	0.096	0.096	0.0014	0.0056	11:18:39	No
2	0.098	0.098	0.0014	0.0056	11:19:14	No
Mean:	0.097	0.097	0.0014			
SD :	0.0015	0.0015	0.0000			
%RSD:	1.6	1.6	0.9508			

=====

Element: Hg Seq. No.: 45 AS Loc.: 41 Date: 02/22/2010  
 Sample ID: 246735002|i|||

-----

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	0.167	0.167	0.0020	0.0062	11:20:38	No
2	0.165	0.165	0.0020	0.0062	11:21:13	No
Mean:	0.166	0.166	0.0020			
SD :	0.0012	0.0012	0.0000			
%RSD:	0.7	0.7	0.5369			

=====

Element: Hg Seq. No.: 46 AS Loc.: 7 Date: 02/22/2010  
 Sample ID: CCV

-----

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	5.075	5.075	0.0450	0.0492	11:22:38	No
2	5.054	5.054	0.0448	0.0490	11:23:13	No
Mean:	5.065	5.065	0.0449			
SD :	0.0149	0.0149	0.0001			
%RSD:	0.3	0.3	0.2912			

QC value within specified limits.

=====

Element: Hg Seq. No.: 47 AS Loc.: 8 Date: 02/22/2010  
 Sample ID: CCB

-----

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	-0.046	-0.046	0.0002	0.0043	11:24:40	No
2	-0.069	-0.069	0.0000	0.0041	11:25:15	No
Mean:	-0.058	-0.058	0.0001			
SD :	0.0165	0.0165	0.0001			
%RSD:	28.7	28.7	257.8852			

QC value within specified limits.

=====

Element: Hg Seq. No.: 48 AS Loc.: 42 Date: 02/22/2010  
 Sample ID: 246735003|i|||

=====

# Miscellaneous

# Prep LogBook

Analyst: BCD1  
 Batch: 950490  
 Lab SOP: GL-MA-E-009 REV# 19

Verified by: \_\_\_\_\_

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1202036885	U1062540-1	.512	g
MS	1202036883	U11268741-01	.25	mL
MS	1202036883	U11268744-06	.25	mL
MSD	1202036884	U11268741-01	.25	mL
MSD	1202036884	U11268744-06	.25	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1202036880		SW846 3050B	20-FEB-2010 08:03	0.533 g	50 mL	93.80863	SOIL
LCS	1202036885		SW846 3050B	20-FEB-2010 08:03	0.512 g	50 mL	97.65625	SOIL
SAMPLE	246437001		SW846 3050B	20-FEB-2010 08:03	0.552 g	50 mL	90.57971	SOIL
DUP	1202036881	246437001	SW846 3050B	20-FEB-2010 08:03	0.54 g	50 mL	92.59259	SOIL
SDILT	1202036882	246437001	SW846 3050B	20-FEB-2010 08:03	0.552 g	50 mL	90.57971	SOIL
MS	1202036883	246437001	SW846 3050B	20-FEB-2010 08:03	0.528 g	50 mL	94.69697	SOIL
MSD	1202036884	246437001	SW846 3050B	20-FEB-2010 08:03	0.521 g	50 mL	95.96929	SOIL
SAMPLE	246437002		SW846 3050B	20-FEB-2010 08:03	0.51 g	50 mL	98.03922	SOIL
SAMPLE	246437003		SW846 3050B	20-FEB-2010 08:03	0.529 g	50 mL	94.51796	SOIL
SAMPLE	246437004		SW846 3050B	20-FEB-2010 08:03	0.544 g	50 mL	91.91176	SOIL
SAMPLE	246437005		SW846 3050B	20-FEB-2010 08:03	0.55 g	50 mL	90.90909	SOIL
SAMPLE	246437006		SW846 3050B	20-FEB-2010 08:03	0.536 g	50 mL	93.28358	SOIL
SAMPLE	246437007		SW846 3050B	20-FEB-2010 08:03	0.543 g	50 mL	92.08103	SOIL
SAMPLE	246437008		SW846 3050B	20-FEB-2010 08:03	0.51 g	50 mL	98.03922	SOIL
SAMPLE	246437009		SW846 3050B	20-FEB-2010 08:03	0.545 g	50 mL	91.74312	SOIL
SAMPLE	246437010		SW846 3050B	20-FEB-2010 08:03	0.536 g	50 mL	93.28358	SOIL
SAMPLE	246437011		SW846 3050B	20-FEB-2010 08:03	0.541 g	50 mL	92.42144	SOIL
SAMPLE	246437012		SW846 3050B	20-FEB-2010 08:03	0.522 g	50 mL	95.78544	SOIL
SAMPLE	246437013		SW846 3050B	20-FEB-2010 08:03	0.526 g	50 mL	95.05703	SOIL
SAMPLE	246437014		SW846 3050B	20-FEB-2010 08:03	0.555 g	50 mL	90.09009	SOIL

Comments: The C sample is a muddy, rocky soil.

Reagent/Solvent Lot ID	Amount	Description
1265209	10 mL	HYDROCHLORIC ACID
1268732	1.25 mL	Nitric Acid CONC.

# Prep LogBook

Analyst: BCDI  
 Batch: 950492  
 Lab SOP: GL-MA-E-009 REV# 19

Verified by: \_\_\_\_\_

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1202036891	U1062540-MS	.516	g
MS	1202036889	U1091015-A	.5	mL
MS	1202036889	U1091015-B	.5	mL
MSD	1202036890	U1091015-A	.5	mL
MSD	1202036890	U1091015-B	.5	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1202036886		SW846 3050B	20-FEB-2010 08:31	0.554 g	50 mL	90.25271	SOIL
LCS	1202036891		SW846 3050B	20-FEB-2010 08:31	0.516 g	50 mL	96.89922	SOIL
SAMPLE	246437001		SW846 3050B	20-FEB-2010 08:31	0.541 g	50 mL	92.42144	SOIL
DUP	1202036887	246437001	SW846 3050B	20-FEB-2010 08:31	0.534 g	50 mL	93.63296	SOIL
SDILT	1202036888	246437001	SW846 3050B	20-FEB-2010 08:31	0.541 g	50 mL	92.42144	SOIL
MS	1202036889	246437001	SW846 3050B	20-FEB-2010 08:31	0.544 g	50 mL	91.91176	SOIL
MSD	1202036890	246437001	SW846 3050B	20-FEB-2010 08:31	0.527 g	50 mL	94.87666	SOIL
SAMPLE	246437002		SW846 3050B	20-FEB-2010 08:31	0.557 g	50 mL	89.76661	SOIL
SAMPLE	246437003		SW846 3050B	20-FEB-2010 08:31	0.52 g	50 mL	96.15385	SOIL
SAMPLE	246437004		SW846 3050B	20-FEB-2010 08:31	0.529 g	50 mL	94.51796	SOIL
SAMPLE	246437005		SW846 3050B	20-FEB-2010 08:31	0.514 g	50 mL	97.27626	SOIL
SAMPLE	246437006		SW846 3050B	20-FEB-2010 08:31	0.536 g	50 mL	93.28358	SOIL
SAMPLE	246437007		SW846 3050B	20-FEB-2010 08:31	0.519 g	50 mL	96.33911	SOIL
SAMPLE	246437008		SW846 3050B	20-FEB-2010 08:31	0.548 g	50 mL	91.24088	SOIL
SAMPLE	246437009		SW846 3050B	20-FEB-2010 08:31	0.528 g	50 mL	94.69697	SOIL
SAMPLE	246437010		SW846 3050B	20-FEB-2010 08:31	0.535 g	50 mL	93.45794	SOIL
SAMPLE	246437011		SW846 3050B	20-FEB-2010 08:31	0.526 g	50 mL	95.05703	SOIL
SAMPLE	246437012		SW846 3050B	20-FEB-2010 08:31	0.549 g	50 mL	91.07468	SOIL
SAMPLE	246437013		SW846 3050B	20-FEB-2010 08:31	0.52 g	50 mL	96.15385	SOIL
SAMPLE	246437014		SW846 3050B	20-FEB-2010 08:31	0.543 g	50 mL	92.08103	SOIL

Comments: The QC sample is a muddy, rocky soil.

Reagent/Solvent Lot ID	Amount	Description
1250038-02	1.5 mL	Hydrogen Peroxide 30%
1268732	5 mL	Nitric Acid CONC.

# Prep LogBook

Analyst: \_\_\_\_\_ Verified by: \_\_\_\_\_

Batch: 958096

Lab SOP: GL-MA-E-009 REV# 19

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix	Spike Amount	Spike Units
MB	1202054615		SW846 3050B	27-FEB-2010 14:00	0.533 g	50 mL	93.80863	SOIL	.501	g
LCS	1202054620		SW846 3050B	27-FEB-2010 14:00	0.501 g	50 mL	99.8004	SOIL	.25	mL
SAMPLE	246437001		SW846 3050B	27-FEB-2010 14:00	0.524 g	50 mL	95.41985	SOIL	.25	mL
DUP	1202054616	246437001	SW846 3050B	27-FEB-2010 14:00	0.525 g	50 mL	95.2381	SOIL	.25	mL
SDILT	1202054617	246437001	SW846 3050B	27-FEB-2010 14:00	0.524 g	50 mL	95.41985	SOIL	.25	mL
MS	1202054618	246437001	SW846 3050B	27-FEB-2010 14:00	0.521 g	50 mL	95.96929	SOIL	.25	mL
MSD	1202054619	246437001	SW846 3050B	27-FEB-2010 14:00	0.541 g	50 mL	92.42144	SOIL	.25	mL
SAMPLE	246437002		SW846 3050B	27-FEB-2010 14:00	0.519 g	50 mL	96.33911	SOIL	.25	mL
SAMPLE	246437003		SW846 3050B	27-FEB-2010 14:00	0.533 g	50 mL	93.80863	SOIL	.25	mL
SAMPLE	246437004		SW846 3050B	27-FEB-2010 14:00	0.511 g	50 mL	97.84736	SOIL	.25	mL
SAMPLE	246437005		SW846 3050B	27-FEB-2010 14:00	0.547 g	50 mL	91.40768	SOIL	.25	mL
SAMPLE	246437006		SW846 3050B	27-FEB-2010 14:00	0.566 g	50 mL	88.33922	SOIL	.25	mL
SAMPLE	246437007		SW846 3050B	27-FEB-2010 14:00	0.509 g	50 mL	98.23183	SOIL	.25	mL
SAMPLE	246437008		SW846 3050B	27-FEB-2010 14:00	0.523 g	50 mL	95.60229	SOIL	.25	mL
SAMPLE	246437009		SW846 3050B	27-FEB-2010 14:00	0.504 g	50 mL	99.20635	SOIL	.25	mL
SAMPLE	246437010		SW846 3050B	27-FEB-2010 14:00	0.518 g	50 mL	96.5251	SOIL	.25	mL
SAMPLE	246437011		SW846 3050B	27-FEB-2010 14:00	0.503 g	50 mL	99.40358	SOIL	.25	mL
SAMPLE	246437012		SW846 3050B	27-FEB-2010 14:00	0.525 g	50 mL	95.2381	SOIL	.25	mL
SAMPLE	246437013		SW846 3050B	27-FEB-2010 14:00	0.53 g	50 mL	94.33962	SOIL	.25	mL
SAMPLE	246437014		SW846 3050B	27-FEB-2010 14:00	0.508 g	50 mL	98.4252	SOIL	.25	mL

Comments: Brown,muddy,rocky soil w/plant matter.

Reagent/Solvent Lot ID	Amount	Description
1274973	10 mL	HYDROCHLORIC ACID
1274969	1.25 mL	Nitric Acid CONC.

Prep Data Logbook Version 1:1

GEL Laboratories LLC

Page#

# Prep LogBook

Analyst: TXB3  
 Batch: 951616  
 Lab SOP: GL-MA-E-010 REV# 23

Verified by:

Type	Sample Id	Lot Id	Spike Amount	Spike Units
LCS	1202039422	UI031809A	.209	g
MS	1202039424	WHG100219-14	.3	mL
MSD	1202039426	WHG100219-14	.3	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1202039421		SW846 7471A Prep	19-FEB-2010 16:05	0.564 g	30 mL	53.19149	SOIL
LCS	1202039422		SW846 7471A Prep	19-FEB-2010 16:05	0.209 g	30 mL	143.54067	SOIL
SAMPLE	246437001		SW846 7471A Prep	19-FEB-2010 16:05	0.574 g	30 mL	52.26481	SOIL
SAMPLE	246437002		SW846 7471A Prep	19-FEB-2010 16:05	0.526 g	30 mL	57.03422	SOIL
SAMPLE	246437003		SW846 7471A Prep	19-FEB-2010 16:05	0.563 g	30 mL	53.28597	SOIL
SAMPLE	246437004		SW846 7471A Prep	19-FEB-2010 16:05	0.551 g	30 mL	54.44646	SOIL
SAMPLE	246437005		SW846 7471A Prep	19-FEB-2010 16:05	0.535 g	30 mL	56.07477	SOIL
SAMPLE	246437006		SW846 7471A Prep	19-FEB-2010 16:05	0.521 g	30 mL	57.58157	SOIL
SAMPLE	246437007		SW846 7471A Prep	19-FEB-2010 16:05	0.523 g	30 mL	57.36138	SOIL
SAMPLE	246437008		SW846 7471A Prep	19-FEB-2010 16:05	0.522 g	30 mL	57.47126	SOIL
SAMPLE	246437009		SW846 7471A Prep	19-FEB-2010 16:05	0.528 g	30 mL	56.81818	SOIL
SAMPLE	246437010		SW846 7471A Prep	19-FEB-2010 16:05	0.514 g	30 mL	58.36576	SOIL
SAMPLE	246437011		SW846 7471A Prep	19-FEB-2010 16:05	0.516 g	30 mL	58.13953	SOIL
SAMPLE	246437012		SW846 7471A Prep	19-FEB-2010 16:05	0.547 g	30 mL	54.84461	SOIL
SAMPLE	246437013		SW846 7471A Prep	19-FEB-2010 16:05	0.53 g	30 mL	56.60377	SOIL
SAMPLE	246437014		SW846 7471A Prep	19-FEB-2010 16:05	0.546 g	30 mL	54.94505	SOIL
SAMPLE	246554001		SW846 7471A Prep	19-FEB-2010 16:05	0.546 g	30 mL	54.94505	SOIL
DUP	1202039423	246554001	SW846 7471A Prep	19-FEB-2010 16:05	0.5 g	30 mL	60	SOIL
MS	1202039424	246554001	SW846 7471A Prep	19-FEB-2010 16:05	0.595 g	30 mL	50.42017	SOIL
MSD	1202039426	246554001	SW846 7471A Prep	19-FEB-2010 16:05	0.521 g	30 mL	57.58157	SOIL
SDILT	1202039425	246554001	SW846 7471A Prep	19-FEB-2010 16:05	0.546 g	30 mL	54.94505	SOIL
SAMPLE	246554002		SW846 7471A Prep	19-FEB-2010 16:05	0.505 g	30 mL	59.40594	SOIL
SAMPLE	246554003		SW846 7471A Prep	19-FEB-2010 16:05	0.538 g	30 mL	55.76208	SOIL
SAMPLE	246554004		SW846 7471A Prep	19-FEB-2010 16:05	0.575 g	30 mL	52.17391	SOIL
SAMPLE	246554005		SW846 7471A Prep	19-FEB-2010 16:05	0.546 g	30 mL	54.94505	SOIL
SAMPLE	246554006		SW846 7471A Prep	19-FEB-2010 16:05	0.563 g	30 mL	53.28597	SOIL

Comments: Sample 246554001 is a rocky dry brown soil.  
 Digestion Start Date: 19-FEB-10 16:05  
 Digestion End Date: 19-FEB-10 16:35

GEL Laboratories LLC

Page#

Prep Data Logbook Version 1:1

Reagent/Solvent Lot ID	Amount	Description
1264796-A	1.125 mL	Hydrochloric Acid Conc.
1257474-1	.375 mL	NITRIC ACID
1264984-C	7.5 mL	5% KMnO4 solution



Prep LogBook

1255532-C	2 mL	Hg reducing agent
WHG100219-07	30 uL	Mercury Working Standard 1st Source CAL S 0.2/CRA
WHG100219-08	75 uL	Mercury Working Standard 1st Source CAL S 0.5
WHG100219-11	1.5 mL	Mercury Working 1st Source CAL S 10.0
WHG100219-09	300 uL	Mercury Working 1st Source CAL S 2.0
WHG100219-10	750 uL	Mercury Working 1st Source CAL S 5.0/CCV
WHG100219-12	750 uL	Mercury Working 2nd Source S 5.0/ICV

### DATA EXCEPTION REPORT

<b>Mo.Day Yr.</b> 23-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> 950491	<b>Sample Numbers:</b> See Below		
<b>Potentially affected work order(s)(SDG): 246437(10-1621-1)</b> <b>Application Issues:</b> Failed Recovery for MS/PS Failed RPD for DUP Failed Recovery for MSD/PSD			
<b>Specification and Requirements Exception Description:</b>		<b>DER Disposition:</b>	
1. Failed Recovery for MS/PS: QC 1202036883MS 2. Failed RPD for DUP: QC 1202036881DUP 3. Failed Recovery for MSD/PSD: QC 1202036884MSD		1. The matrix spike recovery failed outside of the control limits for magnesium, manganese, potassium and aluminum 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 iron, lead, magnesium, manganese, potassium and zinc due to possible sample non-homogeneity and/or matrix interference. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported. 3. The matrix spike duplicate recovery failed outside of the control limits for magnesium, potassium and aluminum 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:**

Jerry Wigfall 26-FEB-10

**Data Validator/Group Leader:**

Louise Smith 26-FEB-10

### DATA EXCEPTION REPORT

<b>Mo.Day Yr.</b> 05-MAR-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> 958097	<b>Sample Numbers:</b> See Below		
<b>Potentially affected work order(s)(SDG): 246437(10-1621-1)</b> <b>Application Issues:</b> Failed Recovery for MS/PS Failed RPD for DUP Failed Recovery for MSD/PSD			
<b>Specification and Requirements Exception Description:</b>		<b>DER Disposition:</b>	
1. Failed Recovery for MS/PS: QC 1202054618MS 2. Failed RPD for DUP: QC 1202054616DUP 3. Failed Recovery for MSD/PSD: QC 1202054619MSD		1./3. The matrix spike and matrix spike duplicate recovery failed outside of the control limits for calcium 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 calcium,cobalt,copper and vanadium 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:**

Helen Camello 05-MAR-10

**Data Validator/Group Leader:**

Eric Lawson 05-MAR-10

**DATA EXCEPTION REPORT**

<b>Mo. Day Yr.</b> 05-MAR-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> 950493	<b>Sample Numbers:</b> See Below					
<b>Potentially affected work order(s)(SDG): 246437(10-1621-1)</b>						
<b>Application Issues:</b> Failed Recovery for MSD/PSD						
<b>Specification and Requirements</b> <b>Exception Description:</b>		<b>DER Disposition:</b>				
1. Failed Recovery for MSD/PSD:  QC 1202036890MSD		The matrix spike duplicate recovery failed outside of the control limits for U 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:**  
Elizabeth Janssen 05-MAR-10

**Data Validator/Group Leader:**  
Samantha Jacobs 05-MAR-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:** UI090421-40      **Opened:** 09-OCT-09      **Amount :** 250 mL  
**Name:** TRACE ICP Na-1000SOUR      **Received:** 21-APR-09      **Catalog Number :** HP100052-1  
**Type:** Source Material      **Expires:** 09-OCT-10      **Lot Number :** 0830227  
**Employee:** Helen Camello      **Solvent :** 1%HNO3  
**Supplier:** ENVIRONMENTAL EXPRESS  
**Description:** Sodium 1000 +/- 3 ug/mL in 1% HNO3  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Sodium	1000 ug/mL		

**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:** UI090612-02      **Opened:** 12-JUN-09      **Catalog Number :** 060074-06-01  
**Name:** ICPMS Tungsten - 10mg/L      **Received:** 12-JUN-09      **Lot Number :** 1016377  
**Type:** Source Material      **Expires:** 12-JUN-10      **Solvent :** 2% HNO3  
**Employee:** Paul Boyd  
**Supplier:** O2SI  
**Description:** ICPMS Tungsten standard SPIKE - 10mg/L  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Tungsten	10 mg/L		

# Standard Logbook

**Serial ID:** UI090701-09      **Opened:** 01-JUL-09      **Amount :** 250 mL  
**Name:** ICP-MS CRDL Master #1      **Received:** 01-JUL-09      **Catalog Number :** 160044-09-02  
**Type:** Source Material      **Expires:** 01-JUL-10      **Lot Number :** 1016477  
**Employee:** Paul Boyd      **Solvent :** +/- 0.5% IN 2% HNO3  
**Supplier:** 02SI  
**Description:** ICPMS CRDL Master Soln #1  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Aluminum	15 mg/L	Arsenic	5 mg/L
Barium	2 mg/L	Beryllium	.5 mg/L
Boron	15 mg/L	Cadmium	1 mg/L
Calcium	100 mg/L	Chromium	3 mg/L
Cobalt	1 mg/L	Copper	1 mg/L
Iron	25 mg/L	Lead	2 mg/L
Lithium	10 mg/L	Magnesium	15 mg/L
Manganese	5 mg/L	Nickel	2 mg/L
Phosphorous	50 mg/L	Potassium	300 mg/L
Selenium	5 mg/L	Sodium	250 mg/L
Strontium	10 mg/L	Thallium	1 mg/L
Thorium	1 mg/L	Uranium	.2 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

**Serial ID:** UI090701-10      **Opened:** 01-JUL-09      **Amount :** 250 mL  
**Name:** ICP-MS CRDL Master #2      **Received:** 01-JUL-09      **Catalog Number :** 160044-08-02  
**Type:** Source Material      **Expires:** 01-JUL-10      **Lot Number :** 1016476  
**Employee:** Paul Boyd      **Solvent :** +/- 0.5% IN 2% HNO3  
**Supplier:** 02SI  
**Description:** ICPMS CRDL Soln #2  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Molybdenum	.5 mg/L
Silver	1 mg/L	Tin	2 mg/L
Titanium	10 mg/L	Tungsten	5 mg/L
Zirconium	2 mg/L		

**Serial ID:** UI090701-40      **Opened:** 01-JUL-09      **Amount :** 500 mL  
**Name:** TRACE ICP Stock PQL St      **Received:** 30-JUN-09      **Catalog Number :** 160543-01-03  
**Type:** Source Material      **Expires:** 01-JUL-10      **Lot Number :** 1016475  
**Employee:** Helen Camello      **Solvent :** +/-0.5%in2%HNO3+TrHF  
**Supplier:** 02si  
**Description:** TRACE ICP Stock PQL Standard  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
---------	---------------	---------	---------------



# 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:** 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

# Standard Logbook

Analyte	Concentration	Analyte	Concentration
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:** 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:** 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

<b>Analyte</b>	<b>Concentration</b>	<b>Analyte</b>	<b>Concentration</b>
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

<b>Analyte</b>	<b>Concentration</b>	<b>Analyte</b>	<b>Concentration</b>
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

# Standard Logbook

Analyte	Concentration	Analyte	Concentration
Uranium	20 mg/L	Vanadium	20 mg/L
Zinc	20 mg/L		

**Serial ID:** UI091217-08      **Opened:** 17-DEC-09      **Amount :** 250 mL  
**Name:** ICP-MS ICV/CCV Master C      **Received:** 17-DEC-09      **Catalog Number :** 160054-03  
**Type:** Source Material      **Expires:** 17-DEC-10      **Lot Number :** 1018211  
**Employee:** Paul Boyd      **Solvent :** +/- 0.5% in 5% HNO3 100 cm2  
**Supplier:** 02SI  
**Description:** ICPMS ICV/CCV Soln C - 10ppm  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	20 mg/L
Silver	20 mg/L	Tin	20 mg/L
Titanium	20 mg/L	Tungsten	20 mg/L
Zirconium	20 mg/L		

**Serial ID:** UI091217-12      **Opened:** 17-DEC-09      **Amount :** 250 mL  
**Name:** ICP-MS ICSAB Master B      **Received:** 17-DEC-09      **Catalog Number :** 160033-02  
**Type:** Source Material      **Expires:** 17-DEC-10      **Lot Number :** 1018212  
**Employee:** Paul Boyd      **Solvent :** +/- 0.5% in 2% HNO3  
**Supplier:** 02SI  
**Description:** ICPMS ICSAB Master B  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Arsenic	2 mg/L	Barium	2 mg/L
Beryllium	2 mg/L	Boron	2 mg/L
Cadmium	2 mg/L	Chromium	2 mg/L
Cobalt	2 mg/L	Copper	2 mg/L
Lead	2 mg/L	Lithium	2 mg/L
Manganese	2 mg/L	Nickel	2 mg/L
Selenium	2 mg/L	Strontium	2 mg/L
Thallium	2 mg/L	Thorium	2 mg/L
Uranium	2 mg/L	Vanadium	2 mg/L
Zinc	2 mg/L		

**Serial ID:** UI091217-13      **Opened:** 17-DEC-09      **Amount :** 250 mL  
**Name:** ICP-MS ICSAB Master C      **Received:** 17-DEC-09      **Catalog Number :** 160033-03  
**Type:** Source Material      **Expires:** 17-DEC-10      **Lot Number :** 1016926  
**Employee:** Paul Boyd      **Solvent :** +/- 0.5% in 2% HNO3  
**Supplier:** 02SI  
**Description:** ICPMS ICSAB Master C  
**Comments:** None

# Standard Logbook

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:** 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:** OS2I  
**Description:** Metals Spike Mix I  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 ug/mL	Arsenic	100 ug/mL
Barium	100 ug/mL	Beryllium	100 ug/mL
Boron	100 ug/mL	Cadmium	100 ug/mL
Calcium	1000 ug/mL	Cobalt	100 ug/mL
Iron	1000 ug/mL	Lead	100 ug/mL
Magnesium	1000 ug/mL	Phosphorous	100 ug/mL
Potassium	1000 ug/mL	Silver	100 ug/mL
Sodium	1000 ug/mL	Strontium	100 ug/mL

**Serial ID:** 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:** 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
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 ICSEA      **Received:** 10-FEB-10      **Catalog Number :** 160005-02  
**Type:** Source Material      **Expires:** 04-MAR-10      **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

Analyte	Concentration	Analyte	Concentration
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

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Carbon	2000 mg/L	Chloride	10000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Molybdenum	20 mg/L	Phosphorous	1000 mg/L
Potassium	1000 mg/L	Sodium	1000 mg/L
Sulfur	1000 mg/L	Titanium	20 mg/L

**Serial ID:** 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

Analyte	Concentration	Analyte	Concentration
Aluminum	5000 mg/L	Arsenic	100 mg/L
Barium	250 mg/L	Beryllium	100 mg/L
Cadmium	100 mg/L	Calcium	5000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	5000 mg/L
Lead	500 mg/L	Lithium	100 mg/L
Magnesium	5000 mg/L	Manganese	100 mg/L
Nickel	100 mg/L	Phosphorous	2500 mg/L
Potassium	5000 mg/L	Selenium	50 mg/L
Sodium	5000 mg/L	Strontium	100 mg/L
Thallium	50 mg/L	Thorium	250 mg/L
Uranium	500 mg/L	Vanadium	100 mg/L
Zinc	250 mg/L		



# 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:** UI100226-40      **Opened:** 26-FEB-10      **Amount :** 500 mL  
**Name:** ICP HIGH RANGE STD-A      **Received:** 25-FEB-10      **Catalog Number :** 160211-05-03  
**Type:** Source Material      **Expires:** 26-FEB-11      **Lot Number :** 1018981  
**Employee:** Helen Camello      **Solvent :** +/-0.5%in2%HNO3  
**Supplier:** O2SI  
**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:** UI100226-41      **Opened:** 26-FEB-10      **Amount :** 500 mL  
**Name:** ICP HIGH RANGE STD B      **Received:** 25-FEB-10      **Catalog Number :** 160211-05-03  
**Type:** Source Material      **Expires:** 26-FEB-11      **Lot Number :** 1018981  
**Employee:** Helen Camello      **Solvent :** +/-0.5%in2%HNO3  
**Supplier:** O2SI  
**Description:** ICP HIGH RANGE STD SOLUTION B  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 ug/L	Calcium	500000 ug/L

# Standard Logbook

Analyte	Concentration	Analyte	Concentration
Iron	500000 ug/L	Magnesium	500000 ug/L
Sodium	500000 ug/L	Uranium	15000 ug/L

**Serial ID:** UI1268741-01      **Opened:** 11-FEB-10      **Lot Number :** 1018514  
**Name:** METALSPIKE-1      **Received:** 11-FEB-10  
**Type:** Source Material      **Expires:** 11-FEB-11  
**Employee:** Bryan Davis  
**Supplier:** OS2I  
**Description:** Metals Spike Mix I  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 ug/mL	Arsenic	100 ug/mL
Barium	100 ug/mL	Beryllium	100 ug/mL
Boron	100 ug/mL	Cadmium	100 ug/mL
Calcium	1000 ug/mL	Cobalt	100 ug/mL
Iron	1000 ug/mL	Lead	100 ug/mL
Magnesium	1000 ug/mL	Phosphorous	100 ug/mL
Potassium	1000 ug/mL	Silver	100 ug/mL
Sodium	1000 ug/mL	Strontium	100 ug/mL

**Serial ID:** UI1268744-06      **Opened:** 11-FEB-10      **Lot Number :** 1018515  
**Name:** METALSPIKE-2      **Received:** 11-FEB-10  
**Type:** Source Material      **Expires:** 11-FEB-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:** UMS100226-01      **Opened:** 26-FEB-10      **Amount :** 250 mL  
**Name:** ICPMSCaSPIKEB      **Received:** 26-FEB-10      **Catalog Number :** ZGEL-100-250  
**Type:** Source Material      **Expires:** 26-FEB-11      **Lot Number :** 21-104JB  
**Employee:** Paul Boyd  
**Supplier:** SPEX

# Standard Logbook

**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:** UMS100226-02      **Opened:** 26-FEB-10      **Catalog Number :** ZGEL-102-250  
**Name:** ICPMSCaSPIKEA      **Received:** 26-FEB-10      **Lot Number :** 21-103JB  
**Type:** Source Material      **Expires:** 26-FEB-11  
**Employee:** Paul Boyd  
**Supplier:** SPEX  
**Description:** ICPMS Calibration Standard Solution A  
**Comments:** None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Phosphorous	1000 mg/L	Potassium	1000 mg/L
Sodium	1000 mg/L		

**Serial ID:** UMS100226-03      **Opened:** 26-FEB-10      **Amount :** 250 ml  
**Name:** ICPMSCaSPIKEC      **Received:** 26-FEB-10      **Catalog Number :** ZGEL-101-250  
**Type:** Source Material      **Expires:** 26-FEB-11      **Lot Number :** 21-102JB  
**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		

# Standard Logbook

**Serial ID:** IHG100219-01      **Opened:** 19-FEB-10      **Instrument Id :** Mercury  
**Name:** MHGINTER1      **Received:** 19-FEB-10      **Pipet Id :** Minou1  
**Type:** Intermediate      **Expires:** 20-FEB-10      **Solvent :** 1mL HNO3 + TypeI H2O  
**Employee:** Tara Griffin  
**Supplier:** GEL  
**Description:** Mercury Intermediate 1st Source 200 ug/L  
**Comments:** Prepare fresh daily

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

**Serial ID:** IHG100219-02      **Opened:** 19-FEB-10      **Pipet Id :** Minou1  
**Name:** MHGINTER2      **Received:** 19-FEB-10      **Solvent :** 2% HNO3-1257474  
**Type:** Intermediate      **Expires:** 20-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:** WHG100219-07      **Opened:** 19-FEB-10      **Pipet Id :** Hg1289245  
**Name:** MHGWORKCALS0.2CRA      **Received:** 19-FEB-10      **Solvent :** 2% HNO3-1257474  
**Type:** Working      **Expires:** 26-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.
IHG100219-01	Mercury	200 ug/L	30 uL	30 mL	.2 ug/L

**Serial ID:** WHG100219-08      **Opened:** 19-FEB-10      **Pipet Id :** Hg1289245  
**Name:** MHGWORKCALS0.5      **Received:** 19-FEB-10      **Solvent :** 2% HNO3-1257474  
**Type:** Working      **Expires:** 26-FEB-10  
**Employee:** Tara Griffin      **Verified:** 20-JUL-07  
**Supplier:** GEL  
**Description:** Mercury Working Standard 1st Source CAL S 0.5  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100219-01	Mercury	200 ug/L	75 uL	30 mL	.5 ug/L

# Standard Logbook

**Serial ID:** WHG100219-09      **Opened:** 19-FEB-10      **Pipet Id :** Hg1289245  
**Name:** MHGWORKCALS2.0      **Received:** 19-FEB-10      **Solvent :** 2% HNO3-1257474  
**Type:** Working      **Expires:** 26-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.
IHG100219-01	Mercury	200 ug/L	300 uL	30 mL	2 ug/L

**Serial ID:** WHG100219-10      **Opened:** 19-FEB-10      **Pipet Id :** Hg1289245  
**Name:** MHGWORKCALS5.0CCV      **Received:** 19-FEB-10      **Solvent :** 2% HNO3-1257474  
**Type:** Working      **Expires:** 26-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.
IHG100219-01	Mercury	200 ug/L	750 uL	30 mL	5 ug/L

**Serial ID:** WHG100219-11      **Opened:** 19-FEB-10      **Pipet Id :** Hg1289245  
**Name:** MHGWORKCALS10.0      **Received:** 19-FEB-10      **Solvent :** 2% HNO3-1257474  
**Type:** Working      **Expires:** 26-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.
IHG100219-01	Mercury	200 ug/L	1.5 mL	30 mL	10 ug/L

**Serial ID:** WHG100219-12      **Opened:** 19-FEB-10      **Pipet Id :** Hg1289245  
**Name:** MHGWORKS5.0ICV      **Received:** 19-FEB-10      **Solvent :** 2% HNO3-1257474  
**Type:** Working      **Expires:** 26-FEB-10  
**Employee:** Tara Griffin      **Verified:** 20-JUL-07  
**Supplier:** GEL  
**Description:** Mercury Working 2nd Source S 5.0/ICV  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100219-02	Mercury	200 ug/L	750 uL	30 mL	5 ug/L

# Standard Logbook

**Serial ID:** WHG100219-14      **Opened:** 19-FEB-10      **Pipet Id :** Hg1289245  
**Name:** MHGSOILMSSPIKE      **Received:** 19-FEB-10      **Solvent :** 2% HNO3-1257474  
**Type:** Working      **Expires:** 26-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:** WI100303-42      **Opened:** 03-MAR-10      **Balance Id :** 216  
**Name:** TRACE ICP 0.1 PPM STD.      **Received:** 02-NOV-09      **Pipet Id :** 3581809  
**Type:** Working      **Expires:** 04-MAR-10      **Solvent :** 3%HCL and 1%HNO3 -1276974  
**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.
WI100303-44	Aluminum	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100303-44	Antimony	1000 ug/L	10 mL	100 mL	100 ug/L
WI100303-44	Arsenic	1000 ug/L	10 mL	100 mL	100 ug/L
WI100303-44	Barium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100303-44	Beryllium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100303-44	Boron	1000 ug/L	10 mL	100 mL	100 ug/L
WI100303-44	Cadmium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100303-44	Calcium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100303-44	Chromium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100303-44	Cobalt	1000 ug/L	10 mL	100 mL	100 ug/L
WI100303-44	Copper	1000 ug/L	10 mL	100 mL	100 ug/L
WI100303-44	Iron	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100303-44	Lead	1000 ug/L	10 mL	100 mL	100 ug/L
WI100303-44	Magnesium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100303-44	Manganese	1000 ug/L	10 mL	100 mL	100 ug/L
WI100303-44	Molybdenum	1000 ug/L	10 mL	100 mL	100 ug/L
WI100303-44	Nickel	1000 ug/L	10 mL	100 mL	100 ug/L
WI100303-44	Phosphorous	5000 ug/L	10 mL	100 mL	500 ug/L
WI100303-44	Potassium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100303-44	Selenium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100303-44	Silica	10698 ug/L	10 mL	100 mL	1069 ug/L
WI100303-44	Silicon	5000 ug/L	10 mL	100 mL	500 ug/L
WI100303-44	Silver	1000 ug/L	10 mL	100 mL	100 ug/L
WI100303-44	Sodium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100303-44	Strontium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100303-44	Sulfur	2000 ug/L	10 mL	100 mL	200 ug/L
WI100303-44	Thallium	1000 ug/L	10 mL	100 mL	100 ug/L

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI100303-44	Tin	1000 ug/L	10 mL	100 mL	100 ug/L
WI100303-44	Titanium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100303-44	Uranium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100303-44	Vanadium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100303-44	Zinc	1000 ug/L	10 mL	100 mL	100 ug/L

**Serial ID:** WI100303-43      **Opened:** 03-MAR-10      **Balance Id :** 216  
**Name:** TRACE ICP 0.5/CCV STD.      **Received:** 02-NOV-09      **Pipet Id :** 3581809  
**Type:** Working      **Expres:** 04-MAR-10      **Solvent :** 3%HCL and 1%HNO3 -1263028  
**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.
UI090421-40	Sodium	1000 ug/mL	5 mL	1000 mL	5000 UG/L
UI091015-42	Silica	2139 mg/L	2.5 mL	1000 mL	5348.25 UG/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Barium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Boron	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Chromium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Copper	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Iron	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Lead	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Manganese	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Nickel	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Selenium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Strontium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Thallium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Uranium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Zinc	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Antimony	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Silver	200 mg/L	2.5 mL	1000 mL	500 UG/L

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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:** WI100303-44      **Opened:** 03-MAR-10      **Balance Id :** 216  
**Name:** TRACE ICP SCAL 1.0      **Received:** 02-NOV-09      **Pipet Id :** 3581809  
**Type:** Working      **Expires:** 04-MAR-10      **Solvent :** 3%HCL and 1 %HNO3-1276974

**Employee:** Helen Camello

**Supplier:** o2si

**Description:** Trace ICP Calibration Standard 1.0ppm

**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091015-42	Silica	2139 mg/L	2.5 mL	500 mL	10698 ug/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Barium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Boron	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Chromium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Copper	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Iron	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Lead	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Manganese	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Nickel	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Selenium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Strontium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Thallium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Uranium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Zinc	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Antimony	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Silver	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	500 mL	2000 ug/L
UI091102-41	Tin	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Titanium	200 mg/L	2.5 mL	500 mL	1000 ug/L



# Standard Logbook

**Serial ID:** WI100303-45      **Opened:** 03-MAR-10      **Balance Id :** 216  
**Name:** TRACE ICP S-10 STD      **Received:** 22-APR-09      **Pipet Id :** 3581809  
**Type:** Working      **Expires:** 04-MAR-10      **Solvent :** 3%HCL and 1%HNO3 -1276974  
**Employee:** Helen Camello  
**Supplier:** GEL  
**Description:** TRACE ICP S-10 CALIBRATION STD.  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090421-40	Sodium	1000 ug/mL	10 mL	500 mL	20000 UG/L
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

**Serial ID:** WI100303-46      **Opened:** 03-MAR-10      **Balance Id :** 216  
**Name:** ICP TRACE ICV      **Received:** 25-SEP-09      **Pipet Id :** 3581809  
**Type:** Working      **Expires:** 04-MAR-10      **Solvent :** 3%HCL AND 1%HNO3-1276974  
**Employee:** Helen Camello  
**Supplier:** GEL  
**Description:** Initial Calibration Verification ICP Trace Metals  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-40	Aluminum	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Arsenic	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Barium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Boron	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cadmium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Calcium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Chromium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cobalt	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Copper	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Iron	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Lead	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Phosphorous	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Potassium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Selenium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Sodium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Strontium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Antimony	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Beryllium	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Magnesium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-41	Manganese	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Molybdenum	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Nickel	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Silver	50 mg/L	2.5 mL	500 mL	250 ug/L

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-41	Sulfur	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-41	Thallium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Tin	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Titanium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Uranium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Vanadium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Zinc	100 mg/L	2.5 mL	500 mL	500 ug/L
UI091102-42	Silica	2139 mg/L	2.5 mL	500 mL	10695 ug/L
UI091102-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L

**Serial ID:** WI100303-47      **Opened:** 03-MAR-10      **Balance Id :** 216  
**Name:** PQL Working Standard      **Received:** 30-JUN-09      **Pipet Id :** 3581809  
**Type:** Working      **Expires:** 04-MAR-10      **Solvent :** 3%HCL &1%HNO3-1276974  
**Employee:** Helen Camello  
**Supplier:** 02si  
**Description:** PQL Working Standard  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Aluminum	100 mg/L	2 mL	1000 mL	200 ug/L
UI090701-40	Antimony	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Arsenic	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Barium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Beryllium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Boron	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Cadmium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Calcium	100 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Chromium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Cobalt	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Copper	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Iron	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Lead	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Magnesium	150 mg/L	2 mL	1000 mL	300 ug/L
UI090701-40	Manganese	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Molybdenum	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Nickel	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Phosphorous	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Potassium	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Selenium	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Silicon	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Silver	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sodium	150 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Strontium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sulfur	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Thallium	10 mg/L	2 mL	1000 mL	20 ug/L

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Tin	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Titanium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Uranium	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Vanadium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Zinc	5 mg/L	2 mL	1000 mL	10 ug/L

**Serial ID:** WMS100303-04B      **Opened:** 03-MAR-10      **Amount :** 50 mL  
**Name:** ICPMS Cal Standard 100      **Received:** 03-MAR-10      **Balance Id :** 40245216  
**Type:** Working      **Expires:** 04-MAR-10      **Pipet Id :** 1758088  
**Employee:** Rose Jenkins      **Solvent :** 2%HNO3/1%HCl- 1276824  
**Supplier:** GEL  
**Description:** ICPMS Calibration Standard (100 ppb)  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090612-02	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS100226-01	Arsenic	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Barium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Beryllium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Boron	20 mg/L	.5	50 mL	200 ug/l
UMS100226-01	Cadmium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Chromium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Cobalt	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Copper	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Lead	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Lithium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Manganese	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Nickel	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Selenium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Silver	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Strontium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Thallium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Thorium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Uranium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Vanadium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Zinc	10 mg/L	.5	50 mL	100 ug/l
UMS100226-02	Aluminum	1000 mg/L	.5	50 mL	10000 ug/l
UMS100226-02	Calcium	1000 mg/L	.5	50 mL	10000 ug/l
UMS100226-02	Iron	1000 mg/L	.5	50 mL	10000 ug/l
UMS100226-02	Magnesium	1000 mg/L	.5	50 mL	10000 ug/l
UMS100226-02	Phosphorous	1000 mg/L	.5	50 mL	10000 ug/l
UMS100226-02	Potassium	1000 mg/L	.5	50 mL	10000 ug/l
UMS100226-02	Sodium	1000 mg/L	.5	50 mL	10000 ug/l
UMS100226-03	Antimony	10 mg/L	.5	50 mL	100 ug/l
UMS100226-03	Molybdenum	10 mg/L	.5	50 mL	100 ug/l

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS100226-03	Tin	10 mg/L	.5	50 mL	100 ug/l
UMS100226-03	Titanium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-03	Zirconium	10 mg/L	.5	50 mL	100 ug/l

**Serial ID:** WMS100304-04      **Opened:** 04-MAR-10      **Amount :** 50 mL  
**Name:** ICPMS Cal Standard 100      **Received:** 04-MAR-10      **Balance Id :** 4025216  
**Type:** Working      **Expires:** 05-MAR-10      **Pipet Id :** 3541598  
**Employee:** Paul Boyd      **Solvent :** 2%HNO3/1%HCl-1276824  
**Supplier:** GEL  
**Description:** ICPMS Calibration Standard (100 ppb)  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090612-02	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS100226-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS100226-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l

# Standard Logbook

<b>Parent Material</b>	<b>Analyte</b>	<b>Parent Conc.</b>	<b>Allquot</b>	<b>Final Vol.</b>	<b>Final Conc.</b>
UMS100226-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

**Serial ID:** WMS100304-04A      **Opened:** 04-MAR-10      **Balance Id :** 4025216  
**Name:** ICPMS Cal Standard 10      **Received:** 04-MAR-10      **Pipet Id :** 3541598  
**Type:** Working      **Expires:** 05-MAR-10      **Solvent :** 2%HNO3/1%HCl - 1276824  
**Employee:** Paul Boyd  
**Supplier:** GEL  
**Description:** ICPMS Calibration Standard (10 ppb)  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Allquot	Final Vol.	Final Conc.
WMS100303-04B	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100303-04B	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS100303-04B	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS100303-04B	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100303-04B	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100303-04B	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS100303-04B	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100303-04B	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100303-04B	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100303-04B	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS100303-04B	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS100303-04B	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100303-04B	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS100303-04B	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100303-04B	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100303-04B	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS100303-04B	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS100303-04B	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS100303-04B	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100303-04B	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100303-04B	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100303-04B	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS100303-04B	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100303-04B	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100303-04B	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100303-04B	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100303-04B	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS100303-04B	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100303-04B	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS100303-04B	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100303-04B	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100303-04B	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS100303-04B	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

# Standard Logbook

**Serial ID:** WMS100304-05      **Opened:** 04-MAR-10      **Balance Id :** 40245216  
**Name:** ICPMS ICV      **Received:** 04-MAR-10      **Pipet Id :** 3541598  
**Type:** Working      **Expires:** 05-MAR-10      **Solvent :** 2%HNO3/1%HCl - 1276824  
**Employee:** Paul Boyd  
**Supplier:** GEL  
**Description:** ICPMS ICV  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI091217-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI091217-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

# Standard Logbook

**Serial ID:** WMS100304-06      **Opened:** 04-MAR-10      **Balance Id :** 40245216  
**Name:** ICPMS CRDL      **Received:** 04-MAR-10      **Pipet Id :** 3820544  
**Type:** Working      **Expires:** 05-MAR-10      **Solvent :** 2%HNO3/1%HCl - 1276824  
**Employee:** Paul Boyd  
**Supplier:** GEL  
**Description:** ICPMS CRDL  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

# Standard Logbook

**Serial ID:** WMS100304-07      **Opened:** 04-MAR-10      **Balance Id :** 40245216  
**Name:** ICPMS ICSA      **Received:** 04-MAR-10      **Lot Number :** 1010773  
**Type:** Working      **Expires:** 05-MAR-10      **Pipet Id :** 3541598  
**Employee:** Paul Boyd      **Solvent :** 2%HNO3/1%HCl - 1276824  
**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

**Serial ID:** WMS100304-08      **Opened:** 04-MAR-10      **Balance Id :** 40245216  
**Name:** ICPMS ICSAB      **Received:** 04-MAR-10      **Pipet Id :** 1758088  
**Type:** Working      **Expires:** 05-MAR-10      **Solvent :** 2%HNO3/1%HCl - 1276824  
**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
UI091217-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L



# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI091217-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI091217-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L
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:** WMS100304-70      **Opened:** 04-MAR-10      **Balance Id :** 40245216  
**Name:** ICPMS LINEAR RANGE ST      **Received:** 04-MAR-10      **Pipet Id :** 1758088  
**Type:** Working      **Expires:** 05-MAR-10      **Solvent :** 2%HNO3/1%HCl - 1276824  
**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
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

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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:** WMS100305-04      **Opened:** 05-MAR-10      **Amount :** 50 mL  
**Name:** ICPMS Cal Standard 100      **Received:** 05-MAR-10      **Balance Id :** 4025216  
**Type:** Working      **Expires:** 06-MAR-10      **Pipet Id :** 3541598  
**Employee:** Paul Boyd      **Solvent :** 2%HNO3/1%HCl-1276824  
**Supplier:** GEL  
**Description:** ICPMS Calibration Standard (100 ppb)  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090612-02	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS100226-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS100226-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS100226-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

**Serial ID:** WMS100305-04A      **Opened:** 05-MAR-10      **Balance Id :** 4025216  
**Name:** ICPMS Cal Standard 10      **Received:** 05-MAR-10      **Pipet Id :** 3541598  
**Type:** Working      **Expires:** 06-MAR-10      **Solvent :** 2%HNO3/1%HCl - 1276824  
**Employee:** Paul Boyd  
**Supplier:** GEL  
**Description:** ICPMS Calibration Standard (10 ppb)  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100305-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100305-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS100305-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS100305-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100305-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100305-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS100305-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100305-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100305-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100305-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS100305-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS100305-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100305-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS100305-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100305-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100305-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS100305-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS100305-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS100305-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100305-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100305-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100305-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS100305-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100305-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100305-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100305-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100305-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS100305-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100305-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS100305-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100305-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100305-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS100305-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

**Serial ID:** WMS100305-05      **Opened:** 05-MAR-10      **Balance Id :** 40245216  
**Name:** ICPMS ICV      **Received:** 05-MAR-10      **Pipet Id :** 3541598  
**Type:** Working      **Expires:** 06-MAR-10      **Solvent :** 2%HNO3/1%HCl - 1276824  
**Employee:** Paul Boyd  
**Supplier:** GEL  
**Description:** ICPMS ICV  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI091217-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI091217-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

**Serial ID:** WMS100305-06      **Opened:** 05-MAR-10      **Balance Id :** 40245216  
**Name:** ICPMS CRDL      **Received:** 05-MAR-10      **Pipet Id :** 3820544  
**Type:** Working      **Expires:** 06-MAR-10      **Solvent :** 2%HNO3/1%HCl - 1276824  
**Employee:** Paul Boyd  
**Supplier:** GEL  
**Description:** ICPMS CRDL  
**Comments:** None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

**Serial ID:** WMS100305-07      **Opened:** 05-MAR-10      **Balance Id :** 40245216  
**Name:** ICPMS ICSA      **Received:** 05-MAR-10      **Lot Number :** 1010773  
**Type:** Working      **Expires:** 06-MAR-10      **Pipet Id :** 3541598  
**Employee:** Paul Boyd      **Solvent :** 2%HNO3/1%HCl - 1276824  
**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

**Serial ID:** WMS100305-08      **Opened:** 05-MAR-10      **Balance Id :** 40245216  
**Name:** ICPMS ICSAB      **Received:** 05-MAR-10      **Pipet Id :** 1758088  
**Type:** Working      **Expires:** 06-MAR-10      **Solvent :** 2%HNO3/1%HCl - 1276824  
**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

# Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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:** 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

**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

# Standard Logbook

**Serial ID:** 1156689-A      **Opened:** 20-JUL-09      **Lot Number :** 41226920  
**Name:** B-KMnO4(VWR)-MER      **Received:** 20-JUL-09  
**Type:** Reagent/Solvent      **Expires:** 20-JUL-10  
**Employee:** Tara Griffin      **Verified:** 07-AUG-07  
**Supplier:** VWR  
**Description:** Potassium Permanganate  
**Comments:** None

**Serial ID:** 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:** 1250038-02      **Opened:** 04-JAN-10      **Lot Number :** ZU74081198 mL  
**Name:** B-H2O2      **Received:** 04-JAN-10  
**Type:** Reagent/Solvent      **Expires:** 04-JAN-11  
**Employee:** Bryan Davis  
**Supplier:** EM SCIENCE  
**Description:** Hydrogen Peroxide 30%  
**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

**Serial ID:** 1257474-1      **Opened:** 20-JAN-10      **Instrument Id :** MERCURY  
**Name:** B-HNO3-MER      **Received:** 20-JAN-10      **Lot Number :** H20053  
**Type:** Reagent/Solvent      **Expires:** 20-JAN-11  
**Employee:** Tara Griffin  
**Supplier:** Mallinckrodt Chemicals  
**Description:** NITRIC ACID  
**Comments:** None



# Standard Logbook

**Serial ID:** 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.	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:** 1268732      **Opened:** 11-FEB-10      **Lot Number :** H12022 L  
**Name:** I-HNO3      **Received:** 11-FEB-10  
**Type:** Reagent/Solvent      **Expires:** 11-FEB-11  
**Employee:** Bryan Davis  
**Supplier:** BAKER  
**Description:** Nitric Acid CONC.  
**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

# 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

**Serial ID:** 1274973      **Opened:** 24-FEB-10      **Lot Number :** J02039  
**Name:** I-HCL      **Received:** 24-FEB-10      **Preservative\_Id :** 5 none  
**Type:** Reagent/Solvent      **Expires:** 24-FEB-11  
**Employee:** Francena Armstrong  
**Supplier:** J.T. BAKER  
**Description:** HYDROCHLORIC ACID  
**Comments:** None

**Serial ID:** 1276824      **Opened:** 01-MAR-10      **Solvent :** Type I Water  
**Name:** B-2%HNO3/1%HCL-ICPMS      **Received:** 01-MAR-10  
**Type:** Reagent/Solvent      **Expires:** 08-MAR-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:** 1276974      **Opened:** 01-MAR-10      **Amount :** 20 L  
**Name:** B-ICP-RINSE SOLN      **Received:** 25-FEB-10      **Lot Number :** H04040+G34050  
**Type:** Reagent/Solvent      **Expires:** 07-MAR-10      **Solvent :** 3%HCL+1%HNO3  
**Employee:** Helen Camello  
**Supplier:** GEL  
**Description:** 3%HCL+1%HNO3 RINSE SOLN.  
**Comments:** None

# **General Chemistry Analysis**

# Case Narrative

**General Chemistry Narrative  
Los Alamos National Laboratory (LANL)  
SDG 10-1621**

**Method/Analysis Information**

**Product:** Cyanide, Total

**Analytical Batch:** 949511      **Method:** SW9012A Cyanide and Total

**Prep Batch :** 949509      **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>
246436001	RE15-10-8378
1202034323	Method Blank (MB)
1202034324	245934002(CASA-10-9412) Sample Duplicate (DUP)
1202034325	246064001(CASA-10-9111) Sample Duplicate (DUP)
1202034326	245934002(CASA-10-9412) Matrix Spike (MS)
1202034327	246064001(CASA-10-9111) Matrix Spike (MS)
1202034328	245934002(CASA-10-9412) Matrix Spike Duplicate (MSD)
1202034329	246064001(CASA-10-9111) Matrix Spike Duplicate (MSD)
1202034330	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: 245934002 (CASA-10-9412) and 246064001 (CASA-10-9111).

**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. 1202034324 (CASA-10-9412) and 1202034325 (CASA-10-9111).

**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**

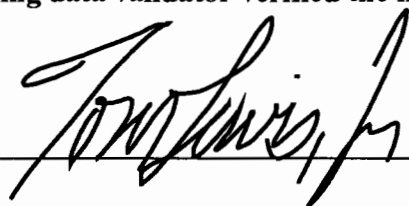
Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

**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: \_\_\_\_\_

05Mar10



# **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: 10-1621 GEL Work Order: 246436

**The Qualifiers in this report are defined as follows:**


- \* Indicates that a quality control analyte recovery is outside of specified acceptance criteria.
- \*\* Indicates the analyte is a surrogate compound.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the detection limit.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by



# GEL LABORATORIES LLC

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

## Certificate of Analysis

Company : Los Alamos National Laboratory

Address : PO Box 1663

TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545

Contact: Ms. Joylene Valdez

Project: LANL ER Project

Report Date: February 19, 2010

Client SDG: 10-1621

Client Sample ID: RE15-10-8378  
Sample ID: 246436001  
Matrix: W  
Collect Date: 02-FEB-10 12:00  
Receive Date: 06-FEB-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	U	ND	1.66	5.00	ug/L	1	AXC2	02/11/10	1034	949511	1

### The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/11/10	0838	949509

### 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 19, 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: 246436

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Flow Injection Analysis</b>											
Batch	949511										
QC1202034324	245934002	DUP									
Cyanide, Total		J	2.66	J	4.23	ug/L	45.6 ^	(+/-5.00)	AXC2	02/11/10	10:07
QC1202034325	246064001	DUP									
Cyanide, Total		U	ND	J	2.13	ug/L	200	(+/-5.00)		02/11/10	10:12
QC1202034330	LCS										
Cyanide, Total	50.0				48.1	ug/L	96.2	(90%-110%)		02/11/10	10:06
QC1202034323	MB										
Cyanide, Total				U	5.00	ug/L				02/11/10	10:05
QC1202034326	245934002	MS									
Cyanide, Total	100	J	2.66		105	ug/L	102	(60%-144%)		02/11/10	10:08
QC1202034327	246064001	MS									
Cyanide, Total	100	U	ND		104	ug/L	102	(60%-144%)		02/11/10	10:13
QC1202034328	245934002	MSD									
Cyanide, Total	100	J	2.66		92.5	ug/L	12.7	89.8	(0%-20%)	02/11/10	10:09
QC1202034329	246064001	MSD									
Cyanide, Total	100	U	ND		104	ug/L	0.00	102	(0%-20%)	02/11/10	10:17

### Notes:

RER is calculated at the 95% confidence level (2-sigma).

The Qualifiers in this report are defined as follows:

- \*\* Analyte is a surrogate compound
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product
- B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
- C Analyte has been confirmed by GC/MS analysis
- D Results are reported from a diluted aliquot of the sample
- E General Chemistry--Concentration of the target analyte exceeds the instrument calibration range
- E Metals--%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
- E Organics--Concentration of the target analyte exceeds the instrument calibration range
- F Estimated Value
- H Analytical holding time was exceeded
- J Value is estimated
- M Matrix Related Failure
- N Organics--Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor
- N/A RPD or %Recovery limits do not apply.

# GEL LABORATORIES LLC

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

## QC Summary

Workorder: 246436

Page 2 of 2

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
ND	Analyte concentration is not detected above the detection limit										
NJ	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier										
P	Organics--The concentrations between the primary and confirmation columns/detectors is >40% different. For HPLC, difference is also <70%										
R	Sample results are rejected										
U	Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.										
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier										
Y	QC Samples were not spiked with this compound										
Z	Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.										
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.										
d	5-day BOD--The 2:1 depletion requirement was not met for this sample										
h	Preparation or preservation holding time was exceeded										

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.

^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.

\* Indicates that a Quality Control parameter was not within specifications.

For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

# **Instrument QC Data Summary**

# INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 19-FEB-2010 11:09

**GEL Laboratories LLC**

**Contract: LANL01004**

**SDG #: 10-1621**

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
<b>ICV</b>	<b>11-FEB-2010 09:59:47</b>	<b>OM_2-11-2010_09-49-17</b>	<b>146</b>	<b>150</b>	<b>97.3</b>	<b>(90%-110%)</b>	<b>Yes</b>
CCV	11-FEB-2010 10:14:05	OM_2-11-2010_09-49-17	102	100	102	(90%-110%)	Yes
CCV	11-FEB-2010 10:26:31	OM_2-11-2010_09-49-17	103	100	103	(90%-110%)	Yes
CCV	11-FEB-2010 10:37:09	OM_2-11-2010_09-49-17	103	100	103	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
<b>ICB</b>	<b>11-FEB-2010 10:01:38</b>	<b>OM_2-11-2010_09-49-17</b>	<b>-1.07</b>	<b>10</b>	<b>Yes</b>
CCB	11-FEB-2010 10:15:55	OM_2-11-2010_09-49-17	-0.943	10	Yes
CCB	11-FEB-2010 10:28:21	OM_2-11-2010_09-49-17	-1.02	10	Yes
CCB	11-FEB-2010 10:38:59	OM_2-11-2010_09-49-17	-0.764	10	Yes



# Cyanide, Total

# Prep Logbook

## Cyanide Sample Distillation

**Batch ID:** 949509.0  
**Analyst:** Alan Stanley  
**Method:** SW846 9010B Prep EPA 335.4  
**Lab SOP:** GL-GC-E-067 REV# 13  
**Instrument:** Sartorius Balance B-001

Verified by:

Sample ID	Run Date	Matrix	Initial Volume (mL)	Final Volume (mL)	Prep Factor (mL/mL)	pH Check	Serial Number	Spike Amount	Spike Units
1202034323 MB	11-FEB-2010 08:38:00	Water	25	25	1	>12	URF1184831-02	.0125	mL
1202034330 LCS	11-FEB-2010 08:38:00	Water	25	25	1	>12	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV		
245934002	11-FEB-2010 08:38:00	Water	25	25	1	>12	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	.025	mL
1202034324 DUP (245934002)	11-FEB-2010 08:38:00	Water	25	25	1	>12	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV		
1202034326 MS (245934002)	11-FEB-2010 08:38:00	Water	25	25	1	>12	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	.025	mL
1202034328 MSD (245934002)	11-FEB-2010 08:38:00	Water	25	25	1	>12	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	.025	mL
245934003	11-FEB-2010 08:38:00	Water	25	25	1	>12	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV		
246064001	11-FEB-2010 08:38:00	Surface Water	25	25	1	>12	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	.025	mL
1202034325 DUP (246064001)	11-FEB-2010 08:38:00	Surface Water	25	25	1	>12	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV		
1202034327 MS (246064001)	11-FEB-2010 08:38:00	Surface Water	25	25	1	>12	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	.025	mL
1202034329 MSD (246064001)	11-FEB-2010 08:38:00	Surface Water	25	25	1	>12	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV		
246064005	11-FEB-2010 08:38:00	Surface Water	25	25	1	>12	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	.025	mL
246064009	11-FEB-2010 08:38:00	Surface Water	25	25	1	>12	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV		
246225002	11-FEB-2010 08:38:00	Waste Water	25	25	1	>12	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	.025	mL
246264001	11-FEB-2010 08:38:00	Water	25	25	1	>12	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV		
246269001	11-FEB-2010 08:38:00	Water	25	25	1	>12	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	.025	mL
246278001	11-FEB-2010 08:38:00	Water	25	25	1	>12	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV		
246292001	11-FEB-2010 08:38:00	Water	25	25	1	>12	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	.025	mL
246292002	11-FEB-2010 08:38:00	Water	25	25	1	>12	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV		
246293001	11-FEB-2010 08:38:00	Water	25	25	1	>12	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	.025	mL

Analytical Logbook version 1 11-04-2002

GEL Laboratories LLC

Prep Logbook

Batch ID: 949509.0  
Analyst: Alan Stanley  
Method: SW846 9010B Prep EPA 335.4  
Lab SOP: GL-GC-E-067 REV# 13  
Instrument: Sartorius Balance B-001

Verified by:

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
LCS	1202034330	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1184831-02	.0125	mL
MS	1202034326	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1184831-02	.025	mL
MS	1202034327	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1184831-02	.025	mL
MSD	1202034328	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1184831-02	.025	mL
MSD	1202034329	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
246293003	11-FEB-2010 08:38:00	Water	25	25	1	>12
246306001	11-FEB-2010 08:38:00	Water	25	25	1	>12
246313001	11-FEB-2010 08:38:00	Water	25	25	1	>12
246323001	11-FEB-2010 08:38:00	Water	25	25	1	>12
246334001	11-FEB-2010 08:38:00	Water	25	25	1	>12
246436001	11-FEB-2010 08:38:00	Water	25	25	1	>12
246448001	11-FEB-2010 08:38:00	Water	25	25	1	>12
246472001	11-FEB-2010 08:38:00	Water	25	25	1	>12

Comments:

Reagent/Solvent Lot ID	Description	Amount
I00210-C	0.25N Sodium Hydroxide Solution	25 mL
1176724-C	0.8N H3NO3S	1.25 mL
1176778-C	51% MgCl2 Soln	1 mL
1238142-C	Bismuth Nitrate Solution	1.25 mL
1260189-C	50% H2SO4 CN Prep	2.5 mL
WCN100210-07	150 ppb CN Distilled ICV Standard	.0375 mL

This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
200 ppb		1	axc2	2/11/2010 9:52:37	OM_2-11-2010_09-49-17
150 ppb		1	axc2	2/11/2010 9:53:30	OM_2-11-2010_09-49-17
100 ppb		1	axc2	2/11/2010 9:54:22	OM_2-11-2010_09-49-17
50 ppb		1	axc2	2/11/2010 9:55:15	OM_2-11-2010_09-49-17
10 ppb		1	axc2	2/11/2010 9:56:08	OM_2-11-2010_09-49-17
CRDL 5.0 ppb		1	axc2	2/11/2010 9:57:02	OM_2-11-2010_09-49-17
ICAL-00		1	axc2	2/11/2010 9:57:56	OM_2-11-2010_09-49-17
ICV		1	axc2	2/11/2010 9:59:47	OM_2-11-2010_09-49-17
ICB		1	axc2	2/11/2010 10:01:38	OM_2-11-2010_09-49-17
		1	axc2	2/11/2010 10:03:27	OM_2-11-2010_09-49-17
1202034323	949511	1	axc2	2/11/2010 10:05:17	OM_2-11-2010_09-49-17
1202034330	949511	1	axc2	2/11/2010 10:06:10	OM_2-11-2010_09-49-17
245934002	949511	1	axc2	2/11/2010 10:07:04	OM_2-11-2010_09-49-17
1202034324	949511	1	axc2	2/11/2010 10:07:57	OM_2-11-2010_09-49-17
1202034326	949511	1	axc2	2/11/2010 10:08:50	OM_2-11-2010_09-49-17
1202034328	949511	1	axc2	2/11/2010 10:09:43	OM_2-11-2010_09-49-17
245934003	949511	1	axc2	2/11/2010 10:10:35	OM_2-11-2010_09-49-17
246064001	949511	1	axc2	2/11/2010 10:11:28	OM_2-11-2010_09-49-17
1202034325	949511	1	axc2	2/11/2010 10:12:20	OM_2-11-2010_09-49-17
1202034327	949511	1	axc2	2/11/2010 10:13:12	OM_2-11-2010_09-49-17
CCV		1	axc2	2/11/2010 10:14:05	OM_2-11-2010_09-49-17
CCB		1	axc2	2/11/2010 10:15:55	OM_2-11-2010_09-49-17
1202034329	949511	1	axc2	2/11/2010 10:17:43	OM_2-11-2010_09-49-17
246064005	949511	1	axc2	2/11/2010 10:18:36	OM_2-11-2010_09-49-17
246064009	949511	1	axc2	2/11/2010 10:19:27	OM_2-11-2010_09-49-17
246225002	949511	1	axc2	2/11/2010 10:20:19	OM_2-11-2010_09-49-17
246264001	949511	1	axc2	2/11/2010 10:21:11	OM_2-11-2010_09-49-17
246269001	949511	1	axc2	2/11/2010 10:22:05	OM_2-11-2010_09-49-17
246278001	949511	1	axc2	2/11/2010 10:22:58	OM_2-11-2010_09-49-17
246292001	949511	1	axc2	2/11/2010 10:23:52	OM_2-11-2010_09-49-17
246292002	949511	1	axc2	2/11/2010 10:24:45	OM_2-11-2010_09-49-17
246293001	949511	1	axc2	2/11/2010 10:25:38	OM_2-11-2010_09-49-17
CCV		1	axc2	2/11/2010 10:26:31	OM_2-11-2010_09-49-17
CCB		1	axc2	2/11/2010 10:28:21	OM_2-11-2010_09-49-17
246293003	949511	1	axc2	2/11/2010 10:30:10	OM_2-11-2010_09-49-17
246306001	949511	1	axc2	2/11/2010 10:31:03	OM_2-11-2010_09-49-17
246313001	949511	1	axc2	2/11/2010 10:31:55	OM_2-11-2010_09-49-17
246323001	949511	1	axc2	2/11/2010 10:32:47	OM_2-11-2010_09-49-17
246334001	949511	1	axc2	2/11/2010 10:33:40	OM_2-11-2010_09-49-17
246436001	949511	1	axc2	2/11/2010 10:34:33	OM_2-11-2010_09-49-17
246448001	949511	1	axc2	2/11/2010 10:35:25	OM_2-11-2010_09-49-17
246472001	949511	1	axc2	2/11/2010 10:36:17	OM_2-11-2010_09-49-17
CCV		1	axc2	2/11/2010 10:37:09	OM_2-11-2010_09-49-17
CCB		1	axc2	2/11/2010 10:38:59	OM_2-11-2010_09-49-17

Original Run Filename: OM\_2-11-2010\_09-49-17.OMN created 2/11/2010 09:49:17  
 Original Run Author's Signature: [axc2]  
 Current Run Filename: OM\_2-11-2010\_09-49-17.OMN last modified 2/11/2010 10:40:05  
 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		Detection Time	ADF	MDF	Description
			TCYANIDE Conc. (ug/L)	Area (Vs)				
WCN100211-01	1	S1	200	8.83	2/11/2010@09:52:37			200 ppb
WCN100211-02	1	S2	150	6.63	2/11/2010@09:53:30			150 ppb
WCN100211-03	1	S3	100	4.36	2/11/2010@09:54:22			100 ppb
WCN100211-04	1	S4	50.0	2.20	2/11/2010@09:55:15			50 ppb
WCN100211-05	1	S5	10.0	0.540	2/11/2010@09:56:08			10 ppb
WCN100211-06	1	S6	5.00	0.362	2/11/2010@09:57:02			CRDL 5.0 ppb
WCN100211-08	1	S7	0.00	0.0328	2/11/2010@09:57:56			0.0 ppb
DQM Test: Minimum Correlation Coefficient								
Result:			0.99988 > 0.99500					
Message			Pass					
Action			Continue					
WCN100211-07	1	S8	146	6.43	2/11/2010@09:59:47			ICV
Known Conc:			150					
DQM Test: > + Percent Relative Difference								
Result:			-2.8 < 10.0					
Message			ICV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			-2.8 < 10.0					
Message			ICV Passed					
Action			Continue					
Calibration:			Table/Fig. 1					
WCN100211-08	1	S7	-1.07	0.0209	2/11/2010@10:01:38			ICB/CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-1.07 < 5.01					
Message			ICB/CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-1.07 > -5.01					
Message			ICB/CCB Passed					
Action			Continue					
WCN100211-06	1	S6	6.35	0.345	2/11/2010@10:03:27			
Known Conc:			5.00					
DQM Test: > + Concentration Limit								
Result:			6.35 < 7.50					
Message			CRDL Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			6.35 > 2.50					
Message			Pass					
Action			None					
1202034323 949511 MB	1	1	-1.45	0.00419	2/11/2010@10:05:17			
1202034330 LCS	1	2	48.1	2.17	2/11/2010@10:06:10			
245934002	1	3	2.66	0.183	2/11/2010@10:07:04			
1202034324 DUP	1	4	4.23	0.252	2/11/2010@10:07:57			
1202034326 MS	1	5	105	4.65	2/11/2010@10:08:50			
1202034328 MSD	1	6	92.5	4.10	2/11/2010@10:09:43			
245934003	1	7	-0.642	0.0396	2/11/2010@10:10:35			
246064001	1	8	1.58	0.136	2/11/2010@10:11:28			
1202034325 DUP	1	9	2.13	0.161	2/11/2010@10:12:20			
1202034327 MS	1	10	104	4.59	2/11/2010@10:13:12			
WCN100211-03	1	S3	102	4.52	2/11/2010@10:14:05			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			2.1 < 10.0					

Message			CCV Passed				
Action			Continue				
DQM Test: < - Percent Relative Difference							
Result:			2.1 < 10.0				
Message			CCV Passed				
Action			Continue				
WCN100211-08	1	S7	-0.943	0.0264	2/11/2010@10:15:55		CCB
Known Conc:			0.00				
DQM Test: > + Concentration Limit							
Result:			-0.943 < 5.00				
Message			CCB Passed				
Action			Continue				
DQM Test: < - Concentration Limit							
Result:			-0.943 > -5.00				
Message			CCB Passed				
Action			Continue				
1202034329  MSD	1	11	104	4.62	2/11/2010@10:17:43		
246064005	1	12	2.07	0.158	2/11/2010@10:18:36		
246064009	1	13	0.264	0.0791	2/11/2010@10:19:27		
246225002	1	14	39.6	1.80	2/11/2010@10:20:19		
246264001	1	15	-0.705	0.0368	2/11/2010@10:21:11		
246269001	1	16	0.112	0.0725	2/11/2010@10:22:05		
246278001	1	17	-1.45	0.00411	2/11/2010@10:22:58		
246292001	1	18	-0.826	0.0315	2/11/2010@10:23:52		
246292002	1	19	-1.37	0.00769	2/11/2010@10:24:45		
246293001	1	20	0.188	0.0758	2/11/2010@10:25:38		
WCN100211-03	1	S3	103	4.55	2/11/2010@10:26:31		CCV
Known Conc:			100				
DQM Test: > + Percent Relative Difference							
Result:			2.6 < 10.0				
Message			CCV Passed				
Action			Continue				
DQM Test: < - Percent Relative Difference							
Result:			2.6 < 10.0				
Message			CCV Passed				
Action			Continue				
WCN100211-08	1	S7	-1.02	0.0233	2/11/2010@10:28:21		CCB
Known Conc:			0.00				
DQM Test: > + Concentration Limit							
Result:			-1.02 < 5.00				
Message			CCB Passed				
Action			Continue				
DQM Test: < - Concentration Limit							
Result:			-1.02 > -5.00				
Message			CCB Passed				
Action			Continue				
246293003	1	21	-0.359	0.0519	2/11/2010@10:30:10		
246306001	1	22	-0.770	0.0340	2/11/2010@10:31:03		
246313001	1	23	-1.08	0.0206	2/11/2010@10:31:55		
246323001	1	24	-0.601	0.0413	2/11/2010@10:32:47		
246334001	1	25	-2.72	-0.0512	2/11/2010@10:33:40		
246436001	1	26	-0.864	0.0299	2/11/2010@10:34:33		
246448001	1	27	-1.37	0.00777	2/11/2010@10:35:25		
246472001	1	28	-0.472	0.0470	2/11/2010@10:36:17		
WCN100211-03	1	S3	103	4.55	2/11/2010@10:37:09		CCV
Known Conc:			100				
DQM Test: > + Percent Relative Difference							
Result:			2.7 < 10.0				
Message			CCV Passed				
Action			Continue				
DQM Test: < - Percent Relative Difference							
Result:			2.7 < 10.0				
Message			CCV Passed				
Action			Continue				
WCN100211-08	1	S7	-0.764	0.0342	2/11/2010@10:38:59		CCB
Known Conc:			0.00				
DQM Test: > + Concentration Limit							
Result:			-0.764 < 5.00				

[illegible]

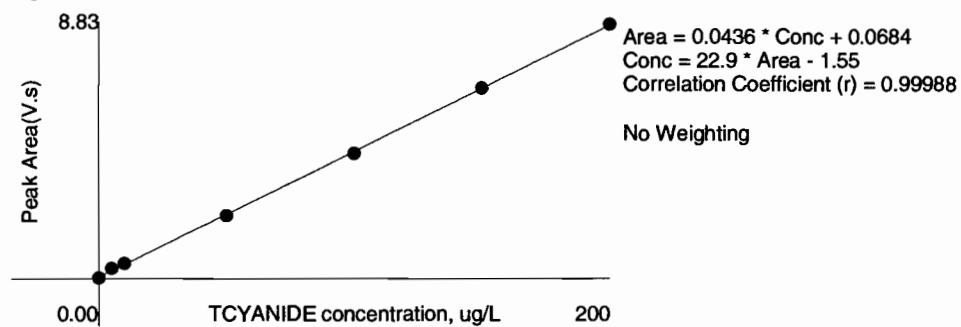
Property	Channel 1 TCYANIDE
Concentration Units	ug/L
Calibration Fit Type	First Order
Clear Calibration	True
Force Through Zero	False
Calibration Weighting	None
Auto Dilution Trigger	True
% of High Standard	100
Quik Chem Method	10-204-00-1-A
Chemistry	Direct/Bipolar
Calibration by Height	False
Inject to Peak Start	22
Peak Base Width	39

Chromatogram showing detector response (Volts) versus Time (s). The plot displays numerous peaks, many of which are labeled with sample identifiers and concentrations. The y-axis ranges from 1.09 to 1.86 Volts, and the x-axis ranges from 0.4 to 2995.9 seconds. Key peaks are labeled with sample IDs like WCN100211-01 through WCN100211-08 and concentrations such as 146 ug/L, 103 ug/L, and 104 ug/L. Some peaks are also labeled with 'MSD' or 'LCS'.

Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	8.83	0.563	-0.4	2/11/2010	09:53:41
2	150	1	6.63	0.424	-0.2	2/11/2010	09:54:33
3	100	1	4.36	0.279	1.6	2/11/2010	09:55:25
4	50.0	1	2.20	0.140	2.4	2/11/2010	09:56:18
5	10.0	1	0.540	0.0343	-7.1	2/11/2010	09:57:11
6	5.00	1	0.362	0.0225	-26.4	2/11/2010	09:58:05
7	0.00	1	0.0328	0.00101		2/11/2010	09:58:59

Figure 1: TCYANIDE





# **General Chemistry Analysis**

# Case Narrative

**General Chemistry Narrative  
Los Alamos National Laboratory (LANL)  
SDG 10-1621-1**

**Method/Analysis Information**

**Product:** pH

**Analytical Batch:** 950202 and 950208    **Method:** SW9045C pH

**Sample Analysis**

The following samples were analyzed using the analytical protocol as established in SW846 9045C/9045D:

<b>Sample ID</b>	<b>Client ID</b>
246437001	RE15-10-8354
246437002	RE15-10-8356
246437003	RE15-10-8353
246437004	RE15-10-8352
246437005	RE15-10-8355
246437006	RE15-10-8351
246437007	RE15-10-8350
246437008	RE15-10-8357
246437009	RE15-10-8338
246437010	RE15-10-8336
246437011	RE15-10-8339
246437012	RE15-10-8337
246437013	RE15-10-8375
246437014	RE15-10-8374
1202036070	246336001(RE15-10-8304) Sample Duplicate (DUP)
1202036071	246336002(RE15-10-8305) Sample Duplicate (DUP)
1202036072	Laboratory Control Sample (LCS)
1202036080	246437012(RE15-10-8337) Sample Duplicate (DUP)
1202036081	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-008 REV# 17.

**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 Electrode analysis was performed on a PerpHect pH Meter Orion 370.

**Initial Calibration**

All initial calibration requirements have been met for this SDG.

**Calibration Verification Information (CCV)**

All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

**Quality Control (QC) Information****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: 246336001 (RE15-10-8304), 246336002 (RE15-10-8305)- Batch 950202 and 246437012 (RE15-10-8337)- Batch 950208.

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

The RPD between the sample and its duplicate met the acceptance limits.

**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**

The following samples from this sample group were received by the lab outside of the method specified holding time: 1202036070 (RE15-10-8304), 1202036071 (RE15-10-8305), 246437001 (RE15-10-8354), 246437002 (RE15-10-8356), 246437003 (RE15-10-8353), 246437004 (RE15-10-8352), 246437005 (RE15-10-8355), 246437006 (RE15-10-8351), 246437007 (RE15-10-8350), 246437008 (RE15-10-8357), 246437009 (RE15-10-8338), 246437010 (RE15-10-8336), 246437011 (RE15-10-8339)- Batch 950202, 1202036080 (RE15-10-8337), 246437012 (RE15-10-8337), 246437013 (RE15-10-8375) and 246437014 (RE15-10-8374)- Batch 950208.

**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.

### **Method/Analysis Information**

**Product:** Cyanide, Total  
**Analytical Batch:** 950200      **Method:** SW9012A Cyanide and Total  
**Prep Batch :** 950199      **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>
246437001	RE15-10-8354
246437002	RE15-10-8356
246437003	RE15-10-8353
246437004	RE15-10-8352
246437005	RE15-10-8355
246437006	RE15-10-8351
246437007	RE15-10-8350
246437008	RE15-10-8357
246437009	RE15-10-8338
246437010	RE15-10-8336
246437011	RE15-10-8339
246437012	RE15-10-8337
246437013	RE15-10-8375
246437014	RE15-10-8374
1202036036	Method Blank (MB)
1202036037	246338001(RE46-10-11592) Sample Duplicate (DUP)
1202036038	246338002(RE46-10-11593) Sample Duplicate (DUP)
1202036039	246338001(RE46-10-11592) Matrix Spike (MS)
1202036040	246338002(RE46-10-11593) Matrix Spike (MS)
1202036041	246338001(RE46-10-11592) Matrix Spike Duplicate (MSD)
1202036042	246338002(RE46-10-11593) Matrix Spike Duplicate (MSD)
1202036043	Laboratory Control Sample (LCS)

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

### **SOP Reference**

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-095 REV# 12.

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

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

**Calibration Information**

The Flow Injection analysis was performed on a Lachat QuickChem FIA+ 8000 Series.

**Initial Calibration**

All initial calibration requirements have been met for this SDG.

**Continuing Calibration Blanks**

All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

**Calibration Verification Information (CCV)**

All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

**Y Intercept Rule**

The absolute value of the intercept is less than 3 times the MDL.

**Quality Control (QC) Information****Method Blank (MB) Statement**

The MB analyzed with this SDG met the acceptance criteria.

**Laboratory Control Sample (LCS) Recovery**

The LCS spike recovery met the acceptance limits.

**Quality Control (QC) Designation**

The following samples were selected for QC analysis: 246338001 (RE46-10-11592) and 246338002 (RE46-10-11593).

**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. 1202036038 (RE46-10-11593).

**Technical Information**

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

**Holding Times**

All samples in this SDG met the specified holding time.

**Sample Preservation/Integrity**

All the samples from this sample group met the preservation and integrity requirements of the method.

**Sample Dilutions**

The following sample in this sample group was diluted due to high concentration: 1202036043 (LCS).

**Sample Re-analysis**

The samples in this SDG did not require re-analysis.

**Miscellaneous Information****Data Exception (DER) Documentation**

A DER was not required for this SDG.

**Additional Comments**

Additional comments were not required for this SDG.

**Electronic Packaging Comment**

This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted: Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.



### Method/Analysis Information

**Product:** Ion Chromatography  
**Analytical Batch:** 955298 **Method:** EPA 300.0 Nitrate in Soil  
**Prep Batch :** 955296 **Method:** EPA 300.0 PREP

### Sample Analysis

The following samples were analyzed using the analytical protocol as established in EPA 300.0:

Sample ID	Client ID
246437001	RE15-10-8354
246437002	RE15-10-8356
246437003	RE15-10-8353
246437004	RE15-10-8352
246437005	RE15-10-8355
246437006	RE15-10-8351
246437007	RE15-10-8350
246437008	RE15-10-8357
246437009	RE15-10-8338
246437010	RE15-10-8336
246437011	RE15-10-8339
246437012	RE15-10-8337
246437013	RE15-10-8375
246437014	RE15-10-8374
1202048173	Method Blank (MB)
1202048174	246437001(RE15-10-8354) Sample Duplicate (DUP)
1202048175	246437014(RE15-10-8374) Sample Duplicate (DUP)
1202048176	246437001(RE15-10-8354) Matrix Spike (MS)
1202048177	246437014(RE15-10-8374) Matrix Spike (MS)
1202048178	246437001(RE15-10-8354) Matrix Spike Duplicate (MSD)
1202048179	246437014(RE15-10-8374) Matrix Spike Duplicate (MSD)
1202048180	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-086 REV# 17.

### **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 Ion Chromatography analysis was performed on a Dionex ICS-3000 Ion Chromatograph.

**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: 246437001 (RE15-10-8354) and 246437014 (RE15-10-8374).

**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 RPD between the sample and its duplicate met the acceptance limits.

**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 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.

**Manual Integrations**

Manual integrations were not required for the samples in 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: 05Mar10

# 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: 10-1621-1 GEL Work Order: 246437

**The Qualifiers in this report are defined as follows:**

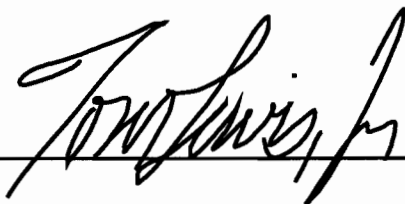
- \* Indicates that a quality control analyte recovery is outside of specified acceptance criteria.
- \*\* Indicates the analyte is a surrogate compound.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the detection limit.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by



# GEL LABORATORIES LLC

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

## Certificate of Analysis

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

Report Date: March 2, 2010

Client SDG: 10-1621-1

Client Sample ID: RE15-10-8354  
Sample ID: 246437001  
Matrix: R  
Collect Date: 02-FEB-10 12:00  
Receive Date: 06-FEB-10  
Collector: Client  
Moisture: 22%

Project: LANL01004  
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Electrode Analysis</b>											
<i>SW9045C pH "As Received"</i>											
pH at Temp 20.3C	H	6.81	0.010	0.100	SU	1	EXF1	02/08/10	1342	950202	1
<b>Flow Injection Analysis</b>											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	85.5	314	ug/kg	1	AXC2	02/16/10	1315	950200	2
<b>Ion Chromatography</b>											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N	U	ND	0.380	1.27	mg/kg	1	GXM	02/19/10	2029	955298	3

### The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 300.0 PREP	EPA 300.0 Total Anions in Soil	GXM3	02/19/10	1125	955296
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/15/10	1536	950199

### The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9045C/9045D	
2	SW846 9012A	
3	EPA 300.0	

# 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: March 2, 2010

Client SDG: 10-1621-1

Client Sample ID: RE15-10-8356  
Sample ID: 246437002  
Matrix: R  
Collect Date: 02-FEB-10 12:00  
Receive Date: 06-FEB-10  
Collector: Client  
Moisture: 14.7%

Project: LANL01004  
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Electrode Analysis</b>											
<i>SW9045C pH "As Received"</i>											
pH at Temp 20.3C	H	7.04	0.010	0.100	SU	1	EXF1	02/08/10	1344	950202	1
<b>Flow Injection Analysis</b>											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	79.7	293	ug/kg	1	AXC2	02/16/10	1316	950200	2
<b>Ion Chromatography</b>											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N	U	ND	0.347	1.16	mg/kg	1	GXM	02/19/10	2214	955298	3

### The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 300.0 PREP	EPA 300.0 Total Anions in Soil	GXM3	02/19/10	1125	955296
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/15/10	1536	950199

### The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9045C/9045D	
2	SW846 9012A	
3	EPA 300.0	



# 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: March 2, 2010

Client SDG: 10-1621-1

Client Sample ID: RE15-10-8353  
Sample ID: 246437003  
Matrix: R  
Collect Date: 02-FEB-10 12:00  
Receive Date: 06-FEB-10  
Collector: Client  
Moisture: 13%

Project: LANL01004  
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Electrode Analysis</b>											
<i>SW9045C pH "As Received"</i>											
pH at Temp 20.1C	H	6.76	0.010	0.100	SU	1	EXF1	02/08/10	1345	950202	1
<b>Flow Injection Analysis</b>											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	75.2	276	ug/kg	1	AXC2	02/16/10	1320	950200	2
<b>Ion Chromatography</b>											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N	U	ND	0.342	1.14	mg/kg	1	GXM	02/19/10	2240	955298	3

### The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 300.0 PREP	EPA 300.0 Total Anions in Soil	GXM3	02/19/10	1125	955296
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/15/10	1536	950199

### The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9045C/9045D	
2	SW846 9012A	
3	EPA 300.0	

# 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: March 2, 2010

Client SDG: 10-1621-1

Client Sample ID: RE15-10-8352  
Sample ID: 246437004  
Matrix: R  
Collect Date: 02-FEB-10 12:00  
Receive Date: 06-FEB-10  
Collector: Client  
Moisture: 23%

Project: LANL01004  
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Electrode Analysis</b>											
<i>SW9045C pH "As Received"</i>											
pH at Temp 20.3C	H	7.12	0.010	0.100	SU	1	EXF1	02/08/10	1349	950202	1
<b>Flow Injection Analysis</b>											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	78.9	290	ug/kg	1	AXC2	02/16/10	1321	950200	2
<b>Ion Chromatography</b>											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N	U	ND	0.385	1.28	mg/kg	1	GXM	02/19/10	2306	955298	3

### The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 300.0 PREP	EPA 300.0 Total Anions in Soil	GXM3	02/19/10	1125	955296
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/15/10	1536	950199

### The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9045C/9045D	
2	SW846 9012A	
3	EPA 300.0	

# 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: March 2, 2010

Client SDG: 10-1621-1

Client Sample ID: RE15-10-8355  
Sample ID: 246437005  
Matrix: R  
Collect Date: 02-FEB-10 12:00  
Receive Date: 06-FEB-10  
Collector: Client  
Moisture: 12.7%

Project: LANL01004  
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Electrode Analysis</b>											
<i>SW9045C pH "As Received"</i>											
pH at Temp 20.2C	H	7.21	0.010	0.100	SU	1	EXF1	02/08/10	1351	950202	1
<b>Flow Injection Analysis</b>											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	70.8	260	ug/kg	1	AXC2	02/16/10	1322	950200	2
<b>Ion Chromatography</b>											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N	U	ND	0.340	1.13	mg/kg	1	GXM	02/19/10	2332	955298	3

### The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 300.0 PREP	EPA 300.0 Total Anions in Soil	GXM3	02/19/10	1125	955296
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/15/10	1536	950199

### The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9045C/9045D	
2	SW846 9012A	
3	EPA 300.0	

# 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: March 2, 2010

Client SDG: 10-1621-1

Client Sample ID: RE15-10-8351  
Sample ID: 246437006  
Matrix: R  
Collect Date: 02-FEB-10 12:00  
Receive Date: 06-FEB-10  
Collector: Client  
Moisture: 15.1%

Project: LANL01004  
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Electrode Analysis</b>											
<i>SW9045C pH "As Received"</i>											
pH at Temp 20.5C	H	7.24	0.010	0.100	SU	1	EXF1	02/08/10	1353	950202	1
<b>Flow Injection Analysis</b>											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	77.0	283	ug/kg	1	AXC2	02/16/10	1323	950200	2
<b>Ion Chromatography</b>											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N	U	ND	0.347	1.16	mg/kg	1	GXM	02/20/10	0835	955298	3

### The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 300.0 PREP	EPA 300.0 Total Anions in Soil	GXM3	02/19/10	1125	955296
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/15/10	1536	950199

### The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9045C/9045D	
2	SW846 9012A	
3	EPA 300.0	

# 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: March 2, 2010

Client SDG: 10-1621-1

Client Sample ID: RE15-10-8350  
Sample ID: 246437007  
Matrix: R  
Collect Date: 02-FEB-10 12:00  
Receive Date: 06-FEB-10  
Collector: Client  
Moisture: 23.1%

Project: LANL01004  
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Electrode Analysis</b>											
<i>SW9045C pH "As Received"</i>											
pH at Temp 20.4C	H	7.25	0.010	0.100	SU	1	EXF1	02/08/10	1355	950202	1
<b>Flow Injection Analysis</b>											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	80.4	295	ug/kg	1	AXC2	02/16/10	1324	950200	2
<b>Ion Chromatography</b>											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N	U	ND	0.390	1.30	mg/kg	1	GXM	02/20/10	0901	955298	3

### The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 300.0 PREP	EPA 300.0 Total Anions in Soil	GXM3	02/19/10	1125	955296
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/15/10	1536	950199

### The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9045C/9045D	
2	SW846 9012A	
3	EPA 300.0	

# 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: March 2, 2010

Client SDG: 10-1621-1

Client Sample ID: RE15-10-8357  
Sample ID: 246437008  
Matrix: R  
Collect Date: 02-FEB-10 12:00  
Receive Date: 06-FEB-10  
Collector: Client  
Moisture: 5.95%

Project: LANL01004  
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Electrode Analysis</b>											
<i>SW9045C pH "As Received"</i>											
pH at Temp 20.2C	H	7.41	0.010	0.100	SU	1	EXF1	02/08/10	1357	950202	1
<b>Flow Injection Analysis</b>											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	69.5	256	ug/kg	1	AXC2	02/16/10	1325	950200	2
<b>Ion Chromatography</b>											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N	U	ND	0.312	1.04	mg/kg	1	GXM	02/20/10	0927	955298	3

### The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 300.0 PREP	EPA 300.0 Total Anions in Soil	GXM3	02/19/10	1125	955296
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/15/10	1536	950199

### The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9045C/9045D	
2	SW846 9012A	
3	EPA 300.0	

# 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: March 2, 2010

Client SDG: 10-1621-1

Client Sample ID: RE15-10-8338  
Sample ID: 246437009  
Matrix: R  
Collect Date: 02-FEB-10 12:00  
Receive Date: 06-FEB-10  
Collector: Client  
Moisture: 22.4%

Project: LANL01004  
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Electrode Analysis</b>											
<i>SW9045C pH "As Received"</i>											
pH at Temp 20.2C	H	6.60	0.010	0.100	SU	1	EXF1	02/08/10	1400	950202	1
<b>Flow Injection Analysis</b>											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	78.2	288	ug/kg	1	AXC2	02/16/10	1326	950200	2
<b>Ion Chromatography</b>											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N	U	ND	0.386	1.29	mg/kg	1	GXM	02/20/10	0953	955298	3

### The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 300.0 PREP	EPA 300.0 Total Anions in Soil	GXM3	02/19/10	1125	955296
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/15/10	1536	950199

### The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9045C/9045D	
2	SW846 9012A	
3	EPA 300.0	

# 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: March 2, 2010

Client SDG: 10-1621-1

Client Sample ID: RE15-10-8336  
Sample ID: 246437010  
Matrix: R  
Collect Date: 02-FEB-10 12:00  
Receive Date: 06-FEB-10  
Collector: Client  
Moisture: 17.6%

Project: LANL01004  
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Electrode Analysis</b>											
<i>SW9045C pH "As Received"</i>											
pH at Temp 20.2C	H	7.29	0.010	0.100	SU	1	EXF1	02/08/10	1403	950202	1
<b>Flow Injection Analysis</b>											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	77.8	286	ug/kg	1	AXC2	02/16/10	1327	950200	2
<b>Ion Chromatography</b>											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N	U	ND	0.358	1.19	mg/kg	1	GXM	02/20/10	1019	955298	3

### The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 300.0 PREP	EPA 300.0 Total Anions in Soil	GXM3	02/19/10	1125	955296
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/15/10	1536	950199

### The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9045C/9045D	
2	SW846 9012A	
3	EPA 300.0	



# 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: March 2, 2010

Client SDG: 10-1621-1

Client Sample ID: RE15-10-8339  
Sample ID: 246437011  
Matrix: R  
Collect Date: 02-FEB-10 12:00  
Receive Date: 06-FEB-10  
Collector: Client  
Moisture: 5.98%

Project: LANL01004  
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Electrode Analysis</b>											
<i>SW9045C pH "As Received"</i>											
pH at Temp 20.0C	H	6.88	0.010	0.100	SU	1	EXF1	02/08/10	1405	950202	1
<b>Flow Injection Analysis</b>											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	64.6	237	ug/kg	1	AXC2	02/16/10	1328	950200	2
<b>Ion Chromatography</b>											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N	U	ND	0.319	1.06	mg/kg	1	GXM	02/20/10	1045	955298	3

### The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 300.0 PREP	EPA 300.0 Total Anions in Soil	GXM3	02/19/10	1125	955296
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/15/10	1536	950199

### The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9045C/9045D	
2	SW846 9012A	
3	EPA 300.0	

# 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: March 2, 2010

Client SDG: 10-1621-1

Client Sample ID: RE15-10-8337  
Sample ID: 246437012  
Matrix: R  
Collect Date: 02-FEB-10 12:00  
Receive Date: 06-FEB-10  
Collector: Client  
Moisture: 11.4%

Project: LANL01004  
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Electrode Analysis</b>											
<i>SW9045C pH "As Received"</i>											
pH at Temp 20.3C	H	7.94	0.010	0.100	SU	1	EXF1	02/08/10	1131	950208	1
<b>Flow Injection Analysis</b>											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	68.5	252	ug/kg	1	AXC2	02/16/10	1328	950200	2
<b>Ion Chromatography</b>											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N		1.30	0.336	1.12	mg/kg	1	GXM	02/20/10	1111	955298	3

### The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 300.0 PREP	EPA 300.0 Total Anions in Soil	GXM3	02/19/10	1125	955296
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/15/10	1536	950199

### The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9045C/9045D	
2	SW846 9012A	
3	EPA 300.0	

# 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: March 2, 2010

Client SDG: 10-1621-1

Client Sample ID: RE15-10-8375  
Sample ID: 246437013  
Matrix: R  
Collect Date: 02-FEB-10 12:00  
Receive Date: 06-FEB-10  
Collector: Client  
Moisture: 19.7%

Project: LANL01004  
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Electrode Analysis</b>											
<i>SW9045C pH "As Received"</i>											
pH at Temp 20.4C	H	6.98	0.010	0.100	SU	1	EXF1	02/08/10	1141	950208	1
<b>Flow Injection Analysis</b>											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	78.4	288	ug/kg	1	AXC2	02/16/10	1333	950200	2
<b>Ion Chromatography</b>											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N	U	ND	0.369	1.23	mg/kg	1	GXM	02/20/10	1137	955298	3

### The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 300.0 PREP	EPA 300.0 Total Anions in Soil	GXM3	02/19/10	1125	955296
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/15/10	1536	950199

### The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9045C/9045D	
2	SW846 9012A	
3	EPA 300.0	

# 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: March 2, 2010

Client SDG: 10-1621-1

Client Sample ID: RE15-10-8374  
Sample ID: 246437014  
Matrix: R  
Collect Date: 02-FEB-10 12:00  
Receive Date: 06-FEB-10  
Collector: Client  
Moisture: 6.31%

Project: LANL01004  
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Electrode Analysis</b>											
<i>SW9045C pH "As Received"</i>											
pH at Temp 20.3C	H	7.05	0.010	0.100	SU	1	EXF1	02/08/10	1142	950208	1
<b>Flow Injection Analysis</b>											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	64.8	238	ug/kg	1	AXC2	02/16/10	1334	950200	2
<b>Ion Chromatography</b>											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N	U	ND	0.314	1.05	mg/kg	1	GXM	02/20/10	1255	955298	3

### The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 300.0 PREP	EPA 300.0 Total Anions in Soil	GXM3	02/19/10	1125	955296
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/15/10	1536	950199

### The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9045C/9045D	
2	SW846 9012A	
3	EPA 300.0	

# **Quality Control Summary**

# GEL LABORATORIES LLC

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

## QC Summary

Report Date: March 2, 2010

Page 1 of 3

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

Workorder: 246437

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Electrode Analysis</b>											
Batch	950202										
QC1202036070	246336001	DUP									
pH		H	6.47	H	6.52	SU	0.770	(0%-10%)	EXF1	02/08/10	13:21
QC1202036071	246336002	DUP									
pH		H	6.23	H	6.24	SU	0.160	(0%-10%)		02/08/10	13:24
QC1202036072	LCS										
pH	7.00				6.95	SU		99.3	(95%-105%)		02/08/10 13:17
Batch	950208										
QC1202036080	246437012	DUP									
pH		H	7.94	H	7.96	SU	0.252	(0%-10%)	EXF1	02/08/10	11:35
QC1202036081	LCS										
pH	7.00				6.94	SU		99.1	(95%-105%)		02/08/10 11:30
<b>Flow Injection Analysis</b>											
Batch	950200										
QC1202036037	246338001	DUP									
Cyanide, Total		U	ND	U	ND	ug/kg	N/A		AXC2	02/16/10	13:09
QC1202036038	246338002	DUP									
Cyanide, Total		U	ND	U	ND	ug/kg	N/A			02/16/10	13:12
QC1202036043	LCS										
Cyanide, Total	67900				76800	ug/kg		113	(32%-157%)		02/16/10 13:03
QC1202036036	MB										
Cyanide, Total				U	250	ug/kg				02/16/10	13:03
QC1202036039	246338001	MS									
Cyanide, Total	4740	U	ND		5170	ug/kg		109	(26%-158%)		02/16/10 13:10
QC1202036040	246338002	MS									
Cyanide, Total	5510	U	ND		5900	ug/kg		107	(26%-158%)		02/16/10 13:13
QC1202036041	246338001	MSD									
Cyanide, Total	5020	U	ND		5370	ug/kg	3.76	107	(0%-30%)		02/16/10 13:11
QC1202036042	246338002	MSD									
Cyanide, Total	5400	U	ND		5620	ug/kg	4.82	104	(0%-30%)		02/16/10 13:14
<b>Ion Chromatography</b>											
Batch	955298										
QC1202048174	246437001	DUP									
Nitrate-N		U	ND	U	ND	mg/kg	N/A		GXM3	02/19/10	20:55
QC1202048175	246437014	DUP									
Nitrate-N		U	ND	U	ND	mg/kg	N/A			02/20/10	13:22
QC1202048180	LCS										
Nitrate-N	50.0				45.8	mg/kg		91.6	(90%-110%)		02/19/10 20:03
QC1202048173	MB										
Nitrate-N				U	1.00	mg/kg				02/19/10	19:37
QC1202048176	246437001	MS									
Nitrate-N	64.1	U	ND		57.8	mg/kg		90.2	(90%-110%)		02/19/10 21:22
QC1202048177	246437014	MS									

# GEL LABORATORIES LLC

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

## QC Summary

Workorder: 246437

Page 2 of 3

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Ion Chromatography</b>											
Batch	955298										
Nitrate-N	53.2	U	ND	48.1	mg/kg		90.3	(90%-110%)		02/20/10	13:48
QC1202048178 246437001 MSD											
Nitrate-N	63.8	U	ND	57.4	mg/kg	0.736	90	(0%-20%)	GXM3	02/19/10	21:48
QC1202048179 246437014 MSD											
Nitrate-N	53.4	U	ND	49.2	mg/kg	2.21	92.1	(0%-20%)		02/20/10	14:14

### Notes:

RER is calculated at the 95% confidence level (2-sigma).

The Qualifiers in this report are defined as follows:

- \*\* Analyte is a surrogate compound
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product
- B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
- BD Results are either below the MDC or tracer recovery is low
- C Analyte has been confirmed by GC/MS analysis
- D Results are reported from a diluted aliquot of the sample
- E General Chemistry--Concentration of the target analyte exceeds the instrument calibration range
- E Metals--%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
- E Organics--Concentration of the target analyte exceeds the instrument calibration range
- F Estimated Value
- H Analytical holding time was exceeded
- J Value is estimated
- M M if above MDC and less than LLD
- M Matrix Related Failure
- N Organics--Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based 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.

## GEL LABORATORIES LLC

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

### QC Summary

Workorder: 246437

Page 3 of 3

Parmname	NOM	Sample Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
d	5-day BOD--The 2:1 depletion requirement was not met for this sample									
h	Preparation or preservation holding time was exceeded									

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.

^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.

\* Indicates that a Quality Control parameter was not within specifications.

For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.



# **Instrument QC Data Summary**

# INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 02-MAR-2010 18:27

**GEL Laboratories LLC**

**Contract: LANL01004**

**SDG #: 10-1621-1**

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
<b>ICV</b>	<b>16-FEB-2010 12:25:43</b>	<b>OM_2-16-2010_12-15-14</b>	<b>161</b>	<b>150</b>	<b>107</b>	<b>(90%-110%)</b>	<b>Yes</b>
CCV	16-FEB-2010 12:52:26	OM_2-16-2010_12-15-14	105	100	105	(90%-110%)	Yes
CCV	16-FEB-2010 13:04:50	OM_2-16-2010_12-15-14	105	100	105	(90%-110%)	Yes
CCV	16-FEB-2010 13:17:21	OM_2-16-2010_12-15-14	105	100	105	(90%-110%)	Yes
CCV	16-FEB-2010 13:29:49	OM_2-16-2010_12-15-14	105	100	105	(90%-110%)	Yes
CCV	16-FEB-2010 13:42:15	OM_2-16-2010_12-15-14	105	100	105	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
<b>ICB</b>	<b>16-FEB-2010 12:27:34</b>	<b>OM_2-16-2010_12-15-14</b>	<b>-1.46</b>	<b>10</b>	<b>Yes</b>
CCB	16-FEB-2010 12:54:16	OM_2-16-2010_12-15-14	-1.95	10	Yes
CCB	16-FEB-2010 13:06:40	OM_2-16-2010_12-15-14	-1.46	10	Yes
CCB	16-FEB-2010 13:19:11	OM_2-16-2010_12-15-14	-2.06	10	Yes
CCB	16-FEB-2010 13:31:39	OM_2-16-2010_12-15-14	-1.73	10	Yes
CCB	16-FEB-2010 13:44:05	OM_2-16-2010_12-15-14	-1.62	10	Yes

# INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 02-MAR-2010 18:27

**GEL Laboratories LLC**

**Contract: LANL01004**

**SDG #: 10-1621-1**

Ion Chromatography

Method: EPA 300.0

Concentration Units:mg/L

Instrument: Dionex ICS-3000 Ion Chromatograph

Parmname: Nitrate-N

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
<b>ICV</b>	<b>19-FEB-2010 09:11:00</b>	<b>100219</b>	<b>4.5346</b>	<b>5</b>	<b>90.7</b>	<b>(90%-110%)</b>	<b>Yes</b>
CCV	19-FEB-2010 18:45:00	100219	7.149	7.5	95.3	(90%-110%)	Yes
CCV	19-FEB-2010 23:58:00	100219	4.5889	5	91.8	(90%-110%)	Yes
CCV	20-FEB-2010 07:42:00	100219	4.6113	5	92.2	(90%-110%)	Yes
CCV	20-FEB-2010 12:03:00	100219	7.1532	7.5	95.4	(90%-110%)	Yes
CCV	20-FEB-2010 14:40:00	100219	4.6013	5	92	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
<b>ICB</b>	<b>19-FEB-2010 09:37:00</b>	<b>100219</b>	<b>0</b>	<b>0.1</b>	<b>Yes</b>
CCB	19-FEB-2010 19:11:00	100219	0	0.1	Yes
CCB	20-FEB-2010 00:24:00	100219	0	0.1	Yes
CCB	20-FEB-2010 08:08:00	100219	0	0.1	Yes
CCB	20-FEB-2010 12:29:00	100219	0	0.1	Yes
CCB	20-FEB-2010 15:06:00	100219	0	0.1	Yes

# Cyanide, Total

# Prep LogBook

Analyst: AXS5

Verified by: \_\_\_\_\_

Batch: 950199

Lab SOP: GL-GC-E-067 REV# 13

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1202036043	URF1200957-01	.25	g
MS	1202036039	URF1269274-02	.025	mL
MS	1202036040	URF1269274-02	.025	mL
MSD	1202036041	URF1269274-02	.025	mL
MSD	1202036042	URF1269274-02	.025	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1202036036		SW846 9010B Prep	15-FEB-2010 15:36	>12	0.5 g	25 mL	50	SOIL
LCS	1202036043		SW846 9010B Prep	15-FEB-2010 15:36	>12	0.25 g	25 mL	100	SOIL
SAMPLE	246338001		SW846 9010B Prep	15-FEB-2010 15:36	>12	0.51 g	25 mL	49.01961	SOIL
DUP	1202036037	246338001	SW846 9010B Prep	15-FEB-2010 15:36	>12	0.51 g	25 mL	49.01961	SOIL
MS	1202036039	246338001	SW846 9010B Prep	15-FEB-2010 15:36	>12	0.55 g	25 mL	45.45455	SOIL
MSD	1202036041	246338001	SW846 9010B Prep	15-FEB-2010 15:36	>12	0.52 g	25 mL	48.07692	SOIL
SAMPLE	246338002		SW846 9010B Prep	15-FEB-2010 15:36	>12	0.51 g	25 mL	49.01961	SOIL
DUP	1202036038	246338002	SW846 9010B Prep	15-FEB-2010 15:36	>12	0.54 g	25 mL	46.2963	SOIL
MS	1202036040	246338002	SW846 9010B Prep	15-FEB-2010 15:36	>12	0.5 g	25 mL	50	SOIL
MSD	1202036042	246338002	SW846 9010B Prep	15-FEB-2010 15:36	>12	0.51 g	25 mL	49.01961	SOIL
SAMPLE	246437001		SW846 9010B Prep	15-FEB-2010 15:36	>12	0.51 g	25 mL	49.01961	SOIL
SAMPLE	246437002		SW846 9010B Prep	15-FEB-2010 15:36	>12	0.5 g	25 mL	50	SOIL
SAMPLE	246437003		SW846 9010B Prep	15-FEB-2010 15:36	>12	0.52 g	25 mL	48.07692	SOIL
SAMPLE	246437004		SW846 9010B Prep	15-FEB-2010 15:36	>12	0.56 g	25 mL	44.64286	SOIL
SAMPLE	246437005		SW846 9010B Prep	15-FEB-2010 15:36	>12	0.55 g	25 mL	45.45455	SOIL
SAMPLE	246437006		SW846 9010B Prep	15-FEB-2010 15:36	>12	0.52 g	25 mL	48.07692	SOIL
SAMPLE	246437007		SW846 9010B Prep	15-FEB-2010 15:36	>12	0.55 g	25 mL	45.45455	SOIL
SAMPLE	246437008		SW846 9010B Prep	15-FEB-2010 15:36	>12	0.52 g	25 mL	48.07692	SOIL
SAMPLE	246437009		SW846 9010B Prep	15-FEB-2010 15:36	>12	0.56 g	25 mL	44.64286	SOIL
SAMPLE	246437010		SW846 9010B Prep	15-FEB-2010 15:36	>12	0.53 g	25 mL	47.16981	SOIL
SAMPLE	246437011		SW846 9010B Prep	15-FEB-2010 15:36	>12	0.56 g	25 mL	44.64286	SOIL
SAMPLE	246437012		SW846 9010B Prep	15-FEB-2010 15:36	>12	0.56 g	25 mL	44.64286	SOIL
SAMPLE	246437013		SW846 9010B Prep	15-FEB-2010 15:36	>12	0.54 g	25 mL	46.2963	SOIL
SAMPLE	246437014		SW846 9010B Prep	15-FEB-2010 15:36	>12	0.56 g	25 mL	44.64286	SOIL
SAMPLE	246443001		SW846 9010B Prep	15-FEB-2010 15:36	>12	0.57 g	25 mL	43.85965	SOIL
SAMPLE	246443002		SW846 9010B Prep	15-FEB-2010 15:36	>12	0.51 g	25 mL	49.01961	SOIL
SAMPLE	246443003		SW846 9010B Prep	15-FEB-2010 15:36	>12	0.55 g	25 mL	45.45455	SOIL
SAMPLE	246443004		SW846 9010B Prep	15-FEB-2010 15:36	>12	0.5 g	25 mL	50	SOIL

Prep LogBook

Comments:

Reagent/Solvent Lot ID	Amount	Description
100210-C	25 mL	0.25N Sodium Hydroxide Solution
WCN100215-07	.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	2/16/2010 12:18:34	OM_2-16-2010_12-15-14
150 ppb		1	axc2	2/16/2010 12:19:26	OM_2-16-2010_12-15-14
100 ppb		1	axc2	2/16/2010 12:20:19	OM_2-16-2010_12-15-14
50 ppb		1	axc2	2/16/2010 12:21:11	OM_2-16-2010_12-15-14
10 ppb		1	axc2	2/16/2010 12:22:05	OM_2-16-2010_12-15-14
CRDL 5.0 ppb		1	axc2	2/16/2010 12:22:59	OM_2-16-2010_12-15-14
ICAL-00		1	axc2	2/16/2010 12:23:53	OM_2-16-2010_12-15-14
ICV		1	axc2	2/16/2010 12:25:43	OM_2-16-2010_12-15-14
ICB		1	axc2	2/16/2010 12:27:34	OM_2-16-2010_12-15-14
		1	axc2	2/16/2010 12:29:23	OM_2-16-2010_12-15-14
1202040227	951948	1	axc2	2/16/2010 12:31:13	OM_2-16-2010_12-15-14
1202040234	951948	25	axc2	2/16/2010 12:32:06	OM_2-16-2010_12-15-14
246554005	951948	1	axc2	2/16/2010 12:32:59	OM_2-16-2010_12-15-14
1202040228	951948	1	axc2	2/16/2010 12:33:52	OM_2-16-2010_12-15-14
1202040230	951948	1	axc2	2/16/2010 12:34:45	OM_2-16-2010_12-15-14
1202040232	951948	1	axc2	2/16/2010 12:35:38	OM_2-16-2010_12-15-14
246554006	951948	1	axc2	2/16/2010 12:36:31	OM_2-16-2010_12-15-14
1202040229	951948	1	axc2	2/16/2010 12:37:24	OM_2-16-2010_12-15-14
1202040231	951948	1	axc2	2/16/2010 12:38:16	OM_2-16-2010_12-15-14
1202040233	951948	1	axc2	2/16/2010 12:39:08	OM_2-16-2010_12-15-14
CCV		1	axc2	2/16/2010 12:40:00	OM_2-16-2010_12-15-14
CCB		1	axc2	2/16/2010 12:41:51	OM_2-16-2010_12-15-14
246575003	951948	1	axc2	2/16/2010 12:43:40	OM_2-16-2010_12-15-14
246575004	951948	1	axc2	2/16/2010 12:44:31	OM_2-16-2010_12-15-14
246688002	951948	1	axc2	2/16/2010 12:45:23	OM_2-16-2010_12-15-14
246688008	951948	1	axc2	2/16/2010 12:46:14	OM_2-16-2010_12-15-14
246719001	951948	1	axc2	2/16/2010 12:47:06	OM_2-16-2010_12-15-14
246719002	951948	1	axc2	2/16/2010 12:48:00	OM_2-16-2010_12-15-14
246719003	951948	1	axc2	2/16/2010 12:48:53	OM_2-16-2010_12-15-14
246719004	951948	1	axc2	2/16/2010 12:49:47	OM_2-16-2010_12-15-14
246719005	951948	1	axc2	2/16/2010 12:50:40	OM_2-16-2010_12-15-14
246719006	951948	1	axc2	2/16/2010 12:51:33	OM_2-16-2010_12-15-14
CCV		1	axc2	2/16/2010 12:52:26	OM_2-16-2010_12-15-14
CCB		1	axc2	2/16/2010 12:54:16	OM_2-16-2010_12-15-14
246719007	951948	1	axc2	2/16/2010 12:56:06	OM_2-16-2010_12-15-14
246719008	951948	1	axc2	2/16/2010 12:56:59	OM_2-16-2010_12-15-14
246736001	951948	1	axc2	2/16/2010 12:57:52	OM_2-16-2010_12-15-14
246736002	951948	1	axc2	2/16/2010 12:58:45	OM_2-16-2010_12-15-14
246738001	951948	1	axc2	2/16/2010 12:59:37	OM_2-16-2010_12-15-14
246738002	951948	1	axc2	2/16/2010 13:00:29	OM_2-16-2010_12-15-14
246738003	951948	1	axc2	2/16/2010 13:01:21	OM_2-16-2010_12-15-14
246738004	951948	1	axc2	2/16/2010 13:02:13	OM_2-16-2010_12-15-14
1202036036	950200	1	axc2	2/16/2010 13:03:05	OM_2-16-2010_12-15-14
1202036043	950200	25	axc2	2/16/2010 13:03:57	OM_2-16-2010_12-15-14
CCV		1	axc2	2/16/2010 13:04:50	OM_2-16-2010_12-15-14
CCB		1	axc2	2/16/2010 13:06:40	OM_2-16-2010_12-15-14
246338001	950200	1	axc2	2/16/2010 13:08:30	OM_2-16-2010_12-15-14
1202036037	950200	1	axc2	2/16/2010 13:09:23	OM_2-16-2010_12-15-14
1202036039	950200	1	axc2	2/16/2010 13:10:17	OM_2-16-2010_12-15-14
1202036041	950200	1	axc2	2/16/2010 13:11:11	OM_2-16-2010_12-15-14
246338002	950200	1	axc2	2/16/2010 13:12:03	OM_2-16-2010_12-15-14
1202036038	950200	1	axc2	2/16/2010 13:12:57	OM_2-16-2010_12-15-14
1202036040	950200	1	axc2	2/16/2010 13:13:50	OM_2-16-2010_12-15-14
1202036042	950200	1	axc2	2/16/2010 13:14:43	OM_2-16-2010_12-15-14
246437001	950200	1	axc2	2/16/2010 13:15:35	OM_2-16-2010_12-15-14
246437002	950200	1	axc2	2/16/2010 13:16:28	OM_2-16-2010_12-15-14
CCV		1	axc2	2/16/2010 13:17:21	OM_2-16-2010_12-15-14
CCB		1	axc2	2/16/2010 13:19:11	OM_2-16-2010_12-15-14

246437003	950200	1	axc2	2/16/2010	13:20:59	OM_2-16-2010_12-15-14
246437004	950200	1	axc2	2/16/2010	13:21:52	OM_2-16-2010_12-15-14
246437005	950200	1	axc2	2/16/2010	13:22:44	OM_2-16-2010_12-15-14
246437006	950200	1	axc2	2/16/2010	13:23:36	OM_2-16-2010_12-15-14
246437007	950200	1	axc2	2/16/2010	13:24:28	OM_2-16-2010_12-15-14
246437008	950200	1	axc2	2/16/2010	13:25:22	OM_2-16-2010_12-15-14
246437009	950200	1	axc2	2/16/2010	13:26:16	OM_2-16-2010_12-15-14
246437010	950200	1	axc2	2/16/2010	13:27:10	OM_2-16-2010_12-15-14
246437011	950200	1	axc2	2/16/2010	13:28:04	OM_2-16-2010_12-15-14
246437012	950200	1	axc2	2/16/2010	13:28:58	OM_2-16-2010_12-15-14
CCV		1	axc2	2/16/2010	13:29:49	OM_2-16-2010_12-15-14
CCB		1	axc2	2/16/2010	13:31:39	OM_2-16-2010_12-15-14
246437013	950200	1	axc2	2/16/2010	13:33:29	OM_2-16-2010_12-15-14
246437014	950200	1	axc2	2/16/2010	13:34:22	OM_2-16-2010_12-15-14
246443001	950200	1	axc2	2/16/2010	13:35:15	OM_2-16-2010_12-15-14
246443002	950200	1	axc2	2/16/2010	13:36:09	OM_2-16-2010_12-15-14
246443003	950200	1	axc2	2/16/2010	13:37:01	OM_2-16-2010_12-15-14
246443004	950200	1	axc2	2/16/2010	13:37:53	OM_2-16-2010_12-15-14
1202034316	949506	1	axc2	2/16/2010	13:38:46	OM_2-16-2010_12-15-14
1202034318	949506	250	axc2	2/16/2010	13:39:38	OM_2-16-2010_12-15-14
246086001	949506	1	axc2	2/16/2010	13:40:31	OM_2-16-2010_12-15-14
1202034317	949506	1	axc2	2/16/2010	13:41:23	OM_2-16-2010_12-15-14
CCV		1	axc2	2/16/2010	13:42:15	OM_2-16-2010_12-15-14
CCB		1	axc2	2/16/2010	13:44:05	OM_2-16-2010_12-15-14



Original Run Filename: OM\_2-16-2010\_12-15-14.OMN created 2/16/2010 12:15:14  
 Original Run Author's Signature: [axc2]  
 Current Run Filename: OM\_2-16-2010\_12-15-14.OMN last modified 2/16/2010 13:45:12  
 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)				
WCN100216-01	1	S1	200	9.83	2/16/2010@12:18:34			200 ppb
WCN100216-02	1	S2	150	7.35	2/16/2010@12:19:26			150 ppb
WCN100216-03	1	S3	100	4.91	2/16/2010@12:20:19			100 ppb
WCN100216-04	1	S4	50.0	2.60	2/16/2010@12:21:11			50 ppb
WCN100216-05	1	S5	10.0	0.637	2/16/2010@12:22:05			10 ppb
WCN100216-06	1	S6	5.00	0.369	2/16/2010@12:22:59			CRDL 5.0 ppb
WCN100216-08	1	S7	0.00	0.0164	2/16/2010@12:23:53			0.0 ppb
DQM Test: Minimum Correlation Coefficient								
Result:			0.99989 > 0.99500					
Message			Pass					
Action			Continue					
WCN100216-07	1	S8	161	7.92	2/16/2010@12:25:43			ICV
Known Conc:			150					
DQM Test: > + Percent Relative Difference								
Result:			7.4 < 10.0					
Message			ICV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			7.4 < 10.0					
Message			ICV Passed					
Action			Continue					
Calibration:			Table/Fig. 1					
WCN100216-08	1	S7	-1.46	0.0326	2/16/2010@12:27:34			ICB/CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-1.46 < 5.01					
Message			ICB/CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-1.46 > -5.01					
Message			ICB/CCB Passed					
Action			Continue					
WCN100216-06	1	S6	5.56	0.373	2/16/2010@12:29:23			
Known Conc:			5.00					
DQM Test: > + Concentration Limit								
Result:			5.56 < 7.50					
Message			CRDL Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			5.56 > 2.50					
Message			Pass					
Action			None					
1202040227 951948 MB	1	1	-1.54	0.0290	2/16/2010@12:31:13			
1202040234 LCS	1	2	26.2	1.38	2/16/2010@12:32:06		25.00	
246554005	1	3	-1.08	0.0513	2/16/2010@12:32:59			
1202040228 DUP	1	4	-1.63	0.0243	2/16/2010@12:33:52			
1202040230 MS	1	5	108	5.35	2/16/2010@12:34:45			
1202040232 MSD	1	6	102	5.06	2/16/2010@12:35:38			
246554006	1	7	-1.16	0.0471	2/16/2010@12:36:31			
1202040229 DUP	1	8	-1.45	0.0333	2/16/2010@12:37:24			
1202040231 MS	1	9	112	5.54	2/16/2010@12:38:16			
1202040233 MSD	1	10	112	5.54	2/16/2010@12:39:08			
WCN100216-03	1	S3	109	5.38	2/16/2010@12:40:00			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			8.9 < 10.0					

			Message	CCV Passed					
			Action	Continue					
			DQM Test: < - Percent Relative Difference						
			Result:	8.9 < 10.0					
			Message	CCV Passed					
			Action	Continue					
WCN100216-08	1	S7		-2.13	2.62e-4	2/16/2010@12:41:51			CCB
			Known Conc:	0.00					
			DQM Test: > + Concentration Limit						
			Result:	-2.13 < 5.00					
			Message	CCB Passed					
			Action	Continue					
			DQM Test: < - Concentration Limit						
			Result:	-2.13 > -5.00					
			Message	CCB Passed					
			Action	Continue					
246575003	1	11		-0.699	0.0696	2/16/2010@12:43:40			
246575004	1	12		-1.59	0.0264	2/16/2010@12:44:31			
246688002	1	13		-1.31	0.0399	2/16/2010@12:45:23			
246688008	1	14		-2.08	0.00243	2/16/2010@12:46:14			
246719001	1	15		-1.59	0.0264	2/16/2010@12:47:06			
246719002	1	16		-1.69	0.0215	2/16/2010@12:48:00			
246719003	1	17		-2.02	0.00544	2/16/2010@12:48:53			
246719004	1	18		-1.70	0.0209	2/16/2010@12:49:47			
246719005	1	19		-1.72	0.0203	2/16/2010@12:50:40			
246719006	1	20		-2.13	1.55e-4	2/16/2010@12:51:33			
WCN100216-03	1	S3		105	5.18	2/16/2010@12:52:26			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					
WCN100216-08	1	S7		-1.95	0.00902	2/16/2010@12:54:16			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					
246719007	1	21		-1.60	0.0260	2/16/2010@12:56:06			
246719008	1	22		-1.73	0.0195	2/16/2010@12:56:59			
246736001	1	23		10.9	0.631	2/16/2010@12:57:52			
246736002	1	24		4.59	0.326	2/16/2010@12:58:45			
246738001	1	25		0.262	0.116	2/16/2010@12:59:37			
246738002	1	26		0.241	0.115	2/16/2010@13:00:29			
246738003	1	27		0.0963	0.108	2/16/2010@13:01:21			
246738004	1	28		1.55	0.179	2/16/2010@13:02:13			
1202036036 950200 MB	1	29		-2.13	1.91e-4	2/16/2010@13:03:05			
1202036043 LCS	1	30		30.7	1.59	2/16/2010@13:03:57		25.00	
WCN100216-03	1	S3		105	5.21	2/16/2010@13:04:50			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					
WCN100216-08	1	S7		-1.46	0.0329	2/16/2010@13:06:40			CCB
			Known Conc:	0.00					

DQM Test: > + Concentration Limit						
Result:		-1.46 < 5.00				
Message		CCB Passed				
Action		Continue				
DQM Test: < - Concentration Limit						
Result:		-1.46 > -5.00				
Message		CCB Passed				
Action		Continue				
246338001	1	31	-2.34	-0.00999	2/16/2010@13:08:30	
1202036037	DUP	1	32	-2.09	0.00198	2/16/2010@13:09:23
1202036039	MS	1	33	109	5.38	2/16/2010@13:10:17
1202036041	MSD	1	34	107	5.27	2/16/2010@13:11:11
246338002		1	35	-0.243	0.0918	2/16/2010@13:12:03
1202036038	DUP	1	36	-2.13	2.67e-4	2/16/2010@13:12:57
1202036040	MS	1	37	107	5.29	2/16/2010@13:13:50
1202036042	MSD	1	38	104	5.16	2/16/2010@13:14:43
246437001		1	39	-0.864	0.0616	2/16/2010@13:15:35
246437002		1	40	-1.07	0.0516	2/16/2010@13:16:28
WCN100216-03		1	S3	105	5.18	2/16/2010@13:17:21
Known Conc:		100				CCV
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				
WCN100216-08	1	S7	-2.06	0.00359	2/16/2010@13:19:11	CCB
Known Conc:		0.00				
DQM Test: > + Concentration Limit						
Result:		-2.06 < 5.00				
Message		CCB Passed				
Action		Continue				
DQM Test: < - Concentration Limit						
Result:		-2.06 > -5.00				
Message		CCB Passed				
Action		Continue				
246437003	1	41	-1.25	0.0427	2/16/2010@13:20:59	
246437004	1	42	-1.62	0.0250	2/16/2010@13:21:52	
246437005	1	43	-0.818	0.0638	2/16/2010@13:22:44	
246437006	1	44	-1.64	0.0239	2/16/2010@13:23:36	
246437007	1	45	-1.23	0.0439	2/16/2010@13:24:28	
246437008	1	46	-1.14	0.0483	2/16/2010@13:25:22	
246437009	1	47	-1.40	0.0359	2/16/2010@13:26:16	
246437010	1	48	-1.59	0.0265	2/16/2010@13:27:10	
246437011	1	49	-1.44	0.0338	2/16/2010@13:28:04	
246437012	1	50	-1.60	0.0258	2/16/2010@13:28:58	
WCN100216-03	1	S3	105	5.20	2/16/2010@13:29:49	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				
WCN100216-08	1	S7	-1.73	0.0198	2/16/2010@13:31:39	CCB
Known Conc:		0.00				
DQM Test: > + Concentration Limit						
Result:		-1.73 < 5.00				
Message		CCB Passed				
Action		Continue				
DQM Test: < - Concentration Limit						
Result:		-1.73 > -5.00				
Message		CCB Passed				
Action		Continue				

246437013	1	51	-0.931	0.0584	2/16/2010@13:33:29			
246437014	1	52	-2.13	0.00	2/16/2010@13:34:22			
246443001	1	53	0.408	0.123	2/16/2010@13:35:15			
246443002	1	54	-1.89	0.0120	2/16/2010@13:36:09			
246443003	1	55	-1.47	0.0320	2/16/2010@13:37:01			
246443004	1	56	-1.18	0.0462	2/16/2010@13:37:53			
1202034316 949506 MB	1	57	-0.669	0.0711	2/16/2010@13:38:46			
1202034318  LCS	1	58	150	7.38	2/16/2010@13:39:38	250.00		
246086001	1	59	-1.22	0.0444	2/16/2010@13:40:31			
1202034317  DUP	1	60	-1.98	0.00761	2/16/2010@13:41:23			
WCN100216-03	1	S3	105	5.19	2/16/2010@13:42:15			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					
WCN100216-08	1	S7	-1.62	0.0250	2/16/2010@13:44:05			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-1.62 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-1.62 > -5.00					
Message			CCB Passed					
Action			Continue					

Analyte Properties Table for OM\_2-16-2010\_12-15-14.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

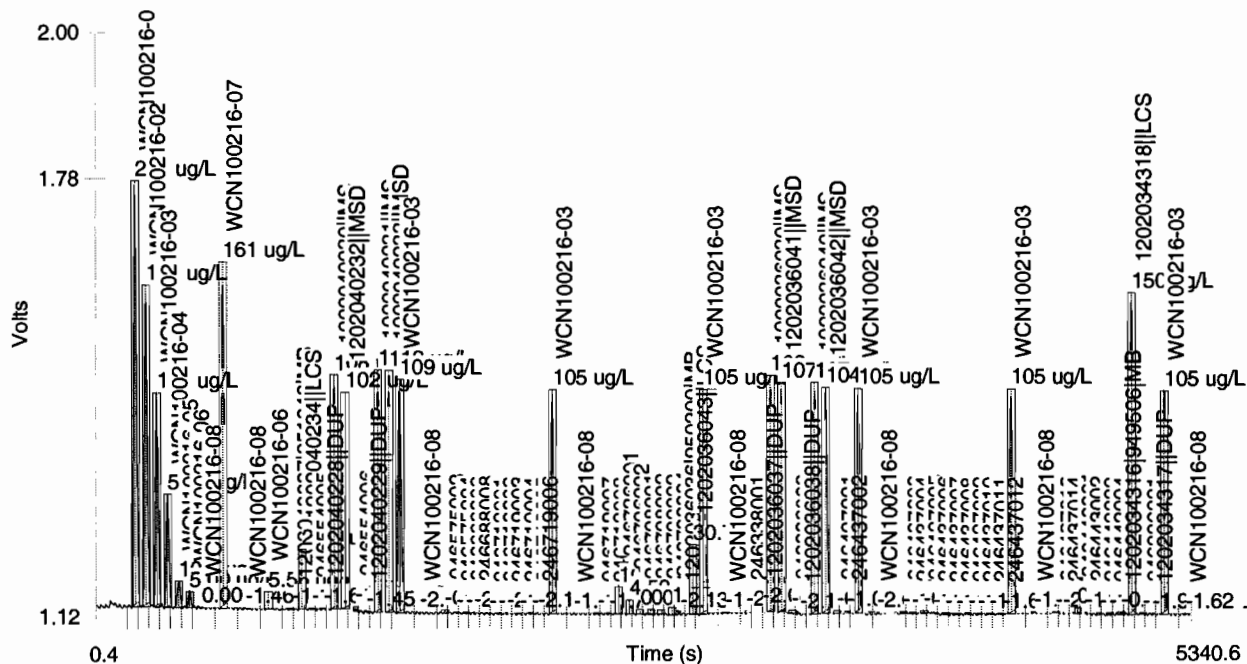
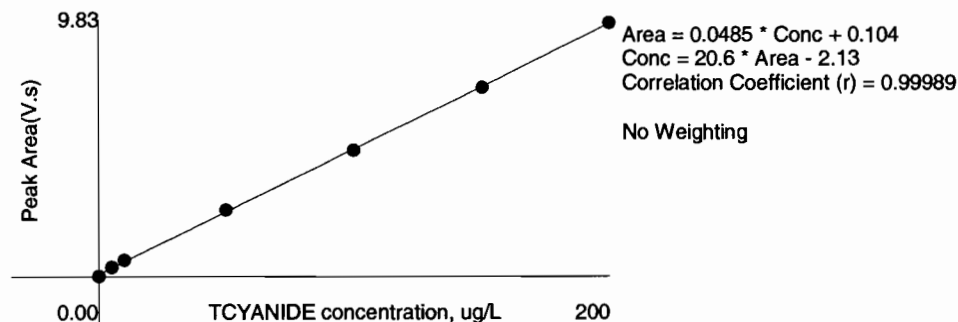


Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	9.83	0.635	-0.3	2/16/2010	12:19:37
2	150	1	7.35	0.478	0.4	2/16/2010	12:20:29
3	100	1	4.91	0.319	0.9	2/16/2010	12:21:21
4	50.0	1	2.60	0.168	-2.7	2/16/2010	12:22:14
5	10.0	1	0.637	0.0389	-8.1	2/16/2010	12:23:08
6	5.00	1	0.369	0.0232	-6.4	2/16/2010	12:24:02
7	0.00	1	0.0164	0.00106		2/16/2010	12:24:56

Figure 1: TCYANIDE



# **Ion Chromatography**

# Prep LogBook

Analyst: GXM3  
 Batch: 955296  
 Lab SOP: GL-GC-E-086 REV# 17

Verified by: \_\_\_\_\_

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1202048180	UIC100123SPK-1	.8	mL
MS	1202048176	UIC100123SPK-1	.8	mL
MS	1202048177	UIC100123SPK-1	.8	mL
MSD	1202048178	UIC100123SPK-1	.8	mL
MSD	1202048179	UIC100123SPK-1	.8	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1202048173		EPA 300.0 PREP	19-FEB-2010 11:25	4 g	40 mL	10	SOIL
LCS	1202048180		EPA 300.0 PREP	19-FEB-2010 11:25	4 g	40 mL	10	SOIL
SAMPLE	246437001		EPA 300.0 PREP	19-FEB-2010 11:25	4.05 g	40 mL	9.87654	SOIL
DUP	1202048174	246437001	EPA 300.0 PREP	19-FEB-2010 11:25	4.06 g	40 mL	9.85222	SOIL
MS	1202048176	246437001	EPA 300.0 PREP	19-FEB-2010 11:25	4 g	40 mL	10	SOIL
MSD	1202048178	246437001	EPA 300.0 PREP	19-FEB-2010 11:25	4.02 g	40 mL	9.95025	SOIL
SAMPLE	246437002		EPA 300.0 PREP	19-FEB-2010 11:25	4.05 g	40 mL	9.87654	SOIL
SAMPLE	246437003		EPA 300.0 PREP	19-FEB-2010 11:25	4.03 g	40 mL	9.92556	SOIL
SAMPLE	246437004		EPA 300.0 PREP	19-FEB-2010 11:25	4.05 g	40 mL	9.87654	SOIL
SAMPLE	246437005		EPA 300.0 PREP	19-FEB-2010 11:25	4.04 g	40 mL	9.90099	SOIL
SAMPLE	246437006		EPA 300.0 PREP	19-FEB-2010 11:25	4.07 g	40 mL	9.82801	SOIL
SAMPLE	246437007		EPA 300.0 PREP	19-FEB-2010 11:25	4 g	40 mL	10	SOIL
SAMPLE	246437008		EPA 300.0 PREP	19-FEB-2010 11:25	4.09 g	40 mL	9.77995	SOIL
SAMPLE	246437009		EPA 300.0 PREP	19-FEB-2010 11:25	4 g	40 mL	10	SOIL
SAMPLE	246437010		EPA 300.0 PREP	19-FEB-2010 11:25	4.07 g	40 mL	9.82801	SOIL
SAMPLE	246437011		EPA 300.0 PREP	19-FEB-2010 11:25	4 g	40 mL	10	SOIL
SAMPLE	246437012		EPA 300.0 PREP	19-FEB-2010 11:25	4.03 g	40 mL	9.92556	SOIL
SAMPLE	246437013		EPA 300.0 PREP	19-FEB-2010 11:25	4.05 g	40 mL	9.87654	SOIL
SAMPLE	246437014		EPA 300.0 PREP	19-FEB-2010 11:25	4.08 g	40 mL	9.80392	SOIL
DUP	1202048175	246437014	EPA 300.0 PREP	19-FEB-2010 11:25	4.07 g	40 mL	9.82801	SOIL
MS	1202048177	246437014	EPA 300.0 PREP	19-FEB-2010 11:25	4.01 g	40 mL	9.97506	SOIL
MSD	1202048179	246437014	EPA 300.0 PREP	19-FEB-2010 11:25	4 g	40 mL	10	SOIL

Comments

This is runlog for Sequence 100301.seq for IC5

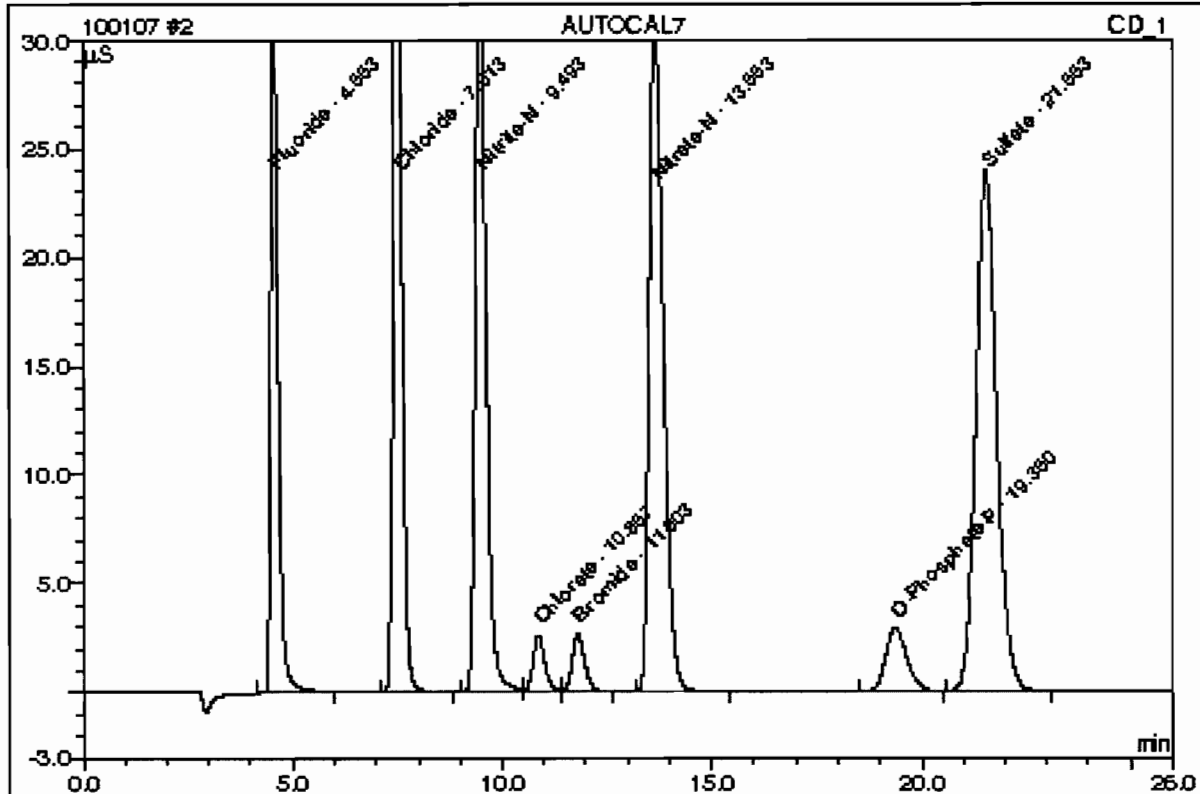
Sample ID	Run Time	Batch	Dilution	Dataset	Analyst
ICAL-07	01/07/10 12:11		1	100301	MAR1
ICAL-06	01/07/10 12:37		1	100301	MAR1
ICAL-05	01/07/10 13:03		1	100301	MAR1
ICAL-04	01/07/10 13:29		1	100301	MAR1
ICAL-03	01/07/10 13:55		1	100301	MAR1
ICAL-02	01/07/10 14:21		1	100301	MAR1
ICAL-01	01/07/10 14:47		1	100301	MAR1



**2 AUTOCAL7**

Sample Name: AUTOCAL7  
 Vial Number: 53  
 Sample Type: standard  
 Control Program: AS23  
 Quantif. Method: 010710an  
 Recording Time: 1/7/2010 12:11  
 Run Time (min): 26.00

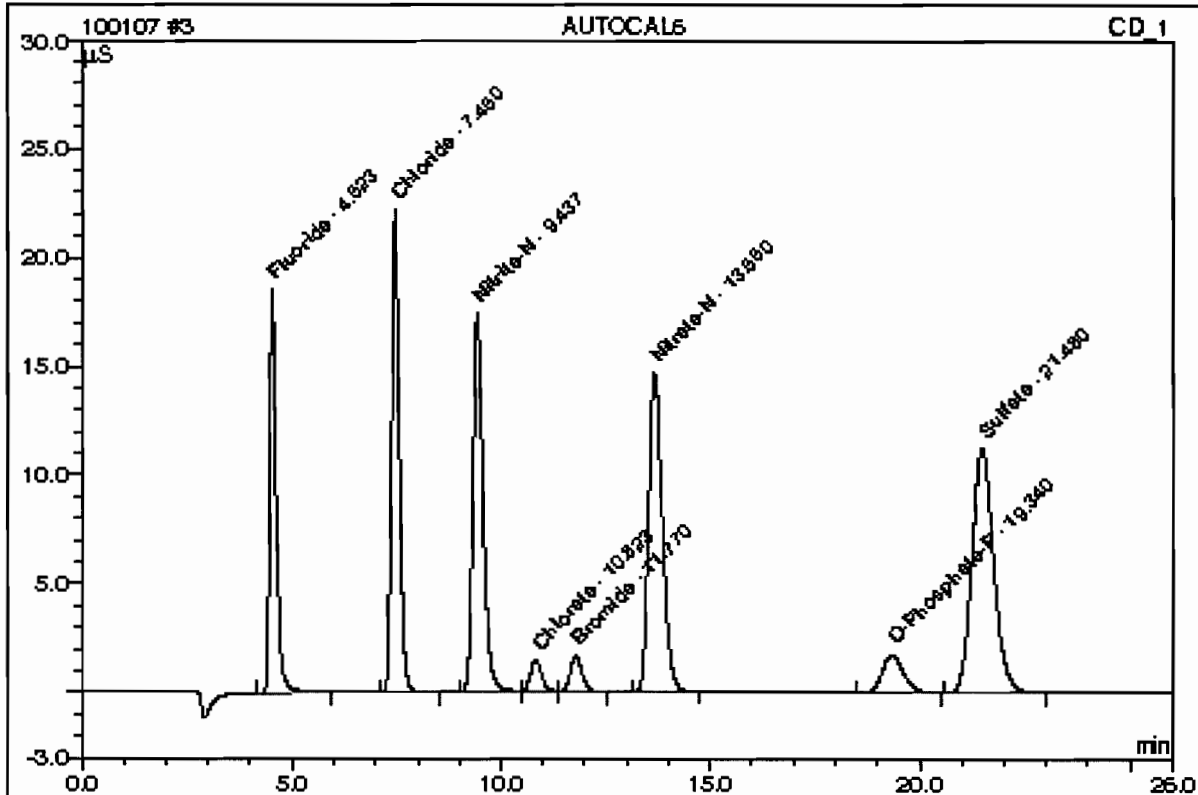
Injection Volume: 50.0  
 Channel: CD\_1  
 Dilution Factor: 1.0000  
 Sample Weight: 1.0000  
 Sample Amount: 1.0000  
 Analyst: MAR1  
 Column: AS23-002588;GLGCE086;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
1	4.56	Fluoride	10.0000	10.0075		6.88790	12.27
2	7.51	Chloride	20.0000	20.0306		10.19791	18.17
3	9.49	Nitrite-N	10.0000	10.0066		9.94253	17.71
4	10.86	Chlorate	5.0000	5.0308		0.84412	1.50
5	11.80	Bromide	5.0000	4.9892		0.88842	1.58
6	13.66	Nitrate-N	10.0000	10.0122		11.85102	21.11
7	19.36	O-Phosphate-P	5.0000	4.9839		1.70262	3.03
8	21.55	Sulfate	40.0000	40.0367		13.81159	24.61
Total:				105.0974	0.000	56.128	100.00

**3 AUTOCAL6**

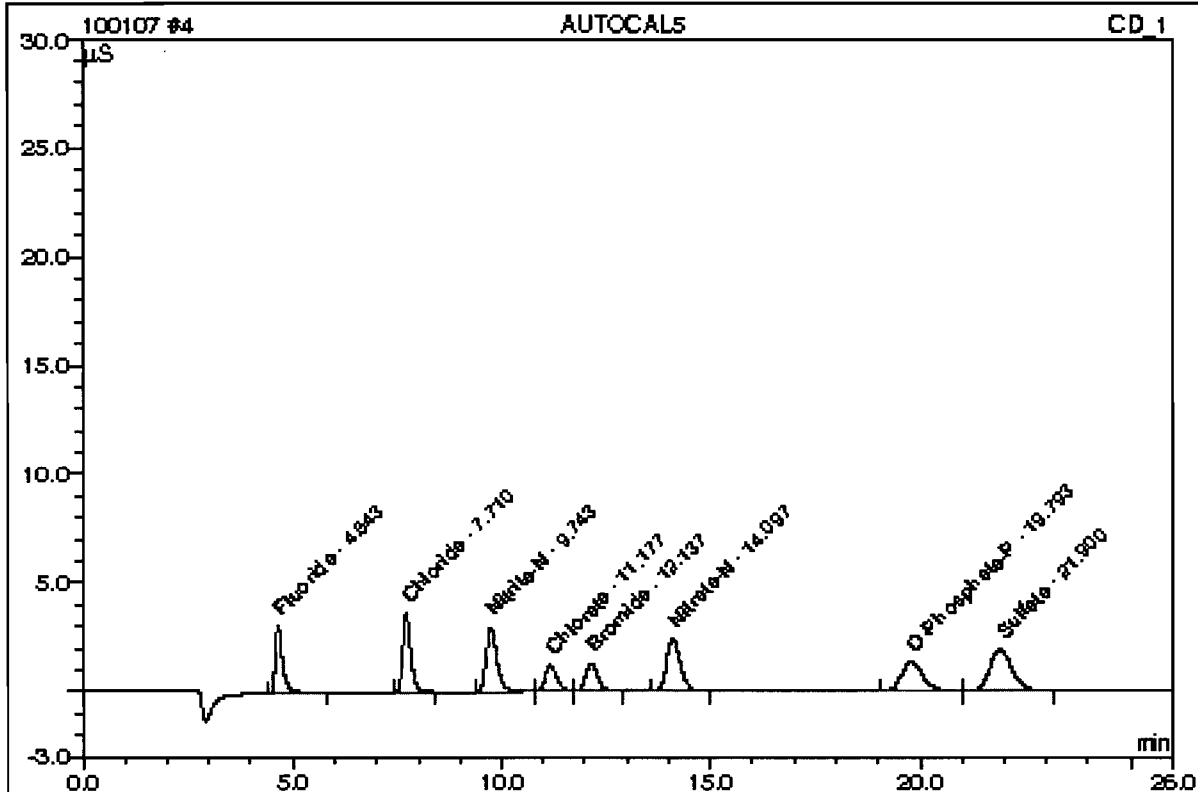
Sample Name:	AUTOCAL6	Injection Volume:	50.0
Vial Number:	54	Channel:	CD_1
Sample Type:	standard	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	010710an	Sample Amount:	1.0000
Recording Time:	1/7/2010 12:37	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.52	Fluoride	5.0000	4.9368		3.40433	12.43
2	7.46	Chloride	10.0000	9.5089		4.75068	17.34
3	9.44	Nitrite-N	5.0000	4.9800		4.92907	17.99
4	10.82	Chlorate	3.0000	2.9496		0.49135	1.79
5	11.77	Bromide	3.0000	3.0803		0.55111	2.01
6	13.66	Nitrate-N	5.0000	4.8040		5.59683	20.43
7	19.34	O-Phosphate-P	3.0000	3.0605		1.03825	3.79
8	21.48	Sulfate	20.0000	19.4326		6.63459	24.22
Total:				52.7527	0.000	27.396	100.00

**4 AUTOCAL5**

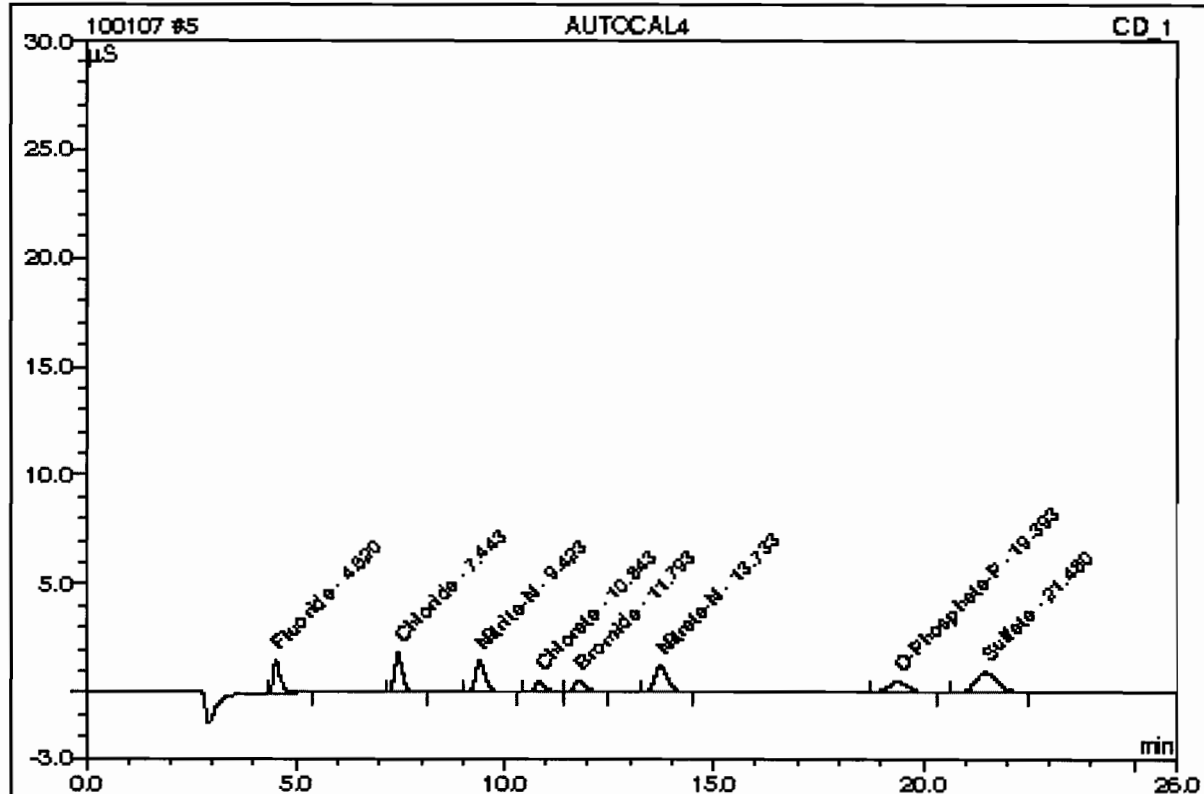
Sample Name:	AUTOCAL5	Injection Volume:	50.0
Vial Number:	55	Channel:	CD_1
Sample Type:	standard	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	010710an	Sample Amount:	1.0000
Recording Time:	1/7/2010 13:03	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area $\mu\text{S} \cdot \text{min}$	Rel. Area %
1	4.64	Fluoride	1.0000	0.9154		0.64332	10.50
2	7.71	Chloride	2.0000	1.8128		0.83397	13.62
3	9.74	Nitrite-N	1.0000	0.9201		0.87392	14.27
4	11.18	Chlorate	2.5000	2.3761		0.39167	6.39
5	12.14	Bromide	2.5000	2.4494		0.43690	7.13
6	14.10	Nitrate-N	1.0000	0.8948		0.95658	15.62
7	19.79	O-Phosphate-P	2.5000	2.4211		0.81248	13.26
8	21.90	Sulfate	4.0000	3.6452		1.17625	19.20
Total:				15.4369	0.000	6.125	100.00

**5 AUTOCAL4**

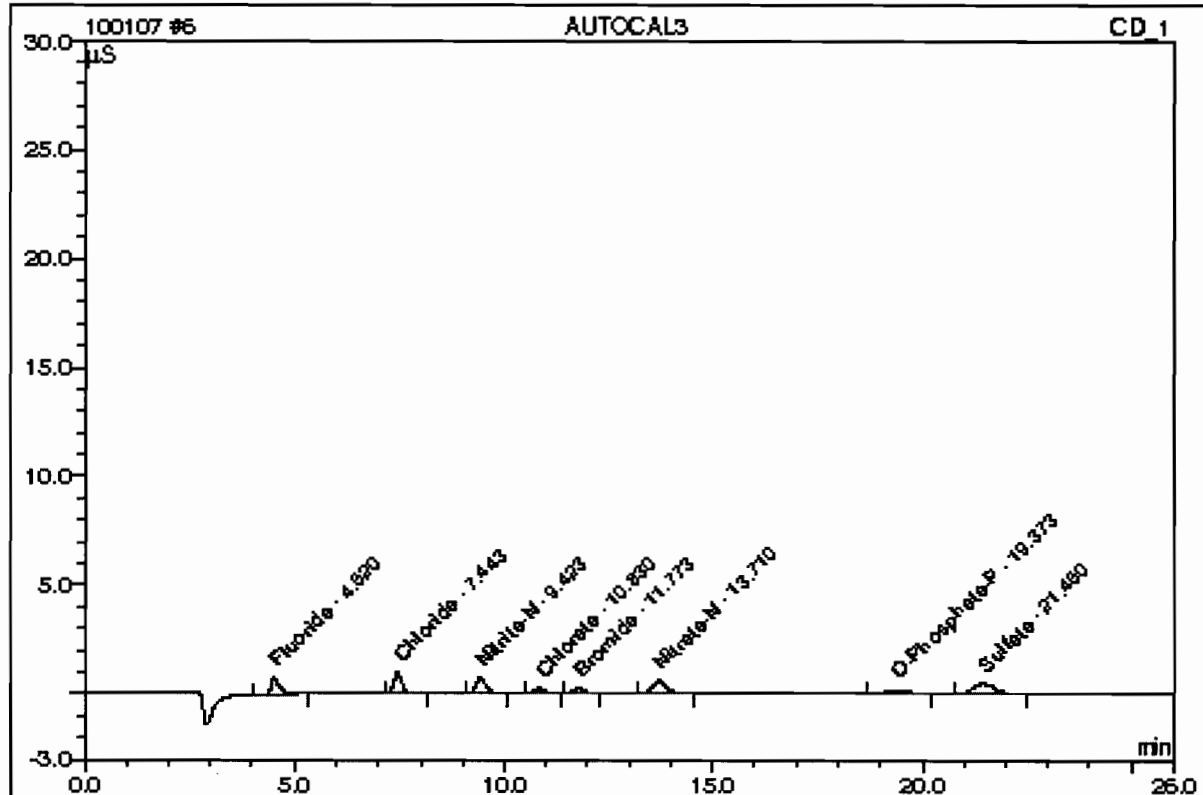
Sample Name:	AUTOCAL4	Injection Volume:	50.0
Vial Number:	55	Channel:	CD_1
Sample Type:	standard	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	010710an	Sample Amount:	1.0000
Recording Time:	1/7/2010 13:29	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.52	Fluoride	0.5000	0.4527		0.30488	10.95
2	7.44	Chloride	1.0000	1.0099		0.41158	14.79
3	9.42	Nitrite-N	0.5000	0.4737		0.41905	15.06
4	10.84	Chlorate	1.0000	0.9582		0.15127	5.43
5	11.79	Bromide	1.0000	0.9660		0.16997	6.11
6	13.73	Nitrate-N	0.5000	0.4907		0.46258	16.62
7	19.39	O-Phosphate-P	1.0000	0.9122		0.28586	10.27
8	21.48	Sulfate	2.0000	1.9700		0.57823	20.77
Total:				7.2333	0.000	2.783	100.00

**6 AUTOCAL3**

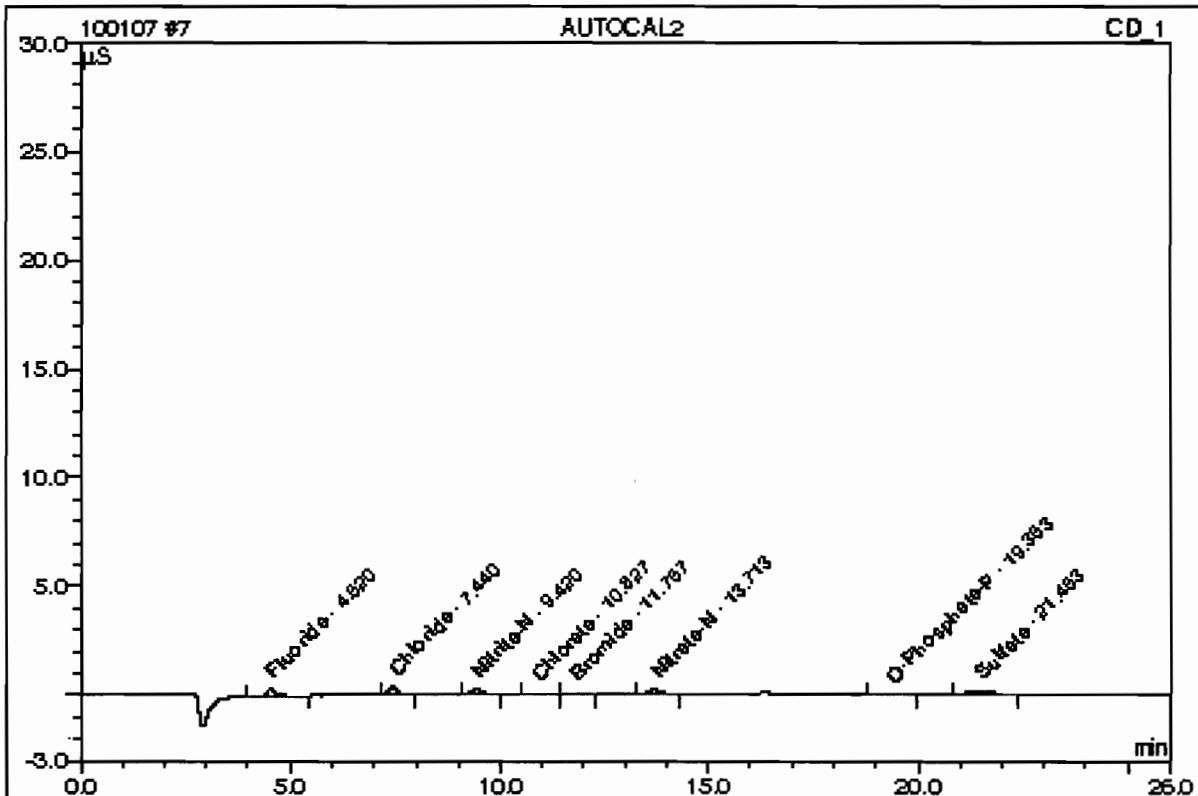
Sample Name:	AUTOCAL3	Injection Volume:	50.0
Vial Number:	55	Channel:	CD_1
Sample Type:	standard	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	010710an	Sample Amount:	1.0000
Recording Time:	1/7/2010 13:55	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-002588;GLGC086;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
1	4.52	Fluoride	0.2500	0.2796		0.16814	12.03
2	7.44	Chloride	0.5000	0.6410		0.21925	15.69
3	9.42	Nitrite-N	0.2500	0.2661		0.20381	14.58
4	10.83	Chlorate	0.5000	0.5141		0.07443	5.33
5	11.77	Bromide	0.5000	0.4808		0.08197	5.87
6	13.71	Nitrate-N	0.2500	0.3053		0.23198	16.60
7	19.37	O-Phosphate-P	0.5000	0.4584		0.12529	8.96
8	21.45	Sulfate	1.0000	1.1715		0.29267	20.94
Total:				4.1168	0.000	1.398	100.00

**7 AUTOCAL2**

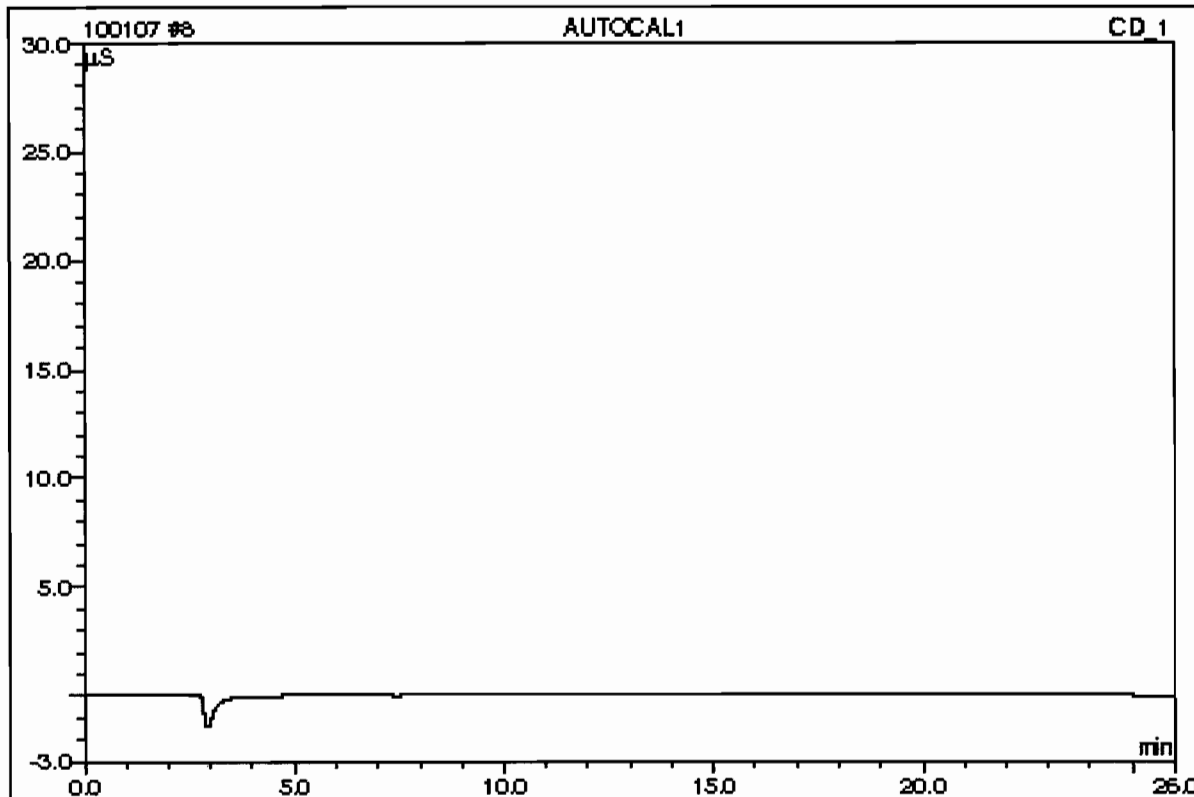
Sample Name:	AUTOCAL2	Injection Volume:	50.0
Vial Number:	54	Channel:	CD_1
Sample Type:	standard	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	010710an	Sample Amount:	1.0000
Recording Time:	1/7/2010 14:21	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-002588;GLGC086;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
1	4.52	Fluoride	0.1000	0.1357		0.07521	13.10
2	7.44	Chloride	0.2000	0.3610		0.09754	16.98
3	9.42	Nitrite-N	0.1000	0.1350		0.08179	14.24
4	10.83	Chlorate	0.2000	0.2454		0.03169	5.52
5	11.77	Bromide	0.2000	0.2079		0.03346	5.83
6	13.71	Nitrate-N	0.1000	0.1706		0.09348	16.28
7	19.35	O-Phosphate-P	0.2000	0.1882		0.02997	5.22
8	21.45	Sulfate	0.4000	0.6425		0.13113	22.83
Total:				2.0864	0.000	0.574	100.00

**8 AUTOCAL1**

Sample Name:	AUTOCAL1	Injection Volume:	50.0
Vial Number:	54	Channel:	CD_1
Sample Type:	standard	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	010710an	Sample Amount:	1.0000
Recording Time:	1/7/2010 14:47	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

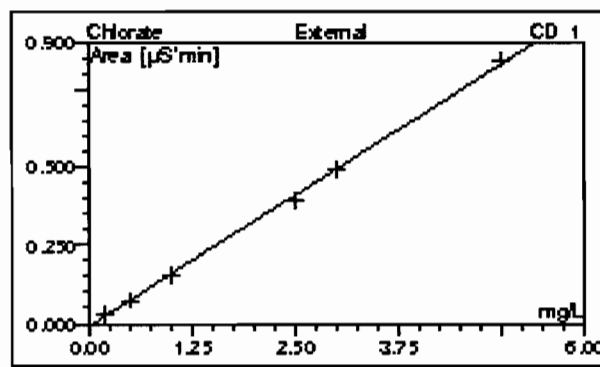
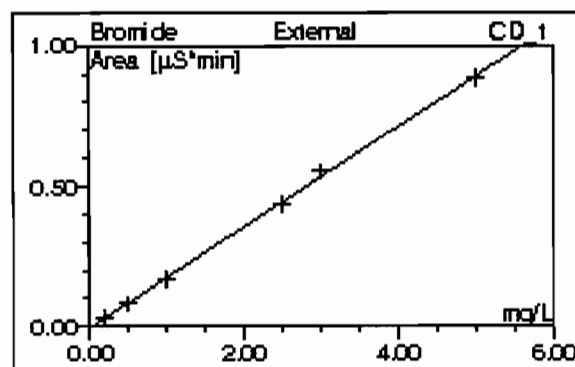
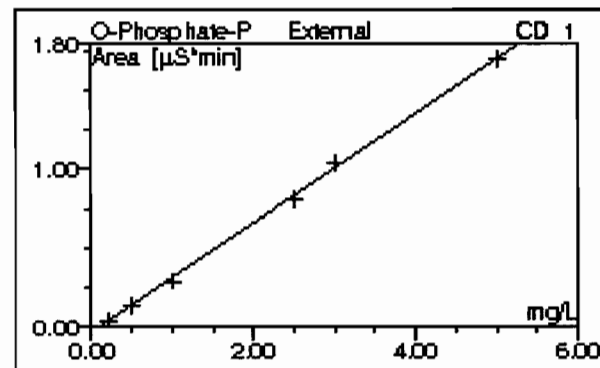
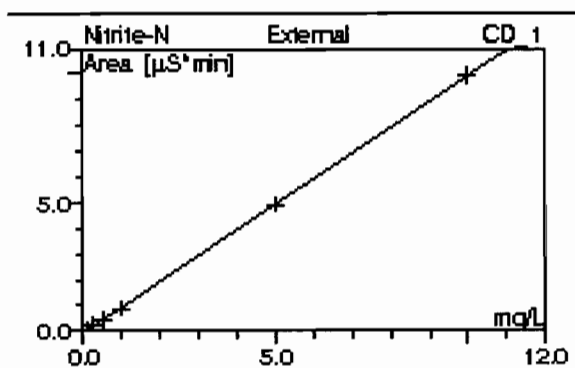
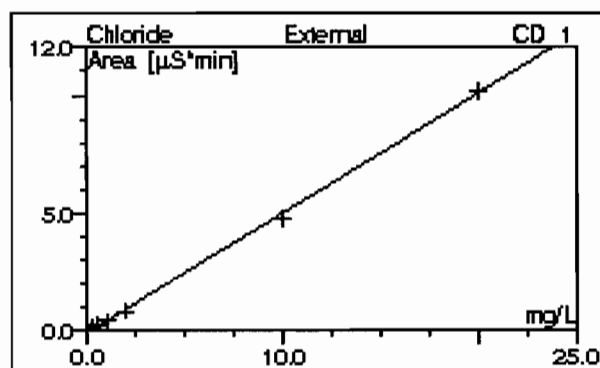
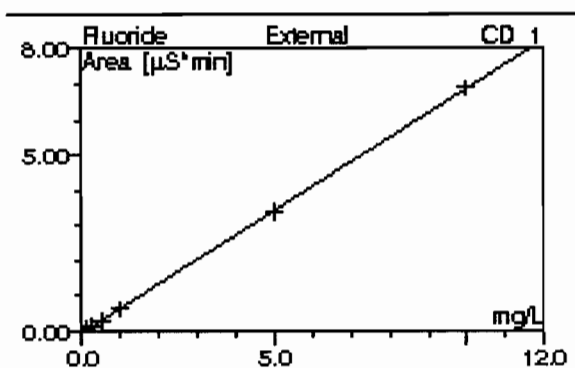


No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
n.a.	n.a.	Fluoride	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chloride	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrite-N	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Sulfate	0.0000	n.a.	n.a.	n.a.	n.a.
Total:				0.0000	0.000	0.000	0.00

**8 AUTOCAL1**

Sample Name: AUTOCAL1  
Vial Number: 54  
Sample Type: standard  
Control Program: AS23  
Quantif. Method: 010710an  
Recording Time: 1/7/2010 14:47  
Run Time (min): 26.00

Injection Volume: 50.0  
Channel: CD\_1  
Dilution Factor: 1.0000  
Sample Weight: 1.0000  
Sample Amount: 1.0000  
Analyst: MAR1  
Column: AS23-002588; GL GCED86;300;9056





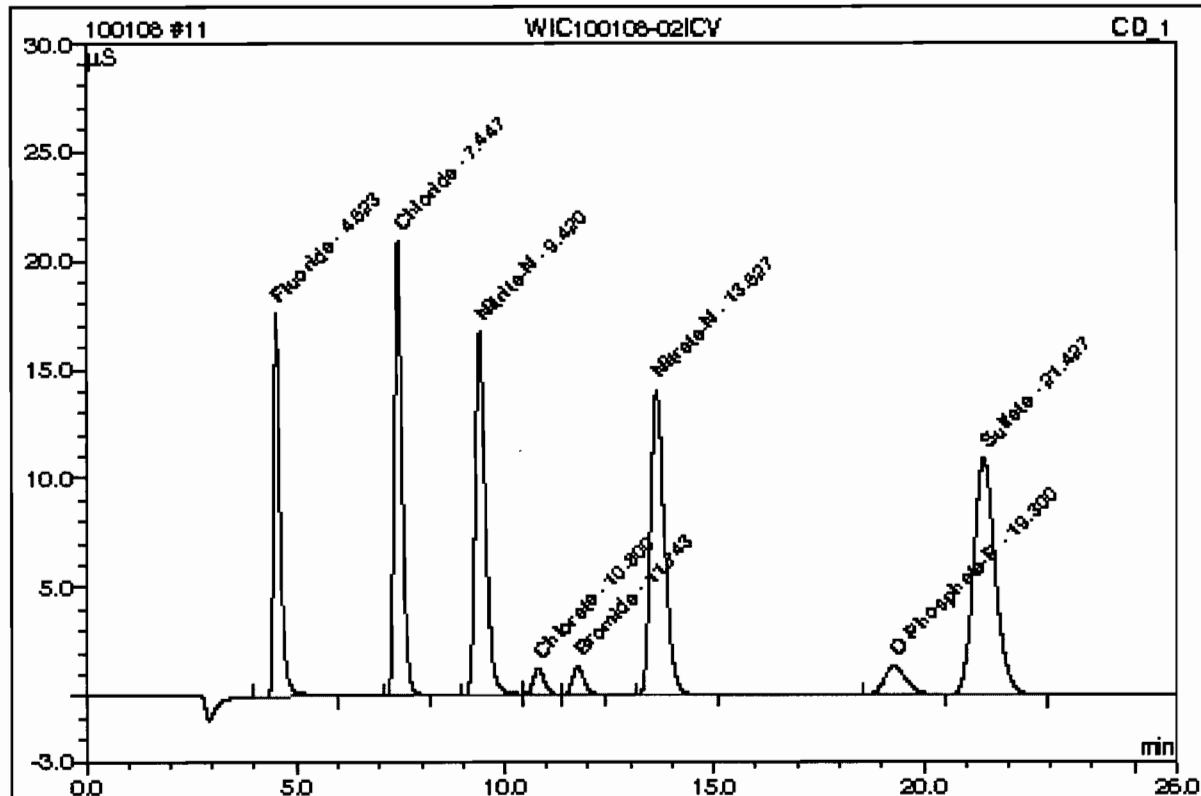
This is runlog for Sequence 100108.seq for IC5

Sample ID	Run Time	Batch	Dilution	Dataset	Analyst
BLK	01/08/10 08:36		1	100108	GXM3
BLK	01/08/10 09:02		1	100108	GXM3
ICV	01/08/10 09:29		1	100108	GXM3
ICB	01/08/10 09:55		1	100108	GXM3
CVH	01/08/10 10:21		1	100108	GXM3
CCV	01/08/10 10:47		1	100108	GXM3
CCB_blue	01/08/10 11:13		1	100108	GXM3
CCB_red	01/08/10 11:39		1	100108	GXM3
CCB newred	01/08/10 12:13		1	100108	GXM3
CCV	01/08/10 12:39		1	100108	GXM3
CCB	01/08/10 13:05		1	100108	GXM3
1202002251	01/08/10 13:31	935759	1	100108	GXM3
1202002258	01/08/10 13:57	935759	1	100108	GXM3
243267001	01/08/10 14:24	935759	1	100108	GXM3
1202002252	01/08/10 14:50	935759	1	100108	GXM3
1202002254	01/08/10 15:16	935759	1	100108	GXM3
1202002256	01/08/10 15:42	935759	1	100108	GXM3
243267002	01/08/10 16:08	935759	1	100108	GXM3
243267003	01/08/10 16:34	935759	1	100108	GXM3
243267004	01/08/10 17:00	935759	1	100108	GXM3
243267005	01/08/10 17:26	935759	1	100108	GXM3
CVH	01/08/10 17:52		1	100108	GXM3
CCB	01/08/10 18:18		1	100108	GXM3
243267006	01/08/10 18:44	935759	1	100108	GXM3
243267007	01/08/10 19:11	935759	1	100108	GXM3
243267008	01/08/10 19:37	935759	1	100108	GXM3
243267009	01/08/10 20:03	935759	1	100108	GXM3
243267010	01/08/10 20:29	935759	1	100108	GXM3

243267011	01/08/10 20:55 935759 1	100108	GXM3
243267012	01/08/10 21:21 935759 1	100108	GXM3
243267013	01/08/10 21:47 935759 1	100108	GXM3
CCV	01/08/10 22:13 1	100108	GXM3
CCB	01/08/10 22:39 1	100108	GXM3
243267014	01/08/10 23:05 935759 1	100108	GXM3
1202002253	01/08/10 23:31 935759 1	100108	GXM3
1202002255	01/08/10 23:58 935759 1	100108	GXM3

**11 WIC100108-02ICV**

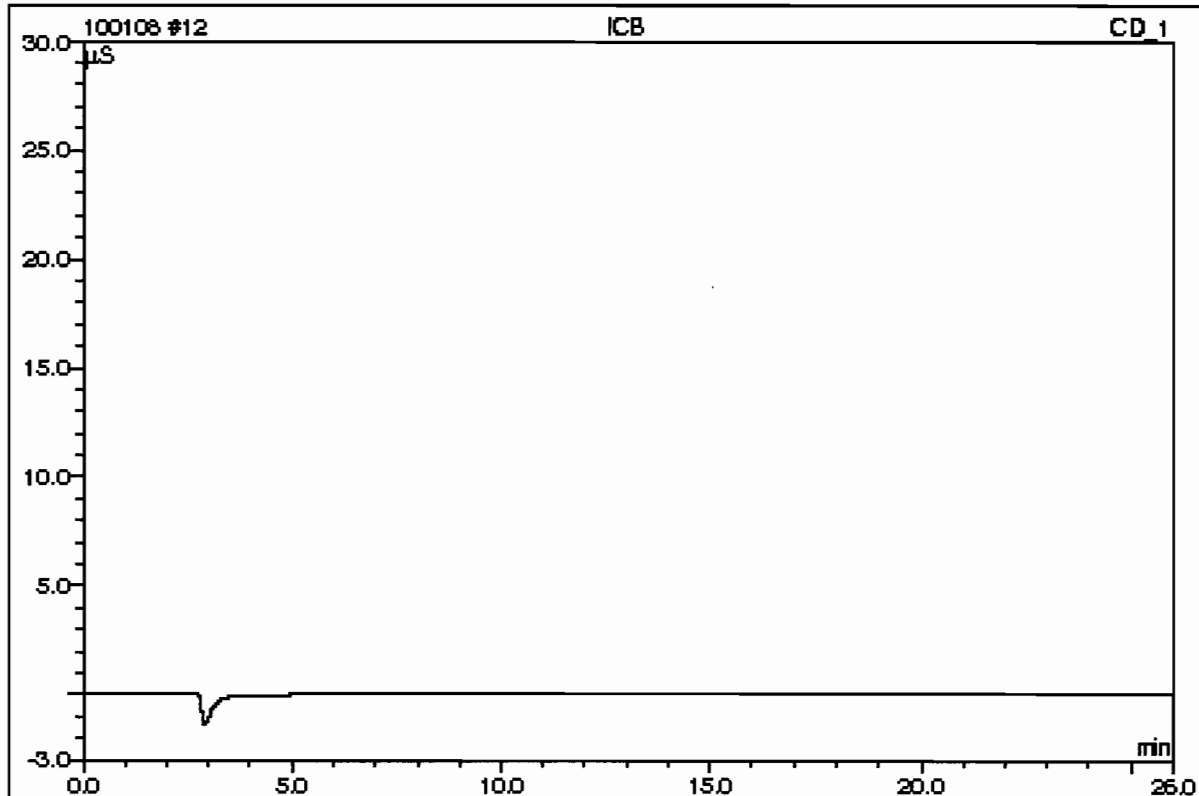
Sample Name:	WIC100108-02ICV	Injection Volume:	50.0
Vial Number:	57	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	010710an	Sample Amount:	1.0000
Recording Time:	1/8/2010 9:29	Analyst:	GXM3
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.52	Fluoride	n.a.	4.7674		3.26709	12.58
2	7.45	Chloride	n.a.	9.0159		4.49213	17.30
3	9.42	Nitrite-N	n.a.	4.8040		4.74281	18.27
4	10.80	Chlorate	n.a.	2.4366		0.40017	1.54
5	11.74	Bromide	n.a.	2.4111		0.42871	1.65
6	13.63	Nitrate-N	n.a.	4.6467		5.39362	20.78
7	19.30	O-Phosphate-P	n.a.	2.4327		0.81053	3.12
8	21.43	Sulfate	n.a.	18.8842		6.42603	24.75
Total:				49.3986	0.000	25.961	100.00

**12 ICB**

Sample Name:	ICB	Injection Volume:	50.0
Vial Number:	58	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	010710an	Sample Amount:	1.0000
Recording Time:	1/8/2010 9:55	Analyst:	GXM3
Run Time (min):	26.00	Column:	AS23-002588;GLGC086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	n.a.
Total:				0.0000	0.000	0.000	0.00

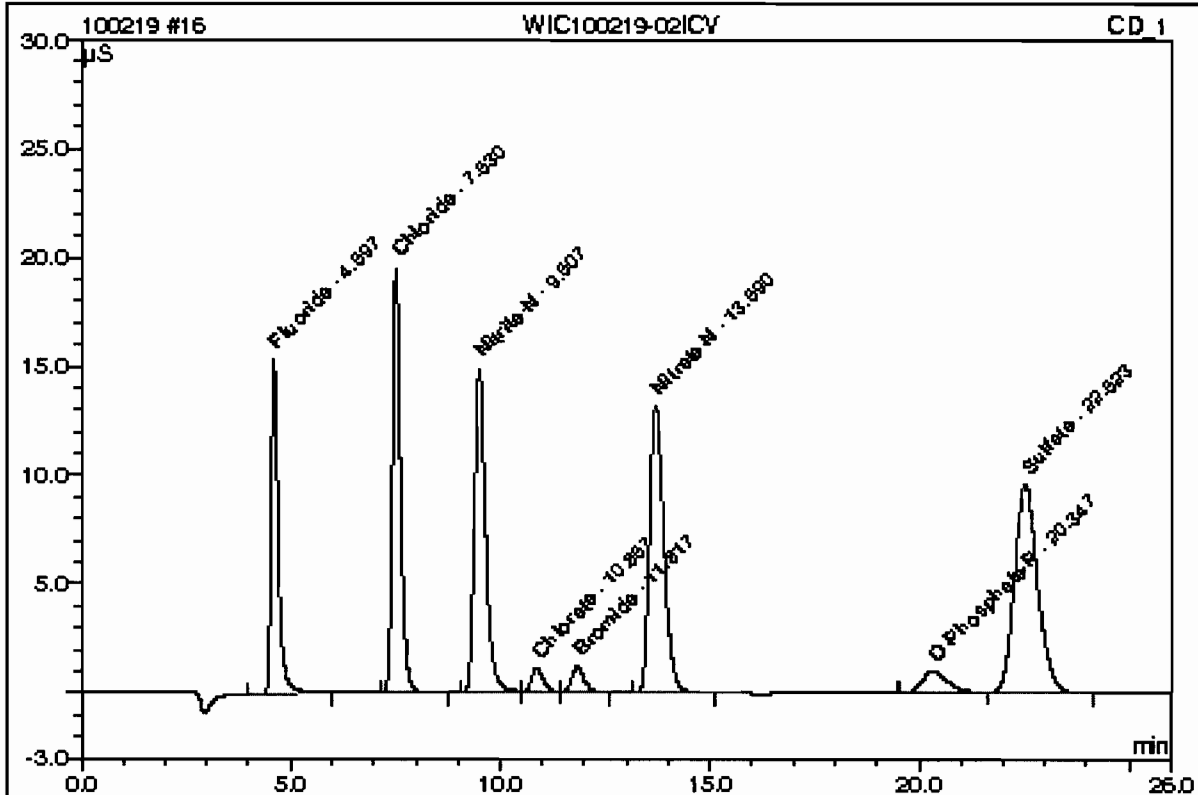
This is runlog for Sequence 100219.seq for IC5

Sample ID	Run Time	Batch	Dilution	Dataset	Analyst
BLK	02/19/10 08:19		1	100219	GXM3
BLK	02/19/10 08:45		1	100219	GXM3
ICV	02/19/10 09:11		1	100219	GXM3
ICB	02/19/10 09:37		1	100219	GXM3
1202048079	02/19/10 10:03	955253	1	100219	GXM3
1202048080	02/19/10 10:29	955253	1	100219	GXM3
247414001	02/19/10 10:55	955253	1	100219	GXM3
247414002	02/19/10 11:21	955253	1	100219	GXM3
247414003	02/19/10 11:47	955253	1	100219	GXM3
247414004	02/19/10 12:14	955253	1	100219	GXM3
247414005	02/19/10 12:40	955253	1	100219	GXM3
247414006	02/19/10 13:06	955253	1	100219	GXM3
CVH	02/19/10 13:32		1	100219	GXM3
CCB	02/19/10 13:58		1	100219	GXM3
247414007	02/19/10 14:24	955253	1	100219	GXM3
1202048081	02/19/10 14:50	955253	1	100219	GXM3
1202048082	02/19/10 15:16	955253	1	100219	GXM3
CCV	02/19/10 15:42		1	100219	GXM3
CCB	02/19/10 16:08		1	100219	GXM3
1202048020	02/19/10 16:34	955233	1	100219	GXM3
1202048021	02/19/10 17:01	955233	1	100219	GXM3
247399001	02/19/10 17:27	955233	1	100219	GXM3
1202048022	02/19/10 17:53	955233	1	100219	GXM3
1202048023	02/19/10 18:19	955233	1	100219	GXM3
CVH	02/19/10 18:45		1	100219	GXM3
CCB	02/19/10 19:11		1	100219	GXM3
1202048173	02/19/10 19:37	955298	1	100219	GXM3
1202048180	02/19/10 20:03	955298	1	100219	GXM3

246437001	02/19/10 20:29 955298 1	100219	GXM3
1202048174	02/19/10 20:55 955298 1	100219	GXM3
1202048176	02/19/10 21:22 955298 1	100219	GXM3
1202048178	02/19/10 21:48 955298 1	100219	GXM3
246437002	02/19/10 22:14 955298 1	100219	GXM3
246437003	02/19/10 22:40 955298 1	100219	GXM3
246437004	02/19/10 23:06 955298 1	100219	GXM3
246437005	02/19/10 23:32 955298 1	100219	GXM3
CCV	02/19/10 23:58 1	100219	GXM3

**16 WIC100219-02ICV**

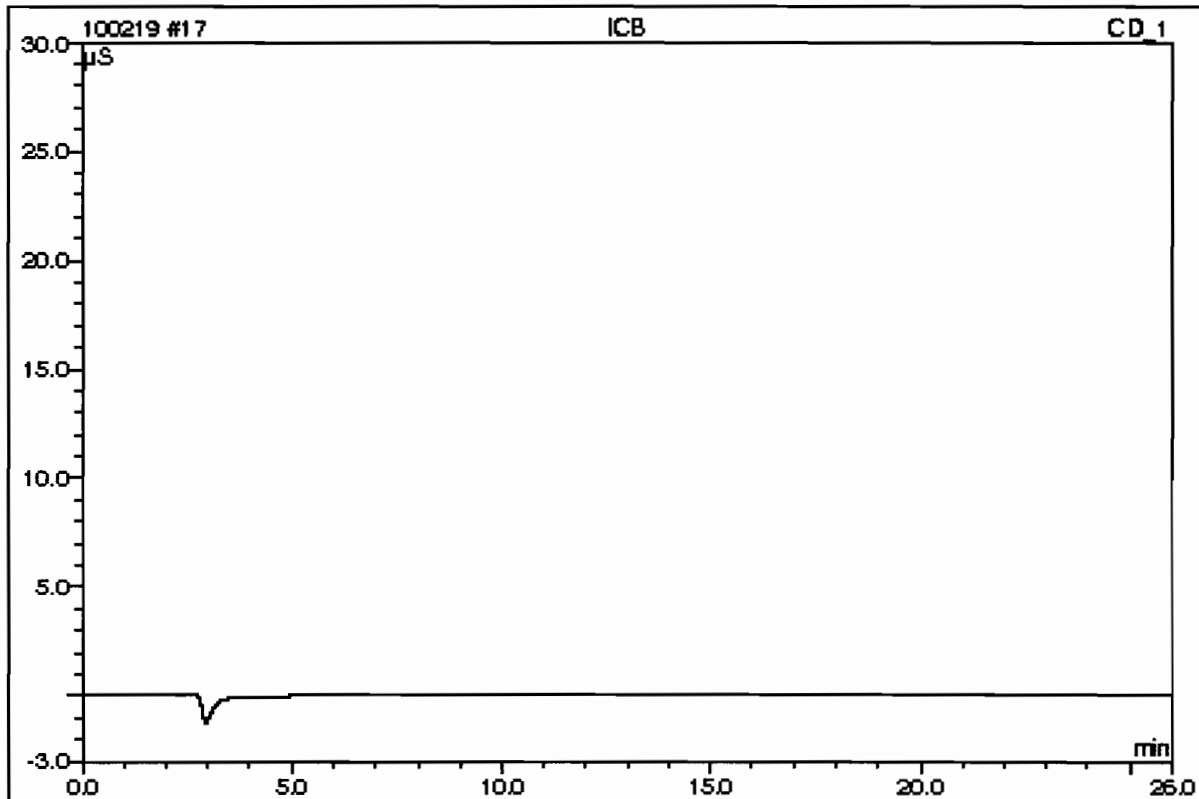
Sample Name:	WIC100219-02ICV	Injection Volume:	50.0
Vial Number:	92	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	010710an	Sample Amount:	1.0000
Recording Time:	2/19/2010 9:11	Analys:	GXM3
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.60	Fluoride	n.a.	4.5018		3.08406	12.29
2	7.53	Chloride	n.a.	8.8904		4.42840	17.65
3	9.51	Nitrite-N	n.a.	4.5789		4.51802	18.00
4	10.87	Chlorate	n.a.	2.3891		0.39604	1.58
5	11.82	Bromide	n.a.	2.4224		0.42314	1.69
6	13.69	Nitrate-N	n.a.	4.5346		5.26092	20.97
7	20.35	O-Phosphate-P	n.a.	2.1724		0.72001	2.87
8	22.52	Sulfate	n.a.	18.4107		6.26263	24.96
Total:				47.9003	0.000	25.093	100.00

**17 ICB**

Sample Name:	ICB	Injection Volume:	50.0
Vial Number:	90	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	010710an	Sample Amount:	1.0000
Recording Time:	2/19/2010 9:37	Analyst:	GXM3
Run Time (min):	26.00	Column:	AS23-002588;GLGC086;300;9056

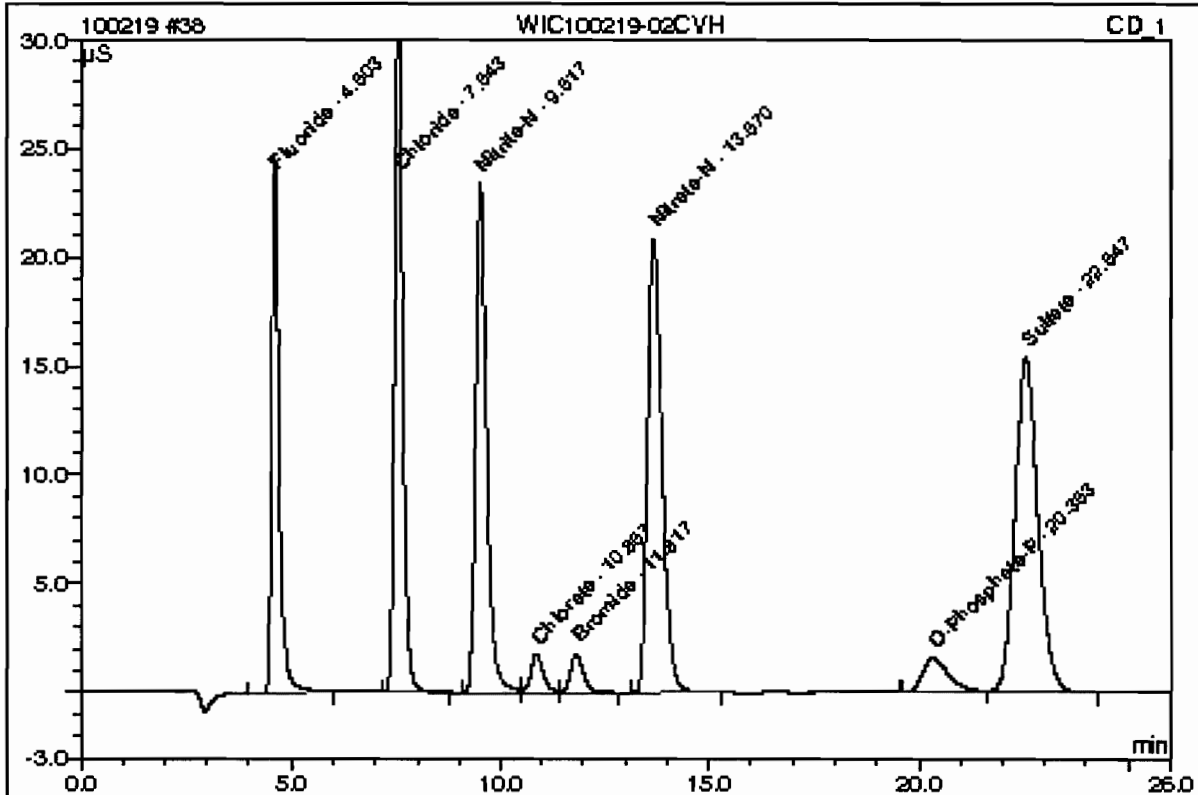


No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	<u>n.a.</u>	n.a.
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	<u>n.a.</u>	n.a.
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	<u>n.a.</u>	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	<u>n.a.</u>	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	<u>n.a.</u>	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	<u>n.a.</u>	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	<u>n.a.</u>	n.a.
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	<u>n.a.</u>	n.a.
Total:				0.0000	0.000	0.000	0.00



**38 WIC100219-02CVH**

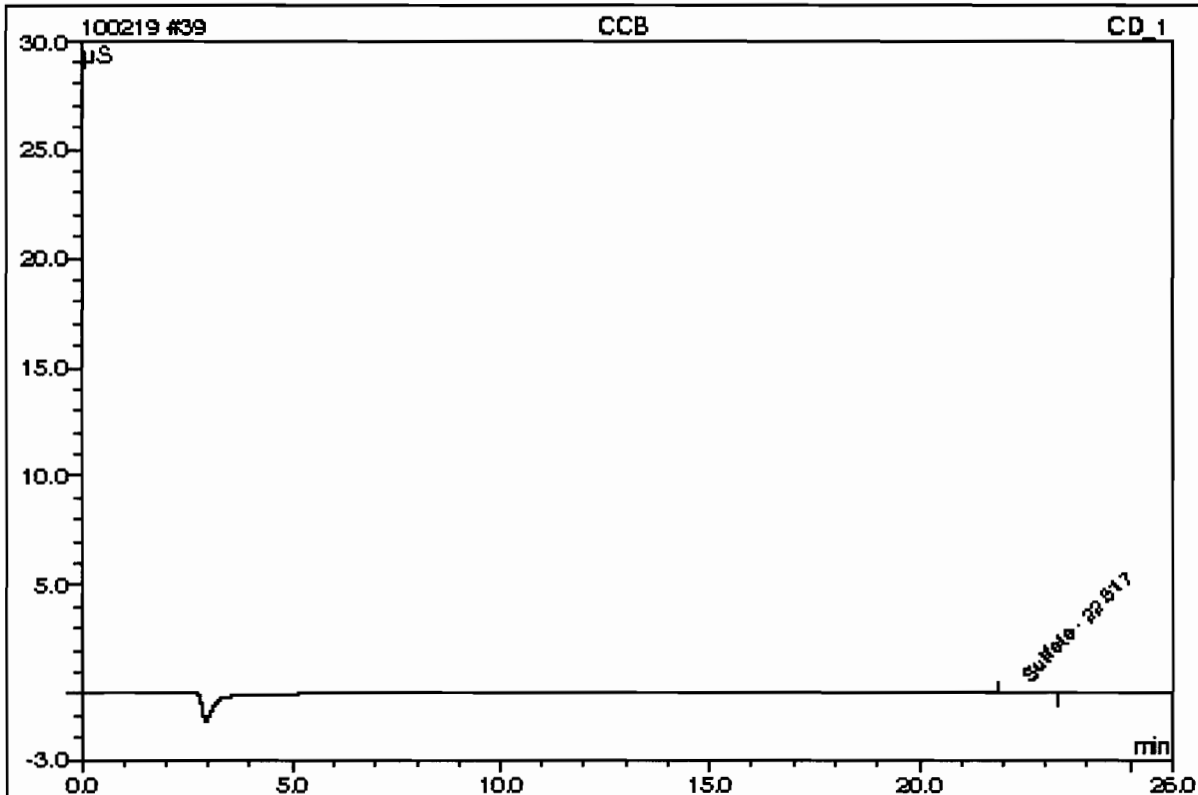
Sample Name:	WIC100219-02CVH	Injection Volume:	50.0
Vial Number:	95	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	010710an	Sample Amount:	1.0000
Recording Time:	2/19/2010 18:45	Analyst:	GXM3
Run Time (min):	26.00	Column:	AS23-002588;GLGC086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.80	Fluoride	n.a.	7.1132		4.88369	12.32
2	7.54	Chloride	n.a.	14.1813		7.11485	17.95
3	9.52	Nitrite-N	n.a.	7.1124		7.04722	17.78
4	10.87	Chlorate	n.a.	3.6397		0.60742	1.53
5	11.82	Bromide	n.a.	3.5739		0.62776	1.58
6	13.87	Nitrate-N	n.a.	7.1490		8.35655	21.08
7	20.35	O-Phosphate-P	n.a.	3.3141		1.11706	2.82
8	22.55	Sulfate	n.a.	28.9253		9.89105	24.95
Total:				75.0088	0.000	39.646	100.00

**39 CCB**

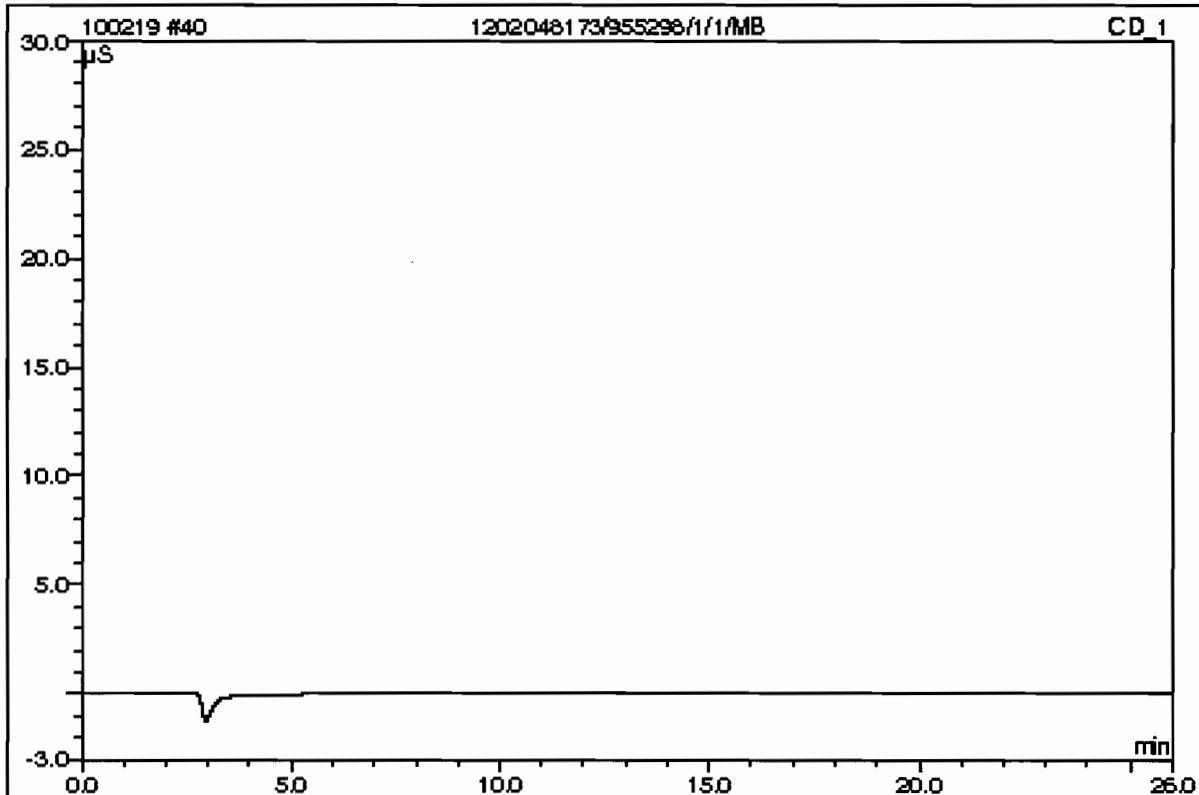
Sample Name:	CCB	Injection Volume:	50.0
Vial Number:	96	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	010710an	Sample Amount:	1.0000
Recording Time:	2/19/2010 19:11	Analyst:	GXM3
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
1	22.52	Sulfate	n.a.	0.3230		0.02087	100.00
Total:				0.3230	0.000	0.021	100.00

**40 1202048173/955298/1/1/MB**

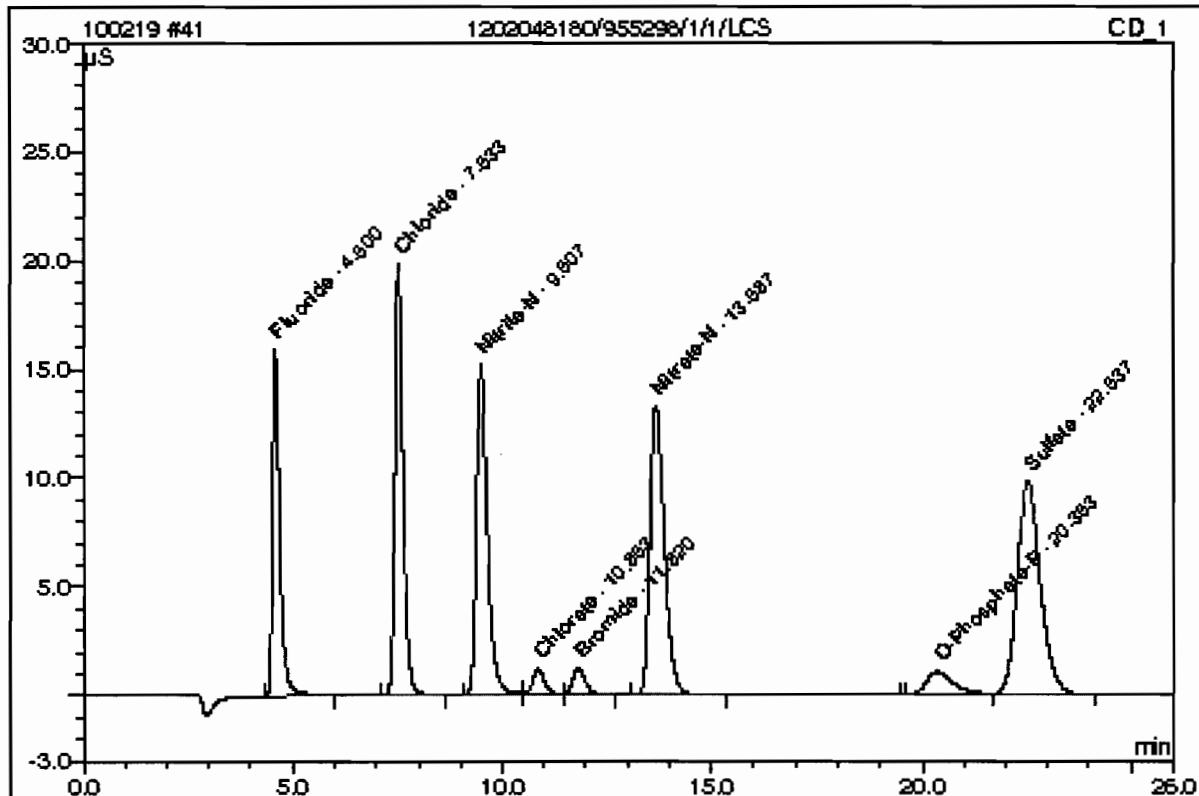
Sample Name:	1202048173/955298/1/1/MB	Injection Volume:	50.0
Vial Number:	97	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	010710an	Sample Amount:	1.0000
Recording Time:	2/19/2010 19:37	Analyst:	GXM3
Run Time (min):	26.00	Column:	AS23-002588;GLGC086;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	<u>n.a.</u>	n.a.
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	<u>n.a.</u>	n.a.
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	<u>n.a.</u>	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	<u>n.a.</u>	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	<u>n.a.</u>	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	<u>n.a.</u>	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	<u>n.a.</u>	n.a.
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	<u>n.a.</u>	n.a.
Total:				0.0000	0.000	0.000	0.00

**41 1202048180/955298/1/1/LCS**

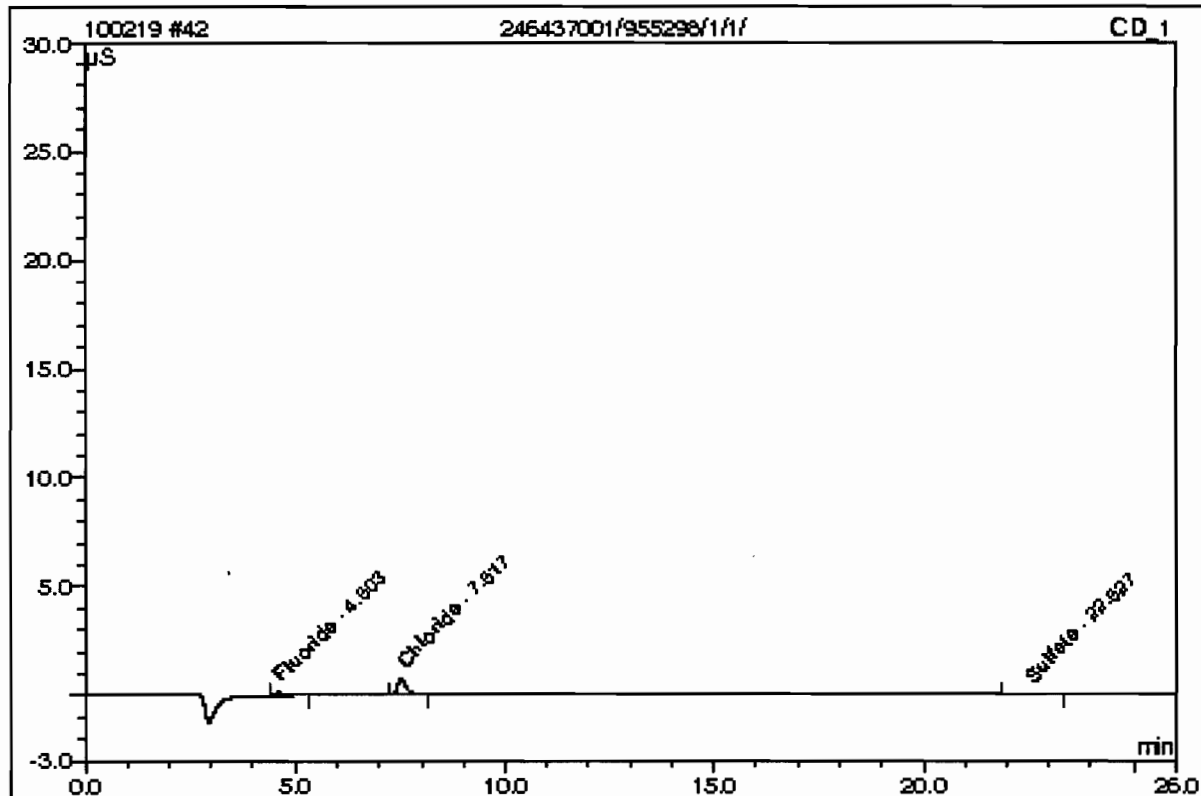
Sample Name:	1202048180/955298/1/1/LCS	Injection Volume:	50.0
Vial Number:	98	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	010710an	Sample Amount:	1.0000
Recording Time:	2/19/2010 20:03	Analyst:	GXM3
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area μS*min	Rel.Area %
1	4.60	Fluoride	n.a.	4.6148		3.16192	12.41
2	7.53	Chloride	n.a.	9.0023		4.48521	17.60
3	9.51	Nitrite-N	n.a.	4.6369		4.57796	17.97
4	10.86	Chlorate	n.a.	2.4177		0.40088	1.57
5	11.82	Bromide	n.a.	2.4372		0.42575	1.67
6	13.69	Nitrate-N	n.a.	4.5823		5.31740	20.87
7	20.36	O-Phosphate-P	n.a.	2.2566		0.74929	2.94
8	22.54	Sulfate	n.a.	18.7016		6.36302	24.97
Total:				48.6514	0.000	25.481	100.00

**42 246437001/955298/1/1/**

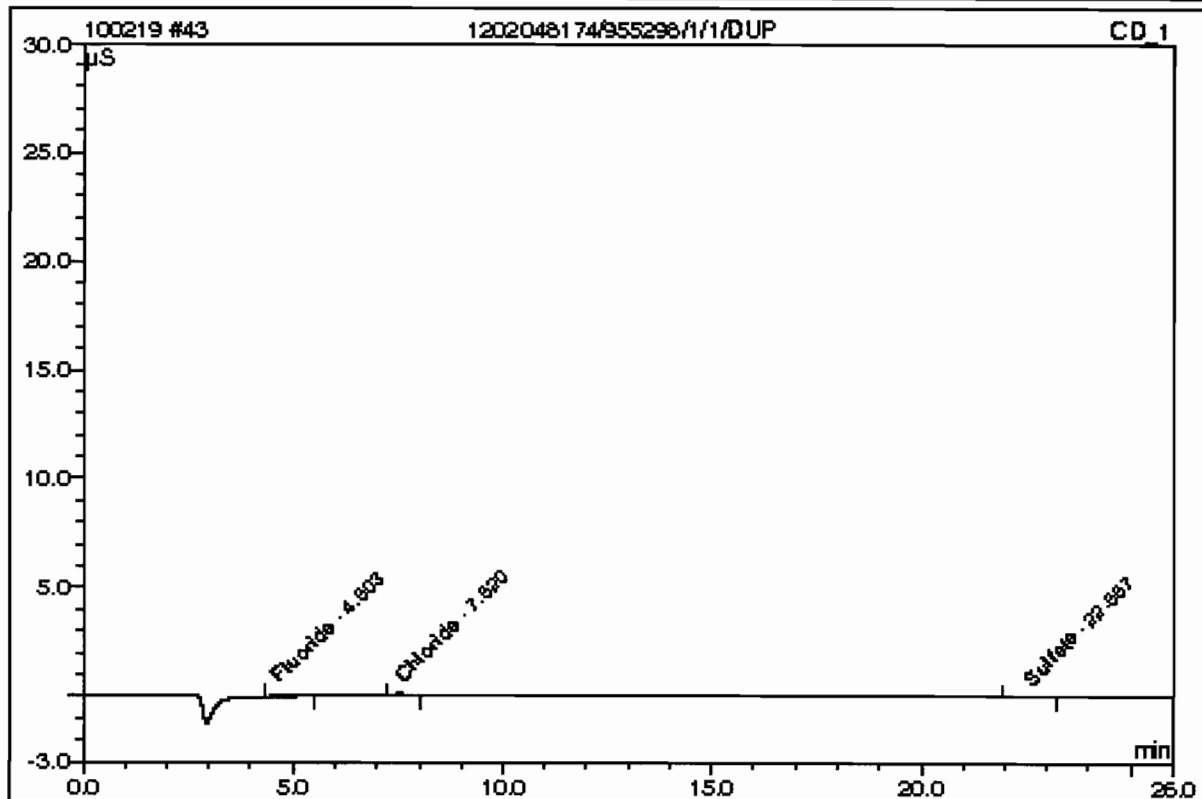
Sample Name:	246437001/955298/1/1/	Injection Volume:	50.0
Vial Number:	99	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	010710an	Sample Amount:	1.0000
Recording Time:	2/19/2010 20:29	Analyst:	GXM3
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.60	Fluoride	n.a.	0.0801		0.03686	14.98
2	7.52	Chloride	n.a.	0.5314		0.18402	74.81
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
3	22.53	Sulfate	n.a.	0.3353		0.02511	10.21
Total:				0.9467	0.000	0.246	100.00

**43 1202048174/955298/1/1/DUP**

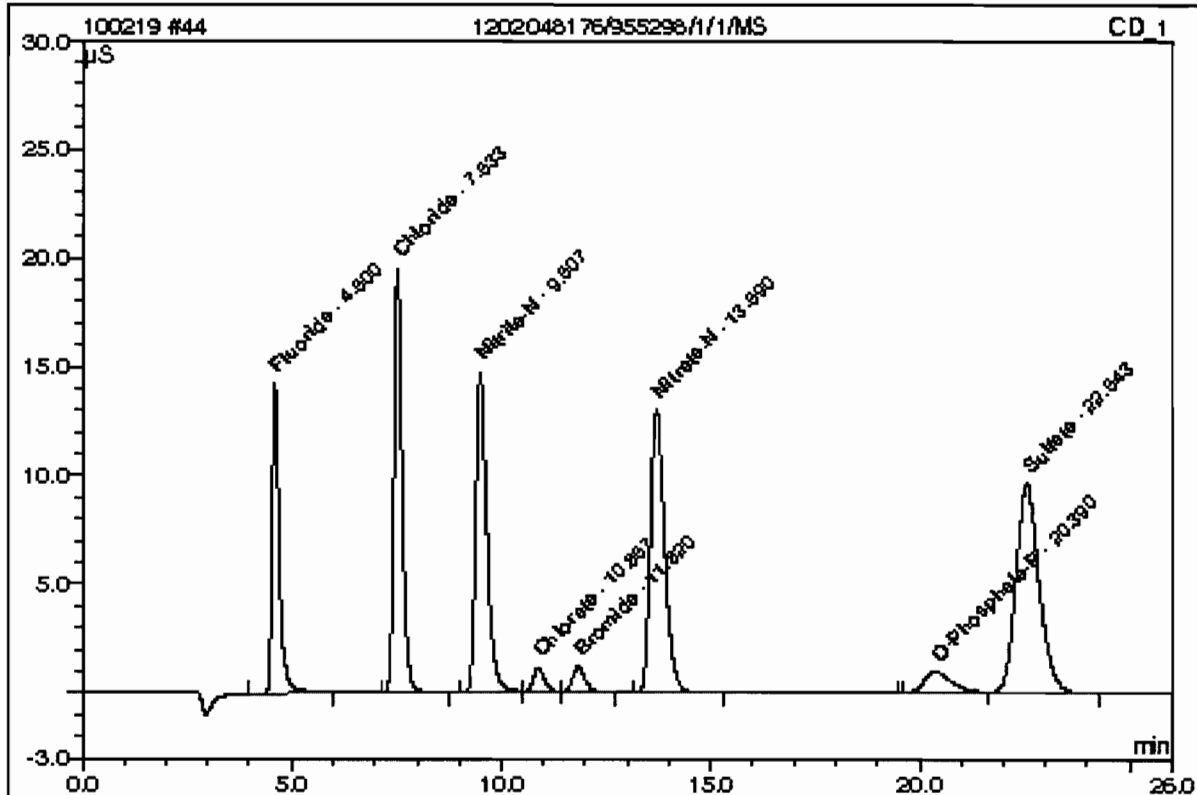
Sample Name:	1202048174/955298/1/1/DUP	Injection Volume:	50.0
Vial Number:	100	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	010710an	Sample Amount:	1.0000
Recording Time:	2/19/2010 20:55	Analyst:	GXM3
Run Time (min):	26.00	Column:	AS23-002588;GLGC086;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
1	4.60	Fluoride	n.a.	0.0758		0.03388	41.75
2	7.52	Chloride	n.a.	0.2217		0.02676	32.98
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
3	22.58	Sulfate	n.a.	0.3219		0.02051	25.27
Total:				0.6194	0.000	0.081	100.00

**44 1202048176/955298/1/1/MS**

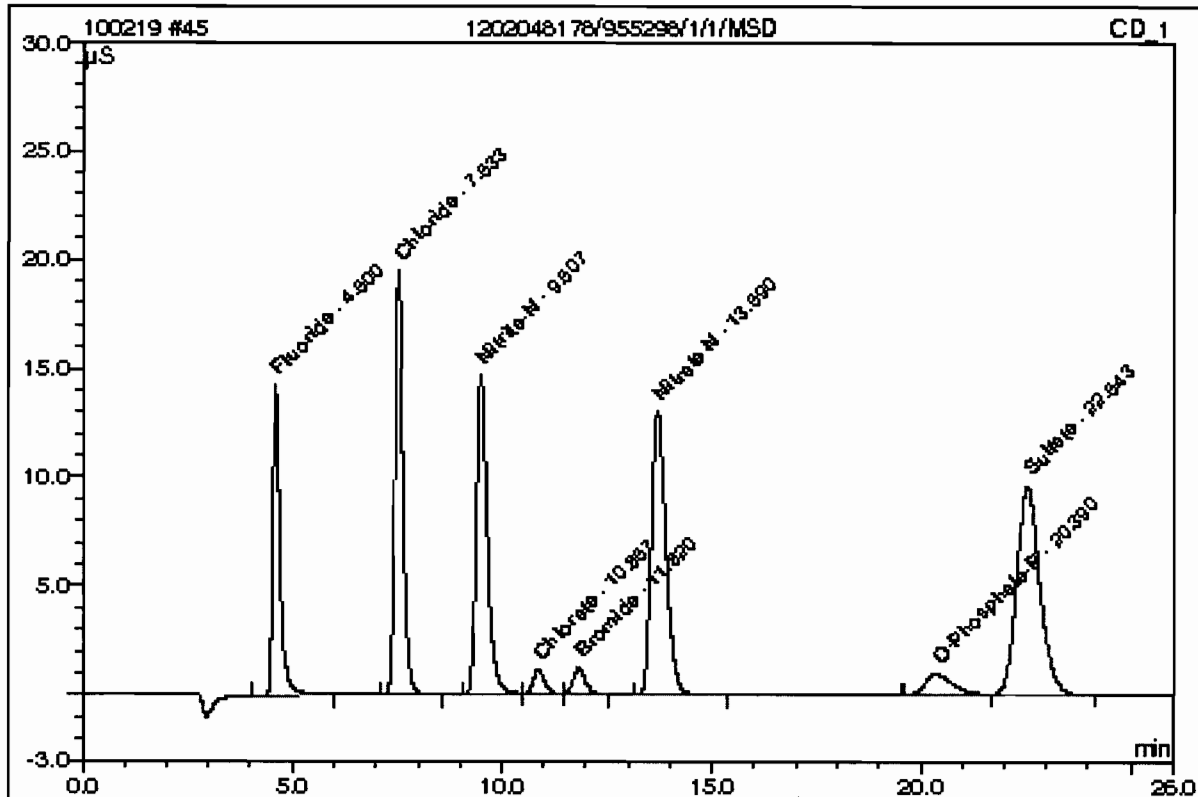
Sample Name:	1202048176/955298/1/1/MS	Injection Volume:	50.0
Vial Number:	101	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	010710an	Sample Amount:	1.0000
Recording Time:	2/19/2010 21:22	Analyst:	GXM3
Run Time (min):	26.00	Column:	AS23-002588;GLGC086;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
1	4.60	Fluoride	n.a.	4.1686		2.85447	11.51
2	7.53	Chloride	n.a.	8.8815		4.42385	17.84
3	9.51	Nitrite-N	n.a.	4.5262		4.46545	18.01
4	10.87	Chlorate	n.a.	2.3713		0.39303	1.59
5	11.82	Bromide	n.a.	2.4104		0.42099	1.70
6	13.69	Nitrate-N	n.a.	4.5105		5.23234	21.10
7	20.39	O-Phosphate-P	n.a.	2.1647		0.71733	2.89
8	22.54	Sulfate	n.a.	18.4746		6.28469	25.35
Total:				47.5077	0.000	24.792	100.00

**45 1202048178/955298/1/1/MSD**

Sample Name:	1202048178/955298/1/1/MSD	Injection Volume:	50.0
Vial Number:	102	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	010710an	Sample Amount:	1.0000
Recording Time:	2/19/2010 21:48	Analyst:	GXM3
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

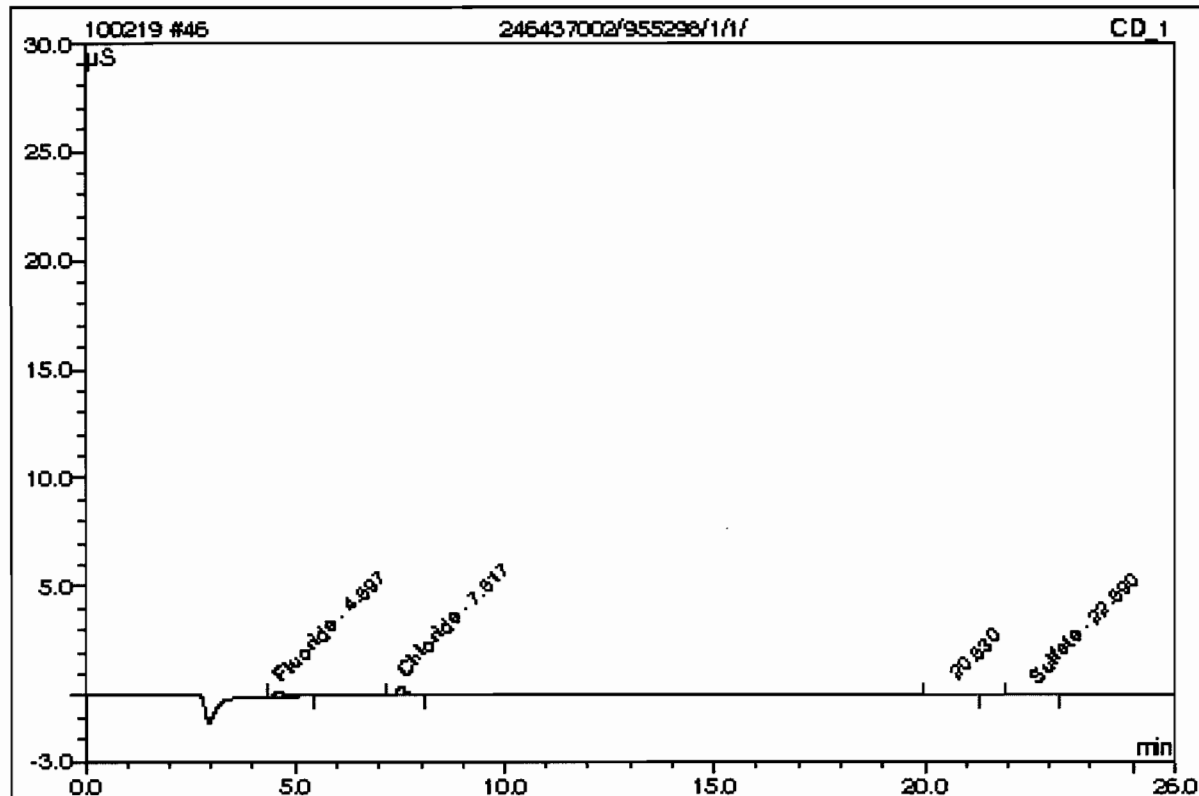


No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.60	Fluoride	n.a.	4.1666		2.85304	11.54
2	7.53	Chloride	n.a.	8.8569		4.41240	17.84
3	9.51	Nitrite-N	n.a.	4.5224		4.46171	18.04
4	10.87	Chlorate	n.a.	2.3651		0.39199	1.59
5	11.82	Bromide	n.a.	2.3663		0.41316	1.67
6	13.69	Nitrate-N	n.a.	4.4998		5.21969	21.11
7	20.39	O-Phosphate-P	n.a.	2.1713		0.71963	2.91
8	22.54	Sulfate	n.a.	18.3899		6.25544	25.30
Total:				47.3403	0.000	24.727	100.00



**46 246437002/955298/1/1/**

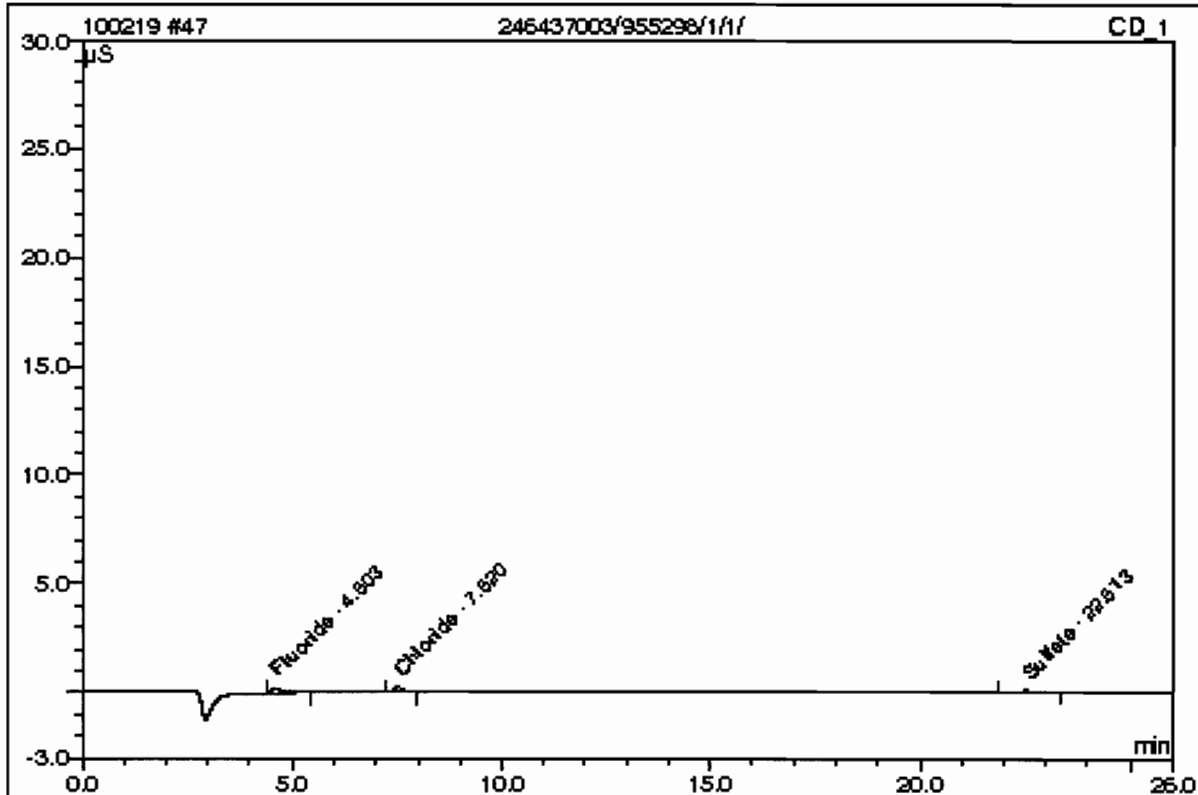
Sample Name:	246437002/955298/1/1/	Injection Volume:	50.0
Vial Number:	103	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	010710an	Sample Amount:	1.0000
Recording Time:	2/19/2010 22:14	Analyst:	GXM3
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.60	Fluoride	n.a.	0.0933		0.04595	24.91
2	7.52	Chloride	n.a.	0.3575		0.09575	51.90
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
4	22.59	Sulfate	n.a.	0.3268		0.02219	12.03
Total:				0.7776	0.000	0.164	88.84

**47 246437003/955298/1/1/**

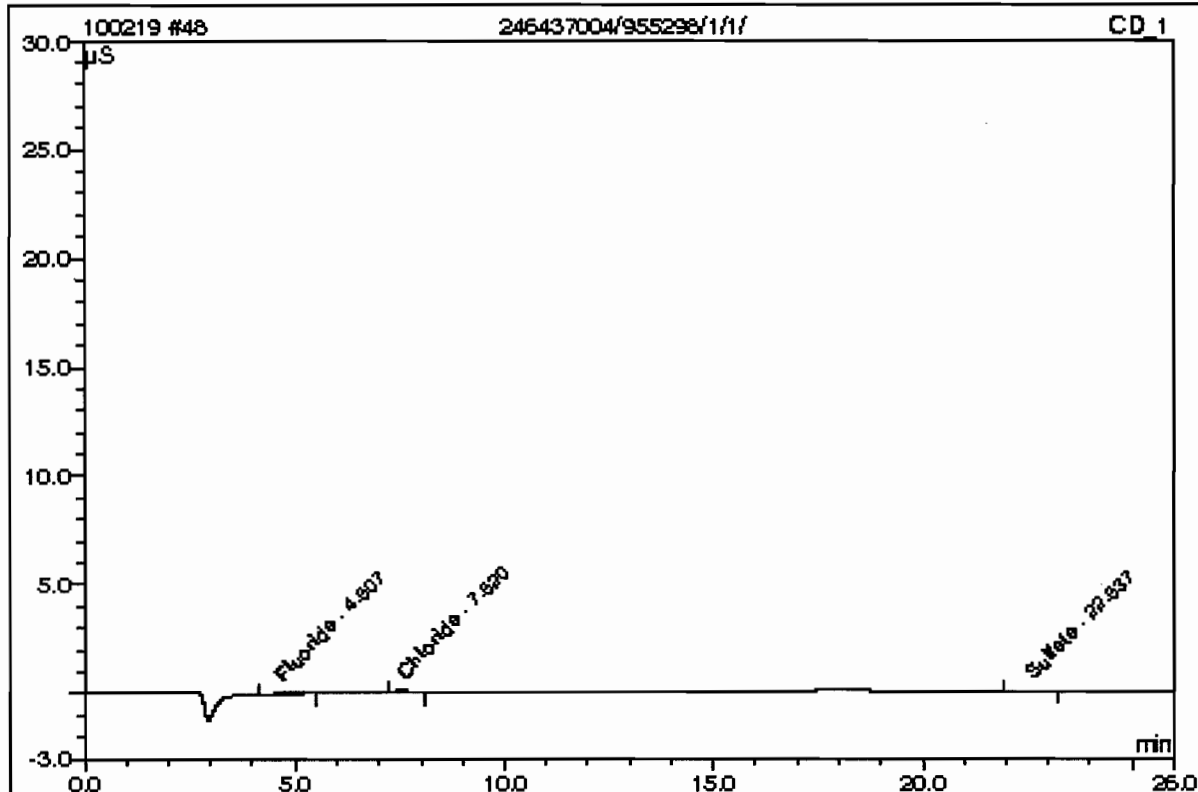
Sample Name:	246437003/955298/1/1/	Injection Volume:	50.0
Vial Number:	104	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	010710an	Sample Amount:	1.0000
Recording Time:	2/19/2010 22:40	Analyst:	GXM3
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
1	4.60	Fluoride	n.a.	0.1087		0.05657	33.78
2	7.52	Chloride	n.a.	0.2830		0.05794	34.60
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
3	22.51	Sulfate	n.a.	0.4159		0.05294	31.62
Total:				0.8077	0.000	0.167	100.00

**48 246437004/955298/1/1/**

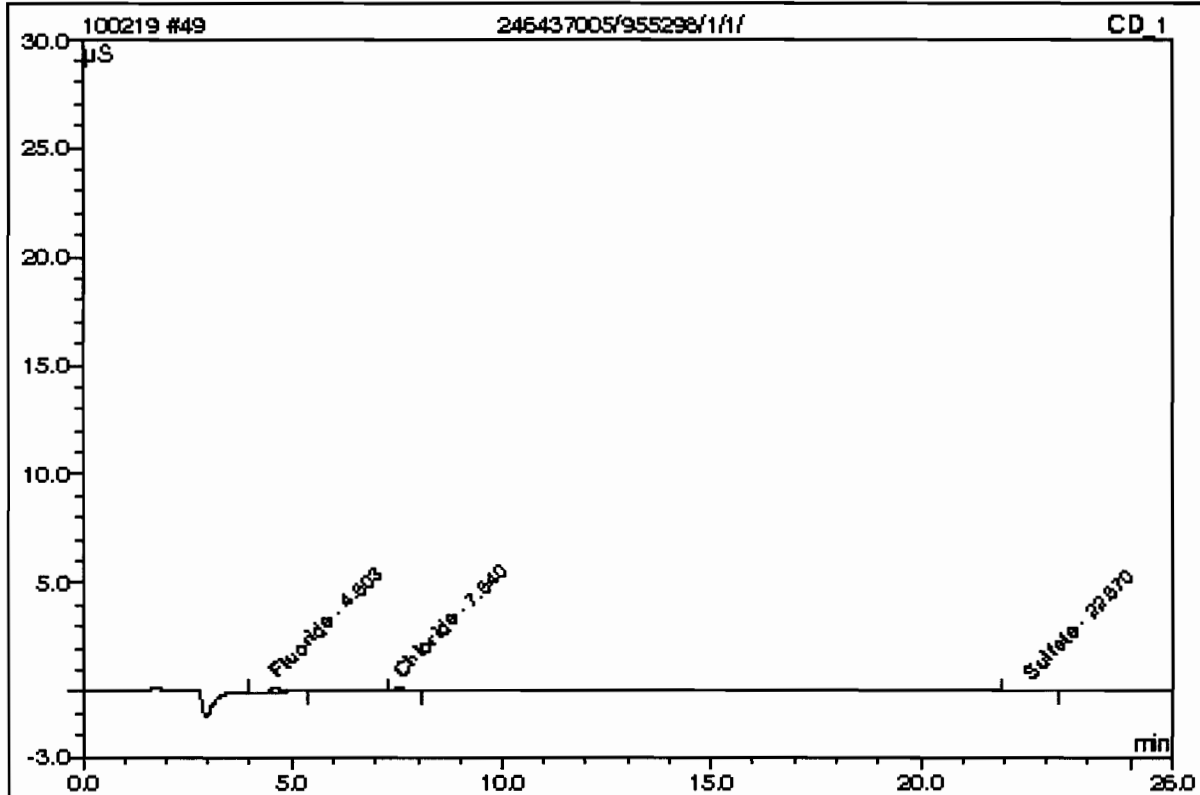
Sample Name:	246437004/955298/1/1/	Injection Volume:	50.0
Vial Number:	105	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	010710an	Sample Amount:	1.0000
Recording Time:	2/19/2010 23:06	Analyst:	GXM3
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.61	Fluoride	n.a.	0.0625		0.02475	26.87
2	7.52	Chloride	n.a.	0.2558		0.04413	47.89
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
3	22.54	Sulfate	n.a.	0.3299		0.02326	25.24
Total:				0.6483	0.000	0.092	100.00

**49 246437005/955298/1/1/**

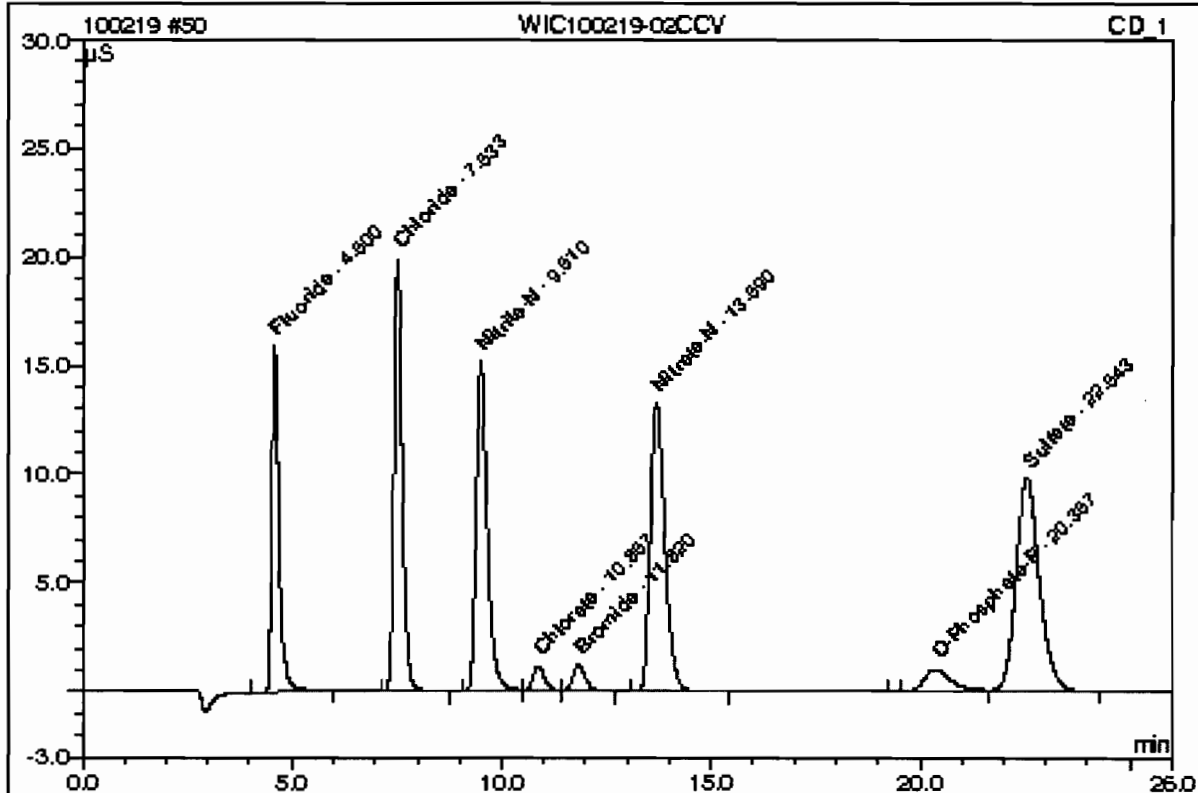
Sample Name:	246437005/955298/1/1/	Injection Volume:	50.0
Vial Number:	106	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	010710an	Sample Amount:	1.0000
Recording Time:	2/19/2010 23:32	Analysis:	GXM3
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
1	4.60	Fluoride	n.a.	0.0903		0.04391	39.08
2	7.54	Chloride	n.a.	0.2478		0.04004	35.63
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
3	22.57	Sulfate	n.a.	0.3449		0.02842	25.29
Total:				0.6830	0.000	0.112	100.00

**50 WIC100219-02CCV**

Sample Name:	WIC100219-02CCV	Injection Volume:	50.0
Vial Number:	107	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	010710an	Sample Amount:	1.0000
Recording Time:	2/19/2010 23:58	Analyst:	GXM3
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



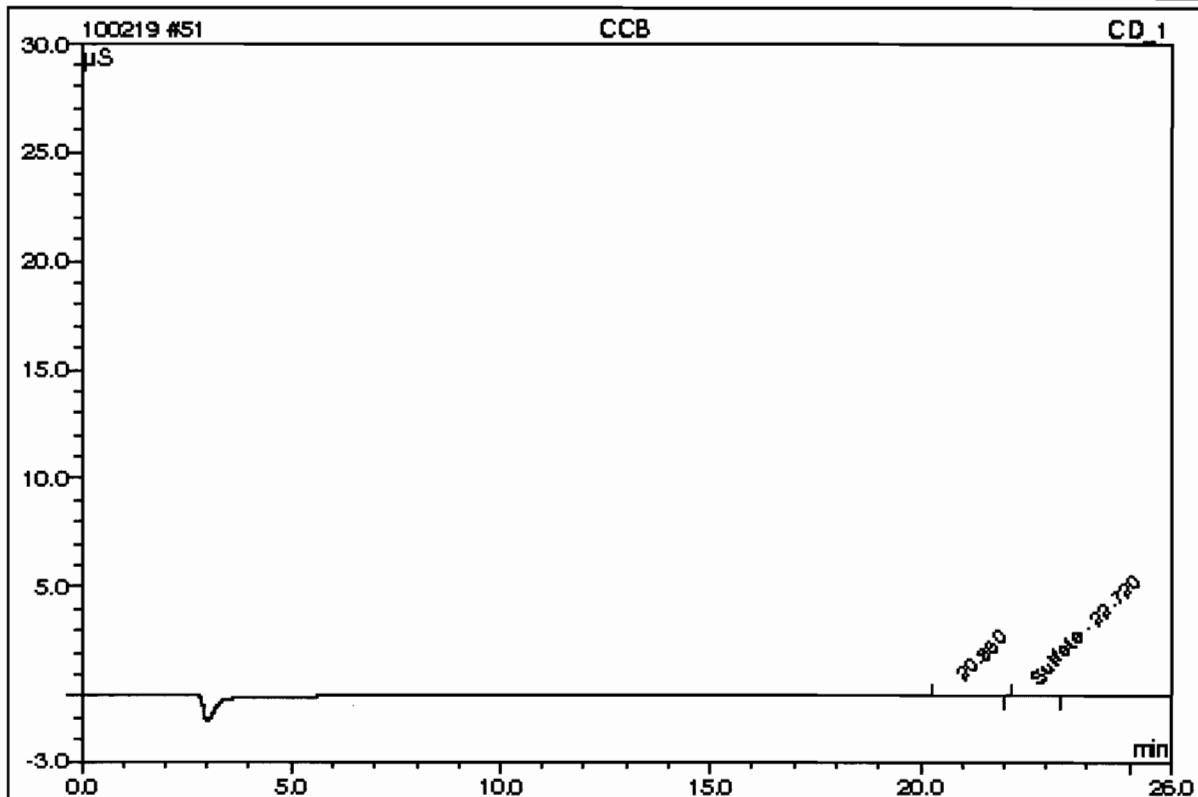
No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
1	4.60	Fluoride	n.a.	4.6296		3.17213	12.41
2	7.53	Chloride	n.a.	9.0357		4.50218	17.62
3	9.51	Nitrite-N	n.a.	4.6391		4.57819	17.91
4	10.87	Chlorate	n.a.	2.3921		0.39655	1.55
5	11.82	Bromide	n.a.	2.4031		0.41969	1.64
6	13.69	Nitrate-N	n.a.	4.5889		5.32521	20.84
7	20.37	O-Phosphate-P	n.a.	2.1991		0.72931	2.85
8	22.54	Sulfate	n.a.	18.9025		6.43233	25.17
Total:				48.7901	0.000	25.556	100.00

This is runlog for Sequence 100219.seq for IC5

Sample ID	Run Time	Batch	Dilution	Dataset	Analyst
CCB	02/20/10 00:24		1	100219	GXM3
CCV	02/20/10 07:42		1	100219	GXM3
CCB	02/20/10 08:08		1	100219	GXM3
246437006	02/20/10 08:35	955298	1	100219	GXM3
246437007	02/20/10 09:01	955298	1	100219	GXM3
246437008	02/20/10 09:27	955298	1	100219	GXM3
246437009	02/20/10 09:53	955298	1	100219	GXM3
246437010	02/20/10 10:19	955298	1	100219	GXM3
246437011	02/20/10 10:45	955298	1	100219	GXM3
246437012	02/20/10 11:11	955298	1	100219	GXM3
246437013	02/20/10 11:37	955298	1	100219	GXM3
CVH	02/20/10 12:03		1	100219	GXM3
CCB	02/20/10 12:29		1	100219	GXM3
246437014	02/20/10 12:55	955298	1	100219	GXM3
1202048175	02/20/10 13:22	955298	1	100219	GXM3
1202048177	02/20/10 13:48	955298	1	100219	GXM3
1202048179	02/20/10 14:14	955298	1	100219	GXM3
CCV	02/20/10 14:40		1	100219	GXM3
CCB	02/20/10 15:06		1	100219	GXM3

**51 CCB**

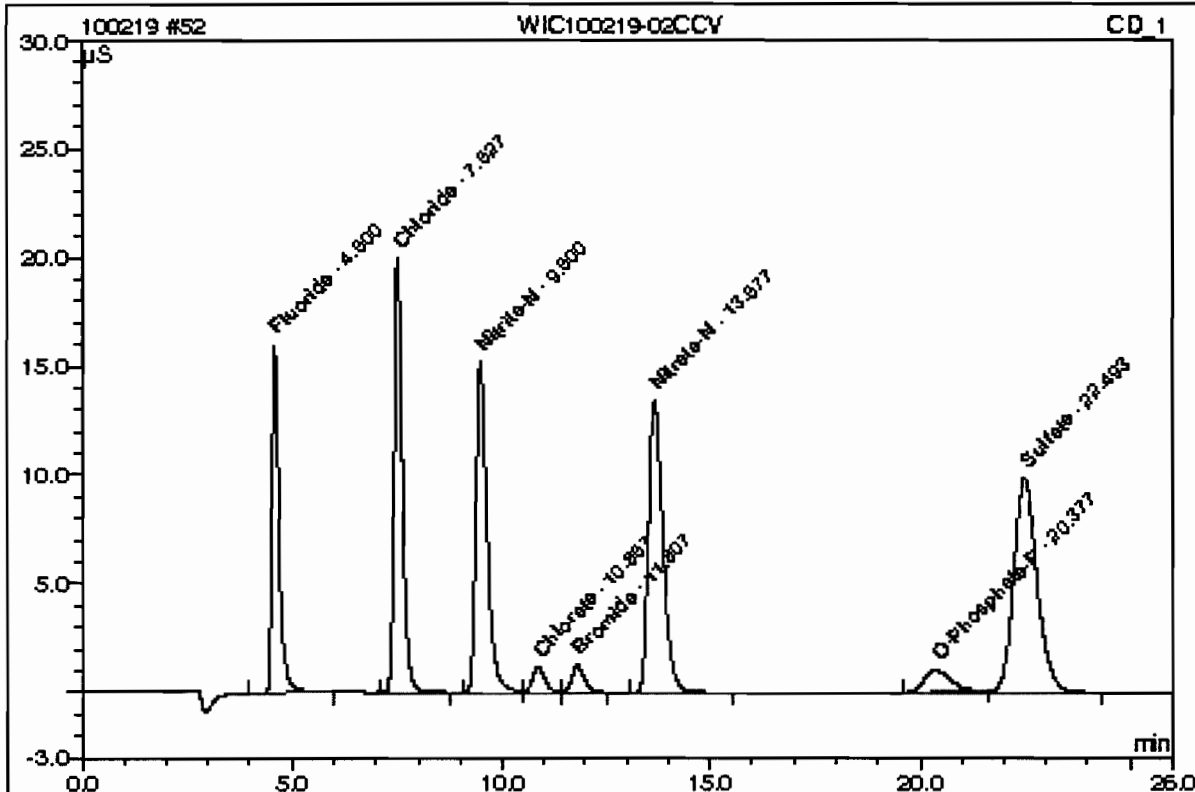
Sample Name:	CCB	Injection Volume:	50.0
Vial Number:	108	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	010710an	Sample Amount:	1.0000
Recording Time:	2/20/2010 0:24	Analyst:	GXM3
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
2	22.72	Sulfate	n.a.	0.3089		0.01600	38.94
Total:				0.3089	0.000	0.016	38.94

**52 WIC100219-02CCV**

Sample Name:	WIC100219-02CCV	Injection Volume:	50.0
Vial Number:	109	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	010710an	Sample Amount:	1.0000
Recording Time:	2/20/2010 7:42	Analyst:	GXM3
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

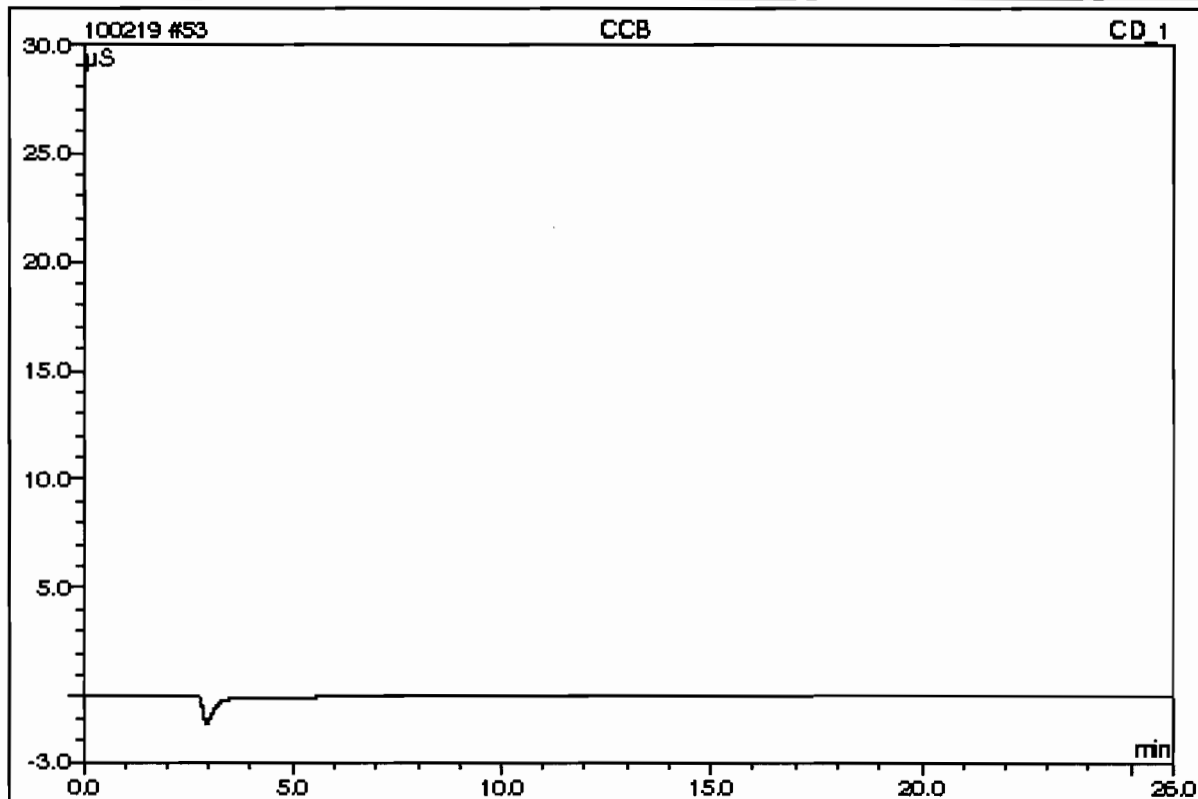


No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.60	Fluoride	n.a.	4.6469		3.18409	12.43
2	7.53	Chloride	n.a.	9.0679		4.51850	17.64
3	9.50	Nitrite-N	n.a.	4.6478		4.58687	17.91
4	10.86	Chlorate	n.a.	2.3900		0.39619	1.55
5	11.81	Bromide	n.a.	2.4044		0.41992	1.64
6	13.68	Nitrate-N	n.a.	4.6113		5.35170	20.89
7	20.38	O-Phosphate-P	n.a.	2.2176		0.73573	2.87
8	22.49	Sulfate	n.a.	18.8783		6.42400	25.08
Total:				48.8642	0.000	25.617	100.00



**53 CCB**

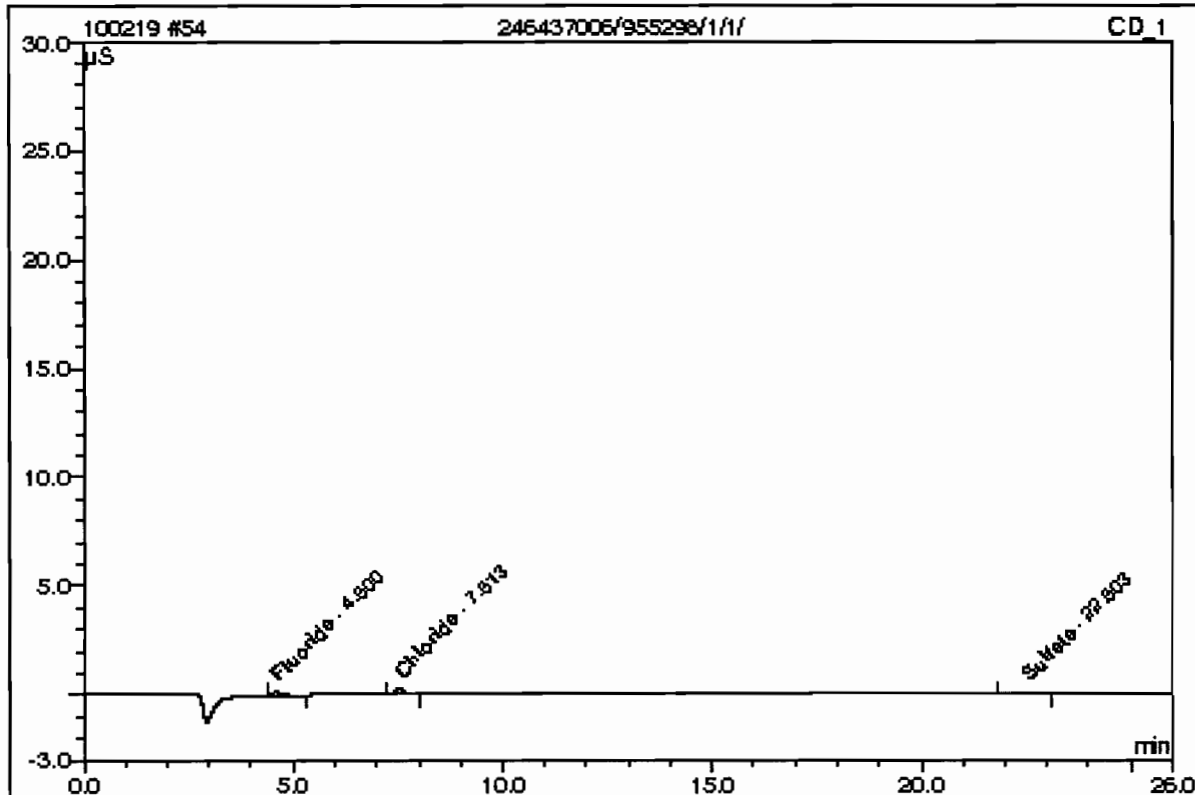
Sample Name:	CCB	Injection Volume:	50.0
Vial Number:	110	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	010710an	Sample Amount:	1.0000
Recording Time:	2/20/2010 8:08	Analyst:	GXM3
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;8056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	<u>n.a.</u>	n.a.
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	<u>n.a.</u>	n.a.
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	<u>n.a.</u>	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	<u>n.a.</u>	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	<u>n.a.</u>	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	<u>n.a.</u>	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	<u>n.a.</u>	n.a.
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	<u>n.a.</u>	n.a.
Total:				0.0000	0.000	0.000	0.00

**54 246437006/955298/1/1/**

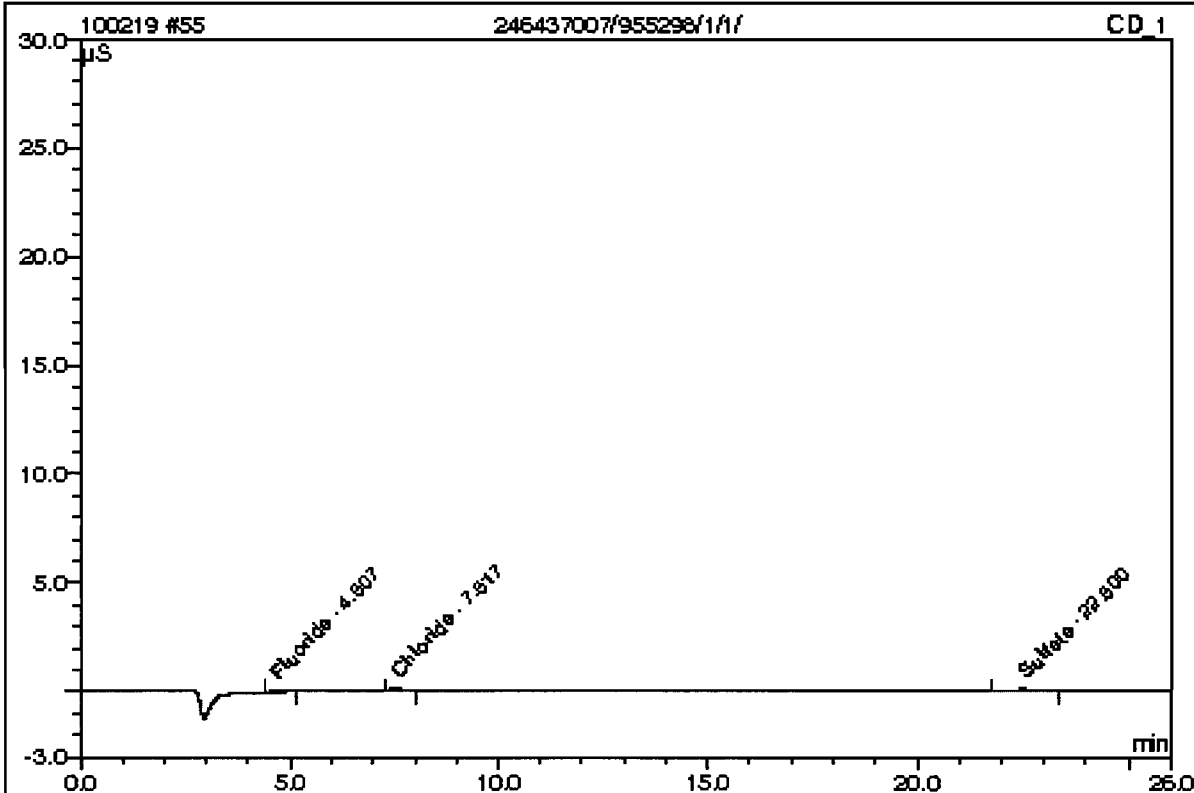
Sample Name:	246437006/955298/1/1/	Injection Volume:	50.0
Vial Number:	100	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	010710an	Sample Amount:	1.0000
Recording Time:	2/20/2010 8:35	Analyst:	GXM3
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.80	Fluoride	n.a.	0.0858		0.04077	24.94
2	7.51	Chloride	n.a.	0.3173		0.07533	46.08
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
3	22.80	Sulfate	n.a.	0.3998		0.04736	28.98
Total:				0.8028	0.000	0.163	100.00

**55 246437007/955298/1/1/**

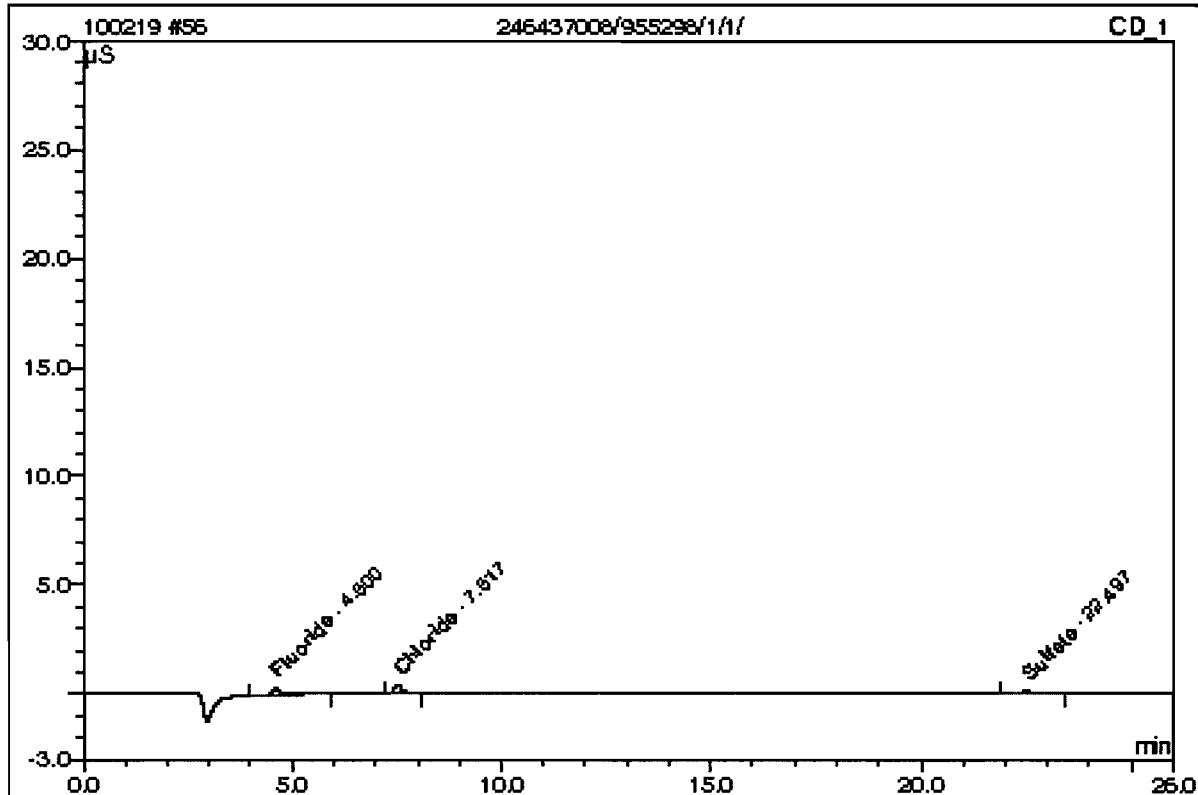
Sample Name:	246437007/955298/1/1/	Injection Volume:	50.0
Vial Number:	110	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	010710an	Sample Amount:	1.0000
Recording Time:	2/20/2010 9:01	Analyst:	GXM3
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.61	Fluoride	n.a.	0.0593		0.02252	17.96
2	7.52	Chloride	n.a.	0.2555		0.04396	35.07
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
3	22.50	Sulfate	n.a.	0.4331		0.05887	46.96
Total:				0.7479	0.000	0.125	100.00

**56 246437008/955298/1/1/**

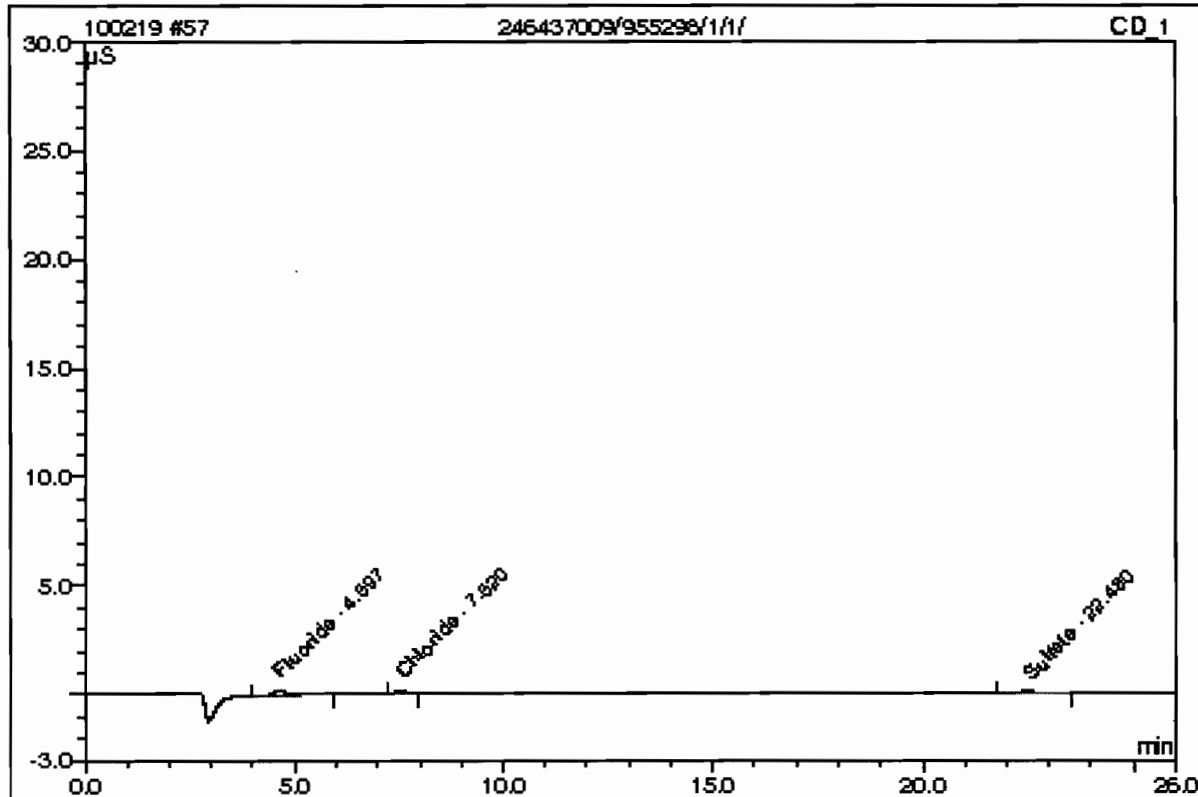
Sample Name:	246437008/955298/1/1/	Injection Volume:	50.0
Vial Number:	111	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	010710an	Sample Amount:	1.0000
Recording Time:	2/20/2010 9:27	Analyst:	GXM3
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.60	Fluoride	n.a.	0.1569		0.08982	36.99
2	7.52	Chloride	n.a.	0.3525		0.09320	38.38
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
3	22.50	Sulfate	n.a.	0.4359		0.05982	24.63
Total:				0.9453	0.000	0.243	100.00

**57 246437009/955298/1/1/**

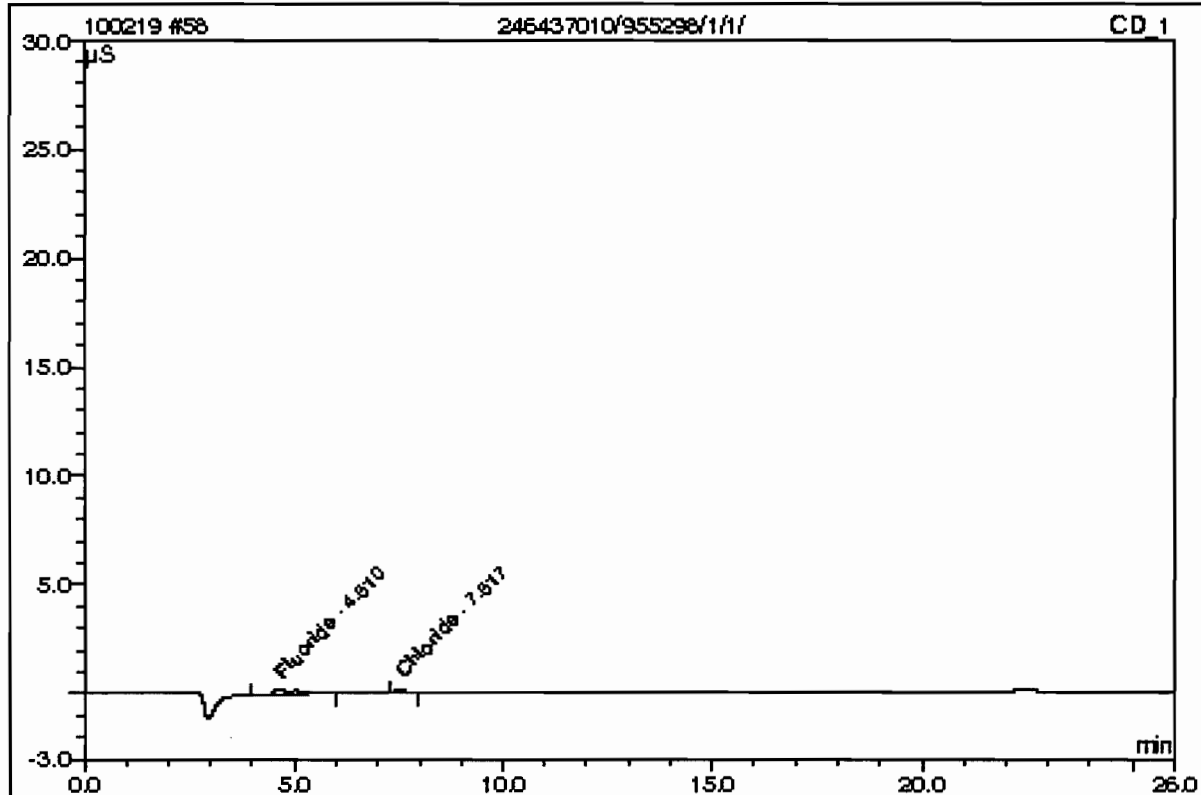
Sample Name:	246437009/955298/1/1/	Injection Volume:	50.0
Vial Number:	112	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	010710an	Sample Amount:	1.0000
Recording Time:	2/20/2010 9:53	Analyst:	GXM3
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
1	4.80	Fluoride	n.a.	0.1691		0.09820	46.15
2	7.52	Chloride	n.a.	0.2660		0.04925	23.15
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
3	22.48	Sulfate	n.a.	0.4518		0.06533	30.70
Total:				0.8869	0.000	0.213	100.00

**58 246437010/955298/1/1/**

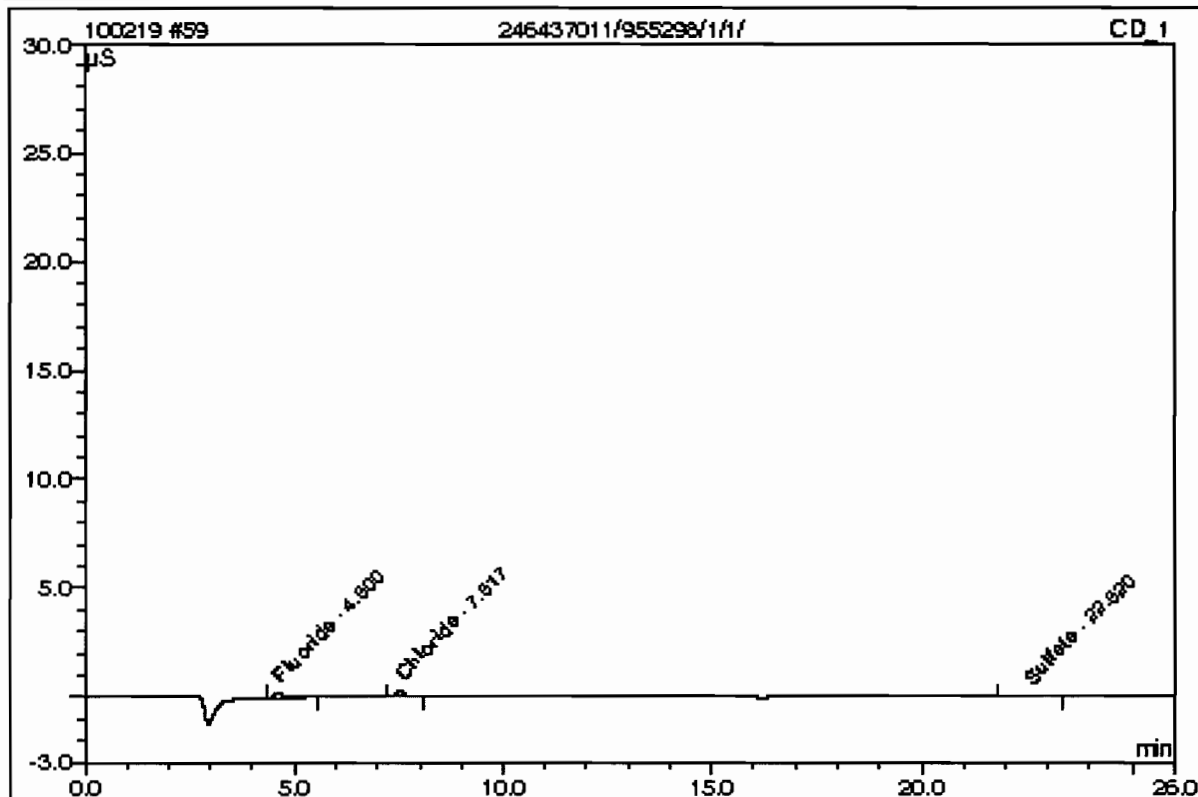
Sample Name:	246437010/955298/1/1/	Injection Volume:	50.0
Vial Number:	113	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	010710an	Sample Amount:	1.0000
Recording Time:	2/20/2010 10:19	Analyst:	GXM3
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area μS*min	Rel. Area %
1	4.61	Fluoride	n.a.	0.2385		0.14803	75.39
2	7.52	Chloride	n.a.	0.2629		0.04768	24.61
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	n.a.
Total:				0.5014	0.000	0.194	100.00

**59 246437011/955298/1/1/**

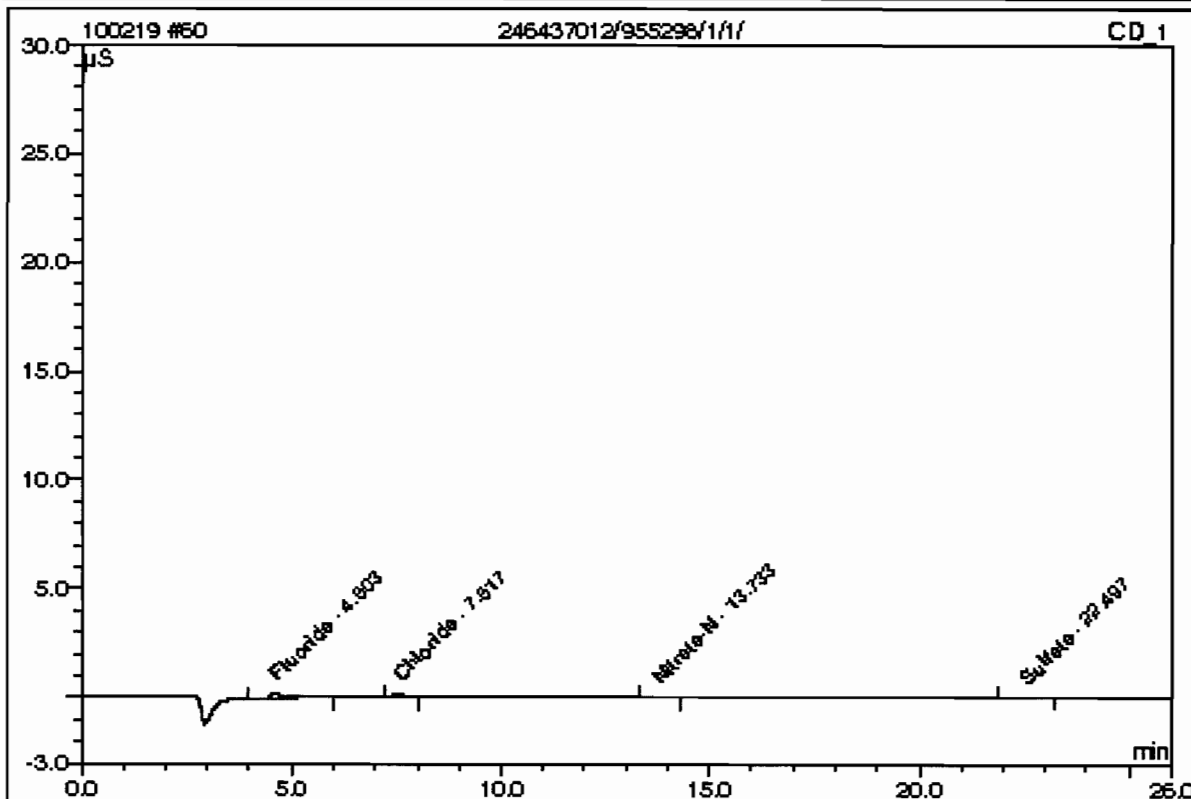
Sample Name:	246437011/955298/1/1/	Injection Volume:	50.0
Vial Number:	114	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	010710an	Sample Amount:	1.0000
Recording Time:	2/20/2010 10:45	Analyst:	GXM3
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
1	4.60	Fluoride	n.a.	0.1115		0.05850	32.65
2	7.52	Chloride	n.a.	0.3059		0.06954	38.80
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
3	22.52	Sulfate	n.a.	0.4108		0.05116	28.55
Total:				0.8282	0.000	0.179	100.00

**60 246437012/955298/1/1/**

Sample Name:	246437012/955298/1/1/	Injection Volume:	50.0
Vial Number:	115	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	010710an	Sample Amount:	1.0000
Recording Time:	2/20/2010 11:11	Analyst:	GXM3
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

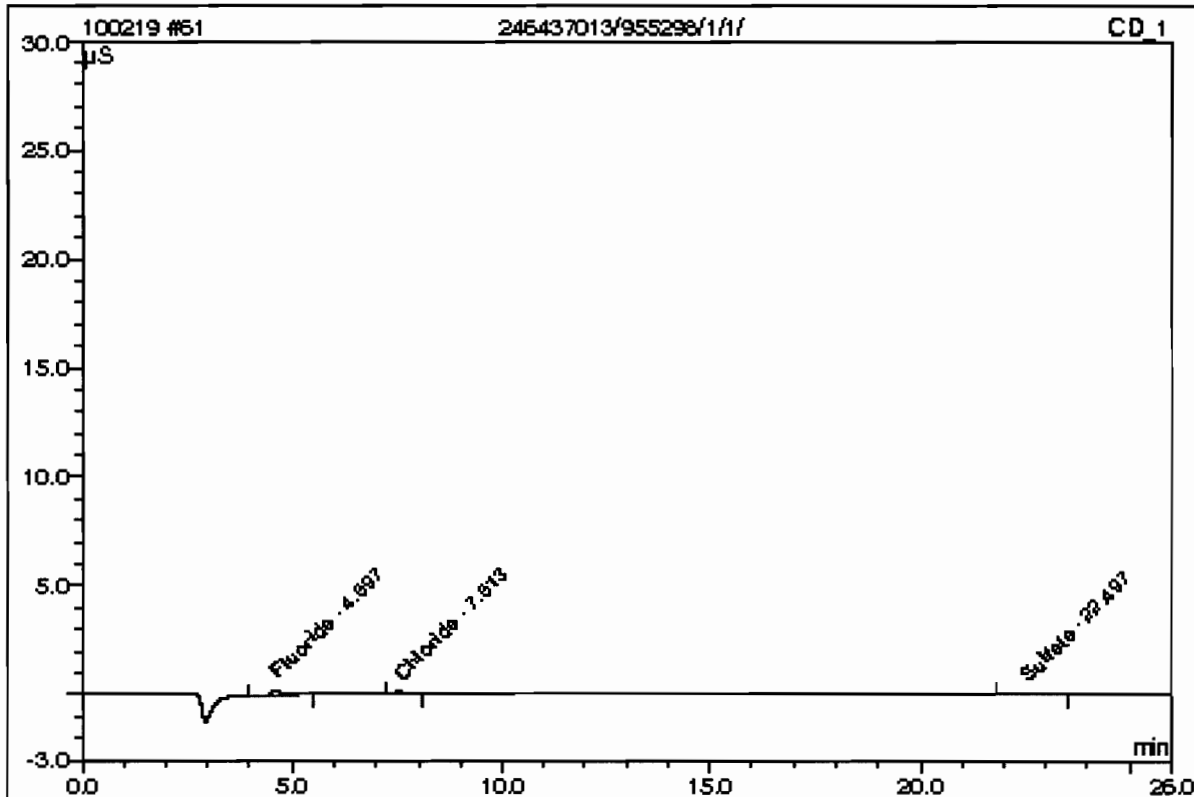


No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
1	4.60	Fluoride	n.a.	0.1858		0.10969	48.30
2	7.52	Chloride	n.a.	0.2640		0.04825	21.25
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
3	13.73	Nitrate-N	n.a.	0.1158		0.02857	12.58
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
4	22.50	Sulfate	n.a.	0.3801		0.04059	17.87
Total:				0.9457	0.000	0.227	100.00



**61 246437013/955298/1/1/**

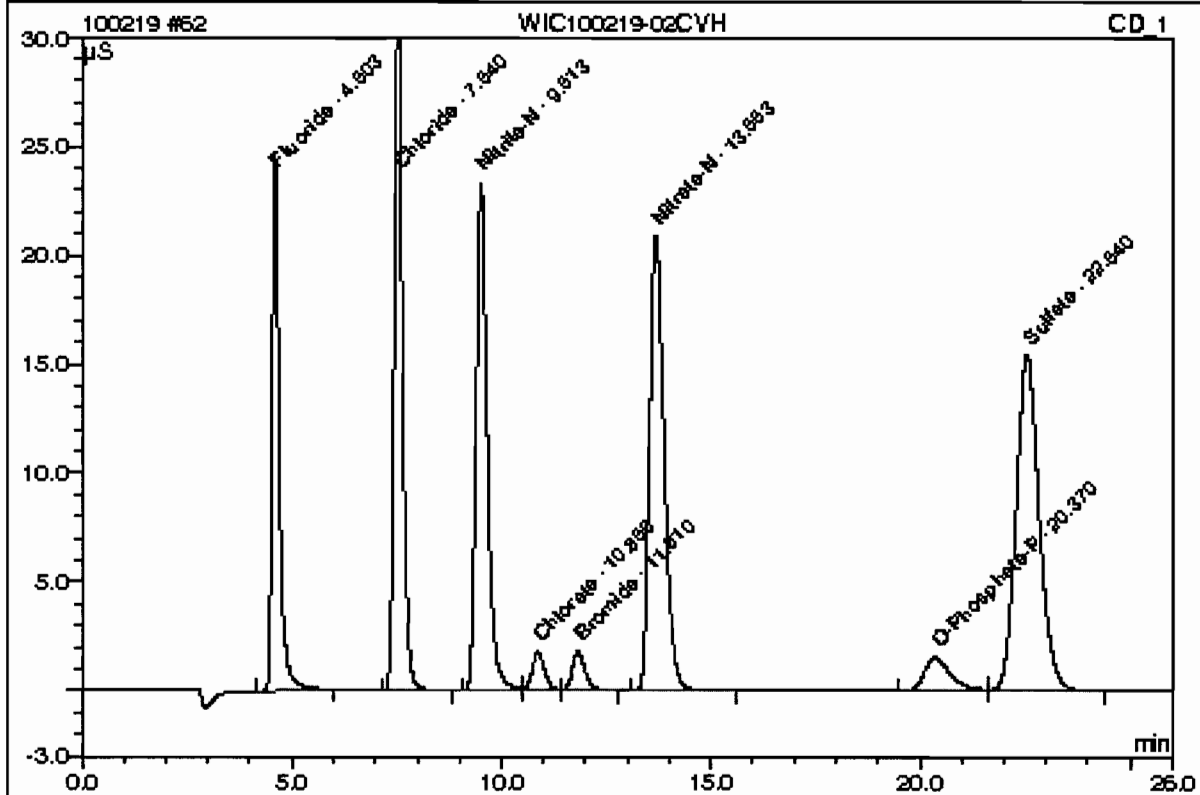
Sample Name:	246437013/955298/1/1/	Injection Volume:	50.0
Vial Number:	116	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	010710an	Sample Amount:	1.0000
Recording Time:	2/20/2010 11:37	Analyst:	GXM3
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.60	Fluoride	n.a.	0.1209		0.06499	40.63
2	7.51	Chloride	n.a.	0.2391		0.03564	22.28
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
3	22.50	Sulfate	n.a.	0.4344		0.05931	37.08
Total:				0.7944	0.000	0.160	100.00

**62 WIC100219-02CVH**

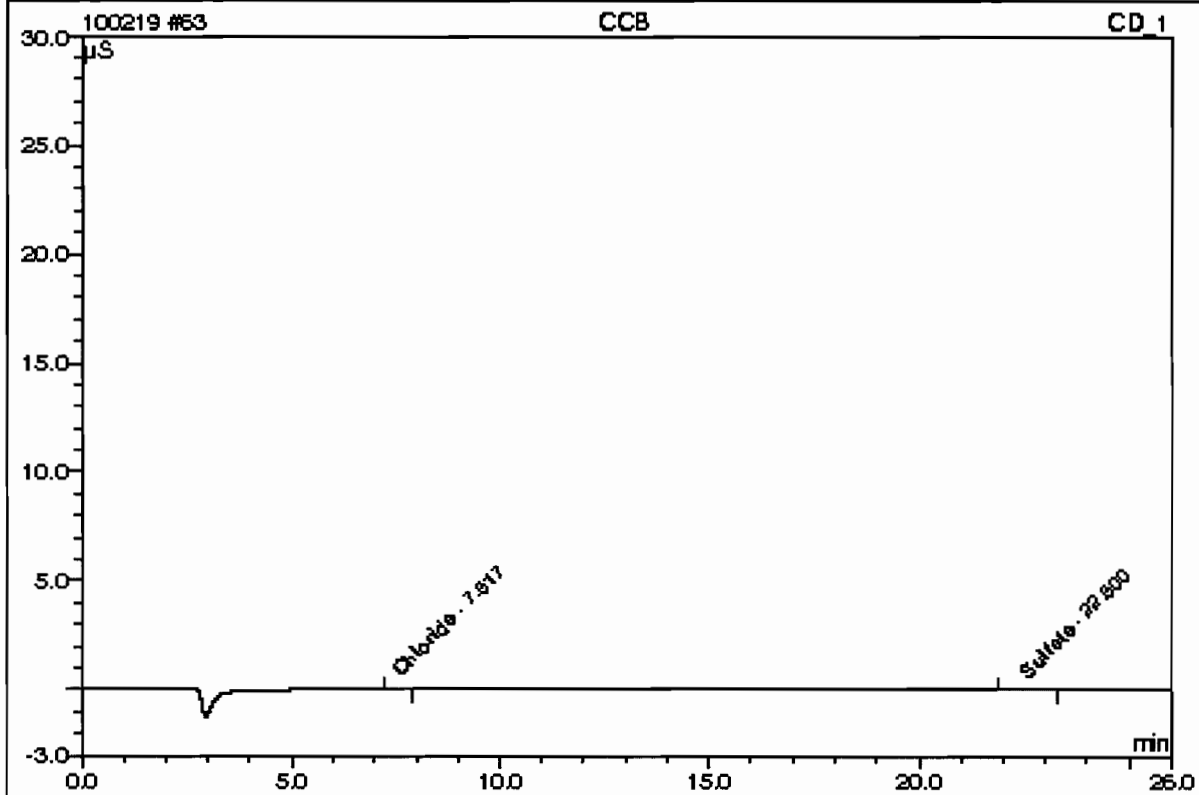
Sample Name:	WIC100219-02CVH	Injection Volume:	50.0
Vial Number:	117	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	010710an	Sample Amount:	1.0000
Recording Time:	2/20/2010 12:03	Analyst:	GXM3
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area μS*min	Rel.Area %
1	4.60	Fluoride	n.a.	7.1359		4.89935	12.37
2	7.54	Chloride	n.a.	14.1578		7.10295	17.93
3	9.51	Nitrite-N	n.a.	7.1096		7.04441	17.78
4	10.86	Chlorate	n.a.	3.6381		0.60716	1.53
5	11.81	Bromide	n.a.	3.5453		0.62267	1.57
6	13.66	Nitrate-N	n.a.	7.1532		8.36153	21.11
7	20.37	O-Phosphate-P	n.a.	3.3383		1.12549	2.84
8	22.54	Sulfate	n.a.	28.7926		9.84525	24.86
Total:				74.8708	0.000	39.609	100.00

**63 CCB**

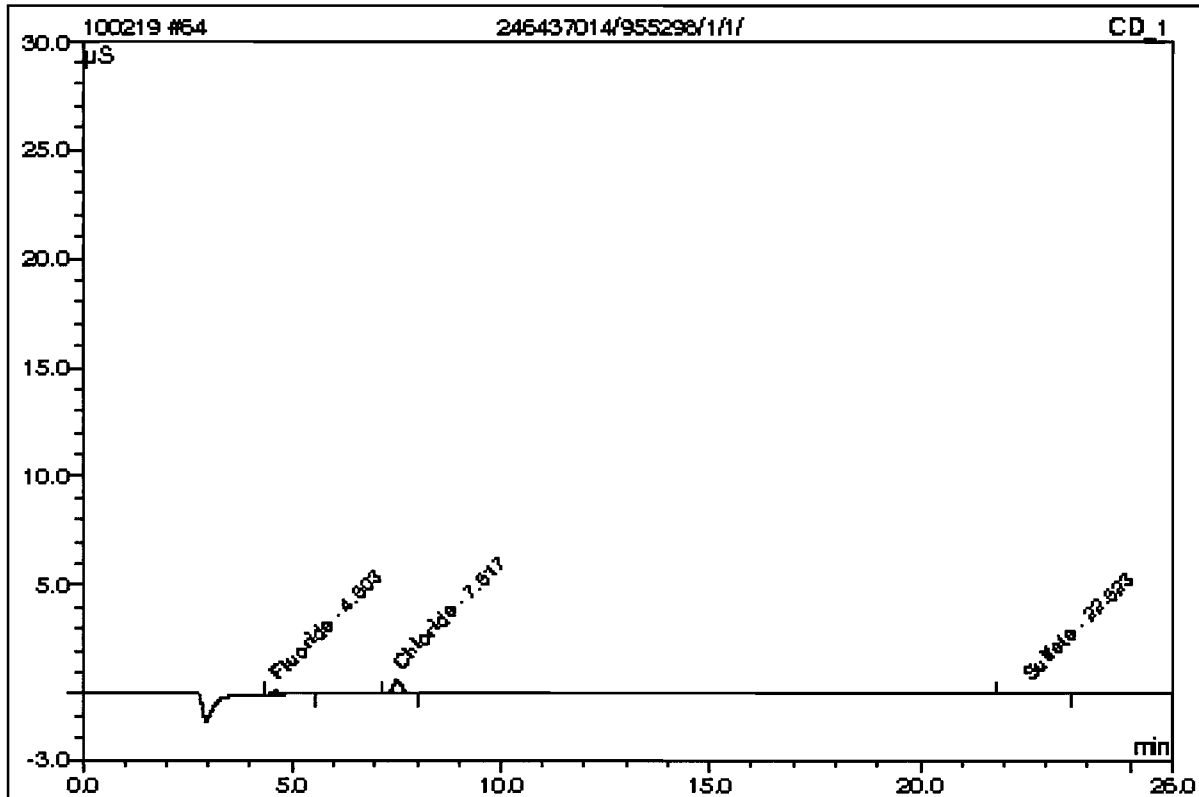
Sample Name:	CCB	Injection Volume:	50.0
Vial Number:	118	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	010710an	Sample Amount:	1.0000
Recording Time:	2/20/2010 12:29	Analyst:	GXM3
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.
1	7.52	Chloride	n.a.	0.2069		0.01925	33.30
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
2	22.50	Sulfate	n.a.	0.3743		0.03857	66.70
Total:				0.5811	0.000	0.058	100.00

**64 246437014/955298/1/1/**

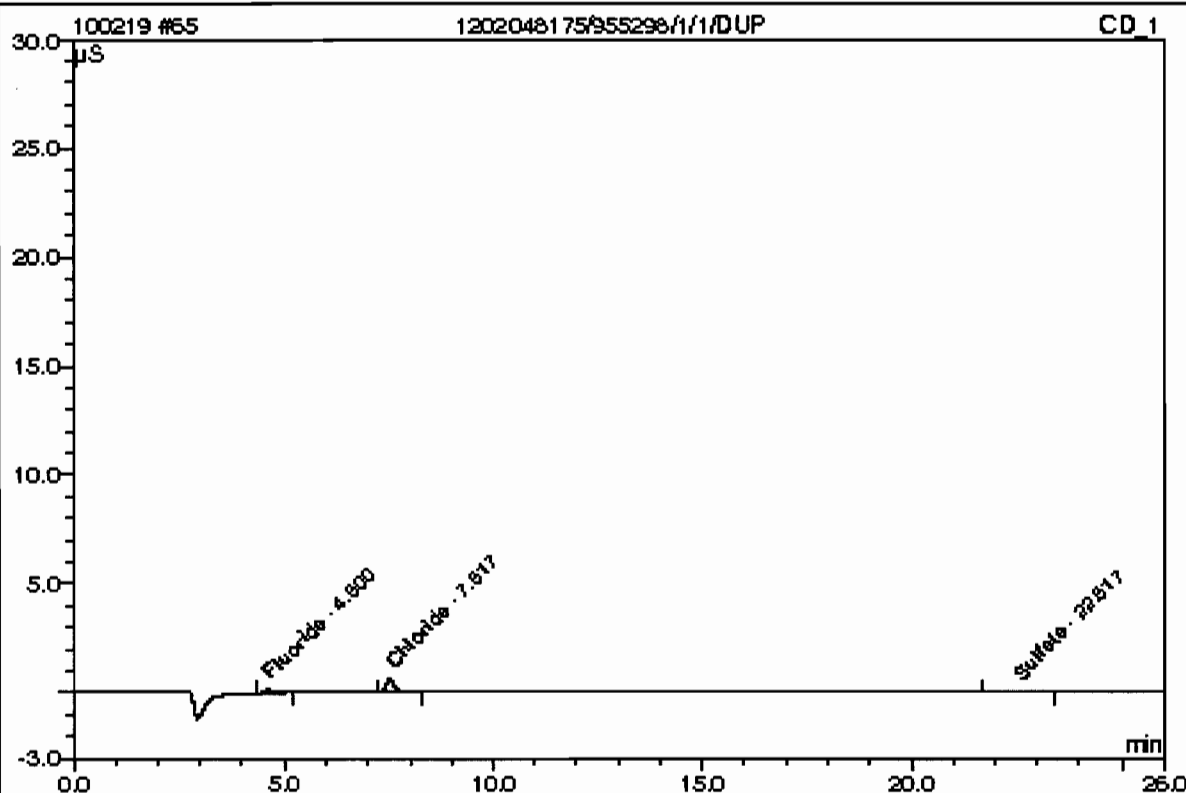
Sample Name:	246437014/955298/1/1/	Injection Volume:	50.0
Vial Number:	119	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	010710an	Sample Amount:	1.0000
Recording Time:	2/20/2010 12:55	Analyst:	GXM3
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
1	4.60	Fluoride	n.a.	0.0829		0.03876	16.19
2	7.52	Chloride	n.a.	0.4638		0.14969	62.54
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
3	22.52	Sulfate	n.a.	0.4101		0.05091	21.27
Total:				0.9567	0.000	0.239	100.00

**65 1202048175/955298/1/1/DUP**

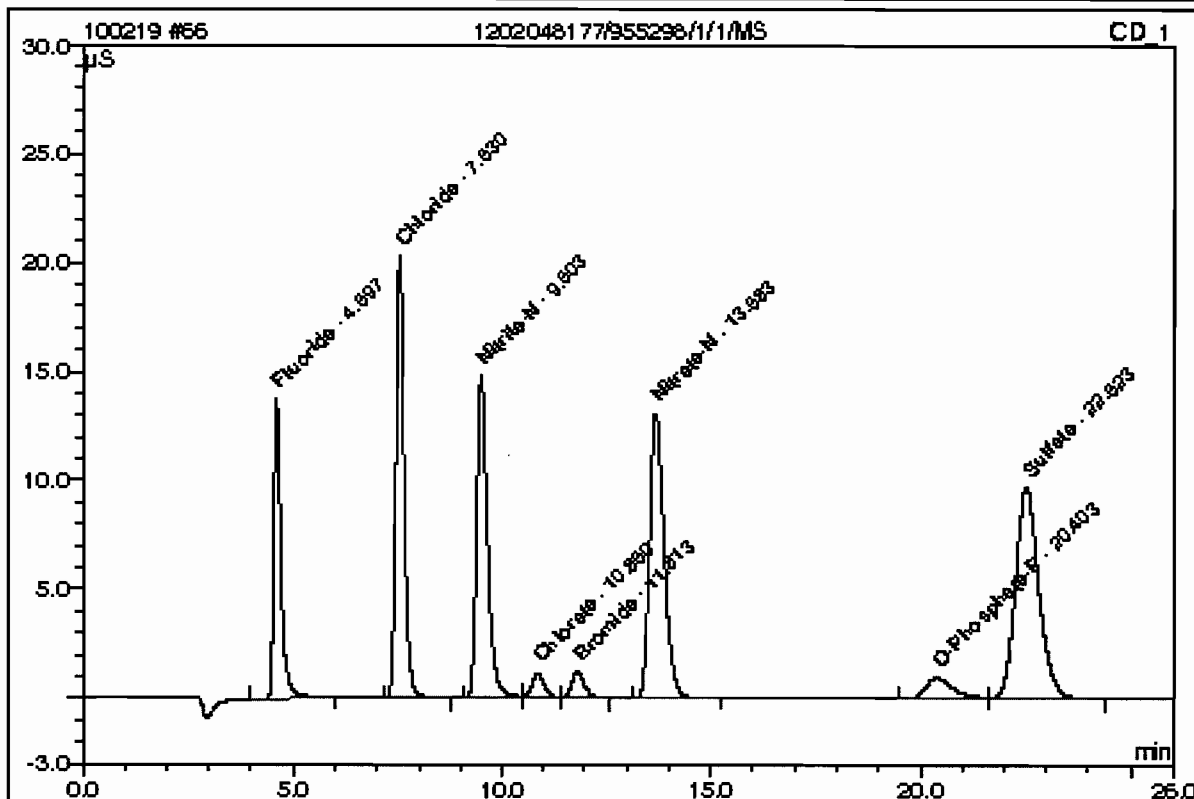
Sample Name:	1202048175/955298/1/1/DUP	Injection Volume:	50.0
Vial Number:	120	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	010710an	Sample Amount:	1.0000
Recording Time:	2/20/2010 13:22	Analyst:	GXM3
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
1	4.60	Fluoride	n.a.	0.0771		0.03482	15.75
2	7.52	Chloride	n.a.	0.4515		0.14347	64.89
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
3	22.52	Sulfate	n.a.	0.3865		0.04279	19.36
Total:				0.9151	0.000	0.221	100.00

**66 1202048177/955298/1/1/MS**

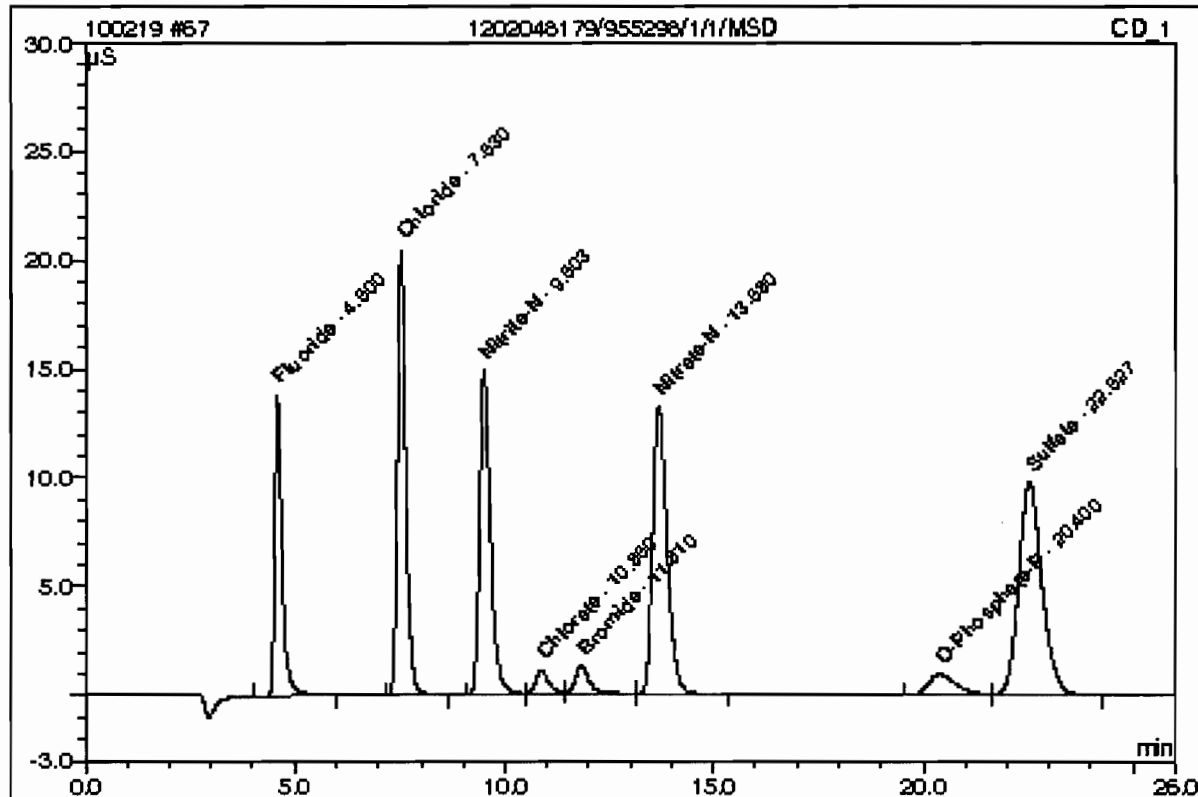
Sample Name:	1202048177/955298/1/1/MS	Injection Volume:	50.0
Vial Number:	121	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	010710an	Sample Amount:	1.0000
Recording Time:	2/20/2010 13:48	Analyst:	GXM3
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
1	4.60	Fluoride	n.a.	4.0362		2.76318	11.13
2	7.53	Chloride	n.a.	9.2143		4.59285	18.49
3	9.50	Nitrite-N	n.a.	4.5207		4.45999	17.96
4	10.86	Chlorate	n.a.	2.2690		0.37574	1.51
5	11.81	Bromide	n.a.	2.3163		0.40427	1.63
6	13.68	Nitrate-N	n.a.	4.5169		5.23995	21.10
7	20.40	O-Phosphate-P	n.a.	2.2099		0.73307	2.95
8	22.52	Sulfate	n.a.	18.4224		6.26665	25.23
Total:				47.5056	0.000	24.836	100.00

**67 1202048179/955298/1/1/MSD**

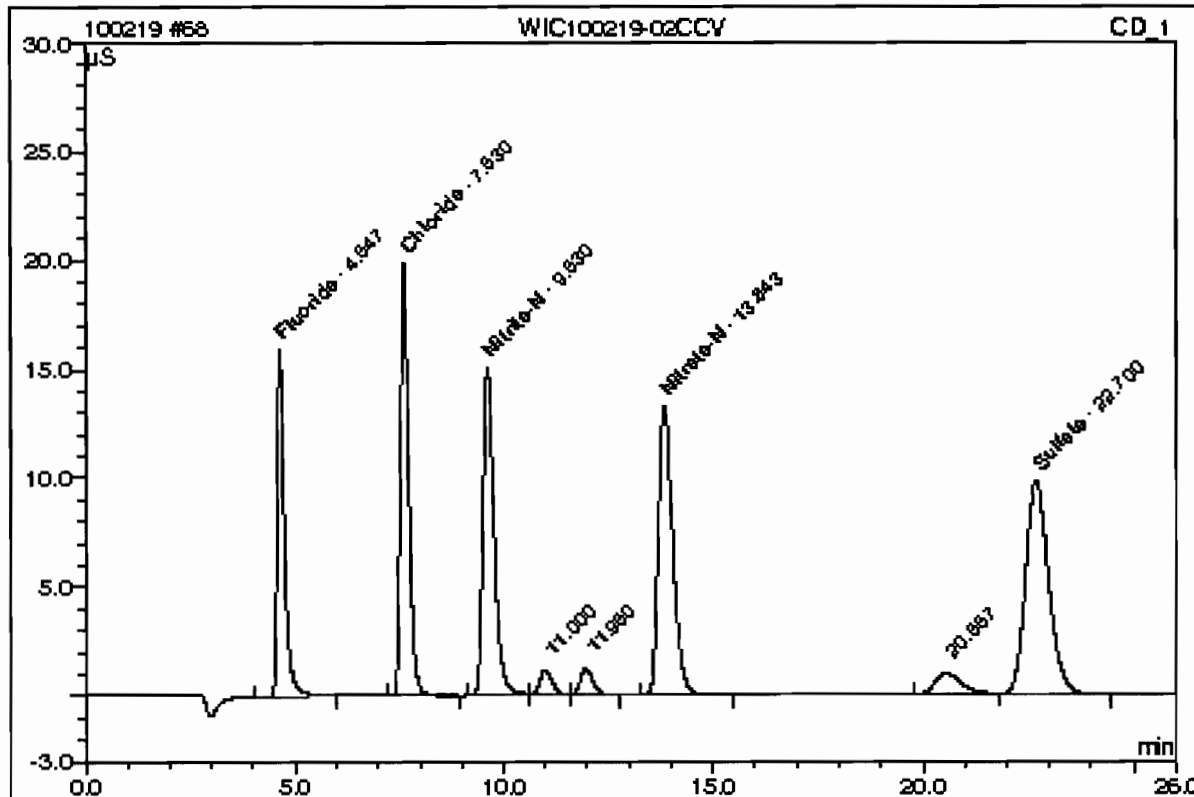
Sample Name:	1202048179/955298/1/1/MSD	Injection Volume:	50.0
Vial Number:	122	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	010710an	Sample Amount:	1.0000
Recording Time:	2/20/2010 14:14	Analyst:	GXM3
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
1	4.60	Fluoride	n.a.	4.0512		2.77352	10.96
2	7.53	Chloride	n.a.	9.2828		4.62760	18.28
3	9.50	Nitrite-N	n.a.	4.5712		4.51039	17.82
4	10.86	Chlorate	n.a.	2.5581		0.42461	1.68
5	11.81	Bromide	n.a.	3.3821		0.59367	2.35
6	13.68	Nitrate-N	n.a.	4.6061		5.34557	21.12
7	20.40	O-Phosphate-P	n.a.	2.2095		0.73291	2.90
8	22.53	Sulfate	n.a.	18.5391		6.30695	24.91
Total:				49.2001	0.000	25.315	100.00

**68 WIC100219-02CCV**

Sample Name:	WIC100219-02CCV	Injection Volume:	50.0
Vial Number:	123	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	010710an	Sample Amount:	1.0000
Recording Time:	2/20/2010 14:40	Analyst:	GXM3
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056

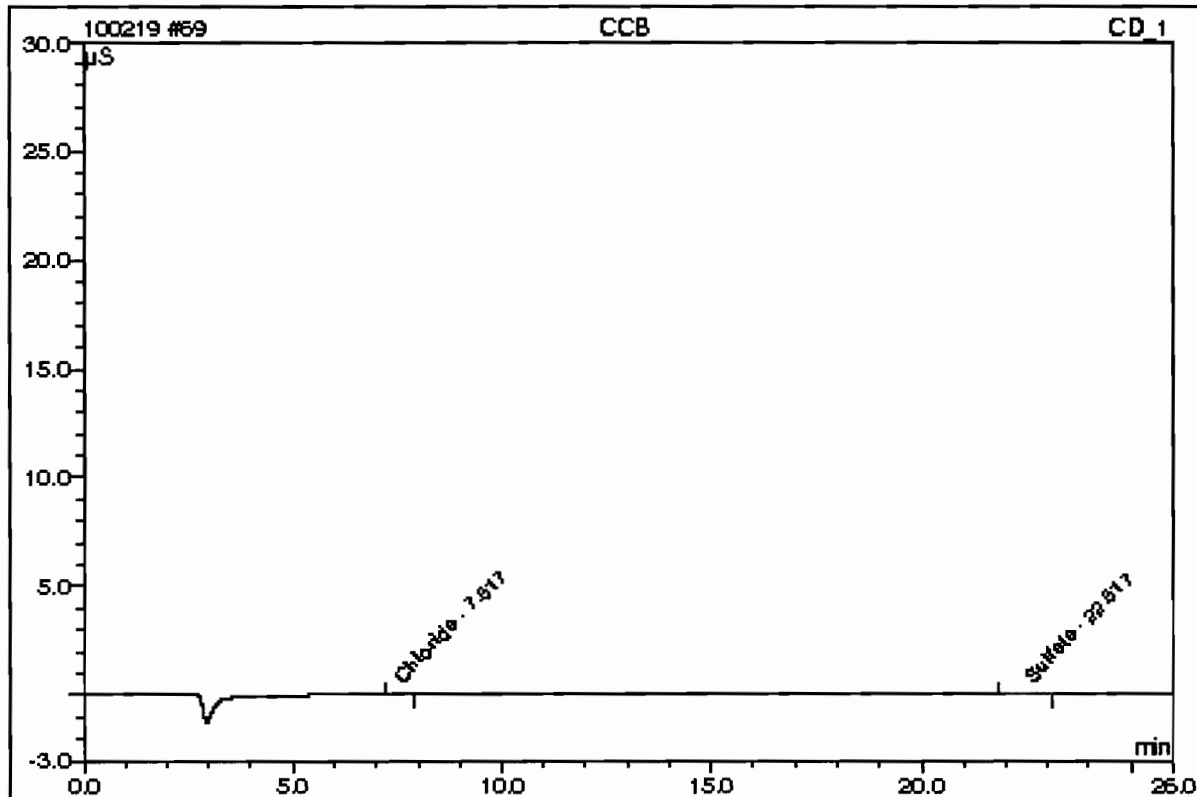


No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
1	4.65	Fluoride	n.a.	4.7021		3.22210	12.54
2	7.63	Chloride	n.a.	9.1529		4.56167	17.75
3	9.63	Nitrate-N	n.a.	4.6866		4.62558	18.00
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
6	13.84	Nitrate-N	n.a.	4.6013		5.33984	20.78
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
8	22.70	Sulfate	n.a.	18.7731		6.38770	24.86
Total:				41.9160	0.000	24.137	93.93



**69 CCB**

Sample Name:	CCB	Injection Volume:	50.0
Vial Number:	124	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	010710an	Sample Amount:	1.0000
Recording Time:	2/20/2010 15:06	Analyst:	GXM3
Run Time (min):	26.00	Column:	AS23-002588;GLGCE086;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.
1	7.52	Chloride	n.a.	0.2007		0.01612	42.65
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
2	22.52	Sulfate	n.a.	0.3253		0.02168	57.35
Total:				0.5260	0.000	0.038	100.00

**pH**

# pH / Corrosivity LogBook

Analyst: EXF1  
 Batch: 950208  
 Lab SOP: GL-GC-E-008 REV# 17  
 Description: pH  
 Method: SW846 9045C/9045D

Type Sample Id Serial Number Description  
 CCV 240 IMM091029-PH PH 7 BUFFER FOR PH  
 LCS 1202036081 IMM091221-01 LCS BUFFER SOLUTION

Sample id	Parent Sample Id	Matrix	Start Time	Stop Time	Run Date	Parname	Initial Wt(g)	Final Vol(mL)	Ph	Temp	Nc(mg/L)	Recovery(%)	Rpd(%)
1202036081 LCS		Soil	11:05	11:00	08-FEB-10 11:30	pH	20	20	6.94	21.0°C	7	99.143	
1202036081 LCS		Soil	11:05	11:00	08-FEB-10 11:30	pH 2	20	20	6.94	21.0°C	7	99.143	
246437012		Soil	11:05	11:00	08-FEB-10 11:31	pH	20	20	7.94	20.3°C			
246437012		Soil	11:05	11:00	08-FEB-10 11:31	pH 2	20	20	7.95	20.3°C			
1202036080 DUP	246437012	Soil	11:05	11:00	08-FEB-10 11:35	pH	20	20	7.96	20.4°C			.252
1202036080 DUP	246437012	Soil	11:05	11:00	08-FEB-10 11:35	pH 2	20	20	7.95	20.4°C			0
246437013		Soil	11:05	11:00	08-FEB-10 11:41	pH	20	20	6.98	20.4°C			
246437013		Soil	11:05	11:00	08-FEB-10 11:41	pH 2	20	20	6.98	20.4°C			
246437014		Soil	11:05	11:00	08-FEB-10 11:42	pH	20	20	7.05	20.3°C			
246437014		Soil	11:05	11:00	08-FEB-10 11:42	pH 2	20	20	7.05	20.6°C			
CCV			11:05	11:00	08-FEB-10 11:44	pH	20	20	7	20.7°C	7	100	
CCV			11:05	11:00	08-FEB-10 11:44	pH 2	20	20	7	20.8°C	7	100	
246443001		Soil	11:05	11:00	08-FEB-10 11:46	pH	20	20	6.53	21.4°C			
246443001		Soil	11:05	11:00	08-FEB-10 11:46	pH 2	20	20	6.53	21.4°C			
246443002		Soil	11:05	11:00	08-FEB-10 12:03	pH	20	20	6.08	21.0°C			
246443002		Soil	11:05	11:00	08-FEB-10 12:03	pH 2	20	20	6.08	21.0°C			
246443003		Soil	11:05	11:00	08-FEB-10 12:04	pH	20	20	6.68	21.1°C			
246443003		Soil	11:05	11:00	08-FEB-10 12:04	pH 2	20	20	6.7	21.1°C			
246443004		Soil	11:05	11:00	08-FEB-10 12:06	pH	20	20	6.48	21.1°C			
246443004		Soil	11:05	11:00	08-FEB-10 12:06	pH 2	20	20	6.5	21.1°C			
246443005		Soil	11:05	11:00	08-FEB-10 12:08	pH	20	20	7.07	21.3°C			
246443005		Soil	11:05	11:00	08-FEB-10 12:08	pH 2	20	20	7.08	21.5°C			
CCV			11:05	11:00	08-FEB-10 12:12	pH	20	20	7	21.3°C	7	100	
CCV			11:05	11:00	08-FEB-10 12:12	pH 2	20	20	7	21.3°C	7	100	

Comments:

GEL Laboratories LLC

Page#

pH / Corrosivity LogBook

Calibration Information:

Run Date: 08-FEB-10 10:46  
Instrument: PHX370  
Analyst: EXF1

Standard	Observed	Theoretical	C	%Recovery
10:46 IMM100208-PH1	4.01	4	SU 21.3	100.25
10:46 IMM100208-PH-	7.02	7	SU 21.3	100.29
10:46 UPH100208-a	9.97	10	SU 21.3	99.7
10:46 UPH100208-02c-	2.05	2	SU 21.3	102.5
10:46 100208-a	12.02	12	SU 21.3	100.17
10:46 IMM100208-01a	6.96	7	SU 21.3	99.429

# pH / Corrosivity LogBook

Analyst: EXP1  
 Batch: 950202  
 Lab SOP: GL-GC-E-008 REV# 17  
 Description: pH  
 Method: SW846 9045C/9045D

Sample id	Parent Sample Id	Matrix	Start Time	Stop Time	Run Date	Parname	Initial Wt(g)	Final Vol(mL)	Ph	Temp	Nc(mg/L)	Recovery(%)	Rpd(%)	Description	
														Type	Serial Number
1202036072 LCS		Soil	12:10	12:15	08-FEB-10 13:17	pH	20	20	6.95	21.0C	7	99.286		CCV	IMM091029-PH
1202036072 LCS		Soil	12:10	12:15	08-FEB-10 13:17	pH 2	20	20	6.95	21.0C	7	99.286			PH 7 BUFFER FOR PH
246336001		Soil	12:10	12:15	08-FEB-10 13:18	pH	20	20	6.47	20.2C				LCS	IMM091221-01
246336001		Soil	12:10	12:15	08-FEB-10 13:18	pH 2	20	20	6.47	20.2C					LCS BUFFER SOLUTION
1202036070 DUP	246336001	Soil	12:10	12:15	08-FEB-10 13:21	pH	20	20	6.52	20.0C			.77		
1202036070 DUP	246336001	Soil	12:10	12:15	08-FEB-10 13:21	pH 2	20	20	6.53	20.0C			.923		
246336002		Soil	12:10	12:15	08-FEB-10 13:22	pH	20	20	6.23	20.1C					
246336002		Soil	12:10	12:15	08-FEB-10 13:22	pH 2	20	20	6.24	20.1C					
1202036071 DUP	246336002	Soil	12:10	12:15	08-FEB-10 13:24	pH	20	20	6.24	20.1C			.16		
1202036071 DUP	246336002	Soil	12:10	12:15	08-FEB-10 13:24	pH 2	20	20	6.25	20.1C			.16		
CCV			12:10	12:15	08-FEB-10 13:26	pH	20	20	7	20.8C	7	100			
CCV			12:10	12:15	08-FEB-10 13:26	pH 2	20	20	7	20.8C	7	100			
246336003		Soil	12:10	12:15	08-FEB-10 13:27	pH	20	20	5.98	20.1C					
246336003		Soil	12:10	12:15	08-FEB-10 13:27	pH 2	20	20	5.99	20.1C					
246336004		Soil	12:10	12:15	08-FEB-10 13:29	pH	20	20	5.47	20.0C					
246336004		Soil	12:10	12:15	08-FEB-10 13:29	pH 2	20	20	5.47	20.0C					
246336005		Soil	12:10	12:15	08-FEB-10 13:31	pH	20	20	7.09	20.0C					
246336005		Soil	12:10	12:15	08-FEB-10 13:31	pH 2	20	20	7.09	20.1C					
246336006		Soil	12:10	12:15	08-FEB-10 13:32	pH	20	20	6.8	20.1C					
246336006		Soil	12:10	12:15	08-FEB-10 13:32	pH 2	20	20	6.8	20.2C					
246336007		Soil	12:10	12:15	08-FEB-10 13:35	pH	20	20	6.82	20.4C					
246336007		Soil	12:10	12:15	08-FEB-10 13:35	pH 2	20	20	6.82	20.4C					
CCV			12:10	12:15	08-FEB-10 13:36	pH	20	20	7.01	20.9C	7	100.143			
CCV			12:10	12:15	08-FEB-10 13:36	pH 2	20	20	7	20.9C	7	100			
246336008		Soil	12:10	12:15	08-FEB-10 13:38	pH	20	20	6.19	20.3C					
246336008		Soil	12:10	12:15	08-FEB-10 13:38	pH 2	20	20	6.21	20.3C					
246336009		Soil	12:10	12:15	08-FEB-10 13:40	pH	20	20	6.03	20.3C					
246336009		Soil	12:10	12:15	08-FEB-10 13:40	pH 2	20	20	6.03	20.3C					

GEL Laboratories LLC

Page# \_\_\_\_\_

# pH / Corrosivity LogBook

Analyst: EXF1  
 Batch: 950202  
 Lab SOP: GL-GC-E-008 REV# 17  
 Description: pH  
 Method: SW846 9045C/9045D

Sample id	Parent Sample Id	Matrix	Start Time	Stop Time	Run Date	Parmname	Initial Wt(g)	Final Vol(mL)	Ph	Temp	Nc(mg/L)	Recovery(%)	Rpd(%)	Description	
														Type	Serial Number
246437001		Soil	12:10	12:15	08-FEB-10 13:42	pH	20	20	6.81	20.3°C				CCV	IMM091029-PH
246437001		Soil	12:10	12:15	08-FEB-10 13:42	pH 2	20	20	6.82	20.3°C					PH 7 BUFFER FOR PH
246437002		Soil	12:10	12:15	08-FEB-10 13:44	pH	20	20	7.04	20.3°C					LCS BUFFER SOLUTION
246437002		Soil	12:10	12:15	08-FEB-10 13:44	pH 2	20	20	7.05	20.3°C					
246437003		Soil	12:10	12:15	08-FEB-10 13:45	pH	20	20	6.76	20.1°C					
246437003		Soil	12:10	12:15	08-FEB-10 13:45	pH 2	20	20	6.77	20.1°C					
CCV			12:10	12:15	08-FEB-10 13:48	pH	20	20	7	20.8°C	7	100			
CCV			12:10	12:15	08-FEB-10 13:48	pH 2	20	20	7	20.8°C	7	100			
246437004		Soil	12:10	12:15	08-FEB-10 13:49	pH	20	20	7.12	20.3°C					
246437004		Soil	12:10	12:15	08-FEB-10 13:49	pH 2	20	20	7.13	20.3°C					
246437005		Soil	12:10	12:15	08-FEB-10 13:51	pH	20	20	7.21	20.2°C					
246437005		Soil	12:10	12:15	08-FEB-10 13:51	pH 2	20	20	7.22	20.3°C					
246437006		Soil	12:10	12:15	08-FEB-10 13:53	pH	20	20	7.24	20.5°C					
246437006		Soil	12:10	12:15	08-FEB-10 13:53	pH 2	20	20	7.25	20.5°C					
246437007		Soil	12:10	12:15	08-FEB-10 13:55	pH	20	20	7.25	20.4°C					
246437007		Soil	12:10	12:15	08-FEB-10 13:55	pH 2	20	20	7.27	20.4°C					
246437008		Soil	12:10	12:15	08-FEB-10 13:57	pH	20	20	7.41	20.2°C					
246437008		Soil	12:10	12:15	08-FEB-10 13:57	pH 2	20	20	7.39	20.2°C					
CCV			12:10	12:15	08-FEB-10 13:58	pH	20	20	7.01	20.7°C	7	100.143			
CCV			12:10	12:15	08-FEB-10 13:58	pH 2	20	20	7	20.7°C	7	100			
246437009		Soil	12:10	12:15	08-FEB-10 14:00	pH	20	20	6.6	20.2°C					
246437009		Soil	12:10	12:15	08-FEB-10 14:00	pH 2	20	20	6.62	20.2°C					
246437010		Soil	12:10	12:15	08-FEB-10 14:03	pH	20	20	7.29	20.2°C					
246437010		Soil	12:10	12:15	08-FEB-10 14:03	pH 2	20	20	7.3	20.1°C					
246437011		Soil	12:10	12:15	08-FEB-10 14:05	pH	20	20	6.88	20.0°C					
246437011		Soil	12:10	12:15	08-FEB-10 14:05	pH 2	20	20	6.89	20.1°C					
CCV			12:10	12:15	08-FEB-10 14:07	pH	20	20	7	20.7°C	7	100			
CCV			12:10	12:15	08-FEB-10 14:07	pH 2	20	20	7	20.7°C	7	100			

GEL Laboratories LLC

Page# \_\_\_\_\_

pH / Corrosivity LogBook

Calibration Information:

Run Date: 08-FEB-10 10:46  
Instrument: PHX370  
Analyst: EXF1

Comments:

	Standard	Observed	Theoretical	C	%Recovery
10:46	IMM100208-PH1	4.01	4	21.3	100.25
10:46	IMM100208-PH-	7.02	7	21.3	100.29
10:46	UPH100208-a	9.97	10	21.3	99.7
10:46	UPH100208-02c-	2.05	2	21.3	102.5
10:46	100208-a	12.02	12	21.3	100.17
10:46	IMM100208-01a	6.96	7	21.3	99.429