

Wednesday, February 24, 2010

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REQUEST NUMBER: 10-2069

**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: 10-2069

Per Agreement Number: 126310011

Project Cost Code: MR3A05529E00

Please analyse the enclosed samples
according to the schedule indicated:

SHIP DATE: 2/24/2010

TURNAROUND/REPORT DUE: 3/26/2010

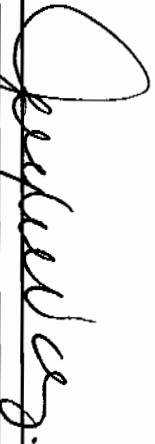
TURNAROUND REQ'D: 30 Days

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	RE15-10-8388	R	2/19/2010	
		1	RE15-10-8389	R	2/19/2010	
		1	RE15-10-8390	R	2/19/2010	
		1	RE15-10-8391	R	2/19/2010	
		1	RE15-10-8392	R	2/19/2010	
	EPA.353.2	1	RE15-10-8406	W	2/19/2010	
	SW-846:6010B	1	RE15-10-8388	R	2/19/2010	
		1	RE15-10-8389	R	2/19/2010	
		1	RE15-10-8390	R	2/19/2010	

Wednesday, February 24, 2010

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REQUEST NUMBER: 10-2069

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
SW-846:6010B	1	1	RE15-10-8391	R	2/19/2010	
			RE15-10-8392	R	2/19/2010	
SW-846:6020	1	1	RE15-10-8388	R	2/19/2010	
			RE15-10-8389	R	2/19/2010	
			RE15-10-8390	R	2/19/2010	
			RE15-10-8391	R	2/19/2010	
			RE15-10-8392	R	2/19/2010	
SW-846:6850	1	1	RE15-10-8406	W	2/19/2010	
			RE15-10-8388	R	2/19/2010	
			RE15-10-8389	R	2/19/2010	
			RE15-10-8390	R	2/19/2010	
			RE15-10-8391	R	2/19/2010	
SW-846:7470A	1	1	RE15-10-8406	W	2/19/2010	
			RE15-10-8388	R	2/19/2010	
			RE15-10-8389	R	2/19/2010	
			RE15-10-8390	R	2/19/2010	
			RE15-10-8391	R	2/19/2010	
SW-846:7471A	1	1	RE15-10-8392	R	2/19/2010	
			RE15-10-8388	R	2/19/2010	
			RE15-10-8389	R	2/19/2010	
			RE15-10-8390	R	2/19/2010	
			RE15-10-8391	R	2/19/2010	
SW-846:9012A	1	1	RE15-10-8388	R	2/19/2010	
			RE15-10-8389	R	2/19/2010	
			RE15-10-8390	R	2/19/2010	
			RE15-10-8391	R	2/19/2010	
			RE15-10-8392	R	2/19/2010	
SW-846:9045C	1	1	RE15-10-8406	W	2/19/2010	
			RE15-10-8388	R	2/19/2010	
			RE15-10-8389	R	2/19/2010	
			RE15-10-8390	R	2/19/2010	
			RE15-10-8391	R	2/19/2010	

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PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
SW-846:9045C		1	RE15-10-8390	R	2/19/2010	
		1	RE15-10-8391	R	2/19/2010	
		1	RE15-10-8392	R	2/19/2010	

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Wednesday, February 24, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-2069

LOS ALAMOS

REQUEST NUMBER: 10-2069

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 3/26/2010

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
RE15-10-8406	1	POLY	METALS+U-GEL	Nitric Acid	W
RE15-10-8406	1	POLY	NO3NO2	Sulfuric Acid (Hydrogen Sulfate)	W
RE15-10-8406	1	POLY	SW-846:6850	Ice	W
RE15-10-8406	1	POLY	TCN	Sodium Hydroxide	W
RE15-10-8389	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8388	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8390	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8390	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8392	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8392	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8391	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8391	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8389	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8388	1	POLY	METALS+U-GEL	Ice	R

Relinquished By:

Date Time

Received By:

Date Time

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Received for DISPOSAL By:

Date Time

Remarks:

Printed Name

Signature

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2508

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

SAMPLE ID: RE15-10-8388

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/19/2010		MEDIA:		QBT3	
TIME COLLECTED (HH:MM)		0844		SUB-MEDIA:		TUFF.1	
PRS ID: 15-009(h)		OK		SAMPLE TECH CODE: HA		OK	
LOCATION ID: 15-610856		↓		FIELD QC TYPE: NA		↓	
LOCATION TYPE: GENERIC		↓		FIELD PREP: NA		↓	
TOP DEPTH: 0		6-0		SAMPLE USAGE: INV		↓	
BOTTOM DEPTH: 0		7.0		SCREEN/PORT DESC: NA			
FIELD MATRIX: R		S		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE: NA		COMPOSITE TIME INTERVAL: NA		WATER FLOWING: YES/NO/NA			
BOREHOLE: YES/NO/NA		BOREHOLE DECLINATION: NA		BOREHOLE DIRECTION: NA			

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

SAMPLE DESC: Light brown brown fill with pumice and tuff fragments

SAMPLE COMMENTS: none

LOCATION DESC: below tank inlet 9h-2

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha \leq 20 dpm
 Beta/Gamma \leq 1924 dpm

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

COLLECTED BY (PRINT)

REVIEWED BY (PRINT)

Jon Roberson

LARRY A. LOPEZ

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) LARRY A. LOPEZ	2/19/10	(Printed Name) Sheri Sherwood	2/19/10
(Signature) Larry A. Lopez	1545	(Signature) Sheri Sherwood	1545
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2508

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

SAMPLE ID: RE15-10-8389

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/19/2010		MEDIA:		QBT3	
TIME COLLECTED(HH:MM)		10:00		SUB-MEDIA:		TUFF 1	
PRS ID: 15-009(h)		OK		SAMPLE TECH CODE:		HA	
LOCATION ID: 15-610856		↓		FIELD QC TYPE:		NA	
LOCATION TYPE: GENERIC		↓		FIELD PREP:		NA	
TOP DEPTH: 0		11.0		SAMPLE USAGE:		INV	
BOTTOM DEPTH: 0		13.0		SCREEN/PORT DESC:		NA	
FIELD MATRIX: R		S		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE: NA		COMPOSITE TIME INTERVAL: NA		WATER FLOWING: YES/NO/NA		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		
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None		
1		H3	500 ML POLY	Ice		
1		Perchlorate+CN+ N03+pH	500 ML POLY	Ice		
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None		
1		METALS+U-GEL	125 ML POLY	Ice		

SAMPLE DESC: Light brown soil/tuff fill

SAMPLE COMMENTS: none

LOCATION DESC: 5' below inlet - 9h-2

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 25 dpm
Beta/Gamma = 2070 dpm

PID $\frac{\text{Ambient Reading}}{\text{Reading}} = \text{ppm} = \frac{0.0}{0.2} \text{ ppm}$

COLLECTED BY (PRINT)

REVIEWED BY (PRINT)

Jon Roberson

Larry A. Lopez

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Jon Roberson	2/19/10	(Printed Name) Sheri Sherwood	2/19/10
(Signature) Jon Roberson	1545	(Signature) Sheri Sherwood	1545
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2508

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

SAMPLE ID: RE15-10-8390

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/19/2010		MEDIA: QBT3		Fill	
TIME COLLECTED (HH:MM)		09:13		SUB-MEDIA: TUFF 1		NA	
PRS ID:	15-009(h)	OK		SAMPLE TECH CODE:	HA	OK	
LOCATION ID:	15-610857	OK		FIELD QC TYPE:	NA		
LOCATION TYPE:	GENERIC	OK		FIELD PREP:	NA		
TOP DEPTH:	0	6.5		SAMPLE USAGE:	INV		
BOTTOM DEPTH:	0	32.17/10 7.5 8.0		SCREEN/PORT DESC:	NA		
FIELD MATRIX:	R	S		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE: NA		COMPOSITE TIME INTERVAL: NA		WATER FLOWING: YES/NO/NA			
BOREHOLE: YES/NO/NA		BOREHOLE DECLINATION: NA		BOREHOLE DIRECTION: NA			

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

SAMPLE DESC: Light brown fill with tuff fragments

SAMPLE COMMENTS: none

LOCATION DESC: below tank outlet 9h-4

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 15 dpm
Beta/Gamma = 2090 dpm

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

COLLECTED BY (PRINT)

Jon Roberson

REVIEWED BY (PRINT)

LARRY A. LEWIS

RELINQUISHED BY (Printed Name) Jon Roberson (Signature) <i>Jon Roberson</i>	Date/Time 2/19/10 1545	RECEIVED BY (Printed Name) Sheri Sherwood (Signature) <i>Sheri Sherwood</i>	Date/Time 2/19/10 1545
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2508

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

SAMPLE ID: RE15-10-8391

WORK ORDER:

AS PLANNED		AS COLLECTED	AS PLANNED		AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/19/2010	MEDIA:	QBT3	Fill
TIME COLLECTED(HH:MM)		0940	SUB-MEDIA:	TUFF 1	NA
PRS ID:	15-009(h)	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	15-610857	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	382/110 +210 11.5	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	13.0	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	R	S	EXCAVATED: YES/NO/NA		
COMPOSITE TYPE:	NA		COMPOSITE TIME INTERVAL:	NA	
BOREHOLE: YES/NO/NA	NO		BOREHOLE DECLINATION:	NA	
			BOREHOLE DIRECTION:	NA	

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

SAMPLE DESC: Light brown soil/tuff Fill

SAMPLE COMMENTS: none FTB collected RE15-10-8409

LOCATION DESC: 5' below tank outlet (9L-4)

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 30 dpm
Beta/Gamma = 2190 dpm

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

COLLECTED BY (PRINT)

Jon Roberson

REVIEWED BY (PRINT) Leroy A. Lopez

RELINQUISHED BY (Printed Name) Jon Roberson (Signature) <i>Jon Roberson</i>	Date/Time 2/19/10 1545	RECEIVED BY (Printed Name) Sheri Sheppard (Signature) <i>Sheri Sheppard</i>	Date/Time 2/19/10 1545
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2508

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

SAMPLE ID: RE15-10-8392

WORK ORDER:

AS PLANNED		AS COLLECTED	AS PLANNED		AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/19/2010	MEDIA:	QBT3	FILL
TIME COLLECTED(HH:MM)		1450	SUB-MEDIA:	TUFF 1	NA
PRS ID:	15-009(h)	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	15-610858	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	5.7	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	6.5	SCREEN/PORT DESC:		NA
FIELD MATRIX:	R	S	EXCAVATED: YES/NO/NA		
COMPOSITE TYPE:	NA		COMPOSITE TIME INTERVAL:	NA	
BOREHOLE: YES/NO/NA			BOREHOLE DECLINATION:	NA	
			BOREHOLE DIRECTION:	NA	

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	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 fill with tuff fragments, moist, some clay

SAMPLE COMMENTS:

NA

LOCATION DESC:

9h-5 leachfield

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha \leq 22 dpm
Beta/Gamma \leq 1955 dpm

PID $\frac{\text{Ambient Reading}}{\text{Reading}} = \text{ppm}$ 73m 2/19/10

COLLECTED BY (PRINT)

T. McFarland

REVIEWED BY (PRINT)

Lacey A Lopez

RELINQUISHED BY (Printed Name) T. McFarland (Signature) <i>T. McFarland</i>	Date/Time 2/19/10 1545	RECEIVED BY (Printed Name) Sheri Sherwood (Signature) <i>Sheri Sherwood</i>	Date/Time 2/19/10 1545
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2508

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

SAMPLE ID: RE15-10-8406

WORK ORDER:

AS PLANNED		AS COLLECTED	AS PLANNED		AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/19/2010	MEDIA:	NA	OK
TIME COLLECTED(HH:MM)		1434	SUB-MEDIA:	OTHER	
PRS ID:	15-009(h)	OK	SAMPLE TECH CODE:	DC	
LOCATION ID:	UNK	15-610856	FIELD QC TYPE:	ER	
LOCATION TYPE:	GENERIC	OK	FIELD PREP:	UF	
TOP DEPTH:	0		SAMPLE USAGE:	QC	
BOTTOM DEPTH:	0		SCREEN/PORT DESC:	NA	
FIELD MATRIX:	W		EXCAVATED: YES/NO	NA	
COMPOSITE TYPE:	NA		COMPOSITE TIME INTERVAL:	NA	
			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	METALS+U-GEL	1 LITER POLY	Nitric Acid	Y	
1		NO3NO2	250 ML POLY	Sulfuric Acid (Hydrogen Sulfate)	N	
1		SW-846:6850	250 ML POLY	Ice	Y	
1		TCN	500 ML POLY	Sodium Hydroxide	Y	

SAMPLE DESC: QC Sample of RE15-10-8389

SAMPLE COMMENTS: none

LOCATION DESC: 9h-2 (5' below inlet)

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 22/19/10 dpm
Beta/Gamma = NA dpmPID Ambient Reading = ppm

COLLECTED BY (PRINT)

Jon Roberson

REVIEWED BY (PRINT)

Larry A. Lopez

RELINQUISHED BY (Printed Name) Jon Roberson (Signature) <u>Jon Roberson</u>	Date/Time 2/19/10 1545	RECEIVED BY (Printed Name) Shew: Shewood (Signature) <u>Shew Shewood</u>	Date/Time 2/19/10 1545
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2508

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

SAMPLE ID: RE15-10-8409

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/19/2010		MEDIA:	QBT3		Allh
TIME COLLECTED (HH:MM)		0945		SUB-MEDIA:	TUFF 1		NA
PRS ID:	15-009(h)	OK		SAMPLE TECH CODE:	DC		OK
LOCATION ID:	UNK	15-610856		FIELD QC TYPE:	ETB		
LOCATION TYPE:	GENERIC	OK		FIELD PREP:	NA		
TOP DEPTH:	0			SAMPLE USAGE:	QC		
BOTTOM DEPTH:	0			SCREEN/PORT DESC:			
FIELD MATRIX:	R	5		EXCAVATED: YES/NO/NA	NA		
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
BOREHOLE: YES/NO/NA	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 RE15-10-8391

SAMPLE COMMENTS: none

LOCATION DESC: 9h-4

FIELD SCREENING/MEASUREMENT RESULTS:

NA

COLLECTED BY (PRINT)

Jon Roberson

REVIEWED BY (PRINT)

Larry A. Lopez

RELINQUISHED BY (Printed Name) Jon Roberson (Signature) <i>Jon Roberson</i>	Date/Time 2/19/10 1545	RECEIVED BY (Printed Name) Sheri Newwood (Signature) <i>Sheri Newwood</i>	Date/Time
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time



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

ARS Sample Delivery Group: ARS2-10-00064
Client Sample ID: RE15-10-8388
Sample Collection Date: 02/19/10 08:44
Sample Matrix: Soil/Solid

Request or PO Number:
ARS Sample ID: ARS2-10-00064-010
Date Received: 02/22/10 00:00
Report Date: 02/22/10 23:02

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	TPU	Quel	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Yrecor/Chem Recovery
GROSS ALPHA	46.48	31.38	33.91	31.90		pCi/g	EPA 900.0M	2/22/2010	NP	N/A
GROSS BETA	43.78	15.97	17.73	16.85		pCi/g	EPA 900.0M	2/22/2010	NP	N/A
NA-22	-0.05	47.19	0.13	47.19		pCi/g	EPA 901.1M	2/22/2010	ME	N/A
K-40	32.62	11.36	1.63	11.40		pCi/g	EPA 901.1M	2/22/2010	ME	N/A
CO-60	0.00	0.00	0.16	0.00		pCi/g	EPA 901.1M	2/22/2010	ME	N/A
CS-134	-0.06	45.88	0.11	45.88		pCi/g	EPA 901.1M	2/22/2010	ME	N/A
CS-137	0.22	0.22	0.09	0.22		pCi/g	EPA 901.1M	2/22/2010	ME	N/A
EU-152	0.13	0.23	0.41	0.23		pCi/g	EPA 901.1M	2/22/2010	ME	N/A
PB-212	1.53	0.62	0.20	0.62		pCi/g	EPA 901.1M	2/22/2010	ME	N/A
RA-228	2.89	1.22	0.39	1.23		pCi/g	EPA 901.1M	2/22/2010	ME	N/A
U-235	0.68	1.23	0.77	1.23		pCi/g	EPA 901.1M	2/22/2010	ME	N/A
U-238	5.83	4.70	1.94	4.89		pCi/g	EPA 901.1M	2/22/2010	ME	N/A
AM-241	0.38	0.43	0.19	0.43		pCi/g	EPA 901.1M	2/22/2010	ME	N/A
NOTES: % Moisture: 0.80										

Matthew A. Eder
Quality Assurance Review

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

LELAP Certificate # 30658

NELAP Certificate # E87558



133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00064

Request or PO Number:

Client Sample ID: RE15-10-8389

ARS Sample ID: ARS2-10-00064-011

Sample Collection Date: 02/19/10 10:00

Date Received: 02/22/10 00:00

Sample Matrix: Soil/Solid

Report Date: 02/22/10 23:02

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	TPU	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	138.28	53.35	37.46	55.97		pCi/g	EPA 900.0M	2/22/2010	NP	N/A
GROSS BETA	106.43	22.62	18.42	26.10		pCi/g	EPA 900.0M	2/22/2010	NP	N/A
NA-22	-0.04	43.31	0.14	43.31		pCi/g	EPA 901.1M	2/22/2010	ME	N/A
K-40	21.77	5.89	1.49	5.91		pCi/g	EPA 901.1M	2/22/2010	ME	N/A
CO-60	0.00	0.00	0.14	0.00		pCi/g	EPA 901.1M	2/22/2010	ME	N/A
CS-134	0.04	0.11	0.16	0.11		pCi/g	EPA 901.1M	2/22/2010	ME	N/A
CS-137	0.05	0.10	0.08	0.10		pCi/g	EPA 901.1M	2/22/2010	ME	N/A
EU-152	0.17	0.21	0.38	0.21		pCi/g	EPA 901.1M	2/22/2010	ME	N/A
PB-212	1.53	0.59	0.18	0.59		pCi/g	EPA 901.1M	2/22/2010	ME	N/A
RA-228	0.00	0.00	0.36	0.00		pCi/g	EPA 901.1M	2/22/2010	ME	N/A
U-235	0.69	0.63	0.45	0.63		pCi/g	EPA 901.1M	2/22/2010	ME	N/A
U-238	6.24	3.99	1.48	4.23		pCi/g	EPA 901.1M	2/22/2010	ME	N/A
AM-241	0.31	0.27	0.09	0.27		pCi/g	EPA 901.1M	2/22/2010	ME	N/A
NOTES: % Moisture: 0.97										

Matthew J. Eden
Quality Assurance Review

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LELAP Certificate# 30658

NELAP Certificate # E87558



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

ARS Sample Delivery Group: ARS2-10-00064
Client Sample ID: RE15-10-8390
Sample Collection Date: 02/19/10 09:13
Sample Matrix: Sol/Solid

Request or PO Number:
ARS Sample ID: ARS2-10-00064-012
Date Received: 02/22/10 00:00
Report Date: 02/22/10 23:02

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	TPU	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	42.03	30.21	34.06	30.65		pCi/g	EPA 900.0M	2/22/2010	NP	N/A
GROSS BETA	86.89	19.88	17.92	22.53		pCi/g	EPA 900.0M	2/22/2010	NP	N/A
NA-22	-0.04	44.34	0.14	44.34		pCi/g	EPA 901.1M	2/22/2010	ME	N/A
K-40	0.46	3.18	3.24	3.18		pCi/g	EPA 901.1M	2/22/2010	ME	N/A
CO-60	0.00	0.00	0.15	0.00		pCi/g	EPA 901.1M	2/22/2010	ME	N/A
CS-134	0.13	0.13	0.20	0.13		pCi/g	EPA 901.1M	2/22/2010	ME	N/A
CS-137	0.21	0.21	0.09	0.21		pCi/g	EPA 901.1M	2/22/2010	ME	N/A
EU-152	-0.12	-0.19	0.38	-0.19		pCi/g	EPA 901.1M	2/22/2010	ME	N/A
PB-212	1.57	0.57	0.15	0.57		pCi/g	EPA 901.1M	2/22/2010	ME	N/A
RA-228	2.98	1.14	0.37	1.14		pCi/g	EPA 901.1M	2/22/2010	ME	N/A
U-235	1.86	1.14	0.59	1.14		pCi/g	EPA 901.1M	2/22/2010	ME	N/A
U-238	4.61	3.46	1.51	3.62		pCi/g	EPA 901.1M	2/22/2010	ME	N/A
AM-241	0.36	0.35	0.13	0.35		pCi/g	EPA 901.1M	2/22/2010	ME	N/A
NOTES: % Moisture: 1.60										

Matthew J. Eder
Quality Assurance Review

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LELAP Certificate# 30658

NELAP Certificate # E87558



133 State Road 4, White Rock, NM 87944
505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00064
Client Sample ID: RE15-10-8391
Sample Collection Date: 02/19/10 09:40
Sample Matrix: Soil/Solid

Request or PO Number:
ARS Sample ID: ARS2-10-00064-013
Date Received: 02/22/10 00:00
Report Date: 02/22/10 23:02

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	TPU	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	22.09	23.39	32.75	23.55		pCi/g	EPA 900.0M	2/22/2010	NP	N/A
GROSS BETA	40.88	15.81	18.31	16.88		pCi/g	EPA 900.0M	2/22/2010	NP	N/A
NA-22	-0.02	-0.15	0.17	-0.15		pCi/g	EPA 901.1M	2/22/2010	ME	N/A
K-40	23.66	9.87	1.69	9.89		pCi/g	EPA 901.1M	2/22/2010	ME	N/A
CO-60	0.00	0.00	0.16	0.00		pCi/g	EPA 901.1M	2/22/2010	ME	N/A
CS-134	0.14	0.14	0.11	0.14		pCi/g	EPA 901.1M	2/22/2010	ME	N/A
CS-137	0.00	0.00	0.09	0.00		pCi/g	EPA 901.1M	2/22/2010	ME	N/A
EU-152	-0.63	-3.10	0.48	-3.10		pCi/g	EPA 901.1M	2/22/2010	ME	N/A
PB-212	1.73	0.64	0.18	0.64		pCi/g	EPA 901.1M	2/22/2010	ME	N/A
RA-228	2.97	1.10	0.41	1.10		pCi/g	EPA 901.1M	2/22/2010	ME	N/A
U-235	1.16	1.00	0.51	1.00		pCi/g	EPA 901.1M	2/22/2010	ME	N/A
U-238	5.78	4.01	1.65	4.22		pCi/g	EPA 901.1M	2/22/2010	ME	N/A
AM-241	0.46	0.38	0.14	0.38		pCi/g	EPA 901.1M	2/22/2010	ME	N/A
NOTES: % Moisture: 1.20										

Matthew L. Eder
Quality Assurance Review

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

LELAP Certificate# 30658

NELAP Certificate # E87558



133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00064
 Client Sample ID: RE15-10-8392
 Sample Collection Date: 02/19/10 14:50
 Sample Matrix: Soil/Solid

Request or PO Number:
 ARS Sample ID: ARS2-10-00064-014
 Date Received: 02/22/10 00:00
 Report Date: 02/22/10 23:02

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	TPU	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	74.03	38.36	33.91	39.42		pCi/g	EPA 900.0M	2/22/2010	NP	N/A
GROSS BETA	67.25	18.66	17.73	20.40		pCi/g	EPA 900.0M	2/22/2010	NP	N/A
NA-22	0.05	0.19	0.16	0.19		pCi/g	EPA 901.1M	2/22/2010	ME	N/A
K-40	1.36	4.92	2.17	4.92		pCi/g	EPA 901.1M	2/22/2010	ME	N/A
CO-60	0.10	0.20	0.16	0.20		pCi/g	EPA 901.1M	2/22/2010	ME	N/A
CS-134	-0.06	67.91	0.13	67.91		pCi/g	EPA 901.1M	2/22/2010	ME	N/A
CS-137	0.00	0.00	0.09	0.00		pCi/g	EPA 901.1M	2/22/2010	ME	N/A
EU-152	0.30	0.38	0.46	0.38		pCi/g	EPA 901.1M	2/22/2010	ME	N/A
PE-212	1.37	0.60	0.20	0.60		pCi/g	EPA 901.1M	2/22/2010	ME	N/A
RA-228	1.14	0.83	0.41	0.83		pCi/g	EPA 901.1M	2/22/2010	ME	N/A
U-235	2.70	1.37	0.66	1.37		pCi/g	EPA 901.1M	2/22/2010	ME	N/A
U-238	4.79	3.65	1.45	3.81		pCi/g	EPA 901.1M	2/22/2010	ME	N/A
AM-241	0.04	0.28	0.16	0.28		pCi/g	EPA 901.1M	2/22/2010	ME	N/A

NOTES: % Moisture: 2.38

Matthew L. Eden
 Quality Assurance Review

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LELAP Certificate# 30658

NELAP Certificate # E87558

DATA VALIDATION COVER SHEET

5121-1

Data Validation Cover Sheet

Records Use only



Section I.

REQUEST NUMBER: 10-2069 VALIDATION DATE: 4/26/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Eyda Hergenreder 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 | <input type="checkbox"/> 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):

- The water MS and MSD %R calculations were performed incorrectly. The parent sample result was < the MDL and, thus, a result of 0 µg/L should have been used to calculate the %Rs. The laboratory subtracted the parent sample concentration. The %Rs were within the acceptance limits when calculated correctly. No sample results were qualified.
- It should be noted that the MS/MSD analyses for both the water and soil samples were performed on samples from other LANL RNs and the raw data for the parent samples were not included in the data package. No data were qualified.

Reviewed by: ETM


Level: 1

Date: 4/27/10


VALIDATOR'S SIGNATURE:

A handwritten signature in cursive script, appearing to read 'Eyda Hergenreder', written over a printed name.


DATE: 4/26/10

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

Yes No N/A				Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 LC/MS/MS Perchlorate Analytical Data Validation Checklist	Records Use only 

Yes No N/A				Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	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 type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" type="checkbox"/>	17. The ion ratio documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	N/A	R, PERC8a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	18. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ PERC9	J-, PERC9
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	19. The holding time was > 2 times the applicable holding time requirement.	R, PERC9a	J-, PERC9a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	20. The LCS percent recovery was <10%. Follow the external laboratory limits.	R, PERC12	J-, PERC12
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	21. The LCS percent recovery was < the Lower Acceptance Limit but >10%. Follow the external laboratory limits.	UJ, PERC12a	J-, PERC12a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	22. The LCS percent recovery was > the Upper Acceptance Limit. Follow the external laboratory limits.	N/A	J+, PERC12b
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	23. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, PERC12c	R, PERC12c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	24. The MS/MSD percent recovery was <10%	R, PERC12d	R, PERC12d
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	25. The MS/MSD percent recovery was >10% but <75%	UJ, PERC12e	J, PERC12e
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	26. The MS/MSD percent recovery was >125%.	N/A	J+, PERC12f

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

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

Form 1

P perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: WATER

Extraction Batch ID: 959043

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.

RE15-10-8406

Date Received: 25-FEB-10

GEL Job No (SDG): 10-2069

GEL Sample ID: 248039001

Date Filtered: 03-MAR-10

Injection Volume (uL): 20

%Solids:

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.050	ug/L	U	1	09-MAR-10 06:16	per0308097a
	Perchlorate Isotope Ratio						1	09-MAR-10 06:16	per0308097a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	09-MAR-10 06:16	per0308097a
	Perchlorate-O(18)			0.442	ug/L		1	09-MAR-10 06:16	per0308097a

[^] 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

EH
4/26/10

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 958955
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE15-10-8389
 Date Received: 25-FEB-10
 GEL Job No (SDG): 10-2069-1
 GEL Sample ID: 248041001
 Date Filtered: 06-MAR-10
 Injection Volume (uL): 20
 %Solids: 90.8

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.551	2.2	0.551	ug/kg	U	1	15-MAR-10 00:51	per0314069a
	Perchlorate Isotope Ratio						1	15-MAR-10 00:51	per0314069a
14797-73-0	Perchlorate-101	.551	2.2	0.551	ug/kg	U	1	15-MAR-10 00:51	per0314069a
	Perchlorate-O(18)			4.92	ug/kg		1	15-MAR-10 00:51	per0314069a

[^] 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

EH
 4/26/10

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 958955
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE15-10-8388
 Date Received: 25-FEB-10
 GEL Job No (SDG): 10-2069-1
 GEL Sample ID: 248041002
 Date Filtered: 06-MAR-10
 Injection Volume (uL): 20
 %Solids: 92.4

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.541	2.16	0.541	ug/kg	U	1	15-MAR-10 00:59	per0314070a
	Perchlorate Isotope Ratio						1	15-MAR-10 00:59	per0314070a
14797-73-0	Perchlorate-101	.541	2.16	0.541	ug/kg	U	1	15-MAR-10 00:59	per0314070a
	Perchlorate-O(18)			4.86	ug/kg		1	15-MAR-10 00:59	per0314070a

[^] 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 $\frac{1}{\% \text{Solids}}$

EH
4/26/10

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 258955
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE15-10-8390
 Date Received: 25-FEB-10
 GEL Job No (SDG): 10-2069-1
 GEL Sample ID: 248041003
 Date Filtered: 06-MAR-10
 Injection Volume (uL): 20
 %Solids: 85

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.59	2.36	0.590	ug/kg	U	1	15-MAR-10 01:07	per0314071a
	Perchlorate Isotope Ratio						1	15-MAR-10 01:07	per0314071a
14797-73-0	Perchlorate-101	.59	2.36	0.590	ug/kg	U	1	15-MAR-10 01:07	per0314071a
	Perchlorate-O(18)			5.23	ug/kg		1	15-MAR-10 01:07	per0314071a

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

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

EH
 4/26/10

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
Lab Code: GEL
Instrument: LCMSMS
Method: SW846 6850 Modified
Matrix: SOIL
Extraction Batch ID: 958955
Extraction Type: Solid Prep
Sample Volume/Weight: 2.00 g
Concentrated Extract Volume: 20.0
Client Sample No.
RE15-10-8392
Date Received: 25-FEB-10
GEL Job No (SDG): 10-2069-1
GEL Sample ID: 248041004
Date Filtered: 06-MAR-10
Injection Volume (uL): 20
%Solids: 81

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.621	2.48	0.621	ug/kg	U	1	15-MAR-10 01:15	per0314072a
	Perchlorate Isotope Ratio								
14797-73-0	Perchlorate-101	.621	2.48	0.621	ug/kg	U	1	15-MAR-10 01:15	per0314072a
	Perchlorate-O(18)			5.44	ug/kg		1	15-MAR-10 01:15	per0314072a

[^] 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 $\frac{1}{\% \text{Solids}}$

EH
4/26/10

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: 958955
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE15-10-8391
 Date Received: 25-FEB-10
 GEL Job No (SDG): 10-2069-1
 GEL Sample ID: 248041005
 Date Filtered: 06-MAR-10
 Injection Volume (uL): 20
 %Solids: 89

CAS No.	Analyte ^a	MDL	RL	Conc [*]	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.561	2.25	0.561	ug/kg	U	1	15-MAR-10 01:24	per0314073a
	Perchlorate Isotope Ratio						1	15-MAR-10 01:24	per0314073a
14797-73-0	Perchlorate-101	.561	2.25	0.561	ug/kg	U	1	15-MAR-10 01:24	per0314073a
	Perchlorate-O(18)			5.27	ug/kg		1	15-MAR-10 01:24	per0314073a

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

*Concentration =
 Instrument Value X Concentrated Extract Volume X 1
 Aliquot %Solids

EH
 4/26/10

DATA VALIDATION COVER SHEET	
5118-1 <div style="text-align: center;">Data Validation Cover Sheet</div>	Records Use only 


Section I.			
REQUEST NUMBER: <u>10-2069</u>	VALIDATION DATE: <u>4/26/10</u>	LAB CODE: <u>GEL</u>	
CONTRACT LABORATORY NAME: <u>GEL Laboratories LLC</u>			
VALIDATOR: <u>Eyda Hergenreder</u>		ORGANIZATION: <u>Analytical Quality Associates, Inc.</u>	
ANALYTICAL SUITE (CHECK ALL THAT APPLY):			
<input type="checkbox"/> TPH-GRO	<input type="checkbox"/> HIGH EXPLOSIVES	<input type="checkbox"/> DIOXIN FURANS	<input type="checkbox"/> LCMSMS PERCHLORATES
<input type="checkbox"/> TPH-DRO	<input checked="" type="checkbox"/> METALS	<input type="checkbox"/> PCB CONGENERS	<input type="checkbox"/> ORGANOCHLORINE
<input type="checkbox"/> GENERAL CHEMISTRY	<input type="checkbox"/> RADIOCHEMISTRY	<input type="checkbox"/> LCMSMS HIGH EXPLOSIVES	<input type="checkbox"/> 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):

1. In the water MB, V, Se, Pb and Tl were detects. The associated V, Se and Pb sample results were detects $\leq 5X$ the blank values and, thus, were qualified U,14. The associated Tl sample result was an ND and, thus, was not qualified.
2. In the soil MB, Zn was detected. All associated sample results were detects $> 50X$ the blank value and, thus, were not qualified, based on professional judgment.
3. In the CCBs associated with the water sample, Tl, V and Se were detects. The associated Tl sample result was an ND and, thus, was not qualified. The associated V and Se sample results were detects $\leq 5X$ the blank values and, thus, were qualified U,14b.
4. In FR blank sample RE15-10-8406, associated with all soil samples, K and Na were detects. All associated K and Na sample results were detects $> 5X$ the blank values and, thus, were not qualified.
5. The soil MS %Rs for Al, Fe, Mn, K, Na and Zn were $>$ the laboratory UAL. The associated Fe and Mn sample results were $> 4X$ the spike concentration and, thus, were not qualified, based on professional judgment. All associated Al, K, Na and Zn sample results were detects and, thus, were qualified J+,16b.
6. It should be noted that the matrix QC for all analyses associated with both the water and soil samples were performed on samples from other LANL. RNs and the raw data for the ICP and ICPMS parent samples were not included in the data package. No data were qualified.

Reviewed by: ETMLevel: 1Date: 4/27/10
 VALIDATOR'S SIGNATURE: Eyda Hergenreder
 Eyda Hergenreder
DATE: 4/26/10

DATA VALIDATION COVER SHEET	
5118-1 Data Validation Cover Sheet	Records Use only  EST. 1945
Form 5118-1, Revision 0.0	LOS ALAMOS Environmental Restoration Project

METALS ANALYTICAL DATA VALIDATION CHECKLIST


5118-2

Metals Analytical Data Validation Checklist


Records Use only



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

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

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

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

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

METALS ANALYTICAL DATA VALIDATION CHECKLIST

5118-2

Metals Analytical Data Validation Checklist

Records Use only



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

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2069

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 248039001

BASIS: As Received

DATE COLLECTED 19-FEB-10

CLIENT ID: RE15-10 8406

LEVEL: Low

DATE RECEIVED 25-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	03/26/10 23:23	032610A-1	959089
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	PRB	04/13/10 13:01	100413-3	959091
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	03/26/10 23:23	032610A-1	959089
7440-39-3	Barium	5	ug/L	U	1	5	5	1	P	HSC	03/26/10 23:23	032610A-1	959089
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	BCD1	04/12/10 01:35	100411-2	959091
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	BCD1	04/12/10 01:35	100411-2	959091
7440-70-2	Calcium	200	ug/L	U	50	200	200	1	P	HSC	03/26/10 23:23	032610A-1	959089
7440-47-3	Chromium	5	ug/L	U	1	5	5	1	P	HSC	03/26/10 23:23	032610A-1	959089
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	03/26/10 23:23	032610A-1	959089
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	03/26/10 23:23	032610A-1	959089
7439-89-6	Iron	100	ug/L	U	30	100	100	1	P	HSC	03/26/10 23:23	032610A-1	959089
7439-92-1	Lead U,14	0.776	ug/L	J	0.5	2	2	1	MS	BCD1	04/12/10 01:35	100411-2	959091
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	03/26/10 23:23	032610A-1	959089
7439-96-5	Manganese	5	ug/L	U	1	5	5	1	MS	BCD1	04/12/10 01:35	100411-2	959091
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JXL1	03/02/10 11:40	030210W3-6	958951
7440-02-0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	03/26/10 23:23	032610A-1	959089
7440-09-7	Potassium	51.3	ug/L	J	50	150	150	1	P	HSC	03/26/10 23:23	032610A-1	959089
7782-49-2	Selenium U,14	7.2	ug/L	J	5	30	30	1	P	HSC	03/26/10 23:23	032610A-1	959089
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	03/26/10 23:23	032610A-1	959089
7440-23-5	Sodium	123	ug/L	J	100	300	300	1	P	HSC	03/26/10 23:23	032610A-1	959089
7440-28-0	Thallium	1	ug/L	U	0.3	1	1	1	MS	BCD1	04/12/10 01:35	100411-2	959091
7440-61-1	Uranium	0.20	ug/L	U	0.05	0.2	0.2	1	MS	PRB	04/13/10 16:04	100413-5	959091
7440-62-2	Vanadium U,14	1.59	ug/L	J	1	5	5	1	P	HSC	03/26/10 23:23	032610A-1	959089
7440-66-6	Zinc	10	ug/L	U	3.3	10	10	1	P	HSC	03/26/10 23:23	032610A-1	959089

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt/vol.	Units	Final wt/vol.	Units	Date	Analyst
958951	958949	SW846 7470A Prep	20	mL	20	mL	03/01/10	TXB3
959089	959088	SW846 3005A	50	mL	50	mL	03/04/10	LYH1
959091	959090	SW846 3005A	50	mL	50	mL	03/02/10	PGA

EH
4/26/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2069-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 248041001

BASIS: Dry Weight

DATE COLLECTED 19-FEB-10

CLIENT ID: RE15-10-8389

LEVEL: Low

DATE RECEIVED 25-FEB-10

MATRIX: SOIL

%SOLIDS: 90.8

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	NI*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum J+,16b	15400000	ug/Kg		6820	20100	20100	1	P	HSC	03/26/10 06:45	032510A-1	959101
7440-36-0	Antimony	1000	ug/Kg	U	331	1000	1000	1	P	HSC	03/26/10 06:45	032510A-1	959101
7440-38-2	Arsenic	1.92	mg/kg		0.202	1.01	1.01	2	MS	PRB	04/11/10 23:21	100411-2	959103
7440-39-3	Barium	205000	ug/Kg		100	502	502	1	P	HSC	03/26/10 06:45	032510A-1	959101
7440-41-7	Beryllium	1.12	mg/kg		0.0202	0.101	0.101	2	MS	PRB	04/11/10 23:21	100411-2	959103
7440-43-9	Cadmium	207	ug/Kg	J	100	502	502	1	P	HSC	03/26/10 06:45	032510A-1	959101
7440-70-2	Calcium	3130000	ug/Kg		8030	25100	25100	1	P	HSC	03/26/10 06:45	032510A-1	959101
7440-47-3	Chromium	13900	ug/Kg		150	502	502	1	P	HSC	03/26/10 06:45	032510A-1	959101
7440-48-4	Cobalt	5980	ug/Kg		150	502	502	1	P	HSC	03/26/10 06:45	032510A-1	959101
7440-50-8	Copper	8240	ug/Kg		301	1000	1000	1	P	HSC	03/26/10 06:45	032510A-1	959101
7439-89-6	Iron	16900000	ug/Kg		8030	25100	25100	1	P	HSC	03/26/10 06:45	032510A-1	959101
7439-92-1	Lead	12400	ug/Kg		251	1000	1000	1	P	HSC	03/26/10 06:45	032510A-1	959101
7439-95-4	Magnesium	2400000	ug/Kg		8530	30100	30100	1	P	HSC	03/26/10 06:45	032510A-1	959101
7439-96-5	Manganese	400000	ug/Kg		201	1000	1000	1	P	HSC	03/26/10 06:45	032510A-1	959101
7439-97-6	Mercury	17.3	ug/kg		3.9	11.5	11.5	1	AV	JXL	03/15/10 14:07	031510S1-5	958744
7440-02-0	Nickel	8.77	mg/kg		0.101	0.404	0.404	2	MS	PRB	04/11/10 23:21	100411-2	959103
7440-09-7	Potassium J+,16b	2210000	ug/Kg		6420	25100	25100	1	P	HSC	03/26/10 06:45	032510A-1	959101
7782-49-2	Selenium	1.01	mg/kg	U	0.505	1.01	1.01	2	MS	PRB	04/11/10 23:21	100411-2	959103
7440-22-4	Silver	502	ug/Kg	U	100	502	502	1	P	HSC	03/26/10 06:45	032510A-1	959101
7440-23-5	Sodium J+,16b	275000	ug/Kg		7020	25100	25100	1	P	HSC	03/26/10 06:45	032510A-1	959101
7440-28-0	Thallium	0.204	mg/kg		0.0606	0.202	0.202	2	MS	PRB	04/11/10 23:21	100411-2	959103
7440-61-1	Uranium	3.1	mg/kg		0.0133	0.0404	0.0404	2	MS	PRB	04/12/10 14:00	100412-3	959103
7440-62-2	Vanadium	28200	ug/Kg		100	502	502	1	P	HSC	03/26/10 06:45	032510A-1	959101
7440-66-6	Zinc J+,16b	31800	ug/Kg		331	1000	1000	1	P	HSC	03/26/10 06:45	032510A-1	959101

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
958744	958742	SW846 7471A Prep	0.576	g	30	mL	03/12/10	TXB3
959101	959100	SW846 3050B	0.549	g	50	mL	03/04/10	LYHI
959103	959102	SW846 3050B	0.545	g	50	mL	03/04/10	LYHI

EH
4/26/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10 2069-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 248041002

BASIS: Dry Weight

DATE COLLECTED 19-FEB-10

CLIENT ID: RE15-10-8388

LEVEL: Low

DATE RECEIVED 25-FEB-10

MATRIX: SOIL

%SOLIDS: 92.4

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M ²	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum J+,16b	8730000	ug/Kg		6800	20000	20000	1	P	HSC	03/26/10 06:53	032510A-1	959101
7440-36-0	Antimony	1000	ug/Kg	U	330	1000	1000	1	P	HSC	03/26/10 06:53	032510A-1	959101
7440-38-2	Arsenic	1.78	mg/kg		0.212	1.06	1.06	2	MS	PRB	04/11/10 23:24	100411-2	959103
7440-39-3	Barium	105000	ug/Kg		100	500	500	1	P	HSC	03/26/10 06:53	032510A-1	959101
7440-41-7	Beryllium	1	mg/kg		0.0212	0.106	0.106	2	MS	PRB	04/11/10 23:24	100411-2	959103
7440-43-9	Cadmium	500	ug/Kg	U	100	500	500	1	P	HSC	03/26/10 06:53	032510A-1	959101
7440-70-2	Calcium	2150000	ug/Kg		8000	25000	25000	1	P	HSC	03/26/10 06:53	032510A-1	959101
7440-47-3	Chromium	9260	ug/Kg		150	500	500	1	P	HSC	03/26/10 06:53	032510A-1	959101
7440-48-4	Cobalt	3480	ug/Kg		150	500	500	1	P	HSC	03/26/10 06:53	032510A-1	959101
7440-50-8	Copper	6670	ug/Kg		300	1000	1000	1	P	HSC	03/26/10 06:53	032510A-1	959101
7439-89-6	Iron	14200000	ug/Kg		8000	25000	25000	1	P	HSC	03/26/10 06:53	032510A-1	959101
7439-92-1	Lead	7070	ug/Kg		250	1000	1000	1	P	HSC	03/26/10 06:53	032510A-1	959101
7439-95-4	Magnesium	1680000	ug/Kg		8500	30000	30000	1	P	HSC	03/26/10 06:53	032510A-1	959101
7439-96-5	Manganese	270000	ug/Kg		200	1000	1000	1	P	HSC	03/26/10 06:53	032510A-1	959101
7439-97-6	Mercury	16	ug/kg		4.14	12.2	12.2	1	AV	JXL1	03/15/10 14:09	031510S1-5	958744
7440-02-0	Nickel	7.61	mg/kg		0.106	0.423	0.423	2	MS	PRB	04/11/10 23:24	100411-2	959103
7440-09-7	Potassium J+,16b	1360000	ug/Kg		6400	25000	25000	1	P	HSC	03/26/10 06:53	032510A-1	959101
7782-49-2	Selenium	1.06	mg/kg	U	0.529	1.06	1.06	2	MS	PRB	04/11/10 23:24	100411-2	959103
7440-22-4	Silver	138	ug/Kg	J	100	500	500	1	P	HSC	03/26/10 06:53	032510A-1	959101
7440-23-5	Sodium J+,16b	190000	ug/Kg		7000	25000	25000	1	P	HSC	03/26/10 06:53	032510A-1	959101
7440-28-0	Thallium	0.181	mg/kg	J	0.0635	0.212	0.212	2	MS	PRB	04/11/10 23:24	100411-2	959103
7440-61-1	Uranium	5.66	mg/kg		0.014	0.0423	0.0423	2	MS	PRB	04/12/10 14:02	100412-3	959103
7440-62-2	Vanadium	17900	ug/Kg		100	500	500	1	P	HSC	03/26/10 06:53	032510A-1	959101
7440-66-6	Zinc J+,16b	40500	ug/Kg		330	1000	1000	1	P	HSC	03/26/10 06:53	032510A-1	959101

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
958744	958742	SW846 7471A Prep	0.533	g	30	mL	03/12/10	TXB3
959101	959100	SW846 3050B	0.541	g	50	mL	03/04/10	LYH1
959103	959102	SW846 3050B	0.511	g	50	mL	03/04/10	LYH1

EH
4/26/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2069-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 248041003

BASIS: Dry Weight

DATE COLLECTED 19-FEB-10

CLIENT ID: RE15-10-8390

LEVEL: Low

DATE RECEIVED 25-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	16500000	ug/Kg		7180	21100	21100	1	P	HSC	03/26/10 07:00	032510A-1	959101
7440-36-0	Antimony	1060	ug/Kg	U	349	1060	1060	1	P	HSC	03/26/10 07:00	032510A-1	959101
7440-38-2	Arsenic	1.95	mg/kg		0.222	1.11	1.11	2	MS	PRB	04/11/10 23:27	100411-2	959103
7440-39-3	Barium	143000	ug/Kg		106	528	528	1	P	HSC	03/26/10 07:00	032510A-1	959101
7440-41-7	Beryllium	0.995	mg/kg		0.0222	0.111	0.111	2	MS	PRB	04/11/10 23:27	100411-2	959103
7440-43-9	Cadmium	127	ug/Kg	J	106	528	528	1	P	HSC	03/26/10 07:00	032510A-1	959101
7440-70-2	Calcium	1520000	ug/Kg		8450	26400	26400	1	P	HSC	03/26/10 07:00	032510A-1	959101
7440-47-3	Chromium	14600	ug/Kg		158	528	528	1	P	HSC	03/26/10 07:00	032510A-1	959101
7440-48-4	Cobalt	3490	ug/Kg		158	528	528	1	P	HSC	03/26/10 07:00	032510A-1	959101
7440-50-8	Copper	11000	ug/Kg		317	1060	1060	1	P	HSC	03/26/10 07:00	032510A-1	959101
7439-89-6	Iron	12200000	ug/Kg		8450	26400	26400	1	P	HSC	03/26/10 07:00	032510A-1	959101
7439-92-1	Lead	12300	ug/Kg		264	1060	1060	1	P	HSC	03/26/10 07:00	032510A-1	959101
7439-95-4	Magnesium	2110000	ug/Kg		8980	31700	31700	1	P	HSC	03/26/10 07:00	032510A-1	959101
7439-96-5	Manganese	174000	ug/Kg		211	1060	1060	1	P	HSC	03/26/10 07:00	032510A-1	959101
7439-97-6	Mercury	118	ug/kg		4.29	12.6	12.6	1	MS	JXL1	03/15/10 14:11	031510S1-5	958744
7440-02-0	Nickel	7.36	mg/kg		0.111	0.445	0.445	2	MS	PRB	04/11/10 23:27	100411-2	959103
7440-09-7	Potassium J+,16b	1840000	ug/Kg		6760	26400	26400	1	P	HSC	03/26/10 07:00	032510A-1	959101
7782-49-2	Selenium	1.11	mg/kg	U	0.556	1.11	1.11	2	MS	PRB	04/11/10 23:27	100411-2	959103
7440-22-4	Silver	160	ug/Kg	J	106	528	528	1	P	HSC	03/26/10 07:00	032510A-1	959101
7440-23-5	Sodium J+,16b	117000	ug/Kg		7400	26400	26400	1	P	HSC	03/26/10 07:00	032510A-1	959101
7440-28-0	Thallium	0.170	mg/kg	J	0.0667	0.222	0.222	2	MS	PRB	04/11/10 23:27	100411-2	959103
7440-61-1	Uranium	6.41	ug/kg		0.0147	0.0445	0.0445	2	MS	PRB	04/12/10 14:04	100412-3	959103
7440-62-2	Vanadium	5900	ug/Kg		106	528	528	1	P	HSC	03/26/10 07:00	032510A-1	959101
7440-66-6	Zinc J+,16b	39700	ug/Kg		349	1060	1060	1	P	HSC	03/26/10 07:00	032510A-1	959101

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
958744	958742	SW846 7471A Prep	0.561	g	30	mL	03/12/10	TXB3
959101	959100	SW846 3050B	0.558	g	50	mL	03/04/10	LYH1
959103	959102	SW846 3050B	0.53	g	50	mL	03/04/10	LYH1

EH
4/26/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2069-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 248041004

BASIS: Dry Weight

DATE COLLECTED 19 FEB-10

CLIENT ID: RE15-10-8392

LEVEL: Low

DATE RECEIVED 25-FEB-10

MATRIX: SOIL

%SOLIDS: 81

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	MS	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum J+,16b	11300000	ug/Kg		7490	22000	22000	1	P	HSC	03/26/10 07:07	032510A-1	959101
7440-36-0	Antimony	1100	ug/Kg	U	363	1100	1100	1	P	HSC	03/26/10 07:07	032510A-1	959101
7440-38-2	Arsenic	1.56	mg/kg		0.24	1.2	1.2	2	MS	PRB	04/11/10 23:30	100411-2	959103
7440-39-3	Barium	108000	ug/Kg		110	551	551	1	P	HSC	03/26/10 07:07	032510A-1	959101
7440-41-7	Beryllium	0.950	mg/kg		0.024	0.12	0.12	2	MS	PRB	04/11/10 23:30	100411-2	959103
7440-43-9	Cadmium	551	ug/Kg	U	110	551	551	1	P	HSC	03/26/10 07:07	032510A-1	959101
7440-70-2	Calcium	1720000	ug/Kg		8810	27500	27500	1	P	HSC	03/26/10 07:07	032510A-1	959101
7440-47-3	Chromium	19800	ug/Kg		165	551	551	1	P	HSC	03/26/10 07:07	032510A-1	959101
7440-48-4	Cobalt	2310	ug/Kg		165	551	551	1	P	HSC	03/26/10 07:07	032510A-1	959101
7440-50-8	Copper	5390	ug/Kg		330	1100	1100	1	P	HSC	03/26/10 07:07	032510A-1	959101
7439-89-6	Iron	13100000	ug/Kg		8810	27500	27500	1	P	HSC	03/26/10 07:07	032510A-1	959101
7439-92-1	Lead	1130	ug/Kg		275	1100	1100	1	P	HSC	03/26/10 07:07	032510A-1	959101
7439-95-4	Magnesium	1680000	ug/Kg		9360	33000	33000	1	P	HSC	03/26/10 07:07	032510A-1	959101
7439-96-5	Manganese	252000	ug/Kg		220	1100	1100	1	P	HSC	03/26/10 07:07	032510A-1	959101
7439-97-6	Mercury	36.3	ug/kg		5.01	14.7	14.7	1	A	JXLI	03/15/10 14:12	031510S1-5	958744
7440-02-0	Nickel	8.63	mg/kg		0.12	0.48	0.48	2	MS	PRB	04/11/10 23:30	100411-2	959103
7440-09-7	Potassium J+,16b	1230000	ug/Kg		7050	27500	27500	1	P	HSC	03/26/10 07:07	032510A-1	959101
7782-49-2	Selenium	1.2	mg/kg	U	0.601	1.2	1.2	2	MS	PRB	04/11/10 23:30	100411-2	959103
7440-22-4	Silver	551	ug/Kg	U	110	551	551	1	P	HSC	03/26/10 07:07	032510A-1	959101
7440-23-5	Sodium J+,16b	430000	ug/Kg		7710	27500	27500	1	P	HSC	03/26/10 07:07	032510A-1	959101
7440-28-0	Thallium	0.123	mg/kg	J	0.0721	0.24	0.24	2	MS	PRB	04/11/10 23:30	100411-2	959103
7440-61-1	Uranium	0.362	mg/kg		0.0159	0.048	0.048	2	MS	PRB	04/12/10 14:05	100412-3	959103
7440-62-2	Vanadium	3300	ug/Kg		110	551	551	1	P	HSC	03/26/10 07:07	032510A-1	959101
7440-66-6	Zinc J+,16b	55700	ug/Kg		363	1100	1100	1	P	HSC	03/26/10 07:07	032510A-1	959101

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
958744	958742	SW846 7471A Prep	0.506	g	30	mL	03/12/10	TXB3
959101	959100	SW846 30-0B	0.564	g	50	mL	03/04/10	LYHI
959103	959102	SW846 30-0B	0.517	g	50	mL	03/04/10	LYHI

EH
4/26/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2069-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 248041005

BASIS: Dry Weight

DATE COLLECTED 19-FEB-10

CLIENT ID: RE15-10-8391

LEVEL: Low

DATE RECEIVED 25-FEB-10

MATRIX: SOIL


%SOLIDS: 89

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	MF	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum J+,16b	19200000	ug/Kg		7600	27100	22400	1	P	HSC	03/26/10 07:14	032510A-1	959101
7440-36-0	Antimony	1120	ug/Kg	U	369	1120	1120	1	P	HSC	03/26/10 07:14	032510A-1	959101
7440-38-2	Arsenic	2.15	mg/kg		0.211	1.05	1.05	2	MS	PRB	04/11/10 23:33	100411-2	959103
7440-39-3	Barium	260000	ug/Kg		112	559	559	1	P	HSC	03/26/10 07:14	032510A-1	959101
7440-41-7	Beryllium	1.17	mg/kg		0.0311	0.105	0.105	2	MS	PRB	04/11/10 23:33	100411-2	959103
7440-43-9	Cadmium	181	ug/Kg	J	112	559	559	1	P	HSC	03/26/10 07:14	032510A-1	959101
7440-70-2	Calcium	1620000	ug/Kg		8950	28000	28000	1	P	HSC	03/26/10 07:14	032510A-1	959101
7440-47-3	Chromium	16200	ug/Kg		168	559	559	1	P	HSC	03/26/10 07:14	032510A-1	959101
7440-48-4	Cobalt	5260	ug/Kg		168	559	559	1	P	HSC	03/26/10 07:14	032510A-1	959101
7440-50-8	Copper	12100	ug/Kg		335	1120	1120	1	P	HSC	03/26/10 07:14	032510A-1	959101
7439-89-6	Iron	6800000	ug/Kg		8950	28000	28000	1	P	HSC	03/26/10 07:14	032510A-1	959101
7439-92-1	Lead	13900	ug/Kg		280	1120	1120	1	P	HSC	03/26/10 07:14	032510A-1	959101
7439-95-4	Magnesium	2200000	ug/Kg		9500	31000	33500	1	P	HSC	03/26/10 07:14	032510A-1	959101
7439-96-5	Manganese	220000	ug/Kg		224	1120	1120	1	P	HSC	03/26/10 07:14	032510A-1	959101
7439-97-6	Mercury	8	ug/kg		4.31	12.7	12.7	1	A	JXLI	03/15/10 14:14	031510S1-5	958744
7440-02-0	Nickel	7.77	mg/kg		0.105	0.421	0.421	2	MS	PRB	04/11/10 23:33	100411-2	959103
7440-09-7	Potassium J+,16b	2120000	ug/Kg		7160	28000	28000	1	P	HSC	03/26/10 07:14	032510A-1	959101
7782-49-2	Selenium	1.05	mg/kg	U	0.527	1.05	1.05	2	MS	PRB	04/11/10 23:33	100411-2	959103
7440-22-4	Silver	559	ug/Kg	U	112	559	559	1	P	HSC	03/26/10 07:14	032510A-1	959101
7440-23-5	Sodium J+,16b	190000	ug/Kg		7830	28000	28000	1	P	HSC	03/26/10 07:14	032510A-1	959101
7440-28-0	Thallium	0.99	mg/kg	J	0.0642	0.211	0.211	2	MS	PRB	04/11/10 23:33	100411-2	959103
7440-61-1	Uranium	1.05	mg/kg		0.0139	0.0421	0.0421	2	MS	PRB	04/12/10 14:07	100412-3	959103
7440-62-2	Vanadium	1200	ug/Kg		112	559	559	1	P	HSC	03/26/10 07:14	032510A-1	959101
7440-66-6	Zinc J+,16b	84500	ug/Kg		369	1120	1120	1	P	HSC	03/26/10 07:14	032510A-1	959101

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
958744	958742	SW846 7471A Prep	0.531	g	30	mL	03/12/10	TXB3
959101	959100	SW846 3050B	0.502	g	50	mL	03/04/10	LYH1
959103	959102	SW846 3050B	0.533	g	50	mL	03/04/10	LYH1

EH
4/26/10

DATA VALIDATION COVER SHEET	
5120-1 <p style="text-align: center;">Data Validation Cover Sheet</p>	Records Use only 

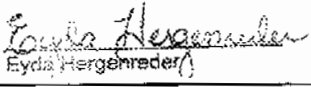
Section I.		
REQUEST NUMBER: <u>10-2069</u>	VALIDATION DATE: <u>4/26/10</u>	LAB CODE: <u>GEL</u>
CONTRACT LABORATORY NAME: <u>GEL Laboratories LLC</u>		
VALIDATOR: <u>Eyda Hergenreder</u> ORGANIZATION: <u>Analytical Quality Associates, Inc.</u>		
ANALYTICAL SUITE (CHECK ALL THAT APPLY):		
<input type="checkbox"/> TPH-GRO	<input type="checkbox"/> HIGH EXPLOSIVES	<input type="checkbox"/> DIOXIN FURANS
<input type="checkbox"/> TPH-DRO	<input type="checkbox"/> METALS	<input type="checkbox"/> PCB CONGENERS
<input checked="" type="checkbox"/> GENERAL CHEMISTRY	<input type="checkbox"/> RADIOCHEMISTRY	<input type="checkbox"/> LCMSMS HIGH EXPLOSIVES
<input type="checkbox"/> OTHER (DESCRIBE): _____		
<input type="checkbox"/> LCMSMS PERCHLORATES		
<input type="checkbox"/> ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS		


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. In the water MB, nitrite as nitrogen was detected. The associated sample result was an ND and, thus, was not qualified.
2. It should be noted that the matrix QC for all analyses except nitrate-N associated with the soil samples were performed on samples from other LANL RNs. No data were qualified.

Reviewed by: ETMLevel: IDate: 4/27/10


VALIDATOR'S SIGNATURE: _____ <div style="text-align: center;"> Eyda Hergenreder</div>	DATE: <u>4/26/10</u>
Form 5120-1, Revision 0.0	
LOG / LOS Environmental Restoration Project	

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

Yes No N/A				Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	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 detected 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 detected results were not analyzed with a valid single-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 detected 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 CV 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 CV 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 reference check sample percent recovery value is <50%.	R, I2	J-, I2
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	10. The reference 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 reference check sample percent recovery value is >120%.	N/A	J+, I2b
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	12. The reference check sample was not analyzed with the samples.	R, I2c	R, I2c
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	13. The sample result is ≤5X the concentration of the method blank.	U, I4	N/A

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

Yes No N/A				Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	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, 14a
<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, 14b	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, 14c	J, 14c
<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, rinse blank, or equipment blank.	U, 14d	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, 14e	R, 14e
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	19. The associated matrix spike recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, 16	R, 16
<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, 16a	J-, 16a
<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, 16b	J+, 16b
<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, 16c	R, 16c
<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, 110b	J, 110b

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

Yes No N/A (Check One)				Assign Qualifier Listed Below If Criterion = Yes	
				Non-Detected Analyte	Detected Analyte
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	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 Report 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, I08	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 External analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB NQ, NQ (no qualification)

GEL LABORATORIES LLC

340 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, Prop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valenzuela
Project: LANL ER Project

Report Date: March 23, 2010

Client SDG: 10-2069

Client Sample ID: RE15-10-8406
Sample ID: 248039001
Matrix: W
Collect Date: 19-FEB-10 12:00
Receive Date: 25-FEB-10
Collector: Client

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "As Received"</i>											
Cyanide, Total	U	ND	1.66	2.00	ug/L	1	AXC2	03/04/10	1544	960499	1
Nutrient Analysis											
<i>EPA 353.2 Nitrogen, Nitrate/Nitrite "As Received"</i>											
Nitrogen, Nitrate/Nitrite	U	ND	0.100	0.100	mg/L	10	AXH3	03/03/10	1141	958150	2

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXH5	03/04/10	1259	960498

The following Analytical Methods were performed

Method	Description	Analyst	Comments
1	SW846 9012A		
2	EPA 353.2		

EH
4/26/10

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Certificate of Analysis

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

Report Date: March 24, 2010

Client SDG: 10-2069-1

Client Sample ID: RE15-10-8389
Sample ID: 248041001
Matrix: R
Collect Date: 19-FEB-10 12:00
Receive Date: 25-FEB-10
Collector: Client
Moisture: 9.22%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis											
<i>SW9045C pH "As Received"</i>											
pH at Temp 19.2C	H	8.62	0.010	0.100	SU	1	TXT1	03/01/10	1700	959481	1
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	70.7	260	ug/kg	1	AXC2	03/05/10	1113	958161	2
Ion Chromatography											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N		1.71	0.330	1.10	mg/kg	1	MAR1	03/19/10	1741	962073	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	MAR1	03/19/10	0920	962072
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/04/10	1304	958159

The following Analytical Methods were performed

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

EH
4/26/10

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Certificate of Analysis

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

Report Date: March 24, 2010

Client SID: 10-2069-1

Client Sample ID: RE15-10-8388
Sample ID: 248041002
Matrix: R
Collect Date: 19-FEB-10 12:00
Receive Date: 25-FEB-10
Collector: Client
Moisture: 7.56%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis											
<i>SW9045C pH "As Received"</i>											
pH at Temp 18.9C	H	8.67	0.010	0.100	SU	1	TXT1	03/01/10	1701	959481	1
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	64.5	237	ug/kg	1	AXC2	03/05/10	1143	958161	2
Ion Chromatography											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N		1.88	0.325	1.08	mg/kg	1	MAR1	03/19/10	1808	962073	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	MAR1	03/19/10	0920	962072
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/04/10	1334	958159

The following Analytical Methods were performed

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

EH
4/26/10

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Certificate of Analysis

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

Report Date: March 24, 2010

Client SIDG: 10-2069-1

Client Sample ID: RE15-10-8390
Sample ID: 248041003
Matrix: R
Collect Date: 19-FEB-10 12:00
Receive Date: 25-FEB-10
Collector: Client
Moisture: 15.2%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis											
<i>SW9045C pH "As Received"</i>											
pH at Temp 18.9C	H	5.18	0.010	0.100	SU	1	TXT1	03/01/10	1703	959481	1
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	J	214	7.6	289	ug/kg	1	AXC2	03/05/10	1144	958161	2
Ion Chromatography											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N		9.71	0.354	1.18	mg/kg	1	MAR1	03/19/10	1835	962073	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	MAR1	03/19/10	0920	962072
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/04/10	1304	958159

The following Analytical Methods were performed

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

EH
4/26/10

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Certificate of Analysis

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 TA-03, SM271, Drop Pt. 02U, Rm111
 Los Alamos, New Mexico 87545
 Contact: Ms. Joylene Valdez
 Project: LANL ER Project

Report Date: March 24, 2010

Client SDC: 10-2069-1

Client Sample ID: RE15-10-8392
 Sample ID: 248041004
 Matrix: R
 Collect Date: 19-FEB-10 12:00
 Receive Date: 25-FEB-10
 Collector: Client
 Moisture: 19.5%

Project: LANL01004
 Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	Lab	Analyst	Date	Time	Batch	Method
Electrode Analysis											
<i>SW9045C pH "As Received"</i>											
pH at Temp 19.0C	H	8.87	0.010	0.100	SU	1	TX11	03/01/10	1705	959481	1
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	78.2	287	ug/kg	1	AXC2	03/05/10	1145	958161	2
Ion Chromatography											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N	U	ND	0.373	1.24	mg/kg	1	MAR103	03/19/10	1901	962073	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	MAR1	03/19/10	0720	962072
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/04/10	1534	958159

The following Analytical Methods were performed

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

EH
4/26/10

GEL LABORATORIES LLC2040 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 24, 2010

Client SDC: 10-2069-1

Client Sample ID: RE15-10-8391
 Sample ID: 248041005
 Matrix: R
 Collect Date: 19-FEB-10 12:00
 Receive Date: 25-FEB-10
 Collector: Client
 Moisture: 10.9%

Project: LANL01004
 Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	Analyst	Date	Time	Batch	Method
Electrode Analysis										
<i>SW9045C pH "As Received"</i>										
pH at Temp 19.0C	H	5.39	0.010	0.100	SU	TXT1	03/01/10	1706	959481	1
Flow Injection Analysis										
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>										
Cyanide, Total	U	ND	70.7	260	ug/kg	AXC2	03/05/10	1146	958161	2
Ion Chromatography										
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>										
Nitrate-N		10.2	0.337	1.12	mg/kg	MAR1	03/19/10	1928	962073	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	MAR1	03/19/10	09:00	962072
SW846 9010B Prep	SW846 9010B Prep	ANS5	03/04/10	14:04	958159

The following Analytical Methods were performed

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

EH
 4/26/10

Wednesday, February 24, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-2069

LOS ALAMOS

REQUEST NUMBER: 10-2069

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 3/26/2010

General Engineering Laboratories, Inc.,
Charleston, SC.

TURNAROUND REQ'D: 30

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS:

248039, 248041%

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE15-10-8406	1	POLY	METALS+U-GEL	Nitric Acid	W
RE15-10-8406	1	POLY	NO3NO2	Sulfuric Acid (Hydrogen Sulfate)	W
RE15-10-8406	1	POLY	SW-846:6850	Ice	W
RE15-10-8406	1	POLY	TCN	Sodium Hydroxide	W
RE15-10-8389	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8388	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8390	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8390	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8392	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8392	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8391	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8391	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8389	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8388	1	POLY	METALS+U-GEL	Ice	R

Relinquished By:

Date

Time

Received By:

Date

Time

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Received for DISPOSAL By:

Date

Time

Remarks:

Printed Name

Signature

Wednesday, February 24, 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: 2/24/2010

TURNAROUND/REPORT DUE: 3/26/2010

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Yes, Below Background

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature: 

Page 1 of 3

REQUEST NUMBER: 10-2069

These Samples are on:

LANL Request Number: 10-2069

Per Agreement Number: 126310011

Project Cost Code: MR3A05529E00

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	EPA-300.0	1	RE15-10-8388	R	2/19/2010	
		1	RE15-10-8389	R	2/19/2010	
		1	RE15-10-8390	R	2/19/2010	
		1	RE15-10-8391	R	2/19/2010	
		1	RE15-10-8392	R	2/19/2010	
	EPA-353.2	1	RE15-10-8406	W	2/19/2010	
	SW-846.6010B	1	RE15-10-8388	R	2/19/2010	
		1	RE15-10-8389	R	2/19/2010	
		1	RE15-10-8390	R	2/19/2010	

Wednesday, February 24, 2010 Page 2 of 3
 REQUEST NUMBER: 10-2069

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846.601DB	1	RE15-10-8391	R	2/19/2010	
		1	RE15-10-8392	R	2/19/2010	
	SW-846.6020	1	RE15-10-8388	R	2/19/2010	
		1	RE15-10-8389	R	2/19/2010	
		1	RE15-10-8390	R	2/19/2010	
		1	RE15-10-8391	R	2/19/2010	
		1	RE15-10-8392	R	2/19/2010	
		1	RE15-10-8406	W	2/19/2010	
	SW-846.6650	1	RE15-10-8388	R	2/19/2010	
		1	RE15-10-8389	R	2/19/2010	
		1	RE15-10-8390	R	2/19/2010	
		1	RE15-10-8391	R	2/19/2010	
		1	RE15-10-8392	R	2/19/2010	
		1	RE15-10-8406	W	2/19/2010	
	SW-846.7470A	1	RE15-10-8406	W	2/19/2010	
	SW-846.7471A	1	RE15-10-8388	R	2/19/2010	
		1	RE15-10-8389	R	2/19/2010	
		1	RE15-10-8390	R	2/19/2010	
		1	RE15-10-8391	R	2/19/2010	
		1	RE15-10-8392	R	2/19/2010	
		1	RE15-10-8388	R	2/19/2010	
	SW-846.9012A	1	RE15-10-8389	R	2/19/2010	
		1	RE15-10-8390	R	2/19/2010	
		1	RE15-10-8391	R	2/19/2010	
		1	RE15-10-8392	R	2/19/2010	
		1	RE15-10-8406	W	2/19/2010	
	SW-846.9045C	1	RE15-10-8388	R	2/19/2010	
		1	RE15-10-8389	R	2/19/2010	

REQUEST NUMBER: 10-2069

Wednesday, February 24, 2010

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846-9045C	1	RE15-10-8390	R	2/19/2010	
		1	RE15-10-8391	R	2/19/2010	
		1	RE15-10-8392	R	2/19/2010	

Final Page of REQUEST NUMBER 10-2069



March 04, 2010

www.gel.com

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

Re: LANL ER Project
Work Orders: 248039 248041
SDG: 10-2069

Dear Ms. Valdez:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the following analytical results for the sample(s) we received on February 25, 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: 10-2069
Enclosures

Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Work Order #: 248039 and 248041
SDG: 10-2069

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Cyanide, Total	1080
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Case Narrative

**Case Narrative for
Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Workorder #: 248039 and 248041
SDG # : 10-2069**

March 04, 2010

Laboratory Identification:

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

Summary

Sample receipt The samples arrived at GEL Laboratories LLC, Charleston, South Carolina on February 25, 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 lab did not receive the NO3NO2 container for sample RE15-10-8406. Los Alamos was notified. All sample containers arrived without any visible signs of tampering or breakage. Containers were checked for pH, where appropriate, and matched the preservative as documented on the accompanying chain of custody. Shipping container temperature was within specification (0 - 6C).

Sample Identification The laboratory received the following samples:

<u>Laboratory ID</u>	<u>Client ID</u>
248039001	RE15-10-8406
248041001	RE15-10-8389
248041002	RE15-10-8388
248041003	RE15-10-8390
248041004	RE15-10-8392
248041005	RE15-10-8391

Case Narrative

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

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

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



Valerie Davis
Project Manager

List of current GEL Certifications as of 04 March 2010

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

Chain of Custody and Supporting Documentation

Wednesday, February 24, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-2069

LOS ALAMOS

REQUEST NUMBER: 10-2069

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 3/26/2010

General Engineering Laboratories, Inc.,
Charleston, SC.

TURNAROUND REQ'D: 30

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS:

248039, 248041%

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE15-10-8406	1	POLY	METALS+U-GEL	Nitric Acid	W
RE15-10-8406	1	POLY	NO3NO2	Sulfuric Acid (Hydrogen Sulfate)	W
RE15-10-8406	1	POLY	SW-846:6850	Ice	W
RE15-10-8406	1	POLY	TCN	Sodium Hydroxide	W
RE15-10-8389	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8388	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8390	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8390	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8392	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8392	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8391	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8391	1	POLY	Perchlorate+CN+N03+pH	Ice	R
RE15-10-8389	1	POLY	METALS+U-GEL	Ice	R
RE15-10-8388	1	POLY	METALS+U-GEL	Ice	R

Relinquished By:

Date Time

Received By:

Date Time

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Received for DISPOSAL By:

Date Time

Remarks:

Printed Name

Signature

Wednesday, February 24, 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: 2/24/2010

TURNAROUND/REPORT DUE: 3/26/2010

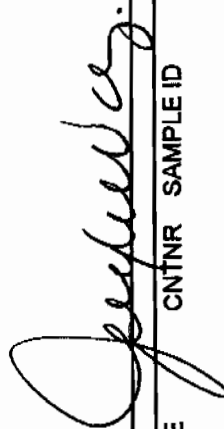
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Yes, Below Background

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:



Page 1 of 3

REQUEST NUMBER: 10-2069

These Samples are on:

LANL Request Number: 10-2069

Per Agreement Number: 126310011

Project Cost Code: MR3A05529E00

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	EPA:300.0	1	RE15-10-8388	R	2/19/2010	
		1	RE15-10-8389	R	2/19/2010	
		1	RE15-10-8390	R	2/19/2010	
		1	RE15-10-8391	R	2/19/2010	
		1	RE15-10-8392	R	2/19/2010	
	EPA:353.2	1	RE15-10-8406	W	2/19/2010	
	SW-846:6010B	1	RE15-10-8388	R	2/19/2010	
		1	RE15-10-8389	R	2/19/2010	
		1	RE15-10-8390	R	2/19/2010	

Wednesday, February 24, 2010

Page 2 of 3

REQUEST NUMBER: 10-2069

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6010B	1	RE15-10-8391	R	2/19/2010	
		1	RE15-10-8392	R	2/19/2010	
	SW-846:6020	1	RE15-10-8388	R	2/19/2010	
		1	RE15-10-8389	R	2/19/2010	
		1	RE15-10-8390	R	2/19/2010	
		1	RE15-10-8391	R	2/19/2010	
		1	RE15-10-8392	R	2/19/2010	
		1	RE15-10-8406	W	2/19/2010	
	SW-846:6850	1	RE15-10-8388	R	2/19/2010	
		1	RE15-10-8389	R	2/19/2010	
		1	RE15-10-8390	R	2/19/2010	
		1	RE15-10-8391	R	2/19/2010	
		1	RE15-10-8392	R	2/19/2010	
		1	RE15-10-8406	W	2/19/2010	
	SW-846:7470A	1	RE15-10-8406	W	2/19/2010	
	SW-846:7471A	1	RE15-10-8388	R	2/19/2010	
		1	RE15-10-8389	R	2/19/2010	
		1	RE15-10-8390	R	2/19/2010	
		1	RE15-10-8391	R	2/19/2010	
		1	RE15-10-8392	R	2/19/2010	
		1	RE15-10-8388	R	2/19/2010	
		1	RE15-10-8389	R	2/19/2010	
		1	RE15-10-8390	R	2/19/2010	
		1	RE15-10-8391	R	2/19/2010	
		1	RE15-10-8392	R	2/19/2010	
		1	RE15-10-8388	R	2/19/2010	
		1	RE15-10-8390	R	2/19/2010	
		1	RE15-10-8391	R	2/19/2010	
		1	RE15-10-8392	R	2/19/2010	
		1	RE15-10-8406	W	2/19/2010	
	SW-846:9045C	1	RE15-10-8388	R	2/19/2010	
		1	RE15-10-8389	R	2/19/2010	

Wednesday, February 24, 2010

Page 3 of 3

REQUEST NUMBER: 10-2069

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:9045C	1	RE15-10-8390	R	2/19/2010	
		1	RE15-10-8391	R	2/19/2010	
		1	RE15-10-8392	R	2/19/2010	

Final Page of REQUEST NUMBER 10-2069



Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: LANL			SDG/ARCOC/Work Order: 10-2069		
Received By: Patricia Dover-Dent			Date Received: FEB-25-2010		
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*: 80 CPM	
Classified Radioactive II by RSO?			X		
COC/Samples marked containing PCBs?			X		
Shipped as a DOT Hazardous?			X	Hazard Class Shipped: UN#:	
Samples identified as Foreign Soil?			X		

Sample Receipt Criteria		Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe)
2	Samples requiring cold preservation within 0 ≤ 6 deg. C?	X			Preservation Method: ice bags blue ice dry ice none other (describe) 0-6, 12-14
3	Chain of custody documents included with shipment?	X			
4	Sample containers intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe)
5	Samples requiring chemical preservation at proper pH?	X			Sample ID's, containers affected and observed pH: If Preservation added, Lot#:
6	VOA vials free of headspace (defined as < 6mm bubble)?		X		Sample ID's and containers affected:
7	Are Encore containers present?			X	(If yes, immediately deliver to Volatiles laboratory)
8	Samples received within holding time?	X			Id's and tests affected:
9	Sample ID's on COC match ID's on bottles?	X			Sample ID's and containers affected:
10	Date & time on COC match date & time on bottles?			X	Sample ID's affected: No Time On chain of custody
11	Number of containers received match number indicated on COC?			X	Sample ID's affected: RE15-10-8406, the lab did not receive a container for NO3NO2
12	COC form is properly signed in relinquished/received sections?	X			

Comments: FEDEX#s

7209 7850 1919 0C	7209 7850 2076 2C	7209 7850 2238 3C	7209 7850 1893 12C
7209 7850 2146 1C	7209 7850 2065 2C	7209 7850 2124 3C	7209 7850 1849 12C
7209 7850 1952 1C	7209 7850 1996 3C	7209 7850 1974 4C	7209 7850 1838 13C
7209 7850 2054 1C	7209 7850 2135 3C	7209 7850 1985 4C	7209 7850 1860 13C
7209 7850 1963 1C	7209 7850 2032 3C	7209 7850 2000 4C	7209 7850 1850 13C
7209 7850 2021 2C	7209 7850 2249 3C	7209 7850 2087 4C	7209 7850 2098 13C
7209 7850 2113 2C	7209 7850 2168 3C	7209 7850 2010 5C	7209 7850 1908 14C
7209 7850 2102 2C	7209 7850 1941 3C	7209 7850 2157 6C	
7209 7850 1882 2C	7209 7850 2043 3C	7209 7850 1871 12C	

PM (or PMA) review: Initials

Date

2/26/10

Subject: Sample Receipt for 2/25/10

From: Dionne Francis <Dionne.Francis@gel.com>

Date: Thu, 25 Feb 2010 20:59:32 -0500

To: "Keith R. Greene" <kgreene@lanl.gov>, Joylene Valdez <joylenev@lanl.gov>, Valerie Davis <vdsd@gel.com>

Keith,

RN 10-2059 2052, 2046 and 2040: the Gross A/B containers will be preserved prior to analysis.

RN 10-2051: the lab rec'd (1) 40ml vial 8260B container for sample WST05-10-12495 instead of (2) as indicated on the COC.

RN 10-2057: the lab rec'd (2) 1L amber glass HEXP container for sample CAPA-10-13803 instead of (3) as indicated on the COC.

RN 10-2069: the lab did not receive a NO3NO2 container for sample RE15-10-8406.

RN 10-2075: the lab did not receive a NO3NO2 container for sample RE36-10-7528 and 7527. An aliquot will be taken from the perchlorate container and preserved prior to analysis.

The following containers were received without a COC:

RE36-10-7404, 7405, 7425, 7426, 7431, 7433, 7434, 8281, 8482 - 500ml glass containers for 8270C+NMED Exp

RE36-10-7403, 7406, 7516, 7429, 7432 - 125ml poly containers for Metals

RE36-10-8928 - (2) 500ml glass containers for 8270C+8082+TPH-DRO, TCLP P/H/S/V

Thanks,
Dionne

--

Dionne Francis
Project Manager Assistant
GEL Laboratories, LLC
2040 Savage Road
Charleston, SC (USA) 29407
Direct: 843.769.7376 Ext. 4432
Main: 843.556.8171
Fax: 843.766.1178
E-mail: daf@gel.com
Web: www.gel.com

Let the Bible fill the memory, rule the heart, and guide the feet.

JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

SHIP DATE: 24FEB11
ACTWGT: 49.0 LB M
CAD: 0014176/CAFE2

LOS ALAMOS, NM 87545
UNITED STATES US

BILL SENDER

ORIGIN ID: SAFA (606) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 24FEB10
ACTWGT: 63.0 LB MAN
CAD: 0014176/CAFE2450

BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

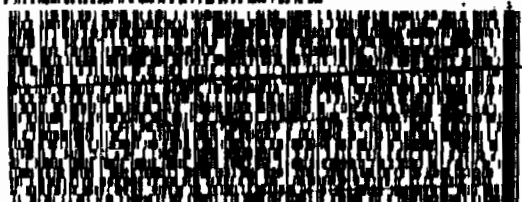
(843) 556-8171

REF: 6B010AMR3A0532VA00

CHARLESTON SC 29407

(843) 556-8171

REF: 6B010AMR1A015AGMM0



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Express



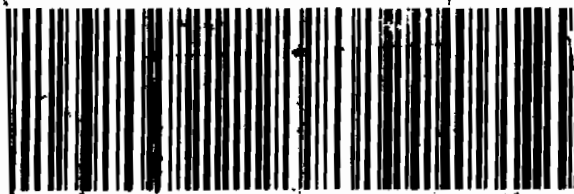
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LOS ALAMOS, NM 87545
UNITED STATES US

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

REF: 6B010AMR3A05529E00



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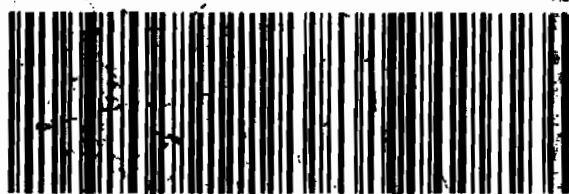
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GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

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REF: 6B010AMR1A015AGMM0



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CHS

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

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 24FEB10
ACTWGT: 55.0 LB MAN
CAD: 0014176/CAFE2450

BILL SENDER

JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

ACTWGT: 55.0 LB MAN
CAD: 0014176/CAFE2450

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TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 656-8171

REF: 68010AMR3A0532VA00

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

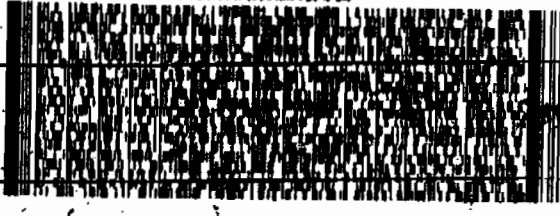
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REF: 68010AMR1A015AGWMO

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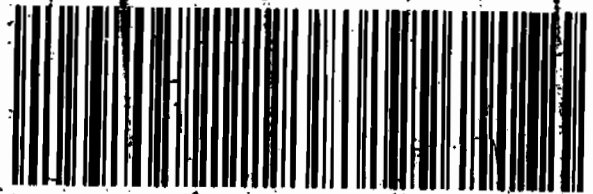


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PRIORITY OVERNIGHT

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LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 24FEB10
ACTWGT: 49.0 LB MAN
CAD: 0014176/CAFE2450

BILL SENDER

LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 24FEB10
ACTWGT: 49.0 LB MAN
CAD: 0014176/CAFE2450

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

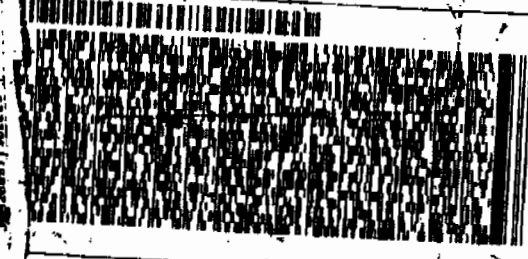
(843) 656-8171

REF: 68010AMR1A015AGWMO

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Matr# 7209 7850 1985 0201

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PRIORITY OVERNIGHT

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CHS

IT VIVA

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

LOS ALAMOS NM 87545
UNITED STATES US

SHIP DATE: 24FEB10
ACTWGT: 52.0 LB MAN
CAD: 0014176/CAFE2450

BILL SENDER

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

LOS ALAMOS NM 87545
UNITED STATES US

SHIP DATE: 24FEB10
ACTWGT: 55.0 LB MAN
CAD: 0014176/CAFE2450

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

REF: 6B010AMR3A05529E00

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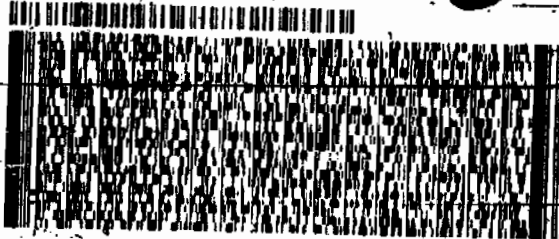
TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

REF: 6B010AMR3A0223KY10

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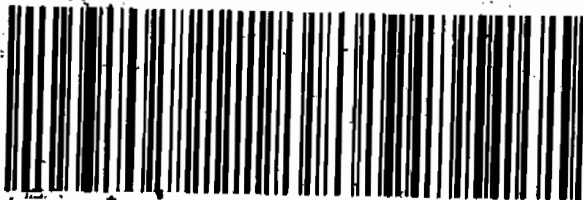


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NM MASTER NM

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PRIORITY OVERNIGHT

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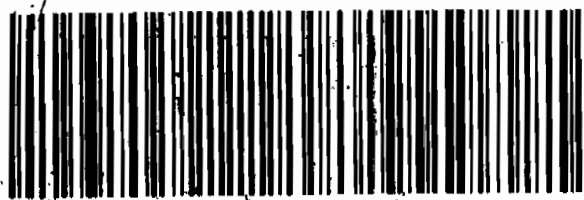


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ORIGIN ID: SAFA (505) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS NM 87545
UNITED STATES US

SHIP DATE: 24FEB10
ACTWGT: 50.0 LB MAN
CAD: 0014176/CAFE2450

BILL SENDER

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

LOS ALAMOS NM 87545
UNITED STATES US

SHIP DATE: 24FEB10
ACTWGT: 57.0 LB MAN
CAD: 0014176/CAFE2450

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TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

REF: 6B010AMR1A015AGWMO

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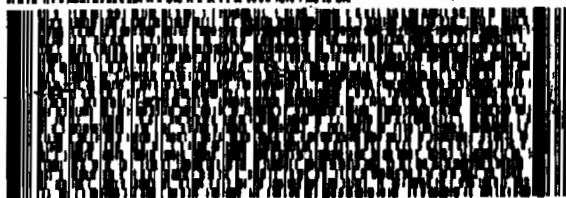
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CHARLESTON SC 29407

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LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

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JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

ACTWGT: 51.0 LB MAN
CAD: 0014176/CAFE2450

LOS ALAMOS, NM 87545
UNITED STATES US

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LOS ALAMOS, NM 87545
UNITED STATES US

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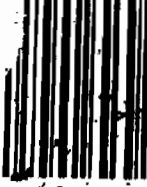
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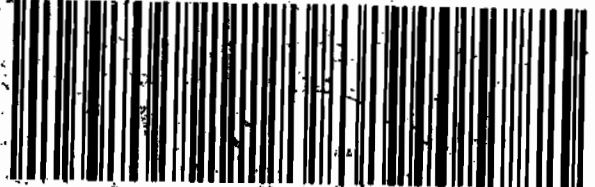


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TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: 6B010AMR2A0515BYDO

JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

ACTWGT: 55.0 LB MAN
CAD: 0014176/CAFE2450

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2040 SAVAGE RD

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

SHIP DATE: 24FEB10
ACTWGT: 62.0 LB MAN
CAD: 0014176/CAFE245

LOS ALAMOS, NM 87545
UNITED STATES US

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: 6B010AMR2A0515BYDO

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ORIGIN ID: SAFA (505) 665-9968
JOYLENE VALDEZ
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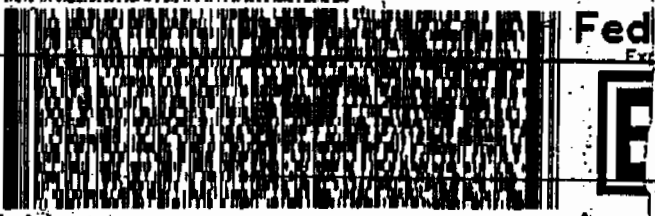
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REF: 6B010AMR2A0515BYDO

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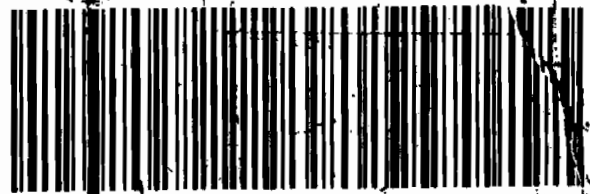
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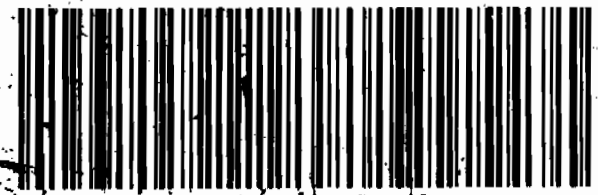


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UNITED STATES US

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ORIGIN ID: SAFA (506) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

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SHIP DATE: 24FEB10
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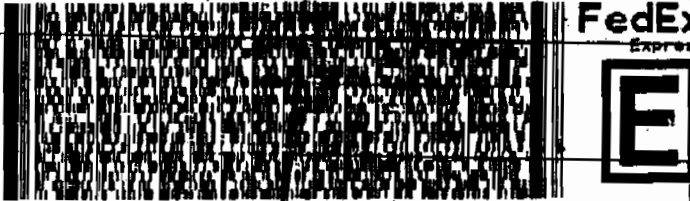
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ORIGIN ID: SAFA (506) 665-9968
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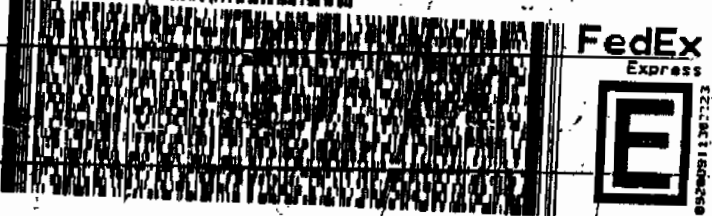
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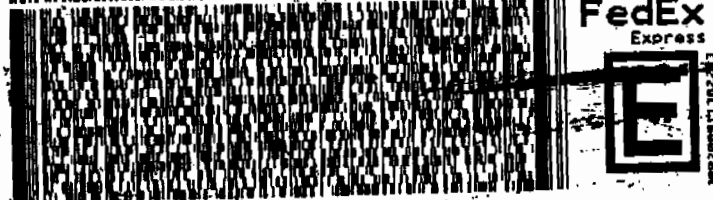
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JOYLENE VALDEZ
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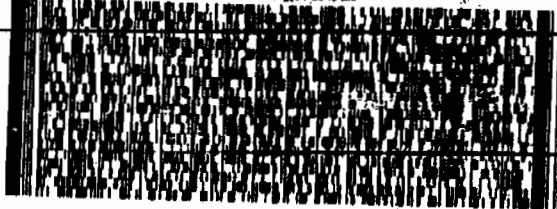
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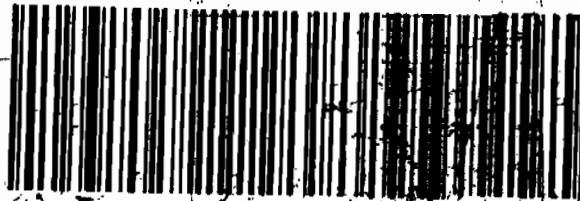
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ORIGIN ID: SAFA (505) 865-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

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UNITED STATES US

SHIP DATE: 24FEB10
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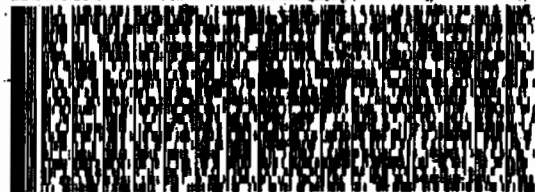
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Data Review Qualifier Flag Definition Sheet

Data Review Qualifier Definitions

Qualifier	Explanation
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*	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 10-2069**

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: 959044

Prep Batch Number: 959043

Sample Analysis

Sample ID	Client ID
248039001	RE15-10-8406
1202056714	Interference Check Sample (ICS)
1202056710	Method Blank (MB)
1202056711	Laboratory Control Sample (LCS)
1202056712	247908001(RE15-10-8089) Matrix Spike (MS)
1202056713	247908001(RE15-10-8089) 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.

10-2069-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 247908001 (RE15-10-8089) from SDG 10-2013-1 was chosen for matrix spike and matrix spike duplicate analysis. Please see the raw data in the Miscellaneous Section.

Matrix Spike (MS) Recovery Statement

The MS recoveries were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement

The MSD recoveries were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement

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

Retention Time Standard Area Acceptance

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

Retention Time

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

Technical Information

Holding Time Specifications

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

Preparation/Analytical Method Verification

All procedures were performed as stated in the SOP.

Sample Dilutions

The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis

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:

Stephen H. Mace

Date:

03/16/10

SAMPLE DATA SUMMARY

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: WATER
 Extraction Batch ID: 259043
 Extraction Type: Filter/DAI
 Client Sample No. RE15-10-8406
 Date Received: 25-FEB-10
 GEL Job No (SDG): 10-2069
 GEL Sample ID: 248039001
 Date Filtered: 03-MAR-10
 Injection Volume (uL): 20

%Solids:

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.050	ug/L	U	1	09-MAR-10 06:16	per0308097a
	Perchlorate Isotope Ratio						1	09-MAR-10 06:16	per0308097a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	09-MAR-10 06:16	per0308097a
	Perchlorate-O(18)			0.442	ug/L		1	09-MAR-10 06:16	per0308097a

[^] 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): 10-2069

Extract Batch Code: 959043 Date Filtered: 03-MAR-10

Matrix: WATER Sample ID: 1202056711

Analyte^	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	0.200	.179	ug/L	89.7		85 - 115
Perchlorate Isotope Ratio		3.2				-
Perchlorate-101	0.200	.184	ug/L	92.2		85 - 115
Perchlorate-O(18)		.419	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): 10-2069

Extract Batch Code: 959043

Date Filtered: 03-MAR-10

Matrix: WATER

Sample ID: 1202056714

Analyte [^]	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	0.200	.193	ug/L	96.7		70 - 130
Perchlorate Isotope Ratio		3.11				
Perchlorate-101	0.200	.204	ug/L	102		70 - 130
Perchlorate-O(18)		.46	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.

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

itaset: C:\MassLynx\Perchlorate.PRO\per030810a.qld

st Altered: Tuesday, March 09, 2010 12:57:27 PM Eastern Standard Time
 inted: Tuesday, March 09, 2010 1:04:52 PM Eastern Standard Time

ime: per0308078a

ite: 09-Mar-2010

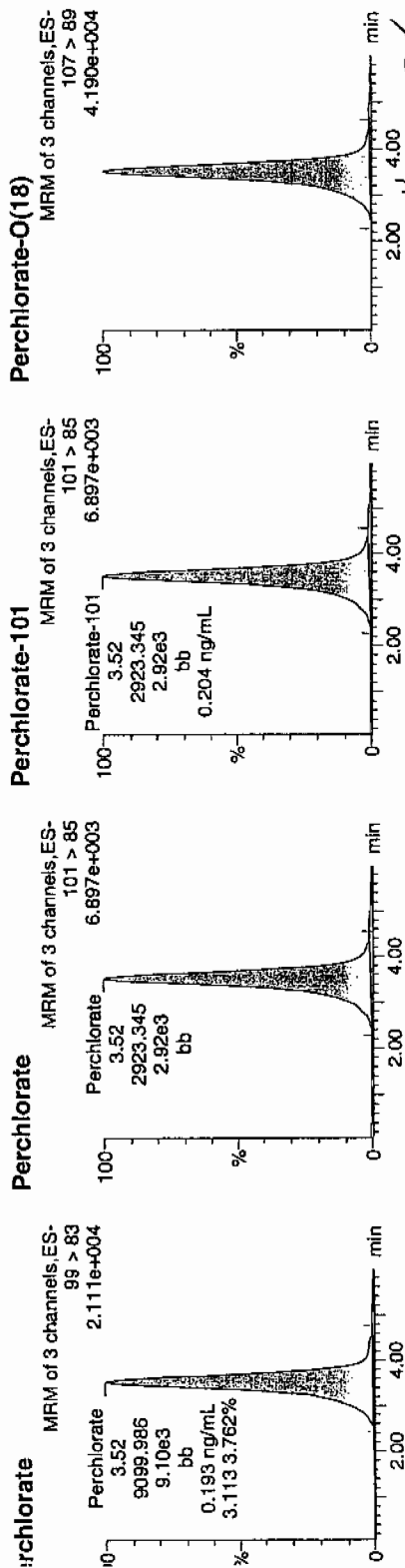
me: 03:24:26

: 1202056714

al: 2:4,C

03-04-10

1202056714 | 03-04-10 | 11



Name	Trace	Area	Response	Flags	Mod	Date	Mod	Time	mg/mL	% Rec	Dev	S/N	Ion Ratio
02056714	Perchlorate	99 > 83	3.52	9099.986	bb			0.1934	96.71	-3.29	1900.4...	3.11	-
02056714	Perchlorate-101	101 > 85	3.52	2923.345	bb			0.2045	102.24	2.24	329.274		
02056714	Perchlorate-O(18)	107 > 89	3.51	17957.422	bb			0.4599	91.97	-8.03	1925.4...		

Form 6

Perchlorate Spike/Spike Duplicate Summary

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No (SDG): 10-2062

Extract Batch Code: 959043

Date Extracted: 03-MAR-10

GEL MS/PS ID: 1202056712

Client ID: RE15-10-8089

GEL MSD/PSD ID: 1202056713

QC Type: MS

Compound^	Spike Added	Sample Conc	Units	MS Conc	MS Rec	#	MSD Conc	MSD Rec	#	RPD	#	RPD Limit	Recovery Limit
Perchlorate	0.200	0.00111	ug/L	0.182	90.7		.19	94.7		4.26		30	75 - 125
Perchlorate Isotope Ratio	0	0.00		3.13			3.16			0			-
Perchlorate-101	0.200	0.00107	ug/L	0.192	95.5		.199	98.7		3.33		30	75 - 125
Perchlorate-Q(18)	0	0.438	ug/L	0.438			.447			2.15			-

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

Comments:

Form 4

Perchlorate Initial Calibration Blank

GEL Job No.(SDG): 10-2069

Lab Name: General Engineering Laboratories

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	08-MAR-10	per0308001a	IPB001
Perchlorate-101	0.00	0	NA	08-MAR-10	per0308001a	IPB001
Perchlorate	0.00	0	NA	08-MAR-10	per0308002a	IPB001
Perchlorate-101	0.00	0	NA	08-MAR-10	per0308002a	IPB001

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

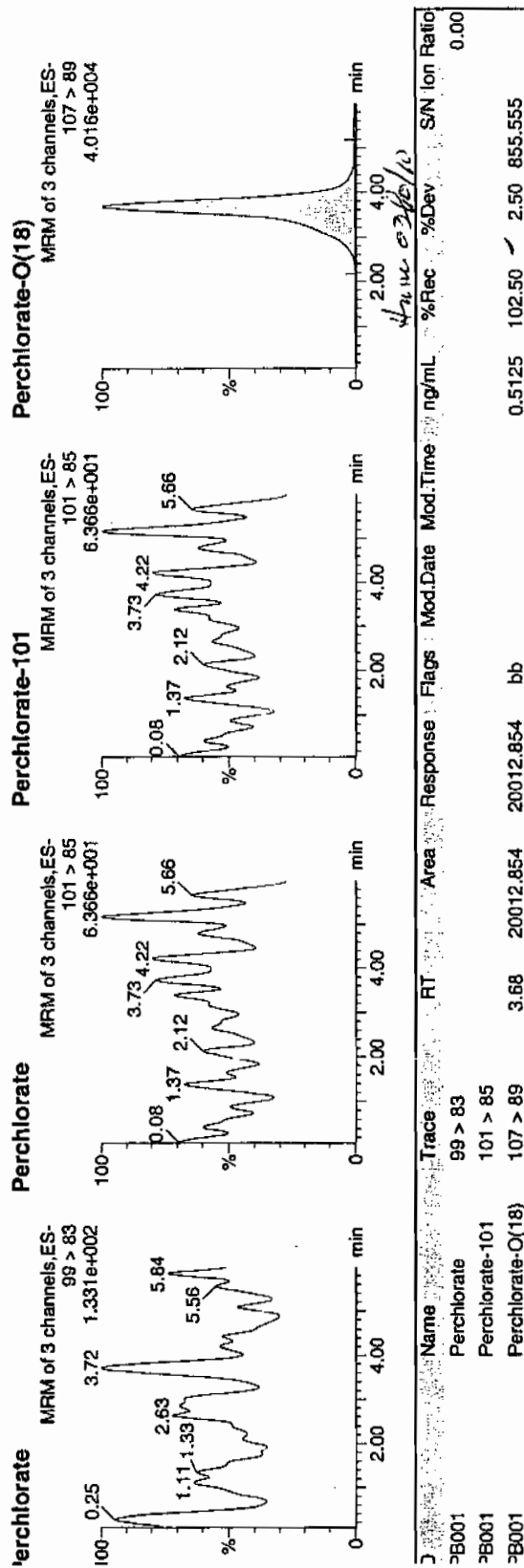
Dataset: C:\MassLynx\Perchlorate.PRO\per030810a.qld

Last Altered: Tuesday, March 09, 2010 12:57:27 PM Eastern Standard Time
Printed: Tuesday, March 09, 2010 1:04:52 PM Eastern Standard Time

Method: C:\MassLynx\Perchlorate.PRO\MethDB\per030810a.mdb 09 Mar 2010 12:48:33
Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per030810a.cdb 09 Mar 2010 12:48:47

Sample Name: per0308001a
Date: 08-Mar-2010
Time: 15:44:43
Dilution: 1:1, A

03-09-10



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	3.68	20012.854	20012.854	bb			0.5125	102.50	2.50	855.555	

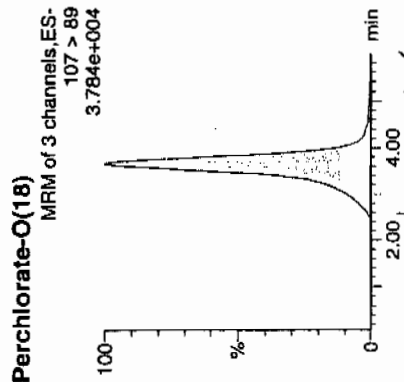
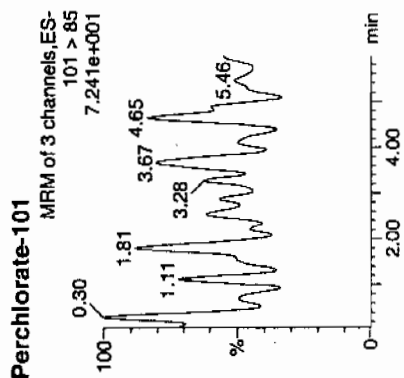
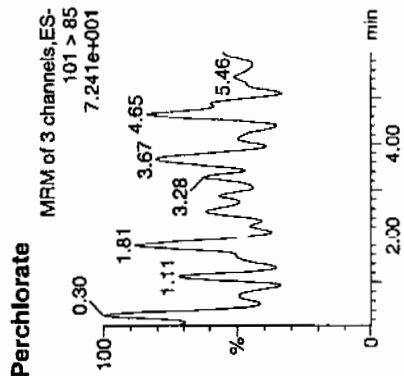
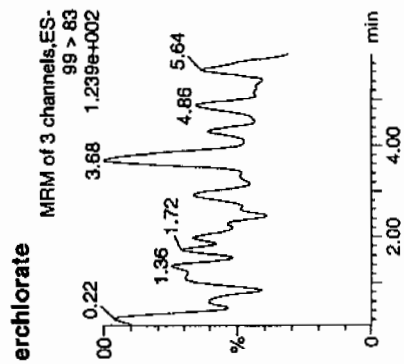
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030810a.qld

Last Altered: Tuesday, March 09, 2010 12:57:27 PM Eastern Standard Time
Printed: Tuesday, March 09, 2010 1:04:52 PM Eastern Standard Time

Sample Name: per0308002a
Date: 08-Mar-2010
Time: 15:53:45
File: (PB001)
Label: 1:1,A

03-04-10



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	3.66	18783.678	18783.678	bb			0.4810	96.21	✓	-3.79	1331.0...

Form 4

Perchlorate Continuing Calibration Blank

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-2069

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	08-MAR-10	per0308008a	IPB002
Perchlorate-101	0.00	0	NA	08-MAR-10	per0308008a	IPB002
Perchlorate	0.00	0	NA	08-MAR-10	per0308010a	IPB003
Perchlorate-101	0.00	0	NA	08-MAR-10	per0308010a	IPB003
Perchlorate	0.00	0	NA	08-MAR-10	per0308022a	IPB004
Perchlorate-101	0.00	0	NA	08-MAR-10	per0308022a	IPB004
Perchlorate	0.00	0	NA	08-MAR-10	per0308035a	IPB005
Perchlorate-101	0.00	0	NA	08-MAR-10	per0308035a	IPB005
Perchlorate	0.00	0	NA	08-MAR-10	per0308048a	IPB006
Perchlorate-101	0.00	0	NA	08-MAR-10	per0308048a	IPB006
Perchlorate	0.00	0	NA	08-MAR-10	per0308052a	IPB007
Perchlorate-101	0.00	0	NA	08-MAR-10	per0308052a	IPB007
Perchlorate	0.00	0	NA	09-MAR-10	per0308061a	IPB008

Form 4

Perchlorate Continuing Calibration Blank

Lab Name: General Engineering Laboratories GEL Job No.(SDG): 10-2069

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	09-MAR-10	per0308061a	IPB008
Perchlorate	0.00	0	NA	09-MAR-10	per0308074a	IPB009
Perchlorate-101	0.00	0	NA	09-MAR-10	per0308074a	IPB009
Perchlorate	0.00	0	NA	09-MAR-10	per0308087a	IPB010
Perchlorate-101	0.00	0	NA	09-MAR-10	per0308087a	IPB010
Perchlorate	0.00	0	NA	09-MAR-10	per0308100a	IPB011
Perchlorate-101	0.00	0	NA	09-MAR-10	per0308100a	IPB011

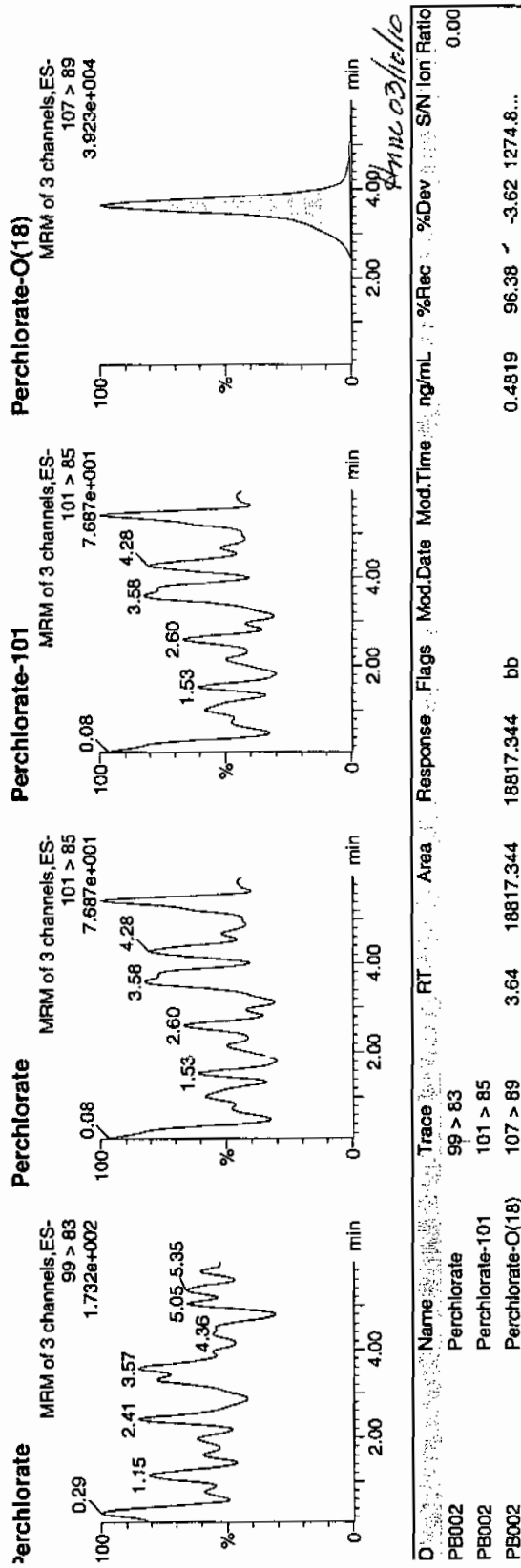
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030810a.qld

Last Altered: Tuesday, March 09, 2010 12:57:27 PM Eastern Standard Time
Printed: Tuesday, March 09, 2010 1:04:52 PM Eastern Standard Time

Name: per0308008a
Date: 08-Mar-2010
Time: 16:48:15
D: IPB002
/lal: 1:1,A

03-09-10



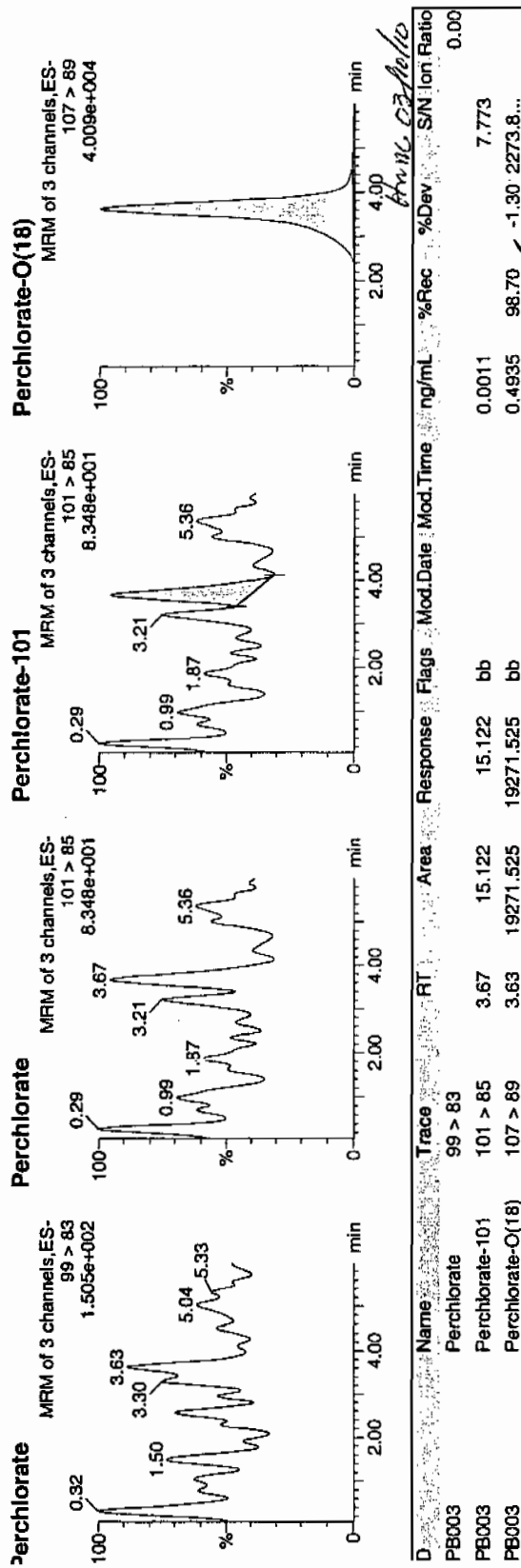
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charters W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030810a.qld

Last Altered: Tuesday, March 09, 2010 12:57:27 PM Eastern Standard Time
Printed: Tuesday, March 09, 2010 1:04:52 PM Eastern Standard Time

Name: per0308010a
Date: 08-Mar-2010
Time: 17:06:27
D: IPB003
Vial: 1:1,A

03-09-10



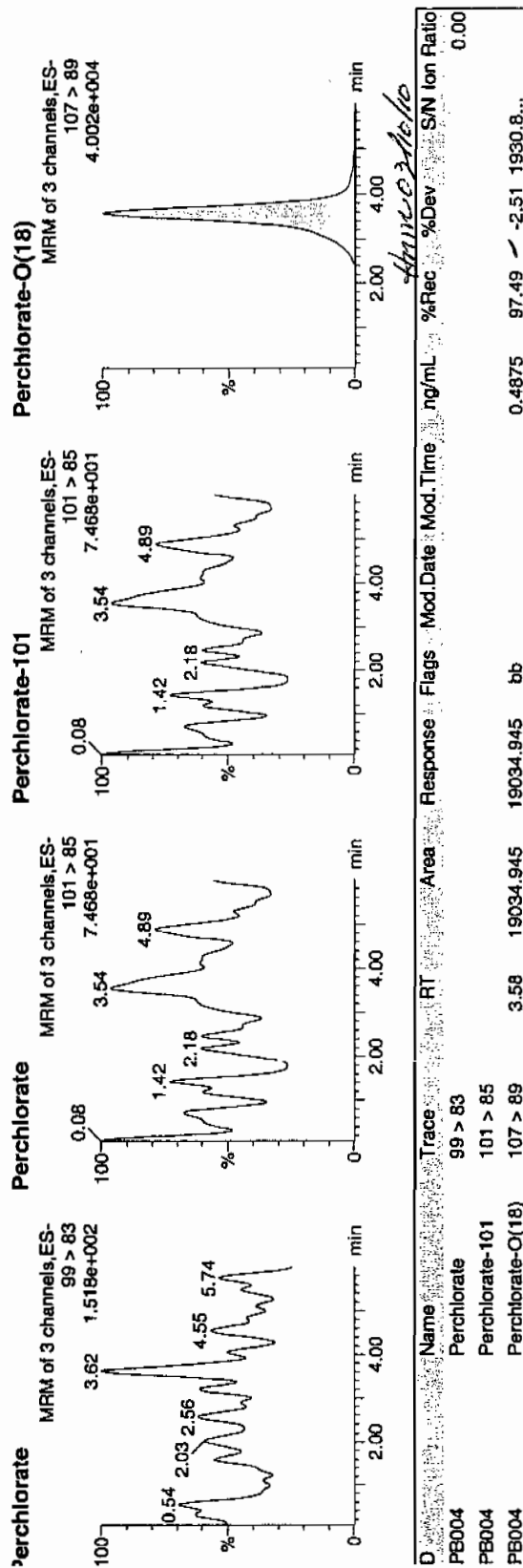
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030810a.qld

Last Altered: Tuesday, March 09, 2010 12:57:27 PM Eastern Standard Time
Printed: Tuesday, March 09, 2010 1:04:52 PM Eastern Standard Time

Name: per0308022a
Date: 08-Mar-2010
Time: 18:55:24
D: IPB004
/lat: 1:1,A

03-09-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
PB004	Perchlorate											0.00
PB004	Perchlorate-101											
PB004	Perchlorate-O(18)	3.58	19034.945	19034.945	bb			0.4875	97.49	-2.51	1930.8...	

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

Dataset: C:\MassLynx\Perchlorate.PRO\per030810a.qtd

Last Altered: Tuesday, March 09, 2010 12:57:27 PM Eastern Standard Time
Printed: Tuesday, March 09, 2010 1:04:52 PM Eastern Standard Time

Name: per0308035a

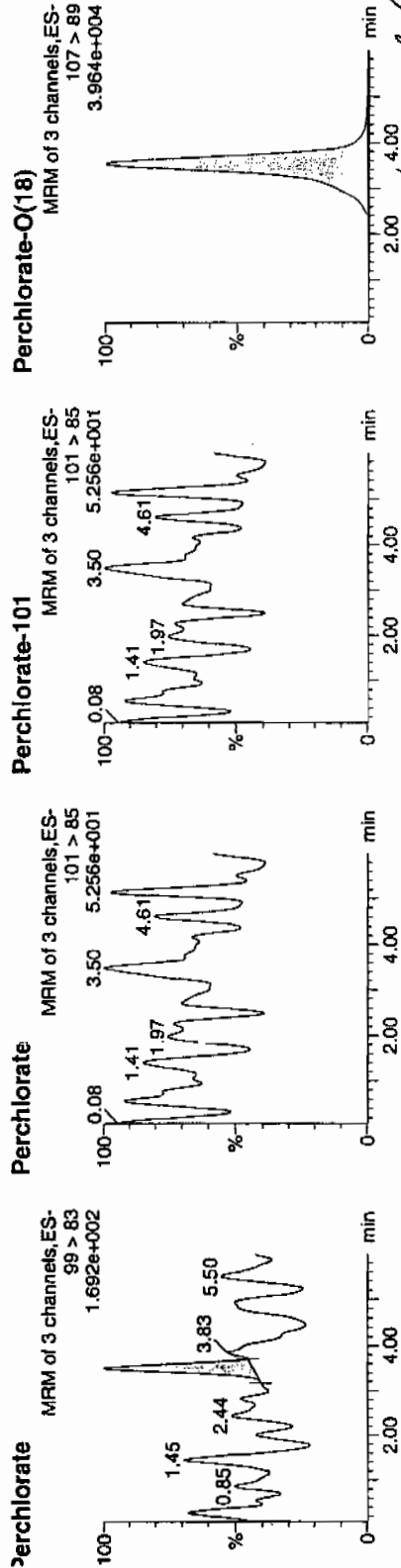
Date: 08-Mar-2010

Time: 20:53:11

D: IPB005

Vial: 1:1,A

0309-10



D	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
PB005	Perchlorate	99 > 83	3.50	20.240	20.240	bb			0.0004			12.166	0.00
PB005	Perchlorate-101	101 > 85											
PB005	Perchlorate-O(18)	107 > 89	3.53	18853.305	18853.305	bb			0.4828	96.56	-3.44	2233.7...	

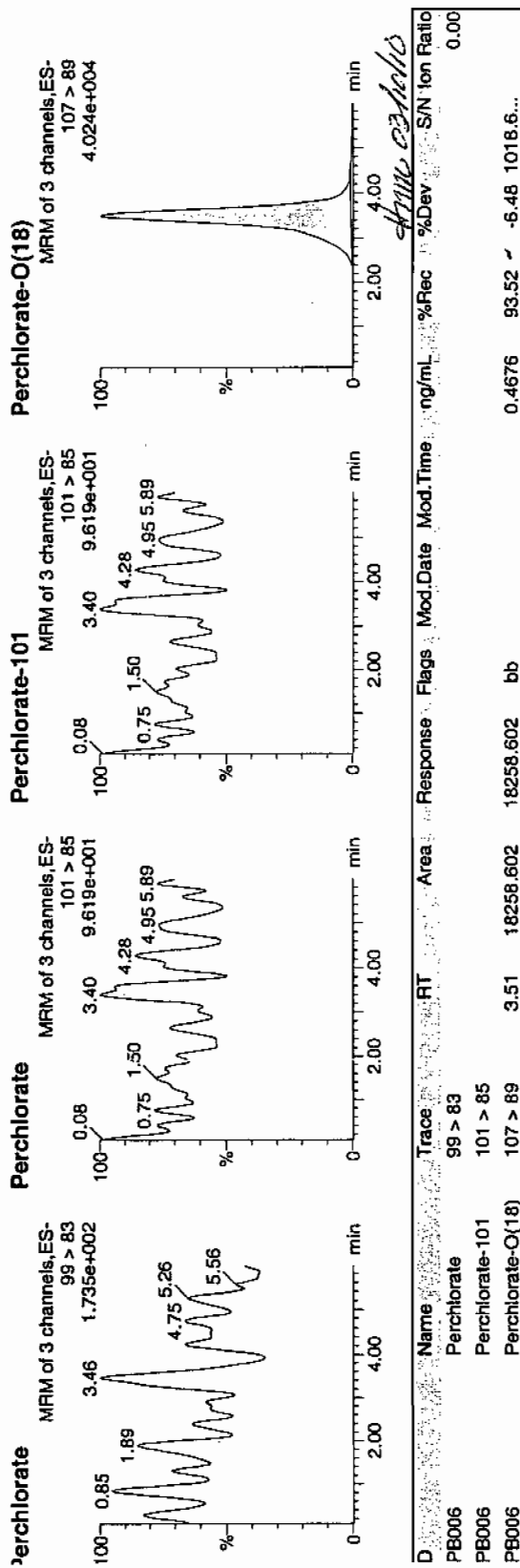
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030810a.qld

Last Altered: Tuesday, March 09, 2010 12:57:27 PM Eastern Standard Time
Printed: Tuesday, March 09, 2010 1:04:52 PM Eastern Standard Time

Name: per0308048a
Date: 08-Mar-2010
Time: 22:51:21
D: IPB006
/ial: 1:1,A

03-09-10



D	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
PB006	Perchlorate	99 > 83											0.00
PB006	Perchlorate-101	101 > 85	3.51	18258.602	18258.602	bb			0.4676	93.52	-6.48	1018.6...	
PB006	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\per030810a.qld

Last Altered: Tuesday, March 09, 2010 12:57:27 PM Eastern Standard Time
Printed: Tuesday, March 09, 2010 1:04:52 PM Eastern Standard Time

Sample Name: per0308052a

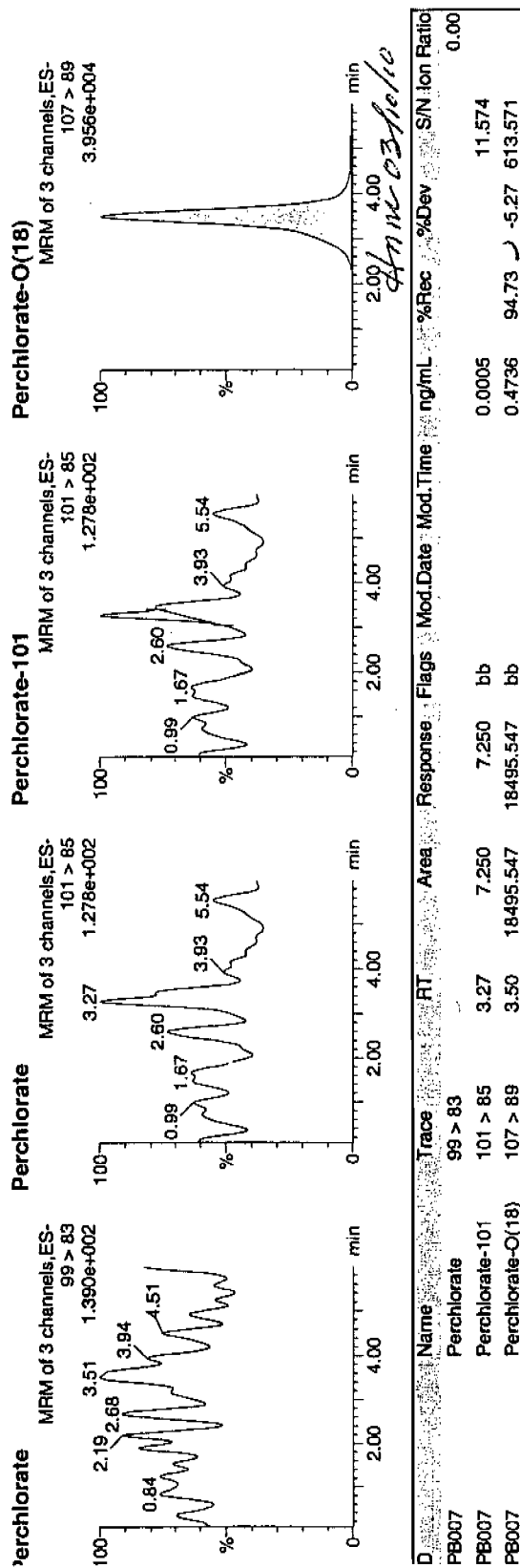
Date: 08-Mar-2010

Time: 23:27:41

D: IPB007

File: 1:1,A

03-04-10



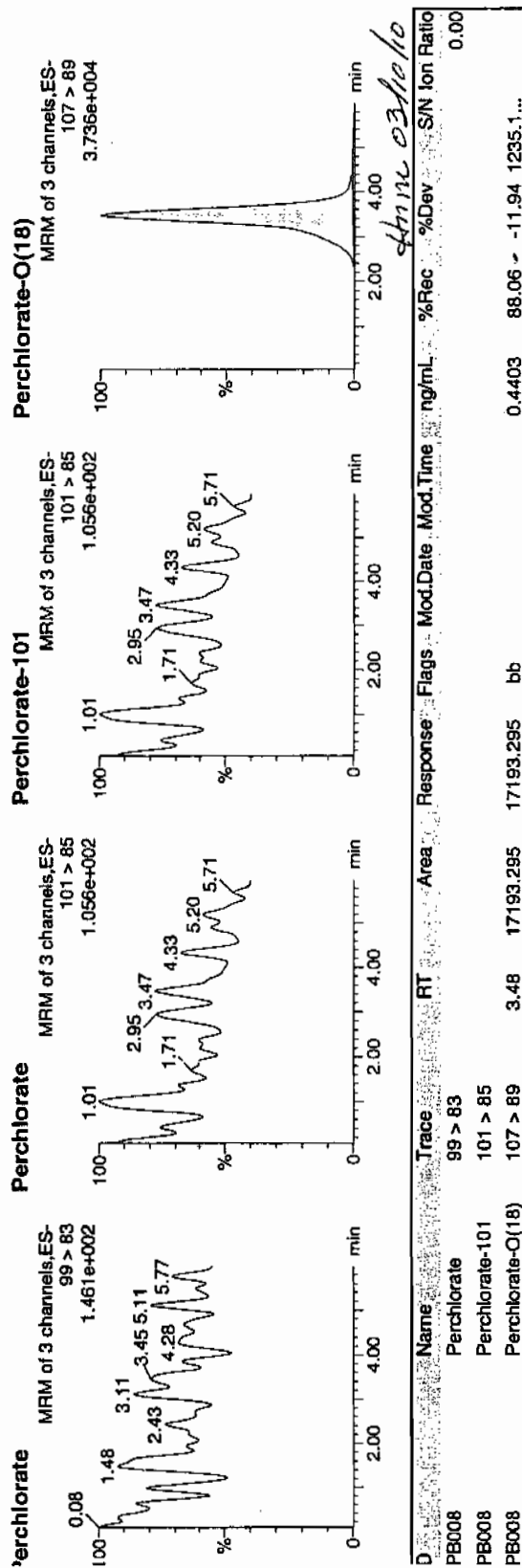
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030810a.qld

Last Altered: Tuesday, March 09, 2010 12:57:27 PM Eastern Standard Time
Printed: Tuesday, March 09, 2010 1:04:52 PM Eastern Standard Time

Sample Name: per0308061a
Date: 09-Mar-2010
Time: 00:50:02
D: IPB008
Vial: 1:1,A

03-09-10



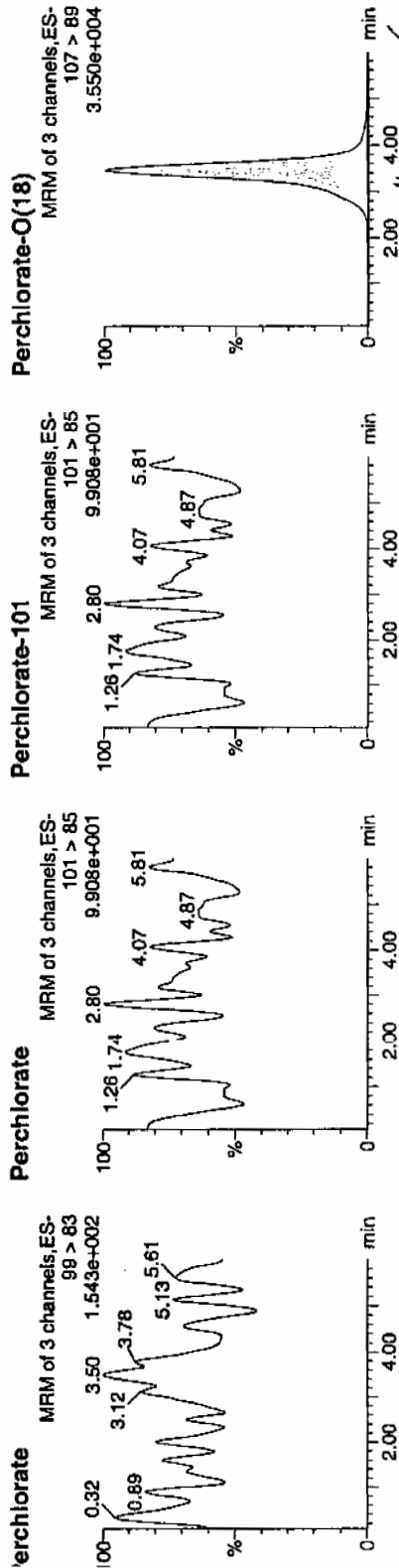
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030810a.qld

Last Altered: Tuesday, March 09, 2010 12:57:27 PM Eastern Standard Time
Printed: Tuesday, March 09, 2010 1:04:52 PM Eastern Standard Time

Sample Name: per0308074a
Date: 09-Mar-2010
Time: 02:48:02
Lab: IPB009
Label: 1:1,A

WJ
03-04-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
PB009	Perchlorate	99 > 83										0.00
PB009	Perchlorate-101	101 > 85										
PB009	Perchlorate-O(18)	107 > 89	3.47	16711.643	bb	16711.643		0.4280	85.59	-14.41	2348.6...	

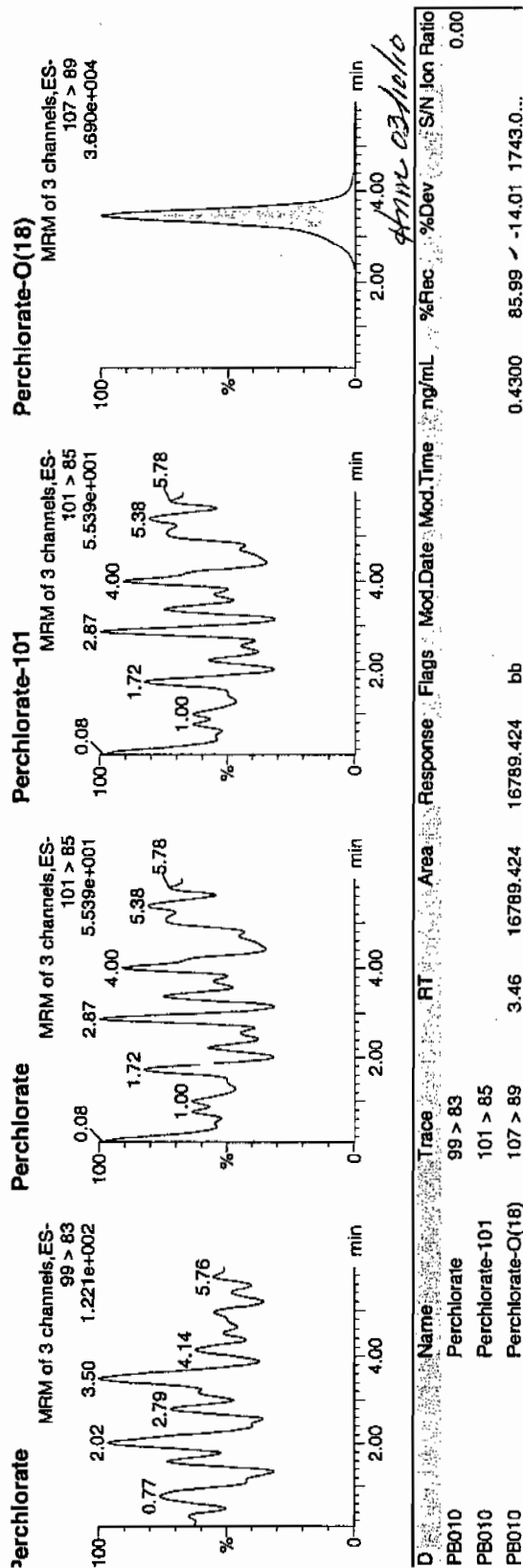
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030810a.qld

Last Altered: Tuesday, March 09, 2010 12:57:27 PM Eastern Standard Time
Printed: Tuesday, March 09, 2010 1:04:52 PM Eastern Standard Time

Name: per0308087a
Date: 09-Mar-2010
Time: 04:46:06
D: IPB010
/ial: 1:1,A

03 04-10



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

Dataset: C:\MassLynx\Perchlorate.PRO\per030810a.qld

Last Altered: Tuesday, March 09, 2010 12:57:27 PM Eastern Standard Time
Printed: Tuesday, March 09, 2010 1:04:52 PM Eastern Standard Time

Name: per0308100a

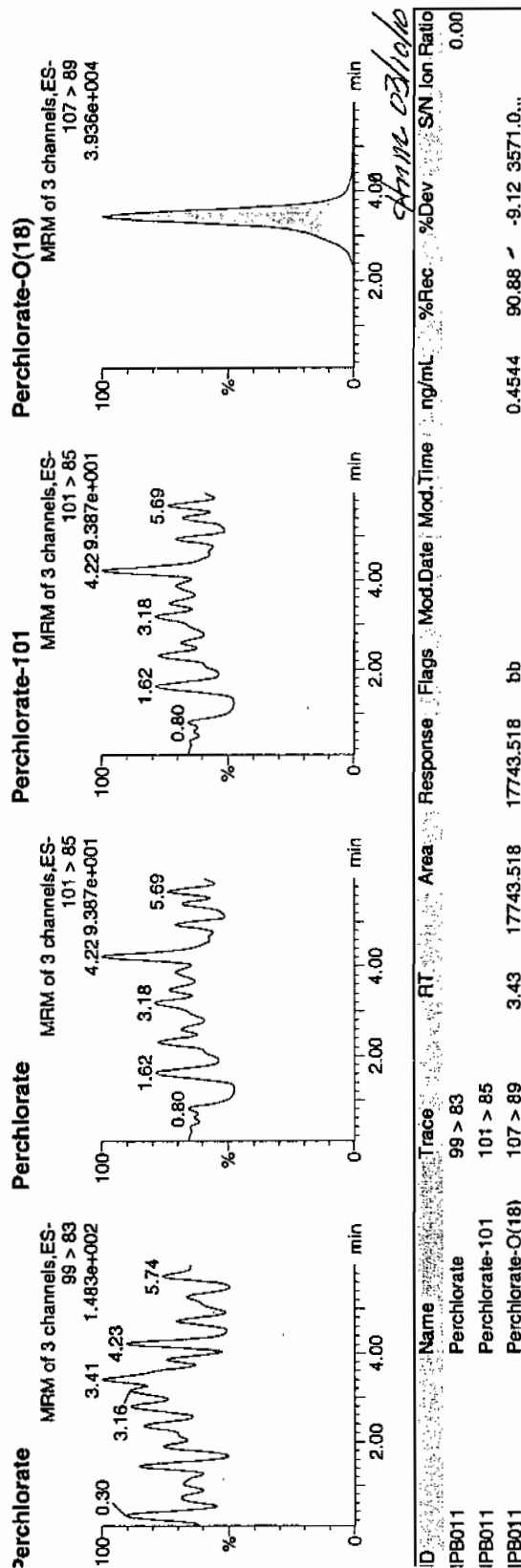
Date: 09-Mar-2010

Time: 06:44:12

D: IPB011

Vial: 1:1,A

03.04.10



Nairb.ref

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

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

QUATRO ULTIMA: nairb_01_08_08.ca

Calibration Report - MS1 Static

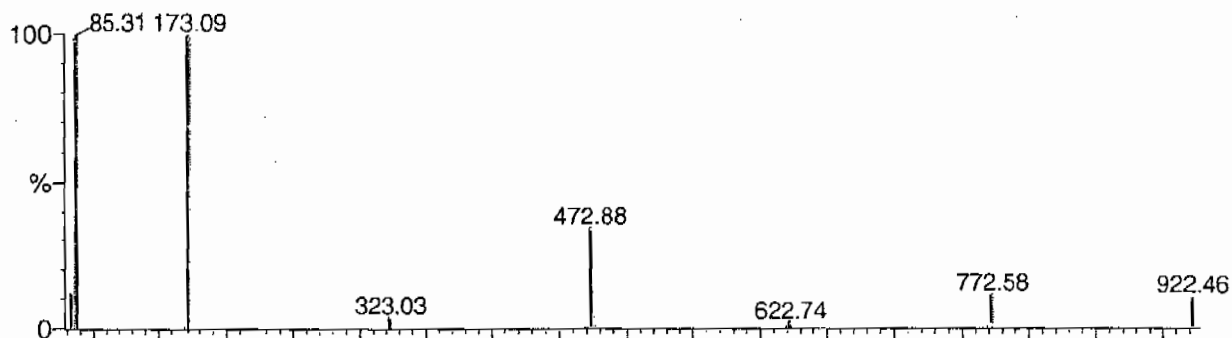
Page 1 of 1

Printed: Tue Jan 08 12:19:12 2008

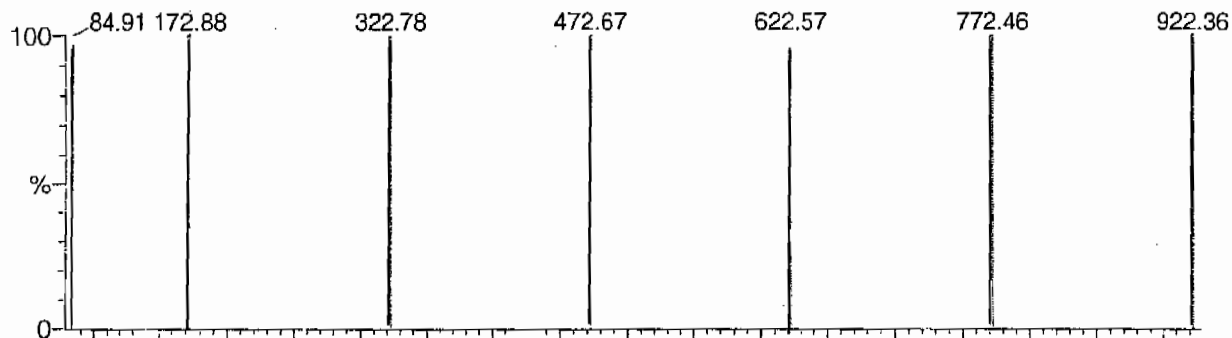
POINTS HIGHLIGHTED BY CURVED 01-09-08

Data file: STATMS1 - Uncalibrated

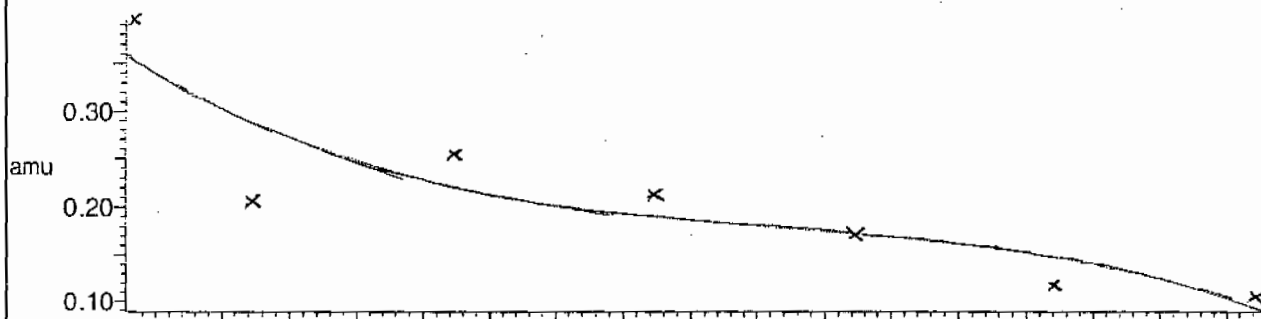
7 matches of 7 tested references



Reference file: Nairb

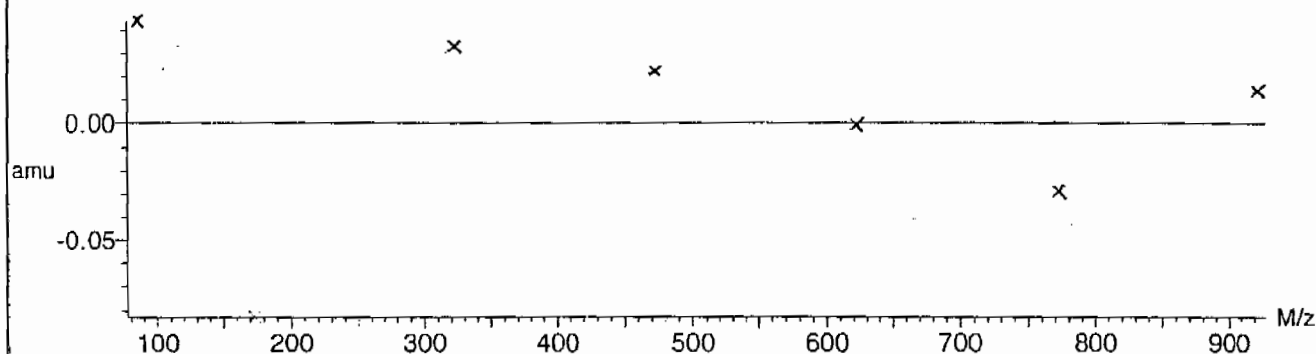


Mass difference (Raw - Ref mass)



Residuals

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



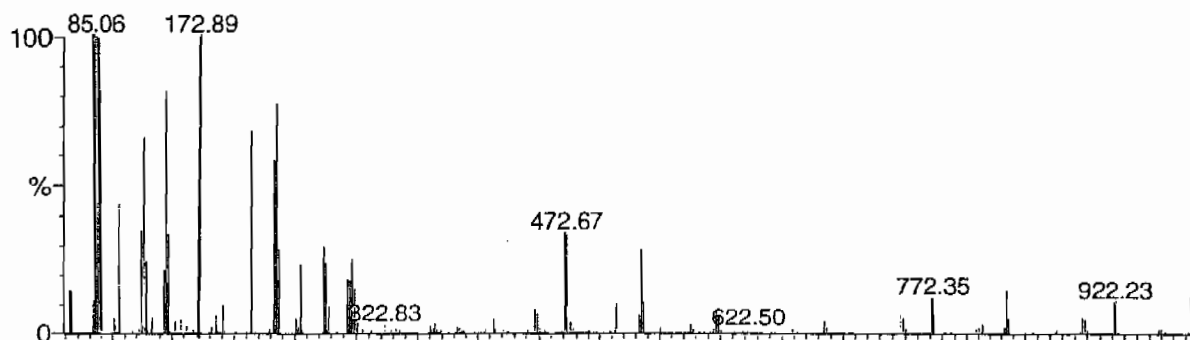
Calibration Report - MS1 Scanning

Page 1 of 1

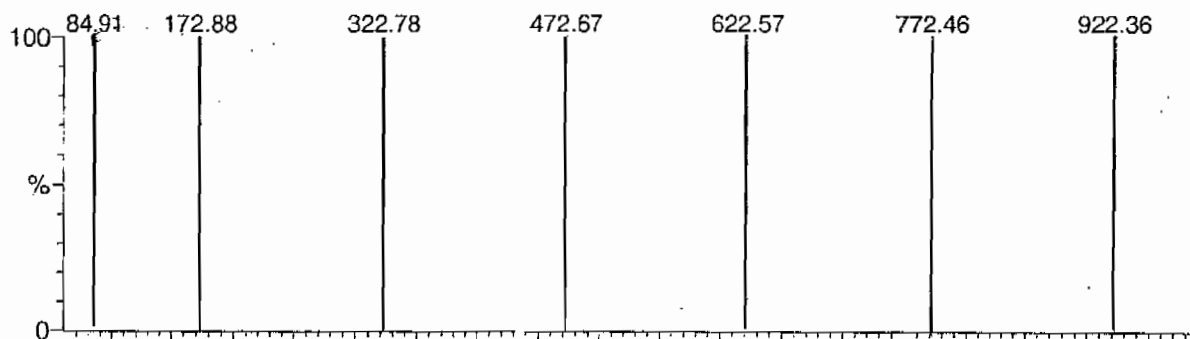
Printed: Tue Jan 08 12:20:09 2008

Data file: SCNMS1 - Uncalibrated

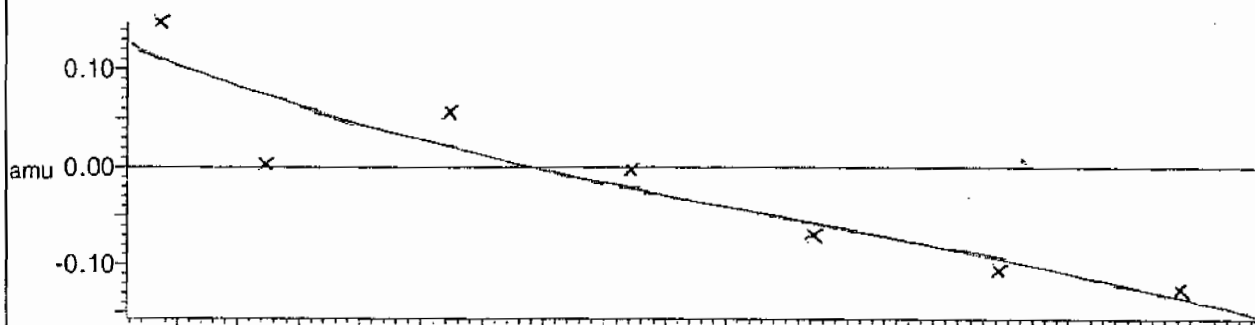
7 matches of 7 tested references



Reference file: Nairb

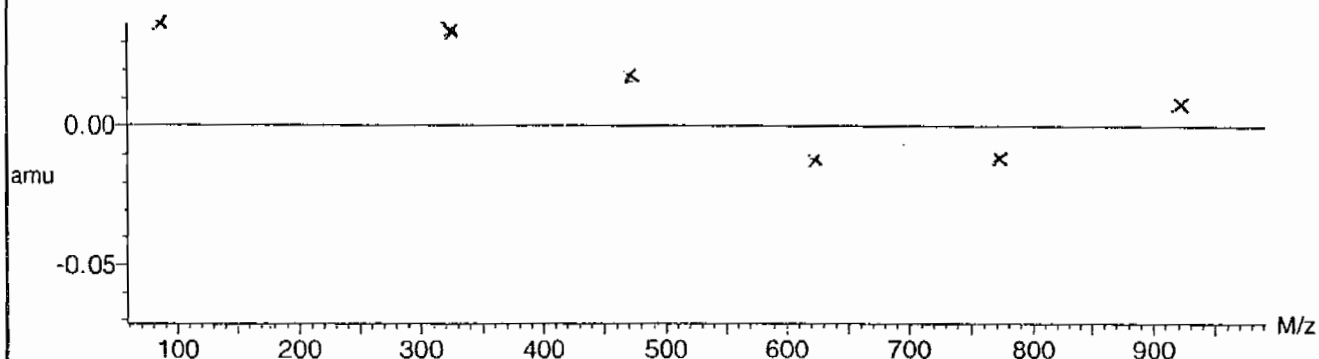


Mass difference (Raw - Ref mass)



Residuals

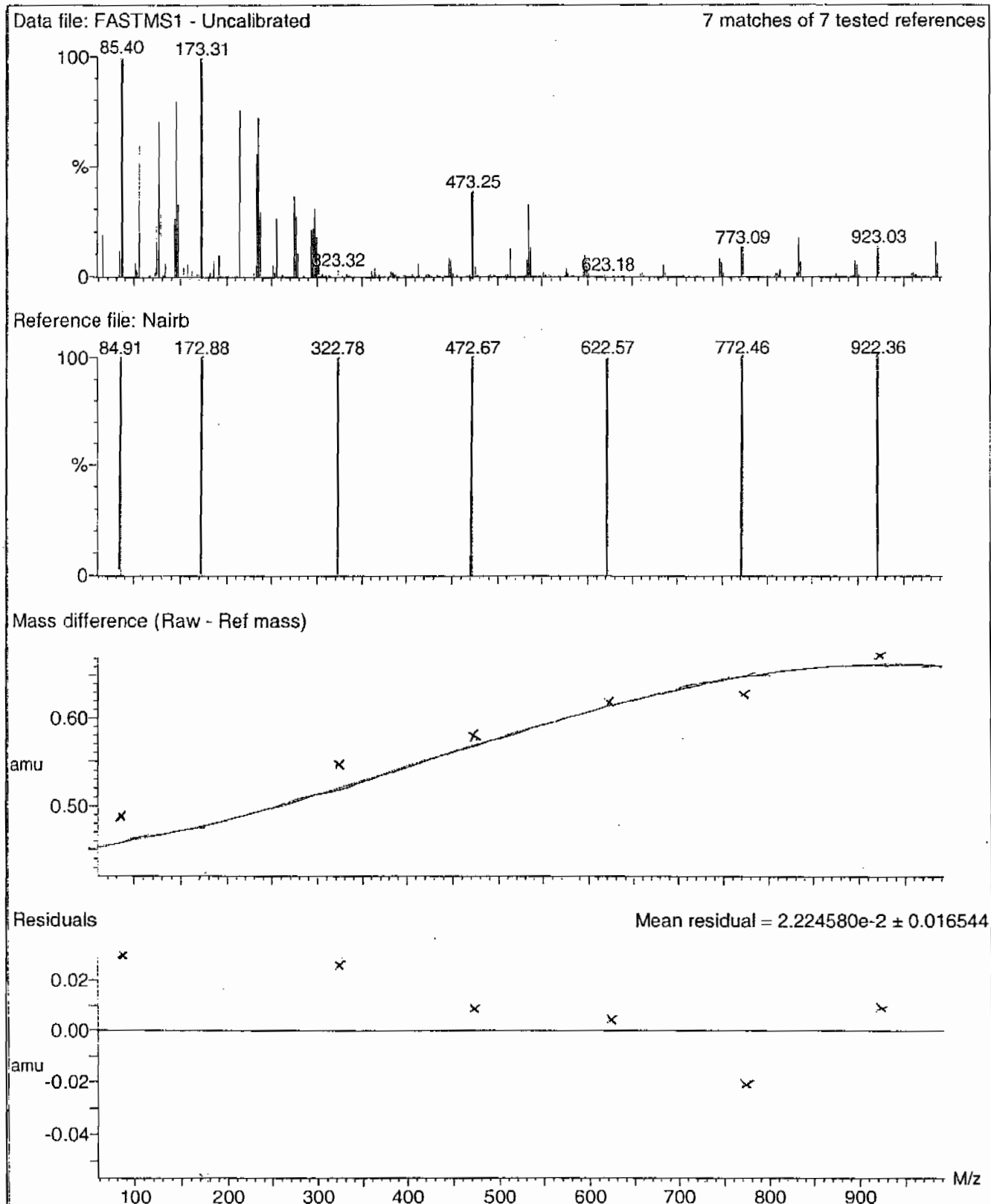
Mean residual = $2.732691 \times 10^{-2} \pm 0.020653$



Calibration Report - MS1 Scan Speed Compensation

Page 1 of 1

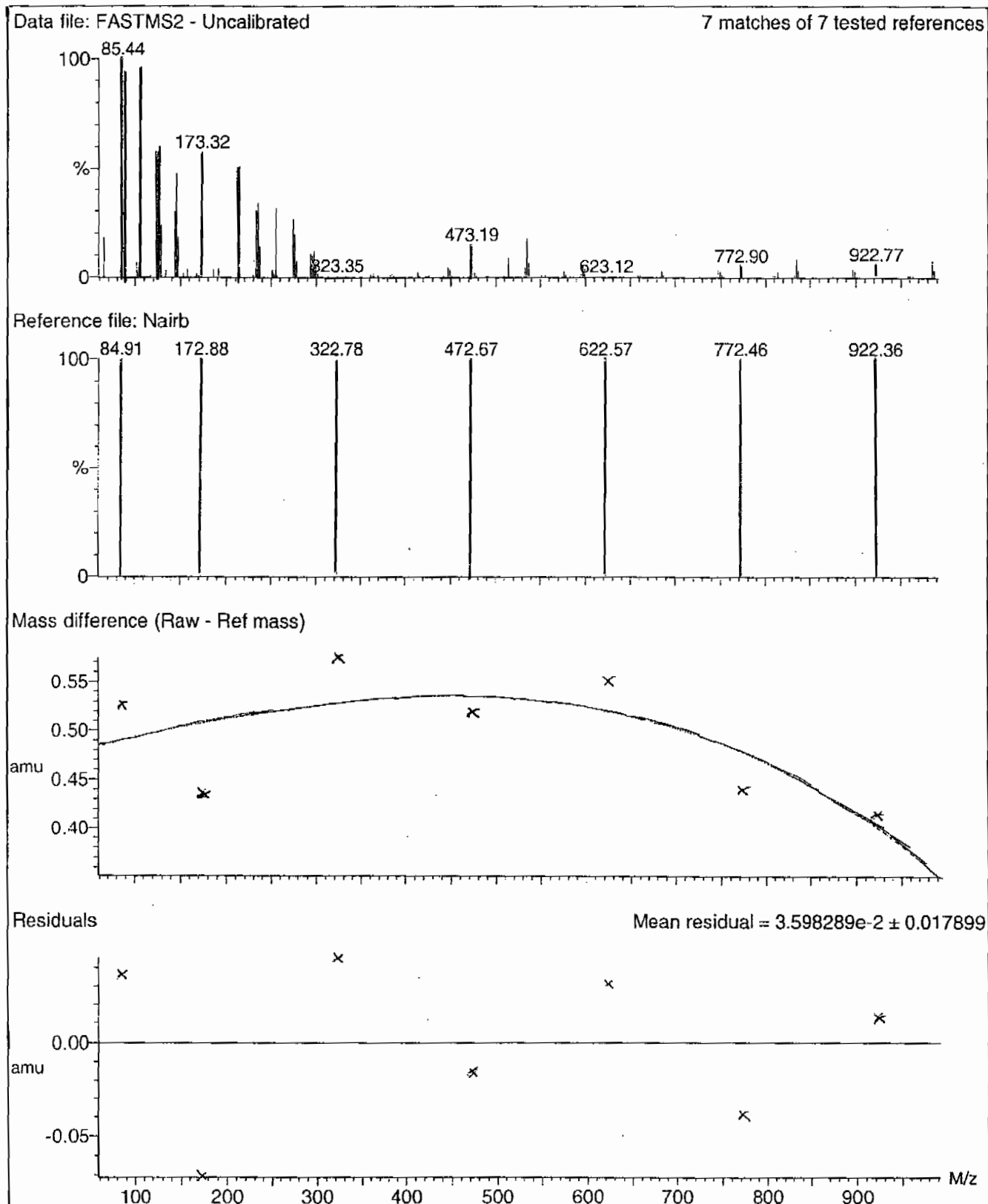
Printed: Tue Jan 08 12:21:04 2008



Calibration Report - MS2 Scan Speed Compensation

Page 1 of 1

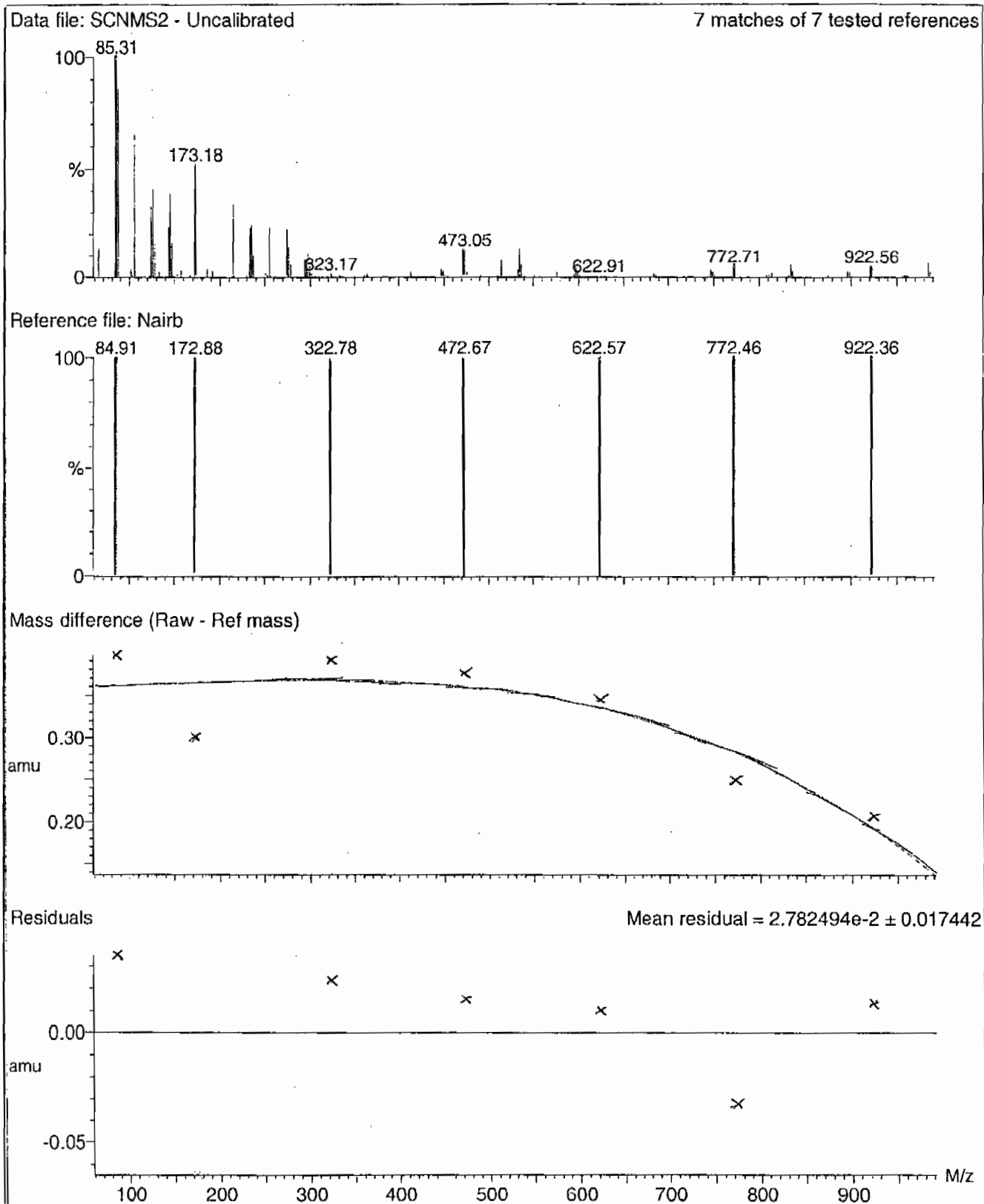
Printed: Tue Jan 08 12:23:51 2008



Calibration Report - MS2 Scanning

Page 1 of 1

Printed: Tue Jan 08 12:22:56 2008



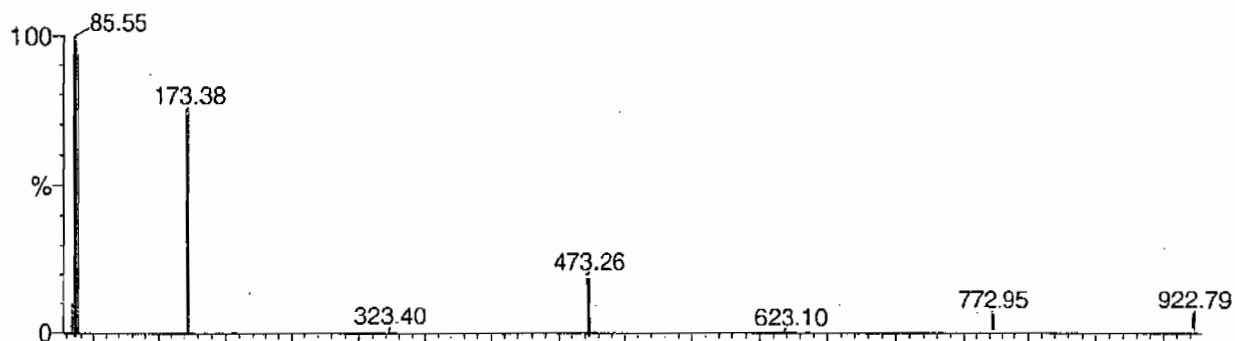
Calibration Report - MS2 Static

Page 1 of 1

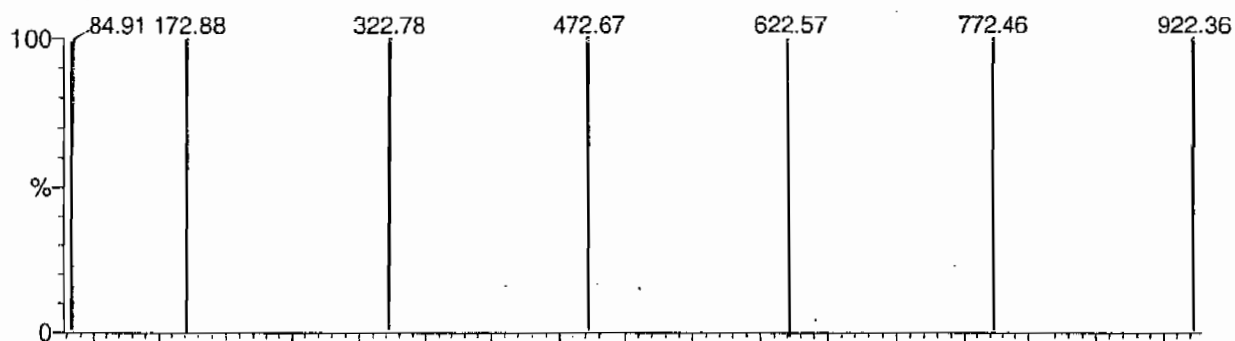
Printed: Tue Jan 08 12:21:59 2008

Data file: STATMS2 - Uncalibrated

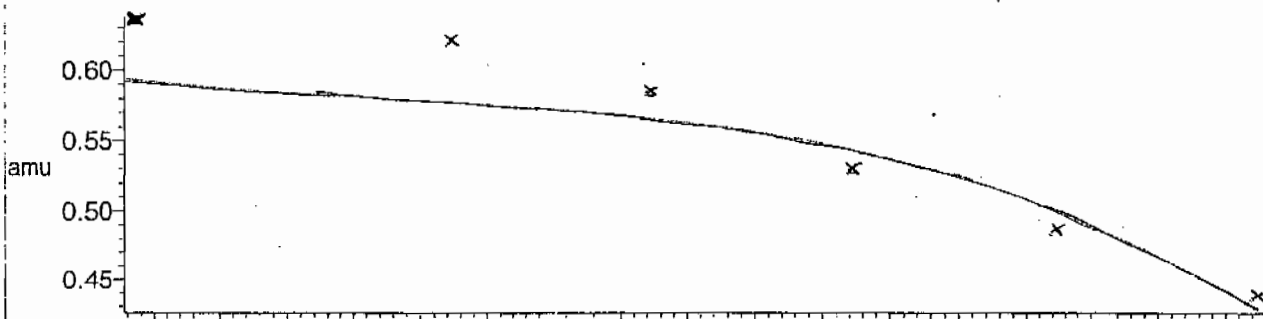
7 matches of 7 tested references



Reference file: Nairb

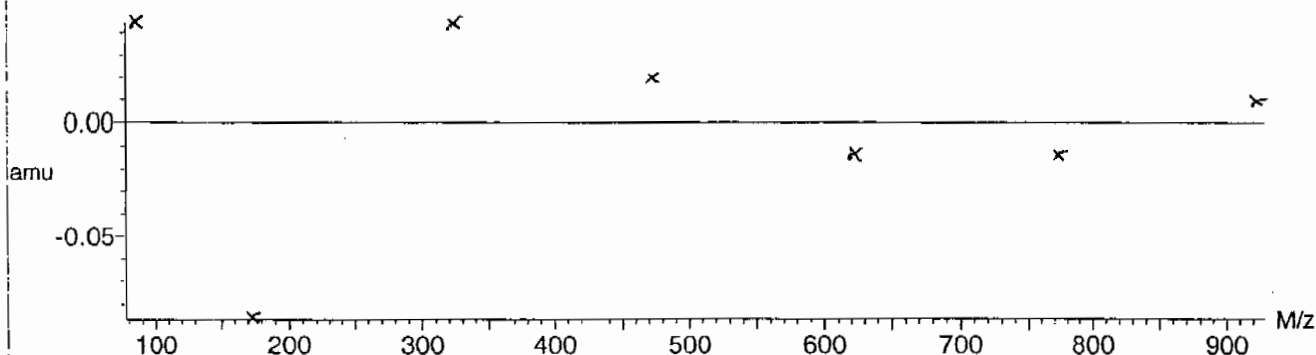


Mass difference (Raw - Ref mass)



Residuals

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



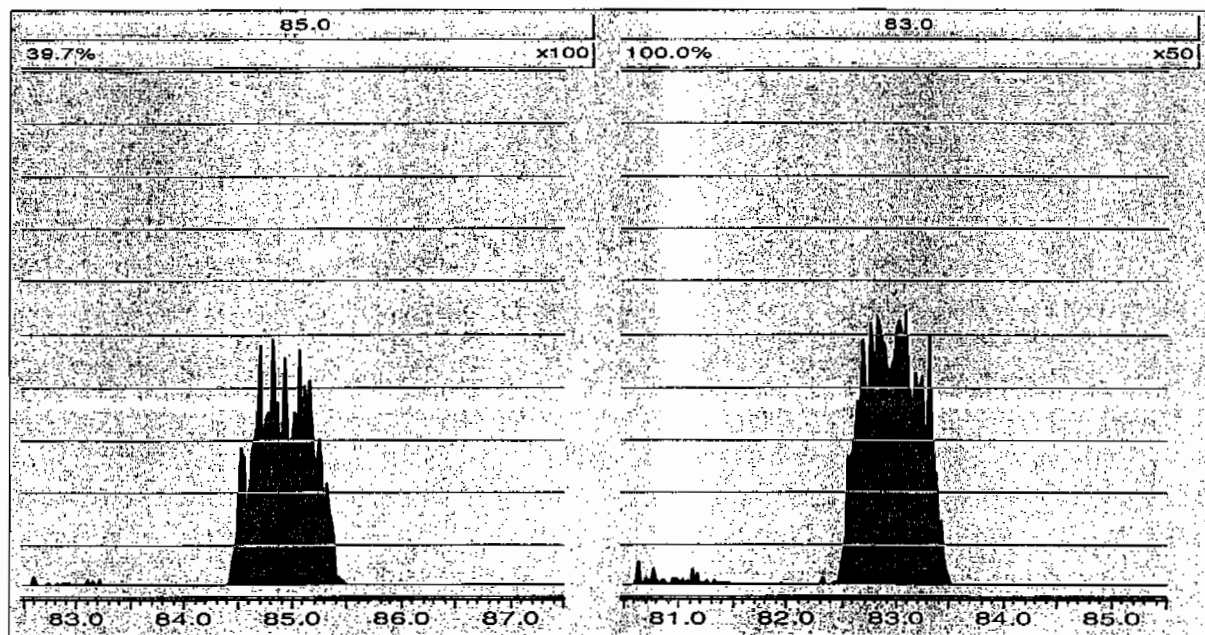
Tune Parameters

MassLynx 4.0 SP4

Page 1 of 1

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

Printed: Monday, March 08, 2010 10:18:13 Eastern Standard Time



Percarbonate RT And Area Summary

Lab Name: General Engineering Laboratories
GEL Job No.(SDG): 10-2069

Lab Code: GEL

Instrument ID: LCMSMS

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

Sample ID	Datafile	Run Date	Area	RT	RT CLO4	RRT	Q 0.98-1.02
MidLevel Standard Area	per0308006a	08-MAR-10	19792.7				
Lower Area Limit			9896.35				
Upper Area Limit			39585.4				
1202056710	per0308076a	09-MAR-10 03:06	15825.6	3.47	3.43317	.989	
1202056711	per0308077a	09-MAR-10 03:15	16378.9	3.47	3.4828	1.004	
1202056714	per0308078a	09-MAR-10 03:24	17957.4	3.51	3.52005	1.003	
248039001	per0308097a	09-MAR-10 06:16	17242.4	3.45			

SAMPLE DATA

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: 959043

Extraction Type: Filter/DAL

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.

RE15-10-8406

Date Received: 25-FEB-10

GEL Job No (SDG): 10-2069

GEL Sample ID: 248039001

Date Filtered: 03-MAR-10

Injection Volume (uL): 20

%Solids:

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.050	ug/L	U	1	09-MAR-10 06:16	per0308097a
	Perchlorate Isotope Ratio						1	09-MAR-10 06:16	per0308097a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	09-MAR-10 06:16	per0308097a
	Perchlorate-O(18)			0.442	ug/L		1	09-MAR-10 06:16	per0308097a

[^] 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

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

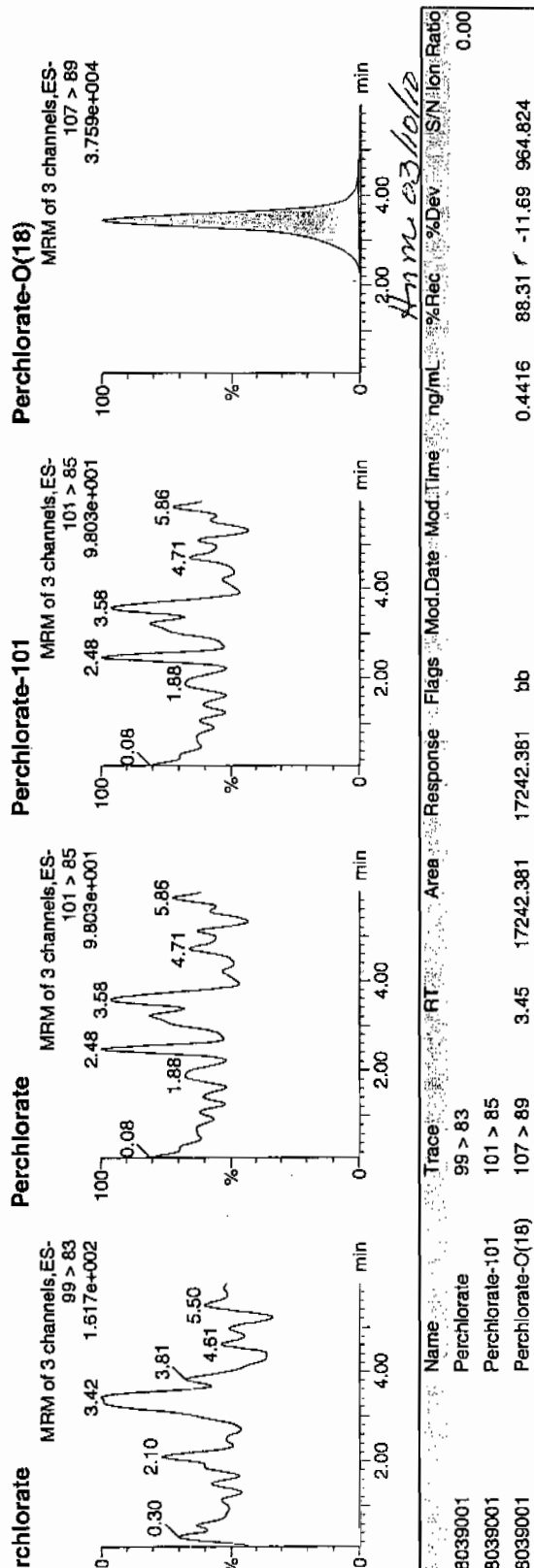
Dataset: C:\MassLynx\Perchlorate.PRO\per030810a.qld

Acquired: Tuesday, March 09, 2010 12:57:27 PM Eastern Standard Time
 Method: Tuesday, March 09, 2010 1:04:52 PM Eastern Standard Time

File: per0308097a
 Date: 09-Mar-2010
 Time: 06:16:45
 Sample: 248039001
 Inj: 2.7, A

03-09-10

1959044 | 1722 | 11



STANDARDS DATA

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories GEL Job No.(SDG): 10-2069

Lab Code: GEL

Instrument ID: LCMSMS Date Analyzed: 08-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: 47047.38

Response Type: External Standard

Curve Type: RF

Perchlorate Initial Calibration

GEL Job No.(SDG): 10-2069

Lab Name: General Engineering Laboratories

Lab Code: GEL

Instrument ID: LCMSMS Date Analyzed: 08-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: 14296.94

Response Type: External Standard

Curve Type: RF

Quantify Calibration Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charlers W. Wilson

Page 1 of 2

Dataset: C:\MassLynx\Perchlorate.PRO\per030810a.qld

Last Altered: Tuesday, March 09, 2010 12:57:27 PM Eastern Standard Time

Printed: Tuesday, March 09, 2010 1:04:52 PM Eastern Standard Time

Method: C:\MassLynx\Perchlorate.PRO\MethDB\per030810a.mdb 09 Mar 2010 12:48:33

Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per030810a.cdb 09 Mar 2010 12:48:47

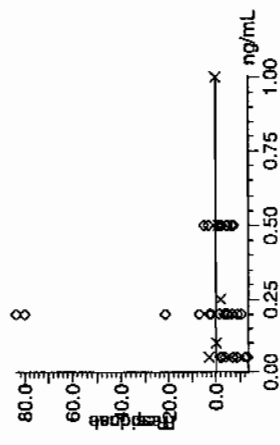
Compound name: Perchlorate

Response Factor: 47047.4

RF SD: 838.521, % Relative SD: 1.78229

Response type: External Std, Area

Curve type: RF



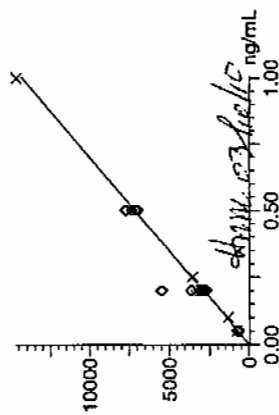
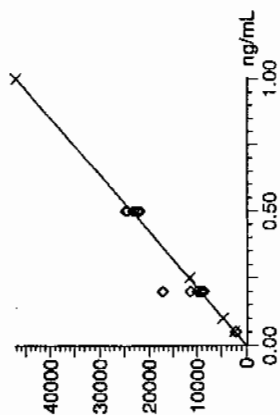
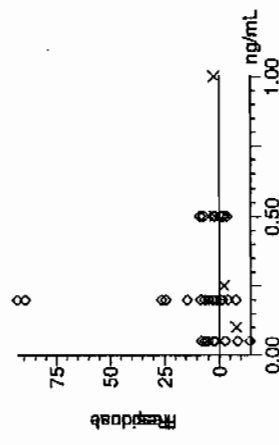
Compound name: Perchlorate-101

Response Factor: 14297

RF SD: 749.315, % Relative SD: 5.24108

Response type: External Std, Area

Curve type: RF



03-09-10

03-09-10

Quantify Calibration Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030810a.qld

Last Altered: Tuesday, March 09, 2010 12:57:27 PM Eastern Standard Time
Printed: Tuesday, March 09, 2010 1:04:52 PM Eastern Standard Time

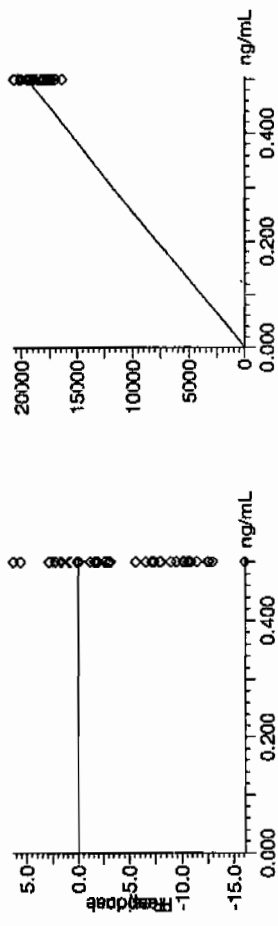
Compound name: Perchlorate-O(18)

Response Factor: 39049

RF SD: 832.552, % Relative SD: 2.13207

Response type: External Std, Area

Curve type: RF



Perchlorate Initial Calibration Verification

Lab Name: General Engineering Laboratories

CEL Job No.(SDG): 10-2069

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.53	105.14	08-MAR-10 16:57	per0308009a
Perchlorate Isotope Ratio		3.18		08-MAR-10 16:57	per0308009a
Perchlorate-101	.5	.54	108.66	08-MAR-10 16:57	per0308009a

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

Dataset: C:\MassLynx\Perchlorate.PRO\per030810a.qld

Last Altered: Tuesday, March 09, 2010 12:57:27 PM Eastern Standard Time
Printed: Tuesday, March 09, 2010 1:04:52 PM Eastern Standard Time

Name: per0308009a

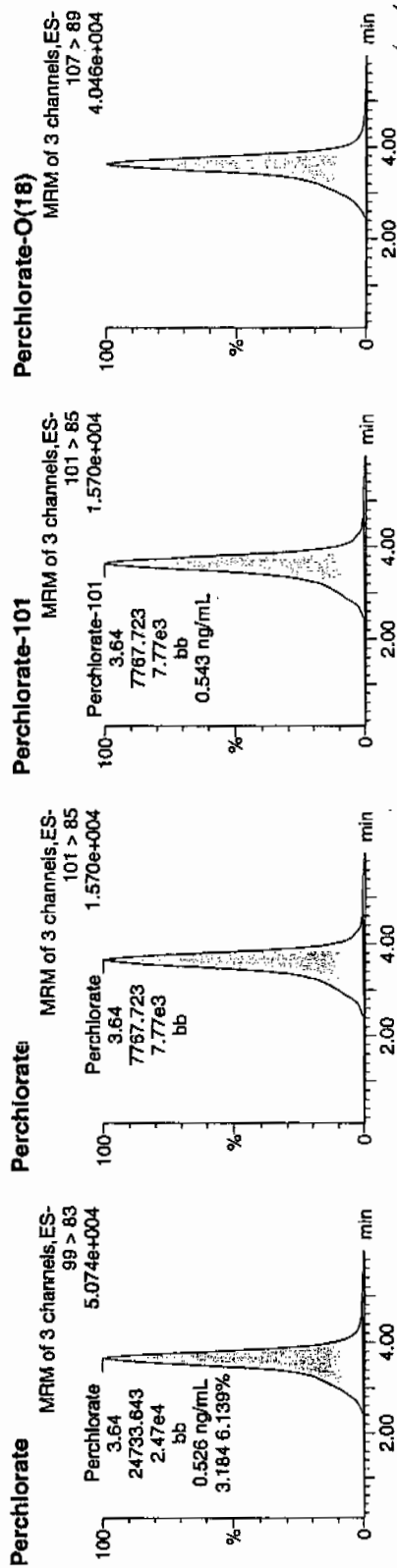
Date: 08-Mar-2010

Time: 16:57:17

ID: WCL100227-06ICV

Vial: 1:2,A

*Per
0304-10*



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	SN	Ion Ratio
WCL100227-06ICV	Perchlorate	99 > 83	3.64	24733.643	24733.643	bb			0.5257	105.14	5.14	543.107	3.18
WCL100227-06ICV	Perchlorate-101	101 > 85	3.64	7767.723	7767.723	bb			0.5433	108.66	8.66	159.570	
WCL100227-06ICV	Perchlorate-O(18)	107 > 89	3.63	19967.303	19967.303	bb			0.5113	102.27	2.27	1535.3...	

Perchlorate Continuing Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-2069

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.52	103.28	08-MAR-10 18:46	per0308021a
Perchlorate Isotope Ratio		3.14		08-MAR-10 18:46	per0308021a
Perchlorate-101	.5	.54	108.41	08-MAR-10 18:46	per0308021a
Perchlorate	.5	.53	105.15	08-MAR-10 20:44	per0308034a
Perchlorate Isotope Ratio		3.23		08-MAR-10 20:44	per0308034a
Perchlorate-101	.5	.54	107.08	08-MAR-10 20:44	per0308034a
Perchlorate	.5	.52	103.16	08-MAR-10 22:42	per0308047a
Perchlorate Isotope Ratio		3.13		08-MAR-10 22:42	per0308047a
Perchlorate-101	.5	.54	108.56	08-MAR-10 22:42	per0308047a
Perchlorate	.5	.5	99.29	09-MAR-10 00:40	per0308060a
Perchlorate Isotope Ratio		3.17		09-MAR-10 00:40	per0308060a
Perchlorate-101	.5	.51	102.95	09-MAR-10 00:40	per0308060a
Perchlorate	.5	.48	95.1	09-MAR-10 02:38	per0308073a

Form 3

Perchlorate Confirming Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-2069

Lab Code: GEL

Reporting Units: ug/L

Perchlorate Isotope Ratio		3.07		09-MAR-10 02:38	per0308073a
Perchlorate-101	.5	.51	101.9	09-MAR-10 02:38	per0308073a
Perchlorate	.5	.46	92.67	09-MAR-10 04:36	per0308086a
Perchlorate Isotope Ratio		3.1		09-MAR-10 04:36	per0308086a
Perchlorate-101	.5	.49	98.48	09-MAR-10 04:36	per0308086a
Perchlorate	.5	.47	93.76	09-MAR-10 06:34	per0308099a
Perchlorate Isotope Ratio		3.2		09-MAR-10 06:34	per0308099a
Perchlorate-101	.5	.48	96.42	09-MAR-10 06:34	per0308099a

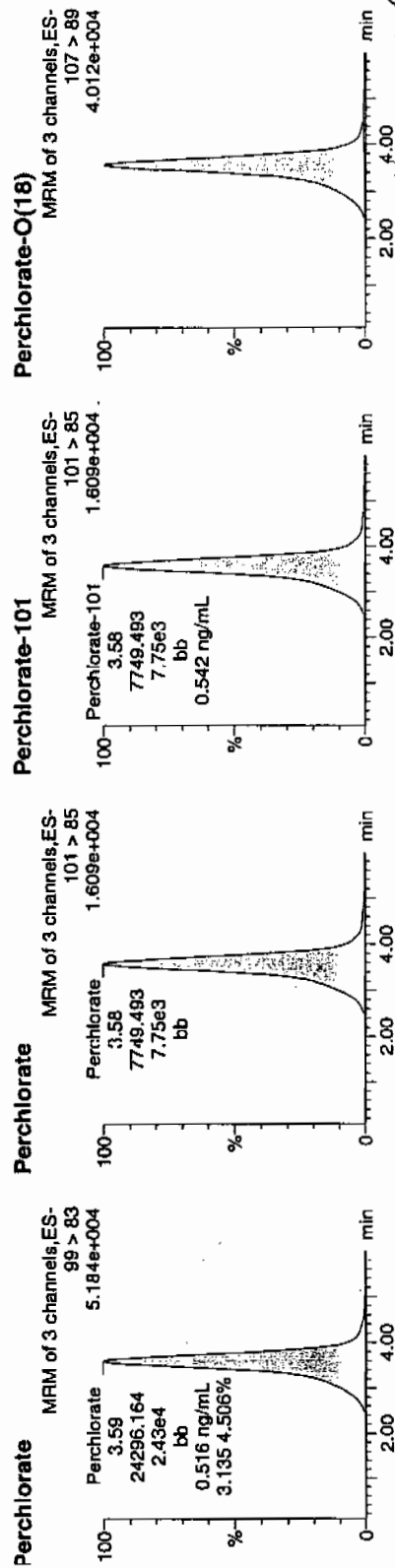
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030810a.qld

Last Altered: Tuesday, March 09, 2010 12:57:27 PM Eastern Standard Time
Printed: Tuesday, March 09, 2010 1:04:52 PM Eastern Standard Time

Name: per0308021a
Date: 08-Mar-2010
Time: 18:46:13
ID: WCL100227-06CCV
Vial: 1:2,A

Per
0309-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100227-06CCV	Perchlorate	3.59	24296.164	24296.164	bb			0.5164	103.28	3.28	2058.4...	3.14
WCL100227-06CCV	Perchlorate-101	3.58	7749.493	7749.493	bb			0.5420	108.41	8.41	842.163	
WCL100227-06CCV	Perchlorate-O(18)	3.57	18892.500	18892.500	bb			0.4838	96.76	-3.24	3961.4...	

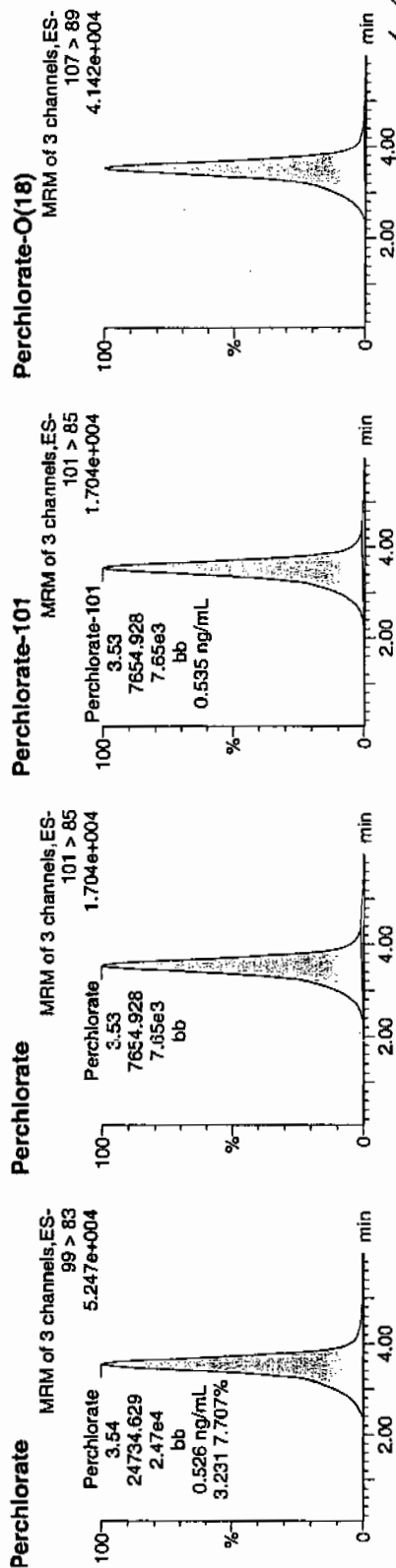
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030810a.qld

Last Altered: Tuesday, March 09, 2010 12:57:27 PM Eastern Standard Time
Printed: Tuesday, March 09, 2010 1:04:52 PM Eastern Standard Time

Name: per0308034a
Date: 08-Mar-2010
Time: 20:44:08
ID: WCL100227-06CCV
Vial: 1:2,A

pure
and
03-29-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	SN	Ion Ratio
WCL100227-06CCV	Perchlorate	99 > 83	3.54	24734.629	24734.629	bb			0.5257	105.15	5.15	2200.8...	3.23
WCL100227-06CCV	Perchlorate-101	101 > 85	3.53	7654.928	7654.928	bb			0.5354	107.08	7.08	2331.6...	
WCL100227-06CCV	Perchlorate-O(18)	107 > 89	3.53	19141.506	19141.506	bb			0.4902	98.04	-1.96	1232.7...	

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

Dataset: C:\MassLynx\Perchlorate.PRO\per030810a.qld

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Printed: Tuesday, March 09, 2010 1:04:52 PM Eastern Standard Time

Name: per0308047a

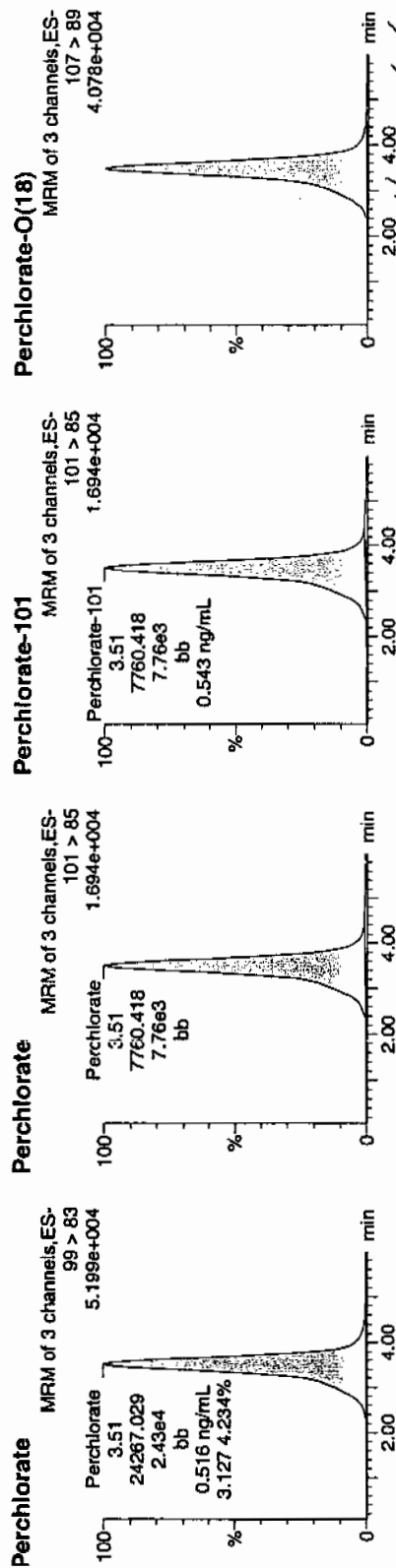
Date: 08-Mar-2010

Time: 22:42:18

ID: WCL100227-06CCV

Vial: 1:2,A

Pass and 03-09-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100227-06CCV	Perchlorate	99 > 83	3.51	24267.029	24267.029	bb			0.5158	103.16	3.16	1490.7...	3.13
WCL100227-06CCV	Perchlorate-101	101 > 85	3.51	7760.418	7760.418	bb			0.5428	108.56	8.56	1343.7...	
WCL100227-06CCV	Perchlorate-O(18)	107 > 89	3.50	18936.834	18936.834	bb			0.4849	96.99	-3.01	1821.0...	

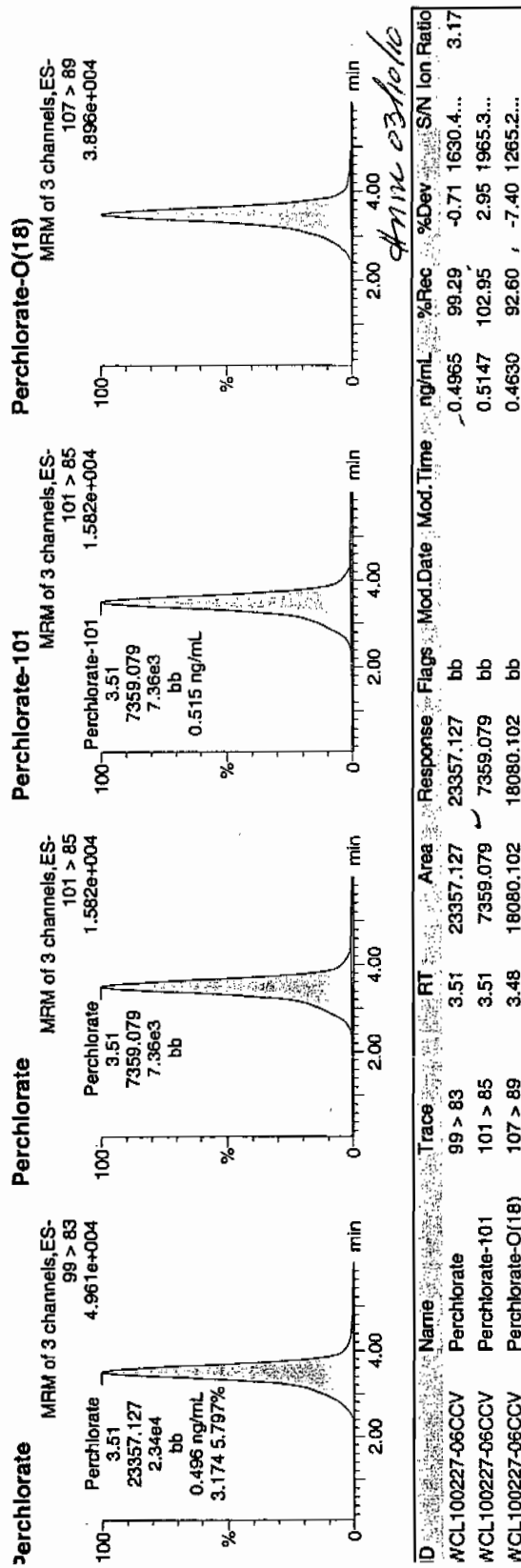
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030810a.qld

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Printed: Tuesday, March 09, 2010 1:04:52 PM Eastern Standard Time

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Date: 09-Mar-2010
Time: 00:40:46
D: WCL100227-06CCV
Vial: 1:2,A

Run
62
03-01-10



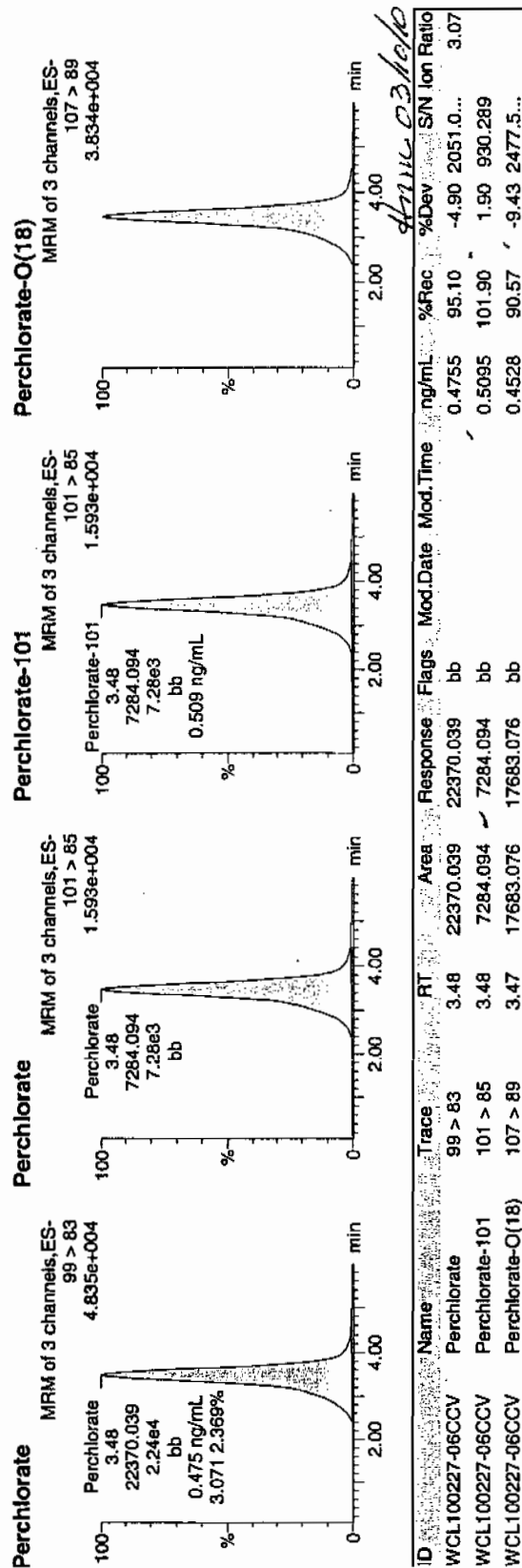
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charfers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030810a.qld

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Printed: Tuesday, March 09, 2010 1:04:52 PM Eastern Standard Time

Name: per0308073a
Date: 09-Mar-2010
Time: 02:38:45
ID: WCL100227-06CCCV
Vial: 1:2,A

Pers
WCL
03-04-10



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

Dataset: C:\MassLynx\Perchlorate.PRO\per030810a.qld

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Printed: Tuesday, March 09, 2010 1:04:52 PM Eastern Standard Time

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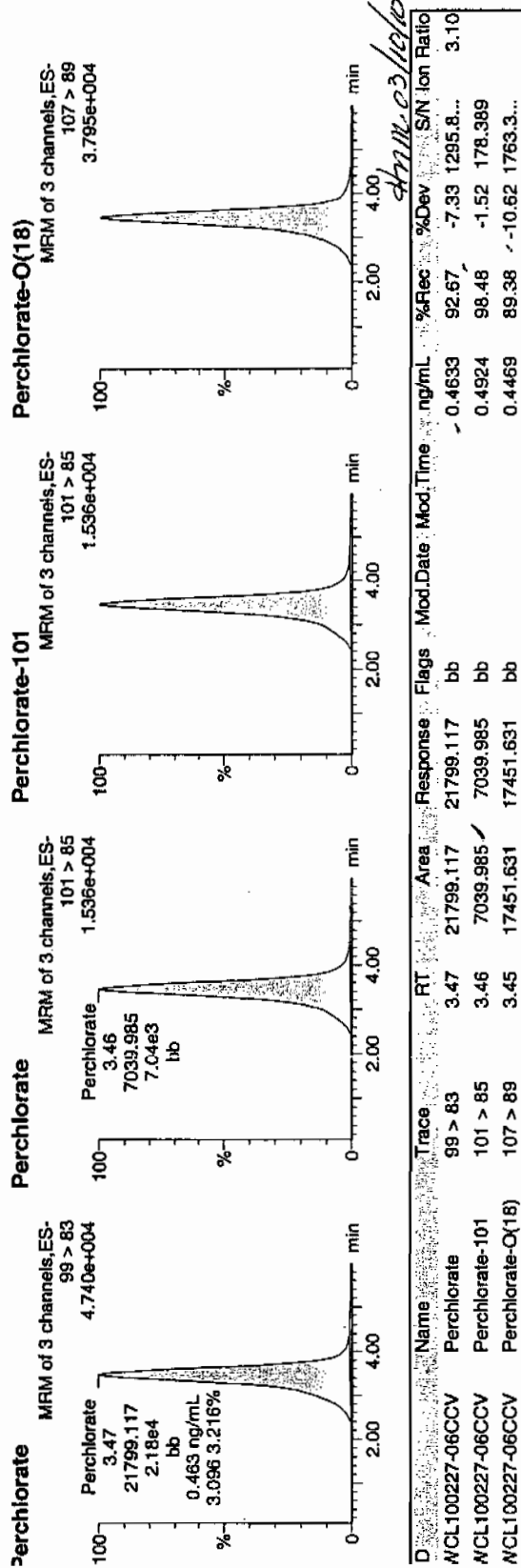
Date: 09-Mar-2010

Time: 04:36:48

D: WCL100227-06CCV

Vial: 1:2,A

Perchlorate
03-09-10



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

Dataset: C:\MassLynx\Perchlorate.PRO\per030810a.qld

Last Altered: Tuesday, March 09, 2010 12:57:27 PM Eastern Standard Time
Printed: Tuesday, March 09, 2010 1:04:52 PM Eastern Standard Time

Name: per0308099a

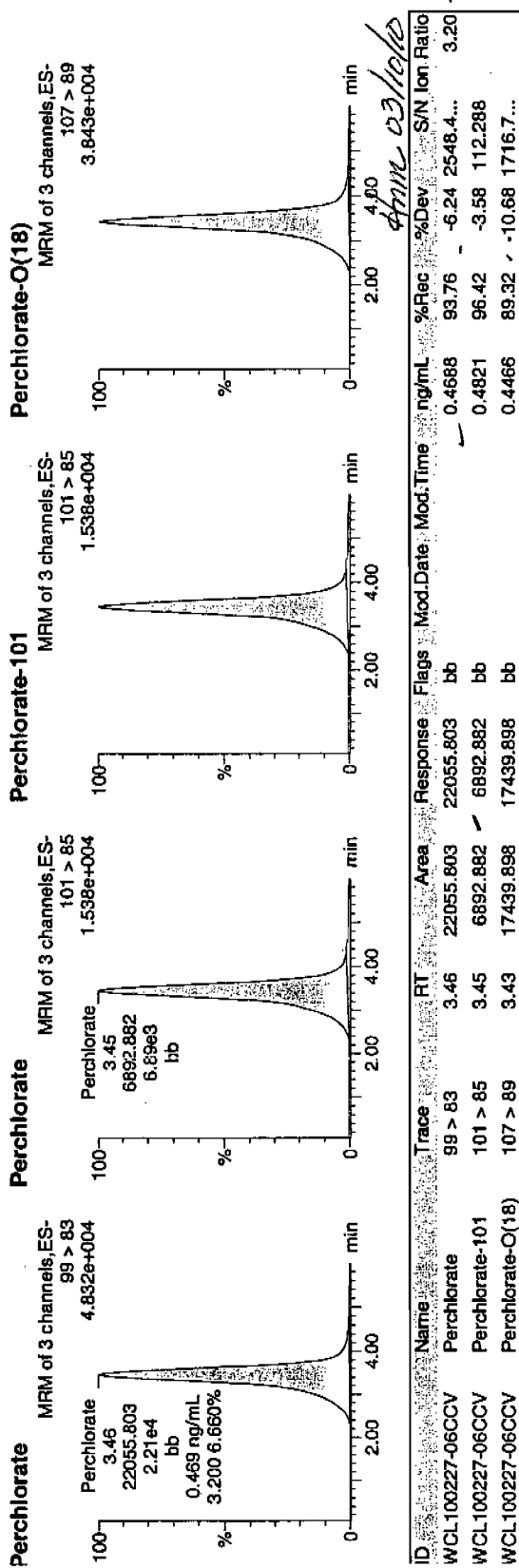
Date: 09-Mar-2010

Time: 06:34:54

ID: WCL100227-06CCV

Vial: 1:2,A

Run
03-04-10



Perchlorate MDL Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-2069

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.05	.05	91.57	08-MAR-10 17:15	per0308011a
Perchlorate Isotope Ratio		2.95		08-MAR-10 17:15	per0308011a
Perchlorate-101	.05	.05	102.06	08-MAR-10 17:15	per0308011a
Perchlorate	.05	.05	97.28	08-MAR-10 19:04	per0308023a
Perchlorate Isotope Ratio		2.97		08-MAR-10 19:04	per0308023a
Perchlorate-101	.05	.05	107.82	08-MAR-10 19:04	per0308023a
Perchlorate	.05	.05	97.48	08-MAR-10 21:02	per0308036a
Perchlorate Isotope Ratio		3.14		08-MAR-10 21:02	per0308036a
Perchlorate-101	.05	.05	102.17	08-MAR-10 21:02	per0308036a
Perchlorate	.05	.05	98.41	08-MAR-10 23:00	per0308049a
Perchlorate Isotope Ratio		3.08		08-MAR-10 23:00	per0308049a

Perchlorate MDL Verification

GEL Job No.(SDG): 10-2069

Lab Name: General Engineering Laboratories

Lab Code: GEL

Reporting Units: ug/L

Perchlorate-101	.05	.05	105.1	08-MAR-10 23:00	per0308049a
Perchlorate	.05	.05	92.76	09-MAR-10 00:59	per0308062a
Perchlorate Isotope Ratio		3.13		09-MAR-10 00:59	per0308062a
Perchlorate-101	.05	.05	97.6	09-MAR-10 00:59	per0308062a
Perchlorate	.05	.04	87.02	09-MAR-10 02:57	per0308075a
Perchlorate Isotope Ratio		2.95		09-MAR-10 02:57	per0308075a
Perchlorate-101	.05	.05	97.15	09-MAR-10 02:57	per0308075a
Perchlorate	.05	.04	88.07	09-MAR-10 04:55	per0308088a
Perchlorate Isotope Ratio		2.98		09-MAR-10 04:55	per0308088a
Perchlorate-101	.05	.05	97.34	09-MAR-10 04:55	per0308088a
Perchlorate	.05	.05	93.32	09-MAR-10 06:53	per0308101a

Form 3

Perchlorate MDL Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-2069

Lab Code: GEL

Reporting Units: ug/L

Perchlorate Isotope Ratio		3.36		09-MAR-10 06:53	per0308101a
Perchlorate-101	.05	.05	91.41	09-MAR-10 06:53	per0308101a

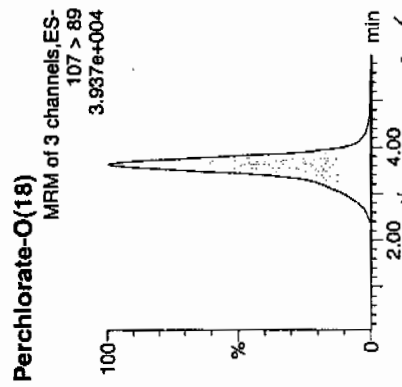
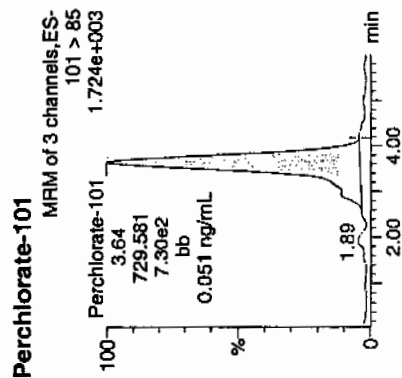
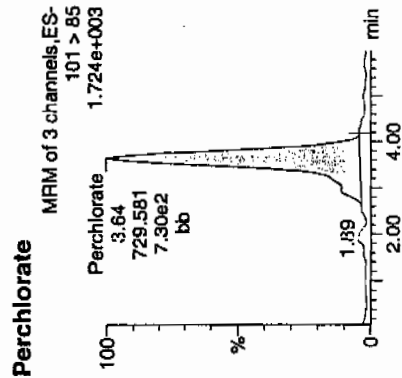
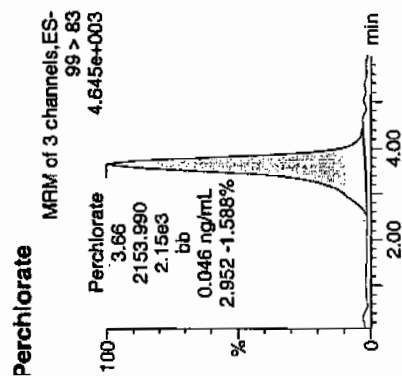
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030810a.qld

Last Altered: Tuesday, March 09, 2010 12:57:27 PM Eastern Standard Time
Printed: Tuesday, March 09, 2010 1:04:52 PM Eastern Standard Time

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Date: 08-Mar-2010
Time: 17:15:29
ID: WCL100227-07CRI
Vial: 1:2,B

Per
03.09.10



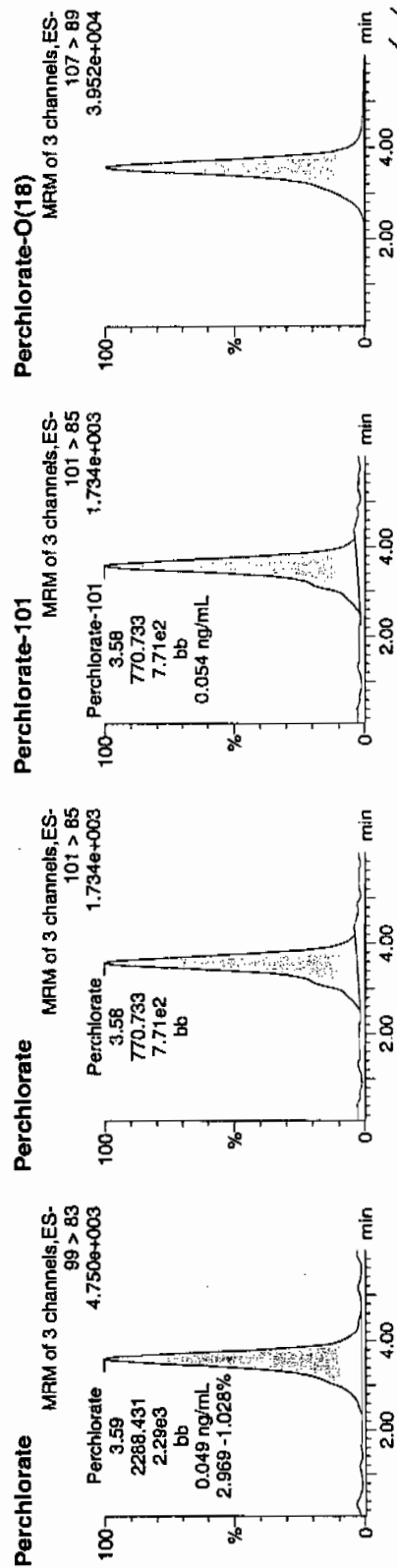
D	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
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WCL100227-07CRI	Perchlorate-101	101 > 85	3.64	729.581	729.581	bb			0.0510	102.06	2.06	143.835	
WCL100227-07CRI	Perchlorate-O(18)	107 > 89	3.63	19505.877	19505.877	bb			0.4995	99.90	-0.10	1304.1...	

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

Dataset: C:\MassLynx\Perchlorate.PRO\per030810a.qld

Last Altered: Tuesday, March 09, 2010 12:57:27 PM Eastern Standard Time
Printed: Tuesday, March 09, 2010 1:04:52 PM Eastern Standard Time

Name: per0308023a
Date: 08-Mar-2010
Time: 19:04:27
ID: WCL100227-07CRI
Vial: 1:2,B



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100227-07CRI	Perchlorate	99 > 83	3.59	2288.431	2288.431	bb			0.0486	97.28	-2.72	379.669	2.97
WCL100227-07CRI	Perchlorate-101	101 > 85	3.58	770.733	770.733	bb			0.0539	107.82	7.82	84.015	
WCL100227-07CRI	Perchlorate-O(18)	107 > 89	3.57	18985.990	18985.990	bb			0.4862	97.24	-2.76	3992.9...	

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

Dataset: C:\MassLynx\Perchlorate.PRO\per030810a.qld

Last Altered: Tuesday, March 09, 2010 12:57:27 PM Eastern Standard Time
Printed: Tuesday, March 09, 2010 1:04:52 PM Eastern Standard Time

Name: per0308036a

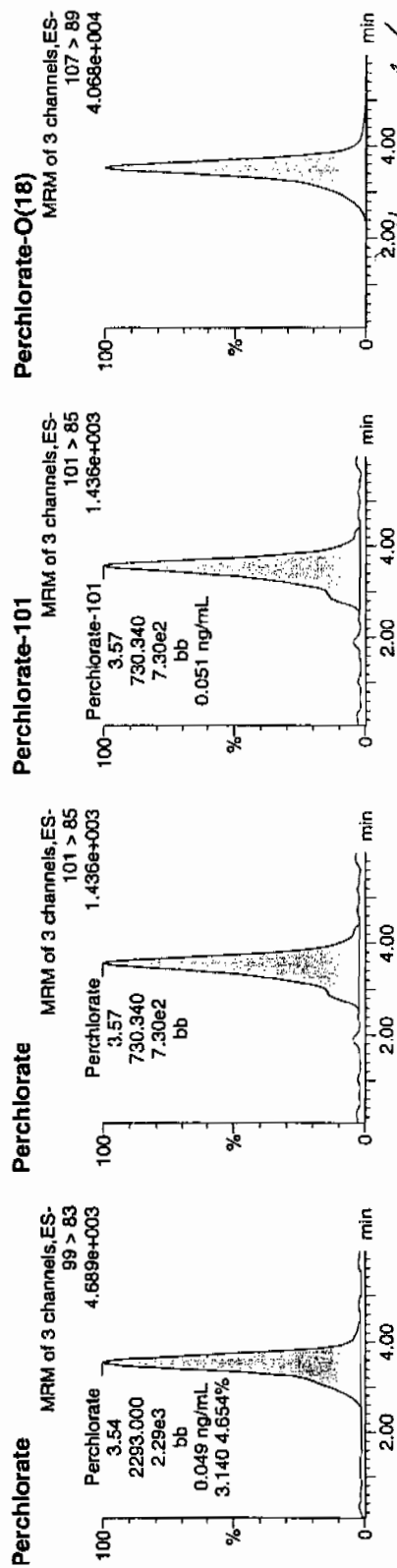
Date: 08-Mar-2010

Time: 21:02:14

ID: WCL100227-07CRI

Vial: 1:2,B

Perchlorate
03-04-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	SN	Ion Ratio
WCL100227-07CRI	Perchlorate	3.54	2293.000	2293.000	bb			0.0487	97.48	-2.52	112.560	3.14
WCL100227-07CRI	Perchlorate-101	3.57	730.340	730.340	bb			0.0511	102.17	2.17	21.006	
WCL100227-07CRI	Perchlorate-O(18)	3.53	19152.959	19152.959	bb			0.4905	98.10	-1.90	2778.2...	

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

Dataset: C:\MassLynx\Perchlorate.PRO\per030810a.qld

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Printed: Tuesday, March 09, 2010 1:04:52 PM Eastern Standard Time

Name: per0308049a

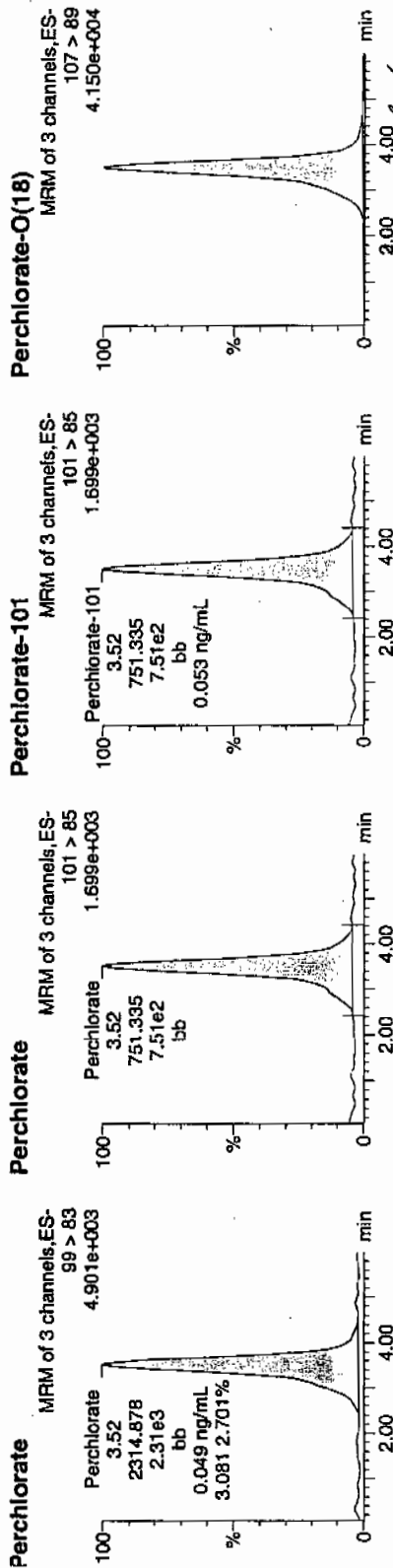
Date: 08-Mar-2010

Time: 23:00:24

ID: WCL100227-07CRI

Vial: 1:2,B

*Per
CWS
0307-10*



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	SN	Ion Ratio
WCL100227-07CRI	Perchlorate	99 > 83	3.52	2314.878	2314.878	bb			0.0492	98.41	-1.59	318.865	3.08
WCL100227-07CRI	Perchlorate-101	101 > 85	3.52	751.335	751.335	bb			0.0526	105.10	5.10	86.561	
WCL100227-07CRI	Perchlorate-O(18)	107 > 89	3.51	19220.762	19220.762	bb			0.4922	98.44	-1.56	1856.7...	

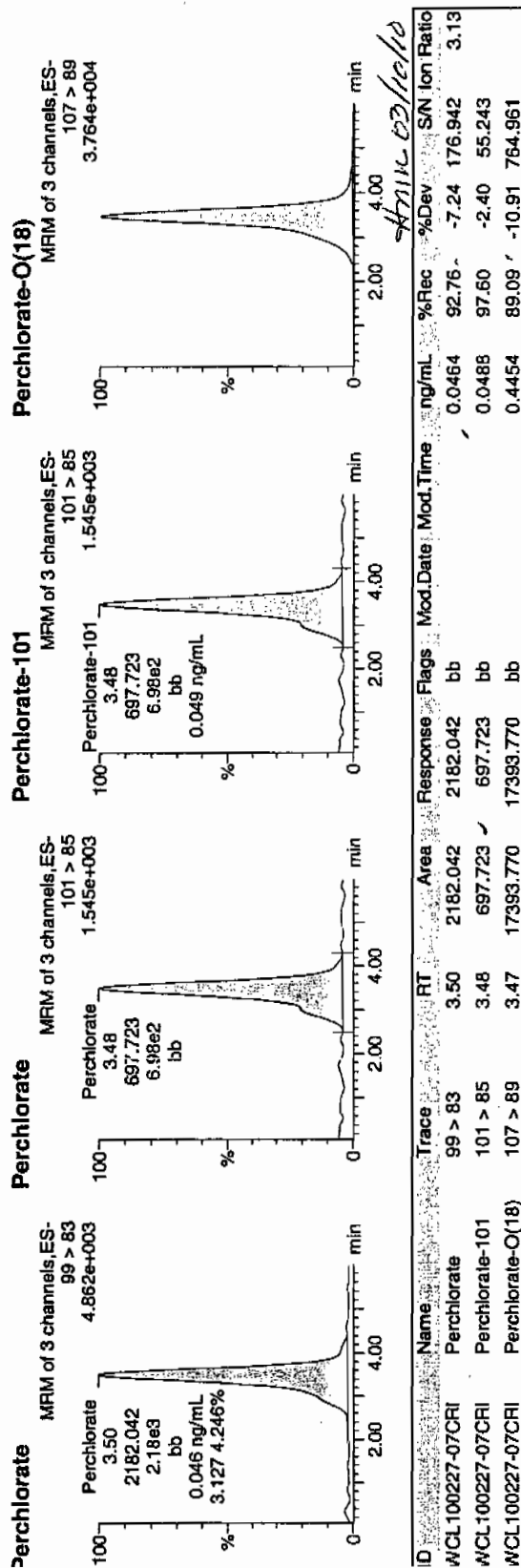
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030810a.qld

Last Altered: Tuesday, March 09, 2010 12:57:27 PM Eastern Standard Time
Printed: Tuesday, March 09, 2010 1:04:52 PM Eastern Standard Time

Name: per0308062a
Date: 09-Mar-2010
Time: 00:59:13
D: WCL100227-07CRI
Vial: 1:2,B

Run
03-09-10



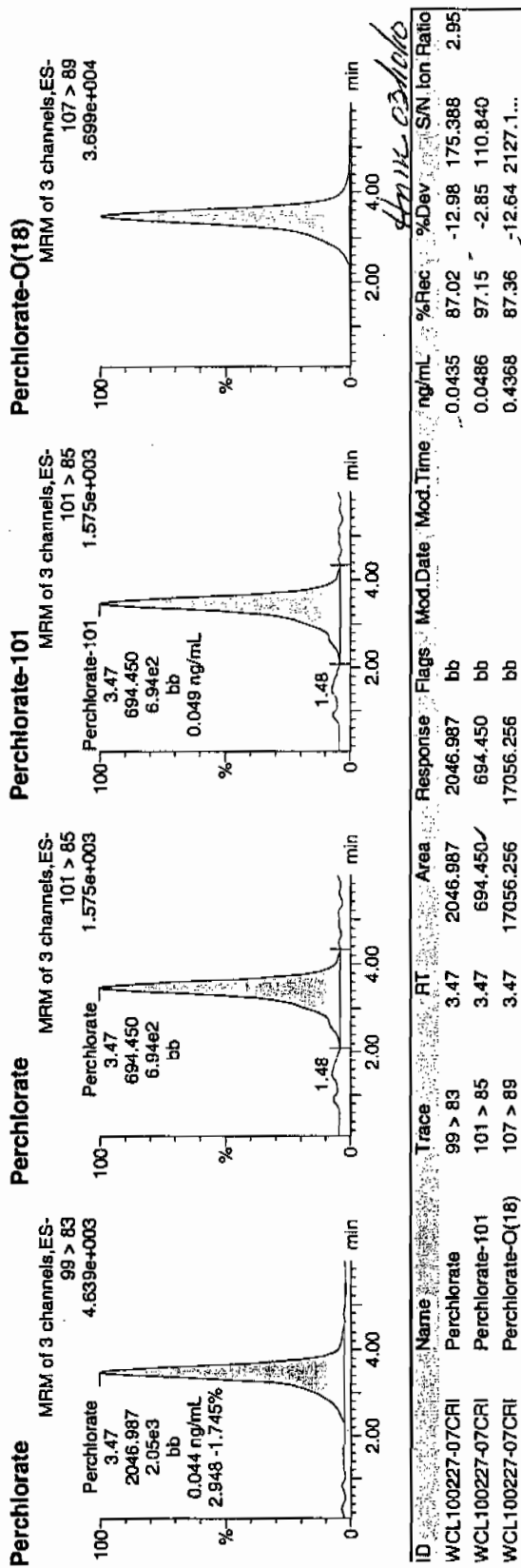
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030810a.qld

Last Altered: Tuesday, March 09, 2010 12:57:27 PM Eastern Standard Time
Printed: Tuesday, March 09, 2010 1:04:52 PM Eastern Standard Time

Name: per0308075a
Date: 09-Mar-2010
Time: 02:57:04
ID: WCL100227-07CRI
Vial: 1:2,B

Pure
and
03-01-10



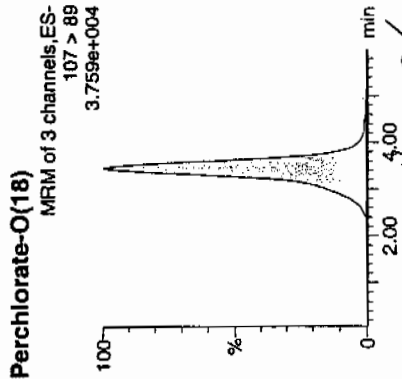
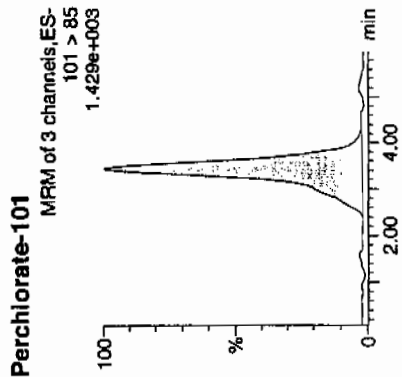
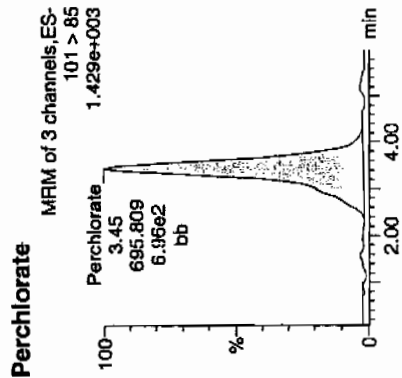
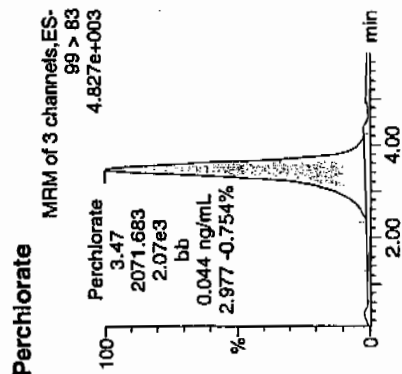
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030810a.qld

Last Altered: Tuesday, March 09, 2010 12:57:27 PM Eastern Standard Time
Printed: Tuesday, March 09, 2010 1:04:52 PM Eastern Standard Time

Name: per0308088a
Date: 09-Mar-2010
Time: 04:55:08
ID: WCL100227-07CRI
Vial: 1:2,B

*Per
and
03-04-10*



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100227-07CRI	Perchlorate	99 > 83	3.47	2071.683	2071.683	bb			0.0440	88.07	-11.93	130.882	2.98
WCL100227-07CRI	Perchlorate-101	101 > 85	3.45	695.809	695.809	bb			0.0487	97.34	-2.66	110.757	
WCL100227-07CRI	Perchlorate-O(18)	107 > 89	3.45	17290.361	17290.361	bb			0.4428	88.56	-11.44	1467.3...	

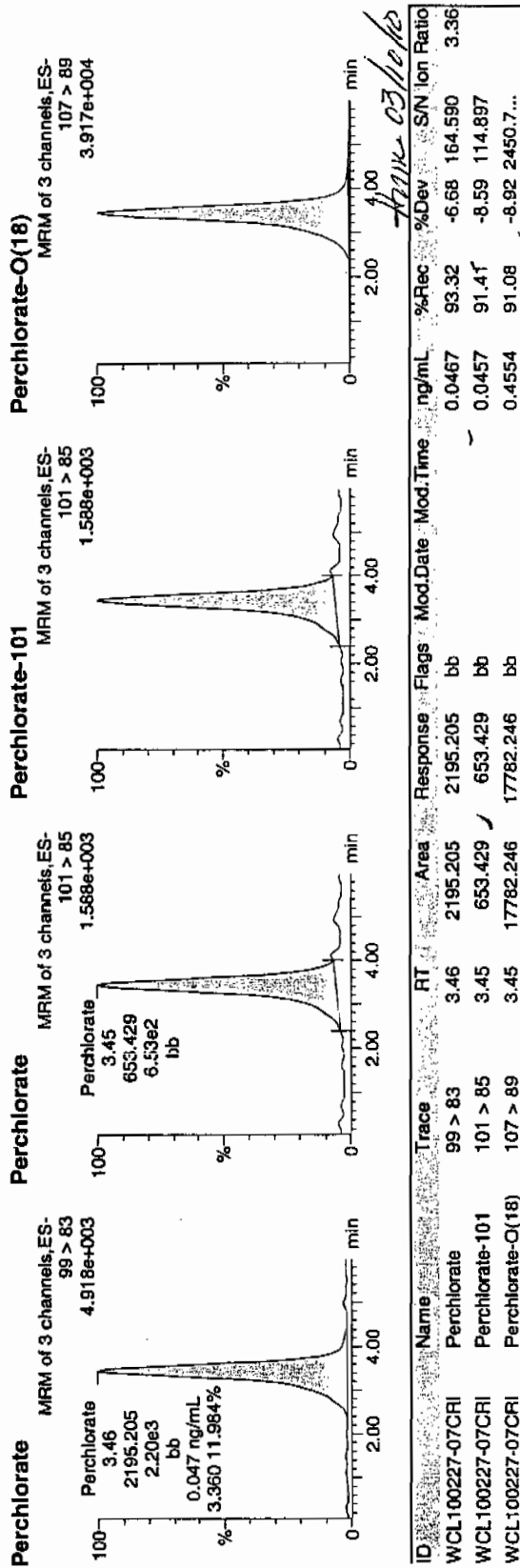
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030810a.qld

Last Altered: Tuesday, March 09, 2010 12:57:27 PM Eastern Standard Time
Printed: Tuesday, March 09, 2010 1:04:52 PM Eastern Standard Time

Name: per0308101a
Date: 09-Mar-2010
Time: 06:53:14
ID: WCL100227-07CRI
Vial: 1;2,B

Pure
WCL
03-04-10



QUALITY CONTROL

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: EPA 6850 Modified

Matrix: WATER

Extraction Batch ID: 959043

Extraction Type: Filter/DAL

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.

MB

Date Received: 03-MAR-10

GEL Job No (SDG): 10-2069

GEL Sample ID: 1202056710

Date Filtered: 03-MAR-10

Injection Volume (uL): 20

%Solids:

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.050	ug/L	U	1	09-MAR-10 03:06	per0308076a
	Perchlorate Isotope Ratio						1	09-MAR-10 03:06	per0308076a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	09-MAR-10 03:06	per0308076a
	Perchlorate-O(18)			0.405	ug/L		1	09-MAR-10 03:06	per0308076a

[^] 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\per030810a.qid

Last Altered: Tuesday, March 09, 2010 12:57:27 PM Eastern Standard Time
Printed: Tuesday, March 09, 2010 1:04:52 PM Eastern Standard Time

Sample Name: per0308076a

Sample Date: 09-Mar-2010

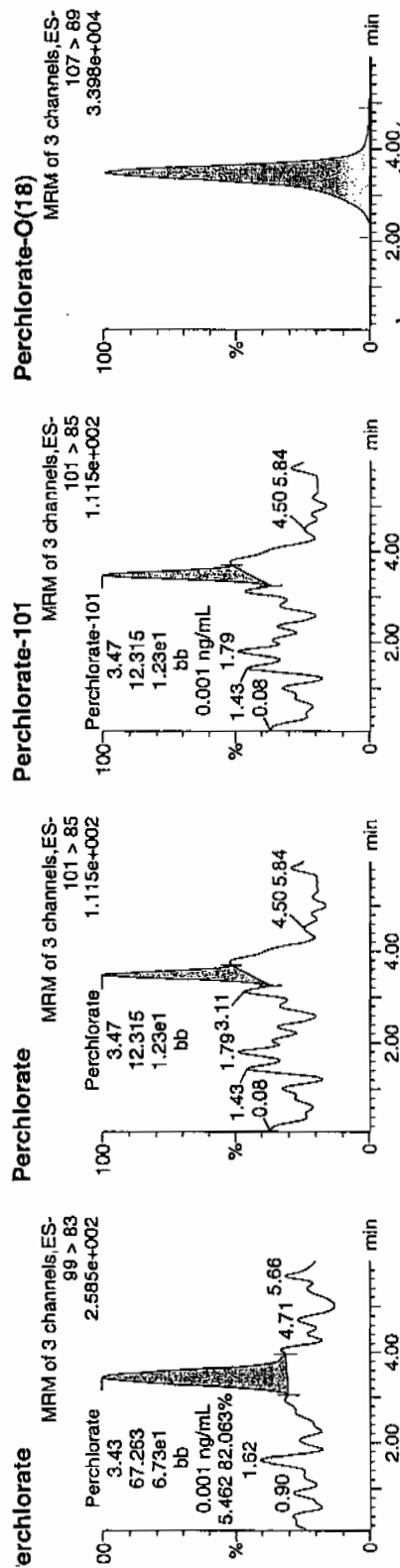
Sample Time: 03:06:09

Sample ID: 1202056710

Sample Label: 2:4.A

03-09-10

1202056710 | 1202056710 | 1202056710



Name	Trace	Area	Response	Flags	Mod	Date	Mod	Time	ng/mL	%Rec	%Dev	SN	Ion Ratio
202056710	Perchlorate	99 > 83	3.43	67.263	bb				0.0014	-	6.443	5.46	
202056710	Perchlorate-101	101 > 85	3.47	12.315	bb				0.0009	-	11.909		
202056710	Perchlorate-Q(18)	107 > 89	3.47	15825.627	bb				0.4053	81.06	-18.94	2133.7...	

0.0014
0.0009
0.4053

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: EPA 6850 Modified

Matrix: WATER

Extraction Batch ID: 259043

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.

LCS

Date Received: 03-MAR-10

GEL Job No (SDG): 10-2069

GEL Sample ID: 1202056711

Date Filtered: 03-MAR-10

Injection Volume (uL): 20

%Solids:

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.179	ug/L	J	1	09-MAR-10 03:15	per0308077a
	Perchlorate Isotope Ratio			3.2			1	09-MAR-10 03:15	per0308077a
14797-73-0	Perchlorate-101	.05	.2	0.184	ug/L	J	1	09-MAR-10 03:15	per0308077a
	Perchlorate-O(18)			0.419	ug/L		1	09-MAR-10 03:15	per0308077a

[^] 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\per030810a.qld

Last Altered: Tuesday, March 09, 2010 12:57:27 PM Eastern Standard Time
Printed: Tuesday, March 09, 2010 1:04:52 PM Eastern Standard Time

Narrie: per0308077a

Date: 09-Mar-2010

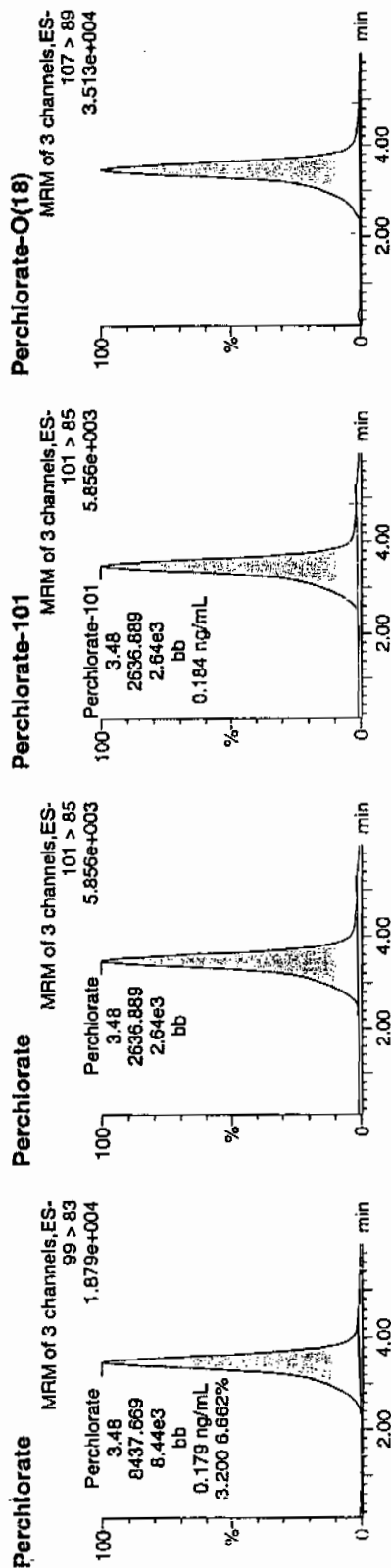
Time: 03:15:24

ID: 1202056711

Vial: 2:4,B

03 08 10

1202056711 | 1202056711 | 1202056711



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202056711	Perchlorate	99 > 83	3.48	8437.669	8437.669	bb			0.1793	88.67	-10.33	777.875	3.20
1202056711	Perchlorate-101	101 > 85	3.48	2636.889	2636.889	bb			0.1844	92.22	-7.78	581.015	
1202056711	Perchlorate-O(18)	107 > 89	3.47	16378.867	16378.867	bb			0.4194	83.89	-16.11	1862.2...	

8437.669
47047.4 = 0.1793
47047.4 / 2636.889 = 17.84

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: 959043

Verified by:

Analyst: Kaylie Westmoreland

Method: SV846 6850 Modified

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

Instrument: MicroMass Quattro Ultima

Sample ID	Run Date	Initial Volume (mL)	Final Volume (mL)	Prepped Factor (mL/mL)
1202056710 MB	03-MAR-2010 16:50:00	10	10	1
1202056711 LCS	03-MAR-2010 16:50:00	10	10	1
247908001	03-MAR-2010 16:50:00	10	10	1
1202056712 NS (247908001)	03-MAR-2010 16:50:00	10	10	1
1202056713 MSD (247908001)	03-MAR-2010 16:50:00	10	10	1
247908002	03-MAR-2010 16:50:00	10	10	1
247908003	03-MAR-2010 16:50:00	10	10	1
247919001	03-MAR-2010 16:50:00	10	10	1
247919002	03-MAR-2010 16:50:00	10	10	1
247922004	03-MAR-2010 16:50:00	10	10	1
247997001	03-MAR-2010 16:50:00	10	10	1
248001001	03-MAR-2010 16:50:00	10	10	1
248019001	03-MAR-2010 16:50:00	10	10	1
248019002	03-MAR-2010 16:50:00	10	10	1
248034001	03-MAR-2010 16:50:00	10	10	1
248038002	03-MAR-2010 16:50:00	10	10	1
248039001	03-MAR-2010 16:50:00	10	10	1
248046001	03-MAR-2010 16:50:00	10	10	1
248046002	03-MAR-2010 16:50:00	10	10	1
248053001	03-MAR-2010 16:50:00	10	10	1
248053002	03-MAR-2010 16:50:00	10	10	1
248053003	03-MAR-2010 16:50:00	10	10	1
1202056714 LCS	03-MAR-2010 16:50:00	10	10	1

Type	Sample ID	Description	Serial Number	Spike Amt	Units	Comments
LCS	1202056714	10 µg/L ICV/CCV Second Source	UCL100210-02.2	2	mL	Desulting cartridges used: 100217-1-H & 100204-1-Ba
LCS	1202056711	10 µg/L ICV/CCV Second Source	UCL100210-02.2	2	mL	
MS	1202056712	10 µg/L ICV/CCV Second Source	UCL100210-02.2	2	mL	
MSD	1202056713	10 µg/L ICV/CCV Second Source	UCL100210-02.2	2	mL	
ICNT All		500 ppm Carbonate, Bicarbonate, Chloride, Sulfate	1267849	10	mL	
ICNT All		Q2S1 Ultra Wulph	1271049	10	mL	

GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS#2

Date: 03/07/10

Extr. Injection Volume: 20uL

Sequence Number: per030710a

Initial Calibration Date: 03/07/10

Method: EPA 6850-Modified

Int. Std.: UCL100126-01

Mobile Phase Lot#: 1278668, 1271949

Standard-Samp Reagent Lot#: 1271949

Reviewed BY: *hink*

Date: *03/10/10*

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
per0308001a	IPB001	CWW	3/8/2010 15:44			1		USE	B
per0308002a	IPB001	CWW	3/8/2010 15:53			1		USE	B
per0308003a	WCLICAL-01	CWW	3/8/2010 16:02			1		USE	I
per0308004a	WCLICAL-02	CWW	3/8/2010 16:11			1		USE	I
per0308005a	WCLICAL-03	CWW	3/8/2010 16:20			1		USE	I
per0308006a	WCLICAL-04	CWW	3/8/2010 16:29			1		USE	I
per0308007a	WCLICAL-05	CWW	3/8/2010 16:39			1		USE	I
per0308008a	IPB002	CWW	3/8/2010 16:48			1		USE	B
per0308009a	WCLICV	CWW	3/8/2010 16:57			1		USE	C
per0308010a	IPB003	CWW	3/8/2010 17:06			1		USE	B
per0308011a	WCLCRI	CWW	3/8/2010 17:15			1		USE	C
per0308012a	246870009	CWW	3/8/2010 17:24	955688	10-1782	1	LANL	USE	S
per0308013a	246870010	CWW	3/8/2010 17:33	955688	10-1782	1	LANL	USE	S
per0308014a	246982001	CWW	3/8/2010 17:42	955688	10-1812	1	LANL	USE	S
per0308015a	246982002	CWW	3/8/2010 17:51	955688	10-1812	1	LANL	USE	S
per0308016a	246982003	CWW	3/8/2010 18:01	955688	10-1812	1	LANL	USE	S
per0308017a	246982004	CWW	3/8/2010 18:10	955688	10-1812	1	LANL	USE	S
per0308018a	246982005	CWW	3/8/2010 18:19	955688	10-1812	1	LANL	USE	S
per0308019a	246982006	CWW	3/8/2010 18:28	955688	10-1812	1	LANL	USE	S
per0308020a	246982007	CWW	3/8/2010 18:37	955688	10-1812	1	LANL	USE	S
per0308021a	WCLCCV	CWW	3/8/2010 18:46			1		USE	C
per0308022a	IPB004	CWW	3/8/2010 18:55			1		USE	B
per0308023a	WCLCRI	CWW	3/8/2010 19:04			1		USE	C
per0308024a	1202049003	CWW	3/8/2010 19:13	955691	10-1809	1	LANL	USE	S
per0308025a	1202049004	CWW	3/8/2010 19:22	955691	10-1809	1	LANL	USE	S
per0308026a	1202049007	CWW	3/8/2010 19:31	955691	10-1809	1	LANL	USE	S
per0308027a	246974001	CWW	3/8/2010 19:40	955691	10-1809	1	LANL	USE	S
per0308028a	1202049005	CWW	3/8/2010 19:49	955691	10-1809	1	LANL	USE	S
per0308029a	1202049006	CWW	3/8/2010 19:58	955691	10-1809	1	LANL	USE	S

per0308030a	246974002	CWW	3/8/2010 20:07	955691	10-1809	1	LANL	USE	S
per0308031a	246974003	CWW	3/8/2010 20:16	955691	10-1809	1	LANL	USE	S
per0308032a	246974004	CWW	3/8/2010 20:26	955691	10-1809	1	LANL	USE	S
per0308033a	246974005	CWW	3/8/2010 20:35	955691	10-1809	1	LANL	USE	S
per0308034a	WCLCCV	CWW	3/8/2010 20:44			1		USE	C
per0308035a	IPB005	CWW	3/8/2010 20:53			1		USE	B
per0308036a	WCLCRI	CWW	3/8/2010 21:02			1		USE	C
per0308037a	246974006	CWW	3/8/2010 21:11	955691	10-1809	1	LANL	USE	S
per0308038a	246974007	CWW	3/8/2010 21:20	955691	10-1809	1	LANL	USE	S
per0308039a	246974008	CWW	3/8/2010 21:29	955691	10-1809	1	LANL	USE	S
per0308040a	246974009	CWW	3/8/2010 21:38	955691	10-1809	1	LANL	USE	S
per0308041a	246974010	CWW	3/8/2010 21:47	955691	10-1809	1	LANL	USE	S
per0308042a	246974011	CWW	3/8/2010 21:56	955691	10-1809	1	LANL	USE	S
per0308043a	246974012	CWW	3/8/2010 22:05	955691	10-1809	1	LANL	USE	S
per0308044a	246974013	CWW	3/8/2010 22:14	955691	10-1809	1	LANL	USE	S
per0308045a	246974014	CWW	3/8/2010 22:23	955691	10-1809	1	LANL	USE	S
per0308046a	246974015	CWW	3/8/2010 22:32	955691	10-1809	1	LANL	USE	S
per0308047a	WCLCCV	CWW	3/8/2010 22:42			1		USE	C
per0308048a	IPB006	CWW	3/8/2010 22:51			1		USE	B
per0308049a	WCLCRI	CWW	3/8/2010 23:00			1		USE	C
per0308050a	246974016	CWW	3/8/2010 23:09	955691	10-1809	1	LANL	USE	S
per0308051a	246974017	CWW	3/8/2010 23:18	955691	10-1809	1	LANL	USE	S
per0308052a	IPB007	CWW	3/8/2010 23:27			1		USE	B
per0308053a	1202049064	CWW	3/8/2010 23:36	955724	VARIOUS	1	LANL	USE	S
per0308054a	1202049065	CWW	3/8/2010 23:46	955724	VARIOUS	1	LANL	USE	S
per0308055a	1202049068	CWW	3/8/2010 23:55	955724	VARIOUS	1	LANL	USE	S
per0308056a	246964002	CWW	3/9/2010 0:04	955724	10-1802	1	LANL	USE	S
per0308057a	246964004	CWW	3/9/2010 0:13	955724	10-1802	1	LANL	USE	S
per0308058a	246967001	CWW	3/9/2010 0:22	955724	10-1807	1	LANL	USE	S
per0308059a	246967004	CWW	3/9/2010 0:31	955724	10-1807	1	LANL	DUSE-DL	S
per0308060a	WCLCCV	CWW	3/9/2010 0:40			1		USE	C
per0308061a	IPB008	CWW	3/9/2010 0:50			1		USE	B
per0308062a	WCLCRI	CWW	3/9/2010 0:59			1		USE	C
per0308063a	247036002	CWW	3/9/2010 1:08	955724	10-1826	1	LANL	USE	S
per0308064a	247036003	CWW	3/9/2010 1:17	955724	10-1826	1	LANL	USE	S
per0308065a	247036006	CWW	3/9/2010 1:26	955724	10-1826	1	LANL	USE	S
per0308066a	247037001	CWW	3/9/2010 1:35	955724	10-1823	1	LANL	DUSE-DL	S

per0308067a	247042002	CWW	3/9/2010 1:44	955724	10-1817	1	LANL	DUSE-RA	S
per0308068a	247042004	CWW	3/9/2010 1:53	955724	10-1817	1	LANL	USE	S
per0308069a	247042006	CWW	3/9/2010 2:02	955724	10-1817	1	LANL	USE	S
per0308070a	247261004	CWW	3/9/2010 2:11	955724	10-1886	1	LANL	USE	S
per0308071a	1202049066	CWW	3/9/2010 2:20	955724	10-1886	1	LANL	USE	S
per0308072a	1202049067	CWW	3/9/2010 2:29	955724	10-1886	1	LANL	USE	S
per0308073a	WCLCCV	CWW	3/9/2010 2:38			1		USE	C
per0308074a	IPB009	CWW	3/9/2010 2:48			1		USE	B
per0308075a	WCLCRI	CWW	3/9/2010 2:57			1		USE	C
per0308076a	1202056710	CWW	3/9/2010 3:06	959044	VARIOUS	1	LANL	USE	S
per0308077a	1202056711	CWW	3/9/2010 3:15	959044	VARIOUS	1	LANL	USE	S
per0308078a	1202056714	CWW	3/9/2010 3:24	959044	VARIOUS	1	LANL	USE	S
per0308079a	247908001	CWW	3/9/2010 3:33	959044	10-2013-1	1	LANL	USE	S
per0308080a	1202056712	CWW	3/9/2010 3:42	959044	10-2013-1	1	LANL	USE	S
per0308081a	1202056713	CWW	3/9/2010 3:51	959044	10-2013-1	1	LANL	USE	S
per0308082a	247908002	CWW	3/9/2010 4:00	959044	10-2013-1	1	LANL	USE	S
per0308083a	247908003	CWW	3/9/2010 4:09	959044	10-2013-1	1	LANL	USE	S
per0308084a	247919001	CWW	3/9/2010 4:18	959044	10-2016-1	1	LANL	USE	S
per0308085a	247919002	CWW	3/9/2010 4:27	959044	10-2016-1	1	LANL	USE	S
per0308086a	WCLCCV	CWW	3/9/2010 4:36			1		USE	C
per0308087a	IPB010	CWW	3/9/2010 4:46			1		USE	B
per0308088a	WCLCRI	CWW	3/9/2010 4:55			1		USE	C
per0308089a	247922004	CWW	3/9/2010 5:04	959044	10-2022	1	LANL	USE	S
per0308090a	247997001	CWW	3/9/2010 5:13	959044	10-2025	1	LANL	USE	S
per0308091a	248001001	CWW	3/9/2010 5:22	959044	10-2028	1	LANL	USE	S
per0308092a	248019001	CWW	3/9/2010 5:31	959044	10-2052	1	LANL	USE	S
per0308093a	248019002	CWW	3/9/2010 5:40	959044	10-2052	1	LANL	USE	S
per0308094a	248034001	CWW	3/9/2010 5:49	959044	10-2072-1	1	LANL	USE	S
per0308095a	248038001	CWW	3/9/2010 5:58	959044	10-2066-1	1	LANL	USE	S
per0308096a	248038002	CWW	3/9/2010 6:07	959044	10-2066-1	1	LANL	USE	S
per0308097a	248039001	CWW	3/9/2010 6:16	959044	10-2069	1	LANL	USE	S
per0308098a	248046001	CWW	3/9/2010 6:25	959044	10-2075-1	1	LANL	USE	S
per0308099a	WCLCCV	CWW	3/9/2010 6:34			1		USE	C
per0308100a	IPB011	CWW	3/9/2010 6:44			1		USE	B
per0308101a	WCLCRI	CWW	3/9/2010 6:53			1		USE	C
per0308102a	248046002	CWW	3/9/2010 7:02	959044	10-2075-1	1	LANL	USE	S
per0308103a	248053001	CWW	3/9/2010 7:11	959044	10-2081	1	LANL	USE	S

per0308104a	248053002	CWW	3/9/2010 7:20	959044	10-2081	1	LANL	USE	S
per0308105a	248053003	CWW	3/9/2010 7:29	959044	10-2081	1	LANL	USE	S
per0308106a	IPB012	CWW	3/9/2010 7:38			1		USE	B
per0308107a	1202056715	CWW	3/9/2010 7:47	959047	VARIOUS	1	LANL	USE	S
per0308108a	1202056716	CWW	3/9/2010 7:57	959047	VARIOUS	1	LANL	USE	S
per0308109a	1202056719	CWW	3/9/2010 8:06	959047	VARIOUS	1	LANL	USE	S
per0308110a	248108001	CWW	3/9/2010 8:15	959047	10-2090	1	LANL	USE	S
per0308111a	248117001	CWW	3/9/2010 8:24	959047	10-2093	1	LANL	USE	S
per0308112a	WCLCCV	CWW	3/9/2010 8:33			1		USE	C
per0308113a	IPB013	CWW	3/9/2010 8:42			1		USE	B
per0308114a	WCLCRI	CWW	3/9/2010 8:51			1		USE	C
per0308115a	248127001	CWW	3/9/2010 9:00	959047	10-2096	1	LANL	USE	S
per0308116a	248127002	CWW	3/9/2010 9:09	959047	10-2096	1	LANL	USE	S
per0308117a	248162001	CWW	3/9/2010 9:18	959047	10-2103	1	LANL	USE	S
per0308118a	248162002	CWW	3/9/2010 9:27	959047	10-2103	1	LANL	USE	S
per0308119a	1202056717	CWW	3/9/2010 9:37	959047	10-2103	1	LANL	USE	S
per0308120a	1202056718	CWW	3/9/2010 9:46	959047	10-2103	1	LANL	USE	S
per0308121a	248162003	CWW	3/9/2010 9:55	959047	10-2103	1	LANL	USE	S
per0308122a	248162004	CWW	3/9/2010 10:04	959047	10-2103	1	LANL	USE	S
per0308123a	248168006	CWW	3/9/2010 10:13	959047	10-2107	1	LANL	USE	S
per0308124a	248169004	CWW	3/9/2010 10:22	959047	10-2108	1	LANL	USE	S
per0308125a	WCLCCV	CWW	3/9/2010 10:31			1		USE	C
per0308126a	IPB014	CWW	3/9/2010 10:40			1		USE	B
per0308127a	WCLCRI	CWW	3/9/2010 10:49			1		USE	C
per0308128a	248188001	CWW	3/9/2010 10:58	959047	10-2120	1	LANL	USE	S
per0308129a	248199001	CWW	3/9/2010 11:07	959047	10-2122-1	1	LANL	USE	S
per0308130a	248238001	CWW	3/9/2010 11:16	959047	10-2132-1	1	LANL	USE	S
per0308131a	248238002	CWW	3/9/2010 11:25	959047	10-2132-1	1	LANL	USE	S
per0308132a	248242001	CWW	3/9/2010 11:34	959047	10-2135-1	1	LANL	USE	S
per0308133a	248245001	CWW	3/9/2010 11:43	959047	10-2138	1	LANL	USE	S
per0308134a	248257001	CWW	3/9/2010 11:52	959047	10-2146-1	1	LANL	USE	S
per0308135a	248257002	CWW	3/9/2010 12:02	959047	10-2146-1	1	LANL	USE	S
per0308136a	248261001	CWW	3/9/2010 12:11	959047	10-2149	1	LANL	USE	S
per0308137a	WCLCCV	CWW	3/9/2010 12:20			1		USE	C
per0308138a	IPB015	CWW	3/9/2010 12:29			1		USE	B
per0308139a	WCLCRI	CWW	3/9/2010 12:38			1		USE	C

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

Dataset: C:\MassLynx\P perchlorate.PRO\per030810a.qld

Last Altered: Tuesday, March 09, 2010 12:57:27 PM Eastern Standard Time
Printed: Tuesday, March 09, 2010 1:04:52 PM Eastern Standard Time

Name: per0308080a

Date: 09-Mar-2010

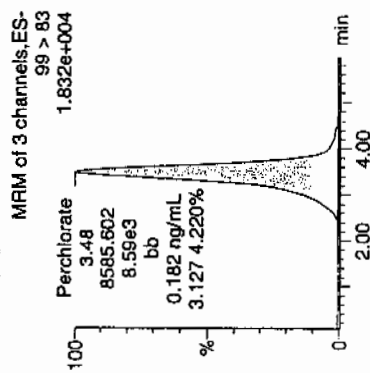
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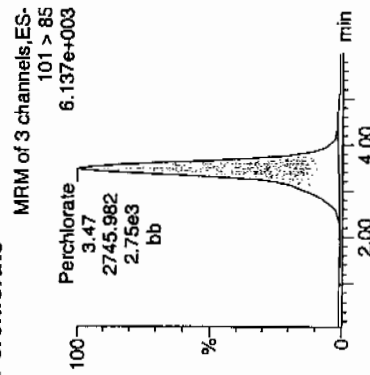
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1202056712 | 1202056712 | MS | 11 | 03-09-10

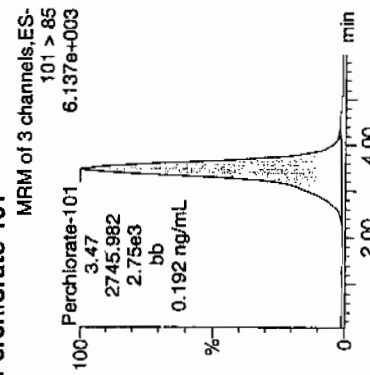
Perchlorate



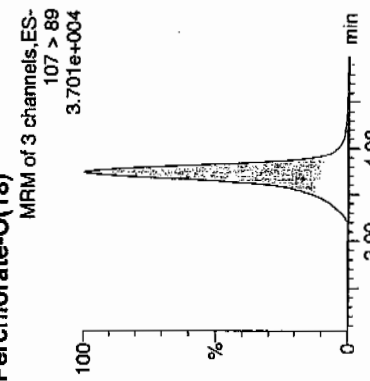
Perchlorate



Perchlorate-101



Perchlorate-O(18)



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202056712	Perchlorate	99 > 83	3.48	8585.602	8585.602	bb			0.1825	91.24	-8.76	461.605	3.13
1202056712	Perchlorate-101	101 > 85	3.47	2745.982	2745.982	bb			0.1921	96.03	-3.97	713.591	
1202056712	Perchlorate-O(18)	107 > 89	3.47	17092.297	17092.297	bb			0.4377	87.54	-12.46	2059.9...	

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

Dataset: C:\MassLynx\Perchlorate.PRO\per030810a.qld

Last Altered: Tuesday, March 09, 2010 12:57:27 PM Eastern Standard Time
Printed: Tuesday, March 09, 2010 1:04:52 PM Eastern Standard Time

Name: per0308081a

Date: 09-Mar-2010

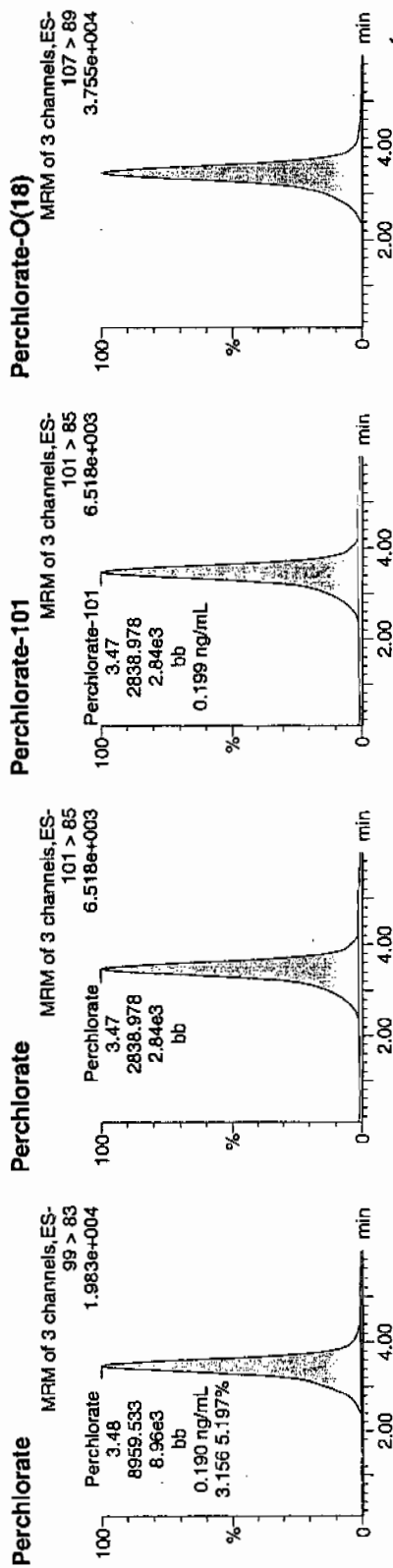
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ID: 1202056713

Vial: 2-4,F

1202056713 | 1202056713 | 1202056713

03-09-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	SN	Ion Ratio
1202056713	Perchlorate	99 > 83	3.48	8959.533	8959.533	bb			0.1904	95.22	-4.78	665.323	3.16
1202056713	Perchlorate-101	101 > 85	3.47	2838.978	2838.978	bb			0.1986	99.29	-0.71	597.531	
1202056713	Perchlorate-Q(18)	107 > 89	3.46	17463.715	17463.715	bb			0.4472	89.45	-10.55	1013.9...	

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 10-2069-1**

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: 958963

Prep Batch Number: 958955

Sample Analysis

Sample ID	Client ID
248041001	RE15-10-8389
248041002	RE15-10-8388
248041003	RE15-10-8390
248041004	RE15-10-8392
248041005	RE15-10-8391
1202056598	Interference Check Sample (ICS)
1202056594	Method Blank (MB)
1202056595	Laboratory Control Sample (LCS)
1202056596	248110001(RE15-10-8404) Matrix Spike (MS)
1202056597	248110001(RE15-10-8404) Matrix Spike Duplicate (MSD)

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

Preparation/Analytical Method Verification

SOP Reference

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

Calibration Information

Initial Calibration

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

CCV Requirements

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

CCB Requirements

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

CCV Requirements

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

Low Level Standard (CRI) Requirements

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

Quality Control (QC) Information**Method Blank (MB) Statement**

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

Interference Check Sample (ICS)

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

Laboratory Control Sample (LCS) Recovery

The LCS spike recoveries met the acceptance limits.

QC Sample Designation

Sample 248110001 (RE15-10-8404) was chosen for matrix spike and matrix spike duplicate analysis. Please see the raw data in the Miscellaneous Section.

Matrix Spike (MS) Recovery Statement

The MS recoveries were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement

The MSD recoveries were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement

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

Retention Time Standard Area Acceptance

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

Retention Time

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

Technical Information**Holding Time Specifications**

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

Preparation/Analytical Method Verification

All procedures were performed as stated in the SOP.

Sample Dilutions

The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis

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

Miscellaneous Information

Data Exception (DER) Documentation

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

Manual Integrations

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

Method Comments

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

Additional Comments

The Perchlorate Isotope Ratio on the Form I may differ slightly from the ratio on the corresponding raw data due to rounding rules and/or significant figures or due to software limitations when there are manual integrations, dilutions or other factors. The ratio value of the Form I is the correct value. The retention time marker, Perchlorate-O (18), is added to all samples, instrument blanks, and standards prior to injection. It is used to verify the retention time of Perchlorate and Perchlorate-101 and to insure an accurate injection occurred. Due to various anions affecting the recovery of Perchlorate-O (18) and not Perchlorate and Perchlorate-101, the calibration curves of Perchlorate and Perchlorate-101 are not internally corrected for using Perchlorate-O (18). They are external calibrations.

Perchlorate Isotope Ratio

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

System Configuration

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

Chromatographic Columns

Chromatographic separation of perchlorate is accomplished through analysis on the following anion column:
Dionex: IonPac AG-16 2 x 50 mm.


Certification Statement

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

Review Validation:

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

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

Reviewer:  Date: 3/19/2010

SAMPLE DATA SUMMARY

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 958955

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8389

Date Received: 25-FEB-10

GEL Job No (SDG): 10-2069-1

GEL Sample ID: 248041001

Date Filtered: 06-MAR-10

Injection Volume (uL): 20

%Solids: 90.8

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.551	2.2	0.551	ug/kg	U	1	15-MAR-10 00:51	per0314069a
	Perchlorate Isotope Ratio						1	15-MAR-10 00:51	per0314069a
14797-73-0	Perchlorate-101	.551	2.2	0.551	ug/kg	U	1	15-MAR-10 00:51	per0314069a
	Perchlorate-O(18)			4.92	ug/kg		1	15-MAR-10 00:51	per0314069a

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

*Concentration =

Instrument Value X Concentrated Extract Volume X 1
Aliquot %Solids

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 958955

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8388

Date Received: 25-FEB-10

GEL Job No (SDG): 10-2069-1

GEL Sample ID: 248041002

Date Filtered: 06-MAR-10

Injection Volume (uL): 20

%Solids: 92.4

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.541	2.16	0.541	ug/kg	U	1	15-MAR-10 00:59	per0314070a
	Perchlorate Isotope Ratio						1	15-MAR-10 00:59	per0314070a
14797-73-0	Perchlorate-101	.541	2.16	0.541	ug/kg	U	1	15-MAR-10 00:59	per0314070a
	Perchlorate-O(18)			4.86	ug/kg		1	15-MAR-10 00:59	per0314070a

[^] 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: 958955

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8390

Date Received: 25-FEB-10

GEL Job No (SDG): 10-2069-1

GEL Sample ID: 248041003

Date Filtered: 06-MAR-10

Injection Volume (uL): 20

%Solids: 85

CAS No.	Analyte ^a	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.59	2.36	0.590	ug/kg	U	1	15-MAR-10 01:07	per0314071a
	Perchlorate Isotope Ratio						1	15-MAR-10 01:07	per0314071a
14797-73-0	Perchlorate-101	.59	2.36	0.590	ug/kg	U	1	15-MAR-10 01:07	per0314071a
	Perchlorate-O(18)			5.23	ug/kg		1	15-MAR-10 01:07	per0314071a

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

*Concentration =

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

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 958955

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8392

Date Received: 25-FEB-10

GEL Job No (SDG): 10-2069-1

GEL Sample ID: 248041004

Date Filtered: 06-MAR-10

Injection Volume (uL): 20

%Solids: 81

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.621	2.48	0.621	ug/kg	U	1	15-MAR-10 01:15	per0314072a
	Perchlorate Isotope Ratio						1	15-MAR-10 01:15	per0314072a
14797-73-0	Perchlorate-101	.621	2.48	0.621	ug/kg	U	1	15-MAR-10 01:15	per0314072a
	Perchlorate-O(18)			5.44	ug/kg		1	15-MAR-10 01:15	per0314072a

[^] 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: 958955

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8391

Date Received: 25-FEB-10

GEL Job No (SDG): 10-2069-1

GEL Sample ID: 248041005

Date Filtered: 06-MAR-10

Injection Volume (uL): 20

%Solids: 82

CAS No.	Analyte ^a	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.561	2.25	0.561	ug/kg	U	1	15-MAR-10 01:24	per0314073a
	Perchlorate Isotope Ratio						1	15-MAR-10 01:24	per0314073a
14797-73-0	Perchlorate-101	.561	2.25	0.561	ug/kg	U	1	15-MAR-10 01:24	per0314073a
	Perchlorate-O(18)			5.27	ug/kg		1	15-MAR-10 01:24	per0314073a

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

*Concentration =

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

QUALITY CONTROL SUMMARY

Perchlorate Laboratory Control Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No. (SDG): 10-2069-1

Extract Batch Code: 958955

Date Filtered: 06-MAR-10

Matrix: SOIL

Sample ID: 1202056595

Analyte ^a	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	2.00	2.04	ug/kg	102		70 - 130
Perchlorate Isotope Ratio		2.99				-
Perchlorate-101	2.00	2.11	ug/kg	105		70 - 130
Perchlorate-O(18)		4.7	ug/kg			-

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

Perchlorate Interference Check Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No. (SDG): 10-2069-1

Extract Batch Code: 958955

Date Filtered: 06-MAR-10

Matrix: SOIL

Sample ID: 1202056598

Analyte [^]	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	2.00	2.08	ug/kg	104		70 - 130
Perchlorate Isotope Ratio		3.01				
Perchlorate-101	2.00	2.14	ug/kg	107		70 - 130
Perchlorate-O(18)		4.88	ug/kg			

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

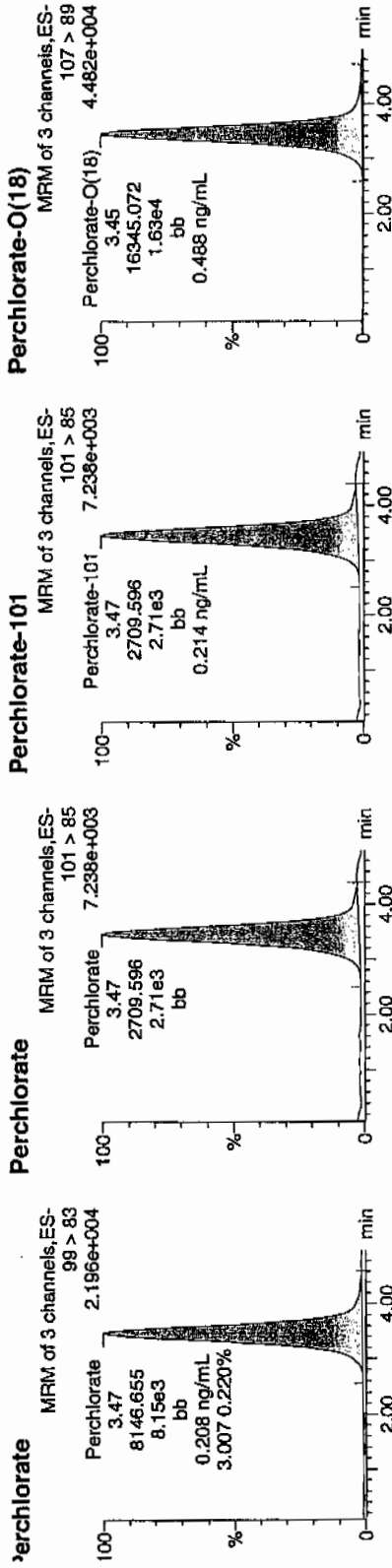
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031410a.qld

Last Altered: Monday, March 15, 2010 8:56:56 AM Eastern Standard Time
Printed: Monday, March 15, 2010 9:13:21 AM Eastern Standard Time

Sample: per0314068a
Date: 15-Mar-2010
Time: 00:43:48
ID: 1202056598
File: 2:4,C

Handwritten: *958963 | 3070 | 1.5 | 1.1*
03-15-10



Name	Trace	RT	Area	Response	Flags	Mod Time	Mod User	Dev	SN	Ratio
202056598	Perchlorate	99 > 83	3.47	8146.655	8146.655	bb		0.2081	104.03	4.03 275.219 3.01
202056598	Perchlorate-101	101 > 85	3.47	2709.596	2709.596	bb		0.2137	106.85	6.85 483.346
202056598	Perchlorate-O(18)	107 > 89	3.45	16345.072	16345.072	bb		0.4885	97.69	-2.31 2153.5...

$$\frac{8146.655}{2709.596} = 3.0066$$

Handwritten: *1.577*
3/16/10

Form 6

Perchlorate Spike/Spike Duplicate Summary

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No (SDG): 10-2069-1

Extract Batch Code: 958955

Date Extracted: 06-MAR-10

GEL MS/PS ID: 1202056596

Client ID: RE15-10-8404

GEL MSD/PSD ID: 1202056597

QC Type: MS

Compound [^]	Spike Added	Sample Conc	Units	MS Conc	MS Rec	#	MSD Conc	MSD Rec	#	RPD	#	RPD Limit	Recovery Limit
Perchlorate	2.21	0.700	ug/kg	2.91	100		2.76	93.5		5.25		30	75 - 125
Perchlorate Isotope Ratio	0	0.00		2.96			3.04			0			-
Perchlorate-101	2.21	0.715	ug/kg	3.04	105		2.81	94.8		8.01		30	75 - 125
Perchlorate-O(18)	0	5.22	ug/kg	4.98			4.96			.35			-

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

Comments:

Form 4

Perchlorate Initial Calibration Blank

GEL Job No.(SDG): 10-2069-1

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	14-MAR-10	per0314001a	IPB001
Perchlorate-101	0.00	0	NA	14-MAR-10	per0314001a	IPB001
Perchlorate	0.00	0	NA	14-MAR-10	per0314002a	IPB001
Perchlorate-101	0.00	0	NA	14-MAR-10	per0314002a	IPB001

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

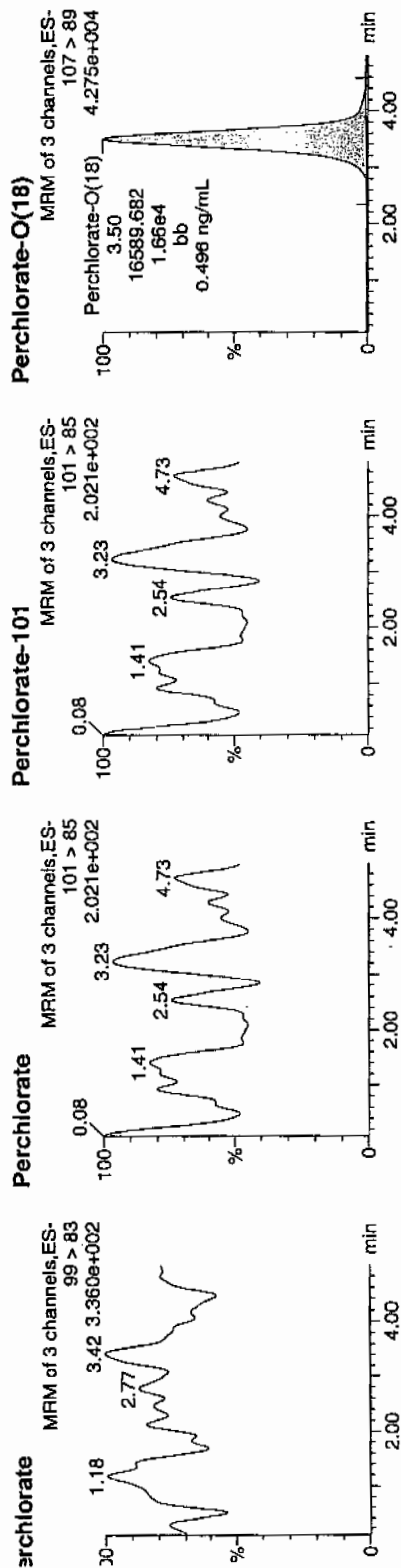
atasset: C:\MassLynx\Perchlorate.PRO\per031410a.qld

ast Altered: Monday, March 15, 2010 8:56:56 AM Eastern Standard Time
rinted: Monday, March 15, 2010 9:13:21 AM Eastern Standard Time

ethod: C:\MassLynx\Perchlorate.PRO\MethDB\per031410a.mdb 15 Mar 2010 08:54:46
alibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per031410a.cdb 15 Mar 2010 08:56:54

ame: per0314001a
ate: 14-Mar-2010
me: 15:41:14
l: IPB001
ial: 1:1,A

03-15-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
B001	Perchlorate	99 > 83										
B001	Perchlorate-101	101 > 85										
B001	Perchlorate-Q(18)	107 > 89	3.50	16589.682	bb	16589.682		0.4958	99.15	-0.85	1780.0...	

1.41
3/16/10

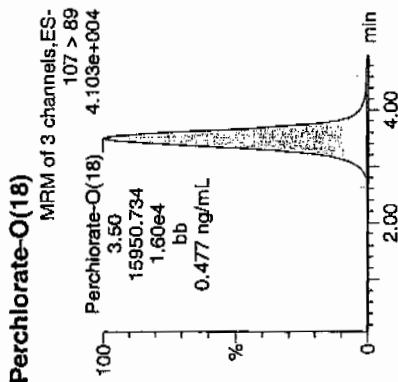
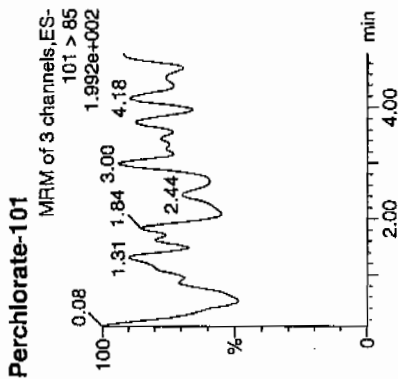
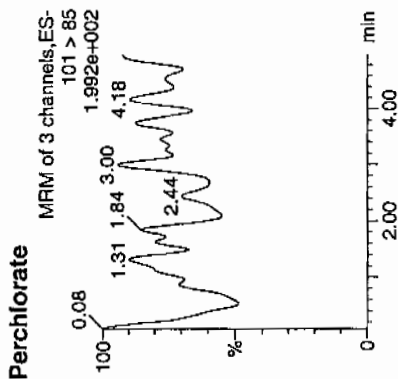
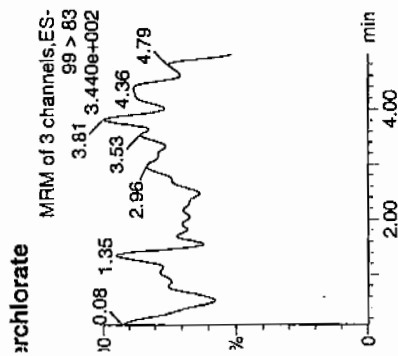
Identify Sample Report MassLynx 4.0 SP4
 GE Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031410a.qld

List Altered: Monday, March 15, 2010 8:56:56 AM Eastern Standard Time
 List Edited: Monday, March 15, 2010 9:13:21 AM Eastern Standard Time

Sample Name: per0314002a
 Date: 14-Mar-2010
 Time: 15:49:17
 File: IPB001
 Label: 1:1,A

03-15-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
3001 Perchlorate	99 > 83											
3001 Perchlorate-101	101 > 85											
3001 Perchlorate-O(18)	107 > 89	3.50	15950.734	15950.734	bb			0.4767	95.34	-4.66	1555.8...	0.00

1577
 3/16/10

Perchlorate Continuing Calibration Blank

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-2069-1

Lab Code: GEL

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

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	14-MAR-10	per0314008a	IPB002
Perchlorate-101	0.00	0	NA	14-MAR-10	per0314008a	IPB002
Perchlorate	0.00	0	NA	14-MAR-10	per0314010a	IPB003
Perchlorate-101	0.00	0	NA	14-MAR-10	per0314010a	IPB003
Perchlorate	0.00	0	NA	14-MAR-10	per0314023a	IPB004
Perchlorate-101	0.00	0	NA	14-MAR-10	per0314023a	IPB004
Perchlorate	0.00	0	NA	14-MAR-10	per0314036a	IPB005
Perchlorate-101	0.00	0	NA	14-MAR-10	per0314036a	IPB005
Perchlorate	0.00	0	NA	14-MAR-10	per0314041a	IPB006
Perchlorate-101	0.00	0	NA	14-MAR-10	per0314041a	IPB006
Perchlorate	0.00	0	NA	14-MAR-10	per0314049a	IPB007
Perchlorate-101	0.00	0	NA	14-MAR-10	per0314049a	IPB007
Perchlorate	0.00	0	NA	14-MAR-10	per0314062a	IPB008

Form 4

Perchlorate Continuing Calibration Blank

GEL Job No.(SDG): 10-2069-1

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-101	0.00	0	NA	14-MAR-10	per0314062a	IPB008
Perchlorate	0.00	0	NA	15-MAR-10	per0314065a	IPB009
Perchlorate-101	0.00	0	NA	15-MAR-10	per0314065a	IPB009
Perchlorate	0.00	0	NA	15-MAR-10	per0314075a	IPB010
Perchlorate-101	0.00	0	NA	15-MAR-10	per0314075a	IPB010

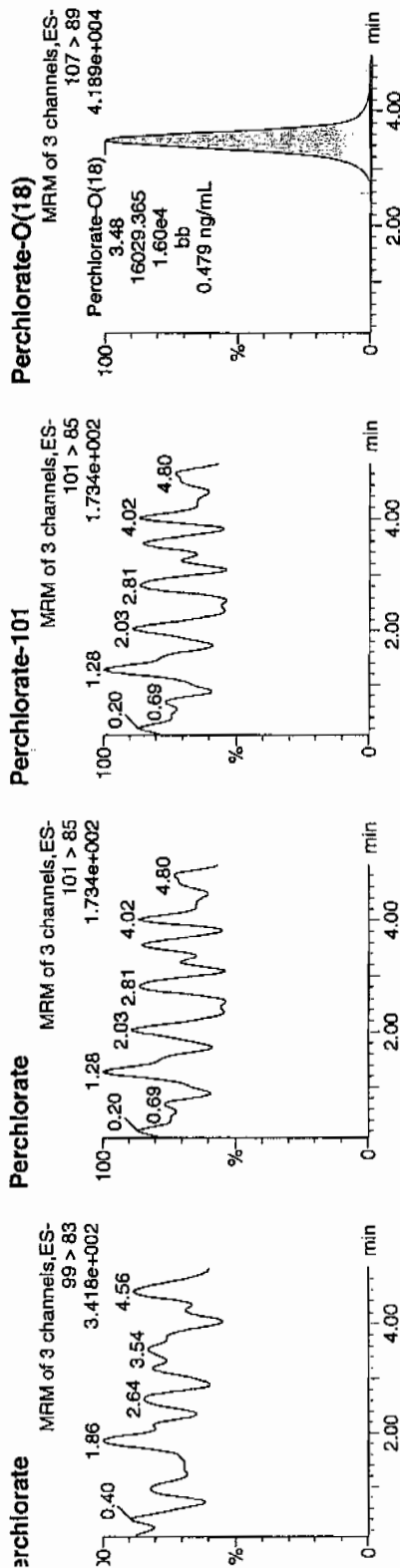
uantify Sample Report MassLynx 4.0 SP4
ne GEL Group, LLC Analyst: Charles W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per031410a.qld

st Altered: Monday, March 15, 2010 8:56:56 AM Eastern Standard Time
nted: Monday, March 15, 2010 9:13:21 AM Eastern Standard Time

ame: per0314008a
ate: 14-Mar-2010
me: 16:37:25
l: IPB002
al: 1:1,A

03-15-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
B002	Perchlorate	99 > 83										0.00
B002	Perchlorate-101	101 > 85										
B002	Perchlorate-O(18)	107 > 89	3.48	16029.365	bb			0.4790	95.81	-4.19	1104.5...	

WAT
3/14/10

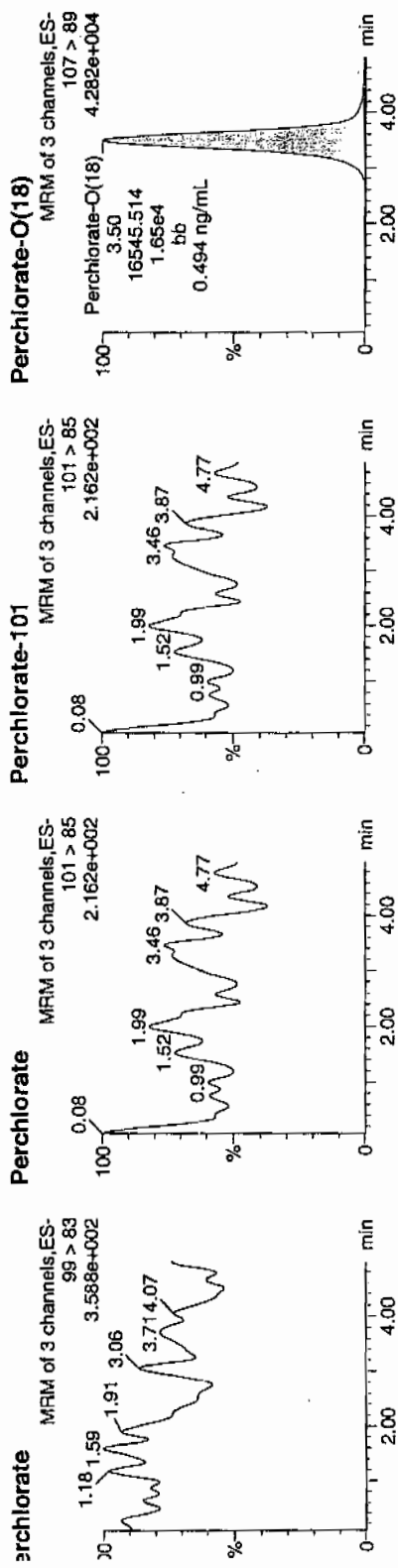
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charters W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031410a.qld

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Printed: Monday, March 15, 2010 9:13:21 AM Eastern Standard Time

Sample Name: per0314010a
Date: 14-Mar-2010
Time: 16:53:41
File: IPB003
Label: 1:1,A

03-15-10



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	3.50	16545.514	16545.514	bb			0.4945	98.89	-1.11	1258.9...	

147
3/16/10

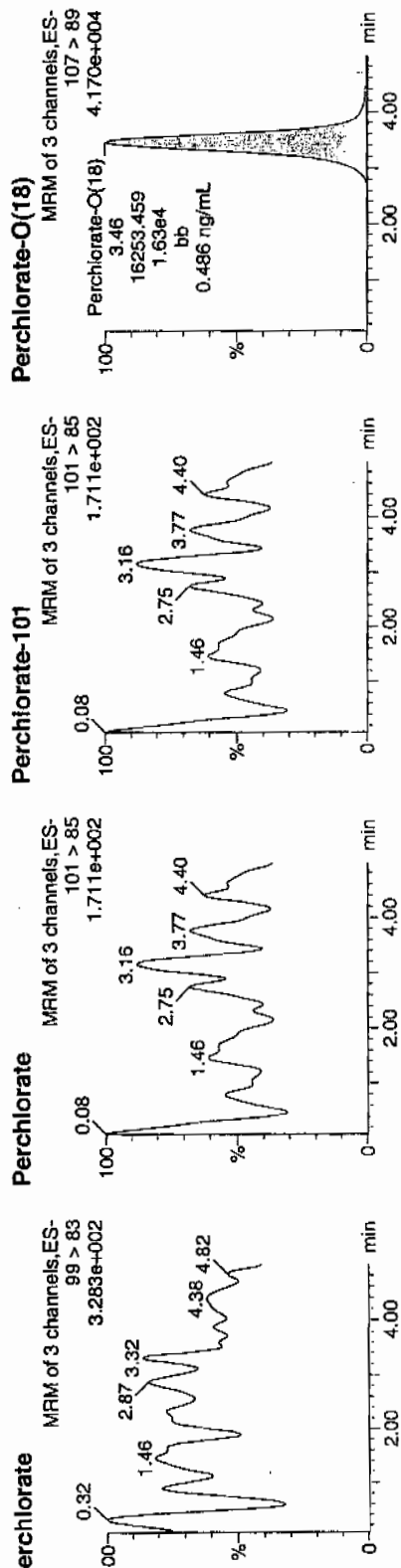
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The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031410a.qid

Last Altered: Monday, March 15, 2010 8:56:56 AM Eastern Standard Time
Printed: Monday, March 15, 2010 9:13:21 AM Eastern Standard Time

Sample Name: per0314023a
Date: 14-Mar-2010
Time: 18:38:13
Job: IPB004
Label: 1:1,A

03-15-10



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	3.46	16253.459	16253.459	bb			0.4857	97.14	-2.86	1623.8...	

3/16/10

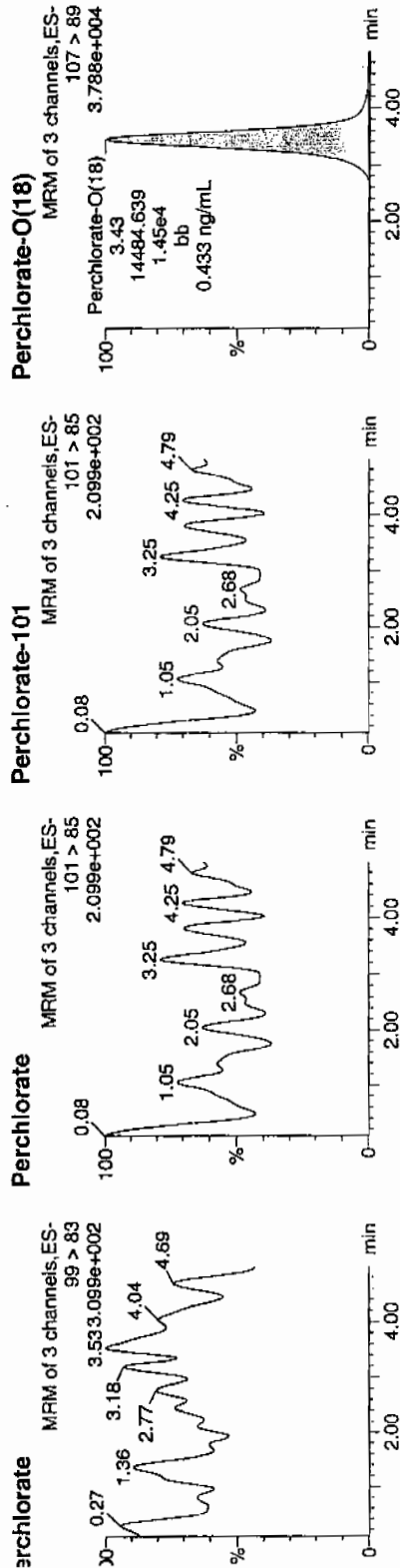
Quantity Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charliers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031410a.qld

Last Altered: Monday, March 15, 2010 8:56:56 AM Eastern Standard Time
Printed: Monday, March 15, 2010 9:13:21 AM Eastern Standard Time

Sample Name: per0314036a
Date: 14-Mar-2010
Time: 20:23:35
ID: IPB005
Label: 1:1,A

03-15-10



Name	Trapezoid	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	3.43	14484.639	14484.639	bb			0.4329	86.57	-13.43	330.725	

MAT
3/16/10

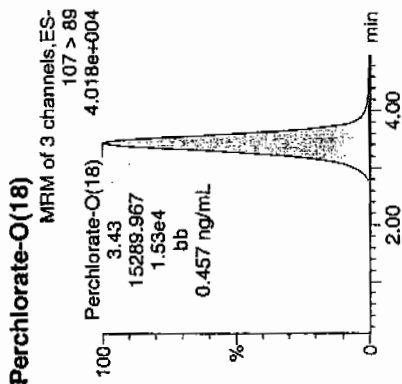
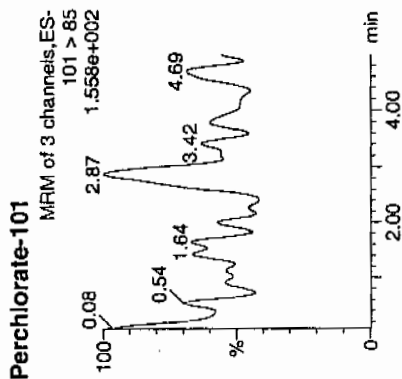
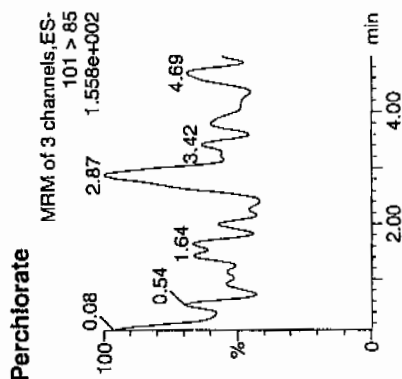
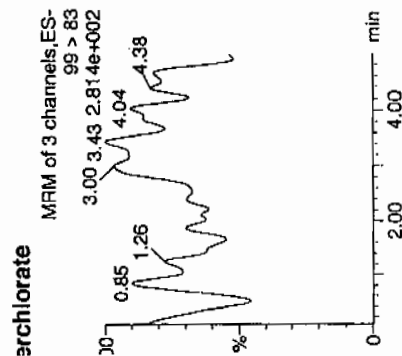
Quantify Sample Report MassLynx 4.0 SP4
 he GEL Group, LLC Analyst: Charlers W. Wilson

atasset: C:\MassLynx\Perchlorate.PRO\per031410a.qld

ast Altered: Monday, March 15, 2010 8:56:56 AM Eastern Standard Time
 rinted: Monday, March 15, 2010 9:13:21 AM Eastern Standard Time

ame: per0314041a
 ate: 14-Mar-2010
 ime: 21:04:20
 i: IPB006
 ial: 1:1,A

03-15-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
B006	Perchlorate	99 > 83										0.00
B006	Perchlorate-101	101 > 85										
B006	Perchlorate-O(18)	107 > 89	3.43	15289.967				0.4569	91.39	-8.61	4719.0...	

107
 3/16/10

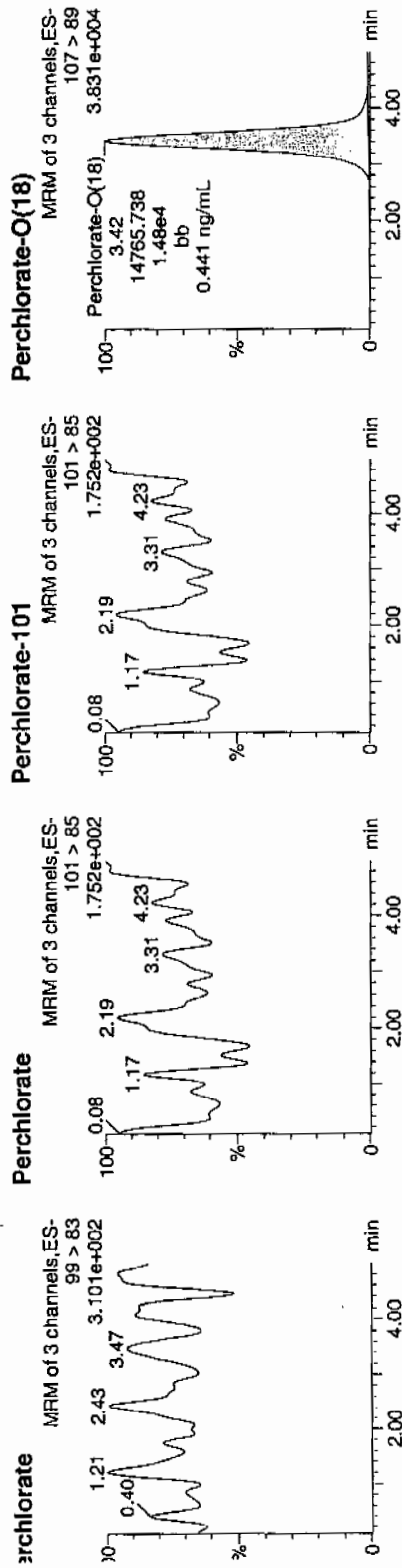
uantify Sample Report MassLynx 4.0 SP4
ne GEL Group, LLC Analyst: Charlers W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per031410a.qld

ist Altered: Monday, March 15, 2010 8:56:56 AM Eastern Standard Time
inted: Monday, March 15, 2010 9:13:21 AM Eastern Standard Time

ame: per0314049a
ate: 14-Mar-2010
me: 22:09:28
i: IPB007
al: 1:1,A

03-15-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
3007	Perchlorate	99 > 83										0.00
3007	Perchlorate-101	101 > 85										
3007	Perchlorate-O(18)	107 > 89	3.42	14765.738	bb			0.4413	88.25	-11.75	2275.0...	

147
3/16/10

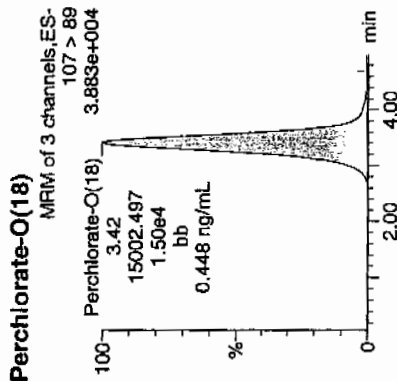
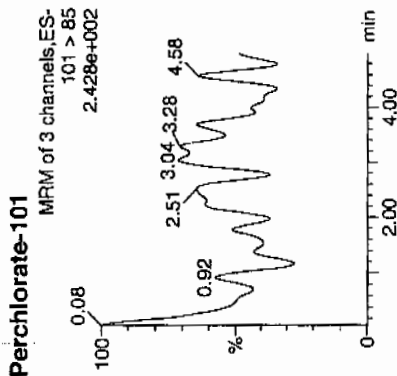
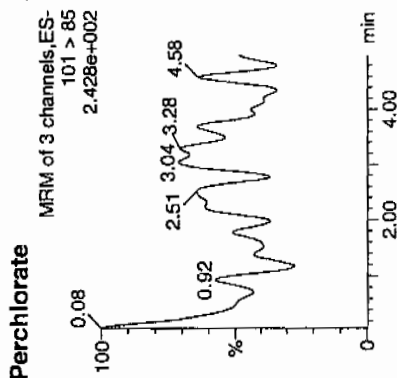
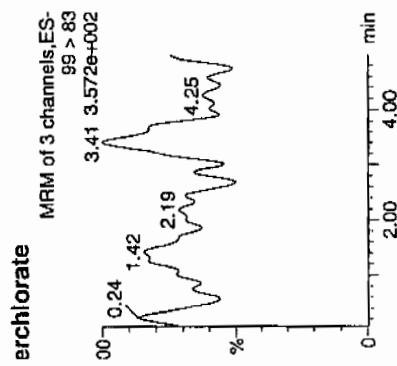
Quantify Sample Report MassLynx 4.0 SP4
 he GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031410a.qld

Acquired: Monday, March 15, 2010 8:56:56 AM Eastern Standard Time
 Printed: Monday, March 15, 2010 9:13:21 AM Eastern Standard Time

Sample Name: per0314062a
 Date: 14-Mar-2010
 Time: 23:54:34
 ID: IPB008
 Label: 1:1,A

03-15-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
B008	Perchlorate	99 > 83										0.00
B008	Perchlorate-101	101 > 85										
B008	Perchlorate-O(18)	107 > 89	3.42	15002.497	bb			0.4483	89.67	-10.33	1644.4...	

MSD
 3/16/10

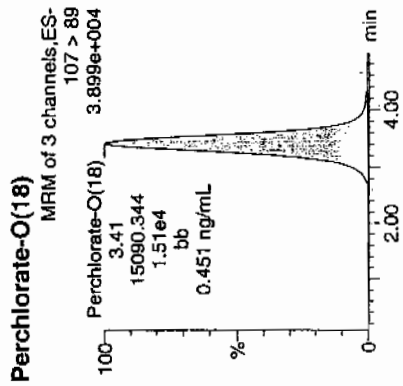
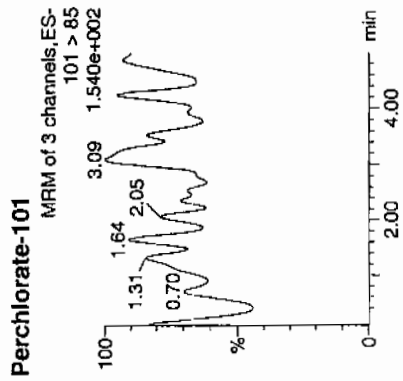
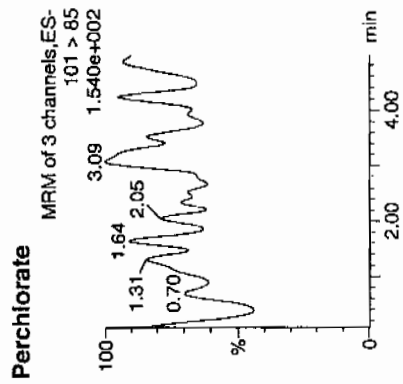
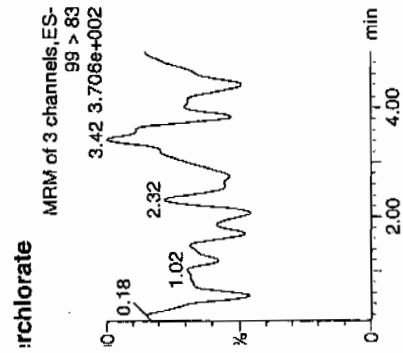
Identify Sample Report MassLynx 4.0 SP4
 ie GEL Group, LLC Analyst: Charfers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031410a.qld

Sample Name: Monday, March 15, 2010 8:56:56 AM Eastern Standard Time
 Date: Monday, March 15, 2010 9:13:21 AM Eastern Standard Time

File: per0314065a
 Date: 15-Mar-2010
 Time: 00:19:07
 Operator: IPB009
 Sample: al: 1:1,A

0.00
 03-15-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
3009 Perchlorate	99 > 83											0.00
3009 Perchlorate-101	101 > 85											
3009 Perchlorate-O(18)	107 > 89	3.41	15090.344	15090.344	bb			0.4510	90.19	-9.81	1592.9...	

1147
 3/16/10

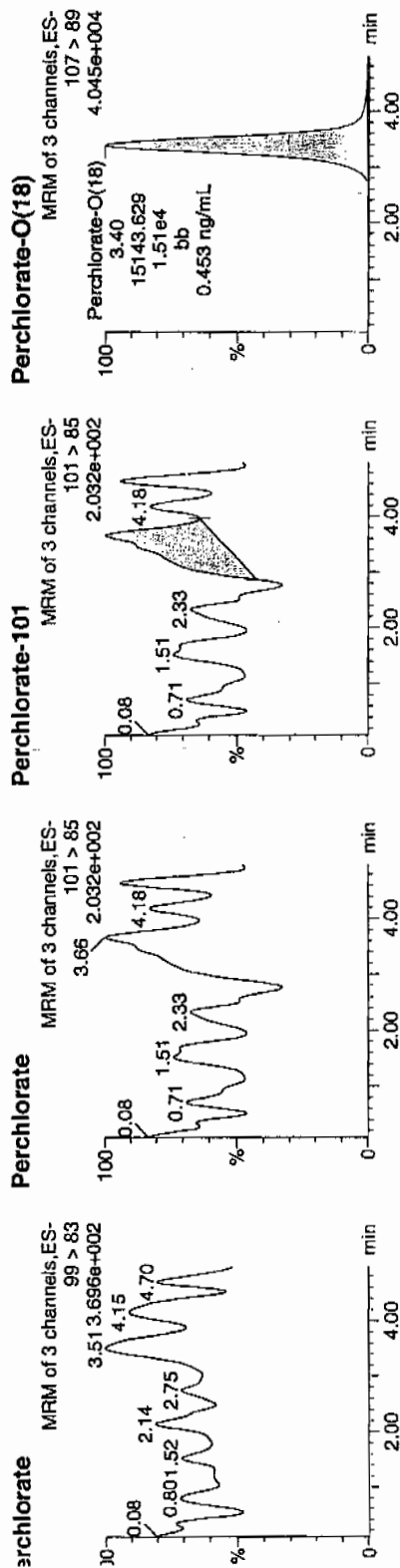
Identify Sample Report MassLynx 4.0 SP4
 ne GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031410a.qld

Acquired: Monday, March 15, 2010 8:56:56 AM Eastern Standard Time
 Method: Monday, March 15, 2010 9:13:21 AM Eastern Standard Time

Sample Name: per0314075a
 Date: 15-Mar-2010
 Time: 01:40:28
 File: IPB010
 Label: 1:1.A

03-13-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion.Ratio
B010	Perchlorate	99 > 83										0.00
B010	Perchlorate-101	101 > 85	3.66	54.354	bb			0.0043			5.863	
B010	Perchlorate-O(18)	107 > 89	3.40	15143.629	bb			0.4526	90.51	-9.49	564.320	

107
 3/16/10

Nairb.ref

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

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

QUATRO ULTIMA: nairb_01_08_08.ca

Calibration Report - MS1 Static

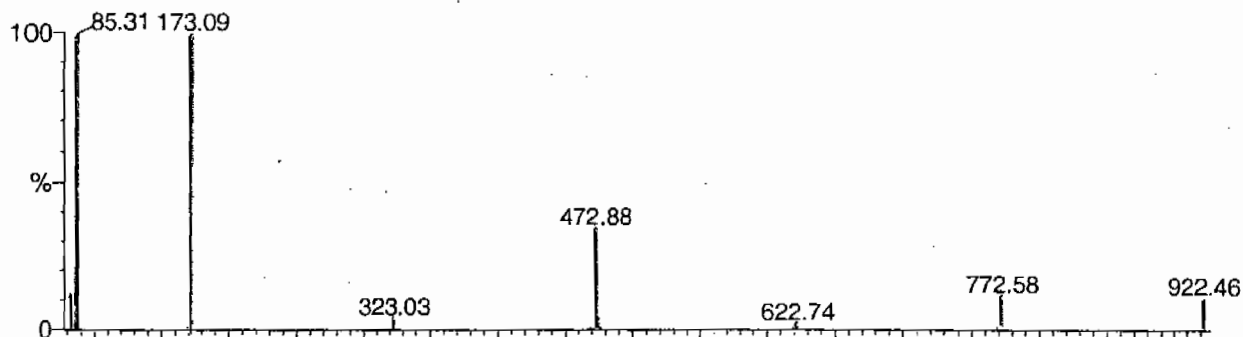
Page 1 of 1

Printed: Tue Jan 08 12:19:12 2008

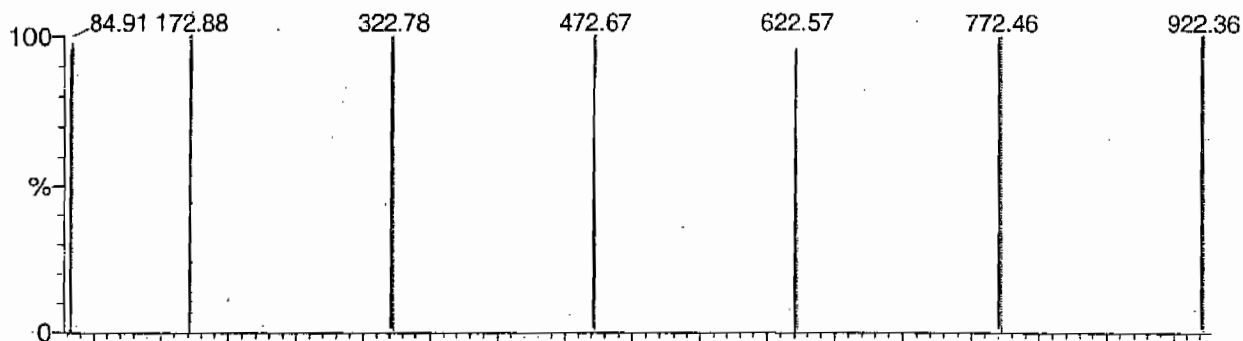
POINTS HIGHLIGHTED BY COW 01-09-08

Data file: STATMS1 - Uncalibrated

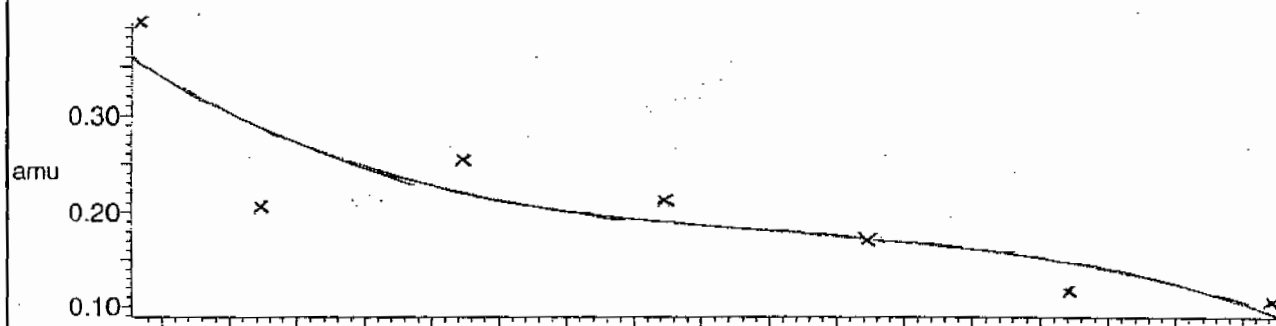
7 matches of 7 tested references



Reference file: Nairb

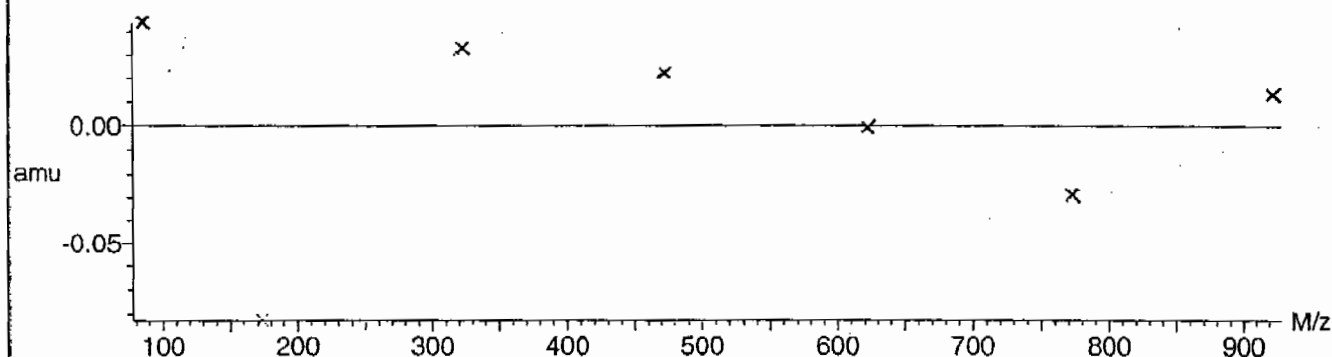


Mass difference (Raw - Ref mass)



Residuals

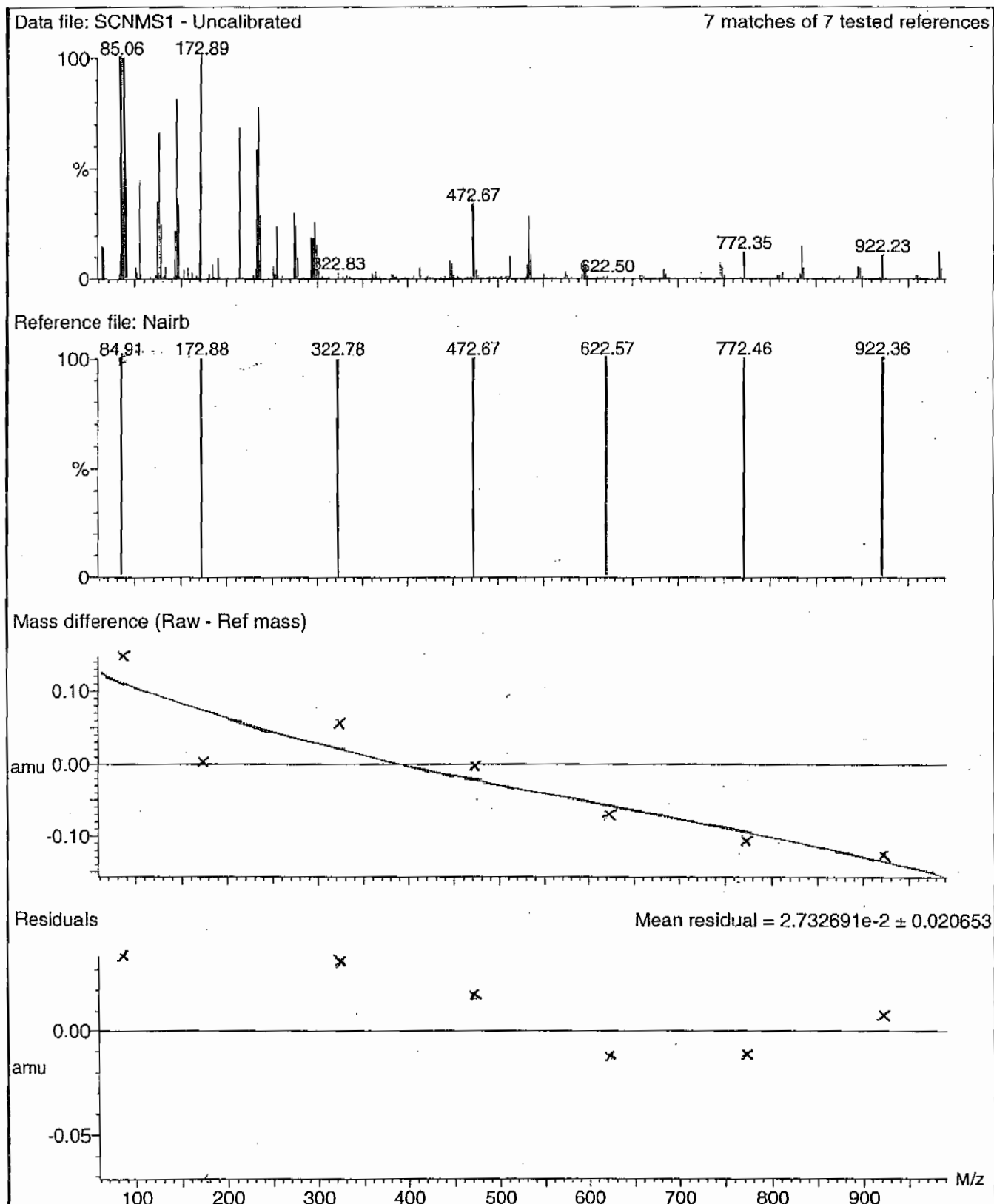
Mean residual = $3.212012 \times 10^{-2} \pm 0.024108$



Calibration Report - MS1 Scanning

Page 1 of 1

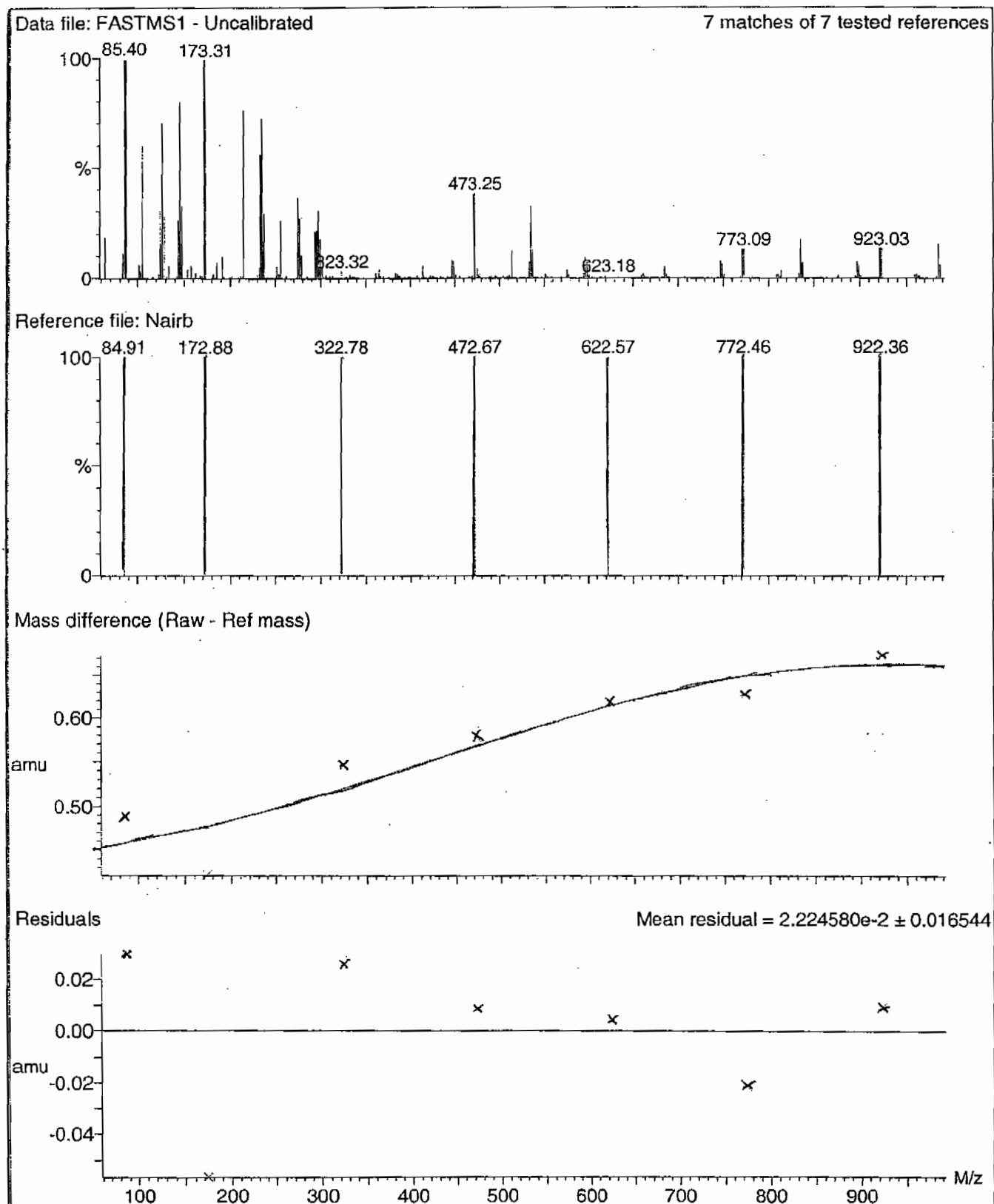
Printed: Tue Jan 08 12:20:09 2008



Calibration Report - MS1 Scan Speed Compensation

Page 1 of 1

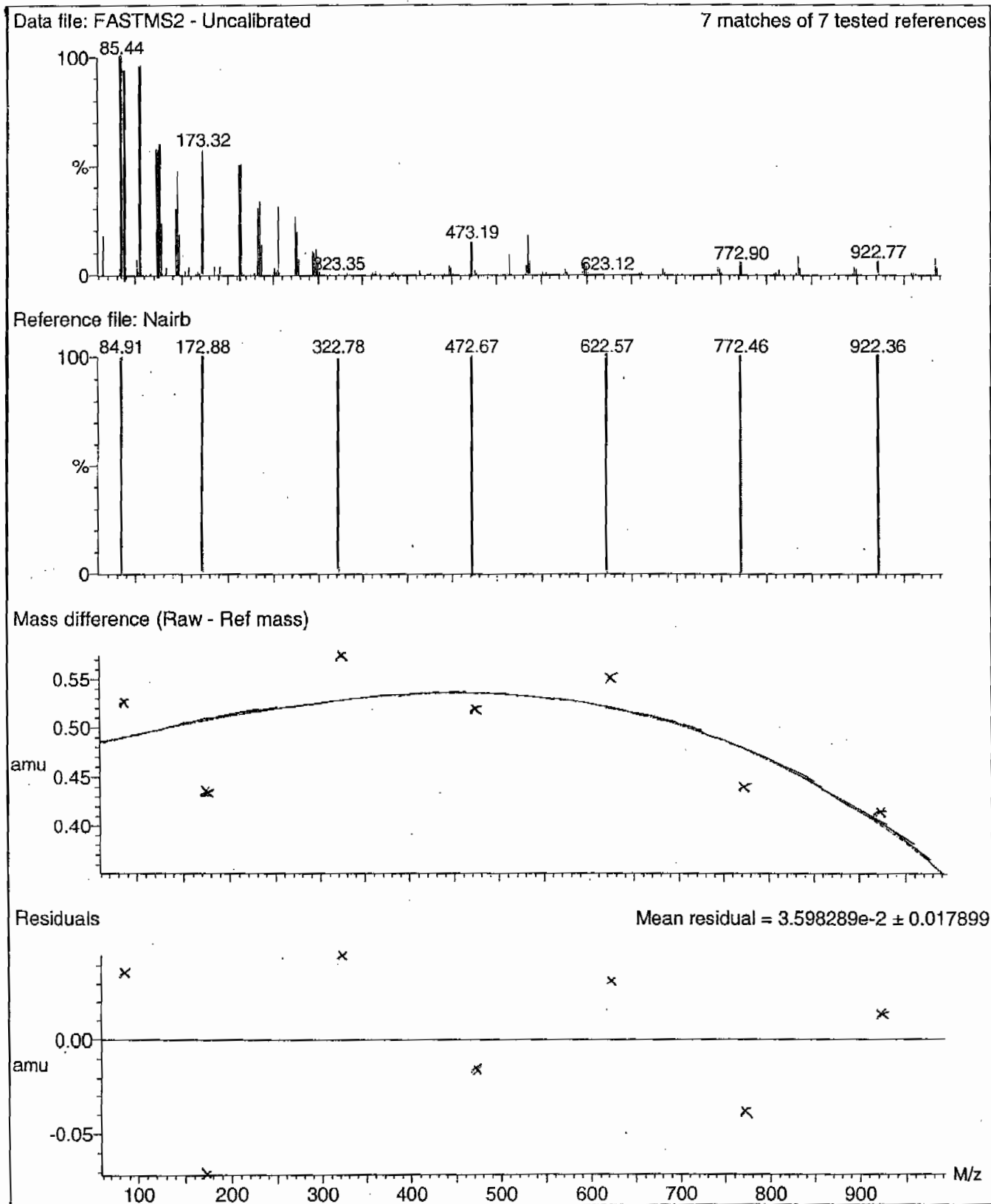
Printed: Tue Jan 08 12:21:04 2008



Calibration Report - MS2 Scan Speed Compensation

Page 1 of 1

Printed: Tue Jan 08 12:23:51 2008



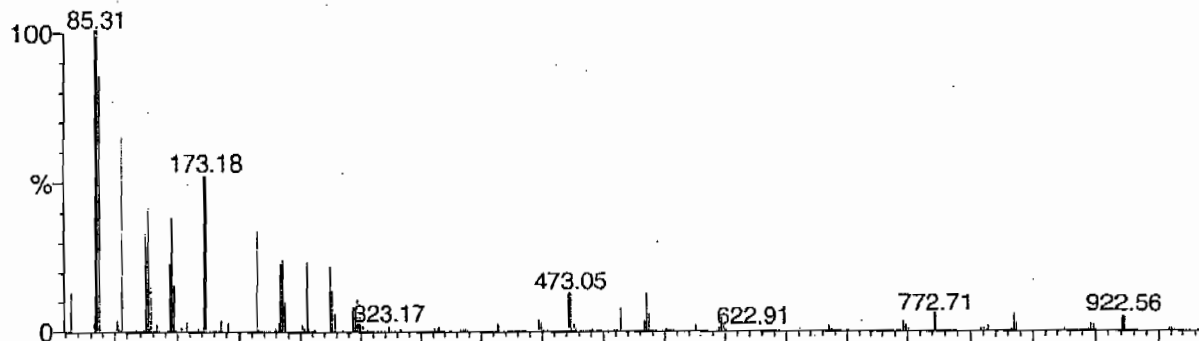
Calibration Report - MS2 Scanning

Page 1 of 1

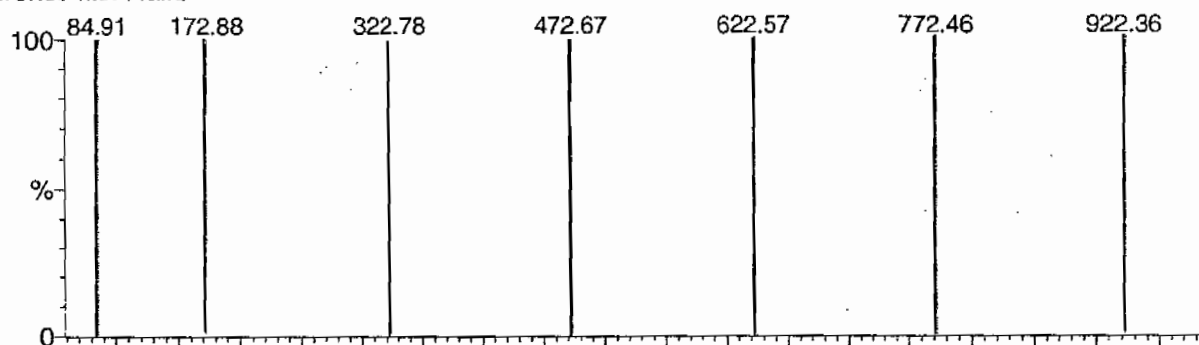
Printed: Tue Jan 08 12:22:56 2008

Data file: SCNMS2 - Uncalibrated

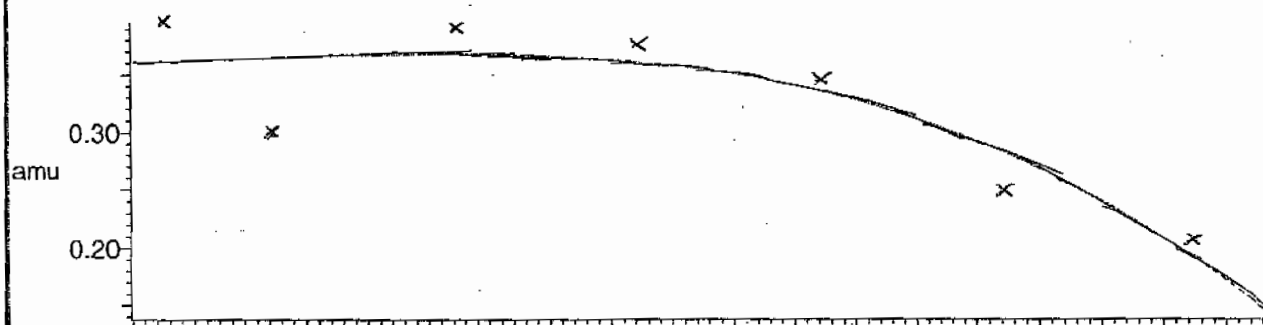
7 matches of 7 tested references



Reference file: Nairb

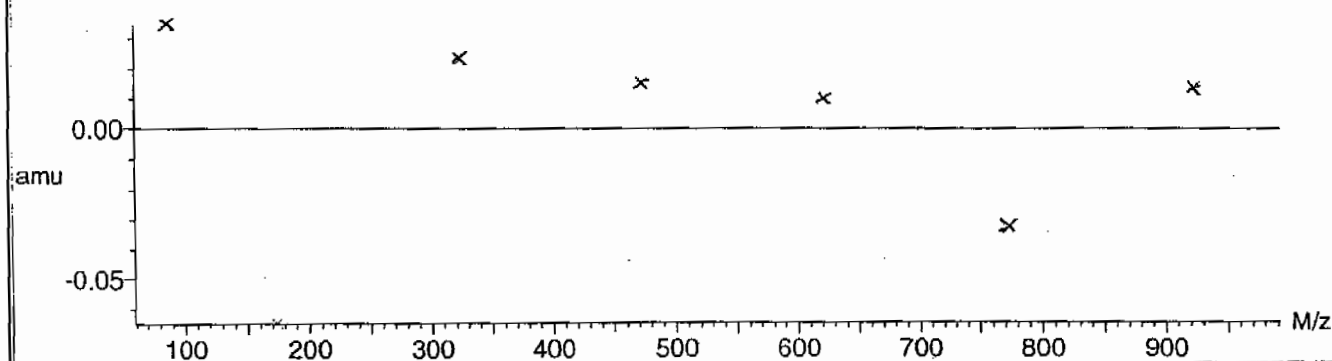


Mass difference (Raw - Ref mass)



Residuals

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



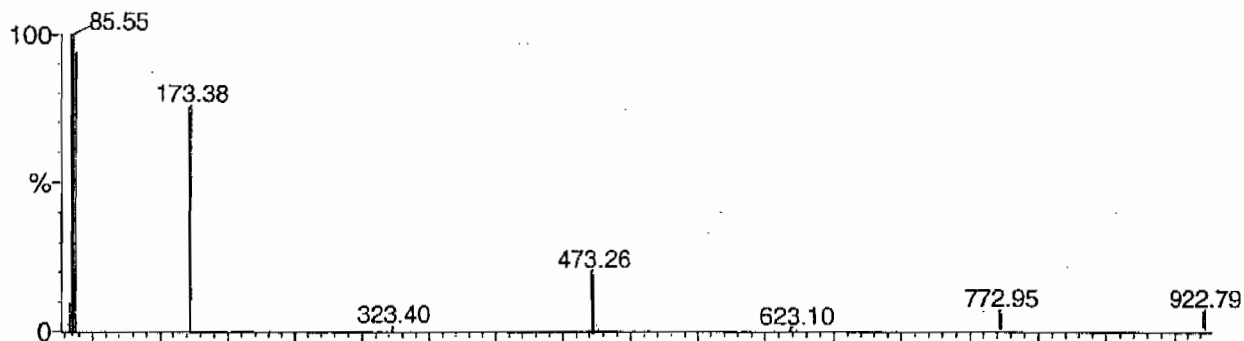
Calibration Report - MS2 Static

Page 1 of 1

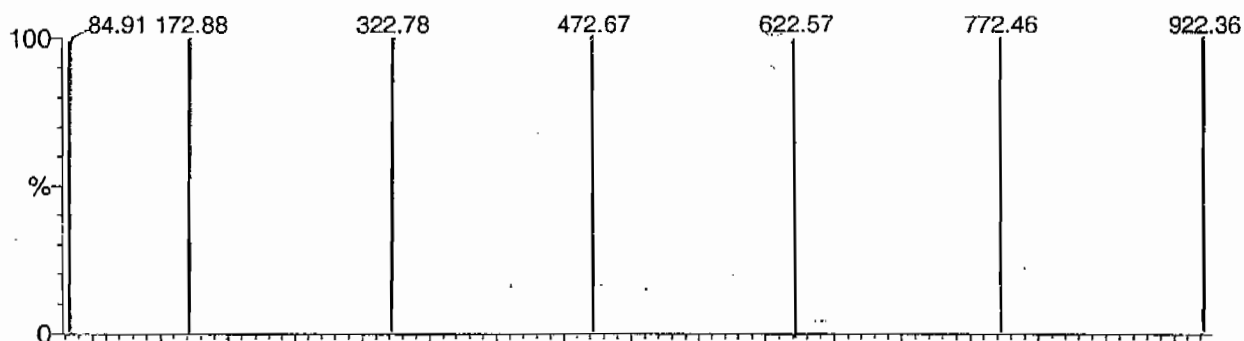
Printed: Tue Jan 08 12:21:59 2008

Data file: STATMS2 - Uncalibrated

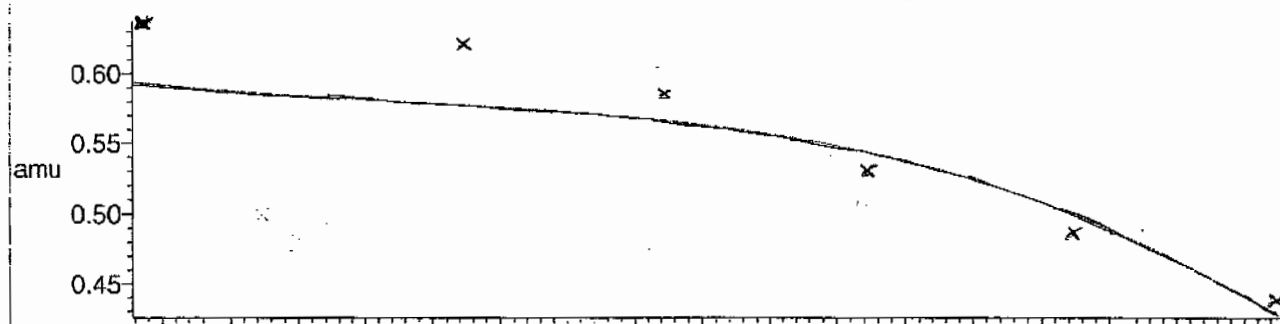
7 matches of 7 tested references



Reference file: Nairb

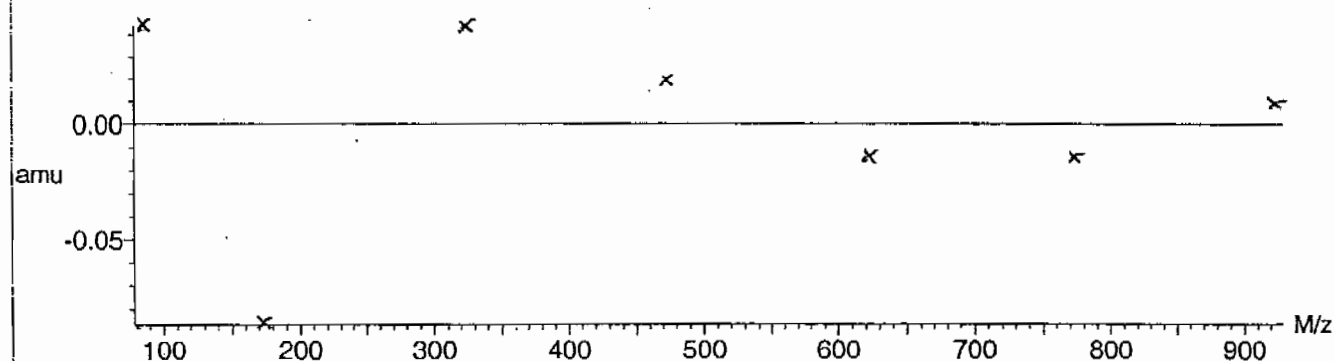


Mass difference (Raw - Ref mass)



Residuals

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



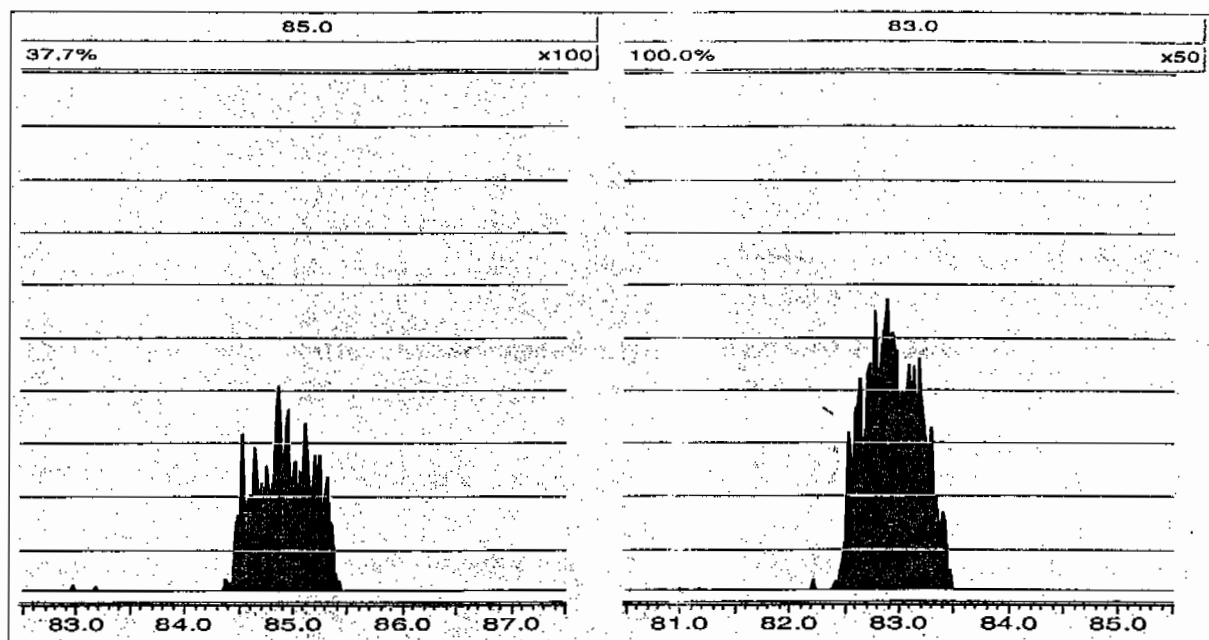
Tune Parameters

MassLynx 4.0 SP4

Page 1 of 1

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

Printed: Sunday, March 14, 2010 11:36:48 Eastern Standard Time



Form 8

Perchlorate RT And Area Summary

GEL Job No.(SDG): 10-2069-1

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	per0314006a	14-MAR-10	17326				
Lower Area Limit			8663				
Upper Area Limit			34652				
1202056594	per0314066a	15-MAR-10 00:27	15157.8	3.41	3.44548	1.01	
1202056595	per0314067a	15-MAR-10 00:35	15721	3.4	3.4208	1.006	
1202056598	per0314068a	15-MAR-10 00:43	16345.1	3.45	3.47043	1.006	
248041001	per0314069a	15-MAR-10 00:51	14950.8	3.41	3.42082	1.003	
248041002	per0314070a	15-MAR-10 00:59	15038.6	3.4	3.40823	1.002	
248041003	per0314071a	15-MAR-10 01:07	14846.3	3.4	3.40822	1.002	
248041004	per0314072a	15-MAR-10 01:15	14668.1	3.4	3.42068	1.006	
248041005	per0314073a	15-MAR-10 01:24	15697.4	3.38	3.42068	1.012	

SAMPLE DATA

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 958955

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8389

Date Received: 25-FEB-10

GEL Job No (SDG): 10-2069-1

GEL Sample ID: 248041001

Date Filtered: 06-MAR-10

Injection Volume (uL): 20

%Solids: 90.8

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.551	2.2	0.551	ug/kg	U	1	15-MAR-10 00:51	per0314069a
	Perchlorate Isotope Ratio						1	15-MAR-10 00:51	per0314069a
14797-73-0	Perchlorate-101	.551	2.2	0.551	ug/kg	U	1	15-MAR-10 00:51	per0314069a
	Perchlorate-O(18)			4.92	ug/kg		1	15-MAR-10 00:51	per0314069a

[^] 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\per031410a.qld

Last Altered: Monday, March 15, 2010 8:56:56 AM Eastern Standard Time
Printed: Monday, March 15, 2010 9:13:21 AM Eastern Standard Time

Sample Name: per0314069a

Date: 15-Mar-2010

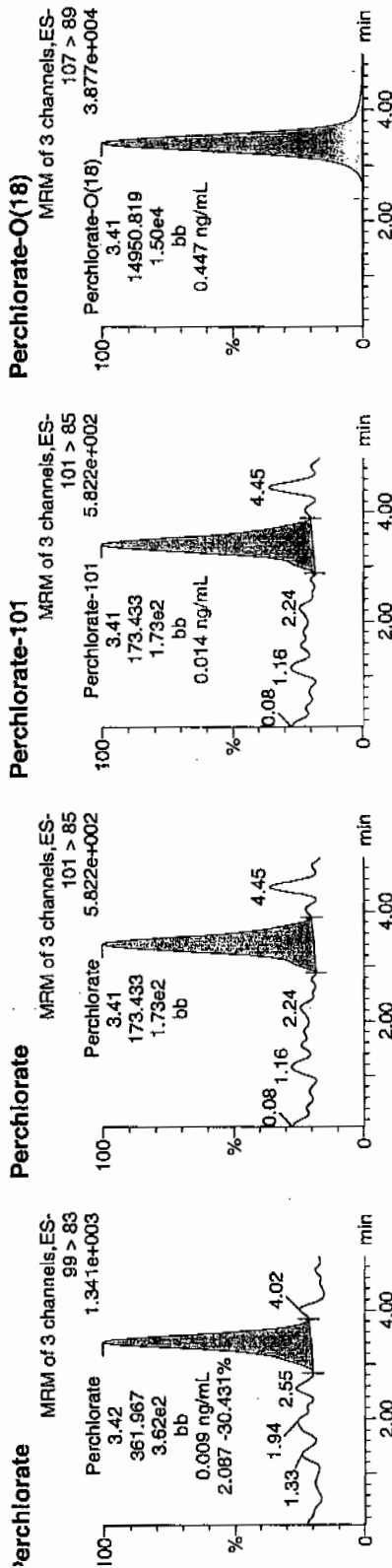
Time: 00:51:51

ID: 248041001

File: 2:4,D

03-15-10

12400-1538963 | 5070 | 11



Name	RT	Area	Response	Flags	Mod	Date	Mod	Time	ng/mL	Rec	% Exp	SN	Ion Ratio
Perchlorate	3.42	361.967	361.967	bb					0.0092	22.891		2.09	
Perchlorate-101	3.41	173.433	173.433	bb					0.0137	27.617			
Perchlorate-O(18)	3.41	14950.819	14950.819	bb					0.4468	89.36	-10.84	4654.8...	

OK 3/24
20.0500
1077
3/16/10

Perchlorate Analysis Data Sheet

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

Lab Name: GEL Laboratories LLCLab Code: GELInstrument: LCMSMSMethod: SW846 6850 ModifiedMatrix: SOILExtraction Batch ID: 958955Extraction Type: Solid Prep

Client Sample No.

RE15-10-8388Date Received: 25-FEB-10GEL Job No (SDG): 10-2069-1GEL Sample ID: 248041002Date Filtered: 06-MAR-10Injection Volume (uL): 20%Solids: 92.4Sample Volume/Weight: 2.00 gConcentrated Extract Volume: 20.0

CAS No.	Analyte ^a	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.541	2.16	0.541	ug/kg	U	1	15-MAR-10 00:59	per0314070a
	Perchlorate Isotope Ratio						1	15-MAR-10 00:59	per0314070a
14797-73-0	Perchlorate-101	.541	2.16	0.541	ug/kg	U	1	15-MAR-10 00:59	per0314070a
	Perchlorate-O(18)			4.86	ug/kg		1	15-MAR-10 00:59	per0314070a

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

*Concentration =

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

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

Dataset: C:\MassLynx\Perchlorate.PRO\per031410a.qld

Last Altered: Monday, March 15, 2010 8:56:56 AM Eastern Standard Time
Printed: Monday, March 15, 2010 9:13:21 AM Eastern Standard Time

Sample Name: per0314070a

Sample Date: 15-Mar-2010

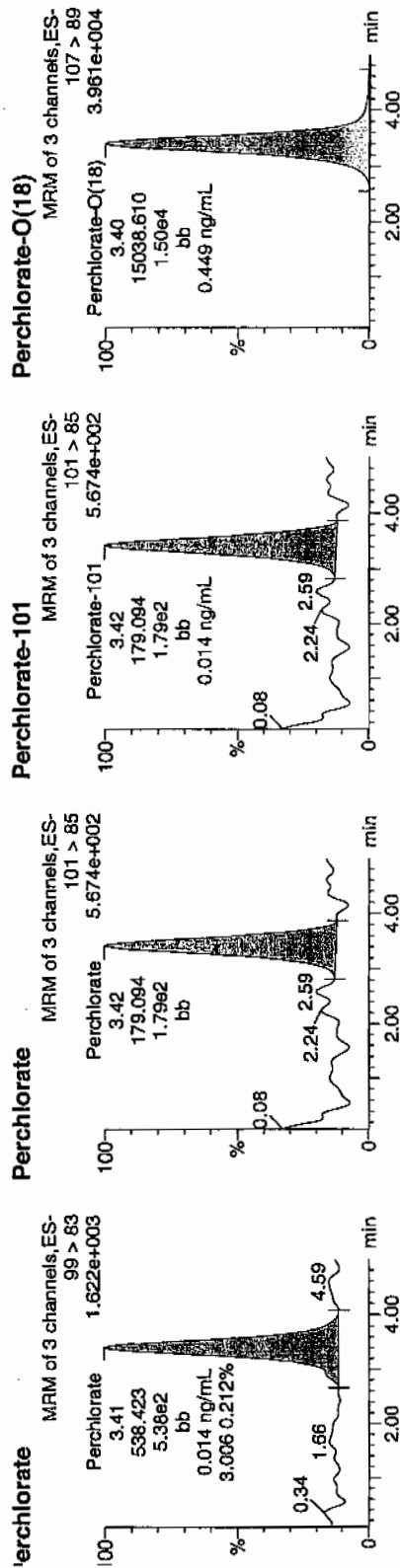
Sample Time: 00:59:53

Sample ID: 248041002

Sample Label: 2:4,E

03-15-10

LAN-958963 | 5072 | 11 |



Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	CS	Ratio
48041002	Perchlorate	99 > 83	3.41	538.423	538.423	bb		0.0138	40.570	3.01		
48041002	Perchlorate-101	101 > 85	3.42	179.094	179.094	bb		0.0141	26.608			
48041002	Perchlorate-O(18)	107 > 89	3.40	15038.610	15038.610	bb		0.4494	89.88	-10.12	2545.0...	

WAT
3/16/10

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: 958955

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8390

Date Received: 25-FEB-10

GEL Job No (SDG): 10-2069-1

GEL Sample ID: 248041003

Date Filtered: 06-MAR-10

Injection Volume (uL): 20

%Solids: 85

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.59	2.36	0.590	ug/kg	U	1	15-MAR-10 01:07	per0314071a
	Perchlorate Isotope Ratio						1	15-MAR-10 01:07	per0314071a
14797-73-0	Perchlorate-101	.59	2.36	0.590	ug/kg	U	1	15-MAR-10 01:07	per0314071a
	Perchlorate-O(18)			5.23	ug/kg		1	15-MAR-10 01:07	per0314071a

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

*Concentration =

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

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

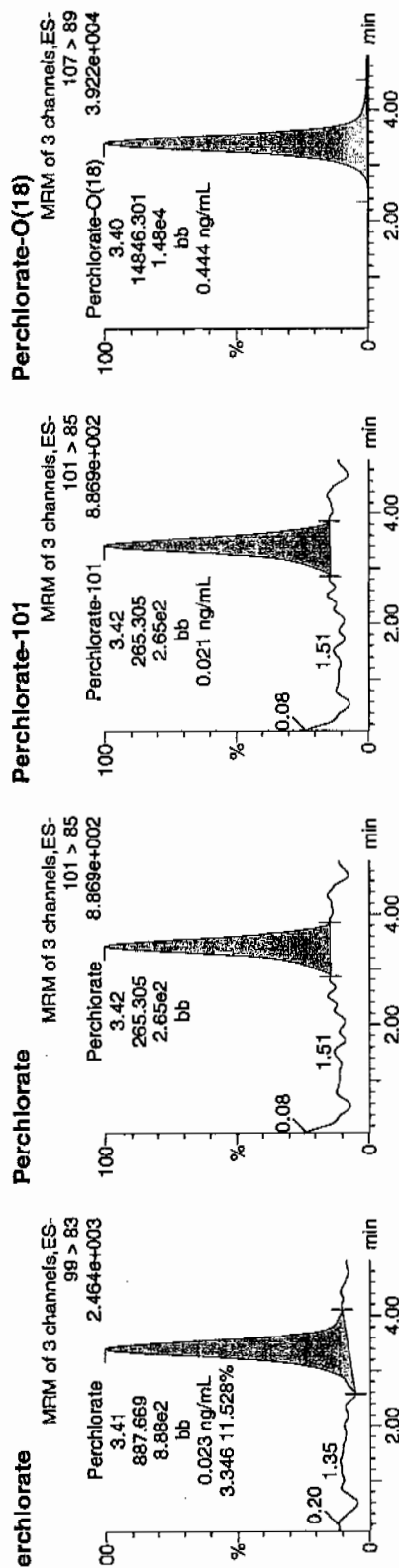
Dataset: C:\MassLynx\Perchlorate.PRO\per031410a.qld

Last Altered: Monday, March 15, 2010 8:56:56 AM Eastern Standard Time
Printed: Monday, March 15, 2010 9:13:21 AM Eastern Standard Time

Sample Name: per0314071a
Date: 15-Mar-2010
Time: 01:07:54
ID: 248041003
Label: 2:4,F

603
03-15-10

1400 | 958963 | 50020 | 11



Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	Conc	% Dev	S/N	Ion Ratio
48041003	Perchlorate	99 > 83	3.41	887.669	bb			0.0227	35.255	3.35	
48041003	Perchlorate-101	101 > 85	3.42	265.305	bb			0.0209	44.885		
48041003	Perchlorate-O(18)	107 > 89	3.40	14846.301	bb			0.4437	88.73	-11.27	9242.7...

3/16/10

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 958955

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8392

Date Received: 25-FEB-10

GEL Job No (SDG): 10-2069-1

GEL Sample ID: 248041004

Date Filtered: 06-MAR-10

Injection Volume (uL): 20

%Solids: 81

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.621	2.48	0.621	ug/kg	U	1	15-MAR-10 01:15	per0314072a
	Perchlorate Isotope Ratio						1	15-MAR-10 01:15	per0314072a
14797-73-0	Perchlorate-101	.621	2.48	0.621	ug/kg	U	1	15-MAR-10 01:15	per0314072a
	Perchlorate-O(18)			5.44	ug/kg		1	15-MAR-10 01:15	per0314072a

[^] 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
he GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031410a.qld

Last Altered: Monday, March 15, 2010 8:56:56 AM Eastern Standard Time
Printed: Monday, March 15, 2010 9:13:21 AM Eastern Standard Time

Sample Name: per0314072a

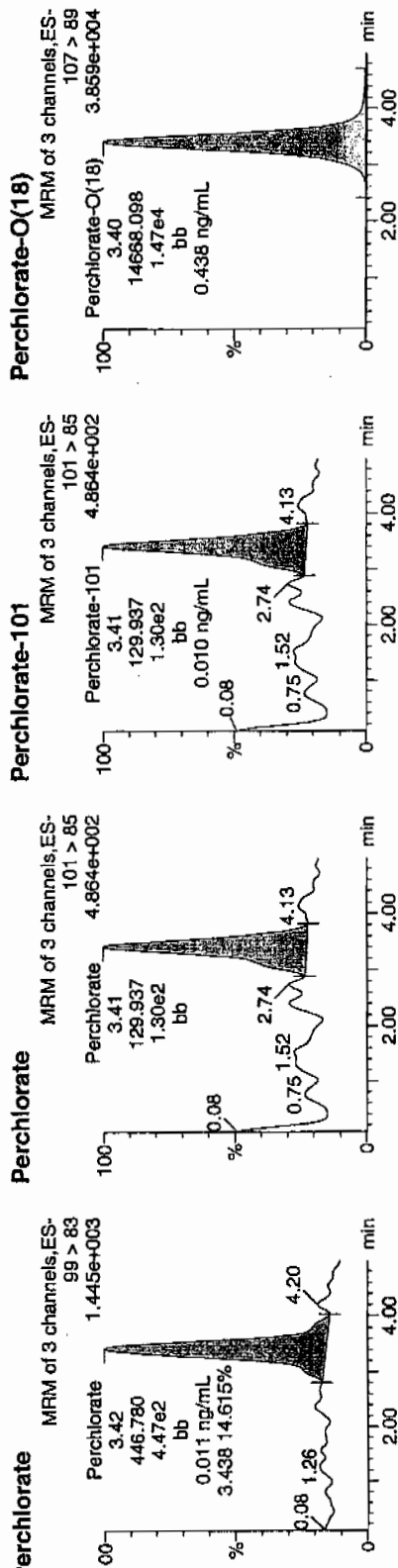
Date: 15-Mar-2010

Time: 01:15:55

ID: 248041004

Label: 2:5:A

1222 | 958463 | 30120 | 1.1
03-15-10



Name	Trace	RT	Area	Response	Flags	Mod	Date	Mod	Time	ng/mL	% Rep	% Dev	SN	Ratio
48041004	Perchlorate	99 > 83	3.42	446.780		bb				0.0114			13.299	3.44
48041004	Perchlorate-101	101 > 85	3.41	129.937	✓	bb				0.0102			30.811	
48041004	Perchlorate-O(18)	107 > 89	3.40	14668.098		bb				0.4383	87.67	-12.33	1800.3...	

447
3/16/10

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLCLab Code: GELInstrument: LCMSMSMethod: SW846 6850 ModifiedMatrix: SOILExtraction Batch ID: 958955Extraction Type: Solid PrepSample Volume/Weight: 2.00 gConcentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8391Date Received: 25-FEB-10GEL Job No (SDG): 10-2069-1GEL Sample ID: 248041005Date Filtered: 06-MAR-10Injection Volume (uL): 20%Solids: 89

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.561	2.25	0.561	ug/kg	U	1	15-MAR-10 01:24	per0314073a
	Perchlorate Isotope Ratio						1	15-MAR-10 01:24	per0314073a
14797-73-0	Perchlorate-101	.561	2.25	0.561	ug/kg	U	1	15-MAR-10 01:24	per0314073a
	Perchlorate-O(18)			5.27	ug/kg		1	15-MAR-10 01:24	per0314073a

[^] 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

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

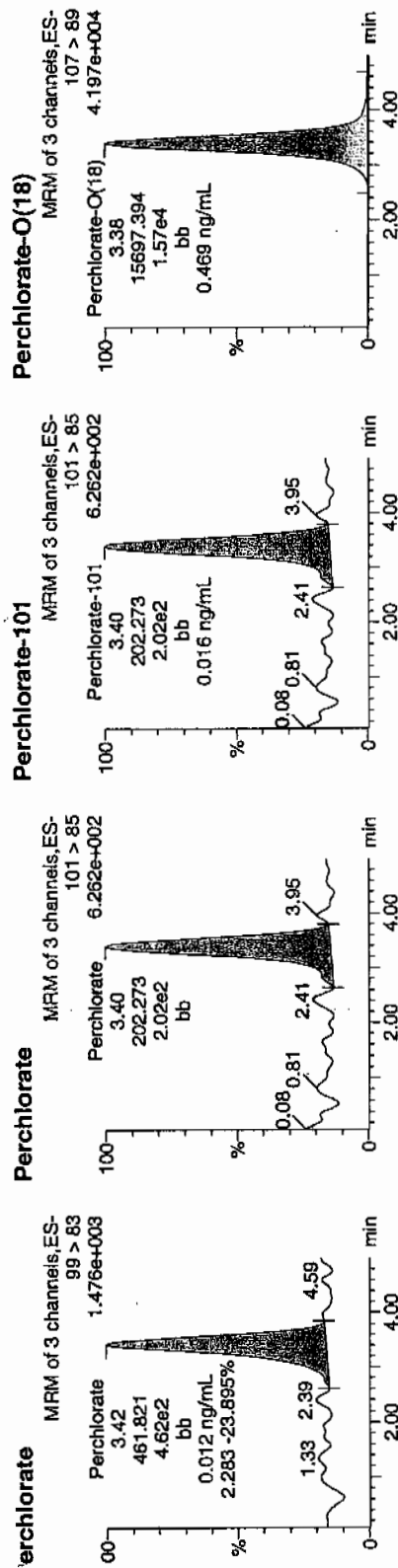
Dataset: C:\MassLynx\Perchlorate.PRO\per031410a.qld

Last Altered: Monday, March 15, 2010 8:56:56 AM Eastern Standard Time
Printed: Monday, March 15, 2010 9:13:21 AM Eastern Standard Time

Name: per0314073a
Date: 15-Mar-2010
Time: 01:24:00
ID: 248041005
Label: 2:5,B

03-15-10

1222-AS8963/5000/11



Name	Area	Fit	Response	Flags	Mod Date	Mod Time	Conc	Rec	Dev	SN	Ratio
48041005 Perchlorate	99 > 83	3.42	461.821	bb			0.0118		46.167	2.28	
48041005 Perchlorate-101	101 > 85	3.40	202.273	bb			0.0160		12.456		
48041005 Perchlorate-O(18)	107 > 89	3.38	15697.394	bb			0.4691	93.82	-6.18	719.611	

OK 94
2.0500
1.00
2/16/10

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

STANDARDS DATA

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories

Lab Code: GEL

Instrument ID: LCMSMS **Date Analyzed:** 14-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: 39154.12
Response Type: External Standard
Curve Type: RF

Form 2

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories GEL Job No.(SDG): 10-2069-1

Lab Code: GEL

Instrument ID: LCMSMS Date Analyzed: 14-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

Paramname Perchlorate-101

Coefficient of Determination:

Calibration Curve: 12679.04

Response Type: External Standard

Curve Type: RF

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

Dataset: C:\MassLynx\Perchlorate.PRO\per031410a.qld

List Altered: Monday, March 15, 2010 8:56:56 AM Eastern Standard Time
Printed: Monday, March 15, 2010 9:13:21 AM Eastern Standard Time

Method: C:\MassLynx\Perchlorate.PRO\MethDB\per031410a.mdb 15 Mar 2010 08:54:46
Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per031410a.cdb 15 Mar 2010 08:56:54

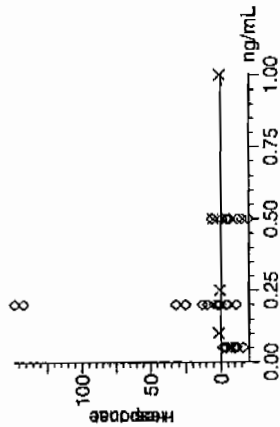
Compound name: Perchlorate

Response Factor: 39154.1

RF SD: 1960.58, % Relative SD: 5.00734 ✓

Response type: External Std, Area ✓

Injection type: RF ✓



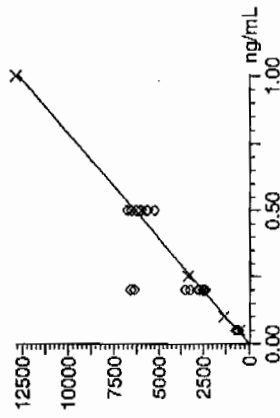
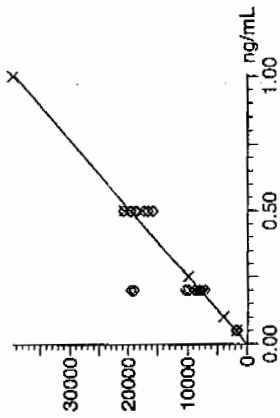
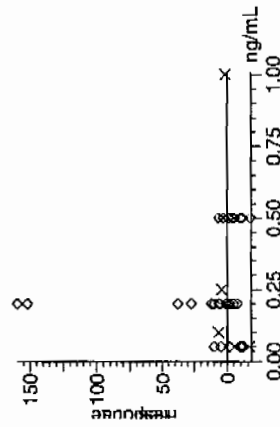
Compound name: Perchlorate-101

Response Factor: 12679

RF SD: 1159.92, % Relative SD: 9.14836 ✓

Response type: External Std, Area ✓

Injection type: RF ✓



303-15-10

4477
3/16/10

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

Dataset: C:\MassLynx\Perchlorate.PRO\per031410a.qld

List Altered: Monday, March 15, 2010 8:56:56 AM Eastern Standard Time
 Init: Monday, March 15, 2010 9:13:21 AM Eastern Standard Time

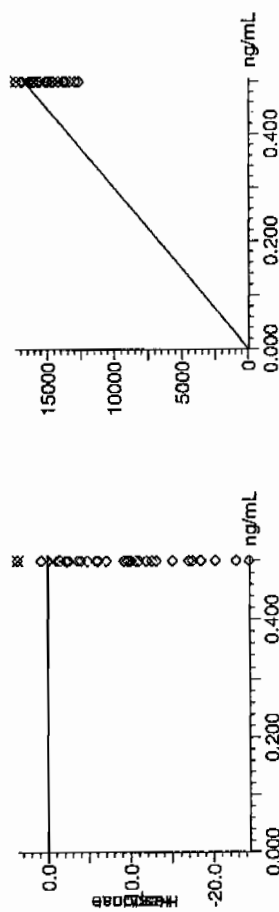
Compound name: Perchlorate-O(18)

Response Factor: 33462.4

RF SD: 678.465, % Relative SD: 2.02755

Response type: External Std, Area

Curve type: RF



Form 3

Perchlorate Initial Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-2069-1

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.53	105.94	14-MAR-10 16:45	per0314009a
Perchlorate Isotope Ratio		3.07		14-MAR-10 16:45	per0314009a
Perchlorate-101	.5	.53	106.4	14-MAR-10 16:45	per0314009a

Quantify Sample Report MassLynx 4.0 SP4

the GEL Group, LLC Analyst: Charliers W. Wilson

atset: C:\MassLynx\Perchlorate.PRO\per031410a.qld

st Altered: Monday, March 15, 2010 8:56:56 AM Eastern Standard Time
rinted: Monday, March 15, 2010 9:13:21 AM Eastern Standard Time

ame: per0314009a

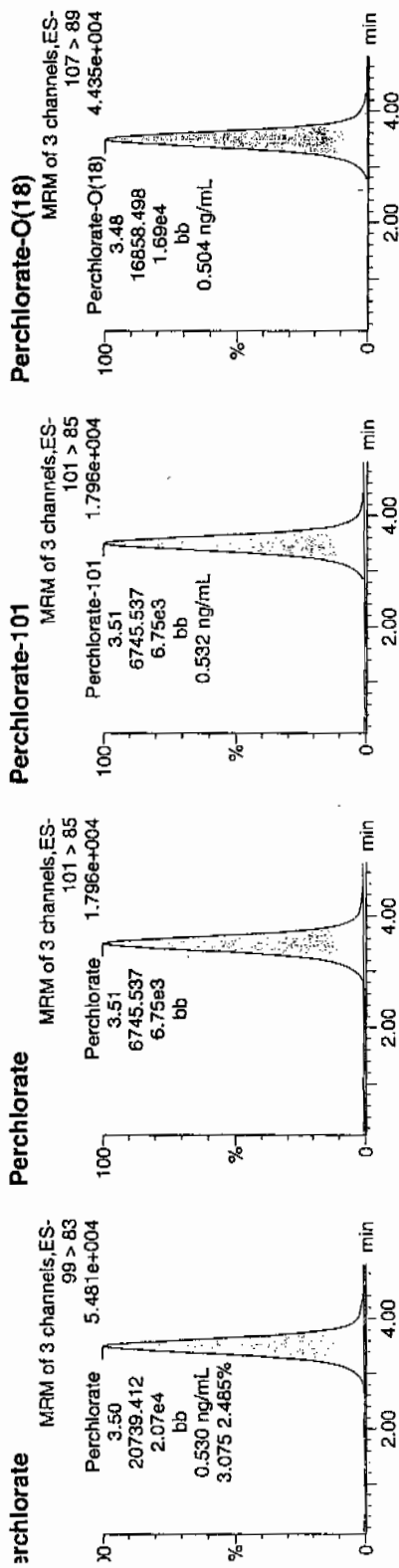
ate: 14-Mar-2010

me: 16:45:39

i: WCL100309-06ICV

al: 1:2,A

Pure
6.2
03-15-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	pg/mL	%Rec	%Dev	S/N	Ion Ratio
CL100309-06ICV	Perchlorate	99 > 83	3.50	20739.412	bb			0.5297	105.94	5.94	4083.9...	3.07
CL100309-06ICV	Perchlorate-101	101 > 85	3.51	6745.537	bb			0.5320	106.40	6.40	253.341	
CL100309-06ICV	Perchlorate-O(18)	107 > 89	3.48	16858.498	bb			0.5038	100.76	0.76	7322.5...	

$$\frac{20739.412}{39154.1} = 0.5297$$

not
3/14/10

Form 3

Perchlorate Containing Calibration Verification

GEL Job No.(SDG): 10-2069-1

Lab Name: General Engineering Laboratories

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.5	99.52	14-MAR-10 18:30	per0314022a
Perchlorate Isotope Ratio		3.12		14-MAR-10 18:30	per0314022a
Perchlorate-101	.5	.49	98.56	14-MAR-10 18:30	per0314022a
Perchlorate	.5	.5	99.03	14-MAR-10 20:15	per0314035a
Perchlorate Isotope Ratio		2.97		14-MAR-10 20:15	per0314035a
Perchlorate-101	.5	.52	103.01	14-MAR-10 20:15	per0314035a
Perchlorate	.5	.5	99.09	14-MAR-10 22:01	per0314048a
Perchlorate Isotope Ratio		3.18		14-MAR-10 22:01	per0314048a
Perchlorate-101	.5	.48	96.26	14-MAR-10 22:01	per0314048a
Perchlorate	.5	.48	95.03	14-MAR-10 23:46	per0314061a
Perchlorate Isotope Ratio		3.05		14-MAR-10 23:46	per0314061a
Perchlorate-101	.5	.48	96.29	14-MAR-10 23:46	per0314061a
Perchlorate	.5	.48	96.15	15-MAR-10 01:32	per0314074a

Form 3

Perchlorate Continuing Calibration Verification

GEL Job No.(SDG): 10-2069-1

Lab Name: General Engineering Laboratories

Lab Code: GEL

Reporting Units: ug/Kg

Perchlorate Isotope Ratio		2.99		15-MAR-10 01:32	per0314074a
Perchlorate-101	.5	5	99.3	15-MAR-10 01:32	per0314074a

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

Dataset: C:\MassLynx\Perchlorate.PRO\per031410a.qld

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Initiated: Monday, March 15, 2010 9:13:21 AM Eastern Standard Time

Sample Name: per0314022a

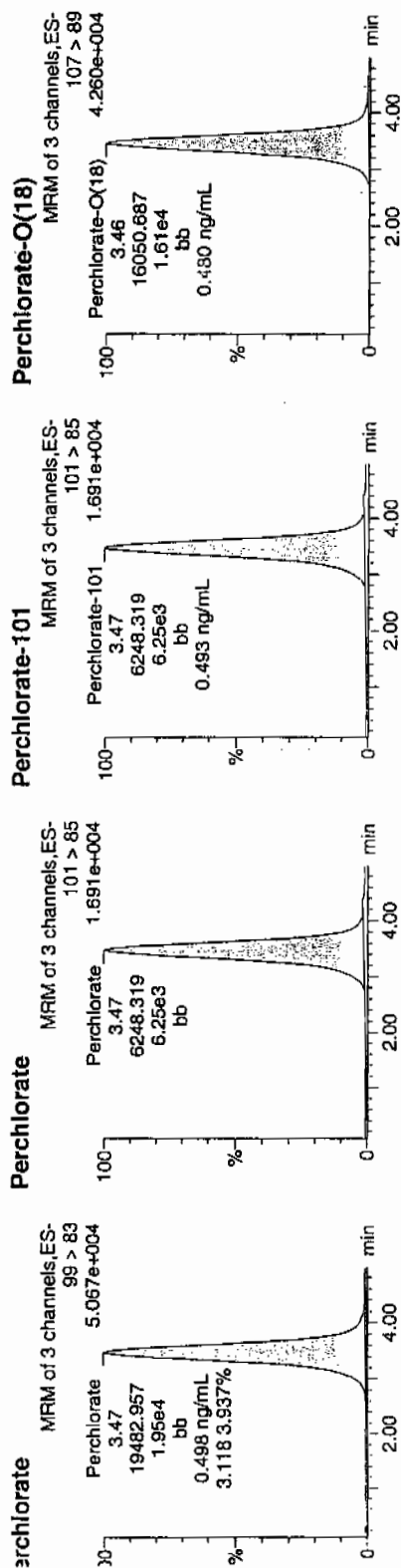
Date: 14-Mar-2010

Time: 18:30:11

File: WCL100309-06CCV

Label: 1;2,A

Page 22
03-15-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
CL100309-06CCV	Perchlorate	3.47	19482.957	19482.957	bb			0.4976	99.52	-0.48	1472.0...	3.12
CL100309-06CCV	Perchlorate-101	3.47	6248.319	6248.319	bb			0.4928	98.56	-1.44	709.723	
CL100309-06CCV	Perchlorate-O(18)	3.46	16050.687	16050.687	bb			0.4797	95.93	-4.07	2122.7...	

1477
3/16/10

uantify Sample Report MassLynx 4.0 SP4

ne GEL Group, LLC Analyst: Charters W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per031410a.qld

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 inted: Monday, March 15, 2010 9:13:21 AM Eastern Standard Time

ame: per0314035a

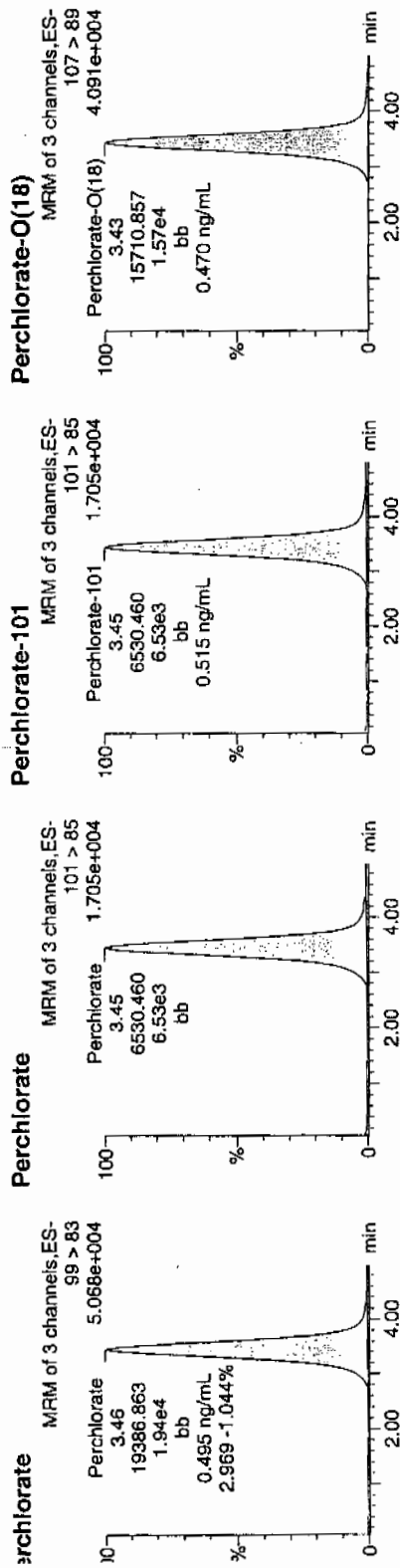
ate: 14-Mar-2010

me: 20:15:24

WCL100309-06CCV

al: 1:2,A

Pass
 03-15-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
CL100309-06CCV	Perchlorate	3.46	19386.863	19386.863	bb			0.4951	99.03	-0.97	5888.7...	2.97
CL100309-06CCV	Perchlorate-101	3.45	6530.460	6530.460	bb			0.5151	103.01	3.01	2522.5...	
CL100309-06CCV	Perchlorate-O(18)	3.43	15710.857	15710.857	bb			0.4695	93.90	-6.10	4011.6...	

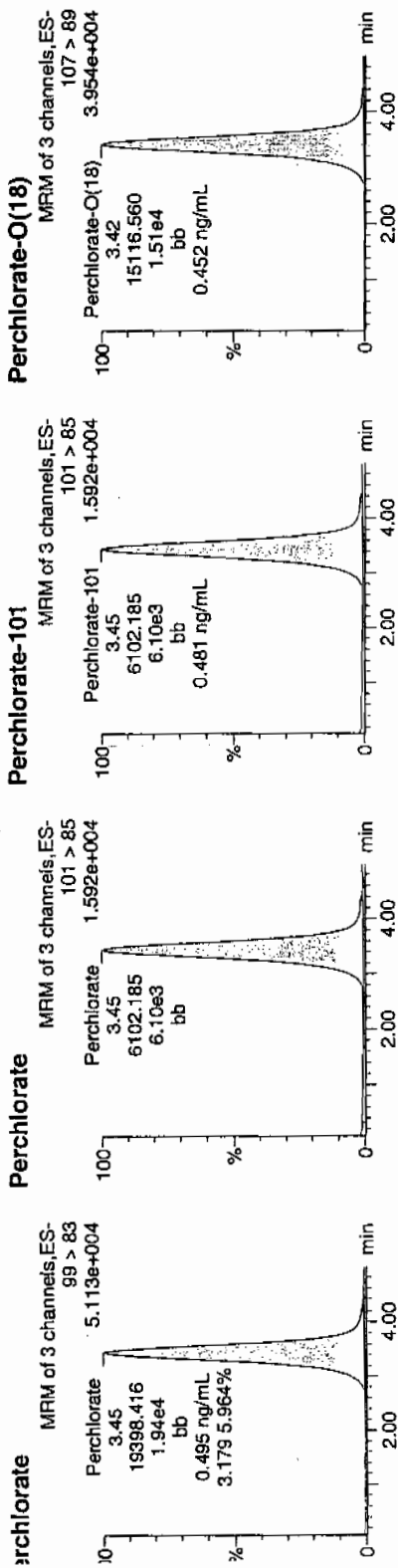
107
 3/16/10

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

atset: C:\MassLynx\Perchlorate.PRO\per031410a.qld

st Altered: Monday, March 15, 2010 8:56:56 AM Eastern Standard Time
nted: Monday, March 15, 2010 9:13:21 AM Eastern Standard Time

ame: per0314048a
ate: 14-Mar-2010
me: 22:01:03
: WCL100309-06CCV
al: 1,2,A



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
CL100309-06CCV	Perchlorate	3.45	19398.416	19398.416	bb			0.4954	99.09	-0.91	1156.9...	3.18
CL100309-06CCV	Perchlorate-101	3.45	6102.185	6102.185	bb			0.4813	96.26	-3.74	549.321	
CL100309-06CCV	Perchlorate-O(18)	3.42	15116.560	15116.560	bb			0.4517	90.35	-9.65	2164.6...	

3/16/10

Identify Sample Report MassLynx 4.0 SP4

the GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031410a.qld

First Altered: Monday, March 15, 2010 8:56:56 AM Eastern Standard Time

Intend: Monday, March 15, 2010 9:13:21 AM Eastern Standard Time

Sample: per0314061a

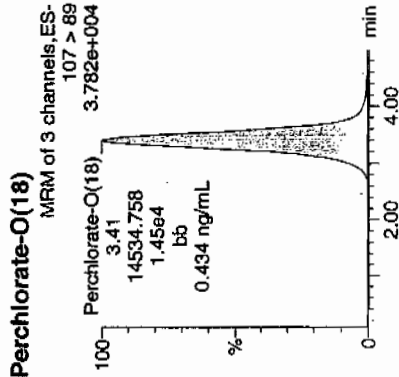
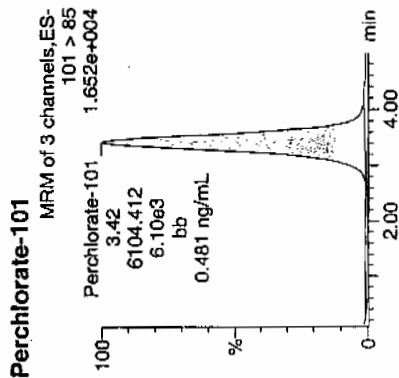
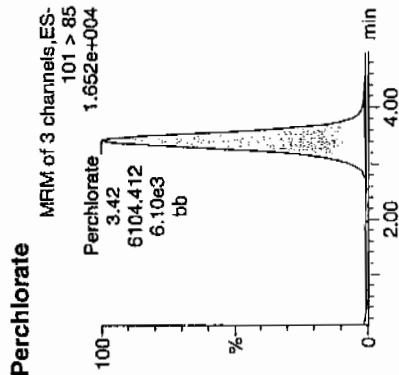
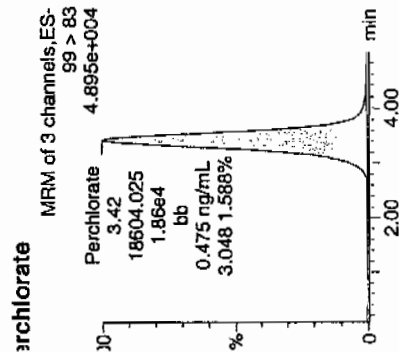
Date: 14-Mar-2010

Time: 23:46:17

File: WCL100309-06CCV

Alt: 1:2,A

Per
03-15-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
CL100309-06CCV	Perchlorate	3.42	18604.025	18604.025	bb			0.4751	95.03	-4.97	1515.8...	3.05
CL100309-06CCV	Perchlorate-101	3.42	6104.412	6104.412	bb			0.4815	96.29	-3.71	357.264	
CL100309-06CCV	Perchlorate-O(18)	3.41	14534.758	14534.758	bb			0.4344	86.87	-13.13	1454.4...	

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3/16/10

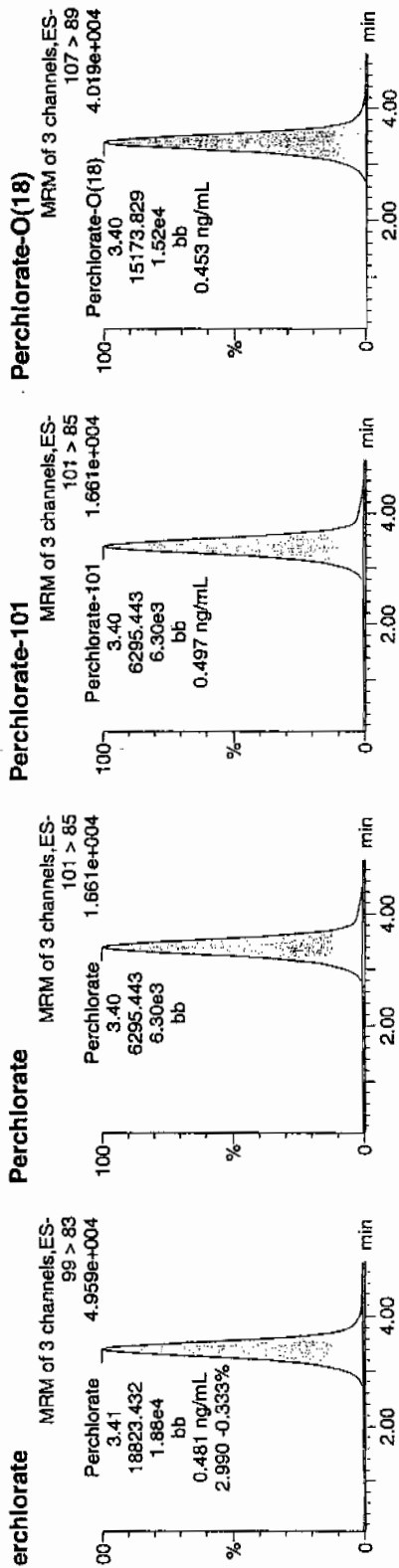
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charters W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031410a.qld

Last Altered: Monday, March 15, 2010 8:56:56 AM Eastern Standard Time
Printed: Monday, March 15, 2010 9:13:21 AM Eastern Standard Time

Sample: per0314074a
Date: 15-Mar-2010
Time: 01:32:03
File: WCL100309-06CCV
Label: 1:2,A

Pure
WCL
03-15-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
CL100309-06CCV	Perchlorate	99 > 83	3.41	18823.432	bb			0.4808	96.15	-3.85	1562.4...	2.99
CL100309-06CCV	Perchlorate-101	101 > 85	3.40	✓ 6295.443	bb			0.4965	99.30	-0.70	1743.7...	
CL100309-06CCV	Perchlorate-O(18)	107 > 89	3.40	15173.829	bb			0.4535	90.69	-9.31	2249.6...	

WCL
8/16/10

Perchlorate MDL Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-2069-1

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.05	.05	97.03	14-MAR-10 17:01	per0314011a
Perchlorate Isotope Ratio		2.72		14-MAR-10 17:01	per0314011a
Perchlorate-101	.05	.06	110.09	14-MAR-10 17:01	per0314011a
Perchlorate	.05	.05	98.74	14-MAR-10 18:46	per0314024a
Perchlorate Isotope Ratio		2.77		14-MAR-10 18:46	per0314024a
Perchlorate-101	.05	.06	110.06	14-MAR-10 18:46	per0314024a
Perchlorate	.05	.05	93.02	14-MAR-10 20:32	per0314037a
Perchlorate Isotope Ratio		2.73		14-MAR-10 20:32	per0314037a
Perchlorate-101	.05	.05	105.06	14-MAR-10 20:32	per0314037a
Perchlorate	.05	.05	98.54	14-MAR-10 22:17	per0314050a
Perchlorate Isotope Ratio		3.35		14-MAR-10 22:17	per0314050a

Perchlorate MDL Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-2069-1

Lab Code: GEL

Reporting Units: ug/kg

Perchlorate-101	.05	.05	90.8	14-MAR-10 22:17	per0314050a
Perchlorate	.05	.05	92.88	15-MAR-10 00:02	per0314063a
Perchlorate Isotope Ratio		3.19		15-MAR-10 00:02	per0314063a
Perchlorate-101	.05	.04	89.83	15-MAR-10 00:02	per0314063a
Perchlorate	.05	.04	89.61	15-MAR-10 01:48	per0314076a
Perchlorate Isotope Ratio		3.04		15-MAR-10 01:48	per0314076a
Perchlorate-101	.05	.05	91.15	15-MAR-10 01:48	per0314076a

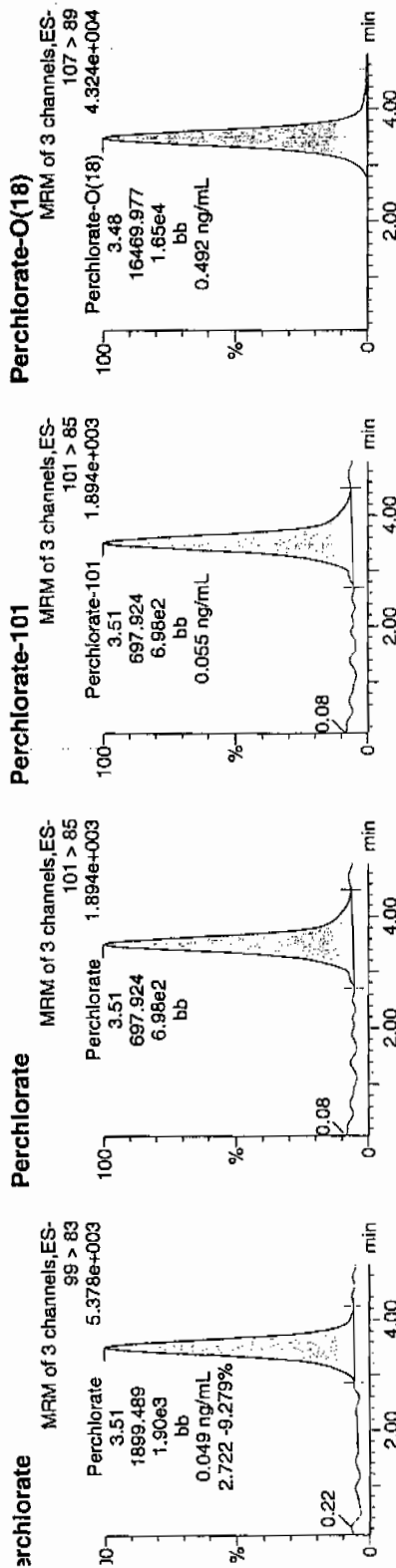
uantify Sample Report MassLynx 4.0 SP4
ne GEL Group, LLC Analyst: Charlers W. Wilson

atasset: C:\MassLynx\Perchlorate.PRO\per031410a.qld

1st Altered: Monday, March 15, 2010 8:56:56 AM Eastern Standard Time
inted: Monday, March 15, 2010 9:13:21 AM Eastern Standard Time

ame: per0314011a
ate: 14-Mar-2010
me: 17:01:44
l: WCL100309-07CRI
al: 1:2,B

Per
and
03-15-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
CL100309-07CRI	Perchlorate	99 > 83	3.51	1899.489	1899.489	bb		0.0485	97.03	-2.97	100.911	2.72
CL100309-07CRI	Perchlorate-101	101 > 85	3.51	697.924	697.924	bb		0.0550	110.09	10.09	108.979	
CL100309-07CRI	Perchlorate-O(18)	107 > 89	3.48	16469.977	16469.977	bb		0.4922	98.44	-1.56	5729.9...	

1399.439
59154.1
= 0.0485

1647
9/16/10

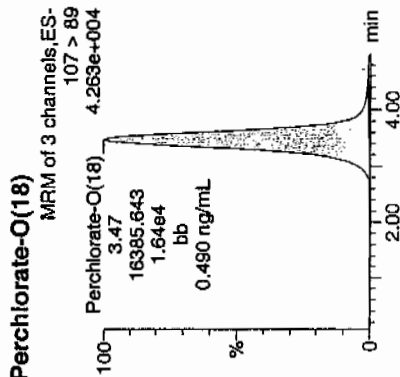
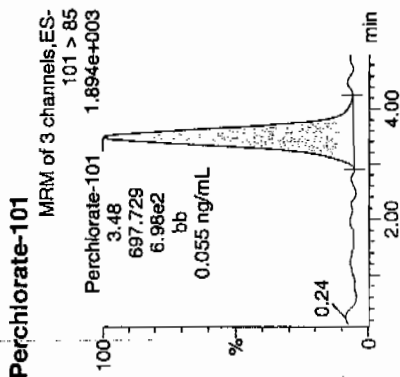
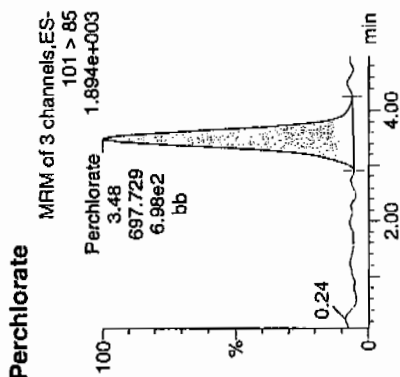
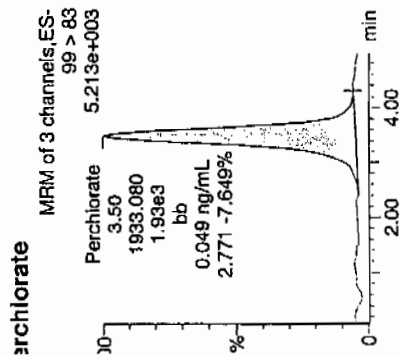
Quantify Sample Report MassLynx 4.0 SP4
 The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031410a.qld

First Altered: Monday, March 15, 2010 8:56:56 AM Eastern Standard Time
 Printed: Monday, March 15, 2010 9:13:21 AM Eastern Standard Time

Sample Name: per0314024a
 Date: 14-Mar-2010
 Time: 18:46:16
 File: WCL100309-07CRI
 Aliot: 1:2,B

Perchlorate
 03-15-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
CL100309-07CRI	Perchlorate	3.50	1933.080	1933.080	bb			0.0494	98.74	-1.26	118.141	2.77
CL100309-07CRI	Perchlorate-101	3.48	697.729	697.729	bb			0.0550	110.06	10.06	138.112	
CL100309-07CRI	Perchlorate-O(18)	3.47	16385.643	16385.643	bb			0.4897	97.93	-2.07	1621.0...	

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 3/16/10

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

Dataset: C:\MassLynx\Perchlorate.PRO\per031410a.qld

Last Altered: Monday, March 15, 2010 8:56:56 AM Eastern Standard Time
Printed: Monday, March 15, 2010 9:13:21 AM Eastern Standard Time

Sample Name: per0314037a

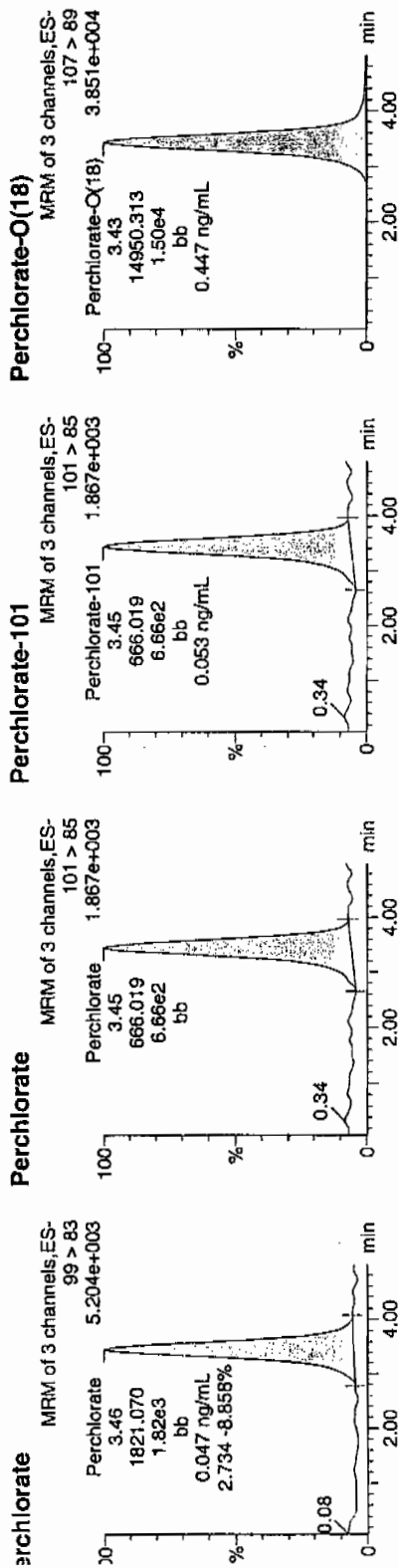
Sample Date: 14-Mar-2010

Sample Time: 20:32:00

Sample ID: WCL100309-07CRI

Sample Aliq: 1:2,B

Per
03-15-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	SN	Ion Ratio
CL100309-07CRI	Perchlorate	3.46	1821.070	1821.070	bb			0.0465	93.02	-6.98	81.504	2.73
CL100309-07CRI	Perchlorate-101	3.45	666.019	666.019	bb			0.0525	105.06	5.06	97.852	
CL100309-07CRI	Perchlorate-O(18)	3.43	14950.313	14950.313	bb			0.4468	89.36	-10.64	701.016	

Quantify Sample Report MassLynx 4.0 SP4

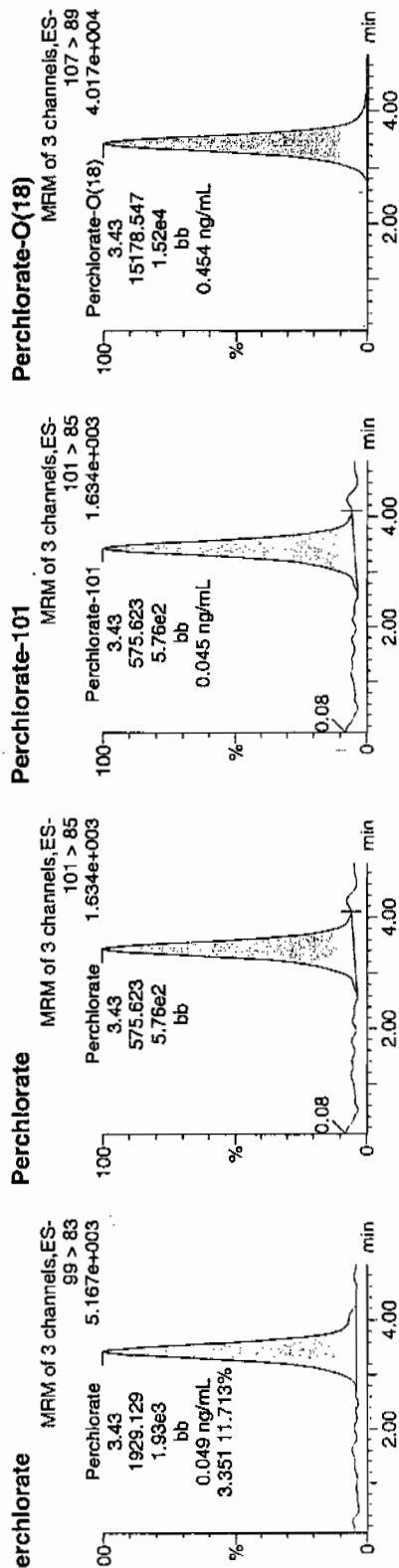
he GEL Group, LLC Analyst: Charles W. Wilson

atset: C:\MassLynx\Perchlorate.PRO\per031410a.qld

ast Altered: Monday, March 15, 2010 8:56:56 AM Eastern Standard Time
rinted: Monday, March 15, 2010 9:13:21 AM Eastern Standard Time

ame: per0314050a
ate: 14-Mar-2010
ime: 22:17:38
): WCL100309-07CRI
ial: 1:2,B

Perchlorate
03-15-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
per0314050a	99 > 83	3.43	1929.129	1929.129	bb			0.0493	98.54	-1.46	139.995	3.35
per0314050a	101 > 85	3.43	575.623	575.623	bb			0.0454	90.80	-9.20	79.878	
per0314050a	107 > 89	3.43	15178.547	15178.547	bb			0.4536	90.72	-9.28	3402.8...	

3/16/10

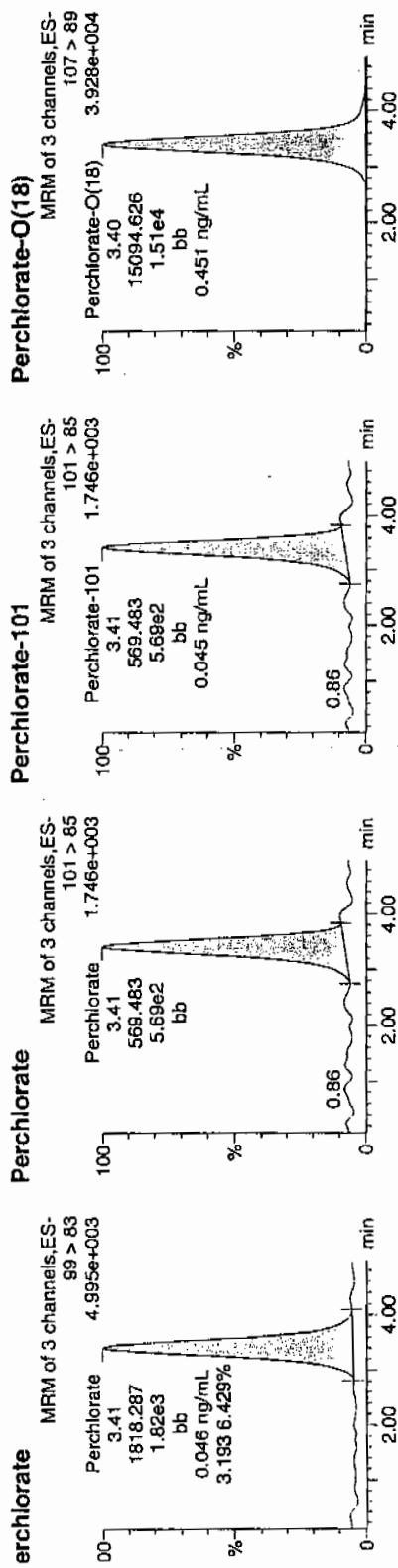
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031410a.qld

Acquired: Monday, March 15, 2010 8:56:56 AM Eastern Standard Time
Printed: Monday, March 15, 2010 9:13:21 AM Eastern Standard Time

Sample Name: per0314063a
Date: 15-Mar-2010
Time: 00:02:44
Injection: WCL100309-07CRI
Injection Volume: 1:2,B

Pure
CWS
03-15-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion:Ratio
CL100309-07CRI	Perchlorate	99 > 83	3.41	1818.287	bb			0.0464	92.88	-7.12	192.354	3.19
CL100309-07CRI	Perchlorate-101	101 > 85	3.41	569.483	bb			0.0449	89.83	-10.17	82.964	
CL100309-07CRI	Perchlorate-O(18)	107 > 89	3.40	15094.626	bb			0.4511	90.22	-9.78	3053.1...	

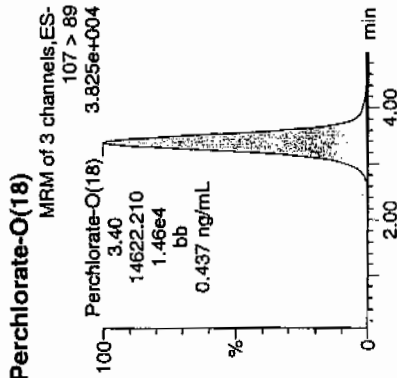
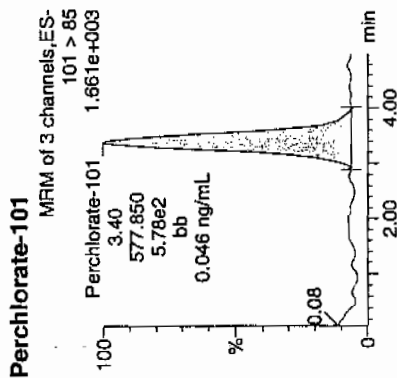
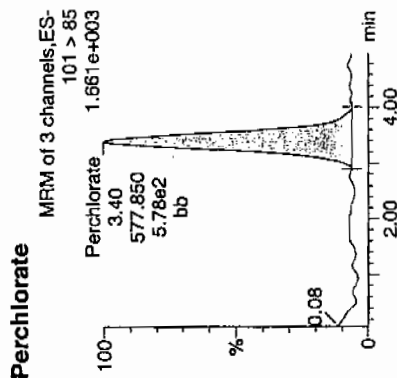
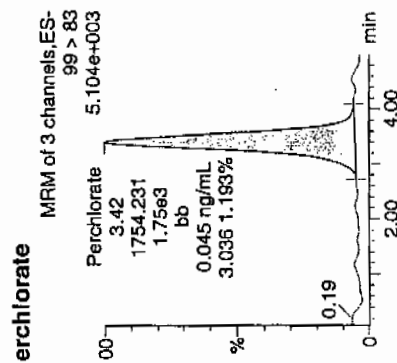
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5/16/10

Dataset: C:\MassLynx\Perchlorate.PRO\per031410a.qld

Last Altered: Monday, March 15, 2010 8:56:56 AM Eastern Standard Time
Printed: Monday, March 15, 2010 9:13:21 AM Eastern Standard Time

Sample Name: per0314076a
Date: 15-Mar-2010
Time: 01:48:30
File: WCL100309-07CRI
Label: 1:2,B

Perchlorate
03-15-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
/CL100309-07CRI	Perchlorate	3.42	1754.231	1754.231	bb			0.0448	89.61	-10.39	207.159	3.04
/CL100309-07CRI	Perchlorate-101	3.40	577.850	577.850	bb			0.0456	91.15	-8.85	58.650	
/CL100309-07CRI	Perchlorate-O(18)	3.40	14622.210	14622.210	bb			0.4370	87.39	-12.61	6788.0...	

QUALITY CONTROL

Perchlorate Analysis Data Sheet

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Lab Name: GEL Laboratories LLCLab Code: GELInstrument: LCMSMSMethod: EPA 6850 ModifiedMatrix: SOILExtraction Batch ID: 958955Extraction Type: Solid PrepSample Volume/Weight: 2.00 gConcentrated Extract Volume: 20.0

Client Sample No.

MBDate Received: 06-MAR-10GEL Job No (SDG): 10-2069-1GEL Sample ID: 1202056594Date Filtered: 06-MAR-10Injection Volume (uL): 20%Solids: 100

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.5	2	0.500	ug/kg	U	1	15-MAR-10 00:27	per0314066a
	Perchlorate Isotope Ratio						1	15-MAR-10 00:27	per0314066a
14797-73-0	Perchlorate-101	.5	2	0.500	ug/kg	U	1	15-MAR-10 00:27	per0314066a
	Perchlorate-O(18)			4.53	ug/kg		1	15-MAR-10 00:27	per0314066a

[^] 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\per031410a.qld

Last Altered: Monday, March 15, 2010 8:56:56 AM Eastern Standard Time
Printed: Monday, March 15, 2010 9:13:21 AM Eastern Standard Time

Name: per0314066a

Date: 15-Mar-2010

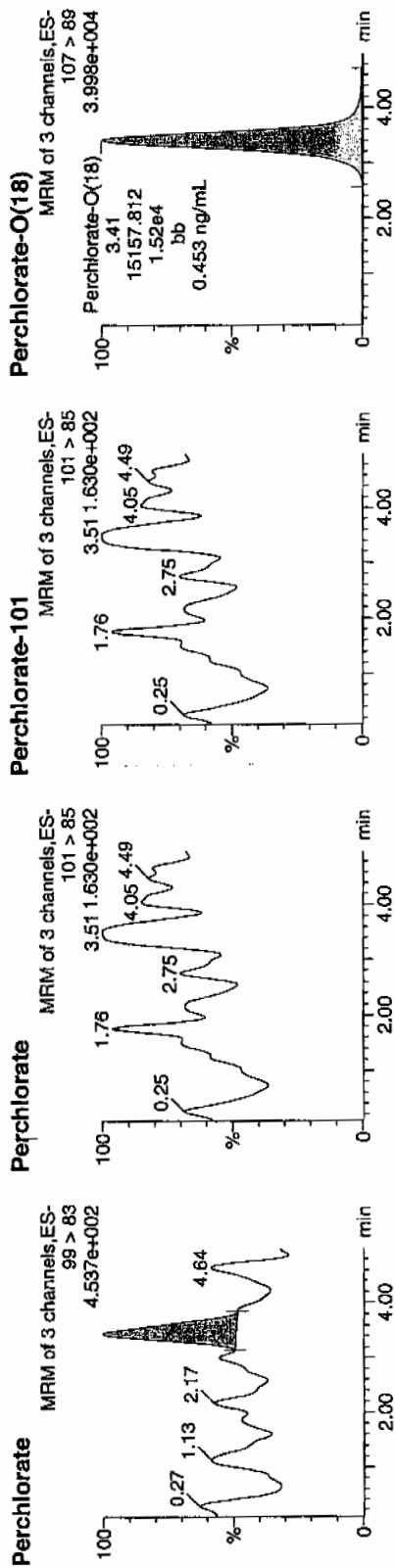
Time: 00:27:31

ID: 1202056594

Vial: 2:4,A

LAUW | 9525463 | 5057D | MO | 11

03-15-10



ID	Name	Flag	Area	Response	Flag	Mod	Time	nm/mL	% Rec	% Dev	S/N	Ion Ratio
1202056594	Perchlorate	99 > 83	3.45	74.077	bb		0.0019	0.0019	4.938	0.00		
1202056594	Perchlorate-101	101 > 85										
1202056594	Perchlorate-O(18)	107 > 89	3.41	15157.812	bb		0.4530	90.60	-9.40	3322.9		

3/16/10

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: EPA 6850 Modified

Matrix: SOIL

Extraction Batch ID: 958955

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

LCS

Date Received: 06-MAR-10

GEL Job No (SDG): 10-2069-1

GEL Sample ID: 1202056595

Date Filtered: 06-MAR-10

Injection Volume (uL): 20

%Solids: 100

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.5	2	2.04	ug/kg		1	15-MAR-10 00:35	per0314067a
	Perchlorate Isotope Ratio			2.99			1	15-MAR-10 00:35	per0314067a
14797-73-0	Perchlorate-101	.5	2	2.11	ug/kg		1	15-MAR-10 00:35	per0314067a
	Perchlorate-O(18)			4.70	ug/kg		1	15-MAR-10 00:35	per0314067a

[^] 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

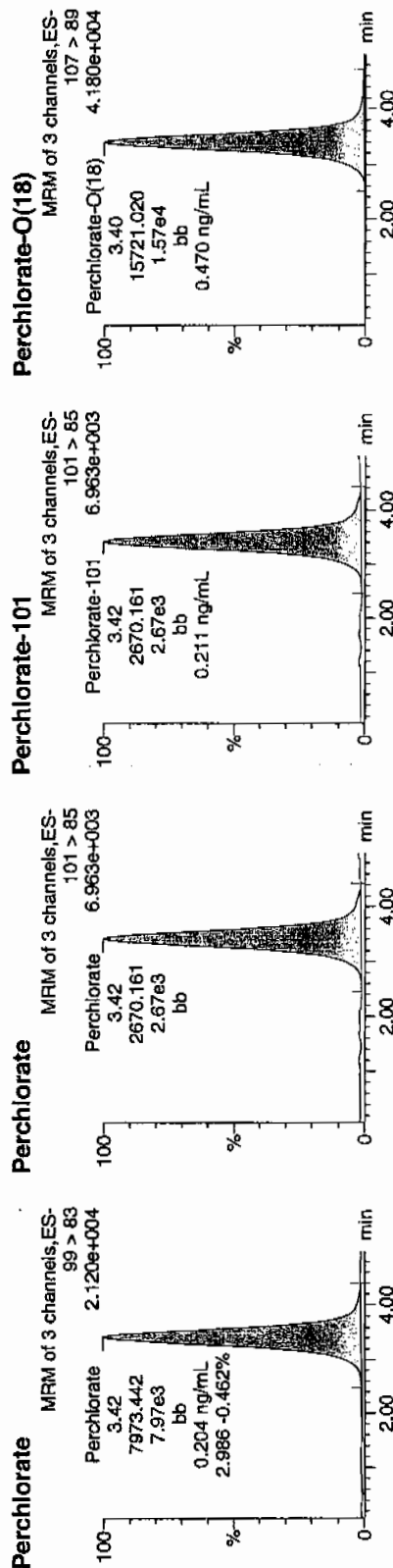
Dataset: C:\MassLynx\Perchlorate.PRO\per031410a.qld

Last Altered: Monday, March 15, 2010 8:56:56 AM Eastern Standard Time
Printed: Monday, March 15, 2010 9:13:21 AM Eastern Standard Time

Name: per0314067a
Date: 15-Mar-2010
Time: 00:35:45
ID: 1202056595
Vial: 2:4,B

03-15-10

1202056595 | 50020 | LCS | 111



ID	Name	Area	Hit	Response	Flags	Mod	Time	Conc	Ratio	SN	Ion Ratio
1202056595	Perchlorate	99 > 83	3.42	7973.442	bb			0.2036	101.82	1.82	499.371
1202056595	Perchlorate-101	101 > 85	3.42	2670.161	bb			0.2106	105.30	5.30	251.541
1202056595	Perchlorate-O(18)	107 > 89	3.40	15721.020	bb			0.4698	93.96	-6.04	3141.7...

7973.442
39154.1

0.2036

MISCELLANEOUS DATA

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.

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: 958955 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)
1202056594 MB	06-MAR-2010 16:48:00	2	20	10
1202056595 LCS	06-MAR-2010 16:48:00	2	20	10
248041001	06-MAR-2010 16:48:00	2	20	10
248041002	06-MAR-2010 16:48:00	2	20	10
248041003	06-MAR-2010 16:48:00	2	20	10
248041004	06-MAR-2010 16:48:00	2	20	10
248041005	06-MAR-2010 16:48:00	2	20	10
248054001	06-MAR-2010 16:48:00	2	20	10
248054002	06-MAR-2010 16:48:00	2	20	10
248054003	06-MAR-2010 16:48:00	2	20	10
248054004	06-MAR-2010 16:48:00	2	20	10
248068001	06-MAR-2010 16:48:00	2	20	10
248068002	06-MAR-2010 16:48:00	2	20	10
248110001	06-MAR-2010 16:48:00	2	20	10
1202056596 MS (248110001)	06-MAR-2010 16:48:00	2	20	10
1202056597 MSD (248110001)	06-MAR-2010 16:48:00	2	20	10
248110002	06-MAR-2010 16:48:00	2	20	10
248110003	06-MAR-2010 16:48:00	2	20	10
248110004	06-MAR-2010 16:48:00	2	20	10
248110005	06-MAR-2010 16:48:00	2	20	10
248110006	06-MAR-2010 16:48:00	2	20	10
248110007	06-MAR-2010 16:48:00	2	20	10
248110008	06-MAR-2010 16:48:00	2	20	10
1202056598 ICS	06-MAR-2010 16:48:00	2	20	10

Comments:

Type	Sample Id	Description	Serial Number	Spike Amt	Units
ICS	1202056598	10 ug/L ICV/CCV Second Source	UCL100226-01.1	.4	mL
LCS	1202056595	10 ug/L ICV/CCV Second Source	UCL100226-01.1	.4	mL
MS	1202056596	10 ug/L ICV/CCV Second Source	UCL100226-01.1	.4	mL
MSD	1202056597	10 ug/L ICV/CCV Second Source	UCL100226-01.1	.4	mL

Desalting cartridges used: 100217-1-H & 100304-1-Ba

GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS#2

Date: 03/14/10
 Extr. Injection Volume: 20uL
 Sequence Number: per031410a
 Initial Calibration Date: 03/14/10

Method: EPA 6850-Modified
 Int. Std.: UCL100210-01
 Mobile Phase Lot#: 1278668, 1271949
 Standard-Samp Reagent Lot#: 1271949

Reviewed BY: AMF
 Date: 3/14/10
 SOP: GL-OA-E-067 Rev.6
 Alt Check Std. ID: WCL100309-06

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC_Flag
per0314001a	IPB001	CWW	3/14/2010 15:41			1		USE	B
per0314002a	IPB001	CWW	3/14/2010 15:49			1		USE	B
per0314003a	WCLICAL-01	CWW	3/14/2010 15:57			1		USE	I
per0314004a	WCLICAL-02	CWW	3/14/2010 16:05			1		USE	I
per0314005a	WCLICAL-03	CWW	3/14/2010 16:13			1		USE	I
per0314006a	WCLICAL-04	CWW	3/14/2010 16:21			1		USE	I
per0314007a	WCLICAL-05	CWW	3/14/2010 16:29			1		USE	I
per0314008a	IPB002	CWW	3/14/2010 16:37			1		USE	B
per0314009a	WCLICV	CWW	3/14/2010 16:45			1		USE	C
per0314010a	IPB003	CWW	3/14/2010 16:53			1		USE	B
per0314011a	WCLCRI	CWW	3/14/2010 17:01			1		USE	C
per0314012a	1202054222	CWW	3/14/2010 17:09	957943	VARIOUS	1	LANL	USE	S
per0314013a	1202054223	CWW	3/14/2010 17:17	957943	VARIOUS	1	LANL	USE	S
per0314014a	1202054226	CWW	3/14/2010 17:25	957943	VARIOUS	1	LANL	USE	S
per0314015a	247539001	CWW	3/14/2010 17:33	957943	10-1960	1	LANL	USE	S
per0314016a	247539002	CWW	3/14/2010 17:41	957943	10-1960	1	LANL	USE	S
per0314017a	1202054224	CWW	3/14/2010 17:49	957943	10-1960	1	LANL	USE	S
per0314018a	1202054225	CWW	3/14/2010 17:58	957943	10-1960	1	LANL	USE	S
per0314019a	247539003	CWW	3/14/2010 18:06	957943	10-1960	1	LANL	USE	S
per0314020a	247539004	CWW	3/14/2010 18:14	957943	10-1960	1	LANL	USE	S
per0314021a	247539005	CWW	3/14/2010 18:22	957943	10-1960	1	LANL	USE	S
per0314022a	WCLCCV	CWW	3/14/2010 18:30			1		USE	C
per0314023a	IPB004	CWW	3/14/2010 18:38			1		USE	B
per0314024a	WCLCRI	CWW	3/14/2010 18:46			1		USE	C
per0314025a	247539006	CWW	3/14/2010 18:54	957943	10-1960	1	LANL	USE	S
per0314026a	247539007	CWW	3/14/2010 19:02	957943	10-1960	1	LANL	USE	S
per0314027a	247539008	CWW	3/14/2010 19:10	957943	10-1960	1	LANL	USE	S
per0314028a	247539009	CWW	3/14/2010 19:18	957943	10-1960	1	LANL	USE	S
per0314029a	247539010	CWW	3/14/2010 19:26	957943	10-1960	1	LANL	USE	S

per0314030a	247539011	CWW	3/14/2010 19:34	957943	10-1960	1	LANL	USE	S
per0314031a	247790002	CWW	3/14/2010 19:42	957943	10-1981	1	LANL	USE	S
per0314032a	247790003	CWW	3/14/2010 19:51	957943	10-1981	1	LANL	USE	S
per0314033a	247794001	CWW	3/14/2010 19:59	957943	10-1983-1	1	LANL	USE	S
per0314034a	247794002	CWW	3/14/2010 20:07	957943	10-1983-1	1	LANL	USE	S
per0314035a	WCLCCV	CWW	3/14/2010 20:15			1		USE	C
per0314036a	IPB005	CWW	3/14/2010 20:23			1		USE	B
per0314037a	WCLCRI	CWW	3/14/2010 20:32			1		USE	C
per0314038a	247794003	CWW	3/14/2010 20:40	957943	10-1983-1	1	LANL	USE	S
per0314039a	247794004	CWW	3/14/2010 20:48	957943	10-1983-1	1	LANL	USE	S
per0314040a	247794005	CWW	3/14/2010 20:56	957943	10-1983-1	1	LANL	USE	S
per0314041a	IPB006	CWW	3/14/2010 21:04			1		USE	B
per0314042a	1202056703	CWW	3/14/2010 21:12	959038	VARIOUS	1	LANL	USE	S
per0314043a	1202056704	CWW	3/14/2010 21:20	959038	VARIOUS	1	LANL	USE	S
per0314044a	1202056709	CWW	3/14/2010 21:28	959038	VARIOUS	1	LANL	USE	S
per0314045a	247431002	CWW	3/14/2010 21:36	959038	10-1927	1	LANL	USE	S
per0314046a	247817001	CWW	3/14/2010 21:44	959038	10-2001	1	LANL	USE	S
per0314047a	247829001	CWW	3/14/2010 21:53	959038	10-2006	1	LANL	USE	S
per0314048a	WCLCCV	CWW	3/14/2010 22:01			1		USE	C
per0314049a	IPB007	CWW	3/14/2010 22:09			1		USE	B
per0314050a	WCLCRI	CWW	3/14/2010 22:17			1		USE	C
per0314051a	248023001	CWW	3/14/2010 22:25	959038	10-2040	1	LANL	USE	S
per0314052a	248024002	CWW	3/14/2010 22:34	959038	10-2046	1	LANL	USE	S
per0314053a	248024004	CWW	3/14/2010 22:42	959038	10-2046	1	LANL	USE	S
per0314054a	248044001	CWW	3/14/2010 22:50	959038	10-2058	1	LANL	USE	S
per0314055a	1202056707	CWW	3/14/2010 22:58	959038	10-2058	1	LANL	USE	S
per0314056a	1202056708	CWW	3/14/2010 23:06	959038	10-2058	1	LANL	USE	S
per0314057a	248044003	CWW	3/14/2010 23:14	959038	10-2058	1	LANL	USE	S
per0314058a	248044005	CWW	3/14/2010 23:22	959038	10-2058	1	LANL	USE	S
per0314059a	248044006	CWW	3/14/2010 23:30	959038	10-2058	1	LANL	USE	S
per0314060a	248164001	CWW	3/14/2010 23:38	959038	10-2111	1	LANL	USE	S
per0314061a	WCLCCV	CWW	3/14/2010 23:46			1		USE	C
per0314062a	IPB008	CWW	3/14/2010 23:54			1		USE	B
per0314063a	WCLCRI	CWW	3/15/2010 0:02			1		USE	C
per0314064a	248164003	CWW	3/15/2010 0:10	959038	10-2111	1	LANL	USE	S
per0314065a	IPB009	CWW	3/15/2010 0:19			1		USE	B
per0314066a	1202056594	CWW	3/15/2010 0:27	958963	VARIOUS	1	LANL	USE	S

per0314067a	1202056595	CWW	3/15/2010 0:35	958963	VARIOUS	1	LANL	USE	S
per0314068a	1202056598	CWW	3/15/2010 0:43	958963	VARIOUS	1	LANL	USE	S
per0314069a	248041001	CWW	3/15/2010 0:51	958963	10-2069-1	1	LANL	USE	S
per0314070a	248041002	CWW	3/15/2010 0:59	958963	10-2069-1	1	LANL	USE	S
per0314071a	248041003	CWW	3/15/2010 1:07	958963	10-2069-1	1	LANL	USE	S
per0314072a	248041004	CWW	3/15/2010 1:15	958963	10-2069-1	1	LANL	USE	S
per0314073a	248041005	CWW	3/15/2010 1:24	958963	10-2069-1	1	LANL	USE	S
per0314074a	WCLCCV	CWW	3/15/2010 1:32			1		USE	C
per0314075a	IPB010	CWW	3/15/2010 1:40			1		USE	B
per0314076a	WCLCRI	CWW	3/15/2010 1:48			1		USE	C
per0314077a	248054001	CWW	3/15/2010 1:56	958963	10-2081-1	1	LANL	USE	S
per0314078a	248054002	CWW	3/15/2010 2:04	958963	10-2081-1	1	LANL	USE	S
per0314079a	248054003	CWW	3/15/2010 2:12	958963	10-2081-1	1	LANL	USE	S
per0314080a	248054004	CWW	3/15/2010 2:21	958963	10-2081-1	1	LANL	USE	S
per0314081a	248068001	CWW	3/15/2010 2:29	958963	10-2088	1	LANL	USE	S
per0314082a	248068002	CWW	3/15/2010 2:37	958963	10-2088	1	LANL	USE	S
per0314083a	248110001	CWW	3/15/2010 2:45	958963	10-2090-1	1	LANL	USE	S
per0314084a	1202056596	CWW	3/15/2010 2:53	958963	10-2090-1	1	LANL	USE	S
per0314085a	1202056597	CWW	3/15/2010 3:01	958963	10-2090-1	1	LANL	USE	S
per0314086a	248110002	CWW	3/15/2010 3:09	958963	10-2090-1	1	LANL	USE	S
per0314087a	WCLCCV	CWW	3/15/2010 3:17			1		USE	C
per0314088a	IPB011	CWW	3/15/2010 3:25			1		USE	B
per0314089a	WCLCRI	CWW	3/15/2010 3:34			1		USE	C
per0314090a	248110003	CWW	3/15/2010 3:42	958963	10-2090-1	1	LANL	USE	S
per0314091a	248110004	CWW	3/15/2010 3:50	958963	10-2090-1	1	LANL	USE	S
per0314092a	248110005	CWW	3/15/2010 3:58	958963	10-2090-1	1	LANL	USE	S
per0314093a	248110006	CWW	3/15/2010 4:06	958963	10-2090-1	1	LANL	USE	S
per0314094a	248110007	CWW	3/15/2010 4:14	958963	10-2090-1	1	LANL	USE	S
per0314095a	248110008	CWW	3/15/2010 4:22	958963	10-2090-1	1	LANL	USE	S
per0314096a	WCLCCV	CWW	3/15/2010 4:30			1		USE	C
per0314097a	IPB012	CWW	3/15/2010 4:39			1		USE	B
per0314098a	WCLCRI	CWW	3/15/2010 4:47			1		USE	C
per0314099a	1202056604	CWW	3/15/2010 4:55	958968	VARIOUS	1	LANL	DUSE_RA	S
per0314100a	1202056605	CWW	3/15/2010 5:03	958968	VARIOUS	1	LANL	DUSE_RA	S
per0314101a	1202056613	CWW	3/15/2010 5:11	958968	VARIOUS	1	LANL	DUSE_RA	S
per0314102a	248058001	CWW	3/15/2010 5:19	958968	10-2083	1	LANL	DUSE_RA	S
per0314103a	248058002	CWW	3/15/2010 5:27	958968	10-2083	1	LANL	DUSE_RA	S

per0314104a	248058003	CWW	3/15/2010 5:35	958968	10-2083	1	LANL	DUSE_RA	S
per0314105a	248058004	CWW	3/15/2010 5:43	958968	10-2083	1	LANL	DUSE_RA	S
per0314106a	WCLCCV	CWW	3/15/2010 5:52			1		DUSE	C
per0314107a	IPB013	CWW	3/15/2010 6:00			1		DUSE	B
per0314108a	WCLCRI	CWW	3/15/2010 6:08			1		DUSE	C
per0314109a	248058005	CWW	3/15/2010 6:16	958968	10-2083	1	LANL	DUSE_RA	S
per0314110a	248058006	CWW	3/15/2010 6:24	958968	10-2083	1	LANL	DUSE_RA	S
per0314111a	248058007	CWW	3/15/2010 6:32	958968	10-2083	1	LANL	DUSE_RA	S
per0314112a	248058008	CWW	3/15/2010 6:40	958968	10-2083	1	LANL	DUSE_RA	S
per0314113a	248065001	CWW	3/15/2010 6:49	958968	10-2086	1	LANL	DUSE_RA	S
per0314114a	1202056606	CWW	3/15/2010 6:57	958968	10-2086	1	LANL	DUSE_RA	S
per0314115a	1202056607	CWW	3/15/2010 7:05	958968	10-2086	1	LANL	DUSE_RA	S
per0314116a	WCLCCV	CWW	3/15/2010 7:13			1		DUSE	C
per0314117a	IPB014	CWW	3/15/2010 7:21			1		DUSE	B
per0314118a	WCLCRI	CWW	3/15/2010 7:29			1		DUSE	C

Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031410a.qld

Last Altered: Monday, March 15, 2010 8:56:56 AM Eastern Standard Time
Printed: Monday, March 15, 2010 9:13:21 AM Eastern Standard Time

Sample: per0314084a

Date: 15-Mar-2010

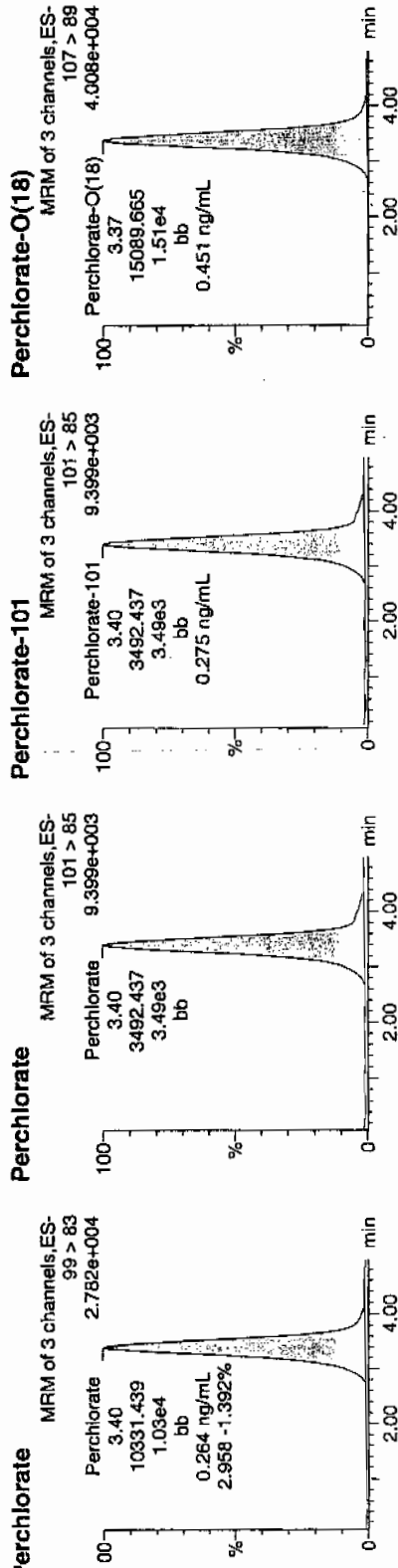
Time: 02:53:29

ID: 1202056596

File: 2.6.D

LAN-958963 | 50720 | MS | 1

03-15-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
202056596	Perchlorate	3.40	10331.439	10331.439	bb			0.2639	131.93	31.93	987.126	2.96
202056596	Perchlorate-101	3.40	3492.437	3492.437	bb			0.2754	137.72	37.72	970.227	
202056596	Perchlorate-O(18)	3.37	15089.665	15089.665	bb			0.4509	90.19	-9.81	1227.9...	

10331.439
3492.437
2.9582

3/16/10

Dataset: C:\MassLynx\Perchlorate.PRO\per031410a.qid

Last Altered: Monday, March 15, 2010 8:56:56 AM Eastern Standard Time
Printed: Monday, March 15, 2010 9:13:21 AM Eastern Standard Time

Name: per0314085a

Date: 15-Mar-2010

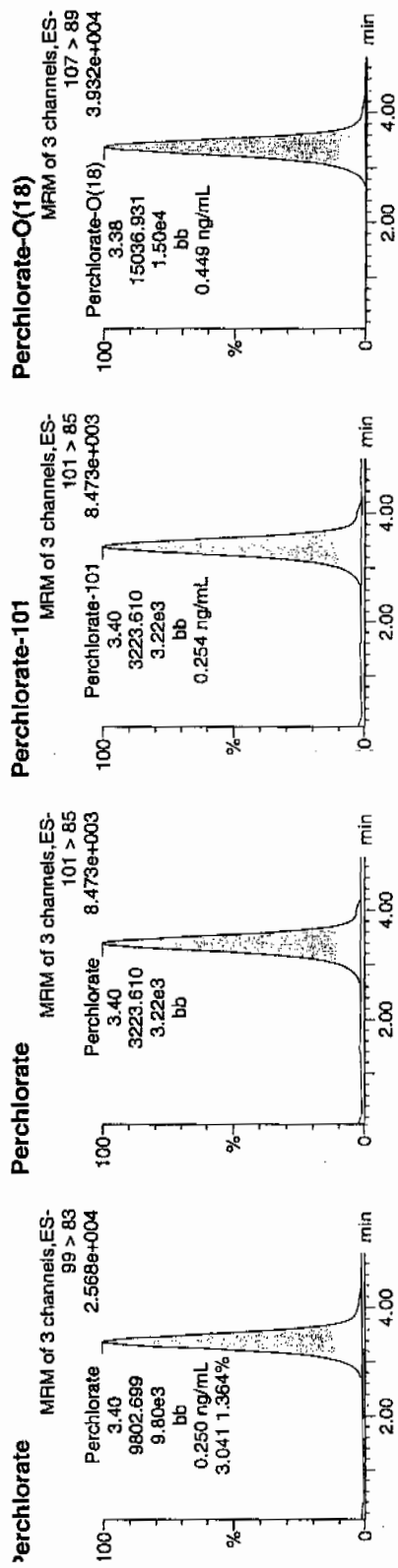
Time: 03:01:31

D: 1202056597

/ial: 2:6,E

663
03-15-10

1292-758963 | 5020 | 11



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
202056597	Perchlorate	3.40	9802.699	9802.699	bb			0.2504	125.18	25.18	572.848	3.04
202056597	Perchlorate-101	3.40	3223.610	3223.610	bb			0.2542	127.12	27.12	1455.2...	
202056597	Perchlorate-O(18)	3.38	15036.931	15036.931	bb			0.4494	89.87	-10.13	2304.9...	

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Metals Analysis

Case Narrative

**Metals Fractional Narrative
Los Alamos National Laboratory (LANL)
SDG 10-2069**

Sample Analysis

Sample ID	Client ID
248039001	RE15-10-8406
1202056808	Method Blank (MB) ICP
1202056809	Laboratory Control Sample (LCS)
1202056812	248046001(RE36-10-7528L) Serial Dilution (SD)
1202056810	248046001(RE36-10-7528D) Sample Duplicate (DUP)
1202056811	248046001(RE36-10-7528S) Matrix Spike (MS)
1202056813	Method Blank (MB) ICP-MS
1202056814	Laboratory Control Sample (LCS)
1202056817	248046002(RE36-10-7527L) Serial Dilution (SD)
1202056815	248046002(RE36-10-7527D) Sample Duplicate (DUP)
1202056816	248046002(RE36-10-7527S) Matrix Spike (MS)
1202056573	Method Blank (MB) CVAA
1202056574	Laboratory Control Sample (LCS)
1202056577	248145001(WST16-10-12239L) Serial Dilution (SD)
1202056575	248145001(WST16-10-12239D) Sample Duplicate (DUP)
1202056576	248145001(WST16-10-12239S) Matrix Spike (MS)

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

Method/Analysis Information

Analytical Batch:	959089, 959091 and 958951
Prep Batch :	959088, 959090 and 958949
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 standards met the advisory control limits with the exceptions of beryllium and potassium that recovered outside of the advisory control limits of 70-130%.

ICSA/ICSAB Statement

All interference check samples (ICSA and ICSAB) associated with this SDG met the established acceptance criteria.

Continuing Calibration Blank (CCB) Requirements

All continuing calibration blanks (CCB) bracketing this batch met the established acceptance criteria.

Continuing Calibration Verification (CCV) Requirements

All continuing calibration verifications (CCV) bracketing this SDG met the acceptance criteria.

Quality Control (QC) Information**Method Blank (MB) Statement**

The 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: 248046001 (RE36-10-7528)-ICP, 248046002 (RE36-10-7527)-ICP-MS and 248145001 (WST16-10-12239)-CVAA.

Matrix Spike (MS) Recovery Statement

The percent recoveries (%R) obtained from the MS analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. All applicable elements met the acceptance criteria.

Duplicate Relative Percent Difference (RPD) Statement

The RPD obtained from the designated sample duplicate (DUP) is evaluated based on acceptance criteria of 20% when the sample is >5X the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control of +/-RL is used to evaluate the DUP results. All applicable analytes met these requirements.

Serial Dilution % Difference Statement

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

Technical Information**Holding Time Specifications**

GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are

calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Sample Dilutions

Dilutions are performed to minimize matrix interferences resulting from elevated mineral element concentrations present in solid samples and/or to bring over range target analyte concentrations into the linear calibration range of the instrument. The samples in this SDG did not require dilutions.

Preparation Information

The samples in this SDG were prepared exactly according to the cited SOP.

Miscellaneous Information

Electronic Packaging Comment

This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Data Exception (DER) Documentation

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

Additional Comments

Additional comments were not required for this SDG.

Certification Statement

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

Review Validation:

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

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

Reviewer: Nikhil A. Emore Date: 4.17.10

Sample Data Summary

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2069

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 248039001

BASIS: As Received

DATE COLLECTED 19-FEB-10

CLIENT ID: RE15-10-8406

LEVEL: Low

DATE RECEIVED 25-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	03/26/10 23:23	032610A-1	959089
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	PRB	04/13/10 13:01	100413-3	959091
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	03/26/10 23:23	032610A-1	959089
7440-39-3	Barium	5	ug/L	U	1	5	5	1	P	HSC	03/26/10 23:23	032610A-1	959089
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	BCD1	04/12/10 01:35	100411-2	959091
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	BCD1	04/12/10 01:35	100411-2	959091
7440-70-2	Calcium	200	ug/L	U	50	200	200	1	P	HSC	03/26/10 23:23	032610A-1	959089
7440-47-3	Chromium	5	ug/L	U	1	5	5	1	P	HSC	03/26/10 23:23	032610A-1	959089
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	03/26/10 23:23	032610A-1	959089
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	03/26/10 23:23	032610A-1	959089
7439-89-6	Iron	100	ug/L	U	30	100	100	1	P	HSC	03/26/10 23:23	032610A-1	959089
7439-92-1	Lead	0.776	ug/L	J	0.5	2	2	1	MS	BCD1	04/12/10 01:35	100411-2	959091
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	03/26/10 23:23	032610A-1	959089
7439-96-5	Manganese	5	ug/L	U	1	5	5	1	MS	BCD1	04/12/10 01:35	100411-2	959091
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JXLI	03/02/10 11:40	030210W3-6	958951
7440-02-0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	03/26/10 23:23	032610A-1	959089
7440-09-7	Potassium	51.3	ug/L	J	50	150	150	1	P	HSC	03/26/10 23:23	032610A-1	959089
7782-49-2	Selenium	7.2	ug/L	J	5	30	30	1	P	HSC	03/26/10 23:23	032610A-1	959089
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	03/26/10 23:23	032610A-1	959089
7440-23-5	Sodium	123	ug/L	J	100	300	300	1	P	HSC	03/26/10 23:23	032610A-1	959089
7440-28-0	Thallium	1	ug/L	U	0.3	1	1	1	MS	BCD1	04/12/10 01:35	100411-2	959091
7440-61-1	Uranium	0.20	ug/L	U	0.05	0.2	0.2	1	MS	PRB	04/13/10 16:04	100413-5	959091
7440-62-2	Vanadium	1.59	ug/L	J	1	5	5	1	P	HSC	03/26/10 23:23	032610A-1	959089
7440-66-6	Zinc	10	ug/L	U	3.3	10	10	1	P	HSC	03/26/10 23:23	032610A-1	959089

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
958951	958949	SW846 7470A Prep	20	mL	20	mL	03/01/10	TXB3
959089	959088	SW846 3005A	50	mL	50	mL	03/04/10	LYH1
959091	959090	SW846 3005A	50	mL	50	mL	03/02/10	FGA

Quality Control Summary

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-2069

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS4,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	5.2	ug/L	5	ug/L	104	90.0 – 110.0	AV	02-MAR-10 08:39	030210W3-6
	Aluminum	5270	ug/L	5000	ug/L	105.4	90.0 – 110.0	P	26-MAR-10 19:33	032610A-1
	Arsenic	485	ug/L	500	ug/L	97	90.0 – 110.0	P	26-MAR-10 19:33	032610A-1
	Barium	513	ug/L	500	ug/L	102.6	90.0 – 110.0	P	26-MAR-10 19:33	032610A-1
	Calcium	5210	ug/L	5000	ug/L	104.2	90.0 – 110.0	P	26-MAR-10 19:33	032610A-1
	Chromium	492	ug/L	500	ug/L	98.3	90.0 – 110.0	P	26-MAR-10 19:33	032610A-1
	Cobalt	520	ug/L	500	ug/L	104	90.0 – 110.0	P	26-MAR-10 19:33	032610A-1
	Copper	511	ug/L	500	ug/L	102.3	90.0 – 110.0	P	26-MAR-10 19:33	032610A-1
	Iron	5130	ug/L	5000	ug/L	102.7	90.0 – 110.0	P	26-MAR-10 19:33	032610A-1
	Magnesium	5100	ug/L	5000	ug/L	102	90.0 – 110.0	P	26-MAR-10 19:33	032610A-1
	Nickel	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	26-MAR-10 19:33	032610A-1
	Potassium	2490	ug/L	2500	ug/L	99.7	90.0 – 110.0	P	26-MAR-10 19:33	032610A-1
	Selenium	2600	ug/L	2500	ug/L	104	90.0 – 110.0	P	26-MAR-10 19:33	032610A-1
	Silver	254	ug/L	250	ug/L	101.8	90.0 – 110.0	P	26-MAR-10 19:33	032610A-1
	Sodium	2460	ug/L	2500	ug/L	98.5	90.0 – 110.0	P	26-MAR-10 19:33	032610A-1
	Vanadium	504	ug/L	500	ug/L	100.9	90.0 – 110.0	P	26-MAR-10 19:33	032610A-1
	Zinc	494	ug/L	500	ug/L	98.9	90.0 – 110.0	P	26-MAR-10 19:33	032610A-1
	Beryllium	51.3	ug/L	50	ug/L	102.7	90.0 – 110.0	MS	11-APR-10 23:44	100411-2
	Cadmium	51.8	ug/L	50	ug/L	103.6	90.0 – 110.0	MS	11-APR-10 23:44	100411-2
	Lead	52	ug/L	50	ug/L	103.9	90.0 – 110.0	MS	11-APR-10 23:44	100411-2
	Manganese	52.7	ug/L	50	ug/L	105.4	90.0 – 110.0	MS	11-APR-10 23:44	100411-2
	Thallium	51	ug/L	50	ug/L	101.9	90.0 – 110.0	MS	11-APR-10 23:44	100411-2
	Antimony	53.1	ug/L	50	ug/L	106.3	90.0 – 110.0	MS	13-APR-10 11:52	100413-3
	Uranium	49.6	ug/L	50	ug/L	99.3	90.0 – 110.0	MS	13-APR-10 15:17	100413-5
CCV01										
	Mercury	5.16	ug/L	5	ug/L	103.1	80.0 – 120.0	AV	02-MAR-10 08:45	030210W3-6
	Aluminum	4750	ug/L	5000	ug/L	95.1	90.0 – 110.0	P	26-MAR-10 20:21	032610A-1
	Arsenic	512	ug/L	500	ug/L	102.4	90.0 – 110.0	P	26-MAR-10 20:21	032610A-1
	Barium	501	ug/L	500	ug/L	100.1	90.0 – 110.0	P	26-MAR-10 20:21	032610A-1
	Calcium	4860	ug/L	5000	ug/L	97.1	90.0 – 110.0	P	26-MAR-10 20:21	032610A-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-2069

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS4,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	503	ug/L	500	ug/L	100.5	90.0 - 110.0	P	26-MAR-10 20:21	032610A-1
	Cobalt	511	ug/L	500	ug/L	102.2	90.0 - 110.0	P	26-MAR-10 20:21	032610A-1
	Copper	497	ug/L	500	ug/L	99.3	90.0 - 110.0	P	26-MAR-10 20:21	032610A-1
	Iron	4850	ug/L	5000	ug/L	97	90.0 - 110.0	P	26-MAR-10 20:21	032610A-1
	Magnesium	4940	ug/L	5000	ug/L	98.7	90.0 - 110.0	P	26-MAR-10 20:21	032610A-1
	Nickel	509	ug/L	500	ug/L	101.8	90.0 - 110.0	P	26-MAR-10 20:21	032610A-1
	Potassium	4580	ug/L	5000	ug/L	91.6	90.0 - 110.0	P	26-MAR-10 20:21	032610A-1
	Selenium	532	ug/L	500	ug/L	106.4	90.0 - 110.0	P	26-MAR-10 20:21	032610A-1
	Silver	505	ug/L	500	ug/L	101	90.0 - 110.0	P	26-MAR-10 20:21	032610A-1
	Sodium	9700	ug/L	10000	ug/L	97	90.0 - 110.0	P	26-MAR-10 20:21	032610A-1
	Vanadium	507	ug/L	500	ug/L	101.3	90.0 - 110.0	P	26-MAR-10 20:21	032610A-1
	Zinc	499	ug/L	500	ug/L	99.9	90.0 - 110.0	P	26-MAR-10 20:21	032610A-1
	Beryllium	51.1	ug/L	50	ug/L	102.3	90.0 - 110.0	MS	12-APR-10 00:15	100411-2
	Cadmium	51.1	ug/L	50	ug/L	102.1	90.0 - 110.0	MS	12-APR-10 00:15	100411-2
	Lead	51.7	ug/L	50	ug/L	103.3	90.0 - 110.0	MS	12-APR-10 00:15	100411-2
	Manganese	53.6	ug/L	50	ug/L	107.1	90.0 - 110.0	MS	12-APR-10 00:15	100411-2
	Thallium	50.7	ug/L	50	ug/L	101.3	90.0 - 110.0	MS	12-APR-10 00:15	100411-2
	Antimony	52.6	ug/L	50	ug/L	105.1	90.0 - 110.0	MS	13-APR-10 12:04	100413-3
	Uranium	49.3	ug/L	50	ug/L	98.6	90.0 - 110.0	MS	13-APR-10 15:26	100413-5
CCV02	Mercury	5.13	ug/L	5	ug/L	102.6	80.0 - 120.0	AV	02-MAR-10 09:08	030210W3-6
	Aluminum	4970	ug/L	5000	ug/L	99.4	90.0 - 110.0	P	26-MAR-10 20:43	032610A-1
	Arsenic	515	ug/L	500	ug/L	103.1	90.0 - 110.0	P	26-MAR-10 20:43	032610A-1
	Barium	507	ug/L	500	ug/L	101.4	90.0 - 110.0	P	26-MAR-10 20:43	032610A-1
	Calcium	5020	ug/L	5000	ug/L	100.3	90.0 - 110.0	P	26-MAR-10 20:43	032610A-1
	Chromium	508	ug/L	500	ug/L	101.7	90.0 - 110.0	P	26-MAR-10 20:43	032610A-1
	Cobalt	518	ug/L	500	ug/L	103.5	90.0 - 110.0	P	26-MAR-10 20:43	032610A-1
	Copper	503	ug/L	500	ug/L	100.6	90.0 - 110.0	P	26-MAR-10 20:43	032610A-1
	Iron	5030	ug/L	5000	ug/L	100.5	90.0 - 110.0	P	26-MAR-10 20:43	032610A-1
	Magnesium	5060	ug/L	5000	ug/L	101.3	90.0 - 110.0	P	26-MAR-10 20:43	032610A-1

METALS

-2a-

Initial and Continuing Calibration Verification

SDG No: 10-2069

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS4,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	515	ug/L	500	ug/L	103.1	90.0 – 110.0	P	26-MAR-10 20:43	032610A-1
	Potassium	4710	ug/L	5000	ug/L	94.2	90.0 – 110.0	P	26-MAR-10 20:43	032610A-1
	Selenium	536	ug/L	500	ug/L	107.2	90.0 – 110.0	P	26-MAR-10 20:43	032610A-1
	Silver	511	ug/L	500	ug/L	102.2	90.0 – 110.0	P	26-MAR-10 20:43	032610A-1
	Sodium	10300	ug/L	10000	ug/L	103.2	90.0 – 110.0	P	26-MAR-10 20:43	032610A-1
	Vanadium	512	ug/L	500	ug/L	102.4	90.0 – 110.0	P	26-MAR-10 20:43	032610A-1
	Zinc	505	ug/L	500	ug/L	101.1	90.0 – 110.0	P	26-MAR-10 20:43	032610A-1
	Beryllium	51.1	ug/L	50	ug/L	102.1	90.0 – 110.0	MS	12-APR-10 00:33	100411-2
	Cadmium	51.8	ug/L	50	ug/L	103.5	90.0 – 110.0	MS	12-APR-10 00:33	100411-2
	Lead	54.4	ug/L	50	ug/L	108.7	90.0 – 110.0	MS	12-APR-10 00:33	100411-2
	Manganese	53.5	ug/L	50	ug/L	107	90.0 – 110.0	MS	12-APR-10 00:33	100411-2
	Thallium	52	ug/L	50	ug/L	104	90.0 – 110.0	MS	12-APR-10 00:33	100411-2
	Antimony	52.9	ug/L	50	ug/L	105.8	90.0 – 110.0	MS	13-APR-10 12:31	100413-3
	Uranium	50.4	ug/L	50	ug/L	100.7	90.0 – 110.0	MS	13-APR-10 15:44	100413-5
CCV03										
	Mercury	5.06	ug/L	5	ug/L	101.1	80.0 – 120.0	AV	02-MAR-10 09:31	030210W3-6
	Aluminum	5150	ug/L	5000	ug/L	103	90.0 – 110.0	P	26-MAR-10 21:59	032610A-1
	Arsenic	518	ug/L	500	ug/L	103.5	90.0 – 110.0	P	26-MAR-10 21:59	032610A-1
	Barium	509	ug/L	500	ug/L	101.8	90.0 – 110.0	P	26-MAR-10 21:59	032610A-1
	Calcium	5230	ug/L	5000	ug/L	104.7	90.0 – 110.0	P	26-MAR-10 21:59	032610A-1
	Chromium	509	ug/L	500	ug/L	101.9	90.0 – 110.0	P	26-MAR-10 21:59	032610A-1
	Cobalt	519	ug/L	500	ug/L	103.7	90.0 – 110.0	P	26-MAR-10 21:59	032610A-1
	Copper	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	26-MAR-10 21:59	032610A-1
	Iron	5190	ug/L	5000	ug/L	103.7	90.0 – 110.0	P	26-MAR-10 21:59	032610A-1
	Magnesium	5240	ug/L	5000	ug/L	104.7	90.0 – 110.0	P	26-MAR-10 21:59	032610A-1
	Nickel	517	ug/L	500	ug/L	103.4	90.0 – 110.0	P	26-MAR-10 21:59	032610A-1
	Potassium	4910	ug/L	5000	ug/L	98.2	90.0 – 110.0	P	26-MAR-10 21:59	032610A-1
	Selenium	529	ug/L	500	ug/L	105.8	90.0 – 110.0	P	26-MAR-10 21:59	032610A-1
	Silver	513	ug/L	500	ug/L	102.7	90.0 – 110.0	P	26-MAR-10 21:59	032610A-1
	Sodium	10500	ug/L	10000	ug/L	104.6	90.0 – 110.0	P	26-MAR-10 21:59	032610A-1

SW846

METALS

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Initial and Continuing Calibration Verification

SDG No: 10-2069

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS4,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	514	ug/L	500	ug/L	102.8	90.0 – 110.0	P	26-MAR-10 21:59	032610A-1
	Zinc	506	ug/L	500	ug/L	101.3	90.0 – 110.0	P	26-MAR-10 21:59	032610A-1
	Beryllium	52.5	ug/L	50	ug/L	105	90.0 – 110.0	MS	12-APR-10 01:41	100411-2
	Cadmium	51.5	ug/L	50	ug/L	103.1	90.0 – 110.0	MS	12-APR-10 01:41	100411-2
	Lead	51.6	ug/L	50	ug/L	103.1	90.0 – 110.0	MS	12-APR-10 01:41	100411-2
	Manganese	53.4	ug/L	50	ug/L	106.9	90.0 – 110.0	MS	12-APR-10 01:41	100411-2
	Thallium	48.6	ug/L	50	ug/L	97.3	90.0 – 110.0	MS	12-APR-10 01:41	100411-2
	Antimony	52.3	ug/L	50	ug/L	104.6	90.0 – 110.0	MS	13-APR-10 12:53	100413-3
	Uranium	48.8	ug/L	50	ug/L	97.6	90.0 – 110.0	MS	13-APR-10 15:59	100413-5
CCV04	Mercury	5.02	ug/L	5	ug/L	100.3	80.0 – 120.0	AV	02-MAR-10 09:54	030210W3-6
	Aluminum	5240	ug/L	5000	ug/L	104.8	90.0 – 110.0	P	26-MAR-10 23:02	032610A-1
	Arsenic	519	ug/L	500	ug/L	103.8	90.0 – 110.0	P	26-MAR-10 23:02	032610A-1
	Barium	503	ug/L	500	ug/L	100.7	90.0 – 110.0	P	26-MAR-10 23:02	032610A-1
	Calcium	5230	ug/L	5000	ug/L	104.7	90.0 – 110.0	P	26-MAR-10 23:02	032610A-1
	Chromium	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	26-MAR-10 23:02	032610A-1
	Cobalt	513	ug/L	500	ug/L	102.5	90.0 – 110.0	P	26-MAR-10 23:02	032610A-1
	Copper	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	26-MAR-10 23:02	032610A-1
	Iron	5070	ug/L	5000	ug/L	101.5	90.0 – 110.0	P	26-MAR-10 23:02	032610A-1
	Magnesium	5170	ug/L	5000	ug/L	103.5	90.0 – 110.0	P	26-MAR-10 23:02	032610A-1
	Nickel	511	ug/L	500	ug/L	102.2	90.0 – 110.0	P	26-MAR-10 23:02	032610A-1
	Potassium	4900	ug/L	5000	ug/L	98	90.0 – 110.0	P	26-MAR-10 23:02	032610A-1
	Selenium	525	ug/L	500	ug/L	104.9	90.0 – 110.0	P	26-MAR-10 23:02	032610A-1
	Silver	507	ug/L	500	ug/L	101.5	90.0 – 110.0	P	26-MAR-10 23:02	032610A-1
	Sodium	9650	ug/L	10000	ug/L	96.5	90.0 – 110.0	P	26-MAR-10 23:02	032610A-1
	Vanadium	508	ug/L	500	ug/L	101.7	90.0 – 110.0	P	26-MAR-10 23:02	032610A-1
	Zinc	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	26-MAR-10 23:02	032610A-1
	Beryllium	53	ug/L	50	ug/L	106.1	90.0 – 110.0	MS	12-APR-10 02:25	100411-2
	Cadmium	51.7	ug/L	50	ug/L	103.4	90.0 – 110.0	MS	12-APR-10 02:25	100411-2
	Lead	51.8	ug/L	50	ug/L	103.7	90.0 – 110.0	MS	12-APR-10 02:25	100411-2

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-2069

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS4,ICPMS5,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Manganese	52.3	ug/L	50	ug/L	104.6	90.0 – 110.0	MS	12-APR-10 02:25	100411-2
	Thallium	49.9	ug/L	50	ug/L	99.8	90.0 – 110.0	MS	12-APR-10 02:25	100411-2
	Antimony	51.4	ug/L	50	ug/L	102.7	90.0 – 110.0	MS	13-APR-10 13:21	100413-3
	Uranium	50.4	ug/L	50	ug/L	100.8	90.0 – 110.0	MS	13-APR-10 16:14	100413-5
CCV05										
	Mercury	5	ug/L	5	ug/L	99.9	80.0 – 120.0	AV	02-MAR-10 10:17	030210W3-6
	Aluminum	5240	ug/L	5000	ug/L	104.8	90.0 – 110.0	P	27-MAR-10 00:04	032610A-1
	Arsenic	511	ug/L	500	ug/L	102.2	90.0 – 110.0	P	27-MAR-10 00:04	032610A-1
	Barium	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	27-MAR-10 00:04	032610A-1
	Calcium	5190	ug/L	5000	ug/L	103.7	90.0 – 110.0	P	27-MAR-10 00:04	032610A-1
	Chromium	504	ug/L	500	ug/L	100.8	90.0 – 110.0	P	27-MAR-10 00:04	032610A-1
	Cobalt	511	ug/L	500	ug/L	102.2	90.0 – 110.0	P	27-MAR-10 00:04	032610A-1
	Copper	499	ug/L	500	ug/L	99.9	90.0 – 110.0	P	27-MAR-10 00:04	032610A-1
	Iron	4970	ug/L	5000	ug/L	99.4	90.0 – 110.0	P	27-MAR-10 00:04	032610A-1
	Magnesium	5100	ug/L	5000	ug/L	102	90.0 – 110.0	P	27-MAR-10 00:04	032610A-1
	Nickel	511	ug/L	500	ug/L	102.3	90.0 – 110.0	P	27-MAR-10 00:04	032610A-1
	Potassium	4890	ug/L	5000	ug/L	97.7	90.0 – 110.0	P	27-MAR-10 00:04	032610A-1
	Selenium	519	ug/L	500	ug/L	103.9	90.0 – 110.0	P	27-MAR-10 00:04	032610A-1
	Silver	508	ug/L	500	ug/L	101.7	90.0 – 110.0	P	27-MAR-10 00:04	032610A-1
	Sodium	9300	ug/L	10000	ug/L	93	90.0 – 110.0	P	27-MAR-10 00:04	032610A-1
	Vanadium	509	ug/L	500	ug/L	101.9	90.0 – 110.0	P	27-MAR-10 00:04	032610A-1
	Zinc	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	27-MAR-10 00:04	032610A-1
	Antimony	52.7	ug/L	50	ug/L	105.4	90.0 – 110.0	MS	13-APR-10 13:36	100413-3
CCV06										
	Mercury	5.06	ug/L	5	ug/L	101.2	80.0 – 120.0	AV	02-MAR-10 10:41	030210W3-6
CCV07										
	Mercury	5.01	ug/L	5	ug/L	100.3	80.0 – 120.0	AV	02-MAR-10 11:04	030210W3-6
CCV08										
	Mercury	5.21	ug/L	5	ug/L	104.3	80.0 – 120.0	AV	02-MAR-10 11:27	030210W3-6

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-2069

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS4,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>
CCV09	Mercury	4.93	ug/L	5	ug/L	98.7	80.0 – 120.0	AV	02-MAR-10 11:50	030210W3-6
CCV10	Mercury	5.01	ug/L	5	ug/L	100.1	80.0 – 120.0	AV	02-MAR-10 12:14	030210W3-6

METALS
-2b-
CRDL Standard for AA & ICP

SDG No: 10-2069

Contract: LANL01004

Lab Code: GEL

AA CRDL Standard Source: SPEX

ICP CRDL Standard Source Solutions Plus

Instrument ID: HG3,ICPMS4,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	.24	ug/L	.2	ug/L	120	70.0 - 130.0	AV	02-MAR-10 08:43	030210W3-6
	Lead	2.25	ug/L	2	ug/L	112.7	70.0 - 130.0	MS	11-APR-10 23:56	100411-2
	Thallium	1.19	ug/L	1	ug/L	119.4	70.0 - 130.0	MS	11-APR-10 23:56	100411-2
	Manganese	6.14	ug/L	5	ug/L	122.7	70.0 - 130.0	MS	11-APR-10 23:56	100411-2
	Cadmium	1.18	ug/L	1	ug/L	118.3	70.0 - 130.0	MS	11-APR-10 23:56	100411-2
	Beryllium	.653	ug/L	.5	ug/L	130.6	70.0 - 130.0	MS	11-APR-10 23:56	100411-2
	Antimony	2.94	ug/L	3	ug/L	98.1	70.0 - 130.0	MS	13-APR-10 11:57	100413-3
	Uranium	.216	ug/L	.2	ug/L	108	70.0 - 130.0	MS	13-APR-10 15:21	100413-5
PQL01										
	Aluminum	207	ug/L	200	ug/L	103.3	70.0 - 130.0	P	26-MAR-10 19:47	032610A-1
	Iron	78.1	ug/L	100	ug/L	78.1	70.0 - 130.0	P	26-MAR-10 19:47	032610A-1
	Magnesium	223	ug/L	300	ug/L	74.3	70.0 - 130.0	P	26-MAR-10 19:47	032610A-1
	Nickel	4.87	ug/L	5	ug/L	97.4	70.0 - 130.0	P	26-MAR-10 19:47	032610A-1
	Potassium	103	ug/L	150	ug/L	68.6	70.0 - 130.0	P	26-MAR-10 19:47	032610A-1
	Silver	4.9	ug/L	5	ug/L	98	70.0 - 130.0	P	26-MAR-10 19:47	032610A-1
	Sodium	293	ug/L	300	ug/L	97.5	70.0 - 130.0	P	26-MAR-10 19:47	032610A-1
	Arsenic	29.8	ug/L	30	ug/L	99.3	70.0 - 130.0	P	26-MAR-10 19:47	032610A-1
	Vanadium	5.74	ug/L	5	ug/L	114.7	70.0 - 130.0	P	26-MAR-10 19:47	032610A-1
	Barium	5.06	ug/L	5	ug/L	101.1	70.0 - 130.0	P	26-MAR-10 19:47	032610A-1
	Chromium	4.99	ug/L	5	ug/L	99.7	70.0 - 130.0	P	26-MAR-10 19:47	032610A-1
	Cobalt	5.03	ug/L	5	ug/L	100.7	70.0 - 130.0	P	26-MAR-10 19:47	032610A-1
	Copper	9.16	ug/L	10	ug/L	91.6	70.0 - 130.0	P	26-MAR-10 19:47	032610A-1
	Zinc	9.68	ug/L	10	ug/L	96.8	70.0 - 130.0	P	26-MAR-10 19:47	032610A-1
	Calcium	189	ug/L	200	ug/L	94.3	70.0 - 130.0	P	26-MAR-10 19:47	032610A-1
	Selenium	32.5	ug/L	30	ug/L	108.2	70.0 - 130.0	P	26-MAR-10 19:47	032610A-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-2069

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>
ICB01	Mercury	0.066	+/-2	U	0.066	0.2	LIQ	AV	02-MAR-10 08:41	030210W3-6
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	26-MAR-10 19:40	032610A-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	26-MAR-10 19:40	032610A-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	26-MAR-10 19:40	032610A-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	26-MAR-10 19:40	032610A-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	26-MAR-10 19:40	032610A-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	26-MAR-10 19:40	032610A-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	26-MAR-10 19:40	032610A-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	26-MAR-10 19:40	032610A-1
	Magnesium	-91.83	+/-300	J	85.0	300	LIQ	P	26-MAR-10 19:40	032610A-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	26-MAR-10 19:40	032610A-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	26-MAR-10 19:40	032610A-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	26-MAR-10 19:40	032610A-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	26-MAR-10 19:40	032610A-1
	Sodium	100	+/-300	U	100	300	LIQ	P	26-MAR-10 19:40	032610A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	26-MAR-10 19:40	032610A-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	26-MAR-10 19:40	032610A-1
	Beryllium	0.1	+/-5	U	0.1	0.5	LIQ	MS	11-APR-10 23:50	100411-2
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	11-APR-10 23:50	100411-2
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	11-APR-10 23:50	100411-2
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	11-APR-10 23:50	100411-2
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	11-APR-10 23:50	100411-2
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	13-APR-10 11:54	100413-3
	Uranium	0.05	+/-2	U	0.05	0.2	LIQ	MS	13-APR-10 15:19	100413-5
CCB01	Mercury	0.066	+/-2	U	0.066	0.2	LIQ	AV	02-MAR-10 08:47	030210W3-6
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	26-MAR-10 20:28	032610A-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	26-MAR-10 20:28	032610A-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	26-MAR-10 20:28	032610A-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	26-MAR-10 20:28	032610A-1
	Chromium	1.25	+/-5	J	1.0	5.0	LIQ	P	26-MAR-10 20:28	032610A-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-2069

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>
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	26-MAR-10 20:28	032610A-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	26-MAR-10 20:28	032610A-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	26-MAR-10 20:28	032610A-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	26-MAR-10 20:28	032610A-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	26-MAR-10 20:28	032610A-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	26-MAR-10 20:28	032610A-1
	Selenium	6.79	+/-30	J	5.0	30.0	LIQ	P	26-MAR-10 20:28	032610A-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	26-MAR-10 20:28	032610A-1
	Sodium	100	+/-300	U	100	300	LIQ	P	26-MAR-10 20:28	032610A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	26-MAR-10 20:28	032610A-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	26-MAR-10 20:28	032610A-1
	Beryllium	0.1	+/-5	U	0.1	0.5	LIQ	MS	12-APR-10 00:21	100411-2
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	12-APR-10 00:21	100411-2
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	12-APR-10 00:21	100411-2
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	12-APR-10 00:21	100411-2
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	12-APR-10 00:21	100411-2
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	13-APR-10 12:07	100413-3
	Uranium	0.05	+/-2	U	0.05	0.2	LIQ	MS	13-APR-10 15:27	100413-5
CCB02	Mercury	0.066	+/-2	U	0.066	0.2	LIQ	AV	02-MAR-10 09:10	030210W3-6
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	26-MAR-10 20:50	032610A-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	26-MAR-10 20:50	032610A-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	26-MAR-10 20:50	032610A-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	26-MAR-10 20:50	032610A-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	26-MAR-10 20:50	032610A-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	26-MAR-10 20:50	032610A-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	26-MAR-10 20:50	032610A-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	26-MAR-10 20:50	032610A-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	26-MAR-10 20:50	032610A-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	26-MAR-10 20:50	032610A-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	26-MAR-10 20:50	032610A-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-2069

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	5.47	+/-30	J	5.0	30.0	LIQ	P	26-MAR-10 20:50	032610A-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	26-MAR-10 20:50	032610A-1
	Sodium	100	+/-300	U	100	300	LIQ	P	26-MAR-10 20:50	032610A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	26-MAR-10 20:50	032610A-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	26-MAR-10 20:50	032610A-1
	Beryllium	0.1	+/-5	U	0.1	0.5	LIQ	MS	12-APR-10 00:39	100411-2
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	12-APR-10 00:39	100411-2
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	12-APR-10 00:39	100411-2
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	12-APR-10 00:39	100411-2
	Thallium	0.508	+/-1	J	0.3	1.0	LIQ	MS	12-APR-10 00:39	100411-2
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	13-APR-10 12:34	100413-3
	Uranium	0.05	+/-2	U	0.05	0.2	LIQ	MS	13-APR-10 15:45	100413-5
CCB03										
	Mercury	0.066	+/-2	U	0.066	0.2	LIQ	AV	02-MAR-10 09:33	030210W3-6
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	26-MAR-10 22:06	032610A-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	26-MAR-10 22:06	032610A-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	26-MAR-10 22:06	032610A-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	26-MAR-10 22:06	032610A-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	26-MAR-10 22:06	032610A-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	26-MAR-10 22:06	032610A-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	26-MAR-10 22:06	032610A-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	26-MAR-10 22:06	032610A-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	26-MAR-10 22:06	032610A-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	26-MAR-10 22:06	032610A-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	26-MAR-10 22:06	032610A-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	26-MAR-10 22:06	032610A-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	26-MAR-10 22:06	032610A-1
	Sodium	100	+/-300	U	100	300	LIQ	P	26-MAR-10 22:06	032610A-1
	Vanadium	1.11	+/-5	J	1.0	5.0	LIQ	P	26-MAR-10 22:06	032610A-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	26-MAR-10 22:06	032610A-1
	Beryllium	0.1	+/-5	U	0.1	0.5	LIQ	MS	12-APR-10 01:47	100411-2

SW846

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-2069

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>
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	12-APR-10 01:47	100411-2
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	12-APR-10 01:47	100411-2
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	12-APR-10 01:47	100411-2
	Thallium	0.463	+/-1	J	0.3	1.0	LIQ	MS	12-APR-10 01:47	100411-2
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	13-APR-10 12:56	100413-3
	Uranium	0.05	+/-2	U	0.05	0.2	LIQ	MS	13-APR-10 16:00	100413-5
CCB04	Mercury	0.066	+/-2	U	0.066	0.2	LIQ	AV	02-MAR-10 09:56	030210W3-6
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	26-MAR-10 23:09	032610A-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	26-MAR-10 23:09	032610A-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	26-MAR-10 23:09	032610A-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	26-MAR-10 23:09	032610A-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	26-MAR-10 23:09	032610A-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	26-MAR-10 23:09	032610A-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	26-MAR-10 23:09	032610A-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	26-MAR-10 23:09	032610A-1
	Magnesium	-89.02	+/-300	J	85.0	300	LIQ	P	26-MAR-10 23:09	032610A-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	26-MAR-10 23:09	032610A-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	26-MAR-10 23:09	032610A-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	26-MAR-10 23:09	032610A-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	26-MAR-10 23:09	032610A-1
	Sodium	100	+/-300	U	100	300	LIQ	P	26-MAR-10 23:09	032610A-1
	Vanadium	1.04	+/-5	J	1.0	5.0	LIQ	P	26-MAR-10 23:09	032610A-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	26-MAR-10 23:09	032610A-1
	Beryllium	0.1	+/-5	U	0.1	0.5	LIQ	MS	12-APR-10 02:31	100411-2
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	12-APR-10 02:31	100411-2
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	12-APR-10 02:31	100411-2
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	12-APR-10 02:31	100411-2
	Thallium	0.456	+/-1	J	0.3	1.0	LIQ	MS	12-APR-10 02:31	100411-2
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	13-APR-10 13:24	100413-3
	Uranium	0.05	+/-2	U	0.05	0.2	LIQ	MS	13-APR-10 16:15	100413-5

SW846

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-2069

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>
CCB05	Mercury	0.066	+/- .2	U	0.066	0.2	LIQ	AV	02-MAR-10 10:19	030210W3-6
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	27-MAR-10 00:11	032610A-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	27-MAR-10 00:11	032610A-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	27-MAR-10 00:11	032610A-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	27-MAR-10 00:11	032610A-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	27-MAR-10 00:11	032610A-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	27-MAR-10 00:11	032610A-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	27-MAR-10 00:11	032610A-1
	Iron	-30.45	+/-100	J	30.0	100	LIQ	P	27-MAR-10 00:11	032610A-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	27-MAR-10 00:11	032610A-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	27-MAR-10 00:11	032610A-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	27-MAR-10 00:11	032610A-1
	Selenium	7.45	+/-30	J	5.0	30.0	LIQ	P	27-MAR-10 00:11	032610A-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	27-MAR-10 00:11	032610A-1
	Sodium	100	+/-300	U	100	300	LIQ	P	27-MAR-10 00:11	032610A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	27-MAR-10 00:11	032610A-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	27-MAR-10 00:11	032610A-1
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	13-APR-10 13:39	100413-3
CCB06	Mercury	0.066	+/- .2	U	0.066	0.2	LIQ	AV	02-MAR-10 10:42	030210W3-6
CCB07	Mercury	0.066	+/- .2	U	0.066	0.2	LIQ	AV	02-MAR-10 11:06	030210W3-6
CCB08	Mercury	0.066	+/- .2	U	0.066	0.2	LIQ	AV	02-MAR-10 11:29	030210W3-6
CCB09	Mercury	0.066	+/- .2	U	0.066	0.2	LIQ	AV	02-MAR-10 11:52	030210W3-6
CCB10	Mercury	0.066	+/- .2	U	0.066	0.2	LIQ	AV	02-MAR-10 12:15	030210W3-6

METALS
-3b-
PREPARATION BLANK SUMMARY

SDG NO. 10-2069

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>
1202056573	Mercury	0.066	ug/L	+/-0.2	U	AV	0.066	0.2
1202056808	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
	Chromium	1	ug/L	+/-5	U	P	1	5
	Iron	30	ug/L	+/-100	U	P	30	100
	Copper	3	ug/L	+/-10	U	P	3	10
	Cobalt	1	ug/L	+/-5	U	P	1	5
	Calcium	50	ug/L	+/-200	U	P	50	200
	Magnesium	85	ug/L	+/-300	U	P	85	300
	Zinc	3.3	ug/L	+/-10	U	P	3.3	10
	Vanadium	1.21	ug/L	+/-5	J	P	1	5
	Sodium	100	ug/L	+/-300	U	P	100	300
	Silver	1	ug/L	+/-5	U	P	1	5
	Selenium	6.01	ug/L	+/-30	J	P	5	30
	Potassium	50	ug/L	+/-150	U	P	50	150
	Nickel	1.5	ug/L	+/-5	U	P	1.5	5
1202056813	Antimony	1	ug/L	+/-3	U	MS	1	3
	Beryllium	0.1	ug/L	+/-0.5	U	MS	0.1	0.5
	Cadmium	0.11	ug/L	+/-1	U	MS	0.11	1
	Lead	1.61	ug/L	+/-2	J	MS	0.5	2
	Manganese	1	ug/L	+/-5	U	MS	1	5
	Thallium	0.302	ug/L	+/-1	J	MS	0.3	1
	Uranium	0.05	ug/L	+/-0.2	U	MS	0.05	0.2

METALS

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Interference Check Sample

SDG No: 10-2069

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICSA01									
	Aluminum	516000	ug/L	500000	ug/L	103	80.0 – 120.0	26-MAR-10 19:54	032610A-1
	Arsenic	5.12	ug/L					26-MAR-10 19:54	032610A-1
	Barium	0.49	ug/L					26-MAR-10 19:54	032610A-1
	Calcium	473000	ug/L	500000	ug/L	94.5	80.0 – 120.0	26-MAR-10 19:54	032610A-1
	Chromium	-1.5	ug/L					26-MAR-10 19:54	032610A-1
	Cobalt	-0.992	ug/L					26-MAR-10 19:54	032610A-1
	Copper	1.32	ug/L					26-MAR-10 19:54	032610A-1
	Iron	182000	ug/L	200000	ug/L	90.8	80.0 – 120.0	26-MAR-10 19:54	032610A-1
	Magnesium	484000	ug/L	500000	ug/L	96.8	80.0 – 120.0	26-MAR-10 19:54	032610A-1
	Nickel	3.17	ug/L					26-MAR-10 19:54	032610A-1
	Potassium	-214.0	ug/L					26-MAR-10 19:54	032610A-1
	Selenium	-29.5	ug/L					26-MAR-10 19:54	032610A-1
	Silver	-1.58	ug/L					26-MAR-10 19:54	032610A-1
	Sodium	78.8	ug/L					26-MAR-10 19:54	032610A-1
	Vanadium	0.309	ug/L					26-MAR-10 19:54	032610A-1
	Zinc	-0.241	ug/L					26-MAR-10 19:54	032610A-1
ICSAB01									
	Aluminum	513000	ug/L	500000	ug/L	103	80.0 – 120.0	26-MAR-10 20:01	032610A-1
	Arsenic	524	ug/L	500	ug/L	105	80.0 – 120.0	26-MAR-10 20:01	032610A-1
	Barium	487	ug/L	500	ug/L	97.3	80.0 – 120.0	26-MAR-10 20:01	032610A-1
	Calcium	468000	ug/L	500000	ug/L	93.6	80.0 – 120.0	26-MAR-10 20:01	032610A-1
	Chromium	481	ug/L	500	ug/L	96.1	80.0 – 120.0	26-MAR-10 20:01	032610A-1
	Cobalt	446	ug/L	500	ug/L	89.1	80.0 – 120.0	26-MAR-10 20:01	032610A-1
	Copper	548	ug/L	500	ug/L	110	80.0 – 120.0	26-MAR-10 20:01	032610A-1
	Iron	179000	ug/L	200000	ug/L	89.5	80.0 – 120.0	26-MAR-10 20:01	032610A-1
	Magnesium	477000	ug/L	500000	ug/L	95.4	80.0 – 120.0	26-MAR-10 20:01	032610A-1
	Nickel	454	ug/L	500	ug/L	90.8	80.0 – 120.0	26-MAR-10 20:01	032610A-1
	Potassium	4830	ug/L	5000	ug/L	96.5	80.0 – 120.0	26-MAR-10 20:01	032610A-1
	Selenium	2470	ug/L	2500	ug/L	98.9	80.0 – 120.0	26-MAR-10 20:01	032610A-1

METALS

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Interference Check Sample

SDG No: 10-2069

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	271	ug/L	250	ug/L	108	80.0 - 120.0	26-MAR-10 20:01	032610A-1
	Sodium	5110	ug/L	5000	ug/L	102	80.0 - 120.0	26-MAR-10 20:01	032610A-1
	Vanadium	508	ug/L	500	ug/L	102	80.0 - 120.0	26-MAR-10 20:01	032610A-1
	Zinc	491	ug/L	500	ug/L	98.1	80.0 - 120.0	26-MAR-10 20:01	032610A-1

METALS

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Interference Check Sample

SDG No: 10-2069

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: ICPMS4

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICSA01									
	Beryllium	0.086	ug/L					12-APR-10 00:02	100411-2
	Cadmium	0.214	ug/L					12-APR-10 00:02	100411-2
	Lead	0.22	ug/L					12-APR-10 00:02	100411-2
	Manganese	5.79	ug/L					12-APR-10 00:02	100411-2
	Thallium	0.027	ug/L					12-APR-10 00:02	100411-2
ICSAB01									
	Beryllium	18.3	ug/L	20	ug/L	91.4	80.0 - 120.0	12-APR-10 00:09	100411-2
	Cadmium	18.9	ug/L	20.44	ug/L	92.5	80.0 - 120.0	12-APR-10 00:09	100411-2
	Lead	18.7	ug/L	20.19	ug/L	92.4	80.0 - 120.0	12-APR-10 00:09	100411-2
	Manganese	25.5	ug/L	25.8	ug/L	98.9	80.0 - 120.0	12-APR-10 00:09	100411-2
	Thallium	17.6	ug/L	20	ug/L	88.2	80.0 - 120.0	12-APR-10 00:09	100411-2

METALS

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Interference Check Sample

SDG No: 10-2069

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: ICPMS5

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICSA01	Antimony	0.265	ug/L					13-APR-10 11:59	100413-3
ICSAB01	Antimony	20.3	ug/L	20	ug/L	101	80.0 - 120.0	13-APR-10 12:02	100413-3

METALS

-4-

Interference Check Sample

SDG No: 10-2069

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	-0.002	ug/L					13-APR-10 15:22	100413-5
ICSAB01	Uranium	21.0	ug/L	20	ug/L	105	80.0 - 120.0	13-APR-10 15:24	100413-5

METALS

-5a-

Matrix Spike Summary

SDG NO. 10-2069 Client ID WST16-10-12239S

Contract: LANL01004 Level: Low

Matrix: WATER % Solids:

Sample ID: 248145001 Spike ID: 1202056576

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/L	75-125	2.27		0.066	U	2	112		AV

METALS

-5a-

Matrix Spike Summary

SDG NO. 10-2069 **Client ID** RE36-10-7528S

Contract: LANL01004 **Level:** Low

Matrix: WATER **% Solids:**

Sample ID: 248046001 **Spike ID:** 1202056811

<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/L	75-125	5140		68	U	5000	102		P
Arsenic	ug/L	75-125	508		5	U	500	101		P
Barium	ug/L	75-125	499		1	U	500	99.7		P
Calcium	ug/L	75-125	5160		84.9	J	5000	102		P
Chromium	ug/L	75-125	493		1	U	500	98.4		P
Cobalt	ug/L	75-125	491		1	U	500	98.1		P
Copper	ug/L	75-125	504		5.99	J	500	99.5		P
Iron	ug/L	75-125	4940		30	U	5000	98.4		P
Magnesium	ug/L	75-125	5070		85	U	5000	101		P
Nickel	ug/L	75-125	502		1.5	U	500	100		P
Potassium	ug/L	75-125	5070		259		5000	96.2		P
Selenium	ug/L	75-125	505		6.94	J	500	99.7		P
Silver	ug/L	75-125	481		1	U	500	96.3		P
Sodium	ug/L	75-125	4980		158	J	5000	96.4		P
Vanadium	ug/L	75-125	501		1.47	J	500	100		P
Zinc	ug/L	75-125	490		6.17	J	500	96.7		P

METALS

-5a-

Matrix Spike Summary

SDG NO. 10-2069

Client ID RE36-10-7527S

Contract: LANL01004

Level: Low

Matrix: WATER

% Solids:

Sample ID: 248046002

Spike ID: 1202056816

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Antimony	ug/L	75-125	213		1	U	200	107		MS
Beryllium	ug/L	75-125	48.2		0.1	U	50	96.3		MS
Cadmium	ug/L	75-125	9.66		0.11	U	10	96.3		MS
Lead	ug/L	75-125	40.2		0.708	J	40	98.8		MS
Manganese	ug/L	75-125	49.1		1.69	J	50	94.9		MS
Thallium	ug/L	75-125	88.2		0.474	J	100	87.7		MS
Uranium	ug/L	75-125	45		0.05	U	50	90.1		MS

Metals

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Duplicate Sample Summary

SDG No.: 10-2069

Contract: LANL01004

Lab Code: GEL

Matrix: LIQUID

Level: Low

Client ID: WST16-10-12239D

Sample ID: 248145001

Duplicate ID: 1202056575

Percent Solids for Dup: N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/L		0.066 U		0.066 U				AV

Metals

-6-

Duplicate Sample Summary

SDG No.: 10-2069

Contract: LANL01004

Lab Code: GEL

Matrix: LIQUID

Level: Low

Client ID: RE36-10-7528D

Sample ID: 248046001

Duplicate ID: 1202056810

Percent Solids for Dup: N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/L		68 U		68 U				P
Arsenic	ug/L		5 U		5 U				P
Barium	ug/L		1 U		1 U				P
Calcium	ug/L	+/-200	84.9 J		66.7 J		24		P
Chromium	ug/L		1 U		1 U				P
Cobalt	ug/L		1 U		1 U				P
Copper	ug/L	+/-10	5.99 J		5.6 J		6.84		P
Iron	ug/L		30 U		30 U				P
Magnesium	ug/L		85 U		85 U				P
Nickel	ug/L		1.5 U		1.5 U				P
Potassium	ug/L	+/-150	259		257		.737		P
Selenium	ug/L		6.94 J		5 U		200		P
Silver	ug/L		1 U		1 U				P
Sodium	ug/L	+/-300	158 J		164 J		3.96		P
Vanadium	ug/L	+/-5	1.47 J		1.51 J		2.72		P
Zinc	ug/L	+/-10	6.17 J		5.56 J		10.4		P

Metals

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Duplicate Sample Summary

SDG No.: 10-2069

Contract: LANL01004

Lab Code: GEL

Matrix: LIQUID

Level: Low

Client ID: RE36-10-7527D

Sample ID: 248046002

Duplicate ID: 1202056815

Percent Solids for Dup: N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Antimony	ug/L		1 U		1 U				MS
Beryllium	ug/L		0.1 U		0.1 U				MS
Cadmium	ug/L		0.11 U		0.11 U				MS
Lead	ug/L	+/-2	0.708 J		0.771 J		8.52		MS
Manganese	ug/L		1.69 J		1 U		200		MS
Thallium	ug/L		0.474 J		0.3 U		200		MS
Uranium	ug/L		0.05 U		0.05 U				MS

METALS

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Laboratory Control Sample Summary

SDG NO. 10-2069

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>
1202056574	Mercury	ug/L	2	2.21		110	80-120	AV

METALS

-7-

Laboratory Control Sample Summary

SDG NO. 10-2069

Contract: LANL01004

Aqueous LCS Source:OS21

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>
1202056809								
	Copper	ug/L	500	508		102	80-120	P
	Iron	ug/L	5000	5070		101	80-120	P
	Magnesium	ug/L	5000	5180		104	80-120	P
	Nickel	ug/L	500	515		103	80-120	P
	Potassium	ug/L	5000	4940		98.8	80-120	P
	Selenium	ug/L	500	515		103	80-120	P
	Silver	ug/L	500	494		98.9	80-120	P
	Sodium	ug/L	5000	4970		99.4	80-120	P
	Vanadium	ug/L	500	512		102	80-120	P
	Zinc	ug/L	500	497		99.4	80-120	P
	Aluminum	ug/L	5000	5370		107	80-120	P
	Arsenic	ug/L	500	513		103	80-120	P
	Barium	ug/L	500	512		102	80-120	P
	Calcium	ug/L	5000	5230		105	80-120	P
	Chromium	ug/L	500	503		101	80-120	P
	Cobalt	ug/L	500	505		101	80-120	P

METALS

-7-

Laboratory Control Sample Summary

SDG NO. 10-2069

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>
1202056814								
	Antimony	ug/L	50	56		112	80-120	MS
	Beryllium	ug/L	50	49.9		99.7	80-120	MS
	Cadmium	ug/L	50	46.9		93.8	80-120	MS
	Lead	ug/L	50	50		100	80-120	MS
	Manganese	ug/L	50	49.7		99.3	80-120	MS
	Thallium	ug/L	50	45		89.9	80-120	MS
	Uranium	ug/L	50	45.3		90.6	80-120	MS

METALS

-9-

Serial Dilution Sample Summary

SDG NO. 10-2069 Client ID WST16-10-12239L

Contract: LANL01004

Matrix: LIQUID Level: Low

Sample ID: 248145001 Serial Dilution ID: 1202056577

<u>Analyte</u>	<u>Initial Value ug/L</u>	<u>C</u>	<u>Serial Value ug/L</u>	<u>C</u>	<u>% Difference</u>	<u>Qual</u>	<u>Acceptance Limit</u>	<u>M</u>
Mercury	.066	U	.33	U				AV

METALS

-9-

Serial Dilution Sample Summary

SDG NO. 10-2069

Client ID RE36-10-7528L

Contract: LANL01004

Matrix: LIQUID

Level: Low

Sample ID: 248046001

Serial Dilution ID: 1202056812

Analyte	Initial Value ug/L	C	Serial Value ng/L	C	% Difference	Qual	Acceptance Limit	M
Aluminum	68	U	340	U				P
Arsenic	5	U	25	U				P
Barium	1	U	5	U				P
Calcium	84.9	J	250	U	100			P
Chromium	1	U	5	U				P
Cobalt	1	U	5	U				P
Copper	5.99	J	15	U	100			P
Iron	30	U	150	U				P
Magnesium	85	U	425	U				P
Nickel	1.5	U	7.5	U				P
Potassium	259		250	U	100			P
Selenium	6.94	J	31	J	347			P
Silver	1	U	5	U				P
Sodium	158	J	500	U	100			P
Vanadium	1.47	J	5	U	100			P
Zinc	6.17	J	16.5	U	100			P

METALS

-9-

Serial Dilution Sample Summary

SDG NO. 10-2069 Client ID RE36-10-7527L

Contract: LANL01004

Matrix: LIQUID Level: Low

Sample ID: 248046002 Serial Dilution ID: 1202056817

<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>
Antimony	1	U	5	U				MS
Beryllium	.1	U	.5	U				MS
Cadmium	.11	U	.55	U				MS
Lead	.708	J	2.5	U	100			MS
Manganese	1.69	J	5	U	100			MS
Thallium	.474	J	6.85		1350			MS
Uranium	.05	U	.25	U				MS

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-2069

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	959088						
1202056808	MB for batch 959088	MB	W	04-MAR-10	50mL	50mL	
1202056809	LCS for batch 959088	LCS	W	04-MAR-10	50mL	50mL	
1202056811	RE36-10-7528S	MS	W	04-MAR-10	50mL	50mL	
1202056810	RE36-10-7528D	DUP	W	04-MAR-10	50mL	50mL	
248039001	RE15-10-8406	SAMPLE	W	04-MAR-10	50mL	50mL	

SW846

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-2069

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	959090						
1202056813	MB for batch 959090	MB	W	02-MAR-10	50mL	50mL	
1202056814	LCS for batch 959090	LCS	W	02-MAR-10	50mL	50mL	
1202056816	RE36-10-7527S	MS	W	02-MAR-10	50mL	50mL	
1202056815	RE36-10-7527D	DUP	W	02-MAR-10	50mL	50mL	
248039001	RE15-10-8406	SAMPLE	W	02-MAR-10	50mL	50mL	

SW846

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-2069

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	958949						
1202056573	MB for batch 958949	MB	W	01-MAR-10	20mL	20mL	
1202056574	LCS for batch 958949	LCS	W	01-MAR-10	20mL	20mL	
1202056576	WST16-10-12239S	MS	W	01-MAR-10	20mL	20mL	
1202056575	WST16-10-12239D	DUP	W	01-MAR-10	20mL	20mL	
248039001	RE15-10-8406	SAMPLE	W	01-MAR-10	20mL	20mL	

SW846

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: ICPMS5

Start Date: 13-APR-10

End Date: 13-APR-10

Client Sdg: 10-2069

Method MS

Data File: 100413-3

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Ti	U	V	Zn
S0.0	1	11:45:00	X																							
S10	1	11:47:00	X																							
S100	1	11:49:00	X																							
ICV01	1	11:52:00	X																							
ICB01	1	11:54:00	X																							
CRDL01	1	11:57:00	X																							
ICSA01	1	11:59:00	X																							
ICSAB01	1	12:02:00	X																							
CCV01	1	12:04:00	X																							
CCB01	1	12:07:00	X																							
ZZZZZZ	1	12:09:00																								
ZZZZZZ	1	12:12:00																								
ZZZZZZ	1	12:14:00																								
ZZZZZZ	1	12:16:00																								
ZZZZZZ	1	12:19:00																								
ZZZZZZ	1	12:21:00																								
ZZZZZZ	1	12:24:00																								
ZZZZZZ	5	12:26:00																								
ZZZZZZ	1	12:29:00																								
CCV02	1	12:31:00	X																							
CCB02	1	12:34:00	X																							
1202056813	1	12:36:00	X																							
1202056814	1	12:39:00	X																							
ZZZZZZ	1	12:41:00																								
ZZZZZZ	1	12:44:00																								
ZZZZZZ	1	12:46:00																								
ZZZZZZ	1	12:48:00																								
ZZZZZZ	1	12:51:00																								
CCV03	1	12:53:00	X																							
CCB03	1	12:56:00	X																							
ZZZZZZ	1	12:58:00																								
248039001	1	13:01:00	X																							
ZZZZZZ	1	13:03:00																								
ZZZZZZ	1	13:06:00																								
ZZZZZZ	1	13:08:00																								
ZZZZZZ	1	13:11:00																								
ZZZZZZ	5	13:13:00																								
ZZZZZZ	1	13:19:00																								
CCV04	1	13:21:00	X																							
CCB04	1	13:24:00	X																							

Samp No.	D/F	Run Time
ZZZZZZ	1	13:26:00
I202056815	1	13:29:00
I202056816	1	13:31:00
I202056817	5	13:34:00
CCV05	1	13:36:00
CCB05	1	13:39:00

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: ICPMS5

Start Date: 13-APR-10

End Date: 13-APR-10

Client Sdg: 10-2069

Method MS

Data File: 100413-5

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
S0.0	1	15:12:00																						X		
S10	1	15:14:00																						X		
S100	1	15:16:00																						X		
ICV01	1	15:17:00																						X		
ICB01	1	15:19:00																						X		
CRDL01	1	15:21:00																						X		
ICSA01	1	15:22:00																						X		
ICSAB01	1	15:24:00																						X		
CCV01	1	15:26:00																						X		
CCB01	1	15:27:00																						X		
ZZZZZZ	1	15:29:00																								
ZZZZZZ	1	15:31:00																								
ZZZZZZ	1	15:32:00																								
ZZZZZZ	1	15:34:00																								
ZZZZZZ	1	15:35:00																								
ZZZZZZ	1	15:37:00																								
ZZZZZZ	1	15:39:00																								
ZZZZZZ	5	15:40:00																								
ZZZZZZ	1	15:42:00																								
CCV02	1	15:44:00																						X		
CCB02	1	15:45:00																						X		
1202056813	1	15:47:00																						X		
1202056814	1	15:49:00																						X		
ZZZZZZ	1	15:50:00																								
ZZZZZZ	1	15:52:00																								
ZZZZZZ	1	15:54:00																								
ZZZZZZ	1	15:55:00																								
ZZZZZZ	1	15:57:00																								
CCV03	1	15:59:00																						X		
CCB03	1	16:00:00																						X		
ZZZZZZ	1	16:02:00																								
248039001	1	16:04:00																						X		
ZZZZZZ	1	16:05:00																								
ZZZZZZ	1	16:07:00																								
1202056815	1	16:09:00																						X		
1202056816	1	16:10:00																						X		
1202056817	5	16:12:00																						X		
CCV04	1	16:14:00																						X		
CCB04	1	16:15:00																						X		

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: OPTIMA3

Start Date: 26-MAR-10

End Date: 27-MAR-10

Client Sdg: 10-2069

Method P

Data File: 032610A-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	18:59:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
S0.1	1	19:07:00			X	X				X	X	X						X	X	X	X				X	X
S0.5	1	19:14:00	X		X	X			X	X	X	X			X			X	X	X	X				X	X
SCAL	1	19:21:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
S10	1	19:27:00	X						X				X		X							X				
ICV01	1	19:33:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ICB01	1	19:40:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
PQL01	1	19:47:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ICSA01	1	19:54:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ICSAB01	1	20:01:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
LR01	1	20:08:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
LR02	1	20:15:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCV01	1	20:21:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCB01	1	20:28:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
LR03	1	20:36:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCV02	1	20:43:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCB02	1	20:50:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ZZZZZZ	1	20:57:00																								
ZZZZZZ	1	21:04:00																								
ZZZZZZ	1	21:11:00																								
ZZZZZZ	1	21:18:00																								
ZZZZZZ	1	21:25:00																								
ZZZZZZ	5	21:32:00																								
ZZZZZZ	1	21:38:00																								
ZZZZZZ	1	21:45:00																								
ZZZZZZ	1	21:52:00																								
CCV03	1	21:59:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCB03	1	22:06:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
1202056808	1	22:13:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
1202056809	1	22:20:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ZZZZZZ	1	22:27:00																								
ZZZZZZ	1	22:34:00																								
ZZZZZZ	1	22:41:00																								
ZZZZZZ	1	22:48:00																								
ZZZZZZ	1	22:55:00																								
CCV04	1	23:02:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCB04	1	23:09:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ZZZZZZ	1	23:16:00																								
248039001	1	23:23:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ZZZZZZ	1	23:30:00																								

Samp No.	D/F	Run Time																										
1202056810	1	23:37:00	X		X	X				X	X	X	X	X		X			X	X	X	X	X				X	X
1202056811	1	23:44:00	X		X	X				X	X	X	X	X		X			X	X	X	X	X				X	X
1202056812	5	23:51:00	X		X	X				X	X	X	X	X		X			X	X	X	X	X				X	X
ZZZZZ	1	23:57:00																										
CCV05	1	00:04:00	X		X	X				X	X	X	X	X		X			X	X	X	X	X				X	X
CCB05	1	00:11:00	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: 02-MAR-10

End Date: 02-MAR-10

Client Sdg: 10-2069

Method: AV

Data File: 030210W3-6

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
S0.0	1	08:28:00															X									
S0.2	1	08:30:00															X									
S0.5	1	08:31:00															X									
S2.0	1	08:33:00															X									
S5.0	1	08:35:00															X									
S10.0	1	08:37:00															X									
ICV01	1	08:39:00															X									
ICB01	1	08:41:00															X									
CRDL01	1	08:43:00															X									
CCV01	1	08:45:00															X									
CCB01	1	08:47:00															X									
ZZZZZZ	1	08:49:00																								
ZZZZZZ	1	08:51:00																								
ZZZZZZ	1	08:53:00																								
ZZZZZZ	1	08:55:00																								
ZZZZZZ	1	08:57:00																								
ZZZZZZ	5	08:58:00																								
ZZZZZZ	1	09:00:00																								
ZZZZZZ	1	09:02:00																								
ZZZZZZ	1	09:04:00																								
ZZZZZZ	1	09:06:00																								
CCV02	1	09:08:00															X									
CCB02	1	09:10:00															X									
ZZZZZZ	1	09:12:00																								
ZZZZZZ	1	09:14:00																								
ZZZZZZ	1	09:16:00																								
ZZZZZZ	1	09:18:00																								
ZZZZZZ	1	09:20:00																								
ZZZZZZ	1	09:21:00																								
ZZZZZZ	1	09:23:00																								
ZZZZZZ	1	09:25:00																								
ZZZZZZ	5	09:27:00																								
ZZZZZZ	1	09:29:00																								
CCV03	1	09:31:00															X									
CCB03	1	09:33:00															X									
ZZZZZZ	1	09:35:00																								
ZZZZZZ	1	09:37:00																								
ZZZZZZ	1	09:39:00																								
ZZZZZZ	1	09:41:00																								
ZZZZZZ	1	09:43:00																								

Metals
-14-
Analysis Run Log

Samp No.	D/F	Run Time
ZZZZZZ	1	09:45:00
ZZZZZZ	1	09:47:00
ZZZZZZ	1	09:48:00
ZZZZZZ	1	09:50:00
ZZZZZZ	1	09:52:00
CCV04	1	09:54:00
CCB04	1	09:56:00
ZZZZZZ	1	09:58:00
ZZZZZZ	1	10:00:00
ZZZZZZ	1	10:02:00
ZZZZZZ	5	10:04:00
ZZZZZZ	1	10:06:00
ZZZZZZ	1	10:08:00
ZZZZZZ	1	10:10:00
ZZZZZZ	1	10:12:00
ZZZZZZ	1	10:13:00
ZZZZZZ	1	10:15:00
CCV05	1	10:17:00
CCB05	1	10:19:00
ZZZZZZ	1	10:21:00
ZZZZZZ	1	10:23:00
ZZZZZZ	1	10:25:00
ZZZZZZ	1	10:27:00
ZZZZZZ	1	10:29:00
ZZZZZZ	5	10:31:00
ZZZZZZ	1	10:33:00
ZZZZZZ	1	10:35:00
ZZZZZZ	1	10:37:00
ZZZZZZ	1	10:39:00
CCV06	1	10:41:00
CCB06	1	10:42:00
ZZZZZZ	1	10:44:00
ZZZZZZ	1	10:46:00
ZZZZZZ	1	10:48:00
ZZZZZZ	1	10:50:00
ZZZZZZ	1	10:52:00
ZZZZZZ	1	10:54:00
ZZZZZZ	1	10:56:00
ZZZZZZ	1	10:58:00
ZZZZZZ	1	11:00:00

Metals
-14-
Analysis Run Log

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
ZZZZZZ	5	11:02:00																								
CCV07	1	11:04:00															X									
CCB07	1	11:06:00															X									
ZZZZZZ	1	11:08:00																								
ZZZZZZ	1	11:09:00																								
ZZZZZZ	1	11:11:00																								
ZZZZZZ	1	11:13:00																								
1202056573	1	11:15:00															X									
1202056574	1	11:17:00															X									
ZZZZZZ	1	11:19:00																								
ZZZZZZ	1	11:21:00																								
ZZZZZZ	1	11:23:00																								
ZZZZZZ	1	11:25:00																								
CCV08	1	11:27:00															X									
CCB08	1	11:29:00															X									
ZZZZZZ	1	11:31:00																								
ZZZZZZ	1	11:33:00																								
ZZZZZZ	1	11:35:00																								
ZZZZZZ	1	11:37:00																								
ZZZZZZ	1	11:39:00																								
248039001	1	11:40:00															X									
ZZZZZZ	1	11:42:00																								
ZZZZZZ	1	11:44:00																								
ZZZZZZ	1	11:46:00																								
ZZZZZZ	1	11:48:00																								
CCV09	1	11:50:00															X									
CCB09	1	11:52:00															X									
ZZZZZZ	1	11:54:00																								
ZZZZZZ	1	11:56:00																								
ZZZZZZ	1	11:58:00																								
ZZZZZZ	1	12:00:00																								
1202056575	1	12:02:00															X									
1202056576	1	12:04:00															X									
1202056577	5	12:06:00															X									
ZZZZZZ	1	12:08:00																								
ZZZZZZ	1	12:10:00																								
ZZZZZZ	1	12:12:00																								
CCV10	1	12:14:00															X									
CCB10	1	12:15:00															X									

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: ICPMS4

Start Date: 11-APR-10

End Date: 12-APR-10

Client Sdg: 10-2069

Method MS

Data File: 100411-2

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	23:26:00					X	X						X		X							X			
S10	1	23:32:00					X	X						X		X							X			
S100	1	23:38:00					X	X						X		X							X			
ICV01	1	23:44:00					X	X						X		X							X			
ICB01	1	23:50:00					X	X						X		X							X			
CRDL01	1	23:56:00					X	X						X		X							X			
ICSA01	1	00:02:00					X	X						X		X							X			
ICSAB01	1	00:09:00					X	X						X		X							X			
CCV01	1	00:15:00					X	X						X		X							X			
CCB01	1	00:21:00					X	X						X		X							X			
LR01	1	00:27:00					X	X						X		X							X			
CCV02	1	00:33:00					X	X						X		X							X			
CCB02	1	00:39:00					X	X						X		X							X			
1202056813	1	00:45:00					X	X						X		X							X			
1202056814	1	00:52:00					X	X						X		X							X			
ZZZZZZ	1	00:58:00																								
ZZZZZZ	1	01:04:00																								
ZZZZZZ	1	01:10:00																								
ZZZZZZ	1	01:16:00																								
ZZZZZZ	1	01:23:00																								
ZZZZZZ	1	01:29:00																								
248039001	1	01:35:00					X	X						X		X							X			
CCV03	1	01:41:00					X	X						X		X							X			
CCB03	1	01:47:00					X	X						X		X							X			
ZZZZZZ	1	01:54:00																								
1202056815	1	02:00:00					X	X						X		X							X			
1202056816	1	02:06:00					X	X						X		X							X			
1202056817	5	02:12:00					X	X						X		X							X			
ZZZZZZ	1	02:18:00																								
CCV04	1	02:25:00					X	X						X		X							X			
CCB04	1	02:31:00					X	X						X		X							X			

Standards

METALS
-10-
Instrument Detection Limits

SDG NO. 10-2069

Contract: LANL01004

Lab Code: GEL

MDL Effective Date: 01-JUL-09

ICP/MS	<u>Analyte</u>	<u>Wavelength (nm)</u>	<u>MDL</u>	<u>RDL</u>
			<u>ug/L</u>	<u>ug/L</u>
LIQUID	Aluminum		15.0	30
	Antimony		1.0	3
	Arsenic		1.6	5
	Barium		0.6	2
	Beryllium		0.1	.5
	Cadmium		0.11	1
	Calcium		65.0	200
	Chromium		2.0	10
	Cobalt		0.1	1
	Copper		0.33	1
	Iron		33.0	100
	Lead		0.5	2
	Magnesium		5.2	15
	Manganese		1.0	5
	Nickel		0.5	2
	Potassium		80.0	300
	Selenium		1.0	5
	Silver		0.2	1
	Sodium		80.0	250
	Thallium		0.3	1
	Uranium		0.05	.2
	Vanadium		3.0	10
	Zinc		3.0	10

METALS
-10-
Instrument Detection Limits

SDG NO. 10-2069

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. 10-2069

Contract: LANL01004

Lab Code: GEL

MDL Effective Date: 01-JUL-09

ICP	<u>Analyte</u>	<u>Wavelength</u> <u>(nm)</u>	<u>MDL</u>	<u>RDL</u>
			<u>ug/L</u>	<u>ug/L</u>
LIQUID	Aluminum	396.153	68.0	200
	Antimony	206.836	3.0	10
	Arsenic	188.979	5.0	30
	Barium	233.527	1.0	5
	Beryllium	313.107	1.0	5
	Cadmium	226.502	1.0	5
	Calcium	317.933	50.0	200
	Chromium	267.716	1.0	5
	Cobalt	228.616	1.0	5
	Copper	324.752	3.0	10
	Iron	238.204	30.0	100
	Lead	220.353	3.3	10
	Magnesium	279.077	85.0	300
	Manganese	257.61	2.0	10
	Nickel	231.604	1.5	5
	Potassium	766.49	50.0	150
	Selenium	196.026	5.0	30
	Silver	328.068	1.0	5
	Sodium	589.592	100	300
	Thallium	190.801	5.0	20
	Uranium	409.014	10.0	50
	Vanadium	292.402	1.0	5
	Zinc	213.857	3.3	10

METALS
-11-
Interelement Correction Factors

Lab Code: GEL

GEL Job No:

10-2069

Contract: LANL01004

Instrument: OPTIMA3

Effective Dates: 01-FEB-10

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Aluminum	Antimony	Arsenic	Barium	Beryllium
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.02697	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	-0.48147	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	-0.21356	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	-0.05186	0.00000	0.00000	0.00000	0.00000
Silica	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.18741	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL

GEL Job No: 10-2069

Contract: LANL01004

Instrument: OPTIMA3

Effective Dates: 01-FEB-10

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Boron	Cadmium	Chromium	Cobalt	Copper
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	2.85580	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.44491	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	-29.9151	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.57616
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.60374	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	198.62
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silica	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	4.37985	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.36147	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	2.23785	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.36818	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	1.35273

METALS
-11-
Interelement Correction Factors

Lab Code: GEL

GEL Job No: 10-2069

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-
Interement Correction Factors

Lab Code: GELGEL Job No: **10-2069**

Contract: LANL01004

Instrument: OPTIMA3

Effective Dates: **01-FEB-10**

Interement Correction Factors (apparent ppb analyte/ppm interferent)

		Nickel	Phosphorous	Potassium	Selenium	Silica
Parmname	Wavelength					
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	-0.84443	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	-0.63547	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silica	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	6.37026	0.00000	0.00000	0.00000	0.00000

METALS

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Interelement Correction Factors

Lab Code: GEL

GEL Job No: 10-2069

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: GEL

GEL Job No: 10-2069

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
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Linear Ranges

SDG NO. 10-2069

Contract: LANL01004

Lab Code: GEL

Instrument ID ICPMS5

<u>Analyte</u>	<u>Integration Time (msec)</u>	<u>LDR</u>	<u>Units</u>	<u>Effective Date</u>
Aluminum	1	50000	ug/L	01-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. 10-2069

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
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
Arsenic	20	10000	ug/L	01-FEB-10

METALS
-12-
Linear Ranges

SDG NO. 10-2069

Contract: LANL01004

Lab Code: GEL

Instrument ID ICPMS4

<u>Analyte</u>	<u>Integration Time (msec)</u>	<u>LDR</u>	<u>Units</u>	<u>Effective Date</u>
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

Raw Data

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Analysis Begun

Start Time: 3/26/2010 18:59:42

Plasma On Time: 3/26/2010 18:41:22

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\032610.sif

Batch ID:

Results Data Set: 032610A

Results Library: C:\pe\Optima3\Results\Results.mdb

=====
Sequence No.: 1

Autosampler Location: 8

Sample ID: S0

Date Collected: 3/26/2010 18:59:42

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	3784.2	3784.2	99.9 %	19:01:55
1	Y RADIAL	4053.5	4053.5	99.28 %	19:01:35
1	Al 396.153Radial†	-70.1	-70.1	[0.00] ug/L	19:01:55
1	Ca 317.933Radial†	24.1	24.2	[0.00] ug/L	19:01:55
1	Fe 238.204 Radial†	9.9	9.9	[0.00] ug/L	19:01:55
1	K 766.490 Radial†	2442.9	2445.3	[0.00] ug/L	19:01:35
1	Mg 279.077 IEC†	1.9	1.9	[0.00] ug/L	19:01:55
1	Na 589.592 Radial†	-395.5	-395.9	[0.00] ug/L	19:01:35
1	Sr 421.552†	43.7	43.7	[0.00] ug/L	19:01:35
1	Sc 361.383	721339.3	721339.3	98.435 %	19:02:52
1	Y 371.029	594849.4	594849.4	98.416 %	19:02:52
1	Ag 328.068†	159.0	161.6	[0.00] ug/L	19:02:52
1	As 188.979†	-18.6	-18.9	[0.00] ug/L	19:03:12
1	B 249.677†	-326.1	-331.3	[0.00] ug/L	19:03:12
1	Ba 233.527†	-2.4	-2.4	[0.00] ug/L	19:03:12
1	Be 313.107†	-3890.2	-3952.0	[0.00] ug/L	19:02:52
1	Cd 226.502†	-169.3	-172.0	[0.00] ug/L	19:03:12
1	Co 228.616†	-48.1	-48.9	[0.00] ug/L	19:03:12
1	Cr 267.716†	94.7	96.2	[0.00] ug/L	19:03:12
1	Cu 324.752†	5666.7	5756.8	[0.00] ug/L	19:02:52
1	Mn 257.610†	429.7	436.5	[0.00] ug/L	19:03:12
1	Mo 202.031†	13.9	14.1	[0.00] ug/L	19:03:12
1	Ni 231.604†	89.7	91.1	[0.00] ug/L	19:03:12
1	P 214.914†	196.9	200.1	[0.00] ug/L	19:03:12
1	Pb 220.353†	-52.9	-53.7	[0.00] ug/L	19:03:12
1	S 181.975 Axial†	27.1	27.5	[0.00] ug/L	19:03:12
1	Sb 206.836†	25.3	25.7	[0.00] ug/L	19:03:12
1	Se 196.026†	-25.0	-25.4	[0.00] ug/L	19:03:12
1	Si 251.611†	450.1	457.2	[0.00] ug/L	19:03:12
1	Sn 189.927†	15.5	15.7	[0.00] ug/L	19:03:12
1	Ti 334.940†	-1040.4	-1056.9	[0.00] ug/L	19:02:52
1	Tl 190.801†	-19.9	-20.2	[0.00] ug/L	19:03:12
1	U 409.014†	-1712.7	-1740.0	[0.00] ug/L	19:02:52
1	V 292.402†	-1338.4	-1359.7	[0.00] ug/L	19:02:52
1	Zn 213.857†	662.4	672.9	[0.00] ug/L	19:03:12
1	SiO2†	463.9	471.2	[0.00] ug/L	19:04:23
2	Sc Radial	3854.2	3854.2	102 %	19:02:20
2	Y RADIAL	4161.4	4161.4	101.9 %	19:02:00
2	Al 396.153Radial†	-73.3	-72.1	[0.00] ug/L	19:02:20
2	Ca 317.933Radial†	23.5	23.1	[0.00] ug/L	19:02:20
2	Fe 238.204 Radial†	9.3	9.1	[0.00] ug/L	19:02:20
2	K 766.490 Radial†	2503.4	2460.4	[0.00] ug/L	19:02:00
2	Mg 279.077 IEC†	3.2	3.2	[0.00] ug/L	19:02:20
2	Na 589.592 Radial†	-388.6	-381.9	[0.00] ug/L	19:02:00
2	Sr 421.552†	48.8	47.9	[0.00] ug/L	19:02:00
2	Sc 361.383	725301.9	725301.9	98.976 %	19:03:17
2	Y 371.029	598502.2	598502.2	99.020 %	19:03:17

2	Ag 328.068†	161.0	162.6	[0.00] ug/L	19:03:17
2	As 188.979†	-23.0	-23.3	[0.00] ug/L	19:03:37
2	B 249.677†	-356.6	-360.3	[0.00] ug/L	19:03:37
2	Ba 233.527†	9.0	9.1	[0.00] ug/L	19:03:37
2	Be 313.107†	-3901.0	-3941.3	[0.00] ug/L	19:03:17
2	Cd 226.502†	-171.1	-172.9	[0.00] ug/L	19:03:37
2	Co 228.616†	-47.4	-47.9	[0.00] ug/L	19:03:37
2	Cr 267.716†	104.0	105.1	[0.00] ug/L	19:03:37
2	Cu 324.752†	5597.9	5655.8	[0.00] ug/L	19:03:17
2	Mn 257.610†	428.5	432.9	[0.00] ug/L	19:03:37
2	Mo 202.031†	13.7	13.8	[0.00] ug/L	19:03:37
2	Ni 231.604†	82.8	83.7	[0.00] ug/L	19:03:37
2	P 214.914†	182.2	184.1	[0.00] ug/L	19:03:37
2	Pb 220.353†	-46.7	-47.2	[0.00] ug/L	19:03:37
2	S 181.975 Axial†	26.8	27.1	[0.00] ug/L	19:03:37
2	Sb 206.836†	30.4	30.7	[0.00] ug/L	19:03:37
2	Se 196.026†	-21.2	-21.5	[0.00] ug/L	19:03:37
2	Si 251.611†	445.1	449.7	[0.00] ug/L	19:03:37
2	Sn 189.927†	12.8	13.0	[0.00] ug/L	19:03:37
2	Ti 334.940†	-1032.1	-1042.8	[0.00] ug/L	19:03:17
2	Tl 190.801†	-27.5	-27.8	[0.00] ug/L	19:03:37
2	U 409.014†	-1939.5	-1959.6	[0.00] ug/L	19:03:17
2	V 292.402†	-1464.5	-1479.7	[0.00] ug/L	19:03:17
2	Zn 213.857†	650.3	657.0	[0.00] ug/L	19:03:37
2	SiO2†	474.2	479.1	[0.00] ug/L	19:04:43
3	Sc Radial	3725.7	3725.7	98.4 %	19:02:45
3	Y RADIAL	4033.3	4033.3	98.79 %	19:02:25
3	Al 396.153Radial†	-75.1	-76.4	[0.00] ug/L	19:02:45
3	Ca 317.933Radial†	18.2	18.5	[0.00] ug/L	19:02:45
3	Fe 238.204 Radial†	6.2	6.3	[0.00] ug/L	19:02:45
3	K 766.490 Radial†	2488.2	2529.8	[0.00] ug/L	19:02:25
3	Mg 279.077 IEC†	3.3	3.4	[0.00] ug/L	19:02:45
3	Na 589.592 Radial†	-374.8	-381.1	[0.00] ug/L	19:02:25
3	Sr 421.552†	25.7	26.1	[0.00] ug/L	19:02:25
3	Sc 361.383	751775.1	751775.1	102.59 %	19:03:42
3	Y 371.029	619924.0	619924.0	102.56 %	19:03:42
3	Ag 328.068†	135.7	132.3	[0.00] ug/L	19:03:42
3	As 188.979†	-25.3	-24.7	[0.00] ug/L	19:04:02
3	B 249.677†	-321.4	-313.3	[0.00] ug/L	19:04:02
3	Ba 233.527†	1.0	1.0	[0.00] ug/L	19:04:02
3	Be 313.107†	-3879.4	-3781.5	[0.00] ug/L	19:03:42
3	Cd 226.502†	-173.0	-168.6	[0.00] ug/L	19:04:02
3	Co 228.616†	-44.5	-43.3	[0.00] ug/L	19:04:02
3	Cr 267.716†	86.1	83.9	[0.00] ug/L	19:04:02
3	Cu 324.752†	5886.8	5738.3	[0.00] ug/L	19:03:42
3	Mn 257.610†	417.7	407.2	[0.00] ug/L	19:04:02
3	Mo 202.031†	22.9	22.4	[0.00] ug/L	19:04:02
3	Ni 231.604†	74.7	72.8	[0.00] ug/L	19:04:02
3	P 214.914†	185.9	181.2	[0.00] ug/L	19:04:02
3	Pb 220.353†	-47.5	-46.3	[0.00] ug/L	19:04:02
3	S 181.975 Axial†	27.4	26.7	[0.00] ug/L	19:04:02
3	Sb 206.836†	21.0	20.5	[0.00] ug/L	19:04:02
3	Se 196.026†	-18.8	-18.4	[0.00] ug/L	19:04:02
3	Si 251.611†	472.1	460.2	[0.00] ug/L	19:04:02
3	Sn 189.927†	12.6	12.3	[0.00] ug/L	19:04:02
3	Ti 334.940†	-1060.0	-1033.2	[0.00] ug/L	19:03:42
3	Tl 190.801†	-19.3	-18.8	[0.00] ug/L	19:04:02
3	U 409.014†	-1849.2	-1802.5	[0.00] ug/L	19:03:42
3	V 292.402†	-1336.1	-1302.4	[0.00] ug/L	19:03:42
3	Zn 213.857†	666.3	649.5	[0.00] ug/L	19:04:02
3	SiO2†	453.1	441.6	[0.00] ug/L	19:05:03

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	732805.4	16547.26	2.26%	100.000 %
Sc Radial	3788.0	64.32	1.70%	100 %
Y 371.029	604425.2	13546.07	2.24%	100.00 %
Y RADIAL	4082.7	68.88	1.69%	100.0 %
Ag 328.068†	152.2	17.20	11.30%	[0.00] ug/L

Al 396.153Radial†	-72.9	3.20	4.39%	[0.00]	ug/L
As 188.979†	-22.3	3.01	13.48%	[0.00]	ug/L
B 249.677†	-335.0	23.71	7.08%	[0.00]	ug/L
Ba 233.527†	2.6	5.93	232.05%	[0.00]	ug/L
Be 313.107†	-3891.6	95.53	2.45%	[0.00]	ug/L
Ca 317.933Radial†	21.9	3.04	13.88%	[0.00]	ug/L
Cd 226.502†	-171.2	2.26	1.32%	[0.00]	ug/L
Co 228.616†	-46.7	2.96	6.33%	[0.00]	ug/L
Cr 267.716†	95.1	10.62	11.17%	[0.00]	ug/L
Cu 324.752†	5717.0	53.75	0.94%	[0.00]	ug/L
Fe 238.204 Radial†	8.5	1.89	22.38%	[0.00]	ug/L
K 766.490 Radial†	2478.5	45.07	1.82%	[0.00]	ug/L
Mg 279.077 IEC†	2.8	0.81	28.97%	[0.00]	ug/L
Mn 257.610†	425.5	15.99	3.76%	[0.00]	ug/L
Mo 202.031†	16.7	4.86	29.00%	[0.00]	ug/L
Na 589.592 Radial†	-386.3	8.34	2.16%	[0.00]	ug/L
Ni 231.604†	82.6	9.20	11.14%	[0.00]	ug/L
P 214.914†	188.5	10.17	5.40%	[0.00]	ug/L
Pb 220.353†	-49.1	4.05	8.25%	[0.00]	ug/L
S 181.975 Axial†	27.1	0.40	1.47%	[0.00]	ug/L
Sb 206.836†	25.6	5.12	19.98%	[0.00]	ug/L
Se 196.026†	-21.7	3.51	16.18%	[0.00]	ug/L
Si 251.611†	455.7	5.39	1.18%	[0.00]	ug/L
Sn 189.927†	13.6	1.81	13.25%	[0.00]	ug/L
Sr 421.552†	39.3	11.56	29.43%	[0.00]	ug/L
Ti 334.940†	-1044.3	11.92	1.14%	[0.00]	ug/L
Tl 190.801†	-22.3	4.86	21.84%	[0.00]	ug/L
U 409.014†	-1834.0	113.13	6.17%	[0.00]	ug/L
V 292.402†	-1380.6	90.48	6.55%	[0.00]	ug/L
Zn 213.857†	659.8	11.94	1.81%	[0.00]	ug/L
SiO2†	464.0	19.75	4.26%	[0.00]	ug/L

Sequence No.: 2

Sample ID: S0.1

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 2

Date Collected: 3/26/2010 19:07:13

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	3959.8	3959.8	105 %		19:09:25
1	Y RADIAL	4241.6	4241.6	103.9 %		19:09:25
1	K 766.490 Radial†	6985.1	4203.4	[1000] ug/L		19:09:05
1	Sr 421.552†	10622.4	10122.3	[100] ug/L		19:09:25
1	Sc 361.383	756854.1	756854.1	103.28 %		19:10:22
1	Y 371.029	624292.2	624292.2	103.29 %		19:10:22
1	Ag 328.068†	18964.0	18209.2	[100] ug/L		19:10:22
1	As 188.979†	155.5	172.8	[100] ug/L		19:10:42
1	B 249.677†	3142.4	3377.5	[100] ug/L		19:10:22
1	Ba 233.527†	10249.5	9921.2	[100] ug/L		19:10:22
1	Be 313.107†	225796.6	222513.6	[100] ug/L		19:10:22
1	Cd 226.502†	6385.3	6353.5	[100] ug/L		19:10:42
1	Co 228.616†	3781.5	3708.1	[100] ug/L		19:10:42
1	Cr 267.716†	7089.6	6769.3	[100] ug/L		19:10:22
1	Cu 324.752†	35323.9	28484.5	[100] ug/L		19:10:22
1	Mn 257.610†	74848.6	72044.8	[100] ug/L		19:10:22
1	Mo 202.031†	1079.6	1028.5	[100] ug/L		19:10:42
1	Ni 231.604†	3108.5	2927.1	[100] ug/L		19:10:42
1	P 214.914†	861.6	645.7	[500] ug/L		19:10:42
1	Pb 220.353†	587.6	618.0	[100] ug/L		19:10:42
1	S 181.975 Axial†	136.4	104.9	[200] ug/L		19:10:42
1	Sb 206.836†	269.0	234.9	[100] ug/L		19:10:42
1	Se 196.026†	103.2	121.6	[100] ug/L		19:10:42
1	Si 251.611†	13311.5	12432.8	[500] ug/L		19:10:22
1	Sn 189.927†	435.9	408.4	[100] ug/L		19:10:42
1	Ti 334.940†	54432.5	53747.3	[100] ug/L		19:10:22
1	Tl 190.801†	220.1	235.4	[100] ug/L		19:10:42
1	U 409.014†	1346.1	3137.3	[100] ug/L		19:10:22
1	V 292.402†	10429.2	11478.4	[100] ug/L		19:10:22
1	Zn 213.857†	8780.6	7841.8	[100] ug/L		19:10:22
1	SiO2†	13483.6	12591.1	[1069.5] ug/L		19:11:39
2	Sc Radial	3905.9	3905.9	103 %		19:09:51
2	Y RADIAL	4193.6	4193.6	102.7 %		19:09:51
2	K 766.490 Radial†	7477.5	4773.4	[1000] ug/L		19:09:31
2	Sr 421.552†	10707.1	10344.8	[100] ug/L		19:09:51
2	Sc 361.383	814135.1	814135.1	111.10 %		19:10:48
2	Y 371.029	670029.6	670029.6	110.85 %		19:10:48
2	Ag 328.068†	20316.1	18134.4	[100] ug/L		19:10:48
2	As 188.979†	159.4	165.8	[100] ug/L		19:11:08
2	B 249.677†	3415.9	3409.6	[100] ug/L		19:10:48
2	Ba 233.527†	11008.6	9906.3	[100] ug/L		19:10:48
2	Be 313.107†	241618.2	221372.9	[100] ug/L		19:10:48
2	Cd 226.502†	6350.0	5886.8	[100] ug/L		19:11:08
2	Co 228.616†	3753.8	3425.6	[100] ug/L		19:11:08
2	Cr 267.716†	7587.4	6734.4	[100] ug/L		19:10:48
2	Cu 324.752†	37932.7	28426.3	[100] ug/L		19:10:48
2	Mn 257.610†	80125.1	71695.3	[100] ug/L		19:10:48
2	Mo 202.031†	1077.1	952.8	[100] ug/L		19:11:08
2	Ni 231.604†	3069.3	2680.1	[100] ug/L		19:11:08
2	P 214.914†	861.5	587.0	[500] ug/L		19:11:08
2	Pb 220.353†	582.8	573.7	[100] ug/L		19:11:08
2	S 181.975 Axial†	138.7	97.7	[200] ug/L		19:11:08
2	Sb 206.836†	268.9	216.4	[100] ug/L		19:11:08
2	Se 196.026†	99.3	111.1	[100] ug/L		19:11:08
2	Si 251.611†	14272.2	12390.8	[500] ug/L		19:10:48
2	Sn 189.927†	424.6	368.6	[100] ug/L		19:11:08
2	Ti 334.940†	58617.3	53806.0	[100] ug/L		19:10:48
2	Tl 190.801†	228.9	228.3	[100] ug/L		19:11:08
2	U 409.014†	1537.3	3217.8	[100] ug/L		19:10:48

2	V 292.402†	11218.7	11478.6	[100]	ug/L	19:10:48
2	Zn 213.857†	9334.9	7742.5	[100]	ug/L	19:10:48
2	SiO2†	13297.4	11505.1	[1069.5]	ug/L	19:11:44
3	Sc Radial	3922.9	3922.9	104	%	19:10:16
3	Y RADIAL	4216.4	4216.4	103.3	%	19:10:16
3	K 766.490 Radial†	7297.7	4568.2	[1000]	ug/L	19:09:56
3	Sr 421.552†	10808.0	10397.0	[100]	ug/L	19:10:16
3	Sc 361.383	755634.2	755634.2	103.12	%	19:11:14
3	Y 371.029	622938.6	622938.6	103.06	%	19:11:14
3	Ag 328.068†	18941.2	18216.8	[100]	ug/L	19:11:14
3	As 188.979†	154.6	172.2	[100]	ug/L	19:11:34
3	B 249.677†	3102.5	3343.8	[100]	ug/L	19:11:14
3	Ba 233.527†	10272.6	9959.7	[100]	ug/L	19:11:14
3	Be 313.107†	225553.0	222630.4	[100]	ug/L	19:11:14
3	Cd 226.502†	6336.8	6316.5	[100]	ug/L	19:11:34
3	Co 228.616†	3751.6	3684.9	[100]	ug/L	19:11:34
3	Cr 267.716†	7145.2	6834.3	[100]	ug/L	19:11:14
3	Cu 324.752†	35269.0	28486.5	[100]	ug/L	19:11:14
3	Mn 257.610†	74830.8	72144.5	[100]	ug/L	19:11:14
3	Mo 202.031†	1073.7	1024.5	[100]	ug/L	19:11:34
3	Ni 231.604†	3093.7	2917.7	[100]	ug/L	19:11:34
3	P 214.914†	855.9	641.6	[500]	ug/L	19:11:34
3	Pb 220.353†	575.1	606.8	[100]	ug/L	19:11:34
3	S 181.975 Axial†	144.4	112.9	[200]	ug/L	19:11:34
3	Sb 206.836†	264.5	230.9	[100]	ug/L	19:11:34
3	Se 196.026†	91.1	110.1	[100]	ug/L	19:11:34
3	Si 251.611†	13300.0	12442.4	[500]	ug/L	19:11:14
3	Sn 189.927†	428.0	401.4	[100]	ug/L	19:11:34
3	Ti 334.940†	54429.7	53829.6	[100]	ug/L	19:11:14
3	Tl 190.801†	224.8	240.3	[100]	ug/L	19:11:34
3	U 409.014†	1480.9	3270.1	[100]	ug/L	19:11:14
3	V 292.402†	10394.2	11460.8	[100]	ug/L	19:11:14
3	Zn 213.857†	8781.8	7856.6	[100]	ug/L	19:11:14
3	SiO2†	13472.0	12601.0	[1069.5]	ug/L	19:11:49

Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	775541.2	33428.90	4.31%	105.83 %
Sc Radial	3929.5	27.59	0.70%	104 %
Y 371.029	639086.8	26805.79	4.19%	105.73 %
Y RADIAL	4217.2	23.97	0.57%	103.3 %
Ag 328.068†	18186.8	45.56	0.25%	[100] ug/L
As 188.979†	170.3	3.91	2.29%	[100] ug/L
B 249.677†	3377.0	32.91	0.97%	[100] ug/L
Ba 233.527†	9929.1	27.53	0.28%	[100] ug/L
Be 313.107†	222172.3	694.77	0.31%	[100] ug/L
Cd 226.502†	6185.6	259.46	4.19%	[100] ug/L
Co 228.616†	3606.2	156.85	4.35%	[100] ug/L
Cr 267.716†	6779.3	50.69	0.75%	[100] ug/L
Cu 324.752†	28465.8	34.17	0.12%	[100] ug/L
K 766.490 Radial†	4515.0	288.69	6.39%	[1000] ug/L
Mn 257.610†	71961.6	235.88	0.33%	[100] ug/L
Mo 202.031†	1001.9	42.63	4.26%	[100] ug/L
Ni 231.604†	2841.7	139.96	4.93%	[100] ug/L
P 214.914†	624.8	32.75	5.24%	[500] ug/L
Pb 220.353†	599.5	23.04	3.84%	[100] ug/L
S 181.975 Axial†	105.2	7.59	7.22%	[200] ug/L
Sb 206.836†	227.4	9.72	4.28%	[100] ug/L
Se 196.026†	114.3	6.40	5.61%	[100] ug/L
Si 251.611†	12422.0	27.47	0.22%	[500] ug/L
Sn 189.927†	392.8	21.28	5.42%	[100] ug/L
Sr 421.552†	10288.0	145.93	1.42%	[100] ug/L
Ti 334.940†	53794.3	42.39	0.08%	[100] ug/L
Tl 190.801†	234.6	6.04	2.57%	[100] ug/L
U 409.014†	3208.4	66.91	2.09%	[100] ug/L
V 292.402†	11472.6	10.23	0.09%	[100] ug/L
Zn 213.857†	7813.6	62.05	0.79%	[100] ug/L
SiO2†	12232.4	629.92	5.15%	[1069.5] ug/L

Sequence No.: 3
 Sample ID: S0.5
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 3
 Date Collected: 3/26/2010 19:14:00
 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	3948.4	3948.4	104 %		19:16:12
1	Y RADIAL	4473.3	4473.3	109.6 %		19:15:52
1	Al 396.153Radial†	4578.3	4465.2	[5000] ug/L		19:15:52
1	Ca 317.933Radial†	2438.3	2317.4	[5000] ug/L		19:16:12
1	K 766.490 Radial†	26802.6	23235.5	[5000] ug/L		19:15:52
1	Mg 279.077 IEC†	119.1	111.5	[5000] ug/L		19:16:12
1	Sr 421.552†	59246.6	56801.0	[500] ug/L		19:15:52
1	Sc 361.383	781698.4	781698.4	106.67 %		19:17:10
1	Y 371.029	639119.4	639119.4	105.74 %		19:17:10
1	Ag 328.068†	96625.6	90429.8	[500] ug/L		19:17:15
1	As 188.979†	867.1	835.2	[500] ug/L		19:17:35
1	B 249.677†	17582.0	16817.3	[500] ug/L		19:17:15
1	Ba 233.527†	51877.6	48630.2	[500] ug/L		19:17:15
1	Be 313.107†	1151343.1	1083221.5	[500] ug/L		19:17:10
1	Cd 226.502†	33338.3	31424.2	[500] ug/L		19:17:15
1	Co 228.616†	19217.2	18061.9	[500] ug/L		19:17:15
1	Cr 267.716†	35556.5	33237.5	[500] ug/L		19:17:15
1	Cu 324.752†	157545.2	141974.3	[500] ug/L		19:17:15
1	Mn 257.610†	368217.3	344760.8	[500] ug/L		19:17:10
1	Mo 202.031†	5413.8	5058.5	[500] ug/L		19:17:35
1	Ni 231.604†	15495.1	14443.3	[500] ug/L		19:17:15
1	P 214.914†	3545.1	3134.9	[2500] ug/L		19:17:35
1	Pb 220.353†	3084.6	2940.7	[500] ug/L		19:17:35
1	S 181.975 Axial†	590.8	526.7	[1000] ug/L		19:17:35
1	Sb 206.836†	1196.0	1095.6	[500] ug/L		19:17:35
1	Se 196.026†	580.7	566.1	[500] ug/L		19:17:35
1	Si 251.611†	66672.6	62046.7	[2500] ug/L		19:17:15
1	Sn 189.927†	2159.6	2010.9	[500] ug/L		19:17:35
1	Ti 334.940†	280353.8	263862.8	[500] ug/L		19:17:15
1	Tl 190.801†	1235.2	1180.2	[500] ug/L		19:17:35
1	U 409.014†	14321.3	15259.6	[500] ug/L		19:17:15
1	V 292.402†	58928.3	56623.1	[500] ug/L		19:17:15
1	Zn 213.857†	41570.1	38310.2	[500] ug/L		19:17:15
1	SiO2†	65661.9	61090.9	[5347.5] ug/L		19:18:42
2	Sc Radial	3835.3	3835.3	101 %		19:16:37
2	Y RADIAL	4488.0	4488.0	109.9 %		19:16:17
2	Al 396.153Radial†	4606.4	4622.5	[5000] ug/L		19:16:17
2	Ca 317.933Radial†	2403.3	2351.7	[5000] ug/L		19:16:37
2	K 766.490 Radial†	26935.2	24124.4	[5000] ug/L		19:16:17
2	Mg 279.077 IEC†	113.3	109.1	[5000] ug/L		19:16:37
2	Sr 421.552†	59628.1	58853.4	[500] ug/L		19:16:17
2	Sc 361.383	786326.1	786326.1	107.30 %		19:17:41
2	Y 371.029	642760.6	642760.6	106.34 %		19:17:41
2	Ag 328.068†	94729.6	88129.7	[500] ug/L		19:17:46
2	As 188.979†	848.5	813.1	[500] ug/L		19:18:06
2	B 249.677†	17147.9	16315.8	[500] ug/L		19:17:46
2	Ba 233.527†	51040.3	47563.8	[500] ug/L		19:17:46
2	Be 313.107†	1143791.7	1069832.0	[500] ug/L		19:17:41
2	Cd 226.502†	32820.7	30757.9	[500] ug/L		19:17:46
2	Co 228.616†	18895.8	17656.4	[500] ug/L		19:17:46
2	Cr 267.716†	35003.7	32526.2	[500] ug/L		19:17:46
2	Cu 324.752†	153934.8	137740.4	[500] ug/L		19:17:46
2	Mn 257.610†	366678.5	341295.3	[500] ug/L		19:17:41
2	Mo 202.031†	5277.5	4901.5	[500] ug/L		19:18:06
2	Ni 231.604†	15251.5	14130.9	[500] ug/L		19:17:46
2	P 214.914†	3437.5	3015.1	[2500] ug/L		19:18:06
2	Pb 220.353†	2992.8	2838.2	[500] ug/L		19:18:06
2	S 181.975 Axial†	568.9	503.1	[1000] ug/L		19:18:06
2	Sb 206.836†	1154.2	1050.0	[500] ug/L		19:18:06

2	Se 196.026†	564.9	548.2	[500]	ug/L	19:18:06
2	Si 251.611†	65277.6	60378.8	[2500]	ug/L	19:17:46
2	Sn 189.927†	2102.9	1946.1	[500]	ug/L	19:18:06
2	Ti 334.940†	275136.8	257454.1	[500]	ug/L	19:17:46
2	Tl 190.801†	1193.5	1134.5	[500]	ug/L	19:18:06
2	U 409.014†	14009.1	14889.6	[500]	ug/L	19:17:46
2	V 292.402†	57814.2	55259.7	[500]	ug/L	19:17:46
2	Zn 213.857†	40881.2	37438.9	[500]	ug/L	19:17:46
2	SiO2†	65430.8	60513.4	[5347.5]	ug/L	19:18:47
3	Sc Radial	4051.5	4051.5	107	%	19:17:02
3	Y RADIAL	4186.1	4186.1	102.5	%	19:16:42
3	Al 396.153Radial†	4337.1	4127.9	[5000]	ug/L	19:16:42
3	Ca 317.933Radial†	2495.3	2311.1	[5000]	ug/L	19:17:02
3	K 766.490 Radial†	25579.1	21436.8	[5000]	ug/L	19:16:42
3	Mg 279.077 IEC†	119.3	108.7	[5000]	ug/L	19:17:02
3	Sr 421.552†	56174.4	52481.3	[500]	ug/L	19:16:42
3	Sc 361.383	771590.3	771590.3	105.29	%	19:18:12
3	Y 371.029	630724.8	630724.8	104.35	%	19:18:12
3	Ag 328.068†	95758.7	90793.1	[500]	ug/L	19:18:17
3	As 188.979†	864.5	843.4	[500]	ug/L	19:18:37
3	B 249.677†	17437.8	16896.3	[500]	ug/L	19:18:17
3	Ba 233.527†	51567.4	48972.7	[500]	ug/L	19:18:17
3	Be 313.107†	1126364.4	1073637.9	[500]	ug/L	19:18:12
3	Cd 226.502†	33229.2	31730.1	[500]	ug/L	19:18:17
3	Co 228.616†	19142.4	18226.9	[500]	ug/L	19:18:17
3	Cr 267.716†	35441.3	33564.7	[500]	ug/L	19:18:17
3	Cu 324.752†	155403.6	141875.1	[500]	ug/L	19:18:17
3	Mn 257.610†	361764.6	343154.6	[500]	ug/L	19:18:12
3	Mo 202.031†	5383.7	5096.3	[500]	ug/L	19:18:37
3	Ni 231.604†	15420.0	14562.4	[500]	ug/L	19:18:17
3	P 214.914†	3497.5	3133.3	[2500]	ug/L	19:18:37
3	Pb 220.353†	3078.8	2973.1	[500]	ug/L	19:18:37
3	S 181.975 Axial†	583.1	526.7	[1000]	ug/L	19:18:37
3	Sb 206.836†	1189.8	1104.4	[500]	ug/L	19:18:37
3	Se 196.026†	574.0	566.9	[500]	ug/L	19:18:37
3	Si 251.611†	66026.9	62252.3	[2500]	ug/L	19:18:17
3	Sn 189.927†	2133.1	2012.3	[500]	ug/L	19:18:37
3	Ti 334.940†	277776.5	264858.0	[500]	ug/L	19:18:17
3	Tl 190.801†	1232.6	1192.9	[500]	ug/L	19:18:37
3	U 409.014†	14075.7	15202.2	[500]	ug/L	19:18:17
3	V 292.402†	58452.7	56895.1	[500]	ug/L	19:18:17
3	Zn 213.857†	41375.3	38635.7	[500]	ug/L	19:18:17
3	SiO2†	64447.8	60744.3	[5347.5]	ug/L	19:18:52

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	779871.6	7535.81	0.97%	106.42 %
Sc Radial	3945.1	108.15	2.74%	104 %
Y 371.029	637534.9	6172.35	0.97%	105.48 %
Y RADIAL	4382.5	170.20	3.88%	107.3 %
Ag 328.068†	89784.2	1444.31	1.61%	[500] ug/L
Al 396.153Radial†	4405.2	252.71	5.74%	[5000] ug/L
As 188.979†	830.5	15.67	1.89%	[500] ug/L
B 249.677†	16676.4	314.85	1.89%	[500] ug/L
Ba 233.527†	48388.9	734.83	1.52%	[500] ug/L
Be 313.107†	1075563.8	6899.37	0.64%	[500] ug/L
Ca 317.933Radial†	2326.7	21.88	0.94%	[5000] ug/L
Cd 226.502†	31304.1	497.07	1.59%	[500] ug/L
Co 228.616†	17981.7	293.60	1.63%	[500] ug/L
Cr 267.716†	33109.5	531.00	1.60%	[500] ug/L
Cu 324.752†	140529.9	2416.31	1.72%	[500] ug/L
K 766.490 Radial†	22932.2	1369.23	5.97%	[5000] ug/L
Mg 279.077 IEC†	109.8	1.50	1.36%	[5000] ug/L
Mn 257.610†	343070.2	1734.31	0.51%	[500] ug/L
Mo 202.031†	5018.8	103.27	2.06%	[500] ug/L
Ni 231.604†	14378.9	222.84	1.55%	[500] ug/L
P 214.914†	3094.4	68.72	2.22%	[2500] ug/L
Pb 220.353†	2917.3	70.43	2.41%	[500] ug/L
S 181.975 Axial†	518.8	13.67	2.63%	[1000] ug/L

Sb 206.836†	1083.3	29.17	2.69%	[500]	ug/L
Se 196.026†	560.4	10.58	1.89%	[500]	ug/L
Si 251.611†	61559.3	1027.47	1.67%	[2500]	ug/L
Sn 189.927†	1989.8	37.81	1.90%	[500]	ug/L
Sr 421.552†	56045.2	3252.57	5.80%	[500]	ug/L
Ti 334.940†	262058.3	4018.28	1.53%	[500]	ug/L
Tl 190.801†	1169.2	30.71	2.63%	[500]	ug/L
U 409.014†	15117.1	199.09	1.32%	[500]	ug/L
V 292.402†	56259.3	876.32	1.56%	[500]	ug/L
Zn 213.857†	38128.3	618.81	1.62%	[500]	ug/L
SiO2†	60782.9	290.70	0.48%	[5347.5]	ug/L

Sequence No.: 4
 Sample ID: SCAL
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 4
 Date Collected: 3/26/2010 19:21:03
 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	3955.0	3955.0	104 %	19:23:16
1	Y RADIAL	4374.2	4374.2	107.1 %	19:22:56
1	Al 396.153Radial†	9148.9	8835.5	[10000] ug/L	19:22:56
1	Ca 317.933Radial†	5037.5	4802.9	[10000] ug/L	19:22:56
1	Fe 238.204 Radial†	828.0	784.6	[10000] ug/L	19:23:16
1	K 766.490 Radial†	50617.6	46002.0	[10000] ug/L	19:22:56
1	Mg 279.077 IEC†	236.8	224.0	[10000] ug/L	19:23:16
1	Na 589.592 Radial†	26401.8	25673.4	[10000] ug/L	19:22:56
1	Sr 421.552†	116616.4	111653.7	[1000] ug/L	19:22:56
1	Sc 361.383	788649.0	788649.0	107.62 %	19:24:15
1	Y 371.029	642971.8	642971.8	106.38 %	19:24:15
1	Ag 328.068†	189873.5	176276.6	[1000] ug/L	19:24:15
1	As 188.979†	1735.0	1634.5	[1000] ug/L	19:24:35
1	B 249.677†	35641.4	33452.7	[1000] ug/L	19:24:15
1	Ba 233.527†	103471.2	96141.9	[1000] ug/L	19:24:15
1	Be 313.107†	2323674.4	2163028.6	[1000] ug/L	19:24:15
1	Cd 226.502†	66598.6	62054.0	[1000] ug/L	19:24:15
1	Co 228.616†	37076.5	34497.9	[1000] ug/L	19:24:35
1	Cr 267.716†	70935.3	65817.3	[1000] ug/L	19:24:15
1	Cu 324.752†	309969.2	282303.6	[1000] ug/L	19:24:15
1	Mn 257.610†	745768.0	692535.3	[1000] ug/L	19:24:15
1	Mo 202.031†	10628.6	9859.3	[1000] ug/L	19:24:35
1	Ni 231.604†	29803.5	27610.6	[1000] ug/L	19:24:35
1	P 214.914†	6850.3	6176.8	[5000] ug/L	19:24:35
1	Pb 220.353†	6159.9	5772.8	[1000] ug/L	19:24:35
1	S 181.975 Axial†	1135.5	1028.0	[2000] ug/L	19:24:35
1	Sb 206.836†	2344.7	2153.0	[1000] ug/L	19:24:35
1	Se 196.026†	1177.2	1115.6	[1000] ug/L	19:24:35
1	Si 251.611†	131489.5	121723.1	[5000] ug/L	19:24:15
1	Sn 189.927†	4253.6	3938.8	[1000] ug/L	19:24:35
1	Ti 334.940†	566898.7	527801.4	[1000] ug/L	19:24:15
1	Tl 190.801†	2458.6	2306.7	[1000] ug/L	19:24:35
1	U 409.014†	29575.9	29315.7	[1000] ug/L	19:24:15
1	V 292.402†	119191.8	112132.6	[1000] ug/L	19:24:15
1	Zn 213.857†	81832.1	75377.8	[1000] ug/L	19:24:15
1	SiO2†	133295.9	123393.4	[10695] ug/L	19:25:35
2	Sc Radial	3878.7	3878.7	102 %	19:23:41
2	Y RADIAL	4329.4	4329.4	106.0 %	19:23:21
2	Al 396.153Radial†	8987.2	8850.1	[10000] ug/L	19:23:21
2	Ca 317.933Radial†	4948.9	4811.4	[10000] ug/L	19:23:21
2	Fe 238.204 Radial†	806.9	779.6	[10000] ug/L	19:23:41
2	K 766.490 Radial†	49756.6	46115.4	[10000] ug/L	19:23:21
2	Mg 279.077 IEC†	232.8	224.5	[10000] ug/L	19:23:41
2	Na 589.592 Radial†	25916.6	25697.3	[10000] ug/L	19:23:21
2	Sr 421.552†	114776.7	112055.3	[1000] ug/L	19:23:21
2	Sc 361.383	811253.9	811253.9	110.71 %	19:24:43
2	Y 371.029	662399.3	662399.3	109.59 %	19:24:43
2	Ag 328.068†	191244.3	172598.8	[1000] ug/L	19:24:43
2	As 188.979†	1788.2	1637.5	[1000] ug/L	19:25:03
2	B 249.677†	35985.2	32840.4	[1000] ug/L	19:24:43
2	Ba 233.527†	103577.6	93559.1	[1000] ug/L	19:24:43
2	Be 313.107†	2330506.2	2109037.1	[1000] ug/L	19:24:43
2	Cd 226.502†	66612.7	60342.4	[1000] ug/L	19:24:43
2	Co 228.616†	37786.9	34179.6	[1000] ug/L	19:25:03
2	Cr 267.716†	71014.7	64052.5	[1000] ug/L	19:24:43
2	Cu 324.752†	312414.9	276487.3	[1000] ug/L	19:24:43
2	Mn 257.610†	746740.7	674105.1	[1000] ug/L	19:24:43
2	Mo 202.031†	10859.4	9792.5	[1000] ug/L	19:25:03
2	Ni 231.604†	30450.1	27423.0	[1000] ug/L	19:25:03

2	P 214.914†	7015.1	6148.3	[5000]	ug/L	19:25:03
2	Pb 220.353†	6259.2	5703.0	[1000]	ug/L	19:25:03
2	S 181.975 Axial†	1155.7	1016.8	[2000]	ug/L	19:25:03
2	Sb 206.836†	2399.3	2141.7	[1000]	ug/L	19:25:03
2	Se 196.026†	1190.2	1096.8	[1000]	ug/L	19:25:03
2	Si 251.611†	132116.6	118885.1	[5000]	ug/L	19:24:43
2	Sn 189.927†	4337.4	3904.4	[1000]	ug/L	19:25:03
2	Ti 334.940†	568983.2	515006.7	[1000]	ug/L	19:24:43
2	Tl 190.801†	2523.1	2301.4	[1000]	ug/L	19:25:03
2	U 409.014†	29905.1	28847.3	[1000]	ug/L	19:24:43
2	V 292.402†	119702.7	109508.0	[1000]	ug/L	19:24:43
2	Zn 213.857†	81983.0	73395.4	[1000]	ug/L	19:24:43
2	SiO2†	133895.3	120483.6	[10695]	ug/L	19:25:41
3	Sc Radial	4024.5	4024.5	106	%	19:24:06
3	Y RADIAL	4241.4	4241.4	103.9	%	19:23:46
3	Al 396.153Radial†	8810.2	8365.4	[10000]	ug/L	19:23:46
3	Ca 317.933Radial†	4817.4	4512.4	[10000]	ug/L	19:23:46
3	Fe 238.204 Radial†	835.2	777.6	[10000]	ug/L	19:24:06
3	K 766.490 Radial†	48679.5	43340.5	[10000]	ug/L	19:23:46
3	Mg 279.077 IEC†	238.3	221.5	[10000]	ug/L	19:24:06
3	Na 589.592 Radial†	25357.2	24253.5	[10000]	ug/L	19:23:46
3	Sr 421.552†	112127.8	105499.8	[1000]	ug/L	19:23:46
3	Sc 361.383	790958.8	790958.8	107.94	%	19:25:10
3	Y 371.029	644933.1	644933.1	106.70	%	19:25:10
3	Ag 328.068†	189465.7	175383.6	[1000]	ug/L	19:25:10
3	As 188.979†	1764.6	1657.2	[1000]	ug/L	19:25:30
3	B 249.677†	35545.1	33266.7	[1000]	ug/L	19:25:10
3	Ba 233.527†	102961.5	95389.0	[1000]	ug/L	19:25:10
3	Be 313.107†	2310240.7	2144277.3	[1000]	ug/L	19:25:10
3	Cd 226.502†	66121.3	61431.0	[1000]	ug/L	19:25:10
3	Co 228.616†	37525.9	34813.6	[1000]	ug/L	19:25:30
3	Cr 267.716†	70613.5	65326.8	[1000]	ug/L	19:25:10
3	Cu 324.752†	309232.9	280780.4	[1000]	ug/L	19:25:10
3	Mn 257.610†	741998.2	687019.0	[1000]	ug/L	19:25:10
3	Mo 202.031†	10760.1	9952.2	[1000]	ug/L	19:25:30
3	Ni 231.604†	30205.1	27901.7	[1000]	ug/L	19:25:30
3	P 214.914†	6925.6	6228.0	[5000]	ug/L	19:25:30
3	Pb 220.353†	6230.0	5821.0	[1000]	ug/L	19:25:30
3	S 181.975 Axial†	1144.4	1033.2	[2000]	ug/L	19:25:30
3	Sb 206.836†	2362.0	2162.7	[1000]	ug/L	19:25:30
3	Se 196.026†	1178.7	1113.8	[1000]	ug/L	19:25:30
3	Si 251.611†	130889.9	120810.8	[5000]	ug/L	19:25:10
3	Sn 189.927†	4293.4	3964.1	[1000]	ug/L	19:25:30
3	Ti 334.940†	565084.2	524582.1	[1000]	ug/L	19:25:10
3	Tl 190.801†	2494.4	2333.3	[1000]	ug/L	19:25:30
3	U 409.014†	29710.6	29360.2	[1000]	ug/L	19:25:10
3	V 292.402†	118908.3	111546.4	[1000]	ug/L	19:25:10
3	Zn 213.857†	81419.1	74773.1	[1000]	ug/L	19:25:10
3	SiO2†	130682.4	120610.3	[10695]	ug/L	19:25:46

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	796953.9	12437.93	1.56%	108.75	%
Sc Radial	3952.7	72.95	1.85%	104	%
Y 371.029	650101.4	10695.35	1.65%	107.56	%
Y RADIAL	4315.0	67.56	1.57%	105.7	%
Ag 328.068†	174753.0	1918.27	1.10%	[1000]	ug/L
Al 396.153Radial†	8683.7	275.73	3.18%	[10000]	ug/L
As 188.979†	1643.1	12.33	0.75%	[1000]	ug/L
B 249.677†	33186.6	313.91	0.95%	[1000]	ug/L
Ba 233.527†	95030.0	1328.31	1.40%	[1000]	ug/L
Be 313.107†	2138781.0	27412.18	1.28%	[1000]	ug/L
Ca 317.933Radial†	4708.9	170.20	3.61%	[10000]	ug/L
Cd 226.502†	61275.8	866.28	1.41%	[1000]	ug/L
Co 228.616†	34497.0	317.01	0.92%	[1000]	ug/L
Cr 267.716†	65065.5	910.98	1.40%	[1000]	ug/L
Cu 324.752†	279857.1	3016.05	1.08%	[1000]	ug/L
Fe 238.204 Radial†	780.6	3.57	0.46%	[10000]	ug/L
K 766.490 Radial†	45152.6	1570.37	3.48%	[10000]	ug/L

Mg 279.077 IEC†	223.3	1.60	0.72%	[10000]	ug/L
Mn 257.610†	684553.1	9459.30	1.38%	[1000]	ug/L
Mo 202.031†	9868.0	80.22	0.81%	[1000]	ug/L
Na 589.592 Radial†	25208.1	826.79	3.28%	[10000]	ug/L
Ni 231.604†	27645.1	241.24	0.87%	[1000]	ug/L
P 214.914†	6184.3	40.40	0.65%	[5000]	ug/L
Pb 220.353†	5765.6	59.35	1.03%	[1000]	ug/L
S 181.975 Axial†	1026.0	8.35	0.81%	[2000]	ug/L
Sb 206.836†	2152.5	10.52	0.49%	[1000]	ug/L
Se 196.026†	1108.7	10.36	0.93%	[1000]	ug/L
Si 251.611†	120473.0	1448.82	1.20%	[5000]	ug/L
Sn 189.927†	3935.7	29.98	0.76%	[1000]	ug/L
Sr 421.552†	109736.3	3674.39	3.35%	[1000]	ug/L
Ti 334.940†	522463.4	6655.29	1.27%	[1000]	ug/L
Tl 190.801†	2313.8	17.09	0.74%	[1000]	ug/L
U 409.014†	29174.4	284.16	0.97%	[1000]	ug/L
V 292.402†	111062.3	1377.61	1.24%	[1000]	ug/L
Zn 213.857†	74515.5	1016.01	1.36%	[1000]	ug/L
SiO2†	121495.8	1644.61	1.35%	[10695]	ug/L

Sequence No.: 5

Sample ID: S10

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 5

Date Collected: 3/26/2010 19:27:58

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	3938.3	3938.3	104 %	19:30:11
1	Y RADIAL	4177.9	4177.9	102.3 %	19:30:11
1	Al 396.153Radial†	42877.7	41314.1	[50000] ug/L	19:29:51
1	Ca 317.933Radial†	22928.2	22031.2	[50000] ug/L	19:29:51
1	Fe 238.204 Radial†	1584.7	1515.7	[20000] ug/L	19:30:11
1	Mg 279.077 IEC†	1111.0	1065.8	[50000] ug/L	19:30:11
1	Na 589.592 Radial†	50332.9	48798.1	[20000] ug/L	19:29:51
1	Sc 361.383	806458.8	806458.8	110.05 %	19:31:08
1	Y 371.029	655971.9	655971.9	108.53 %	19:31:08
2	Sc Radial	4056.8	4056.8	107 %	19:30:36
2	Y RADIAL	4313.9	4313.9	105.7 %	19:30:36
2	Al 396.153Radial†	44903.6	42001.6	[50000] ug/L	19:30:16
2	Ca 317.933Radial†	23838.7	22237.5	[50000] ug/L	19:30:16
2	Fe 238.204 Radial†	1615.7	1500.2	[20000] ug/L	19:30:36
2	Mg 279.077 IEC†	1132.2	1054.4	[50000] ug/L	19:30:36
2	Na 589.592 Radial†	52742.1	49634.3	[20000] ug/L	19:30:16
2	Sc 361.383	783540.7	783540.7	106.92 %	19:31:14
2	Y 371.029	637635.1	637635.1	105.49 %	19:31:14
3	Sc Radial	4193.9	4193.9	111 %	19:31:01
3	Y RADIAL	4446.3	4446.3	108.9 %	19:31:01
3	Al 396.153Radial†	46987.9	42513.4	[50000] ug/L	19:30:41
3	Ca 317.933Radial†	24944.3	22508.3	[50000] ug/L	19:30:41
3	Fe 238.204 Radial†	1655.3	1486.6	[20000] ug/L	19:31:01
3	Mg 279.077 IEC†	1157.9	1043.1	[50000] ug/L	19:31:01
3	Na 589.592 Radial†	55220.2	50262.5	[20000] ug/L	19:30:41
3	Sc 361.383	820097.6	820097.6	111.91 %	19:31:19
3	Y 371.029	667753.4	667753.4	110.48 %	19:31:19

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	803365.7	18473.66	2.30%	109.63 %
Sc Radial	4063.0	127.89	3.15%	107 %
Y 371.029	653786.8	15177.60	2.32%	108.17 %
Y RADIAL	4312.7	134.23	3.11%	105.6 %
Al 396.153Radial†	41943.0	601.82	1.43%	[50000] ug/L
Ca 317.933Radial†	22259.0	239.29	1.08%	[50000] ug/L
Fe 238.204 Radial†	1500.8	14.56	0.97%	[20000] ug/L
Mg 279.077 IEC†	1054.4	11.38	1.08%	[50000] ug/L
Na 589.592 Radial†	49565.0	734.65	1.48%	[20000] ug/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	175.8	0.00000	0.999936	
Al 396.153Radial	3	Lin Thru 0	0.0	0.8404	0.00000	0.999966	
As 188.979	3	Lin Thru 0	0.0	1.647	0.00000	0.999986	
B 249.677	3	Lin Thru 0	0.0	33.22	0.00000	0.999997	
Ba 233.527	3	Lin Thru 0	0.0	95.41	0.00000	0.999967	
Be 313.107	3	Lin Thru 0	0.0	2142	0.00000	0.999992	
Ca 317.933Radial	3	Lin Thru 0	0.0	0.4464	0.00000	0.999931	
Cd 226.502	3	Lin Thru 0	0.0	61.54	0.00000	0.999963	
Co 228.616	3	Lin Thru 0	0.0	34.80	0.00000	0.999854	
Cr 267.716	3	Lin Thru 0	0.0	65.32	0.00000	0.999969	
Cu 324.752	3	Lin Thru 0	0.0	280.1	0.00000	0.999997	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.0756	0.00000	0.999873	
K 766.490 Radial	3	Lin Thru 0	0.0	4.529	0.00000	0.999980	

Mg 279.077 IEC	3	Lin Thru 0	0.0	0.0211	0.00000	0.999929
Mn 257.610	3	Lin Thru 0	0.0	685.1	0.00000	0.999989
Mo 202.031	3	Lin Thru 0	0.0	9.903	0.00000	0.999976
Na 589.592 Radia	2	Lin Thru 0	0.0	2.487	0.00000	0.999977
Ni 231.604	3	Lin Thru 0	0.0	27.87	0.00000	0.999872
P 214.914	3	Lin Thru 0	0.0	1.237	0.00000	1.000000
Pb 220.353	3	Lin Thru 0	0.0	5.781	0.00000	0.999983
S 181.975 Axial	3	Lin Thru 0	0.0	0.5143	0.00000	0.999988
Sb 206.836	3	Lin Thru 0	0.0	2.156	0.00000	0.999985
Se 196.026	3	Lin Thru 0	0.0	1.111	0.00000	0.999988
Si 251.611	3	Lin Thru 0	0.0	24.21	0.00000	0.999959
Sn 189.927	3	Lin Thru 0	0.0	3.944	0.00000	0.999990
Sr 421.552	3	Lin Thru 0	0.0	110.1	0.00000	0.999946
Ti 334.940	3	Lin Thru 0	0.0	522.9	0.00000	0.999996
Tl 190.801	3	Lin Thru 0	0.0	2.319	0.00000	0.999991
U 409.014	3	Lin Thru 0	0.0	29.41	0.00000	0.999864
V 292.402	3	Lin Thru 0	0.0	111.4	0.00000	0.999983
Zn 213.857	3	Lin Thru 0	0.0	74.89	0.00000	0.999950
SiO2	3	Lin Thru 0	0.0	11.36	0.00000	1.000000

Sequence No.: 6
 Sample ID: ICV
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 9
 Date Collected: 3/26/2010 19:33:31
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: ICV

Rep#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Units	Sample Conc.	Analysis Time
1	Sc Radial	3973.6	3973.6	105 %			19:35:44
1	Y RADIAL	4374.9	4374.9	107.2 %			19:35:24
1	Al 396.153Radial†	4544.1	4404.8	5216.3 ug/L		5216.3 ppb	19:35:24
1	Ca 317.933Radial†	2435.7	2300.0	5152.9 ug/L		5152.9 ppb	19:35:44
1	Fe 238.204 Radial†	411.0	383.3	5082.9 ug/L		5082.9 ppb	19:35:44
1	K 766.490 Radial†	14325.2	11177.7	2464.3 ug/L		2464.3 ppb	19:35:24
1	Mg 279.077 IEC†	116.0	107.8	5096.9 ug/L		5096.9 ppb	19:35:44
1	Na 589.592 Radial†	5942.0	6050.8	2433.2 ug/L		2433.2 ppb	19:35:24
1	Sr 421.552†	59592.9	56770.4	515.36 ug/L		515.36 ppb	19:35:24
1	Sc 361.383	825011.1	825011.1	112.58 %			19:36:42
1	Y 371.029	675512.4	675512.4	111.76 %			19:36:42
1	Ag 328.068†	49901.4	44172.1	254.42 ug/L		254.42 ppb	19:36:42
1	As 188.979†	858.5	784.8	480.64 ug/L		480.64 ppb	19:37:02
1	B 249.677†	19365.4	17536.1	525.51 ug/L		525.51 ppb	19:36:42
1	Ba 233.527†	54806.5	48678.6	511.45 ug/L		511.45 ppb	19:36:42
1	Be 313.107†	613354.3	548695.6	257.28 ug/L		257.28 ppb	19:36:42
1	Cd 226.502†	34390.2	30717.8	499.00 ug/L		499.00 ppb	19:36:42
1	Co 228.616†	20261.9	18044.1	518.64 ug/L		518.64 ppb	19:36:42
1	Cr 267.716†	36066.8	31940.8	490.06 ug/L		490.06 ppb	19:36:42
1	Cu 324.752†	167869.2	143390.7	511.86 ug/L		511.86 ppb	19:36:42
1	Mn 257.610†	387078.6	343392.0	501.49 ug/L		501.49 ppb	19:36:42
1	Mo 202.031†	5792.7	5128.5	518.34 ug/L		518.34 ppb	19:37:02
1	Ni 231.604†	15687.2	13851.4	496.65 ug/L		496.65 ppb	19:36:42
1	P 214.914†	3679.2	3079.5	2389.6 ug/L		2389.6 ppb	19:37:02
1	Pb 220.353†	3163.9	2859.4	496.11 ug/L		496.11 ppb	19:37:02
1	S 181.975 Axial†	1431.8	1244.7	2419.4 ug/L		2419.4 ppb	19:37:02
1	Sb 206.836†	1222.6	1060.3	510.41 ug/L		510.41 ppb	19:37:02
1	Se 196.026†	3195.4	2860.0	2589.8 ug/L		2589.8 ppb	19:37:02
1	Si 251.611†	133234.6	117888.1	4863.9 ug/L		4863.9 ppb	19:36:42
1	Sn 189.927†	2315.7	2043.3	518.65 ug/L		518.65 ppb	19:37:02
1	Ti 334.940†	285385.8	254534.6	486.64 ug/L		486.64 ppb	19:36:42
1	Tl 190.801†	1295.4	1172.9	509.02 ug/L		509.02 ppb	19:37:02
1	U 409.014†	14305.4	14540.6	492.77 ug/L		492.77 ppb	19:36:42
1	V 292.402†	60742.6	55334.4	503.73 ug/L		503.73 ppb	19:36:42
1	Zn 213.857†	42609.5	37187.5	491.95 ug/L		491.95 ppb	19:36:42
1	SiO2†	129353.1	114432.2	10057 ug/L		10057 ppb	19:37:59
2	Sc Radial	3911.1	3911.1	103 %			19:36:09
2	Y RADIAL	4216.6	4216.6	103.3 %			19:35:49
2	Al 396.153Radial†	4527.6	4458.0	5279.7 ug/L		5279.7 ppb	19:35:49
2	Ca 317.933Radial†	2459.7	2360.4	5288.2 ug/L		5288.2 ppb	19:36:09
2	Fe 238.204 Radial†	416.3	394.8	5234.1 ug/L		5234.1 ppb	19:36:09
2	K 766.490 Radial†	14345.3	11415.4	2516.8 ug/L		2516.8 ppb	19:35:49
2	Mg 279.077 IEC†	114.8	108.4	5127.5 ug/L		5127.5 ppb	19:36:09
2	Na 589.592 Radial†	5947.0	6146.2	2471.6 ug/L		2471.6 ppb	19:35:49
2	Sr 421.552†	59681.0	57763.8	524.38 ug/L		524.38 ppb	19:35:49
2	Sc 361.383	821861.3	821861.3	112.15 %			19:37:08
2	Y 371.029	673287.5	673287.5	111.39 %			19:37:08
2	Ag 328.068†	49372.1	43870.1	252.73 ug/L		252.73 ppb	19:37:08
2	As 188.979†	851.5	781.5	478.64 ug/L		478.64 ppb	19:37:28
2	B 249.677†	19305.3	17548.4	525.86 ug/L		525.86 ppb	19:37:08
2	Ba 233.527†	54305.2	48418.2	508.72 ug/L		508.72 ppb	19:37:08
2	Be 313.107†	609197.2	547076.9	256.52 ug/L		256.52 ppb	19:37:08
2	Cd 226.502†	34222.2	30685.1	498.45 ug/L		498.45 ppb	19:37:08
2	Co 228.616†	20099.6	17968.4	516.46 ug/L		516.46 ppb	19:37:08
2	Cr 267.716†	35787.3	31814.3	488.14 ug/L		488.14 ppb	19:37:08
2	Cu 324.752†	166074.9	142362.2	508.20 ug/L		508.20 ppb	19:37:08
2	Mn 257.610†	384018.4	341981.1	499.44 ug/L		499.44 ppb	19:37:08
2	Mo 202.031†	5726.0	5088.8	514.34 ug/L		514.34 ppb	19:37:28
2	Ni 231.604†	15566.2	13796.9	494.70 ug/L		494.70 ppb	19:37:08

2	P 214.914†	3654.1	3069.7	2382.3 ug/L	2382.3 ppb	19:37:28
2	Pb 220.353†	3125.5	2835.9	492.03 ug/L	492.03 ppb	19:37:28
2	S 181.975 Axial†	1414.8	1234.4	2399.4 ug/L	2399.4 ppb	19:37:28
2	Sb 206.836†	1213.5	1056.4	508.46 ug/L	508.46 ppb	19:37:28
2	Se 196.026†	3148.0	2828.6	2562.0 ug/L	2562.0 ppb	19:37:28
2	Si 251.611†	132002.5	117243.1	4837.3 ug/L	4837.3 ppb	19:37:08
2	Sn 189.927†	2291.0	2029.1	515.07 ug/L	515.07 ppb	19:37:28
2	Ti 334.940†	282841.1	253237.1	484.18 ug/L	484.18 ppb	19:37:08
2	Tl 190.801†	1293.0	1175.1	509.96 ug/L	509.96 ppb	19:37:28
2	U 409.014†	14112.4	14417.2	488.57 ug/L	488.57 ppb	19:37:08
2	V 292.402†	60160.1	55021.8	500.84 ug/L	500.84 ppb	19:37:08
2	Zn 213.857†	42424.3	37167.4	491.67 ug/L	491.67 ppb	19:37:08
2	SiO2†	130268.1	115688.5	10168 ug/L	10168 ppb	19:38:05
3	Sc Radial	4071.3	4071.3	107 %		19:36:34
3	Y RADIAL	4522.7	4522.7	110.8 %		19:36:14
3	Al 396.153Radial†	4746.4	4489.0	5315.8 ug/L	5315.8 ppb	19:36:14
3	Ca 317.933Radial†	2511.3	2314.7	5185.8 ug/L	5185.8 ppb	19:36:34
3	Fe 238.204 Radial†	421.0	383.3	5082.5 ug/L	5082.5 ppb	19:36:34
3	K 766.490 Radial†	14823.7	11313.9	2494.4 ug/L	2494.4 ppb	19:36:14
3	Mg 279.077 IEC†	118.3	107.2	5072.3 ug/L	5072.3 ppb	19:36:34
3	Na 589.592 Radial†	6222.2	6175.6	2483.4 ug/L	2483.4 ppb	19:36:14
3	Sr 421.552†	62877.9	58464.1	530.73 ug/L	530.73 ppb	19:36:14
3	Sc 361.383	797166.9	797166.9	108.78 %		19:37:34
3	Y 371.029	652378.0	652378.0	107.93 %		19:37:34
3	Ag 328.068†	48523.9	44454.0	256.04 ug/L	256.04 ppb	19:37:34
3	As 188.979†	856.9	810.0	495.92 ug/L	495.92 ppb	19:37:54
3	B 249.677†	18855.4	17668.1	529.46 ug/L	529.46 ppb	19:37:34
3	Ba 233.527†	53730.8	49390.2	518.92 ug/L	518.92 ppb	19:37:34
3	Be 313.107†	599026.3	554553.9	260.02 ug/L	260.02 ppb	19:37:34
3	Cd 226.502†	33700.9	31151.1	506.05 ug/L	506.05 ppb	19:37:34
3	Co 228.616†	19829.5	18275.2	525.31 ug/L	525.31 ppb	19:37:34
3	Cr 267.716†	35327.8	32380.5	496.80 ug/L	496.80 ppb	19:37:34
3	Cu 324.752†	162764.5	143906.3	513.70 ug/L	513.70 ppb	19:37:34
3	Mn 257.610†	378740.8	347736.6	507.83 ug/L	507.83 ppb	19:37:34
3	Mo 202.031†	5755.5	5274.1	533.04 ug/L	533.04 ppb	19:37:54
3	Ni 231.604†	15352.8	14030.7	503.08 ug/L	503.08 ppb	19:37:34
3	P 214.914†	3670.1	3185.3	2474.9 ug/L	2474.9 ppb	19:37:54
3	Pb 220.353†	3150.8	2945.5	511.07 ug/L	511.07 ppb	19:37:54
3	S 181.975 Axial†	1426.2	1283.9	2495.7 ug/L	2495.7 ppb	19:37:54
3	Sb 206.836†	1221.0	1096.8	527.88 ug/L	527.88 ppb	19:37:54
3	Se 196.026†	3157.9	2924.7	2648.1 ug/L	2648.1 ppb	19:37:54
3	Si 251.611†	129617.4	118696.7	4897.1 ug/L	4897.1 ppb	19:37:34
3	Sn 189.927†	2304.3	2104.6	534.21 ug/L	534.21 ppb	19:37:54
3	Ti 334.940†	278284.1	256860.4	491.10 ug/L	491.10 ppb	19:37:34
3	Tl 190.801†	1292.4	1210.4	525.20 ug/L	525.20 ppb	19:37:54
3	U 409.014†	13757.7	14480.9	490.73 ug/L	490.73 ppb	19:37:34
3	V 292.402†	59212.0	55811.9	508.22 ug/L	508.22 ppb	19:37:34
3	Zn 213.857†	41818.6	37782.4	499.85 ug/L	499.85 ppb	19:37:34
3	SiO2†	127687.2	116914.0	10275 ug/L	10275 ppb	19:38:10

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	814679.8	111.17 %	2.081			1.87%
Sc Radial	3985.3	105 %	2.1			2.03%
Y 371.029	667059.3	110.36 %	2.112			1.91%
Y RADIAL	4371.4	107.1 %	3.75			3.50%
Ag 328.068†	44165.4	254.40 ug/L	1.652	254.40 ppb	1.652	0.65%
QC value within limits for Ag 328.068 Recovery = 101.76%						
Al 396.153Radial†	4450.6	5270.6 ug/L	50.40	5270.6 ppb	50.40	0.96%
QC value within limits for Al 396.153Radial Recovery = 105.41%						
As 188.979†	792.1	485.07 ug/L	9.449	485.07 ppb	9.449	1.95%
QC value within limits for As 188.979 Recovery = 97.01%						
B 249.677†	17584.2	526.94 ug/L	2.188	526.94 ppb	2.188	0.42%
QC value within limits for B 249.677 Recovery = 105.39%						
Ba 233.527†	48829.0	513.03 ug/L	5.279	513.03 ppb	5.279	1.03%
QC value within limits for Ba 233.527 Recovery = 102.61%						
Be 313.107†	550108.8	257.94 ug/L	1.844	257.94 ppb	1.844	0.72%
QC value within limits for Be 313.107 Recovery = 103.18%						
Ca 317.933Radial†	2325.0	5209.0 ug/L	70.58	5209.0 ppb	70.58	1.35%

QC value within limits for Ca 317.933 Radial Recovery = 104.18%

Cd 226.502†	30851.3	501.17 ug/L	4.234	501.17 ppb	4.234	0.84%
QC value within limits for Cd 226.502 Recovery = 100.23%						
Co 228.616†	18095.9	520.14 ug/L	4.610	520.14 ppb	4.610	0.89%
QC value within limits for Co 228.616 Recovery = 104.03%						
Cr 267.716†	32045.2	491.67 ug/L	4.548	491.67 ppb	4.548	0.92%
QC value within limits for Cr 267.716 Recovery = 98.33%						
Cu 324.752†	143219.8	511.25 ug/L	2.801	511.25 ppb	2.801	0.55%
QC value within limits for Cu 324.752 Recovery = 102.25%						
Fe 238.204 Radial†	387.1	5133.2 ug/L	87.42	5133.2 ppb	87.42	1.70%
QC value within limits for Fe 238.204 Radial Recovery = 102.66%						
K 766.490 Radial†	11302.3	2491.8 ug/L	26.31	2491.8 ppb	26.31	1.06%
QC value within limits for K 766.490 Radial Recovery = 99.67%						
Mg 279.077 IEC†	107.8	5098.9 ug/L	27.65	5098.9 ppb	27.65	0.54%
QC value within limits for Mg 279.077 IEC Recovery = 101.98%						
Mn 257.610†	344369.9	502.92 ug/L	4.373	502.92 ppb	4.373	0.87%
QC value within limits for Mn 257.610 Recovery = 100.58%						
Mo 202.031†	5163.8	521.90 ug/L	9.847	521.90 ppb	9.847	1.89%
QC value within limits for Mo 202.031 Recovery = 104.38%						
Na 589.592 Radial†	6124.2	2462.7 ug/L	26.23	2462.7 ppb	26.23	1.07%
QC value within limits for Na 589.592 Radial Recovery = 98.51%						
Ni 231.604†	13893.0	498.14 ug/L	4.387	498.14 ppb	4.387	0.88%
QC value within limits for Ni 231.604 Recovery = 99.63%						
P 214.914†	3111.5	2415.6 ug/L	51.51	2415.6 ppb	51.51	2.13%
QC value within limits for P 214.914 Recovery = 96.62%						
Pb 220.353†	2880.3	499.74 ug/L	10.022	499.74 ppb	10.022	2.01%
QC value within limits for Pb 220.353 Recovery = 99.95%						
S 181.975 Axial†	1254.3	2438.1 ug/L	50.83	2438.1 ppb	50.83	2.08%
QC value within limits for S 181.975 Axial Recovery = 97.53%						
Sb 206.836†	1071.2	515.58 ug/L	10.692	515.58 ppb	10.692	2.07%
QC value within limits for Sb 206.836 Recovery = 103.12%						
Se 196.026†	2871.1	2600.0 ug/L	43.95	2600.0 ppb	43.95	1.69%
QC value within limits for Se 196.026 Recovery = 104.00%						
Si 251.611†	117942.6	4866.1 ug/L	29.97	4866.1 ppb	29.97	0.62%
QC value within limits for Si 251.611 Recovery = 97.32%						
Sn 189.927†	2059.0	522.64 ug/L	10.176	522.64 ppb	10.176	1.95%
QC value within limits for Sn 189.927 Recovery = 104.53%						
Sr 421.552†	57666.1	523.49 ug/L	7.726	523.49 ppb	7.726	1.48%
QC value within limits for Sr 421.552 Recovery = 104.70%						
Ti 334.940†	254877.4	487.31 ug/L	3.505	487.31 ppb	3.505	0.72%
QC value within limits for Ti 334.940 Recovery = 97.46%						
Tl 190.801†	1186.1	514.73 ug/L	9.081	514.73 ppb	9.081	1.76%
QC value within limits for Tl 190.801 Recovery = 102.95%						
U 409.014†	14479.6	490.69 ug/L	2.104	490.69 ppb	2.104	0.43%
QC value within limits for U 409.014 Recovery = 98.14%						
V 292.402†	55389.4	504.27 ug/L	3.715	504.27 ppb	3.715	0.74%
QC value within limits for V 292.402 Recovery = 100.85%						
Zn 213.857†	37379.1	494.49 ug/L	4.643	494.49 ppb	4.643	0.94%
QC value within limits for Zn 213.857 Recovery = 98.90%						
SiO2†	115678.2	10167 ug/L	109.0	10167 ppb	109.0	1.07%
QC value within limits for SiO2 Recovery = 95.06%						

All analyte(s) passed QC.

Sequence No.: 7

Sample ID: ICB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 10

Date Collected: 3/26/2010 19:40:20

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	3965.5	3965.5	105 %		19:42:33
1	Y RADIAL	4370.5	4370.5	107.0 %		19:42:13
1	Al 396.153Radial†	-67.9	8.0	9.4766 ug/L	9.4766 ppb	19:42:33
1	Ca 317.933Radial†	25.1	2.1	4.6363 ug/L	4.6363 ppb	19:42:33
1	Fe 238.204 Radial†	6.5	-2.2	-29.551 ug/L	-29.551 ppb	19:42:33
1	K 766.490 Radial†	2442.8	-145.1	-32.029 ug/L	-32.029 ppb	19:42:13
1	Mg 279.077 IEC†	1.6	-1.3	-60.627 ug/L	-60.627 ppb	19:42:33
1	Na 589.592 Radial†	-425.4	-20.0	-8.0429 ug/L	-8.0429 ppb	19:42:13
1	Sr 421.552†	56.9	15.1	0.1371 ug/L	0.1371 ppb	19:42:13
1	Sc 361.383	756477.5	756477.5	103.23 %		19:43:30
1	Y 371.029	624575.8	624575.8	103.33 %		19:43:30
1	Ag 328.068†	134.9	-21.5	-0.1369 ug/L	-0.1369 ppb	19:43:30
1	As 188.979†	-26.4	-3.3	-1.9908 ug/L	-1.9908 ppb	19:43:50
1	B 249.677†	-56.6	280.1	8.4363 ug/L	8.4363 ppb	19:43:50
1	Ba 233.527†	0.9	-1.7	-0.0197 ug/L	-0.0197 ppb	19:43:50
1	Be 313.107†	-3988.6	27.8	0.0125 ug/L	0.0125 ppb	19:43:30
1	Cd 226.502†	-158.1	18.0	0.2973 ug/L	0.2973 ppb	19:43:50
1	Co 228.616†	-52.7	-4.3	-0.1229 ug/L	-0.1229 ppb	19:43:50
1	Cr 267.716†	109.2	10.7	0.1580 ug/L	0.1580 ppb	19:43:50
1	Cu 324.752†	5686.9	-208.0	-0.7468 ug/L	-0.7468 ppb	19:43:30
1	Mn 257.610†	402.1	-36.0	-0.0530 ug/L	-0.0530 ppb	19:43:50
1	Mo 202.031†	20.4	3.0	0.3006 ug/L	0.3006 ppb	19:43:50
1	Ni 231.604†	91.3	5.9	0.2125 ug/L	0.2125 ppb	19:43:50
1	P 214.914†	197.0	2.4	2.0975 ug/L	2.0975 ppb	19:43:50
1	Pb 220.353†	-41.0	9.3	1.6229 ug/L	1.6229 ppb	19:43:50
1	S 181.975 Axial†	31.7	3.6	6.9323 ug/L	6.9323 ppb	19:43:50
1	Sb 206.836†	35.4	8.7	4.0263 ug/L	4.0263 ppb	19:43:50
1	Se 196.026†	-21.9	0.6	0.4293 ug/L	0.4293 ppb	19:43:50
1	Si 251.611†	437.2	-32.2	-1.3338 ug/L	-1.3338 ppb	19:43:50
1	Sn 189.927†	15.8	1.7	0.4329 ug/L	0.4329 ppb	19:43:50
1	Ti 334.940†	-1198.1	-116.3	-0.2191 ug/L	-0.2191 ppb	19:43:30
1	Tl 190.801†	-17.9	5.0	2.1432 ug/L	2.1432 ppb	19:43:50
1	U 409.014†	-1740.3	148.2	5.0409 ug/L	5.0409 ppb	19:43:30
1	V 292.402†	-1465.2	-38.7	-0.3305 ug/L	-0.3305 ppb	19:43:30
1	Zn 213.857†	587.1	-91.1	-1.2118 ug/L	-1.2118 ppb	19:43:50
1	SiO2†	442.6	-35.2	-3.1097 ug/L	-3.1097 ppb	19:45:01
2	Sc Radial	4016.8	4016.8	106 %		19:42:58
2	Y RADIAL	4487.7	4487.7	109.9 %		19:42:38
2	Al 396.153Radial†	-70.5	6.4	7.5366 ug/L	7.5366 ppb	19:42:58
2	Ca 317.933Radial†	20.5	-2.6	-5.8274 ug/L	-5.8274 ppb	19:42:58
2	Fe 238.204 Radial†	7.2	-1.7	-22.273 ug/L	-22.273 ppb	19:42:58
2	K 766.490 Radial†	2550.1	-73.7	-16.267 ug/L	-16.267 ppb	19:42:38
2	Mg 279.077 IEC†	0.6	-2.2	-105.42 ug/L	-105.42 ppb	19:42:58
2	Na 589.592 Radial†	-470.9	-57.7	-23.209 ug/L	-23.209 ppb	19:42:38
2	Sr 421.552†	42.9	1.2	0.0106 ug/L	0.0106 ppb	19:42:38
2	Sc 361.383	778672.5	778672.5	106.26 %		19:43:55
2	Y 371.029	642382.4	642382.4	106.28 %		19:43:55
2	Ag 328.068†	184.0	21.0	0.1133 ug/L	0.1133 ppb	19:43:55
2	As 188.979†	-27.1	-3.3	-1.9809 ug/L	-1.9809 ppb	19:44:15
2	B 249.677†	-83.9	256.0	7.7095 ug/L	7.7095 ppb	19:44:15
2	Ba 233.527†	-3.3	-5.7	-0.0591 ug/L	-0.0591 ppb	19:44:15
2	Be 313.107†	-3921.3	201.3	0.0942 ug/L	0.0942 ppb	19:43:55
2	Cd 226.502†	-162.2	18.5	0.3026 ug/L	0.3026 ppb	19:44:15
2	Co 228.616†	-56.2	-6.2	-0.1755 ug/L	-0.1755 ppb	19:44:15
2	Cr 267.716†	120.8	18.6	0.2822 ug/L	0.2822 ppb	19:44:15
2	Cu 324.752†	5733.0	-321.6	-1.1501 ug/L	-1.1501 ppb	19:43:55
2	Mn 257.610†	440.2	-11.3	-0.0144 ug/L	-0.0144 ppb	19:44:15
2	Mo 202.031†	25.9	7.6	0.7656 ug/L	0.7656 ppb	19:44:15
2	Ni 231.604†	83.4	-4.1	-0.1471 ug/L	-0.1471 ppb	19:44:15

2	P 214.914†	191.1	-8.6	-6.7258 ug/L	-6.7258 ppb	19:44:15
2	Pb 220.353†	-38.1	13.2	2.2959 ug/L	2.2959 ppb	19:44:15
2	S 181.975 Axial†	25.4	-3.2	-6.2299 ug/L	-6.2299 ppb	19:44:15
2	Sb 206.836†	35.9	8.1	3.7833 ug/L	3.7833 ppb	19:44:15
2	Se 196.026†	-18.1	4.7	4.1616 ug/L	4.1616 ppb	19:44:15
2	Si 251.611†	443.2	-38.6	-1.6057 ug/L	-1.6057 ppb	19:44:15
2	Sn 189.927†	13.5	-0.9	-0.2288 ug/L	-0.2288 ppb	19:44:15
2	Ti 334.940†	-1055.6	50.9	0.1044 ug/L	0.1044 ppb	19:43:55
2	Tl 190.801†	-23.0	0.6	0.2543 ug/L	0.2543 ppb	19:44:15
2	U 409.014†	-1905.2	41.0	1.3965 ug/L	1.3965 ppb	19:43:55
2	V 292.402†	-1415.6	48.4	0.4488 ug/L	0.4488 ppb	19:43:55
2	Zn 213.857†	592.9	-101.9	-1.3542 ug/L	-1.3542 ppb	19:44:15
2	SiO2†	468.3	-23.3	-2.0696 ug/L	-2.0696 ppb	19:45:21
3	Sc Radial	4018.5	4018.5	106 %		19:43:23
3	Y RADIAL	4510.6	4510.6	110.5 %		19:43:03
3	Al 396.153Radial†	-62.6	13.8	16.490 ug/L	16.490 ppb	19:43:23
3	Ca 317.933Radial†	25.3	1.9	4.3431 ug/L	4.3431 ppb	19:43:23
3	Fe 238.204 Radial†	8.1	-0.9	-11.481 ug/L	-11.481 ppb	19:43:23
3	K 766.490 Radial†	2374.0	-240.7	-53.145 ug/L	-53.145 ppb	19:43:03
3	Mg 279.077 IEC†	0.5	-2.3	-109.45 ug/L	-109.45 ppb	19:43:23
3	Na 589.592 Radial†	-397.8	11.3	4.5491 ug/L	4.5491 ppb	19:43:03
3	Sr 421.552†	25.9	-14.8	-0.1348 ug/L	-0.1348 ppb	19:43:03
3	Sc 361.383	761609.4	761609.4	103.93 %		19:44:20
3	Y 371.029	627824.5	627824.5	103.87 %		19:44:20
3	Ag 328.068†	124.1	-32.8	-0.1927 ug/L	-0.1927 ppb	19:44:20
3	As 188.979†	-19.8	3.2	1.9539 ug/L	1.9539 ppb	19:44:40
3	B 249.677†	-92.3	246.2	7.4131 ug/L	7.4131 ppb	19:44:40
3	Ba 233.527†	5.9	3.1	0.0336 ug/L	0.0336 ppb	19:44:40
3	Be 313.107†	-3989.6	52.9	0.0246 ug/L	0.0246 ppb	19:44:20
3	Cd 226.502†	-165.0	12.4	0.2039 ug/L	0.2039 ppb	19:44:40
3	Co 228.616†	-58.7	-9.8	-0.2822 ug/L	-0.2822 ppb	19:44:40
3	Cr 267.716†	119.3	19.7	0.2994 ug/L	0.2994 ppb	19:44:40
3	Cu 324.752†	5739.9	-194.2	-0.6969 ug/L	-0.6969 ppb	19:44:20
3	Mn 257.610†	437.9	-4.2	-0.0028 ug/L	-0.0028 ppb	19:44:40
3	Mo 202.031†	11.1	-6.0	-0.6104 ug/L	-0.6104 ppb	19:44:40
3	Ni 231.604†	63.5	-21.4	-0.7689 ug/L	-0.7689 ppb	19:44:40
3	P 214.914†	195.6	-0.3	-0.0948 ug/L	-0.0948 ppb	19:44:40
3	Pb 220.353†	-58.7	-7.4	-1.2740 ug/L	-1.2740 ppb	19:44:40
3	S 181.975 Axial†	26.8	-1.4	-2.6422 ug/L	-2.6422 ppb	19:44:40
3	Sb 206.836†	37.1	10.1	4.6599 ug/L	4.6599 ppb	19:44:40
3	Se 196.026†	-16.7	5.6	5.0269 ug/L	5.0269 ppb	19:44:40
3	Si 251.611†	420.2	-51.4	-2.1163 ug/L	-2.1163 ppb	19:44:40
3	Sn 189.927†	8.1	-5.8	-1.4781 ug/L	-1.4781 ppb	19:44:40
3	Ti 334.940†	-1101.9	-15.9	-0.0236 ug/L	-0.0236 ppb	19:44:20
3	Tl 190.801†	-30.8	-7.4	-3.1904 ug/L	-3.1904 ppb	19:44:40
3	U 409.014†	-1727.5	171.8	5.8441 ug/L	5.8441 ppb	19:44:20
3	V 292.402†	-1370.4	62.0	0.5586 ug/L	0.5586 ppb	19:44:20
3	Zn 213.857†	577.4	-104.2	-1.3841 ug/L	-1.3841 ppb	19:44:40
3	SiO2†	442.8	-37.9	-3.3182 ug/L	-3.3182 ppb	19:45:41

Mean Data: ICB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	765586.5	104.47 %		1.586			1.52%
Sc Radial	4000.3	106 %		0.8			0.75%
Y 371.029	631594.2	104.50 %		1.569			1.50%
Y RADIAL	4456.3	109.1 %		1.84			1.69%
Ag 328.068†	-11.1	-0.0721 ug/L		0.16295	-0.0721 ppb	0.16295	225.98%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	9.4	11.168 ug/L		4.7100	11.168 ppb	4.7100	42.18%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	-1.1	-0.6726 ug/L		2.27466	-0.6726 ppb	2.27466	338.18%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	260.8	7.8530 ug/L		0.52647	7.8530 ppb	0.52647	6.70%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	-1.4	-0.0151 ug/L		0.04648	-0.0151 ppb	0.04648	308.62%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	94.0	0.0438 ug/L		0.04410	0.0438 ppb	0.04410	100.73%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	0.5	1.0507 ug/L		5.95840	1.0507 ppb	5.95840	567.11%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated									
Cd	226.502†	16.3	0.2679 ug/L	0.05553	0.2679 ppb	0.05553	20.72%		
QC value within limits for Cd 226.502 Recovery = Not calculated									
Co	228.616†	-6.8	-0.1935 ug/L	0.08119	-0.1935 ppb	0.08119	41.95%		
QC value within limits for Co 228.616 Recovery = Not calculated									
Cr	267.716†	16.3	0.2465 ug/L	0.07718	0.2465 ppb	0.07718	31.31%		
QC value within limits for Cr 267.716 Recovery = Not calculated									
Cu	324.752†	-241.3	-0.8646 ug/L	0.24854	-0.8646 ppb	0.24854	28.75%		
QC value within limits for Cu 324.752 Recovery = Not calculated									
Fe	238.204 Radial†	-1.6	-21.101 ug/L	9.0918	-21.101 ppb	9.0918	43.09%		
QC value within limits for Fe 238.204 Radial Recovery = Not calculated									
K	766.490 Radial†	-153.2	-33.813 ug/L	18.5033	-33.813 ppb	18.5033	54.72%		
QC value within limits for K 766.490 Radial Recovery = Not calculated									
Mg	279.077 IEC†	-1.9	-91.832 ug/L	27.0991	-91.832 ppb	27.0991	29.51%		
QC value within limits for Mg 279.077 IEC Recovery = Not calculated									
Mn	257.610†	-17.2	-0.0234 ug/L	0.02633	-0.0234 ppb	0.02633	112.58%		
QC value within limits for Mn 257.610 Recovery = Not calculated									
Mo	202.031†	1.5	0.1519 ug/L	0.69996	0.1519 ppb	0.69996	460.80%		
QC value within limits for Mo 202.031 Recovery = Not calculated									
Na	589.592 Radial†	-22.1	-8.9009 ug/L	13.89892	-8.9009 ppb	13.89892	156.15%		
QC value within limits for Na 589.592 Radial Recovery = Not calculated									
Ni	231.604†	-6.5	-0.2345 ug/L	0.49650	-0.2345 ppb	0.49650	211.76%		
QC value within limits for Ni 231.604 Recovery = Not calculated									
P	214.914†	-2.2	-1.5743 ug/L	4.59395	-1.5743 ppb	4.59395	291.80%		
QC value within limits for P 214.914 Recovery = Not calculated									
Pb	220.353†	5.1	0.8816 ug/L	1.89688	0.8816 ppb	1.89688	215.17%		
QC value within limits for Pb 220.353 Recovery = Not calculated									
S	181.975 Axial†	-0.3	-0.6466 ug/L	6.80421	-0.6466 ppb	6.80421	>999.9%		
QC value within limits for S 181.975 Axial Recovery = Not calculated									
Sb	206.836†	9.0	4.1565 ug/L	0.45259	4.1565 ppb	0.45259	10.89%		
QC value within limits for Sb 206.836 Recovery = Not calculated									
Se	196.026†	3.6	3.2060 ug/L	2.44326	3.2060 ppb	2.44326	76.21%		
QC value within limits for Se 196.026 Recovery = Not calculated									
Si	251.611†	-40.7	-1.6853 ug/L	0.39727	-1.6853 ppb	0.39727	23.57%		
QC value within limits for Si 251.611 Recovery = Not calculated									
Sn	189.927†	-1.7	-0.4247 ug/L	0.97045	-0.4247 ppb	0.97045	228.52%		
QC value within limits for Sn 189.927 Recovery = Not calculated									
Sr	421.552†	0.5	0.0043 ug/L	0.13603	0.0043 ppb	0.13603	>999.9%		
QC value within limits for Sr 421.552 Recovery = Not calculated									
Ti	334.940†	-27.1	-0.0461 ug/L	0.16291	-0.0461 ppb	0.16291	353.54%		
QC value within limits for Ti 334.940 Recovery = Not calculated									
Tl	190.801†	-0.6	-0.2643 ug/L	2.70432	-0.2643 ppb	2.70432	>999.9%		
QC value within limits for Tl 190.801 Recovery = Not calculated									
U	409.014†	120.3	4.0938 ug/L	2.37021	4.0938 ppb	2.37021	57.90%		
QC value within limits for U 409.014 Recovery = Not calculated									
V	292.402†	23.9	0.2256 ug/L	0.48474	0.2256 ppb	0.48474	214.84%		
QC value within limits for V 292.402 Recovery = Not calculated									
Zn	213.857†	-99.0	-1.3167 ug/L	0.09207	-1.3167 ppb	0.09207	6.99%		
QC value within limits for Zn 213.857 Recovery = Not calculated									
SiO2†		-32.1	-2.8325 ug/L	0.66887	-2.8325 ppb	0.66887	23.61%		
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: 3/26/2010 19:47:52

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	4188.0	4188.0	111 %		19:49:45
1	Y RADIAL	4481.4	4481.4	109.8 %		19:49:45
1	Al 396.153Radial†	109.1	171.6	203.73 ug/L	203.73 ppb	19:50:05
1	Ca 317.933Radial†	115.8	82.8	185.53 ug/L	185.53 ppb	19:50:05
1	Fe 238.204 Radial†	17.1	7.0	92.755 ug/L	92.755 ppb	19:50:05
1	K 766.490 Radial†	3255.1	465.7	102.62 ug/L	102.62 ppb	19:49:45
1	Mg 279.077 IEC†	7.8	4.2	200.14 ug/L	200.14 ppb	19:50:05
1	Na 589.592 Radial†	443.8	787.8	316.79 ug/L	316.79 ppb	19:49:45
1	Sr 421.552†	604.5	507.5	4.6060 ug/L	4.6060 ppb	19:49:45
1	Sc 361.383	811470.9	811470.9	110.73 %		19:51:02
1	Y 371.029	669286.3	669286.3	110.73 %		19:51:02
1	Ag 328.068†	1096.9	838.4	4.7671 ug/L	4.7671 ppb	19:51:02
1	As 188.979†	29.5	48.9	29.726 ug/L	29.726 ppb	19:51:22
1	B 249.677†	1639.8	1815.8	54.623 ug/L	54.623 ppb	19:51:02
1	Ba 233.527†	537.6	482.9	5.0754 ug/L	5.0754 ppb	19:51:22
1	Be 313.107†	7985.0	11102.5	5.1955 ug/L	5.1955 ppb	19:51:02
1	Cd 226.502†	158.5	314.3	5.1121 ug/L	5.1121 ppb	19:51:22
1	Co 228.616†	142.3	175.2	5.0436 ug/L	5.0436 ppb	19:51:22
1	Cr 267.716†	429.6	292.9	4.4767 ug/L	4.4767 ppb	19:51:22
1	Cu 324.752†	9191.7	2583.7	9.1939 ug/L	9.1939 ppb	19:51:02
1	Mn 257.610†	8466.0	7219.8	10.539 ug/L	10.539 ppb	19:51:02
1	Mo 202.031†	116.7	88.7	8.9623 ug/L	8.9623 ppb	19:51:22
1	Ni 231.604†	239.3	133.6	4.7887 ug/L	4.7887 ppb	19:51:22
1	P 214.914†	397.9	170.8	136.33 ug/L	136.33 ppb	19:51:22
1	Pb 220.353†	20.7	67.8	11.773 ug/L	11.773 ppb	19:51:22
1	S 181.975 Axial†	87.1	51.6	100.29 ug/L	100.29 ppb	19:51:22
1	Sb 206.836†	57.9	26.7	12.735 ug/L	12.735 ppb	19:51:22
1	Se 196.026†	14.0	34.4	31.257 ug/L	31.257 ppb	19:51:22
1	Si 251.611†	3002.5	2255.7	93.080 ug/L	93.080 ppb	19:51:22
1	Sn 189.927†	61.8	42.1	10.713 ug/L	10.713 ppb	19:51:22
1	Ti 334.940†	1896.5	2757.0	5.2522 ug/L	5.2522 ppb	19:51:02
1	Tl 190.801†	39.4	57.9	25.019 ug/L	25.019 ppb	19:51:22
1	U 409.014†	-24.8	1811.6	61.581 ug/L	61.581 ppb	19:51:02
1	V 292.402†	-888.0	578.7	5.4228 ug/L	5.4228 ppb	19:51:02
1	Zn 213.857†	1506.0	700.1	9.2922 ug/L	9.2922 ppb	19:51:22
1	SiO2†	3181.0	2408.6	211.75 ug/L	211.75 ppb	19:52:19
2	Sc Radial	4037.6	4037.6	107 %		19:50:11
2	Y RADIAL	4335.2	4335.2	106.2 %		19:50:11
2	Al 396.153Radial†	113.4	179.2	212.80 ug/L	212.80 ppb	19:50:31
2	Ca 317.933Radial†	116.0	86.9	194.72 ug/L	194.72 ppb	19:50:31
2	Fe 238.204 Radial†	14.3	4.9	65.483 ug/L	65.483 ppb	19:50:31
2	K 766.490 Radial†	3267.6	587.1	129.44 ug/L	129.44 ppb	19:50:11
2	Mg 279.077 IEC†	7.3	4.0	189.96 ug/L	189.96 ppb	19:50:31
2	Na 589.592 Radial†	301.7	669.4	269.19 ug/L	269.19 ppb	19:50:11
2	Sr 421.552†	617.1	539.7	4.8983 ug/L	4.8983 ppb	19:50:11
2	Sc 361.383	784023.8	784023.8	106.99 %		19:51:28
2	Y 371.029	646431.1	646431.1	106.95 %		19:51:28
2	Ag 328.068†	1096.4	872.6	4.9581 ug/L	4.9581 ppb	19:51:28
2	As 188.979†	31.6	51.8	31.478 ug/L	31.478 ppb	19:51:48
2	B 249.677†	1655.9	1882.7	56.641 ug/L	56.641 ppb	19:51:28
2	Ba 233.527†	519.8	483.3	5.0802 ug/L	5.0802 ppb	19:51:48
2	Be 313.107†	7631.7	11024.8	5.1589 ug/L	5.1589 ppb	19:51:28
2	Cd 226.502†	172.2	332.1	5.4038 ug/L	5.4038 ppb	19:51:48
2	Co 228.616†	140.4	178.0	5.1238 ug/L	5.1238 ppb	19:51:48
2	Cr 267.716†	451.5	327.0	4.9979 ug/L	4.9979 ppb	19:51:48
2	Cu 324.752†	8800.6	2508.7	8.9265 ug/L	8.9265 ppb	19:51:28
2	Mn 257.610†	8168.1	7208.9	10.520 ug/L	10.520 ppb	19:51:28
2	Mo 202.031†	116.9	92.5	9.3467 ug/L	9.3467 ppb	19:51:48
2	Ni 231.604†	234.9	137.0	4.9123 ug/L	4.9123 ppb	19:51:48

2	P 214.914†	401.9	187.2	149.61 ug/L	149.61 ppb	19:51:48
2	Pb 220.353†	24.3	71.8	12.475 ug/L	12.475 ppb	19:51:48
2	S 181.975 Axial†	88.4	55.6	108.01 ug/L	108.01 ppb	19:51:48
2	Sb 206.836†	48.0	19.2	9.2163 ug/L	9.2163 ppb	19:51:48
2	Se 196.026†	8.9	30.0	27.258 ug/L	27.258 ppb	19:51:48
2	Si 251.611†	3030.4	2376.8	98.076 ug/L	98.076 ppb	19:51:48
2	Sn 189.927†	46.2	29.6	7.5247 ug/L	7.5247 ppb	19:51:48
2	Ti 334.940†	1768.3	2697.1	5.1408 ug/L	5.1408 ppb	19:51:28
2	Tl 190.801†	26.1	46.7	20.199 ug/L	20.199 ppb	19:51:48
2	U 409.014†	-115.4	1726.2	58.679 ug/L	58.679 ppb	19:51:28
2	V 292.402†	-778.6	652.9	6.0926 ug/L	6.0926 ppb	19:51:28
2	Zn 213.857†	1501.1	743.2	9.8705 ug/L	9.8705 ppb	19:51:48
2	SiO2†	3191.4	2518.9	221.44 ug/L	221.44 ppb	19:52:24
3	Sc Radial	4222.3	4222.3	111 %		19:50:36
3	Y RADIAL	4498.5	4498.5	110.2 %		19:50:36
3	Al 396.153Radial†	109.4	171.1	203.05 ug/L	203.05 ppb	19:50:56
3	Ca 317.933Radial†	116.6	82.7	185.30 ug/L	185.30 ppb	19:50:56
3	Fe 238.204 Radial†	15.8	5.7	76.089 ug/L	76.089 ppb	19:50:56
3	K 766.490 Radial†	3151.2	348.6	76.769 ug/L	76.769 ppb	19:50:36
3	Mg 279.077 IEC†	9.7	5.9	278.61 ug/L	278.61 ppb	19:50:56
3	Na 589.592 Radial†	378.1	725.5	291.74 ug/L	291.74 ppb	19:50:36
3	Sr 421.552†	591.6	491.5	4.4608 ug/L	4.4608 ppb	19:50:36
3	Sc 361.383	777839.0	777839.0	106.15 %		19:51:53
3	Y 371.029	641104.6	641104.6	106.07 %		19:51:53
3	Ag 328.068†	1091.0	875.7	4.9760 ug/L	4.9760 ppb	19:51:53
3	As 188.979†	25.6	46.4	28.200 ug/L	28.200 ppb	19:52:13
3	B 249.677†	1606.3	1848.3	55.604 ug/L	55.604 ppb	19:51:53
3	Ba 233.527†	508.8	476.8	5.0119 ug/L	5.0119 ppb	19:52:13
3	Be 313.107†	7577.3	11030.2	5.1618 ug/L	5.1618 ppb	19:51:53
3	Cd 226.502†	176.5	337.4	5.4895 ug/L	5.4895 ppb	19:52:13
3	Co 228.616†	132.2	171.3	4.9327 ug/L	4.9327 ppb	19:52:13
3	Cr 267.716†	481.8	358.9	5.4864 ug/L	5.4864 ppb	19:52:13
3	Cu 324.752†	8858.7	2628.9	9.3550 ug/L	9.3550 ppb	19:51:53
3	Mn 257.610†	8112.1	7216.9	10.530 ug/L	10.530 ppb	19:51:53
3	Mo 202.031†	123.0	99.1	10.020 ug/L	10.020 ppb	19:52:13
3	Ni 231.604†	233.1	137.1	4.9147 ug/L	4.9147 ppb	19:52:13
3	P 214.914†	390.0	179.0	142.86 ug/L	142.86 ppb	19:52:13
3	Pb 220.353†	23.6	71.3	12.393 ug/L	12.393 ppb	19:52:13
3	S 181.975 Axial†	87.9	55.7	108.33 ug/L	108.33 ppb	19:52:13
3	Sb 206.836†	44.6	16.4	7.9170 ug/L	7.9170 ppb	19:52:13
3	Se 196.026†	22.5	42.9	38.873 ug/L	38.873 ppb	19:52:13
3	Si 251.611†	3027.4	2396.4	98.878 ug/L	98.878 ppb	19:52:13
3	Sn 189.927†	44.7	28.4	7.2390 ug/L	7.2390 ppb	19:52:13
3	Ti 334.940†	1842.5	2780.2	5.2904 ug/L	5.2904 ppb	19:51:53
3	Tl 190.801†	22.9	43.8	18.953 ug/L	18.953 ppb	19:52:13
3	U 409.014†	-67.4	1770.6	60.186 ug/L	60.186 ppb	19:51:53
3	V 292.402†	-821.4	606.7	5.6909 ug/L	5.6909 ppb	19:51:53
3	Zn 213.857†	1488.9	742.8	9.8636 ug/L	9.8636 ppb	19:52:13
3	SiO2†	3178.6	2530.6	222.45 ug/L	222.45 ppb	19:52:29

Mean Data: PQL

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	791111.2	107.96 %		2.443			2.26%
Sc Radial	4149.3	110 %		2.6			2.37%
Y 371.029	652274.0	107.92 %		2.477			2.30%
Y RADIAL	4438.4	108.7 %		2.20			2.02%
Ag 328.068†	862.3	4.9004 ug/L		0.11579	4.9004 ppb	0.11579	2.36%
QC value within limits for Ag 328.068 Recovery = 98.01%							
Al 396.153Radial†	173.9	206.53 ug/L		5.441	206.53 ppb	5.441	2.63%
QC value within limits for Al 396.153Radial Recovery = 103.26%							
As 188.979†	49.0	29.801 ug/L		1.6407	29.801 ppb	1.6407	5.51%
QC value within limits for As 188.979 Recovery = 99.34%							
B 249.677†	1848.9	55.623 ug/L		1.0091	55.623 ppb	1.0091	1.81%
QC value within limits for B 249.677 Recovery = 111.25%							
Ba 233.527†	481.0	5.0559 ug/L		0.03811	5.0559 ppb	0.03811	0.75%
QC value within limits for Ba 233.527 Recovery = 101.12%							
Be 313.107†	11052.5	5.1721 ug/L		0.02033	5.1721 ppb	0.02033	0.39%
QC value within limits for Be 313.107 Recovery = 103.44%							
Ca 317.933Radial†	84.1	188.52 ug/L		5.373	188.52 ppb	5.373	2.85%

QC value within limits for Ca 317.933 Radial Recovery = 94.26%

Cd 226.502†	327.9	5.3351 ug/L	0.19785	5.3351 ppb	0.19785	3.71%
QC value within limits for Cd 226.502 Recovery = 106.70%						
Co 228.616†	174.8	5.0334 ug/L	0.09598	5.0334 ppb	0.09598	1.91%
QC value within limits for Co 228.616 Recovery = 100.67%						
Cr 267.716†	326.2	4.9870 ug/L	0.50497	4.9870 ppb	0.50497	10.13%
QC value within limits for Cr 267.716 Recovery = 99.74%						
Cu 324.752†	2573.8	9.1585 ug/L	0.21642	9.1585 ppb	0.21642	2.36%
QC value within limits for Cu 324.752 Recovery = 91.58%						
Fe 238.204 Radial†	5.9	78.109 ug/L	13.7478	78.109 ppb	13.7478	17.60%
QC value within limits for Fe 238.204 Radial Recovery = 78.11%						
K 766.490 Radial†	467.1	102.94 ug/L	26.338	102.94 ppb	26.338	25.59%
QC value less than the lower limit for K 766.490 Radial Recovery = 68.63%						
Mg 279.077 IEC†	4.7	222.90 ug/L	48.514	222.90 ppb	48.514	21.76%
QC value within limits for Mg 279.077 IEC Recovery = 74.30%						
Mn 257.610†	7215.2	10.529 ug/L	0.0090	10.529 ppb	0.0090	0.09%
QC value within limits for Mn 257.610 Recovery = 105.29%						
Mo 202.031†	93.4	9.4429 ug/L	0.53515	9.4429 ppb	0.53515	5.67%
QC value within limits for Mo 202.031 Recovery = 94.43%						
Na 589.592 Radial†	727.6	292.57 ug/L	23.810	292.57 ppb	23.810	8.14%
QC value within limits for Na 589.592 Radial Recovery = 97.52%						
Ni 231.604†	135.9	4.8719 ug/L	0.07204	4.8719 ppb	0.07204	1.48%
QC value within limits for Ni 231.604 Recovery = 97.44%						
P 214.914†	179.0	142.93 ug/L	6.636	142.93 ppb	6.636	4.64%
QC value within limits for P 214.914 Recovery = 95.29%						
Pb 220.353†	70.3	12.213 ug/L	0.3840	12.213 ppb	0.3840	3.14%
QC value within limits for Pb 220.353 Recovery = 122.13%						
S 181.975 Axial†	54.3	105.54 ug/L	4.556	105.54 ppb	4.556	4.32%
QC value within limits for S 181.975 Axial Recovery = 105.54%						
Sb 206.836†	20.8	9.9562 ug/L	2.49289	9.9562 ppb	2.49289	25.04%
QC value within limits for Sb 206.836 Recovery = 99.56%						
Se 196.026†	35.8	32.463 ug/L	5.9006	32.463 ppb	5.9006	18.18%
QC value within limits for Se 196.026 Recovery = 108.21%						
Si 251.611†	2342.9	96.678 ug/L	3.1416	96.678 ppb	3.1416	3.25%
QC value within limits for Si 251.611 Recovery = 96.68%						
Sn 189.927†	33.4	8.4922 ug/L	1.92849	8.4922 ppb	1.92849	22.71%
QC value within limits for Sn 189.927 Recovery = 84.92%						
Sr 421.552†	512.9	4.6550 ug/L	0.22282	4.6550 ppb	0.22282	4.79%
QC value within limits for Sr 421.552 Recovery = 93.10%						
Ti 334.940†	2744.8	5.2278 ug/L	0.07770	5.2278 ppb	0.07770	1.49%
QC value within limits for Ti 334.940 Recovery = 104.56%						
Tl 190.801†	49.5	21.390 ug/L	3.2038	21.390 ppb	3.2038	14.98%
QC value within limits for Tl 190.801 Recovery = 106.95%						
U 409.014†	1769.4	60.149 ug/L	1.4514	60.149 ppb	1.4514	2.41%
QC value within limits for U 409.014 Recovery = 120.30%						
V 292.402†	612.8	5.7354 ug/L	0.33710	5.7354 ppb	0.33710	5.88%
QC value within limits for V 292.402 Recovery = 114.71%						
Zn 213.857†	728.7	9.6754 ug/L	0.33193	9.6754 ppb	0.33193	3.43%
QC value within limits for Zn 213.857 Recovery = 96.75%						
SiO2†	2486.0	218.55 ug/L	5.911	218.55 ppb	5.911	2.70%
QC value within limits for SiO2 Recovery = 102.60%						

QC Failed. Continue with analysis.

Sequence No.: 9
 Sample ID: ICSCA
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 13
 Date Collected: 3/26/2010 19:54:40
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: ICSCA

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib.	Sample Conc. Units	Analysis Time
1	Sc Radial	3936.7	3936.7	104 %			19:56:53
1	Y RADIAL	4216.2	4216.2	103.3 %			19:56:53
1	Al 396.153Radial†	441754.7	425143.8	505890 ug/L		505890 ppb	19:56:33
1	Ca 317.933Radial†	215313.6	207160.0	464120 ug/L		464120 ppb	19:56:33
1	Fe 238.204 Radial†	14268.9	13721.5	181390 ug/L		181390 ppb	19:56:53
1	K 766.490 Radial†	2302.9	-262.6	-213.25 ug/L		-213.25 ppb	19:56:33
1	Mg 279.077 IEC†	10650.4	10245.4	484360 ug/L		484360 ppb	19:56:53
1	Na 589.592 Radial†	-178.0	215.0	86.465 ug/L		86.465 ppb	19:56:53
1	Sr 421.552†	433.4	377.7	-0.0363 ug/L		-0.0363 ppb	19:56:53
1	Sc 361.383	699922.4	699922.4	95.513 %			19:57:50
1	Y 371.029	568757.6	568757.6	94.099 %			19:57:50
1	Ag 328.068†	-8425.2	-8973.2	-1.2327 ug/L		-1.2327 ppb	19:57:50
1	As 188.979†	-87.9	-69.7	0.0453 ug/L		0.0453 ppb	19:58:11
1	B 249.677†	433.2	788.5	-5.7279 ug/L		-5.7279 ppb	19:57:50
1	Ba 233.527†	-465.0	-489.4	0.4282 ug/L		0.4282 ppb	19:58:11
1	Be 313.107†	-4147.7	-450.9	-0.2584 ug/L		-0.2584 ppb	19:57:50
1	Cd 226.502†	1060.8	1281.7	2.1013 ug/L		2.1013 ppb	19:58:11
1	Co 228.616†	6.1	53.1	-1.0975 ug/L		-1.0975 ppb	19:58:11
1	Cr 267.716†	-1205.1	-1356.8	-1.5479 ug/L		-1.5479 ppb	19:58:11
1	Cu 324.752†	3270.7	-2292.6	1.3917 ug/L		1.3917 ppb	19:57:50
1	Mn 257.610†	130.4	-289.0	-2.3182 ug/L		-2.3182 ppb	19:57:50
1	Mo 202.031†	-203.4	-229.7	-3.5927 ug/L		-3.5927 ppb	19:58:11
1	Ni 231.604†	183.0	109.0	3.9105 ug/L		3.9105 ppb	19:58:11
1	P 214.914†	161.4	-19.5	-34.903 ug/L		-34.903 ppb	19:58:11
1	Pb 220.353†	-623.2	-603.5	-11.821 ug/L		-11.821 ppb	19:58:11
1	S 181.975 Axial†	28.2	2.5	-90.024 ug/L		-90.024 ppb	19:58:11
1	Sb 206.836†	54.2	31.1	-2.9640 ug/L		-2.9640 ppb	19:58:11
1	Se 196.026†	-718.0	-730.0	-34.859 ug/L		-34.859 ppb	19:58:11
1	Si 251.611†	422.8	-13.0	-0.2526 ug/L		-0.2526 ppb	19:58:11
1	Sn 189.927†	-323.1	-352.0	-17.191 ug/L		-17.191 ppb	19:58:11
1	Ti 334.940†	-11527.0	-11024.2	1.5787 ug/L		1.5787 ppb	19:57:50
1	Tl 190.801†	-52.7	-32.9	-14.396 ug/L		-14.396 ppb	19:58:11
1	U 409.014†	-458.7	1353.7	25.400 ug/L		25.400 ppb	19:57:50
1	V 292.402†	577.7	1985.4	0.5556 ug/L		0.5556 ppb	19:58:11
1	Zn 213.857†	2596.9	2059.1	0.3356 ug/L		0.3356 ppb	19:58:11
1	SiO2†	379.1	-67.0	-5.2670 ug/L		-5.2670 ppb	19:59:07
2	Sc Radial	3807.7	3807.7	101 %			19:57:18
2	Y RADIAL	4082.6	4082.6	100.00 %			19:57:18
2	Al 396.153Radial†	440338.2	438137.4	521350 ug/L		521350 ppb	19:56:58
2	Ca 317.933Radial†	214634.4	213504.1	478330 ug/L		478330 ppb	19:56:58
2	Fe 238.204 Radial†	13846.2	13766.2	181980 ug/L		181980 ppb	19:57:18
2	K 766.490 Radial†	2253.8	-236.4	-212.20 ug/L		-212.20 ppb	19:56:58
2	Mg 279.077 IEC†	10293.1	10237.1	483970 ug/L		483970 ppb	19:57:18
2	Na 589.592 Radial†	-203.0	184.3	74.126 ug/L		74.126 ppb	19:57:18
2	Sr 421.552†	428.1	386.6	-0.0618 ug/L		-0.0618 ppb	19:57:18
2	Sc 361.383	705919.3	705919.3	96.331 %			19:58:16
2	Y 371.029	573669.7	573669.7	94.912 %			19:58:16
2	Ag 328.068†	-8490.2	-8965.7	-1.1983 ug/L		-1.1983 ppb	19:58:16
2	As 188.979†	-74.0	-54.5	9.4164 ug/L		9.4164 ppb	19:58:36
2	B 249.677†	386.4	736.1	-7.4047 ug/L		-7.4047 ppb	19:58:16
2	Ba 233.527†	-476.1	-496.7	0.3697 ug/L		0.3697 ppb	19:58:36
2	Be 313.107†	-4190.2	-458.2	-0.2619 ug/L		-0.2619 ppb	19:58:16
2	Cd 226.502†	1046.9	1257.9	1.6515 ug/L		1.6515 ppb	19:58:36
2	Co 228.616†	27.6	75.3	-0.4643 ug/L		-0.4643 ppb	19:58:36
2	Cr 267.716†	-1241.9	-1384.3	-1.9052 ug/L		-1.9052 ppb	19:58:36
2	Cu 324.752†	3225.9	-2368.2	1.1545 ug/L		1.1545 ppb	19:58:16
2	Mn 257.610†	124.0	-296.8	-2.2553 ug/L		-2.2553 ppb	19:58:16
2	Mo 202.031†	-197.7	-222.0	-2.5971 ug/L		-2.5971 ppb	19:58:36
2	Ni 231.604†	153.5	76.7	2.7521 ug/L		2.7521 ppb	19:58:36

2	P 214.914†	154.5	-28.1	-38.427 ug/L	-38.427 ppb	19:58:36
2	Pb 220.353†	-626.9	-601.7	-7.9714 ug/L	-7.9714 ppb	19:58:36
2	S 181.975 Axial†	42.9	17.4	-63.850 ug/L	-63.850 ppb	19:58:36
2	Sb 206.836†	58.7	35.3	-1.4520 ug/L	-1.4520 ppb	19:58:36
2	Se 196.026†	-725.8	-731.7	-30.551 ug/L	-30.551 ppb	19:58:36
2	Si 251.611†	398.6	-41.9	-1.4547 ug/L	-1.4547 ppb	19:58:36
2	Sn 189.927†	-328.6	-354.7	-15.402 ug/L	-15.402 ppb	19:58:36
2	Ti 334.940†	-11662.2	-11062.1	3.4459 ug/L	3.4459 ppb	19:58:16
2	Tl 190.801†	-66.6	-46.9	-20.425 ug/L	-20.425 ppb	19:58:36
2	U 409.014†	-545.2	1268.0	22.420 ug/L	22.420 ppb	19:58:16
2	V 292.402†	584.9	1987.7	0.4886 ug/L	0.4886 ppb	19:58:36
2	Zn 213.857†	2582.8	2021.4	-0.2487 ug/L	-0.2487 ppb	19:58:36
2	SiO2†	363.8	-86.4	-6.9907 ug/L	-6.9907 ppb	19:59:12
3	Sc Radial	3802.2	3802.2	100 %		19:57:44
3	Y RADIAL	4077.2	4077.2	99.86 %		19:57:44
3	Al 396.153Radial†	437938.5	436377.6	519260 ug/L	519260 ppb	19:57:24
3	Ca 317.933Radial†	212905.5	212089.3	475160 ug/L	475160 ppb	19:57:24
3	Fe 238.204 Radial†	13801.4	13741.5	181660 ug/L	181660 ppb	19:57:44
3	K 766.490 Radial†	2223.0	-263.8	-217.19 ug/L	-217.19 ppb	19:57:24
3	Mg 279.077 IBC†	10273.9	10232.7	483760 ug/L	483760 ppb	19:57:44
3	Na 589.592 Radial†	-198.8	188.3	75.717 ug/L	75.717 ppb	19:57:44
3	Sr 421.552†	430.0	389.2	-0.0149 ug/L	-0.0149 ppb	19:57:44
3	Sc 361.383	714015.7	714015.7	97.436 %		19:58:41
3	Y 371.029	580004.0	580004.0	95.960 %		19:58:41
3	Ag 328.068†	-8768.0	-9150.9	-2.3219 ug/L	-2.3219 ppb	19:58:41
3	As 188.979†	-80.3	-60.1	5.9033 ug/L	5.9033 ppb	19:59:01
3	B 249.677†	512.7	861.2	-3.5820 ug/L	-3.5820 ppb	19:58:41
3	Ba 233.527†	-452.4	-466.8	0.6719 ug/L	0.6719 ppb	19:59:01
3	Be 313.107†	-4356.5	-579.6	-0.3227 ug/L	-0.3227 ppb	19:58:41
3	Cd 226.502†	1050.9	1249.8	1.5552 ug/L	1.5552 ppb	19:59:01
3	Co 228.616†	-4.7	41.9	-1.4139 ug/L	-1.4139 ppb	19:59:01
3	Cr 267.716†	-1199.1	-1325.8	-1.0494 ug/L	-1.0494 ppb	19:59:01
3	Cu 324.752†	3340.3	-2288.8	1.4147 ug/L	1.4147 ppb	19:58:41
3	Mn 257.610†	119.4	-303.0	-2.2881 ug/L	-2.2881 ppb	19:58:41
3	Mo 202.031†	-188.2	-209.9	-1.4433 ug/L	-1.4433 ppb	19:59:01
3	Ni 231.604†	157.7	79.3	2.8438 ug/L	2.8438 ppb	19:59:01
3	P 214.914†	167.2	-16.9	-29.632 ug/L	-29.632 ppb	19:59:01
3	Pb 220.353†	-620.1	-587.4	-5.9586 ug/L	-5.9586 ppb	19:59:01
3	S 181.975 Axial†	28.2	1.8	-93.763 ug/L	-93.763 ppb	19:59:01
3	Sb 206.836†	63.4	39.5	0.7150 ug/L	0.7150 ppb	19:59:01
3	Se 196.026†	-724.3	-721.7	-22.958 ug/L	-22.958 ppb	19:59:01
3	Si 251.611†	401.9	-43.3	-1.5261 ug/L	-1.5261 ppb	19:59:01
3	Sn 189.927†	-301.2	-322.8	-7.8535 ug/L	-7.8535 ppb	19:59:01
3	Ti 334.940†	-12702.2	-11992.2	1.2537 ug/L	1.2537 ppb	19:58:41
3	Tl 190.801†	-67.5	-47.0	-20.492 ug/L	-20.492 ppb	19:59:01
3	U 409.014†	-227.4	1600.6	33.765 ug/L	33.765 ppb	19:58:41
3	V 292.402†	516.6	1910.8	-0.1183 ug/L	-0.1183 ppb	19:59:01
3	Zn 213.857†	2568.0	1975.7	-0.8098 ug/L	-0.8098 ppb	19:59:01
3	SiO2†	367.5	-86.8	-7.0653 ug/L	-7.0653 ppb	19:59:17

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	706619.1	96.427 %	0.9651			1.00%
Sc Radial	3848.9	102 %	2.0			1.98%
Y 371.029	574143.8	94.990 %	0.9328			0.98%
Y RADIAL	4125.3	101.0 %	1.93			1.91%
Ag 328.068†	-9029.9	-1.5843 ug/L	0.63902	-1.5843 ppb	0.63902	40.34%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	433219.6	515500 ug/L	8387.7	515500 ppb	8387.7	1.63%
QC value within limits for Al 396.153Radial Recovery = 103.10%						
As 188.979†	-61.4	5.1217 ug/L	4.73416	5.1217 ppb	4.73416	92.43%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	795.3	-5.5716 ug/L	1.91617	-5.5716 ppb	1.91617	34.39%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	-484.3	0.4899 ug/L	0.16026	0.4899 ppb	0.16026	32.71%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	-496.2	-0.2810 ug/L	0.03612	-0.2810 ppb	0.03612	12.85%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	210917.8	472540 ug/L	7461.4	472540 ppb	7461.4	1.58%

QC value within limits for Ca 317.933 Radial Recovery = 94.51%							
Cd 226.502†	1263.1	1.7693 ug/L	0.29148	1.7693 ppb	0.29148	16.47%	
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	56.8	-0.9919 ug/L	0.48352	-0.9919 ppb	0.48352	48.75%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	-1355.6	-1.5009 ug/L	0.42982	-1.5009 ppb	0.42982	28.64%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	-2316.5	1.3203 ug/L	0.14406	1.3203 ppb	0.14406	10.91%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	13743.1	181680 ug/L	295.7	181680 ppb	295.7	0.16%	
QC value within limits for Fe 238.204 Radial Recovery = 90.84%							
K 766.490 Radial†	-254.3	-214.21 ug/L	2.633	-214.21 ppb	2.633	1.23%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	10238.4	484030 ug/L	303.3	484030 ppb	303.3	0.06%	
QC value within limits for Mg 279.077 IEC Recovery = 96.81%							
Mn 257.610†	-296.3	-2.2872 ug/L	0.03145	-2.2872 ppb	0.03145	1.38%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	-220.5	-2.5444 ug/L	1.07570	-2.5444 ppb	1.07570	42.28%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	195.9	78.769 ug/L	6.7123	78.769 ppb	6.7123	8.52%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	88.3	3.1688 ug/L	0.64398	3.1688 ppb	0.64398	20.32%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	-21.5	-34.320 ug/L	4.4261	-34.320 ppb	4.4261	12.90%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	-597.5	-8.5836 ug/L	2.97868	-8.5836 ppb	2.97868	34.70%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	7.2	-82.546 ug/L	16.2989	-82.546 ppb	16.2989	19.75%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	35.3	-1.2337 ug/L	1.84917	-1.2337 ppb	1.84917	149.89%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	-727.8	-29.456 ug/L	6.0254	-29.456 ppb	6.0254	20.46%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	-32.7	-1.0778 ug/L	0.71552	-1.0778 ppb	0.71552	66.39%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	-343.2	-13.482 ug/L	4.9558	-13.482 ppb	4.9558	36.76%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	384.5	-0.0377 ug/L	0.02349	-0.0377 ppb	0.02349	62.36%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	-11359.5	2.0928 ug/L	1.18307	2.0928 ppb	1.18307	56.53%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	-42.2	-18.438 ug/L	3.5005	-18.438 ppb	3.5005	18.99%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	1407.5	27.195 ug/L	5.8813	27.195 ppb	5.8813	21.63%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	1961.3	0.3086 ug/L	0.37123	0.3086 ppb	0.37123	120.28%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	2018.7	-0.2409 ug/L	0.57274	-0.2409 ppb	0.57274	237.73%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†	-80.1	-6.4410 ug/L	1.01737	-6.4410 ppb	1.01737	15.80%	
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: 3/26/2010 20:01:29
 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	3946.8	3946.8	104 %		20:03:42
1	Y RADIAL	4232.2	4232.2	103.7 %		20:03:42
1	Al 396.153Radial†	445871.0	428008.0	509280 ug/L	509280 ppb	20:03:22
1	Ca 317.933Radial†	216033.3	207321.1	464480 ug/L	464480 ppb	20:03:22
1	Fe 238.204 Radial†	13831.9	13267.0	175400 ug/L	175400 ppb	20:03:42
1	K 766.490 Radial†	25889.1	22369.1	4780.6 ug/L	4780.6 ppb	20:03:22
1	Mg 279.077 IEC†	10309.3	9891.8	467640 ug/L	467640 ppb	20:03:42
1	Na 589.592 Radial†	12721.3	12595.8	5065.2 ug/L	5065.2 ppb	20:03:22
1	Sr 421.552†	54084.0	51869.1	467.43 ug/L	467.43 ppb	20:03:22
1	Sc 361.383	742976.8	742976.8	101.39 %		20:04:40
1	Y 371.029	601813.9	601813.9	99.568 %		20:04:40
1	Ag 328.068†	39360.9	38669.9	269.58 ug/L	269.58 ppb	20:04:40
1	As 188.979†	778.8	790.5	524.05 ug/L	524.05 ppb	20:05:00
1	B 249.677†	17644.9	17738.3	504.15 ug/L	504.15 ppb	20:04:40
1	Ba 233.527†	46337.1	45700.2	485.46 ug/L	485.46 ppb	20:04:40
1	Be 313.107†	531119.2	527739.8	247.48 ug/L	247.48 ppb	20:04:40
1	Cd 226.502†	29375.4	29144.4	455.82 ug/L	455.82 ppb	20:05:00
1	Co 228.616†	15594.0	15427.3	440.86 ug/L	440.86 ppb	20:05:00
1	Cr 267.716†	30599.4	30085.4	479.71 ug/L	479.71 ppb	20:04:40
1	Cu 324.752†	158471.6	150585.1	546.54 ug/L	546.54 ppb	20:04:40
1	Mn 257.610†	330397.5	325448.8	473.20 ug/L	473.20 ppb	20:04:40
1	Mo 202.031†	4619.0	4539.0	477.50 ug/L	477.50 ppb	20:05:00
1	Ni 231.604†	12791.9	12534.2	449.44 ug/L	449.44 ppb	20:05:00
1	P 214.914†	3292.4	3058.9	2355.1 ug/L	2355.1 ppb	20:05:00
1	Pb 220.353†	2000.1	2021.8	444.78 ug/L	444.78 ppb	20:05:00
1	S 181.975 Axial†	1393.4	1347.2	2524.3 ug/L	2524.3 ppb	20:05:00
1	Sb 206.836†	1226.5	1184.1	549.20 ug/L	549.20 ppb	20:05:00
1	Se 196.026†	2032.7	2026.6	2431.9 ug/L	2431.9 ppb	20:05:00
1	Si 251.611†	127381.1	125181.6	5166.0 ug/L	5166.0 ppb	20:04:40
1	Sn 189.927†	1585.9	1550.6	465.56 ug/L	465.56 ppb	20:05:00
1	Ti 334.940†	253904.0	251472.3	504.59 ug/L	504.59 ppb	20:04:40
1	Tl 190.801†	976.3	985.2	428.18 ug/L	428.18 ppb	20:05:00
1	U 409.014†	14012.9	15655.1	511.32 ug/L	511.32 ppb	20:04:40
1	V 292.402†	56909.3	57510.8	506.65 ug/L	506.65 ppb	20:04:40
1	Zn 213.857†	40091.0	38882.4	489.36 ug/L	489.36 ppb	20:04:40
1	SiO2†	126990.5	124788.0	10970 ug/L	10970 ppb	20:05:57
2	Sc Radial	3845.5	3845.5	102 %		20:04:07
2	Y RADIAL	4129.6	4129.6	101.1 %		20:04:07
2	Al 396.153Radial†	435144.4	428717.4	510120 ug/L	510120 ppb	20:03:47
2	Ca 317.933Radial†	211620.5	208437.5	466980 ug/L	466980 ppb	20:03:47
2	Fe 238.204 Radial†	13939.2	13722.5	181420 ug/L	181420 ppb	20:04:07
2	K 766.490 Radial†	25489.4	22630.1	4837.3 ug/L	4837.3 ppb	20:03:47
2	Mg 279.077 IEC†	10376.7	10218.9	483110 ug/L	483110 ppb	20:04:07
2	Na 589.592 Radial†	12536.8	12735.9	5121.5 ug/L	5121.5 ppb	20:03:47
2	Sr 421.552†	52912.9	52083.2	469.36 ug/L	469.36 ppb	20:03:47
2	Sc 361.383	723107.1	723107.1	98.677 %		20:05:06
2	Y 371.029	585407.7	585407.7	96.854 %		20:05:06
2	Ag 328.068†	38455.8	38819.4	272.27 ug/L	272.27 ppb	20:05:06
2	As 188.979†	766.3	798.9	530.57 ug/L	530.57 ppb	20:05:26
2	B 249.677†	17283.6	17850.4	506.52 ug/L	506.52 ppb	20:05:06
2	Ba 233.527†	45428.1	46034.8	489.16 ug/L	489.16 ppb	20:05:06
2	Be 313.107†	520717.8	531593.3	249.29 ug/L	249.29 ppb	20:05:06
2	Cd 226.502†	29133.5	29695.3	464.16 ug/L	464.16 ppb	20:05:26
2	Co 228.616†	15440.1	15693.9	448.46 ug/L	448.46 ppb	20:05:26
2	Cr 267.716†	29873.0	30178.6	481.78 ug/L	481.78 ppb	20:05:06
2	Cu 324.752†	154617.5	150974.3	548.24 ug/L	548.24 ppb	20:05:06
2	Mn 257.610†	324553.1	328480.5	477.59 ug/L	477.59 ppb	20:05:06
2	Mo 202.031†	4608.6	4653.7	489.57 ug/L	489.57 ppb	20:05:26
2	Ni 231.604†	12644.8	12731.8	456.52 ug/L	456.52 ppb	20:05:26

2	P 214.914†	3253.7	3108.8	2390.7 ug/L	2390.7 ppb	20:05:26
2	Pb 220.353†	1995.8	2071.7	452.80 ug/L	452.80 ppb	20:05:26
2	S 181.975 Axial†	1379.4	1370.8	2569.9 ug/L	2569.9 ppb	20:05:26
2	Sb 206.836†	1182.2	1172.5	544.11 ug/L	544.11 ppb	20:05:26
2	Se 196.026†	2036.3	2085.3	2501.0 ug/L	2501.0 ppb	20:05:26
2	Si 251.611†	124609.9	125825.5	5192.4 ug/L	5192.4 ppb	20:05:06
2	Sn 189.927†	1584.4	1592.0	476.15 ug/L	476.15 ppb	20:05:26
2	Ti 334.940†	248963.2	253346.6	507.24 ug/L	507.24 ppb	20:05:06
2	Tl 190.801†	968.8	1004.1	436.34 ug/L	436.34 ppb	20:05:26
2	U 409.014†	13906.5	15927.0	519.88 ug/L	519.88 ppb	20:05:06
2	V 292.402†	55756.1	57884.5	509.61 ug/L	509.61 ppb	20:05:06
2	Zn 213.857†	39350.7	39218.7	492.90 ug/L	492.90 ppb	20:05:06
2	SiO2†	126073.9	127300.9	11191 ug/L	11191 ppb	20:06:02
3	Sc Radial	3880.7	3880.7	102 %		20:04:32
3	Y RADIAL	4167.7	4167.7	102.1 %		20:04:32
3	Al 396.153Radial†	446881.8	436285.0	519130 ug/L	519130 ppb	20:04:12
3	Ca 317.933Radial†	216158.1	210975.3	472670 ug/L	472670 ppb	20:04:12
3	Fe 238.204 Radial†	13983.4	13641.1	180340 ug/L	180340 ppb	20:04:32
3	K 766.490 Radial†	25843.2	22747.7	4861.4 ug/L	4861.4 ppb	20:04:12
3	Mg 279.077 IEC†	10421.5	10169.8	480790 ug/L	480790 ppb	20:04:32
3	Na 589.592 Radial†	12705.0	12788.0	5142.4 ug/L	5142.4 ppb	20:04:12
3	Sr 421.552†	54276.7	52941.6	477.11 ug/L	477.11 ppb	20:04:12
3	Sc 361.383	729841.3	729841.3	99.596 %		20:05:32
3	Y 371.029	591151.2	591151.2	97.804 %		20:05:32
3	Ag 328.068†	38675.4	38680.3	271.06 ug/L	271.06 ppb	20:05:32
3	As 188.979†	751.5	776.9	516.93 ug/L	516.93 ppb	20:05:52
3	B 249.677†	17416.7	17822.4	505.86 ug/L	505.86 ppb	20:05:32
3	Ba 233.527†	45476.2	45658.3	485.17 ug/L	485.17 ppb	20:05:32
3	Be 313.107†	520801.8	526808.5	247.05 ug/L	247.05 ppb	20:05:32
3	Cd 226.502†	29346.3	29636.6	463.31 ug/L	463.31 ppb	20:05:52
3	Co 228.616†	15548.2	15658.1	447.44 ug/L	447.44 ppb	20:05:52
3	Cr 267.716†	30065.1	30092.1	480.34 ug/L	480.34 ppb	20:05:32
3	Cu 324.752†	155954.6	150871.0	547.81 ug/L	547.81 ppb	20:05:32
3	Mn 257.610†	324689.5	325582.6	473.35 ug/L	473.35 ppb	20:05:32
3	Mo 202.031†	4626.9	4628.9	487.05 ug/L	487.05 ppb	20:05:52
3	Ni 231.604†	12748.3	12717.5	456.01 ug/L	456.01 ppb	20:05:52
3	P 214.914†	3273.5	3098.3	2385.4 ug/L	2385.4 ppb	20:05:52
3	Pb 220.353†	1998.8	2056.0	452.31 ug/L	452.31 ppb	20:05:52
3	S 181.975 Axial†	1394.7	1373.3	2573.1 ug/L	2573.1 ppb	20:05:52
3	Sb 206.836†	1222.2	1201.5	557.32 ug/L	557.32 ppb	20:05:52
3	Se 196.026†	2040.9	2070.9	2487.6 ug/L	2487.6 ppb	20:05:52
3	Si 251.611†	125186.8	125239.5	5168.2 ug/L	5168.2 ppb	20:05:32
3	Sn 189.927†	1601.7	1594.6	477.89 ug/L	477.89 ppb	20:05:52
3	Ti 334.940†	249097.2	251153.2	504.00 ug/L	504.00 ppb	20:05:32
3	Tl 190.801†	960.7	986.9	428.90 ug/L	428.90 ppb	20:05:52
3	U 409.014†	13910.2	15800.7	515.71 ug/L	515.71 ppb	20:05:32
3	V 292.402†	55969.0	57576.9	506.92 ug/L	506.92 ppb	20:05:32
3	Zn 213.857†	39437.4	38937.7	489.31 ug/L	489.31 ppb	20:05:32
3	SiO2†	126471.7	126521.3	11123 ug/L	11123 ppb	20:06:07

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	731975.1	99.887 %	1.3790			1.38%
Sc Radial	3891.0	103 %	1.4			1.32%
Y 371.029	592790.9	98.075 %	1.3774			1.40%
Y RADIAL	4176.5	102.3 %	1.27			1.24%
Ag 328.068†	38723.2	270.97 ug/L	1.344	270.97 ppb	1.344	0.50%
QC value within limits for Ag 328.068 Recovery = 108.39%						
Al 396.153Radial†	431003.5	512840 ug/L	5458.9	512840 ppb	5458.9	1.06%
QC value within limits for Al 396.153Radial Recovery = 102.57%						
As 188.979†	788.7	523.85 ug/L	6.823	523.85 ppb	6.823	1.30%
QC value within limits for As 188.979 Recovery = 104.77%						
B 249.677†	17803.7	505.51 ug/L	1.225	505.51 ppb	1.225	0.24%
QC value within limits for B 249.677 Recovery = 101.10%						
Ba 233.527†	45797.8	486.59 ug/L	2.222	486.59 ppb	2.222	0.46%
QC value within limits for Ba 233.527 Recovery = 97.32%						
Be 313.107†	528713.9	247.94 ug/L	1.190	247.94 ppb	1.190	0.48%
QC value within limits for Be 313.107 Recovery = 99.18%						
Ca 317.933Radial†	208911.3	468040 ug/L	4195.3	468040 ppb	4195.3	0.90%

QC value within limits for Ca 317.933 Radial Recovery = 93.61%

Cd 226.502†	29492.1	461.10 ug/L	4.588	461.10 ppb	4.588	1.00%
QC value within limits for Cd 226.502 Recovery = 92.22%						
Co 228.616†	15593.1	445.59 ug/L	4.124	445.59 ppb	4.124	0.93%
QC value within limits for Co 228.616 Recovery = 89.12%						
Cr 267.716†	30118.7	480.61 ug/L	1.059	480.61 ppb	1.059	0.22%
QC value within limits for Cr 267.716 Recovery = 96.12%						
Cu 324.752†	150810.1	547.53 ug/L	0.887	547.53 ppb	0.887	0.16%
QC value within limits for Cu 324.752 Recovery = 109.51%						
Fe 238.204 Radial†	13543.5	179050 ug/L	3211.0	179050 ppb	3211.0	1.79%
QC value within limits for Fe 238.204 Radial Recovery = 89.53%						
K 766.490 Radial†	22582.3	4826.4 ug/L	41.48	4826.4 ppb	41.48	0.86%
QC value within limits for K 766.490 Radial Recovery = 96.53%						
Mg 279.077 IEC†	10093.5	477180 ug/L	8340.9	477180 ppb	8340.9	1.75%
QC value within limits for Mg 279.077 IEC Recovery = 95.44%						
Mn 257.610†	326503.9	474.71 ug/L	2.492	474.71 ppb	2.492	0.52%
QC value within limits for Mn 257.610 Recovery = 94.94%						
Mo 202.031†	4607.2	484.71 ug/L	6.369	484.71 ppb	6.369	1.31%
QC value within limits for Mo 202.031 Recovery = 96.94%						
Na 589.592 Radial†	12706.6	5109.7 ug/L	39.96	5109.7 ppb	39.96	0.78%
QC value within limits for Na 589.592 Radial Recovery = 102.19%						
Ni 231.604†	12661.2	453.99 ug/L	3.951	453.99 ppb	3.951	0.87%
QC value within limits for Ni 231.604 Recovery = 90.80%						
P 214.914†	3088.7	2377.1 ug/L	19.20	2377.1 ppb	19.20	0.81%
QC value within limits for P 214.914 Recovery = 95.08%						
Pb 220.353†	2049.8	449.97 ug/L	4.499	449.97 ppb	4.499	1.00%
QC value within limits for Pb 220.353 Recovery = 89.99%						
S 181.975 Axial†	1363.7	2555.8 ug/L	27.31	2555.8 ppb	27.31	1.07%
QC value within limits for S 181.975 Axial Recovery = 102.23%						
Sb 206.836†	1186.0	550.21 ug/L	6.660	550.21 ppb	6.660	1.21%
QC value within limits for Sb 206.836 Recovery = 110.04%						
Se 196.026†	2060.9	2473.5 ug/L	36.67	2473.5 ppb	36.67	1.48%
QC value within limits for Se 196.026 Recovery = 98.94%						
Si 251.611†	125415.5	5175.5 ug/L	14.66	5175.5 ppb	14.66	0.28%
QC value within limits for Si 251.611 Recovery = 103.51%						
Sn 189.927†	1579.0	473.20 ug/L	6.674	473.20 ppb	6.674	1.41%
QC value within limits for Sn 189.927 Recovery = 94.64%						
Sr 421.552†	52298.0	471.30 ug/L	5.122	471.30 ppb	5.122	1.09%
QC value within limits for Sr 421.552 Recovery = 94.26%						
Ti 334.940†	251990.7	505.28 ug/L	1.726	505.28 ppb	1.726	0.34%
QC value within limits for Ti 334.940 Recovery = 101.06%						
Tl 190.801†	992.0	431.14 ug/L	4.518	431.14 ppb	4.518	1.05%
QC value within limits for Tl 190.801 Recovery = 86.23%						
U 409.014†	15794.3	515.64 ug/L	4.280	515.64 ppb	4.280	0.83%
QC value within limits for U 409.014 Recovery = 103.13%						
V 292.402†	57657.4	507.73 ug/L	1.634	507.73 ppb	1.634	0.32%
QC value within limits for V 292.402 Recovery = 101.55%						
Zn 213.857†	39012.9	490.52 ug/L	2.058	490.52 ppb	2.058	0.42%
QC value within limits for Zn 213.857 Recovery = 98.10%						
SiO2†	126203.4	11095 ug/L	113.0	11095 ppb	113.0	1.02%
QC value within limits for SiO2 Recovery = 103.74%						

All analyte(s) passed QC.

Sequence No.: 11
 Sample ID: LR1
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 15
 Date Collected: 3/26/2010 20:08:17
 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	3822.5	3822.5	101 %		20:10:30
1	Y RADIAL	4100.4	4100.4	100.4 %		20:10:30
1	Al 396.153Radial†	431570.0	427745.1	508990 ug/L	508990 ppb	20:10:10
1	Ca 317.933Radial†	212458.4	210517.6	471640 ug/L	471640 ppb	20:10:10
1	Fe 238.204 Radial†	32027.2	31729.5	419450 ug/L	419450 ppb	20:10:30
1	K 766.490 Radial†	2202.0	-296.4	-419.94 ug/L	-419.94 ppb	20:10:10
1	Mg 279.077 IEC†	10161.4	10066.8	475660 ug/L	475660 ppb	20:10:30
1	Na 589.592 Radial†	1265627.9	1254583.6	504510 ug/L	504510 ppb	20:10:10
1	Sr 421.552†	1370.4	1318.8	8.4512 ug/L	8.4512 ppb	20:10:30
1	Sc 361.383	699374.1	699374.1	95.438 %		20:11:28
1	Y 371.029	570313.7	570313.7	94.356 %		20:11:28
1	Ag 328.068†	-19819.5	-20919.0	-7.6713 ug/L	-7.6713 ppb	20:11:28
1	As 188.979†	-143.0	-127.6	20.738 ug/L	20.738 ppb	20:11:49
1	B 249.677†	1236.1	1630.2	-19.071 ug/L	-19.071 ppb	20:11:28
1	Ba 233.527†	-1327.7	-1393.7	-1.7850 ug/L	-1.7850 ppb	20:11:49
1	Be 313.107†	-9842.6	-6421.5	-3.0418 ug/L	-3.0418 ppb	20:11:28
1	Cd 226.502†	2711.7	3012.5	8.5048 ug/L	8.5048 ppb	20:11:49
1	Co 228.616†	210.0	266.8	1.5510 ug/L	1.5510 ppb	20:11:49
1	Cr 267.716†	-1164.6	-1315.3	18.480 ug/L	18.480 ppb	20:11:49
1	Cu 324.752†	1099.4	-4565.0	-2.2779 ug/L	-2.2779 ppb	20:11:28
1	Mn 257.610†	-19113.7	-20452.9	-7.8910 ug/L	-7.8910 ppb	20:11:28
1	Mo 202.031†	-384.3	-419.4	-4.1797 ug/L	-4.1797 ppb	20:11:49
1	Ni 231.604†	249.1	178.5	6.3985 ug/L	6.3985 ppb	20:11:49
1	P 214.914†	458.2	291.6	27.155 ug/L	27.155 ppb	20:11:49
1	Pb 220.353†	-452.8	-425.4	-14.151 ug/L	-14.151 ppb	20:11:49
1	S 181.975 Axial†	60.2	36.0	-25.457 ug/L	-25.457 ppb	20:11:49
1	Sb 206.836†	64.3	41.7	-1.2164 ug/L	-1.2164 ppb	20:11:49
1	Se 196.026†	-1729.2	-1790.1	-355.20 ug/L	-355.20 ppb	20:11:49
1	Si 251.611†	-451.6	-928.9	-37.854 ug/L	-37.854 ppb	20:11:49
1	Sn 189.927†	-340.8	-370.8	-34.294 ug/L	-34.294 ppb	20:11:49
1	Ti 334.940†	-10612.2	-10075.1	-1.3793 ug/L	-1.3793 ppb	20:11:28
1	Tl 190.801†	-86.8	-68.7	-29.996 ug/L	-29.996 ppb	20:11:49
1	U 409.014†	413137.2	434719.9	14735 ug/L	14735 ppb	20:11:28
1	V 292.402†	1631.2	3089.7	3.5663 ug/L	3.5663 ppb	20:11:49
1	Zn 213.857†	4615.9	4176.7	-7.0176 ug/L	-7.0176 ppb	20:11:49
1	SiO2†	-355.8	-836.8	-72.492 ug/L	-72.492 ppb	20:12:45
2	Sc Radial	3763.1	3763.1	99.3 %		20:10:56
2	Y RADIAL	4030.1	4030.1	98.71 %		20:10:56
2	Al 396.153Radial†	435595.5	438556.3	521850 ug/L	521850 ppb	20:10:36
2	Ca 317.933Radial†	213026.6	214416.9	480380 ug/L	480380 ppb	20:10:36
2	Fe 238.204 Radial†	31795.7	31998.0	423000 ug/L	423000 ppb	20:10:56
2	K 766.490 Radial†	2450.8	-11.5	-363.87 ug/L	-363.87 ppb	20:10:36
2	Mg 279.077 IEC†	10075.0	10139.0	479070 ug/L	479070 ppb	20:10:56
2	Na 589.592 Radial†	1270648.5	1279458.8	514510 ug/L	514510 ppb	20:10:36
2	Sr 421.552†	1330.6	1300.1	8.2165 ug/L	8.2165 ppb	20:10:56
2	Sc 361.383	723811.8	723811.8	98.773 %		20:11:54
2	Y 371.029	589736.3	589736.3	97.570 %		20:11:54
2	Ag 328.068†	-20523.4	-20930.6	-6.7273 ug/L	-6.7273 ppb	20:11:54
2	As 188.979†	-144.3	-123.8	23.814 ug/L	23.814 ppb	20:12:14
2	B 249.677†	1417.9	1770.5	-15.425 ug/L	-15.425 ppb	20:11:54
2	Ba 233.527†	-1333.6	-1352.7	-1.2494 ug/L	-1.2494 ppb	20:12:14
2	Be 313.107†	-10051.0	-6284.3	-2.9812 ug/L	-2.9812 ppb	20:11:54
2	Cd 226.502†	2714.4	2919.3	6.6155 ug/L	6.6155 ppb	20:12:14
2	Co 228.616†	230.4	280.0	1.8831 ug/L	1.8831 ppb	20:12:14
2	Cr 267.716†	-1180.5	-1290.2	19.256 ug/L	19.256 ppb	20:12:14
2	Cu 324.752†	1046.9	-4657.1	-2.3947 ug/L	-2.3947 ppb	20:11:54
2	Mn 257.610†	-20014.1	-20688.4	-8.0238 ug/L	-8.0238 ppb	20:11:54
2	Mo 202.031†	-397.3	-418.9	-3.7528 ug/L	-3.7528 ppb	20:12:14
2	Ni 231.604†	239.9	160.3	5.7481 ug/L	5.7481 ppb	20:12:14

2	P 214.914†	471.6	289.0	25.445 ug/L	25.445 ppb	20:12:14
2	Pb 220.353†	-453.0	-409.5	-8.9385 ug/L	-8.9385 ppb	20:12:14
2	S 181.975 Axial†	47.7	21.2	-56.498 ug/L	-56.498 ppb	20:12:14
2	Sb 206.836†	65.7	40.9	-1.9951 ug/L	-1.9951 ppb	20:12:14
2	Se 196.026†	-1721.5	-1721.2	-280.18 ug/L	-280.18 ppb	20:12:14
2	Si 251.611†	-490.5	-952.3	-38.820 ug/L	-38.820 ppb	20:12:14
2	Sn 189.927†	-351.9	-369.9	-32.732 ug/L	-32.732 ppb	20:12:14
2	Ti 334.940†	-11780.1	-10882.1	-2.0108 ug/L	-2.0108 ppb	20:11:54
2	Tl 190.801†	-89.7	-68.5	-29.947 ug/L	-29.947 ppb	20:12:14
2	U 409.014†	426312.5	433443.6	14691 ug/L	14691 ppb	20:11:54
2	V 292.402†	1568.6	2968.7	1.9475 ug/L	1.9475 ppb	20:12:14
2	Zn 213.857†	4607.0	4004.5	-9.8441 ug/L	-9.8441 ppb	20:12:14
2	SiO2†	-540.0	-1010.7	-87.801 ug/L	-87.801 ppb	20:12:50
3	Sc Radial	3777.1	3777.1	99.7 %		20:11:21
3	Y RADIAL	4062.6	4062.6	99.51 %		20:11:21
3	Al 396.153Radial†	420591.2	421880.8	502010 ug/L	502010 ppb	20:11:01
3	Ca 317.933Radial†	207041.5	207618.5	465150 ug/L	465150 ppb	20:11:01
3	Fe 238.204 Radial†	31775.4	31858.9	421160 ug/L	421160 ppb	20:11:21
3	K 766.490 Radial†	2367.9	-103.8	-371.63 ug/L	-371.63 ppb	20:11:01
3	Mg 279.077 IEC†	10089.9	10116.2	478000 ug/L	478000 ppb	20:11:21
3	Na 589.592 Radial†	1227633.3	1231571.0	495250 ug/L	495250 ppb	20:11:01
3	Sr 421.552†	1350.1	1314.7	8.4624 ug/L	8.4624 ppb	20:11:21
3	Sc 361.383	722925.1	722925.1	98.652 %		20:12:20
3	Y 371.029	588805.3	588805.3	97.416 %		20:12:20
3	Ag 328.068†	-20574.5	-21007.9	-7.5671 ug/L	-7.5671 ppb	20:12:20
3	As 188.979†	-152.8	-132.6	18.099 ug/L	18.099 ppb	20:12:40
3	B 249.677†	1337.8	1691.0	-17.518 ug/L	-17.518 ppb	20:12:20
3	Ba 233.527†	-1341.5	-1362.4	-1.4054 ug/L	-1.4054 ppb	20:12:40
3	Be 313.107†	-10077.2	-6323.3	-2.9961 ug/L	-2.9961 ppb	20:12:20
3	Cd 226.502†	2710.0	2918.2	6.7978 ug/L	6.7978 ppb	20:12:40
3	Co 228.616†	209.3	258.9	1.2985 ug/L	1.2985 ppb	20:12:40
3	Cr 267.716†	-1162.9	-1273.9	19.292 ug/L	19.292 ppb	20:12:40
3	Cu 324.752†	1007.9	-4695.3	-2.6571 ug/L	-2.6571 ppb	20:12:20
3	Mn 257.610†	-19952.1	-20650.3	-8.1058 ug/L	-8.1058 ppb	20:12:20
3	Mo 202.031†	-403.2	-425.5	-4.7365 ug/L	-4.7365 ppb	20:12:40
3	Ni 231.604†	284.9	206.2	7.3942 ug/L	7.3942 ppb	20:12:40
3	P 214.914†	488.6	306.8	36.440 ug/L	36.440 ppb	20:12:40
3	Pb 220.353†	-456.5	-413.7	-13.999 ug/L	-13.999 ppb	20:12:40
3	S 181.975 Axial†	55.5	29.1	-37.458 ug/L	-37.458 ppb	20:12:40
3	Sb 206.836†	51.1	26.2	-8.1705 ug/L	-8.1705 ppb	20:12:40
3	Se 196.026†	-1751.2	-1753.4	-319.51 ug/L	-319.51 ppb	20:12:40
3	Si 251.611†	-396.3	-857.5	-34.896 ug/L	-34.896 ppb	20:12:40
3	Sn 189.927†	-327.3	-345.5	-29.127 ug/L	-29.127 ppb	20:12:40
3	Ti 334.940†	-11000.3	-10106.3	-2.5049 ug/L	-2.5049 ppb	20:12:20
3	Tl 190.801†	-84.0	-62.8	-27.490 ug/L	-27.490 ppb	20:12:40
3	U 409.014†	427284.4	434958.1	14743 ug/L	14743 ppb	20:12:20
3	V 292.402†	1664.1	3067.5	3.1690 ug/L	3.1690 ppb	20:12:40
3	Zn 213.857†	4645.6	4049.3	-8.9809 ug/L	-8.9809 ppb	20:12:40
3	SiO2†	-486.3	-956.9	-83.048 ug/L	-83.048 ppb	20:12:56

Mean Data: LR1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	715370.3	97.621 %		1.8914			1.94%
Sc Radial	3787.6	100.0 %		0.82			0.82%
Y 371.029	582951.8	96.447 %		1.8124			1.88%
Y RADIAL	4064.4	99.55 %		0.861			0.87%
Ag 328.068†	-20952.5	-7.3219 ug/L		0.51760	-7.3219 ppb	0.51760	7.07%
Al 396.153Radial†	429394.1	510950 ug/L		10065.7	510950 ppb	10065.7	1.97%
QC value within limits for Al 396.153Radial Recovery = 102.19%							
As 188.979†	-128.0	20.884 ug/L		2.8603	20.884 ppb	2.8603	13.70%
B 249.677†	1697.2	-17.338 ug/L		1.8296	-17.338 ppb	1.8296	10.55%
Ba 233.527†	-1369.6	-1.4799 ug/L		0.27544	-1.4799 ppb	0.27544	18.61%
Be 313.107†	-6343.0	-3.0064 ug/L		0.03157	-3.0064 ppb	0.03157	1.05%
Ca 317.933Radial†	210851.0	472390 ug/L		7643.0	472390 ppb	7643.0	1.62%
QC value within limits for Ca 317.933Radial Recovery = 94.48%							
Cd 226.502†	2950.0	7.3060 ug/L		1.04213	7.3060 ppb	1.04213	14.26%
Co 228.616†	268.5	1.5775 ug/L		0.29321	1.5775 ppb	0.29321	18.59%
Cr 267.716†	-1293.1	19.009 ug/L		0.4590	19.009 ppb	0.4590	2.41%
Cu 324.752†	-4639.1	-2.4432 ug/L		0.19420	-2.4432 ppb	0.19420	7.95%

Fe 238.204 Radial†	31862.1	421200 ug/L	1774.9	421200 ppb	1774.9	0.42%
QC value less than the lower limit for Fe 238.204 Radial Recovery = 84.24%						
K 766.490 Radial†	-137.2	-385.15 ug/L	30.383	-385.15 ppb	30.383	7.89%
Mg 279.077 IEC†	10107.3	477580 ug/L	1744.3	477580 ppb	1744.3	0.37%
QC value within limits for Mg 279.077 IEC Recovery = 95.52%						
Mn 257.610†	-20597.2	-8.0069 ug/L	0.10836	-8.0069 ppb	0.10836	1.35%
Mo 202.031†	-421.3	-4.2230 ug/L	0.49330	-4.2230 ppb	0.49330	11.68%
Na 589.592 Radial†	1255204.5	504750 ug/L	9631.0	504750 ppb	9631.0	1.91%
QC value within limits for Na 589.592 Radial Recovery = 100.95%						
Ni 231.604†	181.7	6.5136 ug/L	0.82904	6.5136 ppb	0.82904	12.73%
P 214.914†	295.8	29.680 ug/L	5.9163	29.680 ppb	5.9163	19.93%
Pb 220.353†	-416.2	-12.363 ug/L	2.9667	-12.363 ppb	2.9667	24.00%
S 181.975 Axial†	28.8	-39.804 ug/L	15.6530	-39.804 ppb	15.6530	39.32%
Sb 206.836†	36.3	-3.7940 ug/L	3.81011	-3.7940 ppb	3.81011	100.42%
Se 196.026†	-1754.9	-318.30 ug/L	37.525	-318.30 ppb	37.525	11.79%
Si 251.611†	-912.9	-37.190 ug/L	2.0445	-37.190 ppb	2.0445	5.50%
Sn 189.927†	-362.1	-32.051 ug/L	2.6499	-32.051 ppb	2.6499	8.27%
Sr 421.552†	1311.2	8.3767 ug/L	0.13881	8.3767 ppb	0.13881	1.66%
Ti 334.940†	-10354.5	-1.9650 ug/L	0.56420	-1.9650 ppb	0.56420	28.71%
Tl 190.801†	-66.7	-29.144 ug/L	1.4332	-29.144 ppb	1.4332	4.92%
U 409.014†	434373.9	14723 ug/L	27.9	14723 ppb	27.9	0.19%
QC value within limits for U 409.014 Recovery = 98.15%						
V 292.402†	3042.0	2.8943 ug/L	0.84362	2.8943 ppb	0.84362	29.15%
Zn 213.857†	4076.8	-8.6142 ug/L	1.44851	-8.6142 ppb	1.44851	16.82%
SiO2†	-934.8	-81.114 ug/L	7.8359	-81.114 ppb	7.8359	9.66%

QC Failed. Continue with analysis.

Sequence No.: 12
 Sample ID: LR2
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 16
 Date Collected: 3/26/2010 20:15:05
 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	4074.6	4074.6	108 %		20:17:23
1	Y RADIAL	4393.0	4393.0	107.6 %		20:17:03
1	Al 396.153Radial†	339.9	388.9	-19.332 ug/L	-19.332 ppb	20:17:03
1	Ca 317.933Radial†	27.3	3.5	7.7312 ug/L	7.7312 ppb	20:17:23
1	Fe 238.204 Radial†	-15.8	-23.2	-3.7612 ug/L	-3.7612 ppb	20:17:23
1	K 766.490 Radial†	1407117.0	1305677.8	288250 ug/L	288250 ppb	20:16:58
1	Mg 279.077 IEC†	-2.3	-5.0	-131.62 ug/L	-131.62 ppb	20:17:23
1	Na 589.592 Radial†	-242.1	161.3	64.858 ug/L	64.858 ppb	20:17:03
1	Sr 421.552†	1131406.0	1051796.4	9548.9 ug/L	9548.9 ppb	20:16:58
1	Sc 361.383	753006.7	753006.7	102.76 %		20:18:40
1	Y 371.029	610259.9	610259.9	100.97 %		20:18:40
1	Ag 328.068†	-6382.3	-6363.3	6.4283 ug/L	6.4283 ppb	20:18:46
1	As 188.979†	17741.6	17287.9	10564 ug/L	10564 ppb	20:18:46
1	B 249.677†	180415.9	175910.8	5265.8 ug/L	5265.8 ppb	20:18:40
1	Ba 233.527†	1462806.0	1423560.0	14944 ug/L	14944 ppb	20:18:40
1	Be 313.107†	6817810.8	6638797.2	3123.6 ug/L	3123.6 ppb	20:18:34
1	Cd 226.502†	641199.8	624169.1	10148 ug/L	10148 ppb	20:18:40
1	Co 228.616†	361314.2	351667.7	10102 ug/L	10102 ppb	20:18:40
1	Cr 267.716†	1689933.1	1644501.2	25192 ug/L	25192 ppb	20:18:40
1	Cu 324.752†	6181317.3	6009770.7	21453 ug/L	21453 ppb	20:18:34
1	Mn 257.610†	7149579.9	6957348.6	10155 ug/L	10155 ppb	20:18:34
1	Mo 202.031†	101174.3	98443.3	9940.9 ug/L	9940.9 ppb	20:18:46
1	Ni 231.604†	298067.9	289988.9	10398 ug/L	10398 ppb	20:18:40
1	P 214.914†	23730.8	22905.7	14353 ug/L	14353 ppb	20:18:46
1	Pb 220.353†	148907.2	144961.4	25087 ug/L	25087 ppb	20:18:40
1	S 181.975 Axial†	28493.7	27702.2	53868 ug/L	53868 ppb	20:18:46
1	Sb 206.836†	24205.5	23530.5	11283 ug/L	11283 ppb	20:18:46
1	Se 196.026†	11883.1	11586.0	10455 ug/L	10455 ppb	20:18:46
1	Si 251.611†	1234090.3	1200526.9	49475 ug/L	49475 ppb	20:18:40
1	Sn 189.927†	42725.6	41565.7	10538 ug/L	10538 ppb	20:18:46
1	Ti 334.940†	5702616.3	5550673.4	10606 ug/L	10606 ppb	20:18:34
1	Tl 190.801†	23789.1	23173.1	10065 ug/L	10065 ppb	20:18:46
1	U 409.014†	-883.5	974.2	-23.183 ug/L	-23.183 ppb	20:18:40
1	V 292.402†	1208559.5	1177517.4	10692 ug/L	10692 ppb	20:18:40
1	Zn 213.857†	1122155.9	1091391.4	14478 ug/L	14478 ppb	20:18:40
1	SiO2†	1280571.4	1245752.8	109370 ug/L	109370 ppb	20:19:32
2	Sc Radial	3985.2	3985.2	105 %		20:17:53
2	Y RADIAL	4380.1	4380.1	107.3 %		20:17:33
2	Al 396.153Radial†	349.0	404.6	3.1064 ug/L	3.1064 ppb	20:17:33
2	Ca 317.933Radial†	28.3	4.9	11.054 ug/L	11.054 ppb	20:17:53
2	Fe 238.204 Radial†	-14.0	-21.8	-1.4608 ug/L	-1.4608 ppb	20:17:53
2	K 766.490 Radial†	1349903.1	1280632.6	282720 ug/L	282720 ppb	20:17:28
2	Mg 279.077 IEC†	-4.2	-6.8	-216.62 ug/L	-216.62 ppb	20:17:53
2	Na 589.592 Radial†	-268.1	131.5	52.886 ug/L	52.886 ppb	20:17:33
2	Sr 421.552†	1077631.4	1024271.9	9299.0 ug/L	9299.0 ppb	20:17:28
2	Sc 361.383	791176.8	791176.8	107.97 %		20:19:00
2	Y 371.029	641041.0	641041.0	106.06 %		20:19:00
2	Ag 328.068†	-6639.8	-6302.1	4.6074 ug/L	4.6074 ppb	20:19:06
2	As 188.979†	18663.5	17308.8	10570 ug/L	10570 ppb	20:19:06
2	B 249.677†	181259.9	168221.9	5036.0 ug/L	5036.0 ppb	20:19:00
2	Ba 233.527†	1457700.5	1350151.8	14173 ug/L	14173 ppb	20:19:00
2	Be 313.107†	6665658.2	6177771.3	2906.7 ug/L	2906.7 ppb	20:18:54
2	Cd 226.502†	639725.5	592699.1	9636.7 ug/L	9636.7 ppb	20:19:00
2	Co 228.616†	359254.0	332795.7	9561.4 ug/L	9561.4 ppb	20:19:00
2	Cr 267.716†	1683745.4	1559427.1	23889 ug/L	23889 ppb	20:19:00
2	Cu 324.752†	6054908.4	5602472.8	19999 ug/L	19999 ppb	20:18:54
2	Mn 257.610†	6987734.0	6471767.9	9445.8 ug/L	9445.8 ppb	20:18:54
2	Mo 202.031†	105483.5	97684.4	9864.2 ug/L	9864.2 ppb	20:19:06
2	Ni 231.604†	296946.6	274956.0	9859.2 ug/L	9859.2 ppb	20:19:00

2	P 214.914†	24823.0	22803.1	14558 ug/L	14558 ppb	20:19:06
2	Pb 220.353†	148387.5	137488.9	23796 ug/L	23796 ppb	20:19:00
2	S 181.975 Axial†	30032.0	27789.2	54037 ug/L	54037 ppb	20:19:06
2	Sb 206.836†	25428.9	23527.2	11279 ug/L	11279 ppb	20:19:06
2	Se 196.026†	12489.6	11589.8	10458 ug/L	10458 ppb	20:19:06
2	Si 251.611†	1234399.5	1142872.4	47094 ug/L	47094 ppb	20:19:00
2	Sn 189.927†	44447.7	41154.8	10434 ug/L	10434 ppb	20:19:06
2	Ti 334.940†	5583735.4	5172823.2	9883.7 ug/L	9883.7 ppb	20:18:54
2	Tl 190.801†	24791.8	22985.0	9978.3 ug/L	9978.3 ppb	20:19:06
2	U 409.014†	-861.3	1036.3	-18.157 ug/L	-18.157 ppb	20:19:00
2	V 292.402†	1205202.9	1117666.1	10155 ug/L	10155 ppb	20:19:00
2	Zn 213.857†	1121603.7	1038194.2	13773 ug/L	13773 ppb	20:19:00
2	SiO2†	1250264.8	1157558.8	101610 ug/L	101610 ppb	20:19:38
3	Sc Radial	4023.0	4023.0	106 %		20:18:24
3	Y RADIAL	4477.2	4477.2	109.7 %		20:18:04
3	Al 396.153Radial†	358.5	410.5	26.670 ug/L	26.670 ppb	20:18:04
3	Ca 317.933Radial†	24.4	1.0	2.3481 ug/L	2.3481 ppb	20:18:24
3	Fe 238.204 Radial†	-16.3	-23.8	-29.683 ug/L	-29.683 ppb	20:18:24
3	K 766.490 Radial†	1376005.3	1293164.3	285490 ug/L	285490 ppb	20:17:59
3	Mg 279.077 IEC†	-4.6	-7.1	-236.58 ug/L	-236.58 ppb	20:18:24
3	Na 589.592 Radial†	-253.0	148.1	59.550 ug/L	59.550 ppb	20:18:04
3	Sr 421.552†	1103157.1	1038690.4	9429.9 ug/L	9429.9 ppb	20:17:59
3	Sc 361.383	819288.6	819288.6	111.80 %		20:19:21
3	Y 371.029	663250.1	663250.1	109.73 %		20:19:21
3	Ag 328.068†	-6720.7	-6163.4	5.1680 ug/L	5.1680 ppb	20:19:26
3	As 188.979†	18687.8	16737.4	10221 ug/L	10221 ppb	20:19:26
3	B 249.677†	188397.7	168845.6	5054.9 ug/L	5054.9 ppb	20:19:21
3	Ba 233.527†	1497436.4	1339366.1	14060 ug/L	14060 ppb	20:19:21
3	Be 313.107†	6636404.5	5939764.6	2794.8 ug/L	2794.8 ppb	20:19:14
3	Cd 226.502†	657706.1	588450.5	9567.6 ug/L	9567.6 ppb	20:19:21
3	Co 228.616†	370075.6	331057.6	9511.5 ug/L	9511.5 ppb	20:19:21
3	Cr 267.716†	1729436.0	1546783.6	23696 ug/L	23696 ppb	20:19:21
3	Cu 324.752†	6043984.2	5400270.9	19277 ug/L	19277 ppb	20:19:14
3	Mn 257.610†	6966748.4	6230920.6	9094.3 ug/L	9094.3 ppb	20:19:14
3	Mo 202.031†	105439.6	94292.7	9521.8 ug/L	9521.8 ppb	20:19:26
3	Ni 231.604†	305476.7	273148.3	9794.4 ug/L	9794.4 ppb	20:19:21
3	P 214.914†	24929.9	22109.9	14137 ug/L	14137 ppb	20:19:26
3	Pb 220.353†	152600.3	136541.1	23631 ug/L	23631 ppb	20:19:21
3	S 181.975 Axial†	29984.1	26791.9	52098 ug/L	52098 ppb	20:19:26
3	Sb 206.836†	25457.4	22744.5	10904 ug/L	10904 ppb	20:19:26
3	Se 196.026†	12549.7	11246.7	10148 ug/L	10148 ppb	20:19:26
3	Si 251.611†	1279003.6	1143537.7	47126 ug/L	47126 ppb	20:19:21
3	Sn 189.927†	44327.0	39634.2	10048 ug/L	10048 ppb	20:19:26
3	Ti 334.940†	5569163.0	4982332.6	9519.5 ug/L	9519.5 ppb	20:19:14
3	Tl 190.801†	24712.4	22126.0	9603.5 ug/L	9603.5 ppb	20:19:26
3	U 409.014†	-793.1	1124.6	-14.718 ug/L	-14.718 ppb	20:19:21
3	V 292.402†	1241326.5	1111674.0	10097 ug/L	10097 ppb	20:19:21
3	Zn 213.857†	1151559.2	1029342.1	13656 ug/L	13656 ppb	20:19:21
3	SiO2†	1259686.5	1126251.4	98865 ug/L	98865 ppb	20:19:44

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	787824.1	107.51 %	4.540			4.22%
Sc Radial	4027.6	106 %	1.2			1.11%
Y 371.029	638183.7	105.59 %	4.403			4.17%
Y RADIAL	4416.8	108.2 %	1.29			1.19%
Ag 328.068†	-6276.2	5.4012 ug/L	0.93262	5.4012 ppb	0.93262	17.27%
Al 396.153Radial†	401.3	3.4815 ug/L	23.00366	3.4815 ppb	23.00366	660.75%
As 188.979†	17111.4	10452 ug/L	199.8	10452 ppb	199.8	1.91%
QC value within limits for As 188.979 Recovery = 104.52%						
B 249.677†	170992.8	5118.9 ug/L	127.61	5118.9 ppb	127.61	2.49%
QC value within limits for B 249.677 Recovery = 102.38%						
Ba 233.527†	1371026.0	14392 ug/L	480.9	14392 ppb	480.9	3.34%
QC value within limits for Ba 233.527 Recovery = 95.95%						
Be 313.107†	6252111.0	2941.7 ug/L	167.18	2941.7 ppb	167.18	5.68%
QC value within limits for Be 313.107 Recovery = 98.06%						
Ca 317.933Radial†	3.1	7.0443 ug/L	4.39317	7.0443 ppb	4.39317	62.37%
Cd 226.502†	601772.9	9784.2 ug/L	317.24	9784.2 ppb	317.24	3.24%
QC value within limits for Cd 226.502 Recovery = 97.84%						

Co 228.616†	338507.0	9725.0 ug/L	327.57	9725.0 ppb	327.57	3.37%
QC value within limits for Co 228.616 Recovery = 97.25%						
Cr 267.716†	1583570.6	24259 ug/L	814.1	24259 ppb	814.1	3.36%
QC value within limits for Cr 267.716 Recovery = 97.04%						
Cu 324.752†	5670838.2	20243 ug/L	1108.2	20243 ppb	1108.2	5.47%
QC value within limits for Cu 324.752 Recovery = 101.22%						
Fe 238.204 Radial†	-22.9	-11.635 ug/L	15.6724	-11.635 ppb	15.6724	134.70%
K 766.490 Radial†	1293158.2	285490 ug/L	2764.6	285490 ppb	2764.6	0.97%
QC value within limits for K 766.490 Radial Recovery = 95.16%						
Mg 279.077 IEC†	-6.3	-194.94 ug/L	55.741	-194.94 ppb	55.741	28.59%
Mn 257.610†	6553345.7	9564.9 ug/L	540.06	9564.9 ppb	540.06	5.65%
QC value within limits for Mn 257.610 Recovery = 95.65%						
Mo 202.031†	96806.8	9775.6 ug/L	223.18	9775.6 ppb	223.18	2.28%
QC value within limits for Mo 202.031 Recovery = 97.76%						
Na 589.592 Radial†	147.0	59.098 ug/L	5.9987	59.098 ppb	5.9987	10.15%
Ni 231.604†	279364.4	10017 ug/L	331.5	10017 ppb	331.5	3.31%
QC value within limits for Ni 231.604 Recovery = 100.17%						
P 214.914†	22606.2	14349 ug/L	210.3	14349 ppb	210.3	1.47%
QC value within limits for P 214.914 Recovery = 95.66%						
Pb 220.353†	139663.8	24171 ug/L	797.6	24171 ppb	797.6	3.30%
QC value within limits for Pb 220.353 Recovery = 96.69%						
S 181.975 Axial†	27427.8	53335 ug/L	1074.2	53335 ppb	1074.2	2.01%
QC value within limits for S 181.975 Axial Recovery = 106.67%						
Sb 206.836†	23267.4	11155 ug/L	217.7	11155 ppb	217.7	1.95%
QC value greater than the upper limit for Sb 206.836 Recovery = 111.55%						
Se 196.026†	11474.2	10353 ug/L	178.0	10353 ppb	178.0	1.72%
QC value within limits for Se 196.026 Recovery = 103.53%						
Si 251.611†	1162312.3	47898 ug/L	1365.6	47898 ppb	1365.6	2.85%
QC value within limits for Si 251.611 Recovery = 95.80%						
Sn 189.927†	40784.9	10340 ug/L	258.0	10340 ppb	258.0	2.49%
QC value within limits for Sn 189.927 Recovery = 103.40%						
Sr 421.552†	1038252.9	9425.9 ug/L	124.99	9425.9 ppb	124.99	1.33%
QC value within limits for Sr 421.552 Recovery = 94.26%						
Ti 334.940†	5235276.4	10003 ug/L	552.9	10003 ppb	552.9	5.53%
QC value within limits for Ti 334.940 Recovery = 100.03%						
Tl 190.801†	22761.4	9882.4 ug/L	245.43	9882.4 ppb	245.43	2.48%
QC value within limits for Tl 190.801 Recovery = 98.82%						
U 409.014†	1045.0	-18.686 ug/L	4.2572	-18.686 ppb	4.2572	22.78%
V 292.402†	1135619.2	10315 ug/L	328.2	10315 ppb	328.2	3.18%
QC value within limits for V 292.402 Recovery = 103.15%						
Zn 213.857†	1052975.9	13969 ug/L	444.6	13969 ppb	444.6	3.18%
QC value within limits for Zn 213.857 Recovery = 93.13%						
SiO2†	1176521.0	103280 ug/L	5448.9	103280 ppb	5448.9	5.28%
QC value within limits for SiO2 Recovery = 96.53%						
QC Failed. Continue with analysis.						

Sequence No.: 13
 Sample ID: CCV
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 7
 Date Collected: 3/26/2010 20:21:53
 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	4288.5	4288.5	113 %		20:23:45
1	Y RADIAL	4552.4	4552.4	111.5 %		20:23:45
1	Al 396.153Radial†	4724.0	4245.5	5027.5 ug/L	5027.5 ppb	20:23:45
1	Ca 317.933Radial†	2589.8	2265.6	5075.9 ug/L	5075.9 ppb	20:24:05
1	Fe 238.204 Radial†	442.6	382.5	5071.3 ug/L	5071.3 ppb	20:24:05
1	K 766.490 Radial†	27760.1	22041.8	4859.9 ug/L	4859.9 ppb	20:23:45
1	Mg 279.077 IEC†	125.1	107.7	5093.5 ug/L	5093.5 ppb	20:24:05
1	Na 589.592 Radial†	28295.9	25379.8	10206 ug/L	10206 ppb	20:23:45
1	Sr 421.552†	60917.9	53769.0	488.11 ug/L	488.11 ppb	20:23:45
1	Sc 361.383	829894.9	829894.9	113.25 %		20:25:03
1	Y 371.029	675246.3	675246.3	111.72 %		20:25:03
1	Ag 328.068†	99016.6	87280.4	499.66 ug/L	499.66 ppb	20:25:08
1	As 188.979†	921.4	835.9	511.69 ug/L	511.69 ppb	20:25:28
1	B 249.677†	19447.5	17507.3	524.68 ug/L	524.68 ppb	20:25:08
1	Ba 233.527†	53428.4	47175.2	495.69 ug/L	495.69 ppb	20:25:08
1	Be 313.107†	1217275.4	1078757.8	504.76 ug/L	504.76 ppb	20:25:03
1	Cd 226.502†	34515.8	30649.0	497.89 ug/L	497.89 ppb	20:25:08
1	Co 228.616†	19884.9	17605.3	505.99 ug/L	505.99 ppb	20:25:08
1	Cr 267.716†	36900.0	32488.0	498.43 ug/L	498.43 ppb	20:25:08
1	Cu 324.752†	161490.5	136880.8	488.62 ug/L	488.62 ppb	20:25:08
1	Mn 257.610†	390074.6	344014.1	502.39 ug/L	502.39 ppb	20:25:03
1	Mo 202.031†	5661.4	4982.3	503.57 ug/L	503.57 ppb	20:25:28
1	Ni 231.604†	16012.2	14056.4	504.02 ug/L	504.02 ppb	20:25:08
1	P 214.914†	3712.2	3089.4	2402.2 ug/L	2402.2 ppb	20:25:28
1	Pb 220.353†	3224.4	2896.2	502.42 ug/L	502.42 ppb	20:25:28
1	S 181.975 Axial†	623.9	523.8	1017.7 ug/L	1017.7 ppb	20:25:28
1	Sb 206.836†	1271.1	1096.8	526.90 ug/L	526.90 ppb	20:25:28
1	Se 196.026†	625.9	574.4	533.18 ug/L	533.18 ppb	20:25:28
1	Si 251.611†	68889.6	60374.5	2488.1 ug/L	2488.1 ppb	20:25:08
1	Sn 189.927†	2301.4	2018.5	512.36 ug/L	512.36 ppb	20:25:28
1	Ti 334.940†	287936.1	255294.7	488.08 ug/L	488.08 ppb	20:25:08
1	Tl 190.801†	1318.1	1186.2	514.83 ug/L	514.83 ppb	20:25:28
1	U 409.014†	14514.6	14650.6	496.50 ug/L	496.50 ppb	20:25:08
1	V 292.402†	60765.4	55037.1	500.86 ug/L	500.86 ppb	20:25:08
1	Zn 213.857†	43075.5	37376.3	494.45 ug/L	494.45 ppb	20:25:08
1	SiO2†	68678.6	60179.9	5282.9 ug/L	5282.9 ppb	20:26:35
2	Sc Radial	4976.6	4976.6	131 %		20:24:10
2	Y RADIAL	5264.2	5264.2	128.9 %		20:24:10
2	Al 396.153Radial†	4605.9	3578.7	4233.7 ug/L	4233.7 ppb	20:24:10
2	Ca 317.933Radial†	2622.5	1974.2	4423.1 ug/L	4423.1 ppb	20:24:30
2	Fe 238.204 Radial†	446.4	331.3	4395.0 ug/L	4395.0 ppb	20:24:30
2	K 766.490 Radial†	27491.7	18447.1	4067.1 ug/L	4067.1 ppb	20:24:10
2	Mg 279.077 IEC†	129.1	95.5	4516.3 ug/L	4516.3 ppb	20:24:30
2	Na 589.592 Radial†	27941.3	21654.2	8707.8 ug/L	8707.8 ppb	20:24:10
2	Sr 421.552†	60037.0	45658.6	414.48 ug/L	414.48 ppb	20:24:10
2	Sc 361.383	822782.2	822782.2	112.28 %		20:25:34
2	Y 371.029	669951.9	669951.9	110.84 %		20:25:34
2	Ag 328.068†	100560.6	89411.4	511.62 ug/L	511.62 ppb	20:25:39
2	As 188.979†	920.1	841.8	515.18 ug/L	515.18 ppb	20:25:59
2	B 249.677†	19697.7	17878.6	535.93 ug/L	535.93 ppb	20:25:39
2	Ba 233.527†	54139.2	48216.2	506.60 ug/L	506.60 ppb	20:25:39
2	Be 313.107†	1220922.2	1091297.7	510.64 ug/L	510.64 ppb	20:25:34
2	Cd 226.502†	34867.9	31226.0	507.35 ug/L	507.35 ppb	20:25:39
2	Co 228.616†	20182.0	18021.7	517.95 ug/L	517.95 ppb	20:25:39
2	Cr 267.716†	37371.4	33189.6	509.11 ug/L	509.11 ppb	20:25:39
2	Cu 324.752†	165084.0	141314.0	504.40 ug/L	504.40 ppb	20:25:39
2	Mn 257.610†	390176.0	347082.1	506.83 ug/L	506.83 ppb	20:25:34
2	Mo 202.031†	5671.9	5034.9	508.82 ug/L	508.82 ppb	20:25:59
2	Ni 231.604†	16186.4	14333.8	513.96 ug/L	513.96 ppb	20:25:39

2	P 214.914†	3734.5	3137.6	2438.4 ug/L	2438.4 ppb	20:25:59
2	Pb 220.353†	3237.6	2932.6	508.63 ug/L	508.63 ppb	20:25:59
2	S 181.975 Axial†	631.8	535.6	1040.7 ug/L	1040.7 ppb	20:25:59
2	Sb 206.836†	1257.1	1094.0	525.82 ug/L	525.82 ppb	20:25:59
2	Se 196.026†	625.7	579.0	535.34 ug/L	535.34 ppb	20:25:59
2	Si 251.611†	69994.0	61883.9	2550.3 ug/L	2550.3 ppb	20:25:39
2	Sn 189.927†	2298.8	2033.7	516.14 ug/L	516.14 ppb	20:25:59
2	Ti 334.940†	292490.8	261549.3	499.99 ug/L	499.99 ppb	20:25:39
2	Tl 190.801†	1323.7	1201.2	521.34 ug/L	521.34 ppb	20:25:59
2	U 409.014†	14913.0	15116.1	512.38 ug/L	512.38 ppb	20:25:39
2	V 292.402†	61806.8	56428.4	513.53 ug/L	513.53 ppb	20:25:39
2	Zn 213.857†	43582.9	38157.0	504.90 ug/L	504.90 ppb	20:25:39
2	SiO2†	70505.6	62331.4	5472.1 ug/L	5472.1 ppb	20:26:40
3	Sc Radial	4266.1	4266.1	113 %		20:24:36
3	Y RADIAL	4530.5	4530.5	111.0 %		20:24:36
3	Al 396.153Radial†	4670.3	4219.8	4997.0 ug/L	4997.0 ppb	20:24:36
3	Ca 317.933Radial†	2574.4	2264.0	5072.3 ug/L	5072.3 ppb	20:24:56
3	Fe 238.204 Radial†	441.5	383.6	5086.0 ug/L	5086.0 ppb	20:24:56
3	K 766.490 Radial†	27404.8	21855.3	4818.8 ug/L	4818.8 ppb	20:24:36
3	Mg 279.077 IEC†	127.0	110.0	5199.9 ug/L	5199.9 ppb	20:24:56
3	Na 589.592 Radial†	28090.0	25328.6	10185 ug/L	10185 ppb	20:24:36
3	Sr 421.552†	60395.8	53588.7	486.47 ug/L	486.47 ppb	20:24:36
3	Sc 361.383	831778.5	831778.5	113.51 %		20:26:05
3	Y 371.029	676741.9	676741.9	111.96 %		20:26:05
3	Ag 328.068†	100155.7	88086.0	504.26 ug/L	504.26 ppb	20:26:10
3	As 188.979†	917.9	831.0	508.78 ug/L	508.78 ppb	20:26:30
3	B 249.677†	19764.8	17747.9	531.91 ug/L	531.91 ppb	20:26:10
3	Ba 233.527†	53938.8	47518.0	499.29 ug/L	499.29 ppb	20:26:10
3	Be 313.107†	1231206.0	1088596.7	509.36 ug/L	509.36 ppb	20:26:05
3	Cd 226.502†	34842.3	30867.6	501.44 ug/L	501.44 ppb	20:26:10
3	Co 228.616†	20068.3	17727.1	509.47 ug/L	509.47 ppb	20:26:10
3	Cr 267.716†	37144.2	32629.4	500.60 ug/L	500.60 ppb	20:26:10
3	Cu 324.752†	164545.4	139249.2	497.07 ug/L	497.07 ppb	20:26:10
3	Mn 257.610†	393770.5	346490.3	506.01 ug/L	506.01 ppb	20:26:05
3	Mo 202.031†	5648.5	4959.6	501.28 ug/L	501.28 ppb	20:26:30
3	Ni 231.604†	16196.9	14187.0	508.70 ug/L	508.70 ppb	20:26:10
3	P 214.914†	3714.4	3084.0	2396.0 ug/L	2396.0 ppb	20:26:30
3	Pb 220.353†	3190.6	2860.0	496.14 ug/L	496.14 ppb	20:26:30
3	S 181.975 Axial†	624.4	523.0	1016.0 ug/L	1016.0 ppb	20:26:30
3	Sb 206.836†	1246.5	1072.6	515.55 ug/L	515.55 ppb	20:26:30
3	Se 196.026†	619.5	567.5	527.02 ug/L	527.02 ppb	20:26:30
3	Si 251.611†	69719.3	60967.7	2512.6 ug/L	2512.6 ppb	20:26:10
3	Sn 189.927†	2282.5	1997.2	506.96 ug/L	506.96 ppb	20:26:30
3	Ti 334.940†	291640.1	257982.2	493.21 ug/L	493.21 ppb	20:26:10
3	Tl 190.801†	1300.4	1167.9	506.97 ug/L	506.97 ppb	20:26:30
3	U 409.014†	14686.9	14773.4	500.67 ug/L	500.67 ppb	20:26:10
3	V 292.402†	61463.8	55530.8	505.26 ug/L	505.26 ppb	20:26:10
3	Zn 213.857†	43519.1	37681.0	498.48 ug/L	498.48 ppb	20:26:10
3	SiO2†	69903.8	61122.0	5365.9 ug/L	5365.9 ppb	20:26:46

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	828151.9	113.01 %	0.647			0.57%
Sc Radial	4510.4	119 %	10.7			8.96%
Y 371.029	673980.0	111.51 %	0.590			0.53%
Y RADIAL	4782.3	117.1 %	10.22			8.73%
Ag 328.068†	88259.3	505.18 ug/L	6.033	505.18 ppb	6.033	1.19%
QC value within limits for Ag 328.068 Recovery = 101.04%						
Al 396.153Radial†	4014.7	4752.7 ug/L	449.74	4752.7 ppb	449.74	9.46%
QC value within limits for Al 396.153Radial Recovery = 95.05%						
As 188.979†	836.2	511.88 ug/L	3.208	511.88 ppb	3.208	0.63%
QC value within limits for As 188.979 Recovery = 102.38%						
B 249.677†	17711.3	530.84 ug/L	5.701	530.84 ppb	5.701	1.07%
QC value within limits for B 249.677 Recovery = 106.17%						
Ba 233.527†	47636.5	500.53 ug/L	5.563	500.53 ppb	5.563	1.11%
QC value within limits for Ba 233.527 Recovery = 100.11%						
Be 313.107†	1086217.4	508.25 ug/L	3.094	508.25 ppb	3.094	0.61%
QC value within limits for Be 313.107 Recovery = 101.65%						
Ca 317.933Radial†	2168.0	4857.1 ug/L	375.88	4857.1 ppb	375.88	7.74%

QC value within limits for Ca 317.933 Radial Recovery = 97.14%					
Cd 226.502†	30914.2	502.23 ug/L	4.776	502.23 ppb	4.776 0.95%
QC value within limits for Cd 226.502 Recovery = 100.45%					
Co 228.616†	17784.7	511.14 ug/L	6.152	511.14 ppb	6.152 1.20%
QC value within limits for Co 228.616 Recovery = 102.23%					
Cr 267.716†	32769.0	502.72 ug/L	5.645	502.72 ppb	5.645 1.12%
QC value within limits for Cr 267.716 Recovery = 100.54%					
Cu 324.752†	139148.0	496.70 ug/L	7.897	496.70 ppb	7.897 1.59%
QC value within limits for Cu 324.752 Recovery = 99.34%					
Fe 238.204 Radial†	365.8	4850.8 ug/L	394.75	4850.8 ppb	394.75 8.14%
QC value within limits for Fe 238.204 Radial Recovery = 97.02%					
K 766.490 Radial†	20781.4	4581.9 ug/L	446.34	4581.9 ppb	446.34 9.74%
QC value within limits for K 766.490 Radial Recovery = 91.64%					
Mg 279.077 IEC†	104.4	4936.6 ug/L	367.85	4936.6 ppb	367.85 7.45%
QC value within limits for Mg 279.077 IEC Recovery = 98.73%					
Mn 257.610†	345862.2	505.08 ug/L	2.359	505.08 ppb	2.359 0.47%
QC value within limits for Mn 257.610 Recovery = 101.02%					
Mo 202.031†	4992.3	504.56 ug/L	3.864	504.56 ppb	3.864 0.77%
QC value within limits for Mo 202.031 Recovery = 100.91%					
Na 589.592 Radial†	24120.9	9699.7 ug/L	859.11	9699.7 ppb	859.11 8.86%
QC value within limits for Na 589.592 Radial Recovery = 97.00%					
Ni 231.604†	14192.4	508.89 ug/L	4.975	508.89 ppb	4.975 0.98%
QC value within limits for Ni 231.604 Recovery = 101.78%					
P 214.914†	3103.7	2412.2 ug/L	22.88	2412.2 ppb	22.88 0.95%
QC value within limits for P 214.914 Recovery = 96.49%					
Pb 220.353†	2896.3	502.40 ug/L	6.248	502.40 ppb	6.248 1.24%
QC value within limits for Pb 220.353 Recovery = 100.48%					
S 181.975 Axial†	527.5	1024.8 ug/L	13.77	1024.8 ppb	13.77 1.34%
QC value within limits for S 181.975 Axial Recovery = 102.48%					
Sb 206.836†	1087.8	522.75 ug/L	6.264	522.75 ppb	6.264 1.20%
QC value within limits for Sb 206.836 Recovery = 104.55%					
Se 196.026†	573.6	531.85 ug/L	4.320	531.85 ppb	4.320 0.81%
QC value within limits for Se 196.026 Recovery = 106.37%					
Si 251.611†	61075.4	2517.0 ug/L	31.38	2517.0 ppb	31.38 1.25%
QC value within limits for Si 251.611 Recovery = 100.68%					
Sn 189.927†	2016.5	511.82 ug/L	4.613	511.82 ppb	4.613 0.90%
QC value within limits for Sn 189.927 Recovery = 102.36%					
Sr 421.552†	51005.4	463.02 ug/L	42.044	463.02 ppb	42.044 9.08%
QC value within limits for Sr 421.552 Recovery = 92.60%					
Ti 334.940†	258275.4	493.76 ug/L	5.974	493.76 ppb	5.974 1.21%
QC value within limits for Ti 334.940 Recovery = 98.75%					
Tl 190.801†	1185.1	514.38 ug/L	7.193	514.38 ppb	7.193 1.40%
QC value within limits for Tl 190.801 Recovery = 102.88%					
U 409.014†	14846.7	503.18 ug/L	8.236	503.18 ppb	8.236 1.64%
QC value within limits for U 409.014 Recovery = 100.64%					
V 292.402†	55665.4	506.55 ug/L	6.431	506.55 ppb	6.431 1.27%
QC value within limits for V 292.402 Recovery = 101.31%					
Zn 213.857†	37738.1	499.28 ug/L	5.266	499.28 ppb	5.266 1.05%
QC value within limits for Zn 213.857 Recovery = 99.86%					
SiO2†	61211.1	5373.6 ug/L	94.85	5373.6 ppb	94.85 1.77%
QC value within limits for SiO2 Recovery = 100.49%					

All analyte(s) passed QC.

Sequence No.: 14
 Sample ID: CCB
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 8
 Date Collected: 3/26/2010 20:28:56
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4284.7	4284.7	113 %		20:31:08
1	Y RADIAL	4748.1	4748.1	116.3 %		20:30:48
1	Al 396.153Radial†	-83.1	-0.6	-0.6448 ug/L	-0.6448 ppb	20:31:08
1	Ca 317.933Radial†	25.6	0.7	1.5025 ug/L	1.5025 ppb	20:31:08
1	Fe 238.204 Radial†	8.6	-0.9	-11.411 ug/L	-11.411 ppb	20:31:08
1	K 766.490 Radial†	2693.4	-97.4	-21.512 ug/L	-21.512 ppb	20:30:48
1	Mg 279.077 IEC†	3.7	0.5	22.442 ug/L	22.442 ppb	20:31:08
1	Na 589.592 Radial†	-374.7	55.1	22.144 ug/L	22.144 ppb	20:30:48
1	Sr 421.552†	38.1	-5.6	-0.0505 ug/L	-0.0505 ppb	20:30:48
1	Sc 361.383	818070.9	818070.9	111.64 %		20:32:05
1	Y 371.029	672076.7	672076.7	111.19 %		20:32:05
1	Ag 328.068†	185.7	14.2	0.0735 ug/L	0.0735 ppb	20:32:05
1	As 188.979†	-25.8	-0.8	-0.4709 ug/L	-0.4709 ppb	20:32:25
1	B 249.677†	573.5	848.7	25.547 ug/L	25.547 ppb	20:32:25
1	Ba 233.527†	-10.4	-11.9	-0.1227 ug/L	-0.1227 ppb	20:32:25
1	Be 313.107†	-4112.4	207.8	0.0976 ug/L	0.0976 ppb	20:32:05
1	Cd 226.502†	-137.3	48.1	0.7849 ug/L	0.7849 ppb	20:32:25
1	Co 228.616†	-46.8	4.8	0.1356 ug/L	0.1356 ppb	20:32:25
1	Cr 267.716†	189.3	74.5	1.1372 ug/L	1.1372 ppb	20:32:25
1	Cu 324.752†	6088.7	-262.9	-0.9444 ug/L	-0.9444 ppb	20:32:05
1	Mn 257.610†	448.3	-24.0	-0.0371 ug/L	-0.0371 ppb	20:32:25
1	Mo 202.031†	11.1	-6.8	-0.6905 ug/L	-0.6905 ppb	20:32:25
1	Ni 231.604†	80.9	-10.1	-0.3623 ug/L	-0.3623 ppb	20:32:25
1	P 214.914†	196.0	-12.9	-10.192 ug/L	-10.192 ppb	20:32:25
1	Pb 220.353†	-50.4	3.9	0.6738 ug/L	0.6738 ppb	20:32:25
1	S 181.975 Axial†	32.9	2.3	4.5299 ug/L	4.5299 ppb	20:32:25
1	Sb 206.836†	34.1	4.9	2.3298 ug/L	2.3298 ppb	20:32:25
1	Se 196.026†	-15.0	8.3	7.4259 ug/L	7.4259 ppb	20:32:25
1	Si 251.611†	545.8	33.2	1.3816 ug/L	1.3816 ppb	20:32:25
1	Sn 189.927†	29.0	12.4	3.1349 ug/L	3.1349 ppb	20:32:25
1	Ti 334.940†	-1017.7	132.7	0.2475 ug/L	0.2475 ppb	20:32:05
1	Tl 190.801†	-16.7	7.3	3.1363 ug/L	3.1363 ppb	20:32:25
1	U 409.014†	-1730.5	283.9	9.6521 ug/L	9.6521 ppb	20:32:05
1	V 292.402†	-1405.5	121.6	1.1019 ug/L	1.1019 ppb	20:32:05
1	Zn 213.857†	715.6	-18.8	-0.2462 ug/L	-0.2462 ppb	20:32:25
1	SiO2†	524.6	5.9	0.5422 ug/L	0.5422 ppb	20:33:36
2	Sc Radial	4150.4	4150.4	110 %		20:31:33
2	Y RADIAL	4778.9	4778.9	117.1 %		20:31:13
2	Al 396.153Radial†	-76.2	3.3	3.8852 ug/L	3.8852 ppb	20:31:33
2	Ca 317.933Radial†	22.9	-1.0	-2.2032 ug/L	-2.2032 ppb	20:31:33
2	Fe 238.204 Radial†	8.3	-0.9	-11.243 ug/L	-11.243 ppb	20:31:33
2	K 766.490 Radial†	2650.5	-59.4	-13.120 ug/L	-13.120 ppb	20:31:13
2	Mg 279.077 IEC†	0.2	-2.6	-123.24 ug/L	-123.24 ppb	20:31:33
2	Na 589.592 Radial†	-425.6	-2.1	-0.8486 ug/L	-0.8486 ppb	20:31:13
2	Sr 421.552†	19.2	-21.7	-0.1971 ug/L	-0.1971 ppb	20:31:13
2	Sc 361.383	800708.9	800708.9	109.27 %		20:32:30
2	Y 371.029	658878.9	658878.9	109.01 %		20:32:30
2	Ag 328.068†	245.3	72.3	0.4104 ug/L	0.4104 ppb	20:32:30
2	As 188.979†	-26.8	-2.3	-1.3771 ug/L	-1.3771 ppb	20:32:50
2	B 249.677†	559.6	847.1	25.497 ug/L	25.497 ppb	20:32:50
2	Ba 233.527†	14.2	10.4	0.1114 ug/L	0.1114 ppb	20:32:50
2	Be 313.107†	-3962.0	265.6	0.1245 ug/L	0.1245 ppb	20:32:30
2	Cd 226.502†	-144.8	38.7	0.6295 ug/L	0.6295 ppb	20:32:50
2	Co 228.616†	-37.2	12.7	0.3637 ug/L	0.3637 ppb	20:32:50
2	Cr 267.716†	202.0	89.8	1.3743 ug/L	1.3743 ppb	20:32:50
2	Cu 324.752†	6079.5	-153.1	-0.5487 ug/L	-0.5487 ppb	20:32:30
2	Mn 257.610†	453.8	-10.2	-0.0110 ug/L	-0.0110 ppb	20:32:50
2	Mo 202.031†	22.0	3.4	0.3385 ug/L	0.3385 ppb	20:32:50
2	Ni 231.604†	65.1	-22.9	-0.8232 ug/L	-0.8232 ppb	20:32:50

2	P 214.914†	197.6	-7.6	-6.0201 ug/L	-6.0201 ppb	20:32:50
2	Pb 220.353†	-18.2	32.4	5.6103 ug/L	5.6103 ppb	20:32:50
2	S 181.975 Axial†	31.4	1.7	3.2514 ug/L	3.2514 ppb	20:32:50
2	Sb 206.836†	32.6	4.2	2.0134 ug/L	2.0134 ppb	20:32:50
2	Se 196.026†	-14.4	8.6	7.6960 ug/L	7.6960 ppb	20:32:50
2	Si 251.611†	526.1	25.8	1.0611 ug/L	1.0611 ppb	20:32:50
2	Sn 189.927†	27.4	11.4	2.8941 ug/L	2.8941 ppb	20:32:50
2	Ti 334.940†	-1000.4	128.8	0.2542 ug/L	0.2542 ppb	20:32:30
2	Tl 190.801†	-19.9	4.1	1.7645 ug/L	1.7645 ppb	20:32:50
2	U 409.014†	-1903.7	91.7	3.1180 ug/L	3.1180 ppb	20:32:30
2	V 292.402†	-1356.3	139.3	1.2600 ug/L	1.2600 ppb	20:32:30
2	Zn 213.857†	727.4	5.8	0.0858 ug/L	0.0858 ppb	20:32:50
2	SiO2†	538.6	28.9	2.5360 ug/L	2.5360 ppb	20:33:56
3	Sc Radial	4115.1	4115.1	109 %		20:31:58
3	Y RADIAL	4814.0	4814.0	117.9 %		20:31:38
3	Al 396.153Radial†	-75.4	3.4	4.1164 ug/L	4.1164 ppb	20:31:58
3	Ca 317.933Radial†	22.8	-0.9	-2.0004 ug/L	-2.0004 ppb	20:31:58
3	Fe 238.204 Radial†	8.3	-0.9	-11.377 ug/L	-11.377 ppb	20:31:58
3	K 766.490 Radial†	2667.5	-23.0	-5.0893 ug/L	-5.0893 ppb	20:31:38
3	Mg 279.077 IEC†	3.1	0.1	3.6781 ug/L	3.6781 ppb	20:31:58
3	Na 589.592 Radial†	-329.0	83.5	33.568 ug/L	33.568 ppb	20:31:38
3	Sr 421.552†	18.1	-22.6	-0.2051 ug/L	-0.2051 ppb	20:31:38
3	Sc 361.383	801484.8	801484.8	109.37 %		20:32:56
3	Y 371.029	658792.3	658792.3	108.99 %		20:32:56
3	Ag 328.068†	147.7	-17.1	-0.1062 ug/L	-0.1062 ppb	20:32:56
3	As 188.979†	-21.9	2.3	1.4017 ug/L	1.4017 ppb	20:33:16
3	B 249.677†	541.9	830.5	24.996 ug/L	24.996 ppb	20:33:16
3	Ba 233.527†	9.9	6.5	0.0682 ug/L	0.0682 ppb	20:33:16
3	Be 313.107†	-4031.8	205.3	0.0964 ug/L	0.0964 ppb	20:32:56
3	Cd 226.502†	-132.0	50.5	0.8225 ug/L	0.8225 ppb	20:33:16
3	Co 228.616†	-33.8	15.8	0.4530 ug/L	0.4530 ppb	20:33:16
3	Cr 267.716†	192.6	81.0	1.2366 ug/L	1.2366 ppb	20:33:16
3	Cu 324.752†	6146.7	-97.0	-0.3509 ug/L	-0.3509 ppb	20:32:56
3	Mn 257.610†	466.7	1.2	0.0004 ug/L	0.0004 ppb	20:33:16
3	Mo 202.031†	15.8	-2.3	-0.2301 ug/L	-0.2301 ppb	20:33:16
3	Ni 231.604†	83.6	-6.1	-0.2197 ug/L	-0.2197 ppb	20:33:16
3	P 214.914†	181.3	-22.7	-18.259 ug/L	-18.259 ppb	20:33:16
3	Pb 220.353†	-41.4	11.3	1.9496 ug/L	1.9496 ppb	20:33:16
3	S 181.975 Axial†	35.0	4.9	9.5407 ug/L	9.5407 ppb	20:33:16
3	Sb 206.836†	28.7	0.6	0.3239 ug/L	0.3239 ppb	20:33:16
3	Se 196.026†	-17.4	5.9	5.2400 ug/L	5.2400 ppb	20:33:16
3	Si 251.611†	526.3	25.5	1.0553 ug/L	1.0553 ppb	20:33:16
3	Sn 189.927†	25.0	9.2	2.3251 ug/L	2.3251 ppb	20:33:16
3	Ti 334.940†	-1000.1	129.9	0.2442 ug/L	0.2442 ppb	20:32:56
3	Tl 190.801†	-13.8	9.6	4.1563 ug/L	4.1563 ppb	20:33:16
3	U 409.014†	-1767.1	218.4	7.4234 ug/L	7.4234 ppb	20:32:56
3	V 292.402†	-1487.8	20.3	0.1940 ug/L	0.1940 ppb	20:32:56
3	Zn 213.857†	723.9	2.0	0.0307 ug/L	0.0307 ppb	20:33:16
3	SiO2†	523.2	14.4	1.2746 ug/L	1.2746 ppb	20:34:16

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	806754.9	110.09 %	1.338			1.22%
Sc Radial	4183.4	110 %	2.4			2.14%
Y 371.029	663249.3	109.73 %	1.265			1.15%
Y RADIAL	4780.4	117.1 %	0.81			0.69%
Ag 328.068†	23.1	0.1259 ug/L	0.26229	0.1259 ppb	0.26229	208.31%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	2.1	2.4522 ug/L	2.68461	2.4522 ppb	2.68461	109.48%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-0.2	-0.1487 ug/L	1.41714	-0.1487 ppb	1.41714	952.77%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	842.1	25.347 ug/L	0.3044	25.347 ppb	0.3044	1.20%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	1.7	0.0190 ug/L	0.12456	0.0190 ppb	0.12456	656.07%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	226.2	0.1062 ug/L	0.01591	0.1062 ppb	0.01591	14.98%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-0.4	-0.9004 ug/L	2.08342	-0.9004 ppb	2.08342	231.40%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated									
Cd 226.502†	45.8	0.7456 ug/L	0.10229	0.7456 ppb	0.10229	13.72%			
QC value within limits for Cd 226.502 Recovery = Not calculated									
Co 228.616†	11.1	0.3174 ug/L	0.16371	0.3174 ppb	0.16371	51.57%			
QC value within limits for Co 228.616 Recovery = Not calculated									
Cr 267.716†	81.8	1.2494 ug/L	0.11909	1.2494 ppb	0.11909	9.53%			
QC value within limits for Cr 267.716 Recovery = Not calculated									
Cu 324.752†	-171.0	-0.6147 ug/L	0.30217	-0.6147 ppb	0.30217	49.16%			
QC value within limits for Cu 324.752 Recovery = Not calculated									
Fe 238.204 Radial†	-0.9	-11.344 ug/L	0.0888	-11.344 ppb	0.0888	0.78%			
QC value within limits for Fe 238.204 Radial Recovery = Not calculated									
K 766.490 Radial†	-59.9	-13.241 ug/L	8.2120	-13.241 ppb	8.2120	62.02%			
QC value within limits for K 766.490 Radial Recovery = Not calculated									
Mg 279.077 IEC†	-0.7	-32.375 ug/L	79.2531	-32.375 ppb	79.2531	244.80%			
QC value within limits for Mg 279.077 IEC Recovery = Not calculated									
Mn 257.610†	-11.0	-0.0159 ug/L	0.01923	-0.0159 ppb	0.01923	121.21%			
QC value within limits for Mn 257.610 Recovery = Not calculated									
Mo 202.031†	-1.9	-0.1941 ug/L	0.51545	-0.1941 ppb	0.51545	265.62%			
QC value within limits for Mo 202.031 Recovery = Not calculated									
Na 589.592 Radial†	45.5	18.288 ug/L	17.5291	18.288 ppb	17.5291	95.85%			
QC value within limits for Na 589.592 Radial Recovery = Not calculated									
Ni 231.604†	-13.1	-0.4684 ug/L	0.31540	-0.4684 ppb	0.31540	67.33%			
QC value within limits for Ni 231.604 Recovery = Not calculated									
P 214.914†	-14.4	-11.491 ug/L	6.2220	-11.491 ppb	6.2220	54.15%			
QC value within limits for P 214.914 Recovery = Not calculated									
Pb 220.353†	15.9	2.7446 ug/L	2.56246	2.7446 ppb	2.56246	93.36%			
QC value within limits for Pb 220.353 Recovery = Not calculated									
S 181.975 Axial†	3.0	5.7740 ug/L	3.32410	5.7740 ppb	3.32410	57.57%			
QC value within limits for S 181.975 Axial Recovery = Not calculated									
Sb 206.836†	3.3	1.5557 ug/L	1.07845	1.5557 ppb	1.07845	69.32%			
QC value within limits for Sb 206.836 Recovery = Not calculated									
Se 196.026†	7.6	6.7873 ug/L	1.34676	6.7873 ppb	1.34676	19.84%			
QC value within limits for Se 196.026 Recovery = Not calculated									
Si 251.611†	28.2	1.1660 ug/L	0.18671	1.1660 ppb	0.18671	16.01%			
QC value within limits for Si 251.611 Recovery = Not calculated									
Sn 189.927†	11.0	2.7847 ug/L	0.41580	2.7847 ppb	0.41580	14.93%			
QC value within limits for Sn 189.927 Recovery = Not calculated									
Sr 421.552†	-16.6	-0.1509 ug/L	0.08702	-0.1509 ppb	0.08702	57.66%			
QC value within limits for Sr 421.552 Recovery = Not calculated									
Ti 334.940†	130.5	0.2486 ug/L	0.00509	0.2486 ppb	0.00509	2.05%			
QC value within limits for Ti 334.940 Recovery = Not calculated									
Tl 190.801†	7.0	3.0190 ug/L	1.20017	3.0190 ppb	1.20017	39.75%			
QC value within limits for Tl 190.801 Recovery = Not calculated									
U 409.014†	198.0	6.7312 ug/L	3.32158	6.7312 ppb	3.32158	49.35%			
QC value within limits for U 409.014 Recovery = Not calculated									
V 292.402†	93.7	0.8520 ug/L	0.57530	0.8520 ppb	0.57530	67.53%			
QC value within limits for V 292.402 Recovery = Not calculated									
Zn 213.857†	-3.7	-0.0432 ug/L	0.17790	-0.0432 ppb	0.17790	411.50%			
QC value within limits for Zn 213.857 Recovery = Not calculated									
SiO2†	16.4	1.4509 ug/L	1.00854	1.4509 ppb	1.00854	69.51%			
QC value within limits for SiO2 Recovery = Not calculated									

All analyte(s) passed QC.

Sequence No.: 15

Sample ID: LR1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 25

Date Collected: 3/26/2010 20:36:27

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	4167.1	4167.1	110 %		20:38:40
1	Y RADIAL	4680.2	4680.2	114.6 %		20:38:20
1	Al 396.153Radial†	-97.0	-15.3	-17.056 ug/L	-17.056 ppb	20:38:40
1	Ca 317.933Radial†	10.7	-12.2	-27.275 ug/L	-27.275 ppb	20:38:40
1	Fe 238.204 Radial†	32190.0	29253.4	386720 ug/L	386720 ppb	20:38:20
1	K 766.490 Radial†	2277.7	-408.0	-90.019 ug/L	-90.019 ppb	20:38:20
1	Mg 279.077 IEC†	7.4	3.9	-221.43 ug/L	-221.43 ppb	20:38:40
1	Na 589.592 Radial†	-460.5	-32.3	-13.004 ug/L	-13.004 ppb	20:38:20
1	Sr 421.552†	82.2	35.4	0.3220 ug/L	0.3220 ppb	20:38:20
1	Sc 361.383	806617.7	806617.7	110.07 %		20:39:38
1	Y 371.029	662507.4	662507.4	109.61 %		20:39:38
1	Ag 328.068†	-22354.9	-20461.4	3.3447 ug/L	3.3447 ppb	20:39:38
1	As 188.979†	-165.2	-127.8	13.073 ug/L	13.073 ppb	20:39:58
1	B 249.677†	2137.7	2277.1	5.6845 ug/L	5.6845 ppb	20:39:38
1	Ba 233.527†	-1542.8	-1404.2	-2.8304 ug/L	-2.8304 ppb	20:39:38
1	Be 313.107†	-3915.4	334.5	0.1564 ug/L	0.1564 ppb	20:39:38
1	Cd 226.502†	2586.0	2520.5	1.0245 ug/L	1.0245 ppb	20:39:38
1	Co 228.616†	639.7	627.9	12.396 ug/L	12.396 ppb	20:39:58
1	Cr 267.716†	-402.3	-460.5	33.971 ug/L	33.971 ppb	20:39:58
1	Cu 324.752†	-972.7	-6600.6	-3.1316 ug/L	-3.1316 ppb	20:39:38
1	Mn 257.610†	-31803.3	-29318.6	-4.6048 ug/L	-4.6048 ppb	20:39:38
1	Mo 202.031†	-248.4	-242.5	5.5370 ug/L	5.5370 ppb	20:39:38
1	Ni 231.604†	174.1	75.6	2.7026 ug/L	2.7026 ppb	20:39:58
1	P 214.914†	623.9	378.3	-1.0209 ug/L	-1.0209 ppb	20:39:58
1	Pb 220.353†	174.1	207.3	-19.226 ug/L	-19.226 ppb	20:39:58
1	S 181.975 Axial†	33.3	3.1	6.1138 ug/L	6.1138 ppb	20:39:58
1	Sb 206.836†	29.2	1.0	-4.2851 ug/L	-4.2851 ppb	20:39:58
1	Se 196.026†	-1588.1	-1421.0	-250.85 ug/L	-250.85 ppb	20:39:58
1	Si 251.611†	-426.0	-842.7	-34.513 ug/L	-34.513 ppb	20:39:38
1	Sn 189.927†	-6.2	-19.3	-27.096 ug/L	-27.096 ppb	20:39:58
1	Ti 334.940†	-1086.2	57.5	0.0637 ug/L	0.0637 ppb	20:39:38
1	Tl 190.801†	-22.6	1.7	0.3662 ug/L	0.3662 ppb	20:39:58
1	U 409.014†	210.3	2025.1	24.791 ug/L	24.791 ppb	20:39:38
1	V 292.402†	5236.5	6137.9	-1.4228 ug/L	-1.4228 ppb	20:39:38
1	Zn 213.857†	3661.9	2667.0	-22.245 ug/L	-22.245 ppb	20:39:58
1	SiO2†	-460.0	-881.9	-76.949 ug/L	-76.949 ppb	20:40:55
2	Sc Radial	4156.6	4156.6	110 %		20:39:05
2	Y RADIAL	4572.3	4572.3	112.0 %		20:38:45
2	Al 396.153Radial†	-85.6	-5.2	-4.8426 ug/L	-4.8426 ppb	20:39:05
2	Ca 317.933Radial†	15.0	-8.2	-18.419 ug/L	-18.419 ppb	20:39:05
2	Fe 238.204 Radial†	31800.6	28972.1	383000 ug/L	383000 ppb	20:38:45
2	K 766.490 Radial†	2387.8	-302.5	-66.730 ug/L	-66.730 ppb	20:38:45
2	Mg 279.077 IEC†	11.4	7.6	-40.607 ug/L	-40.607 ppb	20:39:05
2	Na 589.592 Radial†	-409.1	13.5	5.4414 ug/L	5.4414 ppb	20:38:45
2	Sr 421.552†	87.7	40.7	0.3693 ug/L	0.3693 ppb	20:38:45
2	Sc 361.383	834478.0	834478.0	113.87 %		20:40:04
2	Y 371.029	684345.6	684345.6	113.22 %		20:40:04
2	Ag 328.068†	-23096.0	-20434.1	2.3537 ug/L	2.3537 ppb	20:40:04
2	As 188.979†	-170.1	-127.1	12.615 ug/L	12.615 ppb	20:40:24
2	B 249.677†	2165.3	2236.5	5.0689 ug/L	5.0689 ppb	20:40:04
2	Ba 233.527†	-1634.3	-1437.8	-3.2942 ug/L	-3.2942 ppb	20:40:04
2	Be 313.107†	-3978.8	397.6	0.1860 ug/L	0.1860 ppb	20:40:04
2	Cd 226.502†	2708.2	2549.4	1.8762 ug/L	1.8762 ppb	20:40:04
2	Co 228.616†	629.0	599.1	11.617 ug/L	11.617 ppb	20:40:24
2	Cr 267.716†	-444.7	-485.6	33.195 ug/L	33.195 ppb	20:40:24
2	Cu 324.752†	-1139.9	-6718.0	-3.7457 ug/L	-3.7457 ppb	20:40:04
2	Mn 257.610†	-33031.1	-29432.1	-5.1451 ug/L	-5.1451 ppb	20:40:04
2	Mo 202.031†	-283.0	-265.3	2.9442 ug/L	2.9442 ppb	20:40:04
2	Ni 231.604†	156.3	54.7	1.9520 ug/L	1.9520 ppb	20:40:24

2	P 214.914†	632.1	366.7	-7.3793 ug/L	-7.3793 ppb	20:40:24
2	Pb 220.353†	170.6	198.9	-20.147 ug/L	-20.147 ppb	20:40:24
2	S 181.975 Axial†	38.9	7.0	13.693 ug/L	13.693 ppb	20:40:24
2	Sb 206.836†	24.1	-4.4	-6.7676 ug/L	-6.7676 ppb	20:40:24
2	Se 196.026†	-1612.2	-1394.1	-236.46 ug/L	-236.46 ppb	20:40:24
2	Si 251.611†	-389.6	-797.9	-32.632 ug/L	-32.632 ppb	20:40:04
2	Sn 189.927†	-4.0	-17.2	-26.339 ug/L	-26.339 ppb	20:40:24
2	Ti 334.940†	-1087.7	89.1	0.1124 ug/L	0.1124 ppb	20:40:04
2	Tl 190.801†	-31.7	-5.6	-2.8049 ug/L	-2.8049 ppb	20:40:24
2	U 409.014†	113.4	1933.6	22.106 ug/L	22.106 ppb	20:40:04
2	V 292.402†	5472.0	6185.9	-0.4852 ug/L	-0.4852 ppb	20:40:04
2	Zn 213.857†	3711.1	2599.1	-22.590 ug/L	-22.590 ppb	20:40:24
2	SiO2†	-474.2	-880.4	-76.755 ug/L	-76.755 ppb	20:41:00
3	Sc Radial	4186.4	4186.4	111 %		20:39:30
3	Y RADIAL	4673.2	4673.2	114.5 %		20:39:10
3	Al 396.153Radial†	-92.2	-10.5	-11.218 ug/L	-11.218 ppb	20:39:30
3	Ca 317.933Radial†	14.1	-9.2	-20.599 ug/L	-20.599 ppb	20:39:30
3	Fe 238.204 Radial†	32166.8	29097.2	384650 ug/L	384650 ppb	20:39:10
3	K 766.490 Radial†	2214.1	-475.1	-104.84 ug/L	-104.84 ppb	20:39:10
3	Mg 279.077 IEC†	11.5	7.6	-42.679 ug/L	-42.679 ppb	20:39:30
3	Na 589.592 Radial†	-472.1	-40.9	-16.447 ug/L	-16.447 ppb	20:39:10
3	Sr 421.552†	70.7	24.7	0.2245 ug/L	0.2245 ppb	20:39:10
3	Sc 361.383	821455.8	821455.8	112.10 %		20:40:29
3	Y 371.029	673907.7	673907.7	111.50 %		20:40:29
3	Ag 328.068†	-22802.9	-20494.2	2.5207 ug/L	2.5207 ppb	20:40:29
3	As 188.979†	-171.1	-130.3	11.042 ug/L	11.042 ppb	20:40:50
3	B 249.677†	2249.1	2341.4	7.9573 ug/L	7.9573 ppb	20:40:29
3	Ba 233.527†	-1669.9	-1492.2	-3.8137 ug/L	-3.8137 ppb	20:40:29
3	Be 313.107†	-4039.1	288.4	0.1349 ug/L	0.1349 ppb	20:40:29
3	Cd 226.502†	2619.9	2508.3	1.0396 ug/L	1.0396 ppb	20:40:29
3	Co 228.616†	631.5	610.1	11.907 ug/L	11.907 ppb	20:40:50
3	Cr 267.716†	-417.9	-467.8	33.641 ug/L	33.641 ppb	20:40:50
3	Cu 324.752†	-990.4	-6600.5	-3.2420 ug/L	-3.2420 ppb	20:40:29
3	Mn 257.610†	-32227.3	-29175.0	-4.6063 ug/L	-4.6063 ppb	20:40:29
3	Mo 202.031†	-281.8	-268.1	2.7865 ug/L	2.7865 ppb	20:40:29
3	Ni 231.604†	153.8	54.6	1.9498 ug/L	1.9498 ppb	20:40:50
3	P 214.914†	624.6	368.7	-7.0953 ug/L	-7.0953 ppb	20:40:50
3	Pb 220.353†	140.4	174.3	-24.639 ug/L	-24.639 ppb	20:40:50
3	S 181.975 Axial†	39.2	7.8	15.256 ug/L	15.256 ppb	20:40:50
3	Sb 206.836†	15.0	-12.2	-10.390 ug/L	-10.390 ppb	20:40:50
3	Se 196.026†	-1603.6	-1408.8	-245.33 ug/L	-245.33 ppb	20:40:50
3	Si 251.611†	-377.7	-792.6	-32.412 ug/L	-32.412 ppb	20:40:29
3	Sn 189.927†	2.5	-11.4	-24.974 ug/L	-24.974 ppb	20:40:50
3	Ti 334.940†	-1111.7	52.6	0.0395 ug/L	0.0395 ppb	20:40:29
3	Tl 190.801†	-34.5	-8.5	-4.0661 ug/L	-4.0661 ppb	20:40:50
3	U 409.014†	311.5	2111.9	27.980 ug/L	27.980 ppb	20:40:29
3	V 292.402†	5452.4	6244.6	-0.1917 ug/L	-0.1917 ppb	20:40:29
3	Zn 213.857†	3694.5	2635.9	-22.346 ug/L	-22.346 ppb	20:40:50
3	SiO2†	-301.0	-732.5	-63.732 ug/L	-63.732 ppb	20:41:05

Mean Data: LRL

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	820850.5	112.01 %		1.902			1.70%
Sc Radial	4170.0	110 %		0.4			0.36%
Y 371.029	673586.9	111.44 %		1.807			1.62%
Y RADIAL	4641.9	113.7 %		1.48			1.30%
Ag 328.068†	-20463.2	2.7397 ug/L		0.53053	2.7397 ppb	0.53053	19.36%
Al 396.153Radial†	-10.3	-11.039 ug/L		6.1089	-11.039 ppb	6.1089	55.34%
As 188.979†	-128.4	12.244 ug/L		1.0652	12.244 ppb	1.0652	8.70%
B 249.677†	2285.0	6.2369 ug/L		1.52138	6.2369 ppb	1.52138	24.39%
Ba 233.527†	-1444.7	-3.3128 ug/L		0.49190	-3.3128 ppb	0.49190	14.85%
Be 313.107†	340.2	0.1591 ug/L		0.02566	0.1591 ppb	0.02566	16.13%
Ca 317.933Radial†	-9.9	-22.098 ug/L		4.6143	-22.098 ppb	4.6143	20.88%
Cd 226.502†	2526.1	1.3135 ug/L		0.48745	1.3135 ppb	0.48745	37.11%
Co 228.616†	612.3	11.973 ug/L		0.3936	11.973 ppb	0.3936	3.29%
Cr 267.716†	-471.3	33.602 ug/L		0.3893	33.602 ppb	0.3893	1.16%
Cu 324.752†	-6639.7	-3.3731 ug/L		0.32738	-3.3731 ppb	0.32738	9.71%
Fe 238.204 Radial†	29107.6	384790 ug/L		1863.1	384790 ppb	1863.1	0.48%
K 766.490 Radial†	-395.2	-87.196 ug/L		19.2116	-87.196 ppb	19.2116	22.03%

Mg 279.077 IEC†	6.4	-101.57 ug/L	103.805	-101.57 ppb	103.805	102.20%
Mn 257.610†	-29308.5	-4.7854 ug/L	0.31149	-4.7854 ppb	0.31149	6.51%
Mo 202.031†	-258.6	3.7559 ug/L	1.54451	3.7559 ppb	1.54451	41.12%
Na 589.592 Radial†	-19.9	-8.0034 ug/L	11.77013	-8.0034 ppb	11.77013	147.06%
Ni 231.604†	61.7	2.2015 ug/L	0.43396	2.2015 ppb	0.43396	19.71%
P 214.914†	371.3	-5.1652 ug/L	3.59183	-5.1652 ppb	3.59183	69.54%
Pb 220.353†	193.5	-21.337 ug/L	2.8962	-21.337 ppb	2.8962	13.57%
S 181.975 Axial†	6.0	11.687 ug/L	4.8898	11.687 ppb	4.8898	41.84%
Sb 206.836†	-5.2	-7.1476 ug/L	3.07016	-7.1476 ppb	3.07016	42.95%
Se 196.026†	-1408.0	-244.21 ug/L	7.261	-244.21 ppb	7.261	2.97%
Si 251.611†	-811.1	-33.186 ug/L	1.1550	-33.186 ppb	1.1550	3.48%
Sn 189.927†	-15.9	-26.136 ug/L	1.0752	-26.136 ppb	1.0752	4.11%
Sr 421.552†	33.6	0.3053 ug/L	0.07383	0.3053 ppb	0.07383	24.18%
Ti 334.940†	66.4	0.0719 ug/L	0.03713	0.0719 ppb	0.03713	51.66%
Tl 190.801†	-4.1	-2.1683 ug/L	2.28370	-2.1683 ppb	2.28370	105.32%
U 409.014†	2023.5	24.959 ug/L	2.9406	24.959 ppb	2.9406	11.78%
V 292.402†	6189.5	-0.6999 ug/L	0.64302	-0.6999 ppb	0.64302	91.87%
Zn 213.857†	2634.0	-22.393 ug/L	0.1771	-22.393 ppb	0.1771	0.79%
SiO2†	-831.6	-72.479 ug/L	7.5753	-72.479 ppb	7.5753	10.45%

Sequence No.: 16

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/26/2010 20:43:17

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	4410.6	4410.6	116 %		20:45:09
1	Y RADIAL	4694.7	4694.7	115.0 %		20:45:09
1	Al 396.153Radial†	4798.7	4194.1	4965.9 ug/L	4965.9 ppb	20:45:09
1	Ca 317.933Radial†	2652.1	2255.8	5053.9 ug/L	5053.9 ppb	20:45:29
1	Fe 238.204 Radial†	451.0	378.8	5023.5 ug/L	5023.5 ppb	20:45:29
1	K 766.490 Radial†	27883.7	21469.2	4733.4 ug/L	4733.4 ppb	20:45:09
1	Mg 279.077 IEC†	128.1	107.2	5071.1 ug/L	5071.1 ppb	20:45:29
1	Na 589.592 Radial†	29496.7	25719.3	10342 ug/L	10342 ppb	20:45:09
1	Sr 421.552†	63153.4	54199.5	492.02 ug/L	492.02 ppb	20:45:09
1	Sc 361.383	826407.0	826407.0	112.77 %		20:46:27
1	Y 371.029	672543.8	672543.8	111.27 %		20:46:27
1	Ag 328.068†	100828.9	89256.5	510.92 ug/L	510.92 ppb	20:46:32
1	As 188.979†	935.8	852.1	521.58 ug/L	521.58 ppb	20:46:52
1	B 249.677†	19217.6	17375.9	520.70 ug/L	520.70 ppb	20:46:32
1	Ba 233.527†	54375.5	48214.2	506.60 ug/L	506.60 ppb	20:46:32
1	Be 313.107†	1233669.7	1097831.9	513.69 ug/L	513.69 ppb	20:46:27
1	Cd 226.502†	35029.5	31233.1	507.39 ug/L	507.39 ppb	20:46:32
1	Co 228.616†	20263.5	18015.1	517.76 ug/L	517.76 ppb	20:46:32
1	Cr 267.716†	37412.1	33079.6	507.50 ug/L	507.50 ppb	20:46:32
1	Cu 324.752†	165052.7	140641.3	502.03 ug/L	502.03 ppb	20:46:32
1	Mn 257.610†	393873.1	348836.2	509.43 ug/L	509.43 ppb	20:46:27
1	Mo 202.031†	5733.5	5067.4	512.16 ug/L	512.16 ppb	20:46:52
1	Ni 231.604†	16278.3	14352.0	514.61 ug/L	514.61 ppb	20:46:32
1	P 214.914†	3768.7	3153.4	2451.2 ug/L	2451.2 ppb	20:46:52
1	Pb 220.353†	3241.2	2923.1	507.08 ug/L	507.08 ppb	20:46:52
1	S 181.975 Axial†	628.4	530.2	1030.0 ug/L	1030.0 ppb	20:46:52
1	Sb 206.836†	1271.8	1102.1	529.52 ug/L	529.52 ppb	20:46:52
1	Se 196.026†	630.8	581.1	539.13 ug/L	539.13 ppb	20:46:52
1	Si 251.611†	70152.0	61750.6	2544.8 ug/L	2544.8 ppb	20:46:32
1	Sn 189.927†	2277.6	2006.0	509.18 ug/L	509.18 ppb	20:46:52
1	Ti 334.940†	293174.7	261013.1	499.01 ug/L	499.01 ppb	20:46:32
1	Tl 190.801†	1311.3	1185.0	514.39 ug/L	514.39 ppb	20:46:52
1	U 409.014†	14814.7	14970.8	507.37 ug/L	507.37 ppb	20:46:32
1	V 292.402†	61848.3	56223.8	511.65 ug/L	511.65 ppb	20:46:32
1	Zn 213.857†	43791.5	38171.7	505.00 ug/L	505.00 ppb	20:46:32
1	SiO2†	69028.8	60746.4	5332.5 ug/L	5332.5 ppb	20:47:59
2	Sc Radial	4338.8	4338.8	115 %		20:45:34
2	Y RADIAL	4595.8	4595.8	112.6 %		20:45:34
2	Al 396.153Radial†	4827.9	4287.9	5077.5 ug/L	5077.5 ppb	20:45:34
2	Ca 317.933Radial†	2672.6	2311.4	5178.5 ug/L	5178.5 ppb	20:45:54
2	Fe 238.204 Radial†	460.3	393.4	5216.5 ug/L	5216.5 ppb	20:45:54
2	K 766.490 Radial†	27896.6	21876.9	4823.3 ug/L	4823.3 ppb	20:45:34
2	Mg 279.077 IEC†	131.3	111.8	5289.0 ug/L	5289.0 ppb	20:45:54
2	Na 589.592 Radial†	29536.0	26173.0	10525 ug/L	10525 ppb	20:45:34
2	Sr 421.552†	63381.2	55296.3	501.98 ug/L	501.98 ppb	20:45:34
2	Sc 361.383	829199.8	829199.8	113.15 %		20:46:58
2	Y 371.029	674746.6	674746.6	111.63 %		20:46:58
2	Ag 328.068†	101547.5	89590.5	512.89 ug/L	512.89 ppb	20:47:03
2	As 188.979†	930.8	844.9	517.27 ug/L	517.27 ppb	20:47:23
2	B 249.677†	19291.6	17384.0	520.91 ug/L	520.91 ppb	20:47:03
2	Ba 233.527†	54761.6	48393.0	508.48 ug/L	508.48 ppb	20:47:03
2	Be 313.107†	1218517.6	1080756.6	505.72 ug/L	505.72 ppb	20:46:58
2	Cd 226.502†	35266.3	31337.8	509.08 ug/L	509.08 ppb	20:47:03
2	Co 228.616†	20328.4	18011.9	517.66 ug/L	517.66 ppb	20:47:03
2	Cr 267.716†	37752.7	33268.9	510.42 ug/L	510.42 ppb	20:47:03
2	Cu 324.752†	166943.2	141819.1	506.24 ug/L	506.24 ppb	20:47:03
2	Mn 257.610†	389132.8	343470.6	501.61 ug/L	501.61 ppb	20:46:58
2	Mo 202.031†	5747.5	5062.6	511.69 ug/L	511.69 ppb	20:47:23
2	Ni 231.604†	16414.6	14423.8	517.19 ug/L	517.19 ppb	20:47:03

2	P 214.914†	3796.1	3166.3	2460.7 ug/L	2460.7 ppb	20:47:23
2	Pb 220.353†	3285.8	2952.9	512.22 ug/L	512.22 ppb	20:47:23
2	S 181.975 Axial†	633.1	532.4	1034.3 ug/L	1034.3 ppb	20:47:23
2	Sb 206.836†	1266.7	1093.8	525.67 ug/L	525.67 ppb	20:47:23
2	Se 196.026†	635.6	583.4	541.72 ug/L	541.72 ppb	20:47:23
2	Si 251.611†	70795.5	62109.8	2559.6 ug/L	2559.6 ppb	20:47:03
2	Sn 189.927†	2287.9	2008.3	509.77 ug/L	509.77 ppb	20:47:23
2	Ti 334.940†	295774.4	262435.0	501.72 ug/L	501.72 ppb	20:47:03
2	Tl 190.801†	1319.5	1188.4	515.81 ug/L	515.81 ppb	20:47:23
2	U 409.014†	15159.4	15231.2	516.20 ug/L	516.20 ppb	20:47:03
2	V 292.402†	62416.0	56540.7	514.48 ug/L	514.48 ppb	20:47:03
2	Zn 213.857†	44082.7	38298.3	506.64 ug/L	506.64 ppb	20:47:03
2	SiO2†	70303.3	61666.6	5413.5 ug/L	5413.5 ppb	20:48:04
3	Sc Radial	4606.4	4606.4	122 %		20:45:59
3	Y RADIAL	4881.6	4881.6	119.6 %		20:45:59
3	Al 396.153Radial†	4909.5	4110.2	4866.8 ug/L	4866.8 ppb	20:45:59
3	Ca 317.933Radial†	2641.9	2150.6	4818.2 ug/L	4818.2 ppb	20:46:20
3	Fe 238.204 Radial†	453.9	364.8	4837.9 ug/L	4837.9 ppb	20:46:20
3	K 766.490 Radial†	28268.0	20767.5	4578.7 ug/L	4578.7 ppb	20:45:59
3	Mg 279.077 IEC†	127.7	102.2	4833.7 ug/L	4833.7 ppb	20:46:20
3	Na 589.592 Radial†	30073.0	25116.7	10100 ug/L	10100 ppb	20:45:59
3	Sr 421.552†	64545.6	53039.4	481.49 ug/L	481.49 ppb	20:45:59
3	Sc 361.383	841647.0	841647.0	114.85 %		20:47:29
3	Y 371.029	683793.3	683793.3	113.13 %		20:47:29
3	Ag 328.068†	102223.1	88851.4	508.56 ug/L	508.56 ppb	20:47:34
3	As 188.979†	926.0	828.6	507.28 ug/L	507.28 ppb	20:47:54
3	B 249.677†	19496.3	17310.0	518.75 ug/L	518.75 ppb	20:47:34
3	Ba 233.527†	55341.8	48182.4	506.26 ug/L	506.26 ppb	20:47:34
3	Be 313.107†	1228859.5	1073835.3	502.48 ug/L	502.48 ppb	20:47:29
3	Cd 226.502†	35694.9	31250.0	507.69 ug/L	507.69 ppb	20:47:34
3	Co 228.616†	20619.9	18000.0	517.30 ug/L	517.30 ppb	20:47:34
3	Cr 267.716†	38070.2	33051.9	507.05 ug/L	507.05 ppb	20:47:34
3	Cu 324.752†	167668.3	140268.5	500.69 ug/L	500.69 ppb	20:47:34
3	Mn 257.610†	393233.0	341954.7	499.38 ug/L	499.38 ppb	20:47:29
3	Mo 202.031†	5664.7	4915.4	496.79 ug/L	496.79 ppb	20:47:54
3	Ni 231.604†	16557.4	14333.6	513.95 ug/L	513.95 ppb	20:47:34
3	P 214.914†	3756.3	3082.1	2393.8 ug/L	2393.8 ppb	20:47:54
3	Pb 220.353†	3230.3	2861.7	496.41 ug/L	496.41 ppb	20:47:54
3	S 181.975 Axial†	625.7	517.7	1005.8 ug/L	1005.8 ppb	20:47:54
3	Sb 206.836†	1256.2	1068.1	513.26 ug/L	513.26 ppb	20:47:54
3	Se 196.026†	627.8	568.3	527.04 ug/L	527.04 ppb	20:47:54
3	Si 251.611†	71371.2	61685.8	2542.3 ug/L	2542.3 ppb	20:47:34
3	Sn 189.927†	2264.1	1957.6	496.89 ug/L	496.89 ppb	20:47:54
3	Ti 334.940†	298016.4	260521.4	498.06 ug/L	498.06 ppb	20:47:34
3	Tl 190.801†	1296.5	1151.1	499.71 ug/L	499.71 ppb	20:47:54
3	U 409.014†	15115.9	14995.1	508.22 ug/L	508.22 ppb	20:47:34
3	V 292.402†	62807.3	56065.7	510.04 ug/L	510.04 ppb	20:47:34
3	Zn 213.857†	44539.8	38120.1	504.34 ug/L	504.34 ppb	20:47:34
3	SiO2†	70925.7	61289.6	5380.8 ug/L	5380.8 ppb	20:48:09

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	832417.9	113.59 %	1.107			0.97%
Sc Radial	4451.9	118 %	3.7			3.11%
Y 371.029	677027.9	112.01 %	0.986			0.88%
Y RADIAL	4724.0	115.7 %	3.55			3.07%
Ag 328.068†	89232.8	510.79 ug/L	2.167	510.79 ppb	2.167	0.42%
QC value within limits for Ag 328.068 Recovery = 102.16%						
Al 396.153Radial†	4197.4	4970.1 ug/L	105.44	4970.1 ppb	105.44	2.12%
QC value within limits for Al 396.153Radial Recovery = 99.40%						
As 188.979†	841.8	515.38 ug/L	7.336	515.38 ppb	7.336	1.42%
QC value within limits for As 188.979 Recovery = 103.08%						
B 249.677†	17356.6	520.12 ug/L	1.193	520.12 ppb	1.193	0.23%
QC value within limits for B 249.677 Recovery = 104.02%						
Ba 233.527†	48263.2	507.11 ug/L	1.200	507.11 ppb	1.200	0.24%
QC value within limits for Ba 233.527 Recovery = 101.42%						
Be 313.107†	1084141.3	507.30 ug/L	5.767	507.30 ppb	5.767	1.14%
QC value within limits for Be 313.107 Recovery = 101.46%						
Ca 317.933Radial†	2239.3	5016.9 ug/L	182.99	5016.9 ppb	182.99	3.65%

QC value within limits for Ca 317.933 Radial Recovery = 100.34%

Cd 226.502†	31273.6	508.05 ug/L	0.900	508.05 ppb	0.900	0.18%
QC value within limits for Cd 226.502 Recovery = 101.61%						
Co 228.616†	18009.0	517.57 ug/L	0.244	517.57 ppb	0.244	0.05%
QC value within limits for Co 228.616 Recovery = 103.51%						
Cr 267.716†	33133.5	508.32 ug/L	1.827	508.32 ppb	1.827	0.36%
QC value within limits for Cr 267.716 Recovery = 101.66%						
Cu 324.752†	140909.6	502.99 ug/L	2.896	502.99 ppb	2.896	0.58%
QC value within limits for Cu 324.752 Recovery = 100.60%						
Fe 238.204 Radial†	379.0	5026.0 ug/L	189.32	5026.0 ppb	189.32	3.77%
QC value within limits for Fe 238.204 Radial Recovery = 100.52%						
K 766.490 Radial†	21371.2	4711.8 ug/L	123.74	4711.8 ppb	123.74	2.63%
QC value within limits for K 766.490 Radial Recovery = 94.24%						
Mg 279.077 IEC†	107.1	5064.6 ug/L	227.74	5064.6 ppb	227.74	4.50%
QC value within limits for Mg 279.077 IEC Recovery = 101.29%						
Mn 257.610†	344753.8	503.47 ug/L	5.279	503.47 ppb	5.279	1.05%
QC value within limits for Mn 257.610 Recovery = 100.69%						
Mo 202.031†	5015.1	506.88 ug/L	8.740	506.88 ppb	8.740	1.72%
QC value within limits for Mo 202.031 Recovery = 101.38%						
Na 589.592 Radial†	25669.7	10323 ug/L	213.1	10323 ppb	213.1	2.06%
QC value within limits for Na 589.592 Radial Recovery = 103.23%						
Ni 231.604†	14369.8	515.25 ug/L	1.710	515.25 ppb	1.710	0.33%
QC value within limits for Ni 231.604 Recovery = 103.05%						
P 214.914†	3133.9	2435.2 ug/L	36.18	2435.2 ppb	36.18	1.49%
QC value within limits for P 214.914 Recovery = 97.41%						
Pb 220.353†	2912.6	505.24 ug/L	8.064	505.24 ppb	8.064	1.60%
QC value within limits for Pb 220.353 Recovery = 101.05%						
S 181.975 Axial†	526.8	1023.4 ug/L	15.39	1023.4 ppb	15.39	1.50%
QC value within limits for S 181.975 Axial Recovery = 102.34%						
Sb 206.836†	1088.0	522.82 ug/L	8.495	522.82 ppb	8.495	1.62%
QC value within limits for Sb 206.836 Recovery = 104.56%						
Se 196.026†	577.6	535.96 ug/L	7.839	535.96 ppb	7.839	1.46%
QC value within limits for Se 196.026 Recovery = 107.19%						
Si 251.611†	61848.7	2548.9 ug/L	9.37	2548.9 ppb	9.37	0.37%
QC value within limits for Si 251.611 Recovery = 101.96%						
Sn 189.927†	1990.6	505.28 ug/L	7.270	505.28 ppb	7.270	1.44%
QC value within limits for Sn 189.927 Recovery = 101.06%						
Sr 421.552†	54178.4	491.83 ug/L	10.245	491.83 ppb	10.245	2.08%
QC value within limits for Sr 421.552 Recovery = 98.37%						
Ti 334.940†	261323.2	499.59 ug/L	1.902	499.59 ppb	1.902	0.38%
QC value within limits for Ti 334.940 Recovery = 99.92%						
Tl 190.801†	1174.9	509.97 ug/L	8.912	509.97 ppb	8.912	1.75%
QC value within limits for Tl 190.801 Recovery = 101.99%						
U 409.014†	15065.7	510.60 ug/L	4.869	510.60 ppb	4.869	0.95%
QC value within limits for U 409.014 Recovery = 102.12%						
V 292.402†	56276.7	512.05 ug/L	2.247	512.05 ppb	2.247	0.44%
QC value within limits for V 292.402 Recovery = 102.41%						
Zn 213.857†	38196.7	505.33 ug/L	1.182	505.33 ppb	1.182	0.23%
QC value within limits for Zn 213.857 Recovery = 101.07%						
SiO2†	61234.2	5375.6 ug/L	40.75	5375.6 ppb	40.75	0.76%
QC value within limits for SiO2 Recovery = 100.53%						

All analyte(s) passed QC.

Sequence No.: 17
 Sample ID: CCB
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 8
 Date Collected: 3/26/2010 20:50:19
 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	4019.4	4019.4	106 %		20:52:32
1	Y RADIAL	4378.4	4378.4	107.2 %		20:52:12
1	Al 396.153Radial†	-78.6	-1.2	-1.4148 ug/L	-1.4148 ppb	20:52:32
1	Ca 317.933Radial†	20.9	-2.3	-5.0465 ug/L	-5.0465 ppb	20:52:32
1	Fe 238.204 Radial†	7.1	-1.7	-23.089 ug/L	-23.089 ppb	20:52:32
1	K 766.490 Radial†	2508.6	-114.4	-25.230 ug/L	-25.230 ppb	20:52:12
1	Mg 279.077 IEC†	2.5	-0.4	-19.235 ug/L	-19.235 ppb	20:52:32
1	Na 589.592 Radial†	-545.7	-127.9	-51.446 ug/L	-51.446 ppb	20:52:12
1	Sr 421.552†	20.9	-19.6	-0.1777 ug/L	-0.1777 ppb	20:52:12
1	Sc 361.383	804049.7	804049.7	109.72 %		20:53:29
1	Y 371.029	661535.8	661535.8	109.45 %		20:53:29
1	Ag 328.068†	242.9	69.2	0.3880 ug/L	0.3880 ppb	20:53:29
1	As 188.979†	-21.1	3.1	1.8573 ug/L	1.8573 ppb	20:53:49
1	B 249.677†	289.3	598.6	18.020 ug/L	18.020 ppb	20:53:49
1	Ba 233.527†	30.0	24.8	0.2616 ug/L	0.2616 ppb	20:53:49
1	Be 313.107†	-4020.4	227.4	0.1068 ug/L	0.1068 ppb	20:53:29
1	Cd 226.502†	-150.3	34.1	0.5573 ug/L	0.5573 ppb	20:53:49
1	Co 228.616†	-40.7	9.6	0.2759 ug/L	0.2759 ppb	20:53:49
1	Cr 267.716†	135.9	28.8	0.4383 ug/L	0.4383 ppb	20:53:49
1	Cu 324.752†	6148.1	-113.6	-0.4087 ug/L	-0.4087 ppb	20:53:29
1	Mn 257.610†	431.9	-32.0	-0.0481 ug/L	-0.0481 ppb	20:53:49
1	Mo 202.031†	22.1	3.4	0.3371 ug/L	0.3371 ppb	20:53:49
1	Ni 231.604†	70.6	-18.2	-0.6532 ug/L	-0.6532 ppb	20:53:49
1	P 214.914†	190.3	-15.0	-12.034 ug/L	-12.034 ppb	20:53:49
1	Pb 220.353†	-47.4	5.9	1.0199 ug/L	1.0199 ppb	20:53:49
1	S 181.975 Axial†	33.3	3.3	6.4016 ug/L	6.4016 ppb	20:53:49
1	Sb 206.836†	24.0	-3.8	-1.7281 ug/L	-1.7281 ppb	20:53:49
1	Se 196.026†	-12.5	10.3	9.2177 ug/L	9.2177 ppb	20:53:49
1	Si 251.611†	486.5	-12.3	-0.5125 ug/L	-0.5125 ppb	20:53:49
1	Sn 189.927†	17.2	2.0	0.5194 ug/L	0.5194 ppb	20:53:49
1	Ti 334.940†	-987.1	144.7	0.2760 ug/L	0.2760 ppb	20:53:29
1	Tl 190.801†	-13.9	9.6	4.1402 ug/L	4.1402 ppb	20:53:49
1	U 409.014†	-1906.4	96.5	3.2836 ug/L	3.2836 ppb	20:53:29
1	V 292.402†	-1389.5	114.2	1.0392 ug/L	1.0392 ppb	20:53:29
1	Zn 213.857†	695.7	-25.8	-0.3358 ug/L	-0.3358 ppb	20:53:49
1	SiO2†	515.3	5.6	0.4861 ug/L	0.4861 ppb	20:55:00
2	Sc Radial	4145.7	4145.7	109 %		20:52:57
2	Y RADIAL	4623.5	4623.5	113.2 %		20:52:37
2	Al 396.153Radial†	-74.5	4.8	5.7380 ug/L	5.7380 ppb	20:52:57
2	Ca 317.933Radial†	26.2	2.0	4.5365 ug/L	4.5365 ppb	20:52:57
2	Fe 238.204 Radial†	6.3	-2.7	-35.787 ug/L	-35.787 ppb	20:52:57
2	K 766.490 Radial†	2604.0	-99.2	-21.885 ug/L	-21.885 ppb	20:52:37
2	Mg 279.077 IEC†	2.8	-0.2	-10.785 ug/L	-10.785 ppb	20:52:57
2	Na 589.592 Radial†	-531.3	-99.1	-39.863 ug/L	-39.863 ppb	20:52:37
2	Sr 421.552†	31.9	-10.1	-0.0918 ug/L	-0.0918 ppb	20:52:37
2	Sc 361.383	789616.2	789616.2	107.75 %		20:53:54
2	Y 371.029	649261.6	649261.6	107.42 %		20:53:54
2	Ag 328.068†	205.7	38.8	0.2089 ug/L	0.2089 ppb	20:53:54
2	As 188.979†	-25.5	-1.3	-0.8171 ug/L	-0.8171 ppb	20:54:14
2	B 249.677†	296.8	610.4	18.378 ug/L	18.378 ppb	20:54:14
2	Ba 233.527†	13.0	9.5	0.1002 ug/L	0.1002 ppb	20:54:14
2	Be 313.107†	-3909.8	263.1	0.1233 ug/L	0.1233 ppb	20:53:54
2	Cd 226.502†	-154.4	27.8	0.4571 ug/L	0.4571 ppb	20:54:14
2	Co 228.616†	-55.9	-5.2	-0.1499 ug/L	-0.1499 ppb	20:54:14
2	Cr 267.716†	126.9	22.7	0.3436 ug/L	0.3436 ppb	20:54:14
2	Cu 324.752†	6025.8	-124.7	-0.4493 ug/L	-0.4493 ppb	20:53:54
2	Mn 257.610†	449.1	-8.8	-0.0159 ug/L	-0.0159 ppb	20:54:14
2	Mo 202.031†	9.3	-8.1	-0.8206 ug/L	-0.8206 ppb	20:54:14
2	Ni 231.604†	93.3	4.1	0.1460 ug/L	0.1460 ppb	20:54:14

2	P 214.914†	187.6	-14.4	-11.508 ug/L	-11.508 ppb	20:54:14
2	Pb 220.353†	-59.7	-6.4	-1.0948 ug/L	-1.0948 ppb	20:54:14
2	S 181.975 Axial†	32.6	3.1	6.0965 ug/L	6.0965 ppb	20:54:14
2	Sb 206.836†	31.5	3.6	1.6499 ug/L	1.6499 ppb	20:54:14
2	Se 196.026†	-21.9	1.4	1.1457 ug/L	1.1457 ppb	20:54:14
2	Si 251.611†	488.1	-2.8	-0.1041 ug/L	-0.1041 ppb	20:54:14
2	Sn 189.927†	12.3	-2.2	-0.5519 ug/L	-0.5519 ppb	20:54:14
2	Ti 334.940†	-1013.9	103.4	0.1972 ug/L	0.1972 ppb	20:53:54
2	Tl 190.801†	-20.2	3.5	1.5273 ug/L	1.5273 ppb	20:54:14
2	U 409.014†	-1839.0	127.3	4.3333 ug/L	4.3333 ppb	20:53:54
2	V 292.402†	-1399.0	82.3	0.7400 ug/L	0.7400 ppb	20:53:54
2	Zn 213.857†	714.2	3.0	0.0446 ug/L	0.0446 ppb	20:54:14
2	SiO2†	493.7	-5.8	-0.4906 ug/L	-0.4906 ppb	20:55:20
3	Sc Radial	4121.5	4121.5	109 %		20:53:22
3	Y RADIAL	4515.2	4515.2	110.6 %		20:53:02
3	Al 396.153Radial†	-68.0	10.4	12.318 ug/L	12.318 ppb	20:53:22
3	Ca 317.933Radial†	19.1	-4.3	-9.7237 ug/L	-9.7237 ppb	20:53:22
3	Fe 238.204 Radial†	7.9	-1.2	-15.287 ug/L	-15.287 ppb	20:53:22
3	K 766.490 Radial†	2531.3	-152.0	-33.556 ug/L	-33.556 ppb	20:53:02
3	Mg 279.077 IEC†	3.3	0.3	12.248 ug/L	12.248 ppb	20:53:22
3	Na 589.592 Radial†	-475.9	-51.1	-20.542 ug/L	-20.542 ppb	20:53:02
3	Sr 421.552†	24.3	-16.9	-0.1536 ug/L	-0.1536 ppb	20:53:02
3	Sc 361.383	790190.1	790190.1	107.83 %		20:54:19
3	Y 371.029	649430.0	649430.0	107.45 %		20:54:19
3	Ag 328.068†	164.3	0.2	-0.0023 ug/L	-0.0023 ppb	20:54:19
3	As 188.979†	-21.1	2.8	1.6747 ug/L	1.6747 ppb	20:54:40
3	B 249.677†	279.0	593.7	17.871 ug/L	17.871 ppb	20:54:40
3	Ba 233.527†	3.1	0.3	0.0045 ug/L	0.0045 ppb	20:54:40
3	Be 313.107†	-3988.4	192.9	0.0903 ug/L	0.0903 ppb	20:54:19
3	Cd 226.502†	-153.3	29.0	0.4724 ug/L	0.4724 ppb	20:54:40
3	Co 228.616†	-36.6	12.8	0.3681 ug/L	0.3681 ppb	20:54:40
3	Cr 267.716†	128.6	24.2	0.3691 ug/L	0.3691 ppb	20:54:40
3	Cu 324.752†	6055.4	-101.3	-0.3638 ug/L	-0.3638 ppb	20:54:19
3	Mn 257.610†	461.2	2.2	0.0011 ug/L	0.0011 ppb	20:54:40
3	Mo 202.031†	21.4	3.1	0.3147 ug/L	0.3147 ppb	20:54:40
3	Ni 231.604†	83.8	-4.8	-0.1736 ug/L	-0.1736 ppb	20:54:40
3	P 214.914†	191.8	-10.6	-8.4841 ug/L	-8.4841 ppb	20:54:40
3	Pb 220.353†	-54.2	-1.1	-0.1928 ug/L	-0.1928 ppb	20:54:40
3	S 181.975 Axial†	32.9	3.4	6.6178 ug/L	6.6178 ppb	20:54:40
3	Sb 206.836†	29.7	2.0	0.9304 ug/L	0.9304 ppb	20:54:40
3	Se 196.026†	-16.1	6.8	6.0542 ug/L	6.0542 ppb	20:54:40
3	Si 251.611†	515.8	22.6	0.9297 ug/L	0.9297 ppb	20:54:40
3	Sn 189.927†	18.7	3.7	0.9445 ug/L	0.9445 ppb	20:54:40
3	Ti 334.940†	-1062.0	59.5	0.1104 ug/L	0.1104 ppb	20:54:19
3	Tl 190.801†	-19.2	4.4	1.9033 ug/L	1.9033 ppb	20:54:40
3	U 409.014†	-1909.4	63.2	2.1512 ug/L	2.1512 ppb	20:54:19
3	V 292.402†	-1401.6	80.8	0.7361 ug/L	0.7361 ppb	20:54:19
3	Zn 213.857†	708.0	-3.2	-0.0392 ug/L	-0.0392 ppb	20:54:40
3	SiO2†	510.0	9.0	0.7825 ug/L	0.7825 ppb	20:55:40

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	794618.7	108.44 %		1.115			1.03%
Sc Radial	4095.5	108 %		1.8			1.64%
Y 371.029	653409.1	108.10 %		1.164			1.08%
Y RADIAL	4505.7	110.4 %		3.01			2.73%
Ag 328.068†	36.0	0.1982 ug/L		0.19536	0.1982 ppb	0.19536	98.57%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	4.7	5.5472 ug/L		6.86863	5.5472 ppb	6.86863	123.82%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	1.5	0.9050 ug/L		1.49416	0.9050 ppb	1.49416	165.10%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	600.9	18.090 ug/L		0.2602	18.090 ppb	0.2602	1.44%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	11.5	0.1221 ug/L		0.12997	0.1221 ppb	0.12997	106.44%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	227.8	0.1068 ug/L		0.01649	0.1068 ppb	0.01649	15.44%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	-1.5	-3.4113 ug/L		7.26941	-3.4113 ppb	7.26941	213.10%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated

Cd 226.502† 30.3 0.4956 ug/L 0.05394 0.4956 ppb 0.05394 10.88%

QC value within limits for Cd 226.502 Recovery = Not calculated

Co 228.616† 5.7 0.1647 ug/L 0.27636 0.1647 ppb 0.27636 167.79%

QC value within limits for Co 228.616 Recovery = Not calculated

Cr 267.716† 25.2 0.3837 ug/L 0.04902 0.3837 ppb 0.04902 12.78%

QC value within limits for Cr 267.716 Recovery = Not calculated

Cu 324.752† -113.2 -0.4073 ug/L 0.04279 -0.4073 ppb 0.04279 10.51%

QC value within limits for Cu 324.752 Recovery = Not calculated

Fe 238.204 Radial† -1.9 -24.721 ug/L 10.3472 -24.721 ppb 10.3472 41.86%

QC value within limits for Fe 238.204 Radial Recovery = Not calculated

K 766.490 Radial† -121.9 -26.890 ug/L 6.0100 -26.890 ppb 6.0100 22.35%

QC value within limits for K 766.490 Radial Recovery = Not calculated

Mg 279.077 IEC† -0.1 -5.9241 ug/L 16.29475 -5.9241 ppb 16.29475 275.06%

QC value within limits for Mg 279.077 IEC Recovery = Not calculated

Mn 257.610† -12.9 -0.0210 ug/L 0.02502 -0.0210 ppb 0.02502 119.39%

QC value within limits for Mn 257.610 Recovery = Not calculated

Mo 202.031† -0.5 -0.0563 ug/L 0.66203 -0.0563 ppb 0.66203 >999.9%

QC value within limits for Mo 202.031 Recovery = Not calculated

Na 589.592 Radial† -92.7 -37.284 ug/L 15.6130 -37.284 ppb 15.6130 41.88%

QC value within limits for Na 589.592 Radial Recovery = Not calculated

Ni 231.604† -6.3 -0.2269 ug/L 0.40224 -0.2269 ppb 0.40224 177.24%

QC value within limits for Ni 231.604 Recovery = Not calculated

P 214.914† -13.3 -10.675 ug/L 1.9159 -10.675 ppb 1.9159 17.95%

QC value within limits for P 214.914 Recovery = Not calculated

Pb 220.353† -0.5 -0.0892 ug/L 1.06116 -0.0892 ppb 1.06116 >999.9%

QC value within limits for Pb 220.353 Recovery = Not calculated

S 181.975 Axial† 3.3 6.3720 ug/L 0.26193 6.3720 ppb 0.26193 4.11%

QC value within limits for S 181.975 Axial Recovery = Not calculated

Sb 206.836† 0.6 0.2841 ug/L 1.77933 0.2841 ppb 1.77933 626.33%

QC value within limits for Sb 206.836 Recovery = Not calculated

Se 196.026† 6.2 5.4725 ug/L 4.06727 5.4725 ppb 4.06727 74.32%

QC value within limits for Se 196.026 Recovery = Not calculated

Si 251.611† 2.5 0.1044 ug/L 0.74339 0.1044 ppb 0.74339 712.26%

QC value within limits for Si 251.611 Recovery = Not calculated

Sn 189.927† 1.2 0.3040 ug/L 0.77112 0.3040 ppb 0.77112 253.67%

QC value within limits for Sn 189.927 Recovery = Not calculated

Sr 421.552† -15.5 -0.1410 ug/L 0.04427 -0.1410 ppb 0.04427 31.39%

QC value within limits for Sr 421.552 Recovery = Not calculated

Ti 334.940† 102.5 0.1945 ug/L 0.08286 0.1945 ppb 0.08286 42.59%

QC value within limits for Ti 334.940 Recovery = Not calculated

Tl 190.801† 5.9 2.5236 ug/L 1.41256 2.5236 ppb 1.41256 55.97%

QC value within limits for Tl 190.801 Recovery = Not calculated

U 409.014† 95.7 3.2560 ug/L 1.09131 3.2560 ppb 1.09131 33.52%

QC value within limits for U 409.014 Recovery = Not calculated

V 292.402† 92.4 0.8384 ug/L 0.17388 0.8384 ppb 0.17388 20.74%

QC value within limits for V 292.402 Recovery = Not calculated

Zn 213.857† -8.7 -0.1101 ug/L 0.19987 -0.1101 ppb 0.19987 181.49%

QC value within limits for Zn 213.857 Recovery = Not calculated

SiO2† 2.9 0.2593 ug/L 0.66617 0.2593 ppb 0.66617 256.91%

QC value within limits for SiO2 Recovery = Not calculated

All analyte(s) passed QC.

Sequence No.: 27
 Sample ID: CCV
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 1
 Date Collected: 3/26/2010 21:59:22
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4240.5	4240.5	112 %		22:01:34
1	Y RADIAL	4594.5	4594.5	112.5 %		22:01:14
1	Al 396.153Radial†	4741.6	4308.6	5102.5 ug/L	5102.5 ppb	22:01:14
1	Ca 317.933Radial†	2635.7	2332.6	5225.9 ug/L	5225.9 ppb	22:01:34
1	Fe 238.204 Radial†	448.5	392.2	5199.8 ug/L	5199.8 ppb	22:01:34
1	K 766.490 Radial†	27512.8	22098.8	4872.4 ug/L	4872.4 ppb	22:01:14
1	Mg 279.077 IEC†	126.3	110.1	5204.7 ug/L	5204.7 ppb	22:01:34
1	Na 589.592 Radial†	28540.3	25881.4	10408 ug/L	10408 ppb	22:01:14
1	Sr 421.552†	61349.8	54764.7	497.15 ug/L	497.15 ppb	22:01:14
1	Sc 361.383	840963.2	840963.2	114.76 %		22:02:32
1	Y 371.029	684325.7	684325.7	113.22 %		22:02:32
1	Ag 328.068†	102434.5	89108.1	510.13 ug/L	510.13 ppb	22:02:37
1	As 188.979†	936.1	838.0	513.06 ug/L	513.06 ppb	22:02:57
1	B 249.677†	19065.4	16948.4	507.81 ug/L	507.81 ppb	22:02:37
1	Ba 233.527†	55257.4	48148.1	505.91 ug/L	505.91 ppb	22:02:37
1	Be 313.107†	1244313.0	1088171.3	509.17 ug/L	509.17 ppb	22:02:32
1	Cd 226.502†	35635.6	31223.6	507.22 ug/L	507.22 ppb	22:02:37
1	Co 228.616†	20544.8	17949.2	515.85 ug/L	515.85 ppb	22:02:37
1	Cr 267.716†	37917.3	32945.6	505.46 ug/L	505.46 ppb	22:02:37
1	Cu 324.752†	166975.1	139783.2	498.98 ug/L	498.98 ppb	22:02:37
1	Mn 257.610†	395951.0	344601.5	503.26 ug/L	503.26 ppb	22:02:32
1	Mo 202.031†	5737.5	4982.8	503.63 ug/L	503.63 ppb	22:02:57
1	Ni 231.604†	16504.9	14299.6	512.74 ug/L	512.74 ppb	22:02:37
1	P 214.914†	3783.9	3108.7	2415.6 ug/L	2415.6 ppb	22:02:57
1	Pb 220.353†	3278.9	2906.3	504.15 ug/L	504.15 ppb	22:02:57
1	S 181.975 Axial†	636.1	527.2	1024.2 ug/L	1024.2 ppb	22:02:57
1	Sb 206.836†	1281.5	1091.1	524.16 ug/L	524.16 ppb	22:02:57
1	Se 196.026†	621.5	563.3	523.60 ug/L	523.60 ppb	22:02:57
1	Si 251.611†	71353.8	61721.1	2543.7 ug/L	2543.7 ppb	22:02:37
1	Sn 189.927†	2302.6	1992.8	505.85 ug/L	505.85 ppb	22:02:57
1	Ti 334.940†	297765.0	260513.2	498.06 ug/L	498.06 ppb	22:02:37
1	Tl 190.801†	1313.6	1166.9	506.54 ug/L	506.54 ppb	22:02:57
1	U 409.014†	15124.3	15013.1	508.80 ug/L	508.80 ppb	22:02:37
1	V 292.402†	62783.5	56089.4	510.30 ug/L	510.30 ppb	22:02:37
1	Zn 213.857†	44403.8	38033.2	503.14 ug/L	503.14 ppb	22:02:37
1	SiO2†	71645.0	61966.6	5440.2 ug/L	5440.2 ppb	22:04:04
2	Sc Radial	4199.8	4199.8	111 %		22:01:59
2	Y RADIAL	4612.6	4612.6	113.0 %		22:01:39
2	Al 396.153Radial†	4754.3	4361.0	5164.5 ug/L	5164.5 ppb	22:01:39
2	Ca 317.933Radial†	2612.6	2334.5	5230.2 ug/L	5230.2 ppb	22:01:59
2	Fe 238.204 Radial†	440.9	389.2	5160.6 ug/L	5160.6 ppb	22:01:59
2	K 766.490 Radial†	27531.4	22353.4	4928.5 ug/L	4928.5 ppb	22:01:39
2	Mg 279.077 IEC†	125.9	110.7	5237.7 ug/L	5237.7 ppb	22:01:59
2	Na 589.592 Radial†	28533.0	26121.7	10504 ug/L	10504 ppb	22:01:39
2	Sr 421.552†	61614.6	55533.9	504.13 ug/L	504.13 ppb	22:01:39
2	Sc 361.383	837809.8	837809.8	114.33 %		22:03:03
2	Y 371.029	681039.7	681039.7	112.68 %		22:03:03
2	Ag 328.068†	103497.9	90374.1	517.34 ug/L	517.34 ppb	22:03:08
2	As 188.979†	942.3	846.5	518.26 ug/L	518.26 ppb	22:03:28
2	B 249.677†	19215.6	17142.3	513.63 ug/L	513.63 ppb	22:03:08
2	Ba 233.527†	55930.8	48918.3	514.00 ug/L	514.00 ppb	22:03:08
2	Be 313.107†	1239360.1	1087920.2	509.08 ug/L	509.08 ppb	22:03:03
2	Cd 226.502†	35978.9	31640.7	514.01 ug/L	514.01 ppb	22:03:08
2	Co 228.616†	20779.3	18221.7	523.68 ug/L	523.68 ppb	22:03:08
2	Cr 267.716†	38388.2	33481.9	513.68 ug/L	513.68 ppb	22:03:08
2	Cu 324.752†	169328.8	142389.5	508.28 ug/L	508.28 ppb	22:03:08
2	Mn 257.610†	394909.4	344989.1	503.82 ug/L	503.82 ppb	22:03:03
2	Mo 202.031†	5797.2	5053.9	510.81 ug/L	510.81 ppb	22:03:28
2	Ni 231.604†	16772.1	14587.5	523.06 ug/L	523.06 ppb	22:03:08

2	P 214.914†	3813.9	3147.4	2445.1 ug/L	2445.1 ppb	22:03:28
2	Pb 220.353†	3305.3	2940.1	510.04 ug/L	510.04 ppb	22:03:28
2	S 181.975 Axial†	635.9	529.1	1028.0 ug/L	1028.0 ppb	22:03:28
2	Sb 206.836†	1279.4	1093.4	525.47 ug/L	525.47 ppb	22:03:28
2	Se 196.026†	632.6	575.0	534.05 ug/L	534.05 ppb	22:03:28
2	Si 251.611†	72269.0	62755.6	2586.3 ug/L	2586.3 ppb	22:03:08
2	Sn 189.927†	2312.7	2009.2	510.02 ug/L	510.02 ppb	22:03:28
2	Ti 334.940†	301629.9	264870.3	506.39 ug/L	506.39 ppb	22:03:08
2	Tl 190.801†	1337.5	1192.1	517.43 ug/L	517.43 ppb	22:03:28
2	U 409.014†	15258.4	15180.0	514.46 ug/L	514.46 ppb	22:03:08
2	V 292.402†	63500.0	56922.0	517.89 ug/L	517.89 ppb	22:03:08
2	Zn 213.857†	44906.8	38618.7	510.88 ug/L	510.88 ppb	22:03:08
2	SiO2†	70920.6	61568.0	5404.9 ug/L	5404.9 ppb	22:04:09
3	Sc Radial	4261.8	4261.8	113 %		22:02:24
3	Y RADIAL	4716.8	4716.8	115.5 %		22:02:04
3	Al 396.153Radial†	4836.7	4371.8	5177.5 ug/L	5177.5 ppb	22:02:04
3	Ca 317.933Radial†	2657.8	2340.4	5243.3 ug/L	5243.3 ppb	22:02:24
3	Fe 238.204 Radial†	450.7	392.2	5199.7 ug/L	5199.7 ppb	22:02:24
3	K 766.490 Radial†	27944.4	22359.1	4929.8 ug/L	4929.8 ppb	22:02:04
3	Mg 279.077 IEC†	128.4	111.3	5264.5 ug/L	5264.5 ppb	22:02:24
3	Na 589.592 Radial†	28835.8	26016.3	10462 ug/L	10462 ppb	22:02:04
3	Sr 421.552†	62489.7	55503.0	503.85 ug/L	503.85 ppb	22:02:04
3	Sc 361.383	834802.6	834802.6	113.92 %		22:03:34
3	Y 371.029	680824.7	680824.7	112.64 %		22:03:34
3	Ag 328.068†	102100.1	89473.2	512.22 ug/L	512.22 ppb	22:03:39
3	As 188.979†	945.7	852.4	521.84 ug/L	521.84 ppb	22:03:59
3	B 249.677†	18923.7	16946.5	507.75 ug/L	507.75 ppb	22:03:39
3	Ba 233.527†	55041.8	48314.2	507.66 ug/L	507.66 ppb	22:03:39
3	Be 313.107†	1234800.7	1087822.8	509.02 ug/L	509.02 ppb	22:03:34
3	Cd 226.502†	35408.8	31253.7	507.71 ug/L	507.71 ppb	22:03:39
3	Co 228.616†	20400.9	17955.0	516.02 ug/L	516.02 ppb	22:03:39
3	Cr 267.716†	37876.1	33153.3	508.65 ug/L	508.65 ppb	22:03:39
3	Cu 324.752†	166656.1	140576.9	501.81 ug/L	501.81 ppb	22:03:39
3	Mn 257.610†	391719.4	343433.1	501.55 ug/L	501.55 ppb	22:03:34
3	Mo 202.031†	5755.9	5035.9	508.99 ug/L	508.99 ppb	22:03:59
3	Ni 231.604†	16457.9	14364.5	515.06 ug/L	515.06 ppb	22:03:39
3	P 214.914†	3769.1	3120.1	2424.3 ug/L	2424.3 ppb	22:03:59
3	Pb 220.353†	3290.0	2937.1	509.51 ug/L	509.51 ppb	22:03:59
3	S 181.975 Axial†	641.2	535.8	1040.8 ug/L	1040.8 ppb	22:03:59
3	Sb 206.836†	1283.2	1100.8	528.90 ug/L	528.90 ppb	22:03:59
3	Se 196.026†	624.4	569.8	529.49 ug/L	529.49 ppb	22:03:59
3	Si 251.611†	71014.8	61882.4	2550.3 ug/L	2550.3 ppb	22:03:39
3	Sn 189.927†	2315.4	2018.9	512.47 ug/L	512.47 ppb	22:03:59
3	Ti 334.940†	297114.1	261856.7	500.63 ug/L	500.63 ppb	22:03:39
3	Tl 190.801†	1312.6	1174.5	509.81 ug/L	509.81 ppb	22:03:59
3	U 409.014†	14900.7	14914.1	505.42 ug/L	505.42 ppb	22:03:39
3	V 292.402†	62680.2	56402.4	513.18 ug/L	513.18 ppb	22:03:39
3	Zn 213.857†	44254.5	38187.6	505.18 ug/L	505.18 ppb	22:03:39
3	SiO2†	71264.5	62093.3	5451.2 ug/L	5451.2 ppb	22:04:14

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	837858.5	114.34 %	0.420			0.37%
Sc Radial	4234.0	112 %	0.8			0.74%
Y 371.029	682063.4	112.84 %	0.325			0.29%
Y RADIAL	4641.3	113.7 %	1.62			1.42%
Ag 328.068†	89651.8	513.23 ug/L	3.713	513.23 ppb	3.713	0.72%
QC value within limits for Ag 328.068 Recovery = 102.65%						
Al 396.153Radial†	4347.1	5148.2 ug/L	40.07	5148.2 ppb	40.07	0.78%
QC value within limits for Al 396.153Radial Recovery = 102.96%						
As 188.979†	845.6	517.72 ug/L	4.415	517.72 ppb	4.415	0.85%
QC value within limits for As 188.979 Recovery = 103.54%						
B 249.677†	17012.4	509.73 ug/L	3.376	509.73 ppb	3.376	0.66%
QC value within limits for B 249.677 Recovery = 101.95%						
Ba 233.527†	48460.2	509.19 ug/L	4.256	509.19 ppb	4.256	0.84%
QC value within limits for Ba 233.527 Recovery = 101.84%						
Be 313.107†	1087971.4	509.09 ug/L	0.079	509.09 ppb	0.079	0.02%
QC value within limits for Be 313.107 Recovery = 101.82%						
Ca 317.933Radial†	2335.8	5233.1 ug/L	9.09	5233.1 ppb	9.09	0.17%

QC value within limits for Ca 317.933 Radial Recovery = 104.66%							
Cd	226.502†	31372.7	509.65 ug/L	3.786	509.65 ppb	3.786	0.74%
QC value within limits for Cd 226.502 Recovery = 101.93%							
Co	228.616†	18042.0	518.52 ug/L	4.473	518.52 ppb	4.473	0.86%
QC value within limits for Co 228.616 Recovery = 103.70%							
Cr	267.716†	33193.6	509.26 ug/L	4.142	509.26 ppb	4.142	0.81%
QC value within limits for Cr 267.716 Recovery = 101.85%							
Cu	324.752†	140916.5	503.02 ug/L	4.766	503.02 ppb	4.766	0.95%
QC value within limits for Cu 324.752 Recovery = 100.60%							
Fe	238.204 Radial†	391.2	5186.7 ug/L	22.62	5186.7 ppb	22.62	0.44%
QC value within limits for Fe 238.204 Radial Recovery = 103.73%							
K	766.490 Radial†	22270.4	4910.2 ug/L	32.80	4910.2 ppb	32.80	0.67%
QC value within limits for K 766.490 Radial Recovery = 98.20%							
Mg	279.077 IEC†	110.7	5235.6 ug/L	29.97	5235.6 ppb	29.97	0.57%
QC value within limits for Mg 279.077 IEC Recovery = 104.71%							
Mn	257.610†	344341.2	502.88 ug/L	1.181	502.88 ppb	1.181	0.23%
QC value within limits for Mn 257.610 Recovery = 100.58%							
Mo	202.031†	5024.2	507.81 ug/L	3.730	507.81 ppb	3.730	0.73%
QC value within limits for Mo 202.031 Recovery = 101.56%							
Na	589.592 Radial†	26006.4	10458 ug/L	48.4	10458 ppb	48.4	0.46%
QC value within limits for Na 589.592 Radial Recovery = 104.58%							
Ni	231.604†	14417.2	516.95 ug/L	5.414	516.95 ppb	5.414	1.05%
QC value within limits for Ni 231.604 Recovery = 103.39%							
P	214.914†	3125.4	2428.3 ug/L	15.15	2428.3 ppb	15.15	0.62%
QC value within limits for P 214.914 Recovery = 97.13%							
Pb	220.353†	2927.8	507.90 ug/L	3.257	507.90 ppb	3.257	0.64%
QC value within limits for Pb 220.353 Recovery = 101.58%							
S	181.975 Axial†	530.7	1031.0 ug/L	8.73	1031.0 ppb	8.73	0.85%
QC value within limits for S 181.975 Axial Recovery = 103.10%							
Sb	206.836†	1095.1	526.18 ug/L	2.447	526.18 ppb	2.447	0.47%
QC value within limits for Sb 206.836 Recovery = 105.24%							
Se	196.026†	569.4	529.04 ug/L	5.239	529.04 ppb	5.239	0.99%
QC value within limits for Se 196.026 Recovery = 105.81%							
Si	251.611†	62119.7	2560.1 ug/L	22.96	2560.1 ppb	22.96	0.90%
QC value within limits for Si 251.611 Recovery = 102.40%							
Sn	189.927†	2007.0	509.45 ug/L	3.344	509.45 ppb	3.344	0.66%
QC value within limits for Sn 189.927 Recovery = 101.89%							
Sr	421.552†	55267.2	501.71 ug/L	3.954	501.71 ppb	3.954	0.79%
QC value within limits for Sr 421.552 Recovery = 100.34%							
Ti	334.940†	262413.4	501.69 ug/L	4.263	501.69 ppb	4.263	0.85%
QC value within limits for Ti 334.940 Recovery = 100.34%							
Tl	190.801†	1177.8	511.26 ug/L	5.588	511.26 ppb	5.588	1.09%
QC value within limits for Tl 190.801 Recovery = 102.25%							
U	409.014†	15035.7	509.56 ug/L	4.565	509.56 ppb	4.565	0.90%
QC value within limits for U 409.014 Recovery = 101.91%							
V	292.402†	56471.3	513.79 ug/L	3.828	513.79 ppb	3.828	0.75%
QC value within limits for V 292.402 Recovery = 102.76%							
Zn	213.857†	38279.8	506.40 ug/L	4.014	506.40 ppb	4.014	0.79%
QC value within limits for Zn 213.857 Recovery = 101.28%							
SiO2†		61876.0	5432.1 ug/L	24.18	5432.1 ppb	24.18	0.45%
QC value within limits for SiO2 Recovery = 101.58%							

All analyte(s) passed QC.

Sequence No.: 28

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 3/26/2010 22:06:24

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	4140.6	4140.6	109 %		22:08:36
1	Y RADIAL	4645.1	4645.1	113.8 %		22:08:16
1	Al 396.153Radial†	-69.4	9.3	11.142 ug/L	11.142 ppb	22:08:36
1	Ca 317.933Radial†	24.2	0.2	0.4976 ug/L	0.4976 ppb	22:08:36
1	Fe 238.204 Radial†	7.8	-1.3	-17.703 ug/L	-17.703 ppb	22:08:36
1	K 766.490 Radial†	2537.2	-157.4	-34.740 ug/L	-34.740 ppb	22:08:16
1	Mg 279.077 IEC†	0.7	-2.2	-102.06 ug/L	-102.06 ppb	22:08:36
1	Na 589.592 Radial†	-525.0	-94.0	-37.797 ug/L	-37.797 ppb	22:08:16
1	Sr 421.552†	67.8	22.8	0.2066 ug/L	0.2066 ppb	22:08:16
1	Sc 361.383	826714.8	826714.8	112.82 %		22:09:33
1	Y 371.029	678959.1	678959.1	112.33 %		22:09:33
1	Ag 328.068†	280.4	96.4	0.5443 ug/L	0.5443 ppb	22:09:33
1	As 188.979†	-29.1	-3.5	-2.1487 ug/L	-2.1487 ppb	22:09:53
1	B 249.677†	-59.9	281.9	8.4860 ug/L	8.4860 ppb	22:09:53
1	Ba 233.527†	11.2	7.4	0.0789 ug/L	0.0789 ppb	22:09:53
1	Be 313.107†	-4023.0	325.6	0.1523 ug/L	0.1523 ppb	22:09:33
1	Cd 226.502†	-169.1	21.3	0.3481 ug/L	0.3481 ppb	22:09:53
1	Co 228.616†	-39.7	11.5	0.3302 ug/L	0.3302 ppb	22:09:53
1	Cr 267.716†	133.2	23.0	0.3502 ug/L	0.3502 ppb	22:09:53
1	Cu 324.752†	6074.8	-332.2	-1.1886 ug/L	-1.1886 ppb	22:09:33
1	Mn 257.610†	447.0	-29.3	-0.0404 ug/L	-0.0404 ppb	22:09:53
1	Mo 202.031†	15.2	-3.2	-0.3291 ug/L	-0.3291 ppb	22:09:53
1	Ni 231.604†	88.0	-4.6	-0.1636 ug/L	-0.1636 ppb	22:09:53
1	P 214.914†	199.2	-11.9	-9.3656 ug/L	-9.3656 ppb	22:09:53
1	Pb 220.353†	-43.4	10.6	1.8447 ug/L	1.8447 ppb	22:09:53
1	S 181.975 Axial†	28.6	-1.7	-3.3243 ug/L	-3.3243 ppb	22:09:53
1	Sb 206.836†	29.3	0.3	0.1149 ug/L	0.1149 ppb	22:09:53
1	Se 196.026†	-20.4	3.7	3.2536 ug/L	3.2536 ppb	22:09:53
1	Si 251.611†	493.5	-18.3	-0.7517 ug/L	-0.7517 ppb	22:09:53
1	Sn 189.927†	4.4	-9.7	-2.4666 ug/L	-2.4666 ppb	22:09:53
1	Ti 334.940†	-1104.9	64.9	0.1310 ug/L	0.1310 ppb	22:09:33
1	Tl 190.801†	-17.1	7.1	3.0639 ug/L	3.0639 ppb	22:09:53
1	U 409.014†	-1966.4	91.0	3.0952 ug/L	3.0952 ppb	22:09:33
1	V 292.402†	-1432.6	110.7	0.9955 ug/L	0.9955 ppb	22:09:33
1	Zn 213.857†	628.5	-102.7	-1.3663 ug/L	-1.3663 ppb	22:09:53
1	SiO2†	499.6	-21.1	-1.8503 ug/L	-1.8503 ppb	22:11:04
2	Sc Radial	4159.1	4159.1	110 %		22:09:01
2	Y RADIAL	4712.8	4712.8	115.4 %		22:08:41
2	Al 396.153Radial†	-75.2	4.4	5.1844 ug/L	5.1844 ppb	22:09:01
2	Ca 317.933Radial†	25.9	1.7	3.7283 ug/L	3.7283 ppb	22:09:01
2	Fe 238.204 Radial†	6.9	-2.2	-29.025 ug/L	-29.025 ppb	22:09:01
2	K 766.490 Radial†	2524.9	-178.9	-39.477 ug/L	-39.477 ppb	22:08:41
2	Mg 279.077 IEC†	0.5	-2.4	-113.37 ug/L	-113.37 ppb	22:09:01
2	Na 589.592 Radial†	-523.7	-90.7	-36.454 ug/L	-36.454 ppb	22:08:41
2	Sr 421.552†	44.2	1.0	0.0088 ug/L	0.0088 ppb	22:08:41
2	Sc 361.383	828154.1	828154.1	113.01 %		22:09:58
2	Y 371.029	680992.4	680992.4	112.67 %		22:09:58
2	Ag 328.068†	278.0	93.8	0.5249 ug/L	0.5249 ppb	22:09:58
2	As 188.979†	-16.6	7.6	4.5962 ug/L	4.5962 ppb	22:10:18
2	B 249.677†	-31.9	306.8	9.2378 ug/L	9.2378 ppb	22:10:18
2	Ba 233.527†	13.8	9.7	0.1037 ug/L	0.1037 ppb	22:10:18
2	Be 313.107†	-3975.3	374.0	0.1753 ug/L	0.1753 ppb	22:09:58
2	Cd 226.502†	-165.0	25.2	0.4128 ug/L	0.4128 ppb	22:10:18
2	Co 228.616†	-44.3	7.5	0.2168 ug/L	0.2168 ppb	22:10:18
2	Cr 267.716†	109.4	1.7	0.0227 ug/L	0.0227 ppb	22:10:18
2	Cu 324.752†	5961.3	-442.0	-1.5832 ug/L	-1.5832 ppb	22:09:58
2	Mn 257.610†	436.6	-39.2	-0.0555 ug/L	-0.0555 ppb	22:10:18
2	Mo 202.031†	23.4	4.0	0.4015 ug/L	0.4015 ppb	22:10:18
2	Ni 231.604†	64.7	-25.3	-0.9089 ug/L	-0.9089 ppb	22:10:18

2	P 214.914†	181.0	-28.3	-22.556 ug/L	-22.556 ppb	22:10:18
2	Pb 220.353†	-59.0	-3.1	-0.5309 ug/L	-0.5309 ppb	22:10:18
2	S 181.975 Axial†	28.3	-2.1	-4.0744 ug/L	-4.0744 ppb	22:10:18
2	Sb 206.836†	25.6	-3.0	-1.3970 ug/L	-1.3970 ppb	22:10:18
2	Se 196.026†	-17.0	6.7	5.9487 ug/L	5.9487 ppb	22:10:18
2	Si 251.611†	486.3	-25.4	-1.0553 ug/L	-1.0553 ppb	22:10:18
2	Sn 189.927†	6.9	-7.5	-1.9081 ug/L	-1.9081 ppb	22:10:18
2	Ti 334.940†	-990.6	167.8	0.3276 ug/L	0.3276 ppb	22:09:58
2	Tl 190.801†	-27.0	-1.6	-0.6897 ug/L	-0.6897 ppb	22:10:18
2	U 409.014†	-1838.0	207.7	7.0649 ug/L	7.0649 ppb	22:09:58
2	V 292.402†	-1372.2	166.4	1.5148 ug/L	1.5148 ppb	22:09:58
2	Zn 213.857†	609.6	-120.4	-1.5957 ug/L	-1.5957 ppb	22:10:18
2	SiO2†	501.1	-20.5	-1.8186 ug/L	-1.8186 ppb	22:11:24
3	Sc Radial	4131.9	4131.9	109 %		22:09:26
3	Y RADIAL	4583.1	4583.1	112.3 %		22:09:06
3	Al 396.153Radial†	-65.8	12.5	14.923 ug/L	14.923 ppb	22:09:26
3	Ca 317.933Radial†	22.0	-1.8	-4.0218 ug/L	-4.0218 ppb	22:09:26
3	Fe 238.204 Radial†	8.0	-1.1	-14.362 ug/L	-14.362 ppb	22:09:26
3	K 766.490 Radial†	2544.9	-145.4	-32.089 ug/L	-32.089 ppb	22:09:06
3	Mg 279.077 IEC†	2.9	-0.2	-8.1053 ug/L	-8.1053 ppb	22:09:26
3	Na 589.592 Radial†	-551.8	-119.6	-48.088 ug/L	-48.088 ppb	22:09:06
3	Sr 421.552†	11.4	-28.8	-0.2613 ug/L	-0.2613 ppb	22:09:06
3	Sc 361.383	815508.0	815508.0	111.29 %		22:10:24
3	Y 371.029	671126.6	671126.6	111.04 %		22:10:24
3	Ag 328.068†	131.8	-33.7	-0.1980 ug/L	-0.1980 ppb	22:10:24
3	As 188.979†	-29.2	-4.0	-2.4067 ug/L	-2.4067 ppb	22:10:44
3	B 249.677†	-64.8	276.7	8.3316 ug/L	8.3316 ppb	22:10:44
3	Ba 233.527†	0.6	-2.0	-0.0196 ug/L	-0.0196 ppb	22:10:44
3	Be 313.107†	-4062.8	240.8	0.1132 ug/L	0.1132 ppb	22:10:24
3	Cd 226.502†	-166.9	21.2	0.3467 ug/L	0.3467 ppb	22:10:44
3	Co 228.616†	-54.6	-2.4	-0.0700 ug/L	-0.0700 ppb	22:10:44
3	Cr 267.716†	122.4	14.9	0.2257 ug/L	0.2257 ppb	22:10:44
3	Cu 324.752†	6026.6	-301.5	-1.0806 ug/L	-1.0806 ppb	22:10:24
3	Mn 257.610†	443.5	-27.0	-0.0405 ug/L	-0.0405 ppb	22:10:44
3	Mo 202.031†	13.4	-4.7	-0.4736 ug/L	-0.4736 ppb	22:10:44
3	Ni 231.604†	81.8	-9.1	-0.3247 ug/L	-0.3247 ppb	22:10:44
3	P 214.914†	199.8	-8.9	-7.0155 ug/L	-7.0155 ppb	22:10:44
3	Pb 220.353†	-60.9	-5.6	-0.9722 ug/L	-0.9722 ppb	22:10:44
3	S 181.975 Axial†	25.5	-4.2	-8.2024 ug/L	-8.2024 ppb	22:10:44
3	Sb 206.836†	20.6	-7.1	-3.3441 ug/L	-3.3441 ppb	22:10:44
3	Se 196.026†	-18.9	4.7	4.2348 ug/L	4.2348 ppb	22:10:44
3	Si 251.611†	487.3	-17.9	-0.7318 ug/L	-0.7318 ppb	22:10:44
3	Sn 189.927†	8.3	-6.2	-1.5799 ug/L	-1.5799 ppb	22:10:44
3	Ti 334.940†	-953.7	187.3	0.3555 ug/L	0.3555 ppb	22:10:24
3	Tl 190.801†	-16.4	7.6	3.2647 ug/L	3.2647 ppb	22:10:44
3	U 409.014†	-1833.0	186.9	6.3565 ug/L	6.3565 ppb	22:10:24
3	V 292.402†	-1434.2	91.8	0.8311 ug/L	0.8311 ppb	22:10:24
3	Zn 213.857†	601.3	-119.5	-1.5906 ug/L	-1.5906 ppb	22:10:44
3	SiO2†	501.4	-13.4	-1.1702 ug/L	-1.1702 ppb	22:11:44

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	823459.0	112.37 %	0.945			0.84%
Sc Radial	4143.9	109 %	0.4			0.33%
Y 371.029	677026.1	112.01 %	0.862			0.77%
Y RADIAL	4647.0	113.8 %	1.59			1.40%
Ag 328.068†	52.2	0.2904 ug/L	0.42306	0.2904 ppb	0.42306	145.67%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	8.7	10.416 ug/L	4.9095	10.416 ppb	4.9095	47.13%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	0.0	0.0136 ug/L	3.97076	0.0136 ppb	3.97076	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	288.5	8.6851 ug/L	0.48480	8.6851 ppb	0.48480	5.58%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	5.0	0.0544 ug/L	0.06522	0.0544 ppb	0.06522	119.98%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	313.5	0.1470 ug/L	0.03139	0.1470 ppb	0.03139	21.36%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	0.0	0.0680 ug/L	3.89283	0.0680 ppb	3.89283	>999.9%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd 226.502†	22.5	0.3692 ug/L	0.03777	0.3692 ppb	0.03777	10.23%	
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	5.6	0.1590 ug/L	0.20629	0.1590 ppb	0.20629	129.75%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	13.2	0.1995 ug/L	0.16531	0.1995 ppb	0.16531	82.85%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	-358.6	-1.2842 ug/L	0.26457	-1.2842 ppb	0.26457	20.60%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	-1.5	-20.363 ug/L	7.6853	-20.363 ppb	7.6853	37.74%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	-160.6	-35.435 ug/L	3.7426	-35.435 ppb	3.7426	10.56%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	-1.6	-74.512 ug/L	57.7873	-74.512 ppb	57.7873	77.55%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	-31.9	-0.0455 ug/L	0.00869	-0.0455 ppb	0.00869	19.12%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	-1.3	-0.1338 ug/L	0.46913	-0.1338 ppb	0.46913	350.74%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	-101.4	-40.780 ug/L	6.3649	-40.780 ppb	6.3649	15.61%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	-13.0	-0.4657 ug/L	0.39211	-0.4657 ppb	0.39211	84.19%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	-16.4	-12.979 ug/L	8.3766	-12.979 ppb	8.3766	64.54%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	0.6	0.1138 ug/L	1.51507	0.1138 ppb	1.51507	>999.9%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	-2.7	-5.2004 ug/L	2.62674	-5.2004 ppb	2.62674	50.51%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	-3.3	-1.5421 ug/L	1.73405	-1.5421 ppb	1.73405	112.45%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	5.0	4.4790 ug/L	1.36404	4.4790 ppb	1.36404	30.45%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	-20.5	-0.8463 ug/L	0.18133	-0.8463 ppb	0.18133	21.43%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	-7.8	-1.9849 ug/L	0.44833	-1.9849 ppb	0.44833	22.59%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	-1.7	-0.0153 ug/L	0.23488	-0.0153 ppb	0.23488	>999.9%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	140.0	0.2714 ug/L	0.12234	0.2714 ppb	0.12234	45.09%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	4.4	1.8796 ug/L	2.22738	1.8796 ppb	2.22738	118.50%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	161.8	5.5055 ug/L	2.11724	5.5055 ppb	2.11724	38.46%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	123.0	1.1138 ug/L	0.35683	1.1138 ppb	0.35683	32.04%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	-114.2	-1.5175 ug/L	0.13103	-1.5175 ppb	0.13103	8.63%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†	-18.4	-1.6130 ug/L	0.38383	-1.6130 ppb	0.38383	23.80%	
QC value within limits for SiO2 Recovery = Not calculated							

All analyte(s) passed QC.

Sequence No.: 29
 Sample ID: 1202056808|959089|1
 Analyst: HSC
 Initial Sample Wt:
 Dilution:

Autosampler Location: 46
 Date Collected: 3/26/2010 22:13:55
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: 1202056808|959089|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4253.7	4253.7	112 %		22:16:07
1	Y RADIAL	4511.8	4511.8	110.5 %		22:15:47
1	Al 396.153Radial†	-70.8	9.8	11.711 ug/L	11.711 ppb	22:16:07
1	Ca 317.933Radial†	22.9	-1.5	-3.3349 ug/L	-3.3349 ppb	22:16:07
1	Fe 238.204 Radial†	8.8	-0.6	-7.8272 ug/L	-7.8272 ppb	22:16:07
1	K 766.490 Radial†	2480.9	-269.2	-59.429 ug/L	-59.429 ppb	22:15:47
1	Mg 279.077 IEC†	0.8	-2.1	-97.670 ug/L	-97.670 ppb	22:16:07
1	Na 589.592 Radial†	-512.9	-70.4	-28.328 ug/L	-28.328 ppb	22:15:47
1	Sr 421.552†	44.4	0.3	0.0024 ug/L	0.0024 ppb	22:15:47
1	Sc 361.383	830716.8	830716.8	113.36 %		22:17:04
1	Y 371.029	682649.9	682649.9	112.94 %		22:17:04
1	Ag 328.068†	192.7	17.8	0.0965 ug/L	0.0965 ppb	22:17:04
1	As 188.979†	-23.0	2.0	1.2279 ug/L	1.2279 ppb	22:17:24
1	B 249.677†	-116.7	232.1	6.9833 ug/L	6.9833 ppb	22:17:24
1	Ba 233.527†	31.3	25.1	0.2660 ug/L	0.2660 ppb	22:17:24
1	Be 313.107†	-4041.7	326.2	0.1533 ug/L	0.1533 ppb	22:17:04
1	Cd 226.502†	-169.5	21.7	0.3548 ug/L	0.3548 ppb	22:17:24
1	Co 228.616†	-19.4	29.6	0.8488 ug/L	0.8488 ppb	22:17:24
1	Cr 267.716†	153.3	40.2	0.6123 ug/L	0.6123 ppb	22:17:24
1	Cu 324.752†	6130.6	-309.0	-1.1089 ug/L	-1.1089 ppb	22:17:04
1	Mn 257.610†	586.1	91.5	0.1368 ug/L	0.1368 ppb	22:17:24
1	Mo 202.031†	18.9	-0.1	-0.0127 ug/L	-0.0127 ppb	22:17:24
1	Ni 231.604†	96.0	2.2	0.0768 ug/L	0.0768 ppb	22:17:24
1	P 214.914†	186.5	-24.0	-19.153 ug/L	-19.153 ppb	22:17:24
1	Pb 220.353†	-50.0	5.0	0.8698 ug/L	0.8698 ppb	22:17:24
1	S 181.975 Axial†	29.1	-1.4	-2.7897 ug/L	-2.7897 ppb	22:17:24
1	Sb 206.836†	39.2	9.0	4.1363 ug/L	4.1363 ppb	22:17:24
1	Se 196.026†	-13.7	9.7	8.6881 ug/L	8.6881 ppb	22:17:24
1	Si 251.611†	851.6	295.5	12.209 ug/L	12.209 ppb	22:17:24
1	Sn 189.927†	5.1	-9.2	-2.3242 ug/L	-2.3242 ppb	22:17:24
1	Ti 334.940†	-922.8	230.3	0.4433 ug/L	0.4433 ppb	22:17:04
1	Tl 190.801†	-30.1	-4.3	-1.8450 ug/L	-1.8450 ppb	22:17:24
1	U 409.014†	-1742.7	296.7	10.088 ug/L	10.088 ppb	22:17:04
1	V 292.402†	-1379.9	163.4	1.4844 ug/L	1.4844 ppb	22:17:04
1	Zn 213.857†	751.6	3.2	0.0447 ug/L	0.0447 ppb	22:17:24
1	SiO2†	839.1	276.2	24.313 ug/L	24.313 ppb	22:18:20
2	Sc Radial	4188.5	4188.5	111 %		22:16:33
2	Y RADIAL	4526.9	4526.9	110.9 %		22:16:12
2	Al 396.153Radial†	-69.1	10.4	12.333 ug/L	12.333 ppb	22:16:33
2	Ca 317.933Radial†	29.7	5.0	11.150 ug/L	11.150 ppb	22:16:33
2	Fe 238.204 Radial†	8.8	-0.5	-6.4822 ug/L	-6.4822 ppb	22:16:33
2	K 766.490 Radial†	2564.8	-159.0	-35.103 ug/L	-35.103 ppb	22:16:12
2	Mg 279.077 IEC†	3.4	0.3	12.434 ug/L	12.434 ppb	22:16:33
2	Na 589.592 Radial†	-489.9	-56.7	-22.807 ug/L	-22.807 ppb	22:16:12
2	Sr 421.552†	45.4	1.8	0.0159 ug/L	0.0159 ppb	22:16:12
2	Sc 361.383	843335.8	843335.8	115.08 %		22:17:30
2	Y 371.029	692867.1	692867.1	114.63 %		22:17:30
2	Ag 328.068†	224.7	43.1	0.2365 ug/L	0.2365 ppb	22:17:30
2	As 188.979†	-27.6	-1.7	-1.0523 ug/L	-1.0523 ppb	22:17:50
2	B 249.677†	-112.5	237.2	7.1385 ug/L	7.1385 ppb	22:17:50
2	Ba 233.527†	16.9	12.1	0.1284 ug/L	0.1284 ppb	22:17:50
2	Be 313.107†	-4032.3	387.7	0.1821 ug/L	0.1821 ppb	22:17:30
2	Cd 226.502†	-160.1	32.1	0.5238 ug/L	0.5238 ppb	22:17:50
2	Co 228.616†	-35.7	15.7	0.4515 ug/L	0.4515 ppb	22:17:50
2	Cr 267.716†	150.6	35.8	0.5445 ug/L	0.5445 ppb	22:17:50
2	Cu 324.752†	6271.7	-267.2	-0.9608 ug/L	-0.9608 ppb	22:17:30
2	Mn 257.610†	554.8	56.5	0.0814 ug/L	0.0814 ppb	22:17:50
2	Mo 202.031†	22.0	2.4	0.2408 ug/L	0.2408 ppb	22:17:50
2	Ni 231.604†	84.0	-9.6	-0.3433 ug/L	-0.3433 ppb	22:17:50

2	P 214.914†	204.5	-10.7	-8.5018 ug/L	-8.5018 ppb	22:17:50
2	Pb 220.353†	-56.3	0.1	0.0246 ug/L	0.0246 ppb	22:17:50
2	S 181.975 Axial†	27.5	-3.2	-6.2342 ug/L	-6.2342 ppb	22:17:50
2	Sb 206.836†	34.6	4.5	2.0516 ug/L	2.0516 ppb	22:17:50
2	Se 196.026†	-16.1	7.8	6.9883 ug/L	6.9883 ppb	22:17:50
2	Si 251.611†	833.0	268.1	11.072 ug/L	11.072 ppb	22:17:50
2	Sn 189.927†	10.1	-4.9	-1.2387 ug/L	-1.2387 ppb	22:17:50
2	Ti 334.940†	-921.4	243.7	0.4611 ug/L	0.4611 ppb	22:17:30
2	Tl 190.801†	-21.5	3.6	1.5530 ug/L	1.5530 ppb	22:17:50
2	U 409.014†	-1713.8	344.8	11.725 ug/L	11.725 ppb	22:17:30
2	V 292.402†	-1489.0	86.7	0.8051 ug/L	0.8051 ppb	22:17:30
2	Zn 213.857†	765.1	5.0	0.0717 ug/L	0.0717 ppb	22:17:50
2	SiO2†	849.2	273.9	24.101 ug/L	24.101 ppb	22:18:25
3	Sc Radial	4247.0	4247.0	112 %		22:16:58
3	Y RADIAL	4672.3	4672.3	114.4 %		22:16:38
3	Al 396.153Radial†	-67.4	12.8	15.162 ug/L	15.162 ppb	22:16:58
3	Ca 317.933Radial†	31.5	6.2	13.897 ug/L	13.897 ppb	22:16:58
3	Fe 238.204 Radial†	7.7	-1.6	-21.365 ug/L	-21.365 ppb	22:16:58
3	K 766.490 Radial†	2520.6	-230.3	-50.849 ug/L	-50.849 ppb	22:16:38
3	Mg 279.077 IEC†	0.3	-2.6	-122.30 ug/L	-122.30 ppb	22:16:58
3	Na 589.592 Radial†	-465.3	-28.7	-11.529 ug/L	-11.529 ppb	22:16:38
3	Sr 421.552†	53.7	8.7	0.0784 ug/L	0.0784 ppb	22:16:38
3	Sc 361.383	830999.7	830999.7	113.40 %		22:17:55
3	Y 371.029	682462.3	682462.3	112.91 %		22:17:55
3	Ag 328.068†	134.0	-34.0	-0.1999 ug/L	-0.1999 ppb	22:17:55
3	As 188.979†	-26.0	-0.6	-0.3727 ug/L	-0.3727 ppb	22:18:15
3	B 249.677†	-132.1	218.4	6.5775 ug/L	6.5775 ppb	22:18:15
3	Ba 233.527†	37.1	30.2	0.3185 ug/L	0.3185 ppb	22:18:15
3	Be 313.107†	-3909.7	443.9	0.2084 ug/L	0.2084 ppb	22:17:55
3	Cd 226.502†	-171.9	19.6	0.3217 ug/L	0.3217 ppb	22:18:15
3	Co 228.616†	-39.8	11.6	0.3344 ug/L	0.3344 ppb	22:18:15
3	Cr 267.716†	165.6	51.0	0.7776 ug/L	0.7776 ppb	22:18:15
3	Cu 324.752†	6275.7	-182.8	-0.6571 ug/L	-0.6571 ppb	22:17:55
3	Mn 257.610†	580.2	86.1	0.1285 ug/L	0.1285 ppb	22:18:15
3	Mo 202.031†	28.4	8.3	0.8401 ug/L	0.8401 ppb	22:18:15
3	Ni 231.604†	92.1	-1.3	-0.0465 ug/L	-0.0465 ppb	22:18:15
3	P 214.914†	192.2	-19.0	-15.209 ug/L	-15.209 ppb	22:18:15
3	Pb 220.353†	-45.9	8.6	1.4990 ug/L	1.4990 ppb	22:18:15
3	S 181.975 Axial†	31.4	0.6	1.2217 ug/L	1.2217 ppb	22:18:15
3	Sb 206.836†	27.9	-1.0	-0.4749 ug/L	-0.4749 ppb	22:18:15
3	Se 196.026†	-21.6	2.7	2.3645 ug/L	2.3645 ppb	22:18:15
3	Si 251.611†	812.2	260.5	10.752 ug/L	10.752 ppb	22:18:15
3	Sn 189.927†	11.9	-3.2	-0.7976 ug/L	-0.7976 ppb	22:18:15
3	Ti 334.940†	-897.1	253.2	0.4932 ug/L	0.4932 ppb	22:17:55
3	Tl 190.801†	-34.4	-8.1	-3.4798 ug/L	-3.4798 ppb	22:18:15
3	U 409.014†	-1878.4	177.6	6.0396 ug/L	6.0396 ppb	22:17:55
3	V 292.402†	-1400.5	145.6	1.3304 ug/L	1.3304 ppb	22:17:55
3	Zn 213.857†	768.9	18.2	0.2477 ug/L	0.2477 ppb	22:18:15
3	SiO2†	835.3	272.6	23.972 ug/L	23.972 ppb	22:18:30

Mean Data: 1202056808|959089|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	835017.4	113.95	%	0.983			0.86%
Sc Radial	4229.8	112	%	0.9			0.85%
Y 371.029	685993.1	113.50	%	0.985			0.87%
Y RADIAL	4570.3	111.9	%	2.17			1.94%
Ag 328.068†	9.0	0.0444	ug/L	0.22284	0.0444 ppb	0.22284	502.22%
Al 396.153Radial†	11.0	13.069	ug/L	1.8393	13.069 ppb	1.8393	14.07%
As 188.979†	-0.1	-0.0657	ug/L	1.17066	-0.0657 ppb	1.17066	>999.9%
B 249.677†	229.2	6.8998	ug/L	0.28967	6.8998 ppb	0.28967	4.20%
Ba 233.527†	22.5	0.2376	ug/L	0.09814	0.2376 ppb	0.09814	41.30%
Be 313.107†	386.0	0.1813	ug/L	0.02753	0.1813 ppb	0.02753	15.19%
Ca 317.933Radial†	3.2	7.2374	ug/L	9.25830	7.2374 ppb	9.25830	127.92%
Cd 226.502†	24.4	0.4001	ug/L	0.10840	0.4001 ppb	0.10840	27.09%
Co 228.616†	19.0	0.5449	ug/L	0.26962	0.5449 ppb	0.26962	49.48%
Cr 267.716†	42.3	0.6448	ug/L	0.11993	0.6448 ppb	0.11993	18.60%
Cu 324.752†	-253.0	-0.9089	ug/L	0.23036	-0.9089 ppb	0.23036	25.34%
Fe 238.204 Radial†	-0.9	-11.892	ug/L	8.2320	-11.892 ppb	8.2320	69.23%
K 766.490 Radial†	-219.5	-48.460	ug/L	12.3380	-48.460 ppb	12.3380	25.46%

Mg 279.077 IEC†	-1.5	-69.178 ug/L	71.7431	-69.178 ppb	71.7431	103.71%
Mn 257.610†	78.0	0.1156 ug/L	0.02989	0.1156 ppb	0.02989	25.87%
Mo 202.031†	3.5	0.3561 ug/L	0.43795	0.3561 ppb	0.43795	123.00%
Na 589.592 Radial†	-51.9	-20.888 ug/L	8.5621	-20.888 ppb	8.5621	40.99%
Ni 231.604†	-2.9	-0.1043 ug/L	0.21593	-0.1043 ppb	0.21593	206.98%
P 214.914†	-17.9	-14.288 ug/L	5.3850	-14.288 ppb	5.3850	37.69%
Pb 220.353†	4.6	0.7978 ug/L	0.73985	0.7978 ppb	0.73985	92.74%
S 181.975 Axial†	-1.3	-2.6007 ug/L	3.73158	-2.6007 ppb	3.73158	143.48%
Sb 206.836†	4.1	1.9043 ug/L	2.30913	1.9043 ppb	2.30913	121.26%
Se 196.026†	6.7	6.0136 ug/L	3.27252	6.0136 ppb	3.27252	54.42%
Si 251.611†	274.7	11.345 ug/L	0.7658	11.345 ppb	0.7658	6.75%
Sn 189.927†	-5.7	-1.4535 ug/L	0.78560	-1.4535 ppb	0.78560	54.05%
Sr 421.552†	3.6	0.0322 ug/L	0.04057	0.0322 ppb	0.04057	125.83%
Ti 334.940†	242.4	0.4659 ug/L	0.02529	0.4659 ppb	0.02529	5.43%
Tl 190.801†	-2.9	-1.2573 ug/L	2.56739	-1.2573 ppb	2.56739	204.21%
U 409.014†	273.0	9.2842 ug/L	2.92660	9.2842 ppb	2.92660	31.52%
V 292.402†	131.9	1.2066 ug/L	0.35616	1.2066 ppb	0.35616	29.52%
Zn 213.857†	8.8	0.1214 ug/L	0.11025	0.1214 ppb	0.11025	90.83%
SiO2†	274.3	24.129 ug/L	0.1725	24.129 ppb	0.1725	0.71%

Sequence No.: 30
 Sample ID: 1202056809|959089|1
 Analyst: HSC
 Initial Sample Wt:
 Dilution:

Autosampler Location: 47
 Date Collected: 3/26/2010 22:20:41
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: 1202056809|959089|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4272.6	4272.6	113 %		22:22:54
1	Y RADIAL	4776.6	4776.6	117.0 %		22:22:34
1	Al 396.153Radial†	5013.2	4517.5	5351.0 ug/L	5351.0 ppb	22:22:34
1	Ca 317.933Radial†	2637.3	2316.3	5189.4 ug/L	5189.4 ppb	22:22:54
1	Fe 238.204 Radial†	435.3	377.4	5004.7 ug/L	5004.7 ppb	22:22:54
1	K 766.490 Radial†	27900.5	22257.7	4909.6 ug/L	4909.6 ppb	22:22:34
1	Mg 279.077 IEC†	127.4	110.1	5207.3 ug/L	5207.3 ppb	22:22:54
1	Na 589.592 Radial†	13537.6	12388.7	4981.8 ug/L	4981.8 ppb	22:22:34
1	Sr 421.552†	61640.4	54610.5	495.75 ug/L	495.75 ppb	22:22:34
1	Sc 361.383	842631.0	842631.0	114.99 %		22:23:52
1	Y 371.029	685006.2	685006.2	113.33 %		22:23:52
1	Ag 328.068†	100330.6	87101.7	498.66 ug/L	498.66 ppb	22:23:57
1	As 188.979†	948.4	847.1	518.54 ug/L	518.54 ppb	22:24:17
1	B 249.677†	19173.7	17009.7	509.70 ug/L	509.70 ppb	22:23:57
1	Ba 233.527†	56584.1	49206.5	517.01 ug/L	517.01 ppb	22:23:57
1	Be 313.107†	1252054.2	1092757.5	511.32 ug/L	511.32 ppb	22:23:52
1	Cd 226.502†	35606.6	31136.9	505.84 ug/L	505.84 ppb	22:23:57
1	Co 228.616†	20404.3	17791.6	511.33 ug/L	511.33 ppb	22:23:57
1	Cr 267.716†	38218.4	33142.1	508.45 ug/L	508.45 ppb	22:23:57
1	Cu 324.752†	171383.7	143329.2	511.62 ug/L	511.62 ppb	22:23:57
1	Mn 257.610†	397935.0	345644.0	504.76 ug/L	504.76 ppb	22:23:52
1	Mo 202.031†	5770.0	5001.2	505.48 ug/L	505.48 ppb	22:24:17
1	Ni 231.604†	16737.5	14473.4	518.97 ug/L	518.97 ppb	22:23:57
1	P 214.914†	1019.6	698.3	464.89 ug/L	464.89 ppb	22:24:17
1	Pb 220.353†	3318.9	2935.4	509.27 ug/L	509.27 ppb	22:24:17
1	S 181.975 Axial†	3090.9	2660.9	5173.3 ug/L	5173.3 ppb	22:24:17
1	Sb 206.836†	1330.8	1131.7	543.15 ug/L	543.15 ppb	22:24:17
1	Se 196.026†	620.8	561.6	521.61 ug/L	521.61 ppb	22:24:17
1	Si 251.611†	139347.8	120730.0	4981.5 ug/L	4981.5 ppb	22:23:57
1	Sn 189.927†	2330.7	2013.2	511.04 ug/L	511.04 ppb	22:24:17
1	Ti 334.940†	298459.5	260603.6	498.22 ug/L	498.22 ppb	22:23:57
1	Tl 190.801†	1323.2	1173.0	509.17 ug/L	509.17 ppb	22:24:17
1	U 409.014†	15719.8	15504.9	525.54 ug/L	525.54 ppb	22:23:57
1	V 292.402†	63789.1	56855.7	517.27 ug/L	517.27 ppb	22:23:57
1	Zn 213.857†	44413.6	37965.1	502.20 ug/L	502.20 ppb	22:23:57
1	SiO2†	137714.3	119301.1	10486 ug/L	10486 ppb	22:25:24
2	Sc Radial	4253.5	4253.5	112 %		22:23:19
2	Y RADIAL	4793.5	4793.5	117.4 %		22:22:59
2	Al 396.153Radial†	5131.3	4642.6	5500.4 ug/L	5500.4 ppb	22:22:59
2	Ca 317.933Radial†	2656.0	2343.4	5250.2 ug/L	5250.2 ppb	22:23:19
2	Fe 238.204 Radial†	440.6	383.9	5090.3 ug/L	5090.3 ppb	22:23:19
2	K 766.490 Radial†	28470.5	22876.3	5046.1 ug/L	5046.1 ppb	22:22:59
2	Mg 279.077 IEC†	127.7	110.9	5247.1 ug/L	5247.1 ppb	22:23:19
2	Na 589.592 Radial†	13725.3	12609.6	5070.7 ug/L	5070.7 ppb	22:22:59
2	Sr 421.552†	62883.5	55962.7	508.02 ug/L	508.02 ppb	22:22:59
2	Sc 361.383	857369.0	857369.0	117.00 %		22:24:23
2	Y 371.029	697895.9	697895.9	115.46 %		22:24:23
2	Ag 328.068†	101243.1	86381.7	494.56 ug/L	494.56 ppb	22:24:28
2	As 188.979†	947.3	832.0	509.40 ug/L	509.40 ppb	22:24:48
2	B 249.677†	19398.4	16915.0	506.86 ug/L	506.86 ppb	22:24:28
2	Ba 233.527†	56927.9	48654.5	511.22 ug/L	511.22 ppb	22:24:28
2	Be 313.107†	1265540.9	1085567.4	507.95 ug/L	507.95 ppb	22:24:23
2	Cd 226.502†	35653.9	30645.0	497.84 ug/L	497.84 ppb	22:24:28
2	Co 228.616†	20423.5	17502.9	503.02 ug/L	503.02 ppb	22:24:28
2	Cr 267.716†	38367.7	32698.4	501.66 ug/L	501.66 ppb	22:24:28
2	Cu 324.752†	173821.1	142850.4	509.91 ug/L	509.91 ppb	22:24:28
2	Mn 257.610†	401414.2	342668.9	500.43 ug/L	500.43 ppb	22:24:23
2	Mo 202.031†	5753.0	4900.4	495.30 ug/L	495.30 ppb	22:24:48
2	Ni 231.604†	16839.7	14310.5	513.13 ug/L	513.13 ppb	22:24:28

2	P 214.914†	1025.7	688.3	457.03 ug/L	457.03 ppb	22:24:48
2	Pb 220.353†	3320.5	2887.2	500.92 ug/L	500.92 ppb	22:24:48
2	S 181.975 Axial†	3089.1	2613.2	5080.5 ug/L	5080.5 ppb	22:24:48
2	Sb 206.836†	1338.9	1118.8	536.79 ug/L	536.79 ppb	22:24:48
2	Se 196.026†	611.8	544.7	506.62 ug/L	506.62 ppb	22:24:48
2	Si 251.611†	140740.8	119837.4	4944.7 ug/L	4944.7 ppb	22:24:28
2	Sn 189.927†	2327.7	1975.9	501.59 ug/L	501.59 ppb	22:24:48
2	Ti 334.940†	301532.0	258768.0	494.72 ug/L	494.72 ppb	22:24:28
2	Tl 190.801†	1327.0	1156.4	502.04 ug/L	502.04 ppb	22:24:48
2	U 409.014†	16331.7	15793.0	535.34 ug/L	535.34 ppb	22:24:28
2	V 292.402†	64208.2	56260.3	511.79 ug/L	511.79 ppb	22:24:28
2	Zn 213.857†	44623.0	37480.0	495.75 ug/L	495.75 ppb	22:24:28
2	SiO2†	142255.2	121123.5	10647 ug/L	10647 ppb	22:25:30
3	Sc Radial	4350.8	4350.8	115 %		22:23:45
3	Y RADIAL	4651.9	4651.9	113.9 %		22:23:24
3	Al 396.153Radial†	5020.2	4443.7	5263.6 ug/L	5263.6 ppb	22:23:24
3	Ca 317.933Radial†	2715.8	2342.6	5248.3 ug/L	5248.3 ppb	22:23:45
3	Fe 238.204 Radial†	453.4	386.3	5121.7 ug/L	5121.7 ppb	22:23:45
3	K 766.490 Radial†	28182.7	22058.8	4865.7 ug/L	4865.7 ppb	22:23:24
3	Mg 279.077 IEC†	126.7	107.5	5085.7 ug/L	5085.7 ppb	22:23:45
3	Na 589.592 Radial†	13430.2	12079.3	4857.5 ug/L	4857.5 ppb	22:23:24
3	Sr 421.552†	61587.3	53581.9	486.41 ug/L	486.41 ppb	22:23:24
3	Sc 361.383	847720.4	847720.4	115.68 %		22:24:54
3	Y 371.029	689626.0	689626.0	114.10 %		22:24:54
3	Ag 328.068†	99085.1	85501.2	489.56 ug/L	489.56 ppb	22:24:59
3	As 188.979†	941.4	836.1	511.85 ug/L	511.85 ppb	22:25:19
3	B 249.677†	18952.4	16718.2	500.93 ug/L	500.93 ppb	22:24:59
3	Ba 233.527†	55942.9	48356.8	508.09 ug/L	508.09 ppb	22:24:59
3	Be 313.107†	1264049.2	1096589.3	513.08 ug/L	513.08 ppb	22:24:54
3	Cd 226.502†	35244.5	30638.0	497.72 ug/L	497.72 ppb	22:24:59
3	Co 228.616†	20155.0	17469.5	502.07 ug/L	502.07 ppb	22:24:59
3	Cr 267.716†	37826.8	32604.0	500.21 ug/L	500.21 ppb	22:24:59
3	Cu 324.752†	169006.7	140379.6	501.10 ug/L	501.10 ppb	22:24:59
3	Mn 257.610†	400964.9	346185.5	505.57 ug/L	505.57 ppb	22:24:54
3	Mo 202.031†	5715.9	4924.3	497.72 ug/L	497.72 ppb	22:25:19
3	Ni 231.604†	16609.3	14275.2	511.87 ug/L	511.87 ppb	22:24:59
3	P 214.914†	1010.4	685.0	456.09 ug/L	456.09 ppb	22:25:19
3	Pb 220.353†	3298.8	2900.7	503.21 ug/L	503.21 ppb	22:25:19
3	S 181.975 Axial†	3073.6	2629.8	5112.9 ug/L	5112.9 ppb	22:25:19
3	Sb 206.836†	1335.0	1128.4	541.37 ug/L	541.37 ppb	22:25:19
3	Se 196.026†	618.7	556.5	517.30 ug/L	517.30 ppb	22:25:19
3	Si 251.611†	137685.0	118565.0	4892.1 ug/L	4892.1 ppb	22:24:59
3	Sn 189.927†	2324.3	1995.6	506.57 ug/L	506.57 ppb	22:25:19
3	Ti 334.940†	294996.0	256051.3	489.54 ug/L	489.54 ppb	22:24:59
3	Tl 190.801†	1321.9	1165.0	505.71 ug/L	505.71 ppb	22:25:19
3	U 409.014†	15747.6	15446.9	523.57 ug/L	523.57 ppb	22:24:59
3	V 292.402†	62970.9	55815.3	507.81 ug/L	507.81 ppb	22:24:59
3	Zn 213.857†	43911.0	37298.7	493.34 ug/L	493.34 ppb	22:24:59
3	SiO2†	140817.0	121264.2	10659 ug/L	10659 ppb	22:25:35

Mean Data: 1202056809|959089|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	849240.1	115.89 %		1.021			0.88%
Sc Radial	4292.3	113 %		1.4			1.20%
Y 371.029	690842.7	114.30 %		1.080			0.95%
Y RADIAL	4740.7	116.1 %		1.89			1.63%
Ag 328.068†	86328.2	494.26 ug/L		4.561	494.26 ppb	4.561	0.92%
Al 396.153Radial†	4534.6	5371.7 ug/L		119.71	5371.7 ppb	119.71	2.23%
As 188.979†	838.4	513.27 ug/L		4.731	513.27 ppb	4.731	0.92%
B 249.677†	16881.0	505.83 ug/L		4.472	505.83 ppb	4.472	0.88%
Ba 233.527†	48739.3	512.11 ug/L		4.527	512.11 ppb	4.527	0.88%
Be 313.107†	1091638.1	510.78 ug/L		2.608	510.78 ppb	2.608	0.51%
Ca 317.933Radial†	2334.1	5229.3 ug/L		34.56	5229.3 ppb	34.56	0.66%
Cd 226.502†	30806.7	500.47 ug/L		4.656	500.47 ppb	4.656	0.93%
Co 228.616†	17588.0	505.47 ug/L		5.094	505.47 ppb	5.094	1.01%
Cr 267.716†	32814.8	503.44 ug/L		4.399	503.44 ppb	4.399	0.87%
Cu 324.752†	142186.4	507.54 ug/L		5.646	507.54 ppb	5.646	1.11%
Fe 238.204 Radial†	382.5	5072.2 ug/L		60.52	5072.2 ppb	60.52	1.19%
K 766.490 Radial†	22397.6	4940.5 ug/L		94.09	4940.5 ppb	94.09	1.90%

Mg 279.077 IEC†	109.5	5180.0 ug/L	84.08	5180.0 ppb	84.08	1.62%
Mn 257.610†	344832.8	503.59 ug/L	2.766	503.59 ppb	2.766	0.55%
Mo 202.031†	4942.0	499.50 ug/L	5.316	499.50 ppb	5.316	1.06%
Na 589.592 Radial†	12359.2	4970.0 ug/L	107.10	4970.0 ppb	107.10	2.15%
Ni 231.604†	14353.1	514.66 ug/L	3.790	514.66 ppb	3.790	0.74%
P 214.914†	690.5	459.34 ug/L	4.836	459.34 ppb	4.836	1.05%
Pb 220.353†	2907.8	504.47 ug/L	4.315	504.47 ppb	4.315	0.86%
S 181.975 Axial†	2634.7	5122.2 ug/L	47.10	5122.2 ppb	47.10	0.92%
Sb 206.836†	1126.3	540.44 ug/L	3.283	540.44 ppb	3.283	0.61%
Se 196.026†	554.3	515.18 ug/L	7.717	515.18 ppb	7.717	1.50%
Si 251.611†	119710.8	4939.5 ug/L	44.91	4939.5 ppb	44.91	0.91%
Sn 189.927†	1994.9	506.40 ug/L	4.732	506.40 ppb	4.732	0.93%
Sr 421.552†	54718.3	496.73 ug/L	10.840	496.73 ppb	10.840	2.18%
Ti 334.940†	258474.3	494.16 ug/L	4.369	494.16 ppb	4.369	0.88%
Tl 190.801†	1164.8	505.64 ug/L	3.568	505.64 ppb	3.568	0.71%
U 409.014†	15581.6	528.15 ug/L	6.304	528.15 ppb	6.304	1.19%
V 292.402†	56310.4	512.29 ug/L	4.750	512.29 ppb	4.750	0.93%
Zn 213.857†	37581.3	497.10 ug/L	4.579	497.10 ppb	4.579	0.92%
SiO2†	120562.9	10598 ug/L	96.5	10598 ppb	96.5	0.91%

Sequence No.: 36

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 3/26/2010 23:02:27

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	4285.2	4285.2	113 %		23:04:39
1	Y RADIAL	4602.1	4602.1	112.7 %		23:04:19
1	Al 396.153Radial†	4790.2	4307.3	5100.8 ug/L	5100.8 ppb	23:04:19
1	Ca 317.933Radial†	2670.3	2338.6	5239.4 ug/L	5239.4 ppb	23:04:39
1	Fe 238.204 Radial†	443.4	383.5	5084.9 ug/L	5084.9 ppb	23:04:39
1	K 766.490 Radial†	27346.6	21695.3	4783.7 ug/L	4783.7 ppb	23:04:19
1	Mg 279.077 IEC†	126.3	108.9	5148.5 ug/L	5148.5 ppb	23:04:39
1	Na 589.592 Radial†	26012.9	23381.2	9402.3 ug/L	9402.3 ppb	23:04:19
1	Sr 421.552†	59277.5	52360.9	475.33 ug/L	475.33 ppb	23:04:19
1	Sc 361.383	834302.6	834302.6	113.85 %		23:05:36
1	Y 371.029	679064.9	679064.9	112.35 %		23:05:36
1	Ag 328.068†	100861.0	88438.5	506.27 ug/L	506.27 ppb	23:05:41
1	As 188.979†	927.5	837.0	512.39 ug/L	512.39 ppb	23:06:01
1	B 249.677†	18470.8	16558.7	496.11 ug/L	496.11 ppb	23:05:41
1	Ba 233.527†	54485.1	47854.1	502.82 ug/L	502.82 ppb	23:05:41
1	Be 313.107†	1232739.8	1086662.3	508.46 ug/L	508.46 ppb	23:05:36
1	Cd 226.502†	35170.8	31063.3	504.63 ug/L	504.63 ppb	23:05:41
1	Co 228.616†	20238.7	17823.3	512.24 ug/L	512.24 ppb	23:05:41
1	Cr 267.716†	37405.8	32760.1	502.61 ug/L	502.61 ppb	23:05:41
1	Cu 324.752†	164403.0	138685.6	495.06 ug/L	495.06 ppb	23:05:41
1	Mn 257.610†	386284.2	338865.2	494.88 ug/L	494.88 ppb	23:05:41
1	Mo 202.031†	5725.1	5011.8	506.56 ug/L	506.56 ppb	23:06:01
1	Ni 231.604†	16309.1	14242.5	510.69 ug/L	510.69 ppb	23:05:41
1	P 214.914†	3770.0	3122.9	2427.9 ug/L	2427.9 ppb	23:06:01
1	Pb 220.353†	3265.9	2917.7	506.15 ug/L	506.15 ppb	23:06:01
1	S 181.975 Axial†	636.3	531.7	1033.1 ug/L	1033.1 ppb	23:06:01
1	Sb 206.836†	1270.9	1090.6	524.05 ug/L	524.05 ppb	23:06:01
1	Se 196.026†	615.7	562.6	522.62 ug/L	522.62 ppb	23:06:01
1	Si 251.611†	70299.2	61291.3	2525.9 ug/L	2525.9 ppb	23:05:41
1	Sn 189.927†	2291.3	1998.9	507.41 ug/L	507.41 ppb	23:06:01
1	Ti 334.940†	293483.1	258823.7	494.84 ug/L	494.84 ppb	23:05:41
1	Tl 190.801†	1324.9	1186.0	514.71 ug/L	514.71 ppb	23:06:01
1	U 409.014†	14845.1	14873.2	504.06 ug/L	504.06 ppb	23:05:41
1	V 292.402†	61987.3	55826.8	508.00 ug/L	508.00 ppb	23:05:41
1	Zn 213.857†	43848.1	37854.0	500.78 ug/L	500.78 ppb	23:05:41
1	SiO2†	71398.5	62248.6	5464.9 ug/L	5464.9 ppb	23:07:08
2	Sc Radial	4311.7	4311.7	114 %		23:05:04
2	Y RADIAL	4723.0	4723.0	115.7 %		23:04:44
2	Al 396.153Radial†	4936.3	4409.6	5222.4 ug/L	5222.4 ppb	23:04:44
2	Ca 317.933Radial†	2683.5	2335.6	5232.7 ug/L	5232.7 ppb	23:05:04
2	Fe 238.204 Radial†	442.8	380.5	5045.9 ug/L	5045.9 ppb	23:05:04
2	K 766.490 Radial†	28017.4	22135.9	4880.9 ug/L	4880.9 ppb	23:04:44
2	Mg 279.077 IEC†	128.2	109.8	5192.5 ug/L	5192.5 ppb	23:05:04
2	Na 589.592 Radial†	26668.1	23815.3	9576.8 ug/L	9576.8 ppb	23:04:44
2	Sr 421.552†	61110.5	53648.7	487.02 ug/L	487.02 ppb	23:04:44
2	Sc 361.383	828430.8	828430.8	113.05 %		23:06:07
2	Y 371.029	674633.3	674633.3	111.62 %		23:06:07
2	Ag 328.068†	100382.4	88643.1	507.43 ug/L	507.43 ppb	23:06:12
2	As 188.979†	943.1	856.5	524.28 ug/L	524.28 ppb	23:06:32
2	B 249.677†	18382.9	16595.9	497.24 ug/L	497.24 ppb	23:06:12
2	Ba 233.527†	54104.0	47856.3	502.84 ug/L	502.84 ppb	23:06:12
2	Be 313.107†	1226341.5	1088677.0	509.41 ug/L	509.41 ppb	23:06:07
2	Cd 226.502†	34830.3	30981.0	503.29 ug/L	503.29 ppb	23:06:12
2	Co 228.616†	20074.7	17804.2	511.70 ug/L	511.70 ppb	23:06:12
2	Cr 267.716†	37188.9	32801.2	503.23 ug/L	503.23 ppb	23:06:12
2	Cu 324.752†	164040.2	139388.2	497.56 ug/L	497.56 ppb	23:06:12
2	Mn 257.610†	384013.2	339261.1	495.45 ug/L	495.45 ppb	23:06:12
2	Mo 202.031†	5713.7	5037.4	509.13 ug/L	509.13 ppb	23:06:32
2	Ni 231.604†	16212.8	14258.8	511.27 ug/L	511.27 ppb	23:06:12

2	P 214.914†	3756.5	3134.4	2436.8 ug/L	2436.8 ppb	23:06:32
2	Pb 220.353†	3232.3	2908.3	504.56 ug/L	504.56 ppb	23:06:32
2	S 181.975 Axial†	626.9	527.4	1024.6 ug/L	1024.6 ppb	23:06:32
2	Sb 206.836†	1280.1	1106.7	531.54 ug/L	531.54 ppb	23:06:32
2	Se 196.026†	614.9	565.7	525.36 ug/L	525.36 ppb	23:06:32
2	Si 251.611†	69801.4	61288.6	2525.7 ug/L	2525.7 ppb	23:06:12
2	Sn 189.927†	2277.5	2001.0	507.95 ug/L	507.95 ppb	23:06:32
2	Ti 334.940†	292224.0	259537.1	496.20 ug/L	496.20 ppb	23:06:12
2	Tl 190.801†	1317.0	1187.2	515.26 ug/L	515.26 ppb	23:06:32
2	U 409.014†	14677.0	14816.8	502.14 ug/L	502.14 ppb	23:06:12
2	V 292.402†	61471.5	55756.5	507.40 ug/L	507.40 ppb	23:06:12
2	Zn 213.857†	43626.4	37930.8	501.80 ug/L	501.80 ppb	23:06:12
2	SiO2†	71826.3	63071.5	5537.3 ug/L	5537.3 ppb	23:07:13
3	Sc Radial	4257.9	4257.9	112 %		23:05:29
3	Y RADIAL	4842.5	4842.5	118.6 %		23:05:09
3	Al 396.153Radial†	5038.4	4555.2	5395.7 ug/L	5395.7 ppb	23:05:09
3	Ca 317.933Radial†	2648.3	2334.1	5229.3 ug/L	5229.3 ppb	23:05:29
3	Fe 238.204 Radial†	440.9	383.8	5089.1 ug/L	5089.1 ppb	23:05:29
3	K 766.490 Radial†	28419.6	22804.7	5028.4 ug/L	5028.4 ppb	23:05:09
3	Mg 279.077 IEC†	126.3	109.5	5180.5 ug/L	5180.5 ppb	23:05:29
3	Na 589.592 Radial†	27409.7	24771.1	9961.2 ug/L	9961.2 ppb	23:05:09
3	Sr 421.552†	62661.4	55706.8	505.70 ug/L	505.70 ppb	23:05:09
3	Sc 361.383	844823.9	844823.9	115.29 %		23:06:38
3	Y 371.029	687249.5	687249.5	113.70 %		23:06:38
3	Ag 328.068†	102513.2	88768.4	508.16 ug/L	508.16 ppb	23:06:43
3	As 188.979†	954.5	850.2	520.46 ug/L	520.46 ppb	23:07:03
3	B 249.677†	18906.3	16734.4	501.39 ug/L	501.39 ppb	23:06:43
3	Ba 233.527†	55342.4	48001.8	504.37 ug/L	504.37 ppb	23:06:43
3	Be 313.107†	1251781.0	1089694.0	509.88 ug/L	509.88 ppb	23:06:38
3	Cd 226.502†	35606.2	31056.2	504.51 ug/L	504.51 ppb	23:06:43
3	Co 228.616†	20552.7	17874.3	513.71 ug/L	513.71 ppb	23:06:43
3	Cr 267.716†	37938.8	32813.3	503.42 ug/L	503.42 ppb	23:06:43
3	Cu 324.752†	167503.9	139577.0	498.24 ug/L	498.24 ppb	23:06:43
3	Mn 257.610†	392536.1	340062.7	496.63 ug/L	496.63 ppb	23:06:43
3	Mo 202.031†	5823.6	5034.6	508.86 ug/L	508.86 ppb	23:07:03
3	Ni 231.604†	16517.7	14245.0	510.78 ug/L	510.78 ppb	23:06:43
3	P 214.914†	3817.8	3123.1	2427.5 ug/L	2427.5 ppb	23:07:03
3	Pb 220.353†	3302.3	2913.5	505.50 ug/L	505.50 ppb	23:07:03
3	S 181.975 Axial†	644.9	532.2	1034.0 ug/L	1034.0 ppb	23:07:03
3	Sb 206.836†	1278.9	1083.7	520.84 ug/L	520.84 ppb	23:07:03
3	Se 196.026†	627.6	566.1	525.93 ug/L	525.93 ppb	23:07:03
3	Si 251.611†	71526.0	61586.4	2538.1 ug/L	2538.1 ppb	23:06:43
3	Sn 189.927†	2316.6	1995.8	506.61 ug/L	506.61 ppb	23:07:03
3	Ti 334.940†	298851.2	260269.7	497.60 ug/L	497.60 ppb	23:06:43
3	Tl 190.801†	1326.5	1172.8	509.07 ug/L	509.07 ppb	23:07:03
3	U 409.014†	15196.0	15015.1	508.88 ug/L	508.88 ppb	23:06:43
3	V 292.402†	62988.2	56017.0	509.74 ug/L	509.74 ppb	23:06:43
3	Zn 213.857†	44417.8	37868.4	500.97 ug/L	500.97 ppb	23:06:43
3	SiO2†	72224.0	62183.6	5459.1 ug/L	5459.1 ppb	23:07:19

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	835852.5	114.06 %	1.133			0.99%
Sc Radial	4284.9	113 %	0.7			0.63%
Y 371.029	680315.9	112.56 %	1.059			0.94%
Y RADIAL	4722.5	115.7 %	2.94			2.55%
Ag 328.068†	88616.7	507.29 ug/L	0.949	507.29 ppb	0.949	0.19%
QC value within limits for Ag 328.068 Recovery = 101.46%						
Al 396.153Radial†	4424.0	5239.7 ug/L	148.20	5239.7 ppb	148.20	2.83%
QC value within limits for Al 396.153Radial Recovery = 104.79%						
As 188.979†	847.9	519.04 ug/L	6.071	519.04 ppb	6.071	1.17%
QC value within limits for As 188.979 Recovery = 103.81%						
B 249.677†	16629.7	498.24 ug/L	2.782	498.24 ppb	2.782	0.56%
QC value within limits for B 249.677 Recovery = 99.65%						
Ba 233.527†	47904.1	503.34 ug/L	0.890	503.34 ppb	0.890	0.18%
QC value within limits for Ba 233.527 Recovery = 100.67%						
Be 313.107†	1088344.4	509.25 ug/L	0.723	509.25 ppb	0.723	0.14%
QC value within limits for Be 313.107 Recovery = 101.85%						
Ca 317.933Radial†	2336.1	5233.8 ug/L	5.12	5233.8 ppb	5.12	0.10%

QC value within limits for Ca 317.933 Radial Recovery = 104.68%

Cd 226.502†	31033.5	504.14 ug/L	0.738	504.14 ppb	0.738	0.15%
QC value within limits for Cd 226.502 Recovery = 100.83%						
Co 228.616†	17833.9	512.55 ug/L	1.039	512.55 ppb	1.039	0.20%
QC value within limits for Co 228.616 Recovery = 102.51%						
Cr 267.716†	32791.5	503.09 ug/L	0.426	503.09 ppb	0.426	0.08%
QC value within limits for Cr 267.716 Recovery = 100.62%						
Cu 324.752†	139216.9	496.95 ug/L	1.676	496.95 ppb	1.676	0.34%
QC value within limits for Cu 324.752 Recovery = 99.39%						
Fe 238.204 Radial†	382.6	5073.3 ug/L	23.81	5073.3 ppb	23.81	0.47%
QC value within limits for Fe 238.204 Radial Recovery = 101.47%						
K 766.490 Radial†	22211.9	4897.7 ug/L	123.21	4897.7 ppb	123.21	2.52%
QC value within limits for K 766.490 Radial Recovery = 97.95%						
Mg 279.077 IEC†	109.4	5173.8 ug/L	22.74	5173.8 ppb	22.74	0.44%
QC value within limits for Mg 279.077 IEC Recovery = 103.48%						
Mn 257.610†	339396.3	495.65 ug/L	0.891	495.65 ppb	0.891	0.18%
QC value within limits for Mn 257.610 Recovery = 99.13%						
Mo 202.031†	5028.0	508.18 ug/L	1.416	508.18 ppb	1.416	0.28%
QC value within limits for Mo 202.031 Recovery = 101.64%						
Na 589.592 Radial†	23989.2	9646.8 ug/L	285.95	9646.8 ppb	285.95	2.96%
QC value within limits for Na 589.592 Radial Recovery = 96.47%						
Ni 231.604†	14248.7	510.91 ug/L	0.315	510.91 ppb	0.315	0.06%
QC value within limits for Ni 231.604 Recovery = 102.18%						
P 214.914†	3126.8	2430.7 ug/L	5.24	2430.7 ppb	5.24	0.22%
QC value within limits for P 214.914 Recovery = 97.23%						
Pb 220.353†	2913.2	505.40 ug/L	0.801	505.40 ppb	0.801	0.16%
QC value within limits for Pb 220.353 Recovery = 101.08%						
S 181.975 Axial†	530.5	1030.5 ug/L	5.18	1030.5 ppb	5.18	0.50%
QC value within limits for S 181.975 Axial Recovery = 103.05%						
Sb 206.836†	1093.7	525.48 ug/L	5.491	525.48 ppb	5.491	1.04%
QC value within limits for Sb 206.836 Recovery = 105.10%						
Se 196.026†	564.8	524.64 ug/L	1.771	524.64 ppb	1.771	0.34%
QC value within limits for Se 196.026 Recovery = 104.93%						
Si 251.611†	61388.7	2529.9 ug/L	7.06	2529.9 ppb	7.06	0.28%
QC value within limits for Si 251.611 Recovery = 101.20%						
Sn 189.927†	1998.5	507.32 ug/L	0.670	507.32 ppb	0.670	0.13%
QC value within limits for Sn 189.927 Recovery = 101.46%						
Sr 421.552†	53905.5	489.35 ug/L	15.322	489.35 ppb	15.322	3.13%
QC value within limits for Sr 421.552 Recovery = 97.87%						
Ti 334.940†	259543.5	496.22 ug/L	1.379	496.22 ppb	1.379	0.28%
QC value within limits for Ti 334.940 Recovery = 99.24%						
Tl 190.801†	1182.0	513.01 ug/L	3.426	513.01 ppb	3.426	0.67%
QC value within limits for Tl 190.801 Recovery = 102.60%						
U 409.014†	14901.7	505.03 ug/L	3.471	505.03 ppb	3.471	0.69%
QC value within limits for U 409.014 Recovery = 101.01%						
V 292.402†	55866.8	508.38 ug/L	1.216	508.38 ppb	1.216	0.24%
QC value within limits for V 292.402 Recovery = 101.68%						
Zn 213.857†	37884.4	501.18 ug/L	0.546	501.18 ppb	0.546	0.11%
QC value within limits for Zn 213.857 Recovery = 100.24%						
SiO2†	62501.2	5487.1 ug/L	43.54	5487.1 ppb	43.54	0.79%
QC value within limits for SiO2 Recovery = 102.61%						

All analyte(s) passed QC.

Sequence No.: 37

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 3/26/2010 23:09:28

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	4155.5	4155.5	110 %		23:11:40
1	Y RADIAL	4622.6	4622.6	113.2 %		23:11:20
1	Al 396.153Radial†	-62.4	16.0	19.055 ug/L	19.055 ppb	23:11:40
1	Ca 317.933Radial†	29.8	5.2	11.733 ug/L	11.733 ppb	23:11:40
1	Fe 238.204 Radial†	6.5	-2.5	-33.139 ug/L	-33.139 ppb	23:11:40
1	K 766.490 Radial†	2476.7	-220.9	-48.748 ug/L	-48.748 ppb	23:11:20
1	Mg 279.077 IEC†	2.1	-0.9	-43.570 ug/L	-43.570 ppb	23:11:40
1	Na 589.592 Radial†	-624.1	-182.6	-73.422 ug/L	-73.422 ppb	23:11:20
1	Sr 421.552†	45.8	2.5	0.0223 ug/L	0.0223 ppb	23:11:20
1	Sc 361.383	821266.7	821266.7	112.07 %		23:12:37
1	Y 371.029	674762.1	674762.1	111.64 %		23:12:37
1	Ag 328.068†	166.3	-3.8	-0.0310 ug/L	-0.0310 ppb	23:12:37
1	As 188.979†	-23.3	1.5	0.9258 ug/L	0.9258 ppb	23:12:57
1	B 249.677†	-169.1	184.1	5.5459 ug/L	5.5459 ppb	23:12:57
1	Ba 233.527†	14.0	9.9	0.1052 ug/L	0.1052 ppb	23:12:57
1	Be 313.107†	-4097.9	235.1	0.1104 ug/L	0.1104 ppb	23:12:37
1	Cd 226.502†	-168.7	20.6	0.3393 ug/L	0.3393 ppb	23:12:57
1	Co 228.616†	-37.3	13.5	0.3854 ug/L	0.3854 ppb	23:12:57
1	Cr 267.716†	107.4	0.8	0.0082 ug/L	0.0082 ppb	23:12:57
1	Cu 324.752†	5952.5	-405.6	-1.4522 ug/L	-1.4522 ppb	23:12:37
1	Mn 257.610†	458.5	-16.4	-0.0255 ug/L	-0.0255 ppb	23:12:57
1	Mo 202.031†	12.9	-5.2	-0.5306 ug/L	-0.5306 ppb	23:12:57
1	Ni 231.604†	82.3	-9.1	-0.3257 ug/L	-0.3257 ppb	23:12:57
1	P 214.914†	187.3	-21.3	-16.896 ug/L	-16.896 ppb	23:12:57
1	Pb 220.353†	-48.8	5.5	0.9602 ug/L	0.9602 ppb	23:12:57
1	S 181.975 Axial†	23.4	-6.3	-12.158 ug/L	-12.158 ppb	23:12:57
1	Sb 206.836†	27.1	-1.4	-0.6771 ug/L	-0.6771 ppb	23:12:57
1	Se 196.026†	-24.1	0.3	0.1456 ug/L	0.1456 ppb	23:12:57
1	Si 251.611†	465.5	-40.4	-1.6611 ug/L	-1.6611 ppb	23:12:57
1	Sn 189.927†	16.2	0.8	0.2171 ug/L	0.2171 ppb	23:12:57
1	Ti 334.940†	-1019.5	134.6	0.2606 ug/L	0.2606 ppb	23:12:37
1	Tl 190.801†	-19.3	5.0	2.1751 ug/L	2.1751 ppb	23:12:57
1	U 409.014†	-1910.8	129.0	4.3912 ug/L	4.3912 ppb	23:12:37
1	V 292.402†	-1402.1	129.5	1.1672 ug/L	1.1672 ppb	23:12:37
1	Zn 213.857†	611.4	-114.3	-1.5173 ug/L	-1.5173 ppb	23:12:57
1	SiO2†	488.6	-28.0	-2.4537 ug/L	-2.4537 ppb	23:14:08
2	Sc Radial	4204.2	4204.2	111 %		23:12:05
2	Y RADIAL	4571.1	4571.1	112.0 %		23:11:45
2	Al 396.153Radial†	-76.0	4.4	5.2640 ug/L	5.2640 ppb	23:12:05
2	Ca 317.933Radial†	22.7	-1.5	-3.3849 ug/L	-3.3849 ppb	23:12:05
2	Fe 238.204 Radial†	8.6	-0.7	-9.5198 ug/L	-9.5198 ppb	23:12:05
2	K 766.490 Radial†	2515.5	-212.1	-46.804 ug/L	-46.804 ppb	23:11:45
2	Mg 279.077 IEC†	1.2	-1.7	-81.106 ug/L	-81.106 ppb	23:12:05
2	Na 589.592 Radial†	-563.0	-120.9	-48.622 ug/L	-48.622 ppb	23:11:45
2	Sr 421.552†	69.5	23.4	0.2122 ug/L	0.2122 ppb	23:11:45
2	Sc 361.383	804056.6	804056.6	109.72 %		23:13:02
2	Y 371.029	661231.6	661231.6	109.40 %		23:13:02
2	Ag 328.068†	140.9	-23.8	-0.1362 ug/L	-0.1362 ppb	23:13:02
2	As 188.979†	-17.0	6.8	4.1327 ug/L	4.1327 ppb	23:13:22
2	B 249.677†	-159.8	189.4	5.7008 ug/L	5.7008 ppb	23:13:22
2	Ba 233.527†	16.6	12.6	0.1336 ug/L	0.1336 ppb	23:13:22
2	Be 313.107†	-4082.8	170.6	0.0801 ug/L	0.0801 ppb	23:13:02
2	Cd 226.502†	-162.2	23.4	0.3806 ug/L	0.3806 ppb	23:13:22
2	Co 228.616†	-50.5	0.7	0.0170 ug/L	0.0170 ppb	23:13:22
2	Cr 267.716†	101.8	-2.3	-0.0356 ug/L	-0.0356 ppb	23:13:22
2	Cu 324.752†	5912.9	-328.0	-1.1724 ug/L	-1.1724 ppb	23:13:02
2	Mn 257.610†	458.5	-7.7	-0.0088 ug/L	-0.0088 ppb	23:13:22
2	Mo 202.031†	7.9	-9.5	-0.9619 ug/L	-0.9619 ppb	23:13:22
2	Ni 231.604†	82.9	-7.0	-0.2513 ug/L	-0.2513 ppb	23:13:22

2	P 214.914†	187.5	-17.5	-13.944 ug/L	-13.944 ppb	23:13:22
2	Pb 220.353†	-63.4	-8.7	-1.5002 ug/L	-1.5002 ppb	23:13:22
2	S 181.975 Axial†	27.6	-2.0	-3.8484 ug/L	-3.8484 ppb	23:13:22
2	Sb 206.836†	17.8	-9.4	-4.4080 ug/L	-4.4080 ppb	23:13:22
2	Se 196.026†	-20.1	3.4	3.0155 ug/L	3.0155 ppb	23:13:22
2	Si 251.611†	487.2	-11.7	-0.4715 ug/L	-0.4715 ppb	23:13:22
2	Sn 189.927†	7.6	-6.7	-1.6984 ug/L	-1.6984 ppb	23:13:22
2	Ti 334.940†	-1039.8	96.6	0.1902 ug/L	0.1902 ppb	23:13:02
2	Tl 190.801†	-29.6	-4.7	-2.0239 ug/L	-2.0239 ppb	23:13:22
2	U 409.014†	-1955.2	52.1	1.7725 ug/L	1.7725 ppb	23:13:02
2	V 292.402†	-1408.0	97.4	0.8636 ug/L	0.8636 ppb	23:13:02
2	Zn 213.857†	591.6	-120.6	-1.6059 ug/L	-1.6059 ppb	23:13:22
2	SiO2†	500.3	-8.0	-0.6821 ug/L	-0.6821 ppb	23:14:28
3	Sc Radial	4112.8	4112.8	109 %		23:12:30
3	Y RADIAL	4492.2	4492.2	110.0 %		23:12:10
3	Al 396.153Radial†	-69.1	9.3	11.039 ug/L	11.039 ppb	23:12:30
3	Ca 317.933Radial†	25.2	1.2	2.7892 ug/L	2.7892 ppb	23:12:30
3	Fe 238.204 Radial†	8.7	-0.5	-6.3075 ug/L	-6.3075 ppb	23:12:30
3	K 766.490 Radial†	2524.6	-153.3	-33.811 ug/L	-33.811 ppb	23:12:10
3	Mg 279.077 IEC†	-0.2	-3.0	-142.38 ug/L	-142.38 ppb	23:12:30
3	Na 589.592 Radial†	-678.3	-238.5	-95.891 ug/L	-95.891 ppb	23:12:10
3	Sr 421.552†	37.8	-4.4	-0.0403 ug/L	-0.0403 ppb	23:12:10
3	Sc 361.383	817977.2	817977.2	111.62 %		23:13:27
3	Y 371.029	672221.2	672221.2	111.22 %		23:13:27
3	Ag 328.068†	114.6	-49.5	-0.2848 ug/L	-0.2848 ppb	23:13:27
3	As 188.979†	-24.3	0.6	0.3388 ug/L	0.3388 ppb	23:13:47
3	B 249.677†	-163.0	189.0	5.6873 ug/L	5.6873 ppb	23:13:47
3	Ba 233.527†	8.8	5.3	0.0582 ug/L	0.0582 ppb	23:13:47
3	Be 313.107†	-4111.9	207.9	0.0975 ug/L	0.0975 ppb	23:13:27
3	Cd 226.502†	-157.7	29.9	0.4876 ug/L	0.4876 ppb	23:13:47
3	Co 228.616†	-40.3	10.6	0.3023 ug/L	0.3023 ppb	23:13:47
3	Cr 267.716†	114.2	7.2	0.1091 ug/L	0.1091 ppb	23:13:47
3	Cu 324.752†	5922.8	-410.8	-1.4706 ug/L	-1.4706 ppb	23:13:27
3	Mn 257.610†	421.0	-48.4	-0.0654 ug/L	-0.0654 ppb	23:13:47
3	Mo 202.031†	13.2	-5.0	-0.5016 ug/L	-0.5016 ppb	23:13:47
3	Ni 231.604†	86.3	-5.3	-0.1890 ug/L	-0.1890 ppb	23:13:47
3	P 214.914†	189.6	-18.6	-14.725 ug/L	-14.725 ppb	23:13:47
3	Pb 220.353†	-62.0	-6.5	-1.1169 ug/L	-1.1169 ppb	23:13:47
3	S 181.975 Axial†	32.8	2.3	4.4821 ug/L	4.4821 ppb	23:13:47
3	Sb 206.836†	29.6	0.9	0.3818 ug/L	0.3818 ppb	23:13:47
3	Se 196.026†	-26.6	-2.1	-1.9196 ug/L	-1.9196 ppb	23:13:47
3	Si 251.611†	489.8	-16.9	-0.6926 ug/L	-0.6926 ppb	23:13:47
3	Sn 189.927†	10.9	-3.8	-0.9724 ug/L	-0.9724 ppb	23:13:47
3	Ti 334.940†	-1038.8	113.7	0.2264 ug/L	0.2264 ppb	23:13:27
3	Tl 190.801†	-21.1	3.4	1.4651 ug/L	1.4651 ppb	23:13:47
3	U 409.014†	-1827.9	196.4	6.6790 ug/L	6.6790 ppb	23:13:27
3	V 292.402†	-1407.4	119.8	1.0789 ug/L	1.0789 ppb	23:13:27
3	Zn 213.857†	611.3	-112.2	-1.4934 ug/L	-1.4934 ppb	23:13:47
3	SiO2†	484.1	-30.3	-2.6507 ug/L	-2.6507 ppb	23:14:48

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	814433.5	111.14 %		1.247			1.12%
Sc Radial	4157.5	110 %		1.2			1.10%
Y 371.029	669405.0	110.75 %		1.190			1.07%
Y RADIAL	4562.0	111.7 %		1.61			1.44%
Ag 328.068†	-25.7	-0.1506 ug/L		0.12751	-0.1506 ppb	0.12751	84.65%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	9.9	11.786 ug/L		6.9260	11.786 ppb	6.9260	58.76%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	3.0	1.7991 ug/L		2.04215	1.7991 ppb	2.04215	113.51%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	187.5	5.6447 ug/L		0.08578	5.6447 ppb	0.08578	1.52%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	9.3	0.0990 ug/L		0.03808	0.0990 ppb	0.03808	38.46%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	204.5	0.0960 ug/L		0.01521	0.0960 ppb	0.01521	15.84%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	1.7	3.7123 ug/L		7.60105	3.7123 ppb	7.60105	204.75%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated									
Cd 226.502†	24.6	0.4025 ug/L	0.07655	0.4025 ppb	0.07655	19.02%			
QC value within limits for Cd 226.502 Recovery = Not calculated									
Co 228.616†	8.2	0.2349 ug/L	0.19322	0.2349 ppb	0.19322	82.27%			
QC value within limits for Co 228.616 Recovery = Not calculated									
Cr 267.716†	1.9	0.0272 ug/L	0.07420	0.0272 ppb	0.07420	272.35%			
QC value within limits for Cr 267.716 Recovery = Not calculated									
Cu 324.752†	-381.5	-1.3651 ug/L	0.16712	-1.3651 ppb	0.16712	12.24%			
QC value within limits for Cu 324.752 Recovery = Not calculated									
Fe 238.204 Radial†	-1.2	-16.322 ug/L	14.6523	-16.322 ppb	14.6523	89.77%			
QC value within limits for Fe 238.204 Radial Recovery = Not calculated									
K 766.490 Radial†	-195.4	-43.121 ug/L	8.1213	-43.121 ppb	8.1213	18.83%			
QC value within limits for K 766.490 Radial Recovery = Not calculated									
Mg 279.077 IEC†	-1.9	-89.019 ug/L	49.8777	-89.019 ppb	49.8777	56.03%			
QC value within limits for Mg 279.077 IEC Recovery = Not calculated									
Mn 257.610†	-24.2	-0.0332 ug/L	0.02910	-0.0332 ppb	0.02910	87.55%			
QC value within limits for Mn 257.610 Recovery = Not calculated									
Mo 202.031†	-6.6	-0.6647 ug/L	0.25776	-0.6647 ppb	0.25776	38.78%			
QC value within limits for Mo 202.031 Recovery = Not calculated									
Na 589.592 Radial†	-180.7	-72.645 ug/L	23.6443	-72.645 ppb	23.6443	32.55%			
QC value within limits for Na 589.592 Radial Recovery = Not calculated									
Ni 231.604†	-7.1	-0.2553 ug/L	0.06848	-0.2553 ppb	0.06848	26.82%			
QC value within limits for Ni 231.604 Recovery = Not calculated									
P 214.914†	-19.1	-15.188 ug/L	1.5299	-15.188 ppb	1.5299	10.07%			
QC value within limits for P 214.914 Recovery = Not calculated									
Pb 220.353†	-3.2	-0.5523 ug/L	1.32381	-0.5523 ppb	1.32381	239.70%			
QC value within limits for Pb 220.353 Recovery = Not calculated									
S 181.975 Axial†	-2.0	-3.8414 ug/L	8.32002	-3.8414 ppb	8.32002	216.59%			
QC value within limits for S 181.975 Axial Recovery = Not calculated									
Sb 206.836†	-3.3	-1.5677 ug/L	2.51605	-1.5677 ppb	2.51605	160.49%			
QC value within limits for Sb 206.836 Recovery = Not calculated									
Se 196.026†	0.5	0.4138 ug/L	2.47848	0.4138 ppb	2.47848	598.90%			
QC value within limits for Se 196.026 Recovery = Not calculated									
Si 251.611†	-23.0	-0.9417 ug/L	0.63268	-0.9417 ppb	0.63268	67.18%			
QC value within limits for Si 251.611 Recovery = Not calculated									
Sn 189.927†	-3.2	-0.8179 ug/L	0.96705	-0.8179 ppb	0.96705	118.23%			
QC value within limits for Sn 189.927 Recovery = Not calculated									
Sr 421.552†	7.1	0.0647 ug/L	0.13147	0.0647 ppb	0.13147	203.16%			
QC value within limits for Sr 421.552 Recovery = Not calculated									
Ti 334.940†	115.0	0.2257 ug/L	0.03520	0.2257 ppb	0.03520	15.59%			
QC value within limits for Ti 334.940 Recovery = Not calculated									
Tl 190.801†	1.3	0.5387 ug/L	2.24756	0.5387 ppb	2.24756	417.18%			
QC value within limits for Tl 190.801 Recovery = Not calculated									
U 409.014†	125.8	4.2809 ug/L	2.45512	4.2809 ppb	2.45512	57.35%			
QC value within limits for U 409.014 Recovery = Not calculated									
V 292.402†	115.5	1.0366 ug/L	0.15615	1.0366 ppb	0.15615	15.06%			
QC value within limits for V 292.402 Recovery = Not calculated									
Zn 213.857†	-115.7	-1.5389 ug/L	0.05924	-1.5389 ppb	0.05924	3.85%			
QC value within limits for Zn 213.857 Recovery = Not calculated									
SiO2†	-22.1	-1.9288 ug/L	1.08420	-1.9288 ppb	1.08420	56.21%			
QC value within limits for SiO2 Recovery = Not calculated									
All analyte(s) passed QC.									

Sequence No.: 39

Sample ID: 248039001|959089|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 54

Date Collected: 3/26/2010 23:23:45

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 248039001|959089|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4278.5	4278.5	113 %		23:25:57
1	Y RADIAL	4848.4	4848.4	118.8 %		23:25:37
1	Al 396.153Radial†	-29.2	47.0	55.933 ug/L	55.933 ppb	23:25:57
1	Ca 317.933Radial†	48.8	21.3	47.752 ug/L	47.752 ppb	23:25:57
1	Fe 238.204 Radial†	10.2	0.6	7.6572 ug/L	7.6572 ppb	23:25:57
1	K 766.490 Radial†	2982.0	161.6	35.620 ug/L	35.620 ppb	23:25:37
1	Mg 279.077 IEC†	4.9	1.5	70.538 ug/L	70.538 ppb	23:25:57
1	Na 589.592 Radial†	-95.3	301.9	121.41 ug/L	121.41 ppb	23:25:37
1	Sr 421.552†	71.3	23.9	0.2164 ug/L	0.2164 ppb	23:25:37
1	Sc 361.383	841210.7	841210.7	114.79 %		23:26:54
1	Y 371.029	689885.3	689885.3	114.14 %		23:26:54
1	Ag 328.068†	161.8	-11.3	-0.0635 ug/L	-0.0635 ppb	23:26:54
1	As 188.979†	-20.9	4.1	2.4899 ug/L	2.4899 ppb	23:27:14
1	B 249.677†	775.1	1010.2	30.401 ug/L	30.401 ppb	23:27:14
1	Ba 233.527†	101.6	85.9	0.9047 ug/L	0.9047 ppb	23:27:14
1	Be 313.107†	-3783.7	595.5	0.2807 ug/L	0.2807 ppb	23:26:54
1	Cd 226.502†	-156.2	35.1	0.5711 ug/L	0.5711 ppb	23:27:14
1	Co 228.616†	-27.9	22.4	0.6416 ug/L	0.6416 ppb	23:27:14
1	Cr 267.716†	179.9	61.7	0.9437 ug/L	0.9437 ppb	23:27:14
1	Cu 324.752†	6345.3	-189.3	-0.6810 ug/L	-0.6810 ppb	23:26:54
1	Mn 257.610†	923.3	378.8	0.5507 ug/L	0.5507 ppb	23:27:14
1	Mo 202.031†	18.7	-0.4	-0.0438 ug/L	-0.0438 ppb	23:27:14
1	Ni 231.604†	110.7	13.9	0.4968 ug/L	0.4968 ppb	23:27:14
1	P 214.914†	195.3	-18.4	-14.716 ug/L	-14.716 ppb	23:27:14
1	Pb 220.353†	-52.7	3.2	0.5574 ug/L	0.5574 ppb	23:27:14
1	S 181.975 Axial†	43.4	10.7	20.820 ug/L	20.820 ppb	23:27:14
1	Sb 206.836†	25.8	-3.1	-1.4903 ug/L	-1.4903 ppb	23:27:14
1	Se 196.026†	-20.0	4.3	3.9155 ug/L	3.9155 ppb	23:27:14
1	Si 251.611†	54691.6	47187.8	1949.5 ug/L	1949.5 ppb	23:26:54
1	Sn 189.927†	6.9	-7.6	-1.9234 ug/L	-1.9234 ppb	23:27:14
1	Ti 334.940†	-503.2	606.0	1.1548 ug/L	1.1548 ppb	23:26:54
1	Tl 190.801†	-23.8	1.6	0.6754 ug/L	0.6754 ppb	23:27:14
1	U 409.014†	-1768.5	293.4	9.9732 ug/L	9.9732 ppb	23:26:54
1	V 292.402†	-1365.9	190.7	1.7293 ug/L	1.7293 ppb	23:26:54
1	Zn 213.857†	902.9	126.7	1.6882 ug/L	1.6882 ppb	23:27:14
1	SiO2†	54240.4	46786.5	4117.8 ug/L	4117.8 ppb	23:28:10
2	Sc Radial	4279.4	4279.4	113 %		23:26:22
2	Y RADIAL	4758.6	4758.6	116.6 %		23:26:02
2	Al 396.153Radial†	-29.2	47.0	55.947 ug/L	55.947 ppb	23:26:22
2	Ca 317.933Radial†	44.9	17.8	39.949 ug/L	39.949 ppb	23:26:22
2	Fe 238.204 Radial†	10.6	0.9	12.461 ug/L	12.461 ppb	23:26:22
2	K 766.490 Radial†	3128.1	290.3	64.043 ug/L	64.043 ppb	23:26:02
2	Mg 279.077 IEC†	-0.0	-2.8	-133.73 ug/L	-133.73 ppb	23:26:22
2	Na 589.592 Radial†	-120.0	280.1	112.65 ug/L	112.65 ppb	23:26:02
2	Sr 421.552†	48.7	3.8	0.0344 ug/L	0.0344 ppb	23:26:02
2	Sc 361.383	858864.7	858864.7	117.20 %		23:27:19
2	Y 371.029	706793.0	706793.0	116.94 %		23:27:19
2	Ag 328.068†	164.6	-11.7	-0.0630 ug/L	-0.0630 ppb	23:27:19
2	As 188.979†	-19.2	5.9	3.6197 ug/L	3.6197 ppb	23:27:39
2	B 249.677†	806.0	1022.6	30.775 ug/L	30.775 ppb	23:27:39
2	Ba 233.527†	80.5	66.1	0.6982 ug/L	0.6982 ppb	23:27:39
2	Be 313.107†	-3542.7	868.9	0.4085 ug/L	0.4085 ppb	23:27:19
2	Cd 226.502†	-165.7	29.8	0.4854 ug/L	0.4854 ppb	23:27:39
2	Co 228.616†	-12.6	36.0	1.0322 ug/L	1.0322 ppb	23:27:39
2	Cr 267.716†	168.7	48.9	0.7487 ug/L	0.7487 ppb	23:27:39
2	Cu 324.752†	6392.3	-262.9	-0.9436 ug/L	-0.9436 ppb	23:27:19
2	Mn 257.610†	904.5	346.2	0.5120 ug/L	0.5120 ppb	23:27:39
2	Mo 202.031†	25.5	5.0	0.5053 ug/L	0.5053 ppb	23:27:39
2	Ni 231.604†	102.4	4.8	0.1725 ug/L	0.1725 ppb	23:27:39

2	P 214.914†	210.6	-8.8	-6.9173 ug/L	-6.9173 ppb	23:27:39
2	Pb 220.353†	-42.0	13.2	2.3022 ug/L	2.3022 ppb	23:27:39
2	S 181.975 Axial†	43.4	9.9	19.258 ug/L	19.258 ppb	23:27:39
2	Sb 206.836†	28.5	-1.3	-0.6197 ug/L	-0.6197 ppb	23:27:39
2	Se 196.026†	-17.4	6.9	6.2684 ug/L	6.2684 ppb	23:27:39
2	Si 251.611†	55882.7	47224.9	1951.0 ug/L	1951.0 ppb	23:27:19
2	Sn 189.927†	13.0	-2.6	-0.6485 ug/L	-0.6485 ppb	23:27:39
2	Ti 334.940†	-452.9	657.9	1.2695 ug/L	1.2695 ppb	23:27:19
2	Tl 190.801†	-35.3	-7.9	-3.3975 ug/L	-3.3975 ppb	23:27:39
2	U 409.014†	-1789.9	306.9	10.432 ug/L	10.432 ppb	23:27:19
2	V 292.402†	-1335.3	241.2	2.1870 ug/L	2.1870 ppb	23:27:19
2	Zn 213.857†	885.5	95.7	1.2763 ug/L	1.2763 ppb	23:27:39
2	SiO2†	54247.7	45821.5	4032.9 ug/L	4032.9 ppb	23:28:15
3	Sc Radial	4320.1	4320.1	114 %		23:26:47
3	Y RADIAL	4733.1	4733.1	115.9 %		23:26:27
3	Al 396.153Radial†	-50.3	28.8	34.204 ug/L	34.204 ppb	23:26:47
3	Ca 317.933Radial†	43.7	16.4	36.734 ug/L	36.734 ppb	23:26:47
3	Fe 238.204 Radial†	10.9	1.1	14.765 ug/L	14.765 ppb	23:26:47
3	K 766.490 Radial†	3106.9	245.7	54.180 ug/L	54.180 ppb	23:26:27
3	Mg 279.077 IEC†	2.7	-0.5	-21.575 ug/L	-21.575 ppb	23:26:47
3	Na 589.592 Radial†	-56.8	336.5	135.31 ug/L	135.31 ppb	23:26:27
3	Sr 421.552†	40.6	-3.7	-0.0339 ug/L	-0.0339 ppb	23:26:27
3	Sc 361.383	830157.8	830157.8	113.28 %		23:27:45
3	Y 371.029	682704.6	682704.6	112.95 %		23:27:45
3	Ag 328.068†	239.9	59.6	0.3392 ug/L	0.3392 ppb	23:27:45
3	As 188.979†	-29.4	-3.6	-2.2009 ug/L	-2.2009 ppb	23:28:05
3	B 249.677†	749.5	996.6	29.991 ug/L	29.991 ppb	23:28:05
3	Ba 233.527†	116.0	99.9	1.0488 ug/L	1.0488 ppb	23:28:05
3	Be 313.107†	-3495.5	806.1	0.3788 ug/L	0.3788 ppb	23:27:45
3	Cd 226.502†	-141.3	46.4	0.7549 ug/L	0.7549 ppb	23:28:05
3	Co 228.616†	-24.2	25.4	0.7282 ug/L	0.7282 ppb	23:28:05
3	Cr 267.716†	197.5	79.3	1.2131 ug/L	1.2131 ppb	23:28:05
3	Cu 324.752†	6263.8	-187.7	-0.6741 ug/L	-0.6741 ppb	23:27:45
3	Mn 257.610†	1124.0	566.7	0.8294 ug/L	0.8294 ppb	23:28:05
3	Mo 202.031†	26.4	6.6	0.6676 ug/L	0.6676 ppb	23:28:05
3	Ni 231.604†	106.8	11.7	0.4193 ug/L	0.4193 ppb	23:28:05
3	P 214.914†	219.0	4.8	4.0153 ug/L	4.0153 ppb	23:28:05
3	Pb 220.353†	-35.7	17.5	3.0426 ug/L	3.0426 ppb	23:28:05
3	S 181.975 Axial†	48.2	15.5	30.066 ug/L	30.066 ppb	23:28:05
3	Sb 206.836†	15.1	-12.3	-5.7236 ug/L	-5.7236 ppb	23:28:05
3	Se 196.026†	-10.3	12.6	11.402 ug/L	11.402 ppb	23:28:05
3	Si 251.611†	53785.5	47022.4	1942.6 ug/L	1942.6 ppb	23:27:45
3	Sn 189.927†	3.8	-10.3	-2.5973 ug/L	-2.5973 ppb	23:28:05
3	Ti 334.940†	-526.0	580.0	1.1117 ug/L	1.1117 ppb	23:27:45
3	Tl 190.801†	-12.6	11.1	4.7948 ug/L	4.7948 ppb	23:28:05
3	U 409.014†	-1791.4	252.7	8.5889 ug/L	8.5889 ppb	23:27:45
3	V 292.402†	-1460.9	91.0	0.8390 ug/L	0.8390 ppb	23:27:45
3	Zn 213.857†	932.2	163.1	2.1736 ug/L	2.1736 ppb	23:28:05
3	SiO2†	54155.8	47341.0	4166.6 ug/L	4166.6 ppb	23:28:20

Mean Data: 248039001|959089|1

Analyte	Mean Corrected	Calib.	Std.Dev.	Sample	Std.Dev.	RSD
	Intensity	Conc. Units		Conc. Units		
Sc 361.383	843411.1	115.09 %	1.976			1.72%
Sc Radial	4292.7	113 %	0.6			0.55%
Y 371.029	693127.6	114.68 %	2.046			1.78%
Y RADIAL	4780.1	117.1 %	1.48			1.27%
Ag 328.068†	12.2	0.0709 ug/L	0.23238	0.0709 ppb	0.23238	327.84%
Al 396.153Radial†	40.9	48.695 ug/L	12.5492	48.695 ppb	12.5492	25.77%
As 188.979†	2.1	1.3029 ug/L	3.08648	1.3029 ppb	3.08648	236.89%
B 249.677†	1009.8	30.389 ug/L	0.3921	30.389 ppb	0.3921	1.29%
Ba 233.527†	84.0	0.8839 ug/L	0.17625	0.8839 ppb	0.17625	19.94%
Be 313.107†	756.8	0.3560 ug/L	0.06692	0.3560 ppb	0.06692	18.80%
Ca 317.933Radial†	18.5	41.478 ug/L	5.6657	41.478 ppb	5.6657	13.66%
Cd 226.502†	37.1	0.6038 ug/L	0.13771	0.6038 ppb	0.13771	22.81%
Co 228.616†	27.9	0.8007 ug/L	0.20512	0.8007 ppb	0.20512	25.62%
Cr 267.716†	63.3	0.9685 ug/L	0.23322	0.9685 ppb	0.23322	24.08%
Cu 324.752†	-213.3	-0.7662 ug/L	0.15361	-0.7662 ppb	0.15361	20.05%
Fe 238.204 Radial†	0.9	11.628 ug/L	3.6266	11.628 ppb	3.6266	31.19%
K 766.490 Radial†	232.6	51.281 ug/L	14.4316	51.281 ppb	14.4316	28.14%

Mg 279.077 IEC†	-0.6	-28.255 ug/L	102.2965	-28.255 ppb	102.2965	362.05%
Mn 257.610†	430.5	0.6307 ug/L	0.17320	0.6307 ppb	0.17320	27.46%
Mo 202.031†	3.7	0.3764 ug/L	0.37279	0.3764 ppb	0.37279	99.05%
Na 589.592 Radial†	306.2	123.12 ug/L	11.426	123.12 ppb	11.426	9.28%
Ni 231.604†	10.1	0.3628 ug/L	0.16934	0.3628 ppb	0.16934	46.67%
P 214.914†	-7.4	-5.8728 ug/L	9.40946	-5.8728 ppb	9.40946	160.22%
Pb 220.353†	11.3	1.9674 ug/L	1.27597	1.9674 ppb	1.27597	64.86%
S 181.975 Axial†	12.0	23.381 ug/L	5.8413	23.381 ppb	5.8413	24.98%
Sb 206.836†	-5.6	-2.6112 ug/L	2.73032	-2.6112 ppb	2.73032	104.56%
Se 196.026†	7.9	7.1952 ug/L	3.82818	7.1952 ppb	3.82818	53.20%
Si 251.611†	47145.0	1947.7 ug/L	4.46	1947.7 ppb	4.46	0.23%
Sn 189.927†	-6.8	-1.7231 ug/L	0.98970	-1.7231 ppb	0.98970	57.44%
Sr 421.552†	8.0	0.0723 ug/L	0.12935	0.0723 ppb	0.12935	178.88%
Ti 334.940†	614.6	1.1787 ug/L	0.08160	1.1787 ppb	0.08160	6.92%
Tl 190.801†	1.6	0.6909 ug/L	4.09615	0.6909 ppb	4.09615	592.87%
U 409.014†	284.3	9.6646 ug/L	0.95943	9.6646 ppb	0.95943	9.93%
V 292.402†	174.3	1.5851 ug/L	0.68545	1.5851 ppb	0.68545	43.24%
Zn 213.857†	128.5	1.7127 ug/L	0.44915	1.7127 ppb	0.44915	26.22%
SiO2†	46649.7	4105.8 ug/L	67.67	4105.8 ppb	67.67	1.65%

Sequence No.: 41
 Sample ID: 1202056810|959089|1
 Analyst: HSC
 Initial Sample Wt:
 Dilution:

Autosampler Location: 56
 Date Collected: 3/26/2010 23:37:18
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: 1202056810|959089|1

Rep#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4195.1	4195.1	111	%		23:39:31
1	Y RADIAL	4628.4	4628.4	113.4	%		23:39:11
1	Al 396.153Radial†	-53.6	24.4	29.055	ug/L	29.055 ppb	23:39:31
1	Ca 317.933Radial†	54.9	27.7	61.999	ug/L	61.999 ppb	23:39:31
1	Fe 238.204 Radial†	10.2	0.7	9.4849	ug/L	9.4849 ppb	23:39:31
1	K 766.490 Radial†	4105.9	1229.0	271.25	ug/L	271.25 ppb	23:39:11
1	Mg 279.077 IEC†	3.1	-0.0	-2.0962	ug/L	-2.0962 ppb	23:39:31
1	Na 589.592 Radial†	56.3	437.2	175.81	ug/L	175.81 ppb	23:39:11
1	Sr 421.552†	66.2	20.5	0.1859	ug/L	0.1859 ppb	23:39:11
1	Sc 361.383	848064.9	848064.9	115.73	%		23:40:27
1	Y 371.029	696727.7	696727.7	115.27	%		23:40:27
1	Ag 328.068†	215.1	33.7	0.1964	ug/L	0.1964 ppb	23:40:27
1	As 188.979†	-27.2	-1.2	-0.7153	ug/L	-0.7153 ppb	23:40:47
1	B 249.677†	690.9	931.9	28.046	ug/L	28.046 ppb	23:40:47
1	Ba 233.527†	80.8	67.2	0.7092	ug/L	0.7092 ppb	23:40:47
1	Be 313.107†	-3940.1	487.0	0.2289	ug/L	0.2289 ppb	23:40:27
1	Cd 226.502†	-174.3	20.5	0.3341	ug/L	0.3341 ppb	23:40:47
1	Co 228.616†	-20.0	29.4	0.8441	ug/L	0.8441 ppb	23:40:47
1	Cr 267.716†	170.6	52.4	0.8031	ug/L	0.8031 ppb	23:40:47
1	Cu 324.752†	8328.1	1479.3	5.2779	ug/L	5.2779 ppb	23:40:27
1	Mn 257.610†	1009.1	446.4	0.6526	ug/L	0.6526 ppb	23:40:47
1	Mo 202.031†	22.8	3.0	0.3002	ug/L	0.3002 ppb	23:40:47
1	Ni 231.604†	99.2	3.1	0.1115	ug/L	0.1115 ppb	23:40:47
1	P 214.914†	197.8	-17.5	-15.255	ug/L	-15.255 ppb	23:40:47
1	Pb 220.353†	-52.4	3.8	0.6610	ug/L	0.6610 ppb	23:40:47
1	S 181.975 Axial†	63.2	27.6	53.568	ug/L	53.568 ppb	23:40:47
1	Sb 206.836†	30.4	0.6	0.2660	ug/L	0.2660 ppb	23:40:47
1	Se 196.026†	-22.8	2.0	1.8215	ug/L	1.8215 ppb	23:40:47
1	Si 251.611†	60202.8	51565.0	2130.3	ug/L	2130.3 ppb	23:40:27
1	Sn 189.927†	4.0	-10.1	-2.5626	ug/L	-2.5626 ppb	23:40:47
1	Ti 334.940†	-806.3	347.6	0.6703	ug/L	0.6703 ppb	23:40:27
1	Tl 190.801†	-26.6	-0.7	-0.3030	ug/L	-0.3030 ppb	23:40:47
1	U 409.014†	-1916.3	178.1	6.0541	ug/L	6.0541 ppb	23:40:27
1	V 292.402†	-1354.7	210.0	1.8989	ug/L	1.8989 ppb	23:40:27
1	Zn 213.857†	1229.9	402.9	5.3711	ug/L	5.3711 ppb	23:40:47
1	SiO2†	59172.3	50666.3	4459.3	ug/L	4459.3 ppb	23:41:44
2	Sc Radial	4269.3	4269.3	113	%		23:39:56
2	Y RADIAL	4717.8	4717.8	115.6	%		23:39:36
2	Al 396.153Radial†	-54.2	24.8	29.504	ug/L	29.504 ppb	23:39:56
2	Ca 317.933Radial†	63.0	34.0	76.132	ug/L	76.132 ppb	23:39:56
2	Fe 238.204 Radial†	9.6	0.1	1.0245	ug/L	1.0245 ppb	23:39:56
2	K 766.490 Radial†	4098.9	1158.3	255.65	ug/L	255.65 ppb	23:39:36
2	Mg 279.077 IEC†	2.9	-0.3	-12.660	ug/L	-12.660 ppb	23:39:56
2	Na 589.592 Radial†	-16.5	371.6	149.45	ug/L	149.45 ppb	23:39:36
2	Sr 421.552†	46.4	1.9	0.0169	ug/L	0.0169 ppb	23:39:36
2	Sc 361.383	827513.8	827513.8	112.92	%		23:40:53
2	Y 371.029	679920.6	679920.6	112.49	%		23:40:53
2	Ag 328.068†	86.9	-75.2	-0.4321	ug/L	-0.4321 ppb	23:40:53
2	As 188.979†	-24.7	0.4	0.2626	ug/L	0.2626 ppb	23:41:13
2	B 249.677†	697.7	952.8	28.677	ug/L	28.677 ppb	23:41:13
2	Ba 233.527†	70.8	60.1	0.6325	ug/L	0.6325 ppb	23:41:13
2	Be 313.107†	-3926.1	414.8	0.1949	ug/L	0.1949 ppb	23:40:53
2	Cd 226.502†	-164.9	25.1	0.4103	ug/L	0.4103 ppb	23:41:13
2	Co 228.616†	-40.5	10.8	0.3110	ug/L	0.3110 ppb	23:41:13
2	Cr 267.716†	156.7	43.7	0.6671	ug/L	0.6671 ppb	23:41:13
2	Cu 324.752†	8298.4	1631.7	5.8194	ug/L	5.8194 ppb	23:40:53
2	Mn 257.610†	1017.6	475.6	0.6948	ug/L	0.6948 ppb	23:41:13
2	Mo 202.031†	24.9	5.3	0.5318	ug/L	0.5318 ppb	23:41:13
2	Ni 231.604†	111.7	16.4	0.5884	ug/L	0.5884 ppb	23:41:13

2	P 214.914†	199.8	-11.5	-10.470 ug/L	-10.470 ppb	23:41:13
2	Pb 220.353†	-46.0	8.3	1.4436 ug/L	1.4436 ppb	23:41:13
2	S 181.975 Axial†	62.2	28.0	54.354 ug/L	54.354 ppb	23:41:13
2	Sb 206.836†	25.4	-3.1	-1.4496 ug/L	-1.4496 ppb	23:41:13
2	Se 196.026†	-22.2	2.1	1.8824 ug/L	1.8824 ppb	23:41:13
2	Si 251.611†	58752.2	51572.3	2130.6 ug/L	2130.6 ppb	23:40:53
2	Sn 189.927†	7.4	-7.1	-1.7915 ug/L	-1.7915 ppb	23:41:13
2	Ti 334.940†	-856.2	286.1	0.5538 ug/L	0.5538 ppb	23:40:53
2	Tl 190.801†	-28.0	-2.5	-1.0923 ug/L	-1.0923 ppb	23:41:13
2	U 409.014†	-1742.8	290.7	9.8840 ug/L	9.8840 ppb	23:40:53
2	V 292.402†	-1421.7	121.6	1.1174 ug/L	1.1174 ppb	23:40:53
2	Zn 213.857†	1216.7	417.6	5.5651 ug/L	5.5651 ppb	23:41:13
2	SiO2†	58200.2	51075.2	4495.3 ug/L	4495.3 ppb	23:41:49
3	Sc Radial	4297.9	4297.9	113 %		23:40:21
3	Y RADIAL	4750.0	4750.0	116.3 %		23:40:01
3	Al 396.153Radial†	-53.0	26.1	31.133 ug/L	31.133 ppb	23:40:21
3	Ca 317.933Radial†	56.3	27.7	62.019 ug/L	62.019 ppb	23:40:21
3	Fe 238.204 Radial†	8.9	-0.6	-8.0823 ug/L	-8.0823 ppb	23:40:21
3	K 766.490 Radial†	4064.5	1103.7	243.60 ug/L	243.60 ppb	23:40:01
3	Mg 279.077 IEC†	3.8	0.6	26.939 ug/L	26.939 ppb	23:40:21
3	Na 589.592 Radial†	32.1	414.6	166.71 ug/L	166.71 ppb	23:40:01
3	Sr 421.552†	73.4	25.5	0.2306 ug/L	0.2306 ppb	23:40:01
3	Sc 361.383	820660.7	820660.7	111.99 %		23:41:18
3	Y 371.029	674829.3	674829.3	111.65 %		23:41:18
3	Ag 328.068†	249.7	70.8	0.3963 ug/L	0.3963 ppb	23:41:18
3	As 188.979†	-36.6	-10.4	-6.2900 ug/L	-6.2900 ppb	23:41:38
3	B 249.677†	699.6	959.7	28.885 ug/L	28.885 ppb	23:41:38
3	Ba 233.527†	73.7	63.3	0.6661 ug/L	0.6661 ppb	23:41:38
3	Be 313.107†	-3768.4	526.6	0.2473 ug/L	0.2473 ppb	23:41:18
3	Cd 226.502†	-168.3	20.9	0.3427 ug/L	0.3427 ppb	23:41:38
3	Co 228.616†	-38.7	12.2	0.3461 ug/L	0.3461 ppb	23:41:38
3	Cr 267.716†	168.6	55.5	0.8460 ug/L	0.8460 ppb	23:41:38
3	Cu 324.752†	8189.2	1595.5	5.6889 ug/L	5.6889 ppb	23:41:18
3	Mn 257.610†	1007.6	474.2	0.6901 ug/L	0.6901 ppb	23:41:38
3	Mo 202.031†	7.9	-9.7	-0.9832 ug/L	-0.9832 ppb	23:41:38
3	Ni 231.604†	101.5	8.1	0.2900 ug/L	0.2900 ppb	23:41:38
3	P 214.914†	206.9	-3.7	-4.1629 ug/L	-4.1629 ppb	23:41:38
3	Pb 220.353†	-46.4	7.6	1.3235 ug/L	1.3235 ppb	23:41:38
3	S 181.975 Axial†	63.6	29.7	57.660 ug/L	57.660 ppb	23:41:38
3	Sb 206.836†	33.6	4.4	1.9698 ug/L	1.9698 ppb	23:41:38
3	Se 196.026†	-18.5	5.2	4.6369 ug/L	4.6369 ppb	23:41:38
3	Si 251.611†	58140.6	51460.7	2126.0 ug/L	2126.0 ppb	23:41:18
3	Sn 189.927†	-1.2	-14.7	-3.7255 ug/L	-3.7255 ppb	23:41:38
3	Ti 334.940†	-796.8	332.8	0.6373 ug/L	0.6373 ppb	23:41:18
3	Tl 190.801†	-32.7	-6.9	-2.9690 ug/L	-2.9690 ppb	23:41:38
3	U 409.014†	-1678.8	334.9	11.388 ug/L	11.388 ppb	23:41:18
3	V 292.402†	-1358.5	167.5	1.5124 ug/L	1.5124 ppb	23:41:18
3	Zn 213.857†	1220.9	430.4	5.7386 ug/L	5.7386 ppb	23:41:38
3	SiO2†	59117.2	52324.4	4605.3 ug/L	4605.3 ppb	23:41:54

Mean Data: 1202056810|959089|1

Analyte	Mean Corrected	Conc.	Calib.	Std.Dev.	Sample	Std.Dev.	RSD
	Intensity	Units			Conc. Units		
Sc 361.383	832079.8	113.55 %		1.946			1.71%
Sc Radial	4254.1	112 %		1.4			1.25%
Y 371.029	683825.9	113.14 %		1.896			1.68%
Y RADIAL	4698.8	115.1 %		1.54			1.34%
Ag 328.068†	9.8	0.0535 ug/L		0.43226	0.0535 ppb	0.43226	807.77%
Al 396.153Radial†	25.1	29.897 ug/L		1.0936	29.897 ppb	1.0936	3.66%
As 188.979†	-3.7	-2.2476 ug/L		3.53480	-2.2476 ppb	3.53480	157.27%
B 249.677†	948.1	28.536 ug/L		0.4368	28.536 ppb	0.4368	1.53%
Ba 233.527†	63.5	0.6692 ug/L		0.03842	0.6692 ppb	0.03842	5.74%
Be 313.107†	476.2	0.2237 ug/L		0.02659	0.2237 ppb	0.02659	11.88%
Ca 317.933Radial†	29.8	66.717 ug/L		8.1539	66.717 ppb	8.1539	12.22%
Cd 226.502†	22.2	0.3624 ug/L		0.04175	0.3624 ppb	0.04175	11.52%
Co 228.616†	17.5	0.5004 ug/L		0.29820	0.5004 ppb	0.29820	59.59%
Cr 267.716†	50.5	0.7721 ug/L		0.09338	0.7721 ppb	0.09338	12.09%
Cu 324.752†	1568.9	5.5954 ug/L		0.28260	5.5954 ppb	0.28260	5.05%
Fe 238.204 Radial†	0.1	0.8091 ug/L		8.78558	0.8091 ppb	8.78558	>999.9%
K 766.490 Radial†	1163.7	256.83 ug/L		13.861	256.83 ppb	13.861	5.40%

Mg 279.077 IEC†	0.1	4.0607 ug/L	20.50490	4.0607 ppb	20.50490	504.96%
Mn 257.610†	465.4	0.6792 ug/L	0.02311	0.6792 ppb	0.02311	3.40%
Mo 202.031†	-0.5	-0.0504 ug/L	0.81609	-0.0504 ppb	0.81609	>999.9%
Na 589.592 Radial†	407.8	163.99 ug/L	13.391	163.99 ppb	13.391	8.17%
Ni 231.604†	9.2	0.3300 ug/L	0.24096	0.3300 ppb	0.24096	73.02%
P 214.914†	-10.9	-9.9627 ug/L	5.56358	-9.9627 ppb	5.56358	55.84%
Pb 220.353†	6.6	1.1427 ug/L	0.42144	1.1427 ppb	0.42144	36.88%
S 181.975 Axial†	28.4	55.194 ug/L	2.1716	55.194 ppb	2.1716	3.93%
Sb 206.836†	0.7	0.2621 ug/L	1.70971	0.2621 ppb	1.70971	652.32%
Se 196.026†	3.1	2.7803 ug/L	1.60817	2.7803 ppb	1.60817	57.84%
Si 251.611†	51532.7	2129.0 ug/L	2.57	2129.0 ppb	2.57	0.12%
Sn 189.927†	-10.7	-2.6932 ug/L	0.97359	-2.6932 ppb	0.97359	36.15%
Sr 421.552†	16.0	0.1445 ug/L	0.11276	0.1445 ppb	0.11276	78.05%
Ti 334.940†	322.2	0.6205 ug/L	0.06004	0.6205 ppb	0.06004	9.68%
Tl 190.801†	-3.4	-1.4548 ug/L	1.36946	-1.4548 ppb	1.36946	94.14%
U 409.014†	267.9	9.1086 ug/L	2.75005	9.1086 ppb	2.75005	30.19%
V 292.402†	166.4	1.5096 ug/L	0.39077	1.5096 ppb	0.39077	25.89%
Zn 213.857†	417.0	5.5582 ug/L	0.18387	5.5582 ppb	0.18387	3.31%
SiO2†	51355.3	4519.9 ug/L	76.05	4519.9 ppb	76.05	1.68%

Sequence No.: 42

Sample ID: 1202056811|959089|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 57

Date Collected: 3/26/2010 23:44:04

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202056811|959089|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4319.7	4319.7	114 %		23:46:17
1	Y RADIAL	4633.9	4633.9	113.5 %		23:45:57
1	Al 396.153Radial†	4791.6	4274.7	5062.9 ug/L	5062.9 ppb	23:45:57
1	Ca 317.933Radial†	2649.8	2301.7	5156.8 ug/L	5156.8 ppb	23:46:17
1	Fe 238.204 Radial†	432.9	371.2	4921.1 ug/L	4921.1 ppb	23:46:17
1	K 766.490 Radial†	28613.3	22612.9	4988.1 ug/L	4988.1 ppb	23:45:57
1	Mg 279.077 IEC†	125.2	106.9	5058.0 ug/L	5058.0 ppb	23:46:17
1	Na 589.592 Radial†	13492.2	12217.8	4913.1 ug/L	4913.1 ppb	23:45:57
1	Sr 421.552†	59567.7	52196.5	473.83 ug/L	473.83 ppb	23:45:57
1	Sc 361.383	850126.8	850126.8	116.01 %		23:47:14
1	Y 371.029	691854.2	691854.2	114.46 %		23:47:14
1	Ag 328.068†	96010.4	82608.4	472.99 ug/L	472.99 ppb	23:47:19
1	As 188.979†	923.9	818.7	501.12 ug/L	501.12 ppb	23:47:39
1	B 249.677†	19109.4	16807.2	503.70 ug/L	503.70 ppb	23:47:19
1	Ba 233.527†	54177.4	46698.1	490.66 ug/L	490.66 ppb	23:47:19
1	Be 313.107†	1231378.9	1065334.7	498.46 ug/L	498.46 ppb	23:47:14
1	Cd 226.502†	33949.1	29435.1	478.18 ug/L	478.18 ppb	23:47:19
1	Co 228.616†	19452.6	16814.7	483.27 ug/L	483.27 ppb	23:47:19
1	Cr 267.716†	36758.5	31590.6	484.66 ug/L	484.66 ppb	23:47:19
1	Cu 324.752†	166987.7	138225.7	493.41 ug/L	493.41 ppb	23:47:19
1	Mn 257.610†	379306.7	326535.1	476.87 ug/L	476.87 ppb	23:47:19
1	Mo 202.031†	5617.0	4825.1	487.69 ug/L	487.69 ppb	23:47:39
1	Ni 231.604†	16089.4	13786.4	494.34 ug/L	494.34 ppb	23:47:19
1	P 214.914†	1002.3	675.6	450.02 ug/L	450.02 ppb	23:47:39
1	Pb 220.353†	3225.9	2829.8	490.92 ug/L	490.92 ppb	23:47:39
1	S 181.975 Axial†	3020.8	2576.8	5009.8 ug/L	5009.8 ppb	23:47:39
1	Sb 206.836†	1297.4	1092.7	524.48 ug/L	524.48 ppb	23:47:39
1	Se 196.026†	603.5	542.0	503.59 ug/L	503.59 ppb	23:47:39
1	Si 251.611†	191065.0	164241.4	6779.3 ug/L	6779.3 ppb	23:47:19
1	Sn 189.927†	2284.1	1955.3	496.35 ug/L	496.35 ppb	23:47:39
1	Ti 334.940†	286821.3	248283.0	474.69 ug/L	474.69 ppb	23:47:19
1	Tl 190.801†	1289.7	1134.0	492.20 ug/L	492.20 ppb	23:47:39
1	U 409.014†	15205.2	14940.8	506.42 ug/L	506.42 ppb	23:47:19
1	V 292.402†	61214.7	54147.4	492.71 ug/L	492.71 ppb	23:47:19
1	Zn 213.857†	43025.4	36427.9	481.87 ug/L	481.87 ppb	23:47:19
1	SiO2†	201693.8	173395.2	15248 ug/L	15248 ppb	23:48:46
2	Sc Radial	4313.0	4313.0	114 %		23:46:42
2	Y RADIAL	4763.4	4763.4	116.7 %		23:46:22
2	Al 396.153Radial†	4920.1	4394.0	5204.6 ug/L	5204.6 ppb	23:46:22
2	Ca 317.933Radial†	2640.7	2297.3	5146.9 ug/L	5146.9 ppb	23:46:42
2	Fe 238.204 Radial†	434.8	373.4	4950.9 ug/L	4950.9 ppb	23:46:42
2	K 766.490 Radial†	29297.0	23252.2	5129.2 ug/L	5129.2 ppb	23:46:22
2	Mg 279.077 IEC†	124.5	106.5	5038.2 ug/L	5038.2 ppb	23:46:42
2	Na 589.592 Radial†	13818.6	12522.8	5035.8 ug/L	5035.8 ppb	23:46:22
2	Sr 421.552†	61386.9	53875.1	489.07 ug/L	489.07 ppb	23:46:22
2	Sc 361.383	847111.6	847111.6	115.60 %		23:47:45
2	Y 371.029	688994.4	688994.4	113.99 %		23:47:45
2	Ag 328.068†	99649.3	86050.8	492.65 ug/L	492.65 ppb	23:47:50
2	As 188.979†	938.1	833.8	510.48 ug/L	510.48 ppb	23:48:10
2	B 249.677†	19874.6	17527.8	525.32 ug/L	525.32 ppb	23:47:50
2	Ba 233.527†	56272.0	48676.3	511.44 ug/L	511.44 ppb	23:47:50
2	Be 313.107†	1230489.9	1068343.7	499.91 ug/L	499.91 ppb	23:47:45
2	Cd 226.502†	35267.1	30679.4	498.41 ug/L	498.41 ppb	23:47:50
2	Co 228.616†	20182.0	17505.4	503.08 ug/L	503.08 ppb	23:47:50
2	Cr 267.716†	38141.5	32899.7	504.73 ug/L	504.73 ppb	23:47:50
2	Cu 324.752†	173870.4	144692.0	516.48 ug/L	516.48 ppb	23:47:50
2	Mn 257.610†	393690.9	340142.2	496.73 ug/L	496.73 ppb	23:47:50
2	Mo 202.031†	5667.6	4886.1	493.85 ug/L	493.85 ppb	23:48:10
2	Ni 231.604†	16639.5	14311.7	513.17 ug/L	513.17 ppb	23:47:50

2	P 214.914†	988.3	666.5	438.17 ug/L	438.17 ppb	23:48:10
2	Pb 220.353†	3244.5	2855.8	495.44 ug/L	495.44 ppb	23:48:10
2	S 181.975 Axial†	3048.4	2609.9	5074.1 ug/L	5074.1 ppb	23:48:10
2	Sb 206.836†	1311.4	1108.8	532.11 ug/L	532.11 ppb	23:48:10
2	Se 196.026†	604.7	544.8	506.26 ug/L	506.26 ppb	23:48:10
2	Si 251.611†	198725.3	171454.3	7077.2 ug/L	7077.2 ppb	23:47:50
2	Sn 189.927†	2294.4	1971.2	500.38 ug/L	500.38 ppb	23:48:10
2	Ti 334.940†	298530.0	259291.8	495.72 ug/L	495.72 ppb	23:47:50
2	Tl 190.801†	1311.1	1156.4	502.01 ug/L	502.01 ppb	23:48:10
2	U 409.014†	16027.4	15698.7	532.14 ug/L	532.14 ppb	23:47:50
2	V 292.402†	63626.9	56421.9	513.23 ug/L	513.23 ppb	23:47:50
2	Zn 213.857†	44556.3	37884.2	501.16 ug/L	501.16 ppb	23:47:50
2	SiO2†	200651.9	173112.7	15223 ug/L	15223 ppb	23:48:52
3	Sc Radial	4271.2	4271.2	113 %		23:47:07
3	Y RADIAL	4704.4	4704.4	115.2 %		23:46:47
3	Al 396.153Radial†	4834.8	4360.8	5165.3 ug/L	5165.3 ppb	23:46:47
3	Ca 317.933Radial†	2629.9	2310.5	5176.4 ug/L	5176.4 ppb	23:47:07
3	Fe 238.204 Radial†	429.3	372.3	4935.9 ug/L	4935.9 ppb	23:47:07
3	K 766.490 Radial†	28844.7	23103.4	5096.3 ug/L	5096.3 ppb	23:46:47
3	Mg 279.077 IEC†	124.9	108.0	5107.2 ug/L	5107.2 ppb	23:47:07
3	Na 589.592 Radial†	13523.6	12380.1	4978.4 ug/L	4978.4 ppb	23:46:47
3	Sr 421.552†	60186.9	53339.5	484.21 ug/L	484.21 ppb	23:46:47
3	Sc 361.383	858661.0	858661.0	117.17 %		23:48:15
3	Y 371.029	698944.4	698944.4	115.64 %		23:48:15
3	Ag 328.068†	98072.2	83545.4	478.34 ug/L	478.34 ppb	23:48:21
3	As 188.979†	956.0	838.2	513.00 ug/L	513.00 ppb	23:48:41
3	B 249.677†	19566.4	17033.5	510.49 ug/L	510.49 ppb	23:48:21
3	Ba 233.527†	55280.8	47175.6	495.68 ug/L	495.68 ppb	23:48:21
3	Be 313.107†	1245806.5	1067097.8	499.30 ug/L	499.30 ppb	23:48:15
3	Cd 226.502†	34656.6	29748.1	483.27 ug/L	483.27 ppb	23:48:21
3	Co 228.616†	19809.7	16952.8	487.23 ug/L	487.23 ppb	23:48:21
3	Cr 267.716†	37478.1	31889.8	489.25 ug/L	489.25 ppb	23:48:21
3	Cu 324.752†	171098.0	140302.8	500.82 ug/L	500.82 ppb	23:48:21
3	Mn 257.610†	386703.6	329598.1	481.34 ug/L	481.34 ppb	23:48:21
3	Mo 202.031†	5702.8	4850.1	490.22 ug/L	490.22 ppb	23:48:41
3	Ni 231.604†	16359.6	13879.2	497.67 ug/L	497.67 ppb	23:48:21
3	P 214.914†	996.9	662.3	437.86 ug/L	437.86 ppb	23:48:41
3	Pb 220.353†	3254.9	2826.9	490.44 ug/L	490.44 ppb	23:48:41
3	S 181.975 Axial†	3075.1	2597.3	5049.6 ug/L	5049.6 ppb	23:48:41
3	Sb 206.836†	1329.6	1109.1	532.10 ug/L	532.10 ppb	23:48:41
3	Se 196.026†	612.9	544.8	506.18 ug/L	506.18 ppb	23:48:41
3	Si 251.611†	195348.6	166260.2	6862.7 ug/L	6862.7 ppb	23:48:21
3	Sn 189.927†	2300.8	1949.9	494.99 ug/L	494.99 ppb	23:48:41
3	Ti 334.940†	293473.2	251502.6	480.84 ug/L	480.84 ppb	23:48:21
3	Tl 190.801†	1317.1	1146.3	497.55 ug/L	497.55 ppb	23:48:41
3	U 409.014†	15729.7	15258.2	517.19 ug/L	517.19 ppb	23:48:21
3	V 292.402†	62540.3	54754.2	498.20 ug/L	498.20 ppb	23:48:21
3	Zn 213.857†	43863.3	36774.4	486.46 ug/L	486.46 ppb	23:48:21
3	SiO2†	195866.2	166693.7	14658 ug/L	14658 ppb	23:48:57

Mean Data: 1202056811|959089|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	851966.5	116.26 %	0.817			0.70%
Sc Radial	4301.3	114 %	0.7			0.61%
Y 371.029	693264.3	114.70 %	0.848			0.74%
Y RADIAL	4700.6	115.1 %	1.59			1.38%
Ag 328.068†	84068.2	481.33 ug/L	10.163	481.33 ppb	10.163	2.11%
Al 396.153Radial†	4343.2	5144.3 ug/L	73.17	5144.3 ppb	73.17	1.42%
As 188.979†	830.2	508.20 ug/L	6.260	508.20 ppb	6.260	1.23%
B 249.677†	17122.8	513.17 ug/L	11.059	513.17 ppb	11.059	2.16%
Ba 233.527†	47516.7	499.26 ug/L	10.843	499.26 ppb	10.843	2.17%
Be 313.107†	1066925.4	499.22 ug/L	0.729	499.22 ppb	0.729	0.15%
Ca 317.933Radial†	2303.2	5160.0 ug/L	14.99	5160.0 ppb	14.99	0.29%
Cd 226.502†	29954.2	486.62 ug/L	10.524	486.62 ppb	10.524	2.16%
Co 228.616†	17091.0	491.19 ug/L	10.487	491.19 ppb	10.487	2.13%
Cr 267.716†	32126.7	492.88 ug/L	10.514	492.88 ppb	10.514	2.13%
Cu 324.752†	141073.5	503.57 ug/L	11.778	503.57 ppb	11.778	2.34%
Fe 238.204 Radial†	372.3	4935.9 ug/L	14.91	4935.9 ppb	14.91	0.30%
K 766.490 Radial†	22989.5	5071.2 ug/L	73.83	5071.2 ppb	73.83	1.46%

Mg 279.077 IEC†	107.2	5067.8 ug/L	35.56	5067.8 ppb	35.56	0.70%
Mn 257.610†	332091.8	484.98 ug/L	10.420	484.98 ppb	10.420	2.15%
Mo 202.031†	4853.8	490.58 ug/L	3.098	490.58 ppb	3.098	0.63%
Na 589.592 Radial†	12373.6	4975.8 ug/L	61.36	4975.8 ppb	61.36	1.23%
Ni 231.604†	13992.4	501.73 ug/L	10.052	501.73 ppb	10.052	2.00%
P 214.914†	668.1	442.02 ug/L	6.930	442.02 ppb	6.930	1.57%
Pb 220.353†	2837.5	492.27 ug/L	2.757	492.27 ppb	2.757	0.56%
S 181.975 Axial†	2594.7	5044.5 ug/L	32.48	5044.5 ppb	32.48	0.64%
Sb 206.836†	1103.6	529.56 ug/L	4.405	529.56 ppb	4.405	0.83%
Se 196.026†	543.8	505.34 ug/L	1.523	505.34 ppb	1.523	0.30%
Si 251.611†	167318.7	6906.4 ug/L	153.69	6906.4 ppb	153.69	2.23%
Sn 189.927†	1958.8	497.24 ug/L	2.804	497.24 ppb	2.804	0.56%
Sr 421.552†	53137.0	482.37 ug/L	7.784	482.37 ppb	7.784	1.61%
Ti 334.940†	253025.8	483.75 ug/L	10.815	483.75 ppb	10.815	2.24%
Tl 190.801†	1145.6	497.26 ug/L	4.913	497.26 ppb	4.913	0.99%
U 409.014†	15299.2	518.58 ug/L	12.918	518.58 ppb	12.918	2.49%
V 292.402†	55107.8	501.38 ug/L	10.624	501.38 ppb	10.624	2.12%
Zn 213.857†	37028.8	489.83 ug/L	10.077	489.83 ppb	10.077	2.06%
SiO2†	171067.2	15043 ug/L	333.6	15043 ppb	333.6	2.22%

Sequence No.: 43
 Sample ID: 1202056812|959089|5
 Analyst: HSC
 Initial Sample Wt:
 Dilution:

Autosampler Location: 58
 Date Collected: 3/26/2010 23:51:07
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: 1202056812|959089|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4086.7	4086.7	108 %		23:53:20
1	Y RADIAL	4351.7	4351.7	106.6 %		23:53:00
1	Al 396.153Radial†	-72.6	5.6	6.6328 ug/L	6.6328 ppb	23:53:20
1	Ca 317.933Radial†	30.8	6.6	14.898 ug/L	14.898 ppb	23:53:20
1	Fe 238.204 Radial†	8.2	-0.9	-11.243 ug/L	-11.243 ppb	23:53:20
1	K 766.490 Radial†	2782.7	100.8	22.271 ug/L	22.271 ppb	23:53:00
1	Mg 279.077 IEC†	2.3	-0.7	-33.783 ug/L	-33.783 ppb	23:53:20
1	Na 589.592 Radial†	-501.5	-78.5	-31.562 ug/L	-31.562 ppb	23:53:00
1	Sr 421.552†	43.3	0.8	0.0075 ug/L	0.0075 ppb	23:53:00
1	Sc 361.383	813764.2	813764.2	111.05 %		23:54:17
1	Y 371.029	667764.2	667764.2	110.48 %		23:54:17
1	Ag 328.068†	207.9	35.1	0.1918 ug/L	0.1918 ppb	23:54:17
1	As 188.979†	-20.8	3.6	2.1666 ug/L	2.1666 ppb	23:54:37
1	B 249.677†	-30.9	307.1	9.2449 ug/L	9.2449 ppb	23:54:37
1	Ba 233.527†	29.5	24.0	0.2524 ug/L	0.2524 ppb	23:54:37
1	Be 313.107†	-3923.8	358.1	0.1678 ug/L	0.1678 ppb	23:54:17
1	Cd 226.502†	-157.0	29.8	0.4859 ug/L	0.4859 ppb	23:54:37
1	Co 228.616†	-35.1	15.1	0.4320 ug/L	0.4320 ppb	23:54:37
1	Cr 267.716†	121.1	13.9	0.2101 ug/L	0.2101 ppb	23:54:37
1	Cu 324.752†	6375.5	24.3	0.0819 ug/L	0.0819 ppb	23:54:17
1	Mn 257.610†	557.6	76.6	0.1121 ug/L	0.1121 ppb	23:54:37
1	Mo 202.031†	14.2	-3.9	-0.3981 ug/L	-0.3981 ppb	23:54:37
1	Ni 231.604†	86.4	-4.8	-0.1718 ug/L	-0.1718 ppb	23:54:37
1	P 214.914†	191.3	-16.2	-13.124 ug/L	-13.124 ppb	23:54:37
1	Pb 220.353†	-53.7	0.7	0.1195 ug/L	0.1195 ppb	23:54:37
1	S 181.975 Axial†	42.5	11.1	21.650 ug/L	21.650 ppb	23:54:37
1	Sb 206.836†	33.6	4.6	2.1114 ug/L	2.1114 ppb	23:54:37
1	Se 196.026†	-16.2	7.2	6.4337 ug/L	6.4337 ppb	23:54:37
1	Si 251.611†	12431.7	10739.2	443.67 ug/L	443.67 ppb	23:54:17
1	Sn 189.927†	8.8	-5.7	-1.4445 ug/L	-1.4445 ppb	23:54:37
1	Ti 334.940†	-1012.2	132.8	0.2553 ug/L	0.2553 ppb	23:54:17
1	Tl 190.801†	-22.4	2.1	0.8913 ug/L	0.8913 ppb	23:54:37
1	U 409.014†	-1786.8	225.0	7.6508 ug/L	7.6508 ppb	23:54:17
1	V 292.402†	-1467.1	59.4	0.5430 ug/L	0.5430 ppb	23:54:17
1	Zn 213.857†	813.1	72.4	0.9694 ug/L	0.9694 ppb	23:54:37
1	SiO2†	12498.3	10790.9	949.75 ug/L	949.75 ppb	23:55:33
2	Sc Radial	4234.2	4234.2	112 %		23:53:45
2	Y RADIAL	4657.3	4657.3	114.1 %		23:53:25
2	Al 396.153Radial†	-76.5	4.4	5.2899 ug/L	5.2899 ppb	23:53:45
2	Ca 317.933Radial†	32.0	6.7	15.037 ug/L	15.037 ppb	23:53:45
2	Fe 238.204 Radial†	8.2	-1.1	-14.797 ug/L	-14.797 ppb	23:53:45
2	K 766.490 Radial†	2813.6	38.6	8.5197 ug/L	8.5197 ppb	23:53:25
2	Mg 279.077 IEC†	1.3	-1.6	-75.990 ug/L	-75.990 ppb	23:53:45
2	Na 589.592 Radial†	-510.9	-70.8	-28.459 ug/L	-28.459 ppb	23:53:25
2	Sr 421.552†	6.1	-33.8	-0.3066 ug/L	-0.3066 ppb	23:53:25
2	Sc 361.383	815971.6	815971.6	111.35 %		23:54:42
2	Y 371.029	670193.0	670193.0	110.88 %		23:54:42
2	Ag 328.068†	98.8	-63.4	-0.3673 ug/L	-0.3673 ppb	23:54:42
2	As 188.979†	-20.4	4.0	2.4116 ug/L	2.4116 ppb	23:55:02
2	B 249.677†	-33.3	305.1	9.1850 ug/L	9.1850 ppb	23:55:02
2	Ba 233.527†	10.0	6.4	0.0689 ug/L	0.0689 ppb	23:55:02
2	Be 313.107†	-3987.2	310.8	0.1457 ug/L	0.1457 ppb	23:54:42
2	Cd 226.502†	-166.0	22.0	0.3608 ug/L	0.3608 ppb	23:55:02
2	Co 228.616†	-50.6	1.3	0.0336 ug/L	0.0336 ppb	23:55:02
2	Cr 267.716†	117.8	10.7	0.1608 ug/L	0.1608 ppb	23:55:02
2	Cu 324.752†	6409.3	39.1	0.1349 ug/L	0.1349 ppb	23:54:42
2	Mn 257.610†	564.0	80.9	0.1198 ug/L	0.1198 ppb	23:55:02
2	Mo 202.031†	7.0	-10.5	-1.0613 ug/L	-1.0613 ppb	23:55:02
2	Ni 231.604†	85.2	-6.0	-0.2155 ug/L	-0.2155 ppb	23:55:02

2	P 214.914†	195.8	-12.6	-10.243 ug/L	-10.243 ppb	23:55:02
2	Pb 220.353†	-49.2	4.9	0.8425 ug/L	0.8425 ppb	23:55:02
2	S 181.975 Axial†	34.9	4.2	8.1908 ug/L	8.1908 ppb	23:55:02
2	Sb 206.836†	28.8	0.2	0.0397 ug/L	0.0397 ppb	23:55:02
2	Se 196.026†	-14.8	8.4	7.5161 ug/L	7.5161 ppb	23:55:02
2	Si 251.611†	12399.6	10680.1	441.24 ug/L	441.24 ppb	23:54:42
2	Sn 189.927†	0.7	-13.0	-3.3006 ug/L	-3.3006 ppb	23:55:02
2	Ti 334.940†	-1016.4	131.5	0.2566 ug/L	0.2566 ppb	23:54:42
2	Tl 190.801†	-11.7	11.8	5.0755 ug/L	5.0755 ppb	23:55:02
2	U 409.014†	-1819.9	199.6	6.7875 ug/L	6.7875 ppb	23:54:42
2	V 292.402†	-1416.6	108.3	0.9711 ug/L	0.9711 ppb	23:54:42
2	Zn 213.857†	824.1	80.3	1.0753 ug/L	1.0753 ppb	23:55:02
2	SiO2†	12323.7	10603.7	933.29 ug/L	933.29 ppb	23:55:38
3	Sc Radial	4174.4	4174.4	110 %		23:54:10
3	Y RADIAL	4556.6	4556.6	111.6 %		23:53:50
3	Al 396.153Radial†	-69.4	9.9	11.766 ug/L	11.766 ppb	23:54:10
3	Ca 317.933Radial†	33.9	8.9	19.859 ug/L	19.859 ppb	23:54:10
3	Fe 238.204 Radial†	6.8	-2.3	-30.507 ug/L	-30.507 ppb	23:54:10
3	K 766.490 Radial†	2850.4	108.0	23.863 ug/L	23.863 ppb	23:53:50
3	Mg 279.077 IEC†	1.2	-1.8	-83.399 ug/L	-83.399 ppb	23:54:10
3	Na 589.592 Radial†	-533.9	-98.1	-39.463 ug/L	-39.463 ppb	23:53:50
3	Sr 421.552†	52.1	8.0	0.0722 ug/L	0.0722 ppb	23:53:50
3	Sc 361.383	818272.9	818272.9	111.66 %		23:55:08
3	Y 371.029	672935.5	672935.5	111.33 %		23:55:08
3	Ag 328.068†	227.3	51.4	0.2847 ug/L	0.2847 ppb	23:55:08
3	As 188.979†	-16.4	7.6	4.6133 ug/L	4.6133 ppb	23:55:28
3	B 249.677†	-11.7	324.5	9.7699 ug/L	9.7699 ppb	23:55:28
3	Ba 233.527†	14.9	10.8	0.1141 ug/L	0.1141 ppb	23:55:28
3	Be 313.107†	-3875.6	420.8	0.1971 ug/L	0.1971 ppb	23:55:08
3	Cd 226.502†	-160.5	27.4	0.4490 ug/L	0.4490 ppb	23:55:28
3	Co 228.616†	-41.6	9.5	0.2728 ug/L	0.2728 ppb	23:55:28
3	Cr 267.716†	127.0	18.7	0.2837 ug/L	0.2837 ppb	23:55:28
3	Cu 324.752†	6365.8	-16.1	-0.0600 ug/L	-0.0600 ppb	23:55:08
3	Mn 257.610†	575.2	89.6	0.1311 ug/L	0.1311 ppb	23:55:28
3	Mo 202.031†	18.5	-0.2	-0.0227 ug/L	-0.0227 ppb	23:55:28
3	Ni 231.604†	86.9	-4.8	-0.1709 ug/L	-0.1709 ppb	23:55:28
3	P 214.914†	180.5	-26.8	-21.650 ug/L	-21.650 ppb	23:55:28
3	Pb 220.353†	-51.6	2.9	0.5040 ug/L	0.5040 ppb	23:55:28
3	S 181.975 Axial†	33.8	3.2	6.1843 ug/L	6.1843 ppb	23:55:28
3	Sb 206.836†	36.3	6.9	3.1811 ug/L	3.1811 ppb	23:55:28
3	Se 196.026†	-18.4	5.3	4.6612 ug/L	4.6612 ppb	23:55:28
3	Si 251.611†	12319.1	10576.6	436.95 ug/L	436.95 ppb	23:55:08
3	Sn 189.927†	9.9	-4.8	-1.2117 ug/L	-1.2117 ppb	23:55:28
3	Ti 334.940†	-997.3	151.2	0.2978 ug/L	0.2978 ppb	23:55:08
3	Tl 190.801†	-16.8	7.2	3.1240 ug/L	3.1240 ppb	23:55:28
3	U 409.014†	-1990.9	51.1	1.7392 ug/L	1.7392 ppb	23:55:08
3	V 292.402†	-1434.1	96.3	0.8697 ug/L	0.8697 ppb	23:55:08
3	Zn 213.857†	823.7	77.8	1.0451 ug/L	1.0451 ppb	23:55:28
3	SiO2†	12292.5	10544.6	928.06 ug/L	928.06 ppb	23:55:43

Mean Data: 1202056812|959089|5

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Sc 361.383	816002.9	111.35 %		0.308			0.28%
Sc Radial	4165.1	110 %		2.0			1.78%
Y 371.029	670297.6	110.90 %		0.428			0.39%
Y RADIAL	4521.9	110.8 %		3.81			3.44%
Ag 328.068†	7.7	0.0364 ug/L		0.35267	0.0364 ppb	0.35267	968.58%
Al 396.153Radial†	6.6	7.8963 ug/L		3.41800	7.8963 ppb	3.41800	43.29%
As 188.979†	5.0	3.0638 ug/L		1.34749	3.0638 ppb	1.34749	43.98%
B 249.677†	312.2	9.4000 ug/L		0.32180	9.4000 ppb	0.32180	3.42%
Ba 233.527†	13.7	0.1452 ug/L		0.09559	0.1452 ppb	0.09559	65.85%
Be 313.107†	363.2	0.1702 ug/L		0.02581	0.1702 ppb	0.02581	15.17%
Ca 317.933Radial†	7.4	16.598 ug/L		2.8251	16.598 ppb	2.8251	17.02%
Cd 226.502†	26.4	0.4319 ug/L		0.06427	0.4319 ppb	0.06427	14.88%
Co 228.616†	8.6	0.2461 ug/L		0.20055	0.2461 ppb	0.20055	81.48%
Cr 267.716†	14.4	0.2182 ug/L		0.06185	0.2182 ppb	0.06185	28.35%
Cu 324.752†	15.8	0.0523 ug/L		0.10078	0.0523 ppb	0.10078	192.85%
Fe 238.204 Radial†	-1.4	-18.849 ug/L		10.2513	-18.849 ppb	10.2513	54.39%
K 766.490 Radial†	82.5	18.218 ug/L		8.4365	18.218 ppb	8.4365	46.31%

Mg 279.077 IEC†	-1.4	-64.391 ug/L	26.7646	-64.391 ppb	26.7646	41.57%
Mn 257.610†	82.4	0.1210 ug/L	0.00960	0.1210 ppb	0.00960	7.94%
Mo 202.031†	-4.9	-0.4941 ug/L	0.52592	-0.4941 ppb	0.52592	106.45%
Na 589.592 Radial†	-82.5	-33.161 ug/L	5.6740	-33.161 ppb	5.6740	17.11%
Ni 231.604†	-5.2	-0.1861 ug/L	0.02551	-0.1861 ppb	0.02551	13.71%
P 214.914†	-18.5	-15.005 ug/L	5.9318	-15.005 ppb	5.9318	39.53%
Pb 220.353†	2.8	0.4887 ug/L	0.36173	0.4887 ppb	0.36173	74.02%
S 181.975 Axial†	6.2	12.008 ug/L	8.4102	12.008 ppb	8.4102	70.04%
Sb 206.836†	3.9	1.7774 ug/L	1.59713	1.7774 ppb	1.59713	89.86%
Se 196.026†	6.9	6.2037 ug/L	1.44126	6.2037 ppb	1.44126	23.23%
Si 251.611†	10665.3	440.62 ug/L	3.403	440.62 ppb	3.403	0.77%
Sn 189.927†	-7.8	-1.9856 ug/L	1.14479	-1.9856 ppb	1.14479	57.65%
Sr 421.552†	-8.3	-0.0757 ug/L	0.20264	-0.0757 ppb	0.20264	267.86%
Ti 334.940†	138.5	0.2699 ug/L	0.02415	0.2699 ppb	0.02415	8.95%
Tl 190.801†	7.0	3.0302 ug/L	2.09368	3.0302 ppb	2.09368	69.09%
U 409.014†	158.5	5.3925 ug/L	3.19314	5.3925 ppb	3.19314	59.21%
V 292.402†	88.0	0.7946 ug/L	0.22369	0.7946 ppb	0.22369	28.15%
Zn 213.857†	76.8	1.0300 ug/L	0.05454	1.0300 ppb	0.05454	5.30%
SiO2†	10646.4	937.04 ug/L	11.320	937.04 ppb	11.320	1.21%

Sequence No.: 45

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 3/27/2010 00:04:42

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	4205.2	4205.2	111 %		00:06:53
1	Y RADIAL	4653.7	4653.7	114.0 %		00:06:33
1	Al 396.153Radial†	4789.3	4387.0	5195.4 ug/L	5195.4 ppb	00:06:33
1	Ca 317.933Radial†	2576.0	2298.5	5149.6 ug/L	5149.6 ppb	00:06:53
1	Fe 238.204 Radial†	422.1	371.8	4929.9 ug/L	4929.9 ppb	00:06:53
1	K 766.490 Radial†	27113.0	21944.5	4838.8 ug/L	4838.8 ppb	00:06:33
1	Mg 279.077 IEC†	122.2	107.2	5071.4 ug/L	5071.4 ppb	00:06:53
1	Na 589.592 Radial†	25164.1	23053.8	9270.6 ug/L	9270.6 ppb	00:06:33
1	Sr 421.552†	58287.3	52465.2	476.27 ug/L	476.27 ppb	00:06:33
1	Sc 361.383	838515.4	838515.4	114.43 %		00:07:51
1	Y 371.029	683287.2	683287.2	113.05 %		00:07:51
1	Ag 328.068†	103243.2	90075.4	515.57 ug/L	515.57 ppb	00:07:56
1	As 188.979†	942.9	846.3	518.11 ug/L	518.11 ppb	00:08:16
1	B 249.677†	18855.4	16813.3	503.78 ug/L	503.78 ppb	00:07:56
1	Ba 233.527†	55576.1	48567.2	510.31 ug/L	510.31 ppb	00:07:56
1	Be 313.107†	1240187.1	1087730.7	508.98 ug/L	508.98 ppb	00:07:51
1	Cd 226.502†	35742.0	31407.2	510.24 ug/L	510.24 ppb	00:07:56
1	Co 228.616†	20605.1	18054.1	518.88 ug/L	518.88 ppb	00:07:56
1	Cr 267.716†	38245.5	33328.9	511.31 ug/L	511.31 ppb	00:07:56
1	Cu 324.752†	169241.6	142188.6	507.55 ug/L	507.55 ppb	00:07:56
1	Mn 257.610†	392552.1	342638.3	500.37 ug/L	500.37 ppb	00:07:51
1	Mo 202.031†	5824.4	5073.4	512.76 ug/L	512.76 ppb	00:08:16
1	Ni 231.604†	16714.7	14525.0	520.82 ug/L	520.82 ppb	00:07:56
1	P 214.914†	3811.1	3142.2	2441.1 ug/L	2441.1 ppb	00:08:16
1	Pb 220.353†	3297.4	2930.8	508.47 ug/L	508.47 ppb	00:08:16
1	S 181.975 Axial†	635.5	528.3	1026.3 ug/L	1026.3 ppb	00:08:16
1	Sb 206.836†	1297.1	1107.9	532.23 ug/L	532.23 ppb	00:08:16
1	Se 196.026†	630.7	573.0	531.60 ug/L	531.60 ppb	00:08:16
1	Si 251.611†	71825.7	62315.1	2568.1 ug/L	2568.1 ppb	00:07:56
1	Sn 189.927†	2310.0	2005.1	508.98 ug/L	508.98 ppb	00:08:16
1	Ti 334.940†	300764.1	263891.7	504.52 ug/L	504.52 ppb	00:07:56
1	Tl 190.801†	1329.7	1184.4	514.07 ug/L	514.07 ppb	00:08:16
1	U 409.014†	15429.6	15318.5	519.20 ug/L	519.20 ppb	00:07:56
1	V 292.402†	63483.1	56860.5	517.40 ug/L	517.40 ppb	00:07:56
1	Zn 213.857†	44725.0	38426.8	508.37 ug/L	508.37 ppb	00:07:56
1	SiO2†	70610.7	61245.0	5376.4 ug/L	5376.4 ppb	00:09:23
2	Sc Radial	4195.5	4195.5	111 %		00:07:18
2	Y RADIAL	4633.0	4633.0	113.5 %		00:06:58
2	Al 396.153Radial†	4814.4	4419.6	5234.9 ug/L	5234.9 ppb	00:06:58
2	Ca 317.933Radial†	2590.2	2316.7	5190.2 ug/L	5190.2 ppb	00:07:18
2	Fe 238.204 Radial†	424.7	375.0	4972.2 ug/L	4972.2 ppb	00:07:18
2	K 766.490 Radial†	27283.5	22154.9	4885.2 ug/L	4885.2 ppb	00:06:58
2	Mg 279.077 IEC†	122.6	107.9	5101.6 ug/L	5101.6 ppb	00:07:18
2	Na 589.592 Radial†	25222.8	23159.2	9313.0 ug/L	9313.0 ppb	00:06:58
2	Sr 421.552†	58802.8	53051.9	481.60 ug/L	481.60 ppb	00:06:58
2	Sc 361.383	852862.4	852862.4	116.38 %		00:08:22
2	Y 371.029	694023.9	694023.9	114.82 %		00:08:22
2	Ag 328.068†	102823.8	88197.2	504.86 ug/L	504.86 ppb	00:08:27
2	As 188.979†	935.7	826.3	505.88 ug/L	505.88 ppb	00:08:47
2	B 249.677†	18923.9	16595.0	497.23 ug/L	497.23 ppb	00:08:27
2	Ba 233.527†	55239.6	47461.0	498.69 ug/L	498.69 ppb	00:08:27
2	Be 313.107†	1263462.1	1089496.9	509.78 ug/L	509.78 ppb	00:08:22
2	Cd 226.502†	35521.7	30692.5	498.61 ug/L	498.61 ppb	00:08:27
2	Co 228.616†	20455.7	17622.8	506.47 ug/L	506.47 ppb	00:08:27
2	Cr 267.716†	38041.7	32591.6	500.01 ug/L	500.01 ppb	00:08:27
2	Cu 324.752†	168625.2	139171.0	496.78 ug/L	496.78 ppb	00:08:27
2	Mn 257.610†	400803.3	343956.9	502.30 ug/L	502.30 ppb	00:08:22
2	Mo 202.031†	5756.3	4929.3	498.21 ug/L	498.21 ppb	00:08:47
2	Ni 231.604†	16585.9	14168.6	508.04 ug/L	508.04 ppb	00:08:27

2	P 214.914†	3780.0	3059.4	2376.3 ug/L	2376.3 ppb	00:08:47
2	Pb 220.353†	3281.8	2868.9	497.73 ug/L	497.73 ppb	00:08:47
2	S 181.975 Axial†	632.4	516.3	1003.0 ug/L	1003.0 ppb	00:08:47
2	Sb 206.836†	1278.8	1073.2	515.61 ug/L	515.61 ppb	00:08:47
2	Se 196.026†	620.1	554.5	515.12 ug/L	515.12 ppb	00:08:47
2	Si 251.611†	71594.6	61060.6	2516.5 ug/L	2516.5 ppb	00:08:27
2	Sn 189.927†	2291.7	1955.4	496.39 ug/L	496.39 ppb	00:08:47
2	Ti 334.940†	299185.9	258114.0	493.48 ug/L	493.48 ppb	00:08:27
2	Tl 190.801†	1305.8	1144.2	496.77 ug/L	496.77 ppb	00:08:47
2	U 409.014†	15257.9	14944.0	506.48 ug/L	506.48 ppb	00:08:27
2	V 292.402†	63097.1	55595.6	505.83 ug/L	505.83 ppb	00:08:27
2	Zn 213.857†	44540.9	37611.0	497.57 ug/L	497.57 ppb	00:08:27
2	SiO2†	69790.8	59502.4	5223.4 ug/L	5223.4 ppb	00:09:28
3	Sc Radial	4205.2	4205.2	111 %		00:07:44
3	Y RADIAL	4682.4	4682.4	114.7 %		00:07:24
3	Al 396.153Radial†	4880.1	4468.9	5293.3 ug/L	5293.3 ppb	00:07:24
3	Ca 317.933Radial†	2610.7	2329.8	5219.7 ug/L	5219.7 ppb	00:07:44
3	Fe 238.204 Radial†	428.9	377.9	5011.2 ug/L	5011.2 ppb	00:07:44
3	K 766.490 Radial†	27604.1	22387.3	4936.5 ug/L	4936.5 ppb	00:07:24
3	Mg 279.077 IEC†	123.5	108.4	5127.5 ug/L	5127.5 ppb	00:07:44
3	Na 589.592 Radial†	25314.0	23189.2	9325.1 ug/L	9325.1 ppb	00:07:24
3	Sr 421.552†	59377.3	53447.9	485.19 ug/L	485.19 ppb	00:07:24
3	Sc 361.383	842276.9	842276.9	114.94 %		00:08:53
3	Y 371.029	686076.6	686076.6	113.51 %		00:08:53
3	Ag 328.068†	101459.8	88120.8	504.43 ug/L	504.43 ppb	00:08:58
3	As 188.979†	930.4	831.8	509.20 ug/L	509.20 ppb	00:09:18
3	B 249.677†	18599.1	16516.7	494.87 ug/L	494.87 ppb	00:08:58
3	Ba 233.527†	54662.0	47555.0	499.67 ug/L	499.67 ppb	00:08:58
3	Be 313.107†	1247319.7	1089096.0	509.59 ug/L	509.59 ppb	00:08:53
3	Cd 226.502†	35169.8	30769.9	499.86 ug/L	499.86 ppb	00:08:58
3	Co 228.616†	20230.4	17647.8	507.20 ug/L	507.20 ppb	00:08:58
3	Cr 267.716†	37558.7	32582.1	499.87 ug/L	499.87 ppb	00:08:58
3	Cu 324.752†	165517.6	138288.1	493.64 ug/L	493.64 ppb	00:08:58
3	Mn 257.610†	396066.3	344163.6	502.61 ug/L	502.61 ppb	00:08:53
3	Mo 202.031†	5727.1	4966.0	501.92 ug/L	501.92 ppb	00:09:18
3	Ni 231.604†	16293.4	14093.2	505.33 ug/L	505.33 ppb	00:08:58
3	P 214.914†	3741.4	3066.7	2382.8 ug/L	2382.8 ppb	00:09:18
3	Pb 220.353†	3259.7	2885.1	500.56 ug/L	500.56 ppb	00:09:18
3	S 181.975 Axial†	626.6	518.0	1006.3 ug/L	1006.3 ppb	00:09:18
3	Sb 206.836†	1280.0	1088.0	522.59 ug/L	522.59 ppb	00:09:18
3	Se 196.026†	607.8	550.5	511.62 ug/L	511.62 ppb	00:09:18
3	Si 251.611†	70536.4	60913.0	2510.3 ug/L	2510.3 ppb	00:08:58
3	Sn 189.927†	2273.7	1964.5	498.69 ug/L	498.69 ppb	00:09:18
3	Ti 334.940†	294796.7	257526.0	492.36 ug/L	492.36 ppb	00:08:58
3	Tl 190.801†	1305.5	1158.1	502.73 ug/L	502.73 ppb	00:09:18
3	U 409.014†	14890.6	14789.2	501.22 ug/L	501.22 ppb	00:08:58
3	V 292.402†	62157.4	55459.3	504.64 ug/L	504.64 ppb	00:08:58
3	Zn 213.857†	43972.7	37597.7	497.40 ug/L	497.40 ppb	00:08:58
3	SiO2†	72009.6	62186.4	5459.6 ug/L	5459.6 ppb	00:09:34

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	844551.6	115.25 %	1.015			0.88%
Sc Radial	4202.0	111 %	0.1			0.13%
Y 371.029	687795.9	113.79 %	0.922			0.81%
Y RADIAL	4656.4	114.1 %	0.61			0.53%
Ag 328.068†	88797.8	508.29 ug/L	6.309	508.29 ppb	6.309	1.24%
QC value within limits for Ag 328.068 Recovery = 101.66%						
Al 396.153Radial†	4425.2	5241.2 ug/L	49.30	5241.2 ppb	49.30	0.94%
QC value within limits for Al 396.153Radial Recovery = 104.82%						
As 188.979†	834.8	511.07 ug/L	6.324	511.07 ppb	6.324	1.24%
QC value within limits for As 188.979 Recovery = 102.21%						
B 249.677†	16641.7	498.63 ug/L	4.613	498.63 ppb	4.613	0.93%
QC value within limits for B 249.677 Recovery = 99.73%						
Ba 233.527†	47861.0	502.89 ug/L	6.442	502.89 ppb	6.442	1.28%
QC value within limits for Ba 233.527 Recovery = 100.58%						
Be 313.107†	1088774.5	509.45 ug/L	0.418	509.45 ppb	0.418	0.08%
QC value within limits for Be 313.107 Recovery = 101.89%						
Ca 317.933Radial†	2315.0	5186.5 ug/L	35.23	5186.5 ppb	35.23	0.68%

QC value within limits for Ca 317.933 Radial Recovery = 103.73%

Cd 226.502†	30956.5	502.90 ug/L	6.383	502.90 ppb	6.383	1.27%
QC value within limits for Cd 226.502 Recovery = 100.58%						
Co 228.616†	17774.9	510.85 ug/L	6.962	510.85 ppb	6.962	1.36%
QC value within limits for Co 228.616 Recovery = 102.17%						
Cr 267.716†	32834.2	503.73 ug/L	6.562	503.73 ppb	6.562	1.30%
QC value within limits for Cr 267.716 Recovery = 100.75%						
Cu 324.752†	139882.6	499.32 ug/L	7.294	499.32 ppb	7.294	1.46%
QC value within limits for Cu 324.752 Recovery = 99.86%						
Fe 238.204 Radial†	374.9	4971.1 ug/L	40.70	4971.1 ppb	40.70	0.82%
QC value within limits for Fe 238.204 Radial Recovery = 99.42%						
K 766.490 Radial†	22162.3	4886.8 ug/L	48.89	4886.8 ppb	48.89	1.00%
QC value within limits for K 766.490 Radial Recovery = 97.74%						
Mg 279.077 IEC†	107.8	5100.2 ug/L	28.09	5100.2 ppb	28.09	0.55%
QC value within limits for Mg 279.077 IEC Recovery = 102.00%						
Mn 257.610†	343586.3	501.76 ug/L	1.210	501.76 ppb	1.210	0.24%
QC value within limits for Mn 257.610 Recovery = 100.35%						
Mo 202.031†	4989.5	504.30 ug/L	7.562	504.30 ppb	7.562	1.50%
QC value within limits for Mo 202.031 Recovery = 100.86%						
Na 589.592 Radial†	23134.1	9302.9 ug/L	28.60	9302.9 ppb	28.60	0.31%
QC value within limits for Na 589.592 Radial Recovery = 93.03%						
Ni 231.604†	14262.3	511.40 ug/L	8.271	511.40 ppb	8.271	1.62%
QC value within limits for Ni 231.604 Recovery = 102.28%						
P 214.914†	3089.4	2400.1 ug/L	35.73	2400.1 ppb	35.73	1.49%
QC value within limits for P 214.914 Recovery = 96.00%						
Pb 220.353†	2894.9	502.25 ug/L	5.566	502.25 ppb	5.566	1.11%
QC value within limits for Pb 220.353 Recovery = 100.45%						
S 181.975 Axial†	520.9	1011.9 ug/L	12.60	1011.9 ppb	12.60	1.24%
QC value within limits for S 181.975 Axial Recovery = 101.19%						
Sb 206.836†	1089.7	523.47 ug/L	8.344	523.47 ppb	8.344	1.59%
QC value within limits for Sb 206.836 Recovery = 104.69%						
Se 196.026†	559.3	519.45 ug/L	10.674	519.45 ppb	10.674	2.05%
QC value within limits for Se 196.026 Recovery = 103.89%						
Si 251.611†	61429.5	2531.6 ug/L	31.74	2531.6 ppb	31.74	1.25%
QC value within limits for Si 251.611 Recovery = 101.27%						
Sn 189.927†	1975.0	501.35 ug/L	6.705	501.35 ppb	6.705	1.34%
QC value within limits for Sn 189.927 Recovery = 100.27%						
Sr 421.552†	52988.4	481.02 ug/L	4.489	481.02 ppb	4.489	0.93%
QC value within limits for Sr 421.552 Recovery = 96.20%						
Ti 334.940†	259843.9	496.79 ug/L	6.719	496.79 ppb	6.719	1.35%
QC value within limits for Ti 334.940 Recovery = 99.36%						
Tl 190.801†	1162.2	504.53 ug/L	8.789	504.53 ppb	8.789	1.74%
QC value within limits for Tl 190.801 Recovery = 100.91%						
U 409.014†	15017.2	508.97 ug/L	9.243	508.97 ppb	9.243	1.82%
QC value within limits for U 409.014 Recovery = 101.79%						
V 292.402†	55971.8	509.29 ug/L	7.051	509.29 ppb	7.051	1.38%
QC value within limits for V 292.402 Recovery = 101.86%						
Zn 213.857†	37878.5	501.11 ug/L	6.285	501.11 ppb	6.285	1.25%
QC value within limits for Zn 213.857 Recovery = 100.22%						
SiO2†	60977.9	5353.1 ug/L	119.77	5353.1 ppb	119.77	2.24%
QC value within limits for SiO2 Recovery = 100.11%						

All analyte(s) passed QC.

Sequence No.: 46

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 3/27/2010 00:11:43

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	4234.9	4234.9	112 %		00:13:55
1	Y RADIAL	4547.8	4547.8	111.4 %		00:13:35
1	Al 396.153Radial†	-69.9	10.4	12.348 ug/L	12.348 ppb	00:13:55
1	Ca 317.933Radial†	26.4	1.7	3.8659 ug/L	3.8659 ppb	00:13:55
1	Fe 238.204 Radial†	4.8	-4.1	-54.792 ug/L	-54.792 ppb	00:13:55
1	K 766.490 Radial†	2601.1	-151.9	-33.518 ug/L	-33.518 ppb	00:13:35
1	Mg 279.077 IEC†	2.2	-0.8	-39.243 ug/L	-39.243 ppb	00:13:55
1	Na 589.592 Radial†	-582.4	-134.6	-54.143 ug/L	-54.143 ppb	00:13:35
1	Sr 421.552†	46.4	2.3	0.0205 ug/L	0.0205 ppb	00:13:35
1	Sc 361.383	823631.4	823631.4	112.39 %		00:14:52
1	Y 371.029	678592.1	678592.1	112.27 %		00:14:52
1	Ag 328.068†	232.1	54.4	0.2974 ug/L	0.2974 ppb	00:14:52
1	As 188.979†	-24.6	0.4	0.2236 ug/L	0.2236 ppb	00:15:12
1	B 249.677†	-194.5	161.9	4.8825 ug/L	4.8825 ppb	00:15:12
1	Ba 233.527†	19.1	14.4	0.1523 ug/L	0.1523 ppb	00:15:12
1	Be 313.107†	-3975.0	354.9	0.1660 ug/L	0.1660 ppb	00:14:52
1	Cd 226.502†	-175.9	14.6	0.2434 ug/L	0.2434 ppb	00:15:12
1	Co 228.616†	-44.9	6.8	0.1958 ug/L	0.1958 ppb	00:15:12
1	Cr 267.716†	106.5	-0.3	-0.0085 ug/L	-0.0085 ppb	00:15:12
1	Cu 324.752†	5898.3	-469.1	-1.6774 ug/L	-1.6774 ppb	00:14:52
1	Mn 257.610†	451.7	-23.6	-0.0383 ug/L	-0.0383 ppb	00:15:12
1	Mo 202.031†	19.3	0.5	0.0420 ug/L	0.0420 ppb	00:15:12
1	Ni 231.604†	92.1	-0.6	-0.0206 ug/L	-0.0206 ppb	00:15:12
1	P 214.914†	192.1	-17.5	-13.795 ug/L	-13.795 ppb	00:15:12
1	Pb 220.353†	-70.5	-13.7	-2.3540 ug/L	-2.3540 ppb	00:15:12
1	S 181.975 Axial†	30.4	-0.1	-0.1430 ug/L	-0.1430 ppb	00:15:12
1	Sb 206.836†	23.4	-4.8	-2.2279 ug/L	-2.2279 ppb	00:15:12
1	Se 196.026†	-15.6	7.9	6.9482 ug/L	6.9482 ppb	00:15:12
1	Si 251.611†	495.4	-14.9	-0.6170 ug/L	-0.6170 ppb	00:15:12
1	Sn 189.927†	9.0	-5.6	-1.4204 ug/L	-1.4204 ppb	00:15:12
1	Ti 334.940†	-1089.5	75.0	0.1472 ug/L	0.1472 ppb	00:14:52
1	Tl 190.801†	-32.1	-6.3	-2.7282 ug/L	-2.7282 ppb	00:15:12
1	U 409.014†	-2071.2	-8.8	-0.2915 ug/L	-0.2915 ppb	00:14:52
1	V 292.402†	-1400.2	134.8	1.2176 ug/L	1.2176 ppb	00:14:52
1	Zn 213.857†	598.5	-127.3	-1.6892 ug/L	-1.6892 ppb	00:15:12
1	SiO2†	482.1	-35.1	-3.0875 ug/L	-3.0875 ppb	00:16:23
2	Sc Radial	4240.8	4240.8	112 %		00:14:20
2	Y RADIAL	4660.6	4660.6	114.2 %		00:14:00
2	Al 396.153Radial†	-68.2	12.0	14.311 ug/L	14.311 ppb	00:14:20
2	Ca 317.933Radial†	27.5	2.6	5.8281 ug/L	5.8281 ppb	00:14:20
2	Fe 238.204 Radial†	6.9	-2.3	-30.312 ug/L	-30.312 ppb	00:14:20
2	K 766.490 Radial†	2707.9	-59.7	-13.164 ug/L	-13.164 ppb	00:14:00
2	Mg 279.077 IEC†	2.8	-0.3	-13.280 ug/L	-13.280 ppb	00:14:20
2	Na 589.592 Radial†	-621.2	-168.5	-67.764 ug/L	-67.764 ppb	00:14:00
2	Sr 421.552†	44.9	0.8	0.0075 ug/L	0.0075 ppb	00:14:00
2	Sc 361.383	821666.0	821666.0	112.13 %		00:15:17
2	Y 371.029	676773.7	676773.7	111.97 %		00:15:17
2	Ag 328.068†	217.8	42.1	0.2297 ug/L	0.2297 ppb	00:15:17
2	As 188.979†	-28.0	-2.7	-1.6467 ug/L	-1.6467 ppb	00:15:37
2	B 249.677†	-209.7	147.9	4.4563 ug/L	4.4563 ppb	00:15:37
2	Ba 233.527†	15.0	10.8	0.1141 ug/L	0.1141 ppb	00:15:37
2	Be 313.107†	-3950.6	368.2	0.1722 ug/L	0.1722 ppb	00:15:17
2	Cd 226.502†	-164.0	24.9	0.4085 ug/L	0.4085 ppb	00:15:37
2	Co 228.616†	-33.8	16.6	0.4745 ug/L	0.4745 ppb	00:15:37
2	Cr 267.716†	113.9	6.5	0.0955 ug/L	0.0955 ppb	00:15:37
2	Cu 324.752†	5938.1	-421.0	-1.5067 ug/L	-1.5067 ppb	00:15:17
2	Mn 257.610†	433.7	-38.8	-0.0590 ug/L	-0.0590 ppb	00:15:37
2	Mo 202.031†	3.9	-13.2	-1.3387 ug/L	-1.3387 ppb	00:15:37
2	Ni 231.604†	76.2	-14.6	-0.5244 ug/L	-0.5244 ppb	00:15:37

2	P 214.914†	190.5	-18.6	-14.716 ug/L	-14.716 ppb	00:15:37
2	Pb 220.353†	-57.8	-2.5	-0.4195 ug/L	-0.4195 ppb	00:15:37
2	S 181.975 Axial†	22.2	-7.3	-14.282 ug/L	-14.282 ppb	00:15:37
2	Sb 206.836†	32.5	3.4	1.5174 ug/L	1.5174 ppb	00:15:37
2	Se 196.026†	-5.7	16.6	14.883 ug/L	14.883 ppb	00:15:37
2	Si 251.611†	473.8	-33.1	-1.3527 ug/L	-1.3527 ppb	00:15:37
2	Sn 189.927†	5.7	-8.5	-2.1598 ug/L	-2.1598 ppb	00:15:37
2	Ti 334.940†	-1092.1	70.4	0.1348 ug/L	0.1348 ppb	00:15:17
2	Tl 190.801†	-30.8	-5.2	-2.2628 ug/L	-2.2628 ppb	00:15:37
2	U 409.014†	-1933.0	110.0	3.7444 ug/L	3.7444 ppb	00:15:17
2	V 292.402†	-1456.6	81.5	0.7243 ug/L	0.7243 ppb	00:15:17
2	Zn 213.857†	600.9	-123.9	-1.6445 ug/L	-1.6445 ppb	00:15:37
2	SiO2†	507.9	-11.0	-0.9353 ug/L	-0.9353 ppb	00:16:43
3	Sc Radial	4273.5	4273.5	113 %		00:14:45
3	Y RADIAL	4585.1	4585.1	112.3 %		00:14:25
3	Al 396.153Radial†	-68.8	11.9	14.161 ug/L	14.161 ppb	00:14:45
3	Ca 317.933Radial†	28.0	2.9	6.5212 ug/L	6.5212 ppb	00:14:45
3	Fe 238.204 Radial†	9.0	-0.5	-6.2495 ug/L	-6.2495 ppb	00:14:45
3	K 766.490 Radial†	2618.4	-157.6	-34.777 ug/L	-34.777 ppb	00:14:25
3	Mg 279.077 IEC†	3.5	0.3	13.753 ug/L	13.753 ppb	00:14:45
3	Na 589.592 Radial†	-616.2	-159.9	-64.298 ug/L	-64.298 ppb	00:14:25
3	Sr 421.552†	42.1	-2.0	-0.0178 ug/L	-0.0178 ppb	00:14:25
3	Sc 361.383	804119.7	804119.7	109.73 %		00:15:43
3	Y 371.029	662186.8	662186.8	109.56 %		00:15:43
3	Ag 328.068†	196.4	26.8	0.1472 ug/L	0.1472 ppb	00:15:43
3	As 188.979†	-22.1	2.1	1.2995 ug/L	1.2995 ppb	00:16:03
3	B 249.677†	-191.5	160.5	4.8316 ug/L	4.8316 ppb	00:16:03
3	Ba 233.527†	13.9	10.1	0.1073 ug/L	0.1073 ppb	00:16:03
3	Be 313.107†	-3940.9	300.2	0.1405 ug/L	0.1405 ppb	00:15:43
3	Cd 226.502†	-171.1	15.2	0.2486 ug/L	0.2486 ppb	00:16:03
3	Co 228.616†	-49.9	1.3	0.0339 ug/L	0.0339 ppb	00:16:03
3	Cr 267.716†	102.4	-1.7	-0.0290 ug/L	-0.0290 ppb	00:16:03
3	Cu 324.752†	5850.6	-385.3	-1.3800 ug/L	-1.3800 ppb	00:15:43
3	Mn 257.610†	433.7	-30.4	-0.0455 ug/L	-0.0455 ppb	00:16:03
3	Mo 202.031†	8.2	-9.3	-0.9415 ug/L	-0.9415 ppb	00:16:03
3	Ni 231.604†	72.9	-16.2	-0.5796 ug/L	-0.5796 ppb	00:16:03
3	P 214.914†	192.8	-12.8	-10.072 ug/L	-10.072 ppb	00:16:03
3	Pb 220.353†	-56.5	-2.4	-0.4111 ug/L	-0.4111 ppb	00:16:03
3	S 181.975 Axial†	29.6	-0.1	-0.1697 ug/L	-0.1697 ppb	00:16:03
3	Sb 206.836†	24.1	-3.6	-1.7417 ug/L	-1.7417 ppb	00:16:03
3	Se 196.026†	-23.2	0.6	0.5056 ug/L	0.5056 ppb	00:16:03
3	Si 251.611†	489.7	-9.5	-0.3804 ug/L	-0.3804 ppb	00:16:03
3	Sn 189.927†	6.1	-8.1	-2.0585 ug/L	-2.0585 ppb	00:16:03
3	Ti 334.940†	-1052.4	85.3	0.1593 ug/L	0.1593 ppb	00:15:43
3	Tl 190.801†	-26.7	-2.1	-0.8998 ug/L	-0.8998 ppb	00:16:03
3	U 409.014†	-1756.8	233.0	7.9248 ug/L	7.9248 ppb	00:15:43
3	V 292.402†	-1418.9	87.5	0.7887 ug/L	0.7887 ppb	00:15:43
3	Zn 213.857†	606.4	-107.2	-1.4247 ug/L	-1.4247 ppb	00:16:03
3	SiO2†	499.0	-9.2	-0.7848 ug/L	-0.7848 ppb	00:17:03

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	816472.4	111.42 %		1.466			1.32%
Sc Radial	4249.7	112 %		0.5			0.49%
Y 371.029	672517.5	111.27 %		1.488			1.34%
Y RADIAL	4597.8	112.6 %		1.41			1.25%
Ag 328.068†	41.1	0.2247 ug/L		0.07522	0.2247 ppb	0.07522	33.47%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	11.4	13.607 ug/L		1.0923	13.607 ppb	1.0923	8.03%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	-0.1	-0.0412 ug/L		1.49081	-0.0412 ppb	1.49081	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	156.8	4.7235 ug/L		0.23278	4.7235 ppb	0.23278	4.93%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	11.8	0.1246 ug/L		0.02430	0.1246 ppb	0.02430	19.51%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	341.1	0.1596 ug/L		0.01680	0.1596 ppb	0.01680	10.53%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	2.4	5.4051 ug/L		1.37726	5.4051 ppb	1.37726	25.48%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd 226.502†	18.3	0.3002 ug/L	0.09387	0.3002 ppb	0.09387	31.27%	
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	8.2	0.2348 ug/L	0.22287	0.2348 ppb	0.22287	94.94%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	1.5	0.0193 ug/L	0.06676	0.0193 ppb	0.06676	345.06%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	-425.1	-1.5214 ug/L	0.14926	-1.5214 ppb	0.14926	9.81%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	-2.3	-30.451 ug/L	24.2716	-30.451 ppb	24.2716	79.71%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	-123.1	-27.153 ug/L	12.1315	-27.153 ppb	12.1315	44.68%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	-0.3	-12.923 ug/L	26.4998	-12.923 ppb	26.4998	205.06%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	-30.9	-0.0476 ug/L	0.01052	-0.0476 ppb	0.01052	22.10%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	-7.4	-0.7460 ug/L	0.71078	-0.7460 ppb	0.71078	95.28%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	-154.3	-62.069 ug/L	7.0789	-62.069 ppb	7.0789	11.40%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	-10.4	-0.3748 ug/L	0.30803	-0.3748 ppb	0.30803	82.17%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	-16.3	-12.861 ug/L	2.4590	-12.861 ppb	2.4590	19.12%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	-6.2	-1.0615 ug/L	1.11930	-1.0615 ppb	1.11930	105.44%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	-2.5	-4.8649 ug/L	8.15542	-4.8649 ppb	8.15542	167.64%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	-1.7	-0.8174 ug/L	2.03656	-0.8174 ppb	2.03656	249.15%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	8.4	7.4455 ug/L	7.20146	7.4455 ppb	7.20146	96.72%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	-19.2	-0.7834 ug/L	0.50705	-0.7834 ppb	0.50705	64.73%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	-7.4	-1.8795 ug/L	0.40086	-1.8795 ppb	0.40086	21.33%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	0.4	0.0034 ug/L	0.01945	0.0034 ppb	0.01945	572.22%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	76.9	0.1471 ug/L	0.01228	0.1471 ppb	0.01228	8.34%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	-4.5	-1.9636 ug/L	0.95019	-1.9636 ppb	0.95019	48.39%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	111.4	3.7926 ug/L	4.10834	3.7926 ppb	4.10834	108.33%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	101.3	0.9102 ug/L	0.26818	0.9102 ppb	0.26818	29.46%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	-119.5	-1.5861 ug/L	0.14158	-1.5861 ppb	0.14158	8.93%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†	-18.4	-1.6025 ug/L	1.28823	-1.6025 ppb	1.28823	80.39%	
QC value within limits for SiO2 Recovery = Not calculated							
All analyte(s) passed QC.							

Daily Performance Report

Sample ID: Sample

Sample Date/Time: Sunday, April 11, 2010 14:25:07

Sample Description:

Method File: C:\elandata\Method\Daily2.mth

Dataset File: c:\elandata\Dataset\100125\Sample.718

Tuning File: c:\elandata\Tuning\default2.tun

Optimization File: c:\elandata\Optimize\default.dac

Dual Detector Mode: Pulse

Acq. Dead Time(ns): 35

Current Dead Time (ns): 35

Summary

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
Be	9.0	1476.9	1476.876	69.851	4.7
Mg	24.0	20563.4	20563.391	243.887	1.2
Co	58.9	60201.8	60201.792	593.479	1.0
Rh	102.9	118302.4	118302.431	575.695	0.5
In	114.9	144990.3	144990.303	1225.130	0.8
Pb	208.0	62594.6	62594.639	440.991	0.7
[> Ba	137.9	132866.7	132866.686	904.406	0.7
[Ba++	69.0	2162.0	0.016	0.001	4.8
[> Ce	139.9	160176.6	160176.628	1412.329	0.9
[CeO	155.9	3192.0	0.020	0.000	1.4
Bkgd	220.0	7.3	7.300	1.789	24.5

Current Optimization File Data

Current Value	Description
0.88	Nebulizer Gas Flow
4.25	Lens Voltage
1000.00	ICP RF Power
-1750.00	Analog Stage Voltage
1100.00	Pulse Stage Voltage
50.00	Discriminator Threshold
-2.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	13	5.5	1447.7
Co	59	13	6.0	52914.8
In	115	13	6.8	126833.9

ICPMS #4 TUNING REPORT

File Name: 100411.tun
File Path: C:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas Peak W
He	3.0	3.0	602	2085	0.624
Be	9.0	9.0	2054	2075	0.628
Mg	24.0	24.0	5659	2110	0.557
Mg	25.0	25.0	5959	2125	0.584
Mg	26.0	26.0	6140	2110	0.602
Co	58.9	58.9	14170	2165	0.603
Rh	102.9	102.9	24875	2255	0.608
In	114.9	114.8	27768	2285	0.615
Ce	139.9	139.9	33849	2320	0.631
Pb	206.0	206.0	49939	2485	0.628
Pb	207.0	207.0	50101	2400	0.596
Pb	208.0	208.0	50448	2480	0.675
U	238.1	238.0	57686	2500	0.623

ICPMS#4 - Summary Report

Sample ID: Blank

Sample Date/Time: Sunday, April 11, 2010 23:26:06

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020.mth

Dataset File: c:\elandata\Dataset\100408\Blank.518

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7		ug/L		30	
Be	9		ug/L		6	
B	11		ug/L		98	
Na	23		ug/L		7336	
Mg	24		ug/L		2334	
Al	27		ug/L		2000	
P	31		ug/L		3895	
K	39		ug/L		374171	
Ca	43		ug/L		159	
> Sc	45		ug/L		637214	
Ti	47		ug/L		174	
V	51		ug/L		17195	
Cr	52		ug/L		-12415	
Cr	53		ug/L		123321	
Mn	55		ug/L		725	
Fe	57		ug/L		5525	
Co	59		ug/L		139	
Ni	60		ug/L		78	
Cu	63		ug/L		6175	
Cu	65		ug/L		3029	
Zn	66		ug/L		4008	
Zn	67		ug/L		7467	
Zn	68		ug/L		3465	
> Ge	74		ug/L		257622	
As	75		ug/L		227	
Se	77		ug/L		4111	
Se	82		ug/L		27	
Kr	83		ug/L		52	
Sr	88		ug/L		163	
Y	89		ug/L		21	
Zr	90		ug/L		498	
Mo	98		ug/L		974	
Ag	107		ug/L		299	
Cd	111		ug/L		12	
Cd	114		ug/L		28	
> In	115		ug/L		164544	
Sn	120		ug/L		1178	
Sb	121		ug/L		786	
Sb	123		ug/L		632	
Ba	135		ug/L		21	
Ba	137		ug/L		30	
Ho	165		ug/L		8	
> Lu	175		ug/L		194680	
Tl	205		ug/L		457	
Pb	208		ug/L		6246	
Th	232		ug/L		1048	
U	238		ug/L		1281	

Sample ID: Blank

Report Date/Time: Sunday, April 11, 2010 23:28:51

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	0.9999
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	0.9963
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	1.0000
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

Sample ID: Blank

Report Date/Time: Sunday, April 11, 2010 23:28:51

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QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45					
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74					
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Zr	90					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115					
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175					
Tl	205					
Pb	208					
Th	232					
U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: Blank

Report Date/Time: Sunday, April 11, 2010 23:28:51

Page 3

ICPMS#4 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Sunday, April 11, 2010 23:32:15

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020.mth

Dataset File: c:\elandata\Dataset\100408\Standard 1.519

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	10.000	ug/L	0.617	5656	0.009
Be	9	10.000	ug/L	2.217	1474	0.002
B	11	20.000	ug/L	5.522	2754	0.004
Na	23	1000.000	ug/L	6.766	1771326	2.724
Mg	24	1000.000	ug/L	4.787	1134024	1.747
Al	27	1000.000	ug/L	6.548	1693691	2.612
P	31	1000.000	ug/L	2.169	102415	0.152
K	39	1000.000	ug/L	3.875	3508351	4.831
Ca	43	1000.000	ug/L	1.298	6217	0.009
> Sc	45		ug/L		647601	647601.313
Ti	47	10.000	ug/L	1.476	3450	0.005
V	51	10.000	ug/L	13.224	59247	0.065
Cr	52	10.000	ug/L	1.435	17978	0.047
Cr	53		ug/L		127317	0.003
Mn	55	10.000	ug/L	1.444	51356	0.078
Fe	57	1000.000	ug/L	2.094	110377	0.162
Co	59	10.000	ug/L	0.682	39833	0.061
Ni	60	10.000	ug/L	1.159	8527	0.013
Cu	63		ug/L		24802	0.029
Cu	65	10.000	ug/L	0.518	12222	0.014
Zn	66	10.000	ug/L	2.198	9022	0.019
Zn	67		ug/L		8335	0.003
Zn	68		ug/L		7102	0.014
> Ge	74		ug/L		260427	260426.780
As	75	10.000	ug/L	7.715	6458	0.024
Se	77		ug/L		4437	0.001
Se	82	10.000	ug/L	9.763	515	0.002
Kr	83		ug/L		71	0.000
Sr	88	10.000	ug/L	2.015	90247	0.538
Y	89		ug/L		33	0.000
Zr	90	10.000	ug/L	0.976	48540	0.287
Mo	98	10.000	ug/L	3.210	22197	0.127
Ag	107	10.000	ug/L	1.065	35293	0.209
Cd	111	10.000	ug/L	2.765	8084	0.048
Cd	114		ug/L		19054	0.114
> In	115		ug/L		167435	167435.373
Sn	120	10.000	ug/L	1.400	37542	0.217
Sb	121	10.000	ug/L	14.123	20883	0.120
Sb	123		ug/L		15932	0.091
Ba	135		ug/L		8771	0.045
Ba	137	10.000	ug/L	2.099	15207	0.078
Ho	165		ug/L		11	0.000
> Lu	175		ug/L		195483	195482.758
Tl	205	10.000	ug/L	2.030	54039	0.274
Pb	208	10.000	ug/L	0.352	109562	0.528
Th	232	10.000	ug/L	3.063	99432	0.503
U	238	10.000	ug/L	2.442	102217	0.516

Sample ID: Standard 1

Report Date/Time: Sunday, April 11, 2010 23:34:57

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	1.0000
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

Sample ID: Standard 1

Report Date/Time: Sunday, April 11, 2010 23:34:57

Page 2

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Li	7				
|	Be	9				
|	B	11				
|	Na	23				
|	Mg	24				
|	Al	27				
|	P	31				
|	K	39				
|	Ca	43				
>	Sc	45				
|	Ti	47				
|	V	51				
|	Cr	52				
|	Cr	53				
|	Mn	55				
|	Fe	57				
|	Co	59				
|	Ni	60				
|	Cu	63				
|	Cu	65				
|	Zn	66				
|	Zn	67				
|	Zn	68				
>	Ge	74				
|	As	75				
|	Se	77				
|	Se	82				
|	Kr	83				
|	Sr	88				
|	Y	89				
|	Zr	90				
|	Mo	98				
|	Ag	107				
|	Cd	111				
|	Cd	114				
>	In	115				
|	Sn	120				
|	Sb	121				
|	Sb	123				
|	Ba	135				
|	Ba	137				
|	Ho	165				
>	Lu	175				
|	Tl	205				
|	Pb	208				
|	Th	232				
|	U	238				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: Standard 1

Report Date/Time: Sunday, April 11, 2010 23:34:57

Page 3

ICPMS#4 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Sunday, April 11, 2010 23:38:20

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020.mth

Dataset File: c:\elandata\Dataset\100408\Standard 2.520

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	100.022	ug/L	1.654	56685	0.089
Be	9	100.025	ug/L	2.207	14848	0.023
B	11	200.001	ug/L	2.596	26263	0.041
Na	23	10006.646	ug/L	3.118	18631244	29.199
Mg	24	10010.812	ug/L	7.360	12526874	19.613
Al	27	10002.568	ug/L	1.583	17115880	26.817
P	31	10002.600	ug/L	2.616	999898	1.561
K	39	9997.334	ug/L	4.556	30372710	47.039
Ca	43	10004.272	ug/L	2.676	62496	0.098
> Sc	45		ug/L		638051	638050.886
Ti	47	100.008	ug/L	0.859	32694	0.051
V	51	100.007	ug/L	1.766	431637	0.650
Cr	52	100.014	ug/L	1.454	293302	0.479
Cr	53		ug/L		138045	0.023
Mn	55	100.019	ug/L	3.817	508908	0.797
Fe	57	10000.799	ug/L	3.573	1045687	1.631
Co	59	100.011	ug/L	3.314	395568	0.620
Ni	60	100.019	ug/L	2.660	84937	0.133
Cu	63		ug/L		198518	0.302
Cu	65	100.019	ug/L	2.689	94809	0.144
Zn	66	100.078	ug/L	1.071	58006	0.207
Zn	67		ug/L		15052	0.029
Zn	68		ug/L		42305	0.149
> Ge	74		ug/L		260512	260511.829
As	75	100.048	ug/L	1.699	65689	0.251
Se	77		ug/L		7708	0.014
Se	82	100.189	ug/L	2.279	6059	0.023
Kr	83		ug/L		69	0.000
Sr	88	100.025	ug/L	0.555	899319	5.522
Y	89		ug/L		100	0.000
Zr	90	100.062	ug/L	0.754	498987	3.061
Mo	98	100.067	ug/L	1.804	222152	1.358
Ag	107	100.003	ug/L	1.027	341585	2.096
Cd	111	100.047	ug/L	0.963	82378	0.506
Cd	114		ug/L		190949	1.173
> In	115		ug/L		162834	162834.445
Sn	120	100.830	ug/L	1.798	365593	2.238
Sb	121	100.223	ug/L	11.289	252626	1.547
Sb	123		ug/L		194841	1.193
Ba	135		ug/L		88293	0.460
Ba	137	100.031	ug/L	1.582	153884	0.802
Ho	165		ug/L		11	0.000
> Lu	175		ug/L		191958	191958.191
Tl	205	100.005	ug/L	1.246	529159	2.755
Pb	208	100.000	ug/L	1.426	1020718	5.286
Th	232	100.052	ug/L	1.441	1020346	5.311
U	238	99.993	ug/L	1.188	985623	5.129

Sample ID: Standard 2

Report Date/Time: Sunday, April 11, 2010 23:41:03

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	0.9998
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	1.0000
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9998
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
|	Li		7				
|	Be		9				
|	B		11				
|	Na		23				
|	Mg		24				
|	Al		27				
|	P		31				
|	K		39				
|	Ca		43				
>	Sc		45				
|	Ti		47				
|	V		51				
|	Cr		52				
|	Cr		53				
|	Mn		55				
|	Fe		57				
|	Co		59				
|	Ni		60				
|	Cu		63				
|	Cu		65				
|	Zn		66				
|	Zn		67				
|	Zn		68				
>	Ge		74				
|	As		75				
|	Se		77				
|	Se		82				
|	Kr		83				
|	Sr		88				
|	Y		89				
|	Zr		90				
|	Mo		98				
|	Ag		107				
|	Cd		111				
|	Cd		114				
>	In		115				
|	Sn		120				
|	Sb		121				
|	Sb		123				
|	Ba		135				
|	Ba		137				
|	Ho		165				
>	Lu		175				
|	Tl		205				
|	Pb		208				
|	Th		232				
|	U		238				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: Standard 2

Report Date/Time: Sunday, April 11, 2010 23:41:03

Page 3

ICPMS#4 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Sunday, April 11, 2010 23:44:27

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020.mth

Dataset File: c:\elandata\Dataset\100408\QC Std 1.521

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	52.029	ug/L	1.262	29761	0.046
Be	9	51.344	ug/L	2.324	7691	0.012
B	11	103.995	ug/L	1.650	13826	0.021
Na	23	4997.812	ug/L	6.727	9390382	14.584
Mg	24	5307.531	ug/L	8.251	6691854	10.398
Al	27	5402.464	ug/L	8.634	9319373	14.484
P	31	4918.163	ug/L	1.196	498035	0.768
K	39	4958.027	ug/L	1.168	15393071	23.328
Ca	43	4785.618	ug/L	1.069	30248	0.047
> Sc	45		ug/L		643616	643615.763
Ti	47	50.468	ug/L	2.909	16727	0.026
V	51	51.180	ug/L	1.524	231335	0.332
Cr	52	52.544	ug/L	1.713	149503	0.252
Cr	53		ug/L		123687	-0.001
Mn	55	52.710	ug/L	2.194	270964	0.420
Fe	57	4918.064	ug/L	0.954	521742	0.802
Co	59	49.957	ug/L	1.102	199453	0.310
Ni	60	51.939	ug/L	1.811	44539	0.069
Cu	63		ug/L		105887	0.155
Cu	65	52.316	ug/L	2.158	51492	0.075
Zn	66	51.884	ug/L	1.460	31903	0.107
Zn	67		ug/L		10944	0.013
Zn	68		ug/L		23591	0.077
> Ge	74		ug/L		259536	259535.738
As	75	51.416	ug/L	2.084	33738	0.129
Se	77		ug/L		5896	0.007
Se	82	53.150	ug/L	2.349	3214	0.012
Kr	83		ug/L		57	0.000
Sr	88	52.620	ug/L	1.312	475877	2.905
Y	89		ug/L		44	0.000
Zr	90	49.695	ug/L	1.506	249486	1.520
Mo	98	49.919	ug/L	1.582	111948	0.678
Ag	107	53.002	ug/L	0.521	182224	1.111
Cd	111	51.786	ug/L	0.515	42893	0.262
Cd	114		ug/L		102194	0.624
> In	115		ug/L		163777	163776.812
Sn	120	50.890	ug/L	0.697	187660	1.139
Sb	121	62.693	ug/L	0.478	159229	0.967
Sb	123		ug/L		123183	0.748
Ba	135		ug/L		45098	0.233
Ba	137	50.015	ug/L	2.868	77586	0.401
Ho	165		ug/L		10	0.000
> Lu	175		ug/L		193558	193558.282
Tl	205	50.956	ug/L	1.747	272078	1.404
Pb	208	51.956	ug/L	1.317	537721	2.746
Th	232	51.789	ug/L	0.688	533109	2.749
U	238	53.455	ug/L	0.774	531900	2.742

Sample ID: QC Std 1

Report Date/Time: Sunday, April 11, 2010 23:47:10

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	0.9998
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	1.0000
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9998
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	7	104.059				
Be	9	102.689				
B	11	103.995				
Na	23	99.956				
Mg	24	106.151				
Al	27	106.979				
P	31	98.363				
K	39	99.161				
Ca	43	95.712				
> Sc	45		101.0			
Ti	47	100.935				
V	51	102.361				
Cr	52	105.088				
Cr	53					
Mn	55	105.419				
Fe	57	98.361				
Co	59	99.914				
Ni	60	103.878				
Cu	63					
Cu	65	104.632				
Zn	66	103.768				
Zn	67					
Zn	68					
> Ge	74		100.7			
As	75	102.831				
Se	77					
Se	82	106.300				
Kr	83					
Sr	88	105.240				
Y	89					
Zr	90	99.390				
Mo	98	99.839				
Ag	107	106.003				
Cd	111	103.571				
Cd	114					
> In	115		99.5			
Sn	120	101.780				
Sb	121	125.386				
Sb	123					
Ba	135					
Ba	137	100.030				
Ho	165					
> Lu	175		99.4			
Tl	205	101.911				
Pb	208	103.912				
Th	232	103.578				
U	238	106.909				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 1	Sb	121ICV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Sunday, April 11, 2010 23:50:36

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020.mth

Dataset File: c:\elandata\Dataset\100408\QC Std 2.522

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.025	ug/L	52.243	45	0.000
Be	9	0.013	ug/L	126.902	8	0.000
B	11	1.860	ug/L	14.899	342	0.000
Na	23	1.599	ug/L	153.275	10338	0.005
Mg	24	-0.812	ug/L	148.275	1333	-0.002
Al	27	0.978	ug/L	151.938	3667	0.003
P	31	3.579	ug/L	27.763	4268	0.001
K	39	4.422	ug/L	43.511	388890	0.021
Ca	43	1.806	ug/L	215.456	171	0.000
> Sc	45		ug/L		639641	639640.858
Ti	47	0.050	ug/L	37.255	191	0.000
V	51	-0.569	ug/L	116.282	14879	-0.004
Cr	52	0.021	ug/L	167.814	-12397	0.000
Cr	53		ug/L		125525	0.003
Mn	55	0.007	ug/L	125.827	765	0.000
Fe	57	2.747	ug/L	64.839	5834	0.000
Co	59	0.012	ug/L	33.777	189	0.000
Ni	60	0.007	ug/L	299.524	84	0.000
Cu	63		ug/L		5323	-0.001
Cu	65	-0.539	ug/L	5.155	2545	-0.001
Zn	66	-1.307	ug/L	10.019	3291	-0.003
Zn	67		ug/L		7524	0.000
Zn	68		ug/L		3138	-0.001
> Ge	74		ug/L		256053	256052.707
As	75	0.154	ug/L	214.806	323	0.000
Se	77		ug/L		4554	0.002
Se	82	1.482	ug/L	10.442	114	0.000
Kr	83		ug/L		63	0.000
Sr	88	0.008	ug/L	13.690	234	0.000
Y	89		ug/L		20	-0.000
Zr	90	0.216	ug/L	23.823	1574	0.007
Mo	98	0.366	ug/L	19.894	1780	0.005
Ag	107	0.047	ug/L	29.738	459	0.001
Cd	111	0.016	ug/L	71.222	25	0.000
Cd	114		ug/L		62	0.000
> In	115		ug/L		163620	163620.458
Sn	120	0.115	ug/L	34.885	1593	0.003
Sb	121	2.281	ug/L	22.865	6540	0.035
Sb	123		ug/L		5170	0.028
Ba	135		ug/L		31	0.000
Ba	137	0.011	ug/L	21.877	46	0.000
Ho	165		ug/L		9	0.000
> Lu	175		ug/L		192618	192618.156
Tl	205	0.153	ug/L	26.723	1266	0.004
Pb	208	0.001	ug/L	1327.782	6193	0.000
Th	232	0.356	ug/L	23.660	4679	0.019
U	238	-0.001	ug/L	3603.512	1260	-0.000

Sample ID: QC Std 2

Report Date/Time: Sunday, April 11, 2010 23:53:21

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	0.9998
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	1.0000
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9998
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

Sample ID: QC Std 2

Report Date/Time: Sunday, April 11, 2010 23:53:21

Page 2

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		100.4			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
L Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		99.4			
As	75					
Se	77					
Se	82					
L Kr	83					
Sr	88					
Y	89					
Zr	90					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		99.4			
Sn	120					
Sb	121					
L Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		98.9			
Tl	205					
Pb	208					
Th	232					
L U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 2

Report Date/Time: Sunday, April 11, 2010 23:53:21

Page 3

ICPMS#4 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Sunday, April 11, 2010 23:56:45

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020.mth

Dataset File: c:\elandata\Dataset\100408\QC Std 3.523

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	12.504	ug/L	1.318	6936	0.011
Be	9	0.653	ug/L	6.785	100	0.000
B	11	18.538	ug/L	1.795	2461	0.004
Na	23	268.828	ug/L	10.432	494803	0.784
Mg	24	17.312	ug/L	20.705	23353	0.034
Al	27	36.672	ug/L	13.879	63141	0.098
P	31	50.309	ug/L	3.665	8688	0.008
K	39	345.909	ug/L	6.201	1378210	1.628
Ca	43	235.253	ug/L	2.398	1585	0.002
> Sc	45		ug/L		622093	622093.484
Ti	47	9.580	ug/L	0.811	3207	0.005
V	51	11.717	ug/L	4.612	64121	0.076
Cr	52	12.522	ug/L	1.711	25206	0.060
Cr	53		ug/L		104117	-0.026
Mn	55	6.135	ug/L	0.780	31117	0.049
Fe	57	118.336	ug/L	1.894	17397	0.019
Co	59	1.174	ug/L	1.786	4663	0.007
Ni	60	2.333	ug/L	4.241	2006	0.003
Cu	63		ug/L		5757	-0.000
Cu	65	-0.051	ug/L	29.935	2911	-0.000
Zn	66	10.989	ug/L	2.582	9617	0.023
Zn	67		ug/L		6840	-0.002
Zn	68		ug/L		7323	0.016
> Ge	74		ug/L		251148	251147.981
As	75	4.911	ug/L	22.221	3324	0.012
Se	77		ug/L		3531	-0.002
Se	82	4.375	ug/L	8.607	280	0.001
Kr	83		ug/L		57	0.000
Sr	88	12.036	ug/L	1.086	106609	0.664
Y	89		ug/L		18	-0.000
Zr	90	2.126	ug/L	3.677	10900	0.065
Mo	98	0.481	ug/L	9.696	1993	0.007
Ag	107	1.021	ug/L	1.050	3720	0.021
Cd	111	1.183	ug/L	3.871	970	0.006
Cd	114		ug/L		2243	0.014
> In	115		ug/L		160224	160223.669
Sn	120	5.523	ug/L	5.079	20934	0.124
Sb	121	2.631	ug/L	11.969	7267	0.041
Sb	123		ug/L		5598	0.031
Ba	135		ug/L		2043	0.011
Ba	137	2.300	ug/L	2.540	3472	0.018
Ho	165		ug/L		13	0.000
> Lu	175		ug/L		186869	186869.491
Tl	205	1.194	ug/L	0.271	6582	0.033
Pb	208	2.253	ug/L	1.679	28246	0.119
Th	232	1.181	ug/L	3.288	12722	0.063
U	238	0.280	ug/L	10.106	3912	0.014

Sample ID: QC Std 3

Report Date/Time: Sunday, April 11, 2010 23:59:28

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	0.9998
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	1.0000
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9998
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	7	125.043				
Be	9	130.643				
B	11	123.584				
Na	23	107.531				
Mg	24	115.416				
Al	27	122.239				
P	31	100.619				
K	39	115.303				
Ca	43	117.627				
> Sc	45		97.6			
Ti	47	95.799				
V	51	117.168				
Cr	52	125.221				
Cr	53					
Mn	55	122.710				
Fe	57	118.336				
Co	59	117.396				
Ni	60	116.635				
Cu	63					
Cu	65	-5.118				
Zn	66	109.891				
Zn	67					
Zn	68					
> Ge	74		97.5			
As	75	98.223				
Se	77					
Se	82	87.504				
Kr	83					
Sr	88	120.364				
Y	89					
Zr	90	106.277				
Mo	98	96.115				
Ag	107	102.119				
Cd	111	118.307				
Cd	114					
> In	115		97.4			
Sn	120	110.451				
Sb	121	87.714				
Sb	123					
Ba	135					
Ba	137	114.986				
Ho	165					
> Lu	175		96.0			
Tl	205	119.350				
Pb	208	112.634				
Th	232	118.099				
U	238	139.988				

QC Out Of Limits

Measurement Type	Analyte	Mass Out of Limits Message
QC Std 3	Be	9CRDL is out of limits
QC Std 3	Cu	65CRDL is out of limits
QC Std 3	U	238CRDL is out of limits

QC Action

Sample ID: QC Std 3
 Report Date/Time: Sunday, April 11, 2010 23:59:28
 Page 3

QC Action Line: Continue

Sample ID: QC Std 3

Report Date/Time: Sunday, April 11, 2010 23:59:28

Page 4

ICPMS#4 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Monday, April 12, 2010 00:02:52

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020.mth

Dataset File: c:\elandata\Dataset\100408\QC Std 4.524

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.169	ug/L	49.015	127	0.000
Be	9	0.086	ug/L	14.439	19	0.000
B	11	1.159	ug/L	10.266	253	0.000
Na	23	91441.011	ug/L	6.013	172875200	266.823
Mg	24	92590.954	ug/L	7.507	117362368	181.401
Al	27	91561.336	ug/L	4.238	159038489	245.479
P	31	91900.584	ug/L	3.112	9289498	14.345
K	39	94063.917	ug/L	3.093	286956887	442.588
Ca	43	92164.693	ug/L	2.040	582937	0.900
> Sc	45		ug/L		647528	647527.874
Ti	47	1557.634	ug/L	2.337	514071	0.794
V	51	-0.125	ug/L	204.565	16937	-0.001
Cr	52	2.681	ug/L	2.580	-4299	0.013
Cr	53		ug/L		123667	-0.003
Mn	55	5.790	ug/L	4.535	30589	0.046
Fe	57	97922.365	ug/L	4.126	10340966	15.969
Co	59	0.236	ug/L	6.668	1087	0.001
Ni	60	3.264	ug/L	0.828	2890	0.004
Cu	63		ug/L		11024	0.007
Cu	65	3.007	ug/L	2.303	5879	0.004
Zn	66	4.632	ug/L	8.372	6558	0.010
Zn	67		ug/L		8883	0.005
Zn	68		ug/L		4088	0.002
> Ge	74		ug/L		260864	260864.175
As	75	0.032	ug/L	1714.357	250	0.000
Se	77		ug/L		6320	0.008
Se	82	0.907	ug/L	54.051	82	0.000
Kr	83		ug/L		134	0.000
Sr	88	2.922	ug/L	1.675	26432	0.161
Y	89		ug/L		253	0.001
Zr	90	0.795	ug/L	46.307	4452	0.024
Mo	98	2088.043	ug/L	1.782	4617128	28.345
Ag	107	0.093	ug/L	9.722	613	0.002
Cd	111	0.214	ug/L	96.194	189	0.001
Cd	114		ug/L		5544	0.034
> In	115		ug/L		162870	162869.842
Sn	120	1.678	ug/L	12.061	7278	0.038
Sb	121	1.581	ug/L	31.941	4750	0.024
Sb	123		ug/L		3653	0.019
Ba	135		ug/L		675	0.003
Ba	137	0.704	ug/L	4.174	1119	0.006
Ho	165		ug/L		4021	0.021
> Lu	175		ug/L		192909	192908.793
Tl	205	0.027	ug/L	16.531	598	0.001
Pb	208	0.220	ug/L	16.491	8426	0.012
Th	232	0.357	ug/L	35.720	4700	0.019
U	238	-0.036	ug/L	60.001	912	-0.002

Sample ID: QC Std 4

Report Date/Time: Monday, April 12, 2010 00:05:36

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	0.9998
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	1.0000
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9998
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
|	Li	7					
|	Be	9					
|	B	11					
|	Na	23	91.441				
|	Mg	24	92.591				
|	Al	27	91.561				
|	P	31	91.901				
|	K	39	94.064				
|	Ca	43	92.165				
>	Sc	45		101.6			
|	Ti	47	77.882				
|	V	51					
|	Cr	52	81.231				
|	Cr	53					
|	Mn	55	99.827				
|	Fe	57	97.922				
|	Co	59	100.275				
|	Ni	60	98.607				
|	Cu	63					
|	Cu	65	90.040				
|	Zn	66	123.199				
|	Zn	67					
|	Zn	68					
>	Ge	74		101.3			
|	As	75					
|	Se	77					
|	Se	82					
|	Kr	83					
|	Sr	88	98.718				
|	Y	89					
|	Zr	90					
|	Mo	98	104.402				
|	Ag	107					
|	Cd	111	48.147				
|	Cd	114					
>	In	115		99.0			
|	Sn	120					
|	Sb	121					
|	Sb	123					
|	Ba	135					
|	Ba	137	88.271				
|	Ho	165					
>	Lu	175		99.1			
|	Tl	205					
|	Pb	208	116.210				
|	Th	232					
|	U	238					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 4	Ti	47ICSA is out of limits

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Monday, April 12, 2010 00:09:01

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020.mth

Dataset File: c:\elandata\Dataset\100408\QC Std 5.525

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	18.803	ug/L	1.787	10852	0.017
Be	9	18.269	ug/L	2.846	2761	0.004
B	11	18.200	ug/L	1.534	2519	0.004
Na	23	87169.616	ug/L	4.761	164874624	254.359
Mg	24	88514.851	ug/L	0.677	112408207	173.415
Al	27	94251.243	ug/L	3.567	163775031	252.690
P	31	92336.730	ug/L	1.021	9346567	14.414
K	39	96429.163	ug/L	11.152	294596649	453.717
Ca	43	92936.246	ug/L	1.136	588553	0.908
Sc	45		ug/L		648204	648203.621
Ti	47	1558.970	ug/L	0.069	515199	0.795
V	51	19.036	ug/L	4.938	97633	0.124
Cr	52	22.112	ug/L	1.755	56049	0.106
Cr	53		ug/L		127794	0.004
Mn	55	25.512	ug/L	1.580	132489	0.203
Fe	57	100096.900	ug/L	0.917	10586127	16.323
Co	59	19.034	ug/L	2.778	76620	0.118
Ni	60	21.744	ug/L	2.629	18824	0.029
Cu	63		ug/L		47236	0.063
Cu	65	22.028	ug/L	0.528	23622	0.032
Zn	66	21.393	ug/L	2.143	15751	0.044
Zn	67		ug/L		10445	0.011
Zn	68		ug/L		10987	0.028
Ge	74		ug/L		263290	263290.105
As	75	20.605	ug/L	5.586	13851	0.052
Se	77		ug/L		7293	0.012
Se	82	20.578	ug/L	4.866	1279	0.005
Kr	83		ug/L		139	0.000
Sr	88	23.485	ug/L	1.401	211429	1.296
Y	89		ug/L		271	0.002
Zr	90	20.449	ug/L	1.504	102423	0.626
Mo	98	2113.533	ug/L	2.646	4674372	28.691
Ag	107	19.298	ug/L	2.190	66182	0.404
Cd	111	18.900	ug/L	2.441	15578	0.096
Cd	114		ug/L		41625	0.255
In	115		ug/L		162949	162949.484
Sn	120	20.154	ug/L	2.846	74642	0.451
Sb	121	21.808	ug/L	2.232	55628	0.337
Sb	123		ug/L		42903	0.259
Ba	135		ug/L		17781	0.091
Ba	137	19.444	ug/L	0.858	30565	0.156
Ho	165		ug/L		4043	0.021
Lu	175		ug/L		195973	195973.100
Tl	205	17.643	ug/L	0.678	95699	0.486
Pb	208	18.661	ug/L	2.456	199571	0.986
Th	232	19.358	ug/L	0.704	202428	1.028
U	238	20.155	ug/L	0.365	203873	1.034

Sample ID: QC Std 5

Report Date/Time: Monday, April 12, 2010 00:11:44

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	0.9998
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	1.0000
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9998
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

Sample ID: QC Std 5

Report Date/Time: Monday, April 12, 2010 00:11:44

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QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	7	94.014				
Be	9	91.346				
B	11	91.001				
Na	23	87.170				
Mg	24	88.515				
Al	27	94.251				
P	31	92.337				
K	39	96.429				
Ca	43	92.936				
> Sc	45		101.7			
Ti	47	77.948				
V	51	95.181				
Cr	52	94.903				
Cr	53					
Mn	55	98.886				
Fe	57	100.097				
Co	59	94.067				
Ni	60	93.280				
Cu	63					
Cu	65	94.379				
Zn	66	90.040				
Zn	67					
Zn	68					
> Ge	74		102.2			
As	75	103.023				
Se	77					
Se	82	102.889				
Kr	83					
Sr	88	102.285				
Y	89					
Zr	90	102.247				
Mo	98	105.677				
Ag	107	96.490				
Cd	111	92.446				
Cd	114					
> In	115		99.0			
Sn	120	100.770				
Sb	121	109.040				
Sb	123					
Ba	135					
Ba	137	93.489				
Ho	165					
> Lu	175		100.7			
Tl	205	88.213				
Pb	208	92.434				
Th	232	96.790				
U	238	100.773				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 5	Ti	47ICSAB is out of limits

QC Action

QC Action Line: Continue

Sample ID: QC Std 5
 Report Date/Time: Monday, April 12, 2010 00:11:44
 Page 3

ICPMS#4 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Monday, April 12, 2010 00:15:09

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020.mth

Dataset File: c:\elandata\Dataset\100408\QC Std 6.526

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	51.367	ug/L	1.246	29804	0.046
Be	9	51.131	ug/L	0.847	7770	0.012
B	11	100.040	ug/L	2.810	13494	0.021
Na	23	4830.645	ug/L	6.593	9206546	14.096
Mg	24	4912.183	ug/L	5.203	6283456	9.624
Al	27	5265.238	ug/L	2.810	9216900	14.116
P	31	4879.270	ug/L	1.329	501192	0.762
K	39	4977.805	ug/L	3.253	15675486	23.421
Ca	43	4868.414	ug/L	0.688	31207	0.048
> Sc	45		ug/L		652836	652835.672
Ti	47	51.730	ug/L	0.824	17390	0.026
V	51	52.287	ug/L	0.736	239345	0.340
Cr	52	53.153	ug/L	0.727	153551	0.255
Cr	53		ug/L		122668	-0.006
Mn	55	53.562	ug/L	1.502	279297	0.427
Fe	57	5040.468	ug/L	2.366	542208	0.822
Co	59	51.862	ug/L	2.042	210009	0.322
Ni	60	53.357	ug/L	0.510	46413	0.071
Cu	63		ug/L		111121	0.161
Cu	65	54.248	ug/L	1.229	54046	0.078
Zn	66	52.373	ug/L	0.958	33132	0.108
Zn	67		ug/L		11094	0.013
Zn	68		ug/L		24450	0.078
> Ge	74		ug/L		267316	267315.857
As	75	51.499	ug/L	3.105	34805	0.129
Se	77		ug/L		6274	0.008
Se	82	50.602	ug/L	2.662	3153	0.012
Kr	83		ug/L		55	0.000
Sr	88	51.979	ug/L	0.891	481915	2.869
Y	89		ug/L		53	0.000
Zr	90	49.514	ug/L	0.394	254832	1.515
Mo	98	50.777	ug/L	1.531	116709	0.689
Ag	107	52.135	ug/L	1.045	183745	1.093
Cd	111	51.065	ug/L	1.376	43358	0.258
Cd	114		ug/L		102143	0.608
> In	115		ug/L		167884	167884.251
Sn	120	49.734	ug/L	2.105	188017	1.113
Sb	121	56.995	ug/L	3.539	148447	0.880
Sb	123		ug/L		113662	0.673
Ba	135		ug/L		45058	0.231
Ba	137	49.883	ug/L	2.218	78138	0.400
Ho	165		ug/L		10	0.000
> Lu	175		ug/L		195401	195400.941
Tl	205	50.645	ug/L	1.493	273026	1.395
Pb	208	51.667	ug/L	1.612	539906	2.731
Th	232	51.054	ug/L	1.095	530584	2.710
U	238	54.568	ug/L	1.072	548139	2.799

Sample ID: QC Std 6

Report Date/Time: Monday, April 12, 2010 00:17:54

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	0.9998
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	1.0000
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9998
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	7	102.734				
Be	9	102.262				
B	11	100.040				
Na	23	96.613				
Mg	24	98.244				
Al	27	104.262				
P	31	97.585				
K	39	99.556				
Ca	43	97.368				
> Sc	45		102.5			
Ti	47	103.460				
V	51	104.573				
Cr	52	106.306				
Cr	53					
Mn	55	107.125				
Fe	57	100.809				
Co	59	103.724				
Ni	60	106.714				
Cu	63					
Cu	65	108.495				
Zn	66	104.747				
Zn	67					
Zn	68					
> Ge	74		103.8			
As	75	102.999				
Se	77					
Se	82	101.204				
Kr	83					
Sr	88	103.958				
Y	89					
Zr	90	99.029				
Mo	98	101.554				
Ag	107	104.271				
Cd	111	102.131				
Cd	114					
> In	115		102.0			
Sn	120	99.469				
Sb	121	113.991				
Sb	123					
Ba	135					
Ba	137	99.767				
Ho	165					
> Lu	175		100.4			
Tl	205	101.291				
Pb	208	103.335				
Th	232	102.107				
U	238	109.136				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message
 QC Std 6 Sb 121CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Monday, April 12, 2010 00:21:19

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020.mth

Dataset File: c:\elandata\Dataset\100408\QC Std 7.527

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.085	ug/L	22.845	81	0.000
Be	9	0.001	ug/L	2041.921	6	0.000
B	11	1.063	ug/L	24.635	245	0.000
Na	23	6.985	ug/L	31.387	21016	0.020
Mg	24	4.591	ug/L	43.527	8336	0.009
Al	27	4.119	ug/L	30.252	9336	0.011
P	31	0.432	ug/L	462.821	4077	0.000
K	39	2.825	ug/L	506.078	395771	0.013
Ca	43	13.746	ug/L	39.061	254	0.000
> Sc	45		ug/L		660006	660005.544
Ti	47	0.575	ug/L	15.604	373	0.000
V	51	0.032	ug/L	1837.112	17936	0.000
Cr	52	0.418	ug/L	25.296	-11532	0.002
Cr	53		ug/L		126208	-0.002
Mn	55	0.003	ug/L	312.739	766	0.000
Fe	57	7.145	ug/L	30.935	6489	0.001
Co	59	0.005	ug/L	106.056	166	0.000
Ni	60	0.003	ug/L	286.120	83	0.000
Cu	63		ug/L		5286	-0.002
Cu	65	-0.712	ug/L	13.021	2460	-0.001
Zn	66	-2.739	ug/L	6.760	2674	-0.006
Zn	67		ug/L		7451	-0.001
Zn	68		ug/L		2418	-0.005
> Ge	74		ug/L		270383	270382.605
As	75	0.215	ug/L	377.865	389	0.001
Se	77		ug/L		5464	0.004
Se	82	1.009	ug/L	16.226	91	0.000
Kr	83		ug/L		52	-0.000
Sr	88	0.007	ug/L	33.618	234	0.000
Y	89		ug/L		21	-0.000
Zr	90	0.141	ug/L	35.144	1221	0.004
Mo	98	0.531	ug/L	26.259	2190	0.007
Ag	107	0.017	ug/L	85.397	364	0.000
Cd	111	0.018	ug/L	83.532	27	0.000
Cd	114		ug/L		57	0.000
> In	115		ug/L		167116	167116.344
Sn	120	0.140	ug/L	35.284	1719	0.003
Sb	121	1.289	ug/L	32.883	4106	0.020
Sb	123		ug/L		3112	0.015
Ba	135		ug/L		28	0.000
Ba	137	0.010	ug/L	107.374	44	0.000
Ho	165		ug/L		8	0.000
> Lu	175		ug/L		192711	192711.016
Tl	205	0.149	ug/L	29.712	1240	0.004
Pb	208	0.037	ug/L	72.261	6551	0.002
Th	232	0.225	ug/L	32.576	3323	0.012
U	238	0.008	ug/L	599.748	1338	0.000

Sample ID: QC Std 7

Report Date/Time: Monday, April 12, 2010 00:24:05

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	0.9998
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	1.0000
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9998
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		103.6			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		105.0			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Zr	90					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		101.6			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		99.0			
Tl	205					
Pb	208					
Th	232					
U	238					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 7	Mo	98CCB is out of limits (+/- PQL)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 10

Sample Date/Time: Monday, April 12, 2010 00:27:28

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020.mth

Dataset File: c:\elandata\Dataset\100408\QC Std 10.528

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	955.847	ug/L	2.047	552253	0.849
Be	9	934.488	ug/L	0.451	141450	0.217
B	11	0.454	ug/L	30.599	160	0.000
Na	23	47663.735	ug/L	3.613	90516325	139.082
Mg	24	46091.059	ug/L	3.780	58766600	90.300
Al	27	49699.402	ug/L	4.809	86715144	133.246
P	31	23362.557	ug/L	3.012	2377132	3.647
K	39	48311.724	ug/L	6.342	148323170	227.315
Ca	43	47063.198	ug/L	0.781	299291	0.460
Sc	45		ug/L		650711	650711.039
Ti	47	38.568	ug/L	3.201	12967	0.020
V	51	978.279	ug/L	0.570	4152807	6.355
Cr	52	977.604	ug/L	0.972	3035638	4.685
Cr	53		ug/L		479579	0.543
Mn	55	985.121	ug/L	1.710	5107544	7.848
Fe	57	49983.322	ug/L	1.605	5309532	8.151
Co	59	952.932	ug/L	2.697	3844194	5.907
Ni	60	920.711	ug/L	1.227	796995	1.225
Cu	63		ug/L		1774283	2.717
Cu	65	927.285	ug/L	0.679	871110	1.334
Zn	66	2204.337	ug/L	1.950	1221377	4.562
Zn	67		ug/L		201975	0.728
Zn	68		ug/L		886010	3.307
Ge	74		ug/L		266901	266901.419
As	75	931.420	ug/L	1.185	624436	2.339
Se	77		ug/L		27889	0.089
Se	82	491.638	ug/L	3.417	30344	0.114
Kr	83		ug/L		82	0.000
Sr	88	1039.913	ug/L	1.812	9231126	57.408
Y	89		ug/L		271	0.002
Zr	90	520.091	ug/L	2.230	2559117	15.912
Mo	98	1035.836	ug/L	1.866	2261978	14.061
Ag	107	254.201	ug/L	0.932	856943	5.328
Cd	111	958.081	ug/L	0.449	778912	4.844
Cd	114		ug/L		1792988	11.150
In	115		ug/L		160794	160794.376
Sn	120	1006.335	ug/L	2.020	3621797	22.517
Sb	121	317.652	ug/L	1.333	788986	4.902
Sb	123		ug/L		613101	3.809
Ba	135		ug/L		856139	4.261
Ba	137	896.314	ug/L	1.780	1443060	7.183
Ho	165		ug/L		105	0.000
Lu	175		ug/L		200941	200941.382
Tl	205	460.026	ug/L	1.249	2546200	12.671
Pb	208	4777.215	ug/L	1.719	50737939	252.524
Th	232	2422.699	ug/L	0.482	25842427	128.599
U	238	5163.035	ug/L	0.772	53206975	264.809

Sample ID: QC Std 10

Report Date/Time: Monday, April 12, 2010 00:30:11

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	0.9998
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	1.0000
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9998
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	7	95.585				
Be	9	93.449				
B	11					
Na	23	95.327				
Mg	24	92.182				
Al	27	99.399				
P	31	93.450				
K	39	96.623				
Ca	43	94.126				
> Sc	45		102.1			
Ti	47					
V	51	97.828				
Cr	52	97.760				
Cr	53					
Mn	55	98.512				
Fe	57	99.967				
Co	59	95.293				
Ni	60	92.071				
Cu	63					
Cu	65	92.729				
Zn	66	88.173				
Zn	67					
Zn	68					
> Ge	74		103.6			
As	75	93.142				
Se	77					
Se	82	98.328				
Kr	83					
Sr	88	103.991				
Y	89					
Zr	90	104.018				
Mo	98	103.584				
Ag	107	101.680				
Cd	111	95.808				
Cd	114					
> In	115		97.7			
Sn	120	100.634				
Sb	121	127.061				
Sb	123					
Ba	135					
Ba	137	89.631				
Ho	165					
> Lu	175		103.2			
Tl	205	92.005				
Pb	208	95.544				
Th	232	96.908				
U	238	103.261				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 10	Zn	66LRS is out of limits (+/- 10%)
QC Std 10	Sb	121LRS is out of limits (+/- 10%)
QC Std 10	Ba	137LRS is out of limits (+/- 10%)

QC Action

Sample ID: QC Std 10
 Report Date/Time: Monday, April 12, 2010 00:30:11
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QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 11

Sample Date/Time: Monday, April 12, 2010 00:33:35

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020.mth

Dataset File: c:\elandata\Dataset\100408\QC Std 11.529

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	52.085	ug/L	0.806	30803	0.046
Be	9	51.045	ug/L	1.504	7907	0.012
B	11	100.801	ug/L	0.680	13859	0.021
Na	23	4821.975	ug/L	1.458	9370773	14.070
Mg	24	5092.400	ug/L	4.340	6641138	9.977
Al	27	5117.895	ug/L	6.597	9128659	13.721
P	31	4836.073	ug/L	0.921	506367	0.755
K	39	4931.744	ug/L	2.855	15829795	23.205
Ca	43	4856.600	ug/L	1.350	31732	0.047
> Sc	45		ug/L		665402	665401.571
Ti	47	49.413	ug/L	1.149	16939	0.025
V	51	51.207	ug/L	1.462	239278	0.333
Cr	52	53.907	ug/L	1.711	158901	0.258
Cr	53		ug/L		123003	-0.009
Mn	55	53.493	ug/L	0.712	284328	0.426
Fe	57	5054.347	ug/L	1.484	554270	0.824
Co	59	51.833	ug/L	0.662	213961	0.321
Ni	60	53.369	ug/L	1.265	47315	0.071
Cu	63		ug/L		112210	0.159
Cu	65	53.204	ug/L	1.223	54089	0.077
Zn	66	50.855	ug/L	1.047	33056	0.105
Zn	67		ug/L		11261	0.012
Zn	68		ug/L		24709	0.077
> Ge	74		ug/L		273631	273630.796
As	75	52.830	ug/L	1.241	36546	0.133
Se	77		ug/L		6405	0.007
Se	82	56.788	ug/L	1.174	3619	0.013
Kr	83		ug/L		60	0.000
Sr	88	52.595	ug/L	0.874	496629	2.903
Y	89		ug/L		45	0.000
Zr	90	51.718	ug/L	2.102	271045	1.582
Mo	98	51.488	ug/L	1.474	120518	0.699
Ag	107	52.629	ug/L	2.024	188896	1.103
Cd	111	51.754	ug/L	1.077	44754	0.262
Cd	114		ug/L		105433	0.616
> In	115		ug/L		170993	170993.393
Sn	120	50.859	ug/L	1.685	195788	1.138
Sb	121	57.869	ug/L	2.417	153522	0.893
Sb	123		ug/L		116357	0.677
Ba	135		ug/L		45810	0.234
Ba	137	50.770	ug/L	2.958	79789	0.407
Ho	165		ug/L		12	0.000
> Lu	175		ug/L		196123	196123.206
Tl	205	52.014	ug/L	0.928	281423	1.433
Pb	208	54.364	ug/L	2.357	569687	2.874
Th	232	55.481	ug/L	1.999	578461	2.945
U	238	56.679	ug/L	1.242	571315	2.907

Sample ID: QC Std 11

Report Date/Time: Monday, April 12, 2010 00:36:18

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	0.9998
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	1.0000
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9998
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	7	104.171				
Be	9	102.089				
B	11	100.801				
Na	23	96.440				
Mg	24	101.848				
Al	27	101.344				
P	31	96.721				
K	39	98.635				
Ca	43	97.132				
> Sc	45		104.4			
Ti	47	98.825				
V	51	102.414				
Cr	52	107.814				
Cr	53					
Mn	55	106.986				
Fe	57	101.087				
Co	59	103.666				
Ni	60	106.737				
Cu	63					
Cu	65	106.407				
Zn	66	101.710				
Zn	67					
Zn	68					
> Ge	74		106.2			
As	75	105.661				
Se	77					
Se	82	113.576				
Kr	83					
Sr	88	105.190				
Y	89					
Zr	90	103.436				
Mo	98	102.976				
Ag	107	105.258				
Cd	111	103.508				
Cd	114					
> In	115		103.9			
Sn	120	101.717				
Sb	121	115.738				
Sb	123					
Ba	135					
Ba	137	101.539				
Ho	165					
> Lu	175		100.7			
Tl	205	104.027				
Pb	208	108.727				
Th	232	110.962				
U	238	113.358				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 11	Se	82CCV is out of limits (+/- 10%)
QC Std 11	Sb	121CCV is out of limits (+/- 10%)
QC Std 11	Th	232CCV is out of limits (+/- 10%)
QC Std 11	U	238CCV is out of limits (+/- 10%)

Sample ID: QC Std 11

Report Date/Time: Monday, April 12, 2010 00:36:18

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QC Action

QC Action Line: Continue

Sample ID: QC Std 11

Report Date/Time: Monday, April 12, 2010 00:36:18

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ICPMS#4 - Summary Report

Sample ID: QC Std 12

Sample Date/Time: Monday, April 12, 2010 00:39:44

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020.mth

Dataset File: c:\elandata\Dataset\100408\QC Std 12.530

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Li	7	0.128 ug/L	19.443	109	0.000
|	Be	9	0.027 ug/L	13.476	10	0.000
|	B	11	1.145 ug/L	28.218	263	0.000
|	Na	23	3.301 ug/L	47.157	14341	0.010
|	Mg	24	1.412 ug/L	174.475	4334	0.003
|	Al	27	1.210 ug/L	159.643	4334	0.003
|	P	31	-0.597 ug/L	88.681	4077	-0.000
|	K	39	16.143 ug/L	79.670	448977	0.076
|	Ca	43	8.271 ug/L	31.766	224	0.000
>	Sc	45	ug/L		677376	677375.669
|	Ti	47	0.154 ug/L	13.711	238	0.000
|	V	51	0.078 ug/L	1175.065	18613	0.001
|	Cr	52	0.646 ug/L	5.167	-11100	0.003
|	Cr	53	ug/L		125856	-0.008
|	Mn	55	0.025 ug/L	33.474	904	0.000
|	Fe	57	3.183 ug/L	28.922	6225	0.001
|	Co	59	0.037 ug/L	16.686	303	0.000
|	Ni	60	0.022 ug/L	17.346	103	0.000
|	Cu	63	ug/L		4813	-0.003
[	Cu	65	-0.963 ug/L	15.372	2282	-0.001
|	Zn	66	-3.161 ug/L	2.082	2470	-0.007
|	Zn	67	ug/L		7667	-0.001
|	Zn	68	ug/L		2427	-0.005
>	Ge	74	ug/L		274004	274004.219
|	As	75	0.659 ug/L	42.817	695	0.002
|	Se	77	ug/L		5291	0.003
|	Se	82	2.131 ug/L	17.330	163	0.000
[	Kr	83	ug/L		64	0.000
|	Sr	88	0.048 ug/L	12.865	619	0.003
|	Y	89	ug/L		21	-0.000
|	Zr	90	0.414 ug/L	10.704	2694	0.013
|	Mo	98	0.729 ug/L	10.750	2713	0.010
|	Ag	107	0.060 ug/L	30.106	529	0.001
|	Cd	111	0.062 ug/L	1.721	67	0.000
|	Cd	114	ug/L		168	0.001
>	In	115	ug/L		171495	171495.177
|	Sn	120	0.398 ug/L	6.060	2755	0.009
|	Sb	121	1.118 ug/L	20.947	3782	0.017
[	Sb	123	ug/L		2920	0.013
|	Ba	135	ug/L		60	0.000
|	Ba	137	0.045 ug/L	20.260	102	0.000
|	Ho	165	ug/L		9	0.000
>	Lu	175	ug/L		197876	197875.855
|	Tl	205	0.508 ug/L	15.301	3229	0.014
|	Pb	208	0.336 ug/L	8.508	9860	0.018
|	Th	232	0.822 ug/L	13.827	9686	0.044
[U	238	0.265 ug/L	11.449	3990	0.014

Sample ID: QC Std 12

Report Date/Time: Monday, April 12, 2010 00:42:29

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	0.9998
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	1.0000
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9998
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		106.3			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		106.4			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Zr	90					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		104.2			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		101.6			
Tl	205					
Pb	208					
Th	232					
U	238					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 12	Mo	98CCB is out of limits (+/- PQL)
QC Std 12	U	238CCB is out of limits (+/- PQL)

QC Action

QC Action Line: Continue

Sample ID: QC Std 12
 Report Date/Time: Monday, April 12, 2010 00:42:29
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ICPMS#4 - Summary Report

Sample ID: 1202056813

Sample Date/Time: Monday, April 12, 2010 00:45:55

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 959091|1|bcd1

Method File: c:\elandata\Method\6020.mth

Dataset File: c:\elandata\Dataset\100408\1202056813.531

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.155	ug/L	15.345	125	0.000
Be	9	0.023	ug/L	67.286	10	0.000
B	11	0.663	ug/L	10.159	195	0.000
Na	23	11.855	ug/L	40.087	31036	0.035
Mg	24	0.913	ug/L	98.392	3667	0.002
Al	27	4.914	ug/L	29.048	11004	0.013
P	31	-8.107	ug/L	13.471	3265	-0.001
K	39	6.398	ug/L	73.883	415975	0.030
Ca	43	37.720	ug/L	7.485	417	0.000
> Sc	45		ug/L		673807	673806.501
Ti	47	0.490	ug/L	13.392	352	0.000
V	51	0.739	ug/L	351.636	21469	0.005
Cr	52	-5.292	ug/L	13.097	-30205	-0.025
Cr	53		ug/L		337127	0.307
Mn	55	0.322	ug/L	6.098	2494	0.003
Fe	57	21.928	ug/L	6.752	8251	0.004
Co	59	0.012	ug/L	14.584	199	0.000
Ni	60	0.062	ug/L	13.129	138	0.000
Cu	63		ug/L		7583	0.002
Cu	65	0.353	ug/L	16.811	3545	0.001
Zn	66	10.280	ug/L	46.446	10205	0.021
Zn	67		ug/L		29445	0.077
Zn	68		ug/L		8671	0.018
> Ge	74		ug/L		277448	277447.574
As	75	0.412	ug/L	222.814	534	0.001
Se	77		ug/L		17595	0.047
Se	82	1.484	ug/L	14.902	124	0.000
Kr	83		ug/L		62	0.000
Sr	88	0.049	ug/L	14.929	640	0.003
Y	89		ug/L		30	0.000
Zr	90	0.402	ug/L	16.111	2660	0.012
Mo	98	0.434	ug/L	12.264	2052	0.006
Ag	107	0.022	ug/L	13.743	396	0.000
Cd	111	0.052	ug/L	27.084	59	0.000
Cd	114		ug/L		98	0.000
> In	115		ug/L		173670	173670.067
Sn	120	1.467	ug/L	6.580	6943	0.033
Sb	121	0.694	ug/L	13.212	2689	0.011
Sb	123		ug/L		2084	0.008
Ba	135		ug/L		278	0.001
Ba	137	0.295	ug/L	3.003	495	0.002
Ho	165		ug/L		8	-0.000
> Lu	175		ug/L		196945	196945.014
Tl	205	0.302	ug/L	9.696	2101	0.008
Pb	208	1.611	ug/L	2.400	23086	0.085
Th	232	0.512	ug/L	12.018	6415	0.027
U	238	0.005	ug/L	288.648	1343	0.000

Sample ID: 1202056813

Report Date/Time: Monday, April 12, 2010 00:48:41

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	0.9998
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	1.0000
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9998
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45			105.7		
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74			107.7		
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Zr	90					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115			105.5		
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175			101.2		
Tl	205					
Pb	208					
Th	232					
U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202056813

Report Date/Time: Monday, April 12, 2010 00:48:41

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ICPMS#4 - Summary Report

Sample ID: 1202056814

Sample Date/Time: Monday, April 12, 2010 00:52:08

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 959091|1|bcd1

Method File: c:\elandata\Method\6020.mth

Dataset File: c:\elandata\Dataset\100408\1202056814.532

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	46.840	ug/L	2.341	28310	0.042
Be	9	49.870	ug/L	1.330	7894	0.012
B	11	101.397	ug/L	2.049	14245	0.021
Na	23	1726.961	ug/L	11.280	3434071	5.039
Mg	24	1763.429	ug/L	2.154	2351625	3.455
Al	27	1747.678	ug/L	1.943	3188057	4.686
P	31	1775.636	ug/L	0.711	192618	0.277
K	39	1831.828	ug/L	2.729	6259713	8.619
Ca	43	1885.873	ug/L	1.863	12695	0.018
> Sc	45		ug/L		679946	679945.587
Ti	47	44.433	ug/L	3.194	15583	0.023
V	51	49.220	ug/L	3.312	235748	0.320
Cr	52	43.021	ug/L	3.035	126921	0.206
Cr	53		ug/L		368269	0.348
Mn	55	49.673	ug/L	0.396	269845	0.396
Fe	57	1940.527	ug/L	0.447	221067	0.316
Co	59	47.990	ug/L	2.495	202430	0.297
Ni	60	49.060	ug/L	2.685	44453	0.065
Cu	63		ug/L		109623	0.152
Cu	65	50.838	ug/L	2.388	52960	0.073
Zn	66	50.445	ug/L	0.453	34045	0.104
Zn	67		ug/L		35523	0.096
Zn	68		ug/L		26018	0.078
> Ge	74		ug/L		283816	283816.400
As	75	47.582	ug/L	2.184	34166	0.119
Se	77		ug/L		20020	0.055
Se	82	47.431	ug/L	1.754	3140	0.011
Kr	83		ug/L		72	0.000
Sr	88	49.003	ug/L	0.536	465288	2.705
Y	89		ug/L		57	0.000
Zr	90	49.967	ug/L	1.578	263330	1.529
Mo	98	50.259	ug/L	2.211	118298	0.682
Ag	107	52.667	ug/L	2.814	190050	1.104
Cd	111	46.917	ug/L	2.053	40792	0.237
Cd	114		ug/L		96216	0.559
> In	115		ug/L		171947	171946.823
Sn	120	50.247	ug/L	1.150	194524	1.124
Sb	121	62.218	ug/L	2.128	165878	0.960
Sb	123		ug/L		128860	0.746
Ba	135		ug/L		42526	0.212
Ba	137	45.703	ug/L	2.965	73427	0.366
Ho	165		ug/L		12	0.000
> Lu	175		ug/L		200460	200460.278
Tl	205	44.969	ug/L	1.663	248754	1.239
Pb	208	50.021	ug/L	2.024	536346	2.644
Th	232	48.190	ug/L	2.520	513756	2.558
U	238	51.174	ug/L	2.777	527288	2.625

Sample ID: 1202056814

Report Date/Time: Monday, April 12, 2010 00:54:54

Page 1

Calibration

Analyte	Mass Curve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	0.9998
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	1.0000
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9998
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		106.7			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
L Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		110.2			
As	75					
Se	77					
Se	82					
L Kr	83					
Sr	88					
Y	89					
Zr	90					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		104.5			
Sn	120					
Sb	121					
L Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		103.0			
Tl	205					
Pb	208					
Th	232					
L U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202056814

Report Date/Time: Monday, April 12, 2010 00:54:54

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ICPMS#4 - Summary Report

Sample ID: 248039001

Sample Date/Time: Monday, April 12, 2010 01:35:33

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 959091|1|bcd1

Method File: c:\elandata\Method\6020.mth

Dataset File: c:\elandata\Dataset\100408\248039001.539

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.182	ug/L	11.022	140	0.000
Be	9	-0.017	ug/L	80.518	3	-0.000
B	11	29.696	ug/L	3.565	4171	0.006
Na	23	139.412	ug/L	9.454	279387	0.407
Mg	24	3.978	ug/L	108.439	7669	0.008
Al	27	21.383	ug/L	9.803	40391	0.057
P	31	-10.703	ug/L	6.832	2967	-0.002
K	39	69.778	ug/L	5.452	611481	0.328
Ca	43	74.125	ug/L	10.364	651	0.001
Sc	45		ug/L		667948	667948.450
Ti	47	0.933	ug/L	5.455	500	0.000
V	51	-0.066	ug/L	4140.661	17707	-0.000
Cr	52	-5.532	ug/L	3.461	-30721	-0.027
Cr	53		ug/L		387066	0.386
Mn	55	0.622	ug/L	7.762	4072	0.005
Fe	57	20.745	ug/L	6.354	8051	0.003
Co	59	0.009	ug/L	86.139	185	0.000
Ni	60	0.210	ug/L	15.518	268	0.000
Cu	63		ug/L		5601	-0.001
Cu	65	-0.330	ug/L	60.525	2858	-0.000
Zn	66	-1.221	ug/L	26.442	3614	-0.003
Zn	67		ug/L		31041	0.083
Zn	68		ug/L		4224	0.002
Ge	74		ug/L		277421	277420.940
As	75	-1.161	ug/L	71.734	-567	-0.003
Se	77		ug/L		23690	0.069
Se	82	-0.133	ug/L	42.462	20	-0.000
Kr	83		ug/L		68	0.000
Sr	88	0.119	ug/L	0.624	1283	0.007
Y	89		ug/L		194	0.001
Zr	90	0.022	ug/L	16.868	628	0.001
Mo	98	-0.184	ug/L	12.751	582	-0.002
Ag	107	-0.041	ug/L	9.544	162	-0.001
Cd	111	0.005	ug/L	161.768	17	0.000
Cd	114		ug/L		50	0.000
In	115		ug/L		169682	169682.276
Sn	120	0.474	ug/L	3.785	3013	0.011
Sb	121	0.027	ug/L	22.957	882	0.000
Sb	123		ug/L		690	0.000
Ba	135		ug/L		343	0.002
Ba	137	0.336	ug/L	4.009	551	0.003
Ho	165		ug/L		15	0.000
Lu	175		ug/L		193680	193680.267
Tl	205	0.022	ug/L	20.876	570	0.001
Pb	208	0.776	ug/L	5.217	14156	0.041
Th	232	-0.014	ug/L	20.554	897	-0.001
U	238	-0.090	ug/L	4.825	376	-0.005

Sample ID: 248039001

Report Date/Time: Monday, April 12, 2010 01:38:19

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	0.9998
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	1.0000
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9998
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

Sample ID: 248039001

Report Date/Time: Monday, April 12, 2010 01:38:19

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QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45			104.8		
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74			107.7		
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Zr	90					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115			103.1		
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175			99.5		
Tl	205					
Pb	208					
Th	232					
U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 248039001

Report Date/Time: Monday, April 12, 2010 01:38:19

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ICPMS#4 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Monday, April 12, 2010 01:41:44

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020.mth

Dataset File: c:\elandata\Dataset\100408\QC Std 6.540

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	52.288	ug/L	1.701	30272	0.046
Be	9	52.512	ug/L	2.249	7962	0.012
B	11	100.621	ug/L	0.937	13545	0.021
Na	23	4571.497	ug/L	5.154	8699156	13.340
Mg	24	4976.164	ug/L	7.195	6352857	9.749
Al	27	5216.804	ug/L	10.404	9120120	13.986
P	31	4844.122	ug/L	1.180	496630	0.756
K	39	4843.869	ug/L	3.133	15230027	22.791
Ca	43	4806.200	ug/L	0.906	30747	0.047
> Sc	45		ug/L		651477	651477.091
Ti	47	49.133	ug/L	2.574	16490	0.025
V	51	51.410	ug/L	2.006	235155	0.334
Cr	52	52.970	ug/L	0.582	152675	0.254
Cr	53		ug/L		137947	0.018
Mn	55	53.437	ug/L	2.171	278066	0.426
Fe	57	4991.258	ug/L	1.787	535868	0.814
Co	59	51.288	ug/L	2.065	207284	0.318
Ni	60	52.524	ug/L	0.983	45591	0.070
Cu	63		ug/L		109236	0.158
Cu	65	52.377	ug/L	2.714	52175	0.075
Zn	66	49.626	ug/L	2.938	31639	0.103
Zn	67		ug/L		12098	0.016
Zn	68		ug/L		23762	0.075
> Ge	74		ug/L		267603	267602.851
As	75	51.232	ug/L	2.535	34658	0.129
Se	77		ug/L		6573	0.009
Se	82	47.848	ug/L	9.648	2984	0.011
Kr	83		ug/L		62	0.000
Sr	88	52.819	ug/L	2.267	478627	2.916
Y	89		ug/L		43	0.000
Zr	90	50.039	ug/L	1.863	251729	1.531
Mo	98	49.205	ug/L	2.060	110601	0.668
Ag	107	52.594	ug/L	1.776	181179	1.102
Cd	111	51.524	ug/L	0.740	42763	0.261
Cd	114		ug/L		99913	0.609
> In	115		ug/L		164114	164114.050
Sn	120	50.794	ug/L	2.119	187685	1.137
Sb	121	56.277	ug/L	2.905	143325	0.868
Sb	123		ug/L		109729	0.665
Ba	135		ug/L		44831	0.231
Ba	137	50.023	ug/L	0.783	77695	0.401
Ho	165		ug/L		12	0.000
> Lu	175		ug/L		193732	193732.409
Tl	205	48.642	ug/L	2.602	259992	1.340
Pb	208	51.545	ug/L	1.088	534052	2.725
Th	232	51.056	ug/L	4.285	525981	2.710
U	238	54.309	ug/L	2.331	540861	2.785

Sample ID: QC Std 6

Report Date/Time: Monday, April 12, 2010 01:44:28

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Calibration

Analyte	Mass Curve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	0.9998
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	1.0000
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9998
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

Sample ID: QC Std 6

Report Date/Time: Monday, April 12, 2010 01:44:28

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QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	7	104.575				
Be	9	105.025				
B	11	100.621				
Na	23	91.430				
Mg	24	99.523				
Al	27	103.299				
P	31	96.882				
K	39	96.877				
Ca	43	96.124				
> Sc	45		102.2			
Ti	47	98.266				
V	51	102.820				
Cr	52	105.941				
Cr	53					
Mn	55	106.874				
Fe	57	99.825				
Co	59	102.576				
Ni	60	105.048				
Cu	63					
Cu	65	104.755				
Zn	66	99.252				
Zn	67					
Zn	68					
> Ge	74		103.9			
As	75	102.465				
Se	77					
Se	82	95.696				
Kr	83					
Sr	88	105.638				
Y	89					
Zr	90	100.078				
Mo	98	98.409				
Ag	107	105.188				
Cd	111	103.048				
Cd	114					
> In	115		99.7			
Sn	120	101.589				
Sb	121	112.554				
Sb	123					
Ba	135					
Ba	137	100.046				
Ho	165					
> Lu	175		99.5			
Tl	205	97.285				
Pb	208	103.091				
Th	232	102.112				
U	238	108.618				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message
 QC Std 6 Sb 121CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Monday, April 12, 2010 01:47:54

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020.mth

Dataset File: c:\elandata\Dataset\100408\QC Std 7.541

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Li	7	0.007 ug/L	115.824	36	0.000
|	Be	9	0.009 ug/L	228.060	7	0.000
|	B	11	1.175 ug/L	29.159	262	0.000
|	Na	23	2.775 ug/L	105.561	13007	0.008
|	Mg	24	-1.107 ug/L	68.344	1000	-0.002
|	Al	27	-0.233 ug/L	142.819	1667	-0.001
|	P	31	-7.544 ug/L	19.662	3282	-0.001
|	K	39	5.739 ug/L	483.628	408245	0.027
|	Ca	43	9.285 ug/L	13.374	227	0.000
>	Sc	45	ug/L		665098	665098.256
|	Ti	47	-0.032 ug/L	62.065	171	-0.000
|	V	51	-0.475 ug/L	194.914	15882	-0.003
|	Cr	52	0.309 ug/L	20.945	-11974	0.001
|	Cr	53	ug/L		130228	0.002
|	Mn	55	-0.003 ug/L	114.846	740	-0.000
|	Fe	57	-2.111 ug/L	109.308	5537	-0.000
|	Co	59	0.004 ug/L	42.106	160	0.000
|	Ni	60	0.007 ug/L	169.595	87	0.000
|	Cu	63	ug/L		3313	-0.005
[	Cu	65	-1.687 ug/L	1.292	1547	-0.002
|	Zn	66	-4.789 ug/L	1.295	1518	-0.010
|	Zn	67	ug/L		7765	-0.000
|	Zn	68	ug/L		1696	-0.007
>	Ge	74	ug/L		269033	269033.161
|	As	75	0.519 ug/L	57.717	586	0.001
|	Se	77	ug/L		5427	0.004
|	Se	82	1.455 ug/L	5.993	118	0.000
[	Kr	83	ug/L		58	0.000
|	Sr	88	0.008 ug/L	47.370	236	0.000
|	Y	89	ug/L		22	0.000
|	Zr	90	0.239 ug/L	12.523	1729	0.007
|	Mo	98	0.157 ug/L	31.217	1347	0.002
|	Ag	107	-0.002 ug/L	331.467	298	-0.000
|	Cd	111	0.012 ug/L	90.375	22	0.000
|	Cd	114	ug/L		57	0.000
>	In	115	ug/L		167098	167098.478
|	Sn	120	0.067 ug/L	22.986	1446	0.001
|	Sb	121	1.156 ug/L	21.274	3782	0.018
[	Sb	123	ug/L		2998	0.014
|	Ba	135	ug/L		28	0.000
|	Ba	137	0.009 ug/L	35.292	44	0.000
|	Ho	165	ug/L		7	-0.000
>	Lu	175	ug/L		196925	196924.607
|	Tl	205	0.463 ug/L	16.816	2973	0.013
|	Pb	208	-0.093 ug/L	15.849	5354	-0.005
|	Th	232	0.380 ug/L	23.971	5029	0.020
[	U	238	-0.031 ug/L	25.385	987	-0.002

Sample ID: QC Std 7

Report Date/Time: Monday, April 12, 2010 01:50:39

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	0.9998
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	1.0000
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9998
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

Sample ID: QC Std 7

Report Date/Time: Monday, April 12, 2010 01:50:39

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QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		104.4			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		104.4			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Zr	90					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		101.6			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		101.2			
Tl	205					
Pb	208					
Th	232					
U	238					

QC Out Of Limits

Measurement Type Analyte
QC Std 7 Cu

MassOut of Limits Message
65CCB is out of limits (+/- PQL)

QC Action

QC Action Line: Continue

Sample ID: QC Std 7

Report Date/Time: Monday, April 12, 2010 01:50:39

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ICPMS#4 - Summary Report

Sample ID: 1202056815
 Sample Date/Time: Monday, April 12, 2010 02:00:19
 Sample Type:
 Sample Description: LANL 6020 DUP
 Number of Replicates: 3
 Batch ID: 959091|1|bcd1
 Method File: c:\elandata\Method\6020.mth
 Dataset File: c:\elandata\Dataset\100408\1202056815.543

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.387	ug/L	10.443	263	0.000
Be	9	0.002	ug/L	673.561	6	0.000
B	11	30.442	ug/L	0.477	4294	0.006
Na	23	177.208	ug/L	3.492	354684	0.517
Mg	24	7.506	ug/L	14.059	12339	0.015
Al	27	9.388	ug/L	19.787	19013	0.025
P	31	-6.958	ug/L	35.584	3372	-0.001
K	39	281.474	ug/L	13.004	1281900	1.324
Ca	43	84.734	ug/L	11.911	723	0.001
> Sc	45		ug/L		671183	671183.125
Ti	47	0.746	ug/L	20.034	438	0.000
V	51	-0.991	ug/L	277.301	13716	-0.006
Cr	52	-4.904	ug/L	5.625	-28843	-0.023
Cr	53		ug/L		401204	0.404
Mn	55	0.597	ug/L	1.306	3957	0.005
Fe	57	21.109	ug/L	7.735	8128	0.003
Co	59	0.005	ug/L	29.272	166	0.000
Ni	60	0.170	ug/L	16.517	234	0.000
Cu	63		ug/L		19183	0.019
Cu	65	6.224	ug/L	4.186	9198	0.009
Zn	66	3.255	ug/L	11.275	6252	0.007
Zn	67		ug/L		31954	0.085
Zn	68		ug/L		6124	0.008
> Ge	74		ug/L		280578	280577.781
As	75	-2.544	ug/L	22.540	-1540	-0.006
Se	77		ug/L		26543	0.079
Se	82	0.096	ug/L	124.435	35	0.000
Kr	83		ug/L		58	0.000
Sr	88	0.206	ug/L	3.005	2089	0.011
Y	89		ug/L		215	0.001
Zr	90	0.105	ug/L	9.767	1053	0.003
Mo	98	-0.106	ug/L	17.690	758	-0.001
Ag	107	-0.032	ug/L	14.037	194	-0.001
Cd	111	0.016	ug/L	80.846	26	0.000
Cd	114		ug/L		60	0.000
> In	115		ug/L		168984	168984.460
Sn	120	0.447	ug/L	8.816	2901	0.010
Sb	121	0.189	ug/L	13.854	1301	0.003
Sb	123		ug/L		1052	0.002
Ba	135		ug/L		374	0.002
Ba	137	0.405	ug/L	5.615	655	0.003
Ho	165		ug/L		14	0.000
> Lu	175		ug/L		192635	192635.362
Tl	205	0.086	ug/L	4.318	910	0.002
Pb	208	0.771	ug/L	3.768	14030	0.041
Th	232	0.057	ug/L	12.097	1622	0.003
U	238	-0.100	ug/L	6.155	276	-0.005

Sample ID: 1202056815
 Report Date/Time: Monday, April 12, 2010 02:03:04
 Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	0.9998
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	1.0000
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9998
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

Sample ID: 1202056815

Report Date/Time: Monday, April 12, 2010 02:03:04

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QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		105.3			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		108.9			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Zr	90					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		102.7			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		98.9			
Tl	205					
Pb	208					
Th	232					
U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202056815

Report Date/Time: Monday, April 12, 2010 02:03:04

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ICPMS#4 - Summary Report

Sample ID: 1202056816
 Sample Date/Time: Monday, April 12, 2010 02:06:31
 Sample Type:
 Sample Description: LANL 6020 MS
 Number of Replicates: 3
 Batch ID: 959091|1|bcd1
 Method File: c:\elandata\Method\6020.mth
 Dataset File: c:\elandata\Dataset\100408\1202056816.544

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Li	7	46.298 ug/L	1.274	28024	0.041
|	Be	9	48.173 ug/L	0.824	7637	0.011
|	B	11	130.225 ug/L	2.495	18289	0.027
|	Na	23	1874.191 ug/L	2.886	3733112	5.469
|	Mg	24	1794.960 ug/L	2.068	2397003	3.517
|	Al	27	1749.039 ug/L	6.508	3193750	4.689
|	P	31	1713.377 ug/L	2.852	186251	0.267
|	K	39	2164.894 ug/L	9.045	7336966	10.186
|	Ca	43	1905.505 ug/L	2.099	12842	0.019
>	Sc	45	ug/L		680982	680981.897
|	Ti	47	42.604 ug/L	1.713	14972	0.022
|	V	51	47.889 ug/L	6.765	230076	0.311
|	Cr	52	43.541 ug/L	2.302	128781	0.209
|	Cr	53	ug/L		383530	0.370
|	Mn	55	49.144 ug/L	1.084	267359	0.392
|	Fe	57	1952.469 ug/L	2.958	222665	0.318
|	Co	59	48.221 ug/L	2.429	203667	0.299
|	Ni	60	48.941 ug/L	2.876	44401	0.065
|	Cu	63	ug/L		121395	0.169
|	Cu	65	56.323 ug/L	0.517	58411	0.081
[	Zn	66	49.462 ug/L	0.838	33066	0.102
|	Zn	67	ug/L		35545	0.098
|	Zn	68	ug/L		25742	0.078
>	Ge	74	ug/L		280415	280414.514
|	As	75	71.943 ug/L	0.689	50911	0.181
|	Se	77	ug/L		21576	0.061
|	Se	82	18.846 ug/L	3.305	1250	0.004
|	Kr	83	ug/L		67	0.000
[	Sr	88	49.557 ug/L	2.166	466497	2.736
|	Y	89	ug/L		240	0.001
|	Zr	90	49.063 ug/L	2.029	256402	1.501
|	Mo	98	47.992 ug/L	1.729	112068	0.651
|	Ag	107	51.735 ug/L	0.750	185157	1.084
|	Cd	111	9.655 ug/L	2.165	8334	0.049
|	Cd	114	ug/L		19232	0.113
>	In	115	ug/L		170487	170487.383
|	Sn	120	48.881 ug/L	1.728	187657	1.094
|	Sb	121	239.672 ug/L	1.064	631315	3.699
|	Sb	123	ug/L		486179	2.848
[	Ba	135	ug/L		42314	0.215
|	Ba	137	46.680 ug/L	2.122	73620	0.374
|	Ho	165	ug/L		107	0.001
>	Lu	175	ug/L		196755	196755.477
|	Tl	205	88.155 ug/L	4.522	478021	2.428
|	Pb	208	40.235 ug/L	2.135	424700	2.127
|	Th	232	49.770 ug/L	4.091	520662	2.642
|	U	238	52.960 ug/L	2.384	535615	2.716

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	0.9998
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	1.0000
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9998
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		106.9			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		108.8			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Zr	90					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		103.6			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		101.1			
Tl	205					
Pb	208					
Th	232					
U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202056816

Report Date/Time: Monday, April 12, 2010 02:09:16

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ICPMS#4 - Summary Report

Sample ID: 1202056817

Sample Date/Time: Monday, April 12, 2010 02:12:43

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 959091|5|bcd1

Method File: c:\elandata\Method\6020.mth

Dataset File: c:\elandata\Dataset\100408\1202056817.545

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.074	ug/L	13.971	73	0.000
Be	9	0.044	ug/L	63.332	12	0.000
B	11	4.970	ug/L	0.885	759	0.001
Na	23	24.536	ug/L	15.721	53769	0.072
Mg	24	0.494	ug/L	156.871	3000	0.001
Al	27	4.187	ug/L	60.583	9337	0.011
P	31	-7.931	ug/L	26.921	3156	-0.001
K	39	43.820	ug/L	14.634	513750	0.206
Ca	43	21.835	ug/L	12.331	300	0.000
> Sc	45		ug/L		647592	647591.888
Ti	47	0.198	ug/L	31.903	242	0.000
V	51	1.041	ug/L	110.971	21814	0.007
Cr	52	-0.305	ug/L	23.212	-13564	-0.001
Cr	53		ug/L		175636	0.078
Mn	55	0.122	ug/L	4.199	1367	0.001
Fe	57	-0.000	ug/L	75007.894	5615	-0.000
Co	59	0.028	ug/L	13.300	254	0.000
Ni	60	0.046	ug/L	35.272	119	0.000
Cu	63		ug/L		4687	-0.002
Cu	65	-0.934	ug/L	10.586	2208	-0.001
Zn	66	-3.810	ug/L	2.501	2036	-0.008
Zn	67		ug/L		10003	0.009
Zn	68		ug/L		2164	-0.005
> Ge	74		ug/L		265492	265491.893
As	75	-0.163	ug/L	733.032	126	-0.000
Se	77		ug/L		9490	0.020
Se	82	0.184	ug/L	114.493	39	0.000
Kr	83		ug/L		52	-0.000
Sr	88	0.064	ug/L	9.807	746	0.004
Y	89		ug/L		46	0.000
Zr	90	0.029	ug/L	29.693	649	0.001
Mo	98	-0.162	ug/L	12.821	616	-0.002
Ag	107	-0.001	ug/L	390.807	297	-0.000
Cd	111	-0.005	ug/L	219.900	9	-0.000
Cd	114		ug/L		38	0.000
> In	115		ug/L		165841	165841.131
Sn	120	0.047	ug/L	66.651	1359	0.001
Sb	121	0.033	ug/L	107.626	877	0.001
Sb	123		ug/L		667	0.000
Ba	135		ug/L		110	0.000
Ba	137	0.113	ug/L	12.286	206	0.001
Ho	165		ug/L		10	0.000
> Lu	175		ug/L		193366	193366.467
Tl	205	1.365	ug/L	15.082	7724	0.038
Pb	208	-0.042	ug/L	15.186	5773	-0.002
Th	232	0.251	ug/L	14.187	3617	0.013
U	238	-0.040	ug/L	71.660	874	-0.002

Sample ID: 1202056817

Report Date/Time: Monday, April 12, 2010 02:15:29

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	0.9998
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	1.0000
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9998
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

Sample ID: 1202056817

Report Date/Time: Monday, April 12, 2010 02:15:29

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QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45			101.6		
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74			103.1		
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Zr	90					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115			100.8		
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175			99.3		
Tl	205					
Pb	208					
Th	232					
U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202056817

Report Date/Time: Monday, April 12, 2010 02:15:29

Page 3

ICPMS#4 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Monday, April 12, 2010 02:25:07

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020.mth

Dataset File: c:\elandata\Dataset\100408\QC Std 6.547

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	53.289	ug/L	1.274	30593	0.047
Be	9	53.035	ug/L	3.534	7973	0.012
B	11	102.923	ug/L	3.679	13731	0.021
Na	23	4606.262	ug/L	5.982	8684449	13.441
Mg	24	4775.979	ug/L	3.806	6045892	9.357
Al	27	4822.015	ug/L	10.851	8351570	12.928
P	31	4834.134	ug/L	3.319	491220	0.755
K	39	4673.714	ug/L	2.230	14583675	21.991
Ca	43	4747.743	ug/L	1.408	30118	0.046
> Sc	45		ug/L		646060	646060.109
Ti	47	48.971	ug/L	2.696	16295	0.025
V	51	50.907	ug/L	2.888	230987	0.331
Cr	52	52.268	ug/L	2.246	149169	0.250
Cr	53		ug/L		134666	0.015
Mn	55	52.277	ug/L	1.955	269722	0.416
Fe	57	4957.615	ug/L	2.824	527735	0.808
Co	59	50.590	ug/L	1.617	202714	0.314
Ni	60	52.949	ug/L	1.633	45569	0.070
Cu	63		ug/L		109166	0.159
Cu	65	52.658	ug/L	2.922	51991	0.076
Zn	66	48.498	ug/L	2.537	30732	0.100
Zn	67		ug/L		11521	0.014
Zn	68		ug/L		22580	0.072
> Ge	74		ug/L		265141	265140.729
As	75	50.683	ug/L	3.042	33982	0.127
Se	77		ug/L		6774	0.010
Se	82	48.227	ug/L	5.796	2982	0.011
Kr	83		ug/L		55	0.000
Sr	88	52.755	ug/L	1.156	473607	2.912
Y	89		ug/L		45	0.000
Zr	90	48.744	ug/L	1.433	242908	1.491
Mo	98	48.693	ug/L	1.228	108417	0.661
Ag	107	52.623	ug/L	2.272	179559	1.103
Cd	111	51.718	ug/L	2.499	42514	0.261
Cd	114		ug/L		99737	0.613
> In	115		ug/L		162573	162572.599
Sn	120	49.867	ug/L	2.892	182510	1.116
Sb	121	55.756	ug/L	0.958	140650	0.860
Sb	123		ug/L		108215	0.662
Ba	135		ug/L		43794	0.227
Ba	137	49.218	ug/L	1.321	76035	0.394
Ho	165		ug/L		12	0.000
> Lu	175		ug/L		192721	192720.697
Tl	205	49.894	ug/L	2.489	265263	1.374
Pb	208	51.832	ug/L	2.766	534055	2.740
Th	232	50.799	ug/L	3.077	520679	2.696
U	238	54.551	ug/L	1.578	540392	2.798

Sample ID: QC Std 6

Report Date/Time: Monday, April 12, 2010 02:27:51

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	0.9998
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	1.0000
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9998
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass QC Std	% Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Li	7	106.579				
|	Be	9	106.070				
|	B	11	102.923				
|	Na	23	92.125				
|	Mg	24	95.520				
|	Al	27	95.485				
|	P	31	96.683				
|	K	39	93.474				
|	Ca	43	94.955				
>	Sc	45		101.4			
|	Ti	47	97.942				
|	V	51	101.814				
|	Cr	52	104.535				
|	Cr	53					
|	Mn	55	104.554				
|	Fe	57	99.152				
|	Co	59	101.180				
|	Ni	60	105.898				
|	Cu	63					
|	Cu	65	105.317				
|	Zn	66	96.997				
|	Zn	67					
|	Zn	68					
>	Ge	74		102.9			
|	As	75	101.365				
|	Se	77					
|	Se	82	96.454				
|	Kr	83					
|	Sr	88	105.511				
|	Y	89					
|	Zr	90	97.487				
|	Mo	98	97.385				
|	Ag	107	105.245				
|	Cd	111	103.436				
|	Cd	114					
>	In	115		98.8			
|	Sn	120	99.735				
|	Sb	121	111.512				
|	Sb	123					
|	Ba	135					
|	Ba	137	98.437				
|	Ho	165					
>	Lu	175		99.0			
|	Tl	205	99.788				
|	Pb	208	103.664				
|	Th	232	101.598				
|	U	238	109.103				

QC Out Of Limits

Measurement Type	Analyte	Mass Out of Limits Message
QC Std 6	Sb	121CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Monday, April 12, 2010 02:31:17

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020.mth

Dataset File: c:\elandata\Dataset\100408\QC Std 7.548

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Li	7	0.009 ug/L	77.194	36	0.000
|	Be	9	0.015 ug/L	194.846	8	0.000
|	B	11	1.304 ug/L	24.531	273	0.000
|	Na	23	3.121 ug/L	62.867	13340	0.009
|	Mg	24	0.225 ug/L	1006.100	2667	0.000
|	Al	27	0.374 ug/L	327.515	2667	0.001
|	P	31	-4.652 ug/L	44.021	3492	-0.001
|	K	39	-2.050 ug/L	156.294	374513	-0.010
|	Ca	43	11.082 ug/L	59.173	232	0.000
>	Sc	45	ug/L		648601	648601.256
|	Ti	47	0.019 ug/L	77.745	183	0.000
|	V	51	0.293 ug/L	160.607	18753	0.002
|	Cr	52	0.296 ug/L	10.513	-11717	0.001
|	Cr	53	ug/L		130121	0.007
|	Mn	55	0.005 ug/L	67.733	762	0.000
|	Fe	57	-0.146 ug/L	1108.011	5607	-0.000
|	Co	59	0.008 ug/L	10.752	173	0.000
|	Ni	60	-0.005 ug/L	360.063	75	-0.000
|	Cu	63	ug/L		2918	-0.005
[	Cu	65	-1.823 ug/L	2.381	1382	-0.003
|	Zn	66	-5.140 ug/L	3.648	1294	-0.011
|	Zn	67	ug/L		7644	0.000
|	Zn	68	ug/L		1538	-0.008
>	Ge	74	ug/L		263064	263063.942
|	As	75	-0.214 ug/L	108.469	90	-0.001
|	Se	77	ug/L		5552	0.005
|	Se	82	1.619 ug/L	16.864	126	0.000
[	Kr	83	ug/L		55	0.000
|	Sr	88	0.008 ug/L	32.844	240	0.000
|	Y	89	ug/L		22	0.000
|	Zr	90	0.260 ug/L	22.749	1802	0.008
|	Mo	98	0.152 ug/L	57.279	1313	0.002
|	Ag	107	0.005 ug/L	125.644	317	0.000
|	Cd	111	0.015 ug/L	96.257	25	0.000
|	Cd	114	ug/L		60	0.000
>	In	115	ug/L		164402	164402.130
|	Sn	120	0.052 ug/L	29.313	1367	0.001
|	Sb	121	1.186 ug/L	23.087	3795	0.018
[	Sb	123	ug/L		2931	0.014
|	Ba	135	ug/L		27	0.000
|	Ba	137	0.012 ug/L	44.210	49	0.000
|	Ho	165	ug/L		8	-0.000
>	Lu	175	ug/L		193991	193990.904
|	Tl	205	0.456 ug/L	8.671	2891	0.013
|	Pb	208	-0.132 ug/L	6.805	4866	-0.007
|	Th	232	0.412 ug/L	18.741	5285	0.022
|	U	238	-0.043 ug/L	9.613	853	-0.002

Sample ID: QC Std 7

Report Date/Time: Monday, April 12, 2010 02:34:02

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	0.9998
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	1.0000
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9998
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		101.8			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		102.1			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Zr	90					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		99.9			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		99.6			
Tl	205					
Pb	208					
Th	232					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass Out of Limits Message
QC Std 7	Cu	65CCB is out of limits (+/- PQL)

QC Action

QC Action Line: Continue

Sample ID: QC Std 7

Report Date/Time: Monday, April 12, 2010 02:34:02

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ICPMS #5 Daily Performance Report

Sample ID: Sample

Sample Date/Time: Tuesday, April 13, 2010 11:33:12

Sample Description:

Method File: c:\elandata\Method\Daily2.mth

Dataset File: c:\elandata\Dataset\default\Sample.1054

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		1541.9		1541.883		43.705		2.8
Mg	24.0		38738.9		38738.859		434.290		1.1
Co	58.9		63185.8		63185.831		373.250		0.6
Rh	102.9		123622.6		123622.601		766.014		0.6
In	114.9		178721.4		178721.441		1254.626		0.7
Pb	208.0		214246.1		214246.105		2038.893		1.0
[> Ba	137.9		169586.4		169586.427		957.403		0.6
[Ba++	69.0		1987.6		0.012		0.000		2.3
[> Ce	139.9		205613.0		205612.974		1509.978		0.7
[CeO	155.9		4192.2		0.020		0.000		2.1
Bkgd	220.0		19.8		19.800		2.564		13.0

Current Optimization File Data

Current Value	Description
0.86	Nebulizer Gas Flow
6.75	Lens Voltage
1450.00	ICP RF Power
-1812.50	Analog Stage Voltage
1300.00	Pulse Stage Voltage
200.00	Discriminator Threshold
-6.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	21	7.0	3372.1
Co	59	21	7.8	60333.1
In	115	21	9.5	172853.8

ICPMS #5 Instrument Tuning Report

File Name: 100413.tun
File Path: C:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	606	2072	0.540
Be	9.0	9.0	2061	2088	0.543
Mg	24.0	24.0	5699	2085	0.562
Mg	25.0	25.0	5939	2085	0.540
Mg	26.0	26.0	6187	2100	0.545
Co	58.9	59.0	14193	2125	0.528
Rh	102.9	102.9	24880	2180	0.530
In	114.9	114.9	27796	2200	0.535
Ce	139.9	139.9	33878	2220	0.547
Pb	206.0	206.0	49948	2305	0.522
Pb	207.0	207.0	50171	2240	0.593
Pb	208.0	208.0	50451	2280	0.636
U	238.1	238.0	57731	2295	0.641

ICPMS#5 - Summary Report

Sample ID: Blank

Sample Date/Time: Tuesday, April 13, 2010 11:45:01

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\sb and u.mth

Dataset File: C:\elandata\Dataset\100413\Blank.001

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	In	115	ug/L		185761	
|	Sn	120	ug/L		601	
|	Sb	121	ug/L		81	
|	Sb	123	ug/L		67	
[>	Lu	175	ug/L		392643	
|	U	238	ug/L		76	

Calibration

Analyte	MassCurve Type	Correlation Coefficient
In	115Simple Linear	
Sn	120Simple Linear	
Sb	121Simple Linear	
Sb	123Simple Linear	
Lu	175Simple Linear	
U	238Simple Linear	

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[>	In	115					
|	Sn	120					
|	Sb	121					
|	Sb	123					
[>	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: Tuesday, April 13, 2010 11:45:32

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ICPMS#5 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Tuesday, April 13, 2010 11:47:29

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\sb and u.mth

Dataset File: C:\elandata\Dataset\100413\Standard 1.002

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	In	115		ug/L		182036	182035.964
|	Sn	120	10.000	ug/L	2.014	53910	0.293
|	Sb	121	10.000	ug/L	2.863	41462	0.227
|	Sb	123		ug/L		32322	0.177
[>	Lu	175		ug/L		382362	382362.256
|	U	238	10.000	ug/L	3.365	459323	1.201

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[>	In	115					
|	Sn	120					
|	Sb	121					
|	Sb	123					
[>	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: Tuesday, April 13, 2010 11:47:57

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ICPMS#5 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Tuesday, April 13, 2010 11:49:55

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\sb and u.mth

Dataset File: C:\elandata\Dataset\100413\Standard 2.003

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	In 115		ug/L		184236	184236.210
|	Sn 120	99.964	ug/L	2.074	521119	2.826
|	Sb 121	100.049	ug/L	1.558	440889	2.393
|	Sb 123		ug/L		342818	1.861
[>	Lu 175		ug/L		399772	399771.738
|	U 238	99.900	ug/L	1.081	4361704	10.910

Calibration

Analyte	MassCurve Type	Correlation Coefficient
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[>	In 115					
|	Sn 120					
|	Sb 121					
|	Sb 123					
[>	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: Standard 2

Report Date/Time: Tuesday, April 13, 2010 11:50:23

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Tuesday, April 13, 2010 11:52:21

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\sb and u.mth

Dataset File: C:\elandata\Dataset\100413\QC Std 1.004

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> In	115		ug/L		184783	184782.938
| Sn	120	50.255	ug/L	2.353	263015	1.421
| Sb	121	53.137	ug/L	3.381	234778	1.271
| Sb	123		ug/L		182858	0.989
[> Lu	175		ug/L		396367	396366.712
| U	238	51.729	ug/L	1.463	2238990	5.649

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[> In	115			99.5			
| Sn	120	100.511					
| Sb	121	106.273					
| Sb	123						
[> Lu	175		100.9				
| U	238	103.458					

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: Tuesday, April 13, 2010 11:52:49

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Tuesday, April 13, 2010 11:54:49

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\sb and u.mth

Dataset File: C:\elandata\Dataset\100413\QC Std 2.005

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	In	115		ug/L		186749	186749.324
|	Sn	120	-0.014	ug/L	83.102	532	-0.000
|	Sb	121	0.344	ug/L	3.857	1616	0.008
|	Sb	123		ug/L		1273	0.006
[>	Lu	175		ug/L		394533	394532.622
|	U	238	0.005	ug/L	10.622	275	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	In	115		100.5				
|	Sn	120						
|	Sb	121						
|	Sb	123						
[>	Lu	175		100.5				
|	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 2

Report Date/Time: Tuesday, April 13, 2010 11:55:20

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ICPMS#5 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Tuesday, April 13, 2010 11:57:18

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\sb and u.mth

Dataset File: C:\elandata\Dataset\100413\QC Std 3.006

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> In	115		ug/L		187234	187233.558
| Sn	120	5.598	ug/L	2.621	30227	0.158
| Sb	121	2.944	ug/L	1.367	13265	0.070
| Sb	123		ug/L		10433	0.055
[> Lu	175		ug/L		396608	396607.555
| U	238	0.301	ug/L	2.546	13096	0.033

Calibration

Analyte	MassCurve Type	Correlation Coefficient
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[> In	115		100.8			
| Sn	120	111.957				
| Sb	121	98.142				
| Sb	123					
[> Lu	175		101.0			
| U	238	150.304				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 3	U	238CRDL is out of limits

QC Action

QC Action Line: Continue

Sample ID: QC Std 3

Report Date/Time: Tuesday, April 13, 2010 11:57:47

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ICPMS#5 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Tuesday, April 13, 2010 11:59:45

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\sb and u.mth

Dataset File: C:\elandata\Dataset\100413\QC Std 4.007

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	In	115		ug/L		163099	163099.298
|	Sn	120	0.204	ug/L	2.717	1469	0.006
|	Sb	121	0.265	ug/L	3.152	1103	0.006
|	Sb	123		ug/L		895	0.005
[>	Lu	175		ug/L		355401	355400.625
|	U	238	0.002	ug/L	19.302	147	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[>	In	115		87.8			
|	Sn	120					
|	Sb	121					
|	Sb	123					
[>	Lu	175		90.5			
|	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 4

Report Date/Time: Tuesday, April 13, 2010 12:00:14

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ICPMS#5 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Tuesday, April 13, 2010 12:02:12

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\sb and u.mth

Dataset File: C:\elandata\Dataset\100413\QC Std 5.008

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> In	115		ug/L		164246	164245.716
| Sn	120	20.117	ug/L	2.678	93906	0.569
| Sb	121	20.261	ug/L	2.170	79645	0.485
| Sb	123		ug/L		62352	0.379
[> Lu	175		ug/L		356670	356669.933
| U	238	21.126	ug/L	0.769	822958	2.307

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel.	% Difference
[> In	115			88.4			
| Sn	120	100.587					
| Sb	121	101.307					
| Sb	123						
[> Lu	175			90.8			
| U	238	105.631					

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: Tuesday, April 13, 2010 12:02:42

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ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Tuesday, April 13, 2010 12:04:40

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\sb and u.mth

Dataset File: C:\elandata\Dataset\100413\QC Std 6.009

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> In	115		ug/L		180800	180799.988
| Sn	120	49.813	ug/L	3.483	255017	1.408
| Sb	121	52.557	ug/L	3.494	227209	1.257
| Sb	123		ug/L		178584	0.988
[> Lu	175		ug/L		384201	384200.999
| U	238	52.168	ug/L	0.479	2188900	5.697

Calibration

Analyte	MassCurve Type	Correlation Coefficient
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[> In	115		97.3				
| Sn	120	99.627					
| Sb	121	105.114					
| Sb	123						
[> Lu	175		97.8				
| U	238	104.336					

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: Tuesday, April 13, 2010 12:05:10

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Tuesday, April 13, 2010 12:07:10

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\sb and u.mth

Dataset File: C:\elandata\Dataset\100413\QC Std 7.010

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> In	115		ug/L		178005	178004.541
| Sn	120	-0.027	ug/L	23.813	442	-0.001
| Sb	121	0.191	ug/L	2.212	892	0.005
| Sb	123		ug/L		687	0.004
[> Lu	175		ug/L		382061	382060.614
| U	238	0.003	ug/L	10.893	210	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[> In	115			95.8		
| Sn	120					
| Sb	121					
| Sb	123					
[> Lu	175		97.3			
| 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: Tuesday, April 13, 2010 12:07:40

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ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Tuesday, April 13, 2010 12:31:44

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\sb and u.mth

Dataset File: C:\elandata\Dataset\100413\QC Std 8.020

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	In	115		ug/L		179880	179879.590
|	Sn	120	50.183	ug/L	0.622	255755	1.419
|	Sb	121	52.882	ug/L	0.671	227587	1.265
|	Sb	123		ug/L		177328	0.985
[>	Lu	175		ug/L		385933	385933.317
|	U	238	51.782	ug/L	2.522	2181888	5.655

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	In	115			96.8			
|	Sn	120	100.367					
|	Sb	121	105.764					
|	Sb	123						
[>	Lu	175			98.3			
|	U	238	103.564					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Tuesday, April 13, 2010 12:34:13

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\sb and u.mth

Dataset File: C:\elandata\Dataset\100413\QC Std 9.021

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	In	115		ug/L		180084	180084.005
|	Sn	120	-0.039	ug/L	7.068	383	-0.001
|	Sb	121	0.142	ug/L	4.782	688	0.003
|	Sb	123		ug/L		548	0.003
[>	Lu	175		ug/L		382471	382471.262
|	U	238	0.004	ug/L	7.628	243	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[>	In	115		96.9			
|	Sn	120					
|	Sb	121					
|	Sb	123					
[>	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

ICPMS#5 - Summary Report

Sample ID: 1202056813

Sample Date/Time: Tuesday, April 13, 2010 12:36:42

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 959091|1|prb

Method File: c:\elandata\Method\sb and u.mth

Dataset File: C:\elandata\Dataset\100413\1202056813.022

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> In	115		ug/L		182948	182947.575
| Sn	120	0.147	ug/L	7.597	1351	0.004
| Sb	121	0.097	ug/L	3.410	506	0.002
| Sb	123		ug/L		404	0.002
[> Lu	175		ug/L		384345	384344.903
| U	238	0.016	ug/L	4.601	757	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[> In	115		98.5				
| Sn	120						
| Sb	121						
| Sb	123						
[> 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: 1202056813

Report Date/Time: Tuesday, April 13, 2010 12:37:11

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ICPMS#5 - Summary Report

Sample ID: 1202056814

Sample Date/Time: Tuesday, April 13, 2010 12:39:09

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 959091|1|prb

Method File: c:\elandata\Method\sb and u.mth

Dataset File: C:\elandata\Dataset\100413\1202056814.023

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> In	115		ug/L		184347	184347.192
| Sn	120	53.014	ug/L	1.871	276836	1.499
| Sb	121	56.017	ug/L	1.433	247049	1.340
| Sb	123		ug/L		193795	1.051
[> Lu	175		ug/L		388355	388354.632
| U	238	47.093	ug/L	4.802	1996875	5.143

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[> In	115		99.2				
| Sn	120						
| Sb	121						
| Sb	123						
[> Lu	175		98.9				
| 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: 1202056814

Report Date/Time: Tuesday, April 13, 2010 12:39:38

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ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Tuesday, April 13, 2010 12:53:55

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\sb and u.mth

Dataset File: C:\elandata\Dataset\100413\QC Std 8.029

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> In	115		ug/L		179439	179438.954
| Sn	120	49.856	ug/L	1.546	253434	1.409
| Sb	121	52.280	ug/L	2.701	224406	1.250
| Sb	123		ug/L		175814	0.980
[> Lu	175		ug/L		380571	380570.868
| U	238	51.864	ug/L	1.091	2155752	5.664

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[> In	115		96.6				
| Sn	120	99.711					
| Sb	121	104.560					
| Sb	123						
[> Lu	175		96.9				
| U	238	103.728					

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: Tuesday, April 13, 2010 12:54:24

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ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Tuesday, April 13, 2010 12:56:24

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\sb and u.mth

Dataset File: C:\elandata\Dataset\100413\QC Std 9.030

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	In	115		ug/L		178375	178374.506
|	Sn	120	-0.037	ug/L	13.537	393	-0.001
|	Sb	121	0.145	ug/L	3.498	696	0.003
|	Sb	123		ug/L		550	0.003
[>	Lu	175		ug/L		376824	376824.203
|	U	238	0.004	ug/L	28.193	240	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	In	115		96.0				
|	Sn	120						
|	Sb	121						
|	Sb	123						
[>	Lu	175		96.0				
|	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 9

Report Date/Time: Tuesday, April 13, 2010 12:56:55

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ICPMS#5 - Summary Report

Sample ID: 248039001

Sample Date/Time: Tuesday, April 13, 2010 13:01:21

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 959091|1|prb

Method File: c:\elandata\Method\sb and u.mth

Dataset File: C:\elandata\Dataset\100413\248039001.032

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	In	115		ug/L		186840	186840.255
|	Sn	120	0.028	ug/L	38.109	755	0.001
|	Sb	121	0.039	ug/L	1.774	256	0.001
|	Sb	123		ug/L		226	0.001
[>	Lu	175		ug/L		387645	387645.195
|	U	238	0.012	ug/L	10.324	602	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[>	In	115		100.6		
|	Sn	120				
|	Sb	121				
|	Sb	123				
[>	Lu	175		98.7		
|	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

ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Tuesday, April 13, 2010 13:21:54

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\sb and u.mth

Dataset File: C:\elandata\Dataset\100413\QC Std 8.039

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> In	115		ug/L		181343	181343.112
| Sn	120	49.625	ug/L	1.270	254948	1.403
| Sb	121	51.369	ug/L	0.964	222861	1.229
| Sb	123		ug/L		175048	0.965
[> Lu	175		ug/L		380870	380870.172
| U	238	51.061	ug/L	0.982	2123878	5.576

Calibration

Analyte	MassCurve Type	Correlation Coefficient
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel.	% Difference
[> In	115		97.6				
| Sn	120	99.251					
| Sb	121	102.737					
| Sb	123						
[> Lu	175		97.0				
| U	238	102.121					

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: Tuesday, April 13, 2010 13:22:24

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ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Tuesday, April 13, 2010 13:24:23

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\sb and u.mth

Dataset File: C:\elandata\Dataset\100413\QC Std 9.040

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	In	115		ug/L		182593	182593.360
|	Sn	120	-0.048	ug/L	9.118	341	-0.001
|	Sb	121	0.142	ug/L	3.687	700	0.003
|	Sb	123		ug/L		534	0.003
[>	Lu	175		ug/L		384056	384055.625
|	U	238	0.004	ug/L	3.626	253	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	In	115		98.3				
|	Sn	120						
|	Sb	121						
|	Sb	123						
[>	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 9

Report Date/Time: Tuesday, April 13, 2010 13:24:54

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ICPMS#5 - Summary Report

Sample ID: 1202056815

Sample Date/Time: Tuesday, April 13, 2010 13:29:21

Sample Type:

Sample Description: LANL 6020 DUP

Number of Replicates: 3

Batch ID: 959091|1|prb

Method File: c:\elandata\Method\sb and u.mth

Dataset File: C:\elandata\Dataset\100413\1202056815.042

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> In	115		ug/L		186636	186636.140
| Sn	120	0.016	ug/L	8.740	687	0.000
| Sb	121	0.045	ug/L	6.753	281	0.001
| Sb	123		ug/L		231	0.001
[> Lu	175		ug/L		381121	381120.525
| U	238	0.004	ug/L	15.025	254	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Di	Duplicate Rel. % Difference
[> In	115		100.5			
| Sn	120					
| Sb	121					
| Sb	123					
[> 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: 1202056815

Report Date/Time: Tuesday, April 13, 2010 13:29:50

Page 1

ICPMS#5 - Summary Report

Sample ID: 1202056816

Sample Date/Time: Tuesday, April 13, 2010 13:31:49

Sample Type:

Sample Description: LANL 6020 MS

Number of Replicates: 3

Batch ID: 959091|1|prb

Method File: c:\elandata\Method\sb and u.mth

Dataset File: C:\elandata\Dataset\100413\1202056816.043

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	In	115		ug/L		182129	182128.936
|	Sn	120	51.809	ug/L	0.531	267315	1.465
|	Sb	121	213.423	ug/L	1.870	929701	5.105
|	Sb	123		ug/L		732807	4.023
[>	Lu	175		ug/L		377501	377500.781
|	U	238	46.046	ug/L	0.561	1898346	5.029

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	In	115			98.0			
|	Sn	120						
|	Sb	121						
|	Sb	123						
[>	Lu	175			96.1			
|	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: 1202056816

Report Date/Time: Tuesday, April 13, 2010 13:32:18

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ICPMS#5 - Summary Report

Sample ID: 1202056817

Sample Date/Time: Tuesday, April 13, 2010 13:34:17

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 959091|5|prb

Method File: c:\elandata\Method\sb and u.mth

Dataset File: C:\elandata\Dataset\100413\1202056817.044

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	In	115		ug/L		180322	180322.483
|	Sn	120	-0.022	ug/L	13.652	474	-0.001
|	Sb	121	0.122	ug/L	7.610	604	0.003
|	Sb	123		ug/L		491	0.002
[>	Lu	175		ug/L		383535	383534.538
|	U	238	0.027	ug/L	3.994	1195	0.003

Calibration

Analyte	MassCurve Type	Correlation Coefficient
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[>	In	115			97.1		
|	Sn	120					
|	Sb	121					
|	Sb	123					
[>	Lu	175			97.7		
|	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: 1202056817

Report Date/Time: Tuesday, April 13, 2010 13:34:46

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Tuesday, April 13, 2010 13:36:45

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\sb and u.mth

Dataset File: C:\elandata\Dataset\100413\QC Std 8.045

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	In	115		ug/L		169071	169071.440
|	Sn	120	49.887	ug/L	2.022	238915	1.410
|	Sb	121	52.708	ug/L	3.274	213128	1.261
|	Sb	123		ug/L		164071	0.970
[>	Lu	175		ug/L		364393	364393.398
|	U	238	49.365	ug/L	2.181	1964182	5.391

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	In	115			91.0			
|	Sn	120	99.775					
|	Sb	121	105.416					
|	Sb	123						
[>	Lu	175			92.8			
|	U	238	98.730					

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: Tuesday, April 13, 2010 13:37:15

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ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Tuesday, April 13, 2010 13:39:15

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\sb and u.mth

Dataset File: C:\elandata\Dataset\100413\QC Std 9.046

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> In	115		ug/L		179196	179196.267
| Sn	120	-0.042	ug/L	10.523	368	-0.001
| Sb	121	0.141	ug/L	7.956	681	0.003
| Sb	123		ug/L		547	0.003
[> Lu	175		ug/L		383407	383407.402
| U	238	0.006	ug/L	16.687	322	0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[> In	115		96.5			
| Sn	120					
| Sb	121					
| Sb	123					
[> Lu	175		97.6			
| 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: Blank
Sample Date/Time: Tuesday, April 13, 2010 15:12:52
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\w only.mth
Dataset File: C:\elandata\Dataset\100413\Blank.090

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		350450	
[U	238		ug/L		325	

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 % Dif	Duplicate Rel. % Difference
[> Lu	175					
[U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Tuesday, April 13, 2010 15:14:32

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: C:\elandata\Dataset\100413\Standard 1.091

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		357385	357385.496
[	U	238	10.000	ug/L	1.263	423309	1.183

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Lu	175						
[U	238						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Tuesday, April 13, 2010 15:16:09

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only.mth

Dataset File: C:\elandata\Dataset\100413\Standard 2.092

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		346400	346400.487
[	U	238	99.956 ug/L	0.528	3924964	11.330

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175				
[U	238				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Tuesday, April 13, 2010 15:17:46

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only.mth

Dataset File: C:\elandata\Dataset\100413\QC Std 1.093

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		349311	349311.125
[	U	238	49.627	ug/L	0.746	1965252	5.625

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[>	Lu	175			99.7		
[U	238	99.254				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Tuesday, April 13, 2010 15:19:26

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: C:\elandata\Dataset\100413\QC Std 2.094

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		350872	350872.277
[	U	238	0.012	ug/L	5.508	815	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Lu	175			100.1			
[U	238						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Tuesday, April 13, 2010 15:21:07

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: C:\elandata\Dataset\100413\QC Std 3.095

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		341237	341237.117
[U	238	0.216	ug/L	1.954	8686	0.025

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[> Lu	175			97.4			
[U	238	108.183					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 3

Report Date/Time: Tuesday, April 13, 2010 15:21:17

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Tuesday, April 13, 2010 15:22:46

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: C:\elandata\Dataset\100413\QC Std 4.096

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		321479	321479.366
[	U	238	-0.002	ug/L	2.476	214	-0.000

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Lu	175			91.7			
[U	238						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Tuesday, April 13, 2010 15:24:25

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: C:\elandata\Dataset\100413\QC Std 5.097

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		323412	323411.634
[	U	238	20.986	ug/L	1.639	769564	2.379

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
>	Lu	175		92.3				
[U	238	104.932					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Tuesday, April 13, 2010 15:26:04

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only.mth

Dataset File: C:\elandata\Dataset\100413\QC Std 6.098

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		344845	344845.355
[U	238	49.309	ug/L	1.762	1927882	5.589

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[> Lu	175			98.4		
[U	238	98.617				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Tuesday, April 13, 2010 15:27:45

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: C:\elandata\Dataset\100413\QC Std 7.099

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		345974	345974.197
[U	238	0.010	ug/L	12.917	706	0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[> Lu	175			98.7		
[U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Tuesday, April 13, 2010 15:27:57

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ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Tuesday, April 13, 2010 15:44:13

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\w only.mth

Dataset File: C:\elandata\Dataset\100413\QC Std 8.109

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		341777	341777.190
[	U	238	50.362	ug/L	1.286	1951226	5.709

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			97.5		
[U	238	100.723				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Tuesday, April 13, 2010 15:45:54

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only.mth

Dataset File: C:\elandata\Dataset\100413\QC Std 9.110

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		349790	349789.814
[U	238	0.009	ug/L	2.899	693	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[> Lu	175			99.8		
[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 - Summary Report

Sample ID: 1202056813
Sample Date/Time: Tuesday, April 13, 2010 15:47:34
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 959091|1|prb
Method File: c:\elandata\Method\only.mth
Dataset File: C:\elandata\Dataset\100413\1202056813.111

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		349509	349508.811
[U	238	0.012	ug/L	2.771	800	0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[> Lu	175			99.7		
[U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202056814

Sample Date/Time: Tuesday, April 13, 2010 15:49:13

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 959091|1|prb

Method File: c:\elandata\Method\lu only.mth

Dataset File: C:\elandata\Dataset\100413\1202056814.112

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		358689	358688.810
[	U	238	45.301 ug/L	2.269	1841875	5.135

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Lu	175		102.4			
[U	238					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202056814

Report Date/Time: Tuesday, April 13, 2010 15:49:23

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Tuesday, April 13, 2010 15:59:07

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: C:\elandata\Dataset\100413\QC Std 8.118

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		351399	351399.441
[U	238	48.797	ug/L	2.328	1943686	5.531

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[> Lu	175			100.3			
[U	238	97.594					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 8

Report Date/Time: Tuesday, April 13, 2010 15:59:18

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Tuesday, April 13, 2010 16:00:48

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only.mth

Dataset File: C:\elandata\Dataset\100413\QC Std 9.119

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		348712	348712.118
[U	238	0.009	ug/L	8.140	686	0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[> Lu	175		99.5			
[U	238					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 9

Report Date/Time: Tuesday, April 13, 2010 16:01:00

Page 1

ICPMS#5 - Summary Report

Sample ID: 248039001

Sample Date/Time: Tuesday, April 13, 2010 16:04:07

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 959091|1|prb

Method File: c:\elandata\Method\only.mth

Dataset File: C:\elandata\Dataset\100413\248039001.121

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		353588	353588.446
[	U	238	0.006	ug/L	8.779	577	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Lu	175			100.9			
[U	238						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202056815

Sample Date/Time: Tuesday, April 13, 2010 16:09:05

Sample Type:

Sample Description: LANL 6020 DUP

Number of Replicates: 3

Batch ID: 959091|1|prb

Method File: c:\elandata\Method\lu only.mth

Dataset File: C:\elandata\Dataset\100413\1202056815.124

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		353376	353376.063
[	U	238	-0.002	ug/L	16.442	255	-0.000

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[>	Lu	175			100.8		
[U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202056816
Sample Date/Time: Tuesday, April 13, 2010 16:10:45
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 959091|1|prb
Method File: c:\elandata\Method\only.mth
Dataset File: C:\elandata\Dataset\100413\1202056816.125

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		357811	357811.472
[U	238	45.049	ug/L	1.992	1827432	5.106

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[> Lu	175			102.1		
[U	238					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202056817

Sample Date/Time: Tuesday, April 13, 2010 16:12:24

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 959091|5|prb

Method File: c:\elandata\Method\lu only.mth

Dataset File: C:\elandata\Dataset\100413\1202056817.126

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		351505	351505.276
[U	238	0.030	ug/L	3.571	1540	0.003

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			100.3		
[U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Tuesday, April 13, 2010 16:14:04

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\du only.mth

Dataset File: C:\elandata\Dataset\100413\QC Std 8.127

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		343618	343618.256
[	U	238	50.399	ug/L	1.318	1963281	5.713

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Lu	175			98.1			
[U	238	100.798					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 8

Report Date/Time: Tuesday, April 13, 2010 16:14:15

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Tuesday, April 13, 2010 16:15:45

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: C:\elandata\Dataset\100413\QC Std 9.128

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		351588	351587.835
[	U	238	0.011	ug/L	7.475	771	0.001

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			100.3			
[U	238						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

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Analysis Begun

Logged In Analyst: Administrator
Spectrometer Model: FIMS-100, S/N B050-9550

Technique: AA FIMS-MHS
Autosampler Model: S10

Sample Information File: C:\data-AA\Administrator\Sample Information\030210W1.SIF

Batch ID:

Results Data Set: 030210W3

Results Library: C:\data-AA\Administrator\Results\Results.mdb

Sequence No.: 1
Sample ID: Calib Blank
Analyst:

Autosampler Location: 1
Date Collected: 3/2/2010 08:26:33
Data Type: Original

Replicate Data: Calib Blank

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1		[0.00]	0.0006	0.0027	0.0006	08:27:33	Yes
2		[0.00]	0.0006	0.0025	0.0006	08:28:08	Yes
Mean:		[0.00]	0.0006				
SD:		0.00	0.0000				
%RSD:		0.00	8.04				

Auto-zero performed.

Sequence No.: 2
Sample ID: S0.2
Analyst:

Autosampler Location: 2
Date Collected: 3/2/2010 08:28:26
Data Type: Original

Replicate Data: S0.2

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1		[0.2]	0.0021	0.0131	0.0027	08:29:27	Yes
2		[0.2]	0.0021	0.0122	0.0028	08:30:02	Yes
Mean:		[0.2]	0.0021				
SD:		0.0	0.0000				
%RSD:		0.0	0.35				

Standard number 1 applied. [0.2]

Correlation Coef.: 1.000000 Slope: 0.01068 Intercept: 0.00000

Sequence No.: 3
Sample ID: S0.5
Analyst:

Autosampler Location: 3
Date Collected: 3/2/2010 08:30:21
Data Type: Original

Replicate Data: S0.5

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1		[0.5]	0.0054	0.0299	0.0060	08:31:22	Yes
2		[0.5]	0.0055	0.0282	0.0061	08:31:57	Yes
Mean:		[0.5]	0.0055				
SD:		0.0	0.0001				
%RSD:		0.0	1.42				

Standard number 2 applied. [0.5]

Correlation Coef.: 0.999936 Slope: 0.01097 Intercept: -0.00002

Sequence No.: 4
Sample ID: S2.0
Analyst:

Autosampler Location: 4
Date Collected: 3/2/2010 08:32:17
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]	0.0209	0.1041	0.0215	08:33:18	Yes
2	[2.0]	0.0206	0.1004	0.0212	08:33:53	Yes
Mean:	[2.0]	0.0207				
SD:	0.0	0.0002				
%RSD:	0.0	0.90				
Standard number 3 applied. [2.0]						
Correlation Coef.: 0.999896 Slope: 0.01034 Intercept: 0.00011						

Sequence No.: 5 Autosampler Location: 5
 Sample ID: S5.0 Date Collected: 3/2/2010 08:34:13
 Analyst: Data Type: Original

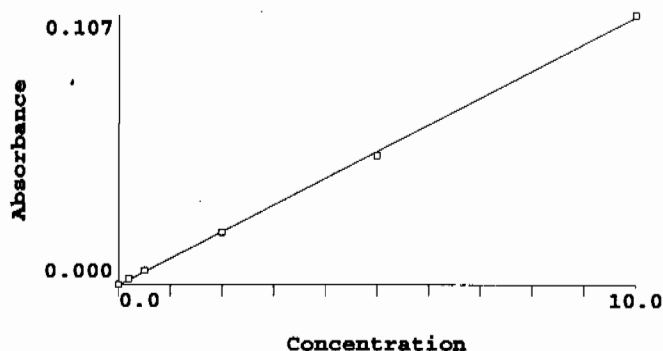
Replicate Data: S5.0

Repl #	Sample Conc ug/L	Std Conc ug/L	Blk Corr Signal	Peak Area	Peak Height	Time	Peak Stored
1	[5.0]	0.0520	0.2558	0.0526	08:35:15	Yes	
2	[5.0]	0.0500	0.2379	0.0506	08:35:49	Yes	
Mean:	[5.0]	0.0510					
SD:	0.0	0.0014					
%RSD:	0.0	2.77					
Standard number 4 applied. [5.0]							
Correlation Coef.: 0.999965 Slope: 0.01018 Intercept: 0.00020							

Sequence No.: 6 Autosampler Location: 6
 Sample ID: S10.0 Date Collected: 3/2/2010 08:36:10
 Analyst: Data Type: Original

Replicate Data: S10.0

Repl #	Sample Conc ug/L	Std Conc ug/L	Blk Corr Signal	Peak Area	Peak Height	Time	Peak Stored
1	[10.0]	0.1058	0.5210	0.1064	08:37:10	Yes	
2	[10.0]	0.1077	0.5459	0.1083	08:37:45	Yes	
Mean:	[10.0]	0.1068					
SD:	0.0	0.0014					
%RSD:	0.0	1.27					
Standard number 5 applied. [10.0]							
Correlation Coef.: 0.999746 Slope: 0.01062 Intercept: -0.00030							



Calibration data for Hg 253.7

Equation: Linear, Calculated Intercept

ID	Mean Signal (Abs)	Entered Conc. ug/L	Calculated Conc. ug/L	Standard Deviation	%RSD
Calib Blank	0.0000	0	0.028	0.00	8.0
S0.2	0.0021	0.2	0.229	0.00	0.4
S0.5	0.0055	0.5	0.544	0.00	1.4
S2.0	0.0207	2.0	1.982	0.00	0.9
S5.0	0.0510	5.0	4.832	0.00	2.8
S10.0	0.1068	10.0	10.085	0.00	1.3
Correlation Coef.: 0.999746 Slope: 0.01062 Intercept: -0.00030					

Sequence No.: 7
Sample ID: ICV
Analyst:

Autosampler Location: 9
Date Collected: 3/2/2010 08:38:04
Data Type: Original

Replicate Data: ICV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.221	5.221	0.0551	0.2819	0.0557	08:39:05	Yes
2	5.176	5.176	0.0547	0.2755	0.0553	08:39:40	Yes
Mean:	5.199	5.199	0.0549				
SD:	0.032	0.032	0.0003				
%RSD:	0.612	0.612	0.61				

QC value within limits for Hg 253.7 Recovery = 103.98%
All analyte(s) passed QC.

Sequence No.: 8
Sample ID: ICB
Analyst:

Autosampler Location: 10
Date Collected: 3/2/2010 08:40:00
Data Type: Original

Replicate Data: ICB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.031	0.031	0.0000	0.0024	0.0006	08:41:01	Yes
2	0.039	0.039	0.0001	0.0036	0.0007	08:41:36	Yes
Mean:	0.035	0.035	0.0001				
SD:	0.006	0.006	0.0001				
%RSD:	15.89	15.89	82.13				

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: 3/2/2010 08:41:56
Data Type: Original

Replicate Data: CRDL

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.234	0.234	0.0022	0.0142	0.0028	08:42:57	Yes
2	0.245	0.245	0.0023	0.0156	0.0029	08:43:32	Yes
Mean:	0.240	0.240	0.0022				
SD:	0.008	0.008	0.0001				
%RSD:	3.187	3.187	3.61				

QC value within limits for Hg 253.7 Recovery = 119.76%
All analyte(s) passed QC.

Sequence No.: 10
Sample ID: CCV
Analyst:

Autosampler Location: 7
Date Collected: 3/2/2010 08:43:52
Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.182	5.182	0.0547	0.2774	0.0553	08:44:52	Yes
2	5.128	5.128	0.0542	0.2734	0.0548	08:45:27	Yes
Mean:	5.155	5.155	0.0544				
SD:	0.038	0.038	0.0004				
%RSD:	0.738	0.738	0.74				

QC value within limits for Hg 253.7 Recovery = 103.11%
All analyte(s) passed QC.

Sequence No.: 11
Sample ID: CCB
Analyst:

Autosampler Location: 8
Date Collected: 3/2/2010 08:45:46
Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.012	0.012	-0.0002	-0.0000	0.0004	08:46:47	Yes
2	0.012	0.012	-0.0002	-0.0001	0.0004	08:47:22	Yes
Mean:	0.012	0.012	-0.0002				
SD:	0.000	0.000	0.0000				
%RSD:	0.848	0.848	0.63				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 12

Sample ID: 1202055823|958575|1

Analyst: JXL

Autosampler Location: 12

Date Collected: 3/2/2010 08:47:41

Data Type: Original

Replicate Data: 1202055823|958575|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.012	0.012	-0.0002	-0.0000	0.0004	08:48:43	Yes
2	0.016	0.016	-0.0001	0.0004	0.0005	08:49:17	Yes
Mean:	0.014	0.014	-0.0001				
SD:	0.003	0.003	0.0000				
%RSD:	18.17	18.17	19.03				

Sequence No.: 13

Sample ID: 1202055824|958575|1

Analyst: JXL

Autosampler Location: 13

Date Collected: 3/2/2010 08:49:38

Data Type: Original

Replicate Data: 1202055824|958575|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	2.127	2.127	0.0223	0.1129	0.0229	08:50:40	Yes
2	2.104	2.104	0.0220	0.1110	0.0227	08:51:14	Yes
Mean:	2.116	2.116	0.0222				
SD:	0.016	0.016	0.0002				
%RSD:	0.778	0.778	0.79				

Sequence No.: 14

Sample ID: 247037001|958575|1

Analyst: JXL

Autosampler Location: 14

Date Collected: 3/2/2010 08:51:35

Data Type: Original

Replicate Data: 247037001|958575|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.028	0.028	-0.0000	0.0025	0.0006	08:52:35	Yes
2	0.045	0.045	0.0002	0.0048	0.0008	08:53:11	Yes
Mean:	0.037	0.037	0.0001				
SD:	0.012	0.012	0.0001				
%RSD:	34.19	34.19	145.41				

Sequence No.: 15

Sample ID: 1202055825|958575|1

Analyst: JXL

Autosampler Location: 15

Date Collected: 3/2/2010 08:53:30

Data Type: Original

Replicate Data: 1202055825|958575|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.019	0.019	-0.0001	0.0021	0.0005	08:54:30	Yes
2	0.028	0.028	-0.0000	0.0030	0.0006	08:55:05	Yes
Mean:	0.024	0.024	-0.0000				
SD:	0.006	0.006	0.0001				

1	0.032	0.032	0.0000	0.0035	0.0007	09:04:04	Yes
2	0.032	0.032	0.0000	0.0030	0.0007	09:04:39	Yes
Mean:	0.032	0.032	0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	0.786	0.786	6.22				

Sequence No.: 21

Autosampler Location: 21

Sample ID: 247042004|958575|1

Date Collected: 3/2/2010 09:04:58

Analyst: JXL

Data Type: Original

Replicate Data: 247042004|958575|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.028	0.028	0.0000	0.0031	0.0006	09:05:59	Yes
2	0.030	0.030	0.0000	0.0036	0.0006	09:06:34	Yes
Mean:	0.029	0.029	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	4.826	4.826	93.90				

Sequence No.: 22

Autosampler Location: 7

Sample ID: CCV

Date Collected: 3/2/2010 09:06:54

Analyst:

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.128	5.128	0.0541	0.2768	0.0548	09:07:54	Yes
2	5.127	5.127	0.0541	0.2755	0.0547	09:08:29	Yes
Mean:	5.128	5.128	0.0541				
SD:	0.001	0.001	0.0000				
%RSD:	0.015	0.015	0.02				

QC value within limits for Hg 253.7 Recovery = 102.55%
All analyte(s) passed QC.

Sequence No.: 23

Autosampler Location: 8

Sample ID: CCB

Date Collected: 3/2/2010 09:08:48

Analyst:

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.032	0.032	0.0000	0.0035	0.0007	09:09:49	Yes
2	0.037	0.037	0.0001	0.0040	0.0007	09:10:24	Yes
Mean:	0.035	0.035	0.0001				
SD:	0.004	0.004	0.0000				
%RSD:	10.44	10.44	53.94				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 24

Autosampler Location: 22

Sample ID: 247042005|958575|1

Date Collected: 3/2/2010 09:10:43

Analyst: JXL

Data Type: Original

Replicate Data: 247042005|958575|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.029	0.029	0.0000	0.0033	0.0006	09:11:44	Yes
2	0.033	0.033	0.0001	0.0036	0.0007	09:12:19	Yes
Mean:	0.031	0.031	0.0000				
SD:	0.003	0.003	0.0000				
%RSD:	8.235	8.235	83.29				

SD: 0.003 0.003 0.0000
%RSD: 9.252 9.252 154.88

Sequence No.: 30

Sample ID: 1202055830|958578|1

Analyst: JXL

Autosampler Location: 28

Date Collected: 3/2/2010 09:22:19

Data Type: Original

Replicate Data: 1202055830|958578|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.029	0.029	0.0000	0.0034	0.0006	09:23:19	Yes
2	0.026	0.026	-0.0000	0.0025	0.0006	09:23:54	Yes
Mean:	0.027	0.027	-0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	7.825	7.825	359.08				

Sequence No.: 31

Sample ID: 1202055831|958578|1

Analyst: JXL

Autosampler Location: 29

Date Collected: 3/2/2010 09:24:13

Data Type: Original

Replicate Data: 1202055831|958578|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	2.105	2.105	0.0221	0.1147	0.0227	09:25:14	Yes
2	2.105	2.105	0.0221	0.1146	0.0227	09:25:49	Yes
Mean:	2.105	2.105	0.0221				
SD:	0.000	0.000	0.0000				
%RSD:	0.010	0.010	0.01				

Sequence No.: 32

Sample ID: 1202055832|958278|5

Analyst: JXL

Autosampler Location: 30

Date Collected: 3/2/2010 09:26:08

Data Type: Original

Replicate Data: 1202055832|958278|5

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.026	0.026	-0.0000	0.0028	0.0006	09:27:08	Yes
2	0.025	0.025	-0.0000	0.0026	0.0006	09:27:43	Yes
Mean:	0.025	0.025	-0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	3.125	3.125	27.93				

Sequence No.: 33

Sample ID: 247036002|958578|1

Analyst: JXL

Autosampler Location: 31

Date Collected: 3/2/2010 09:28:02

Data Type: Original

Replicate Data: 247036002|958578|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.023	0.023	-0.0001	0.0026	0.0006	09:29:03	Yes
2	0.029	0.029	0.0000	0.0031	0.0006	09:29:38	Yes
Mean:	0.026	0.026	-0.0000				
SD:	0.004	0.004	0.0000				
%RSD:	16.58	16.58	246.20				

Sequence No.: 34

Sample ID: CCV

Analyst:

Autosampler Location: 7

Date Collected: 3/2/2010 09:29:57

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
------	------------	----------	---------	------	------	------	------

#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.092	5.092	0.0538	0.2718	0.0544	09:30:58	Yes
2	5.019	5.019	0.0530	0.2655	0.0536	09:31:32	Yes
Mean:	5.056	5.056	0.0534				
SD:	0.051	0.051	0.0005				
%RSD:	1.013	1.013	1.02				

QC value within limits for Hg 253.7 Recovery = 101.11%
All analyte(s) passed QC.

Sequence No.: 35

Sample ID: CCB

Analyst:

Autosampler Location: 8

Date Collected: 3/2/2010 09:31:51

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.048	0.048	0.0002	0.0039	0.0008	09:32:52	Yes
2	0.033	0.033	0.0001	0.0029	0.0007	09:33:27	Yes
Mean:	0.040	0.040	0.0001				
SD:	0.010	0.010	0.0001				
%RSD:	25.10	25.10	81.63				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 36

Sample ID: 247036003|958578|1

Analyst: JXL

Autosampler Location: 32

Date Collected: 3/2/2010 09:33:47

Data Type: Original

Replicate Data: 247036003|958578|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.026	0.026	-0.0000	0.0027	0.0006	09:34:48	Yes
2	0.029	0.029	0.0000	0.0030	0.0006	09:35:23	Yes
Mean:	0.028	0.028	-0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	8.511	8.511	602.34				

Sequence No.: 37

Sample ID: 247036004|958578|1

Analyst: JXL

Autosampler Location: 33

Date Collected: 3/2/2010 09:35:42

Data Type: Original

Replicate Data: 247036004|958578|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.023	0.023	-0.0000	0.0024	0.0006	09:36:43	Yes
2	0.037	0.037	0.0001	0.0036	0.0007	09:37:18	Yes
Mean:	0.030	0.030	0.0000				
SD:	0.009	0.009	0.0001				
%RSD:	31.23	31.23	437.06				

Sequence No.: 38

Sample ID: 247036005|958578|1

Analyst: JXL

Autosampler Location: 34

Date Collected: 3/2/2010 09:37:38

Data Type: Original

Replicate Data: 247036005|958578|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.027	0.027	-0.0000	0.0029	0.0006	09:38:39	Yes
2	0.025	0.025	-0.0000	0.0028	0.0006	09:39:14	Yes
Mean:	0.026	0.026	-0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	4.570	4.570	52.14				

Mean: 0.029 0.029 0.0000
SD: 0.004 0.004 0.0000
%RSD: 15.71 15.71 746.11

Sequence No.: 44

Autosampler Location: 40

Sample ID: 1202055833|958581|1

Date Collected: 3/2/2010 09:49:16

Analyst: JXL

Data Type: Original

Replicate Data: 1202055833|958581|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.021	0.021	-0.0001	0.0024	0.0005	09:50:17	Yes
2	0.029	0.029	0.0000	0.0030	0.0006	09:50:51	Yes
Mean:	0.025	0.025	-0.0000				
SD:	0.005	0.005	0.0001				
%RSD:	21.51	21.51	171.71				

Sequence No.: 45

Autosampler Location: 41

Sample ID: 1202055834|958581|1

Date Collected: 3/2/2010 09:51:11

Analyst: JXL

Data Type: Original

Replicate Data: 1202055834|958581|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	2.186	2.186	0.0229	0.1196	0.0235	09:52:12	Yes
2	2.183	2.183	0.0229	0.1194	0.0235	09:52:47	Yes
Mean:	2.184	2.184	0.0229				
SD:	0.003	0.003	0.0000				
%RSD:	0.123	0.123	0.12				

Sequence No.: 46

Autosampler Location: 7

Sample ID: CCV

Date Collected: 3/2/2010 09:53:06

Analyst:

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.016	5.016	0.0530	0.2735	0.0536	09:54:06	Yes
2	5.018	5.018	0.0530	0.2717	0.0536	09:54:41	Yes
Mean:	5.017	5.017	0.0530				
SD:	0.001	0.001	0.0000				
%RSD:	0.023	0.023	0.02				

QC value within limits for Hg 253.7 Recovery = 100.34%
All analyte(s) passed QC.

Sequence No.: 47

Autosampler Location: 8

Sample ID: CCB

Date Collected: 3/2/2010 09:55:00

Analyst:

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.035	0.035	0.0001	0.0033	0.0007	09:56:01	Yes
2	0.032	0.032	0.0000	0.0031	0.0007	09:56:36	Yes
Mean:	0.034	0.034	0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	5.467	5.467	32.35				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 48

Autosampler Location: 42

Sample ID: 247817001|958581|1

Date Collected: 3/2/2010 09:56:55

2	0.038	0.038	0.0001	0.0037	0.0007	10:15:55	Yes
Mean:	0.037	0.037	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	4.045	4.045	16.44				

Sequence No.: 58

Sample ID: CCV

Analyst:

Autosampler Location: 7

Date Collected: 3/2/2010 10:16:14

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.001	5.001	0.0528	0.2739	0.0534	10:17:15	Yes
2	4.992	4.992	0.0527	0.2715	0.0533	10:17:50	Yes
Mean:	4.997	4.997	0.0528				
SD:	0.006	0.006	0.0001				
%RSD:	0.126	0.126	0.13				

QC value within limits for Hg 253.7 Recovery = 99.93%
All analyte(s) passed QC.

Sequence No.: 59

Sample ID: CCB

Analyst:

Autosampler Location: 8

Date Collected: 3/2/2010 10:18:09

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.031	0.031	0.0000	0.0030	0.0006	10:19:09	Yes
2	0.033	0.033	0.0001	0.0032	0.0007	10:19:45	Yes
Mean:	0.032	0.032	0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	5.084	5.084	37.73				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 60

Sample ID: 1202055843|958587|1

Analyst: JXL

Autosampler Location: 52

Date Collected: 3/2/2010 10:20:04

Data Type: Original

Replicate Data: 1202055843|958587|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.028	0.028	-0.0000	0.0029	0.0006	10:21:05	Yes
2	0.032	0.032	0.0000	0.0035	0.0007	10:21:41	Yes
Mean:	0.030	0.030	0.0000				
SD:	0.003	0.003	0.0000				
%RSD:	11.19	11.19	167.05				

Sequence No.: 61

Sample ID: 1202055844|958587|1

Analyst: JXL

Autosampler Location: 53

Date Collected: 3/2/2010 10:22:00

Data Type: Original

Replicate Data: 1202055844|958587|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	2.176	2.176	0.0228	0.1196	0.0234	10:23:01	Yes
2	2.169	2.169	0.0227	0.1186	0.0233	10:23:36	Yes
Mean:	2.173	2.173	0.0228				
SD:	0.005	0.005	0.0001				
%RSD:	0.228	0.228	0.23				

Sequence No.: 62

Autosampler Location: 54

%RSD: 3.709 3.709 11.51

Sequence No.: 67

Sample ID: 248044003|958587|1

Analyst: JXL

Autosampler Location: 59

Date Collected: 3/2/2010 10:33:34

Data Type: Original

Replicate Data: 248044003|958587|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.037	0.037	0.0001	0.0035	0.0007	10:34:36	Yes
2	0.042	0.042	0.0001	0.0036	0.0008	10:35:11	Yes
Mean:	0.039	0.039	0.0001				
SD:	0.003	0.003	0.0000				
%RSD:	8.563	8.563	29.80				

Sequence No.: 68

Sample ID: 248044004|958587|1

Analyst: JXL

Autosampler Location: 60

Date Collected: 3/2/2010 10:35:31

Data Type: Original

Replicate Data: 248044004|958587|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.037	0.037	0.0001	0.0035	0.0007	10:36:32	Yes
2	0.037	0.037	0.0001	0.0031	0.0007	10:37:07	Yes
Mean:	0.037	0.037	0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	0.860	0.860	3.53				

Sequence No.: 69

Sample ID: 248044005|958587|1

Analyst: JXL

Autosampler Location: 61

Date Collected: 3/2/2010 10:37:27

Data Type: Original

Replicate Data: 248044005|958587|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.026	0.026	-0.0000	0.0028	0.0006	10:38:29	Yes
2	0.029	0.029	0.0000	0.0030	0.0006	10:39:04	Yes
Mean:	0.027	0.027	-0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	7.669	7.669	260.52				

Sequence No.: 70

Sample ID: CCV

Analyst:

Autosampler Location: 7

Date Collected: 3/2/2010 10:39:24

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.079	5.079	0.0536	0.2761	0.0542	10:40:25	Yes
2	5.044	5.044	0.0533	0.2727	0.0539	10:41:00	Yes
Mean:	5.061	5.061	0.0534				
SD:	0.025	0.025	0.0003				
%RSD:	0.487	0.487	0.49				

QC value within limits for Hg 253.7 Recovery = 101.22%
All analyte(s) passed QC.

Sequence No.: 71

Sample ID: CCB

Analyst:

Autosampler Location: 8

Date Collected: 3/2/2010 10:41:19

Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StdndConc ug/L	BlndCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.032	0.032	0.0000	0.0028	0.0006	10:42:20	Yes
2	0.037	0.037	0.0001	0.0037	0.0007	10:42:55	Yes
Mean:	0.034	0.034	0.0001				
SD:	0.004	0.004	0.0000				
%RSD:	10.27	10.27	56.74				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 72

Sample ID: 248044006|958587|1

Analyst: JXL

Autosampler Location: 62

Date Collected: 3/2/2010 10:43:14

Data Type: Original

Replicate Data: 248044006|958587|1

Repl #	SampleConc ug/L	StdndConc ug/L	BlndCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.035	0.035	0.0001	0.0032	0.0007	10:44:16	Yes
2	0.041	0.041	0.0001	0.0037	0.0007	10:44:51	Yes
Mean:	0.038	0.038	0.0001				
SD:	0.004	0.004	0.0000				
%RSD:	10.62	10.62	40.88				

Sequence No.: 73

Sample ID: 248127002|958587|1

Analyst: JXL

Autosampler Location: 63

Date Collected: 3/2/2010 10:45:11

Data Type: Original

Replicate Data: 248127002|958587|1

Repl #	SampleConc ug/L	StdndConc ug/L	BlndCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.049	0.049	0.0002	0.0042	0.0008	10:46:12	Yes
2	0.049	0.049	0.0002	0.0038	0.0008	10:46:47	Yes
Mean:	0.049	0.049	0.0002				
SD:	0.000	0.000	0.0000				
%RSD:	0.072	0.072	0.17				

Sequence No.: 74

Sample ID: 248168006|958587|1

Analyst: JXL

Autosampler Location: 64

Date Collected: 3/2/2010 10:47:07

Data Type: Original

Replicate Data: 248168006|958587|1

Repl #	SampleConc ug/L	StdndConc ug/L	BlndCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.032	0.032	0.0000	0.0032	0.0006	10:48:08	Yes
2	0.039	0.039	0.0001	0.0038	0.0007	10:48:43	Yes
Mean:	0.035	0.035	0.0001				
SD:	0.005	0.005	0.0001				
%RSD:	15.15	15.15	72.49				

Sequence No.: 75

Sample ID: 248169004|958587|1

Analyst: JXL

Autosampler Location: 65

Date Collected: 3/2/2010 10:49:03

Data Type: Original

Replicate Data: 248169004|958587|1

Repl #	SampleConc ug/L	StdndConc ug/L	BlndCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.039	0.039	0.0001	0.0037	0.0007	10:50:04	Yes
2	0.041	0.041	0.0001	0.0036	0.0008	10:50:39	Yes
Mean:	0.040	0.040	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	3.561	3.561	11.62				

Replicate Data: 1202055863|958593|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	26.95	26.95	0.2859	1.4918	0.2865	10:59:45	Yes
Sample concentration is greater than that of the highest standard.							
2	26.74	26.74	0.2836	1.4832	0.2842	11:00:20	Yes
Sample concentration is greater than that of the highest standard.							
Mean:	26.85	26.85	0.2847				
SD:	0.150	0.150	0.0016				
%RSD:	0.559	0.559	0.56				

Sample concentration is greater than that of the highest standard.

Sequence No.: 81

Autosampler Location: 71

Sample ID: 1202055864|958593|5

Date Collected: 3/2/2010 11:00:40

Analyst: JXL

Data Type: Original

Replicate Data: 1202055864|958593|5

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.495	5.495	0.0580	0.2982	0.0586	11:01:41	Yes
2	5.466	5.466	0.0577	0.2966	0.0583	11:02:16	Yes
Mean:	5.480	5.480	0.0579				
SD:	0.020	0.020	0.0002				
%RSD:	0.371	0.371	0.37				

Sequence No.: 82

Autosampler Location: 7

Sample ID: CCV

Date Collected: 3/2/2010 11:02:36

Analyst:

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.006	5.006	0.0528	0.2714	0.0535	11:03:37	Yes
2	5.022	5.022	0.0530	0.2712	0.0536	11:04:12	Yes
Mean:	5.014	5.014	0.0529				
SD:	0.011	0.011	0.0001				
%RSD:	0.227	0.227	0.23				

QC value within limits for Hg 253.7 Recovery = 100.27%
All analyte(s) passed QC.

Sequence No.: 83

Autosampler Location: 8

Sample ID: CCB

Date Collected: 3/2/2010 11:04:31

Analyst:

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.033	0.033	0.0001	0.0031	0.0007	11:05:31	Yes
2	0.048	0.048	0.0002	0.0040	0.0008	11:06:06	Yes
Mean:	0.040	0.040	0.0001				
SD:	0.010	0.010	0.0001				
%RSD:	26.02	26.02	85.60				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 84

Autosampler Location: 72

Sample ID: 247958002|958593|1

Date Collected: 3/2/2010 11:06:25

Analyst: JXL

Data Type: Original

Replicate Data: 247958002|958593|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.063	0.063	0.0004	0.0052	0.0010	11:07:27	Yes

2	0.068	0.068	0.0004	0.0049	0.0010	11:08:02	Yes
Mean:	0.066	0.066	0.0004				
SD:	0.004	0.004	0.0000				
%RSD:	5.695	5.695	9.90				

Sequence No.: 85

Sample ID: 247958003|958593|1

Analyst: JXL

Autosampler Location: 73

Date Collected: 3/2/2010 11:08:22

Data Type: Original

Replicate Data: 247958003|958593|1

Repl	SampleConc	StdndConc	BlndCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	14.14	14.14	0.1498	0.7668	0.1504	11:09:24	Yes
Sample concentration is greater than that of the highest standard.							
2	14.18	14.18	0.1503	0.7699	0.1509	11:09:59	Yes
Sample concentration is greater than that of the highest standard.							
Mean:	14.16	14.16	0.1501				
SD:	0.029	0.029	0.0003				
%RSD:	0.202	0.202	0.20				
Sample concentration is greater than that of the highest standard.							

Sequence No.: 86

Sample ID: 247958004|958593|1

Analyst: JXL

Autosampler Location: 74

Date Collected: 3/2/2010 11:10:19

Data Type: Original

Replicate Data: 247958004|958593|1

Repl	SampleConc	StdndConc	BlndCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.261	0.261	0.0025	0.0153	0.0031	11:11:21	Yes
2	0.275	0.275	0.0026	0.0162	0.0032	11:11:56	Yes
Mean:	0.268	0.268	0.0026				
SD:	0.010	0.010	0.0001				
%RSD:	3.710	3.710	4.14				

Sequence No.: 87

Sample ID: 247958005|958593|1

Analyst: JXL

Autosampler Location: 75

Date Collected: 3/2/2010 11:12:16

Data Type: Original

Replicate Data: 247958005|958593|1

Repl	SampleConc	StdndConc	BlndCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.159	0.159	0.0014	0.0102	0.0020	11:13:17	Yes
2	0.170	0.170	0.0015	0.0105	0.0021	11:13:52	Yes
Mean:	0.165	0.165	0.0015				
SD:	0.007	0.007	0.0001				
%RSD:	4.420	4.420	5.32				

Sequence No.: 88

Sample ID: 1202056573|958951|1

Analyst: JXL

Autosampler Location: 76

Date Collected: 3/2/2010 11:14:12

Data Type: Original

Replicate Data: 1202056573|958951|1

Repl	SampleConc	StdndConc	BlndCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.033	0.033	0.0000	0.0033	0.0007	11:15:13	Yes
2	0.046	0.046	0.0002	0.0042	0.0008	11:15:48	Yes
Mean:	0.040	0.040	0.0001				
SD:	0.010	0.010	0.0001				
%RSD:	24.87	24.87	84.85				

Sequence No.: 89

Sample ID: 1202056574|958951|1

Autosampler Location: 77

Date Collected: 3/2/2010 11:16:08

Analyst: JXL

Data Type: Original

Replicate Data: 1202056574|958951|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	2.200	2.200	0.0231	0.1197	0.0237	11:17:10	Yes
2	2.209	2.209	0.0232	0.1196	0.0238	11:17:45	Yes
Mean:	2.205	2.205	0.0231				
SD:	0.006	0.006	0.0001				
%RSD:	0.267	0.267	0.27				

Sequence No.: 90

Autosampler Location: 78

Sample ID: 247997001|958951|1

Date Collected: 3/2/2010 11:18:05

Analyst: JXL

Data Type: Original

Replicate Data: 247997001|958951|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.033	0.033	0.0001	0.0032	0.0007	11:19:06	Yes
2	0.041	0.041	0.0001	0.0035	0.0007	11:19:41	Yes
Mean:	0.037	0.037	0.0001				
SD:	0.006	0.006	0.0001				
%RSD:	15.81	15.81	65.70				

Sequence No.: 91

Autosampler Location: 79

Sample ID: 248001001|958951|1

Date Collected: 3/2/2010 11:20:01

Analyst: JXL

Data Type: Original

Replicate Data: 248001001|958951|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.033	0.033	0.0001	0.0032	0.0007	11:21:03	Yes
2	0.041	0.041	0.0001	0.0038	0.0008	11:21:38	Yes
Mean:	0.037	0.037	0.0001				
SD:	0.006	0.006	0.0001				
%RSD:	15.33	15.33	60.50				

Sequence No.: 92

Autosampler Location: 80

Sample ID: 248010001|958951|1

Date Collected: 3/2/2010 11:21:58

Analyst: JXL

Data Type: Original

Replicate Data: 248010001|958951|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.034	0.034	0.0001	0.0037	0.0007	11:22:59	Yes
2	0.035	0.035	0.0001	0.0034	0.0007	11:23:34	Yes
Mean:	0.035	0.035	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	3.747	3.747	19.55				

Sequence No.: 93

Autosampler Location: 81

Sample ID: 248010002|958951|1

Date Collected: 3/2/2010 11:23:54

Analyst: JXL

Data Type: Original

Replicate Data: 248010002|958951|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.039	0.039	0.0001	0.0041	0.0007	11:24:55	Yes
2	0.036	0.036	0.0001	0.0033	0.0007	11:25:30	Yes
Mean:	0.038	0.038	0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	5.841	5.841	22.77				

Sequence No.: 94
Sample ID: CCV
Analyst:

Autosampler Location: 7
Date Collected: 3/2/2010 11:25:50
Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.218	5.218	0.0551	0.2817	0.0557	11:26:50	Yes
2	5.211	5.211	0.0550	0.2791	0.0556	11:27:25	Yes
Mean:	5.214	5.214	0.0551				
SD:	0.005	0.005	0.0001				
%RSD:	0.095	0.095	0.10				

QC value within limits for Hg 253.7 Recovery = 104.29%
All analyte(s) passed QC.

Sequence No.: 95
Sample ID: CCB
Analyst:

Autosampler Location: 8
Date Collected: 3/2/2010 11:27:44
Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.029	0.029	0.0000	0.0027	0.0006	11:28:45	Yes
2	0.038	0.038	0.0001	0.0032	0.0007	11:29:20	Yes
Mean:	0.033	0.033	0.0001				
SD:	0.006	0.006	0.0001				
%RSD:	19.42	19.42	124.89				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 96
Sample ID: 248026001|958951|1
Analyst: JXL

Autosampler Location: 82
Date Collected: 3/2/2010 11:29:40
Data Type: Original

Replicate Data: 248026001|958951|1

Repl #	SampleConc ug/L	StndConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.036	0.036	0.0001	0.0035	0.0007	11:30:41	Yes
2	0.037	0.037	0.0001	0.0031	0.0007	11:31:16	Yes
Mean:	0.036	0.036	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	1.939	1.939	8.63				

Sequence No.: 97
Sample ID: 248032001|958951|1
Analyst: JXL

Autosampler Location: 83
Date Collected: 3/2/2010 11:31:36
Data Type: Original

Replicate Data: 248032001|958951|1

Repl #	SampleConc ug/L	StndConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.028	0.028	-0.0000	0.0029	0.0006	11:32:37	Yes
2	0.031	0.031	0.0000	0.0032	0.0006	11:33:12	Yes
Mean:	0.030	0.030	0.0000				
SD:	0.003	0.003	0.0000				
%RSD:	8.573	8.573	152.05				

Sequence No.: 98
Sample ID: 248034001|958951|1
Analyst: JXL

Autosampler Location: 84
Date Collected: 3/2/2010 11:33:32
Data Type: Original

Replicate Data: 248034001|958951|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.033	0.033	0.0001	0.0036	0.0007	11:34:34	Yes
2	0.034	0.034	0.0001	0.0030	0.0007	11:35:09	Yes
Mean:	0.034	0.034	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	2.319	2.319	13.14				

Sequence No.: 99

Sample ID: 248038001|958951|1

Analyst: JXL

Autosampler Location: 85

Date Collected: 3/2/2010 11:35:29

Data Type: Original

Replicate Data: 248038001|958951|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.031	0.031	0.0000	0.0032	0.0006	11:36:31	Yes
2	0.038	0.038	0.0001	0.0037	0.0007	11:37:06	Yes
Mean:	0.034	0.034	0.0001				
SD:	0.005	0.005	0.0001				
%RSD:	14.82	14.82	79.95				

Sequence No.: 100

Sample ID: 248038002|958951|1

Analyst: JXL

Autosampler Location: 86

Date Collected: 3/2/2010 11:37:26

Data Type: Original

Replicate Data: 248038002|958951|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.036	0.036	0.0001	0.0036	0.0007	11:38:28	Yes
2	0.035	0.035	0.0001	0.0034	0.0007	11:39:02	Yes
Mean:	0.036	0.036	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	1.622	1.622	7.34				

Sequence No.: 101

Sample ID: 248039001|958951|1

Analyst: JXL

Autosampler Location: 87

Date Collected: 3/2/2010 11:39:23

Data Type: Original

Replicate Data: 248039001|958951|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.027	0.027	-0.0000	0.0027	0.0006	11:40:24	Yes
2	0.033	0.033	0.0001	0.0032	0.0007	11:40:59	Yes
Mean:	0.030	0.030	0.0000				
SD:	0.004	0.004	0.0000				
%RSD:	13.87	13.87	176.80				

Sequence No.: 102

Sample ID: 248046001|958951|1

Analyst: JXL

Autosampler Location: 88

Date Collected: 3/2/2010 11:41:19

Data Type: Original

Replicate Data: 248046001|958951|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.028	0.028	0.0000	0.0028	0.0006	11:42:21	Yes
2	0.031	0.031	0.0000	0.0029	0.0006	11:42:56	Yes
Mean:	0.030	0.030	0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	6.264	6.264	101.14				

Sequence No.: 103

Autosampler Location: 89

Sample ID: 248046002|958951|1
Analyst: JXL

Date Collected: 3/2/2010 11:43:16
Data Type: Original

Replicate Data: 248046002|958951|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.025	0.025	-0.0000	0.0028	0.0006	11:44:17	Yes
2	0.031	0.031	0.0000	0.0032	0.0006	11:44:52	Yes
Mean:	0.028	0.028	-0.0000				
SD:	0.004	0.004	0.0000				
%RSD:	15.25	15.25	>999.9%				

Sequence No.: 104

Autosampler Location: 90

Sample ID: 248053001|958951|1
Analyst: JXL

Date Collected: 3/2/2010 11:45:12
Data Type: Original

Replicate Data: 248053001|958951|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.028	0.028	0.0000	0.0030	0.0006	11:46:14	Yes
2	0.031	0.031	0.0000	0.0030	0.0006	11:46:49	Yes
Mean:	0.029	0.029	0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	5.471	5.471	107.18				

Sequence No.: 105

Autosampler Location: 91

Sample ID: 248053002|958951|1
Analyst: JXL

Date Collected: 3/2/2010 11:47:10
Data Type: Original

Replicate Data: 248053002|958951|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.026	0.026	-0.0000	0.0027	0.0006	11:48:11	Yes
2	0.028	0.028	0.0000	0.0029	0.0006	11:48:46	Yes
Mean:	0.027	0.027	-0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	5.952	5.952	162.46				

Sequence No.: 106

Autosampler Location: 7

Sample ID: CCV
Analyst:

Date Collected: 3/2/2010 11:49:06
Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	4.948	4.948	0.0522	0.2686	0.0529	11:50:06	Yes
2	4.918	4.918	0.0519	0.2653	0.0525	11:50:41	Yes
Mean:	4.933	4.933	0.0521				
SD:	0.021	0.021	0.0002				
%RSD:	0.435	0.435	0.44				

QC value within limits for Hg 253.7 Recovery = 98.67%
All analyte(s) passed QC.

Sequence No.: 107

Autosampler Location: 8

Sample ID: CCB
Analyst:

Date Collected: 3/2/2010 11:51:00
Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.024	0.024	-0.0000	0.0025	0.0006	11:52:01	Yes
2	0.032	0.032	0.0000	0.0029	0.0007	11:52:36	Yes

Mean: 0.028 0.028 -0.0000
SD: 0.006 0.006 0.0001
%RSD: 20.56 20.56 >999.9%

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 108

Autosampler Location: 92

Sample ID: 248053003|958951|1

Date Collected: 3/2/2010 11:52:55

Analyst: JXL

Data Type: Original

Replicate Data: 248053003|958951|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.030	0.030	0.0000	0.0032	0.0006	11:53:57	Yes
2	0.035	0.035	0.0001	0.0036	0.0007	11:54:31	Yes
Mean:	0.032	0.032	0.0000				
SD:	0.004	0.004	0.0000				
%RSD:	11.99	11.99	88.45				

Sequence No.: 109

Autosampler Location: 93

Sample ID: 248108001|958951|1

Date Collected: 3/2/2010 11:54:52

Analyst: JXL

Data Type: Original

Replicate Data: 248108001|958951|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.026	0.026	-0.0000	0.0030	0.0006	11:55:53	Yes
2	0.030	0.030	0.0000	0.0033	0.0006	11:56:28	Yes
Mean:	0.028	0.028	0.0000				
SD:	0.003	0.003	0.0000				
%RSD:	9.111	9.111	>999.9%				

Sequence No.: 110

Autosampler Location: 94

Sample ID: 248117001|958951|1

Date Collected: 3/2/2010 11:56:48

Analyst: JXL

Data Type: Original

Replicate Data: 248117001|958951|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.023	0.023	-0.0000	0.0025	0.0006	11:57:50	Yes
2	0.031	0.031	0.0000	0.0032	0.0006	11:58:25	Yes
Mean:	0.027	0.027	-0.0000				
SD:	0.005	0.005	0.0001				
%RSD:	19.43	19.43	681.10				

Sequence No.: 111

Autosampler Location: 95

Sample ID: 248145001|958951|1

Date Collected: 3/2/2010 11:58:45

Analyst: JXL

Data Type: Original

Replicate Data: 248145001|958951|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.029	0.029	0.0000	0.0032	0.0006	11:59:46	Yes
2	0.027	0.027	-0.0000	0.0029	0.0006	12:00:21	Yes
Mean:	0.028	0.028	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	4.334	4.334	287.89				

Sequence No.: 112

Autosampler Location: 96

Sample ID: 1202056575|958951|1

Date Collected: 3/2/2010 12:00:41

Analyst: JXL

Data Type: Original

Replicate Data: 1202056575|958951|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.024	0.024	-0.0000	0.0028	0.0006	12:01:43	Yes
2	0.032	0.032	0.0000	0.0030	0.0007	12:02:19	Yes
Mean:	0.028	0.028	-0.0000				
SD:	0.006	0.006	0.0001				
%RSD:	20.52	20.52	>999.9%				

Sequence No.: 113

Autosampler Location: 97

Sample ID: 1202056576|958951|1

Date Collected: 3/2/2010 12:02:39

Analyst: JXL

Data Type: Original

Replicate Data: 1202056576|958951|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	2.290	2.290	0.0240	0.1266	0.0246	12:03:41	Yes
2	2.255	2.255	0.0236	0.1250	0.0243	12:04:16	Yes
Mean:	2.273	2.273	0.0238				
SD:	0.024	0.024	0.0003				
%RSD:	1.063	1.063	1.08				

Sequence No.: 114

Autosampler Location: 98

Sample ID: 1202056577|958951|5

Date Collected: 3/2/2010 12:04:36

Analyst: JXL

Data Type: Original

Replicate Data: 1202056577|958951|5

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.030	0.030	0.0000	0.0032	0.0006	12:05:38	Yes
2	0.032	0.032	0.0000	0.0031	0.0006	12:06:13	Yes
Mean:	0.031	0.031	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	4.606	4.606	53.00				

Sequence No.: 115

Autosampler Location: 99

Sample ID: 1202056608|958969|1

Date Collected: 3/2/2010 12:06:33

Analyst: JXL

Data Type: Original

Replicate Data: 1202056608|958969|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.025	0.025	-0.0000	0.0030	0.0006	12:07:35	Yes
2	0.023	0.023	-0.0000	0.0027	0.0006	12:08:10	Yes
Mean:	0.024	0.024	-0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	4.800	4.800	32.24				

Sequence No.: 116

Autosampler Location: 100

Sample ID: 1202056609|958969|1

Date Collected: 3/2/2010 12:08:30

Analyst: JXL

Data Type: Original

Replicate Data: 1202056609|958969|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	2.265	2.265	0.0237	0.1245	0.0244	12:09:32	Yes
2	2.262	2.262	0.0237	0.1229	0.0243	12:10:08	Yes
Mean:	2.263	2.263	0.0237				
SD:	0.002	0.002	0.0000				
%RSD:	0.077	0.077	0.08				

Sequence No.: 117
Sample ID: 248162001|958969|1
Analyst: JXL

Autosampler Location: 101
Date Collected: 3/2/2010 12:10:28
Data Type: Original

Replicate Data: 248162001|958969|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.027	0.027	-0.0000	0.0030	0.0006	12:11:30	Yes
2	0.030	0.030	0.0000	0.0030	0.0006	12:12:05	Yes
Mean:	0.028	0.028	0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	5.485	5.485	294.70				

Sequence No.: 118
Sample ID: CCV
Analyst:

Autosampler Location: 7
Date Collected: 3/2/2010 12:12:25
Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.004	5.004	0.0528	0.2717	0.0534	12:13:26	Yes
2	5.010	5.010	0.0529	0.2692	0.0535	12:14:01	Yes
Mean:	5.007	5.007	0.0529				
SD:	0.004	0.004	0.0000				
%RSD:	0.080	0.080	0.08				

QC value within limits for Hg 253.7 Recovery = 100.14%
All analyte(s) passed QC.

Sequence No.: 119
Sample ID: CCB
Analyst:

Autosampler Location: 8
Date Collected: 3/2/2010 12:14:20
Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.030	0.030	0.0000	0.0031	0.0006	12:15:21	Yes
2	0.038	0.038	0.0001	0.0035	0.0007	12:15:56	Yes
Mean:	0.034	0.034	0.0001				
SD:	0.005	0.005	0.0001				
%RSD:	15.64	15.64	89.85				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 120
Sample ID: 248162002|958969|1
Analyst: JXL

Autosampler Location: 102
Date Collected: 3/2/2010 12:16:15
Data Type: Original

Replicate Data: 248162002|958969|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.024	0.024	-0.0000	0.0026	0.0006	12:17:17	Yes
2	0.032	0.032	0.0000	0.0031	0.0006	12:17:52	Yes
Mean:	0.028	0.028	-0.0000				
SD:	0.005	0.005	0.0001				
%RSD:	18.16	18.16	>999.9%				

Sequence No.: 121
Sample ID: 248162003|958969|1
Analyst: JXL

Autosampler Location: 103
Date Collected: 3/2/2010 12:18:12
Data Type: Original

Replicate Data: 248162003|958969|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
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Miscellaneous

Prep Logbook

Acid Digestion of Total Recoverable or Dissolved Metals in Surface and Groundwater Samples for Analysis by ICP or ICP-MS

Batch ID: 959090.0
 Analyst: Francena Armstrong
 Method: SW846 3005A
 Lab SOP: GL-MA-E-006 REV# 9
 Instrument: Sartorius Balance B-001

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
LCS	1202056814	ICP-MS SPIKE FOR ALL CLIENTS EXCEPT DOE CLIENTS (Solution A)	UI100205-A	.5	mL
LCS	1202056814	MS SPIKE FOR ALL CLIENTS EXCEPT DOE CLIENTS (Solution B)	UI100205-B	.5	mL
MS	1202056816	ICP-MS DOE Liquid Spike Solution A	UI090930-A	.5	mL
MS	1202056816	ICP-MS DOE Liquid Spike Solution B	UI090930-B	.5	mL

Sample ID	Run Date	Matrix	Initial Volume (mL)	Final Volume (mL)	Prep Factor (mL/mL)	pH Check
1202056813 MB	02-MAR-2010 14:30:00	Water	50	50	1	<2
1202056814 LCS	02-MAR-2010 14:30:00	Water	50	50	1	<2
247997001	02-MAR-2010 14:30:00	Water	50	50	1	<2
248001001	02-MAR-2010 14:30:00	Water	50	50	1	<2
248010001	02-MAR-2010 14:30:00	Water	50	50	1	<2
248010002	02-MAR-2010 14:30:00	Water	50	50	1	<2
248032001	02-MAR-2010 14:30:00	Water	50	50	1	<2
248034001	02-MAR-2010 14:30:00	Water	50	50	1	<2
248039001	02-MAR-2010 14:30:00	Water	50	50	1	<2
248046001	02-MAR-2010 14:30:00	Water	50	50	1	<2
248046002	02-MAR-2010 14:30:00	Water	50	50	1	<2
1202056815 DUP (248046002)	02-MAR-2010 14:30:00	Water	50	50	1	<2
1202056816 MS (248046002)	02-MAR-2010 14:30:00	Water	50	50	1	<2
1202056817 SDILT (248046002)	02-MAR-2010 14:30:00	Water	50	50	1	<2

Reagent/Solvent Lot ID	Description	Amount	Comments:
1274969	Nitric Acid CONC.	1 mL	
1274973	HYDROCHLORIC ACID	2.5 mL	

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GEL Laboratories LLC

Prep Logbook

Mercury Analysis Using the Perkin Elmer Automated Mercury Analyzer

Batch ID: 958949.0
Analyst: Tara Griffin
Method: SW846 7470A Prep
Lab SOP: GL-MA-E-010 REV# 23
Instrument: No analytical instrument

Verified by:

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
LCS	1202056574	Mercury working intermediate standard for LCS/MS	WHG100301-13	.2	mL
MS	1202056576	Mercury working intermediate standard for LCS/MS	WHG100301-13	.2	mL

Sample ID	Run Date	Matrix	Initial Volume (mL)	Final Volume (mL)	Prep Factor (mL/mL)	pH Check
1202056573 MB	01-MAR-2010 12:20:00	Water	20	20	1	<2
1202056574 LCS	01-MAR-2010 12:20:00	Water	20	20	1	<2
247997001	01-MAR-2010 12:20:00	Water	20	20	1	<2
248001001	01-MAR-2010 12:20:00	Water	20	20	1	<2
248010001	01-MAR-2010 12:20:00	Water	20	20	1	<2
248010002	01-MAR-2010 12:20:00	Water	20	20	1	<2
248032001	01-MAR-2010 12:20:00	Water	20	20	1	<2
248034001	01-MAR-2010 12:20:00	Water	20	20	1	<2
248038001	01-MAR-2010 12:20:00	Water	20	20	1	<2
248038002	01-MAR-2010 12:20:00	Water	20	20	1	<2
248039001	01-MAR-2010 12:20:00	Water	20	20	1	<2
248046001	01-MAR-2010 12:20:00	Water	20	20	1	<2
248046002	01-MAR-2010 12:20:00	Water	20	20	1	<2
248053001	01-MAR-2010 12:20:00	Water	20	20	1	<2
248053002	01-MAR-2010 12:20:00	Water	20	20	1	<2
248053003	01-MAR-2010 12:20:00	Water	20	20	1	<2
248108001	01-MAR-2010 12:20:00	Water	20	20	1	<2
248117001	01-MAR-2010 12:20:00	Water	20	20	1	<2
248145001	01-MAR-2010 12:20:00	Water	20	20	1	<2
1202056575 DUP (248145001)	01-MAR-2010 12:20:00	Water	20	20	1	<2
1202056576 MS (248145001)	01-MAR-2010 12:20:00	Water	20	20	1	<2
1202056577 SDIL.T (248145001)	01-MAR-2010 12:20:00	Water	20	20	1	<2

Reagent/Solvent Lot ID	Description	Amount	Comments:
1176183	Sulfuric Acid, Concentrated	1 mL	Digestion Start Date: 01-MAR-10 12:20
1255532-C	Hg reducing agent	1 mL	Digestion End Date: 01-MAR-10 14:20
1274391-1	NITRIC ACID	.5 mL	

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GEL Laboratories LLC

Prep Logbook

Acid Digestion of Total Recoverable or Dissolved Metals in Surface and Groundwater Samples for Analysis by ICP or ICP-MS

Batch ID: 959088.0 Verified by:

Analyst: Louis Hall

Method: SW846 3005A

Lab SOP: GL-MA-E-006 REV# 9

Instrument: Metals Manual Instrument

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
LCS	1202056809	Metals Spike Mix I	U1100205-01	.25	mL
LCS	1202056809	Metals Spike Mix II	U1100205-06	.25	mL
MS	1202056811	Metals Spike Mix I	U1100205-01	.25	mL
MS	1202056811	Metals Spike Mix II	U1100205-06	.25	mL

Sample ID	Run Date	Matrix	Initial Volume (mL)	Final Volume (mL)	Prep Factor (mL/mL)	pH Check
1202056808 MB	04-MAR-2010 09:20:00	Water	50	50	1	<2
1202056809 LCS	04-MAR-2010 09:20:00	Water	50	50	1	<2
247997001	04-MAR-2010 09:20:00	Water	50	50	1	<2
248001001	04-MAR-2010 09:20:00	Water	50	50	1	<2
248010001	04-MAR-2010 09:20:00	Water	50	50	1	<2
248010002	04-MAR-2010 09:20:00	Water	50	50	1	<2
248032001	04-MAR-2010 09:20:00	Water	50	50	1	<2
248034001	04-MAR-2010 09:20:00	Water	50	50	1	<2
248039001	04-MAR-2010 09:20:00	Water	50	50	1	<2
248046001	04-MAR-2010 09:20:00	Water	50	50	1	<2
1202056810 DUP (248046001)	04-MAR-2010 09:20:00	Water	50	50	1	<2
1202056811 MS (248046001)	04-MAR-2010 09:20:00	Water	50	50	1	<2
1202056812 SDILT (248046001)	04-MAR-2010 09:20:00	Water	50	50	1	<2
248046002	04-MAR-2010 09:20:00	Water	50	50	1	<2

Reagent/Solvent Lot ID	Description	Amount	Comments:
1277916	HYDROCHLORIC ACID	2.5 mL	
1277919	Nitric Acid CONC.	1 mL	

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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: 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

Standard Logbook

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		

Serial ID: UI090701-09 **Opened:** 01-JUL-09 **Amount :** 250 mL
Name: ICP-MS CRDL Master #1 **Received:** 01-JUL-09 **Catalog Number :** 160044-09-02
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016477
Employee: Paul Boyd **Solvent :** +/- 0.5% IN 2% HNO3
Supplier: O2SI
Description: ICPMS CRDL Master Soln #1
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	15 mg/L	Arsenic	5 mg/L
Barium	2 mg/L	Beryllium	.5 mg/L
Boron	15 mg/L	Cadmium	1 mg/L
Calcium	100 mg/L	Chromium	3 mg/L
Cobalt	1 mg/L	Copper	1 mg/L
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: O2SI
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

Standard Logbook

Analyte	Concentration	Analyte	Concentration
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: O2si
Description: TRACE ICP Stock PQL Standard
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	100 mg/L	Antimony	5 mg/L
Arsenic	15 mg/L	Barium	2.5 mg/L
Beryllium	2.5 mg/L	Boron	25 mg/L
Cadmium	2.5 mg/L	Calcium	100 mg/L
Chromium	2.5 mg/L	Cobalt	2.5 mg/L
Copper	5 mg/L	Iron	50 mg/L
Lead	5 mg/L	Magnesium	150 mg/L
Manganese	5 mg/L	Molybdenum	5 mg/L
Nickel	2.5 mg/L	Phosphorous	75 mg/L
Potassium	75 mg/L	Selenium	15 mg/L
Silicon	50 mg/L	Silver	2.5 mg/L
Sodium	150 mg/L	Strontium	2.5 mg/L
Sulfur	50 mg/L	Thallium	10 mg/L
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

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 SOUP **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: ENVIRONMENTAL EXPRESS
Description: SILICON 1000mg/L H2O/tr HF
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: 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

Standard Logbook

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

Serial ID: UI100205-A **Opened:** 05-FEB-10 **Catalog Number :** 160067-05
Name: ICP-MS ALL OTHER SPIKE **Received:** 05-FEB-10 **Lot Number :** 1018516
Type: Source Material **Expires:** 05-FEB-11
Employee: Francena Armstrong
Supplier: O2si
Description: ICP-MS SPIKE FOR ALL CLIENTS EXCEPT DOE CLIENTS (Solution A).
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	200 mg/L	Arsenic	5 mg/L
Barium	5 mg/L	Beryllium	5 mg/L
Bismuth	5 mg/L	Boron	10 mg/L
Cadmium	5 mg/L	Calcium	200 mg/L
Cesium	5 mg/L	Chromium	5 mg/L
Cobalt	5 mg/L	Copper	5 mg/L
Iron	200 mg/L	Lead	5 mg/L
Lithium	5 mg/L	Magnesium	200 mg/L
Manganese	5 mg/L	Nickel	5 mg/L
Phosphorous	200 mg/L	Potassium	200 mg/L
Selenium	5 mg/L	Sodium	200 mg/L
Strontium	5 mg/L	Thallium	5 mg/L
Thorium	5 mg/L	Uranium	5 mg/L
Uranium-235	.036 mg/L	Uranium-238	4.964 mg/L
Vanadium	5 mg/L	Zinc	5 mg/L

Standard Logbook

Serial ID: UI100205-B **Opened:** 05-FEB-10 **Catalog Number :** 160067-05
Name: ICP-MS ALL OTHER SPIKE **Received:** 05-FEB-10 **Lot Number :** 1018516
Type: Source Material **Expires:** 05-FEB-11
Employee: Francena Armstrong
Supplier: O2si
Description: MS SPIKE FOR ALL CLIENTS EXCEPT DOE CLIENTS (Solution B).
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	5 mg/L	Molybdenum	5 mg/L
Silver	5 mg/L	Tin	5 mg/L
Titanium	5 mg/L	Zirconium	5 mg/L

Serial ID: UI100310-48 **Opened:** 19-MAR-10 **Amount :** 1000 mL
Name: Trace ICP ICESA **Received:** 12-MAR-10 **Catalog Number :** 160005-02
Type: Source Material **Expires:** 19-MAR-11 **Lot Number :** 1019141
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: UI100317-06 **Opened:** 17-MAR-10 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master A **Received:** 17-MAR-10 **Catalog Number :** 160055-01
Type: Source Material **Expires:** 17-MAR-11 **Lot Number :** 1019161
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: O2SI
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: UI100317-07 **Opened:** 17-MAR-10 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master B **Received:** 17-MAR-10 **Catalog Number :** 160054-02
Type: Source Material **Expires:** 17-MAR-11 **Lot Number :** 1019162
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: O2SI
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: UI100317-08 **Opened:** 17-MAR-10 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master C **Received:** 17-MAR-10 **Catalog Number :** 160054-03
Type: Source Material **Expires:** 17-MAR-11 **Lot Number :** 1019163
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: UI100318-11 **Opened:** 18-MAR-10 **Amount :** 1000 mL
Name: ICP-MS ICSA Master A **Received:** 18-MAR-10 **Catalog Number :** 160013-01-01L
Type: Source Material **Expires:** 15-APR-10 **Lot Number :** 1018321
Employee: Paul Boyd **Solvent :** 2% HNO3
Supplier: 02SI
Description: ICP-MS ICSA Master A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Carbon	2000 mg/L	Chloride	10000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Molybdenum	20 mg/L	Phosphorous	1000 mg/L
Potassium	1000 mg/L	Sodium	1000 mg/L
Sulfur	1000 mg/L	Titanium	20 mg/L

Standard Logbook

Serial ID: UI100325-40 **Opened:** 25-MAR-10 **Amount :** 500 mL
Name: ICP HIGH RANGE STD-A **Received:** 25-MAR-10 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 25-MAR-11 **Lot Number :** 1019348
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: Q2SI
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: UI100325-41 **Opened:** 25-MAR-10 **Amount :** 500 mL
Name: ICP HIGH RANGE STD B **Received:** 25-MAR-10 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 25-MAR-11 **Lot Number :** 1019348
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: Q2SI
Description: ICP HIGH RANGE STD SOLUTION B
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 ug/L	Calcium	500000 ug/L
Iron	500000 ug/L	Magnesium	500000 ug/L
Sodium	500000 ug/L	Uranium	15000 ug/L

Serial ID: UI100405-12 **Opened:** 05-APR-10 **Amount :** 250 mL
Name: ICP-MS ICSAB Master B **Received:** 05-APR-10 **Catalog Number :** 160033-02
Type: Source Material **Expires:** 05-APR-11 **Lot Number :** 1019466
Employee: Paul Boyd **Solvent :** +/- 0.5% in 2% HNO3
Supplier: Q2SI
Description: ICPMS ICSAB Master B
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	2 mg/L	Barium	2 mg/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
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: UI100405-13 **Opened:** 05-APR-10 **Amount :** 250 mL
Name: ICP-MS ICSAB Master C **Received:** 05-APR-10 **Catalog Number :** 160033-03
Type: Source Material **Expires:** 05-APR-11 **Lot Number :** 1019467
Employee: Paul Boyd **Solvent :** +/- 0.5% in 2% HNO3
Supplier: O2SI
Description: ICPMS ICSAB Master C
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Silver	2 mg/L
Tin	2 mg/L	Tungsten	2 mg/L
Zirconium	2 mg/L		

Serial ID: UI100405-60 **Opened:** 05-APR-10 **Amount :** .5 mL
Name: ICPMS High Range Standard **Received:** 05-APR-10 **Catalog Number :** 160212-02-01
Type: Source Material **Expires:** 05-APR-11 **Lot Number :** 1019464
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: UI100405-61 **Opened:** 05-APR-10 **Amount :** 5 mL
Name: ICPMS High Range Standard **Received:** 05-APR-10 **Catalog Number :** 160212-02-01
Type: Source Material **Expires:** 05-APR-11 **Lot Number :** 1019464
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

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Sodium	1000 mg/L		

Serial ID: UMS100226-03 **Opened:** 26-FEB-10 **Amount :** 250 ml
Name: ICPMSCalSPIKEC **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		

Serial ID: IHG100301-01 **Opened:** 01-MAR-10 **Instrument Id :** Mercury
Name: MHGINTER1 **Received:** 01-MAR-10 **Pipet Id :** Minou1
Type: Intermediate **Expires:** 02-MAR-10 **Solvent :** 1mL HNO3 + Typel H2O
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Intermediate 1st Source 200 ug/L
Comments: Prepare fresh daily

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: IHG100301-02 **Opened:** 01-MAR-10 **Pipet Id :** Minou1
Name: MHGINTER2 **Received:** 01-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Intermediate **Expires:** 02-MAR-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: WHG100301-01a **Opened:** 01-MAR-10 **Pipet Id :** Hg1289245
Name: MHGWORKCAL0.2CRA **Received:** 01-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 08-MAR-10
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working 1st Source CAL 0.2/CRA
Comments: None

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100301-01	Mercury	200 ug/L	20 uL	20 mL	.2 ug/L

Serial ID: WHG100301-02 **Opened:** 01-MAR-10 **Pipet Id :** Hg1289245
Name: MHGWORKCAL0.5 **Received:** 01-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 08-MAR-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.
IHG100301-01	Mercury	200 ug/L	50 uL	20 mL	.5 ug/L

Serial ID: WHG100301-03 **Opened:** 01-MAR-10 **Pipet Id :** Hg1289245
Name: MHGWORKCAL2.0 **Received:** 01-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 08-MAR-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.
IHG100301-01	Mercury	200 ug/L	200 uL	20 mL	2 ug/L

Serial ID: WHG100301-04 **Opened:** 01-MAR-10 **Pipet Id :** Hg1289245
Name: MHGWORKCAL5.0CCV **Received:** 01-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 08-MAR-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.
IHG100301-01	Mercury	200 ug/L	500 uL	20 mL	5 ug/L

Serial ID: WHG100301-05 **Opened:** 01-MAR-10 **Pipet Id :** Hg1289245
Name: MHGWORKCAL10.0 **Received:** 01-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 08-MAR-10
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL 10.0
Comments: None

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100301-01	Mercury	200 ug/L	1 mL	20 mL	10 ug/L

Serial ID: WHG100301-06 **Opened:** 01-MAR-10 **Pipet Id :** Hg1289245
Name: MHGWORK5.0ICV **Received:** 01-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 08-MAR-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.
IHG100301-02	Mercury	200 ug/L	500 uL	20 mL	5 ug/L

Serial ID: WHG100301-13 **Opened:** 01-MAR-10 **Pipet Id :** Hg1289245
Name: MHGLIQLCSMSSPIKE **Received:** 01-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 08-MAR-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: WI100326-42 **Opened:** 26-MAR-10 **Balance Id :** 216
Name: TRACE ICP 0.1 PPM STD. **Received:** 02-NOV-09 **Pipet Id :** 3581809
Type: Working **Expires:** 27-MAR-10 **Solvent :** 3%HCL and 1%HNO3 -1289705
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.
WI100326-44	Aluminum	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100326-44	Antimony	1000 ug/L	10 mL	100 mL	100 ug/L
WI100326-44	Arsenic	1000 ug/L	10 mL	100 mL	100 ug/L
WI100326-44	Barium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100326-44	Beryllium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100326-44	Boron	1000 ug/L	10 mL	100 mL	100 ug/L
WI100326-44	Cadmium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100326-44	Calcium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100326-44	Chromium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100326-44	Cobalt	1000 ug/L	10 mL	100 mL	100 ug/L
WI100326-44	Copper	1000 ug/L	10 mL	100 mL	100 ug/L
WI100326-44	Iron	10000 ug/L	10 mL	100 mL	1000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI100326-44	Lead	1000 ug/L	10 mL	100 mL	100 ug/L
WI100326-44	Magnesium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100326-44	Manganese	1000 ug/L	10 mL	100 mL	100 ug/L
WI100326-44	Molybdenum	1000 ug/L	10 mL	100 mL	100 ug/L
WI100326-44	Nickel	1000 ug/L	10 mL	100 mL	100 ug/L
WI100326-44	Phosphorous	5000 ug/L	10 mL	100 mL	500 ug/L
WI100326-44	Potassium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100326-44	Selenium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100326-44	Silica	10698 ug/L	10 mL	100 mL	1069 ug/L
WI100326-44	Silicon	5000 ug/L	10 mL	100 mL	500 ug/L
WI100326-44	Silver	1000 ug/L	10 mL	100 mL	100 ug/L
WI100326-44	Sodium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100326-44	Strontium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100326-44	Sulfur	2000 ug/L	10 mL	100 mL	200 ug/L
WI100326-44	Thallium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100326-44	Tin	1000 ug/L	10 mL	100 mL	100 ug/L
WI100326-44	Titanium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100326-44	Uranium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100326-44	Vanadium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100326-44	Zinc	1000 ug/L	10 mL	100 mL	100 ug/L

Serial ID: WI100326-43 **Opened:** 26-MAR-10 **Balance Id :** 216
Name: TRACE ICP 0.5/CCV STD. **Received:** 02-NOV-09 **Pipet Id :** 3581809
Type: Working **Expires:** 27-MAR-10 **Solvent :** 3%HCL and 1%HNO3 -1289705
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Allquot	Final Vol.	Final Conc.
UI091102-40	Magnesium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Manganese	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Nickel	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Selenium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Strontium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Thallium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Uranium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Zinc	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Antimony	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Silver	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	1000 mL	1000 UG/L
UI091102-41	Tin	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Titanium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Serial ID: WI100326-44 **Opened:** 26-MAR-10 **Balance Id :** 216
Name: TRACE ICP SCAL 1.0 **Received:** 02-NOV-09 **Pipet Id :** 3581809
Type: Working **Expires:** 27-MAR-10 **Solvent :** 3%HCL and 1 %HNO3-1289705
Employee: Helen Camello
Supplier: o2si
Description: Trace ICP Calibration Standard 1.0ppm
Comments: None

Parent Material	Analyte	Parent Conc.	Allquot	Final Vol.	Final Conc.
UI091015-42	Silica	2139 mg/L	2.5 mL	500 mL	10698 ug/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Barium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Boron	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Selenium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Strontium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Thallium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Uranium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Zinc	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Antimony	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Silver	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	500 mL	2000 ug/L
UI091102-41	Tin	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Titanium	200 mg/L	2.5 mL	500 mL	1000 ug/L

Serial ID: WI100326-45 **Opened:** 26-MAR-10 **Balance Id :** 216
Name: TRACE ICP S-10 STD **Received:** 22-APR-09 **Pipet Id :** 3581809
Type: Working **Expires:** 27-MAR-10 **Solvent :** 3%HCL and 1%HNO3 -1289705
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: WI100326-46 **Opened:** 26-MAR-10 **Balance Id :** 216
Name: ICP TRACE ICV **Received:** 25-SEP-09 **Pipet Id :** 3581809
Type: Working **Expires:** 27-MAR-10 **Solvent :** 3%HCL AND 1%HNO3-1289705
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-40	Calcium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Chromium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cobalt	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Copper	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Iron	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Lead	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Phosphorous	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Potassium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Selenium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Sodium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Strontium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Antimony	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Beryllium	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Magnesium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-41	Manganese	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Molybdenum	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Nickel	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Silver	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Sulfur	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-41	Thallium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Tin	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Titanium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Uranium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Vanadium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Zinc	100 mg/L	2.5 mL	500 mL	500 ug/L
UI091102-42	Silica	2139 mg/L	2.5 mL	500 mL	10695 ug/L
UI091102-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L

Serial ID: WI100326-47

Name: PQL Working Standard

Type: Working

Employee: Helen Camello

Supplier: 02si

Description: PQL Working Standard

Comments: None

Opened: 26-MAR-10

Received: 30-JUN-09

Expires: 27-MAR-10

Balance Id : 216

Pipet Id : 3581809

Solvent : 3%HCL & 1%HNO3-1289705

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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Chromium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Cobalt	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Copper	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Iron	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Lead	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Magnesium	150 mg/L	2 mL	1000 mL	300 ug/L
UI090701-40	Manganese	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Molybdenum	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Nickel	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Phosphorous	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Potassium	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Selenium	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Silicon	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Silver	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sodium	150 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Strontium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sulfur	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Thallium	10 mg/L	2 mL	1000 mL	20 ug/L
UI090701-40	Tin	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Titanium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Uranium	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Vanadium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Zinc	5 mg/L	2 mL	1000 mL	10 ug/L

Serial ID: WMS100411-04 **Opened:** 11-APR-10 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 11-APR-10 **Balance Id :** 4025216
Type: Working **Expires:** 12-APR-10 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl-1296562
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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: WMS100411-04A **Opened:** 11-APR-10 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 11-APR-10 **Pipet Id :** 3541598
Type: Working **Expires:** 12-APR-10 **Solvent :** 2%HNO3/1%HCl - 1296562
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100411-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100411-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS100411-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100411-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100411-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Allquot	Final Vol.	Final Conc.
WMS100411-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100411-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100411-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100411-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100411-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS100411-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS100411-05

Name: ICPMS ICV

Type: Working

Employee: Paul Boyd

Supplier: GEL

Description: ICPMS ICV

Comments: None

Opened: 11-APR-10

Received: 11-APR-10

Expires: 12-APR-10

Balance Id :

Pipet Id :

Solvent :

40245216

3541598

2%HNO3/1%HCl - 1296562

Parent Material	Analyte	Parent Conc.	Allquot	Final Vol.	Final Conc.
UI100317-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI100317-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI100317-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI100317-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI100317-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI100317-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI100317-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI100317-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI100317-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100317-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Serial ID: WMS100411-06 **Opened:** 11-APR-10 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 11-APR-10 **Pipet Id :** 3820544
Type: Working **Expires:** 12-APR-10 **Solvent :** 2%HNO3/1%HCl - 1296562
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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: WMS100411-07 **Opened:** 11-APR-10 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 11-APR-10 **Lot Number :** 1010773
Type: Working **Expires:** 12-APR-10 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl - 1296562
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100318-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100318-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100318-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS100411-08 **Opened:** 11-APR-10 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 11-APR-10 **Pipet Id :** 1758088
Type: Working **Expires:** 12-APR-10 **Solvent :** 2%HNO3/1%HCl - 1296562
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100318-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100318-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100318-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L
UI100405-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI100405-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI100405-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI100405-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI100405-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI100405-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI100405-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI100405-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI100405-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L

Serial ID: WMS100411-70 **Opened:** 11-APR-10 **Balance Id :** 40245216
Name: ICPMS LINEAR RANGE ST **Received:** 11-APR-10 **Pipet Id :** 1758088
Type: Working **Expires:** 12-APR-10 **Solvent :** 2%HNO3/1%HCl - 1296562
Employee: Paul Boyd
Supplier: 02SI
Description: ICPMS LINEAR RANGE STANDARD
Comments: None

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100405-60	Aluminum	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI100405-60	Arsenic	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100405-60	Barium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI100405-60	Beryllium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100405-60	Cadmium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100405-60	Calcium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI100405-60	Chromium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100405-60	Cobalt	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100405-60	Copper	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100405-60	Iron	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI100405-60	Lead	500 mg/L	.5 mL	50 mL	5000 ug/L
UI100405-60	Lithium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100405-60	Magnesium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI100405-60	Manganese	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100405-60	Nickel	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100405-60	Phosphorous	2500 mg/L	.5 mL	50 mL	25000 ug/L
UI100405-60	Potassium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI100405-60	Selenium	50 mg/L	.5 mL	50 mL	500 ug/L
UI100405-60	Sodium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI100405-60	Strontium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100405-60	Thallium	50 mg/L	.5 mL	50 mL	500 ug/L
UI100405-60	Thorium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI100405-60	Uranium	500 mg/L	.5 mL	50 mL	5000 ug/L
UI100405-60	Vanadium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100405-60	Zinc	250 mg/L	.5 mL	50 mL	2500 ug/L
UI100405-61	Antimony	25 mg/L	.5 mL	50 mL	250 ug/L
UI100405-61	Molybdenum	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100405-61	Silver	25 mg/L	.5 mL	50 mL	250 ug/L
UI100405-61	Tin	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100405-61	Tungsten	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100405-61	Zirconium	50 mg/L	.5 mL	50 mL	500 ug/L

Serial ID: WMS100413-04 **Opened:** 13-APR-10 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 13-APR-10 **Balance Id :** 4025216
Type: Working **Expires:** 14-APR-10 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl-1300209
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: WMS100413-04A **Opened:** 13-APR-10 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 13-APR-10 **Pipet Id :** 3541598
Type: Working **Expres:** 14-APR-10 **Solvent :** 2%HNO3/1%HCl - 1300209
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100413-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100413-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS100413-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS100413-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100413-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100413-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100413-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100413-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100413-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100413-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS100413-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS100413-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100413-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS100413-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100413-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100413-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS100413-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS100413-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS100413-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100413-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100413-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100413-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS100413-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100413-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100413-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100413-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100413-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS100413-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100413-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS100413-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100413-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100413-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS100413-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS100413-05 **Opened:** 13-APR-10 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 13-APR-10 **Pipet Id :** 3541598
Type: Working **Expires:** 14-APR-10 **Solvent :** 2%HNO3/1%HCl - 1300209
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100317-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI100317-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI100317-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI100317-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI100317-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI100317-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI100317-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI100317-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Allquot	Final Vol.	Final Conc.
UI100317-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI100317-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Serial ID: WMS100413-06 **Opened:** 13-APR-10 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 13-APR-10 **Pipet Id :** 3820544
Type: Working **Expires:** 14-APR-10 **Solvent :** 2%HNO3/1%HCl - 1300209
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS CRDL
Comments: None

Parent Material	Analyte	Parent Conc.	Allquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L

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: WMS100413-07 **Opened:** 13-APR-10 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 13-APR-10 **Lot Number :** 1010773
Type: Working **Expires:** 14-APR-10 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl - 1300209
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100318-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100318-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100318-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Standard Logbook

Serial ID: WMS100413-08 **Opened:** 13-APR-10 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 13-APR-10 **Pipet Id :** 1758088
Type: Working **Expires:** 14-APR-10 **Solvent :** 2%HNO3/1%HCl - 1300209
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Allquot	Final Vol.	Final Conc.
UI100318-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100318-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100318-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L
UI100405-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI100405-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI100405-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI100405-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI100405-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI100405-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI100405-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI100405-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI100405-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L

Standard Logbook

Serial ID: 1156689-A **Opened:** 20-JUL-09 **Lot Number :** 41226920
Name: B-KMnO4(VWR)-MER **Received:** 20-JUL-09
Type: Reagent/Solvent **Expires:** 20-JUL-10
Employee: Tara Griffin **Verified:** 07-AUG-07
Supplier: VWR
Description: Potassium Permanganate
Comments: None

Serial ID: 1176183 **Opened:** 24-AUG-09 **Lot Number :** H20001
Name: B-H2SO4-MER **Received:** 24-AUG-09
Type: Reagent/Solvent **Expires:** 24-AUG-10
Employee: Tara Griffin
Supplier: Mallinckrodt
Description: Sulfuric Acid, Concentrated
Comments: None

Serial ID: 1215906 **Opened:** 06-NOV-09 **Lot Number :** H44465
Name: B-K2S2O8S-MER **Received:** 06-NOV-09
Type: Reagent/Solvent **Expires:** 06-NOV-10
Employee: Tara Griffin
Supplier: J.T BAKER
Description: Potassium Persulfate Concentrate
Comments: None

Serial ID: 1228372-A **Opened:** 12-NOV-09 **Lot Number :** 49215936
Name: B-NH2OH.HCI-MER **Received:** 12-NOV-09
Type: Reagent/Solvent **Expires:** 12-NOV-10
Employee: Tara Griffin
Supplier: Fisher Scientific
Description: Hydroxylamine Hydrochloride
Comments: None

Serial ID: 1255532-C **Opened:** 15-JAN-10 **Balance Id :** BAL-002
Name: B-NaCl.NH2OH.HCI-MER **Received:** 15-JAN-10
Type: Reagent/Solvent **Expires:** 15-JUL-10
Employee: Tara Griffin
Supplier: GEL
Description: Hg reducing agent
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1228372-A	B-NH2OH.HCI-MER	N/A	120 g	1000 mL	N/A

Standard Logbook

Serial ID: 1274391-1 **Opened:** 24-FEB-10 **Instrument Id :** MERCURY
Name: B-HNO3-MER **Received:** 24-FEB-10 **Lot Number :** H44025
Type: Reagent/Solvent **Expires:** 24-FEB-11
Employee: Tara Griffin
Supplier: Mallinckrodt Chemicals
Description: NITRIC ACID
Comments: None

Serial ID: 1274397-C **Opened:** 24-FEB-10 **Balance Id :** BAL-002
Name: B-KMnO4-MER **Received:** 24-FEB-10
Type: Reagent/Solvent **Expires:** 20-JUL-10
Employee: Tara Griffin
Supplier: GEL
Description: 5% KMnO4 solution
Comments: None

Parent Material	Analyte	Parent Conc.	Allquot	Final Vol.	Final Conc.
1156689-A	B-KMnO4(VWR)-MER	Crystals	50 g	1000 mL	3%

Serial ID: 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: 1276435-C **Opened:** 28-FEB-10 **Balance Id :** BAL-002
Name: B-K2S2O8-MER **Received:** 28-FEB-10
Type: Reagent/Solvent **Expires:** 28-AUG-10
Employee: Tara Griffin
Supplier: GEL
Description: 5% Potassium Persulfate
Comments: None

Standard Logbook

Parent Material	Analyte	Parent Conc.	Allquot	Final Vol.	Final Conc.
1215906	B-K2S2O8S-MER	N/A	50 g	1000 mL	N/A

Serial ID: 1277916 Opened: 02-MAR-10 Lot Number : J02039
 Name: I-HCL Received: 02-MAR-10 Preservative Id : 5 none
 Type: Reagent/Solvent Expires: 02-MAR-11
 Employee: Francena Armstrong
 Supplier: J.T. BAKER
 Description: HYDROCHLORIC ACID
 Comments: None

Serial ID: 1277919 Opened: 02-MAR-10 Lot Number : J 04043 L
 Name: I-HNO3 Received: 02-MAR-10
 Type: Reagent/Solvent Expires: 02-MAR-11
 Employee: Francena Armstrong
 Supplier: BAKER
 Description: Nitric Acid CONC.
 Comments: None

Serial ID: 1289705 Opened: 22-MAR-10 Amount : 20 L
 Name: B-ICP-RINSE SOLN Received: 12-MAR-10 Lot Number : H04040+G34050
 Type: Reagent/Solvent Expires: 28-MAR-10 Solvent : 3%HCL+1%HNO3
 Employee: Helen Camello
 Supplier: GEL
 Description: 3%HCL+1%HNO3 RINSE SOLN.
 Comments: None

Serial ID: 1291278 Opened: 25-MAR-10 Lot Number : J 08035 L
 Name: I-HNO3 Received: 25-MAR-10
 Type: Reagent/Solvent Expires: 25-MAR-11
 Employee: Anthony Green
 Supplier: BAKER
 Description: Nitric Acid CONC.
 Comments: None

Serial ID: 1296562 Opened: 05-APR-10 Solvent : Type I Water
 Name: B-2%HNO3/1%HCl-ICPMS Received: 05-APR-10
 Type: Reagent/Solvent Expires: 12-APR-10
 Employee: Paul Boyd
 Supplier: GEL
 Description: 2%HNO3/1%HCl Solution (Type I Water)
 Comments: None

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1277916	I-HCL	36.5-38.0	90 mL	9 l	N/A
1291278	I-HNO3	69.0-70.0	180 mL	9 l	N/A

Serial ID: 1300209 Opened: 12-APR-10 Solvent : Type I Water

Name: B-2%HNO3/1%HCl-ICPMS Received: 12-APR-10

Type: Reagent/Solvent Expires: 19-APR-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.
1277916	I-HCL	36.5-38.0	90 mL	9 l	N/A
1291278	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 10-2069-1**

Sample Analysis

Sample ID	Client ID
248041001	RE15-10-8389
248041002	RE15-10-8388
248041003	RE15-10-8390
248041004	RE15-10-8392
248041005	RE15-10-8391
1202056842	Method Blank (MB) ICP
1202056847	Laboratory Control Sample (LCS)
1202056844	248031001(CAPU-10-12584L) Serial Dilution (SD)
1202056843	248031001(CAPU-10-12584D) Sample Duplicate (DUP)
1202056845	248031001(CAPU-10-12584S) Matrix Spike (MS)
1202056846	248031001(CAPU-10-12584SD) Matrix Spike Duplicate (MSD)
1202056848	Method Blank (MB) ICP-MS
1202056853	Laboratory Control Sample (LCS)
1202056850	248031001(CAPU-10-12584L) Serial Dilution (SD)
1202056849	248031001(CAPU-10-12584D) Sample Duplicate (DUP)
1202056851	248031001(CAPU-10-12584S) Matrix Spike (MS)
1202056852	248031001(CAPU-10-12584SD) Matrix Spike Duplicate (MSD)
1202056151	Method Blank (MB) CVAA
1202056152	Laboratory Control Sample (LCS)
1202056155	248033001(RE15-10-7902L) Serial Dilution (SD)

1202056153	248033001(RE15-10-7902D) Sample Duplicate (DUP)
1202056154	248033001(RE15-10-7902S) Matrix Spike (MS)
1202056156	248033001(RE15-10-7902SD) Matrix Spike Duplicate (MSD)

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

Method/Analysis Information

Analytical Batch:	959101, 959103 and 958744
Prep Batch :	959100, 959102 and 958742
Standard Operating Procedures:	GL-MA-E-013 REV# 20, GL-MA-E-009 REV# 19, GL-MA-E-014 REV# 21 and GL-MA-E-010 REV# 23
Analytical Method:	SW846 3050B/6010B, SW846 3050B/6020 and SW846 7471A
Prep Method :	SW846 3050B and SW846 7471A Prep

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

System Configuration

The Metals analysis-ICP was performed on a P E 5300 Optima radial/axial-viewing inductively coupled plasma atomic emission spectrometer. The instrument is equipped with a Burgener nebulizer, cyclonic spray chamber, and yttrium or scandium internal standard. Operating conditions for the ICP are set at a power level of 1500 watts. The instrument has a peristaltic pump flow rate of 1.4L/min, argon gas flows of 15 L/min and 0.2 L/min for the torch and auxiliary gases, and a flow setting of 0.65L/min for the nebulizer.

The Metals analysis - ICPMS was performed on a Perkin Elmer ELAN 9000 inductively coupled plasma mass spectrometer (ICP-MS). The instrument is equipped with a cross-flow nebulizer, quadrupole mass spectrometer, and dual mode electron multiplier detector. Internal standards of scandium, germanium, indium, tantalum, and/or lutetium were utilized to cover the mass spectrum. Operating conditions are set at 1400W power and combined argon pressures of 360+/- 7 kPa for the plasma and auxiliary gases, and 0.85 L/min carrier gas flow, and an initial lens voltage of 5.2.

The Metals analysis-Mercury was performed on a Perkin-Elmer Flow Injection Mercury System (FIMS-100) automated mercury analyzer. The instrument consists of a cold vapor atomic absorption spectrometer set to detect mercury at a wavelength of 253.7 nm. Sample introduction

through the flow injection system is performed via a peristaltic pump at 9 mL/min and nitrogen carrier gas rate of 80 mL/min.

Calibration Information

Instrument Calibration

All initial calibration requirements have been met for this sample delivery group (SDG).

CRDL Requirements

All CRDL standard(s) met the referenced advisory control limits.

ICSA/ICSAB Statement

All interference check samples (ICSA and ICSAB) associated with this SDG met the established acceptance criteria.

Continuing Calibration Blank (CCB) Requirements

All continuing calibration blanks (CCB) bracketing this batch met the established acceptance criteria.

Continuing Calibration Verification (CCV) Requirements

All continuing calibration verifications (CCV) bracketing this SDG met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement

The MBs analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery

The LCS spike recoveries met the acceptance limits.

Quality Control (QC) Sample Statement

The following samples were selected as the quality control (QC) samples for this SDG: 248031001 (CAPU-10-12584) and 248033001 (RE15-10-7902).

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, potassium, sodium and zinc, 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, calcium and selenium, as indicated by the "N" qualifiers.

MS/MSD Relative Percent Difference (RPD) Statement

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

Duplicate Relative Percent Difference (RPD) Statement

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

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: 810796 and 816462. 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 Pauson Date: 4/14/10

Sample Data Summary

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2069-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 248041001

BASIS: Dry Weight

DATE COLLECTED 19-FEB-10

CLIENT ID: RE15-10-8389

LEVEL: Low

DATE RECEIVED 25-FEB-10

MATRIX: SOIL

%SOLIDS: 90.8

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	15400000	ug/Kg		6820	20100	20100	1	P	HSC	03/26/10 06:45	032510A-1	959101
7440-36-0	Antimony	1000	ug/Kg	U	331	1000	1000	1	P	HSC	03/26/10 06:45	032510A-1	959101
7440-38-2	Arsenic	1.92	mg/kg		0.202	1.01	1.01	2	MS	PRB	04/11/10 23:21	100411-2	959103
7440-39-3	Barium	205000	ug/Kg		100	502	502	1	P	HSC	03/26/10 06:45	032510A-1	959101
7440-41-7	Beryllium	1.12	mg/kg		0.0202	0.101	0.101	2	MS	PRB	04/11/10 23:21	100411-2	959103
7440-43-9	Cadmium	207	ug/Kg	J	100	502	502	1	P	HSC	03/26/10 06:45	032510A-1	959101
7440-70-2	Calcium	3130000	ug/Kg		8030	25100	25100	1	P	HSC	03/26/10 06:45	032510A-1	959101
7440-47-3	Chromium	13900	ug/Kg		150	502	502	1	P	HSC	03/26/10 06:45	032510A-1	959101
7440-48-4	Cobalt	5980	ug/Kg		150	502	502	1	P	HSC	03/26/10 06:45	032510A-1	959101
7440-50-8	Copper	8240	ug/Kg		301	1000	1000	1	P	HSC	03/26/10 06:45	032510A-1	959101
7439-89-6	Iron	16900000	ug/Kg		8030	25100	25100	1	P	HSC	03/26/10 06:45	032510A-1	959101
7439-92-1	Lead	12400	ug/Kg		251	1000	1000	1	P	HSC	03/26/10 06:45	032510A-1	959101
7439-95-4	Magnesium	2400000	ug/Kg		8530	30100	30100	1	P	HSC	03/26/10 06:45	032510A-1	959101
7439-96-5	Manganese	400000	ug/Kg		201	1000	1000	1	P	HSC	03/26/10 06:45	032510A-1	959101
7439-97-6	Mercury	17.3	ug/kg		3.9	11.5	11.5	1	AV	JXLI	03/15/10 14:07	031510S1-5	958744
7440-02-0	Nickel	8.77	mg/kg		0.101	0.404	0.404	2	MS	PRB	04/11/10 23:21	100411-2	959103
7440-09-7	Potassium	2210000	ug/Kg		6420	25100	25100	1	P	HSC	03/26/10 06:45	032510A-1	959101
7782-49-2	Selenium	1.01	mg/kg	U	0.505	1.01	1.01	2	MS	PRB	04/11/10 23:21	100411-2	959103
7440-22-4	Silver	502	ug/Kg	U	100	502	502	1	P	HSC	03/26/10 06:45	032510A-1	959101
7440-23-5	Sodium	275000	ug/Kg		7020	25100	25100	1	P	HSC	03/26/10 06:45	032510A-1	959101
7440-28-0	Thallium	0.204	mg/kg		0.0606	0.202	0.202	2	MS	PRB	04/11/10 23:21	100411-2	959103
7440-61-1	Uranium	3.1	mg/kg		0.0133	0.0404	0.0404	2	MS	PRB	04/12/10 14:00	100412-3	959103
7440-62-2	Vanadium	28200	ug/Kg		100	502	502	1	P	HSC	03/26/10 06:45	032510A-1	959101
7440-66-6	Zinc	31800	ug/Kg		331	1000	1000	1	P	HSC	03/26/10 06:45	032510A-1	959101

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
958744	958742	SW846 7471A Prep	0.576	g	30	mL	03/12/10	TXB3
959101	959100	SW846 3050B	0.549	g	50	mL	03/04/10	LYH1
959103	959102	SW846 3050B	0.545	g	50	mL	03/04/10	LYH1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2069-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 248041002

BASIS: Dry Weight

DATE COLLECTED 19-FEB-10

CLIENT ID: RE15-10-8388

LEVEL: Low

DATE RECEIVED 25-FEB-10

MATRIX: SOIL

%SOLIDS: 92.4

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Rnn	Analytical Batch
7429-90-5	Aluminum	8730000	ug/Kg		6800	20000	20000	1	P	HSC	03/26/10 06:53	032510A-1	959101
7440-36-0	Antimony	1000	ug/Kg	U	330	1000	1000	1	P	HSC	03/26/10 06:53	032510A-1	959101
7440-38-2	Arsenic	1.78	mg/kg		0.212	1.06	1.06	2	MS	PRB	04/11/10 23:24	100411-2	959103
7440-39-3	Barium	105000	ug/Kg		100	500	500	1	P	HSC	03/26/10 06:53	032510A-1	959101
7440-41-7	Beryllium	1	mg/kg		0.0212	0.106	0.106	2	MS	PRB	04/11/10 23:24	100411-2	959103
7440-43-9	Cadmium	500	ug/Kg	U	100	500	500	1	P	HSC	03/26/10 06:53	032510A-1	959101
7440-70-2	Calcium	2150000	ug/Kg		8000	25000	25000	1	P	HSC	03/26/10 06:53	032510A-1	959101
7440-47-3	Chromium	9260	ug/Kg		150	500	500	1	P	HSC	03/26/10 06:53	032510A-1	959101
7440-48-4	Cobalt	3480	ug/Kg		150	500	500	1	P	HSC	03/26/10 06:53	032510A-1	959101
7440-50-8	Copper	6670	ug/Kg		300	1000	1000	1	P	HSC	03/26/10 06:53	032510A-1	959101
7439-89-6	Iron	14200000	ug/Kg		8000	25000	25000	1	P	HSC	03/26/10 06:53	032510A-1	959101
7439-92-1	Lead	7070	ug/Kg		250	1000	1000	1	P	HSC	03/26/10 06:53	032510A-1	959101
7439-95-4	Magnesium	1680000	ug/Kg		8500	30000	30000	1	P	HSC	03/26/10 06:53	032510A-1	959101
7439-96-5	Manganese	270000	ug/Kg		200	1000	1000	1	P	HSC	03/26/10 06:53	032510A-1	959101
7439-97-6	Mercury	16	ug/kg		4.14	12.2	12.2	1	AV	JXL1	03/15/10 14:09	031510S1-5	958744
7440-02-0	Nickel	7.61	mg/kg		0.106	0.423	0.423	2	MS	PRB	04/11/10 23:24	100411-2	959103
7440-09-7	Potassium	1360000	ug/Kg		6400	25000	25000	1	P	HSC	03/26/10 06:53	032510A-1	959101
7782-49-2	Selenium	1.06	mg/kg	U	0.529	1.06	1.06	2	MS	PRB	04/11/10 23:24	100411-2	959103
7440-22-4	Silver	138	ug/Kg	J	100	500	500	1	P	HSC	03/26/10 06:53	032510A-1	959101
7440-23-5	Sodium	190000	ug/Kg		7000	25000	25000	1	P	HSC	03/26/10 06:53	032510A-1	959101
7440-28-0	Thallium	0.181	mg/kg	J	0.0635	0.212	0.212	2	MS	PRB	04/11/10 23:24	100411-2	959103
7440-61-1	Uranium	5.66	mg/kg		0.014	0.0423	0.0423	2	MS	PRB	04/12/10 14:02	100412-3	959103
7440-62-2	Vanadium	17900	ug/Kg		100	500	500	1	P	HSC	03/26/10 06:53	032510A-1	959101
7440-66-6	Zinc	40500	ug/Kg		330	1000	1000	1	P	HSC	03/26/10 06:53	032510A-1	959101

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
958744	958742	SW846 7471A Prep	0.533	g	30	mL	03/12/10	TXB3
959101	959100	SW846 3050B	0.541	g	50	mL	03/04/10	LYH1
959103	959102	SW846 3050B	0.511	g	50	mL	03/04/10	LYH1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2069-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 248041003

BASIS: Dry Weight

DATE COLLECTED 19-FEB-10

CLIENT ID: RE15-10-8390

LEVEL: Low

DATE RECEIVED 25-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	16500000	ug/Kg		7180	21100	21100	1	P	HSC	03/26/10 07:00	032510A-1	959101
7440-36-0	Antimony	1060	ug/Kg	U	349	1060	1060	1	P	HSC	03/26/10 07:00	032510A-1	959101
7440-38-2	Arsenic	1.95	mg/kg		0.222	1.11	1.11	2	MS	PRB	04/11/10 23:27	100411-2	959103
7440-39-3	Barium	143000	ug/Kg		106	528	528	1	P	HSC	03/26/10 07:00	032510A-1	959101
7440-41-7	Beryllium	0.995	mg/kg		0.0222	0.111	0.111	2	MS	PRB	04/11/10 23:27	100411-2	959103
7440-43-9	Cadmium	127	ug/Kg	J	106	528	528	1	P	HSC	03/26/10 07:00	032510A-1	959101
7440-70-2	Calcium	1520000	ug/Kg		8450	26400	26400	1	P	HSC	03/26/10 07:00	032510A-1	959101
7440-47-3	Chromium	14600	ug/Kg		158	528	528	1	P	HSC	03/26/10 07:00	032510A-1	959101
7440-48-4	Cobalt	3490	ug/Kg		158	528	528	1	P	HSC	03/26/10 07:00	032510A-1	959101
7440-50-8	Copper	11000	ug/Kg		317	1060	1060	1	P	HSC	03/26/10 07:00	032510A-1	959101
7439-89-6	Iron	15200000	ug/Kg		8450	26400	26400	1	P	HSC	03/26/10 07:00	032510A-1	959101
7439-92-1	Lead	12300	ug/Kg		264	1060	1060	1	P	HSC	03/26/10 07:00	032510A-1	959101
7439-95-4	Magnesium	2110000	ug/Kg		8980	31700	31700	1	P	HSC	03/26/10 07:00	032510A-1	959101
7439-96-5	Manganese	174000	ug/Kg		211	1060	1060	1	P	HSC	03/26/10 07:00	032510A-1	959101
7439-97-6	Mercury	118	ug/kg		4.29	12.6	12.6	1	AV	JXL1	03/15/10 14:11	031510S1-5	958744
7440-02-0	Nickel	7.36	mg/kg		0.111	0.445	0.445	2	MS	PRB	04/11/10 23:27	100411-2	959103
7440-09-7	Potassium	1840000	ug/Kg		6760	26400	26400	1	P	HSC	03/26/10 07:00	032510A-1	959101
7782-49-2	Selenium	1.11	mg/kg	U	0.556	1.11	1.11	2	MS	PRB	04/11/10 23:27	100411-2	959103
7440-22-4	Silver	160	ug/Kg	J	106	528	528	1	P	HSC	03/26/10 07:00	032510A-1	959101
7440-23-5	Sodium	177000	ug/Kg		7400	26400	26400	1	P	HSC	03/26/10 07:00	032510A-1	959101
7440-28-0	Thallium	0.170	mg/kg	J	0.0667	0.222	0.222	2	MS	PRB	04/11/10 23:27	100411-2	959103
7440-61-1	Uranium	6.41	mg/kg		0.0147	0.0445	0.0445	2	MS	PRB	04/12/10 14:04	100412-3	959103
7440-62-2	Vanadium	25900	ug/Kg		106	528	528	1	P	HSC	03/26/10 07:00	032510A-1	959101
7440-66-6	Zinc	39700	ug/Kg		349	1060	1060	1	P	HSC	03/26/10 07:00	032510A-1	959101

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
958744	958742	SW846 7471A Prep	0.561	g	30	mL	03/12/10	TXB3
959101	959100	SW846 3050B	0.558	g	50	mL	03/04/10	LYH1
959103	959102	SW846 3050B	0.53	g	50	mL	03/04/10	LYH1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2069-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 248041004

BASIS: Dry Weight

DATE COLLECTED 19-FEB-10

CLIENT ID: RE15-10-8392

LEVEL: Low

DATE RECEIVED 25-FEB-10

MATRIX: SOIL

%SOLIDS: 81

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	11300000	ug/Kg		7490	22000	22000	1	P	HSC	03/26/10 07:07	032510A-1	959101
7440-36-0	Antimony	1100	ug/Kg	U	363	1100	1100	1	P	HSC	03/26/10 07:07	032510A-1	959101
7440-38-2	Arsenic	1.56	mg/kg		0.24	1.2	1.2	2	MS	PRB	04/11/10 23:30	100411-2	959103
7440-39-3	Barium	108000	ug/Kg		110	551	551	1	P	HSC	03/26/10 07:07	032510A-1	959101
7440-41-7	Beryllium	0.950	mg/kg		0.024	0.12	0.12	2	MS	PRB	04/11/10 23:30	100411-2	959103
7440-43-9	Cadmium	551	ug/Kg	U	110	551	551	1	P	HSC	03/26/10 07:07	032510A-1	959101
7440-70-2	Calcium	1720000	ug/Kg		8810	27500	27500	1	P	HSC	03/26/10 07:07	032510A-1	959101
7440-47-3	Chromium	19800	ug/Kg		165	551	551	1	P	HSC	03/26/10 07:07	032510A-1	959101
7440-48-4	Cobalt	2310	ug/Kg		165	551	551	1	P	HSC	03/26/10 07:07	032510A-1	959101
7440-50-8	Copper	5390	ug/Kg		330	1100	1100	1	P	HSC	03/26/10 07:07	032510A-1	959101
7439-89-6	Iron	13100000	ug/Kg		8810	27500	27500	1	P	HSC	03/26/10 07:07	032510A-1	959101
7439-92-1	Lead	4430	ug/Kg		275	1100	1100	1	P	HSC	03/26/10 07:07	032510A-1	959101
7439-95-4	Magnesium	1690000	ug/Kg		9360	33000	33000	1	P	HSC	03/26/10 07:07	032510A-1	959101
7439-96-5	Manganese	252000	ug/Kg		220	1100	1100	1	P	HSC	03/26/10 07:07	032510A-1	959101
7439-97-6	Mercury	36.3	ug/kg		5.01	14.7	14.7	1	AV	JXL	03/15/10 14:12	031510S1-5	958744
7440-02-0	Nickel	8.63	mg/kg		0.12	0.48	0.48	2	MS	PRB	04/11/10 23:30	100411-2	959103
7440-09-7	Potassium	1230000	ug/Kg		7050	27500	27500	1	P	HSC	03/26/10 07:07	032510A-1	959101
7782-49-2	Selenium	1.2	mg/kg	U	0.601	1.2	1.2	2	MS	PRB	04/11/10 23:30	100411-2	959103
7440-22-4	Silver	551	ug/Kg	U	110	551	551	1	P	HSC	03/26/10 07:07	032510A-1	959101
7440-23-5	Sodium	430000	ug/Kg		7710	27500	27500	1	P	HSC	03/26/10 07:07	032510A-1	959101
7440-28-0	Thallium	0.123	mg/kg	J	0.0721	0.24	0.24	2	MS	PRB	04/11/10 23:30	100411-2	959103
7440-61-1	Uranium	0.962	mg/kg		0.0159	0.048	0.048	2	MS	PRB	04/12/10 14:05	100412-3	959103
7440-62-2	Vanadium	13400	ug/Kg		110	551	551	1	P	HSC	03/26/10 07:07	032510A-1	959101
7440-66-6	Zinc	35700	ug/Kg		363	1100	1100	1	P	HSC	03/26/10 07:07	032510A-1	959101

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
958744	958742	SW846 7471A Prep	0.506	g	30	mL	03/12/10	TXB3
959101	959100	SW846 3050B	0.564	g	50	mL	03/04/10	LYH1
959103	959102	SW846 3050B	0.517	g	50	mL	03/04/10	LYH1

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-2069-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 248041005

BASIS: Dry Weight

DATE COLLECTED 19-FEB-10

CLIENT ID: RE15-10-8391

LEVEL: Low

DATE RECEIVED 25-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	19200000	ug/Kg		7600	22400	22400	1	P	HSC	03/26/10 07:14	032510A-1	959101
7440-36-0	Antimony	1120	ug/Kg	U	369	1120	1120	1	P	HSC	03/26/10 07:14	032510A-1	959101
7440-38-2	Arsenic	2.15	mg/kg		0.211	1.05	1.05	2	MS	PRB	04/11/10 23:33	100411-2	959103
7440-39-3	Barium	260000	ug/Kg		112	559	559	1	P	HSC	03/26/10 07:14	032510A-1	959101
7440-41-7	Beryllium	1.17	mg/kg		0.0211	0.105	0.105	2	MS	PRB	04/11/10 23:33	100411-2	959103
7440-43-9	Cadmium	181	ug/Kg	J	112	559	559	1	P	HSC	03/26/10 07:14	032510A-1	959101
7440-70-2	Calcium	1620000	ug/Kg		8950	28000	28000	1	P	HSC	03/26/10 07:14	032510A-1	959101
7440-47-3	Chromium	16200	ug/Kg		168	559	559	1	P	HSC	03/26/10 07:14	032510A-1	959101
7440-48-4	Cobalt	5260	ug/Kg		168	559	559	1	P	HSC	03/26/10 07:14	032510A-1	959101
7440-50-8	Copper	12100	ug/Kg		335	1120	1120	1	P	HSC	03/26/10 07:14	032510A-1	959101
7439-89-6	Iron	16500000	ug/Kg		8950	28000	28000	1	P	HSC	03/26/10 07:14	032510A-1	959101
7439-92-1	Lead	12900	ug/Kg		280	1120	1120	1	P	HSC	03/26/10 07:14	032510A-1	959101
7439-95-4	Magnesium	2390000	ug/Kg		9500	33500	33500	1	P	HSC	03/26/10 07:14	032510A-1	959101
7439-96-5	Manganese	202000	ug/Kg		224	1120	1120	1	P	HSC	03/26/10 07:14	032510A-1	959101
7439-97-6	Mercury	58	ug/kg		4.31	12.7	12.7	1	AV	JXL1	03/15/10 14:14	031510S1-5	958744
7440-02-0	Nickel	7.77	mg/kg		0.105	0.421	0.421	2	MS	PRB	04/11/10 23:33	100411-2	959103
7440-09-7	Potassium	2150000	ug/Kg		7160	28000	28000	1	P	HSC	03/26/10 07:14	032510A-1	959101
7782-49-2	Selenium	1.05	mg/kg	U	0.527	1.05	1.05	2	MS	PRB	04/11/10 23:33	100411-2	959103
7440-22-4	Silver	559	ug/Kg	U	112	559	559	1	P	HSC	03/26/10 07:14	032510A-1	959101
7440-23-5	Sodium	195000	ug/Kg		7830	28000	28000	1	P	HSC	03/26/10 07:14	032510A-1	959101
7440-28-0	Thallium	0.199	mg/kg	J	0.0632	0.211	0.211	2	MS	PRB	04/11/10 23:33	100411-2	959103
7440-61-1	Uranium	4.05	mg/kg		0.0139	0.0421	0.0421	2	MS	PRB	04/12/10 14:07	100412-3	959103
7440-62-2	Vanadium	31200	ug/Kg		112	559	559	1	P	HSC	03/26/10 07:14	032510A-1	959101
7440-66-6	Zinc	86500	ug/Kg		369	1120	1120	1	P	HSC	03/26/10 07:14	032510A-1	959101

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
958744	958742	SW846 7471 A Prep	0.531	g	30	mL	03/12/10	TXB3
959101	959100	SW846 3050B	0.502	g	50	mL	03/04/10	LYHI
959103	959102	SW846 3050B	0.533	g	50	mL	03/04/10	LYHI

Quality Control Summary

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-2069-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICV01										
	Mercury	5.18	ug/L	5	ug/L	103.6	90.0 – 110.0	AV	15-MAR-10 09:15	031510S1-5
	Aluminum	5000	ug/L	5000	ug/L	100	90.0 – 110.0	P	25-MAR-10 08:09	032510A-1
	Antimony	517	ug/L	500	ug/L	103.4	90.0 – 110.0	P	25-MAR-10 08:09	032510A-1
	Barium	500	ug/L	500	ug/L	100.1	90.0 – 110.0	P	25-MAR-10 08:09	032510A-1
	Cadmium	490	ug/L	500	ug/L	98	90.0 – 110.0	P	25-MAR-10 08:09	032510A-1
	Calcium	5010	ug/L	5000	ug/L	100.2	90.0 – 110.0	P	25-MAR-10 08:09	032510A-1
	Chromium	480	ug/L	500	ug/L	96	90.0 – 110.0	P	25-MAR-10 08:09	032510A-1
	Cobalt	506	ug/L	500	ug/L	101.3	90.0 – 110.0	P	25-MAR-10 08:09	032510A-1
	Copper	495	ug/L	500	ug/L	99.1	90.0 – 110.0	P	25-MAR-10 08:09	032510A-1
	Iron	5040	ug/L	5000	ug/L	100.7	90.0 – 110.0	P	25-MAR-10 08:09	032510A-1
	Lead	489	ug/L	500	ug/L	97.7	90.0 – 110.0	P	25-MAR-10 08:09	032510A-1
	Magnesium	5350	ug/L	5000	ug/L	107	90.0 – 110.0	P	25-MAR-10 08:09	032510A-1
	Manganese	505	ug/L	500	ug/L	101.1	90.0 – 110.0	P	25-MAR-10 08:09	032510A-1
	Potassium	2410	ug/L	2500	ug/L	96.4	90.0 – 110.0	P	25-MAR-10 08:09	032510A-1
	Silver	256	ug/L	250	ug/L	102.5	90.0 – 110.0	P	25-MAR-10 08:09	032510A-1
	Sodium	2400	ug/L	2500	ug/L	95.8	90.0 – 110.0	P	25-MAR-10 08:09	032510A-1
	Vanadium	505	ug/L	500	ug/L	101	90.0 – 110.0	P	25-MAR-10 08:09	032510A-1
	Zinc	498	ug/L	500	ug/L	99.7	90.0 – 110.0	P	25-MAR-10 08:09	032510A-1
	Arsenic	51.9	ug/L	50	ug/L	103.8	90.0 – 110.0	MS	11-APR-10 21:51	100411-2
	Beryllium	51.1	ug/L	50	ug/L	102.2	90.0 – 110.0	MS	11-APR-10 21:51	100411-2
	Nickel	52.7	ug/L	50	ug/L	105.5	90.0 – 110.0	MS	11-APR-10 21:51	100411-2
	Selenium	52	ug/L	50	ug/L	104	90.0 – 110.0	MS	11-APR-10 21:51	100411-2
	Thallium	53.5	ug/L	50	ug/L	106.9	90.0 – 110.0	MS	11-APR-10 21:51	100411-2
	Uranium	50.9	ug/L	50	ug/L	101.7	90.0 – 110.0	MS	12-APR-10 13:11	100412-3
	Uranium	49.6	ug/L	50	ug/L	99.2	90.0 – 110.0	MS	12-APR-10 15:22	100412-4
CCV01										
	Mercury	5.13	ug/L	5	ug/L	102.6	80.0 – 120.0	AV	15-MAR-10 09:20	031510S1-5
	Aluminum	4940	ug/L	5000	ug/L	98.9	90.0 – 110.0	P	25-MAR-10 08:57	032510A-1
	Antimony	527	ug/L	500	ug/L	105.3	90.0 – 110.0	P	25-MAR-10 08:57	032510A-1
	Barium	496	ug/L	500	ug/L	99.3	90.0 – 110.0	P	25-MAR-10 08:57	032510A-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-2069-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,JCPMS5,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>
	Cadmium	499	ug/L	500	ug/L	99.8	90.0 – 110.0	P	25-MAR-10 08:57	032510A-1
	Calcium	5000	ug/L	5000	ug/L	100	90.0 – 110.0	P	25-MAR-10 08:57	032510A-1
	Chromium	498	ug/L	500	ug/L	99.7	90.0 – 110.0	P	25-MAR-10 08:57	032510A-1
	Cobalt	506	ug/L	500	ug/L	101.3	90.0 – 110.0	P	25-MAR-10 08:57	032510A-1
	Copper	491	ug/L	500	ug/L	98.2	90.0 – 110.0	P	25-MAR-10 08:57	032510A-1
	Iron	4960	ug/L	5000	ug/L	99.2	90.0 – 110.0	P	25-MAR-10 08:57	032510A-1
	Lead	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	25-MAR-10 08:57	032510A-1
	Magnesium	5180	ug/L	5000	ug/L	103.6	90.0 – 110.0	P	25-MAR-10 08:57	032510A-1
	Manganese	489	ug/L	500	ug/L	97.8	90.0 – 110.0	P	25-MAR-10 08:57	032510A-1
	Potassium	4910	ug/L	5000	ug/L	98.2	90.0 – 110.0	P	25-MAR-10 08:57	032510A-1
	Silver	504	ug/L	500	ug/L	100.8	90.0 – 110.0	P	25-MAR-10 08:57	032510A-1
	Sodium	9610	ug/L	10000	ug/L	96.1	90.0 – 110.0	P	25-MAR-10 08:57	032510A-1
	Vanadium	501	ug/L	500	ug/L	100.3	90.0 – 110.0	P	25-MAR-10 08:57	032510A-1
	Zinc	494	ug/L	500	ug/L	98.9	90.0 – 110.0	P	25-MAR-10 08:57	032510A-1
	Arsenic	51.9	ug/L	50	ug/L	103.8	90.0 – 110.0	MS	11-APR-10 22:07	100411-2
	Beryllium	49.7	ug/L	50	ug/L	99.4	90.0 – 110.0	MS	11-APR-10 22:07	100411-2
	Nickel	54.1	ug/L	50	ug/L	108.2	90.0 – 110.0	MS	11-APR-10 22:07	100411-2
	Selenium	51.3	ug/L	50	ug/L	102.7	90.0 – 110.0	MS	11-APR-10 22:07	100411-2
	Thallium	52.6	ug/L	50	ug/L	105.3	90.0 – 110.0	MS	11-APR-10 22:07	100411-2
	Uranium	50	ug/L	50	ug/L	100	90.0 – 110.0	MS	12-APR-10 13:20	100412-3
	Uranium	50.4	ug/L	50	ug/L	100.8	90.0 – 110.0	MS	12-APR-10 15:30	100412-4
CCV02	Mercury	5.15	ug/L	5	ug/L	102.9	80.0 – 120.0	AV	15-MAR-10 09:40	031510S1-5
	Aluminum	5110	ug/L	5000	ug/L	102.1	90.0 – 110.0	P	25-MAR-10 09:24	032510A-1
	Antimony	523	ug/L	500	ug/L	104.6	90.0 – 110.0	P	25-MAR-10 09:24	032510A-1
	Barium	499	ug/L	500	ug/L	99.8	90.0 – 110.0	P	25-MAR-10 09:24	032510A-1
	Cadmium	500	ug/L	500	ug/L	100	90.0 – 110.0	P	25-MAR-10 09:24	032510A-1
	Calcium	5140	ug/L	5000	ug/L	102.8	90.0 – 110.0	P	25-MAR-10 09:24	032510A-1
	Chromium	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	25-MAR-10 09:24	032510A-1
	Cobalt	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	25-MAR-10 09:24	032510A-1

METALS

-2a-

Initial and Continuing Calibration Verification

SDG No: 10-2069-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Copper	496	ug/L	500	ug/L	99.3	90.0 - 110.0	P	25-MAR-10 09:24	032510A-1
	Iron	5140	ug/L	5000	ug/L	102.8	90.0 - 110.0	P	25-MAR-10 09:24	032510A-1
	Lead	494	ug/L	500	ug/L	98.7	90.0 - 110.0	P	25-MAR-10 09:24	032510A-1
	Magnesium	5240	ug/L	5000	ug/L	104.8	90.0 - 110.0	P	25-MAR-10 09:24	032510A-1
	Manganese	496	ug/L	500	ug/L	99.1	90.0 - 110.0	P	25-MAR-10 09:24	032510A-1
	Potassium	4970	ug/L	5000	ug/L	99.4	90.0 - 110.0	P	25-MAR-10 09:24	032510A-1
	Silver	509	ug/L	500	ug/L	101.7	90.0 - 110.0	P	25-MAR-10 09:24	032510A-1
	Sodium	10200	ug/L	10000	ug/L	101.8	90.0 - 110.0	P	25-MAR-10 09:24	032510A-1
	Vanadium	505	ug/L	500	ug/L	101	90.0 - 110.0	P	25-MAR-10 09:24	032510A-1
	Zinc	495	ug/L	500	ug/L	99.1	90.0 - 110.0	P	25-MAR-10 09:24	032510A-1
	Arsenic	51.5	ug/L	50	ug/L	103.1	90.0 - 110.0	MS	11-APR-10 22:34	100411-2
	Beryllium	52.1	ug/L	50	ug/L	104.3	90.0 - 110.0	MS	11-APR-10 22:34	100411-2
	Nickel	53.9	ug/L	50	ug/L	107.8	90.0 - 110.0	MS	11-APR-10 22:34	100411-2
	Selenium	51.5	ug/L	50	ug/L	103.1	90.0 - 110.0	MS	11-APR-10 22:34	100411-2
	Thallium	53.1	ug/L	50	ug/L	106.3	90.0 - 110.0	MS	11-APR-10 22:34	100411-2
	Uranium	49.6	ug/L	50	ug/L	99.1	90.0 - 110.0	MS	12-APR-10 13:36	100412-3
	Uranium	50.6	ug/L	50	ug/L	101.2	90.0 - 110.0	MS	12-APR-10 15:45	100412-4
CCV03										
	Mercury	5.23	ug/L	5	ug/L	104.5	80.0 - 120.0	AV	15-MAR-10 10:00	031510S1-5
	Aluminum	4850	ug/L	5000	ug/L	97.1	90.0 - 110.0	P	25-MAR-10 10:14	032510A-1
	Antimony	514	ug/L	500	ug/L	102.7	90.0 - 110.0	P	25-MAR-10 10:14	032510A-1
	Barium	491	ug/L	500	ug/L	98.2	90.0 - 110.0	P	25-MAR-10 10:14	032510A-1
	Cadmium	493	ug/L	500	ug/L	98.6	90.0 - 110.0	P	25-MAR-10 10:14	032510A-1
	Calcium	4890	ug/L	5000	ug/L	97.8	90.0 - 110.0	P	25-MAR-10 10:14	032510A-1
	Chromium	493	ug/L	500	ug/L	98.6	90.0 - 110.0	P	25-MAR-10 10:14	032510A-1
	Cobalt	501	ug/L	500	ug/L	100.1	90.0 - 110.0	P	25-MAR-10 10:14	032510A-1
	Copper	486	ug/L	500	ug/L	97.1	90.0 - 110.0	P	25-MAR-10 10:14	032510A-1
	Iron	4860	ug/L	5000	ug/L	97.1	90.0 - 110.0	P	25-MAR-10 10:14	032510A-1
	Lead	494	ug/L	500	ug/L	98.7	90.0 - 110.0	P	25-MAR-10 10:14	032510A-1
	Magnesium	5030	ug/L	5000	ug/L	100.7	90.0 - 110.0	P	25-MAR-10 10:14	032510A-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-2069-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Manganese	484	ug/L	500	ug/L	96.7	90.0 - 110.0	P	25-MAR-10 10:14	032510A-1
	Potassium	4680	ug/L	5000	ug/L	93.6	90.0 - 110.0	P	25-MAR-10 10:14	032510A-1
	Silver	499	ug/L	500	ug/L	99.8	90.0 - 110.0	P	25-MAR-10 10:14	032510A-1
	Sodium	9520	ug/L	10000	ug/L	95.2	90.0 - 110.0	P	25-MAR-10 10:14	032510A-1
	Vanadium	497	ug/L	500	ug/L	99.4	90.0 - 110.0	P	25-MAR-10 10:14	032510A-1
	Zinc	488	ug/L	500	ug/L	97.7	90.0 - 110.0	P	25-MAR-10 10:14	032510A-1
	Arsenic	51.1	ug/L	50	ug/L	102.2	90.0 - 110.0	MS	11-APR-10 23:05	100411-2
	Beryllium	53.8	ug/L	50	ug/L	107.7	90.0 - 110.0	MS	11-APR-10 23:05	100411-2
	Nickel	52.9	ug/L	50	ug/L	105.7	90.0 - 110.0	MS	11-APR-10 23:05	100411-2
	Selenium	51.7	ug/L	50	ug/L	103.3	90.0 - 110.0	MS	11-APR-10 23:05	100411-2
	Thallium	53.4	ug/L	50	ug/L	106.9	90.0 - 110.0	MS	11-APR-10 23:05	100411-2
	Uranium	49.8	ug/L	50	ug/L	99.5	90.0 - 110.0	MS	12-APR-10 13:52	100412-3
CCV04	Mercury	4.93	ug/L	5	ug/L	98.6	80.0 - 120.0	AV	15-MAR-10 10:20	031510S1-5
	Aluminum	5020	ug/L	5000	ug/L	100.4	90.0 - 110.0	P	25-MAR-10 11:24	032510A-1
	Antimony	516	ug/L	500	ug/L	103.2	90.0 - 110.0	P	25-MAR-10 11:24	032510A-1
	Barium	499	ug/L	500	ug/L	99.8	90.0 - 110.0	P	25-MAR-10 11:24	032510A-1
	Cadmium	499	ug/L	500	ug/L	99.9	90.0 - 110.0	P	25-MAR-10 11:24	032510A-1
	Calcium	5080	ug/L	5000	ug/L	101.6	90.0 - 110.0	P	25-MAR-10 11:24	032510A-1
	Chromium	500	ug/L	500	ug/L	100	90.0 - 110.0	P	25-MAR-10 11:24	032510A-1
	Cobalt	508	ug/L	500	ug/L	101.6	90.0 - 110.0	P	25-MAR-10 11:24	032510A-1
	Copper	494	ug/L	500	ug/L	98.8	90.0 - 110.0	P	25-MAR-10 11:24	032510A-1
	Iron	5090	ug/L	5000	ug/L	101.8	90.0 - 110.0	P	25-MAR-10 11:24	032510A-1
	Lead	495	ug/L	500	ug/L	99.1	90.0 - 110.0	P	25-MAR-10 11:24	032510A-1
	Magnesium	5210	ug/L	5000	ug/L	104.2	90.0 - 110.0	P	25-MAR-10 11:24	032510A-1
	Manganese	491	ug/L	500	ug/L	98.2	90.0 - 110.0	P	25-MAR-10 11:24	032510A-1
	Potassium	4830	ug/L	5000	ug/L	96.7	90.0 - 110.0	P	25-MAR-10 11:24	032510A-1
	Silver	507	ug/L	500	ug/L	101.4	90.0 - 110.0	P	25-MAR-10 11:24	032510A-1
	Sodium	9990	ug/L	10000	ug/L	99.9	90.0 - 110.0	P	25-MAR-10 11:24	032510A-1
	Vanadium	504	ug/L	500	ug/L	100.9	90.0 - 110.0	P	25-MAR-10 11:24	032510A-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-2069-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Zinc	495	ug/L	500	ug/L	99.1	90.0 – 110.0	P	25-MAR-10 11:24	032510A-1
	Arsenic	52.1	ug/L	50	ug/L	104.3	90.0 – 110.0	MS	11-APR-10 23:36	100411-2
	Beryllium	54.4	ug/L	50	ug/L	108.8	90.0 – 110.0	MS	11-APR-10 23:36	100411-2
	Nickel	52.8	ug/L	50	ug/L	105.6	90.0 – 110.0	MS	11-APR-10 23:36	100411-2
	Selenium	51.5	ug/L	50	ug/L	103	90.0 – 110.0	MS	11-APR-10 23:36	100411-2
	Thallium	53.8	ug/L	50	ug/L	107.7	90.0 – 110.0	MS	11-APR-10 23:36	100411-2
	Uranium	48.9	ug/L	50	ug/L	97.7	90.0 – 110.0	MS	12-APR-10 14:09	100412-3
CCV05										
	Mercury	5.26	ug/L	5	ug/L	105.2	80.0 – 120.0	AV	15-MAR-10 10:40	031510S1-5
	Aluminum	5050	ug/L	5000	ug/L	100.9	90.0 – 110.0	P	25-MAR-10 12:43	032510A-1
	Antimony	522	ug/L	500	ug/L	104.4	90.0 – 110.0	P	25-MAR-10 12:43	032510A-1
	Barium	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	25-MAR-10 12:43	032510A-1
	Cadmium	498	ug/L	500	ug/L	99.7	90.0 – 110.0	P	25-MAR-10 12:43	032510A-1
	Calcium	5060	ug/L	5000	ug/L	101.1	90.0 – 110.0	P	25-MAR-10 12:43	032510A-1
	Chromium	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	25-MAR-10 12:43	032510A-1
	Cobalt	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	25-MAR-10 12:43	032510A-1
	Copper	492	ug/L	500	ug/L	98.4	90.0 – 110.0	P	25-MAR-10 12:43	032510A-1
	Iron	5030	ug/L	5000	ug/L	100.6	90.0 – 110.0	P	25-MAR-10 12:43	032510A-1
	Lead	495	ug/L	500	ug/L	99	90.0 – 110.0	P	25-MAR-10 12:43	032510A-1
	Magnesium	5200	ug/L	5000	ug/L	104.1	90.0 – 110.0	P	25-MAR-10 12:43	032510A-1
	Manganese	490	ug/L	500	ug/L	98	90.0 – 110.0	P	25-MAR-10 12:43	032510A-1
	Potassium	4920	ug/L	5000	ug/L	98.3	90.0 – 110.0	P	25-MAR-10 12:43	032510A-1
	Silver	504	ug/L	500	ug/L	100.9	90.0 – 110.0	P	25-MAR-10 12:43	032510A-1
	Sodium	10100	ug/L	10000	ug/L	100.6	90.0 – 110.0	P	25-MAR-10 12:43	032510A-1
	Vanadium	501	ug/L	500	ug/L	100.3	90.0 – 110.0	P	25-MAR-10 12:43	032510A-1
	Zinc	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	25-MAR-10 12:43	032510A-1
CCV06										
	Mercury	5.3	ug/L	5	ug/L	106.1	80.0 – 120.0	AV	15-MAR-10 11:00	031510S1-5
	Aluminum	4990	ug/L	5000	ug/L	99.8	90.0 – 110.0	P	25-MAR-10 13:50	032510A-1
	Antimony	523	ug/L	500	ug/L	104.7	90.0 – 110.0	P	25-MAR-10 13:50	032510A-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-2069-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Barium	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	25-MAR-10 13:50	032510A-1
	Cadmium	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	25-MAR-10 13:50	032510A-1
	Calcium	5080	ug/L	5000	ug/L	101.5	90.0 – 110.0	P	25-MAR-10 13:50	032510A-1
	Chromium	496	ug/L	500	ug/L	99.3	90.0 – 110.0	P	25-MAR-10 13:50	032510A-1
	Cobalt	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	25-MAR-10 13:50	032510A-1
	Copper	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	25-MAR-10 13:50	032510A-1
	Iron	5140	ug/L	5000	ug/L	102.7	90.0 – 110.0	P	25-MAR-10 13:50	032510A-1
	Lead	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	25-MAR-10 13:50	032510A-1
	Magnesium	5280	ug/L	5000	ug/L	105.6	90.0 – 110.0	P	25-MAR-10 13:50	032510A-1
	Manganese	499	ug/L	500	ug/L	99.8	90.0 – 110.0	P	25-MAR-10 13:50	032510A-1
	Potassium	4890	ug/L	5000	ug/L	97.9	90.0 – 110.0	P	25-MAR-10 13:50	032510A-1
	Silver	506	ug/L	500	ug/L	101.3	90.0 – 110.0	P	25-MAR-10 13:50	032510A-1
	Sodium	10100	ug/L	10000	ug/L	101.1	90.0 – 110.0	P	25-MAR-10 13:50	032510A-1
	Vanadium	502	ug/L	500	ug/L	100.5	90.0 – 110.0	P	25-MAR-10 13:50	032510A-1
	Zinc	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	25-MAR-10 13:50	032510A-1
CCV07	Mercury	5.13	ug/L	5	ug/L	102.7	80.0 – 120.0	AV	15-MAR-10 11:20	031510S1-5
	Aluminum	5030	ug/L	5000	ug/L	100.6	90.0 – 110.0	P	25-MAR-10 15:00	032510A-1
	Antimony	521	ug/L	500	ug/L	104.1	90.0 – 110.0	P	25-MAR-10 15:00	032510A-1
	Barium	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	25-MAR-10 15:00	032510A-1
	Cadmium	494	ug/L	500	ug/L	98.7	90.0 – 110.0	P	25-MAR-10 15:00	032510A-1
	Calcium	5060	ug/L	5000	ug/L	101.2	90.0 – 110.0	P	25-MAR-10 15:00	032510A-1
	Chromium	491	ug/L	500	ug/L	98.2	90.0 – 110.0	P	25-MAR-10 15:00	032510A-1
	Cobalt	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	25-MAR-10 15:00	032510A-1
	Copper	491	ug/L	500	ug/L	98.2	90.0 – 110.0	P	25-MAR-10 15:00	032510A-1
	Iron	5070	ug/L	5000	ug/L	101.5	90.0 – 110.0	P	25-MAR-10 15:00	032510A-1
	Lead	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	25-MAR-10 15:00	032510A-1
	Magnesium	5150	ug/L	5000	ug/L	103.1	90.0 – 110.0	P	25-MAR-10 15:00	032510A-1
	Manganese	486	ug/L	500	ug/L	97.2	90.0 – 110.0	P	25-MAR-10 15:00	032510A-1
	Potassium	4910	ug/L	5000	ug/L	98.3	90.0 – 110.0	P	25-MAR-10 15:00	032510A-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-2069-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Silver	503	ug/L	500	ug/L	100.5	90.0 - 110.0	P	25-MAR-10 15:00	032510A-1
	Sodium	9660	ug/L	10000	ug/L	96.6	90.0 - 110.0	P	25-MAR-10 15:00	032510A-1
	Vanadium	498	ug/L	500	ug/L	99.7	90.0 - 110.0	P	25-MAR-10 15:00	032510A-1
	Zinc	489	ug/L	500	ug/L	97.9	90.0 - 110.0	P	25-MAR-10 15:00	032510A-1
CCV08										
	Mercury	5.16	ug/L	5	ug/L	103.2	80.0 - 120.0	AV	15-MAR-10 11:40	031510S1-5
	Aluminum	4900	ug/L	5000	ug/L	98	90.0 - 110.0	P	25-MAR-10 16:11	032510A-1
	Antimony	519	ug/L	500	ug/L	103.8	90.0 - 110.0	P	25-MAR-10 16:11	032510A-1
	Barium	494	ug/L	500	ug/L	98.8	90.0 - 110.0	P	25-MAR-10 16:11	032510A-1
	Cadmium	495	ug/L	500	ug/L	99	90.0 - 110.0	P	25-MAR-10 16:11	032510A-1
	Calcium	5070	ug/L	5000	ug/L	101.4	90.0 - 110.0	P	25-MAR-10 16:11	032510A-1
	Chromium	492	ug/L	500	ug/L	98.4	90.0 - 110.0	P	25-MAR-10 16:11	032510A-1
	Cobalt	505	ug/L	500	ug/L	100.9	90.0 - 110.0	P	25-MAR-10 16:11	032510A-1
	Copper	491	ug/L	500	ug/L	98.2	90.0 - 110.0	P	25-MAR-10 16:11	032510A-1
	Iron	5160	ug/L	5000	ug/L	103.2	90.0 - 110.0	P	25-MAR-10 16:11	032510A-1
	Lead	488	ug/L	500	ug/L	97.7	90.0 - 110.0	P	25-MAR-10 16:11	032510A-1
	Magnesium	5190	ug/L	5000	ug/L	103.9	90.0 - 110.0	P	25-MAR-10 16:11	032510A-1
	Manganese	487	ug/L	500	ug/L	97.3	90.0 - 110.0	P	25-MAR-10 16:11	032510A-1
	Potassium	4820	ug/L	5000	ug/L	96.4	90.0 - 110.0	P	25-MAR-10 16:11	032510A-1
	Silver	503	ug/L	500	ug/L	100.7	90.0 - 110.0	P	25-MAR-10 16:11	032510A-1
	Sodium	9870	ug/L	10000	ug/L	98.7	90.0 - 110.0	P	25-MAR-10 16:11	032510A-1
	Vanadium	499	ug/L	500	ug/L	99.7	90.0 - 110.0	P	25-MAR-10 16:11	032510A-1
	Zinc	490	ug/L	500	ug/L	97.9	90.0 - 110.0	P	25-MAR-10 16:11	032510A-1
CCV09										
	Mercury	5.16	ug/L	5	ug/L	103.1	80.0 - 120.0	AV	15-MAR-10 12:01	031510S1-5
	Aluminum	4960	ug/L	5000	ug/L	99.3	90.0 - 110.0	P	25-MAR-10 16:32	032510A-1
	Antimony	519	ug/L	500	ug/L	103.8	90.0 - 110.0	P	25-MAR-10 16:32	032510A-1
	Barium	493	ug/L	500	ug/L	98.7	90.0 - 110.0	P	25-MAR-10 16:32	032510A-1
	Cadmium	493	ug/L	500	ug/L	98.7	90.0 - 110.0	P	25-MAR-10 16:32	032510A-1
	Calcium	5000	ug/L	5000	ug/L	100	90.0 - 110.0	P	25-MAR-10 16:32	032510A-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-2069-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Chromium	493	ug/L	500	ug/L	98.6	90.0 - 110.0	P	25-MAR-10 16:32	032510A-1
	Cobalt	504	ug/L	500	ug/L	100.9	90.0 - 110.0	P	25-MAR-10 16:32	032510A-1
	Copper	493	ug/L	500	ug/L	98.6	90.0 - 110.0	P	25-MAR-10 16:32	032510A-1
	Iron	5060	ug/L	5000	ug/L	101.3	90.0 - 110.0	P	25-MAR-10 16:32	032510A-1
	Lead	491	ug/L	500	ug/L	98.1	90.0 - 110.0	P	25-MAR-10 16:32	032510A-1
	Magnesium	5090	ug/L	5000	ug/L	101.9	90.0 - 110.0	P	25-MAR-10 16:32	032510A-1
	Manganesec	487	ug/L	500	ug/L	97.3	90.0 - 110.0	P	25-MAR-10 16:32	032510A-1
	Potassium	4860	ug/L	5000	ug/L	97.3	90.0 - 110.0	P	25-MAR-10 16:32	032510A-1
	Silver	505	ug/L	500	ug/L	100.9	90.0 - 110.0	P	25-MAR-10 16:32	032510A-1
	Sodium	10000	ug/L	10000	ug/L	100.1	90.0 - 110.0	P	25-MAR-10 16:32	032510A-1
	Vanadium	500	ug/L	500	ug/L	100	90.0 - 110.0	P	25-MAR-10 16:32	032510A-1
	Zinc	490	ug/L	500	ug/L	97.9	90.0 - 110.0	P	25-MAR-10 16:32	032510A-1
CCV10	Mercury	5.36	ug/L	5	ug/L	107.2	80.0 - 120.0	AV	15-MAR-10 12:21	031510S1-5
	Aluminum	5040	ug/L	5000	ug/L	100.9	90.0 - 110.0	P	25-MAR-10 17:36	032510A-1
	Antimony	522	ug/L	500	ug/L	104.4	90.0 - 110.0	P	25-MAR-10 17:36	032510A-1
	Barium	494	ug/L	500	ug/L	98.7	90.0 - 110.0	P	25-MAR-10 17:36	032510A-1
	Cadmium	494	ug/L	500	ug/L	98.9	90.0 - 110.0	P	25-MAR-10 17:36	032510A-1
	Calcium	5080	ug/L	5000	ug/L	101.6	90.0 - 110.0	P	25-MAR-10 17:36	032510A-1
	Chromium	492	ug/L	500	ug/L	98.4	90.0 - 110.0	P	25-MAR-10 17:36	032510A-1
	Cobalt	505	ug/L	500	ug/L	101	90.0 - 110.0	P	25-MAR-10 17:36	032510A-1
	Copper	492	ug/L	500	ug/L	98.3	90.0 - 110.0	P	25-MAR-10 17:36	032510A-1
	Iron	5140	ug/L	5000	ug/L	102.9	90.0 - 110.0	P	25-MAR-10 17:36	032510A-1
	Lead	490	ug/L	500	ug/L	97.9	90.0 - 110.0	P	25-MAR-10 17:36	032510A-1
	Magnesium	5130	ug/L	5000	ug/L	102.6	90.0 - 110.0	P	25-MAR-10 17:36	032510A-1
	Manganese	487	ug/L	500	ug/L	97.5	90.0 - 110.0	P	25-MAR-10 17:36	032510A-1
	Potassium	4970	ug/L	5000	ug/L	99.4	90.0 - 110.0	P	25-MAR-10 17:36	032510A-1
	Silver	504	ug/L	500	ug/L	100.8	90.0 - 110.0	P	25-MAR-10 17:36	032510A-1
	Sodium	9850	ug/L	10000	ug/L	98.5	90.0 - 110.0	P	25-MAR-10 17:36	032510A-1
	Vanadium	498	ug/L	500	ug/L	99.7	90.0 - 110.0	P	25-MAR-10 17:36	032510A-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-2069-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
CCV11	Zinc	490	ug/L	500	ug/L	98	90.0 - 110.0	P	25-MAR-10 17:36	032510A-1
	Mercury	5.34	ug/L	5	ug/L	106.8	80.0 - 120.0	AV	15-MAR-10 12:41	031510S1-5
	Aluminum	4880	ug/L	5000	ug/L	97.6	90.0 - 110.0	P	25-MAR-10 18:45	032510A-1
	Antimony	524	ug/L	500	ug/L	104.8	90.0 - 110.0	P	25-MAR-10 18:45	032510A-1
	Barium	493	ug/L	500	ug/L	98.6	90.0 - 110.0	P	25-MAR-10 18:45	032510A-1
	Cadmium	493	ug/L	500	ug/L	98.7	90.0 - 110.0	P	25-MAR-10 18:45	032510A-1
	Calcium	5020	ug/L	5000	ug/L	100.3	90.0 - 110.0	P	25-MAR-10 18:45	032510A-1
	Chromium	492	ug/L	500	ug/L	98.4	90.0 - 110.0	P	25-MAR-10 18:45	032510A-1
	Cobalt	504	ug/L	500	ug/L	100.8	90.0 - 110.0	P	25-MAR-10 18:45	032510A-1
	Copper	492	ug/L	500	ug/L	98.5	90.0 - 110.0	P	25-MAR-10 18:45	032510A-1
	Iron	5120	ug/L	5000	ug/L	102.3	90.0 - 110.0	P	25-MAR-10 18:45	032510A-1
	Lead	494	ug/L	500	ug/L	98.8	90.0 - 110.0	P	25-MAR-10 18:45	032510A-1
	Magnesium	5120	ug/L	5000	ug/L	102.3	90.0 - 110.0	P	25-MAR-10 18:45	032510A-1
	Manganese	486	ug/L	500	ug/L	97.3	90.0 - 110.0	P	25-MAR-10 18:45	032510A-1
	Potassium	4810	ug/L	5000	ug/L	96.1	90.0 - 110.0	P	25-MAR-10 18:45	032510A-1
	Silver	505	ug/L	500	ug/L	101	90.0 - 110.0	P	25-MAR-10 18:45	032510A-1
	Sodium	9920	ug/L	10000	ug/L	99.2	90.0 - 110.0	P	25-MAR-10 18:45	032510A-1
	Vanadium	499	ug/L	500	ug/L	99.9	90.0 - 110.0	P	25-MAR-10 18:45	032510A-1
	Zinc	489	ug/L	500	ug/L	97.9	90.0 - 110.0	P	25-MAR-10 18:45	032510A-1
CCV12	Mercury	-.04	ug/L	5	ug/L	-.8	80.0 - 120.0	AV	15-MAR-10 13:02	031510S1-5
	Aluminum	4910	ug/L	5000	ug/L	98.2	90.0 - 110.0	P	25-MAR-10 19:49	032510A-1
	Antimony	512	ug/L	500	ug/L	102.4	90.0 - 110.0	P	25-MAR-10 19:49	032510A-1
	Barium	484	ug/L	500	ug/L	96.8	90.0 - 110.0	P	25-MAR-10 19:49	032510A-1
	Cadmium	487	ug/L	500	ug/L	97.3	90.0 - 110.0	P	25-MAR-10 19:49	032510A-1
	Calcium	5040	ug/L	5000	ug/L	100.7	90.0 - 110.0	P	25-MAR-10 19:49	032510A-1
	Chromium	484	ug/L	500	ug/L	96.7	90.0 - 110.0	P	25-MAR-10 19:49	032510A-1
	Cobalt	497	ug/L	500	ug/L	99.3	90.0 - 110.0	P	25-MAR-10 19:49	032510A-1
	Copper	481	ug/L	500	ug/L	96.3	90.0 - 110.0	P	25-MAR-10 19:49	032510A-1

METALS

-2a-

Initial and Continuing Calibration Verification

SDG No: 10-2069-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Iron	5050	ug/L	5000	ug/L	101	90.0 - 110.0	P	25-MAR-10 19:49	032510A-1
	Lead	484	ug/L	500	ug/L	96.8	90.0 - 110.0	P	25-MAR-10 19:49	032510A-1
	Magnesium	5170	ug/L	5000	ug/L	103.4	90.0 - 110.0	P	25-MAR-10 19:49	032510A-1
	Manganese	478	ug/L	500	ug/L	95.5	90.0 - 110.0	P	25-MAR-10 19:49	032510A-1
	Potassium	4870	ug/L	5000	ug/L	97.5	90.0 - 110.0	P	25-MAR-10 19:49	032510A-1
	Silver	494	ug/L	500	ug/L	98.9	90.0 - 110.0	P	25-MAR-10 19:49	032510A-1
	Sodium	9740	ug/L	10000	ug/L	97.4	90.0 - 110.0	P	25-MAR-10 19:49	032510A-1
	Vanadium	490	ug/L	500	ug/L	98.1	90.0 - 110.0	P	25-MAR-10 19:49	032510A-1
	Zinc	481	ug/L	500	ug/L	96.1	90.0 - 110.0	P	25-MAR-10 19:49	032510A-1
CCV13	Mercury	5.34	ug/L	5	ug/L	106.8	80.0 - 120.0	AV	15-MAR-10 13:21	031510S1-5
	Aluminum	4860	ug/L	5000	ug/L	97.3	90.0 - 110.0	P	25-MAR-10 20:45	032510A-1
	Antimony	524	ug/L	500	ug/L	104.9	90.0 - 110.0	P	25-MAR-10 20:45	032510A-1
	Barium	496	ug/L	500	ug/L	99.2	90.0 - 110.0	P	25-MAR-10 20:45	032510A-1
	Cadmium	497	ug/L	500	ug/L	99.5	90.0 - 110.0	P	25-MAR-10 20:45	032510A-1
	Calcium	4980	ug/L	5000	ug/L	99.7	90.0 - 110.0	P	25-MAR-10 20:45	032510A-1
	Chromium	496	ug/L	500	ug/L	99.1	90.0 - 110.0	P	25-MAR-10 20:45	032510A-1
	Cobalt	507	ug/L	500	ug/L	101.4	90.0 - 110.0	P	25-MAR-10 20:45	032510A-1
	Copper	497	ug/L	500	ug/L	99.4	90.0 - 110.0	P	25-MAR-10 20:45	032510A-1
	Iron	5120	ug/L	5000	ug/L	102.4	90.0 - 110.0	P	25-MAR-10 20:45	032510A-1
	Lead	490	ug/L	500	ug/L	98	90.0 - 110.0	P	25-MAR-10 20:45	032510A-1
	Magnesium	5060	ug/L	5000	ug/L	101.1	90.0 - 110.0	P	25-MAR-10 20:45	032510A-1
	Manganese	490	ug/L	500	ug/L	98	90.0 - 110.0	P	25-MAR-10 20:45	032510A-1
	Potassium	4820	ug/L	5000	ug/L	96.5	90.0 - 110.0	P	25-MAR-10 20:45	032510A-1
	Silver	509	ug/L	500	ug/L	101.8	90.0 - 110.0	P	25-MAR-10 20:45	032510A-1
	Sodium	10200	ug/L	10000	ug/L	102	90.0 - 110.0	P	25-MAR-10 20:45	032510A-1
	Vanadium	503	ug/L	500	ug/L	100.7	90.0 - 110.0	P	25-MAR-10 20:45	032510A-1
	Zinc	493	ug/L	500	ug/L	98.6	90.0 - 110.0	P	25-MAR-10 20:45	032510A-1
CCV14	Mercury	5.36	ug/L	5	ug/L	107.2	80.0 - 120.0	AV	15-MAR-10 13:42	031510S1-5

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-2069-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Aluminum	4930	ug/L	5000	ug/L	98.6	90.0 - 110.0	P	25-MAR-10 22:02	032510A-1
	Antimony	522	ug/L	500	ug/L	104.3	90.0 - 110.0	P	25-MAR-10 22:02	032510A-1
	Barium	489	ug/L	500	ug/L	97.7	90.0 - 110.0	P	25-MAR-10 22:02	032510A-1
	Cadmium	490	ug/L	500	ug/L	98	90.0 - 110.0	P	25-MAR-10 22:02	032510A-1
	Calcium	5020	ug/L	5000	ug/L	100.4	90.0 - 110.0	P	25-MAR-10 22:02	032510A-1
	Chromium	487	ug/L	500	ug/L	97.5	90.0 - 110.0	P	25-MAR-10 22:02	032510A-1
	Cobalt	501	ug/L	500	ug/L	100.2	90.0 - 110.0	P	25-MAR-10 22:02	032510A-1
	Copper	489	ug/L	500	ug/L	97.7	90.0 - 110.0	P	25-MAR-10 22:02	032510A-1
	Iron	5300	ug/L	5000	ug/L	106	90.0 - 110.0	P	25-MAR-10 22:02	032510A-1
	Lead	487	ug/L	500	ug/L	97.5	90.0 - 110.0	P	25-MAR-10 22:02	032510A-1
	Magnesium	5200	ug/L	5000	ug/L	104	90.0 - 110.0	P	25-MAR-10 22:02	032510A-1
	Manganese	483	ug/L	500	ug/L	96.6	90.0 - 110.0	P	25-MAR-10 22:02	032510A-1
	Potassium	4970	ug/L	5000	ug/L	99.3	90.0 - 110.0	P	25-MAR-10 22:02	032510A-1
	Silver	502	ug/L	500	ug/L	100.3	90.0 - 110.0	P	25-MAR-10 22:02	032510A-1
	Sodium	10700	ug/L	10000	ug/L	106.9	90.0 - 110.0	P	25-MAR-10 22:02	032510A-1
	Vanadium	495	ug/L	500	ug/L	99	90.0 - 110.0	P	25-MAR-10 22:02	032510A-1
	Zinc	484	ug/L	500	ug/L	96.9	90.0 - 110.0	P	25-MAR-10 22:02	032510A-1
CCV15	Mercury	5.38	ug/L	5	ug/L	107.6	80.0 - 120.0	AV	15-MAR-10 14:02	031510S1-5
	Aluminum	4860	ug/L	5000	ug/L	97.2	90.0 - 110.0	P	25-MAR-10 23:20	032510A-1
	Antimony	527	ug/L	500	ug/L	105.5	90.0 - 110.0	P	25-MAR-10 23:20	032510A-1
	Barium	496	ug/L	500	ug/L	99.3	90.0 - 110.0	P	25-MAR-10 23:20	032510A-1
	Cadmium	500	ug/L	500	ug/L	100	90.0 - 110.0	P	25-MAR-10 23:20	032510A-1
	Calcium	5000	ug/L	5000	ug/L	100.1	90.0 - 110.0	P	25-MAR-10 23:20	032510A-1
	Chromium	496	ug/L	500	ug/L	99.1	90.0 - 110.0	P	25-MAR-10 23:20	032510A-1
	Cobalt	510	ug/L	500	ug/L	102	90.0 - 110.0	P	25-MAR-10 23:20	032510A-1
	Copper	495	ug/L	500	ug/L	99.1	90.0 - 110.0	P	25-MAR-10 23:20	032510A-1
	Iron	5050	ug/L	5000	ug/L	100.9	90.0 - 110.0	P	25-MAR-10 23:20	032510A-1
	Lead	497	ug/L	500	ug/L	99.5	90.0 - 110.0	P	25-MAR-10 23:20	032510A-1
	Magnesium	5020	ug/L	5000	ug/L	100.5	90.0 - 110.0	P	25-MAR-10 23:20	032510A-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-2069-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Manganese	500	ug/L	500	ug/L	100.1	90.0 – 110.0	P	25-MAR-10 23:20	032510A-1
	Potassium	4870	ug/L	5000	ug/L	97.4	90.0 – 110.0	P	25-MAR-10 23:20	032510A-1
	Silver	508	ug/L	500	ug/L	101.7	90.0 – 110.0	P	25-MAR-10 23:20	032510A-1
	Sodium	9970	ug/L	10000	ug/L	99.7	90.0 – 110.0	P	25-MAR-10 23:20	032510A-1
	Vanadium	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	25-MAR-10 23:20	032510A-1
	Zinc	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	25-MAR-10 23:20	032510A-1
CCV16										
	Mercury	5.37	ug/L	5	ug/L	107.5	80.0 – 120.0	AV	15-MAR-10 14:16	031510S1-5
	Aluminum	4810	ug/L	5000	ug/L	96.2	90.0 – 110.0	P	26-MAR-10 00:31	032510A-1
	Antimony	526	ug/L	500	ug/L	105.1	90.0 – 110.0	P	26-MAR-10 00:31	032510A-1
	Barium	495	ug/L	500	ug/L	99.1	90.0 – 110.0	P	26-MAR-10 00:31	032510A-1
	Cadmium	500	ug/L	500	ug/L	100	90.0 – 110.0	P	26-MAR-10 00:31	032510A-1
	Calcium	4970	ug/L	5000	ug/L	99.4	90.0 – 110.0	P	26-MAR-10 00:31	032510A-1
	Chromium	495	ug/L	500	ug/L	98.9	90.0 – 110.0	P	26-MAR-10 00:31	032510A-1
	Cobalt	509	ug/L	500	ug/L	101.8	90.0 – 110.0	P	26-MAR-10 00:31	032510A-1
	Copper	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	26-MAR-10 00:31	032510A-1
	Iron	5090	ug/L	5000	ug/L	101.9	90.0 – 110.0	P	26-MAR-10 00:31	032510A-1
	Lead	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	26-MAR-10 00:31	032510A-1
	Magnesium	5020	ug/L	5000	ug/L	100.5	90.0 – 110.0	P	26-MAR-10 00:31	032510A-1
	Manganese	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	26-MAR-10 00:31	032510A-1
	Potassium	4830	ug/L	5000	ug/L	96.6	90.0 – 110.0	P	26-MAR-10 00:31	032510A-1
	Silver	507	ug/L	500	ug/L	101.5	90.0 – 110.0	P	26-MAR-10 00:31	032510A-1
	Sodium	10300	ug/L	10000	ug/L	103.4	90.0 – 110.0	P	26-MAR-10 00:31	032510A-1
	Vanadium	503	ug/L	500	ug/L	100.5	90.0 – 110.0	P	26-MAR-10 00:31	032510A-1
	Zinc	492	ug/L	500	ug/L	98.4	90.0 – 110.0	P	26-MAR-10 00:31	032510A-1
CCV17										
	Aluminum	4780	ug/L	5000	ug/L	95.6	90.0 – 110.0	P	26-MAR-10 01:34	032510A-1
	Antimony	538	ug/L	500	ug/L	107.6	90.0 – 110.0	P	26-MAR-10 01:34	032510A-1
	Barium	503	ug/L	500	ug/L	100.7	90.0 – 110.0	P	26-MAR-10 01:34	032510A-1
	Cadmium	509	ug/L	500	ug/L	101.8	90.0 – 110.0	P	26-MAR-10 01:34	032510A-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-2069-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Calcium	5010	ug/L	5000	ug/L	100.2	90.0 - 110.0	P	26-MAR-10 01:34	032510A-1
	Chromium	504	ug/L	500	ug/L	100.8	90.0 - 110.0	P	26-MAR-10 01:34	032510A-1
	Cobalt	519	ug/L	500	ug/L	103.8	90.0 - 110.0	P	26-MAR-10 01:34	032510A-1
	Copper	502	ug/L	500	ug/L	100.4	90.0 - 110.0	P	26-MAR-10 01:34	032510A-1
	Iron	5090	ug/L	5000	ug/L	101.8	90.0 - 110.0	P	26-MAR-10 01:34	032510A-1
	Lead	504	ug/L	500	ug/L	100.8	90.0 - 110.0	P	26-MAR-10 01:34	032510A-1
	Magnesium	5070	ug/L	5000	ug/L	101.3	90.0 - 110.0	P	26-MAR-10 01:34	032510A-1
	Manganese	507	ug/L	500	ug/L	101.3	90.0 - 110.0	P	26-MAR-10 01:34	032510A-1
	Potassium	4780	ug/L	5000	ug/L	95.5	90.0 - 110.0	P	26-MAR-10 01:34	032510A-1
	Silver	515	ug/L	500	ug/L	103.1	90.0 - 110.0	P	26-MAR-10 01:34	032510A-1
	Sodium	10000	ug/L	10000	ug/L	100.5	90.0 - 110.0	P	26-MAR-10 01:34	032510A-1
	Vanadium	511	ug/L	500	ug/L	102.1	90.0 - 110.0	P	26-MAR-10 01:34	032510A-1
	Zinc	501	ug/L	500	ug/L	100.1	90.0 - 110.0	P	26-MAR-10 01:34	032510A-1
CCV18	Aluminum	4900	ug/L	5000	ug/L	98	90.0 - 110.0	P	26-MAR-10 02:45	032510A-1
	Antimony	541	ug/L	500	ug/L	108.3	90.0 - 110.0	P	26-MAR-10 02:45	032510A-1
	Barium	507	ug/L	500	ug/L	101.4	90.0 - 110.0	P	26-MAR-10 02:45	032510A-1
	Cadmium	513	ug/L	500	ug/L	102.6	90.0 - 110.0	P	26-MAR-10 02:45	032510A-1
	Calcium	5100	ug/L	5000	ug/L	102	90.0 - 110.0	P	26-MAR-10 02:45	032510A-1
	Chromium	507	ug/L	500	ug/L	101.4	90.0 - 110.0	P	26-MAR-10 02:45	032510A-1
	Cobalt	522	ug/L	500	ug/L	104.5	90.0 - 110.0	P	26-MAR-10 02:45	032510A-1
	Copper	506	ug/L	500	ug/L	101.3	90.0 - 110.0	P	26-MAR-10 02:45	032510A-1
	Iron	5150	ug/L	5000	ug/L	103	90.0 - 110.0	P	26-MAR-10 02:45	032510A-1
	Lead	505	ug/L	500	ug/L	101	90.0 - 110.0	P	26-MAR-10 02:45	032510A-1
	Magnesium	5270	ug/L	5000	ug/L	105.5	90.0 - 110.0	P	26-MAR-10 02:45	032510A-1
	Manganese	506	ug/L	500	ug/L	101.2	90.0 - 110.0	P	26-MAR-10 02:45	032510A-1
	Potassium	4910	ug/L	5000	ug/L	98.3	90.0 - 110.0	P	26-MAR-10 02:45	032510A-1
	Silver	520	ug/L	500	ug/L	103.9	90.0 - 110.0	P	26-MAR-10 02:45	032510A-1
	Sodium	10000	ug/L	10000	ug/L	100.5	90.0 - 110.0	P	26-MAR-10 02:45	032510A-1
	Vanadium	514	ug/L	500	ug/L	102.9	90.0 - 110.0	P	26-MAR-10 02:45	032510A-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-2069-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,JCPMS5,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>
CCV19	Zinc	505	ug/L	500	ug/L	101	90.0 – 110.0	P	26-MAR-10 02:45	032510A-1
	Aluminum	4740	ug/L	5000	ug/L	94.8	90.0 – 110.0	P	26-MAR-10 03:55	032510A-1
	Antimony	549	ug/L	500	ug/L	109.8	90.0 – 110.0	P	26-MAR-10 03:55	032510A-1
	Barium	510	ug/L	500	ug/L	102.1	90.0 – 110.0	P	26-MAR-10 03:55	032510A-1
	Cadmium	516	ug/L	500	ug/L	103.1	90.0 – 110.0	P	26-MAR-10 03:55	032510A-1
	Calcium	4940	ug/L	5000	ug/L	98.8	90.0 – 110.0	P	26-MAR-10 03:55	032510A-1
	Chromium	511	ug/L	500	ug/L	102.1	90.0 – 110.0	P	26-MAR-10 03:55	032510A-1
	Cobalt	526	ug/L	500	ug/L	105.2	90.0 – 110.0	P	26-MAR-10 03:55	032510A-1
	Copper	509	ug/L	500	ug/L	101.7	90.0 – 110.0	P	26-MAR-10 03:55	032510A-1
	Iron	5050	ug/L	5000	ug/L	100.9	90.0 – 110.0	P	26-MAR-10 03:55	032510A-1
	Lead	514	ug/L	500	ug/L	102.9	90.0 – 110.0	P	26-MAR-10 03:55	032510A-1
	Magnesium	5070	ug/L	5000	ug/L	101.4	90.0 – 110.0	P	26-MAR-10 03:55	032510A-1
	Manganese	518	ug/L	500	ug/L	103.5	90.0 – 110.0	P	26-MAR-10 03:55	032510A-1
	Potassium	4740	ug/L	5000	ug/L	94.9	90.0 – 110.0	P	26-MAR-10 03:55	032510A-1
	Silver	523	ug/L	500	ug/L	104.5	90.0 – 110.0	P	26-MAR-10 03:55	032510A-1
	Sodium	10400	ug/L	10000	ug/L	104.1	90.0 – 110.0	P	26-MAR-10 03:55	032510A-1
	Vanadium	517	ug/L	500	ug/L	103.5	90.0 – 110.0	P	26-MAR-10 03:55	032510A-1
	Zinc	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	26-MAR-10 03:55	032510A-1
CCV20	Aluminum	4910	ug/L	5000	ug/L	98.2	90.0 – 110.0	P	26-MAR-10 04:58	032510A-1
	Antimony	541	ug/L	500	ug/L	108.1	90.0 – 110.0	P	26-MAR-10 04:58	032510A-1
	Barium	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	26-MAR-10 04:58	032510A-1
	Cadmium	509	ug/L	500	ug/L	101.8	90.0 – 110.0	P	26-MAR-10 04:58	032510A-1
	Calcium	5100	ug/L	5000	ug/L	102	90.0 – 110.0	P	26-MAR-10 04:58	032510A-1
	Chromium	503	ug/L	500	ug/L	100.5	90.0 – 110.0	P	26-MAR-10 04:58	032510A-1
	Cobalt	518	ug/L	500	ug/L	103.7	90.0 – 110.0	P	26-MAR-10 04:58	032510A-1
	Copper	500	ug/L	500	ug/L	99.9	90.0 – 110.0	P	26-MAR-10 04:58	032510A-1
	Iron	5220	ug/L	5000	ug/L	104.5	90.0 – 110.0	P	26-MAR-10 04:58	032510A-1
	Lead	506	ug/L	500	ug/L	101.1	90.0 – 110.0	P	26-MAR-10 04:58	032510A-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-2069-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
CCV21	Magnesium	5290	ug/L	5000	ug/L	105.8	90.0 – 110.0	P	26-MAR-10 04:58	032510A-1
	Manganese	505	ug/L	500	ug/L	101.1	90.0 – 110.0	P	26-MAR-10 04:58	032510A-1
	Potassium	4920	ug/L	5000	ug/L	98.4	90.0 – 110.0	P	26-MAR-10 04:58	032510A-1
	Silver	515	ug/L	500	ug/L	102.9	90.0 – 110.0	P	26-MAR-10 04:58	032510A-1
	Sodium	10600	ug/L	10000	ug/L	106.2	90.0 – 110.0	P	26-MAR-10 04:58	032510A-1
	Vanadium	509	ug/L	500	ug/L	101.9	90.0 – 110.0	P	26-MAR-10 04:58	032510A-1
	Zinc	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	26-MAR-10 04:58	032510A-1
CCV21	Aluminum	4890	ug/L	5000	ug/L	97.7	90.0 – 110.0	P	26-MAR-10 06:09	032510A-1
	Antimony	534	ug/L	500	ug/L	106.8	90.0 – 110.0	P	26-MAR-10 06:09	032510A-1
	Barium	500	ug/L	500	ug/L	99.9	90.0 – 110.0	P	26-MAR-10 06:09	032510A-1
	Cadmium	506	ug/L	500	ug/L	101.2	90.0 – 110.0	P	26-MAR-10 06:09	032510A-1
	Calcium	5080	ug/L	5000	ug/L	101.7	90.0 – 110.0	P	26-MAR-10 06:09	032510A-1
	Chromium	501	ug/L	500	ug/L	100.1	90.0 – 110.0	P	26-MAR-10 06:09	032510A-1
	Cobalt	515	ug/L	500	ug/L	102.9	90.0 – 110.0	P	26-MAR-10 06:09	032510A-1
	Copper	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	26-MAR-10 06:09	032510A-1
	Iron	5210	ug/L	5000	ug/L	104.1	90.0 – 110.0	P	26-MAR-10 06:09	032510A-1
	Lead	500	ug/L	500	ug/L	100	90.0 – 110.0	P	26-MAR-10 06:09	032510A-1
	Magnesium	5240	ug/L	5000	ug/L	104.8	90.0 – 110.0	P	26-MAR-10 06:09	032510A-1
	Manganese	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	26-MAR-10 06:09	032510A-1
	Potassium	4860	ug/L	5000	ug/L	97.3	90.0 – 110.0	P	26-MAR-10 06:09	032510A-1
	Silver	513	ug/L	500	ug/L	102.6	90.0 – 110.0	P	26-MAR-10 06:09	032510A-1
	Sodium	10600	ug/L	10000	ug/L	106	90.0 – 110.0	P	26-MAR-10 06:09	032510A-1
	Vanadium	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	26-MAR-10 06:09	032510A-1
	Zinc	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	26-MAR-10 06:09	032510A-1
CCV22	Aluminum	4680	ug/L	5000	ug/L	93.6	90.0 – 110.0	P	26-MAR-10 07:21	032510A-1
	Antimony	539	ug/L	500	ug/L	107.9	90.0 – 110.0	P	26-MAR-10 07:21	032510A-1
	Barium	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	26-MAR-10 07:21	032510A-1
	Cadmium	507	ug/L	500	ug/L	101.5	90.0 – 110.0	P	26-MAR-10 07:21	032510A-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-2069-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Calcium	5000	ug/L	5000	ug/L	100	90.0 – 110.0	P	26-MAR-10 07:21	032510A-1
	Chromium	498	ug/L	500	ug/L	99.7	90.0 – 110.0	P	26-MAR-10 07:21	032510A-1
	Cobalt	514	ug/L	500	ug/L	102.8	90.0 – 110.0	P	26-MAR-10 07:21	032510A-1
	Copper	492	ug/L	500	ug/L	98.4	90.0 – 110.0	P	26-MAR-10 07:21	032510A-1
	Iron	5080	ug/L	5000	ug/L	101.6	90.0 – 110.0	P	26-MAR-10 07:21	032510A-1
	Lead	502	ug/L	500	ug/L	100.3	90.0 – 110.0	P	26-MAR-10 07:21	032510A-1
	Magnesium	5140	ug/L	5000	ug/L	102.8	90.0 – 110.0	P	26-MAR-10 07:21	032510A-1
	Manganese	491	ug/L	500	ug/L	98.1	90.0 – 110.0	P	26-MAR-10 07:21	032510A-1
	Potassium	4620	ug/L	5000	ug/L	92.4	90.0 – 110.0	P	26-MAR-10 07:21	032510A-1
	Silver	508	ug/L	500	ug/L	101.5	90.0 – 110.0	P	26-MAR-10 07:21	032510A-1
	Sodium	9830	ug/L	10000	ug/L	98.3	90.0 – 110.0	P	26-MAR-10 07:21	032510A-1
	Vanadium	504	ug/L	500	ug/L	100.8	90.0 – 110.0	P	26-MAR-10 07:21	032510A-1
	Zinc	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	26-MAR-10 07:21	032510A-1

METALS
-2b-
CRDL Standard for AA & ICP

SDG No: 10-2069-1

Contract: LANL01004

Lab Code: GEL

AA CRDL Standard Source: SPEX

ICP CRDL Standard Source Solutions Plus

Instrument ID: HG3,ICPMS5,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Advisory Limits (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
CRDL01										
	Mercury	.169	ug/L	.2	ug/L	84.5	70.0 – 130.0	AV	15-MAR-10 09:18	031510S1-5
	Nickel	2.34	ug/L	2	ug/L	116.8	70.0 – 130.0	MS	11-APR-10 21:57	100411-2
	Thallium	1.3	ug/L	1	ug/L	129.7	70.0 – 130.0	MS	11-APR-10 21:57	100411-2
	Beryllium	.559	ug/L	.5	ug/L	111.8	70.0 – 130.0	MS	11-APR-10 21:57	100411-2
	Selenium	5.57	ug/L	5	ug/L	111.3	70.0 – 130.0	MS	11-APR-10 21:57	100411-2
	Arsenic	5.71	ug/L	5	ug/L	114.1	70.0 – 130.0	MS	11-APR-10 21:57	100411-2
	Uranium	.22	ug/L	.2	ug/L	110	70.0 – 130.0	MS	12-APR-10 13:15	100412-3
	Uranium	.216	ug/L	.2	ug/L	108	70.0 – 130.0	MS	12-APR-10 15:26	100412-4
PQL01										
	Aluminum	223	ug/L	200	ug/L	111.6	70.0 – 130.0	P	25-MAR-10 08:23	032510A-1
	Iron	82.5	ug/L	100	ug/L	82.5	70.0 – 130.0	P	25-MAR-10 08:23	032510A-1
	Lead	10.6	ug/L	10	ug/L	106.2	70.0 – 130.0	P	25-MAR-10 08:23	032510A-1
	Magnesium	357	ug/L	300	ug/L	118.9	70.0 – 130.0	P	25-MAR-10 08:23	032510A-1
	Manganese	10.9	ug/L	10	ug/L	108.6	70.0 – 130.0	P	25-MAR-10 08:23	032510A-1
	Potassium	147	ug/L	150	ug/L	98.3	70.0 – 130.0	P	25-MAR-10 08:23	032510A-1
	Silver	4.86	ug/L	5	ug/L	97.2	70.0 – 130.0	P	25-MAR-10 08:23	032510A-1
	Sodium	279	ug/L	300	ug/L	93.1	70.0 – 130.0	P	25-MAR-10 08:23	032510A-1
	Antimony	10.4	ug/L	10	ug/L	104.1	70.0 – 130.0	P	25-MAR-10 08:23	032510A-1
	Barium	5.26	ug/L	5	ug/L	105.3	70.0 – 130.0	P	25-MAR-10 08:23	032510A-1
	Cadmium	5.18	ug/L	5	ug/L	103.6	70.0 – 130.0	P	25-MAR-10 08:23	032510A-1
	Chromium	5.32	ug/L	5	ug/L	106.4	70.0 – 130.0	P	25-MAR-10 08:23	032510A-1
	Cobalt	5.21	ug/L	5	ug/L	104.3	70.0 – 130.0	P	25-MAR-10 08:23	032510A-1
	Copper	10.8	ug/L	10	ug/L	107.5	70.0 – 130.0	P	25-MAR-10 08:23	032510A-1
	Vanadium	5.24	ug/L	5	ug/L	104.9	70.0 – 130.0	P	25-MAR-10 08:23	032510A-1
	Zinc	11.9	ug/L	10	ug/L	118.5	70.0 – 130.0	P	25-MAR-10 08:23	032510A-1
	Calcium	221	ug/L	200	ug/L	110.6	70.0 – 130.0	P	25-MAR-10 08:23	032510A-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-2069-1

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	15-MAR-10 09:16	031510S1-5
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	25-MAR-10 08:16	032510A-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	25-MAR-10 08:16	032510A-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	25-MAR-10 08:16	032510A-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	25-MAR-10 08:16	032510A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	25-MAR-10 08:16	032510A-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	25-MAR-10 08:16	032510A-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	25-MAR-10 08:16	032510A-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	25-MAR-10 08:16	032510A-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	25-MAR-10 08:16	032510A-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	25-MAR-10 08:16	032510A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	25-MAR-10 08:16	032510A-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	25-MAR-10 08:16	032510A-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	25-MAR-10 08:16	032510A-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	25-MAR-10 08:16	032510A-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	25-MAR-10 08:16	032510A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	25-MAR-10 08:16	032510A-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	25-MAR-10 08:16	032510A-1
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	11-APR-10 21:54	100411-2
	Beryllium	0.1	+/- .5	U	0.1	0.5	SOL	MS	11-APR-10 21:54	100411-2
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	11-APR-10 21:54	100411-2
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	11-APR-10 21:54	100411-2
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	11-APR-10 21:54	100411-2
	Uranium	0.066	+/- .2	U	0.066	0.2	SOL	MS	12-APR-10 13:13	100412-3
	Uranium	0.066	+/- .2	U	0.066	0.2	SOL	MS	12-APR-10 15:24	100412-4
CCB01										
	Mercury	0.068	+/- .2	U	0.068	0.2	SOL	AV	15-MAR-10 09:21	031510S1-5
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	25-MAR-10 09:04	032510A-1
	Antimony	3.82	+/-10	J	3.3	10.0	SOL	P	25-MAR-10 09:04	032510A-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	25-MAR-10 09:04	032510A-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	25-MAR-10 09:04	032510A-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-2069-1

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>
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	25-MAR-10 09:04	032510A-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	25-MAR-10 09:04	032510A-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	25-MAR-10 09:04	032510A-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	25-MAR-10 09:04	032510A-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	25-MAR-10 09:04	032510A-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	25-MAR-10 09:04	032510A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	25-MAR-10 09:04	032510A-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	25-MAR-10 09:04	032510A-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	25-MAR-10 09:04	032510A-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	25-MAR-10 09:04	032510A-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	25-MAR-10 09:04	032510A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	25-MAR-10 09:04	032510A-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	25-MAR-10 09:04	032510A-1
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	11-APR-10 22:10	100411-2
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	11-APR-10 22:10	100411-2
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	11-APR-10 22:10	100411-2
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	11-APR-10 22:10	100411-2
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	11-APR-10 22:10	100411-2
	Uranium	0.066	+/-2	U	0.066	0.2	SOL	MS	12-APR-10 13:21	100412-3
	Uranium	0.066	+/-2	U	0.066	0.2	SOL	MS	12-APR-10 15:32	100412-4
CCB02	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	15-MAR-10 09:41	031510S1-5
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	25-MAR-10 09:31	032510A-1
	Antimony	4.02	+/-10	U	3.3	10.0	SOL	P	25-MAR-10 09:31	032510A-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	25-MAR-10 09:31	032510A-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	25-MAR-10 09:31	032510A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	25-MAR-10 09:31	032510A-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	25-MAR-10 09:31	032510A-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	25-MAR-10 09:31	032510A-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	25-MAR-10 09:31	032510A-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	25-MAR-10 09:31	032510A-1

Metals
--3a--
Initial and Continuing Calibration Blank Summary

SDG No.: 10-2069-1

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>
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	25-MAR-10 09:31	032510A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	25-MAR-10 09:31	032510A-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	25-MAR-10 09:31	032510A-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	25-MAR-10 09:31	032510A-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	25-MAR-10 09:31	032510A-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	25-MAR-10 09:31	032510A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	25-MAR-10 09:31	032510A-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	25-MAR-10 09:31	032510A-1
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	11-APR-10 22:38	100411-2
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	11-APR-10 22:38	100411-2
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	11-APR-10 22:38	100411-2
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	11-APR-10 22:38	100411-2
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	11-APR-10 22:38	100411-2
	Uranium	0.066	+/-2	U	0.066	0.2	SOL	MS	12-APR-10 13:37	100412-3
	Uranium	0.066	+/-2	U	0.066	0.2	SOL	MS	12-APR-10 15:47	100412-4
CCB03	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	15-MAR-10 10:01	031510SI-5
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	25-MAR-10 10:21	032510A-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	25-MAR-10 10:21	032510A-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	25-MAR-10 10:21	032510A-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	25-MAR-10 10:21	032510A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	25-MAR-10 10:21	032510A-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	25-MAR-10 10:21	032510A-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	25-MAR-10 10:21	032510A-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	25-MAR-10 10:21	032510A-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	25-MAR-10 10:21	032510A-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	25-MAR-10 10:21	032510A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	25-MAR-10 10:21	032510A-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	25-MAR-10 10:21	032510A-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	25-MAR-10 10:21	032510A-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	25-MAR-10 10:21	032510A-1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-2069-1

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	25-MAR-10 10:21	032510A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	25-MAR-10 10:21	032510A-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	25-MAR-10 10:21	032510A-1
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	11-APR-10 23:08	100411-2
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	11-APR-10 23:08	100411-2
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	11-APR-10 23:08	100411-2
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	11-APR-10 23:08	100411-2
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	11-APR-10 23:08	100411-2
	Uranium	0.066	+/-2	U	0.066	0.2	SOL	MS	12-APR-10 13:54	100412-3
CCB04	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	15-MAR-10 10:22	031510S1-5
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	25-MAR-10 11:31	032510A-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	25-MAR-10 11:31	032510A-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	25-MAR-10 11:31	032510A-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	25-MAR-10 11:31	032510A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	25-MAR-10 11:31	032510A-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	25-MAR-10 11:31	032510A-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	25-MAR-10 11:31	032510A-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	25-MAR-10 11:31	032510A-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	25-MAR-10 11:31	032510A-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	25-MAR-10 11:31	032510A-1
	Magnesium	95.12	+/-300	J	85.0	300	SOL	P	25-MAR-10 11:31	032510A-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	25-MAR-10 11:31	032510A-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	25-MAR-10 11:31	032510A-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	25-MAR-10 11:31	032510A-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	25-MAR-10 11:31	032510A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	25-MAR-10 11:31	032510A-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	25-MAR-10 11:31	032510A-1
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	11-APR-10 23:39	100411-2
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	11-APR-10 23:39	100411-2
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	11-APR-10 23:39	100411-2

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-2069-1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	11-APR-10 23:39	100411-2
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	11-APR-10 23:39	100411-2
	Uranium	0.066	+/-2	U	0.066	0.2	SOL	MS	12-APR-10 14:10	100412-3
CCB05	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	15-MAR-10 10:42	031510S1-5
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	25-MAR-10 12:50	032510A-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	25-MAR-10 12:50	032510A-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	25-MAR-10 12:50	032510A-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	25-MAR-10 12:50	032510A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	25-MAR-10 12:50	032510A-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	25-MAR-10 12:50	032510A-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	25-MAR-10 12:50	032510A-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	25-MAR-10 12:50	032510A-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	25-MAR-10 12:50	032510A-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	25-MAR-10 12:50	032510A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	25-MAR-10 12:50	032510A-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	25-MAR-10 12:50	032510A-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	25-MAR-10 12:50	032510A-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	25-MAR-10 12:50	032510A-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	25-MAR-10 12:50	032510A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	25-MAR-10 12:50	032510A-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	25-MAR-10 12:50	032510A-1
CCB06	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	15-MAR-10 11:02	031510S1-5
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	25-MAR-10 13:57	032510A-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	25-MAR-10 13:57	032510A-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	25-MAR-10 13:57	032510A-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	25-MAR-10 13:57	032510A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	25-MAR-10 13:57	032510A-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	25-MAR-10 13:57	032510A-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	25-MAR-10 13:57	032510A-1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-2069-1

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>
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	25-MAR-10 13:57	032510A-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	25-MAR-10 13:57	032510A-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	25-MAR-10 13:57	032510A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	25-MAR-10 13:57	032510A-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	25-MAR-10 13:57	032510A-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	25-MAR-10 13:57	032510A-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	25-MAR-10 13:57	032510A-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	25-MAR-10 13:57	032510A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	25-MAR-10 13:57	032510A-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	25-MAR-10 13:57	032510A-1
CCB07	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	15-MAR-10 11:22	031510S1-5
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	25-MAR-10 15:07	032510A-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	25-MAR-10 15:07	032510A-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	25-MAR-10 15:07	032510A-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	25-MAR-10 15:07	032510A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	25-MAR-10 15:07	032510A-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	25-MAR-10 15:07	032510A-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	25-MAR-10 15:07	032510A-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	25-MAR-10 15:07	032510A-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	25-MAR-10 15:07	032510A-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	25-MAR-10 15:07	032510A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	25-MAR-10 15:07	032510A-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	25-MAR-10 15:07	032510A-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	25-MAR-10 15:07	032510A-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	25-MAR-10 15:07	032510A-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	25-MAR-10 15:07	032510A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	25-MAR-10 15:07	032510A-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	25-MAR-10 15:07	032510A-1
CCB08	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	15-MAR-10 11:42	031510S1-5

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-2069-1

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>
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	25-MAR-10 16:18	032510A-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	25-MAR-10 16:18	032510A-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	25-MAR-10 16:18	032510A-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	25-MAR-10 16:18	032510A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	25-MAR-10 16:18	032510A-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	25-MAR-10 16:18	032510A-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	25-MAR-10 16:18	032510A-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	25-MAR-10 16:18	032510A-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	25-MAR-10 16:18	032510A-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	25-MAR-10 16:18	032510A-1
	Magnesium	92.31	+/-300	J	85.0	300	SOL	P	25-MAR-10 16:18	032510A-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	25-MAR-10 16:18	032510A-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	25-MAR-10 16:18	032510A-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	25-MAR-10 16:18	032510A-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	25-MAR-10 16:18	032510A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	25-MAR-10 16:18	032510A-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	25-MAR-10 16:18	032510A-1
CCB09	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	15-MAR-10 12:02	031510S1-5
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	25-MAR-10 16:39	032510A-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	25-MAR-10 16:39	032510A-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	25-MAR-10 16:39	032510A-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	25-MAR-10 16:39	032510A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	25-MAR-10 16:39	032510A-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	25-MAR-10 16:39	032510A-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	25-MAR-10 16:39	032510A-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	25-MAR-10 16:39	032510A-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	25-MAR-10 16:39	032510A-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	25-MAR-10 16:39	032510A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	25-MAR-10 16:39	032510A-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	25-MAR-10 16:39	032510A-1

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Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-2069-1

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>
CCB10	Potassium	64.0	+/-250	U	64.0	250	SOL	P	25-MAR-10 16:39	032510A-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	25-MAR-10 16:39	032510A-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	25-MAR-10 16:39	032510A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	25-MAR-10 16:39	032510A-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	25-MAR-10 16:39	032510A-1
	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	15-MAR-10 12:23	031510S1-5
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	25-MAR-10 17:43	032510A-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	25-MAR-10 17:43	032510A-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	25-MAR-10 17:43	032510A-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	25-MAR-10 17:43	032510A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	25-MAR-10 17:43	032510A-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	25-MAR-10 17:43	032510A-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	25-MAR-10 17:43	032510A-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	25-MAR-10 17:43	032510A-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	25-MAR-10 17:43	032510A-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	25-MAR-10 17:43	032510A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	25-MAR-10 17:43	032510A-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	25-MAR-10 17:43	032510A-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	25-MAR-10 17:43	032510A-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	25-MAR-10 17:43	032510A-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	25-MAR-10 17:43	032510A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	25-MAR-10 17:43	032510A-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	25-MAR-10 17:43	032510A-1
CCB11	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	15-MAR-10 12:43	031510S1-5
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	25-MAR-10 18:52	032510A-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	25-MAR-10 18:52	032510A-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	25-MAR-10 18:52	032510A-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	25-MAR-10 18:52	032510A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	25-MAR-10 18:52	032510A-1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-2069-1

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	25-MAR-10 18:52	032510A-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	25-MAR-10 18:52	032510A-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	25-MAR-10 18:52	032510A-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	25-MAR-10 18:52	032510A-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	25-MAR-10 18:52	032510A-1
	Magnesium	99.66	+/-300	J	85.0	300	SOL	P	25-MAR-10 18:52	032510A-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	25-MAR-10 18:52	032510A-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	25-MAR-10 18:52	032510A-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	25-MAR-10 18:52	032510A-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	25-MAR-10 18:52	032510A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	25-MAR-10 18:52	032510A-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	25-MAR-10 18:52	032510A-1
CCB12	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	15-MAR-10 13:03	031510S1-5
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	25-MAR-10 19:56	032510A-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	25-MAR-10 19:56	032510A-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	25-MAR-10 19:56	032510A-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	25-MAR-10 19:56	032510A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	25-MAR-10 19:56	032510A-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	25-MAR-10 19:56	032510A-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	25-MAR-10 19:56	032510A-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	25-MAR-10 19:56	032510A-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	25-MAR-10 19:56	032510A-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	25-MAR-10 19:56	032510A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	25-MAR-10 19:56	032510A-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	25-MAR-10 19:56	032510A-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	25-MAR-10 19:56	032510A-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	25-MAR-10 19:56	032510A-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	25-MAR-10 19:56	032510A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	25-MAR-10 19:56	032510A-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	25-MAR-10 19:56	032510A-1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-2069-1

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>
CCB13										
	Mercury	0.068	+/- .2	U	0.068	0.2	SOL	AV	15-MAR-10 13:23	031510S1-5
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	25-MAR-10 20:52	032510A-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	25-MAR-10 20:52	032510A-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	25-MAR-10 20:52	032510A-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	25-MAR-10 20:52	032510A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	25-MAR-10 20:52	032510A-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	25-MAR-10 20:52	032510A-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	25-MAR-10 20:52	032510A-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	25-MAR-10 20:52	032510A-1
	Iron	92.44	+/-250	J	80.0	250	SOL	P	25-MAR-10 20:52	032510A-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	25-MAR-10 20:52	032510A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	25-MAR-10 20:52	032510A-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	25-MAR-10 20:52	032510A-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	25-MAR-10 20:52	032510A-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	25-MAR-10 20:52	032510A-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	25-MAR-10 20:52	032510A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	25-MAR-10 20:52	032510A-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	25-MAR-10 20:52	032510A-1
CCB14										
	Mercury	0.068	+/- .2	U	0.068	0.2	SOL	AV	15-MAR-10 13:43	031510S1-5
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	25-MAR-10 22:09	032510A-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	25-MAR-10 22:09	032510A-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	25-MAR-10 22:09	032510A-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	25-MAR-10 22:09	032510A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	25-MAR-10 22:09	032510A-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	25-MAR-10 22:09	032510A-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	25-MAR-10 22:09	032510A-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	25-MAR-10 22:09	032510A-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	25-MAR-10 22:09	032510A-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	25-MAR-10 22:09	032510A-1
	Magnesium	114.29	+/-300	J	85.0	300	SOL	P	25-MAR-10 22:09	032510A-1

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SDG No.: 10-2069-1

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	25-MAR-10 22:09	032510A-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	25-MAR-10 22:09	032510A-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	25-MAR-10 22:09	032510A-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	25-MAR-10 22:09	032510A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	25-MAR-10 22:09	032510A-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	25-MAR-10 22:09	032510A-1
CCB15	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	15-MAR-10 14:04	031510S1-5
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	25-MAR-10 23:27	032510A-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	25-MAR-10 23:27	032510A-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	25-MAR-10 23:27	032510A-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	25-MAR-10 23:27	032510A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	25-MAR-10 23:27	032510A-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	25-MAR-10 23:27	032510A-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	25-MAR-10 23:27	032510A-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	25-MAR-10 23:27	032510A-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	25-MAR-10 23:27	032510A-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	25-MAR-10 23:27	032510A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	25-MAR-10 23:27	032510A-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	25-MAR-10 23:27	032510A-1
	Potassium	-77.56	+/-250	J	64.0	250	SOL	P	25-MAR-10 23:27	032510A-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	25-MAR-10 23:27	032510A-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	25-MAR-10 23:27	032510A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	25-MAR-10 23:27	032510A-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	25-MAR-10 23:27	032510A-1
CCB16	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	15-MAR-10 14:17	031510S1-5
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	26-MAR-10 00:38	032510A-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	26-MAR-10 00:38	032510A-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	26-MAR-10 00:38	032510A-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	26-MAR-10 00:38	032510A-1

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Initial and Continuing Calibration Blank Summary

SDG No.: 10-2069-1

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>
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	26-MAR-10 00:38	032510A-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	26-MAR-10 00:38	032510A-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	26-MAR-10 00:38	032510A-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	26-MAR-10 00:38	032510A-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	26-MAR-10 00:38	032510A-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	26-MAR-10 00:38	032510A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	26-MAR-10 00:38	032510A-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	26-MAR-10 00:38	032510A-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	26-MAR-10 00:38	032510A-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	26-MAR-10 00:38	032510A-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	26-MAR-10 00:38	032510A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	26-MAR-10 00:38	032510A-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	26-MAR-10 00:38	032510A-1
CCB17	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	26-MAR-10 01:41	032510A-1
	Antimony	3.59	+/-10	J	3.3	10.0	SOL	P	26-MAR-10 01:41	032510A-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	26-MAR-10 01:41	032510A-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	26-MAR-10 01:41	032510A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	26-MAR-10 01:41	032510A-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	26-MAR-10 01:41	032510A-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	26-MAR-10 01:41	032510A-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	26-MAR-10 01:41	032510A-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	26-MAR-10 01:41	032510A-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	26-MAR-10 01:41	032510A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	26-MAR-10 01:41	032510A-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	26-MAR-10 01:41	032510A-1
	Potassium	-80.57	+/-250	J	64.0	250	SOL	P	26-MAR-10 01:41	032510A-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	26-MAR-10 01:41	032510A-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	26-MAR-10 01:41	032510A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	26-MAR-10 01:41	032510A-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	26-MAR-10 01:41	032510A-1

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Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-2069-1

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>
CCB18	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	26-MAR-10 02:52	032510A-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	26-MAR-10 02:52	032510A-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	26-MAR-10 02:52	032510A-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	26-MAR-10 02:52	032510A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	26-MAR-10 02:52	032510A-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	26-MAR-10 02:52	032510A-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	26-MAR-10 02:52	032510A-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	26-MAR-10 02:52	032510A-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	26-MAR-10 02:52	032510A-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	26-MAR-10 02:52	032510A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	26-MAR-10 02:52	032510A-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	26-MAR-10 02:52	032510A-1
	Potassium	-75.76	+/-250	J	64.0	250	SOL	P	26-MAR-10 02:52	032510A-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	26-MAR-10 02:52	032510A-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	26-MAR-10 02:52	032510A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	26-MAR-10 02:52	032510A-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	26-MAR-10 02:52	032510A-1
CCB19	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	26-MAR-10 04:02	032510A-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	26-MAR-10 04:02	032510A-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	26-MAR-10 04:02	032510A-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	26-MAR-10 04:02	032510A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	26-MAR-10 04:02	032510A-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	26-MAR-10 04:02	032510A-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	26-MAR-10 04:02	032510A-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	26-MAR-10 04:02	032510A-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	26-MAR-10 04:02	032510A-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	26-MAR-10 04:02	032510A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	26-MAR-10 04:02	032510A-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	26-MAR-10 04:02	032510A-1
	Potassium	-87.27	+/-250	J	64.0	250	SOL	P	26-MAR-10 04:02	032510A-1

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Initial and Continuing Calibration Blank Summary

SDG No.: 10-2069-1

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	26-MAR-10 04:02	032510A-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	26-MAR-10 04:02	032510A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	26-MAR-10 04:02	032510A-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	26-MAR-10 04:02	032510A-1
CCB20	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	26-MAR-10 05:05	032510A-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	26-MAR-10 05:05	032510A-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	26-MAR-10 05:05	032510A-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	26-MAR-10 05:05	032510A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	26-MAR-10 05:05	032510A-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	26-MAR-10 05:05	032510A-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	26-MAR-10 05:05	032510A-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	26-MAR-10 05:05	032510A-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	26-MAR-10 05:05	032510A-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	26-MAR-10 05:05	032510A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	26-MAR-10 05:05	032510A-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	26-MAR-10 05:05	032510A-1
	Potassium	-71.54	+/-250	J	64.0	250	SOL	P	26-MAR-10 05:05	032510A-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	26-MAR-10 05:05	032510A-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	26-MAR-10 05:05	032510A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	26-MAR-10 05:05	032510A-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	26-MAR-10 05:05	032510A-1
CCB21	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	26-MAR-10 06:16	032510A-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	26-MAR-10 06:16	032510A-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	26-MAR-10 06:16	032510A-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	26-MAR-10 06:16	032510A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	26-MAR-10 06:16	032510A-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	26-MAR-10 06:16	032510A-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	26-MAR-10 06:16	032510A-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	26-MAR-10 06:16	032510A-1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-2069-1

Contract: LANL01004

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<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Iron	80.0	+/-250	U	80.0	250	SOL	P	26-MAR-10 06:16	032510A-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	26-MAR-10 06:16	032510A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	26-MAR-10 06:16	032510A-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	26-MAR-10 06:16	032510A-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	26-MAR-10 06:16	032510A-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	26-MAR-10 06:16	032510A-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	26-MAR-10 06:16	032510A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	26-MAR-10 06:16	032510A-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	26-MAR-10 06:16	032510A-1
CCB22	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	26-MAR-10 07:28	032510A-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	26-MAR-10 07:28	032510A-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	26-MAR-10 07:28	032510A-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	26-MAR-10 07:28	032510A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	26-MAR-10 07:28	032510A-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	26-MAR-10 07:28	032510A-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	26-MAR-10 07:28	032510A-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	26-MAR-10 07:28	032510A-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	26-MAR-10 07:28	032510A-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	26-MAR-10 07:28	032510A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	26-MAR-10 07:28	032510A-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	26-MAR-10 07:28	032510A-1
	Potassium	-87.67	+/-250	J	64.0	250	SOL	P	26-MAR-10 07:28	032510A-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	26-MAR-10 07:28	032510A-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	26-MAR-10 07:28	032510A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	26-MAR-10 07:28	032510A-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	26-MAR-10 07:28	032510A-1

METALS
-3b-
PREPARATION BLANK SUMMARY

SDG NO. 10-2069-1

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>
1202056151	Mercury	3.81	ug/kg	+/-11.2	U	AV	3.81	11.2
1202056842	Aluminum	6400	ug/Kg	+/-18800	U	P	6400	18800
	Antimony	311	ug/Kg	+/-942	U	P	311	942
	Barium	94.2	ug/Kg	+/-471	U	P	94.2	471
	Cadmium	94.2	ug/Kg	+/-471	U	P	94.2	471
	Calcium	7530	ug/Kg	+/-23500	U	P	7530	23500
	Chromium	141	ug/Kg	+/-471	U	P	141	471
	Cobalt	141	ug/Kg	+/-471	U	P	141	471
	Copper	282	ug/Kg	+/-942	U	P	282	942
	Iron	7530	ug/Kg	+/-23500	U	P	7530	23500
	Lead	235	ug/Kg	+/-942	U	P	235	942
	Magnesium	8000	ug/Kg	+/-28200	U	P	8000	28200
	Manganese	188	ug/Kg	+/-942	U	P	188	942
	Potassium	-6480	ug/Kg	+/-23500	J	P	6030	23500
	Silver	94.2	ug/Kg	+/-471	U	P	94.2	471
	Sodium	6590	ug/Kg	+/-23500	U	P	6590	23500
	Vanadium	94.2	ug/Kg	+/-471	U	P	94.2	471
	Zinc	369	ug/Kg	+/-942	J	P	311	942
1202056848	Arsenic	0.192	mg/kg	+/-0.958	U	MS	0.192	0.958
	Beryllium	0.0192	mg/kg	+/-0.0958	U	MS	0.0192	0.0958
	Nickel	0.0958	mg/kg	+/-0.383	U	MS	0.0958	0.383
	Selenium	0.479	mg/kg	+/-0.958	U	MS	0.479	0.958
	Thallium	0.0575	mg/kg	+/-0.192	U	MS	0.0575	0.192
	Uranium	0.0126	mg/kg	+/-0.0383	U	MS	0.0126	0.0383

METALS

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Interference Check Sample

SDG No: 10-2069-1

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									
	Aluminum	518000	ug/L	500000	ug/L	104	80.0 - 120.0	25-MAR-10 08:30	032510A-1
	Antimony	-5.95	ug/L					25-MAR-10 08:30	032510A-1
	Barium	-0.354	ug/L					25-MAR-10 08:30	032510A-1
	Cadmium	0.784	ug/L					25-MAR-10 08:30	032510A-1
	Calcium	478000	ug/L	500000	ug/L	95.6	80.0 - 120.0	25-MAR-10 08:30	032510A-1
	Chromium	-1.32	ug/L					25-MAR-10 08:30	032510A-1
	Cobalt	-1.2	ug/L					25-MAR-10 08:30	032510A-1
	Copper	2.29	ug/L					25-MAR-10 08:30	032510A-1
	Iron	184000	ug/L	200000	ug/L	92.1	80.0 - 120.0	25-MAR-10 08:30	032510A-1
	Lead	-14.9	ug/L					25-MAR-10 08:30	032510A-1
	Magnesium	485000	ug/L	500000	ug/L	97	80.0 - 120.0	25-MAR-10 08:30	032510A-1
	Manganese	-3.62	ug/L					25-MAR-10 08:30	032510A-1
	Potassium	-202.0	ug/L					25-MAR-10 08:30	032510A-1
	Silver	-3.38	ug/L					25-MAR-10 08:30	032510A-1
	Sodium	143	ug/L					25-MAR-10 08:30	032510A-1
	Vanadium	-3.86	ug/L					25-MAR-10 08:30	032510A-1
	Zinc	2.16	ug/L					25-MAR-10 08:30	032510A-1
ICSAB01									
	Aluminum	525000	ug/L	500000	ug/L	105	80.0 - 120.0	25-MAR-10 08:36	032510A-1
	Antimony	575	ug/L	500	ug/L	115	80.0 - 120.0	25-MAR-10 08:36	032510A-1
	Barium	498	ug/L	500	ug/L	99.6	80.0 - 120.0	25-MAR-10 08:36	032510A-1
	Cadmium	475	ug/L	500	ug/L	95	80.0 - 120.0	25-MAR-10 08:36	032510A-1
	Calcium	480000	ug/L	500000	ug/L	96.1	80.0 - 120.0	25-MAR-10 08:36	032510A-1
	Chromium	487	ug/L	500	ug/L	97.5	80.0 - 120.0	25-MAR-10 08:36	032510A-1
	Cobalt	463	ug/L	500	ug/L	92.6	80.0 - 120.0	25-MAR-10 08:36	032510A-1
	Copper	558	ug/L	500	ug/L	112	80.0 - 120.0	25-MAR-10 08:36	032510A-1
	Iron	183000	ug/L	200000	ug/L	91.6	80.0 - 120.0	25-MAR-10 08:36	032510A-1
	Lead	460	ug/L	500	ug/L	92.1	80.0 - 120.0	25-MAR-10 08:36	032510A-1
	Magnesium	487000	ug/L	500000	ug/L	97.4	80.0 - 120.0	25-MAR-10 08:36	032510A-1

METALS

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Interference Check Sample

SDG No: 10-2069-1

Contract: LANL01004

Lab Code: GEL

ICS:

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Manganese	484	ug/L	500	ug/L	96.8	80.0 – 120.0	25-MAR-10 08:36	032510A-1
	Potassium	5110	ug/L	5000	ug/L	102	80.0 – 120.0	25-MAR-10 08:36	032510A-1
	Silver	274	ug/L	250	ug/L	109	80.0 – 120.0	25-MAR-10 08:36	032510A-1
	Sodium	5260	ug/L	5000	ug/L	105	80.0 – 120.0	25-MAR-10 08:36	032510A-1
	Vanadium	510	ug/L	500	ug/L	102	80.0 – 120.0	25-MAR-10 08:36	032510A-1
	Zinc	502	ug/L	500	ug/L	100	80.0 – 120.0	25-MAR-10 08:36	032510A-1

METALS

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Interference Check Sample

SDG No: 10-2069-1

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									
	Arsenic	0.024	ug/L					11-APR-10 22:01	100411-2
	Beryllium	0.104	ug/L					11-APR-10 22:01	100411-2
	Nickel	2.98	ug/L					11-APR-10 22:01	100411-2
	Selenium	-1.51	ug/L					11-APR-10 22:01	100411-2
	Thallium	0.011	ug/L					11-APR-10 22:01	100411-2
ICSAB01									
	Arsenic	19.3	ug/L	20	ug/L	96.6	80.0 - 120.0	11-APR-10 22:04	100411-2
	Beryllium	18.6	ug/L	20	ug/L	92.8	80.0 - 120.0	11-APR-10 22:04	100411-2
	Nickel	22.0	ug/L	23.31	ug/L	94.4	80.0 - 120.0	11-APR-10 22:04	100411-2
	Selenium	17.5	ug/L	20	ug/L	87.3	80.0 - 120.0	11-APR-10 22:04	100411-2
	Thallium	19.3	ug/L	20	ug/L	96.7	80.0 - 120.0	11-APR-10 22:04	100411-2

METALS

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Interference Check Sample

SDG No: 10-2069-1

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	0.004	ug/L					12-APR-10 13:16	100412-3
ICSAB01	Uranium	21.1	ug/L	20	ug/L	105	80.0 - 120.0	12-APR-10 13:18	100412-3

METALS

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Interference Check Sample

SDG No: 10-2069-1

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: ICPMS5

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICSA01	Uranium	-0.001	ug/L					12-APR-10 15:27	100412-4
ICSAB01	Uranium	22.6	ug/L	20	ug/L	113	80.0 - 120.0	12-APR-10 15:29	100412-4

METALS

-5a-

Matrix Spike Summary

SDG NO. 10-2069-1 Client ID RE15-10-7902S

Contract: LANL01004 Level: Low

Matrix: SOIL % Solids: 84

Sample ID: 248033001 Spike ID: 1202056154

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/kg	75-125	159		15.8		130	110		AV

METALS

-5a-

Matrix Spike Duplicate Summary

SDG NO. 10-2069-1 Client ID: RE15-10-7902SD

Contract: LANL01004 Level: Low

Matrix: SOIL % Solids: 84

Sample ID: 248033001 Spike ID: 1202056156

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/kg	75-125	164		15.8		136	109		AV

METALS

-5a-

Matrix Spike Summary

SDG NO.	10-2069-1	Client ID	CAPU-10-12584S
Contract:	LANL01004	Level:	Low
Matrix:	SOIL	% Solids:	94.7
Sample ID:	248031001	Spike ID:	1202056845

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/Kg	75-125	2770000		1630000		464000	245	N	P
Antimony	ug/Kg	75-125	47700		326	U	46400	103		P
Barium	ug/Kg	75-125	61900		13500		46400	104		P
Cadmium	ug/Kg	75-125	45500		98.9	U	46400	98		P
Calcium	ug/Kg	75-125	1110000		566000		464000	116		P
Chromium	ug/Kg	75-125	47800		1980		46400	98.8		P
Cobalt	ug/Kg	75-125	46000		281	J	46400	98.6		P
Copper	ug/Kg	75-125	51100		2380		46400	105		P
Iron	ug/Kg		9050000		7430000		464000	349	N/A	P
Lead	ug/Kg	75-125	58500		10800		46400	103		P
Magnesium	ug/Kg	75-125	963000		397000		464000	122		P
Manganese	ug/Kg		402000		279000		46400	265	N/A	P
Potassium	ug/Kg	75-125	907000		270000		464000	137	N	P
Silver	ug/Kg	75-125	46300		98.9	U	46400	99.5		P
Sodium	ug/Kg	75-125	765000		164000		464000	129	N	P
Vanadium	ug/Kg	75-125	50000		2890		46400	101		P
Zinc	ug/Kg	75-125	108000		48100		46400	129	N	P

METALS

-5a-

Matrix Spike Duplicate Summary

SDG NO. 10-2069-1 Client ID CAPU-10-12584SD

Contract: LANL01004 Level: Low

Matrix: SOIL % Solids: 94.7

Sample ID: 248031001 Spike ID: 1202056846

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/Kg	75-125	2400000		1630000		480000	161	N	P
Antimony	ug/Kg	75-125	48400		326	U	48000	101		P
Barium	ug/Kg	75-125	57100		13500		48000	90.8		P
Cadmium	ug/Kg	75-125	45400		98.9	U	48000	94.5		P
Calcium	ug/Kg	75-125	1220000		566000		480000	136	N	P
Chromium	ug/Kg	75-125	48800		1980		48000	97.6		P
Cobalt	ug/Kg	75-125	46100		281	J	48000	95.5		P
Copper	ug/Kg	75-125	52000		2380		48000	103		P
Iron	ug/Kg		7570000		7430000		480000	28.9	N/A	P
Lead	ug/Kg	75-125	56100		10800		48000	94.5		P
Magnesium	ug/Kg	75-125	859000		397000		480000	96.3		P
Manganese	ug/Kg		293000		279000		48000	29.4	N/A	P
Potassium	ug/Kg	75-125	848000		270000		480000	120		P
Silver	ug/Kg	75-125	46000		98.9	U	48000	95.7		P
Sodium	ug/Kg	75-125	712000		164000		480000	114		P
Vanadium	ug/Kg	75-125	49900		2890		48000	98		P
Zinc	ug/Kg	75-125	97900		48100		48000	104		P

METALS

-5a-

Matrix Spike Summary

SDG NO. 10-2069-1 Client ID CAPU-10-12584S

Contract: LANL01004 Level: Low

Matrix: SOIL % Solids: 94.7

Sample ID: 248031001 Spike ID: 1202056851

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	mg/kg	75-125	7.36		0.329	J	7.78	90.4		MS
Beryllium	mg/kg	75-125	4.9		0.31		4.86	94.5		MS
Nickel	mg/kg	75-125	6.21		1.35		4.86	100		MS
Selenium	mg/kg	75-125	1.68		0.503	U	1.94	79.4		MS
Thallium	mg/kg	75-125	8.94		0.0869	J	9.72	91		MS
Uranium	mg/kg	75-125	5.25		0.589		4.86	95.8		MS

METALS

-5a-

Matrix Spike Duplicate Summary

SDG NO. 10-2069-1 **Client ID** CAPU-10-12584SD

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 94.7

Sample ID: 248031001 **Spike ID:** 1202056852

<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	7.06		0.329	J	7.63	88.3		MS
Beryllium	mg/kg	75-125	4.81		0.31		4.77	94.5		MS
Nickel	mg/kg	75-125	5.75		1.35		4.77	92.2		MS
Selenium	mg/kg	75-125	1.52		0.503	U	1.91	72.4	N	MS
Thallium	mg/kg	75-125	8.58		0.0869	J	9.53	89.1		MS
Uranium	mg/kg	75-125	5.17		0.589		4.77	96.2		MS

Metals

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Duplicate Sample Summary

SDG No.: 10-2069-1

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE15-10-7902D

Sample ID: 248033001

Duplicate ID: 1202056153

Percent Solids for Dup: 84

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/kg	+/-13.7	15.8		14.8		6.92		AV

Metals

-6-

Duplicate Sample Summary

SDG No.: 10-2069-1

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE15-10-7902SD

Sample ID: 1202056154

Duplicate ID: 1202056156

Percent Solids for Dup: 84

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/kg	+/-20	159		164		3.38		AV

Metals

-6-

Duplicate Sample Summary

SDG No.: 10-2069-1

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: CAPU-10-12584D

Sample ID: 248031001

Duplicate ID: 1202056843

Percent Solids for Dup: 94.7

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/Kg	+/-20%	1630000		1740000		6.39		P
Antimony	ug/Kg		326 U		328 U				P
Barium	ug/Kg	+/-20%	13500		13700		1.8		P
Cadmium	ug/Kg		98.9 U		99.4 U				P
Calcium	ug/Kg	+/-20%	566000		615000		8.23		P
Chromium	ug/Kg	+/-497	1980		2130		7.25		P
Cobalt	ug/Kg	+/-497	281 J		341 J		19.5		P
Copper	ug/Kg	+/-994	2380		2500		4.94		P
Iron	ug/Kg	+/-20%	7430000		8190000		9.7		P
Lead	ug/Kg	+/-20%	10800		11000		1.61		P
Magnesium	ug/Kg	+/-20%	397000		417000		4.99		P
Manganese	ug/Kg	+/-20%	279000		293000		4.95		P
Potassium	ug/Kg	+/-20%	270000		286000		5.67		P
Silver	ug/Kg		98.9 U		147 J		200		P
Sodium	ug/Kg	+/-20%	164000		166000		1.1		P
Vanadium	ug/Kg	+/-20%	2890		3100		7.14		P
Zinc	ug/Kg	+/-20%	48100		55200		13.7		P

Metals

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Duplicate Sample Summary

SDG No.: 10-2069-1

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: CAPU-10-12584SD

Sample ID: 1202056845

Duplicate ID: 1202056846

Percent Solids for Dup: 94.7

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/Kg	+/-20	2770000		2400000		14		P
Antimony	ug/Kg	+/-20	47700		48400		1.49		P
Barium	ug/Kg	+/-20	61900		57100		8.19		P
Cadmium	ug/Kg	+/-20	45500		45400		.233		P
Calcium	ug/Kg	+/-20	1110000		1220000		9.71		P
Chromium	ug/Kg	+/-20	47800		48800		2.08		P
Cobalt	ug/Kg	+/-20	46000		46100		.157		P
Copper	ug/Kg	+/-20	51100		52000		1.86		P
Iron	ug/Kg	+/-20	9050000		7570000		17.8		P
Lead	ug/Kg	+/-20	58500		56100		4.13		P
Magnesium	ug/Kg	+/-20	963000		859000		11.3		P
Manganese	ug/Kg	+/-20	402000		293000		31.3	*	P
Potassium	ug/Kg	+/-20	907000		848000		6.69		P
Silver	ug/Kg	+/-20	46300		46000		.516		P
Sodium	ug/Kg	+/-20	765000		712000		7.14		P
Vanadium	ug/Kg	+/-20	50000		49900		.0903		P
Zinc	ug/Kg	+/-20	108000		97900		9.82		P

Metals

-6-

Duplicate Sample Summary

SDG No.: 10-2069-1

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: CAPU-10-12584D

Sample ID: 248031001

Duplicate ID: 1202056849

Percent Solids for Dup: 94.7

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	mg/kg	+/- .983	0.329 J		0.412 J		22.2		MS
Beryllium	mg/kg	+/- .0983	0.31		0.302		2.58		MS
Nickel	mg/kg	+/- .393	1.35		2.02		39.7	*	MS
Selenium	mg/kg		0.503 U		0.492 U				MS
Thallium	mg/kg	+/- .197	0.0869 J		0.0667 J		26.3		MS
Uranium	mg/kg	+/- 20%	0.589		0.482		19.9		MS

Metals

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Duplicate Sample Summary

SDG No.: 10-2069-1

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: CAPU-10-12584SD

Sample ID: 1202056851

Duplicate ID: 1202056852

Percent Solids for Dup: 94.7

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	mg/kg	+/-20	7.36		7.06		4.16		MS
Beryllium	mg/kg	+/-20	4.9		4.81		1.87		MS
Nickel	mg/kg	+/-20	6.21		5.75		7.81		MS
Selenium	mg/kg	+/-20	1.68		1.52		10.3		MS
Thallium	mg/kg	+/-20	8.94		8.58		4.08		MS
Uranium	mg/kg	+/-20	5.25		5.17		1.43		MS

METALS

-7-

Laboratory Control Sample Summary

SDG NO. 10-2069-1

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>
1202056152	Mercury	ug/kg	5150	6370		124	71.6-128.3	AV

METALS

-7-

Laboratory Control Sample Summary

SDG NO. 10-2069-1

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>
1202056847								
	Aluminum	ug/Kg	10500000	9840000		93.7	56-144	P
	Antimony	ug/Kg	173000	128000		74.1	71-130	P
	Barium	ug/Kg	198000	186000		93.8	80-120	P
	Cadmium	ug/Kg	60700	58700		96.8	81-120	P
	Calcium	ug/Kg	9870000	9640000		97.7	83-117	P
	Chromium	ug/Kg	236000	234000		99	80-120	P
	Cobalt	ug/Kg	91200	92700		102	81-120	P
	Copper	ug/Kg	174000	182000		105	81-118	P
	Iron	ug/Kg	18000000	18800000		104	51-149	P
	Lead	ug/Kg	86000	79200		92.1	79-121	P
	Magnesium	ug/Kg	4000000	3840000		96.1	79-122	P
	Manganese	ug/Kg	558000	545000		97.7	81-119	P
	Potassium	ug/Kg	4300000	4040000		93.9	74-127	P
	Silver	ug/Kg	30100	30200		100	66-134	P
	Sodium	ug/Kg	1020000	1000000		98.2	74-127	P
	Vanadium	ug/Kg	115000	124000		108	79-121	P
	Zinc	ug/Kg	594000	573000		96.5	80-121	P

METALS

-7-

Laboratory Control Sample Summary

SDG NO. 10-2069-1

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>
1202056853								
	Arsenic	mg/kg	104	113		108	78-123	MS
	Beryllium	mg/kg	77.6	81.1		105	84-116	MS
	Nickel	mg/kg	134	154		115	78-123	MS
	Selenium	mg/kg	286	304		106	77-123	MS
	Thallium	mg/kg	121	136		112	78-122	MS
	Uranium	mg/kg	2.13	2.13		100	73-127	MS

METALS

-9-

Serial Dilution Sample Summary

SDG NO. 10-2069-1 Client ID RE15-10-7902L

Contract: LANL01004

Matrix: SOLID Level: Low

Sample ID: 248033001 Serial Dilution ID: 1202056155

<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	.223		.34	U	100			AV

METALS

-9-

Serial Dilution Sample Summary

SDG NO. 10-2069-1 Client ID CAPU-10-12584L

Contract: LANL01004

Matrix: SOLID Level: Low

Sample ID: 248031001 Serial Dilution ID: 1202056844

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Aluminum	16500		16000		3.33		10	P
Antimony	3.3	U	16.5	U				P
Barium	136		137		.368		10	P
Cadmium	1	U	5	U				P
Calcium	5730		5500		4.01		10	P
Chromium	20		20.4	J	1.75			P
Cobalt	2.84	J	7.5	U	100			P
Copper	24		28.7	J	19.6			P
Iron	75200		74000		1.6		10	P
Lead	109		119		9.17			P
Magnesium	4020		4050		.746			P
Manganese	2820		2920		3.37		10	P
Potassium	2730		2200		19.6			P
Silver	1	U	5	U				P
Sodium	1660		1660		.301			P
Vanadium	29.2		33.2		13.7			P
Zinc	487		500		2.67		10	P

METALS

-9-

Serial Dilution Sample Summary

SDG NO. 10-2069-1 **Client ID** CAPU-10-12584L**Contract:** LANL01004**Matrix:** SOLID **Level:** Low**Sample ID:** 248031001 **Serial Dilution ID:** 1202056850

<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	1.64	J	5	U	100			MS
Beryllium	1.54		1.7	J	10.4			MS
Nickel	6.72		7.5	J	11.6			MS
Selenium	2.5	U	12.5	U				MS
Thallium	.432	J	1.59	J	268			MS
Uranium	2.93		2.94		.171			MS

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-2069-1

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 959100							
1202056842	MB for batch 959100	MB	S	04-MAR-10	.531g	50mL	
1202056847	LCS for batch 959100	LCS	S	04-MAR-10	.508g	50mL	
1202056845	CAPU-10-12584S	MS	S	04-MAR-10	.569g	50mL	
1202056846	CAPU-10-12584SD	MSD	S	04-MAR-10	.55g	50mL	
1202056843	CAPU-10-12584D	DUP	S	04-MAR-10	.531g	50mL	
248041001	RE15-10-8389	SAMPLE	S	04-MAR-10	.549g	50mL	
248041002	RE15-10-8388	SAMPLE	S	04-MAR-10	.541g	50mL	
248041003	RE15-10-8390	SAMPLE	S	04-MAR-10	.558g	50mL	
248041004	RE15-10-8392	SAMPLE	S	04-MAR-10	.564g	50mL	
248041005	RE15-10-8391	SAMPLE	S	04-MAR-10	.502g	50mL	

SW846

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-2069-1

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	959102						
1202056848	MB for batch 959102	MB	S	04-MAR-10	.522g	50mL	
1202056853	LCS for batch 959102	LCS	S	04-MAR-10	.528g	50mL	
1202056851	CAPU-10-12584S	MS	S	04-MAR-10	.543g	50mL	
1202056852	CAPU-10-12584SD	MSD	S	04-MAR-10	.554g	50mL	
1202056849	CAPU-10-12584D	DUP	S	04-MAR-10	.537g	50mL	
248041001	RE15-10-8389	SAMPLE	S	04-MAR-10	.545g	50mL	
248041002	RE15-10-8388	SAMPLE	S	04-MAR-10	.511g	50mL	
248041003	RE15-10-8390	SAMPLE	S	04-MAR-10	.53g	50mL	
248041004	RE15-10-8392	SAMPLE	S	04-MAR-10	.517g	50mL	
248041005	RE15-10-8391	SAMPLE	S	04-MAR-10	.533g	50mL	

SW846

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-2069-1

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 958742							
1202056151	MB for batch 958742	MB	S	12-MAR-10	.535g	30mL	
1202056152	LCS for batch 958742	LCS	S	12-MAR-10	.209g	30mL	
1202056154	RE15-10-7902S	MS	S	12-MAR-10	.548g	30mL	
1202056156	RE15-10-7902SD	MSD	S	12-MAR-10	.522g	30mL	
1202056153	RE15-10-7902D	DUP	S	12-MAR-10	.519g	30mL	
248041001	RE15-10-8389	SAMPLE	S	12-MAR-10	.576g	30mL	
248041002	RE15-10-8388	SAMPLE	S	12-MAR-10	.533g	30mL	
248041003	RE15-10-8390	SAMPLE	S	12-MAR-10	.561g	30mL	
248041004	RE15-10-8392	SAMPLE	S	12-MAR-10	.506g	30mL	
248041005	RE15-10-8391	SAMPLE	S	12-MAR-10	.531g	30mL	

SW846

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: ICPMS5

Start Date: 11-APR-10

End Date: 11-APR-10

Client Sdg: 10-2069-1

Method MS

Data File: 100411-2

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	21:42:00			X		X											X		X			X			
S10	1	21:45:00			X		X											X		X			X			
S100	1	21:48:00			X		X											X		X			X			
ICV01	1	21:51:00			X		X											X		X			X			
ICB01	1	21:54:00			X		X											X		X			X			
CRDL01	1	21:57:00			X		X											X		X			X			
ICSA01	1	22:01:00			X		X											X		X			X			
ICSAB01	1	22:04:00			X		X											X		X			X			
CCV01	1	22:07:00			X		X											X		X			X			
CCB01	1	22:10:00			X		X											X		X			X			
1202056848	2	22:13:00			X		X											X		X			X			
1202056853	40	22:16:00			X		X											X		X			X			
ZZZZZZ	2	22:19:00																								
1202056849	2	22:22:00			X		X											X		X			X			
1202056851	2	22:25:00			X		X											X		X			X			
1202056852	2	22:28:00			X		X											X		X			X			
1202056850	10	22:31:00			X		X											X		X			X			
CCV02	1	22:34:00			X		X											X		X			X			
CCB02	1	22:38:00			X		X											X		X			X			
ZZZZZZ	2	22:41:00																								
ZZZZZZ	2	22:44:00																								
ZZZZZZ	2	22:47:00																								
ZZZZZZ	2	22:50:00																								
ZZZZZZ	2	22:53:00																								
ZZZZZZ	2	22:56:00																								
ZZZZZZ	2	22:59:00																								
ZZZZZZ	2	23:02:00																								
CCV03	1	23:05:00			X		X											X		X			X			
CCB03	1	23:08:00			X		X											X		X			X			
ZZZZZZ	2	23:12:00																								
ZZZZZZ	2	23:15:00																								
ZZZZZZ	2	23:18:00																								
248041001	2	23:21:00			X		X											X		X			X			
248041002	2	23:24:00			X		X											X		X			X			
248041003	2	23:27:00			X		X											X		X			X			
248041004	2	23:30:00			X		X											X		X			X			
248041005	2	23:33:00			X		X											X		X			X			
CCV04	1	23:36:00			X		X											X		X			X			
CCB04	1	23:39:00			X		X											X		X			X			

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: ICPMS5

Start Date: 12-APR-10

End Date: 12-APR-10

Client Sdg: 10-2069-1

Method MS

Data File: 100412-3

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	13:07:00																						X		
S10	1	13:08:00																						X		
S100	1	13:10:00																						X		
ICV01	1	13:11:00																						X		
ICB01	1	13:13:00																						X		
CRDL01	1	13:15:00																						X		
ICSA01	1	13:16:00																						X		
ICSAB01	1	13:18:00																						X		
CCV01	1	13:20:00																						X		
CCB01	1	13:21:00																						X		
1202056848	2	13:23:00																						X		
1202056853	40	13:25:00																						X		
ZZZZZZ	2	13:27:00																								
ZZZZZZ	2	13:29:00																								
ZZZZZZ	2	13:31:00																								
ZZZZZZ	2	13:32:00																								
ZZZZZZ	10	13:34:00																								
CCV02	1	13:36:00																						X		
CCB02	1	13:37:00																						X		
ZZZZZZ	2	13:39:00																								
ZZZZZZ	2	13:41:00																								
ZZZZZZ	2	13:42:00																								
ZZZZZZ	2	13:44:00																								
ZZZZZZ	2	13:46:00																								
ZZZZZZ	2	13:47:00																								
ZZZZZZ	2	13:49:00																								
ZZZZZZ	2	13:50:00																								
CCV03	1	13:52:00																						X		
CCB03	1	13:54:00																						X		
ZZZZZZ	2	13:55:00																								
ZZZZZZ	2	13:57:00																								
ZZZZZZ	2	13:59:00																								
248041001	2	14:00:00																						X		
248041002	2	14:02:00																						X		
248041003	2	14:04:00																						X		
248041004	2	14:05:00																						X		
248041005	2	14:07:00																						X		
CCV04	1	14:09:00																						X		
CCB04	1	14:10:00																						X		

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: ICPMS5

Start Date: 12-APR-10

Client Sdg: 10-2069-1

Method MS

Data File: 100412-4

End Date: 12-APR-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	15:17:00																						X		
S10	1	15:19:00																						X		
S100	1	15:21:00																						X		
ICV01	1	15:22:00																						X		
ICB01	1	15:24:00																						X		
CRDL01	1	15:26:00																						X		
ICSA01	1	15:27:00																						X		
IC SAB01	1	15:29:00																						X		
CCV01	1	15:30:00																						X		
CCB01	1	15:32:00																						X		
ZZZZZZ	2	15:34:00																								
ZZZZZZ	40	15:35:00																								
ZZZZZZ	2	15:37:00																								
1202056849	2	15:39:00																						X		
1202056851	2	15:40:00																						X		
1202056852	2	15:42:00																						X		
1202056850	10	15:44:00																						X		
CCV02	1	15:45:00																						X		
CCB02	1	15:47:00																						X		

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: OPTIMA3

Start Date: 25-MAR-10

End Date: 26-MAR-10

Client Sdg: 10-2069-1

Method P

Data File: 032510A-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	07:36:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
S0.1	1	07:43:00		X		X		X		X	X	X		X		X			X		X				X	X
S0.5	1	07:50:00	X	X		X		X	X	X	X	X		X	X	X			X		X				X	X
SCAL	1	07:57:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
S10	1	08:04:00	X					X					X		X							X				
ICV01	1	08:09:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ICB01	1	08:16:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
PQL01	1	08:23:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ICSA01	1	08:30:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ICSAB01	1	08:36:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
LR01	1	08:43:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
LR02	1	08:50:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCV01	1	08:57:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB01	1	09:04:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
LR03	1	09:10:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
LR04	1	09:17:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCV02	1	09:24:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB02	1	09:31:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ZZZZZZ	5	09:54:00																								
ZZZZZZ	5	10:01:00																								
ZZZZZZ	5	10:07:00																								
CCV03	1	10:14:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB03	1	10:21:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ZZZZZZ	1	10:28:00																								
ZZZZZZ	1	10:35:00																								
ZZZZZZ	1	10:42:00																								
ZZZZZZ	1	10:49:00																								
ZZZZZZ	5	10:56:00																								
ZZZZZZ	20	11:03:00																								
ZZZZZZ	50	11:10:00																								
ZZZZZZ	100	11:17:00																								
CCV04	1	11:24:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB04	1	11:31:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ZZZZZZ	1	11:40:00																								
ZZZZZZ	1	11:46:00																								
ZZZZZZ	200	11:54:00																								
ZZZZZZ	200	12:01:00																								
ZZZZZZ	200	12:08:00																								
ZZZZZZ	200	12:15:00																								
ZZZZZZ	1000	12:22:00																								

Metals
-14-
Analysis Run Log

[illegible]

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	17:15:00																								
ZZZZZZ	1	17:22:00																								
ZZZZZZ	5	17:29:00																								
CCV10	1	17:36:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB10	1	17:43:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ZZZZZZ	1	17:49:00																								
ZZZZZZ	1	17:56:00																								
ZZZZZZ	1	18:04:00																								
ZZZZZZ	1	18:10:00																								
ZZZZZZ	1	18:17:00																								
ZZZZZZ	1	18:24:00																								
ZZZZZZ	1	18:31:00																								
ZZZZZZ	1	18:38:00																								
CCV11	1	18:45:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB11	1	18:52:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ZZZZZZ	1	19:00:00																								
ZZZZZZ	1	19:07:00																								
ZZZZZZ	1	19:14:00																								
ZZZZZZ	1	19:21:00																								
ZZZZZZ	1	19:28:00																								
ZZZZZZ	1	19:35:00																								
ZZZZZZ	5	19:42:00																								
CCV12	1	19:49:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB12	1	19:56:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ZZZZZZ	1	20:03:00																								
ZZZZZZ	1	20:10:00																								
ZZZZZZ	1	20:17:00																								
ZZZZZZ	1	20:24:00																								
ZZZZZZ	1	20:31:00																								
ZZZZZZ	1	20:38:00																								
CCV13	1	20:45:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB13	1	20:52:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ZZZZZZ	1	20:59:00																								
ZZZZZZ	1	21:06:00																								
ZZZZZZ	1	21:13:00																								
ZZZZZZ	1	21:20:00																								
ZZZZZZ	1	21:27:00																								
ZZZZZZ	1	21:34:00																								
ZZZZZZ	5	21:41:00																								
ZZZZZZ	1	21:48:00																								

Metals
-14-
Analysis Run Log

[illegible]

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	02:38:00																								
CCV18	1	02:45:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB18	1	02:52:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ZZZZZZ	1	02:59:00																								
ZZZZZZ	1	03:06:00																								
ZZZZZZ	1	03:13:00																								
ZZZZZZ	1	03:20:00																								
ZZZZZZ	1	03:27:00																								
ZZZZZZ	1	03:34:00																								
ZZZZZZ	1	03:41:00																								
ZZZZZZ	1	03:49:00																								
CCV19	1	03:55:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB19	1	04:02:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
1202056842	1	04:10:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
1202056847	1	04:17:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ZZZZZZ	1	04:23:00																								
1202056843	1	04:30:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
1202056845	1	04:37:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
1202056846	1	04:45:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
1202056844	5	04:51:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCV20	1	04:58:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB20	1	05:05:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ZZZZZZ	1	05:12:00																								
ZZZZZZ	1	05:19:00																								
ZZZZZZ	1	05:26:00																								
ZZZZZZ	1	05:34:00																								
ZZZZZZ	1	05:41:00																								
ZZZZZZ	1	05:48:00																								
ZZZZZZ	1	05:55:00																								
ZZZZZZ	1	06:02:00																								
CCV21	1	06:09:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB21	1	06:16:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ZZZZZZ	1	06:24:00																								
ZZZZZZ	1	06:31:00																								
ZZZZZZ	1	06:38:00																								
248041001	1	06:45:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
248041002	1	06:53:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
248041003	1	07:00:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
248041004	1	07:07:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
248041005	1	07:14:00	X	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																				
CCV22	1	07:21:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X
CCB22	1	07:28:00	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: 15-MAR-10

End Date: 15-MAR-10

Client Sdg: 10-2069-1

Method AV

Data File: 031510S1-5

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
S0.0	1	09:05:00															X									
S0.2	1	09:06:00															X									
S0.5	1	09:08:00															X									
S2.0	1	09:10:00															X									
S5.0	1	09:11:00															X									
S10.0	1	09:13:00															X									
ICV01	1	09:15:00															X									
ICB01	1	09:16:00															X									
CRDL01	1	09:18:00															X									
CCV01	1	09:20:00															X									
CCB01	1	09:21:00															X									
ZZZZZZ	1	09:23:00																								
ZZZZZZ	10	09:25:00																								
ZZZZZZ	1	09:26:00																								
ZZZZZZ	1	09:28:00																								
ZZZZZZ	1	09:30:00																								
ZZZZZZ	1	09:31:00																								
ZZZZZZ	5	09:33:00																								
ZZZZZZ	1	09:35:00																								
ZZZZZZ	1	09:36:00																								
ZZZZZZ	1	09:38:00																								
CCV02	1	09:40:00															X									
CCB02	1	09:41:00															X									
ZZZZZZ	1	09:43:00																								
ZZZZZZ	1	09:45:00																								
ZZZZZZ	1	09:46:00																								
ZZZZZZ	1	09:48:00																								
ZZZZZZ	1	09:50:00																								
ZZZZZZ	1	09:51:00																								
ZZZZZZ	1	09:53:00																								
ZZZZZZ	1	09:55:00																								
ZZZZZZ	1	09:56:00																								
ZZZZZZ	1	09:58:00																								
CCV03	1	10:00:00															X									
CCB03	1	10:01:00															X									
ZZZZZZ	1	10:03:00																								
ZZZZZZ	1	10:05:00																								
ZZZZZZ	1	10:06:00																								
ZZZZZZ	1	10:08:00																								
ZZZZZZ	1	10:10:00																								

SW846

Metals
-14-
Analysis Run Log

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
ZZZZZZ	1	11:19:00																								
CCV07	1	11:20:00															X									
CCB07	1	11:22:00															X									
ZZZZZZ	1	11:24:00																								
ZZZZZZ	1	11:25:00																								
ZZZZZZ	1	11:27:00																								
ZZZZZZ	1	11:29:00																								
ZZZZZZ	1	11:30:00																								
ZZZZZZ	1	11:32:00																								
ZZZZZZ	10	11:34:00																								
ZZZZZZ	1	11:35:00																								
ZZZZZZ	1	11:37:00																								
ZZZZZZ	1	11:39:00																								
CCV08	1	11:40:00															X									
CCB08	1	11:42:00															X									
ZZZZZZ	1	11:44:00																								
ZZZZZZ	5	11:46:00																								
ZZZZZZ	1	11:47:00																								
ZZZZZZ	1	11:49:00																								
ZZZZZZ	1	11:51:00																								
ZZZZZZ	1	11:52:00																								
ZZZZZZ	1	11:54:00																								
ZZZZZZ	1	11:56:00																								
ZZZZZZ	1	11:57:00																								
ZZZZZZ	1	11:59:00																								
CCV09	1	12:01:00															X									
CCB09	1	12:02:00															X									
ZZZZZZ	1	12:04:00																								
ZZZZZZ	1	12:06:00																								
ZZZZZZ	1	12:07:00																								
ZZZZZZ	1	12:09:00																								
ZZZZZZ	1	12:11:00																								
ZZZZZZ	1	12:13:00																								
ZZZZZZ	1	12:14:00																								
ZZZZZZ	10	12:16:00																								
ZZZZZZ	1	12:18:00																								
ZZZZZZ	1	12:19:00																								
CCV10	1	12:21:00															X									
CCB10	1	12:23:00															X									
ZZZZZZ	1	12:24:00																								

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
1202056152	10	13:36:00															X									
ZZZZZZ	1	13:38:00																								
1202056153	1	13:40:00															X									
CCV14	1	13:42:00															X									
CCB14	1	13:43:00															X									
1202056154	1	13:45:00															X									
1202056156	1	13:47:00															X									
1202056155	5	13:48:00															X									
ZZZZZZ	1	13:50:00																								
ZZZZZZ	1	13:52:00																								
ZZZZZZ	1	13:53:00																								
ZZZZZZ	1	13:55:00																								
ZZZZZZ	1	13:57:00																								
ZZZZZZ	1	13:59:00																								
ZZZZZZ	1	14:00:00																								
CCV15	1	14:02:00															X									
CCB15	1	14:04:00															X									
ZZZZZZ	1	14:05:00																								
248041001	1	14:07:00															X									
248041002	1	14:09:00															X									
248041003	1	14:11:00															X									
248041004	1	14:12:00															X									
248041005	1	14:14:00															X									
CCV16	1	14:16:00															X									
CCB16	1	14:17:00															X									

Standards

METALS
-10-
Instrument Detection Limits

SDG NO. 10-2069-1

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. 10-2069-1

Contract: LANL01004

Lab Code: GEL

MDL Effective Date: 15-JUN-09

	<u>Analyte</u>	<u>Wavelength</u> <u>(nm)</u>	<u>MDL</u> <u>ug/L</u>	<u>RDL</u> <u>ug/L</u>
MERCURY				
SOLID	Mercury		0.068	.2

METALS
-10-
Instrument Detection Limits

SDG NO. 10-2069-1

Contract: LANL01004

Lab Code: GEL

MDL Effective Date: 01-JUL-09

ICP	<u>Analyte</u>	<u>Wavelength</u> (nm)	<u>MDL</u>	<u>RDL</u>
			<u>ug/L</u>	<u>ug/L</u>
SOLID	Aluminum	396.153	68.0	200
	Antimony	206.836	3.3	10
	Arsenic	188.979	5.0	30
	Barium	233.527	1.0	5
	Beryllium	313.107	1.0	5
	Cadmium	226.502	1.0	5
	Calcium	317.933	80.0	250
	Chromium	267.716	1.5	5
	Cobalt	228.616	1.5	5
	Copper	324.752	3.0	10
	Iron	238.204	80.0	250
	Lead	220.353	2.5	10
	Magnesium	279.077	85.0	300
	Manganese	257.61	2.0	10
	Nickel	231.604	1.5	5
	Potassium	766.49	64.0	250
	Selenium	196.026	5.0	30
	Silver	328.068	1.0	5
	Sodium	589.592	70.0	250
	Thallium	190.801	5.0	20
	Uranium	409.014	10.0	50
	Vanadium	292.402	1.0	5
	Zinc	213.857	3.3	10

METALS
-11-
Interelement Correction Factors

Lab Code: GEL

GEL Job No: 10-2069-1

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: 10-2069-1

Contract: LANL01004

Instrument: OPTIMA3

Effective Dates: 01-FEB-10

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Boron	Cadmium	Chromium	Cobalt	Copper
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	2.85580	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.44491	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	-29.9151	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.57616
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.60374	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	198.62
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silica	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	4.37985	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.36147	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	2.23785	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.36818	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	1.35273

METALS
-11-
Interelement Correction Factors

Lab Code: GEL

GEL Job No: 10-2069-1

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: **10-2069-1**

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: GEL

GEL Job No: 10-2069-1

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-
Interement Correction Factors

Lab Code: GEL

GEL Job No: 10-2069-1

Contract: LANL01004

Instrument: OPTIMA3

Effective Dates: 01-FEB-10

Interement Correction Factors (apparent ppb analyte/ppm interferent)

		Tin	Titanium	Uranium	Vanadium	Zinc
Parmname	Wavelength					
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	-15.4932	3.30431	0.00000	-2.81282	0.00000
Arsenic	188.979	0.00000	-8.66313	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	-2.20293	0.00000
Beryllium	313.107	0.00000	-2.27027	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	-0.19473	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.39645	-1.41250	0.00000
Cobalt	228.616	0.00000	2.09497	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.55360	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	-9.37529	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silica	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.81635	-4.04400	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	-8.29801	0.00000	1.88584	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.43915	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	1.05947	-1.91382	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-12-
Linear Ranges

SDG NO. 10-2069-1

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>
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. 10-2069-1

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
Uranium	20	15000	ug/L	01-FEB-10
Vanadium	20	10000	ug/L	01-FEB-10
Zinc	20	15000	ug/L	01-FEB-10
Thallium	20	10000	ug/L	01-FEB-10

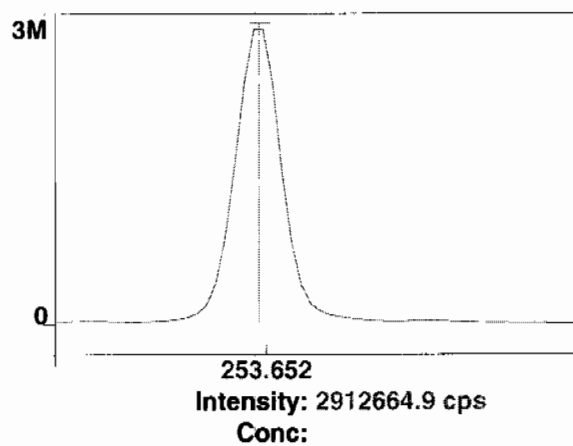
Raw Data

Method: Hg_ReAlign
Result: 041410

Sample ID: Hg_ReAlign

Hg 253.652

Rep: 1



1

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Reprocessing Begun

Logged In Analyst: Optima3

Technique: ICP Continuous

Results Data Set (original): 032510

Results Library (original): C:\pe\Optima3\Results\Results.mdb

Results Data Set (reprocessed): 032510A

Results Library (reprocessed): C:\pe\Optima3\Results\Results.mdb

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Method Loaded

Method Name: General Eng.2AX

Method Last Saved: 3/25/2010 09:39:44

IEC File: 011110.iec

MSF File:

Method Description:

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Ag 328.068	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Al 396.153Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
As 188.979	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
B 249.677	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ba 233.527	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Be 313.107	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ca 317.933Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Cd 226.502	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Co 228.616	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cr 267.716	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cu 324.752	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Fe 238.204 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
K 766.490 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mg 279.077 IEC	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Mn 257.610	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Mo 202.031	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Na 589.592 Radial	Lin Thru 0	Peak Area	Radial	Sc Radial	No
Ni 231.604	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
P 214.914	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Pb 220.353	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
S 181.975 Axial	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sb 206.836	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sc 361.383	Lin Thru 0	Peak Area	Axial	n/a	n/a
Sc Radial	Lin, Calc Int	Peak Area	Radial	n/a	n/a
Se 196.026	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Si 251.611	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sn 189.927	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
Ti 334.940	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Tl 190.801	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
U 409.014	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
V 292.402	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y 371.029	Lin, Calc Int	Peak Area	Axial	n/a	n/a
Zn 213.857	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y RADIAL	Lin, Calc Int	Peak Area	Radial	n/a	n/a
SiO2	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes

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Sequence No.: 1

Autosampler Location: 8

Sample ID: S0

Date Collected: 3/25/2010 07:36:22

Analyst:

Data Type: Reprocessed on 3/25/2010 09:41:34

Logged In Analyst (Original) : Optima3

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

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Replicate Data: S0

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Analysis Time
1	Sc 361.383	836103.0	836103.0	99.553 %	07:39:31
1	Sc Radial	4000.8	4000.8	99.2 %	07:38:35
1	Y 371.029	713700.0	713700.0	99.668 %	07:39:31
1	Y RADIAL	4493.5	4493.5	99.46 %	07:38:15
1	Ag 328.068†	255.1	256.3	[0.00] ug/L	07:39:36

1	Al 396.153Radial†	-80.2	-80.9	[0.00]	ug/L	07:38:35
1	As 188.979†	-19.7	-19.8	[0.00]	ug/L	07:39:57
1	B 249.677†	-248.0	-249.2	[0.00]	ug/L	07:39:57
1	Ba 233.527†	17.8	17.8	[0.00]	ug/L	07:39:57
1	Be 313.107†	-4288.8	-4308.1	[0.00]	ug/L	07:39:36
1	Ca 317.933Radial†	14.9	15.0	[0.00]	ug/L	07:38:35
1	Cd 226.502†	-166.3	-167.0	[0.00]	ug/L	07:39:57
1	Co 228.616†	-40.9	-41.1	[0.00]	ug/L	07:39:57
1	Cr 267.716†	104.4	104.8	[0.00]	ug/L	07:39:57
1	Cu 324.752†	6285.6	6313.8	[0.00]	ug/L	07:39:36
1	Fe 238.204 Radial†	7.9	8.0	[0.00]	ug/L	07:38:35
1	K 766.490 Radial†	2888.6	2912.5	[0.00]	ug/L	07:38:15
1	Mg 279.077 IEC†	0.6	0.6	[0.00]	ug/L	07:38:35
1	Mn 257.610†	458.2	460.3	[0.00]	ug/L	07:39:57
1	Mo 202.031†	9.0	9.0	[0.00]	ug/L	07:39:57
1	Na 589.592 Radial†	-423.8	-427.3	[0.00]	ug/L	07:38:15
1	Ni 231.604†	96.1	96.5	[0.00]	ug/L	07:39:57
1	P 214.914†	174.1	174.9	[0.00]	ug/L	07:39:57
1	Pb 220.353†	-63.2	-63.4	[0.00]	ug/L	07:39:57
1	S 181.975 Axial†	26.6	26.8	[0.00]	ug/L	07:39:57
1	Sb 206.836†	33.5	33.7	[0.00]	ug/L	07:39:57
1	Se 196.026†	-17.3	-17.4	[0.00]	ug/L	07:39:57
1	Si 251.611†	537.0	539.4	[0.00]	ug/L	07:39:57
1	Sn 189.927†	0.1	0.1	[0.00]	ug/L	07:39:57
1	Sr 421.552†	56.6	57.1	[0.00]	ug/L	07:38:15
1	Ti 334.940†	-1119.0	-1124.1	[0.00]	ug/L	07:39:36
1	Tl 190.801†	-24.9	-25.0	[0.00]	ug/L	07:39:57
1	U 409.014†	-1979.2	-1988.1	[0.00]	ug/L	07:39:31
1	V 292.402†	-1383.4	-1389.6	[0.00]	ug/L	07:39:36
1	Zn 213.857†	608.4	611.1	[0.00]	ug/L	07:39:57
1	SiO2†	551.8	554.3	[0.00]	ug/L	07:41:02
2	Sc 361.383	844946.8	844946.8	100.61	%	07:40:02
2	Sc Radial	4057.7	4057.7	101	%	07:39:00
2	Y 371.029	720116.7	720116.7	100.56	%	07:40:02
2	Y RADIAL	4532.7	4532.7	100.3	%	07:38:40
2	Ag 328.068†	237.1	235.7	[0.00]	ug/L	07:40:07
2	Al 396.153Radial†	-79.4	-78.9	[0.00]	ug/L	07:39:00
2	As 188.979†	-19.9	-19.8	[0.00]	ug/L	07:40:27
2	B 249.677†	-256.7	-255.1	[0.00]	ug/L	07:40:27
2	Ba 233.527†	19.4	19.3	[0.00]	ug/L	07:40:27
2	Be 313.107†	-4273.8	-4248.0	[0.00]	ug/L	07:40:07
2	Ca 317.933Radial†	17.6	17.5	[0.00]	ug/L	07:39:00
2	Cd 226.502†	-163.4	-162.5	[0.00]	ug/L	07:40:27
2	Co 228.616†	-35.9	-35.6	[0.00]	ug/L	07:40:27
2	Cr 267.716†	87.7	87.2	[0.00]	ug/L	07:40:27
2	Cu 324.752†	6383.0	6344.5	[0.00]	ug/L	07:40:07
2	Fe 238.204 Radial†	8.6	8.5	[0.00]	ug/L	07:39:00
2	K 766.490 Radial†	2817.5	2800.9	[0.00]	ug/L	07:38:40
2	Mg 279.077 IEC†	2.0	2.0	[0.00]	ug/L	07:39:00
2	Mn 257.610†	445.5	442.8	[0.00]	ug/L	07:40:27
2	Mo 202.031†	16.5	16.4	[0.00]	ug/L	07:40:27
2	Na 589.592 Radial†	-464.4	-461.7	[0.00]	ug/L	07:38:40
2	Ni 231.604†	105.3	104.7	[0.00]	ug/L	07:40:27
2	P 214.914†	160.8	159.8	[0.00]	ug/L	07:40:27
2	Pb 220.353†	-53.7	-53.3	[0.00]	ug/L	07:40:27
2	S 181.975 Axial†	23.5	23.3	[0.00]	ug/L	07:40:27
2	Sb 206.836†	19.9	19.8	[0.00]	ug/L	07:40:27
2	Se 196.026†	-18.3	-18.2	[0.00]	ug/L	07:40:27
2	Si 251.611†	521.7	518.5	[0.00]	ug/L	07:40:27
2	Sn 189.927†	12.3	12.2	[0.00]	ug/L	07:40:27
2	Sr 421.552†	80.9	80.5	[0.00]	ug/L	07:38:40
2	Ti 334.940†	-1077.7	-1071.2	[0.00]	ug/L	07:40:07
2	Tl 190.801†	-25.6	-25.4	[0.00]	ug/L	07:40:27
2	U 409.014†	-1994.9	-1982.8	[0.00]	ug/L	07:40:02
2	V 292.402†	-1444.8	-1436.1	[0.00]	ug/L	07:40:07
2	Zn 213.857†	604.8	601.1	[0.00]	ug/L	07:40:27
2	SiO2†	559.1	555.7	[0.00]	ug/L	07:41:08
3	Sc 361.383	838516.4	838516.4	99.841	%	07:40:32
3	Sc Radial	4043.0	4043.0	100	%	07:39:25
3	Y 371.029	714407.8	714407.8	99.767	%	07:40:32
3	Y RADIAL	4527.9	4527.9	100.2	%	07:39:05

3	Ag 328.068†	267.8	268.2	[0.00]	ug/L	07:40:37
3	Al 396.153Radial†	-79.3	-79.1	[0.00]	ug/L	07:39:25
3	As 188.979†	-22.9	-22.9	[0.00]	ug/L	07:40:57
3	B 249.677†	-245.8	-246.2	[0.00]	ug/L	07:40:57
3	Ba 233.527†	18.4	18.4	[0.00]	ug/L	07:40:57
3	Be 313.107†	-4225.3	-4232.0	[0.00]	ug/L	07:40:37
3	Ca 317.933Radial†	19.1	19.0	[0.00]	ug/L	07:39:25
3	Cd 226.502†	-169.4	-169.7	[0.00]	ug/L	07:40:57
3	Co 228.616†	-39.9	-40.0	[0.00]	ug/L	07:40:57
3	Cr 267.716†	92.7	92.9	[0.00]	ug/L	07:40:57
3	Cu 324.752†	6389.7	6399.9	[0.00]	ug/L	07:40:37
3	Fe 238.204 Radial†	10.5	10.4	[0.00]	ug/L	07:39:25
3	K 766.490 Radial†	2702.5	2696.4	[0.00]	ug/L	07:39:05
3	Mg 279.077 IEC†	-0.4	-0.4	[0.00]	ug/L	07:39:25
3	Mn 257.610†	453.4	454.2	[0.00]	ug/L	07:40:57
3	Mo 202.031†	17.1	17.2	[0.00]	ug/L	07:40:57
3	Na 589.592 Radial†	-494.7	-493.6	[0.00]	ug/L	07:39:05
3	Ni 231.604†	79.5	79.6	[0.00]	ug/L	07:40:57
3	P 214.914†	169.7	169.9	[0.00]	ug/L	07:40:57
3	Pb 220.353†	-59.6	-59.7	[0.00]	ug/L	07:40:57
3	S 181.975 Axial†	23.0	23.1	[0.00]	ug/L	07:40:57
3	Sb 206.836†	26.4	26.4	[0.00]	ug/L	07:40:57
3	Se 196.026†	-15.2	-15.3	[0.00]	ug/L	07:40:57
3	Si 251.611†	517.6	518.4	[0.00]	ug/L	07:40:57
3	Sn 189.927†	-3.1	-3.1	[0.00]	ug/L	07:40:57
3	Sr 421.552†	72.7	72.6	[0.00]	ug/L	07:39:05
3	Ti 334.940†	-1053.0	-1054.7	[0.00]	ug/L	07:40:37
3	Tl 190.801†	-24.7	-24.7	[0.00]	ug/L	07:40:57
3	U 409.014†	-2131.2	-2134.6	[0.00]	ug/L	07:40:32
3	V 292.402†	-1454.6	-1456.9	[0.00]	ug/L	07:40:37
3	Zn 213.857†	606.1	607.1	[0.00]	ug/L	07:40:57
3	SiO2†	549.2	550.1	[0.00]	ug/L	07:41:13

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	839855.4	4571.41	0.54%	100.00 %
Sc Radial	4033.8	29.56	0.73%	100 %
Y 371.029	716074.8	3518.18	0.49%	100.00 %
Y RADIAL	4518.0	21.39	0.47%	100.0 %
Ag 328.068†	253.4	16.46	6.49%	[0.00] ug/L
Al 396.153Radial†	-79.6	1.10	1.38%	[0.00] ug/L
As 188.979†	-20.8	1.81	8.68%	[0.00] ug/L
B 249.677†	-250.2	4.55	1.82%	[0.00] ug/L
Ba 233.527†	18.5	0.73	3.95%	[0.00] ug/L
Be 313.107†	-4262.7	40.09	0.94%	[0.00] ug/L
Ca 317.933Radial†	17.2	2.01	11.71%	[0.00] ug/L
Cd 226.502†	-166.4	3.67	2.20%	[0.00] ug/L
Co 228.616†	-38.9	2.88	7.41%	[0.00] ug/L
Cr 267.716†	95.0	9.01	9.49%	[0.00] ug/L
Cu 324.752†	6352.8	43.63	0.69%	[0.00] ug/L
Fe 238.204 Radial†	9.0	1.27	14.16%	[0.00] ug/L
K 766.490 Radial†	2803.2	108.10	3.86%	[0.00] ug/L
Mg 279.077 IEC†	0.7	1.18	167.64%	[0.00] ug/L
Mn 257.610†	452.4	8.84	1.95%	[0.00] ug/L
Mo 202.031†	14.2	4.48	31.55%	[0.00] ug/L
Na 589.592 Radial†	-460.9	33.14	7.19%	[0.00] ug/L
Ni 231.604†	93.6	12.79	13.67%	[0.00] ug/L
P 214.914†	168.2	7.67	4.56%	[0.00] ug/L
Pb 220.353†	-58.8	5.11	8.68%	[0.00] ug/L
S 181.975 Axial†	24.4	2.06	8.46%	[0.00] ug/L
Sb 206.836†	26.6	6.94	26.07%	[0.00] ug/L
Se 196.026†	-16.9	1.52	8.98%	[0.00] ug/L
Si 251.611†	525.5	12.10	2.30%	[0.00] ug/L
Sn 189.927†	3.1	8.09	262.02%	[0.00] ug/L
Sr 421.552†	70.0	11.90	16.99%	[0.00] ug/L
Ti 334.940†	-1083.3	36.23	3.34%	[0.00] ug/L
Tl 190.801†	-25.1	0.36	1.43%	[0.00] ug/L
U 409.014†	-2035.2	86.16	4.23%	[0.00] ug/L
V 292.402†	-1427.5	34.43	2.41%	[0.00] ug/L

Zn 213.857†	606.4	5.02	0.83%	[0.00] ug/L
SiO2†	553.4	2.90	0.52%	[0.00] ug/L

Sequence No.: 2

Sample ID: S0.1

Analyst:

Logged In Analyst (Original) : Optima3

Initial Sample Wt:

Dilution:

Autosampler Location: 2

Date Collected: 3/25/2010 07:43:23

Data Type: Reprocessed on 3/25/2010 09:41:36

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: S0.1

Rep#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Analysis Time
1	Sc 361.383	821023.4	821023.4	97.758 %	07:46:32
1	Sc Radial	4127.0	4127.0	102 %	07:45:35
1	Y 371.029	698941.8	698941.8	97.607 %	07:46:32
1	Y RADIAL	4473.9	4473.9	99.02 %	07:45:35
1	Ag 328.068†	19878.5	20081.1	[100] ug/L	07:46:32
1	As 188.979†	160.7	185.2	[100] ug/L	07:46:52
1	B 249.677†	3185.5	3508.7	[100] ug/L	07:46:32
1	Ba 233.527†	10757.3	10985.5	[100] ug/L	07:46:32
1	Be 313.107†	240605.7	250387.2	[100] ug/L	07:46:32
1	Cd 226.502†	6844.8	7168.2	[100] ug/L	07:46:52
1	Co 228.616†	3880.7	4008.7	[100] ug/L	07:46:52
1	Cr 267.716†	7787.1	7870.8	[100] ug/L	07:46:32
1	Cu 324.752†	36784.8	31275.8	[100] ug/L	07:46:32
1	K 766.490 Radial†	7777.2	4798.4	[1000] ug/L	07:45:15
1	Mn 257.610†	77724.0	79054.4	[100] ug/L	07:46:32
1	Mo 202.031†	1161.8	1174.2	[100] ug/L	07:46:52
1	Ni 231.604†	3327.8	3310.5	[100] ug/L	07:46:52
1	P 214.914†	873.8	725.6	[500] ug/L	07:46:52
1	Pb 220.353†	616.2	689.1	[100] ug/L	07:46:52
1	S 181.975 Axial†	139.9	118.8	[200] ug/L	07:46:52
1	Sb 206.836†	258.3	237.6	[100] ug/L	07:46:52
1	Se 196.026†	101.3	120.6	[100] ug/L	07:46:52
1	Si 251.611†	13686.8	13475.3	[500] ug/L	07:46:32
1	Sn 189.927†	439.4	446.4	[100] ug/L	07:46:52
1	Sr 421.552†	12051.5	11709.4	[100] ug/L	07:45:35
1	Ti 334.940†	56390.3	58767.1	[100] ug/L	07:46:32
1	Tl 190.801†	240.2	270.7	[100] ug/L	07:46:52
1	U 409.014†	1416.4	3484.0	[100] ug/L	07:46:32
1	V 292.402†	11376.3	13064.8	[100] ug/L	07:46:32
1	Zn 213.857†	9118.3	8721.1	[100] ug/L	07:46:32
1	SiO2†	13925.9	13692.0	[1069.5] ug/L	07:47:49
2	Sc 361.383	833646.3	833646.3	99.261 %	07:46:58
2	Sc Radial	4215.1	4215.1	104 %	07:46:00
2	Y 371.029	709448.6	709448.6	99.075 %	07:46:58
2	Y RADIAL	4571.2	4571.2	101.2 %	07:46:00
2	Ag 328.068†	20388.2	20286.6	[100] ug/L	07:46:58
2	As 188.979†	167.6	189.7	[100] ug/L	07:47:18
2	B 249.677†	3281.4	3556.0	[100] ug/L	07:46:58
2	Ba 233.527†	10965.8	11029.0	[100] ug/L	07:46:58
2	Be 313.107†	244618.3	250703.0	[100] ug/L	07:46:58
2	Cd 226.502†	6846.9	7064.3	[100] ug/L	07:47:18
2	Co 228.616†	3867.5	3935.2	[100] ug/L	07:47:18
2	Cr 267.716†	7970.7	7935.1	[100] ug/L	07:46:58
2	Cu 324.752†	37206.7	31131.1	[100] ug/L	07:46:58
2	K 766.490 Radial†	7791.7	4653.3	[1000] ug/L	07:45:40
2	Mn 257.610†	79103.0	79239.7	[100] ug/L	07:46:58
2	Mo 202.031†	1167.4	1161.9	[100] ug/L	07:47:18
2	Ni 231.604†	3349.3	3280.7	[100] ug/L	07:47:18
2	P 214.914†	865.2	703.5	[500] ug/L	07:47:18
2	Pb 220.353†	606.9	670.3	[100] ug/L	07:47:18
2	S 181.975 Axial†	137.1	113.8	[200] ug/L	07:47:18
2	Sb 206.836†	264.7	240.1	[100] ug/L	07:47:18
2	Se 196.026†	104.6	122.3	[100] ug/L	07:47:18
2	Si 251.611†	13985.8	13564.6	[500] ug/L	07:46:58
2	Sn 189.927†	449.7	449.9	[100] ug/L	07:47:18
2	Sr 421.552†	12194.4	11599.9	[100] ug/L	07:46:00
2	Ti 334.940†	57297.6	58807.7	[100] ug/L	07:46:58
2	Tl 190.801†	231.4	258.2	[100] ug/L	07:47:18

2	U 409.014†	1429.1	3474.9	[100]	ug/L	07:46:58
2	V 292.402†	11662.7	13177.1	[100]	ug/L	07:46:58
2	Zn 213.857†	9192.0	8654.1	[100]	ug/L	07:46:58
2	SiO2†	13855.3	13405.1	[1069.5]	ug/L	07:47:54
3	Sc 361.383	828606.5	828606.5	98.661	%	07:47:23
3	Sc Radial	4193.1	4193.1	104	%	07:46:25
3	Y 371.029	705706.8	705706.8	98.552	%	07:47:23
3	Y RADIAL	4561.8	4561.8	101.0	%	07:46:25
3	Ag 328.068†	20096.1	20115.5	[100]	ug/L	07:47:23
3	As 188.979†	158.7	181.6	[100]	ug/L	07:47:43
3	B 249.677†	3312.5	3607.7	[100]	ug/L	07:47:23
3	Ba 233.527†	10875.7	11004.9	[100]	ug/L	07:47:23
3	Be 313.107†	242954.3	250515.2	[100]	ug/L	07:47:23
3	Cd 226.502†	6797.6	7056.3	[100]	ug/L	07:47:43
3	Co 228.616†	3855.2	3946.4	[100]	ug/L	07:47:43
3	Cr 267.716†	7892.1	7904.3	[100]	ug/L	07:47:23
3	Cu 324.752†	37148.2	31299.7	[100]	ug/L	07:47:23
3	K 766.490 Radial†	7733.6	4636.6	[1000]	ug/L	07:46:05
3	Mn 257.610†	78392.6	79004.4	[100]	ug/L	07:47:23
3	Mo 202.031†	1169.1	1170.7	[100]	ug/L	07:47:43
3	Ni 231.604†	3335.3	3287.0	[100]	ug/L	07:47:43
3	P 214.914†	868.7	712.3	[500]	ug/L	07:47:43
3	Pb 220.353†	611.1	678.2	[100]	ug/L	07:47:43
3	S 181.975 Axial†	137.4	114.8	[200]	ug/L	07:47:43
3	Sb 206.836†	250.1	226.8	[100]	ug/L	07:47:43
3	Se 196.026†	109.9	128.3	[100]	ug/L	07:47:43
3	Si 251.611†	13803.7	13465.7	[500]	ug/L	07:47:23
3	Sn 189.927†	455.0	458.1	[100]	ug/L	07:47:43
3	Sr 421.552†	12158.3	11626.4	[100]	ug/L	07:46:25
3	Ti 334.940†	56923.7	58779.8	[100]	ug/L	07:47:23
3	Tl 190.801†	234.4	262.7	[100]	ug/L	07:47:43
3	U 409.014†	1552.5	3608.7	[100]	ug/L	07:47:23
3	V 292.402†	11612.6	13197.8	[100]	ug/L	07:47:23
3	Zn 213.857†	9123.1	8640.5	[100]	ug/L	07:47:23
3	SiO2†	13861.8	13496.6	[1069.5]	ug/L	07:47:59

Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	827758.8	6354.01	0.77%	98.560	%
Sc Radial	4178.4	45.87	1.10%	104	%
Y 371.029	704699.1	5325.39	0.76%	98.411	%
Y RADIAL	4535.6	53.66	1.18%	100.4	%
Ag 328.068†	20161.1	110.08	0.55%	[100]	ug/L
As 188.979†	185.5	4.04	2.18%	[100]	ug/L
B 249.677†	3557.4	49.51	1.39%	[100]	ug/L
Ba 233.527†	11006.5	21.74	0.20%	[100]	ug/L
Be 313.107†	250535.1	158.83	0.06%	[100]	ug/L
Cd 226.502†	7096.3	62.42	0.88%	[100]	ug/L
Co 228.616†	3963.5	39.55	1.00%	[100]	ug/L
Cr 267.716†	7903.4	32.18	0.41%	[100]	ug/L
Cu 324.752†	31235.5	91.26	0.29%	[100]	ug/L
K 766.490 Radial†	4696.1	88.99	1.90%	[1000]	ug/L
Mn 257.610†	79099.5	124.00	0.16%	[100]	ug/L
Mo 202.031†	1169.0	6.33	0.54%	[100]	ug/L
Ni 231.604†	3292.7	15.73	0.48%	[100]	ug/L
P 214.914†	713.8	11.16	1.56%	[500]	ug/L
Pb 220.353†	679.2	9.46	1.39%	[100]	ug/L
S 181.975 Axial†	115.8	2.62	2.26%	[200]	ug/L
Sb 206.836†	234.8	7.04	3.00%	[100]	ug/L
Se 196.026†	123.8	4.06	3.28%	[100]	ug/L
Si 251.611†	13501.8	54.53	0.40%	[500]	ug/L
Sn 189.927†	451.5	5.99	1.33%	[100]	ug/L
Sr 421.552†	11645.2	57.14	0.49%	[100]	ug/L
Ti 334.940†	58784.9	20.77	0.04%	[100]	ug/L
Tl 190.801†	263.9	6.35	2.41%	[100]	ug/L
U 409.014†	3522.6	74.79	2.12%	[100]	ug/L
V 292.402†	13146.5	71.54	0.54%	[100]	ug/L
Zn 213.857†	8671.9	43.13	0.50%	[100]	ug/L
SiO2†	13531.2	146.55	1.08%	[1069.5]	ug/L

Sequence No.: 3
 Sample ID: S0.5
 Analyst:
 Logged In Analyst (Original) : Optima3
 Initial Sample Wt:
 Dilution:

Autosampler Location: 3
 Date Collected: 3/25/2010 07:50:09
 Data Type: Reprocessed on 3/25/2010 09:41:41
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: S0.5

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Analysis Time
1	Sc 361.383	841974.3	841974.3	100.25 %	07:53:19
1	Sc Radial	4011.4	4011.4	99.4 %	07:52:22
1	Y 371.029	709346.7	709346.7	99.060 %	07:53:19
1	Y RADIAL	4397.0	4397.0	97.32 %	07:52:01
1	Ag 328.068†	99753.1	99248.7	[500] ug/L	07:53:24
1	Al 396.153Radial†	4657.2	4762.9	[5000] ug/L	07:52:01
1	As 188.979†	906.2	924.8	[500] ug/L	07:53:44
1	B 249.677†	17632.0	17837.8	[500] ug/L	07:53:24
1	Ba 233.527†	53079.4	52927.4	[500] ug/L	07:53:24
1	Be 313.107†	1232123.8	1233285.8	[500] ug/L	07:53:19
1	Ca 317.933Radial†	2536.9	2533.9	[5000] ug/L	07:52:22
1	Cd 226.502†	35169.9	35247.8	[500] ug/L	07:53:24
1	Co 228.616†	19413.5	19403.5	[500] ug/L	07:53:24
1	Cr 267.716†	38241.2	38050.0	[500] ug/L	07:53:24
1	Cu 324.752†	157681.8	150932.2	[500] ug/L	07:53:24
1	K 766.490 Radial†	27275.5	24624.7	[5000] ug/L	07:52:01
1	Mg 279.077 IEC†	121.8	121.8	[5000] ug/L	07:52:22
1	Mn 257.610†	373488.5	372096.1	[500] ug/L	07:53:24
1	Mo 202.031†	5711.5	5682.9	[500] ug/L	07:53:44
1	Ni 231.604†	16266.4	16131.9	[500] ug/L	07:53:24
1	P 214.914†	3611.5	3434.2	[2500] ug/L	07:53:44
1	Pb 220.353†	3231.1	3281.8	[500] ug/L	07:53:44
1	S 181.975 Axial†	604.7	578.8	[1000] ug/L	07:53:44
1	Sb 206.836†	1191.8	1162.1	[500] ug/L	07:53:44
1	Se 196.026†	609.3	624.7	[500] ug/L	07:53:44
1	Si 251.611†	67271.8	66577.1	[2500] ug/L	07:53:24
1	Sn 189.927†	2251.0	2242.2	[500] ug/L	07:53:44
1	Sr 421.552†	56646.1	56892.7	[500] ug/L	07:52:01
1	Ti 334.940†	284907.4	285273.7	[500] ug/L	07:53:24
1	Tl 190.801†	1245.3	1267.2	[500] ug/L	07:53:44
1	U 409.014†	15111.9	17109.0	[500] ug/L	07:53:24
1	V 292.402†	62766.6	64036.2	[500] ug/L	07:53:24
1	Zn 213.857†	42526.1	41812.6	[500] ug/L	07:53:24
1	SiO2†	67019.3	66297.3	[5347.5] ug/L	07:54:51
2	Sc 361.383	846719.0	846719.0	100.82 %	07:53:49
2	Sc Radial	3978.2	3978.2	98.6 %	07:52:47
2	Y 371.029	713643.5	713643.5	99.660 %	07:53:49
2	Y RADIAL	4546.4	4546.4	100.6 %	07:52:27
2	Ag 328.068†	99872.8	98809.9	[500] ug/L	07:53:55
2	Al 396.153Radial†	4808.0	4954.9	[5000] ug/L	07:52:27
2	As 188.979†	911.1	924.5	[500] ug/L	07:54:15
2	B 249.677†	17631.3	17738.5	[500] ug/L	07:53:55
2	Ba 233.527†	53130.5	52681.3	[500] ug/L	07:53:55
2	Be 313.107†	1239244.9	1233462.1	[500] ug/L	07:53:49
2	Ca 317.933Radial†	2531.7	2550.0	[5000] ug/L	07:52:47
2	Cd 226.502†	35234.8	35115.6	[500] ug/L	07:53:55
2	Co 228.616†	19493.5	19374.4	[500] ug/L	07:53:55
2	Cr 267.716†	38351.3	37945.4	[500] ug/L	07:53:55
2	Cu 324.752†	157772.5	150140.8	[500] ug/L	07:53:55
2	K 766.490 Radial†	27961.8	25549.9	[5000] ug/L	07:52:27
2	Mg 279.077 IEC†	119.2	120.2	[5000] ug/L	07:52:47
2	Mn 257.610†	374023.1	370538.8	[500] ug/L	07:53:55
2	Mo 202.031†	5721.5	5660.9	[500] ug/L	07:54:15
2	Ni 231.604†	16358.6	16132.4	[500] ug/L	07:53:55
2	P 214.914†	3606.1	3408.7	[2500] ug/L	07:54:15
2	Pb 220.353†	3227.3	3260.0	[500] ug/L	07:54:15
2	S 181.975 Axial†	589.5	560.4	[1000] ug/L	07:54:15
2	Sb 206.836†	1197.0	1160.6	[500] ug/L	07:54:15

2	Se 196.026†	611.3	623.3	[500]	ug/L	07:54:15
2	Si 251.611†	67305.9	66234.9	[2500]	ug/L	07:53:55
2	Sn 189.927†	2268.2	2246.7	[500]	ug/L	07:54:15
2	Sr 421.552†	58458.6	59206.8	[500]	ug/L	07:52:27
2	Ti 334.940†	285442.2	284211.7	[500]	ug/L	07:53:55
2	Tl 190.801†	1248.6	1263.5	[500]	ug/L	07:54:15
2	U 409.014†	15058.7	16971.8	[500]	ug/L	07:53:55
2	V 292.402†	62929.8	63847.2	[500]	ug/L	07:53:55
2	Zn 213.857†	42713.5	41760.9	[500]	ug/L	07:53:55
2	SiO2†	66614.6	65521.3	[5347.5]	ug/L	07:54:56
3	Sc 361.383	830346.7	830346.7	98.868	%	07:54:20
3	Sc Radial	4008.7	4008.7	99.4	%	07:53:12
3	Y 371.029	700001.2	700001.2	97.755	%	07:54:20
3	Y RADIAL	4446.3	4446.3	98.41	%	07:52:52
3	Ag 328.068†	100388.7	101284.9	[500]	ug/L	07:54:25
3	Al 396.153Radial†	4724.6	4833.9	[5000]	ug/L	07:52:52
3	As 188.979†	897.7	928.8	[500]	ug/L	07:54:45
3	B 249.677†	17814.4	18268.5	[500]	ug/L	07:54:25
3	Ba 233.527†	53124.2	53714.0	[500]	ug/L	07:54:25
3	Be 313.107†	1217307.0	1235509.6	[500]	ug/L	07:54:20
3	Ca 317.933Radial†	2533.4	2532.1	[5000]	ug/L	07:53:12
3	Cd 226.502†	35214.6	35784.2	[500]	ug/L	07:54:25
3	Co 228.616†	19467.0	19728.9	[500]	ug/L	07:54:25
3	Cr 267.716†	38440.6	38785.8	[500]	ug/L	07:54:25
3	Cu 324.752†	159005.1	154473.2	[500]	ug/L	07:54:25
3	K 766.490 Radial†	27457.7	24826.7	[5000]	ug/L	07:52:52
3	Mg 279.077 IEC†	119.3	119.4	[5000]	ug/L	07:53:12
3	Mn 257.610†	374717.1	378555.7	[500]	ug/L	07:54:25
3	Mo 202.031†	5739.1	5790.7	[500]	ug/L	07:54:45
3	Ni 231.604†	16327.5	16420.9	[500]	ug/L	07:54:25
3	P 214.914†	3606.4	3479.5	[2500]	ug/L	07:54:45
3	Pb 220.353†	3223.1	3318.8	[500]	ug/L	07:54:45
3	S 181.975 Axial†	597.5	580.0	[1000]	ug/L	07:54:45
3	Sb 206.836†	1202.1	1189.2	[500]	ug/L	07:54:45
3	Se 196.026†	603.7	627.5	[500]	ug/L	07:54:45
3	Si 251.611†	67670.2	67919.6	[2500]	ug/L	07:54:25
3	Sn 189.927†	2265.1	2288.0	[500]	ug/L	07:54:45
3	Sr 421.552†	57171.8	57460.4	[500]	ug/L	07:52:52
3	Ti 334.940†	286774.2	291141.6	[500]	ug/L	07:54:25
3	Tl 190.801†	1251.4	1290.8	[500]	ug/L	07:54:45
3	U 409.014†	15285.7	17495.9	[500]	ug/L	07:54:25
3	V 292.402†	63332.3	65485.1	[500]	ug/L	07:54:25
3	Zn 213.857†	42602.5	42483.9	[500]	ug/L	07:54:25
3	SiO2†	67335.3	67553.0	[5347.5]	ug/L	07:55:01

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	839680.0	8423.83	1.00%	99.979	%
Sc Radial	3999.4	18.47	0.46%	99.1	%
Y 371.029	707663.8	6975.11	0.99%	98.825	%
Y RADIAL	4463.2	76.14	1.71%	98.79	%
Ag 328.068†	99781.2	1320.62	1.32%	[500]	ug/L
Al 396.153Radial†	4850.6	97.12	2.00%	[5000]	ug/L
As 188.979†	926.0	2.43	0.26%	[500]	ug/L
B 249.677†	17948.3	281.73	1.57%	[500]	ug/L
Ba 233.527†	53107.6	539.46	1.02%	[500]	ug/L
Be 313.107†	1234085.9	1236.18	0.10%	[500]	ug/L
Ca 317.933Radial†	2538.7	9.87	0.39%	[5000]	ug/L
Cd 226.502†	35382.6	354.09	1.00%	[500]	ug/L
Co 228.616†	19502.3	196.78	1.01%	[500]	ug/L
Cr 267.716†	38260.4	458.03	1.20%	[500]	ug/L
Cu 324.752†	151848.7	2307.01	1.52%	[500]	ug/L
K 766.490 Radial†	25000.4	486.47	1.95%	[5000]	ug/L
Mg 279.077 IEC†	120.4	1.22	1.01%	[5000]	ug/L
Mn 257.610†	373730.2	4250.94	1.14%	[500]	ug/L
Mo 202.031†	5711.5	69.44	1.22%	[500]	ug/L
Ni 231.604†	16228.4	166.71	1.03%	[500]	ug/L
P 214.914†	3440.8	35.84	1.04%	[2500]	ug/L
Pb 220.353†	3286.9	29.77	0.91%	[500]	ug/L

S 181.975 Axial†	573.1	11.00	1.92%	[1000] ug/L
Sb 206.836†	1170.7	16.08	1.37%	[500] ug/L
Se 196.026†	625.2	2.13	0.34%	[500] ug/L
Si 251.611†	66910.5	890.51	1.33%	[2500] ug/L
Sn 189.927†	2259.0	25.23	1.12%	[500] ug/L
Sr 421.552†	57853.3	1206.07	2.08%	[500] ug/L
Ti 334.940†	286875.7	3732.34	1.30%	[500] ug/L
Tl 190.801†	1273.9	14.82	1.16%	[500] ug/L
U 409.014†	17192.2	271.83	1.58%	[500] ug/L
V 292.402†	64456.1	896.08	1.39%	[500] ug/L
Zn 213.857†	42019.1	403.33	0.96%	[500] ug/L
SiO2†	66457.2	1025.28	1.54%	[5347.5] ug/L

Sequence No.: 4

Sample ID: SCAL

Analyst:

Logged In Analyst (Original) : Optima3

Initial Sample Wt:

Dilution:

Autosampler Location: 4

Date Collected: 3/25/2010 07:57:12

Data Type: Reprocessed on 3/25/2010 09:41:42

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: SCAL

Rep#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Analysis Time
1	Sc 361.383	836028.2	836028.2	99.544 %	08:00:24
1	Sc Radial	3994.3	3994.3	99.0 %	07:59:25
1	Y 371.029	702397.8	702397.8	98.090 %	08:00:24
1	Y RADIAL	4515.2	4515.2	99.94 %	07:59:05
1	Ag 328.068†	197469.4	198119.9	[1000] ug/L	08:00:24
1	Al 396.153Radial†	9697.8	9873.3	[10000] ug/L	07:59:05
1	As 188.979†	1838.9	1868.2	[1000] ug/L	08:00:44
1	B 249.677†	36156.4	36572.1	[1000] ug/L	08:00:24
1	Ba 233.527†	106341.0	106809.3	[1000] ug/L	08:00:24
1	Be 313.107†	2447465.3	2462931.9	[1000] ug/L	08:00:24
1	Ca 317.933Radial†	5226.4	5260.9	[10000] ug/L	07:59:05
1	Cd 226.502†	70535.9	71025.2	[1000] ug/L	08:00:24
1	Co 228.616†	37910.1	38122.6	[1000] ug/L	08:00:44
1	Cr 267.716†	76637.1	76893.0	[1000] ug/L	08:00:24
1	Cu 324.752†	314991.4	310080.6	[1000] ug/L	08:00:24
1	Fe 238.204 Radial†	829.7	828.9	[10000] ug/L	07:59:25
1	K 766.490 Radial†	53321.8	51046.0	[10000] ug/L	07:59:05
1	Mg 279.077 IEC†	240.5	242.2	[10000] ug/L	07:59:25
1	Mn 257.610†	763213.2	766254.6	[1000] ug/L	08:00:24
1	Mo 202.031†	11272.6	11310.1	[1000] ug/L	08:00:44
1	Na 589.592 Radial†	25374.6	26086.5	[10000] ug/L	07:59:05
1	Ni 231.604†	31742.4	31794.1	[1000] ug/L	08:00:44
1	P 214.914†	7085.2	6949.4	[5000] ug/L	08:00:44
1	Pb 220.353†	6541.7	6630.4	[1000] ug/L	08:00:44
1	S 181.975 Axial†	1148.2	1129.1	[2000] ug/L	08:00:44
1	Sb 206.836†	2364.0	2348.2	[1000] ug/L	08:00:44
1	Se 196.026†	1226.1	1248.6	[1000] ug/L	08:00:44
1	Si 251.611†	134437.9	134527.9	[5000] ug/L	08:00:24
1	Sn 189.927†	4478.2	4495.7	[1000] ug/L	08:00:44
1	Sr 421.552†	119226.7	120335.9	[1000] ug/L	07:59:05
1	Ti 334.940†	579430.6	583166.5	[1000] ug/L	08:00:24
1	Tl 190.801†	2544.0	2580.7	[1000] ug/L	08:00:44
1	U 409.014†	31774.2	33954.8	[1000] ug/L	08:00:24
1	V 292.402†	128014.4	130027.9	[1000] ug/L	08:00:24
1	Zn 213.857†	84582.3	84363.1	[1000] ug/L	08:00:24
1	SiO2†	134145.3	134206.0	[10695] ug/L	08:01:44
2	Sc 361.383	836081.3	836081.3	99.551 %	08:00:52
2	Sc Radial	4034.2	4034.2	100 %	07:59:50
2	Y 371.029	701502.4	701502.4	97.965 %	08:00:52
2	Y RADIAL	4436.0	4436.0	98.18 %	07:59:30
2	Ag 328.068†	197172.0	197808.6	[1000] ug/L	08:00:52
2	Al 396.153Radial†	9444.3	9523.1	[10000] ug/L	07:59:30
2	As 188.979†	1834.8	1863.9	[1000] ug/L	08:01:12
2	B 249.677†	36051.8	36464.7	[1000] ug/L	08:00:52
2	Ba 233.527†	106428.6	106890.5	[1000] ug/L	08:00:52
2	Be 313.107†	2443182.4	2458473.5	[1000] ug/L	08:00:52
2	Ca 317.933Radial†	5131.6	5113.9	[10000] ug/L	07:59:30
2	Cd 226.502†	70504.1	70988.8	[1000] ug/L	08:00:52
2	Co 228.616†	38159.4	38370.5	[1000] ug/L	08:01:12
2	Cr 267.716†	76709.6	76960.9	[1000] ug/L	08:00:52
2	Cu 324.752†	313793.7	308857.4	[1000] ug/L	08:00:52
2	Fe 238.204 Radial†	828.9	819.8	[10000] ug/L	07:59:50
2	K 766.490 Radial†	52330.3	49522.1	[10000] ug/L	07:59:30
2	Mg 279.077 IEC†	243.7	243.0	[10000] ug/L	07:59:50
2	Mn 257.610†	763197.2	766189.8	[1000] ug/L	08:00:52
2	Mo 202.031†	11357.3	11394.4	[1000] ug/L	08:01:12
2	Na 589.592 Radial†	24781.1	25239.7	[10000] ug/L	07:59:30
2	Ni 231.604†	31956.8	32007.4	[1000] ug/L	08:01:12

2	P 214.914†	7127.7	6991.6	[5000]	ug/L	08:01:12
2	Pb 220.353†	6577.0	6665.5	[1000]	ug/L	08:01:12
2	S 181.975 Axial†	1167.6	1148.5	[2000]	ug/L	08:01:12
2	Sb 206.836†	2383.9	2368.0	[1000]	ug/L	08:01:12
2	Se 196.026†	1242.5	1265.0	[1000]	ug/L	08:01:12
2	Si 251.611†	134446.4	134527.9	[5000]	ug/L	08:00:52
2	Sn 189.927†	4509.1	4526.4	[1000]	ug/L	08:01:12
2	Sr 421.552†	116230.7	116149.7	[1000]	ug/L	07:59:30
2	Ti 334.940†	579678.4	583378.4	[1000]	ug/L	08:00:52
2	Tl 190.801†	2562.3	2598.9	[1000]	ug/L	08:01:12
2	U 409.014†	31634.3	33812.2	[1000]	ug/L	08:00:52
2	V 292.402†	127716.9	129720.9	[1000]	ug/L	08:00:52
2	Zn 213.857†	84422.3	84197.0	[1000]	ug/L	08:00:52
2	SiO2†	133295.9	133344.3	[10695]	ug/L	08:01:50
3	Sc 361.383	833096.1	833096.1	99.195 %		08:01:19
3	Sc Radial	4008.5	4008.5	99.4 %		08:00:15
3	Y 371.029	700484.3	700484.3	97.823 %		08:01:19
3	Y RADIAL	4465.3	4465.3	98.83 %		07:59:55
3	Ag 328.068†	196785.4	198128.7	[1000]	ug/L	08:01:19
3	Al 396.153Radial†	9492.4	9632.0	[10000]	ug/L	07:59:55
3	As 188.979†	1838.4	1874.1	[1000]	ug/L	08:01:39
3	B 249.677†	35948.9	36490.7	[1000]	ug/L	08:01:19
3	Ba 233.527†	105720.3	106559.5	[1000]	ug/L	08:01:19
3	Be 313.107†	2438545.2	2462592.9	[1000]	ug/L	08:01:19
3	Ca 317.933Radial†	5137.4	5152.7	[10000]	ug/L	07:59:55
3	Cd 226.502†	70062.2	70797.0	[1000]	ug/L	08:01:19
3	Co 228.616†	37950.4	38297.2	[1000]	ug/L	08:01:39
3	Cr 267.716†	76200.3	76723.6	[1000]	ug/L	08:01:19
3	Cu 324.752†	313478.5	309669.1	[1000]	ug/L	08:01:19
3	Fe 238.204 Radial†	827.7	823.9	[10000]	ug/L	08:00:15
3	K 766.490 Radial†	52343.1	49870.6	[10000]	ug/L	07:59:55
3	Mg 279.077 IEC†	239.0	239.8	[10000]	ug/L	08:00:15
3	Mn 257.610†	758515.2	764216.9	[1000]	ug/L	08:01:19
3	Mo 202.031†	11295.5	11372.9	[1000]	ug/L	08:01:39
3	Na 589.592 Radial†	24817.1	25434.8	[10000]	ug/L	07:59:55
3	Ni 231.604†	31760.6	31924.6	[1000]	ug/L	08:01:39
3	P 214.914†	7088.9	6978.2	[5000]	ug/L	08:01:39
3	Pb 220.353†	6530.7	6642.5	[1000]	ug/L	08:01:39
3	S 181.975 Axial†	1156.2	1141.2	[2000]	ug/L	08:01:39
3	Sb 206.836†	2361.3	2353.8	[1000]	ug/L	08:01:39
3	Se 196.026†	1227.7	1254.6	[1000]	ug/L	08:01:39
3	Si 251.611†	133582.1	134140.4	[5000]	ug/L	08:01:19
3	Sn 189.927†	4487.7	4521.0	[1000]	ug/L	08:01:39
3	Sr 421.552†	116468.3	117134.2	[1000]	ug/L	07:59:55
3	Ti 334.940†	576770.7	582533.7	[1000]	ug/L	08:01:19
3	Tl 190.801†	2561.0	2606.9	[1000]	ug/L	08:01:39
3	U 409.014†	31561.3	33852.5	[1000]	ug/L	08:01:19
3	V 292.402†	127502.9	129965.0	[1000]	ug/L	08:01:19
3	Zn 213.857†	83921.6	83996.1	[1000]	ug/L	08:01:19
3	SiO2†	134171.9	134707.1	[10695]	ug/L	08:01:55

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	835068.6	1708.41	0.20%	99.430 %
Sc Radial	4012.3	20.22	0.50%	99.5 %
Y 371.029	701461.5	957.39	0.14%	97.959 %
Y RADIAL	4472.2	40.09	0.90%	98.98 %
Ag 328.068†	198019.1	182.31	0.09%	[1000] ug/L
Al 396.153Radial†	9676.1	179.24	1.85%	[10000] ug/L
As 188.979†	1868.7	5.15	0.28%	[1000] ug/L
B 249.677†	36509.2	56.02	0.15%	[1000] ug/L
Ba 233.527†	106753.1	172.50	0.16%	[1000] ug/L
Be 313.107†	2461332.8	2481.99	0.10%	[1000] ug/L
Ca 317.933Radial†	5175.8	76.18	1.47%	[10000] ug/L
Cd 226.502†	70937.0	122.57	0.17%	[1000] ug/L
Co 228.616†	38263.4	127.38	0.33%	[1000] ug/L
Cr 267.716†	76859.2	122.25	0.16%	[1000] ug/L
Cu 324.752†	309535.7	622.39	0.20%	[1000] ug/L
Fe 238.204 Radial†	824.2	4.59	0.56%	[10000] ug/L

K 766.490 Radial†	50146.2	798.45	1.59%	[10000]	ug/L
Mg 279.077 IEC†	241.7	1.64	0.68%	[10000]	ug/L
Mn 257.610†	765553.8	1158.21	0.15%	[1000]	ug/L
Mo 202.031†	11359.1	43.82	0.39%	[1000]	ug/L
Na 589.592 Radial†	25587.0	443.45	1.73%	[10000]	ug/L
Ni 231.604†	31908.7	107.52	0.34%	[1000]	ug/L
P 214.914†	6973.1	21.55	0.31%	[5000]	ug/L
Pb 220.353†	6646.1	17.84	0.27%	[1000]	ug/L
S 181.975 Axial†	1139.6	9.78	0.86%	[2000]	ug/L
Sb 206.836†	2356.7	10.22	0.43%	[1000]	ug/L
Se 196.026†	1256.1	8.31	0.66%	[1000]	ug/L
Si 251.611†	134398.7	223.70	0.17%	[5000]	ug/L
Sn 189.927†	4514.4	16.43	0.36%	[1000]	ug/L
Sr 421.552†	117873.3	2188.78	1.86%	[1000]	ug/L
Ti 334.940†	583026.2	439.50	0.08%	[1000]	ug/L
Tl 190.801†	2595.5	13.42	0.52%	[1000]	ug/L
U 409.014†	33873.2	73.50	0.22%	[1000]	ug/L
V 292.402†	129904.6	162.16	0.12%	[1000]	ug/L
Zn 213.857†	84185.4	183.77	0.22%	[1000]	ug/L
SiO2†	134085.8	689.33	0.51%	[10695]	ug/L

Sequence No.: 5

Sample ID: S10

Analyst:

Logged In Analyst (Original) : Optima3

Initial Sample Wt:

Dilution:

Autosampler Location: 5

Date Collected: 3/25/2010 08:04:05

Data Type: Reprocessed on 3/25/2010 09:41:43

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: S10

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib.	Analysis Time
1	Sc 361.383	814570.1	814570.1	96.989 %		08:07:16
1	Sc Radial	4084.3	4084.3	101 %		08:06:19
1	Y 371.029	681370.4	681370.4	95.154 %		08:07:16
1	Y RADIAL	4398.8	4398.8	97.36 %		08:06:19
1	Al 396.153Radial†	46686.9	46189.2	[50000] ug/L		08:05:59
1	Ca 317.933Radial†	24518.1	24197.7	[50000] ug/L		08:05:59
1	Fe 238.204 Radial†	1599.7	1570.9	[20000] ug/L		08:06:19
1	Mg 279.077 IEC†	1150.4	1135.5	[50000] ug/L		08:06:19
1	Na 589.592 Radial†	50513.9	50350.1	[20000] ug/L		08:05:59
2	Sc 361.383	811526.2	811526.2	96.627 %		08:07:22
2	Sc Radial	4063.0	4063.0	101 %		08:06:44
2	Y 371.029	679014.3	679014.3	94.824 %		08:07:22
2	Y RADIAL	4381.4	4381.4	96.98 %		08:06:44
2	Al 396.153Radial†	46908.1	46650.8	[50000] ug/L		08:06:24
2	Ca 317.933Radial†	24653.9	24459.6	[50000] ug/L		08:06:24
2	Fe 238.204 Radial†	1623.7	1603.0	[20000] ug/L		08:06:44
2	Mg 279.077 IEC†	1154.0	1145.0	[50000] ug/L		08:06:44
2	Na 589.592 Radial†	50550.6	50648.4	[20000] ug/L		08:06:24
3	Sc 361.383	813679.7	813679.7	96.883 %		08:07:27
3	Sc Radial	4043.8	4043.8	100 %		08:07:09
3	Y 371.029	680826.7	680826.7	95.078 %		08:07:27
3	Y RADIAL	4360.6	4360.6	96.52 %		08:07:09
3	Al 396.153Radial†	47719.4	47681.3	[50000] ug/L		08:06:49
3	Ca 317.933Radial†	25074.0	24995.0	[50000] ug/L		08:06:49
3	Fe 238.204 Radial†	1600.5	1587.6	[20000] ug/L		08:07:09
3	Mg 279.077 IEC†	1147.4	1143.9	[50000] ug/L		08:07:09
3	Na 589.592 Radial†	51265.0	51599.4	[20000] ug/L		08:06:49

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc. Units	Calib
Sc 361.383	813258.7	1565.00	0.19%	96.833 %	
Sc Radial	4063.7	20.28	0.50%	101 %	
Y 371.029	680403.8	1233.62	0.18%	95.019 %	
Y RADIAL	4380.3	19.11	0.44%	96.95 %	
Al 396.153Radial†	46840.5	763.94	1.63%	[50000] ug/L	
Ca 317.933Radial†	24550.8	406.35	1.66%	[50000] ug/L	
Fe 238.204 Radial†	1587.2	16.06	1.01%	[20000] ug/L	
Mg 279.077 IEC†	1141.4	5.19	0.45%	[50000] ug/L	
Na 589.592 Radial†	50866.0	652.44	1.28%	[20000] ug/L	

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	198.4	0.00000	0.999994	
Al 396.153Radial	3	Lin Thru 0	0.0	0.9383	0.00000	0.999975	
As 188.979	3	Lin Thru 0	0.0	1.865	0.00000	0.999994	
B 249.677	3	Lin Thru 0	0.0	36.38	0.00000	0.999976	
Ba 233.527	3	Lin Thru 0	0.0	106.7	0.00000	0.999994	
Be 313.107	3	Lin Thru 0	0.0	2463	0.00000	0.999998	
Ca 317.933Radial	3	Lin Thru 0	0.0	0.4922	0.00000	0.999942	
Cd 226.502	3	Lin Thru 0	0.0	70.90	0.00000	1.000000	
Co 228.616	3	Lin Thru 0	0.0	38.42	0.00000	0.999966	
Cr 267.716	3	Lin Thru 0	0.0	76.81	0.00000	0.999995	
Cu 324.752	3	Lin Thru 0	0.0	308.4	0.00000	0.999971	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.0800	0.00000	0.999883	

K 766.490 Radial	3	Lin Thru 0	0.0	5.009	0.00000	0.999984
Mg 279.077 IEC	3	Lin Thru 0	0.0	0.0229	0.00000	0.999924
Mn 257.610	3	Lin Thru 0	0.0	762.2	0.00000	0.999950
Mo 202.031	3	Lin Thru 0	0.0	11.37	0.00000	0.999994
Na 589.592 Radia	2	Lin Thru 0	0.0	2.546	0.00000	0.999997
Ni 231.604	3	Lin Thru 0	0.0	32.03	0.00000	0.999974
P 214.914	3	Lin Thru 0	0.0	1.391	0.00000	0.999984
Pb 220.353	3	Lin Thru 0	0.0	6.633	0.00000	0.999988
S 181.975 Axial	3	Lin Thru 0	0.0	0.5705	0.00000	0.999997
Sb 206.836	3	Lin Thru 0	0.0	2.354	0.00000	0.999997
Se 196.026	3	Lin Thru 0	0.0	1.255	0.00000	0.999998
Si 251.611	3	Lin Thru 0	0.0	26.86	0.00000	0.999998
Sn 189.927	3	Lin Thru 0	0.0	4.515	0.00000	1.000000
Sr 421.552	3	Lin Thru 0	0.0	117.4	0.00000	0.999973
Ti 334.940	3	Lin Thru 0	0.0	581.2	0.00000	0.999979
Tl 190.801	3	Lin Thru 0	0.0	2.586	0.00000	0.999971
U 409.014	3	Lin Thru 0	0.0	33.99	0.00000	0.999977
V 292.402	3	Lin Thru 0	0.0	129.7	0.00000	0.999995
Zn 213.857	3	Lin Thru 0	0.0	84.18	0.00000	0.999996
SiO2	3	Lin Thru 0	0.0	12.52	0.00000	0.999993

Sequence No.: 6

Sample ID: ICV

Analyst:

Logged In Analyst (Original) : Optima3

Initial Sample Wt:

Dilution:

Autosampler Location: 9

Date Collected: 3/25/2010 08:09:39

Data Type: Reprocessed on 3/25/2010 09:41:43

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: ICV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc 361.383	843298.4	843298.4	100.41 %		08:12:50
1	Sc Radial	4058.8	4058.8	101 %		08:11:52
1	Y 371.029	711724.4	711724.4	99.392 %		08:12:50
1	Y RADIAL	4543.6	4543.6	100.6 %		08:11:32
1	Ag 328.068†	50729.3	50268.8	256.51 ug/L	256.51 ppb	08:12:50
1	Al 396.153Radial†	4683.0	4733.8	5019.8 ug/L	5019.8 ppb	08:11:32
1	As 188.979†	850.7	868.1	469.50 ug/L	469.50 ppb	08:13:10
1	B 249.677†	18280.2	18455.8	505.05 ug/L	505.05 ppb	08:12:50
1	Ba 233.527†	53540.9	53303.8	500.94 ug/L	500.94 ppb	08:12:50
1	Be 313.107†	629873.9	631564.9	257.53 ug/L	257.53 ppb	08:12:50
1	Ca 317.933Radial†	2489.7	2457.2	4992.5 ug/L	4992.5 ppb	08:11:52
1	Cd 226.502†	34793.5	34817.8	490.96 ug/L	490.96 ppb	08:12:50
1	Co 228.616†	19521.9	19481.2	507.19 ug/L	507.19 ppb	08:12:50
1	Cr 267.716†	37001.8	36755.7	479.57 ug/L	479.57 ppb	08:12:50
1	Cu 324.752†	159928.8	152923.1	495.85 ug/L	495.85 ppb	08:12:50
1	Fe 238.204 Radial†	407.9	396.4	4971.6 ug/L	4971.6 ppb	08:11:52
1	K 766.490 Radial†	14878.9	11984.1	2389.0 ug/L	2389.0 ppb	08:11:32
1	Mg 279.077 IEC†	126.1	124.6	5444.5 ug/L	5444.5 ppb	08:11:52
1	Mn 257.610†	388057.6	386020.7	506.75 ug/L	506.75 ppb	08:12:50
1	Mo 202.031†	5979.0	5940.4	522.71 ug/L	522.71 ppb	08:13:10
1	Na 589.592 Radial†	5679.6	6105.5	2397.7 ug/L	2397.7 ppb	08:11:32
1	Ni 231.604†	16230.7	16070.8	501.51 ug/L	501.51 ppb	08:12:50
1	P 214.914†	3597.5	3414.5	2358.0 ug/L	2358.0 ppb	08:13:10
1	Pb 220.353†	3186.3	3232.1	488.77 ug/L	488.77 ppb	08:13:10
1	S 181.975 Axial†	1426.8	1396.5	2446.9 ug/L	2446.9 ppb	08:13:10
1	Sb 206.836†	1202.7	1171.1	516.46 ug/L	516.46 ppb	08:13:10
1	Se 196.026†	3154.3	3158.4	2535.2 ug/L	2535.2 ppb	08:13:10
1	Si 251.611†	130767.6	129708.3	4823.0 ug/L	4823.0 ppb	08:12:50
1	Sn 189.927†	2381.5	2368.7	525.23 ug/L	525.23 ppb	08:13:10
1	Sr 421.552†	60508.2	60066.0	511.46 ug/L	511.46 ppb	08:11:32
1	Ti 334.940†	283956.8	283880.8	488.25 ug/L	488.25 ppb	08:12:50
1	Tl 190.801†	1308.4	1328.1	516.81 ug/L	516.81 ppb	08:13:10
1	U 409.014†	14740.8	16715.8	490.22 ug/L	490.22 ppb	08:12:50
1	V 292.402†	63391.1	64559.8	504.70 ug/L	504.70 ppb	08:12:50
1	Zn 213.857†	43188.5	42405.7	499.16 ug/L	499.16 ppb	08:12:50
1	SiO2†	130561.9	129475.5	10330 ug/L	10330 ppb	08:14:07
2	Sc 361.383	842302.4	842302.4	100.29 %		08:13:16
2	Sc Radial	4067.3	4067.3	101 %		08:12:17
2	Y 371.029	712092.4	712092.4	99.444 %		08:13:16
2	Y RADIAL	4460.7	4460.7	98.73 %		08:11:57
2	Ag 328.068†	50524.5	50124.3	255.82 ug/L	255.82 ppb	08:13:16
2	Al 396.153Radial†	4620.0	4661.7	4942.8 ug/L	4942.8 ppb	08:11:57
2	As 188.979†	845.7	864.1	467.39 ug/L	467.39 ppb	08:13:36
2	B 249.677†	18250.8	18448.0	504.82 ug/L	504.82 ppb	08:13:16
2	Ba 233.527†	53459.3	53285.5	500.78 ug/L	500.78 ppb	08:13:16
2	Be 313.107†	628837.8	631273.6	257.41 ug/L	257.41 ppb	08:13:16
2	Ca 317.933Radial†	2509.4	2471.6	5021.6 ug/L	5021.6 ppb	08:12:17
2	Cd 226.502†	34635.2	34701.0	489.30 ug/L	489.30 ppb	08:13:16
2	Co 228.616†	19421.1	19403.6	505.17 ug/L	505.17 ppb	08:13:16
2	Cr 267.716†	36958.2	36755.9	479.58 ug/L	479.58 ppb	08:13:16
2	Cu 324.752†	159577.2	152760.8	495.33 ug/L	495.33 ppb	08:13:16
2	Fe 238.204 Radial†	418.6	406.1	5093.4 ug/L	5093.4 ppb	08:12:17
2	K 766.490 Radial†	14951.5	12025.2	2397.2 ug/L	2397.2 ppb	08:11:57
2	Mg 279.077 IEC†	122.9	121.1	5292.0 ug/L	5292.0 ppb	08:12:17
2	Mn 257.610†	386444.7	384869.6	505.25 ug/L	505.25 ppb	08:13:16
2	Mo 202.031†	5982.3	5950.7	523.62 ug/L	523.62 ppb	08:13:36
2	Na 589.592 Radial†	5628.5	6043.1	2373.2 ug/L	2373.2 ppb	08:11:57
2	Ni 231.604†	16204.1	16063.4	501.28 ug/L	501.28 ppb	08:13:16

2	P 214.914†	3559.1	3380.6	2333.6 ug/L	2333.6 ppb	08:13:36
2	Pb 220.353†	3179.4	3229.0	488.27 ug/L	488.27 ppb	08:13:36
2	S 181.975 Axial†	1405.2	1376.7	2412.2 ug/L	2412.2 ppb	08:13:36
2	Sb 206.836†	1195.3	1165.2	513.96 ug/L	513.96 ppb	08:13:36
2	Se 196.026†	3149.2	3157.0	2534.5 ug/L	2534.5 ppb	08:13:36
2	Si 251.611†	130475.1	129570.6	4817.9 ug/L	4817.9 ppb	08:13:16
2	Sn 189.927†	2382.9	2372.9	526.16 ug/L	526.16 ppb	08:13:36
2	Sr 421.552†	59644.2	59083.3	503.09 ug/L	503.09 ppb	08:11:57
2	Ti 334.940†	283263.7	283524.1	487.66 ug/L	487.66 ppb	08:13:16
2	Tl 190.801†	1313.2	1334.5	519.26 ug/L	519.26 ppb	08:13:36
2	U 409.014†	14719.5	16711.9	490.09 ug/L	490.09 ppb	08:13:16
2	V 292.402†	63393.4	64636.8	505.28 ug/L	505.28 ppb	08:13:16
2	Zn 213.857†	43022.0	42290.5	497.78 ug/L	497.78 ppb	08:13:16
2	SiO2†	130875.2	129941.7	10367 ug/L	10367 ppb	08:14:12
3	Sc 361.383	844277.2	844277.2	100.53 %		08:13:42
3	Sc Radial	4040.1	4040.1	100 %		08:12:42
3	Y 371.029	715025.4	715025.4	99.853 %		08:13:42
3	Y RADIAL	4511.5	4511.5	99.85 %		08:12:22
3	Ag 328.068†	50732.1	50213.0	256.25 ug/L	256.25 ppb	08:13:42
3	Al 396.153Radial†	4672.0	4744.4	5030.9 ug/L	5030.9 ppb	08:12:22
3	As 188.979†	859.7	876.0	473.77 ug/L	473.77 ppb	08:14:02
3	B 249.677†	18268.9	18423.4	504.15 ug/L	504.15 ppb	08:13:42
3	Ba 233.527†	53393.8	53095.7	498.99 ug/L	498.99 ppb	08:13:42
3	Be 313.107†	630940.7	631899.0	257.66 ug/L	257.66 ppb	08:13:42
3	Ca 317.933Radial†	2492.0	2471.0	5020.5 ug/L	5020.5 ppb	08:12:42
3	Cd 226.502†	34749.8	34734.2	489.78 ug/L	489.78 ppb	08:13:42
3	Co 228.616†	19515.8	19452.5	506.45 ug/L	506.45 ppb	08:13:42
3	Cr 267.716†	37132.6	36843.2	480.71 ug/L	480.71 ppb	08:13:42
3	Cu 324.752†	159808.9	152619.1	494.87 ug/L	494.87 ppb	08:13:42
3	Fe 238.204 Radial†	411.6	401.9	5041.1 ug/L	5041.1 ppb	08:12:42
3	K 766.490 Radial†	15096.1	12269.6	2446.0 ug/L	2446.0 ppb	08:12:22
3	Mg 279.077 IEC†	122.6	121.7	5315.4 ug/L	5315.4 ppb	08:12:42
3	Mn 257.610†	386713.6	384235.8	504.42 ug/L	504.42 ppb	08:13:42
3	Mo 202.031†	6019.8	5974.0	525.67 ug/L	525.67 ppb	08:14:02
3	Na 589.592 Radial†	5701.0	6153.1	2416.4 ug/L	2416.4 ppb	08:12:22
3	Ni 231.604†	16184.2	16005.8	499.48 ug/L	499.48 ppb	08:13:42
3	P 214.914†	3628.1	3440.9	2377.1 ug/L	2377.1 ppb	08:14:02
3	Pb 220.353†	3191.4	3233.5	488.99 ug/L	488.99 ppb	08:14:02
3	S 181.975 Axial†	1430.7	1398.8	2451.0 ug/L	2451.0 ppb	08:14:02
3	Sb 206.836†	1214.4	1181.4	520.96 ug/L	520.96 ppb	08:14:02
3	Se 196.026†	3167.2	3167.5	2542.7 ug/L	2542.7 ppb	08:14:02
3	Si 251.611†	130436.3	129227.7	4805.1 ug/L	4805.1 ppb	08:13:42
3	Sn 189.927†	2406.3	2390.6	530.07 ug/L	530.07 ppb	08:14:02
3	Sr 421.552†	60231.3	60068.5	511.48 ug/L	511.48 ppb	08:12:22
3	Ti 334.940†	283386.8	282985.9	486.73 ug/L	486.73 ppb	08:13:42
3	Tl 190.801†	1324.7	1342.8	522.49 ug/L	522.49 ppb	08:14:02
3	U 409.014†	14536.5	16495.5	483.73 ug/L	483.73 ppb	08:13:42
3	V 292.402†	63455.8	64551.0	504.65 ug/L	504.65 ppb	08:13:42
3	Zn 213.857†	43118.0	42285.8	497.74 ug/L	497.74 ppb	08:13:42
3	SiO2†	130153.9	128918.9	10286 ug/L	10286 ppb	08:14:17

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	843292.7	100.41 %	0.118			0.12%
Sc Radial	4055.4	101 %	0.3			0.34%
Y 371.029	712947.4	99.563 %	0.2526			0.25%
Y RADIAL	4505.2	99.72 %	0.925			0.93%
Ag 328.068†	50202.0	256.19 ug/L	0.348	256.19 ppb	0.348	0.14%
QC value within limits for Ag 328.068 Recovery = 102.48%						
Al 396.153Radial†	4713.3	4997.9 ug/L	47.98	4997.9 ppb	47.98	0.96%
QC value within limits for Al 396.153Radial Recovery = 99.96%						
As 188.979†	869.4	470.22 ug/L	3.249	470.22 ppb	3.249	0.69%
QC value within limits for As 188.979 Recovery = 94.04%						
B 249.677†	18442.4	504.67 ug/L	0.467	504.67 ppb	0.467	0.09%
QC value within limits for B 249.677 Recovery = 100.93%						
Ba 233.527†	53228.3	500.24 ug/L	1.080	500.24 ppb	1.080	0.22%
QC value within limits for Ba 233.527 Recovery = 100.05%						
Be 313.107†	631579.2	257.53 ug/L	0.126	257.53 ppb	0.126	0.05%
QC value within limits for Be 313.107 Recovery = 103.01%						

Ca 317.933Radial†	2466.6	5011.5 ug/L	16.52	5011.5 ppb	16.52	0.33%
QC value within limits for Ca 317.933Radial Recovery = 100.23%						
Cd 226.502†	34751.0	490.01 ug/L	0.856	490.01 ppb	0.856	0.17%
QC value within limits for Cd 226.502 Recovery = 98.00%						
Co 228.616†	19445.8	506.27 ug/L	1.020	506.27 ppb	1.020	0.20%
QC value within limits for Co 228.616 Recovery = 101.25%						
Cr 267.716†	36784.9	479.95 ug/L	0.659	479.95 ppb	0.659	0.14%
QC value within limits for Cr 267.716 Recovery = 95.99%						
Cu 324.752†	152767.7	495.35 ug/L	0.489	495.35 ppb	0.489	0.10%
QC value within limits for Cu 324.752 Recovery = 99.07%						
Fe 238.204 Radial†	401.5	5035.3 ug/L	61.10	5035.3 ppb	61.10	1.21%
QC value within limits for Fe 238.204 Radial Recovery = 100.71%						
K 766.490 Radial†	12093.0	2410.7 ug/L	30.80	2410.7 ppb	30.80	1.28%
QC value within limits for K 766.490 Radial Recovery = 96.43%						
Mg 279.077 IEC†	122.5	5350.6 ug/L	82.15	5350.6 ppb	82.15	1.54%
QC value within limits for Mg 279.077 IEC Recovery = 107.01%						
Mn 257.610†	385042.1	505.47 ug/L	1.180	505.47 ppb	1.180	0.23%
QC value within limits for Mn 257.610 Recovery = 101.09%						
Mo 202.031†	5955.1	524.00 ug/L	1.515	524.00 ppb	1.515	0.29%
QC value within limits for Mo 202.031 Recovery = 104.80%						
Na 589.592 Radial†	6100.6	2395.8 ug/L	21.67	2395.8 ppb	21.67	0.90%
QC value within limits for Na 589.592 Radial Recovery = 95.83%						
Ni 231.604†	16046.7	500.75 ug/L	1.111	500.75 ppb	1.111	0.22%
QC value within limits for Ni 231.604 Recovery = 100.15%						
P 214.914†	3412.0	2356.2 ug/L	21.83	2356.2 ppb	21.83	0.93%
QC value within limits for P 214.914 Recovery = 94.25%						
Pb 220.353†	3231.5	488.68 ug/L	0.368	488.68 ppb	0.368	0.08%
QC value within limits for Pb 220.353 Recovery = 97.74%						
S 181.975 Axial†	1390.7	2436.7 ug/L	21.32	2436.7 ppb	21.32	0.88%
QC value within limits for S 181.975 Axial Recovery = 97.47%						
Sb 206.836†	1172.6	517.12 ug/L	3.550	517.12 ppb	3.550	0.69%
QC value within limits for Sb 206.836 Recovery = 103.42%						
Se 196.026†	3161.0	2537.5 ug/L	4.58	2537.5 ppb	4.58	0.18%
QC value within limits for Se 196.026 Recovery = 101.50%						
Si 251.611†	129502.2	4815.3 ug/L	9.23	4815.3 ppb	9.23	0.19%
QC value within limits for Si 251.611 Recovery = 96.31%						
Sn 189.927†	2377.4	527.15 ug/L	2.570	527.15 ppb	2.570	0.49%
QC value within limits for Sn 189.927 Recovery = 105.43%						
Sr 421.552†	59739.3	508.68 ug/L	4.837	508.68 ppb	4.837	0.95%
QC value within limits for Sr 421.552 Recovery = 101.74%						
Ti 334.940†	283463.6	487.55 ug/L	0.767	487.55 ppb	0.767	0.16%
QC value within limits for Ti 334.940 Recovery = 97.51%						
Tl 190.801†	1335.1	519.52 ug/L	2.846	519.52 ppb	2.846	0.55%
QC value within limits for Tl 190.801 Recovery = 103.90%						
U 409.014†	16641.1	488.01 ug/L	3.711	488.01 ppb	3.711	0.76%
QC value within limits for U 409.014 Recovery = 97.60%						
V 292.402†	64582.5	504.87 ug/L	0.354	504.87 ppb	0.354	0.07%
QC value within limits for V 292.402 Recovery = 100.97%						
Zn 213.857†	42327.3	498.23 ug/L	0.810	498.23 ppb	0.810	0.16%
QC value within limits for Zn 213.857 Recovery = 99.65%						
SiO2†	129445.3	10328 ug/L	40.9	10328 ppb	40.9	0.40%
QC value within limits for SiO2 Recovery = 96.57%						

All analyte(s) passed QC.

Sequence No.: 7
 Sample ID: ICB
 Analyst:
 Logged In Analyst (Original) : Optima3
 Initial Sample Wt:
 Dilution:

Autosampler Location: 10
 Date Collected: 3/25/2010 08:16:28
 Data Type: Reprocessed on 3/25/2010 09:41:45

Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: ICB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc 361.383	790407.3	790407.3	94.112 %		08:19:38
1	Sc Radial	4085.3	4085.3	101 %		08:18:21
1	Y 371.029	672726.6	672726.6	93.946 %		08:19:38
1	Y RADIAL	4469.1	4469.1	98.92 %		08:18:21
1	Ag 328.068†	171.1	-71.6	-0.3723 ug/L	-0.3723 ppb	08:19:38
1	Al 396.153Radial†	-77.5	3.1	3.3017 ug/L	3.3017 ppb	08:18:41
1	As 188.979†	-21.4	-1.9	-1.0528 ug/L	-1.0528 ppb	08:19:58
1	B 249.677†	-128.4	113.7	3.1337 ug/L	3.1337 ppb	08:19:58
1	Ba 233.527†	14.7	-2.9	-0.0292 ug/L	-0.0292 ppb	08:19:58
1	Be 313.107†	-4306.4	-313.1	-0.1274 ug/L	-0.1274 ppb	08:19:38
1	Ca 317.933Radial†	20.1	2.7	5.4300 ug/L	5.4300 ppb	08:18:41
1	Cd 226.502†	-179.0	-23.8	-0.3316 ug/L	-0.3316 ppb	08:19:58
1	Co 228.616†	-30.3	6.7	0.1761 ug/L	0.1761 ppb	08:19:58
1	Cr 267.716†	113.5	25.6	0.3303 ug/L	0.3303 ppb	08:19:58
1	Cu 324.752†	6430.7	480.2	1.5584 ug/L	1.5584 ppb	08:19:38
1	Fe 238.204 Radial†	5.1	-4.0	-49.564 ug/L	-49.564 ppb	08:18:41
1	K 766.490 Radial†	2825.1	-13.8	-2.7431 ug/L	-2.7431 ppb	08:18:21
1	Mg 279.077 IEC†	1.3	0.6	27.162 ug/L	27.162 ppb	08:18:41
1	Mn 257.610†	519.0	99.1	0.1240 ug/L	0.1240 ppb	08:19:58
1	Mo 202.031†	19.9	7.0	0.6106 ug/L	0.6106 ppb	08:19:58
1	Na 589.592 Radial†	-530.1	-62.5	-24.563 ug/L	-24.563 ppb	08:18:21
1	Ni 231.604†	74.4	-14.6	-0.4549 ug/L	-0.4549 ppb	08:19:58
1	P 214.914†	187.1	30.5	21.713 ug/L	21.713 ppb	08:19:58
1	Pb 220.353†	-67.1	-12.5	-1.8733 ug/L	-1.8733 ppb	08:19:58
1	S 181.975 Axial†	28.4	5.8	10.227 ug/L	10.227 ppb	08:19:58
1	Sb 206.836†	27.4	2.5	1.1290 ug/L	1.1290 ppb	08:19:58
1	Se 196.026†	-18.2	-2.3	-2.0135 ug/L	-2.0135 ppb	08:19:58
1	Si 251.611†	517.2	24.1	0.8896 ug/L	0.8896 ppb	08:19:58
1	Sn 189.927†	14.0	11.7	2.6045 ug/L	2.6045 ppb	08:19:58
1	Sr 421.552†	37.5	-33.0	-0.2810 ug/L	-0.2810 ppb	08:18:21
1	Ti 334.940†	-1088.6	-73.4	-0.1248 ug/L	-0.1248 ppb	08:19:38
1	Tl 190.801†	-24.7	-1.2	-0.4711 ug/L	-0.4711 ppb	08:19:58
1	U 409.014†	-2143.0	-241.9	-7.1127 ug/L	-7.1127 ppb	08:19:38
1	V 292.402†	-1389.8	-49.2	-0.3767 ug/L	-0.3767 ppb	08:19:38
1	Zn 213.857†	570.5	-0.2	0.0054 ug/L	0.0054 ppb	08:19:58
1	SiO2†	545.1	25.9	2.0515 ug/L	2.0515 ppb	08:20:54
2	Sc 361.383	841118.2	841118.2	100.15 %		08:20:03
2	Sc Radial	4098.1	4098.1	102 %		08:18:46
2	Y 371.029	717854.0	717854.0	100.25 %		08:20:03
2	Y RADIAL	4508.9	4508.9	99.80 %		08:18:46
2	Ag 328.068†	221.7	-32.0	-0.1764 ug/L	-0.1764 ppb	08:20:03
2	Al 396.153Radial†	-75.4	5.4	5.7212 ug/L	5.7212 ppb	08:19:06
2	As 188.979†	-24.6	-3.7	-2.0054 ug/L	-2.0054 ppb	08:20:23
2	B 249.677†	-114.4	135.9	3.7419 ug/L	3.7419 ppb	08:20:23
2	Ba 233.527†	27.1	8.6	0.0792 ug/L	0.0792 ppb	08:20:23
2	Be 313.107†	-4276.6	-7.4	-0.0032 ug/L	-0.0032 ppb	08:20:03
2	Ca 317.933Radial†	19.8	2.3	4.5979 ug/L	4.5979 ppb	08:19:06
2	Cd 226.502†	-159.5	7.2	0.1060 ug/L	0.1060 ppb	08:20:23
2	Co 228.616†	-39.1	-0.1	-0.0013 ug/L	-0.0013 ppb	08:20:23
2	Cr 267.716†	119.8	24.7	0.3154 ug/L	0.3154 ppb	08:20:23
2	Cu 324.752†	6337.5	-24.8	-0.0847 ug/L	-0.0847 ppb	08:20:03
2	Fe 238.204 Radial†	6.0	-3.1	-38.632 ug/L	-38.632 ppb	08:19:06
2	K 766.490 Radial†	2787.7	-59.3	-11.836 ug/L	-11.836 ppb	08:18:46
2	Mg 279.077 IEC†	0.2	-0.6	-24.083 ug/L	-24.083 ppb	08:19:06
2	Mn 257.610†	685.8	232.3	0.3020 ug/L	0.3020 ppb	08:20:23
2	Mo 202.031†	17.5	3.2	0.2819 ug/L	0.2819 ppb	08:20:23
2	Na 589.592 Radial†	-513.1	-44.2	-17.340 ug/L	-17.340 ppb	08:18:46
2	Ni 231.604†	92.7	-1.0	-0.0313 ug/L	-0.0313 ppb	08:20:23

2	P 214.914†	180.2	11.7	8.4942 ug/L	8.4942 ppb	08:20:23
2	Pb 220.353†	-61.2	-2.3	-0.3437 ug/L	-0.3437 ppb	08:20:23
2	S 181.975 Axial†	27.3	2.8	4.9851 ug/L	4.9851 ppb	08:20:23
2	Sb 206.836†	33.5	6.8	2.9086 ug/L	2.9086 ppb	08:20:23
2	Se 196.026†	-20.0	-3.0	-2.4887 ug/L	-2.4887 ppb	08:20:23
2	Si 251.611†	525.2	-1.1	-0.0427 ug/L	-0.0427 ppb	08:20:23
2	Sn 189.927†	7.1	4.0	0.8900 ug/L	0.8900 ppb	08:20:23
2	Sr 421.552†	86.9	15.5	0.1316 ug/L	0.1316 ppb	08:18:46
2	Ti 334.940†	-1128.2	-43.2	-0.0737 ug/L	-0.0737 ppb	08:20:03
2	Tl 190.801†	-26.6	-1.5	-0.5673 ug/L	-0.5673 ppb	08:20:23
2	U 409.014†	-1895.5	142.5	4.1969 ug/L	4.1969 ppb	08:20:03
2	V 292.402†	-1419.6	10.1	0.0948 ug/L	0.0948 ppb	08:20:03
2	Zn 213.857†	616.1	8.8	0.1102 ug/L	0.1102 ppb	08:20:23
2	SiO2†	520.2	-34.0	-2.7225 ug/L	-2.7225 ppb	08:20:59
3	Sc 361.383	829519.0	829519.0	98.769 %		08:20:28
3	Sc Radial	4117.3	4117.3	102 %		08:19:11
3	Y 371.029	708342.3	708342.3	98.920 %		08:20:28
3	Y RADIAL	4472.5	4472.5	98.99 %		08:19:11
3	Ag 328.068†	92.8	-159.5	-0.8146 ug/L	-0.8146 ppb	08:20:28
3	Al 396.153Radial†	-80.7	0.6	0.6253 ug/L	0.6253 ppb	08:19:31
3	As 188.979†	-21.3	-0.8	-0.4168 ug/L	-0.4168 ppb	08:20:48
3	B 249.677†	-143.8	104.5	2.8773 ug/L	2.8773 ppb	08:20:48
3	Ba 233.527†	18.6	0.3	0.0023 ug/L	0.0023 ppb	08:20:48
3	Be 313.107†	-4215.8	-5.7	-0.0027 ug/L	-0.0027 ppb	08:20:28
3	Ca 317.933Radial†	13.6	-3.8	-7.7871 ug/L	-7.7871 ppb	08:19:31
3	Cd 226.502†	-164.1	0.3	0.0070 ug/L	0.0070 ppb	08:20:48
3	Co 228.616†	-38.9	-0.4	-0.0107 ug/L	-0.0107 ppb	08:20:48
3	Cr 267.716†	106.4	12.8	0.1620 ug/L	0.1620 ppb	08:20:48
3	Cu 324.752†	6387.0	113.8	0.3654 ug/L	0.3654 ppb	08:20:28
3	Fe 238.204 Radial†	7.4	-1.8	-22.253 ug/L	-22.253 ppb	08:19:31
3	K 766.490 Radial†	2798.2	-61.8	-12.318 ug/L	-12.318 ppb	08:19:11
3	Mg 279.077 IEC†	2.7	1.9	83.821 ug/L	83.821 ppb	08:19:31
3	Mn 257.610†	712.2	268.6	0.3468 ug/L	0.3468 ppb	08:20:48
3	Mo 202.031†	15.6	1.6	0.1355 ug/L	0.1355 ppb	08:20:48
3	Na 589.592 Radial†	-535.8	-64.1	-25.159 ug/L	-25.159 ppb	08:19:11
3	Ni 231.604†	84.0	-8.5	-0.2657 ug/L	-0.2657 ppb	08:20:48
3	P 214.914†	171.3	5.2	3.6896 ug/L	3.6896 ppb	08:20:48
3	Pb 220.353†	-60.4	-2.3	-0.3440 ug/L	-0.3440 ppb	08:20:48
3	S 181.975 Axial†	28.4	4.4	7.6424 ug/L	7.6424 ppb	08:20:48
3	Sb 206.836†	25.7	-0.6	-0.2250 ug/L	-0.2250 ppb	08:20:48
3	Se 196.026†	-14.2	2.6	2.0180 ug/L	2.0180 ppb	08:20:48
3	Si 251.611†	514.6	-4.4	-0.1658 ug/L	-0.1658 ppb	08:20:48
3	Sn 189.927†	11.4	8.4	1.8702 ug/L	1.8702 ppb	08:20:48
3	Sr 421.552†	53.4	-17.8	-0.1511 ug/L	-0.1511 ppb	08:19:11
3	Ti 334.940†	-1164.3	-95.4	-0.1742 ug/L	-0.1742 ppb	08:20:28
3	Tl 190.801†	-18.9	5.9	2.3009 ug/L	2.3009 ppb	08:20:48
3	U 409.014†	-1857.5	154.5	4.5476 ug/L	4.5476 ppb	08:20:28
3	V 292.402†	-1414.0	-4.1	-0.0160 ug/L	-0.0160 ppb	08:20:28
3	Zn 213.857†	614.0	15.2	0.1852 ug/L	0.1852 ppb	08:20:48
3	SiO2†	522.5	-24.3	-1.9476 ug/L	-1.9476 ppb	08:21:04

Mean Data: ICB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	820348.2	97.677	%	3.1637			3.24%
Sc Radial	4100.3	102	%	0.4			0.39%
Y 371.029	699641.0	97.705	%	3.3221			3.40%
Y RADIAL	4483.5	99.24	%	0.489			0.49%
Ag 328.068†	-87.7	-0.4544	ug/L	0.32692	-0.4544 ppb	0.32692	71.94%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	3.0	3.2161	ug/L	2.54903	3.2161 ppb	2.54903	79.26%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	-2.1	-1.1583	ug/L	0.79954	-1.1583 ppb	0.79954	69.03%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	118.1	3.2509	ug/L	0.44409	3.2509 ppb	0.44409	13.66%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	2.0	0.0174	ug/L	0.05575	0.0174 ppb	0.05575	319.65%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	-108.7	-0.0444	ug/L	0.07187	-0.0444 ppb	0.07187	161.79%
QC value within limits for Be 313.107 Recovery = Not calculated							

Ca 317.933Radial†	0.4	0.7469 ug/L	7.40238	0.7469 ppb	7.40238 991.03%
QC value within limits for Ca 317.933Radial Recovery = Not calculated					
Cd 226.502†	-5.4	-0.0729 ug/L	0.22944	-0.0729 ppb	0.22944 314.90%
QC value within limits for Cd 226.502 Recovery = Not calculated					
Co 228.616†	2.0	0.0547 ug/L	0.10521	0.0547 ppb	0.10521 192.38%
QC value within limits for Co 228.616 Recovery = Not calculated					
Cr 267.716†	21.0	0.2692 ug/L	0.09313	0.2692 ppb	0.09313 34.59%
QC value within limits for Cr 267.716 Recovery = Not calculated					
Cu 324.752†	189.8	0.6130 ug/L	0.84911	0.6130 ppb	0.84911 138.51%
QC value within limits for Cu 324.752 Recovery = Not calculated					
Fe 238.204 Radial†	-2.9	-36.816 ug/L	13.7461	-36.816 ppb	13.7461 37.34%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated					
K 766.490 Radial†	-45.0	-8.9659 ug/L	5.39443	-8.9659 ppb	5.39443 60.17%
QC value within limits for K 766.490 Radial Recovery = Not calculated					
Mg 279.077 IEC†	0.7	28.967 ug/L	53.9747	28.967 ppb	53.9747 186.33%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated					
Mn 257.610†	200.0	0.2576 ug/L	0.11789	0.2576 ppb	0.11789 45.77%
QC value within limits for Mn 257.610 Recovery = Not calculated					
Mo 202.031†	3.9	0.3427 ug/L	0.24331	0.3427 ppb	0.24331 71.00%
QC value within limits for Mo 202.031 Recovery = Not calculated					
Na 589.592 Radial†	-56.9	-22.354 ug/L	4.3525	-22.354 ppb	4.3525 19.47%
QC value within limits for Na 589.592 Radial Recovery = Not calculated					
Ni 231.604†	-8.0	-0.2506 ug/L	0.21219	-0.2506 ppb	0.21219 84.66%
QC value within limits for Ni 231.604 Recovery = Not calculated					
P 214.914†	15.8	11.299 ug/L	9.3331	11.299 ppb	9.3331 82.60%
QC value within limits for P 214.914 Recovery = Not calculated					
Pb 220.353†	-5.7	-0.8537 ug/L	0.88298	-0.8537 ppb	0.88298 103.43%
QC value within limits for Pb 220.353 Recovery = Not calculated					
S 181.975 Axial†	4.3	7.6181 ug/L	2.62088	7.6181 ppb	2.62088 34.40%
QC value within limits for S 181.975 Axial Recovery = Not calculated					
Sb 206.836†	2.9	1.2709 ug/L	1.57162	1.2709 ppb	1.57162 123.67%
QC value within limits for Sb 206.836 Recovery = Not calculated					
Se 196.026†	-0.9	-0.8281 ug/L	2.47623	-0.8281 ppb	2.47623 299.03%
QC value within limits for Se 196.026 Recovery = Not calculated					
Si 251.611†	6.2	0.2270 ug/L	0.57709	0.2270 ppb	0.57709 254.19%
QC value within limits for Si 251.611 Recovery = Not calculated					
Sn 189.927†	8.1	1.7882 ug/L	0.86018	1.7882 ppb	0.86018 48.10%
QC value within limits for Sn 189.927 Recovery = Not calculated					
Sr 421.552†	-11.8	-0.1001 ug/L	0.21098	-0.1001 ppb	0.21098 210.68%
QC value within limits for Sr 421.552 Recovery = Not calculated					
Ti 334.940†	-70.7	-0.1242 ug/L	0.05025	-0.1242 ppb	0.05025 40.46%
QC value within limits for Ti 334.940 Recovery = Not calculated					
Tl 190.801†	1.1	0.4208 ug/L	1.62893	0.4208 ppb	1.62893 387.08%
QC value within limits for Tl 190.801 Recovery = Not calculated					
U 409.014†	18.4	0.5439 ug/L	6.63313	0.5439 ppb	6.63313 >999.9%
QC value within limits for U 409.014 Recovery = Not calculated					
V 292.402†	-14.4	-0.0993 ug/L	0.24658	-0.0993 ppb	0.24658 248.34%
QC value within limits for V 292.402 Recovery = Not calculated					
Zn 213.857†	7.9	0.1003 ug/L	0.09034	0.1003 ppb	0.09034 90.10%
QC value within limits for Zn 213.857 Recovery = Not calculated					
SiO2†	-10.8	-0.8729 ug/L	2.56207	-0.8729 ppb	2.56207 293.52%
QC value within limits for SiO2 Recovery = Not calculated					

All analyte(s) passed QC.

Sequence No.: 8

Sample ID: PQL

Analyst:

Logged In Analyst (Original) : Optima3

Initial Sample Wt:

Dilution:

Autosampler Location: 11

Date Collected: 3/25/2010 08:23:16

Data Type: Reprocessed on 3/25/2010 09:41:46

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 361.383	826591.3	826591.3	98.421 %		08:26:26
1	Sc Radial	4083.8	4083.8	101 %		08:25:29
1	Y 371.029	704089.2	704089.2	98.326 %		08:26:26
1	Y RADIAL	4492.1	4492.1	99.43 %		08:25:09
1	Ag 328.068†	1237.8	1004.3	5.0643 ug/L	5.0643 ppb	08:26:26
1	Al 396.153Radial†	142.0	219.9	233.80 ug/L	233.80 ppb	08:25:29
1	As 188.979†	36.5	57.9	31.095 ug/L	31.095 ppb	08:26:46
1	B 249.677†	1658.1	1934.9	53.156 ug/L	53.156 ppb	08:26:26
1	Ba 233.527†	584.7	575.5	5.4105 ug/L	5.4105 ppb	08:26:46
1	Be 313.107†	8113.8	12506.7	5.0891 ug/L	5.0891 ppb	08:26:26
1	Ca 317.933Radial†	129.3	110.6	224.64 ug/L	224.64 ppb	08:25:29
1	Cd 226.502†	183.3	352.6	4.9786 ug/L	4.9786 ppb	08:26:46
1	Co 228.616†	161.1	202.6	5.2870 ug/L	5.2870 ppb	08:26:46
1	Cr 267.716†	498.8	411.9	5.3572 ug/L	5.3572 ppb	08:26:46
1	Cu 324.752†	9495.9	3295.5	10.660 ug/L	10.660 ppb	08:26:26
1	Fe 238.204 Radial†	16.1	6.9	86.363 ug/L	86.363 ppb	08:25:29
1	K 766.490 Radial†	3493.6	647.6	129.08 ug/L	129.08 ppb	08:25:09
1	Mg 279.077 IEC†	8.3	7.5	328.39 ug/L	328.39 ppb	08:25:29
1	Mn 257.610†	8546.9	8231.6	10.795 ug/L	10.795 ppb	08:26:26
1	Mo 202.031†	134.6	122.5	10.782 ug/L	10.782 ppb	08:26:46
1	Na 589.592 Radial†	287.2	744.6	292.42 ug/L	292.42 ppb	08:25:09
1	Ni 231.604†	267.3	178.0	5.5534 ug/L	5.5534 ppb	08:26:46
1	P 214.914†	386.4	224.4	159.26 ug/L	159.26 ppb	08:26:46
1	Pb 220.353†	11.1	70.1	10.627 ug/L	10.627 ppb	08:26:46
1	S 181.975 Axial†	89.4	66.4	116.42 ug/L	116.42 ppb	08:26:46
1	Sb 206.836†	45.6	19.7	8.7750 ug/L	8.7750 ppb	08:26:46
1	Se 196.026†	28.6	46.0	37.067 ug/L	37.067 ppb	08:26:46
1	Si 251.611†	3151.9	2677.0	99.542 ug/L	99.542 ppb	08:26:46
1	Sn 189.927†	54.3	52.0	11.563 ug/L	11.563 ppb	08:26:46
1	Sr 421.552†	611.9	534.4	4.5492 ug/L	4.5492 ppb	08:25:09
1	Ti 334.940†	1796.7	2908.9	4.9818 ug/L	4.9818 ppb	08:26:26
1	Tl 190.801†	22.0	47.5	18.406 ug/L	18.406 ppb	08:26:46
1	U 409.014†	-149.1	1883.7	55.405 ug/L	55.405 ppb	08:26:26
1	V 292.402†	-682.7	733.8	5.9020 ug/L	5.9020 ppb	08:26:26
1	Zn 213.857†	1588.8	1007.8	11.910 ug/L	11.910 ppb	08:26:46
1	SiO2†	3354.8	2855.3	227.83 ug/L	227.83 ppb	08:27:42
2	Sc 361.383	843989.6	843989.6	100.49 %		08:26:51
2	Sc Radial	4077.7	4077.7	101 %		08:25:54
2	Y 371.029	720812.2	720812.2	100.66 %		08:26:51
2	Y RADIAL	4503.9	4503.9	99.69 %		08:25:34
2	Ag 328.068†	1216.8	957.4	4.8345 ug/L	4.8345 ppb	08:26:51
2	Al 396.153Radial†	128.8	207.0	220.15 ug/L	220.15 ppb	08:25:54
2	As 188.979†	33.2	53.9	28.929 ug/L	28.929 ppb	08:27:11
2	B 249.677†	1632.7	1874.8	51.503 ug/L	51.503 ppb	08:26:51
2	Ba 233.527†	567.8	546.5	5.1377 ug/L	5.1377 ppb	08:27:11
2	Be 313.107†	8455.7	12677.0	5.1586 ug/L	5.1586 ppb	08:26:51
2	Ca 317.933Radial†	124.1	105.6	214.51 ug/L	214.51 ppb	08:25:54
2	Cd 226.502†	205.4	370.8	5.2324 ug/L	5.2324 ppb	08:27:11
2	Co 228.616†	162.5	200.6	5.2316 ug/L	5.2316 ppb	08:27:11
2	Cr 267.716†	493.2	395.8	5.1505 ug/L	5.1505 ppb	08:27:11
2	Cu 324.752†	9723.9	3323.5	10.753 ug/L	10.753 ppb	08:26:51
2	Fe 238.204 Radial†	17.5	8.3	104.33 ug/L	104.33 ppb	08:25:54
2	K 766.490 Radial†	3613.2	771.1	153.75 ug/L	153.75 ppb	08:25:34
2	Mg 279.077 IEC†	9.0	8.2	360.01 ug/L	360.01 ppb	08:25:54
2	Mn 257.610†	8853.5	8357.7	10.961 ug/L	10.961 ppb	08:26:51
2	Mo 202.031†	127.6	112.8	9.9272 ug/L	9.9272 ppb	08:27:11
2	Na 589.592 Radial†	237.5	695.8	273.25 ug/L	273.25 ppb	08:25:34
2	Ni 231.604†	272.0	177.1	5.5256 ug/L	5.5256 ppb	08:27:11

2	P 214.914†	387.6	217.4	154.23 ug/L	154.23 ppb	08:27:11
2	Pb 220.353†	4.9	63.7	9.6539 ug/L	9.6539 ppb	08:27:11
2	S 181.975 Axial†	85.8	61.0	106.83 ug/L	106.83 ppb	08:27:11
2	Sb 206.836†	55.7	28.8	12.616 ug/L	12.616 ppb	08:27:11
2	Se 196.026†	14.8	31.6	25.644 ug/L	25.644 ppb	08:27:11
2	Si 251.611†	3105.2	2564.6	95.364 ug/L	95.364 ppb	08:27:11
2	Sn 189.927†	52.9	49.5	11.005 ug/L	11.005 ppb	08:27:11
2	Sr 421.552†	608.3	531.7	4.5264 ug/L	4.5264 ppb	08:25:34
2	Ti 334.940†	1927.8	3001.7	5.1391 ug/L	5.1391 ppb	08:26:51
2	Tl 190.801†	26.9	51.9	20.124 ug/L	20.124 ppb	08:27:11
2	U 409.014†	-263.9	1772.6	52.133 ug/L	52.133 ppb	08:26:51
2	V 292.402†	-760.9	670.3	5.3920 ug/L	5.3920 ppb	08:26:51
2	Zn 213.857†	1593.0	978.8	11.563 ug/L	11.563 ppb	08:27:11
2	SiO2†	3254.6	2685.3	214.27 ug/L	214.27 ppb	08:27:47
3	Sc 361.383	821797.4	821797.4	97.850 %		08:27:17
3	Sc Radial	4060.7	4060.7	101 %		08:26:19
3	Y 371.029	700918.2	700918.2	97.883 %		08:27:17
3	Y RADIAL	4461.2	4461.2	98.74 %		08:25:59
3	Ag 328.068†	1158.2	930.2	4.6763 ug/L	4.6763 ppb	08:27:17
3	Al 396.153Radial†	124.0	202.9	215.75 ug/L	215.75 ppb	08:26:19
3	As 188.979†	31.7	53.2	28.563 ug/L	28.563 ppb	08:27:37
3	B 249.677†	1551.8	1836.1	50.446 ug/L	50.446 ppb	08:27:17
3	Ba 233.527†	564.1	558.0	5.2415 ug/L	5.2415 ppb	08:27:37
3	Be 313.107†	8184.9	12627.4	5.1382 ug/L	5.1382 ppb	08:27:17
3	Ca 317.933Radial†	128.6	110.6	224.68 ug/L	224.68 ppb	08:26:19
3	Cd 226.502†	205.8	376.7	5.3210 ug/L	5.3210 ppb	08:27:37
3	Co 228.616†	154.1	196.4	5.1221 ug/L	5.1221 ppb	08:27:37
3	Cr 267.716†	503.6	419.7	5.4548 ug/L	5.4548 ppb	08:27:37
3	Cu 324.752†	9498.3	3354.2	10.849 ug/L	10.849 ppb	08:27:17
3	Fe 238.204 Radial†	13.6	4.5	56.847 ug/L	56.847 ppb	08:26:19
3	K 766.490 Radial†	3627.6	800.3	159.57 ug/L	159.57 ppb	08:25:59
3	Mg 279.077 IEC†	9.5	8.7	381.64 ug/L	381.64 ppb	08:26:19
3	Mn 257.610†	8517.2	8251.9	10.817 ug/L	10.817 ppb	08:27:17
3	Mo 202.031†	120.8	109.3	9.6162 ug/L	9.6162 ppb	08:27:37
3	Na 589.592 Radial†	232.9	692.2	271.84 ug/L	271.84 ppb	08:25:59
3	Ni 231.604†	261.8	174.0	5.4295 ug/L	5.4295 ppb	08:27:37
3	P 214.914†	381.5	221.7	157.29 ug/L	157.29 ppb	08:27:37
3	Pb 220.353†	17.2	76.4	11.584 ug/L	11.584 ppb	08:27:37
3	S 181.975 Axial†	91.3	69.0	120.85 ug/L	120.85 ppb	08:27:37
3	Sb 206.836†	47.9	22.4	9.8400 ug/L	9.8400 ppb	08:27:37
3	Se 196.026†	24.8	42.3	33.989 ug/L	33.989 ppb	08:27:37
3	Si 251.611†	3145.0	2688.6	99.988 ug/L	99.988 ppb	08:27:37
3	Sn 189.927†	44.5	42.4	9.4196 ug/L	9.4196 ppb	08:27:37
3	Sr 421.552†	628.9	554.7	4.7217 ug/L	4.7217 ppb	08:25:59
3	Ti 334.940†	1804.1	2927.1	5.0089 ug/L	5.0089 ppb	08:27:17
3	Tl 190.801†	26.5	52.2	20.234 ug/L	20.234 ppb	08:27:37
3	U 409.014†	-157.1	1874.7	55.142 ug/L	55.142 ppb	08:27:17
3	V 292.402†	-863.1	545.4	4.4378 ug/L	4.4378 ppb	08:27:17
3	Zn 213.857†	1592.8	1021.4	12.076 ug/L	12.076 ppb	08:27:37
3	SiO2†	3297.8	2816.9	224.80 ug/L	224.80 ppb	08:27:52

Mean Data: PQL

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	830792.8	98.921 %		1.3904			1.41%
Sc Radial	4074.1	101 %		0.3			0.29%
Y 371.029	708606.5	98.957 %		1.4927			1.51%
Y RADIAL	4485.7	99.29 %		0.489			0.49%
Ag 328.068†	964.0	4.8584 ug/L		0.19512	4.8584 ppb	0.19512	4.02%
QC value within limits for Ag 328.068 Recovery = 97.17%							
Al 396.153Radial†	209.9	223.23 ug/L		9.413	223.23 ppb	9.413	4.22%
QC value within limits for Al 396.153Radial Recovery = 111.62%							
As 188.979†	55.0	29.529 ug/L		1.3688	29.529 ppb	1.3688	4.64%
QC value within limits for As 188.979 Recovery = 98.43%							
B 249.677†	1881.9	51.702 ug/L		1.3663	51.702 ppb	1.3663	2.64%
QC value within limits for B 249.677 Recovery = 103.40%							
Ba 233.527†	560.0	5.2632 ug/L		0.13771	5.2632 ppb	0.13771	2.62%
QC value within limits for Ba 233.527 Recovery = 105.26%							
Be 313.107†	12603.7	5.1286 ug/L		0.03571	5.1286 ppb	0.03571	0.70%
QC value within limits for Be 313.107 Recovery = 102.57%							

Ca 317.933Radial†	108.9	221.27 ug/L	5.862	221.27 ppb	5.862	2.65%
QC value within limits for Ca 317.933Radial Recovery = 110.64%						
Cd 226.502†	366.7	5.1773 ug/L	0.17772	5.1773 ppb	0.17772	3.43%
QC value within limits for Cd 226.502 Recovery = 103.55%						
Co 228.616†	199.9	5.2136 ug/L	0.08388	5.2136 ppb	0.08388	1.61%
QC value within limits for Co 228.616 Recovery = 104.27%						
Cr 267.716†	409.1	5.3208 ug/L	0.15539	5.3208 ppb	0.15539	2.92%
QC value within limits for Cr 267.716 Recovery = 106.42%						
Cu 324.752†	3324.4	10.754 ug/L	0.0945	10.754 ppb	0.0945	0.88%
QC value within limits for Cu 324.752 Recovery = 107.54%						
Fe 238.204 Radial†	6.6	82.514 ug/L	23.9757	82.514 ppb	23.9757	29.06%
QC value within limits for Fe 238.204 Radial Recovery = 82.51%						
K 766.490 Radial†	739.7	147.46 ug/L	16.187	147.46 ppb	16.187	10.98%
QC value within limits for K 766.490 Radial Recovery = 98.31%						
Mg 279.077 IEC†	8.2	356.68 ug/L	26.784	356.68 ppb	26.784	7.51%
QC value within limits for Mg 279.077 IEC Recovery = 118.89%						
Mn 257.610†	8280.4	10.858 ug/L	0.0902	10.858 ppb	0.0902	0.83%
QC value within limits for Mn 257.610 Recovery = 108.58%						
Mo 202.031†	114.9	10.109 ug/L	0.6038	10.109 ppb	0.6038	5.97%
QC value within limits for Mo 202.031 Recovery = 101.09%						
Na 589.592 Radial†	710.9	279.17 ug/L	11.495	279.17 ppb	11.495	4.12%
QC value within limits for Na 589.592 Radial Recovery = 93.06%						
Ni 231.604†	176.3	5.5028 ug/L	0.06498	5.5028 ppb	0.06498	1.18%
QC value within limits for Ni 231.604 Recovery = 110.06%						
P 214.914†	221.2	156.93 ug/L	2.535	156.93 ppb	2.535	1.62%
QC value within limits for P 214.914 Recovery = 104.62%						
Pb 220.353†	70.1	10.622 ug/L	0.9648	10.622 ppb	0.9648	9.08%
QC value within limits for Pb 220.353 Recovery = 106.22%						
S 181.975 Axial†	65.5	114.70 ug/L	7.165	114.70 ppb	7.165	6.25%
QC value within limits for S 181.975 Axial Recovery = 114.70%						
Sb 206.836†	23.6	10.410 ug/L	1.9829	10.410 ppb	1.9829	19.05%
QC value within limits for Sb 206.836 Recovery = 104.10%						
Se 196.026†	40.0	32.233 ug/L	5.9104	32.233 ppb	5.9104	18.34%
QC value within limits for Se 196.026 Recovery = 107.44%						
Si 251.611†	2643.4	98.298 ug/L	2.5503	98.298 ppb	2.5503	2.59%
QC value within limits for Si 251.611 Recovery = 98.30%						
Sn 189.927†	48.0	10.662 ug/L	1.1118	10.662 ppb	1.1118	10.43%
QC value within limits for Sn 189.927 Recovery = 106.62%						
Sr 421.552†	540.3	4.5991 ug/L	0.10680	4.5991 ppb	0.10680	2.32%
QC value within limits for Sr 421.552 Recovery = 91.98%						
Ti 334.940†	2945.9	5.0433 ug/L	0.08408	5.0433 ppb	0.08408	1.67%
QC value within limits for Ti 334.940 Recovery = 100.87%						
Tl 190.801†	50.5	19.588 ug/L	1.0253	19.588 ppb	1.0253	5.23%
QC value within limits for Tl 190.801 Recovery = 97.94%						
U 409.014†	1843.6	54.227 ug/L	1.8176	54.227 ppb	1.8176	3.35%
QC value within limits for U 409.014 Recovery = 108.45%						
V 292.402†	649.9	5.2439 ug/L	0.74321	5.2439 ppb	0.74321	14.17%
QC value within limits for V 292.402 Recovery = 104.88%						
Zn 213.857†	1002.7	11.850 ug/L	0.2620	11.850 ppb	0.2620	2.21%
QC value within limits for Zn 213.857 Recovery = 118.50%						
SiO2†	2785.8	222.30 ug/L	7.114	222.30 ppb	7.114	3.20%
QC value within limits for SiO2 Recovery = 104.37%						
All analyte(s) passed QC.						

Sequence No.: 9
 Sample ID: ICSA
 Analyst:
 Logged In Analyst (Original) : Optima3
 Initial Sample Wt:
 Dilution:

Autosampler Location: 13
 Date Collected: 3/25/2010 08:30:04
 Data Type: Reprocessed on 3/25/2010 09:41:47
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: ICSA

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc 361.383	707696.0	707696.0	84.264 %		08:33:14
1	Sc Radial	3753.1	3753.1	93.0 %		08:32:17
1	Y 371.029	589906.4	589906.4	82.381 %		08:33:14
1	Y RADIAL	4073.2	4073.2	90.15 %		08:32:17
1	Ag 328.068†	-8912.7	-10830.5	-4.1156 ug/L	-4.1156 ppb	08:33:14
1	Al 396.153Radial†	455601.1	489757.3	521960 ug/L	521960 ppb	08:31:57
1	As 188.979†	-62.6	-53.5	14.358 ug/L	14.358 ppb	08:33:34
1	B 249.677†	263.9	563.3	-14.460 ug/L	-14.460 ppb	08:33:14
1	Ba 233.527†	-536.4	-655.1	-0.5012 ug/L	-0.5012 ppb	08:33:34
1	Be 313.107†	-4506.7	-1085.6	-0.4961 ug/L	-0.4961 ppb	08:33:14
1	Ca 317.933Radial†	220929.8	237437.0	482410 ug/L	482410 ppb	08:31:57
1	Cd 226.502†	1030.2	1389.0	0.5556 ug/L	0.5556 ppb	08:33:34
1	Co 228.616†	19.2	61.6	-1.0498 ug/L	-1.0498 ppb	08:33:34
1	Cr 267.716†	-1281.9	-1616.3	-1.5033 ug/L	-1.5033 ppb	08:33:34
1	Cu 324.752†	3398.9	-2319.2	2.2207 ug/L	2.2207 ppb	08:33:14
1	Fe 238.204 Radial†	13726.1	14743.7	184360 ug/L	184360 ppb	08:32:17
1	K 766.490 Radial†	2382.7	-242.3	-209.78 ug/L	-209.78 ppb	08:31:57
1	Mg 279.077 IEC†	10343.0	11115.9	485390 ug/L	485390 ppb	08:32:17
1	Mn 257.610†	-816.6	-1421.5	-3.5103 ug/L	-3.5103 ppb	08:33:14
1	Mo 202.031†	-189.3	-238.9	-0.9493 ug/L	-0.9493 ppb	08:33:34
1	Na 589.592 Radial†	-88.5	365.7	143.63 ug/L	143.63 ppb	08:32:17
1	Ni 231.604†	177.7	117.2	3.6595 ug/L	3.6595 ppb	08:33:34
1	P 214.914†	159.7	21.4	-2.2902 ug/L	-2.2902 ppb	08:33:34
1	Pb 220.353†	-662.3	-727.2	-13.675 ug/L	-13.675 ppb	08:33:34
1	S 181.975 Axial†	36.9	19.5	-63.706 ug/L	-63.706 ppb	08:33:34
1	Sb 206.836†	49.0	31.5	-4.3685 ug/L	-4.3685 ppb	08:33:34
1	Se 196.026†	-821.2	-957.6	-17.279 ug/L	-17.279 ppb	08:33:34
1	Si 251.611†	433.5	-10.9	-0.1488 ug/L	-0.1488 ppb	08:33:34
1	Sn 189.927†	-315.6	-377.7	-8.5258 ug/L	-8.5258 ppb	08:33:34
1	Sr 421.552†	418.8	380.1	-0.3651 ug/L	-0.3651 ppb	08:32:17
1	Ti 334.940†	-12845.8	-14161.4	0.6710 ug/L	0.6710 ppb	08:33:14
1	Tl 190.801†	-67.0	-54.5	-21.310 ug/L	-21.310 ppb	08:33:34
1	U 409.014†	-796.6	1089.8	11.096 ug/L	11.096 ppb	08:33:14
1	V 292.402†	330.5	1819.7	-3.6472 ug/L	-3.6472 ppb	08:33:34
1	Zn 213.857†	2633.3	2518.6	2.3177 ug/L	2.3177 ppb	08:33:34
1	SiO2†	557.1	107.7	9.1800 ug/L	9.1800 ppb	08:34:31
2	Sc 361.383	714756.1	714756.1	85.105 %		08:33:40
2	Sc Radial	3804.1	3804.1	94.3 %		08:32:42
2	Y 371.029	595723.2	595723.2	83.193 %		08:33:40
2	Y RADIAL	4134.7	4134.7	91.52 %		08:32:42
2	Ag 328.068†	-8924.4	-10739.8	-4.2222 ug/L	-4.2222 ppb	08:33:40
2	Al 396.153Radial†	448737.6	475911.1	507210 ug/L	507210 ppb	08:32:22
2	As 188.979†	-68.6	-59.8	10.430 ug/L	10.430 ppb	08:34:00
2	B 249.677†	386.0	703.7	-10.206 ug/L	-10.206 ppb	08:33:40
2	Ba 233.527†	-533.4	-645.3	-0.4834 ug/L	-0.4834 ppb	08:34:00
2	Be 313.107†	-4542.5	-1074.8	-0.4899 ug/L	-0.4899 ppb	08:33:40
2	Ca 317.933Radial†	217322.3	230426.6	468170 ug/L	468170 ppb	08:32:22
2	Cd 226.502†	1040.9	1389.5	0.8138 ug/L	0.8138 ppb	08:34:00
2	Co 228.616†	11.0	51.9	-1.2697 ug/L	-1.2697 ppb	08:34:00
2	Cr 267.716†	-1297.6	-1619.6	-1.8072 ug/L	-1.8072 ppb	08:34:00
2	Cu 324.752†	3504.0	-2235.4	2.3596 ug/L	2.3596 ppb	08:33:40
2	Fe 238.204 Radial†	13729.5	14549.4	181940 ug/L	181940 ppb	08:32:42
2	K 766.490 Radial†	2512.3	-139.3	-184.44 ug/L	-184.44 ppb	08:32:22
2	Mg 279.077 IEC†	10344.2	10968.0	478940 ug/L	478940 ppb	08:32:42
2	Mn 257.610†	-957.2	-1577.1	-3.6903 ug/L	-3.6903 ppb	08:33:40
2	Mo 202.031†	-184.9	-231.4	-0.6508 ug/L	-0.6508 ppb	08:34:00
2	Na 589.592 Radial†	-121.0	332.5	130.60 ug/L	130.60 ppb	08:32:42
2	Ni 231.604†	149.0	81.5	2.5433 ug/L	2.5433 ppb	08:34:00

2	P 214.914†	158.1	17.6	-6.7776 ug/L	-6.7776 ppb	08:34:00
2	Pb 220.353†	-674.8	-734.1	-17.837 ug/L	-17.837 ppb	08:34:00
2	S 181.975 Axial†	47.8	31.8	-39.291 ug/L	-39.291 ppb	08:34:00
2	Sb 206.836†	52.4	35.0	-2.4608 ug/L	-2.4608 ppb	08:34:00
2	Se 196.026†	-823.9	-951.2	-25.025 ug/L	-25.025 ppb	08:34:00
2	Si 251.611†	401.0	-54.3	-1.7698 ug/L	-1.7698 ppb	08:34:00
2	Sn 189.927†	-326.2	-386.4	-12.851 ug/L	-12.851 ppb	08:34:00
2	Sr 421.552†	438.9	395.4	-0.1289 ug/L	-0.1289 ppb	08:32:42
2	Ti 334.940†	-12588.1	-13708.0	0.0650 ug/L	0.0650 ppb	08:33:40
2	Tl 190.801†	-67.8	-54.5	-21.325 ug/L	-21.325 ppb	08:34:00
2	U 409.014†	-592.5	1338.9	18.703 ug/L	18.703 ppb	08:33:40
2	V 292.402†	320.5	1804.1	-3.5155 ug/L	-3.5155 ppb	08:34:00
2	Zn 213.857†	2633.7	2488.2	2.3265 ug/L	2.3265 ppb	08:34:00
2	SiO2†	390.5	-94.6	-7.0021 ug/L	-7.0021 ppb	08:34:36
3	Sc 361.383	718206.8	718206.8	85.516 %		08:34:05
3	Sc Radial	3716.1	3716.1	92.1 %		08:33:08
3	Y 371.029	599800.3	599800.3	83.762 %		08:34:05
3	Y RADIAL	4026.8	4026.8	89.13 %		08:33:08
3	Ag 328.068†	-8750.4	-10485.9	-1.7967 ug/L	-1.7967 ppb	08:34:05
3	Al 396.153Radial†	454483.4	493428.6	525880 ug/L	525880 ppb	08:32:48
3	As 188.979†	-69.4	-60.3	11.167 ug/L	11.167 ppb	08:34:25
3	B 249.677†	175.8	455.8	-17.734 ug/L	-17.734 ppb	08:34:05
3	Ba 233.527†	-510.9	-616.0	-0.0760 ug/L	-0.0760 ppb	08:34:25
3	Be 313.107†	-4449.2	-940.1	-0.4338 ug/L	-0.4338 ppb	08:34:05
3	Ca 317.933Radial†	219506.8	238260.9	484090 ug/L	484090 ppb	08:32:48
3	Cd 226.502†	1083.8	1433.8	0.9837 ug/L	0.9837 ppb	08:34:25
3	Co 228.616†	13.0	54.1	-1.2866 ug/L	-1.2866 ppb	08:34:25
3	Cr 267.716†	-1257.6	-1565.5	-0.6353 ug/L	-0.6353 ppb	08:34:25
3	Cu 324.752†	3439.7	-2330.4	2.2881 ug/L	2.2881 ppb	08:34:05
3	Fe 238.204 Radial†	13734.9	14900.4	186320 ug/L	186320 ppb	08:33:08
3	K 766.490 Radial†	2358.7	-242.9	-210.45 ug/L	-210.45 ppb	08:32:48
3	Mg 279.077 IEC†	10357.7	11242.7	490930 ug/L	490930 ppb	08:33:08
3	Mn 257.610†	-898.5	-1503.1	-3.6504 ug/L	-3.6504 ppb	08:34:05
3	Mo 202.031†	-225.8	-278.3	-4.2410 ug/L	-4.2410 ppb	08:34:25
3	Na 589.592 Radial†	-58.3	397.6	156.14 ug/L	156.14 ppb	08:33:08
3	Ni 231.604†	162.8	96.8	3.0218 ug/L	3.0218 ppb	08:34:25
3	P 214.914†	159.0	17.7	-5.5359 ug/L	-5.5359 ppb	08:34:25
3	Pb 220.353†	-672.9	-728.0	-13.198 ug/L	-13.198 ppb	08:34:25
3	S 181.975 Axial†	44.1	27.2	-50.803 ug/L	-50.803 ppb	08:34:25
3	Sb 206.836†	36.8	16.4	-11.023 ug/L	-11.023 ppb	08:34:25
3	Se 196.026†	-835.6	-960.1	-12.044 ug/L	-12.044 ppb	08:34:25
3	Si 251.611†	412.3	-43.3	-1.3118 ug/L	-1.3118 ppb	08:34:25
3	Sn 189.927†	-328.3	-387.0	-10.417 ug/L	-10.417 ppb	08:34:25
3	Sr 421.552†	443.5	411.4	-0.1117 ug/L	-0.1117 ppb	08:33:08
3	Ti 334.940†	-12329.2	-13334.2	1.8662 ug/L	1.8662 ppb	08:34:05
3	Tl 190.801†	-76.6	-64.5	-25.163 ug/L	-25.163 ppb	08:34:25
3	U 409.014†	-818.9	1077.5	10.510 ug/L	10.510 ppb	08:34:05
3	V 292.402†	275.1	1749.2	-4.4206 ug/L	-4.4206 ppb	08:34:25
3	Zn 213.857†	2658.4	2502.3	1.8341 ug/L	1.8341 ppb	08:34:25
3	SiO2†	405.7	-79.0	-5.6448 ug/L	-5.6448 ppb	08:34:41

Mean Data: ICSCA

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	713553.0	84.961 %		0.6379			0.75%
Sc Radial	3757.8	93.2 %		1.10			1.18%
Y 371.029	595143.3	83.112 %		0.6944			0.84%
Y RADIAL	4078.2	90.27 %		1.199			1.33%
Ag 328.068†	-10685.4	-3.3782 ug/L		1.37061	-3.3782 ppb	1.37061	40.57%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	486365.7	518350 ug/L		9845.7	518350 ppb	9845.7	1.90%
QC value within limits for Al 396.153Radial Recovery = 103.67%							
As 188.979†	-57.8	11.985 ug/L		2.0881	11.985 ppb	2.0881	17.42%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	574.3	-14.133 ug/L		3.7749	-14.133 ppb	3.7749	26.71%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	-638.8	-0.3536 ug/L		0.24052	-0.3536 ppb	0.24052	68.03%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	-1033.5	-0.4733 ug/L		0.03435	-0.4733 ppb	0.03435	7.26%
QC value within limits for Be 313.107 Recovery = Not calculated							

Ca 317.933Radial†	235374.9	478220 ug/L	8746.8	478220 ppb	8746.8	1.83%
QC value within limits for Ca 317.933Radial Recovery = 95.64%						
Cd 226.502†	1404.1	0.7843 ug/L	0.21554	0.7843 ppb	0.21554	27.48%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	55.9	-1.2020 ug/L	0.13207	-1.2020 ppb	0.13207	10.99%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-1600.5	-1.3153 ug/L	0.60814	-1.3153 ppb	0.60814	46.24%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-2295.0	2.2895 ug/L	0.06944	2.2895 ppb	0.06944	3.03%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	14731.2	184210 ug/L	2198.7	184210 ppb	2198.7	1.19%
QC value within limits for Fe 238.204 Radial Recovery = 92.10%						
K 766.490 Radial†	-208.2	-201.56 ug/L	14.827	-201.56 ppb	14.827	7.36%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	11108.9	485090 ug/L	6003.0	485090 ppb	6003.0	1.24%
QC value within limits for Mg 279.077 IEC Recovery = 97.02%						
Mn 257.610†	-1500.6	-3.6170 ug/L	0.09450	-3.6170 ppb	0.09450	2.61%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	-249.5	-1.9470 ug/L	1.99223	-1.9470 ppb	1.99223	102.32%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	365.3	143.46 ug/L	12.774	143.46 ppb	12.774	8.90%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	98.5	3.0749 ug/L	0.55994	3.0749 ppb	0.55994	18.21%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	18.9	-4.8679 ug/L	2.31708	-4.8679 ppb	2.31708	47.60%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	-729.8	-14.903 ug/L	2.5520	-14.903 ppb	2.5520	17.12%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	26.2	-51.267 ug/L	12.2141	-51.267 ppb	12.2141	23.82%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	27.6	-5.9509 ug/L	4.49522	-5.9509 ppb	4.49522	75.54%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-956.3	-18.116 ug/L	6.5308	-18.116 ppb	6.5308	36.05%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	-36.2	-1.0768 ug/L	0.83565	-1.0768 ppb	0.83565	77.61%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	-383.7	-10.598 ug/L	2.1685	-10.598 ppb	2.1685	20.46%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	395.6	-0.2019 ug/L	0.14157	-0.2019 ppb	0.14157	70.12%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	-13734.5	0.8674 ug/L	0.91650	0.8674 ppb	0.91650	105.66%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	-57.8	-22.599 ug/L	2.2199	-22.599 ppb	2.2199	9.82%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	1168.7	13.436 ug/L	4.5709	13.436 ppb	4.5709	34.02%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	1791.0	-3.8611 ug/L	0.48896	-3.8611 ppb	0.48896	12.66%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	2503.0	2.1594 ug/L	0.28177	2.1594 ppb	0.28177	13.05%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	-21.9	-1.1556 ug/L	8.97661	-1.1556 ppb	8.97661	776.77%
QC value within limits for SiO2 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 10

Sample ID: ICSAB

Analyst:

Logged In Analyst (Original) : Optima3

Initial Sample Wt:

Dilution:

Autosampler Location: 14

Date Collected: 3/25/2010 08:36:52

Data Type: Reprocessed on 3/25/2010 09:41:48

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: ICSAB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc 361.383	731947.1	731947.1	87.152 %		08:40:03
1	Sc Radial	3686.7	3686.7	91.4 %		08:39:05
1	Y 371.029	608253.7	608253.7	84.943 %		08:40:03
1	Y RADIAL	4011.7	4011.7	88.79 %		08:39:05
1	Ag 328.068†	38604.6	44042.6	273.97 ug/L	273.97 ppb	08:40:03
1	Al 396.153Radial†	451258.7	493832.2	526280 ug/L	526280 ppb	08:38:44
1	As 188.979†	785.8	922.5	540.67 ug/L	540.67 ppb	08:40:23
1	B 249.677†	16965.2	19716.5	510.79 ug/L	510.79 ppb	08:40:03
1	Ba 233.527†	45857.1	52599.1	499.83 ug/L	499.83 ppb	08:40:03
1	Be 313.107†	531262.2	613847.0	250.34 ug/L	250.34 ppb	08:40:03
1	Ca 317.933Radial†	217204.1	237640.5	482830 ug/L	482830 ppb	08:38:44
1	Cd 226.502†	30418.6	35069.6	476.04 ug/L	476.04 ppb	08:40:23
1	Co 228.616†	15580.1	17916.0	463.77 ug/L	463.77 ppb	08:40:23
1	Cr 267.716†	31475.2	36020.5	488.95 ug/L	488.95 ppb	08:40:03
1	Cu 324.752†	153032.6	169240.9	558.20 ug/L	558.20 ppb	08:40:03
1	Fe 238.204 Radial†	13436.2	14692.5	183740 ug/L	183740 ppb	08:39:05
1	K 766.490 Radial†	26780.1	26498.7	5125.7 ug/L	5125.7 ppb	08:38:44
1	Mg 279.077 IEC†	10232.0	11194.8	488850 ug/L	488850 ppb	08:39:05
1	Mn 257.610†	324387.0	371757.8	485.92 ug/L	485.92 ppb	08:40:03
1	Mo 202.031†	4774.1	5463.7	500.36 ug/L	500.36 ppb	08:40:23
1	Na 589.592 Radial†	11878.6	13458.1	5285.2 ug/L	5285.2 ppb	08:39:05
1	Ni 231.604†	13130.4	14972.5	467.24 ug/L	467.24 ppb	08:40:23
1	P 214.914†	3322.0	3643.6	2497.1 ug/L	2497.1 ppb	08:40:23
1	Pb 220.353†	2024.7	2382.0	457.06 ug/L	457.06 ppb	08:40:23
1	S 181.975 Axial†	1389.0	1569.4	2652.3 ug/L	2652.3 ppb	08:40:23
1	Sb 206.836†	1194.0	1343.4	571.06 ug/L	571.06 ppb	08:40:23
1	Se 196.026†	2072.2	2394.7	2655.6 ug/L	2655.6 ppb	08:40:23
1	Si 251.611†	124966.7	142864.7	5313.4 ug/L	5313.4 ppb	08:40:03
1	Sn 189.927†	1636.0	1874.0	490.29 ug/L	490.29 ppb	08:40:23
1	Sr 421.552†	52392.6	57256.2	483.96 ug/L	483.96 ppb	08:38:44
1	Ti 334.940†	247324.4	284869.9	514.53 ug/L	514.53 ppb	08:40:03
1	Tl 190.801†	986.7	1157.2	450.80 ug/L	450.80 ppb	08:40:23
1	U 409.014†	13890.4	17973.3	506.86 ug/L	506.86 ppb	08:40:03
1	V 292.402†	57579.1	67495.3	510.11 ug/L	510.11 ppb	08:40:03
1	Zn 213.857†	39794.3	45054.6	504.03 ug/L	504.03 ppb	08:40:03
1	SiO2†	125037.6	142918.1	11405 ug/L	11405 ppb	08:41:20
2	Sc 361.383	726270.1	726270.1	86.476 %		08:40:29
2	Sc Radial	3712.5	3712.5	92.0 %		08:39:30
2	Y 371.029	605012.0	605012.0	84.490 %		08:40:29
2	Y RADIAL	4050.3	4050.3	89.65 %		08:39:30
2	Ag 328.068†	38325.1	44065.5	273.90 ug/L	273.90 ppb	08:40:29
2	Al 396.153Radial†	452648.0	491907.7	524230 ug/L	524230 ppb	08:39:10
2	As 188.979†	772.0	913.6	535.72 ug/L	535.72 ppb	08:40:49
2	B 249.677†	16808.9	19687.9	510.12 ug/L	510.12 ppb	08:40:29
2	Ba 233.527†	45343.2	52416.1	498.09 ug/L	498.09 ppb	08:40:29
2	Be 313.107†	525880.1	612388.0	249.74 ug/L	249.74 ppb	08:40:29
2	Ca 317.933Radial†	217159.2	235938.7	479370 ug/L	479370 ppb	08:39:10
2	Cd 226.502†	30255.0	35153.1	477.29 ug/L	477.29 ppb	08:40:49
2	Co 228.616†	15533.4	18001.6	466.01 ug/L	466.01 ppb	08:40:49
2	Cr 267.716†	31159.2	35937.4	487.79 ug/L	487.79 ppb	08:40:29
2	Cu 324.752†	151880.2	169280.8	558.29 ug/L	558.29 ppb	08:40:29
2	Fe 238.204 Radial†	13472.9	14630.1	182960 ug/L	182960 ppb	08:39:30
2	K 766.490 Radial†	26782.6	26297.5	5086.7 ug/L	5086.7 ppb	08:39:10
2	Mg 279.077 IEC†	10249.7	11136.1	486290 ug/L	486290 ppb	08:39:30
2	Mn 257.610†	321017.8	370771.1	484.65 ug/L	484.65 ppb	08:40:29
2	Mo 202.031†	4738.4	5465.2	500.39 ug/L	500.39 ppb	08:40:49
2	Na 589.592 Radial†	11844.4	13330.5	5235.1 ug/L	5235.1 ppb	08:39:30
2	Ni 231.604†	13090.2	15043.8	469.46 ug/L	469.46 ppb	08:40:49

2	P 214.914†	3342.8	3697.3	2535.9 ug/L	2535.9 ppb	08:40:49
2	Pb 220.353†	2071.4	2454.2	467.55 ug/L	467.55 ppb	08:40:49
2	S 181.975 Axial†	1379.2	1570.5	2654.6 ug/L	2654.6 ppb	08:40:49
2	Sb 206.836†	1214.6	1377.9	585.94 ug/L	585.94 ppb	08:40:49
2	Se 196.026†	2040.9	2377.1	2638.4 ug/L	2638.4 ppb	08:40:49
2	Si 251.611†	123593.1	142397.0	5296.0 ug/L	5296.0 ppb	08:40:29
2	Sn 189.927†	1659.8	1916.3	499.07 ug/L	499.07 ppb	08:40:49
2	Sr 421.552†	52401.1	56866.8	480.67 ug/L	480.67 ppb	08:39:10
2	Ti 334.940†	245240.4	284678.1	513.95 ug/L	513.95 ppb	08:40:29
2	Tl 190.801†	996.2	1177.1	458.45 ug/L	458.45 ppb	08:40:49
2	U 409.014†	13633.2	17800.6	501.87 ug/L	501.87 ppb	08:40:29
2	V 292.402†	57302.5	67691.9	511.68 ug/L	511.68 ppb	08:40:29
2	Zn 213.857†	39339.8	44886.0	502.12 ug/L	502.12 ppb	08:40:29
2	SiO2†	125387.7	144444.3	11527 ug/L	11527 ppb	08:41:26
3	Sc 361.383	739054.8	739054.8	87.998 %		08:40:55
3	Sc Radial	3705.3	3705.3	91.9 %		08:39:55
3	Y 371.029	615574.4	615574.4	85.965 %		08:40:55
3	Y RADIAL	4045.5	4045.5	89.54 %		08:39:55
3	Ag 328.068†	38824.9	43866.9	272.86 ug/L	272.86 ppb	08:40:55
3	Al 396.153Radial†	452407.0	492598.0	524970 ug/L	524970 ppb	08:39:35
3	As 188.979†	783.2	910.8	534.23 ug/L	534.23 ppb	08:41:15
3	B 249.677†	17193.6	19788.8	512.93 ug/L	512.93 ppb	08:40:55
3	Ba 233.527†	45966.4	52217.3	496.22 ug/L	496.22 ppb	08:40:55
3	Be 313.107†	533966.0	611057.0	249.20 ug/L	249.20 ppb	08:40:55
3	Ca 317.933Radial†	216685.0	235879.6	479250 ug/L	479250 ppb	08:39:35
3	Cd 226.502†	30422.4	34738.2	471.45 ug/L	471.45 ppb	08:41:15
3	Co 228.616†	15569.1	17731.5	458.97 ug/L	458.97 ppb	08:41:15
3	Cr 267.716†	31541.7	35748.8	485.32 ug/L	485.32 ppb	08:40:55
3	Cu 324.752†	154118.1	168785.7	556.68 ug/L	556.68 ppb	08:40:55
3	Fe 238.204 Radial†	13441.9	14624.7	182890 ug/L	182890 ppb	08:39:55
3	K 766.490 Radial†	26905.6	26487.9	5124.7 ug/L	5124.7 ppb	08:39:35
3	Mg 279.077 IEC†	10230.8	11137.2	486330 ug/L	486330 ppb	08:39:55
3	Mn 257.610†	324939.0	368805.5	482.06 ug/L	482.06 ppb	08:40:55
3	Mo 202.031†	4757.7	5392.5	493.99 ug/L	493.99 ppb	08:41:15
3	Na 589.592 Radial†	11858.3	13370.6	5250.8 ug/L	5250.8 ppb	08:39:55
3	Ni 231.604†	13199.8	14906.5	465.18 ug/L	465.18 ppb	08:41:15
3	P 214.914†	3313.3	3597.0	2464.3 ug/L	2464.3 ppb	08:41:15
3	Pb 220.353†	2043.2	2380.7	456.63 ug/L	456.63 ppb	08:41:15
3	S 181.975 Axial†	1387.2	1552.0	2622.0 ug/L	2622.0 ppb	08:41:15
3	Sb 206.836†	1198.8	1335.7	567.77 ug/L	567.77 ppb	08:41:15
3	Se 196.026†	2046.5	2342.6	2611.0 ug/L	2611.0 ppb	08:41:15
3	Si 251.611†	125437.0	142020.1	5282.0 ug/L	5282.0 ppb	08:40:55
3	Sn 189.927†	1668.0	1892.4	493.78 ug/L	493.78 ppb	08:41:15
3	Sr 421.552†	52363.5	56936.1	481.26 ug/L	481.26 ppb	08:39:35
3	Ti 334.940†	249088.0	284144.8	513.01 ug/L	513.01 ppb	08:40:55
3	Tl 190.801†	978.1	1136.5	442.79 ug/L	442.79 ppb	08:41:15
3	U 409.014†	14115.4	18075.8	509.98 ug/L	509.98 ppb	08:40:55
3	V 292.402†	57975.4	67310.2	508.68 ug/L	508.68 ppb	08:40:55
3	Zn 213.857†	39856.0	44685.6	499.78 ug/L	499.78 ppb	08:40:55
3	SiO2†	124757.2	141219.7	11270 ug/L	11270 ppb	08:41:31

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	732424.0	87.208 %	0.7627			0.87%
Sc Radial	3701.5	91.8 %	0.33			0.36%
Y 371.029	609613.4	85.133 %	0.7556			0.89%
Y RADIAL	4035.8	89.33 %	0.465			0.52%
Ag 328.068†	43991.7	273.57 ug/L	0.621	273.57 ppb	0.621	0.23%
QC value within limits for Ag 328.068 Recovery = 109.43%						
Al 396.153Radial†	492779.3	525160 ug/L	1039.1	525160 ppb	1039.1	0.20%
QC value within limits for Al 396.153Radial Recovery = 105.03%						
As 188.979†	915.6	536.87 ug/L	3.374	536.87 ppb	3.374	0.63%
QC value within limits for As 188.979 Recovery = 107.37%						
B 249.677†	19731.1	511.28 ug/L	1.465	511.28 ppb	1.465	0.29%
QC value within limits for B 249.677 Recovery = 102.26%						
Ba 233.527†	52410.9	498.04 ug/L	1.805	498.04 ppb	1.805	0.36%
QC value within limits for Ba 233.527 Recovery = 99.61%						
Be 313.107†	612430.7	249.76 ug/L	0.568	249.76 ppb	0.568	0.23%
QC value within limits for Be 313.107 Recovery = 99.90%						

Ca 317.933Radial†	236486.3	480480 ug/L	2031.8	480480 ppb	2031.8	0.42%
QC value within limits for Ca 317.933Radial Recovery = 96.10%						
Cd 226.502†	34986.9	474.93 ug/L	3.077	474.93 ppb	3.077	0.65%
QC value within limits for Cd 226.502 Recovery = 94.99%						
Co 228.616†	17883.0	462.92 ug/L	3.598	462.92 ppb	3.598	0.78%
QC value within limits for Co 228.616 Recovery = 92.58%						
Cr 267.716†	35902.2	487.35 ug/L	1.855	487.35 ppb	1.855	0.38%
QC value within limits for Cr 267.716 Recovery = 97.47%						
Cu 324.752†	169102.5	557.73 ug/L	0.906	557.73 ppb	0.906	0.16%
QC value within limits for Cu 324.752 Recovery = 111.55%						
Fe 238.204 Radial†	14649.1	183200 ug/L	471.1	183200 ppb	471.1	0.26%
QC value within limits for Fe 238.204 Radial Recovery = 91.60%						
K 766.490 Radial†	26428.0	5112.4 ug/L	22.24	5112.4 ppb	22.24	0.43%
QC value within limits for K 766.490 Radial Recovery = 102.25%						
Mg 279.077 IEC†	11156.1	487160 ug/L	1465.9	487160 ppb	1465.9	0.30%
QC value within limits for Mg 279.077 IEC Recovery = 97.43%						
Mn 257.610†	370444.8	484.21 ug/L	1.965	484.21 ppb	1.965	0.41%
QC value within limits for Mn 257.610 Recovery = 96.84%						
Mo 202.031†	5440.5	498.24 ug/L	3.689	498.24 ppb	3.689	0.74%
QC value within limits for Mo 202.031 Recovery = 99.65%						
Na 589.592 Radial†	13386.4	5257.0 ug/L	25.62	5257.0 ppb	25.62	0.49%
QC value within limits for Na 589.592 Radial Recovery = 105.14%						
Ni 231.604†	14974.3	467.29 ug/L	2.143	467.29 ppb	2.143	0.46%
QC value within limits for Ni 231.604 Recovery = 93.46%						
P 214.914†	3646.0	2499.1 ug/L	35.85	2499.1 ppb	35.85	1.43%
QC value within limits for P 214.914 Recovery = 99.96%						
Pb 220.353†	2405.6	460.41 ug/L	6.185	460.41 ppb	6.185	1.34%
QC value within limits for Pb 220.353 Recovery = 92.08%						
S 181.975 Axial†	1564.0	2643.0 ug/L	18.19	2643.0 ppb	18.19	0.69%
QC value within limits for S 181.975 Axial Recovery = 105.72%						
Sb 206.836†	1352.3	574.93 ug/L	9.682	574.93 ppb	9.682	1.68%
QC value within limits for Sb 206.836 Recovery = 114.99%						
Se 196.026†	2371.5	2635.0 ug/L	22.45	2635.0 ppb	22.45	0.85%
QC value within limits for Se 196.026 Recovery = 105.40%						
Si 251.611†	142427.3	5297.1 ug/L	15.72	5297.1 ppb	15.72	0.30%
QC value within limits for Si 251.611 Recovery = 105.94%						
Sn 189.927†	1894.3	494.38 ug/L	4.421	494.38 ppb	4.421	0.89%
QC value within limits for Sn 189.927 Recovery = 98.88%						
Sr 421.552†	57019.7	481.97 ug/L	1.754	481.97 ppb	1.754	0.36%
QC value within limits for Sr 421.552 Recovery = 96.39%						
Ti 334.940†	284564.3	513.83 ug/L	0.768	513.83 ppb	0.768	0.15%
QC value within limits for Ti 334.940 Recovery = 102.77%						
Tl 190.801†	1156.9	450.68 ug/L	7.830	450.68 ppb	7.830	1.74%
QC value within limits for Tl 190.801 Recovery = 90.14%						
U 409.014†	17949.9	506.24 ug/L	4.092	506.24 ppb	4.092	0.81%
QC value within limits for U 409.014 Recovery = 101.25%						
V 292.402†	67499.1	510.16 ug/L	1.503	510.16 ppb	1.503	0.29%
QC value within limits for V 292.402 Recovery = 102.03%						
Zn 213.857†	44875.4	501.98 ug/L	2.125	501.98 ppb	2.125	0.42%
QC value within limits for Zn 213.857 Recovery = 100.40%						
SiO2†	142860.7	11401 ug/L	128.8	11401 ppb	128.8	1.13%
QC value within limits for SiO2 Recovery = 106.60%						

All analyte(s) passed QC.

Sequence No.: 11

Sample ID: LR1

Analyst:

Logged In Analyst (Original) : Optima3

Initial Sample Wt:

Dilution:

Autosampler Location: 15

Date Collected: 3/25/2010 08:43:41

Data Type: Reprocessed on 3/25/2010 09:41:49

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc 361.383	711857.2	711857.2	84.759 %		08:46:52
1	Sc Radial	3681.3	3681.3	91.3 %		08:45:53
1	Y 371.029	594108.5	594108.5	82.967 %		08:46:52
1	Y RADIAL	3991.6	3991.6	88.35 %		08:45:53
1	Ag 328.068†	-20543.7	-24491.0	-7.8650 ug/L	-7.8650 ppb	08:46:52
1	Al 396.153Radial†	443336.2	485867.5	517820 ug/L	517820 ppb	08:45:33
1	As 188.979†	-164.4	-173.1	8.7453 ug/L	8.7453 ppb	08:47:12
1	B 249.677†	922.3	1338.3	-33.691 ug/L	-33.691 ppb	08:46:52
1	Ba 233.527†	-1452.7	-1732.4	-2.9986 ug/L	-2.9986 ppb	08:47:12
1	Be 313.107†	-10237.9	-7816.1	-3.2264 ug/L	-3.2264 ppb	08:46:52
1	Ca 317.933Radial†	214725.2	235269.0	478010 ug/L	478010 ppb	08:45:33
1	Cd 226.502†	2750.0	3410.9	6.1923 ug/L	6.1923 ppb	08:47:12
1	Co 228.616†	198.6	273.2	0.7944 ug/L	0.7944 ppb	08:47:12
1	Cr 267.716†	-1135.8	-1435.0	21.413 ug/L	21.413 ppb	08:47:12
1	Cu 324.752†	973.8	-5203.9	-2.1446 ug/L	-2.1446 ppb	08:46:52
1	Fe 238.204 Radial†	31672.7	34696.5	433870 ug/L	433870 ppb	08:45:53
1	K 766.490 Radial†	2599.3	45.0	-348.42 ug/L	-348.42 ppb	08:45:33
1	Mg 279.077 IEC†	10181.8	11156.0	486890 ug/L	486890 ppb	08:45:53
1	Mn 257.610†	-22008.4	-26418.1	-11.736 ug/L	-11.736 ppb	08:46:52
1	Mo 202.031†	-395.3	-480.6	-2.8814 ug/L	-2.8814 ppb	08:47:12
1	Na 589.592 Radial†	1176582.1	1289706.4	506490 ug/L	506490 ppb	08:45:33
1	Ni 231.604†	246.7	197.5	6.1626 ug/L	6.1626 ppb	08:47:12
1	P 214.914†	494.5	415.2	80.601 ug/L	80.601 ppb	08:47:12
1	Pb 220.353†	-499.0	-529.9	-20.454 ug/L	-20.454 ppb	08:47:12
1	S 181.975 Axial†	57.3	43.2	-21.265 ug/L	-21.265 ppb	08:47:12
1	Sb 206.836†	50.2	32.6	-7.1174 ug/L	-7.1174 ppb	08:47:12
1	Se 196.026†	-1949.4	-2283.0	-336.68 ug/L	-336.68 ppb	08:47:12
1	Si 251.611†	-435.7	-1039.5	-38.184 ug/L	-38.184 ppb	08:47:12
1	Sn 189.927†	-350.7	-416.8	-32.309 ug/L	-32.309 ppb	08:47:12
1	Sr 421.552†	1325.2	1382.0	8.1995 ug/L	8.1995 ppb	08:45:53
1	Ti 334.940†	-12424.5	-13575.2	-5.5739 ug/L	-5.5739 ppb	08:46:52
1	Tl 190.801†	-86.2	-76.7	-30.062 ug/L	-30.062 ppb	08:47:12
1	U 409.014†	426790.6	505566.5	14827 ug/L	14827 ppb	08:46:52
1	V 292.402†	870.6	2454.7	-6.9500 ug/L	-6.9500 ppb	08:47:12
1	Zn 213.857†	4731.4	4975.7	-5.8344 ug/L	-5.8344 ppb	08:47:12
1	SiO2†	-529.5	-1178.0	-92.967 ug/L	-92.967 ppb	08:48:09
2	Sc 361.383	721124.0	721124.0	85.863 %		08:47:17
2	Sc Radial	3662.5	3662.5	90.8 %		08:46:19
2	Y 371.029	601501.5	601501.5	84.000 %		08:47:17
2	Y RADIAL	3991.4	3991.4	88.34 %		08:46:19
2	Ag 328.068†	-20684.4	-24343.4	-7.5856 ug/L	-7.5856 ppb	08:47:17
2	Al 396.153Radial†	442847.6	487828.1	519910 ug/L	519910 ppb	08:45:59
2	As 188.979†	-139.2	-141.2	25.482 ug/L	25.482 ppb	08:47:37
2	B 249.677†	828.6	1215.2	-36.839 ug/L	-36.839 ppb	08:47:17
2	Ba 233.527†	-1439.5	-1695.0	-2.6918 ug/L	-2.6918 ppb	08:47:37
2	Be 313.107†	-10342.6	-7782.8	-3.2116 ug/L	-3.2116 ppb	08:47:17
2	Ca 317.933Radial†	214684.4	236434.3	480380 ug/L	480380 ppb	08:45:59
2	Cd 226.502†	2717.2	3331.0	5.2101 ug/L	5.2101 ppb	08:47:37
2	Co 228.616†	182.9	251.9	0.2557 ug/L	0.2557 ppb	08:47:37
2	Cr 267.716†	-1167.8	-1455.1	21.005 ug/L	21.005 ppb	08:47:37
2	Cu 324.752†	940.0	-5258.0	-2.3864 ug/L	-2.3864 ppb	08:47:17
2	Fe 238.204 Radial†	31405.6	34580.8	432420 ug/L	432420 ppb	08:46:19
2	K 766.490 Radial†	2463.5	-89.9	-377.28 ug/L	-377.28 ppb	08:45:59
2	Mg 279.077 IEC†	10063.0	11082.6	483680 ug/L	483680 ppb	08:46:19
2	Mn 257.610†	-22280.9	-26401.8	-11.727 ug/L	-11.727 ppb	08:47:17
2	Mo 202.031†	-425.8	-510.2	-5.5667 ug/L	-5.5667 ppb	08:47:37
2	Na 589.592 Radial†	1177257.6	1297082.2	509380 ug/L	509380 ppb	08:45:59
2	Ni 231.604†	237.2	182.6	5.6974 ug/L	5.6974 ppb	08:47:37

2	P 214.914†	500.6	414.9	82.084 ug/L	82.084 ppb	08:47:37
2	Pb 220.353†	-521.4	-548.4	-22.552 ug/L	-22.552 ppb	08:47:37
2	S 181.975 Axial†	49.0	32.7	-40.116 ug/L	-40.116 ppb	08:47:37
2	Sb 206.836†	50.9	32.7	-7.1244 ug/L	-7.1244 ppb	08:47:37
2	Se 196.026†	-1966.1	-2272.9	-332.09 ug/L	-332.09 ppb	08:47:37
2	Si 251.611†	-425.5	-1021.0	-37.462 ug/L	-37.462 ppb	08:47:37
2	Sn 189.927†	-343.4	-403.0	-28.748 ug/L	-28.748 ppb	08:47:37
2	Sr 421.552†	1324.2	1388.4	8.2363 ug/L	8.2363 ppb	08:46:19
2	Ti 334.940†	-12302.2	-13244.4	-4.4174 ug/L	-4.4174 ppb	08:47:17
2	Tl 190.801†	-82.5	-71.0	-27.860 ug/L	-27.860 ppb	08:47:37
2	U 409.014†	431811.6	504943.6	14808 ug/L	14808 ppb	08:47:17
2	V 292.402†	881.1	2453.7	-6.8812 ug/L	-6.8812 ppb	08:47:37
2	Zn 213.857†	4757.6	4934.5	-6.1042 ug/L	-6.1042 ppb	08:47:37
2	SiO2†	-476.6	-1108.4	-87.335 ug/L	-87.335 ppb	08:48:14
3	Sc 361.383	722835.2	722835.2	86.067 %		08:47:43
3	Sc Radial	3672.1	3672.1	91.0 %		08:46:45
3	Y 371.029	604237.5	604237.5	84.382 %		08:47:43
3	Y RADIAL	3981.0	3981.0	88.11 %		08:46:45
3	Ag 328.068†	-20560.4	-24142.3	-6.7567 ug/L	-6.7567 ppb	08:47:43
3	Al 396.153Radial†	443426.7	487192.4	519230 ug/L	519230 ppb	08:46:25
3	As 188.979†	-149.3	-152.6	19.234 ug/L	19.234 ppb	08:48:03
3	B 249.677†	886.9	1280.6	-34.941 ug/L	-34.941 ppb	08:47:43
3	Ba 233.527†	-1462.5	-1717.7	-2.9251 ug/L	-2.9251 ppb	08:48:03
3	Be 313.107†	-10370.4	-7786.5	-3.2130 ug/L	-3.2130 ppb	08:47:43
3	Ca 317.933Radial†	214504.7	235620.4	478720 ug/L	478720 ppb	08:46:25
3	Cd 226.502†	2750.2	3361.9	5.7134 ug/L	5.7134 ppb	08:48:03
3	Co 228.616†	188.8	258.3	0.4327 ug/L	0.4327 ppb	08:48:03
3	Cr 267.716†	-1144.2	-1424.4	21.333 ug/L	21.333 ppb	08:48:03
3	Cu 324.752†	859.0	-5354.7	-2.7414 ug/L	-2.7414 ppb	08:47:43
3	Fe 238.204 Radial†	31442.4	34531.0	431800 ug/L	431800 ppb	08:46:45
3	K 766.490 Radial†	2333.3	-240.0	-404.63 ug/L	-404.63 ppb	08:46:25
3	Mg 279.077 IEC†	10110.8	11106.2	484710 ug/L	484710 ppb	08:46:45
3	Mn 257.610†	-22398.3	-26476.8	-11.929 ug/L	-11.929 ppb	08:47:43
3	Mo 202.031†	-414.6	-495.9	-4.3775 ug/L	-4.3775 ppb	08:48:03
3	Na 589.592 Radial†	1168111.1	1283653.3	504110 ug/L	504110 ppb	08:46:25
3	Ni 231.604†	246.2	192.5	6.0067 ug/L	6.0067 ppb	08:48:03
3	P 214.914†	482.8	392.7	66.538 ug/L	66.538 ppb	08:48:03
3	Pb 220.353†	-481.1	-500.2	-15.363 ug/L	-15.363 ppb	08:48:03
3	S 181.975 Axial†	59.8	45.2	-18.162 ug/L	-18.162 ppb	08:48:03
3	Sb 206.836†	57.2	39.9	-4.0511 ug/L	-4.0511 ppb	08:48:03
3	Se 196.026†	-1982.7	-2286.7	-345.21 ug/L	-345.21 ppb	08:48:03
3	Si 251.611†	-403.4	-994.2	-36.480 ug/L	-36.480 ppb	08:48:03
3	Sn 189.927†	-351.9	-411.9	-30.979 ug/L	-30.979 ppb	08:48:03
3	Sr 421.552†	1320.8	1380.9	8.1845 ug/L	8.1845 ppb	08:46:45
3	Ti 334.940†	-12323.6	-13235.3	-4.7145 ug/L	-4.7145 ppb	08:47:43
3	Tl 190.801†	-75.0	-62.1	-24.436 ug/L	-24.436 ppb	08:48:03
3	U 409.014†	433283.5	505463.2	14824 ug/L	14824 ppb	08:47:43
3	V 292.402†	812.1	2371.1	-7.3602 ug/L	-7.3602 ppb	08:48:03
3	Zn 213.857†	4774.0	4940.5	-5.9415 ug/L	-5.9415 ppb	08:48:03
3	SiO2†	-461.5	-1089.6	-85.867 ug/L	-85.867 ppb	08:48:19

Mean Data: LR1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	718605.5	85.563 %		0.7033			0.82%
Sc Radial	3672.0	91.0 %		0.23			0.26%
Y 371.029	599949.2	83.783 %		0.7318			0.87%
Y RADIAL	3988.0	88.27 %		0.134			0.15%
Ag 328.068†	-24325.6	-7.4024 ug/L		0.57646	-7.4024 ppb	0.57646	7.79%
Al 396.153Radial†	486962.6	518990 ug/L		1066.1	518990 ppb	1066.1	0.21%
QC value within limits for Al 396.153Radial Recovery = 103.80%							
As 188.979†	-155.6	17.820 ug/L		8.4574	17.820 ppb	8.4574	47.46%
B 249.677†	1278.0	-35.157 ug/L		1.5851	-35.157 ppb	1.5851	4.51%
Ba 233.527†	-1715.1	-2.8718 ug/L		0.16021	-2.8718 ppb	0.16021	5.58%
Be 313.107†	-7795.1	-3.2170 ug/L		0.00816	-3.2170 ppb	0.00816	0.25%
Ca 317.933Radial†	235774.6	479030 ug/L		1214.6	479030 ppb	1214.6	0.25%
QC value within limits for Ca 317.933Radial Recovery = 95.81%							
Cd 226.502†	3367.9	5.7053 ug/L		0.49116	5.7053 ppb	0.49116	8.61%
Co 228.616†	261.1	0.4943 ug/L		0.27454	0.4943 ppb	0.27454	55.54%
Cr 267.716†	-1438.1	21.251 ug/L		0.2161	21.251 ppb	0.2161	1.02%

Cu 324.752†	-5272.2	-2.4241 ug/L	0.30018	-2.4241 ppb	0.30018	12.38%
Fe 238.204 Radial†	34602.8	432700 ug/L	1061.5	432700 ppb	1061.5	0.25%
QC value less than the lower limit for Fe 238.204 Radial Recovery = 86.54%						
K 766.490 Radial†	-95.0	-376.78 ug/L	28.109	-376.78 ppb	28.109	7.46%
Mg 279.077 IEC†	11115.0	485090 ug/L	1635.1	485090 ppb	1635.1	0.34%
QC value within limits for Mg 279.077 IEC Recovery = 97.02%						
Mn 257.610†	-26432.3	-11.797 ug/L	0.1140	-11.797 ppb	0.1140	0.97%
Mo 202.031†	-495.5	-4.2752 ug/L	1.34557	-4.2752 ppb	1.34557	31.47%
Na 589.592 Radial†	1290147.3	506660 ug/L	2641.1	506660 ppb	2641.1	0.52%
QC value within limits for Na 589.592 Radial Recovery = 101.33%						
Ni 231.604†	190.9	5.9556 ug/L	0.23676	5.9556 ppb	0.23676	3.98%
P 214.914†	407.6	76.408 ug/L	8.5794	76.408 ppb	8.5794	11.23%
Pb 220.353†	-526.1	-19.456 ug/L	3.6968	-19.456 ppb	3.6968	19.00%
S 181.975 Axial†	40.4	-26.514 ug/L	11.8808	-26.514 ppb	11.8808	44.81%
Sb 206.836†	35.0	-6.0976 ug/L	1.77238	-6.0976 ppb	1.77238	29.07%
Se 196.026†	-2280.9	-337.99 ug/L	6.661	-337.99 ppb	6.661	1.97%
Si 251.611†	-1018.2	-37.375 ug/L	0.8554	-37.375 ppb	0.8554	2.29%
Sn 189.927†	-410.6	-30.679 ug/L	1.7993	-30.679 ppb	1.7993	5.86%
Sr 421.552†	1383.8	8.2068 ug/L	0.02664	8.2068 ppb	0.02664	0.32%
Ti 334.940†	-13351.6	-4.9019 ug/L	0.60061	-4.9019 ppb	0.60061	12.25%
Tl 190.801†	-69.9	-27.453 ug/L	2.8354	-27.453 ppb	2.8354	10.33%
U 409.014†	505324.4	14820 ug/L	9.8	14820 ppb	9.8	0.07%
QC value within limits for U 409.014 Recovery = 98.80%						
V 292.402†	2426.5	-7.0638 ug/L	0.25897	-7.0638 ppb	0.25897	3.67%
Zn 213.857†	4950.2	-5.9600 ug/L	0.13581	-5.9600 ppb	0.13581	2.28%
SiO2†	-1125.4	-88.723 ug/L	3.7479	-88.723 ppb	3.7479	4.22%

QC Failed. Continue with analysis.

Sequence No.: 12

Sample ID: LR2

Analyst:

Logged In Analyst (Original) : Optima3

Initial Sample Wt:

Dilution:

Autosampler Location: 16

Date Collected: 3/25/2010 08:50:29

Data Type: Reprocessed on 3/25/2010 09:41:51

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc 361.383	812279.4	812279.4	96.717 %		08:54:04
1	Sc Radial	3955.8	3955.8	98.1 %		08:52:46
1	Y 371.029	676098.6	676098.6	94.417 %		08:54:04
1	Y RADIAL	4424.0	4424.0	97.92 %		08:52:26
1	Ag 328.068†	-6263.1	-6729.2	7.3024 ug/L	7.3024 ppb	08:54:09
1	Al 396.153Radial†	367.2	454.1	7.4579 ug/L	7.4579 ppb	08:52:26
1	As 188.979†	18091.6	18726.6	10102 ug/L	10102 ppb	08:54:09
1	B 249.677†	180345.8	186718.6	5104.0 ug/L	5104.0 ppb	08:54:04
1	Ba 233.527†	1403478.1	1451106.2	13626 ug/L	13626 ppb	08:54:04
1	Be 313.107†	6974964.5	7216019.8	2952.4 ug/L	2952.4 ppb	08:53:57
1	Ca 317.933Radial†	26.3	9.6	19.505 ug/L	19.505 ppb	08:52:46
1	Cd 226.502†	684169.4	707562.6	9985.8 ug/L	9985.8 ppb	08:54:04
1	Co 228.616†	370123.3	382727.5	9958.8 ug/L	9958.8 ppb	08:54:04
1	Cr 267.716†	1830402.4	1892447.7	24653 ug/L	24653 ppb	08:54:04
1	Cu 324.752†	6126605.9	6328244.9	20520 ug/L	20520 ppb	08:53:57
1	Fe 238.204 Radial†	-14.3	-23.6	2.8032 ug/L	2.8032 ppb	08:52:46
1	K 766.490 Radial†	1440001.9	1465592.8	292560 ug/L	292560 ppb	08:52:21
1	Mg 279.077 IEC†	-2.8	-3.6	-54.541 ug/L	-54.541 ppb	08:52:46
1	Mn 257.610†	7138329.9	7380216.2	9683.2 ug/L	9683.2 ppb	08:53:57
1	Mo 202.031†	108110.2	111766.3	9826.1 ug/L	9826.1 ppb	08:54:09
1	Na 589.592 Radial†	-250.3	205.7	80.765 ug/L	80.765 ppb	08:52:26
1	Ni 231.604†	315536.1	326154.6	10178 ug/L	10178 ppb	08:54:04
1	P 214.914†	24218.5	24872.5	13899 ug/L	13899 ppb	08:54:09
1	Pb 220.353†	159235.5	164700.2	24843 ug/L	24843 ppb	08:54:04
1	S 181.975 Axial†	29031.7	29992.9	52572 ug/L	52572 ppb	08:54:09
1	Sb 206.836†	24646.6	25456.7	11182 ug/L	11182 ppb	08:54:09
1	Se 196.026†	12628.1	13073.8	10448 ug/L	10448 ppb	08:54:09
1	Si 251.611†	1260845.0	1303123.9	48398 ug/L	48398 ppb	08:54:04
1	Sn 189.927†	45186.1	46717.1	10347 ug/L	10347 ppb	08:54:09
1	Sr 421.552†	1105470.7	1127198.5	9598.7 ug/L	9598.7 ppb	08:52:21
1	Ti 334.940†	5624582.6	5816614.5	9998.6 ug/L	9998.6 ppb	08:53:57
1	Tl 190.801†	24638.2	25499.7	9925.7 ug/L	9925.7 ppb	08:54:09
1	U 409.014†	-1132.4	864.4	-29.670 ug/L	-29.670 ppb	08:54:04
1	V 292.402†	1281143.8	1326064.8	10342 ug/L	10342 ppb	08:54:04
1	Zn 213.857†	1174558.1	1213826.7	14327 ug/L	14327 ppb	08:54:04
1	SiO2†	1262426.2	1304730.9	103970 ug/L	103970 ppb	08:54:55
2	Sc 361.383	814009.4	814009.4	96.923 %		08:54:24
2	Sc Radial	3913.2	3913.2	97.0 %		08:53:17
2	Y 371.029	678170.9	678170.9	94.707 %		08:54:24
2	Y RADIAL	4253.2	4253.2	94.14 %		08:52:57
2	Ag 328.068†	-6157.9	-6606.8	7.8844 ug/L	7.8844 ppb	08:54:29
2	Al 396.153Radial†	372.2	463.4	20.453 ug/L	20.453 ppb	08:52:57
2	As 188.979†	18020.8	18613.8	10041 ug/L	10041 ppb	08:54:29
2	B 249.677†	180762.6	186752.2	5105.0 ug/L	5105.0 ppb	08:54:24
2	Ba 233.527†	1401802.7	1446293.5	13581 ug/L	13581 ppb	08:54:24
2	Be 313.107†	6895609.3	7118818.2	2912.6 ug/L	2912.6 ppb	08:54:17
2	Ca 317.933Radial†	33.3	17.1	34.749 ug/L	34.749 ppb	08:53:17
2	Cd 226.502†	683767.0	705644.1	9958.7 ug/L	9958.7 ppb	08:54:24
2	Co 228.616†	369980.6	381767.0	9934.0 ug/L	9934.0 ppb	08:54:24
2	Cr 267.716†	1830442.2	1888466.5	24601 ug/L	24601 ppb	08:54:24
2	Cu 324.752†	6043359.2	6228892.4	20197 ug/L	20197 ppb	08:54:17
2	Fe 238.204 Radial†	-13.5	-22.9	11.052 ug/L	11.052 ppb	08:53:17
2	K 766.490 Radial†	1472184.0	1514764.8	302380 ug/L	302380 ppb	08:52:52
2	Mg 279.077 IEC†	-3.6	-4.5	-92.002 ug/L	-92.002 ppb	08:53:17
2	Mn 257.610†	7053872.4	7277391.2	9548.3 ug/L	9548.3 ppb	08:54:17
2	Mo 202.031†	107630.0	111033.3	9761.6 ug/L	9761.6 ppb	08:54:29
2	Na 589.592 Radial†	-249.3	203.9	80.091 ug/L	80.091 ppb	08:52:57
2	Ni 231.604†	315372.4	325292.4	10151 ug/L	10151 ppb	08:54:24

2	P 214.914†	23937.2	24529.0	13716 ug/L	13716 ppb	08:54:29
2	Pb 220.353†	159055.2	164164.2	24763 ug/L	24763 ppb	08:54:24
2	S 181.975 Axial†	28822.7	29713.5	52082 ug/L	52082 ppb	08:54:29
2	Sb 206.836†	24558.9	25312.0	11119 ug/L	11119 ppb	08:54:29
2	Se 196.026†	12577.3	12993.6	10384 ug/L	10384 ppb	08:54:29
2	Si 251.611†	1261622.6	1301155.6	48326 ug/L	48326 ppb	08:54:24
2	Sn 189.927†	44942.3	46366.2	10269 ug/L	10269 ppb	08:54:29
2	Sr 421.552†	1131511.6	1166323.5	9931.9 ug/L	9931.9 ppb	08:52:52
2	Ti 334.940†	5554927.7	5732388.4	9853.7 ug/L	9853.7 ppb	08:54:17
2	Tl 190.801†	24530.7	25334.7	9860.1 ug/L	9860.1 ppb	08:54:29
2	U 409.014†	-1171.5	826.5	-30.670 ug/L	-30.670 ppb	08:54:24
2	V 292.402†	1282675.7	1324830.1	10331 ug/L	10331 ppb	08:54:24
2	Zn 213.857†	1173982.9	1210652.2	14290 ug/L	14290 ppb	08:54:24
2	SiO2†	1266015.6	1305660.1	104050 ug/L	104050 ppb	08:55:01
3	Sc 361.383	821266.5	821266.5	97.787 %		08:54:44
3	Sc Radial	3880.0	3880.0	96.2 %		08:53:47
3	Y 371.029	684193.0	684193.0	95.548 %		08:54:44
3	Y RADIAL	4285.6	4285.6	94.85 %		08:53:27
3	Ag 328.068†	-6093.6	-6484.9	8.3627 ug/L	8.3627 ppb	08:54:49
3	Al 396.153Radial†	392.8	488.1	49.154 ug/L	49.154 ppb	08:53:27
3	As 188.979†	18125.4	18556.5	10009 ug/L	10009 ppb	08:54:49
3	B 249.677†	182320.5	186697.4	5103.7 ug/L	5103.7 ppb	08:54:44
3	Ba 233.527†	1408455.1	1440316.1	13525 ug/L	13525 ppb	08:54:44
3	Be 313.107†	6894710.6	7055030.9	2886.5 ug/L	2886.5 ppb	08:54:37
3	Ca 317.933Radial†	30.7	14.8	30.016 ug/L	30.016 ppb	08:53:47
3	Cd 226.502†	685592.0	701276.4	9897.1 ug/L	9897.1 ppb	08:54:44
3	Co 228.616†	371200.3	379641.1	9878.8 ug/L	9878.8 ppb	08:54:44
3	Cr 267.716†	1838924.4	1880452.4	24496 ug/L	24496 ppb	08:54:44
3	Cu 324.752†	6052121.7	6182755.1	20048 ug/L	20048 ppb	08:54:37
3	Fe 238.204 Radial†	-13.5	-23.1	7.3386 ug/L	7.3386 ppb	08:53:47
3	K 766.490 Radial†	1438587.6	1492816.4	298000 ug/L	298000 ppb	08:53:22
3	Mg 279.077 IEC†	-4.5	-5.4	-132.03 ug/L	-132.03 ppb	08:53:47
3	Mn 257.610†	7043105.3	7202069.3	9449.5 ug/L	9449.5 ppb	08:54:37
3	Mo 202.031†	108041.4	110472.6	9712.4 ug/L	9712.4 ppb	08:54:49
3	Na 589.592 Radial†	-280.4	169.3	66.495 ug/L	66.495 ppb	08:53:27
3	Ni 231.604†	316613.4	323686.2	10101 ug/L	10101 ppb	08:54:44
3	P 214.914†	23953.5	24327.5	13600 ug/L	13600 ppb	08:54:49
3	Pb 220.353†	159583.1	163253.9	24625 ug/L	24625 ppb	08:54:44
3	S 181.975 Axial†	28828.9	29457.0	51632 ug/L	51632 ppb	08:54:49
3	Sb 206.836†	24681.7	25213.7	11075 ug/L	11075 ppb	08:54:49
3	Se 196.026†	12609.6	12912.0	10319 ug/L	10319 ppb	08:54:49
3	Si 251.611†	1271592.0	1299848.3	48278 ug/L	48278 ppb	08:54:44
3	Sn 189.927†	45045.3	46061.8	10202 ug/L	10202 ppb	08:54:49
3	Sr 421.552†	1101788.6	1145398.4	9753.7 ug/L	9753.7 ppb	08:53:22
3	Ti 334.940†	5553643.8	5680430.5	9764.4 ug/L	9764.4 ppb	08:54:37
3	Tl 190.801†	24547.3	25127.9	9779.3 ug/L	9779.3 ppb	08:54:49
3	U 409.014†	-917.8	1096.6	-22.488 ug/L	-22.488 ppb	08:54:44
3	V 292.402†	1290058.0	1320685.2	10299 ug/L	10299 ppb	08:54:44
3	Zn 213.857†	1178398.8	1204464.7	14217 ug/L	14217 ppb	08:54:44
3	SiO2†	1258708.4	1286645.1	102530 ug/L	102530 ppb	08:55:07

Mean Data: LR2

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	815851.7	97.142 %		0.5678			0.58%
Sc Radial	3916.3	97.1 %		0.94			0.97%
Y 371.029	679487.5	94.891 %		0.5872			0.62%
Y RADIAL	4320.9	95.64 %		2.008			2.10%
Ag 328.068†	-6606.9	7.8499 ug/L		0.53098	7.8499 ppb	0.53098	6.76%
Al 396.153Radial†	468.5	25.688 ug/L		21.3352	25.688 ppb	21.3352	83.05%
As 188.979†	18632.3	10051 ug/L		47.3	10051 ppb	47.3	0.47%
QC value within limits for As 188.979 Recovery = 100.51%							
B 249.677†	186722.7	5104.2 ug/L		0.70	5104.2 ppb	0.70	0.01%
QC value within limits for B 249.677 Recovery = 102.08%							
Ba 233.527†	1445905.3	13577 ug/L		50.7	13577 ppb	50.7	0.37%
QC value within limits for Ba 233.527 Recovery = 90.51%							
Be 313.107†	7129956.3	2917.2 ug/L		33.18	2917.2 ppb	33.18	1.14%
QC value within limits for Be 313.107 Recovery = 97.24%							
Ca 317.933Radial†	13.8	28.090 ug/L		7.8020	28.090 ppb	7.8020	27.77%
Cd 226.502†	704827.7	9947.2 ug/L		45.46	9947.2 ppb	45.46	0.46%

QC value within limits for Cd 226.502 Recovery = 99.47%							
Co	228.616†	381378.6	9923.9 ug/L	40.99	9923.9 ppb	40.99	0.41%
QC value within limits for Co 228.616 Recovery = 99.24%							
Cr	267.716†	1887122.2	24583 ug/L	79.6	24583 ppb	79.6	0.32%
QC value within limits for Cr 267.716 Recovery = 98.33%							
Cu	324.752†	6246630.8	20255 ug/L	241.1	20255 ppb	241.1	1.19%
QC value within limits for Cu 324.752 Recovery = 101.27%							
Fe	238.204 Radial†	-23.2	7.0647 ug/L	4.13135	7.0647 ppb	4.13135	58.48%
K	766.490 Radial†	1491058.0	297650 ug/L	4917.6	297650 ppb	4917.6	1.65%
QC value within limits for K 766.490 Radial Recovery = 99.22%							
Mg	279.077 IEC†	-4.5	-92.859 ug/L	38.7538	-92.859 ppb	38.7538	41.73%
Mn	257.610†	7286558.9	9560.3 ug/L	117.33	9560.3 ppb	117.33	1.23%
QC value within limits for Mn 257.610 Recovery = 95.60%							
Mo	202.031†	111090.7	9766.7 ug/L	57.03	9766.7 ppb	57.03	0.58%
QC value within limits for Mo 202.031 Recovery = 97.67%							
Na	589.592 Radial†	193.0	75.783 ug/L	8.0510	75.783 ppb	8.0510	10.62%
Ni	231.604†	325044.4	10144 ug/L	39.1	10144 ppb	39.1	0.39%
QC value within limits for Ni 231.604 Recovery = 101.44%							
P	214.914†	24576.3	13738 ug/L	151.0	13738 ppb	151.0	1.10%
QC value within limits for P 214.914 Recovery = 91.59%							
Pb	220.353†	164039.5	24744 ug/L	110.2	24744 ppb	110.2	0.45%
QC value within limits for Pb 220.353 Recovery = 98.98%							
S	181.975 Axial†	29721.1	52095 ug/L	469.8	52095 ppb	469.8	0.90%
QC value within limits for S 181.975 Axial Recovery = 104.19%							
Sb	206.836†	25327.5	11125 ug/L	53.9	11125 ppb	53.9	0.48%
QC value greater than the upper limit for Sb 206.836 Recovery = 111.25%							
Se	196.026†	12993.1	10384 ug/L	64.6	10384 ppb	64.6	0.62%
QC value within limits for Se 196.026 Recovery = 103.84%							
Si	251.611†	1301376.0	48334 ug/L	60.7	48334 ppb	60.7	0.13%
QC value within limits for Si 251.611 Recovery = 96.67%							
Sn	189.927†	46381.7	10273 ug/L	72.6	10273 ppb	72.6	0.71%
QC value within limits for Sn 189.927 Recovery = 102.73%							
Sr	421.552†	1146306.8	9761.4 ug/L	166.72	9761.4 ppb	166.72	1.71%
QC value within limits for Sr 421.552 Recovery = 97.61%							
Ti	334.940†	5743144.5	9872.2 ug/L	118.21	9872.2 ppb	118.21	1.20%
QC value within limits for Ti 334.940 Recovery = 98.72%							
Tl	190.801†	25320.8	9855.0 ug/L	73.32	9855.0 ppb	73.32	0.74%
QC value within limits for Tl 190.801 Recovery = 98.55%							
U	409.014†	929.1	-27.609 ug/L	4.4632	-27.609 ppb	4.4632	16.17%
V	292.402†	1323860.1	10324 ug/L	22.3	10324 ppb	22.3	0.22%
QC value within limits for V 292.402 Recovery = 103.24%							
Zn	213.857†	1209647.8	14278 ug/L	56.0	14278 ppb	56.0	0.39%
QC value within limits for Zn 213.857 Recovery = 95.19%							
SiO2†		1299012.0	103520 ug/L	855.2	103520 ppb	855.2	0.83%
QC value within limits for SiO2 Recovery = 96.75%							
QC Failed. Continue with analysis.							

Sequence No.: 13

Sample ID: CCV

Analyst:

Logged In Analyst (Original) : Optima3

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/25/2010 08:57:17

Data Type: Reprocessed on 3/25/2010 09:41:52

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc 361.383	836331.0	836331.0	99.580 %		09:00:27
1	Sc Radial	4071.9	4071.9	101 %		08:59:10
1	Y 371.029	703534.7	703534.7	98.249 %		09:00:27
1	Y RADIAL	4405.5	4405.5	97.51 %		08:59:10
1	Ag 328.068†	99414.4	99580.0	505.08 ug/L	505.08 ppb	09:00:32
1	Al 396.153Radial†	4621.1	4657.5	4939.4 ug/L	4939.4 ppb	08:59:10
1	As 188.979†	920.5	945.2	510.95 ug/L	510.95 ppb	09:00:52
1	B 249.677†	18573.3	18901.8	517.31 ug/L	517.31 ppb	09:00:32
1	Ba 233.527†	52725.7	52929.4	497.43 ug/L	497.43 ppb	09:00:32
1	Be 313.107†	1217293.2	1226685.7	499.16 ug/L	499.16 ppb	09:00:27
1	Ca 317.933Radial†	2486.5	2446.1	4969.9 ug/L	4969.9 ppb	08:59:30
1	Cd 226.502†	35189.7	35504.4	500.66 ug/L	500.66 ppb	09:00:32
1	Co 228.616†	19391.9	19512.5	507.94 ug/L	507.94 ppb	09:00:32
1	Cr 267.716†	38169.5	38235.4	498.82 ug/L	498.82 ppb	09:00:32
1	Cu 324.752†	157569.5	151880.7	492.46 ug/L	492.46 ppb	09:00:32
1	Fe 238.204 Radial†	407.6	394.8	4951.7 ug/L	4951.7 ppb	08:59:30
1	K 766.490 Radial†	27689.4	24627.3	4910.2 ug/L	4910.2 ppb	08:59:10
1	Mg 279.077 IEC†	119.6	117.8	5145.2 ug/L	5145.2 ppb	08:59:30
1	Mn 257.610†	372082.1	373197.6	489.93 ug/L	489.93 ppb	09:00:32
1	Mo 202.031†	5695.2	5705.0	502.00 ug/L	502.00 ppb	09:00:52
1	Na 589.592 Radial†	24391.1	24623.9	9670.2 ug/L	9670.2 ppb	08:59:10
1	Ni 231.604†	16261.8	16236.7	506.68 ug/L	506.68 ppb	09:00:32
1	P 214.914†	3605.4	3452.4	2385.7 ug/L	2385.7 ppb	09:00:52
1	Pb 220.353†	3222.0	3294.4	498.11 ug/L	498.11 ppb	09:00:52
1	S 181.975 Axial†	602.2	580.3	1016.3 ug/L	1016.3 ppb	09:00:52
1	Sb 206.836†	1222.6	1201.1	528.49 ug/L	528.49 ppb	09:00:52
1	Se 196.026†	601.8	621.3	513.15 ug/L	513.15 ppb	09:00:52
1	Si 251.611†	67255.1	67013.0	2488.9 ug/L	2488.9 ppb	09:00:32
1	Sn 189.927†	2283.0	2289.5	507.69 ug/L	507.69 ppb	09:00:52
1	Sr 421.552†	56836.9	56235.5	478.84 ug/L	478.84 ppb	08:59:10
1	Ti 334.940†	283842.6	286122.1	492.12 ug/L	492.12 ppb	09:00:32
1	Tl 190.801†	1260.1	1290.5	502.22 ug/L	502.22 ppb	09:00:52
1	U 409.014†	14989.6	17088.0	501.13 ug/L	501.13 ppb	09:00:32
1	V 292.402†	62583.2	64274.5	502.21 ug/L	502.21 ppb	09:00:32
1	Zn 213.857†	42536.9	42109.7	495.62 ug/L	495.62 ppb	09:00:32
1	SiO2†	67074.5	66803.8	5323.6 ug/L	5323.6 ppb	09:01:59
2	Sc 361.383	839277.7	839277.7	99.931 %		09:00:58
2	Sc Radial	4031.5	4031.5	99.9 %		08:59:35
2	Y 371.029	706790.4	706790.4	98.703 %		09:00:58
2	Y RADIAL	4384.6	4384.6	97.05 %		08:59:35
2	Ag 328.068†	99540.7	99355.8	503.96 ug/L	503.96 ppb	09:01:03
2	Al 396.153Radial†	4593.8	4676.1	4959.2 ug/L	4959.2 ppb	08:59:35
2	As 188.979†	921.7	943.2	509.84 ug/L	509.84 ppb	09:01:23
2	B 249.677†	18546.9	18809.8	514.78 ug/L	514.78 ppb	09:01:03
2	Ba 233.527†	52937.6	52955.5	497.67 ug/L	497.67 ppb	09:01:03
2	Be 313.107†	1217217.1	1222317.7	497.38 ug/L	497.38 ppb	09:00:58
2	Ca 317.933Radial†	2498.7	2482.9	5044.6 ug/L	5044.6 ppb	08:59:55
2	Cd 226.502†	35272.6	35463.3	500.07 ug/L	500.07 ppb	09:01:03
2	Co 228.616†	19428.8	19481.1	507.12 ug/L	507.12 ppb	09:01:03
2	Cr 267.716†	38329.1	38260.5	499.15 ug/L	499.15 ppb	09:01:03
2	Cu 324.752†	157723.5	151479.3	491.16 ug/L	491.16 ppb	09:01:03
2	Fe 238.204 Radial†	407.6	398.8	5002.1 ug/L	5002.1 ppb	08:59:55
2	K 766.490 Radial†	27525.6	24738.1	4932.3 ug/L	4932.3 ppb	08:59:35
2	Mg 279.077 IEC†	119.7	119.0	5199.2 ug/L	5199.2 ppb	08:59:55
2	Mn 257.610†	373227.8	373032.3	489.72 ug/L	489.72 ppb	09:01:03
2	Mo 202.031†	5718.0	5707.7	502.25 ug/L	502.25 ppb	09:01:23
2	Na 589.592 Radial†	24074.7	24549.3	9640.9 ug/L	9640.9 ppb	08:59:35
2	Ni 231.604†	16240.3	16157.8	504.22 ug/L	504.22 ppb	09:01:03

2	P 214.914†	3604.4	3438.7	2376.0 ug/L	2376.0 ppb	09:01:23
2	Pb 220.353†	3214.0	3275.0	495.18 ug/L	495.18 ppb	09:01:23
2	S 181.975 Axial†	610.1	586.1	1026.4 ug/L	1026.4 ppb	09:01:23
2	Sb 206.836†	1221.3	1195.5	526.09 ug/L	526.09 ppb	09:01:23
2	Se 196.026†	614.1	631.5	521.48 ug/L	521.48 ppb	09:01:23
2	Si 251.611†	67431.9	66952.8	2486.7 ug/L	2486.7 ppb	09:01:03
2	Sn 189.927†	2285.9	2284.4	506.55 ug/L	506.55 ppb	09:01:23
2	Sr 421.552†	56365.4	56327.5	479.62 ug/L	479.62 ppb	08:59:35
2	Ti 334.940†	284759.4	286038.7	491.98 ug/L	491.98 ppb	09:01:03
2	Tl 190.801†	1265.9	1291.9	502.76 ug/L	502.76 ppb	09:01:23
2	U 409.014†	15114.9	17160.4	503.25 ug/L	503.25 ppb	09:01:03
2	V 292.402†	62728.6	64199.3	501.63 ug/L	501.63 ppb	09:01:03
2	Zn 213.857†	42594.5	42017.4	494.53 ug/L	494.53 ppb	09:01:03
2	SiO2†	67156.0	66648.9	5311.2 ug/L	5311.2 ppb	09:02:04
3	Sc 361.383	832252.8	832252.8	99.095 %		09:01:29
3	Sc Radial	4065.9	4065.9	101 %		09:00:00
3	Y 371.029	702327.0	702327.0	98.080 %		09:01:29
3	Y RADIAL	4429.2	4429.2	98.03 %		09:00:00
3	Ag 328.068†	98485.3	99131.6	502.80 ug/L	502.80 ppb	09:01:34
3	Al 396.153Radial†	4606.7	4650.0	4931.3 ug/L	4931.3 ppb	09:00:00
3	As 188.979†	906.8	935.9	505.93 ug/L	505.93 ppb	09:01:54
3	B 249.677†	18277.3	18694.4	511.63 ug/L	511.63 ppb	09:01:34
3	Ba 233.527†	52088.7	52546.1	493.83 ug/L	493.83 ppb	09:01:34
3	Be 313.107†	1209095.1	1224402.8	498.22 ug/L	498.22 ppb	09:01:29
3	Ca 317.933Radial†	2491.8	2455.0	4987.9 ug/L	4987.9 ppb	09:00:20
3	Cd 226.502†	34681.5	35164.7	495.87 ug/L	495.87 ppb	09:01:34
3	Co 228.616†	19152.6	19366.5	504.15 ug/L	504.15 ppb	09:01:34
3	Cr 267.716†	37860.8	38111.7	497.20 ug/L	497.20 ppb	09:01:34
3	Cu 324.752†	155749.7	150819.7	489.02 ug/L	489.02 ppb	09:01:34
3	Fe 238.204 Radial†	404.4	392.2	4919.8 ug/L	4919.8 ppb	09:00:20
3	K 766.490 Radial†	27518.2	24498.0	4884.4 ug/L	4884.4 ppb	09:00:00
3	Mg 279.077 IEC†	120.5	118.8	5191.1 ug/L	5191.1 ppb	09:00:20
3	Mn 257.610†	367873.2	370781.3	486.76 ug/L	486.76 ppb	09:01:34
3	Mo 202.031†	5710.5	5748.5	505.83 ug/L	505.83 ppb	09:01:54
3	Na 589.592 Radial†	23956.7	24228.8	9515.0 ug/L	9515.0 ppb	09:00:00
3	Ni 231.604†	16036.2	16089.1	502.08 ug/L	502.08 ppb	09:01:34
3	P 214.914†	3564.1	3428.5	2369.2 ug/L	2369.2 ppb	09:01:54
3	Pb 220.353†	3221.2	3309.4	500.38 ug/L	500.38 ppb	09:01:54
3	S 181.975 Axial†	595.6	576.6	1009.8 ug/L	1009.8 ppb	09:01:54
3	Sb 206.836†	1209.7	1194.1	525.59 ug/L	525.59 ppb	09:01:54
3	Se 196.026†	608.9	631.4	521.19 ug/L	521.19 ppb	09:01:54
3	Si 251.611†	66356.3	66437.0	2467.4 ug/L	2467.4 ppb	09:01:34
3	Sn 189.927†	2270.2	2287.9	507.32 ug/L	507.32 ppb	09:01:54
3	Sr 421.552†	56465.8	55950.6	476.41 ug/L	476.41 ppb	09:00:00
3	Ti 334.940†	280862.1	284511.1	489.35 ug/L	489.35 ppb	09:01:34
3	Tl 190.801†	1254.5	1291.1	502.42 ug/L	502.42 ppb	09:01:54
3	U 409.014†	14961.8	17133.6	502.48 ug/L	502.48 ppb	09:01:34
3	V 292.402†	62013.6	64007.6	500.22 ug/L	500.22 ppb	09:01:34
3	Zn 213.857†	42074.0	41851.9	492.60 ug/L	492.60 ppb	09:01:34
3	SiO2†	66952.8	67011.0	5340.1 ug/L	5340.1 ppb	09:02:09

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	835953.9	99.535 %	0.4200			0.42%
Sc Radial	4056.4	101 %	0.5			0.54%
Y 371.029	704217.4	98.344 %	0.3224			0.33%
Y RADIAL	4406.4	97.53 %	0.494			0.51%
Ag 328.068†	99355.8	503.95 ug/L	1.140	503.95 ppb	1.140	0.23%
QC value within limits for Ag 328.068 Recovery = 100.79%						
Al 396.153Radial†	4661.2	4943.3 ug/L	14.38	4943.3 ppb	14.38	0.29%
QC value within limits for Al 396.153Radial Recovery = 98.87%						
As 188.979†	941.4	508.91 ug/L	2.639	508.91 ppb	2.639	0.52%
QC value within limits for As 188.979 Recovery = 101.78%						
B 249.677†	18802.0	514.57 ug/L	2.847	514.57 ppb	2.847	0.55%
QC value within limits for B 249.677 Recovery = 102.91%						
Ba 233.527†	52810.3	496.31 ug/L	2.152	496.31 ppb	2.152	0.43%
QC value within limits for Ba 233.527 Recovery = 99.26%						
Be 313.107†	1224468.7	498.25 ug/L	0.887	498.25 ppb	0.887	0.18%
QC value within limits for Be 313.107 Recovery = 99.65%						

Ca 317.933Radial†	2461.3	5000.8 ug/L	39.02	5000.8 ppb	39.02	0.78%
QC value within limits for Ca 317.933Radial Recovery = 100.02%						
Cd 226.502†	35377.5	498.86 ug/L	2.613	498.86 ppb	2.613	0.52%
QC value within limits for Cd 226.502 Recovery = 99.77%						
Co 228.616†	19453.4	506.41 ug/L	1.993	506.41 ppb	1.993	0.39%
QC value within limits for Co 228.616 Recovery = 101.28%						
Cr 267.716†	38202.5	498.39 ug/L	1.043	498.39 ppb	1.043	0.21%
QC value within limits for Cr 267.716 Recovery = 99.68%						
Cu 324.752†	151393.2	490.88 ug/L	1.739	490.88 ppb	1.739	0.35%
QC value within limits for Cu 324.752 Recovery = 98.18%						
Fe 238.204 Radial†	395.3	4957.9 ug/L	41.53	4957.9 ppb	41.53	0.84%
QC value within limits for Fe 238.204 Radial Recovery = 99.16%						
K 766.490 Radial†	24621.1	4909.0 ug/L	23.95	4909.0 ppb	23.95	0.49%
QC value within limits for K 766.490 Radial Recovery = 98.18%						
Mg 279.077 IEC†	118.5	5178.5 ug/L	29.10	5178.5 ppb	29.10	0.56%
QC value within limits for Mg 279.077 IEC Recovery = 103.57%						
Mn 257.610†	372337.1	488.80 ug/L	1.775	488.80 ppb	1.775	0.36%
QC value within limits for Mn 257.610 Recovery = 97.76%						
Mo 202.031†	5720.4	503.36 ug/L	2.142	503.36 ppb	2.142	0.43%
QC value within limits for Mo 202.031 Recovery = 100.67%						
Na 589.592 Radial†	24467.3	9608.7 ug/L	82.45	9608.7 ppb	82.45	0.86%
QC value within limits for Na 589.592 Radial Recovery = 96.09%						
Ni 231.604†	16161.2	504.33 ug/L	2.305	504.33 ppb	2.305	0.46%
QC value within limits for Ni 231.604 Recovery = 100.87%						
P 214.914†	3439.8	2377.0 ug/L	8.28	2377.0 ppb	8.28	0.35%
QC value within limits for P 214.914 Recovery = 95.08%						
Pb 220.353†	3293.0	497.89 ug/L	2.604	497.89 ppb	2.604	0.52%
QC value within limits for Pb 220.353 Recovery = 99.58%						
S 181.975 Axial†	581.0	1017.5 ug/L	8.38	1017.5 ppb	8.38	0.82%
QC value within limits for S 181.975 Axial Recovery = 101.75%						
Sb 206.836†	1196.9	526.72 ug/L	1.550	526.72 ppb	1.550	0.29%
QC value within limits for Sb 206.836 Recovery = 105.34%						
Se 196.026†	628.1	518.61 ug/L	4.727	518.61 ppb	4.727	0.91%
QC value within limits for Se 196.026 Recovery = 103.72%						
Si 251.611†	66801.0	2481.0 ug/L	11.82	2481.0 ppb	11.82	0.48%
QC value within limits for Si 251.611 Recovery = 99.24%						
Sn 189.927†	2287.3	507.19 ug/L	0.580	507.19 ppb	0.580	0.11%
QC value within limits for Sn 189.927 Recovery = 101.44%						
Sr 421.552†	56171.2	478.29 ug/L	1.673	478.29 ppb	1.673	0.35%
QC value within limits for Sr 421.552 Recovery = 95.66%						
Ti 334.940†	285557.3	491.15 ug/L	1.563	491.15 ppb	1.563	0.32%
QC value within limits for Ti 334.940 Recovery = 98.23%						
Tl 190.801†	1291.1	502.47 ug/L	0.273	502.47 ppb	0.273	0.05%
QC value within limits for Tl 190.801 Recovery = 100.49%						
U 409.014†	17127.4	502.29 ug/L	1.076	502.29 ppb	1.076	0.21%
QC value within limits for U 409.014 Recovery = 100.46%						
V 292.402†	64160.5	501.35 ug/L	1.025	501.35 ppb	1.025	0.20%
QC value within limits for V 292.402 Recovery = 100.27%						
Zn 213.857†	41993.0	494.25 ug/L	1.532	494.25 ppb	1.532	0.31%
QC value within limits for Zn 213.857 Recovery = 98.85%						
SiO2†	66821.2	5325.0 ug/L	14.46	5325.0 ppb	14.46	0.27%
QC value within limits for SiO2 Recovery = 99.58%						
All analyte(s) passed QC.						

Sequence No.: 14

Sample ID: CCB

Analyst:

Logged In Analyst (Original) : Optima3

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/25/2010 09:04:20

Data Type: Reprocessed on 3/25/2010 09:41:53

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc 361.383	842439.2	842439.2	100.31 %		09:07:29
1	Sc Radial	4139.7	4139.7	103 %		09:06:12
1	Y 371.029	717387.2	717387.2	100.18 %		09:07:29
1	Y RADIAL	4507.2	4507.2	99.76 %		09:06:12
1	Ag 328.068†	265.3	11.1	0.0489 ug/L	0.0489 ppb	09:07:34
1	Al 396.153Radial†	-71.3	10.2	10.789 ug/L	10.789 ppb	09:06:32
1	As 188.979†	-9.1	11.7	6.2734 ug/L	6.2734 ppb	09:07:54
1	B 249.677†	393.9	642.8	17.675 ug/L	17.675 ppb	09:07:54
1	Ba 233.527†	16.1	-2.5	-0.0241 ug/L	-0.0241 ppb	09:07:54
1	Be 313.107†	-4212.9	62.8	0.0256 ug/L	0.0256 ppb	09:07:34
1	Ca 317.933Radial†	20.8	3.1	6.3583 ug/L	6.3583 ppb	09:06:32
1	Cd 226.502†	-149.0	17.9	0.2544 ug/L	0.2544 ppb	09:07:54
1	Co 228.616†	-42.6	-3.5	-0.0896 ug/L	-0.0896 ppb	09:07:54
1	Cr 267.716†	134.2	38.8	0.5032 ug/L	0.5032 ppb	09:07:54
1	Cu 324.752†	6481.6	109.0	0.3530 ug/L	0.3530 ppb	09:07:34
1	Fe 238.204 Radial†	6.8	-2.4	-29.670 ug/L	-29.670 ppb	09:06:32
1	K 766.490 Radial†	3232.7	346.8	69.217 ug/L	69.217 ppb	09:06:12
1	Mg 279.077 IEC†	2.6	1.8	79.581 ug/L	79.581 ppb	09:06:32
1	Mn 257.610†	461.8	8.0	0.0043 ug/L	0.0043 ppb	09:07:54
1	Mo 202.031†	26.3	12.0	1.0533 ug/L	1.0533 ppb	09:07:54
1	Na 589.592 Radial†	-444.6	27.6	10.853 ug/L	10.853 ppb	09:06:12
1	Ni 231.604†	89.7	-4.2	-0.1312 ug/L	-0.1312 ppb	09:07:54
1	P 214.914†	174.9	6.1	4.3938 ug/L	4.3938 ppb	09:07:54
1	Pb 220.353†	-50.6	8.3	1.2660 ug/L	1.2660 ppb	09:07:54
1	S 181.975 Axial†	26.0	1.6	2.7730 ug/L	2.7730 ppb	09:07:54
1	Sb 206.836†	36.8	10.0	4.3630 ug/L	4.3630 ppb	09:07:54
1	Se 196.026†	-16.8	0.2	0.0771 ug/L	0.0771 ppb	09:07:54
1	Si 251.611†	567.4	40.2	1.4837 ug/L	1.4837 ppb	09:07:54
1	Sn 189.927†	24.3	21.2	4.6907 ug/L	4.6907 ppb	09:07:54
1	Sr 421.552†	48.6	-22.6	-0.1928 ug/L	-0.1928 ppb	09:06:12
1	Ti 334.940†	-1061.9	24.7	0.0376 ug/L	0.0376 ppb	09:07:34
1	Tl 190.801†	-23.2	2.0	0.7560 ug/L	0.7560 ppb	09:07:54
1	U 409.014†	-2114.3	-72.6	-2.1340 ug/L	-2.1340 ppb	09:07:29
1	V 292.402†	-1411.5	20.3	0.1732 ug/L	0.1732 ppb	09:07:34
1	Zn 213.857†	640.7	32.3	0.3891 ug/L	0.3891 ppb	09:07:54
1	SiO2†	604.2	49.0	3.8880 ug/L	3.8880 ppb	09:09:00
2	Sc 361.383	840798.0	840798.0	100.11 %		09:07:59
2	Sc Radial	4133.7	4133.7	102 %		09:06:37
2	Y 371.029	716874.3	716874.3	100.11 %		09:07:59
2	Y RADIAL	4509.6	4509.6	99.81 %		09:06:37
2	Ag 328.068†	242.1	-11.6	-0.0616 ug/L	-0.0616 ppb	09:08:04
2	Al 396.153Radial†	-74.7	6.8	7.1934 ug/L	7.1934 ppb	09:06:57
2	As 188.979†	-8.9	12.0	6.4216 ug/L	6.4216 ppb	09:08:24
2	B 249.677†	359.0	608.8	16.736 ug/L	16.736 ppb	09:08:24
2	Ba 233.527†	36.1	17.6	0.1662 ug/L	0.1662 ppb	09:08:24
2	Be 313.107†	-3886.6	380.5	0.1549 ug/L	0.1549 ppb	09:08:04
2	Ca 317.933Radial†	21.0	3.3	6.7320 ug/L	6.7320 ppb	09:06:57
2	Cd 226.502†	-149.9	16.7	0.2373 ug/L	0.2373 ppb	09:08:24
2	Co 228.616†	-41.6	-2.6	-0.0658 ug/L	-0.0658 ppb	09:08:24
2	Cr 267.716†	127.7	32.6	0.4226 ug/L	0.4226 ppb	09:08:24
2	Cu 324.752†	7561.2	1200.0	3.8892 ug/L	3.8892 ppb	09:08:04
2	Fe 238.204 Radial†	7.8	-1.4	-17.408 ug/L	-17.408 ppb	09:06:57
2	K 766.490 Radial†	3137.9	258.8	51.665 ug/L	51.665 ppb	09:06:37
2	Mg 279.077 IEC†	0.2	-0.5	-22.131 ug/L	-22.131 ppb	09:06:57
2	Mn 257.610†	455.9	2.9	0.0030 ug/L	0.0030 ppb	09:08:24
2	Mo 202.031†	23.4	9.2	0.8034 ug/L	0.8034 ppb	09:08:24
2	Na 589.592 Radial†	-460.3	11.7	4.5957 ug/L	4.5957 ppb	09:06:37
2	Ni 231.604†	83.2	-10.5	-0.3270 ug/L	-0.3270 ppb	09:08:24

2	P 214.914†	178.2	9.7	6.2800 ug/L	6.2800 ppb	09:08:24
2	Pb 220.353†	-54.6	4.2	0.6429 ug/L	0.6429 ppb	09:08:24
2	S 181.975 Axial†	32.0	7.6	13.271 ug/L	13.271 ppb	09:08:24
2	Sb 206.836†	44.0	17.3	7.4230 ug/L	7.4230 ppb	09:08:24
2	Se 196.026†	-16.0	1.0	0.7162 ug/L	0.7162 ppb	09:08:24
2	Si 251.611†	582.3	56.2	2.0819 ug/L	2.0819 ppb	09:08:24
2	Sn 189.927†	17.5	14.4	3.1977 ug/L	3.1977 ppb	09:08:24
2	Sr 421.552†	33.0	-37.8	-0.3221 ug/L	-0.3221 ppb	09:06:37
2	Ti 334.940†	-973.8	110.6	0.1922 ug/L	0.1922 ppb	09:08:04
2	Tl 190.801†	-25.1	-0.0	-0.0175 ug/L	-0.0175 ppb	09:08:24
2	U 409.014†	-1978.0	59.4	1.7484 ug/L	1.7484 ppb	09:07:59
2	V 292.402†	-1312.7	116.3	0.9129 ug/L	0.9129 ppb	09:08:04
2	Zn 213.857†	652.8	45.7	0.5420 ug/L	0.5420 ppb	09:08:24
2	SiO2†	600.9	46.8	3.7196 ug/L	3.7196 ppb	09:09:05
3	Sc 361.383	845201.4	845201.4	100.64 %		09:08:29
3	Sc Radial	4198.2	4198.2	104 %		09:07:02
3	Y 371.029	720627.3	720627.3	100.64 %		09:08:29
3	Y RADIAL	4568.3	4568.3	101.1 %		09:07:02
3	Ag 328.068†	293.1	37.9	0.1890 ug/L	0.1890 ppb	09:08:34
3	Al 396.153Radial†	-74.3	8.2	8.7407 ug/L	8.7407 ppb	09:07:22
3	As 188.979†	-20.8	0.2	0.0975 ug/L	0.0975 ppb	09:08:54
3	B 249.677†	357.1	605.0	16.631 ug/L	16.631 ppb	09:08:54
3	Ba 233.527†	36.3	17.5	0.1641 ug/L	0.1641 ppb	09:08:54
3	Be 313.107†	-4263.0	26.7	0.0110 ug/L	0.0110 ppb	09:08:34
3	Ca 317.933Radial†	18.3	0.4	0.7437 ug/L	0.7437 ppb	09:07:22
3	Cd 226.502†	-140.2	27.1	0.3827 ug/L	0.3827 ppb	09:08:54
3	Co 228.616†	-37.1	2.1	0.0545 ug/L	0.0545 ppb	09:08:54
3	Cr 267.716†	148.9	52.9	0.6884 ug/L	0.6884 ppb	09:08:54
3	Cu 324.752†	6504.7	110.8	0.3582 ug/L	0.3582 ppb	09:08:34
3	Fe 238.204 Radial†	9.4	0.0	0.2978 ug/L	0.2978 ppb	09:07:22
3	K 766.490 Radial†	3183.9	256.0	51.114 ug/L	51.114 ppb	09:07:02
3	Mg 279.077 IEC†	1.9	1.2	50.903 ug/L	50.903 ppb	09:07:22
3	Mn 257.610†	451.2	-4.1	-0.0074 ug/L	-0.0074 ppb	09:08:54
3	Mo 202.031†	16.0	1.7	0.1499 ug/L	0.1499 ppb	09:08:54
3	Na 589.592 Radial†	-533.5	-51.7	-20.312 ug/L	-20.312 ppb	09:07:02
3	Ni 231.604†	89.9	-4.3	-0.1338 ug/L	-0.1338 ppb	09:08:54
3	P 214.914†	155.0	-14.2	-10.252 ug/L	-10.252 ppb	09:08:54
3	Pb 220.353†	-63.8	-4.6	-0.6955 ug/L	-0.6955 ppb	09:08:54
3	S 181.975 Axial†	39.4	14.7	25.843 ug/L	25.843 ppb	09:08:54
3	Sb 206.836†	26.0	-0.8	-0.3144 ug/L	-0.3144 ppb	09:08:54
3	Se 196.026†	-18.7	-1.7	-1.3187 ug/L	-1.3187 ppb	09:08:54
3	Si 251.611†	563.8	34.8	1.2944 ug/L	1.2944 ppb	09:08:54
3	Sn 189.927†	15.5	12.3	2.7346 ug/L	2.7346 ppb	09:08:54
3	Sr 421.552†	16.3	-54.4	-0.4632 ug/L	-0.4632 ppb	09:07:02
3	Ti 334.940†	-1060.3	29.7	0.0458 ug/L	0.0458 ppb	09:08:34
3	Tl 190.801†	-17.4	7.8	3.0052 ug/L	3.0052 ppb	09:08:54
3	U 409.014†	-1974.0	73.7	2.1665 ug/L	2.1665 ppb	09:08:29
3	V 292.402†	-1446.3	-9.6	-0.0670 ug/L	-0.0670 ppb	09:08:34
3	Zn 213.857†	637.9	27.5	0.3266 ug/L	0.3266 ppb	09:08:54
3	SiO2†	553.7	-3.2	-0.2595 ug/L	-0.2595 ppb	09:09:10

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	842812.8	100.35 %	0.265			0.26%
Sc Radial	4157.2	103 %	0.9			0.86%
Y 371.029	718296.3	100.31 %	0.284			0.28%
Y RADIAL	4528.4	100.2 %	0.77			0.76%
Ag 328.068†	12.5	0.0588 ug/L	0.12558	0.0588 ppb	0.12558	213.69%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	8.4	8.9076 ug/L	1.80346	8.9076 ppb	1.80346	20.25%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	8.0	4.2642 ug/L	3.60921	4.2642 ppb	3.60921	84.64%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	618.9	17.014 ug/L	0.5749	17.014 ppb	0.5749	3.38%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	10.9	0.1021 ug/L	0.10925	0.1021 ppb	0.10925	107.02%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	156.6	0.0638 ug/L	0.07923	0.0638 ppb	0.07923	124.16%
QC value within limits for Be 313.107 Recovery = Not calculated						

Ca 317.933Radial†	2.3	4.6113 ug/L	3.35469	4.6113 ppb	3.35469	72.75%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	20.6	0.2915 ug/L	0.07945	0.2915 ppb	0.07945	27.26%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-1.3	-0.0336 ug/L	0.07721	-0.0336 ppb	0.07721	229.55%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	41.4	0.5381 ug/L	0.13629	0.5381 ppb	0.13629	25.33%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	473.3	1.5335 ug/L	2.04011	1.5335 ppb	2.04011	133.04%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	-1.2	-15.594 ug/L	15.0663	-15.594 ppb	15.0663	96.62%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	287.2	57.332 ug/L	10.2963	57.332 ppb	10.2963	17.96%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	0.8	36.118 ug/L	52.4434	36.118 ppb	52.4434	145.20%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	2.3	0.0000 ug/L	0.00640	0.0000 ppb	0.00640	>999.9%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	7.6	0.6689 ug/L	0.46648	0.6689 ppb	0.46648	69.74%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	-4.1	-1.6210 ug/L	16.48610	-1.6210 ppb	16.48610	>999.9%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	-6.3	-0.1973 ug/L	0.11229	-0.1973 ppb	0.11229	56.91%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	0.6	0.1404 ug/L	9.04979	0.1404 ppb	9.04979	>999.9%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	2.6	0.4045 ug/L	1.00224	0.4045 ppb	1.00224	247.80%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	8.0	13.962 ug/L	11.5504	13.962 ppb	11.5504	82.73%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	8.8	3.8239 ug/L	3.89674	3.8239 ppb	3.89674	101.91%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-0.2	-0.1752 ug/L	1.04063	-0.1752 ppb	1.04063	594.11%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	43.7	1.6200 ug/L	0.41107	1.6200 ppb	0.41107	25.38%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	16.0	3.5410 ug/L	1.02226	3.5410 ppb	1.02226	28.87%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	-38.3	-0.3260 ug/L	0.13526	-0.3260 ppb	0.13526	41.49%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	55.0	0.0919 ug/L	0.08695	0.0919 ppb	0.08695	94.64%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	3.2	1.2479 ug/L	1.57021	1.2479 ppb	1.57021	125.83%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	20.2	0.5936 ug/L	2.37144	0.5936 ppb	2.37144	399.49%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	42.3	0.3397 ug/L	0.51073	0.3397 ppb	0.51073	150.35%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	35.2	0.4192 ug/L	0.11082	0.4192 ppb	0.11082	26.43%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	30.9	2.4494 ug/L	2.34745	2.4494 ppb	2.34745	95.84%
QC value within limits for SiO2 Recovery = Not calculated						
All analyte(s) passed QC.						

Sequence No.: 15

Sample ID: LR1

Analyst: HSC

Logged In Analyst (Original) : Optima3

Initial Sample Wt:

Dilution:

Autosampler Location: 36

Date Collected: 3/25/2010 09:10:32

Data Type: Reprocessed on 3/25/2010 09:41:54

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc 361.383	813728.4	813728.4	96.889 %		09:13:42
1	Sc Radial	3974.1	3974.1	98.5 %		09:12:45
1	Y 371.029	690514.6	690514.6	96.431 %		09:13:42
1	Y RADIAL	4373.9	4373.9	96.81 %		09:12:25
1	Ag 328.068†	-23584.8	-24595.5	-3.5614 ug/L	-3.5614 ppb	09:13:42
1	Al 396.153Radial†	-98.7	-20.5	-20.710 ug/L	-20.710 ppb	09:12:45
1	As 188.979†	-164.7	-149.1	11.211 ug/L	11.211 ppb	09:14:02
1	B 249.677†	1547.9	1847.8	-12.425 ug/L	-12.425 ppb	09:13:42
1	Ba 233.527†	-1607.6	-1677.8	-3.7855 ug/L	-3.7855 ppb	09:13:42
1	Be 313.107†	-4108.4	22.4	0.0085 ug/L	0.0085 ppb	09:13:42
1	Ca 317.933Radial†	16.5	-0.4	-0.8592 ug/L	-0.8592 ppb	09:12:45
1	Cd 226.502†	2586.0	2835.4	-0.1742 ug/L	-0.1742 ppb	09:13:42
1	Co 228.616†	601.5	659.7	11.494 ug/L	11.494 ppb	09:14:02
1	Cr 267.716†	-482.6	-593.1	33.533 ug/L	33.533 ppb	09:14:02
1	Cu 324.752†	-1562.7	-7965.6	-5.2748 ug/L	-5.2748 ppb	09:13:42
1	Fe 238.204 Radial†	30654.5	31106.2	388970 ug/L	388970 ppb	09:12:25
1	K 766.490 Radial†	2803.3	42.2	8.4761 ug/L	8.4761 ppb	09:12:25
1	Mg 279.077 IEC†	9.9	9.3	1.0150 ug/L	1.0150 ppb	09:12:45
1	Mn 257.610†	-33860.3	-35399.9	-8.0459 ug/L	-8.0459 ppb	09:13:42
1	Mo 202.031†	-250.5	-272.7	6.2177 ug/L	6.2177 ppb	09:13:42
1	Na 589.592 Radial†	-503.2	-49.9	-19.602 ug/L	-19.602 ppb	09:12:25
1	Ni 231.604†	146.6	57.7	1.7914 ug/L	1.7914 ppb	09:14:02
1	P 214.914†	616.4	467.9	28.141 ug/L	28.141 ppb	09:14:02
1	Pb 220.353†	148.1	211.6	-23.491 ug/L	-23.491 ppb	09:14:02
1	S 181.975 Axial†	41.2	18.1	31.766 ug/L	31.766 ppb	09:14:02
1	Sb 206.836†	23.4	-2.5	-5.7881 ug/L	-5.7881 ppb	09:14:02
1	Se 196.026†	-1715.7	-1753.9	-246.43 ug/L	-246.43 ppb	09:14:02
1	Si 251.611†	-538.1	-1080.9	-39.949 ug/L	-39.949 ppb	09:13:42
1	Sn 189.927†	-14.8	-18.4	-26.397 ug/L	-26.397 ppb	09:14:02
1	Sr 421.552†	88.3	19.6	0.1667 ug/L	0.1667 ppb	09:12:25
1	Ti 334.940†	-1191.6	-146.5	-0.3100 ug/L	-0.3100 ppb	09:13:42
1	Tl 190.801†	-26.6	-2.4	-1.3006 ug/L	-1.3006 ppb	09:14:02
1	U 409.014†	72.3	2109.8	17.752 ug/L	17.752 ppb	09:13:42
1	V 292.402†	4784.9	6366.0	-7.7848 ug/L	-7.7848 ppb	09:13:42
1	Zn 213.857†	3659.8	3170.9	-20.517 ug/L	-20.517 ppb	09:14:02
1	SiO2†	-326.5	-890.3	-70.478 ug/L	-70.478 ppb	09:14:59
2	Sc 361.383	809884.7	809884.7	96.431 %		09:14:08
2	Sc Radial	3952.7	3952.7	98.0 %		09:13:10
2	Y 371.029	687829.0	687829.0	96.055 %		09:14:08
2	Y RADIAL	4460.6	4460.6	98.73 %		09:12:50
2	Ag 328.068†	-23346.6	-24464.0	0.5895 ug/L	0.5895 ppb	09:14:08
2	Al 396.153Radial†	-93.6	-15.9	-15.751 ug/L	-15.751 ppb	09:13:10
2	As 188.979†	-162.6	-147.8	14.585 ug/L	14.585 ppb	09:14:28
2	B 249.677†	1533.5	1840.4	-14.457 ug/L	-14.457 ppb	09:14:08
2	Ba 233.527†	-1680.7	-1761.4	-4.2260 ug/L	-4.2260 ppb	09:14:08
2	Be 313.107†	-4207.6	-100.6	-0.0412 ug/L	-0.0412 ppb	09:14:08
2	Ca 317.933Radial†	14.0	-2.9	-5.8781 ug/L	-5.8781 ppb	09:13:10
2	Cd 226.502†	2626.9	2890.5	-0.5609 ug/L	-0.5609 ppb	09:14:08
2	Co 228.616†	596.5	657.4	11.269 ug/L	11.269 ppb	09:14:28
2	Cr 267.716†	-471.0	-583.4	34.854 ug/L	34.854 ppb	09:14:28
2	Cu 324.752†	-1599.8	-8011.8	-4.8279 ug/L	-4.8279 ppb	09:14:08
2	Fe 238.204 Radial†	31372.7	32007.5	400240 ug/L	400240 ppb	09:12:50
2	K 766.490 Radial†	2722.0	-25.4	-5.0208 ug/L	-5.0208 ppb	09:12:50
2	Mg 279.077 IEC†	8.6	8.0	-68.435 ug/L	-68.435 ppb	09:13:10
2	Mn 257.610†	-33595.8	-35291.5	-6.7881 ug/L	-6.7881 ppb	09:14:08
2	Mo 202.031†	-256.6	-280.3	6.4294 ug/L	6.4294 ppb	09:14:08
2	Na 589.592 Radial†	-478.5	-27.4	-10.763 ug/L	-10.763 ppb	09:12:50
2	Ni 231.604†	188.7	102.1	3.1776 ug/L	3.1776 ppb	09:14:28

2	P 214.914†	621.2	476.0	24.895 ug/L	24.895 ppb	09:14:28
2	Pb 220.353†	147.2	211.5	-25.121 ug/L	-25.121 ppb	09:14:28
2	S 181.975 Axial†	38.8	15.9	27.864 ug/L	27.864 ppb	09:14:28
2	Sb 206.836†	12.9	-13.2	-10.489 ug/L	-10.489 ppb	09:14:28
2	Se 196.026†	-1734.0	-1781.3	-234.90 ug/L	-234.90 ppb	09:14:28
2	Si 251.611†	-460.5	-1003.0	-37.041 ug/L	-37.041 ppb	09:14:08
2	Sn 189.927†	-11.8	-15.3	-26.367 ug/L	-26.367 ppb	09:14:28
2	Sr 421.552†	72.4	3.9	0.0329 ug/L	0.0329 ppb	09:12:50
2	Ti 334.940†	-1124.2	-82.4	-0.1955 ug/L	-0.1955 ppb	09:14:08
2	Tl 190.801†	-34.0	-10.2	-4.3425 ug/L	-4.3425 ppb	09:14:28
2	U 409.014†	57.1	2094.4	16.016 ug/L	16.016 ppb	09:14:08
2	V 292.402†	4828.9	6435.2	-8.9048 ug/L	-8.9048 ppb	09:14:08
2	Zn 213.857†	3700.4	3230.9	-21.499 ug/L	-21.499 ppb	09:14:28
2	SiO2†	-470.1	-1040.9	-82.490 ug/L	-82.490 ppb	09:15:05
3	Sc 361.383	816661.1	816661.1	97.238 %		09:14:34
3	Sc Radial	3919.6	3919.6	97.2 %		09:13:35
3	Y 371.029	692092.9	692092.9	96.651 %		09:14:34
3	Y RADIAL	4441.5	4441.5	98.31 %		09:13:15
3	Ag 328.068†	-23494.3	-24414.9	1.0701 ug/L	1.0701 ppb	09:14:34
3	Al 396.153Radial†	-92.1	-15.1	-14.809 ug/L	-14.809 ppb	09:13:35
3	As 188.979†	-168.2	-152.1	12.438 ug/L	12.438 ppb	09:14:54
3	B 249.677†	1608.2	1904.0	-12.834 ug/L	-12.834 ppb	09:14:34
3	Ba 233.527†	-1781.5	-1850.7	-5.0383 ug/L	-5.0383 ppb	09:14:34
3	Be 313.107†	-4252.8	-110.9	-0.0454 ug/L	-0.0454 ppb	09:14:34
3	Ca 317.933Radial†	14.0	-2.8	-5.6540 ug/L	-5.6540 ppb	09:13:35
3	Cd 226.502†	2614.1	2854.8	-1.1429 ug/L	-1.1429 ppb	09:14:34
3	Co 228.616†	620.9	677.4	11.773 ug/L	11.773 ppb	09:14:54
3	Cr 267.716†	-463.0	-571.1	35.094 ug/L	35.094 ppb	09:14:54
3	Cu 324.752†	-1532.5	-7928.8	-4.5202 ug/L	-4.5202 ppb	09:14:34
3	Fe 238.204 Radial†	31168.2	32067.9	401000 ug/L	401000 ppb	09:13:15
3	K 766.490 Radial†	2898.0	179.3	35.793 ug/L	35.793 ppb	09:13:15
3	Mg 279.077 IEC†	7.4	7.0	-115.75 ug/L	-115.75 ppb	09:13:35
3	Mn 257.610†	-33692.0	-35101.4	-6.4621 ug/L	-6.4621 ppb	09:14:34
3	Mo 202.031†	-278.6	-300.7	4.6958 ug/L	4.6958 ppb	09:14:34
3	Na 589.592 Radial†	-159.5	296.7	116.52 ug/L	116.52 ppb	09:13:15
3	Ni 231.604†	169.4	80.6	2.5050 ug/L	2.5050 ppb	09:14:54
3	P 214.914†	619.9	469.3	19.373 ug/L	19.373 ppb	09:14:54
3	Pb 220.353†	162.3	225.7	-23.086 ug/L	-23.086 ppb	09:14:54
3	S 181.975 Axial†	38.8	15.5	27.244 ug/L	27.244 ppb	09:14:54
3	Sb 206.836†	20.6	-5.5	-7.2775 ug/L	-7.2775 ppb	09:14:54
3	Se 196.026†	-1734.2	-1766.5	-220.89 ug/L	-220.89 ppb	09:14:54
3	Si 251.611†	-429.5	-967.2	-35.685 ug/L	-35.685 ppb	09:14:34
3	Sn 189.927†	-19.1	-22.7	-28.059 ug/L	-28.059 ppb	09:14:54
3	Sr 421.552†	106.8	39.8	0.3393 ug/L	0.3393 ppb	09:13:15
3	Ti 334.940†	-1143.4	-92.5	-0.2103 ug/L	-0.2103 ppb	09:14:34
3	Tl 190.801†	-20.4	4.1	1.1802 ug/L	1.1802 ppb	09:14:54
3	U 409.014†	150.6	2190.0	18.742 ug/L	18.742 ppb	09:14:34
3	V 292.402†	4931.2	6498.8	-8.5449 ug/L	-8.5449 ppb	09:14:34
3	Zn 213.857†	3664.4	3162.0	-22.426 ug/L	-22.426 ppb	09:14:54
3	SiO2†	-414.8	-980.0	-77.575 ug/L	-77.575 ppb	09:15:10

Mean Data: LR1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	813424.7	96.853 %		0.4046				0.42%
Sc Radial	3948.8	97.9 %		0.68				0.70%
Y 371.029	690145.5	96.379 %		0.3010				0.31%
Y RADIAL	4425.3	97.95 %		1.008				1.03%
Ag 328.068†	-24491.5	-0.6339 ug/L		2.54665	-0.6339 ppb		2.54665	401.72%
Al 396.153Radial†	-17.2	-17.090 ug/L		3.1704	-17.090 ppb		3.1704	18.55%
As 188.979†	-149.7	12.745 ug/L		1.7073	12.745 ppb		1.7073	13.40%
B 249.677†	1864.1	-13.239 ug/L		1.0750	-13.239 ppb		1.0750	8.12%
Ba 233.527†	-1763.3	-4.3499 ug/L		0.63551	-4.3499 ppb		0.63551	14.61%
Be 313.107†	-63.0	-0.0260 ug/L		0.02999	-0.0260 ppb		0.02999	115.31%
Ca 317.933Radial†	-2.0	-4.1304 ug/L		2.83518	-4.1304 ppb		2.83518	68.64%
Cd 226.502†	2860.2	-0.6260 ug/L		0.48761	-0.6260 ppb		0.48761	77.89%
Co 228.616†	664.9	11.512 ug/L		0.2527	11.512 ppb		0.2527	2.19%
Cr 267.716†	-582.5	34.494 ug/L		0.8407	34.494 ppb		0.8407	2.44%
Cu 324.752†	-7968.7	-4.8743 ug/L		0.37944	-4.8743 ppb		0.37944	7.78%
Fe 238.204 Radial†	31727.2	396740 ug/L		6735.9	396740 ppb		6735.9	1.70%

K 766.490 Radial†	65.3	13.083 ug/L	20.7933	13.083 ppb	20.7933	158.94%
Mg 279.077 IEC†	8.1	-61.056 ug/L	58.7305	-61.056 ppb	58.7305	96.19%
Mn 257.610†	-35264.2	-7.0987 ug/L	0.83632	-7.0987 ppb	0.83632	11.78%
Mo 202.031†	-284.6	5.7809 ug/L	0.94573	5.7809 ppb	0.94573	16.36%
Na 589.592 Radial†	73.1	28.719 ug/L	76.1669	28.719 ppb	76.1669	265.22%
Ni 231.604†	80.1	2.4913 ug/L	0.69320	2.4913 ppb	0.69320	27.82%
P 214.914†	471.1	24.136 ug/L	4.4332	24.136 ppb	4.4332	18.37%
Pb 220.353†	216.3	-23.899 ug/L	1.0771	-23.899 ppb	1.0771	4.51%
S 181.975 Axial†	16.5	28.958 ug/L	2.4514	28.958 ppb	2.4514	8.47%
Sb 206.836†	-7.1	-7.8514 ug/L	2.40232	-7.8514 ppb	2.40232	30.60%
Se 196.026†	-1767.2	-234.07 ug/L	12.787	-234.07 ppb	12.787	5.46%
Si 251.611†	-1017.0	-37.559 ug/L	2.1785	-37.559 ppb	2.1785	5.80%
Sn 189.927†	-18.8	-26.941 ug/L	0.9686	-26.941 ppb	0.9686	3.60%
Sr 421.552†	21.1	0.1796 ug/L	0.15360	0.1796 ppb	0.15360	85.52%
Ti 334.940†	-107.1	-0.2386 ug/L	0.06226	-0.2386 ppb	0.06226	26.09%
Tl 190.801†	-2.8	-1.4877 ug/L	2.76609	-1.4877 ppb	2.76609	185.94%
U 409.014†	2131.4	17.504 ug/L	1.3797	17.504 ppb	1.3797	7.88%
V 292.402†	6433.3	-8.4115 ug/L	0.57180	-8.4115 ppb	0.57180	6.80%
Zn 213.857†	3187.9	-21.481 ug/L	0.9549	-21.481 ppb	0.9549	4.45%
SiO2†	-970.4	-76.848 ug/L	6.0387	-76.848 ppb	6.0387	7.86%

Sequence No.: 16

Sample ID: LR2

Analyst: HSC

Logged In Analyst (Original) : Optima3

Initial Sample Wt:

Dilution:

Autosampler Location: 37

Date Collected: 3/25/2010 09:17:21

Data Type: Reprocessed on 3/25/2010 09:41:55

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc 361.383	811391.4	811391.4	96.611 %		09:20:31
1	Sc Radial	4042.9	4042.9	100 %		09:19:34
1	Y 371.029	701031.9	701031.9	97.899 %		09:20:31
1	Y RADIAL	4470.9	4470.9	98.96 %		09:19:14
1	Ag 328.068†	193.6	-53.0	-0.2548 ug/L	-0.2548 ppb	09:20:31
1	Al 396.153Radial†	-68.7	11.1	11.784 ug/L	11.784 ppb	09:19:34
1	As 188.979†	-19.1	1.1	0.5980 ug/L	0.5980 ppb	09:20:51
1	B 249.677†	137.6	392.6	10.787 ug/L	10.787 ppb	09:20:51
1	Ba 233.527†	29.9	12.4	0.1163 ug/L	0.1163 ppb	09:20:51
1	Be 313.107†	-4163.9	-47.3	-0.0195 ug/L	-0.0195 ppb	09:20:31
1	Ca 317.933Radial†	18.4	1.2	2.4138 ug/L	2.4138 ppb	09:19:34
1	Cd 226.502†	-169.5	-9.0	-0.1321 ug/L	-0.1321 ppb	09:20:51
1	Co 228.616†	-42.3	-4.8	-0.1262 ug/L	-0.1262 ppb	09:20:51
1	Cr 267.716†	125.0	34.5	0.4533 ug/L	0.4533 ppb	09:20:51
1	Cu 324.752†	6375.6	246.5	0.8035 ug/L	0.8035 ppb	09:20:31
1	Fe 238.204 Radial†	11.9	2.9	36.360 ug/L	36.360 ppb	09:19:34
1	K 766.490 Radial†	2853.9	44.2	8.8444 ug/L	8.8444 ppb	09:19:14
1	Mg 279.077 IEC†	6.0	5.3	232.75 ug/L	232.75 ppb	09:19:34
1	Mn 257.610†	429.8	-7.5	-0.0158 ug/L	-0.0158 ppb	09:20:51
1	Mo 202.031†	13.3	-0.4	-0.0361 ug/L	-0.0361 ppb	09:20:51
1	Na 589.592 Radial†	-556.2	-94.0	-36.924 ug/L	-36.924 ppb	09:19:14
1	Ni 231.604†	86.1	-4.5	-0.1399 ug/L	-0.1399 ppb	09:20:51
1	P 214.914†	181.5	19.7	13.996 ug/L	13.996 ppb	09:20:51
1	Pb 220.353†	-64.7	-8.2	-1.2392 ug/L	-1.2392 ppb	09:20:51
1	S 181.975 Axial†	31.8	8.6	14.985 ug/L	14.985 ppb	09:20:51
1	Sb 206.836†	11517.4	11894.8	5054.0 ug/L	5054.0 ppb	09:20:31
1	Se 196.026†	-27.1	-11.1	-8.7678 ug/L	-8.7678 ppb	09:20:51
1	Si 251.611†	833.6	337.4	12.564 ug/L	12.564 ppb	09:20:51
1	Sn 189.927†	14.9	12.3	2.7207 ug/L	2.7207 ppb	09:20:51
1	Sr 421.552†	41.0	-29.2	-0.2483 ug/L	-0.2483 ppb	09:19:14
1	Ti 334.940†	-1113.0	-68.7	-0.1353 ug/L	-0.1353 ppb	09:20:31
1	Tl 190.801†	-26.5	-2.3	-0.8937 ug/L	-0.8937 ppb	09:20:51
1	U 409.014†	-2100.2	-138.7	-4.0864 ug/L	-4.0864 ppb	09:20:31
1	V 292.402†	-1446.1	-69.3	-0.5432 ug/L	-0.5432 ppb	09:20:31
1	Zn 213.857†	641.1	57.2	0.6736 ug/L	0.6736 ppb	09:20:51
1	SiO2†	823.2	298.7	23.866 ug/L	23.866 ppb	09:21:47
2	Sc 361.383	815073.0	815073.0	97.049 %		09:20:56
2	Sc Radial	4042.2	4042.2	100 %		09:19:59
2	Y 371.029	704053.1	704053.1	98.321 %		09:20:56
2	Y RADIAL	4456.6	4456.6	98.64 %		09:19:39
2	Ag 328.068†	220.1	-26.6	-0.1403 ug/L	-0.1403 ppb	09:20:56
2	Al 396.153Radial†	-83.7	-3.8	-4.0712 ug/L	-4.0712 ppb	09:19:59
2	As 188.979†	-21.4	-1.2	-0.6435 ug/L	-0.6435 ppb	09:21:16
2	B 249.677†	110.6	364.1	10.013 ug/L	10.013 ppb	09:21:16
2	Ba 233.527†	13.5	-4.6	-0.0438 ug/L	-0.0438 ppb	09:21:16
2	Be 313.107†	-4229.8	-95.7	-0.0390 ug/L	-0.0390 ppb	09:20:56
2	Ca 317.933Radial†	19.1	1.9	3.7770 ug/L	3.7770 ppb	09:19:59
2	Cd 226.502†	-157.8	3.8	0.0554 ug/L	0.0554 ppb	09:21:16
2	Co 228.616†	-45.6	-8.0	-0.2091 ug/L	-0.2091 ppb	09:21:16
2	Cr 267.716†	133.2	42.3	0.5484 ug/L	0.5484 ppb	09:21:16
2	Cu 324.752†	6462.6	306.4	0.9935 ug/L	0.9935 ppb	09:20:56
2	Fe 238.204 Radial†	6.8	-2.2	-27.949 ug/L	-27.949 ppb	09:19:59
2	K 766.490 Radial†	3052.8	243.2	48.556 ug/L	48.556 ppb	09:19:39
2	Mg 279.077 IEC†	4.1	3.4	148.97 ug/L	148.97 ppb	09:19:59
2	Mn 257.610†	466.2	28.0	0.0278 ug/L	0.0278 ppb	09:21:16
2	Mo 202.031†	11.1	-2.8	-0.2473 ug/L	-0.2473 ppb	09:21:16
2	Na 589.592 Radial†	-524.0	-62.0	-24.351 ug/L	-24.351 ppb	09:19:39
2	Ni 231.604†	82.8	-8.3	-0.2585 ug/L	-0.2585 ppb	09:21:16

2	P 214.914†	184.5	21.9	15.605 ug/L	15.605 ppb	09:21:16
2	Pb 220.353†	-63.7	-6.9	-1.0310 ug/L	-1.0310 ppb	09:21:16
2	S 181.975 Axial†	29.4	5.9	10.429 ug/L	10.429 ppb	09:21:16
2	Sb 206.836†	11668.3	11996.4	5097.2 ug/L	5097.2 ppb	09:20:56
2	Se 196.026†	-16.3	0.1	0.0273 ug/L	0.0273 ppb	09:21:16
2	Si 251.611†	827.2	326.9	12.175 ug/L	12.175 ppb	09:21:16
2	Sn 189.927†	14.0	11.3	2.5079 ug/L	2.5079 ppb	09:21:16
2	Sr 421.552†	40.1	-30.0	-0.2553 ug/L	-0.2553 ppb	09:19:39
2	Ti 334.940†	-1086.0	-35.7	-0.0719 ug/L	-0.0719 ppb	09:20:56
2	Tl 190.801†	-18.4	6.1	2.3461 ug/L	2.3461 ppb	09:21:16
2	U 409.014†	-2073.1	-101.0	-2.9701 ug/L	-2.9701 ppb	09:20:56
2	V 292.402†	-1382.9	2.6	0.0174 ug/L	0.0174 ppb	09:20:56
2	Zn 213.857†	652.5	65.9	0.7877 ug/L	0.7877 ppb	09:21:16
2	SiO2†	847.3	319.7	25.552 ug/L	25.552 ppb	09:21:52
3	Sc 361.383	823437.0	823437.0	98.045 %		09:21:22
3	Sc Radial	4027.1	4027.1	99.8 %		09:20:24
3	Y 371.029	712465.2	712465.2	99.496 %		09:21:22
3	Y RADIAL	4568.9	4568.9	101.1 %		09:20:04
3	Ag 328.068†	204.4	-44.9	-0.2307 ug/L	-0.2307 ppb	09:21:22
3	Al 396.153Radial†	-77.7	1.8	1.8277 ug/L	1.8277 ppb	09:20:24
3	As 188.979†	-15.6	4.9	2.6364 ug/L	2.6364 ppb	09:21:42
3	B 249.677†	114.3	366.8	10.085 ug/L	10.085 ppb	09:21:42
3	Ba 233.527†	8.0	-10.4	-0.0985 ug/L	-0.0985 ppb	09:21:42
3	Be 313.107†	-4309.6	-132.9	-0.0541 ug/L	-0.0541 ppb	09:21:22
3	Ca 317.933Radial†	19.4	2.3	4.5815 ug/L	4.5815 ppb	09:20:24
3	Cd 226.502†	-161.2	2.0	0.0296 ug/L	0.0296 ppb	09:21:42
3	Co 228.616†	-47.7	-9.7	-0.2493 ug/L	-0.2493 ppb	09:21:42
3	Cr 267.716†	120.8	28.3	0.3670 ug/L	0.3670 ppb	09:21:42
3	Cu 324.752†	6485.3	261.8	0.8493 ug/L	0.8493 ppb	09:21:22
3	Fe 238.204 Radial†	7.7	-1.3	-16.028 ug/L	-16.028 ppb	09:20:24
3	K 766.490 Radial†	2906.2	107.7	21.521 ug/L	21.521 ppb	09:20:04
3	Mg 279.077 IEC†	1.8	1.1	50.012 ug/L	50.012 ppb	09:20:24
3	Mn 257.610†	436.0	-7.7	-0.0138 ug/L	-0.0138 ppb	09:21:42
3	Mo 202.031†	27.2	13.5	1.1860 ug/L	1.1860 ppb	09:21:42
3	Na 589.592 Radial†	-552.3	-92.4	-36.271 ug/L	-36.271 ppb	09:20:04
3	Ni 231.604†	82.8	-9.2	-0.2869 ug/L	-0.2869 ppb	09:21:42
3	P 214.914†	174.0	9.2	6.4926 ug/L	6.4926 ppb	09:21:42
3	Pb 220.353†	-48.7	9.2	1.3875 ug/L	1.3875 ppb	09:21:42
3	S 181.975 Axial†	28.3	4.4	7.7817 ug/L	7.7817 ppb	09:21:42
3	Sb 206.836†	11787.3	11995.7	5096.9 ug/L	5096.9 ppb	09:21:22
3	Se 196.026†	-27.0	-10.6	-8.4655 ug/L	-8.4655 ppb	09:21:42
3	Si 251.611†	824.1	315.1	11.716 ug/L	11.716 ppb	09:21:42
3	Sn 189.927†	15.6	12.8	2.8341 ug/L	2.8341 ppb	09:21:42
3	Sr 421.552†	39.8	-30.2	-0.2568 ug/L	-0.2568 ppb	09:20:04
3	Ti 334.940†	-1097.7	-36.2	-0.0650 ug/L	-0.0650 ppb	09:21:22
3	Tl 190.801†	-13.8	11.0	4.2456 ug/L	4.2456 ppb	09:21:42
3	U 409.014†	-2070.1	-76.2	-2.2423 ug/L	-2.2423 ppb	09:21:22
3	V 292.402†	-1430.8	-31.8	-0.2298 ug/L	-0.2298 ppb	09:21:22
3	Zn 213.857†	658.3	65.0	0.7751 ug/L	0.7751 ppb	09:21:42
3	SiO2†	842.6	306.0	24.416 ug/L	24.416 ppb	09:21:57

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	816633.8	97.235 %	0.7350			0.76%
Sc Radial	4037.4	100 %	0.2			0.22%
Y 371.029	705850.1	98.572 %	0.8274			0.84%
Y RADIAL	4498.8	99.57 %	1.352			1.36%
Ag 328.068†	-41.5	-0.2086 ug/L	0.06039	-0.2086 ppb	0.06039	28.95%
Al 396.153Radial†	3.0	3.1801 ug/L	8.01356	3.1801 ppb	8.01356	251.99%
As 188.979†	1.6	0.8636 ug/L	1.65602	0.8636 ppb	1.65602	191.75%
B 249.677†	374.5	10.295 ug/L	0.4276	10.295 ppb	0.4276	4.15%
Ba 233.527†	-0.9	-0.0087 ug/L	0.11162	-0.0087 ppb	0.11162	>999.9%
Be 313.107†	-92.0	-0.0375 ug/L	0.01735	-0.0375 ppb	0.01735	46.24%
Ca 317.933Radial†	1.8	3.5908 ug/L	1.09580	3.5908 ppb	1.09580	30.52%
Cd 226.502†	-1.1	-0.0157 ug/L	0.10162	-0.0157 ppb	0.10162	647.20%
Co 228.616†	-7.5	-0.1949 ug/L	0.06278	-0.1949 ppb	0.06278	32.22%
Cr 267.716†	35.0	0.4562 ug/L	0.09075	0.4562 ppb	0.09075	19.89%
Cu 324.752†	271.6	0.8821 ug/L	0.09919	0.8821 ppb	0.09919	11.24%
Fe 238.204 Radial†	-0.2	-2.5393 ug/L	34.21080	-2.5393 ppb	34.21080	>999.9%

K 766.490 Radial†	131.7	26.307 ug/L	20.2838	26.307 ppb	20.2838	77.10%
Mg 279.077 IEC†	3.3	143.91 ug/L	91.472	143.91 ppb	91.472	63.56%
Mn 257.610†	4.2	-0.0006 ug/L	0.02462	-0.0006 ppb	0.02462	>999.9%
Mo 202.031†	3.4	0.3009 ug/L	0.77380	0.3009 ppb	0.77380	257.19%
Na 589.592 Radial†	-82.8	-32.516 ug/L	7.0780	-32.516 ppb	7.0780	21.77%
Ni 231.604†	-7.3	-0.2285 ug/L	0.07799	-0.2285 ppb	0.07799	34.14%
P 214.914†	16.9	12.031 ug/L	4.8637	12.031 ppb	4.8637	40.43%
Pb 220.353†	-2.0	-0.2942 ug/L	1.46014	-0.2942 ppb	1.46014	496.23%
S 181.975 Axial†	6.3	11.065 ug/L	3.6437	11.065 ppb	3.6437	32.93%
Sb 206.836†	11962.3	5082.7 ug/L	24.85	5082.7 ppb	24.85	0.49%
Se 196.026†	-7.2	-5.7354 ug/L	4.99290	-5.7354 ppb	4.99290	87.05%
Si 251.611†	326.5	12.152 ug/L	0.4241	12.152 ppb	0.4241	3.49%
Sn 189.927†	12.1	2.6876 ug/L	0.16557	2.6876 ppb	0.16557	6.16%
Sr 421.552†	-29.8	-0.2535 ug/L	0.00452	-0.2535 ppb	0.00452	1.78%
Ti 334.940†	-46.9	-0.0907 ug/L	0.03875	-0.0907 ppb	0.03875	42.71%
Tl 190.801†	4.9	1.8993 ug/L	2.59864	1.8993 ppb	2.59864	136.82%
U 409.014†	-105.3	-3.0996 ug/L	0.92887	-3.0996 ppb	0.92887	29.97%
V 292.402†	-32.9	-0.2519 ug/L	0.28100	-0.2519 ppb	0.28100	111.57%
Zn 213.857†	62.7	0.7455 ug/L	0.06254	0.7455 ppb	0.06254	8.39%
SiO2†	308.2	24.612 ug/L	0.8597	24.612 ppb	0.8597	3.49%

Sequence No.: 17

Sample ID: CCV

Analyst:

Logged In Analyst (Original) : Optima3

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/25/2010 09:24:09

Data Type: Reprocessed on 3/25/2010 09:41:56

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc 361.383	842149.8	842149.8	100.27 %		09:27:18
1	Sc Radial	3876.8	3876.8	96.1 %		09:26:21
1	Y 371.029	710504.1	710504.1	99.222 %		09:27:18
1	Y RADIAL	4232.1	4232.1	93.67 %		09:26:01
1	Ag 328.068†	100187.7	99661.3	505.58 ug/L	505.58 ppb	09:27:23
1	Al 396.153Radial†	4697.6	4967.5	5270.1 ug/L	5270.1 ppb	09:26:01
1	As 188.979†	900.7	919.1	497.00 ug/L	497.00 ppb	09:27:44
1	B 249.677†	18105.5	18306.3	500.90 ug/L	500.90 ppb	09:27:23
1	Ba 233.527†	53146.0	52982.7	497.94 ug/L	497.94 ppb	09:27:23
1	Be 313.107†	1222307.3	1223239.8	497.76 ug/L	497.76 ppb	09:27:18
1	Ca 317.933Radial†	2504.9	2589.1	5260.4 ug/L	5260.4 ppb	09:26:21
1	Cd 226.502†	35258.6	35328.9	498.15 ug/L	498.15 ppb	09:27:23
1	Co 228.616†	19489.5	19475.3	506.95 ug/L	506.95 ppb	09:27:23
1	Cr 267.716†	38474.4	38274.6	499.36 ug/L	499.36 ppb	09:27:23
1	Cu 324.752†	158871.6	152086.0	493.14 ug/L	493.14 ppb	09:27:23
1	Fe 238.204 Radial†	410.8	418.5	5247.9 ug/L	5247.9 ppb	09:26:21
1	K 766.490 Radial†	27431.6	25739.1	5131.7 ug/L	5131.7 ppb	09:26:01
1	Mg 279.077 IEC†	119.1	123.3	5384.3 ug/L	5384.3 ppb	09:26:21
1	Mn 257.610†	378439.0	376955.5	494.88 ug/L	494.88 ppb	09:27:18
1	Mo 202.031†	5674.8	5645.1	496.77 ug/L	496.77 ppb	09:27:44
1	Na 589.592 Radial†	25199.4	26680.7	10478 ug/L	10478 ppb	09:26:01
1	Ni 231.604†	16322.6	16184.5	505.06 ug/L	505.06 ppb	09:27:23
1	P 214.914†	3543.1	3365.2	2322.7 ug/L	2322.7 ppb	09:27:44
1	Pb 220.353†	3184.3	3234.5	489.09 ug/L	489.09 ppb	09:27:44
1	S 181.975 Axial†	585.9	559.9	980.40 ug/L	980.40 ppb	09:27:44
1	Sb 206.836†	1222.5	1192.5	524.54 ug/L	524.54 ppb	09:27:44
1	Se 196.026†	595.4	610.7	505.73 ug/L	505.73 ppb	09:27:44
1	Si 251.611†	67602.9	66893.2	2484.5 ug/L	2484.5 ppb	09:27:23
1	Sn 189.927†	2248.3	2239.1	496.55 ug/L	496.55 ppb	09:27:44
1	Sr 421.552†	58335.2	60627.4	516.24 ug/L	516.24 ppb	09:26:01
1	Ti 334.940†	286177.7	286481.4	492.76 ug/L	492.76 ppb	09:27:23
1	Tl 190.801†	1240.4	1262.1	491.28 ug/L	491.28 ppb	09:27:44
1	U 409.014†	15255.0	17248.6	505.82 ug/L	505.82 ppb	09:27:23
1	V 292.402†	63159.2	64414.7	503.19 ug/L	503.19 ppb	09:27:23
1	Zn 213.857†	42617.1	41894.5	493.03 ug/L	493.03 ppb	09:27:23
1	SiO2†	66609.2	65874.4	5249.5 ug/L	5249.5 ppb	09:28:51
2	Sc 361.383	835022.8	835022.8	99.425 %		09:27:49
2	Sc Radial	4017.5	4017.5	99.6 %		09:26:46
2	Y 371.029	703671.4	703671.4	98.268 %		09:27:49
2	Y RADIAL	4350.9	4350.9	96.30 %		09:26:26
2	Ag 328.068†	100137.4	100463.6	509.59 ug/L	509.59 ppb	09:27:55
2	Al 396.153Radial†	4582.3	4680.5	4963.9 ug/L	4963.9 ppb	09:26:26
2	As 188.979†	914.4	940.6	508.51 ug/L	508.51 ppb	09:28:15
2	B 249.677†	18082.5	18437.3	504.52 ug/L	504.52 ppb	09:27:55
2	Ba 233.527†	52876.3	53163.8	499.64 ug/L	499.64 ppb	09:27:55
2	Be 313.107†	1209832.9	1221097.3	496.90 ug/L	496.90 ppb	09:27:49
2	Ca 317.933Radial†	2507.6	2500.6	5080.5 ug/L	5080.5 ppb	09:26:46
2	Cd 226.502†	35210.9	35581.1	501.73 ug/L	501.73 ppb	09:27:55
2	Co 228.616†	19388.8	19539.9	508.64 ug/L	508.64 ppb	09:27:55
2	Cr 267.716†	38295.9	38422.6	501.27 ug/L	501.27 ppb	09:27:55
2	Cu 324.752†	158733.4	153299.3	497.07 ug/L	497.07 ppb	09:27:55
2	Fe 238.204 Radial†	412.8	405.5	5085.6 ug/L	5085.6 ppb	09:26:46
2	K 766.490 Radial†	26720.2	24025.3	4789.9 ug/L	4789.9 ppb	09:26:26
2	Mg 279.077 IEC†	119.7	119.5	5221.0 ug/L	5221.0 ppb	09:26:46
2	Mn 257.610†	375906.2	377629.3	495.76 ug/L	495.76 ppb	09:27:49
2	Mo 202.031†	5692.9	5711.6	502.60 ug/L	502.60 ppb	09:28:15
2	Na 589.592 Radial†	24588.2	25148.8	9876.3 ug/L	9876.3 ppb	09:26:26
2	Ni 231.604†	16277.8	16278.4	507.99 ug/L	507.99 ppb	09:27:55

2	P 214.914†	3604.7	3457.3	2388.2 ug/L	2388.2 ppb	09:28:15
2	Pb 220.353†	3242.2	3319.7	501.91 ug/L	501.91 ppb	09:28:15
2	S 181.975 Axial†	591.5	570.6	999.20 ug/L	999.20 ppb	09:28:15
2	Sb 206.836†	1216.4	1196.8	526.64 ug/L	526.64 ppb	09:28:15
2	Se 196.026†	604.0	624.4	516.10 ug/L	516.10 ppb	09:28:15
2	Si 251.611†	67573.9	67439.5	2504.8 ug/L	2504.8 ppb	09:27:55
2	Sn 189.927†	2270.4	2280.5	505.69 ug/L	505.69 ppb	09:28:15
2	Sr 421.552†	56763.9	56924.1	484.70 ug/L	484.70 ppb	09:26:26
2	Ti 334.940†	285671.3	288407.9	496.06 ug/L	496.06 ppb	09:27:55
2	Tl 190.801†	1243.7	1276.0	496.67 ug/L	496.67 ppb	09:28:15
2	U 409.014†	15228.0	17351.3	508.85 ug/L	508.85 ppb	09:27:55
2	V 292.402†	62972.0	64763.9	505.98 ug/L	505.98 ppb	09:27:55
2	Zn 213.857†	42568.7	42208.6	496.76 ug/L	496.76 ppb	09:27:55
2	SiO2†	66967.8	66802.0	5323.5 ug/L	5323.5 ppb	09:28:56
3	Sc 361.383	839934.4	839934.4	100.01 %		09:28:20
3	Sc Radial	4001.2	4001.2	99.2 %		09:27:11
3	Y 371.029	707199.1	707199.1	98.761 %		09:28:20
3	Y RADIAL	4478.9	4478.9	99.13 %		09:26:51
3	Ag 328.068†	100983.2	100720.3	510.89 ug/L	510.89 ppb	09:28:26
3	Al 396.153Radial†	4678.4	4796.2	5087.6 ug/L	5087.6 ppb	09:26:51
3	As 188.979†	888.1	908.9	491.55 ug/L	491.55 ppb	09:28:46
3	B 249.677†	18219.0	18467.4	505.34 ug/L	505.34 ppb	09:28:26
3	Ba 233.527†	53217.4	53193.9	499.92 ug/L	499.92 ppb	09:28:26
3	Be 313.107†	1218964.4	1223112.3	497.71 ug/L	497.71 ppb	09:28:20
3	Ca 317.933Radial†	2492.7	2495.9	5071.1 ug/L	5071.1 ppb	09:27:11
3	Cd 226.502†	35336.1	35499.2	500.57 ug/L	500.57 ppb	09:28:26
3	Co 228.616†	19513.6	19550.6	508.91 ug/L	508.91 ppb	09:28:26
3	Cr 267.716†	38557.3	38458.7	501.74 ug/L	501.74 ppb	09:28:26
3	Cu 324.752†	160106.4	153738.5	498.49 ug/L	498.49 ppb	09:28:26
3	Fe 238.204 Radial†	411.7	406.0	5092.6 ug/L	5092.6 ppb	09:27:11
3	K 766.490 Radial†	27573.3	24995.2	4983.4 ug/L	4983.4 ppb	09:26:51
3	Mg 279.077 IEC†	116.7	117.0	5109.1 ug/L	5109.1 ppb	09:27:11
3	Mn 257.610†	378470.2	377982.1	496.22 ug/L	496.22 ppb	09:28:20
3	Mo 202.031†	5643.4	5628.6	495.30 ug/L	495.30 ppb	09:28:46
3	Na 589.592 Radial†	25249.8	25916.8	10178 ug/L	10178 ppb	09:26:51
3	Ni 231.604†	16381.6	16286.5	508.24 ug/L	508.24 ppb	09:28:26
3	P 214.914†	3538.4	3369.8	2325.0 ug/L	2325.0 ppb	09:28:46
3	Pb 220.353†	3178.8	3237.4	489.50 ug/L	489.50 ppb	09:28:46
3	S 181.975 Axial†	588.8	564.4	988.27 ug/L	988.27 ppb	09:28:46
3	Sb 206.836†	1201.5	1174.8	517.00 ug/L	517.00 ppb	09:28:46
3	Se 196.026†	590.7	607.6	502.69 ug/L	502.69 ppb	09:28:46
3	Si 251.611†	67953.2	67421.4	2504.2 ug/L	2504.2 ppb	09:28:26
3	Sn 189.927†	2247.8	2244.5	497.73 ug/L	497.73 ppb	09:28:46
3	Sr 421.552†	58410.3	58817.1	500.82 ug/L	500.82 ppb	09:26:51
3	Ti 334.940†	287466.5	288522.7	496.26 ug/L	496.26 ppb	09:28:26
3	Tl 190.801†	1237.3	1262.3	491.37 ug/L	491.37 ppb	09:28:46
3	U 409.014†	15273.1	17306.9	507.55 ug/L	507.55 ppb	09:28:26
3	V 292.402†	63372.3	64793.8	506.10 ug/L	506.10 ppb	09:28:26
3	Zn 213.857†	42806.5	42196.1	496.61 ug/L	496.61 ppb	09:28:26
3	SiO2†	66239.9	65680.3	5234.1 ug/L	5234.1 ppb	09:29:01

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	839035.7	99.902 %	0.4343			0.43%
Sc Radial	3965.2	98.3 %	1.91			1.94%
Y 371.029	707124.9	98.750 %	0.4772			0.48%
Y RADIAL	4354.0	96.37 %	2.732			2.83%
Ag 328.068†	100281.7	508.69 ug/L	2.765	508.69 ppb	2.765	0.54%
QC value within limits for Ag 328.068 Recovery = 101.74%						
Al 396.153Radial†	4814.7	5107.2 ug/L	154.03	5107.2 ppb	154.03	3.02%
QC value within limits for Al 396.153Radial Recovery = 102.14%						
As 188.979†	922.8	499.02 ug/L	8.657	499.02 ppb	8.657	1.73%
QC value within limits for As 188.979 Recovery = 99.80%						
B 249.677†	18403.7	503.59 ug/L	2.366	503.59 ppb	2.366	0.47%
QC value within limits for B 249.677 Recovery = 100.72%						
Ba 233.527†	53113.5	499.16 ug/L	1.072	499.16 ppb	1.072	0.21%
QC value within limits for Ba 233.527 Recovery = 99.83%						
Be 313.107†	1222483.2	497.46 ug/L	0.486	497.46 ppb	0.486	0.10%
QC value within limits for Be 313.107 Recovery = 99.49%						

Ca 317.933Radial†	2528.5	5137.3 ug/L	106.70	5137.3 ppb	106.70	2.08%
QC value within limits for Ca 317.933Radial Recovery = 102.75%						
Cd 226.502†	35469.8	500.15 ug/L	1.825	500.15 ppb	1.825	0.36%
QC value within limits for Cd 226.502 Recovery = 100.03%						
Co 228.616†	19521.9	508.17 ug/L	1.060	508.17 ppb	1.060	0.21%
QC value within limits for Co 228.616 Recovery = 101.63%						
Cr 267.716†	38385.3	500.79 ug/L	1.262	500.79 ppb	1.262	0.25%
QC value within limits for Cr 267.716 Recovery = 100.16%						
Cu 324.752†	153041.3	496.23 ug/L	2.770	496.23 ppb	2.770	0.56%
QC value within limits for Cu 324.752 Recovery = 99.25%						
Fe 238.204 Radial†	410.0	5142.1 ug/L	91.75	5142.1 ppb	91.75	1.78%
QC value within limits for Fe 238.204 Radial Recovery = 102.84%						
K 766.490 Radial†	24919.9	4968.3 ug/L	171.42	4968.3 ppb	171.42	3.45%
QC value within limits for K 766.490 Radial Recovery = 99.37%						
Mg 279.077 IEC†	119.9	5238.1 ug/L	138.37	5238.1 ppb	138.37	2.64%
QC value within limits for Mg 279.077 IEC Recovery = 104.76%						
Mn 257.610†	377522.3	495.62 ug/L	0.682	495.62 ppb	0.682	0.14%
QC value within limits for Mn 257.610 Recovery = 99.12%						
Mo 202.031†	5661.8	498.23 ug/L	3.860	498.23 ppb	3.860	0.77%
QC value within limits for Mo 202.031 Recovery = 99.65%						
Na 589.592 Radial†	25915.5	10177 ug/L	300.8	10177 ppb	300.8	2.96%
QC value within limits for Na 589.592 Radial Recovery = 101.77%						
Ni 231.604†	16249.8	507.09 ug/L	1.769	507.09 ppb	1.769	0.35%
QC value within limits for Ni 231.604 Recovery = 101.42%						
P 214.914†	3397.5	2345.3 ug/L	37.18	2345.3 ppb	37.18	1.59%
QC value within limits for P 214.914 Recovery = 93.81%						
Pb 220.353†	3263.9	493.50 ug/L	7.288	493.50 ppb	7.288	1.48%
QC value within limits for Pb 220.353 Recovery = 98.70%						
S 181.975 Axial†	564.9	989.29 ug/L	9.441	989.29 ppb	9.441	0.95%
QC value within limits for S 181.975 Axial Recovery = 98.93%						
Sb 206.836†	1188.0	522.73 ug/L	5.071	522.73 ppb	5.071	0.97%
QC value within limits for Sb 206.836 Recovery = 104.55%						
Se 196.026†	614.2	508.17 ug/L	7.029	508.17 ppb	7.029	1.38%
QC value within limits for Se 196.026 Recovery = 101.63%						
Si 251.611†	67251.4	2497.9 ug/L	11.54	2497.9 ppb	11.54	0.46%
QC value within limits for Si 251.611 Recovery = 99.91%						
Sn 189.927†	2254.7	499.99 ug/L	4.971	499.99 ppb	4.971	0.99%
QC value within limits for Sn 189.927 Recovery = 100.00%						
Sr 421.552†	58789.5	500.59 ug/L	15.769	500.59 ppb	15.769	3.15%
QC value within limits for Sr 421.552 Recovery = 100.12%						
Ti 334.940†	287804.0	495.03 ug/L	1.968	495.03 ppb	1.968	0.40%
QC value within limits for Ti 334.940 Recovery = 99.01%						
Tl 190.801†	1266.8	493.11 ug/L	3.086	493.11 ppb	3.086	0.63%
QC value within limits for Tl 190.801 Recovery = 98.62%						
U 409.014†	17302.2	507.41 ug/L	1.522	507.41 ppb	1.522	0.30%
QC value within limits for U 409.014 Recovery = 101.48%						
V 292.402†	64657.5	505.09 ug/L	1.651	505.09 ppb	1.651	0.33%
QC value within limits for V 292.402 Recovery = 101.02%						
Zn 213.857†	42099.7	495.47 ug/L	2.112	495.47 ppb	2.112	0.43%
QC value within limits for Zn 213.857 Recovery = 99.09%						
SiO2†	66118.9	5269.0 ug/L	47.79	5269.0 ppb	47.79	0.91%
QC value within limits for SiO2 Recovery = 98.53%						
All analyte(s) passed QC.						

Sequence No.: 18

Sample ID: CCB

Analyst:

Logged In Analyst (Original) : Optima3

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/25/2010 09:31:11

Data Type: Reprocessed on 3/25/2010 09:41:58

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc 361.383	848278.8	848278.8	101.00 %		09:34:21
1	Sc Radial	4125.2	4125.2	102 %		09:33:04
1	Y 371.029	723772.8	723772.8	101.08 %		09:34:21
1	Y RADIAL	4481.7	4481.7	99.20 %		09:33:04
1	Ag 328.068†	240.1	-15.7	-0.0889 ug/L	-0.0889 ppb	09:34:26
1	Al 396.153Radial†	-80.5	0.9	0.9744 ug/L	0.9744 ppb	09:33:24
1	As 188.979†	-26.1	-5.0	-2.6869 ug/L	-2.6869 ppb	09:34:46
1	B 249.677†	100.6	349.8	9.6178 ug/L	9.6178 ppb	09:34:46
1	Ba 233.527†	19.9	1.2	0.0107 ug/L	0.0107 ppb	09:34:46
1	Be 313.107†	-4209.2	95.3	0.0389 ug/L	0.0389 ppb	09:34:26
1	Ca 317.933Radial†	17.2	-0.4	-0.8031 ug/L	-0.8031 ppb	09:33:24
1	Cd 226.502†	-156.7	11.2	0.1614 ug/L	0.1614 ppb	09:34:46
1	Co 228.616†	-49.0	-9.6	-0.2495 ug/L	-0.2495 ppb	09:34:46
1	Cr 267.716†	129.6	33.3	0.4299 ug/L	0.4299 ppb	09:34:46
1	Cu 324.752†	6452.3	35.5	0.1104 ug/L	0.1104 ppb	09:34:26
1	Fe 238.204 Radial†	8.1	-1.1	-13.391 ug/L	-13.391 ppb	09:33:24
1	K 766.490 Radial†	2783.5	-81.4	-16.247 ug/L	-16.247 ppb	09:33:04
1	Mg 279.077 IEC†	2.1	1.4	61.000 ug/L	61.000 ppb	09:33:24
1	Mn 257.610†	481.5	24.3	0.0281 ug/L	0.0281 ppb	09:34:46
1	Mo 202.031†	13.2	-1.2	-0.1024 ug/L	-0.1024 ppb	09:34:46
1	Na 589.592 Radial†	-509.3	-37.1	-14.570 ug/L	-14.570 ppb	09:33:04
1	Ni 231.604†	106.6	11.9	0.3729 ug/L	0.3729 ppb	09:34:46
1	P 214.914†	178.2	8.2	5.9153 ug/L	5.9153 ppb	09:34:46
1	Pb 220.353†	-49.3	10.0	1.5158 ug/L	1.5158 ppb	09:34:46
1	S 181.975 Axial†	32.2	7.5	13.097 ug/L	13.097 ppb	09:34:46
1	Sb 206.836†	37.0	10.0	4.2859 ug/L	4.2859 ppb	09:34:46
1	Se 196.026†	-19.7	-2.6	-2.0829 ug/L	-2.0829 ppb	09:34:46
1	Si 251.611†	534.3	3.6	0.1350 ug/L	0.1350 ppb	09:34:46
1	Sn 189.927†	13.5	10.3	2.2854 ug/L	2.2854 ppb	09:34:46
1	Sr 421.552†	33.4	-37.4	-0.3181 ug/L	-0.3181 ppb	09:33:04
1	Ti 334.940†	-1032.5	61.1	0.0967 ug/L	0.0967 ppb	09:34:26
1	Tl 190.801†	-15.2	10.0	3.8863 ug/L	3.8863 ppb	09:34:46
1	U 409.014†	-1810.2	243.0	7.1498 ug/L	7.1498 ppb	09:34:21
1	V 292.402†	-1436.0	5.8	0.0599 ug/L	0.0599 ppb	09:34:26
1	Zn 213.857†	618.9	6.3	0.0743 ug/L	0.0743 ppb	09:34:46
1	SiO2†	545.9	-12.9	-1.0272 ug/L	-1.0272 ppb	09:35:52
2	Sc 361.383	832068.6	832068.6	99.073 %		09:34:51
2	Sc Radial	4161.2	4161.2	103 %		09:33:29
2	Y 371.029	709818.4	709818.4	99.126 %		09:34:51
2	Y RADIAL	4535.5	4535.5	100.4 %		09:33:29
2	Ag 328.068†	228.6	-22.7	-0.1121 ug/L	-0.1121 ppb	09:34:56
2	Al 396.153Radial†	-80.3	1.8	1.9358 ug/L	1.9358 ppb	09:33:49
2	As 188.979†	-16.5	4.2	2.2203 ug/L	2.2203 ppb	09:35:16
2	B 249.677†	76.2	327.0	8.9898 ug/L	8.9898 ppb	09:35:16
2	Ba 233.527†	22.7	4.5	0.0428 ug/L	0.0428 ppb	09:35:16
2	Be 313.107†	-4269.0	-46.2	-0.0192 ug/L	-0.0192 ppb	09:34:56
2	Ca 317.933Radial†	17.6	-0.1	-0.2945 ug/L	-0.2945 ppb	09:33:49
2	Cd 226.502†	-170.3	-5.5	-0.0778 ug/L	-0.0778 ppb	09:35:16
2	Co 228.616†	-28.6	10.1	0.2635 ug/L	0.2635 ppb	09:35:16
2	Cr 267.716†	117.9	24.0	0.3141 ug/L	0.3141 ppb	09:35:16
2	Cu 324.752†	6494.4	202.4	0.6573 ug/L	0.6573 ppb	09:34:56
2	Fe 238.204 Radial†	8.7	-0.5	-6.7950 ug/L	-6.7950 ppb	09:33:49
2	K 766.490 Radial†	2824.4	-65.3	-13.026 ug/L	-13.026 ppb	09:33:29
2	Mg 279.077 IEC†	-2.1	-2.7	-118.02 ug/L	-118.02 ppb	09:33:49
2	Mn 257.610†	450.9	2.7	0.0077 ug/L	0.0077 ppb	09:35:16
2	Mo 202.031†	19.7	5.7	0.4995 ug/L	0.4995 ppb	09:35:16
2	Na 589.592 Radial†	-599.4	-120.1	-47.177 ug/L	-47.177 ppb	09:33:29
2	Ni 231.604†	87.0	-5.8	-0.1806 ug/L	-0.1806 ppb	09:35:16

2	P 214.914†	181.4	14.9	10.579 ug/L	10.579 ppb	09:35:16
2	Pb 220.353†	-58.3	0.0	0.0038 ug/L	0.0038 ppb	09:35:16
2	S 181.975 Axial†	26.5	2.4	4.1680 ug/L	4.1680 ppb	09:35:16
2	Sb 206.836†	30.6	4.3	1.8575 ug/L	1.8575 ppb	09:35:16
2	Se 196.026†	-13.8	3.1	2.4276 ug/L	2.4276 ppb	09:35:16
2	Si 251.611†	549.6	29.3	1.0849 ug/L	1.0849 ppb	09:35:16
2	Sn 189.927†	10.6	7.6	1.6930 ug/L	1.6930 ppb	09:35:16
2	Sr 421.552†	6.7	-63.6	-0.5414 ug/L	-0.5414 ppb	09:33:29
2	Ti 334.940†	-1186.9	-114.7	-0.1867 ug/L	-0.1867 ppb	09:34:56
2	Tl 190.801†	-18.6	6.3	2.4233 ug/L	2.4233 ppb	09:35:16
2	U 409.014†	-2097.9	-82.4	-2.4231 ug/L	-2.4231 ppb	09:34:51
2	V 292.402†	-1337.7	77.3	0.5975 ug/L	0.5975 ppb	09:34:56
2	Zn 213.857†	614.8	14.1	0.1686 ug/L	0.1686 ppb	09:35:16
2	SiO2†	568.2	20.1	1.5953 ug/L	1.5953 ppb	09:35:57
3	Sc 361.383	842673.4	842673.4	100.34 %		09:35:21
3	Sc Radial	4163.8	4163.8	103 %		09:33:54
3	Y 371.029	718038.8	718038.8	100.27 %		09:35:21
3	Y RADIAL	4507.2	4507.2	99.76 %		09:33:54
3	Ag 328.068†	297.0	42.6	0.2047 ug/L	0.2047 ppb	09:35:26
3	Al 396.153Radial†	-73.0	8.9	9.4651 ug/L	9.4651 ppb	09:34:14
3	As 188.979†	-19.1	1.8	0.9626 ug/L	0.9626 ppb	09:35:46
3	B 249.677†	90.9	340.7	9.3707 ug/L	9.3707 ppb	09:35:46
3	Ba 233.527†	30.1	11.5	0.1071 ug/L	0.1071 ppb	09:35:46
3	Be 313.107†	-4139.1	137.5	0.0565 ug/L	0.0565 ppb	09:35:26
3	Ca 317.933Radial†	25.1	7.2	14.531 ug/L	14.531 ppb	09:34:14
3	Cd 226.502†	-153.2	13.7	0.1966 ug/L	0.1966 ppb	09:35:46
3	Co 228.616†	-36.7	2.3	0.0605 ug/L	0.0605 ppb	09:35:46
3	Cr 267.716†	114.0	18.7	0.2399 ug/L	0.2399 ppb	09:35:46
3	Cu 324.752†	6509.3	134.8	0.4351 ug/L	0.4351 ppb	09:35:26
3	Fe 238.204 Radial†	6.9	-2.3	-28.904 ug/L	-28.904 ppb	09:34:14
3	K 766.490 Radial†	2842.3	-49.6	-9.8947 ug/L	-9.8947 ppb	09:33:54
3	Mg 279.077 IEC†	2.2	1.5	64.176 ug/L	64.176 ppb	09:34:14
3	Mn 257.610†	442.5	-11.4	-0.0205 ug/L	-0.0205 ppb	09:35:46
3	Mo 202.031†	13.6	-0.6	-0.0566 ug/L	-0.0566 ppb	09:35:46
3	Na 589.592 Radial†	-580.7	-101.7	-39.954 ug/L	-39.954 ppb	09:33:54
3	Ni 231.604†	86.9	-7.0	-0.2193 ug/L	-0.2193 ppb	09:35:46
3	P 214.914†	174.7	5.9	4.2229 ug/L	4.2229 ppb	09:35:46
3	Pb 220.353†	-45.4	13.5	2.0466 ug/L	2.0466 ppb	09:35:46
3	S 181.975 Axial†	26.0	1.5	2.6231 ug/L	2.6231 ppb	09:35:46
3	Sb 206.836†	40.6	13.9	5.9065 ug/L	5.9065 ppb	09:35:46
3	Se 196.026†	-21.2	-4.2	-3.4053 ug/L	-3.4053 ppb	09:35:46
3	Si 251.611†	524.4	-2.8	-0.1030 ug/L	-0.1030 ppb	09:35:46
3	Sn 189.927†	7.7	4.6	1.0298 ug/L	1.0298 ppb	09:35:46
3	Sr 421.552†	31.5	-39.5	-0.3369 ug/L	-0.3369 ppb	09:33:54
3	Ti 334.940†	-904.1	182.2	0.3098 ug/L	0.3098 ppb	09:35:26
3	Tl 190.801†	-26.8	-1.7	-0.6489 ug/L	-0.6489 ppb	09:35:46
3	U 409.014†	-2012.1	29.8	0.8801 ug/L	0.8801 ppb	09:35:21
3	V 292.402†	-1432.4	-0.1	0.0054 ug/L	0.0054 ppb	09:35:26
3	Zn 213.857†	615.7	7.2	0.0911 ug/L	0.0911 ppb	09:35:46
3	SiO2†	579.7	24.4	1.9536 ug/L	1.9536 ppb	09:36:02

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	841006.9	100.14 %	0.980			0.98%
Sc Radial	4150.1	103 %	0.5			0.52%
Y 371.029	717210.0	100.16 %	0.980			0.98%
Y RADIAL	4508.1	99.78 %	0.596			0.60%
Ag 328.068†	1.4	0.0012 ug/L	0.17660	0.0012 ppb	0.17660	>999.9%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	3.9	4.1251 ug/L	4.64950	4.1251 ppb	4.64950	112.71%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	0.3	0.1653 ug/L	2.54893	0.1653 ppb	2.54893	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	339.2	9.3261 ug/L	0.31636	9.3261 ppb	0.31636	3.39%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	5.7	0.0535 ug/L	0.04906	0.0535 ppb	0.04906	91.63%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	62.2	0.0254 ug/L	0.03963	0.0254 ppb	0.03963	155.93%
QC value within limits for Be 313.107 Recovery = Not calculated						

Ca 317.933Radial†	2.2	4.4779 ug/L	8.71015	4.4779 ppb	8.71015	194.52%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	6.5	0.0934 ug/L	0.14930	0.0934 ppb	0.14930	159.79%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	0.9	0.0248 ug/L	0.25834	0.0248 ppb	0.25834	>999.9%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	25.4	0.3279 ug/L	0.09577	0.3279 ppb	0.09577	29.20%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	124.2	0.4009 ug/L	0.27505	0.4009 ppb	0.27505	68.60%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	-1.3	-16.363 ug/L	11.3500	-16.363 ppb	11.3500	69.36%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	-65.5	-13.056 ug/L	3.1764	-13.056 ppb	3.1764	24.33%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	0.1	2.3848 ug/L	104.28697	2.3848 ppb	104.28697	>999.9%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	5.2	0.0051 ug/L	0.02439	0.0051 ppb	0.02439	479.23%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	1.3	0.1135 ug/L	0.33504	0.1135 ppb	0.33504	295.20%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	-86.3	-33.900 ug/L	17.1255	-33.900 ppb	17.1255	50.52%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	-0.3	-0.0090 ug/L	0.33128	-0.0090 ppb	0.33128	>999.9%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	9.7	6.9058 ug/L	3.29189	6.9058 ppb	3.29189	47.67%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	7.9	1.1887 ug/L	1.05994	1.1887 ppb	1.05994	89.17%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	3.8	6.6295 ug/L	5.65438	6.6295 ppb	5.65438	85.29%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	9.4	4.0166 ug/L	2.03790	4.0166 ppb	2.03790	50.74%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-1.2	-1.0202 ug/L	3.05824	-1.0202 ppb	3.05824	299.77%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	10.0	0.3723 ug/L	0.62850	0.3723 ppb	0.62850	168.82%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	7.5	1.6694 ug/L	0.62814	1.6694 ppb	0.62814	37.63%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	-46.8	-0.3988 ug/L	0.12388	-0.3988 ppb	0.12388	31.06%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	42.9	0.0732 ug/L	0.24910	0.0732 ppb	0.24910	340.08%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	4.9	1.8869 ug/L	2.31468	1.8869 ppb	2.31468	122.67%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	63.5	1.8689 ug/L	4.86248	1.8689 ppb	4.86248	260.17%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	27.7	0.2210 ug/L	0.32723	0.2210 ppb	0.32723	148.10%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	9.2	0.1113 ug/L	0.05033	0.1113 ppb	0.05033	45.22%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	10.6	0.8405 ug/L	1.62741	0.8405 ppb	1.62741	193.61%
QC value within limits for SiO2 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 4

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/25/2010 10:14:45

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	4136.6	4136.6	103 %		10:16:37
1	Y RADIAL	4464.2	4464.2	98.81 %		10:16:37
1	Al 396.153Radial†	4619.7	4584.5	4862.0 ug/L	4862.0 ppb	10:16:37
1	Ca 317.933Radial†	2500.1	2420.8	4918.4 ug/L	4918.4 ppb	10:16:57
1	Fe 238.204 Radial†	405.4	386.4	4846.3 ug/L	4846.3 ppb	10:16:57
1	K 766.490 Radial†	27144.4	23666.6	4718.5 ug/L	4718.5 ppb	10:16:37
1	Mg 279.077 IEC†	121.8	118.1	5159.8 ug/L	5159.8 ppb	10:16:57
1	Na 589.592 Radial†	24583.4	24433.4	9595.4 ug/L	9595.4 ppb	10:16:37
1	Sr 421.552†	57229.5	55737.4	474.60 ug/L	474.60 ppb	10:16:37
1	Sc 361.383	850739.0	850739.0	101.30 %		10:17:54
1	Y 371.029	717689.5	717689.5	100.23 %		10:17:54
1	Ag 328.068†	100375.4	98837.9	501.30 ug/L	501.30 ppb	10:18:00
1	As 188.979†	910.1	919.2	496.98 ug/L	496.98 ppb	10:18:20
1	B 249.677†	17771.6	17794.4	486.90 ug/L	486.90 ppb	10:18:00
1	Ba 233.527†	53106.8	52408.9	492.54 ug/L	492.54 ppb	10:18:00
1	Be 313.107†	1229321.6	1217857.5	495.56 ug/L	495.56 ppb	10:17:54
1	Cd 226.502†	35341.3	35055.6	494.33 ug/L	494.33 ppb	10:18:00
1	Co 228.616†	19507.9	19297.2	502.33 ug/L	502.33 ppb	10:18:00
1	Cr 267.716†	38591.8	38003.1	495.78 ug/L	495.78 ppb	10:18:00
1	Cu 324.752†	158722.6	150339.3	487.46 ug/L	487.46 ppb	10:18:00
1	Mn 257.610†	374711.9	369465.7	485.02 ug/L	485.02 ppb	10:18:00
1	Mo 202.031†	5708.8	5621.6	494.67 ug/L	494.67 ppb	10:18:20
1	Ni 231.604†	16408.3	16104.8	502.57 ug/L	502.57 ppb	10:18:00
1	P 214.914†	3607.1	3392.8	2343.8 ug/L	2343.8 ppb	10:18:20
1	Pb 220.353†	3234.8	3252.3	491.73 ug/L	491.73 ppb	10:18:20
1	S 181.975 Axial†	596.5	564.5	988.61 ug/L	988.61 ppb	10:18:20
1	Sb 206.836†	1208.4	1166.3	513.37 ug/L	513.37 ppb	10:18:20
1	Se 196.026†	611.4	620.5	512.19 ug/L	512.19 ppb	10:18:20
1	Si 251.611†	67576.5	66186.5	2458.2 ug/L	2458.2 ppb	10:18:00
1	Sn 189.927†	2275.6	2243.4	497.46 ug/L	497.46 ppb	10:18:20
1	Ti 334.940†	286494.5	283912.6	488.31 ug/L	488.31 ppb	10:18:00
1	Tl 190.801†	1254.5	1263.6	491.79 ug/L	491.79 ppb	10:18:20
1	U 409.014†	15214.4	17054.9	500.17 ug/L	500.17 ppb	10:18:00
1	V 292.402†	63223.8	63842.5	498.80 ug/L	498.80 ppb	10:18:00
1	Zn 213.857†	42793.2	41639.3	490.08 ug/L	490.08 ppb	10:18:00
1	SiO2†	68236.1	66809.8	5324.3 ug/L	5324.3 ppb	10:19:27
2	Sc Radial	4223.9	4223.9	105 %		10:17:02
2	Y RADIAL	4554.5	4554.5	100.8 %		10:17:02
2	Al 396.153Radial†	4673.5	4542.9	4817.4 ug/L	4817.4 ppb	10:17:02
2	Ca 317.933Radial†	2502.8	2373.0	4821.4 ug/L	4821.4 ppb	10:17:22
2	Fe 238.204 Radial†	413.7	386.1	4842.9 ug/L	4842.9 ppb	10:17:22
2	K 766.490 Radial†	27285.8	23255.0	4636.4 ug/L	4636.4 ppb	10:17:02
2	Mg 279.077 IEC†	117.9	111.9	4887.7 ug/L	4887.7 ppb	10:17:22
2	Na 589.592 Radial†	24639.1	23991.5	9421.8 ug/L	9421.8 ppb	10:17:02
2	Sr 421.552†	57601.5	54939.9	467.81 ug/L	467.81 ppb	10:17:02
2	Sc 361.383	846623.9	846623.9	100.81 %		10:18:25
2	Y 371.029	713264.6	713264.6	99.608 %		10:18:25
2	Ag 328.068†	99089.8	98044.2	497.29 ug/L	497.29 ppb	10:18:30
2	As 188.979†	911.3	924.8	499.91 ug/L	499.91 ppb	10:18:50
2	B 249.677†	17483.8	17594.2	481.41 ug/L	481.41 ppb	10:18:30
2	Ba 233.527†	52588.9	52150.0	490.10 ug/L	490.10 ppb	10:18:30
2	Be 313.107†	1219751.5	1214262.7	494.09 ug/L	494.09 ppb	10:18:25
2	Cd 226.502†	35026.1	34912.5	492.31 ug/L	492.31 ppb	10:18:30
2	Co 228.616†	19301.9	19186.5	499.47 ug/L	499.47 ppb	10:18:30
2	Cr 267.716†	38021.9	37622.9	490.83 ug/L	490.83 ppb	10:18:30
2	Cu 324.752†	156762.0	149156.0	483.63 ug/L	483.63 ppb	10:18:30
2	Mn 257.610†	370891.2	367473.6	482.42 ug/L	482.42 ppb	10:18:30
2	Mo 202.031†	5744.6	5684.5	500.20 ug/L	500.20 ppb	10:18:50
2	Ni 231.604†	16227.6	16004.2	499.43 ug/L	499.43 ppb	10:18:30

2	P 214.914†	3622.9	3425.8	2368.3 ug/L	2368.3 ppb	10:18:50
2	Pb 220.353†	3255.0	3287.8	497.09 ug/L	497.09 ppb	10:18:50
2	S 181.975 Axial†	597.2	568.0	994.73 ug/L	994.73 ppb	10:18:50
2	Sb 206.836†	1210.0	1173.7	516.68 ug/L	516.68 ppb	10:18:50
2	Se 196.026†	602.2	614.3	507.26 ug/L	507.26 ppb	10:18:50
2	Si 251.611†	66865.9	65805.9	2444.0 ug/L	2444.0 ppb	10:18:30
2	Sn 189.927†	2277.0	2255.7	500.18 ug/L	500.18 ppb	10:18:50
2	Ti 334.940†	282951.7	281772.9	484.65 ug/L	484.65 ppb	10:18:30
2	Tl 190.801†	1260.3	1275.3	496.30 ug/L	496.30 ppb	10:18:50
2	U 409.014†	14860.7	16777.1	492.01 ug/L	492.01 ppb	10:18:30
2	V 292.402†	62453.2	63381.4	495.30 ug/L	495.30 ppb	10:18:30
2	Zn 213.857†	42416.3	41470.8	488.11 ug/L	488.11 ppb	10:18:30
2	SiO2†	67761.6	66666.5	5312.7 ug/L	5312.7 ppb	10:19:32
3	Sc Radial	4159.2	4159.2	103 %		10:17:27
3	Y RADIAL	4472.8	4472.8	99.00 %		10:17:27
3	Al 396.153Radial†	4662.4	4601.5	4880.0 ug/L	4880.0 ppb	10:17:27
3	Ca 317.933Radial†	2517.7	2424.6	4926.2 ug/L	4926.2 ppb	10:17:47
3	Fe 238.204 Radial†	410.2	388.8	4877.1 ug/L	4877.1 ppb	10:17:47
3	K 766.490 Radial†	27098.7	23478.8	4681.0 ug/L	4681.0 ppb	10:17:27
3	Mg 279.077 IEC†	120.0	115.7	5053.7 ug/L	5053.7 ppb	10:17:47
3	Na 589.592 Radial†	24561.9	24282.6	9536.1 ug/L	9536.1 ppb	10:17:27
3	Sr 421.552†	57510.1	55706.9	474.34 ug/L	474.34 ppb	10:17:27
3	Sc 361.383	847964.8	847964.8	100.97 %		10:18:56
3	Y 371.029	713785.6	713785.6	99.680 %		10:18:56
3	Ag 328.068†	99561.6	98356.1	498.87 ug/L	498.87 ppb	10:19:01
3	As 188.979†	896.3	908.5	491.21 ug/L	491.21 ppb	10:19:21
3	B 249.677†	17630.8	17712.4	484.65 ug/L	484.65 ppb	10:19:01
3	Ba 233.527†	52703.6	52181.1	490.40 ug/L	490.40 ppb	10:19:01
3	Be 313.107†	1222926.2	1215493.7	494.60 ug/L	494.60 ppb	10:18:56
3	Cd 226.502†	35064.2	34895.2	492.07 ug/L	492.07 ppb	10:19:01
3	Co 228.616†	19365.0	19218.7	500.29 ug/L	500.29 ppb	10:19:01
3	Cr 267.716†	38190.0	37729.8	492.22 ug/L	492.22 ppb	10:19:01
3	Cu 324.752†	157737.8	149876.5	485.96 ug/L	485.96 ppb	10:19:01
3	Mn 257.610†	372102.0	368091.0	483.23 ug/L	483.23 ppb	10:19:01
3	Mo 202.031†	5708.3	5639.5	496.25 ug/L	496.25 ppb	10:19:21
3	Ni 231.604†	16212.7	15964.0	498.18 ug/L	498.18 ppb	10:19:01
3	P 214.914†	3576.7	3374.3	2330.8 ug/L	2330.8 ppb	10:19:21
3	Pb 220.353†	3225.3	3253.3	491.89 ug/L	491.89 ppb	10:19:21
3	S 181.975 Axial†	583.7	553.7	969.63 ug/L	969.63 ppb	10:19:21
3	Sb 206.836†	1198.7	1160.6	511.01 ug/L	511.01 ppb	10:19:21
3	Se 196.026†	604.5	615.7	508.45 ug/L	508.45 ppb	10:19:21
3	Si 251.611†	67124.8	65957.4	2449.7 ug/L	2449.7 ppb	10:19:01
3	Sn 189.927†	2266.4	2241.6	497.07 ug/L	497.07 ppb	10:19:21
3	Ti 334.940†	284395.4	282759.0	486.34 ug/L	486.34 ppb	10:19:01
3	Tl 190.801†	1253.7	1266.8	493.02 ug/L	493.02 ppb	10:19:21
3	U 409.014†	15190.0	17079.9	500.91 ug/L	500.91 ppb	10:19:01
3	V 292.402†	62672.9	63501.0	496.18 ug/L	496.18 ppb	10:19:01
3	Zn 213.857†	42413.8	41401.7	487.29 ug/L	487.29 ppb	10:19:01
3	SiO2†	67910.7	66707.9	5316.1 ug/L	5316.1 ppb	10:19:37

Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	848442.6	101.02 %		0.250			0.25%
Sc Radial	4173.2	103 %		1.1			1.09%
Y 371.029	714913.3	99.838 %		0.3377			0.34%
Y RADIAL	4497.2	99.54 %		1.103			1.11%
Ag 328.068†	98412.7	499.15 ug/L		2.020	499.15 ppb	2.020	0.40%
QC value within limits for Ag 328.068 Recovery = 99.83%							
Al 396.153Radial†	4576.3	4853.1 ug/L		32.26	4853.1 ppb	32.26	0.66%
QC value within limits for Al 396.153Radial Recovery = 97.06%							
As 188.979†	917.5	496.03 ug/L		4.424	496.03 ppb	4.424	0.89%
QC value within limits for As 188.979 Recovery = 99.21%							
B 249.677†	17700.3	484.32 ug/L		2.761	484.32 ppb	2.761	0.57%
QC value within limits for B 249.677 Recovery = 96.86%							
Ba 233.527†	52246.7	491.01 ug/L		1.329	491.01 ppb	1.329	0.27%
QC value within limits for Ba 233.527 Recovery = 98.20%							
Be 313.107†	1215871.3	494.75 ug/L		0.746	494.75 ppb	0.746	0.15%
QC value within limits for Be 313.107 Recovery = 98.95%							
Ca 317.933Radial†	2406.1	4888.7 ug/L		58.37	4888.7 ppb	58.37	1.19%

QC value within limits for Ca 317.933 Radial Recovery = 97.77%							
Cd	226.502†	34954.4	492.90 ug/L	1.244	492.90 ppb	1.244	0.25%
QC value within limits for Cd 226.502 Recovery = 98.58%							
Co	228.616†	19234.1	500.70 ug/L	1.472	500.70 ppb	1.472	0.29%
QC value within limits for Co 228.616 Recovery = 100.14%							
Cr	267.716†	37785.3	492.94 ug/L	2.554	492.94 ppb	2.554	0.52%
QC value within limits for Cr 267.716 Recovery = 98.59%							
Cu	324.752†	149790.6	485.68 ug/L	1.931	485.68 ppb	1.931	0.40%
QC value within limits for Cu 324.752 Recovery = 97.14%							
Fe	238.204 Radial†	387.1	4855.4 ug/L	18.86	4855.4 ppb	18.86	0.39%
QC value within limits for Fe 238.204 Radial Recovery = 97.11%							
K	766.490 Radial†	23466.8	4678.6 ug/L	41.10	4678.6 ppb	41.10	0.88%
QC value within limits for K 766.490 Radial Recovery = 93.57%							
Mg	279.077 IEC†	115.2	5033.8 ug/L	137.18	5033.8 ppb	137.18	2.73%
QC value within limits for Mg 279.077 IEC Recovery = 100.68%							
Mn	257.610†	368343.5	483.56 ug/L	1.332	483.56 ppb	1.332	0.28%
QC value within limits for Mn 257.610 Recovery = 96.71%							
Mo	202.031†	5648.6	497.04 ug/L	2.849	497.04 ppb	2.849	0.57%
QC value within limits for Mo 202.031 Recovery = 99.41%							
Na	589.592 Radial†	24235.8	9517.8 ug/L	88.23	9517.8 ppb	88.23	0.93%
QC value within limits for Na 589.592 Radial Recovery = 95.18%							
Ni	231.604†	16024.3	500.06 ug/L	2.263	500.06 ppb	2.263	0.45%
QC value within limits for Ni 231.604 Recovery = 100.01%							
P	214.914†	3397.6	2347.6 ug/L	19.03	2347.6 ppb	19.03	0.81%
QC value within limits for P 214.914 Recovery = 93.91%							
Pb	220.353†	3264.4	493.57 ug/L	3.050	493.57 ppb	3.050	0.62%
QC value within limits for Pb 220.353 Recovery = 98.71%							
S	181.975 Axial†	562.1	984.32 ug/L	13.089	984.32 ppb	13.089	1.33%
QC value within limits for S 181.975 Axial Recovery = 98.43%							
Sb	206.836†	1166.9	513.69 ug/L	2.851	513.69 ppb	2.851	0.56%
QC value within limits for Sb 206.836 Recovery = 102.74%							
Se	196.026†	616.8	509.30 ug/L	2.573	509.30 ppb	2.573	0.51%
QC value within limits for Se 196.026 Recovery = 101.86%							
Si	251.611†	65983.3	2450.7 ug/L	7.17	2450.7 ppb	7.17	0.29%
QC value within limits for Si 251.611 Recovery = 98.03%							
Sn	189.927†	2246.9	498.23 ug/L	1.692	498.23 ppb	1.692	0.34%
QC value within limits for Sn 189.927 Recovery = 99.65%							
Sr	421.552†	55461.4	472.25 ug/L	3.848	472.25 ppb	3.848	0.81%
QC value within limits for Sr 421.552 Recovery = 94.45%							
Ti	334.940†	282814.8	486.43 ug/L	1.835	486.43 ppb	1.835	0.38%
QC value within limits for Ti 334.940 Recovery = 97.29%							
Tl	190.801†	1268.5	493.70 ug/L	2.332	493.70 ppb	2.332	0.47%
QC value within limits for Tl 190.801 Recovery = 98.74%							
U	409.014†	16970.7	497.70 ug/L	4.941	497.70 ppb	4.941	0.99%
QC value within limits for U 409.014 Recovery = 99.54%							
V	292.402†	63575.0	496.76 ug/L	1.816	496.76 ppb	1.816	0.37%
QC value within limits for V 292.402 Recovery = 99.35%							
Zn	213.857†	41503.9	488.49 ug/L	1.438	488.49 ppb	1.438	0.29%
QC value within limits for Zn 213.857 Recovery = 97.70%							
SiO2†		66728.1	5317.7 ug/L	5.96	5317.7 ppb	5.96	0.11%
QC value within limits for SiO2 Recovery = 99.44%							

All analyte(s) passed QC.

Sequence No.: 5

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/25/2010 10:21:46

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4061.4	4061.4	101 %		10:23:59
1	Y RADIAL	4484.6	4484.6	99.26 %		10:23:39
1	Al 396.153Radial†	-67.2	12.9	13.767 ug/L	13.767 ppb	10:23:59
1	Ca 317.933Radial†	19.8	2.5	5.0751 ug/L	5.0751 ppb	10:23:59
1	Fe 238.204 Radial†	6.2	-2.8	-35.479 ug/L	-35.479 ppb	10:23:59
1	K 766.490 Radial†	2929.1	106.0	21.175 ug/L	21.175 ppb	10:23:39
1	Mg 279.077 IEC†	1.5	0.8	35.686 ug/L	35.686 ppb	10:23:59
1	Na 589.592 Radial†	-583.5	-118.7	-46.602 ug/L	-46.602 ppb	10:23:39
1	Sr 421.552†	41.2	-29.2	-0.2484 ug/L	-0.2484 ppb	10:23:39
1	Sc 361.383	839397.5	839397.5	99.945 %		10:24:56
1	Y 371.029	714711.2	714711.2	99.810 %		10:24:56
1	Ag 328.068†	282.1	28.8	0.1354 ug/L	0.1354 ppb	10:25:01
1	As 188.979†	-20.8	-0.0	-0.0084 ug/L	-0.0084 ppb	10:25:21
1	B 249.677†	-115.9	134.2	3.6934 ug/L	3.6934 ppb	10:25:21
1	Ba 233.527†	8.1	-10.4	-0.0992 ug/L	-0.0992 ppb	10:25:21
1	Be 313.107†	-4206.0	54.5	0.0221 ug/L	0.0221 ppb	10:25:01
1	Cd 226.502†	-167.5	-1.2	-0.0130 ug/L	-0.0130 ppb	10:25:21
1	Co 228.616†	-33.1	5.8	0.1502 ug/L	0.1502 ppb	10:25:21
1	Cr 267.716†	129.1	34.2	0.4421 ug/L	0.4421 ppb	10:25:21
1	Cu 324.752†	6398.0	48.8	0.1574 ug/L	0.1574 ppb	10:25:01
1	Mn 257.610†	417.1	-35.1	-0.0510 ug/L	-0.0510 ppb	10:25:21
1	Mo 202.031†	13.1	-1.1	-0.0972 ug/L	-0.0972 ppb	10:25:21
1	Ni 231.604†	99.6	6.1	0.1895 ug/L	0.1895 ppb	10:25:21
1	P 214.914†	172.9	4.8	3.4642 ug/L	3.4642 ppb	10:25:21
1	Pb 220.353†	-47.6	11.2	1.6939 ug/L	1.6939 ppb	10:25:21
1	S 181.975 Axial†	29.1	4.7	8.2967 ug/L	8.2967 ppb	10:25:21
1	Sb 206.836†	32.0	5.4	2.3278 ug/L	2.3278 ppb	10:25:21
1	Se 196.026†	-16.3	0.7	0.4352 ug/L	0.4352 ppb	10:25:21
1	Si 251.611†	561.7	36.5	1.3608 ug/L	1.3608 ppb	10:25:21
1	Sn 189.927†	10.6	7.6	1.6752 ug/L	1.6752 ppb	10:25:21
1	Ti 334.940†	-1077.4	5.4	0.0077 ug/L	0.0077 ppb	10:25:01
1	Tl 190.801†	-20.5	4.6	1.7654 ug/L	1.7654 ppb	10:25:21
1	U 409.014†	-2102.7	-68.7	-2.0182 ug/L	-2.0182 ppb	10:24:56
1	V 292.402†	-1447.3	-20.6	-0.1581 ug/L	-0.1581 ppb	10:25:01
1	Zn 213.857†	687.5	81.4	0.9713 ug/L	0.9713 ppb	10:25:21
1	SiO2†	634.7	81.7	6.5266 ug/L	6.5266 ppb	10:26:27
2	Sc Radial	4087.7	4087.7	101 %		10:24:24
2	Y RADIAL	4528.3	4528.3	100.2 %		10:24:04
2	Al 396.153Radial†	-81.3	-0.5	-0.6047 ug/L	-0.6047 ppb	10:24:24
2	Ca 317.933Radial†	23.8	6.3	12.830 ug/L	12.830 ppb	10:24:24
2	Fe 238.204 Radial†	6.9	-2.2	-27.087 ug/L	-27.087 ppb	10:24:24
2	K 766.490 Radial†	2888.8	47.5	9.4818 ug/L	9.4818 ppb	10:24:04
2	Mg 279.077 IEC†	-0.4	-1.1	-47.683 ug/L	-47.683 ppb	10:24:24
2	Na 589.592 Radial†	-528.8	-60.9	-23.928 ug/L	-23.928 ppb	10:24:04
2	Sr 421.552†	7.0	-63.1	-0.5378 ug/L	-0.5378 ppb	10:24:04
2	Sc 361.383	846621.1	846621.1	100.81 %		10:25:26
2	Y 371.029	721085.2	721085.2	100.70 %		10:25:26
2	Ag 328.068†	259.6	4.1	0.0124 ug/L	0.0124 ppb	10:25:31
2	As 188.979†	-17.8	3.2	1.7130 ug/L	1.7130 ppb	10:25:51
2	B 249.677†	-96.9	154.1	4.2387 ug/L	4.2387 ppb	10:25:51
2	Ba 233.527†	16.8	-1.9	-0.0175 ug/L	-0.0175 ppb	10:25:51
2	Be 313.107†	-4317.8	-20.6	-0.0087 ug/L	-0.0087 ppb	10:25:31
2	Cd 226.502†	-185.3	-17.5	-0.2430 ug/L	-0.2430 ppb	10:25:51
2	Co 228.616†	-36.5	2.7	0.0730 ug/L	0.0730 ppb	10:25:51
2	Cr 267.716†	111.6	15.8	0.2026 ug/L	0.2026 ppb	10:25:51
2	Cu 324.752†	6440.9	36.7	0.1168 ug/L	0.1168 ppb	10:25:31
2	Mn 257.610†	438.9	-17.1	-0.0231 ug/L	-0.0231 ppb	10:25:51
2	Mo 202.031†	21.3	7.0	0.6104 ug/L	0.6104 ppb	10:25:51
2	Ni 231.604†	102.9	8.4	0.2635 ug/L	0.2635 ppb	10:25:51

2	P 214.914†	171.9	2.3	1.6655 ug/L	1.6655 ppb	10:25:51
2	Pb 220.353†	-62.7	-3.4	-0.5007 ug/L	-0.5007 ppb	10:25:51
2	S 181.975 Axial†	29.9	5.3	9.2173 ug/L	9.2173 ppb	10:25:51
2	Sb 206.836†	31.1	4.2	1.8143 ug/L	1.8143 ppb	10:25:51
2	Se 196.026†	-25.2	-8.1	-6.5155 ug/L	-6.5155 ppb	10:25:51
2	Si 251.611†	546.6	16.8	0.6184 ug/L	0.6184 ppb	10:25:51
2	Sn 189.927†	10.9	7.7	1.7154 ug/L	1.7154 ppb	10:25:51
2	Ti 334.940†	-1174.5	-81.8	-0.1359 ug/L	-0.1359 ppb	10:25:31
2	Tl 190.801†	-18.7	6.5	2.5070 ug/L	2.5070 ppb	10:25:51
2	U 409.014†	-2001.1	50.1	1.4771 ug/L	1.4771 ppb	10:25:26
2	V 292.402†	-1396.9	41.8	0.3365 ug/L	0.3365 ppb	10:25:31
2	Zn 213.857†	685.1	73.2	0.8713 ug/L	0.8713 ppb	10:25:51
2	SiO2†	564.5	6.6	0.5096 ug/L	0.5096 ppb	10:26:32
3	Sc Radial	4076.9	4076.9	101 %		10:24:49
3	Y RADIAL	4576.6	4576.6	101.3 %		10:24:29
3	Al 396.153Radial†	-83.0	-2.5	-2.6610 ug/L	-2.6610 ppb	10:24:49
3	Ca 317.933Radial†	21.5	4.1	8.2519 ug/L	8.2519 ppb	10:24:49
3	Fe 238.204 Radial†	8.4	-0.7	-8.8487 ug/L	-8.8487 ppb	10:24:49
3	K 766.490 Radial†	2932.7	98.5	19.674 ug/L	19.674 ppb	10:24:29
3	Mg 279.077 IEC†	1.0	0.3	13.528 ug/L	13.528 ppb	10:24:49
3	Na 589.592 Radial†	-537.5	-70.9	-27.860 ug/L	-27.860 ppb	10:24:29
3	Sr 421.552†	64.5	-6.2	-0.0529 ug/L	-0.0529 ppb	10:24:29
3	Sc 361.383	852757.7	852757.7	101.54 %		10:25:56
3	Y 371.029	726356.1	726356.1	101.44 %		10:25:56
3	Ag 328.068†	243.1	-14.0	-0.0718 ug/L	-0.0718 ppb	10:26:01
3	As 188.979†	-21.0	0.2	0.0824 ug/L	0.0824 ppb	10:26:21
3	B 249.677†	-139.4	112.8	3.1029 ug/L	3.1029 ppb	10:26:21
3	Ba 233.527†	23.2	4.3	0.0412 ug/L	0.0412 ppb	10:26:21
3	Be 313.107†	-4284.0	43.5	0.0177 ug/L	0.0177 ppb	10:26:01
3	Cd 226.502†	-170.5	-1.6	-0.0209 ug/L	-0.0209 ppb	10:26:21
3	Co 228.616†	-33.7	5.7	0.1495 ug/L	0.1495 ppb	10:26:21
3	Cr 267.716†	115.7	19.0	0.2467 ug/L	0.2467 ppb	10:26:21
3	Cu 324.752†	6502.2	51.0	0.1648 ug/L	0.1648 ppb	10:26:01
3	Mn 257.610†	490.7	30.8	0.0390 ug/L	0.0390 ppb	10:26:21
3	Mo 202.031†	14.5	0.1	0.0050 ug/L	0.0050 ppb	10:26:21
3	Ni 231.604†	102.2	7.1	0.2205 ug/L	0.2205 ppb	10:26:21
3	P 214.914†	184.1	13.1	9.3869 ug/L	9.3869 ppb	10:26:21
3	Pb 220.353†	-40.4	19.1	2.8729 ug/L	2.8729 ppb	10:26:21
3	S 181.975 Axial†	27.7	2.9	5.0771 ug/L	5.0771 ppb	10:26:21
3	Sb 206.836†	27.3	0.2	0.1066 ug/L	0.1066 ppb	10:26:21
3	Se 196.026†	-22.3	-5.0	-4.0187 ug/L	-4.0187 ppb	10:26:21
3	Si 251.611†	555.3	21.4	0.7976 ug/L	0.7976 ppb	10:26:21
3	Sn 189.927†	8.0	4.8	1.0704 ug/L	1.0704 ppb	10:26:21
3	Ti 334.940†	-1083.5	16.2	0.0276 ug/L	0.0276 ppb	10:26:01
3	Tl 190.801†	-21.8	3.6	1.4039 ug/L	1.4039 ppb	10:26:21
3	U 409.014†	-2052.4	13.8	0.4072 ug/L	0.4072 ppb	10:25:56
3	V 292.402†	-1389.0	59.5	0.4612 ug/L	0.4612 ppb	10:26:01
3	Zn 213.857†	717.0	99.7	1.1846 ug/L	1.1846 ppb	10:26:21
3	SiO2†	586.5	24.3	1.9377 ug/L	1.9377 ppb	10:26:37

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	846258.8	100.76 %		0.796			0.79%
Sc Radial	4075.3	101 %		0.3			0.32%
Y 371.029	720717.5	100.65 %		0.814			0.81%
Y RADIAL	4529.8	100.3 %		1.02			1.02%
Ag 328.068†	6.3	0.0253 ug/L		0.10419	0.0253 ppb	0.10419	411.05%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	3.3	3.5003 ug/L		8.95013	3.5003 ppb	8.95013	255.69%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	1.1	0.5957 ug/L		0.96868	0.5957 ppb	0.96868	162.62%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	133.7	3.6783 ug/L		0.56804	3.6783 ppb	0.56804	15.44%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	-2.7	-0.0252 ug/L		0.07051	-0.0252 ppb	0.07051	280.14%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	25.8	0.0104 ug/L		0.01667	0.0104 ppb	0.01667	160.51%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	4.3	8.7189 ug/L		3.89845	8.7189 ppb	3.89845	44.71%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated					
Cd 226.502†	-6.7	-0.0923 ug/L	0.13058	-0.0923 ppb	0.13058 141.47%
QC value within limits for Cd 226.502 Recovery = Not calculated					
Co 228.616†	4.7	0.1242 ug/L	0.04435	0.1242 ppb	0.04435 35.69%
QC value within limits for Co 228.616 Recovery = Not calculated					
Cr 267.716†	23.0	0.2971 ug/L	0.12749	0.2971 ppb	0.12749 42.91%
QC value within limits for Cr 267.716 Recovery = Not calculated					
Cu 324.752†	45.5	0.1463 ug/L	0.02586	0.1463 ppb	0.02586 17.68%
QC value within limits for Cu 324.752 Recovery = Not calculated					
Fe 238.204 Radial†	-1.9	-23.805 ug/L	13.6151	-23.805 ppb	13.6151 57.19%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated					
K 766.490 Radial†	84.0	16.777 ug/L	6.3621	16.777 ppb	6.3621 37.92%
QC value within limits for K 766.490 Radial Recovery = Not calculated					
Mg 279.077 IEC†	0.0	0.5104 ug/L	43.18168	0.5104 ppb	43.18168 >999.9%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated					
Mn 257.610†	-7.1	-0.0117 ug/L	0.04609	-0.0117 ppb	0.04609 393.87%
QC value within limits for Mn 257.610 Recovery = Not calculated					
Mo 202.031†	2.0	0.1727 ug/L	0.38245	0.1727 ppb	0.38245 221.40%
QC value within limits for Mo 202.031 Recovery = Not calculated					
Na 589.592 Radial†	-83.5	-32.797 ug/L	12.1164	-32.797 ppb	12.1164 36.94%
QC value within limits for Na 589.592 Radial Recovery = Not calculated					
Ni 231.604†	7.2	0.2245 ug/L	0.03714	0.2245 ppb	0.03714 16.54%
QC value within limits for Ni 231.604 Recovery = Not calculated					
P 214.914†	6.7	4.8389 ug/L	4.04010	4.8389 ppb	4.04010 83.49%
QC value within limits for P 214.914 Recovery = Not calculated					
Pb 220.353†	9.0	1.3554 ug/L	1.71207	1.3554 ppb	1.71207 126.32%
QC value within limits for Pb 220.353 Recovery = Not calculated					
S 181.975 Axial†	4.3	7.5304 ug/L	2.17387	7.5304 ppb	2.17387 28.87%
QC value within limits for S 181.975 Axial Recovery = Not calculated					
Sb 206.836†	3.3	1.4162 ug/L	1.16285	1.4162 ppb	1.16285 82.11%
QC value within limits for Sb 206.836 Recovery = Not calculated					
Se 196.026†	-4.1	-3.3663 ug/L	3.52098	-3.3663 ppb	3.52098 104.59%
QC value within limits for Se 196.026 Recovery = Not calculated					
Si 251.611†	24.9	0.9256 ug/L	0.38740	0.9256 ppb	0.38740 41.85%
QC value within limits for Si 251.611 Recovery = Not calculated					
Sn 189.927†	6.7	1.4870 ug/L	0.36133	1.4870 ppb	0.36133 24.30%
QC value within limits for Sn 189.927 Recovery = Not calculated					
Sr 421.552†	-32.8	-0.2797 ug/L	0.24394	-0.2797 ppb	0.24394 87.22%
QC value within limits for Sr 421.552 Recovery = Not calculated					
Ti 334.940†	-20.1	-0.0335 ug/L	0.08921	-0.0335 ppb	0.08921 266.31%
QC value within limits for Ti 334.940 Recovery = Not calculated					
Tl 190.801†	4.9	1.8921 ug/L	0.56236	1.8921 ppb	0.56236 29.72%
QC value within limits for Tl 190.801 Recovery = Not calculated					
U 409.014†	-1.6	-0.0446 ug/L	1.79095	-0.0446 ppb	1.79095 >999.9%
QC value within limits for U 409.014 Recovery = Not calculated					
V 292.402†	26.9	0.2132 ug/L	0.32755	0.2132 ppb	0.32755 153.63%
QC value within limits for V 292.402 Recovery = Not calculated					
Zn 213.857†	84.8	1.0091 ug/L	0.16002	1.0091 ppb	0.16002 15.86%
QC value within limits for Zn 213.857 Recovery = Not calculated					
SiO2†	37.5	2.9913 ug/L	3.14380	2.9913 ppb	3.14380 105.10%
QC value within limits for SiO2 Recovery = Not calculated					

All analyte(s) passed QC.

Sequence No.: 14

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/25/2010 11:24:07

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	3990.2	3990.2	98.9 %		11:26:19
1	Y RADIAL	4440.2	4440.2	98.28 %		11:25:59
1	Al 396.153Radial†	4642.7	4773.2	5062.7 ug/L	5062.7 ppb	11:25:59
1	Ca 317.933Radial†	2491.4	2501.5	5082.3 ug/L	5082.3 ppb	11:26:19
1	Fe 238.204 Radial†	407.9	403.3	5058.6 ug/L	5058.6 ppb	11:26:19
1	K 766.490 Radial†	26874.8	24365.7	4857.8 ug/L	4857.8 ppb	11:25:59
1	Mg 279.077 IEC†	117.9	118.5	5177.3 ug/L	5177.3 ppb	11:26:19
1	Na 589.592 Radial†	24850.2	25583.1	10047 ug/L	10047 ppb	11:25:59
1	Sr 421.552†	57384.7	57942.8	493.38 ug/L	493.38 ppb	11:25:59
1	Sc 361.383	840225.5	840225.5	100.04 %		11:27:16
1	Y 371.029	709397.8	709397.8	99.068 %		11:27:16
1	Ag 328.068†	100130.3	99832.8	506.40 ug/L	506.40 ppb	11:27:21
1	As 188.979†	902.3	922.7	498.92 ug/L	498.92 ppb	11:27:41
1	B 249.677†	17699.1	17941.5	490.89 ug/L	490.89 ppb	11:27:21
1	Ba 233.527†	53109.2	53067.3	498.73 ug/L	498.73 ppb	11:27:21
1	Be 313.107†	1226611.6	1230334.0	500.64 ug/L	500.64 ppb	11:27:16
1	Cd 226.502†	35313.6	35464.5	500.08 ug/L	500.08 ppb	11:27:21
1	Co 228.616†	19545.0	19575.3	509.57 ug/L	509.57 ppb	11:27:21
1	Cr 267.716†	38489.5	38377.6	500.69 ug/L	500.69 ppb	11:27:21
1	Cu 324.752†	158402.7	151980.2	492.79 ug/L	492.79 ppb	11:27:21
1	Mn 257.610†	374685.7	374068.2	491.08 ug/L	491.08 ppb	11:27:21
1	Mo 202.031†	5720.2	5703.5	501.89 ug/L	501.89 ppb	11:27:41
1	Ni 231.604†	16386.8	16286.0	508.22 ug/L	508.22 ppb	11:27:21
1	P 214.914†	3599.7	3429.9	2369.4 ug/L	2369.4 ppb	11:27:41
1	Pb 220.353†	3236.1	3293.5	497.98 ug/L	497.98 ppb	11:27:41
1	S 181.975 Axial†	592.6	567.9	994.49 ug/L	994.49 ppb	11:27:41
1	Sb 206.836†	1208.6	1181.5	520.10 ug/L	520.10 ppb	11:27:41
1	Se 196.026†	591.0	607.6	502.68 ug/L	502.68 ppb	11:27:41
1	Si 251.611†	67467.1	66911.9	2485.2 ug/L	2485.2 ppb	11:27:21
1	Sn 189.927†	2282.9	2278.8	505.31 ug/L	505.31 ppb	11:27:41
1	Ti 334.940†	285912.8	286870.2	493.42 ug/L	493.42 ppb	11:27:21
1	Tl 190.801†	1255.3	1279.8	498.09 ug/L	498.09 ppb	11:27:41
1	U 409.014†	15133.7	17162.2	503.29 ug/L	503.29 ppb	11:27:21
1	V 292.402†	63260.7	64660.4	505.17 ug/L	505.17 ppb	11:27:21
1	Zn 213.857†	42740.7	42115.4	495.66 ug/L	495.66 ppb	11:27:21
1	SiO2†	66865.1	66282.3	5282.0 ug/L	5282.0 ppb	11:28:48
2	Sc Radial	4028.6	4028.6	99.9 %		11:26:44
2	Y RADIAL	4417.9	4417.9	97.78 %		11:26:24
2	Al 396.153Radial†	4599.4	4685.0	4969.1 ug/L	4969.1 ppb	11:26:24
2	Ca 317.933Radial†	2511.2	2497.2	5073.8 ug/L	5073.8 ppb	11:26:44
2	Fe 238.204 Radial†	417.2	408.7	5126.3 ug/L	5126.3 ppb	11:26:44
2	K 766.490 Radial†	26910.2	24141.7	4813.1 ug/L	4813.1 ppb	11:26:24
2	Mg 279.077 IEC†	120.5	120.0	5239.9 ug/L	5239.9 ppb	11:26:44
2	Na 589.592 Radial†	24770.6	25263.4	9921.3 ug/L	9921.3 ppb	11:26:24
2	Sr 421.552†	57475.8	57480.0	489.44 ug/L	489.44 ppb	11:26:24
2	Sc 361.383	847843.3	847843.3	100.95 %		11:27:47
2	Y 371.029	713668.5	713668.5	99.664 %		11:27:47
2	Ag 328.068†	101003.7	99798.7	506.25 ug/L	506.25 ppb	11:27:52
2	As 188.979†	908.5	920.8	497.94 ug/L	497.94 ppb	11:28:12
2	B 249.677†	17800.3	17882.7	489.27 ug/L	489.27 ppb	11:27:52
2	Ba 233.527†	53763.9	53238.9	500.34 ug/L	500.34 ppb	11:27:52
2	Be 313.107†	1233238.9	1225882.8	498.83 ug/L	498.83 ppb	11:27:47
2	Cd 226.502†	35588.8	35419.9	499.45 ug/L	499.45 ppb	11:27:52
2	Co 228.616†	19718.6	19571.7	509.45 ug/L	509.45 ppb	11:27:52
2	Cr 267.716†	38775.9	38315.6	499.88 ug/L	499.88 ppb	11:27:52
2	Cu 324.752†	160240.0	152377.5	494.08 ug/L	494.08 ppb	11:27:52
2	Mn 257.610†	379038.5	375015.0	492.33 ug/L	492.33 ppb	11:27:52
2	Mo 202.031†	5682.2	5614.5	494.06 ug/L	494.06 ppb	11:28:12
2	Ni 231.604†	16571.5	16321.7	509.34 ug/L	509.34 ppb	11:27:52

2	P 214.914†	3569.3	3367.4	2324.0 ug/L	2324.0 ppb	11:28:12
2	Pb 220.353†	3213.9	3242.5	490.24 ug/L	490.24 ppb	11:28:12
2	S 181.975 Axial†	595.4	565.4	990.03 ug/L	990.03 ppb	11:28:12
2	Sb 206.836†	1192.8	1154.9	508.48 ug/L	508.48 ppb	11:28:12
2	Se 196.026†	593.7	605.1	500.78 ug/L	500.78 ppb	11:28:12
2	Si 251.611†	68198.4	67030.4	2489.7 ug/L	2489.7 ppb	11:27:52
2	Sn 189.927†	2250.9	2226.6	493.75 ug/L	493.75 ppb	11:28:12
2	Ti 334.940†	289227.8	287586.2	494.64 ug/L	494.64 ppb	11:27:52
2	Tl 190.801†	1254.9	1268.2	493.62 ug/L	493.62 ppb	11:28:12
2	U 409.014†	15319.9	17210.7	504.72 ug/L	504.72 ppb	11:27:52
2	V 292.402†	63726.6	64553.8	504.23 ug/L	504.23 ppb	11:27:52
2	Zn 213.857†	43156.5	42143.4	495.98 ug/L	495.98 ppb	11:27:52
2	SiO2†	67150.4	65964.3	5256.8 ug/L	5256.8 ppb	11:28:53
3	Sc Radial	4025.6	4025.6	99.8 %		11:27:09
3	Y RADIAL	4462.1	4462.1	98.76 %		11:26:49
3	Al 396.153Radial†	4644.3	4733.5	5020.4 ug/L	5020.4 ppb	11:26:49
3	Ca 317.933Radial†	2513.8	2501.8	5082.9 ug/L	5082.9 ppb	11:27:09
3	Fe 238.204 Radial†	414.1	405.9	5090.8 ug/L	5090.8 ppb	11:27:09
3	K 766.490 Radial†	26988.7	24241.0	4832.9 ug/L	4832.9 ppb	11:26:49
3	Mg 279.077 IEC†	119.9	119.5	5219.2 ug/L	5219.2 ppb	11:27:09
3	Na 589.592 Radial†	24952.8	25465.0	10000 ug/L	10000 ppb	11:26:49
3	Sr 421.552†	57929.4	57978.5	493.68 ug/L	493.68 ppb	11:26:49
3	Sc 361.383	837106.2	837106.2	99.673 %		11:28:18
3	Y 371.029	705777.7	705777.7	98.562 %		11:28:18
3	Ag 328.068†	100018.9	100093.9	507.72 ug/L	507.72 ppb	11:28:23
3	As 188.979†	900.0	923.8	499.50 ug/L	499.50 ppb	11:28:43
3	B 249.677†	17716.5	18024.8	493.19 ug/L	493.19 ppb	11:28:23
3	Ba 233.527†	52894.5	53049.7	498.56 ug/L	498.56 ppb	11:28:23
3	Be 313.107†	1218115.2	1226378.4	499.03 ug/L	499.03 ppb	11:28:18
3	Cd 226.502†	35063.9	35345.5	498.40 ug/L	498.40 ppb	11:28:23
3	Co 228.616†	19307.6	19409.9	505.26 ug/L	505.26 ppb	11:28:23
3	Cr 267.716†	38249.5	38280.1	499.42 ug/L	499.42 ppb	11:28:23
3	Cu 324.752†	158416.5	152584.0	494.75 ug/L	494.75 ppb	11:28:23
3	Mn 257.610†	372652.7	373424.1	490.24 ug/L	490.24 ppb	11:28:23
3	Mo 202.031†	5695.1	5699.6	501.55 ug/L	501.55 ppb	11:28:43
3	Ni 231.604†	16223.9	16183.5	505.03 ug/L	505.03 ppb	11:28:23
3	P 214.914†	3598.0	3441.6	2377.3 ug/L	2377.3 ppb	11:28:43
3	Pb 220.353†	3223.3	3292.7	497.84 ug/L	497.84 ppb	11:28:43
3	S 181.975 Axial†	589.2	566.8	992.47 ug/L	992.47 ppb	11:28:43
3	Sb 206.836†	1202.0	1179.3	519.14 ug/L	519.14 ppb	11:28:43
3	Se 196.026†	599.7	618.6	511.49 ug/L	511.49 ppb	11:28:43
3	Si 251.611†	67344.6	67040.3	2490.0 ug/L	2490.0 ppb	11:28:23
3	Sn 189.927†	2261.3	2265.6	502.40 ug/L	502.40 ppb	11:28:43
3	Ti 334.940†	284943.7	286962.9	493.57 ug/L	493.57 ppb	11:28:23
3	Tl 190.801†	1244.9	1274.0	495.88 ug/L	495.88 ppb	11:28:43
3	U 409.014†	15216.2	17301.3	507.39 ug/L	507.39 ppb	11:28:23
3	V 292.402†	62835.3	64469.2	503.70 ug/L	503.70 ppb	11:28:23
3	Zn 213.857†	42489.4	42022.5	494.57 ug/L	494.57 ppb	11:28:23
3	SiO2†	66902.6	66569.0	5304.9 ug/L	5304.9 ppb	11:28:58

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	841725.0	100.22 %	0.658			0.66%
Sc Radial	4014.8	99.5 %	0.53			0.53%
Y 371.029	709614.7	99.098 %	0.5516			0.56%
Y RADIAL	4440.1	98.27 %	0.489			0.50%
Ag 328.068†	99908.5	506.79 ug/L	0.809	506.79 ppb	0.809	0.16%
QC value within limits for Ag 328.068 Recovery = 101.36%						
Al 396.153Radial†	4730.5	5017.4 ug/L	46.86	5017.4 ppb	46.86	0.93%
QC value within limits for Al 396.153Radial Recovery = 100.35%						
As 188.979†	922.4	498.79 ug/L	0.789	498.79 ppb	0.789	0.16%
QC value within limits for As 188.979 Recovery = 99.76%						
B 249.677†	17949.7	491.12 ug/L	1.971	491.12 ppb	1.971	0.40%
QC value within limits for B 249.677 Recovery = 98.22%						
Ba 233.527†	53118.6	499.21 ug/L	0.981	499.21 ppb	0.981	0.20%
QC value within limits for Ba 233.527 Recovery = 99.84%						
Be 313.107†	1227531.7	499.50 ug/L	0.989	499.50 ppb	0.989	0.20%
QC value within limits for Be 313.107 Recovery = 99.90%						
Ca 317.933Radial†	2500.2	5079.7 ug/L	5.14	5079.7 ppb	5.14	0.10%

QC value within limits for Ca 317.933 Radial Recovery = 101.59%									
Cd	226.502†	35410.0	499.31 ug/L	0.850	499.31 ppb	0.850	0.17%		
QC value within limits for Cd 226.502 Recovery = 99.86%									
Co	228.616†	19519.0	508.10 ug/L	2.454	508.10 ppb	2.454	0.48%		
QC value within limits for Co 228.616 Recovery = 101.62%									
Cr	267.716†	38324.4	500.00 ug/L	0.642	500.00 ppb	0.642	0.13%		
QC value within limits for Cr 267.716 Recovery = 100.00%									
Cu	324.752†	152313.9	493.87 ug/L	0.995	493.87 ppb	0.995	0.20%		
QC value within limits for Cu 324.752 Recovery = 98.77%									
Fe	238.204 Radial†	406.0	5091.9 ug/L	33.87	5091.9 ppb	33.87	0.67%		
QC value within limits for Fe 238.204 Radial Recovery = 101.84%									
K	766.490 Radial†	24249.5	4834.6 ug/L	22.37	4834.6 ppb	22.37	0.46%		
QC value within limits for K 766.490 Radial Recovery = 96.69%									
Mg	279.077 IEC†	119.3	5212.1 ug/L	31.87	5212.1 ppb	31.87	0.61%		
QC value within limits for Mg 279.077 IEC Recovery = 104.24%									
Mn	257.610†	374169.1	491.22 ug/L	1.051	491.22 ppb	1.051	0.21%		
QC value within limits for Mn 257.610 Recovery = 98.24%									
Mo	202.031†	5672.5	499.17 ug/L	4.424	499.17 ppb	4.424	0.89%		
QC value within limits for Mo 202.031 Recovery = 99.83%									
Na	589.592 Radial†	25437.2	9989.5 ug/L	63.47	9989.5 ppb	63.47	0.64%		
QC value within limits for Na 589.592 Radial Recovery = 99.90%									
Ni	231.604†	16263.7	507.53 ug/L	2.238	507.53 ppb	2.238	0.44%		
QC value within limits for Ni 231.604 Recovery = 101.51%									
P	214.914†	3413.0	2356.9 ug/L	28.76	2356.9 ppb	28.76	1.22%		
QC value within limits for P 214.914 Recovery = 94.28%									
Pb	220.353†	3276.2	495.35 ug/L	4.433	495.35 ppb	4.433	0.89%		
QC value within limits for Pb 220.353 Recovery = 99.07%									
S	181.975 Axial†	566.7	992.33 ug/L	2.233	992.33 ppb	2.233	0.23%		
QC value within limits for S 181.975 Axial Recovery = 99.23%									
Sb	206.836†	1171.9	515.91 ug/L	6.451	515.91 ppb	6.451	1.25%		
QC value within limits for Sb 206.836 Recovery = 103.18%									
Se	196.026†	610.5	504.98 ug/L	5.715	504.98 ppb	5.715	1.13%		
QC value within limits for Se 196.026 Recovery = 101.00%									
Si	251.611†	66994.2	2488.3 ug/L	2.69	2488.3 ppb	2.69	0.11%		
QC value within limits for Si 251.611 Recovery = 99.53%									
Sn	189.927†	2257.0	500.49 ug/L	6.013	500.49 ppb	6.013	1.20%		
QC value within limits for Sn 189.927 Recovery = 100.10%									
Sr	421.552†	57800.4	492.16 ug/L	2.368	492.16 ppb	2.368	0.48%		
QC value within limits for Sr 421.552 Recovery = 98.43%									
Ti	334.940†	287139.7	493.88 ug/L	0.667	493.88 ppb	0.667	0.14%		
QC value within limits for Ti 334.940 Recovery = 98.78%									
Tl	190.801†	1274.0	495.86 ug/L	2.237	495.86 ppb	2.237	0.45%		
QC value within limits for Tl 190.801 Recovery = 99.17%									
U	409.014†	17224.8	505.13 ug/L	2.078	505.13 ppb	2.078	0.41%		
QC value within limits for U 409.014 Recovery = 101.03%									
V	292.402†	64561.1	504.37 ug/L	0.746	504.37 ppb	0.746	0.15%		
QC value within limits for V 292.402 Recovery = 100.87%									
Zn	213.857†	42093.8	495.40 ug/L	0.737	495.40 ppb	0.737	0.15%		
QC value within limits for Zn 213.857 Recovery = 99.08%									
SiO2†		66271.9	5281.2 ug/L	24.06	5281.2 ppb	24.06	0.46%		
QC value within limits for SiO2 Recovery = 98.76%									
All analyte(s) passed QC.									

Sequence No.: 15

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/25/2010 11:31:09

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Rep#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4038.3	4038.3	100 %		11:33:21
1	Y RADIAL	4571.2	4571.2	101.2 %		11:33:01
1	Al 396.153Radial†	-81.2	-1.5	-1.5663 ug/L	-1.5663 ppb	11:33:21
1	Ca 317.933Radial†	17.9	0.7	1.3285 ug/L	1.3285 ppb	11:33:21
1	Fe 238.204 Radial†	7.1	-1.9	-23.439 ug/L	-23.439 ppb	11:33:21
1	K 766.490 Radial†	2759.8	-46.5	-9.2666 ug/L	-9.2666 ppb	11:33:01
1	Mg 279.077 IEC†	2.6	1.9	82.585 ug/L	82.585 ppb	11:33:21
1	Na 589.592 Radial†	-515.5	-54.1	-21.241 ug/L	-21.241 ppb	11:33:01
1	Sr 421.552†	51.7	-18.4	-0.1567 ug/L	-0.1567 ppb	11:33:01
1	Sc 361.383	846065.6	846065.6	100.74 %		11:34:18
1	Y 371.029	720715.5	720715.5	100.65 %		11:34:18
1	Ag 328.068†	214.6	-40.4	-0.2138 ug/L	-0.2138 ppb	11:34:23
1	As 188.979†	-26.6	-5.5	-2.9791 ug/L	-2.9791 ppb	11:34:43
1	B 249.677†	-174.3	77.2	2.1246 ug/L	2.1246 ppb	11:34:43
1	Ba 233.527†	24.8	6.1	0.0562 ug/L	0.0562 ppb	11:34:43
1	Be 313.107†	-4273.9	20.2	0.0079 ug/L	0.0079 ppb	11:34:23
1	Cd 226.502†	-165.9	1.7	0.0278 ug/L	0.0278 ppb	11:34:43
1	Co 228.616†	-29.5	9.6	0.2506 ug/L	0.2506 ppb	11:34:43
1	Cr 267.716†	141.6	45.6	0.5900 ug/L	0.5900 ppb	11:34:43
1	Cu 324.752†	6430.0	30.1	0.0941 ug/L	0.0941 ppb	11:34:23
1	Mn 257.610†	458.5	2.7	-0.0022 ug/L	-0.0022 ppb	11:34:43
1	Mo 202.031†	17.1	2.8	0.2445 ug/L	0.2445 ppb	11:34:43
1	Ni 231.604†	97.4	3.1	0.0964 ug/L	0.0964 ppb	11:34:43
1	P 214.914†	174.5	5.0	3.5811 ug/L	3.5811 ppb	11:34:43
1	Pb 220.353†	-51.2	8.0	1.2030 ug/L	1.2030 ppb	11:34:43
1	S 181.975 Axial†	23.9	-0.7	-1.2174 ug/L	-1.2174 ppb	11:34:43
1	Sb 206.836†	29.4	2.6	1.1112 ug/L	1.1112 ppb	11:34:43
1	Se 196.026†	-16.9	0.2	0.0885 ug/L	0.0885 ppb	11:34:43
1	Si 251.611†	544.6	15.1	0.5593 ug/L	0.5593 ppb	11:34:43
1	Sn 189.927†	8.5	5.4	1.1925 ug/L	1.1925 ppb	11:34:43
1	Ti 334.940†	-1158.8	-66.9	-0.1236 ug/L	-0.1236 ppb	11:34:23
1	Tl 190.801†	-16.7	8.5	3.2918 ug/L	3.2918 ppb	11:34:43
1	U 409.014†	-1916.5	132.7	3.9071 ug/L	3.9071 ppb	11:34:18
1	V 292.402†	-1436.4	1.7	0.0287 ug/L	0.0287 ppb	11:34:23
1	Zn 213.857†	687.8	76.4	0.9100 ug/L	0.9100 ppb	11:34:43
1	SiO2†	555.6	-1.9	-0.1561 ug/L	-0.1561 ppb	11:36:04
2	Sc Radial	4005.7	4005.7	99.3 %		11:33:46
2	Y RADIAL	4566.7	4566.7	101.1 %		11:33:26
2	Al 396.153Radial†	-71.9	7.3	7.7202 ug/L	7.7202 ppb	11:33:46
2	Ca 317.933Radial†	23.4	6.3	12.868 ug/L	12.868 ppb	11:33:46
2	Fe 238.204 Radial†	9.4	0.5	6.3476 ug/L	6.3476 ppb	11:33:46
2	K 766.490 Radial†	2805.3	21.8	4.3624 ug/L	4.3624 ppb	11:33:26
2	Mg 279.077 IEC†	1.8	1.1	46.294 ug/L	46.294 ppb	11:33:46
2	Na 589.592 Radial†	-567.7	-110.8	-43.527 ug/L	-43.527 ppb	11:33:26
2	Sr 421.552†	26.6	-43.3	-0.3685 ug/L	-0.3685 ppb	11:33:26
2	Sc 361.383	847877.4	847877.4	100.96 %		11:34:48
2	Y 371.029	722408.6	722408.6	100.88 %		11:34:48
2	Ag 328.068†	269.9	14.0	0.0666 ug/L	0.0666 ppb	11:34:53
2	As 188.979†	-24.2	-3.1	-1.6820 ug/L	-1.6820 ppb	11:35:13
2	B 249.677†	-155.5	96.1	2.6416 ug/L	2.6416 ppb	11:35:13
2	Ba 233.527†	9.3	-9.3	-0.0884 ug/L	-0.0884 ppb	11:35:13
2	Be 313.107†	-4315.5	-12.0	-0.0052 ug/L	-0.0052 ppb	11:34:53
2	Cd 226.502†	-176.3	-8.2	-0.1155 ug/L	-0.1155 ppb	11:35:13
2	Co 228.616†	-38.1	1.2	0.0309 ug/L	0.0309 ppb	11:35:13
2	Cr 267.716†	125.8	29.7	0.3844 ug/L	0.3844 ppb	11:35:13
2	Cu 324.752†	6507.0	92.7	0.2986 ug/L	0.2986 ppb	11:34:53
2	Mn 257.610†	450.2	-6.5	-0.0098 ug/L	-0.0098 ppb	11:35:13
2	Mo 202.031†	18.6	4.3	0.3747 ug/L	0.3747 ppb	11:35:13
2	Ni 231.604†	80.7	-13.7	-0.4271 ug/L	-0.4271 ppb	11:35:13

2	P 214.914†	177.9	8.0	5.7203 ug/L	5.7203 ppb	11:35:13
2	Pb 220.353†	-45.2	14.0	2.1167 ug/L	2.1167 ppb	11:35:13
2	S 181.975 Axial†	21.5	-3.1	-5.4850 ug/L	-5.4850 ppb	11:35:13
2	Sb 206.836†	19.6	-7.3	-3.0410 ug/L	-3.0410 ppb	11:35:13
2	Se 196.026†	-18.0	-0.9	-0.6654 ug/L	-0.6654 ppb	11:35:13
2	Si 251.611†	526.8	-3.6	-0.1397 ug/L	-0.1397 ppb	11:35:13
2	Sn 189.927†	13.7	10.5	2.3285 ug/L	2.3285 ppb	11:35:13
2	Ti 334.940†	-1165.4	-71.0	-0.1262 ug/L	-0.1262 ppb	11:34:53
2	Tl 190.801†	-24.1	1.2	0.4697 ug/L	0.4697 ppb	11:35:13
2	U 409.014†	-1911.5	141.8	4.1705 ug/L	4.1705 ppb	11:34:48
2	V 292.402†	-1511.3	-69.4	-0.5219 ug/L	-0.5219 ppb	11:34:53
2	Zn 213.857†	689.5	76.6	0.9113 ug/L	0.9113 ppb	11:35:13
2	SiO2†	547.4	-11.2	-0.9022 ug/L	-0.9022 ppb	11:36:24
3	Sc Radial	4038.1	4038.1	100 %		11:34:11
3	Y RADIAL	4543.9	4543.9	100.6 %		11:33:51
3	Al 396.153Radial†	-72.5	7.2	7.6809 ug/L	7.6809 ppb	11:34:11
3	Ca 317.933Radial†	20.6	3.4	6.9097 ug/L	6.9097 ppb	11:34:11
3	Fe 238.204 Radial†	9.9	0.8	10.614 ug/L	10.614 ppb	11:34:11
3	K 766.490 Radial†	2679.1	-127.0	-25.333 ug/L	-25.333 ppb	11:33:51
3	Mg 279.077 IEC†	4.3	3.6	156.48 ug/L	156.48 ppb	11:34:11
3	Na 589.592 Radial†	-602.0	-140.5	-55.166 ug/L	-55.166 ppb	11:33:51
3	Sr 421.552†	21.6	-48.4	-0.4124 ug/L	-0.4124 ppb	11:33:51
3	Sc 361.383	852826.9	852826.9	101.54 %		11:35:19
3	Y 371.029	728257.2	728257.2	101.70 %		11:35:19
3	Ag 328.068†	334.6	76.2	0.3851 ug/L	0.3851 ppb	11:35:24
3	As 188.979†	-20.6	0.5	0.2872 ug/L	0.2872 ppb	11:35:44
3	B 249.677†	-177.2	75.7	2.0790 ug/L	2.0790 ppb	11:35:44
3	Ba 233.527†	16.0	-2.7	-0.0250 ug/L	-0.0250 ppb	11:35:44
3	Be 313.107†	-4200.7	125.9	0.0515 ug/L	0.0515 ppb	11:35:24
3	Cd 226.502†	-160.6	8.2	0.1154 ug/L	0.1154 ppb	11:35:44
3	Co 228.616†	-37.0	2.4	0.0631 ug/L	0.0631 ppb	11:35:44
3	Cr 267.716†	122.6	25.7	0.3351 ug/L	0.3351 ppb	11:35:44
3	Cu 324.752†	6418.8	-31.5	-0.1035 ug/L	-0.1035 ppb	11:35:24
3	Mn 257.610†	441.7	-17.4	-0.0282 ug/L	-0.0282 ppb	11:35:44
3	Mo 202.031†	15.1	0.7	0.0607 ug/L	0.0607 ppb	11:35:44
3	Ni 231.604†	92.1	-2.9	-0.0913 ug/L	-0.0913 ppb	11:35:44
3	P 214.914†	175.5	4.6	3.3600 ug/L	3.3600 ppb	11:35:44
3	Pb 220.353†	-68.4	-8.6	-1.2889 ug/L	-1.2889 ppb	11:35:44
3	S 181.975 Axial†	34.1	9.2	16.069 ug/L	16.069 ppb	11:35:44
3	Sb 206.836†	21.9	-5.1	-2.1284 ug/L	-2.1284 ppb	11:35:44
3	Se 196.026†	-15.1	2.0	1.6538 ug/L	1.6538 ppb	11:35:44
3	Si 251.611†	545.6	11.9	0.4422 ug/L	0.4422 ppb	11:35:44
3	Sn 189.927†	11.7	8.5	1.8774 ug/L	1.8774 ppb	11:35:44
3	Ti 334.940†	-1002.0	96.6	0.1529 ug/L	0.1529 ppb	11:35:24
3	Tl 190.801†	-22.6	2.8	1.0714 ug/L	1.0714 ppb	11:35:44
3	U 409.014†	-1959.1	105.9	3.1145 ug/L	3.1145 ppb	11:35:19
3	V 292.402†	-1431.0	18.3	0.1494 ug/L	0.1494 ppb	11:35:24
3	Zn 213.857†	683.9	67.1	0.7958 ug/L	0.7958 ppb	11:35:44
3	SiO2†	556.3	-5.5	-0.4399 ug/L	-0.4399 ppb	11:36:44

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	848923.3	101.08 %	0.417			0.41%
Sc Radial	4027.3	99.8 %	0.47			0.47%
Y 371.029	723793.8	101.08 %	0.553			0.55%
Y RADIAL	4560.6	100.9 %	0.32			0.32%
Ag 328.068†	16.6	0.0793 ug/L	0.29968	0.0793 ppb	0.29968	377.93%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	4.3	4.6116 ug/L	5.35030	4.6116 ppb	5.35030	116.02%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-2.7	-1.4579 ug/L	1.64460	-1.4579 ppb	1.64460	112.80%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	83.0	2.2817 ug/L	0.31248	2.2817 ppb	0.31248	13.69%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	-2.0	-0.0191 ug/L	0.07249	-0.0191 ppb	0.07249	380.21%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	44.7	0.0181 ug/L	0.02967	0.0181 ppb	0.02967	163.89%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	3.5	7.0354 ug/L	5.77078	7.0354 ppb	5.77078	82.03%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated						
Cd 226.502†	0.6	0.0092 ug/L	0.11655	0.0092 ppb	0.11655	>999.9%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	4.4	0.1149 ug/L	0.11864	0.1149 ppb	0.11864	103.28%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	33.7	0.4365 ug/L	0.13521	0.4365 ppb	0.13521	30.97%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	30.4	0.0964 ug/L	0.20104	0.0964 ppb	0.20104	208.56%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	-0.2	-2.1594 ug/L	18.55204	-2.1594 ppb	18.55204	859.13%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	-50.6	-10.079 ug/L	14.8643	-10.079 ppb	14.8643	147.48%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	2.2	95.121 ug/L	56.1537	95.121 ppb	56.1537	59.03%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	-7.1	-0.0134 ug/L	0.01337	-0.0134 ppb	0.01337	99.90%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	2.6	0.2266 ug/L	0.15776	0.2266 ppb	0.15776	69.61%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	-101.8	-39.978 ug/L	17.2388	-39.978 ppb	17.2388	43.12%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	-4.5	-0.1407 ug/L	0.26523	-0.1407 ppb	0.26523	188.52%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	5.9	4.2204 ug/L	1.30360	4.2204 ppb	1.30360	30.89%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	4.5	0.6769 ug/L	1.76266	0.6769 ppb	1.76266	260.39%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	1.8	3.1223 ug/L	11.41367	3.1223 ppb	11.41367	365.55%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	-3.3	-1.3527 ug/L	2.18209	-1.3527 ppb	2.18209	161.31%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	0.5	0.3590 ug/L	1.18305	0.3590 ppb	1.18305	329.56%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	7.8	0.2873 ug/L	0.37435	0.2873 ppb	0.37435	130.30%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	8.1	1.7995 ug/L	0.57200	1.7995 ppb	0.57200	31.79%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	-36.7	-0.3125 ug/L	0.13675	-0.3125 ppb	0.13675	43.76%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	-13.8	-0.0323 ug/L	0.16039	-0.0323 ppb	0.16039	495.93%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	4.2	1.6110 ug/L	1.48641	1.6110 ppb	1.48641	92.27%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	126.8	3.7307 ug/L	0.54967	3.7307 ppb	0.54967	14.73%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	-16.5	-0.1146 ug/L	0.35785	-0.1146 ppb	0.35785	312.20%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	73.3	0.8724 ug/L	0.06630	0.8724 ppb	0.06630	7.60%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	-6.2	-0.4994 ug/L	0.37657	-0.4994 ppb	0.37657	75.41%
QC value within limits for SiO2 Recovery = Not calculated						
All analyte(s) passed QC.						

Sequence No.: 10

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/25/2010 12:43:21

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	4016.1	4016.1	99.6 %		12:45:33
1	Y RADIAL	4482.3	4482.3	99.21 %		12:45:13
1	Al 396.153Radial†	4698.8	4799.2	5090.4 ug/L	5090.4 ppb	12:45:13
1	Ca 317.933Radial†	2497.0	2490.8	5060.7 ug/L	5060.7 ppb	12:45:33
1	Fe 238.204 Radial†	404.8	397.6	4986.6 ug/L	4986.6 ppb	12:45:33
1	K 766.490 Radial†	27612.4	24931.1	4970.6 ug/L	4970.6 ppb	12:45:13
1	Mg 279.077 IEC†	118.7	118.6	5178.9 ug/L	5178.9 ppb	12:45:33
1	Na 589.592 Radial†	25254.5	25826.9	10143 ug/L	10143 ppb	12:45:13
1	Sr 421.552†	58354.8	58542.5	498.48 ug/L	498.48 ppb	12:45:13
1	Sc 361.383	841186.5	841186.5	100.16 %		12:46:30
1	Y 371.029	708161.3	708161.3	98.895 %		12:46:30
1	Ag 328.068†	99947.0	99535.5	504.86 ug/L	504.86 ppb	12:46:35
1	As 188.979†	917.0	936.4	506.23 ug/L	506.23 ppb	12:46:55
1	B 249.677†	17482.4	17704.9	484.41 ug/L	484.41 ppb	12:46:35
1	Ba 233.527†	53089.0	52986.5	497.96 ug/L	497.96 ppb	12:46:35
1	Be 313.107†	1217794.2	1220129.9	496.50 ug/L	496.50 ppb	12:46:30
1	Cd 226.502†	35263.6	35374.2	498.82 ug/L	498.82 ppb	12:46:35
1	Co 228.616†	19495.6	19503.7	507.71 ug/L	507.71 ppb	12:46:35
1	Cr 267.716†	38241.0	38085.5	496.87 ug/L	496.87 ppb	12:46:35
1	Cu 324.752†	158615.9	152012.1	492.89 ug/L	492.89 ppb	12:46:35
1	Mn 257.610†	374449.3	373404.4	490.20 ug/L	490.20 ppb	12:46:35
1	Mo 202.031†	5758.9	5735.6	504.70 ug/L	504.70 ppb	12:46:55
1	Ni 231.604†	16296.7	16177.3	504.83 ug/L	504.83 ppb	12:46:35
1	P 214.914†	3619.4	3445.5	2380.6 ug/L	2380.6 ppb	12:46:55
1	Pb 220.353†	3247.9	3301.6	499.22 ug/L	499.22 ppb	12:46:55
1	S 181.975 Axial†	600.7	575.4	1007.6 ug/L	1007.6 ppb	12:46:55
1	Sb 206.836†	1218.5	1190.0	523.79 ug/L	523.79 ppb	12:46:55
1	Se 196.026†	615.3	631.3	521.35 ug/L	521.35 ppb	12:46:55
1	Si 251.611†	67500.0	66867.8	2483.5 ug/L	2483.5 ppb	12:46:35
1	Sn 189.927†	2291.5	2284.7	506.64 ug/L	506.64 ppb	12:46:55
1	Ti 334.940†	285947.3	286578.1	492.91 ug/L	492.91 ppb	12:46:35
1	Tl 190.801†	1264.3	1287.4	501.02 ug/L	501.02 ppb	12:46:55
1	U 409.014†	15336.8	17347.7	508.77 ug/L	508.77 ppb	12:46:35
1	V 292.402†	62941.0	64269.0	502.22 ug/L	502.22 ppb	12:46:35
1	Zn 213.857†	42716.7	42042.7	494.83 ug/L	494.83 ppb	12:46:35
1	SiO2†	66365.9	65707.5	5236.0 ug/L	5236.0 ppb	12:48:02
2	Sc Radial	4056.4	4056.4	101 %		12:45:58
2	Y RADIAL	4468.9	4468.9	98.91 %		12:45:38
2	Al 396.153Radial†	4655.2	4709.0	4994.3 ug/L	4994.3 ppb	12:45:38
2	Ca 317.933Radial†	2515.5	2484.3	5047.5 ug/L	5047.5 ppb	12:45:58
2	Fe 238.204 Radial†	411.8	400.5	5023.7 ug/L	5023.7 ppb	12:45:58
2	K 766.490 Radial†	27575.5	24618.7	4908.3 ug/L	4908.3 ppb	12:45:38
2	Mg 279.077 IEC†	121.2	119.9	5236.0 ug/L	5236.0 ppb	12:45:58
2	Na 589.592 Radial†	25344.7	25664.4	10079 ug/L	10079 ppb	12:45:38
2	Sr 421.552†	57713.2	57321.8	488.09 ug/L	488.09 ppb	12:45:38
2	Sc 361.383	838552.3	838552.3	99.845 %		12:47:00
2	Y 371.029	705908.9	705908.9	98.580 %		12:47:00
2	Ag 328.068†	100319.6	100222.1	508.35 ug/L	508.35 ppb	12:47:06
2	As 188.979†	892.7	914.9	494.75 ug/L	494.75 ppb	12:47:26
2	B 249.677†	17680.5	17958.1	491.35 ug/L	491.35 ppb	12:47:06
2	Ba 233.527†	53161.6	53225.7	500.21 ug/L	500.21 ppb	12:47:06
2	Be 313.107†	1213909.8	1220058.9	496.47 ug/L	496.47 ppb	12:47:00
2	Cd 226.502†	35387.3	35608.7	502.12 ug/L	502.12 ppb	12:47:06
2	Co 228.616†	19601.5	19670.9	512.05 ug/L	512.05 ppb	12:47:06
2	Cr 267.716†	38409.7	38374.5	500.64 ug/L	500.64 ppb	12:47:06
2	Cu 324.752†	159091.9	152986.3	496.05 ug/L	496.05 ppb	12:47:06
2	Mn 257.610†	375744.2	375875.6	493.45 ug/L	493.45 ppb	12:47:06
2	Mo 202.031†	5703.8	5698.4	501.44 ug/L	501.44 ppb	12:47:26
2	Ni 231.604†	16327.3	16259.0	507.38 ug/L	507.38 ppb	12:47:06

2	P 214.914†	3600.7	3438.1	2374.6 ug/L	2374.6 ppb	12:47:26
2	Pb 220.353†	3214.2	3278.0	495.63 ug/L	495.63 ppb	12:47:26
2	S 181.975 Axial†	599.7	576.2	1009.1 ug/L	1009.1 ppb	12:47:26
2	Sb 206.836†	1219.0	1194.3	525.49 ug/L	525.49 ppb	12:47:26
2	Se 196.026†	604.8	622.6	514.50 ug/L	514.50 ppb	12:47:26
2	Si 251.611†	67756.6	67336.5	2501.0 ug/L	2501.0 ppb	12:47:06
2	Sn 189.927†	2264.1	2264.5	502.16 ug/L	502.16 ppb	12:47:26
2	Ti 334.940†	286751.7	288280.6	495.83 ug/L	495.83 ppb	12:47:06
2	Tl 190.801†	1246.0	1273.0	495.50 ug/L	495.50 ppb	12:47:26
2	U 409.014†	15232.2	17291.0	507.09 ug/L	507.09 ppb	12:47:06
2	V 292.402†	63059.4	64584.9	504.59 ug/L	504.59 ppb	12:47:06
2	Zn 213.857†	42838.8	42299.0	497.85 ug/L	497.85 ppb	12:47:06
2	SiO2†	67558.6	67110.2	5348.1 ug/L	5348.1 ppb	12:48:07
3	Sc Radial	4021.5	4021.5	99.7 %		12:46:23
3	Y RADIAL	4461.3	4461.3	98.74 %		12:46:03
3	Al 396.153Radial†	4671.7	4765.6	5054.9 ug/L	5054.9 ppb	12:46:03
3	Ca 317.933Radial†	2501.1	2491.5	5062.2 ug/L	5062.2 ppb	12:46:23
3	Fe 238.204 Radial†	412.5	404.8	5076.7 ug/L	5076.7 ppb	12:46:23
3	K 766.490 Radial†	27153.4	24433.4	4871.3 ug/L	4871.3 ppb	12:46:03
3	Mg 279.077 IEC†	119.3	119.0	5198.3 ug/L	5198.3 ppb	12:46:23
3	Na 589.592 Radial†	24843.9	25380.9	9967.4 ug/L	9967.4 ppb	12:46:03
3	Sr 421.552†	57318.1	57423.8	488.96 ug/L	488.96 ppb	12:46:03
3	Sc 361.383	849495.3	849495.3	101.15 %		12:47:31
3	Y 371.029	714922.7	714922.7	99.839 %		12:47:31
3	Ag 328.068†	99931.1	98543.7	499.88 ug/L	499.88 ppb	12:47:36
3	As 188.979†	906.7	917.2	495.93 ug/L	495.93 ppb	12:47:57
3	B 249.677†	17518.6	17570.0	480.69 ug/L	480.69 ppb	12:47:36
3	Ba 233.527†	53102.6	52481.5	493.22 ug/L	493.22 ppb	12:47:36
3	Be 313.107†	1226338.0	1216684.5	495.09 ug/L	495.09 ppb	12:47:31
3	Cd 226.502†	35287.3	35053.3	494.28 ug/L	494.28 ppb	12:47:36
3	Co 228.616†	19541.7	19358.8	503.93 ug/L	503.93 ppb	12:47:36
3	Cr 267.716†	38294.8	37765.3	492.71 ug/L	492.71 ppb	12:47:36
3	Cu 324.752†	158203.0	150055.0	486.55 ug/L	486.55 ppb	12:47:36
3	Mn 257.610†	374860.7	370154.4	485.95 ug/L	485.95 ppb	12:47:36
3	Mo 202.031†	5723.1	5644.0	496.65 ug/L	496.65 ppb	12:47:57
3	Ni 231.604†	16327.3	16048.5	500.81 ug/L	500.81 ppb	12:47:36
3	P 214.914†	3601.4	3392.3	2343.5 ug/L	2343.5 ppb	12:47:57
3	Pb 220.353†	3222.3	3244.6	490.59 ug/L	490.59 ppb	12:47:57
3	S 181.975 Axial†	591.7	560.6	981.65 ug/L	981.65 ppb	12:47:57
3	Sb 206.836†	1215.3	1174.9	517.04 ug/L	517.04 ppb	12:47:57
3	Se 196.026†	601.9	612.0	506.16 ug/L	506.16 ppb	12:47:57
3	Si 251.611†	67506.7	66215.2	2459.3 ug/L	2459.3 ppb	12:47:36
3	Sn 189.927†	2269.9	2241.0	496.95 ug/L	496.95 ppb	12:47:57
3	Ti 334.940†	286155.2	283991.3	488.46 ug/L	488.46 ppb	12:47:36
3	Tl 190.801†	1247.7	1258.6	489.87 ug/L	489.87 ppb	12:47:57
3	U 409.014†	15212.8	17075.4	500.76 ug/L	500.76 ppb	12:47:36
3	V 292.402†	62953.2	63666.4	497.43 ug/L	497.43 ppb	12:47:36
3	Zn 213.857†	42677.2	41586.5	489.43 ug/L	489.43 ppb	12:47:36
3	SiO2†	67090.6	65775.9	5241.7 ug/L	5241.7 ppb	12:48:12

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	843078.0	100.38 %	0.680			0.68%
Sc Radial	4031.3	99.9 %	0.54			0.54%
Y 371.029	709664.3	99.105 %	0.6551			0.66%
Y RADIAL	4470.9	98.96 %	0.235			0.24%
Ag 328.068†	99433.8	504.36 ug/L	4.257	504.36 ppb	4.257	0.84%
QC value within limits for Ag 328.068 Recovery = 100.87%						
Al 396.153Radial†	4757.9	5046.5 ug/L	48.57	5046.5 ppb	48.57	0.96%
QC value within limits for Al 396.153Radial Recovery = 100.93%						
As 188.979†	922.9	498.97 ug/L	6.314	498.97 ppb	6.314	1.27%
QC value within limits for As 188.979 Recovery = 99.79%						
B 249.677†	17744.3	485.48 ug/L	5.408	485.48 ppb	5.408	1.11%
QC value within limits for B 249.677 Recovery = 97.10%						
Ba 233.527†	52897.9	497.13 ug/L	3.568	497.13 ppb	3.568	0.72%
QC value within limits for Ba 233.527 Recovery = 99.43%						
Be 313.107†	1218957.8	496.02 ug/L	0.807	496.02 ppb	0.807	0.16%
QC value within limits for Be 313.107 Recovery = 99.20%						
Ca 317.933Radial†	2488.9	5056.8 ug/L	8.06	5056.8 ppb	8.06	0.16%

QC value within limits for Ca 317.933 Radial Recovery = 101.14%

Cd 226.502†	35345.4	498.40 ug/L	3.938	498.40 ppb	3.938	0.79%
QC value within limits for Cd 226.502 Recovery = 99.68%						
Co 228.616†	19511.1	507.90 ug/L	4.062	507.90 ppb	4.062	0.80%
QC value within limits for Co 228.616 Recovery = 101.58%						
Cr 267.716†	38075.1	496.74 ug/L	3.968	496.74 ppb	3.968	0.80%
QC value within limits for Cr 267.716 Recovery = 99.35%						
Cu 324.752†	151684.5	491.83 ug/L	4.837	491.83 ppb	4.837	0.98%
QC value within limits for Cu 324.752 Recovery = 98.37%						
Fe 238.204 Radial†	401.0	5029.0 ug/L	45.28	5029.0 ppb	45.28	0.90%
QC value within limits for Fe 238.204 Radial Recovery = 100.58%						
K 766.490 Radial†	24661.1	4916.7 ug/L	50.18	4916.7 ppb	50.18	1.02%
QC value within limits for K 766.490 Radial Recovery = 98.33%						
Mg 279.077 IEC†	119.1	5204.4 ug/L	29.03	5204.4 ppb	29.03	0.56%
QC value within limits for Mg 279.077 IEC Recovery = 104.09%						
Mn 257.610†	373144.8	489.87 ug/L	3.761	489.87 ppb	3.761	0.77%
QC value within limits for Mn 257.610 Recovery = 97.97%						
Mo 202.031†	5692.7	500.93 ug/L	4.047	500.93 ppb	4.047	0.81%
QC value within limits for Mo 202.031 Recovery = 100.19%						
Na 589.592 Radial†	25624.1	10063 ug/L	88.6	10063 ppb	88.6	0.88%
QC value within limits for Na 589.592 Radial Recovery = 100.63%						
Ni 231.604†	16161.6	504.34 ug/L	3.312	504.34 ppb	3.312	0.66%
QC value within limits for Ni 231.604 Recovery = 100.87%						
P 214.914†	3425.3	2366.3 ug/L	19.93	2366.3 ppb	19.93	0.84%
QC value within limits for P 214.914 Recovery = 94.65%						
Pb 220.353†	3274.7	495.14 ug/L	4.336	495.14 ppb	4.336	0.88%
QC value within limits for Pb 220.353 Recovery = 99.03%						
S 181.975 Axial†	570.7	999.44 ug/L	15.425	999.44 ppb	15.425	1.54%
QC value within limits for S 181.975 Axial Recovery = 99.94%						
Sb 206.836†	1186.4	522.11 ug/L	4.469	522.11 ppb	4.469	0.86%
QC value within limits for Sb 206.836 Recovery = 104.42%						
Se 196.026†	622.0	514.00 ug/L	7.609	514.00 ppb	7.609	1.48%
QC value within limits for Se 196.026 Recovery = 102.80%						
Si 251.611†	66806.5	2481.3 ug/L	20.93	2481.3 ppb	20.93	0.84%
QC value within limits for Si 251.611 Recovery = 99.25%						
Sn 189.927†	2263.4	501.92 ug/L	4.847	501.92 ppb	4.847	0.97%
QC value within limits for Sn 189.927 Recovery = 100.38%						
Sr 421.552†	57762.7	491.84 ug/L	5.767	491.84 ppb	5.767	1.17%
QC value within limits for Sr 421.552 Recovery = 98.37%						
Ti 334.940†	286283.4	492.40 ug/L	3.711	492.40 ppb	3.711	0.75%
QC value within limits for Ti 334.940 Recovery = 98.48%						
Tl 190.801†	1273.0	495.46 ug/L	5.576	495.46 ppb	5.576	1.13%
QC value within limits for Tl 190.801 Recovery = 99.09%						
U 409.014†	17238.0	505.54 ug/L	4.226	505.54 ppb	4.226	0.84%
QC value within limits for U 409.014 Recovery = 101.11%						
V 292.402†	64173.4	501.41 ug/L	3.646	501.41 ppb	3.646	0.73%
QC value within limits for V 292.402 Recovery = 100.28%						
Zn 213.857†	41976.1	494.04 ug/L	4.264	494.04 ppb	4.264	0.86%
QC value within limits for Zn 213.857 Recovery = 98.81%						
SiO2†	66197.9	5275.3 ug/L	63.18	5275.3 ppb	63.18	1.20%
QC value within limits for SiO2 Recovery = 98.65%						

All analyte(s) passed QC.

Sequence No.: 11
 Sample ID: CCB
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 8
 Date Collected: 3/25/2010 12:50:23
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4078.4	4078.4	101 %		12:52:35
1	Y RADIAL	4530.8	4530.8	100.3 %		12:52:15
1	Al 396.153Radial†	-85.8	-5.2	-5.6017 ug/L	-5.6017 ppb	12:52:35
1	Ca 317.933Radial†	24.4	7.0	14.122 ug/L	14.122 ppb	12:52:35
1	Fe 238.204 Radial†	8.9	-0.2	-2.3690 ug/L	-2.3690 ppb	12:52:35
1	K 766.490 Radial†	2815.2	-18.8	-3.7799 ug/L	-3.7799 ppb	12:52:15
1	Mg 279.077 IEC†	1.5	0.7	32.710 ug/L	32.710 ppb	12:52:35
1	Na 589.592 Radial†	-314.3	150.0	58.903 ug/L	58.903 ppb	12:52:15
1	Sr 421.552†	71.1	0.3	0.0027 ug/L	0.0027 ppb	12:52:15
1	Sc 361.383	825990.6	825990.6	98.349 %		12:53:32
1	Y 371.029	705250.2	705250.2	98.488 %		12:53:32
1	Ag 328.068†	270.4	21.5	0.1103 ug/L	0.1103 ppb	12:53:32
1	As 188.979†	-24.9	-4.4	-2.3839 ug/L	-2.3839 ppb	12:53:52
1	B 249.677†	-281.2	-35.8	-0.9832 ug/L	-0.9832 ppb	12:53:52
1	Ba 233.527†	33.3	15.3	0.1439 ug/L	0.1439 ppb	12:53:52
1	Be 313.107†	-4239.9	-48.4	-0.0199 ug/L	-0.0199 ppb	12:53:32
1	Cd 226.502†	-169.0	-5.4	-0.0762 ug/L	-0.0762 ppb	12:53:52
1	Co 228.616†	-46.5	-8.4	-0.2171 ug/L	-0.2171 ppb	12:53:52
1	Cr 267.716†	102.5	9.2	0.1214 ug/L	0.1214 ppb	12:53:52
1	Cu 324.752†	6371.8	126.0	0.4099 ug/L	0.4099 ppb	12:53:32
1	Mn 257.610†	439.1	-6.0	-0.0094 ug/L	-0.0094 ppb	12:53:52
1	Mo 202.031†	16.2	2.3	0.1985 ug/L	0.1985 ppb	12:53:52
1	Ni 231.604†	89.2	-2.9	-0.0894 ug/L	-0.0894 ppb	12:53:52
1	P 214.914†	183.2	18.1	12.930 ug/L	12.930 ppb	12:53:52
1	Pb 220.353†	-66.0	-8.3	-1.2528 ug/L	-1.2528 ppb	12:53:52
1	S 181.975 Axial†	30.2	6.3	11.056 ug/L	11.056 ppb	12:53:52
1	Sb 206.836†	22.9	-3.4	-1.4271 ug/L	-1.4271 ppb	12:53:52
1	Se 196.026†	-15.2	1.5	1.1525 ug/L	1.1525 ppb	12:53:52
1	Si 251.611†	524.3	7.6	0.2807 ug/L	0.2807 ppb	12:53:52
1	Sn 189.927†	0.7	-2.3	-0.5133 ug/L	-0.5133 ppb	12:53:52
1	Ti 334.940†	-1118.9	-54.3	-0.0932 ug/L	-0.0932 ppb	12:53:32
1	Tl 190.801†	-22.1	2.6	1.0191 ug/L	1.0191 ppb	12:53:52
1	U 409.014†	-2085.8	-85.6	-2.5192 ug/L	-2.5192 ppb	12:53:32
1	V 292.402†	-1379.9	24.5	0.1875 ug/L	0.1875 ppb	12:53:32
1	Zn 213.857†	696.7	102.0	1.2115 ug/L	1.2115 ppb	12:53:52
1	SiO2†	552.0	7.9	0.6277 ug/L	0.6277 ppb	12:55:03
2	Sc Radial	4038.2	4038.2	100 %		12:53:00
2	Y RADIAL	4445.9	4445.9	98.40 %		12:52:40
2	Al 396.153Radial†	-81.9	-2.1	-2.3141 ug/L	-2.3141 ppb	12:53:00
2	Ca 317.933Radial†	20.2	3.0	5.9981 ug/L	5.9981 ppb	12:53:00
2	Fe 238.204 Radial†	7.7	-1.3	-16.731 ug/L	-16.731 ppb	12:53:00
2	K 766.490 Radial†	2951.3	144.9	28.894 ug/L	28.894 ppb	12:52:40
2	Mg 279.077 IEC†	0.1	-0.6	-26.836 ug/L	-26.836 ppb	12:53:00
2	Na 589.592 Radial†	-316.2	145.1	56.969 ug/L	56.969 ppb	12:52:40
2	Sr 421.552†	89.1	19.0	0.1615 ug/L	0.1615 ppb	12:52:40
2	Sc 361.383	831254.3	831254.3	98.976 %		12:53:57
2	Y 371.029	709547.1	709547.1	99.088 %		12:53:57
2	Ag 328.068†	136.8	-115.2	-0.5869 ug/L	-0.5869 ppb	12:53:57
2	As 188.979†	-25.7	-5.1	-2.7625 ug/L	-2.7625 ppb	12:54:17
2	B 249.677†	-310.2	-63.3	-1.7371 ug/L	-1.7371 ppb	12:54:17
2	Ba 233.527†	21.9	3.6	0.0320 ug/L	0.0320 ppb	12:54:17
2	Be 313.107†	-4291.2	-72.9	-0.0297 ug/L	-0.0297 ppb	12:53:57
2	Cd 226.502†	-162.9	1.9	0.0276 ug/L	0.0276 ppb	12:54:17
2	Co 228.616†	-35.1	3.4	0.0906 ug/L	0.0906 ppb	12:54:17
2	Cr 267.716†	91.8	-2.2	-0.0312 ug/L	-0.0312 ppb	12:54:17
2	Cu 324.752†	6512.1	226.7	0.7350 ug/L	0.7350 ppb	12:53:57
2	Mn 257.610†	444.6	-3.2	-0.0048 ug/L	-0.0048 ppb	12:54:17
2	Mo 202.031†	20.2	6.2	0.5415 ug/L	0.5415 ppb	12:54:17
2	Ni 231.604†	94.5	1.9	0.0591 ug/L	0.0591 ppb	12:54:17

2	P 214.914†	181.2	14.8	10.547 ug/L	10.547 ppb	12:54:17
2	Pb 220.353†	-58.3	-0.1	-0.0149 ug/L	-0.0149 ppb	12:54:17
2	S 181.975 Axial†	31.8	7.7	13.504 ug/L	13.504 ppb	12:54:17
2	Sb 206.836†	21.1	-5.3	-2.2106 ug/L	-2.2106 ppb	12:54:17
2	Se 196.026†	-22.5	-5.7	-4.6285 ug/L	-4.6285 ppb	12:54:17
2	Si 251.611†	531.2	11.2	0.4112 ug/L	0.4112 ppb	12:54:17
2	Sn 189.927†	11.3	8.4	1.8515 ug/L	1.8515 ppb	12:54:17
2	Ti 334.940†	-1096.0	-24.0	-0.0377 ug/L	-0.0377 ppb	12:53:57
2	Tl 190.801†	-19.7	5.2	2.0112 ug/L	2.0112 ppb	12:54:17
2	U 409.014†	-2062.3	-48.5	-1.4240 ug/L	-1.4240 ppb	12:53:57
2	V 292.402†	-1479.1	-66.9	-0.5087 ug/L	-0.5087 ppb	12:53:57
2	Zn 213.857†	680.8	81.4	0.9680 ug/L	0.9680 ppb	12:54:17
2	SiO2†	544.8	-2.9	-0.2493 ug/L	-0.2493 ppb	12:55:23
3	Sc Radial	4048.1	4048.1	100 %		12:53:25
3	Y RADIAL	4454.2	4454.2	98.59 %		12:53:05
3	Al 396.153Radial†	-70.8	9.1	9.6519 ug/L	9.6519 ppb	12:53:25
3	Ca 317.933Radial†	26.9	9.6	19.443 ug/L	19.443 ppb	12:53:25
3	Fe 238.204 Radial†	9.0	-0.1	-0.7986 ug/L	-0.7986 ppb	12:53:25
3	K 766.490 Radial†	2816.6	3.4	0.6589 ug/L	0.6589 ppb	12:53:05
3	Mg 279.077 IEC†	0.3	-0.4	-16.027 ug/L	-16.027 ppb	12:53:25
3	Na 589.592 Radial†	-355.2	106.9	41.981 ug/L	41.981 ppb	12:53:05
3	Sr 421.552†	40.2	-30.0	-0.2555 ug/L	-0.2555 ppb	12:53:05
3	Sc 361.383	829647.3	829647.3	98.785 %		12:54:23
3	Y 371.029	707961.0	707961.0	98.867 %		12:54:23
3	Ag 328.068†	168.8	-82.5	-0.4209 ug/L	-0.4209 ppb	12:54:23
3	As 188.979†	-18.5	2.1	1.1239 ug/L	1.1239 ppb	12:54:43
3	B 249.677†	-269.6	-22.8	-0.6252 ug/L	-0.6252 ppb	12:54:43
3	Ba 233.527†	27.2	9.0	0.0833 ug/L	0.0833 ppb	12:54:43
3	Be 313.107†	-4218.6	-7.8	-0.0034 ug/L	-0.0034 ppb	12:54:23
3	Cd 226.502†	-158.0	6.4	0.0916 ug/L	0.0916 ppb	12:54:43
3	Co 228.616†	-39.1	-0.7	-0.0182 ug/L	-0.0182 ppb	12:54:43
3	Cr 267.716†	98.2	4.4	0.0555 ug/L	0.0555 ppb	12:54:43
3	Cu 324.752†	6325.2	50.2	0.1609 ug/L	0.1609 ppb	12:54:23
3	Mn 257.610†	458.2	11.4	0.0156 ug/L	0.0156 ppb	12:54:43
3	Mo 202.031†	13.9	-0.2	-0.0140 ug/L	-0.0140 ppb	12:54:43
3	Ni 231.604†	89.2	-3.3	-0.1034 ug/L	-0.1034 ppb	12:54:43
3	P 214.914†	168.4	2.3	1.6113 ug/L	1.6113 ppb	12:54:43
3	Pb 220.353†	-54.3	3.8	0.5815 ug/L	0.5815 ppb	12:54:43
3	S 181.975 Axial†	33.6	9.6	16.791 ug/L	16.791 ppb	12:54:43
3	Sb 206.836†	20.1	-6.3	-2.6748 ug/L	-2.6748 ppb	12:54:43
3	Se 196.026†	-18.8	-2.1	-1.6605 ug/L	-1.6605 ppb	12:54:43
3	Si 251.611†	533.5	14.6	0.5435 ug/L	0.5435 ppb	12:54:43
3	Sn 189.927†	3.6	0.5	0.1252 ug/L	0.1252 ppb	12:54:43
3	Ti 334.940†	-1134.9	-65.5	-0.1103 ug/L	-0.1103 ppb	12:54:23
3	Tl 190.801†	-29.7	-4.9	-1.9137 ug/L	-1.9137 ppb	12:54:43
3	U 409.014†	-1894.3	117.6	3.4589 ug/L	3.4589 ppb	12:54:23
3	V 292.402†	-1462.4	-52.9	-0.4012 ug/L	-0.4012 ppb	12:54:23
3	Zn 213.857†	697.2	99.3	1.1803 ug/L	1.1803 ppb	12:54:43
3	SiO2†	555.6	9.0	0.7231 ug/L	0.7231 ppb	12:55:43

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	828964.0	98.703 %		0.3212			0.33%
Sc Radial	4054.9	101 %		0.5			0.52%
Y 371.029	707586.1	98.815 %		0.3034			0.31%
Y RADIAL	4477.0	99.09 %		1.036			1.05%
Ag 328.068†	-58.7	-0.2992 ug/L		0.36422	-0.2992 ppb	0.36422	121.74%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	0.6	0.5787 ug/L		8.02774	0.5787 ppb	8.02774	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	-2.5	-1.3408 ug/L		2.14290	-1.3408 ppb	2.14290	159.82%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	-40.6	-1.1152 ug/L		0.56754	-1.1152 ppb	0.56754	50.89%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	9.3	0.0864 ug/L		0.05603	0.0864 ppb	0.05603	64.85%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	-43.0	-0.0177 ug/L		0.01327	-0.0177 ppb	0.01327	75.15%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	6.5	13.188 ug/L		6.7711	13.188 ppb	6.7711	51.34%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated						
Cd 226.502†	1.0	0.0143 ug/L	0.08473	0.0143 ppb	0.08473	591.05%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-1.9	-0.0482 ug/L	0.15603	-0.0482 ppb	0.15603	323.64%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	3.8	0.0486 ug/L	0.07653	0.0486 ppb	0.07653	157.54%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	134.3	0.4352 ug/L	0.28788	0.4352 ppb	0.28788	66.14%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	-0.5	-6.6329 ug/L	8.78042	-6.6329 ppb	8.78042	132.38%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	43.2	8.5909 ug/L	17.72225	8.5909 ppb	17.72225	206.29%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	-0.1	-3.3842 ug/L	31.72242	-3.3842 ppb	31.72242	937.37%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	0.7	0.0005 ug/L	0.01329	0.0005 ppb	0.01329	>999.9%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	2.8	0.2420 ug/L	0.28030	0.2420 ppb	0.28030	115.82%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	134.0	52.618 ug/L	9.2624	52.618 ppb	9.2624	17.60%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	-1.4	-0.0446 ug/L	0.09007	-0.0446 ppb	0.09007	202.01%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	11.7	8.3628 ug/L	5.96708	8.3628 ppb	5.96708	71.35%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	-1.5	-0.2287 ug/L	0.93564	-0.2287 ppb	0.93564	409.03%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	7.9	13.783 ug/L	2.8777	13.783 ppb	2.8777	20.88%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	-5.0	-2.1042 ug/L	0.63064	-2.1042 ppb	0.63064	29.97%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-2.1	-1.7122 ug/L	2.89089	-1.7122 ppb	2.89089	168.85%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	11.1	0.4118 ug/L	0.13139	0.4118 ppb	0.13139	31.90%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	2.2	0.4878 ug/L	1.22343	0.4878 ppb	1.22343	250.80%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	-3.6	-0.0304 ug/L	0.21048	-0.0304 ppb	0.21048	691.42%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	-48.0	-0.0804 ug/L	0.03797	-0.0804 ppb	0.03797	47.22%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	1.0	0.3722 ug/L	2.04086	0.3722 ppb	2.04086	548.33%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	-5.5	-0.1614 ug/L	3.18274	-0.1614 ppb	3.18274	>999.9%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	-31.8	-0.2408 ug/L	0.37479	-0.2408 ppb	0.37479	155.64%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	94.2	1.1199 ug/L	0.13250	1.1199 ppb	0.13250	11.83%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	4.7	0.3672 ug/L	0.53596	0.3672 ppb	0.53596	145.98%
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: 7

Date Collected: 3/25/2010 13:50:52

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	4044.0	4044.0	100 %		13:53:05
1	Y RADIAL	4505.9	4505.9	99.73 %		13:52:45
1	Al 396.153Radial†	4688.7	4756.5	5045.1 ug/L	5045.1 ppb	13:52:45
1	Ca 317.933Radial†	2520.7	2497.2	5073.7 ug/L	5073.7 ppb	13:53:05
1	Fe 238.204 Radial†	421.8	411.7	5163.5 ug/L	5163.5 ppb	13:53:05
1	K 766.490 Radial†	27547.3	24674.6	4919.4 ug/L	4919.4 ppb	13:52:45
1	Mg 279.077 IEC†	120.5	119.5	5219.9 ug/L	5219.9 ppb	13:53:05
1	Na 589.592 Radial†	25649.5	26045.7	10229 ug/L	10229 ppb	13:52:45
1	Sr 421.552†	58843.0	58624.5	499.18 ug/L	499.18 ppb	13:52:45
1	Sc 361.383	840360.4	840360.4	100.06 %		13:54:02
1	Y 371.029	708486.1	708486.1	98.940 %		13:54:02
1	Ag 328.068†	100353.9	100040.1	507.47 ug/L	507.47 ppb	13:54:07
1	As 188.979†	884.1	904.4	489.15 ug/L	489.15 ppb	13:54:27
1	B 249.677†	17599.9	17839.5	488.08 ug/L	488.08 ppb	13:54:07
1	Ba 233.527†	53110.2	53059.8	498.66 ug/L	498.66 ppb	13:54:07
1	Be 313.107†	1217906.0	1221436.8	497.03 ug/L	497.03 ppb	13:54:02
1	Cd 226.502†	35270.5	35415.7	499.38 ug/L	499.38 ppb	13:54:07
1	Co 228.616†	19490.9	19518.1	508.07 ug/L	508.07 ppb	13:54:07
1	Cr 267.716†	38252.1	38134.2	497.52 ug/L	497.52 ppb	13:54:07
1	Cu 324.752†	159121.0	152672.6	495.04 ug/L	495.04 ppb	13:54:07
1	Mn 257.610†	380251.8	379570.9	498.31 ug/L	498.31 ppb	13:54:02
1	Mo 202.031†	5688.7	5671.1	499.05 ug/L	499.05 ppb	13:54:27
1	Ni 231.604†	16270.0	16166.7	504.50 ug/L	504.50 ppb	13:54:07
1	P 214.914†	3604.2	3433.8	2371.6 ug/L	2371.6 ppb	13:54:27
1	Pb 220.353†	3232.9	3289.8	497.39 ug/L	497.39 ppb	13:54:27
1	S 181.975 Axial†	595.7	571.0	999.84 ug/L	999.84 ppb	13:54:27
1	Sb 206.836†	1210.8	1183.4	520.77 ug/L	520.77 ppb	13:54:27
1	Se 196.026†	600.5	617.1	510.51 ug/L	510.51 ppb	13:54:27
1	Si 251.611†	67799.6	67233.4	2497.2 ug/L	2497.2 ppb	13:54:07
1	Sn 189.927†	2257.4	2253.0	499.60 ug/L	499.60 ppb	13:54:27
1	Ti 334.940†	286682.7	287593.8	494.66 ug/L	494.66 ppb	13:54:07
1	Tl 190.801†	1241.7	1266.0	492.81 ug/L	492.81 ppb	13:54:27
1	U 409.014†	15330.7	17356.7	509.01 ug/L	509.01 ppb	13:54:07
1	V 292.402†	63122.5	64512.1	503.98 ug/L	503.98 ppb	13:54:07
1	Zn 213.857†	42709.5	42077.4	495.22 ug/L	495.22 ppb	13:54:07
1	SiO2†	68322.1	67727.7	5397.5 ug/L	5397.5 ppb	13:55:35
2	Sc Radial	4038.4	4038.4	100 %		13:53:30
2	Y RADIAL	4419.7	4419.7	97.82 %		13:53:10
2	Al 396.153Radial†	4591.9	4666.4	4948.9 ug/L	4948.9 ppb	13:53:10
2	Ca 317.933Radial†	2514.1	2494.1	5067.4 ug/L	5067.4 ppb	13:53:30
2	Fe 238.204 Radial†	415.6	406.2	5094.2 ug/L	5094.2 ppb	13:53:30
2	K 766.490 Radial†	27285.7	24451.5	4874.9 ug/L	4874.9 ppb	13:53:10
2	Mg 279.077 IEC†	122.4	121.5	5308.3 ug/L	5308.3 ppb	13:53:30
2	Na 589.592 Radial†	25081.2	25513.6	10020 ug/L	10020 ppb	13:53:10
2	Sr 421.552†	57525.7	57390.4	488.67 ug/L	488.67 ppb	13:53:10
2	Sc 361.383	846854.3	846854.3	100.83 %		13:54:33
2	Y 371.029	712864.1	712864.1	99.552 %		13:54:33
2	Ag 328.068†	101347.1	100256.1	508.53 ug/L	508.53 ppb	13:54:38
2	As 188.979†	912.5	925.7	500.57 ug/L	500.57 ppb	13:54:58
2	B 249.677†	17842.5	17945.2	490.98 ug/L	490.98 ppb	13:54:38
2	Ba 233.527†	53622.2	53160.5	499.60 ug/L	499.60 ppb	13:54:38
2	Be 313.107†	1228699.1	1222807.1	497.59 ug/L	497.59 ppb	13:54:33
2	Cd 226.502†	35543.3	35415.9	499.40 ug/L	499.40 ppb	13:54:38
2	Co 228.616†	19755.9	19631.6	511.03 ug/L	511.03 ppb	13:54:38
2	Cr 267.716†	38587.6	38173.8	498.03 ug/L	498.03 ppb	13:54:38
2	Cu 324.752†	160676.3	152995.6	496.08 ug/L	496.08 ppb	13:54:38
2	Mn 257.610†	384358.4	380729.4	499.82 ug/L	499.82 ppb	13:54:33
2	Mo 202.031†	5758.8	5697.1	501.32 ug/L	501.32 ppb	13:54:58
2	Ni 231.604†	16448.7	16219.2	506.14 ug/L	506.14 ppb	13:54:38

2	P 214.914†	3644.8	3446.5	2380.6 ug/L	2380.6 ppb	13:54:58
2	Pb 220.353†	3256.2	3288.1	497.13 ug/L	497.13 ppb	13:54:58
2	S 181.975 Axial†	603.4	574.0	1005.3 ug/L	1005.3 ppb	13:54:58
2	Sb 206.836†	1238.5	1201.6	528.66 ug/L	528.66 ppb	13:54:58
2	Se 196.026†	609.3	621.2	513.56 ug/L	513.56 ppb	13:54:58
2	Si 251.611†	68622.5	67529.9	2508.2 ug/L	2508.2 ppb	13:54:38
2	Sn 189.927†	2307.4	2285.2	506.73 ug/L	506.73 ppb	13:54:58
2	Ti 334.940†	289790.3	288478.6	496.17 ug/L	496.17 ppb	13:54:38
2	Tl 190.801†	1272.6	1287.2	501.01 ug/L	501.01 ppb	13:54:58
2	U 409.014†	15604.4	17510.6	513.55 ug/L	513.55 ppb	13:54:38
2	V 292.402†	63590.2	64492.2	503.88 ug/L	503.88 ppb	13:54:38
2	Zn 213.857†	43096.8	42134.2	495.89 ug/L	495.89 ppb	13:54:38
2	SiO2†	68125.9	67009.5	5340.1 ug/L	5340.1 ppb	13:55:40
3	Sc Radial	4046.3	4046.3	100 %		13:53:55
3	Y RADIAL	4454.7	4454.7	98.60 %		13:53:35
3	Al 396.153Radial†	4627.1	4692.5	4976.9 ug/L	4976.9 ppb	13:53:35
3	Ca 317.933Radial†	2528.4	2503.4	5086.3 ug/L	5086.3 ppb	13:53:55
3	Fe 238.204 Radial†	420.9	410.6	5149.7 ug/L	5149.7 ppb	13:53:55
3	K 766.490 Radial†	27392.2	24504.7	4885.5 ug/L	4885.5 ppb	13:53:35
3	Mg 279.077 IEC†	122.6	121.6	5309.9 ug/L	5309.9 ppb	13:53:55
3	Na 589.592 Radial†	25262.9	25646.1	10072 ug/L	10072 ppb	13:53:35
3	Sr 421.552†	57999.4	57751.1	491.74 ug/L	491.74 ppb	13:53:35
3	Sc 361.383	842137.7	842137.7	100.27 %		13:55:04
3	Y 371.029	708731.8	708731.8	98.975 %		13:55:04
3	Ag 328.068†	99642.5	99119.1	502.81 ug/L	502.81 ppb	13:55:09
3	As 188.979†	901.9	920.3	497.61 ug/L	497.61 ppb	13:55:29
3	B 249.677†	17475.1	17677.9	483.64 ug/L	483.64 ppb	13:55:09
3	Ba 233.527†	52913.4	52751.5	495.76 ug/L	495.76 ppb	13:55:09
3	Be 313.107†	1218643.0	1219603.0	496.28 ug/L	496.28 ppb	13:55:04
3	Cd 226.502†	35055.1	35126.5	495.30 ug/L	495.30 ppb	13:55:09
3	Co 228.616†	19413.2	19399.5	504.99 ug/L	504.99 ppb	13:55:09
3	Cr 267.716†	38045.2	37847.1	493.78 ug/L	493.78 ppb	13:55:09
3	Cu 324.752†	157947.7	151166.8	490.16 ug/L	490.16 ppb	13:55:09
3	Mn 257.610†	381504.5	380018.1	498.89 ug/L	498.89 ppb	13:55:04
3	Mo 202.031†	5703.1	5673.5	499.25 ug/L	499.25 ppb	13:55:29
3	Ni 231.604†	16230.9	16093.3	502.21 ug/L	502.21 ppb	13:55:09
3	P 214.914†	3618.6	3440.6	2377.4 ug/L	2377.4 ppb	13:55:29
3	Pb 220.353†	3231.4	3281.5	496.13 ug/L	496.13 ppb	13:55:29
3	S 181.975 Axial†	596.2	570.2	998.49 ug/L	998.49 ppb	13:55:29
3	Sb 206.836†	1212.1	1182.2	520.29 ug/L	520.29 ppb	13:55:29
3	Se 196.026†	597.2	612.5	506.77 ug/L	506.77 ppb	13:55:29
3	Si 251.611†	67449.7	66741.4	2478.9 ug/L	2478.9 ppb	13:55:09
3	Sn 189.927†	2269.8	2260.6	501.28 ug/L	501.28 ppb	13:55:29
3	Ti 334.940†	285085.7	285396.4	490.87 ug/L	490.87 ppb	13:55:09
3	Tl 190.801†	1250.0	1271.6	494.99 ug/L	494.99 ppb	13:55:29
3	U 409.014†	15215.1	17209.1	504.68 ug/L	504.68 ppb	13:55:09
3	V 292.402†	62618.2	63876.0	499.08 ug/L	499.08 ppb	13:55:09
3	Zn 213.857†	42482.8	41761.2	491.48 ug/L	491.48 ppb	13:55:09
3	SiO2†	68406.1	67667.3	5392.7 ug/L	5392.7 ppb	13:55:45

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	843117.5	100.39 %	0.400			0.40%
Sc Radial	4042.9	100 %	0.1			0.10%
Y 371.029	710027.3	99.155 %	0.3435			0.35%
Y RADIAL	4460.1	98.72 %	0.959			0.97%
Ag 328.068†	99805.1	506.27 ug/L	3.047	506.27 ppb	3.047	0.60%
QC value within limits for Ag 328.068 Recovery = 101.25%						
Al 396.153Radial†	4705.1	4990.3 ug/L	49.46	4990.3 ppb	49.46	0.99%
QC value within limits for Al 396.153Radial Recovery = 99.81%						
As 188.979†	916.8	495.78 ug/L	5.924	495.78 ppb	5.924	1.19%
QC value within limits for As 188.979 Recovery = 99.16%						
B 249.677†	17820.8	487.57 ug/L	3.696	487.57 ppb	3.696	0.76%
QC value within limits for B 249.677 Recovery = 97.51%						
Ba 233.527†	52990.6	498.01 ug/L	2.003	498.01 ppb	2.003	0.40%
QC value within limits for Ba 233.527 Recovery = 99.60%						
Be 313.107†	1221282.3	496.97 ug/L	0.659	496.97 ppb	0.659	0.13%
QC value within limits for Be 313.107 Recovery = 99.39%						
Ca 317.933Radial†	2498.2	5075.8 ug/L	9.63	5075.8 ppb	9.63	0.19%

QC value within limits for Ca 317.933 Radial Recovery = 101.52%

Cd 226.502†	35319.4	498.03 ug/L	2.359	498.03 ppb	2.359	0.47%
QC value within limits for Cd 226.502 Recovery = 99.61%						
Co 228.616†	19516.4	508.03 ug/L	3.018	508.03 ppb	3.018	0.59%
QC value within limits for Co 228.616 Recovery = 101.61%						
Cr 267.716†	38051.7	496.44 ug/L	2.322	496.44 ppb	2.322	0.47%
QC value within limits for Cr 267.716 Recovery = 99.29%						
Cu 324.752†	152278.4	493.76 ug/L	3.162	493.76 ppb	3.162	0.64%
QC value within limits for Cu 324.752 Recovery = 98.75%						
Fe 238.204 Radial†	409.5	5135.8 ug/L	36.69	5135.8 ppb	36.69	0.71%
QC value within limits for Fe 238.204 Radial Recovery = 102.72%						
K 766.490 Radial†	24543.6	4893.3 ug/L	23.22	4893.3 ppb	23.22	0.47%
QC value within limits for K 766.490 Radial Recovery = 97.87%						
Mg 279.077 IEC†	120.9	5279.4 ug/L	51.52	5279.4 ppb	51.52	0.98%
QC value within limits for Mg 279.077 IEC Recovery = 105.59%						
Mn 257.610†	380106.2	499.01 ug/L	0.761	499.01 ppb	0.761	0.15%
QC value within limits for Mn 257.610 Recovery = 99.80%						
Mo 202.031†	5680.6	499.87 ug/L	1.259	499.87 ppb	1.259	0.25%
QC value within limits for Mo 202.031 Recovery = 99.97%						
Na 589.592 Radial†	25735.1	10107 ug/L	108.8	10107 ppb	108.8	1.08%
QC value within limits for Na 589.592 Radial Recovery = 101.07%						
Ni 231.604†	16159.7	504.28 ug/L	1.972	504.28 ppb	1.972	0.39%
QC value within limits for Ni 231.604 Recovery = 100.86%						
P 214.914†	3440.3	2376.5 ug/L	4.57	2376.5 ppb	4.57	0.19%
QC value within limits for P 214.914 Recovery = 95.06%						
Pb 220.353†	3286.5	496.88 ug/L	0.664	496.88 ppb	0.664	0.13%
QC value within limits for Pb 220.353 Recovery = 99.38%						
S 181.975 Axial†	571.7	1001.2 ug/L	3.58	1001.2 ppb	3.58	0.36%
QC value within limits for S 181.975 Axial Recovery = 100.12%						
Sb 206.836†	1189.1	523.24 ug/L	4.705	523.24 ppb	4.705	0.90%
QC value within limits for Sb 206.836 Recovery = 104.65%						
Se 196.026†	616.9	510.28 ug/L	3.403	510.28 ppb	3.403	0.67%
QC value within limits for Se 196.026 Recovery = 102.06%						
Si 251.611†	67168.2	2494.7 ug/L	14.82	2494.7 ppb	14.82	0.59%
QC value within limits for Si 251.611 Recovery = 99.79%						
Sn 189.927†	2266.3	502.54 ug/L	3.731	502.54 ppb	3.731	0.74%
QC value within limits for Sn 189.927 Recovery = 100.51%						
Sr 421.552†	57922.0	493.20 ug/L	5.403	493.20 ppb	5.403	1.10%
QC value within limits for Sr 421.552 Recovery = 98.64%						
Ti 334.940†	287156.3	493.90 ug/L	2.728	493.90 ppb	2.728	0.55%
QC value within limits for Ti 334.940 Recovery = 98.78%						
Tl 190.801†	1274.9	496.27 ug/L	4.247	496.27 ppb	4.247	0.86%
QC value within limits for Tl 190.801 Recovery = 99.25%						
U 409.014†	17358.8	509.08 ug/L	4.435	509.08 ppb	4.435	0.87%
QC value within limits for U 409.014 Recovery = 101.82%						
V 292.402†	64293.4	502.32 ug/L	2.800	502.32 ppb	2.800	0.56%
QC value within limits for V 292.402 Recovery = 100.46%						
Zn 213.857†	41990.9	494.20 ug/L	2.373	494.20 ppb	2.373	0.48%
QC value within limits for Zn 213.857 Recovery = 98.84%						
SiO2†	67468.2	5376.8 ug/L	31.86	5376.8 ppb	31.86	0.59%
QC value within limits for SiO2 Recovery = 100.55%						

All analyte(s) passed QC.

Sequence No.: 10

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/25/2010 13:57:56

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4058.9	4058.9	101 %		14:00:08
1	Y RADIAL	4458.4	4458.4	98.68 %		13:59:48
1	Al 396.153Radial†	-73.2	6.9	7.3267 ug/L	7.3267 ppb	14:00:08
1	Ca 317.933Radial†	30.1	12.7	25.764 ug/L	25.764 ppb	14:00:08
1	Fe 238.204 Radial†	9.5	0.4	5.6043 ug/L	5.6043 ppb	14:00:08
1	K 766.490 Radial†	2743.0	-77.2	-15.420 ug/L	-15.420 ppb	13:59:48
1	Mg 279.077 IEC†	3.1	2.4	105.62 ug/L	105.62 ppb	14:00:08
1	Na 589.592 Radial†	-447.7	16.0	6.2689 ug/L	6.2689 ppb	13:59:48
1	Sr 421.552†	140.1	69.2	0.5890 ug/L	0.5890 ppb	13:59:48
1	Sc 361.383	838243.7	838243.7	99.808 %		14:01:05
1	Y 371.029	715520.3	715520.3	99.923 %		14:01:05
1	Ag 328.068†	167.6	-85.4	-0.4265 ug/L	-0.4265 ppb	14:01:05
1	As 188.979†	-25.3	-4.5	-2.4064 ug/L	-2.4064 ppb	14:01:25
1	B 249.677†	-220.5	29.2	0.8029 ug/L	0.8029 ppb	14:01:25
1	Ba 233.527†	69.2	50.8	0.4778 ug/L	0.4778 ppb	14:01:25
1	Be 313.107†	-4065.1	189.8	0.0776 ug/L	0.0776 ppb	14:01:05
1	Cd 226.502†	-151.5	14.6	0.2052 ug/L	0.2052 ppb	14:01:25
1	Co 228.616†	-37.4	1.5	0.0391 ug/L	0.0391 ppb	14:01:25
1	Cr 267.716†	113.3	18.6	0.2431 ug/L	0.2431 ppb	14:01:25
1	Cu 324.752†	6616.3	276.2	0.8959 ug/L	0.8959 ppb	14:01:05
1	Mn 257.610†	1002.3	551.8	0.7202 ug/L	0.7202 ppb	14:01:25
1	Mo 202.031†	19.2	5.0	0.4417 ug/L	0.4417 ppb	14:01:25
1	Ni 231.604†	89.6	-3.9	-0.1205 ug/L	-0.1205 ppb	14:01:25
1	P 214.914†	181.8	14.0	9.8659 ug/L	9.8659 ppb	14:01:25
1	Pb 220.353†	-54.2	4.5	0.6826 ug/L	0.6826 ppb	14:01:25
1	S 181.975 Axial†	25.0	0.7	1.2449 ug/L	1.2449 ppb	14:01:25
1	Sb 206.836†	15.8	-10.8	-4.5919 ug/L	-4.5919 ppb	14:01:25
1	Se 196.026†	-17.1	-0.2	-0.1145 ug/L	-0.1145 ppb	14:01:25
1	Si 251.611†	591.2	66.9	2.4852 ug/L	2.4852 ppb	14:01:25
1	Sn 189.927†	4.0	0.9	0.2085 ug/L	0.2085 ppb	14:01:25
1	Ti 334.940†	-950.1	131.4	0.2207 ug/L	0.2207 ppb	14:01:05
1	Tl 190.801†	-20.2	4.8	1.8662 ug/L	1.8662 ppb	14:01:25
1	U 409.014†	-2022.9	8.4	0.2451 ug/L	0.2451 ppb	14:01:05
1	V 292.402†	-1329.8	95.1	0.7411 ug/L	0.7411 ppb	14:01:05
1	Zn 213.857†	720.8	115.7	1.3738 ug/L	1.3738 ppb	14:01:25
1	SiO2†	613.7	61.5	4.8993 ug/L	4.8993 ppb	14:02:21
2	Sc Radial	3830.0	3830.0	94.9 %		14:00:33
2	Y RADIAL	4455.2	4455.2	98.61 %		14:00:13
2	Al 396.153Radial†	-72.3	3.5	3.6648 ug/L	3.6648 ppb	14:00:33
2	Ca 317.933Radial†	37.9	22.7	46.157 ug/L	46.157 ppb	14:00:33
2	Fe 238.204 Radial†	11.2	2.8	34.408 ug/L	34.408 ppb	14:00:33
2	K 766.490 Radial†	2966.2	320.8	63.999 ug/L	63.999 ppb	14:00:13
2	Mg 279.077 IEC†	-0.4	-1.1	-49.444 ug/L	-49.444 ppb	14:00:33
2	Na 589.592 Radial†	-323.6	120.0	47.138 ug/L	47.138 ppb	14:00:13
2	Sr 421.552†	200.6	141.3	1.2028 ug/L	1.2028 ppb	14:00:13
2	Sc 361.383	840601.1	840601.1	100.09 %		14:01:30
2	Y 371.029	717400.3	717400.3	100.19 %		14:01:30
2	Ag 328.068†	222.7	-30.9	-0.1451 ug/L	-0.1451 ppb	14:01:30
2	As 188.979†	-23.5	-2.7	-1.4315 ug/L	-1.4315 ppb	14:01:50
2	B 249.677†	-233.5	16.9	0.4575 ug/L	0.4575 ppb	14:01:50
2	Ba 233.527†	99.6	81.0	0.7598 ug/L	0.7598 ppb	14:01:50
2	Be 313.107†	-4211.1	55.4	0.0226 ug/L	0.0226 ppb	14:01:30
2	Cd 226.502†	-151.0	15.6	0.2154 ug/L	0.2154 ppb	14:01:50
2	Co 228.616†	-34.0	4.9	0.1279 ug/L	0.1279 ppb	14:01:50
2	Cr 267.716†	124.2	29.1	0.3832 ug/L	0.3832 ppb	14:01:50
2	Cu 324.752†	6594.0	235.4	0.7662 ug/L	0.7662 ppb	14:01:30
2	Mn 257.610†	935.9	482.6	0.6386 ug/L	0.6386 ppb	14:01:50
2	Mo 202.031†	17.6	3.3	0.2977 ug/L	0.2977 ppb	14:01:50
2	Ni 231.604†	90.0	-3.7	-0.1161 ug/L	-0.1161 ppb	14:01:50

2	P 214.914†	186.0	17.6	12.465 ug/L	12.465 ppb	14:01:50
2	Pb 220.353†	-63.0	-4.2	-0.6330 ug/L	-0.6330 ppb	14:01:50
2	S 181.975 Axial†	34.1	9.7	16.995 ug/L	16.995 ppb	14:01:50
2	Sb 206.836†	32.2	5.5	2.3592 ug/L	2.3592 ppb	14:01:50
2	Se 196.026†	-19.0	-2.0	-1.4891 ug/L	-1.4891 ppb	14:01:50
2	Si 251.611†	576.9	51.0	1.8946 ug/L	1.8946 ppb	14:01:50
2	Sn 189.927†	6.1	3.0	0.6774 ug/L	0.6774 ppb	14:01:50
2	Ti 334.940†	-1049.8	34.5	0.0703 ug/L	0.0703 ppb	14:01:30
2	Tl 190.801†	-30.1	-5.0	-1.9115 ug/L	-1.9115 ppb	14:01:50
2	U 409.014†	-2108.0	-71.0	-2.0926 ug/L	-2.0926 ppb	14:01:30
2	V 292.402†	-1467.7	-38.8	-0.3053 ug/L	-0.3053 ppb	14:01:30
2	Zn 213.857†	723.4	116.3	1.3765 ug/L	1.3765 ppb	14:01:50
2	SiO2†	603.0	49.1	3.9173 ug/L	3.9173 ppb	14:02:26
3	Sc Radial	3962.8	3962.8	98.2 %		14:00:58
3	Y RADIAL	4487.4	4487.4	99.32 %		14:00:38
3	Al 396.153Radial†	-64.0	14.5	15.437 ug/L	15.437 ppb	14:00:58
3	Ca 317.933Radial†	32.2	15.6	31.716 ug/L	31.716 ppb	14:00:58
3	Fe 238.204 Radial†	12.4	3.7	45.852 ug/L	45.852 ppb	14:00:58
3	K 766.490 Radial†	2728.5	-25.9	-5.1803 ug/L	-5.1803 ppb	14:00:38
3	Mg 279.077 IEC†	2.2	1.5	66.449 ug/L	66.449 ppb	14:00:58
3	Na 589.592 Radial†	-404.2	49.4	19.416 ug/L	19.416 ppb	14:00:38
3	Sr 421.552†	132.8	65.1	0.5544 ug/L	0.5544 ppb	14:00:38
3	Sc 361.383	828569.8	828569.8	98.656 %		14:01:56
3	Y 371.029	705817.8	705817.8	98.568 %		14:01:56
3	Ag 328.068†	260.9	11.0	0.0676 ug/L	0.0676 ppb	14:01:56
3	As 188.979†	-23.8	-3.3	-1.7490 ug/L	-1.7490 ppb	14:02:16
3	B 249.677†	-244.7	2.1	0.0504 ug/L	0.0504 ppb	14:02:16
3	Ba 233.527†	70.4	52.8	0.4963 ug/L	0.4963 ppb	14:02:16
3	Be 313.107†	-4149.9	56.3	0.0239 ug/L	0.0239 ppb	14:01:56
3	Cd 226.502†	-162.1	2.1	0.0253 ug/L	0.0253 ppb	14:02:16
3	Co 228.616†	-33.3	5.2	0.1333 ug/L	0.1333 ppb	14:02:16
3	Cr 267.716†	141.2	48.1	0.6309 ug/L	0.6309 ppb	14:02:16
3	Cu 324.752†	6559.2	295.8	0.9606 ug/L	0.9606 ppb	14:01:56
3	Mn 257.610†	914.9	474.9	0.6249 ug/L	0.6249 ppb	14:02:16
3	Mo 202.031†	12.9	-1.1	-0.0907 ug/L	-0.0907 ppb	14:02:16
3	Ni 231.604†	105.9	13.7	0.4275 ug/L	0.4275 ppb	14:02:16
3	P 214.914†	182.2	16.4	11.595 ug/L	11.595 ppb	14:02:16
3	Pb 220.353†	-53.4	4.7	0.7036 ug/L	0.7036 ppb	14:02:16
3	S 181.975 Axial†	24.1	0.1	0.1369 ug/L	0.1369 ppb	14:02:16
3	Sb 206.836†	36.9	10.8	4.5941 ug/L	4.5941 ppb	14:02:16
3	Se 196.026†	-16.1	0.6	0.6445 ug/L	0.6445 ppb	14:02:16
3	Si 251.611†	582.1	64.5	2.4042 ug/L	2.4042 ppb	14:02:16
3	Sn 189.927†	6.4	3.4	0.7567 ug/L	0.7567 ppb	14:02:16
3	Ti 334.940†	-803.5	268.9	0.4605 ug/L	0.4605 ppb	14:01:56
3	Tl 190.801†	-24.0	0.8	0.3076 ug/L	0.3076 ppb	14:02:16
3	U 409.014†	-1951.7	56.9	1.6673 ug/L	1.6673 ppb	14:01:56
3	V 292.402†	-1420.1	-11.9	-0.0963 ug/L	-0.0963 ppb	14:01:56
3	Zn 213.857†	728.3	131.8	1.5550 ug/L	1.5550 ppb	14:02:16
3	SiO2†	575.4	29.9	2.3904 ug/L	2.3904 ppb	14:02:31

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	835804.9	99.518 %	0.7591			0.76%
Sc Radial	3950.6	97.9 %	2.85			2.91%
Y 371.029	712912.8	99.558 %	0.8681			0.87%
Y RADIAL	4467.0	98.87 %	0.393			0.40%
Ag 328.068†	-35.1	-0.1680 ug/L	0.24789	-0.1680 ppb	0.24789	147.57%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	8.3	8.8095 ug/L	6.02450	8.8095 ppb	6.02450	68.39%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-3.5	-1.8623 ug/L	0.49720	-1.8623 ppb	0.49720	26.70%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	16.1	0.4369 ug/L	0.37666	0.4369 ppb	0.37666	86.20%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	61.5	0.5780 ug/L	0.15775	0.5780 ppb	0.15775	27.29%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	100.5	0.0414 ug/L	0.03137	0.0414 ppb	0.03137	75.83%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	17.0	34.546 ug/L	10.4868	34.546 ppb	10.4868	30.36%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated									
Cd	226.502†	10.7	0.1486 ug/L	0.10693	0.1486 ppb	0.10693	71.93%		
QC value within limits for Cd 226.502 Recovery = Not calculated									
Co	228.616†	3.9	0.1001 ug/L	0.05291	0.1001 ppb	0.05291	52.87%		
QC value within limits for Co 228.616 Recovery = Not calculated									
Cr	267.716†	31.9	0.4190 ug/L	0.19639	0.4190 ppb	0.19639	46.87%		
QC value within limits for Cr 267.716 Recovery = Not calculated									
Cu	324.752†	269.1	0.8743 ug/L	0.09898	0.8743 ppb	0.09898	11.32%		
QC value within limits for Cu 324.752 Recovery = Not calculated									
Fe	238.204 Radial†	2.3	28.622 ug/L	20.7386	28.622 ppb	20.7386	72.46%		
QC value within limits for Fe 238.204 Radial Recovery = Not calculated									
K	766.490 Radial†	72.6	14.467 ug/L	43.2011	14.467 ppb	43.2011	298.63%		
QC value within limits for K 766.490 Radial Recovery = Not calculated									
Mg	279.077 IEC†	0.9	40.874 ug/L	80.6315	40.874 ppb	80.6315	197.27%		
QC value within limits for Mg 279.077 IEC Recovery = Not calculated									
Mn	257.610†	503.1	0.6613 ug/L	0.05155	0.6613 ppb	0.05155	7.80%		
QC value within limits for Mn 257.610 Recovery = Not calculated									
Mo	202.031†	2.4	0.2162 ug/L	0.27543	0.2162 ppb	0.27543	127.39%		
QC value within limits for Mo 202.031 Recovery = Not calculated									
Na	589.592 Radial†	61.8	24.274 ug/L	20.8631	24.274 ppb	20.8631	85.95%		
QC value within limits for Na 589.592 Radial Recovery = Not calculated									
Ni	231.604†	2.0	0.0636 ug/L	0.31511	0.0636 ppb	0.31511	495.08%		
QC value within limits for Ni 231.604 Recovery = Not calculated									
P	214.914†	16.0	11.309 ug/L	1.3232	11.309 ppb	1.3232	11.70%		
QC value within limits for P 214.914 Recovery = Not calculated									
Pb	220.353†	1.7	0.2511 ug/L	0.76569	0.2511 ppb	0.76569	304.96%		
QC value within limits for Pb 220.353 Recovery = Not calculated									
S	181.975 Axial†	3.5	6.1255 ug/L	9.42930	6.1255 ppb	9.42930	153.93%		
QC value within limits for S 181.975 Axial Recovery = Not calculated									
Sb	206.836†	1.8	0.7871 ug/L	4.79057	0.7871 ppb	4.79057	608.62%		
QC value within limits for Sb 206.836 Recovery = Not calculated									
Se	196.026†	-0.5	-0.3197 ug/L	1.08146	-0.3197 ppb	1.08146	338.26%		
QC value within limits for Se 196.026 Recovery = Not calculated									
Si	251.611†	60.8	2.2613 ug/L	0.32018	2.2613 ppb	0.32018	14.16%		
QC value within limits for Si 251.611 Recovery = Not calculated									
Sn	189.927†	2.5	0.5475 ug/L	0.29624	0.5475 ppb	0.29624	54.10%		
QC value within limits for Sn 189.927 Recovery = Not calculated									
Sr	421.552†	91.9	0.7821 ug/L	0.36475	0.7821 ppb	0.36475	46.64%		
QC value within limits for Sr 421.552 Recovery = Not calculated									
Ti	334.940†	144.9	0.2505 ug/L	0.19679	0.2505 ppb	0.19679	78.56%		
QC value within limits for Ti 334.940 Recovery = Not calculated									
Tl	190.801†	0.2	0.0874 ug/L	1.89840	0.0874 ppb	1.89840	>999.9%		
QC value within limits for Tl 190.801 Recovery = Not calculated									
U	409.014†	-1.9	-0.0601 ug/L	1.89845	-0.0601 ppb	1.89845	>999.9%		
QC value within limits for U 409.014 Recovery = Not calculated									
V	292.402†	14.8	0.1131 ug/L	0.55375	0.1131 ppb	0.55375	489.45%		
QC value within limits for V 292.402 Recovery = Not calculated									
Zn	213.857†	121.3	1.4351 ug/L	0.10387	1.4351 ppb	0.10387	7.24%		
QC value within limits for Zn 213.857 Recovery = Not calculated									
SiO2†		46.8	3.7357 ug/L	1.26426	3.7357 ppb	1.26426	33.84%		
QC value within limits for SiO2 Recovery = Not calculated									
All analyte(s) passed QC.									

Sequence No.: 19

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/25/2010 15:00:52

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	3978.8	3978.8	98.6 %		15:03:04
1	Y RADIAL	4474.7	4474.7	99.04 %		15:02:44
1	Al 396.153Radial†	4629.9	4773.6	5063.2 ug/L	5063.2 ppb	15:02:44
1	Ca 317.933Radial†	2486.6	2503.8	5087.2 ug/L	5087.2 ppb	15:03:04
1	Fe 238.204 Radial†	412.1	408.8	5126.5 ug/L	5126.5 ppb	15:03:04
1	K 766.490 Radial†	27183.0	24756.0	4935.8 ug/L	4935.8 ppb	15:02:44
1	Mg 279.077 IEC†	120.4	121.4	5301.0 ug/L	5301.0 ppb	15:03:04
1	Na 589.592 Radial†	24122.1	24916.9	9785.2 ug/L	9785.2 ppb	15:02:44
1	Sr 421.552†	56711.5	57426.6	488.98 ug/L	488.98 ppb	15:02:44
1	Sc 361.383	840365.2	840365.2	100.06 %		15:04:01
1	Y 371.029	707495.8	707495.8	98.802 %		15:04:01
1	Ag 328.068†	99634.9	99321.1	503.81 ug/L	503.81 ppb	15:04:06
1	As 188.979†	899.5	919.8	497.34 ug/L	497.34 ppb	15:04:26
1	B 249.677†	17377.5	17617.1	481.98 ug/L	481.98 ppb	15:04:06
1	Ba 233.527†	52690.6	52640.1	494.71 ug/L	494.71 ppb	15:04:06
1	Be 313.107†	1216301.3	1219826.2	496.37 ug/L	496.37 ppb	15:04:01
1	Cd 226.502†	35000.3	35145.5	495.57 ug/L	495.57 ppb	15:04:06
1	Co 228.616†	19400.5	19427.6	505.73 ug/L	505.73 ppb	15:04:06
1	Cr 267.716†	37837.8	37719.9	492.12 ug/L	492.12 ppb	15:04:06
1	Cu 324.752†	158060.2	151611.6	491.60 ug/L	491.60 ppb	15:04:06
1	Mn 257.610†	371832.2	371154.2	487.26 ug/L	487.26 ppb	15:04:06
1	Mo 202.031†	5707.1	5689.4	500.65 ug/L	500.65 ppb	15:04:26
1	Ni 231.604†	16175.5	16072.1	501.55 ug/L	501.55 ppb	15:04:06
1	P 214.914†	3614.4	3444.0	2379.7 ug/L	2379.7 ppb	15:04:26
1	Pb 220.353†	3240.7	3297.5	498.57 ug/L	498.57 ppb	15:04:26
1	S 181.975 Axial†	606.2	581.4	1018.1 ug/L	1018.1 ppb	15:04:26
1	Sb 206.836†	1221.3	1193.9	525.26 ug/L	525.26 ppb	15:04:26
1	Se 196.026†	601.3	617.9	511.06 ug/L	511.06 ppb	15:04:26
1	Si 251.611†	67386.7	66820.4	2481.8 ug/L	2481.8 ppb	15:04:06
1	Sn 189.927†	2257.5	2253.0	499.61 ug/L	499.61 ppb	15:04:26
1	Ti 334.940†	284797.7	285708.3	491.41 ug/L	491.41 ppb	15:04:06
1	Tl 190.801†	1246.8	1271.1	494.74 ug/L	494.74 ppb	15:04:26
1	U 409.014†	15230.6	17256.5	506.08 ug/L	506.08 ppb	15:04:06
1	V 292.402†	62410.7	63800.4	498.53 ug/L	498.53 ppb	15:04:06
1	Zn 213.857†	42338.7	41706.5	490.84 ug/L	490.84 ppb	15:04:06
1	SiO2†	67957.1	67362.5	5368.3 ug/L	5368.3 ppb	15:05:33
2	Sc Radial	4035.3	4035.3	100 %		15:03:29
2	Y RADIAL	4431.7	4431.7	98.09 %		15:03:09
2	Al 396.153Radial†	4623.1	4701.1	4986.3 ug/L	4986.3 ppb	15:03:09
2	Ca 317.933Radial†	2495.0	2476.9	5032.4 ug/L	5032.4 ppb	15:03:29
2	Fe 238.204 Radial†	409.6	400.4	5022.4 ug/L	5022.4 ppb	15:03:29
2	K 766.490 Radial†	27236.3	24423.4	4869.5 ug/L	4869.5 ppb	15:03:09
2	Mg 279.077 IEC†	118.8	118.1	5157.8 ug/L	5157.8 ppb	15:03:29
2	Na 589.592 Radial†	23876.0	24328.4	9554.1 ug/L	9554.1 ppb	15:03:09
2	Sr 421.552†	56567.5	56477.4	480.90 ug/L	480.90 ppb	15:03:09
2	Sc 361.383	851485.6	851485.6	101.38 %		15:04:31
2	Y 371.029	715289.6	715289.6	99.890 %		15:04:31
2	Ag 328.068†	100449.5	98824.1	501.27 ug/L	501.27 ppb	15:04:37
2	As 188.979†	905.2	913.7	494.04 ug/L	494.04 ppb	15:04:57
2	B 249.677†	17454.3	17466.0	477.85 ug/L	477.85 ppb	15:04:37
2	Ba 233.527†	52983.8	52241.6	490.97 ug/L	490.97 ppb	15:04:37
2	Be 313.107†	1227735.1	1215228.6	494.50 ug/L	494.50 ppb	15:04:31
2	Cd 226.502†	35179.3	34865.2	491.63 ug/L	491.63 ppb	15:04:37
2	Co 228.616†	19497.3	19269.9	501.61 ug/L	501.61 ppb	15:04:37
2	Cr 267.716†	38113.0	37497.4	489.21 ug/L	489.21 ppb	15:04:37
2	Cu 324.752†	159560.4	151028.2	489.70 ug/L	489.70 ppb	15:04:37
2	Mn 257.610†	374464.9	368897.7	484.30 ug/L	484.30 ppb	15:04:37
2	Mo 202.031†	5703.6	5611.5	493.80 ug/L	493.80 ppb	15:04:57
2	Ni 231.604†	16210.8	15895.8	496.04 ug/L	496.04 ppb	15:04:37

2	P 214.914†	3608.5	3391.0	2341.9 ug/L	2341.9 ppb	15:04:57
2	Pb 220.353†	3215.3	3230.2	488.40 ug/L	488.40 ppb	15:04:57
2	S 181.975 Axial†	596.5	564.0	987.56 ug/L	987.56 ppb	15:04:57
2	Sb 206.836†	1213.4	1170.2	514.97 ug/L	514.97 ppb	15:04:57
2	Se 196.026†	605.2	613.9	507.46 ug/L	507.46 ppb	15:04:57
2	Si 251.611†	67890.0	66437.3	2467.6 ug/L	2467.6 ppb	15:04:37
2	Sn 189.927†	2262.4	2228.4	494.15 ug/L	494.15 ppb	15:04:57
2	Ti 334.940†	287230.5	284390.6	489.15 ug/L	489.15 ppb	15:04:37
2	Tl 190.801†	1233.9	1242.1	483.49 ug/L	483.49 ppb	15:04:57
2	U 409.014†	15424.8	17249.3	505.89 ug/L	505.89 ppb	15:04:37
2	V 292.402†	63078.1	63644.1	497.24 ug/L	497.24 ppb	15:04:37
2	Zn 213.857†	42600.9	41412.6	487.40 ug/L	487.40 ppb	15:04:37
2	SiO2†	67267.2	65795.0	5243.3 ug/L	5243.3 ppb	15:05:38
3	Sc Radial	4022.9	4022.9	99.7 %		15:03:54
3	Y RADIAL	4491.5	4491.5	99.41 %		15:03:34
3	Al 396.153Radial†	4653.7	4745.9	5033.8 ug/L	5033.8 ppb	15:03:34
3	Ca 317.933Radial†	2497.1	2486.7	5052.4 ug/L	5052.4 ppb	15:03:54
3	Fe 238.204 Radial†	412.5	404.6	5074.0 ug/L	5074.0 ppb	15:03:54
3	K 766.490 Radial†	27496.7	24768.0	4938.3 ug/L	4938.3 ppb	15:03:34
3	Mg 279.077 IEC†	114.8	114.4	4998.0 ug/L	4998.0 ppb	15:03:54
3	Na 589.592 Radial†	24011.2	24537.2	9636.1 ug/L	9636.1 ppb	15:03:34
3	Sr 421.552†	56770.7	56854.5	484.11 ug/L	484.11 ppb	15:03:34
3	Sc 361.383	840431.3	840431.3	100.07 %		15:05:02
3	Y 371.029	708222.0	708222.0	98.903 %		15:05:02
3	Ag 328.068†	99494.5	99172.9	503.05 ug/L	503.05 ppb	15:05:08
3	As 188.979†	900.8	921.0	497.98 ug/L	497.98 ppb	15:05:28
3	B 249.677†	17320.2	17558.5	480.38 ug/L	480.38 ppb	15:05:08
3	Ba 233.527†	52505.1	52450.7	492.94 ug/L	492.94 ppb	15:05:08
3	Be 313.107†	1209434.6	1212868.5	493.54 ug/L	493.54 ppb	15:05:02
3	Cd 226.502†	34858.2	35000.7	493.54 ug/L	493.54 ppb	15:05:08
3	Co 228.616†	19270.0	19295.7	502.29 ug/L	502.29 ppb	15:05:08
3	Cr 267.716†	37844.6	37723.7	492.16 ug/L	492.16 ppb	15:05:08
3	Cu 324.752†	157942.6	151481.6	491.17 ug/L	491.17 ppb	15:05:08
3	Mn 257.610†	371131.3	370424.6	486.31 ug/L	486.31 ppb	15:05:08
3	Mo 202.031†	5688.4	5670.3	498.96 ug/L	498.96 ppb	15:05:28
3	Ni 231.604†	16109.7	16005.1	499.46 ug/L	499.46 ppb	15:05:08
3	P 214.914†	3595.0	3424.4	2365.6 ug/L	2365.6 ppb	15:05:28
3	Pb 220.353†	3221.5	3278.1	495.64 ug/L	495.64 ppb	15:05:28
3	S 181.975 Axial†	597.9	573.1	1003.6 ug/L	1003.6 ppb	15:05:28
3	Sb 206.836†	1213.6	1186.1	521.85 ug/L	521.85 ppb	15:05:28
3	Se 196.026†	596.3	612.9	506.87 ug/L	506.87 ppb	15:05:28
3	Si 251.611†	67090.6	66519.1	2470.6 ug/L	2470.6 ppb	15:05:08
3	Sn 189.927†	2239.4	2234.7	495.56 ug/L	495.56 ppb	15:05:28
3	Ti 334.940†	284382.5	285271.0	490.68 ug/L	490.68 ppb	15:05:08
3	Tl 190.801†	1244.5	1268.7	493.80 ug/L	493.80 ppb	15:05:28
3	U 409.014†	15419.4	17444.0	511.61 ug/L	511.61 ppb	15:05:08
3	V 292.402†	62508.5	63893.2	499.23 ug/L	499.23 ppb	15:05:08
3	Zn 213.857†	42243.6	41608.2	489.69 ug/L	489.69 ppb	15:05:08
3	SiO2†	68202.7	67602.5	5387.5 ug/L	5387.5 ppb	15:05:43

Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	844094.0	100.50 %		0.762			0.76%
Sc Radial	4012.3	99.5 %		0.74			0.74%
Y 371.029	710335.8	99.199 %		0.6013			0.61%
Y RADIAL	4466.0	98.85 %		0.683			0.69%
Ag 328.068†	99106.0	502.71 ug/L		1.304	502.71 ppb	1.304	0.26%
QC value within limits for Ag 328.068 Recovery = 100.54%							
Al 396.153Radial†	4740.2	5027.8 ug/L		38.82	5027.8 ppb	38.82	0.77%
QC value within limits for Al 396.153Radial Recovery = 100.56%							
As 188.979†	918.2	496.45 ug/L		2.115	496.45 ppb	2.115	0.43%
QC value within limits for As 188.979 Recovery = 99.29%							
B 249.677†	17547.2	480.07 ug/L		2.079	480.07 ppb	2.079	0.43%
QC value within limits for B 249.677 Recovery = 96.01%							
Ba 233.527†	52444.1	492.87 ug/L		1.871	492.87 ppb	1.871	0.38%
QC value within limits for Ba 233.527 Recovery = 98.57%							
Be 313.107†	1215974.4	494.80 ug/L		1.438	494.80 ppb	1.438	0.29%
QC value within limits for Be 313.107 Recovery = 98.96%							
Ca 317.933Radial†	2489.2	5057.3 ug/L		27.70	5057.3 ppb	27.70	0.55%

QC value within limits for Ca 317.933 Radial Recovery = 101.15%							
Cd	226.502†	35003.8	493.58 ug/L	1.973	493.58 ppb	1.973	0.40%
QC value within limits for Cd 226.502 Recovery = 98.72%							
Co	228.616†	19331.1	503.21 ug/L	2.207	503.21 ppb	2.207	0.44%
QC value within limits for Co 228.616 Recovery = 100.64%							
Cr	267.716†	37647.0	491.16 ug/L	1.692	491.16 ppb	1.692	0.34%
QC value within limits for Cr 267.716 Recovery = 98.23%							
Cu	324.752†	151373.8	490.82 ug/L	0.995	490.82 ppb	0.995	0.20%
QC value within limits for Cu 324.752 Recovery = 98.16%							
Fe	238.204 Radial†	404.6	5074.3 ug/L	52.08	5074.3 ppb	52.08	1.03%
QC value within limits for Fe 238.204 Radial Recovery = 101.49%							
K	766.490 Radial†	24649.1	4914.5 ug/L	39.00	4914.5 ppb	39.00	0.79%
QC value within limits for K 766.490 Radial Recovery = 98.29%							
Mg	279.077 IEC†	117.9	5152.3 ug/L	151.55	5152.3 ppb	151.55	2.94%
QC value within limits for Mg 279.077 IEC Recovery = 103.05%							
Mn	257.610†	370158.8	485.96 ug/L	1.514	485.96 ppb	1.514	0.31%
QC value within limits for Mn 257.610 Recovery = 97.19%							
Mo	202.031†	5657.1	497.80 ug/L	3.572	497.80 ppb	3.572	0.72%
QC value within limits for Mo 202.031 Recovery = 99.56%							
Na	589.592 Radial†	24594.2	9658.5 ug/L	117.17	9658.5 ppb	117.17	1.21%
QC value within limits for Na 589.592 Radial Recovery = 96.58%							
Ni	231.604†	15991.0	499.02 ug/L	2.777	499.02 ppb	2.777	0.56%
QC value within limits for Ni 231.604 Recovery = 99.80%							
P	214.914†	3419.8	2362.4 ug/L	19.06	2362.4 ppb	19.06	0.81%
QC value within limits for P 214.914 Recovery = 94.50%							
Pb	220.353†	3268.6	494.20 ug/L	5.236	494.20 ppb	5.236	1.06%
QC value within limits for Pb 220.353 Recovery = 98.84%							
S	181.975 Axial†	572.8	1003.1 ug/L	15.30	1003.1 ppb	15.30	1.52%
QC value within limits for S 181.975 Axial Recovery = 100.31%							
Sb	206.836†	1183.4	520.70 ug/L	5.242	520.70 ppb	5.242	1.01%
QC value within limits for Sb 206.836 Recovery = 104.14%							
Se	196.026†	614.9	508.46 ug/L	2.264	508.46 ppb	2.264	0.45%
QC value within limits for Se 196.026 Recovery = 101.69%							
Si	251.611†	66592.3	2473.3 ug/L	7.48	2473.3 ppb	7.48	0.30%
QC value within limits for Si 251.611 Recovery = 98.93%							
Sn	189.927†	2238.7	496.44 ug/L	2.831	496.44 ppb	2.831	0.57%
QC value within limits for Sn 189.927 Recovery = 99.29%							
Sr	421.552†	56919.5	484.66 ug/L	4.070	484.66 ppb	4.070	0.84%
QC value within limits for Sr 421.552 Recovery = 96.93%							
Ti	334.940†	285123.3	490.41 ug/L	1.154	490.41 ppb	1.154	0.24%
QC value within limits for Ti 334.940 Recovery = 98.08%							
Tl	190.801†	1260.6	490.68 ug/L	6.241	490.68 ppb	6.241	1.27%
QC value within limits for Tl 190.801 Recovery = 98.14%							
U	409.014†	17316.6	507.86 ug/L	3.246	507.86 ppb	3.246	0.64%
QC value within limits for U 409.014 Recovery = 101.57%							
V	292.402†	63779.2	498.33 ug/L	1.010	498.33 ppb	1.010	0.20%
QC value within limits for V 292.402 Recovery = 99.67%							
Zn	213.857†	41575.8	489.31 ug/L	1.751	489.31 ppb	1.751	0.36%
QC value within limits for Zn 213.857 Recovery = 97.86%							
SiO2†		66920.0	5333.0 ug/L	78.34	5333.0 ppb	78.34	1.47%
QC value within limits for SiO2 Recovery = 99.73%							
All analyte(s) passed QC.							

Sequence No.: 20
 Sample ID: CCB
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 8
 Date Collected: 3/25/2010 15:07:55
 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	4049.0	4049.0	100 %		15:10:08
1	Y RADIAL	4251.7	4251.7	94.10 %		15:09:48
1	Al 396.153Radial†	-79.0	1.0	1.0294 ug/L	1.0294 ppb	15:10:08
1	Ca 317.933Radial†	30.9	13.6	27.624 ug/L	27.624 ppb	15:10:08
1	Fe 238.204 Radial†	16.0	7.0	87.330 ug/L	87.330 ppb	15:10:08
1	K 766.490 Radial†	2621.3	-191.7	-38.297 ug/L	-38.297 ppb	15:09:48
1	Mg 279.077 IEC†	1.3	0.6	25.497 ug/L	25.497 ppb	15:10:08
1	Na 589.592 Radial†	-399.4	63.0	24.736 ug/L	24.736 ppb	15:09:48
1	Sr 421.552†	97.3	26.9	0.2290 ug/L	0.2290 ppb	15:09:48
1	Sc 361.383	837525.5	837525.5	99.723 %		15:11:05
1	Y 371.029	713954.7	713954.7	99.704 %		15:11:05
1	Ag 328.068†	233.0	-19.7	-0.0714 ug/L	-0.0714 ppb	15:11:05
1	As 188.979†	-23.6	-2.8	-1.4911 ug/L	-1.4911 ppb	15:11:25
1	B 249.677†	-347.7	-98.5	-2.7219 ug/L	-2.7219 ppb	15:11:25
1	Ba 233.527†	48.2	29.8	0.2843 ug/L	0.2843 ppb	15:11:25
1	Be 313.107†	-4335.5	-84.8	-0.0340 ug/L	-0.0340 ppb	15:11:05
1	Cd 226.502†	-173.8	-7.9	-0.1202 ug/L	-0.1202 ppb	15:11:25
1	Co 228.616†	-40.9	-2.1	-0.0560 ug/L	-0.0560 ppb	15:11:25
1	Cr 267.716†	95.6	0.9	0.0218 ug/L	0.0218 ppb	15:11:25
1	Cu 324.752†	6511.7	177.1	0.5775 ug/L	0.5775 ppb	15:11:05
1	Mn 257.610†	1001.0	551.3	0.7309 ug/L	0.7309 ppb	15:11:25
1	Mo 202.031†	16.0	1.8	0.1682 ug/L	0.1682 ppb	15:11:25
1	Ni 231.604†	99.6	6.3	0.1964 ug/L	0.1964 ppb	15:11:25
1	P 214.914†	184.9	17.2	12.165 ug/L	12.165 ppb	15:11:25
1	Pb 220.353†	-52.1	6.6	0.9817 ug/L	0.9817 ppb	15:11:25
1	S 181.975 Axial†	28.7	4.4	7.7009 ug/L	7.7009 ppb	15:11:25
1	Sb 206.836†	26.4	-0.2	-0.0352 ug/L	-0.0352 ppb	15:11:25
1	Se 196.026†	-22.2	-5.4	-4.0105 ug/L	-4.0105 ppb	15:11:25
1	Si 251.611†	600.7	76.9	2.8617 ug/L	2.8617 ppb	15:11:25
1	Sn 189.927†	12.9	9.8	2.1756 ug/L	2.1756 ppb	15:11:25
1	Ti 334.940†	-977.8	102.8	0.1774 ug/L	0.1774 ppb	15:11:05
1	Tl 190.801†	-25.9	-0.9	-0.3364 ug/L	-0.3364 ppb	15:11:25
1	U 409.014†	-1948.6	81.2	2.3787 ug/L	2.3787 ppb	15:11:05
1	V 292.402†	-1314.2	109.7	0.8402 ug/L	0.8402 ppb	15:11:05
1	Zn 213.857†	755.8	151.5	1.7845 ug/L	1.7845 ppb	15:11:25
1	SiO2†	646.2	94.6	7.5532 ug/L	7.5532 ppb	15:12:36
2	Sc Radial	4073.1	4073.1	101 %		15:10:33
2	Y RADIAL	4547.3	4547.3	100.6 %		15:10:13
2	Al 396.153Radial†	-67.3	13.0	13.821 ug/L	13.821 ppb	15:10:33
2	Ca 317.933Radial†	36.9	19.4	39.422 ug/L	39.422 ppb	15:10:33
2	Fe 238.204 Radial†	15.9	6.8	84.626 ug/L	84.626 ppb	15:10:33
2	K 766.490 Radial†	2567.8	-260.2	-51.973 ug/L	-51.973 ppb	15:10:13
2	Mg 279.077 IEC†	2.7	1.9	84.928 ug/L	84.928 ppb	15:10:33
2	Na 589.592 Radial†	-410.4	54.5	21.390 ug/L	21.390 ppb	15:10:13
2	Sr 421.552†	52.8	-17.7	-0.1512 ug/L	-0.1512 ppb	15:10:13
2	Sc 361.383	833423.5	833423.5	99.234 %		15:11:30
2	Y 371.029	710884.3	710884.3	99.275 %		15:11:30
2	Ag 328.068†	212.3	-39.5	-0.1722 ug/L	-0.1722 ppb	15:11:30
2	As 188.979†	-20.5	0.2	0.1387 ug/L	0.1387 ppb	15:11:50
2	B 249.677†	-328.6	-81.0	-2.2403 ug/L	-2.2403 ppb	15:11:50
2	Ba 233.527†	56.7	38.6	0.3658 ug/L	0.3658 ppb	15:11:50
2	Be 313.107†	-4238.6	-8.6	-0.0035 ug/L	-0.0035 ppb	15:11:30
2	Cd 226.502†	-172.7	-7.6	-0.1159 ug/L	-0.1159 ppb	15:11:50
2	Co 228.616†	-29.8	8.9	0.2316 ug/L	0.2316 ppb	15:11:50
2	Cr 267.716†	77.3	-17.0	-0.2125 ug/L	-0.2125 ppb	15:11:50
2	Cu 324.752†	6563.5	261.4	0.8515 ug/L	0.8515 ppb	15:11:30
2	Mn 257.610†	1042.1	597.7	0.7891 ug/L	0.7891 ppb	15:11:50
2	Mo 202.031†	18.3	4.2	0.3791 ug/L	0.3791 ppb	15:11:50
2	Ni 231.604†	83.2	-9.8	-0.3050 ug/L	-0.3050 ppb	15:11:50

2	P 214.914†	179.7	12.8	9.0036 ug/L	9.0036 ppb	15:11:50
2	Pb 220.353†	-37.4	21.1	3.1773 ug/L	3.1773 ppb	15:11:50
2	S 181.975 Axial†	22.6	-1.7	-2.9006 ug/L	-2.9006 ppb	15:11:50
2	Sb 206.836†	19.9	-6.5	-2.7427 ug/L	-2.7427 ppb	15:11:50
2	Se 196.026†	-18.1	-1.3	-0.7638 ug/L	-0.7638 ppb	15:11:50
2	Si 251.611†	614.8	94.1	3.5005 ug/L	3.5005 ppb	15:11:50
2	Sn 189.927†	10.1	7.1	1.5742 ug/L	1.5742 ppb	15:11:50
2	Ti 334.940†	-1070.9	4.2	0.0052 ug/L	0.0052 ppb	15:11:30
2	Tl 190.801†	-16.0	8.9	3.4617 ug/L	3.4617 ppb	15:11:50
2	U 409.014†	-1987.0	32.9	0.9580 ug/L	0.9580 ppb	15:11:30
2	V 292.402†	-1356.3	60.8	0.4653 ug/L	0.4653 ppb	15:11:30
2	Zn 213.857†	785.7	185.3	2.1896 ug/L	2.1896 ppb	15:11:50
2	SiO2†	657.3	109.0	8.6996 ug/L	8.6996 ppb	15:12:56
3	Sc Radial	4129.2	4129.2	102 %		15:10:58
3	Y RADIAL	4507.3	4507.3	99.76 %		15:10:38
3	Al 396.153Radial†	-75.5	5.9	6.3646 ug/L	6.3646 ppb	15:10:58
3	Ca 317.933Radial†	34.9	16.9	34.375 ug/L	34.375 ppb	15:10:58
3	Fe 238.204 Radial†	12.0	2.8	34.447 ug/L	34.447 ppb	15:10:58
3	K 766.490 Radial†	2630.9	-233.1	-46.549 ug/L	-46.549 ppb	15:10:38
3	Mg 279.077 IEC†	3.6	2.8	124.13 ug/L	124.13 ppb	15:10:58
3	Na 589.592 Radial†	-392.7	77.2	30.327 ug/L	30.327 ppb	15:10:38
3	Sr 421.552†	82.4	10.5	0.0889 ug/L	0.0889 ppb	15:10:38
3	Sc 361.383	841735.2	841735.2	100.22 %		15:11:55
3	Y 371.029	717451.5	717451.5	100.19 %		15:11:55
3	Ag 328.068†	211.3	-42.5	-0.2026 ug/L	-0.2026 ppb	15:11:55
3	As 188.979†	-20.9	-0.0	0.0088 ug/L	0.0088 ppb	15:12:15
3	B 249.677†	-318.9	-68.0	-1.8756 ug/L	-1.8756 ppb	15:12:15
3	Ba 233.527†	55.1	36.5	0.3452 ug/L	0.3452 ppb	15:12:15
3	Be 313.107†	-4343.5	-71.1	-0.0288 ug/L	-0.0288 ppb	15:11:55
3	Cd 226.502†	-151.8	14.9	0.2075 ug/L	0.2075 ppb	15:12:15
3	Co 228.616†	-34.7	4.3	0.1087 ug/L	0.1087 ppb	15:12:15
3	Cr 267.716†	120.7	25.5	0.3354 ug/L	0.3354 ppb	15:12:15
3	Cu 324.752†	6538.5	171.1	0.5553 ug/L	0.5553 ppb	15:11:55
3	Mn 257.610†	971.7	517.1	0.6767 ug/L	0.6767 ppb	15:12:15
3	Mo 202.031†	1.7	-12.5	-1.0973 ug/L	-1.0973 ppb	15:12:15
3	Ni 231.604†	95.8	2.0	0.0614 ug/L	0.0614 ppb	15:12:15
3	P 214.914†	189.9	21.2	15.111 ug/L	15.111 ppb	15:12:15
3	Pb 220.353†	-46.4	12.6	1.8885 ug/L	1.8885 ppb	15:12:15
3	S 181.975 Axial†	29.3	4.9	8.5863 ug/L	8.5863 ppb	15:12:15
3	Sb 206.836†	25.4	-1.3	-0.5621 ug/L	-0.5621 ppb	15:12:15
3	Se 196.026†	-20.9	-3.9	-3.0185 ug/L	-3.0185 ppb	15:12:15
3	Si 251.611†	608.1	81.3	3.0404 ug/L	3.0404 ppb	15:12:15
3	Sn 189.927†	3.6	0.5	0.1074 ug/L	0.1074 ppb	15:12:15
3	Ti 334.940†	-1060.1	25.6	0.0372 ug/L	0.0372 ppb	15:11:55
3	Tl 190.801†	-26.4	-1.3	-0.5014 ug/L	-0.5014 ppb	15:12:15
3	U 409.014†	-1947.0	92.6	2.7191 ug/L	2.7191 ppb	15:11:55
3	V 292.402†	-1303.1	127.3	0.9686 ug/L	0.9686 ppb	15:11:55
3	Zn 213.857†	757.1	149.0	1.7638 ug/L	1.7638 ppb	15:12:15
3	SiO2†	644.7	89.9	7.2120 ug/L	7.2120 ppb	15:13:16

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	837561.4	99.727 %		0.4948			0.50%
Sc Radial	4083.8	101 %		1.0			1.01%
Y 371.029	714096.8	99.724 %		0.4589			0.46%
Y RADIAL	4435.4	98.17 %		3.550			3.62%
Ag 328.068†	-33.9	-0.1487 ug/L		0.06865	-0.1487 ppb	0.06865	46.16%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	6.6	7.0717 ug/L		6.42508	7.0717 ppb	6.42508	90.86%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	-0.9	-0.4479 ug/L		0.90576	-0.4479 ppb	0.90576	202.24%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	-82.5	-2.2793 ug/L		0.42453	-2.2793 ppb	0.42453	18.63%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	35.0	0.3318 ug/L		0.04240	0.3318 ppb	0.04240	12.78%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	-54.9	-0.0221 ug/L		0.01634	-0.0221 ppb	0.01634	73.94%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	16.6	33.807 ug/L		5.9196	33.807 ppb	5.9196	17.51%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated						
Cd 226.502†	-0.2	-0.0095 ug/L	0.18795	-0.0095 ppb	0.18795	>999.9%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	3.7	0.0948 ug/L	0.14428	0.0948 ppb	0.14428	152.25%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	3.1	0.0482 ug/L	0.27490	0.0482 ppb	0.27490	570.12%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	203.2	0.6614 ug/L	0.16501	0.6614 ppb	0.16501	24.95%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	5.5	68.801 ug/L	29.7817	68.801 ppb	29.7817	43.29%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	-228.3	-45.606 ug/L	6.8866	-45.606 ppb	6.8866	15.10%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	1.8	78.184 ug/L	49.6597	78.184 ppb	49.6597	63.52%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	555.4	0.7323 ug/L	0.05621	0.7323 ppb	0.05621	7.68%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	-2.2	-0.1833 ug/L	0.79850	-0.1833 ppb	0.79850	435.60%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	64.9	25.484 ug/L	4.5152	25.484 ppb	4.5152	17.72%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	-0.5	-0.0157 ug/L	0.25940	-0.0157 ppb	0.25940	>999.9%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	17.1	12.093 ug/L	3.0543	12.093 ppb	3.0543	25.26%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	13.4	2.0158 ug/L	1.10334	2.0158 ppb	1.10334	54.73%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	2.5	4.4622 ug/L	6.39171	4.4622 ppb	6.39171	143.24%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	-2.7	-1.1133 ug/L	1.43544	-1.1133 ppb	1.43544	128.93%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-3.5	-2.5976 ug/L	1.66377	-2.5976 ppb	1.66377	64.05%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	84.1	3.1342 ug/L	0.32957	3.1342 ppb	0.32957	10.52%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	5.8	1.2857 ug/L	1.06382	1.2857 ppb	1.06382	82.74%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	6.6	0.0556 ug/L	0.19230	0.0556 ppb	0.19230	346.00%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	44.2	0.0732 ug/L	0.09163	0.0732 ppb	0.09163	125.10%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	2.3	0.8746 ug/L	2.24202	0.8746 ppb	2.24202	256.34%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	68.9	2.0186 ug/L	0.93415	2.0186 ppb	0.93415	46.28%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	99.3	0.7580 ug/L	0.26148	0.7580 ppb	0.26148	34.50%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	161.9	1.9126 ug/L	0.24005	1.9126 ppb	0.24005	12.55%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	97.8	7.8216 ug/L	0.77927	7.8216 ppb	0.77927	9.96%
QC value within limits for SiO2 Recovery = Not calculated						
All analyte(s) passed QC.						

Sequence No.: 29

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/25/2010 16:11:21

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	3955.1	3955.1	98.0 %		16:13:33
1	Y RADIAL	4264.1	4264.1	94.38 %		16:13:13
1	Al 396.153Radial†	4353.6	4519.9	4793.1 ug/L	4793.1 ppb	16:13:13
1	Ca 317.933Radial†	2507.2	2539.9	5160.5 ug/L	5160.5 ppb	16:13:33
1	Fe 238.204 Radial†	418.1	417.4	5234.4 ug/L	5234.4 ppb	16:13:33
1	K 766.490 Radial†	26095.8	23812.0	4747.3 ug/L	4747.3 ppb	16:13:13
1	Mg 279.077 IEC†	115.5	117.1	5114.9 ug/L	5114.9 ppb	16:13:33
1	Na 589.592 Radial†	23882.0	24818.2	9746.5 ug/L	9746.5 ppb	16:13:13
1	Sr 421.552†	54468.9	55482.9	472.43 ug/L	472.43 ppb	16:13:13
1	Sc 361.383	851735.6	851735.6	101.41 %		16:14:30
1	Y 371.029	716677.2	716677.2	100.08 %		16:14:30
1	Ag 328.068†	102350.6	100669.6	510.66 ug/L	510.66 ppb	16:14:36
1	As 188.979†	904.7	913.0	493.79 ug/L	493.79 ppb	16:14:56
1	B 249.677†	17886.5	17887.2	489.36 ug/L	489.36 ppb	16:14:36
1	Ba 233.527†	54021.1	53249.0	500.44 ug/L	500.44 ppb	16:14:36
1	Be 313.107†	1223562.6	1210758.8	492.70 ug/L	492.70 ppb	16:14:30
1	Cd 226.502†	35970.2	35634.9	502.47 ug/L	502.47 ppb	16:14:36
1	Co 228.616†	19899.8	19661.2	511.77 ug/L	511.77 ppb	16:14:36
1	Cr 267.716†	38784.0	38148.1	497.71 ug/L	497.71 ppb	16:14:36
1	Cu 324.752†	162631.4	154010.2	499.37 ug/L	499.37 ppb	16:14:36
1	Mn 257.610†	381507.5	375733.7	493.29 ug/L	493.29 ppb	16:14:36
1	Mo 202.031†	5709.1	5615.2	494.14 ug/L	494.14 ppb	16:14:56
1	Ni 231.604†	16531.3	16207.2	505.76 ug/L	505.76 ppb	16:14:36
1	P 214.914†	3656.8	3437.6	2373.3 ug/L	2373.3 ppb	16:14:56
1	Pb 220.353†	3210.4	3224.4	487.45 ug/L	487.45 ppb	16:14:56
1	S 181.975 Axial†	596.7	564.0	987.65 ug/L	987.65 ppb	16:14:56
1	Sb 206.836†	1234.5	1190.6	523.66 ug/L	523.66 ppb	16:14:56
1	Se 196.026†	614.6	623.0	515.30 ug/L	515.30 ppb	16:14:56
1	Si 251.611†	69288.9	67797.0	2518.2 ug/L	2518.2 ppb	16:14:36
1	Sn 189.927†	2265.3	2230.6	494.65 ug/L	494.65 ppb	16:14:56
1	Ti 334.940†	292870.9	289869.2	498.59 ug/L	498.59 ppb	16:14:36
1	Tl 190.801†	1247.7	1255.4	488.69 ug/L	488.69 ppb	16:14:56
1	U 409.014†	15779.8	17594.8	516.01 ug/L	516.01 ppb	16:14:36
1	V 292.402†	64101.9	64635.3	504.86 ug/L	504.86 ppb	16:14:36
1	Zn 213.857†	43396.4	42184.7	496.47 ug/L	496.47 ppb	16:14:36
1	SiO2†	67954.3	66453.1	5295.8 ug/L	5295.8 ppb	16:16:03
2	Sc Radial	4089.1	4089.1	101 %		16:13:59
2	Y RADIAL	4456.6	4456.6	98.64 %		16:13:38
2	Al 396.153Radial†	4622.2	4639.4	4920.3 ug/L	4920.3 ppb	16:13:38
2	Ca 317.933Radial†	2516.3	2465.1	5008.4 ug/L	5008.4 ppb	16:13:59
2	Fe 238.204 Radial†	420.7	406.1	5092.6 ug/L	5092.6 ppb	16:13:59
2	K 766.490 Radial†	27245.4	24074.0	4799.7 ug/L	4799.7 ppb	16:13:38
2	Mg 279.077 IEC†	124.0	121.6	5311.9 ug/L	5311.9 ppb	16:13:59
2	Na 589.592 Radial†	24954.2	25077.9	9848.5 ug/L	9848.5 ppb	16:13:38
2	Sr 421.552†	57722.5	56872.6	484.26 ug/L	484.26 ppb	16:13:38
2	Sc 361.383	844511.7	844511.7	100.55 %		16:15:01
2	Y 371.029	710119.0	710119.0	99.168 %		16:15:01
2	Ag 328.068†	99552.0	98749.7	500.92 ug/L	500.92 ppb	16:15:07
2	As 188.979†	911.4	927.2	501.29 ug/L	501.29 ppb	16:15:27
2	B 249.677†	17196.5	17351.9	474.70 ug/L	474.70 ppb	16:15:07
2	Ba 233.527†	52682.8	52373.8	492.21 ug/L	492.21 ppb	16:15:07
2	Be 313.107†	1216567.1	1214122.0	494.05 ug/L	494.05 ppb	16:15:01
2	Cd 226.502†	34951.6	34925.3	492.47 ug/L	492.47 ppb	16:15:07
2	Co 228.616†	19388.6	19320.6	502.94 ug/L	502.94 ppb	16:15:07
2	Cr 267.716†	37862.2	37558.5	490.01 ug/L	490.01 ppb	16:15:07
2	Cu 324.752†	157569.6	150348.1	487.50 ug/L	487.50 ppb	16:15:07
2	Mn 257.610†	371566.0	369064.9	484.52 ug/L	484.52 ppb	16:15:07
2	Mo 202.031†	5708.1	5662.5	498.28 ug/L	498.28 ppb	16:15:27
2	Ni 231.604†	16094.9	15912.6	496.57 ug/L	496.57 ppb	16:15:07

2	P 214.914†	3619.1	3430.9	2371.0 ug/L	2371.0 ppb	16:15:27
2	Pb 220.353†	3219.3	3260.3	492.94 ug/L	492.94 ppb	16:15:27
2	S 181.975 Axial†	606.8	579.1	1014.1 ug/L	1014.1 ppb	16:15:27
2	Sb 206.836†	1217.9	1184.5	521.16 ug/L	521.16 ppb	16:15:27
2	Se 196.026†	613.2	626.8	517.96 ug/L	517.96 ppb	16:15:27
2	Si 251.611†	67320.9	66424.3	2467.1 ug/L	2467.1 ppb	16:15:07
2	Sn 189.927†	2248.8	2233.4	495.24 ug/L	495.24 ppb	16:15:27
2	Ti 334.940†	284804.9	284318.0	489.01 ug/L	489.01 ppb	16:15:07
2	Tl 190.801†	1237.8	1256.1	488.89 ug/L	488.89 ppb	16:15:27
2	U 409.014†	15178.5	17130.0	502.37 ug/L	502.37 ppb	16:15:07
2	V 292.402†	62516.5	63599.3	496.94 ug/L	496.94 ppb	16:15:07
2	Zn 213.857†	42311.4	41471.7	488.09 ug/L	488.09 ppb	16:15:07
2	SiO2†	68280.0	67350.2	5367.4 ug/L	5367.4 ppb	16:16:08
3	Sc Radial	4069.0	4069.0	101 %		16:14:24
3	Y RADIAL	4521.2	4521.2	100.1 %		16:14:04
3	Al 396.153Radial†	4660.6	4699.9	4985.3 ug/L	4985.3 ppb	16:14:04
3	Ca 317.933Radial†	2520.8	2481.9	5042.5 ug/L	5042.5 ppb	16:14:24
3	Fe 238.204 Radial†	423.5	410.8	5152.3 ug/L	5152.3 ppb	16:14:24
3	K 766.490 Radial†	27644.1	24601.9	4905.0 ug/L	4905.0 ppb	16:14:04
3	Mg 279.077 IEC†	119.8	118.0	5156.1 ug/L	5156.1 ppb	16:14:24
3	Na 589.592 Radial†	25232.9	25475.6	10005 ug/L	10005 ppb	16:14:04
3	Sr 421.552†	58133.1	57560.5	490.12 ug/L	490.12 ppb	16:14:04
3	Sc 361.383	858583.8	858583.8	102.23 %		16:15:32
3	Y 371.029	722897.7	722897.7	100.95 %		16:15:32
3	Ag 328.068†	100684.4	98234.8	498.33 ug/L	498.33 ppb	16:15:37
3	As 188.979†	893.9	895.2	484.15 ug/L	484.15 ppb	16:15:57
3	B 249.677†	17528.9	17396.7	475.93 ug/L	475.93 ppb	16:15:37
3	Ba 233.527†	53210.8	52031.6	489.00 ug/L	489.00 ppb	16:15:37
3	Be 313.107†	1234647.0	1211978.2	493.17 ug/L	493.17 ppb	16:15:32
3	Cd 226.502†	35314.6	34710.7	489.43 ug/L	489.43 ppb	16:15:37
3	Co 228.616†	19559.2	19171.5	499.04 ug/L	499.04 ppb	16:15:37
3	Cr 267.716†	38324.8	37393.8	487.87 ug/L	487.87 ppb	16:15:37
3	Cu 324.752†	159706.5	149870.0	485.95 ug/L	485.95 ppb	16:15:37
3	Mn 257.610†	376059.2	367403.8	482.35 ug/L	482.35 ppb	16:15:37
3	Mo 202.031†	5700.4	5561.8	489.44 ug/L	489.44 ppb	16:15:57
3	Ni 231.604†	16289.3	15840.3	494.31 ug/L	494.31 ppb	16:15:37
3	P 214.914†	3594.6	3348.0	2311.6 ug/L	2311.6 ppb	16:15:57
3	Pb 220.353†	3215.5	3204.1	484.45 ug/L	484.45 ppb	16:15:57
3	S 181.975 Axial†	597.9	560.5	981.44 ug/L	981.44 ppb	16:15:57
3	Sb 206.836†	1217.7	1164.5	512.32 ug/L	512.32 ppb	16:15:57
3	Se 196.026†	600.7	604.5	500.38 ug/L	500.38 ppb	16:15:57
3	Si 251.611†	67986.6	65978.2	2450.6 ug/L	2450.6 ppb	16:15:37
3	Sn 189.927†	2247.1	2195.0	486.76 ug/L	486.76 ppb	16:15:57
3	Ti 334.940†	288252.7	283048.3	486.84 ug/L	486.84 ppb	16:15:37
3	Tl 190.801†	1247.2	1245.1	484.63 ug/L	484.63 ppb	16:15:57
3	U 409.014†	15421.6	17120.4	502.08 ug/L	502.08 ppb	16:15:37
3	V 292.402†	63232.1	63280.3	494.35 ug/L	494.35 ppb	16:15:37
3	Zn 213.857†	42705.1	41167.1	484.48 ug/L	484.48 ppb	16:15:37
3	SiO2†	67876.5	65842.5	5247.2 ug/L	5247.2 ppb	16:16:13

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	851610.4	101.40 %	0.838			0.83%
Sc Radial	4037.7	100 %	1.8			1.79%
Y 371.029	716564.6	100.07 %	0.892			0.89%
Y RADIAL	4414.0	97.70 %	2.960			3.03%
Ag 328.068†	99218.0	503.30 ug/L	6.502	503.30 ppb	6.502	1.29%
QC value within limits for Ag 328.068 Recovery = 100.66%						
Al 396.153Radial†	4619.7	4899.6 ug/L	97.73	4899.6 ppb	97.73	1.99%
QC value within limits for Al 396.153Radial Recovery = 97.99%						
As 188.979†	911.8	493.08 ug/L	8.591	493.08 ppb	8.591	1.74%
QC value within limits for As 188.979 Recovery = 98.62%						
B 249.677†	17545.3	480.00 ug/L	8.134	480.00 ppb	8.134	1.69%
QC value within limits for B 249.677 Recovery = 96.00%						
Ba 233.527†	52551.5	493.88 ug/L	5.899	493.88 ppb	5.899	1.19%
QC value within limits for Ba 233.527 Recovery = 98.78%						
Be 313.107†	1212286.3	493.31 ug/L	0.682	493.31 ppb	0.682	0.14%
QC value within limits for Be 313.107 Recovery = 98.66%						
Ca 317.933Radial†	2495.6	5070.5 ug/L	79.83	5070.5 ppb	79.83	1.57%

QC value within limits for Ca 317.933 Radial Recovery = 101.41%

Cd	226.502†	35090.3	494.79 ug/L	6.822	494.79 ppb	6.822	1.38%
QC value within limits for Cd 226.502 Recovery = 98.96%							
Co	228.616†	19384.4	504.59 ug/L	6.523	504.59 ppb	6.523	1.29%
QC value within limits for Co 228.616 Recovery = 100.92%							
Cr	267.716†	37700.1	491.87 ug/L	5.174	491.87 ppb	5.174	1.05%
QC value within limits for Cr 267.716 Recovery = 98.37%							
Cu	324.752†	151409.4	490.94 ug/L	7.343	490.94 ppb	7.343	1.50%
QC value within limits for Cu 324.752 Recovery = 98.19%							
Fe	238.204 Radial†	411.4	5159.8 ug/L	71.22	5159.8 ppb	71.22	1.38%
QC value within limits for Fe 238.204 Radial Recovery = 103.20%							
K	766.490 Radial†	24162.6	4817.3 ug/L	80.29	4817.3 ppb	80.29	1.67%
QC value within limits for K 766.490 Radial Recovery = 96.35%							
Mg	279.077 IEC†	118.9	5194.3 ug/L	103.92	5194.3 ppb	103.92	2.00%
QC value within limits for Mg 279.077 IEC Recovery = 103.89%							
Mn	257.610†	370734.1	486.72 ug/L	5.792	486.72 ppb	5.792	1.19%
QC value within limits for Mn 257.610 Recovery = 97.34%							
Mo	202.031†	5613.2	493.95 ug/L	4.424	493.95 ppb	4.424	0.90%
QC value within limits for Mo 202.031 Recovery = 98.79%							
Na	589.592 Radial†	25123.9	9866.5 ug/L	130.03	9866.5 ppb	130.03	1.32%
QC value within limits for Na 589.592 Radial Recovery = 98.67%							
Ni	231.604†	15986.7	498.88 ug/L	6.063	498.88 ppb	6.063	1.22%
QC value within limits for Ni 231.604 Recovery = 99.78%							
P	214.914†	3405.5	2352.0 ug/L	34.97	2352.0 ppb	34.97	1.49%
QC value within limits for P 214.914 Recovery = 94.08%							
Pb	220.353†	3229.6	488.28 ug/L	4.303	488.28 ppb	4.303	0.88%
QC value within limits for Pb 220.353 Recovery = 97.66%							
S	181.975 Axial†	567.8	994.38 ug/L	17.328	994.38 ppb	17.328	1.74%
QC value within limits for S 181.975 Axial Recovery = 99.44%							
Sb	206.836†	1179.9	519.05 ug/L	5.955	519.05 ppb	5.955	1.15%
QC value within limits for Sb 206.836 Recovery = 103.81%							
Se	196.026†	618.1	511.21 ug/L	9.477	511.21 ppb	9.477	1.85%
QC value within limits for Se 196.026 Recovery = 102.24%							
Si	251.611†	66733.1	2478.6 ug/L	35.28	2478.6 ppb	35.28	1.42%
QC value within limits for Si 251.611 Recovery = 99.14%							
Sn	189.927†	2219.7	492.22 ug/L	4.738	492.22 ppb	4.738	0.96%
QC value within limits for Sn 189.927 Recovery = 98.44%							
Sr	421.552†	56638.7	482.27 ug/L	9.013	482.27 ppb	9.013	1.87%
QC value within limits for Sr 421.552 Recovery = 96.45%							
Ti	334.940†	285745.2	491.48 ug/L	6.250	491.48 ppb	6.250	1.27%
QC value within limits for Ti 334.940 Recovery = 98.30%							
Tl	190.801†	1252.2	487.40 ug/L	2.403	487.40 ppb	2.403	0.49%
QC value within limits for Tl 190.801 Recovery = 97.48%							
U	409.014†	17281.7	506.82 ug/L	7.961	506.82 ppb	7.961	1.57%
QC value within limits for U 409.014 Recovery = 101.36%							
V	292.402†	63838.3	498.72 ug/L	5.475	498.72 ppb	5.475	1.10%
QC value within limits for V 292.402 Recovery = 99.74%							
Zn	213.857†	41607.8	489.68 ug/L	6.148	489.68 ppb	6.148	1.26%
QC value within limits for Zn 213.857 Recovery = 97.94%							
SiO2†		66548.6	5303.5 ug/L	60.47	5303.5 ppb	60.47	1.14%
QC value within limits for SiO2 Recovery = 99.18%							

All analyte(s) passed QC.

Sequence No.: 30
 Sample ID: CCB
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 8
 Date Collected: 3/25/2010 16:18:23
 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	4034.0	4034.0	100 %		16:20:36
1	Y RADIAL	4423.4	4423.4	97.91 %		16:20:16
1	Al 396.153Radial†	-68.7	10.9	11.674 ug/L	11.674 ppb	16:20:36
1	Ca 317.933Radial†	38.4	21.2	43.119 ug/L	43.119 ppb	16:20:36
1	Fe 238.204 Radial†	15.8	6.8	85.359 ug/L	85.359 ppb	16:20:36
1	K 766.490 Radial†	2850.4	47.1	9.3727 ug/L	9.3727 ppb	16:20:16
1	Mg 279.077 IEC†	1.7	1.0	44.231 ug/L	44.231 ppb	16:20:36
1	Na 589.592 Radial†	-417.9	43.0	16.904 ug/L	16.904 ppb	16:20:16
1	Sr 421.552†	85.5	15.5	0.1313 ug/L	0.1313 ppb	16:20:16
1	Sc 361.383	837863.7	837863.7	99.763 %		16:21:33
1	Y 371.029	714441.1	714441.1	99.772 %		16:21:33
1	Ag 328.068†	222.0	-30.8	-0.1304 ug/L	-0.1304 ppb	16:21:33
1	As 188.979†	-15.9	4.9	2.6600 ug/L	2.6600 ppb	16:21:53
1	B 249.677†	-373.7	-124.5	-3.4343 ug/L	-3.4343 ppb	16:21:53
1	Ba 233.527†	39.8	21.4	0.2041 ug/L	0.2041 ppb	16:21:53
1	Be 313.107†	-4371.5	-119.2	-0.0481 ug/L	-0.0481 ppb	16:21:33
1	Cd 226.502†	-171.5	-5.5	-0.0857 ug/L	-0.0857 ppb	16:21:53
1	Co 228.616†	-52.4	-13.6	-0.3563 ug/L	-0.3563 ppb	16:21:53
1	Cr 267.716†	87.8	-6.9	-0.0818 ug/L	-0.0818 ppb	16:21:53
1	Cu 324.752†	6502.8	165.5	0.5389 ug/L	0.5389 ppb	16:21:33
1	Mn 257.610†	923.0	472.8	0.6270 ug/L	0.6270 ppb	16:21:53
1	Mo 202.031†	8.0	-6.2	-0.5352 ug/L	-0.5352 ppb	16:21:53
1	Ni 231.604†	88.5	-4.9	-0.1535 ug/L	-0.1535 ppb	16:21:53
1	P 214.914†	192.4	24.6	17.512 ug/L	17.512 ppb	16:21:53
1	Pb 220.353†	-51.0	7.7	1.1461 ug/L	1.1461 ppb	16:21:53
1	S 181.975 Axial†	35.2	10.9	19.063 ug/L	19.063 ppb	16:21:53
1	Sb 206.836†	26.3	-0.3	-0.1289 ug/L	-0.1289 ppb	16:21:53
1	Se 196.026†	-24.6	-7.8	-5.9250 ug/L	-5.9250 ppb	16:21:53
1	Si 251.611†	624.0	100.0	3.7310 ug/L	3.7310 ppb	16:21:53
1	Sn 189.927†	5.0	1.9	0.4222 ug/L	0.4222 ppb	16:21:53
1	Ti 334.940†	-1010.4	70.5	0.1218 ug/L	0.1218 ppb	16:21:33
1	Tl 190.801†	-17.4	7.6	2.9417 ug/L	2.9417 ppb	16:21:53
1	U 409.014†	-1900.7	130.0	3.8150 ug/L	3.8150 ppb	16:21:33
1	V 292.402†	-1348.8	75.5	0.5701 ug/L	0.5701 ppb	16:21:33
1	Zn 213.857†	761.9	157.3	1.8564 ug/L	1.8564 ppb	16:21:53
1	SiO2†	646.4	94.6	7.5745 ug/L	7.5745 ppb	16:23:04
2	Sc Radial	4069.2	4069.2	101 %		16:21:01
2	Y RADIAL	4631.5	4631.5	102.5 %		16:20:41
2	Al 396.153Radial†	-71.6	8.7	9.2599 ug/L	9.2599 ppb	16:21:01
2	Ca 317.933Radial†	34.5	17.0	34.535 ug/L	34.535 ppb	16:21:01
2	Fe 238.204 Radial†	15.4	6.3	78.660 ug/L	78.660 ppb	16:21:01
2	K 766.490 Radial†	2721.4	-105.4	-21.076 ug/L	-21.076 ppb	16:20:41
2	Mg 279.077 IEC†	2.2	1.5	64.836 ug/L	64.836 ppb	16:21:01
2	Na 589.592 Radial†	-373.0	91.1	35.769 ug/L	35.769 ppb	16:20:41
2	Sr 421.552†	74.2	3.5	0.0300 ug/L	0.0300 ppb	16:20:41
2	Sc 361.383	834943.8	834943.8	99.415 %		16:21:58
2	Y 371.029	711436.5	711436.5	99.352 %		16:21:58
2	Ag 328.068†	40.5	-212.7	-1.0497 ug/L	-1.0497 ppb	16:21:58
2	As 188.979†	-19.1	1.6	0.8816 ug/L	0.8816 ppb	16:22:18
2	B 249.677†	-359.9	-111.8	-3.0865 ug/L	-3.0865 ppb	16:22:18
2	Ba 233.527†	77.3	59.3	0.5575 ug/L	0.5575 ppb	16:22:18
2	Be 313.107†	-4383.7	-146.8	-0.0594 ug/L	-0.0594 ppb	16:21:58
2	Cd 226.502†	-152.6	12.9	0.1732 ug/L	0.1732 ppb	16:22:18
2	Co 228.616†	-42.5	-3.9	-0.1030 ug/L	-0.1030 ppb	16:22:18
2	Cr 267.716†	110.7	16.4	0.2210 ug/L	0.2210 ppb	16:22:18
2	Cu 324.752†	6563.6	249.4	0.8127 ug/L	0.8127 ppb	16:21:58
2	Mn 257.610†	1114.6	668.7	0.8825 ug/L	0.8825 ppb	16:22:18
2	Mo 202.031†	8.9	-5.2	-0.4509 ug/L	-0.4509 ppb	16:22:18
2	Ni 231.604†	77.9	-15.3	-0.4763 ug/L	-0.4763 ppb	16:22:18

2	P 214.914†	190.8	23.7	16.848 ug/L	16.848 ppb	16:22:18
2	Pb 220.353†	-50.7	7.9	1.1736 ug/L	1.1736 ppb	16:22:18
2	S 181.975 Axial†	31.4	7.2	12.654 ug/L	12.654 ppb	16:22:18
2	Sb 206.836†	27.2	0.7	0.3279 ug/L	0.3279 ppb	16:22:18
2	Se 196.026†	-23.1	-6.3	-4.8086 ug/L	-4.8086 ppb	16:22:18
2	Si 251.611†	711.8	190.6	7.1007 ug/L	7.1007 ppb	16:22:18
2	Sn 189.927†	10.6	7.6	1.6830 ug/L	1.6830 ppb	16:22:18
2	Ti 334.940†	-1034.0	43.3	0.0735 ug/L	0.0735 ppb	16:21:58
2	Tl 190.801†	-30.2	-5.3	-2.0420 ug/L	-2.0420 ppb	16:22:18
2	U 409.014†	-2007.1	16.3	0.4701 ug/L	0.4701 ppb	16:21:58
2	V 292.402†	-1446.3	-27.3	-0.2264 ug/L	-0.2264 ppb	16:21:58
2	Zn 213.857†	783.6	181.8	2.1495 ug/L	2.1495 ppb	16:22:18
2	SiO2†	697.1	147.8	11.824 ug/L	11.824 ppb	16:23:24
3	Sc Radial	4035.2	4035.2	100 %		16:21:26
3	Y RADIAL	4587.6	4587.6	101.5 %		16:21:06
3	Al 396.153Radial†	-63.3	16.3	17.375 ug/L	17.375 ppb	16:21:26
3	Ca 317.933Radial†	32.1	14.9	30.228 ug/L	30.228 ppb	16:21:26
3	Fe 238.204 Radial†	13.6	4.6	57.741 ug/L	57.741 ppb	16:21:26
3	K 766.490 Radial†	2709.5	-94.6	-18.905 ug/L	-18.905 ppb	16:21:06
3	Mg 279.077 IEC†	4.6	3.8	167.85 ug/L	167.85 ppb	16:21:26
3	Na 589.592 Radial†	-418.0	43.1	16.910 ug/L	16.910 ppb	16:21:06
3	Sr 421.552†	81.4	11.3	0.0959 ug/L	0.0959 ppb	16:21:06
3	Sc 361.383	832588.3	832588.3	99.135 %		16:22:23
3	Y 371.029	710157.9	710157.9	99.174 %		16:22:23
3	Ag 328.068†	102.1	-150.4	-0.7370 ug/L	-0.7370 ppb	16:22:23
3	As 188.979†	-24.7	-4.1	-2.1845 ug/L	-2.1845 ppb	16:22:43
3	B 249.677†	-355.5	-108.4	-2.9886 ug/L	-2.9886 ppb	16:22:43
3	Ba 233.527†	67.0	49.1	0.4637 ug/L	0.4637 ppb	16:22:43
3	Be 313.107†	-4339.9	-115.0	-0.0462 ug/L	-0.0462 ppb	16:22:23
3	Cd 226.502†	-171.8	-6.9	-0.1036 ug/L	-0.1036 ppb	16:22:43
3	Co 228.616†	-47.5	-9.0	-0.2331 ug/L	-0.2331 ppb	16:22:43
3	Cr 267.716†	114.2	20.3	0.2715 ug/L	0.2715 ppb	16:22:43
3	Cu 324.752†	6498.0	202.0	0.6585 ug/L	0.6585 ppb	16:22:23
3	Mn 257.610†	1312.8	871.9	1.1428 ug/L	1.1428 ppb	16:22:43
3	Mo 202.031†	22.8	8.8	0.7804 ug/L	0.7804 ppb	16:22:43
3	Ni 231.604†	95.9	3.1	0.0978 ug/L	0.0978 ppb	16:22:43
3	P 214.914†	190.0	23.4	16.677 ug/L	16.677 ppb	16:22:43
3	Pb 220.353†	-47.4	11.0	1.6588 ug/L	1.6588 ppb	16:22:43
3	S 181.975 Axial†	28.9	4.8	8.4107 ug/L	8.4107 ppb	16:22:43
3	Sb 206.836†	24.0	-2.4	-1.0090 ug/L	-1.0090 ppb	16:22:43
3	Se 196.026†	-17.5	-0.7	-0.3445 ug/L	-0.3445 ppb	16:22:43
3	Si 251.611†	703.6	184.3	6.8530 ug/L	6.8530 ppb	16:22:43
3	Sn 189.927†	3.2	0.1	0.0284 ug/L	0.0284 ppb	16:22:43
3	Ti 334.940†	-940.7	134.4	0.2220 ug/L	0.2220 ppb	16:22:23
3	Tl 190.801†	-23.2	1.6	0.6411 ug/L	0.6411 ppb	16:22:43
3	U 409.014†	-2053.8	-36.6	-1.0830 ug/L	-1.0830 ppb	16:22:23
3	V 292.402†	-1316.7	99.3	0.7688 ug/L	0.7688 ppb	16:22:23
3	Zn 213.857†	771.3	171.6	2.0287 ug/L	2.0287 ppb	16:22:43
3	SiO2†	633.4	85.6	6.8185 ug/L	6.8185 ppb	16:23:44

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	835132.0	99.438 %	0.3147			0.32%
Sc Radial	4046.1	100 %	0.5			0.49%
Y 371.029	712011.8	99.433 %	0.3071			0.31%
Y RADIAL	4547.5	100.7 %	2.43			2.41%
Ag 328.068†	-131.3	-0.6390 ug/L	0.46738	-0.6390 ppb	0.46738	73.14%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	12.0	12.770 ug/L	4.1671	12.770 ppb	4.1671	32.63%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	0.8	0.4524 ug/L	2.45063	0.4524 ppb	2.45063	541.75%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-114.9	-3.1698 ug/L	0.23425	-3.1698 ppb	0.23425	7.39%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	43.2	0.4084 ug/L	0.18305	0.4084 ppb	0.18305	44.82%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	-127.0	-0.0512 ug/L	0.00716	-0.0512 ppb	0.00716	13.97%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	17.7	35.960 ug/L	6.5627	35.960 ppb	6.5627	18.25%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated						
Cd 226.502†	0.2	-0.0054 ug/L	0.15488	-0.0054 ppb	0.15488	>999.9%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-8.8	-0.2308 ug/L	0.12667	-0.2308 ppb	0.12667	54.89%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	9.9	0.1369 ug/L	0.19105	0.1369 ppb	0.19105	139.55%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	205.6	0.6700 ug/L	0.13724	0.6700 ppb	0.13724	20.48%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	5.9	73.920 ug/L	14.4062	73.920 ppb	14.4062	19.49%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	-51.0	-10.203 ug/L	16.9875	-10.203 ppb	16.9875	166.50%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	2.1	92.305 ug/L	66.2294	92.305 ppb	66.2294	71.75%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	671.1	0.8841 ug/L	0.25790	0.8841 ppb	0.25790	29.17%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	-0.9	-0.0686 ug/L	0.73642	-0.0686 ppb	0.73642	>999.9%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	59.1	23.194 ug/L	10.8902	23.194 ppb	10.8902	46.95%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	-5.7	-0.1773 ug/L	0.28778	-0.1773 ppb	0.28778	162.27%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	23.9	17.013 ug/L	0.4412	17.013 ppb	0.4412	2.59%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	8.8	1.3261 ug/L	0.28842	1.3261 ppb	0.28842	21.75%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	7.6	13.376 ug/L	5.3629	13.376 ppb	5.3629	40.09%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	-0.7	-0.2700 ug/L	0.67950	-0.2700 ppb	0.67950	251.67%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-4.9	-3.6927 ug/L	2.95287	-3.6927 ppb	2.95287	79.97%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	158.3	5.8949 ug/L	1.87809	5.8949 ppb	1.87809	31.86%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	3.2	0.7112 ug/L	0.86435	0.7112 ppb	0.86435	121.54%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	10.1	0.0857 ug/L	0.05143	0.0857 ppb	0.05143	60.00%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	82.7	0.1391 ug/L	0.07574	0.1391 ppb	0.07574	54.45%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	1.3	0.5136 ug/L	2.49430	0.5136 ppb	2.49430	485.64%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	36.6	1.0674 ug/L	2.50300	1.0674 ppb	2.50300	234.50%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	49.2	0.3708 ug/L	0.52671	0.3708 ppb	0.52671	142.03%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	170.2	2.0115 ug/L	0.14732	2.0115 ppb	0.14732	7.32%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	109.4	8.7389 ug/L	2.69826	8.7389 ppb	2.69826	30.88%
QC value within limits for SiO2 Recovery = Not calculated						

All analyte(s) passed QC.

===== Analysis Begun

Start Time: 3/25/2010 16:32:43

Plasma On Time: 3/22/2010 06:16:18

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\032510.sif

Batch ID:

Results Data Set: 032510A

Results Library: C:\pe\Optima3\Results\Results.mdb
=====

Sequence No.: 1

Autosampler Location: 7

Sample ID: CCV

Date Collected: 3/25/2010 16:32:44

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	4027.7	4027.7	99.8 %		16:34:56
1	Y RADIAL	4324.2	4324.2	95.71 %		16:34:36
1	Al 396.153Radial†	4671.4	4758.1	5047.0 ug/L	5047.0 ppb	16:34:36
1	Ca 317.933Radial†	2476.5	2463.1	5004.3 ug/L	5004.3 ppb	16:34:56
1	Fe 238.204 Radial†	411.3	402.9	5053.7 ug/L	5053.7 ppb	16:34:56
1	K 766.490 Radial†	27394.6	24632.9	4911.1 ug/L	4911.1 ppb	16:34:36
1	Mg 279.077 IEC†	118.8	118.3	5166.7 ug/L	5166.7 ppb	16:34:56
1	Na 589.592 Radial†	25413.0	25912.3	10176 ug/L	10176 ppb	16:34:36
1	Sr 421.552†	58364.4	58382.7	497.12 ug/L	497.12 ppb	16:34:36
1	Sc 361.383	839614.0	839614.0	99.971 %		16:35:53
1	Y 371.029	707105.6	707105.6	98.747 %		16:35:53
1	Ag 328.068†	100202.1	99977.5	507.10 ug/L	507.10 ppb	16:35:59
1	As 188.979†	901.7	922.8	498.97 ug/L	498.97 ppb	16:36:19
1	B 249.677†	17403.4	17658.5	483.13 ug/L	483.13 ppb	16:35:59
1	Ba 233.527†	52722.9	52719.6	495.46 ug/L	495.46 ppb	16:35:59
1	Be 313.107†	1204619.2	1209228.3	492.07 ug/L	492.07 ppb	16:35:53
1	Cd 226.502†	35046.3	35222.7	496.67 ug/L	496.67 ppb	16:35:59
1	Co 228.616†	19401.8	19446.3	506.20 ug/L	506.20 ppb	16:35:59
1	Cr 267.716†	37956.5	37872.4	494.10 ug/L	494.10 ppb	16:35:59
1	Cu 324.752†	158811.1	152504.1	494.48 ug/L	494.48 ppb	16:35:59
1	Mn 257.610†	372566.4	372221.1	488.66 ug/L	488.66 ppb	16:35:59
1	Mo 202.031†	5649.6	5637.0	496.04 ug/L	496.04 ppb	16:36:19
1	Ni 231.604†	16151.2	16062.3	501.24 ug/L	501.24 ppb	16:35:59
1	P 214.914†	3585.3	3418.1	2360.5 ug/L	2360.5 ppb	16:36:19
1	Pb 220.353†	3191.6	3251.4	491.61 ug/L	491.61 ppb	16:36:19
1	S 181.975 Axial†	588.6	564.4	988.37 ug/L	988.37 ppb	16:36:19
1	Sb 206.836†	1208.3	1182.0	520.01 ug/L	520.01 ppb	16:36:19
1	Se 196.026†	609.6	626.8	517.87 ug/L	517.87 ppb	16:36:19
1	Si 251.611†	67480.6	66974.6	2487.6 ug/L	2487.6 ppb	16:35:59
1	Sn 189.927†	2234.1	2231.7	494.88 ug/L	494.88 ppb	16:36:19
1	Ti 334.940†	285988.1	287153.7	493.89 ug/L	493.89 ppb	16:35:59
1	Tl 190.801†	1229.5	1254.9	488.50 ug/L	488.50 ppb	16:36:19
1	U 409.014†	15625.5	17665.2	518.11 ug/L	518.11 ppb	16:35:59
1	V 292.402†	62666.0	64111.5	500.89 ug/L	500.89 ppb	16:35:59
1	Zn 213.857†	42415.7	41821.5	492.21 ug/L	492.21 ppb	16:35:59
1	SiO2†	66150.2	65615.8	5228.9 ug/L	5228.9 ppb	16:37:26
2	Sc Radial	4035.2	4035.2	100 %		16:35:21
2	Y RADIAL	4496.7	4496.7	99.53 %		16:35:01
2	Al 396.153Radial†	4564.5	4642.6	4923.9 ug/L	4923.9 ppb	16:35:01
2	Ca 317.933Radial†	2473.2	2455.2	4988.4 ug/L	4988.4 ppb	16:35:21
2	Fe 238.204 Radial†	411.2	402.1	5043.1 ug/L	5043.1 ppb	16:35:21
2	K 766.490 Radial†	27054.3	24242.2	4833.2 ug/L	4833.2 ppb	16:35:01
2	Mg 279.077 IEC†	116.1	115.4	5039.8 ug/L	5039.8 ppb	16:35:21
2	Na 589.592 Radial†	24748.6	25201.3	9896.9 ug/L	9896.9 ppb	16:35:01
2	Sr 421.552†	56872.0	56783.2	483.50 ug/L	483.50 ppb	16:35:01
2	Sc 361.383	838991.4	838991.4	99.897 %		16:36:24
2	Y 371.029	706721.3	706721.3	98.694 %		16:36:24

2	Ag 328.068†	100015.6	99865.3	506.54 ug/L	506.54 ppb	16:36:29
2	As 188.979†	887.7	909.4	491.81 ug/L	491.81 ppb	16:36:49
2	B 249.677†	17415.6	17683.7	483.82 ug/L	483.82 ppb	16:36:29
2	Ba 233.527†	52644.6	52680.3	495.09 ug/L	495.09 ppb	16:36:29
2	Be 313.107†	1203310.0	1208811.9	491.90 ug/L	491.90 ppb	16:36:24
2	Cd 226.502†	34867.1	35069.4	494.51 ug/L	494.51 ppb	16:36:29
2	Co 228.616†	19427.3	19486.2	507.24 ug/L	507.24 ppb	16:36:29
2	Cr 267.716†	38010.4	37954.6	495.17 ug/L	495.17 ppb	16:36:29
2	Cu 324.752†	158824.5	152635.3	494.91 ug/L	494.91 ppb	16:36:29
2	Mn 257.610†	372011.2	371941.9	488.30 ug/L	488.30 ppb	16:36:29
2	Mo 202.031†	5644.8	5636.4	495.98 ug/L	495.98 ppb	16:36:49
2	Ni 231.604†	16134.6	16057.6	501.09 ug/L	501.09 ppb	16:36:29
2	P 214.914†	3561.6	3397.0	2345.2 ug/L	2345.2 ppb	16:36:49
2	Pb 220.353†	3186.5	3248.6	491.17 ug/L	491.17 ppb	16:36:49
2	S 181.975 Axial†	577.2	553.4	969.16 ug/L	969.16 ppb	16:36:49
2	Sb 206.836†	1201.4	1176.0	517.45 ug/L	517.45 ppb	16:36:49
2	Se 196.026†	600.3	617.8	510.67 ug/L	510.67 ppb	16:36:49
2	Si 251.611†	67392.8	66936.7	2486.2 ug/L	2486.2 ppb	16:36:29
2	Sn 189.927†	2221.6	2220.8	492.45 ug/L	492.45 ppb	16:36:49
2	Ti 334.940†	285941.3	287319.1	494.19 ug/L	494.19 ppb	16:36:29
2	Tl 190.801†	1223.6	1249.9	486.54 ug/L	486.54 ppb	16:36:49
2	U 409.014†	15370.6	17421.6	510.94 ug/L	510.94 ppb	16:36:29
2	V 292.402†	62811.9	64304.1	502.36 ug/L	502.36 ppb	16:36:29
2	Zn 213.857†	42281.7	41718.8	491.00 ug/L	491.00 ppb	16:36:29
2	SiO2†	67025.4	66541.1	5302.8 ug/L	5302.8 ppb	16:37:31
3	Sc Radial	4008.5	4008.5	99.4 %		16:35:46
3	Y RADIAL	4420.3	4420.3	97.84 %		16:35:26
3	Al 396.153Radial†	4530.9	4639.2	4920.4 ug/L	4920.4 ppb	16:35:26
3	Ca 317.933Radial†	2463.0	2461.4	5001.0 ug/L	5001.0 ppb	16:35:46
3	Fe 238.204 Radial†	412.3	405.9	5091.0 ug/L	5091.0 ppb	16:35:46
3	K 766.490 Radial†	26934.9	24302.1	4845.1 ug/L	4845.1 ppb	16:35:26
3	Mg 279.077 IEC†	116.1	116.1	5073.1 ug/L	5073.1 ppb	16:35:46
3	Na 589.592 Radial†	24744.3	25361.7	9959.9 ug/L	9959.9 ppb	16:35:26
3	Sr 421.552†	56494.9	56782.2	483.49 ug/L	483.49 ppb	16:35:26
3	Sc 361.383	846528.6	846528.6	100.79 %		16:36:55
3	Y 371.029	712343.0	712343.0	99.479 %		16:36:55
3	Ag 328.068†	99596.3	98557.8	499.95 ug/L	499.95 ppb	16:37:00
3	As 188.979†	882.8	896.7	484.93 ug/L	484.93 ppb	16:37:20
3	B 249.677†	17368.4	17481.7	478.28 ug/L	478.28 ppb	16:37:00
3	Ba 233.527†	52479.0	52046.8	489.15 ug/L	489.15 ppb	16:37:00
3	Be 313.107†	1211952.6	1206661.4	491.02 ug/L	491.02 ppb	16:36:55
3	Cd 226.502†	34777.3	34669.5	488.86 ug/L	488.86 ppb	16:37:00
3	Co 228.616†	19307.7	19194.4	499.64 ug/L	499.64 ppb	16:37:00
3	Cr 267.716†	37887.7	37494.1	489.18 ug/L	489.18 ppb	16:37:00
3	Cu 324.752†	158442.8	150841.0	489.10 ug/L	489.10 ppb	16:37:00
3	Mn 257.610†	371275.6	367896.4	482.99 ug/L	482.99 ppb	16:37:00
3	Mo 202.031†	5653.1	5594.3	492.29 ug/L	492.29 ppb	16:37:20
3	Ni 231.604†	16120.2	15899.5	496.16 ug/L	496.16 ppb	16:37:00
3	P 214.914†	3583.1	3386.6	2338.9 ug/L	2338.9 ppb	16:37:20
3	Pb 220.353†	3201.5	3235.1	489.11 ug/L	489.11 ppb	16:37:20
3	S 181.975 Axial†	588.5	559.5	979.71 ug/L	979.71 ppb	16:37:20
3	Sb 206.836†	1217.0	1180.8	519.43 ug/L	519.43 ppb	16:37:20
3	Se 196.026†	597.6	609.8	504.43 ug/L	504.43 ppb	16:37:20
3	Si 251.611†	67219.9	66164.6	2457.5 ug/L	2457.5 ppb	16:37:00
3	Sn 189.927†	2248.4	2227.6	493.96 ug/L	493.96 ppb	16:37:20
3	Ti 334.940†	284939.3	283776.5	488.10 ug/L	488.10 ppb	16:37:00
3	Tl 190.801†	1230.5	1245.9	484.95 ug/L	484.95 ppb	16:37:20
3	U 409.014†	15157.7	17073.4	500.70 ug/L	500.70 ppb	16:37:00
3	V 292.402†	62637.3	63571.1	496.64 ug/L	496.64 ppb	16:37:00
3	Zn 213.857†	42215.1	41275.9	485.77 ug/L	485.77 ppb	16:37:00
3	SiO2†	67486.1	66400.8	5291.7 ug/L	5291.7 ppb	16:37:36

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	841711.3	100.22 %	0.498			0.50%
Sc Radial	4023.8	99.8 %	0.34			0.34%
Y 371.029	708723.3	98.973 %	0.4386			0.44%
Y RADIAL	4413.7	97.69 %	1.913			1.96%
Ag 328.068†	99466.9	504.53 ug/L	3.976	504.53 ppb	3.976	0.79%

QC value within limits for Ag 328.068 Recovery = 100.91%					
Al 396.153Radial†	4680.0	4963.7 ug/L	72.09	4963.7 ppb	72.09 1.45%
QC value within limits for Al 396.153Radial Recovery = 99.27%					
As 188.979†	909.6	491.90 ug/L	7.023	491.90 ppb	7.023 1.43%
QC value within limits for As 188.979 Recovery = 98.38%					
B 249.677†	17608.0	481.74 ug/L	3.019	481.74 ppb	3.019 0.63%
QC value within limits for B 249.677 Recovery = 96.35%					
Ba 233.527†	52482.2	493.23 ug/L	3.545	493.23 ppb	3.545 0.72%
QC value within limits for Ba 233.527 Recovery = 98.65%					
Be 313.107†	1208233.9	491.66 ug/L	0.567	491.66 ppb	0.567 0.12%
QC value within limits for Be 313.107 Recovery = 98.33%					
Ca 317.933Radial†	2459.9	4997.9 ug/L	8.42	4997.9 ppb	8.42 0.17%
QC value within limits for Ca 317.933Radial Recovery = 99.96%					
Cd 226.502†	34987.2	493.35 ug/L	4.034	493.35 ppb	4.034 0.82%
QC value within limits for Cd 226.502 Recovery = 98.67%					
Co 228.616†	19375.6	504.36 ug/L	4.117	504.36 ppb	4.117 0.82%
QC value within limits for Co 228.616 Recovery = 100.87%					
Cr 267.716†	37773.7	492.81 ug/L	3.196	492.81 ppb	3.196 0.65%
QC value within limits for Cr 267.716 Recovery = 98.56%					
Cu 324.752†	151993.5	492.83 ug/L	3.238	492.83 ppb	3.238 0.66%
QC value within limits for Cu 324.752 Recovery = 98.57%					
Fe 238.204 Radial†	403.7	5062.6 ug/L	25.16	5062.6 ppb	25.16 0.50%
QC value within limits for Fe 238.204 Radial Recovery = 101.25%					
K 766.490 Radial†	24392.4	4863.1 ug/L	41.94	4863.1 ppb	41.94 0.86%
QC value within limits for K 766.490 Radial Recovery = 97.26%					
Mg 279.077 IEC†	116.6	5093.2 ug/L	65.83	5093.2 ppb	65.83 1.29%
QC value within limits for Mg 279.077 IEC Recovery = 101.86%					
Mn 257.610†	370686.5	486.65 ug/L	3.172	486.65 ppb	3.172 0.65%
QC value within limits for Mn 257.610 Recovery = 97.33%					
Mo 202.031†	5622.6	494.77 ug/L	2.151	494.77 ppb	2.151 0.43%
QC value within limits for Mo 202.031 Recovery = 98.95%					
Na 589.592 Radial†	25491.8	10011 ug/L	146.5	10011 ppb	146.5 1.46%
QC value within limits for Na 589.592 Radial Recovery = 100.11%					
Ni 231.604†	16006.5	499.50 ug/L	2.890	499.50 ppb	2.890 0.58%
QC value within limits for Ni 231.604 Recovery = 99.90%					
P 214.914†	3400.6	2348.2 ug/L	11.10	2348.2 ppb	11.10 0.47%
QC value within limits for P 214.914 Recovery = 93.93%					
Pb 220.353†	3245.0	490.63 ug/L	1.334	490.63 ppb	1.334 0.27%
QC value within limits for Pb 220.353 Recovery = 98.13%					
S 181.975 Axial†	559.1	979.08 ug/L	9.619	979.08 ppb	9.619 0.98%
QC value within limits for S 181.975 Axial Recovery = 97.91%					
Sb 206.836†	1179.6	518.97 ug/L	1.342	518.97 ppb	1.342 0.26%
QC value within limits for Sb 206.836 Recovery = 103.79%					
Se 196.026†	618.1	510.99 ug/L	6.723	510.99 ppb	6.723 1.32%
QC value within limits for Se 196.026 Recovery = 102.20%					
Si 251.611†	66691.9	2477.1 ug/L	16.99	2477.1 ppb	16.99 0.69%
QC value within limits for Si 251.611 Recovery = 99.08%					
Sn 189.927†	2226.7	493.76 ug/L	1.223	493.76 ppb	1.223 0.25%
QC value within limits for Sn 189.927 Recovery = 98.75%					
Sr 421.552†	57316.0	488.04 ug/L	7.866	488.04 ppb	7.866 1.61%
QC value within limits for Sr 421.552 Recovery = 97.61%					
Ti 334.940†	286083.1	492.06 ug/L	3.434	492.06 ppb	3.434 0.70%
QC value within limits for Ti 334.940 Recovery = 98.41%					
Tl 190.801†	1250.2	486.66 ug/L	1.776	486.66 ppb	1.776 0.36%
QC value within limits for Tl 190.801 Recovery = 97.33%					
U 409.014†	17386.7	509.92 ug/L	8.748	509.92 ppb	8.748 1.72%
QC value within limits for U 409.014 Recovery = 101.98%					
V 292.402†	63995.6	499.96 ug/L	2.971	499.96 ppb	2.971 0.59%
QC value within limits for V 292.402 Recovery = 99.99%					
Zn 213.857†	41605.4	489.66 ug/L	3.426	489.66 ppb	3.426 0.70%
QC value within limits for Zn 213.857 Recovery = 97.93%					
SiO2†	66185.9	5274.5 ug/L	39.86	5274.5 ppb	39.86 0.76%
QC value within limits for SiO2 Recovery = 98.63%					
All analyte(s) passed QC.					

Sequence No.: 2

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/25/2010 16:39:46

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4048.7	4048.7	100 %		16:41:59
1	Y RADIAL	4446.2	4446.2	98.41 %		16:41:39
1	Al 396.153Radial†	-68.9	11.0	11.707 ug/L	11.707 ppb	16:41:59
1	Ca 317.933Radial†	30.2	12.9	26.158 ug/L	26.158 ppb	16:41:59
1	Fe 238.204 Radial†	11.6	2.6	32.184 ug/L	32.184 ppb	16:41:59
1	K 766.490 Radial†	2563.9	-248.8	-49.683 ug/L	-49.683 ppb	16:41:39
1	Mg 279.077 IEC†	0.8	0.1	6.1513 ug/L	6.1513 ppb	16:41:59
1	Na 589.592 Radial†	-406.8	55.6	21.826 ug/L	21.826 ppb	16:41:39
1	Sr 421.552†	59.1	-11.1	-0.0948 ug/L	-0.0948 ppb	16:41:39
1	Sc 361.383	820604.6	820604.6	97.708 %		16:42:56
1	Y 371.029	702828.4	702828.4	98.150 %		16:42:56
1	Ag 328.068†	215.9	-32.4	-0.1580 ug/L	-0.1580 ppb	16:42:56
1	As 188.979†	-25.5	-5.3	-2.8321 ug/L	-2.8321 ppb	16:43:16
1	B 249.677†	-291.0	-47.7	-1.3163 ug/L	-1.3163 ppb	16:43:16
1	Ba 233.527†	35.7	18.0	0.1702 ug/L	0.1702 ppb	16:43:16
1	Be 313.107†	-4312.5	-151.0	-0.0613 ug/L	-0.0613 ppb	16:42:56
1	Cd 226.502†	-164.5	-1.9	-0.0296 ug/L	-0.0296 ppb	16:43:16
1	Co 228.616†	-44.2	-6.3	-0.1656 ug/L	-0.1656 ppb	16:43:16
1	Cr 267.716†	97.4	4.7	0.0627 ug/L	0.0627 ppb	16:43:16
1	Cu 324.752†	6445.8	244.2	0.7909 ug/L	0.7909 ppb	16:42:56
1	Mn 257.610†	932.0	501.4	0.6608 ug/L	0.6608 ppb	16:43:16
1	Mo 202.031†	13.8	-0.1	-0.0048 ug/L	-0.0048 ppb	16:43:16
1	Ni 231.604†	103.1	11.9	0.3720 ug/L	0.3720 ppb	16:43:16
1	P 214.914†	182.5	18.6	13.171 ug/L	13.171 ppb	16:43:16
1	Pb 220.353†	-65.9	-8.7	-1.3109 ug/L	-1.3109 ppb	16:43:16
1	S 181.975 Axial†	30.6	7.0	12.207 ug/L	12.207 ppb	16:43:16
1	Sb 206.836†	28.7	2.7	1.1609 ug/L	1.1609 ppb	16:43:16
1	Se 196.026†	-21.9	-5.5	-4.2466 ug/L	-4.2466 ppb	16:43:16
1	Si 251.611†	575.6	63.7	2.3707 ug/L	2.3707 ppb	16:43:16
1	Sn 189.927†	5.8	2.9	0.6417 ug/L	0.6417 ppb	16:43:16
1	Ti 334.940†	-1050.9	7.8	0.0142 ug/L	0.0142 ppb	16:42:56
1	Tl 190.801†	-26.3	-1.8	-0.6967 ug/L	-0.6967 ppb	16:43:16
1	U 409.014†	-1823.5	168.9	4.9661 ug/L	4.9661 ppb	16:42:56
1	V 292.402†	-1394.6	0.2	0.0065 ug/L	0.0065 ppb	16:42:56
1	Zn 213.857†	753.3	164.5	1.9462 ug/L	1.9462 ppb	16:43:16
1	SiO2†	594.5	55.1	4.4020 ug/L	4.4020 ppb	16:44:27
2	Sc Radial	4050.8	4050.8	100 %		16:42:24
2	Y RADIAL	4500.9	4500.9	99.62 %		16:42:04
2	Al 396.153Radial†	-69.5	10.5	11.162 ug/L	11.162 ppb	16:42:24
2	Ca 317.933Radial†	26.5	9.2	18.711 ug/L	18.711 ppb	16:42:24
2	Fe 238.204 Radial†	8.9	-0.1	-1.7483 ug/L	-1.7483 ppb	16:42:24
2	K 766.490 Radial†	2663.9	-150.5	-30.070 ug/L	-30.070 ppb	16:42:04
2	Mg 279.077 IEC†	2.4	1.7	73.595 ug/L	73.595 ppb	16:42:24
2	Na 589.592 Radial†	-391.5	71.0	27.877 ug/L	27.877 ppb	16:42:04
2	Sr 421.552†	35.4	-34.8	-0.2962 ug/L	-0.2962 ppb	16:42:04
2	Sc 361.383	821641.3	821641.3	97.831 %		16:43:21
2	Y 371.029	705970.9	705970.9	98.589 %		16:43:21
2	Ag 328.068†	281.2	34.0	0.1672 ug/L	0.1672 ppb	16:43:21
2	As 188.979†	-19.3	1.1	0.5990 ug/L	0.5990 ppb	16:43:41
2	B 249.677†	-305.5	-62.1	-1.7059 ug/L	-1.7059 ppb	16:43:41
2	Ba 233.527†	45.9	28.4	0.2659 ug/L	0.2659 ppb	16:43:41
2	Be 313.107†	-4408.7	-243.7	-0.0986 ug/L	-0.0986 ppb	16:43:21
2	Cd 226.502†	-166.4	-3.6	-0.0509 ug/L	-0.0509 ppb	16:43:41
2	Co 228.616†	-40.6	-2.6	-0.0678 ug/L	-0.0678 ppb	16:43:41
2	Cr 267.716†	100.6	7.9	0.1012 ug/L	0.1012 ppb	16:43:41
2	Cu 324.752†	6523.3	315.1	1.0199 ug/L	1.0199 ppb	16:43:21
2	Mn 257.610†	795.1	360.3	0.4695 ug/L	0.4695 ppb	16:43:41
2	Mo 202.031†	11.4	-2.6	-0.2264 ug/L	-0.2264 ppb	16:43:41
2	Ni 231.604†	81.5	-10.3	-0.3224 ug/L	-0.3224 ppb	16:43:41

2	P 214.914†	195.9	32.1	22.848 ug/L	22.848 ppb	16:43:41
2	Pb 220.353†	-55.6	2.0	0.3082 ug/L	0.3082 ppb	16:43:41
2	S 181.975 Axial†	34.2	10.6	18.494 ug/L	18.494 ppb	16:43:41
2	Sb 206.836†	35.5	9.7	4.1229 ug/L	4.1229 ppb	16:43:41
2	Se 196.026†	-24.0	-7.6	-6.0590 ug/L	-6.0590 ppb	16:43:41
2	Si 251.611†	580.5	68.0	2.5333 ug/L	2.5333 ppb	16:43:41
2	Sn 189.927†	7.0	4.1	0.9110 ug/L	0.9110 ppb	16:43:41
2	Ti 334.940†	-974.3	87.5	0.1456 ug/L	0.1456 ppb	16:43:21
2	Tl 190.801†	-28.2	-3.8	-1.4554 ug/L	-1.4554 ppb	16:43:41
2	U 409.014†	-1882.9	110.5	3.2523 ug/L	3.2523 ppb	16:43:21
2	V 292.402†	-1427.1	-31.2	-0.2357 ug/L	-0.2357 ppb	16:43:21
2	Zn 213.857†	738.4	148.4	1.7634 ug/L	1.7634 ppb	16:43:41
2	SiO2†	609.4	69.5	5.5606 ug/L	5.5606 ppb	16:44:47
3	Sc Radial	4029.5	4029.5	99.9 %		16:42:49
3	Y RADIAL	4454.8	4454.8	98.60 %		16:42:29
3	Al 396.153Radial†	-60.8	18.8	19.976 ug/L	19.976 ppb	16:42:49
3	Ca 317.933Radial†	38.4	21.3	43.281 ug/L	43.281 ppb	16:42:49
3	Fe 238.204 Radial†	13.6	4.6	57.391 ug/L	57.391 ppb	16:42:49
3	K 766.490 Radial†	2705.7	-94.6	-18.921 ug/L	-18.921 ppb	16:42:29
3	Mg 279.077 IEC†	0.9	0.2	7.8408 ug/L	7.8408 ppb	16:42:49
3	Na 589.592 Radial†	-362.9	97.6	38.320 ug/L	38.320 ppb	16:42:29
3	Sr 421.552†	81.6	11.7	0.0991 ug/L	0.0991 ppb	16:42:29
3	Sc 361.383	825226.5	825226.5	98.258 %		16:43:46
3	Y 371.029	710011.7	710011.7	99.153 %		16:43:46
3	Ag 328.068†	195.0	-55.0	-0.2596 ug/L	-0.2596 ppb	16:43:46
3	As 188.979†	-21.6	-1.2	-0.6057 ug/L	-0.6057 ppb	16:44:07
3	B 249.677†	-333.5	-89.3	-2.4632 ug/L	-2.4632 ppb	16:44:07
3	Ba 233.527†	36.6	18.8	0.1777 ug/L	0.1777 ppb	16:44:07
3	Be 313.107†	-4304.3	-117.9	-0.0479 ug/L	-0.0479 ppb	16:43:46
3	Cd 226.502†	-171.0	-7.7	-0.1140 ug/L	-0.1140 ppb	16:44:07
3	Co 228.616†	-35.0	3.3	0.0855 ug/L	0.0855 ppb	16:44:07
3	Cr 267.716†	93.7	0.4	0.0113 ug/L	0.0113 ppb	16:44:07
3	Cu 324.752†	6566.9	330.6	1.0750 ug/L	1.0750 ppb	16:43:46
3	Mn 257.610†	923.3	487.3	0.6447 ug/L	0.6447 ppb	16:44:07
3	Mo 202.031†	16.3	2.4	0.2199 ug/L	0.2199 ppb	16:44:07
3	Ni 231.604†	84.0	-8.1	-0.2535 ug/L	-0.2535 ppb	16:44:07
3	P 214.914†	186.1	21.2	14.968 ug/L	14.968 ppb	16:44:07
3	Pb 220.353†	-53.2	4.7	0.7018 ug/L	0.7018 ppb	16:44:07
3	S 181.975 Axial†	25.0	1.1	1.8790 ug/L	1.8790 ppb	16:44:07
3	Sb 206.836†	27.2	1.0	0.4687 ug/L	0.4687 ppb	16:44:07
3	Se 196.026†	-23.2	-6.6	-5.1192 ug/L	-5.1192 ppb	16:44:07
3	Si 251.611†	579.8	64.6	2.4025 ug/L	2.4025 ppb	16:44:07
3	Sn 189.927†	9.0	6.1	1.3453 ug/L	1.3453 ppb	16:44:07
3	Ti 334.940†	-1069.4	-5.0	-0.0034 ug/L	-0.0034 ppb	16:43:46
3	Tl 190.801†	-27.0	-2.4	-0.9308 ug/L	-0.9308 ppb	16:44:07
3	U 409.014†	-2005.5	-5.9	-0.1805 ug/L	-0.1805 ppb	16:43:46
3	V 292.402†	-1394.4	8.4	0.0590 ug/L	0.0590 ppb	16:43:46
3	Zn 213.857†	756.4	163.3	1.9320 ug/L	1.9320 ppb	16:44:07
3	SiO2†	604.2	61.5	4.9112 ug/L	4.9112 ppb	16:45:07

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	822490.8	97.932 %		0.2888			0.29%
Sc Radial	4043.0	100 %		0.3			0.29%
Y 371.029	706270.3	98.631 %		0.5029			0.51%
Y RADIAL	4467.3	98.88 %		0.651			0.66%
Ag 328.068†	-17.8	-0.0835 ug/L		0.22295	-0.0835 ppb	0.22295	267.07%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	13.4	14.282 ug/L		4.9388	14.282 ppb	4.9388	34.58%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	-1.8	-0.9463 ug/L		1.74070	-0.9463 ppb	1.74070	183.95%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	-66.4	-1.8285 ug/L		0.58316	-1.8285 ppb	0.58316	31.89%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	21.7	0.2046 ug/L		0.05323	0.2046 ppb	0.05323	26.01%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	-170.9	-0.0693 ug/L		0.02629	-0.0693 ppb	0.02629	37.97%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	14.5	29.383 ug/L		12.5986	29.383 ppb	12.5986	42.88%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated

Cd 226.502† -4.4 -0.0648 ug/L 0.04392 -0.0648 ppb 0.04392 67.75%

QC value within limits for Cd 226.502 Recovery = Not calculated

Co 228.616† -1.9 -0.0493 ug/L 0.12656 -0.0493 ppb 0.12656 256.57%

QC value within limits for Co 228.616 Recovery = Not calculated

Cr 267.716† 4.3 0.0584 ug/L 0.04508 0.0584 ppb 0.04508 77.19%

QC value within limits for Cr 267.716 Recovery = Not calculated

Cu 324.752† 296.6 0.9619 ug/L 0.15064 0.9619 ppb 0.15064 15.66%

QC value within limits for Cu 324.752 Recovery = Not calculated

Fe 238.204 Radial† 2.3 29.276 ug/L 29.6769 29.276 ppb 29.6769 101.37%

QC value within limits for Fe 238.204 Radial Recovery = Not calculated

K 766.490 Radial† -164.7 -32.891 ug/L 15.5738 -32.891 ppb 15.5738 47.35%

QC value within limits for K 766.490 Radial Recovery = Not calculated

Mg 279.077 IEC† 0.7 29.196 ug/L 38.4603 29.196 ppb 38.4603 131.73%

QC value within limits for Mg 279.077 IEC Recovery = Not calculated

Mn 257.610† 449.6 0.5917 ug/L 0.10609 0.5917 ppb 0.10609 17.93%

QC value within limits for Mn 257.610 Recovery = Not calculated

Mo 202.031† -0.1 -0.0038 ug/L 0.22316 -0.0038 ppb 0.22316 >999.9%

QC value within limits for Mo 202.031 Recovery = Not calculated

Na 589.592 Radial† 74.7 29.341 ug/L 8.3443 29.341 ppb 8.3443 28.44%

QC value within limits for Na 589.592 Radial Recovery = Not calculated

Ni 231.604† -2.2 -0.0680 ug/L 0.38258 -0.0680 ppb 0.38258 562.96%

QC value within limits for Ni 231.604 Recovery = Not calculated

P 214.914† 23.9 16.996 ug/L 5.1474 16.996 ppb 5.1474 30.29%

QC value within limits for P 214.914 Recovery = Not calculated

Pb 220.353† -0.7 -0.1003 ug/L 1.06670 -0.1003 ppb 1.06670 >999.9%

QC value within limits for Pb 220.353 Recovery = Not calculated

S 181.975 Axial† 6.2 10.860 ug/L 8.3890 10.860 ppb 8.3890 77.25%

QC value within limits for S 181.975 Axial Recovery = Not calculated

Sb 206.836† 4.5 1.9175 ug/L 1.94104 1.9175 ppb 1.94104 101.23%

QC value within limits for Sb 206.836 Recovery = Not calculated

Se 196.026† -6.6 -5.1416 ug/L 0.90639 -5.1416 ppb 0.90639 17.63%

QC value within limits for Se 196.026 Recovery = Not calculated

Si 251.611† 65.4 2.4355 ug/L 0.08616 2.4355 ppb 0.08616 3.54%

QC value within limits for Si 251.611 Recovery = Not calculated

Sn 189.927† 4.3 0.9660 ug/L 0.35500 0.9660 ppb 0.35500 36.75%

QC value within limits for Sn 189.927 Recovery = Not calculated

Sr 421.552† -11.4 -0.0973 ug/L 0.19769 -0.0973 ppb 0.19769 203.17%

QC value within limits for Sr 421.552 Recovery = Not calculated

Ti 334.940† 30.1 0.0521 ug/L 0.08142 0.0521 ppb 0.08142 156.31%

QC value within limits for Ti 334.940 Recovery = Not calculated

Tl 190.801† -2.7 -1.0276 ug/L 0.38851 -1.0276 ppb 0.38851 37.81%

QC value within limits for Tl 190.801 Recovery = Not calculated

U 409.014† 91.2 2.6793 ug/L 2.62072 2.6793 ppb 2.62072 97.81%

QC value within limits for U 409.014 Recovery = Not calculated

V 292.402† -7.5 -0.0567 ug/L 0.15720 -0.0567 ppb 0.15720 277.26%

QC value within limits for V 292.402 Recovery = Not calculated

Zn 213.857† 158.7 1.8805 ug/L 0.10169 1.8805 ppb 0.10169 5.41%

QC value within limits for Zn 213.857 Recovery = Not calculated

SiO2† 62.1 4.9580 ug/L 0.58072 4.9580 ppb 0.58072 11.71%

QC value within limits for SiO2 Recovery = Not calculated

All analyte(s) passed QC.

Sequence No.: 10
 Sample ID: CCV
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 1
 Date Collected: 3/25/2010 17:36:03
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4033.0	4033.0	100.0 %		17:38:15
1	Y RADIAL	4441.3	4441.3	98.30 %		17:37:55
1	Al 396.153Radial†	4555.2	4635.8	4916.6 ug/L	4916.6 ppb	17:37:55
1	Ca 317.933Radial†	2429.8	2413.1	4902.8 ug/L	4902.8 ppb	17:38:15
1	Fe 238.204 Radial†	406.4	397.5	4986.0 ug/L	4986.0 ppb	17:38:15
1	K 766.490 Radial†	26937.7	24139.9	4812.9 ug/L	4812.9 ppb	17:37:55
1	Mg 279.077 IEC†	115.1	114.4	4997.5 ug/L	4997.5 ppb	17:38:15
1	Na 589.592 Radial†	23985.5	24451.3	9602.4 ug/L	9602.4 ppb	17:37:55
1	Sr 421.552†	56029.2	55970.4	476.58 ug/L	476.58 ppb	17:37:55
1	Sc 361.383	840981.1	840981.1	100.13 %		17:39:12
1	Y 371.029	707499.5	707499.5	98.802 %		17:39:12
1	Ag 328.068†	100055.1	99667.8	505.52 ug/L	505.52 ppb	17:39:17
1	As 188.979†	884.0	903.6	488.68 ug/L	488.68 ppb	17:39:37
1	B 249.677†	17513.2	17739.9	485.37 ug/L	485.37 ppb	17:39:17
1	Ba 233.527†	52852.3	52763.0	495.87 ug/L	495.87 ppb	17:39:17
1	Be 313.107†	1226799.3	1229419.9	500.27 ug/L	500.27 ppb	17:39:12
1	Cd 226.502†	35069.2	35188.7	496.20 ug/L	496.20 ppb	17:39:17
1	Co 228.616†	19464.0	19476.9	506.99 ug/L	506.99 ppb	17:39:17
1	Cr 267.716†	37940.8	37795.0	493.08 ug/L	493.08 ppb	17:39:17
1	Cu 324.752†	158815.2	152249.9	493.65 ug/L	493.65 ppb	17:39:17
1	Mn 257.610†	373829.1	372876.3	489.52 ug/L	489.52 ppb	17:39:17
1	Mo 202.031†	5650.0	5628.3	495.26 ug/L	495.26 ppb	17:39:37
1	Ni 231.604†	16234.4	16119.0	503.01 ug/L	503.01 ppb	17:39:17
1	P 214.914†	3567.1	3394.1	2343.4 ug/L	2343.4 ppb	17:39:37
1	Pb 220.353†	3171.6	3226.1	487.78 ug/L	487.78 ppb	17:39:37
1	S 181.975 Axial†	590.2	565.1	989.54 ug/L	989.54 ppb	17:39:37
1	Sb 206.836†	1205.9	1177.6	518.13 ug/L	518.13 ppb	17:39:37
1	Se 196.026†	606.6	622.8	514.44 ug/L	514.44 ppb	17:39:37
1	Si 251.611†	68225.6	67608.8	2511.2 ug/L	2511.2 ppb	17:39:17
1	Sn 189.927†	2232.4	2226.4	493.68 ug/L	493.68 ppb	17:39:37
1	Ti 334.940†	286829.3	287528.7	494.54 ug/L	494.54 ppb	17:39:17
1	Tl 190.801†	1235.2	1258.7	489.94 ug/L	489.94 ppb	17:39:37
1	U 409.014†	15631.8	17646.0	517.56 ug/L	517.56 ppb	17:39:17
1	V 292.402†	62776.9	64120.4	500.95 ug/L	500.95 ppb	17:39:17
1	Zn 213.857†	42402.4	41739.2	491.24 ug/L	491.24 ppb	17:39:17
1	SiO2†	67200.5	66557.2	5304.1 ug/L	5304.1 ppb	17:40:44
2	Sc Radial	4067.7	4067.7	101 %		17:38:40
2	Y RADIAL	4575.8	4575.8	101.3 %		17:38:20
2	Al 396.153Radial†	4636.8	4677.9	4961.5 ug/L	4961.5 ppb	17:38:20
2	Ca 317.933Radial†	2479.9	2442.1	4961.7 ug/L	4961.7 ppb	17:38:40
2	Fe 238.204 Radial†	412.6	400.1	5018.4 ug/L	5018.4 ppb	17:38:40
2	K 766.490 Radial†	27540.7	24508.0	4886.4 ug/L	4886.4 ppb	17:38:20
2	Mg 279.077 IEC†	115.8	114.2	4987.6 ug/L	4987.6 ppb	17:38:40
2	Na 589.592 Radial†	24388.9	24646.6	9679.1 ug/L	9679.1 ppb	17:38:20
2	Sr 421.552†	56981.5	56436.8	480.55 ug/L	480.55 ppb	17:38:20
2	Sc 361.383	845346.1	845346.1	100.65 %		17:39:43
2	Y 371.029	712188.1	712188.1	99.457 %		17:39:43
2	Ag 328.068†	99514.6	98614.8	500.20 ug/L	500.20 ppb	17:39:48
2	As 188.979†	888.8	903.9	488.79 ug/L	488.79 ppb	17:40:08
2	B 249.677†	17446.8	17583.6	481.09 ug/L	481.09 ppb	17:39:48
2	Ba 233.527†	52461.7	52102.4	489.66 ug/L	489.66 ppb	17:39:48
2	Be 313.107†	1210088.6	1206491.5	490.95 ug/L	490.95 ppb	17:39:43
2	Cd 226.502†	34836.1	34776.2	490.37 ug/L	490.37 ppb	17:39:48
2	Co 228.616†	19328.8	19242.2	500.90 ug/L	500.90 ppb	17:39:48
2	Cr 267.716†	37792.4	37451.9	488.61 ug/L	488.61 ppb	17:39:48
2	Cu 324.752†	157810.2	150432.5	487.77 ug/L	487.77 ppb	17:39:48
2	Mn 257.610†	371016.9	368154.6	483.33 ug/L	483.33 ppb	17:39:48
2	Mo 202.031†	5671.6	5620.6	494.59 ug/L	494.59 ppb	17:40:08
2	Ni 231.604†	16143.8	15945.4	497.59 ug/L	497.59 ppb	17:39:48

2	P 214.914†	3586.4	3394.8	2345.1 ug/L	2345.1 ppb	17:40:08
2	Pb 220.353†	3187.2	3225.3	487.67 ug/L	487.67 ppb	17:40:08
2	S 181.975 Axial†	594.8	566.5	992.06 ug/L	992.06 ppb	17:40:08
2	Sb 206.836†	1218.1	1183.6	520.67 ug/L	520.67 ppb	17:40:08
2	Se 196.026†	595.1	608.1	502.89 ug/L	502.89 ppb	17:40:08
2	Si 251.611†	67389.9	66426.8	2467.2 ug/L	2467.2 ppb	17:39:48
2	Sn 189.927†	2246.2	2228.6	494.18 ug/L	494.18 ppb	17:40:08
2	Ti 334.940†	284304.2	283540.9	487.69 ug/L	487.69 ppb	17:39:48
2	Tl 190.801†	1228.5	1245.6	484.86 ug/L	484.86 ppb	17:40:08
2	U 409.014†	15402.1	17337.2	508.48 ug/L	508.48 ppb	17:39:48
2	V 292.402†	62258.4	63281.6	494.46 ug/L	494.46 ppb	17:39:48
2	Zn 213.857†	42238.1	41357.3	486.74 ug/L	486.74 ppb	17:39:48
2	SiO2†	67324.2	66333.5	5286.3 ug/L	5286.3 ppb	17:40:49
3	Sc Radial	3787.1	3787.1	93.9 %		17:39:05
3	Y RADIAL	4487.4	4487.4	99.32 %		17:38:45
3	Al 396.153Radial†	4575.5	4953.2	5254.7 ug/L	5254.7 ppb	17:38:45
3	Ca 317.933Radial†	2498.4	2643.9	5371.7 ug/L	5371.7 ppb	17:39:05
3	Fe 238.204 Radial†	414.9	432.9	5428.6 ug/L	5428.6 ppb	17:39:05
3	K 766.490 Radial†	27165.0	26131.2	5210.0 ug/L	5210.0 ppb	17:38:45
3	Mg 279.077 IEC†	116.7	123.6	5399.1 ug/L	5399.1 ppb	17:39:05
3	Na 589.592 Radial†	24107.2	26138.3	10265 ug/L	10265 ppb	17:38:45
3	Sr 421.552†	56377.5	59979.7	510.72 ug/L	510.72 ppb	17:38:45
3	Sc 361.383	840090.3	840090.3	100.03 %		17:40:14
3	Y 371.029	707454.1	707454.1	98.796 %		17:40:14
3	Ag 328.068†	100053.4	99772.0	506.18 ug/L	506.18 ppb	17:40:19
3	As 188.979†	894.0	914.5	494.62 ug/L	494.62 ppb	17:40:39
3	B 249.677†	17502.6	17747.9	485.52 ug/L	485.52 ppb	17:40:19
3	Ba 233.527†	52708.0	52674.7	495.05 ug/L	495.05 ppb	17:40:19
3	Be 313.107†	1204992.4	1208918.1	491.94 ug/L	491.94 ppb	17:40:14
3	Cd 226.502†	35071.7	35228.3	496.71 ug/L	496.71 ppb	17:40:19
3	Co 228.616†	19468.7	19502.2	507.66 ug/L	507.66 ppb	17:40:19
3	Cr 267.716†	37935.9	37830.3	493.59 ug/L	493.59 ppb	17:40:19
3	Cu 324.752†	158620.9	152223.7	493.60 ug/L	493.60 ppb	17:40:19
3	Mn 257.610†	372941.5	372384.8	488.90 ug/L	488.90 ppb	17:40:19
3	Mo 202.031†	5687.7	5671.9	499.14 ug/L	499.14 ppb	17:40:39
3	Ni 231.604†	16164.6	16066.5	501.37 ug/L	501.37 ppb	17:40:19
3	P 214.914†	3606.2	3436.9	2374.0 ug/L	2374.0 ppb	17:40:39
3	Pb 220.353†	3207.1	3265.0	493.67 ug/L	493.67 ppb	17:40:39
3	S 181.975 Axial†	597.2	572.6	1002.7 ug/L	1002.7 ppb	17:40:39
3	Sb 206.836†	1226.3	1199.3	527.46 ug/L	527.46 ppb	17:40:39
3	Se 196.026†	599.6	616.4	510.80 ug/L	510.80 ppb	17:40:39
3	Si 251.611†	67678.9	67134.5	2493.5 ug/L	2493.5 ppb	17:40:19
3	Sn 189.927†	2242.7	2239.0	496.53 ug/L	496.53 ppb	17:40:39
3	Ti 334.940†	285416.7	286420.2	492.67 ug/L	492.67 ppb	17:40:19
3	Tl 190.801†	1241.4	1266.1	492.79 ug/L	492.79 ppb	17:40:39
3	U 409.014†	15236.7	17267.6	506.37 ug/L	506.37 ppb	17:40:19
3	V 292.402†	62576.9	63987.0	499.90 ug/L	499.90 ppb	17:40:19
3	Zn 213.857†	42389.9	41771.6	491.57 ug/L	491.57 ppb	17:40:19
3	SiO2†	67507.1	66934.8	5334.2 ug/L	5334.2 ppb	17:40:54

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	842139.2	100.27 %	0.335			0.33%
Sc Radial	3962.6	98.2 %	3.79			3.86%
Y 371.029	709047.3	99.019 %	0.3799			0.38%
Y RADIAL	4501.5	99.63 %	1.512			1.52%
Ag 328.068†	99351.5	503.97 ug/L	3.278	503.97 ppb	3.278	0.65%
QC value within limits for Ag 328.068 Recovery = 100.79%						
Al 396.153Radial†	4755.6	5044.3 ug/L	183.64	5044.3 ppb	183.64	3.64%
QC value within limits for Al 396.153Radial Recovery = 100.89%						
As 188.979†	907.4	490.70 ug/L	3.399	490.70 ppb	3.399	0.69%
QC value within limits for As 188.979 Recovery = 98.14%						
B 249.677†	17690.5	483.99 ug/L	2.516	483.99 ppb	2.516	0.52%
QC value within limits for B 249.677 Recovery = 96.80%						
Ba 233.527†	52513.4	493.53 ug/L	3.372	493.53 ppb	3.372	0.68%
QC value within limits for Ba 233.527 Recovery = 98.71%						
Be 313.107†	1214943.2	494.39 ug/L	5.120	494.39 ppb	5.120	1.04%
QC value within limits for Be 313.107 Recovery = 98.88%						
Ca 317.933Radial†	2499.7	5078.7 ug/L	255.47	5078.7 ppb	255.47	5.03%

QC value within limits for Ca 317.933 Radial Recovery = 101.57%							
Cd	226.502†	35064.4	494.43 ug/L	3.520	494.43 ppb	3.520	0.71%
QC value within limits for Cd 226.502 Recovery = 98.89%							
Co	228.616†	19407.1	505.18 ug/L	3.727	505.18 ppb	3.727	0.74%
QC value within limits for Co 228.616 Recovery = 101.04%							
Cr	267.716†	37692.4	491.76 ug/L	2.739	491.76 ppb	2.739	0.56%
QC value within limits for Cr 267.716 Recovery = 98.35%							
Cu	324.752†	151635.4	491.67 ug/L	3.383	491.67 ppb	3.383	0.69%
QC value within limits for Cu 324.752 Recovery = 98.33%							
Fe	238.204 Radial†	410.2	5144.3 ug/L	246.73	5144.3 ppb	246.73	4.80%
QC value within limits for Fe 238.204 Radial Recovery = 102.89%							
K	766.490 Radial†	24926.4	4969.8 ug/L	211.28	4969.8 ppb	211.28	4.25%
QC value within limits for K 766.490 Radial Recovery = 99.40%							
Mg	279.077 IEC†	117.4	5128.1 ug/L	234.76	5128.1 ppb	234.76	4.58%
QC value within limits for Mg 279.077 IEC Recovery = 102.56%							
Mn	257.610†	371138.6	487.25 ug/L	3.410	487.25 ppb	3.410	0.70%
QC value within limits for Mn 257.610 Recovery = 97.45%							
Mo	202.031†	5640.3	496.33 ug/L	2.454	496.33 ppb	2.454	0.49%
QC value within limits for Mo 202.031 Recovery = 99.27%							
Na	589.592 Radial†	25078.7	9848.8 ug/L	362.40	9848.8 ppb	362.40	3.68%
QC value within limits for Na 589.592 Radial Recovery = 98.49%							
Ni	231.604†	16043.6	500.66 ug/L	2.779	500.66 ppb	2.779	0.56%
QC value within limits for Ni 231.604 Recovery = 100.13%							
P	214.914†	3408.6	2354.1 ug/L	17.18	2354.1 ppb	17.18	0.73%
QC value within limits for P 214.914 Recovery = 94.17%							
Pb	220.353†	3238.8	489.71 ug/L	3.436	489.71 ppb	3.436	0.70%
QC value within limits for Pb 220.353 Recovery = 97.94%							
S	181.975 Axial†	568.1	994.77 ug/L	6.992	994.77 ppb	6.992	0.70%
QC value within limits for S 181.975 Axial Recovery = 99.48%							
Sb	206.836†	1186.8	522.08 ug/L	4.822	522.08 ppb	4.822	0.92%
QC value within limits for Sb 206.836 Recovery = 104.42%							
Se	196.026†	615.8	509.38 ug/L	5.906	509.38 ppb	5.906	1.16%
QC value within limits for Se 196.026 Recovery = 101.88%							
Si	251.611†	67056.7	2490.6 ug/L	22.14	2490.6 ppb	22.14	0.89%
QC value within limits for Si 251.611 Recovery = 99.63%							
Sn	189.927†	2231.3	494.80 ug/L	1.519	494.80 ppb	1.519	0.31%
QC value within limits for Sn 189.927 Recovery = 98.96%							
Sr	421.552†	57462.3	489.29 ug/L	18.669	489.29 ppb	18.669	3.82%
QC value within limits for Sr 421.552 Recovery = 97.86%							
Ti	334.940†	285829.9	491.63 ug/L	3.538	491.63 ppb	3.538	0.72%
QC value within limits for Ti 334.940 Recovery = 98.33%							
Tl	190.801†	1256.8	489.20 ug/L	4.019	489.20 ppb	4.019	0.82%
QC value within limits for Tl 190.801 Recovery = 97.84%							
U	409.014†	17416.9	510.80 ug/L	5.945	510.80 ppb	5.945	1.16%
QC value within limits for U 409.014 Recovery = 102.16%							
V	292.402†	63796.3	498.44 ug/L	3.483	498.44 ppb	3.483	0.70%
QC value within limits for V 292.402 Recovery = 99.69%							
Zn	213.857†	41622.7	489.85 ug/L	2.698	489.85 ppb	2.698	0.55%
QC value within limits for Zn 213.857 Recovery = 97.97%							
SiO2†	66608.5	5308.2 ug/L	24.22	5308.2 ppb	24.22	0.46%	
QC value within limits for SiO2 Recovery = 99.26%							
All analyte(s) passed QC.							

Sequence No.: 11
 Sample ID: CCB
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 6
 Date Collected: 3/25/2010 17:43:04
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4154.6	4154.6	103 %		17:45:16
1	Y RADIAL	3846.2	3846.2	85.13 %		17:44:56
1	Al 396.153Radial†	-69.9	11.8	12.554 ug/L	12.554 ppb	17:45:16
1	Ca 317.933Radial†	29.1	11.1	22.580 ug/L	22.580 ppb	17:45:16
1	Fe 238.204 Radial†	16.6	7.1	88.484 ug/L	88.484 ppb	17:45:16
1	K 766.490 Radial†	2558.2	-319.4	-63.778 ug/L	-63.778 ppb	17:44:56
1	Mg 279.077 IEC†	3.6	2.8	120.35 ug/L	120.35 ppb	17:45:16
1	Na 589.592 Radial†	-447.0	26.9	10.562 ug/L	10.562 ppb	17:44:56
1	Sr 421.552†	65.4	-6.6	-0.0562 ug/L	-0.0562 ppb	17:44:56
1	Sc 361.383	828696.3	828696.3	98.671 %		17:46:13
1	Y 371.029	706635.0	706635.0	98.682 %		17:46:13
1	Ag 328.068†	139.3	-112.2	-0.5386 ug/L	-0.5386 ppb	17:46:13
1	As 188.979†	-28.5	-8.0	-4.2848 ug/L	-4.2848 ppb	17:46:33
1	B 249.677†	-189.6	58.0	1.5794 ug/L	1.5794 ppb	17:46:33
1	Ba 233.527†	34.0	15.9	0.1537 ug/L	0.1537 ppb	17:46:33
1	Be 313.107†	-4380.6	-176.9	-0.0715 ug/L	-0.0715 ppb	17:46:13
1	Cd 226.502†	-151.2	13.2	0.1769 ug/L	0.1769 ppb	17:46:33
1	Co 228.616†	-35.0	3.5	0.0897 ug/L	0.0897 ppb	17:46:33
1	Cr 267.716†	109.3	15.8	0.2141 ug/L	0.2141 ppb	17:46:33
1	Cu 324.752†	6494.6	229.3	0.7461 ug/L	0.7461 ppb	17:46:13
1	Mn 257.610†	1159.9	723.1	0.9526 ug/L	0.9526 ppb	17:46:33
1	Mo 202.031†	17.7	3.7	0.3359 ug/L	0.3359 ppb	17:46:33
1	Ni 231.604†	79.8	-12.7	-0.3973 ug/L	-0.3973 ppb	17:46:33
1	P 214.914†	177.4	11.6	8.1196 ug/L	8.1196 ppb	17:46:33
1	Pb 220.353†	-47.8	10.4	1.5538 ug/L	1.5538 ppb	17:46:33
1	S 181.975 Axial†	34.2	10.3	17.995 ug/L	17.995 ppb	17:46:33
1	Sb 206.836†	32.1	5.9	2.5141 ug/L	2.5141 ppb	17:46:33
1	Se 196.026†	-22.1	-5.5	-4.1039 ug/L	-4.1039 ppb	17:46:33
1	Si 251.611†	653.2	136.6	5.0812 ug/L	5.0812 ppb	17:46:33
1	Sn 189.927†	-0.6	-3.7	-0.8219 ug/L	-0.8219 ppb	17:46:33
1	Ti 334.940†	-1004.3	65.5	0.1043 ug/L	0.1043 ppb	17:46:13
1	Tl 190.801†	-26.9	-2.2	-0.8303 ug/L	-0.8303 ppb	17:46:33
1	U 409.014†	-1889.2	120.6	3.5366 ug/L	3.5366 ppb	17:46:13
1	V 292.402†	-1317.2	92.6	0.7144 ug/L	0.7144 ppb	17:46:13
1	Zn 213.857†	700.9	103.9	1.2230 ug/L	1.2230 ppb	17:46:33
1	SiO2†	628.6	83.7	6.6796 ug/L	6.6796 ppb	17:47:29
2	Sc Radial	4059.2	4059.2	101 %		17:45:41
2	Y RADIAL	4462.0	4462.0	98.76 %		17:45:21
2	Al 396.153Radial†	-75.0	5.1	5.4775 ug/L	5.4775 ppb	17:45:41
2	Ca 317.933Radial†	22.0	4.7	9.5820 ug/L	9.5820 ppb	17:45:41
2	Fe 238.204 Radial†	11.8	2.7	34.167 ug/L	34.167 ppb	17:45:41
2	K 766.490 Radial†	2542.1	-277.0	-55.311 ug/L	-55.311 ppb	17:45:21
2	Mg 279.077 IEC†	4.2	3.5	152.14 ug/L	152.14 ppb	17:45:41
2	Na 589.592 Radial†	-434.1	29.5	11.576 ug/L	11.576 ppb	17:45:21
2	Sr 421.552†	58.1	-12.3	-0.1052 ug/L	-0.1052 ppb	17:45:21
2	Sc 361.383	834294.9	834294.9	99.338 %		17:46:38
2	Y 371.029	712534.1	712534.1	99.506 %		17:46:38
2	Ag 328.068†	183.4	-68.8	-0.3343 ug/L	-0.3343 ppb	17:46:38
2	As 188.979†	-24.2	-3.5	-1.8866 ug/L	-1.8866 ppb	17:46:58
2	B 249.677†	-230.6	18.0	0.4903 ug/L	0.4903 ppb	17:46:58
2	Ba 233.527†	15.0	-3.4	-0.0298 ug/L	-0.0298 ppb	17:46:58
2	Be 313.107†	-4253.4	-19.0	-0.0074 ug/L	-0.0074 ppb	17:46:38
2	Cd 226.502†	-162.1	3.2	0.0410 ug/L	0.0410 ppb	17:46:58
2	Co 228.616†	-42.0	-3.4	-0.0886 ug/L	-0.0886 ppb	17:46:58
2	Cr 267.716†	111.2	17.0	0.2252 ug/L	0.2252 ppb	17:46:58
2	Cu 324.752†	6451.9	142.1	0.4631 ug/L	0.4631 ppb	17:46:38
2	Mn 257.610†	995.1	549.3	0.7178 ug/L	0.7178 ppb	17:46:58
2	Mo 202.031†	15.9	1.9	0.1662 ug/L	0.1662 ppb	17:46:58
2	Ni 231.604†	83.0	-10.1	-0.3149 ug/L	-0.3149 ppb	17:46:58

2	P 214.914†	183.9	16.9	12.073 ug/L	12.073 ppb	17:46:58
2	Pb 220.353†	-47.4	11.1	1.6640 ug/L	1.6640 ppb	17:46:58
2	S 181.975 Axial†	29.2	5.0	8.8097 ug/L	8.8097 ppb	17:46:58
2	Sb 206.836†	30.0	3.6	1.5637 ug/L	1.5637 ppb	17:46:58
2	Se 196.026†	-17.3	-0.4	-0.2294 ug/L	-0.2294 ppb	17:46:58
2	Si 251.611†	650.5	129.4	4.8155 ug/L	4.8155 ppb	17:46:58
2	Sn 189.927†	11.5	8.5	1.8809 ug/L	1.8809 ppb	17:46:58
2	Ti 334.940†	-995.8	80.9	0.1282 ug/L	0.1282 ppb	17:46:38
2	Tl 190.801†	-26.6	-1.7	-0.6520 ug/L	-0.6520 ppb	17:46:58
2	U 409.014†	-2041.9	-20.3	-0.6028 ug/L	-0.6028 ppb	17:46:38
2	V 292.402†	-1363.7	54.8	0.4211 ug/L	0.4211 ppb	17:46:38
2	Zn 213.857†	691.4	89.5	1.0601 ug/L	1.0601 ppb	17:46:58
2	SiO2†	642.2	93.2	7.4389 ug/L	7.4389 ppb	17:47:34
3	Sc Radial	3994.4	3994.4	99.0 %		17:46:06
3	Y RADIAL	4401.2	4401.2	97.41 %		17:45:46
3	Al 396.153Radial†	-74.7	4.2	4.5215 ug/L	4.5215 ppb	17:46:06
3	Ca 317.933Radial†	23.8	6.9	13.924 ug/L	13.924 ppb	17:46:06
3	Fe 238.204 Radial†	17.0	8.2	102.31 ug/L	102.31 ppb	17:46:06
3	K 766.490 Radial†	2714.5	-62.0	-12.371 ug/L	-12.371 ppb	17:45:46
3	Mg 279.077 IEC†	-0.1	-0.8	-35.813 ug/L	-35.813 ppb	17:46:06
3	Na 589.592 Radial†	-487.1	-31.1	-12.198 ug/L	-12.198 ppb	17:45:46
3	Sr 421.552†	67.4	-2.0	-0.0169 ug/L	-0.0169 ppb	17:45:46
3	Sc 361.383	827403.3	827403.3	98.517 %		17:47:03
3	Y 371.029	706139.4	706139.4	98.613 %		17:47:03
3	Ag 328.068†	125.2	-126.3	-0.6056 ug/L	-0.6056 ppb	17:47:03
3	As 188.979†	-19.1	1.5	0.8040 ug/L	0.8040 ppb	17:47:23
3	B 249.677†	-221.3	25.5	0.6846 ug/L	0.6846 ppb	17:47:23
3	Ba 233.527†	33.0	15.0	0.1447 ug/L	0.1447 ppb	17:47:23
3	Be 313.107†	-4175.4	24.5	0.0104 ug/L	0.0104 ppb	17:47:03
3	Cd 226.502†	-171.1	-7.2	-0.1118 ug/L	-0.1118 ppb	17:47:23
3	Co 228.616†	-30.2	8.2	0.2120 ug/L	0.2120 ppb	17:47:23
3	Cr 267.716†	115.2	22.0	0.2965 ug/L	0.2965 ppb	17:47:23
3	Cu 324.752†	6507.6	252.7	0.8230 ug/L	0.8230 ppb	17:47:03
3	Mn 257.610†	1102.9	667.0	0.8867 ug/L	0.8867 ppb	17:47:23
3	Mo 202.031†	10.6	-3.5	-0.2954 ug/L	-0.2954 ppb	17:47:23
3	Ni 231.604†	91.3	-0.9	-0.0293 ug/L	-0.0293 ppb	17:47:23
3	P 214.914†	174.9	9.3	6.4761 ug/L	6.4761 ppb	17:47:23
3	Pb 220.353†	-63.1	-5.2	-0.8027 ug/L	-0.8027 ppb	17:47:23
3	S 181.975 Axial†	27.1	3.2	5.5635 ug/L	5.5635 ppb	17:47:23
3	Sb 206.836†	19.7	-6.6	-2.7901 ug/L	-2.7901 ppb	17:47:23
3	Se 196.026†	-16.5	0.2	0.4630 ug/L	0.4630 ppb	17:47:23
3	Si 251.611†	639.9	124.1	4.6227 ug/L	4.6227 ppb	17:47:23
3	Sn 189.927†	10.2	7.3	1.6105 ug/L	1.6105 ppb	17:47:23
3	Ti 334.940†	-940.7	128.4	0.2241 ug/L	0.2241 ppb	17:47:03
3	Tl 190.801†	-31.3	-6.7	-2.5876 ug/L	-2.5876 ppb	17:47:23
3	U 409.014†	-1888.8	117.9	3.4574 ug/L	3.4574 ppb	17:47:03
3	V 292.402†	-1326.5	81.1	0.6118 ug/L	0.6118 ppb	17:47:03
3	Zn 213.857†	701.2	105.4	1.2356 ug/L	1.2356 ppb	17:47:23
3	SiO2†	678.8	135.6	10.843 ug/L	10.843 ppb	17:47:39

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	830131.5	98.842 %	0.4362			0.44%
Sc Radial	4069.4	101 %	2.0			1.98%
Y 371.029	708436.2	98.933 %	0.4968			0.50%
Y RADIAL	4236.5	93.77 %	7.510			8.01%
Ag 328.068†	-102.4	-0.4928 ug/L	0.14132	-0.4928 ppb	0.14132	28.68%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	7.1	7.5176 ug/L	4.38764	7.5176 ppb	4.38764	58.36%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-3.4	-1.7892 ug/L	2.54578	-1.7892 ppb	2.54578	142.29%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	33.9	0.9181 ug/L	0.58087	0.9181 ppb	0.58087	63.27%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	9.2	0.0895 ug/L	0.10345	0.0895 ppb	0.10345	115.54%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	-57.1	-0.0228 ug/L	0.04312	-0.0228 ppb	0.04312	188.79%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	7.6	15.362 ug/L	6.6172	15.362 ppb	6.6172	43.07%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd 226.502†	3.0	0.0354 ug/L	0.14444	0.0354 ppb	0.14444	408.44%	
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	2.8	0.0711 ug/L	0.15115	0.0711 ppb	0.15115	212.69%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	18.2	0.2453 ug/L	0.04470	0.2453 ppb	0.04470	18.23%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	208.0	0.6774 ug/L	0.18956	0.6774 ppb	0.18956	27.98%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	6.0	74.986 ug/L	36.0199	74.986 ppb	36.0199	48.04%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	-219.5	-43.820 ug/L	27.5624	-43.820 ppb	27.5624	62.90%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	1.8	78.895 ug/L	100.6027	78.895 ppb	100.6027	127.52%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	646.5	0.8524 ug/L	0.12108	0.8524 ppb	0.12108	14.21%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	0.7	0.0689 ug/L	0.32666	0.0689 ppb	0.32666	474.18%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	8.4	3.3135 ug/L	13.44259	3.3135 ppb	13.44259	405.69%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	-7.9	-0.2472 ug/L	0.19312	-0.2472 ppb	0.19312	78.14%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	12.6	8.8896 ug/L	2.87673	8.8896 ppb	2.87673	32.36%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	5.4	0.8050 ug/L	1.39346	0.8050 ppb	1.39346	173.09%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	6.2	10.789 ug/L	6.4479	10.789 ppb	6.4479	59.76%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	1.0	0.4292 ug/L	2.82825	0.4292 ppb	2.82825	658.90%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	-1.9	-1.2901 ug/L	2.46129	-1.2901 ppb	2.46129	190.78%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	130.0	4.8398 ug/L	0.23023	4.8398 ppb	0.23023	4.76%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	4.0	0.8898 ug/L	1.48859	0.8898 ppb	1.48859	167.29%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	-7.0	-0.0594 ug/L	0.04423	-0.0594 ppb	0.04423	74.42%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	91.6	0.1522 ug/L	0.06340	0.1522 ppb	0.06340	41.65%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	-3.5	-1.3567 ug/L	1.06977	-1.3567 ppb	1.06977	78.85%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	72.7	2.1304 ug/L	2.36736	2.1304 ppb	2.36736	111.12%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	76.2	0.5824 ug/L	0.14885	0.5824 ppb	0.14885	25.56%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	99.6	1.1729 ug/L	0.09788	1.1729 ppb	0.09788	8.35%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†	104.2	8.3206 ug/L	2.21756	8.3206 ppb	2.21756	26.65%	
QC value within limits for SiO2 Recovery = Not calculated							
All analyte(s) passed QC.							

Sequence No.: 20
 Sample ID: CCV
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 1
 Date Collected: 3/25/2010 18:45:58
 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	4049.4	4049.4	100 %		18:48:10
1	Y RADIAL	4465.4	4465.4	98.84 %		18:47:50
1	Al 396.153Radial†	4598.2	4660.1	4942.3 ug/L	4942.3 ppb	18:47:50
1	Ca 317.933Radial†	2493.0	2466.2	5010.7 ug/L	5010.7 ppb	18:48:10
1	Fe 238.204 Radial†	418.3	407.7	5113.5 ug/L	5113.5 ppb	18:48:10
1	K 766.490 Radial†	27337.5	24428.9	4870.4 ug/L	4870.4 ppb	18:47:50
1	Mg 279.077 IEC†	117.1	116.0	5066.6 ug/L	5066.6 ppb	18:48:10
1	Na 589.592 Radial†	25329.3	25692.6	10090 ug/L	10090 ppb	18:47:50
1	Sr 421.552†	57920.8	57627.6	490.69 ug/L	490.69 ppb	18:47:50
1	Sc 361.383	838446.9	838446.9	99.832 %		18:49:07
1	Y 371.029	706173.4	706173.4	98.617 %		18:49:07
1	Ag 328.068†	100990.4	100906.6	511.83 ug/L	511.83 ppb	18:49:12
1	As 188.979†	900.3	922.6	498.94 ug/L	498.94 ppb	18:49:32
1	B 249.677†	17520.2	17799.8	486.98 ug/L	486.98 ppb	18:49:12
1	Ba 233.527†	53140.2	53211.0	500.08 ug/L	500.08 ppb	18:49:12
1	Be 313.107†	1214320.0	1220622.7	496.71 ug/L	496.71 ppb	18:49:07
1	Cd 226.502†	35279.0	35504.6	500.64 ug/L	500.64 ppb	18:49:12
1	Co 228.616†	19556.2	19628.0	510.92 ug/L	510.92 ppb	18:49:12
1	Cr 267.716†	38265.2	38234.5	498.83 ug/L	498.83 ppb	18:49:12
1	Cu 324.752†	160177.8	154094.2	499.64 ug/L	499.64 ppb	18:49:12
1	Mn 257.610†	375631.9	375810.5	493.38 ug/L	493.38 ppb	18:49:12
1	Mo 202.031†	5686.7	5682.1	500.00 ug/L	500.00 ppb	18:49:32
1	Ni 231.604†	16240.2	16173.9	504.72 ug/L	504.72 ppb	18:49:12
1	P 214.914†	3607.6	3445.5	2379.1 ug/L	2379.1 ppb	18:49:32
1	Pb 220.353†	3210.9	3275.1	495.17 ug/L	495.17 ppb	18:49:32
1	S 181.975 Axial†	596.4	573.0	1003.4 ug/L	1003.4 ppb	18:49:32
1	Sb 206.836†	1212.3	1187.7	522.55 ug/L	522.55 ppb	18:49:32
1	Se 196.026†	597.5	615.5	509.01 ug/L	509.01 ppb	18:49:32
1	Si 251.611†	68268.7	67858.0	2520.4 ug/L	2520.4 ppb	18:49:12
1	Sn 189.927†	2239.0	2239.7	496.63 ug/L	496.63 ppb	18:49:32
1	Ti 334.940†	288678.9	290247.2	499.22 ug/L	499.22 ppb	18:49:12
1	Tl 190.801†	1229.8	1257.0	489.32 ug/L	489.32 ppb	18:49:32
1	U 409.014†	15619.6	17681.0	518.56 ug/L	518.56 ppb	18:49:12
1	V 292.402†	63337.2	64871.2	506.78 ug/L	506.78 ppb	18:49:12
1	Zn 213.857†	42657.3	42122.6	495.75 ug/L	495.75 ppb	18:49:12
1	SiO2†	66918.3	66477.4	5297.6 ug/L	5297.6 ppb	18:50:39
2	Sc Radial	4034.6	4034.6	100 %		18:48:35
2	Y RADIAL	4342.5	4342.5	96.11 %		18:48:15
2	Al 396.153Radial†	4523.1	4601.8	4880.1 ug/L	4880.1 ppb	18:48:15
2	Ca 317.933Radial†	2498.9	2481.2	5041.2 ug/L	5041.2 ppb	18:48:35
2	Fe 238.204 Radial†	421.5	412.4	5171.6 ug/L	5171.6 ppb	18:48:35
2	K 766.490 Radial†	27010.7	24202.2	4825.2 ug/L	4825.2 ppb	18:48:15
2	Mg 279.077 IEC†	118.6	117.9	5148.1 ug/L	5148.1 ppb	18:48:35
2	Na 589.592 Radial†	24675.7	25131.8	9869.6 ug/L	9869.6 ppb	18:48:15
2	Sr 421.552†	56330.7	56249.7	478.96 ug/L	478.96 ppb	18:48:15
2	Sc 361.383	844461.1	844461.1	100.55 %		18:49:38
2	Y 371.029	711856.7	711856.7	99.411 %		18:49:38
2	Ag 328.068†	99385.3	98589.9	500.13 ug/L	500.13 ppb	18:49:43
2	As 188.979†	907.5	923.3	499.22 ug/L	499.22 ppb	18:50:03
2	B 249.677†	17213.6	17369.9	475.19 ug/L	475.19 ppb	18:49:43
2	Ba 233.527†	52317.2	52013.4	488.83 ug/L	488.83 ppb	18:49:43
2	Be 313.107†	1210389.9	1208051.1	491.58 ug/L	491.58 ppb	18:49:38
2	Cd 226.502†	34665.9	34643.2	488.48 ug/L	488.48 ppb	18:49:43
2	Co 228.616†	19261.5	19195.3	499.69 ug/L	499.69 ppb	18:49:43
2	Cr 267.716†	37650.2	37349.9	487.30 ug/L	487.30 ppb	18:49:43
2	Cu 324.752†	157626.4	150413.9	487.72 ug/L	487.72 ppb	18:49:43
2	Mn 257.610†	369718.5	367249.6	482.15 ug/L	482.15 ppb	18:49:43
2	Mo 202.031†	5752.1	5706.5	502.16 ug/L	502.16 ppb	18:50:03
2	Ni 231.604†	16027.3	15846.3	494.50 ug/L	494.50 ppb	18:49:43

2	P 214.914†	3614.3	3426.4	2367.7 ug/L	2367.7 ppb	18:50:03
2	Pb 220.353†	3240.4	3281.5	496.12 ug/L	496.12 ppb	18:50:03
2	S 181.975 Axial†	595.1	567.5	993.83 ug/L	993.83 ppb	18:50:03
2	Sb 206.836†	1239.9	1206.5	530.67 ug/L	530.67 ppb	18:50:03
2	Se 196.026†	626.7	640.2	528.89 ug/L	528.89 ppb	18:50:03
2	Si 251.611†	67167.9	66276.1	2461.5 ug/L	2461.5 ppb	18:49:43
2	Sn 189.927†	2272.5	2257.1	500.49 ug/L	500.49 ppb	18:50:03
2	Ti 334.940†	283933.7	283468.5	487.57 ug/L	487.57 ppb	18:49:43
2	Tl 190.801†	1253.0	1271.2	494.75 ug/L	494.75 ppb	18:50:03
2	U 409.014†	15246.4	17198.5	504.38 ug/L	504.38 ppb	18:49:43
2	V 292.402†	62232.1	63320.2	494.84 ug/L	494.84 ppb	18:49:43
2	Zn 213.857†	42062.4	41226.5	485.18 ug/L	485.18 ppb	18:49:43
2	SiO2†	68034.1	67109.7	5348.1 ug/L	5348.1 ppb	18:50:44
3	Sc Radial	4075.2	4075.2	101 %		18:49:00
3	Y RADIAL	4395.5	4395.5	97.29 %		18:48:40
3	Al 396.153Radial†	4514.5	4548.4	4823.5 ug/L	4823.5 ppb	18:48:40
3	Ca 317.933Radial†	2502.6	2460.0	4998.1 ug/L	4998.1 ppb	18:49:00
3	Fe 238.204 Radial†	417.0	403.8	5064.3 ug/L	5064.3 ppb	18:49:00
3	K 766.490 Radial†	26756.1	23681.4	4721.3 ug/L	4721.3 ppb	18:48:40
3	Mg 279.077 IEC†	119.5	117.6	5136.2 ug/L	5136.2 ppb	18:49:00
3	Na 589.592 Radial†	24735.1	24945.0	9796.2 ug/L	9796.2 ppb	18:48:40
3	Sr 421.552†	56348.3	55706.5	474.33 ug/L	474.33 ppb	18:48:40
3	Sc 361.383	845724.4	845724.4	100.70 %		18:50:09
3	Y 371.029	711950.6	711950.6	99.424 %		18:50:09
3	Ag 328.068†	100046.2	99098.5	502.67 ug/L	502.67 ppb	18:50:14
3	As 188.979†	894.9	909.5	491.83 ug/L	491.83 ppb	18:50:34
3	B 249.677†	17314.1	17444.1	477.24 ug/L	477.24 ppb	18:50:14
3	Ba 233.527†	52581.3	52197.9	490.56 ug/L	490.56 ppb	18:50:14
3	Be 313.107†	1212023.3	1207875.0	491.51 ug/L	491.51 ppb	18:50:09
3	Cd 226.502†	34920.4	34844.5	491.33 ug/L	491.33 ppb	18:50:14
3	Co 228.616†	19351.6	19256.2	501.26 ug/L	501.26 ppb	18:50:14
3	Cr 267.716†	37850.5	37492.9	489.16 ug/L	489.16 ppb	18:50:14
3	Cu 324.752†	158445.1	150992.8	489.59 ug/L	489.59 ppb	18:50:14
3	Mn 257.610†	371360.7	368331.1	483.56 ug/L	483.56 ppb	18:50:14
3	Mo 202.031†	5683.6	5629.9	495.42 ug/L	495.42 ppb	18:50:34
3	Ni 231.604†	16129.0	15923.5	496.91 ug/L	496.91 ppb	18:50:14
3	P 214.914†	3600.9	3407.7	2353.9 ug/L	2353.9 ppb	18:50:34
3	Pb 220.353†	3210.9	3247.4	490.96 ug/L	490.96 ppb	18:50:34
3	S 181.975 Axial†	586.8	558.3	977.70 ug/L	977.70 ppb	18:50:34
3	Sb 206.836†	1213.5	1178.5	518.51 ug/L	518.51 ppb	18:50:34
3	Se 196.026†	608.6	621.3	513.49 ug/L	513.49 ppb	18:50:34
3	Si 251.611†	67464.0	66470.4	2468.8 ug/L	2468.8 ppb	18:50:14
3	Sn 189.927†	2246.4	2227.7	493.99 ug/L	493.99 ppb	18:50:34
3	Ti 334.940†	285198.1	284302.2	489.00 ug/L	489.00 ppb	18:50:14
3	Tl 190.801†	1247.9	1264.3	492.07 ug/L	492.07 ppb	18:50:34
3	U 409.014†	15195.6	17125.3	502.24 ug/L	502.24 ppb	18:50:14
3	V 292.402†	62593.4	63586.6	496.81 ug/L	496.81 ppb	18:50:14
3	Zn 213.857†	42259.2	41359.5	486.76 ug/L	486.76 ppb	18:50:14
3	SiO2†	68591.0	67561.7	5384.4 ug/L	5384.4 ppb	18:50:49

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	842877.5	100.36 %	0.463			0.46%
Sc Radial	4053.1	100 %	0.5			0.51%
Y 371.029	709993.6	99.151 %	0.4621			0.47%
Y RADIAL	4401.2	97.41 %	1.365			1.40%
Ag 328.068†	99531.7	504.87 ug/L	6.153	504.87 ppb	6.153	1.22%
QC value within limits for Ag 328.068 Recovery = 100.97%						
Al 396.153Radial†	4603.5	4882.0 ug/L	59.46	4882.0 ppb	59.46	1.22%
QC value within limits for Al 396.153Radial Recovery = 97.64%						
As 188.979†	918.5	496.67 ug/L	4.186	496.67 ppb	4.186	0.84%
QC value within limits for As 188.979 Recovery = 99.33%						
B 249.677†	17537.9	479.81 ug/L	6.300	479.81 ppb	6.300	1.31%
QC value within limits for B 249.677 Recovery = 95.96%						
Ba 233.527†	52474.1	493.16 ug/L	6.059	493.16 ppb	6.059	1.23%
QC value within limits for Ba 233.527 Recovery = 98.63%						
Be 313.107†	1212182.9	493.27 ug/L	2.982	493.27 ppb	2.982	0.60%
QC value within limits for Be 313.107 Recovery = 98.65%						
Ca 317.933Radial†	2469.1	5016.7 ug/L	22.19	5016.7 ppb	22.19	0.44%

QC value within limits for Ca 317.933 Radial Recovery = 100.33%

Cd 226.502†	34997.4	493.49 ug/L	6.362	493.49 ppb	6.362	1.29%
QC value within limits for Cd 226.502 Recovery = 98.70%						
Co 228.616†	19359.8	503.96 ug/L	6.084	503.96 ppb	6.084	1.21%
QC value within limits for Co 228.616 Recovery = 100.79%						
Cr 267.716†	37692.4	491.76 ug/L	6.187	491.76 ppb	6.187	1.26%
QC value within limits for Cr 267.716 Recovery = 98.35%						
Cu 324.752†	151833.6	492.32 ug/L	6.412	492.32 ppb	6.412	1.30%
QC value within limits for Cu 324.752 Recovery = 98.46%						
Fe 238.204 Radial†	408.0	5116.5 ug/L	53.67	5116.5 ppb	53.67	1.05%
QC value within limits for Fe 238.204 Radial Recovery = 102.33%						
K 766.490 Radial†	24104.2	4805.6 ug/L	76.46	4805.6 ppb	76.46	1.59%
QC value within limits for K 766.490 Radial Recovery = 96.11%						
Mg 279.077 IEC†	117.1	5117.0 ug/L	44.03	5117.0 ppb	44.03	0.86%
QC value within limits for Mg 279.077 IEC Recovery = 102.34%						
Mn 257.610†	370463.8	486.36 ug/L	6.118	486.36 ppb	6.118	1.26%
QC value within limits for Mn 257.610 Recovery = 97.27%						
Mo 202.031†	5672.8	499.19 ug/L	3.444	499.19 ppb	3.444	0.69%
QC value within limits for Mo 202.031 Recovery = 99.84%						
Na 589.592 Radial†	25256.4	9918.6 ug/L	152.81	9918.6 ppb	152.81	1.54%
QC value within limits for Na 589.592 Radial Recovery = 99.19%						
Ni 231.604†	15981.2	498.71 ug/L	5.345	498.71 ppb	5.345	1.07%
QC value within limits for Ni 231.604 Recovery = 99.74%						
P 214.914†	3426.5	2366.9 ug/L	12.61	2366.9 ppb	12.61	0.53%
QC value within limits for P 214.914 Recovery = 94.67%						
Pb 220.353†	3268.0	494.08 ug/L	2.745	494.08 ppb	2.745	0.56%
QC value within limits for Pb 220.353 Recovery = 98.82%						
S 181.975 Axial†	566.3	991.65 ug/L	13.003	991.65 ppb	13.003	1.31%
QC value within limits for S 181.975 Axial Recovery = 99.17%						
Sb 206.836†	1190.9	523.91 ug/L	6.190	523.91 ppb	6.190	1.18%
QC value within limits for Sb 206.836 Recovery = 104.78%						
Se 196.026†	625.7	517.13 ug/L	10.425	517.13 ppb	10.425	2.02%
QC value within limits for Se 196.026 Recovery = 103.43%						
Si 251.611†	66868.2	2483.6 ug/L	32.12	2483.6 ppb	32.12	1.29%
QC value within limits for Si 251.611 Recovery = 99.34%						
Sn 189.927†	2241.5	497.04 ug/L	3.271	497.04 ppb	3.271	0.66%
QC value within limits for Sn 189.927 Recovery = 99.41%						
Sr 421.552†	56527.9	481.33 ug/L	8.433	481.33 ppb	8.433	1.75%
QC value within limits for Sr 421.552 Recovery = 96.27%						
Ti 334.940†	286006.0	491.93 ug/L	6.357	491.93 ppb	6.357	1.29%
QC value within limits for Ti 334.940 Recovery = 98.39%						
Tl 190.801†	1264.2	492.05 ug/L	2.717	492.05 ppb	2.717	0.55%
QC value within limits for Tl 190.801 Recovery = 98.41%						
U 409.014†	17334.9	508.39 ug/L	8.870	508.39 ppb	8.870	1.74%
QC value within limits for U 409.014 Recovery = 101.68%						
V 292.402†	63926.0	499.48 ug/L	6.403	499.48 ppb	6.403	1.28%
QC value within limits for V 292.402 Recovery = 99.90%						
Zn 213.857†	41569.5	489.23 ug/L	5.703	489.23 ppb	5.703	1.17%
QC value within limits for Zn 213.857 Recovery = 97.85%						
SiO2†	67049.6	5343.3 ug/L	43.57	5343.3 ppb	43.57	0.82%
QC value within limits for SiO2 Recovery = 99.92%						

All analyte(s) passed QC.

Sequence No.: 21

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 3/25/2010 18:52:59

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	4046.3	4046.3	100 %			18:55:11
1	Y RADIAL	4496.7	4496.7	99.53 %			18:54:51
1	Al 396.153Radial†	-71.2	8.7	9.2224 ug/L	9.2224 ppb		18:55:11
1	Ca 317.933Radial†	23.0	5.8	11.746 ug/L	11.746 ppb		18:55:11
1	Fe 238.204 Radial†	10.5	1.4	17.735 ug/L	17.735 ppb		18:55:11
1	K 766.490 Radial†	2723.9	-87.8	-17.531 ug/L	-17.531 ppb		18:54:51
1	Mg 279.077 IEC†	3.3	2.6	114.32 ug/L	114.32 ppb		18:55:11
1	Na 589.592 Radial†	-461.2	1.1	0.4168 ug/L	0.4168 ppb		18:54:51
1	Sr 421.552†	61.2	-9.0	-0.0771 ug/L	-0.0771 ppb		18:54:51
1	Sc 361.383	825278.9	825278.9	98.264 %			18:56:08
1	Y 371.029	707417.3	707417.3	98.791 %			18:56:08
1	Ag 328.068†	190.8	-59.2	-0.2864 ug/L	-0.2864 ppb		18:56:08
1	As 188.979†	-25.6	-5.2	-2.7857 ug/L	-2.7857 ppb		18:56:28
1	B 249.677†	-332.8	-88.5	-2.4346 ug/L	-2.4346 ppb		18:56:28
1	Ba 233.527†	42.5	24.7	0.2340 ug/L	0.2340 ppb		18:56:28
1	Be 313.107†	-4373.2	-187.7	-0.0758 ug/L	-0.0758 ppb		18:56:08
1	Cd 226.502†	-178.2	-14.9	-0.2134 ug/L	-0.2134 ppb		18:56:28
1	Co 228.616†	-40.2	-2.0	-0.0524 ug/L	-0.0524 ppb		18:56:28
1	Cr 267.716†	88.3	-5.1	-0.0615 ug/L	-0.0615 ppb		18:56:28
1	Cu 324.752†	6431.6	192.5	0.6271 ug/L	0.6271 ppb		18:56:08
1	Mn 257.610†	1246.0	815.6	1.0672 ug/L	1.0672 ppb		18:56:08
1	Mo 202.031†	17.1	3.3	0.2879 ug/L	0.2879 ppb		18:56:28
1	Ni 231.604†	74.2	-18.1	-0.5644 ug/L	-0.5644 ppb		18:56:28
1	P 214.914†	190.4	25.5	18.234 ug/L	18.234 ppb		18:56:28
1	Pb 220.353†	-61.8	-4.1	-0.6197 ug/L	-0.6197 ppb		18:56:28
1	S 181.975 Axial†	27.2	3.3	5.7959 ug/L	5.7959 ppb		18:56:28
1	Sb 206.836†	21.4	-4.8	-2.0292 ug/L	-2.0292 ppb		18:56:28
1	Se 196.026†	-11.9	4.8	3.8739 ug/L	3.8739 ppb		18:56:28
1	Si 251.611†	574.3	59.0	2.1917 ug/L	2.1917 ppb		18:56:28
1	Sn 189.927†	8.4	5.5	1.2122 ug/L	1.2122 ppb		18:56:28
1	Ti 334.940†	-961.3	105.0	0.1746 ug/L	0.1746 ppb		18:56:08
1	Tl 190.801†	-28.7	-4.2	-1.6101 ug/L	-1.6101 ppb		18:56:28
1	U 409.014†	-2123.8	-126.1	-3.7120 ug/L	-3.7120 ppb		18:56:08
1	V 292.402†	-1288.5	116.2	0.8924 ug/L	0.8924 ppb		18:56:08
1	Zn 213.857†	691.0	96.8	1.1497 ug/L	1.1497 ppb		18:56:28
1	SiO2†	563.7	20.3	1.6112 ug/L	1.6112 ppb		18:57:39
2	Sc Radial	4058.5	4058.5	101 %			18:55:36
2	Y RADIAL	4484.1	4484.1	99.25 %			18:55:16
2	Al 396.153Radial†	-67.5	12.6	13.365 ug/L	13.365 ppb		18:55:36
2	Ca 317.933Radial†	21.8	4.5	9.2036 ug/L	9.2036 ppb		18:55:36
2	Fe 238.204 Radial†	12.8	3.7	46.372 ug/L	46.372 ppb		18:55:36
2	K 766.490 Radial†	2461.3	-356.9	-71.258 ug/L	-71.258 ppb		18:55:16
2	Mg 279.077 IEC†	2.1	1.4	61.898 ug/L	61.898 ppb		18:55:36
2	Na 589.592 Radial†	-456.6	7.1	2.7826 ug/L	2.7826 ppb		18:55:16
2	Sr 421.552†	67.0	-3.4	-0.0290 ug/L	-0.0290 ppb		18:55:16
2	Sc 361.383	832797.8	832797.8	99.160 %			18:56:33
2	Y 371.029	716108.5	716108.5	100.00 %			18:56:33
2	Ag 328.068†	206.3	-45.3	-0.2180 ug/L	-0.2180 ppb		18:56:33
2	As 188.979†	-26.2	-5.6	-2.9991 ug/L	-2.9991 ppb		18:56:53
2	B 249.677†	-333.9	-86.6	-2.3873 ug/L	-2.3873 ppb		18:56:53
2	Ba 233.527†	42.4	24.3	0.2290 ug/L	0.2290 ppb		18:56:53
2	Be 313.107†	-4400.0	-174.6	-0.0704 ug/L	-0.0704 ppb		18:56:33
2	Cd 226.502†	-155.0	10.1	0.1388 ug/L	0.1388 ppb		18:56:53
2	Co 228.616†	-49.4	-10.9	-0.2842 ug/L	-0.2842 ppb		18:56:53
2	Cr 267.716†	78.2	-16.1	-0.2062 ug/L	-0.2062 ppb		18:56:53
2	Cu 324.752†	6559.7	262.5	0.8514 ug/L	0.8514 ppb		18:56:33
2	Mn 257.610†	834.2	388.8	0.5122 ug/L	0.5122 ppb		18:56:33
2	Mo 202.031†	19.7	5.7	0.5020 ug/L	0.5020 ppb		18:56:53
2	Ni 231.604†	84.8	-8.0	-0.2510 ug/L	-0.2510 ppb		18:56:53

2	P 214.914†	176.1	9.3	6.5257 ug/L	6.5257 ppb	18:56:53
2	Pb 220.353†	-46.1	12.3	1.8576 ug/L	1.8576 ppb	18:56:53
2	S 181.975 Axial†	18.4	-5.9	-10.291 ug/L	-10.291 ppb	18:56:53
2	Sb 206.836†	27.9	1.5	0.6537 ug/L	0.6537 ppb	18:56:53
2	Se 196.026†	-20.0	-3.2	-2.4366 ug/L	-2.4366 ppb	18:56:53
2	Si 251.611†	553.7	32.9	1.2189 ug/L	1.2189 ppb	18:56:53
2	Sn 189.927†	9.3	6.3	1.3913 ug/L	1.3913 ppb	18:56:53
2	Ti 334.940†	-954.9	120.4	0.2015 ug/L	0.2015 ppb	18:56:33
2	Tl 190.801†	-25.2	-0.3	-0.1240 ug/L	-0.1240 ppb	18:56:53
2	U 409.014†	-1879.3	139.9	4.1127 ug/L	4.1127 ppb	18:56:33
2	V 292.402†	-1424.1	-8.6	-0.0572 ug/L	-0.0572 ppb	18:56:33
2	Zn 213.857†	676.0	75.3	0.8879 ug/L	0.8879 ppb	18:56:53
2	SiO2†	589.1	40.7	3.2416 ug/L	3.2416 ppb	18:57:59
3	Sc Radial	4069.3	4069.3	101 %		18:56:01
3	Y RADIAL	4480.7	4480.7	99.17 %		18:55:41
3	Al 396.153Radial†	-71.4	8.8	9.4368 ug/L	9.4368 ppb	18:56:01
3	Ca 317.933Radial†	27.9	10.5	21.304 ug/L	21.304 ppb	18:56:01
3	Fe 238.204 Radial†	12.9	3.7	46.857 ug/L	46.857 ppb	18:56:01
3	K 766.490 Radial†	2670.9	-155.6	-31.074 ug/L	-31.074 ppb	18:55:41
3	Mg 279.077 IEC†	3.5	2.8	122.76 ug/L	122.76 ppb	18:56:01
3	Na 589.592 Radial†	-411.5	53.0	20.804 ug/L	20.804 ppb	18:55:41
3	Sr 421.552†	42.7	-27.7	-0.2363 ug/L	-0.2363 ppb	18:55:41
3	Sc 361.383	829974.6	829974.6	98.824 %		18:56:59
3	Y 371.029	714580.1	714580.1	99.791 %		18:56:59
3	Ag 328.068†	141.5	-110.2	-0.5410 ug/L	-0.5410 ppb	18:56:59
3	As 188.979†	-18.4	2.2	1.2122 ug/L	1.2122 ppb	18:57:19
3	B 249.677†	-308.1	-61.6	-1.7004 ug/L	-1.7004 ppb	18:57:19
3	Ba 233.527†	47.5	29.6	0.2795 ug/L	0.2795 ppb	18:57:19
3	Be 313.107†	-4439.6	-229.7	-0.0929 ug/L	-0.0929 ppb	18:56:59
3	Cd 226.502†	-177.0	-12.7	-0.1848 ug/L	-0.1848 ppb	18:57:19
3	Co 228.616†	-42.6	-4.2	-0.1124 ug/L	-0.1124 ppb	18:57:19
3	Cr 267.716†	88.4	-5.5	-0.0662 ug/L	-0.0662 ppb	18:57:19
3	Cu 324.752†	6564.7	290.0	0.9424 ug/L	0.9424 ppb	18:56:59
3	Mn 257.610†	803.9	361.1	0.4734 ug/L	0.4734 ppb	18:56:59
3	Mo 202.031†	8.3	-5.8	-0.5032 ug/L	-0.5032 ppb	18:57:19
3	Ni 231.604†	67.2	-25.6	-0.7981 ug/L	-0.7981 ppb	18:57:19
3	P 214.914†	203.7	37.9	27.052 ug/L	27.052 ppb	18:57:19
3	Pb 220.353†	-41.9	16.4	2.4614 ug/L	2.4614 ppb	18:57:19
3	S 181.975 Axial†	25.2	1.2	2.0362 ug/L	2.0362 ppb	18:57:19
3	Sb 206.836†	36.3	10.1	4.3057 ug/L	4.3057 ppb	18:57:19
3	Se 196.026†	-12.5	4.3	3.5808 ug/L	3.5808 ppb	18:57:19
3	Si 251.611†	589.2	70.8	2.6410 ug/L	2.6410 ppb	18:57:19
3	Sn 189.927†	5.9	2.9	0.6463 ug/L	0.6463 ppb	18:57:19
3	Ti 334.940†	-981.4	90.2	0.1477 ug/L	0.1477 ppb	18:56:59
3	Tl 190.801†	-24.7	0.1	0.0519 ug/L	0.0519 ppb	18:57:19
3	U 409.014†	-1978.2	33.4	0.9774 ug/L	0.9774 ppb	18:56:59
3	V 292.402†	-1376.1	35.0	0.2602 ug/L	0.2602 ppb	18:56:59
3	Zn 213.857†	689.9	91.6	1.0855 ug/L	1.0855 ppb	18:57:19
3	SiO2†	564.9	18.2	1.4710 ug/L	1.4710 ppb	18:58:19

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	829350.4	98.749 %		0.4522			0.46%
Sc Radial	4058.0	101 %		0.3			0.28%
Y 371.029	712702.0	99.529 %		0.6480			0.65%
Y RADIAL	4487.2	99.32 %		0.187			0.19%
Ag 328.068†	-71.6	-0.3485 ug/L		0.17020	-0.3485 ppb	0.17020	48.84%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	10.0	10.675 ug/L		2.3320	10.675 ppb	2.3320	21.85%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	-2.9	-1.5242 ug/L		2.37220	-1.5242 ppb	2.37220	155.64%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	-78.9	-2.1741 ug/L		0.41089	-2.1741 ppb	0.41089	18.90%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	26.2	0.2475 ug/L		0.02783	0.2475 ppb	0.02783	11.24%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	-197.3	-0.0797 ug/L		0.01175	-0.0797 ppb	0.01175	14.74%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	6.9	14.085 ug/L		6.3799	14.085 ppb	6.3799	45.30%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated						
Cd 226.502†	-5.8	-0.0865 ug/L	0.19561	-0.0865 ppb	0.19561	226.24%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-5.7	-0.1497 ug/L	0.12034	-0.1497 ppb	0.12034	80.41%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-8.9	-0.1113 ug/L	0.08220	-0.1113 ppb	0.08220	73.86%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	248.3	0.8070 ug/L	0.16231	0.8070 ppb	0.16231	20.11%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	3.0	36.988 ug/L	16.6756	36.988 ppb	16.6756	45.08%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	-200.1	-39.954 ug/L	27.9429	-39.954 ppb	27.9429	69.94%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	2.3	99.660 ug/L	32.9740	99.660 ppb	32.9740	33.09%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	521.8	0.6843 ug/L	0.33217	0.6843 ppb	0.33217	48.55%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	1.1	0.0956 ug/L	0.52947	0.0956 ppb	0.52947	554.10%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	20.4	8.0011 ug/L	11.15044	8.0011 ppb	11.15044	139.36%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	-17.2	-0.5378 ug/L	0.27450	-0.5378 ppb	0.27450	51.04%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	24.3	17.270 ug/L	10.2969	17.270 ppb	10.2969	59.62%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	8.2	1.2331 ug/L	1.63271	1.2331 ppb	1.63271	132.41%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	-0.5	-0.8198 ug/L	8.41532	-0.8198 ppb	8.41532	>999.9%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	2.3	0.9767 ug/L	3.17981	0.9767 ppb	3.17981	325.56%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	2.0	1.6727 ug/L	3.56178	1.6727 ppb	3.56178	212.94%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	54.2	2.0172 ug/L	0.72691	2.0172 ppb	0.72691	36.04%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	4.9	1.0833 ug/L	0.38891	1.0833 ppb	0.38891	35.90%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	-13.4	-0.1141 ug/L	0.10851	-0.1141 ppb	0.10851	95.07%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	105.2	0.1746 ug/L	0.02693	0.1746 ppb	0.02693	15.42%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	-1.5	-0.5608 ug/L	0.91302	-0.5608 ppb	0.91302	162.82%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	15.7	0.4594 ug/L	3.93797	0.4594 ppb	3.93797	857.25%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	47.6	0.3651 ug/L	0.48342	0.3651 ppb	0.48342	132.39%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	87.9	1.0411 ug/L	0.13642	1.0411 ppb	0.13642	13.10%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	26.4	2.1080 ug/L	0.98431	2.1080 ppb	0.98431	46.70%
QC value within limits for SiO2 Recovery = Not calculated						
All analyte(s) passed QC.						

Sequence No.: 29

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 3/25/2010 19:49:21

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	4025.6	4025.6	99.8 %		19:51:32
1	Y RADIAL	4465.7	4465.7	98.84 %		19:51:12
1	Al 396.153Radial†	4521.5	4610.4	4889.5 ug/L	4889.5 ppb	19:51:12
1	Ca 317.933Radial†	2460.4	2448.2	4974.1 ug/L	4974.1 ppb	19:51:32
1	Fe 238.204 Radial†	408.8	400.7	5025.3 ug/L	5025.3 ppb	19:51:32
1	K 766.490 Radial†	27102.4	24354.3	4855.7 ug/L	4855.7 ppb	19:51:12
1	Mg 279.077 IEC†	117.4	116.9	5106.8 ug/L	5106.8 ppb	19:51:32
1	Na 589.592 Radial†	24153.5	24663.5	9685.7 ug/L	9685.7 ppb	19:51:12
1	Sr 421.552†	55998.3	56042.3	477.19 ug/L	477.19 ppb	19:51:12
1	Sc 361.383	844064.7	844064.7	100.50 %		19:52:30
1	Y 371.029	711213.7	711213.7	99.321 %		19:52:30
1	Ag 328.068†	100290.4	99536.8	504.87 ug/L	504.87 ppb	19:52:35
1	As 188.979†	892.3	908.7	491.39 ug/L	491.39 ppb	19:52:55
1	B 249.677†	17545.1	17707.8	484.48 ug/L	484.48 ppb	19:52:35
1	Ba 233.527†	52866.8	52584.6	494.19 ug/L	494.19 ppb	19:52:35
1	Be 313.107†	1205628.0	1203878.3	489.89 ug/L	489.89 ppb	19:52:30
1	Cd 226.502†	35186.2	35177.2	496.03 ug/L	496.03 ppb	19:52:35
1	Co 228.616†	19529.6	19471.1	506.85 ug/L	506.85 ppb	19:52:35
1	Cr 267.716†	38146.4	37861.2	493.95 ug/L	493.95 ppb	19:52:35
1	Cu 324.752†	158780.5	151635.9	491.67 ug/L	491.67 ppb	19:52:35
1	Mn 257.610†	373761.1	371444.7	487.64 ug/L	487.64 ppb	19:52:35
1	Mo 202.031†	5687.0	5644.5	496.69 ug/L	496.69 ppb	19:52:55
1	Ni 231.604†	16225.8	16051.3	500.90 ug/L	500.90 ppb	19:52:35
1	P 214.914†	3620.0	3433.7	2372.2 ug/L	2372.2 ppb	19:52:55
1	Pb 220.353†	3220.2	3262.9	493.32 ug/L	493.32 ppb	19:52:55
1	S 181.975 Axial†	592.8	565.5	990.21 ug/L	990.21 ppb	19:52:55
1	Sb 206.836†	1219.7	1187.0	522.18 ug/L	522.18 ppb	19:52:55
1	Se 196.026†	617.5	631.3	521.36 ug/L	521.36 ppb	19:52:55
1	Si 251.611†	67948.6	67084.2	2491.6 ug/L	2491.6 ppb	19:52:35
1	Sn 189.927†	2244.6	2230.4	494.58 ug/L	494.58 ppb	19:52:55
1	Ti 334.940†	286376.9	286032.0	491.97 ug/L	491.97 ppb	19:52:35
1	Tl 190.801†	1244.0	1262.8	491.53 ug/L	491.53 ppb	19:52:55
1	U 409.014†	15473.6	17431.6	511.24 ug/L	511.24 ppb	19:52:35
1	V 292.402†	62775.8	63890.2	499.18 ug/L	499.18 ppb	19:52:35
1	Zn 213.857†	42545.4	41726.8	491.10 ug/L	491.10 ppb	19:52:35
1	SiO2†	67758.3	66867.0	5328.8 ug/L	5328.8 ppb	19:54:02
2	Sc Radial	3956.8	3956.8	98.1 %		19:51:58
2	Y RADIAL	4463.8	4463.8	98.80 %		19:51:37
2	Al 396.153Radial†	4519.3	4687.0	4971.8 ug/L	4971.8 ppb	19:51:37
2	Ca 317.933Radial†	2496.4	2527.8	5135.9 ug/L	5135.9 ppb	19:51:58
2	Fe 238.204 Radial†	410.2	409.2	5131.6 ug/L	5131.6 ppb	19:51:58
2	K 766.490 Radial†	27131.4	24856.5	4955.8 ug/L	4955.8 ppb	19:51:37
2	Mg 279.077 IEC†	119.2	120.8	5278.8 ug/L	5278.8 ppb	19:51:58
2	Na 589.592 Radial†	24431.8	25368.4	9962.6 ug/L	9962.6 ppb	19:51:37
2	Sr 421.552†	56267.3	57293.0	487.84 ug/L	487.84 ppb	19:51:37
2	Sc 361.383	866025.0	866025.0	103.12 %		19:53:00
2	Y 371.029	728876.2	728876.2	101.79 %		19:53:00
2	Ag 328.068†	99245.9	95993.5	486.99 ug/L	486.99 ppb	19:53:06
2	As 188.979†	884.0	878.1	474.90 ug/L	474.90 ppb	19:53:26
2	B 249.677†	17338.1	17064.3	466.83 ug/L	466.83 ppb	19:53:06
2	Ba 233.527†	52430.9	50828.0	477.69 ug/L	477.69 ppb	19:53:06
2	Be 313.107†	1228411.7	1195554.1	486.48 ug/L	486.48 ppb	19:53:00
2	Cd 226.502†	34989.7	34098.8	480.80 ug/L	480.80 ppb	19:53:06
2	Co 228.616†	19359.2	18813.1	489.73 ug/L	489.73 ppb	19:53:06
2	Cr 267.716†	37782.3	36545.6	476.82 ug/L	476.82 ppb	19:53:06
2	Cu 324.752†	157009.8	145912.5	473.13 ug/L	473.13 ppb	19:53:06
2	Mn 257.610†	370621.3	358969.4	471.28 ug/L	471.28 ppb	19:53:06
2	Mo 202.031†	5673.1	5487.5	482.90 ug/L	482.90 ppb	19:53:26
2	Ni 231.604†	16122.4	15541.6	484.99 ug/L	484.99 ppb	19:53:06

2	P 214.914†	3616.0	3338.6	2307.4 ug/L	2307.4 ppb	19:53:26
2	Pb 220.353†	3218.6	3180.2	480.83 ug/L	480.83 ppb	19:53:26
2	S 181.975 Axial†	603.1	560.5	981.54 ug/L	981.54 ppb	19:53:26
2	Sb 206.836†	1220.8	1157.3	509.09 ug/L	509.09 ppb	19:53:26
2	Se 196.026†	614.6	613.0	507.05 ug/L	507.05 ppb	19:53:26
2	Si 251.611†	67252.8	64695.1	2402.9 ug/L	2402.9 ppb	19:53:06
2	Sn 189.927†	2253.8	2182.6	484.02 ug/L	484.02 ppb	19:53:26
2	Ti 334.940†	283605.3	276118.6	474.93 ug/L	474.93 ppb	19:53:06
2	Tl 190.801†	1233.4	1221.2	475.32 ug/L	475.32 ppb	19:53:26
2	U 409.014†	15204.5	16780.2	492.10 ug/L	492.10 ppb	19:53:06
2	V 292.402†	62459.7	61999.9	484.39 ug/L	484.39 ppb	19:53:06
2	Zn 213.857†	42137.6	40257.9	473.76 ug/L	473.76 ppb	19:53:06
2	SiO2†	68153.7	65540.9	5223.3 ug/L	5223.3 ppb	19:54:07
3	Sc Radial	4045.1	4045.1	100 %		19:52:23
3	Y RADIAL	4422.5	4422.5	97.89 %		19:52:03
3	Al 396.153Radial†	4527.1	4594.2	4872.9 ug/L	4872.9 ppb	19:52:03
3	Ca 317.933Radial†	2485.0	2460.9	4999.9 ug/L	4999.9 ppb	19:52:23
3	Fe 238.204 Radial†	407.9	397.7	4988.0 ug/L	4988.0 ppb	19:52:23
3	K 766.490 Radial†	27012.0	24133.5	4811.7 ug/L	4811.7 ppb	19:52:03
3	Mg 279.077 IEC†	118.5	117.4	5130.0 ug/L	5130.0 ppb	19:52:23
3	Na 589.592 Radial†	23993.1	24387.1	9577.2 ug/L	9577.2 ppb	19:52:03
3	Sr 421.552†	55974.1	55748.2	474.69 ug/L	474.69 ppb	19:52:03
3	Sc 361.383	874603.6	874603.6	104.14 %		19:53:31
3	Y 371.029	735798.8	735798.8	102.75 %		19:53:31
3	Ag 328.068†	101148.6	96876.5	491.40 ug/L	491.40 ppb	19:53:36
3	As 188.979†	892.2	877.6	474.62 ug/L	474.62 ppb	19:53:56
3	B 249.677†	17792.8	17336.0	474.31 ug/L	474.31 ppb	19:53:36
3	Ba 233.527†	53280.9	51145.5	480.67 ug/L	480.67 ppb	19:53:36
3	Be 313.107†	1229737.7	1185142.6	482.26 ug/L	482.26 ppb	19:53:31
3	Cd 226.502†	35513.2	34268.7	483.21 ug/L	483.21 ppb	19:53:36
3	Co 228.616†	19699.2	18955.5	493.42 ug/L	493.42 ppb	19:53:36
3	Cr 267.716†	38398.1	36777.6	479.82 ug/L	479.82 ppb	19:53:36
3	Cu 324.752†	160639.6	147904.6	479.57 ug/L	479.57 ppb	19:53:36
3	Mn 257.610†	376546.1	361133.4	474.11 ug/L	474.11 ppb	19:53:36
3	Mo 202.031†	5715.3	5474.1	481.71 ug/L	481.71 ppb	19:53:56
3	Ni 231.604†	16331.3	15588.8	486.46 ug/L	486.46 ppb	19:53:36
3	P 214.914†	3612.1	3300.4	2278.7 ug/L	2278.7 ppb	19:53:56
3	Pb 220.353†	3229.1	3159.6	477.72 ug/L	477.72 ppb	19:53:56
3	S 181.975 Axial†	592.1	544.2	952.93 ug/L	952.93 ppb	19:53:56
3	Sb 206.836†	1223.4	1148.2	505.09 ug/L	505.09 ppb	19:53:56
3	Se 196.026†	616.8	609.3	503.64 ug/L	503.64 ppb	19:53:56
3	Si 251.611†	68388.2	65145.6	2419.7 ug/L	2419.7 ppb	19:53:36
3	Sn 189.927†	2244.1	2151.9	477.20 ug/L	477.20 ppb	19:53:56
3	Ti 334.940†	289186.9	278780.8	479.50 ug/L	479.50 ppb	19:53:36
3	Tl 190.801†	1251.8	1227.2	477.65 ug/L	477.65 ppb	19:53:56
3	U 409.014†	15725.7	17136.1	502.58 ug/L	502.58 ppb	19:53:36
3	V 292.402†	63442.7	62349.6	487.10 ug/L	487.10 ppb	19:53:36
3	Zn 213.857†	42861.0	40551.7	477.25 ug/L	477.25 ppb	19:53:36
3	SiO2†	66739.5	63534.6	5063.0 ug/L	5063.0 ppb	19:54:12

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	861564.5	102.58 %	1.875			1.83%
Sc Radial	4009.2	99.4 %	1.15			1.16%
Y 371.029	725296.2	101.29 %	1.770			1.75%
Y RADIAL	4450.7	98.51 %	0.540			0.55%
Ag 328.068†	97469.0	494.42 ug/L	9.312	494.42 ppb	9.312	1.88%
QC value within limits for Ag 328.068 Recovery = 98.88%						
Al 396.153Radial†	4630.5	4911.4 ug/L	52.96	4911.4 ppb	52.96	1.08%
QC value within limits for Al 396.153Radial Recovery = 98.23%						
As 188.979†	888.1	480.30 ug/L	9.603	480.30 ppb	9.603	2.00%
QC value within limits for As 188.979 Recovery = 96.06%						
B 249.677†	17369.4	475.20 ug/L	8.863	475.20 ppb	8.863	1.86%
QC value within limits for B 249.677 Recovery = 95.04%						
Ba 233.527†	51519.4	484.19 ug/L	8.792	484.19 ppb	8.792	1.82%
QC value within limits for Ba 233.527 Recovery = 96.84%						
Be 313.107†	1194858.4	486.21 ug/L	3.824	486.21 ppb	3.824	0.79%
QC value within limits for Be 313.107 Recovery = 97.24%						
Ca 317.933Radial†	2479.0	5036.6 ug/L	86.96	5036.6 ppb	86.96	1.73%

QC value within limits for Ca 317.933 Radial Recovery = 100.73%							
Cd 226.502†	34514.9	486.68 ug/L	8.188	486.68 ppb	8.188	1.68%	
QC value within limits for Cd 226.502 Recovery = 97.34%							
Co 228.616†	19079.9	496.67 ug/L	9.011	496.67 ppb	9.011	1.81%	
QC value within limits for Co 228.616 Recovery = 99.33%							
Cr 267.716†	37061.5	483.53 ug/L	9.147	483.53 ppb	9.147	1.89%	
QC value within limits for Cr 267.716 Recovery = 96.71%							
Cu 324.752†	148484.3	481.45 ug/L	9.413	481.45 ppb	9.413	1.96%	
QC value within limits for Cu 324.752 Recovery = 96.29%							
Fe 238.204 Radial†	402.5	5048.3 ug/L	74.49	5048.3 ppb	74.49	1.48%	
QC value within limits for Fe 238.204 Radial Recovery = 100.97%							
K 766.490 Radial†	24448.1	4874.4 ug/L	73.87	4874.4 ppb	73.87	1.52%	
QC value within limits for K 766.490 Radial Recovery = 97.49%							
Mg 279.077 IEC†	118.4	5171.9 ug/L	93.32	5171.9 ppb	93.32	1.80%	
QC value within limits for Mg 279.077 IEC Recovery = 103.44%							
Mn 257.610†	363849.2	477.67 ug/L	8.746	477.67 ppb	8.746	1.83%	
QC value within limits for Mn 257.610 Recovery = 95.53%							
Mo 202.031†	5535.3	487.10 ug/L	8.330	487.10 ppb	8.330	1.71%	
QC value within limits for Mo 202.031 Recovery = 97.42%							
Na 589.592 Radial†	24806.4	9741.8 ug/L	198.71	9741.8 ppb	198.71	2.04%	
QC value within limits for Na 589.592 Radial Recovery = 97.42%							
Ni 231.604†	15727.3	490.78 ug/L	8.788	490.78 ppb	8.788	1.79%	
QC value within limits for Ni 231.604 Recovery = 98.16%							
P 214.914†	3357.6	2319.4 ug/L	47.93	2319.4 ppb	47.93	2.07%	
QC value within limits for P 214.914 Recovery = 92.78%							
Pb 220.353†	3200.9	483.96 ug/L	8.261	483.96 ppb	8.261	1.71%	
QC value within limits for Pb 220.353 Recovery = 96.79%							
S 181.975 Axial†	556.7	974.89 ug/L	19.508	974.89 ppb	19.508	2.00%	
QC value within limits for S 181.975 Axial Recovery = 97.49%							
Sb 206.836†	1164.2	512.12 ug/L	8.936	512.12 ppb	8.936	1.74%	
QC value within limits for Sb 206.836 Recovery = 102.42%							
Se 196.026†	617.9	510.68 ug/L	9.404	510.68 ppb	9.404	1.84%	
QC value within limits for Se 196.026 Recovery = 102.14%							
Si 251.611†	65641.7	2438.1 ug/L	47.17	2438.1 ppb	47.17	1.93%	
QC value within limits for Si 251.611 Recovery = 97.52%							
Sn 189.927†	2188.3	485.27 ug/L	8.753	485.27 ppb	8.753	1.80%	
QC value within limits for Sn 189.927 Recovery = 97.05%							
Sr 421.552†	56361.2	479.91 ug/L	6.984	479.91 ppb	6.984	1.46%	
QC value within limits for Sr 421.552 Recovery = 95.98%							
Ti 334.940†	280310.5	482.13 ug/L	8.817	482.13 ppb	8.817	1.83%	
QC value within limits for Ti 334.940 Recovery = 96.43%							
Tl 190.801†	1237.1	481.50 ug/L	8.761	481.50 ppb	8.761	1.82%	
QC value within limits for Tl 190.801 Recovery = 96.30%							
U 409.014†	17116.0	501.97 ug/L	9.585	501.97 ppb	9.585	1.91%	
QC value within limits for U 409.014 Recovery = 100.39%							
V 292.402†	62746.6	490.23 ug/L	7.875	490.23 ppb	7.875	1.61%	
QC value within limits for V 292.402 Recovery = 98.05%							
Zn 213.857†	40845.5	480.70 ug/L	9.170	480.70 ppb	9.170	1.91%	
QC value within limits for Zn 213.857 Recovery = 96.14%							
SiO2†	65314.2	5205.0 ug/L	133.85	5205.0 ppb	133.85	2.57%	
QC value within limits for SiO2 Recovery = 97.34%							
All analyte(s) passed QC.							

Sequence No.: 30

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 3/25/2010 19:56:23

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	4091.8	4091.8	101 %			19:58:34
1	Y RADIAL	4577.8	4577.8	101.3 %			19:58:14
1	Al 396.153Radial†	-71.0	9.7	10.302 ug/L		10.302 ppb	19:58:34
1	Ca 317.933Radial†	20.3	2.8	5.7128 ug/L		5.7128 ppb	19:58:34
1	Fe 238.204 Radial†	11.0	1.9	23.297 ug/L		23.297 ppb	19:58:34
1	K 766.490 Radial†	2668.8	-172.2	-34.393 ug/L		-34.393 ppb	19:58:14
1	Mg 279.077 IEC†	1.7	1.0	43.792 ug/L		43.792 ppb	19:58:34
1	Na 589.592 Radial†	-403.4	63.2	24.811 ug/L		24.811 ppb	19:58:14
1	Sr 421.552†	21.1	-49.2	-0.4193 ug/L		-0.4193 ppb	19:58:14
1	Sc 361.383	834549.8	834549.8	99.368 %			19:59:31
1	Y 371.029	713360.1	713360.1	99.621 %			19:59:31
1	Ag 328.068†	250.8	-1.0	0.0007 ug/L		0.0007 ppb	19:59:31
1	As 188.979†	-21.1	-0.4	-0.2174 ug/L		-0.2174 ppb	19:59:51
1	B 249.677†	-193.9	55.1	1.5096 ug/L		1.5096 ppb	19:59:51
1	Ba 233.527†	21.1	2.7	0.0290 ug/L		0.0290 ppb	19:59:51
1	Be 313.107†	-4214.5	21.4	0.0114 ug/L		0.0114 ppb	19:59:31
1	Cd 226.502†	-166.1	-0.7	-0.0110 ug/L		-0.0110 ppb	19:59:51
1	Co 228.616†	-41.9	-3.2	-0.0872 ug/L		-0.0872 ppb	19:59:51
1	Cr 267.716†	96.9	2.5	0.0338 ug/L		0.0338 ppb	19:59:51
1	Cu 324.752†	6622.3	311.7	1.0075 ug/L		1.0075 ppb	19:59:31
1	Mn 257.610†	1022.0	576.1	0.7563 ug/L		0.7563 ppb	19:59:51
1	Mo 202.031†	14.8	0.7	0.0651 ug/L		0.0651 ppb	19:59:51
1	Ni 231.604†	90.9	-2.1	-0.0666 ug/L		-0.0666 ppb	19:59:51
1	P 214.914†	186.8	19.8	14.012 ug/L		14.012 ppb	19:59:51
1	Pb 220.353†	-38.3	20.3	3.0545 ug/L		3.0545 ppb	19:59:51
1	S 181.975 Axial†	27.5	3.3	5.7903 ug/L		5.7903 ppb	19:59:51
1	Sb 206.836†	30.5	4.1	1.7362 ug/L		1.7362 ppb	19:59:51
1	Se 196.026†	-22.1	-5.3	-4.1589 ug/L		-4.1589 ppb	19:59:51
1	Si 251.611†	723.7	202.8	7.5517 ug/L		7.5517 ppb	19:59:51
1	Sn 189.927†	2.2	-0.9	-0.2040 ug/L		-0.2040 ppb	19:59:51
1	Ti 334.940†	-397.0	683.8	1.1702 ug/L		1.1702 ppb	19:59:31
1	Tl 190.801†	-31.8	-6.9	-2.6547 ug/L		-2.6547 ppb	19:59:51
1	U 409.014†	-1758.9	265.1	7.7985 ug/L		7.7985 ppb	19:59:31
1	V 292.402†	-1267.0	152.5	1.1876 ug/L		1.1876 ppb	19:59:31
1	Zn 213.857†	707.2	105.2	1.2457 ug/L		1.2457 ppb	19:59:51
1	SiO2†	680.4	131.4	10.496 ug/L		10.496 ppb	20:00:47
2	Sc Radial	4062.2	4062.2	101 %			19:59:00
2	Y RADIAL	4477.9	4477.9	99.11 %			19:58:39
2	Al 396.153Radial†	-71.8	8.3	8.8691 ug/L		8.8691 ppb	19:59:00
2	Ca 317.933Radial†	21.6	4.2	8.6013 ug/L		8.6013 ppb	19:59:00
2	Fe 238.204 Radial†	13.6	4.5	56.286 ug/L		56.286 ppb	19:59:00
2	K 766.490 Radial†	2711.9	-110.3	-22.033 ug/L		-22.033 ppb	19:58:39
2	Mg 279.077 IEC†	-0.1	-0.9	-37.269 ug/L		-37.269 ppb	19:59:00
2	Na 589.592 Radial†	-400.3	63.4	24.880 ug/L		24.880 ppb	19:58:39
2	Sr 421.552†	30.0	-40.2	-0.3425 ug/L		-0.3425 ppb	19:58:39
2	Sc 361.383	828972.9	828972.9	98.704 %			19:59:57
2	Y 371.029	706404.9	706404.9	98.650 %			19:59:57
2	Ag 328.068†	140.0	-111.5	-0.5463 ug/L		-0.5463 ppb	19:59:57
2	As 188.979†	-20.5	0.1	0.0414 ug/L		0.0414 ppb	20:00:17
2	B 249.677†	-189.1	58.6	1.6004 ug/L		1.6004 ppb	20:00:17
2	Ba 233.527†	45.7	27.7	0.2614 ug/L		0.2614 ppb	20:00:17
2	Be 313.107†	-4458.5	-254.3	-0.1031 ug/L		-0.1031 ppb	19:59:57
2	Cd 226.502†	-169.2	-5.0	-0.0764 ug/L		-0.0764 ppb	20:00:17
2	Co 228.616†	-30.4	8.1	0.2093 ug/L		0.2093 ppb	20:00:17
2	Cr 267.716†	103.5	9.9	0.1344 ug/L		0.1344 ppb	20:00:17
2	Cu 324.752†	6533.4	266.4	0.8664 ug/L		0.8664 ppb	19:59:57
2	Mn 257.610†	1136.5	699.0	0.9242 ug/L		0.9242 ppb	20:00:17
2	Mo 202.031†	12.0	-2.0	-0.1749 ug/L		-0.1749 ppb	20:00:17
2	Ni 231.604†	82.5	-10.0	-0.3131 ug/L		-0.3131 ppb	20:00:17

2	P 214.914†	192.0	26.3	18.675 ug/L	18.675 ppb	20:00:17
2	Pb 220.353†	-48.5	9.7	1.4572 ug/L	1.4572 ppb	20:00:17
2	S 181.975 Axial†	33.7	9.8	17.117 ug/L	17.117 ppb	20:00:17
2	Sb 206.836†	31.4	5.2	2.1781 ug/L	2.1781 ppb	20:00:17
2	Se 196.026†	-14.3	2.5	2.1601 ug/L	2.1601 ppb	20:00:17
2	Si 251.611†	650.4	133.5	4.9716 ug/L	4.9716 ppb	20:00:17
2	Sn 189.927†	1.5	-1.6	-0.3512 ug/L	-0.3512 ppb	20:00:17
2	Ti 334.940†	-1023.9	46.0	0.0830 ug/L	0.0830 ppb	19:59:57
2	Tl 190.801†	-21.7	3.1	1.2143 ug/L	1.2143 ppb	20:00:17
2	U 409.014†	-1982.6	26.6	0.7746 ug/L	0.7746 ppb	19:59:57
2	V 292.402†	-1430.1	-21.3	-0.1743 ug/L	-0.1743 ppb	19:59:57
2	Zn 213.857†	725.9	129.0	1.5249 ug/L	1.5249 ppb	20:00:17
2	SiO2†	623.4	78.2	6.2515 ug/L	6.2515 ppb	20:00:52
3	Sc Radial	4097.8	4097.8	102 %		19:59:25
3	Y RADIAL	4527.6	4527.6	100.2 %		19:59:05
3	Al 396.153Radial†	-65.9	14.8	15.802 ug/L	15.802 ppb	19:59:25
3	Ca 317.933Radial†	23.8	6.2	12.696 ug/L	12.696 ppb	19:59:25
3	Fe 238.204 Radial†	14.1	4.9	60.903 ug/L	60.903 ppb	19:59:25
3	K 766.490 Radial†	2574.6	-268.8	-53.670 ug/L	-53.670 ppb	19:59:05
3	Mg 279.077 IEC†	2.5	1.7	75.487 ug/L	75.487 ppb	19:59:25
3	Na 589.592 Radial†	-477.4	-9.1	-3.5631 ug/L	-3.5631 ppb	19:59:05
3	Sr 421.552†	42.6	-28.1	-0.2394 ug/L	-0.2394 ppb	19:59:05
3	Sc 361.383	837975.3	837975.3	99.776 %		20:00:22
3	Y 371.029	714194.2	714194.2	99.737 %		20:00:22
3	Ag 328.068†	203.3	-49.6	-0.2327 ug/L	-0.2327 ppb	20:00:22
3	As 188.979†	-25.0	-4.3	-2.2716 ug/L	-2.2716 ppb	20:00:42
3	B 249.677†	-198.8	50.9	1.3908 ug/L	1.3908 ppb	20:00:42
3	Ba 233.527†	43.0	24.5	0.2341 ug/L	0.2341 ppb	20:00:42
3	Be 313.107†	-4359.0	-106.1	-0.0423 ug/L	-0.0423 ppb	20:00:22
3	Cd 226.502†	-171.0	-5.0	-0.0759 ug/L	-0.0759 ppb	20:00:42
3	Co 228.616†	-44.9	-6.0	-0.1592 ug/L	-0.1592 ppb	20:00:42
3	Cr 267.716†	113.4	18.7	0.2481 ug/L	0.2481 ppb	20:00:42
3	Cu 324.752†	6726.4	388.7	1.2601 ug/L	1.2601 ppb	20:00:22
3	Mn 257.610†	1113.1	663.2	0.8731 ug/L	0.8731 ppb	20:00:42
3	Mo 202.031†	11.8	-2.3	-0.1987 ug/L	-0.1987 ppb	20:00:42
3	Ni 231.604†	95.4	2.0	0.0641 ug/L	0.0641 ppb	20:00:42
3	P 214.914†	189.6	21.8	15.395 ug/L	15.395 ppb	20:00:42
3	Pb 220.353†	-59.6	-0.9	-0.1458 ug/L	-0.1458 ppb	20:00:42
3	S 181.975 Axial†	29.1	4.8	8.3970 ug/L	8.3970 ppb	20:00:42
3	Sb 206.836†	35.8	9.3	3.9435 ug/L	3.9435 ppb	20:00:42
3	Se 196.026†	-14.6	2.4	2.0652 ug/L	2.0652 ppb	20:00:42
3	Si 251.611†	645.6	121.6	4.5294 ug/L	4.5294 ppb	20:00:42
3	Sn 189.927†	3.5	0.4	0.0844 ug/L	0.0844 ppb	20:00:42
3	Ti 334.940†	-889.5	191.8	0.3227 ug/L	0.3227 ppb	20:00:22
3	Tl 190.801†	-22.0	3.0	1.1720 ug/L	1.1720 ppb	20:00:42
3	U 409.014†	-1817.0	214.1	6.2915 ug/L	6.2915 ppb	20:00:22
3	V 292.402†	-1301.5	123.1	0.9506 ug/L	0.9506 ppb	20:00:22
3	Zn 213.857†	724.0	119.1	1.4042 ug/L	1.4042 ppb	20:00:42
3	SiO2†	682.7	130.9	10.461 ug/L	10.461 ppb	20:00:57

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	833832.7	99.283 %		0.5410				0.54%
Sc Radial	4083.9	101 %		0.5				0.47%
Y 371.029	711319.7	99.336 %		0.5973				0.60%
Y RADIAL	4527.7	100.2 %		1.11				1.10%
Ag 328.068†	-54.0	-0.2595 ug/L		0.27445	-0.2595 ppb		0.27445	105.78%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	10.9	11.658 ug/L		3.6602	11.658 ppb		3.6602	31.40%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-1.6	-0.8159 ug/L		1.26735	-0.8159 ppb		1.26735	155.34%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	54.9	1.5003 ug/L		0.10513	1.5003 ppb		0.10513	7.01%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	18.3	0.1748 ug/L		0.12702	0.1748 ppb		0.12702	72.66%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-113.0	-0.0447 ug/L		0.05725	-0.0447 ppb		0.05725	128.16%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	4.4	9.0035 ug/L		3.50915	9.0035 ppb		3.50915	38.98%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated					
Cd 226.502†	-3.6	-0.0545 ug/L	0.03761	-0.0545 ppb	0.03761 69.07%
QC value within limits for Cd 226.502 Recovery = Not calculated					
Co 228.616†	-0.4	-0.0124 ug/L	0.19531	-0.0124 ppb	0.19531 >999.9%
QC value within limits for Co 228.616 Recovery = Not calculated					
Cr 267.716†	10.4	0.1388 ug/L	0.10725	0.1388 ppb	0.10725 77.29%
QC value within limits for Cr 267.716 Recovery = Not calculated					
Cu 324.752†	322.3	1.0447 ug/L	0.19948	1.0447 ppb	0.19948 19.09%
QC value within limits for Cu 324.752 Recovery = Not calculated					
Fe 238.204 Radial†	3.7	46.829 ug/L	20.5097	46.829 ppb	20.5097 43.80%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated					
K 766.490 Radial†	-183.8	-36.699 ug/L	15.9437	-36.699 ppb	15.9437 43.44%
QC value within limits for K 766.490 Radial Recovery = Not calculated					
Mg 279.077 IEC†	0.6	27.337 ug/L	58.1515	27.337 ppb	58.1515 212.72%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated					
Mn 257.610†	646.1	0.8512 ug/L	0.08607	0.8512 ppb	0.08607 10.11%
QC value within limits for Mn 257.610 Recovery = Not calculated					
Mo 202.031†	-1.2	-0.1028 ug/L	0.14590	-0.1028 ppb	0.14590 141.88%
QC value within limits for Mo 202.031 Recovery = Not calculated					
Na 589.592 Radial†	39.2	15.376 ug/L	16.4019	15.376 ppb	16.4019 106.67%
QC value within limits for Na 589.592 Radial Recovery = Not calculated					
Ni 231.604†	-3.4	-0.1052 ug/L	0.19153	-0.1052 ppb	0.19153 182.04%
QC value within limits for Ni 231.604 Recovery = Not calculated					
P 214.914†	22.6	16.027 ug/L	2.3951	16.027 ppb	2.3951 14.94%
QC value within limits for P 214.914 Recovery = Not calculated					
Pb 220.353†	9.7	1.4553 ug/L	1.60012	1.4553 ppb	1.60012 109.95%
QC value within limits for Pb 220.353 Recovery = Not calculated					
S 181.975 Axial†	6.0	10.435 ug/L	5.9322	10.435 ppb	5.9322 56.85%
QC value within limits for S 181.975 Axial Recovery = Not calculated					
Sb 206.836†	6.2	2.6193 ug/L	1.16788	2.6193 ppb	1.16788 44.59%
QC value within limits for Sb 206.836 Recovery = Not calculated					
Se 196.026†	-0.2	0.0222 ug/L	3.62118	0.0222 ppb	3.62118 >999.9%
QC value within limits for Se 196.026 Recovery = Not calculated					
Si 251.611†	152.6	5.6842 ug/L	1.63230	5.6842 ppb	1.63230 28.72%
QC value within limits for Si 251.611 Recovery = Not calculated					
Sn 189.927†	-0.7	-0.1569 ug/L	0.22159	-0.1569 ppb	0.22159 141.21%
QC value within limits for Sn 189.927 Recovery = Not calculated					
Sr 421.552†	-39.2	-0.3338 ug/L	0.09027	-0.3338 ppb	0.09027 27.05%
QC value within limits for Sr 421.552 Recovery = Not calculated					
Ti 334.940†	307.2	0.5253 ug/L	0.57122	0.5253 ppb	0.57122 108.74%
QC value within limits for Ti 334.940 Recovery = Not calculated					
Tl 190.801†	-0.3	-0.0894 ug/L	2.22166	-0.0894 ppb	2.22166 >999.9%
QC value within limits for Tl 190.801 Recovery = Not calculated					
U 409.014†	168.6	4.9549 ug/L	3.69780	4.9549 ppb	3.69780 74.63%
QC value within limits for U 409.014 Recovery = Not calculated					
V 292.402†	84.8	0.6546 ug/L	0.72758	0.6546 ppb	0.72758 111.15%
QC value within limits for V 292.402 Recovery = Not calculated					
Zn 213.857†	117.8	1.3916 ug/L	0.14005	1.3916 ppb	0.14005 10.06%
QC value within limits for Zn 213.857 Recovery = Not calculated					
SiO2†	113.5	9.0696 ug/L	2.44054	9.0696 ppb	2.44054 26.91%
QC value within limits for SiO2 Recovery = Not calculated					

All analyte(s) passed QC.

Sequence No.: 37
 Sample ID: CCV
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 1
 Date Collected: 3/25/2010 20:45:36
 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	4010.1	4010.1	99.4 %		20:47:48
1	Y RADIAL	4487.8	4487.8	99.33 %		20:47:28
1	Al 396.153Radial†	4512.8	4619.2	4898.6 ug/L	4898.6 ppb	20:47:28
1	Ca 317.933Radial†	2447.7	2445.0	4967.7 ug/L	4967.7 ppb	20:47:48
1	Fe 238.204 Radial†	416.3	409.8	5139.8 ug/L	5139.8 ppb	20:47:48
1	K 766.490 Radial†	27183.1	24541.1	4892.7 ug/L	4892.7 ppb	20:47:28
1	Mg 279.077 IEC†	114.7	114.6	5008.1 ug/L	5008.1 ppb	20:47:48
1	Na 589.592 Radial†	25889.2	26503.6	10408 ug/L	10408 ppb	20:47:28
1	Sr 421.552†	57966.3	58240.1	495.91 ug/L	495.91 ppb	20:47:28
1	Sc 361.383	832477.2	832477.2	99.121 %		20:48:45
1	Y 371.029	700928.7	700928.7	97.885 %		20:48:45
1	Ag 328.068†	99965.3	100597.9	510.27 ug/L	510.27 ppb	20:48:50
1	As 188.979†	881.0	909.7	491.97 ug/L	491.97 ppb	20:49:10
1	B 249.677†	17314.9	17718.5	484.75 ug/L	484.75 ppb	20:48:50
1	Ba 233.527†	52494.2	52940.9	497.55 ug/L	497.55 ppb	20:48:50
1	Be 313.107†	1195358.7	1210215.9	492.48 ug/L	492.48 ppb	20:48:45
1	Cd 226.502†	34924.6	35400.6	499.17 ug/L	499.17 ppb	20:48:50
1	Co 228.616†	19337.1	19547.4	508.84 ug/L	508.84 ppb	20:48:50
1	Cr 267.716†	37851.9	38092.5	496.97 ug/L	496.97 ppb	20:48:50
1	Cu 324.752†	158325.1	153375.6	497.31 ug/L	497.31 ppb	20:48:50
1	Mn 257.610†	371424.8	374264.3	491.36 ug/L	491.36 ppb	20:48:50
1	Mo 202.031†	5673.8	5709.9	502.46 ug/L	502.46 ppb	20:49:10
1	Ni 231.604†	16101.4	16150.5	503.99 ug/L	503.99 ppb	20:48:50
1	P 214.914†	3591.2	3454.8	2386.2 ug/L	2386.2 ppb	20:49:10
1	Pb 220.353†	3179.1	3266.1	493.80 ug/L	493.80 ppb	20:49:10
1	S 181.975 Axial†	599.5	580.4	1016.4 ug/L	1016.4 ppb	20:49:10
1	Sb 206.836†	1219.0	1203.1	529.23 ug/L	529.23 ppb	20:49:10
1	Se 196.026†	603.0	625.3	516.90 ug/L	516.90 ppb	20:49:10
1	Si 251.611†	67462.2	67534.7	2508.3 ug/L	2508.3 ppb	20:48:50
1	Sn 189.927†	2242.2	2259.0	500.90 ug/L	500.90 ppb	20:49:10
1	Ti 334.940†	285270.9	288882.6	496.87 ug/L	496.87 ppb	20:48:50
1	Tl 190.801†	1227.2	1263.2	491.70 ug/L	491.70 ppb	20:49:10
1	U 409.014†	15597.1	17770.5	521.19 ug/L	521.19 ppb	20:48:50
1	V 292.402†	62535.4	64517.2	504.09 ug/L	504.09 ppb	20:48:50
1	Zn 213.857†	42211.6	41979.3	494.06 ug/L	494.06 ppb	20:48:50
1	SiO2†	67748.2	67795.3	5402.8 ug/L	5402.8 ppb	20:50:17
2	Sc Radial	4065.5	4065.5	101 %		20:48:13
2	Y RADIAL	4426.7	4426.7	97.98 %		20:47:53
2	Al 396.153Radial†	4476.6	4521.4	4794.9 ug/L	4794.9 ppb	20:47:53
2	Ca 317.933Radial†	2496.4	2459.7	4997.6 ug/L	4997.6 ppb	20:48:13
2	Fe 238.204 Radial†	421.1	408.8	5127.6 ug/L	5127.6 ppb	20:48:13
2	K 766.490 Radial†	26736.2	23724.5	4729.8 ug/L	4729.8 ppb	20:47:53
2	Mg 279.077 IEC†	119.3	117.6	5138.1 ug/L	5138.1 ppb	20:48:13
2	Na 589.592 Radial†	25166.4	25431.1	9987.2 ug/L	9987.2 ppb	20:47:53
2	Sr 421.552†	56760.1	56247.5	478.94 ug/L	478.94 ppb	20:47:53
2	Sc 361.383	844704.9	844704.9	100.58 %		20:49:16
2	Y 371.029	711741.2	711741.2	99.395 %		20:49:16
2	Ag 328.068†	101128.4	100294.4	508.73 ug/L	508.73 ppb	20:49:21
2	As 188.979†	885.3	901.0	487.35 ug/L	487.35 ppb	20:49:41
2	B 249.677†	17519.3	17668.9	483.39 ug/L	483.39 ppb	20:49:21
2	Ba 233.527†	53009.8	52687.0	495.16 ug/L	495.16 ppb	20:49:21
2	Be 313.107†	1210831.6	1208142.8	491.63 ug/L	491.63 ppb	20:49:16
2	Cd 226.502†	35263.3	35227.3	496.73 ug/L	496.73 ppb	20:49:21
2	Co 228.616†	19557.4	19484.0	507.16 ug/L	507.16 ppb	20:49:21
2	Cr 267.716†	38253.5	37939.0	494.97 ug/L	494.97 ppb	20:49:21
2	Cu 324.752†	160421.1	153147.4	496.57 ug/L	496.57 ppb	20:49:21
2	Mn 257.610†	375433.6	372825.8	489.46 ug/L	489.46 ppb	20:49:21
2	Mo 202.031†	5629.7	5583.2	491.31 ug/L	491.31 ppb	20:49:41
2	Ni 231.604†	16279.1	16092.0	502.17 ug/L	502.17 ppb	20:49:21

2	P 214.914†	3566.6	3377.9	2331.0 ug/L	2331.0 ppb	20:49:41
2	Pb 220.353†	3172.2	3212.8	485.72 ug/L	485.72 ppb	20:49:41
2	S 181.975 Axial†	585.8	558.1	977.30 ug/L	977.30 ppb	20:49:41
2	Sb 206.836†	1204.0	1170.4	514.95 ug/L	514.95 ppb	20:49:41
2	Se 196.026†	608.1	621.6	513.84 ug/L	513.84 ppb	20:49:41
2	Si 251.611†	68067.3	67151.1	2494.2 ug/L	2494.2 ppb	20:49:21
2	Sn 189.927†	2227.8	2212.0	490.50 ug/L	490.50 ppb	20:49:41
2	Ti 334.940†	288842.7	288267.8	495.81 ug/L	495.81 ppb	20:49:21
2	Tl 190.801†	1234.8	1252.8	487.67 ug/L	487.67 ppb	20:49:41
2	U 409.014†	15757.0	17701.7	519.18 ug/L	519.18 ppb	20:49:21
2	V 292.402†	63402.4	64465.9	503.54 ug/L	503.54 ppb	20:49:21
2	Zn 213.857†	42667.7	41816.3	492.13 ug/L	492.13 ppb	20:49:21
2	SiO2†	67622.6	66681.0	5314.1 ug/L	5314.1 ppb	20:50:22
3	Sc Radial	4048.9	4048.9	100 %		20:48:38
3	Y RADIAL	4473.2	4473.2	99.01 %		20:48:18
3	Al 396.153Radial†	4557.4	4620.1	4899.9 ug/L	4899.9 ppb	20:48:18
3	Ca 317.933Radial†	2479.8	2453.4	4984.6 ug/L	4984.6 ppb	20:48:38
3	Fe 238.204 Radial†	417.1	406.6	5099.1 ug/L	5099.1 ppb	20:48:38
3	K 766.490 Radial†	27241.0	24336.5	4851.9 ug/L	4851.9 ppb	20:48:18
3	Mg 279.077 IEC†	116.1	115.0	5021.8 ug/L	5021.8 ppb	20:48:38
3	Na 589.592 Radial†	25608.5	25974.2	10200 ug/L	10200 ppb	20:48:18
3	Sr 421.552†	57925.0	57639.6	490.80 ug/L	490.80 ppb	20:48:18
3	Sc 361.383	843560.3	843560.3	100.44 %		20:49:47
3	Y 371.029	711600.2	711600.2	99.375 %		20:49:47
3	Ag 328.068†	100796.4	100100.3	507.74 ug/L	507.74 ppb	20:49:52
3	As 188.979†	895.1	912.0	493.23 ug/L	493.23 ppb	20:50:12
3	B 249.677†	17491.2	17664.5	483.28 ug/L	483.28 ppb	20:49:52
3	Ba 233.527†	52994.8	52743.5	495.69 ug/L	495.69 ppb	20:49:52
3	Be 313.107†	1210168.3	1209115.9	492.03 ug/L	492.03 ppb	20:49:47
3	Cd 226.502†	35149.6	35161.6	495.81 ug/L	495.81 ppb	20:49:52
3	Co 228.616†	19464.1	19417.6	505.44 ug/L	505.44 ppb	20:49:52
3	Cr 267.716†	38185.0	37922.3	494.75 ug/L	494.75 ppb	20:49:52
3	Cu 324.752†	160430.8	153373.4	497.30 ug/L	497.30 ppb	20:49:52
3	Mn 257.610†	374384.7	372288.0	488.76 ug/L	488.76 ppb	20:49:52
3	Mo 202.031†	5668.6	5629.5	495.38 ug/L	495.38 ppb	20:50:12
3	Ni 231.604†	16217.7	16052.8	500.95 ug/L	500.95 ppb	20:49:52
3	P 214.914†	3586.1	3402.1	2348.3 ug/L	2348.3 ppb	20:50:12
3	Pb 220.353†	3198.1	3242.8	490.28 ug/L	490.28 ppb	20:50:12
3	S 181.975 Axial†	587.0	560.1	980.77 ug/L	980.77 ppb	20:50:12
3	Sb 206.836†	1235.3	1203.3	529.05 ug/L	529.05 ppb	20:50:12
3	Se 196.026†	613.7	628.0	518.91 ug/L	518.91 ppb	20:50:12
3	Si 251.611†	67976.6	67152.6	2494.2 ug/L	2494.2 ppb	20:49:52
3	Sn 189.927†	2245.6	2232.7	495.09 ug/L	495.09 ppb	20:50:12
3	Ti 334.940†	288610.8	288426.6	496.09 ug/L	496.09 ppb	20:49:52
3	Tl 190.801†	1239.8	1259.4	490.24 ug/L	490.24 ppb	20:50:12
3	U 409.014†	15663.6	17630.0	517.07 ug/L	517.07 ppb	20:49:52
3	V 292.402†	63203.2	64353.1	502.73 ug/L	502.73 ppb	20:49:52
3	Zn 213.857†	42597.2	41803.7	491.99 ug/L	491.99 ppb	20:49:52
3	SiO2†	67584.4	66734.2	5318.3 ug/L	5318.3 ppb	20:50:27

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	840247.5	100.05 %	0.804			0.80%
Sc Radial	4041.5	100 %	0.7			0.70%
Y 371.029	708090.1	98.885 %	0.8662			0.88%
Y RADIAL	4462.6	98.77 %	0.705			0.71%
Ag 328.068†	100330.8	508.91 ug/L	1.271	508.91 ppb	1.271	0.25%
QC value within limits for Ag 328.068 Recovery = 101.78%						
Al 396.153Radial†	4586.9	4864.5 ug/L	60.26	4864.5 ppb	60.26	1.24%
QC value within limits for Al 396.153Radial Recovery = 97.29%						
As 188.979†	907.6	490.85 ug/L	3.099	490.85 ppb	3.099	0.63%
QC value within limits for As 188.979 Recovery = 98.17%						
B 249.677†	17684.0	483.81 ug/L	0.818	483.81 ppb	0.818	0.17%
QC value within limits for B 249.677 Recovery = 96.76%						
Ba 233.527†	52790.5	496.13 ug/L	1.251	496.13 ppb	1.251	0.25%
QC value within limits for Ba 233.527 Recovery = 99.23%						
Be 313.107†	1209158.2	492.05 ug/L	0.422	492.05 ppb	0.422	0.09%
QC value within limits for Be 313.107 Recovery = 98.41%						
Ca 317.933Radial†	2452.7	4983.3 ug/L	15.00	4983.3 ppb	15.00	0.30%

QC value within limits for Ca 317.933 Radial Recovery = 99.67%						
Cd 226.502†	35263.1	497.24 ug/L	1.741	497.24 ppb	1.741	0.35%
QC value within limits for Cd 226.502 Recovery = 99.45%						
Co 228.616†	19483.0	507.15 ug/L	1.697	507.15 ppb	1.697	0.33%
QC value within limits for Co 228.616 Recovery = 101.43%						
Cr 267.716†	37984.6	495.57 ug/L	1.223	495.57 ppb	1.223	0.25%
QC value within limits for Cr 267.716 Recovery = 99.11%						
Cu 324.752†	153298.8	497.06 ug/L	0.425	497.06 ppb	0.425	0.09%
QC value within limits for Cu 324.752 Recovery = 99.41%						
Fe 238.204 Radial†	408.4	5122.2 ug/L	20.89	5122.2 ppb	20.89	0.41%
QC value within limits for Fe 238.204 Radial Recovery = 102.44%						
K 766.490 Radial†	24200.7	4824.8 ug/L	84.74	4824.8 ppb	84.74	1.76%
QC value within limits for K 766.490 Radial Recovery = 96.50%						
Mg 279.077 IEC†	115.7	5056.0 ug/L	71.43	5056.0 ppb	71.43	1.41%
QC value within limits for Mg 279.077 IEC Recovery = 101.12%						
Mn 257.610†	373126.0	489.86 ug/L	1.343	489.86 ppb	1.343	0.27%
QC value within limits for Mn 257.610 Recovery = 97.97%						
Mo 202.031†	5640.9	496.38 ug/L	5.638	496.38 ppb	5.638	1.14%
QC value within limits for Mo 202.031 Recovery = 99.28%						
Na 589.592 Radial†	25969.6	10199 ug/L	210.6	10199 ppb	210.6	2.06%
QC value within limits for Na 589.592 Radial Recovery = 101.99%						
Ni 231.604†	16098.5	502.37 ug/L	1.534	502.37 ppb	1.534	0.31%
QC value within limits for Ni 231.604 Recovery = 100.47%						
P 214.914†	3411.6	2355.2 ug/L	28.23	2355.2 ppb	28.23	1.20%
QC value within limits for P 214.914 Recovery = 94.21%						
Pb 220.353†	3240.6	489.93 ug/L	4.049	489.93 ppb	4.049	0.83%
QC value within limits for Pb 220.353 Recovery = 97.99%						
S 181.975 Axial†	566.2	991.48 ug/L	21.630	991.48 ppb	21.630	2.18%
QC value within limits for S 181.975 Axial Recovery = 99.15%						
Sb 206.836†	1192.3	524.41 ug/L	8.190	524.41 ppb	8.190	1.56%
QC value within limits for Sb 206.836 Recovery = 104.88%						
Se 196.026†	624.9	516.55 ug/L	2.549	516.55 ppb	2.549	0.49%
QC value within limits for Se 196.026 Recovery = 103.31%						
Si 251.611†	67279.5	2498.9 ug/L	8.17	2498.9 ppb	8.17	0.33%
QC value within limits for Si 251.611 Recovery = 99.96%						
Sn 189.927†	2234.5	495.50 ug/L	5.212	495.50 ppb	5.212	1.05%
QC value within limits for Sn 189.927 Recovery = 99.10%						
Sr 421.552†	57375.7	488.55 ug/L	8.704	488.55 ppb	8.704	1.78%
QC value within limits for Sr 421.552 Recovery = 97.71%						
Ti 334.940†	288525.7	496.26 ug/L	0.551	496.26 ppb	0.551	0.11%
QC value within limits for Ti 334.940 Recovery = 99.25%						
Tl 190.801†	1258.4	489.87 ug/L	2.039	489.87 ppb	2.039	0.42%
QC value within limits for Tl 190.801 Recovery = 97.97%						
U 409.014†	17700.8	519.15 ug/L	2.062	519.15 ppb	2.062	0.40%
QC value within limits for U 409.014 Recovery = 103.83%						
V 292.402†	64445.4	503.45 ug/L	0.687	503.45 ppb	0.687	0.14%
QC value within limits for V 292.402 Recovery = 100.69%						
Zn 213.857†	41866.4	492.73 ug/L	1.152	492.73 ppb	1.152	0.23%
QC value within limits for Zn 213.857 Recovery = 98.55%						
SiO2†	67070.2	5345.1 ug/L	50.07	5345.1 ppb	50.07	0.94%
QC value within limits for SiO2 Recovery = 99.95%						

All analyte(s) passed QC.

Sequence No.: 38
 Sample ID: CCB
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 6
 Date Collected: 3/25/2010 20:52:37
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4125.2	4125.2	102 %		20:54:49
1	Y RADIAL	4509.6	4509.6	99.81 %		20:54:29
1	Al 396.153Radial†	-64.8	16.3	17.399 ug/L	17.399 ppb	20:54:49
1	Ca 317.933Radial†	23.2	5.5	11.103 ug/L	11.103 ppb	20:54:49
1	Fe 238.204 Radial†	14.8	5.5	68.189 ug/L	68.189 ppb	20:54:49
1	K 766.490 Radial†	2598.0	-262.8	-52.475 ug/L	-52.475 ppb	20:54:29
1	Mg 279.077 IEC†	2.6	1.9	81.001 ug/L	81.001 ppb	20:54:49
1	Na 589.592 Radial†	-381.4	87.9	34.527 ug/L	34.527 ppb	20:54:29
1	Sr 421.552†	63.0	-8.4	-0.0715 ug/L	-0.0715 ppb	20:54:29
1	Sc 361.383	826959.5	826959.5	98.465 %		20:55:46
1	Y 371.029	707842.6	707842.6	98.850 %		20:55:46
1	Ag 328.068†	170.5	-80.2	-0.3864 ug/L	-0.3864 ppb	20:55:46
1	As 188.979†	-21.2	-0.7	-0.3507 ug/L	-0.3507 ppb	20:56:06
1	B 249.677†	-280.9	-35.1	-0.9765 ug/L	-0.9765 ppb	20:56:06
1	Ba 233.527†	33.5	15.5	0.1489 ug/L	0.1489 ppb	20:56:06
1	Be 313.107†	-4365.6	-171.0	-0.0686 ug/L	-0.0686 ppb	20:55:46
1	Cd 226.502†	-154.6	9.4	0.1269 ug/L	0.1269 ppb	20:56:06
1	Co 228.616†	-42.3	-4.0	-0.1073 ug/L	-0.1073 ppb	20:56:06
1	Cr 267.716†	85.5	-8.1	-0.1002 ug/L	-0.1002 ppb	20:56:06
1	Cu 324.752†	6511.2	260.0	0.8432 ug/L	0.8432 ppb	20:55:46
1	Mn 257.610†	960.3	522.8	0.6894 ug/L	0.6894 ppb	20:56:06
1	Mo 202.031†	10.7	-3.3	-0.2842 ug/L	-0.2842 ppb	20:56:06
1	Ni 231.604†	70.2	-22.3	-0.6961 ug/L	-0.6961 ppb	20:56:06
1	P 214.914†	189.3	24.1	17.102 ug/L	17.102 ppb	20:56:06
1	Pb 220.353†	-52.9	5.1	0.7661 ug/L	0.7661 ppb	20:56:06
1	S 181.975 Axial†	33.2	9.3	16.296 ug/L	16.296 ppb	20:56:06
1	Sb 206.836†	29.0	2.9	1.2254 ug/L	1.2254 ppb	20:56:06
1	Se 196.026†	-24.4	-7.9	-6.0541 ug/L	-6.0541 ppb	20:56:06
1	Si 251.611†	578.7	62.3	2.3238 ug/L	2.3238 ppb	20:56:06
1	Sn 189.927†	7.0	4.0	0.8797 ug/L	0.8797 ppb	20:56:06
1	Ti 334.940†	-863.1	206.8	0.3480 ug/L	0.3480 ppb	20:55:46
1	Tl 190.801†	-31.1	-6.6	-2.5273 ug/L	-2.5273 ppb	20:56:06
1	U 409.014†	-1793.9	213.3	6.2681 ug/L	6.2681 ppb	20:55:46
1	V 292.402†	-1339.5	67.2	0.5172 ug/L	0.5172 ppb	20:55:46
1	Zn 213.857†	692.7	97.0	1.1458 ug/L	1.1458 ppb	20:56:06
1	SiO2†	626.8	83.2	6.6557 ug/L	6.6557 ppb	20:57:02
2	Sc Radial	4088.2	4088.2	101 %		20:55:14
2	Y RADIAL	4505.1	4505.1	99.71 %		20:54:54
2	Al 396.153Radial†	-70.5	10.1	10.732 ug/L	10.732 ppb	20:55:14
2	Ca 317.933Radial†	27.0	9.5	19.213 ug/L	19.213 ppb	20:55:14
2	Fe 238.204 Radial†	13.3	4.1	51.833 ug/L	51.833 ppb	20:55:14
2	K 766.490 Radial†	2526.6	-310.3	-61.954 ug/L	-61.954 ppb	20:54:54
2	Mg 279.077 IEC†	2.6	1.8	79.087 ug/L	79.087 ppb	20:55:14
2	Na 589.592 Radial†	-430.2	36.4	14.277 ug/L	14.277 ppb	20:54:54
2	Sr 421.552†	46.8	-23.8	-0.2032 ug/L	-0.2032 ppb	20:54:54
2	Sc 361.383	845279.5	845279.5	100.65 %		20:56:11
2	Y 371.029	725296.7	725296.7	101.29 %		20:56:11
2	Ag 328.068†	221.8	-33.0	-0.1516 ug/L	-0.1516 ppb	20:56:11
2	As 188.979†	-29.3	-8.3	-4.4179 ug/L	-4.4179 ppb	20:56:31
2	B 249.677†	-285.1	-33.1	-0.9182 ug/L	-0.9182 ppb	20:56:31
2	Ba 233.527†	26.8	8.1	0.0789 ug/L	0.0789 ppb	20:56:31
2	Be 313.107†	-4528.8	-237.0	-0.0959 ug/L	-0.0959 ppb	20:56:11
2	Cd 226.502†	-166.9	0.5	0.0025 ug/L	0.0025 ppb	20:56:31
2	Co 228.616†	-45.2	-6.0	-0.1573 ug/L	-0.1573 ppb	20:56:31
2	Cr 267.716†	103.7	8.0	0.1093 ug/L	0.1093 ppb	20:56:31
2	Cu 324.752†	6620.1	224.9	0.7301 ug/L	0.7301 ppb	20:56:11
2	Mn 257.610†	1051.7	592.5	0.7793 ug/L	0.7793 ppb	20:56:31
2	Mo 202.031†	16.2	1.9	0.1687 ug/L	0.1687 ppb	20:56:31
2	Ni 231.604†	67.7	-26.3	-0.8222 ug/L	-0.8222 ppb	20:56:31

2	P 214.914†	201.1	31.5	22.495 ug/L	22.495 ppb	20:56:31
2	Pb 220.353†	-48.6	10.6	1.5889 ug/L	1.5889 ppb	20:56:31
2	S 181.975 Axial†	26.0	1.4	2.4612 ug/L	2.4612 ppb	20:56:31
2	Sb 206.836†	33.3	6.5	2.7705 ug/L	2.7705 ppb	20:56:31
2	Se 196.026†	-13.3	3.7	3.1235 ug/L	3.1235 ppb	20:56:31
2	Si 251.611†	645.7	116.1	4.3195 ug/L	4.3195 ppb	20:56:31
2	Sn 189.927†	6.0	2.9	0.6364 ug/L	0.6364 ppb	20:56:31
2	Ti 334.940†	-1006.8	83.0	0.1374 ug/L	0.1374 ppb	20:56:11
2	Tl 190.801†	-32.5	-7.3	-2.8045 ug/L	-2.8045 ppb	20:56:31
2	U 409.014†	-1931.9	115.7	3.3986 ug/L	3.3986 ppb	20:56:11
2	V 292.402†	-1381.7	54.7	0.4245 ug/L	0.4245 ppb	20:56:11
2	Zn 213.857†	699.0	88.1	1.0429 ug/L	1.0429 ppb	20:56:31
2	SiO2†	600.0	42.8	3.4118 ug/L	3.4118 ppb	20:57:07
3	Sc Radial	4067.5	4067.5	101 %		20:55:39
3	Y RADIAL	4511.7	4511.7	99.86 %		20:55:19
3	Al 396.153Radial†	-44.4	35.7	38.010 ug/L	38.010 ppb	20:55:39
3	Ca 317.933Radial†	33.5	16.0	32.500 ug/L	32.500 ppb	20:55:39
3	Fe 238.204 Radial†	21.8	12.6	157.28 ug/L	157.28 ppb	20:55:39
3	K 766.490 Radial†	2445.2	-378.3	-75.548 ug/L	-75.548 ppb	20:55:19
3	Mg 279.077 IEC†	1.7	0.9	40.930 ug/L	40.930 ppb	20:55:39
3	Na 589.592 Radial†	-392.7	71.4	28.056 ug/L	28.056 ppb	20:55:19
3	Sr 421.552†	62.0	-8.6	-0.0733 ug/L	-0.0733 ppb	20:55:19
3	Sc 361.383	827432.7	827432.7	98.521 %		20:56:36
3	Y 371.029	710173.1	710173.1	99.176 %		20:56:36
3	Ag 328.068†	199.8	-50.6	-0.2052 ug/L	-0.2052 ppb	20:56:36
3	As 188.979†	-17.5	3.1	1.7030 ug/L	1.7030 ppb	20:56:56
3	B 249.677†	-277.3	-31.3	-0.8858 ug/L	-0.8858 ppb	20:56:56
3	Ba 233.527†	22.9	4.7	0.0511 ug/L	0.0511 ppb	20:56:56
3	Be 313.107†	-4334.7	-137.1	-0.0556 ug/L	-0.0556 ppb	20:56:36
3	Cd 226.502†	-163.6	0.3	-0.0118 ug/L	-0.0118 ppb	20:56:56
3	Co 228.616†	-41.6	-3.3	-0.0878 ug/L	-0.0878 ppb	20:56:56
3	Cr 267.716†	90.7	-3.0	-0.0215 ug/L	-0.0215 ppb	20:56:56
3	Cu 324.752†	6526.4	271.6	0.8879 ug/L	0.8879 ppb	20:56:36
3	Mn 257.610†	975.6	537.8	0.7195 ug/L	0.7195 ppb	20:56:56
3	Mo 202.031†	13.2	-0.8	-0.0602 ug/L	-0.0602 ppb	20:56:56
3	Ni 231.604†	80.4	-12.0	-0.3746 ug/L	-0.3746 ppb	20:56:56
3	P 214.914†	190.8	25.5	18.035 ug/L	18.035 ppb	20:56:56
3	Pb 220.353†	-47.0	11.1	1.6616 ug/L	1.6616 ppb	20:56:56
3	S 181.975 Axial†	30.0	6.1	10.695 ug/L	10.695 ppb	20:56:56
3	Sb 206.836†	34.1	8.0	3.3818 ug/L	3.3818 ppb	20:56:56
3	Se 196.026†	-21.7	-5.1	-3.5508 ug/L	-3.5508 ppb	20:56:56
3	Si 251.611†	562.0	45.0	1.6765 ug/L	1.6765 ppb	20:56:56
3	Sn 189.927†	3.6	0.6	0.1237 ug/L	0.1237 ppb	20:56:56
3	Ti 334.940†	-1063.0	4.4	0.0076 ug/L	0.0076 ppb	20:56:36
3	Tl 190.801†	-27.6	-2.9	-1.1186 ug/L	-1.1186 ppb	20:56:56
3	U 409.014†	-1931.6	74.5	2.1753 ug/L	2.1753 ppb	20:56:36
3	V 292.402†	-1297.1	111.0	0.8365 ug/L	0.8365 ppb	20:56:36
3	Zn 213.857†	688.0	91.9	1.0693 ug/L	1.0693 ppb	20:56:56
3	SiO2†	590.8	46.3	3.7032 ug/L	3.7032 ppb	20:57:12

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	833223.9	99.210 %	1.2434			1.25%
Sc Radial	4093.6	101 %	0.7			0.71%
Y 371.029	714437.4	99.771 %	1.3234			1.33%
Y RADIAL	4508.8	99.80 %	0.075			0.07%
Ag 328.068†	-54.6	-0.2477 ug/L	0.12302	-0.2477 ppb	0.12302	49.66%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	20.7	22.047 ug/L	14.2209	22.047 ppb	14.2209	64.50%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-1.9	-1.0219 ug/L	3.11513	-1.0219 ppb	3.11513	304.84%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-33.2	-0.9268 ug/L	0.04595	-0.9268 ppb	0.04595	4.96%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	9.5	0.0930 ug/L	0.05043	0.0930 ppb	0.05043	54.25%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	-181.7	-0.0734 ug/L	0.02055	-0.0734 ppb	0.02055	28.00%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	10.3	20.939 ug/L	10.8022	20.939 ppb	10.8022	51.59%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated						
Cd 226.502†	3.4	0.0392 ug/L	0.07628	0.0392 ppb	0.07628	194.57%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-4.4	-0.1175 ug/L	0.03584	-0.1175 ppb	0.03584	30.52%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-1.0	-0.0041 ug/L	0.10580	-0.0041 ppb	0.10580	>999.9%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	252.2	0.8204 ug/L	0.08132	0.8204 ppb	0.08132	9.91%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	7.4	92.435 ug/L	56.7523	92.435 ppb	56.7523	61.40%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	-317.1	-63.326 ug/L	11.5975	-63.326 ppb	11.5975	18.31%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	1.5	67.006 ug/L	22.6026	67.006 ppb	22.6026	33.73%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	551.1	0.7294 ug/L	0.04573	0.7294 ppb	0.04573	6.27%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	-0.8	-0.0586 ug/L	0.22647	-0.0586 ppb	0.22647	386.79%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	65.2	25.620 ug/L	10.3425	25.620 ppb	10.3425	40.37%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	-20.2	-0.6310 ug/L	0.23081	-0.6310 ppb	0.23081	36.58%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	27.0	19.211 ug/L	2.8824	19.211 ppb	2.8824	15.00%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	8.9	1.3389 ug/L	0.49737	1.3389 ppb	0.49737	37.15%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	5.6	9.8174 ug/L	6.95910	9.8174 ppb	6.95910	70.89%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	5.8	2.4592 ug/L	1.11136	2.4592 ppb	1.11136	45.19%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-3.1	-2.1604 ug/L	4.74414	-2.1604 ppb	4.74414	219.59%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	74.5	2.7733 ug/L	1.37764	2.7733 ppb	1.37764	49.68%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	2.5	0.5466 ug/L	0.38591	0.5466 ppb	0.38591	70.60%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	-13.6	-0.1160 ug/L	0.07552	-0.1160 ppb	0.07552	65.12%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	98.1	0.1644 ug/L	0.17176	0.1644 ppb	0.17176	104.51%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	-5.6	-2.1501 ug/L	0.90401	-2.1501 ppb	0.90401	42.04%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	134.5	3.9474 ug/L	2.10087	3.9474 ppb	2.10087	53.22%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	77.6	0.5927 ug/L	0.21616	0.5927 ppb	0.21616	36.47%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	92.3	1.0860 ug/L	0.05349	1.0860 ppb	0.05349	4.93%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	57.4	4.5902 ug/L	1.79468	4.5902 ppb	1.79468	39.10%
QC value within limits for SiO2 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 48
 Sample ID: CCV
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 1
 Date Collected: 3/25/2010 22:02:30
 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	4001.4	4001.4	99.2 %		22:04:42
1	Y RADIAL	4395.0	4395.0	97.28 %		22:04:22
1	Al 396.153Radial†	4574.0	4690.6	4975.3 ug/L	4975.3 ppb	22:04:22
1	Ca 317.933Radial†	2484.3	2487.2	5053.4 ug/L	5053.4 ppb	22:04:42
1	Fe 238.204 Radial†	432.7	427.2	5356.6 ug/L	5356.6 ppb	22:04:42
1	K 766.490 Radial†	27550.6	24970.5	4978.2 ug/L	4978.2 ppb	22:04:22
1	Mg 279.077 IEC†	116.3	116.5	5088.5 ug/L	5088.5 ppb	22:04:42
1	Na 589.592 Radial†	26768.0	27445.6	10778 ug/L	10778 ppb	22:04:22
1	Sr 421.552†	59062.7	59470.9	506.39 ug/L	506.39 ppb	22:04:22
1	Sc 361.383	839379.5	839379.5	99.943 %		22:05:39
1	Y 371.029	706194.1	706194.1	98.620 %		22:05:39
1	Ag 328.068†	98759.4	98561.9	500.03 ug/L	500.03 ppb	22:05:45
1	As 188.979†	875.1	896.5	484.90 ug/L	484.90 ppb	22:06:05
1	B 249.677†	17031.1	17290.9	472.99 ug/L	472.99 ppb	22:05:45
1	Ba 233.527†	51853.1	51863.9	487.43 ug/L	487.43 ppb	22:05:45
1	Be 313.107†	1192099.2	1197037.8	487.11 ug/L	487.11 ppb	22:05:39
1	Cd 226.502†	34502.2	34688.2	489.10 ug/L	489.10 ppb	22:05:45
1	Co 228.616†	19153.2	19203.0	499.86 ug/L	499.86 ppb	22:05:45
1	Cr 267.716†	37365.7	37291.9	486.56 ug/L	486.56 ppb	22:05:45
1	Cu 324.752†	156302.4	150038.3	486.50 ug/L	486.50 ppb	22:05:45
1	Mn 257.610†	367594.9	367350.9	482.30 ug/L	482.30 ppb	22:05:45
1	Mo 202.031†	5581.3	5570.3	490.20 ug/L	490.20 ppb	22:06:05
1	Ni 231.604†	15881.7	15797.1	492.96 ug/L	492.96 ppb	22:05:45
1	P 214.914†	3559.3	3393.1	2343.8 ug/L	2343.8 ppb	22:06:05
1	Pb 220.353†	3162.9	3223.5	487.34 ug/L	487.34 ppb	22:06:05
1	S 181.975 Axial†	594.2	570.2	998.43 ug/L	998.43 ppb	22:06:05
1	Sb 206.836†	1206.5	1180.5	519.18 ug/L	519.18 ppb	22:06:05
1	Se 196.026†	604.9	622.2	515.11 ug/L	515.11 ppb	22:06:05
1	Si 251.611†	66967.8	66480.3	2469.2 ug/L	2469.2 ppb	22:05:45
1	Sn 189.927†	2207.8	2205.9	489.16 ug/L	489.16 ppb	22:06:05
1	Ti 334.940†	282717.0	283960.6	488.42 ug/L	488.42 ppb	22:05:45
1	Tl 190.801†	1219.2	1244.9	484.59 ug/L	484.59 ppb	22:06:05
1	U 409.014†	15395.3	17439.2	511.44 ug/L	511.44 ppb	22:05:45
1	V 292.402†	61733.8	63196.4	493.70 ug/L	493.70 ppb	22:05:45
1	Zn 213.857†	41660.3	41077.5	483.39 ug/L	483.39 ppb	22:05:45
1	SiO2†	67300.2	66785.0	5322.5 ug/L	5322.5 ppb	22:07:12
2	Sc Radial	3976.3	3976.3	98.6 %		22:05:07
2	Y RADIAL	4482.0	4482.0	99.20 %		22:04:47
2	Al 396.153Radial†	4509.2	4654.1	4936.0 ug/L	4936.0 ppb	22:04:47
2	Ca 317.933Radial†	2456.9	2475.3	5029.1 ug/L	5029.1 ppb	22:05:07
2	Fe 238.204 Radial†	424.8	421.9	5291.2 ug/L	5291.2 ppb	22:05:07
2	K 766.490 Radial†	27377.5	24970.3	4978.3 ug/L	4978.3 ppb	22:04:47
2	Mg 279.077 IEC†	120.0	121.0	5287.3 ug/L	5287.3 ppb	22:05:07
2	Na 589.592 Radial†	26323.3	27165.1	10668 ug/L	10668 ppb	22:04:47
2	Sr 421.552†	58272.7	59045.7	502.77 ug/L	502.77 ppb	22:04:47
2	Sc 361.383	837626.8	837626.8	99.735 %		22:06:10
2	Y 371.029	705658.3	705658.3	98.545 %		22:06:10
2	Ag 328.068†	99010.0	99020.0	502.32 ug/L	502.32 ppb	22:06:15
2	As 188.979†	878.5	901.6	487.64 ug/L	487.64 ppb	22:06:35
2	B 249.677†	17154.8	17450.6	477.39 ug/L	477.39 ppb	22:06:15
2	Ba 233.527†	51923.4	52043.1	489.11 ug/L	489.11 ppb	22:06:15
2	Be 313.107†	1191243.4	1198675.5	487.78 ug/L	487.78 ppb	22:06:10
2	Cd 226.502†	34435.5	34693.5	489.18 ug/L	489.18 ppb	22:06:15
2	Co 228.616†	19120.5	19210.3	500.07 ug/L	500.07 ppb	22:06:15
2	Cr 267.716†	37339.8	37344.2	487.24 ug/L	487.24 ppb	22:06:15
2	Cu 324.752†	156809.3	150873.8	489.21 ug/L	489.21 ppb	22:06:15
2	Mn 257.610†	367348.0	367873.0	482.97 ug/L	482.97 ppb	22:06:15
2	Mo 202.031†	5662.8	5663.7	498.40 ug/L	498.40 ppb	22:06:35
2	Ni 231.604†	15885.9	15834.6	494.13 ug/L	494.13 ppb	22:06:15

2	P 214.914†	3589.7	3431.0	2370.6 ug/L	2370.6 ppb	22:06:35
2	Pb 220.353†	3173.6	3240.9	489.97 ug/L	489.97 ppb	22:06:35
2	S 181.975 Axial†	580.0	557.1	975.60 ug/L	975.60 ppb	22:06:35
2	Sb 206.836†	1219.5	1196.1	526.04 ug/L	526.04 ppb	22:06:35
2	Se 196.026†	609.1	627.7	519.30 ug/L	519.30 ppb	22:06:35
2	Si 251.611†	66758.0	66410.1	2466.5 ug/L	2466.5 ppb	22:06:15
2	Sn 189.927†	2226.5	2229.3	494.34 ug/L	494.34 ppb	22:06:35
2	Ti 334.940†	282990.3	284826.6	489.89 ug/L	489.89 ppb	22:06:15
2	Tl 190.801†	1228.9	1257.2	489.35 ug/L	489.35 ppb	22:06:35
2	U 409.014†	15471.2	17547.5	514.64 ug/L	514.64 ppb	22:06:15
2	V 292.402†	61709.7	63301.4	494.64 ug/L	494.64 ppb	22:06:15
2	Zn 213.857†	41617.4	41121.7	483.92 ug/L	483.92 ppb	22:06:15
2	SiO2†	66953.4	66578.2	5305.7 ug/L	5305.7 ppb	22:07:17
3	Sc Radial	4044.5	4044.5	100 %		22:05:32
3	Y RADIAL	4435.6	4435.6	98.18 %		22:05:12
3	Al 396.153Radial†	4536.9	4604.6	4883.6 ug/L	4883.6 ppb	22:05:12
3	Ca 317.933Radial†	2474.8	2451.1	4980.0 ug/L	4980.0 ppb	22:05:32
3	Fe 238.204 Radial†	429.4	419.2	5257.2 ug/L	5257.2 ppb	22:05:32
3	K 766.490 Radial†	27646.4	24770.4	4938.4 ug/L	4938.4 ppb	22:05:12
3	Mg 279.077 IEC†	120.5	119.4	5217.7 ug/L	5217.7 ppb	22:05:32
3	Na 589.592 Radial†	26635.9	27026.7	10614 ug/L	10614 ppb	22:05:12
3	Sr 421.552†	58784.0	58559.2	498.63 ug/L	498.63 ppb	22:05:12
3	Sc 361.383	846524.5	846524.5	100.79 %		22:06:41
3	Y 371.029	712501.6	712501.6	99.501 %		22:06:41
3	Ag 328.068†	100109.7	99067.6	502.56 ug/L	502.56 ppb	22:06:46
3	As 188.979†	887.3	901.1	487.40 ug/L	487.40 ppb	22:07:06
3	B 249.677†	17498.3	17610.6	481.78 ug/L	481.78 ppb	22:06:46
3	Ba 233.527†	52473.8	52041.8	489.10 ug/L	489.10 ppb	22:06:46
3	Be 313.107†	1198951.6	1193768.8	485.79 ug/L	485.79 ppb	22:06:41
3	Cd 226.502†	34944.4	34835.5	491.18 ug/L	491.18 ppb	22:06:46
3	Co 228.616†	19427.0	19312.9	502.72 ug/L	502.72 ppb	22:06:46
3	Cr 267.716†	37798.1	37405.4	488.03 ug/L	488.03 ppb	22:06:46
3	Cu 324.752†	158830.0	151225.9	490.35 ug/L	490.35 ppb	22:06:46
3	Mn 257.610†	371770.9	368389.6	483.65 ug/L	483.65 ppb	22:06:46
3	Mo 202.031†	5641.3	5582.6	491.27 ug/L	491.27 ppb	22:07:06
3	Ni 231.604†	16068.2	15848.0	494.55 ug/L	494.55 ppb	22:06:46
3	P 214.914†	3588.8	3392.3	2342.5 ug/L	2342.5 ppb	22:07:06
3	Pb 220.353†	3174.7	3208.5	485.07 ug/L	485.07 ppb	22:07:06
3	S 181.975 Axial†	584.8	555.8	973.30 ug/L	973.30 ppb	22:07:06
3	Sb 206.836†	1217.1	1180.9	519.35 ug/L	519.35 ppb	22:07:06
3	Se 196.026†	607.1	619.3	512.44 ug/L	512.44 ppb	22:07:06
3	Si 251.611†	67648.7	66590.3	2473.3 ug/L	2473.3 ppb	22:06:46
3	Sn 189.927†	2224.2	2203.5	488.62 ug/L	488.62 ppb	22:07:06
3	Ti 334.940†	286616.4	285441.7	490.94 ug/L	490.94 ppb	22:06:46
3	Tl 190.801†	1228.3	1243.7	484.13 ug/L	484.13 ppb	22:07:06
3	U 409.014†	15513.8	17426.8	511.09 ug/L	511.09 ppb	22:06:46
3	V 292.402†	62578.6	63513.1	496.17 ug/L	496.17 ppb	22:06:46
3	Zn 213.857†	42187.2	41248.4	485.42 ug/L	485.42 ppb	22:06:46
3	SiO2†	67283.7	66200.2	5275.7 ug/L	5275.7 ppb	22:07:22

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	841176.9	100.16 %	0.561			0.56%
Sc Radial	4007.4	99.3 %	0.85			0.86%
Y 371.029	708118.0	98.889 %	0.5315			0.54%
Y RADIAL	4437.5	98.22 %	0.963			0.98%
Ag 328.068†	98883.2	501.64 ug/L	1.397	501.64 ppb	1.397	0.28%
QC value within limits for Ag 328.068 Recovery = 100.33%						
Al 396.153Radial†	4649.8	4931.6 ug/L	46.02	4931.6 ppb	46.02	0.93%
QC value within limits for Al 396.153Radial Recovery = 98.63%						
As 188.979†	899.8	486.65 ug/L	1.517	486.65 ppb	1.517	0.31%
QC value within limits for As 188.979 Recovery = 97.33%						
B 249.677†	17450.7	477.39 ug/L	4.398	477.39 ppb	4.398	0.92%
QC value within limits for B 249.677 Recovery = 95.48%						
Ba 233.527†	51983.0	488.55 ug/L	0.967	488.55 ppb	0.967	0.20%
QC value within limits for Ba 233.527 Recovery = 97.71%						
Be 313.107†	1196494.0	486.89 ug/L	1.013	486.89 ppb	1.013	0.21%
QC value within limits for Be 313.107 Recovery = 97.38%						
Ca 317.933Radial†	2471.2	5020.8 ug/L	37.42	5020.8 ppb	37.42	0.75%

QC value within limits for Ca 317.933 Radial Recovery = 100.42%

Cd 226.502†	34739.1	489.82 ug/L	1.183	489.82 ppb	1.183	0.24%
QC value within limits for Cd 226.502 Recovery = 97.96%						
Co 228.616†	19242.1	500.88 ug/L	1.594	500.88 ppb	1.594	0.32%
QC value within limits for Co 228.616 Recovery = 100.18%						
Cr 267.716†	37347.2	487.28 ug/L	0.736	487.28 ppb	0.736	0.15%
QC value within limits for Cr 267.716 Recovery = 97.46%						
Cu 324.752†	150712.7	488.69 ug/L	1.975	488.69 ppb	1.975	0.40%
QC value within limits for Cu 324.752 Recovery = 97.74%						
Fe 238.204 Radial†	422.8	5301.7 ug/L	50.51	5301.7 ppb	50.51	0.95%
QC value within limits for Fe 238.204 Radial Recovery = 106.03%						
K 766.490 Radial†	24903.7	4965.0 ug/L	23.01	4965.0 ppb	23.01	0.46%
QC value within limits for K 766.490 Radial Recovery = 99.30%						
Mg 279.077 IEC†	119.0	5197.8 ug/L	100.85	5197.8 ppb	100.85	1.94%
QC value within limits for Mg 279.077 IEC Recovery = 103.96%						
Mn 257.610†	367871.2	482.98 ug/L	0.674	482.98 ppb	0.674	0.14%
QC value within limits for Mn 257.610 Recovery = 96.60%						
Mo 202.031†	5605.5	493.29 ug/L	4.459	493.29 ppb	4.459	0.90%
QC value within limits for Mo 202.031 Recovery = 98.66%						
Na 589.592 Radial†	27212.4	10687 ug/L	83.8	10687 ppb	83.8	0.78%
QC value within limits for Na 589.592 Radial Recovery = 106.87%						
Ni 231.604†	15826.6	493.88 ug/L	0.822	493.88 ppb	0.822	0.17%
QC value within limits for Ni 231.604 Recovery = 98.78%						
P 214.914†	3405.5	2352.3 ug/L	15.84	2352.3 ppb	15.84	0.67%
QC value within limits for P 214.914 Recovery = 94.09%						
Pb 220.353†	3224.3	487.46 ug/L	2.457	487.46 ppb	2.457	0.50%
QC value within limits for Pb 220.353 Recovery = 97.49%						
S 181.975 Axial†	561.0	982.44 ug/L	13.891	982.44 ppb	13.891	1.41%
QC value within limits for S 181.975 Axial Recovery = 98.24%						
Sb 206.836†	1185.8	521.52 ug/L	3.908	521.52 ppb	3.908	0.75%
QC value within limits for Sb 206.836 Recovery = 104.30%						
Se 196.026†	623.1	515.62 ug/L	3.456	515.62 ppb	3.456	0.67%
QC value within limits for Se 196.026 Recovery = 103.12%						
Si 251.611†	66493.6	2469.7 ug/L	3.42	2469.7 ppb	3.42	0.14%
QC value within limits for Si 251.611 Recovery = 98.79%						
Sn 189.927†	2212.9	490.71 ug/L	3.154	490.71 ppb	3.154	0.64%
QC value within limits for Sn 189.927 Recovery = 98.14%						
Sr 421.552†	59025.3	502.60 ug/L	3.884	502.60 ppb	3.884	0.77%
QC value within limits for Sr 421.552 Recovery = 100.52%						
Ti 334.940†	284743.0	489.75 ug/L	1.269	489.75 ppb	1.269	0.26%
QC value within limits for Ti 334.940 Recovery = 97.95%						
Tl 190.801†	1248.6	486.02 ug/L	2.887	486.02 ppb	2.887	0.59%
QC value within limits for Tl 190.801 Recovery = 97.20%						
U 409.014†	17471.2	512.39 ug/L	1.955	512.39 ppb	1.955	0.38%
QC value within limits for U 409.014 Recovery = 102.48%						
V 292.402†	63337.0	494.84 ug/L	1.247	494.84 ppb	1.247	0.25%
QC value within limits for V 292.402 Recovery = 98.97%						
Zn 213.857†	41149.2	484.24 ug/L	1.054	484.24 ppb	1.054	0.22%
QC value within limits for Zn 213.857 Recovery = 96.85%						
SiO2†	66521.1	5301.3 ug/L	23.69	5301.3 ppb	23.69	0.45%
QC value within limits for SiO2 Recovery = 99.14%						

All analyte(s) passed QC.

Sequence No.: 49

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 3/25/2010 22:09:31

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4152.7	4152.7	103 %		22:11:43
1	Y RADIAL	4648.0	4648.0	102.9 %		22:11:23
1	Al 396.153Radial†	-74.2	7.5	8.0568 ug/L	8.0568 ppb	22:11:43
1	Ca 317.933Radial†	23.4	5.5	11.271 ug/L	11.271 ppb	22:11:43
1	Fe 238.204 Radial†	15.8	6.4	79.450 ug/L	79.450 ppb	22:11:43
1	K 766.490 Radial†	2584.0	-293.3	-58.565 ug/L	-58.565 ppb	22:11:23
1	Mg 279.077 IEC†	4.5	3.7	161.38 ug/L	161.38 ppb	22:11:43
1	Na 589.592 Radial†	-370.0	101.4	39.834 ug/L	39.834 ppb	22:11:23
1	Sr 421.552†	59.3	-12.4	-0.1061 ug/L	-0.1061 ppb	22:11:23
1	Sc 361.383	824304.3	824304.3	98.148 %		22:12:40
1	Y 371.029	701365.4	701365.4	97.946 %		22:12:40
1	Ag 328.068†	142.8	-107.9	-0.5158 ug/L	-0.5158 ppb	22:12:40
1	As 188.979†	-28.3	-8.0	-4.2534 ug/L	-4.2534 ppb	22:13:00
1	B 249.677†	-242.2	3.4	0.0809 ug/L	0.0809 ppb	22:13:00
1	Ba 233.527†	16.1	-2.1	-0.0139 ug/L	-0.0139 ppb	22:13:00
1	Be 313.107†	-4453.6	-274.9	-0.1109 ug/L	-0.1109 ppb	22:12:40
1	Cd 226.502†	-169.7	-6.5	-0.1005 ug/L	-0.1005 ppb	22:13:00
1	Co 228.616†	-44.8	-6.8	-0.1787 ug/L	-0.1787 ppb	22:13:00
1	Cr 267.716†	111.4	18.5	0.2505 ug/L	0.2505 ppb	22:13:00
1	Cu 324.752†	6419.5	187.8	0.6120 ug/L	0.6120 ppb	22:12:40
1	Mn 257.610†	1007.1	573.6	0.7539 ug/L	0.7539 ppb	22:13:00
1	Mo 202.031†	10.6	-3.4	-0.2957 ug/L	-0.2957 ppb	22:13:00
1	Ni 231.604†	62.2	-30.3	-0.9453 ug/L	-0.9453 ppb	22:13:00
1	P 214.914†	197.7	33.2	23.716 ug/L	23.716 ppb	22:13:00
1	Pb 220.353†	-53.0	4.8	0.7119 ug/L	0.7119 ppb	22:13:00
1	S 181.975 Axial†	25.3	1.3	2.3642 ug/L	2.3642 ppb	22:13:00
1	Sb 206.836†	27.8	1.7	0.7790 ug/L	0.7790 ppb	22:13:00
1	Se 196.026†	-21.6	-5.0	-3.7588 ug/L	-3.7588 ppb	22:13:00
1	Si 251.611†	616.1	102.3	3.8114 ug/L	3.8114 ppb	22:13:00
1	Sn 189.927†	17.0	14.2	3.1522 ug/L	3.1522 ppb	22:13:00
1	Ti 334.940†	-887.9	178.6	0.2946 ug/L	0.2946 ppb	22:12:40
1	Tl 190.801†	-28.0	-3.5	-1.3440 ug/L	-1.3440 ppb	22:13:00
1	U 409.014†	-1921.9	77.0	2.2572 ug/L	2.2572 ppb	22:12:40
1	V 292.402†	-1231.3	173.0	1.3250 ug/L	1.3250 ppb	22:12:40
1	Zn 213.857†	684.4	90.9	1.0730 ug/L	1.0730 ppb	22:13:00
1	SiO2†	618.3	76.6	6.1270 ug/L	6.1270 ppb	22:13:56
2	Sc Radial	4084.5	4084.5	101 %		22:12:08
2	Y RADIAL	4561.2	4561.2	101.0 %		22:11:48
2	Al 396.153Radial†	-61.1	19.3	20.580 ug/L	20.580 ppb	22:12:08
2	Ca 317.933Radial†	24.5	7.0	14.266 ug/L	14.266 ppb	22:12:08
2	Fe 238.204 Radial†	15.8	6.6	83.080 ug/L	83.080 ppb	22:12:08
2	K 766.490 Radial†	2480.9	-353.2	-70.520 ug/L	-70.520 ppb	22:11:48
2	Mg 279.077 IEC†	3.1	2.3	101.63 ug/L	101.63 ppb	22:12:08
2	Na 589.592 Radial†	-369.6	95.8	37.641 ug/L	37.641 ppb	22:11:48
2	Sr 421.552†	70.4	-0.5	-0.0045 ug/L	-0.0045 ppb	22:11:48
2	Sc 361.383	822658.7	822658.7	97.952 %		22:13:05
2	Y 371.029	701650.4	701650.4	97.986 %		22:13:05
2	Ag 328.068†	207.4	-41.7	-0.1887 ug/L	-0.1887 ppb	22:13:05
2	As 188.979†	-26.7	-6.4	-3.4297 ug/L	-3.4297 ppb	22:13:25
2	B 249.677†	-234.6	10.6	0.2805 ug/L	0.2805 ppb	22:13:25
2	Ba 233.527†	29.2	11.3	0.1080 ug/L	0.1080 ppb	22:13:25
2	Be 313.107†	-4369.5	-198.2	-0.0799 ug/L	-0.0799 ppb	22:13:05
2	Cd 226.502†	-160.9	2.1	0.0225 ug/L	0.0225 ppb	22:13:25
2	Co 228.616†	-54.8	-17.0	-0.4455 ug/L	-0.4455 ppb	22:13:25
2	Cr 267.716†	117.4	24.8	0.3302 ug/L	0.3302 ppb	22:13:25
2	Cu 324.752†	6423.9	205.5	0.6682 ug/L	0.6682 ppb	22:13:05
2	Mn 257.610†	1369.1	945.3	1.2443 ug/L	1.2443 ppb	22:13:25
2	Mo 202.031†	11.0	-3.0	-0.2569 ug/L	-0.2569 ppb	22:13:25
2	Ni 231.604†	96.2	4.6	0.1432 ug/L	0.1432 ppb	22:13:25

2	P 214.914†	183.9	19.5	13.851 ug/L	13.851 ppb	22:13:25
2	Pb 220.353†	-44.0	13.8	2.0794 ug/L	2.0794 ppb	22:13:25
2	S 181.975 Axial†	25.5	1.7	2.9554 ug/L	2.9554 ppb	22:13:25
2	Sb 206.836†	30.3	4.3	1.8728 ug/L	1.8728 ppb	22:13:25
2	Se 196.026†	-13.5	3.2	2.7672 ug/L	2.7672 ppb	22:13:25
2	Si 251.611†	704.4	193.6	7.2129 ug/L	7.2129 ppb	22:13:25
2	Sn 189.927†	12.8	10.0	2.2132 ug/L	2.2132 ppb	22:13:25
2	Ti 334.940†	-931.5	132.4	0.2193 ug/L	0.2193 ppb	22:13:05
2	Tl 190.801†	-22.5	2.1	0.8035 ug/L	0.8035 ppb	22:13:25
2	U 409.014†	-1846.3	150.3	4.4115 ug/L	4.4115 ppb	22:13:05
2	V 292.402†	-1414.1	-16.1	-0.1298 ug/L	-0.1298 ppb	22:13:05
2	Zn 213.857†	693.1	101.1	1.1872 ug/L	1.1872 ppb	22:13:25
2	SiO2†	562.2	20.5	1.6484 ug/L	1.6484 ppb	22:14:01
3	Sc Radial	4077.3	4077.3	101 %		22:12:33
3	Y RADIAL	4472.3	4472.3	98.99 %		22:12:13
3	Al 396.153Radial†	-66.6	13.7	14.633 ug/L	14.633 ppb	22:12:33
3	Ca 317.933Radial†	19.1	1.7	3.3895 ug/L	3.3895 ppb	22:12:33
3	Fe 238.204 Radial†	12.4	3.2	40.536 ug/L	40.536 ppb	22:12:33
3	K 766.490 Radial†	2587.1	-243.8	-48.678 ug/L	-48.678 ppb	22:12:13
3	Mg 279.077 IEC†	2.6	1.8	79.853 ug/L	79.853 ppb	22:12:33
3	Na 589.592 Radial†	-393.1	71.9	28.253 ug/L	28.253 ppb	22:12:13
3	Sr 421.552†	60.8	-9.9	-0.0844 ug/L	-0.0844 ppb	22:12:13
3	Sc 361.383	830689.1	830689.1	98.909 %		22:13:31
3	Y 371.029	707615.3	707615.3	98.819 %		22:13:31
3	Ag 328.068†	156.7	-95.0	-0.4660 ug/L	-0.4660 ppb	22:13:31
3	As 188.979†	-20.5	0.1	0.0762 ug/L	0.0762 ppb	22:13:51
3	B 249.677†	-252.6	-5.2	-0.1500 ug/L	-0.1500 ppb	22:13:51
3	Ba 233.527†	11.3	-7.1	-0.0625 ug/L	-0.0625 ppb	22:13:51
3	Be 313.107†	-4265.0	-49.4	-0.0178 ug/L	-0.0178 ppb	22:13:31
3	Cd 226.502†	-170.2	-5.7	-0.0839 ug/L	-0.0839 ppb	22:13:51
3	Co 228.616†	-49.4	-11.0	-0.2895 ug/L	-0.2895 ppb	22:13:51
3	Cr 267.716†	105.3	11.5	0.1530 ug/L	0.1530 ppb	22:13:51
3	Cu 324.752†	6538.7	258.1	0.8359 ug/L	0.8359 ppb	22:13:31
3	Mn 257.610†	937.8	495.7	0.6512 ug/L	0.6512 ppb	22:13:51
3	Mo 202.031†	14.8	0.7	0.0687 ug/L	0.0687 ppb	22:13:51
3	Ni 231.604†	70.1	-22.7	-0.7086 ug/L	-0.7086 ppb	22:13:51
3	P 214.914†	203.5	37.5	26.766 ug/L	26.766 ppb	22:13:51
3	Pb 220.353†	-55.5	2.7	0.4006 ug/L	0.4006 ppb	22:13:51
3	S 181.975 Axial†	30.0	5.9	10.377 ug/L	10.377 ppb	22:13:51
3	Sb 206.836†	25.7	-0.6	-0.2493 ug/L	-0.2493 ppb	22:13:51
3	Se 196.026†	-20.5	-3.8	-2.8926 ug/L	-2.8926 ppb	22:13:51
3	Si 251.611†	596.4	77.5	2.8857 ug/L	2.8857 ppb	22:13:51
3	Sn 189.927†	6.9	3.9	0.8578 ug/L	0.8578 ppb	22:13:51
3	Ti 334.940†	-506.9	570.9	0.9736 ug/L	0.9736 ppb	22:13:31
3	Tl 190.801†	-22.5	2.3	0.9081 ug/L	0.9081 ppb	22:13:51
3	U 409.014†	-1818.8	196.3	5.7699 ug/L	5.7699 ppb	22:13:31
3	V 292.402†	-1253.6	160.1	1.2405 ug/L	1.2405 ppb	22:13:31
3	Zn 213.857†	675.4	76.4	0.9052 ug/L	0.9052 ppb	22:13:51
3	SiO2†	685.9	140.1	11.191 ug/L	11.191 ppb	22:14:06

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	825884.0	98.336 %		0.5051			0.51%
Sc Radial	4104.9	102 %		1.0			1.01%
Y 371.029	703543.7	98.250 %		0.4928			0.50%
Y RADIAL	4560.5	100.9 %		1.94			1.93%
Ag 328.068†	-81.5	-0.3902 ug/L		0.17625	-0.3902 ppb	0.17625	45.17%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	13.5	14.423 ug/L		6.2642	14.423 ppb	6.2642	43.43%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	-4.8	-2.5356 ug/L		2.29914	-2.5356 ppb	2.29914	90.67%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	2.9	0.0705 ug/L		0.21542	0.0705 ppb	0.21542	305.70%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	0.7	0.0105 ug/L		0.08787	0.0105 ppb	0.08787	834.35%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	-174.2	-0.0696 ug/L		0.04741	-0.0696 ppb	0.04741	68.15%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	4.7	9.6422 ug/L		5.61821	9.6422 ppb	5.61821	58.27%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated						
Cd 226.502†	-3.4	-0.0540 ug/L	0.06678	-0.0540 ppb	0.06678	123.75%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-11.6	-0.3046 ug/L	0.13404	-0.3046 ppb	0.13404	44.01%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	18.3	0.2446 ug/L	0.08878	0.2446 ppb	0.08878	36.30%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	217.1	0.7053 ug/L	0.11646	0.7053 ppb	0.11646	16.51%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	5.4	67.689 ug/L	23.5848	67.689 ppb	23.5848	34.84%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	-296.7	-59.254 ug/L	10.9373	-59.254 ppb	10.9373	18.46%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	2.6	114.29 ug/L	42.211	114.29 ppb	42.211	36.93%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	671.6	0.8831 ug/L	0.31701	0.8831 ppb	0.31701	35.90%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	-1.9	-0.1613 ug/L	0.20013	-0.1613 ppb	0.20013	124.07%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	89.7	35.243 ug/L	6.1514	35.243 ppb	6.1514	17.45%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	-16.1	-0.5036 ug/L	0.57247	-0.5036 ppb	0.57247	113.68%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	30.1	21.444 ug/L	6.7506	21.444 ppb	6.7506	31.48%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	7.1	1.0640 ug/L	0.89308	1.0640 ppb	0.89308	83.94%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	3.0	5.2322 ug/L	4.46544	5.2322 ppb	4.46544	85.34%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	1.8	0.8008 ug/L	1.06124	0.8008 ppb	1.06124	132.52%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-1.9	-1.2947 ug/L	3.54430	-1.2947 ppb	3.54430	273.75%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	124.5	4.6367 ug/L	2.27860	4.6367 ppb	2.27860	49.14%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	9.4	2.0744 ug/L	1.15347	2.0744 ppb	1.15347	55.60%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	-7.6	-0.0650 ug/L	0.05348	-0.0650 ppb	0.05348	82.29%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	294.0	0.4958 ug/L	0.41544	0.4958 ppb	0.41544	83.79%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	0.3	0.1225 ug/L	1.27115	0.1225 ppb	1.27115	>999.9%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	141.2	4.1462 ug/L	1.77130	4.1462 ppb	1.77130	42.72%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	105.7	0.8119 ug/L	0.81663	0.8119 ppb	0.81663	100.58%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	89.5	1.0551 ug/L	0.14183	1.0551 ppb	0.14183	13.44%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	79.1	6.3221 ug/L	4.77432	6.3221 ppb	4.77432	75.52%
QC value within limits for SiO2 Recovery = Not calculated						
All analyte(s) passed QC.						

Sequence No.: 59

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 3/25/2010 23:20:08

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	3978.3	3978.3	98.6 %		23:22:20
1	Y RADIAL	4504.8	4504.8	99.71 %		23:22:00
1	Al 396.153Radial†	4368.7	4509.3	4781.7 ug/L	4781.7 ppb	23:22:00
1	Ca 317.933Radial†	2422.5	2439.1	4955.6 ug/L	4955.6 ppb	23:22:20
1	Fe 238.204 Radial†	403.1	399.7	5013.1 ug/L	5013.1 ppb	23:22:20
1	K 766.490 Radial†	26505.5	24072.1	4799.3 ug/L	4799.3 ppb	23:22:00
1	Mg 279.077 IEC†	113.7	114.6	5004.8 ug/L	5004.8 ppb	23:22:20
1	Na 589.592 Radial†	24350.4	25151.1	9877.2 ug/L	9877.2 ppb	23:22:00
1	Sr 421.552†	55059.5	55757.7	474.77 ug/L	474.77 ppb	23:22:00
1	Sc 361.383	843509.8	843509.8	100.44 %		23:23:18
1	Y 371.029	709207.5	709207.5	99.041 %		23:23:18
1	Ag 328.068†	99691.6	99006.3	502.19 ug/L	502.19 ppb	23:23:23
1	As 188.979†	888.1	905.1	489.46 ug/L	489.46 ppb	23:23:43
1	B 249.677†	17148.8	17324.6	473.95 ug/L	473.95 ppb	23:23:23
1	Ba 233.527†	52539.1	52292.9	491.45 ug/L	491.45 ppb	23:23:23
1	Be 313.107†	1217695.7	1216682.8	495.09 ug/L	495.09 ppb	23:23:18
1	Cd 226.502†	35139.8	35154.0	495.70 ug/L	495.70 ppb	23:23:23
1	Co 228.616†	19513.4	19467.8	506.77 ug/L	506.77 ppb	23:23:23
1	Cr 267.716†	37920.1	37660.9	491.34 ug/L	491.34 ppb	23:23:23
1	Cu 324.752†	157772.5	150736.2	488.75 ug/L	488.75 ppb	23:23:23
1	Mn 257.610†	383451.9	381338.2	500.62 ug/L	500.62 ppb	23:23:18
1	Mo 202.031†	5691.1	5652.2	497.37 ug/L	497.37 ppb	23:23:43
1	Ni 231.604†	16138.4	15974.9	498.51 ug/L	498.51 ppb	23:23:23
1	P 214.914†	3631.7	3447.8	2382.9 ug/L	2382.9 ppb	23:23:43
1	Pb 220.353†	3244.5	3289.2	497.27 ug/L	497.27 ppb	23:23:43
1	S 181.975 Axial†	594.7	567.7	994.25 ug/L	994.25 ppb	23:23:43
1	Sb 206.836†	1220.2	1188.2	522.74 ug/L	522.74 ppb	23:23:43
1	Se 196.026†	617.3	631.6	521.51 ug/L	521.51 ppb	23:23:43
1	Si 251.611†	67764.1	66945.0	2486.5 ug/L	2486.5 ppb	23:23:23
1	Sn 189.927†	2253.1	2240.3	496.77 ug/L	496.77 ppb	23:23:43
1	Ti 334.940†	285754.4	285599.7	491.23 ug/L	491.23 ppb	23:23:23
1	Tl 190.801†	1230.0	1249.8	486.53 ug/L	486.53 ppb	23:23:43
1	U 409.014†	15362.6	17331.3	508.30 ug/L	508.30 ppb	23:23:23
1	V 292.402†	62530.2	63686.8	497.62 ug/L	497.62 ppb	23:23:23
1	Zn 213.857†	42218.9	41429.6	487.59 ug/L	487.59 ppb	23:23:23
1	SiO2†	69063.1	68210.5	5436.1 ug/L	5436.1 ppb	23:24:50
2	Sc Radial	3970.1	3970.1	98.4 %		23:22:45
2	Y RADIAL	4323.2	4323.2	95.69 %		23:22:25
2	Al 396.153Radial†	4456.2	4607.3	4885.9 ug/L	4885.9 ppb	23:22:25
2	Ca 317.933Radial†	2453.4	2475.6	5029.8 ug/L	5029.8 ppb	23:22:45
2	Fe 238.204 Radial†	407.2	404.7	5076.1 ug/L	5076.1 ppb	23:22:45
2	K 766.490 Radial†	27039.7	24670.4	4918.6 ug/L	4918.6 ppb	23:22:25
2	Mg 279.077 IEC†	114.5	115.6	5050.4 ug/L	5050.4 ppb	23:22:45
2	Na 589.592 Radial†	24731.0	25588.7	10049 ug/L	10049 ppb	23:22:25
2	Sr 421.552†	56372.3	57206.8	487.11 ug/L	487.11 ppb	23:22:25
2	Sc 361.383	829873.2	829873.2	98.811 %		23:23:49
2	Y 371.029	698250.0	698250.0	97.511 %		23:23:49
2	Ag 328.068†	100391.2	101345.4	514.02 ug/L	514.02 ppb	23:23:54
2	As 188.979†	886.0	917.5	496.20 ug/L	496.20 ppb	23:24:14
2	B 249.677†	17377.3	17836.5	487.99 ug/L	487.99 ppb	23:23:54
2	Ba 233.527†	52858.8	53476.1	502.57 ug/L	502.57 ppb	23:23:54
2	Be 313.107†	1196126.9	1214777.4	494.34 ug/L	494.34 ppb	23:23:49
2	Cd 226.502†	35235.7	35826.0	505.18 ug/L	505.18 ppb	23:23:54
2	Co 228.616†	19520.4	19794.1	515.25 ug/L	515.25 ppb	23:23:54
2	Cr 267.716†	38044.2	38406.9	501.06 ug/L	501.06 ppb	23:23:54
2	Cu 324.752†	158886.3	154444.7	500.77 ug/L	500.77 ppb	23:23:54
2	Mn 257.610†	377677.0	381767.5	501.19 ug/L	501.19 ppb	23:23:49
2	Mo 202.031†	5675.9	5730.0	504.22 ug/L	504.22 ppb	23:24:14
2	Ni 231.604†	16169.6	16270.5	507.74 ug/L	507.74 ppb	23:23:54

2	P 214.914†	3609.1	3484.3	2406.8 ug/L	2406.8 ppb	23:24:14
2	Pb 220.353†	3210.6	3308.0	500.13 ug/L	500.13 ppb	23:24:14
2	S 181.975 Axial†	593.7	576.5	1009.5 ug/L	1009.5 ppb	23:24:14
2	Sb 206.836†	1229.0	1217.2	535.29 ug/L	535.29 ppb	23:24:14
2	Se 196.026†	608.3	632.6	522.54 ug/L	522.54 ppb	23:24:14
2	Si 251.611†	67926.8	68218.4	2533.8 ug/L	2533.8 ppb	23:23:54
2	Sn 189.927†	2255.0	2279.0	505.35 ug/L	505.35 ppb	23:24:14
2	Ti 334.940†	287249.1	291787.6	501.87 ug/L	501.87 ppb	23:23:54
2	Tl 190.801†	1230.3	1270.1	494.45 ug/L	494.45 ppb	23:24:14
2	U 409.014†	15673.2	17896.9	524.91 ug/L	524.91 ppb	23:23:54
2	V 292.402†	62794.2	64977.1	507.67 ug/L	507.67 ppb	23:23:54
2	Zn 213.857†	42457.6	42361.8	498.58 ug/L	498.58 ppb	23:23:54
2	SiO2†	67986.3	68250.7	5439.2 ug/L	5439.2 ppb	23:24:55
3	Sc Radial	3989.0	3989.0	98.9 %		23:23:10
3	Y RADIAL	4429.4	4429.4	98.04 %		23:22:50
3	Al 396.153Radial†	4499.1	4629.2	4909.5 ug/L	4909.5 ppb	23:22:50
3	Ca 317.933Radial†	2462.0	2472.5	5023.5 ug/L	5023.5 ppb	23:23:10
3	Fe 238.204 Radial†	406.9	402.5	5048.1 ug/L	5048.1 ppb	23:23:10
3	K 766.490 Radial†	27032.1	24532.4	4891.1 ug/L	4891.1 ppb	23:22:50
3	Mg 279.077 IEC†	114.3	114.9	5017.8 ug/L	5017.8 ppb	23:23:10
3	Na 589.592 Radial†	24651.7	25389.4	9970.8 ug/L	9970.8 ppb	23:22:50
3	Sr 421.552†	56313.6	56875.9	484.29 ug/L	484.29 ppb	23:22:50
3	Sc 361.383	842604.3	842604.3	100.33 %		23:24:20
3	Y 371.029	709818.2	709818.2	99.126 %		23:24:20
3	Ag 328.068†	100834.1	100251.8	508.49 ug/L	508.49 ppb	23:24:25
3	As 188.979†	896.2	914.1	494.35 ug/L	494.35 ppb	23:24:45
3	B 249.677†	17440.4	17633.6	482.43 ug/L	482.43 ppb	23:24:25
3	Ba 233.527†	52842.0	52651.1	494.82 ug/L	494.82 ppb	23:24:25
3	Be 313.107†	1214791.6	1215091.2	494.46 ug/L	494.46 ppb	23:24:20
3	Cd 226.502†	35345.5	35396.6	499.13 ug/L	499.13 ppb	23:24:25
3	Co 228.616†	19563.5	19538.6	508.60 ug/L	508.60 ppb	23:24:25
3	Cr 267.716†	38105.4	37886.1	494.28 ug/L	494.28 ppb	23:24:25
3	Cu 324.752†	160043.0	153168.2	496.63 ug/L	496.63 ppb	23:24:25
3	Mn 257.610†	382288.1	380588.5	499.64 ug/L	499.64 ppb	23:24:20
3	Mo 202.031†	5681.5	5648.8	497.08 ug/L	497.08 ppb	23:24:45
3	Ni 231.604†	16180.6	16034.2	500.36 ug/L	500.36 ppb	23:24:25
3	P 214.914†	3627.2	3447.1	2380.9 ug/L	2380.9 ppb	23:24:45
3	Pb 220.353†	3222.0	3270.3	494.43 ug/L	494.43 ppb	23:24:45
3	S 181.975 Axial†	595.7	569.4	997.04 ug/L	997.04 ppb	23:24:45
3	Sb 206.836†	1222.6	1192.0	524.32 ug/L	524.32 ppb	23:24:45
3	Se 196.026†	600.9	615.9	509.15 ug/L	509.15 ppb	23:24:45
3	Si 251.611†	68136.5	67388.8	2503.0 ug/L	2503.0 ppb	23:24:25
3	Sn 189.927†	2247.0	2236.6	495.96 ug/L	495.96 ppb	23:24:45
3	Ti 334.940†	288521.9	288664.0	496.50 ug/L	496.50 ppb	23:24:25
3	Tl 190.801†	1237.1	1258.2	489.80 ug/L	489.80 ppb	23:24:45
3	U 409.014†	15865.1	17848.5	523.50 ug/L	523.50 ppb	23:24:25
3	V 292.402†	63178.2	64399.6	503.13 ug/L	503.13 ppb	23:24:25
3	Zn 213.857†	42580.9	41835.6	492.38 ug/L	492.38 ppb	23:24:25
3	SiO2†	67620.8	66846.8	5327.2 ug/L	5327.2 ppb	23:25:00

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	838662.4	99.858 %	0.9079			0.91%
Sc Radial	3979.2	98.6 %	0.24			0.24%
Y 371.029	705758.6	98.559 %	0.9091			0.92%
Y RADIAL	4419.1	97.81 %	2.020			2.07%
Ag 328.068†	100201.1	508.23 ug/L	5.923	508.23 ppb	5.923	1.17%
QC value within limits for Ag 328.068 Recovery = 101.65%						
Al 396.153Radial†	4581.9	4859.0 ug/L	68.02	4859.0 ppb	68.02	1.40%
QC value within limits for Al 396.153Radial Recovery = 97.18%						
As 188.979†	912.3	493.34 ug/L	3.486	493.34 ppb	3.486	0.71%
QC value within limits for As 188.979 Recovery = 98.67%						
B 249.677†	17598.2	481.46 ug/L	7.068	481.46 ppb	7.068	1.47%
QC value within limits for B 249.677 Recovery = 96.29%						
Ba 233.527†	52806.7	496.28 ug/L	5.699	496.28 ppb	5.699	1.15%
QC value within limits for Ba 233.527 Recovery = 99.26%						
Be 313.107†	1215517.1	494.63 ug/L	0.404	494.63 ppb	0.404	0.08%
QC value within limits for Be 313.107 Recovery = 98.93%						
Ca 317.933Radial†	2462.4	5003.0 ug/L	41.11	5003.0 ppb	41.11	0.82%

QC value within limits for Ca 317.933 Radial Recovery = 100.06%

Cd 226.502†	35458.9	500.00 ug/L	4.801	500.00 ppb	4.801	0.96%
QC value within limits for Cd 226.502 Recovery = 100.00%						
Co 228.616†	19600.2	510.21 ug/L	4.466	510.21 ppb	4.466	0.88%
QC value within limits for Co 228.616 Recovery = 102.04%						
Cr 267.716†	37984.6	495.56 ug/L	4.988	495.56 ppb	4.988	1.01%
QC value within limits for Cr 267.716 Recovery = 99.11%						
Cu 324.752†	152783.0	495.38 ug/L	6.106	495.38 ppb	6.106	1.23%
QC value within limits for Cu 324.752 Recovery = 99.08%						
Fe 238.204 Radial†	402.3	5045.7 ug/L	31.57	5045.7 ppb	31.57	0.63%
QC value within limits for Fe 238.204 Radial Recovery = 100.91%						
K 766.490 Radial†	24425.0	4869.7 ug/L	62.49	4869.7 ppb	62.49	1.28%
QC value within limits for K 766.490 Radial Recovery = 97.39%						
Mg 279.077 IEC†	115.0	5024.3 ug/L	23.52	5024.3 ppb	23.52	0.47%
QC value within limits for Mg 279.077 IEC Recovery = 100.49%						
Mn 257.610†	381231.4	500.49 ug/L	0.783	500.49 ppb	0.783	0.16%
QC value within limits for Mn 257.610 Recovery = 100.10%						
Mo 202.031†	5677.0	499.55 ug/L	4.040	499.55 ppb	4.040	0.81%
QC value within limits for Mo 202.031 Recovery = 99.91%						
Na 589.592 Radial†	25376.4	9965.7 ug/L	86.04	9965.7 ppb	86.04	0.86%
QC value within limits for Na 589.592 Radial Recovery = 99.66%						
Ni 231.604†	16093.2	502.20 ug/L	4.880	502.20 ppb	4.880	0.97%
QC value within limits for Ni 231.604 Recovery = 100.44%						
P 214.914†	3459.7	2390.2 ug/L	14.42	2390.2 ppb	14.42	0.60%
QC value within limits for P 214.914 Recovery = 95.61%						
Pb 220.353†	3289.2	497.28 ug/L	2.847	497.28 ppb	2.847	0.57%
QC value within limits for Pb 220.353 Recovery = 99.46%						
S 181.975 Axial†	571.2	1000.3 ug/L	8.14	1000.3 ppb	8.14	0.81%
QC value within limits for S 181.975 Axial Recovery = 100.03%						
Sb 206.836†	1199.1	527.45 ug/L	6.837	527.45 ppb	6.837	1.30%
QC value within limits for Sb 206.836 Recovery = 105.49%						
Se 196.026†	626.7	517.73 ug/L	7.452	517.73 ppb	7.452	1.44%
QC value within limits for Se 196.026 Recovery = 103.55%						
Si 251.611†	67517.4	2507.7 ug/L	24.02	2507.7 ppb	24.02	0.96%
QC value within limits for Si 251.611 Recovery = 100.31%						
Sn 189.927†	2251.9	499.36 ug/L	5.206	499.36 ppb	5.206	1.04%
QC value within limits for Sn 189.927 Recovery = 99.87%						
Sr 421.552†	56613.5	482.06 ug/L	6.466	482.06 ppb	6.466	1.34%
QC value within limits for Sr 421.552 Recovery = 96.41%						
Ti 334.940†	288683.8	496.54 ug/L	5.321	496.54 ppb	5.321	1.07%
QC value within limits for Ti 334.940 Recovery = 99.31%						
Tl 190.801†	1259.4	490.26 ug/L	3.977	490.26 ppb	3.977	0.81%
QC value within limits for Tl 190.801 Recovery = 98.05%						
U 409.014†	17692.2	518.90 ug/L	9.214	518.90 ppb	9.214	1.78%
QC value within limits for U 409.014 Recovery = 103.78%						
V 292.402†	64354.5	502.81 ug/L	5.034	502.81 ppb	5.034	1.00%
QC value within limits for V 292.402 Recovery = 100.56%						
Zn 213.857†	41875.7	492.85 ug/L	5.510	492.85 ppb	5.510	1.12%
QC value within limits for Zn 213.857 Recovery = 98.57%						
SiO2†	67769.4	5400.8 ug/L	63.79	5400.8 ppb	63.79	1.18%
QC value within limits for SiO2 Recovery = 101.00%						

All analyte(s) passed QC.

Sequence No.: 60
 Sample ID: CCB
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 6
 Date Collected: 3/25/2010 23:27:10
 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	4063.6	4063.6	101 %		23:29:02
1	Y RADIAL	4381.4	4381.4	96.98 %		23:29:02
1	Al 396.153Radial†	-68.7	11.4	12.209 ug/L	12.209 ppb	23:29:22
1	Ca 317.933Radial†	18.3	0.9	1.9209 ug/L	1.9209 ppb	23:29:22
1	Fe 238.204 Radial†	10.0	0.9	11.361 ug/L	11.361 ppb	23:29:22
1	K 766.490 Radial†	2390.7	-430.1	-85.869 ug/L	-85.869 ppb	23:29:02
1	Mg 279.077 IEC†	2.2	1.5	64.392 ug/L	64.392 ppb	23:29:22
1	Na 589.592 Radial†	-372.8	90.9	35.681 ug/L	35.681 ppb	23:29:02
1	Sr 421.552†	26.0	-44.2	-0.3767 ug/L	-0.3767 ppb	23:29:02
1	Sc 361.383	834128.9	834128.9	99.318 %		23:30:19
1	Y 371.029	710247.4	710247.4	99.186 %		23:30:19
1	Ag 328.068†	230.0	-21.8	-0.1053 ug/L	-0.1053 ppb	23:30:19
1	As 188.979†	-20.0	0.7	0.3929 ug/L	0.3929 ppb	23:30:39
1	B 249.677†	-336.4	-88.6	-2.4340 ug/L	-2.4340 ppb	23:30:39
1	Ba 233.527†	19.4	1.0	0.0112 ug/L	0.0112 ppb	23:30:39
1	Be 313.107†	-4390.0	-157.5	-0.0620 ug/L	-0.0620 ppb	23:30:19
1	Cd 226.502†	-164.6	0.7	0.0087 ug/L	0.0087 ppb	23:30:39
1	Co 228.616†	-63.1	-24.6	-0.6427 ug/L	-0.6427 ppb	23:30:39
1	Cr 267.716†	58.4	-36.2	-0.4693 ug/L	-0.4693 ppb	23:30:39
1	Cu 324.752†	6589.2	281.7	0.9129 ug/L	0.9129 ppb	23:30:19
1	Mn 257.610†	792.2	345.2	0.4515 ug/L	0.4515 ppb	23:30:39
1	Mo 202.031†	11.1	-3.0	-0.2656 ug/L	-0.2656 ppb	23:30:39
1	Ni 231.604†	68.2	-24.9	-0.7780 ug/L	-0.7780 ppb	23:30:39
1	P 214.914†	193.8	26.9	19.180 ug/L	19.180 ppb	23:30:39
1	Pb 220.353†	-46.7	11.8	1.7824 ug/L	1.7824 ppb	23:30:39
1	S 181.975 Axial†	31.2	7.0	12.282 ug/L	12.282 ppb	23:30:39
1	Sb 206.836†	27.8	1.3	0.5567 ug/L	0.5567 ppb	23:30:39
1	Se 196.026†	-19.7	-2.9	-2.2472 ug/L	-2.2472 ppb	23:30:39
1	Si 251.611†	572.2	50.6	1.8889 ug/L	1.8889 ppb	23:30:39
1	Sn 189.927†	3.8	0.8	0.1740 ug/L	0.1740 ppb	23:30:39
1	Ti 334.940†	-594.6	484.7	0.8281 ug/L	0.8281 ppb	23:30:19
1	Tl 190.801†	-25.7	-0.8	-0.3089 ug/L	-0.3089 ppb	23:30:39
1	U 409.014†	-1949.9	71.9	2.1163 ug/L	2.1163 ppb	23:30:19
1	V 292.402†	-1323.6	94.8	0.7302 ug/L	0.7302 ppb	23:30:19
1	Zn 213.857†	668.1	66.2	0.7887 ug/L	0.7887 ppb	23:30:39
1	SiO2†	622.1	73.0	5.8387 ug/L	5.8387 ppb	23:31:50
2	Sc Radial	4062.5	4062.5	101 %		23:29:27
2	Y RADIAL	4404.9	4404.9	97.50 %		23:29:27
2	Al 396.153Radial†	-31.7	48.2	51.344 ug/L	51.344 ppb	23:29:47
2	Ca 317.933Radial†	25.9	8.5	17.279 ug/L	17.279 ppb	23:29:47
2	Fe 238.204 Radial†	16.0	6.9	86.584 ug/L	86.584 ppb	23:29:47
2	K 766.490 Radial†	2529.7	-291.4	-58.183 ug/L	-58.183 ppb	23:29:27
2	Mg 279.077 IEC†	2.3	1.6	68.793 ug/L	68.793 ppb	23:29:47
2	Na 589.592 Radial†	-444.7	19.3	7.5979 ug/L	7.5979 ppb	23:29:27
2	Sr 421.552†	21.9	-48.3	-0.4117 ug/L	-0.4117 ppb	23:29:27
2	Sc 361.383	821669.6	821669.6	97.835 %		23:30:44
2	Y 371.029	700250.7	700250.7	97.790 %		23:30:44
2	Ag 328.068†	128.5	-122.1	-0.5914 ug/L	-0.5914 ppb	23:30:44
2	As 188.979†	-18.2	2.2	1.2039 ug/L	1.2039 ppb	23:31:04
2	B 249.677†	-343.5	-100.9	-2.7880 ug/L	-2.7880 ppb	23:31:04
2	Ba 233.527†	-1.0	-19.5	-0.1807 ug/L	-0.1807 ppb	23:31:04
2	Be 313.107†	-4488.7	-325.3	-0.1317 ug/L	-0.1317 ppb	23:30:44
2	Cd 226.502†	-174.1	-11.6	-0.1720 ug/L	-0.1720 ppb	23:31:04
2	Co 228.616†	-43.3	-5.4	-0.1412 ug/L	-0.1412 ppb	23:31:04
2	Cr 267.716†	88.1	-5.0	-0.0564 ug/L	-0.0564 ppb	23:31:04
2	Cu 324.752†	6445.8	235.7	0.7680 ug/L	0.7680 ppb	23:30:44
2	Mn 257.610†	840.3	406.5	0.5390 ug/L	0.5390 ppb	23:31:04
2	Mo 202.031†	17.3	3.5	0.3129 ug/L	0.3129 ppb	23:31:04
2	Ni 231.604†	75.7	-16.2	-0.5066 ug/L	-0.5066 ppb	23:31:04

2	P 214.914†	198.9	35.1	25.002 ug/L	25.002 ppb	23:31:04
2	Pb 220.353†	-54.9	2.7	0.4100 ug/L	0.4100 ppb	23:31:04
2	S 181.975 Axial†	32.3	8.6	15.113 ug/L	15.113 ppb	23:31:04
2	Sb 206.836†	35.8	9.9	4.2252 ug/L	4.2252 ppb	23:31:04
2	Se 196.026†	-25.4	-9.0	-6.8957 ug/L	-6.8957 ppb	23:31:04
2	Si 251.611†	601.8	89.7	3.3353 ug/L	3.3353 ppb	23:31:04
2	Sn 189.927†	5.7	2.7	0.6040 ug/L	0.6040 ppb	23:31:04
2	Ti 334.940†	-969.7	92.2	0.1545 ug/L	0.1545 ppb	23:30:44
2	Tl 190.801†	-30.8	-6.4	-2.4737 ug/L	-2.4737 ppb	23:31:04
2	U 409.014†	-1935.2	57.1	1.6710 ug/L	1.6710 ppb	23:30:44
2	V 292.402†	-1428.7	-32.8	-0.2564 ug/L	-0.2564 ppb	23:30:44
2	Zn 213.857†	655.4	63.5	0.7436 ug/L	0.7436 ppb	23:31:04
2	SiO2†	589.8	49.5	3.9426 ug/L	3.9426 ppb	23:32:10
3	Sc Radial	4177.6	4177.6	104 %		23:29:52
3	Y RADIAL	4495.7	4495.7	99.51 %		23:29:52
3	Al 396.153Radial†	-63.0	18.8	20.070 ug/L	20.070 ppb	23:30:12
3	Ca 317.933Radial†	20.2	2.3	4.7125 ug/L	4.7125 ppb	23:30:12
3	Fe 238.204 Radial†	13.3	3.9	48.367 ug/L	48.367 ppb	23:30:12
3	K 766.490 Radial†	2443.5	-443.9	-88.616 ug/L	-88.616 ppb	23:29:52
3	Mg 279.077 IEC†	2.1	1.3	55.893 ug/L	55.893 ppb	23:30:12
3	Na 589.592 Radial†	-441.8	34.2	13.450 ug/L	13.450 ppb	23:29:52
3	Sr 421.552†	20.1	-50.6	-0.4308 ug/L	-0.4308 ppb	23:29:52
3	Sc 361.383	828240.5	828240.5	98.617 %		23:31:09
3	Y 371.029	705568.3	705568.3	98.533 %		23:31:09
3	Ag 328.068†	96.3	-155.8	-0.7730 ug/L	-0.7730 ppb	23:31:09
3	As 188.979†	-26.5	-6.0	-3.2254 ug/L	-3.2254 ppb	23:31:29
3	B 249.677†	-340.4	-95.0	-2.6190 ug/L	-2.6190 ppb	23:31:29
3	Ba 233.527†	10.6	-7.8	-0.0711 ug/L	-0.0711 ppb	23:31:29
3	Be 313.107†	-4430.6	-230.0	-0.0934 ug/L	-0.0934 ppb	23:31:09
3	Cd 226.502†	-168.2	-4.2	-0.0637 ug/L	-0.0637 ppb	23:31:29
3	Co 228.616†	-49.5	-11.3	-0.2939 ug/L	-0.2939 ppb	23:31:29
3	Cr 267.716†	84.7	-9.0	-0.1139 ug/L	-0.1139 ppb	23:31:29
3	Cu 324.752†	6468.5	206.4	0.6699 ug/L	0.6699 ppb	23:31:09
3	Mn 257.610†	736.4	294.3	0.3887 ug/L	0.3887 ppb	23:31:29
3	Mo 202.031†	16.2	2.2	0.1985 ug/L	0.1985 ppb	23:31:29
3	Ni 231.604†	64.0	-28.7	-0.8962 ug/L	-0.8962 ppb	23:31:29
3	P 214.914†	192.7	27.2	19.356 ug/L	19.356 ppb	23:31:29
3	Pb 220.353†	-51.3	6.8	1.0198 ug/L	1.0198 ppb	23:31:29
3	S 181.975 Axial†	30.7	6.8	11.892 ug/L	11.892 ppb	23:31:29
3	Sb 206.836†	28.7	2.5	1.0771 ug/L	1.0771 ppb	23:31:29
3	Se 196.026†	-25.6	-9.0	-7.0151 ug/L	-7.0151 ppb	23:31:29
3	Si 251.611†	584.9	67.6	2.5163 ug/L	2.5163 ppb	23:31:29
3	Sn 189.927†	4.3	1.3	0.2784 ug/L	0.2784 ppb	23:31:29
3	Ti 334.940†	-1060.0	8.4	0.0090 ug/L	0.0090 ppb	23:31:09
3	Tl 190.801†	-26.9	-2.2	-0.8409 ug/L	-0.8409 ppb	23:31:29
3	U 409.014†	-1885.2	123.5	3.6296 ug/L	3.6296 ppb	23:31:09
3	V 292.402†	-1395.4	12.6	0.1007 ug/L	0.1007 ppb	23:31:09
3	Zn 213.857†	650.2	52.9	0.6260 ug/L	0.6260 ppb	23:31:29
3	SiO2†	617.6	72.9	5.8193 ug/L	5.8193 ppb	23:32:30

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	828013.0	98.590 %	0.7421			0.75%
Sc Radial	4101.2	102 %	1.6			1.61%
Y 371.029	705355.5	98.503 %	0.6985			0.71%
Y RADIAL	4427.3	97.99 %	1.336			1.36%
Ag 328.068†	-99.9	-0.4899 ug/L	0.34527	-0.4899 ppb	0.34527	70.48%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	26.2	27.875 ug/L	20.7018	27.875 ppb	20.7018	74.27%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-1.0	-0.5429 ug/L	2.35826	-0.5429 ppb	2.35826	434.40%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-94.8	-2.6137 ug/L	0.17703	-2.6137 ppb	0.17703	6.77%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	-8.8	-0.0802 ug/L	0.09628	-0.0802 ppb	0.09628	120.02%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	-237.6	-0.0957 ug/L	0.03491	-0.0957 ppb	0.03491	36.47%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	3.9	7.9708 ug/L	8.18112	7.9708 ppb	8.18112	102.64%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated					
Cd 226.502†	-5.0	-0.0757 ug/L	0.09093	-0.0757 ppb	0.09093 120.20%
QC value within limits for Cd 226.502 Recovery = Not calculated					
Co 228.616†	-13.8	-0.3593 ug/L	0.25703	-0.3593 ppb	0.25703 71.54%
QC value within limits for Co 228.616 Recovery = Not calculated					
Cr 267.716†	-16.7	-0.2132 ug/L	0.22367	-0.2132 ppb	0.22367 104.90%
QC value within limits for Cr 267.716 Recovery = Not calculated					
Cu 324.752†	241.3	0.7836 ug/L	0.12223	0.7836 ppb	0.12223 15.60%
QC value within limits for Cu 324.752 Recovery = Not calculated					
Fe 238.204 Radial†	3.9	48.771 ug/L	37.6133	48.771 ppb	37.6133 77.12%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated					
K 766.490 Radial†	-388.4	-77.556 ug/L	16.8337	-77.556 ppb	16.8337 21.71%
QC value within limits for K 766.490 Radial Recovery = Not calculated					
Mg 279.077 IEC†	1.4	63.026 ug/L	6.5577	63.026 ppb	6.5577 10.40%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated					
Mn 257.610†	348.7	0.4597 ug/L	0.07552	0.4597 ppb	0.07552 16.43%
QC value within limits for Mn 257.610 Recovery = Not calculated					
Mo 202.031†	0.9	0.0820 ug/L	0.30637	0.0820 ppb	0.30637 373.82%
QC value within limits for Mo 202.031 Recovery = Not calculated					
Na 589.592 Radial†	48.2	18.910 ug/L	14.8164	18.910 ppb	14.8164 78.35%
QC value within limits for Na 589.592 Radial Recovery = Not calculated					
Ni 231.604†	-23.3	-0.7269 ug/L	0.19971	-0.7269 ppb	0.19971 27.47%
QC value within limits for Ni 231.604 Recovery = Not calculated					
P 214.914†	29.7	21.179 ug/L	3.3117	21.179 ppb	3.3117 15.64%
QC value within limits for P 214.914 Recovery = Not calculated					
Pb 220.353†	7.1	1.0707 ug/L	0.68765	1.0707 ppb	0.68765 64.22%
QC value within limits for Pb 220.353 Recovery = Not calculated					
S 181.975 Axial†	7.5	13.096 ug/L	1.7579	13.096 ppb	1.7579 13.42%
QC value within limits for S 181.975 Axial Recovery = Not calculated					
Sb 206.836†	4.6	1.9530 ug/L	1.98493	1.9530 ppb	1.98493 101.63%
QC value within limits for Sb 206.836 Recovery = Not calculated					
Se 196.026†	-7.0	-5.3860 ug/L	2.71896	-5.3860 ppb	2.71896 50.48%
QC value within limits for Se 196.026 Recovery = Not calculated					
Si 251.611†	69.3	2.5802 ug/L	0.72531	2.5802 ppb	0.72531 28.11%
QC value within limits for Si 251.611 Recovery = Not calculated					
Sn 189.927†	1.6	0.3521 ug/L	0.22427	0.3521 ppb	0.22427 63.69%
QC value within limits for Sn 189.927 Recovery = Not calculated					
Sr 421.552†	-47.7	-0.4064 ug/L	0.02743	-0.4064 ppb	0.02743 6.75%
QC value within limits for Sr 421.552 Recovery = Not calculated					
Ti 334.940†	195.1	0.3306 ug/L	0.43699	0.3306 ppb	0.43699 132.20%
QC value within limits for Ti 334.940 Recovery = Not calculated					
Tl 190.801†	-3.1	-1.2078 ug/L	1.12807	-1.2078 ppb	1.12807 93.40%
QC value within limits for Tl 190.801 Recovery = Not calculated					
U 409.014†	84.2	2.4723 ug/L	1.02668	2.4723 ppb	1.02668 41.53%
QC value within limits for U 409.014 Recovery = Not calculated					
V 292.402†	24.9	0.1915 ug/L	0.49953	0.1915 ppb	0.49953 260.83%
QC value within limits for V 292.402 Recovery = Not calculated					
Zn 213.857†	60.9	0.7195 ug/L	0.08399	0.7195 ppb	0.08399 11.67%
QC value within limits for Zn 213.857 Recovery = Not calculated					
SiO2†	65.1	5.2002 ug/L	1.08914	5.2002 ppb	1.08914 20.94%
QC value within limits for SiO2 Recovery = Not calculated					

All analyte(s) passed QC.

Sequence No.: 69

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 3/26/2010 00:31:46

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4031.0	4031.0	99.9 %		00:33:58
1	Y RADIAL	4461.7	4461.7	98.75 %		00:33:38
1	Al 396.153Radial†	4275.1	4357.7	4620.2 ug/L	4620.2 ppb	00:33:38
1	Ca 317.933Radial†	2439.0	2423.5	4923.9 ug/L	4923.9 ppb	00:33:58
1	Fe 238.204 Radial†	410.2	401.5	5035.9 ug/L	5035.9 ppb	00:33:58
1	K 766.490 Radial†	26383.1	23598.1	4704.6 ug/L	4704.6 ppb	00:33:38
1	Mg 279.077 IEC†	114.3	113.7	4965.9 ug/L	4965.9 ppb	00:33:58
1	Na 589.592 Radial†	25290.7	25769.1	10120 ug/L	10120 ppb	00:33:38
1	Sr 421.552†	55619.4	55587.9	473.33 ug/L	473.33 ppb	00:33:38
1	Sc 361.383	843174.0	843174.0	100.40 %		00:34:56
1	Y 371.029	708828.2	708828.2	98.988 %		00:34:56
1	Ag 328.068†	100476.0	99827.1	506.34 ug/L	506.34 ppb	00:35:01
1	As 188.979†	885.5	902.9	488.31 ug/L	488.31 ppb	00:35:21
1	B 249.677†	17331.6	17513.6	479.14 ug/L	479.14 ppb	00:35:01
1	Ba 233.527†	52801.8	52575.5	494.11 ug/L	494.11 ppb	00:35:01
1	Be 313.107†	1205411.1	1204929.5	490.33 ug/L	490.33 ppb	00:34:56
1	Cd 226.502†	35362.9	35390.1	499.04 ug/L	499.04 ppb	00:35:01
1	Co 228.616†	19585.2	19547.1	508.82 ug/L	508.82 ppb	00:35:01
1	Cr 267.716†	38040.4	37795.7	493.10 ug/L	493.10 ppb	00:35:01
1	Cu 324.752†	159076.9	152098.0	493.16 ug/L	493.16 ppb	00:35:01
1	Mn 257.610†	380414.6	378464.9	496.86 ug/L	496.86 ppb	00:34:56
1	Mo 202.031†	5661.4	5624.9	494.97 ug/L	494.97 ppb	00:35:21
1	Ni 231.604†	16221.2	16063.7	501.28 ug/L	501.28 ppb	00:35:01
1	P 214.914†	3616.8	3434.4	2372.4 ug/L	2372.4 ppb	00:35:21
1	Pb 220.353†	3211.7	3257.9	492.50 ug/L	492.50 ppb	00:35:21
1	S 181.975 Axial†	591.3	564.5	988.67 ug/L	988.67 ppb	00:35:21
1	Sb 206.836†	1227.8	1196.3	526.14 ug/L	526.14 ppb	00:35:21
1	Se 196.026†	605.1	619.6	511.98 ug/L	511.98 ppb	00:35:21
1	Si 251.611†	68067.8	67274.4	2498.7 ug/L	2498.7 ppb	00:35:01
1	Sn 189.927†	2256.7	2244.8	497.75 ug/L	497.75 ppb	00:35:21
1	Ti 334.940†	287656.5	287607.7	494.68 ug/L	494.68 ppb	00:35:01
1	Tl 190.801†	1232.1	1252.3	487.50 ug/L	487.50 ppb	00:35:21
1	U 409.014†	15769.3	17742.5	520.39 ug/L	520.39 ppb	00:35:01
1	V 292.402†	63044.2	64223.6	501.74 ug/L	501.74 ppb	00:35:01
1	Zn 213.857†	42472.3	41698.7	490.76 ug/L	490.76 ppb	00:35:01
1	SiO2†	66937.9	66121.1	5269.3 ug/L	5269.3 ppb	00:36:28
2	Sc Radial	3981.0	3981.0	98.7 %		00:34:23
2	Y RADIAL	4503.5	4503.5	99.68 %		00:34:03
2	Al 396.153Radial†	4533.7	4673.6	4956.6 ug/L	4956.6 ppb	00:34:03
2	Ca 317.933Radial†	2440.5	2455.7	4989.4 ug/L	4989.4 ppb	00:34:23
2	Fe 238.204 Radial†	409.8	406.3	5095.6 ug/L	5095.6 ppb	00:34:23
2	K 766.490 Radial†	27216.1	24774.3	4939.2 ug/L	4939.2 ppb	00:34:03
2	Mg 279.077 IEC†	112.4	113.2	4944.8 ug/L	4944.8 ppb	00:34:23
2	Na 589.592 Radial†	26024.5	26831.0	10537 ug/L	10537 ppb	00:34:03
2	Sr 421.552†	57736.2	58432.9	497.55 ug/L	497.55 ppb	00:34:03
2	Sc 361.383	835269.9	835269.9	99.454 %		00:35:27
2	Y 371.029	703430.2	703430.2	98.234 %		00:35:27
2	Ag 328.068†	100569.1	100867.8	511.62 ug/L	511.62 ppb	00:35:32
2	As 188.979†	896.2	922.0	498.59 ug/L	498.59 ppb	00:35:52
2	B 249.677†	17342.3	17687.6	483.90 ug/L	483.90 ppb	00:35:32
2	Ba 233.527†	52964.5	53236.7	500.32 ug/L	500.32 ppb	00:35:32
2	Be 313.107†	1192126.3	1202933.6	489.53 ug/L	489.53 ppb	00:35:27
2	Cd 226.502†	35460.2	35821.2	505.11 ug/L	505.11 ppb	00:35:32
2	Co 228.616†	19544.9	19691.1	512.57 ug/L	512.57 ppb	00:35:32
2	Cr 267.716†	38139.2	38253.6	499.07 ug/L	499.07 ppb	00:35:32
2	Cu 324.752†	159323.1	153845.0	498.83 ug/L	498.83 ppb	00:35:32
2	Mn 257.610†	376191.2	377804.0	496.00 ug/L	496.00 ppb	00:35:27
2	Mo 202.031†	5671.5	5688.4	500.56 ug/L	500.56 ppb	00:35:52
2	Ni 231.604†	16221.6	16217.1	506.07 ug/L	506.07 ppb	00:35:32

2	P 214.914†	3619.0	3470.6	2397.4 ug/L	2397.4 ppb	00:35:52
2	Pb 220.353†	3206.8	3283.2	496.39 ug/L	496.39 ppb	00:35:52
2	S 181.975 Axial†	594.6	573.4	1004.2 ug/L	1004.2 ppb	00:35:52
2	Sb 206.836†	1213.6	1193.6	525.12 ug/L	525.12 ppb	00:35:52
2	Se 196.026†	608.0	628.3	519.21 ug/L	519.21 ppb	00:35:52
2	Si 251.611†	68182.0	68030.8	2526.8 ug/L	2526.8 ppb	00:35:32
2	Sn 189.927†	2238.6	2247.8	498.44 ug/L	498.44 ppb	00:35:52
2	Ti 334.940†	288155.2	290820.5	500.21 ug/L	500.21 ppb	00:35:32
2	Tl 190.801†	1228.6	1260.4	490.67 ug/L	490.67 ppb	00:35:52
2	U 409.014†	15712.3	17833.8	523.05 ug/L	523.05 ppb	00:35:32
2	V 292.402†	63056.1	64829.8	506.48 ug/L	506.48 ppb	00:35:32
2	Zn 213.857†	42536.8	42163.9	496.24 ug/L	496.24 ppb	00:35:32
2	SiO2†	68709.0	68532.8	5461.8 ug/L	5461.8 ppb	00:36:33
3	Sc Radial	4024.3	4024.3	99.8 %		00:34:49
3	Y RADIAL	4450.1	4450.1	98.50 %		00:34:29
3	Al 396.153Radial†	4481.8	4572.0	4848.7 ug/L	4848.7 ppb	00:34:29
3	Ca 317.933Radial†	2468.9	2457.5	4993.1 ug/L	4993.1 ppb	00:34:49
3	Fe 238.204 Radial†	418.3	410.3	5145.7 ug/L	5145.7 ppb	00:34:49
3	K 766.490 Radial†	27025.8	24286.3	4841.8 ug/L	4841.8 ppb	00:34:29
3	Mg 279.077 IEC†	118.5	118.1	5158.7 ug/L	5158.7 ppb	00:34:49
3	Na 589.592 Radial†	25862.0	26383.9	10361 ug/L	10361 ppb	00:34:29
3	Sr 421.552†	57035.9	57100.4	486.20 ug/L	486.20 ppb	00:34:29
3	Sc 361.383	845317.1	845317.1	100.65 %		00:35:58
3	Y 371.029	712047.8	712047.8	99.438 %		00:35:58
3	Ag 328.068†	100261.2	99360.0	504.01 ug/L	504.01 ppb	00:36:03
3	As 188.979†	895.5	910.5	492.40 ug/L	492.40 ppb	00:36:23
3	B 249.677†	17276.4	17415.0	476.42 ug/L	476.42 ppb	00:36:03
3	Ba 233.527†	52691.9	52332.9	491.84 ug/L	491.84 ppb	00:36:03
3	Be 313.107†	1206256.5	1202725.4	489.43 ug/L	489.43 ppb	00:35:58
3	Cd 226.502†	35195.7	35134.7	495.42 ug/L	495.42 ppb	00:36:03
3	Co 228.616†	19523.2	19436.0	505.93 ug/L	505.93 ppb	00:36:03
3	Cr 267.716†	38007.6	37667.0	491.43 ug/L	491.43 ppb	00:36:03
3	Cu 324.752†	158628.9	151251.2	490.42 ug/L	490.42 ppb	00:36:03
3	Mn 257.610†	379512.4	376607.9	494.42 ug/L	494.42 ppb	00:35:58
3	Mo 202.031†	5674.6	5623.7	494.87 ug/L	494.87 ppb	00:36:23
3	Ni 231.604†	16213.0	16014.6	499.75 ug/L	499.75 ppb	00:36:03
3	P 214.914†	3626.2	3434.6	2373.0 ug/L	2373.0 ppb	00:36:23
3	Pb 220.353†	3207.8	3245.9	490.73 ug/L	490.73 ppb	00:36:23
3	S 181.975 Axial†	598.9	570.7	999.40 ug/L	999.40 ppb	00:36:23
3	Sb 206.836†	1229.1	1194.5	525.31 ug/L	525.31 ppb	00:36:23
3	Se 196.026†	614.4	627.4	518.56 ug/L	518.56 ppb	00:36:23
3	Si 251.611†	67750.9	66787.7	2480.6 ug/L	2480.6 ppb	00:36:03
3	Sn 189.927†	2245.4	2227.8	494.00 ug/L	494.00 ppb	00:36:23
3	Ti 334.940†	287035.4	286264.2	492.36 ug/L	492.36 ppb	00:36:03
3	Tl 190.801†	1237.3	1254.4	488.29 ug/L	488.29 ppb	00:36:23
3	U 409.014†	15745.0	17678.4	518.49 ug/L	518.49 ppb	00:36:03
3	V 292.402†	62897.1	63918.3	499.37 ug/L	499.37 ppb	00:36:03
3	Zn 213.857†	42375.8	41495.5	488.34 ug/L	488.34 ppb	00:36:03
3	SiO2†	68267.2	67272.7	5361.3 ug/L	5361.3 ppb	00:36:39

Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	841253.7	100.17 %		0.630			0.63%
Sc Radial	4012.1	99.5 %		0.67			0.68%
Y 371.029	708102.1	98.887 %		0.6081			0.61%
Y RADIAL	4471.8	98.98 %		0.621			0.63%
Ag 328.068†	100018.3	507.32 ug/L		3.900	507.32 ppb	3.900	0.77%
QC value within limits for Ag 328.068 Recovery = 101.46%							
Al 396.153Radial†	4534.4	4808.5 ug/L		171.76	4808.5 ppb	171.76	3.57%
QC value within limits for Al 396.153Radial Recovery = 96.17%							
As 188.979†	911.8	493.10 ug/L		5.175	493.10 ppb	5.175	1.05%
QC value within limits for As 188.979 Recovery = 98.62%							
B 249.677†	17538.7	479.82 ug/L		3.788	479.82 ppb	3.788	0.79%
QC value within limits for B 249.677 Recovery = 95.96%							
Ba 233.527†	52715.0	495.42 ug/L		4.393	495.42 ppb	4.393	0.89%
QC value within limits for Ba 233.527 Recovery = 99.08%							
Be 313.107†	1203529.5	489.76 ug/L		0.493	489.76 ppb	0.493	0.10%
QC value within limits for Be 313.107 Recovery = 97.95%							
Ca 317.933Radial†	2445.6	4968.8 ug/L		38.95	4968.8 ppb	38.95	0.78%

QC value within limits for Ca 317.933 Radial Recovery = 99.38%						
Cd 226.502†	35448.7	499.86 ug/L	4.898	499.86 ppb	4.898	0.98%
QC value within limits for Cd 226.502 Recovery = 99.97%						
Co 228.616†	19558.1	509.10 ug/L	3.329	509.10 ppb	3.329	0.65%
QC value within limits for Co 228.616 Recovery = 101.82%						
Cr 267.716†	37905.4	494.53 ug/L	4.017	494.53 ppb	4.017	0.81%
QC value within limits for Cr 267.716 Recovery = 98.91%						
Cu 324.752†	152398.1	494.14 ug/L	4.287	494.14 ppb	4.287	0.87%
QC value within limits for Cu 324.752 Recovery = 98.83%						
Fe 238.204 Radial†	406.0	5092.4 ug/L	55.01	5092.4 ppb	55.01	1.08%
QC value within limits for Fe 238.204 Radial Recovery = 101.85%						
K 766.490 Radial†	24219.6	4828.5 ug/L	117.87	4828.5 ppb	117.87	2.44%
QC value within limits for K 766.490 Radial Recovery = 96.57%						
Mg 279.077 IEC†	115.0	5023.2 ug/L	117.90	5023.2 ppb	117.90	2.35%
QC value within limits for Mg 279.077 IEC Recovery = 100.46%						
Mn 257.610†	377625.6	495.76 ug/L	1.234	495.76 ppb	1.234	0.25%
QC value within limits for Mn 257.610 Recovery = 99.15%						
Mo 202.031†	5645.7	496.80 ug/L	3.255	496.80 ppb	3.255	0.66%
QC value within limits for Mo 202.031 Recovery = 99.36%						
Na 589.592 Radial†	26328.0	10339 ug/L	209.4	10339 ppb	209.4	2.03%
QC value within limits for Na 589.592 Radial Recovery = 103.39%						
Ni 231.604†	16098.5	502.37 ug/L	3.295	502.37 ppb	3.295	0.66%
QC value within limits for Ni 231.604 Recovery = 100.47%						
P 214.914†	3446.5	2380.9 ug/L	14.25	2380.9 ppb	14.25	0.60%
QC value within limits for P 214.914 Recovery = 95.24%						
Pb 220.353†	3262.3	493.21 ug/L	2.898	493.21 ppb	2.898	0.59%
QC value within limits for Pb 220.353 Recovery = 98.64%						
S 181.975 Axial†	569.6	997.42 ug/L	7.945	997.42 ppb	7.945	0.80%
QC value within limits for S 181.975 Axial Recovery = 99.74%						
Sb 206.836†	1194.8	525.53 ug/L	0.538	525.53 ppb	0.538	0.10%
QC value within limits for Sb 206.836 Recovery = 105.11%						
Se 196.026†	625.1	516.59 ug/L	4.003	516.59 ppb	4.003	0.77%
QC value within limits for Se 196.026 Recovery = 103.32%						
Si 251.611†	67364.3	2502.1 ug/L	23.29	2502.1 ppb	23.29	0.93%
QC value within limits for Si 251.611 Recovery = 100.08%						
Sn 189.927†	2240.1	496.73 ug/L	2.389	496.73 ppb	2.389	0.48%
QC value within limits for Sn 189.927 Recovery = 99.35%						
Sr 421.552†	57040.4	485.69 ug/L	12.121	485.69 ppb	12.121	2.50%
QC value within limits for Sr 421.552 Recovery = 97.14%						
Ti 334.940†	288230.8	495.75 ug/L	4.034	495.75 ppb	4.034	0.81%
QC value within limits for Ti 334.940 Recovery = 99.15%						
Tl 190.801†	1255.7	488.82 ug/L	1.649	488.82 ppb	1.649	0.34%
QC value within limits for Tl 190.801 Recovery = 97.76%						
U 409.014†	17751.5	520.65 ug/L	2.291	520.65 ppb	2.291	0.44%
QC value within limits for U 409.014 Recovery = 104.13%						
V 292.402†	64323.9	502.53 ug/L	3.620	502.53 ppb	3.620	0.72%
QC value within limits for V 292.402 Recovery = 100.51%						
Zn 213.857†	41786.1	491.78 ug/L	4.046	491.78 ppb	4.046	0.82%
QC value within limits for Zn 213.857 Recovery = 98.36%						
SiO2†	67308.9	5364.1 ug/L	96.30	5364.1 ppb	96.30	1.80%
QC value within limits for SiO2 Recovery = 100.31%						

All analyte(s) passed QC.

Sequence No.: 70

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 3/26/2010 00:38:48

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	4019.2	4019.2	99.6 %		00:41:00
1	Y RADIAL	4405.9	4405.9	97.52 %		00:40:40
1	Al 396.153Radial†	-63.4	16.0	17.043 ug/L	17.043 ppb	00:41:00
1	Ca 317.933Radial†	21.1	4.0	8.1467 ug/L	8.1467 ppb	00:41:00
1	Fe 238.204 Radial†	16.3	7.4	92.542 ug/L	92.542 ppb	00:41:00
1	K 766.490 Radial†	2447.7	-346.7	-69.214 ug/L	-69.214 ppb	00:40:40
1	Mg 279.077 IEC†	3.4	2.7	117.49 ug/L	117.49 ppb	00:41:00
1	Na 589.592 Radial†	-417.8	41.6	16.332 ug/L	16.332 ppb	00:40:40
1	Sr 421.552†	75.1	5.4	0.0456 ug/L	0.0456 ppb	00:40:40
1	Sc 361.383	825989.4	825989.4	98.349 %		00:41:57
1	Y 371.029	703158.4	703158.4	98.196 %		00:41:57
1	Ag 328.068†	121.7	-129.6	-0.6260 ug/L	-0.6260 ppb	00:41:57
1	As 188.979†	-25.0	-4.6	-2.4471 ug/L	-2.4471 ppb	00:42:17
1	B 249.677†	-359.8	-115.7	-3.1934 ug/L	-3.1934 ppb	00:42:17
1	Ba 233.527†	26.6	8.5	0.0844 ug/L	0.0844 ppb	00:42:17
1	Be 313.107†	-4540.4	-353.9	-0.1434 ug/L	-0.1434 ppb	00:41:57
1	Cd 226.502†	-173.3	-9.8	-0.1476 ug/L	-0.1476 ppb	00:42:17
1	Co 228.616†	-46.1	-8.0	-0.2111 ug/L	-0.2111 ppb	00:42:17
1	Cr 267.716†	101.5	8.2	0.1158 ug/L	0.1158 ppb	00:42:17
1	Cu 324.752†	6544.2	301.3	0.9795 ug/L	0.9795 ppb	00:41:57
1	Mn 257.610†	980.4	544.4	0.7186 ug/L	0.7186 ppb	00:42:17
1	Mo 202.031†	8.1	-6.0	-0.5182 ug/L	-0.5182 ppb	00:42:17
1	Ni 231.604†	79.9	-12.4	-0.3862 ug/L	-0.3862 ppb	00:42:17
1	P 214.914†	195.0	30.0	21.324 ug/L	21.324 ppb	00:42:17
1	Pb 220.353†	-53.5	4.4	0.6531 ug/L	0.6531 ppb	00:42:17
1	S 181.975 Axial†	27.3	3.3	5.8310 ug/L	5.8310 ppb	00:42:17
1	Sb 206.836†	29.6	3.5	1.4854 ug/L	1.4854 ppb	00:42:17
1	Se 196.026†	-14.9	1.8	1.7176 ug/L	1.7176 ppb	00:42:17
1	Si 251.611†	549.5	33.3	1.2453 ug/L	1.2453 ppb	00:42:17
1	Sn 189.927†	5.5	2.5	0.5462 ug/L	0.5462 ppb	00:42:17
1	Ti 334.940†	-1001.7	64.8	0.1010 ug/L	0.1010 ppb	00:41:57
1	Tl 190.801†	-26.6	-2.0	-0.7609 ug/L	-0.7609 ppb	00:42:17
1	U 409.014†	-1849.5	154.7	4.5402 ug/L	4.5402 ppb	00:41:57
1	V 292.402†	-1316.5	89.0	0.6758 ug/L	0.6758 ppb	00:41:57
1	Zn 213.857†	670.3	75.1	0.8794 ug/L	0.8794 ppb	00:42:17
1	SiO2†	1451.7	922.7	73.730 ug/L	73.730 ppb	00:43:28
2	Sc Radial	4042.2	4042.2	100 %		00:41:25
2	Y RADIAL	4477.5	4477.5	99.10 %		00:41:05
2	Al 396.153Radial†	-65.7	14.1	14.980 ug/L	14.980 ppb	00:41:25
2	Ca 317.933Radial†	22.2	5.0	10.117 ug/L	10.117 ppb	00:41:25
2	Fe 238.204 Radial†	17.1	8.0	100.55 ug/L	100.55 ppb	00:41:25
2	K 766.490 Radial†	2574.2	-234.4	-46.807 ug/L	-46.807 ppb	00:41:05
2	Mg 279.077 IEC†	1.4	0.7	29.645 ug/L	29.645 ppb	00:41:25
2	Na 589.592 Radial†	-402.4	59.3	23.281 ug/L	23.281 ppb	00:41:05
2	Sr 421.552†	46.3	-23.8	-0.2030 ug/L	-0.2030 ppb	00:41:05
2	Sc 361.383	825425.3	825425.3	98.282 %		00:42:22
2	Y 371.029	703215.5	703215.5	98.204 %		00:42:22
2	Ag 328.068†	102.7	-148.9	-0.7208 ug/L	-0.7208 ppb	00:42:22
2	As 188.979†	-25.7	-5.4	-2.8493 ug/L	-2.8493 ppb	00:42:42
2	B 249.677†	-393.2	-149.9	-4.1362 ug/L	-4.1362 ppb	00:42:42
2	Ba 233.527†	14.1	-4.2	-0.0356 ug/L	-0.0356 ppb	00:42:42
2	Be 313.107†	-4534.9	-351.5	-0.1423 ug/L	-0.1423 ppb	00:42:22
2	Cd 226.502†	-164.0	-0.5	-0.0167 ug/L	-0.0167 ppb	00:42:42
2	Co 228.616†	-51.6	-13.6	-0.3562 ug/L	-0.3562 ppb	00:42:42
2	Cr 267.716†	92.0	-1.3	-0.0074 ug/L	-0.0074 ppb	00:42:42
2	Cu 324.752†	6520.5	281.8	0.9176 ug/L	0.9176 ppb	00:42:22
2	Mn 257.610†	1113.8	680.9	0.9021 ug/L	0.9021 ppb	00:42:42
2	Mo 202.031†	14.1	0.2	0.0257 ug/L	0.0257 ppb	00:42:42
2	Ni 231.604†	79.3	-13.0	-0.4045 ug/L	-0.4045 ppb	00:42:42

2	P 214.914†	194.3	29.5	20.944 ug/L	20.944 ppb	00:42:42
2	Pb 220.353†	-54.0	3.9	0.5708 ug/L	0.5708 ppb	00:42:42
2	S 181.975 Axial†	29.3	5.4	9.5032 ug/L	9.5032 ppb	00:42:42
2	Sb 206.836†	27.2	1.1	0.4650 ug/L	0.4650 ppb	00:42:42
2	Se 196.026†	-13.4	3.3	2.9543 ug/L	2.9543 ppb	00:42:42
2	Si 251.611†	674.1	160.4	5.9731 ug/L	5.9731 ppb	00:42:42
2	Sn 189.927†	8.0	5.1	1.1218 ug/L	1.1218 ppb	00:42:42
2	Ti 334.940†	-961.3	105.2	0.1790 ug/L	0.1790 ppb	00:42:22
2	Tl 190.801†	-29.8	-5.2	-2.0091 ug/L	-2.0091 ppb	00:42:42
2	U 409.014†	-1922.5	79.0	2.3136 ug/L	2.3136 ppb	00:42:22
2	V 292.402†	-1375.1	28.4	0.2092 ug/L	0.2092 ppb	00:42:22
2	Zn 213.857†	666.2	71.4	0.8347 ug/L	0.8347 ppb	00:42:42
2	SiO2†	592.1	49.1	3.9232 ug/L	3.9232 ppb	00:43:48
3	Sc Radial	4022.2	4022.2	99.7 %		00:41:50
3	Y RADIAL	4501.5	4501.5	99.63 %		00:41:30
3	Al 396.153Radial†	-59.6	19.9	21.177 ug/L	21.177 ppb	00:41:50
3	Ca 317.933Radial†	24.4	7.3	14.848 ug/L	14.848 ppb	00:41:50
3	Fe 238.204 Radial†	11.6	2.7	33.466 ug/L	33.466 ppb	00:41:50
3	K 766.490 Radial†	2471.3	-324.8	-64.851 ug/L	-64.851 ppb	00:41:30
3	Mg 279.077 IEC†	2.9	2.2	95.719 ug/L	95.719 ppb	00:41:50
3	Na 589.592 Radial†	-398.1	61.6	24.185 ug/L	24.185 ppb	00:41:30
3	Sr 421.552†	73.5	3.7	0.0311 ug/L	0.0311 ppb	00:41:30
3	Sc 361.383	834276.1	834276.1	99.336 %		00:42:47
3	Y 371.029	711682.2	711682.2	99.387 %		00:42:47
3	Ag 328.068†	243.7	-8.1	-0.0327 ug/L	-0.0327 ppb	00:42:47
3	As 188.979†	-31.2	-10.5	-5.6343 ug/L	-5.6343 ppb	00:43:07
3	B 249.677†	-391.1	-143.6	-3.9521 ug/L	-3.9521 ppb	00:43:07
3	Ba 233.527†	23.1	4.8	0.0475 ug/L	0.0475 ppb	00:43:07
3	Be 313.107†	-4529.6	-297.2	-0.1200 ug/L	-0.1200 ppb	00:42:47
3	Cd 226.502†	-176.2	-11.0	-0.1576 ug/L	-0.1576 ppb	00:43:07
3	Co 228.616†	-44.7	-6.1	-0.1593 ug/L	-0.1593 ppb	00:43:07
3	Cr 267.716†	75.2	-19.3	-0.2487 ug/L	-0.2487 ppb	00:43:07
3	Cu 324.752†	6617.0	308.5	0.9984 ug/L	0.9984 ppb	00:42:47
3	Mn 257.610†	1143.9	699.1	0.9167 ug/L	0.9167 ppb	00:43:07
3	Mo 202.031†	15.9	1.8	0.1642 ug/L	0.1642 ppb	00:43:07
3	Ni 231.604†	63.6	-29.6	-0.9235 ug/L	-0.9235 ppb	00:43:07
3	P 214.914†	192.0	25.0	17.792 ug/L	17.792 ppb	00:43:07
3	Pb 220.353†	-49.3	9.2	1.3908 ug/L	1.3908 ppb	00:43:07
3	S 181.975 Axial†	31.1	6.9	12.174 ug/L	12.174 ppb	00:43:07
3	Sb 206.836†	25.8	-0.7	-0.2653 ug/L	-0.2653 ppb	00:43:07
3	Se 196.026†	-12.1	4.8	3.9008 ug/L	3.9008 ppb	00:43:07
3	Si 251.611†	689.1	168.2	6.2618 ug/L	6.2618 ppb	00:43:07
3	Sn 189.927†	9.7	6.7	1.4847 ug/L	1.4847 ppb	00:43:07
3	Ti 334.940†	-917.0	160.2	0.2670 ug/L	0.2670 ppb	00:42:47
3	Tl 190.801†	-35.8	-10.9	-4.2265 ug/L	-4.2265 ppb	00:43:07
3	U 409.014†	-1800.7	222.4	6.5402 ug/L	6.5402 ppb	00:42:47
3	V 292.402†	-1314.3	104.5	0.8169 ug/L	0.8169 ppb	00:42:47
3	Zn 213.857†	654.9	52.8	0.6268 ug/L	0.6268 ppb	00:43:07
3	SiO2†	592.7	43.3	3.4523 ug/L	3.4523 ppb	00:44:08

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	828563.6	98.656 %		0.5900			0.60%
Sc Radial	4027.9	99.9 %		0.31			0.31%
Y 371.029	706018.7	98.596 %		0.6850			0.69%
Y RADIAL	4461.6	98.75 %		1.101			1.12%
Ag 328.068†	-95.5	-0.4598 ug/L		0.37294	-0.4598 ppb	0.37294	81.10%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	16.6	17.733 ug/L		3.1560	17.733 ppb	3.1560	17.80%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	-6.8	-3.6436 ug/L		1.73575	-3.6436 ppb	1.73575	47.64%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	-136.4	-3.7606 ug/L		0.49973	-3.7606 ppb	0.49973	13.29%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	3.0	0.0321 ug/L		0.06146	0.0321 ppb	0.06146	191.65%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	-334.2	-0.1353 ug/L		0.01320	-0.1353 ppb	0.01320	9.76%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	5.4	11.037 ug/L		3.4442	11.037 ppb	3.4442	31.20%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated									
Cd	226.502†	-7.1	-0.1073 ug/L	0.07864	-0.1073 ppb	0.07864	73.29%		
QC value within limits for Cd 226.502 Recovery = Not calculated									
Co	228.616†	-9.2	-0.2422 ug/L	0.10207	-0.2422 ppb	0.10207	42.14%		
QC value within limits for Co 228.616 Recovery = Not calculated									
Cr	267.716†	-4.1	-0.0468 ug/L	0.18541	-0.0468 ppb	0.18541	396.52%		
QC value within limits for Cr 267.716 Recovery = Not calculated									
Cu	324.752†	297.2	0.9652 ug/L	0.04223	0.9652 ppb	0.04223	4.37%		
QC value within limits for Cu 324.752 Recovery = Not calculated									
Fe	238.204 Radial†	6.0	75.520 ug/L	36.6398	75.520 ppb	36.6398	48.52%		
QC value within limits for Fe 238.204 Radial Recovery = Not calculated									
K	766.490 Radial†	-301.9	-60.291 ug/L	11.8791	-60.291 ppb	11.8791	19.70%		
QC value within limits for K 766.490 Radial Recovery = Not calculated									
Mg	279.077 IEC†	1.9	80.951 ug/L	45.7468	80.951 ppb	45.7468	56.51%		
QC value within limits for Mg 279.077 IEC Recovery = Not calculated									
Mn	257.610†	641.5	0.8458 ug/L	0.11038	0.8458 ppb	0.11038	13.05%		
QC value within limits for Mn 257.610 Recovery = Not calculated									
Mo	202.031†	-1.3	-0.1094 ug/L	0.36074	-0.1094 ppb	0.36074	329.60%		
QC value within limits for Mo 202.031 Recovery = Not calculated									
Na	589.592 Radial†	54.2	21.266 ug/L	4.2971	21.266 ppb	4.2971	20.21%		
QC value within limits for Na 589.592 Radial Recovery = Not calculated									
Ni	231.604†	-18.3	-0.5714 ug/L	0.30507	-0.5714 ppb	0.30507	53.39%		
QC value within limits for Ni 231.604 Recovery = Not calculated									
P	214.914†	28.2	20.020 ug/L	1.9390	20.020 ppb	1.9390	9.69%		
QC value within limits for P 214.914 Recovery = Not calculated									
Pb	220.353†	5.8	0.8716 ug/L	0.45152	0.8716 ppb	0.45152	51.81%		
QC value within limits for Pb 220.353 Recovery = Not calculated									
S	181.975 Axial†	5.2	9.1694 ug/L	3.18469	9.1694 ppb	3.18469	34.73%		
QC value within limits for S 181.975 Axial Recovery = Not calculated									
Sb	206.836†	1.3	0.5617 ug/L	0.87936	0.5617 ppb	0.87936	156.55%		
QC value within limits for Sb 206.836 Recovery = Not calculated									
Se	196.026†	3.3	2.8576 ug/L	1.09484	2.8576 ppb	1.09484	38.31%		
QC value within limits for Se 196.026 Recovery = Not calculated									
Si	251.611†	120.6	4.4934 ug/L	2.81662	4.4934 ppb	2.81662	62.68%		
QC value within limits for Si 251.611 Recovery = Not calculated									
Sn	189.927†	4.8	1.0509 ug/L	0.47329	1.0509 ppb	0.47329	45.04%		
QC value within limits for Sn 189.927 Recovery = Not calculated									
Sr	421.552†	-4.9	-0.0421 ug/L	0.13955	-0.0421 ppb	0.13955	331.53%		
QC value within limits for Sr 421.552 Recovery = Not calculated									
Ti	334.940†	110.1	0.1823 ug/L	0.08304	0.1823 ppb	0.08304	45.55%		
QC value within limits for Ti 334.940 Recovery = Not calculated									
Tl	190.801†	-6.0	-2.3322 ug/L	1.75523	-2.3322 ppb	1.75523	75.26%		
QC value within limits for Tl 190.801 Recovery = Not calculated									
U	409.014†	152.0	4.4647 ug/L	2.11430	4.4647 ppb	2.11430	47.36%		
QC value within limits for U 409.014 Recovery = Not calculated									
V	292.402†	73.9	0.5673 ug/L	0.31804	0.5673 ppb	0.31804	56.06%		
QC value within limits for V 292.402 Recovery = Not calculated									
Zn	213.857†	66.4	0.7803 ug/L	0.13481	0.7803 ppb	0.13481	17.28%		
QC value within limits for Zn 213.857 Recovery = Not calculated									
SiO2†	338.3	27.035 ug/L	40.4398	27.035 ppb	40.4398	149.58%			
QC value within limits for SiO2 Recovery = Not calculated									

All analyte(s) passed QC.

Sequence No.: 78

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/26/2010 01:34:20

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	4056.9	4056.9	101 %		01:36:12
1	Y RADIAL	4335.8	4335.8	95.97 %		01:36:12
1	Al 396.153Radial†	4416.7	4471.2	4740.6 ug/L	4740.6 ppb	01:36:12
1	Ca 317.933Radial†	2508.3	2476.9	5032.4 ug/L	5032.4 ppb	01:36:32
1	Fe 238.204 Radial†	416.1	404.7	5076.2 ug/L	5076.2 ppb	01:36:32
1	K 766.490 Radial†	26867.6	23911.6	4767.1 ug/L	4767.1 ppb	01:36:12
1	Mg 279.077 IEC†	117.2	115.9	5061.7 ug/L	5061.7 ppb	01:36:32
1	Na 589.592 Radial†	25103.5	25421.7	9983.5 ug/L	9983.5 ppb	01:36:12
1	Sr 421.552†	56066.5	55677.8	474.09 ug/L	474.09 ppb	01:36:12
1	Sc 361.383	833160.1	833160.1	99.203 %		01:37:29
1	Y 371.029	700996.4	700996.4	97.894 %		01:37:29
1	Ag 328.068†	100747.3	101303.5	513.83 ug/L	513.83 ppb	01:37:35
1	As 188.979†	906.5	934.6	505.36 ug/L	505.36 ppb	01:37:55
1	B 249.677†	17456.0	17846.4	488.25 ug/L	488.25 ppb	01:37:35
1	Ba 233.527†	53102.6	53510.8	502.90 ug/L	502.90 ppb	01:37:35
1	Be 313.107†	1216631.7	1230671.2	500.80 ug/L	500.80 ppb	01:37:29
1	Cd 226.502†	35609.0	36061.5	508.51 ug/L	508.51 ppb	01:37:35
1	Co 228.616†	19736.5	19934.0	518.90 ug/L	518.90 ppb	01:37:35
1	Cr 267.716†	38407.5	38621.2	503.86 ug/L	503.86 ppb	01:37:35
1	Cu 324.752†	159084.1	154009.8	499.36 ug/L	499.36 ppb	01:37:35
1	Mn 257.610†	383767.4	386398.9	507.27 ug/L	507.27 ppb	01:37:29
1	Mo 202.031†	5748.6	5780.6	508.66 ug/L	508.66 ppb	01:37:55
1	Ni 231.604†	16330.9	16368.5	510.80 ug/L	510.80 ppb	01:37:35
1	P 214.914†	3679.1	3540.5	2447.5 ug/L	2447.5 ppb	01:37:55
1	Pb 220.353†	3263.5	3348.5	506.21 ug/L	506.21 ppb	01:37:55
1	S 181.975 Axial†	600.9	581.3	1018.0 ug/L	1018.0 ppb	01:37:55
1	Sb 206.836†	1245.3	1228.7	540.40 ug/L	540.40 ppb	01:37:55
1	Se 196.026†	623.9	645.9	533.07 ug/L	533.07 ppb	01:37:55
1	Si 251.611†	68472.3	68497.1	2544.1 ug/L	2544.1 ppb	01:37:35
1	Sn 189.927†	2294.1	2309.4	512.09 ug/L	512.09 ppb	01:37:55
1	Ti 334.940†	289060.2	292466.4	503.04 ug/L	503.04 ppb	01:37:35
1	Tl 190.801†	1245.2	1280.2	498.37 ug/L	498.37 ppb	01:37:55
1	U 409.014†	15611.7	17772.4	521.24 ug/L	521.24 ppb	01:37:35
1	V 292.402†	63313.9	65250.3	509.83 ug/L	509.83 ppb	01:37:35
1	Zn 213.857†	42747.9	42485.0	500.03 ug/L	500.03 ppb	01:37:35
1	SiO2†	69499.6	69504.8	5539.2 ug/L	5539.2 ppb	01:39:02
2	Sc Radial	4088.3	4088.3	101 %		01:36:37
2	Y RADIAL	4370.9	4370.9	96.74 %		01:36:37
2	Al 396.153Radial†	4487.8	4507.6	4779.5 ug/L	4779.5 ppb	01:36:37
2	Ca 317.933Radial†	2483.9	2433.6	4944.4 ug/L	4944.4 ppb	01:36:57
2	Fe 238.204 Radial†	417.2	402.7	5051.0 ug/L	5051.0 ppb	01:36:57
2	K 766.490 Radial†	26973.6	23811.1	4747.1 ug/L	4747.1 ppb	01:36:37
2	Mg 279.077 IEC†	119.4	117.1	5116.5 ug/L	5116.5 ppb	01:36:57
2	Na 589.592 Radial†	25354.5	25477.7	10005 ug/L	10005 ppb	01:36:37
2	Sr 421.552†	56637.8	55813.4	475.25 ug/L	475.25 ppb	01:36:37
2	Sc 361.383	843404.9	843404.9	100.42 %		01:38:00
2	Y 371.029	710206.3	710206.3	99.180 %		01:38:00
2	Ag 328.068†	102318.1	101634.1	515.49 ug/L	515.49 ppb	01:38:06
2	As 188.979†	911.6	928.6	502.16 ug/L	502.16 ppb	01:38:26
2	B 249.677†	17866.4	18041.4	493.61 ug/L	493.61 ppb	01:38:06
2	Ba 233.527†	53720.3	53475.7	502.57 ug/L	502.57 ppb	01:38:06
2	Be 313.107†	1231355.8	1230436.4	500.70 ug/L	500.70 ppb	01:38:00
2	Cd 226.502†	36040.8	36055.5	508.43 ug/L	508.43 ppb	01:38:06
2	Co 228.616†	19986.6	19941.4	519.09 ug/L	519.09 ppb	01:38:06
2	Cr 267.716†	38815.3	38557.0	503.02 ug/L	503.02 ppb	01:38:06
2	Cu 324.752†	162132.2	155097.1	502.88 ug/L	502.88 ppb	01:38:06
2	Mn 257.610†	388031.3	385945.8	506.67 ug/L	506.67 ppb	01:38:00
2	Mo 202.031†	5794.1	5755.5	506.45 ug/L	506.45 ppb	01:38:26
2	Ni 231.604†	16594.9	16431.5	512.76 ug/L	512.76 ppb	01:38:06

2	P 214.914†	3678.8	3495.1	2414.2 ug/L	2414.2 ppb	01:38:26
2	Pb 220.353†	3272.7	3317.8	501.58 ug/L	501.58 ppb	01:38:26
2	S 181.975 Axial†	607.3	580.4	1016.4 ug/L	1016.4 ppb	01:38:26
2	Sb 206.836†	1241.8	1210.0	532.31 ug/L	532.31 ppb	01:38:26
2	Se 196.026†	614.3	628.7	519.30 ug/L	519.30 ppb	01:38:26
2	Si 251.611†	69300.2	68483.1	2543.6 ug/L	2543.6 ppb	01:38:06
2	Sn 189.927†	2295.6	2282.9	506.20 ug/L	506.20 ppb	01:38:26
2	Ti 334.940†	292803.7	292654.8	503.35 ug/L	503.35 ppb	01:38:06
2	Tl 190.801†	1263.7	1283.4	499.59 ug/L	499.59 ppb	01:38:26
2	U 409.014†	15927.9	17896.0	524.88 ug/L	524.88 ppb	01:38:06
2	V 292.402†	64258.1	65415.2	511.08 ug/L	511.08 ppb	01:38:06
2	Zn 213.857†	43293.0	42504.3	500.24 ug/L	500.24 ppb	01:38:06
2	SiO2†	68679.8	67837.4	5406.1 ug/L	5406.1 ppb	01:39:07
3	Sc Radial	4017.9	4017.9	99.6 %		01:37:02
3	Y RADIAL	4331.8	4331.8	95.88 %		01:37:02
3	Al 396.153Radial†	4446.0	4543.3	4817.6 ug/L	4817.6 ppb	01:37:02
3	Ca 317.933Radial†	2492.3	2484.9	5048.8 ug/L	5048.8 ppb	01:37:22
3	Fe 238.204 Radial†	417.3	409.9	5141.5 ug/L	5141.5 ppb	01:37:22
3	K 766.490 Radial†	26859.6	24162.5	4817.2 ug/L	4817.2 ppb	01:37:02
3	Mg 279.077 IEC†	115.1	114.9	5017.7 ug/L	5017.7 ppb	01:37:22
3	Na 589.592 Radial†	25306.7	25867.6	10159 ug/L	10159 ppb	01:37:02
3	Sr 421.552†	56129.2	56281.1	479.23 ug/L	479.23 ppb	01:37:02
3	Sc 361.383	837672.7	837672.7	99.740 %		01:38:32
3	Y 371.029	705307.7	705307.7	98.496 %		01:38:32
3	Ag 328.068†	101893.5	101905.6	516.88 ug/L	516.88 ppb	01:38:37
3	As 188.979†	901.0	924.2	499.80 ug/L	499.80 ppb	01:38:57
3	B 249.677†	17815.2	18111.8	495.53 ug/L	495.53 ppb	01:38:37
3	Ba 233.527†	53612.0	53733.2	504.99 ug/L	504.99 ppb	01:38:37
3	Be 313.107†	1224598.0	1232051.6	501.36 ug/L	501.36 ppb	01:38:32
3	Cd 226.502†	35860.4	36120.3	509.33 ug/L	509.33 ppb	01:38:37
3	Co 228.616†	19861.7	19952.4	519.37 ug/L	519.37 ppb	01:38:37
3	Cr 267.716†	38685.4	38691.3	504.78 ug/L	504.78 ppb	01:38:37
3	Cu 324.752†	161265.2	155332.6	503.65 ug/L	503.65 ppb	01:38:37
3	Mn 257.610†	385056.1	385607.0	506.24 ug/L	506.24 ppb	01:38:32
3	Mo 202.031†	5733.4	5734.2	504.59 ug/L	504.59 ppb	01:38:57
3	Ni 231.604†	16431.5	16380.7	511.18 ug/L	511.18 ppb	01:38:37
3	P 214.914†	3674.3	3515.6	2428.7 ug/L	2428.7 ppb	01:38:57
3	Pb 220.353†	3263.7	3331.0	503.56 ug/L	503.56 ppb	01:38:57
3	S 181.975 Axial†	601.9	579.1	1014.1 ug/L	1014.1 ppb	01:38:57
3	Sb 206.836†	1254.1	1230.8	541.10 ug/L	541.10 ppb	01:38:57
3	Se 196.026†	617.7	636.2	525.62 ug/L	525.62 ppb	01:38:57
3	Si 251.611†	69026.9	68681.3	2551.0 ug/L	2551.0 ppb	01:38:37
3	Sn 189.927†	2279.8	2282.6	506.16 ug/L	506.16 ppb	01:38:57
3	Ti 334.940†	291425.5	293268.2	504.42 ug/L	504.42 ppb	01:38:37
3	Tl 190.801†	1250.8	1279.1	497.95 ug/L	497.95 ppb	01:38:57
3	U 409.014†	15841.5	17918.0	525.52 ug/L	525.52 ppb	01:38:37
3	V 292.402†	63806.4	65400.2	510.93 ug/L	510.93 ppb	01:38:37
3	Zn 213.857†	43124.6	42630.6	501.74 ug/L	501.74 ppb	01:38:37
3	SiO2†	69586.6	69214.6	5516.2 ug/L	5516.2 ppb	01:39:12

Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	838079.2	99.789 %		0.6113			0.61%
Sc Radial	4054.4	101 %		0.9			0.87%
Y 371.029	705503.5	98.524 %		0.6435			0.65%
Y RADIAL	4346.2	96.20 %		0.476			0.49%
Ag 328.068†	101614.4	515.40 ug/L		1.530	515.40 ppb	1.530	0.30%
QC value within limits for Ag 328.068 Recovery = 103.08%							
Al 396.153Radial†	4507.4	4779.2 ug/L		38.48	4779.2 ppb	38.48	0.81%
QC value within limits for Al 396.153Radial Recovery = 95.58%							
As 188.979†	929.1	502.44 ug/L		2.792	502.44 ppb	2.792	0.56%
QC value within limits for As 188.979 Recovery = 100.49%							
B 249.677†	17999.9	492.47 ug/L		3.775	492.47 ppb	3.775	0.77%
QC value within limits for B 249.677 Recovery = 98.49%							
Ba 233.527†	53573.3	503.49 ug/L		1.311	503.49 ppb	1.311	0.26%
QC value within limits for Ba 233.527 Recovery = 100.70%							
Be 313.107†	1231053.1	500.95 ug/L		0.356	500.95 ppb	0.356	0.07%
QC value within limits for Be 313.107 Recovery = 100.19%							
Ca 317.933Radial†	2465.1	5008.5 ug/L		56.12	5008.5 ppb	56.12	1.12%

QC value within limits for Ca 317.933 Radial Recovery = 100.17%

Cd 226.502†	36079.1	508.75 ug/L	0.500	508.75 ppb	0.500	0.10%
QC value within limits for Cd 226.502 Recovery = 101.75%						
Co 228.616†	19942.6	519.12 ug/L	0.234	519.12 ppb	0.234	0.05%
QC value within limits for Co 228.616 Recovery = 103.82%						
Cr 267.716†	38623.2	503.89 ug/L	0.879	503.89 ppb	0.879	0.17%
QC value within limits for Cr 267.716 Recovery = 100.78%						
Cu 324.752†	154813.2	501.97 ug/L	2.288	501.97 ppb	2.288	0.46%
QC value within limits for Cu 324.752 Recovery = 100.39%						
Fe 238.204 Radial†	405.8	5089.6 ug/L	46.71	5089.6 ppb	46.71	0.92%
QC value within limits for Fe 238.204 Radial Recovery = 101.79%						
K 766.490 Radial†	23961.7	4777.1 ug/L	36.09	4777.1 ppb	36.09	0.76%
QC value within limits for K 766.490 Radial Recovery = 95.54%						
Mg 279.077 IEC†	116.0	5065.3 ug/L	49.47	5065.3 ppb	49.47	0.98%
QC value within limits for Mg 279.077 IEC Recovery = 101.31%						
Mn 257.610†	385983.9	506.72 ug/L	0.518	506.72 ppb	0.518	0.10%
QC value within limits for Mn 257.610 Recovery = 101.34%						
Mo 202.031†	5756.7	506.57 ug/L	2.041	506.57 ppb	2.041	0.40%
QC value within limits for Mo 202.031 Recovery = 101.31%						
Na 589.592 Radial†	25589.0	10049 ug/L	95.4	10049 ppb	95.4	0.95%
QC value within limits for Na 589.592 Radial Recovery = 100.49%						
Ni 231.604†	16393.6	511.58 ug/L	1.042	511.58 ppb	1.042	0.20%
QC value within limits for Ni 231.604 Recovery = 102.32%						
P 214.914†	3517.1	2430.2 ug/L	16.70	2430.2 ppb	16.70	0.69%
QC value within limits for P 214.914 Recovery = 97.21%						
Pb 220.353†	3332.4	503.79 ug/L	2.322	503.79 ppb	2.322	0.46%
QC value within limits for Pb 220.353 Recovery = 100.76%						
S 181.975 Axial†	580.3	1016.2 ug/L	1.95	1016.2 ppb	1.95	0.19%
QC value within limits for S 181.975 Axial Recovery = 101.62%						
Sb 206.836†	1223.1	537.93 ug/L	4.884	537.93 ppb	4.884	0.91%
QC value within limits for Sb 206.836 Recovery = 107.59%						
Se 196.026†	636.9	526.00 ug/L	6.893	526.00 ppb	6.893	1.31%
QC value within limits for Se 196.026 Recovery = 105.20%						
Si 251.611†	68553.8	2546.2 ug/L	4.14	2546.2 ppb	4.14	0.16%
QC value within limits for Si 251.611 Recovery = 101.85%						
Sn 189.927†	2291.6	508.15 ug/L	3.412	508.15 ppb	3.412	0.67%
QC value within limits for Sn 189.927 Recovery = 101.63%						
Sr 421.552†	55924.1	476.19 ug/L	2.695	476.19 ppb	2.695	0.57%
QC value within limits for Sr 421.552 Recovery = 95.24%						
Ti 334.940†	292796.5	503.60 ug/L	0.726	503.60 ppb	0.726	0.14%
QC value within limits for Ti 334.940 Recovery = 100.72%						
Tl 190.801†	1280.9	498.64 ug/L	0.852	498.64 ppb	0.852	0.17%
QC value within limits for Tl 190.801 Recovery = 99.73%						
U 409.014†	17862.1	523.88 ug/L	2.308	523.88 ppb	2.308	0.44%
QC value within limits for U 409.014 Recovery = 104.78%						
V 292.402†	65355.2	510.61 ug/L	0.682	510.61 ppb	0.682	0.13%
QC value within limits for V 292.402 Recovery = 102.12%						
Zn 213.857†	42540.0	500.67 ug/L	0.932	500.67 ppb	0.932	0.19%
QC value within limits for Zn 213.857 Recovery = 100.13%						
SiO2†	68852.3	5487.2 ug/L	71.16	5487.2 ppb	71.16	1.30%
QC value within limits for SiO2 Recovery = 102.61%						

All analyte(s) passed QC.

Sequence No.: 79

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/26/2010 01:41:22

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4384.6	4384.6	109 %		01:43:15
1	Y RADIAL	4730.0	4730.0	104.7 %		01:43:15
1	Al 396.153Radial†	-59.1	25.2	26.881 ug/L	26.881 ppb	01:43:35
1	Ca 317.933Radial†	27.3	7.9	16.110 ug/L	16.110 ppb	01:43:35
1	Fe 238.204 Radial†	8.5	-1.2	-15.083 ug/L	-15.083 ppb	01:43:35
1	K 766.490 Radial†	2465.2	-535.3	-106.89 ug/L	-106.89 ppb	01:43:15
1	Mg 279.077 IEC†	4.0	3.0	130.97 ug/L	130.97 ppb	01:43:35
1	Na 589.592 Radial†	-360.8	128.9	50.620 ug/L	50.620 ppb	01:43:15
1	Sr 421.552†	61.6	-13.4	-0.1140 ug/L	-0.1140 ppb	01:43:15
1	Sc 361.383	817728.5	817728.5	97.365 %		01:44:32
1	Y 371.029	697345.5	697345.5	97.384 %		01:44:32
1	Ag 328.068†	170.8	-77.9	-0.3999 ug/L	-0.3999 ppb	01:44:32
1	As 188.979†	-20.6	-0.3	-0.1534 ug/L	-0.1534 ppb	01:44:52
1	B 249.677†	-241.9	1.7	0.0515 ug/L	0.0515 ppb	01:44:52
1	Ba 233.527†	15.8	-2.3	-0.0214 ug/L	-0.0214 ppb	01:44:52
1	Be 313.107†	-4384.7	-240.7	-0.0973 ug/L	-0.0973 ppb	01:44:32
1	Cd 226.502†	-169.8	-8.0	-0.1102 ug/L	-0.1102 ppb	01:44:52
1	Co 228.616†	-50.4	-12.8	-0.3336 ug/L	-0.3336 ppb	01:44:52
1	Cr 267.716†	111.1	19.2	0.2467 ug/L	0.2467 ppb	01:44:52
1	Cu 324.752†	6539.5	363.7	1.1760 ug/L	1.1760 ppb	01:44:32
1	Mn 257.610†	794.9	364.0	0.4707 ug/L	0.4707 ppb	01:44:52
1	Mo 202.031†	16.4	2.7	0.2365 ug/L	0.2365 ppb	01:44:52
1	Ni 231.604†	88.3	-3.0	-0.0922 ug/L	-0.0922 ppb	01:44:52
1	P 214.914†	190.3	27.3	19.406 ug/L	19.406 ppb	01:44:52
1	Pb 220.353†	-51.1	6.4	0.9679 ug/L	0.9679 ppb	01:44:52
1	S 181.975 Axial†	31.8	8.2	14.430 ug/L	14.430 ppb	01:44:52
1	Sb 206.836†	31.7	5.9	2.5531 ug/L	2.5531 ppb	01:44:52
1	Se 196.026†	-18.8	-2.4	-1.9340 ug/L	-1.9340 ppb	01:44:52
1	Si 251.611†	706.4	200.1	7.4464 ug/L	7.4464 ppb	01:44:52
1	Sn 189.927†	13.4	10.7	2.3754 ug/L	2.3754 ppb	01:44:52
1	Ti 334.940†	-962.2	95.1	0.1531 ug/L	0.1531 ppb	01:44:32
1	Tl 190.801†	-25.5	-1.1	-0.4099 ug/L	-0.4099 ppb	01:44:52
1	U 409.014†	-1829.6	156.1	4.5945 ug/L	4.5945 ppb	01:44:32
1	V 292.402†	-1339.9	51.3	0.4123 ug/L	0.4123 ppb	01:44:32
1	Zn 213.857†	762.7	176.9	2.1025 ug/L	2.1025 ppb	01:44:52
1	SiO2†	850.7	320.3	25.587 ug/L	25.587 ppb	01:45:48
2	Sc Radial	4143.3	4143.3	103 %		01:43:40
2	Y RADIAL	4474.2	4474.2	99.03 %		01:43:40
2	Al 396.153Radial†	-67.7	13.8	14.635 ug/L	14.635 ppb	01:44:00
2	Ca 317.933Radial†	24.2	6.4	13.040 ug/L	13.040 ppb	01:44:00
2	Fe 238.204 Radial†	10.8	1.5	18.530 ug/L	18.530 ppb	01:44:00
2	K 766.490 Radial†	2587.0	-284.6	-56.850 ug/L	-56.850 ppb	01:43:40
2	Mg 279.077 IEC†	1.7	1.0	43.542 ug/L	43.542 ppb	01:44:00
2	Na 589.592 Radial†	-324.6	144.9	56.887 ug/L	56.887 ppb	01:43:40
2	Sr 421.552†	23.2	-47.4	-0.4039 ug/L	-0.4039 ppb	01:43:40
2	Sc 361.383	831694.6	831694.6	99.028 %		01:44:57
2	Y 371.029	709451.5	709451.5	99.075 %		01:44:57
2	Ag 328.068†	162.8	-89.0	-0.4442 ug/L	-0.4442 ppb	01:44:57
2	As 188.979†	-22.2	-1.6	-0.8503 ug/L	-0.8503 ppb	01:45:17
2	B 249.677†	-235.9	11.9	0.3250 ug/L	0.3250 ppb	01:45:17
2	Ba 233.527†	4.0	-14.5	-0.1340 ug/L	-0.1340 ppb	01:45:17
2	Be 313.107†	-4506.4	-287.9	-0.1167 ug/L	-0.1167 ppb	01:44:57
2	Cd 226.502†	-174.4	-9.7	-0.1377 ug/L	-0.1377 ppb	01:45:17
2	Co 228.616†	-40.0	-1.5	-0.0372 ug/L	-0.0372 ppb	01:45:17
2	Cr 267.716†	126.0	32.3	0.4209 ug/L	0.4209 ppb	01:45:17
2	Cu 324.752†	6642.9	355.4	1.1509 ug/L	1.1509 ppb	01:44:57
2	Mn 257.610†	777.4	332.6	0.4364 ug/L	0.4364 ppb	01:45:17
2	Mo 202.031†	21.1	7.1	0.6258 ug/L	0.6258 ppb	01:45:17
2	Ni 231.604†	77.0	-15.9	-0.4961 ug/L	-0.4961 ppb	01:45:17

2	P 214.914†	190.1	23.7	16.806 ug/L	16.806 ppb	01:45:17
2	Pb 220.353†	-52.0	6.4	0.9593 ug/L	0.9593 ppb	01:45:17
2	S 181.975 Axial†	35.1	11.1	19.473 ug/L	19.473 ppb	01:45:17
2	Sb 206.836†	38.8	12.6	5.3806 ug/L	5.3806 ppb	01:45:17
2	Se 196.026†	-24.5	-7.8	-6.1717 ug/L	-6.1717 ppb	01:45:17
2	Si 251.611†	666.9	148.0	5.5019 ug/L	5.5019 ppb	01:45:17
2	Sn 189.927†	8.9	5.9	1.3113 ug/L	1.3113 ppb	01:45:17
2	Ti 334.940†	-1014.7	58.7	0.0972 ug/L	0.0972 ppb	01:44:57
2	Tl 190.801†	-31.1	-6.4	-2.4662 ug/L	-2.4662 ppb	01:45:17
2	U 409.014†	-1870.5	146.3	4.3020 ug/L	4.3020 ppb	01:44:57
2	V 292.402†	-1342.2	72.2	0.5715 ug/L	0.5715 ppb	01:44:57
2	Zn 213.857†	781.5	182.7	2.1698 ug/L	2.1698 ppb	01:45:17
2	SiO2†	645.2	98.2	7.8250 ug/L	7.8250 ppb	01:45:53
3	Sc Radial	4143.7	4143.7	103 %		01:44:05
3	Y RADIAL	4466.0	4466.0	98.85 %		01:44:05
3	Al 396.153Radial†	-72.3	9.2	9.7692 ug/L	9.7692 ppb	01:44:25
3	Ca 317.933Radial†	28.5	10.5	21.405 ug/L	21.405 ppb	01:44:25
3	Fe 238.204 Radial†	11.8	2.4	30.476 ug/L	30.476 ppb	01:44:25
3	K 766.490 Radial†	2478.6	-390.4	-77.967 ug/L	-77.967 ppb	01:44:05
3	Mg 279.077 IEC†	1.4	0.7	30.419 ug/L	30.419 ppb	01:44:25
3	Na 589.592 Radial†	-327.9	141.7	55.634 ug/L	55.634 ppb	01:44:05
3	Sr 421.552†	23.6	-47.1	-0.4010 ug/L	-0.4010 ppb	01:44:05
3	Sc 361.383	825545.9	825545.9	98.296 %		01:45:22
3	Y 371.029	704266.7	704266.7	98.351 %		01:45:22
3	Ag 328.068†	149.1	-101.7	-0.5051 ug/L	-0.5051 ppb	01:45:22
3	As 188.979†	-22.0	-1.6	-0.8360 ug/L	-0.8360 ppb	01:45:42
3	B 249.677†	-247.6	-1.7	-0.0514 ug/L	-0.0514 ppb	01:45:42
3	Ba 233.527†	17.7	-0.5	-0.0035 ug/L	-0.0035 ppb	01:45:42
3	Be 313.107†	-4541.2	-357.2	-0.1452 ug/L	-0.1452 ppb	01:45:22
3	Cd 226.502†	-164.2	-0.7	-0.0125 ug/L	-0.0125 ppb	01:45:42
3	Co 228.616†	-47.6	-9.5	-0.2448 ug/L	-0.2448 ppb	01:45:42
3	Cr 267.716†	141.7	49.1	0.6424 ug/L	0.6424 ppb	01:45:42
3	Cu 324.752†	6535.9	296.5	0.9621 ug/L	0.9621 ppb	01:45:22
3	Mn 257.610†	728.9	289.2	0.3811 ug/L	0.3811 ppb	01:45:42
3	Mo 202.031†	27.7	14.0	1.2356 ug/L	1.2356 ppb	01:45:42
3	Ni 231.604†	97.3	5.4	0.1676 ug/L	0.1676 ppb	01:45:42
3	P 214.914†	200.7	36.0	25.623 ug/L	25.623 ppb	01:45:42
3	Pb 220.353†	-49.4	8.6	1.2970 ug/L	1.2970 ppb	01:45:42
3	S 181.975 Axial†	37.9	14.1	24.764 ug/L	24.764 ppb	01:45:42
3	Sb 206.836†	32.7	6.6	2.8249 ug/L	2.8249 ppb	01:45:42
3	Se 196.026†	-15.7	0.9	0.8468 ug/L	0.8468 ppb	01:45:42
3	Si 251.611†	647.4	133.1	4.9417 ug/L	4.9417 ppb	01:45:42
3	Sn 189.927†	-0.9	-4.0	-0.8734 ug/L	-0.8734 ppb	01:45:42
3	Ti 334.940†	-1118.8	-54.8	-0.0949 ug/L	-0.0949 ppb	01:45:22
3	Tl 190.801†	-33.9	-9.4	-3.6283 ug/L	-3.6283 ppb	01:45:42
3	U 409.014†	-1948.4	53.0	1.5538 ug/L	1.5538 ppb	01:45:22
3	V 292.402†	-1406.0	-2.8	-0.0055 ug/L	-0.0055 ppb	01:45:22
3	Zn 213.857†	770.2	177.1	2.0970 ug/L	2.0970 ppb	01:45:42
3	SiO2†	654.7	112.7	8.9693 ug/L	8.9693 ppb	01:45:58

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	824989.7	98.230 %		0.8334			0.85%
Sc Radial	4223.9	105 %		3.5			3.30%
Y 371.029	703687.9	98.270 %		0.8482			0.86%
Y RADIAL	4556.7	100.9 %		3.32			3.29%
Ag 328.068†	-89.5	-0.4497 ug/L		0.05281	-0.4497 ppb	0.05281	11.74%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	16.1	17.095 ug/L		8.8171	17.095 ppb	8.8171	51.58%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	-1.1	-0.6132 ug/L		0.39826	-0.6132 ppb	0.39826	64.94%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	4.0	0.1084 ug/L		0.19451	0.1084 ppb	0.19451	179.49%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	-5.8	-0.0530 ug/L		0.07076	-0.0530 ppb	0.07076	133.58%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	-295.2	-0.1197 ug/L		0.02409	-0.1197 ppb	0.02409	20.12%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	8.3	16.852 ug/L		4.2319	16.852 ppb	4.2319	25.11%

QC value within limits for Ca 317.933 Radial	Recovery = Not calculated		
Cd 226.502†	-6.1 -0.0868 ug/L	0.06580 -0.0868 ppb	0.06580 75.83%
QC value within limits for Cd 226.502	Recovery = Not calculated		
Co 228.616†	-7.9 -0.2052 ug/L	0.15213 -0.2052 ppb	0.15213 74.15%
QC value within limits for Co 228.616	Recovery = Not calculated		
Cr 267.716†	33.5 0.4367 ug/L	0.19831 0.4367 ppb	0.19831 45.42%
QC value within limits for Cr 267.716	Recovery = Not calculated		
Cu 324.752†	338.5 1.0963 ug/L	0.11694 1.0963 ppb	0.11694 10.67%
QC value within limits for Cu 324.752	Recovery = Not calculated		
Fe 238.204 Radial†	0.9 11.307 ug/L	23.6224 11.307 ppb	23.6224 208.91%
QC value within limits for Fe 238.204 Radial	Recovery = Not calculated		
K 766.490 Radial†	-403.4 -80.569 ug/L	25.1206 -80.569 ppb	25.1206 31.18%
QC value within limits for K 766.490 Radial	Recovery = Not calculated		
Mg 279.077 IEC†	1.6 68.311 ug/L	54.6615 68.311 ppb	54.6615 80.02%
QC value within limits for Mg 279.077 IEC	Recovery = Not calculated		
Mn 257.610†	328.6 0.4294 ug/L	0.04519 0.4294 ppb	0.04519 10.52%
QC value within limits for Mn 257.610	Recovery = Not calculated		
Mo 202.031†	7.9 0.6993 ug/L	0.50358 0.6993 ppb	0.50358 72.01%
QC value within limits for Mo 202.031	Recovery = Not calculated		
Na 589.592 Radial†	138.5 54.380 ug/L	3.3160 54.380 ppb	3.3160 6.10%
QC value within limits for Na 589.592 Radial	Recovery = Not calculated		
Ni 231.604†	-4.5 -0.1403 ug/L	0.33445 -0.1403 ppb	0.33445 238.44%
QC value within limits for Ni 231.604	Recovery = Not calculated		
P 214.914†	29.0 20.612 ug/L	4.5307 20.612 ppb	4.5307 21.98%
QC value within limits for P 214.914	Recovery = Not calculated		
Pb 220.353†	7.1 1.0747 ug/L	0.19253 1.0747 ppb	0.19253 17.91%
QC value within limits for Pb 220.353	Recovery = Not calculated		
S 181.975 Axial†	11.2 19.556 ug/L	5.1676 19.556 ppb	5.1676 26.43%
QC value within limits for S 181.975 Axial	Recovery = Not calculated		
Sb 206.836†	8.4 3.5862 ug/L	1.55995 3.5862 ppb	1.55995 43.50%
QC value within limits for Sb 206.836	Recovery = Not calculated		
Se 196.026†	-3.1 -2.4196 ug/L	3.53437 -2.4196 ppb	3.53437 146.07%
QC value within limits for Se 196.026	Recovery = Not calculated		
Si 251.611†	160.4 5.9634 ug/L	1.31456 5.9634 ppb	1.31456 22.04%
QC value within limits for Si 251.611	Recovery = Not calculated		
Sn 189.927†	4.2 0.9377 ug/L	1.65631 0.9377 ppb	1.65631 176.63%
QC value within limits for Sn 189.927	Recovery = Not calculated		
Sr 421.552†	-35.9 -0.3063 ug/L	0.16654 -0.3063 ppb	0.16654 54.38%
QC value within limits for Sr 421.552	Recovery = Not calculated		
Ti 334.940†	33.0 0.0518 ug/L	0.13005 0.0518 ppb	0.13005 251.12%
QC value within limits for Ti 334.940	Recovery = Not calculated		
Tl 190.801†	-5.6 -2.1681 ug/L	1.62978 -2.1681 ppb	1.62978 75.17%
QC value within limits for Tl 190.801	Recovery = Not calculated		
U 409.014†	118.5 3.4834 ug/L	1.67751 3.4834 ppb	1.67751 48.16%
QC value within limits for U 409.014	Recovery = Not calculated		
V 292.402†	40.2 0.3261 ug/L	0.29800 0.3261 ppb	0.29800 91.38%
QC value within limits for V 292.402	Recovery = Not calculated		
Zn 213.857†	178.9 2.1231 ug/L	0.04055 2.1231 ppb	0.04055 1.91%
QC value within limits for Zn 213.857	Recovery = Not calculated		
SiO2†	177.1 14.127 ug/L	9.9410 14.127 ppb	9.9410 70.37%
QC value within limits for SiO2	Recovery = Not calculated		

All analyte(s) passed QC.

Sequence No.: 88

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/26/2010 02:45:13

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib.	Sample Conc. Units	Analysis Time
1	Sc Radial	4032.2	4032.2	100.0 %			02:47:26
1	Y RADIAL	4473.2	4473.2	99.01 %			02:47:06
1	Al 396.153Radial†	4511.5	4593.0	4870.4 ug/L		4870.4 ppb	02:47:06
1	Ca 317.933Radial†	2517.6	2501.5	5082.4 ug/L		5082.4 ppb	02:47:26
1	Fe 238.204 Radial†	420.0	411.1	5157.0 ug/L		5157.0 ppb	02:47:26
1	K 766.490 Radial†	27111.8	24319.8	4848.6 ug/L		4848.6 ppb	02:47:06
1	Mg 279.077 IEC†	121.4	120.8	5275.1 ug/L		5275.1 ppb	02:47:26
1	Na 589.592 Radial†	24921.8	25393.0	9972.2 ug/L		9972.2 ppb	02:47:06
1	Sr 421.552†	56414.6	56368.0	479.97 ug/L		479.97 ppb	02:47:06
1	Sc 361.383	837676.0	837676.0	99.740 %			02:48:23
1	Y 371.029	705673.3	705673.3	98.547 %			02:48:23
1	Ag 328.068†	103801.3	103817.9	526.56 ug/L		526.56 ppb	02:48:28
1	As 188.979†	908.6	931.8	503.95 ug/L		503.95 ppb	02:48:48
1	B 249.677†	18034.0	18331.0	501.53 ug/L		501.53 ppb	02:48:28
1	Ba 233.527†	54412.9	54536.0	512.53 ug/L		512.53 ppb	02:48:28
1	Be 313.107†	1222165.0	1229607.5	500.39 ug/L		500.39 ppb	02:48:23
1	Cd 226.502†	36648.1	36909.8	520.47 ug/L		520.47 ppb	02:48:28
1	Co 228.616†	20256.1	20347.7	529.65 ug/L		529.65 ppb	02:48:28
1	Cr 267.716†	39239.1	39246.2	512.01 ug/L		512.01 ppb	02:48:28
1	Cu 324.752†	164424.6	158499.6	513.92 ug/L		513.92 ppb	02:48:28
1	Mn 257.610†	384894.9	385443.8	506.01 ug/L		506.01 ppb	02:48:23
1	Mo 202.031†	5789.1	5790.0	509.49 ug/L		509.49 ppb	02:48:48
1	Ni 231.604†	16797.5	16747.6	522.62 ug/L		522.62 ppb	02:48:28
1	P 214.914†	3711.8	3553.2	2453.7 ug/L		2453.7 ppb	02:48:48
1	Pb 220.353†	3285.6	3353.0	506.90 ug/L		506.90 ppb	02:48:48
1	S 181.975 Axial†	602.1	579.3	1014.4 ug/L		1014.4 ppb	02:48:48
1	Sb 206.836†	1233.1	1209.7	532.28 ug/L		532.28 ppb	02:48:48
1	Se 196.026†	630.0	648.6	535.57 ug/L		535.57 ppb	02:48:48
1	Si 251.611†	70323.3	69980.8	2599.3 ug/L		2599.3 ppb	02:48:28
1	Sn 189.927†	2293.6	2296.5	509.24 ug/L		509.24 ppb	02:48:48
1	Ti 334.940†	296911.3	298767.1	513.86 ug/L		513.86 ppb	02:48:28
1	Tl 190.801†	1256.1	1284.4	499.99 ug/L		499.99 ppb	02:48:48
1	U 409.014†	16132.6	18209.8	534.08 ug/L		534.08 ppb	02:48:28
1	V 292.402†	65081.0	66677.8	520.85 ug/L		520.85 ppb	02:48:28
1	Zn 213.857†	43932.7	43440.6	511.27 ug/L		511.27 ppb	02:48:28
1	SiO2†	70310.8	69940.4	5574.0 ug/L		5574.0 ppb	02:49:56
2	Sc Radial	3987.7	3987.7	98.9 %			02:47:51
2	Y RADIAL	4438.5	4438.5	98.24 %			02:47:31
2	Al 396.153Radial†	4522.6	4654.6	4936.1 ug/L		4936.1 ppb	02:47:31
2	Ca 317.933Radial†	2501.6	2513.3	5106.5 ug/L		5106.5 ppb	02:47:51
2	Fe 238.204 Radial†	415.4	411.2	5156.9 ug/L		5156.9 ppb	02:47:51
2	K 766.490 Radial†	27395.2	24909.1	4966.2 ug/L		4966.2 ppb	02:47:31
2	Mg 279.077 IEC†	117.6	118.2	5165.6 ug/L		5165.6 ppb	02:47:51
2	Na 589.592 Radial†	24996.7	25747.0	10111 ug/L		10111 ppb	02:47:31
2	Sr 421.552†	56711.7	57298.3	487.89 ug/L		487.89 ppb	02:47:31
2	Sc 361.383	842024.2	842024.2	100.26 %			02:48:54
2	Y 371.029	708980.1	708980.1	99.009 %			02:48:54
2	Ag 328.068†	102235.0	101718.2	515.94 ug/L		515.94 ppb	02:48:59
2	As 188.979†	904.4	922.9	499.10 ug/L		499.10 ppb	02:49:20
2	B 249.677†	17646.4	17851.1	488.37 ug/L		488.37 ppb	02:48:59
2	Ba 233.527†	53860.7	53703.5	504.71 ug/L		504.71 ppb	02:48:59
2	Be 313.107†	1227206.6	1228308.4	499.84 ug/L		499.84 ppb	02:48:54
2	Cd 226.502†	36149.5	36222.8	510.78 ug/L		510.78 ppb	02:48:59
2	Co 228.616†	19918.4	19906.0	518.17 ug/L		518.17 ppb	02:48:59
2	Cr 267.716†	38875.0	38679.9	504.63 ug/L		504.63 ppb	02:48:59
2	Cu 324.752†	161475.6	154706.9	501.62 ug/L		501.62 ppb	02:48:59
2	Mn 257.610†	387250.9	385801.0	506.49 ug/L		506.49 ppb	02:48:54
2	Mo 202.031†	5788.1	5759.0	506.77 ug/L		506.77 ppb	02:49:20
2	Ni 231.604†	16576.1	16439.8	513.02 ug/L		513.02 ppb	02:48:59

2	P 214.914†	3696.5	3518.8	2431.4 ug/L	2431.4 ppb	02:49:20
2	Pb 220.353†	3277.3	3327.6	503.09 ug/L	503.09 ppb	02:49:20
2	S 181.975 Axial†	609.1	583.1	1021.1 ug/L	1021.1 ppb	02:49:20
2	Sb 206.836†	1265.4	1235.5	543.17 ug/L	543.17 ppb	02:49:20
2	Se 196.026†	625.2	640.6	529.18 ug/L	529.18 ppb	02:49:20
2	Si 251.611†	69248.7	68544.9	2545.9 ug/L	2545.9 ppb	02:48:59
2	Sn 189.927†	2297.6	2288.5	507.48 ug/L	507.48 ppb	02:49:20
2	Ti 334.940†	292607.2	292936.8	503.85 ug/L	503.85 ppb	02:48:59
2	Tl 190.801†	1269.1	1290.9	502.51 ug/L	502.51 ppb	02:49:20
2	U 409.014†	15987.2	17981.2	527.37 ug/L	527.37 ppb	02:48:59
2	V 292.402†	64196.7	65458.9	511.41 ug/L	511.41 ppb	02:48:59
2	Zn 213.857†	43363.5	42645.3	501.90 ug/L	501.90 ppb	02:48:59
2	SiO2†	69344.9	68612.9	5468.0 ug/L	5468.0 ppb	02:50:01
3	Sc Radial	3983.7	3983.7	98.8 %		02:48:16
3	Y RADIAL	4438.6	4438.6	98.24 %		02:47:56
3	Al 396.153Radial†	4481.5	4617.6	4896.5 ug/L	4896.5 ppb	02:47:56
3	Ca 317.933Radial†	2504.1	2518.5	5116.9 ug/L	5116.9 ppb	02:48:16
3	Fe 238.204 Radial†	413.6	409.8	5140.0 ug/L	5140.0 ppb	02:48:16
3	K 766.490 Radial†	27159.1	24697.9	4924.1 ug/L	4924.1 ppb	02:47:56
3	Mg 279.077 IEC†	122.3	123.1	5378.1 ug/L	5378.1 ppb	02:48:16
3	Na 589.592 Radial†	24849.3	25623.1	10063 ug/L	10063 ppb	02:47:56
3	Sr 421.552†	56433.2	57073.9	485.98 ug/L	485.98 ppb	02:47:56
3	Sc 361.383	840419.0	840419.0	100.07 %		02:49:25
3	Y 371.029	707934.7	707934.7	98.863 %		02:49:25
3	Ag 328.068†	102140.9	101819.0	516.45 ug/L	516.45 ppb	02:49:30
3	As 188.979†	924.6	944.8	510.83 ug/L	510.83 ppb	02:49:51
3	B 249.677†	17691.0	17929.2	490.52 ug/L	490.52 ppb	02:49:30
3	Ba 233.527†	53643.0	53588.5	503.63 ug/L	503.63 ppb	02:49:30
3	Be 313.107†	1224401.3	1227842.8	499.65 ug/L	499.65 ppb	02:49:25
3	Cd 226.502†	35903.9	36046.3	508.29 ug/L	508.29 ppb	02:49:30
3	Co 228.616†	19908.2	19933.8	518.90 ug/L	518.90 ppb	02:49:30
3	Cr 267.716†	38754.9	38633.9	504.03 ug/L	504.03 ppb	02:49:30
3	Cu 324.752†	161727.6	155266.3	503.44 ug/L	503.44 ppb	02:49:30
3	Mn 257.610†	385547.9	384836.9	505.21 ug/L	505.21 ppb	02:49:25
3	Mo 202.031†	5825.6	5807.5	511.03 ug/L	511.03 ppb	02:49:51
3	Ni 231.604†	16515.8	16411.1	512.12 ug/L	512.12 ppb	02:49:30
3	P 214.914†	3718.5	3547.8	2451.9 ug/L	2451.9 ppb	02:49:51
3	Pb 220.353†	3286.9	3343.6	505.49 ug/L	505.49 ppb	02:49:51
3	S 181.975 Axial†	607.5	582.7	1020.4 ug/L	1020.4 ppb	02:49:51
3	Sb 206.836†	1276.3	1248.8	548.90 ug/L	548.90 ppb	02:49:51
3	Se 196.026†	627.2	643.7	531.64 ug/L	531.64 ppb	02:49:51
3	Si 251.611†	69095.7	68523.9	2545.1 ug/L	2545.1 ppb	02:49:30
3	Sn 189.927†	2284.7	2280.0	505.60 ug/L	505.60 ppb	02:49:51
3	Ti 334.940†	291898.0	292785.5	503.58 ug/L	503.58 ppb	02:49:30
3	Tl 190.801†	1261.8	1286.1	500.61 ug/L	500.61 ppb	02:49:51
3	U 409.014†	15726.2	17750.8	520.60 ug/L	520.60 ppb	02:49:30
3	V 292.402†	63944.3	65329.0	510.47 ug/L	510.47 ppb	02:49:30
3	Zn 213.857†	43275.2	42639.7	501.84 ug/L	501.84 ppb	02:49:30
3	SiO2†	68332.3	67733.1	5397.6 ug/L	5397.6 ppb	02:50:06

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	840039.7	100.02 %	0.262			0.26%
Sc Radial	4001.2	99.2 %	0.67			0.67%
Y 371.029	707529.4	98.807 %	0.2360			0.24%
Y RADIAL	4450.1	98.50 %	0.443			0.45%
Ag 328.068†	102451.7	519.65 ug/L	5.990	519.65 ppb	5.990	1.15%
QC value within limits for Ag 328.068 Recovery = 103.93%						
Al 396.153Radial†	4621.7	4901.0 ug/L	33.10	4901.0 ppb	33.10	0.68%
QC value within limits for Al 396.153Radial Recovery = 98.02%						
As 188.979†	933.1	504.62 ug/L	5.894	504.62 ppb	5.894	1.17%
QC value within limits for As 188.979 Recovery = 100.92%						
B 249.677†	18037.1	493.47 ug/L	7.060	493.47 ppb	7.060	1.43%
QC value within limits for B 249.677 Recovery = 98.69%						
Ba 233.527†	53942.7	506.96 ug/L	4.860	506.96 ppb	4.860	0.96%
QC value within limits for Ba 233.527 Recovery = 101.39%						
Be 313.107†	1228586.2	499.96 ug/L	0.384	499.96 ppb	0.384	0.08%
QC value within limits for Be 313.107 Recovery = 99.99%						
Ca 317.933Radial†	2511.1	5101.9 ug/L	17.72	5101.9 ppb	17.72	0.35%

QC value within limits for Ca 317.933 Radial Recovery = 102.04%

Cd 226.502†	36393.0	513.18 ug/L	6.439	513.18 ppb	6.439	1.25%
QC value within limits for Cd 226.502 Recovery = 102.64%						
Co 228.616†	20062.5	522.24 ug/L	6.427	522.24 ppb	6.427	1.23%
QC value within limits for Co 228.616 Recovery = 104.45%						
Cr 267.716†	38853.4	506.89 ug/L	4.446	506.89 ppb	4.446	0.88%
QC value within limits for Cr 267.716 Recovery = 101.38%						
Cu 324.752†	156157.6	506.33 ug/L	6.636	506.33 ppb	6.636	1.31%
QC value within limits for Cu 324.752 Recovery = 101.27%						
Fe 238.204 Radial†	410.7	5151.3 ug/L	9.76	5151.3 ppb	9.76	0.19%
QC value within limits for Fe 238.204 Radial Recovery = 103.03%						
K 766.490 Radial†	24642.3	4913.0 ug/L	59.57	4913.0 ppb	59.57	1.21%
QC value within limits for K 766.490 Radial Recovery = 98.26%						
Mg 279.077 IEC†	120.7	5272.9 ug/L	106.31	5272.9 ppb	106.31	2.02%
QC value within limits for Mg 279.077 IEC Recovery = 105.46%						
Mn 257.610†	385360.6	505.90 ug/L	0.645	505.90 ppb	0.645	0.13%
QC value within limits for Mn 257.610 Recovery = 101.18%						
Mo 202.031†	5785.5	509.10 ug/L	2.157	509.10 ppb	2.157	0.42%
QC value within limits for Mo 202.031 Recovery = 101.82%						
Na 589.592 Radial†	25587.7	10049 ug/L	70.5	10049 ppb	70.5	0.70%
QC value within limits for Na 589.592 Radial Recovery = 100.49%						
Ni 231.604†	16532.8	515.92 ug/L	5.821	515.92 ppb	5.821	1.13%
QC value within limits for Ni 231.604 Recovery = 103.18%						
P 214.914†	3539.9	2445.7 ug/L	12.39	2445.7 ppb	12.39	0.51%
QC value within limits for P 214.914 Recovery = 97.83%						
Pb 220.353†	3341.4	505.16 ug/L	1.924	505.16 ppb	1.924	0.38%
QC value within limits for Pb 220.353 Recovery = 101.03%						
S 181.975 Axial†	581.7	1018.7 ug/L	3.68	1018.7 ppb	3.68	0.36%
QC value within limits for S 181.975 Axial Recovery = 101.87%						
Sb 206.836†	1231.3	541.45 ug/L	8.438	541.45 ppb	8.438	1.56%
QC value within limits for Sb 206.836 Recovery = 108.29%						
Se 196.026†	644.3	532.13 ug/L	3.222	532.13 ppb	3.222	0.61%
QC value within limits for Se 196.026 Recovery = 106.43%						
Si 251.611†	69016.5	2563.4 ug/L	31.09	2563.4 ppb	31.09	1.21%
QC value within limits for Si 251.611 Recovery = 102.54%						
Sn 189.927†	2288.4	507.44 ug/L	1.821	507.44 ppb	1.821	0.36%
QC value within limits for Sn 189.927 Recovery = 101.49%						
Sr 421.552†	56913.4	484.61 ug/L	4.134	484.61 ppb	4.134	0.85%
QC value within limits for Sr 421.552 Recovery = 96.92%						
Ti 334.940†	294829.8	507.10 ug/L	5.862	507.10 ppb	5.862	1.16%
QC value within limits for Ti 334.940 Recovery = 101.42%						
Tl 190.801†	1287.1	501.04 ug/L	1.313	501.04 ppb	1.313	0.26%
QC value within limits for Tl 190.801 Recovery = 100.21%						
U 409.014†	17980.6	527.35 ug/L	6.742	527.35 ppb	6.742	1.28%
QC value within limits for U 409.014 Recovery = 105.47%						
V 292.402†	65821.9	514.24 ug/L	5.741	514.24 ppb	5.741	1.12%
QC value within limits for V 292.402 Recovery = 102.85%						
Zn 213.857†	42908.5	505.00 ug/L	5.427	505.00 ppb	5.427	1.07%
QC value within limits for Zn 213.857 Recovery = 101.00%						
SiO2†	68762.1	5479.9 ug/L	88.79	5479.9 ppb	88.79	1.62%
QC value within limits for SiO2 Recovery = 102.48%						

All analyte(s) passed QC.

Sequence No.: 89

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/26/2010 02:52:17

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	4090.0	4090.0	.101 %		02:54:09
1	Y RADIAL	4390.3	4390.3	97.17 %		02:54:09
1	Al 396.153Radial†	-78.8	1.9	1.9982 ug/L	1.9982 ppb	02:54:29
1	Ca 317.933Radial†	26.5	8.9	18.165 ug/L	18.165 ppb	02:54:29
1	Fe 238.204 Radial†	7.9	-1.2	-14.595 ug/L	-14.595 ppb	02:54:29
1	K 766.490 Radial†	2426.9	-409.7	-81.800 ug/L	-81.800 ppb	02:54:09
1	Mg 279.077 IEC†	2.0	1.2	53.714 ug/L	53.714 ppb	02:54:29
1	Na 589.592 Radial†	-380.0	86.1	33.796 ug/L	33.796 ppb	02:54:09
1	Sr 421.552†	33.5	-36.9	-0.3148 ug/L	-0.3148 ppb	02:54:09
1	Sc 361.383	825630.5	825630.5	98.306 %		02:55:26
1	Y 371.029	702831.8	702831.8	98.151 %		02:55:26
1	Ag 328.068†	198.7	-51.3	-0.2655 ug/L	-0.2655 ppb	02:55:26
1	As 188.979†	-16.7	3.9	2.0753 ug/L	2.0753 ppb	02:55:46
1	B 249.677†	-329.7	-85.3	-2.3402 ug/L	-2.3402 ppb	02:55:46
1	Ba 233.527†	15.7	-2.6	-0.0250 ug/L	-0.0250 ppb	02:55:46
1	Be 313.107†	-4521.1	-336.2	-0.1363 ug/L	-0.1363 ppb	02:55:26
1	Cd 226.502†	-176.6	-13.2	-0.1847 ug/L	-0.1847 ppb	02:55:46
1	Co 228.616†	-50.6	-12.5	-0.3240 ug/L	-0.3240 ppb	02:55:46
1	Cr 267.716†	98.5	5.3	0.0662 ug/L	0.0662 ppb	02:55:46
1	Cu 324.752†	6611.1	372.2	1.2055 ug/L	1.2055 ppb	02:55:26
1	Mn 257.610†	872.7	435.4	0.5676 ug/L	0.5676 ppb	02:55:46
1	Mo 202.031†	24.1	10.3	0.9046 ug/L	0.9046 ppb	02:55:46
1	Ni 231.604†	82.4	-9.8	-0.3044 ug/L	-0.3044 ppb	02:55:46
1	P 214.914†	184.9	19.8	14.044 ug/L	14.044 ppb	02:55:46
1	Pb 220.353†	-43.9	14.2	2.1455 ug/L	2.1455 ppb	02:55:46
1	S 181.975 Axial†	32.8	9.0	15.726 ug/L	15.726 ppb	02:55:46
1	Sb 206.836†	34.7	8.7	3.7255 ug/L	3.7255 ppb	02:55:46
1	Se 196.026†	-15.9	0.8	0.5862 ug/L	0.5862 ppb	02:55:46
1	Si 251.611†	650.3	136.1	5.0557 ug/L	5.0557 ppb	02:55:46
1	Sn 189.927†	9.2	6.3	1.3891 ug/L	1.3891 ppb	02:55:46
1	Ti 334.940†	-1017.7	48.1	0.0802 ug/L	0.0802 ppb	02:55:26
1	Tl 190.801†	-29.0	-4.5	-1.7179 ug/L	-1.7179 ppb	02:55:46
1	U 409.014†	-1954.1	47.4	1.3951 ug/L	1.3951 ppb	02:55:26
1	V 292.402†	-1428.9	-26.0	-0.1819 ug/L	-0.1819 ppb	02:55:26
1	Zn 213.857†	768.4	175.2	2.0840 ug/L	2.0840 ppb	02:55:46
1	SiO2†	623.4	80.7	6.4255 ug/L	6.4255 ppb	02:56:42
2	Sc Radial	3962.5	3962.5	98.2 %		02:54:34
2	Y RADIAL	4263.7	4263.7	94.37 %		02:54:34
2	Al 396.153Radial†	-68.3	10.1	10.707 ug/L	10.707 ppb	02:54:54
2	Ca 317.933Radial†	22.9	6.1	12.365 ug/L	12.365 ppb	02:54:54
2	Fe 238.204 Radial†	10.2	1.4	17.481 ug/L	17.481 ppb	02:54:54
2	K 766.490 Radial†	2403.3	-356.7	-71.218 ug/L	-71.218 ppb	02:54:34
2	Mg 279.077 IEC†	0.1	-0.6	-25.046 ug/L	-25.046 ppb	02:54:54
2	Na 589.592 Radial†	-474.9	-22.6	-8.8795 ug/L	-8.8795 ppb	02:54:34
2	Sr 421.552†	27.6	-41.9	-0.3568 ug/L	-0.3568 ppb	02:54:34
2	Sc 361.383	831618.9	831618.9	99.019 %		02:55:51
2	Y 371.029	707401.0	707401.0	98.789 %		02:55:51
2	Ag 328.068†	163.3	-88.5	-0.4431 ug/L	-0.4431 ppb	02:55:51
2	As 188.979†	-18.3	2.4	1.2843 ug/L	1.2843 ppb	02:56:11
2	B 249.677†	-328.8	-81.9	-2.2546 ug/L	-2.2546 ppb	02:56:11
2	Ba 233.527†	4.2	-14.3	-0.1315 ug/L	-0.1315 ppb	02:56:11
2	Be 313.107†	-4675.1	-458.7	-0.1860 ug/L	-0.1860 ppb	02:55:51
2	Cd 226.502†	-164.8	-0.1	-0.0018 ug/L	-0.0018 ppb	02:56:11
2	Co 228.616†	-45.2	-6.7	-0.1738 ug/L	-0.1738 ppb	02:56:11
2	Cr 267.716†	99.1	5.1	0.0668 ug/L	0.0668 ppb	02:56:11
2	Cu 324.752†	6656.5	369.7	1.1956 ug/L	1.1956 ppb	02:55:51
2	Mn 257.610†	799.7	355.2	0.4687 ug/L	0.4687 ppb	02:56:11
2	Mo 202.031†	19.6	5.7	0.4986 ug/L	0.4986 ppb	02:56:11
2	Ni 231.604†	71.5	-21.4	-0.6692 ug/L	-0.6692 ppb	02:56:11

2	P 214.914†	208.6	42.4	30.261 ug/L	30.261 ppb	02:56:11
2	Pb 220.353†	-49.1	9.2	1.3887 ug/L	1.3887 ppb	02:56:11
2	S 181.975 Axial†	28.6	4.5	7.8852 ug/L	7.8852 ppb	02:56:11
2	Sb 206.836†	23.4	-3.0	-1.2379 ug/L	-1.2379 ppb	02:56:11
2	Se 196.026†	-17.8	-1.0	-0.7244 ug/L	-0.7244 ppb	02:56:11
2	Si 251.611†	664.4	145.5	5.4121 ug/L	5.4121 ppb	02:56:11
2	Sn 189.927†	12.5	9.5	2.1119 ug/L	2.1119 ppb	02:56:11
2	Ti 334.940†	-1000.0	73.4	0.1269 ug/L	0.1269 ppb	02:55:51
2	Tl 190.801†	-25.6	-0.8	-0.3093 ug/L	-0.3093 ppb	02:56:11
2	U 409.014†	-1774.1	243.5	7.1625 ug/L	7.1625 ppb	02:55:51
2	V 292.402†	-1298.3	116.4	0.9149 ug/L	0.9149 ppb	02:55:51
2	Zn 213.857†	767.0	168.2	1.9981 ug/L	1.9981 ppb	02:56:11
2	SiO2†	680.9	134.2	10.711 ug/L	10.711 ppb	02:56:47
3	Sc Radial	3998.2	3998.2	99.1 %		02:54:59
3	Y RADIAL	4332.3	4332.3	95.89 %		02:54:59
3	Al 396.153Radial†	-74.8	4.2	4.3979 ug/L	4.3979 ppb	02:55:19
3	Ca 317.933Radial†	25.2	8.2	16.746 ug/L	16.746 ppb	02:55:19
3	Fe 238.204 Radial†	11.7	2.8	34.991 ug/L	34.991 ppb	02:55:19
3	K 766.490 Radial†	2409.8	-372.0	-74.273 ug/L	-74.273 ppb	02:54:59
3	Mg 279.077 IEC†	2.9	2.2	96.746 ug/L	96.746 ppb	02:55:19
3	Na 589.592 Radial†	-396.2	61.2	24.030 ug/L	24.030 ppb	02:54:59
3	Sr 421.552†	32.1	-37.6	-0.3207 ug/L	-0.3207 ppb	02:54:59
3	Sc 361.383	819278.4	819278.4	97.550 %		02:56:16
3	Y 371.029	699251.0	699251.0	97.651 %		02:56:16
3	Ag 328.068†	164.6	-84.7	-0.4181 ug/L	-0.4181 ppb	02:56:16
3	As 188.979†	-21.7	-1.4	-0.7570 ug/L	-0.7570 ppb	02:56:36
3	B 249.677†	-351.6	-110.3	-3.0372 ug/L	-3.0372 ppb	02:56:36
3	Ba 233.527†	5.6	-12.8	-0.1170 ug/L	-0.1170 ppb	02:56:36
3	Be 313.107†	-4554.7	-406.4	-0.1647 ug/L	-0.1647 ppb	02:56:16
3	Cd 226.502†	-166.5	-4.3	-0.0630 ug/L	-0.0630 ppb	02:56:36
3	Co 228.616†	-48.2	-10.5	-0.2724 ug/L	-0.2724 ppb	02:56:36
3	Cr 267.716†	93.6	1.0	0.0155 ug/L	0.0155 ppb	02:56:36
3	Cu 324.752†	6647.3	461.5	1.4946 ug/L	1.4946 ppb	02:56:16
3	Mn 257.610†	783.9	351.2	0.4603 ug/L	0.4603 ppb	02:56:36
3	Mo 202.031†	20.0	6.3	0.5567 ug/L	0.5567 ppb	02:56:36
3	Ni 231.604†	63.0	-29.0	-0.9050 ug/L	-0.9050 ppb	02:56:36
3	P 214.914†	186.6	23.1	16.322 ug/L	16.322 ppb	02:56:36
3	Pb 220.353†	-61.0	-3.7	-0.5639 ug/L	-0.5639 ppb	02:56:36
3	S 181.975 Axial†	25.5	1.7	3.0513 ug/L	3.0513 ppb	02:56:36
3	Sb 206.836†	26.4	0.5	0.2618 ug/L	0.2618 ppb	02:56:36
3	Se 196.026†	-15.1	1.4	1.2599 ug/L	1.2599 ppb	02:56:36
3	Si 251.611†	658.1	149.2	5.5475 ug/L	5.5475 ppb	02:56:36
3	Sn 189.927†	16.8	14.2	3.1378 ug/L	3.1378 ppb	02:56:36
3	Ti 334.940†	-988.8	69.7	0.1114 ug/L	0.1114 ppb	02:56:16
3	Tl 190.801†	-38.8	-14.7	-5.6790 ug/L	-5.6790 ppb	02:56:36
3	U 409.014†	-1773.2	217.4	6.3941 ug/L	6.3941 ppb	02:56:16
3	V 292.402†	-1287.2	108.0	0.8490 ug/L	0.8490 ppb	02:56:16
3	Zn 213.857†	765.6	178.4	2.1174 ug/L	2.1174 ppb	02:56:36
3	SiO2†	599.6	61.3	4.8851 ug/L	4.8851 ppb	02:56:52

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	825509.3	98.292 %		0.7348			0.75%
Sc Radial	4016.9	99.6 %		1.63			1.64%
Y 371.029	703161.3	98.197 %		0.5705			0.58%
Y RADIAL	4328.8	95.81 %		1.403			1.46%
Ag 328.068†	-74.8	-0.3756 ug/L		0.09616	-0.3756 ppb	0.09616	25.60%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	5.4	5.7011 ug/L		4.49850	5.7011 ppb	4.49850	78.91%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	1.6	0.8675 ug/L		1.46141	0.8675 ppb	1.46141	168.46%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	-92.5	-2.5440 ug/L		0.42926	-2.5440 ppb	0.42926	16.87%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	-9.9	-0.0912 ug/L		0.05774	-0.0912 ppb	0.05774	63.34%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	-400.5	-0.1623 ug/L		0.02490	-0.1623 ppb	0.02490	15.34%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	7.8	15.759 ug/L		3.0238	15.759 ppb	3.0238	19.19%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated					
Cd 226.502†	-5.8	-0.0831 ug/L	0.09310	-0.0831 ppb	0.09310 111.97%
QC value within limits for Cd 226.502 Recovery = Not calculated					
Co 228.616†	-9.9	-0.2567 ug/L	0.07633	-0.2567 ppb	0.07633 29.73%
QC value within limits for Co 228.616 Recovery = Not calculated					
Cr 267.716†	3.8	0.0495 ug/L	0.02948	0.0495 ppb	0.02948 59.54%
QC value within limits for Cr 267.716 Recovery = Not calculated					
Cu 324.752†	401.1	1.2986 ug/L	0.16983	1.2986 ppb	0.16983 13.08%
QC value within limits for Cu 324.752 Recovery = Not calculated					
Fe 238.204 Radial†	1.0	12.626 ug/L	25.1473	12.626 ppb	25.1473 199.18%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated					
K 766.490 Radial†	-379.5	-75.764 ug/L	5.4463	-75.764 ppb	5.4463 7.19%
QC value within limits for K 766.490 Radial Recovery = Not calculated					
Mg 279.077 IEC†	1.0	41.805 ug/L	61.7630	41.805 ppb	61.7630 147.74%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated					
Mn 257.610†	380.6	0.4989 ug/L	0.05966	0.4989 ppb	0.05966 11.96%
QC value within limits for Mn 257.610 Recovery = Not calculated					
Mo 202.031†	7.4	0.6533 ug/L	0.21959	0.6533 ppb	0.21959 33.61%
QC value within limits for Mo 202.031 Recovery = Not calculated					
Na 589.592 Radial†	41.5	16.316 ug/L	22.3594	16.316 ppb	22.3594 137.04%
QC value within limits for Na 589.592 Radial Recovery = Not calculated					
Ni 231.604†	-20.1	-0.6262 ug/L	0.30262	-0.6262 ppb	0.30262 48.33%
QC value within limits for Ni 231.604 Recovery = Not calculated					
P 214.914†	28.5	20.209 ug/L	8.7792	20.209 ppb	8.7792 43.44%
QC value within limits for P 214.914 Recovery = Not calculated					
Pb 220.353†	6.6	0.9901 ug/L	1.39803	0.9901 ppb	1.39803 141.20%
QC value within limits for Pb 220.353 Recovery = Not calculated					
S 181.975 Axial†	5.1	8.8873 ug/L	6.39629	8.8873 ppb	6.39629 71.97%
QC value within limits for S 181.975 Axial Recovery = Not calculated					
Sb 206.836†	2.0	0.9165 ug/L	2.54561	0.9165 ppb	2.54561 277.77%
QC value within limits for Sb 206.836 Recovery = Not calculated					
Se 196.026†	0.4	0.3739 ug/L	1.00908	0.3739 ppb	1.00908 269.88%
QC value within limits for Se 196.026 Recovery = Not calculated					
Si 251.611†	143.6	5.3384 ug/L	0.25400	5.3384 ppb	0.25400 4.76%
QC value within limits for Si 251.611 Recovery = Not calculated					
Sn 189.927†	10.0	2.2129 ug/L	0.87869	2.2129 ppb	0.87869 39.71%
QC value within limits for Sn 189.927 Recovery = Not calculated					
Sr 421.552†	-38.8	-0.3308 ug/L	0.02277	-0.3308 ppb	0.02277 6.88%
QC value within limits for Sr 421.552 Recovery = Not calculated					
Ti 334.940†	63.8	0.1062 ug/L	0.02377	0.1062 ppb	0.02377 22.39%
QC value within limits for Ti 334.940 Recovery = Not calculated					
Tl 190.801†	-6.7	-2.5687 ug/L	2.78413	-2.5687 ppb	2.78413 108.39%
QC value within limits for Tl 190.801 Recovery = Not calculated					
U 409.014†	169.4	4.9839 ug/L	3.13164	4.9839 ppb	3.13164 62.84%
QC value within limits for U 409.014 Recovery = Not calculated					
V 292.402†	66.1	0.5274 ug/L	0.61508	0.5274 ppb	0.61508 116.63%
QC value within limits for V 292.402 Recovery = Not calculated					
Zn 213.857†	173.9	2.0665 ug/L	0.06154	2.0665 ppb	0.06154 2.98%
QC value within limits for Zn 213.857 Recovery = Not calculated					
SiO2†	92.1	7.3405 ug/L	3.01875	7.3405 ppb	3.01875 41.12%
QC value within limits for SiO2 Recovery = Not calculated					

All analyte(s) passed QC.

Sequence No.: 98

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/26/2010 03:55:54

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	4131.6	4131.6	102 %		03:57:47
1	Y RADIAL	4443.8	4443.8	98.36 %		03:57:47
1	Al 396.153Radial†	4532.2	4504.7	4776.1 ug/L	4776.1 ppb	03:57:47
1	Ca 317.933Radial†	2497.5	2421.2	4919.3 ug/L	4919.3 ppb	03:58:07
1	Fe 238.204 Radial†	423.5	404.4	5073.0 ug/L	5073.0 ppb	03:58:07
1	K 766.490 Radial†	27570.6	24115.2	4807.6 ug/L	4807.6 ppb	03:57:47
1	Mg 279.077 IEC†	120.5	117.0	5110.1 ug/L	5110.1 ppb	03:58:07
1	Na 589.592 Radial†	27128.6	26947.8	10583 ug/L	10583 ppb	03:57:47
1	Sr 421.552†	59057.6	57590.6	490.38 ug/L	490.38 ppb	03:57:47
1	Sc 361.383	833955.6	833955.6	99.298 %		03:59:04
1	Y 371.029	702592.7	702592.7	98.117 %		03:59:04
1	Ag 328.068†	101345.7	101809.3	516.37 ug/L	516.37 ppb	03:59:09
1	As 188.979†	896.6	923.8	499.57 ug/L	499.57 ppb	03:59:29
1	B 249.677†	17338.6	17711.4	484.54 ug/L	484.54 ppb	03:59:09
1	Ba 233.527†	53201.6	53559.4	503.35 ug/L	503.35 ppb	03:59:09
1	Be 313.107†	1219838.3	1232730.8	501.63 ug/L	501.63 ppb	03:59:04
1	Cd 226.502†	35601.1	36019.4	507.91 ug/L	507.91 ppb	03:59:09
1	Co 228.616†	19722.8	19901.3	518.05 ug/L	518.05 ppb	03:59:09
1	Cr 267.716†	38357.6	38533.9	502.72 ug/L	502.72 ppb	03:59:09
1	Cu 324.752†	159733.7	154511.0	500.98 ug/L	500.98 ppb	03:59:09
1	Mn 257.610†	384606.3	386874.8	507.89 ug/L	507.89 ppb	03:59:04
1	Mo 202.031†	5774.3	5801.0	510.45 ug/L	510.45 ppb	03:59:29
1	Ni 231.604†	16340.1	16362.1	510.59 ug/L	510.59 ppb	03:59:09
1	P 214.914†	3710.6	3568.6	2467.5 ug/L	2467.5 ppb	03:59:29
1	Pb 220.353†	3286.4	3368.5	509.23 ug/L	509.23 ppb	03:59:29
1	S 181.975 Axial†	606.1	586.1	1026.3 ug/L	1026.3 ppb	03:59:29
1	Sb 206.836†	1263.7	1246.0	547.79 ug/L	547.79 ppb	03:59:29
1	Se 196.026†	632.4	653.8	539.42 ug/L	539.42 ppb	03:59:29
1	Si 251.611†	68443.0	68401.8	2540.5 ug/L	2540.5 ppb	03:59:09
1	Sn 189.927†	2296.8	2310.0	512.20 ug/L	512.20 ppb	03:59:29
1	Ti 334.940†	289121.7	292250.4	502.65 ug/L	502.65 ppb	03:59:09
1	Tl 190.801†	1263.1	1297.1	504.90 ug/L	504.90 ppb	03:59:29
1	U 409.014†	15913.3	18061.1	529.74 ug/L	529.74 ppb	03:59:09
1	V 292.402†	63349.0	65224.7	509.68 ug/L	509.68 ppb	03:59:09
1	Zn 213.857†	42779.5	42475.7	499.92 ug/L	499.92 ppb	03:59:09
1	SiO2†	69094.9	69030.4	5501.3 ug/L	5501.3 ppb	04:00:37
2	Sc Radial	4144.3	4144.3	103 %		03:58:12
2	Y RADIAL	4431.1	4431.1	98.08 %		03:58:12
2	Al 396.153Radial†	4482.5	4442.6	4709.9 ug/L	4709.9 ppb	03:58:12
2	Ca 317.933Radial†	2519.7	2435.4	4948.1 ug/L	4948.1 ppb	03:58:32
2	Fe 238.204 Radial†	419.5	399.3	5008.7 ug/L	5008.7 ppb	03:58:32
2	K 766.490 Radial†	27188.7	23660.5	4716.9 ug/L	4716.9 ppb	03:58:12
2	Mg 279.077 IEC†	121.6	117.7	5140.0 ug/L	5140.0 ppb	03:58:32
2	Na 589.592 Radial†	26704.6	26453.4	10389 ug/L	10389 ppb	03:58:12
2	Sr 421.552†	58090.2	56471.2	480.85 ug/L	480.85 ppb	03:58:12
2	Sc 361.383	833036.2	833036.2	99.188 %		03:59:35
2	Y 371.029	700804.8	700804.8	97.868 %		03:59:35
2	Ag 328.068†	101745.7	102325.2	518.96 ug/L	518.96 ppb	03:59:40
2	As 188.979†	908.7	936.9	506.63 ug/L	506.63 ppb	04:00:00
2	B 249.677†	17498.6	17892.1	489.50 ug/L	489.50 ppb	03:59:40
2	Ba 233.527†	53542.6	53962.4	507.14 ug/L	507.14 ppb	03:59:40
2	Be 313.107†	1223785.0	1238065.6	503.81 ug/L	503.81 ppb	03:59:35
2	Cd 226.502†	35916.0	36376.4	512.96 ug/L	512.96 ppb	03:59:40
2	Co 228.616†	19930.3	20132.3	524.07 ug/L	524.07 ppb	03:59:40
2	Cr 267.716†	38648.3	38869.7	507.09 ug/L	507.09 ppb	03:59:40
2	Cu 324.752†	160988.4	155953.5	505.66 ug/L	505.66 ppb	03:59:40
2	Mn 257.610†	387285.4	390003.3	511.99 ug/L	511.99 ppb	03:59:35
2	Mo 202.031†	5805.1	5838.4	513.74 ug/L	513.74 ppb	04:00:00
2	Ni 231.604†	16483.2	16524.6	515.66 ug/L	515.66 ppb	03:59:40

2	P 214.914†	3719.2	3581.5	2475.8 ug/L	2475.8 ppb	04:00:00
2	Pb 220.353†	3282.2	3367.9	509.15 ug/L	509.15 ppb	04:00:00
2	S 181.975 Axial†	609.4	590.0	1033.3 ug/L	1033.3 ppb	04:00:00
2	Sb 206.836†	1252.0	1235.6	543.43 ug/L	543.43 ppb	04:00:00
2	Se 196.026†	625.1	647.2	533.94 ug/L	533.94 ppb	04:00:00
2	Si 251.611†	69275.0	69316.6	2574.6 ug/L	2574.6 ppb	03:59:40
2	Sn 189.927†	2291.1	2306.7	511.49 ug/L	511.49 ppb	04:00:00
2	Ti 334.940†	291679.5	295150.5	507.63 ug/L	507.63 ppb	03:59:40
2	Tl 190.801†	1260.8	1296.2	504.59 ug/L	504.59 ppb	04:00:00
2	U 409.014†	15969.9	18135.8	531.93 ug/L	531.93 ppb	03:59:40
2	V 292.402†	63778.5	65728.1	513.61 ug/L	513.61 ppb	03:59:40
2	Zn 213.857†	43193.6	42940.8	505.41 ug/L	505.41 ppb	03:59:40
2	SiO2†	69575.4	69591.6	5546.0 ug/L	5546.0 ppb	04:00:42
3	Sc Radial	4114.3	4114.3	102 %		03:58:37
3	Y RADIAL	4397.9	4397.9	97.34 %		03:58:37
3	Al 396.153Radial†	4476.3	4468.4	4736.7 ug/L	4736.7 ppb	03:58:37
3	Ca 317.933Radial†	2499.8	2433.8	4944.8 ug/L	4944.8 ppb	03:58:57
3	Fe 238.204 Radial†	420.4	403.2	5057.5 ug/L	5057.5 ppb	03:58:57
3	K 766.490 Radial†	26931.7	23601.9	4705.2 ug/L	4705.2 ppb	03:58:37
3	Mg 279.077 IEC†	116.3	113.4	4952.0 ug/L	4952.0 ppb	03:58:57
3	Na 589.592 Radial†	26170.0	26119.2	10257 ug/L	10257 ppb	03:58:37
3	Sr 421.552†	57488.2	56294.3	479.34 ug/L	479.34 ppb	03:58:37
3	Sc 361.383	810760.3	810760.3	96.536 %		04:00:06
3	Y 371.029	681796.8	681796.8	95.213 %		04:00:06
3	Ag 328.068†	101589.8	104982.1	532.42 ug/L	532.42 ppb	04:00:11
3	As 188.979†	903.7	956.9	517.44 ug/L	517.44 ppb	04:00:31
3	B 249.677†	17489.4	18367.1	502.52 ug/L	502.52 ppb	04:00:11
3	Ba 233.527†	53491.5	55392.6	520.58 ug/L	520.58 ppb	04:00:11
3	Be 313.107†	1242283.4	1291126.9	525.38 ug/L	525.38 ppb	04:00:06
3	Cd 226.502†	35847.7	37300.5	526.00 ug/L	526.00 ppb	04:00:11
3	Co 228.616†	19856.1	20607.6	536.44 ug/L	536.44 ppb	04:00:11
3	Cr 267.716†	38701.3	39995.2	521.76 ug/L	521.76 ppb	04:00:11
3	Cu 324.752†	160617.1	160028.3	518.86 ug/L	518.86 ppb	04:00:11
3	Mn 257.610†	392434.3	406064.9	533.07 ug/L	533.07 ppb	04:00:06
3	Mo 202.031†	5813.5	6007.9	528.65 ug/L	528.65 ppb	04:00:31
3	Ni 231.604†	16495.9	16994.2	530.32 ug/L	530.32 ppb	04:00:11
3	P 214.914†	3732.7	3698.5	2557.4 ug/L	2557.4 ppb	04:00:31
3	Pb 220.353†	3293.5	3470.5	524.64 ug/L	524.64 ppb	04:00:31
3	S 181.975 Axial†	607.8	605.2	1059.9 ug/L	1059.9 ppb	04:00:31
3	Sb 206.836†	1246.2	1264.3	556.17 ug/L	556.17 ppb	04:00:31
3	Se 196.026†	626.1	665.5	548.74 ug/L	548.74 ppb	04:00:31
3	Si 251.611†	68943.1	70891.7	2633.0 ug/L	2633.0 ppb	04:00:11
3	Sn 189.927†	2297.2	2376.5	526.94 ug/L	526.94 ppb	04:00:31
3	Ti 334.940†	291330.7	302868.7	520.92 ug/L	520.92 ppb	04:00:11
3	Tl 190.801†	1268.0	1338.5	521.07 ug/L	521.07 ppb	04:00:31
3	U 409.014†	16022.6	18632.7	546.52 ug/L	546.52 ppb	04:00:11
3	V 292.402†	63903.8	67624.6	528.44 ug/L	528.44 ppb	04:00:11
3	Zn 213.857†	43087.0	44026.8	518.19 ug/L	518.19 ppb	04:00:11
3	SiO2†	69411.9	71349.5	5686.1 ug/L	5686.1 ppb	04:00:47

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	825917.3	98.340 %	1.5639			1.59%
Sc Radial	4130.1	102 %	0.4			0.37%
Y 371.029	695064.8	97.066 %	1.6095			1.66%
Y RADIAL	4424.3	97.92 %	0.524			0.54%
Ag 328.068†	103038.9	522.58 ug/L	8.617	522.58 ppb	8.617	1.65%
QC value within limits for Ag 328.068 Recovery = 104.52%						
Al 396.153Radial†	4471.9	4740.9 ug/L	33.34	4740.9 ppb	33.34	0.70%
QC value within limits for Al 396.153Radial Recovery = 94.82%						
As 188.979†	939.2	507.88 ug/L	9.000	507.88 ppb	9.000	1.77%
QC value within limits for As 188.979 Recovery = 101.58%						
B 249.677†	17990.2	492.19 ug/L	9.283	492.19 ppb	9.283	1.89%
QC value within limits for B 249.677 Recovery = 98.44%						
Ba 233.527†	54304.8	510.36 ug/L	9.052	510.36 ppb	9.052	1.77%
QC value within limits for Ba 233.527 Recovery = 102.07%						
Be 313.107†	1253974.4	510.28 ug/L	13.129	510.28 ppb	13.129	2.57%
QC value within limits for Be 313.107 Recovery = 102.06%						
Ca 317.933Radial†	2430.1	4937.4 ug/L	15.74	4937.4 ppb	15.74	0.32%

QC value within limits for Ca 317.933 Radial Recovery = 98.75%

Cd 226.502†	36565.4	515.62 ug/L	9.333	515.62 ppb	9.333	1.81%
QC value within limits for Cd 226.502 Recovery = 103.12%						
Co 228.616†	20213.7	526.19 ug/L	9.376	526.19 ppb	9.376	1.78%
QC value within limits for Co 228.616 Recovery = 105.24%						
Cr 267.716†	39132.9	510.52 ug/L	9.975	510.52 ppb	9.975	1.95%
QC value within limits for Cr 267.716 Recovery = 102.10%						
Cu 324.752†	156830.9	508.50 ug/L	9.273	508.50 ppb	9.273	1.82%
QC value within limits for Cu 324.752 Recovery = 101.70%						
Fe 238.204 Radial†	402.3	5046.4 ug/L	33.56	5046.4 ppb	33.56	0.67%
QC value within limits for Fe 238.204 Radial Recovery = 100.93%						
K 766.490 Radial†	23792.5	4743.2 ug/L	56.05	4743.2 ppb	56.05	1.18%
QC value within limits for K 766.490 Radial Recovery = 94.86%						
Mg 279.077 IEC†	116.0	5067.4 ug/L	101.00	5067.4 ppb	101.00	1.99%
QC value within limits for Mg 279.077 IEC Recovery = 101.35%						
Mn 257.610†	394314.3	517.65 ug/L	13.513	517.65 ppb	13.513	2.61%
QC value within limits for Mn 257.610 Recovery = 103.53%						
Mo 202.031†	5882.4	517.61 ug/L	9.696	517.61 ppb	9.696	1.87%
QC value within limits for Mo 202.031 Recovery = 103.52%						
Na 589.592 Radial†	26506.8	10410 ug/L	163.7	10410 ppb	163.7	1.57%
QC value within limits for Na 589.592 Radial Recovery = 104.10%						
Ni 231.604†	16627.0	518.86 ug/L	10.245	518.86 ppb	10.245	1.97%
QC value within limits for Ni 231.604 Recovery = 103.77%						
P 214.914†	3616.2	2500.2 ug/L	49.68	2500.2 ppb	49.68	1.99%
QC value within limits for P 214.914 Recovery = 100.01%						
Pb 220.353†	3402.3	514.34 ug/L	8.920	514.34 ppb	8.920	1.73%
QC value within limits for Pb 220.353 Recovery = 102.87%						
S 181.975 Axial†	593.8	1039.8 ug/L	17.75	1039.8 ppb	17.75	1.71%
QC value within limits for S 181.975 Axial Recovery = 103.98%						
Sb 206.836†	1248.6	549.13 ug/L	6.476	549.13 ppb	6.476	1.18%
QC value within limits for Sb 206.836 Recovery = 109.83%						
Se 196.026†	655.5	540.70 ug/L	7.483	540.70 ppb	7.483	1.38%
QC value within limits for Se 196.026 Recovery = 108.14%						
Si 251.611†	69536.7	2582.7 ug/L	46.78	2582.7 ppb	46.78	1.81%
QC value within limits for Si 251.611 Recovery = 103.31%						
Sn 189.927†	2331.1	516.88 ug/L	8.724	516.88 ppb	8.724	1.69%
QC value within limits for Sn 189.927 Recovery = 103.38%						
Sr 421.552†	56785.4	483.52 ug/L	5.986	483.52 ppb	5.986	1.24%
QC value within limits for Sr 421.552 Recovery = 96.70%						
Ti 334.940†	296756.5	510.40 ug/L	9.444	510.40 ppb	9.444	1.85%
QC value within limits for Ti 334.940 Recovery = 102.08%						
Tl 190.801†	1310.6	510.19 ug/L	9.424	510.19 ppb	9.424	1.85%
QC value within limits for Tl 190.801 Recovery = 102.04%						
U 409.014†	18276.5	536.06 ug/L	9.120	536.06 ppb	9.120	1.70%
QC value within limits for U 409.014 Recovery = 107.21%						
V 292.402†	66192.4	517.24 ug/L	9.894	517.24 ppb	9.894	1.91%
QC value within limits for V 292.402 Recovery = 103.45%						
Zn 213.857†	43147.8	507.84 ug/L	9.379	507.84 ppb	9.379	1.85%
QC value within limits for Zn 213.857 Recovery = 101.57%						
SiO2†	69990.5	5577.8 ug/L	96.40	5577.8 ppb	96.40	1.73%
QC value within limits for SiO2 Recovery = 104.31%						

All analyte(s) passed QC.

Sequence No.: 99

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/26/2010 04:02:57

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	4103.0	4103.0	102 %		04:04:49
1	Y RADIAL	4429.0	4429.0	98.03 %		04:04:49
1	Al 396.153Radial†	-69.2	11.6	12.391 ug/L	12.391 ppb	04:05:09
1	Ca 317.933Radial†	25.7	8.1	16.491 ug/L	16.491 ppb	04:05:09
1	Fe 238.204 Radial†	11.2	2.0	25.157 ug/L	25.157 ppb	04:05:09
1	K 766.490 Radial†	2423.6	-420.5	-83.969 ug/L	-83.969 ppb	04:04:49
1	Mg 279.077 IEC†	1.2	0.4	19.429 ug/L	19.429 ppb	04:05:09
1	Na 589.592 Radial†	-356.4	110.5	43.405 ug/L	43.405 ppb	04:04:49
1	Sr 421.552†	78.8	7.4	0.0632 ug/L	0.0632 ppb	04:04:49
1	Sc 361.383	810405.3	810405.3	96.493 %		04:06:06
1	Y 371.029	690733.9	690733.9	96.461 %		04:06:06
1	Ag 328.068†	84.6	-165.7	-0.8329 ug/L	-0.8329 ppb	04:06:06
1	As 188.979†	-28.6	-8.8	-4.7262 ug/L	-4.7262 ppb	04:06:26
1	B 249.677†	-355.5	-118.2	-3.2540 ug/L	-3.2540 ppb	04:06:26
1	Ba 233.527†	15.2	-2.7	-0.0246 ug/L	-0.0246 ppb	04:06:26
1	Be 313.107†	-4534.0	-436.1	-0.1768 ug/L	-0.1768 ppb	04:06:06
1	Cd 226.502†	-186.1	-26.4	-0.3744 ug/L	-0.3744 ppb	04:06:26
1	Co 228.616†	-43.7	-6.4	-0.1659 ug/L	-0.1659 ppb	04:06:26
1	Cr 267.716†	76.3	-15.8	-0.2062 ug/L	-0.2062 ppb	04:06:26
1	Cu 324.752†	6528.8	413.3	1.3378 ug/L	1.3378 ppb	04:06:06
1	Mn 257.610†	771.3	346.9	0.4568 ug/L	0.4568 ppb	04:06:26
1	Mo 202.031†	17.6	4.1	0.3616 ug/L	0.3616 ppb	04:06:26
1	Ni 231.604†	76.5	-14.3	-0.4462 ug/L	-0.4462 ppb	04:06:26
1	P 214.914†	190.8	29.5	20.920 ug/L	20.920 ppb	04:06:26
1	Pb 220.353†	-39.3	18.1	2.7240 ug/L	2.7240 ppb	04:06:26
1	S 181.975 Axial†	31.0	7.7	13.578 ug/L	13.578 ppb	04:06:26
1	Sb 206.836†	33.0	7.5	3.2310 ug/L	3.2310 ppb	04:06:26
1	Se 196.026†	-14.0	2.5	2.0417 ug/L	2.0417 ppb	04:06:26
1	Si 251.611†	633.0	130.5	4.8554 ug/L	4.8554 ppb	04:06:26
1	Sn 189.927†	7.9	5.1	1.1313 ug/L	1.1313 ppb	04:06:26
1	Ti 334.940†	-990.2	57.2	0.0961 ug/L	0.0961 ppb	04:06:06
1	Tl 190.801†	-26.5	-2.4	-0.9107 ug/L	-0.9107 ppb	04:06:26
1	U 409.014†	-1747.5	224.1	6.5928 ug/L	6.5928 ppb	04:06:06
1	V 292.402†	-1364.3	13.7	0.1196 ug/L	0.1196 ppb	04:06:06
1	Zn 213.857†	755.5	176.6	2.0948 ug/L	2.0948 ppb	04:06:26
1	SiO2†	711.9	184.4	14.726 ug/L	14.726 ppb	04:07:37
2	Sc Radial	4119.6	4119.6	102 %		04:05:14
2	Y RADIAL	4419.9	4419.9	97.83 %		04:05:14
2	Al 396.153Radial†	-73.2	8.0	8.4701 ug/L	8.4701 ppb	04:05:34
2	Ca 317.933Radial†	26.3	8.5	17.345 ug/L	17.345 ppb	04:05:34
2	Fe 238.204 Radial†	10.2	1.0	12.854 ug/L	12.854 ppb	04:05:34
2	K 766.490 Radial†	2373.0	-479.7	-95.783 ug/L	-95.783 ppb	04:05:14
2	Mg 279.077 IEC†	3.8	3.0	132.47 ug/L	132.47 ppb	04:05:34
2	Na 589.592 Radial†	-344.0	124.1	48.728 ug/L	48.728 ppb	04:05:14
2	Sr 421.552†	62.2	-9.1	-0.0775 ug/L	-0.0775 ppb	04:05:14
2	Sc 361.383	824456.9	824456.9	98.167 %		04:06:31
2	Y 371.029	701903.6	701903.6	98.021 %		04:06:31
2	Ag 328.068†	38.7	-214.0	-1.0742 ug/L	-1.0742 ppb	04:06:31
2	As 188.979†	-26.9	-6.6	-3.5125 ug/L	-3.5125 ppb	04:06:51
2	B 249.677†	-382.4	-139.4	-3.8340 ug/L	-3.8340 ppb	04:06:51
2	Ba 233.527†	17.6	-0.6	-0.0040 ug/L	-0.0040 ppb	04:06:51
2	Be 313.107†	-4623.6	-447.2	-0.1816 ug/L	-0.1816 ppb	04:06:31
2	Cd 226.502†	-172.7	-9.6	-0.1361 ug/L	-0.1361 ppb	04:06:51
2	Co 228.616†	-47.0	-9.0	-0.2320 ug/L	-0.2320 ppb	04:06:51
2	Cr 267.716†	100.2	7.1	0.0936 ug/L	0.0936 ppb	04:06:51
2	Cu 324.752†	6661.0	432.6	1.4027 ug/L	1.4027 ppb	04:06:31
2	Mn 257.610†	932.9	497.9	0.6491 ug/L	0.6491 ppb	04:06:51
2	Mo 202.031†	20.1	6.3	0.5548 ug/L	0.5548 ppb	04:06:51
2	Ni 231.604†	78.8	-13.3	-0.4160 ug/L	-0.4160 ppb	04:06:51

2	P 214.914†	199.6	35.1	24.947 ug/L	24.947 ppb	04:06:51
2	Pb 220.353†	-51.3	6.5	0.9832 ug/L	0.9832 ppb	04:06:51
2	S 181.975 Axial†	29.3	5.5	9.6468 ug/L	9.6468 ppb	04:06:51
2	Sb 206.836†	37.1	11.2	4.7850 ug/L	4.7850 ppb	04:06:51
2	Se 196.026†	-21.0	-4.4	-3.4741 ug/L	-3.4741 ppb	04:06:51
2	Si 251.611†	674.9	162.1	6.0268 ug/L	6.0268 ppb	04:06:51
2	Sn 189.927†	12.0	9.1	2.0238 ug/L	2.0238 ppb	04:06:51
2	Ti 334.940†	-1067.0	-3.6	-0.0153 ug/L	-0.0153 ppb	04:06:31
2	Tl 190.801†	-27.2	-2.7	-1.0225 ug/L	-1.0225 ppb	04:06:51
2	U 409.014†	-1951.5	47.2	1.3865 ug/L	1.3865 ppb	04:06:31
2	V 292.402†	-1343.4	59.1	0.4665 ug/L	0.4665 ppb	04:06:31
2	Zn 213.857†	756.9	164.6	1.9547 ug/L	1.9547 ppb	04:06:51
2	SiO2†	771.8	232.9	18.591 ug/L	18.591 ppb	04:07:57
3	Sc Radial	4075.7	4075.7	101 %		04:05:39
3	Y RADIAL	4373.7	4373.7	96.80 %		04:05:39
3	Al 396.153Radial†	-57.6	22.7	24.115 ug/L	24.115 ppb	04:05:59
3	Ca 317.933Radial†	28.3	10.8	22.024 ug/L	22.024 ppb	04:05:59
3	Fe 238.204 Radial†	7.3	-1.8	-22.266 ug/L	-22.266 ppb	04:05:59
3	K 766.490 Radial†	2417.2	-410.9	-82.056 ug/L	-82.056 ppb	04:05:39
3	Mg 279.077 IEC†	2.7	1.9	84.319 ug/L	84.319 ppb	04:05:59
3	Na 589.592 Radial†	-400.9	64.1	25.168 ug/L	25.168 ppb	04:05:39
3	Sr 421.552†	32.8	-37.6	-0.3201 ug/L	-0.3201 ppb	04:05:39
3	Sc 361.383	820472.8	820472.8	97.692 %		04:06:57
3	Y 371.029	699296.6	699296.6	97.657 %		04:06:57
3	Ag 328.068†	228.1	-19.9	-0.1089 ug/L	-0.1089 ppb	04:06:57
3	As 188.979†	-16.4	4.0	2.1457 ug/L	2.1457 ppb	04:07:17
3	B 249.677†	-373.8	-132.5	-3.6374 ug/L	-3.6374 ppb	04:07:17
3	Ba 233.527†	33.6	15.9	0.1499 ug/L	0.1499 ppb	04:07:17
3	Be 313.107†	-4525.9	-370.2	-0.1503 ug/L	-0.1503 ppb	04:06:57
3	Cd 226.502†	-168.9	-6.4	-0.0881 ug/L	-0.0881 ppb	04:07:17
3	Co 228.616†	-49.6	-11.9	-0.3077 ug/L	-0.3077 ppb	04:07:17
3	Cr 267.716†	93.8	1.0	0.0099 ug/L	0.0099 ppb	04:07:17
3	Cu 324.752†	6586.0	388.8	1.2570 ug/L	1.2570 ppb	04:06:57
3	Mn 257.610†	1252.9	830.1	1.0834 ug/L	1.0834 ppb	04:07:17
3	Mo 202.031†	21.6	7.9	0.6907 ug/L	0.6907 ppb	04:07:17
3	Ni 231.604†	70.2	-21.8	-0.6804 ug/L	-0.6804 ppb	04:07:17
3	P 214.914†	196.2	32.6	23.240 ug/L	23.240 ppb	04:07:17
3	Pb 220.353†	-48.6	9.1	1.3748 ug/L	1.3748 ppb	04:07:17
3	S 181.975 Axial†	31.7	8.1	14.216 ug/L	14.216 ppb	04:07:17
3	Sb 206.836†	27.1	1.1	0.5003 ug/L	0.5003 ppb	04:07:17
3	Se 196.026†	-22.7	-6.3	-5.0771 ug/L	-5.0771 ppb	04:07:17
3	Si 251.611†	851.4	346.1	12.877 ug/L	12.877 ppb	04:07:17
3	Sn 189.927†	11.1	8.2	1.8315 ug/L	1.8315 ppb	04:07:17
3	Ti 334.940†	-1052.6	5.9	0.0041 ug/L	0.0041 ppb	04:06:57
3	Tl 190.801†	-23.0	1.5	0.5780 ug/L	0.5780 ppb	04:07:17
3	U 409.014†	-1829.9	162.0	4.7701 ug/L	4.7701 ppb	04:06:57
3	V 292.402†	-1316.9	79.5	0.6365 ug/L	0.6365 ppb	04:06:57
3	Zn 213.857†	777.0	188.9	2.2498 ug/L	2.2498 ppb	04:07:17
3	SiO2†	660.2	122.4	9.7622 ug/L	9.7622 ppb	04:08:17

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	818445.0	97.451 %		0.8623			0.88%
Sc Radial	4099.5	102 %		0.5			0.54%
Y 371.029	697311.4	97.380 %		0.8160			0.84%
Y RADIAL	4407.5	97.55 %		0.657			0.67%
Ag 328.068†	-133.2	-0.6720 ug/L		0.50236	-0.6720 ppb	0.50236	74.75%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	14.1	14.992 ug/L		8.1404	14.992 ppb	8.1404	54.30%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	-3.8	-2.0310 ug/L		3.66769	-2.0310 ppb	3.66769	180.58%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	-130.1	-3.5751 ug/L		0.29500	-3.5751 ppb	0.29500	8.25%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	4.2	0.0404 ug/L		0.09533	0.0404 ppb	0.09533	235.81%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	-417.8	-0.1696 ug/L		0.01688	-0.1696 ppb	0.01688	9.95%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	9.2	18.620 ug/L		2.9787	18.620 ppb	2.9787	16.00%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd	226.502†	-14.1	-0.1996 ug/L	0.15334	-0.1996 ppb	0.15334	76.84%
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co	228.616†	-9.1	-0.2352 ug/L	0.07096	-0.2352 ppb	0.07096	30.17%
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr	267.716†	-2.6	-0.0342 ug/L	0.15467	-0.0342 ppb	0.15467	452.14%
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu	324.752†	411.6	1.3325 ug/L	0.07299	1.3325 ppb	0.07299	5.48%
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe	238.204 Radial†	0.4	5.2484 ug/L	24.60943	5.2484 ppb	24.60943	468.89%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K	766.490 Radial†	-437.0	-87.270 ug/L	7.4347	-87.270 ppb	7.4347	8.52%
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg	279.077 IEC†	1.8	78.741 ug/L	56.7283	78.741 ppb	56.7283	72.04%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn	257.610†	558.3	0.7298 ug/L	0.32100	0.7298 ppb	0.32100	43.98%
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo	202.031†	6.1	0.5357 ug/L	0.16537	0.5357 ppb	0.16537	30.87%
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na	589.592 Radial†	99.6	39.100 ug/L	12.3556	39.100 ppb	12.3556	31.60%
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni	231.604†	-16.5	-0.5142 ug/L	0.14472	-0.5142 ppb	0.14472	28.15%
QC value within limits for Ni 231.604 Recovery = Not calculated							
P	214.914†	32.4	23.036 ug/L	2.0216	23.036 ppb	2.0216	8.78%
QC value within limits for P 214.914 Recovery = Not calculated							
Pb	220.353†	11.2	1.6940 ug/L	0.91325	1.6940 ppb	0.91325	53.91%
QC value within limits for Pb 220.353 Recovery = Not calculated							
S	181.975 Axial†	7.1	12.480 ug/L	2.4745	12.480 ppb	2.4745	19.83%
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb	206.836†	6.6	2.8388 ug/L	2.16907	2.8388 ppb	2.16907	76.41%
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se	196.026†	-2.8	-2.1698 ug/L	3.73430	-2.1698 ppb	3.73430	172.10%
QC value within limits for Se 196.026 Recovery = Not calculated							
Si	251.611†	212.9	7.9198 ug/L	4.33300	7.9198 ppb	4.33300	54.71%
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn	189.927†	7.5	1.6622 ug/L	0.46968	1.6622 ppb	0.46968	28.26%
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr	421.552†	-13.1	-0.1114 ug/L	0.19389	-0.1114 ppb	0.19389	174.00%
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti	334.940†	19.8	0.0283 ug/L	0.05954	0.0283 ppb	0.05954	210.39%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl	190.801†	-1.2	-0.4518 ug/L	0.89350	-0.4518 ppb	0.89350	197.78%
QC value within limits for Tl 190.801 Recovery = Not calculated							
U	409.014†	144.4	4.2498 ug/L	2.64186	4.2498 ppb	2.64186	62.16%
QC value within limits for U 409.014 Recovery = Not calculated							
V	292.402†	50.7	0.4075 ug/L	0.26343	0.4075 ppb	0.26343	64.64%
QC value within limits for V 292.402 Recovery = Not calculated							
Zn	213.857†	176.7	2.0998 ug/L	0.14760	2.0998 ppb	0.14760	7.03%
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†		179.9	14.360 ug/L	4.4257	14.360 ppb	4.4257	30.82%
QC value within limits for SiO2 Recovery = Not calculated							

All analyte(s) passed QC.

Sequence No.: 100
 Sample ID: 1202056842|959101|1
 Analyst: HSC
 Initial Sample Wt:
 Dilution:

Autosampler Location: 115
 Date Collected: 3/26/2010 04:10:28
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: 1202056842|959101|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3986.2	3986.2	98.8 %		04:12:41
1	Y RADIAL	4432.1	4432.1	98.10 %		04:12:21
1	Al 396.153Radial†	-56.2	22.8	24.247 ug/L	24.247 ppb	04:12:41
1	Ca 317.933Radial†	31.5	14.7	29.905 ug/L	29.905 ppb	04:12:41
1	Fe 238.204 Radial†	11.9	3.1	38.618 ug/L	38.618 ppb	04:12:41
1	K 766.490 Radial†	2427.1	-347.1	-69.322 ug/L	-69.322 ppb	04:12:21
1	Mg 279.077 IEC†	2.6	1.9	84.798 ug/L	84.798 ppb	04:12:41
1	Na 589.592 Radial†	-316.4	140.6	55.235 ug/L	55.235 ppb	04:12:21
1	Sr 421.552†	40.2	-29.3	-0.2499 ug/L	-0.2499 ppb	04:12:21
1	Sc 361.383	820640.7	820640.7	97.712 %		04:13:38
1	Y 371.029	699290.4	699290.4	97.656 %		04:13:38
1	Ag 328.068†	31.2	-221.5	-1.1093 ug/L	-1.1093 ppb	04:13:38
1	As 188.979†	-24.0	-3.7	-1.9873 ug/L	-1.9873 ppb	04:13:58
1	B 249.677†	-384.4	-143.3	-3.9433 ug/L	-3.9433 ppb	04:13:58
1	Ba 233.527†	17.5	-0.6	-0.0038 ug/L	-0.0038 ppb	04:13:58
1	Be 313.107†	-4501.8	-344.4	-0.1389 ug/L	-0.1389 ppb	04:13:38
1	Cd 226.502†	-192.5	-30.6	-0.2661 ug/L	-0.2661 ppb	04:13:58
1	Co 228.616†	-55.2	-17.6	-0.4604 ug/L	-0.4604 ppb	04:13:58
1	Cr 267.716†	159.7	68.4	0.8930 ug/L	0.8930 ppb	04:13:58
1	Cu 324.752†	6556.5	357.2	1.1566 ug/L	1.1566 ppb	04:13:38
1	Mn 257.610†	941.5	511.1	0.6709 ug/L	0.6709 ppb	04:13:58
1	Mo 202.031†	14.8	0.9	0.0843 ug/L	0.0843 ppb	04:13:58
1	Ni 231.604†	8404.4	8507.6	265.65 ug/L	265.65 ppb	04:13:38
1	P 214.914†	200.2	36.7	26.127 ug/L	26.127 ppb	04:13:58
1	Pb 220.353†	-52.9	4.7	0.7109 ug/L	0.7109 ppb	04:13:58
1	S 181.975 Axial†	29.6	5.9	10.392 ug/L	10.392 ppb	04:13:58
1	Sb 206.836†	32.2	6.3	2.9381 ug/L	2.9381 ppb	04:13:58
1	Se 196.026†	-23.6	-7.2	-5.6278 ug/L	-5.6278 ppb	04:13:58
1	Si 251.611†	1265.7	769.9	28.666 ug/L	28.666 ppb	04:13:58
1	Sn 189.927†	15.7	13.0	2.8764 ug/L	2.8764 ppb	04:13:58
1	Ti 334.940†	-817.9	246.3	0.4175 ug/L	0.4175 ppb	04:13:38
1	Tl 190.801†	-26.0	-1.5	-0.5853 ug/L	-0.5853 ppb	04:13:58
1	U 409.014†	-1763.7	230.1	6.7650 ug/L	6.7650 ppb	04:13:38
1	V 292.402†	-1353.3	42.5	0.3370 ug/L	0.3370 ppb	04:13:38
1	Zn 213.857†	1051.7	469.9	3.8827 ug/L	3.8827 ppb	04:13:58
1	SiO2†	1280.7	757.4	60.507 ug/L	60.507 ppb	04:14:54
2	Sc Radial	3983.3	3983.3	98.7 %		04:13:07
2	Y RADIAL	4430.4	4430.4	98.06 %		04:12:47
2	Al 396.153Radial†	-61.4	17.5	18.593 ug/L	18.593 ppb	04:13:07
2	Ca 317.933Radial†	24.9	8.1	16.388 ug/L	16.388 ppb	04:13:07
2	Fe 238.204 Radial†	12.0	3.1	39.219 ug/L	39.219 ppb	04:13:07
2	K 766.490 Radial†	2482.1	-289.7	-57.854 ug/L	-57.854 ppb	04:12:47
2	Mg 279.077 IEC†	4.6	3.9	170.81 ug/L	170.81 ppb	04:13:07
2	Na 589.592 Radial†	-358.5	97.8	38.415 ug/L	38.415 ppb	04:12:47
2	Sr 421.552†	37.7	-31.8	-0.2713 ug/L	-0.2713 ppb	04:12:47
2	Sc 361.383	831660.2	831660.2	99.024 %		04:14:04
2	Y 371.029	707928.2	707928.2	98.862 %		04:14:04
2	Ag 328.068†	145.6	-106.3	-0.5285 ug/L	-0.5285 ppb	04:14:04
2	As 188.979†	-18.2	2.5	1.3519 ug/L	1.3519 ppb	04:14:24
2	B 249.677†	-403.3	-157.2	-4.3262 ug/L	-4.3262 ppb	04:14:24
2	Ba 233.527†	26.7	8.5	0.0819 ug/L	0.0819 ppb	04:14:24
2	Be 313.107†	-4658.4	-441.6	-0.1782 ug/L	-0.1782 ppb	04:14:04
2	Cd 226.502†	-180.6	-16.0	-0.0600 ug/L	-0.0600 ppb	04:14:24
2	Co 228.616†	-39.7	-1.2	-0.0331 ug/L	-0.0331 ppb	04:14:24
2	Cr 267.716†	158.0	64.6	0.8431 ug/L	0.8431 ppb	04:14:24
2	Cu 324.752†	6684.9	398.0	1.2881 ug/L	1.2881 ppb	04:14:04
2	Mn 257.610†	1083.5	641.8	0.8390 ug/L	0.8390 ppb	04:14:24
2	Mo 202.031†	16.3	2.2	0.1988 ug/L	0.1988 ppb	04:14:24
2	Ni 231.604†	8489.5	8479.5	264.77 ug/L	264.77 ppb	04:14:04

2	P 214.914†	201.4	35.2	25.016 ug/L	25.016 ppb	04:14:24
2	Pb 220.353†	-56.0	2.3	0.3413 ug/L	0.3413 ppb	04:14:24
2	S 181.975 Axial†	34.0	9.9	17.388 ug/L	17.388 ppb	04:14:24
2	Sb 206.836†	28.4	2.0	1.1237 ug/L	1.1237 ppb	04:14:24
2	Se 196.026†	-22.3	-5.5	-4.2973 ug/L	-4.2973 ppb	04:14:24
2	Si 251.611†	1269.3	756.3	28.159 ug/L	28.159 ppb	04:14:24
2	Sn 189.927†	12.8	9.8	2.1759 ug/L	2.1759 ppb	04:14:24
2	Ti 334.940†	-803.1	272.3	0.4528 ug/L	0.4528 ppb	04:14:04
2	Tl 190.801†	-29.4	-4.6	-1.7721 ug/L	-1.7721 ppb	04:14:24
2	U 409.014†	-1735.9	282.2	8.2974 ug/L	8.2974 ppb	04:14:04
2	V 292.402†	-1332.9	81.5	0.6438 ug/L	0.6438 ppb	04:14:04
2	Zn 213.857†	1068.7	472.8	3.9225 ug/L	3.9225 ppb	04:14:24
2	SiO2†	1636.4	1099.2	87.814 ug/L	87.814 ppb	04:14:59
3	Sc Radial	3989.0	3989.0	98.9 %		04:13:32
3	Y RADIAL	4388.3	4388.3	97.13 %		04:13:12
3	Al 396.153Radial†	-57.3	21.7	23.150 ug/L	23.150 ppb	04:13:32
3	Ca 317.933Radial†	28.7	11.8	23.963 ug/L	23.963 ppb	04:13:32
3	Fe 238.204 Radial†	13.5	4.6	57.646 ug/L	57.646 ppb	04:13:32
3	K 766.490 Radial†	2379.2	-397.3	-79.342 ug/L	-79.342 ppb	04:13:12
3	Mg 279.077 IEC†	0.5	-0.2	-9.2399 ug/L	-9.2399 ppb	04:13:32
3	Na 589.592 Radial†	-320.0	137.3	53.922 ug/L	53.922 ppb	04:13:12
3	Sr 421.552†	74.3	5.1	0.0436 ug/L	0.0436 ppb	04:13:12
3	Sc 361.383	816393.2	816393.2	97.206 %		04:14:29
3	Y 371.029	696415.3	696415.3	97.255 %		04:14:29
3	Ag 328.068†	122.3	-127.6	-0.6217 ug/L	-0.6217 ppb	04:14:29
3	As 188.979†	-15.7	4.6	2.5075 ug/L	2.5075 ppb	04:14:49
3	B 249.677†	-374.2	-134.8	-3.7138 ug/L	-3.7138 ppb	04:14:49
3	Ba 233.527†	16.2	-1.8	-0.0132 ug/L	-0.0132 ppb	04:14:49
3	Be 313.107†	-4575.4	-444.2	-0.1794 ug/L	-0.1794 ppb	04:14:29
3	Cd 226.502†	-196.4	-35.7	-0.3400 ug/L	-0.3400 ppb	04:14:49
3	Co 228.616†	-43.8	-6.2	-0.1611 ug/L	-0.1611 ppb	04:14:49
3	Cr 267.716†	151.0	60.3	0.7928 ug/L	0.7928 ppb	04:14:49
3	Cu 324.752†	6483.7	317.3	1.0318 ug/L	1.0318 ppb	04:14:29
3	Mn 257.610†	1015.9	592.7	0.7837 ug/L	0.7837 ppb	04:14:49
3	Mo 202.031†	18.6	4.9	0.4357 ug/L	0.4357 ppb	04:14:49
3	Ni 231.604†	8371.7	8518.7	266.00 ug/L	266.00 ppb	04:14:29
3	P 214.914†	212.4	50.2	35.896 ug/L	35.896 ppb	04:14:49
3	Pb 220.353†	-34.8	23.0	3.4718 ug/L	3.4718 ppb	04:14:49
3	S 181.975 Axial†	31.1	7.6	13.297 ug/L	13.297 ppb	04:14:49
3	Sb 206.836†	35.5	9.9	4.4872 ug/L	4.4872 ppb	04:14:49
3	Se 196.026†	-21.2	-4.9	-3.6915 ug/L	-3.6915 ppb	04:14:49
3	Si 251.611†	1260.4	771.2	28.709 ug/L	28.709 ppb	04:14:49
3	Sn 189.927†	16.9	14.3	3.1679 ug/L	3.1679 ppb	04:14:49
3	Ti 334.940†	-824.8	234.8	0.4076 ug/L	0.4076 ppb	04:14:29
3	Tl 190.801†	-32.5	-8.4	-3.2419 ug/L	-3.2419 ppb	04:14:49
3	U 409.014†	-1972.2	6.3	0.1781 ug/L	0.1781 ppb	04:14:29
3	V 292.402†	-1262.5	128.7	0.9896 ug/L	0.9896 ppb	04:14:29
3	Zn 213.857†	1051.1	474.9	3.9374 ug/L	3.9374 ppb	04:14:49
3	SiO2†	1272.7	755.9	60.384 ug/L	60.384 ppb	04:15:04

Mean Data: 1202056842|959101|1

Analyte	Mean Corrected	Conc.	Calib.	Std.Dev.	Sample	Std.Dev.	RSD
	Intensity	Units			Conc. Units		
Sc 361.383	822898.0	97.981 %		0.9382			0.96%
Sc Radial	3986.2	98.8 %		0.07			0.07%
Y 371.029	701211.3	97.924 %		0.8368			0.85%
Y RADIAL	4416.9	97.76 %		0.549			0.56%
Ag 328.068†	-151.8	-0.7532 ug/L		0.31192	-0.7532 ppb	0.31192	41.41%
Al 396.153Radial†	20.7	21.997 ug/L		2.9983	21.997 ppb	2.9983	13.63%
As 188.979†	1.1	0.6240 ug/L		2.33411	0.6240 ppb	2.33411	374.03%
B 249.677†	-145.1	-3.9944 ug/L		0.30940	-3.9944 ppb	0.30940	7.75%
Ba 233.527†	2.0	0.0216 ug/L		0.05237	0.0216 ppb	0.05237	242.05%
Be 313.107†	-410.1	-0.1655 ug/L		0.02306	-0.1655 ppb	0.02306	13.94%
Ca 317.933Radial†	11.5	23.418 ug/L		6.7751	23.418 ppb	6.7751	28.93%
Cd 226.502†	-27.4	-0.2220 ug/L		0.14509	-0.2220 ppb	0.14509	65.35%
Co 228.616†	-8.3	-0.2182 ug/L		0.21930	-0.2182 ppb	0.21930	100.50%
Cr 267.716†	64.5	0.8430 ug/L		0.05010	0.8430 ppb	0.05010	5.94%
Cu 324.752†	357.5	1.1588 ug/L		0.12818	1.1588 ppb	0.12818	11.06%
Fe 238.204 Radial†	3.6	45.161 ug/L		10.8167	45.161 ppb	10.8167	23.95%
K 766.490 Radial†	-344.7	-68.839 ug/L		10.7525	-68.839 ppb	10.7525	15.62%

Mg 279.077 IEC†	1.9	82.123 ug/L	90.0549	82.123 ppb	90.0549	109.66%
Mn 257.610†	581.9	0.7645 ug/L	0.08563	0.7645 ppb	0.08563	11.20%
Mo 202.031†	2.7	0.2396 ug/L	0.17923	0.2396 ppb	0.17923	74.80%
Na 589.592 Radial†	125.3	49.191 ug/L	9.3551	49.191 ppb	9.3551	19.02%
Ni 231.604†	8502.0	265.47 ug/L	0.631	265.47 ppb	0.631	0.24%
P 214.914†	40.7	29.013 ug/L	5.9867	29.013 ppb	5.9867	20.63%
Pb 220.353†	10.0	1.5080 ug/L	1.71073	1.5080 ppb	1.71073	113.44%
S 181.975 Axial†	7.8	13.692 ug/L	3.5145	13.692 ppb	3.5145	25.67%
Sb 206.836†	6.1	2.8497 ug/L	1.68349	2.8497 ppb	1.68349	59.08%
Se 196.026†	-5.9	-4.5389 ug/L	0.99049	-4.5389 ppb	0.99049	21.82%
Si 251.611†	765.8	28.511 ug/L	0.3060	28.511 ppb	0.3060	1.07%
Sn 189.927†	12.4	2.7400 ug/L	0.50986	2.7400 ppb	0.50986	18.61%
Sr 421.552†	-18.7	-0.1592 ug/L	0.17594	-0.1592 ppb	0.17594	110.53%
Ti 334.940†	251.1	0.4260 ug/L	0.02377	0.4260 ppb	0.02377	5.58%
Tl 190.801†	-4.8	-1.8664 ug/L	1.33082	-1.8664 ppb	1.33082	71.30%
U 409.014†	172.9	5.0802 ug/L	4.31389	5.0802 ppb	4.31389	84.92%
V 292.402†	84.3	0.6568 ug/L	0.32652	0.6568 ppb	0.32652	49.71%
Zn 213.857†	472.5	3.9142 ug/L	0.02826	3.9142 ppb	0.02826	0.72%
SiO2†	870.8	69.568 ug/L	15.8015	69.568 ppb	15.8015	22.71%

Sequence No.: 101

Sample ID: 1202056847|959101|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 116

Date Collected: 3/26/2010 04:17:16

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202056847|959101|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4273.5	4273.5	106 %			04:19:30
1	Y RADIAL	5013.6	5013.6	111.0 %			04:19:30
1	Al 396.153Radial†	99485.0	93986.0	100140 ug/L		100140 ppb	04:19:10
1	Ca 317.933Radial†	51210.5	48321.7	98178 ug/L		98178 ppb	04:19:10
1	Fe 238.204 Radial†	16207.9	15290.0	191220 ug/L		191220 ppb	04:19:10
1	K 766.490 Radial†	221079.1	205878.9	41060 ug/L		41060 ppb	04:19:10
1	Mg 279.077 IEC†	955.7	901.4	39184 ug/L		39184 ppb	04:19:30
1	Na 589.592 Radial†	27076.8	26019.3	10218 ug/L		10218 ppb	04:19:10
1	Sr 421.552†	269312.4	254140.8	2163.4 ug/L		2163.4 ppb	04:19:10
1	Sc 361.383	852170.5	852170.5	101.47 %			04:20:32
1	Y 371.029	781089.9	781089.9	109.08 %			04:20:32
1	Ag 328.068†	49327.9	48361.6	306.95 ug/L		306.95 ppb	04:20:32
1	As 188.979†	1850.0	1844.1	1087.2 ug/L		1087.2 ppb	04:20:37
1	B 249.677†	56850.3	56278.9	1513.2 ug/L		1513.2 ppb	04:20:32
1	Ba 233.527†	203307.8	200351.2	1886.8 ug/L		1886.8 ppb	04:20:32
1	Be 313.107†	1912286.5	1888914.0	781.31 ug/L		781.31 ppb	04:20:32
1	Cd 226.502†	44352.3	43877.7	599.92 ug/L		599.92 ppb	04:20:37
1	Co 228.616†	37391.3	36889.9	945.10 ug/L		945.10 ppb	04:20:37
1	Cr 267.716†	183572.9	180825.0	2376.3 ug/L		2376.3 ppb	04:20:32
1	Cu 324.752†	583117.9	568338.2	1853.1 ug/L		1853.1 ppb	04:20:32
1	Mn 257.610†	4275438.0	4213199.4	5545.2 ug/L		5545.2 ppb	04:20:32
1	Mo 202.031†	5714.7	5617.9	509.92 ug/L		509.92 ppb	04:20:37
1	Ni 231.604†	44012.5	43282.9	1350.9 ug/L		1350.9 ppb	04:20:37
1	P 214.914†	12189.6	11845.2	8028.5 ug/L		8028.5 ppb	04:20:37
1	Pb 220.353†	5432.5	5412.8	812.54 ug/L		812.54 ppb	04:20:37
1	S 181.975 Axial†	2209.7	2153.4	3755.8 ug/L		3755.8 ppb	04:20:37
1	Sb 206.836†	3135.7	3063.8	1306.6 ug/L		1306.6 ppb	04:20:37
1	Se 196.026†	3255.1	3225.1	3176.0 ug/L		3176.0 ppb	04:20:37
1	Si 251.611†	1141678.9	1124654.6	41868 ug/L		41868 ppb	04:20:32
1	Sn 189.927†	4643.9	4573.7	1019.5 ug/L		1019.5 ppb	04:20:37
1	Ti 334.940†	3740332.8	3687363.0	6353.3 ug/L		6353.3 ppb	04:20:32
1	Tl 190.801†	2970.5	2952.7	1214.0 ug/L		1214.0 ppb	04:20:37
1	U 409.014†	-7694.0	-5547.6	-190.30 ug/L		-190.30 ppb	04:20:32
1	V 292.402†	168185.9	167182.9	1260.8 ug/L		1260.8 ppb	04:20:32
1	Zn 213.857†	501445.3	493592.2	5824.1 ug/L		5824.1 ppb	04:20:32
1	SiO2†	1132388.3	1115470.3	89107 ug/L		89107 ppb	04:21:12
2	Sc Radial	4229.2	4229.2	105 %			04:19:56
2	Y RADIAL	4972.3	4972.3	110.1 %			04:19:56
2	Al 396.153Radial†	99611.9	95089.3	101320 ug/L		101320 ppb	04:19:36
2	Ca 317.933Radial†	51360.3	48970.1	99495 ug/L		99495 ppb	04:19:36
2	Fe 238.204 Radial†	16227.0	15468.3	193450 ug/L		193450 ppb	04:19:36
2	K 766.490 Radial†	221888.9	208833.9	41650 ug/L		41650 ppb	04:19:36
2	Mg 279.077 IEC†	939.9	895.8	38935 ug/L		38935 ppb	04:19:56
2	Na 589.592 Radial†	27050.8	26261.9	10313 ug/L		10313 ppb	04:19:36
2	Sr 421.552†	269694.5	257164.0	2189.2 ug/L		2189.2 ppb	04:19:36
2	Sc 361.383	850610.4	850610.4	101.28 %			04:20:46
2	Y 371.029	779140.8	779140.8	108.81 %			04:20:46
2	Ag 328.068†	49395.7	48517.8	308.41 ug/L		308.41 ppb	04:20:46
2	As 188.979†	1832.4	1830.0	1080.2 ug/L		1080.2 ppb	04:20:51
2	B 249.677†	56652.6	56186.5	1510.3 ug/L		1510.3 ppb	04:20:46
2	Ba 233.527†	203216.2	200628.2	1889.5 ug/L		1889.5 ppb	04:20:46
2	Be 313.107†	1908000.3	1888138.5	780.99 ug/L		780.99 ppb	04:20:46
2	Cd 226.502†	44154.8	43762.9	598.07 ug/L		598.07 ppb	04:20:51
2	Co 228.616†	37362.7	36929.2	946.09 ug/L		946.09 ppb	04:20:51
2	Cr 267.716†	183286.5	180874.1	2377.2 ug/L		2377.2 ppb	04:20:46
2	Cu 324.752†	582029.4	568317.5	1853.1 ug/L		1853.1 ppb	04:20:46
2	Mn 257.610†	4267512.6	4213102.3	5545.3 ug/L		5545.3 ppb	04:20:46
2	Mo 202.031†	5730.5	5643.9	512.39 ug/L		512.39 ppb	04:20:51
2	Ni 231.604†	43840.4	43192.5	1348.1 ug/L		1348.1 ppb	04:20:51

2	P 214.914†	12079.2	11758.3	7964.5 ug/L	7964.5 ppb	04:20:51
2	Pb 220.353†	5398.8	5389.3	808.98 ug/L	808.98 ppb	04:20:51
2	S 181.975 Axial†	2243.7	2191.0	3821.3 ug/L	3821.3 ppb	04:20:51
2	Sb 206.836†	3145.6	3079.2	1313.1 ug/L	1313.1 ppb	04:20:51
2	Se 196.026†	3242.4	3218.4	3177.8 ug/L	3177.8 ppb	04:20:51
2	Si 251.611†	1139354.9	1124423.6	41860 ug/L	41860 ppb	04:20:46
2	Sn 189.927†	4636.6	4574.9	1019.8 ug/L	1019.8 ppb	04:20:51
2	Ti 334.940†	3733728.1	3687602.7	6353.9 ug/L	6353.9 ppb	04:20:46
2	Tl 190.801†	2982.5	2969.9	1220.7 ug/L	1220.7 ppb	04:20:51
2	U 409.014†	-7575.2	-5444.2	-187.51 ug/L	-187.51 ppb	04:20:46
2	V 292.402†	167911.1	167215.6	1260.7 ug/L	1260.7 ppb	04:20:46
2	Zn 213.857†	500831.5	493892.6	5827.3 ug/L	5827.3 ppb	04:20:46
2	SiO2†	1144855.1	1129826.4	90254 ug/L	90254 ppb	04:21:18
3	Sc Radial	4271.2	4271.2	106 %		04:20:21
3	Y RADIAL	5019.4	5019.4	111.1 %		04:20:21
3	Al 396.153Radial†	97635.1	92287.9	98333 ug/L	98333 ppb	04:20:01
3	Ca 317.933Radial†	50179.3	47373.0	96250 ug/L	96250 ppb	04:20:01
3	Fe 238.204 Radial†	15854.3	14964.1	187150 ug/L	187150 ppb	04:20:01
3	K 766.490 Radial†	217052.2	202184.6	40324 ug/L	40324 ppb	04:20:01
3	Mg 279.077 IEC†	952.2	898.6	39064 ug/L	39064 ppb	04:20:21
3	Na 589.592 Radial†	26435.6	25427.1	9985.6 ug/L	9985.6 ppb	04:20:01
3	Sr 421.552†	263263.0	248560.0	2115.9 ug/L	2115.9 ppb	04:20:01
3	Sc 361.383	856092.0	856092.0	101.93 %		04:21:00
3	Y 371.029	785163.9	785163.9	109.65 %		04:21:00
3	Ag 328.068†	49654.3	48459.1	306.20 ug/L	306.20 ppb	04:21:00
3	As 188.979†	1837.0	1823.0	1074.9 ug/L	1074.9 ppb	04:21:05
3	B 249.677†	57071.7	56239.5	1512.8 ug/L	1512.8 ppb	04:21:00
3	Ba 233.527†	204076.9	200187.8	1885.2 ug/L	1885.2 ppb	04:21:00
3	Be 313.107†	1917467.4	1885363.6	779.86 ug/L	779.86 ppb	04:21:00
3	Cd 226.502†	43957.1	43289.8	592.03 ug/L	592.03 ppb	04:21:05
3	Co 228.616†	37097.5	36432.8	933.25 ug/L	933.25 ppb	04:21:05
3	Cr 267.716†	183843.2	180261.5	2368.6 ug/L	2368.6 ppb	04:21:00
3	Cu 324.752†	585798.2	568335.2	1852.8 ug/L	1852.8 ppb	04:21:00
3	Mn 257.610†	4286842.6	4205086.2	5534.2 ug/L	5534.2 ppb	04:21:00
3	Mo 202.031†	5649.9	5528.5	501.72 ug/L	501.72 ppb	04:21:05
3	Ni 231.604†	43555.6	42635.9	1330.7 ug/L	1330.7 ppb	04:21:05
3	P 214.914†	12070.6	11673.4	7907.7 ug/L	7907.7 ppb	04:21:05
3	Pb 220.353†	5325.7	5283.5	793.18 ug/L	793.18 ppb	04:21:05
3	S 181.975 Axial†	2210.9	2144.6	3740.7 ug/L	3740.7 ppb	04:21:05
3	Sb 206.836†	3109.8	3024.2	1289.4 ug/L	1289.4 ppb	04:21:05
3	Se 196.026†	3237.4	3192.9	3137.7 ug/L	3137.7 ppb	04:21:05
3	Si 251.611†	1144293.4	1122065.4	41772 ug/L	41772 ppb	04:21:00
3	Sn 189.927†	4596.7	4506.4	1004.4 ug/L	1004.4 ppb	04:21:05
3	Ti 334.940†	3755829.0	3685679.5	6350.2 ug/L	6350.2 ppb	04:21:00
3	Tl 190.801†	2969.8	2938.6	1208.6 ug/L	1208.6 ppb	04:21:05
3	U 409.014†	-7852.8	-5668.7	-193.38 ug/L	-193.38 ppb	04:21:00
3	V 292.402†	168685.4	166913.7	1259.2 ug/L	1259.2 ppb	04:21:00
3	Zn 213.857†	503122.1	492973.5	5817.5 ug/L	5817.5 ppb	04:21:00
3	SiO2†	1150149.2	1127782.1	90091 ug/L	90091 ppb	04:21:23

Mean Data: 1202056847|959101|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	852957.6	101.56 %	0.336			0.33%
Sc Radial	4258.0	106 %	0.6			0.59%
Y 371.029	781798.2	109.18 %	0.429			0.39%
Y RADIAL	5001.8	110.7 %	0.57			0.51%
Ag 328.068†	48446.2	307.19 ug/L	1.122	307.19 ppb	1.122	0.37%
Al 396.153Radial†	93787.7	99931 ug/L	1503.7	99931 ppb	1503.7	1.50%
As 188.979†	1832.4	1080.7 ug/L	6.14	1080.7 ppb	6.14	0.57%
B 249.677†	56234.9	1512.1 ug/L	1.58	1512.1 ppb	1.58	0.10%
Ba 233.527†	200389.1	1887.2 ug/L	2.18	1887.2 ppb	2.18	0.12%
Be 313.107†	1887472.0	780.72 ug/L	0.762	780.72 ppb	0.762	0.10%
Ca 317.933Radial†	48221.6	97974 ug/L	1632.0	97974 ppb	1632.0	1.67%
Cd 226.502†	43643.5	596.67 ug/L	4.123	596.67 ppb	4.123	0.69%
Co 228.616†	36750.6	941.48 ug/L	7.145	941.48 ppb	7.145	0.76%
Cr 267.716†	180653.5	2374.1 ug/L	4.76	2374.1 ppb	4.76	0.20%
Cu 324.752†	568330.3	1853.0 ug/L	0.15	1853.0 ppb	0.15	0.01%
Fe 238.204 Radial†	15240.8	190610 ug/L	3197.6	190610 ppb	3197.6	1.68%
K 766.490 Radial†	205632.5	41011 ug/L	664.5	41011 ppb	664.5	1.62%

Mg 279.077 IEC†	898.6	39061 ug/L	124.2	39061 ppb	124.2	0.32%
Mn 257.610†	4210462.7	5541.6 ug/L	6.41	5541.6 ppb	6.41	0.12%
Mo 202.031†	5596.8	508.01 ug/L	5.587	508.01 ppb	5.587	1.10%
Na 589.592 Radial†	25902.8	10172 ug/L	168.6	10172 ppb	168.6	1.66%
Ni 231.604†	43037.1	1343.3 ug/L	10.94	1343.3 ppb	10.94	0.81%
P 214.914†	11759.0	7966.9 ug/L	60.43	7966.9 ppb	60.43	0.76%
Pb 220.353†	5361.9	804.90 ug/L	10.304	804.90 ppb	10.304	1.28%
S 181.975 Axial†	2163.0	3772.6 ug/L	42.89	3772.6 ppb	42.89	1.14%
Sb 206.836†	3055.8	1303.0 ug/L	12.22	1303.0 ppb	12.22	0.94%
Se 196.026†	3212.1	3163.8 ug/L	22.68	3163.8 ppb	22.68	0.72%
Si 251.611†	1123714.5	41833 ug/L	53.3	41833 ppb	53.3	0.13%
Sn 189.927†	4551.7	1014.6 ug/L	8.77	1014.6 ppb	8.77	0.86%
Sr 421.552†	253288.3	2156.2 ug/L	37.16	2156.2 ppb	37.16	1.72%
Ti 334.940†	3686881.7	6352.5 ug/L	2.01	6352.5 ppb	2.01	0.03%
Tl 190.801†	2953.7	1214.4 ug/L	6.07	1214.4 ppb	6.07	0.50%
U 409.014†	-5553.5	-190.40 ug/L	2.935	-190.40 ppb	2.935	1.54%
V 292.402†	167104.1	1260.2 ug/L	0.91	1260.2 ppb	0.91	0.07%
Zn 213.857†	493486.1	5823.0 ug/L	5.03	5823.0 ppb	5.03	0.09%
SiO2†	1124359.6	89817 ug/L	620.5	89817 ppb	620.5	0.69%

Sequence No.: 103
 Sample ID: 1202056843|959101|1
 Analyst: HSC
 Initial Sample Wt:
 Dilution:

Autosampler Location: 118
 Date Collected: 3/26/2010 04:30:42
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: 1202056843|959101|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4093.2	4093.2	101 %		04:32:56
1	Y RADIAL	6431.7	6431.7	142.4 %		04:32:36
1	Al 396.153Radial†	16767.8	16604.3	17695 ug/L	17695 ppb	04:32:36
1	Ca 317.933Radial†	3110.3	3048.0	6192.8 ug/L	6192.8 ppb	04:32:56
1	Fe 238.204 Radial†	6799.4	6691.8	83679 ug/L	83679 ppb	04:32:36
1	K 766.490 Radial†	17651.0	14591.8	2909.1 ug/L	2909.1 ppb	04:32:36
1	Mg 279.077 IEC†	101.6	99.4	4254.5 ug/L	4254.5 ppb	04:32:56
1	Na 589.592 Radial†	3910.3	4314.5	1694.4 ug/L	1694.4 ppb	04:32:36
1	Sr 421.552†	3489.9	3369.2	28.645 ug/L	28.645 ppb	04:32:36
1	Sc 361.383	850091.0	850091.0	101.22 %		04:33:54
1	Y 371.029	1003035.6	1003035.6	140.07 %		04:33:54
1	Ag 328.068†	-4647.6	-4845.1	1.8452 ug/L	1.8452 ppb	04:33:59
1	As 188.979†	-66.3	-44.7	24.029 ug/L	24.029 ppb	04:34:19
1	B 249.677†	422.7	667.8	4.7334 ug/L	4.7334 ppb	04:33:59
1	Ba 233.527†	14691.8	14496.4	138.55 ug/L	138.55 ppb	04:33:59
1	Be 313.107†	-16604.0	-12141.4	2.5277 ug/L	2.5277 ppb	04:33:59
1	Cd 226.502†	446.3	607.4	-0.1359 ug/L	-0.1359 ppb	04:34:19
1	Co 228.616†	404.3	438.3	3.4409 ug/L	3.4409 ppb	04:34:19
1	Cr 267.716†	1078.7	970.7	21.710 ug/L	21.710 ppb	04:34:19
1	Cu 324.752†	12867.5	6359.8	25.246 ug/L	25.246 ppb	04:33:59
1	Mn 257.610†	2267841.8	2240083.2	2947.2 ug/L	2947.2 ppb	04:33:54
1	Mo 202.031†	321.2	303.1	33.218 ug/L	33.218 ppb	04:34:19
1	Ni 231.604†	592.3	491.6	15.344 ug/L	15.344 ppb	04:34:19
1	P 214.914†	1054.6	873.7	560.90 ug/L	560.90 ppb	04:34:19
1	Pb 220.353†	731.7	781.8	110.01 ug/L	110.01 ppb	04:34:19
1	S 181.975 Axial†	47.9	22.9	36.885 ug/L	36.885 ppb	04:34:19
1	Sb 206.836†	39.9	12.8	-6.1755 ug/L	-6.1755 ppb	04:34:19
1	Se 196.026†	-298.2	-277.6	33.314 ug/L	33.314 ppb	04:34:19
1	Si 251.611†	655690.7	647270.3	24100 ug/L	24100 ppb	04:33:54
1	Sn 189.927†	-12.5	-15.4	-7.1127 ug/L	-7.1127 ppb	04:34:19
1	Ti 334.940†	1931328.1	1909157.1	3285.3 ug/L	3285.3 ppb	04:33:54
1	Tl 190.801†	-153.9	-127.0	-7.9380 ug/L	-7.9380 ppb	04:34:19
1	U 409.014†	-14177.9	-11972.0	-361.84 ug/L	-361.84 ppb	04:33:54
1	V 292.402†	4751.6	6122.0	31.308 ug/L	31.308 ppb	04:34:19
1	Zn 213.857†	49063.8	47866.6	556.00 ug/L	556.00 ppb	04:33:59
1	SiO2†	667747.8	659154.3	52662 ug/L	52662 ppb	04:35:27
2	Sc Radial	4129.9	4129.9	102 %		04:33:21
2	Y RADIAL	6367.2	6367.2	140.9 %		04:33:01
2	Al 396.153Radial†	16726.9	16417.4	17496 ug/L	17496 ppb	04:33:01
2	Ca 317.933Radial†	3135.3	3045.2	6187.0 ug/L	6187.0 ppb	04:33:21
2	Fe 238.204 Radial†	6764.2	6597.9	82504 ug/L	82504 ppb	04:33:01
2	K 766.490 Radial†	17674.6	14460.2	2882.8 ug/L	2882.8 ppb	04:33:01
2	Mg 279.077 IEC†	101.8	98.7	4224.7 ug/L	4224.7 ppb	04:33:21
2	Na 589.592 Radial†	3923.0	4292.6	1685.8 ug/L	1685.8 ppb	04:33:01
2	Sr 421.552†	3483.4	3332.3	28.330 ug/L	28.330 ppb	04:33:01
2	Sc 361.383	859754.8	859754.8	102.37 %		04:34:25
2	Y 371.029	1013474.4	1013474.4	141.53 %		04:34:25
2	Ag 328.068†	-4633.2	-4779.4	1.8105 ug/L	1.8105 ppb	04:34:30
2	As 188.979†	-50.6	-28.6	32.436 ug/L	32.436 ppb	04:34:50
2	B 249.677†	460.3	699.8	5.8073 ug/L	5.8073 ppb	04:34:30
2	Ba 233.527†	14670.0	14312.0	136.78 ug/L	136.78 ppb	04:34:30
2	Be 313.107†	-16470.9	-11827.0	2.6621 ug/L	2.6621 ppb	04:34:30
2	Cd 226.502†	462.7	618.4	0.1409 ug/L	0.1409 ppb	04:34:50
2	Co 228.616†	394.7	424.5	3.0888 ug/L	3.0888 ppb	04:34:50
2	Cr 267.716†	1072.1	952.3	21.344 ug/L	21.344 ppb	04:34:50
2	Cu 324.752†	12857.1	6206.7	24.686 ug/L	24.686 ppb	04:34:30
2	Mn 257.610†	2295826.4	2242235.9	2949.9 ug/L	2949.9 ppb	04:34:25
2	Mo 202.031†	316.8	295.3	32.438 ug/L	32.438 ppb	04:34:50
2	Ni 231.604†	595.7	488.3	15.242 ug/L	15.242 ppb	04:34:50

2	P 214.914†	1070.9	877.9	564.90 ug/L	564.90 ppb	04:34:50
2	Pb 220.353†	745.1	786.6	110.87 ug/L	110.87 ppb	04:34:50
2	S 181.975 Axial†	56.5	30.8	50.722 ug/L	50.722 ppb	04:34:50
2	Sb 206.836†	40.3	12.7	-6.1748 ug/L	-6.1748 ppb	04:34:50
2	Se 196.026†	-295.8	-272.0	34.215 ug/L	34.215 ppb	04:34:50
2	Si 251.611†	663385.9	647506.0	24108 ug/L	24108 ppb	04:34:25
2	Sn 189.927†	0.7	-2.4	-4.1784 ug/L	-4.1784 ppb	04:34:50
2	Ti 334.940†	1955028.8	1910862.0	3288.3 ug/L	3288.3 ppb	04:34:25
2	Tl 190.801†	-137.6	-109.4	-1.0861 ug/L	-1.0861 ppb	04:34:50
2	U 409.014†	-14264.7	-11899.3	-359.56 ug/L	-359.56 ppb	04:34:25
2	V 292.402†	4770.7	6087.8	31.206 ug/L	31.206 ppb	04:34:50
2	Zn 213.857†	49122.7	47379.3	550.39 ug/L	550.39 ppb	04:34:30
2	SiO2†	657843.2	642063.8	51297 ug/L	51297 ppb	04:35:32
3	Sc Radial	4125.5	4125.5	102 %		04:33:46
3	Y RADIAL	6299.5	6299.5	139.4 %		04:33:26
3	Al 396.153Radial†	16458.4	16172.4	17235 ug/L	17235 ppb	04:33:26
3	Ca 317.933Radial†	3124.5	3037.9	6172.3 ug/L	6172.3 ppb	04:33:46
3	Fe 238.204 Radial†	6624.0	6467.8	80878 ug/L	80878 ppb	04:33:26
3	K 766.490 Radial†	17397.2	14207.5	2832.4 ug/L	2832.4 ppb	04:33:26
3	Mg 279.077 IEC†	99.0	96.1	4115.1 ug/L	4115.1 ppb	04:33:46
3	Na 589.592 Radial†	3781.9	4158.7	1633.2 ug/L	1633.2 ppb	04:33:26
3	Sr 421.552†	3415.0	3269.1	27.792 ug/L	27.792 ppb	04:33:26
3	Sc 361.383	863364.8	863364.8	102.80 %		04:34:56
3	Y 371.029	1017889.6	1017889.6	142.15 %		04:34:56
3	Ag 328.068†	-4758.7	-4882.5	0.7885 ug/L	0.7885 ppb	04:35:01
3	As 188.979†	-60.9	-38.4	26.771 ug/L	26.771 ppb	04:35:21
3	B 249.677†	442.4	680.5	5.5373 ug/L	5.5373 ppb	04:35:01
3	Ba 233.527†	14968.7	14542.6	138.89 ug/L	138.89 ppb	04:35:01
3	Be 313.107†	-16762.8	-12043.6	2.5671 ug/L	2.5671 ppb	04:35:01
3	Cd 226.502†	469.9	623.5	0.3797 ug/L	0.3797 ppb	04:35:21
3	Co 228.616†	421.7	449.1	3.7616 ug/L	3.7616 ppb	04:35:21
3	Cr 267.716†	1067.6	943.5	21.059 ug/L	21.059 ppb	04:35:21
3	Cu 324.752†	13154.0	6443.1	25.368 ug/L	25.368 ppb	04:35:01
3	Mn 257.610†	2298058.8	2235030.4	2940.3 ug/L	2940.3 ppb	04:34:56
3	Mo 202.031†	321.2	298.2	32.571 ug/L	32.571 ppb	04:35:21
3	Ni 231.604†	580.2	470.8	14.694 ug/L	14.694 ppb	04:35:21
3	P 214.914†	1051.6	854.7	549.33 ug/L	549.33 ppb	04:35:21
3	Pb 220.353†	743.5	782.0	110.35 ug/L	110.35 ppb	04:35:21
3	S 181.975 Axial†	57.1	31.2	51.471 ug/L	51.471 ppb	04:35:21
3	Sb 206.836†	39.6	11.9	-6.5418 ug/L	-6.5418 ppb	04:35:21
3	Se 196.026†	-304.8	-279.5	23.330 ug/L	23.330 ppb	04:35:21
3	Si 251.611†	665650.0	646998.9	24089 ug/L	24089 ppb	04:34:56
3	Sn 189.927†	-9.1	-11.9	-6.1858 ug/L	-6.1858 ppb	04:35:21
3	Ti 334.940†	1961385.9	1909060.8	3285.2 ug/L	3285.2 ppb	04:34:56
3	Tl 190.801†	-148.1	-119.0	-4.8640 ug/L	-4.8640 ppb	04:35:21
3	U 409.014†	-14423.3	-11995.4	-362.20 ug/L	-362.20 ppb	04:34:56
3	V 292.402†	4738.0	6036.6	31.048 ug/L	31.048 ppb	04:35:21
3	Zn 213.857†	49974.0	48006.8	558.09 ug/L	558.09 ppb	04:35:01
3	SiO2†	657427.4	638972.3	51050 ug/L	51050 ppb	04:35:38

Mean Data: 1202056843|959101|1

Analyte	Mean Corrected	Calib.	Std.Dev.	Sample	Std.Dev.	RSD
	Intensity	Conc. Units		Conc. Units		
Sc 361.383	857736.9	102.13 %	0.817			0.80%
Sc Radial	4116.2	102 %	0.5			0.49%
Y 371.029	1011466.5	141.25 %	1.065			0.75%
Y RADIAL	6366.1	140.9 %	1.46			1.04%
Ag 328.068†	-4835.7	1.4814 ug/L	0.60034	1.4814 ppb	0.60034	40.52%
Al 396.153Radial†	16398.0	17475 ug/L	230.9	17475 ppb	230.9	1.32%
As 188.979†	-37.2	27.746 ug/L	4.2874	27.746 ppb	4.2874	15.45%
B 249.677†	682.7	5.3593 ug/L	0.55862	5.3593 ppb	0.55862	10.42%
Ba 233.527†	14450.3	138.07 ug/L	1.132	138.07 ppb	1.132	0.82%
Be 313.107†	-12004.0	2.5856 ug/L	0.06905	2.5856 ppb	0.06905	2.67%
Ca 317.933Radial†	3043.7	6184.0 ug/L	10.54	6184.0 ppb	10.54	0.17%
Cd 226.502†	616.4	0.1282 ug/L	0.25803	0.1282 ppb	0.25803	201.22%
Co 228.616†	437.3	3.4304 ug/L	0.33651	3.4304 ppb	0.33651	9.81%
Cr 267.716†	955.5	21.371 ug/L	0.3264	21.371 ppb	0.3264	1.53%
Cu 324.752†	6336.6	25.100 ug/L	0.3636	25.100 ppb	0.3636	1.45%
Fe 238.204 Radial†	6585.8	82354 ug/L	1406.4	82354 ppb	1406.4	1.71%
K 766.490 Radial†	14419.8	2874.8 ug/L	38.98	2874.8 ppb	38.98	1.36%

Mg 279.077 IEC†	98.1	4198.1 ug/L	73.42	4198.1 ppb	73.42	1.75%
Mn 257.610†	2239116.5	2945.8 ug/L	4.96	2945.8 ppb	4.96	0.17%
Mo 202.031†	298.9	32.742 ug/L	0.4169	32.742 ppb	0.4169	1.27%
Na 589.592 Radial†	4255.3	1671.1 ug/L	33.11	1671.1 ppb	33.11	1.98%
Ni 231.604†	483.6	15.093 ug/L	0.3494	15.093 ppb	0.3494	2.32%
P 214.914†	868.8	558.38 ug/L	8.085	558.38 ppb	8.085	1.45%
Pb 220.353†	783.5	110.41 ug/L	0.431	110.41 ppb	0.431	0.39%
S 181.975 Axial†	28.3	46.359 ug/L	8.2136	46.359 ppb	8.2136	17.72%
Sb 206.836†	12.5	-6.2974 ug/L	0.21164	-6.2974 ppb	0.21164	3.36%
Se 196.026†	-276.4	30.286 ug/L	6.0411	30.286 ppb	6.0411	19.95%
Si 251.611†	647258.4	24099 ug/L	9.4	24099 ppb	9.4	0.04%
Sn 189.927†	-9.9	-5.8256 ug/L	1.49994	-5.8256 ppb	1.49994	25.75%
Sr 421.552†	3323.5	28.256 ug/L	0.4311	28.256 ppb	0.4311	1.53%
Ti 334.940†	1909693.3	3286.3 ug/L	1.74	3286.3 ppb	1.74	0.05%
Tl 190.801†	-118.4	-4.6294 ug/L	3.43197	-4.6294 ppb	3.43197	74.13%
U 409.014†	-11955.6	-361.20 ug/L	1.430	-361.20 ppb	1.430	0.40%
V 292.402†	6082.1	31.187 ug/L	0.1311	31.187 ppb	0.1311	0.42%
Zn 213.857†	47750.9	554.82 ug/L	3.982	554.82 ppb	3.982	0.72%
SiO2†	646730.1	51670 ug/L	868.5	51670 ppb	868.5	1.68%

Sequence No.: 104
 Sample ID: 1202056845|959101|1
 Analyst: HSC
 Initial Sample Wt:
 Dilution:

Autosampler Location: 119
 Date Collected: 3/26/2010 04:37:49
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: 1202056845|959101|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib.	Sample Conc. Units	Analysis Time
1	Sc Radial	4046.5	4046.5	100 %			04:40:03
1	Y RADIAL	6711.2	6711.2	148.5 %			04:39:43
1	Al 396.153Radial†	28418.4	28409.2	30252 ug/L		30252 ppb	04:39:43
1	Ca 317.933Radial†	5982.1	5946.2	12081 ug/L		12081 ppb	04:39:43
1	Fe 238.204 Radial†	7943.6	7909.7	98924 ug/L		98924 ppb	04:39:43
1	K 766.490 Radial†	52602.9	49635.2	9899.1 ug/L		9899.1 ppb	04:39:43
1	Mg 279.077 IEC†	239.5	238.0	10300 ug/L		10300 ppb	04:40:03
1	Na 589.592 Radial†	20945.7	21341.1	8381.0 ug/L		8381.0 ppb	04:39:43
1	Sr 421.552†	60296.1	60037.5	511.16 ug/L		511.16 ppb	04:39:43
1	Sc 361.383	820137.9	820137.9	97.652 %			04:41:07
1	Y 371.029	1084278.9	1084278.9	151.42 %			04:41:02
1	Ag 328.068†	90397.0	92316.9	497.97 ug/L		497.97 ppb	04:41:07
1	As 188.979†	824.3	864.9	539.86 ug/L		539.86 ppb	04:41:27
1	B 249.677†	18150.1	18836.6	500.25 ug/L		500.25 ppb	04:41:07
1	Ba 233.527†	69207.0	70852.3	668.43 ug/L		668.43 ppb	04:41:07
1	Be 313.107†	1179433.3	1212051.6	506.31 ug/L		506.31 ppb	04:41:02
1	Cd 226.502†	34587.2	35585.2	492.02 ug/L		492.02 ppb	04:41:27
1	Co 228.616†	19156.5	19656.0	498.34 ug/L		498.34 ppb	04:41:27
1	Cr 267.716†	37950.1	38767.5	515.94 ug/L		515.94 ppb	04:41:07
1	Cu 324.752†	169996.3	167730.5	549.05 ug/L		549.05 ppb	04:41:07
1	Mn 257.610†	3239792.7	3317230.3	4361.7 ug/L		4361.7 ppb	04:41:02
1	Mo 202.031†	5753.0	5877.1	524.52 ug/L		524.52 ppb	04:41:27
1	Ni 231.604†	16221.4	16517.8	515.46 ug/L		515.46 ppb	04:41:27
1	P 214.914†	2006.7	1886.7	1180.6 ug/L		1180.6 ppb	04:41:27
1	Pb 220.353†	4093.9	4251.1	634.68 ug/L		634.68 ppb	04:41:27
1	S 181.975 Axial†	2872.2	2916.9	5107.1 ug/L		5107.1 ppb	04:41:27
1	Sb 206.836†	1217.0	1219.6	515.73 ug/L		515.73 ppb	04:41:27
1	Se 196.026†	309.9	334.3	572.38 ug/L		572.38 ppb	04:41:27
1	Si 251.611†	723219.8	740081.7	27549 ug/L		27549 ppb	04:41:07
1	Sn 189.927†	2152.5	2201.1	483.98 ug/L		483.98 ppb	04:41:27
1	Ti 334.940†	3553599.4	3640117.2	6263.4 ug/L		6263.4 ppb	04:41:02
1	Tl 190.801†	1032.8	1082.7	488.11 ug/L		488.11 ppb	04:41:27
1	U 409.014†	1845.2	3924.7	103.08 ug/L		103.08 ppb	04:41:07
1	V 292.402†	68485.5	71559.5	538.14 ug/L		538.14 ppb	04:41:07
1	Zn 213.857†	97976.1	99725.2	1165.9 ug/L		1165.9 ppb	04:41:07
1	SiO2†	739390.7	756613.5	60436 ug/L		60436 ppb	04:42:37
2	Sc Radial	4053.0	4053.0	100 %			04:40:28
2	Y RADIAL	6721.5	6721.5	148.8 %			04:40:08
2	Al 396.153Radial†	27705.3	27653.8	29448 ug/L		29448 ppb	04:40:08
2	Ca 317.933Radial†	5854.1	5809.2	11803 ug/L		11803 ppb	04:40:08
2	Fe 238.204 Radial†	7765.4	7719.6	96546 ug/L		96546 ppb	04:40:08
2	K 766.490 Radial†	51585.0	48537.5	9680.2 ug/L		9680.2 ppb	04:40:08
2	Mg 279.077 IEC†	241.3	239.4	10364 ug/L		10364 ppb	04:40:28
2	Na 589.592 Radial†	20442.5	20806.6	8171.1 ug/L		8171.1 ppb	04:40:08
2	Sr 421.552†	58770.2	58422.0	497.41 ug/L		497.41 ppb	04:40:08
2	Sc 361.383	836494.3	836494.3	99.600 %			04:41:39
2	Y 371.029	1077263.1	1077263.1	150.44 %			04:41:34
2	Ag 328.068†	92656.2	92775.0	499.56 ug/L		499.56 ppb	04:41:39
2	As 188.979†	809.9	834.0	521.39 ug/L		521.39 ppb	04:41:59
2	B 249.677†	18862.4	19188.3	510.32 ug/L		510.32 ppb	04:41:39
2	Ba 233.527†	70531.3	70796.1	667.83 ug/L		667.83 ppb	04:41:39
2	Be 313.107†	1171574.8	1180544.9	493.16 ug/L		493.16 ppb	04:41:34
2	Cd 226.502†	34758.1	35064.1	484.91 ug/L		484.91 ppb	04:41:59
2	Co 228.616†	19253.4	19369.7	491.24 ug/L		491.24 ppb	04:41:59
2	Cr 267.716†	38630.1	38690.3	514.68 ug/L		514.68 ppb	04:41:39
2	Cu 324.752†	174471.2	168819.5	552.45 ug/L		552.45 ppb	04:41:39
2	Mn 257.610†	3221507.8	3233999.4	4252.3 ug/L		4252.3 ppb	04:41:34
2	Mo 202.031†	5761.9	5770.9	514.99 ug/L		514.99 ppb	04:41:59
2	Ni 231.604†	16289.2	16261.0	507.45 ug/L		507.45 ppb	04:41:59

2	P 214.914†	2006.6	1846.5	1152.6 ug/L	1152.6 ppb	04:41:59
2	Pb 220.353†	4089.2	4164.5	621.75 ug/L	621.75 ppb	04:41:59
2	S 181.975 Axial†	2888.8	2876.0	5035.6 ug/L	5035.6 ppb	04:41:59
2	Sb 206.836†	1224.4	1202.6	508.77 ug/L	508.77 ppb	04:41:59
2	Se 196.026†	309.1	327.3	559.44 ug/L	559.44 ppb	04:41:59
2	Si 251.611†	738540.7	740982.7	27583 ug/L	27583 ppb	04:41:39
2	Sn 189.927†	2160.5	2166.1	476.30 ug/L	476.30 ppb	04:41:59
2	Ti 334.940†	3532123.6	3547399.1	6103.8 ug/L	6103.8 ppb	04:41:34
2	Tl 190.801†	1032.2	1061.5	478.08 ug/L	478.08 ppb	04:41:59
2	U 409.014†	1826.5	3869.0	101.71 ug/L	101.71 ppb	04:41:39
2	V 292.402†	69962.9	71671.6	539.39 ug/L	539.39 ppb	04:41:39
2	Zn 213.857†	99843.9	99638.6	1165.3 ug/L	1165.3 ppb	04:41:39
2	SiO2†	751951.4	754419.4	60261 ug/L	60261 ppb	04:42:43
3	Sc Radial	4060.9	4060.9	101 %		04:40:54
3	Y RADIAL	6815.4	6815.4	150.8 %		04:40:34
3	Al 396.153Radial†	27998.1	27891.4	29700 ug/L	29700 ppb	04:40:34
3	Ca 317.933Radial†	5885.9	5829.6	11844 ug/L	11844 ppb	04:40:34
3	Fe 238.204 Radial†	7832.2	7771.1	97190 ug/L	97190 ppb	04:40:34
3	K 766.490 Radial†	52020.6	48871.1	9746.8 ug/L	9746.8 ppb	04:40:34
3	Mg 279.077 IEC†	243.8	241.4	10451 ug/L	10451 ppb	04:40:54
3	Na 589.592 Radial†	20489.7	20814.1	8174.0 ug/L	8174.0 ppb	04:40:34
3	Sr 421.552†	59331.5	58866.5	501.19 ug/L	501.19 ppb	04:40:34
3	Sc 361.383	819400.9	819400.9	97.565 %		04:42:11
3	Y 371.029	1089325.1	1089325.1	152.12 %		04:42:06
3	Ag 328.068†	90464.4	92469.3	498.21 ug/L	498.21 ppb	04:42:11
3	As 188.979†	811.9	853.0	533.28 ug/L	533.28 ppb	04:42:31
3	B 249.677†	18289.2	18995.9	504.91 ug/L	504.91 ppb	04:42:11
3	Ba 233.527†	68846.2	70546.3	665.51 ug/L	665.51 ppb	04:42:11
3	Be 313.107†	1182233.4	1216007.8	507.98 ug/L	507.98 ppb	04:42:06
3	Cd 226.502†	34595.4	35625.4	492.76 ug/L	492.76 ppb	04:42:31
3	Co 228.616†	19152.7	19669.8	498.66 ug/L	498.66 ppb	04:42:31
3	Cr 267.716†	37867.8	38718.1	515.11 ug/L	515.11 ppb	04:42:11
3	Cu 324.752†	169997.4	167888.2	549.47 ug/L	549.47 ppb	04:42:11
3	Mn 257.610†	3246234.5	3326816.8	4374.1 ug/L	4374.1 ppb	04:42:06
3	Mo 202.031†	5742.3	5871.4	523.88 ug/L	523.88 ppb	04:42:31
3	Ni 231.604†	16169.6	16479.7	514.27 ug/L	514.27 ppb	04:42:31
3	P 214.914†	1983.2	1864.5	1165.7 ug/L	1165.7 ppb	04:42:31
3	Pb 220.353†	4093.0	4254.0	635.23 ug/L	635.23 ppb	04:42:31
3	S 181.975 Axial†	2863.9	2911.1	5096.9 ug/L	5096.9 ppb	04:42:31
3	Sb 206.836†	1220.4	1224.2	517.59 ug/L	517.59 ppb	04:42:31
3	Se 196.026†	315.0	339.8	571.45 ug/L	571.45 ppb	04:42:31
3	Si 251.611†	720586.4	738048.8	27474 ug/L	27474 ppb	04:42:11
3	Sn 189.927†	2144.9	2195.4	482.76 ug/L	482.76 ppb	04:42:31
3	Ti 334.940†	3565818.5	3655914.3	6290.5 ug/L	6290.5 ppb	04:42:06
3	Tl 190.801†	1029.7	1080.4	487.52 ug/L	487.52 ppb	04:42:31
3	U 409.014†	1679.7	3756.8	98.336 ug/L	98.336 ppb	04:42:11
3	V 292.402†	68360.9	71494.9	537.85 ug/L	537.85 ppb	04:42:11
3	Zn 213.857†	97459.4	99285.9	1160.9 ug/L	1160.9 ppb	04:42:11
3	SiO2†	749931.2	768098.2	61353 ug/L	61353 ppb	04:42:49

Mean Data: 1202056845|959101|1

Analyte	Mean Corrected	Calib.	Std.Dev.	Sample	Std.Dev.	RSD
	Intensity	Conc. Units		Conc. Units		
Sc 361.383	825344.4	98.272 %	1.1506			1.17%
Sc Radial	4053.5	100 %	0.2			0.18%
Y 371.029	1083622.3	151.33 %	0.846			0.56%
Internal Standard Check greater than the upper limit for Y 371.029. Recovery = 151.3%						
Y RADIAL	6749.4	149.4 %	1.27			0.85%
Ag 328.068†	92520.4	498.58 ug/L	0.854	498.58 ppb	0.854	0.17%
Al 396.153Radial†	27984.8	29800 ug/L	411.4	29800 ppb	411.4	1.38%
As 188.979†	850.6	531.51 ug/L	9.361	531.51 ppb	9.361	1.76%
B 249.677†	19006.9	505.16 ug/L	5.043	505.16 ppb	5.043	1.00%
Ba 233.527†	70731.6	667.25 ug/L	1.544	667.25 ppb	1.544	0.23%
Be 313.107†	1202868.1	502.49 ug/L	8.119	502.49 ppb	8.119	1.62%
Ca 317.933Radial†	5861.7	11909 ug/L	150.2	11909 ppb	150.2	1.26%
Cd 226.502†	35424.9	489.90 ug/L	4.335	489.90 ppb	4.335	0.88%
Co 228.616†	19565.1	496.08 ug/L	4.198	496.08 ppb	4.198	0.85%
Cr 267.716†	38725.3	515.24 ug/L	0.638	515.24 ppb	0.638	0.12%
Cu 324.752†	168146.1	550.32 ug/L	1.857	550.32 ppb	1.857	0.34%
Fe 238.204 Radial†	7800.2	97553 ug/L	1229.6	97553 ppb	1229.6	1.26%

K 766.490 Radial†	49014.6	9775.4 ug/L	112.22	9775.4 ppb	112.22	1.15%
Mg 279.077 IEC†	239.6	10372 ug/L	76.0	10372 ppb	76.0	0.73%
Mn 257.610†	3292682.2	4329.4 ug/L	67.05	4329.4 ppb	67.05	1.55%
Mo 202.031†	5839.8	521.13 ug/L	5.324	521.13 ppb	5.324	1.02%
Na 589.592 Radial†	20987.3	8242.0 ug/L	120.34	8242.0 ppb	120.34	1.46%
Ni 231.604†	16419.5	512.39 ug/L	4.324	512.39 ppb	4.324	0.84%
P 214.914†	1865.9	1166.3 ug/L	14.01	1166.3 ppb	14.01	1.20%
Pb 220.353†	4223.2	630.55 ug/L	7.629	630.55 ppb	7.629	1.21%
S 181.975 Axial†	2901.3	5079.9 ug/L	38.69	5079.9 ppb	38.69	0.76%
Sb 206.836†	1215.5	514.03 ug/L	4.652	514.03 ppb	4.652	0.90%
Se 196.026†	333.8	567.76 ug/L	7.216	567.76 ppb	7.216	1.27%
Si 251.611†	739704.4	27535 ug/L	56.0	27535 ppb	56.0	0.20%
Sn 189.927†	2187.5	481.01 ug/L	4.125	481.01 ppb	4.125	0.86%
Sr 421.552†	59108.7	503.25 ug/L	7.106	503.25 ppb	7.106	1.41%
Ti 334.940†	3614476.9	6219.2 ug/L	100.87	6219.2 ppb	100.87	1.62%
Tl 190.801†	1074.9	484.57 ug/L	5.632	484.57 ppb	5.632	1.16%
U 409.014†	3850.2	101.04 ug/L	2.441	101.04 ppb	2.441	2.42%
V 292.402†	71575.3	538.46 ug/L	0.815	538.46 ppb	0.815	0.15%
Zn 213.857†	99549.9	1164.0 ug/L	2.70	1164.0 ppb	2.70	0.23%
SiO2†	759710.4	60683 ug/L	586.9	60683 ppb	586.9	0.97%

Internal Standard Check failed. Continue with analysis.

Sequence No.: 105

Sample ID: 1202056846|959101|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 120

Date Collected: 3/26/2010 04:45:01

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202056846|959101|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4002.1	4002.1	99.2 %		04:47:15
1	Y RADIAL	6560.9	6560.9	145.2 %		04:46:55
1	Al 396.153Radial†	23477.6	23743.3	25280 ug/L	25280 ppb	04:46:55
1	Ca 317.933Radial†	6264.4	6296.8	12794 ug/L	12794 ppb	04:46:55
1	Fe 238.204 Radial†	6330.0	6371.2	79684 ug/L	79684 ppb	04:46:55
1	K 766.490 Radial†	47225.7	44796.7	8933.8 ug/L	8933.8 ppb	04:46:55
1	Mg 279.077 IEC†	206.9	207.9	9002.5 ug/L	9002.5 ppb	04:47:15
1	Na 589.592 Radial†	18650.8	19259.5	7563.5 ug/L	7563.5 ppb	04:46:55
1	Sr 421.552†	57234.0	57617.5	490.55 ug/L	490.55 ppb	04:46:55
1	Sc 361.383	845162.5	845162.5	100.63 %		04:48:14
1	Y 371.029	1048820.5	1048820.5	146.47 %		04:48:14
1	Ag 328.068†	90854.1	90030.2	480.35 ug/L	480.35 ppb	04:48:14
1	As 188.979†	838.0	853.5	506.71 ug/L	506.71 ppb	04:48:34
1	B 249.677†	17904.7	18042.4	481.61 ug/L	481.61 ppb	04:48:14
1	Ba 233.527†	63505.4	63088.1	595.01 ug/L	595.01 ppb	04:48:14
1	Be 313.107†	1175601.2	1172481.9	484.33 ug/L	484.33 ppb	04:48:14
1	Cd 226.502†	34092.3	34044.6	472.28 ug/L	472.28 ppb	04:48:34
1	Co 228.616†	18805.2	18726.0	479.81 ug/L	479.81 ppb	04:48:34
1	Cr 267.716†	38604.8	38267.4	507.33 ug/L	507.33 ppb	04:48:14
1	Cu 324.752†	173566.0	166123.4	542.79 ug/L	542.79 ppb	04:48:14
1	Mn 257.610†	2336404.9	2321281.4	3053.1 ug/L	3053.1 ppb	04:48:14
1	Mo 202.031†	5749.4	5699.1	507.39 ug/L	507.39 ppb	04:48:34
1	Ni 231.604†	16447.7	16250.8	507.14 ug/L	507.14 ppb	04:48:34
1	P 214.914†	1777.9	1598.5	988.62 ug/L	988.62 ppb	04:48:34
1	Pb 220.353†	3869.1	3903.6	583.90 ug/L	583.90 ppb	04:48:34
1	S 181.975 Axial†	2910.0	2867.4	5021.2 ug/L	5021.2 ppb	04:48:34
1	Sb 206.836†	1209.7	1175.5	505.41 ug/L	505.41 ppb	04:48:34
1	Se 196.026†	356.5	371.2	542.90 ug/L	542.90 ppb	04:48:34
1	Si 251.611†	800308.9	794758.0	29585 ug/L	29585 ppb	04:48:14
1	Sn 189.927†	2179.1	2162.3	476.61 ug/L	476.61 ppb	04:48:34
1	Ti 334.940†	2137408.8	2125070.6	3656.9 ug/L	3656.9 ppb	04:48:14
1	Tl 190.801†	1123.3	1141.3	483.03 ug/L	483.03 ppb	04:48:34
1	U 409.014†	3711.7	5723.6	158.22 ug/L	158.22 ppb	04:48:14
1	V 292.402†	67518.2	68521.8	520.14 ug/L	520.14 ppb	04:48:14
1	Zn 213.857†	88511.3	87349.1	1021.8 ug/L	1021.8 ppb	04:48:14
1	SiO2†	797319.8	791759.8	63244 ug/L	63244 ppb	04:49:35
2	Sc Radial	3992.3	3992.3	99.0 %		04:47:40
2	Y RADIAL	6458.1	6458.1	142.9 %		04:47:20
2	Al 396.153Radial†	23157.5	23478.1	24998 ug/L	24998 ppb	04:47:20
2	Ca 317.933Radial†	6201.7	6249.0	12696 ug/L	12696 ppb	04:47:20
2	Fe 238.204 Radial†	6239.3	6295.2	78733 ug/L	78733 ppb	04:47:20
2	K 766.490 Radial†	46571.0	44252.2	8825.2 ug/L	8825.2 ppb	04:47:20
2	Mg 279.077 IEC†	203.7	205.1	8883.6 ug/L	8883.6 ppb	04:47:40
2	Na 589.592 Radial†	18199.1	18849.3	7402.4 ug/L	7402.4 ppb	04:47:20
2	Sr 421.552†	56391.5	56908.1	484.51 ug/L	484.51 ppb	04:47:20
2	Sc 361.383	844920.2	844920.2	100.60 %		04:48:41
2	Y 371.029	1047816.6	1047816.6	146.33 %		04:48:41
2	Ag 328.068†	90671.3	89874.4	479.27 ug/L	479.27 ppb	04:48:41
2	As 188.979†	832.3	848.2	503.59 ug/L	503.59 ppb	04:49:01
2	B 249.677†	17894.9	18037.7	481.63 ug/L	481.63 ppb	04:48:41
2	Ba 233.527†	63425.9	63027.2	594.40 ug/L	594.40 ppb	04:48:41
2	Be 313.107†	1174542.5	1171764.6	484.03 ug/L	484.03 ppb	04:48:41
2	Cd 226.502†	34179.0	34140.5	473.73 ug/L	473.73 ppb	04:49:01
2	Co 228.616†	18872.0	18797.8	481.70 ug/L	481.70 ppb	04:49:01
2	Cr 267.716†	38735.5	38408.3	509.07 ug/L	509.07 ppb	04:48:41
2	Cu 324.752†	173125.8	165735.2	541.48 ug/L	541.48 ppb	04:48:41
2	Mn 257.610†	2334760.2	2320312.2	3051.8 ug/L	3051.8 ppb	04:48:41
2	Mo 202.031†	5762.0	5713.2	508.55 ug/L	508.55 ppb	04:49:01
2	Ni 231.604†	16490.0	16297.5	508.60 ug/L	508.60 ppb	04:49:01

2	P 214.914†	1786.3	1607.4	995.95 ug/L	995.95 ppb	04:49:01
2	Pb 220.353†	3888.9	3924.4	587.11 ug/L	587.11 ppb	04:49:01
2	S 181.975 Axial†	2910.0	2868.2	5022.7 ug/L	5022.7 ppb	04:49:01
2	Sb 206.836†	1214.4	1180.5	507.58 ug/L	507.58 ppb	04:49:01
2	Se 196.026†	357.2	372.0	540.61 ug/L	540.61 ppb	04:49:01
2	Si 251.611†	798010.8	792701.7	29509 ug/L	29509 ppb	04:48:41
2	Sn 189.927†	2175.6	2159.5	476.02 ug/L	476.02 ppb	04:49:01
2	Ti 334.940†	2135235.3	2123519.1	3654.2 ug/L	3654.2 ppb	04:48:41
2	Tl 190.801†	1130.7	1149.0	485.99 ug/L	485.99 ppb	04:49:01
2	U 409.014†	3520.0	5534.1	152.74 ug/L	152.74 ppb	04:48:41
2	V 292.402†	67463.8	68486.9	520.02 ug/L	520.02 ppb	04:48:41
2	Zn 213.857†	88282.1	87146.4	1019.5 ug/L	1019.5 ppb	04:48:41
2	SiO2†	798084.8	792747.4	63323 ug/L	63323 ppb	04:49:41
3	Sc Radial	4013.2	4013.2	99.5 %		04:48:05
3	Y RADIAL	6459.1	6459.1	143.0 %		04:47:45
3	Al 396.153Radial†	23144.4	23343.2	24854 ug/L	24854 ppb	04:47:45
3	Ca 317.933Radial†	6171.3	6185.9	12568 ug/L	12568 ppb	04:47:45
3	Fe 238.204 Radial†	6225.0	6248.0	78144 ug/L	78144 ppb	04:47:45
3	K 766.490 Radial†	46447.9	43883.7	8751.8 ug/L	8751.8 ppb	04:47:45
3	Mg 279.077 IEC†	206.6	207.0	8966.3 ug/L	8966.3 ppb	04:48:05
3	Na 589.592 Radial†	18002.9	18556.4	7287.4 ug/L	7287.4 ppb	04:47:45
3	Sr 421.552†	56021.0	56239.4	478.82 ug/L	478.82 ppb	04:47:45
3	Sc 361.383	847002.4	847002.4	100.85 %		04:49:09
3	Y 371.029	1051588.4	1051588.4	146.85 %		04:49:09
3	Ag 328.068†	90820.0	89800.3	478.72 ug/L	478.72 ppb	04:49:09
3	As 188.979†	845.3	859.0	509.23 ug/L	509.23 ppb	04:49:29
3	B 249.677†	18064.6	18162.3	485.16 ug/L	485.16 ppb	04:49:09
3	Ba 233.527†	63471.1	62917.0	593.35 ug/L	593.35 ppb	04:49:09
3	Be 313.107†	1177185.3	1171514.9	483.93 ug/L	483.93 ppb	04:49:09
3	Cd 226.502†	34085.9	33964.7	471.31 ug/L	471.31 ppb	04:49:29
3	Co 228.616†	18825.8	18705.8	479.31 ug/L	479.31 ppb	04:49:29
3	Cr 267.716†	38836.5	38413.8	509.08 ug/L	509.08 ppb	04:49:09
3	Cu 324.752†	173562.7	165745.4	541.48 ug/L	541.48 ppb	04:49:09
3	Mn 257.610†	2337645.5	2317468.0	3048.0 ug/L	3048.0 ppb	04:49:09
3	Mo 202.031†	5743.0	5680.4	505.61 ug/L	505.61 ppb	04:49:29
3	Ni 231.604†	16480.3	16247.7	507.04 ug/L	507.04 ppb	04:49:29
3	P 214.914†	1784.0	1600.7	991.55 ug/L	991.55 ppb	04:49:29
3	Pb 220.353†	3874.0	3900.2	583.49 ug/L	583.49 ppb	04:49:29
3	S 181.975 Axial†	2926.5	2877.4	5038.8 ug/L	5038.8 ppb	04:49:29
3	Sb 206.836†	1199.5	1162.7	499.96 ug/L	499.96 ppb	04:49:29
3	Se 196.026†	363.2	377.1	542.87 ug/L	542.87 ppb	04:49:29
3	Si 251.611†	800032.1	792756.0	29511 ug/L	29511 ppb	04:49:09
3	Sn 189.927†	2173.7	2152.3	474.43 ug/L	474.43 ppb	04:49:29
3	Ti 334.940†	2139671.5	2122700.3	3652.8 ug/L	3652.8 ppb	04:49:09
3	Tl 190.801†	1124.8	1140.4	482.63 ug/L	482.63 ppb	04:49:29
3	U 409.014†	3685.1	5689.2	157.38 ug/L	157.38 ppb	04:49:09
3	V 292.402†	67600.9	68458.0	519.85 ug/L	519.85 ppb	04:49:09
3	Zn 213.857†	88368.4	87016.3	1018.1 ug/L	1018.1 ppb	04:49:09
3	SiO2†	793682.7	786432.2	62818 ug/L	62818 ppb	04:49:47

Mean Data: 1202056846|959101|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	845695.0	100.70 %	0.136			0.13%
Sc Radial	4002.5	99.2 %	0.26			0.26%
Y 371.029	1049408.5	146.55 %	0.273			0.19%
Y RADIAL	6492.7	143.7 %	1.31			0.91%
Ag 328.068†	89901.6	479.45 ug/L	0.830	479.45 ppb	0.830	0.17%
Al 396.153Radial†	23521.5	25044 ug/L	216.9	25044 ppb	216.9	0.87%
As 188.979†	853.6	506.51 ug/L	2.824	506.51 ppb	2.824	0.56%
B 249.677†	18080.8	482.80 ug/L	2.042	482.80 ppb	2.042	0.42%
Ba 233.527†	63010.8	594.25 ug/L	0.836	594.25 ppb	0.836	0.14%
Be 313.107†	1171920.5	484.10 ug/L	0.208	484.10 ppb	0.208	0.04%
Ca 317.933Radial†	6243.9	12686 ug/L	113.0	12686 ppb	113.0	0.89%
Cd 226.502†	34049.9	472.44 ug/L	1.217	472.44 ppb	1.217	0.26%
Co 228.616†	18743.2	480.27 ug/L	1.260	480.27 ppb	1.260	0.26%
Cr 267.716†	38363.2	508.49 ug/L	1.004	508.49 ppb	1.004	0.20%
Cu 324.752†	165868.0	541.92 ug/L	0.754	541.92 ppb	0.754	0.14%
Fe 238.204 Radial†	6304.8	78854 ug/L	777.0	78854 ppb	777.0	0.99%
K 766.490 Radial†	44310.9	8836.9 ug/L	91.60	8836.9 ppb	91.60	1.04%

Mg 279.077 IEC†	206.7	8950.8 ug/L	60.98	8950.8 ppb	60.98	0.68%
Mn 257.610†	2319687.2	3051.0 ug/L	2.67	3051.0 ppb	2.67	0.09%
Mo 202.031†	5697.6	507.18 ug/L	1.479	507.18 ppb	1.479	0.29%
Na 589.592 Radial†	18888.4	7417.8 ug/L	138.69	7417.8 ppb	138.69	1.87%
Ni 231.604†	16265.3	507.59 ug/L	0.871	507.59 ppb	0.871	0.17%
P 214.914†	1602.2	992.04 ug/L	3.692	992.04 ppb	3.692	0.37%
Pb 220.353†	3909.4	584.83 ug/L	1.981	584.83 ppb	1.981	0.34%
S 181.975 Axial†	2871.0	5027.6 ug/L	9.79	5027.6 ppb	9.79	0.19%
Sb 206.836†	1172.9	504.31 ug/L	3.929	504.31 ppb	3.929	0.78%
Se 196.026†	373.4	542.13 ug/L	1.313	542.13 ppb	1.313	0.24%
Si 251.611†	793405.2	29535 ug/L	43.6	29535 ppb	43.6	0.15%
Sn 189.927†	2158.0	475.69 ug/L	1.127	475.69 ppb	1.127	0.24%
Sr 421.552†	56921.6	484.62 ug/L	5.868	484.62 ppb	5.868	1.21%
Ti 334.940†	2123763.3	3654.7 ug/L	2.08	3654.7 ppb	2.08	0.06%
Tl 190.801†	1143.6	483.88 ug/L	1.835	483.88 ppb	1.835	0.38%
U 409.014†	5649.0	156.11 ug/L	2.947	156.11 ppb	2.947	1.89%
V 292.402†	68488.9	520.01 ug/L	0.145	520.01 ppb	0.145	0.03%
Zn 213.857†	87170.6	1019.8 ug/L	1.88	1019.8 ppb	1.88	0.18%
SiO2†	790313.1	63128 ug/L	271.4	63128 ppb	271.4	0.43%

Sequence No.: 106

Sample ID: 1202056844|959101|5

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 121

Date Collected: 3/26/2010 04:51:58

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202056844|959101|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4091.0	4091.0	101 %		04:53:52
1	Y RADIAL	4765.9	4765.9	105.5 %		04:53:52
1	Al 396.153Radial†	2955.3	2993.6	3190.1 ug/L	3190.1 ppb	04:53:52
1	Ca 317.933Radial†	570.0	544.8	1106.9 ug/L	1106.9 ppb	04:54:12
1	Fe 238.204 Radial†	1216.7	1190.7	14889 ug/L	14889 ppb	04:54:12
1	K 766.490 Radial†	5116.6	2241.8	446.80 ug/L	446.80 ppb	04:53:52
1	Mg 279.077 IEC†	18.6	17.6	755.23 ug/L	755.23 ppb	04:54:12
1	Na 589.592 Radial†	385.3	840.8	330.20 ug/L	330.20 ppb	04:53:52
1	Sr 421.552†	678.8	599.3	5.0951 ug/L	5.0951 ppb	04:53:52
1	Sc 361.383	827040.9	827040.9	98.474 %		04:55:09
1	Y 371.029	754074.8	754074.8	105.31 %		04:55:09
1	Ag 328.068†	-708.7	-973.0	-0.2266 ug/L	-0.2266 ppb	04:55:09
1	As 188.979†	-30.0	-9.7	3.4050 ug/L	3.4050 ppb	04:55:29
1	B 249.677†	-110.0	138.4	1.3810 ug/L	1.3810 ppb	04:55:09
1	Ba 233.527†	2833.6	2859.0	27.275 ug/L	27.275 ppb	04:55:29
1	Be 313.107†	-6627.1	-2467.0	0.3383 ug/L	0.3383 ppb	04:55:09
1	Cd 226.502†	-57.3	108.2	-0.0235 ug/L	-0.0235 ppb	04:55:29
1	Co 228.616†	34.8	74.2	0.5071 ug/L	0.5071 ppb	04:55:29
1	Cr 267.716†	286.9	196.4	4.1724 ug/L	4.1724 ppb	04:55:29
1	Cu 324.752†	7766.8	1534.4	5.7986 ug/L	5.7986 ppb	04:55:09
1	Mn 257.610†	436917.7	443235.1	582.99 ug/L	582.99 ppb	04:55:09
1	Mo 202.031†	83.7	70.8	7.3920 ug/L	7.3920 ppb	04:55:29
1	Ni 231.604†	141.2	49.8	1.5547 ug/L	1.5547 ppb	04:55:29
1	P 214.914†	340.4	177.5	115.36 ug/L	115.36 ppb	04:55:29
1	Pb 220.353†	91.6	151.8	21.503 ug/L	21.503 ppb	04:55:29
1	S 181.975 Axial†	34.7	10.8	18.398 ug/L	18.398 ppb	04:55:29
1	Sb 206.836†	28.8	2.6	-0.9372 ug/L	-0.9372 ppb	04:55:29
1	Se 196.026†	-69.5	-53.6	2.5765 ug/L	2.5765 ppb	04:55:29
1	Si 251.611†	123531.5	124920.0	4651.1 ug/L	4651.1 ppb	04:55:09
1	Sn 189.927†	2.1	-0.9	-0.8671 ug/L	-0.8671 ppb	04:55:29
1	Ti 334.940†	336737.4	343038.3	590.31 ug/L	590.31 ppb	04:55:09
1	Tl 190.801†	-47.2	-22.9	-1.1892 ug/L	-1.1892 ppb	04:55:29
1	U 409.014†	-4133.8	-2162.7	-65.340 ug/L	-65.340 ppb	04:55:09
1	V 292.402†	-216.8	1207.4	6.4940 ug/L	6.4940 ppb	04:55:09
1	Zn 213.857†	9112.1	8646.8	100.48 ug/L	100.48 ppb	04:55:09
1	SiO2†	124504.5	125880.2	10057 ug/L	10057 ppb	04:56:25
2	Sc Radial	4077.6	4077.6	101 %		04:54:17
2	Y RADIAL	4668.5	4668.5	103.3 %		04:54:17
2	Al 396.153Radial†	2926.4	2974.6	3170.0 ug/L	3170.0 ppb	04:54:17
2	Ca 317.933Radial†	580.1	556.7	1131.0 ug/L	1131.0 ppb	04:54:37
2	Fe 238.204 Radial†	1222.3	1200.1	15007 ug/L	15007 ppb	04:54:37
2	K 766.490 Radial†	5103.0	2245.0	447.43 ug/L	447.43 ppb	04:54:17
2	Mg 279.077 IEC†	20.6	19.7	843.21 ug/L	843.21 ppb	04:54:37
2	Na 589.592 Radial†	364.1	821.1	322.44 ug/L	322.44 ppb	04:54:17
2	Sr 421.552†	645.6	568.7	4.8342 ug/L	4.8342 ppb	04:54:17
2	Sc 361.383	832065.7	832065.7	99.072 %		04:55:34
2	Y 371.029	758596.2	758596.2	105.94 %		04:55:34
2	Ag 328.068†	-814.2	-1075.3	-0.6995 ug/L	-0.6995 ppb	04:55:34
2	As 188.979†	-29.1	-8.5	4.0426 ug/L	4.0426 ppb	04:55:54
2	B 249.677†	-99.8	149.4	1.6651 ug/L	1.6651 ppb	04:55:34
2	Ba 233.527†	2852.0	2860.2	27.290 ug/L	27.290 ppb	04:55:54
2	Be 313.107†	-6758.4	-2559.0	0.3024 ug/L	0.3024 ppb	04:55:34
2	Cd 226.502†	-61.2	104.6	-0.0870 ug/L	-0.0870 ppb	04:55:54
2	Co 228.616†	26.7	65.9	0.2834 ug/L	0.2834 ppb	04:55:54
2	Cr 267.716†	264.6	172.1	3.8715 ug/L	3.8715 ppb	04:55:54
2	Cu 324.752†	7816.8	1537.2	5.8185 ug/L	5.8185 ppb	04:55:34
2	Mn 257.610†	439430.8	443092.2	582.81 ug/L	582.81 ppb	04:55:34
2	Mo 202.031†	72.7	59.2	6.3858 ug/L	6.3858 ppb	04:55:54
2	Ni 231.604†	152.1	59.9	1.8697 ug/L	1.8697 ppb	04:55:54

2	P 214.914†	342.1	177.1	115.01 ug/L	115.01 ppb	04:55:54
2	Pb 220.353†	107.4	167.3	23.808 ug/L	23.808 ppb	04:55:54
2	S 181.975 Axial†	34.6	10.5	17.811 ug/L	17.811 ppb	04:55:54
2	Sb 206.836†	30.9	4.5	-0.1409 ug/L	-0.1409 ppb	04:55:54
2	Se 196.026†	-73.2	-56.9	0.3053 ug/L	0.3053 ppb	04:55:54
2	Si 251.611†	124333.5	124972.1	4653.0 ug/L	4653.0 ppb	04:55:34
2	Sn 189.927†	4.3	1.2	-0.3937 ug/L	-0.3937 ppb	04:55:54
2	Ti 334.940†	339151.3	343409.7	590.95 ug/L	590.95 ppb	04:55:34
2	Tl 190.801†	-50.5	-25.9	-2.3401 ug/L	-2.3401 ppb	04:55:54
2	U 409.014†	-4428.9	-2435.2	-73.369 ug/L	-73.369 ppb	04:55:34
2	V 292.402†	-225.2	1200.3	6.3932 ug/L	6.3932 ppb	04:55:34
2	Zn 213.857†	9169.9	8649.4	100.49 ug/L	100.49 ppb	04:55:34
2	SiO2†	124608.7	125221.9	10004 ug/L	10004 ppb	04:56:30
3	Sc Radial	4182.0	4182.0	104 %		04:54:42
3	Y RADIAL	4890.9	4890.9	108.3 %		04:54:42
3	Al 396.153Radial†	3031.3	3003.6	3200.8 ug/L	3200.8 ppb	04:54:42
3	Ca 317.933Radial†	565.7	528.5	1073.7 ug/L	1073.7 ppb	04:55:02
3	Fe 238.204 Radial†	1199.3	1147.8	14353 ug/L	14353 ppb	04:55:02
3	K 766.490 Radial†	5099.6	2115.7	421.63 ug/L	421.63 ppb	04:54:42
3	Mg 279.077 IEC†	20.8	19.4	831.32 ug/L	831.32 ppb	04:55:02
3	Na 589.592 Radial†	421.1	867.1	340.50 ug/L	340.50 ppb	04:54:42
3	Sr 421.552†	702.5	607.6	5.1659 ug/L	5.1659 ppb	04:54:42
3	Sc 361.383	839767.5	839767.5	99.990 %		04:55:59
3	Y 371.029	764266.1	764266.1	106.73 %		04:55:59
3	Ag 328.068†	-724.9	-978.4	-0.4159 ug/L	-0.4159 ppb	04:55:59
3	As 188.979†	-34.2	-13.4	1.2793 ug/L	1.2793 ppb	04:56:20
3	B 249.677†	-87.2	162.9	2.1427 ug/L	2.1427 ppb	04:55:59
3	Ba 233.527†	2873.1	2854.9	27.221 ug/L	27.221 ppb	04:56:20
3	Be 313.107†	-6697.0	-2435.0	0.3535 ug/L	0.3535 ppb	04:55:59
3	Cd 226.502†	-57.8	108.6	0.0381 ug/L	0.0381 ppb	04:56:20
3	Co 228.616†	34.6	73.5	0.4927 ug/L	0.4927 ppb	04:56:20
3	Cr 267.716†	295.9	200.9	4.1759 ug/L	4.1759 ppb	04:56:20
3	Cu 324.752†	7832.7	1480.8	5.5972 ug/L	5.5972 ppb	04:55:59
3	Mn 257.610†	443925.6	443519.6	583.30 ug/L	583.30 ppb	04:55:59
3	Mo 202.031†	84.2	70.0	7.2808 ug/L	7.2808 ppb	04:56:20
3	Ni 231.604†	158.2	64.6	2.0170 ug/L	2.0170 ppb	04:56:20
3	P 214.914†	340.5	172.3	112.14 ug/L	112.14 ppb	04:56:20
3	Pb 220.353†	122.7	181.5	26.064 ug/L	26.064 ppb	04:56:20
3	S 181.975 Axial†	42.4	18.0	31.005 ug/L	31.005 ppb	04:56:20
3	Sb 206.836†	31.6	5.0	0.0960 ug/L	0.0960 ppb	04:56:20
3	Se 196.026†	-75.0	-58.0	-2.5048 ug/L	-2.5048 ppb	04:56:20
3	Si 251.611†	125325.3	124813.0	4647.1 ug/L	4647.1 ppb	04:55:59
3	Sn 189.927†	8.8	5.7	0.6311 ug/L	0.6311 ppb	04:56:20
3	Ti 334.940†	342494.2	343613.4	591.29 ug/L	591.29 ppb	04:55:59
3	Tl 190.801†	-48.0	-23.0	-1.2185 ug/L	-1.2185 ppb	04:56:20
3	U 409.014†	-4238.5	-2203.7	-66.486 ug/L	-66.486 ppb	04:55:59
3	V 292.402†	-158.7	1268.9	7.0431 ug/L	7.0431 ppb	04:55:59
3	Zn 213.857†	9239.3	8633.9	100.40 ug/L	100.40 ppb	04:55:59
3	SiO2†	125750.0	125209.8	10003 ug/L	10003 ppb	04:56:35

Mean Data: 1202056844|959101|5

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	832958.1	99.179 %	0.7632			0.77%
Sc Radial	4116.9	102 %	1.4			1.38%
Y 371.029	758979.0	105.99 %	0.713			0.67%
Y RADIAL	4775.1	105.7 %	2.47			2.33%
Ag 328.068†	-1008.9	-0.4473 ug/L	0.23801	-0.4473 ppb	0.23801	53.21%
Al 396.153Radial†	2990.6	3187.0 ug/L	15.63	3187.0 ppb	15.63	0.49%
As 188.979†	-10.5	2.9090 ug/L	1.44690	2.9090 ppb	1.44690	49.74%
B 249.677†	150.3	1.7296 ug/L	0.38489	1.7296 ppb	0.38489	22.25%
Ba 233.527†	2858.0	27.262 ug/L	0.0363	27.262 ppb	0.0363	0.13%
Be 313.107†	-2487.0	0.3314 ug/L	0.02625	0.3314 ppb	0.02625	7.92%
Ca 317.933Radial†	543.3	1103.9 ug/L	28.77	1103.9 ppb	28.77	2.61%
Cd 226.502†	107.2	-0.0241 ug/L	0.06255	-0.0241 ppb	0.06255	259.36%
Co 228.616†	71.2	0.4277 ug/L	0.12518	0.4277 ppb	0.12518	29.27%
Cr 267.716†	189.8	4.0733 ug/L	0.17474	4.0733 ppb	0.17474	4.29%
Cu 324.752†	1517.5	5.7381 ug/L	0.12241	5.7381 ppb	0.12241	2.13%
Fe 238.204 Radial†	1179.5	14750 ug/L	348.8	14750 ppb	348.8	2.36%
K 766.490 Radial†	2200.8	438.62 ug/L	14.717	438.62 ppb	14.717	3.36%

Mg 279.077 IEC†	18.9	809.92 ug/L	47.735	809.92 ppb	47.735	5.89%
Mn 257.610†	443282.3	583.03 ug/L	0.252	583.03 ppb	0.252	0.04%
Mo 202.031†	66.7	7.0195 ug/L	0.55163	7.0195 ppb	0.55163	7.86%
Na 589.592 Radial†	843.0	331.05 ug/L	9.062	331.05 ppb	9.062	2.74%
Ni 231.604†	58.1	1.8138 ug/L	0.23615	1.8138 ppb	0.23615	13.02%
P 214.914†	175.6	114.17 ug/L	1.770	114.17 ppb	1.770	1.55%
Pb 220.353†	166.9	23.792 ug/L	2.2806	23.792 ppb	2.2806	9.59%
S 181.975 Axial†	13.1	22.405 ug/L	7.4536	22.405 ppb	7.4536	33.27%
Sb 206.836†	4.0	-0.3273 ug/L	0.54129	-0.3273 ppb	0.54129	165.35%
Se 196.026†	-56.2	0.1257 ug/L	2.54542	0.1257 ppb	2.54542	>999.9%
Si 251.611†	124901.7	4650.4 ug/L	3.03	4650.4 ppb	3.03	0.07%
Sn 189.927†	2.0	-0.2099 ug/L	0.76584	-0.2099 ppb	0.76584	364.88%
Sr 421.552†	591.9	5.0317 ug/L	0.17471	5.0317 ppb	0.17471	3.47%
Ti 334.940†	343353.8	590.85 ug/L	0.497	590.85 ppb	0.497	0.08%
Tl 190.801†	-23.9	-1.5826 ug/L	0.65618	-1.5826 ppb	0.65618	41.46%
U 409.014†	-2267.2	-68.398 ug/L	4.3427	-68.398 ppb	4.3427	6.35%
V 292.402†	1225.5	6.6434 ug/L	0.34976	6.6434 ppb	0.34976	5.26%
Zn 213.857†	8643.4	100.46 ug/L	0.047	100.46 ppb	0.047	0.05%
SiO2†	125437.3	10022 ug/L	30.6	10022 ppb	30.6	0.31%

Sequence No.: 107

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/26/2010 04:58:47

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	3958.3	3958.3	98.1 %		05:00:59
1	Y RADIAL	4442.6	4442.6	98.33 %		05:00:39
1	Al 396.153Radial†	4511.1	4676.8	4960.0 ug/L	4960.0 ppb	05:00:39
1	Ca 317.933Radial†	2482.8	2513.0	5105.8 ug/L	5105.8 ppb	05:00:59
1	Fe 238.204 Radial†	420.3	419.3	5258.8 ug/L	5258.8 ppb	05:00:59
1	K 766.490 Radial†	27264.0	24981.3	4980.4 ug/L	4980.4 ppb	05:00:39
1	Mg 279.077 IEC†	119.9	121.5	5305.8 ug/L	5305.8 ppb	05:00:59
1	Na 589.592 Radial†	26503.0	27469.9	10788 ug/L	10788 ppb	05:00:39
1	Sr 421.552†	57989.2	59026.3	502.60 ug/L	502.60 ppb	05:00:39
1	Sc 361.383	842214.3	842214.3	100.28 %		05:01:56
1	Y 371.029	709457.6	709457.6	99.076 %		05:01:56
1	Ag 328.068†	100021.0	99487.5	504.70 ug/L	504.70 ppb	05:02:02
1	As 188.979†	901.7	920.0	497.48 ug/L	497.48 ppb	05:02:22
1	B 249.677†	17387.8	17589.3	481.18 ug/L	481.18 ppb	05:02:02
1	Ba 233.527†	52593.3	52427.5	492.73 ug/L	492.73 ppb	05:02:02
1	Be 313.107†	1225851.6	1226681.0	499.15 ug/L	499.15 ppb	05:01:56
1	Cd 226.502†	35392.3	35459.6	499.99 ug/L	499.99 ppb	05:02:02
1	Co 228.616†	19540.9	19525.1	508.27 ug/L	508.27 ppb	05:02:02
1	Cr 267.716†	38102.0	37900.3	494.48 ug/L	494.48 ppb	05:02:02
1	Cu 324.752†	157640.2	150845.9	489.12 ug/L	489.12 ppb	05:02:02
1	Mn 257.610†	385331.5	383799.8	503.87 ug/L	503.87 ppb	05:01:56
1	Mo 202.031†	5748.1	5717.8	503.16 ug/L	503.16 ppb	05:02:22
1	Ni 231.604†	16235.1	16096.0	502.29 ug/L	502.29 ppb	05:02:02
1	P 214.914†	3680.2	3501.7	2421.5 ug/L	2421.5 ppb	05:02:22
1	Pb 220.353†	3273.0	3322.7	502.33 ug/L	502.33 ppb	05:02:22
1	S 181.975 Axial†	604.5	578.4	1012.9 ug/L	1012.9 ppb	05:02:22
1	Sb 206.836†	1248.0	1217.8	535.51 ug/L	535.51 ppb	05:02:22
1	Se 196.026†	628.2	643.4	531.75 ug/L	531.75 ppb	05:02:22
1	Si 251.611†	67673.5	66958.5	2486.9 ug/L	2486.9 ppb	05:02:02
1	Sn 189.927†	2271.9	2262.4	501.69 ug/L	501.69 ppb	05:02:22
1	Ti 334.940†	285826.3	286109.1	492.10 ug/L	492.10 ppb	05:02:02
1	Tl 190.801†	1239.2	1260.8	490.80 ug/L	490.80 ppb	05:02:22
1	U 409.014†	15475.9	17467.7	512.28 ug/L	512.28 ppb	05:02:02
1	V 292.402†	62870.1	64121.5	501.03 ug/L	501.03 ppb	05:02:02
1	Zn 213.857†	42527.7	41802.1	491.95 ug/L	491.95 ppb	05:02:02
1	SiO2†	67524.9	66782.4	5321.9 ug/L	5321.9 ppb	05:03:29
2	Sc Radial	3988.0	3988.0	98.9 %		05:01:24
2	Y RADIAL	4400.2	4400.2	97.39 %		05:01:04
2	Al 396.153Radial†	4472.3	4603.4	4881.4 ug/L	4881.4 ppb	05:01:04
2	Ca 317.933Radial†	2497.4	2508.9	5097.5 ug/L	5097.5 ppb	05:01:24
2	Fe 238.204 Radial†	417.6	413.4	5184.6 ug/L	5184.6 ppb	05:01:24
2	K 766.490 Radial†	27036.4	24544.0	4893.2 ug/L	4893.2 ppb	05:01:04
2	Mg 279.077 IEC†	119.9	120.6	5267.5 ug/L	5267.5 ppb	05:01:24
2	Na 589.592 Radial†	26161.6	26923.3	10573 ug/L	10573 ppb	05:01:04
2	Sr 421.552†	57467.2	58058.0	494.36 ug/L	494.36 ppb	05:01:04
2	Sc 361.383	838206.8	838206.8	99.804 %		05:02:27
2	Y 371.029	705611.9	705611.9	98.539 %		05:02:27
2	Ag 328.068†	101515.2	101461.5	514.65 ug/L	514.65 ppb	05:02:33
2	As 188.979†	913.1	935.8	505.99 ug/L	505.99 ppb	05:02:53
2	B 249.677†	17720.3	18005.4	492.60 ug/L	492.60 ppb	05:02:33
2	Ba 233.527†	53317.3	53403.6	501.89 ug/L	501.89 ppb	05:02:33
2	Be 313.107†	1220241.6	1226904.4	499.26 ug/L	499.26 ppb	05:02:27
2	Cd 226.502†	35835.8	36072.6	508.65 ug/L	508.65 ppb	05:02:33
2	Co 228.616†	19821.3	19899.2	518.00 ug/L	518.00 ppb	05:02:33
2	Cr 267.716†	38422.6	38403.2	501.03 ug/L	501.03 ppb	05:02:33
2	Cu 324.752†	160117.8	154080.0	499.60 ug/L	499.60 ppb	05:02:33
2	Mn 257.610†	385144.3	385449.4	506.02 ug/L	506.02 ppb	05:02:27
2	Mo 202.031†	5790.0	5787.2	509.25 ug/L	509.25 ppb	05:02:53
2	Ni 231.604†	16449.2	16387.9	511.40 ug/L	511.40 ppb	05:02:33

2	P 214.914†	3726.6	3565.7	2465.6 ug/L	2465.6 ppb	05:02:53
2	Pb 220.353†	3284.1	3349.3	506.35 ug/L	506.35 ppb	05:02:53
2	S 181.975 Axial†	612.6	589.4	1032.2 ug/L	1032.2 ppb	05:02:53
2	Sb 206.836†	1252.2	1228.1	540.08 ug/L	540.08 ppb	05:02:53
2	Se 196.026†	629.8	647.9	535.11 ug/L	535.11 ppb	05:02:53
2	Si 251.611†	68564.0	68173.4	2532.0 ug/L	2532.0 ppb	05:02:33
2	Sn 189.927†	2289.3	2290.7	507.96 ug/L	507.96 ppb	05:02:53
2	Ti 334.940†	289592.7	291245.6	500.93 ug/L	500.93 ppb	05:02:33
2	Tl 190.801†	1259.4	1286.9	500.94 ug/L	500.94 ppb	05:02:53
2	U 409.014†	15663.2	17729.2	519.96 ug/L	519.96 ppb	05:02:33
2	V 292.402†	63487.0	65039.4	508.20 ug/L	508.20 ppb	05:02:33
2	Zn 213.857†	43075.2	42553.5	500.82 ug/L	500.82 ppb	05:02:33
2	SiO2†	67930.2	67510.5	5379.9 ug/L	5379.9 ppb	05:03:34
3	Sc Radial	3980.9	3980.9	98.7 %		05:01:49
3	Y RADIAL	4389.6	4389.6	97.16 %		05:01:29
3	Al 396.153Radial†	4467.1	4606.2	4884.3 ug/L	4884.3 ppb	05:01:29
3	Ca 317.933Radial†	2495.6	2511.6	5103.0 ug/L	5103.0 ppb	05:01:49
3	Fe 238.204 Radial†	420.1	416.7	5225.9 ug/L	5225.9 ppb	05:01:49
3	K 766.490 Radial†	26955.8	24511.2	4886.6 ug/L	4886.6 ppb	05:01:29
3	Mg 279.077 IEC†	120.4	121.3	5297.4 ug/L	5297.4 ppb	05:01:49
3	Na 589.592 Radial†	25940.8	26746.9	10504 ug/L	10504 ppb	05:01:29
3	Sr 421.552†	57206.4	57897.5	492.99 ug/L	492.99 ppb	05:01:29
3	Sc 361.383	829978.5	829978.5	98.824 %		05:02:58
3	Y 371.029	699216.6	699216.6	97.646 %		05:02:58
3	Ag 328.068†	102394.6	103359.7	524.26 ug/L	524.26 ppb	05:03:04
3	As 188.979†	905.3	936.9	506.72 ug/L	506.72 ppb	05:03:24
3	B 249.677†	17987.1	18451.3	504.83 ug/L	504.83 ppb	05:03:04
3	Ba 233.527†	53752.1	54373.3	511.01 ug/L	511.01 ppb	05:03:04
3	Be 313.107†	1207166.1	1225794.3	498.84 ug/L	498.84 ppb	05:02:58
3	Cd 226.502†	36164.0	36760.7	518.36 ug/L	518.36 ppb	05:03:04
3	Co 228.616†	20029.6	20306.9	528.59 ug/L	528.59 ppb	05:03:04
3	Cr 267.716†	38901.3	39269.2	512.32 ug/L	512.32 ppb	05:03:04
3	Cu 324.752†	161851.3	157424.6	510.44 ug/L	510.44 ppb	05:03:04
3	Mn 257.610†	381574.8	385663.1	506.31 ug/L	506.31 ppb	05:02:58
3	Mo 202.031†	5746.9	5801.1	510.48 ug/L	510.48 ppb	05:03:24
3	Ni 231.604†	16552.1	16655.5	519.75 ug/L	519.75 ppb	05:03:04
3	P 214.914†	3661.7	3537.1	2442.8 ug/L	2442.8 ppb	05:03:24
3	Pb 220.353†	3262.5	3360.2	507.98 ug/L	507.98 ppb	05:03:24
3	S 181.975 Axial†	595.5	578.2	1012.6 ug/L	1012.6 ppb	05:03:24
3	Sb 206.836†	1254.6	1242.9	546.46 ug/L	546.46 ppb	05:03:24
3	Se 196.026†	615.9	640.1	529.03 ug/L	529.03 ppb	05:03:24
3	Si 251.611†	69202.8	69500.9	2581.5 ug/L	2581.5 ppb	05:03:04
3	Sn 189.927†	2279.1	2303.2	510.71 ug/L	510.71 ppb	05:03:24
3	Ti 334.940†	292964.4	297534.1	511.74 ug/L	511.74 ppb	05:03:04
3	Tl 190.801†	1243.3	1283.2	499.51 ug/L	499.51 ppb	05:03:24
3	U 409.014†	15997.8	18223.3	534.47 ug/L	534.47 ppb	05:03:04
3	V 292.402†	64242.3	66434.4	518.98 ug/L	518.98 ppb	05:03:04
3	Zn 213.857†	43393.1	43303.0	509.65 ug/L	509.65 ppb	05:03:04
3	SiO2†	68024.8	68280.9	5441.4 ug/L	5441.4 ppb	05:03:39

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	836799.8	99.636 %	0.7428			0.75%
Sc Radial	3975.7	98.6 %	0.38			0.39%
Y 371.029	704762.0	98.420 %	0.7224			0.73%
Y RADIAL	4410.8	97.63 %	0.621			0.64%
Ag 328.068†	101436.2	514.54 ug/L	9.783	514.54 ppb	9.783	1.90%
QC value within limits for Ag 328.068 Recovery = 102.91%						
Al 396.153Radial†	4628.8	4908.6 ug/L	44.54	4908.6 ppb	44.54	0.91%
QC value within limits for Al 396.153Radial Recovery = 98.17%						
As 188.979†	930.9	503.40 ug/L	5.136	503.40 ppb	5.136	1.02%
QC value within limits for As 188.979 Recovery = 100.68%						
B 249.677†	18015.3	492.87 ug/L	11.824	492.87 ppb	11.824	2.40%
QC value within limits for B 249.677 Recovery = 98.57%						
Ba 233.527†	53401.5	501.88 ug/L	9.139	501.88 ppb	9.139	1.82%
QC value within limits for Ba 233.527 Recovery = 100.38%						
Be 313.107†	1226459.9	499.08 ug/L	0.221	499.08 ppb	0.221	0.04%
QC value within limits for Be 313.107 Recovery = 99.82%						
Ca 317.933Radial†	2511.2	5102.1 ug/L	4.24	5102.1 ppb	4.24	0.08%

QC value within limits for Ca 317.933 Radial Recovery = 102.04%

Cd 226.502†	36097.7	509.00 ug/L	9.190	509.00 ppb	9.190	1.81%
QC value within limits for Cd 226.502 Recovery = 101.80%						
Co 228.616†	19910.4	518.29 ug/L	10.165	518.29 ppb	10.165	1.96%
QC value within limits for Co 228.616 Recovery = 103.66%						
Cr 267.716†	38524.3	502.61 ug/L	9.022	502.61 ppb	9.022	1.80%
QC value within limits for Cr 267.716 Recovery = 100.52%						
Cu 324.752†	154116.8	499.72 ug/L	10.659	499.72 ppb	10.659	2.13%
QC value within limits for Cu 324.752 Recovery = 99.94%						
Fe 238.204 Radial†	416.5	5223.1 ug/L	37.17	5223.1 ppb	37.17	0.71%
QC value within limits for Fe 238.204 Radial Recovery = 104.46%						
K 766.490 Radial†	24678.8	4920.0 ug/L	52.33	4920.0 ppb	52.33	1.06%
QC value within limits for K 766.490 Radial Recovery = 98.40%						
Mg 279.077 IEC†	121.1	5290.2 ug/L	20.11	5290.2 ppb	20.11	0.38%
QC value within limits for Mg 279.077 IEC Recovery = 105.80%						
Mn 257.610†	384970.8	505.40 ug/L	1.336	505.40 ppb	1.336	0.26%
QC value within limits for Mn 257.610 Recovery = 101.08%						
Mo 202.031†	5768.7	507.63 ug/L	3.920	507.63 ppb	3.920	0.77%
QC value within limits for Mo 202.031 Recovery = 101.53%						
Na 589.592 Radial†	27046.7	10622 ug/L	148.0	10622 ppb	148.0	1.39%
QC value within limits for Na 589.592 Radial Recovery = 106.22%						
Ni 231.604†	16379.8	511.15 ug/L	8.730	511.15 ppb	8.730	1.71%
QC value within limits for Ni 231.604 Recovery = 102.23%						
P 214.914†	3534.8	2443.3 ug/L	22.02	2443.3 ppb	22.02	0.90%
QC value within limits for P 214.914 Recovery = 97.73%						
Pb 220.353†	3344.1	505.56 ug/L	2.907	505.56 ppb	2.907	0.58%
QC value within limits for Pb 220.353 Recovery = 101.11%						
S 181.975 Axial†	582.0	1019.2 ug/L	11.23	1019.2 ppb	11.23	1.10%
QC value within limits for S 181.975 Axial Recovery = 101.92%						
Sb 206.836†	1229.6	540.68 ug/L	5.501	540.68 ppb	5.501	1.02%
QC value within limits for Sb 206.836 Recovery = 108.14%						
Se 196.026†	643.8	531.96 ug/L	3.050	531.96 ppb	3.050	0.57%
QC value within limits for Se 196.026 Recovery = 106.39%						
Si 251.611†	68210.9	2533.5 ug/L	47.30	2533.5 ppb	47.30	1.87%
QC value within limits for Si 251.611 Recovery = 101.34%						
Sn 189.927†	2285.4	506.79 ug/L	4.623	506.79 ppb	4.623	0.91%
QC value within limits for Sn 189.927 Recovery = 101.36%						
Sr 421.552†	58327.3	496.65 ug/L	5.200	496.65 ppb	5.200	1.05%
QC value within limits for Sr 421.552 Recovery = 99.33%						
Ti 334.940†	291629.6	501.59 ug/L	9.837	501.59 ppb	9.837	1.96%
QC value within limits for Ti 334.940 Recovery = 100.32%						
Tl 190.801†	1277.0	497.08 ug/L	5.486	497.08 ppb	5.486	1.10%
QC value within limits for Tl 190.801 Recovery = 99.42%						
U 409.014†	17806.7	522.24 ug/L	11.272	522.24 ppb	11.272	2.16%
QC value within limits for U 409.014 Recovery = 104.45%						
V 292.402†	65198.4	509.40 ug/L	9.036	509.40 ppb	9.036	1.77%
QC value within limits for V 292.402 Recovery = 101.88%						
Zn 213.857†	42552.9	500.81 ug/L	8.848	500.81 ppb	8.848	1.77%
QC value within limits for Zn 213.857 Recovery = 100.16%						
SiO2†	67524.6	5381.1 ug/L	59.77	5381.1 ppb	59.77	1.11%
QC value within limits for SiO2 Recovery = 100.63%						

All analyte(s) passed QC.

Sequence No.: 108

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/26/2010 05:05:49

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	3906.6	3906.6	96.8 %		05:08:02
1	Y RADIAL	4370.4	4370.4	96.73 %		05:07:42
1	Al 396.153Radial†	-62.2	15.5	16.491 ug/L	16.491 ppb	05:08:02
1	Ca 317.933Radial†	28.5	12.3	24.896 ug/L	24.896 ppb	05:08:02
1	Fe 238.204 Radial†	12.0	3.4	42.947 ug/L	42.947 ppb	05:08:02
1	K 766.490 Radial†	2468.0	-254.8	-50.899 ug/L	-50.899 ppb	05:07:42
1	Mg 279.077 IEC†	1.4	0.7	30.333 ug/L	30.333 ppb	05:08:02
1	Na 589.592 Radial†	-350.9	98.6	38.712 ug/L	38.712 ppb	05:07:42
1	Sr 421.552†	58.2	-10.0	-0.0852 ug/L	-0.0852 ppb	05:07:42
1	Sc 361.383	830343.2	830343.2	98.867 %		05:08:59
1	Y 371.029	708423.6	708423.6	98.932 %		05:08:59
1	Ag 328.068†	115.6	-136.5	-0.6757 ug/L	-0.6757 ppb	05:08:59
1	As 188.979†	-16.1	4.6	2.4669 ug/L	2.4669 ppb	05:09:19
1	B 249.677†	-189.6	58.3	1.5976 ug/L	1.5976 ppb	05:09:19
1	Ba 233.527†	19.0	0.7	0.0090 ug/L	0.0090 ppb	05:09:19
1	Be 313.107†	-4442.3	-230.4	-0.0931 ug/L	-0.0931 ppb	05:08:59
1	Cd 226.502†	-162.9	1.6	0.0185 ug/L	0.0185 ppb	05:09:19
1	Co 228.616†	-47.8	-9.4	-0.2468 ug/L	-0.2468 ppb	05:09:19
1	Cr 267.716†	124.5	31.0	0.4070 ug/L	0.4070 ppb	05:09:19
1	Cu 324.752†	6649.4	372.8	1.2093 ug/L	1.2093 ppb	05:08:59
1	Mn 257.610†	1068.4	628.2	0.8273 ug/L	0.8273 ppb	05:09:19
1	Mo 202.031†	11.6	-2.5	-0.2155 ug/L	-0.2155 ppb	05:09:19
1	Ni 231.604†	60.5	-32.5	-1.0133 ug/L	-1.0133 ppb	05:09:19
1	P 214.914†	189.1	23.0	16.296 ug/L	16.296 ppb	05:09:19
1	Pb 220.353†	-65.1	-7.1	-1.0696 ug/L	-1.0696 ppb	05:09:19
1	S 181.975 Axial†	35.3	11.4	19.903 ug/L	19.903 ppb	05:09:19
1	Sb 206.836†	31.1	4.8	2.0481 ug/L	2.0481 ppb	05:09:19
1	Se 196.026†	-15.5	1.3	1.1690 ug/L	1.1690 ppb	05:09:19
1	Si 251.611†	595.6	76.9	2.8673 ug/L	2.8673 ppb	05:09:19
1	Sn 189.927†	7.9	5.0	1.0991 ug/L	1.0991 ppb	05:09:19
1	Ti 334.940†	-950.5	122.0	0.2090 ug/L	0.2090 ppb	05:08:59
1	Tl 190.801†	-25.5	-0.7	-0.2673 ug/L	-0.2673 ppb	05:09:19
1	U 409.014†	-1896.9	116.6	3.4246 ug/L	3.4246 ppb	05:08:59
1	V 292.402†	-1336.6	75.6	0.5802 ug/L	0.5802 ppb	05:08:59
1	Zn 213.857†	787.1	189.7	2.2520 ug/L	2.2520 ppb	05:09:19
1	SiO2†	722.5	177.4	14.181 ug/L	14.181 ppb	05:10:15
2	Sc Radial	4016.7	4016.7	99.6 %		05:08:27
2	Y RADIAL	4403.9	4403.9	97.47 %		05:08:07
2	Al 396.153Radial†	-67.6	11.7	12.480 ug/L	12.480 ppb	05:08:27
2	Ca 317.933Radial†	26.7	9.6	19.584 ug/L	19.584 ppb	05:08:27
2	Fe 238.204 Radial†	10.9	2.0	24.569 ug/L	24.569 ppb	05:08:27
2	K 766.490 Radial†	2382.2	-410.9	-82.055 ug/L	-82.055 ppb	05:08:07
2	Mg 279.077 IEC†	2.1	1.4	61.306 ug/L	61.306 ppb	05:08:27
2	Na 589.592 Radial†	-345.7	113.8	44.673 ug/L	44.673 ppb	05:08:07
2	Sr 421.552†	65.4	-4.3	-0.0370 ug/L	-0.0370 ppb	05:08:07
2	Sc 361.383	820752.3	820752.3	97.725 %		05:09:24
2	Y 371.029	699459.8	699459.8	97.680 %		05:09:24
2	Ag 328.068†	176.4	-72.9	-0.3585 ug/L	-0.3585 ppb	05:09:24
2	As 188.979†	-20.0	0.3	0.1883 ug/L	0.1883 ppb	05:09:44
2	B 249.677†	-218.7	26.3	0.7210 ug/L	0.7210 ppb	05:09:44
2	Ba 233.527†	25.8	7.9	0.0758 ug/L	0.0758 ppb	05:09:44
2	Be 313.107†	-4358.8	-197.6	-0.0793 ug/L	-0.0793 ppb	05:09:24
2	Cd 226.502†	-166.3	-3.8	-0.0559 ug/L	-0.0559 ppb	05:09:44
2	Co 228.616†	-53.2	-15.6	-0.4062 ug/L	-0.4062 ppb	05:09:44
2	Cr 267.716†	96.2	3.4	0.0479 ug/L	0.0479 ppb	05:09:44
2	Cu 324.752†	6557.2	357.1	1.1585 ug/L	1.1585 ppb	05:09:24
2	Mn 257.610†	1373.9	953.4	1.2509 ug/L	1.2509 ppb	05:09:44
2	Mo 202.031†	14.7	0.9	0.0781 ug/L	0.0781 ppb	05:09:44
2	Ni 231.604†	77.1	-14.7	-0.4597 ug/L	-0.4597 ppb	05:09:44

2	P 214.914†	191.6	27.8	19.786 ug/L	19.786 ppb	05:09:44
2	Pb 220.353†	-44.6	13.1	1.9816 ug/L	1.9816 ppb	05:09:44
2	S 181.975 Axial†	34.2	10.7	18.665 ug/L	18.665 ppb	05:09:44
2	Sb 206.836†	33.9	8.1	3.4687 ug/L	3.4687 ppb	05:09:44
2	Se 196.026†	-19.3	-2.8	-2.1688 ug/L	-2.1688 ppb	05:09:44
2	Si 251.611†	643.8	133.3	4.9617 ug/L	4.9617 ppb	05:09:44
2	Sn 189.927†	13.2	10.5	2.3205 ug/L	2.3205 ppb	05:09:44
2	Ti 334.940†	-836.8	227.1	0.3877 ug/L	0.3877 ppb	05:09:24
2	Tl 190.801†	-28.7	-4.3	-1.6428 ug/L	-1.6428 ppb	05:09:44
2	U 409.014†	-1947.5	42.3	1.2421 ug/L	1.2421 ppb	05:09:24
2	V 292.402†	-1314.6	82.3	0.6353 ug/L	0.6353 ppb	05:09:24
2	Zn 213.857†	800.5	212.7	2.5240 ug/L	2.5240 ppb	05:09:44
2	SiO2†	629.1	90.4	7.2188 ug/L	7.2188 ppb	05:10:20
3	Sc Radial	4020.3	4020.3	99.7 %		05:08:52
3	Y RADIAL	4381.0	4381.0	96.97 %		05:08:32
3	Al 396.153Radial†	-61.9	17.5	18.692 ug/L	18.692 ppb	05:08:52
3	Ca 317.933Radial†	31.0	13.9	28.300 ug/L	28.300 ppb	05:08:52
3	Fe 238.204 Radial†	13.1	4.1	51.204 ug/L	51.204 ppb	05:08:52
3	K 766.490 Radial†	2386.2	-409.1	-81.677 ug/L	-81.677 ppb	05:08:32
3	Mg 279.077 IEC†	1.8	1.1	46.179 ug/L	46.179 ppb	05:08:52
3	Na 589.592 Radial†	-415.7	43.7	17.177 ug/L	17.177 ppb	05:08:32
3	Sr 421.552†	20.1	-49.9	-0.4248 ug/L	-0.4248 ppb	05:08:32
3	Sc 361.383	823470.7	823470.7	98.049 %		05:09:49
3	Y 371.029	701958.0	701958.0	98.029 %		05:09:49
3	Ag 328.068†	131.3	-119.5	-0.5852 ug/L	-0.5852 ppb	05:09:49
3	As 188.979†	-16.0	4.5	2.4353 ug/L	2.4353 ppb	05:10:09
3	B 249.677†	-216.7	29.1	0.7931 ug/L	0.7931 ppb	05:10:09
3	Ba 233.527†	15.0	-3.2	-0.0286 ug/L	-0.0286 ppb	05:10:09
3	Be 313.107†	-4440.7	-266.4	-0.1077 ug/L	-0.1077 ppb	05:09:49
3	Cd 226.502†	-156.1	7.2	0.0955 ug/L	0.0955 ppb	05:10:09
3	Co 228.616†	-53.1	-15.3	-0.3986 ug/L	-0.3986 ppb	05:10:09
3	Cr 267.716†	129.6	37.2	0.4903 ug/L	0.4903 ppb	05:10:09
3	Cu 324.752†	6551.3	328.9	1.0703 ug/L	1.0703 ppb	05:09:49
3	Mn 257.610†	1315.6	889.4	1.1701 ug/L	1.1701 ppb	05:10:09
3	Mo 202.031†	14.8	0.9	0.0799 ug/L	0.0799 ppb	05:10:09
3	Ni 231.604†	69.5	-22.7	-0.7100 ug/L	-0.7100 ppb	05:10:09
3	P 214.914†	196.7	32.4	23.041 ug/L	23.041 ppb	05:10:09
3	Pb 220.353†	-48.7	9.1	1.3708 ug/L	1.3708 ppb	05:10:09
3	S 181.975 Axial†	31.2	7.4	12.949 ug/L	12.949 ppb	05:10:09
3	Sb 206.836†	31.9	5.9	2.5427 ug/L	2.5427 ppb	05:10:09
3	Se 196.026†	-22.5	-6.0	-4.6095 ug/L	-4.6095 ppb	05:10:09
3	Si 251.611†	644.1	131.4	4.8922 ug/L	4.8922 ppb	05:10:09
3	Sn 189.927†	8.1	5.2	1.1581 ug/L	1.1581 ppb	05:10:09
3	Ti 334.940†	-954.6	109.7	0.1894 ug/L	0.1894 ppb	05:09:49
3	Tl 190.801†	-27.2	-2.6	-1.0109 ug/L	-1.0109 ppb	05:10:09
3	U 409.014†	-2056.6	-62.4	-1.8424 ug/L	-1.8424 ppb	05:09:49
3	V 292.402†	-1384.8	15.1	0.1073 ug/L	0.1073 ppb	05:09:49
3	Zn 213.857†	790.8	200.2	2.3732 ug/L	2.3732 ppb	05:10:09
3	SiO2†	663.2	123.1	9.8304 ug/L	9.8304 ppb	05:10:25

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	824855.4	98.214 %	0.5886			0.60%
Sc Radial	3981.2	98.7 %	1.60			1.62%
Y 371.029	703280.5	98.213 %	0.6460			0.66%
Y RADIAL	4385.1	97.06 %	0.379			0.39%
Ag 328.068†	-109.6	-0.5398 ug/L	0.16340	-0.5398 ppb	0.16340	30.27%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	14.9	15.888 ug/L	3.1496	15.888 ppb	3.1496	19.82%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	3.1	1.6968 ug/L	1.30656	1.6968 ppb	1.30656	77.00%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	37.9	1.0372 ug/L	0.48658	1.0372 ppb	0.48658	46.91%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	1.8	0.0187 ug/L	0.05287	0.0187 ppb	0.05287	282.50%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	-231.5	-0.0934 ug/L	0.01420	-0.0934 ppb	0.01420	15.21%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	11.9	24.260 ug/L	4.3927	24.260 ppb	4.3927	18.11%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated				
Cd 226.502†	1.7	0.0194 ug/L	0.07575	0.0194 ppb 0.07575 391.05%
QC value within limits for Cd 226.502 Recovery = Not calculated				
Co 228.616†	-13.4	-0.3505 ug/L	0.08991	-0.3505 ppb 0.08991 25.65%
QC value within limits for Co 228.616 Recovery = Not calculated				
Cr 267.716†	23.9	0.3151 ug/L	0.23507	0.3151 ppb 0.23507 74.61%
QC value within limits for Cr 267.716 Recovery = Not calculated				
Cu 324.752†	353.0	1.1460 ug/L	0.07035	1.1460 ppb 0.07035 6.14%
QC value within limits for Cu 324.752 Recovery = Not calculated				
Fe 238.204 Radial†	3.2	39.573 ug/L	13.6339	39.573 ppb 13.6339 34.45%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated				
K 766.490 Radial†	-358.3	-71.543 ug/L	17.8797	-71.543 ppb 17.8797 24.99%
QC value within limits for K 766.490 Radial Recovery = Not calculated				
Mg 279.077 IEC†	1.1	45.939 ug/L	15.4882	45.939 ppb 15.4882 33.71%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated				
Mn 257.610†	823.7	1.0827 ug/L	0.22491	1.0827 ppb 0.22491 20.77%
QC value within limits for Mn 257.610 Recovery = Not calculated				
Mo 202.031†	-0.3	-0.0192 ug/L	0.17004	-0.0192 ppb 0.17004 885.88%
QC value within limits for Mo 202.031 Recovery = Not calculated				
Na 589.592 Radial†	85.4	33.521 ug/L	14.4644	33.521 ppb 14.4644 43.15%
QC value within limits for Na 589.592 Radial Recovery = Not calculated				
Ni 231.604†	-23.3	-0.7277 ug/L	0.27722	-0.7277 ppb 0.27722 38.10%
QC value within limits for Ni 231.604 Recovery = Not calculated				
P 214.914†	27.8	19.708 ug/L	3.3728	19.708 ppb 3.3728 17.11%
QC value within limits for P 214.914 Recovery = Not calculated				
Pb 220.353†	5.1	0.7609 ug/L	1.61442	0.7609 ppb 1.61442 212.16%
QC value within limits for Pb 220.353 Recovery = Not calculated				
S 181.975 Axial†	9.8	17.173 ug/L	3.7098	17.173 ppb 3.7098 21.60%
QC value within limits for S 181.975 Axial Recovery = Not calculated				
Sb 206.836†	6.3	2.6865 ug/L	0.72117	2.6865 ppb 0.72117 26.84%
QC value within limits for Sb 206.836 Recovery = Not calculated				
Se 196.026†	-2.5	-1.8698 ug/L	2.90082	-1.8698 ppb 2.90082 155.14%
QC value within limits for Se 196.026 Recovery = Not calculated				
Si 251.611†	113.9	4.2404 ug/L	1.18966	4.2404 ppb 1.18966 28.06%
QC value within limits for Si 251.611 Recovery = Not calculated				
Sn 189.927†	6.9	1.5259 ug/L	0.68876	1.5259 ppb 0.68876 45.14%
QC value within limits for Sn 189.927 Recovery = Not calculated				
Sr 421.552†	-21.4	-0.1823 ug/L	0.21137	-0.1823 ppb 0.21137 115.94%
QC value within limits for Sr 421.552 Recovery = Not calculated				
Ti 334.940†	152.9	0.2621 ug/L	0.10928	0.2621 ppb 0.10928 41.70%
QC value within limits for Ti 334.940 Recovery = Not calculated				
Tl 190.801†	-2.5	-0.9737 ug/L	0.68847	-0.9737 ppb 0.68847 70.71%
QC value within limits for Tl 190.801 Recovery = Not calculated				
U 409.014†	32.2	0.9414 ug/L	2.64631	0.9414 ppb 2.64631 281.09%
QC value within limits for U 409.014 Recovery = Not calculated				
V 292.402†	57.7	0.4409 ug/L	0.29026	0.4409 ppb 0.29026 65.83%
QC value within limits for V 292.402 Recovery = Not calculated				
Zn 213.857†	200.8	2.3831 ug/L	0.13625	2.3831 ppb 0.13625 5.72%
QC value within limits for Zn 213.857 Recovery = Not calculated				
SiO2†	130.3	10.410 ug/L	3.5173	10.410 ppb 3.5173 33.79%
QC value within limits for SiO2 Recovery = Not calculated				

All analyte(s) passed QC.

Sequence No.: 117
 Sample ID: CCV
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 7
 Date Collected: 3/26/2010 06:09:49
 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	3973.9	3973.9	98.5 %		06:12:01
1	Y RADIAL	4356.1	4356.1	96.42 %		06:11:41
1	Al 396.153Radial†	4532.4	4680.4	4963.7 ug/L	4963.7 ppb	06:11:41
1	Ca 317.933Radial†	2493.2	2513.6	5107.0 ug/L	5107.0 ppb	06:12:01
1	Fe 238.204 Radial†	419.4	416.8	5226.8 ug/L	5226.8 ppb	06:12:01
1	K 766.490 Radial†	27163.8	24770.3	4938.3 ug/L	4938.3 ppb	06:11:41
1	Mg 279.077 IEC†	117.1	118.1	5159.7 ug/L	5159.7 ppb	06:12:01
1	Na 589.592 Radial†	26510.4	27371.3	10749 ug/L	10749 ppb	06:11:41
1	Sr 421.552†	58064.7	58870.7	501.28 ug/L	501.28 ppb	06:11:41
1	Sc 361.383	833432.5	833432.5	99.235 %		06:12:59
1	Y 371.029	702972.7	702972.7	98.170 %		06:12:59
1	Ag 328.068†	100595.9	101117.8	512.93 ug/L	512.93 ppb	06:13:04
1	As 188.979†	898.2	926.0	500.73 ug/L	500.73 ppb	06:13:24
1	B 249.677†	17277.7	17661.1	483.14 ug/L	483.14 ppb	06:13:04
1	Ba 233.527†	52742.4	53130.3	499.33 ug/L	499.33 ppb	06:13:04
1	Be 313.107†	1205895.8	1219451.8	496.23 ug/L	496.23 ppb	06:12:59
1	Cd 226.502†	35423.8	35863.2	505.69 ug/L	505.69 ppb	06:13:04
1	Co 228.616†	19547.5	19737.1	513.78 ug/L	513.78 ppb	06:13:04
1	Cr 267.716†	38187.7	38387.0	500.82 ug/L	500.82 ppb	06:13:04
1	Cu 324.752†	158535.0	153404.0	497.41 ug/L	497.41 ppb	06:13:04
1	Mn 257.610†	379902.2	382377.5	502.00 ug/L	502.00 ppb	06:12:59
1	Mo 202.031†	5725.7	5755.6	506.48 ug/L	506.48 ppb	06:13:24
1	Ni 231.604†	16281.4	16313.3	509.07 ug/L	509.07 ppb	06:13:04
1	P 214.914†	3658.2	3518.1	2431.8 ug/L	2431.8 ppb	06:13:24
1	Pb 220.353†	3237.2	3320.9	502.08 ug/L	502.08 ppb	06:13:24
1	S 181.975 Axial†	598.0	578.2	1012.6 ug/L	1012.6 ppb	06:13:24
1	Sb 206.836†	1227.4	1210.3	532.44 ug/L	532.44 ppb	06:13:24
1	Se 196.026†	616.1	637.8	527.15 ug/L	527.15 ppb	06:13:24
1	Si 251.611†	67843.5	67840.9	2519.7 ug/L	2519.7 ppb	06:13:04
1	Sn 189.927†	2269.6	2284.0	506.47 ug/L	506.47 ppb	06:13:24
1	Ti 334.940†	286859.2	290153.3	499.07 ug/L	499.07 ppb	06:13:04
1	Tl 190.801†	1227.0	1261.5	491.09 ug/L	491.09 ppb	06:13:24
1	U 409.014†	15505.8	17660.5	517.94 ug/L	517.94 ppb	06:13:04
1	V 292.402†	63117.8	65031.8	508.10 ug/L	508.10 ppb	06:13:04
1	Zn 213.857†	42509.1	42230.3	496.99 ug/L	496.99 ppb	06:13:04
1	SiO2†	68540.2	68515.1	5460.2 ug/L	5460.2 ppb	06:14:32
2	Sc Radial	3966.5	3966.5	98.3 %		06:12:27
2	Y RADIAL	4312.7	4312.7	95.46 %		06:12:07
2	Al 396.153Radial†	4404.6	4559.0	4834.7 ug/L	4834.7 ppb	06:12:07
2	Ca 317.933Radial†	2481.6	2506.5	5092.7 ug/L	5092.7 ppb	06:12:27
2	Fe 238.204 Radial†	417.1	415.1	5206.4 ug/L	5206.4 ppb	06:12:27
2	K 766.490 Radial†	26541.8	24189.0	4822.3 ug/L	4822.3 ppb	06:12:07
2	Mg 279.077 IEC†	120.5	121.8	5322.3 ug/L	5322.3 ppb	06:12:27
2	Na 589.592 Radial†	25974.9	26876.6	10555 ug/L	10555 ppb	06:12:07
2	Sr 421.552†	56869.4	57764.5	491.86 ug/L	491.86 ppb	06:12:07
2	Sc 361.383	852695.8	852695.8	101.53 %		06:13:30
2	Y 371.029	718133.4	718133.4	100.29 %		06:13:30
2	Ag 328.068†	101641.0	99857.0	506.54 ug/L	506.54 ppb	06:13:35
2	As 188.979†	896.6	904.0	488.90 ug/L	488.90 ppb	06:13:55
2	B 249.677†	17598.2	17583.3	481.02 ug/L	481.02 ppb	06:13:35
2	Ba 233.527†	53331.3	52509.7	493.50 ug/L	493.50 ppb	06:13:35
2	Be 313.107†	1236554.2	1222196.2	497.34 ug/L	497.34 ppb	06:13:30
2	Cd 226.502†	35923.3	35548.7	501.26 ug/L	501.26 ppb	06:13:35
2	Co 228.616†	19831.1	19571.4	509.46 ug/L	509.46 ppb	06:13:35
2	Cr 267.716†	38648.8	37971.8	495.41 ug/L	495.41 ppb	06:13:35
2	Cu 324.752†	160377.3	151609.5	491.59 ug/L	491.59 ppb	06:13:35
2	Mn 257.610†	388784.5	382477.5	502.12 ug/L	502.12 ppb	06:13:30
2	Mo 202.031†	5768.7	5667.7	498.74 ug/L	498.74 ppb	06:13:55
2	Ni 231.604†	16507.9	16165.7	504.47 ug/L	504.47 ppb	06:13:35

2	P 214.914†	3703.8	3479.8	2405.3 ug/L	2405.3 ppb	06:13:55
2	Pb 220.353†	3250.4	3260.3	492.89 ug/L	492.89 ppb	06:13:55
2	S 181.975 Axial†	603.2	569.7	997.71 ug/L	997.71 ppb	06:13:55
2	Sb 206.836†	1244.9	1199.5	527.58 ug/L	527.58 ppb	06:13:55
2	Se 196.026†	627.2	634.7	524.57 ug/L	524.57 ppb	06:13:55
2	Si 251.611†	68842.2	67280.1	2498.9 ug/L	2498.9 ppb	06:13:35
2	Sn 189.927†	2287.5	2250.0	498.93 ug/L	498.93 ppb	06:13:55
2	Ti 334.940†	290517.8	287226.3	494.02 ug/L	494.02 ppb	06:13:35
2	Tl 190.801†	1247.2	1253.5	488.00 ug/L	488.00 ppb	06:13:55
2	U 409.014†	15953.5	17748.4	520.54 ug/L	520.54 ppb	06:13:35
2	V 292.402†	63747.9	64215.5	501.71 ug/L	501.71 ppb	06:13:35
2	Zn 213.857†	43057.5	41802.7	491.95 ug/L	491.95 ppb	06:13:35
2	SiO2†	67562.7	65992.0	5258.9 ug/L	5258.9 ppb	06:14:37
3	Sc Radial	4004.0	4004.0	99.3 %		06:12:52
3	Y RADIAL	4398.8	4398.8	97.36 %		06:12:32
3	Al 396.153Radial†	4473.3	4586.2	4863.2 ug/L	4863.2 ppb	06:12:32
3	Ca 317.933Radial†	2485.5	2486.9	5052.7 ug/L	5052.7 ppb	06:12:52
3	Fe 238.204 Radial†	419.4	413.5	5186.4 ug/L	5186.4 ppb	06:12:52
3	K 766.490 Radial†	26815.6	24212.0	4826.9 ug/L	4826.9 ppb	06:12:32
3	Mg 279.077 IEC†	119.9	120.0	5243.6 ug/L	5243.6 ppb	06:12:52
3	Na 589.592 Radial†	26076.4	26731.4	10498 ug/L	10498 ppb	06:12:32
3	Sr 421.552†	57441.0	57798.5	492.15 ug/L	492.15 ppb	06:12:32
3	Sc 361.383	836527.6	836527.6	99.604 %		06:14:01
3	Y 371.029	704187.5	704187.5	98.340 %		06:14:01
3	Ag 328.068†	102114.0	102266.8	518.73 ug/L	518.73 ppb	06:14:06
3	As 188.979†	909.0	933.4	504.79 ug/L	504.79 ppb	06:14:26
3	B 249.677†	17693.5	18014.1	492.83 ug/L	492.83 ppb	06:14:06
3	Ba 233.527†	53634.5	53829.3	505.90 ug/L	505.90 ppb	06:14:06
3	Be 313.107†	1213983.8	1223075.8	497.72 ug/L	497.72 ppb	06:14:01
3	Cd 226.502†	35947.4	36256.8	511.25 ug/L	511.25 ppb	06:14:06
3	Co 228.616†	19892.8	20010.9	520.89 ug/L	520.89 ppb	06:14:06
3	Cr 267.716†	38692.9	38751.8	505.57 ug/L	505.57 ppb	06:14:06
3	Cu 324.752†	161281.1	155569.9	504.42 ug/L	504.42 ppb	06:14:06
3	Mn 257.610†	383005.3	384076.5	504.22 ug/L	504.22 ppb	06:14:01
3	Mo 202.031†	5762.6	5771.4	507.86 ug/L	507.86 ppb	06:14:26
3	Ni 231.604†	16514.6	16486.7	514.48 ug/L	514.48 ppb	06:14:06
3	P 214.914†	3679.2	3525.6	2435.7 ug/L	2435.7 ppb	06:14:26
3	Pb 220.353†	3265.3	3337.1	504.49 ug/L	504.49 ppb	06:14:26
3	S 181.975 Axial†	614.5	592.6	1037.8 ug/L	1037.8 ppb	06:14:26
3	Sb 206.836†	1253.6	1232.0	541.69 ug/L	541.69 ppb	06:14:26
3	Se 196.026†	621.0	640.5	529.14 ug/L	529.14 ppb	06:14:26
3	Si 251.611†	69201.6	68951.4	2561.0 ug/L	2561.0 ppb	06:14:06
3	Sn 189.927†	2278.3	2284.3	506.52 ug/L	506.52 ppb	06:14:26
3	Ti 334.940†	292124.8	294370.3	506.30 ug/L	506.30 ppb	06:14:06
3	Tl 190.801†	1249.7	1279.7	498.18 ug/L	498.18 ppb	06:14:26
3	U 409.014†	15917.4	18015.9	528.39 ug/L	528.39 ppb	06:14:06
3	V 292.402†	64106.8	65789.4	513.97 ug/L	513.97 ppb	06:14:06
3	Zn 213.857†	43298.8	42864.6	504.49 ug/L	504.49 ppb	06:14:06
3	SiO2†	69166.4	68888.2	5490.0 ug/L	5490.0 ppb	06:14:42

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	840885.3	100.12 %	1.232			1.23%
Sc Radial	3981.5	98.7 %	0.49			0.50%
Y 371.029	708431.2	98.933 %	1.1765			1.19%
Y RADIAL	4355.9	96.41 %	0.952			0.99%
Ag 328.068†	101080.5	512.73 ug/L	6.095	512.73 ppb	6.095	1.19%
QC value within limits for Ag 328.068 Recovery = 102.55%						
Al 396.153Radial†	4608.6	4887.2 ug/L	67.78	4887.2 ppb	67.78	1.39%
QC value within limits for Al 396.153Radial Recovery = 97.74%						
As 188.979†	921.1	498.14 ug/L	8.252	498.14 ppb	8.252	1.66%
QC value within limits for As 188.979 Recovery = 99.63%						
B 249.677†	17752.8	485.67 ug/L	6.297	485.67 ppb	6.297	1.30%
QC value within limits for B 249.677 Recovery = 97.13%						
Ba 233.527†	53156.4	499.58 ug/L	6.202	499.58 ppb	6.202	1.24%
QC value within limits for Ba 233.527 Recovery = 99.92%						
Be 313.107†	1221574.6	497.10 ug/L	0.772	497.10 ppb	0.772	0.16%
QC value within limits for Be 313.107 Recovery = 99.42%						
Ca 317.933Radial†	2502.3	5084.1 ug/L	28.14	5084.1 ppb	28.14	0.55%

QC value within limits for Ca 317.933 Radial Recovery = 101.68%

Cd 226.502†	35889.6	506.07 ug/L	5.008	506.07 ppb	5.008	0.99%
QC value within limits for Cd 226.502 Recovery = 101.21%						
Co 228.616†	19773.1	514.71 ug/L	5.774	514.71 ppb	5.774	1.12%
QC value within limits for Co 228.616 Recovery = 102.94%						
Cr 267.716†	38370.2	500.60 ug/L	5.087	500.60 ppb	5.087	1.02%
QC value within limits for Cr 267.716 Recovery = 100.12%						
Cu 324.752†	153527.8	497.81 ug/L	6.427	497.81 ppb	6.427	1.29%
QC value within limits for Cu 324.752 Recovery = 99.56%						
Fe 238.204 Radial†	415.1	5206.5 ug/L	20.20	5206.5 ppb	20.20	0.39%
QC value within limits for Fe 238.204 Radial Recovery = 104.13%						
K 766.490 Radial†	24390.4	4862.5 ug/L	65.66	4862.5 ppb	65.66	1.35%
QC value within limits for K 766.490 Radial Recovery = 97.25%						
Mg 279.077 IEC†	120.0	5241.9 ug/L	81.34	5241.9 ppb	81.34	1.55%
QC value within limits for Mg 279.077 IEC Recovery = 104.84%						
Mn 257.610†	382977.2	502.78 ug/L	1.249	502.78 ppb	1.249	0.25%
QC value within limits for Mn 257.610 Recovery = 100.56%						
Mo 202.031†	5731.6	504.36 ug/L	4.914	504.36 ppb	4.914	0.97%
QC value within limits for Mo 202.031 Recovery = 100.87%						
Na 589.592 Radial†	26993.1	10601 ug/L	131.7	10601 ppb	131.7	1.24%
QC value within limits for Na 589.592 Radial Recovery = 106.01%						
Ni 231.604†	16321.9	509.34 ug/L	5.013	509.34 ppb	5.013	0.98%
QC value within limits for Ni 231.604 Recovery = 101.87%						
P 214.914†	3507.9	2424.3 ug/L	16.55	2424.3 ppb	16.55	0.68%
QC value within limits for P 214.914 Recovery = 96.97%						
Pb 220.353†	3306.1	499.82 ug/L	6.120	499.82 ppb	6.120	1.22%
QC value within limits for Pb 220.353 Recovery = 99.96%						
S 181.975 Axial†	580.2	1016.0 ug/L	20.24	1016.0 ppb	20.24	1.99%
QC value within limits for S 181.975 Axial Recovery = 101.60%						
Sb 206.836†	1213.9	533.90 ug/L	7.172	533.90 ppb	7.172	1.34%
QC value within limits for Sb 206.836 Recovery = 106.78%						
Se 196.026†	637.6	526.95 ug/L	2.291	526.95 ppb	2.291	0.43%
QC value within limits for Se 196.026 Recovery = 105.39%						
Si 251.611†	68024.1	2526.5 ug/L	31.62	2526.5 ppb	31.62	1.25%
QC value within limits for Si 251.611 Recovery = 101.06%						
Sn 189.927†	2272.8	503.97 ug/L	4.364	503.97 ppb	4.364	0.87%
QC value within limits for Sn 189.927 Recovery = 100.79%						
Sr 421.552†	58144.5	495.10 ug/L	5.357	495.10 ppb	5.357	1.08%
QC value within limits for Sr 421.552 Recovery = 99.02%						
Ti 334.940†	290583.3	499.79 ug/L	6.175	499.79 ppb	6.175	1.24%
QC value within limits for Ti 334.940 Recovery = 99.96%						
Tl 190.801†	1264.9	492.42 ug/L	5.219	492.42 ppb	5.219	1.06%
QC value within limits for Tl 190.801 Recovery = 98.48%						
U 409.014†	17808.3	522.29 ug/L	5.441	522.29 ppb	5.441	1.04%
QC value within limits for U 409.014 Recovery = 104.46%						
V 292.402†	65012.2	507.93 ug/L	6.132	507.93 ppb	6.132	1.21%
QC value within limits for V 292.402 Recovery = 101.59%						
Zn 213.857†	42299.2	497.81 ug/L	6.309	497.81 ppb	6.309	1.27%
QC value within limits for Zn 213.857 Recovery = 99.56%						
SiO2†	67798.4	5403.0 ug/L	125.74	5403.0 ppb	125.74	2.33%
QC value within limits for SiO2 Recovery = 101.04%						

All analyte(s) passed QC.

Sequence No.: 118

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/26/2010 06:16:51

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Conc. Units	Sample Units	Analysis Time
1	Sc Radial	3955.0	3955.0	98.0 %			06:19:04
1	Y RADIAL	4441.8	4441.8	98.31 %			06:18:44
1	Al 396.153Radial†	-63.4	15.0	16.018 ug/L	16.018	ppb	06:19:04
1	Ca 317.933Radial†	33.5	17.0	34.599 ug/L	34.599	ppb	06:19:04
1	Fe 238.204 Radial†	12.1	3.3	41.526 ug/L	41.526	ppb	06:19:04
1	K 766.490 Radial†	2485.5	-268.2	-53.568 ug/L	-53.568	ppb	06:18:44
1	Mg 279.077 IEC†	2.6	1.9	83.399 ug/L	83.399	ppb	06:19:04
1	Na 589.592 Radial†	-408.5	44.3	17.379 ug/L	17.379	ppb	06:18:44
1	Sr 421.552†	55.8	-13.1	-0.1122 ug/L	-0.1122	ppb	06:18:44
1	Sc 361.383	835311.7	835311.7	99.459 %			06:20:01
1	Y 371.029	714711.1	714711.1	99.810 %			06:20:01
1	Ag 328.068†	138.7	-114.0	-0.5662 ug/L	-0.5662	ppb	06:20:01
1	As 188.979†	-19.7	1.1	0.5832 ug/L	0.5832	ppb	06:20:21
1	B 249.677†	-348.5	-100.3	-2.7620 ug/L	-2.7620	ppb	06:20:21
1	Ba 233.527†	25.2	6.8	0.0654 ug/L	0.0654	ppb	06:20:21
1	Be 313.107†	-4544.4	-306.4	-0.1220 ug/L	-0.1220	ppb	06:20:01
1	Cd 226.502†	-167.7	-2.2	-0.0346 ug/L	-0.0346	ppb	06:20:21
1	Co 228.616†	-50.5	-11.9	-0.3113 ug/L	-0.3113	ppb	06:20:21
1	Cr 267.716†	84.6	-9.9	-0.1271 ug/L	-0.1271	ppb	06:20:21
1	Cu 324.752†	6802.4	486.6	1.5768 ug/L	1.5768	ppb	06:20:01
1	Mn 257.610†	788.5	340.4	0.4473 ug/L	0.4473	ppb	06:20:21
1	Mo 202.031†	13.8	-0.4	-0.0271 ug/L	-0.0271	ppb	06:20:21
1	Ni 231.604†	77.4	-15.8	-0.4937 ug/L	-0.4937	ppb	06:20:21
1	P 214.914†	193.3	26.1	18.438 ug/L	18.438	ppb	06:20:21
1	Pb 220.353†	-54.9	3.6	0.5384 ug/L	0.5384	ppb	06:20:21
1	S 181.975 Axial†	31.3	7.0	12.332 ug/L	12.332	ppb	06:20:21
1	Sb 206.836†	27.3	0.8	0.3564 ug/L	0.3564	ppb	06:20:21
1	Se 196.026†	-21.7	-4.8	-3.7258 ug/L	-3.7258	ppb	06:20:21
1	Si 251.611†	595.5	73.3	2.7296 ug/L	2.7296	ppb	06:20:21
1	Sn 189.927†	3.9	0.8	0.1918 ug/L	0.1918	ppb	06:20:21
1	Ti 334.940†	-470.4	610.4	1.0455 ug/L	1.0455	ppb	06:20:01
1	Tl 190.801†	-33.9	-9.1	-3.4883 ug/L	-3.4883	ppb	06:20:21
1	U 409.014†	-1825.9	199.3	5.8600 ug/L	5.8600	ppb	06:20:01
1	V 292.402†	-1395.9	24.0	0.1905 ug/L	0.1905	ppb	06:20:01
1	Zn 213.857†	766.8	164.5	1.9489 ug/L	1.9489	ppb	06:20:21
1	SiO2†	755.2	206.0	16.458 ug/L	16.458	ppb	06:21:32
2	Sc Radial	4004.3	4004.3	99.3 %			06:19:29
2	Y RADIAL	4474.2	4474.2	99.03 %			06:19:09
2	Al 396.153Radial†	-71.0	8.1	8.6670 ug/L	8.6670	ppb	06:19:29
2	Ca 317.933Radial†	27.3	10.4	21.054 ug/L	21.054	ppb	06:19:29
2	Fe 238.204 Radial†	7.2	-1.7	-21.566 ug/L	-21.566	ppb	06:19:29
2	K 766.490 Radial†	2464.7	-320.3	-63.957 ug/L	-63.957	ppb	06:19:09
2	Mg 279.077 IEC†	2.4	1.7	73.932 ug/L	73.932	ppb	06:19:29
2	Na 589.592 Radial†	-422.1	35.6	13.989 ug/L	13.989	ppb	06:19:09
2	Sr 421.552†	13.7	-56.2	-0.4790 ug/L	-0.4790	ppb	06:19:09
2	Sc 361.383	834198.3	834198.3	99.326 %			06:20:26
2	Y 371.029	712877.3	712877.3	99.553 %			06:20:26
2	Ag 328.068†	122.9	-129.7	-0.6644 ug/L	-0.6644	ppb	06:20:26
2	As 188.979†	-23.8	-3.2	-1.6951 ug/L	-1.6951	ppb	06:20:46
2	B 249.677†	-359.6	-111.9	-3.0710 ug/L	-3.0710	ppb	06:20:46
2	Ba 233.527†	19.0	0.6	0.0065 ug/L	0.0065	ppb	06:20:46
2	Be 313.107†	-4584.5	-352.8	-0.1429 ug/L	-0.1429	ppb	06:20:26
2	Cd 226.502†	-177.6	-12.4	-0.1724 ug/L	-0.1724	ppb	06:20:46
2	Co 228.616†	-45.4	-6.8	-0.1789 ug/L	-0.1789	ppb	06:20:46
2	Cr 267.716†	90.1	-4.2	-0.0596 ug/L	-0.0596	ppb	06:20:46
2	Cu 324.752†	6696.3	389.0	1.2560 ug/L	1.2560	ppb	06:20:26
2	Mn 257.610†	767.3	320.0	0.4148 ug/L	0.4148	ppb	06:20:46
2	Mo 202.031†	5.0	-9.2	-0.8080 ug/L	-0.8080	ppb	06:20:46
2	Ni 231.604†	65.2	-28.0	-0.8728 ug/L	-0.8728	ppb	06:20:46

2	P 214.914†	198.7	31.8	22.642 ug/L	22.642 ppb	06:20:46
2	Pb 220.353†	-53.4	5.0	0.7630 ug/L	0.7630 ppb	06:20:46
2	S 181.975 Axial†	27.2	3.0	5.1760 ug/L	5.1760 ppb	06:20:46
2	Sb 206.836†	35.0	8.6	3.6656 ug/L	3.6656 ppb	06:20:46
2	Se 196.026†	-14.6	2.2	1.7117 ug/L	1.7117 ppb	06:20:46
2	Si 251.611†	609.6	88.3	3.2974 ug/L	3.2974 ppb	06:20:46
2	Sn 189.927†	6.2	3.1	0.6987 ug/L	0.6987 ppb	06:20:46
2	Ti 334.940†	-975.6	101.2	0.1677 ug/L	0.1677 ppb	06:20:26
2	Tl 190.801†	-31.5	-6.6	-2.5643 ug/L	-2.5643 ppb	06:20:46
2	U 409.014†	-1777.0	246.1	7.2435 ug/L	7.2435 ppb	06:20:26
2	V 292.402†	-1347.1	71.3	0.5562 ug/L	0.5562 ppb	06:20:26
2	Zn 213.857†	770.7	169.5	2.0208 ug/L	2.0208 ppb	06:20:46
2	SiO2†	636.2	87.1	6.9846 ug/L	6.9846 ppb	06:21:52
3	Sc Radial	3986.4	3986.4	98.8 %		06:19:54
3	Y RADIAL	4423.0	4423.0	97.90 %		06:19:34
3	Al 396.153Radial†	-64.8	14.0	14.969 ug/L	14.969 ppb	06:19:54
3	Ca 317.933Radial†	31.1	14.3	29.014 ug/L	29.014 ppb	06:19:54
3	Fe 238.204 Radial†	10.9	2.0	24.817 ug/L	24.817 ppb	06:19:54
3	K 766.490 Radial†	2471.7	-302.2	-60.342 ug/L	-60.342 ppb	06:19:34
3	Mg 279.077 IEC†	2.5	1.9	81.182 ug/L	81.182 ppb	06:19:54
3	Na 589.592 Radial†	-375.9	80.6	31.637 ug/L	31.637 ppb	06:19:34
3	Sr 421.552†	20.5	-49.3	-0.4204 ug/L	-0.4204 ppb	06:19:34
3	Sc 361.383	835950.1	835950.1	99.535 %		06:20:51
3	Y 371.029	714091.6	714091.6	99.723 %		06:20:51
3	Ag 328.068†	195.3	-57.2	-0.2865 ug/L	-0.2865 ppb	06:20:51
3	As 188.979†	-19.0	1.8	0.9618 ug/L	0.9618 ppb	06:21:12
3	B 249.677†	-380.7	-132.3	-3.6407 ug/L	-3.6407 ppb	06:21:12
3	Ba 233.527†	3.1	-15.3	-0.1424 ug/L	-0.1424 ppb	06:21:12
3	Be 313.107†	-4579.5	-338.2	-0.1367 ug/L	-0.1367 ppb	06:20:51
3	Cd 226.502†	-166.1	-0.5	-0.0079 ug/L	-0.0079 ppb	06:21:12
3	Co 228.616†	-52.8	-14.2	-0.3698 ug/L	-0.3698 ppb	06:21:12
3	Cr 267.716†	99.4	4.9	0.0640 ug/L	0.0640 ppb	06:21:12
3	Cu 324.752†	6744.6	423.4	1.3696 ug/L	1.3696 ppb	06:20:51
3	Mn 257.610†	948.0	500.0	0.6552 ug/L	0.6552 ppb	06:21:12
3	Mo 202.031†	15.1	1.0	0.0865 ug/L	0.0865 ppb	06:21:12
3	Ni 231.604†	83.4	-9.8	-0.3057 ug/L	-0.3057 ppb	06:21:12
3	P 214.914†	201.3	34.0	24.140 ug/L	24.140 ppb	06:21:12
3	Pb 220.353†	-49.0	9.6	1.4410 ug/L	1.4410 ppb	06:21:12
3	S 181.975 Axial†	27.1	2.8	4.9372 ug/L	4.9372 ppb	06:21:12
3	Sb 206.836†	30.5	4.1	1.7302 ug/L	1.7302 ppb	06:21:12
3	Se 196.026†	-19.9	-3.1	-2.3547 ug/L	-2.3547 ppb	06:21:12
3	Si 251.611†	697.3	175.1	6.5176 ug/L	6.5176 ppb	06:21:12
3	Sn 189.927†	5.1	2.0	0.4564 ug/L	0.4564 ppb	06:21:12
3	Ti 334.940†	-921.4	157.6	0.2648 ug/L	0.2648 ppb	06:20:51
3	Tl 190.801†	-29.1	-4.1	-1.5920 ug/L	-1.5920 ppb	06:21:12
3	U 409.014†	-1744.0	283.1	8.3258 ug/L	8.3258 ppb	06:20:51
3	V 292.402†	-1378.4	42.7	0.3436 ug/L	0.3436 ppb	06:20:51
3	Zn 213.857†	779.7	176.9	2.0984 ug/L	2.0984 ppb	06:21:12
3	SiO2†	600.8	50.2	4.0113 ug/L	4.0113 ppb	06:22:12

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	835153.4	99.440 %		0.1056			0.11%
Sc Radial	3981.9	98.7 %		0.62			0.63%
Y 371.029	713893.3	99.695 %		0.1303			0.13%
Y RADIAL	4446.3	98.41 %		0.574			0.58%
Ag 328.068†	-100.3	-0.5057 ug/L		0.19609	-0.5057 ppb	0.19609	38.77%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	12.4	13.218 ug/L		3.9759	13.218 ppb	3.9759	30.08%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	-0.1	-0.0500 ug/L		1.43722	-0.0500 ppb	1.43722	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	-114.8	-3.1579 ug/L		0.44577	-3.1579 ppb	0.44577	14.12%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	-2.6	-0.0235 ug/L		0.10711	-0.0235 ppb	0.10711	456.23%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	-332.5	-0.1339 ug/L		0.01070	-0.1339 ppb	0.01070	7.99%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	13.9	28.223 ug/L		6.8071	28.223 ppb	6.8071	24.12%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated						
Cd 226.502†	-5.0	-0.0716 ug/L	0.08830	-0.0716 ppb	0.08830	123.30%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-10.9	-0.2867 ug/L	0.09781	-0.2867 ppb	0.09781	34.12%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-3.1	-0.0409 ug/L	0.09692	-0.0409 ppb	0.09692	237.03%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	433.0	1.4008 ug/L	0.16264	1.4008 ppb	0.16264	11.61%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	1.2	14.926 ug/L	32.6880	14.926 ppb	32.6880	219.00%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	-296.9	-59.289 ug/L	5.2738	-59.289 ppb	5.2738	8.89%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	1.8	79.504 ug/L	4.9512	79.504 ppb	4.9512	6.23%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	386.8	0.5058 ug/L	0.13043	0.5058 ppb	0.13043	25.79%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	-2.9	-0.2495 ug/L	0.48696	-0.2495 ppb	0.48696	195.14%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	53.5	21.002 ug/L	9.3650	21.002 ppb	9.3650	44.59%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	-17.9	-0.5574 ug/L	0.28887	-0.5574 ppb	0.28887	51.83%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	30.6	21.740 ug/L	2.9559	21.740 ppb	2.9559	13.60%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	6.1	0.9141 ug/L	0.46992	0.9141 ppb	0.46992	51.41%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	4.3	7.4819 ug/L	4.20242	7.4819 ppb	4.20242	56.17%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	4.5	1.9174 ug/L	1.66254	1.9174 ppb	1.66254	86.71%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-1.9	-1.4563 ug/L	2.82789	-1.4563 ppb	2.82789	194.19%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	112.2	4.1815 ug/L	2.04292	4.1815 ppb	2.04292	48.86%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	2.0	0.4490 ug/L	0.25354	0.4490 ppb	0.25354	56.47%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	-39.6	-0.3372 ug/L	0.19701	-0.3372 ppb	0.19701	58.43%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	289.7	0.4926 ug/L	0.48124	0.4926 ppb	0.48124	97.69%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	-6.6	-2.5482 ug/L	0.94825	-2.5482 ppb	0.94825	37.21%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	242.8	7.1431 ug/L	1.23595	7.1431 ppb	1.23595	17.30%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	46.0	0.3634 ug/L	0.18366	0.3634 ppb	0.18366	50.54%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	170.3	2.0227 ug/L	0.07476	2.0227 ppb	0.07476	3.70%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	114.5	9.1512 ug/L	6.49987	9.1512 ppb	6.49987	71.03%
QC value within limits for SiO2 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 122

Sample ID: 248041001|959101|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 133

Date Collected: 3/26/2010 06:45:53

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 248041001|959101|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Units	Sample Conc.	Analysis Time
1	Sc Radial	4186.8	4186.8	104 %			06:48:07
1	Y RADIAL	5053.1	5053.1	111.8 %			06:48:07
1	Al 396.153Radial†	150704.5	145279.2	154830 ug/L		154830 ppb	06:47:47
1	Ca 317.933Radial†	16048.8	15445.4	31381 ug/L		31381 ppb	06:47:47
1	Fe 238.204 Radial†	14091.1	13567.4	169660 ug/L		169660 ppb	06:47:47
1	K 766.490 Radial†	118510.1	111377.8	22222 ug/L		22222 ppb	06:47:47
1	Mg 279.077 IEC†	577.9	556.1	24116 ug/L		24116 ppb	06:48:07
1	Na 589.592 Radial†	6784.7	6997.8	2748.1 ug/L		2748.1 ppb	06:47:47
1	Sr 421.552†	40645.1	39090.4	332.64 ug/L		332.64 ppb	06:47:47
1	Sc 361.383	833706.8	833706.8	99.268 %			06:49:10
1	Y 371.029	789333.4	789333.4	110.23 %			06:49:10
1	Ag 328.068†	-10398.7	-10728.8	-0.6447 ug/L		-0.6447 ppb	06:49:10
1	As 188.979†	-96.6	-76.5	51.422 ug/L		51.422 ppb	06:49:30
1	B 249.677†	1583.6	1845.5	22.967 ug/L		22.967 ppb	06:49:10
1	Ba 233.527†	214901.3	216467.7	2035.1 ug/L		2035.1 ppb	06:49:10
1	Be 313.107†	-10331.6	-6145.1	11.302 ug/L		11.302 ppb	06:49:10
1	Cd 226.502†	1200.2	1375.4	1.8998 ug/L		1.8998 ppb	06:49:30
1	Co 228.616†	2756.0	2815.2	58.993 ug/L		58.993 ppb	06:49:30
1	Cr 267.716†	9190.8	9163.7	137.79 ug/L		137.79 ppb	06:49:30
1	Cu 324.752†	28729.6	22588.7	82.322 ug/L		82.322 ppb	06:49:10
1	Mn 257.610†	2976632.2	2998132.5	3949.5 ug/L		3949.5 ppb	06:49:05
1	Mo 202.031†	-92.2	-107.1	4.1304 ug/L		4.1304 ppb	06:49:30
1	Ni 231.604†	3065.7	2994.7	93.467 ug/L		93.467 ppb	06:49:30
1	P 214.914†	2249.0	2097.4	1394.7 ug/L		1394.7 ppb	06:49:30
1	Pb 220.353†	687.0	750.9	123.71 ug/L		123.71 ppb	06:49:30
1	S 181.975 Axial†	492.1	471.4	797.22 ug/L		797.22 ppb	06:49:30
1	Sb 206.836†	76.1	50.0	-4.5286 ug/L		-4.5286 ppb	06:49:30
1	Se 196.026†	-653.7	-641.6	50.253 ug/L		50.253 ppb	06:49:30
1	Si 251.611†	1221373.5	1229855.8	45791 ug/L		45791 ppb	06:49:05
1	Sn 189.927†	-114.7	-118.7	-30.446 ug/L		-30.446 ppb	06:49:30
1	Ti 334.940†	3505190.0	3532124.2	6079.3 ug/L		6079.3 ppb	06:49:05
1	Tl 190.801†	-216.2	-192.8	-6.2123 ug/L		-6.2123 ppb	06:49:30
1	U 409.014†	-7940.7	-5964.1	-195.10 ug/L		-195.10 ppb	06:49:10
1	V 292.402†	38773.2	40486.6	280.92 ug/L		280.92 ppb	06:49:10
1	Zn 213.857†	29041.3	28649.0	314.26 ug/L		314.26 ppb	06:49:30
1	SiO2†	1237797.2	1246372.6	99579 ug/L		99579 ppb	06:50:40
2	Sc Radial	4136.4	4136.4	103 %			06:48:32
2	Y RADIAL	4993.1	4993.1	110.5 %			06:48:32
2	Al 396.153Radial†	150116.2	146472.1	156100 ug/L		156100 ppb	06:48:12
2	Ca 317.933Radial†	15986.5	15572.8	31640 ug/L		31640 ppb	06:48:12
2	Fe 238.204 Radial†	14071.1	13713.0	171480 ug/L		171480 ppb	06:48:12
2	K 766.490 Radial†	117826.5	112100.4	22366 ug/L		22366 ppb	06:48:12
2	Mg 279.077 IEC†	565.8	551.0	23892 ug/L		23892 ppb	06:48:32
2	Na 589.592 Radial†	6783.6	7076.2	2778.9 ug/L		2778.9 ppb	06:48:12
2	Sr 421.552†	40400.1	39327.9	334.66 ug/L		334.66 ppb	06:48:12
2	Sc 361.383	829870.8	829870.8	98.811 %			06:49:42
2	Y 371.029	786756.8	786756.8	109.87 %			06:49:42
2	Ag 328.068†	-10328.1	-10705.8	0.0276 ug/L		0.0276 ppb	06:49:42
2	As 188.979†	-85.8	-66.0	57.720 ug/L		57.720 ppb	06:50:02
2	B 249.677†	1454.7	1722.3	19.283 ug/L		19.283 ppb	06:49:42
2	Ba 233.527†	214298.9	216858.7	2038.8 ug/L		2038.8 ppb	06:49:42
2	Be 313.107†	-10849.5	-6717.3	11.145 ug/L		11.145 ppb	06:49:42
2	Cd 226.502†	1192.1	1372.9	1.6775 ug/L		1.6775 ppb	06:50:02
2	Co 228.616†	2797.4	2870.0	60.323 ug/L		60.323 ppb	06:50:02
2	Cr 267.716†	9243.5	9259.7	139.23 ug/L		139.23 ppb	06:50:02
2	Cu 324.752†	28579.1	22570.2	82.356 ug/L		82.356 ppb	06:49:42
2	Mn 257.610†	2975833.3	3011184.5	3966.8 ug/L		3966.8 ppb	06:49:37
2	Mo 202.031†	-90.8	-106.1	4.3636 ug/L		4.3636 ppb	06:50:02
2	Ni 231.604†	3105.1	3048.9	95.157 ug/L		95.157 ppb	06:50:02

2	P 214.914†	2258.7	2117.7	1408.2 ug/L	1408.2 ppb	06:50:02
2	Pb 220.353†	685.5	752.6	123.99 ug/L	123.99 ppb	06:50:02
2	S 181.975 Axial†	484.9	466.3	788.15 ug/L	788.15 ppb	06:50:02
2	Sb 206.836†	63.1	37.2	-10.141 ug/L	-10.141 ppb	06:50:02
2	Se 196.026†	-664.2	-655.3	45.207 ug/L	45.207 ppb	06:50:02
2	Si 251.611†	1221140.3	1235307.0	45994 ug/L	45994 ppb	06:49:37
2	Sn 189.927†	-112.7	-117.2	-30.173 ug/L	-30.173 ppb	06:50:02
2	Ti 334.940†	3508187.2	3551479.0	6112.7 ug/L	6112.7 ppb	06:49:37
2	Tl 190.801†	-201.7	-179.0	-0.5564 ug/L	-0.5564 ppb	06:50:02
2	U 409.014†	-7757.0	-5815.1	-190.93 ug/L	-190.93 ppb	06:49:42
2	V 292.402†	38603.7	40495.7	280.69 ug/L	280.69 ppb	06:49:42
2	Zn 213.857†	29265.5	29011.2	318.28 ug/L	318.28 ppb	06:50:02
2	SiO2†	1226669.8	1240875.0	99140 ug/L	99140 ppb	06:50:46
3	Sc Radial	4196.9	4196.9	104 %		06:48:57
3	Y RADIAL	5036.3	5036.3	111.5 %		06:48:57
3	Al 396.153Radial†	146862.1	141235.4	150520 ug/L	150520 ppb	06:48:37
3	Ca 317.933Radial†	15638.0	15013.2	30503 ug/L	30503 ppb	06:48:37
3	Fe 238.204 Radial†	13791.2	13246.4	165640 ug/L	165640 ppb	06:48:37
3	K 766.490 Radial†	115773.8	108472.2	21642 ug/L	21642 ppb	06:48:37
3	Mg 279.077 IEC†	568.1	545.3	23647 ug/L	23647 ppb	06:48:57
3	Na 589.592 Radial†	6633.3	6836.4	2684.8 ug/L	2684.8 ppb	06:48:37
3	Sr 421.552†	39609.6	38000.5	323.37 ug/L	323.37 ppb	06:48:37
3	Sc 361.383	826972.8	826972.8	98.466 %		06:50:14
3	Y 371.029	782826.8	782826.8	109.32 %		06:50:14
3	Ag 328.068†	-10223.3	-10635.9	-1.4108 ug/L	-1.4108 ppb	06:50:14
3	As 188.979†	-84.7	-65.2	57.751 ug/L	57.751 ppb	06:50:34
3	B 249.677†	1604.8	1879.9	24.564 ug/L	24.564 ppb	06:50:14
3	Ba 233.527†	213881.9	217195.3	2041.8 ug/L	2041.8 ppb	06:50:14
3	Be 313.107†	-10495.4	-6396.1	11.516 ug/L	11.516 ppb	06:50:14
3	Cd 226.502†	1211.0	1396.3	2.6099 ug/L	2.6099 ppb	06:50:34
3	Co 228.616†	2759.3	2841.2	59.435 ug/L	59.435 ppb	06:50:34
3	Cr 267.716†	9193.4	9241.7	138.38 ug/L	138.38 ppb	06:50:34
3	Cu 324.752†	28384.4	22473.8	81.735 ug/L	81.735 ppb	06:50:14
3	Mn 257.610†	3016514.3	3063053.3	4034.3 ug/L	4034.3 ppb	06:50:08
3	Mo 202.031†	-101.5	-117.3	2.9083 ug/L	2.9083 ppb	06:50:34
3	Ni 231.604†	3060.1	3014.1	94.072 ug/L	94.072 ppb	06:50:34
3	P 214.914†	2251.2	2118.1	1411.8 ug/L	1411.8 ppb	06:50:34
3	Pb 220.353†	674.4	743.7	122.23 ug/L	122.23 ppb	06:50:34
3	S 181.975 Axial†	480.1	463.2	783.71 ug/L	783.71 ppb	06:50:34
3	Sb 206.836†	69.5	43.9	-7.4628 ug/L	-7.4628 ppb	06:50:34
3	Se 196.026†	-657.8	-651.1	29.100 ug/L	29.100 ppb	06:50:34
3	Si 251.611†	1239046.1	1257822.6	46833 ug/L	46833 ppb	06:50:08
3	Sn 189.927†	-117.1	-122.0	-31.113 ug/L	-31.113 ppb	06:50:34
3	Ti 334.940†	3556719.1	3613209.2	6218.7 ug/L	6218.7 ppb	06:50:08
3	Tl 190.801†	-226.9	-205.3	-9.5141 ug/L	-9.5141 ppb	06:50:34
3	U 409.014†	-7739.3	-5824.7	-190.54 ug/L	-190.54 ppb	06:50:14
3	V 292.402†	38413.2	40439.1	280.97 ug/L	280.97 ppb	06:50:14
3	Zn 213.857†	29089.4	28936.1	318.27 ug/L	318.27 ppb	06:50:34
3	SiO2†	1233021.6	1251676.3	100000 ug/L	100000 ppb	06:50:52

Mean Data: 248041001|959101|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	830183.5	98.848 %	0.4022			0.41%
Sc Radial	4173.4	103 %	0.8			0.78%
Y 371.029	786305.7	109.81 %	0.458			0.42%
Y RADIAL	5027.5	111.3 %	0.69			0.62%
Ag 328.068†	-10690.2	-0.6760 ug/L	0.71973	-0.6760 ppb	0.71973	106.47%
Al 396.153Radial†	144328.9	153820 ug/L	2925.1	153820 ppb	2925.1	1.90%
As 188.979†	-69.2	55.631 ug/L	3.6454	55.631 ppb	3.6454	6.55%
B 249.677†	1815.9	22.271 ug/L	2.7084	22.271 ppb	2.7084	12.16%
Ba 233.527†	216840.5	2038.6 ug/L	3.36	2038.6 ppb	3.36	0.16%
Be 313.107†	-6419.5	11.321 ug/L	0.1865	11.321 ppb	0.1865	1.65%
Ca 317.933Radial†	15343.8	31175 ug/L	595.9	31175 ppb	595.9	1.91%
Cd 226.502†	1381.5	2.0624 ug/L	0.48698	2.0624 ppb	0.48698	23.61%
Co 228.616†	2842.1	59.583 ug/L	0.6774	59.583 ppb	0.6774	1.14%
Cr 267.716†	9221.7	138.47 ug/L	0.725	138.47 ppb	0.725	0.52%
Cu 324.752†	22544.2	82.137 ug/L	0.3494	82.137 ppb	0.3494	0.43%
Fe 238.204 Radial†	13508.9	168930 ug/L	2985.4	168930 ppb	2985.4	1.77%
K 766.490 Radial†	110650.2	22076 ug/L	383.2	22076 ppb	383.2	1.74%

Mg 279.077 IEC†	550.8	23885 ug/L	234.7	23885 ppb	234.7	0.98%
Mn 257.610†	3024123.4	3983.5 ug/L	44.81	3983.5 ppb	44.81	1.12%
Mo 202.031†	-110.1	3.8008 ug/L	0.78164	3.8008 ppb	0.78164	20.57%
Na 589.592 Radial†	6970.2	2737.3 ug/L	48.01	2737.3 ppb	48.01	1.75%
Ni 231.604†	3019.3	94.232 ug/L	0.8563	94.232 ppb	0.8563	0.91%
P 214.914†	2111.0	1404.9 ug/L	9.02	1404.9 ppb	9.02	0.64%
Pb 220.353†	749.1	123.31 ug/L	0.947	123.31 ppb	0.947	0.77%
S 181.975 Axial†	467.0	789.70 ug/L	6.886	789.70 ppb	6.886	0.87%
Sb 206.836†	43.7	-7.3776 ug/L	2.80732	-7.3776 ppb	2.80732	38.05%
Se 196.026†	-649.3	41.520 ug/L	11.0480	41.520 ppb	11.0480	26.61%
Si 251.611†	1240995.1	46206 ug/L	552.0	46206 ppb	552.0	1.19%
Sn 189.927†	-119.3	-30.577 ug/L	0.4836	-30.577 ppb	0.4836	1.58%
Sr 421.552†	38806.3	330.22 ug/L	6.023	330.22 ppb	6.023	1.82%
Ti 334.940†	3565604.2	6136.9 ug/L	72.81	6136.9 ppb	72.81	1.19%
Tl 190.801†	-192.4	-5.4276 ug/L	4.53014	-5.4276 ppb	4.53014	83.46%
U 409.014†	-5868.0	-192.19 ug/L	2.528	-192.19 ppb	2.528	1.32%
V 292.402†	40473.8	280.86 ug/L	0.149	280.86 ppb	0.149	0.05%
Zn 213.857†	28865.4	316.94 ug/L	2.317	316.94 ppb	2.317	0.73%
SiO2†	1246308.0	99574 ug/L	431.5	99574 ppb	431.5	0.43%

Sequence No.: 123
 Sample ID: 248041002|959101|1
 Analyst: HSC
 Initial Sample Wt:
 Dilution:

Autosampler Location: 134
 Date Collected: 3/26/2010 06:53:04
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: 248041002|959101|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Units	Sample Conc.	Analysis Time
1	Sc Radial	4112.5	4112.5	102 %			06:55:18
1	Y RADIAL	5434.5	5434.5	120.3 %			06:55:18
1	Al 396.153Radial†	83955.9	82429.1	87849 ug/L		87849 ppb	06:54:58
1	Ca 317.933Radial†	10879.7	10654.3	21647 ug/L		21647 ppb	06:54:58
1	Fe 238.204 Radial†	11651.7	11419.7	142800 ug/L		142800 ppb	06:54:58
1	K 766.490 Radial†	72733.7	68538.7	13673 ug/L		13673 ppb	06:54:58
1	Mg 279.077 IEC†	401.0	392.6	17000 ug/L		17000 ppb	06:55:18
1	Na 589.592 Radial†	4505.5	4880.1	1916.5 ug/L		1916.5 ppb	06:54:58
1	Sr 421.552†	23309.8	22793.7	193.94 ug/L		193.94 ppb	06:54:58
1	Sc 361.383	858284.7	858284.7	102.19 %			06:56:16
1	Y 371.029	892451.9	892451.9	124.63 %			06:56:16
1	Ag 328.068†	-8553.3	-8623.0	1.4773 ug/L		1.4773 ppb	06:56:21
1	As 188.979†	-77.0	-54.5	49.104 ug/L		49.104 ppb	06:56:41
1	B 249.677†	960.1	1189.6	9.3744 ug/L		9.3744 ppb	06:56:21
1	Ba 233.527†	113288.9	110837.8	1043.8 ug/L		1043.8 ppb	06:56:21
1	Be 313.107†	-15850.6	-11247.6	7.1949 ug/L		7.1949 ppb	06:56:21
1	Cd 226.502†	952.9	1098.8	0.7301 ug/L		0.7301 ppb	06:56:41
1	Co 228.616†	1832.0	1831.6	35.220 ug/L		35.220 ppb	06:56:41
1	Cr 267.716†	6129.1	5902.6	92.390 ug/L		92.390 ppb	06:56:21
1	Cu 324.752†	24931.5	18043.5	66.239 ug/L		66.239 ppb	06:56:21
1	Mn 257.610†	2092168.2	2046792.4	2698.9 ug/L		2698.9 ppb	06:56:16
1	Mo 202.031†	4.1	-10.2	10.448 ug/L		10.448 ppb	06:56:41
1	Ni 231.604†	2326.7	2183.1	68.139 ug/L		68.139 ppb	06:56:41
1	P 214.914†	3671.9	3424.9	2356.9 ug/L		2356.9 ppb	06:56:41
1	Pb 220.353†	425.5	475.2	71.030 ug/L		71.030 ppb	06:56:41
1	S 181.975 Axial†	267.9	237.7	400.22 ug/L		400.22 ppb	06:56:41
1	Sb 206.836†	53.9	26.1	-9.5267 ug/L		-9.5267 ppb	06:56:41
1	Se 196.026†	-544.9	-516.2	44.976 ug/L		44.976 ppb	06:56:41
1	Si 251.611†	1140285.0	1115275.1	41525 ug/L		41525 ppb	06:56:16
1	Sn 189.927†	-46.6	-48.7	-15.144 ug/L		-15.144 ppb	06:56:41
1	Ti 334.940†	3076080.6	3011113.7	5182.3 ug/L		5182.3 ppb	06:56:16
1	Tl 190.801†	-188.1	-159.0	-6.2284 ug/L		-6.2284 ppb	06:56:41
1	U 409.014†	-12958.7	-10645.3	-329.68 ug/L		-329.68 ppb	06:56:16
1	V 292.402†	25694.8	26570.6	178.23 ug/L		178.23 ppb	06:56:21
1	Zn 213.857†	37143.2	35739.3	402.69 ug/L		402.69 ppb	06:56:21
1	SiO2†	1131127.7	1106286.5	88387 ug/L		88387 ppb	06:57:50
2	Sc Radial	4181.6	4181.6	104 %			06:55:43
2	Y RADIAL	5513.0	5513.0	122.0 %			06:55:43
2	Al 396.153Radial†	83841.6	80958.8	86282 ug/L		86282 ppb	06:55:23
2	Ca 317.933Radial†	10828.7	10428.9	21189 ug/L		21189 ppb	06:55:23
2	Fe 238.204 Radial†	11632.3	11212.3	140210 ug/L		140210 ppb	06:55:23
2	K 766.490 Radial†	72332.5	66973.4	13361 ug/L		13361 ppb	06:55:23
2	Mg 279.077 IEC†	405.7	390.7	16920 ug/L		16920 ppb	06:55:43
2	Na 589.592 Radial†	4456.4	4759.8	1869.3 ug/L		1869.3 ppb	06:55:23
2	Sr 421.552†	23131.2	22243.8	189.26 ug/L		189.26 ppb	06:55:23
2	Sc 361.383	862876.5	862876.5	102.74 %			06:56:47
2	Y 371.029	896798.7	896798.7	125.24 %			06:56:47
2	Ag 328.068†	-8359.3	-8389.7	1.8545 ug/L		1.8545 ppb	06:56:52
2	As 188.979†	-75.5	-52.6	49.423 ug/L		49.423 ppb	06:57:12
2	B 249.677†	1023.6	1246.5	11.360 ug/L		11.360 ppb	06:56:52
2	Ba 233.527†	113392.4	110348.6	1039.2 ug/L		1039.2 ppb	06:56:52
2	Be 313.107†	-15793.0	-11108.9	7.2284 ug/L		7.2284 ppb	06:56:52
2	Cd 226.502†	951.6	1092.7	0.9108 ug/L		0.9108 ppb	06:57:12
2	Co 228.616†	1814.4	1804.9	34.583 ug/L		34.583 ppb	06:57:12
2	Cr 267.716†	6138.1	5879.4	91.812 ug/L		91.812 ppb	06:56:52
2	Cu 324.752†	25021.1	18000.8	65.963 ug/L		65.963 ppb	06:56:52
2	Mn 257.610†	2099980.2	2043501.3	2694.3 ug/L		2694.3 ppb	06:56:47
2	Mo 202.031†	11.0	-3.4	10.834 ug/L		10.834 ppb	06:57:12
2	Ni 231.604†	2342.3	2186.2	68.236 ug/L		68.236 ppb	06:57:12

2	P 214.914†	3681.4	3415.0	2351.5 ug/L	2351.5 ppb	06:57:12
2	Pb 220.353†	426.3	473.7	70.827 ug/L	70.827 ppb	06:57:12
2	S 181.975 Axial†	266.2	234.7	395.24 ug/L	395.24 ppb	06:57:12
2	Sb 206.836†	68.1	39.6	-3.6769 ug/L	-3.6769 ppb	06:57:12
2	Se 196.026†	-543.5	-512.1	40.002 ug/L	40.002 ppb	06:57:12
2	Si 251.611†	1146204.0	1115098.4	41519 ug/L	41519 ppb	06:56:47
2	Sn 189.927†	-48.2	-50.0	-15.358 ug/L	-15.358 ppb	06:57:12
2	Ti 334.940†	3086548.6	3005284.2	5172.2 ug/L	5172.2 ppb	06:56:47
2	Tl 190.801†	-184.1	-154.1	-4.4492 ug/L	-4.4492 ppb	06:57:12
2	U 409.014†	-13014.2	-10631.8	-328.99 ug/L	-328.99 ppb	06:56:47
2	V 292.402†	25740.8	26481.6	177.94 ug/L	177.94 ppb	06:56:52
2	Zn 213.857†	37241.5	35641.5	401.92 ug/L	401.92 ppb	06:56:52
2	SiO2†	1134486.9	1103666.0	88177 ug/L	88177 ppb	06:57:56
3	Sc Radial	4132.0	4132.0	102 %		06:56:09
3	Y RADIAL	5458.5	5458.5	120.8 %		06:56:09
3	Al 396.153Radial†	84258.9	82337.3	87752 ug/L	87752 ppb	06:55:49
3	Ca 317.933Radial†	10913.1	10636.7	21611 ug/L	21611 ppb	06:55:49
3	Fe 238.204 Radial†	11663.4	11377.4	142270 ug/L	142270 ppb	06:55:49
3	K 766.490 Radial†	72969.2	68432.8	13652 ug/L	13652 ppb	06:55:49
3	Mg 279.077 IEC†	393.0	382.9	16579 ug/L	16579 ppb	06:56:09
3	Na 589.592 Radial†	4504.6	4858.5	1908.0 ug/L	1908.0 ppb	06:55:49
3	Sr 421.552†	23350.3	22725.7	193.36 ug/L	193.36 ppb	06:55:49
3	Sc 361.383	862203.7	862203.7	102.66 %		06:57:18
3	Y 371.029	895426.5	895426.5	125.05 %		06:57:18
3	Ag 328.068†	-8698.3	-8726.3	0.8026 ug/L	0.8026 ppb	06:57:23
3	As 188.979†	-78.3	-55.4	48.404 ug/L	48.404 ppb	06:57:43
3	B 249.677†	1065.5	1288.0	12.167 ug/L	12.167 ppb	06:57:23
3	Ba 233.527†	115124.6	112122.0	1055.9 ug/L	1055.9 ppb	06:57:23
3	Be 313.107†	-15992.1	-11314.8	7.1416 ug/L	7.1416 ppb	06:57:23
3	Cd 226.502†	943.1	1085.0	0.5904 ug/L	0.5904 ppb	06:57:43
3	Co 228.616†	1815.0	1806.8	34.615 ug/L	34.615 ppb	06:57:43
3	Cr 267.716†	6266.0	6008.6	93.717 ug/L	93.717 ppb	06:57:23
3	Cu 324.752†	25546.6	18531.7	67.792 ug/L	67.792 ppb	06:57:23
3	Mn 257.610†	2100570.8	2045671.7	2697.4 ug/L	2697.4 ppb	06:57:18
3	Mo 202.031†	22.7	7.9	12.000 ug/L	12.000 ppb	06:57:43
3	Ni 231.604†	2330.3	2176.3	67.927 ug/L	67.927 ppb	06:57:43
3	P 214.914†	3676.8	3413.3	2348.7 ug/L	2348.7 ppb	06:57:43
3	Pb 220.353†	421.1	469.0	70.154 ug/L	70.154 ppb	06:57:43
3	S 181.975 Axial†	265.7	234.4	394.43 ug/L	394.43 ppb	06:57:43
3	Sb 206.836†	58.5	30.3	-7.5923 ug/L	-7.5923 ppb	06:57:43
3	Se 196.026†	-544.4	-513.4	45.646 ug/L	45.646 ppb	06:57:43
3	Si 251.611†	1145979.3	1115750.1	41543 ug/L	41543 ppb	06:57:18
3	Sn 189.927†	-25.2	-27.6	-10.446 ug/L	-10.446 ppb	06:57:43
3	Ti 334.940†	3083298.0	3004462.4	5170.8 ug/L	5170.8 ppb	06:57:18
3	Tl 190.801†	-186.9	-157.0	-5.5813 ug/L	-5.5813 ppb	06:57:43
3	U 409.014†	-12934.9	-10564.5	-327.25 ug/L	-327.25 ppb	06:57:18
3	V 292.402†	26174.6	26923.7	181.06 ug/L	181.06 ppb	06:57:23
3	Zn 213.857†	37865.0	36277.1	409.16 ug/L	409.16 ppb	06:57:23
3	SiO2†	1138985.0	1108909.2	88596 ug/L	88596 ppb	06:58:01

Mean Data: 248041002|959101|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	861121.6	102.53 %	0.295			0.29%
Sc Radial	4142.0	103 %	0.9			0.86%
Y 371.029	894892.4	124.97 %	0.310			0.25%
Y RADIAL	5468.6	121.0 %	0.89			0.74%
Ag 328.068†	-8579.7	1.3781 ug/L	0.53292	1.3781 ppb	0.53292	38.67%
Al 396.153Radial†	81908.4	87295 ug/L	877.8	87295 ppb	877.8	1.01%
As 188.979†	-54.2	48.977 ug/L	0.5215	48.977 ppb	0.5215	1.06%
B 249.677†	1241.4	10.967 ug/L	1.4370	10.967 ppb	1.4370	13.10%
Ba 233.527†	111102.8	1046.3 ug/L	8.61	1046.3 ppb	8.61	0.82%
Be 313.107†	-11223.8	7.1883 ug/L	0.04378	7.1883 ppb	0.04378	0.61%
Ca 317.933Radial†	10573.3	21482 ug/L	254.7	21482 ppb	254.7	1.19%
Cd 226.502†	1092.2	0.7437 ug/L	0.16062	0.7437 ppb	0.16062	21.60%
Co 228.616†	1814.4	34.806 ug/L	0.3589	34.806 ppb	0.3589	1.03%
Cr 267.716†	5930.2	92.640 ug/L	0.9768	92.640 ppb	0.9768	1.05%
Cu 324.752†	18192.0	66.665 ug/L	0.9863	66.665 ppb	0.9863	1.48%
Fe 238.204 Radial†	11336.5	141760 ug/L	1370.6	141760 ppb	1370.6	0.97%
K 766.490 Radial†	67981.7	13562 ug/L	174.5	13562 ppb	174.5	1.29%

Mg 279.077 IEC†	388.7	16833 ug/L	223.6	16833 ppb	223.6	1.33%
Mn 257.610†	2045321.8	2696.9 ug/L	2.33	2696.9 ppb	2.33	0.09%
Mo 202.031†	-1.9	11.094 ug/L	0.8077	11.094 ppb	0.8077	7.28%
Na 589.592 Radial†	4832.8	1897.9 ug/L	25.18	1897.9 ppb	25.18	1.33%
Ni 231.604†	2181.9	68.101 ug/L	0.1579	68.101 ppb	0.1579	0.23%
P 214.914†	3417.7	2352.4 ug/L	4.17	2352.4 ppb	4.17	0.18%
Pb 220.353†	472.6	70.670 ug/L	0.4585	70.670 ppb	0.4585	0.65%
S 181.975 Axial†	235.6	396.63 ug/L	3.137	396.63 ppb	3.137	0.79%
Sb 206.836†	32.0	-6.9319 ug/L	2.98030	-6.9319 ppb	2.98030	42.99%
Se 196.026†	-513.9	43.541 ug/L	3.0830	43.541 ppb	3.0830	7.08%
Si 251.611†	1115374.5	41529 ug/L	12.5	41529 ppb	12.5	0.03%
Sn 189.927†	-42.1	-13.649 ug/L	2.7764	-13.649 ppb	2.7764	20.34%
Sr 421.552†	22587.7	192.19 ug/L	2.551	192.19 ppb	2.551	1.33%
Ti 334.940†	3006953.5	5175.1 ug/L	6.24	5175.1 ppb	6.24	0.12%
Tl 190.801†	-156.7	-5.4196 ug/L	0.90056	-5.4196 ppb	0.90056	16.62%
U 409.014†	-10613.9	-328.64 ug/L	1.255	-328.64 ppb	1.255	0.38%
V 292.402†	26658.6	179.08 ug/L	1.724	179.08 ppb	1.724	0.96%
Zn 213.857†	35886.0	404.59 ug/L	3.977	404.59 ppb	3.977	0.98%
SiO2†	1106287.2	88387 ug/L	209.4	88387 ppb	209.4	0.24%

Sequence No.: 124

Sample ID: 248041003|959101|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 135

Date Collected: 3/26/2010 07:00:14

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 248041003|959101|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4257.2	4257.2	106 %		07:02:28
1	Y RADIAL	5035.1	5035.1	111.4 %		07:02:28
1	Al 396.153Radial†	151888.5	143998.1	153470 ug/L	153470 ppb	07:02:08
1	Ca 317.933Radial†	7480.3	7070.6	14366 ug/L	14366 ppb	07:02:28
1	Fe 238.204 Radial†	11944.0	11308.2	141410 ug/L	141410 ppb	07:02:08
1	K 766.490 Radial†	93539.1	85827.5	17128 ug/L	17128 ppb	07:02:08
1	Mg 279.077 IEC†	487.7	461.4	20010 ug/L	20010 ppb	07:02:28
1	Na 589.592 Radial†	3990.8	4242.2	1666.0 ug/L	1666.0 ppb	07:02:08
1	Sr 421.552†	18385.6	17350.8	147.64 ug/L	147.64 ppb	07:02:08
1	Sc 361.383	839829.2	839829.2	99.997 %		07:03:31
1	Y 371.029	783853.2	783853.2	109.47 %		07:03:31
1	Ag 328.068†	-8478.9	-8732.6	0.7207 ug/L	0.7207 ppb	07:03:51
1	As 188.979†	-91.0	-70.2	43.655 ug/L	43.655 ppb	07:03:51
1	B 249.677†	1451.9	1702.1	23.691 ug/L	23.691 ppb	07:03:31
1	Ba 233.527†	144026.2	144012.2	1354.9 ug/L	1354.9 ppb	07:03:31
1	Be 313.107†	-11826.5	-7564.1	9.5489 ug/L	9.5489 ppb	07:03:31
1	Cd 226.502†	973.6	1140.0	1.4933 ug/L	1.4933 ppb	07:03:51
1	Co 228.616†	1743.0	1782.0	33.273 ug/L	33.273 ppb	07:03:51
1	Cr 267.716†	9571.3	9476.6	138.80 ug/L	138.80 ppb	07:03:51
1	Cu 324.752†	36132.7	29781.0	104.13 ug/L	104.13 ppb	07:03:31
1	Mn 257.610†	1247902.1	1247488.7	1649.9 ug/L	1649.9 ppb	07:03:26
1	Mo 202.031†	-56.1	-70.3	4.9685 ug/L	4.9685 ppb	07:03:51
1	Ni 231.604†	2556.3	2462.8	76.874 ug/L	76.874 ppb	07:03:51
1	P 214.914†	7200.9	7032.9	4960.2 ug/L	4960.2 ppb	07:03:51
1	Pb 220.353†	622.6	681.4	116.71 ug/L	116.71 ppb	07:03:51
1	S 181.975 Axial†	949.7	925.3	1593.1 ug/L	1593.1 ppb	07:03:51
1	Sb 206.836†	80.4	53.8	-0.7008 ug/L	-0.7008 ppb	07:03:51
1	Se 196.026†	-560.9	-543.9	43.917 ug/L	43.917 ppb	07:03:51
1	Si 251.611†	1261357.9	1260871.8	46946 ug/L	46946 ppb	07:03:26
1	Sn 189.927†	-45.9	-49.0	-16.408 ug/L	-16.408 ppb	07:03:51
1	Ti 334.940†	3229740.4	3230924.6	5559.1 ug/L	5559.1 ppb	07:03:26
1	Tl 190.801†	-173.4	-148.4	-4.1289 ug/L	-4.1289 ppb	07:03:51
1	U 409.014†	-6851.7	-4816.8	-158.13 ug/L	-158.13 ppb	07:03:31
1	V 292.402†	33737.5	35166.0	244.59 ug/L	244.59 ppb	07:03:31
1	Zn 213.857†	34040.9	33435.5	375.43 ug/L	375.43 ppb	07:03:31
1	SiO2†	1265905.8	1265392.0	101100 ug/L	101100 ppb	07:05:01
2	Sc Radial	4198.1	4198.1	104 %		07:02:53
2	Y RADIAL	4980.4	4980.4	110.2 %		07:02:53
2	Al 396.153Radial†	155423.2	149420.9	159250 ug/L	159250 ppb	07:02:33
2	Ca 317.933Radial†	7415.0	7107.6	14441 ug/L	14441 ppb	07:02:53
2	Fe 238.204 Radial†	12194.3	11708.1	146410 ug/L	146410 ppb	07:02:33
2	K 766.490 Radial†	95267.3	88736.1	17708 ug/L	17708 ppb	07:02:33
2	Mg 279.077 IEC†	479.4	460.0	19940 ug/L	19940 ppb	07:02:53
2	Na 589.592 Radial†	4049.6	4352.0	1709.1 ug/L	1709.1 ppb	07:02:33
2	Sr 421.552†	18809.9	18003.8	153.20 ug/L	153.20 ppb	07:02:33
2	Sc 361.383	846356.4	846356.4	100.77 %		07:04:03
2	Y 371.029	791437.8	791437.8	110.52 %		07:04:03
2	Ag 328.068†	-8420.3	-8609.0	2.8955 ug/L	2.8955 ppb	07:04:23
2	As 188.979†	-72.8	-51.4	54.571 ug/L	54.571 ppb	07:04:23
2	B 249.677†	1528.3	1766.7	24.657 ug/L	24.657 ppb	07:04:03
2	Ba 233.527†	145386.2	144250.9	1357.3 ug/L	1357.3 ppb	07:04:03
2	Be 313.107†	-11986.1	-7631.3	9.4369 ug/L	9.4369 ppb	07:04:03
2	Cd 226.502†	956.2	1115.2	0.6267 ug/L	0.6267 ppb	07:04:23
2	Co 228.616†	1723.8	1749.4	32.434 ug/L	32.434 ppb	07:04:23
2	Cr 267.716†	9552.5	9384.2	138.13 ug/L	138.13 ppb	07:04:23
2	Cu 324.752†	36574.1	29940.4	104.91 ug/L	104.91 ppb	07:04:03
2	Mn 257.610†	1248939.7	1238894.0	1639.1 ug/L	1639.1 ppb	07:03:58
2	Mo 202.031†	-53.7	-67.5	5.6028 ug/L	5.6028 ppb	07:04:23
2	Ni 231.604†	2552.5	2439.3	76.139 ug/L	76.139 ppb	07:04:23

2	P 214.914†	7145.4	6922.3	4878.1 ug/L	4878.1 ppb	07:04:23
2	Pb 220.353†	618.1	672.2	115.88 ug/L	115.88 ppb	07:04:23
2	S 181.975 Axial†	949.6	917.9	1579.1 ug/L	1579.1 ppb	07:04:23
2	Sb 206.836†	77.1	49.9	-2.3642 ug/L	-2.3642 ppb	07:04:23
2	Se 196.026†	-558.9	-537.6	65.952 ug/L	65.952 ppb	07:04:23
2	Si 251.611†	1263430.9	1253200.8	46661 ug/L	46661 ppb	07:03:58
2	Sn 189.927†	-25.2	-28.1	-12.060 ug/L	-12.060 ppb	07:04:23
2	Ti 334.940†	3232967.6	3209218.0	5521.8 ug/L	5521.8 ppb	07:03:58
2	Tl 190.801†	-172.8	-146.4	-3.7434 ug/L	-3.7434 ppb	07:04:23
2	U 409.014†	-6965.9	-4877.2	-160.47 ug/L	-160.47 ppb	07:04:03
2	V 292.402†	34165.0	35330.1	245.17 ug/L	245.17 ppb	07:04:03
2	Zn 213.857†	34391.3	33520.7	375.69 ug/L	375.69 ppb	07:04:03
2	SiO2†	1262671.4	1252419.3	100060 ug/L	100060 ppb	07:05:07
3	Sc Radial	4229.0	4229.0	105 %		07:03:18
3	Y RADIAL	5018.8	5018.8	111.1 %		07:03:18
3	Al 396.153Radial†	154101.4	147069.9	156740 ug/L	156740 ppb	07:02:58
3	Ca 317.933Radial†	7450.1	7089.1	14403 ug/L	14403 ppb	07:03:18
3	Fe 238.204 Radial†	12014.0	11450.6	143190 ug/L	143190 ppb	07:02:58
3	K 766.490 Radial†	94383.3	87224.7	17407 ug/L	17407 ppb	07:02:58
3	Mg 279.077 IEC†	482.7	459.7	19933 ug/L	19933 ppb	07:03:18
3	Na 589.592 Radial†	3940.3	4219.3	1657.0 ug/L	1657.0 ppb	07:02:58
3	Sr 421.552†	18616.8	17687.7	150.51 ug/L	150.51 ppb	07:02:58
3	Sc 361.383	833528.8	833528.8	99.247 %		07:04:35
3	Y 371.029	776987.8	776987.8	108.51 %		07:04:35
3	Ag 328.068†	-8486.3	-8804.1	0.9236 ug/L	0.9236 ppb	07:04:55
3	As 188.979†	-79.7	-59.5	49.463 ug/L	49.463 ppb	07:04:55
3	B 249.677†	1565.4	1827.4	26.845 ug/L	26.845 ppb	07:04:35
3	Ba 233.527†	143312.6	144381.8	1358.5 ug/L	1358.5 ppb	07:04:35
3	Be 313.107†	-11499.6	-7324.1	9.5578 ug/L	9.5578 ppb	07:04:35
3	Cd 226.502†	979.7	1153.6	1.4979 ug/L	1.4979 ppb	07:04:55
3	Co 228.616†	1735.4	1787.5	33.477 ug/L	33.477 ppb	07:04:55
3	Cr 267.716†	9501.2	9478.4	139.02 ug/L	139.02 ppb	07:04:55
3	Cu 324.752†	35820.0	29739.2	104.10 ug/L	104.10 ppb	07:04:35
3	Mn 257.610†	1233261.1	1242169.3	1643.1 ug/L	1643.1 ppb	07:04:29
3	Mo 202.031†	-44.4	-58.9	6.1084 ug/L	6.1084 ppb	07:04:55
3	Ni 231.604†	2541.1	2466.8	76.998 ug/L	76.998 ppb	07:04:55
3	P 214.914†	7126.6	7012.5	4944.9 ug/L	4944.9 ppb	07:04:55
3	Pb 220.353†	619.2	682.7	117.38 ug/L	117.38 ppb	07:04:55
3	S 181.975 Axial†	949.8	932.7	1605.4 ug/L	1605.4 ppb	07:04:55
3	Sb 206.836†	78.5	52.5	-1.1756 ug/L	-1.1756 ppb	07:04:55
3	Se 196.026†	-561.8	-549.1	46.341 ug/L	46.341 ppb	07:04:55
3	Si 251.611†	1244525.0	1253445.7	46670 ug/L	46670 ppb	07:04:29
3	Sn 189.927†	-38.1	-41.4	-14.841 ug/L	-14.841 ppb	07:04:55
3	Ti 334.940†	3182989.0	3208231.7	5520.1 ug/L	5520.1 ppb	07:04:29
3	Tl 190.801†	-153.1	-129.2	2.9092 ug/L	2.9092 ppb	07:04:55
3	U 409.014†	-7330.3	-5350.7	-174.04 ug/L	-174.04 ppb	07:04:35
3	V 292.402†	33497.8	35179.6	244.46 ug/L	244.46 ppb	07:04:35
3	Zn 213.857†	33816.1	33466.4	375.53 ug/L	375.53 ppb	07:04:35
3	SiO2†	1254731.8	1263702.0	100960 ug/L	100960 ppb	07:05:13

Mean Data: 248041003|959101|1

Analyte	Mean Corrected	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	839904.8	100.01 %		0.764			0.76%
Sc Radial	4228.1	105 %		0.7			0.70%
Y 371.029	784092.9	109.50 %		1.009			0.92%
Y RADIAL	5011.4	110.9 %		0.62			0.56%
Ag 328.068†	-8715.2	1.5133 ug/L		1.20136	1.5133 ppb	1.20136	79.39%
Al 396.153Radial†	146829.6	156490 ug/L		2898.2	156490 ppb	2898.2	1.85%
As 188.979†	-60.4	49.230 ug/L		5.4618	49.230 ppb	5.4618	11.09%
B 249.677†	1765.4	25.064 ug/L		1.6160	25.064 ppb	1.6160	6.45%
Ba 233.527†	144215.0	1356.9 ug/L		1.80	1356.9 ppb	1.80	0.13%
Be 313.107†	-7506.5	9.5145 ug/L		0.06737	9.5145 ppb	0.06737	0.71%
Ca 317.933Radial†	7089.1	14403 ug/L		37.6	14403 ppb	37.6	0.26%
Cd 226.502†	1136.3	1.2060 ug/L		0.50168	1.2060 ppb	0.50168	41.60%
Co 228.616†	1773.0	33.061 ug/L		0.5529	33.061 ppb	0.5529	1.67%
Cr 267.716†	9446.4	138.65 ug/L		0.463	138.65 ppb	0.463	0.33%
Cu 324.752†	29820.2	104.38 ug/L		0.462	104.38 ppb	0.462	0.44%
Fe 238.204 Radial†	11489.0	143670 ug/L		2534.1	143670 ppb	2534.1	1.76%
K 766.490 Radial†	87262.8	17414 ug/L		290.4	17414 ppb	290.4	1.67%

Mg 279.077 IEC†	460.4	19961 ug/L	42.6	19961 ppb	42.6	0.21%
Mn 257.610†	1242850.7	1644.0 ug/L	5.45	1644.0 ppb	5.45	0.33%
Mo 202.031†	-65.6	5.5599 ug/L	0.57112	5.5599 ppb	0.57112	10.27%
Na 589.592 Radial†	4271.2	1677.4 ug/L	27.85	1677.4 ppb	27.85	1.66%
Ni 231.604†	2456.3	76.670 ug/L	0.4646	76.670 ppb	0.4646	0.61%
P 214.914†	6989.2	4927.7 ug/L	43.69	4927.7 ppb	43.69	0.89%
Pb 220.353†	678.8	116.66 ug/L	0.751	116.66 ppb	0.751	0.64%
S 181.975 Axial†	925.3	1592.6 ug/L	13.14	1592.6 ppb	13.14	0.83%
Sb 206.836†	52.1	-1.4136 ug/L	0.85686	-1.4136 ppb	0.85686	60.62%
Se 196.026†	-543.6	52.070 ug/L	12.0831	52.070 ppb	12.0831	23.21%
Si 251.611†	1255839.4	46759 ug/L	162.3	46759 ppb	162.3	0.35%
Sn 189.927†	-39.5	-14.436 ug/L	2.2017	-14.436 ppb	2.2017	15.25%
Sr 421.552†	17680.8	150.45 ug/L	2.780	150.45 ppb	2.780	1.85%
Ti 334.940†	3216124.8	5533.7 ug/L	22.06	5533.7 ppb	22.06	0.40%
Tl 190.801†	-141.3	-1.6544 ug/L	3.95688	-1.6544 ppb	3.95688	239.18%
U 409.014†	-5014.9	-164.21 ug/L	8.592	-164.21 ppb	8.592	5.23%
V 292.402†	35225.2	244.74 ug/L	0.376	244.74 ppb	0.376	0.15%
Zn 213.857†	33474.2	375.55 ug/L	0.135	375.55 ppb	0.135	0.04%
SiO2†	1260504.4	100710 ug/L	563.5	100710 ppb	563.5	0.56%

Sequence No.: 125

Sample ID: 248041004|959101|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 136

Date Collected: 3/26/2010 07:07:25

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 248041004|959101|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4278.7	4278.7	106 %		07:09:20
1	Y RADIAL	5360.1	5360.1	118.6 %		07:09:20
1	Al 396.153Radial†	101988.1	96231.6	102560 ug/L	102560 ppb	07:09:20
1	Ca 317.933Radial†	8182.2	7696.8	15638 ug/L	15638 ppb	07:09:20
1	Fe 238.204 Radial†	10043.4	9459.7	118290 ug/L	118290 ppb	07:09:20
1	K 766.490 Radial†	62342.7	55971.9	11166 ug/L	11166 ppb	07:09:20
1	Mg 279.077 IEC†	373.2	351.1	15214 ug/L	15214 ppb	07:09:40
1	Na 589.592 Radial†	10073.5	9957.9	3910.6 ug/L	3910.6 ppb	07:09:20
1	Sr 421.552†	16829.3	15796.3	134.40 ug/L	134.40 ppb	07:09:20
1	Sc 361.383	863672.6	863672.6	102.84 %		07:10:37
1	Y 371.029	841343.4	841343.4	117.49 %		07:10:37
1	Ag 328.068†	-7171.9	-7227.6	0.7660 ug/L	0.7660 ppb	07:10:43
1	As 188.979†	-60.8	-38.3	37.770 ug/L	37.770 ppb	07:11:03
1	B 249.677†	725.9	956.1	6.9859 ug/L	6.9859 ppb	07:10:43
1	Ba 233.527†	108437.1	105428.3	992.25 ug/L	992.25 ppb	07:10:43
1	Be 313.107†	-3001.2	1344.2	8.5622 ug/L	8.5622 ppb	07:10:43
1	Cd 226.502†	757.4	902.9	0.5252 ug/L	0.5252 ppb	07:11:03
1	Co 228.616†	1133.5	1141.1	20.992 ug/L	20.992 ppb	07:11:03
1	Cr 267.716†	13438.3	12972.8	181.75 ug/L	181.75 ppb	07:10:43
1	Cu 324.752†	20190.1	13280.6	49.494 ug/L	49.494 ppb	07:10:43
1	Mn 257.610†	1795658.7	1745688.0	2301.5 ug/L	2301.5 ppb	07:10:37
1	Mo 202.031†	-3.5	-17.6	7.8211 ug/L	7.8211 ppb	07:11:03
1	Ni 231.604†	3671.8	3476.9	108.55 ug/L	108.55 ppb	07:11:03
1	P 214.914†	2406.7	2172.2	1483.0 ug/L	1483.0 ppb	07:11:03
1	Pb 220.353†	177.8	231.7	40.995 ug/L	40.995 ppb	07:11:03
1	S 181.975 Axial†	170.4	141.4	228.56 ug/L	228.56 ppb	07:11:03
1	Sb 206.836†	69.1	40.6	1.8018 ug/L	1.8018 ppb	07:11:03
1	Se 196.026†	-473.8	-443.8	35.798 ug/L	35.798 ppb	07:11:03
1	Si 251.611†	1149064.5	1116851.7	41584 ug/L	41584 ppb	07:10:37
1	Sn 189.927†	-41.2	-43.2	-13.570 ug/L	-13.570 ppb	07:11:03
1	Ti 334.940†	2109426.5	2052338.9	3532.0 ug/L	3532.0 ppb	07:10:37
1	Tl 190.801†	-135.8	-106.9	-1.5037 ug/L	-1.5037 ppb	07:11:03
1	U 409.014†	-12849.7	-10460.2	-321.65 ug/L	-321.65 ppb	07:10:37
1	V 292.402†	17800.4	18737.1	123.10 ug/L	123.10 ppb	07:10:43
1	Zn 213.857†	30588.9	29138.9	327.71 ug/L	327.71 ppb	07:10:43
1	SiO2†	1160435.2	1127880.9	90112 ug/L	90112 ppb	07:12:11
2	Sc Radial	4160.1	4160.1	103 %		07:09:45
2	Y RADIAL	5219.9	5219.9	115.5 %		07:09:45
2	Al 396.153Radial†	100302.5	97336.9	103740 ug/L	103740 ppb	07:09:45
2	Ca 317.933Radial†	7983.4	7723.9	15693 ug/L	15693 ppb	07:09:45
2	Fe 238.204 Radial†	9884.6	9575.4	119740 ug/L	119740 ppb	07:09:45
2	K 766.490 Radial†	61345.9	56680.2	11308 ug/L	11308 ppb	07:09:45
2	Mg 279.077 IEC†	373.6	361.6	15670 ug/L	15670 ppb	07:10:05
2	Na 589.592 Radial†	9789.1	9952.8	3908.6 ug/L	3908.6 ppb	07:09:45
2	Sr 421.552†	16558.2	15985.4	136.01 ug/L	136.01 ppb	07:09:45
2	Sc 361.383	868061.3	868061.3	103.36 %		07:11:08
2	Y 371.029	843122.4	843122.4	117.74 %		07:11:08
2	Ag 328.068†	-7224.3	-7242.9	1.1279 ug/L	1.1279 ppb	07:11:14
2	As 188.979†	-56.7	-34.0	40.222 ug/L	40.222 ppb	07:11:34
2	B 249.677†	735.8	962.1	6.9151 ug/L	6.9151 ppb	07:11:14
2	Ba 233.527†	107936.5	104410.8	982.75 ug/L	982.75 ppb	07:11:14
2	Be 313.107†	-3100.7	1262.7	8.4784 ug/L	8.4784 ppb	07:11:14
2	Cd 226.502†	749.4	891.4	0.2137 ug/L	0.2137 ppb	07:11:34
2	Co 228.616†	1143.8	1145.5	21.127 ug/L	21.127 ppb	07:11:34
2	Cr 267.716†	13353.9	12825.0	179.98 ug/L	179.98 ppb	07:11:14
2	Cu 324.752†	20250.1	13239.3	49.436 ug/L	49.436 ppb	07:11:14
2	Mn 257.610†	1794902.8	1736128.6	2289.1 ug/L	2289.1 ppb	07:11:08
2	Mo 202.031†	-9.5	-23.4	7.4284 ug/L	7.4284 ppb	07:11:34
2	Ni 231.604†	3658.2	3445.7	107.58 ug/L	107.58 ppb	07:11:34

2	P 214.914†	2410.7	2164.2	1476.3 ug/L	1476.3 ppb	07:11:34
2	Pb 220.353†	195.8	248.3	43.545 ug/L	43.545 ppb	07:11:34
2	S 181.975 Axial†	167.9	138.1	222.63 ug/L	222.63 ppb	07:11:34
2	Sb 206.836†	58.0	29.5	-2.9134 ug/L	-2.9134 ppb	07:11:34
2	Se 196.026†	-483.2	-450.5	35.182 ug/L	35.182 ppb	07:11:34
2	Si 251.611†	1148153.6	1110321.2	41341 ug/L	41341 ppb	07:11:08
2	Sn 189.927†	-44.4	-46.1	-14.290 ug/L	-14.290 ppb	07:11:34
2	Ti 334.940†	2106725.2	2039354.7	3509.6 ug/L	3509.6 ppb	07:11:08
2	Tl 190.801†	-145.1	-115.3	-4.9802 ug/L	-4.9802 ppb	07:11:34
2	U 409.014†	-12808.4	-10357.0	-318.77 ug/L	-318.77 ppb	07:11:08
2	V 292.402†	17725.9	18577.5	121.69 ug/L	121.69 ppb	07:11:14
2	Zn 213.857†	30584.1	28983.9	325.66 ug/L	325.66 ppb	07:11:14
2	SiO2†	1154659.3	1116587.6	89210 ug/L	89210 ppb	07:12:17
3	Sc Radial	4383.4	4383.4	109 %		07:10:10
3	Y RADIAL	5445.1	5445.1	120.5 %		07:10:10
3	Al 396.153Radial†	104385.7	96141.1	102460 ug/L	102460 ppb	07:10:10
3	Ca 317.933Radial†	8333.4	7651.7	15546 ug/L	15546 ppb	07:10:10
3	Fe 238.204 Radial†	10242.1	9416.4	117750 ug/L	117750 ppb	07:10:10
3	K 766.490 Radial†	63607.9	55732.3	11118 ug/L	11118 ppb	07:10:10
3	Mg 279.077 IEC†	378.7	347.8	15068 ug/L	15068 ppb	07:10:30
3	Na 589.592 Radial†	10246.2	9890.0	3884.0 ug/L	3884.0 ppb	07:10:10
3	Sr 421.552†	17199.6	15758.0	134.07 ug/L	134.07 ppb	07:10:10
3	Sc 361.383	880053.3	880053.3	104.79 %		07:11:40
3	Y 371.029	854309.9	854309.9	119.30 %		07:11:40
3	Ag 328.068†	-7232.9	-7156.0	0.9387 ug/L	0.9387 ppb	07:11:45
3	As 188.979†	-40.9	-18.2	48.166 ug/L	48.166 ppb	07:12:05
3	B 249.677†	761.0	976.4	7.6342 ug/L	7.6342 ppb	07:11:45
3	Ba 233.527†	107781.3	102839.7	967.96 ug/L	967.96 ppb	07:11:45
3	Be 313.107†	-2946.4	1450.9	8.5421 ug/L	8.5421 ppb	07:11:45
3	Cd 226.502†	750.2	882.4	0.2913 ug/L	0.2913 ppb	07:12:05
3	Co 228.616†	1146.3	1132.8	20.833 ug/L	20.833 ppb	07:12:05
3	Cr 267.716†	13293.8	12591.6	176.73 ug/L	176.73 ppb	07:11:45
3	Cu 324.752†	20072.9	12803.3	47.914 ug/L	47.914 ppb	07:11:45
3	Mn 257.610†	1813736.5	1730438.6	2281.4 ug/L	2281.4 ppb	07:11:40
3	Mo 202.031†	0.7	-13.5	8.1390 ug/L	8.1390 ppb	07:12:05
3	Ni 231.604†	3665.8	3404.8	106.30 ug/L	106.30 ppb	07:12:05
3	P 214.914†	2417.8	2139.1	1459.9 ug/L	1459.9 ppb	07:12:05
3	Pb 220.353†	146.6	198.7	36.069 ug/L	36.069 ppb	07:12:05
3	S 181.975 Axial†	168.1	136.0	219.17 ug/L	219.17 ppb	07:12:05
3	Sb 206.836†	60.2	30.8	-2.2365 ug/L	-2.2365 ppb	07:12:05
3	Se 196.026†	-478.4	-439.6	37.504 ug/L	37.504 ppb	07:12:05
3	Si 251.611†	1162098.4	1108492.1	41273 ug/L	41273 ppb	07:11:40
3	Sn 189.927†	-41.7	-42.9	-13.490 ug/L	-13.490 ppb	07:12:05
3	Ti 334.940†	2132426.4	2036107.5	3504.1 ug/L	3504.1 ppb	07:11:40
3	Tl 190.801†	-152.0	-120.0	-6.8727 ug/L	-6.8727 ppb	07:12:05
3	U 409.014†	-12856.0	-10233.6	-314.91 ug/L	-314.91 ppb	07:11:40
3	V 292.402†	17585.4	18209.7	119.16 ug/L	119.16 ppb	07:11:45
3	Zn 213.857†	30444.0	28447.0	319.59 ug/L	319.59 ppb	07:11:45
3	SiO2†	1151526.2	1098374.9	87755 ug/L	87755 ppb	07:12:23

Mean Data: 248041004|959101|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	870595.7	103.66 %	1.010			0.97%
Sc Radial	4274.1	106 %	2.8			2.61%
Y 371.029	846258.6	118.18 %	0.982			0.83%
Y RADIAL	5341.7	118.2 %	2.52			2.13%
Ag 328.068†	-7208.8	0.9442 ug/L	0.18101	0.9442 ppb	0.18101	19.17%
Al 396.153Radial†	96569.9	102920 ug/L	709.6	102920 ppb	709.6	0.69%
As 188.979†	-30.2	42.052 ug/L	5.4342	42.052 ppb	5.4342	12.92%
B 249.677†	964.9	7.1784 ug/L	0.39630	7.1784 ppb	0.39630	5.52%
Ba 233.527†	104226.2	980.99 ug/L	12.242	980.99 ppb	12.242	1.25%
Be 313.107†	1352.6	8.5276 ug/L	0.04376	8.5276 ppb	0.04376	0.51%
Ca 317.933Radial†	7690.8	15626 ug/L	74.1	15626 ppb	74.1	0.47%
Cd 226.502†	892.2	0.3434 ug/L	0.16213	0.3434 ppb	0.16213	47.22%
Co 228.616†	1139.8	20.984 ug/L	0.1468	20.984 ppb	0.1468	0.70%
Cr 267.716†	12796.5	179.49 ug/L	2.551	179.49 ppb	2.551	1.42%
Cu 324.752†	13107.7	48.948 ug/L	0.8958	48.948 ppb	0.8958	1.83%
Fe 238.204 Radial†	9483.8	118590 ug/L	1028.5	118590 ppb	1028.5	0.87%
K 766.490 Radial†	56128.1	11197 ug/L	98.4	11197 ppb	98.4	0.88%

Mg 279.077 IEC†	353.5	15317 ug/L	313.8	15317 ppb	313.8	2.05%
Mn 257.610†	1737418.4	2290.7 ug/L	10.12	2290.7 ppb	10.12	0.44%
Mo 202.031†	-18.2	7.7962 ug/L	0.35597	7.7962 ppb	0.35597	4.57%
Na 589.592 Radial†	9933.6	3901.1 ug/L	14.85	3901.1 ppb	14.85	0.38%
Ni 231.604†	3442.5	107.47 ug/L	1.130	107.47 ppb	1.130	1.05%
P 214.914†	2158.5	1473.1 ug/L	11.85	1473.1 ppb	11.85	0.80%
Pb 220.353†	226.2	40.203 ug/L	3.8002	40.203 ppb	3.8002	9.45%
S 181.975 Axial†	138.5	223.46 ug/L	4.752	223.46 ppb	4.752	2.13%
Sb 206.836†	33.6	-1.1161 ug/L	2.54947	-1.1161 ppb	2.54947	228.44%
Se 196.026†	-444.6	36.161 ug/L	1.2030	36.161 ppb	1.2030	3.33%
Si 251.611†	1111888.3	41399 ug/L	163.6	41399 ppb	163.6	0.40%
Sn 189.927†	-44.0	-13.783 ug/L	0.4406	-13.783 ppb	0.4406	3.20%
Sr 421.552†	15846.6	134.83 ug/L	1.036	134.83 ppb	1.036	0.77%
Ti 334.940†	2042600.4	3515.2 ug/L	14.78	3515.2 ppb	14.78	0.42%
Tl 190.801†	-114.1	-4.4522 ug/L	2.72315	-4.4522 ppb	2.72315	61.16%
U 409.014†	-10350.3	-318.44 ug/L	3.383	-318.44 ppb	3.383	1.06%
V 292.402†	18508.1	121.31 ug/L	1.996	121.31 ppb	1.996	1.65%
Zn 213.857†	28856.6	324.32 ug/L	4.224	324.32 ppb	4.224	1.30%
SiO2†	1114281.1	89026 ug/L	1189.5	89026 ppb	1189.5	1.34%

Sequence No.: 126

Sample ID: 248041005|959101|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 137

Date Collected: 3/26/2010 07:14:36

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 248041005|959101|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Units	Sample Conc.	Analysis Time
1	Sc Radial	4283.8	4283.8	106 %			07:16:50
1	Y RADIAL	5211.0	5211.0	115.3 %			07:16:50
1	Al 396.153Radial†	172361.4	162383.9	173060 ug/L		173060 ppb	07:16:30
1	Ca 317.933Radial†	7545.2	7087.8	14401 ug/L		14401 ppb	07:16:50
1	Fe 238.204 Radial†	12683.9	11934.8	149240 ug/L		149240 ppb	07:16:30
1	K 766.490 Radial†	106297.1	97291.5	19416 ug/L		19416 ppb	07:16:30
1	Mg 279.077 IEC†	518.0	487.1	21123 ug/L		21123 ppb	07:16:50
1	Na 589.592 Radial†	4326.8	4535.2	1781.0 ug/L		1781.0 ppb	07:16:30
1	Sr 421.552†	21712.1	20375.1	173.40 ug/L		173.40 ppb	07:16:30
1	Sc 361.383	842097.6	842097.6	100.27 %			07:17:54
1	Y 371.029	806271.5	806271.5	112.60 %			07:17:54
1	Ag 328.068†	-9073.7	-9302.9	0.4327 ug/L		0.4327 ppb	07:17:54
1	As 188.979†	-87.2	-66.1	52.425 ug/L		52.425 ppb	07:18:14
1	B 249.677†	1601.7	1847.6	26.378 ug/L		26.378 ppb	07:17:54
1	Ba 233.527†	247460.0	246782.6	2318.7 ug/L		2318.7 ppb	07:17:54
1	Be 313.107†	-13616.8	-9317.9	10.077 ug/L		10.077 ppb	07:17:54
1	Cd 226.502†	1025.0	1188.6	1.3686 ug/L		1.3686 ppb	07:18:14
1	Co 228.616†	2287.6	2320.4	46.489 ug/L		46.489 ppb	07:18:14
1	Cr 267.716†	9931.2	9809.7	144.03 ug/L		144.03 ppb	07:18:14
1	Cu 324.752†	37514.0	31061.4	108.71 ug/L		108.71 ppb	07:17:54
1	Mn 257.610†	1369975.5	1365875.3	1806.0 ug/L		1806.0 ppb	07:17:48
1	Mo 202.031†	-61.1	-75.1	5.1557 ug/L		5.1557 ppb	07:18:14
1	Ni 231.604†	2742.8	2641.9	82.456 ug/L		82.456 ppb	07:18:14
1	P 214.914†	6917.3	6730.7	4740.7 ug/L		4740.7 ppb	07:18:14
1	Pb 220.353†	587.0	644.3	114.32 ug/L		114.32 ppb	07:18:14
1	S 181.975 Axial†	801.4	774.9	1325.8 ug/L		1325.8 ppb	07:18:14
1	Sb 206.836†	80.8	54.0	-2.9477 ug/L		-2.9477 ppb	07:18:14
1	Se 196.026†	-580.1	-561.6	60.584 ug/L		60.584 ppb	07:18:14
1	Si 251.611†	1288324.2	1284368.4	47821 ug/L		47821 ppb	07:17:48
1	Sn 189.927†	-50.3	-53.3	-17.804 ug/L		-17.804 ppb	07:18:14
1	Ti 334.940†	3556817.6	3548430.3	6105.3 ug/L		6105.3 ppb	07:17:48
1	Tl 190.801†	-193.5	-167.9	-6.5407 ug/L		-6.5407 ppb	07:18:14
1	U 409.014†	-7765.3	-5709.4	-185.30 ug/L		-185.30 ppb	07:17:54
1	V 292.402†	38433.5	39758.7	278.24 ug/L		278.24 ppb	07:17:54
1	Zn 213.857†	67759.6	66972.8	772.63 ug/L		772.63 ppb	07:17:54
1	SiO2†	1289191.5	1285205.4	102680 ug/L		102680 ppb	07:19:24
2	Sc Radial	4235.6	4235.6	105 %			07:17:15
2	Y RADIAL	5164.6	5164.6	114.3 %			07:17:15
2	Al 396.153Radial†	167658.5	159752.0	170260 ug/L		170260 ppb	07:16:55
2	Ca 317.933Radial†	7547.8	7171.1	14570 ug/L		14570 ppb	07:17:15
2	Fe 238.204 Radial†	12319.7	11723.9	146600 ug/L		146600 ppb	07:16:55
2	K 766.490 Radial†	103552.4	95816.5	19122 ug/L		19122 ppb	07:16:55
2	Mg 279.077 IEC†	517.2	491.9	21334 ug/L		21334 ppb	07:17:15
2	Na 589.592 Radial†	4146.3	4409.7	1731.7 ug/L		1731.7 ppb	07:16:55
2	Sr 421.552†	21055.2	19982.2	170.05 ug/L		170.05 ppb	07:16:55
2	Sc 361.383	839661.1	839661.1	99.977 %			07:18:25
2	Y 371.029	803708.4	803708.4	112.24 %			07:18:25
2	Ag 328.068†	-9208.1	-9463.7	-1.1889 ug/L		-1.1889 ppb	07:18:25
2	As 188.979†	-81.7	-60.9	54.511 ug/L		54.511 ppb	07:18:46
2	B 249.677†	1617.3	1867.8	27.360 ug/L		27.360 ppb	07:18:25
2	Ba 233.527†	247610.7	247649.5	2326.7 ug/L		2326.7 ppb	07:18:25
2	Be 313.107†	-13273.1	-9013.4	10.175 ug/L		10.175 ppb	07:18:25
2	Cd 226.502†	1016.5	1183.1	1.5640 ug/L		1.5640 ppb	07:18:46
2	Co 228.616†	2303.5	2343.0	47.144 ug/L		47.144 ppb	07:18:46
2	Cr 267.716†	9946.9	9854.2	144.33 ug/L		144.33 ppb	07:18:46
2	Cu 324.752†	37385.4	31041.3	108.51 ug/L		108.51 ppb	07:18:25
2	Mn 257.610†	1364486.8	1364350.2	1803.7 ug/L		1803.7 ppb	07:18:20
2	Mo 202.031†	-55.5	-69.7	5.4234 ug/L		5.4234 ppb	07:18:46
2	Ni 231.604†	2803.2	2710.2	84.590 ug/L		84.590 ppb	07:18:46

2	P 214.914†	6953.9	6787.3	4782.8 ug/L	4782.8 ppb	07:18:46
2	Pb 220.353†	600.2	659.1	116.33 ug/L	116.33 ppb	07:18:46
2	S 181.975 Axial†	798.5	774.3	1325.3 ug/L	1325.3 ppb	07:18:46
2	Sb 206.836†	73.3	46.7	-5.8869 ug/L	-5.8869 ppb	07:18:46
2	Se 196.026†	-595.3	-578.5	38.179 ug/L	38.179 ppb	07:18:46
2	Si 251.611†	1282134.4	1281905.6	47729 ug/L	47729 ppb	07:18:20
2	Sn 189.927†	-47.7	-50.8	-17.086 ug/L	-17.086 ppb	07:18:46
2	Ti 334.940†	3539885.3	3541787.9	6093.9 ug/L	6093.9 ppb	07:18:20
2	Tl 190.801†	-185.7	-160.7	-3.8430 ug/L	-3.8430 ppb	07:18:46
2	U 409.014†	-7754.9	-5721.5	-185.35 ug/L	-185.35 ppb	07:18:25
2	V 292.402†	38537.3	39973.8	280.31 ug/L	280.31 ppb	07:18:25
2	Zn 213.857†	67707.4	67116.7	774.72 ug/L	774.72 ppb	07:18:25
2	SiO2†	1288619.1	1288364.0	102930 ug/L	102930 ppb	07:19:29
3	Sc Radial	4258.6	4258.6	106 %		07:17:41
3	Y RADIAL	5193.3	5193.3	114.9 %		07:17:41
3	Al 396.153Radial†	169063.2	160220.4	170760 ug/L	170760 ppb	07:17:21
3	Ca 317.933Radial†	7577.4	7160.3	14548 ug/L	14548 ppb	07:17:41
3	Fe 238.204 Radial†	12392.5	11729.5	146670 ug/L	146670 ppb	07:17:21
3	K 766.490 Radial†	104201.0	95898.4	19138 ug/L	19138 ppb	07:17:21
3	Mg 279.077 IEC†	524.9	496.5	21534 ug/L	21534 ppb	07:17:41
3	Na 589.592 Radial†	4164.6	4405.7	1730.2 ug/L	1730.2 ppb	07:17:21
3	Sr 421.552†	21126.4	19941.4	169.70 ug/L	169.70 ppb	07:17:21
3	Sc 361.383	842372.7	842372.7	100.30 %		07:18:57
3	Y 371.029	806697.6	806697.6	112.66 %		07:18:57
3	Ag 328.068†	-9174.5	-9400.5	-0.8522 ug/L	-0.8522 ppb	07:18:57
3	As 188.979†	-81.3	-60.2	54.961 ug/L	54.961 ppb	07:19:17
3	B 249.677†	1652.4	1897.6	28.166 ug/L	28.166 ppb	07:18:57
3	Ba 233.527†	248243.1	247482.7	2325.2 ug/L	2325.2 ppb	07:18:57
3	Be 313.107†	-13242.7	-8940.4	10.230 ug/L	10.230 ppb	07:18:57
3	Cd 226.502†	1045.3	1208.6	1.9166 ug/L	1.9166 ppb	07:19:17
3	Co 228.616†	2324.2	2356.2	47.464 ug/L	47.464 ppb	07:19:17
3	Cr 267.716†	10031.2	9906.3	145.01 ug/L	145.01 ppb	07:19:17
3	Cu 324.752†	37446.6	30981.9	108.32 ug/L	108.32 ppb	07:18:57
3	Mn 257.610†	1370312.4	1365765.0	1805.6 ug/L	1805.6 ppb	07:18:52
3	Mo 202.031†	-46.4	-60.4	6.2450 ug/L	6.2450 ppb	07:19:17
3	Ni 231.604†	2792.8	2690.8	83.984 ug/L	83.984 ppb	07:19:17
3	P 214.914†	6995.1	6806.0	4796.4 ug/L	4796.4 ppb	07:19:17
3	Pb 220.353†	601.7	658.7	116.37 ug/L	116.37 ppb	07:19:17
3	S 181.975 Axial†	797.4	770.6	1318.8 ug/L	1318.8 ppb	07:19:17
3	Sb 206.836†	82.4	55.5	-2.1894 ug/L	-2.1894 ppb	07:19:17
3	Se 196.026†	-588.4	-569.7	45.610 ug/L	45.610 ppb	07:19:17
3	Si 251.611†	1287433.7	1283060.9	47772 ug/L	47772 ppb	07:18:52
3	Sn 189.927†	-52.2	-55.2	-18.053 ug/L	-18.053 ppb	07:19:17
3	Ti 334.940†	3557948.4	3548399.4	6105.3 ug/L	6105.3 ppb	07:18:52
3	Tl 190.801†	-189.0	-163.4	-4.8030 ug/L	-4.8030 ppb	07:19:17
3	U 409.014†	-7703.2	-5645.0	-183.11 ug/L	-183.11 ppb	07:18:57
3	V 292.402†	38593.6	39905.8	279.78 ug/L	279.78 ppb	07:18:57
3	Zn 213.857†	67750.0	66941.1	772.63 ug/L	772.63 ppb	07:18:57
3	SiO2†	1288579.6	1284175.5	102600 ug/L	102600 ppb	07:19:35

Mean Data: 248041005|959101|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	841377.1	100.18 %		0.178				0.18%
Sc Radial	4259.3	106 %		0.6				0.57%
Y 371.029	805559.2	112.50 %		0.226				0.20%
Y RADIAL	5189.6	114.9 %		0.52				0.45%
Ag 328.068†	-9389.0	-0.5362 ug/L		0.85575	-0.5362 ppb		0.85575	159.60%
Al 396.153Radial†	160785.4	171360 ug/L		1496.3	171360 ppb		1496.3	0.87%
As 188.979†	-62.4	53.966 ug/L		1.3531	53.966 ppb		1.3531	2.51%
B 249.677†	1871.0	27.301 ug/L		0.8954	27.301 ppb		0.8954	3.28%
Ba 233.527†	247304.9	2323.5 ug/L		4.27	2323.5 ppb		4.27	0.18%
Be 313.107†	-9090.6	10.161 ug/L		0.0775	10.161 ppb		0.0775	0.76%
Ca 317.933Radial†	7139.7	14506 ug/L		92.1	14506 ppb		92.1	0.63%
Cd 226.502†	1193.4	1.6164 ug/L		0.27773	1.6164 ppb		0.27773	17.18%
Co 228.616†	2339.9	47.033 ug/L		0.4969	47.033 ppb		0.4969	1.06%
Cr 267.716†	9856.8	144.46 ug/L		0.505	144.46 ppb		0.505	0.35%
Cu 324.752†	31028.2	108.51 ug/L		0.197	108.51 ppb		0.197	0.18%
Fe 238.204 Radial†	11796.1	147510 ug/L		1503.1	147510 ppb		1503.1	1.02%
K 766.490 Radial†	96335.5	19225 ug/L		165.5	19225 ppb		165.5	0.86%

Mg 279.077 IEC†	491.8	21330 ug/L	205.6	21330 ppb	205.6	0.96%
Mn 257.610†	1365330.2	1805.1 ug/L	1.21	1805.1 ppb	1.21	0.07%
Mo 202.031†	-68.4	5.6080 ug/L	0.56762	5.6080 ppb	0.56762	10.12%
Na 589.592 Radial†	4450.2	1747.7 ug/L	28.91	1747.7 ppb	28.91	1.65%
Ni 231.604†	2681.0	83.677 ug/L	1.0998	83.677 ppb	1.0998	1.31%
P 214.914†	6774.7	4773.3 ug/L	29.02	4773.3 ppb	29.02	0.61%
Pb 220.353†	654.0	115.67 ug/L	1.169	115.67 ppb	1.169	1.01%
S 181.975 Axial†	773.3	1323.3 ug/L	3.94	1323.3 ppb	3.94	0.30%
Sb 206.836†	52.1	-3.6747 ug/L	1.95302	-3.6747 ppb	1.95302	53.15%
Se 196.026†	-569.9	48.124 ug/L	11.4121	48.124 ppb	11.4121	23.71%
Si 251.611†	1283111.7	47774 ug/L	45.9	47774 ppb	45.9	0.10%
Sn 189.927†	-53.1	-17.647 ug/L	0.5022	-17.647 ppb	0.5022	2.85%
Sr 421.552†	20099.6	171.05 ug/L	2.040	171.05 ppb	2.040	1.19%
Ti 334.940†	3546205.9	6101.5 ug/L	6.58	6101.5 ppb	6.58	0.11%
Tl 190.801†	-164.0	-5.0622 ug/L	1.36743	-5.0622 ppb	1.36743	27.01%
U 409.014†	-5692.0	-184.59 ug/L	1.277	-184.59 ppb	1.277	0.69%
V 292.402†	39879.4	279.44 ug/L	1.072	279.44 ppb	1.072	0.38%
Zn 213.857†	67010.2	773.33 ug/L	1.208	773.33 ppb	1.208	0.16%
SiO2†	1285915.0	102740 ug/L	174.4	102740 ppb	174.4	0.17%

Sequence No.: 127

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/26/2010 07:21:47

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	4285.5	4285.5	106 %		07:23:39
1	Y RADIAL	4619.9	4619.9	102.3 %		07:23:39
1	Al 396.153Radial†	4390.8	4212.7	4464.9 ug/L	4464.9 ppb	07:23:39
1	Ca 317.933Radial†	2505.8	2341.5	4757.3 ug/L	4757.3 ppb	07:23:59
1	Fe 238.204 Radial†	415.9	382.5	4798.7 ug/L	4798.7 ppb	07:23:59
1	K 766.490 Radial†	26557.1	22194.5	4424.6 ug/L	4424.6 ppb	07:23:39
1	Mg 279.077 IEC†	118.3	110.6	4832.1 ug/L	4832.1 ppb	07:23:59
1	Na 589.592 Radial†	25251.4	24229.6	9515.3 ug/L	9515.3 ppb	07:23:39
1	Sr 421.552†	55667.0	52328.4	445.57 ug/L	445.57 ppb	07:23:39
1	Sc 361.383	841398.2	841398.2	100.18 %		07:24:56
1	Y 371.029	707840.0	707840.0	98.850 %		07:24:56
1	Ag 328.068†	101663.8	101224.0	513.34 ug/L	513.34 ppb	07:25:02
1	As 188.979†	924.0	943.1	509.84 ug/L	509.84 ppb	07:25:22
1	B 249.677†	17628.0	17845.9	488.28 ug/L	488.28 ppb	07:25:02
1	Ba 233.527†	53648.4	53531.6	503.08 ug/L	503.08 ppb	07:25:02
1	Be 313.107†	1218736.3	1220764.3	496.77 ug/L	496.77 ppb	07:24:56
1	Cd 226.502†	36301.9	36401.7	513.33 ug/L	513.33 ppb	07:25:02
1	Co 228.616†	19917.3	19919.7	518.54 ug/L	518.54 ppb	07:25:02
1	Cr 267.716†	38710.9	38544.9	502.84 ug/L	502.84 ppb	07:25:02
1	Cu 324.752†	160487.8	153840.8	498.80 ug/L	498.80 ppb	07:25:02
1	Mn 257.610†	379194.3	378046.6	496.29 ug/L	496.29 ppb	07:25:02
1	Mo 202.031†	5831.4	5806.5	510.92 ug/L	510.92 ppb	07:25:22
1	Ni 231.604†	16588.5	16464.5	513.79 ug/L	513.79 ppb	07:25:02
1	P 214.914†	3764.5	3589.4	2482.9 ug/L	2482.9 ppb	07:25:22
1	Pb 220.353†	3317.5	3370.2	509.46 ug/L	509.46 ppb	07:25:22
1	S 181.975 Axial†	621.3	595.7	1043.4 ug/L	1043.4 ppb	07:25:22
1	Sb 206.836†	1274.9	1245.9	547.80 ug/L	547.80 ppb	07:25:22
1	Se 196.026†	625.9	641.7	528.86 ug/L	528.86 ppb	07:25:22
1	Si 251.611†	69055.3	68403.2	2540.6 ug/L	2540.6 ppb	07:25:02
1	Sn 189.927†	2322.6	2315.2	513.35 ug/L	513.35 ppb	07:25:22
1	Ti 334.940†	290779.7	291329.8	501.07 ug/L	501.07 ppb	07:25:02
1	Tl 190.801†	1271.5	1294.3	503.74 ug/L	503.74 ppb	07:25:22
1	U 409.014†	15573.9	17580.5	515.63 ug/L	515.63 ppb	07:25:02
1	V 292.402†	63843.6	65154.0	509.15 ug/L	509.15 ppb	07:25:02
1	Zn 213.857†	43402.6	42716.6	502.80 ug/L	502.80 ppb	07:25:02
1	SiO2†	69030.6	68350.6	5447.0 ug/L	5447.0 ppb	07:26:29
2	Sc Radial	3822.0	3822.0	94.7 %		07:24:04
2	Y RADIAL	4106.7	4106.7	90.90 %		07:24:04
2	Al 396.153Radial†	4336.7	4656.6	4938.6 ug/L	4938.6 ppb	07:24:04
2	Ca 317.933Radial†	2518.6	2641.0	5365.8 ug/L	5365.8 ppb	07:24:24
2	Fe 238.204 Radial†	425.0	439.5	5511.2 ug/L	5511.2 ppb	07:24:24
2	K 766.490 Radial†	25794.8	24421.1	4868.7 ug/L	4868.7 ppb	07:24:04
2	Mg 279.077 IEC†	118.6	124.5	5439.0 ug/L	5439.0 ppb	07:24:24
2	Na 589.592 Radial†	24340.9	26150.7	10270 ug/L	10270 ppb	07:24:04
2	Sr 421.552†	54085.1	57012.4	485.45 ug/L	485.45 ppb	07:24:04
2	Sc 361.383	854673.7	854673.7	101.76 %		07:25:27
2	Y 371.029	718660.9	718660.9	100.36 %		07:25:27
2	Ag 328.068†	101492.1	99479.0	504.73 ug/L	504.73 ppb	07:25:33
2	As 188.979†	916.2	921.2	498.19 ug/L	498.19 ppb	07:25:53
2	B 249.677†	17585.1	17530.4	479.51 ug/L	479.51 ppb	07:25:33
2	Ba 233.527†	53528.3	52581.7	494.18 ug/L	494.18 ppb	07:25:33
2	Be 313.107†	1237681.5	1220485.3	496.64 ug/L	496.64 ppb	07:25:27
2	Cd 226.502†	36271.4	35808.9	504.89 ug/L	504.89 ppb	07:25:33
2	Co 228.616†	19971.3	19663.9	511.87 ug/L	511.87 ppb	07:25:33
2	Cr 267.716†	38779.4	38012.1	495.97 ug/L	495.97 ppb	07:25:33
2	Cu 324.752†	159826.2	150702.4	488.67 ug/L	488.67 ppb	07:25:33
2	Mn 257.610†	378798.3	371778.3	488.11 ug/L	488.11 ppb	07:25:33
2	Mo 202.031†	5811.5	5696.6	501.31 ug/L	501.31 ppb	07:25:53
2	Ni 231.604†	16566.5	16185.7	505.09 ug/L	505.09 ppb	07:25:33

2	P 214.914†	3741.5	3508.4	2426.2 ug/L	2426.2 ppb	07:25:53
2	Pb 220.353†	3306.8	3308.3	500.12 ug/L	500.12 ppb	07:25:53
2	S 181.975 Axial†	616.6	581.5	1018.3 ug/L	1018.3 ppb	07:25:53
2	Sb 206.836†	1270.4	1221.8	537.16 ug/L	537.16 ppb	07:25:53
2	Se 196.026†	629.9	635.9	526.48 ug/L	526.48 ppb	07:25:53
2	Si 251.611†	69010.9	67288.9	2499.2 ug/L	2499.2 ppb	07:25:33
2	Sn 189.927†	2308.8	2265.6	502.43 ug/L	502.43 ppb	07:25:53
2	Ti 334.940†	289912.5	285969.4	491.88 ug/L	491.88 ppb	07:25:33
2	Tl 190.801†	1261.0	1264.2	492.03 ug/L	492.03 ppb	07:25:53
2	U 409.014†	15700.7	17463.7	512.12 ug/L	512.12 ppb	07:25:33
2	V 292.402†	63756.8	64078.9	500.64 ug/L	500.64 ppb	07:25:33
2	Zn 213.857†	43387.7	42029.0	494.59 ug/L	494.59 ppb	07:25:33
2	SiO2†	70462.4	68687.4	5474.1 ug/L	5474.1 ppb	07:26:34
3	Sc Radial	4169.1	4169.1	103 %		07:24:30
3	Y RADIAL	4461.9	4461.9	98.76 %		07:24:30
3	Al 396.153Radial†	4433.7	4369.5	4632.7 ug/L	4632.7 ppb	07:24:30
3	Ca 317.933Radial†	2495.8	2397.6	4871.3 ug/L	4871.3 ppb	07:24:50
3	Fe 238.204 Radial†	415.2	392.7	4926.0 ug/L	4926.0 ppb	07:24:50
3	K 766.490 Radial†	26590.8	22924.9	4570.3 ug/L	4570.3 ppb	07:24:30
3	Mg 279.077 IEC†	122.5	117.9	5148.4 ug/L	5148.4 ppb	07:24:50
3	Na 589.592 Radial†	25071.0	24718.5	9707.3 ug/L	9707.3 ppb	07:24:30
3	Sr 421.552†	55798.4	53918.0	459.11 ug/L	459.11 ppb	07:24:30
3	Sc 361.383	857147.4	857147.4	102.06 %		07:25:58
3	Y 371.029	721963.2	721963.2	100.82 %		07:25:58
3	Ag 328.068†	101766.9	99460.4	504.47 ug/L	504.47 ppb	07:26:03
3	As 188.979†	913.6	916.0	495.28 ug/L	495.28 ppb	07:26:23
3	B 249.677†	17671.0	17564.6	480.55 ug/L	480.55 ppb	07:26:03
3	Ba 233.527†	53616.1	52516.0	493.55 ug/L	493.55 ppb	07:26:03
3	Be 313.107†	1240828.8	1220059.2	496.46 ug/L	496.46 ppb	07:25:58
3	Cd 226.502†	36306.8	35740.7	503.99 ug/L	503.99 ppb	07:26:03
3	Co 228.616†	20022.7	19657.7	511.71 ug/L	511.71 ppb	07:26:03
3	Cr 267.716†	38891.3	38011.8	495.90 ug/L	495.90 ppb	07:26:03
3	Cu 324.752†	160305.0	150718.2	488.69 ug/L	488.69 ppb	07:26:03
3	Mn 257.610†	379565.4	371455.6	487.64 ug/L	487.64 ppb	07:26:03
3	Mo 202.031†	5783.3	5652.4	497.38 ug/L	497.38 ppb	07:26:23
3	Ni 231.604†	16584.2	16156.0	504.16 ug/L	504.16 ppb	07:26:03
3	P 214.914†	3743.0	3499.3	2420.0 ug/L	2420.0 ppb	07:26:23
3	Pb 220.353†	3284.5	3277.0	495.41 ug/L	495.41 ppb	07:26:23
3	S 181.975 Axial†	611.9	575.2	1007.3 ug/L	1007.3 ppb	07:26:23
3	Sb 206.836†	1265.2	1213.0	533.32 ug/L	533.32 ppb	07:26:23
3	Se 196.026†	621.9	626.4	517.01 ug/L	517.01 ppb	07:26:23
3	Si 251.611†	69129.7	67209.6	2496.3 ug/L	2496.3 ppb	07:26:03
3	Sn 189.927†	2297.5	2248.1	498.49 ug/L	498.49 ppb	07:26:23
3	Ti 334.940†	290879.9	286095.0	492.06 ug/L	492.06 ppb	07:26:03
3	Tl 190.801†	1251.2	1251.1	486.95 ug/L	486.95 ppb	07:26:23
3	U 409.014†	15728.3	17446.2	511.68 ug/L	511.68 ppb	07:26:03
3	V 292.402†	64135.4	64269.0	502.13 ug/L	502.13 ppb	07:26:03
3	Zn 213.857†	43412.1	41929.8	493.51 ug/L	493.51 ppb	07:26:03
3	SiO2†	69391.2	67437.9	5374.4 ug/L	5374.4 ppb	07:26:39

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	851073.1	101.34 %	1.008			1.00%
Sc Radial	4092.2	101 %	6.0			5.89%
Y 371.029	716154.7	100.01 %	1.032			1.03%
Y RADIAL	4396.2	97.30 %	5.817			5.98%
Ag 328.068†	100054.5	507.51 ug/L	5.052	507.51 ppb	5.052	1.00%
QC value within limits for Ag 328.068 Recovery = 101.50%						
Al 396.153Radial†	4412.9	4678.7 ug/L	240.14	4678.7 ppb	240.14	5.13%
QC value within limits for Al 396.153Radial Recovery = 93.57%						
As 188.979†	926.8	501.10 ug/L	7.705	501.10 ppb	7.705	1.54%
QC value within limits for As 188.979 Recovery = 100.22%						
B 249.677†	17647.0	482.78 ug/L	4.792	482.78 ppb	4.792	0.99%
QC value within limits for B 249.677 Recovery = 96.56%						
Ba 233.527†	52876.4	496.94 ug/L	5.330	496.94 ppb	5.330	1.07%
QC value within limits for Ba 233.527 Recovery = 99.39%						
Be 313.107†	1220436.3	496.62 ug/L	0.154	496.62 ppb	0.154	0.03%
QC value within limits for Be 313.107 Recovery = 99.32%						
Ca 317.933Radial†	2460.0	4998.1 ug/L	323.49	4998.1 ppb	323.49	6.47%

QC value within limits for Ca 317.933 Radial Recovery = 99.96%

Cd 226.502†	35983.8	507.41 ug/L	5.153	507.41 ppb	5.153	1.02%
QC value within limits for Cd 226.502 Recovery = 101.48%						
Co 228.616†	19747.1	514.04 ug/L	3.899	514.04 ppb	3.899	0.76%
QC value within limits for Co 228.616 Recovery = 102.81%						
Cr 267.716†	38189.6	498.23 ug/L	3.986	498.23 ppb	3.986	0.80%
QC value within limits for Cr 267.716 Recovery = 99.65%						
Cu 324.752†	151753.8	492.05 ug/L	5.847	492.05 ppb	5.847	1.19%
QC value within limits for Cu 324.752 Recovery = 98.41%						
Fe 238.204 Radial†	404.9	5078.6 ug/L	379.95	5078.6 ppb	379.95	7.48%
QC value within limits for Fe 238.204 Radial Recovery = 101.57%						
K 766.490 Radial†	23180.1	4621.2 ug/L	226.34	4621.2 ppb	226.34	4.90%
QC value within limits for K 766.490 Radial Recovery = 92.42%						
Mg 279.077 IEC†	117.7	5139.8 ug/L	303.53	5139.8 ppb	303.53	5.91%
QC value within limits for Mg 279.077 IEC Recovery = 102.80%						
Mn 257.610†	373760.2	490.68 ug/L	4.863	490.68 ppb	4.863	0.99%
QC value within limits for Mn 257.610 Recovery = 98.14%						
Mo 202.031†	5718.5	503.20 ug/L	6.965	503.20 ppb	6.965	1.38%
QC value within limits for Mo 202.031 Recovery = 100.64%						
Na 589.592 Radial†	25032.9	9830.8 ug/L	392.09	9830.8 ppb	392.09	3.99%
QC value within limits for Na 589.592 Radial Recovery = 98.31%						
Ni 231.604†	16268.7	507.68 ug/L	5.311	507.68 ppb	5.311	1.05%
QC value within limits for Ni 231.604 Recovery = 101.54%						
P 214.914†	3532.4	2443.1 ug/L	34.68	2443.1 ppb	34.68	1.42%
QC value within limits for P 214.914 Recovery = 97.72%						
Pb 220.353†	3318.5	501.66 ug/L	7.152	501.66 ppb	7.152	1.43%
QC value within limits for Pb 220.353 Recovery = 100.33%						
S 181.975 Axial†	584.1	1023.0 ug/L	18.50	1023.0 ppb	18.50	1.81%
QC value within limits for S 181.975 Axial Recovery = 102.30%						
Sb 206.836†	1226.9	539.42 ug/L	7.499	539.42 ppb	7.499	1.39%
QC value within limits for Sb 206.836 Recovery = 107.88%						
Se 196.026†	634.7	524.12 ug/L	6.270	524.12 ppb	6.270	1.20%
QC value within limits for Se 196.026 Recovery = 104.82%						
Si 251.611†	67633.9	2512.0 ug/L	24.77	2512.0 ppb	24.77	0.99%
QC value within limits for Si 251.611 Recovery = 100.48%						
Sn 189.927†	2276.3	504.76 ug/L	7.699	504.76 ppb	7.699	1.53%
QC value within limits for Sn 189.927 Recovery = 100.95%						
Sr 421.552†	54419.6	463.38 ug/L	20.281	463.38 ppb	20.281	4.38%
QC value within limits for Sr 421.552 Recovery = 92.68%						
Ti 334.940†	287798.1	495.00 ug/L	5.254	495.00 ppb	5.254	1.06%
QC value within limits for Ti 334.940 Recovery = 99.00%						
Tl 190.801†	1269.9	494.24 ug/L	8.606	494.24 ppb	8.606	1.74%
QC value within limits for Tl 190.801 Recovery = 98.85%						
U 409.014†	17496.8	513.14 ug/L	2.163	513.14 ppb	2.163	0.42%
QC value within limits for U 409.014 Recovery = 102.63%						
V 292.402†	64500.7	503.97 ug/L	4.545	503.97 ppb	4.545	0.90%
QC value within limits for V 292.402 Recovery = 100.79%						
Zn 213.857†	42225.2	496.97 ug/L	5.080	496.97 ppb	5.080	1.02%
QC value within limits for Zn 213.857 Recovery = 99.39%						
SiO2†	68158.6	5431.8 ug/L	51.55	5431.8 ppb	51.55	0.95%
QC value within limits for SiO2 Recovery = 101.58%						

All analyte(s) passed QC.

Sequence No.: 128
 Sample ID: CCB
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 8
 Date Collected: 3/26/2010 07:28:49
 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	4529.8	4529.8	112 %		07:30:42
1	Y RADIAL	4879.5	4879.5	108.0 %		07:30:42
1	Al 396.153Radial†	-72.1	15.5	16.482 ug/L	16.482 ppb	07:31:02
1	Ca 317.933Radial†	27.4	7.2	14.586 ug/L	14.586 ppb	07:31:02
1	Fe 238.204 Radial†	10.1	0.0	0.1275 ug/L	0.1275 ppb	07:31:02
1	K 766.490 Radial†	2455.3	-616.7	-123.14 ug/L	-123.14 ppb	07:30:42
1	Mg 279.077 IEC†	3.8	2.7	116.35 ug/L	116.35 ppb	07:31:02
1	Na 589.592 Radial†	-444.8	64.8	25.441 ug/L	25.441 ppb	07:30:42
1	Sr 421.552†	51.8	-23.9	-0.2040 ug/L	-0.2040 ppb	07:30:42
1	Sc 361.383	834670.8	834670.8	99.383 %		07:31:59
1	Y 371.029	710134.8	710134.8	99.170 %		07:31:59
1	Ag 328.068†	190.3	-62.0	-0.3115 ug/L	-0.3115 ppb	07:31:59
1	As 188.979†	-23.7	-3.0	-1.6053 ug/L	-1.6053 ppb	07:32:19
1	B 249.677†	-371.9	-124.1	-3.4092 ug/L	-3.4092 ppb	07:32:19
1	Ba 233.527†	4.2	-14.3	-0.1328 ug/L	-0.1328 ppb	07:32:19
1	Be 313.107†	-4474.7	-239.8	-0.0967 ug/L	-0.0967 ppb	07:31:59
1	Cd 226.502†	-167.7	-2.4	-0.0334 ug/L	-0.0334 ppb	07:32:19
1	Co 228.616†	-59.9	-21.3	-0.5554 ug/L	-0.5554 ppb	07:32:19
1	Cr 267.716†	87.8	-6.6	-0.0859 ug/L	-0.0859 ppb	07:32:19
1	Cu 324.752†	6758.8	448.0	1.4521 ug/L	1.4521 ppb	07:31:59
1	Mn 257.610†	619.8	171.3	0.2200 ug/L	0.2200 ppb	07:32:19
1	Mo 202.031†	15.4	1.3	0.1188 ug/L	0.1188 ppb	07:32:19
1	Ni 231.604†	82.9	-10.2	-0.3177 ug/L	-0.3177 ppb	07:32:19
1	P 214.914†	210.7	43.8	31.212 ug/L	31.212 ppb	07:32:19
1	Pb 220.353†	-53.5	5.0	0.7576 ug/L	0.7576 ppb	07:32:19
1	S 181.975 Axial†	36.7	12.5	21.989 ug/L	21.989 ppb	07:32:19
1	Sb 206.836†	37.6	11.2	4.8077 ug/L	4.8077 ppb	07:32:19
1	Se 196.026†	-21.2	-4.4	-3.4658 ug/L	-3.4658 ppb	07:32:19
1	Si 251.611†	652.4	131.0	4.8753 ug/L	4.8753 ppb	07:32:19
1	Sn 189.927†	15.5	12.5	2.7808 ug/L	2.7808 ppb	07:32:19
1	Ti 334.940†	-906.7	171.0	0.2863 ug/L	0.2863 ppb	07:31:59
1	Tl 190.801†	-24.8	0.2	0.0645 ug/L	0.0645 ppb	07:32:19
1	U 409.014†	-1991.9	30.9	0.9106 ug/L	0.9106 ppb	07:31:59
1	V 292.402†	-1361.6	57.4	0.4481 ug/L	0.4481 ppb	07:31:59
1	Zn 213.857†	783.0	181.5	2.1557 ug/L	2.1557 ppb	07:32:19
1	SiO2†	1058.4	511.6	40.875 ug/L	40.875 ppb	07:33:15
2	Sc Radial	4065.1	4065.1	101 %		07:31:07
2	Y RADIAL	4376.5	4376.5	96.87 %		07:31:07
2	Al 396.153Radial†	-65.0	15.2	16.205 ug/L	16.205 ppb	07:31:27
2	Ca 317.933Radial†	28.5	11.1	22.586 ug/L	22.586 ppb	07:31:27
2	Fe 238.204 Radial†	7.0	-2.1	-25.976 ug/L	-25.976 ppb	07:31:27
2	K 766.490 Radial†	2503.8	-318.7	-63.633 ug/L	-63.633 ppb	07:31:07
2	Mg 279.077 IEC†	0.3	-0.4	-16.745 ug/L	-16.745 ppb	07:31:27
2	Na 589.592 Radial†	-421.0	43.1	16.944 ug/L	16.944 ppb	07:31:07
2	Sr 421.552†	47.3	-23.1	-0.1966 ug/L	-0.1966 ppb	07:31:07
2	Sc 361.383	830886.8	830886.8	98.932 %		07:32:24
2	Y 371.029	707489.6	707489.6	98.801 %		07:32:24
2	Ag 328.068†	192.1	-59.2	-0.3087 ug/L	-0.3087 ppb	07:32:24
2	As 188.979†	-19.3	1.3	0.7136 ug/L	0.7136 ppb	07:32:44
2	B 249.677†	-382.7	-136.7	-3.7510 ug/L	-3.7510 ppb	07:32:44
2	Ba 233.527†	6.2	-12.2	-0.1141 ug/L	-0.1141 ppb	07:32:44
2	Be 313.107†	-4447.1	-232.4	-0.0937 ug/L	-0.0937 ppb	07:32:24
2	Cd 226.502†	-175.3	-10.8	-0.1490 ug/L	-0.1490 ppb	07:32:44
2	Co 228.616†	-53.3	-14.9	-0.3900 ug/L	-0.3900 ppb	07:32:44
2	Cr 267.716†	104.3	10.4	0.1319 ug/L	0.1319 ppb	07:32:44
2	Cu 324.752†	6662.5	381.7	1.2339 ug/L	1.2339 ppb	07:32:24
2	Mn 257.610†	584.9	138.8	0.1802 ug/L	0.1802 ppb	07:32:44
2	Mo 202.031†	9.0	-5.1	-0.4514 ug/L	-0.4514 ppb	07:32:44
2	Ni 231.604†	73.1	-19.7	-0.6138 ug/L	-0.6138 ppb	07:32:44

2	P 214.914†	200.6	34.5	24.602 ug/L	24.602 ppb	07:32:44
2	Pb 220.353†	-50.5	7.8	1.1836 ug/L	1.1836 ppb	07:32:44
2	S 181.975 Axial†	33.3	9.2	16.198 ug/L	16.198 ppb	07:32:44
2	Sb 206.836†	31.1	4.8	2.0224 ug/L	2.0224 ppb	07:32:44
2	Se 196.026†	-23.0	-6.3	-5.0666 ug/L	-5.0666 ppb	07:32:44
2	Si 251.611†	623.4	104.7	3.9037 ug/L	3.9037 ppb	07:32:44
2	Sn 189.927†	6.5	3.5	0.7785 ug/L	0.7785 ppb	07:32:44
2	Ti 334.940†	-899.4	174.2	0.3022 ug/L	0.3022 ppb	07:32:24
2	Tl 190.801†	-33.5	-8.8	-3.3804 ug/L	-3.3804 ppb	07:32:44
2	U 409.014†	-1869.9	145.1	4.2718 ug/L	4.2718 ppb	07:32:24
2	V 292.402†	-1355.9	57.0	0.4444 ug/L	0.4444 ppb	07:32:24
2	Zn 213.857†	777.3	179.2	2.1353 ug/L	2.1353 ppb	07:32:44
2	SiO2†	697.1	151.3	12.100 ug/L	12.100 ppb	07:33:20
3	Sc Radial	4096.8	4096.8	102 %		07:31:32
3	Y RADIAL	4423.1	4423.1	97.90 %		07:31:32
3	Al 396.153Radial†	-69.6	11.2	11.863 ug/L	11.863 ppb	07:31:52
3	Ca 317.933Radial†	31.5	13.8	28.115 ug/L	28.115 ppb	07:31:52
3	Fe 238.204 Radial†	10.2	1.1	13.242 ug/L	13.242 ppb	07:31:52
3	K 766.490 Radial†	2459.2	-381.8	-76.239 ug/L	-76.239 ppb	07:31:32
3	Mg 279.077 IEC†	1.4	0.7	29.132 ug/L	29.132 ppb	07:31:52
3	Na 589.592 Radial†	-457.3	10.7	4.1836 ug/L	4.1836 ppb	07:31:32
3	Sr 421.552†	18.8	-51.5	-0.4391 ug/L	-0.4391 ppb	07:31:32
3	Sc 361.383	829447.6	829447.6	98.761 %		07:32:49
3	Y 371.029	706978.9	706978.9	98.730 %		07:32:49
3	Ag 328.068†	157.7	-93.7	-0.4704 ug/L	-0.4704 ppb	07:32:49
3	As 188.979†	-29.4	-8.9	-4.7914 ug/L	-4.7914 ppb	07:33:09
3	B 249.677†	-393.7	-148.5	-4.0821 ug/L	-4.0821 ppb	07:33:09
3	Ba 233.527†	21.2	3.0	0.0287 ug/L	0.0287 ppb	07:33:09
3	Be 313.107†	-4511.9	-305.8	-0.1236 ug/L	-0.1236 ppb	07:32:49
3	Cd 226.502†	-182.4	-18.3	-0.2589 ug/L	-0.2589 ppb	07:33:09
3	Co 228.616†	-47.8	-9.5	-0.2469 ug/L	-0.2469 ppb	07:33:09
3	Cr 267.716†	98.0	4.3	0.0560 ug/L	0.0560 ppb	07:33:09
3	Cu 324.752†	6734.0	465.7	1.5089 ug/L	1.5089 ppb	07:32:49
3	Mn 257.610†	610.9	166.1	0.2181 ug/L	0.2181 ppb	07:33:09
3	Mo 202.031†	21.5	7.6	0.6678 ug/L	0.6678 ppb	07:33:09
3	Ni 231.604†	64.4	-28.4	-0.8869 ug/L	-0.8869 ppb	07:33:09
3	P 214.914†	206.1	40.4	28.752 ug/L	28.752 ppb	07:33:09
3	Pb 220.353†	-49.4	8.8	1.3342 ug/L	1.3342 ppb	07:33:09
3	S 181.975 Axial†	33.6	9.7	16.954 ug/L	16.954 ppb	07:33:09
3	Sb 206.836†	29.6	3.3	1.4197 ug/L	1.4197 ppb	07:33:09
3	Se 196.026†	-31.1	-14.6	-11.565 ug/L	-11.565 ppb	07:33:09
3	Si 251.611†	641.9	124.5	4.6258 ug/L	4.6258 ppb	07:33:09
3	Sn 189.927†	0.5	-2.6	-0.5683 ug/L	-0.5683 ppb	07:33:09
3	Ti 334.940†	-937.0	134.6	0.2314 ug/L	0.2314 ppb	07:32:49
3	Tl 190.801†	-22.1	2.6	1.0282 ug/L	1.0282 ppb	07:33:09
3	U 409.014†	-1897.6	113.7	3.3443 ug/L	3.3443 ppb	07:32:49
3	V 292.402†	-1380.7	29.5	0.2416 ug/L	0.2416 ppb	07:32:49
3	Zn 213.857†	780.2	183.5	2.1819 ug/L	2.1819 ppb	07:33:09
3	SiO2†	638.1	92.8	7.3943 ug/L	7.3943 ppb	07:33:25

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	831668.4	99.025 %		0.3212			0.32%
Sc Radial	4230.5	105 %		6.4			6.14%
Y 371.029	708201.1	98.900 %		0.2366			0.24%
Y RADIAL	4559.7	100.9 %		6.15			6.10%
Ag 328.068†	-71.6	-0.3635 ug/L		0.09256	-0.3635 ppb	0.09256	25.46%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	13.9	14.850 ug/L		2.5906	14.850 ppb	2.5906	17.44%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	-3.5	-1.8944 ug/L		2.76384	-1.8944 ppb	2.76384	145.90%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	-136.4	-3.7474 ug/L		0.33648	-3.7474 ppb	0.33648	8.98%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	-7.8	-0.0728 ug/L		0.08835	-0.0728 ppb	0.08835	121.41%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	-259.3	-0.1047 ug/L		0.01651	-0.1047 ppb	0.01651	15.77%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	10.7	21.762 ug/L		6.8020	21.762 ppb	6.8020	31.26%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated									
Cd 226.502†	-10.5	-0.1471 ug/L	0.11275	-0.1471 ppb	0.11275	76.66%			
QC value within limits for Cd 226.502 Recovery = Not calculated									
Co 228.616†	-15.3	-0.3974 ug/L	0.15437	-0.3974 ppb	0.15437	38.85%			
QC value within limits for Co 228.616 Recovery = Not calculated									
Cr 267.716†	2.7	0.0340 ug/L	0.11053	0.0340 ppb	0.11053	325.05%			
QC value within limits for Cr 267.716 Recovery = Not calculated									
Cu 324.752†	431.8	1.3983 ug/L	0.14517	1.3983 ppb	0.14517	10.38%			
QC value within limits for Cu 324.752 Recovery = Not calculated									
Fe 238.204 Radial†	-0.3	-4.2021 ug/L	19.96457	-4.2021 ppb	19.96457	475.11%			
QC value within limits for Fe 238.204 Radial Recovery = Not calculated									
K 766.490 Radial†	-439.1	-87.670 ug/L	31.3560	-87.670 ppb	31.3560	35.77%			
QC value within limits for K 766.490 Radial Recovery = Not calculated									
Mg 279.077 IEC†	1.0	42.912 ug/L	67.6076	42.912 ppb	67.6076	157.55%			
QC value within limits for Mg 279.077 IEC Recovery = Not calculated									
Mn 257.610†	158.7	0.2061 ug/L	0.02242	0.2061 ppb	0.02242	10.88%			
QC value within limits for Mn 257.610 Recovery = Not calculated									
Mo 202.031†	1.3	0.1117 ug/L	0.55966	0.1117 ppb	0.55966	500.87%			
QC value within limits for Mo 202.031 Recovery = Not calculated									
Na 589.592 Radial†	39.5	15.523 ug/L	10.6997	15.523 ppb	10.6997	68.93%			
QC value within limits for Na 589.592 Radial Recovery = Not calculated									
Ni 231.604†	-19.4	-0.6061 ug/L	0.28468	-0.6061 ppb	0.28468	46.97%			
QC value within limits for Ni 231.604 Recovery = Not calculated									
P 214.914†	39.6	28.189 ug/L	3.3410	28.189 ppb	3.3410	11.85%			
QC value within limits for P 214.914 Recovery = Not calculated									
Pb 220.353†	7.2	1.0918 ug/L	0.29903	1.0918 ppb	0.29903	27.39%			
QC value within limits for Pb 220.353 Recovery = Not calculated									
S 181.975 Axial†	10.5	18.381 ug/L	3.1478	18.381 ppb	3.1478	17.13%			
QC value within limits for S 181.975 Axial Recovery = Not calculated									
Sb 206.836†	6.4	2.7499 ug/L	1.80738	2.7499 ppb	1.80738	65.72%			
QC value within limits for Sb 206.836 Recovery = Not calculated									
Se 196.026†	-8.4	-6.6992 ug/L	4.28934	-6.6992 ppb	4.28934	64.03%			
QC value within limits for Se 196.026 Recovery = Not calculated									
Si 251.611†	120.0	4.4683 ug/L	0.50462	4.4683 ppb	0.50462	11.29%			
QC value within limits for Si 251.611 Recovery = Not calculated									
Sn 189.927†	4.5	0.9970 ug/L	1.68522	0.9970 ppb	1.68522	169.03%			
QC value within limits for Sn 189.927 Recovery = Not calculated									
Sr 421.552†	-32.8	-0.2799 ug/L	0.13792	-0.2799 ppb	0.13792	49.27%			
QC value within limits for Sr 421.552 Recovery = Not calculated									
Ti 334.940†	159.9	0.2733 ug/L	0.03714	0.2733 ppb	0.03714	13.59%			
QC value within limits for Ti 334.940 Recovery = Not calculated									
Tl 190.801†	-2.0	-0.7626 ug/L	2.31772	-0.7626 ppb	2.31772	303.93%			
QC value within limits for Tl 190.801 Recovery = Not calculated									
U 409.014†	96.6	2.8423 ug/L	1.73597	2.8423 ppb	1.73597	61.08%			
QC value within limits for U 409.014 Recovery = Not calculated									
V 292.402†	48.0	0.3780 ug/L	0.11816	0.3780 ppb	0.11816	31.26%			
QC value within limits for V 292.402 Recovery = Not calculated									
Zn 213.857†	181.4	2.1576 ug/L	0.02338	2.1576 ppb	0.02338	1.08%			
QC value within limits for Zn 213.857 Recovery = Not calculated									
SiO2†	251.9	20.123 ug/L	18.1249	20.123 ppb	18.1249	90.07%			
QC value within limits for SiO2 Recovery = Not calculated									

All analyte(s) passed QC.

ICPMS #5 Daily Performance Report

Sample ID: Sample

Sample Date/Time: Sunday, April 11, 2010 12:25:51

Sample Description:

Method File: c:\elandata\Method\Daily2.mth

Dataset File: c:\elandata\Dataset\default\Sample.1043

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		3223.8		3223.764		50.641		1.6
Mg	24.0		89591.9		89591.887		1041.216		1.2
Co	58.9		77961.8		77961.763		628.495		0.8
Rh	102.9		143543.8		143543.773		594.571		0.4
In	114.9		197887.8		197887.795		1158.717		0.6
Pb	208.0		229905.9		229905.890		1624.773		0.7
[> Ba	137.9		191326.2		191326.179		1418.614		0.7
[Ba++	69.0		2760.8		0.014		0.000		1.7
[> Ce	139.9		235666.5		235666.484		2198.898		0.9
[CeO	155.9		4920.4		0.021		0.000		1.4
Bkgd	220.0		21.9		21.900		3.305		15.1

Current Optimization File Data

Current Value	Description
0.86	Nebulizer Gas Flow
6.75	Lens Voltage
1450.00	ICP RF Power
-1812.50	Analog Stage Voltage
1300.00	Pulse Stage Voltage
200.00	Discriminator Threshold
-6.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	21	8.5	4298.3
Co	59	21	9.3	70972.2
In	115	21	10.3	196918.6

ICPMS #5 Instrument Tuning Report

File Name: 100411.tun
File Path: C:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	599	2072	0.544
Be	9.0	9.0	2060	2088	0.571
Mg	24.0	24.0	5695	2100	0.538
Mg	25.0	25.0	5935	2100	0.530
Mg	26.0	26.0	6181	2100	0.543
Co	58.9	58.9	14189	2125	0.561
Rh	102.9	102.9	24872	2180	0.569
In	114.9	114.9	27788	2200	0.570
Ce	139.9	139.9	33870	2220	0.574
Pb	206.0	206.0	49948	2305	0.576
Pb	207.0	207.0	50171	2240	0.633
Pb	208.0	208.0	50451	2280	0.689
U	238.1	238.0	57732	2295	0.690

ICPMS#5 - Summary Report

Sample ID: Blank

Sample Date/Time: Sunday, April 11, 2010 21:42:33

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\Vanl soil 2.mth

Dataset File: C:\elandata\Dataset\100411\Blank.140

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		782204	
[Ni	60		ug/L		93	
[> Ge	74		ug/L		320155	
| As	75		ug/L		1	
| Se	77		ug/L		3403	
| Se	82		ug/L		16	
[Kr	83		ug/L		71	
[> Lu	175		ug/L		488234	
| Tl	205		ug/L		1304	
[U	238		ug/L		117	

Sample ID: Blank

Report Date/Time: Sunday, April 11, 2010 21:43:16

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % 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						
[	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: Sunday, April 11, 2010 21:45:38

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl soil 2.mth

Dataset File: C:\elandata\Dataset\100411\Standard 1.141

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	10.000	ug/L	4.226	3420	0.004
|>	Sc	45		ug/L		808560	808559.720
[	Ni	60	10.000	ug/L	1.462	10875	0.013
[>	Ge	74		ug/L		329664	329664.083
|	As	75	10.000	ug/L	1.147	8059	0.024
|	Se	77		ug/L		4311	0.002
|	Se	82	10.000	ug/L	4.215	829	0.002
[	Kr	83		ug/L		80	0.000
[>	Lu	175		ug/L		508278	508278.232
|	Tl	205	10.000	ug/L	2.038	200077	0.391
[	U	238	10.000	ug/L	0.220	480945	0.946

Sample ID: Standard 1

Report Date/Time: Sunday, April 11, 2010 21:46:19

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	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9					
[>	Sc	45					
[	Ni	60					
[>	Ge	74					
[	As	75					
[	Se	77					
[	Se	82					
[	Kr	83					
[>	Lu	175					
[	Tl	205					
[	U	238					

QC Out Of Limits

Measurement Type Analyte 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: Sunday, April 11, 2010 21:48:41

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl soil 2.mth

Dataset File: C:\elandata\Dataset\100411\Standard 2.142

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	99.984	ug/L	1.670	34581	0.041
[>	Sc	45		ug/L		833402	833401.631
[	Ni	60	99.989	ug/L	1.865	109923	0.132
[>	Ge	74		ug/L		344279	344278.538
|	As	75	100.027	ug/L	1.672	86471	0.251
|	Se	77		ug/L		9875	0.018
|	Se	82	100.045	ug/L	1.488	8913	0.026
[	Kr	83		ug/L		97	0.000
[>	Lu	175		ug/L		506487	506487.275
|	Tl	205	99.917	ug/L	0.801	1827672	3.606
[	U	238	99.924	ug/L	1.333	4449234	8.785

Sample ID: Standard 2

Report Date/Time: Sunday, April 11, 2010 21:49:22

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
U	238Linear 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					
[U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Sunday, April 11, 2010 21:51:45

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl soil 2.mth

Dataset File: C:\elandata\Dataset\100411\QC Std 1.143

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	51.099	ug/L	1.229	17954	0.021
|>	Sc	45		ug/L		846226	846225.642
[	Ni	60	52.731	ug/L	1.169	58911	0.069
[>	Ge	74		ug/L		346066	346065.880
|	As	75	51.920	ug/L	0.851	45121	0.130
|	Se	77		ug/L		6898	0.009
|	Se	82	52.011	ug/L	1.960	4666	0.013
[	Kr	83		ug/L		86	0.000
[>	Lu	175		ug/L		507402	507401.847
|	Ti	205	53.455	ug/L	1.534	980194	1.929
[	U	238	53.039	ug/L	0.370	2366043	4.663

Sample ID: QC Std 1

Report Date/Time: Sunday, April 11, 2010 21:52:26

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
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[	Be	9	102.198				
|>	Sc	45		108.2			
[	Ni	60	105.462				
[>	Ge	74		108.1			
|	As	75	103.840				
|	Se	77					
|	Se	82	104.022				
[	Kr	83					
[>	Lu	175		103.9			
|	Tl	205	106.910				
[	U	238	106.078				

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Sunday, April 11, 2010 21:54:51

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\ani soil 2.mth

Dataset File: C:\elandata\Dataset\100411\QC Std 2.144

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	-0.009	ug/L	71.871	12	-0.000
[>	Sc	45		ug/L		841057	841057.038
[	Ni	60	-0.012	ug/L	125.015	87	-0.000
[>	Ge	74		ug/L		345294	345293.749
[	As	75	-0.119	ug/L	108.236	-101	-0.000
[	Se	77		ug/L		4025	0.001
[	Se	82	-0.023	ug/L	167.869	16	-0.000
[	Kr	83		ug/L		81	0.000
[>	Lu	175		ug/L		509716	509716.327
[	Tl	205	0.141	ug/L	7.546	3946	0.005
[	U	238	0.003	ug/L	23.443	262	0.000

Sample ID: QC Std 2

Report Date/Time: Sunday, April 11, 2010 21:55:34

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
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[	Be	9						
[>	Sc	45			107.5			
[	Ni	60						
[>	Ge	74			107.9			
|	As	75						
|	Se	77						
|	Se	82						
[	Kr	83						
[>	Lu	175			104.4			
|	Tl	205						
[U	238						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Sunday, April 11, 2010 21:57:57

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl soil 2.mth

Dataset File: C:\elandata\Dataset\100411\QC Std 3.145

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	0.559	ug/L	5.179	210	0.000
[> Sc	45		ug/L		839903	839903.332
[Ni	60	2.336	ug/L	2.474	2686	0.003
[> Ge	74		ug/L		344781	344781.302
[As	75	5.707	ug/L	1.829	4942	0.014
[Se	77		ug/L		3720	0.000
[Se	82	5.566	ug/L	3.966	513	0.001
[Kr	83		ug/L		79	0.000
[> Lu	175		ug/L		504876	504876.235
[Tl	205	1.297	ug/L	1.936	24988	0.047
[U	238	0.320	ug/L	0.763	14343	0.028

Sample ID: QC Std 3

Report Date/Time: Sunday, April 11, 2010 21:58:38

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
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9	111.756				
|>	Sc	45		107.4			
[	Ni	60	116.804				
|>	Ge	74		107.7			
|	As	75	114.134				
|	Se	77					
|	Se	82	111.311				
[	Kr	83					
|>	Lu	175		103.4			
|	Tl	205	129.743				
[	U	238	160.218				

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: Sunday, April 11, 2010 22:01:01

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\ani soil 2.mth

Dataset File: C:\elandata\Dataset\100411\QC Std 4.146

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.104	ug/L	15.606	51	0.000
|>	Sc	45		ug/L		830533	830533.415
[	Ni	60	2.982	ug/L	3.035	3362	0.004
[>	Ge	74		ug/L		339531	339531.200
|	As	75	0.024	ug/L	4275.709	25	0.000
|	Se	77		ug/L		6228	0.008
|	Se	82	-1.509	ug/L	18.868	-115	-0.000
[	Kr	83		ug/L		247	0.001
[>	Lu	175		ug/L		482283	482282.717
|	Ti	205	0.011	ug/L	33.748	1478	0.000
[U	238	0.001	ug/L	40.202	170	0.000

Sample ID: QC Std 4

Report Date/Time: Sunday, April 11, 2010 22:01:42

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[	Be	9						
|>	Sc	45			106.2			
[	Ni	60	90.085					
|>	Ge	74			106.1			
|	As	75						
|	Se	77						
|	Se	82						
[	Kr	83						
|>	Lu	175			98.8			
|	Tl	205						
[	U	238						

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Sunday, April 11, 2010 22:04:06

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\Vanl soil 2.mth

Dataset File: C:\elandata\Dataset\100411\QC Std 5.147

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	18.568	ug/L	0.719	6348	0.008
|>	Sc	45		ug/L		821970	821970.063
[	Ni	60	22.014	ug/L	2.705	23940	0.029
[>	Ge	74		ug/L		338228	338228.428
|	As	75	19.323	ug/L	2.963	16410	0.049
|	Se	77		ug/L		7443	0.011
|	Se	82	17.450	ug/L	3.799	1541	0.005
[	Kr	83		ug/L		237	0.000
[>	Lu	175		ug/L		483363	483363.196
|	Tl	205	19.334	ug/L	1.281	338547	0.698
[U	238	21.094	ug/L	0.094	896497	1.854

Sample ID: QC Std 5

Report Date/Time: Sunday, April 11, 2010 22:04:47

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9	92.838				
|>	Sc	45		105.1			
[	Ni	60	94.439				
|>	Ge	74		105.6			
|	As	75	96.614				
|	Se	77					
|	Se	82	87.248				
[	Kr	83					
|>	Lu	175		99.0			
|	Tl	205	96.670				
[	U	238	105.471				

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: Sunday, April 11, 2010 22:07:11

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\Nani soil 2.mth

Dataset File: C:\elandata\Dataset\100411\QC Std 6.148

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	49.715	ug/L	2.829	17639	0.021
[>	Sc	45		ug/L		854720	854720.226
[	Ni	60	54.101	ug/L	2.135	61026	0.071
[>	Ge	74		ug/L		355099	355099.352
|	As	75	51.917	ug/L	2.292	46298	0.130
|	Se	77		ug/L		7996	0.012
|	Se	82	51.340	ug/L	1.262	4727	0.013
[	Kr	83		ug/L		97	0.000
[>	Lu	175		ug/L		509712	509712.473
|	Tl	205	52.623	ug/L	0.682	969371	1.899
[U	238	52.791	ug/L	0.731	2365787	4.641

Sample ID: QC Std 6

Report Date/Time: Sunday, April 11, 2010 22:07:53

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9	99.429				
[>	Sc	45		109.3			
[	Ni	60	108.203				
[>	Ge	74		110.9			
|	As	75	103.834				
|	Se	77					
|	Se	82	102.680				
[	Kr	83					
[>	Lu	175		104.4			
|	Tl	205	105.245				
[	U	238	105.583				

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: Sunday, April 11, 2010 22:10:18

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\Nanl soil 2.mth

Dataset File: C:\elandata\Dataset\100411\QC Std 7.149

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.009	ug/L	59.893	19	0.000
[>	Sc	45		ug/L		859191	859190.839
[	Ni	60	-0.005	ug/L	249.023	96	-0.000
[>	Ge	74		ug/L		352844	352844.146
[	As	75	-0.104	ug/L	85.075	-90	-0.000
[	Se	77		ug/L		5298	0.004
[	Se	82	-0.038	ug/L	455.842	15	-0.000
[	Kr	83		ug/L		86	0.000
[>	Lu	175		ug/L		496622	496622.250
[	Tl	205	0.186	ug/L	8.960	4658	0.007
[	U	238	0.003	ug/L	10.359	243	0.000

Sample ID: QC Std 7

Report Date/Time: Sunday, April 11, 2010 22:11:01

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	
Ti	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate	Rel. % Difference
[	Be	9						
[>	Sc	45		109.8				
[	Ni	60						
[>	Ge	74		110.2				
|	As	75						
|	Se	77						
|	Se	82						
[	Kr	83						
[>	Lu	175		101.7				
|	Tl	205						
[U	238						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202056848

Sample Date/Time: Sunday, April 11, 2010 22:13:24

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 959103|2|prb

Method File: c:\elandata\Method\lanl soil 2.mth

Dataset File: C:\elandata\Dataset\100411\1202056848.150

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.012	ug/L	106.415	20	0.000
[>	Sc	45		ug/L		862560	862559.678
[	Ni	60	0.261	ug/L	5.436	400	0.000
[>	Ge	74		ug/L		344747	344746.517
|	As	75	-0.194	ug/L	163.097	-167	-0.000
|	Se	77		ug/L		4084	0.001
|	Se	82	-0.128	ug/L	105.792	6	-0.000
[	Kr	83		ug/L		91	0.000
[>	Lu	175		ug/L		502838	502838.179
|	Tl	205	0.073	ug/L	2.353	2667	0.003
[U	238	0.009	ug/L	6.770	528	0.001

Sample ID: 1202056848

Report Date/Time: Sunday, April 11, 2010 22:14:05

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9					
[>	Sc	45		110.3			
[	Ni	60					
[>	Ge	74		107.7			
|	As	75					
|	Se	77					
|	Se	82					
[	Kr	83					
[>	Lu	175		103.0			
|	Tl	205					
[	U	238					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202056853

Sample Date/Time: Sunday, April 11, 2010 22:16:28

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 959103|40|prb

Method File: c:\elandata\Method\lanl soil 2.mth

Dataset File: C:\elandata\Dataset\100411\1202056853.151

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	21.419	ug/L	1.379	8063	0.009
[>	Sc	45		ug/L		905241	905240.509
[	Ni	60	40.524	ug/L	1.055	48451	0.053
[>	Ge	74		ug/L		367880	367879.914
|	As	75	29.720	ug/L	3.220	27455	0.075
|	Se	77		ug/L		10802	0.019
|	Se	82	80.257	ug/L	2.769	7644	0.021
[	Kr	83		ug/L		90	0.000
[>	Lu	175		ug/L		525451	525450.793
|	Tl	205	35.826	ug/L	0.792	680769	1.293
[	U	238	0.571	ug/L	0.501	26503	0.050

Sample ID: 1202056853

Report Date/Time: Sunday, April 11, 2010 22:17:09

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
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[	Be	9						
[>	Sc	45		115.7				
[	Ni	60						
[>	Ge	74		114.9				
[	As	75						
[	Se	77						
[	Se	82						
[	Kr	83						
[>	Lu	175		107.6				
[	Tl	205						
[	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: 1202056849

Sample Date/Time: Sunday, April 11, 2010 22:22:36

Sample Type:

Sample Description: LANL 6020 DUP

Number of Replicates: 3

Batch ID: 959103|2|prb

Method File: c:\elandata\Method\lanl soil 2.mth

Dataset File: C:\elandata\Dataset\100411\1202056849.153

Concentration Results

	Analyte	Mass	Conc.	Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	1.538	ug/L	5.595	555	0.001
[>	Sc	45		ug/L		846148	846147.703	
[	Ni	60	10.274	ug/L	3.454	11552	0.014
[>	Ge	74		ug/L		337292	337291.553	
|	As	75	2.093	ug/L	17.202	1776	0.005	
|	Se	77		ug/L		3083	-0.001	
|	Se	82	0.302	ug/L	86.606	44	0.000	
[	Kr	83		ug/L		169	0.000
[>	Lu	175		ug/L		540205	540204.845	
|	Tl	205	0.339	ug/L	3.955	8057	0.012	
[	U	238	2.457	ug/L	0.915	116822	0.216

Sample ID: 1202056849

Report Date/Time: Sunday, April 11, 2010 22:23:17

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
U	238Linear 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		108.2				
[	Ni	60						
[>	Ge	74		105.4				
|	As	75						
|	Se	77						
|	Se	82						
[	Kr	83						
[>	Lu	175		110.6				
|	Tl	205						
[	U	238						

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202056851

Sample Date/Time: Sunday, April 11, 2010 22:25:41

Sample Type:

Sample Description: LANL 6020 MS

Number of Replicates: 3

Batch ID: 959103|2|prb

Method File: c:\elandata\Method\lanl soil 2.mth

Dataset File: C:\elandata\Dataset\100411\1202056851.154

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	25.214	ug/L	1.259	8592	0.010
|>	Sc	45		ug/L		819802	819801.717
[	Ni	60	31.944	ug/L	1.556	34612	0.042
[>	Ge	74		ug/L		328100	328100.331
|	As	75	37.865	ug/L	0.828	31198	0.095
|	Se	77		ug/L		3406	-0.000
|	Se	82	8.645	ug/L	3.937	750	0.002
[	Kr	83		ug/L		163	0.000
[>	Lu	175		ug/L		538163	538162.649
|	Tl	205	45.942	ug/L	2.457	893416	1.658
[	U	238	27.433	ug/L	2.915	1297520	2.412

Sample ID: 1202056851

Report Date/Time: Sunday, April 11, 2010 22:26:22

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
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[	Be	9						
[>	Sc	45			104.8			
[	Ni	60						
[>	Ge	74			102.5			
|	As	75						
|	Se	77						
|	Se	82						
[	Kr	83						
[>	Lu	175			110.2			
|	Tl	205						
[	U	238						

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202056852

Sample Date/Time: Sunday, April 11, 2010 22:28:46

Sample Type:

Sample Description: LANL 6020 MSD

Number of Replicates: 3

Batch ID: 959103|2|prb

Method File: c:\elandata\Method\lanl soil 2.mth

Dataset File: C:\elandata\Dataset\100411\1202056852.155

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	25.248	ug/L	2.107	8461	0.010
[>	Sc	45		ug/L		806377	806377.401
[	Ni	60	30.141	ug/L	2.290	32125	0.040
[>	Ge	74		ug/L		323161	323160.637
|	As	75	37.056	ug/L	1.130	30074	0.093
|	Se	77		ug/L		3292	-0.000
|	Se	82	7.954	ug/L	5.082	680	0.002
[	Kr	83		ug/L		168	0.000
[>	Lu	175		ug/L		535040	535039.664
|	Tl	205	44.998	ug/L	1.412	870211	1.624
[	U	238	27.434	ug/L	2.128	1290350	2.412

Sample ID: 1202056852

Report Date/Time: Sunday, April 11, 2010 22:29:27

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	1.0000
U	238Linear 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		103.1			
[	Ni	60					
|>	Ge	74		100.9			
|	As	75					
|	Se	77					
|	Se	82					
[	Kr	83					
|>	Lu	175		109.6			
|	Tl	205					
[	U	238					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202056850

Sample Date/Time: Sunday, April 11, 2010 22:31:51

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 959103|10|prb

Method File: c:\elandata\Method\lanl soil 2.mth

Dataset File: C:\elandata\Dataset\100411\1202056850.156

Concentration Results

	Analyte	Mass	Conc.	Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.340		ug/L	9.149	126	0.000
[>	Sc	45			ug/L		792441	792440.759
[	Ni	60	1.503		ug/L	2.625	1663	0.002
[>	Ge	74			ug/L		330125	330124.569
|	As	75	0.343		ug/L	67.617	286	0.001
|	Se	77			ug/L		3603	0.000
|	Se	82	0.024		ug/L	550.860	19	0.000
[	Kr	83			ug/L		93	0.000
[>	Lu	175			ug/L		507362	507362.117
|	Tl	205	0.318		ug/L	5.197	7182	0.011
[	U	238	0.600		ug/L	1.408	26878	0.053

Sample ID: 1202056850

Report Date/Time: Sunday, April 11, 2010 22:32:33

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	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[	Be	9						
[>	Sc	45		101.3				
[	Ni	60						
[>	Ge	74		103.1				
|	As	75						
|	Se	77						
|	Se	82						
[	Kr	83						
[>	Lu	175		103.9				
|	Tl	205						
[	U	238						

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Sunday, April 11, 2010 22:34:57

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\Nani solI 2.mth

Dataset File: C:\elandata\Dataset\100411\QC Std 8.157

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	52.131	ug/L	0.422	17250	0.022
[> Sc	45		ug/L		796864	796863.562
[Ni	60	53.884	ug/L	3.480	56652	0.071
[> Ge	74		ug/L		336916	336916.116
[As	75	51.525	ug/L	2.327	43595	0.129
[Se	77		ug/L		7114	0.010
[Se	82	51.535	ug/L	3.716	4501	0.013
[Kr	83		ug/L		97	0.000
[> Lu	175		ug/L		499603	499602.908
[Tl	205	53.126	ug/L	1.005	959198	1.917
[U	238	53.088	ug/L	1.518	2331669	4.667

Sample ID: QC Std 8

Report Date/Time: Sunday, April 11, 2010 22:35:39

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
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9	104.261				
[>	Sc	45		101.9			
[	Ni	60	107.769				
[>	Ge	74		105.2			
|	As	75	103.049				
|	Se	77					
|	Se	82	103.071				
[	Kr	83					
[>	Lu	175		102.3			
|	Tl	205	106.252				
[	U	238	106.177				

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: Sunday, April 11, 2010 22:38:04

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\Nani soil 2.mth

Dataset File: C:\elandata\Dataset\100411\QC Std 9.158

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.007	ug/L	134.113	17	0.000
[>	Sc	45		ug/L		806753	806753.498
[	Ni	60	-0.015	ug/L	35.369	80	-0.000
[>	Ge	74		ug/L		339643	339643.476
[	As	75	-0.210	ug/L	72.709	-177	-0.001
[	Se	77		ug/L		4490	0.003
[	Se	82	-0.044	ug/L	312.407	14	-0.000
[	Kr	83		ug/L		86	0.000
[>	Lu	175		ug/L		503258	503257.746
[	Tl	205	0.209	ug/L	5.949	5146	0.008
[	U	238	0.003	ug/L	23.018	264	0.000

Sample ID: QC Std 9

Report Date/Time: Sunday, April 11, 2010 22:38:46

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
U	238Linear 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			103.1			
[	Ni	60						
[>	Ge	74			106.1			
|	As	75						
|	Se	77						
|	Se	82						
[	Kr	83						
[>	Lu	175			103.1			
|	Tl	205						
[U	238						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Sunday, April 11, 2010 23:05:49

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\Nanl soil 2.mth

Dataset File: C:\elandata\Dataset\100411\QC Std 8.167

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	53.836	ug/L	1.005	16521	0.022
[>	Sc	45		ug/L		739076	739076.239
[	Ni	60	52.858	ug/L	1.811	51577	0.070
[>	Ge	74		ug/L		311690	311690.003
|	As	75	51.080	ug/L	1.477	39978	0.128
|	Se	77		ug/L		5733	0.008
|	Se	82	51.660	ug/L	1.738	4174	0.013
[	Kr	83		ug/L		81	0.000
[>	Lu	175		ug/L		483904	483903.509
|	Tl	205	53.436	ug/L	2.057	934330	1.928
[	U	238	54.338	ug/L	1.347	2311456	4.777

Sample ID: QC Std 8

Report Date/Time: Sunday, April 11, 2010 23:06:31

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	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9	107.673				
[>	Sc	45		94.5			
[	Ni	60	105.716				
[>	Ge	74		97.4			
|	As	75	102.160				
|	Se	77					
|	Se	82	103.320				
[	Kr	83					
[>	Lu	175		99.1			
|	Tl	205	106.873				
[	U	238	108.677				

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: Sunday, April 11, 2010 23:08:56

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\ani soil 2.mth

Dataset File: C:\elandata\Dataset\100411\QC Std 9.168

Concentration Results

	Analyte	Mass	Conc.	Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.021		ug/L	82.686	20	0.000
[>	Sc	45			ug/L		736933	736933.188
[	Ni	60	-0.009		ug/L	77.830	79	-0.000
[>	Ge	74			ug/L		307935	307934.877
|	As	75	-0.076		ug/L	255.491	-57	-0.000
|	Se	77			ug/L		3285	0.000
|	Se	82	0.024		ug/L	302.076	18	0.000
[	Kr	83			ug/L		81	0.000
[>	Lu	175			ug/L		478038	478037.670
|	Tl	205	0.139		ug/L	9.685	3666	0.005
[	U	238	0.005		ug/L	6.346	308	0.000

Sample ID: QC Std 9

Report Date/Time: Sunday, April 11, 2010 23:09:39

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
U	238Linear 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			94.2			
[	Ni	60						
|>	Ge	74			96.2			
|	As	75						
|	Se	77						
|	Se	82						
[	Kr	83						
|>	Lu	175			97.9			
|	Tl	205						
[	U	238						

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 248041001

Sample Date/Time: Sunday, April 11, 2010 23:21:17

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 959103|2|prb

Method File: c:\elandata\Method\lanl soil 2.mth

Dataset File: C:\elandata\Dataset\100411\248041001.172

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	5.539	ug/L	3.618	1872	0.002
|>	Sc	45		ug/L		808252	808251.645
[	Ni	60	43.409	ug/L	3.464	46317	0.057
|>	Ge	74		ug/L		298513	298512.879
|	As	75	9.493	ug/L	0.957	7118	0.024
|	Se	77		ug/L		2221	-0.003
|	Se	82	-1.259	ug/L	4.696	-82	-0.000
[	Kr	83		ug/L		244	0.001
|>	Lu	175		ug/L		498686	498686.225
|	Tl	205	1.011	ug/L	2.963	19530	0.036
[	U	238	18.343	ug/L	1.652	804274	1.613

Sample ID: 248041001

Report Date/Time: Sunday, April 11, 2010 23:21:59

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
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9					
[>	Sc	45		103.3			
[	Ni	60					
[>	Ge	74		93.2			
|	As	75					
|	Se	77					
|	Se	82					
[	Kr	83					
[>	Lu	175		102.1			
|	Tl	205					
[	U	238					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 248041002

Sample Date/Time: Sunday, April 11, 2010 23:24:22

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 959103|2|prb

Method File: c:\elandata\Method\lanl soil 2.mth

Dataset File: C:\elandata\Dataset\100411\248041002.173

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	4.742	ug/L	2.813	1558	0.002
[>	Sc	45		ug/L		784256	784255.942
[	Ni	60	35.950	ug/L	3.123	37229	0.047
[>	Ge	74		ug/L		297070	297070.348
|	As	75	8.391	ug/L	4.899	6262	0.021
|	Se	77		ug/L		2080	-0.004
|	Se	82	-0.728	ug/L	73.943	-40	-0.000
[	Kr	83		ug/L		209	0.000
[>	Lu	175		ug/L		492733	492732.526
|	Tl	205	0.857	ug/L	2.453	16551	0.031
[	U	238	32.360	ug/L	2.375	1401555	2.845

Sample ID: 248041002

Report Date/Time: Sunday, April 11, 2010 23:25:04

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
U	238Linear 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		100.3			
[	Ni	60					
[>	Ge	74		92.8			
|	As	75					
|	Se	77					
|	Se	82					
[	Kr	83					
[>	Lu	175		100.9			
|	Tl	205					
[	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: 248041003

Sample Date/Time: Sunday, April 11, 2010 23:27:28

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 959103|2|prb

Method File: c:\elandata\Method\lanl soil 2.mth

Dataset File: C:\elandata\Dataset\100411\248041003.174

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	4.473	ug/L	3.945	1478	0.002
[>	Sc	45		ug/L		789065	789064.587
[	Ni	60	33.088	ug/L	1.960	34493	0.044
[>	Ge	74		ug/L		296785	296785.240
|	As	75	8.764	ug/L	2.374	6531	0.022
|	Se	77		ug/L		2002	-0.004
|	Se	82	-0.877	ug/L	45.213	-52	-0.000
[	Kr	83		ug/L		222	0.001
[>	Lu	175		ug/L		489425	489425.202
|	Tl	205	0.763	ug/L	1.871	14788	0.028
[	U	238	37.248	ug/L	1.808	1602764	3.275

Sample ID: 248041003

Report Date/Time: Sunday, April 11, 2010 23:28:10

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	1.0000
U	238Linear 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		100.9			
L	Ni	60					
[>	Ge	74		92.7			
|	As	75					
|	Se	77					
|	Se	82					
L	Kr	83					
[>	Lu	175		100.2			
|	Tl	205					
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: 248041004

Sample Date/Time: Sunday, April 11, 2010 23:30:33

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 959103|2|prb

Method File: c:\elandata\Method\Nani soil 2.mth

Dataset File: C:\elandata\Dataset\100411\248041004.175

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	3.953	ug/L	3.688	1338	0.002
[>	Sc	45		ug/L		807104	807103.701
[	Ni	60	35.909	ug/L	2.041	38280	0.047
[>	Ge	74		ug/L		299388	299388.062
|	As	75	6.497	ug/L	4.278	4886	0.016
|	Se	77		ug/L		2047	-0.004
|	Se	82	-0.830	ug/L	17.564	-49	-0.000
[	Kr	83		ug/L		209	0.000
[>	Lu	175		ug/L		502398	502397.667
|	Tl	205	0.511	ug/L	2.101	10603	0.018
[	U	238	4.701	ug/L	1.889	207744	0.413

Sample ID: 248041004

Report Date/Time: Sunday, April 11, 2010 23:31:15

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
U	238Linear Thru Zero	1.0000

Sample ID: 248041004

Report Date/Time: Sunday, April 11, 2010 23:31:15

Page 2

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9					
[>	Sc	45		103.2			
[	Ni	60					
[>	Ge	74		93.5			
|	As	75					
|	Se	77					
|	Se	82					
[	Kr	83					
[>	Lu	175		102.9			
|	Tl	205					
[	U	238					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 248041005

Sample Date/Time: Sunday, April 11, 2010 23:33:39

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 959103|2|prb

Method File: c:\elandata\Method\lanl soil 2.mth

Dataset File: C:\elandata\Dataset\100411\248041005.176

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	5.548	ug/L	2.291	1818	0.002
| >	Sc	45		ug/L		783964	783963.654
[	Ni	60	36.890	ug/L	1.485	38197	0.049
| >	Ge	74		ug/L		297295	297295.122
|	As	75	10.201	ug/L	3.734	7615	0.026
|	Se	77		ug/L		2002	-0.004
|	Se	82	-1.301	ug/L	17.039	-85	-0.000
[	Kr	83		ug/L		259	0.001
| >	Lu	175		ug/L		484107	484107.195
|	Tl	205	0.944	ug/L	2.440	17789	0.034
[	U	238	24.128	ug/L	0.250	1026978	2.121

Sample ID: 248041005

Report Date/Time: Sunday, April 11, 2010 23:34:21

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
U	238Linear 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		100.2			
[	Ni	60					
|>	Ge	74		92.9			
|	As	75					
|	Se	77					
|	Se	82					
[	Kr	83					
|>	Lu	175		99.2			
|	Tl	205					
[	U	238					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Sunday, April 11, 2010 23:36:45

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl soil 2.mth

Dataset File: C:\elandata\Dataset\100411\QC Std 8.177

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	54.382	ug/L	2.305	17220	0.023
[>	Sc	45		ug/L		762874	762873.667
[	Ni	60	52.786	ug/L	1.298	53153	0.070
[>	Ge	74		ug/L		316928	316927.832
[	As	75	52.129	ug/L	1.877	41490	0.131
[	Se	77		ug/L		5756	0.008
[	Se	82	51.507	ug/L	1.315	4232	0.013
[	Kr	83		ug/L		104	0.000
[>	Lu	175		ug/L		485417	485416.944
[	Tl	205	53.831	ug/L	0.756	944353	1.943
[	U	238	54.503	ug/L	0.923	2326045	4.792

Sample ID: QC Std 8

Report Date/Time: Sunday, April 11, 2010 23:37:26

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
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9	108.763				
[>	Sc	45		97.5			
[	Ni	60	105.572				
[>	Ge	74		99.0			
|	As	75	104.258				
|	Se	77					
|	Se	82	103.015				
[	Kr	83					
[>	Lu	175		99.4			
|	Tl	205	107.662				
[	U	238	109.006				

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: Sunday, April 11, 2010 23:39:51

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\ani soil 2.mth

Dataset File: C:\elandata\Dataset\100411\QC Std 9.178

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.012	ug/L	16.538	18	0.000
[>	Sc	45		ug/L		771234	771234.408
[	Ni	60	-0.007	ug/L	97.919	85	-0.000
[>	Ge	74		ug/L		319292	319291.631
|	As	75	0.003	ug/L	5859.472	3	0.000
|	Se	77		ug/L		2947	-0.001
|	Se	82	-0.113	ug/L	129.423	7	-0.000
[	Kr	83		ug/L		82	0.000
[>	Lu	175		ug/L		494380	494379.928
|	Tl	205	0.139	ug/L	9.639	3801	0.005
[	U	238	0.003	ug/L	0.266	247	0.000

Sample ID: QC Std 9

Report Date/Time: Sunday, April 11, 2010 23:40:34

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
U	238Linear 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		98.6			
[	Ni	60					
[>	Ge	74		99.7			
|	As	75					
|	Se	77					
|	Se	82					
[	Kr	83					
[>	Lu	175		101.3			
|	Tl	205					
[	U	238					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS #5 Daily Performance Report

Sample ID: Sample

Sample Date/Time: Monday, April 12, 2010 12:06:55

Sample Description:

Method File: c:\elandata\Method\Daily2.mth

Dataset File: c:\elandata\Dataset\default\Sample.1047

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		1600.7		1600.690		66.606		4.2
Mg	24.0		42537.5		42537.482		1284.267		3.0
Co	58.9		65006.2		65006.172		391.198		0.6
Rh	102.9		127267.0		127267.002		942.029		0.7
In	114.9		184150.5		184150.534		1137.512		0.6
Pb	208.0		214713.3		214713.337		559.415		0.3
[> Ba	137.9		172158.1		172158.058		849.562		0.5
[Ba++	69.0		1998.4		0.012		0.000		1.4
[> Ce	139.9		211469.3		211469.349		1635.986		0.8
[CeO	155.9		4156.7		0.020		0.001		2.7
Bkgd	220.0		20.6		20.600		2.559		12.4

Current Optimization File Data

Current Value	Description
0.86	Nebulizer Gas Flow
6.75	Lens Voltage
1450.00	ICP RF Power
-1812.50	Analog Stage Voltage
1300.00	Pulse Stage Voltage
200.00	Discriminator Threshold
-6.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	21	7.0	3575.4
Co	59	21	8.3	64290.0
In	115	21	9.8	174307.3

ICPMS #5 Instrument Tuning Report

File Name: 100412.tun
File Path: C:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	601	2072	0.537
Be	9.0	9.0	2052	2088	0.534
Mg	24.0	24.0	5693	2100	0.514
Mg	25.0	25.0	5933	2100	0.500
Mg	26.0	26.0	6180	2100	0.514
Co	58.9	58.9	14187	2125	0.535
Rh	102.9	102.9	24877	2180	0.538
In	114.9	114.9	27793	2200	0.533
Ce	139.9	139.9	33875	2220	0.545
Pb	206.0	206.0	49948	2305	0.528
Pb	207.0	207.0	50171	2240	0.592
Pb	208.0	208.0	50451	2280	0.646
U	238.1	238.0	57726	2295	0.643

ICPMS#5 - Summary Report

Sample ID: Blank

Sample Date/Time: Monday, April 12, 2010 13:07:04

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: C:\elandata\Dataset\100412\Blank.002

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		401983	
[	U	238		ug/L		33	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175					
[U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: Blank

Report Date/Time: Monday, April 12, 2010 13:07:16

Page 1

ICPMS#5 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Monday, April 12, 2010 13:08:43

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only.mth

Dataset File: C:\elandata\Dataset\100412\Standard 1.003

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		403596	403595.719
[	U	238	10.000	ug/L	1.469	456239	1.130

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Lu	175						
[U	238						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Monday, April 12, 2010 13:10:20

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\w only.mth

Dataset File: C:\elandata\Dataset\100412\Standard 2.004

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		403373	403373.342
[U	238	99.946	ug/L	1.206	4324678	10.720

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[> Lu	175					
[U	238					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: Standard 2

Report Date/Time: Monday, April 12, 2010 13:10:30

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Monday, April 12, 2010 13:11:58

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: C:\elandata\Dataset\100412\QC Std 1.005

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		415856	415855.900
[U	238	50.861	ug/L	0.330	2268787	5.455

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[> Lu	175		103.5			
[U	238	101.722				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Monday, April 12, 2010 13:13:38

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only.mth

Dataset File: C:\elandata\Dataset\100412\QC Std 2.006

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		403472	403472.356
[	U	238	0.011	ug/L	7.599	498	0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Lu	175			100.4			
[U	238						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Monday, April 12, 2010 13:15:18

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only.mth

Dataset File: C:\elandata\Dataset\100412\QC Std 3.007

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		400126	400125.688
[U	238	0.220	ug/L	1.008	9491	0.024

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[> Lu	175		99.5			
[U	238	110.169				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 3

Report Date/Time: Monday, April 12, 2010 13:15:29

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Monday, April 12, 2010 13:16:57

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: C:\elandata\Dataset\100412\QC Std 4.008

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		373096	373095.683
[	U	238	0.004	ug/L	3.927	188	0.000

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[>	Lu	175		92.8				
[	U	238						

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Monday, April 12, 2010 13:18:36

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: C:\elandata\Dataset\100412\QC Std 5.009

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		374124	374124.304
[	U	238	21.076	ug/L	1.033	845812	2.261

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Lu	175			93.1			
[U	238	105.382					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 5

Report Date/Time: Monday, April 12, 2010 13:18:47

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Monday, April 12, 2010 13:20:16

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only.mth

Dataset File: C:\elandata\Dataset\100412\QC Std 6.010

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		407279	407278.894
[	U	238	49.996	ug/L	1.540	2184194	5.363

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Lu	175			101.3			
[U	238	99.992					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Monday, April 12, 2010 13:21:57

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: C:\elandata\Dataset\100412\QC Std 7.011

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		406499	406499.440
[	U	238	0.008	ug/L	2.370	402	0.001

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 % Recovery	Dilution % Dil	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

ICPMS#5 - Summary Report

Sample ID: 1202056848

Sample Date/Time: Monday, April 12, 2010 13:23:37

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 959103|2|prb

Method File: c:\elandata\Method\only.mth

Dataset File: C:\elandata\Dataset\100412\1202056848.012

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		448946	448945.922
[U	238	0.013	ug/L	5.448	687	0.001

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			111.7		
[U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202056848

Report Date/Time: Monday, April 12, 2010 13:23:47

Page 1

ICPMS#5 - Summary Report

Sample ID: 1202056853

Sample Date/Time: Monday, April 12, 2010 13:25:15

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 959103|40|prb

Method File: c:\elandata\Method\lu only.mth

Dataset File: C:\elandata\Dataset\100412\1202056853.013

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		413937	413937.134
[U	238	0.563	ug/L	1.456	25040	0.060

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[> Lu	175			103.0		
[U	238					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Monday, April 12, 2010 13:36:04

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: C:\elandata\Dataset\100412\QC Std 8.019

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		402031	402030.824
[	U	238	49.551	ug/L	0.890	2136971	5.315

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			100.0		
[U	238	99.102				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 8

Report Date/Time: Monday, April 12, 2010 13:36:15

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Monday, April 12, 2010 13:37:45

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only.mth

Dataset File: C:\elandata\Dataset\100412\QC Std 9.020

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		404188	404187.644
[	U	238	0.009	ug/L	7.427	435	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Lu	175		100.5				
[U	238						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Monday, April 12, 2010 13:52:37

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: C:\elandata\Dataset\100412\QC Std 8.029

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		384670	384669.642
[U	238	49.748	ug/L	1.695	2053043	5.336

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[> Lu	175			95.7		
[U	238	99.496				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Monday, April 12, 2010 13:54:18

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only.mth

Dataset File: C:\elandata\Dataset\100412\QC Std 9.030

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		384119	384118.651
[	U	238	0.010	ug/L	5.049	461	0.001

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		95.6			
[U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 9

Report Date/Time: Monday, April 12, 2010 13:54:30

Page 1

ICPMS#5 - Summary Report

Sample ID: 248041001

Sample Date/Time: Monday, April 12, 2010 14:00:55

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 959103|2|prb

Method File: c:\elandata\Method\only.mth

Dataset File: C:\elandata\Dataset\100412\248041001.034

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		443681	443680.797
[	U	238	15.323	ug/L	1.643	729273	1.644

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[>	Lu	175			110.4			
[U	238						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 248041002

Sample Date/Time: Monday, April 12, 2010 14:02:34

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 959103|2|prb

Method File: c:\elandata\Method\lu only.mth

Dataset File: C:\elandata\Dataset\100412\248041002.035

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		451025	451025.027
[	U	238	26.752 ug/L	1.469	1294252	2.869

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[>	Lu	175		112.2		
[	U	238				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 248041003

Sample Date/Time: Monday, April 12, 2010 14:04:14

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 959103|2|prb

Method File: c:\elandata\Method\lu only.mth

Dataset File: C:\elandata\Dataset\100412\248041003.036

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		463780	463780.107
[U	238	28.807	ug/L	0.367	1433000	3.090

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[> Lu	175			115.4			
[U	238						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: 248041003

Report Date/Time: Monday, April 12, 2010 14:04:25

Page 1

ICPMS#5 - Summary Report

Sample ID: 248041004

Sample Date/Time: Monday, April 12, 2010 14:05:54

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 959103|2|prb

Method File: c:\elandata\Method\lu only.mth

Dataset File: C:\elandata\Dataset\100412\248041004.037

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		442388	442388.381
[	U	238	4.006	ug/L	1.094	190074	0.430

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Lu	175			110.1			
[U	238						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 248041005

Sample Date/Time: Monday, April 12, 2010 14:07:33

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 959103|2|prb

Method File: c:\elandata\Method\only.mth

Dataset File: C:\elandata\Dataset\100412\248041005.038

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		443055	443055.031
[U	238	19.229	ug/L	0.435	913879	2.063

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 % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[> Lu	175		110.2			
[U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Monday, April 12, 2010 14:09:13

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: C:\elandata\Dataset\100412\QC Std 8.039

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		389768	389768.141
[	U	238	48.860	ug/L	0.924	2042940	5.241

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Lu	175			97.0			
[U	238	97.719					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 8

Report Date/Time: Monday, April 12, 2010 14:09:24

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Monday, April 12, 2010 14:10:54

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\w only.mth

Dataset File: C:\elandata\Dataset\100412\QC Std 9.040

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		386379	386378.819
[	U	238	0.008	ug/L	7.883	371	0.001

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 % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175		96.1			
[	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

ICPMS#5 - Summary Report

Sample ID: Blank

Sample Date/Time: Monday, April 12, 2010 15:17:48

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: C:\elandata\Dataset\100412\Blank.078

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		428015	
[	U	238		ug/L		212	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Lu	175						
[U	238						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Monday, April 12, 2010 15:19:27

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: C:\elandata\Dataset\100412\Standard 1.079

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		419579	419579.381
[	U	238	10.000 ug/L	1.897	399242	0.951

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Lu	175					
[U	238					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Monday, April 12, 2010 15:21:04

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: C:\elandata\Dataset\100412\Standard 2.080

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		428174	428174.109
[U	238	99.920	ug/L	0.917	3767816	8.799

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[> Lu	175						
[U	238						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Monday, April 12, 2010 15:22:41

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: C:\elandata\Dataset\100412\QC Std 1.081

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		437989	437989.145
[	U	238	49.605	ug/L	0.821	1913274	4.369

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175			102.3		
[U	238	99.211				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 1

Report Date/Time: Monday, April 12, 2010 15:22:51

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ICPMS#5 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Monday, April 12, 2010 15:24:21

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: C:\elandata\Dataset\100412\QC Std 2.082

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		431242	431241.934
[	U	238	0.011	ug/L	7.608	643	0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175			100.8		
[U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Monday, April 12, 2010 15:26:02

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only.mth

Dataset File: C:\elandata\Dataset\100412\QC Std 3.083

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		430405	430405.220
[	U	238	0.216	ug/L	0.559	8415	0.019

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Lu	175			100.6			
[U	238	108.200					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 3

Report Date/Time: Monday, April 12, 2010 15:26:13

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ICPMS#5 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Monday, April 12, 2010 15:27:41

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: C:\elandata\Dataset\100412\QC Std 4.084

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		413540	413539.554
[	U	238	-0.001	ug/L	5.584	168	-0.000

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175			96.6		
[U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 4

Report Date/Time: Monday, April 12, 2010 15:27:51

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ICPMS#5 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Monday, April 12, 2010 15:29:20

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: C:\elandata\Dataset\100412\QC Std 5.085

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		397854	397853.954
[	U	238	22.611	ug/L	0.976	792454	1.991

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175			93.0		
[U	238	113.057				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Monday, April 12, 2010 15:30:59

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: C:\elandata\Dataset\100412\QC Std 6.086

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		442021	442020.594
[	U	238	50.379	ug/L	0.217	1961272	4.437

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			103.3		
[	U	238	100.757				

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Monday, April 12, 2010 15:32:40

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only.mth

Dataset File: C:\elandata\Dataset\100412\QC Std 7.087

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		440778	440778.222
[	U	238	0.007	ug/L	10.214	487	0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[>	Lu	175			103.0			
[U	238						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202056849

Sample Date/Time: Monday, April 12, 2010 15:39:15

Sample Type:

Sample Description: LANL 6020 DUP

Number of Replicates: 3

Batch ID: 959103|2|prb

Method File: c:\elandata\Method\lu only.mth

Dataset File: C:\elandata\Dataset\100412\1202056849.091

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		466702	466702.398
[	U	238	2.452	ug/L	2.007	101001	0.216

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			109.0		
[U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202056851

Sample Date/Time: Monday, April 12, 2010 15:40:53

Sample Type:

Sample Description: LANL 6020 MS

Number of Replicates: 3

Batch ID: 959103|2|prb

Method File: c:\elandata\Method\only.mth

Dataset File: C:\elandata\Dataset\100412\1202056851.092

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		466977	466977.337
[	U	238	26.979	ug/L	1.236	1109876	2.376

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Lu	175			109.1			
[U	238						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202056852

Sample Date/Time: Monday, April 12, 2010 15:42:32

Sample Type:

Sample Description: LANL 6020 MSD

Number of Replicates: 3

Batch ID: 959103|2|prb

Method File: c:\elandata\Method\only.mth

Dataset File: C:\elandata\Dataset\100412\1202056852.093

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		464279	464278.708
[	U	238	27.136	ug/L	1.521	1109413	2.390

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[>	Lu	175		108.5			
[U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202056850

Sample Date/Time: Monday, April 12, 2010 15:44:11

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 959103|10|prb

Method File: c:\elandata\Method\lu only.mth

Dataset File: C:\elandata\Dataset\100412\1202056850.094

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		438059	438059.252
[	U	238	0.587	ug/L	0.933	22870	0.052

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel.	% Difference
[>	Lu	175		102.3				
[U	238						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Monday, April 12, 2010 15:45:51

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: C:\elandata\Dataset\100412\QC Std 6.095

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		431174	431173.706
[U	238	50.590	ug/L	0.290	1921237	4.455

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[> Lu	175		100.7			
[U	238	101.181				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 6

Report Date/Time: Monday, April 12, 2010 15:46:02

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ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Monday, April 12, 2010 15:47:32

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: C:\elandata\Dataset\100412\QC Std 7.096

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		418104	418103.515
[	U	238	0.007	ug/L	9.437	475	0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Lu	175			97.7			
[U	238						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Monday, April 12, 2010 15:47:44

Page 1

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Analysis Begun

Logged In Analyst: Administrator

Technique: AA FIMS-MHS

Spectrometer Model: FIMS-100, S/N B050-9550

Autosampler Model: S10

Sample Information File: C:\data-AA\Administrator\Sample Information\031510S1.SIF

Batch ID:

Results Data Set: 031510S1

Results Library: C:\data-AA\Administrator\Results\Results.mdb

=====
Method Loaded

Method Name: SOIL

Method Last Saved: 3/12/2010 14:32:37

Method Description: 7471A, ILM04 ANALYST JXL

Sequence No.: 1

Autosampler Location: 1

Sample ID: Calib Blank

Date Collected: 3/15/2010 09:03:45

Analyst:

Data Type: Original

Replicate Data: Calib Blank

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1		[0.00]	0.0003	0.0014	0.0003	09:04:38	Yes
2		[0.00]	0.0002	-0.0005	0.0002	09:05:07	Yes
Mean:		[0.00]	0.0003				
SD:		0.00	0.0001				
%RSD:		0.00	24.54				

Auto-zero performed.

Sequence No.: 2

Autosampler Location: 2

Sample ID: S0.2

Date Collected: 3/15/2010 09:05:26

Analyst:

Data Type: Original

Replicate Data: S0.2

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1		[0.2]	0.0026	0.0117	0.0029	09:06:17	Yes
2		[0.2]	0.0026	0.0118	0.0028	09:06:47	Yes
Mean:		[0.2]	0.0026				
SD:		0.0	0.0000				
%RSD:		0.0	0.51				

Standard number 1 applied. [0.2]

Correlation Coef.: 1.000000 Slope: 0.01289 Intercept: 0.00000

Sequence No.: 3

Autosampler Location: 3

Sample ID: S0.5

Date Collected: 3/15/2010 09:07:06

Analyst:

Data Type: Original

Replicate Data: S0.5

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1		[0.5]	0.0067	0.0306	0.0069	09:07:57	Yes
2		[0.5]	0.0066	0.0302	0.0069	09:08:26	Yes
Mean:		[0.5]	0.0067				
SD:		0.0	0.0000				
%RSD:		0.0	0.29				

Standard number 2 applied. [0.5]

Correlation Coef.: 0.999893 Slope: 0.01334 Intercept: -0.00003

Sequence No.: 4

Autosampler Location: 4

Sample ID: S2.0

Date Collected: 3/15/2010 09:08:46

Analyst:

Data Type: Original

Replicate Data: S2.0

Repl #	SampleConc ug/L	StdndConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[2.0]	0.0270	0.1245	0.0273	09:09:38	Yes
2		[2.0]	0.0269	0.1224	0.0271	09:10:08	Yes
Mean:		[2.0]	0.0270				
SD:		0.0	0.0001				
%RSD:		0.0	0.48				

Standard number 3 applied. [2.0]
Correlation Coef.: 0.999991 Slope: 0.01351 Intercept: -0.00007

Sequence No.: 5

Autosampler Location: 5

Sample ID: S5.0

Date Collected: 3/15/2010 09:10:27

Analyst:

Data Type: Original

Replicate Data: S5.0

Repl #	SampleConc ug/L	StdndConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[5.0]	0.0662	0.3042	0.0665	09:11:20	Yes
2		[5.0]	0.0665	0.3042	0.0667	09:11:49	Yes
Mean:		[5.0]	0.0663				
SD:		0.0	0.0002				
%RSD:		0.0	0.28				

Standard number 4 applied. [5.0]
Correlation Coef.: 0.999975 Slope: 0.01328 Intercept: 0.00005

Sequence No.: 6

Autosampler Location: 6

Sample ID: S10.0

Date Collected: 3/15/2010 09:12:10

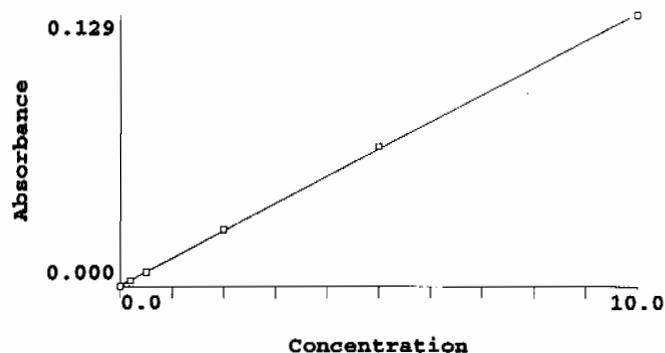
Analyst:

Data Type: Original

Replicate Data: S10.0

Repl #	SampleConc ug/L	StdndConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[10.0]	0.1293	0.5981	0.1295	09:13:00	Yes
2		[10.0]	0.1296	0.5961	0.1299	09:13:30	Yes
Mean:		[10.0]	0.1294				
SD:		0.0	0.0002				
%RSD:		0.0	0.17				

Standard number 5 applied. [10.0]
Correlation Coef.: 0.999908 Slope: 0.01297 Intercept: 0.00041

-----
Calibration data for Hg 253.7

Equation: Linear, Calculated Intercept

ID	Mean Signal (Abs)	Entered Conc. ug/L	Calculated Conc. ug/L	Standard Deviation	%RSD
Calib Blank	0.0000	0	-0.031	0.00	24.5
S0.2	0.0026	0.2	0.167	0.00	0.5
S0.5	0.0067	0.5	0.482	0.00	0.3
S2.0	0.0270	2.0	2.047	0.00	0.5

S5.0 0.0663 5.0 5.084 0.00 0.3
S10.0 0.1294 10.0 9.950 0.00 0.2
Correlation Coef.: 0.999908 Slope: 0.01297 Intercept: 0.00041

Sequence No.: 7

Autosampler Location: 9

Sample ID: ICV

Date Collected: 3/15/2010 09:13:49

Analyst:

Data Type: Original

Replicate Data: ICV

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.175	5.175	0.0675	0.3121	0.0678	09:14:40	Yes
2	5.185	5.185	0.0676	0.3100	0.0679	09:15:10	Yes
Mean:	5.180	5.180	0.0676				
SD:	0.007	0.007	0.0001				
%RSD:	0.130	0.130	0.13				

QC value within limits for Hg 253.7 Recovery = 103.60%

All analyte(s) passed QC.

Sequence No.: 8

Autosampler Location: 10

Sample ID: ICB

Date Collected: 3/15/2010 09:15:30

Analyst:

Data Type: Original

Replicate Data: ICB

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.035	-0.035	-0.0001	-0.0003	0.0002	09:16:21	Yes
2	-0.040	-0.040	-0.0001	-0.0008	0.0002	09:16:51	Yes
Mean:	-0.037	-0.037	-0.0001				
SD:	0.003	0.003	0.0000				
%RSD:	8.328	8.328	51.08				

QC value within limits for Hg 253.7 Recovery = Not calculated

All analyte(s) passed QC.

Sequence No.: 9

Autosampler Location: 11

Sample ID: CRDL

Date Collected: 3/15/2010 09:17:11

Analyst:

Data Type: Original

Replicate Data: CRDL

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.172	0.172	0.0026	0.0126	0.0029	09:18:02	Yes
2	0.166	0.166	0.0026	0.0116	0.0028	09:18:32	Yes
Mean:	0.169	0.169	0.0026				
SD:	0.004	0.004	0.0001				
%RSD:	2.512	2.512	2.12				

QC value within limits for Hg 253.7 Recovery = 84.36%

All analyte(s) passed QC.

Sequence No.: 10

Autosampler Location: 7

Sample ID: CCV

Date Collected: 3/15/2010 09:18:52

Analyst:

Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.133	5.133	0.0670	0.3085	0.0672	09:19:42	Yes
2	5.131	5.131	0.0669	0.3085	0.0672	09:20:12	Yes
Mean:	5.132	5.132	0.0669				
SD:	0.001	0.001	0.0000				
%RSD:	0.029	0.029	0.03				

QC value within limits for Hg 253.7 Recovery = 102.63%

All analyte(s) passed QC.

Sequence No.: 11
Sample ID: CCB
Analyst:

Autosampler Location: 8
Date Collected: 3/15/2010 09:20:31
Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.043	-0.043	-0.0002	-0.0011	0.0001	09:21:22	Yes
2	-0.042	-0.042	-0.0001	-0.0007	0.0001	09:21:52	Yes
Mean:	-0.042	-0.042	-0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	2.344	2.344	9.04				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 12
Sample ID: 1202056193|958761|1
Analyst: JXL

Autosampler Location: 12
Date Collected: 3/15/2010 09:22:11
Data Type: Original

Replicate Data: 1202056193|958761|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.042	-0.042	-0.0001	-0.0007	0.0001	09:23:03	Yes
2	-0.041	-0.041	-0.0001	-0.0007	0.0001	09:23:33	Yes
Mean:	-0.042	-0.042	-0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	1.475	1.475	5.94				

Sequence No.: 13
Sample ID: 1202056194|958761|10
Analyst: JXL

Autosampler Location: 13
Date Collected: 3/15/2010 09:23:53
Data Type: Original

Replicate Data: 1202056194|958761|10

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	3.338	3.338	0.0437	0.2012	0.0440	09:24:45	Yes
2	3.361	3.361	0.0440	0.2021	0.0443	09:25:15	Yes
Mean:	3.350	3.350	0.0438				
SD:	0.016	0.016	0.0002				
%RSD:	0.489	0.489	0.48				

Sequence No.: 14
Sample ID: 248150001|958761|1
Analyst: JXL

Autosampler Location: 14
Date Collected: 3/15/2010 09:25:35
Data Type: Original

Replicate Data: 248150001|958761|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.047	0.047	0.0010	0.0048	0.0013	09:26:26	Yes
2	0.051	0.051	0.0011	0.0054	0.0013	09:26:55	Yes
Mean:	0.049	0.049	0.0010				
SD:	0.003	0.003	0.0000				
%RSD:	5.978	5.978	3.65				

Sequence No.: 15
Sample ID: 1202056195|958761|1
Analyst: JXL

Autosampler Location: 15
Date Collected: 3/15/2010 09:27:14
Data Type: Original

Replicate Data: 1202056195|958761|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
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Replicate Data: 248150003|958761|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.076	0.076	0.0014	0.0070	0.0017	09:36:23	Yes
2	0.076	0.076	0.0014	0.0070	0.0017	09:36:52	Yes
Mean:	0.076	0.076	0.0014				
SD:	0.000	0.000	0.0000				
%RSD:	0.331	0.331	0.23				

=====

Sequence No.: 21
Sample ID: 248150004|958761|1
Analyst: JXLAutosampler Location: 21
Date Collected: 3/15/2010 09:37:12
Data Type: Original-----
Replicate Data: 248150004|958761|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.003	-0.003	0.0004	0.0025	0.0006	09:38:03	Yes
2	-0.008	-0.008	0.0003	0.0019	0.0006	09:38:32	Yes
Mean:	-0.006	-0.006	0.0003				
SD:	0.003	0.003	0.0000				
%RSD:	57.05	57.05	12.59				

=====

Sequence No.: 22
Sample ID: CCV
Analyst:Autosampler Location: 7
Date Collected: 3/15/2010 09:38:52
Data Type: Original-----
Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.151	5.151	0.0672	0.3086	0.0675	09:39:42	Yes
2	5.142	5.142	0.0671	0.3071	0.0674	09:40:12	Yes
Mean:	5.147	5.147	0.0671				
SD:	0.006	0.006	0.0001				
%RSD:	0.122	0.122	0.12				

QC value within limits for Hg 253.7 Recovery = 102.93%
All analyte(s) passed QC.

=====

Sequence No.: 23
Sample ID: CCB
Analyst:Autosampler Location: 8
Date Collected: 3/15/2010 09:40:31
Data Type: Original-----
Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.040	-0.040	-0.0001	0.0001	0.0002	09:41:21	Yes
2	-0.037	-0.037	-0.0001	0.0002	0.0002	09:41:51	Yes
Mean:	-0.038	-0.038	-0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	5.626	5.626	31.19				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

=====

Sequence No.: 24
Sample ID: 248163001|958761|1
Analyst: JXLAutosampler Location: 22
Date Collected: 3/15/2010 09:42:11
Data Type: Original-----
Replicate Data: 248163001|958761|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.030	0.030	0.0008	0.0042	0.0011	09:43:02	Yes
2	0.029	0.029	0.0008	0.0044	0.0011	09:43:32	Yes

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.173	0.173	0.0026	0.0131	0.0029	09:51:26	Yes
2	0.172	0.172	0.0026	0.0132	0.0029	09:51:56	Yes
Mean:	0.173	0.173	0.0026				
SD:	0.000	0.000	0.0000				
%RSD:	0.128	0.128	0.11				

Sequence No.: 30

Autosampler Location: 28

Sample ID: 248163007|958761|1

Date Collected: 3/15/2010 09:52:16

Analyst: JXL

Data Type: Original

Replicate Data: 248163007|958761|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.240	0.240	0.0035	0.0172	0.0038	09:53:06	Yes
2	0.239	0.239	0.0035	0.0170	0.0038	09:53:36	Yes
Mean:	0.239	0.239	0.0035				
SD:	0.001	0.001	0.0000				
%RSD:	0.258	0.258	0.23				

Sequence No.: 31

Autosampler Location: 29

Sample ID: 248163008|958761|1

Date Collected: 3/15/2010 09:53:55

Analyst: JXL

Data Type: Original

Replicate Data: 248163008|958761|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.036	0.036	0.0009	0.0048	0.0011	09:54:46	Yes
2	0.039	0.039	0.0009	0.0055	0.0012	09:55:16	Yes
Mean:	0.038	0.038	0.0009				
SD:	0.002	0.002	0.0000				
%RSD:	6.226	6.226	3.40				

Sequence No.: 32

Autosampler Location: 30

Sample ID: 248163009|958761|1

Date Collected: 3/15/2010 09:55:35

Analyst: JXL

Data Type: Original

Replicate Data: 248163009|958761|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.161	0.161	0.0025	0.0125	0.0028	09:56:26	Yes
2	0.163	0.163	0.0025	0.0128	0.0028	09:56:56	Yes
Mean:	0.162	0.162	0.0025				
SD:	0.001	0.001	0.0000				
%RSD:	0.899	0.899	0.75				

Sequence No.: 33

Autosampler Location: 31

Sample ID: 248163010|958761|1

Date Collected: 3/15/2010 09:57:15

Analyst: JXL

Data Type: Original

Replicate Data: 248163010|958761|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.314	0.314	0.0045	0.0225	0.0047	09:58:06	Yes
2	0.315	0.315	0.0045	0.0226	0.0048	09:58:36	Yes
Mean:	0.315	0.315	0.0045				
SD:	0.001	0.001	0.0000				
%RSD:	0.342	0.342	0.31				

Sequence No.: 34

Autosampler Location: 7

Sample ID: CCV

Date Collected: 3/15/2010 09:58:55

Analyst:

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.234	5.234	0.0683	0.3120	0.0685	09:59:45	Yes
2	5.219	5.219	0.0681	0.3095	0.0683	10:00:15	Yes
Mean:	5.227	5.227	0.0682				
SD:	0.011	0.011	0.0001				
%RSD:	0.208	0.208	0.21				

QC value within limits for Hg 253.7 Recovery = 104.54%
All analyte(s) passed QC.

=====

Sequence No.: 35

Autosampler Location: 8

Sample ID: CCB

Date Collected: 3/15/2010 10:00:34

Analyst:

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.027	-0.027	0.0001	0.0023	0.0003	10:01:25	Yes
2	-0.027	-0.027	0.0001	0.0022	0.0003	10:01:55	Yes
Mean:	-0.027	-0.027	0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	1.025	1.025	5.96				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

=====

Sequence No.: 36

Autosampler Location: 32

Sample ID: 248163011|958761|1

Date Collected: 3/15/2010 10:02:14

Analyst: JXL

Data Type: Original

Replicate Data: 248163011|958761|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.533	0.533	0.0073	0.0342	0.0076	10:03:05	Yes
2	0.531	0.531	0.0073	0.0339	0.0076	10:03:35	Yes
Mean:	0.532	0.532	0.0073				
SD:	0.001	0.001	0.0000				
%RSD:	0.191	0.191	0.18				

=====

Sequence No.: 37

Autosampler Location: 33

Sample ID: 248163012|958761|1

Date Collected: 3/15/2010 10:03:54

Analyst: JXL

Data Type: Original

Replicate Data: 248163012|958761|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.242	0.242	0.0035	0.0169	0.0038	10:04:45	Yes
2	0.241	0.241	0.0035	0.0170	0.0038	10:05:15	Yes
Mean:	0.242	0.242	0.0035				
SD:	0.001	0.001	0.0000				
%RSD:	0.214	0.214	0.19				

=====

Sequence No.: 38

Autosampler Location: 34

Sample ID: 248163013|958761|1

Date Collected: 3/15/2010 10:05:35

Analyst: JXL

Data Type: Original

Replicate Data: 248163013|958761|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.197	0.197	0.0030	0.0141	0.0032	10:06:26	Yes

Replicate Data: 248549002|964655|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.005	-0.005	0.0003	0.0048	0.0006	10:14:51	Yes
2	-0.014	-0.014	0.0002	0.0033	0.0005	10:15:21	Yes
Mean:	-0.009	-0.009	0.0003				
SD:	0.006	0.006	0.0001				
%RSD:	68.23	68.23	29.42				

Sequence No.: 44

Autosampler Location: 40

Sample ID: 248549003|964655|1

Date Collected: 3/15/2010 10:15:41

Analyst: JXL

Data Type: Original

Replicate Data: 248549003|964655|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.010	-0.010	0.0003	0.0020	0.0005	10:16:32	Yes
2	-0.007	-0.007	0.0003	0.0022	0.0006	10:17:01	Yes
Mean:	-0.009	-0.009	0.0003				
SD:	0.002	0.002	0.0000				
%RSD:	23.42	23.42	9.18				

Sequence No.: 45

Autosampler Location: 41

Sample ID: 248549004|964655|1

Date Collected: 3/15/2010 10:17:21

Analyst: JXL

Data Type: Original

Replicate Data: 248549004|964655|1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.126	0.126	0.0020	0.0103	0.0023	10:18:12	Yes
2	0.124	0.124	0.0020	0.0099	0.0023	10:18:41	Yes
Mean:	0.125	0.125	0.0020				
SD:	0.002	0.002	0.0000				
%RSD:	1.409	1.409	1.13				

Sequence No.: 46

Autosampler Location: 7

Sample ID: CCV

Date Collected: 3/15/2010 10:19:01

Analyst:

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	4.944	4.944	0.0645	0.2920	0.0648	10:19:51	Yes
2	4.913	4.913	0.0641	0.2893	0.0644	10:20:21	Yes
Mean:	4.928	4.928	0.0643				
SD:	0.022	0.022	0.0003				
%RSD:	0.448	0.448	0.45				

QC value within limits for Hg 253.7 Recovery = 98.57%

All analyte(s) passed QC.

Sequence No.: 47

Autosampler Location: 8

Sample ID: CCB

Date Collected: 3/15/2010 10:20:40

Analyst:

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.032	-0.032	-0.0000	0.0009	0.0003	10:21:31	Yes
2	-0.032	-0.032	-0.0000	0.0010	0.0003	10:22:01	Yes
Mean:	-0.032	-0.032	-0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	1.377	1.377	60.42				

QC value within limits for Hg 253.7 Recovery = Not calculated

Replicate Data: 1202069557|964660|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.036	-0.036	-0.0001	0.0008	0.0002	10:38:20	Yes
2	-0.037	-0.037	-0.0001	0.0007	0.0002	10:38:50	Yes
Mean:	-0.037	-0.037	-0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	0.977	0.977	6.93				

Sequence No.: 58
Sample ID: CCV
Analyst:Autosampler Location: 7
Date Collected: 3/15/2010 10:39:09
Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.260	5.260	0.0686	0.3107	0.0689	10:39:59	Yes
2	5.261	5.261	0.0686	0.3096	0.0689	10:40:29	Yes
Mean:	5.260	5.260	0.0686				
SD:	0.001	0.001	0.0000				
%RSD:	0.013	0.013	0.01				

QC value within limits for Hg 253.7 Recovery = 105.20%
All analyte(s) passed QC.Sequence No.: 59
Sample ID: CCB
Analyst:Autosampler Location: 8
Date Collected: 3/15/2010 10:40:48
Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.007	-0.007	0.0003	0.0022	0.0006	10:41:39	Yes
2	-0.008	-0.008	0.0003	0.0022	0.0006	10:42:09	Yes
Mean:	-0.008	-0.008	0.0003				
SD:	0.001	0.001	0.0000				
%RSD:	9.021	9.021	3.05				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.Sequence No.: 60
Sample ID: 1202069558|964660|10
Analyst: JXLAutosampler Location: 52
Date Collected: 3/15/2010 10:42:28
Data Type: Original

Replicate Data: 1202069558|964660|10

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	4.313	4.313	0.0563	0.2553	0.0566	10:43:19	Yes
2	4.279	4.279	0.0559	0.2529	0.0562	10:43:49	Yes
Mean:	4.296	4.296	0.0561				
SD:	0.024	0.024	0.0003				
%RSD:	0.550	0.550	0.55				

Sequence No.: 61
Sample ID: 248666001|964660|1
Analyst: JXLAutosampler Location: 53
Date Collected: 3/15/2010 10:44:08
Data Type: Original

Replicate Data: 248666001|964660|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.003	0.003	0.0004	0.0031	0.0007	10:45:00	Yes
2	0.005	0.005	0.0005	0.0034	0.0007	10:45:29	Yes
Mean:	0.004	0.004	0.0005				

#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.318	0.318	0.0045	0.0217	0.0048	10:53:22	Yes
2	0.315	0.315	0.0045	0.0216	0.0048	10:53:52	Yes
Mean:	0.316	0.316	0.0045				
SD:	0.002	0.002	0.0000				
%RSD:	0.716	0.716	0.65				

Sequence No.: 67

Autosampler Location: 59

Sample ID: 248666003|964660|1

Date Collected: 3/15/2010 10:54:12

Analyst: JXL

Data Type: Original

Replicate Data: 248666003|964660|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.148	0.148	0.0023	0.0114	0.0026	10:55:03	Yes
2	0.151	0.151	0.0024	0.0117	0.0026	10:55:33	Yes
Mean:	0.149	0.149	0.0023				
SD:	0.003	0.003	0.0000				
%RSD:	1.717	1.717	1.42				

Sequence No.: 68

Autosampler Location: 60

Sample ID: 248666004|964660|1

Date Collected: 3/15/2010 10:55:53

Analyst: JXL

Data Type: Original

Replicate Data: 248666004|964660|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.026	-0.026	0.0001	0.0013	0.0003	10:56:45	Yes
2	-0.027	-0.027	0.0001	0.0013	0.0003	10:57:14	Yes
Mean:	-0.026	-0.026	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	2.981	2.981	15.68				

Sequence No.: 69

Autosampler Location: 61

Sample ID: 248666005|964660|1

Date Collected: 3/15/2010 10:57:35

Analyst: JXL

Data Type: Original

Replicate Data: 248666005|964660|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.368	0.368	0.0052	0.0243	0.0054	10:58:27	Yes
2	0.367	0.367	0.0052	0.0242	0.0054	10:58:57	Yes
Mean:	0.368	0.368	0.0052				
SD:	0.000	0.000	0.0000				
%RSD:	0.111	0.111	0.10				

Sequence No.: 70

Autosampler Location: 7

Sample ID: CCV

Date Collected: 3/15/2010 10:59:17

Analyst:

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.304	5.304	0.0692	0.3120	0.0694	11:00:07	Yes
2	5.302	5.302	0.0692	0.3095	0.0694	11:00:37	Yes
Mean:	5.303	5.303	0.0692				
SD:	0.001	0.001	0.0000				
%RSD:	0.017	0.017	0.02				

QC value within limits for Hg 253.7 Recovery = 106.06%

All analyte(s) passed QC.

Sequence No.: 71

Autosampler Location: 8

Sample ID: CCB
Analyst:

Date Collected: 3/15/2010 11:00:56
Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.008	-0.008	0.0003	0.0022	0.0006	11:01:47	Yes
2	-0.007	-0.007	0.0003	0.0022	0.0006	11:02:17	Yes
Mean:	-0.008	-0.008	0.0003				
SD:	0.001	0.001	0.0000				
%RSD:	11.72	11.72	3.78				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

=====

Sequence No.: 72
Sample ID: 248666006|964660|1
Analyst: JXL

Autosampler Location: 62
Date Collected: 3/15/2010 11:02:36
Data Type: Original

Replicate Data: 248666006|964660|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.024	-0.024	0.0001	0.0016	0.0004	11:03:27	Yes
2	-0.024	-0.024	0.0001	0.0012	0.0004	11:03:57	Yes
Mean:	-0.024	-0.024	0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	0.099	0.099	0.34				

=====

Sequence No.: 73
Sample ID: 248666007|964660|1
Analyst: JXL

Autosampler Location: 63
Date Collected: 3/15/2010 11:04:17
Data Type: Original

Replicate Data: 248666007|964660|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.123	0.123	0.0020	0.0099	0.0023	11:05:08	Yes
2	0.123	0.123	0.0020	0.0101	0.0023	11:05:38	Yes
Mean:	0.123	0.123	0.0020				
SD:	0.000	0.000	0.0000				
%RSD:	0.216	0.216	0.17				

=====

Sequence No.: 74
Sample ID: 248666008|964660|1
Analyst: JXL

Autosampler Location: 64
Date Collected: 3/15/2010 11:05:57
Data Type: Original

Replicate Data: 248666008|964660|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.003	-0.003	0.0004	0.0027	0.0006	11:06:48	Yes
2	-0.005	-0.005	0.0003	0.0026	0.0006	11:07:18	Yes
Mean:	-0.004	-0.004	0.0004				
SD:	0.001	0.001	0.0000				
%RSD:	30.29	30.29	4.71				

=====

Sequence No.: 75
Sample ID: 248666009|964660|1
Analyst: JXL

Autosampler Location: 65
Date Collected: 3/15/2010 11:07:38
Data Type: Original

Replicate Data: 248666009|964660|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.126	0.126	0.0020	0.0103	0.0023	11:08:29	Yes
2	0.127	0.127	0.0021	0.0104	0.0023	11:08:59	Yes

Repl #	SampleConc ug/L	StdndConc ug/L	BlndCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.003	0.003	0.0004	0.0031	0.0007	11:16:53	Yes
2	0.000	0.000	0.0004	0.0028	0.0007	11:17:23	Yes
Mean:	0.002	0.002	0.0004				
SD:	0.002	0.002	0.0000				
%RSD:	125.1	125.1	5.93				

Sequence No.: 81

Autosampler Location: 71

Sample ID: 248666015|964660|1

Date Collected: 3/15/2010 11:17:43

Analyst: JXL

Data Type: Original

Replicate Data: 248666015|964660|1

Repl #	SampleConc ug/L	StdndConc ug/L	BlndCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.328	0.328	0.0047	0.0220	0.0049	11:18:35	Yes
2	0.328	0.328	0.0047	0.0219	0.0049	11:19:05	Yes
Mean:	0.328	0.328	0.0047				
SD:	0.000	0.000	0.0000				
%RSD:	0.019	0.019	0.02				

Sequence No.: 82

Autosampler Location: 7

Sample ID: CCV

Date Collected: 3/15/2010 11:19:25

Analyst:

Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StdndConc ug/L	BlndCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.125	5.125	0.0669	0.3022	0.0671	11:20:15	Yes
2	5.141	5.141	0.0671	0.3019	0.0673	11:20:45	Yes
Mean:	5.133	5.133	0.0670				
SD:	0.012	0.012	0.0001				
%RSD:	0.225	0.225	0.22				

QC value within limits for Hg 253.7 Recovery = 102.66%

All analyte(s) passed QC.

Sequence No.: 83

Autosampler Location: 8

Sample ID: CCB

Date Collected: 3/15/2010 11:21:04

Analyst:

Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StdndConc ug/L	BlndCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.008	-0.008	0.0003	0.0023	0.0006	11:21:54	Yes
2	-0.010	-0.010	0.0003	0.0019	0.0005	11:22:24	Yes
Mean:	-0.009	-0.009	0.0003				
SD:	0.002	0.002	0.0000				
%RSD:	19.00	19.00	7.28				

QC value within limits for Hg 253.7 Recovery = Not calculated

All analyte(s) passed QC.

Sequence No.: 84

Autosampler Location: 72

Sample ID: 248666016|964660|1

Date Collected: 3/15/2010 11:22:44

Analyst: JXL

Data Type: Original

Replicate Data: 248666016|964660|1

Repl #	SampleConc ug/L	StdndConc ug/L	BlndCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.028	-0.028	0.0000	0.0012	0.0003	11:23:36	Yes
2	-0.028	-0.028	0.0000	0.0012	0.0003	11:24:05	Yes
Mean:	-0.028	-0.028	0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	1.019	1.019	8.12				

2	-0.041	-0.041	-0.0001	0.0003	0.0001	11:32:33	Yes
Mean:	-0.040	-0.040	-0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	4.552	4.552	21.64				

Sequence No.: 90

Sample ID: 1202056134|958734|10

Analyst: JXL

Autosampler Location: 78

Date Collected: 3/15/2010 11:32:53

Data Type: Original

Replicate Data: 1202056134|958734|10

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	3.717	3.717	0.0486	0.2202	0.0489	11:33:45	Yes
2	3.718	3.718	0.0486	0.2188	0.0489	11:34:15	Yes
Mean:	3.717	3.717	0.0486				
SD:	0.000	0.000	0.0000				
%RSD:	0.011	0.011	0.01				

Sequence No.: 91

Sample ID: 248002001|958734|1

Analyst: JXL

Autosampler Location: 79

Date Collected: 3/15/2010 11:34:35

Data Type: Original

Replicate Data: 248002001|958734|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.163	0.163	0.0025	0.0125	0.0028	11:35:26	Yes
2	0.158	0.158	0.0025	0.0121	0.0027	11:35:56	Yes
Mean:	0.160	0.160	0.0025				
SD:	0.003	0.003	0.0000				
%RSD:	2.147	2.147	1.80				

Sequence No.: 92

Sample ID: 1202056135|958734|1

Analyst: JXL

Autosampler Location: 80

Date Collected: 3/15/2010 11:36:16

Data Type: Original

Replicate Data: 1202056135|958734|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.179	0.179	0.0027	0.0135	0.0030	11:37:07	Yes
2	0.181	0.181	0.0028	0.0135	0.0030	11:37:37	Yes
Mean:	0.180	0.180	0.0027				
SD:	0.001	0.001	0.0000				
%RSD:	0.791	0.791	0.67				

Sequence No.: 93

Sample ID: 1202056136|958734|1

Analyst: JXL

Autosampler Location: 81

Date Collected: 3/15/2010 11:37:57

Data Type: Original

Replicate Data: 1202056136|958734|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	2.446	2.446	0.0321	0.1458	0.0324	11:38:49	Yes
2	2.444	2.444	0.0321	0.1451	0.0324	11:39:19	Yes
Mean:	2.445	2.445	0.0321				
SD:	0.001	0.001	0.0000				
%RSD:	0.051	0.051	0.05				

Sequence No.: 94

Sample ID: CCV

Analyst:

Autosampler Location: 7

Date Collected: 3/15/2010 11:39:39

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.173	5.173	0.0675	0.3049	0.0678	11:40:29	Yes
2	5.147	5.147	0.0671	0.3028	0.0674	11:40:59	Yes
Mean:	5.160	5.160	0.0673				
SD:	0.019	0.019	0.0002				
%RSD:	0.360	0.360	0.36				

QC value within limits for Hg 253.7 Recovery = 103.20%
All analyte(s) passed QC.

Sequence No.: 95

Sample ID: CCB

Analyst:

Autosampler Location: 8

Date Collected: 3/15/2010 11:41:18

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.006	-0.006	0.0003	0.0027	0.0006	11:42:09	Yes
2	-0.010	-0.010	0.0003	0.0021	0.0005	11:42:39	Yes
Mean:	-0.008	-0.008	0.0003				
SD:	0.002	0.002	0.0000				
%RSD:	31.92	31.92	10.52				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 96

Sample ID: 1202056138|958734|1

Analyst: JXL

Autosampler Location: 82

Date Collected: 3/15/2010 11:42:58

Data Type: Original

Replicate Data: 1202056138|958734|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	2.402	2.402	0.0316	0.1437	0.0318	11:43:50	Yes
2	2.399	2.399	0.0315	0.1426	0.0318	11:44:20	Yes
Mean:	2.401	2.401	0.0315				
SD:	0.002	0.002	0.0000				
%RSD:	0.071	0.071	0.07				

Sequence No.: 97

Sample ID: 1202056137|958734|5

Analyst: JXL

Autosampler Location: 83

Date Collected: 3/15/2010 11:44:40

Data Type: Original

Replicate Data: 1202056137|958734|5

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.005	0.005	0.0005	0.0030	0.0007	11:45:31	Yes
2	0.004	0.004	0.0005	0.0025	0.0007	11:46:01	Yes
Mean:	0.004	0.004	0.0005				
SD:	0.001	0.001	0.0000				
%RSD:	13.85	13.85	1.71				

Sequence No.: 98

Sample ID: 248002002|958734|1

Analyst: JXL

Autosampler Location: 84

Date Collected: 3/15/2010 11:46:21

Data Type: Original

Replicate Data: 248002002|958734|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.245	0.245	0.0036	0.0170	0.0039	11:47:12	Yes
2	0.250	0.250	0.0036	0.0176	0.0039	11:47:42	Yes
Mean:	0.248	0.248	0.0036				
SD:	0.003	0.003	0.0000				

1	0.095	0.095	0.0016	0.0087	0.0019	11:55:40	Yes
2	0.091	0.091	0.0016	0.0079	0.0019	11:56:10	Yes
Mean:	0.093	0.093	0.0016				
SD:	0.003	0.003	0.0000				
%RSD:	3.146	3.146	2.35				

Sequence No.: 104

Autosampler Location: 90

Sample ID: 248002008|958734|1

Date Collected: 3/15/2010 11:56:30

Analyst: JXL

Data Type: Original

Replicate Data: 248002008|958734|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.155	0.155	0.0024	0.0117	0.0027	11:57:22	Yes
2	0.159	0.159	0.0025	0.0121	0.0027	11:57:52	Yes
Mean:	0.157	0.157	0.0024				
SD:	0.003	0.003	0.0000				
%RSD:	1.765	1.765	1.47				

Sequence No.: 105

Autosampler Location: 91

Sample ID: 248009001|958734|1

Date Collected: 3/15/2010 11:58:12

Analyst: JXL

Data Type: Original

Replicate Data: 248009001|958734|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.037	0.037	0.0009	0.0051	0.0012	11:59:03	Yes
2	0.033	0.033	0.0008	0.0044	0.0011	11:59:33	Yes
Mean:	0.035	0.035	0.0009				
SD:	0.003	0.003	0.0000				
%RSD:	8.772	8.772	4.61				

Sequence No.: 106

Autosampler Location: 7

Sample ID: CCV

Date Collected: 3/15/2010 11:59:53

Analyst:

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.168	5.168	0.0674	0.3036	0.0677	12:00:43	Yes
2	5.142	5.142	0.0671	0.3012	0.0673	12:01:13	Yes
Mean:	5.155	5.155	0.0673				
SD:	0.019	0.019	0.0002				
%RSD:	0.363	0.363	0.36				

QC value within limits for Hg 253.7 Recovery = 103.10%

All analyte(s) passed QC.

Sequence No.: 107

Autosampler Location: 8

Sample ID: CCB

Date Collected: 3/15/2010 12:01:32

Analyst:

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.007	-0.007	0.0003	0.0022	0.0006	12:02:23	Yes
2	-0.009	-0.009	0.0003	0.0024	0.0006	12:02:53	Yes
Mean:	-0.008	-0.008	0.0003				
SD:	0.001	0.001	0.0000				
%RSD:	17.48	17.48	5.66				

QC value within limits for Hg 253.7 Recovery = Not calculated

All analyte(s) passed QC.

#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.221	0.221	0.0033	0.0155	0.0035	12:19:20	Yes
2	0.213	0.213	0.0032	0.0154	0.0034	12:19:50	Yes
Mean:	0.217	0.217	0.0032				
SD:	0.006	0.006	0.0001				
%RSD:	2.624	2.624	2.29				

Sequence No.: 118

Autosampler Location: 7

Sample ID: CCV

Date Collected: 3/15/2010 12:20:10

Analyst:

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.354	5.354	0.0698	0.3154	0.0701	12:21:01	Yes
2	5.363	5.363	0.0700	0.3143	0.0702	12:21:30	Yes
Mean:	5.358	5.358	0.0699				
SD:	0.006	0.006	0.0001				
%RSD:	0.121	0.121	0.12				

QC value within limits for Hg 253.7 Recovery = 107.17%
All analyte(s) passed QC.

Sequence No.: 119

Autosampler Location: 8

Sample ID: CCB

Date Collected: 3/15/2010 12:21:49

Analyst:

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.015	-0.015	0.0002	0.0016	0.0005	12:22:40	Yes
2	-0.014	-0.014	0.0002	0.0017	0.0005	12:23:10	Yes
Mean:	-0.014	-0.014	0.0002				
SD:	0.001	0.001	0.0000				
%RSD:	6.339	6.339	5.34				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 120

Autosampler Location: 102

Sample ID: 1202056142|958737|1

Date Collected: 3/15/2010 12:23:30

Analyst: JXL

Data Type: Original

Replicate Data: 1202056142|958737|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	2.490	2.490	0.0327	0.1477	0.0330	12:24:21	Yes
2	2.480	2.480	0.0326	0.1469	0.0328	12:24:51	Yes
Mean:	2.485	2.485	0.0326				
SD:	0.007	0.007	0.0001				
%RSD:	0.287	0.287	0.28				

Sequence No.: 121

Autosampler Location: 103

Sample ID: 1202056144|958737|1

Date Collected: 3/15/2010 12:25:12

Analyst: JXL

Data Type: Original

Replicate Data: 1202056144|958737|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	2.465	2.465	0.0324	0.1468	0.0326	12:26:04	Yes
2	2.484	2.484	0.0326	0.1466	0.0329	12:26:34	Yes
Mean:	2.474	2.474	0.0325				
SD:	0.013	0.013	0.0002				
%RSD:	0.540	0.540	0.53				

Mean: -0.029 -0.029 0.0000
SD: 0.001 0.001 0.0000
%RSD: 3.368 3.368 34.07

Sequence No.: 127
Sample ID: 248025002|958737|1
Analyst: JXL

Autosampler Location: 109
Date Collected: 3/15/2010 12:35:26
Data Type: Original

Replicate Data: 248025002|958737|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.029	0.029	0.0008	0.0039	0.0010	12:36:18	Yes
2	0.032	0.032	0.0008	0.0046	0.0011	12:36:48	Yes
Mean:	0.031	0.031	0.0008				
SD:	0.003	0.003	0.0000				
%RSD:	8.427	8.427	4.15				

Sequence No.: 128
Sample ID: 248025003|958737|1
Analyst: JXL

Autosampler Location: 110
Date Collected: 3/15/2010 12:37:09
Data Type: Original

Replicate Data: 248025003|958737|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.007	0.007	0.0005	0.0027	0.0008	12:38:01	Yes
2	0.004	0.004	0.0005	0.0028	0.0007	12:38:30	Yes
Mean:	0.006	0.006	0.0005				
SD:	0.002	0.002	0.0000				
%RSD:	32.69	32.69	5.06				

Sequence No.: 129
Sample ID: 248025004|958737|1
Analyst: JXL

Autosampler Location: 111
Date Collected: 3/15/2010 12:38:51
Data Type: Original

Replicate Data: 248025004|958737|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.041	0.041	0.0009	0.0051	0.0012	12:39:43	Yes
2	0.037	0.037	0.0009	0.0048	0.0011	12:40:13	Yes
Mean:	0.039	0.039	0.0009				
SD:	0.003	0.003	0.0000				
%RSD:	7.226	7.226	3.99				

Sequence No.: 130
Sample ID: CCV
Analyst:

Autosampler Location: 7
Date Collected: 3/15/2010 12:40:33
Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.340	5.340	0.0697	0.3137	0.0699	12:41:24	Yes
2	5.342	5.342	0.0697	0.3122	0.0699	12:41:54	Yes
Mean:	5.341	5.341	0.0697				
SD:	0.001	0.001	0.0000				
%RSD:	0.017	0.017	0.02				

QC value within limits for Hg 253.7 Recovery = 106.82%
All analyte(s) passed QC.

Sequence No.: 131
Sample ID: CCB
Analyst:

Autosampler Location: 8
Date Collected: 3/15/2010 12:42:13
Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.007	-0.007	0.0003	0.0017	0.0006	12:43:03	Yes
2	-0.018	-0.018	0.0002	0.0016	0.0004	12:43:33	Yes
Mean:	-0.013	-0.013	0.0002				
SD:	0.008	0.008	0.0001				
%RSD:	60.55	60.55	40.23				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

=====

Sequence No.: 132
Sample ID: 248025005|958737|1
Analyst: JXL

Autosampler Location: 112
Date Collected: 3/15/2010 12:43:52
Data Type: Original

Replicate Data: 248025005|958737|1

Repl	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.005	-0.005	0.0003	0.0022	0.0006	12:44:45	Yes
2	-0.012	-0.012	0.0002	0.0017	0.0005	12:45:15	Yes
Mean:	-0.009	-0.009	0.0003				
SD:	0.005	0.005	0.0001				
%RSD:	60.10	60.10	22.76				

=====

Sequence No.: 133
Sample ID: 248025006|958737|1
Analyst: JXL

Autosampler Location: 113
Date Collected: 3/15/2010 12:45:35
Data Type: Original

Replicate Data: 248025006|958737|1

Repl	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.372	0.372	0.0052	0.0241	0.0055	12:46:27	Yes
2	0.379	0.379	0.0053	0.0243	0.0056	12:46:57	Yes
Mean:	0.375	0.375	0.0053				
SD:	0.004	0.004	0.0001				
%RSD:	1.193	1.193	1.10				

=====

Sequence No.: 134
Sample ID: 248025007|958737|1
Analyst: JXL

Autosampler Location: 114
Date Collected: 3/15/2010 12:47:18
Data Type: Original

Replicate Data: 248025007|958737|1

Repl	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.018	0.018	0.0006	0.0036	0.0009	12:48:10	Yes
2	0.019	0.019	0.0007	0.0035	0.0009	12:48:40	Yes
Mean:	0.019	0.019	0.0006				
SD:	0.001	0.001	0.0000				
%RSD:	2.688	2.688	1.00				

=====

Sequence No.: 135
Sample ID: 248031001|958737|1
Analyst: JXL

Autosampler Location: 115
Date Collected: 3/15/2010 12:49:01
Data Type: Original

Replicate Data: 248031001|958737|1

Repl	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.026	0.026	0.0007	0.0034	0.0010	12:49:53	Yes
2	0.022	0.022	0.0007	0.0035	0.0010	12:50:23	Yes
Mean:	0.024	0.024	0.0007				
SD:	0.003	0.003	0.0000				
%RSD:	12.99	12.99	5.65				

2	-0.038	-0.038	-0.0001	0.0002	0.0002	12:58:55	Yes
Mean:	-0.034	-0.034	-0.0000				
SD:	0.005	0.005	0.0001				
%RSD:	15.42	15.42	210.37				

Sequence No.: 141

Sample ID: 1202056153|958744|1

Analyst: JXL

Autosampler Location: 121

Date Collected: 3/15/2010 12:59:16

Data Type: Original

Replicate Data: 1202056153|958744|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.038	-0.038	-0.0001	-0.0002	0.0002	13:00:07	Yes
2	-0.043	-0.043	-0.0002	-0.0004	0.0001	13:00:37	Yes
Mean:	-0.041	-0.041	-0.0001				
SD:	0.004	0.004	0.0000				
%RSD:	8.905	8.905	39.08				

Sequence No.: 142

Sample ID: CCV

Analyst:

Autosampler Location: 7

Date Collected: 3/15/2010 13:00:58

Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.041	-0.041	-0.0001	-0.0001	0.0001	13:01:48	Yes
2	-0.044	-0.044	-0.0002	-0.0004	0.0001	13:02:18	Yes
Mean:	-0.042	-0.042	-0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	5.473	5.473	21.07				

QC value less than the lower limit for Hg 253.7 Recovery = -0.85%
QC Failed. Continue with analysis.

Sequence No.: 143

Sample ID: CCB

Analyst:

Autosampler Location: 8

Date Collected: 3/15/2010 13:02:37

Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.043	-0.043	-0.0002	0.0001	0.0001	13:03:28	Yes
2	-0.042	-0.042	-0.0001	0.0002	0.0001	13:03:57	Yes
Mean:	-0.043	-0.043	-0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	1.297	1.297	4.91				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 144

Sample ID: 1202056154|958744|1

Analyst: JXL

Autosampler Location: 122

Date Collected: 3/15/2010 13:04:17

Data Type: Original

Replicate Data: 1202056154|958744|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.041	-0.041	-0.0001	0.0002	0.0001	13:05:09	Yes
2	-0.042	-0.042	-0.0001	0.0002	0.0001	13:05:39	Yes
Mean:	-0.041	-0.041	-0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	0.338	0.338	1.39				

Sequence No.: 145

Autosampler Location: 123

=====
Analysis BegunLogged In Analyst: Administrator
Spectrometer Model: FIMS-100, S/N B050-9550Technique: AA FIMS-MHS
Autosampler Model: S10Sample Information File: C:\data-AA\Administrator\Sample Information\031510S1.SIF
Batch ID:
Results Data Set: 031510S1
Results Library: C:\data-AA\Administrator\Results\Results.mdb=====
Method Loaded

Method Name: SOIL

Method Last Saved: 3/15/2010 09:05:09

Method Description: 7471A, ILM04 ANALYST JXL

Sequence No.: 1

Autosampler Location: 7

Sample ID: CCV

Date Collected: 3/15/2010 13:20:21

Analyst:

Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.351	5.351	0.0698	0.3165	0.0701	13:21:11	Yes
2	5.333	5.333	0.0696	0.3142	0.0698	13:21:40	Yes
Mean:	5.342	5.342	0.0697				
SD:	0.012	0.012	0.0002				
%RSD:	0.231	0.231	0.23				

QC value within limits for Hg 253.7 Recovery = 106.84%
All analyte(s) passed QC.

Sequence No.: 2

Autosampler Location: 8

Sample ID: CCB

Date Collected: 3/15/2010 13:21:59

Analyst:

Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.019	-0.019	0.0002	0.0011	0.0004	13:22:50	Yes
2	-0.020	-0.020	0.0001	0.0011	0.0004	13:23:20	Yes
Mean:	-0.019	-0.019	0.0002				
SD:	0.001	0.001	0.0000				
%RSD:	5.495	5.495	8.87				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 3

Autosampler Location: 112

Sample ID: 248025005|958737|1

Date Collected: 3/15/2010 13:23:39

Analyst: JXL

Data Type: Original

Replicate Data: 248025005|958737|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.017	-0.017	0.0002	0.0015	0.0005	13:24:31	Yes
2	-0.017	-0.017	0.0002	0.0017	0.0005	13:25:01	Yes
Mean:	-0.017	-0.017	0.0002				
SD:	0.000	0.000	0.0000				
%RSD:	0.625	0.625	0.70				

Sequence No.: 4

Autosampler Location: 113

Sample ID: 248025006|958737|1

Date Collected: 3/15/2010 13:25:21

Analyst: JXL

Data Type: Original

Sequence No.: 9
Sample ID: 1202056151|958744|1
Analyst: JXL

Autosampler Location: 118
Date Collected: 3/15/2010 13:33:54
Data Type: Original

Replicate Data: 1202056151|958744|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.037	-0.037	-0.0001	0.0005	0.0002	13:34:46	Yes
2	-0.037	-0.037	-0.0001	0.0004	0.0002	13:35:16	Yes
Mean:	-0.037	-0.037	-0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	0.176	0.176	1.15				

Sequence No.: 10
Sample ID: 1202056152|958744|10
Analyst: JXL

Autosampler Location: 119
Date Collected: 3/15/2010 13:35:37
Data Type: Original

Replicate Data: 1202056152|958744|10

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	4.438	4.438	0.0580	0.2607	0.0582	13:36:29	Yes
2	4.432	4.432	0.0579	0.2595	0.0581	13:36:59	Yes
Mean:	4.435	4.435	0.0579				
SD:	0.004	0.004	0.0001				
%RSD:	0.094	0.094	0.09				

Sequence No.: 11
Sample ID: 248033001|958744|1
Analyst: JXL

Autosampler Location: 120
Date Collected: 3/15/2010 13:37:20
Data Type: Original

Replicate Data: 248033001|958744|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.220	0.220	0.0033	0.0158	0.0035	13:38:11	Yes
2	0.226	0.226	0.0033	0.0159	0.0036	13:38:41	Yes
Mean:	0.223	0.223	0.0033				
SD:	0.004	0.004	0.0001				
%RSD:	1.791	1.791	1.57				

Sequence No.: 12
Sample ID: 1202056153|958744|1
Analyst: JXL

Autosampler Location: 121
Date Collected: 3/15/2010 13:39:02
Data Type: Original

Replicate Data: 1202056153|958744|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.217	0.217	0.0032	0.0155	0.0035	13:39:54	Yes
2	0.215	0.215	0.0032	0.0154	0.0035	13:40:24	Yes
Mean:	0.216	0.216	0.0032				
SD:	0.001	0.001	0.0000				
%RSD:	0.506	0.506	0.44				

Sequence No.: 13
Sample ID: CCV
Analyst:

Autosampler Location: 7
Date Collected: 3/15/2010 13:40:45
Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.344	5.344	0.0697	0.3155	0.0700	13:41:35	Yes
2	5.380	5.380	0.0702	0.3142	0.0704	13:42:05	Yes
Mean:	5.362	5.362	0.0699				

SD: 0.026 0.026 0.0003
%RSD: 0.487 0.487 0.48

QC value within limits for Hg 253.7 Recovery = 107.24%
All analyte(s) passed QC.

Sequence No.: 14

Sample ID: CCB

Analyst:

Autosampler Location: 8

Date Collected: 3/15/2010 13:42:24

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.017	-0.017	0.0002	0.0017	0.0005	13:43:14	Yes
2	-0.017	-0.017	0.0002	0.0018	0.0005	13:43:44	Yes
Mean:	-0.017	-0.017	0.0002				
SD:	0.000	0.000	0.0000				
%RSD:	0.696	0.696	0.79				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 15

Sample ID: 1202056154|958744|1

Analyst: JXL

Autosampler Location: 122

Date Collected: 3/15/2010 13:44:03

Data Type: Original

Replicate Data: 1202056154|958744|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	2.441	2.441	0.0321	0.1458	0.0323	13:44:55	Yes
2	2.449	2.449	0.0322	0.1465	0.0324	13:45:25	Yes
Mean:	2.445	2.445	0.0321				
SD:	0.006	0.006	0.0001				
%RSD:	0.242	0.242	0.24				

Sequence No.: 16

Sample ID: 1202056156|958744|1

Analyst: JXL

Autosampler Location: 123

Date Collected: 3/15/2010 13:45:46

Data Type: Original

Replicate Data: 1202056156|958744|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	2.413	2.413	0.0317	0.1438	0.0320	13:46:38	Yes
2	2.406	2.406	0.0316	0.1433	0.0319	13:47:08	Yes
Mean:	2.409	2.409	0.0316				
SD:	0.005	0.005	0.0001				
%RSD:	0.209	0.209	0.21				

Sequence No.: 17

Sample ID: 1202056155|958744|5

Analyst: JXL

Autosampler Location: 124

Date Collected: 3/15/2010 13:47:29

Data Type: Original

Replicate Data: 1202056155|958744|5

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.019	0.019	0.0006	0.0041	0.0009	13:48:21	Yes
2	0.016	0.016	0.0006	0.0037	0.0009	13:48:51	Yes
Mean:	0.018	0.018	0.0006				
SD:	0.002	0.002	0.0000				
%RSD:	9.207	9.207	3.31				

Sequence No.: 18

Sample ID: 248033002|958744|1

Analyst: JXL

Autosampler Location: 125

Date Collected: 3/15/2010 13:49:12

Data Type: Original

Sequence No.: 23

Sample ID: 248033007|958744|1

Analyst: JXL

Autosampler Location: 130

Date Collected: 3/15/2010 13:57:46

Data Type: Original

Replicate Data: 248033007|958744|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.096	0.096	0.0017	0.0085	0.0019	13:58:38	Yes
2	0.093	0.093	0.0016	0.0083	0.0019	13:59:08	Yes
Mean:	0.094	0.094	0.0016				
SD:	0.002	0.002	0.0000				
%RSD:	2.538	2.538	1.90				

Sequence No.: 24

Sample ID: 248033008|958744|1

Analyst: JXL

Autosampler Location: 131

Date Collected: 3/15/2010 13:59:29

Data Type: Original

Replicate Data: 248033008|958744|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.123	0.123	0.0020	0.0100	0.0023	14:00:21	Yes
2	0.121	0.121	0.0020	0.0098	0.0022	14:00:51	Yes
Mean:	0.122	0.122	0.0020				
SD:	0.002	0.002	0.0000				
%RSD:	1.259	1.259	1.00				

Sequence No.: 25

Sample ID: CCV

Analyst:

Autosampler Location: 7

Date Collected: 3/15/2010 14:01:12

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.383	5.383	0.0702	0.3149	0.0705	14:02:02	Yes
2	5.382	5.382	0.0702	0.3153	0.0705	14:02:32	Yes
Mean:	5.382	5.382	0.0702				
SD:	0.000	0.000	0.0000				
%RSD:	0.008	0.008	0.01				

QC value within limits for Hg 253.7 Recovery = 107.65%
All analyte(s) passed QC.

Sequence No.: 26

Sample ID: CCB

Analyst:

Autosampler Location: 8

Date Collected: 3/15/2010 14:02:51

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.014	-0.014	0.0002	0.0019	0.0005	14:03:42	Yes
2	-0.017	-0.017	0.0002	0.0018	0.0005	14:04:11	Yes
Mean:	-0.016	-0.016	0.0002				
SD:	0.002	0.002	0.0000				
%RSD:	12.42	12.42	12.21				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 27

Sample ID: 248033009|958744|1

Analyst: JXL

Autosampler Location: 132

Date Collected: 3/15/2010 14:04:31

Data Type: Original

Replicate Data: 248033009|958744|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.227	0.227	0.0034	0.0163	0.0036	14:05:23	Yes
2	0.224	0.224	0.0033	0.0160	0.0036	14:05:53	Yes
Mean:	0.226	0.226	0.0033				
SD:	0.002	0.002	0.0000				
%RSD:	0.902	0.902	0.79				

Sequence No.: 28

Autosampler Location: 133

Sample ID: 248041001|958744|1

Date Collected: 3/15/2010 14:06:13

Analyst: JXL

Data Type: Original

Replicate Data: 248041001|958744|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.301	0.301	0.0043	0.0207	0.0046	14:07:06	Yes
2	0.302	0.302	0.0043	0.0203	0.0046	14:07:36	Yes
Mean:	0.301	0.301	0.0043				
SD:	0.000	0.000	0.0000				
%RSD:	0.104	0.104	0.09				

Sequence No.: 29

Autosampler Location: 134

Sample ID: 248041002|958744|1

Date Collected: 3/15/2010 14:07:57

Analyst: JXL

Data Type: Original

Replicate Data: 248041002|958744|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.263	0.263	0.0038	0.0179	0.0041	14:08:49	Yes
2	0.261	0.261	0.0038	0.0179	0.0041	14:09:19	Yes
Mean:	0.262	0.262	0.0038				
SD:	0.001	0.001	0.0000				
%RSD:	0.542	0.542	0.48				

Sequence No.: 30

Autosampler Location: 135

Sample ID: 248041003|958744|1

Date Collected: 3/15/2010 14:09:40

Analyst: JXL

Data Type: Original

Replicate Data: 248041003|958744|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	1.877	1.877	0.0247	0.1125	0.0250	14:10:33	Yes
2	1.867	1.867	0.0246	0.1116	0.0249	14:11:03	Yes
Mean:	1.872	1.872	0.0247				
SD:	0.007	0.007	0.0001				
%RSD:	0.362	0.362	0.36				

Sequence No.: 31

Autosampler Location: 136

Sample ID: 248041004|958744|1

Date Collected: 3/15/2010 14:11:24

Analyst: JXL

Data Type: Original

Replicate Data: 248041004|958744|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.490	0.490	0.0068	0.0313	0.0070	14:12:16	Yes
2	0.497	0.497	0.0068	0.0317	0.0071	14:12:46	Yes
Mean:	0.493	0.493	0.0068				
SD:	0.005	0.005	0.0001				
%RSD:	0.972	0.972	0.91				

Sequence No.: 32

Autosampler Location: 137

Sample ID: 248041005|958744|1

Date Collected: 3/15/2010 14:13:07

Analyst: JXL

Data Type: Original

Replicate Data: 248041005|958744|1

Repl #	SampleConc ug/L	StdConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.913	0.913	0.0122	0.0563	0.0125	14:14:00	Yes
2	0.917	0.917	0.0123	0.0562	0.0126	14:14:30	Yes
Mean:	0.915	0.915	0.0123				
SD:	0.003	0.003	0.0000				
%RSD:	0.288	0.288	0.28				

Sequence No.: 33

Autosampler Location: 7

Sample ID: CCV

Date Collected: 3/15/2010 14:14:50

Analyst:

Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StdConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.374	5.374	0.0701	0.3148	0.0704	14:15:41	Yes
2	5.372	5.372	0.0701	0.3132	0.0703	14:16:11	Yes
Mean:	5.373	5.373	0.0701				
SD:	0.001	0.001	0.0000				
%RSD:	0.025	0.025	0.03				

QC value within limits for Hg 253.7 Recovery = 107.45%
All analyte(s) passed QC.

Sequence No.: 34

Autosampler Location: 8

Sample ID: CCB

Date Collected: 3/15/2010 14:16:30

Analyst:

Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StdConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.015	-0.015	0.0002	0.0020	0.0005	14:17:20	Yes
2	-0.015	-0.015	0.0002	0.0018	0.0005	14:17:50	Yes
Mean:	-0.015	-0.015	0.0002				
SD:	0.000	0.000	0.0000				
%RSD:	2.776	2.776	2.61				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Miscellaneous

Prep Logbook

Acid Digestion of Sediments, Sludges, and Soils

Batch ID: 959102.0 Verified by: _____ Lab SOP: GL-MA-E-009 REV# 19
 Analyst: Louis Hall Instrument: Sartorius Balance B-001
 Method: SW846 3050B

Sample ID	Run Date	Initial Weight (g)	Final Volume (mL)	Prep Factor (mL/g)	pH Check
1202056848 MB	04-MAR-2010 09:20:00	0.522	50	95.78544	<2
1202056853 LCS	04-MAR-2010 09:20:00	0.528	50	94.69697	<2
248031001	04-MAR-2010 09:20:00	0.525	50	95.2381	<2
1202056849 DUP (248031001)	04-MAR-2010 09:20:00	0.537	50	93.10987	<2
1202056850 SDILT (248031001)	04-MAR-2010 09:20:00	0.525	50	95.2381	<2
1202056851 MS (248031001)	04-MAR-2010 09:20:00	0.543	50	92.08103	<2
1202056852 MSD (248031001)	04-MAR-2010 09:20:00	0.554	50	90.25271	<2
248031002	04-MAR-2010 09:20:00	0.56	50	89.28571	<2
248031003	04-MAR-2010 09:20:00	0.543	50	92.08103	<2
248033001	04-MAR-2010 09:20:00	0.513	50	97.46589	<2
248033002	04-MAR-2010 09:20:00	0.509	50	98.23183	<2
248033003	04-MAR-2010 09:20:00	0.548	50	91.24088	<2
248033004	04-MAR-2010 09:20:00	0.533	50	93.80863	<2
248033005	04-MAR-2010 09:20:00	0.508	50	98.4252	<2
248033006	04-MAR-2010 09:20:00	0.527	50	94.87666	<2
248033007	04-MAR-2010 09:20:00	0.521	50	95.96929	<2
248033008	04-MAR-2010 09:20:00	0.504	50	99.20635	<2
248033009	04-MAR-2010 09:20:00	0.564	50	88.65248	<2
248041001	04-MAR-2010 09:20:00	0.545	50	91.74312	<2
248041002	04-MAR-2010 09:20:00	0.511	50	97.84736	<2
248041003	04-MAR-2010 09:20:00	0.53	50	94.33962	<2
248041004	04-MAR-2010 09:20:00	0.517	50	96.7118	<2
248041005	04-MAR-2010 09:20:00	0.533	50	93.80863	<2

Comments:

Type	Sample Id	Description	Serial Number	Spike Amt	Units
LCS	1202056853	Metals Soil LCS SRM ICPMS	U1062540-MS	.528	g
MS	1202056851	ICP-MS Spike for soil products.	U1090827-A	.5	mL
MS	1202056851	ICP-MS Spike for Soil Products	U1090827-B	.5	mL
MSD	1202056852	ICP-MS Spike for soil products.	U1090827-A	.5	mL
MSD	1202056852	ICP-MS Spike for Soil Products	U1090827-B	.5	mL
REGNT	All	Hydrogen Peroxide 30%	1250038-02	1.5	mL
REGNT	All	Nitric Acid CONC.	1277919	5	mL

Prep Logbook

Acid Digestion of Sediments, Sludges, and Soils

Batch ID:	959100.0	Verified by:		Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
Analyst:	Louis Hall			LCS	1202056847	Metals Soil LCS SRM ICP/Hg	U1062540-1	.508	g
Method:	SW846 3050B			MS	1202056845	Metals Spike Mix I	U11268741-01	.25	mL
Lab SOP:	GL-MA-E-009 REV# 19			MS	1202056845	Metals Spike Mix II	U11268744-06	.25	mL
Instrument:	Sartorius Balance B-001			MSD	1202056846	Metals Spike Mix I	U11268741-01	.25	mL
				MSD	1202056846	Metals Spike Mix II	U11268744-06	.25	mL

Sample ID	Run Date	Matrix	Initial Weight (g)	Final Volume (mL)	Prep Factor (mL/g)	pH Check 1
1202056842 MB	04-MAR-2010 10:00:00	Soil	0.531	50	94.16196	<2
1202056847 LCS	04-MAR-2010 10:00:00	Soil	0.508	50	98.4252	<2
248031001	04-MAR-2010 10:00:00	Soil	0.534	50	93.63296	<2
1202056843 DUP (248031001)	04-MAR-2010 10:00:00	Soil	0.531	50	94.16196	<2
1202056844 SDILT (248031001)	04-MAR-2010 10:00:00	Soil	0.534	50	93.63296	<2
1202056845 MS (248031001)	04-MAR-2010 10:00:00	Soil	0.569	50	87.87346	<2
1202056846 MSD (248031001)	04-MAR-2010 10:00:00	Soil	0.55	50	90.90909	<2
248031002	04-MAR-2010 10:00:00	Soil	0.552	50	90.57971	<2
248031003	04-MAR-2010 10:00:00	Soil	0.503	50	99.40358	<2
248033001	04-MAR-2010 10:00:00	Soil	0.553	50	90.41591	<2
248033002	04-MAR-2010 10:00:00	Soil	0.516	50	96.89922	<2
248033003	04-MAR-2010 10:00:00	Soil	0.542	50	92.25092	<2
248033004	04-MAR-2010 10:00:00	Soil	0.538	50	92.9368	<2
248033005	04-MAR-2010 10:00:00	Soil	0.524	50	95.41985	<2
248033006	04-MAR-2010 10:00:00	Soil	0.54	50	92.59259	<2
248033007	04-MAR-2010 10:00:00	Soil	0.522	50	95.78544	<2
248033008	04-MAR-2010 10:00:00	Soil	0.533	50	93.80863	<2
248033009	04-MAR-2010 10:00:00	Soil	0.535	50	93.45794	<2
248041001	04-MAR-2010 10:00:00	Soil	0.549	50	91.07468	<2
248041002	04-MAR-2010 10:00:00	Soil	0.541	50	92.42144	<2
248041003	04-MAR-2010 10:00:00	Soil	0.558	50	89.60573	<2
248041004	04-MAR-2010 10:00:00	Soil	0.564	50	88.65248	<2
248041005	04-MAR-2010 10:00:00	Soil	0.502	50	99.60159	<2

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GEL Laboratories LLC

Prep Logbook

Batch ID: 959100.0

Analyst: Louis Hall

Method: SW846 3050B

Lab SOP: GL-MA-E-009 REV# 19

Instrument: Sartorius Balance B-001

Verified by: _____

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
LCS	1202056847	Metals Soil LCS SRM ICP/Hg	U1062540-I	.508	g
MS	1202056845	Metals Spike Mix I	U11268741-01	.25	mL
MS	1202056845	Metals Spike Mix II	U11268744-06	.25	mL
MSD	1202056846	Metals Spike Mix I	U11268741-01	.25	mL
MSD	1202056846	Metals Spike Mix II	U11268744-06	.25	mL

Sample ID	Run Date	Matrix	Initial Weight (g)	Final Volume (mL)	Prep Factor (mL/g)	pH Check 1
Reagent/Solvent Lot ID	Description	Amount	Comments:			
1277916	HYDROCHLORIC ACID	10 mL	Brown, Clumpy soil.			
1277919	Nitric Acid CONC.	1.25 mL				

Prep Logbook

Mercury Analysis Using the Perkin Elmer Automated Mercury Analyzer

Batch ID: 958742.0
Analyst: Tara Griffin
Method: SW846 7471A Prep
Lab SOP: GL-MA-E-010 REV# 23
Instrument: BAL-002

Verified by: _____

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
LCS	1202056152	Metals LCS Soil SRM	U1031809A	.209	g
MS	1202056154	Mercury soil working intermediate standard for MS	WHG100312-14	.3	mL
MSD	1202056156	Mercury soil working intermediate standard for MS	WHG100312-14	.3	mL

Sample ID	Run Date	Matrix	Initial Weight (g)	Final Volume (mL)	Prep Factor (mL/g)	pH Check 1
1202056151 MB	12-MAR-2010 18:55:00	Soil	0.535	30	56.07477	
1202056152 LCS	12-MAR-2010 18:55:00	Soil	0.209	30	143.54067	
248033001	12-MAR-2010 18:55:00	Soil	0.5	30	60	
1202056153 DUP (248033001)	12-MAR-2010 18:55:00	Soil	0.519	30	57.80347	
1202056154 MS (248033001)	12-MAR-2010 18:55:00	Soil	0.548	30	54.74453	
1202056156 MSD (248033001)	12-MAR-2010 18:55:00	Soil	0.522	30	57.47126	
1202056155 SDILT (248033001)	12-MAR-2010 18:55:00	Soil	0.5	30	60	
248033002	12-MAR-2010 18:55:00	Soil	0.525	30	57.14286	
248033003	12-MAR-2010 18:55:00	Soil	0.597	30	50.25126	
248033004	12-MAR-2010 18:55:00	Soil	0.556	30	53.95683	
248033005	12-MAR-2010 18:55:00	Soil	0.511	30	58.70841	
248033006	12-MAR-2010 18:55:00	Soil	0.583	30	51.45798	
248033007	12-MAR-2010 18:55:00	Soil	0.574	30	52.26481	
248033008	12-MAR-2010 18:55:00	Soil	0.558	30	53.76344	
248033009	12-MAR-2010 18:55:00	Soil	0.539	30	55.65863	
248041001	12-MAR-2010 18:55:00	Soil	0.576	30	52.08333	
248041002	12-MAR-2010 18:55:00	Soil	0.533	30	56.28518	
248041003	12-MAR-2010 18:55:00	Soil	0.561	30	53.47594	
248041004	12-MAR-2010 18:55:00	Soil	0.506	30	59.28854	
248041005	12-MAR-2010 18:55:00	Soil	0.531	30	56.49718	

Reagent/Solvent Lot ID	Description	Amount	Comments:
1255532-C	Hg reducing agent	2 mL	Sample 248033001 is a dark brown soil.
1274391-I	NITRIC ACID	.375 mL	Digestion Start Date: 12-MAR-10 18:55
1277235-A	Hydrochloric Acid Conc.	1.125 mL	Digestion End Date: 12-MAR-10 19:55
1277238-C	5% KMnO4 solution	7.5 mL	

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DATA EXCEPTION REPORT

Mo.Day Yr. 29-MAR-10	Division: Industrial	Quality Criteria: Specifications	Type: Process
Instrument Type: ICP	Test / Method: SW846 3050B/6010B	Matrix Type: Solid	Client Code: LANL
Batch ID: 959101	Sample Numbers: See Below		
Potentially affected work order(s)(SDG): 248031(10-2049),248033(10-2072),248041(10-2069-1)			
Application Issues: Failed Recovery for MS/PS Failed RPD for MS/MSD, or PS/PSD Failed Recovery for MSD/PSD			
Specification and Requirements		DER Disposition:	
Exception Description: 1. Failed Recovery for MS/PS: QC 1202056845MS 2. Failed RPD for MS/MSD, or PS/PSD: QC 1202056846MSD 3. Failed Recovery for MSD/PSD: QC 1202056846MSD		1. The matrix spike recovery failed outside of the control limits for aluminum,potassium,sodium and zinc due to possible matrix interferences and/or non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported. 2. The matrix spike and matrix spike duplicate % RPD failed outside of the control limits for manganese due to possible matrix interferences and/or sample non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported. 3. The matrix spike duplicate recovery failed outside of the control limits for aluminum and 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.	

Originator's Name:

Helen Camello 29-MAR-10

Data Validator/Group Leader:

Christopher Louviere 29-MAR-10

DATA EXCEPTION REPORT

Mo. Day Yr. 12-APR-10	Division: Industrial	Quality Criteria: Specifications	Type: Process
Instrument Type: ICP/MS	Test / Method: SW846 3050B/6020	Matrix Type: Solid	Client Code: LANL
Batch ID: 959103	Sample Numbers: See Below		
Potentially affected work order(s)(SDG): 248031(10-2049),248033(10-2072),248041(10-2069-1)			
Application Issues: Failed RPD for DUP Failed Recovery for MSD/PSD			
Specification and Requirements Exception Description: 1. Failed RPD for DUP: QC 1202056849DUP 2. Failed Recovery for MSD/PSD: QC 1202056852MSD		DER Disposition: The matrix spike duplicate recovery failed outside of the control limits for Se due to possible matrix interferences and/or non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported. The sample and sample duplicate % RPD failed outside the control limits for Ni due to possible sample non-homogeneity and/or matrix interference. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.	

Originator's Name:

Samantha Jacobs 13-APR-10

Data Validator/Group Leader:

Jamie Johnson 14-APR-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:** 12-JUN-10
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:** 12-JAN-10
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 ICSEA SOLN A **Received:** 22-APR-09 **Catalog Number :** 160005-01-03
Type: Source Material **Expires:** 04-MAY-10 **Lot Number :** 1013357
Employee: Helen Camello **Solvent :** 5%HNO3
Supplier: o2si
Description: TRACE ICP ICSEA SOLN A mg/L +/- 0.5% 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
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Standard Logbook

Analyte	Concentration	Analyte	Concentration
Aluminum	100 mg/L	Antimony	5 mg/L
Arsenic	15 mg/L	Barium	2.5 mg/L
Beryllium	2.5 mg/L	Boron	25 mg/L
Cadmium	2.5 mg/L	Calcium	100 mg/L
Chromium	2.5 mg/L	Cobalt	2.5 mg/L
Copper	5 mg/L	Iron	50 mg/L
Lead	5 mg/L	Magnesium	150 mg/L
Manganese	5 mg/L	Molybdenum	5 mg/L
Nickel	2.5 mg/L	Phosphorous	75 mg/L
Potassium	75 mg/L	Selenium	15 mg/L
Silicon	50 mg/L	Silver	2.5 mg/L
Sodium	150 mg/L	Strontium	2.5 mg/L
Sulfur	50 mg/L	Thallium	10 mg/L
Tin	5 mg/L	Titanium	2.5 mg/L
Uranium	25 mg/L	Vanadium	2.5 mg/L
Zinc	5 mg/L		

Serial ID: UI090827-A **Opened:** 27-AUG-09 **Catalog Number :** 160067-03
Name: ICP-MS DOE SOIL SPIKE **Received:** 27-AUG-09 **Lot Number :** 1015749
Type: Source Material **Expires:** 27-AUG-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: UI090827-B **Opened:** 27-AUG-09 **Catalog Number :** 160067-03
Name: ICP-MS DOE SOIL SPIKE **Received:** 27-AUG-09 **Lot Number :** 1015749
Type: Source Material **Expires:** 27-AUG-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: UI090925-40 **Opened:** 23-OCT-09 **Amount :** 500 mL
Name: SECOND SOURCE STD -1 **Received:** 25-SEP-09 **Catalog Number :** SGELMX38-500N
Type: Source Material **Expires:** 30-SEP-10 **Lot Number :** 4909129
Employee: Helen Camello **Solvent :** 5%HNO3
Supplier: SPECTRO PURE
Description: SECOND SOURCE STD #1A 5%HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Arsenic	100 mg/L
Barium	100 mg/L	Boron	100 mg/L
Cadmium	100 mg/L	Calcium	1000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	1000 mg/L
Lead	100 mg/L	Phosphorous	500 mg/L
Potassium	500 mg/L	Selenium	500 mg/L
Sodium	500 mg/L	Strontium	100 mg/L

Serial ID: UI090925-41 **Opened:** 23-OCT-09 **Amount :** 500 mL
Name: SECOND SOURCE STD -1 **Received:** 25-SEP-09 **Catalog Number :** SGELMX39-500B
Type: Source Material **Expires:** 30-SEP-10 **Lot Number :** 4909130
Employee: Helen Camello **Solvent :** 5%HNO3,TR.HF
Supplier: SPECTRO PURE
Description: SECOND SOURCE STD #1B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 mg/L	Beryllium	50 mg/L
Magnesium	1000 mg/L	Manganese	100 mg/L
Molybdenum	100 mg/L	Nickel	100 mg/L
Silver	50 mg/L	Sulfur	500 mg/L
Thallium	100 mg/L	Tin	100 mg/L
Titanium	100 mg/L	Uranium	100 mg/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Vanadium	100 mg/L	Zinc	100 mg/L

Serial ID: UI091015-42 **Opened:** 28-OCT-09 **Amount :** 500 mL
Name: SI 1000mg/L **Received:** 15-OCT-09 **Catalog Number :** 060014-02-03
Type: Source Material **Expires:** 28-OCT-10 **Lot Number :** 1017581
Employee: Helen Camello **Solvent :** 0.3%H2O(NH4)2SiF6
Supplier: o2si
Description: Silicon 1000mg/L+/-0.3%in H2O(NH4)2SiF6
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: UI091102-40 **Opened:** 16-NOV-09 **Amount :** 500 mL
Name: TRACE CALSTD#1A SOUF **Received:** 02-NOV-09 **Catalog Number :** HP2270-1-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number :** 0930215
Employee: Helen Camello **Solvent :** HNO3
Supplier: Environmental Express
Description: Trace Calibration Std #1A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	2000 mg/L	Arsenic	200 mg/L
Barium	200 mg/L	Beryllium	200 mg/L
Boron	200 mg/L	Cadmium	200 mg/L
Calcium	2000 mg/L	Chromium	200 mg/L
Cobalt	200 mg/L	Copper	200 mg/L
Iron	2000 mg/L	Lead	200 mg/L
Magnesium	2000 mg/L	Manganese	200 mg/L
Nickel	200 mg/L	Phosphorous	1000 mg/L
Potassium	2000 mg/L	Selenium	200 mg/L
Sodium	2000 mg/L	Strontium	200 mg/L
Thallium	200 mg/L	Uranium	200 mg/L
Vanadium	200 mg/L	Zinc	200 mg/L

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
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Standard Logbook

Analyte	Concentration	Analyte	Concentration
Antimony	200 mg/L	Molybdenum	200 mg/L
Silver	200 mg/L	Sulfur	400 mg/L
Tin	200 mg/L	Titanium	200 mg/L

Serial ID: UI091102-42 **Opened:** 17-NOV-09 **Amount :** 200 mL
Name: SILICON **Received:** 02-NOV-09 **Catalog Number :** HP100050-4F
Type: Source Material **Expires:** 17-NOV-10 **Lot Number :** 0921924
Employee: Helen Camello **Solvent :** H2O/tr HF
Supplier: ENVIRONMENTAL EXPRESS
Description: SILICON 1000mg/L H2O/tr HF
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: UI100310-48 **Opened:** 19-MAR-10 **Amount :** 1000 mL
Name: Trace ICP ICSA **Received:** 12-MAR-10 **Catalog Number :** 160005-02
Type: Source Material **Expires:** 19-MAR-11 **Lot Number :** 1019141
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: UI100317-06 **Opened:** 17-MAR-10 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master A **Received:** 17-MAR-10 **Catalog Number :** 160055-01
Type: Source Material **Expires:** 17-MAR-11 **Lot Number :** 1019161
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: O2SI
Description: ICPMS ICV/CCV SOLN A - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	2000 mg/L	Calcium	2000 mg/L
Iron	2000 mg/L	Magnesium	2000 mg/L
Phosphorous	2000 mg/L	Potassium	2000 mg/L
Sodium	2000 mg/L		

Standard Logbook

Serial ID: UI100317-07 **Opened:** 17-MAR-10 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master B **Received:** 17-MAR-10 **Catalog Number :** 160054-02
Type: Source Material **Expires:** 17-MAR-11 **Lot Number :** 1019162
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV Soln B - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	20 mg/L	Barium	20 mg/L
Beryllium	20 mg/L	Boron	40 mg/L
Cadmium	20 mg/L	Chromium	20 mg/L
Cobalt	20 mg/L	Copper	20 mg/L
Lead	20 mg/L	Lithium	20 mg/L
Manganese	20 mg/L	Nickel	20 mg/L
Selenium	20 mg/L	Strontium	20 mg/L
Thallium	20 mg/L	Thorium	20 mg/L
Uranium	20 mg/L	Vanadium	20 mg/L
Zinc	20 mg/L		

Serial ID: UI100317-08 **Opened:** 17-MAR-10 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master C **Received:** 17-MAR-10 **Catalog Number :** 160054-03
Type: Source Material **Expires:** 17-MAR-11 **Lot Number :** 1019163
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: UI100318-11 **Opened:** 18-MAR-10 **Amount :** 1000 mL
Name: ICP-MS ICSA Master A **Received:** 18-MAR-10 **Catalog Number :** 160013-01-01L
Type: Source Material **Expires:** 18-MAR-11 **Lot Number :** 1018321
Employee: Paul Boyd **Solvent :** 2% HNO3
Supplier: 02SI
Description: ICP-MS ICSA Master A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Carbon	2000 mg/L	Chloride	10000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
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: UI100405-12 **Opened:** 05-APR-10 **Amount :** 250 mL
Name: ICP-MS ICSAB Master B **Received:** 05-APR-10 **Catalog Number :** 160033-02
Type: Source Material **Expires:** 05-APR-11 **Lot Number :** 1019466
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: UI100405-13 **Opened:** 05-APR-10 **Amount :** 250 mL
Name: ICP-MS ICSAB Master C **Received:** 05-APR-10 **Catalog Number :** 160033-03
Type: Source Material **Expires:** 05-APR-11 **Lot Number :** 1019467
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: 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

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 ug/mL	Arsenic	100 ug/mL
Barium	100 ug/mL	Beryllium	100 ug/mL
Boron	100 ug/mL	Cadmium	100 ug/mL
Calcium	1000 ug/mL	Cobalt	100 ug/mL
Iron	1000 ug/mL	Lead	100 ug/mL
Magnesium	1000 ug/mL	Phosphorous	100 ug/mL
Potassium	1000 ug/mL	Silver	100 ug/mL
Sodium	1000 ug/mL	Strontium	100 ug/mL

Serial ID: 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
Uranium-235	.72 ug/mL	Uranium-238	99.28 ug/mL
Vanadium	100 ug/mL	Zinc	100 ug/mL

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

Standard Logbook

Analyte	Concentration	Analyte	Concentration
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		

Serial ID: IHG100312-01 **Opened:** 12-MAR-10 **Instrument Id :** Mercury
Name: MHGINTER1 **Received:** 12-MAR-10 **Pipet Id :** Minou1
Type: Intermediate **Expires:** 13-MAR-10 **Solvent :** 1mL HNO3 + Type1 H2O
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Intermediate 1st Source 200 ug/L
Comments: Prepare fresh daily

Parent Material	Analyte	Parent Conc.	Allquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Standard Logbook

Serial ID: IHG100312-02 **Opened:** 12-MAR-10 **Pipet Id :** Minou1
Name: MHGINTER2 **Received:** 12-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Intermediate **Expires:** 13-MAR-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: WHG100312-07 **Opened:** 12-MAR-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS0.2CRA **Received:** 12-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 19-MAR-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.
IHG100312-01	Mercury	200 ug/L	30 uL	30 mL	.2 ug/L

Serial ID: WHG100312-08 **Opened:** 12-MAR-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS0.5 **Received:** 12-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 19-MAR-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.
IHG100312-01	Mercury	200 ug/L	75 uL	30 mL	.5 ug/L

Serial ID: WHG100312-09 **Opened:** 12-MAR-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS2.0 **Received:** 12-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 19-MAR-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.
IHG100312-01	Mercury	200 ug/L	300 uL	30 mL	2 ug/L

Standard Logbook

Serial ID: WHG100312-10 **Opened:** 12-MAR-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS5.0CCV **Received:** 12-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 19-MAR-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.
IHG100312-01	Mercury	200 ug/L	750 uL	30 mL	5 ug/L

Serial ID: WHG100312-11 **Opened:** 12-MAR-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS10.0 **Received:** 12-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 19-MAR-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.
IHG100312-01	Mercury	200 ug/L	1.5 mL	30 mL	10 ug/L

Serial ID: WHG100312-12 **Opened:** 12-MAR-10 **Pipet Id :** Hg1289245
Name: MHGWORKS5.0ICV **Received:** 12-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 19-MAR-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.
IHG100312-02	Mercury	200 ug/L	750 uL	30 mL	5 ug/L

Serial ID: WHG100312-14 **Opened:** 12-MAR-10 **Pipet Id :** Hg1289245
Name: MHGSOILMSSPIKE **Received:** 12-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 19-MAR-10
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury soil working intermediate standard for MS
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Standard Logbook

Serial ID: WI100325-42 **Opened:** 25-MAR-10 **Balance Id :** 216
Name: TRACE ICP 0.1 PPM STD. **Received:** 02-NOV-09 **Pipet Id :** 3581809
Type: Working **Expires:** 26-MAR-10 **Solvent :** 3%HCL and 1%HNO3 -1289705
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.
WI100325-44	Aluminum	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100325-44	Antimony	1000 ug/L	10 mL	100 mL	100 ug/L
WI100325-44	Arsenic	1000 ug/L	10 mL	100 mL	100 ug/L
WI100325-44	Barium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100325-44	Beryllium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100325-44	Boron	1000 ug/L	10 mL	100 mL	100 ug/L
WI100325-44	Cadmium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100325-44	Calcium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100325-44	Chromium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100325-44	Cobalt	1000 ug/L	10 mL	100 mL	100 ug/L
WI100325-44	Copper	1000 ug/L	10 mL	100 mL	100 ug/L
WI100325-44	Iron	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100325-44	Lead	1000 ug/L	10 mL	100 mL	100 ug/L
WI100325-44	Magnesium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100325-44	Manganese	1000 ug/L	10 mL	100 mL	100 ug/L
WI100325-44	Molybdenum	1000 ug/L	10 mL	100 mL	100 ug/L
WI100325-44	Nickel	1000 ug/L	10 mL	100 mL	100 ug/L
WI100325-44	Phosphorous	5000 ug/L	10 mL	100 mL	500 ug/L
WI100325-44	Potassium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100325-44	Selenium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100325-44	Silica	10698 ug/L	10 mL	100 mL	1069 ug/L
WI100325-44	Silicon	5000 ug/L	10 mL	100 mL	500 ug/L
WI100325-44	Silver	1000 ug/L	10 mL	100 mL	100 ug/L
WI100325-44	Sodium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100325-44	Strontium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100325-44	Sulfur	2000 ug/L	10 mL	100 mL	200 ug/L
WI100325-44	Thallium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100325-44	Tin	1000 ug/L	10 mL	100 mL	100 ug/L
WI100325-44	Titanium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100325-44	Uranium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100325-44	Vanadium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100325-44	Zinc	1000 ug/L	10 mL	100 mL	100 ug/L

Standard Logbook

Serial ID: WI100325-43 **Opened:** 25-MAR-10 **Balance Id :** 216
Name: TRACE ICP 0.5/CCV STD. **Received:** 02-NOV-09 **Pipet Id :** 3581809
Type: Working **Expires:** 26-MAR-10 **Solvent :** 3%HCL and 1%HNO3 -1289705
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
UI091102-41	Sulfur	400 mg/L	2.5 mL	1000 mL	1000 UG/L
UI091102-41	Tin	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Titanium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Standard Logbook

Serial ID: WI100325-44 **Opened:** 25-MAR-10 **Balance Id :** 216
Name: TRACE ICP SCAL 1.0 **Received:** 02-NOV-09 **Pipet Id :** 3581809
Type: Working **Expires:** 26-MAR-10 **Solvent :** 3%HCL and 1 %HNO3-1289705
Employee: Helen Camello
Supplier: o2si
Description: Trace ICP Calibration Standard 1.0ppm
Comments: None

Parent Material	Analyte	Parent Conc.	Alliquot	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: WI100325-45 **Opened:** 25-MAR-10 **Balance Id :** 216
Name: TRACE ICP S-10 STD **Received:** 22-APR-09 **Pipet Id :** 3581809
Type: Working **Expires:** 26-MAR-10 **Solvent :** 3%HCL and 1%HNO3 -1289705
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: WI100325-46 **Opened:** 25-MAR-10 **Balance Id :** 216
Name: ICP TRACE ICV **Received:** 25-SEP-09 **Pipet Id :** 3581809
Type: Working **Expires:** 26-MAR-10 **Solvent :** 3%HCL AND 1%HNO3-1289705
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: WI100325-47 **Opened:** 25-MAR-10 **Balance Id :** 216
Name: PQL Working Standard **Received:** 30-JUN-09 **Pipet Id :** 3581809
Type: Working **Expires:** 26-MAR-10 **Solvent :** 3%HCL &1%HNO3-1289705
Employee: Helen Camello
Supplier: 02sj
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: WMS100411-04 **Opened:** 11-APR-10 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 11-APR-10 **Balance Id :** 4025216
Type: Working **Expires:** 12-APR-10 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl-1296562
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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: WMS100411-04A **Opened:** 11-APR-10 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 11-APR-10 **Pipet Id :** 3541598
Type: Working **Expires:** 12-APR-10 **Solvent :** 2%HNO3/1%HCl - 1296562
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100411-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100411-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS100411-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100411-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100411-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100411-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100411-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100411-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100411-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS100411-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100411-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: <u>WMS100411-05</u>	Opened: <u>11-APR-10</u>	Balance Id : <u>40245216</u>
Name: <u>ICPMS ICV</u>	Received: <u>11-APR-10</u>	Pipet Id : <u>3541598</u>
Type: <u>Working</u>	Expires: <u>12-APR-10</u>	Solvent : <u>2%HNO3/1%HCl - 1296562</u>
Employee: <u>Paul Boyd</u>		
Supplier: <u>GEL</u>		
Description: <u>ICPMS ICV</u>		
Comments: <u>None</u>		

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100317-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI100317-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI100317-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI100317-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI100317-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI100317-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI100317-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI100317-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI100317-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Standard Logbook

Serial ID: WMS100411-06 **Opened:** 11-APR-10 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 11-APR-10 **Pipet Id :** 3820544
Type: Working **Expires:** 12-APR-10 **Solvent :** 2%HNO3/1%HCl - 1296562
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: WMS100411-07 **Opened:** 11-APR-10 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 11-APR-10 **Lot Number :** 1010773
Type: Working **Expires:** 12-APR-10 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2% HNO_3 /1% HCl - 1296562
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100318-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100318-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100318-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS100411-08 **Opened:** 11-APR-10 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 11-APR-10 **Pipet Id :** 1758088
Type: Working **Expires:** 12-APR-10 **Solvent :** 2% HNO_3 /1% HCl - 1296562
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100318-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100318-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100318-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L
UI100405-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI100405-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100405-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI100405-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI100405-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI100405-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI100405-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI100405-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI100405-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L

Serial ID: WMS100412-04 **Opened:** 12-APR-10 **Amount:** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 12-APR-10 **Balance Id:** 4025216
Type: Working **Expres:** 13-APR-10 **Pipet Id:** 3541598
Employee: Paul Boyd **Solvent:** 2%HNO3/1%HCl-1300209
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: WMS100412-04A **Opened:** 12-APR-10 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 12-APR-10 **Pipet Id :** 3541598
Type: Working **Expires:** 13-APR-10 **Solvent :** 2%HNO3/1%HCl - 1300209
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100412-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100412-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS100412-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS100412-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100412-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100412-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS100412-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100412-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100412-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100412-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS100412-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS100412-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100412-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS100412-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100412-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100412-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS100412-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS100412-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS100412-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100412-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100412-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100412-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS100412-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100412-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100412-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100412-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100412-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS100412-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100412-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS100412-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100412-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100412-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS100412-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS100412-05 **Opened:** 12-APR-10 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 12-APR-10 **Pipet Id :** 3541598
Type: Working **Expires:** 13-APR-10 **Solvent :** 2%HNO3/1%HCl - 1300209
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100317-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI100317-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI100317-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI100317-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI100317-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI100317-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI100317-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI100317-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI100317-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100317-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Serial ID: WMS100412-06 **Opened:** 12-APR-10 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 12-APR-10 **Pipet Id :** 3820544
Type: Working **Expires:** 13-APR-10 **Solvent :** 2%HNO3/1%HCl - 1300209
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: WMS100412-07 **Opened:** 12-APR-10 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 12-APR-10 **Lot Number :** 1010773
Type: Working **Expires:** 13-APR-10 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl - 1300209
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100318-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100318-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100318-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS100412-08 **Opened:** 12-APR-10 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 12-APR-10 **Pipet Id :** 1758088
Type: Working **Expires:** 13-APR-10 **Solvent :** 2%HNO3/1%HCl - 1300209
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100318-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100318-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100318-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100318-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L
UI100405-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI100405-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI100405-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI100405-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI100405-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI100405-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI100405-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI100405-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI100405-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L

Serial ID: 1156689-A **Opened:** 20-JUL-09 **Lot Number :** 41226920
Name: B-KMnO4(VWR)-MER **Received:** 20-JUL-09
Type: Reagent/Solvent **Expires:** 20-JUL-10
Employee: Tara Griffin **Verified:** 07-AUG-07
Supplier: VWR
Description: Potassium Permanganate
Comments: None

Standard Logbook

Serial ID: 1228372-A **Opened:** 12-NOV-09 **Lot Number :** 49215936
Name: B-NH2OH.HCI-MER **Received:** 12-NOV-09
Type: Reagent/Solvent **Expires:** 12-NOV-10
Employee: Tara Griffin
Supplier: Fisher Scientific
Description: Hydroxylamine Hydrochloride
Comments: None

Serial ID: 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.HCI-MER **Received:** 15-JAN-10
Type: Reagent/Solvent **Expires:** 15-JUL-10
Employee: Tara Griffin
Supplier: GEL
Description: Hg reducing agent
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1228372-A	B-NH2OH.HCI-MER	N/A	120 g	1000 mL	N/A

Serial ID: 1274391-1 **Opened:** 24-FEB-10 **Instrument Id :** MERCURY
Name: B-HNO3-MER **Received:** 24-FEB-10 **Lot Number :** H44025
Type: Reagent/Solvent **Expires:** 24-FEB-11
Employee: Tara Griffin
Supplier: Mallinckrodt Chemicals
Description: NITRIC ACID
Comments: None

Serial ID: 1277235-A **Opened:** 01-MAR-10 **Lot Number :** J02039
Name: B-HCI-MER **Received:** 01-MAR-10
Type: Reagent/Solvent **Expires:** 01-MAR-11
Employee: Tara Griffin
Supplier: J T Baker
Description: Hydrochloric Acid Conc.
Comments: None

Standard Logbook

Serial ID: 1277238-C **Opened:** 01-MAR-10 **Balance Id :** BAL-002
Name: B-KMnO4-MER **Received:** 01-MAR-10
Type: Reagent/Solvent **Expires:** 20-JUL-10
Employee: Tara Griffin
Supplier: GEL
Description: 5% KMnO4 solution
Comments: None

Parent Material	Analyte	Parent Conc.	Allquot	Final Vol.	Final Conc.
1156689-A	B-KMnO4(VWR)-MER	Crystals	50 g	1000 mL	3%

Serial ID: 1277916 **Opened:** 02-MAR-10 **Lot Number :** J02039
Name: I-HCL **Received:** 02-MAR-10 **Preservative_Id :** 5 none
Type: Reagent/Solvent **Expires:** 02-MAR-11
Employee: Francena Armstrong
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Serial ID: 1277919 **Opened:** 02-MAR-10 **Lot Number :** J 04043 L
Name: I-HNO3 **Received:** 02-MAR-10
Type: Reagent/Solvent **Expires:** 02-MAR-11
Employee: Francena Armstrong
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Serial ID: 1289705 **Opened:** 22-MAR-10 **Amount :** 20 L
Name: B-ICP-RINSE SOLN **Received:** 12-MAR-10 **Lot Number :** H04040+G34050
Type: Reagent/Solvent **Expires:** 28-MAR-10 **Solvent :** 3%HCL+1%HNO3
Employee: Helen Camello
Supplier: GEL
Description: 3%HCL+1%HNO3 RINSE SOLN.
Comments: None

Serial ID: 1291278 **Opened:** 25-MAR-10 **Lot Number :** J 08035 L
Name: I-HNO3 **Received:** 25-MAR-10
Type: Reagent/Solvent **Expires:** 25-MAR-11
Employee: Anthony Green
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Standard Logbook

Serial ID: 1296562 Opened: 05-APR-10 Solvent : Type I Water
Name: B-2%HNO3/1%HCl-ICPMS Received: 05-APR-10
Type: Reagent/Solvent Expires: 12-APR-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.
1277916	I-HCL	36.5-38.0	90 mL	9 l	N/A
1291278	I-HNO3	69.0-70.0	180 mL	9 l	N/A

Serial ID: 1300209 Opened: 12-APR-10 Solvent : Type I Water
Name: B-2%HNO3/1%HCl-ICPMS Received: 12-APR-10
Type: Reagent/Solvent Expires: 19-APR-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.
1277916	I-HCL	36.5-38.0	90 mL	9 l	N/A
1291278	I-HNO3	69.0-70.0	180 mL	9 l	N/A

General Chemistry Analysis

Case Narrative

**General Chemistry Narrative
Los Alamos National Laboratory (LANL)
SDG 10-2069**

Method/Analysis Information

Product:	Cyanide, Total		
Analytical Batch:	960499	Method:	SW9012A Cyanide and Total
Prep Batch :	960498	Method:	SSW846 9010B Prep

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 9012A:

Sample ID	Client ID
248039001	RE15-10-8406
1202060243	Method Blank (MB)
1202060244	248038001(RE11-10-1684) Sample Duplicate (DUP)
1202060245	248038002(RE11-10-1683) Sample Duplicate (DUP)
1202060246	248038001(RE11-10-1684) Matrix Spike (MS)
1202060247	248038002(RE11-10-1683) Matrix Spike (MS)
1202060248	248038001(RE11-10-1684) Matrix Spike Duplicate (MSD)
1202060249	248038002(RE11-10-1683) Matrix Spike Duplicate (MSD)
1202060250	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: 248038001 (RE11-10-1684) and 248038002 (RE11-10-1683).

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. 1202060245 (RE11-10-1683).

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.

Method/Analysis Information

Product: Nitrate Nitrite by Cadmium Reduction

Analytical Batch: 958150

Method: EPA 353.2 Nitrogen and Nitrate/Nitrite

Sample Analysis

The following samples were analyzed using the analytical protocol as established in EPA 353.2:

Sample ID	Client ID
248039001	RE15-10-8406
1202054725	Method Blank (MB)
1202054726	247793001(RE15-10-8330) Sample Duplicate (DUP)
1202054727	248044001(CAPA-10-12770) Sample Duplicate (DUP)
1202054728	248074001(SWWS46-10-13636) Sample Duplicate (DUP)
1202054729	247793001(RE15-10-8330) Post Spike (PS)
1202054730	248044001(CAPA-10-12770) Post Spike (PS)
1202054731	248074001(SWWS46-10-13636) Post Spike (PS)
1202054732	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-128 REV# 5.

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 Nutrient analysis was performed on a Lachat QuickChem FIA+ 8500 Series.

Continuing Calibration Blanks

All continuing calibration blanks (CCBs) 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: 247793001 (RE15-10-8330), 248044001 (CAPA-10-12770) and 248074001 (SWWS46-10-13636).

Matrix Spike (MS)/Post Spike (PS) Recovery Statement

The MS/PS recoveries for this sample set were within the required 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. 1202054726 (RE15-10-8330).

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times

All samples in this SDG met the specified holding time.

Sample Preservation/Integrity

All the samples from this sample group met the preservation and integrity requirements of the method.

Sample Dilutions

The following samples in this sample group were diluted due to high concentration: 1202054728 (SWWS46-10-13636) and 1202054731 (SWWS46-10-13636). The following samples in this sample group were diluted due to matrix interference: 1202054726 (RE15-10-8330), 1202054727 (CAPA-10-12770), 1202054729 (RE15-10-8330), 1202054730 (CAPA-10-12770) and 248039001 (RE15-10-8406).

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: 4 Nick Cole A. Enman Date: 3.23.10

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: 10-2069 GEL Work Order: 248039

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

Nikola A. Emani 3.23.10

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 23, 2010

Client SDG: 10-2069

Client Sample ID: RE15-10-8406
Sample ID: 248039001
Matrix: W
Collect Date: 19-FEB-10 12:00
Receive Date: 25-FEB-10
Collector: Client

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "As Received"</i>											
Cyanide, Total	U	ND	1.66	5.00	ug/L	1	AXC2	03/04/10	1544	960499	1
Nutrient Analysis											
<i>EPA 353.2 Nitrogen, Nitrate/Nitrite "As Received"</i>											
Nitrogen, Nitrate/Nitrite	U	ND	0.100	0.500	mg/L	10	AXH3	03/03/10	1141	958150	2

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/04/10	1259	960498

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	
2	EPA 353.2	

Quality Control Summary

GEL LABORATORIES LLC

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

QC Summary

Report Date: March 23, 2010

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

Contact: Ms. Joylene Valdez

Workorder: 248039

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Flow Injection Analysis											
Batch	960499										
QC1202060244	248038001	DUP									
Cyanide, Total		U	ND	U	ND	ug/L	N/A		AXC2	03/04/10	15:34
QC1202060245	248038002	DUP									
Cyanide, Total		U	ND	U	ND	ug/L	N/A			03/04/10	15:41
QC1202060250	LCS										
Cyanide, Total	50.0				54.7	ug/L	109	(90%-110%)		03/04/10	15:27
QC1202060243	MB										
Cyanide, Total			U		5.00	ug/L				03/04/10	15:26
QC1202060246	248038001	MS									
Cyanide, Total	100	U	ND		115	ug/L	115	(60%-144%)		03/04/10	15:38
QC1202060247	248038002	MS									
Cyanide, Total	100	U	ND		106	ug/L	106	(60%-144%)		03/04/10	15:42
QC1202060248	248038001	MSD									
Cyanide, Total	100	U	ND		113	ug/L	1.75	113	(0%-20%)	03/04/10	15:39
QC1202060249	248038002	MSD									
Cyanide, Total	100	U	ND		117	ug/L	9.87	117	(0%-20%)	03/04/10	15:43
Nutrient Analysis											
Batch	958150										
QC1202054726	247793001	DUP									
Nitrogen, Nitrate/Nitrite		U	ND	J	0.111	mg/L	200	(+/-0.500)	AXH3	03/03/10	11:38
QC1202054727	248044001	DUP									
Nitrogen, Nitrate/Nitrite			0.446		0.428	mg/L	4.12	^	(+/-0.250)	03/03/10	11:11
QC1202054728	248074001	DUP									
Nitrogen, Nitrate/Nitrite			1.97		1.94	mg/L	1.28		(0%-20%)	03/03/10	11:28
QC1202054732	LCS										
Nitrogen, Nitrate/Nitrite	1.00				0.986	mg/L		98.6	(90%-110%)	03/03/10	10:50
QC1202054725	MB										
Nitrogen, Nitrate/Nitrite				J	0.0124	mg/L				03/03/10	10:49
QC1202054729	247793001	PS									
Nitrogen, Nitrate/Nitrite	1.00	U	ND		1.01	mg/L		100	(90%-110%)	03/03/10	11:40
QC1202054730	248044001	PS									
Nitrogen, Nitrate/Nitrite	1.00		0.0892		1.05	mg/L		96.1	(90%-110%)	03/03/10	11:12
QC1202054731	248074001	PS									
Nitrogen, Nitrate/Nitrite	1.00		0.393		1.39	mg/L		99.7	(90%-110%)	03/03/10	11:29

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

GEL LABORATORIES LLC

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

QC Summary

Workorder: 248039

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
B	For General Chemistry and Organic analysis the target analyte was detected in the associated blank.										
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.										
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: 23-MAR-2010 11:19

GEL Laboratories LLC

Contract: LANL01004

SDG #: 10-2069

Flow Injection Analysis

Method: SW846 9012A

Concentration Units:ug/L

Instrument: Lachat QuickChem FIA+ 8000 Series

Parmname: Cyanide, Total

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	04-MAR-2010 14:05:55	OM_3-4-2010_13-55-23	151	150	101	(90%-110%)	Yes
CCV	04-MAR-2010 15:22:30	OM_3-4-2010_13-55-23	103	100	103	(90%-110%)	Yes
CCV	04-MAR-2010 15:35:01	OM_3-4-2010_13-55-23	103	100	103	(90%-110%)	Yes
CCV	04-MAR-2010 15:47:31	OM_3-4-2010_13-55-23	105	100	105	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	04-MAR-2010 14:07:45	OM_3-4-2010_13-55-23	-1.31	10	Yes
CCB	04-MAR-2010 15:24:20	OM_3-4-2010_13-55-23	-1.05	10	Yes
CCB	04-MAR-2010 15:36:53	OM_3-4-2010_13-55-23	-0.945	10	Yes
CCB	04-MAR-2010 15:49:22	OM_3-4-2010_13-55-23	-1.39	10	Yes

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 23-MAR-2010 11:19

GEL Laboratories LLC

Contract: LANL01004

SDG #: 10-2069

Nutrient Analysis

Method: EPA 353.2

Concentration Units:mg/L

Instrument: Lachat Quickchem FIA+ 8500 Series

Parmname: Nitrogen, Nitrate/Nitrite

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	03-MAR-2010 10:40:18	OM_3-3-2010_10-30-06	0.983	1	98.3	(90%-110%)	Yes
CCV	03-MAR-2010 11:01:46	OM_3-3-2010_10-30-06	0.983	1	98.3	(90%-110%)	Yes
CCV	03-MAR-2010 11:17:24	OM_3-3-2010_10-30-06	1	1	100	(90%-110%)	Yes
CCV	03-MAR-2010 11:34:09	OM_3-3-2010_10-30-06	0.985	1	98.5	(90%-110%)	Yes
CCV	03-MAR-2010 11:50:55	OM_3-3-2010_10-30-06	0.968	1	96.8	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	03-MAR-2010 10:42:40	OM_3-3-2010_10-30-06	0.00396	0.05	Yes
CCB	03-MAR-2010 11:04:08	OM_3-3-2010_10-30-06	0.00204	0.05	Yes
CCB	03-MAR-2010 11:19:46	OM_3-3-2010_10-30-06	0.00357	0.05	Yes
CCB	03-MAR-2010 11:36:31	OM_3-3-2010_10-30-06	0.00385	0.05	Yes
CCB	03-MAR-2010 11:53:16	OM_3-3-2010_10-30-06	0.00438	0.05	Yes

Cyanide, Total

Prep Logbook

Cyanide Sample Distillation

Batch ID: 960498.0

Analyst: Alan Stanley

Method: SW846 9010B Prep

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	1202060250	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.0125	mL
MS	1202060246	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
MS	1202060247	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
MSD	1202060248	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
MSD	1202060249	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL

Sample ID	Run Date	Matrix	Initial Volume (mL)	Final Volume (mL)	Prep Factor (mL/mL)	pH Check
1202060243 MB	04-MAR-2010 12:59:00	Water	25	25	1	>12
1202060250 LCS	04-MAR-2010 12:59:00	Water	25	25	1	>12
247908001	04-MAR-2010 12:59:00	Water	25	25	1	>12
247908002	04-MAR-2010 12:59:00	Water	25	25	1	>12
247908003	04-MAR-2010 12:59:00	Water	25	25	1	>12
247997001	04-MAR-2010 12:59:00	Water	25	25	1	>12
248001001	04-MAR-2010 12:59:00	Water	25	25	1	>12
248034001	04-MAR-2010 12:59:00	Water	25	25	1	>12
248038001	04-MAR-2010 12:59:00	Water	25	25	1	>12
1202060244 DUP (248038001)	04-MAR-2010 12:59:00	Water	25	25	1	>12
1202060246 MS (248038001)	04-MAR-2010 12:59:00	Water	25	25	1	>12
1202060248 MSD (248038001)	04-MAR-2010 12:59:00	Water	25	25	1	>12
248038002	04-MAR-2010 12:59:00	Water	25	25	1	>12
1202060245 DUP (248038002)	04-MAR-2010 12:59:00	Water	25	25	1	>12
1202060247 MS (248038002)	04-MAR-2010 12:59:00	Water	25	25	1	>12
1202060249 MSD (248038002)	04-MAR-2010 12:59:00	Water	25	25	1	>12
248039001	04-MAR-2010 12:59:00	Water	25	25	1	>12
248046001	04-MAR-2010 12:59:00	Water	25	25	1	>12
248046002	04-MAR-2010 12:59:00	Water	25	25	1	>12
248053001	04-MAR-2010 12:59:00	Water	25	25	1	>12

Analytical Logbook version 1 11-04-2002

GEL Laboratories LLC

Prep Logbook

Batch ID: 960498.0
Analyst: Alan Stanley
Method: SW846 9010B Prep
Lab SOP: GL-GC-E-067 REV# 13
Instrument: Sartorius Balance B-001

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
LCS	1202060250	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.0125	mL
MS	1202060246	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
MS	1202060247	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
MSD	1202060248	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
MSD	1202060249	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL

Sample ID	Run Date	Matrix	Initial Volume (mL)	Final Volume (mL)	Prep Factor (mL/mL)	pH Check
248053002	04-MAR-2010 12:59:00	Water	25	25	1	>12
248053003	04-MAR-2010 12:59:00	Water	25	25	1	>12

Comments:

Reagent/Solvent Lot ID	Description	Amount
1260189-C	50% H2SO4 CN Prep	2.5 mL
1270661-C	Bismuth Nitrate Solution	1.25 mL
1270663-C	0.8N HNO3S	1.25 mL
1270669-C	51% MgCl2 Soln	1 mL
1273851-C	0.25N Sodium Hydroxide Solution	25 mL
WCN100304-07	150 ppb CN Distilled ICV Standard	0.375 mL

This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
200 ppb		1	axc2	3/4/2010 13:58:46	OM_3-4-2010_13-55-23
150 ppb		1	axc2	3/4/2010 13:59:38	OM_3-4-2010_13-55-23
100 ppb		1	axc2	3/4/2010 14:00:30	OM_3-4-2010_13-55-23
50 ppb		1	axc2	3/4/2010 14:01:23	OM_3-4-2010_13-55-23
10 ppb		1	axc2	3/4/2010 14:02:16	OM_3-4-2010_13-55-23
CRDL 5.0 ppb		1	axc2	3/4/2010 14:03:10	OM_3-4-2010_13-55-23
ICAL-00		1	axc2	3/4/2010 14:04:04	OM_3-4-2010_13-55-23
ICV		1	axc2	3/4/2010 14:05:55	OM_3-4-2010_13-55-23
ICB		1	axc2	3/4/2010 14:07:45	OM_3-4-2010_13-55-23
CRDL		1	axc2	3/4/2010 14:09:35	OM_3-4-2010_13-55-23
1202053284	957578	1	axc2	3/4/2010 14:11:25	OM_3-4-2010_13-55-23
1202053291	957578	25	axc2	3/4/2010 14:12:18	OM_3-4-2010_13-55-23
247899001	957578	1	axc2	3/4/2010 14:13:11	OM_3-4-2010_13-55-23
1202053285	957578	1	axc2	3/4/2010 14:14:05	OM_3-4-2010_13-55-23
1202053287	957578	1	axc2	3/4/2010 14:14:58	OM_3-4-2010_13-55-23
1202053289	957578	1	axc2	3/4/2010 14:15:51	OM_3-4-2010_13-55-23
247899002	957578	1	axc2	3/4/2010 14:16:44	OM_3-4-2010_13-55-23
1202053286	957578	1	axc2	3/4/2010 14:17:36	OM_3-4-2010_13-55-23
1202053288	957578	1	axc2	3/4/2010 14:18:29	OM_3-4-2010_13-55-23
1202053290	957578	1	axc2	3/4/2010 14:19:21	OM_3-4-2010_13-55-23
CCV		1	axc2	3/4/2010 14:20:13	OM_3-4-2010_13-55-23
CCB		1	axc2	3/4/2010 14:22:04	OM_3-4-2010_13-55-23
247899003	957578	1	axc2	3/4/2010 14:23:52	OM_3-4-2010_13-55-23
247899004	957578	1	axc2	3/4/2010 14:24:44	OM_3-4-2010_13-55-23
247899005	957578	1	axc2	3/4/2010 14:25:35	OM_3-4-2010_13-55-23
247899006	957578	1	axc2	3/4/2010 14:26:28	OM_3-4-2010_13-55-23
247899007	957578	1	axc2	3/4/2010 14:27:19	OM_3-4-2010_13-55-23
247899008	957578	1	axc2	3/4/2010 14:28:13	OM_3-4-2010_13-55-23
247899009	957578	1	axc2	3/4/2010 14:29:06	OM_3-4-2010_13-55-23
247899010	957578	1	axc2	3/4/2010 14:29:59	OM_3-4-2010_13-55-23
247899011	957578	1	axc2	3/4/2010 14:30:53	OM_3-4-2010_13-55-23
247899012	957578	1	axc2	3/4/2010 14:31:46	OM_3-4-2010_13-55-23
CCV		1	axc2	3/4/2010 14:32:38	OM_3-4-2010_13-55-23
CCB		1	axc2	3/4/2010 14:34:28	OM_3-4-2010_13-55-23
247899013	957578	1	axc2	3/4/2010 14:36:18	OM_3-4-2010_13-55-23
247899014	957578	1	axc2	3/4/2010 14:37:11	OM_3-4-2010_13-55-23
247899015	957578	1	axc2	3/4/2010 14:38:03	OM_3-4-2010_13-55-23
247899016	957578	1	axc2	3/4/2010 14:38:56	OM_3-4-2010_13-55-23
247899017	957578	1	axc2	3/4/2010 14:39:48	OM_3-4-2010_13-55-23
247899018	957578	1	axc2	3/4/2010 14:40:41	OM_3-4-2010_13-55-23
247899019	957578	1	axc2	3/4/2010 14:41:33	OM_3-4-2010_13-55-23
247899020	957578	1	axc2	3/4/2010 14:42:25	OM_3-4-2010_13-55-23
1202053292	957580	1	axc2	3/4/2010 14:43:17	OM_3-4-2010_13-55-23
1202053299	957580	25	axc2	3/4/2010 14:44:08	OM_3-4-2010_13-55-23
CCV		1	axc2	3/4/2010 14:45:01	OM_3-4-2010_13-55-23
CCB		1	axc2	3/4/2010 14:46:51	OM_3-4-2010_13-55-23
247907001	957580	1	axc2	3/4/2010 14:48:41	OM_3-4-2010_13-55-23
1202053293	957580	1	axc2	3/4/2010 14:49:35	OM_3-4-2010_13-55-23
1202053295*	957580	1	axc2	3/4/2010 14:50:28	OM_3-4-2010_13-55-23
1202053297	957580	1	axc2	3/4/2010 14:51:22	OM_3-4-2010_13-55-23
247907002	957580	1	axc2	3/4/2010 14:52:15	OM_3-4-2010_13-55-23
1202053294	957580	1	axc2	3/4/2010 14:53:09	OM_3-4-2010_13-55-23
1202053296	957580	1	axc2	3/4/2010 14:54:02	OM_3-4-2010_13-55-23
1202053298*	957580	1	axc2	3/4/2010 14:54:55	OM_3-4-2010_13-55-23
247907003*	957580	1	axc2	3/4/2010 14:55:47	OM_3-4-2010_13-55-23
247907004	957580	1	axc2	3/4/2010 14:56:40	OM_3-4-2010_13-55-23
CCV		1	axc2	3/4/2010 14:57:33	OM_3-4-2010_13-55-23
CCB		1	axc2	3/4/2010 14:59:22	OM_3-4-2010_13-55-23

1202053295	957580	1	axc2	3/4/2010	15:01:12	OM_3-4-2010_13-55-23
1202053298	957580	1	axc2	3/4/2010	15:02:05	OM_3-4-2010_13-55-23
247907003	957580	1	axc2	3/4/2010	15:02:58	OM_3-4-2010_13-55-23
247907004	957580	1	axc2	3/4/2010	15:03:50	OM_3-4-2010_13-55-23
247907005	957580	1	axc2	3/4/2010	15:04:43	OM_3-4-2010_13-55-23
247907006	957580	1	axc2	3/4/2010	15:05:35	OM_3-4-2010_13-55-23
247907007	957580	1	axc2	3/4/2010	15:06:28	OM_3-4-2010_13-55-23
247907008	957580	1	axc2	3/4/2010	15:07:20	OM_3-4-2010_13-55-23
247907009	957580	1	axc2	3/4/2010	15:08:11	OM_3-4-2010_13-55-23
247907010	957580	1	axc2	3/4/2010	15:09:06	OM_3-4-2010_13-55-23
CCV		1	axc2	3/4/2010	15:09:58	OM_3-4-2010_13-55-23
CCB		1	axc2	3/4/2010	15:11:48	OM_3-4-2010_13-55-23
247907011	957580	1	axc2	3/4/2010	15:13:39	OM_3-4-2010_13-55-23
247907012	957580	1	axc2	3/4/2010	15:14:32	OM_3-4-2010_13-55-23
247907013	957580	1	axc2	3/4/2010	15:15:27	OM_3-4-2010_13-55-23
247907014	957580	1	axc2	3/4/2010	15:16:20	OM_3-4-2010_13-55-23
247907015	957580	1	axc2	3/4/2010	15:17:13	OM_3-4-2010_13-55-23
247907016	957580	1	axc2	3/4/2010	15:18:07	OM_3-4-2010_13-55-23
247907017	957580	1	axc2	3/4/2010	15:18:59	OM_3-4-2010_13-55-23
248045012	957580	1	axc2	3/4/2010	15:19:52	OM_3-4-2010_13-55-23
248045013	957580	1	axc2	3/4/2010	15:20:45	OM_3-4-2010_13-55-23
248045014	957580	1	axc2	3/4/2010	15:21:38	OM_3-4-2010_13-55-23
CCV		1	axc2	3/4/2010	15:22:30	OM_3-4-2010_13-55-23
CCB		1	axc2	3/4/2010	15:24:20	OM_3-4-2010_13-55-23
1202060243	960499	1	axc2	3/4/2010	15:26:09	OM_3-4-2010_13-55-23
1202060250	960499	1	axc2	3/4/2010	15:27:01	OM_3-4-2010_13-55-23
247908001	960499	1	axc2	3/4/2010	15:27:53	OM_3-4-2010_13-55-23
247908002	960499	1	axc2	3/4/2010	15:28:47	OM_3-4-2010_13-55-23
247908003	960499	1	axc2	3/4/2010	15:29:41	OM_3-4-2010_13-55-23
247997001	960499	1	axc2	3/4/2010	15:30:34	OM_3-4-2010_13-55-23
248001001	960499	1	axc2	3/4/2010	15:31:29	OM_3-4-2010_13-55-23
248034001	960499	1	axc2	3/4/2010	15:32:22	OM_3-4-2010_13-55-23
248038001	960499	1	axc2	3/4/2010	15:33:15	OM_3-4-2010_13-55-23
1202060244	960499	1	axc2	3/4/2010	15:34:09	OM_3-4-2010_13-55-23
CCV		1	axc2	3/4/2010	15:35:01	OM_3-4-2010_13-55-23
CCB		1	axc2	3/4/2010	15:36:53	OM_3-4-2010_13-55-23
1202060246	960499	1	axc2	3/4/2010	15:38:42	OM_3-4-2010_13-55-23
1202060248	960499	1	axc2	3/4/2010	15:39:36	OM_3-4-2010_13-55-23
248038002	960499	1	axc2	3/4/2010	15:40:29	OM_3-4-2010_13-55-23
1202060245	960499	1	axc2	3/4/2010	15:41:22	OM_3-4-2010_13-55-23
1202060247	960499	1	axc2	3/4/2010	15:42:15	OM_3-4-2010_13-55-23
1202060249	960499	1	axc2	3/4/2010	15:43:07	OM_3-4-2010_13-55-23
248039001	960499	1	axc2	3/4/2010	15:44:01	OM_3-4-2010_13-55-23
248046001	960499	1	axc2	3/4/2010	15:44:52	OM_3-4-2010_13-55-23
248046002	960499	1	axc2	3/4/2010	15:45:45	OM_3-4-2010_13-55-23
248053001	960499	1	axc2	3/4/2010	15:46:39	OM_3-4-2010_13-55-23
CCV		1	axc2	3/4/2010	15:47:31	OM_3-4-2010_13-55-23
CCB		1	axc2	3/4/2010	15:49:22	OM_3-4-2010_13-55-23
248053002	960499	1	axc2	3/4/2010	15:51:13	OM_3-4-2010_13-55-23
248053003	960499	1	axc2	3/4/2010	15:52:07	OM_3-4-2010_13-55-23
CCV		1	axc2	3/4/2010	15:52:59	OM_3-4-2010_13-55-23
CCB		1	axc2	3/4/2010	15:54:49	OM_3-4-2010_13-55-23

Original Run Filename: OM_3-4-2010_13-55-23.OMN created 3/4/2010 13:55:23
 Original Run Author's Signature: [axc2]
 Current Run Filename: OM_3-4-2010_13-55-23.OMN last modified 3/4/2010 15:55:54
 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)				
WCN100304-01	1	S1	200	9.08	3/4/2010@13:58:46			200 ppb
WCN100304-02	1	S2	150	6.91	3/4/2010@13:59:38			150 ppb
WCN100304-03	1	S3	100	4.35	3/4/2010@14:00:30			100 ppb
WCN100304-04	1	S4	50.0	2.45	3/4/2010@14:01:23			50 ppb
WCN100304-05	1	S5	10.0	0.578	3/4/2010@14:02:16			10 ppb
WCN100304-06	1	S6	5.00	0.340	3/4/2010@14:03:10			CRDL 5.0 ppb
WCN100304-08	1	S7	0.00	0.0240	3/4/2010@14:04:04			0.0 ppb
DQM Test: Minimum Correlation Coefficient								
Result:			0.99948 > 0.99500					
Message			Pass					
Action			Continue					
WCN100304-07	1	S8	151	6.88	3/4/2010@14:05:55			ICV
Known Conc:			150					
DQM Test: > + Percent Relative Difference								
Result:			0.8 < 10.0					
Message			ICV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			0.8 < 10.0					
Message			ICV Passed					
Action			Continue					
Calibration:			Table/Fig. 1					
WCN100304-08	1	S7	-1.31	0.0240	3/4/2010@14:07:45			ICB/CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-1.31 < 5.01					
Message			ICB/CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-1.31 > -5.01					
Message			ICB/CCB Passed					
Action			Continue					
WCN100304-06	1	S6	5.86	0.346	3/4/2010@14:09:35			CRDL
Known Conc:			5.00					
DQM Test: > + Concentration Limit								
Result:			5.86 < 7.50					
Message			CRDL Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			5.86 > 2.50					
Message			Pass					
Action			None					
1202053284|957578|MB	1	1	-2.31	-0.0206	3/4/2010@14:11:25			
1202053291|LCS	1	2	18.3	0.904	3/4/2010@14:12:18		25.00	
247899001	1	3	-0.820	0.0461	3/4/2010@14:13:11			
1202053285|DUP	1	4	-0.872	0.0438	3/4/2010@14:14:05			
1202053287|MS	1	5	100	4.59	3/4/2010@14:14:58			
1202053289|MSD	1	6	99.8	4.57	3/4/2010@14:15:51			
247899002	1	7	1.56	0.153	3/4/2010@14:16:44			
1202053286|DUP	1	8	2.02	0.174	3/4/2010@14:17:36			
1202053288|MS	1	9	87.4	4.01	3/4/2010@14:18:29			
1202053290|MSD	1	10	94.8	4.35	3/4/2010@14:19:21			
WCN100304-03	1	S3	103	4.72	3/4/2010@14:20:13			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			3.1 < 10.0					

Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			3.1 < 10.0					
Message			CCV Passed					
Action			Continue					
WCN100304-08	1	S7	-1.38	0.0208	3/4/2010@14:22:04			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-1.38 > 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-1.38 > -5.00					
Message			CCB Passed					
Action			Continue					
247899003	1	11	-0.646	0.0540	3/4/2010@14:23:52			
247899004	1	12	-0.530	0.0592	3/4/2010@14:24:44			
247899005	1	13	-1.15	0.0313	3/4/2010@14:25:35			
247899006	1	14	0.280	0.0956	3/4/2010@14:26:28			
247899007	1	15	0.0899	0.0871	3/4/2010@14:27:19			
247899008	1	16	1.52	0.151	3/4/2010@14:28:13			
247899009	1	17	5.29	0.321	3/4/2010@14:29:06			
247899010	1	18	0.0677	0.0861	3/4/2010@14:29:59			
247899011	1	19	2.55	0.198	3/4/2010@14:30:53			
247899012	1	20	-0.401	0.0650	3/4/2010@14:31:46			
WCN100304-03	1	S3	104	4.77	3/4/2010@14:32:38			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			4.3 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			4.3 < 10.0					
Message			CCV Passed					
Action			Continue					
WCN100304-08	1	S7	-1.42	0.0192	3/4/2010@14:34:28			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-1.42 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-1.42 > -5.00					
Message			CCB Passed					
Action			Continue					
247899013	1	21	1.98	0.172	3/4/2010@14:36:18			
247899014	1	22	-0.282	0.0703	3/4/2010@14:37:11			
247899015	1	23	-0.685	0.0522	3/4/2010@14:38:03			
247899016	1	24	-1.13	0.0322	3/4/2010@14:38:56			
247899017	1	25	0.385	0.100	3/4/2010@14:39:48			
247899018	1	26	-0.640	0.0543	3/4/2010@14:40:41			
247899019	1	27	0.0545	0.0855	3/4/2010@14:41:33			
247899020	1	28	1.88	0.168	3/4/2010@14:42:25			
1202053292|957580|MB	1	29	-1.43	0.0185	3/4/2010@14:43:17			
1202053299|LCS	1	30	18.7	0.924	3/4/2010@14:44:08		25.00	
WCN100304-03	1	S3	104	4.75	3/4/2010@14:45:01			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			3.9 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			3.9 < 10.0					
Message			CCV Passed					
Action			Continue					
WCN100304-08	1	S7	-1.45	0.0178	3/4/2010@14:46:51			CCB
Known Conc:			0.00					

DQM Test: > + Concentration Limit									
Result:		-1.45 < 5.00							
Message		CCB Passed							
Action		Continue							
DQM Test: < - Concentration Limit									
Result:		-1.45 > -5.00							
Message		CCB Passed							
Action		Continue							
247907001	1	31	0.423	0.102	3/4/2010@14:48:41				
1202053293|DUP	1	32	3.32	0.232	3/4/2010@14:49:35				
1202053295|MS	1	33	45.9	2.15	3/4/2010@14:50:28				
1202053297|MSD	1	34	66.1	3.06	3/4/2010@14:51:22				
247907002	1	35	-0.678	0.0526	3/4/2010@14:52:15				
1202053294|DUP	1	36	-0.764	0.0487	3/4/2010@14:53:09				
1202053296|MS	1	37	44.0	2.06	3/4/2010@14:54:02				
1202053298|MSD	1	38	36.8	1.74	3/4/2010@14:54:55				
247907003	1	39	147	6.70	3/4/2010@14:55:47				
247907004	1	40	515	23.2	3/4/2010@14:56:40				
WCN100304-03	1	S3	105	4.80	3/4/2010@14:57:33				CCV
Known Conc:			100						
DQM Test: > + Percent Relative Difference									
Result:		4.8 < 10.0							
Message		CCV Passed							
Action		Continue							
DQM Test: < - Percent Relative Difference									
Result:		4.8 < 10.0							
Message		CCV Passed							
Action		Continue							
WCN100304-08	1	S7	-0.946	0.0405	3/4/2010@14:59:22				CCB
Known Conc:			0.00						
DQM Test: > + Concentration Limit									
Result:		-0.946 < 5.00							
Message		CCB Passed							
Action		Continue							
DQM Test: < - Concentration Limit									
Result:		-0.946 > -5.00							
Message		CCB Passed							
Action		Continue							
1202053295|MS	1	33	48.1	2.24	3/4/2010@15:01:12				
1202053298|MSD	1	38	41.0	1.93	3/4/2010@15:02:05				
247907003	1	39	-0.540	0.0588	3/4/2010@15:02:58				
247907004	1	40	-0.705	0.0513	3/4/2010@15:03:50				
247907005	1	41	0.810	0.119	3/4/2010@15:04:43				
247907006	1	42	-1.32	0.0235	3/4/2010@15:05:35				
247907007	1	43	-0.570	0.0574	3/4/2010@15:06:28				
247907008	1	44	0.767	0.118	3/4/2010@15:07:20				
247907009	1	45	-1.10	0.0334	3/4/2010@15:08:11				
247907010	1	46	-0.113	0.0779	3/4/2010@15:09:06				
WCN100304-03	1	S3	103	4.72	3/4/2010@15:09:58				CCV
Known Conc:			100						
DQM Test: > + Percent Relative Difference									
Result:		3.1 < 10.0							
Message		CCV Passed							
Action		Continue							
DQM Test: < - Percent Relative Difference									
Result:		3.1 < 10.0							
Message		CCV Passed							
Action		Continue							
WCN100304-08	1	S7	-1.40	0.0200	3/4/2010@15:11:48				CCB
Known Conc:			0.00						
DQM Test: > + Concentration Limit									
Result:		-1.40 < 5.00							
Message		CCB Passed							
Action		Continue							
DQM Test: < - Concentration Limit									
Result:		-1.40 > -5.00							
Message		CCB Passed							
Action		Continue							

247907011	1	47	0.796	0.119	3/4/2010@15:13:39		
247907012	1	48	-0.529	0.0593	3/4/2010@15:14:32		
247907013	1	49	-0.631	0.0547	3/4/2010@15:15:27		
247907014	1	50	-1.12	0.0329	3/4/2010@15:16:20		
247907015	1	51	-0.547	0.0584	3/4/2010@15:17:13		
247907016	1	52	-0.602	0.0560	3/4/2010@15:18:07		
247907017	1	53	-0.0840	0.0793	3/4/2010@15:18:59		
248045012	1	54	2.35	0.189	3/4/2010@15:19:52		
248045013	1	55	0.0806	0.0867	3/4/2010@15:20:45		
248045014	1	56	-0.941	0.0407	3/4/2010@15:21:38		
WCN100304-03	1	S3	103	4.71	3/4/2010@15:22:30		CCV
Known Conc:			100				
DQM Test: > + Percent Relative Difference							
Result:			3.0 < 10.0				
Message			CCV Passed				
Action			Continue				
DQM Test: < - Percent Relative Difference							
Result:			3.0 < 10.0				
Message			CCV Passed				
Action			Continue				
WCN100304-08	1	S7	-1.05	0.0360	3/4/2010@15:24:20		CCB
Known Conc:			0.00				
DQM Test: > + Concentration Limit							
Result:			-1.05 < 5.00				
Message			CCB Passed				
Action			Continue				
DQM Test: < - Concentration Limit							
Result:			-1.05 > -5.00				
Message			CCB Passed				
Action			Continue				
1202060243|960499|MB	1	57	-1.44	0.0185	3/4/2010@15:26:09		
1202060250|LCS	1	58	54.7	2.54	3/4/2010@15:27:01		
247908001	1	59	-1.24	0.0273	3/4/2010@15:27:53		
247908002	1	60	-1.23	0.0275	3/4/2010@15:28:47		
247908003	1	61	-1.31	0.0241	3/4/2010@15:29:41		
247997001	1	62	-1.39	0.0205	3/4/2010@15:30:34		
248001001	1	63	-1.27	0.0260	3/4/2010@15:31:29		
248034001	1	64	-1.28	0.0256	3/4/2010@15:32:22		
248038001	1	65	-1.45	0.0180	3/4/2010@15:33:15		
1202060244|DUP	1	66	-1.77	0.00344	3/4/2010@15:34:09		
WCN100304-03	1	S3	103	4.72	3/4/2010@15:35:01		CCV
Known Conc:			100				
DQM Test: > + Percent Relative Difference							
Result:			3.1 < 10.0				
Message			CCV Passed				
Action			Continue				
DQM Test: < - Percent Relative Difference							
Result:			3.1 < 10.0				
Message			CCV Passed				
Action			Continue				
WCN100304-08	1	S7	-0.945	0.0405	3/4/2010@15:36:53		CCB
Known Conc:			0.00				
DQM Test: > + Concentration Limit							
Result:			-0.945 < 5.00				
Message			CCB Passed				
Action			Continue				
DQM Test: < - Concentration Limit							
Result:			-0.945 > -5.00				
Message			CCB Passed				
Action			Continue				
1202060246|MS	1	67	115	5.25	3/4/2010@15:38:42		
1202060248|MSD	1	68	113	5.14	3/4/2010@15:39:36		
248038002	1	69	-1.15	0.0315	3/4/2010@15:40:29		
1202060245|DUP	1	70	-1.85	-3.69e-4	3/4/2010@15:41:22		
1202060247|MS	1	71	106	4.86	3/4/2010@15:42:15		
1202060249|MSD	1	72	117	5.36	3/4/2010@15:43:07		
248039001	1	73	-0.969	0.0395	3/4/2010@15:44:01		
248046001	1	74	-1.39	0.0206	3/4/2010@15:44:52		

248046002	1	75	-1.19	0.0296	3/4/2010@15:45:45		
248053001	1	76	-1.46	0.0172	3/4/2010@15:46:39		
WCN100304-03	1	S3	105	4.80	3/4/2010@15:47:31		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					
WCN100304-08	1	S7	-1.39	0.0205	3/4/2010@15:49:22		CCB
Known Conc:		0.00					
DQM Test: > + Concentration Limit							
Result:		-1.39 < 5.00					
Message		CCB Passed					
Action		Continue					
DQM Test: < - Concentration Limit							
Result:		-1.39 > -5.00					
Message		CCB Passed					
Action		Continue					
248053002	1	77	-1.84	3.13e-4	3/4/2010@15:51:13		
248053003	1	78	-1.69	0.00722	3/4/2010@15:52:07		
WCN100304-03	1	S3	104	4.77	3/4/2010@15:52:59		CCV
Known Conc:		100					
DQM Test: > + Percent Relative Difference							
Result:		4.4 < 10.0					
Message		CCV Passed					
Action		Continue					
DQM Test: < - Percent Relative Difference							
Result:		4.4 < 10.0					
Message		CCV Passed					
Action		Continue					
WCN100304-08	1	S7	-1.14	0.0318	3/4/2010@15:54:49		CCB
Known Conc:		0.00					
DQM Test: > + Concentration Limit							
Result:		-1.14 < 5.00					
Message		CCB Passed					
Action		Continue					
DQM Test: < - Concentration Limit							
Result:		-1.14 > -5.00					
Message		CCB Passed					
Action		Continue					

Analyte Properties Table for OM_3-4-2010_13-55-23.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

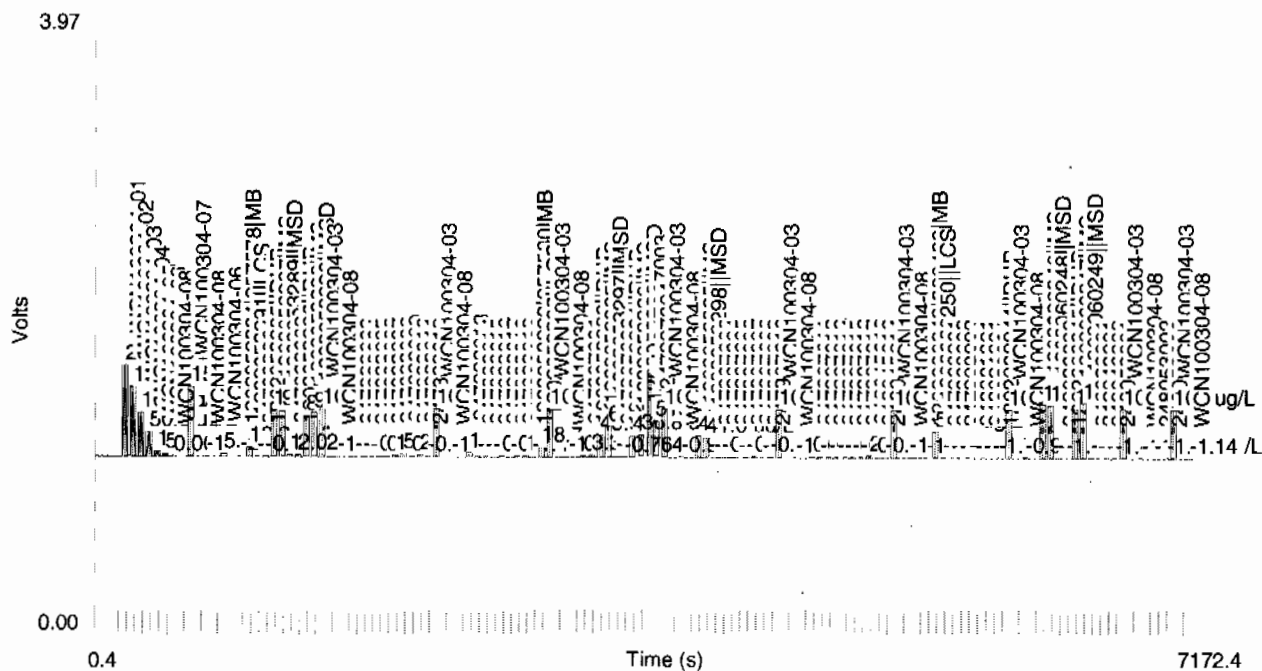
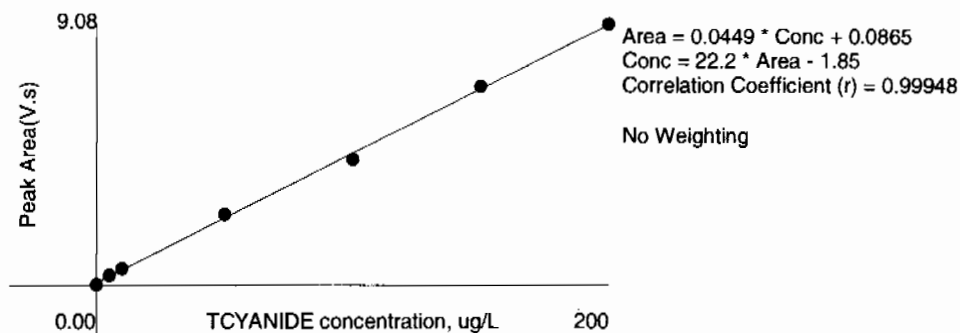


Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	9.08	0.603	-0.2	3/4/2010	13:59:49
2	150	1	6.91	0.459	-1.3	3/4/2010	14:00:41
3	100	1	4.35	0.290	4.9	3/4/2010	14:01:33
4	50.0	1	2.45	0.161	-4.8	3/4/2010	14:02:26
5	10.0	1	0.578	0.0367	-7.9	3/4/2010	14:03:19
6	5.00	1	0.340	0.0210	-9.3	3/4/2010	14:04:13
7	0.00	1	0.0240	7.56e-4		3/4/2010	14:05:07

Figure 1: TCYANIDE



Nitrate Nitrite by Cadmium Reduction

This is runlog lachat3

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
1.5 PPM		1	axh3	3/3/2010 10:31:50	OM_3-3-2010_10-30-06
1.0 PPM		1	axh3	3/3/2010 10:33:02	OM_3-3-2010_10-30-06
0.5 ppm		1	axh3	3/3/2010 10:34:15	OM_3-3-2010_10-30-06
0.1 ppm		1	axh3	3/3/2010 10:35:29	OM_3-3-2010_10-30-06
0.05 ppm		1	axh3	3/3/2010 10:36:42	OM_3-3-2010_10-30-06
ICAL-00		1	axh3	3/3/2010 10:37:56	OM_3-3-2010_10-30-06
1.0 ppm ICV		1	axh3	3/3/2010 10:40:18	OM_3-3-2010_10-30-06
ICB		1	axh3	3/3/2010 10:42:40	OM_3-3-2010_10-30-06
Nitrate 1.0 ppm		1	axh3	3/3/2010 10:44:59	OM_3-3-2010_10-30-06
Nitrite 1.0 ppm		1	axh3	3/3/2010 10:47:19	OM_3-3-2010_10-30-06
1202054725	958150	1	axh3	3/3/2010 10:49:40	OM_3-3-2010_10-30-06
1202054732	958150	1	axh3	3/3/2010 10:50:53	OM_3-3-2010_10-30-06
247793001	958150	5	axh3	3/3/2010 10:52:06	OM_3-3-2010_10-30-06
1202054726	958150	5	axh3	3/3/2010 10:53:20	OM_3-3-2010_10-30-06
1202054729	958150	5	axh3	3/3/2010 10:54:32	OM_3-3-2010_10-30-06
247997001	958150	5	axh3	3/3/2010 10:55:44	OM_3-3-2010_10-30-06
248001001	958150	5	axh3	3/3/2010 10:56:57	OM_3-3-2010_10-30-06
248019001	958150	5	axh3	3/3/2010 10:58:10	OM_3-3-2010_10-30-06
248023001	958150	5	axh3	3/3/2010 10:59:22	OM_3-3-2010_10-30-06
248024002	958150	10	axh3	3/3/2010 11:00:34	OM_3-3-2010_10-30-06
1.0 ppm CCV		1	axh3	3/3/2010 11:01:46	OM_3-3-2010_10-30-06
CCB		1	axh3	3/3/2010 11:04:08	OM_3-3-2010_10-30-06
248024004	958150	10	axh3	3/3/2010 11:05:20	OM_3-3-2010_10-30-06
248038001	958150	5	axh3	3/3/2010 11:06:32	OM_3-3-2010_10-30-06
248038002	958150	5	axh3	3/3/2010 11:07:44	OM_3-3-2010_10-30-06
248039001	958150	5	axh3	3/3/2010 11:08:55	OM_3-3-2010_10-30-06
248044001*	958150	5	axh3	3/3/2010 11:10:07	OM_3-3-2010_10-30-06
1202054727	958150	5	axh3	3/3/2010 11:11:20	OM_3-3-2010_10-30-06
1202054730	958150	5	axh3	3/3/2010 11:12:34	OM_3-3-2010_10-30-06
248044003	958150	5	axh3	3/3/2010 11:13:47	OM_3-3-2010_10-30-06
248046001	958150	5	axh3	3/3/2010 11:14:59	OM_3-3-2010_10-30-06
248046002	958150	5	axh3	3/3/2010 11:16:12	OM_3-3-2010_10-30-06
1.0 ppm CCV		1	axh3	3/3/2010 11:17:24	OM_3-3-2010_10-30-06
CCB		1	axh3	3/3/2010 11:19:46	OM_3-3-2010_10-30-06
248044001	958150	5	axh3	3/3/2010 11:22:05	OM_3-3-2010_10-30-06
248053001	958150	5	axh3	3/3/2010 11:23:18	OM_3-3-2010_10-30-06
248053002	958150	5	axh3	3/3/2010 11:24:30	OM_3-3-2010_10-30-06
248053003	958150	5	axh3	3/3/2010 11:25:43	OM_3-3-2010_10-30-06
248074001	958150	5	axh3	3/3/2010 11:26:55	OM_3-3-2010_10-30-06
1202054728	958150	5	axh3	3/3/2010 11:28:07	OM_3-3-2010_10-30-06
1202054731	958150	5	axh3	3/3/2010 11:29:19	OM_3-3-2010_10-30-06
248074002	958150	5	axh3	3/3/2010 11:30:31	OM_3-3-2010_10-30-06
248074003	958150	5	axh3	3/3/2010 11:31:43	OM_3-3-2010_10-30-06
247793001	958150	10	axh3	3/3/2010 11:32:57	OM_3-3-2010_10-30-06
1.0 ppm CCV		1	axh3	3/3/2010 11:34:09	OM_3-3-2010_10-30-06
CCB		1	axh3	3/3/2010 11:36:31	OM_3-3-2010_10-30-06
1202054726	958150	10	axh3	3/3/2010 11:38:51	OM_3-3-2010_10-30-06
1202054729	958150	10	axh3	3/3/2010 11:40:03	OM_3-3-2010_10-30-06
248039001	958150	10	axh3	3/3/2010 11:41:15	OM_3-3-2010_10-30-06
248046001	958150	10	axh3	3/3/2010 11:42:28	OM_3-3-2010_10-30-06
1202057088	959199	1	axh3	3/3/2010 11:43:39	OM_3-3-2010_10-30-06
1202057095	959199	1	axh3	3/3/2010 11:44:50	OM_3-3-2010_10-30-06
247853003	959199	5	axh3	3/3/2010 11:46:04	OM_3-3-2010_10-30-06
1202057089	959199	5	axh3	3/3/2010 11:47:17	OM_3-3-2010_10-30-06
1202057092	959199	5	axh3	3/3/2010 11:48:30	OM_3-3-2010_10-30-06
247853006	959199	25	axh3	3/3/2010 11:49:43	OM_3-3-2010_10-30-06
1.0 ppm CCV		1	axh3	3/3/2010 11:50:55	OM_3-3-2010_10-30-06
CCB		1	axh3	3/3/2010 11:53:16	OM_3-3-2010_10-30-06

247853009	959199	5	axh3	3/3/2010	11:55:37	OM_3-3-2010_10-30-06
247853012	959199	10	axh3	3/3/2010	11:56:49	OM_3-3-2010_10-30-06
247853015	959199	10	axh3	3/3/2010	11:58:02	OM_3-3-2010_10-30-06
247853018	959199	50	axh3	3/3/2010	11:59:14	OM_3-3-2010_10-30-06
247966003	959199	5	axh3	3/3/2010	12:00:27	OM_3-3-2010_10-30-06
1202057096	959199	5	axh3	3/3/2010	12:01:39	OM_3-3-2010_10-30-06
1202057097	959199	5	axh3	3/3/2010	12:02:51	OM_3-3-2010_10-30-06
247966011	959199	5	axh3	3/3/2010	12:04:03	OM_3-3-2010_10-30-06
248044005	959199	5	axh3	3/3/2010	12:05:15	OM_3-3-2010_10-30-06
1202059915	959199	5	axh3	3/3/2010	12:06:27	OM_3-3-2010_10-30-06
1.0 ppm CCV		1	axh3	3/3/2010	12:07:39	OM_3-3-2010_10-30-06
CCB		1	axh3	3/3/2010	12:10:01	OM_3-3-2010_10-30-06
1202059916	959199	5	axh3	3/3/2010	12:12:21	OM_3-3-2010_10-30-06
248072001	959199	5	axh3	3/3/2010	12:13:31	OM_3-3-2010_10-30-06
1202057091	959199	5	axh3	3/3/2010	12:14:43	OM_3-3-2010_10-30-06
1202057094	959199	5	axh3	3/3/2010	12:15:56	OM_3-3-2010_10-30-06
248072002	959199	5	axh3	3/3/2010	12:17:09	OM_3-3-2010_10-30-06
248072003	959199	5	axh3	3/3/2010	12:18:23	OM_3-3-2010_10-30-06
248103003	959199	5	axh3	3/3/2010	12:19:36	OM_3-3-2010_10-30-06
248108001	959199	5	axh3	3/3/2010	12:20:48	OM_3-3-2010_10-30-06
1202057090	959199	5	axh3	3/3/2010	12:22:01	OM_3-3-2010_10-30-06
1202057093	959199	5	axh3	3/3/2010	12:23:13	OM_3-3-2010_10-30-06
1.0 ppm CCV		1	axh3	3/3/2010	12:24:25	OM_3-3-2010_10-30-06
CCB		1	axh3	3/3/2010	12:26:48	OM_3-3-2010_10-30-06
248117001	959199	5	axh3	3/3/2010	12:29:08	OM_3-3-2010_10-30-06
248126003	959199	5	axh3	3/3/2010	12:30:20	OM_3-3-2010_10-30-06
248127001	959199	5	axh3	3/3/2010	12:31:32	OM_3-3-2010_10-30-06
248199001	959199	5	axh3	3/3/2010	12:32:44	OM_3-3-2010_10-30-06
248238001	959199	5	axh3	3/3/2010	12:33:56	OM_3-3-2010_10-30-06
248238002	959199	5	axh3	3/3/2010	12:35:08	OM_3-3-2010_10-30-06
247966003	959199	5	axh3	3/3/2010	12:36:20	OM_3-3-2010_10-30-06
1202057096	959199	5	axh3	3/3/2010	12:37:32	OM_3-3-2010_10-30-06
1202057097	959199	5	axh3	3/3/2010	12:38:45	OM_3-3-2010_10-30-06
248108001	959199	10	axh3	3/3/2010	12:39:57	OM_3-3-2010_10-30-06
1.0 ppm CCV		1	axh3	3/3/2010	12:41:09	OM_3-3-2010_10-30-06
CCB		1	axh3	3/3/2010	12:43:31	OM_3-3-2010_10-30-06
1202057090	959199	10	axh3	3/3/2010	12:45:52	OM_3-3-2010_10-30-06
1202057093	959199	10	axh3	3/3/2010	12:47:05	OM_3-3-2010_10-30-06
1202058290	959715	1	axh3	3/3/2010	12:48:17	OM_3-3-2010_10-30-06
1202058297	959715	1	axh3	3/3/2010	12:49:29	OM_3-3-2010_10-30-06
248044006	959715	5	axh3	3/3/2010	12:50:42	OM_3-3-2010_10-30-06
1202058291	959715	5	axh3	3/3/2010	12:51:54	OM_3-3-2010_10-30-06
1202058294	959715	5	axh3	3/3/2010	12:53:07	OM_3-3-2010_10-30-06
248164001	959715	5	axh3	3/3/2010	12:54:19	OM_3-3-2010_10-30-06
248164003	959715	5	axh3	3/3/2010	12:55:31	OM_3-3-2010_10-30-06
248261001	959715	5	axh3	3/3/2010	12:56:43	OM_3-3-2010_10-30-06
1.0 ppm CCV		1	axh3	3/3/2010	12:57:55	OM_3-3-2010_10-30-06
CCB		1	axh3	3/3/2010	13:00:17	OM_3-3-2010_10-30-06
1202058292	959715	5	axh3	3/3/2010	13:02:37	OM_3-3-2010_10-30-06
1202058295	959715	5	axh3	3/3/2010	13:03:49	OM_3-3-2010_10-30-06
248298001	959715	5	axh3	3/3/2010	13:05:01	OM_3-3-2010_10-30-06
1202058293	959715	5	axh3	3/3/2010	13:06:15	OM_3-3-2010_10-30-06
1202058296	959715	5	axh3	3/3/2010	13:07:28	OM_3-3-2010_10-30-06
248298002	959715	5	axh3	3/3/2010	13:08:41	OM_3-3-2010_10-30-06
248298003	959715	5	axh3	3/3/2010	13:09:53	OM_3-3-2010_10-30-06
248382001	959715	5	axh3	3/3/2010	13:11:06	OM_3-3-2010_10-30-06
248382004	959715	5	axh3	3/3/2010	13:12:19	OM_3-3-2010_10-30-06
248401001	959715	5	axh3	3/3/2010	13:13:31	OM_3-3-2010_10-30-06
1.0 ppm CCV		1	axh3	3/3/2010	13:14:44	OM_3-3-2010_10-30-06
CCB		1	axh3	3/3/2010	13:17:05	OM_3-3-2010_10-30-06

248401003	959715	5	axh3	3/3/2010	13:19:26	OM_3-3-2010_10-30-06
248401006	959715	5	axh3	3/3/2010	13:20:37	OM_3-3-2010_10-30-06
248407001	959715	5	axh3	3/3/2010	13:21:49	OM_3-3-2010_10-30-06
248419001	959715	5	axh3	3/3/2010	13:23:01	OM_3-3-2010_10-30-06
248419002	959715	5	axh3	3/3/2010	13:24:13	OM_3-3-2010_10-30-06
1.0 ppm CCV		1	axh3	3/3/2010	13:26:33	OM_3-3-2010_10-30-06
CCB		1	axh3	3/3/2010	13:28:56	OM_3-3-2010_10-30-06

Original Run Filename: OM_3-3-2010_10-30-06.OMN created 3/3/2010 10:30:06
 Original Run Author's Signature: [lachat]
 Current Run Filename: OM_3-3-2010_10-30-06.OMN last modified 3/3/2010 13:30:17
 Current Run Author's Signature: [lachat]
 Description: EPA 353.2
 Cadmium Column 9056CAJ
 LCS nominal 1.0 mg/L

Sample	Rep.	Cup No.	Channel 1		Detection Time	ADF	MDF	Description
			NO3 + NO2 Conc. (mg/L)	Area (Vs)				
WTR100303-26	1	S9	1.50	14.8	3/3/2010@10:31:50			1.5 PPM
WTR100303-25	1	S10	1.00	9.68	3/3/2010@10:33:02			1.0 PPM
WTR100303-24	1	S11	0.500	4.89	3/3/2010@10:34:15			0.5 ppm
WTR100303-23	1	S12	0.100	1.02	3/3/2010@10:35:29			0.1 ppm
WTR100303-21	1	S13	0.0500	0.312	3/3/2010@10:36:42			0.05 ppm
0.0ppm	1	S15	0.00	-0.0280	3/3/2010@10:37:56			0.0 ppm
DQM Test: Minimum Correlation Coefficient								
Result:			0.99989 > 0.99500					
Message			Calibration Passed					
Action			Continue					
WTR100303-27 ICV	1	S16	0.983	9.62	3/3/2010@10:40:18			1.0 ppm ICV
Known Conc:			1.00					
DQM Test: > + Concentration Limit								
Result:			0.983 < 1.10					
Message			ICV Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			0.983 > 0.894					
Message			ICV Passed					
Action			Continue					
Calibration:			Table/Fig. 1					
ICB	1	S15	0.00396	-0.0247	3/3/2010@10:42:40			ICB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			0.00396 < 0.0500					
Message			ICB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			0.00396 > -0.0500					
Message			ICB Passed					
Action			Continue					
WTR100303-22	1	S1	0.943	9.22	3/3/2010@10:44:59			Nitrate 1.0 ppm
Known Conc:			1.00					
DQM Test: > + Concentration Limit								
Result:			0.943 < 1.10					
Message			Nitrate Standard Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			0.943 > 0.894					
Message			Nitrate Standard Passed					
Action			Continue					
WTR100303-28	1	S2	0.937	9.17	3/3/2010@10:47:19			Nitrite 1.0 ppm
Known Conc:			1.00					
DQM Test: > + Concentration Limit								
Result:			0.937 < 1.10					
Message			Nitrite Standard Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			0.937 > 0.894					
Message			Nitrite Standard Passed					
Action			Continue					
1202054725|958150|MB	1	1	0.0124	0.0582	3/3/2010@10:49:40			
1202054732|LCS	1	2	0.986	9.65	3/3/2010@10:50:53			
247793001	1	3	-0.0329	-0.388	3/3/2010@10:52:06		5.00	
1202054726|DUP	1	4	-0.0360	-0.419	3/3/2010@10:53:20		5.00	
1202054729|PS	1	5	0.348	3.36	3/3/2010@10:54:32		5.00	

247997001	1	6	0.0124	0.0585	3/3/2010@10:55:44	5.00
248001001	1	7	0.0131	0.0653	3/3/2010@10:56:57	5.00
248019001	1	8	0.196	1.87	3/3/2010@10:58:10	5.00
248023001	1	9	0.0844	0.767	3/3/2010@10:59:22	5.00
248024002	1	10	0.425	4.12	3/3/2010@11:00:34	10.00
WTR100303-25 CCV	1	S10	0.983	9.62	3/3/2010@11:01:46	1.0 ppm CCV
Known Conc:			1.00			
DQM Test: > + Concentration Limit						
Result:			0.983 < 1.10			
Message			CCV Passed			
Action			Continue			
DQM Test: < - Concentration Limit						
Result:			0.983 > 0.894			
Message			CCV Passed			
Action			Continue			
CCB	1	S15	0.00204	-0.0437	3/3/2010@11:04:08	CCB
Known Conc:			0.00			
DQM Test: > + Concentration Limit						
Result:			0.00204 < 0.0500			
Message			CCB Passed			
Action			Continue			
DQM Test: < - Concentration Limit						
Result:			0.00204 > -0.0500			
Message			CCB Passed			
Action			Continue			
248024004	1	11	0.430	4.17	3/3/2010@11:05:20	10.00
248038001	1	12	0.0214	0.147	3/3/2010@11:06:32	5.00
248038002	1	13	0.0741	0.666	3/3/2010@11:07:44	5.00
248039001	1	14	-0.0529	-0.584	3/3/2010@11:08:55	5.00
248044001	1	15	2.97	29.2	3/3/2010@11:10:07	5.00
1202054727||DUP	1	16	0.0856	0.779	3/3/2010@11:11:20	5.00
1202054730||PS	1	17	1.05	10.3	3/3/2010@11:12:34	5.00
248044003	1	18	0.0366	0.297	3/3/2010@11:13:47	5.00
248046001	1	19	-0.0557	-0.613	3/3/2010@11:14:59	5.00
248046002	1	20	-0.0479	-0.535	3/3/2010@11:16:12	5.00
WTR100303-25 CCV	1	S10	1.00	9.80	3/3/2010@11:17:24	1.0 ppm CCV
Known Conc:			1.00			
DQM Test: > + Concentration Limit						
Result:			1.00 < 1.10			
Message			CCV Passed			
Action			Continue			
DQM Test: < - Concentration Limit						
Result:			1.00 > 0.894			
Message			CCV Passed			
Action			Continue			
CCB	1	S15	0.00357	-0.0286	3/3/2010@11:19:46	CCB
Known Conc:			0.00			
DQM Test: > + Concentration Limit						
Result:			0.00357 < 0.0500			
Message			CCB Passed			
Action			Continue			
DQM Test: < - Concentration Limit						
Result:			0.00357 > -0.0500			
Message			CCB Passed			
Action			Continue			
248044001	1	15	0.0892	0.815	3/3/2010@11:22:05	5.00
248053001	1	21	0.0149	0.0826	3/3/2010@11:23:18	5.00
248053002	1	22	0.0149	0.0834	3/3/2010@11:24:30	5.00
248053003	1	23	0.0120	0.0547	3/3/2010@11:25:43	5.00
248074001	1	24	0.393	3.81	3/3/2010@11:26:55	5.00
1202054728||DUP	1	25	0.388	3.76	3/3/2010@11:28:07	5.00
1202054731||PS	1	26	1.39	13.6	3/3/2010@11:29:19	5.00
248074002	1	27	0.131	1.23	3/3/2010@11:30:31	5.00
248074003	1	28	0.276	2.66	3/3/2010@11:31:43	5.00
247793001	1	3	0.00533	-0.0112	3/3/2010@11:32:57	10.00
WTR100303-25 CCV	1	S10	0.985	9.64	3/3/2010@11:34:09	1.0 ppm CCV
Known Conc:			1.00			
DQM Test: > + Concentration Limit						

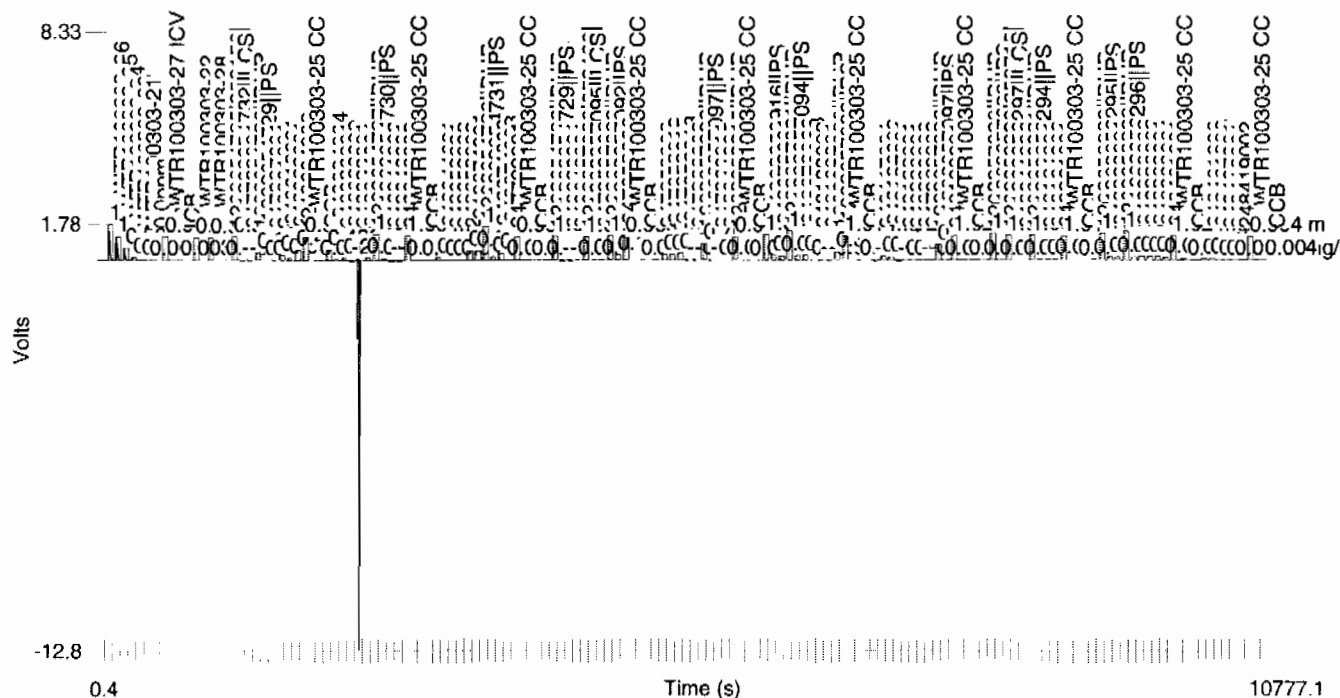
			Result:	0.985 < 1.10					
			Message	CCV Passed					
			Action	Continue					
DQM Test: < - Concentration Limit									
			Result:	0.985 > 0.894					
			Message	CCV Passed					
			Action	Continue					
CCB	1	S15		0.00385	-0.0258	3/3/2010@11:36:31			CCB
			Known Conc:	0.00					
DQM Test: > + Concentration Limit									
			Result:	0.00385 < 0.0500					
			Message	CCB Passed					
			Action	Continue					
DQM Test: < - Concentration Limit									
			Result:	0.00385 > -0.0500					
			Message	CCB Passed					
			Action	Continue					
1202054726||DUP	1	4		0.0111	0.0460	3/3/2010@11:38:51		10.00	
1202054729||PS	1	5		1.01	9.86	3/3/2010@11:40:03		10.00	
248039001	1	14		-0.0350	-0.408	3/3/2010@11:41:15		10.00	
248046001	1	19		-0.0330	-0.389	3/3/2010@11:42:28		10.00	
1202057088|959199|MB	1	29		0.0116	0.0509	3/3/2010@11:43:39			
1202057095||LCS	1	30		1.00	9.79	3/3/2010@11:44:50			
247853003	1	31		0.0341	0.272	3/3/2010@11:46:04		5.00	
1202057089||DUP	1	32		0.0331	0.263	3/3/2010@11:47:17		5.00	
1202057092||PS	1	33		1.02	10.0	3/3/2010@11:48:30		5.00	
247853006	1	34		0.196	1.87	3/3/2010@11:49:43		25.00	
WTR100303-25 CCV	1	S10		0.968	9.47	3/3/2010@11:50:55			1.0 ppm CCV
			Known Conc:	1.00					
DQM Test: > + Concentration Limit									
			Result:	0.968 < 1.10					
			Message	CCV Passed					
			Action	Continue					
DQM Test: < - Concentration Limit									
			Result:	0.968 > 0.894					
			Message	CCV Passed					
			Action	Continue					
CCB	1	S15		0.00438	-0.0206	3/3/2010@11:53:16			CCB
			Known Conc:	0.00					
DQM Test: > + Concentration Limit									
			Result:	0.00438 < 0.0500					
			Message	CCB Passed					
			Action	Continue					
DQM Test: < - Concentration Limit									
			Result:	0.00438 > -0.0500					
			Message	CCB Passed					
			Action	Continue					
247853009	1	35		0.0177	0.110	3/3/2010@11:55:37		5.00	
247853012	1	36		0.204	1.94	3/3/2010@11:56:49		10.00	
247853015	1	37		0.219	2.09	3/3/2010@11:58:02		10.00	
247853018	1	38		0.268	2.58	3/3/2010@11:59:14		50.00	
247966003	1	39		-0.0241	-0.301	3/3/2010@12:00:27		5.00	
1202057096||DUP	1	40		-0.0245	-0.305	3/3/2010@12:01:39		5.00	
1202057097||PS	1	41		0.767	7.49	3/3/2010@12:02:51		5.00	
247966011	1	42		-0.0241	-0.301	3/3/2010@12:04:03		5.00	
248044005	1	43		0.00946	0.0294	3/3/2010@12:05:15		5.00	
1202059915||DUP	1	89		0.00965	0.0313	3/3/2010@12:06:27		5.00	
WTR100303-25 CCV	1	S10		0.981	9.60	3/3/2010@12:07:39			1.0 ppm CCV
			Known Conc:	1.00					
DQM Test: > + Concentration Limit									
			Result:	0.981 < 1.10					
			Message	CCV Passed					
			Action	Continue					
DQM Test: < - Concentration Limit									
			Result:	0.981 > 0.894					
			Message	CCV Passed					
			Action	Continue					
CCB	1	S15		0.00404	-0.0239	3/3/2010@12:10:01			CCB

Known Conc:			0.00				
DQM Test: > + Concentration Limit							
Result:			0.00404 < 0.0500				
Message			CCB Passed				
Action			Continue				
DQM Test: < - Concentration Limit							
Result:			0.00404 > -0.0500				
Message			CCB Passed				
Action			Continue				
1202059916	PS	1	90	1.04	10.2	3/3/2010@12:12:21	5.00
248072001		1	44	0.170	1.61	3/3/2010@12:13:31	5.00
1202057091	DUP	1	45	0.165	1.56	3/3/2010@12:14:43	5.00
1202057094	PS	1	46	1.18	11.6	3/3/2010@12:15:56	5.00
248072002		1	47	0.165	1.56	3/3/2010@12:17:09	5.00
248072003		1	48	0.184	1.75	3/3/2010@12:18:23	5.00
248103003		1	49	0.00535	-0.0110	3/3/2010@12:19:36	5.00
248108001		1	50	-0.0372	-0.430	3/3/2010@12:20:48	5.00
1202057090	DUP	1	51	-0.0370	-0.429	3/3/2010@12:22:01	5.00
1202057093	PS	1	52	0.357	3.45	3/3/2010@12:23:13	5.00
WTR100303-25	CCV	1	S10	1.01	9.89	3/3/2010@12:24:25	1.0 ppm CCV
Known Conc:			1.00				
DQM Test: > + Concentration Limit							
Result:			1.01 < 1.10				
Message			CCV Passed				
Action			Continue				
DQM Test: < - Concentration Limit							
Result:			1.01 > 0.894				
Message			CCV Passed				
Action			Continue				
CCB	1	S15	0.00458	-0.0186	3/3/2010@12:26:48		CCB
Known Conc:			0.00				
DQM Test: > + Concentration Limit							
Result:			0.00458 < 0.0500				
Message			CCB Passed				
Action			Continue				
DQM Test: < - Concentration Limit							
Result:			0.00458 > -0.0500				
Message			CCB Passed				
Action			Continue				
248117001		1	53	-0.0357	-0.415	3/3/2010@12:29:08	5.00
248126003		1	54	0.138	1.29	3/3/2010@12:30:20	5.00
248127001		1	55	0.126	1.17	3/3/2010@12:31:32	5.00
248199001		1	56	-0.0330	-0.389	3/3/2010@12:32:44	5.00
248238001		1	57	0.0119	0.0531	3/3/2010@12:33:56	5.00
248238002		1	58	0.0133	0.0676	3/3/2010@12:35:08	5.00
247966003		1	39	-0.0228	-0.288	3/3/2010@12:36:20	5.00
1202057096	DUP	1	40	-0.0241	-0.301	3/3/2010@12:37:32	5.00
1202057097	PS	1	41	0.737	7.19	3/3/2010@12:38:45	5.00
248108001		1	50	0.00805	0.0156	3/3/2010@12:39:57	10.00
WTR100303-25	CCV	1	S10	1.02	10.0	3/3/2010@12:41:09	1.0 ppm CCV
Known Conc:			1.00				
DQM Test: > + Concentration Limit							
Result:			1.02 < 1.10				
Message			CCV Passed				
Action			Continue				
DQM Test: < - Concentration Limit							
Result:			1.02 > 0.894				
Message			CCV Passed				
Action			Continue				
CCB	1	S15	0.00556	-0.00893	3/3/2010@12:43:31		CCB
Known Conc:			0.00				
DQM Test: > + Concentration Limit							
Result:			0.00556 < 0.0500				
Message			CCB Passed				
Action			Continue				
DQM Test: < - Concentration Limit							
Result:			0.00556 > -0.0500				
Message			CCB Passed				

			Action	Continue					
1202057090	DUP	1	51	0.0123	0.0576	3/3/2010@12:45:52		10.00	
1202057093	PS	1	52	1.10	10.8	3/3/2010@12:47:05		10.00	
1202058290	959715|MB	1	66	0.0112	0.0462	3/3/2010@12:48:17			
1202058297	LCS	1	67	1.02	10.0	3/3/2010@12:49:29			
248044006		1	68	0.00987	0.0335	3/3/2010@12:50:42		5.00	
1202058291	DUP	1	69	0.00950	0.0299	3/3/2010@12:51:54		5.00	
1202058294	PS	1	70	1.03	10.1	3/3/2010@12:53:07		5.00	
248164001		1	71	0.0321	0.253	3/3/2010@12:54:19		5.00	
248164003		1	72	0.0323	0.254	3/3/2010@12:55:31		5.00	
248261001		1	73	0.0490	0.418	3/3/2010@12:56:43		5.00	
WTR100303-25	CCV	1	S10	1.01	9.92	3/3/2010@12:57:55			1.0 ppm CCV
Known Conc:				1.00					
DQM Test: > + Concentration Limit									
			Result:	1.01 < 1.10					
			Message	CCV Passed					
			Action	Continue					
DQM Test: < - Concentration Limit									
			Result:	1.01 > 0.894					
			Message	CCV Passed					
			Action	Continue					
CCB		1	S15	0.00422	-0.0221	3/3/2010@13:00:17			CCB
Known Conc:				0.00					
DQM Test: > + Concentration Limit									
			Result:	0.00422 < 0.0500					
			Message	CCB Passed					
			Action	Continue					
DQM Test: < - Concentration Limit									
			Result:	0.00422 > -0.0500					
			Message	CCB Passed					
			Action	Continue					
1202058292	DUP	1	74	0.0484	0.413	3/3/2010@13:02:37		5.00	
1202058295	PS	1	75	1.11	10.8	3/3/2010@13:03:49		5.00	
248298001		1	76	0.132	1.24	3/3/2010@13:05:01		5.00	
1202058293	DUP	1	77	0.126	1.18	3/3/2010@13:06:15		5.00	
1202058296	PS	1	78	1.18	11.6	3/3/2010@13:07:28		5.00	
248298002		1	79	0.127	1.19	3/3/2010@13:08:41		5.00	
248298003		1	80	0.152	1.44	3/3/2010@13:09:53		5.00	
248382001		1	81	0.146	1.37	3/3/2010@13:11:06		5.00	
248382004		1	82	0.151	1.42	3/3/2010@13:12:19		5.00	
248401001		1	83	0.0983	0.904	3/3/2010@13:13:31		5.00	
WTR100303-25	CCV	1	S10	1.02	9.94	3/3/2010@13:14:44			1.0 ppm CCV
Known Conc:				1.00					
DQM Test: > + Concentration Limit									
			Result:	1.02 < 1.10					
			Message	CCV Passed					
			Action	Continue					
DQM Test: < - Concentration Limit									
			Result:	1.02 > 0.894					
			Message	CCV Passed					
			Action	Continue					
CCB		1	S15	0.00434	-0.0210	3/3/2010@13:17:05			CCB
Known Conc:				0.00					
DQM Test: > + Concentration Limit									
			Result:	0.00434 < 0.0500					
			Message	CCB Passed					
			Action	Continue					
DQM Test: < - Concentration Limit									
			Result:	0.00434 > -0.0500					
			Message	CCB Passed					
			Action	Continue					
248401003		1	84	0.0611	0.538	3/3/2010@13:19:26		5.00	
248401006		1	85	0.0756	0.681	3/3/2010@13:20:37		5.00	
248407001		1	86	0.0122	0.0564	3/3/2010@13:21:49		5.00	
248419001		1	87	0.0150	0.0844	3/3/2010@13:23:01		5.00	
248419002		1	88	0.0129	0.0637	3/3/2010@13:24:13		5.00	
WTR100303-25	CCV	1	S10	0.994	9.72	3/3/2010@13:26:33			1.0 ppm CCV
Known Conc:				1.00					

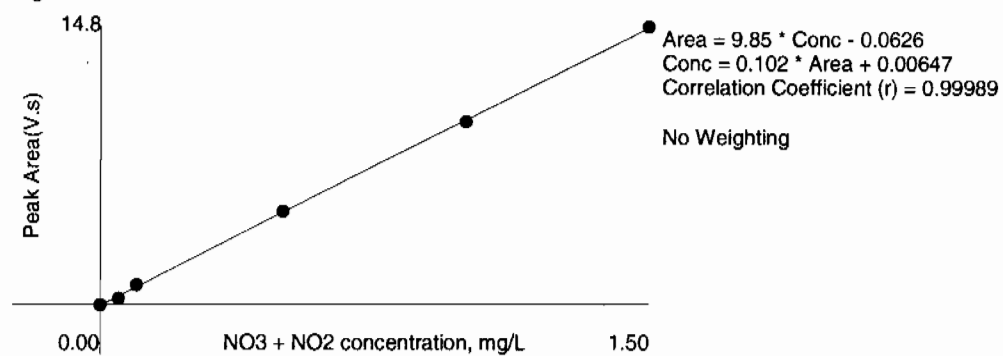
DQM Test: > + Concentration Limit						
Result:		0.994 < 1.10				
Message		CCV Passed				
Action		Continue				
DQM Test: < - Concentration Limit						
Result:		0.994 > 0.894				
Message		CCV Passed				
Action		Continue				
CCB	1	S15	0.00455	-0.0189	3/3/2010@13:28:56	CCB
Known Conc:		0.00				
DQM Test: > + Concentration Limit						
Result:		0.00455 < 0.0500				
Message		CCB Passed				
Action		Continue				
DQM Test: < - Concentration Limit						
Result:		0.00455 > -0.0500				
Message		CCB Passed				
Action		Continue				

Channel 1 (NO₃ + NO₂) : Current View

Table 1: NO₃ + NO₂

	Conc. (mg/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	1.50	1	14.8	1.22	-0.4	3/3/2010	10:33:10
2	1.00	1	9.68	0.804	1.1	3/3/2010	10:34:23
3	0.500	1	4.89	0.403	-0.6	3/3/2010	10:35:35
4	0.100	1	1.02	0.0833	-10.8	3/3/2010	10:36:48
5	0.0500	1	0.312	0.0247	27.4	3/3/2010	10:38:02
6	0.00	1	-0.0280	-0.00133		3/3/2010	10:39:16

Figure 1: NO₃ + NO₂



General Chemistry Analysis

Case Narrative

**General Chemistry Narrative
Los Alamos National Laboratory (LANL)
SDG 10-2069-1**

Method/Analysis Information

Product: pH
Analytical Batch: 959481 **Method:** SW9045C pH

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 9045C/9045D:

Sample ID	Client ID
248041001	RE15-10-8389
248041002	RE15-10-8388
248041003	RE15-10-8390
248041004	RE15-10-8392
248041005	RE15-10-8391
1202057887	248203002(WST36-10-8928) Sample Duplicate (DUP)
1202057888	248000001(RE36-10-8489) Sample Duplicate (DUP)
1202057889	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 LogR pH/ISE.

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 recovery met the acceptance limits.

Quality Control (QC) Designation

The following samples were selected for QC analysis: 248000001 (RE36-10-8489) and 248203002 (WST36-10-8928).

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: 1202057887 (WST36-10-8928), 1202057888 (RE36-10-8489), 248041001 (RE15-10-8389), 248041002 (RE15-10-8388), 248041003 (RE15-10-8390), 248041004 (RE15-10-8392) and 248041005 (RE15-10-8391).

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: 958161 **Method:** SW9012A Cyanide and Total

Prep Batch : 958159 **Method:** SSW846 9010B Prep

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 9012A:

Sample ID	Client ID
248041001	RE15-10-8389
248041002	RE15-10-8388
248041003	RE15-10-8390
248041004	RE15-10-8392
248041005	RE15-10-8391
1202054761	Method Blank (MB)
1202054762	248033007(RE15-10-8029) Sample Duplicate (DUP)
1202054763	248033008(RE15-10-8032) Sample Duplicate (DUP)
1202054764	248033007(RE15-10-8029) Matrix Spike (MS)
1202054765	248033008(RE15-10-8032) Matrix Spike (MS)
1202054766	248033007(RE15-10-8029) Matrix Spike Duplicate (MSD)
1202054767	248033008(RE15-10-8032) Matrix Spike Duplicate (MSD)
1202054768	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: 248033007 (RE15-10-8029) and 248033008 (RE15-10-8032).

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. 1202054762 (RE15-10-8029).

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: 1202054768 (LCS).

Sample Re-analysis

The following samples were re-analyzed due to CCV failure: 248041002 (RE15-10-8388), 248041003 (RE15-10-8390), 248041004 (RE15-10-8392) and 248041005 (RE15-10-8391).

Miscellaneous Information

Data Exception (DER) Documentation

The following DER was generated for this SDG: 800050 248041001 (RE15-10-8389), 248041002 (RE15-10-8388), 248041003 (RE15-10-8390), 248041004 (RE15-10-8392) and 248041005 (RE15-10-8391).

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: 962073

Method: EPA 300.0 Nitrate in Soil

Prep Batch : 962072

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
248041001	RE15-10-8389
248041002	RE15-10-8388
248041003	RE15-10-8390
248041004	RE15-10-8392
248041005	RE15-10-8391
1202063590	Method Blank (MB)
1202063591	248025001(CAPU-10-12542) Sample Duplicate (DUP)
1202063592	248041005(RE15-10-8391) Sample Duplicate (DUP)
1202063593	248025001(CAPU-10-12542) Matrix Spike (MS)
1202063594	248041005(RE15-10-8391) Matrix Spike (MS)
1202063595	248025001(CAPU-10-12542) Matrix Spike Duplicate (MSD)
1202063596	248041005(RE15-10-8391) Matrix Spike Duplicate (MSD)
1202063597	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: 248025001 (CAPU-10-12542) and 248041005 (RE15-10-8391).

Matrix Spike (MS)/Post Spike (PS) Recovery Statement

The spike recovery falls outside of the GEL acceptance limits but within the client specified limits. 1202063593 (CAPU-10-12542).

Matrix Spike Duplicate (MSD) Recovery Statement

The spike duplicate recovery falls outside of the GEL acceptance limits but within the client specified limits. 1202063595 (CAPU-10-12542).

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**

The following DER was generated for this SDG: 808564 1202063593 (CAPU-10-12542) and 1202063595

(CAPU-J0-12542).

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:

Nick-Cole A. Elmore Date: 3.24.10

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: 10-2069-1 GEL Work Order: 248041

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

4 Nick-Cole A. Elmore 3.24.10

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 24, 2010

Client SDG: 10-2069-1

Client Sample ID: RE15-10-8389
Sample ID: 248041001
Matrix: R
Collect Date: 19-FEB-10 12:00
Receive Date: 25-FEB-10
Collector: Client
Moisture: 9.22%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis											
<i>SW9045C pH "As Received"</i>											
pH at Temp 19.2C	H	8.62	0.010	0.100	SU	1	TXT1	03/01/10	1700	959481	1
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	70.7	260	ug/kg	1	AXC2	03/05/10	1113	958161	2
Ion Chromatography											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N		1.71	0.330	1.10	mg/kg	1	MAR1	03/19/10	1741	962073	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	MAR1	03/19/10	0920	962072
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/04/10	1304	958159

The following Analytical Methods were performed

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

GEL LABORATORIES LLC

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Certificate of Analysis

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

Report Date: March 24, 2010

Client SDG: 10-2069-1

Client Sample ID: RE15-10-8388
Sample ID: 248041002
Matrix: R
Collect Date: 19-FEB-10 12:00
Receive Date: 25-FEB-10
Collector: Client
Moisture: 7.56%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis											
<i>SW9045C pH "As Received"</i>											
pH at Temp 18.9C	H	8.67	0.010	0.100	SU	1	TXT1	03/01/10	1701	959481	1
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	64.5	237	ug/kg	1	AXC2	03/05/10	1143	958161	2
Ion Chromatography											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N		1.88	0.325	1.08	mg/kg	1	MAR1	03/19/10	1808	962073	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	MAR1	03/19/10	0920	962072
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/04/10	1304	958159

The following Analytical Methods were performed

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

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

Report Date: March 24, 2010

Client SDG: 10-2069-1

Client Sample ID: RE15-10-8390
Sample ID: 248041003
Matrix: R
Collect Date: 19-FEB-10 12:00
Receive Date: 25-FEB-10
Collector: Client
Moisture: 15.2%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis											
<i>SW9045C pH "As Received"</i>											
pH at Temp 18.9C	H	5.18	0.010	0.100	SU	1	TXT1	03/01/10	1703	959481	1
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	J	214	78.6	289	ug/kg	1	AXC2	03/05/10	1144	958161	2
Ion Chromatography											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N		9.71	0.354	1.18	mg/kg	1	MAR103	03/19/10	1835	962073	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	MAR1	03/19/10	0920	962072
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/04/10	1304	958159

The following Analytical Methods were performed

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

GEL LABORATORIES LLC

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Certificate of Analysis

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

Report Date: March 24, 2010

Client SDG: 10-2069-1

Client Sample ID: RE15-10-8392
Sample ID: 248041004
Matrix: R
Collect Date: 19-FEB-10 12:00
Receive Date: 25-FEB-10
Collector: Client
Moisture: 19.5%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis											
<i>SW9045C pH "As Received"</i>											
pH at Temp 19.0C	H	8.87	0.010	0.100	SU	1	TXT1	03/01/10	1705	959481	1
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	78.2	287	ug/kg	1	AXC2	03/05/10	1145	958161	2
Ion Chromatography											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N	U	ND	0.373	1.24	mg/kg	1	MAR1	03/19/10	1901	962073	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	MAR1	03/19/10	0920	962072
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/04/10	1304	958159

The following Analytical Methods were performed

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

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Certificate of Analysis

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

Report Date: March 24, 2010

Client SDG: 10-2069-1

Client Sample ID: RE15-10-8391
Sample ID: 248041005
Matrix: R
Collect Date: 19-FEB-10 12:00
Receive Date: 25-FEB-10
Collector: Client
Moisture: 10.9%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Electrode Analysis											
<i>SW9045C pH "As Received"</i>											
pH at Temp 19.0C	H	5.39	0.010	0.100	SU	1	TXT1	03/01/10	1706	959481	1
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	70.7	260	ug/kg	1	AXC2	03/05/10	1146	958161	2
Ion Chromatography											
<i>EPA 300.0 Nitrate in Soil "Dry Weight Corrected"</i>											
Nitrate-N		10.2	0.337	1.12	mg/kg	1	MAR1	03/19/10	1928	962073	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	MAR1	03/19/10	0920	962072
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/04/10	1304	958159

The following Analytical Methods were performed

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

Quality Control Summary

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QC Summary

Report Date: March 24, 2010

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

Contact: Ms. Joylene Valdez

Workorder: 248041

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Electrode Analysis											
Batch	959481										
QC1202057887	248203002	DUP									
pH		H	8.65	H	8.62	SU	0.347	(0%-10%)	TXT1	03/01/10	17:15
QC1202057888	248000001	DUP									
pH		H	7.27	H	7.31	SU	0.549	(0%-10%)		03/01/10	16:29
QC1202057889	LCS										
pH	7.00				6.99	SU	99.9	(95%-105%)		03/01/10	16:27
Flow Injection Analysis											
Batch	958161										
QC1202054762	248033007	DUP									
Cyanide, Total		U	ND	U	ND	ug/kg	N/A		AXC2	03/05/10	11:06
QC1202054763	248033008	DUP									
Cyanide, Total		U	ND	U	ND	ug/kg	N/A			03/05/10	11:09
QC1202054768	LCS										
Cyanide, Total	67900				56000	ug/kg	82.5	(32%-157%)		03/05/10	11:00
QC1202054761	MB										
Cyanide, Total			U		250	ug/kg				03/05/10	10:59
QC1202054764	248033007	MS									
Cyanide, Total	5830	U	ND		5390	ug/kg	92.5	(26%-158%)		03/05/10	11:06
QC1202054765	248033008	MS									
Cyanide, Total	5410	U	ND		4290	ug/kg	79.3	(26%-158%)		03/05/10	11:10
QC1202054766	248033007	MSD									
Cyanide, Total	6400	U	ND		5480	ug/kg	1.60	85.6	(0%-30%)	03/05/10	11:07
QC1202054767	248033008	MSD									
Cyanide, Total	5030	U	ND		4960	ug/kg	14.4	98.5	(0%-30%)	03/05/10	11:11
Ion Chromatography											
Batch	962073										
QC1202063591	248025001	DUP									
Nitrate-N			1.52		1.53	mg/kg	0.817	^	(+/-1.04)	MAR1	03/19/10 12:45
QC1202063592	248041005	DUP									
Nitrate-N			10.2		10.1	mg/kg	0.794		(0%-20%)		03/19/10 19:55
QC1202063597	LCS										
Nitrate-N	50.0				46.4	mg/kg	92.9		(90%-110%)		03/19/10 11:52
QC1202063590	MB										
Nitrate-N			U		1.00	mg/kg					03/19/10 11:25
QC1202063593	248025001	MS									
Nitrate-N	51.8		1.52		47.4	mg/kg	88.4*		(90%-110%)		03/19/10 13:12
QC1202063594	248041005	MS									
Nitrate-N	56.1		10.2		62.2	mg/kg	92.6		(90%-110%)		03/19/10 20:22
QC1202063595	248025001	MSD									
Nitrate-N	51.8		1.52		47.6	mg/kg	0.494	88.9*	(0%-20%)		03/19/10 13:39
QC1202063596	248041005	MSD									
Nitrate-N	56.1		10.2		62.4	mg/kg	0.272	92.9	(0%-20%)		03/19/10 20:49

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QC Summary

Workorder: 248041

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
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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
- UJ Gamma Spectroscopy--Uncertain identification
- X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- Y QC Samples were not spiked with this compound
- Z Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.
- ^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
- d 5-day BOD--The 2:1 depletion requirement was not met for this sample
- h Preparation or preservation holding time was exceeded

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QC Summary

Workorder: 248041

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Paramname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
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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: 24-MAR-2010 09:13

GEL Laboratories LLC

Contract: LANL01004

SDG #: 10-2069-1

Flow Injection Analysis

Method: SW846 9012A

Concentration Units:ug/L

Instrument: Lachat QuickChem FIA+ 8000 Series

Parmname: Cyanide, Total

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	05-MAR-2010 10:22:22	OM_3-5-2010_10-11-54	148	150	98.7	(90%-110%)	Yes
CCV	05-MAR-2010 10:49:05	OM_3-5-2010_10-11-54	106	100	106	(90%-110%)	Yes
CCV	05-MAR-2010 11:01:27	OM_3-5-2010_10-11-54	105	100	105	(90%-110%)	Yes
CCV	05-MAR-2010 11:13:58	OM_3-5-2010_10-11-54	105	100	105	(90%-110%)	Yes
CCV	05-MAR-2010 11:40:09	OM_3-5-2010_11-39-23	103	100	103	(90%-110%)	Yes
CCV	05-MAR-2010 11:52:38	OM_3-5-2010_11-39-23	101	100	101	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	05-MAR-2010 10:24:13	OM_3-5-2010_10-11-54	-0.846	10	Yes
CCB	05-MAR-2010 10:50:54	OM_3-5-2010_10-11-54	-0.905	10	Yes
CCB	05-MAR-2010 11:03:17	OM_3-5-2010_10-11-54	-1.66	10	Yes
CCB	05-MAR-2010 11:15:48	OM_3-5-2010_10-11-54	-1.65	10	Yes
CCB	05-MAR-2010 11:42:00	OM_3-5-2010_11-39-23	-1.19	10	Yes
CCB	05-MAR-2010 11:54:29	OM_3-5-2010_11-39-23	-1.03	10	Yes

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 24-MAR-2010 09:13

GEL Laboratories LLC

Contract: LANL01004

SDG #: 10-2069-1

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
ICV	19-MAR-2010 10:31:00	100319	4.6689	5	93.4	(90%-110%)	Yes
CCV	19-MAR-2010 15:53:00	100319	7.2198	7.5	96.3	(90%-110%)	Yes
CCV	19-MAR-2010 21:16:00	100319	4.6251	5	92.5	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	19-MAR-2010 10:58:00	100319	0	0.1	Yes
CCB	19-MAR-2010 16:20:00	100319	0	0.1	Yes
CCB	19-MAR-2010 21:43:00	100319	0	0.1	Yes

Cyanide, Total

Prep Logbook

Cyanide Sample Distillation

Batch ID: 958159.0	Verified by:	Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
Analyst: Alan Stanley		LCS	1202054768	Total Cyanide Solid LCS	URF1200957-01	.25	g
Method: SW846 9010B Prep		MS	1202054764	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
Lab SOP: GL-GC-E-067 REV# 13		MS	1202054765	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
Instrument: Sartorius Balance B-001		MSD	1202054766	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
		MSD	1202054767	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL

Sample ID	Run Date	Matrix	Initial Weight (g)	Final Volume (mL)	Prep Factor (mL/g)	pH Check 1
1202054761 MB	04-MAR-2010 13:04:00	Soil	0.5	25	50	>12
1202054768 LCS	04-MAR-2010 13:04:00	Soil	0.25	25	100	>12
248033007	04-MAR-2010 13:04:00	Soil	0.53	25	47.16981	>12
1202054762 DUP (248033007)	04-MAR-2010 13:04:00	Soil	0.58	25	43.10345	>12
1202054764 MS (248033007)	04-MAR-2010 13:04:00	Soil	0.56	25	44.64286	>12
1202054766 MSD (248033007)	04-MAR-2010 13:04:00	Soil	0.51	25	49.01961	>12
248033008	04-MAR-2010 13:04:00	Soil	0.58	25	43.10345	>12
1202054763 DUP (248033008)	04-MAR-2010 13:04:00	Soil	0.52	25	48.07692	>12
1202054765 MS (248033008)	04-MAR-2010 13:04:00	Soil	0.53	25	47.16981	>12
1202054767 MSD (248033008)	04-MAR-2010 13:04:00	Soil	0.57	25	43.85965	>12
248033009	04-MAR-2010 13:04:00	Soil	0.53	25	47.16981	>12
248041001	04-MAR-2010 13:04:00	Soil	0.53	25	47.16981	>12
248041002	04-MAR-2010 13:04:00	Soil	0.57	25	43.85965	>12
248041003	04-MAR-2010 13:04:00	Soil	0.51	25	49.01961	>12
248041004	04-MAR-2010 13:04:00	Soil	0.54	25	46.2963	>12
248041005	04-MAR-2010 13:04:00	Soil	0.54	25	46.2963	>12
248058001	04-MAR-2010 13:04:00	Soil	0.52	25	48.07692	>12
248058002	04-MAR-2010 13:04:00	Soil	0.53	25	47.16981	>12
248058003	04-MAR-2010 13:04:00	Soil	0.56	25	44.64286	>12
248058004	04-MAR-2010 13:04:00	Soil	0.57	25	43.85965	>12
248058005	04-MAR-2010 13:04:00	Soil	0.6	25	41.66667	>12

Analytical Logbook version 1 11-04-2002

GEL Laboratories LLC

Prep Logbook

Batch ID: 958159.0
Analyst: Alan Stanley
Method: SW846 9010B Prep
Lab SOP: GL-GC-E-067 REV# 13
Instrument: Sartorius Balance B-001

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
LCS	1202054768	Total Cyanide Solid LCS	URF1200957-01	.25	g
MS	1202054764	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
MS	1202054765	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
MSD	1202054766	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
MSD	1202054767	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL

Sample ID	Run Date	Matrix	Initial Weight (g)	Final Volume (mL)	Prep Factor (mL/g)	pH Check 1
248058006	04-MAR-2010 13:04:00	Soil	0.51	25	49.01961	>12
248058007	04-MAR-2010 13:04:00	Soil	0.5	25	50	>12
248058008	04-MAR-2010 13:04:00	Soil	0.53	25	47.16981	>12
248065001	04-MAR-2010 13:04:00	Soil	0.57	25	43.85965	>12
248065002	04-MAR-2010 13:04:00	Soil	0.53	25	47.16981	>12
248065003	04-MAR-2010 13:04:00	Soil	0.51	25	49.01961	>12
248065004	04-MAR-2010 13:04:00	Soil	0.57	25	43.85965	>12

Reagent/Solvent Lot ID	Description	Amount	Comments:
1260189-C	50% H2SO4 CN Prep	2.5 mL	
1270661-C	Bismuth Nitrate Solution	1.25 mL	
1270663-C	0.8N H3NO3S	1.25 mL	
1270669-C	51% MgCl2 Soln	1 mL	
1273851-C	0.25N Sodium Hydroxide Solution	25 mL	
WCN100304-07	150 ppb CN Distilled ICV Standard	.0375 mL	

This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
200 ppb		1	axc2	3/5/2010 10:15:13	OM_3-5-2010_10-11-54
150 ppb		1	axc2	3/5/2010 10:16:05	OM_3-5-2010_10-11-54
100 ppb		1	axc2	3/5/2010 10:16:58	OM_3-5-2010_10-11-54
50 ppb		1	axc2	3/5/2010 10:17:51	OM_3-5-2010_10-11-54
10 ppb		1	axc2	3/5/2010 10:18:44	OM_3-5-2010_10-11-54
CRDL 5.0 ppb		1	axc2	3/5/2010 10:19:37	OM_3-5-2010_10-11-54
ICAL-00		1	axc2	3/5/2010 10:20:32	OM_3-5-2010_10-11-54
ICV		1	axc2	3/5/2010 10:22:22	OM_3-5-2010_10-11-54
ICB		1	axc2	3/5/2010 10:24:13	OM_3-5-2010_10-11-54
CRDL		1	axc2	3/5/2010 10:26:03	OM_3-5-2010_10-11-54
1202054753	958158	1	axc2	3/5/2010 10:27:52	OM_3-5-2010_10-11-54
1202054760	958158	25	axc2	3/5/2010 10:28:46	OM_3-5-2010_10-11-54
248000001	958158	1	axc2	3/5/2010 10:29:39	OM_3-5-2010_10-11-54
248000002	958158	1	axc2	3/5/2010 10:30:32	OM_3-5-2010_10-11-54
248000003	958158	1	axc2	3/5/2010 10:31:25	OM_3-5-2010_10-11-54
248000004	958158	1	axc2	3/5/2010 10:32:18	OM_3-5-2010_10-11-54
248000005	958158	1	axc2	3/5/2010 10:33:11	OM_3-5-2010_10-11-54
248033001	958158	1	axc2	3/5/2010 10:34:03	OM_3-5-2010_10-11-54
248033002	958158	1	axc2	3/5/2010 10:34:55	OM_3-5-2010_10-11-54
248033003	958158	1	axc2	3/5/2010 10:35:47	OM_3-5-2010_10-11-54
CCV		1	axc2	3/5/2010 10:36:40	OM_3-5-2010_10-11-54
CCB		1	axc2	3/5/2010 10:38:30	OM_3-5-2010_10-11-54
248033004	958158	1	axc2	3/5/2010 10:40:18	OM_3-5-2010_10-11-54
248033005	958158	1	axc2	3/5/2010 10:41:10	OM_3-5-2010_10-11-54
248033006	958158	1	axc2	3/5/2010 10:42:02	OM_3-5-2010_10-11-54
248055015	958158	1	axc2	3/5/2010 10:42:53	OM_3-5-2010_10-11-54
1202054754	958158	1	axc2	3/5/2010 10:43:45	OM_3-5-2010_10-11-54
1202054756	958158	1	axc2	3/5/2010 10:44:39	OM_3-5-2010_10-11-54
1202054758	958158	1	axc2	3/5/2010 10:45:32	OM_3-5-2010_10-11-54
248055016	958158	1	axc2	3/5/2010 10:46:26	OM_3-5-2010_10-11-54
1202054755	958158	1	axc2	3/5/2010 10:47:19	OM_3-5-2010_10-11-54
1202054757	958158	1	axc2	3/5/2010 10:48:12	OM_3-5-2010_10-11-54
CCV		1	axc2	3/5/2010 10:49:05	OM_3-5-2010_10-11-54
CCB		1	axc2	3/5/2010 10:50:54	OM_3-5-2010_10-11-54
1202054759	958158	1	axc2	3/5/2010 10:52:43	OM_3-5-2010_10-11-54
248055017	958158	1	axc2	3/5/2010 10:53:37	OM_3-5-2010_10-11-54
248055018	958158	1	axc2	3/5/2010 10:54:29	OM_3-5-2010_10-11-54
248055019	958158	1	axc2	3/5/2010 10:55:22	OM_3-5-2010_10-11-54
248055020	958158	1	axc2	3/5/2010 10:56:14	OM_3-5-2010_10-11-54
248065005	958158	1	axc2	3/5/2010 10:57:06	OM_3-5-2010_10-11-54
248065007	958158	1	axc2	3/5/2010 10:57:58	OM_3-5-2010_10-11-54
248065008	958158	1	axc2	3/5/2010 10:58:51	OM_3-5-2010_10-11-54
1202054761	958161	1	axc2	3/5/2010 10:59:42	OM_3-5-2010_10-11-54
1202054768	958161	25	axc2	3/5/2010 11:00:34	OM_3-5-2010_10-11-54
CCV		1	axc2	3/5/2010 11:01:27	OM_3-5-2010_10-11-54
CCB		1	axc2	3/5/2010 11:03:17	OM_3-5-2010_10-11-54
248033007	958161	1	axc2	3/5/2010 11:05:07	OM_3-5-2010_10-11-54
1202054762	958161	1	axc2	3/5/2010 11:06:01	OM_3-5-2010_10-11-54
1202054764	958161	1	axc2	3/5/2010 11:06:54	OM_3-5-2010_10-11-54
1202054766	958161	1	axc2	3/5/2010 11:07:48	OM_3-5-2010_10-11-54
248033008	958161	1	axc2	3/5/2010 11:08:41	OM_3-5-2010_10-11-54
1202054763	958161	1	axc2	3/5/2010 11:09:34	OM_3-5-2010_10-11-54
1202054765	958161	1	axc2	3/5/2010 11:10:28	OM_3-5-2010_10-11-54
1202054767	958161	1	axc2	3/5/2010 11:11:20	OM_3-5-2010_10-11-54
248033009	958161	1	axc2	3/5/2010 11:12:13	OM_3-5-2010_10-11-54
248041001	958161	1	axc2	3/5/2010 11:13:05	OM_3-5-2010_10-11-54
CCV		1	axc2	3/5/2010 11:13:58	OM_3-5-2010_10-11-54
CCB		1	axc2	3/5/2010 11:15:48	OM_3-5-2010_10-11-54

248041002*	958161	1	axc2	3/5/2010	11:17:36	OM_3-5-2010_10-11-54
248041003*	958161	1	axc2	3/5/2010	11:18:28	OM_3-5-2010_10-11-54
248041004*	958161	1	axc2	3/5/2010	11:19:21	OM_3-5-2010_10-11-54
248041005*	958161	1	axc2	3/5/2010	11:20:12	OM_3-5-2010_10-11-54
248058001*	958161	1	axc2	3/5/2010	11:21:05	OM_3-5-2010_10-11-54
248058002*	958161	1	axc2	3/5/2010	11:21:58	OM_3-5-2010_10-11-54
248058003*	958161	1	axc2	3/5/2010	11:22:53	OM_3-5-2010_10-11-54
248058004*	958161	1	axc2	3/5/2010	11:23:46	OM_3-5-2010_10-11-54
248058005*	958161	1	axc2	3/5/2010	11:24:40	OM_3-5-2010_10-11-54
248058006*	958161	1	axc2	3/5/2010	11:25:34	OM_3-5-2010_10-11-54
CCV		1	axc2	3/5/2010	11:26:26	OM_3-5-2010_10-11-54

Original Run Filename: OM_3-5-2010_10-11-54.OMN created 3/5/2010 10:11:54
 Original Run Author's Signature: [axc2]
 Current Run Filename: OM_3-5-2010_10-11-54.OMN last modified 3/5/2010 11:27:33
 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)				
WCN100305-01	1	S1	200	9.13	3/5/2010@10:15:13			200 ppb
WCN100305-02	1	S2	150	6.89	3/5/2010@10:16:05			150 ppb
WCN100305-03	1	S3	100	4.52	3/5/2010@10:16:58			100 ppb
WCN100305-04	1	S4	50.0	2.40	3/5/2010@10:17:51			50 ppb
WCN100305-05	1	S5	10.0	0.566	3/5/2010@10:18:44			10 ppb
WCN100305-06	1	S6	5.00	0.329	3/5/2010@10:19:37			CRDL 5.0 ppb
WCN100305-08	1	S7	0.00	0.00105	3/5/2010@10:20:32			0.0 ppb
DQM Test: Minimum Correlation Coefficient								
Result:			0.99987 > 0.99500					
Message			Pass					
Action			Continue					
WCN100305-07	1	S8	148	6.78	3/5/2010@10:22:22			ICV
Known Conc:			150					
DQM Test: > + Percent Relative Difference								
Result:			-1.2 < 10.0					
Message			ICV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			-1.2 < 10.0					
Message			ICV Passed					
Action			Continue					
Calibration:			Table/Fig. 1					
WCN100305-08	1	S7	-0.846	0.0363	3/5/2010@10:24:13			ICB/CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-0.846 < 5.01					
Message			ICB/CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-0.846 > -5.01					
Message			ICB/CCB Passed					
Action			Continue					
WCN100305-06	1	S6	5.75	0.335	3/5/2010@10:26:03			CRDL
Known Conc:			5.00					
DQM Test: > + Concentration Limit								
Result:			5.75 < 7.50					
Message			CRDL Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			5.75 > 2.50					
Message			Pass					
Action			None					
1202054753|958158|MB	1	1	-1.10	0.0246	3/5/2010@10:27:52			
1202054760|LCS	1	2	31.3	1.49	3/5/2010@10:28:46		25.00	
248000001	1	3	-0.686	0.0435	3/5/2010@10:29:39			
248000002	1	4	-1.65	-1.40e-4	3/5/2010@10:30:32			
248000003	1	5	-0.583	0.0482	3/5/2010@10:31:25			
248000004	1	6	-1.10	0.0249	3/5/2010@10:32:18			
248000005	1	7	-0.0458	0.0725	3/5/2010@10:33:11			
248033001	1	8	0.690	0.106	3/5/2010@10:34:03			
248033002	1	9	2.55	0.190	3/5/2010@10:34:55			
248033003	1	10	0.898	0.115	3/5/2010@10:35:47			
WCN100305-03	1	S3	105	4.81	3/5/2010@10:36:40			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			4.7 < 10.0					

		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	4.7 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100305-08	1	S7	-0.978	0.0303	3/5/2010@10:38:30			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-0.978 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-0.978 > -5.00					
		Message	CCB Passed					
		Action	Continue					
248033004	1	11	0.725	0.107	3/5/2010@10:40:18			
248033005	1	12	-0.492	0.0523	3/5/2010@10:41:10			
248033006	1	13	-0.189	0.0660	3/5/2010@10:42:02			
248055015	1	14	5.42	0.320	3/5/2010@10:42:53			
1202054754||DUP	1	15	9.09	0.486	3/5/2010@10:43:45			
1202054756||MS	1	16	89.2	4.11	3/5/2010@10:44:39			
1202054758||MSD	1	17	84.4	3.89	3/5/2010@10:45:32			
248055016	1	18	-1.65	-1.35e-4	3/5/2010@10:46:26			
1202054755||DUP	1	19	-0.941	0.0320	3/5/2010@10:47:19			
1202054757||MS	1	20	96.7	4.45	3/5/2010@10:48:12			
WCN100305-03	1	S3	106	4.87	3/5/2010@10:49:05			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	5.9 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	5.9 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100305-08	1	S7	-0.905	0.0336	3/5/2010@10:50:54			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-0.905 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-0.905 > -5.00					
		Message	CCB Passed					
		Action	Continue					
1202054759||MSD	1	21	95.1	4.38	3/5/2010@10:52:43			
248055017	1	22	-1.41	0.0106	3/5/2010@10:53:37			
248055018	1	23	73.0	3.38	3/5/2010@10:54:29			
248055019	1	24	-1.65	-1.34e-4	3/5/2010@10:55:22			
248055020	1	25	0.757	0.109	3/5/2010@10:56:14			
248065005	1	26	0.299	0.0881	3/5/2010@10:57:06			
248065007	1	27	0.579	0.101	3/5/2010@10:57:58			
248065008	1	28	1.27	0.132	3/5/2010@10:58:51			
1202054761||958161||MB	1	29	-1.17	0.0216	3/5/2010@10:59:42			
1202054768||LCS	1	30	22.4	1.09	3/5/2010@11:00:34		25.00	
WCN100305-03	1	S3	105	4.84	3/5/2010@11:01:27			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	5.4 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	5.4 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100305-08	1	S7	-1.66	-5.98e-4	3/5/2010@11:03:17			CCB
		Known Conc:	0.00					

DQM Test: > + Concentration Limit						
Result:		-1.66 < 5.00				
Message		CCB Passed				
Action		Continue				
DQM Test: < - Concentration Limit						
Result:		-1.66 > -5.00				
Message		CCB Passed				
Action		Continue				
248033007	1	31	-0.405	0.0562	3/5/2010@11:05:07	
1202054762	1	32	-0.286	0.0616	3/5/2010@11:06:01	
1202054764	1	33	92.5	4.26	3/5/2010@11:06:54	
1202054766	1	34	85.6	3.95	3/5/2010@11:07:48	
248033008	1	35	-0.629	0.0461	3/5/2010@11:08:41	
1202054763	1	36	-0.450	0.0542	3/5/2010@11:09:34	
1202054765	1	37	79.3	3.66	3/5/2010@11:10:28	
1202054767	1	38	98.5	4.53	3/5/2010@11:11:20	
248033009	1	39	0.790	0.110	3/5/2010@11:12:13	
248041001	1	40	-0.284	0.0617	3/5/2010@11:13:05	
WCN100305-03	1	S3	105	4.84	3/5/2010@11:13:58	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				
WCN100305-08	1	S7	-1.65	0.00	3/5/2010@11:15:48	CCB
Known Conc:			0.00			
DQM Test: > + Concentration Limit						
Result:		-1.65 < 5.00				
Message		CCB Passed				
Action		Continue				
DQM Test: < - Concentration Limit						
Result:		-1.65 > -5.00				
Message		CCB Passed				
Action		Continue				
248041002	1	41	0.0447	0.0766	3/5/2010@11:17:36	
248041003	1	42	3.12	0.216	3/5/2010@11:18:28	
248041004	1	43	-0.946	0.0317	3/5/2010@11:19:21	
248041005	1	44	0.799	0.111	3/5/2010@11:20:12	
248058001	1	45	0.398	0.0926	3/5/2010@11:21:05	
248058002	1	46	-0.864	0.0354	3/5/2010@11:21:58	
248058003	1	47	-1.65	-3.53e-4	3/5/2010@11:22:53	
248058004	1	48	2.77	0.200	3/5/2010@11:23:46	
248058005	1	49	0.181	0.0827	3/5/2010@11:24:40	
248058006	1	50	-0.752	0.0405	3/5/2010@11:25:34	
WCN100305-03	1	S3	114	5.24	3/5/2010@11:26:26	CCV
Known Conc:			100			
DQM Test: > + Percent Relative Difference						
Result:		14.1 > 10.0				
Message		CCV Failed				
Action		Stop Run				
DQM Test: < - Percent Relative Difference						
Result:		14.1 > 10.0				
Message		CCV Passed				
Action		Continue				

Analyte Properties Table for OM_3-5-2010_10-11-54.OMN

Property	Channel 1
Concentration Units	TCYANIDE
Calibration Fit Type	ug/L
Clear Calibration	First Order
Force Through Zero	True
Calibration Weighting	False
	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

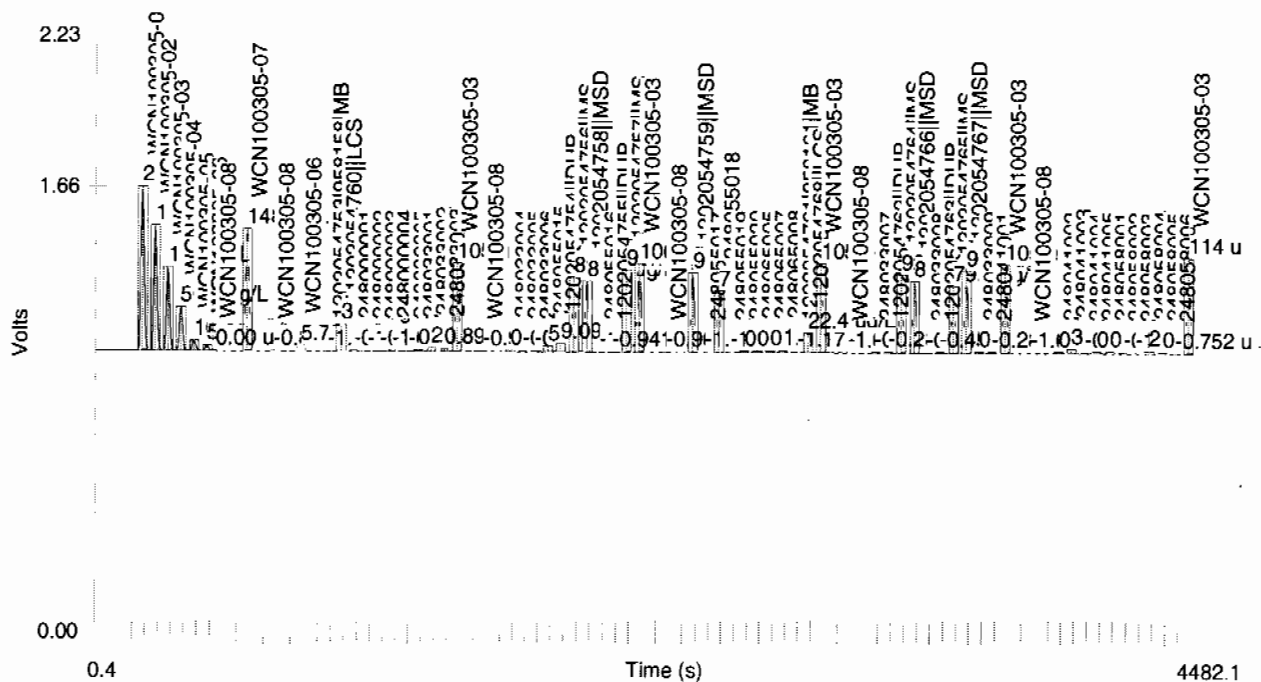
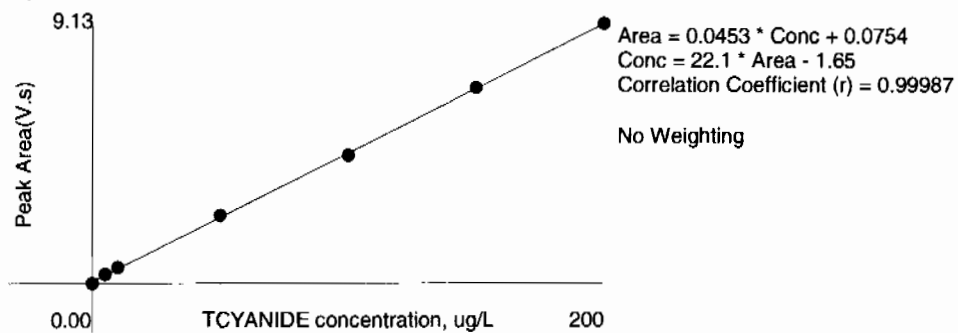


Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	9.13	0.605	-0.1	3/5/2010	10:16:16
2	150	1	6.89	0.460	-0.4	3/5/2010	10:17:08
3	100	1	4.52	0.305	1.8	3/5/2010	10:18:01
4	50.0	1	2.40	0.159	-2.7	3/5/2010	10:18:54
5	10.0	1	0.566	0.0371	-7.2	3/5/2010	10:19:47
6	5.00	1	0.329	0.0204	-9.1	3/5/2010	10:20:41
7	0.00	1	0.00105	-7.02e-5		3/5/2010	10:21:35

Figure 1: TCYANIDE



This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
CCV		1	axc2	3/5/2010 11:40:09	OM_3-5-2010_11-39-23
CCB		1	axc2	3/5/2010 11:42:00	OM_3-5-2010_11-39-23
248041002	958161	1	axc2	3/5/2010 11:43:48	OM_3-5-2010_11-39-23
248041003	958161	1	axc2	3/5/2010 11:44:40	OM_3-5-2010_11-39-23
248041004	958161	1	axc2	3/5/2010 11:45:33	OM_3-5-2010_11-39-23
248041005	958161	1	axc2	3/5/2010 11:46:25	OM_3-5-2010_11-39-23
248058001	958161	1	axc2	3/5/2010 11:47:17	OM_3-5-2010_11-39-23
248058002	958161	1	axc2	3/5/2010 11:48:11	OM_3-5-2010_11-39-23
248058003	958161	1	axc2	3/5/2010 11:49:05	OM_3-5-2010_11-39-23
248058004	958161	1	axc2	3/5/2010 11:49:59	OM_3-5-2010_11-39-23
248058005	958161	1	axc2	3/5/2010 11:50:52	OM_3-5-2010_11-39-23
248058006	958161	1	axc2	3/5/2010 11:51:46	OM_3-5-2010_11-39-23
CCV		1	axc2	3/5/2010 11:52:38	OM_3-5-2010_11-39-23
CCB		1	axc2	3/5/2010 11:54:29	OM_3-5-2010_11-39-23
248058007	958161	1	axc2	3/5/2010 11:56:18	OM_3-5-2010_11-39-23
248058008	958161	1	axc2	3/5/2010 11:57:11	OM_3-5-2010_11-39-23
248065001	958161	1	axc2	3/5/2010 11:58:05	OM_3-5-2010_11-39-23
248065002	958161	1	axc2	3/5/2010 11:58:58	OM_3-5-2010_11-39-23
248065003	958161	1	axc2	3/5/2010 11:59:50	OM_3-5-2010_11-39-23
248065004	958161	1	axc2	3/5/2010 12:00:43	OM_3-5-2010_11-39-23
1202060268	960509	1	axc2	3/5/2010 12:01:35	OM_3-5-2010_11-39-23
1202060272	960509	25	axc2	3/5/2010 12:02:28	OM_3-5-2010_11-39-23
248045015	960509	1	axc2	3/5/2010 12:03:19	OM_3-5-2010_11-39-23
1202060269	960509	1	axc2	3/5/2010 12:04:12	OM_3-5-2010_11-39-23
CCV		1	axc2	3/5/2010 12:05:04	OM_3-5-2010_11-39-23
CCB		1	axc2	3/5/2010 12:06:54	OM_3-5-2010_11-39-23
1202060270*	960509	1	axc2	3/5/2010 12:08:44	OM_3-5-2010_11-39-23
1202060271*	960509	1	axc2	3/5/2010 12:09:39	OM_3-5-2010_11-39-23
248045016*	960509	1	axc2	3/5/2010 12:10:33	OM_3-5-2010_11-39-23
248045017*	960509	1	axc2	3/5/2010 12:11:27	OM_3-5-2010_11-39-23
248045018*	960509	1	axc2	3/5/2010 12:12:21	OM_3-5-2010_11-39-23
1202054773*	958163	1	axc2	3/5/2010 12:13:14	OM_3-5-2010_11-39-23
1202054780*	958163	25	axc2	3/5/2010 12:14:08	OM_3-5-2010_11-39-23
248002001*	958163	1	axc2	3/5/2010 12:15:01	OM_3-5-2010_11-39-23
1202054775*	958163	1	axc2	3/5/2010 12:15:54	OM_3-5-2010_11-39-23
1202054777*	958163	1	axc2	3/5/2010 12:16:47	OM_3-5-2010_11-39-23
CCV		1	axc2	3/5/2010 12:17:39	OM_3-5-2010_11-39-23

Author: axc2

Date : 3/5/2010

Original Run Filename: OM_3-5-2010_11-39-23.OMN created 3/5/2010 11:39:23
 Original Run Author's Signature: [axc2]
 Current Run Filename: OM_3-5-2010_11-39-23.OMN last modified 3/5/2010 12:18:43
 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)				
WCN100305-03	1	S3	103	4.74	3/5/2010@11:40:09			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			3.1 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			3.1 < 10.0					
Message			CCV Passed					
Action			Continue					
Calibration:			Table/Fig. 1					
WCN100305-08	1	S7	-1.19	0.0205	3/5/2010@11:42:00			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-1.19 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-1.19 > -5.00					
Message			CCB Passed					
Action			Continue					
248041002[958161]	1	41	-0.154	0.0676	3/5/2010@11:43:48			
248041003	1	42	3.71	0.243	3/5/2010@11:44:40			
248041004	1	43	-1.57	0.00365	3/5/2010@11:45:33			
248041005	1	44	0.278	0.0871	3/5/2010@11:46:25			
248058001	1	45	0.584	0.101	3/5/2010@11:47:17			
248058002	1	46	-0.938	0.0321	3/5/2010@11:48:11			
248058003	1	47	-1.64	4.38e-4	3/5/2010@11:49:05			
248058004	1	48	3.51	0.234	3/5/2010@11:49:59			
248058005	1	49	0.209	0.0840	3/5/2010@11:50:52			
248058006	1	50	-1.65	-2.07e-4	3/5/2010@11:51:46			
WCN100305-03	1	S3	101	4.63	3/5/2010@11:52:38			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			0.7 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			0.7 < 10.0					
Message			CCV Passed					
Action			Continue					
WCN100305-08	1	S7	-1.03	0.0277	3/5/2010@11:54:29			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-1.03 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-1.03 > -5.00					
Message			CCB Passed					
Action			Continue					
248058007	1	51	-1.96	-0.0140	3/5/2010@11:56:18			
248058008	1	52	-0.359	0.0583	3/5/2010@11:57:11			
248065001	1	53	-0.690	0.0433	3/5/2010@11:58:05			
248065002	1	54	-0.808	0.0380	3/5/2010@11:58:58			
248065003	1	55	-0.965	0.0309	3/5/2010@11:59:50			

248065004	1	56	-0.443	0.0545	3/5/2010@12:00:43		
1202060268|960509|MB	1	57	-1.65	0.00	3/5/2010@12:01:35		
1202060272|LCS	1	58	35.4	1.68	3/5/2010@12:02:28	25.00	
248045015	1	59	7.53	0.415	3/5/2010@12:03:19		
1202060269|DUP	1	60	7.06	0.394	3/5/2010@12:04:12		
WCN100305-03	1	S3	106	4.89	3/5/2010@12:05:04		CCV
Known Conc: 100							
DQM Test: > + Percent Relative Difference							
Result: 6.4 < 10.0							
Message CCV Passed							
Action Continue							
DQM Test: < - Percent Relative Difference							
Result: 6.4 < 10.0							
Message CCV Passed							
Action Continue							
WCN100305-08	1	S7	-1.64	3.30e-4	3/5/2010@12:06:54		CCB
Known Conc: 0.00							
DQM Test: > + Concentration Limit							
Result: -1.64 < 5.00							
Message CCB Passed							
Action Continue							
DQM Test: < - Concentration Limit							
Result: -1.64 > -5.00							
Message CCB Passed							
Action Continue							
1202060270|MS	1	61	107	4.92	3/5/2010@12:08:44		
1202060271|MSD	1	62	97.7	4.50	3/5/2010@12:09:39		
248045016	1	63	6.02	0.347	3/5/2010@12:10:33		
248045017	1	64	1.77	0.155	3/5/2010@12:11:27		
248045018	1	65	1.29	0.133	3/5/2010@12:12:21		
1202054773|958163|MB	1	66	-1.21	0.0197	3/5/2010@12:13:14		
1202054780|LCS	1	67	35.1	1.67	3/5/2010@12:14:08	25.00	
248002001	1	68	-1.65	-1.88e-4	3/5/2010@12:15:01		
1202054775|DUP	1	69	-1.66	-4.62e-4	3/5/2010@12:15:54		
1202054777|MS	1	70	105	4.84	3/5/2010@12:16:47		
WCN100305-03	1	S3	119	5.47	3/5/2010@12:17:39		CCV
Known Conc: 100							
DQM Test: > + Percent Relative Difference							
Result: 19.2 > 10.0							
Message CCV Failed							
Action Stop Run							
DQM Test: < - Percent Relative Difference							
Result: 19.2 > 10.0							
Message CCV Passed							
Action Continue							

Analyte Properties Table for OM_3-5-2010_11-39-23.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

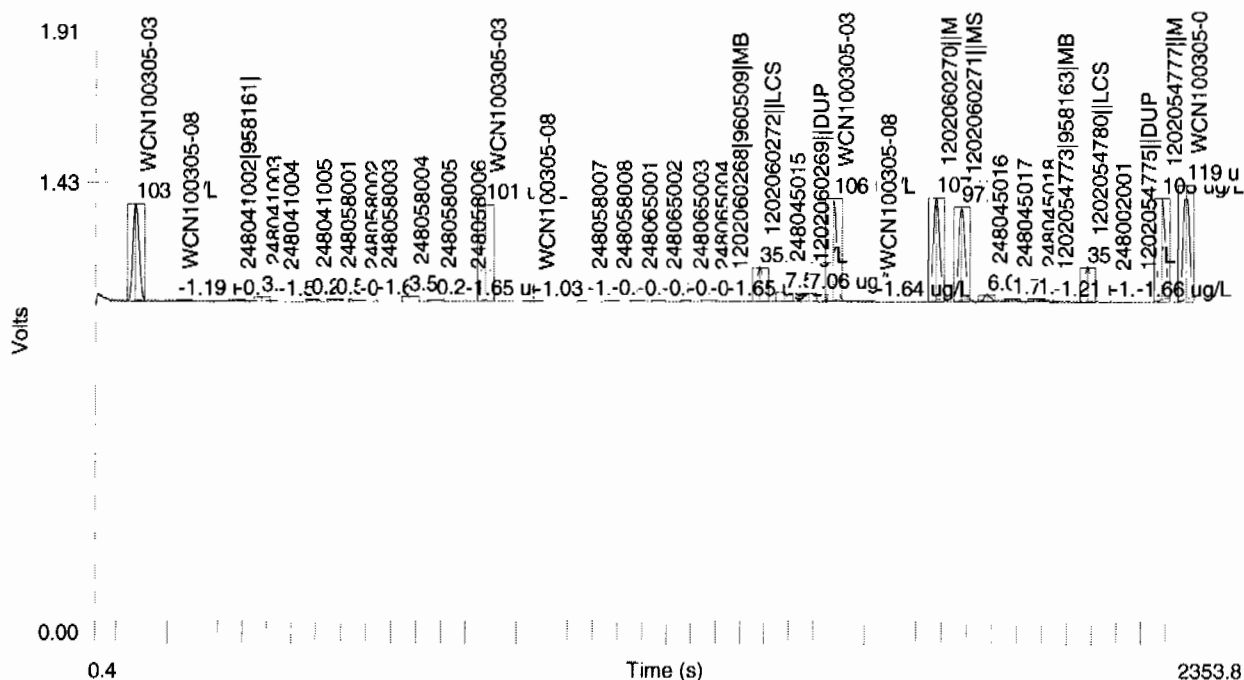
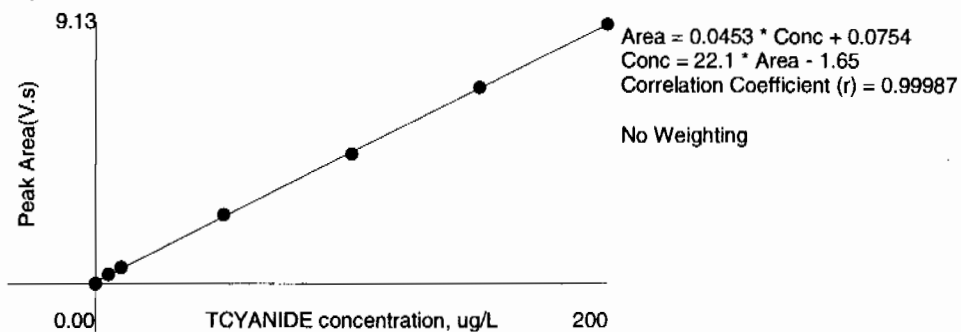


Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	9.13	0.605	-0.1	3/5/2010	10:16:16
2	150	1	6.89	0.460	-0.4	3/5/2010	10:17:08
3	100	1	4.52	0.305	1.8	3/5/2010	10:18:01
4	50.0	1	2.40	0.159	-2.7	3/5/2010	10:18:54
5	10.0	1	0.566	0.0371	-7.2	3/5/2010	10:19:47
6	5.00	1	0.329	0.0204	-9.1	3/5/2010	10:20:41
7	0.00	1	0.00105	-7.02e-5		3/5/2010	10:21:35

Figure 1: TCYANIDE



Ion Chromatography

Prep Logbook

Ion Chromatography (IC)

Batch ID: 962072.0
 Analyst: Mary Sherwood
 Method: EPA 300.0 PREP
 Lab SOP: GL-GC-E-086 REV# 17
 Instrument: Sartorius Balance B-001

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
LCS	1202063597	GEL-ANION-4C Spiking Solution	UTC100224SPK	.8	mL
MS	1202063593	GEL-ANION-4C Spiking Solution	UTC100224SPK	.8	mL
MS	1202063594	GEL-ANION-4C Spiking Solution	UTC100224SPK	.8	mL
MSD	1202063595	GEL-ANION-4C Spiking Solution	UTC100224SPK	.8	mL
MSD	1202063596	GEL-ANION-4C Spiking Solution	UTC100224SPK	.8	mL

Sample ID	Run Date	Matrix	Initial Weight (g)	Final Volume (mL)	Prep Factor (mL/g)	pH Check
1202063590 MB	19-MAR-2010 09:20:00	Soil	4	40	10	
1202063597 LCS	19-MAR-2010 09:20:00	Soil	4	40	10	
248025001	19-MAR-2010 09:20:00	Soil	4	40	10	
1202063591 DUP (248025001)	19-MAR-2010 09:20:00	Soil	4	40	10	
1202063593 MS (248025001)	19-MAR-2010 09:20:00	Soil	4	40	10	
1202063595 MSD (248025001)	19-MAR-2010 09:20:00	Soil	4	40	10	
248025002	19-MAR-2010 09:20:00	Soil	4	40	10	
248025003	19-MAR-2010 09:20:00	Soil	4	40	10	
248025004	19-MAR-2010 09:20:00	Soil	4	40	10	
248025005	19-MAR-2010 09:20:00	Soil	4	40	10	
248025006	19-MAR-2010 09:20:00	Soil	4	40	10	
248025007	19-MAR-2010 09:20:00	Soil	4	40	10	
248041001	19-MAR-2010 09:20:00	Soil	4	40	10	
248041002	19-MAR-2010 09:20:00	Soil	4	40	10	
248041003	19-MAR-2010 09:20:00	Soil	4	40	10	
248041004	19-MAR-2010 09:20:00	Soil	4	40	10	
248041005	19-MAR-2010 09:20:00	Soil	4	40	10	
1202063592 DUP (248041005)	19-MAR-2010 09:20:00	Soil	4	40	10	
1202063594 MS (248041005)	19-MAR-2010 09:20:00	Soil	4	40	10	
1202063596 MSD (248041005)	19-MAR-2010 09:20:00	Soil	4	40	10	

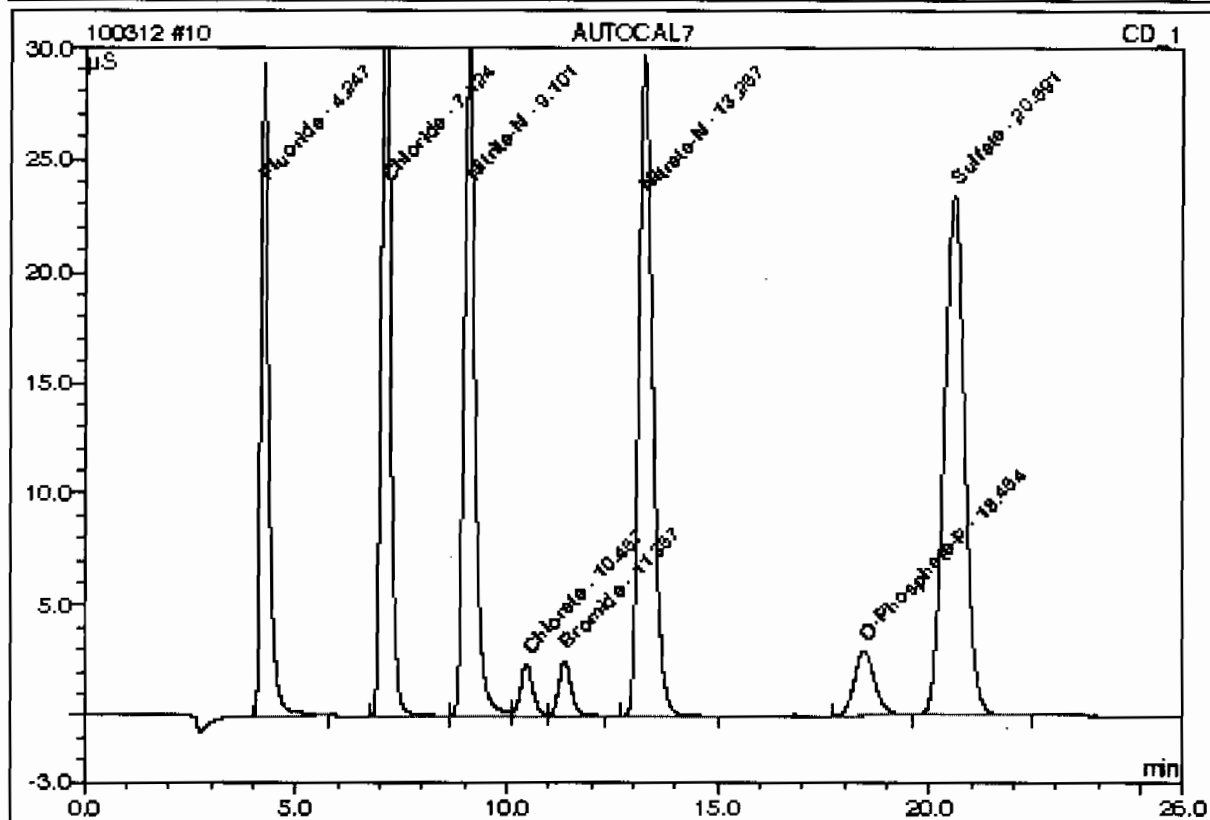
Reagent/Solvent Lot ID	Description	Amount	Comments:
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This is runlog for Sequence 100312.seq for IC6

Sample ID	Run Time	Batch	Dilution	Dataset	Analyst
BLK	03/12/10 11:16		1	100312	MAR1
BLK	03/12/10 11:44		1	100312	MAR1
ICAL-07	03/12/10 12:13		1	100312	MAR1
ICAL-06	03/12/10 12:42		1	100312	MAR1
ICAL-05	03/12/10 13:11		1	100312	MAR1
ICAL-04	03/12/10 13:40		1	100312	MAR1
ICAL-03	03/12/10 14:08		1	100312	MAR1
ICAL-02	03/12/10 14:37		1	100312	MAR1
ICAL-01	03/12/10 15:06		1	100312	MAR1
ICV	03/12/10 15:35		1	100312	MAR1
ICB	03/12/10 16:04		1	100312	MAR1
1202063659	03/12/10 16:33	962090	1	100312	MAR1
1202063663	03/12/10 17:02	962090	1	100312	MAR1
248065001	03/12/10 17:31	962090	1	100312	MAR1
1202063660	03/12/10 18:00	962090	1	100312	MAR1
1202063661	03/12/10 18:29	962090	1	100312	MAR1
1202063662	03/12/10 18:58	962090	1	100312	MAR1
248065002	03/12/10 19:27	962090	1	100312	MAR1
248065003	03/12/10 19:55	962090	1	100312	MAR1
248065004	03/12/10 20:24	962090	1	100312	MAR1
248065005	03/12/10 20:53	962090	1	100312	MAR1
CVH	03/12/10 21:22		1	100312	MAR1
CCB	03/12/10 21:51		1	100312	MAR1
248065006	03/12/10 22:20	962090	1	100312	MAR1
248065007	03/12/10 22:49	962090	1	100312	MAR1
248065008	03/12/10 23:18	962090	1	100312	MAR1
248068001	03/12/10 23:47	962090	1	100312	MAR1

10 AUTOCAL7

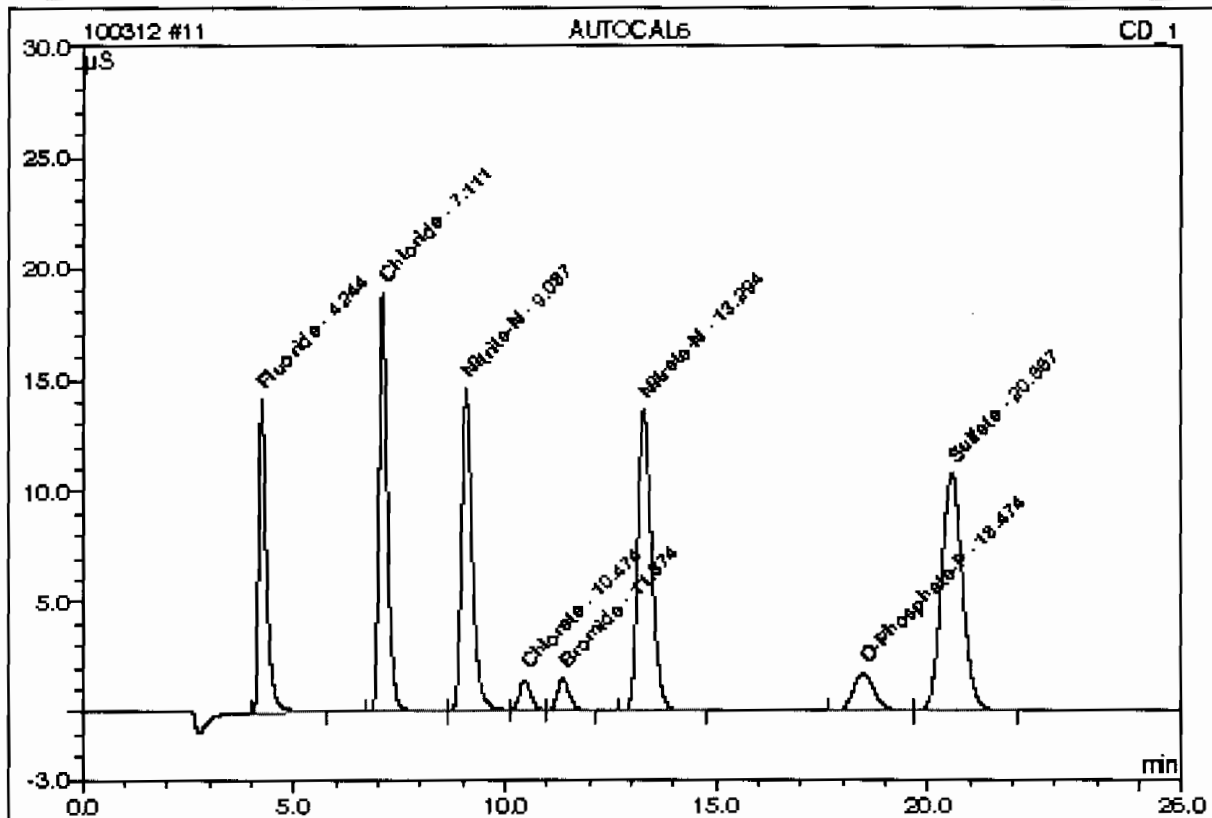
Sample Name:	AUTOCAL7	Injection Volume:	1.0
Vial Number:	3	Channel:	CD_1
Sample Type:	standard	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100312an	Sample Amount:	1.0000
Recording Time:	3/12/2010 12:13	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GL GCE086;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
1	4.25	Fluoride	10.0000	10.0082		6.22157	11.84
2	7.12	Chloride	20.0000	20.0326		9.47163	18.02
3	9.10	Nitrite-N	10.0000	10.0084		9.13994	17.39
4	10.47	Chlorate	5.0000	5.0492		0.79245	1.51
5	11.37	Bromide	5.0000	5.0195		0.84636	1.61
6	13.26	Nitrate-N	10.0000	10.0123		11.22910	21.36
7	18.45	O-Phosphate-P	5.0000	5.0489		1.66651	3.17
8	20.59	Sulfate	40.0000	40.0441		13.19754	25.11
Total:				105.2231	0.000	52.565	100.00

11 AUTOCAL6

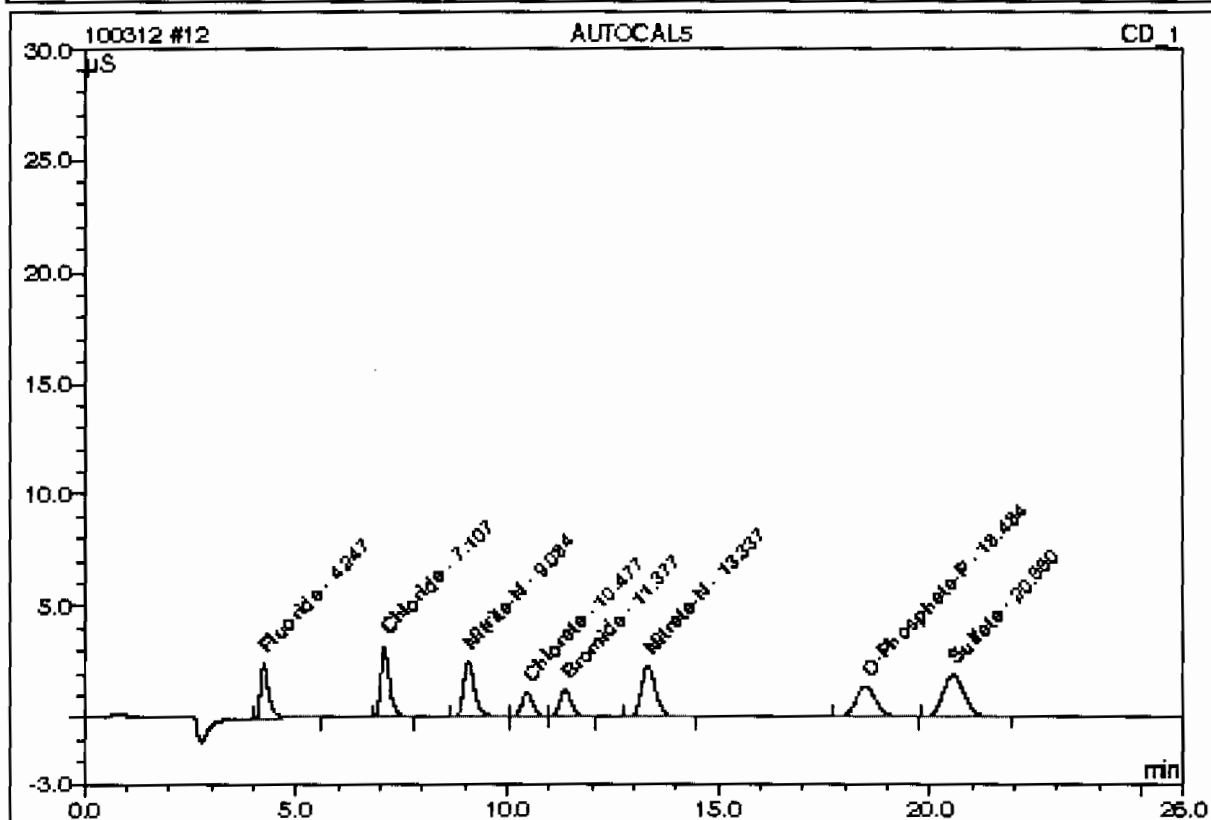
Sample Name:	AUTOCAL 6	Injection Volume:	1.0
Vial Number:	4	Channel:	CD_1
Sample Type:	standard	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100312an	Sample Amount:	1.0000
Recording Time:	3/12/2010 12:42	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GL GC E086;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area μS*min	Rel. Area %
1	4.24	Fluoride	5.0000	4.8561		2.99032	12.03
2	7.11	Chloride	10.0000	9.3413		4.33873	17.46
3	9.09	Nitrate-N	5.0000	4.8263		4.34814	17.50
4	10.47	Chlorate	3.0000	2.9358		0.46050	1.85
5	11.37	Bromide	3.0000	2.9362		0.49122	1.98
6	13.29	Nitrate-N	5.0000	4.8985		5.14610	20.71
7	18.47	O-Phosphate-P	3.0000	2.9248		0.95491	3.84
8	20.57	Sulfate	20.0000	18.9050		6.12051	24.63
Total:				51.4240	0.000	24.850	100.00

12 AUTOCAL5

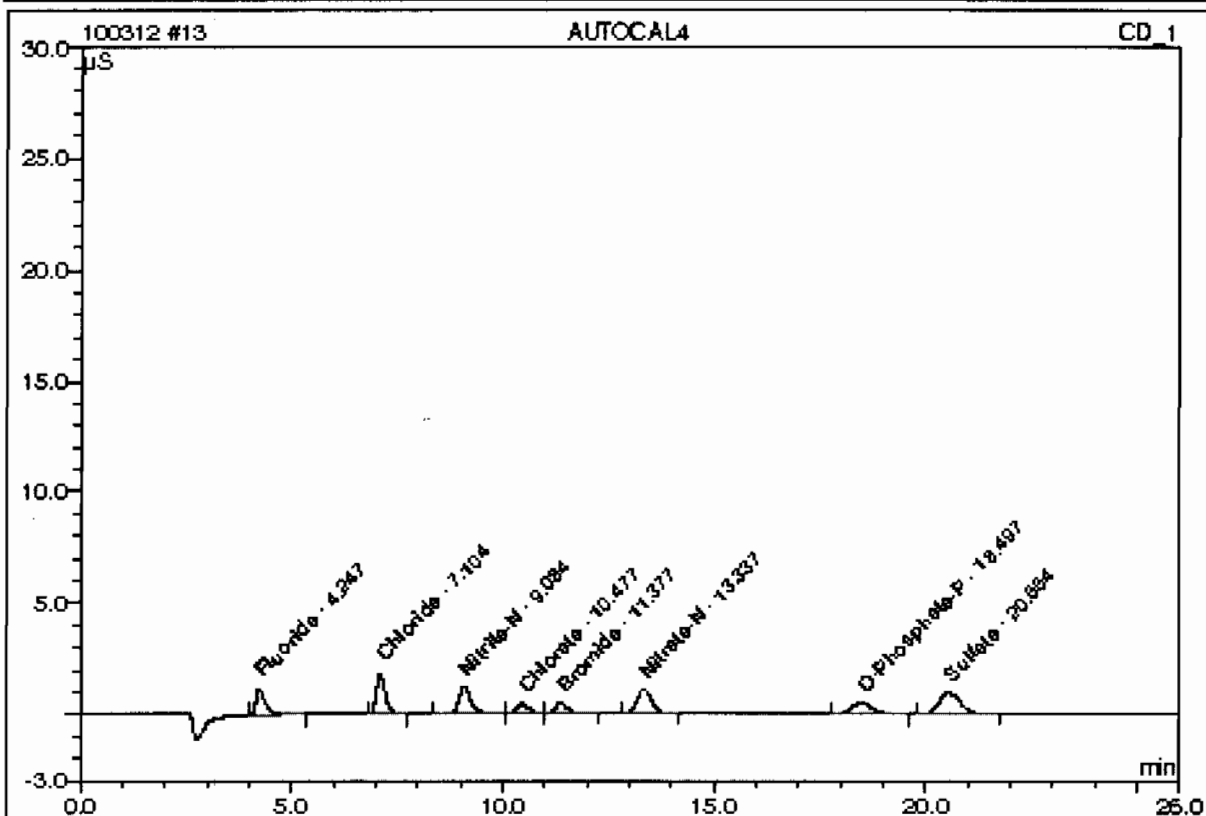
Sample Name:	AUTOCAL5	Injection Volume:	1.0
Vial Number:	5	Channel:	CD_1
Sample Type:	standard	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100312an	Sample Amount:	1.0000
Recording Time:	3/12/2010 13:11	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GL GC BD86;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
1	4.25	Fluoride	1.0000	0.9247		0.54471	9.60
2	7.11	Chloride	2.0000	1.7462		0.75932	13.38
3	9.08	Nitrite-N	1.0000	0.9359		0.79384	13.99
4	10.48	Chlorate	2.5000	2.3846		0.36888	6.50
5	11.38	Bromide	2.5000	2.4488		0.40750	7.18
6	13.34	Nitrate-N	1.0000	0.9150		0.90731	15.99
7	18.48	O-Phosphate-P	2.5000	2.4403		0.78917	13.90
8	20.55	Sulfate	4.0000	3.6492		1.10495	19.47
Total:				15.4446	0.000	5.676	100.00

13 AUTOCAL4

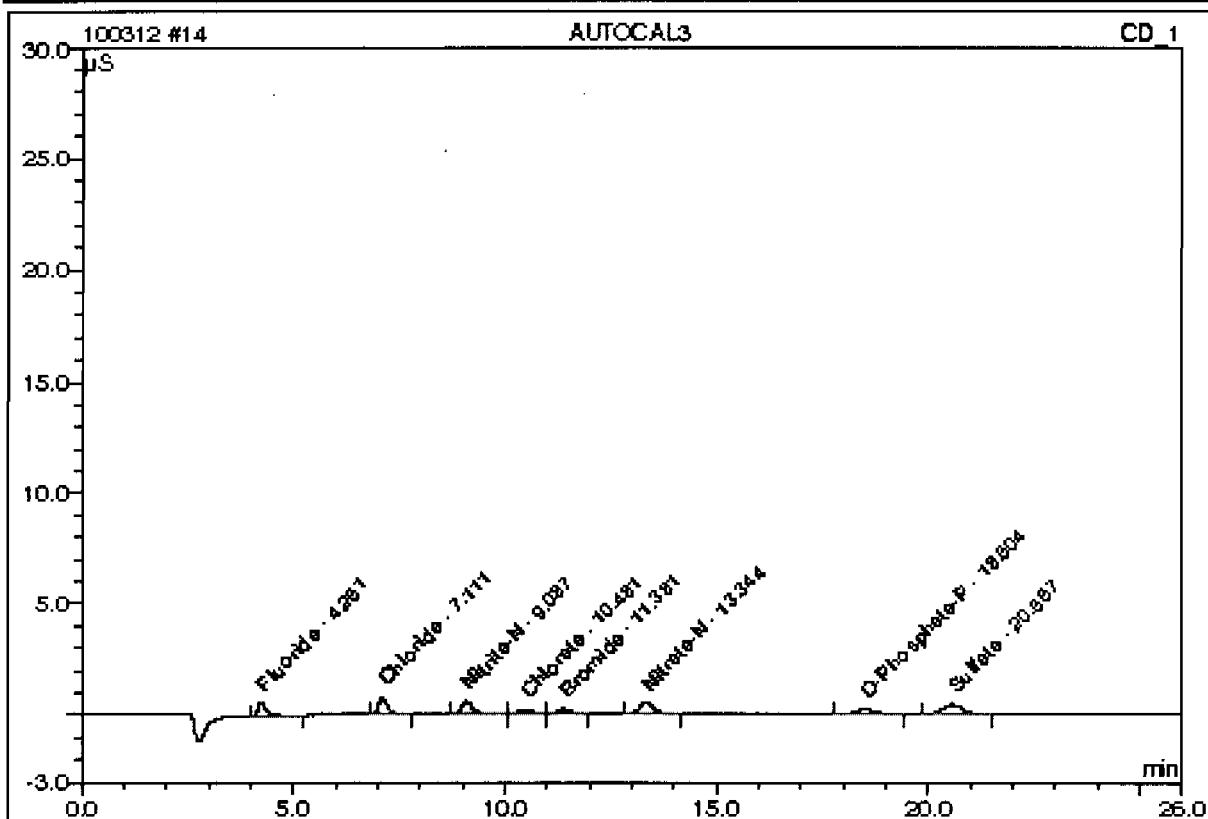
Sample Name:	AUTOCAL4	Injection Volume:	1.0
Vial Number:	6	Channel:	CD_1
Sample Type:	standard	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100312an	Sample Amount:	1.0000
Recording Time:	3/12/2010 13:40	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GL GCED86;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
1	4.25	Fluoride	0.5000	0.5181		0.29079	10.43
2	7.10	Chloride	1.0000	1.0724		0.44928	16.11
3	9.08	Nitrite-N	0.5000	0.5242		0.41773	14.98
4	10.48	Chlorate	1.0000	1.0431		0.15901	5.70
5	11.38	Bromide	1.0000	1.0406		0.17190	6.16
6	13.34	Nitrate-N	0.5000	0.5021		0.43247	15.51
7	18.50	O-Phosphate-P	1.0000	0.9735		0.29999	10.76
8	20.55	Sulfate	2.0000	2.0444		0.56783	20.36
Total:				7.7184	0.000	2.789	100.00

14 AUTOCAL3

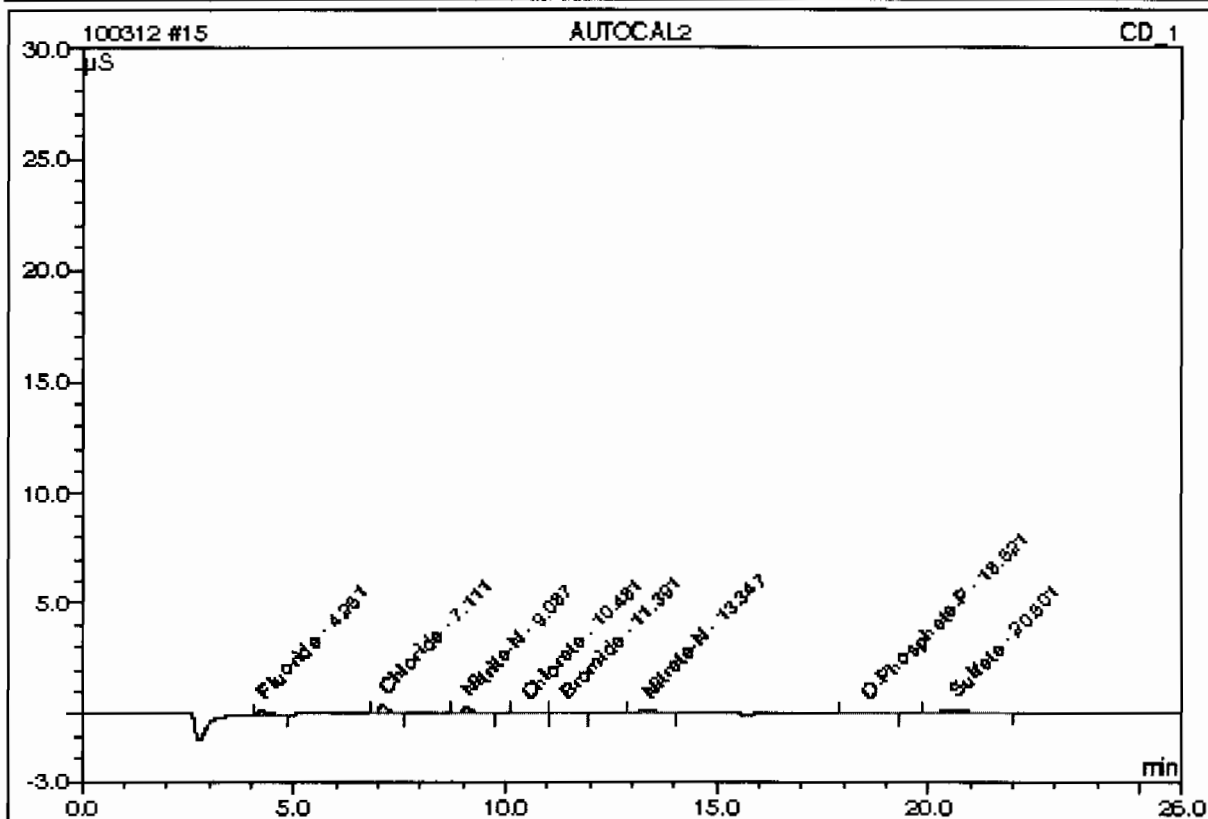
Sample Name:	AUTOCAL3	Injection Volume:	1.0
Vial Number:	7	Channel:	CD_1
Sample Type:	standard	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100312an	Sample Amount:	1.0000
Recording Time:	3/12/2010 14:08	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GL GCED86;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
1	4.25	Fluoride	0.2500	0.2767		0.13273	10.36
2	7.11	Chloride	0.5000	0.6177		0.19612	15.31
3	9.09	Nitrite-N	0.2500	0.2802		0.18850	14.72
4	10.48	Chlorate	0.5000	0.4873		0.07006	5.47
5	11.38	Bromide	0.5000	0.4930		0.07924	6.19
6	13.34	Nitrate-N	0.2500	0.3124		0.20857	16.29
7	18.50	O-Phosphate-P	0.5000	0.4938		0.13687	10.84
8	20.57	Sulfate	1.0000	1.2082		0.26661	20.82
Total:				4.1694	0.000	1.281	100.00

15 AUTOCAL2

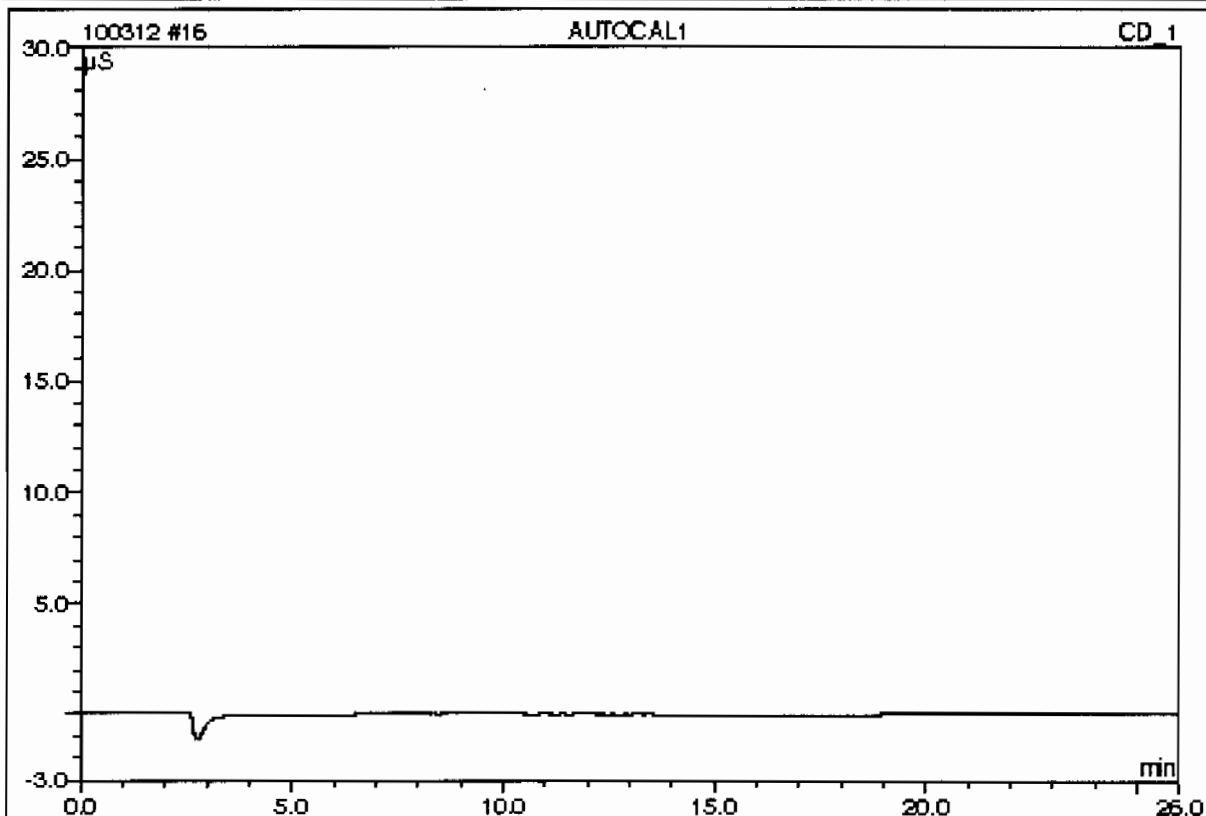
Sample Name:	AUTOCAL2	Injection Volume:	1.0
Vial Number:	8	Channel:	CD_1
Sample Type:	standard	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100312an	Sample Amount:	1.0000
Recording Time:	3/12/2010 14:37	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GL GC ED86; 300; 9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
1	4.25	Fluoride	0.1000	0.1393		0.05352	9.78
2	7.11	Chloride	0.2000	0.3635		0.09592	17.52
3	9.09	Nitrite-N	0.1000	0.1457		0.07635	13.95
4	10.48	Chlorate	0.2000	0.2155		0.02807	5.13
5	11.39	Bromide	0.2000	0.2128		0.03286	6.00
6	13.35	Nitrate-N	0.1000	0.1770		0.07876	14.39
7	18.52	O-Phosphate-P	0.2000	0.2166		0.04829	8.82
8	20.60	Sulfate	0.4000	0.7224		0.13373	24.43
Total:				2.1926	0.000	0.548	100.00

16 AUTOCAL1

Sample Name:	AUTOCAL1	Injection Volume:	1.0
Vial Number:	9	Channel:	CD_1
Sample Type:	standard	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100312an	Sample Amount:	1.0000
Recording Time:	3/12/2010 15:06	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GL GCED86;300;3056



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

16 AUTOCAL1

Sample Name: AUTOCAL1

Vial Number: 9

Sample Type: standard

Control Program: AS23

Quantif. Method: 100312an

Recording Time: 3/12/2010 15:06

Run Time (min): 26.00

Injection Volume: 1.0

Channel: CD_1

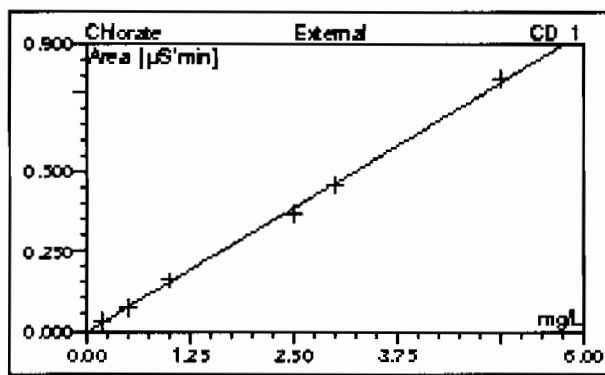
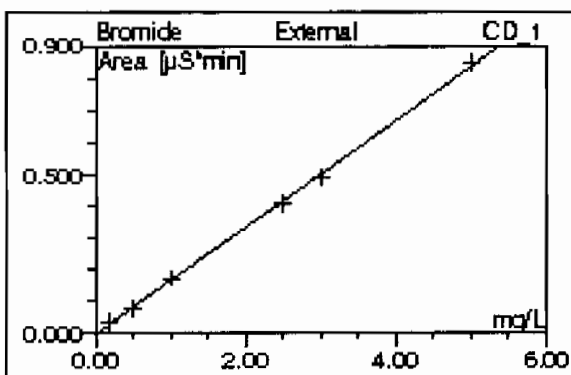
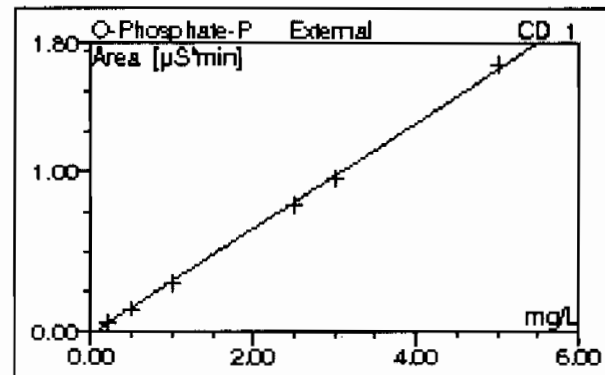
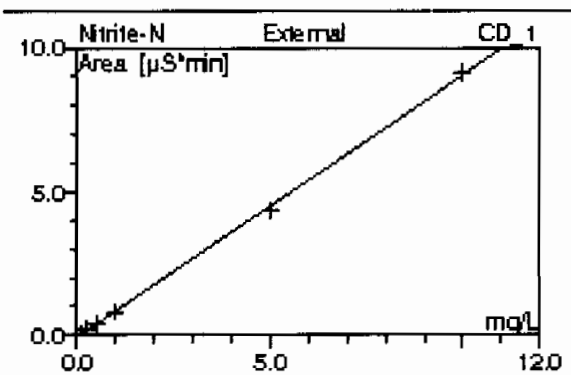
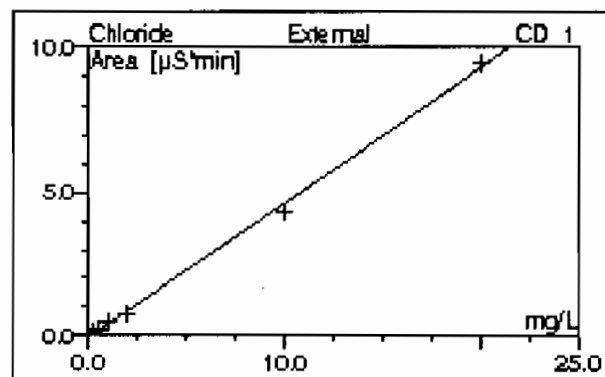
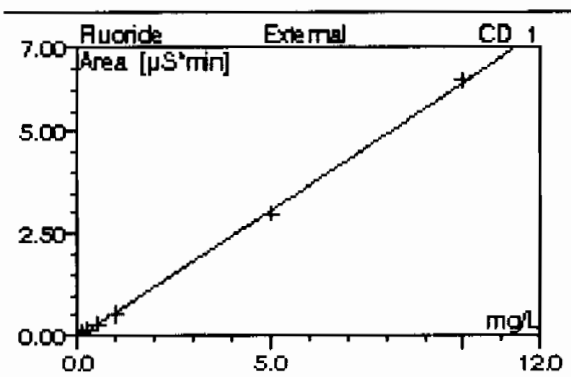
Dilution Factor: 1.0000

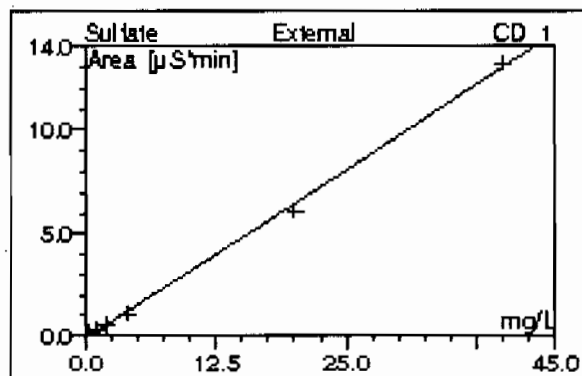
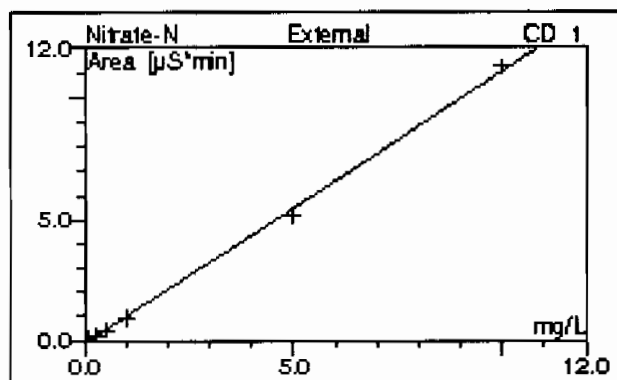
Sample Weight: 1.0000

Sample Amount: 1.0000

Analyst: MAR1

Column: AS23-002712; GL GC E086;300;9056

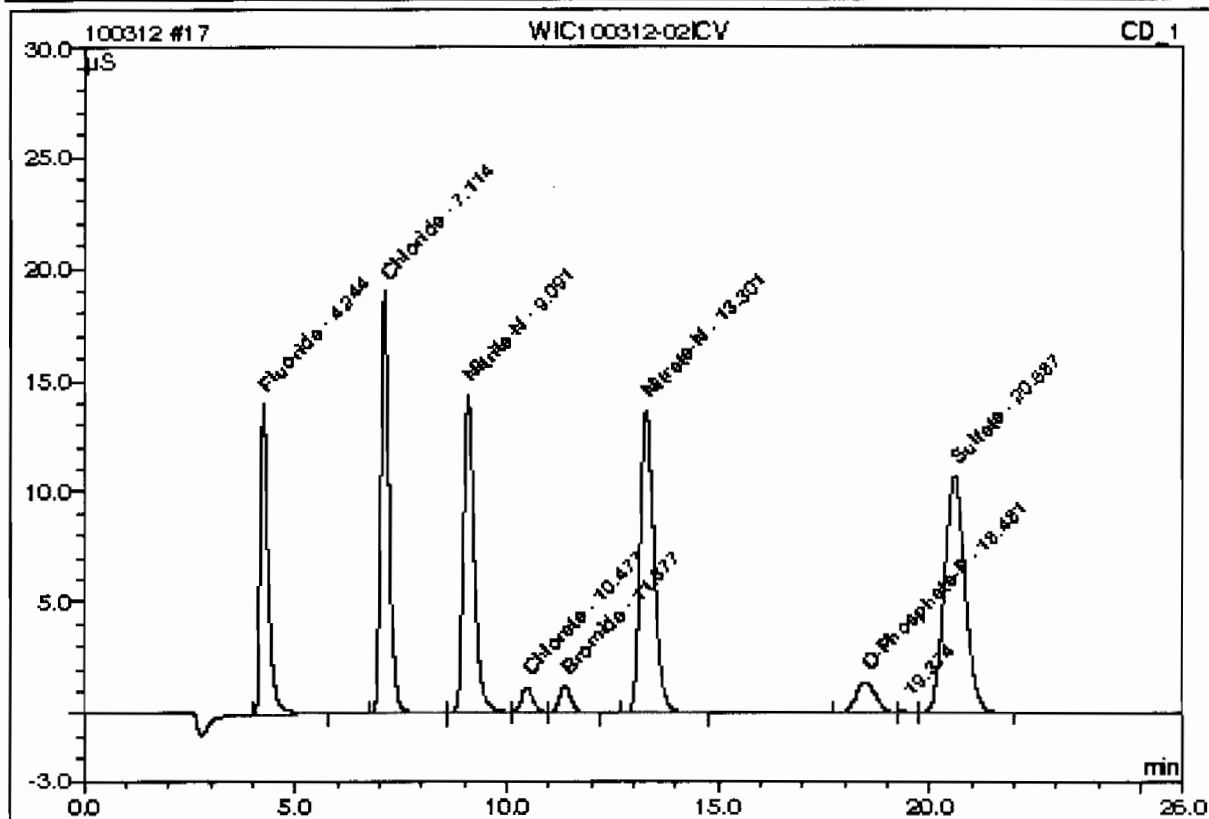




No. CD_1	Ret.Time CD_1 min	Peak Name CD_1	Cal.Type CD_1	Coeff.Det. CD_1 %	Offset CD_1	Slope CD_1	Curve CD_1
n.a.	n.a.	Fluoride	OLO#	99.9627	-0.0330	0.6210	0.0000
n.a.	n.a.	Chloride	OLO#	99.8225	-0.0749	0.4699	0.0000
n.a.	n.a.	Nitrite-N	OLO#	99.9452	-0.0564	0.9115	0.0000
n.a.	n.a.	Chlorate	OLO#	99.8605	-0.0058	0.1574	0.0000
n.a.	n.a.	Bromide	OLO#	99.9304	-0.0029	0.1660	0.0000
n.a.	n.a.	Nitrate-N	OLO#	99.8475	-0.1191	1.1179	0.0000
n.a.	n.a.	O-Phosphate-P	OLO#	99.9176	-0.0239	0.3332	0.0000
n.a.	n.a.	Sulfate	OLO#	99.8762	-0.1033	0.3281	0.0000
Average:				99.8953	-0.0524	0.5134	0.0000

17 WIC100312-02ICV

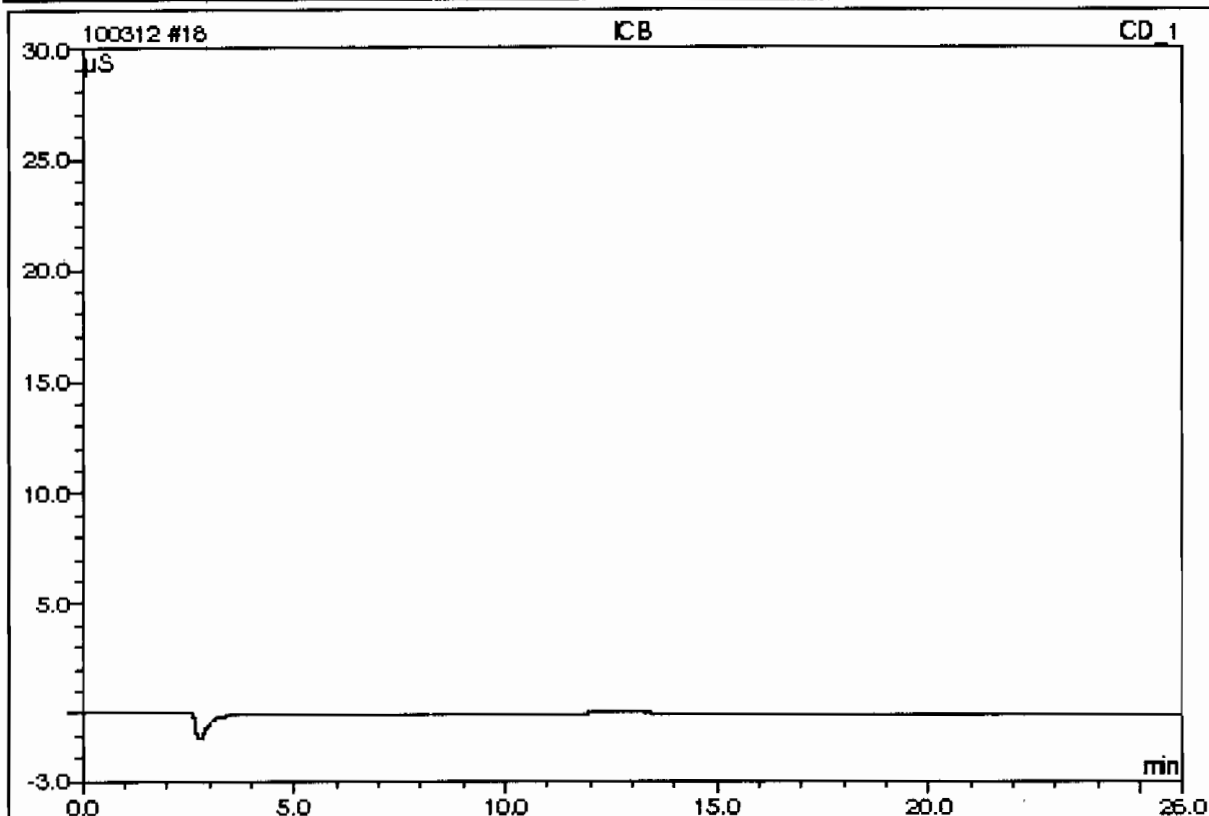
Sample Name:	WIC100312-02ICV	Injection Volume:	1.0
Vial Number:	10	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100312an	Sample Amount:	1.0000
Recording Time:	3/12/2010 15:35	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GL GC ED86;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.24	Fluoride	n.a.	4.8260		2.96419	12.10
2	7.11	Chloride	n.a.	9.4396		4.36065	17.80
3	9.09	Nitrate-N	n.a.	4.7879		4.30795	17.58
4	10.48	Chlorate	n.a.	2.5037		0.38815	1.58
5	11.38	Bromide	n.a.	2.5123		0.41911	1.71
6	13.30	Nitrate-N	n.a.	4.7318		5.17038	21.10
7	18.48	O-Phosphate-P	n.a.	2.4304		0.78590	3.21
9	20.59	Sulfate	n.a.	18.8328		6.07580	24.80
Total:				50.0645	0.000	24.472	99.88

18 ICB

Sample Name:	ICB	Injection Volume:	1.0
Vial Number:	11	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100312an	Sample Amount:	1.0000
Recording Time:	3/12/2010 16:04	Analyst:	MAR1
Run Time (min):	26.00	Column:	AS23-001528; GL GC E086;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

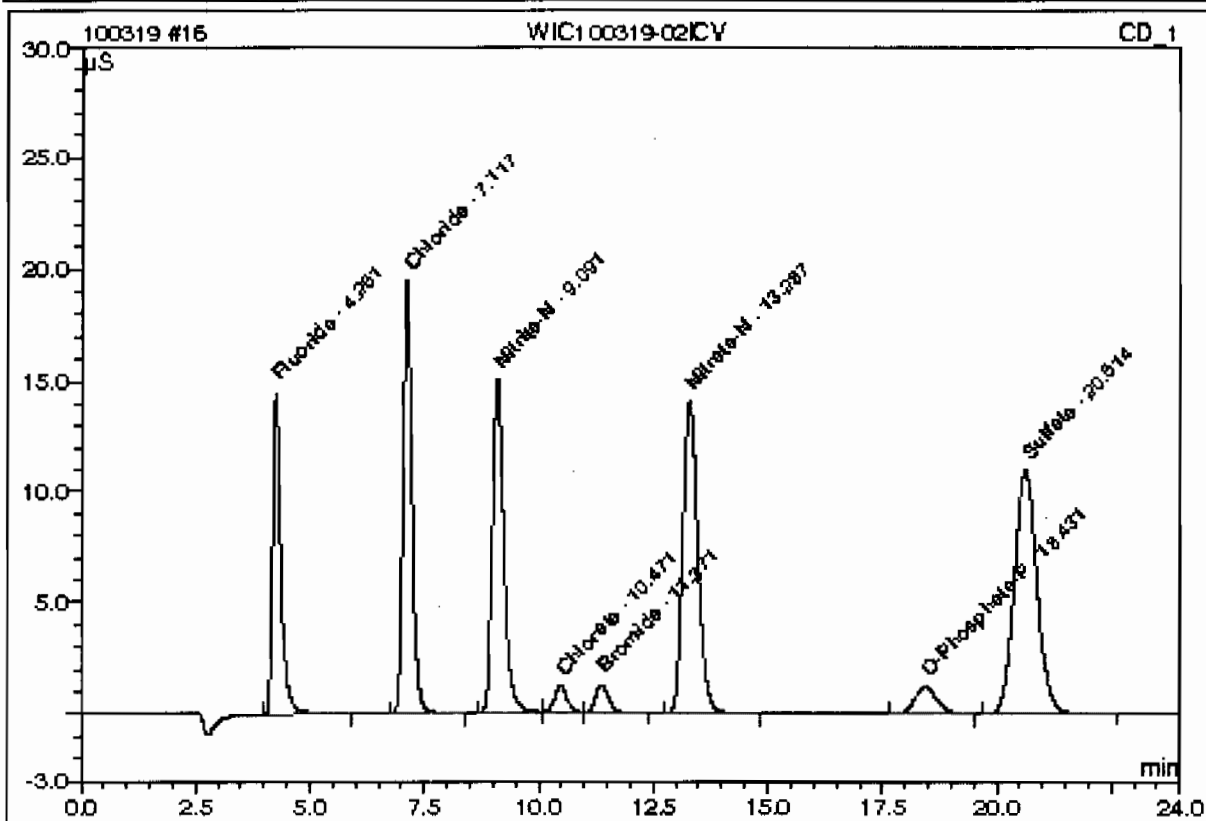
This is runlog for Sequence 100319.seq for IC6

Sample ID	Run Time	Batch	Dilution	Dataset	Analyst
BLK	03/19/10 09:38		1	100319	MAR1
BLK	03/19/10 10:04		1	100319	MAR1
ICV	03/19/10 10:31		1	100319	MAR1
ICB	03/19/10 10:58		1	100319	MAR1
1202063590	03/19/10 11:25	962073	1	100319	MAR1
1202063597	03/19/10 11:52	962073	1	100319	MAR1
248025001	03/19/10 12:19	962073	1	100319	MAR1
1202063591	03/19/10 12:45	962073	1	100319	MAR1
1202063593	03/19/10 13:12	962073	1	100319	MAR1
1202063595	03/19/10 13:39	962073	1	100319	MAR1
248025002	03/19/10 14:06	962073	1	100319	MAR1
248025003	03/19/10 14:33	962073	1	100319	MAR1
248025004	03/19/10 15:00	962073	1	100319	MAR1
248025005	03/19/10 15:26	962073	1	100319	MAR1
CVH	03/19/10 15:53		1	100319	MAR1
CCB	03/19/10 16:20		1	100319	MAR1
248025006	03/19/10 16:47	962073	1	100319	MAR1
248025007	03/19/10 17:14	962073	1	100319	MAR1
248041001	03/19/10 17:41	962073	1	100319	MAR1
248041002	03/19/10 18:08	962073	1	100319	MAR1
248041003	03/19/10 18:35	962073	1	100319	MAR1
248041004	03/19/10 19:01	962073	1	100319	MAR1
248041005	03/19/10 19:28	962073	1	100319	MAR1
1202063592	03/19/10 19:55	962073	1	100319	MAR1
1202063594	03/19/10 20:22	962073	1	100319	MAR1
1202063596	03/19/10 20:49	962073	1	100319	MAR1
CCV	03/19/10 21:16		1	100319	MAR1
CCB	03/19/10 21:43		1	100319	MAR1

1202063582	03/19/10 22:10 962071 1	100319	MAR1
1202063589	03/19/10 22:37 962071 1	100319	MAR1
248000001	03/19/10 23:04 962071 1	100319	MAR1
1202063583	03/19/10 23:30 962071 1	100319	MAR1
1202063585	03/19/10 23:57 962071 1	100319	MAR1

16 WIC100319-02ICV

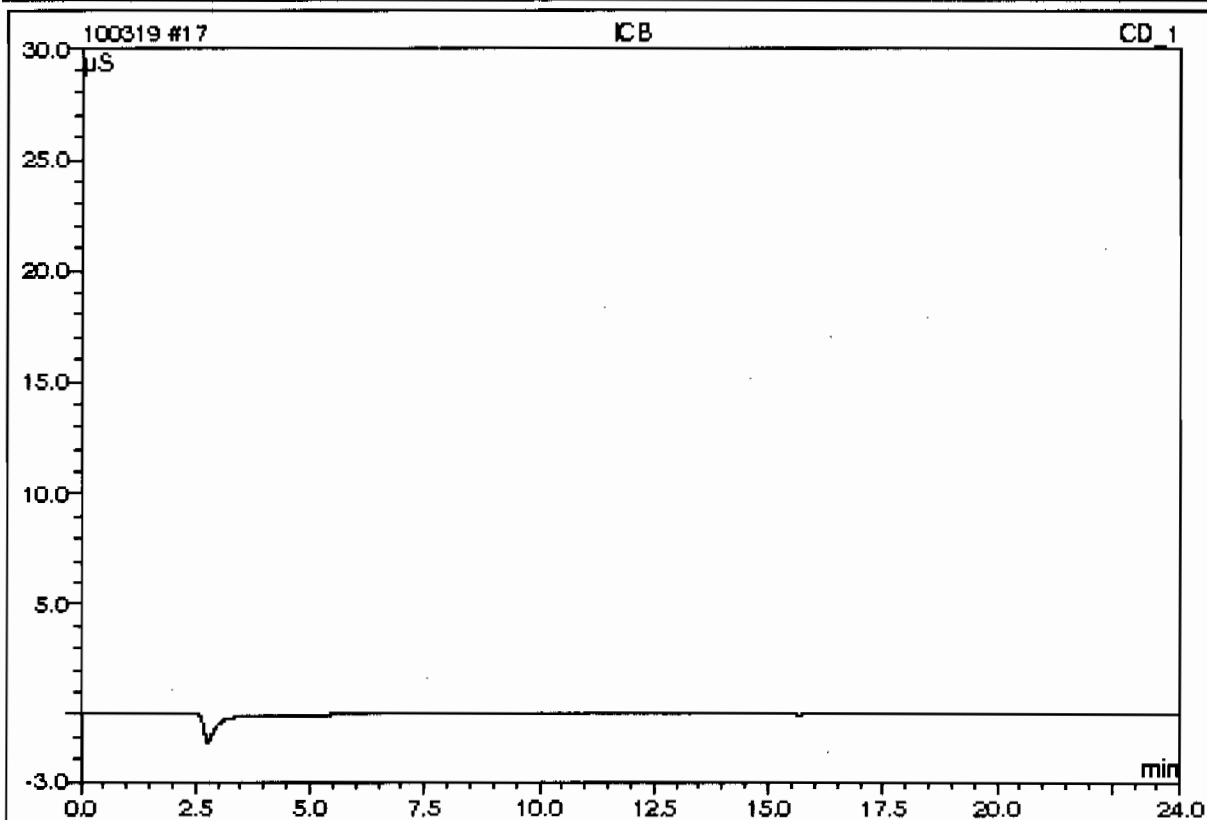
Sample Name:	WIC100319-02ICV	Injection Volume:	1.0
Vial Number:	3	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100311an	Sample Amount:	1.0000
Recording Time:	3/19/2010 10:31	Analyst:	MAR1
Run Time (min):	24.00	Column:	AS23-001528; GL GC E086;300;8056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
1	4.25	Fluoride	n.a.	4.8208		3.06031	12.21
2	7.12	Chloride	n.a.	9.2239		4.42948	17.67
3	9.09	Nitrite-N	n.a.	4.8059		4.46472	17.81
4	10.47	Chlorate	n.a.	2.6276		0.41076	1.64
5	11.37	Bromide	n.a.	2.6109		0.43832	1.75
6	13.29	Nitrate-N	n.a.	4.6689		5.28947	21.10
7	18.43	O-Phosphate-P	n.a.	2.0940		0.66759	2.66
8	20.61	Sulfate	n.a.	18.8821		6.31276	25.18
Total:				49.7341	0.000	25.073	100.00

17 ICB

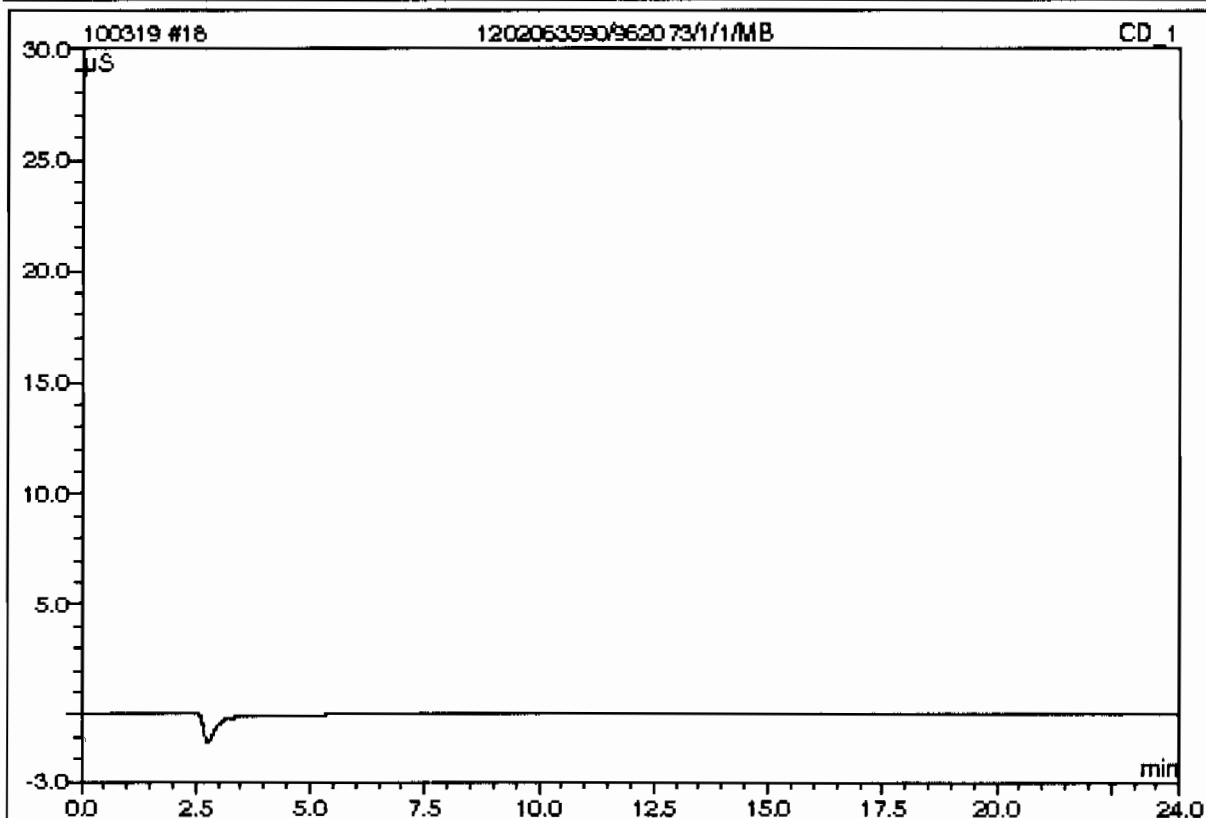
Sample Name:	ICB	Injection Volume:	1.0
Vial Number:	4	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100311an	Sample Amount:	1.0000
Recording Time:	3/19/2010 10:58	Analyst:	MAR1
Run Time (min):	24.00	Column:	AS23-001528; GL GCE086;300;9056



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

18 1202063590/962073/1/1/MB

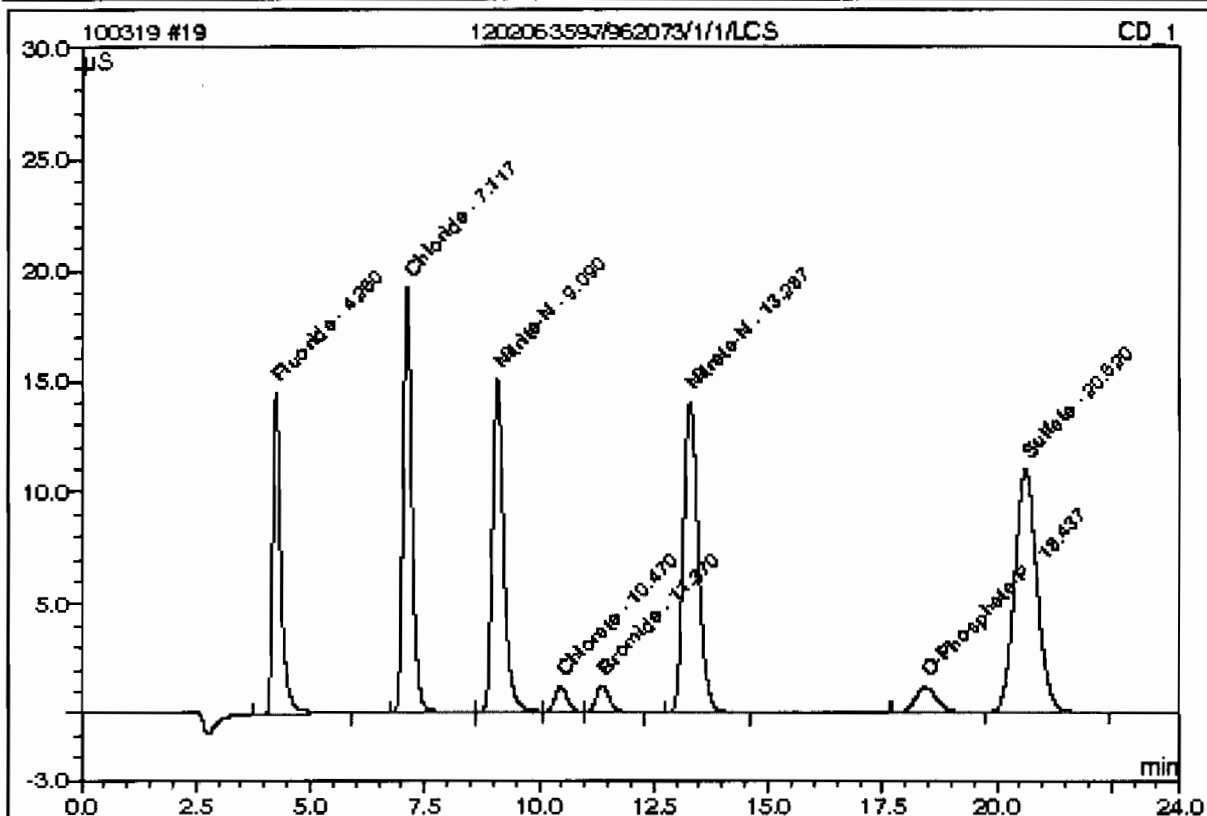
Sample Name:	1202063590/962073/1/1/MB	Injection Volume:	1.0
Vial Number:	5	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100311an	Sample Amount:	1.0000
Recording Time:	3/19/2010 11:25	Analyst:	MAR1
Run Time (min):	24.00	Column:	AS23-001528; GL GC E086;300;0056



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

19 1202063597/962073/1/1/LCS

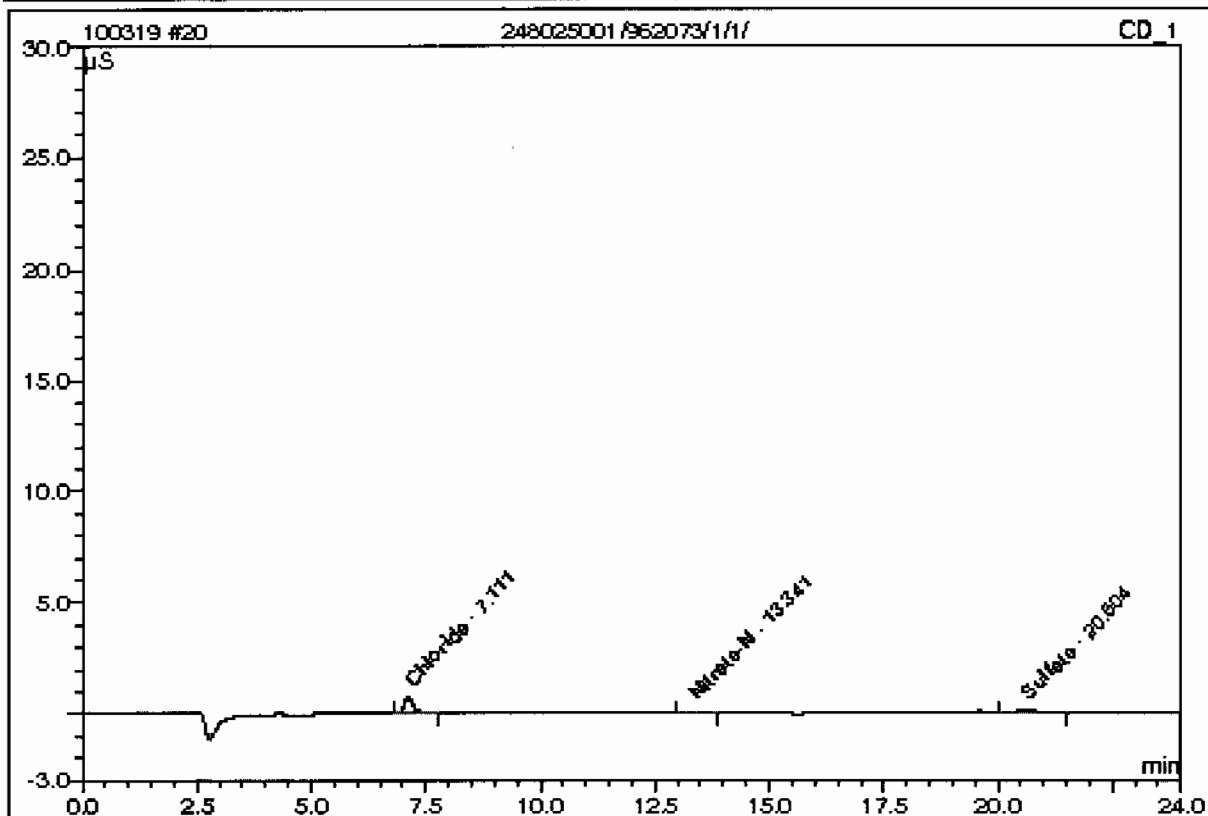
Sample Name:	1202063597/962073/1/1/LCS	Injection Volume:	1.0
Vial Number:	8	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100311an	Sample Amount:	1.0000
Recording Time:	3/19/2010 11:52	Analyst:	MAR1
Run Time (min):	24.00	Column:	AS23-001528; GL GCE086;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
1	4.25	Fluoride	n.a.	4.8152		3.05675	12.23
2	7.12	Chloride	n.a.	9.2085		4.42199	17.69
3	9.09	Nitrite-N	n.a.	4.7935		4.45294	17.81
4	10.47	Chlorate	n.a.	2.5462		0.39788	1.59
5	11.37	Bromide	n.a.	2.5403		0.42638	1.71
6	13.29	Nitrate-N	n.a.	4.6448		5.26140	21.05
7	18.44	O-Phosphate-P	n.a.	2.0666		0.65856	2.63
8	20.62	Sulfate	n.a.	18.9073		6.32135	25.29
Total:				49.5225	0.000	24.997	100.00

20 248025001/962073/1/1/

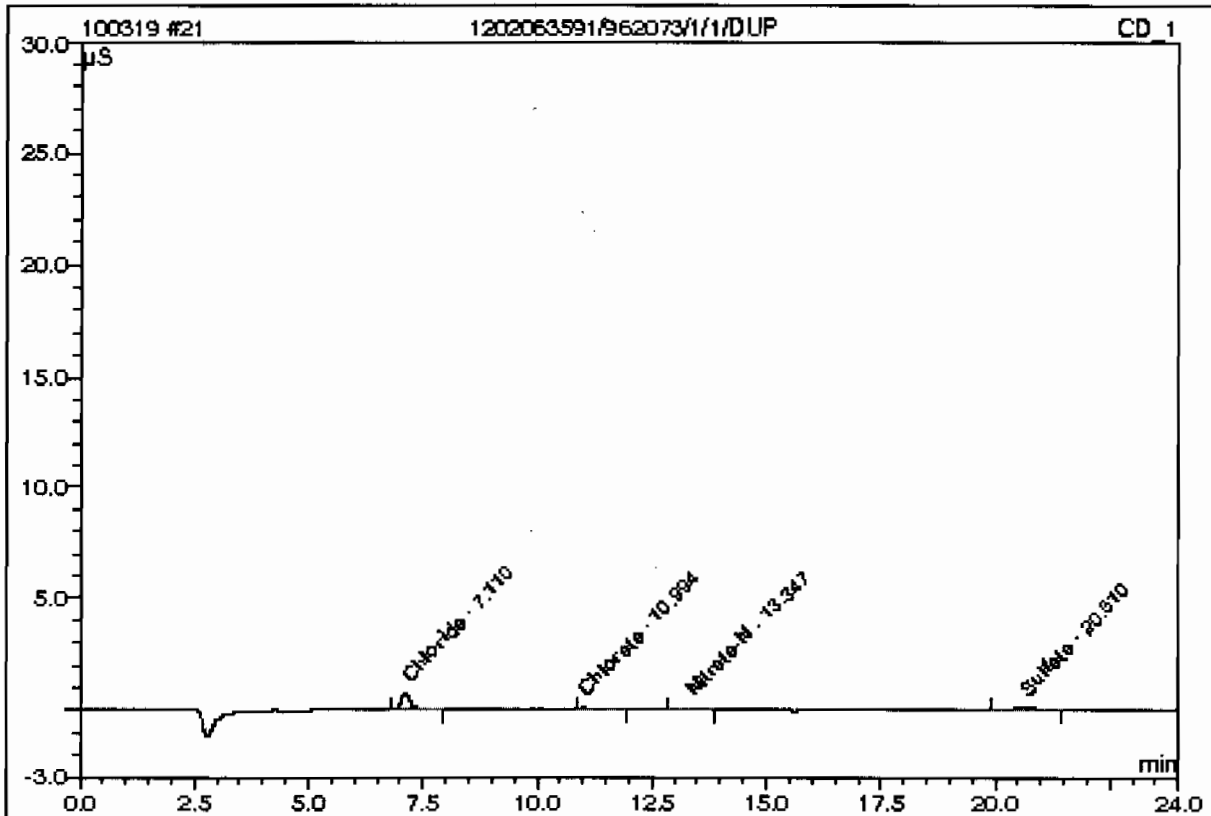
Sample Name:	248025001/962073/1/1/	Injection Volume:	1.0
Vial Number:	7	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100311an	Sample Amount:	1.0000
Recording Time:	3/19/2010 12:19	Analyst:	MAR1
Run Time (min):	24.00	Column:	AS23-001528; GLGCED86;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	7.11	Chloride	n.a.	0.5346		0.18298	63.32
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.
2	13.34	Nitrate-N	n.a.	0.1463		0.02798	9.68
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
3	20.60	Sulfate	n.a.	0.5614		0.07803	27.00
Total:				1.2423	0.000	0.289	100.00

21 1202063591/962073/1/1/DUP

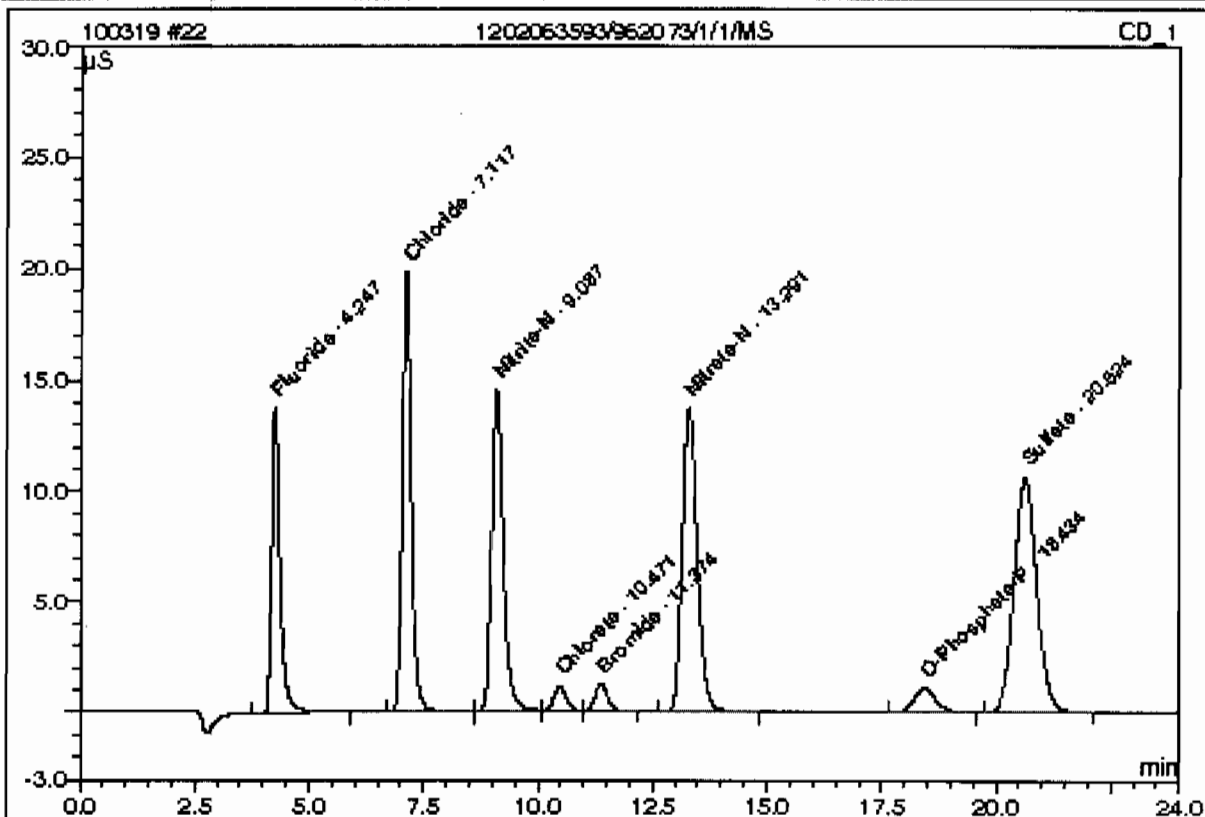
Sample Name:	1202063591/962073/1/1/DUP	Injection Volume:	1.0
Vial Number:	8	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100311an	Sample Amount:	1.0000
Recording Time:	3/19/2010 12:45	Analyst:	MAR1
Run Time (min):	24.00	Column:	AS23-001528; GL GCED86;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	7.11	Chloride	n.a.	0.5310	n.a.	0.18121	56.71
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
2	10.99	Chlorate	n.a.	0.1840	n.a.	0.02454	7.68
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
3	13.35	Nitrate-N	n.a.	0.1475	n.a.	0.02940	9.20
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
4	20.61	Sulfate	n.a.	0.5802	n.a.	0.08442	26.42
Total:				1.4427	0.000	0.320	100.00

22 1202063593/962073/1/1/MS

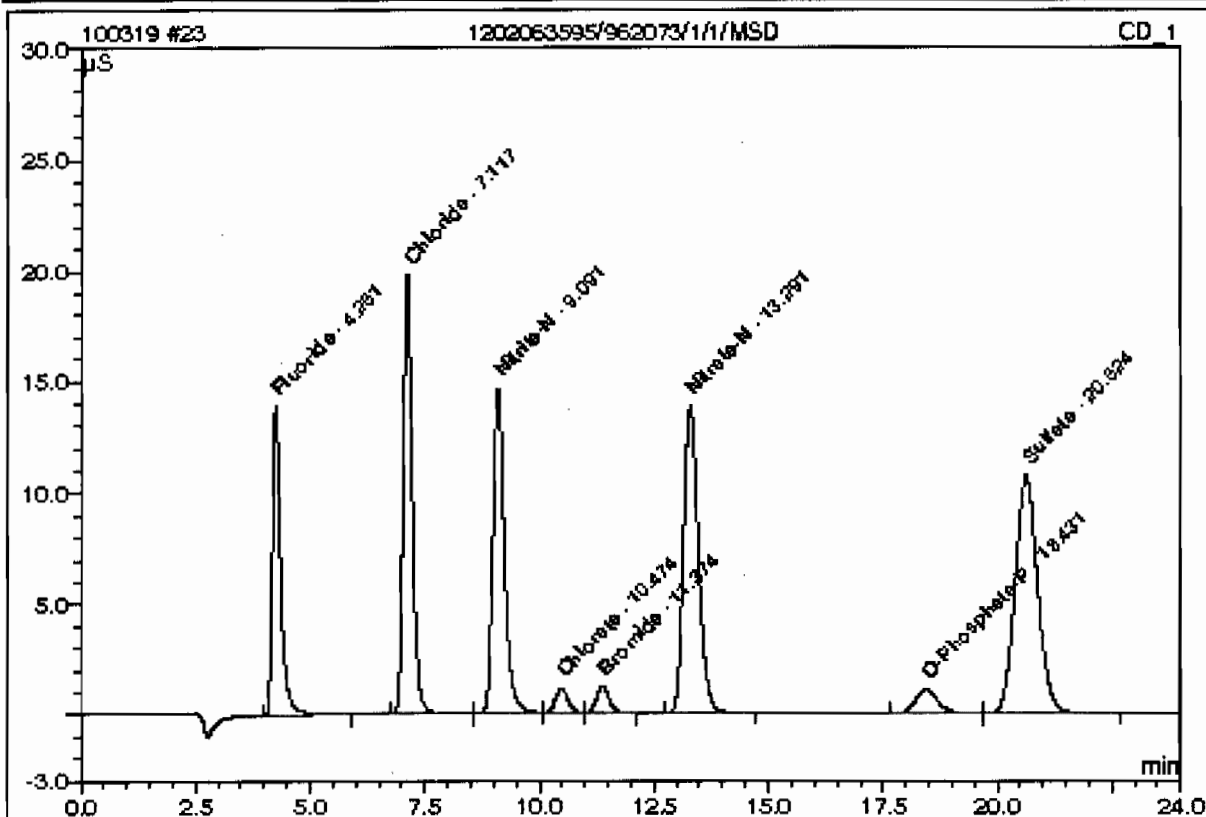
Sample Name:	1202063593/962073/1/1/MS	Injection Volume:	1.0
Vial Number:	9	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100311an	Sample Amount:	1.0000
Recording Time:	3/19/2010 13:12	Analyst:	MAR1
Run Time (min):	24.00	Column:	AS23-001528; GL GC ED86;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area μS*min	Rel.Area %
1	4.25	Fluoride	n.a.	4.6005		2.91875	11.91
2	7.12	Chloride	n.a.	9.4756		4.55249	18.58
3	9.09	Nitrite-N	n.a.	4.6542		4.32129	17.64
4	10.47	Chlorate	n.a.	2.4397		0.39106	1.56
5	11.37	Bromide	n.a.	2.4371		0.40692	1.67
6	13.29	Nitrate-N	n.a.	4.5676		5.17160	21.11
7	18.43	O-Phosphate-P	n.a.	1.9258		0.61218	2.50
8	20.62	Sulfate	n.a.	18.3489		6.13131	25.03
Total:				48.4493	0.000	24.498	100.00

23 1202063595/962073/1/1/MSD

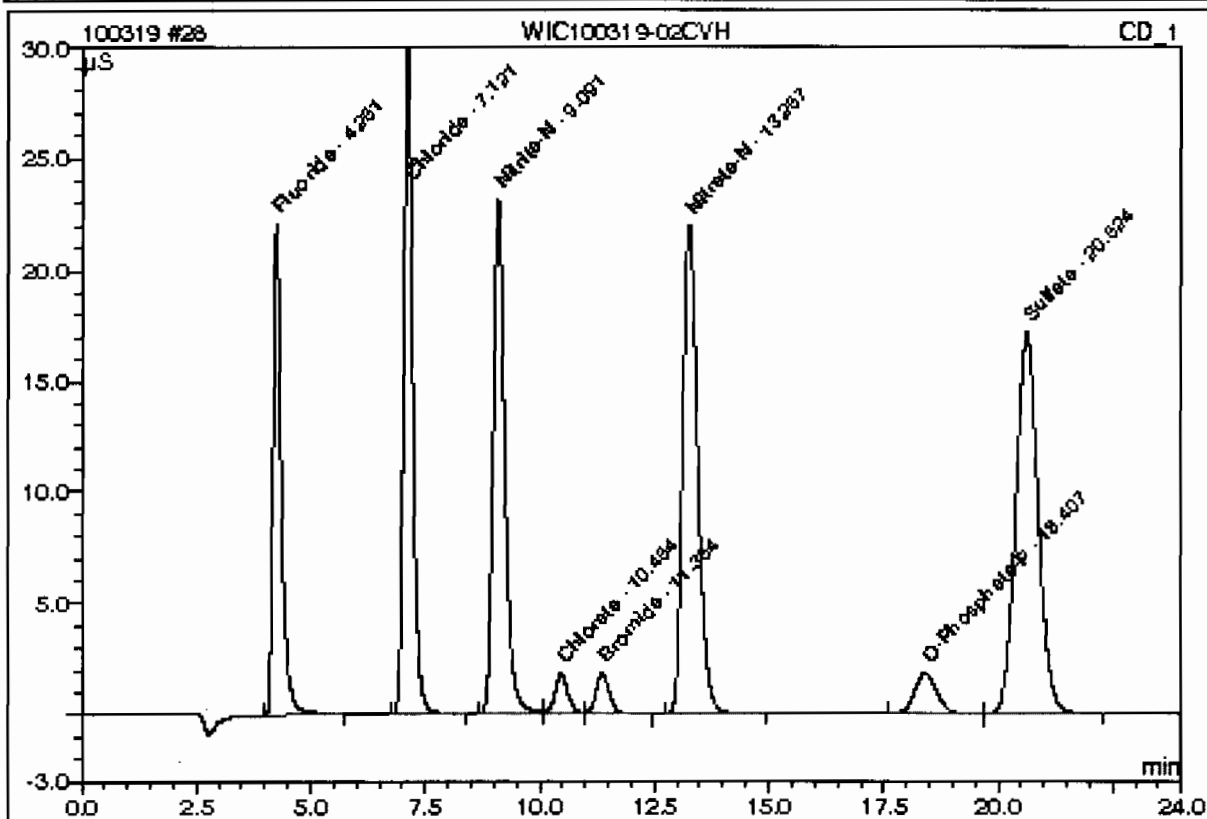
Sample Name:	1202063595/962073/1/1/MSD	Injection Volume:	1.0
Vial Number:	10	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100311an	Sample Amount:	1.0000
Recording Time:	3/19/2010 13:39	Analyst:	MAR1
Run Time (min):	24.00	Column:	AS23-001528; GL GC ED86;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	4.25	Fluoride	n.a.	4.6352		2.94106	11.94
2	7.12	Chloride	n.a.	9.4877		4.55839	18.51
3	9.09	Nitrate-N	n.a.	4.6788		4.34455	17.64
4	10.47	Chlorate	n.a.	2.4437		0.38169	1.55
5	11.37	Bromide	n.a.	2.4427		0.40987	1.66
6	13.29	Nitrate-N	n.a.	4.5902		5.19786	21.11
7	18.43	O-Phosphate-P	n.a.	1.9399		0.61662	2.51
8	20.62	Sulfate	n.a.	18.4681		6.17189	25.07
Total:				48.6862	0.000	24.622	100.00

28 WIC100319-02CVH

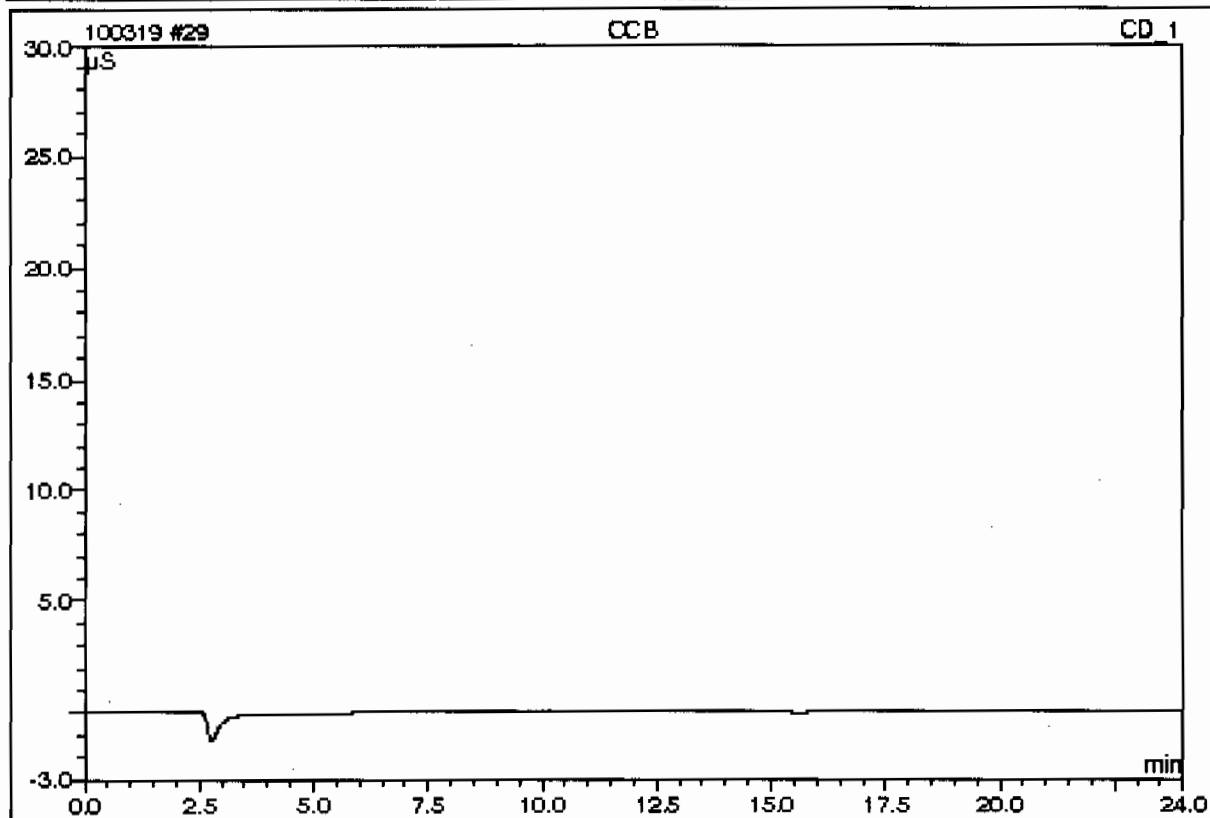
Sample Name:	WIC100319-02CVH	Injection Volume:	1.0
Vial Number:	15	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100311an	Sample Amount:	1.0000
Recording Time:	3/19/2010 15:53	Analyst:	MAR1
Run Time (min):	24.00	Column:	AS23-001528; GL GCE086,300;0056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.25	Fluoride	n.a.	7.3058		4.65742	12.04
2	7.12	Chloride	n.a.	14.3596		6.93937	17.94
3	9.09	Nitrite-N	n.a.	7.3288		6.84853	17.71
4	10.46	Chlorate	n.a.	3.7965		0.59549	1.54
5	11.36	Bromide	n.a.	3.6792		0.61906	1.60
6	13.27	Nitrate-N	n.a.	7.2198		8.25707	21.35
7	18.41	O-Phosphate-P	n.a.	3.2068		1.03409	2.67
8	20.62	Sulfate	n.a.	28.9136		9.72662	25.15
Total:				75.8101	0.000	38.678	100.00

29 CCB

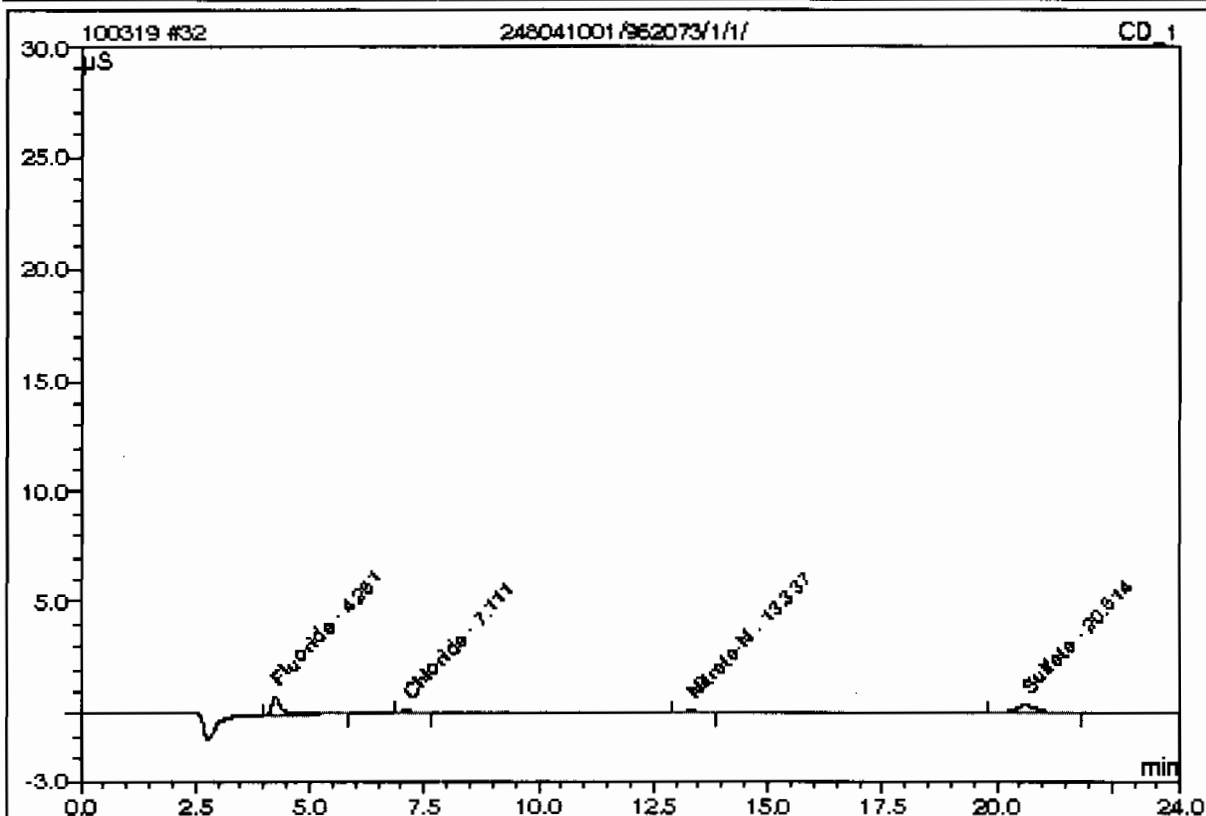
Sample Name:	CCB	Injection Volume:	1.0
Vial Number:	16	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight	1.0000
Quantif. Method:	100311an	Sample Amount:	1.0000
Recording Time:	3/19/2010 16:20	Analyst:	MAR1
Run Time (min):	24.00	Column:	AS23-001528; GL GCED86;300;9056



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

32 248041001/962073/1/1/

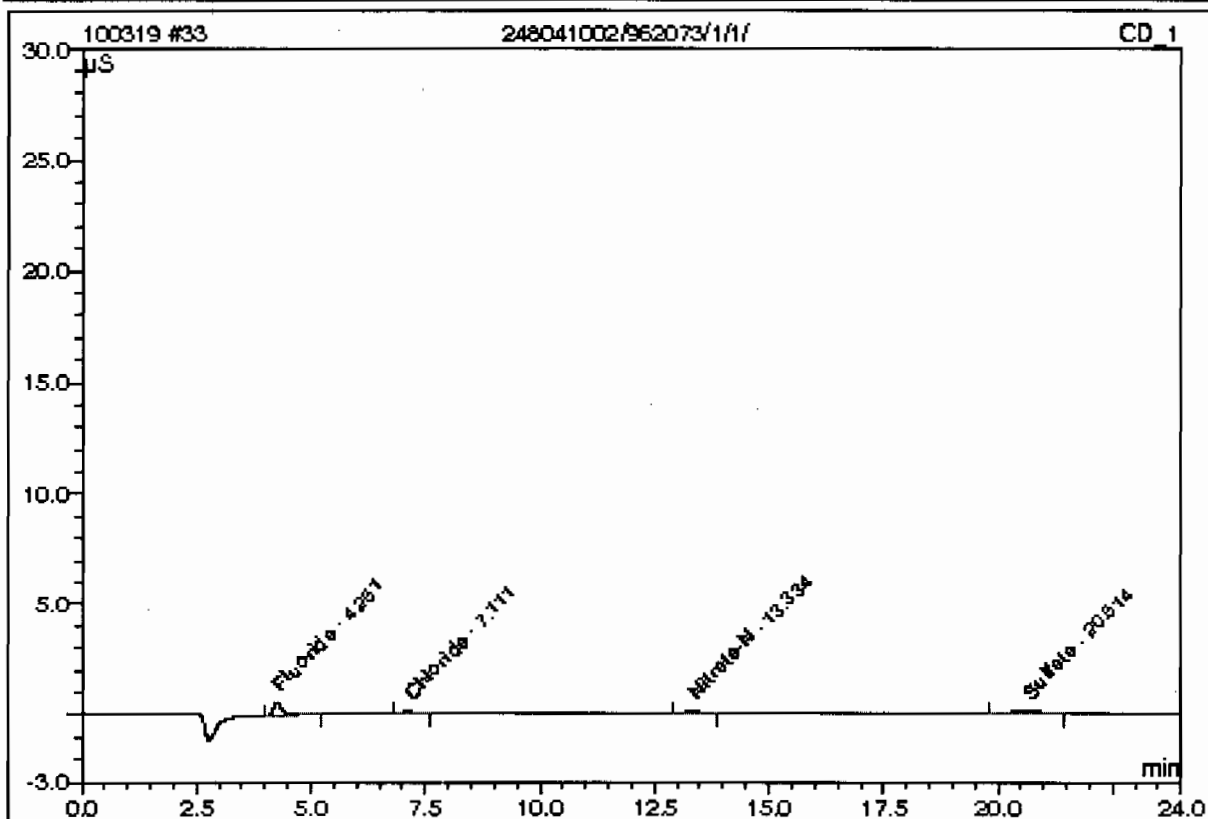
Sample Name:	248041001/962073/1/1/	Injection Volume:	1.0
Vial Number:	19	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100311an	Sample Amount:	1.0000
Recording Time:	3/19/2010 17:41	Analyst:	MAR1
Run Time (min):	24.00	Column:	AS23-001528; GL GC E086;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
1	4.25	Fluoride	n.a.	0.3698		0.19974	41.17
2	7.11	Chloride	n.a.	0.2226		0.03049	6.28
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.
3	13.34	Nitrate-N	n.a.	0.1556		0.03882	8.00
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
4	20.61	Sulfate	n.a.	0.9672		0.21611	44.54
Total:				1.7152	0.000	0.485	100.00

33 248041002/962073/1/1/

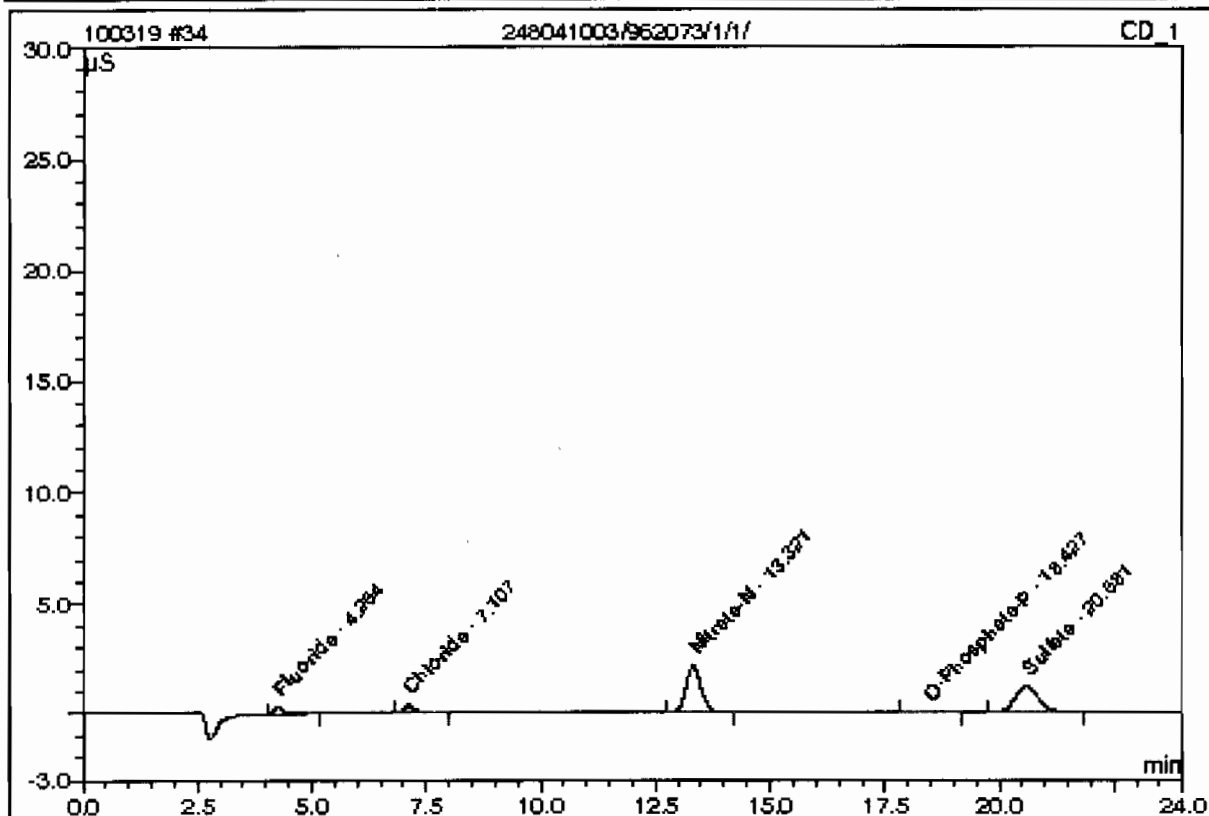
Sample Name:	248041002/962073/1/1/	Injection Volume:	1.0
Vial Number:	20	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100311an	Sample Amount:	1.0000
Recording Time:	3/19/2010 18:08	Analyst:	MAR1
Run Time (min):	24.00	Column:	AS23-001528; GL GC ED86;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
1	4.25	Fluoride	n.a.	0.2626		0.13083	38.50
2	7.11	Chloride	n.a.	0.2276		0.03296	9.70
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	13.33	Nitrate-N	n.a.	0.1737		0.05992	17.63
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
4	20.61	Sulfate	n.a.	0.6734		0.11613	34.17
Total:				1.3373	0.000	0.340	100.00

34 248041003/962073/1/1/

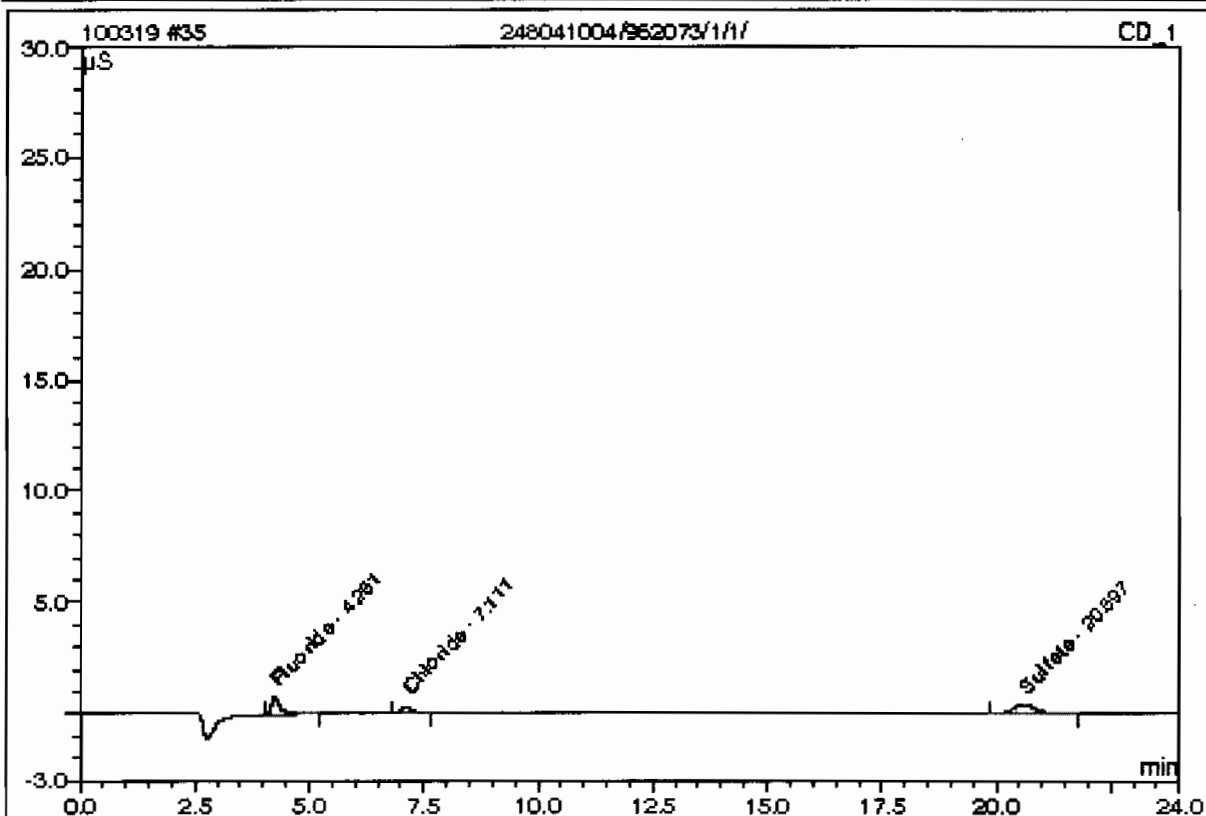
Sample Name:	248041003/962073/1/1/	Injection Volume:	1.0
Vial Number:	21	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100311an	Sample Amount:	1.0000
Recording Time:	3/19/2010 18:35	Analyst:	MAR1
Run Time (min):	24.00	Column:	AS23-001528; GL GCE086;300;0056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.25	Fluoride	n.a.	0.1900		0.08414	4.80
2	7.11	Chloride	n.a.	0.3510		0.09325	5.32
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	13.32	Nitrate-N	n.a.	0.8234		0.81576	46.51
4	18.43	O-Phosphate-P	n.a.	0.1866		0.03936	2.24
5	20.58	Sulfate	n.a.	2.4524		0.72155	41.14
Total:				4.0034	0.000	1.754	100.00

35 248041004/962073/1/1/

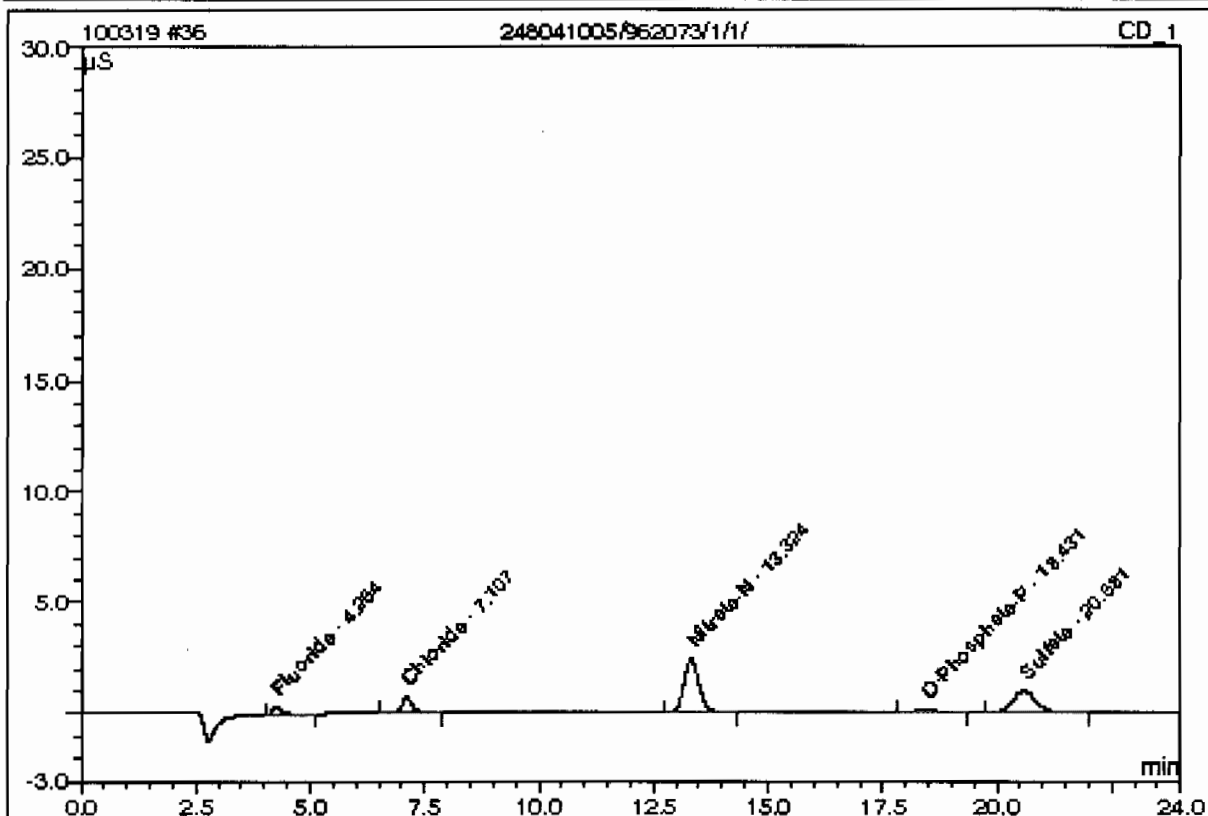
Sample Name:	248041004/962073/1/1/	Injection Volume:	1.0
Vial Number:	22	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100311an	Sample Amount:	1.0000
Recording Time:	3/19/2010 19:01	Analyst:	MAR1
Run Time (min):	24.00	Column:	AS23-001528; GL GC ED86;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area μS*min	Rel. Area %
1	4.25	Fluoride	n.a.	0.3336		0.17645	34.98
2	7.11	Chloride	n.a.	0.3206		0.07838	15.54
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	20.60	Sulfate	n.a.	1.0654		0.24955	49.48
Total:				1.7196	0.000	0.504	100.00

36 248041005/962073/1/1/

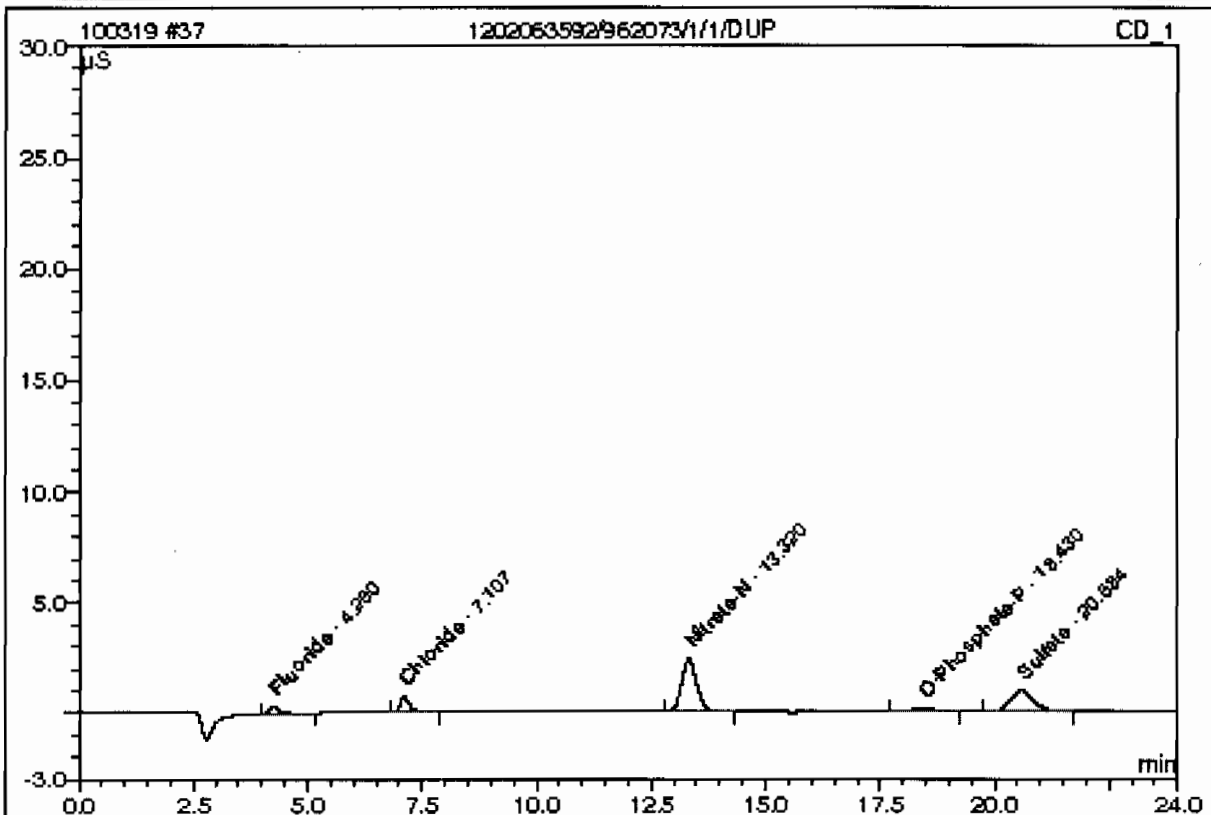
Sample Name:	248041005/962073/1/1/	Injection Volume:	1.0
Vial Number:	23	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100311an	Sample Amount:	1.0000
Recording Time:	3/19/2010 19:28	Analyst:	MAR1
Run Time (min):	24.00	Column:	AS23-001528; GL GC E086;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
1	4.25	Fluoride	n.a.	0.1907		0.08463	4.51
2	7.11	Chloride	n.a.	0.5458		0.18842	10.03
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	13.32	Nitrate-N	n.a.	0.9107		0.91725	48.83
4	18.43	O-Phosphate-P	n.a.	0.3603		0.09654	5.14
5	20.58	Sulfate	n.a.	2.0702		0.59148	31.49
Total:				4.0776	0.000	1.878	100.00

37 1202063592/962073/1/1/DUP

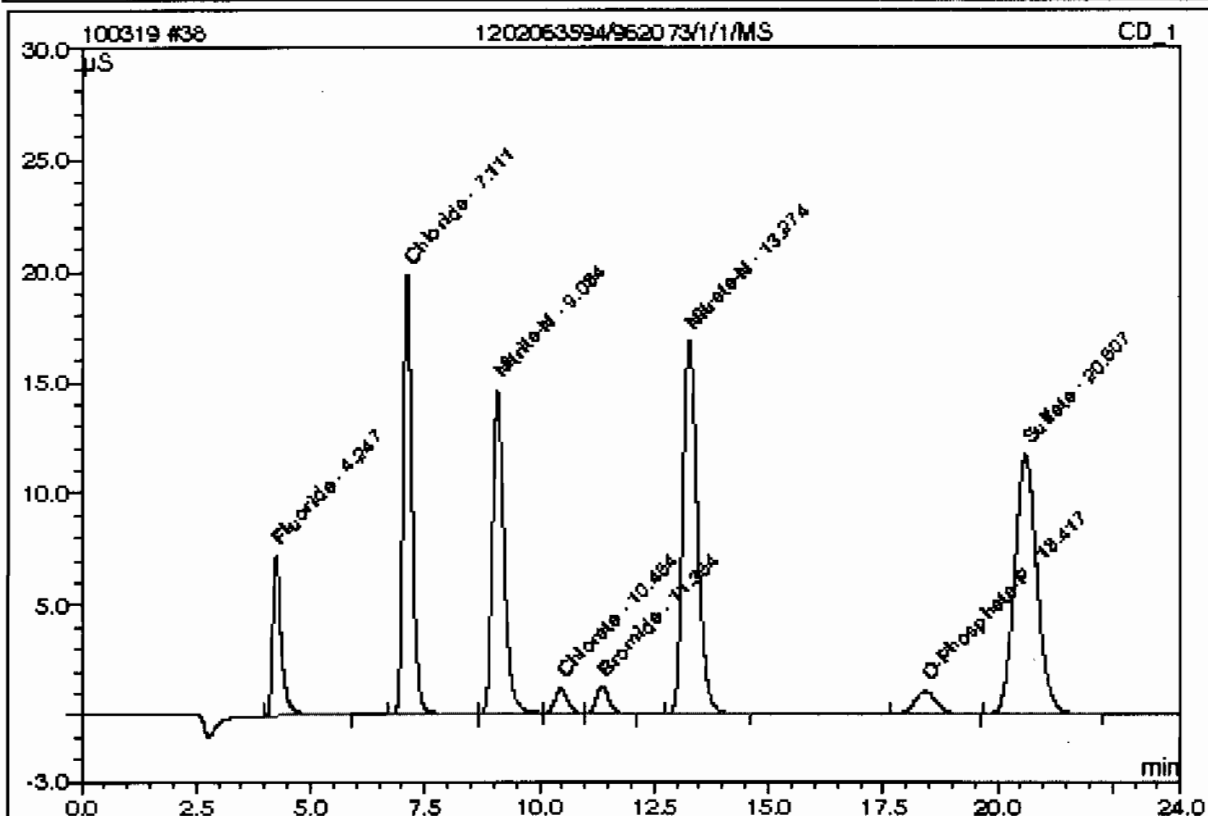
Sample Name:	1202063592/962073/1/1/DUP	Injection Volume:	1.0
Vial Number:	24	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100311an	Sample Amount:	1.0000
Recording Time:	3/19/2010 19:55	Analyst:	MAR1
Run Time (min):	24.00	Column:	AS23-001528; GL GC E086;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
1	4.25	Fluoride	n.a.	0.1948		0.08724	4.70
2	7.11	Chloride	n.a.	0.5200		0.17583	9.48
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	13.32	Nitrate-N	n.a.	0.9035		0.90891	49.01
4	18.43	O-Phosphate-P	n.a.	0.3664		0.09858	5.32
5	20.58	Sulfate	n.a.	2.0483		0.58402	31.49
Total:				4.0330	0.000	1.855	100.00

38 1202063594/962073/1/1/MS

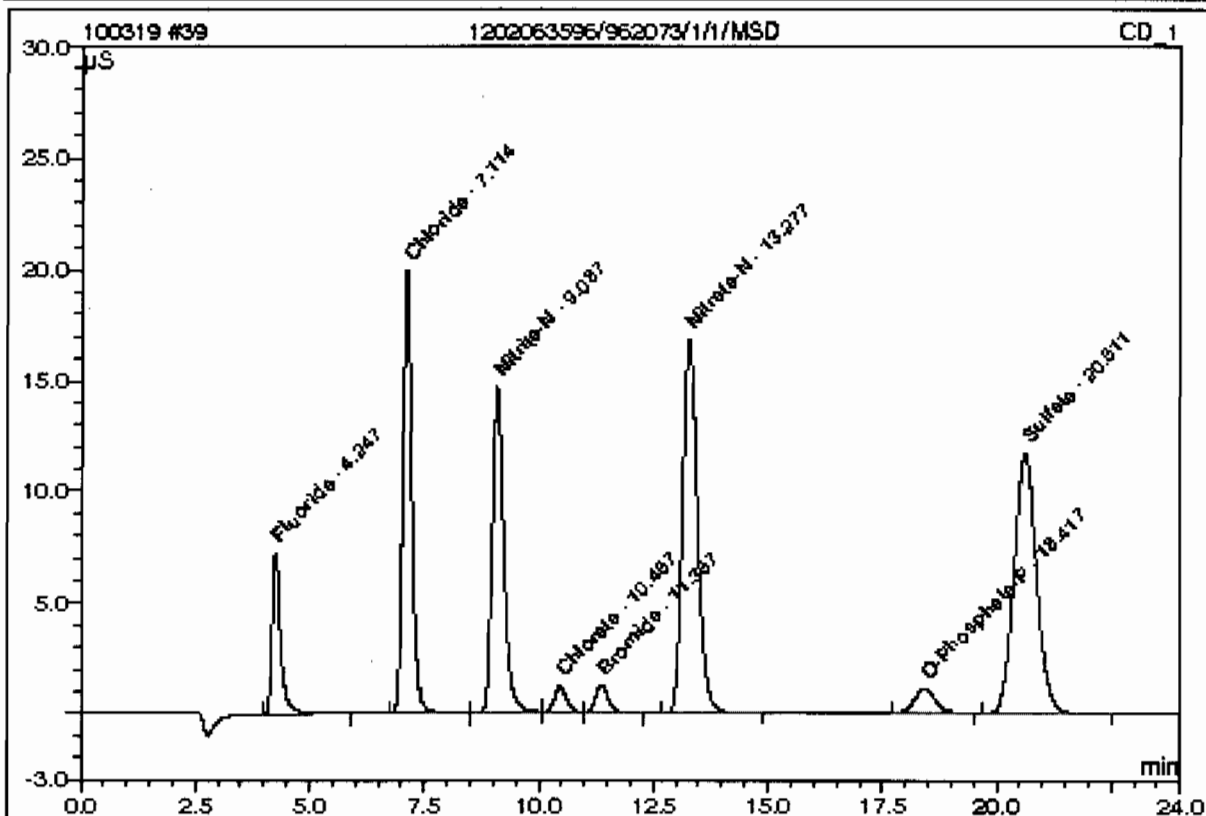
Sample Name:	1202063594/962073/1/1/MS	Injection Volume:	1.0
Vial Number:	25	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100311an	Sample Amount:	1.0000
Recording Time:	3/19/2010 20:22	Analyst:	MAR1
Run Time (min):	24.00	Column:	AS23-001528; GL GC ED86;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area μS*min	Rel.Area %
1	4.25	Fluoride	n.a.	2.5151		1.57850	6.35
2	7.11	Chloride	n.a.	9.5059		4.58732	18.36
3	9.08	Nitrite-N	n.a.	4.6787		4.34449	17.47
4	10.46	Chlorate	n.a.	2.4895		0.38893	1.56
5	11.36	Bromide	n.a.	2.4838		0.41682	1.68
6	13.27	Nitrate-N	n.a.	5.5392		6.30192	25.33
7	18.42	O-Phosphate-P	n.a.	1.8951		0.60207	2.42
8	20.61	Sulfate	n.a.	19.9452		6.67456	26.83
Total:				49.0526	0.000	24.875	100.00

39 1202063596/962073/1/1/MSD

Sample Name:	1202063596/962073/1/1/MSD	Injection Volume:	1.0
Vial Number:	26	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100311an	Sample Amount:	1.0000
Recording Time:	3/19/2010 20:49	Analyst:	MAR1
Run Time (min):	24.00	Column:	AS23-001528; GL GC E086;300;9056



No.	Ret. Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel. Area %
1	4.25	Fluoride	n.a.	2.5390		1.59386	6.38
2	7.11	Chloride	n.a.	9.5163		4.57241	18.30
3	9.09	Nitrate-N	n.a.	4.7090		4.37308	17.50
4	10.47	Chlorate	n.a.	2.4971		0.39012	1.56
5	11.37	Bromide	n.a.	2.5215		0.42319	1.69
6	13.28	Nitrate-N	n.a.	5.5543		6.31955	25.29
7	18.42	O-Phosphate-P	n.a.	1.9236		0.61146	2.45
8	20.61	Sulfate	n.a.	20.0284		6.70288	26.83
Total:				49.2892	0.000	24.997	100.00

40 WIC100319-02CCV

Sample Name: WIC100319-02CCV

Injection Volume: 1.0

Vial Number: 27

Channel: CD_1

Sample Type: unknown

Dilution Factor: 1.0000

Control Program: AS23

Sample Weight: 1.0000

Quantif. Method: 100311an

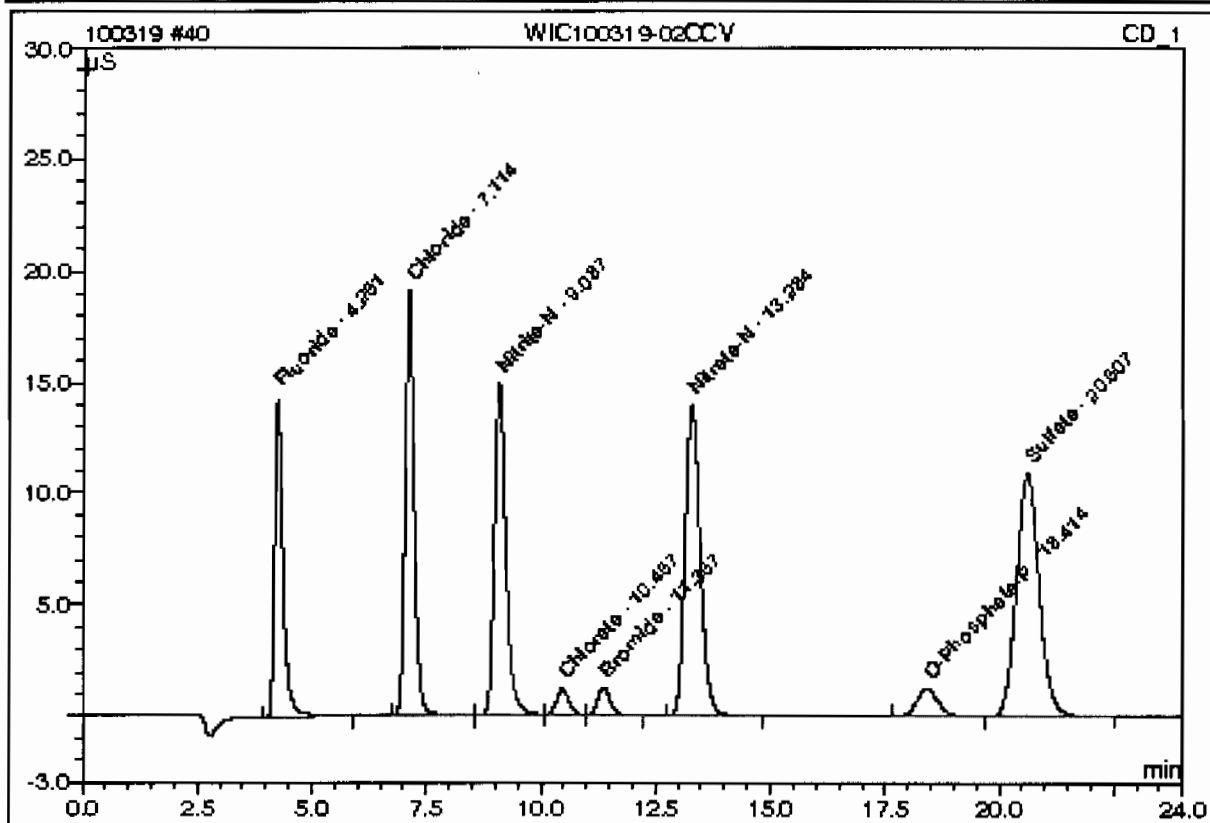
Sample Amount: 1.0000

Recording Time: 3/19/2010 21:16

Analyst: MAR1

Run Time (min): 24.00

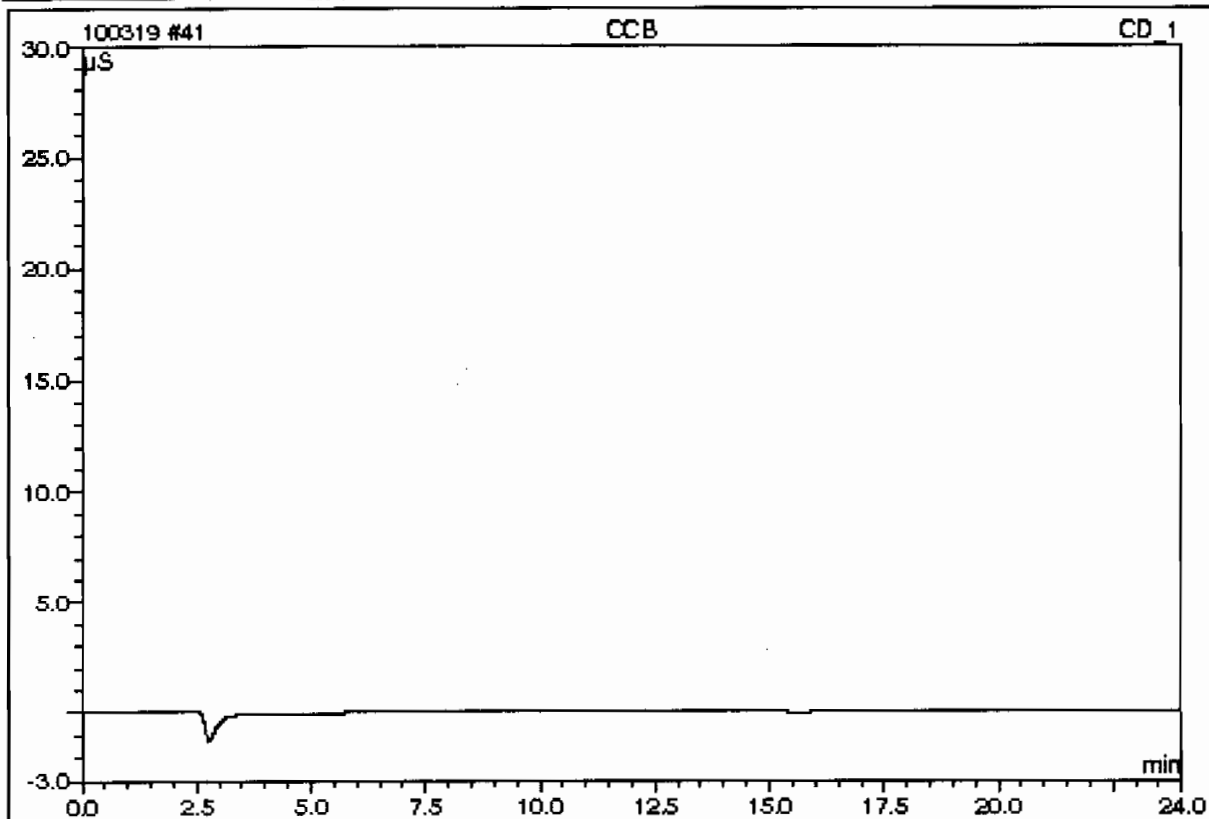
Column: AS23-001528; GL GC ED86;300;9056



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.25	Fluoride	n.a.	4.7822		3.03553	12.21
2	7.11	Chloride	n.a.	9.1369		4.39699	17.64
3	9.09	Nitrate-N	n.a.	4.7765		4.43692	17.84
4	10.47	Chlorate	n.a.	2.5287		0.39512	1.59
5	11.37	Bromide	n.a.	2.5140		0.42193	1.70
6	13.28	Nitrate-N	n.a.	4.6251		5.23849	21.07
7	18.41	O-Phosphate-P	n.a.	2.1594		0.68912	2.77
8	20.61	Sulfate	n.a.	18.7321		6.26173	25.18
Total:				49.2550	0.000	24.866	100.00

41 CCB

Sample Name:	CCB	Injection Volume:	1.0
Vial Number:	28	Channel:	CD_1
Sample Type:	unknown	Dilution Factor:	1.0000
Control Program:	AS23	Sample Weight:	1.0000
Quantif. Method:	100311an	Sample Amount:	1.0000
Recording Time:	3/19/2010 21:43	Analyst:	MAR1
Run Time (min):	24.00	Column:	AS23-001528; GL GC E086;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

pH

pH / Corrosivity LogBook

Analyst: TXT1
 Batch: 959481
 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(%)
1202057889 LCS		Soil	15:00	15:05	01-MAR-10 16:27	pH	20	20	6.99	18.3°C	7	99.857	
1202057889 LCS		Soil	15:00	15:05	01-MAR-10 16:27	pH 2	20	20	6.99	18.3°C	7	99.857	
248000001		Soil	15:00	15:05	01-MAR-10 16:27	pH	20	20	7.27	19.7°C			
248000001		Soil	15:00	15:05	01-MAR-10 16:27	pH 2	20	20	7.27	19.7°C			
1202057888 DUP	248000001	Soil	15:00	15:05	01-MAR-10 16:29	pH	20	20	7.31	19.7°C			.549
1202057888 DUP	248000001	Soil	15:00	15:05	01-MAR-10 16:29	pH 2	20	20	7.31	19.7°C			.549
248000002		Soil	15:00	15:05	01-MAR-10 16:30	pH	20	20	8.62	19.1°C			
248000002		Soil	15:00	15:05	01-MAR-10 16:30	pH 2	20	20	8.59	19.1°C			
248000003		Soil	15:00	15:05	01-MAR-10 16:36	pH	20	20	7.35	19.7°C			
248000003		Soil	15:00	15:05	01-MAR-10 16:36	pH 2	20	20	7.34	19.7°C			
CCV			15:00	15:05	01-MAR-10 16:39	pH	20	20	7.02	18.3°C	7	100.286	
CCV			15:00	15:05	01-MAR-10 16:39	pH 2	20	20	7.01	18.3°C	7	100.143	
248000004		Soil	15:00	15:05	01-MAR-10 16:41	pH	20	20	8.47	19.7°C			
248000004		Soil	15:00	15:05	01-MAR-10 16:41	pH 2	20	20	8.46	19.7°C			
248000005		Soil	15:00	15:05	01-MAR-10 16:42	pH	20	20	7.83	19.6°C			
248000005		Soil	15:00	15:05	01-MAR-10 16:42	pH 2	20	20	7.82	19.6°C			
2480002001		Soil	15:00	15:05	01-MAR-10 16:44	pH	20	20	8	19.6°C			
2480002001		Soil	15:00	15:05	01-MAR-10 16:44	pH 2	20	20	8	19.6°C			
2480002002		Soil	15:00	15:05	01-MAR-10 16:46	pH	20	20	7.83	19.5°C			
2480002002		Soil	15:00	15:05	01-MAR-10 16:46	pH 2	20	20	7.83	19.5°C			
2480002003		Soil	15:00	15:05	01-MAR-10 16:47	pH	20	20	7.66	18.9°C			
2480002003		Soil	15:00	15:05	01-MAR-10 16:47	pH 2	20	20	7.62	19.4°C			
CCV			15:00	15:05	01-MAR-10 16:49	pH	20	20	7.01	18.2°C	7	100.143	
CCV			15:00	15:05	01-MAR-10 16:49	pH 2	20	20	7.01	18.2°C	7	100.143	
2480002004		Soil	15:00	15:05	01-MAR-10 16:50	pH	20	20	7.36	19.5°C			
2480002004		Soil	15:00	15:05	01-MAR-10 16:50	pH 2	20	20	7.37	19.4°C			
2480002005		Soil	15:00	15:05	01-MAR-10 16:52	pH	20	20	6.29	19.6°C			
2480002005		Soil	15:00	15:05	01-MAR-10 16:52	pH 2	20	20	6.29	19.6°C			

pH / Corrosivity LogBook

Analyst: TXT1
 Batch: 959481
 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(%)
248002006		Soil	15:00	15:05	01-MAR-10 16:54	pH	20	20	8.17	19.6°C			
248002006		Soil	15:00	15:05	01-MAR-10 16:54	pH 2	20	20	8.17	19.6°C			
248002007		Soil	15:00	15:05	01-MAR-10 16:55	pH	20	20	7.63	19.5°C			
248002007		Soil	15:00	15:05	01-MAR-10 16:55	pH 2	20	20	7.62	19.5°C			
248002008		Soil	15:00	15:05	01-MAR-10 16:57	pH	20	20	8.04	19.4°C			
248002008		Soil	15:00	15:05	01-MAR-10 16:57	pH 2	20	20	8.03	19.4°C			
CCV			15:00	15:05	01-MAR-10 16:58	pH	20	20	7.02	18.2°C	7	100.286	
CCV			15:00	15:05	01-MAR-10 16:58	pH 2	20	20	7.01	18.3°C	7	100.143	
248041001		Soil	15:00	15:05	01-MAR-10 17:00	pH	20	20	8.62	19.2°C			
248041001		Soil	15:00	15:05	01-MAR-10 17:00	pH 2	20	20	8.62	19.2°C			
248041002		Soil	15:00	15:05	01-MAR-10 17:01	pH	20	20	8.67	18.9°C			
248041002		Soil	15:00	15:05	01-MAR-10 17:01	pH 2	20	20	8.66	19.0°C			
248041003		Soil	15:00	15:05	01-MAR-10 17:03	pH	20	20	5.18	18.9°C			
248041003		Soil	15:00	15:05	01-MAR-10 17:03	pH 2	20	20	5.17	18.9°C			
248041004		Soil	15:00	15:05	01-MAR-10 17:05	pH	20	20	8.87	19.0°C			
248041004		Soil	15:00	15:05	01-MAR-10 17:05	pH 2	20	20	8.88	19.0°C			
248041005		Soil	15:00	15:05	01-MAR-10 17:06	pH	20	20	5.39	19.0°C			
248041005		Soil	15:00	15:05	01-MAR-10 17:06	pH 2	20	20	5.39	19.0°C			
CCV			15:00	15:05	01-MAR-10 17:08	pH	20	20	7.01	18.3°C	7	100.143	
CCV			15:00	15:05	01-MAR-10 17:08	pH 2	20	20	7.01	18.3°C	7	100.143	
248143001		Misc Solid	15:00	15:05	01-MAR-10 17:10	pH	20	20	8.11	18.6°C			
248143001		Misc Solid	15:00	15:05	01-MAR-10 17:10	pH 2	20	20	8.12	18.7°C			
248203002		Soil	15:00	15:05	01-MAR-10 17:14	pH	20	20	8.65	18.9°C			
248203002		Soil	15:00	15:05	01-MAR-10 17:14	pH 2	20	20	8.65	18.9°C			
1202057887 DUP	248203002	Soil	15:00	15:05	01-MAR-10 17:15	pH	20	20	8.62	18.9°C			.347
1202057887 DUP	248203002	Soil	15:00	15:05	01-MAR-10 17:15	pH 2	20	20	8.63	18.9°C			.231
CCV			15:00	15:05	01-MAR-10 17:16	pH	20	20	7.01	18.3°C	7	100.143	
CCV			15:00	15:05	01-MAR-10 17:16	pH 2	20	20	7	18.3°C	7	100	

pH / Corrosivity LogBook

Calibration Information:

Comments:

Run Date:	01-MAR-10 15:06	Standard	Observed	Theoretical	C	%Recovery
Instrument:	PHX742					
Analyst:	LXA1					
15:06	IMM100301-PH1	4.01	4	SU	19.7	100.25
15:06	IMM100301-PH2	7.02	7	SU	19.7	100.29
15:06	UPH100301-PH3	10	10	SU	19.7	100
15:06	UPH100301-PH4	2.07	2	SU	19.7	103.5
15:06	UPH100301-PH5	12.01	12	SU	19.7	100.08
15:06	IMM100301-PH6	6.99	7	SU	19.7	99.857

Miscellaneous

DATA EXCEPTION REPORT

Mo. Day Yr. 05-MAR-10	Division: Industrial	Quality Criteria: Specifications	Type: Process
Instrument Type: LACHAT Flow Injection Analyzer	Test / Method: SW846 9012A	Matrix Type: Solid	Client Code: LANL
Batch ID: 958161	Sample Numbers: See Below		
Potentially affected work order(s)(SDG): 248033(10-2072),248041(10-2069-1),248058(10-2083),248065(10-2086) Application Issues: Container scanning event for custody missed			
Specification and Requirements Exception Description: 1. Container scanning event for custody missed: 248033 007,008,009 248041 001,002,003,004,005 248058 001,002,003,004,005,006,007,008 248065 001,002,003,004		DER Disposition: 1. Due to analyst oversight the following samples were not scanned prior to analysis. However, samples were in custody of the analyst during time of analysis.	

Originator's Name:

Ashley Earl

05-MAR-10

Data Validator/Group Leader:

Elzbieta Szulc

12-MAR-10

DATA EXCEPTION REPORT

Mo.Day Yr. 23-MAR-10	Division: Industrial	Quality Criteria: Specifications	Type: Process
Instrument Type: IC	Test / Method: EPA 300.0	Matrix Type: Solid	Client Code: LANL
Batch ID: 962073	Sample Numbers: See Below		
Potentially affected work order(s)(SDG): 248025(10-2048),248041(10-2069-1)			
Application Issues: Failed Recovery for MS/PS Failed Recovery for MSD/PSD			
Specification and Requirements Exception Description: 1. Failed Recovery for MS/MSD: QC 1202063593MS, 1202063595MSD		DER Disposition: 1.The MS and MSD recovery falls outside of the GEL acceptance limits but within the client specified limits.	

Originator's Name:

Mary Sherwood

23-MAR-10

Data Validator/Group Leader:

Elzbieta Szulc

24-MAR-10